TRPA
APC
PACKETS

APRIL
1991

TAHOE REGIONAL PLANNING AGENCY
ADVISORY PLANNING COMMISSION

NOTICE IS HEREBY GIVEN that the Advisory Planning Commission of the Tahoe Regional Planning Agency will conduct its regular meeting at 9:30 a.m. on April 10, 1991, at the North Tahoe Conference Center, 8318 North Lake Boulevard, Kings Beach, California. The agenda for said meeting is attached hereto and made a part of this notice.

April 1, 1991

David S. Ziegler
Executive Director

This agenda has been posted at the TRPA office and at the following post offices: Zephyr Cove and Stateline, Nevada, and Al Tahoe and Tahoe Valley, California.

TAHOE REGIONAL PLANNING AGENCY
ADVISORY PLANNING COMMISSION

North Tahoe Conference Center, 8313 No. Lake Blvd.
Kings Beach, California

April 10, 1991
9:30 a.m.

All items on this agenda are action items unless otherwise noted.

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AGENDA

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III DISPOSITION OF MINUTES

IV PLANNING MATTERS

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A. Executive Director

B. Legal Counsel

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D. Public Interest Comments

VII PENDING MATTERS

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TAHOE REGIONAL PLANNING AGENCY

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MEMORANDUM

April 1, 1991

To: Advisory Planning Commission

From: TRPA Staff

Subject: Proposed Policy On Commercial And Tourist Bonuses For Community Plans

Proposed Action: The staff is proposing that TRPA adopt a policy to guide the distribution of the 54,000 sq. ft. of bonus commercial allocation that is reserved for community plans by Subsection 33.3.C, and the 200 tourist accommodation units reserved by Section 33.4. The APC is requested to recommend to the Governing Board an appropriate policy to guide the distribution.

Background: When the Governing Board approved three of the preliminary community plans in the fall, they questioned how the 54,000 sq. ft. of the bonus reserve pool was going to be distributed since some preliminary community plans were already planning to use the reserve pool. TRPA staff brought this issue, with a list of allocation requests (Attachment A), to the Community Plan consensus group in December and January. Subsection 33.3.C requirements and possible distribution options were discussed as noted in the Analysis section below. The group first directed staff to pursue a scoring/award system; but, upon review they decided it was too complex for such a small allocation. A second system based on the number of community plans and a local jurisdiction determination of the distribution was suggested at the January meeting. Staff was directed by APC to reconsider this alternative because of testimony at the February APC meeting. The revised recommendation (Attachment B) is now being brought to the APC for the appropriate policy recommendation. Also, the consensus group agreed to revise the allocation request for tourist accommodation units as noted on Attachment A.

Analysis: The Code sets some requirements for the distribution of the bonus commercial reserve. Subparagraph 33.3.C.1(a)(ii) indicates:

-- That when TRPA has reviewed a sufficient number of proposed community plans to assess cumulative impacts and mitigation, it shall distribute the bonus.

GWB:rd
4/1/91

AGENDA ITEM IV.A.

-- This distribution shall reward those community plans that best demonstrate the ability to achieve and maintain environmental thresholds and clearly have a demonstrated need for additional allocation.

The following options were considered by the consensus group:

Community Plan Bonus Options

A.	5 jurisdictions equal share (20%)	10,800 s.f./40 TAUs per jurisdiction
B.	Code jurisdictions equal share (25%)	13,500 s.f./50 TAUs per SLT/ED, Placer, Washoe, and Douglas
C.	Weighted per Code distribution	SLT/ED (28%) - 15,120 s.f./56 TAUs Placer (42%) - 22,680 s.f./84 TAUs Washoe (18%) - 9,720 s.f./36 TAUs Douglas (13%) - 7,020 s.f./26 TAUs
D.	Award actual progress in 1994	Percent of CIP complete, dollars spent on CIP
E.	Best plan as presented	Point evaluation assigns bonus 1992 review of 6 CPs for 40,000 s.f. 1994 review of all CPs, add 14,000 s.f.
F.	Based on current needs assessments and future growth	

	Current Need		Projected Growth 87-97 Res.	Tourist	Day Use	
SLT/ED	+160,000 s.f.		1740	?	?	
Placer	+ 41,000 s.f.	=	630	?	?	= Need
Washoe	- 90,000 s.f.		450	?	?	
Douglas	- 25,000 s.f.		180	?	?	
			3000	200	5%	

G.	Weighted per number of community plans which local government awards. 1994 reconsideration.	SLT (5 CPs)	11,740 s.f.
		ED (1 CP)	2,350 s.f.
		Placer (10 CPs)	23,479 s.f.
		Washoe (4 CPs)	9,389 s.f.
		Douglas (3 CPs)	7,042 s.f.
H.	5 jurisdictions equal commercial share, with local government awards, with 1994 reconsideration	10,800 s.f/per jurisdiction TAUs per Attachment A	

Recommendation: Staff recommends the system proposed in Attachment B with the following conditions:

1. Each jurisdiction agrees to the initial commercial split; El Dorado assumes responsibility for Tahoma; and Washoe assumes responsibility for Stateline.

2. Each jurisdiction develops criteria for individual community plan distribution by May 1, 1991 so that the community plans may plan accordingly.

3. The proposed system will be simple and not require Code amendments.

4. Environmental criteria will need to be developed by the local government as part of the distribution system.

Attachment A
3/8/91

Commercial and Tourist Allocations

	Outside CP	CP + 10%	Bonus	TAUs Bonus
Region	40,000	270,000 + 36,000	54,000	200
So. Lake Tahoe	6,620	65,000 + ~~10,000~~	(10,800)	
1. Stn.		(30,000)		
2. SR		(15,000)		(25)
3. AT		--		
4. Y		(10,000)		
5. Y Ind.		(10,000)		
El Dorado	4,500	10,000	(10,800)	
6. Meyers		(10,000)	~~(10,000)~~	(0)
Placer	16,640	112,500 + ~~14,976~~	(10,800)	
7. TAH			~~(5,000)~~	
8. Home		(2,500)	~~(2,500)~~	
9. SVN			~~(5,000)~~	
10. TC		(50,000)		(25)
11. TC Ind.		--		
12. LF		--		
13. Carn.		(2,000)		
14. TV		(7,500)		
15. KB		(30,000)	(10,000)	
16. KB Ind.		(13,000)		
17a. Stn.		(7,500)		(50)
Washoe	7,240	48,750 + 6,516	(10,800)	
17b. Stn.		(9,000)		
18. I.V.C.		(15,200)		
19. I.V.T.		(7,450)		
20. I.V.I.		(16,560)		(50)
Douglas	5,000	33,750 + 4,500	(10,800)	
21. RH		--		
22. Kgsbury		(13,750)	~~(9,250)~~	(25)
23. Stn		(20,000)		(25)

( ) Indicates requests or estimates request for allocation
--- Indicates allocation used up

Attachment B
3/7/91

Option H. Weight Per Number of CPs

Commercial Floor Area

Step 1 Create a proportional bonus account for each local jurisdiction as follows:

$$54{,}000 \text{ s.f.} \times \frac{1}{5} = 10{,}800$$

Step 2 Include in each CP criteria by which initial CFA and bonus CFA would be distributed employing the overall regional goals of:

A) Consolidation of development through TDR, and
B) ETCC target achievement, and
C) Demonstrated economic need

Step 3 Include in each CP EIS analysis and evaluation of desired bonus CFA by location.

Step 4 Allow local jurisdictions, when they are ready, to recommend to TRPA use of the bonus CFA for specific projects allowed by a particular CP

Step 5 Conduct 1994 Review, review success of plan implementation, ETCC target achievement and economic need; ratify bonus allocation and use or reallocate by local jurisdiction.

Tourist Accommodation

Step 1 Initial breakdown as indicated on Attachment A.

Step 2 Distribution pursuant to Subsection 33.4.A.

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M E M O R A N D U M

April 1, 1991

To: TRPA Advisory Planning Commission

From: Agency Staff

Subject: Interpretation of Section 14.3 Findings for Community Plan Boundary Adjustments

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Proposed Action: In order to approve a community plan which has adjusted boundaries, the attached findings must be made. APC is requested to make a recommendation in regards to the findings for the Tahoe City Community Plan.

Background: To adjust the boundaries of the community plan, the findings of Section 14.3 must be made (see attached findings). There have been comments submitted from the League to Save Lake Tahoe and others questioning the proposed boundary adjustments. The two areas of concern are the Tahoe City Golf Course and the 64-Acre Tract (see attached map).

Boundary adjustment is a region-wide issue and the Community Plan Consensus Group has been working on a region-wide interpretation of Section 14.3. Attached is a working draft of the interpretation that was agreed upon by all except the League to Save Lake Tahoe.

Analysis: The justification for adding the two areas depends on how the findings are applied. The restrictive view (supported by the League) would apply the findings to only the area to be added. The liberal view would apply the findings to the entire community plan area with the revised boundaries. The Consensus Group tried to find a middle ground which allows the use of the liberal point of view under circumstances that meet the intent of the findings.

It should be noted that certain areas around Fanny Bridge and the Tahoe City Golf Course club house would qualify under the restrictive point of view; however, the majority of the golf course and the 64-Acre Tract would need the liberal application of the findings. To stay within middle ground criteria of the consensus working draft, the justification would need to use the relocation of community plan area provision or the community plan target provision.

GWB:jm
4/1/91

AGENDA ITEM IV B.

As to relocation, there has been no community plan reduction in Tahoe City, but 22 acres were deleted by dropping Lake Forest Community Plan. Approximately 100 acres are being added to Tahoe City. This relocation provision does cover the entire area and does not meet the intent of the Consensus Group.

As to helping meet community plan target provisions, the argument is much stronger. A strong case can be made that the two properties should be added because of their contributions to achieving targets.

A. The 64-Acre Tract area and the USFS, California Parks, Lands of Sierra, and Sierra Power Company)* are directly linked to:

1. Transit terminal, shuttle system, and community parking
2. Four acres of SEZ restoration and five acres of restoration
3. Bike and recreation trails
4. River and Beach Access
5. Visitor and Interpretative Centers
6. Area-wide drainage improvements

B. The Golf Course area and the (Golf Course and School District)* are directly linked to:

1. Five acres of SEZ restoration and two acres of restoration
2. Grove Street parking lot
3. Area-wide drainage improvements

* Project approvals linked to commitment to CP target projects such as providing right-of-ways and implementation of SEZ and other restoration projects.

If there is a concern that the golf course area or the 64-Acre Tract will not be used for recreation and resource management as called for in the Plan, the APC could recommend that no incentives (e.g., allocations and land coverage over-rides) be permitted in these areas. The Team did not think this was necessary since the U.S. Forest Service owns the 64-Acre Tract and the golf course is 80% SEZ.

Recommendation: Staff supports the Consensus Group's middle ground application of the findings and recommends the APC recommend that the boundary findings can be made.

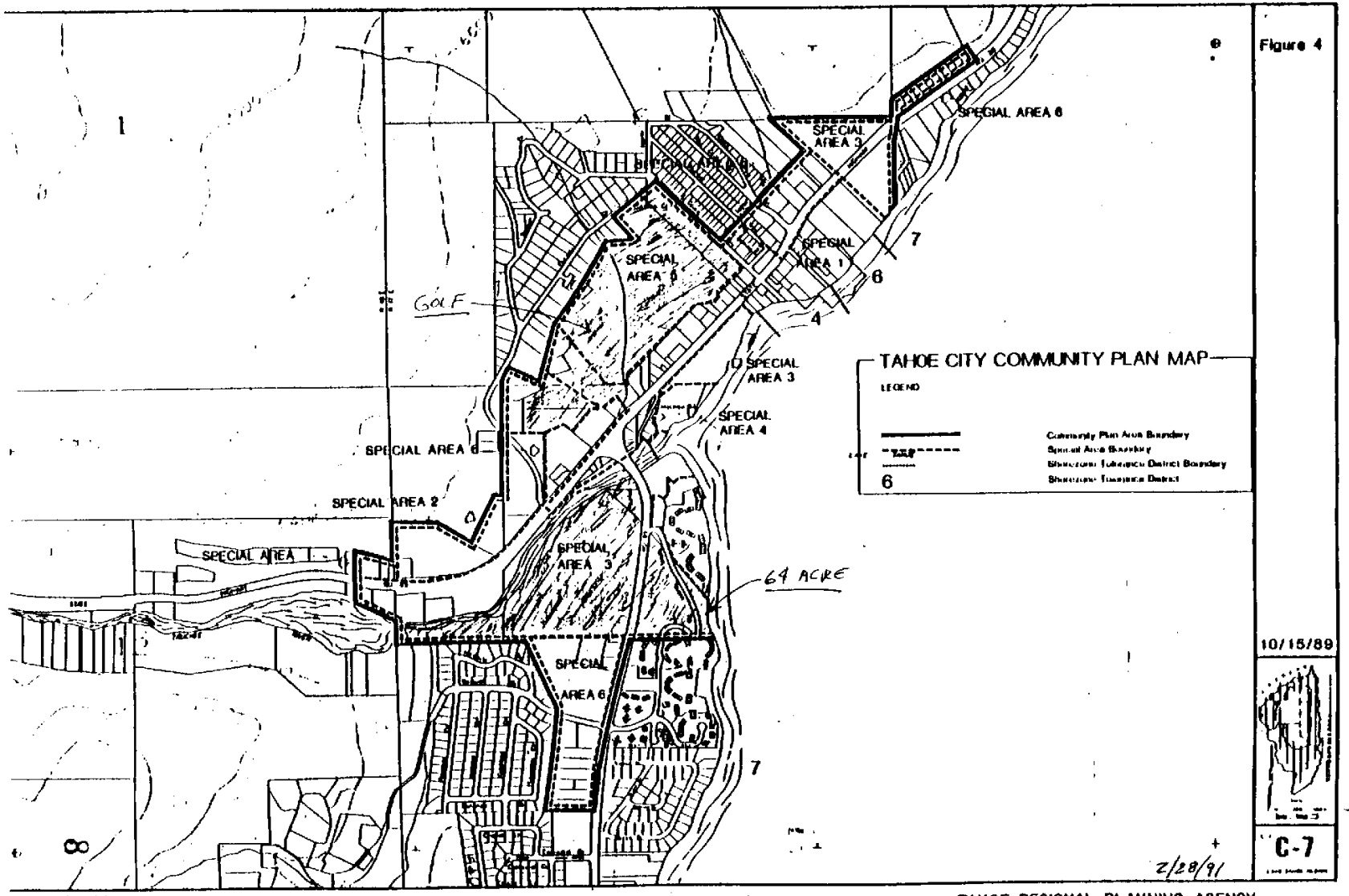
Figure 4
TAHOE CITY COMMUNITY PLAN MAP
LEGEND
Community Plan Area Boundary
Special Area Boundary
Shorezone Tahoe-Truckee District Boundary
Shorezone Tahoe-Truckee District
6
SPECIAL AREA 6
SPECIAL AREA 3
SPECIAL AREA 1
SPECIAL AREA 5
SPECIAL AREA 3
SPECIAL AREA 4
SPECIAL AREA 6
SPECIAL AREA 2
SPECIAL AREA 1
SPECIAL AREA 3
SPECIAL AREA 6
GOLF
64 ACRE
10/15/89
C-7
2/28/91
TAHOE REGIONAL PLANNING AGENCY

4/1/91 Draft

CP BOUNDARY ADJUSTMENT FINDINGS

Purpose:

The purpose of this document to provide a recommended region-wide and consistent interpretation of the CP boundary adjustment findings of Section 14.3.

Background:

Because of the numerous requests to add community plan area (50+% increase through out the Region) and the resulting disagreements, TRPA staff requested the Community Plan Consensus Group review the Section 14.3 findings to see if a consensus could be found on a consistent interpretation. The Community Plan Consensus Group reviewed the requirements of Section 14.3 (listed below) and the proposed CP adjustments.

The major area of disagreement was the proposed addition of CP area for housing. The group could not agree that large areas should be added to achieve housing goals. Some members thought that housing should be addressed with a region-wide approach (TBAG study) and the focus of community planning should be commercial planning. Because of the lack of consensus, this item is not included below.

However, there are areas of consensus as noted in the recommendation below. It is also the Group's recommendation that each of the six CP teams apply the consensus criteria to their proposed boundary adjustments in order to facilitate the review of their plans at TRPA.

It should be noted that upon review of this draft, the League to Save Lake Tahoe indicated that they could not support the trade-off between community plans or the adding of areas to meet targets.

Recommendation:

In all cases, the findings shall apply to the new area added or deleted. In certain cases, the findings may consider the entire CP area as revised. These special cases are as follows:

1. Trade-Off of Area - Area added to the CP is compensated by deleting an equal amount of area in the CP or in a nearby CP.

2. Achievement of CP Targets - Area added to CP is directly linked to achieving CP Environmental Targets or CP Recreation Targets.

CP BOUNDARY CHECK LIST
(Findings of Section 14.3)

Any adjustment of boundaries, including the establishment of parts, shall be subject to TRPA making the following findings at the time of CP adoption. All the following findings must be answered yes based on a review of the proposed community plan addition except as noted in 1 and 2 above.

Yes	No	Findings
		Commercial Use: The area within the boundaries
__	__	1. is an area where commercial uses are concentrated or should be concentrated;
__	__	2. is served or easily served by transit;
__	__	3. which has adequate highway access;
__	__	4. which has or can have housing in the vicinity available for employees working in the area; and
__	__	5. which otherwise qualifies as an area suitable for continued or increased levels of commercial activity.
		(Some areas, because of their existing and proposed development patterns, may incorporate more than commercial use classifications.)
		Traffic Considerations:
__	__	6. The nature and intensity of uses proposed for the area within the boundaries is demonstrably consistent with the achievement of VMT reduction policies and level of service goals for street and highway traffic established for the plan area.
		Concentration: The area within the boundaries
__	__	7. will encourage concentration of commercial development,
__	__	8. discourage the maintenance or exacerbation of strip commercial development, and
__	__	9. shall not allow isolated areas of commercial or tourist accommodations unrelated to the central commercial area.
		Size:
__	__	10. The area within the boundaries is a size consistent with the needs for additional commercial development established by the needs assessment which evaluated the entire area of the community plan, taking into account the needs and opportunities of the Region taken altogether.*

* The Consensus Group recommends that a specific need, i.e an anchor, that is documented in the needs assessment can be considered.

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MEMORANDUM

April 1, 1991

To: Advisory Planning Commission

From: TRPA Staff

Subject: Adoption of Tahoe City Community Plan, Recommendation on Certification of the EIR/EIS: Related Amendments to the 208 Water Quality Plan, Regional Transportation Plan Action Element, TRPA Land Capability Overlay Maps, and Plan Area Statements

Proposed Action: The APC is requested to recommend to the Governing Board the appropriate actions in regard to the Tahoe City Community Plan. The staff recommends the items for consideration be addressed as follows:

Planning Matter Items

1. CP Bonus Allocations - see Agenda Item IV.A. staff summary and recommendation [10 minute presentation by Gordon Barrett].

2. CP Boundary Findings - See Agenda Item IV.B. staff summary and recommendation [10 minute presentation by Gordon Barrett].

Public Hearing Items

3. Land Capability Overlay Map Amendments - see following staff summary and recommendation [15 minute presentation by Gary Shellhorn].

4. Certification of the Tahoe City Community Plans EIR/EIS - see enclosed Final EIR/EIS (March 1991) [10 minute presentation by Sue Rae Irelan].

5. Tahoe City Community Plan - staff summary and recommendation with recommended changes packet [20 minute presentation by the Planning Team].

6. RTP Amendment - see following staff summary and recommendation [5 minute presentation by Gordon Barrett].

GWB:rd
4/1/91

AGENDA ITEM V.A.

Hearing Items for May

7. 208 CIP and SEZ Updates - see following proposed SEZ restoration projects to be added to Volume III of the 208 Plan.

8. PAS Amendments to match Placer County General Plan Update - see Placer County Tahoe City General Plan mailed under separate cover.

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April 1, 1991

To: Advisory Planning Commission

From: TRPA Staff

Subject: Amendment of Regional Plan Land Capability Overlay Map (C-7) for the Tahoe City Community Plan Area

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Agency staff is proposing to amend the TRPA Land Capability Overlay Map (C-7) as a component of the Tahoe City Community Plan adoption process. The current land capability overlay maps were adopted by TRPA in 1987 pursuant to Chapter 12 of the Code of Ordinances. A summary of the information available relating to the land capability investigation report for the Tahoe City Community Plan area is described in the findings below. TRPA is proposing the amendments to the Land Capability Overlay Map (C-7) pursuant to the Community Plan process set forth in Chapter 14.6 of the Code of Ordinances, specifically Subsection 14.6.C(2) and (3) of that Chapter. Additionally, the provisions of the 1988 Water Quality Management Plan for the Lake Tahoe Region (208 Plan) call for TRPA to precisely identify and map stream environment zone (SEZ) areas prior to the approval of any Community Plan (Volume I, p.132). This amendment will update and change the designated land capability in the Tahoe City Community Plan area as shown on the attached map.

Findings

The procedures used to amend the TRPA Land Capability Overlays are set forth in Chapter 20.2.E of the Code of Ordinances. The process in this case was initiated by TRPA as a part of the Tahoe City Community Plan.

A land capability report was prepared for the Tahoe City Community Plan area by Davis[2] Consulting[2] Earth Scientists under contract to TRPA. The team of experts employed by Davis[2] included Sid Davis, Grant Kennedy and Lawrence Welch, Soil Scientists and C. M. Skau, Ph. D., Hydrologist. The attached report covers an area 282 acres in size and contains information concerning the soils, geomorphology, topography, surface and subsurface hydrology, vegetative characteristics and related environmental factors pertaining to the land capability of the area.

Field work for this land capability report was started in August, 1987 with the initial soils investigations. During the following two months additional soil testing, hydrologic evaluations and field inspections were conducted to prepare the proposed land capability amendments. The area was studied using soil

mapping and classification techniques which utilize the Soil Survey of the Tahoe Basin Area, aerial photography, U.S. Geological Survey topographic quadrangle maps and on-site soil observations. Areas exhibiting soil characteristics or hydrologic conditions which were determined to be different than as mapped were intensively examined.

Since the fall of 1987 some additional field work relating to land capability and hydrology of this area has been completed and those reports available to TRPA staff have been reviewed and incorporated into these findings. There were seven representative soil profiles described in the land capability report which identify the soil characteristics of the major soil map units. Auger holes and vegetative species were used to assess the subsurface hydrologic conditions and identify stream environment zone (SEZ) areas.

The land capability report was broken into four areas of study divided by major roadways, streams or other land forms. The findings related to each of the areas are as follows:

Cathedral Drive North to the Truckee River

This area is mapped as land capability 5 associated with the Tallac and Jabu soil series with areas of class 1b associated with the gravelly alluvial lands and beaches. The upper areas, south of the Tahoe Tree Company, were verified as mapped, land capability class 5 associated with the Tallac soil series. The lower areas displayed characteristics of SEZ areas with soils which were seeped in the transition zone to the flat alluvial soils which were poorly and very poorly drained. The flat alluvial soils which are well drained gravelly sandy loams are best classified as land capability class 5. These soils are similar to the Tallac (TcB, gravelly coarse sandy loam, seeped, 0 to 5 percent slopes) soil map unit except that these soils were formed as a result of alluvial deposition rather than glacial deposition.

Quarry Area

The quarry area was verified as mapped, pits and dumps, land capability class 1c. The area between Highway 89 and the Truckee River was verified as mapped, land capability class 5 and 1b. The SEZ lands verified as class 1b are associated with the gravelly alluvial lands (Gr) and within the Truckee River flood plain. A small area, west of the quarry, was verified as mapped land capability class 2. Although there are some minor boundary line adjustments there are no changes in land capability in this area.

Fairway Drive Central Core Area

The majority of this large area is mapped as SEZ, land capability class 1b, associated with the gravelly alluvial land (Gr) soil map unit. The remaining upsloping lands in this area are mapped as land capability class 6 and 5. The

soils found in the concave areas of the golf course and to the west were moderately fine and fine textured soils associated with old lake beds. These soils have evidence of high water tables. The groundwater in the proposed land capability district varies in depth and seasonally from 40 inches to the surface. Some portions of this area have a surface horizon comprised of fill material which has been imported and compacted. The extent and depth of the fill material varies throughout the area and does not significantly alter the soil profile. These areas which have been disturbed by grading can be restored and fill material removed to facilitate enhanced riparian vegetative growth. While these soils are not identified in the Soil Survey they do have the texture and color of an inclusion described in the gravelly alluvial land (Gr) map unit. Based on these findings, the soil labeled in the land capability report as "Soil B" are best classified as land capability class 1b because of near surface wet soil conditions.

The terrace along Highway 28 which encompasses most of the commercial core area of Tahoe City have soils which are moderately well drained gravelly clay loams underlain by cemented lake sediments similar to the Jabu moderately fine subsoil variant soil series. This area is best classified as land capability class 5.

The areas along the lake frontage and below the terrace exhibit wet soil conditions and are complexes of beach and gravelly alluvial soils. These areas are classified as land capability class 1b.

Grove Street and East

This area is predominately mapped as land capability class 5 associated with the Fugawee soil series. There are small areas of class 6 associated with the Jabu soil series and 1b associated with gravelly alluvial land (Gr). The areas mapped as the Fugawee soil series were verified based on physical inspection of the soils in several undisturbed locations. The Tahoe City Creek has been rerouted and straightened to a channel which flows due south to Lake Tahoe. The soils which were developed from the former drainage channel are shallow, seeped sandy loam soils most similar to the Jabu (JbD) soil map unit. These areas are classified as land capability class 3.

The soils found in the area east of Tahoe City Creek and the State Park campground were found to have physical properties similar to the mapped Jabu (JhC) soil map unit. This area remains as mapped, land capability class 5.

The area at the far eastern end of the community plan area was mapped as SEZ, land capability class 1b. This area exhibits the characteristics of a wet meadow with poorly drained soils which are consistent with the gravelly alluvial land (Gr) as mapped.

Staff Recommendation

The TRPA staff has inspected the area and supports the findings and conclusions of the land capability report prepared by the team of experts. The attached land capability map (C-7) identifies the boundaries of the proposed land capability districts as defined in the land capability report and staff summary. While certain portions of the central Tahoe City area have been disturbed by grading and importation of fill material, the information and evidence provided by field inspection and from the team of experts does not support the required findings for man-modified determinations as set forth in Chapter 20.2.F(3) of the TRPA Code of Ordinances. The staff recommends that the Advisory Planning Commission approve the proposed Regional Plan Amendment to change the Land Capability Overlay Map (C-7) for the Tahoe City Community Plan Area.

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September 27, 1987

Tahoe City - Lake Forest Plan Area
Soils Investigation
for
Tahoe Regional Planning Agency

Introduction:

This is a report of soils and stream environment zones in the Tahoe City area and Lake Forest plan areas. It was performed by DAVIS^2 Consulting Earth Scientists in association with Mr. Grant M. Kennedy, Mr. Lawrence E. Welch, Soil Scientists and Dr. Clarence M. Skau, Hygrologist, at the request of the Tahoe Regional Planning Agency (TRPA) to verify Land Capability (Code of Standards, Subchepter 20) and to identify stream environment zones using two methods; (1) Those described in Chepter 3, Volume II of the Handbook of Best Management Practices; (2) Those described in Section 37.3 of the TRPA Code.

Field work for this project was conducted in August, September and October, 1987. In general the area comprises the commercial area of Tahoe City along Highway 89 and Highway 28 and in the Lake Forest area, that portion of commercial property either side of Lake Forest road, south of Lake Forest Glen Unit No. 1 (please refer to the attached maps for the exact boundary delineations).

Because of the size and complexity of the study area, the report narrative is broken into smaller areas generally divided by major roadways, streams or other land features to relate pertinent information regarding Land Capability verifications.

Procedure:

The areas were studied utilizing existing TRPA soils mapping, aerial photography (U.S.D.A.-U.S. Forest Service, 1939, 1972, 1983; Cartwright Aerial Surveys, 1962; Andregg Inc., 1964-65; U.S.D.A. Soil Conservation Service, 1967), and U.S. Geological Survey 7.5 minute quadrangle of Tahoe City (1969 photo revised). The area was also reconnaissance surveyed on the ground. Areas exhibiting soil physical properties, drainage conditions or vegetation patterns determined to be different than presently mapped were more intensively examinated, using soil auger borings or by road cut inspections. The soil in the quarry on the

western border of the study area was described in a backhoe pit. Vegetation species and growth patterns were used as indicators of soil drainage conditions in some cases.

- Area 1 - Lake Forest

Environmental Setting:

This area is shown on TRPA map sheet D6 (Dollar Point) to be mainly within a delineation of JhC (Jabu stony sandy loam, moderately fine subsoil variant, 2 to 9 percent slopes) with a smaller portion represented as Gr (Gravelly alluvial land). The geology map (Mathews, 1968) shows this area to be within a unit of Ql (Recent lake beds). The geomorphic analysis (Bailey 1974) shows this area to be within two delineations, E2 (Outwash ,till, and lake deposits) and E3 (Alluvial lands).

Typical vegetation is Jeffrey pine (Pinus jeffreyi), wyethia (sp.), bitterbrush (Purshia tridentata) and perennial grasses. A drainage way along Main Street displayed willow(salix), alder (Alnus rhombifolia) and perennial grasses.

Topography in the study area is fairly level with an incised drainage (piped at depth) running north to south through the west - central portion. This area receives local storm drainage from the north, east and west.

The Lake Forest area is heavily developed with small lots consisting of both residential dwelling units and commercial establishments.

Findings:

All of the area with the exception of a narrow strip of land adjacent to Main Street was found to be fairly uniform with respect to soil type. It exhibited a grayish brown medium acid gravelly sandy loam surface over a light yellowish brown massive brittle and hard gravelly clay loam subsoil. This unit occurs on the western side of the area and was verified on the northeast side as well. A typical profile description was taken near the intersection of Aspen Street and Hillcrest Avenue in the abandoned roadway easement.

The area along Main Street exhibited a very dark grayish brown mixed very gravelly fill over mottled black and dark grayish brown loam underlain by mottled dark brown, reddish yellow and strong brown silty clay loam. The mottled colors are indicative of wetness. The representative soil profile description was taken at the intersection of Hillcrest Avenue and Main Street.

Conclusions:

The majority of the Lake Forest area is placed in soil unit JhC (Jabu stony sandy loam, fine subsoil variant, 2 to 9 percent slopes). The area adjacent to

Main Street is placed in the unit Lo (Loamy alluvial land).

JhC receives Land Capability class 5 with 25 percent allowable coverage. Lo is placed in Land Capability class 1b with an alloweble 1 percent impervious coverage. Please refer to the attached map for delineation of the Land Capability districts.

- Area 2 - Tahoe City; Cathedral Drive north to the Truckee River

Environmental Setting:

This area comprises the land from approximately 450 feet north of Cathedral Drive, 500 feet west of Highway 89 to Tonopah Drive. It spreads westward from Tonopah Drive to the Truckee River and includes both private and U.S. Forest Service ownership. Land north of Tahoe Tavern, including Tavern Shores, is also included in Area 2.

This area is shown on TRPA map sheet C-7 as having three soil delineations: TdD (Tallac stony coarse sandy loam, 5 to 15 percent slopes); JhC (Jabu stony sandy loam, fine subsoil variant, 2 to 9 percent slopes); Gr (Gravelly alluvial land). The geology map, by Mathews (1968), shows this area to be in delineations of Qlo (Older lake beds) and Qm (Glacial moraines). The geomorphic analysis by Bailey (1974) of this area shows delineations E1 (Moraine land undifferentiated) and E2 (Outwash till and lake deposits).

The area has three fairly distinct landforms: a high bluff composed of glacial till materials; an intermediate terrace; and lower position flat lands. The two lower position landforms consist of lacustrine sediments with seeps and springs surfacing along transitions zone from high to low topography.

Typical vegetation is white fir (Abies concolor), Jeffrey pine, Incense cedar (Libocedrus decurrens) and manzanita in the well drained areas. Seeps display willow, alder, sedge and juncus.

Findings:

Soils were found to be different on each land form. The upper unit was determined to be the Tallac series as presently mapped and no further investigation of that unit was carried out.

The intermediate land form west of Highway 89 was found to display a well or moderately well drained slightly acid brown sandy loam surface over a yellowish brown gravelly sandy loam subsoil, underlain by brittle dark grayish brown sandy loam lacustrine parent materials. This soil was examined in a construction pit at the intersection of Tonopah Drive and Highway 89. The representative pedon was described

from an auger boring, near the southwest corner of Comstock Village. This unit extends north of Tonopah Drive to the slope break where seeps and springs surface to ponding. Soils surrounding the ponds in this area are somewhat poorly and poorly drained with color mottling and riparian vegetation as indicators of wetness.

The well or moderately well drained soils are similar to the Jabu series as mapped in the Lake Tahoe Basin. The somewhat poorly drained soils resemble the Jabu, seeped, soil.

Lower position soils are derived from alluvium of mixed sources. Most of the area displays a well drained grayish brown slightly acid gravelly sandy loam surface over pale brown slightly acid very gravelly sandy loam. This soil has the same taxonomic classification as the Tallac series. It has similar hydrologic properties. This low position soil has not been previously recognized in the Tahoe Basin and differs from other established units because it has formed from river flood plain materials rather than from glacial sources. It lacks a fragipan at depth.

A wet soil area along the intermediate to low position transition zone adjacent to the Jabu seeped unit was found to have the same properties as Gr (Gravelly alluvium), originally mapped nearby. It was poorly or very poorly drained. Inspection of aerial photography between 1964 and 1965 showed that fill material had been placed along the terrace transition zone.

A strip of land influenced by wetness along the Lake front also has properties similar to Gr or Be (Beaches) where wave action from the Lake has routinely reworked alluvial materials.

Conclusions:

Soils displaying characteristics similar to Jabu are placed in the soil unit JaC (Jabu coarse sandy loam, 0 to 9 percent slopes) and in Land Capability class 6. This unit is assigned an allowable coverage of 25 percent. The Jabu , seeped unit is placed in JbD (Jabu coarse sandy loam, seeped, 2 to 15 percent slopes) and receives Land Capability class 3 with 5 percent allowable coverage.

The soil unit with properties similar to Tallac soils, for the purpose of this report, will be called "Soil A" and would be placed in Land Capability class 5. This soil is assigned 25 percent allowable coverage. Gr (Gravelly alluvium) and Be (Beaches) are assigned Land Capability class 1b with 1 percent allowable coverage.

- Area 3 - Tahoe City; The quarry and west

Environmental Setting:

This area is located west of Fairway Drive and north of the Truckee

River. Some of the area has been previously used as a gravel quarry. Several hundred vertical feet of sand and gravel material have been excavated from the mountainside. A leveled surface is currently being utilized as parking for the rafting industry and as a construction corporation yard for heavy equipment maintenance and storage. It is shown on TRPA map sheet C7 as being within soil unit Px (Pits and dumps). Five commercial lots, extenting from the quarry to the western study boundary, are steeply sloping down to Highway 89. Leveled parking areas surrounding buildings have been excavated into the hillside, and paved.

Between Highway 89 and the fence surrounding the maintenance yard at the quarry site, Jeffrey pine and willow has been established by landscaping efforts. Leveler areas of the quarry were void of vegetation. Cutslopes ranged from 40 to 68 percent and were sparsely vegetated with rabbitbrush (Chrysothamnus viscidiflourus) and mountain whitethorn (Ceanothus cordulatus). Slopes under 50 percent were moderately vegetated.

The area south of Highway 89 is mostly associated with the Truckee River flood plain and alluvial terraces. Portions of the properties along the River are shown to be influenced by the Standard Projected Flood, (Dept. of the Army, Sacramento Distric, Corps of Engineers, 1971). The geology map (Mathews, 1968) shows this area to be within two units, Tv^a (andesite) and Qlo (Older lake beds). The geomorphic analysis (Bailey, 1974) shows this site to be in units D1 (Toe slope lands) and E2 (Outwash, till and lake deposits).

Riparian vegetation, largely willows and alders, grows along the Truckee River flood plain.

Findings:

A backhoe pit was examined in the level portion of the quarry area, near the western fence seperating the corporation yard from the parking lot. This pit displayed a very tightly compacted, platy, olive brown very gravelly sand and sandy loam surface over mixed very tightly compacted massive very dark grayish brown very gravelly sandy loam and sandy clay loam, underlain by stratified beds of light olive brown silt. The excavation was moist from 14 to 54 inches. The steep cut slopes surrounding the quarry had a thin mantle of loose mixed andesitic and gravelly colluvial material over exposed older lake terrace.

The area west of the quarry consisted of soils derived from andesite resembling the Jorge soil series.

Conclusions:

Most of the quarry area is disturbed and absent of soil processes. It is presently accurately mapped as Px (Pits and dumps). This unit is assigned Land Capability class 1c with 1 percent allowable coverage.

A small portion of the quarry site and the area west of the quarry, excluding paved parking areas and structures, is representative of the soil unit JwF (Jorge - Tahoma very stony sandy loam, 30 to 50 percent slopes). This unit is assigned Land Capability class 2 with alloweble coverage of 1 percent.

Land between Highway 89 and the Truckee River remains as mapped: JhC (Jabu stony sandy loam, 2 to 9 percent slopes); Gr (Gravelly alluvial land), with the lower lands within the Projected Standard Flood zone. JhC receives Land Capability class 5 with 25 percent allowble coverage; Gr and the Projected Standard Flood are Land Capability 1b with 1 percent allowable coverage.

- Area 4 - Tahoe City: All the area encircled by Fairway Drive and Grove Street, in addition to land between Highway 28 and the Lake.

Environmental Setting:

This area has andesitic materials adjacent to and upslope of old lake deposits. In some places the andesite has overrun the lake terraces. The old lake beds along the public beach area dip, creating a concave shaped landform northwest of the commercial lots. There, fine textured alluvium has accumulated under a marsh-like condition. Most of the golf course has been developed on the marsh land. Several perennial streams interfinger the golf course. They have been piped underneath the commercial lots and Highway 89 to outlet in the Truckee River. The Highway 28 - 89 "Y" area was historically the confluence of several small perennial streams before they were captured by piping.

TRPA map sheet C7 shows most of this area to be within a delineation of Gr (Gravelly alluvial land) and only a minor portion to be within JhC (Jabu stony sandy loam, moderately fine subsoil variant, 2 to 9 percent slopes). The geology map shows (Mathews,1968) the area within delineations of Qlo (Older lake beds) and Tv^a (andesite). Geomorphic analysis (Bailey, 1974) shows the area to be within delineations E2 (Outwash, till and lake deposits) and E3 (Alluvial lands).

Topographic high areas display vegetation consisting of Jeffrey pine, White fir, Incense cedar, wyethia and perennial grasses. Concave landforms and stream zones display willow, alder, aspen, sedge, juncus and perennial grasses.

Findings:

The area adjacent to Fairway Drive and Highway 89 was formed from andesitic materials over lacustrine sediments. This soil was described on Fairway Drive approximately 600 feet north of Highway 89. The soil displayed a brown medium acid gravelly loam surface over a variegated light yellowish brown and brown medium acid very gravelly clay loam, underlain by firm white lacustrine sediments. This soil was determined to be similar the the Fugawee soil series. Elsewhere along Fairway Drive, on moderately sloping terrane, the soils were found to be similar to the Jabu series as presently mapped. Stream environment zones have incised the Jabu unit in several places.

Soils on concave landscapes within the golf course area exhibit very dark gray mildly alkaline clay or silty clay surfaces, under fill materials some places. Subsoils were light gray mildly alkaline clay, to greater than 4 feet depth. These soils were described from auger borings, one in the parking lot near the school ball field behind the Family Tree restaurant, and from other borings inside a roped off parking lot east of the Shell service station at Highway 89. Soils such as these have not been described in the Lake Tahoe Basin.

Soils on the tilted lake beds were found to be moderately well drained with a slightly acid dark brown sandy loam surface over a variegated strong brown and dark brown slightly acid gravelly clay loam subsoil, underlain by cemented lacustrine sediments. These soils are similar to the Jabu moderately fine subsoil variant. The Jabu soil was described on a gently sloping northwest facing surface, northeast of the Gallery. This terrace, adjacent to the Lake shore, terminates as an escarpment with slopes exceeding 30 percent, running from northeast to southwest, from the Firehouse to Grove Street. This terrace is dissected by a small stream zone (now piped) leaving an island of the higher ground between the "Y" and Mackinaw Road.

Soils along the Lake frontage, at the public beach and below Mackinaw Road are wet and/or subject to wave action and fluxuating lake water levels. Lake frontage soil units are complexes of Be (Beaches) and Gr (Gravelly alluvium).

Road ditches, in places, along Fairway Drive and Grove Street conduct active water and support riparian vegetation.

Conclusions:

The small area of Fugawee soils is placed in soil unit FuD (Fugawee very stony sandy loam, 2 to 15 percent slopes). This unit is Land Capability class 5 with 25 percent allowable coverage. For unnamed soils in the golf course and topographic low position areas surrounding the Highway 28-89 " Y ", a "Soil B" designation is proposed with Land Capability class 1b and allowable coverage of 1 percent.

The tilted terrace along Highway 28, or core commercial area, is placed in JhC (Jabu stony sandy loam, moderately fine subsoil variant, 2 to 9 percent slopes). This unit receives Land Capability class 5 with 25 percent alloweble coverage.

Areas along the Lake shore are Gr (Gravelly alluvial land) and Be (Beaches) with Land Capability class 1b and allowable 1 percent coverage.

- Area 5 - Tahoe City; From Grove street to the eastern boundary

Environmental setting:

This area is heavily developed with commercial shops and paved parking areas. It comprises soils formed from lacustrine sediments and from andesitic materials (possibly colluvial). IRPA map sheet C-7 shows the soils to be mainly FuD (Fugawee very stony sandy loam, 2 to 15 percent slopes), JhC (Jabu stony sandy loam, moderately fine subsoil variant, 2 to 9 percent slopes) and Gr (Gravelly alluvium). The geology map (Mathews, 1968) shows this area to be in older lake beds. Geomorphic analysis (Bailey, 1974) shows this area to be in geomorphic unit E2 (Outwash, till and lake deposits).

An order 2 stream used to flow from where the service station presently sits at the corner of Jack Pine Street and Highway 28, down through the public library parking lot, and over to a path between the Boat Works and Safeway shopping areas. It has been rerouted and straightened to flow directly from above the service station, due south, to down between the Fantasy Inn and the Safeway parking lot where it rejoins the pre-existing drainage near the Boat Works. The paved shopping mall parking lot in front of the library, the Boat Works and the Round House diverts Highway 28 storm runoff water all the way to the Lake.

Findings:

The area mapped FuD was inspected in several place along Pioneer Way and Tahoe Street and found to exhibit physical properties (soil texture, depth and drainage) similar to the Fugawee series. It was considered to be accurately defined on IRPA map sheet C-7 and was not changed.

The State Park and the area, northeast of Tahoe Street was found to be poorly drained, growing willow, alder and juncus vegetive types, and consistant with the Gr unit as mapped.

A narrow strip along Highway 28, between the State Park and the east boundary, and a land remnant in the Safeway parking lot were found to have physical properties similar to those described on the dipping terrace near the Gallery, and left in JhC, as mapped.

Four lots on the far east end of the project were noted as derived from volcanic sources on slopes between 15 and 30 percent. These soils were deep and well drained, similar to the Jorge series.

The area of land in the vacanity of the library, Round House and Boat Works has been extensively altered. Because of improvements consisting of paving and underground utilities, field investigations were primarily surficial; they were supplimented with aerial photography to determine the extent of change.

The lawn area near the Boat Works appears to have emerging springs, and much of the pavement in front of the Round House displays signs of alligator cracking or symptoms of subgrade failure due to saturated conditions. Drainage has only slightly improved in this area which used to be stream environment. At best it reflects a soil with hydrologic properties similar to Jabu sandy loam, seeped variant.

Conclusions:

With the exception of the rerouted drainage down through the Round House - Boat Works area, and soils on the four east end lots in the survey area, Land Capability districts remain unchanged.

The rerouted drainage is an order 2 stream and requires 50 feet setbacks to improvements on either side of the center of the flow line. The area which was originally the old stream zone has slightly improved drainage but still exhibits signs of seasonal wetness and is placed in JbD (Jabu coarse sandy loam, seeped, 2 to 5 percent slopes). This unit is Land Capability class 3 with 5 percent allowable coverage.

Soils on the four lots at the northeast end of the study area are JwE (Jorge - Tahoma very stony sandy loam, 15 to 30 percent slopes) rather than Rx (Rock outcrop and rubble land). JwE is Land Capability class 4 with 20 percent allowable coverage.

Please refer to the attached map for proper capability district delineations.

Respectfully submitted,

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Representative soil Profiles:

Lake Forest:

Profile No. 1

Location: Near intersection of Hillcrest Avenue and Aspen Street

Vegetation: Jeffrey pine, wyethia perennial grasses, bitterbrush

Soil Classification: Fine-loamy, mixed frigid Ultic Haploxeralfs

Soil Series: Jabu moderately fine subsoil variant

O 1 to 0 inches, litter and duff.

A11 0 to 10 inches, grayish brown (10YR 5/2) gravelly sandy loam, dark brown (10YR 3/3) moist; moderate fine granular structure; soft, friable, slightly sticky and slightly plastic; many fine and medium, few coarse roots; many very fine and fine interstitial pores; medium acid; 15 percent gravel; clear smooth boundary.

A12 10 to 14 inches, grayish brown (10YR 5/2) gravelly sandy loam, dark brown (10YR 3/3) moist; weak fine granular structure; soft, friable, slightly sticky and slightly plastic; many fine and medium common coarse roots; many very fine and fine interstitial pores; medium acid; 15 percent gravel; clear wavy boundary.

B1 14 to 23 inches, brown (7.5YR 5/4) gravelly loam, dark brown(7.5YR 3/4) moist, weak fine subangular blocky structure; slightly hard, friable, sticky and slightly plastic; many fine and medium few coarse roots; common very fine tubular and interstitial pores; medium acid; 15 percent gravels; gradual smooth boundary.

B21t 23 to 30 inches, light yellowish brown (10YR 6/4) gravelly clay loam, dark yellowish brown (10YR 4/4) moist; moderate medium subangular blocky structure; hard, firm , sticky and plastic; common very fine and fine roots; few very fine and fine tubular pores; few thin clay films on ped faces; medium acid; 15 percent gravel; gradual smooth boundry.

B22t 30 to 36 inches, light yellowish brown and brownish yellow (10YR 6/4, 6/6) gravelly clay loam, dark yellowish brown and yellowish brown (10YR 4/4, 5/6) moist; moderate medium angular blocky structure; hard, firm , sticky and plastic; few very fine and fine roots; few very fine and fine tubular pores; many moderately

thick clay films on ped faces; medium acid; 25 percent gravel; gradual smooth boundary.

B23tx 36 to 55 inches, brownish yellow (10YR 6/6) gravelly clay loam, dark brown (10YR 3/4), moist; massive; hard, very firm, sticky and plastic; many moderately thick clay films coating mineral grains; medium acid; 35 percent gravel; gradual, smooth boundary.

B3tx 55 to 60 plus inches, light brownish gray (2.5Y 6/2) very gravelly clay loam, dark grayish brown (2.5Y 4/2) moist; massive; hard, very firm, sticky and plastic; many moderately thick clay films coating mineral grains; medium acid; 35 percent gravel.

Lake Forest: Profile No. 2

Location: Intersection of Hillcrest Avenue and Main Street
Vegetation: Willow, alder, perennial grasses
Soil Classification: Loamy, mixed, frigid Aquic Haploxeralfs
Soil Series: Unknown

C 0 to 14 inches, dark brown (10YR 4/3, 3/3) very gravelly mixed fill material

A1 14 to 20 inches, black (10YR 2/1) loam, moist, with many medium faint mottles of dark grayish brown (10YR 4/2); strong medium granular structure; hard friable, slightly sticky and slightly plastic; common very fine, fine and few medium roots; common very fine and fine interstitial pores; slightly acid; clear, smooth boundary.

A3 20 to 26 inches, very dark brown (10YR 2/2) with many medium distinct mottles of very dark brown (10YR 3/3) loam, moist; moderate fine subangular blocky structure; slightly hard; very friable; slightly sticky and slightly plastic; common very fine, fine, medium and few coarse roots; pores and reaction as above; gradual smooth boundary.

B21t 26 to 36 inches, dark brown (10YR 3/3) silty clay loam with many coarse prominent mottles of strong brown (7.5YR 5/6); strong medium subangular blocky structure; hard, friable, sticky and plastic; common very fine and fine roots; common very fine and fine tubular pores; many thin clay films on ped faces and

in pores; slightly acid; gradual wavy boundary.

B22t 36 to 40 inches, mottled dark brown, reddish yellow and strong brown (10YR 3/3, 7.5YR 6/6,4/6) silty clay loam; strong subangular blocky structure; hard, firm, sticky and plastic; common thin clay films on ped faces and in pores, slightly acid; manganese concretions.

Tahoe City Soil Profile No. 1

Location: Near south west corner of Comstock Village

Vegetation: Fir, Jeffrey pine, Incense cedar, manzanita

Soil Classification: Coarse-loamy, mixed frigid, Ultic Haploxeralfs

Soil Series: Jabu

O 1 to 0 inches, twigs, conifer needles and duff.

A11 0 to 4 inches, brown (7.5YR 5/4) sandy loam, dark brown (7.5YR 3/4) moist; weak medium subangular blocky structure parting to weak fine granular; soft, friable, nonsticky and nonplastic; common fine and medium roots; common fine tubular pores; slightly acid; 10 percent gravel; clear smooth boundary.

A12 4 to 14 inches, brown (7.5YR 5/4) sandy loam, dark brown (7.5YR 3/4) moist; weak fine subangular blocky structure; soft, friable, nonsticky and nonplastic; common fine , medium and coarse roots; common fine interstitial pores; slightly acid; 10 percent gravel gradual smooth boundary.

B1 14 to 30 inches, yellowish brown (10YR 5/4) gravelly sandy loam, brown (10YR 4/3) moist; weak medium subangular blocky structure; hard, friable, nonsticky and nonplastic; common fine, medium and coarse roots; few fine tubular pores; few thin clay films in pores; medium acid; 15 percent gravels; gradual smooth boundary.

B21t 30 to 48 inches, light yellowish brown (10YR 6/4) and yellowish brown (10YR 5/6) sandy loam (near loam) dark grayish brown (10YR 4/2) moist; moderate medium angular blocky structure; hard, friable, slightly sticky an slightly plastic; few fine and medium roots; few very fine tubular pores; common thin clay films bridging sand grains,; medium acid; gradual smooth boundary.

B22tx 48 to 55 inches, yellowish brown (10YR 6/4) sandy loam, dark yellowish brown (10YR 4/4) moist; strong medium angular blocky structure; hard, friable, slightly sticky and very slightly plastic; few very fine tubular pores; common thin clay films in pores; clear smooth boundary.

IICx 55 to 60 inches, light gray (10YR 7/2) sandy loam, very dark grayish brown (2.5Y 3/2) moist; weak fine platy structure; hard, friable, slightly sticky and nonplastic; few very fine tubular pores; slightly acid.

Note: Peds in last two horizons have brittle feeling when crushed by hand.

Tahoe City Profile No. 2

Location: South of Tavern Shores, 75 feet east of State Highway 89, about 1500 feet south of the Truckee River bridge.
Vegetation: Jeffrey pine, Lodgepole pine, service berry, sweet clover
Classification: Coarse-loamy (or loamy skeletal), mixed, frigid Entic Xerumbrept
Soil Series: Not defined in Lake Tahoe Basin (Soil "A")

A11 0 to 8 inches, grayish brown (10YR 5/2) gravelly sandy loam, very dark grayish brown (10YR 3/2) moist; moderate very fine granular structure; soft, very friable, nonsticky and nonplastic; many very fine and fine , few medium roots; common very fine and fine interstitial pores; slightly acid ; 25 percent gravel; gradual smooty boundary.

A12 8 to 14 inches, brown (10YR 5/3) gravelly sandy loam , very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; many very fine to medium , few coarse roots; common very fine and fine interstitial pores; slightly acid; 30 percent gravel; clear smooth boundray.

C1 14 to 36 inches, pale brown (10YR 6/3) very gravelly sandy loam, dark brown (10YR 3/3) moist; massive; slightly hard, friable, nonsticky and nonplastic; many very fine to medium , few coarse roots; few very fine and fine interstitial pores; slightly acid 35 percent gravel; gradual smooth boundary.

C2 36 to 40 inches plus, pale brown (10YR 6/3) very gravelly sandy loam , dark brown

(10YR 3/3) moist; massive, slightly hard, friable, nonsticky and nonplastic; few fine and medium roots; few very fine and fine interstitial pores; slightly acid; 35 percent gravel.

Tahoe City Soil Profile No. 3

Location: Fairway Drive - approximately 500 feet north of intersection with Hwy 89
Vegetation: Jeffrey pine, wyethia, bitterbrush, perennial grasses
Soil Classification: Fine- loamy, mixed , frigid, Ultic Haploxeralfs
Soil Series: Fugawee

A1 0 to 7 inches, brown (10YR 5/3) gravelly loam, very dark grayish brown (10YR 3/2) moist; moderate medium granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine to meidum roots; common very fine to coarse tubular pores; medium acid; 15 percent gravel, 10 percent cobblestones; clear smooth boundary.

B1 7 to 20 inches, brown (10 YR 5/3) gravelly loam, dark brown (10YR 3/3) moist; week fine subangular blocky structure; slightly hard, friable , sitcky and slightly plastic; many very fine to meidum roots; common very fine and fine tubular pores medium acid; 15 percent gravels; 10 percent cobblestones; clear smooth boundary.

B21t 20 to 34 inches, yellowish brown (10YR 5/4) gravelly sandy clay loam (near loam), brown (10YR 4/3) moist; moderate medium angular blocky structure;; hard, friable, sticky and plastic; many very fine and fine roots; moderate fine and medium, few coarse tubular pores; few thick and common thin clay films on ped faces; medium acid; 25 percent gravels; 5 percent cobblestones; gradual wavy boundary.

B22t 34 to 42 inches, variegated light yellowish brown (10YR 6/4) brownish yellow (10YR 6/6) and strong brown (7.5YR 5/8) gravelly clay loam, variegated yellowish brown (10YR 5/6) and strong brown (7.5YR 5/8) moist; massive; very hard, friable, sticky and plastic; few very fine roots; few very fine and fine tubular pores; few moderately thick clay films in pores; slightly acid; 35 percent gravcels, 5 percent cobblestones; gradual wavy boundary.

IICr 42 inches plus, firm white lacustrine sediments, can be dug with a spade.

Tahoe City Soil Profile No. 4

Location: Corner of ballfield, and golf course off Grove Street

Vegetation: None - lot used for vehicle traffic and parking

Soil Classification: Fine, montmorillonitic, nonacid, frigid, Fluventic Humaquepts

Soil Series: Not defined in the Lake Tahoe Basin (Soil "B")

Note: There is 18 inches of compacted fill over the origional surface.

0 to 18 inches, fill consisting of sandy loam to sandy clay loam material, dark grayish brown in color.

A1 18 to 25 inches, very dark gray (N3/0) clay, black (10YR 2.5/1) moist; very coarse prismatic structure; hard, friable, sticky and plastic; nor roots; mildly alkaline; gradual smooth boundary.

C1 25 to 34 inches, light gray (N 7/0) silty clay, black (N 2/0) and dark gray (N 4/0) moist; very coarse prismatic structure; very hard, firm, sticky and plastic; no roots; mildly alkaline; clear smooth boundry.

C2 34 inches plus, light yellowish brown (2.5Y 6/4) and light gray (N 7/0) clay, black (10YR 2/0) and grayish brown (2.5Y 5/2) moist; week very coarse prismatic breaking to moderate medium angular blocky structue; very hard, firm, sticky and plastic; mildly alkaline.

Tahoe City Soil Profile No. 5

Location: 50 feet northwest of the Gallery - 15 feet from escarpment to Tahoe City beach

Vegetation: Jeffrey pine, wyethia, perennial grasses

Soil Classification: Fine-loamy, mixed frigid Ultic Haploxeralfs

Soil Series: Jabu moderately fine subsoil variant

A1 0 to 12 inches, dark brown (7.5YR 4/4) sandy loam, dark brown (7.5YR 3/2) moist; moderate medium granular structure; soft, friable, nonsticky and nonplastic; common fine and medium, few coarse roots; common very fine and fine interstitial pores; slightly acid; clear smooth boundary.

B1 12 to 24 inches, dark brown (7.5YR 4/4) sandy loam (near loam), dark brown (7.5YR 3/3) moist; moderate fine subangular blocky structure; slightly hard, friable, slightly sticky and nonplastic; common fine and medium and few coarse roots; common very fine and fine tubular and interstitial pores; slightly acid ; gradual smooth boundary.

B21t 24 ot 36 inches, dark brown (7.5YR 4/4) gravelly loam, dark brown (7.5YR 3/4) moist; week medium subangular blocky structure; hard, friable, sticky and slightly plastic; common fine, medium, and few coarse roots; few very fine tubular pores; few thin clay films on ped faces; slightly acid; 20 percent gravel; gradual smooth boundary.

B22t 36 to 48 inches, variegated dark brown (7.5YR 4/4) and strong brown (7.5YR 5/8) gravelly clay loam, moist; moderate medium subangular blocky structure; very hard, friable, sticky and plastic; few fine rocots; few very fine tubular pores; common thin clay films on ped faces and in pores; slightly acid; 15 percent gravels; clear smooth boundary.

IIC1 48 yo 58 inches, olive brown (2.5Y 4/4) clay loam with yellowish red (5YR 4/6) iron mottles, moist; massive; hard, slightly firm, stickky and plastic; very few very fine tubular pores; slightly acid; abrupt smooth boundary.

IIC2 58 inches, cemented lacustrine sediments.

Tahoe City Soil Profile No. 6

Location: Payless lot near Shell station
Vegetation: Very sparse growth of weeds
Soil Classification: Fine, montmorillonitic, nonacid, frigid, Fluventic Humaquepts
Soil Series: Not defined in the Lake Tahoe Basin ("Soil B")

0 to 15 inches, very compacted gravelly engineered fill imported to site

A1 15 to 32 inches, dark gray (10YR 4/1) silty caly, black (10YR 2.5/1) moist; strong very coarse prismatic structure; extremely hard, very firm, very sticky and very plastic; pressure faces; mildly alkaline; abrup smooth boundary.

C1 32 to 46 inches, grayish brown (10YR 5/2) silty clay, very dark grayish brown (10YR 3/2) and black (10YR 2.5/1) moist; strong very coarse prismatic structure; extremely hard, very firm, very sticky and very plastic; pressure faces; mildly alkaline; abrup smooth boundary.

Ab 46 to 55 inches, dark gray (10YR 4/1) and brown (10YR 5/3) silty clay, black (n 2/0) and very dark grayish brown (2.5Y 3/2) moist; structure, consistence as above; pressure faces; mildly alkaline; gradual smooth boundary.

Cg 55 to 60 inches, light gray (5Y 7/2) and pale olive (5Y 6/4) silty clay, olive gray (5Y 4/2) and olive (5Y 5/6) moist; week medium prismatic structure; extremely hard, firm, very sticky a d very plastic; mildly alkaline.

Tahoe City Soil Profile No. 7

Location: Quarry, near the west fence
Vegetation: None
Classification: Engineered fill materials (nonsoil)
Soil Series: None

C1 0 to 7 inches, pale yellow (2.5Y 7/4)very gravelly sand to sandy loam, olive brown (2.5Y 4/4) moist; strong coarse platy sturcture; very hard, very firm, nonsticky and nonplastic; abrupt, smooth boundary.

C2 7 to 46 inches, very dark grayish brown (2.5Y 3/2) very gravelly sandy loam to sandy clay loam, moist; massive; very hard, very firm; slightly sticky and slightly plastic; 15 percent cobblestones and 25 percent gravel; abrupt, smooth boundary.

IIC 46 to 54 inches, light olive brown ((2.5Y 5/4) silt, moist; massive; slightly hard, friable, slightly sticky and slightly plastic; bedded lacustrine sediments.

References:

1. Andrag Inc.
   1964, 65. Aerial photography, black & white, Tahoe City area.

2. Bailey, Robert G.
   1974. Land-Capability Classification of the Lake Tahoe Basin, California - Nevada, A Guide for Planning. Forest Service, U.S. Department of Agriculture in cooperation with the Tahoe Regional Planning Agency.

3. Cartwright Aerial Surveys Inc.
   1962. Aerial photography, black & white, 1: 20,000 scale, Tahoe City and Lake Forest area.

4. Department of the Army, Sacramento District, Corps of Engineers, Sacramento, California.
   1971 Flood Plain Information, Truckee River, Tahoe City, California, prepared for Placer County.

5. Mathews, Robert A.
   1968. Geology of the North Half of the Lake Tahoe Basin, California and Nevada. California Geology (1971), pp. 124.

6. NASA. 1970. Aerial color infrared photography (July).

7. Rogers, John H., et. al., U.S. D. A. Soil Conservation Service.
   1974. Soil Survey of the Lake Tahoe Basin Area, California and Nevada.

8. Tahoe Regional Planning Agency.
   1978. Lake Tahoe Basin Water Quality Management Plan, Volume II, Handbook of Best Management Practices.

9. _____
   1987. Code of Standards, Ch. 20, 37. (Draft 4/28/87, 4-24-87)

10. _____
    1971. Map sheet C-7 (Tahoe City), scale 1" = 400'.

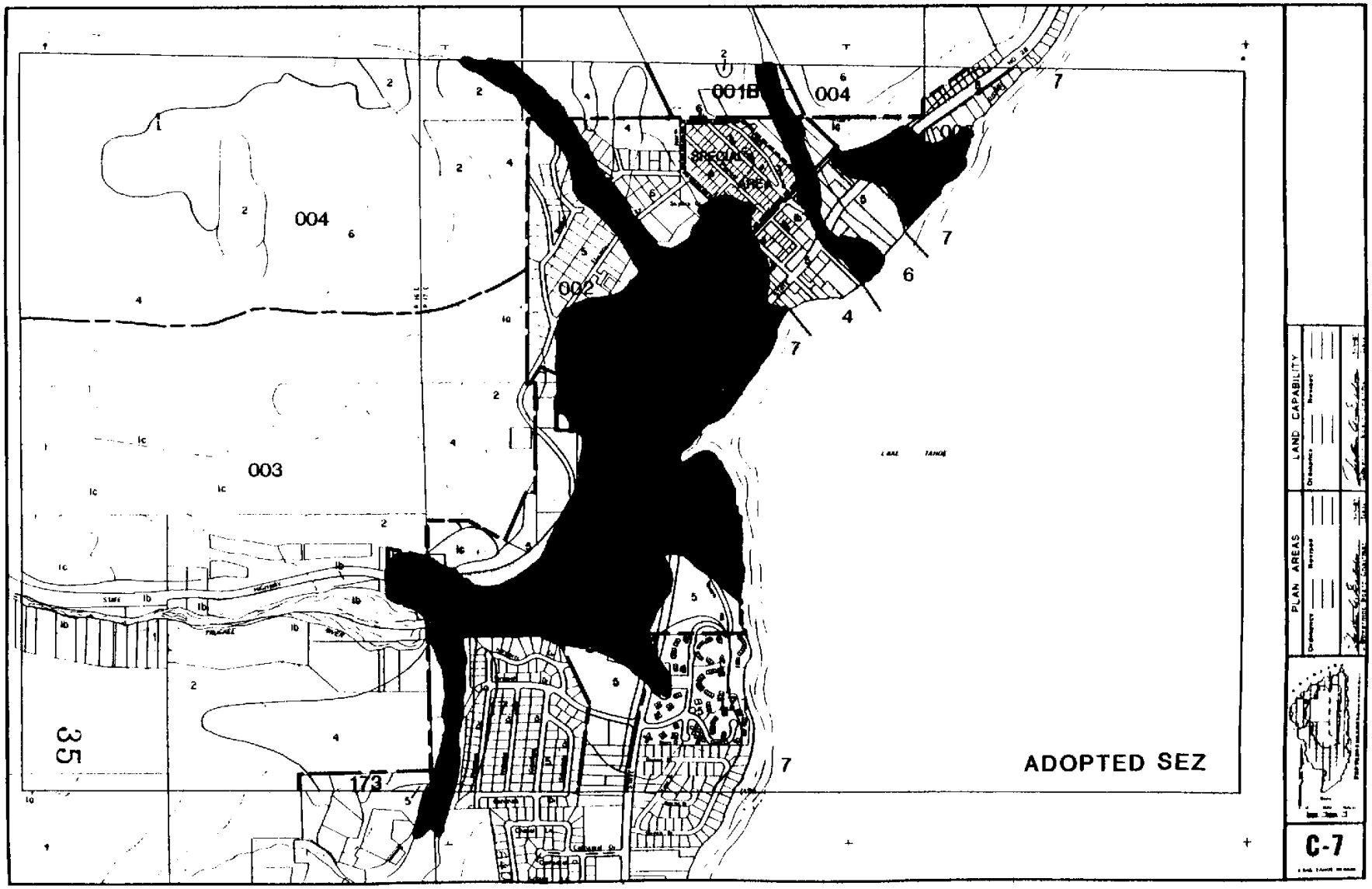
11. United States Department of Agriculture, Soil Conservation Service.
    1975. Soil Taxonomy, Agriculture Handbook No. 436

12. _____
    1981. Soil Survey Manual, Agriculture Handbook No. 18, Ch. 4.

13. _____ 1967. Aerial photo soil map sheets, black & white contact prints.

14. United States Department of Agriculture, Forest Service.
    1983. Aerial photography, color contact prints, Tahoe City and Lake Forest area, scale 1" = 100'.

15. _____
    1939. Aerial photography, black & white contact prints, Tahoe City and Lake Forest Area, scale 1: 20,000.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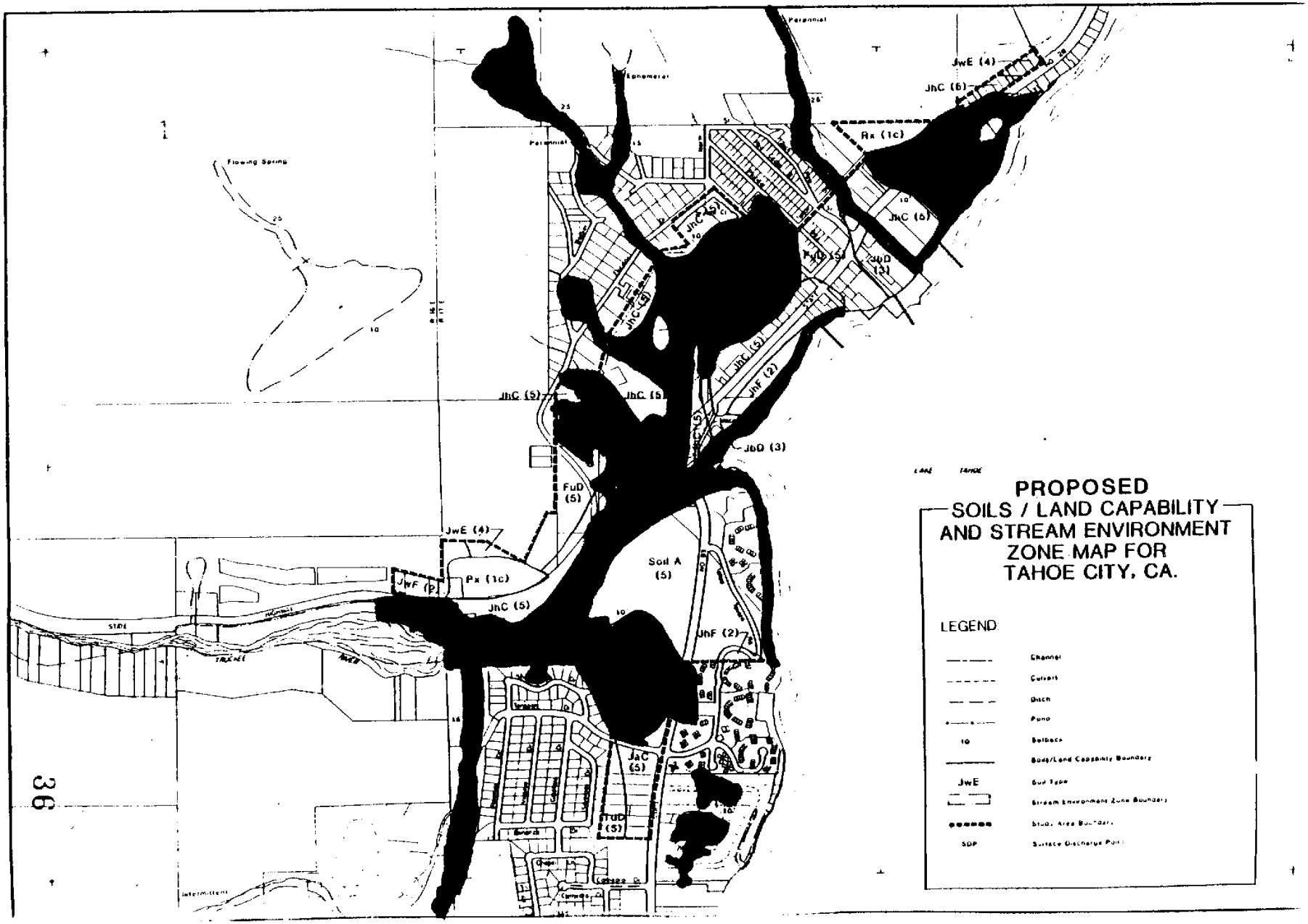
ADOPTED SEZ
LAND CAPABILITY
PLAN AREAS
C-7


Perennial
Ephemeral
Flowing Spring
JwE (4)
JhC (6)
Rx (1c)
JhC (5)
JhC (6)
FuD (5)
JuD (3)
JhC (5)
JhE (5)
JhF (2)
JhC (5)
JhC (5)
JbD (3)
FuD (5)
JwE (4)
JwF (2)
Rx (1c)
JhC (5)
Soil A (5)
JhF (2)
JaC (5)
FuD (5)
PROPOSED
SOILS / LAND CAPABILITY
AND STREAM ENVIRONMENT
ZONE MAP FOR
TAHOE CITY, CA.
LEGEND
Channel
Culvert
Ditch
Pond
Setback
Soils/Land Capability Boundary
JwE
Soil Type
Stream Environment Zone Boundary
Study Area Boundary
SDP
Surface Discharge Point

TAHOE REGIONAL PLANNING AGENCY

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MEMORANDUM

April 1, 1991

To: Advisory Planning Commission

From: TRPA Staff

Subject: Discussion of the Tahoe City Community Plan and the EIR/EIS

Proposed Action: Staff is requesting comments and concerns in regard to the Tahoe City Community Plan, as amended, and the draft and final TRPA Community Plans EIR/EIS. The first drafts were sent to you in your November packet. As noted in the cover memo, the Final EIR/EIS (response to comments and errata) and proposed community plan changes are included in this packet.

Background: The Tahoe City community planning process is coming to an end after five years of planning. The EIR/EIS addresses the impacts of possible community plans for (1) Tahoe City, (2) Tahoe City Industrial Area, (3) Lake Forest, and (4) Dollar Hill. It should be noted that the planning team is only recommending Tahoe City for community plan status.

On March 11 and 21, 1991 the Tahoe City Plan Team unanimously recommended approval of the Tahoe City Community Plan with the changes noted in this packet. The draft Tahoe City Community Plan was included in your November packet. The citizens of Lake Forest decided that they did not desire a community plan and the Planning Team has decided not to forward a draft community plan for Lake Forest. Also, it was decided that Dollar Hill should not be given community plan status. Both of these areas will be addressed with revised Plan Area Statements. Drafts of these Plan Area Statements will match the Placer County General Plan Update which was mailed separately.

GWB:rd
4/1/91

AGENDA ITEM V.A.

Memorandum to Advisory Planning Commission
Discussion of the Tahoe City Community Plan
and the EIR/EIS

The Placer County Planning Commission held a public hearing on Thursday, March 28, 1990, and continued their hearing for 60 to 90 days. The major issues revolve around the proposed public improvements. The two most controversial are the service road behind the town and the area-wide drainage system. Also, the issue of what is SEZ and what is not appeared to be controversial, but that was thought to be a TRPA issue.

Review by the Placer County Supervisors and the TRPA Governing Board awaits APC and Planning Commission recommendations.

Recommendation: Staff recommends that the APC hold the public hearing and make recommendations to prepare a final draft plan and EIR/EIS for approval in May.

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MEMORANDUM

April 1, 1991

To: Advisory Planning Commission

From: TRPA Staff

Subject: Amendment of the Regional Transportation Plan Action Element

Proposed Action: In order to approve the Tahoe City Community Plan's Transportation Element, it must be found consistent with the TRPA Regional Transportation Plan (RTP). The APC is requested to consider the two elements and make the proper recommendation to make them consistent.

Background: The RTP was adopted in April 1988 during the community planning process. The projects listed in the Action Element for Tahoe City were based on discussions with the Tahoe City Plan Team. Since this adoption there has been further study and public input at the community planning level which has caused some changes.

The first and most significant change is that the time schedule of the Action Element is no longer correct. This impacts the construction timetable of the State Route 89 realignment. Based on discussions with Caltrans, this project could not be constructed until after 1997; thus, the project is out of the time frame of the Community Plan.

The second change is that further studies (in two EISs) do not document any significant level of service benefit by constructing the service road behind the town. In fact, public testimony from the golf course owners and most of the major businesses have questioned the need and pointed out adverse impacts. These impacts include construction in SEZ, noise impacts, and impacts on the playability of the golf course.

The third change is that the parking and transit layout has been further developed. The transit terminal and parking lot are now being located at the 64-Acre Tract and a mid-town parking lot is being proposed instead of one at the borrow pit on the edge of town.

GWB:rd
4/1/91

AGENDA ITEM V.A.

Analysis: The administrative draft RTP update now in circulation generally accepts the Community Plan changes based on the Tahoe City Community Plan EIS/EIR, the Tahoe City Urban Improvement EIS/EIR, and the State Route 89 Corridor Study. In general the Community Plan concentrates on non-automobile solutions and does not propose any major new highway improvements. The new RTP will deal with region-wide transportation strategies.

Recommendation: Staff recommends that the RTP Action Element be amended as shown on Attachment A if the Tahoe City Community Plan is to be adopted before the new RTP is adopted.

Tahoe City

(1-10 years)

1. Highway 28 corridor improvements which include parking reconfiguration, a parking lot adjacent to Grove Street, a mid-town parking lot, and a parking lot/transit terminal on the 64-Acre Tract. These improvements must be accompanied by reduced parking on Highway 28 to reduce parking friction and improve levels of service through the corridor from D/E to C/D in the year 2005.

2. A traffic control device and intersection reconfiguration at Route 28 and Grove Street.

(10-15 years)

1. Route 89 realignment South of Fanny Bridge crossing the U.S. Forest Service 64-Acre Tract to Route 89 near the Caltrans maintenance yard.

Kings Beach and North Stateline

(1-5 years)

1. Improvements at the intersection of Routes 28/167, including a left turn storage lane on Route 28 to Route 267, and a free right turn lane on Route 28 to Route 267.

Incline Village

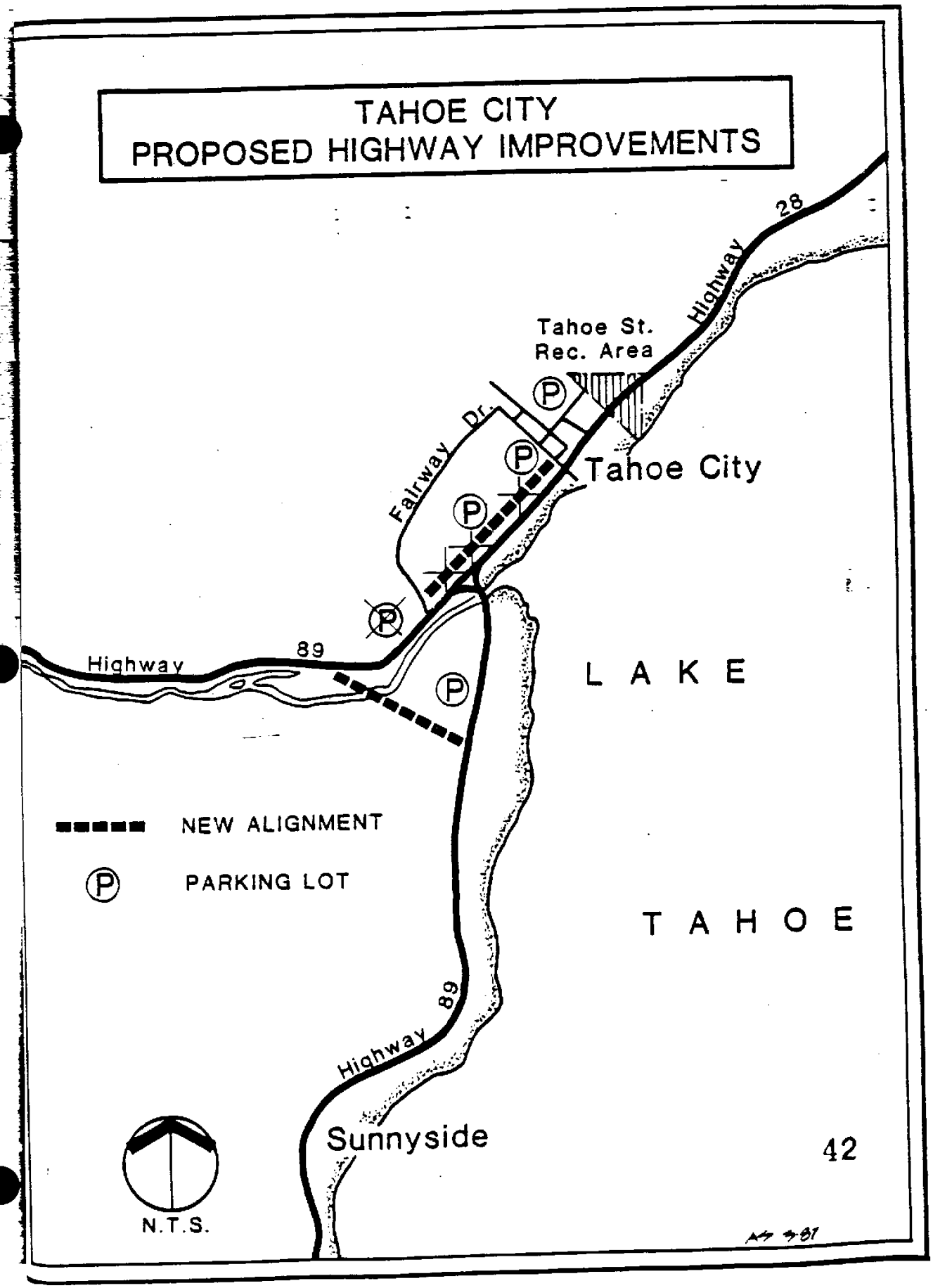
(1-5 years)

1. Expansion from two lanes to three lanes on (one travel lane in each direction with a middle turn lane) Route 28 between the intersection of Lakeshore on the east and Lakeshore on the west (see Figure 52).

Figures 50 through 53 show proposed operational improvements.

Transportation System Management

Transportation System Management (TSM) measures have been identified as additional means for reducing VMT and traffic congestion in the Lake Tahoe Basin. These measures are considered to have equal prioritization.


TAHOE CITY
PROPOSED HIGHWAY IMPROVEMENTS
28
Highway
Tahoe St.
Rec. Area
Fairway Dr.
Tahoe City
89
Highway
L A K E
NEW ALIGNMENT
PARKING LOT
T A H O E
89
Highway
Sunnyside
N.T.S.
42

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MEMORANDUM

April 1, 1991

To: Advisory Planning Commission

From: TRPA Staff

Subject: Proposed SEZ Restoration Project Additions For Volume III Of The 208 Plan

The following is a list of SEZ restoration projects in the Tahoe City Community Plan. Staff is proposing to add these projects to the Water Quality Management Plan, Volume III SEZ Protection and Restoration Program to assist in their implementation.

GWB:rd
4/1/91

AGENDA V.A.

Proposed Additions to Volume III
TRPA 208 Plan

VIII. SEZ RESTORATION PROJECT DESCRIPTION

A. Placer County, California

1. PA 001A, 002: Grove Street Tract
2. PA 002: Tahoe Lake School
3. PA 005: Burton Creek Meadow
4. PA 006: Sierra Pacific Yard
5. PA 024B: Snow Creek
6. PA 158S: Quail Creek
7. PA 158N: Homewood Canyon Creek
8. PA 159: Grand View Avenue
9. PA 166, 167: Ward Creek
*10. PA 001A: Wye Pond
*11. PA 001A: Tahoe City Golf Course
*12. PA 174: 64 Acre Tract
*13. PA 001A: Burton Creek State Park
*14. PA 001A: Caltrans Area
*15. PA 001A: Lands of Sierra
*16. PA 001A, 003: Fairway Drive Fill

* Additions for Tahoe City Community Plan

TAHOE REGIONAL PLANNING AGENCY

SEZ RESTORATION PROJECT DESCRIPTION

PROJECT NAME: Wye Pond

PROJECT NUMBER: PA 001A

TRPA MAP: C-7

WATERSHED NAME (NUMBER): Intervening Area Between Truckee River and Burton Creek (3)

PRIORITY CATEGORY: Medium

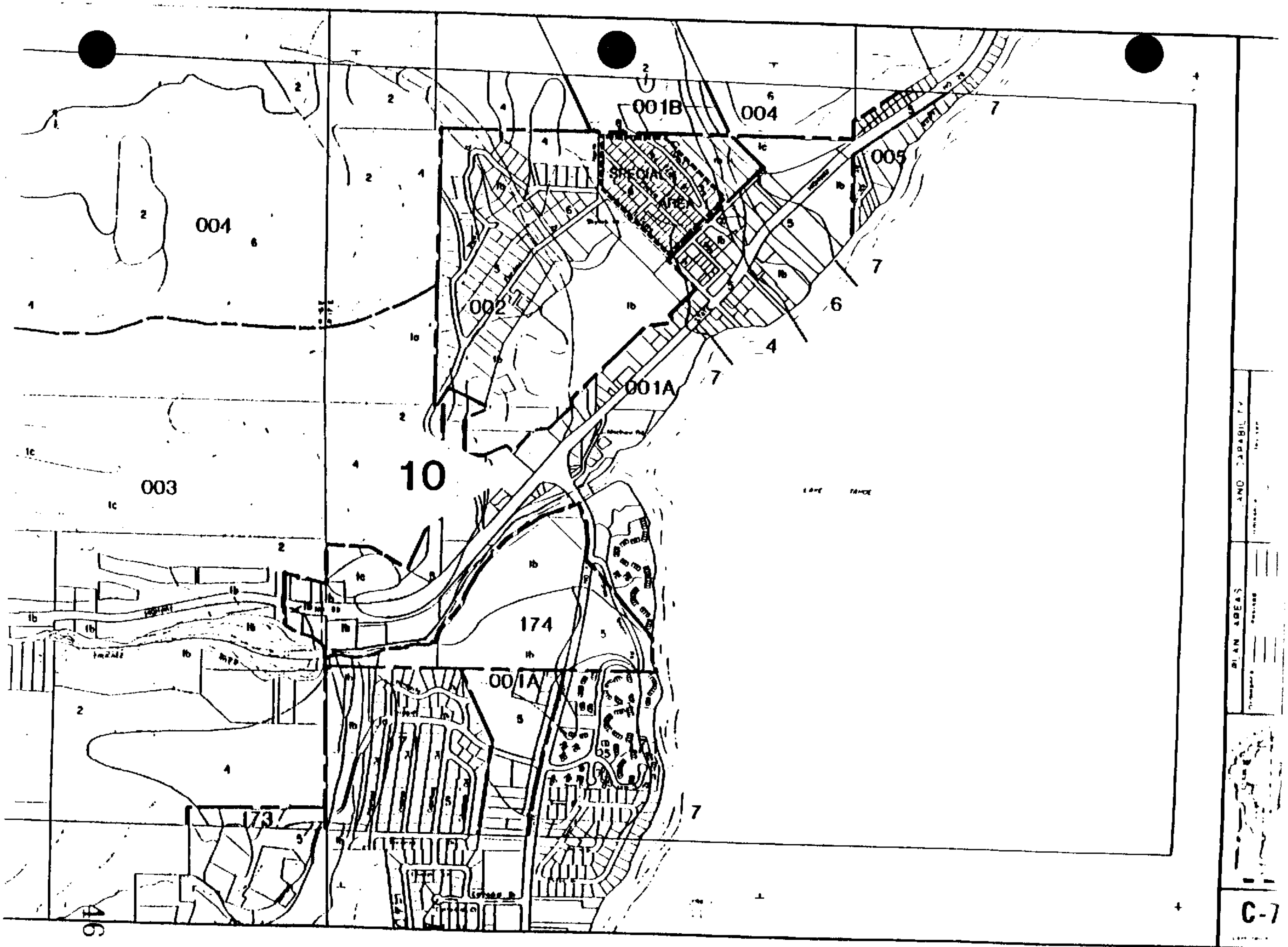
PROJECT LOCATION: The project site is located between the Truckee River and Burton Creek watersheds in Tahoe City, Placer County. The parcel is on the northwest side of State Highway 28, just south of the Wye. A gas station is located on the adjacent parcel to the southwest.

SITE DESCRIPTION/FIELD ANALYSIS: The project site encompasses approximately three acres of fill placed in an SEZ. The lower part of the site has from 12 to 24 inches of compacted fill, covered with asphalt in some areas. Riparian vegetation is re-establishing in the area.

RESTORATION POTENTIAL: The project site has been included in the area-wide drainage plan developed for Tahoe City. A pond and wetland are included in the conceptual plans. A wetland or marsh type restoration has the best potential because of the high ground water present in the area.

IMPLEMENTATION: The California Tahoe Conservancy has proposed to fund a significant portion of the project.

UPDATE: This project description was added to the SEZ Protection and Restoration Program on May 15, 1991.



TAHOE REGIONAL PLANNING AGENCY

TAHOE REGIONAL PLANNING AGENCY

SEZ RESTORATION PROJECT DESCRIPTION

PROJECT NAME: Tahoe City Golf Course

PROJECT NUMBER: PA 001A

TRPA MAP: C-7

WATERSHED NAME (NUMBER): Intervening Area Between Truckee River and Burton Creek (3)

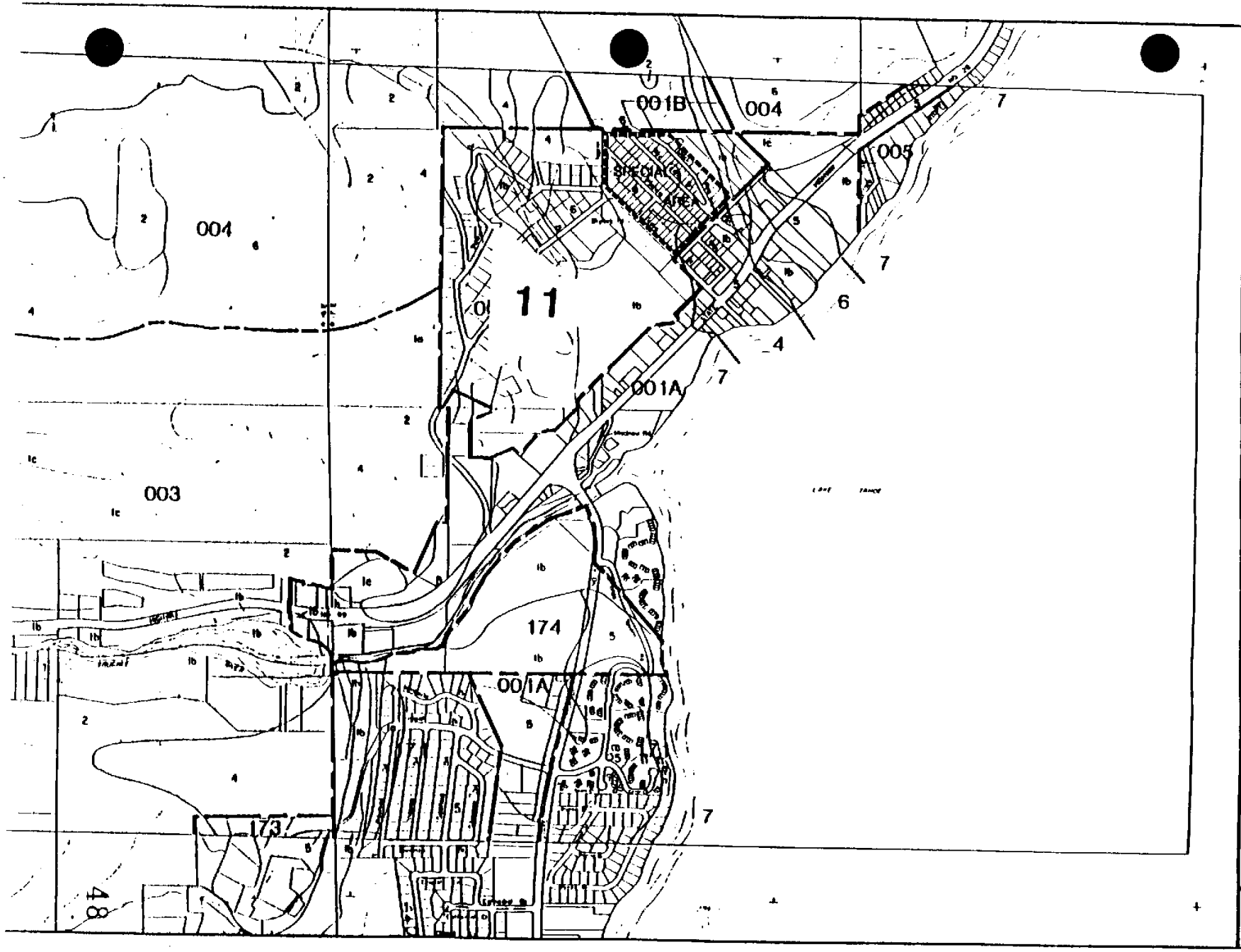
PRIORITY CATEGORY: Medium

PROJECT LOCATION: The project site is located between the Truckee River and Burton Creek watersheds in Tahoe City, Placer County. The parcel lies between Fairway Drive and Grove Street, just northwest of the commercial area on State Highway 28.

SITE DESCRIPTION/FIELD ANALYSIS: The golf course includes approximately 5 acres of areas which could be restored. Ponds could be established and the channel which drains through the area could be improved with riparian vegetation. Also, the drainage in front of the Tahoe Lake School on Grove Street could be diverted to the golf course and returned to a more naturally functioning SEZ.

RESTORATION POTENTIAL: Since most of the golf course is mapped 1B (SEZ), any restoration projects involving the use of riparian vegetation will have excellent potential.

UPDATE: This project description was added to the SEZ Protection and Restoration Program on May 15, 1991.



TAHOE REGIONAL PLANNING AGENCY

LAND CAPABILITY

PLAN AREAS

C-7

TAHOE REGIONAL PLANNING AGENCY

SEZ RESTORATION PROJECT DESCRIPTION

PROJECT NAME: 64 Acre Tract

PROJECT NUMBER: PA 174

TRPA MAP: C-7

WATERSHED NAME (NUMBER): Truckee River (110) and Intervening Area Between the Lake (107)

PRIORITY CATEGORY: High

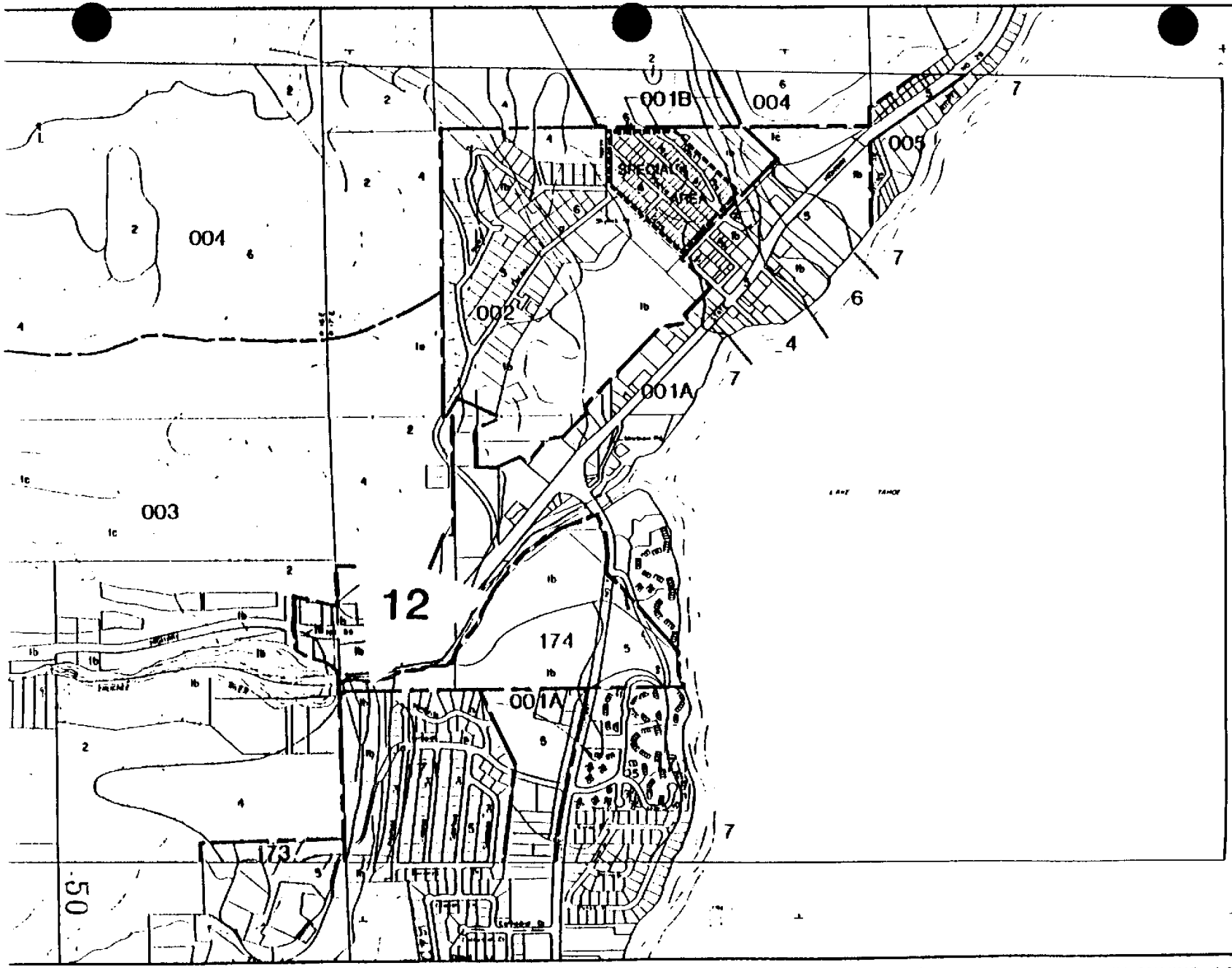
PROJECT LOCATION: The project site is located along the Truckee River in Tahoe City. The site lies between State Highway 89, just southwest of the Wye.

SITE DESCRIPTION/FIELD ANALYSIS: The 64 Acre Tract includes approximately 4 acres of areas which could be restored. Streambank stabilization is a high priority, especially if riparian vegetation is established. Also, numerous dirt road and trails should be stabilized and revegetated, especially those in the mapped SEZ areas.

RESTORATION POTENTIAL: If access to the Truckee River is provided and controlled, then the streambank stabilization has good potential.

IMPLEMENTATION: The U.S. Forest Service has indicated a strong interest in restoring any SEZ in the Tahoe Basin, especially on the 64 Acre Tract.

UPDATE: This project description was added to the SEZ Protection and Restoration Program on May 15, 1991.



TAHOE REGIONAL PLANNING AGENCY

TAHOE REGIONAL PLANNING AGENCY

SEZ RESTORATION PROJECT DESCRIPTION

PROJECT NAME: Burton Creek State Park

PROJECT NUMBER: PA 001A

TRPA MAP: C-7

WATERSHED NAME (NUMBER): Intervening Area Between Truckee River and Burton Creek (3)

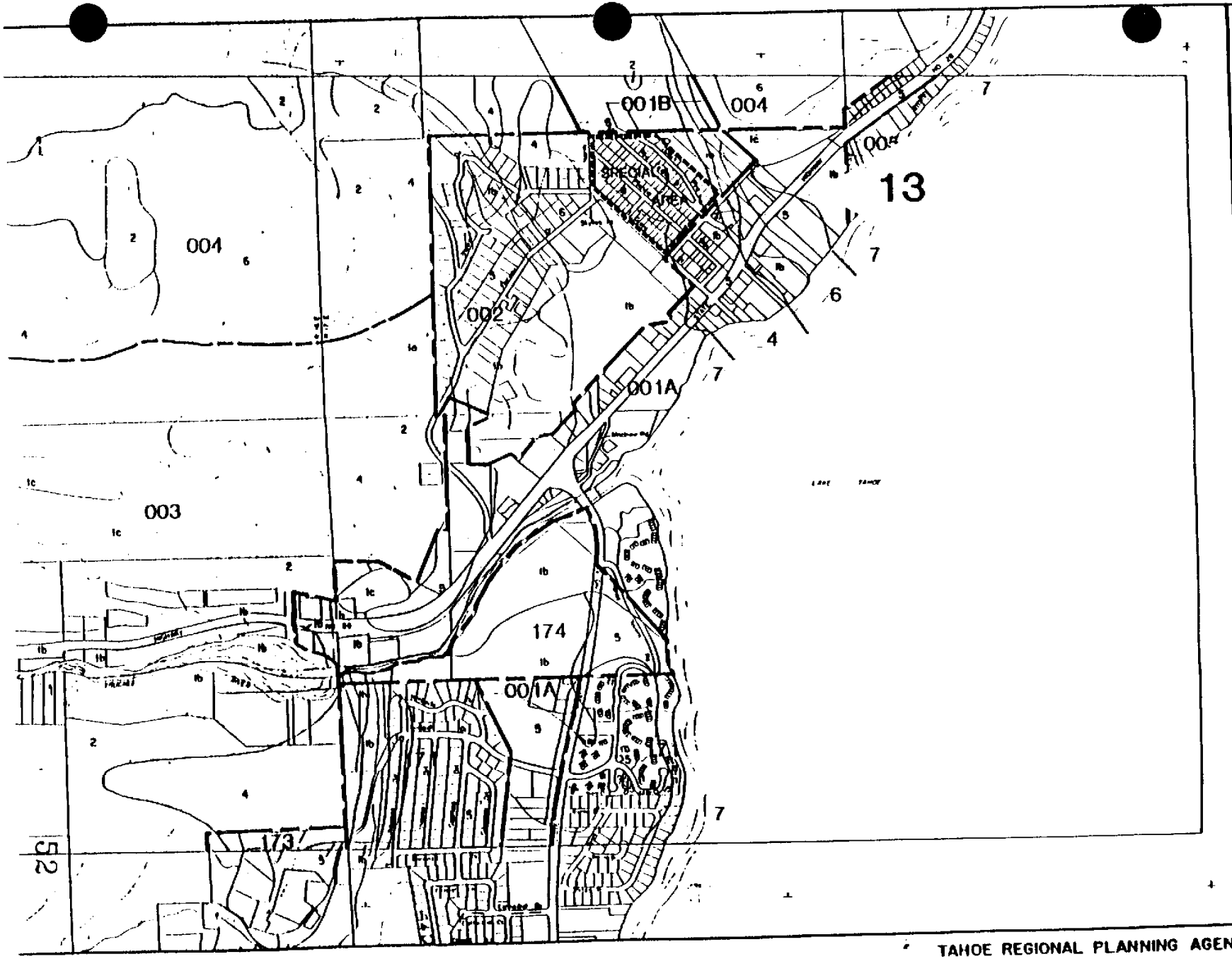
PRIORITY CATEGORY: Low

PROJECT LOCATION: The project site is located between the Truckee River and Burton Creek watersheds in Tahoe City, Placer County. The parcel is divided by State Highway 28 at the east end of Tahoe City.

SITE DESCRIPTION/FIELD ANALYSIS: The project site encompasses approximately one acre of disturbed, compacted areas on both sides of the highway.

RESTORATION POTENTIAL: Since the project areas are mapped 1B (SEZ), any restoration projects involving the establishment of vegetation should have good potential. Also, the areas are visible from the highway corridor and any restoration will provide a scenic benefit.

UPDATE: This project description was added to the SEZ Protection and Restoration Program on May 15, 1991.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TAHOE REGIONAL PLANNING AGENCY

TAHOE REGIONAL PLANNING AGENCY

SEZ RESTORATION PROJECT DESCRIPTION

PROJECT NAME: Caltrans Area

PROJECT NUMBER: PA 001A

TRPA MAP: C-7

WATERSHED NAME (NUMBER): Truckee River (110)

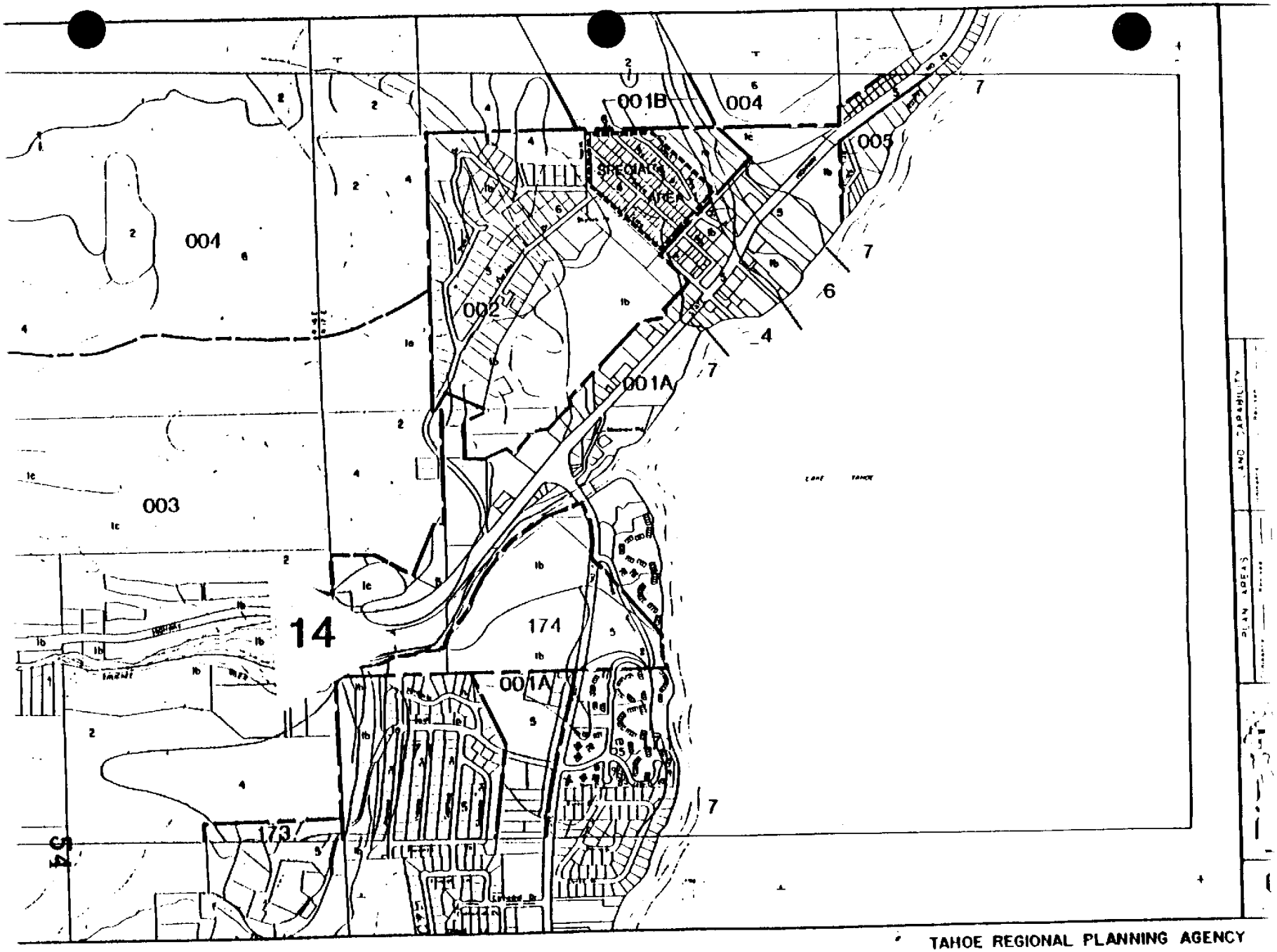
PRIORITY CATEGORY: Medium

PROJECT LOCATION: The project sites are located along the Truckee River in Tahoe City.

SITE DESCRIPTION/FIELD ANALYSIS: Approximately 7.4 acres of mapped SEZ (1B) could be restored. Examples include construction of a new Wye, State Highway 89 improvements, relocation of rafters and streambank stabilization. In addition, strong consideration should be given to the relocation of the equipment yard and other development to a higher capability site than the present location in the floodplain of the Truckee River.

RESTORATION POTENTIAL: The streambank stabilization project has good potential if the relocation of the rafters is completed and access to the river controlled. This area may also be useful for the treatment of storm runoff.

UPDATE: This project description was added to the SEZ Protection and Restoration Program on May 15, 1991.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LAND CAPABILITY
PLAN AREAS
TAHOE REGIONAL PLANNING AGENCY

TAHOE REGIONAL PLANNING AGENCY

SEZ RESTORATION PROJECT DESCRIPTION

PROJECT NAME: Lands of Sierra

PROJECT NUMBER: PA 001A

TRPA MAP: C-7

WATERSHED NAME (NUMBER): Truckee River (110)

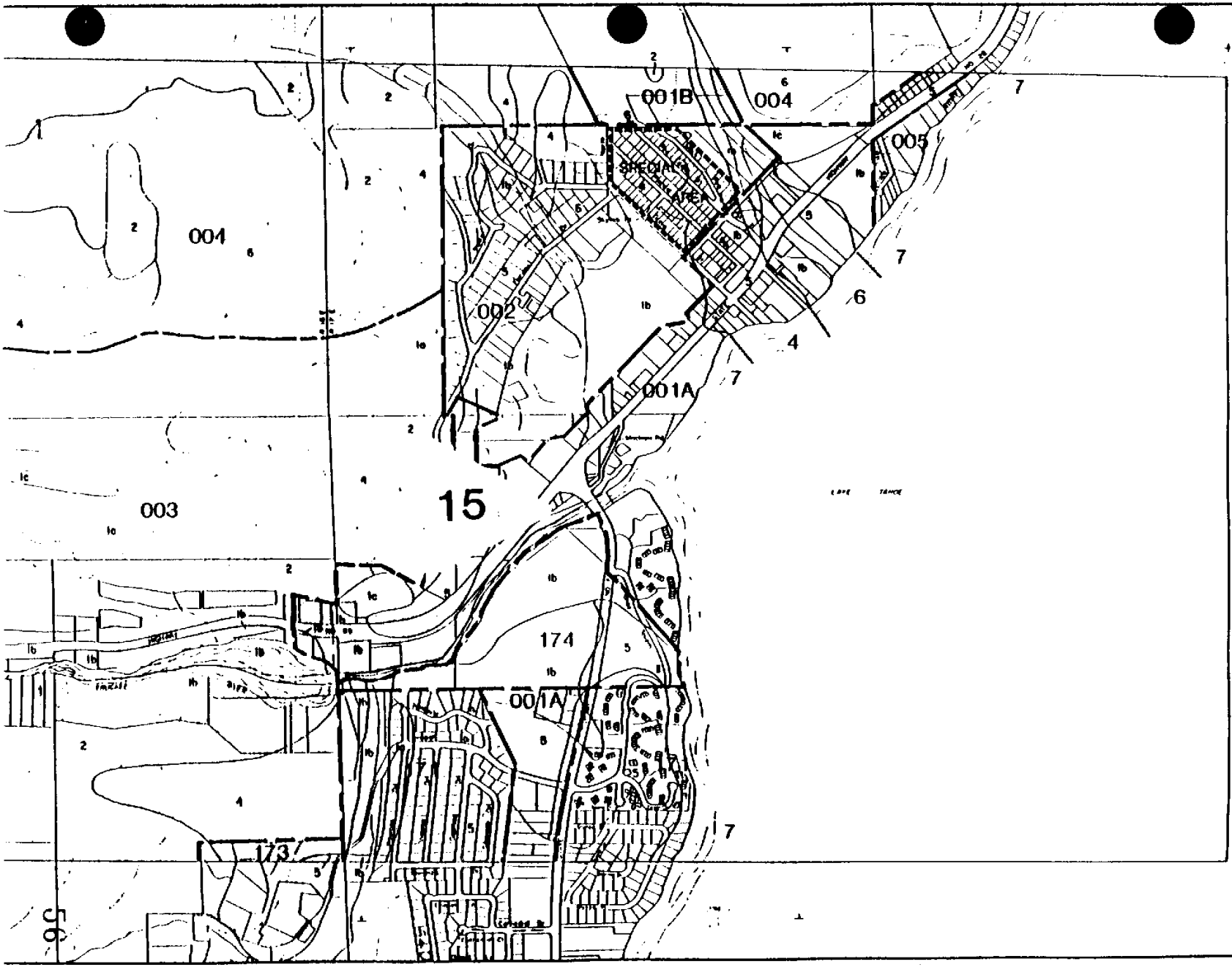
PRIORITY CATEGORY: Medium

PROJECT LOCATION: The project sites are located along the Truckee River in Tahoe City.

SITE DESCRIPTION/FIELD ANALYSIS: Approximately 5 acres of SEZ (1B) could be restored. The areas are presently disturbed, compacted, and lacking sufficient vegetative cover. Stream bank stabilization should be conducted using riparian plant species.

RESTORATION POTENTIAL: The stream bank stabilization has good potential if the relocation of the rafters is completed and access to the river controlled.

UPDATE: This project description was added to the SEZ Protection and Restoration Program on May 15, 1991.



TAHOE REGIONAL PLANNING AGENCY

TAHOE REGIONAL PLANNING AGENCY

SEZ RESTORATION PROJECT DESCRIPTION

PROJECT NAME: Fairway Drive Fill

PROJECT NUMBER: PA 001A, 003

TRPA MAP: C-7

WATERSHED NAME (NUMBER): Intervening Area Between Truckee River and Burton Creek (3)

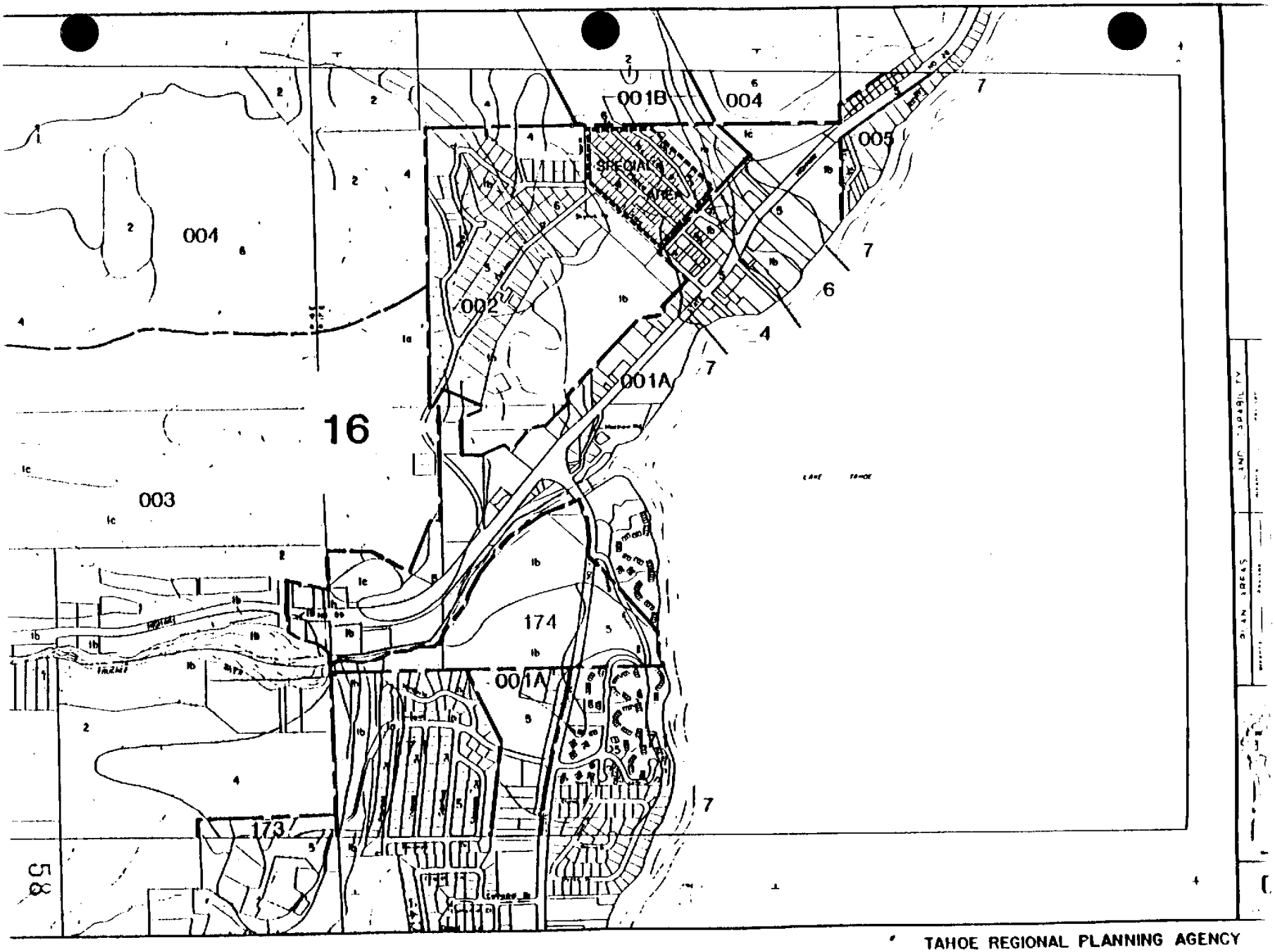
PRIORITY CATEGORY: Low

PROJECT LOCATION: The project site is located on the east side of Fairway Drive, just south of the Fairway Community Center.

SITE DESCRIPTION/FIELD ANALYSIS: The project areas are one acre in size and have been covered with approximately 5 feet of fill. The area probably functioned as an SEZ prior to the placement of fill.

RESTORATION POTENTIAL: The area would function as an SEZ if the fill were removed and riparian vegetation established.

UPDATE: This project description was added to the SEZ Protection and Restoration Program on May 15, 1991.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TAHOE REGIONAL PLANNING AGENCY

TAHOE REGIONAL PLANNING AGENCY

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MEMORANDUM

March 29, 1991

To: Advisory Planning Commission

From: TRPA Staff

Subject: Amendment Of Section 22.4 Additional Height For Certain Buildings

Background: At the March 1991 APC meeting, the APC considered proposed amendments to Section 22.4 of the Code of Ordinances regarding additional height for buildings containing certain recreation uses. The amendments were intended to allow up to four feet of additional height for buildings containing recreation uses which needed the additional height for functional purposes. The uses were limited to participant sports facilities, recreation centers, and sport assembly. The amendments were proposed to be available to only those portions of the building function requiring it. The APC continued action on the item and requested staff to consider changes to the proposal which would provide more flexibility in its application.

Discussion: Based on the APC's direction and on discussions with the TRPA height ordinance drafting group, staff proposes four possible solutions. Each of the four alternatives include a discussion on relative opportunities and limitations. For all alternatives, the additional height findings (1), (2), (3), (4) and (7) as set forth in Section 22.7 (see Attachment A) would be made.

Staff would like the APC to recommend to the Governing Board one preferred alternative, or a variation thereto.

Alternative 1: Allow Additional Building Height for Certain Recreation Uses Without the Building Function Requirement.

This alternative would permit the additional height for the certain recreation uses of participant sports facilities, recreation centers and sport assembly. The additional height would not be limited to those portions of the building function requiring it.

AS:rd
3/29/91

Opportunities:

-- Could be in place quickly in order to be effective for this summer's building season
-- Provides maximum flexibility to the designer as to how to use the additional height; relatively easy to plan check

Limitations:

-- Gives no regulatory control over building bulk and scale. This is especially a problem in large public buildings which often exceed 150 feet in length or width
-- Additional height may be used for secondary uses which have no functional requirement for the added height
-- May only be a temporary amendment which would be amended again as the complete package of height ordinance amendments is considered

Alternative 2: Allow Additional Building Height for Certain Recreation Uses Provided the Building Can Meet a Maximum Visual Magnitude Rating

This alternative would permit the additional height to be used throughout the building provided that the building meets the maximum visual magnitude (VisMag) rating for its applicable visual environment type when viewed from public recreation areas, public streets or Lake Tahoe.

Opportunities:

-- Permits maximum levels of design freedom without limiting the additional height to specific portions of buildings
-- Provides adequate level of regulatory control over building bulk, siting and scale issues without dictating a single design solution; can be used as a basis by which to make scenic resources and community design threshold findings
-- Visual magnitude ratings would be applied based on visual environment type: urban, rural transition and rural; i.e., buildings located in urban areas would not be evaluated against transition or rural ratings
-- Its use could be expanded to public service and tourist accommodation uses which are eligible for the same additional height bonus
-- Is considered by the height ordinance drafting group to be an appropriate type of regulatory control to include in the height ordinance amendment package

Limitations:

-- Requires some additional field testing to ensure the urban VisMag ratings are appropriately calibrated

-- Requires amendment of Design Review Guidelines to add urban and rural transition VisMag rating tables (rural environment ratings are already in the document)

Alternative 3: Permit Certain Recreation Uses Additional Building Height at 150% of That Required for Building Function

Under this alternative, additional height would be granted for the certain recreation uses listed above in Alternative 1. The additional height would be limited to the specific areas of the building requiring it plus an additional 50% of that area to be used on other parts of the building at the designer's discretion.

Opportunities:

-- Provides a moderate level of design flexibility in making a transition from portions of a building which require the additional height to those that do not
-- Retains some level of control over bulk and scale of large buildings by not allowing the entire building the additional height irrespective of need
-- Could be in place quickly in order to be used for this building season

Limitations:

-- Has not been empirically tested and lacks a strong connection between the rule and actual building needs (i.e., why not 40% or 60%, etc ?)
-- May only be a temporary amendment which would be amended again as the complete package of height ordinance amendments is proposed
-- Could result in conflicting provisions with other Code sections (e.g., the ability to use this section is permitted by ordinance yet Section 30.12, Maintenance of Threshold Ratings, may not allow)

Alternative 4: Amend Chapter 18, Permissible Uses to Include Recreation Centers as a Public Service Use

This alternative would reclassify recreation centers as a form of public service use under Chapter 18. It would amend the definition of community center (public service use) to include recreation centers which are open to the general public and are owned or operated by public or quasi-public entities. As a public service use, the benefits of additional height under Section 22.4 are already in place.

Opportunities:

-- Removes the immediate need to amend Chapter 22

-- Allows the height ordinance amendments to be prepared and addressed as a complete package later this year when all outstanding issues have been looked at together

Limitations:

-- From a land use definition and consistency standpoint, this may solve an immediate problem, but be the cause of others down the line
-- Is not noticed for public hearings before the APC or Governing Board; this would delay the amendment by at least a month

Environmental Documentation:

Based on the APC direction, staff will prepare appropriate environmental documentation and findings on the preferred alternative.

Staff Recommendation: Based on the public hearing and APC input, staff will either:

1. Forward the APC's preferred alternative to the Governing Board with an APC recommendation for approval; or

2. Prepare refinements of one or more of the alternatives for APC review at an upcoming meeting.

Please contact Andrew Strain at (702) 588-4547 if you have any questions regarding this agenda item.

TAHOE REGIONAL PLANNING AGENCY

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March 29, 1991

To: Advisory Planning Commission

From: Agency Staff

Subject: Amendment to Chapter 37 Relative to Stream Environment Zone

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Background

During the ongoing evaluation of the Individual Parcel Evaluation System (IPES), TRPA staff has identified a technical problem in the criteria for identifying stream environment zones (SEZs), primarily with respect to the secondary SEZ indicators. This problem makes it technically impossible to classify certain wet areas as SEZs. There are also other minor technical flaws in the SEZ identification criteria.

The staff is requesting a recommendation from the APC supporting the proposed amendments.

Discussion

The Code of Ordinances employs, incorrectly, the terminology "alluvial soil types" to identify soils which owe their major characteristics to the presence of surface and subsurface water. The correct definition of alluvial soil types are those soils which were formed by the process of deposition by flowing water. Of the 16 soil map units identified as alluvial soils in the Tahoe Basin Area Soil Survey (Rodgers, 1974), only six are principally influenced by the presence of surface water or subsurface water within 40 inches of the surface.

TRPA staff sent the proposed amendments to the Chapter 37 SEZ indicators section, which were presented at the March 1991 APC meeting, to the members of the IPES Technical Committee for their review and comment. Generally, the members of the technical committee support amending the language of the Code to clear up confusion over the alluvial soil type references, and employ more appropriate terminology relating to wet soil conditions. Based on our continued review and the comments received from the IPES Technical Committee (attached), TRPA staff has rewritten the amending language of the Code, eliminating the reference to alluvial soil types altogether from the secondary indicators criteria.

GSS:cj
3/29/91

The existing criteria for identification of SEZs define four secondary indicators: (1) designated flood plain, (2) groundwater between 20 and 40 inches, (3) secondary riparian vegetation, and (4) one of the following alluvial soils: Lo, Co, and Gr. (See attachment for details.) The boundaries of an SEZ may be defined as the outermost limits where three secondary indicators coincide, or, if Lo, Co, or Gr soils are present, the outermost limits where two secondary indicators coincide. This language prevents certain wet soils, such as seeped soils and some of the unclassified soil variants known in IPES as "xxx" soils, which have groundwater or evidence of groundwater between 20 and 40 inches, from being classified as SEZ areas when they are in association with riparian vegetation.

In the field, TRPA staff have identified as SEZs many areas based on the presence of the three indicators: evidence of groundwater between 20 and 40 inches, secondary riparian vegetation, and Lo, Co, or Gr soils. However, there are many areas with the same physical characteristics in which the soils do not match the descriptions of Lo, Co, or Gr soils. Under the existing criteria, these areas cannot be classified as SEZs, even though their soils are wet variant inclusions having the same wet soil conditions as the named "alluvial" soil types.

To make the secondary SEZ indicators consistent with generally accepted criteria defining wet soil conditions, the test for wet soil conditions should consist mainly of evidence of groundwater within 40 inches of the surface.

The proposed amendments to Chapter 37 of the Code are attached. These amendments will make the Code technically correct, allow for uniform application of SEZ criteria, and protect sensitive areas which have wet soil conditions and support riparian vegetation communities.

When these recommended Code amendments are adopted by the Governing Board, staff will propose corresponding amendments to the Water Quality Management Plan ("208 plan"). Since the proposed Code amendments create more stringent criteria, TRPA can implement them immediately without waiting for 208 plan amendments to take effect.

If you have any questions or comments on this agenda item, please contact Gary Shellhorn or Joe Pepi at (702) 588-6787.

Clarence M. Skau
Consultant

Hydrology - Forestry
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March 22, 1991

Mr. Gary Shellhorn
Tahoe Regional Planning
Post Office Box 1038
Zephyr Cove, Nevada 89448-1038

Gary,

Re your letter of March 13, 1991 to the IPES Technical Committee regarding "Proposed Amendments to Chapter 37, relating to SEZ Indicators":

1. My first priority is to protect sites with signs of groundwater within the 0-40 inch depth zone. The 40 inch demarcation is, if memory serves correctly, correlated with depth of ordinary construction activities. If subsurface flow is interdicted, then a suite of problems is apt to result; e.g., reduced nutrient uptake, increased erosion, higher peak flows, etc.

2. To be boxed in by artificial constraints, such as tying SEZ delineation to known "alluvial soil types", was never my intent.

3. Common sense should allow inclusion of xxx soils, showing riparian vegetation and subsurface water within the 40 inch zone, as SEZ.

4. By all means, we need to correct the definition of "alluvial soil types".

5. 37.3.A.4 and 37.3.A.8 introduce two new features - low chroma values and existing ground surfaces. The U.S. Army Corps Engineers also uses low chroma values for wetlands delineations. They do, however, specify values as 1 to 2 with a few caveats. Should we also get specific? Also, what does the term "existing" clarify? I'd like to explore what issues are involved, or what the ramifications are.

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6. 37.3.A.15. If there is evidence of groundwater within 40 inches, why do we need to specify soil types? Also, by implication we are excluding xxx soils. With this line of thinking, why not exclude 37.3.B(2)(d) altogether? (It's confusing in the presentation. Is (d) to be included as shown? Then why cross it out? It appears you mean to include it as shown in 37.3.A.15.)

Best Regards,

C. M. Skau

C. M. Skau

CMS:js

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United States Department of Agriculture

Soil Conservation Service

4700 Northgate Blvd., Suite 105
Sacramento, CA 95834
916-927-1384

Date: March 14, 1991

SUBJECT: SOI-Soil Management Support Services - Review of IPES Amendment to Chapter 37 Relative to SEZ Indicators

TO: Gary Shellhorn, TRPA, Zephyr Cove, NV

The following are my comments on proposed changes to Chapter 37 as related to SEZ indicators.

1. 37.3A - I agree with the concept of doing away with the terminology of "alluvial soils." It isn't important that they are alluvial, but that they have wetness properties.

2. 37.3A (4) - Groundwater between 20-40 inches. I agree with the concept of adding mottles as an indicator of wetness. However, not all "low chroma mottles" indicate wetness. Maybe the wording could be "groundwater or evidence of groundwater as indicated by low chroma mottles between 20 and 40 inches below existing ground surface." I would drop all reference to drainage class names (somewhat poorly; poorly drained, etc.) as these terms were not used consistently as to depth to water table.

3. 37.3A (8) - Near surface groundwater. As above, reword to say, "groundwater or evidence of groundwater as indicated by low chroma mottles within 20 inches of the existing ground surface." Drop the reference to poorly drained soil.

4. 37.3A (12) - Primary Soil Map Units. If I were starting from the beginning on writing the rules I probably would just think in terms of criteria and not use map units as part of the criteria. When map units are used you get into the situation that most of the map unit interprets one way and a small part another way; i.e., when the map unit says the water table is 12 to 24 inches, the 12 to 20 inch part meets the primary criteria of having a water table of less than 20 inches but the 20 to 24 part would meet the secondary soil map unit criteria of having a water table at 20 to 40 inches. If one understands the concept the primary and secondary map unit this isn't a problem. Since the map units have been used, I suspect it would be hard to get rid of them now. As long as one realizes what the concept is there isn't confusion.

5. 37.3A (15) - Secondary Soil Map Units. May want to change to read, "--- evidence of groundwater <u>between</u> 20 to 40 inches;" instead of "within 40 inches." When the water table is above 20 inches it would meet the primary soil map unit concept.

I agree that Jabu coarse sandy loam, seeped (JbD) should be a secondary map unit based on water table depth as opposed to only moderately well drained designation.

6. Maybe this is a good time to address the subject of "relict soil mottles." By this I mean the presence of low chroma mottles that formed when the soil was much wetter than it is now. Often this occurs when the present soil has deep cuts made in it and the present soil consists of old lake sediments that formed in wet conditions. These relict mottles may be within 20 inches of between 20 to 40 inches. If they are between 20 to 40 inches other indicators are needed for it to be called a secondary indicator. However, in the case of the key indicators only one is required. If the one is "Evidence of near surface groundwater," their low chroma motties should be evaluated as to when they got there. If other evidence of wetness is present they should be counted as evidence of wetness. This wasn't a problem for the IPES teams as the concept of relict mottles was explained.

7. 37.3B (1) and (2)- Identification of SEZ. The rewording of the requirement to have 2 of 3 rather than 3 of 4 indicators is good. In this way you aren't counting the same thing (depth to water table and certain soils which also meet a criteria because of their depth to water table) twice hit by a different name.

In conclusion, I don't think these changes reflect any differences in how the parcels were evaluated. They merely clarify some wording. The addition of the Jabu (JbD) was recognized before and could be handled as an "XXX" soil that meet the criteria.

Wayne B Sheldon

WAYNE B. SHELDON
Area Soil Scientist

Attachment

cc:
Wm. O. Beatty, SCS, Sacramento
Leonard W. Jolley, SCS, South Lake Tahoe

Age Class: Specific age make-up of a forest stand.

Agency: The Tahoe Regional Planning Agency, including the Governing Board and staff.

Agency of Jurisdiction: As used in Chapter 16, government agency with responsibility for managing land, such as the Forest Service, the state parks departments, City of South Lake Tahoe, and California Tahoe Conservancy.

Airfields, Landing Strips and Heliports: See Chapter 18.

Allocation: An apportionment of additional development opportunity for residential, commercial, tourist accommodation, and certain recreational projects.

Allowable Land Coverage: See Section 20.3.

~~Alluvial Soil Type: All of the following soil types as defined in the United States Department of Agriculture Soil Survey for Lake Tahoe, as identified on Agency maps, or as determined by the Agency to be present in an area: Beam Alluvial land (Bo), Elmira loamy coarse sand, wet variant (Ev), Celio gravelly loamy coarse sand (Ce), Marsh (Mh), Gravelly alluvial land (Gr), Fill land (Fd), Seeped soils, and Beaches (Be).~~

Alternative Fuels: Motor vehicle fuels other than gasoline or diesel such as neat methanol or propane.

Amusement and Recreational Services: See Chapter 18.

Animal Control Ordinance: Regulations established by a city, county or state government which deal with animals.

Animal Husbandry Services: See Chapter 18.

Apartment: A residential complex of two or more residential units under single ownership, usually, but not always, sharing the same structure, water distribution system, sewer collection system, parking facilities, open space and recreational amenities.

Approved Plant Species: Plants designated by TRPA as acceptable species for use in landscaping and revegetation. Such species are usually, but not always, indigenous to the Region. See also Plant List.

Appurtenant Structure: A fixed structure customarily associated with and attached to a main structure.

Area of Wave Run-Up: The area landward of the shoreline that is subjected to wave run-up during high water conditions and an extreme wind event. An extreme wind event is an 80 miles per hour onshore wind of one hour duration.

37.3 Procedure For Establishing SEZ Boundaries And Setbacks: The IPES field evalution teams shall use the following procedures and definitions for purposes of determining the presence and boundaries of an SEZ and establishing SEZ setbacks.

37.3.A Definitions: The definitions are as follows:

~~(1) Alluvial Soils - All the following soil types owe their major characteristics to the presence of surface or subsurface water:~~
~~(a) Loamy alluvial land (Lo)~~
~~(b) Elmira loamy coarse sand, wet variant (Ev)~~
~~(c) Celio gravelly loamy coarse sand (Co)~~
~~(d) Marsh (Mh)~~
~~(e) Gravelly alluvial land (Gr)~~
~~(f) Fill land (Fd)~~

(1) ~~(2)~~ Confined - Stream types classified under major categories A and B, and stream type C2, as defined in the report entitled "A Stream Classification System," David L. Rosgen, April, 1985.

(2) ~~(3)~~ Designated Flood Plain - The limits of the Intermediate Regional Flood where established for creeks by the U.S. Army Corps of Engineers, or the limits of the 100-year flood where established for creeks by the U.S. Army Corps of Engineers.

(3) ~~(4)~~ Ephemeral Stream - Flows sporadically only in response to precipitation, with flows lasting a short time.

(4) ~~(5)~~ Groundwater Between 20-40 Inches - Groundwater or evidence of groundwater as indicated by low chroma mottles between 20 and 40 inches below the existing ground surface ~~(somewhat poorly drained soil)~~.

(5) ~~(6)~~ Intermittent Stream - Flows in response to precipitation or snow melt.

(6) ~~(7)~~ Lake - A water body greater than 20 acres in size, exceeding two meters deep at low water and lacking trees, shrubs, persistent emergents, emergent mosses or lichens with greater than 20 percent aerial coverage.

(7) Low Chroma Mottles - Mottles that have Munsell Soil Color Chart chromas of 2 or less, moist and value, moist of 4 or more. This means that the horizon that has such mottles is saturated with water at some time of the year or the soil is artificially drained. During this period of saturation the temperature of the horizon must be above biological zero, which is about 41 degrees F, at least part of the time.

(8) Man-Made Channel - A channel constructed by man for the purpose of conveying water or a channel created by water being discharged from a man-made source, such as a culvert or pipe.

(9) Near Surface Groundwater - Groundwater or evidence of ground water as indicated by low chroma mottles within 20 inches of the existing ground surface ~~(poorly-drained-soil)~~.

(10) Perennial Stream - Permanently inundated surface stream courses. Surface water flows throughout the year except in years of infrequent drought. Perennial streams shall be those shown as solid blue lines on USGS Quad Maps, or streams determined to be perennial by TRPA.

(11) Pond - A standing water body less than 20 acres in size and/or less than two meters deep at low water.

(12) Primary Riparian Vegetation - The following vegetative community types as identified in the 1971 report entitled "Vegetation of the Lake Tahoe Region, A Guide for Planning:"

(a) Type 0: Open water - Open water, Swamps and pools and Vernal pools.
(b) Type 2: Herbaceous - Wet marsh or meadow and Sphagnum bog.
(c) Type 7: Riparian shrub - Willow thicket and Alder thicket.
(d) Type 9: Broadleaf - Low elevations.

(13) ~~(12)~~ Primary Soil Map Units - The following soil map units owe their major characteristics to the presence of near surface groundwater and are considered primary indicators of soil wetness:

(a) Elmira loamy coarse sand, wet variant (Ev)
(b) Marsh (Mh)

(14) ~~(13)~~ SEZ Setbacks - A strip of land adjacent to the edge of a SEZ, the designated width of which is considered the minimum width necessary to protect the integrity of the various characteristic of the SEZ. The width of the setback shall be established in accordance with the procedure set forth in Subsection 37.3.D.

(15) ~~(14)~~ Secondary Riparian Vegetation - The following vegetative types as identified in the 1971 report entitled "Vegetation of the Lake Tahoe Region, A Guide for Planning:"

(a) Type 2: Herbaceous - Wet mesic meadow.
(b) Type 9: Broadleaf - High elevations.
(c) Type 19: Lodgepole - Wet type.

(16) ~~(15)~~ Slope Condition - The condition of the slope located adjacent to the stream channel or edge of the SEZ shall be defined as follows. The extent of existing slope protection, which is defined as the percent cover of original duff layer, down logs, low growing vegetation or rock fragments greater than 1-2 inches in diameter, shall be given primary consideration when determining slope condition.

(a) Good - Slopes show little or no evidence of surface (sheet, rill, gully) erosion or mass wasting. Slopes are typically covered 90 percent or more with original duff layer, down logs, slash, low growing vegetation or rock fragments greater than 1-2 inches in diameter. Slope gradient is commonly less than 30 percent. Soil horizons are usually cohesive and consolidated.

(b) Average - Slopes show evidence of surface (sheet, rill, gully) erosion or mass wasting over 5 to 25 percent of the slope surface. Slopes are typically covered between 50 to 90 percent with original duff layer, down logs, slash, low growing vegetation or rock fragments greater than 1-2 inches in diameter. Slope gradient is commonly between 30 and 70 percent. Soil horizons are typically moderately cohesive and consolidated.

(c) Poor - Slopes show evidence of active and pronounced surface (sheet, rill, gully) erosion or mass wasting over more than 50 percent of the slope surface. Slopes are typically covered less than 50 percent with original duff layer, down logs, slash, low growing vegetation or rock fragments greater than 1-2 inches in diameter. Slope gradient is often greater than 70 percent. Soil horizons are typically non-cohesive and unconsolidated. Evidence of seeping is often present.

(17) ~~(16)~~ Terrace - A moderately flat land area, above the flood plain, generally less than 20 percent slope.

(18) ~~(17)~~ Unconfined - Stream types classified under major categories C (excluding stream type C2), D and E as defined in the report entitled "A Stream Classification System," David L. Rosgen, April 1985.

37.3.B Identification: A stream environment zone (SEZ) shall be determined to be present if any one of the following key indicators is present or, in absence of a key indicator,

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if any ~~three~~ two of the following secondary indicators are present. Plant communities shall be identified in accordance with the definitions and procedures contained in the 1971 report entitled "Vegetation of the Lake Tahoe Region, A Guide for Planning."

(1) Key Indicators: Key indicators are:

(a) Evidence of surface water flow, including perennial, ephemeral and intermittent streams, but not including rills or man-made channels;
(b) Primary riparian vegetation;
(c) Groundwater or evidence of near surface groundwater;
(d) Lakes or ponds;
(e) Beach (Be) soil; or
(f) One of the following primary ~~alluvial~~ soils map units:

(i) Elmira loamy coarse sand, wet variant (Ev).
(ii) Marsh (Mh).

(2) Secondary Indicators: Secondary indicators are:

(a) Designated 100 year flood plain;
(b) Groundwater or evidence of groundwater between 20 and 40 inches; ~~or~~

~~(d) one of the following alluvial soils:~~

~~(i) loamy alluvial land (Lo);~~
~~(ii) Celio gravelly loamy coarse sand (Co);~~
~~(iii) Gravelly alluvial land (Gr);~~

(c) Secondary riparian vegetation.

37.3.C Boundaries: The boundaries of an SEZ shall be the outermost limits of the key indicators; or the outermost limits where ~~three~~ any two secondary indicators coincide, ~~or, if Lo, Co, or Gr soils are present, the outermost limits where two secondary indicators coincide,~~ whichever limits establish the widest SEZ at any particular point. The outermost boundaries of a stream shall be the bank full width of such stream, which shall be defined as the level of frequent high flow, i.e., the level of flood with a recurrence interval of approximately 1.5 years.

TAHOE REGIONAL PLANNING AGENCY

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MEMORANDUM

March 28, 1991

To: Advisory Planning Commission

From: TRPA Staff

Subject: Approval of Meyers Preliminary Community Plan

Proposed Action: In cooperation with El Dorado County, staff is seeking approval of the Meyers Preliminary Community Plan. Please refer to the Preliminary Plan located in a separate document in the APC packet.

Discussion: The preliminary Plan's vision for Meyers is to enhance the sense of arrival to the Lake Tahoe Basin for both residents and visitors. The Plan intends to encourage development and redevelopment of land uses in order to better serve the retail and service needs of the surrounding residential neighborhoods. It discourages perpetuating the strip commercial appearance and recommends improving the image of Meyers through a comprehensive community design program, including signage. The proposed Meyers Visitors Center is an important element in the community which the Plan supports and encourages.

The Preliminary Plan proposes modest levels of additional growth, emphasizes redevelopment of existing uses, and recommends transfer of development from areas in unincorporated El Dorado County which lie outside the Plan boundary. No changes to the plan area boundary are proposed. The Plan proposes the following additional allocations:

-- 19,900 square feet of additional commercial floor area
-- 150 additional Summer Day Use PAOTs for the Meyers Visitors Center
-- No other additional allocations are proposed by the Preliminary Plan

The Preliminary Plan proposes to achieve several environmental threshold related improvement programs including: a reduction of 1,330 Vehicle Miles Travelled (13.3% reduction from 1981 levels); restoration of 1.64 acres of disturbed Stream Environment Zone (contains related land coverage reduction benefits); installation of applicable portions of the 208 Plan's Capital Improvements Program for Runoff and Erosion Control; attainment of the scenic quality travel route rating threshold for Roadway Unit 36; and development of public recreation facilities including the Meyers Visitors Center and related pedestrian/bicycle access to nearby public lands.

AS:rd
3/28/91

Environmental Documentation: The purpose of the Preliminary Plan is to serve as an intermediate checkpoint for other public agencies with jurisdiction and other potentially affected parties. No project approvals are included as part of the Preliminary Plan. As such, it is not considered a project and requires no environmental documentation. The Draft Community Plan, however, will be accompanied by appropriate environmental documentation and will be the subject of public hearings.

Staff Recommendation: Staff recommends the APC recommend the Governing Board approve the preliminary plan.

Please contact Andrew Strain at (702) 588-4547 if you have any questions or comments regarding this agenda item.