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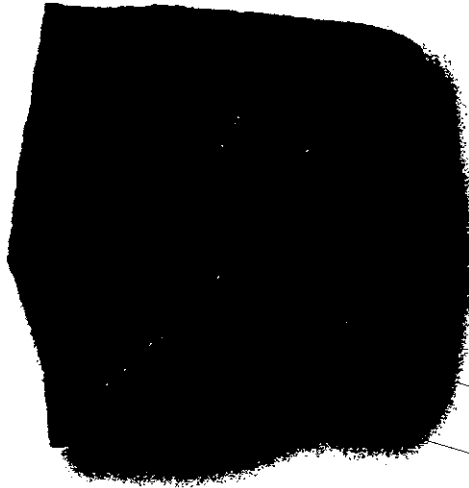
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SOMERSETT SBE PLANNED UNIT DEVELOPMENT HANDBOOK

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SOMERSETT

It's Great To Be Home.

SOMERSETT SBE PLANNED UNIT DEVELOPMENT HANDBOOK

PREPARED BY:
MANHARD CONSULTING, LTD.

PREPARED FOR:
S.B.E. DEVELOPMENT CO., LLC

APRIL 27, 2005



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- A. Preliminary Sewer Report
- B. Master Hydrology Study
- C. Traffic Impact Study
- D. Preliminary Geotechnical Report
- E. Landscape Appendices
 - Landscape Planting Palettes
 - Developed Area Plant Palette
 - Transitional Planting Palette
 - Natural High Desert Plant Palette
 - Wildlife Seed Mix
 - Seeding Practices
- F. Reno Hillside Ordinances

Lucy N. McGuire 9.1.05

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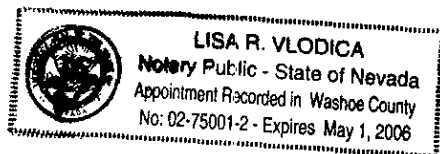
State of Nevada
 County of Washoe

on Sept. 01, 2005

Personally known to me to be the person
 whose name is subscribed to the above
 instrument who acknowledged that executed
 the instrument.

Witness my hand and official seal

Lisa R. Vlodica





CHAPTER ONE – SOMERSETT SBE EXPANSION LAND PUD

INTRODUCTION

AREA DESCRIPTION/PROJECT LOCATION

The property comprising the area of the Somerset SBE Expansion Land PUD Master Plan is a physical and functional extension of the southern portion of the "Somerset Area" in the City of Reno. The property is located south of the Wintercreek PUD and mostly surrounded by the western portion of the Somerset PUD. , Somerset SBE Expansion Land PUD encompasses some 81+/- acres. (See Figure 1-2, Vicinity Map.)

A Cooperative Planning Amendment, and Master Plan Amendment was submitted on January 4, 2005 to the Truckee Meadows Regional Plan for the 81+/- acres that allowed for the annexation into the City of Reno and the general development approach of Somerset SBE Expansion Land PUD. The amendment to the Truckee Meadows Regional Plan included refinements to the Regional Land Use Plan. The amended Regional Plan Land Use designations for Somerset SBE Expansion Land PUD include Residential (38.1 +/- acres) as well as retaining Openspace (43.3+/- acres). While currently within the City's jurisdictional boundary, the property is subject to Cooperative Planning requiring reviews by both the City of Reno and Washoe County. The SBE Development requires the following: ±81.4 acres annexed into the City of Reno; a Master Plan Amendment from Unincorporated Transition to Mixed Residential; a zone map amendment from UT40 (one lot per 40 acres) to planned Unit Development (PUD); a tentative map for 162+ lots; and special permits for hillside development, cuts over 20 feet and fills over 10 feet, disturbance of a major drainageway, and private streets. The PUD handbook has been designed to address these elements.



FIGURE 1-1 - RESIDENTIAL CONCEPT

FIGURE 1-2 VICINITY MAP

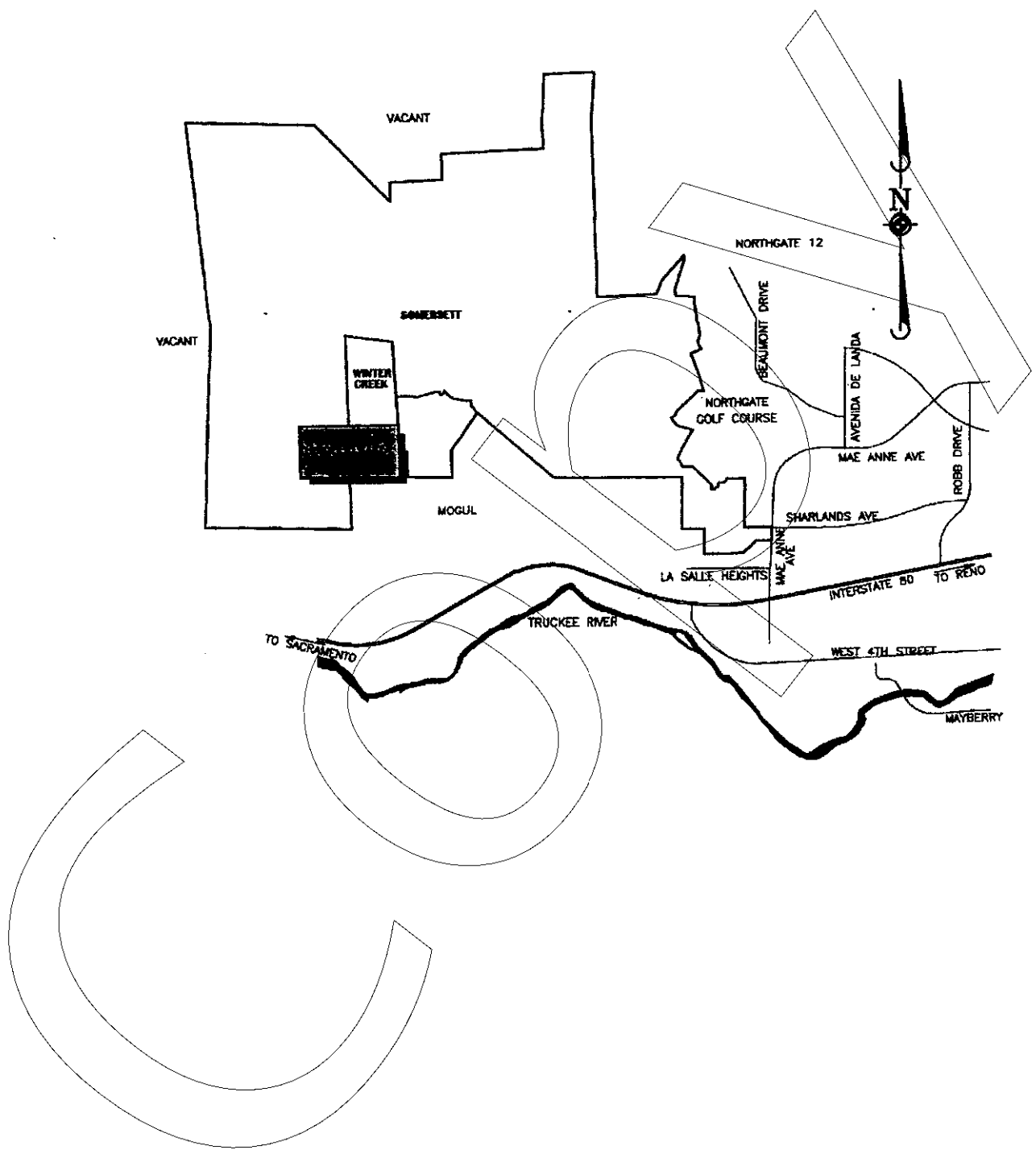
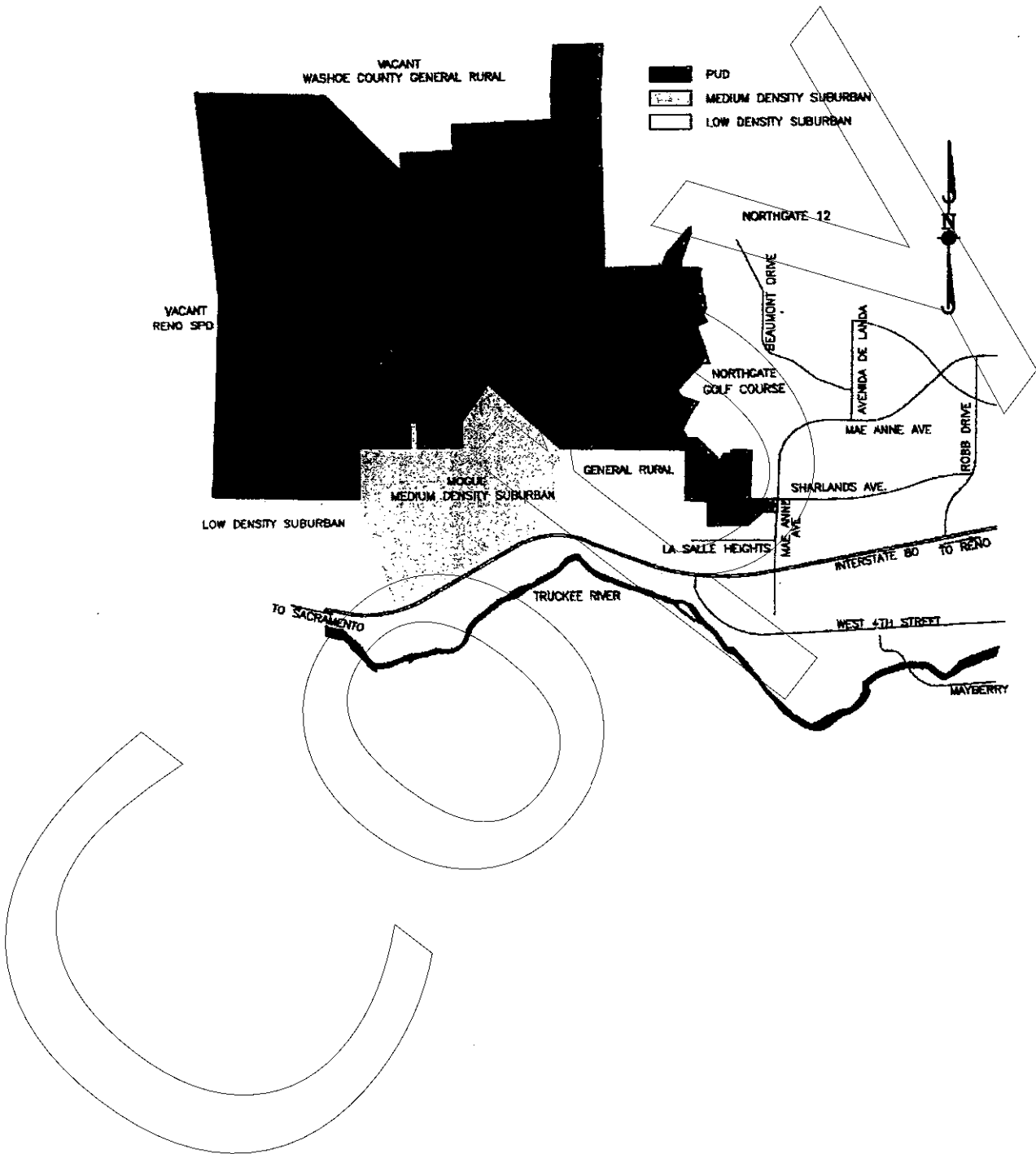




FIGURE 1-3 ZONING





PLAN DESIGN STATEMENTS

The following is a summary of the proposed Somerset SBE Expansion Land PUD,

1. The Site consists of +/- 81 acres of property referred to as the Somerset SBE Expansion Land PUD; APN #s 234-021-07 & 234-021-06. Hereafter for the remainder of this document referred to as "SBE".
2. The gross density of the project is 1.99 DU/AC. The net density of the project 2.24 DU/AC.
3. Trail construction will occur with the adjacent Somerset subdivision.
4. The Master Developer shall be responsible for trail construction.
5. Manned and unmanned gating will be determined at Final Map or Special Use Permit.

PROJECT GOALS

Goal 1: To provide a community that has its own "sense of place" and identity that complements the adjacent urban, suburban and rural environments.

Goal 2: To promote a community that nurtures a unique sense of place with a sensitive contrast of traditional neighborhood design with the dramatic, natural setting.

Goal 3: To provide a community that has a unique open space presence due to the careful placement of common areas between the lots and the greenbelt treatments of the roadway network.

Goal 4: To provide an infrastructure system that efficiently and effectively meets community needs.

Goal 5: To cluster land uses to protect environmentally sensitive areas, and add community interest and function.

Goal 6: To provide a unique variety of housing opportunities with diverse housing types and prices.

TABLE 1-1 - GENERAL LAND USE

| GENERAL LAND USE | PROPOSED |
|-------------------------|-------------------------------|
| Land Use Residential | 31.8+ acres |
| Open Space | 43.3+ acres |
| Total General Land Use | 81.4+ acres |
| HOUSING MIX | PROPOSED |
| Patio Home Units | 139+ |
| Estate Home Units | 23+ |
| Total Residential Units | 162+ |
| Gross Density | 162 du / 81.4 ac = 1.99 du/ac |
| Net Density | 162 du / 38.1 ac = 2.24 du/ac |

SBE includes 23 estate homes and 139 a Patio homes on 81+ acres. This housing compliments the current housing planned in the surrounding community while introducing a new housing type not currently planned for.

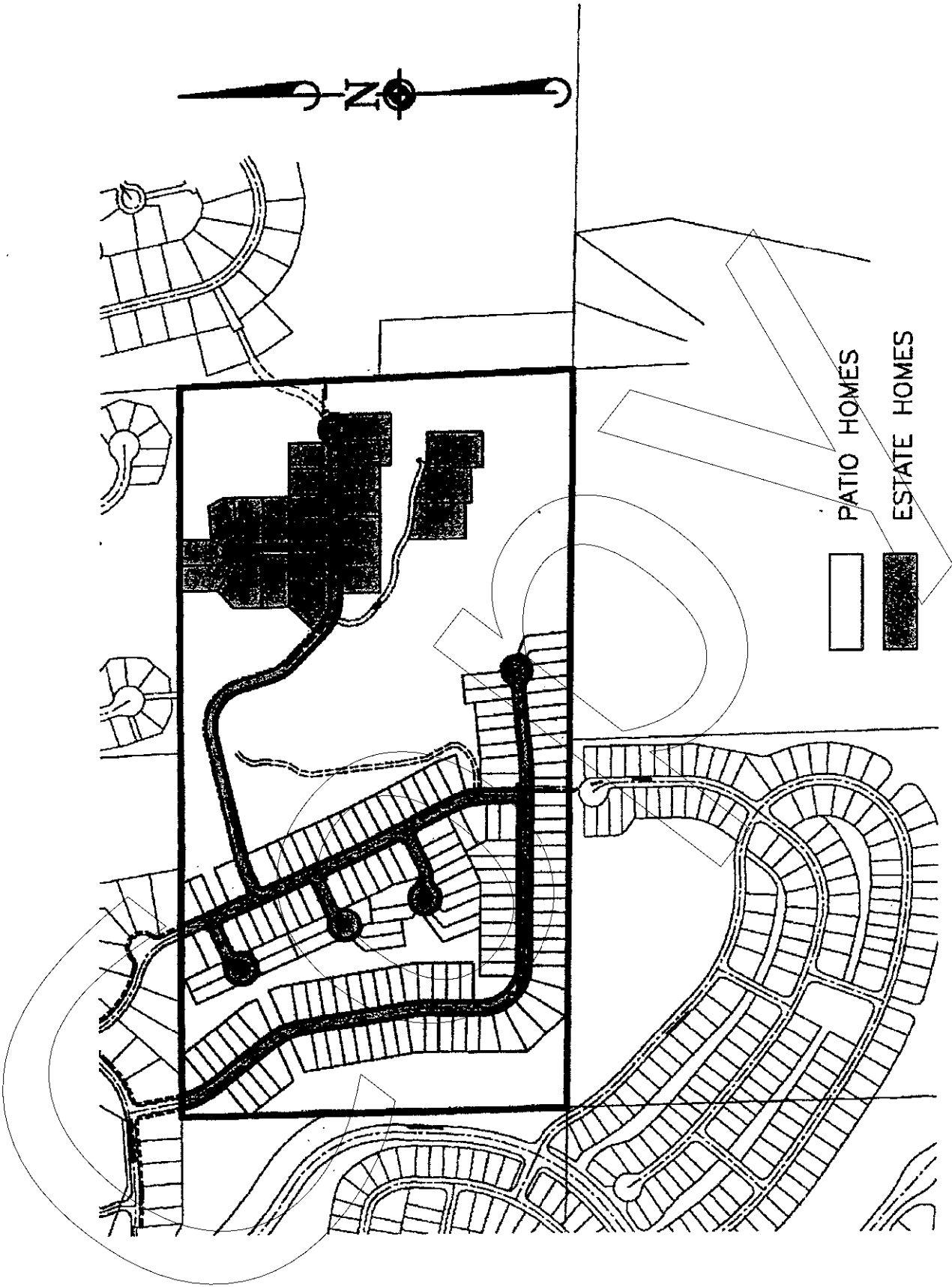


FIGURE 1-4 CONCEPTUAL LAND USE PLAN



There are certain cost advantages associated with clustering: limiting site clearing and grading, reducing lineal footage of residential streets and utilities, and permitting the use of natural/naturalistic swales and drainageways in lieu of underground storm drains. These separations between clusters act as extreme weather moderators by reducing summer heat reflection and softening harsh winter winds. Stormwater runoff volume is lessened by permeable surfaces; irrigation requirements are moderated by focused lotting; and valuable natural features can be preserved. If designed as public spaces, these open space corridors provide a setting for planned and casual interactions among neighbors. More than half of the project area is dedicated to open space and recreation uses.

The Planned Unit Development (PUD) emphasizes focused development with strong design controls to enhance the character and compatibility of different land uses. Major drainageways will function as open space/recreation with local and regional trails.

SITE ANALYSIS VIEWS

Views looking onto the site will be limited from off-site areas. The western area of this site is mostly hidden from surrounding development (Mogul), and contains the patio homes and therefore has the majority of the density of the project. Eastern portion of the site which contains the estate housing, which will be built in to the slope or hillside, which will reduce overall grading. SBE enjoys excellent views of the Sierra and Carson mountain ranges as well as Peavine Peak. Dramatic views are offered in all directions (depending on the location within site).

Access and utilities will be provided from the Somersett Development in the City of Reno and from the I-80 corridor to the south.

TOPOGRAPHY

SBE PUD encompasses 81+/- acres with elevations ranging from 4,900 to 5,200 feet above sea level. The property presents a variety of slopes with the majority falling within the "unconstrained" (0%- 15%) and the "managed" (15%- 30%) slope ranges. Only 11.2 acres of this site fall within the "constrained" (greater than 30%) slope range.

HYDROLOGY

One prominent drainageway exists on site, which defines the physical features of the property. This drainageway leaves the site and continues into Mogul with ultimate discharge into the Truckee River. A portion of the drainageway will be disturbed for the road crossing that connects the east and west portions of the site together with each other. The crossing will be located where existing disturbance has occurred for the installation of utility lines, in order to reassure minimal disturbance. The crossing will include both ornamental landscaping and revegetation to mitigate impacts from grading. The existing drainageway, as well as detention basins, will serve as a part of the open space/recreation areas. The SBE Master Hydrology Study provides workable mitigation strategies to manage any potential increase in discharges. The stormwater system will reduce the fully developed 100-year peak discharge to levels that are at or below the existing condition discharges.

With improved routing and detention facilities, this project will not adversely impact down stream properties.

VEGETATION

Much of the site is covered by thick sagebrush, rabbitbrush, antelope bitterbrush, and grasses such as bottlebrush, squirreltail, cheatgrass, and basin wildrye. Along the utility corridor, crested and slender wheatgrass have been seeded and have become well established. Many native plant species will be incorporated into landscape plans for disturbed areas to provide a tie to open space areas left in a natural state.



ARCHAEOLOGY

A total of 29 sites are located in the Study Area. Among these, five have been documented within the surrounding area and 24 are within the 1-mile zone around the Project Area. None of these sites have been entered on the Nevada State Historic Preservation Office list of National Register of Historic Places (NRHP) eligible sites. Prior to the approval of the first Final Map or grading permit, as applicable, the applicant shall have an archaeological survey performed on the undisturbed portions of the site to the satisfaction of State Historic Preservation Office and City Staff. Should a resource of significance be found on the site, the applicant shall provide mitigation as determined appropriate by the consultant, State Historic Preservation Office and City Staff, based upon the nature of the resource.

PROJECT SUMMARY

SBE contains slopes ranging from 0% to 30%+. This affords an opportunity for a master-plan consisting of two villages, developed generally at 2.24 dwelling units per acre. Moderately sloped areas are proposed for clusters of custom estate lots at approximately one dwelling unit per acre. The central openspace will anchor the two villages to provide a neighborhood gathering place or focal feature. The concept embraces elements of neo-traditional planning concepts such as attached single family homes, estate homes tucked into the hillside and a small common area that will contain picnic amenities.

TABLE 1-2 - PROJECT SUMMARY

| | |
|-----------------------------------|--------------------------------|
| Project Site Area | 81 +/- Acres |
| Number of Residential Units | 162 |
| Master Plan Designation | Mixed Residential |
| Zoning Designation | Planned Unit Development (PUD) |

PHASING

The intent of the phasing strategy presented here for SBE is to provide a balanced and effective approach to the buildout of the project. The phasing plan is a statement of the Master Developer's intentions related to the pattern and timing of construction. The phasing plan also permits governmental entities and public utilities to undertake capital improvement and service programming. The phasing described is not "cast in concrete". It presents a likely and logical sequence for development of SBE. Factors that will affect phasing plans include changes in interest rates, market demands for the various types of housing, the pace of individual developers of SBE, and the availability of infrastructure.

The goal of the phasing is to ensure that the buildout of SBE occurs in a balanced, functional, marketable, and efficient manner. It is the objective to, at all times, provide a broad mix of housing densities, types, sizes, prices and settings to the local housing market in conjunction with the surrounding developments, to the extent practical. The phasing schedule included herein shows how this mix is planned to be provided. It is also crucial to provide recreation facilities, shopping, and services, when justified to meet the needs of the project population and nearby residents. In conjunction with the neighboring Somerset PUD, the phasing schedule for the Somerset PUD also shows how support services are geared toward the residential buildout of the area.

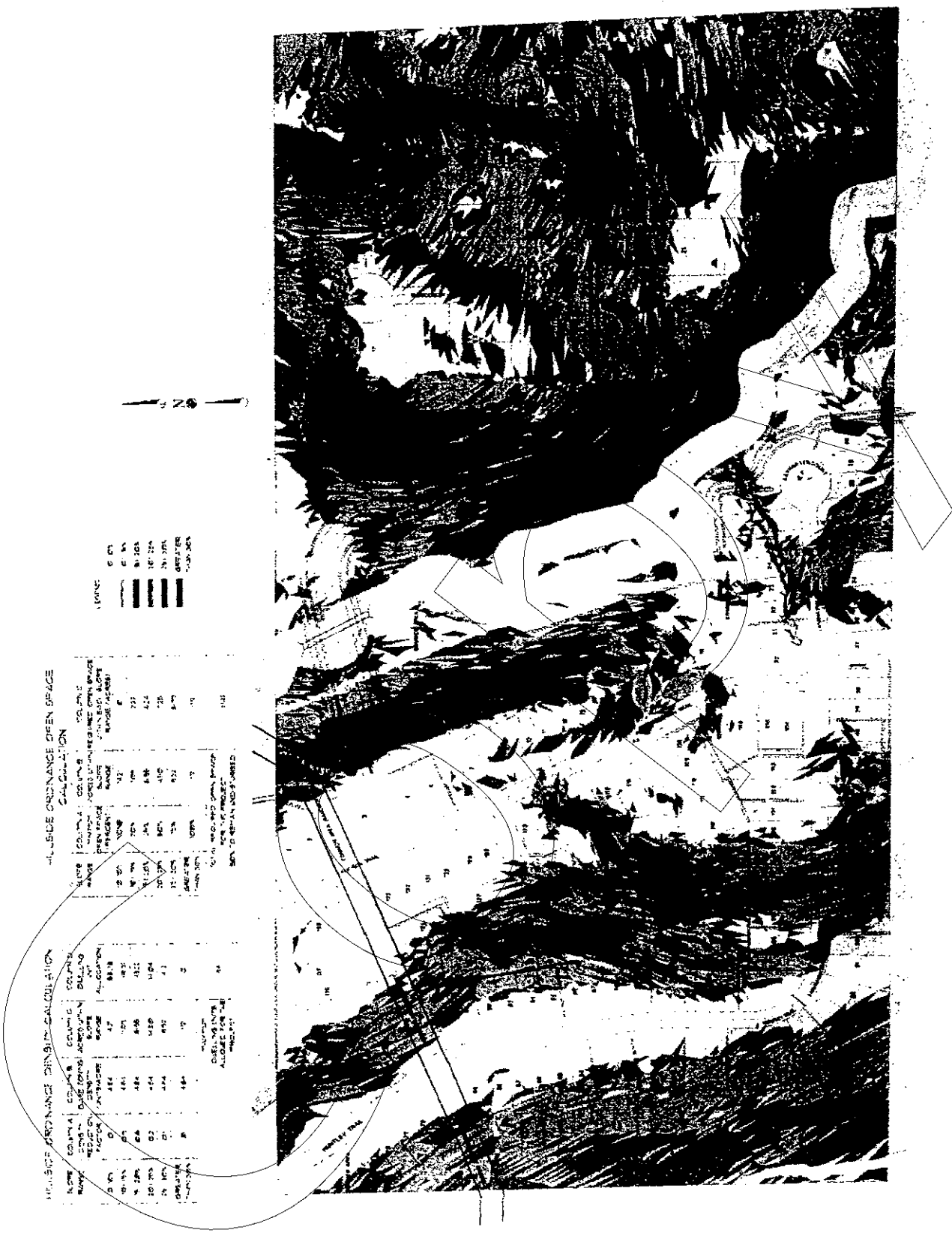


FIGURE 1-5 EXISTING TOPOGRAPHY

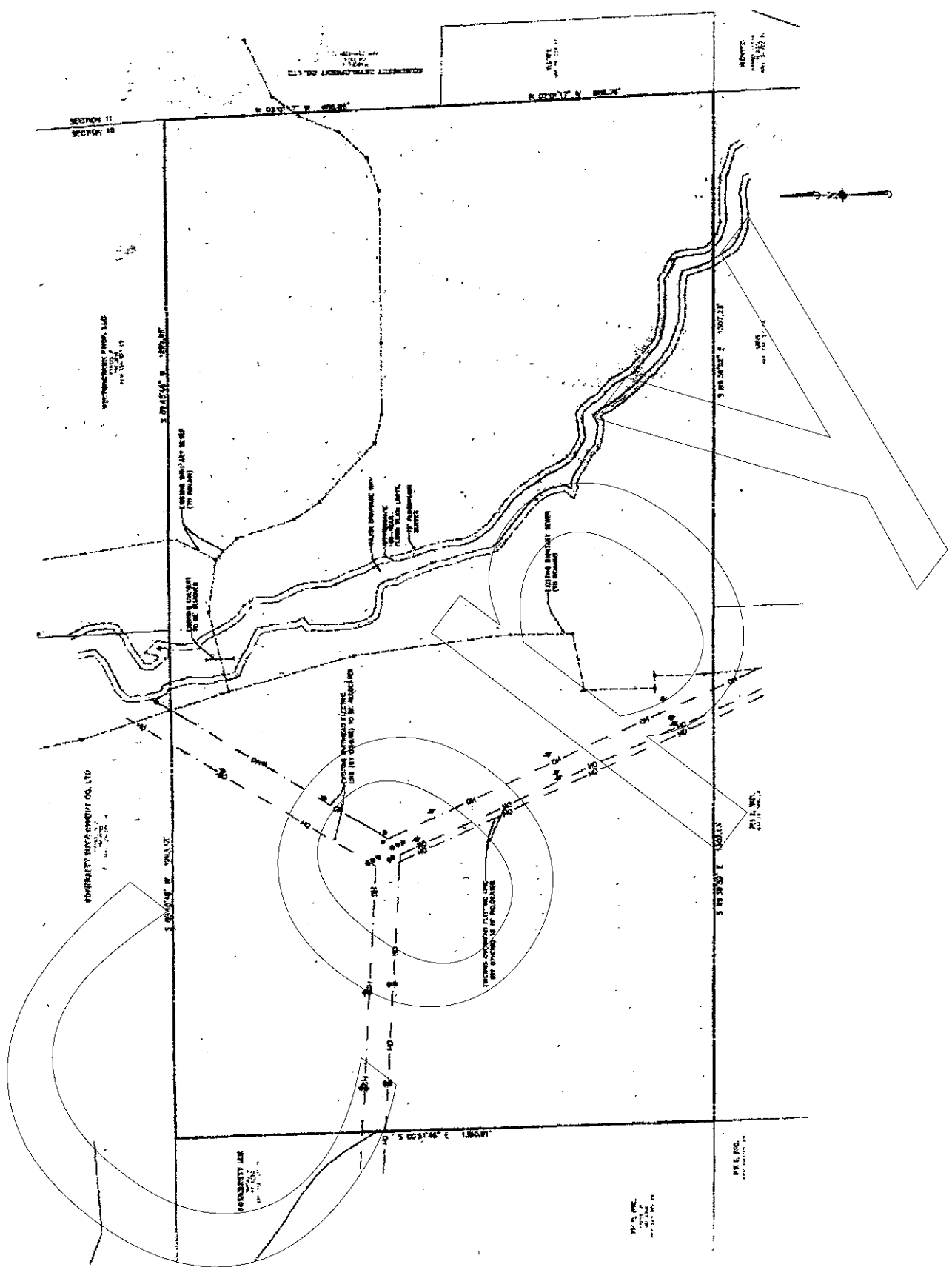
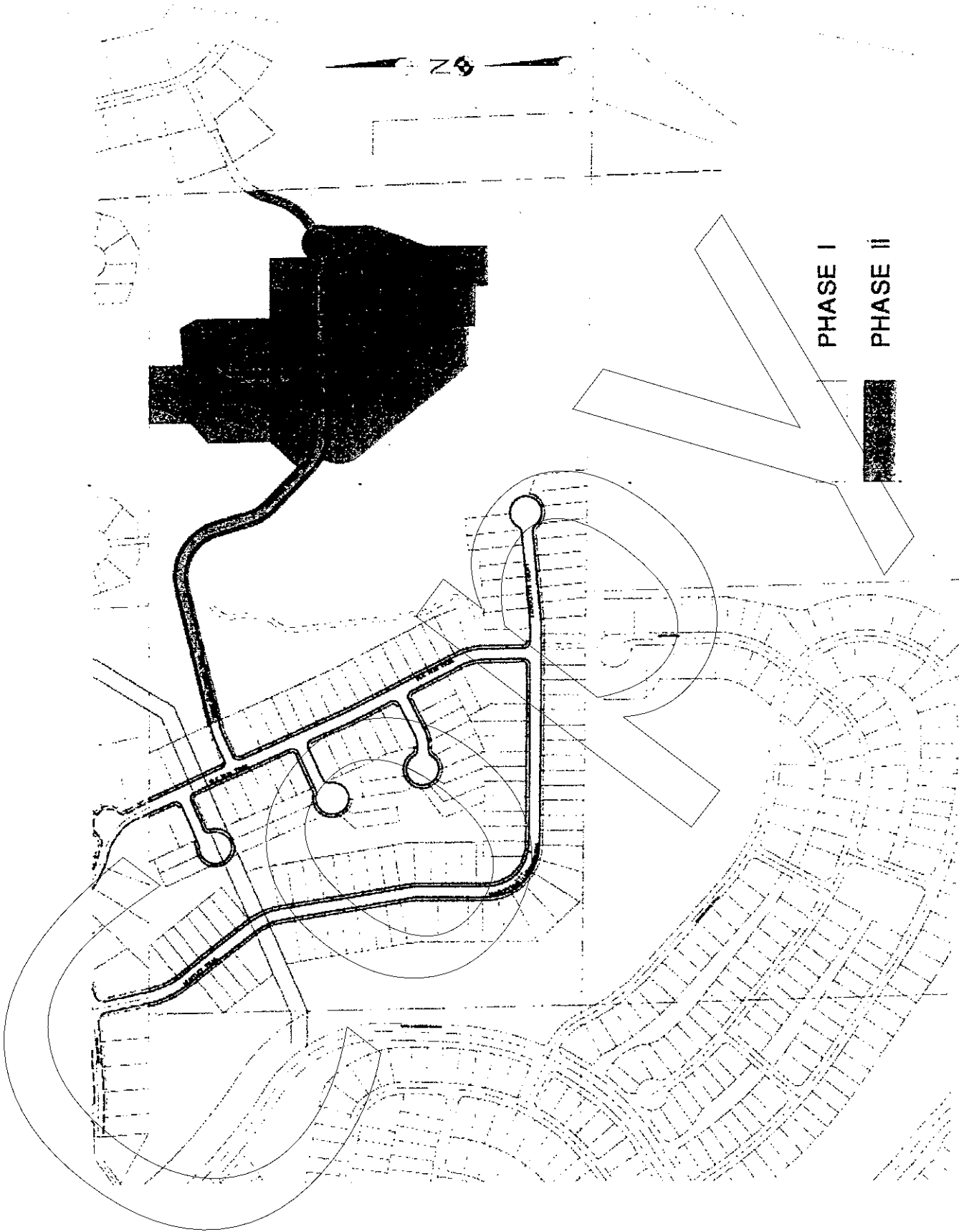


FIGURE 1-6 EXISTING CONDITIONS



PHASE I
PHASE II

FIGURE 1-7 PHASING PLAN



MAINTENANCE

SBE will have Protective Covenants that address maintenance issues. Several areas within SBE will be maintained by the Owners Associations. Enforcement of activities will remain under the control of the Owners Associations. These areas include recreation amenities and drainage facilities located outside of the public rights-of-way. Project Protective Covenants will clearly define maintenance responsibilities of the Owners Association versus the responsibility of individual homeowners. Protective Covenants (CC&R's) will be recorded with the first Final Map for SBE.

OWNERS ASSOCIATION

The SBE Owners Association (SOA) will be overseen by boards of directors. The boards will ultimately hire a full-time professional manager, or Management Company, to maintain, develop, and operate common areas, drainage structures outside public rights-of-way and amenities. Several other duties will be performed by the Associations. SOA duties include enforcement of the Protective Covenants; architectural/site improvement review and approval, purchase and maintenance of equipment, materials and supplies for maintenance purposes, and levying of annual assessments and special assessments as needed for maintenance purposes. These requirements and duties will be reflected in the master protective covenants recorded on the property prior to or concurrent with the first Final Map in SBE.

The increase in the Architectural Guideline Committee (AGC) responsibilities prior to City Staff review in the Handbook does not eliminate the City of Reno's review procedures, or transfer the City's police powers. All requirements of applicable codes and standard reviewing procedures for Special Use Permits (cuts and fills, major drainageway disturbance, etc.), Final Maps, site plan review, building permits, etc., still apply.

RESIDENTIAL RESTRICTIONS

The Protective Covenants place several restrictions on residential parcels to ensure that SBE remains, in perpetuity, a quality development. Restrictions include, but not limited to items pertaining to timely completion of construction, nuisances, maintenance of lots, fencing, animals, R.V. storage, accessory structures, landscaping, building heights, exterior walls and trim, and construction procedures/hours of operation. The SOA will have broad powers to ensure that the Protective Covenants are observed.

AESTHETIC GUIDELINE COMMITTEE

All improvements constructed within the development will require approval by the Aesthetic Guideline Committee (AGC) prior to commencement of construction. The committee will review all plans and specifications and approve, approve with conditions, or reject project applications to ensure compliance with the PUD's Protective Covenants. The committee will include three to seven members with at least one qualified member of the allied physical design profession (i.e.: civil engineer, architect, land planner, etc.). Each application for a building permit shall include written approval from the AGC shall demonstrate compliance with all of the applicable standards contained in the Handbook and any conditions of approval. Review by the AGC prior to the City staff review does not eliminate the City of Reno's review procedures, or transfer the City's police powers.

SNOW REMOVAL

Snow removal service on public streets will be provided by City maintenance crews according to their practices and policies, with snow removal on private streets provided by an Owners Association. Certain landscape areas provided between the street and sidewalk can be used for snow storage. The narrower streets and snow storage areas are desired features that assist maintenance crews in their snow removal efforts.

STORMWATER MANAGEMENT

SBE as proposed will have a positive effect on down stream stormwater conditions. Currently, one drainageway exists on site with limited disturbance. This drainageway is classified a major



drainageway under the City of Reno's Drainageway Plan. Major storm events can produce tremendous run off conditions via this drainageway, and therefore prevents a flooding potential to Mogul. The stormwater improvements will help mitigate the flooding potential to the downstream communities.

To ensure proper storm water management throughout the development of SBE, each Final Map submittal will need to show compliance with the Master Drainage Plan, submitted with the project application. Each application for a Final Map will require a drainage report issued by a licensed professional engineer certifying that the plans and specifications adequately comply with the stormwater management plan and City of Reno requirements. The master drainage study by Manhard Consulting is on file at the City of Reno.

SEWERAGE

Sewer will be connected to the Verdi-Lawton sewer interceptor that has been extended to the Mogul area. Sewer discharge will flow to the Verdi-Lawton interceptor via one main line. This line will flow from north to south and is discussed in detail in the sewerage report on file at the City of Reno. A gravity flow sewer system has been built to connect the site and the Verdi-Lawton interceptor. The Verdi-Lawton interceptor ultimately feeds into the Truckee Meadows Water Reclamation Facility (TMWRF). The off-site sewer system affords a gravity flow from the south boundary of the project that will link down line, and "wrap around" Mogul en route to the Verdi-Lawton interceptor. This sewer alignment uses existing and new easements through private property and public rights-of-way located in the County. The proposed sewer lines offer an ideal alignment from the perspective of "gravity flow" characteristics by using the natural lay of the land. Sewer line flow rate estimates are as follows per the various land uses.

TABLE 1-3 - SEWER LINE FLOW RATES

| | |
|--|-----------------------------------|
| Residential Single-Family..... | 3.0 capita/d.u. x 250 gals/capita |
| <i>Note: All estimates represent peak flows.</i> | |

Total project estimated sewer line flows: (Note that these values are conservative as all dwelling units are considered single family.)

TABLE 1-4 - ESTIMATED SEWER LINE FLOWS

| | | |
|---|---|------------------------------------|
| Residential Units = 162 units x 3.0 x 250 | = | 0.121million gallons per day (MGD) |
| Total Sewer Line Demand | = | 0.121MGD |

The demand estimate for design purposes is used to calculate the piping required for project sewerage discharge that is inflated by a peaking factor. It does not represent actual flows to the treatment plant. This is an important distinction when evaluating actual capacity used at the water reclamation facility versus what is needed for planning and design. The demand estimates for sewer line design should be distinguished from actual demands at the treatment plant. The estimate of actual generation to the treatment plant for planning purposes is between 220 and 325 gallons per unit per day, which means the project would generate between .036 and .053 MGD at build out. Actual demand tends to be closer to 220 gallons per unit per day. The city's current annual average treatment in the TMWRF is 32 MGD, with a peak month capacity of 40 MGD. Another expansion is in design that is scheduled to come on-line in about three years and increase the capacity of 46.5 MGD.

As a "mitigation measure," the City will assess a sewer connection fee at the time each building permit is issued. Connection fees collected from the project will be used to buy more treatment plant capacity.



CHAPTER TWO - DEVELOPMENT STANDARDS HANDBOOK

Any items not addressed in this Handbook shall comply with applicable City Code requirements.

LAND USE DESIGNATIONS/DESIGN STANDARDS

SBE affords Reno residents options regarding housing choices. Each type of product is distinctly different, and the development standards are designed with these differences in mind.

Following are the SBE land development standards.

PATIO HOMES

DESCRIPTION:

Patio homes are detached single-family units located on smaller lots that are a form of clustered housing. Patio home projects may use land planning techniques such as zero lot line or z-lot design to achieve a more spacious feel and may include up to two property lines without a setback, provided that the minimum building separations are provided as required below. Parks and/or open space areas are provided near Patio home projects as a closely linked amenity where yard space is limited. Patio home projects appeal to a large segment of homebuyers desiring low maintenance requirements.

- Lot Size:
 - Patio homes will be located on minimum lot sizes of 2,500 sq. ft.
 - Minimum average lot width of 40 feet.
 - [REDACTED]
- Allowed Uses:
 - Single-family dwellings of a permanent nature.
 - Zero or z-lot line developments.
 - Attached Single Family dwellings of a permanent nature.
 - Temporary residential sales office and model homes.
 - Children's Playhouse (75 sq.ft. maximum floor area, 8' maximum height).
 - In home childcare for the number of children legally permitted with one caregiver.
 - Cluster lot developments (3 or more lots served by a common driveway).
 - Structural additions to the original house, upon review and approval for that subdivision or project by the Aesthetic Guidelines Committee.
 - Home occupations
 - One detached guest building (garage or casita - no kitchen per City Code).
- Architecture
 - Architecture shall be in conformance with the architectural standards of the Handbook.
 - Basic architecture, including rooflines and fenestration treatment, shall be carried around on all four sides of the home.
 - Building footprints/elevations will be submitted with each Final Map for each model, along with written approval of same by AGC.
- Prohibited Uses:
 - Accessory structures on individual lots (except children's playhouses and casitas as noted above).
 - R.V., boat, or trailer storage on individual lots. Pickup trucks with campers or vans up to 21' in length, that serve as primary transportation, are exempted from this provision, if, and only if, the driveway is long enough to accommodate the vehicle without impeding the sidewalk.
 - Garages converted into living space or used exclusively for storage.
 - No structural additions shall be permitted to the original house, unless approved in writing by the AGC.



- These prohibited use provisions will be included with the disclosure statement at the time of sale of each house.
- No other uses are allowed.
- Parking:
 - One off-street parking space shall be provided per bedroom.
 - One on-street guest parking space shall be provided per lot, unless provided in off-street guest parking areas.
 - Demonstrate that sufficient parking is provided with each Final Map.

See Figure 2-1 Yard Definitions/Setbacks)*:

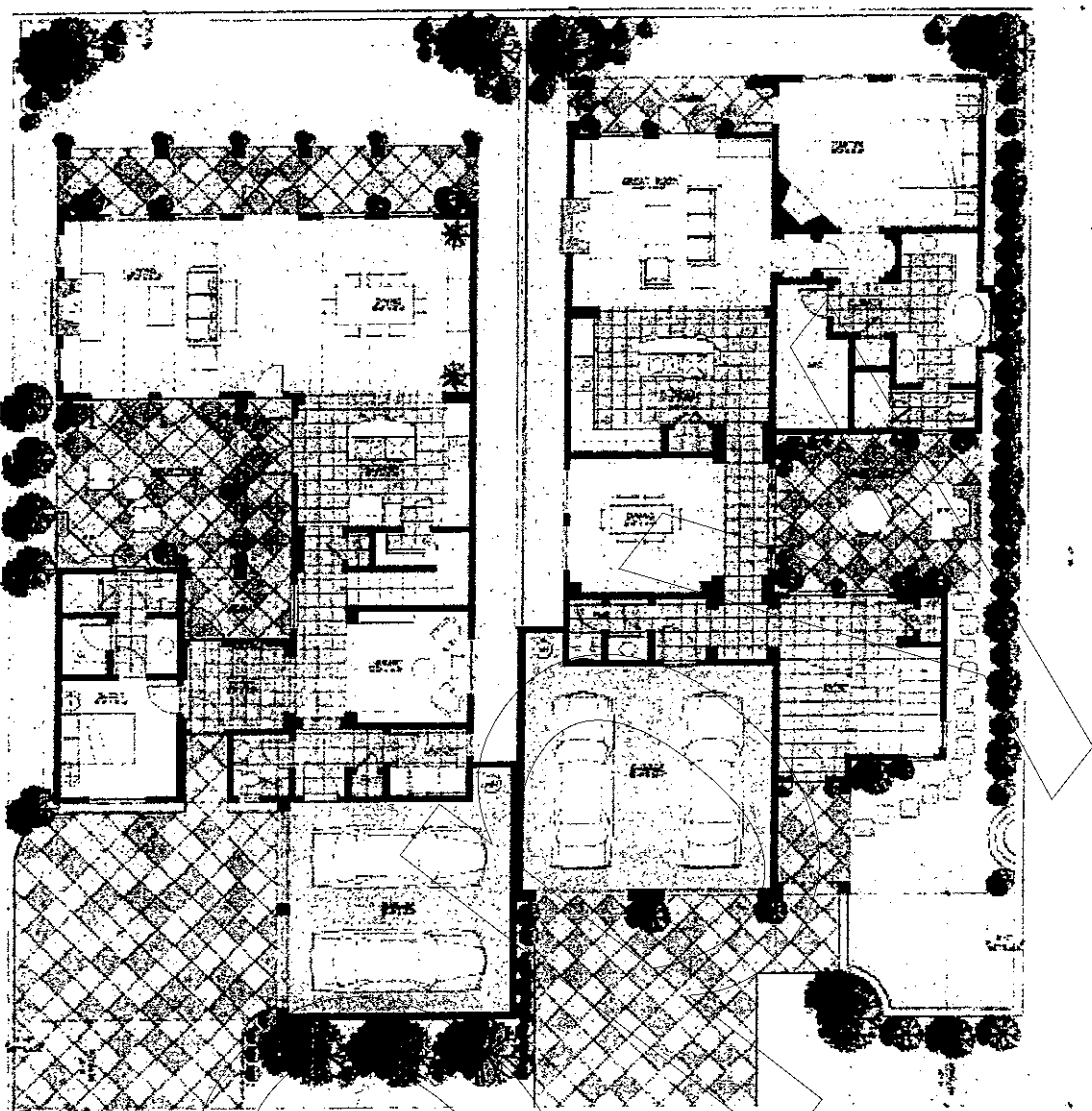
- Front Yard: 5' from back of sidewalk; 20' minimum driveway length (from back of walk), driveways may be deleted if appropriate parking is provided elsewhere.
- Side Yards: 0' and 10', or 5' and 5'.
- Exterior Side Yards (corner lots) 5' from back of sidewalk.
- Rear Yard: 0' or 10' (Determined with submission of the Final Map.)
- Setbacks can be varied for cluster lots/quad lots through the Final Map process.
- A minimum usable side or rear yard area of 400 sq. ft. A reduction in the useable yard area may be allowed in the Town Center with the approval of a Final Map or Special Use Permit.
- Porches: Uncovered front yard porches, courtyards or similar treatments may extend into the front setback area to within three feet of a sidewalk.
- Porches, courtyards, raised planters, or similar treatments that extend at least three feet in front of the main structure are required on 50% of non-cluster lots and required on all cluster lots that face the street. A plot plan will be submitted with each tentative and final map indicating how this requirement will be met.

** Actual yards and setbacks shall be selected with submission of each Final Map.*

- Projections into Required Setbacks:
 - Cornices, canopies, eaves, porches, chimneys, or similar architectural features may extend into a required setback area as much as 2 feet.
 - No air conditioning units will be allowed within 5 feet of any property line nor within the front yard area.
- Variation in Elevations:¹
 - No identical (like or mirrored) front elevations may be repeated on adjacent lots facing the street. Adjacent lots may share the same floor plan, but must have different elevations. Exterior colors must vary from lot to lot, unless a uniform color palette is expressly approved for a project by the Aesthetic Guidelines Committee.

¹ With application for a building permit, the applicant shall submit a copy of the approved subdivision map showing building footprints and models to allow the A.C.C. and staff to check for compliance with required variation in elevations and setbacks.

- Height Limitation: Two stories
- Fencing Requirements: See Hardscape, Fences and Walls. (See Figures 2-54 through 2-57). A plan showing fencing locations consistent with these requirements shall be provided with the Final Map.



FIRST FLOOR

FIGURE 2-1 - YARD DEFINITIONS/SETBACKS FOR ATTACHED PATIO HOMES

SPECIAL CONDITIONS


- Generally, slopes facing the street shall be a 3:1 or less, gradient. Whenever possible, where front yards are steeper, a mixture of front yard slopes which transition from 3:1, 2:1 and rockery walls shall be provided.
- All fill placed on slopes steeper than five to one (H:V) must be keyed into the native soils.
- Other:
 - Any standards not addressed above shall comply with City of Reno, RMC for the SFR-4 zone.
 - SBE



ESTATE HOMES

DESCRIPTION:

Estate lots are the largest lots within the community and are typically located in the areas of most dramatic terrain and command the best views in the community. These lots are larger due to the adaptive hillside grading and house sitting principles required in the design.

- Lot Size:
 - Estate homes will be located on minimum lot sizes of 10,000 square feet.
 - Minimum average lot width shall be 70 feet.
- Allowed Uses:
 - Single-family dwellings of a permanent nature.
 - One detached guest building (garage or casita - kitchens may be allowed)
 - Accessory uses customarily incident to the above uses, located on the same lot, including a private garage, tool/storage shed, garden house, private workshop, private greenhouse, and/or children's playhouse. Accessory buildings shall be separated from any main structure by a distance of at least ten feet.
 - Temporary residential sales office and model homes.
 - In home childcare for the number of children legally permitted with one caregiver.
 - Home occupations.
 - No other uses allowed.
- Architecture:
 - Project architecture shall be in conformance with the architectural standards of the Handbook.
 - Basic architecture, including rooflines and fenestration, shall be carried around on all four sides of the home.
 - Written AGC approval and PUD Handbook compliance must be submitted with each application for a building permit.
- Parking:
 - One off-street parking space shall be provided per bedroom, including any guest unit.
 - One on-street or guest parking space shall be provided per lot.
-  See Figure 2-2, Yard Definitions/Setbacks):
 - Front Yard: 10 feet and 20 feet minimum driveway length (from back of walk).
 - Rear Yard: 25 feet minimum; minimum usable yard area of 600 square feet.
 - Side Yards: 10' one side/15' feet one side, minimum.
 - The residential lot setbacks may be reduced, if in the opinion of the Administrator, the reduction will reduce the amount of grading or terracing required to accommodate the unit. In no case will the driveway standards be reduced administratively.
- Accessory Buildings:
 - Non-buildable area in rear yard: 0 to 10 feet from rear P.L. and 0 to 5' from side P.L.
 - Maximum coverage: 800 sq. ft., provided that at least 500 square feet of useable rear yard area is maintained.
 - Maximum height: One story.
- Projections into Required Setbacks:
 - Cornices, canopies, eaves, porches, chimneys, or similar architectural features may extend into a required setback area not to exceed two (2) feet.



- Variation in Elevations:¹
 - No two identical (like or mirrored) front or rear elevations will be sited on adjacent lots. Colors must vary subtly from lot to lot.
 - Height Limitation: Three stories, and in no instance shall the height of any exposed face of the structure be greater than 40 feet from the natural grade to the ridge line.
 - Fencing Requirements: See Hardscape, Fences and Walls on Figures 2-54 through 2-57.

¹ With application for a building permit, the applicant shall submit a copy of the approved subdivision map showing building footprints and models to allow the A.G.C. and staff to check for compliance with required variation in elevations and setbacks.

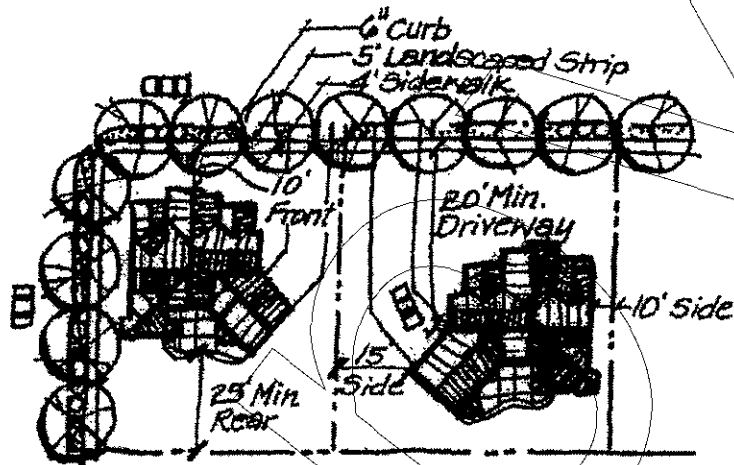


FIGURE 2-2 - YARD DEFINITIONS/SETBACKS FOR ESTATE HOMES

SPECIAL CONDITIONS:

- Tentative building envelopes and/or typical building envelopes shall be provided with Final Maps. At time of final mapping, building envelopes will be established for all lots in accordance with SBE Protective Covenants. The building envelope will be based upon topography of the lot, its relationship to neighboring lots, and shall take into account unique site features such as mature trees, native plants, and rock outcroppings. The size and shape of building envelopes may thus vary from lot to lot.
- The principal structure must be contained within the building envelope as regulated by the Aesthetic Guidelines Committee's review and approval process.
- All residences shall include a minimum of a two-car garage at 20' in depth and two driveway parking spaces a minimum of 20' depth.
- Generally, slopes facing the street shall be a 3:1, or less, gradient. Whenever possible, where front yards are steeper, a mixture of front yard slopes which transition from 3:1, 2:1 and rockery walls shall be provided.
- All fill placed on slopes steeper than five to one (H:V) must be keyed into the native soils.
- Other:
 - Any standards not addressed above shall comply with City of Reno, RMC for the SFR-9 zone.



LANDSCAPE

SBE encompasses 81+ acres, of which approximately half will be dedicated to open space. The main landscape goal is to create a functional link of open space between the established open spaces within the neighboring Somerset PUD.

The Native High Desert Palette provides for revegetation of disturbed areas using desert plant species. This palette also includes a wildlife seed mix to be used in designated areas to enhance wildlife forage. It will be used in the outer, "undeveloped," portion of SBE that will be maintained in its natural state. The Transitional Palette includes native high-desert plants and exotic drought tolerant species that complement the existing vegetation. This treatment will be used at the interface between developed areas and undisturbed areas to blend the project with its natural setting and provide wildlife habitat enhancement and fire protection. The Developed Plant Palette includes both ornamental and native species that promote the desired traditional image. It will be used in the interior portions of SBE that are more highly developed to provide traditional treelined streets. The three plant palettes are described in detail in the Somerset PUD Book II, Appendix J, Landscape Planting Palettes (see Exhibit E, Landscape Exhibit).

SBE's landscape standards address streetscapes, major entries and intersections, open space and trail systems, site grading principles, wildlife enhancement, fuel modification zones/defensible space and residential areas.

GENERAL STANDARDS

All common areas, including pedestrian easements, streetscapes, open space, parks, "commons," and trails will be maintained by the SBE Owner's Association (when enabling legislation is passed by the City of Reno allowing such districts). The following standards apply to all landscape areas. Standards specific to distinct areas within the project are described later.

PLANTING

- Plants will be selected from the three plant palettes described in Landscape Planting Palettes (see Appendix).
- Landscape planting plans shall be approved by the AGC and shall be stamped by a licensed landscape architect.
- Plant species selected will be those that are tolerant of the environment in which they will be grown including salinity, alkalinity, soil/water characteristics, soil physical properties, drainage and proneness to flooding, water tables, and any other influential factor.
- All landscaped areas will be maintained in a neat and attractive condition. Minimum requirements include replacing dead or dying plant materials, mowing, watering and general clean up.
- The area adjacent to the west boundary of the PUD (Sierra Canyon) shall be planted with the "Transitional Palette". The focus of the planting will be in alignment with the trails system wherever possible. Other areas may use a blend of the "Native High Desert Palette" and the "Natural Landscape".
- In areas where existing vegetation is to be retained, the overall forms of any introduced plant material will be complementary to the existing on-site vegetation.
- Plant forms within neighborhoods will be kept similar to each other in order to promote neighborhood unity.
- Species of plants will be massed to provide a simple, uncluttered look.

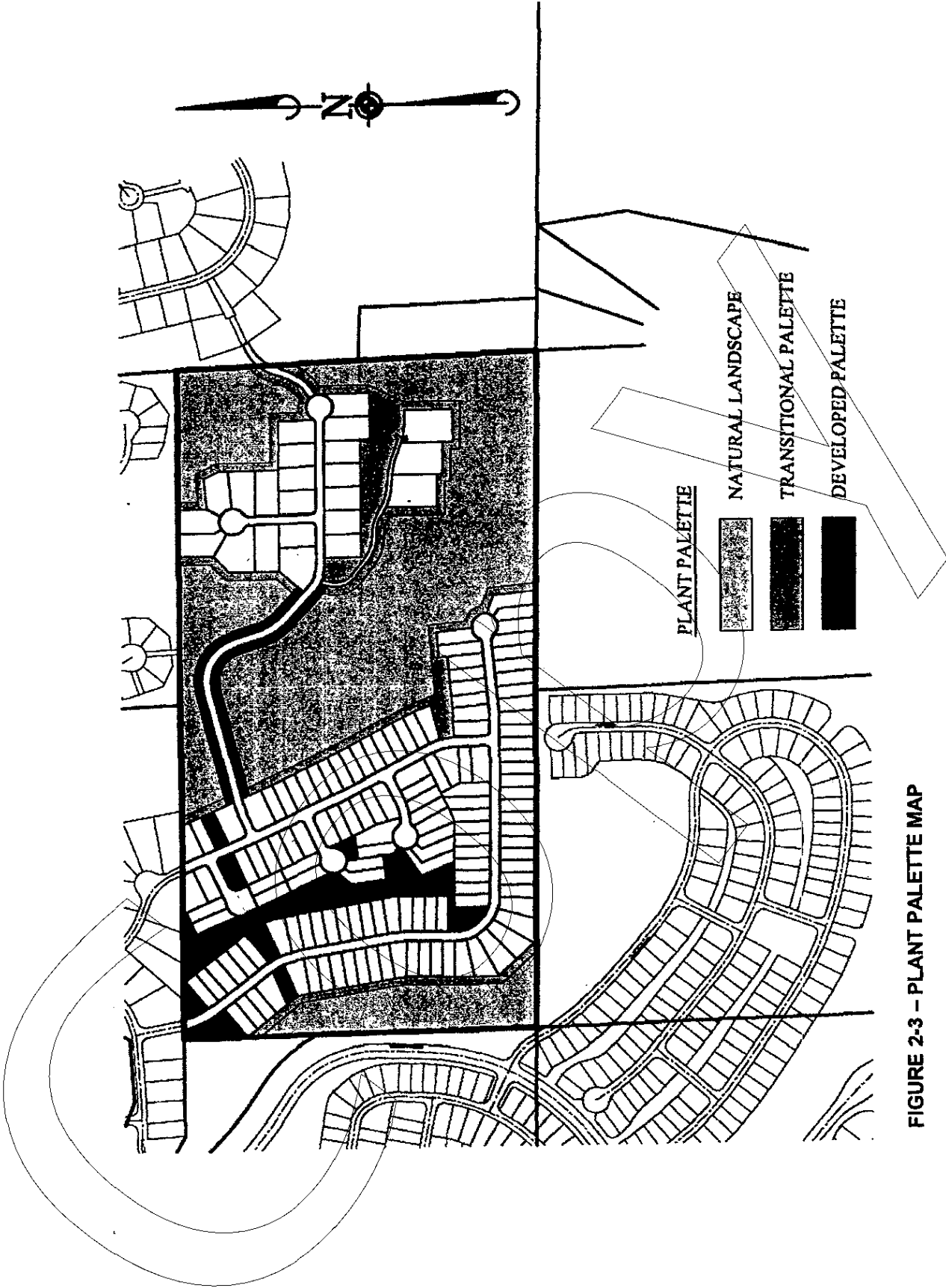


FIGURE 2-3 - PLANT PALETTE MAP



- Species of plants will be massed to provide a simple, uncluttered look.
- Where screening is needed, plants that provide effective year-round screening, such as evergreens that branch close to the ground will be used.
- Where shade is needed, plants with broad canopies, such as large deciduous trees, will be used.
- Plant species that produce objectionable fruit drop should not be located adjacent to paved areas.
- Plants should be grouped with those that have similar growing requirements.
- Water conservation is an objective. Plant species that can survive on low to moderate amounts of irrigation will be used except in developed areas where a lush, high-density appearance is desired.
- Plant materials selected will contain a combination of fast, medium and slow growth rates. Fast growth plants adapt quickly, provide quick cover, but have a short life span and are sometimes subject to disease. Medium growth plants take over as the faster plants begin to die out, usually after 15-20 years. They are generally more attractive and less subject to disease. Slow growth plants remain small for a long period of time, but eventually become a dominant plant type. They are highly resistant to disease, long-lived and are not subject to the problem of wind breakage.
- In informal areas, a variety of sizes will be planted to provide a more natural appearance.
- Use plants for microclimate control where practical.
 - Use deciduous trees to shade the south and west sides of buildings, parking lots, and streets.
 - Use evergreen trees for windbreaks.
 - Use evergreens to insulate the north side of buildings.
 - Use turf for cooling around intensively used areas.
 - Use trees like aspens in areas like the drainageways.

IRRIGATION

- Irrigation systems will be water efficient and low maintenance.
- Provide adequate water to establish and maintain landscape plantings and promote water conservation.
- All Developed and Transitional planting areas will have automatic irrigation systems.
- Irrigation plans shall be approved by the AGC and shall be stamped by a licensed landscape architect.
- Natural High Desert areas may be unirrigated or temporarily irrigated until revegetation is established. Where temporary irrigation is used, irrigation will remain in use until vegetation is well established and can survive without irrigation.
- Irrigation systems will be designed to provide complete and adequate coverage (taking into consideration wind patterns and other disruptive factor(s) while using water-conserving methods.

STREETSCAPES

Streetscaping within SBE will reflect the surrounding level of development.

GENERAL STREETSCAPE STANDARDS

All streetscaping will conform to the following standards. Streetscape standards specific to different types of streets are described later.



- Streetscaping of arterials and collectors will be installed with roadway construction to provide a continuous landscape along streets regardless of the development phasing of individual parcels.
- Streetscaping of connectors and residential streets will be installed within six months of acceptance of the streets by the City of Reno within each block with financial assurance provided for the landscaping to ensure completion.

LANDSCAPE TRIANGLE:

- Visibility triangles will be maintained at all intersections. Within visibility triangles all trees will be pruned such that no branches extend lower than six feet above curb level at time of planting and 8' above curb height at maturity. Other plants will not exceed eighteen (18) inches in height above any curb level.
- Visibility triangles, measured from front face of curb, will be as follows, or per City of Reno Code, whichever is stricter:
 - Controlled Street Intersections: thirty (30) feet
 - Residential Driveway: twenty (20) feet

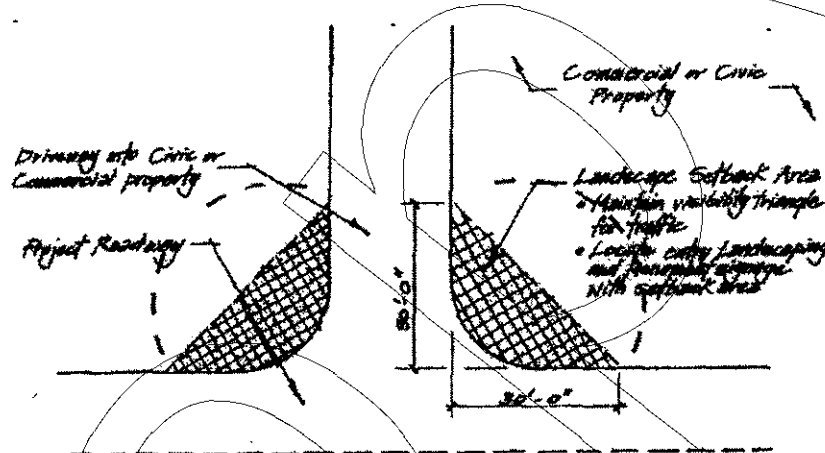


FIGURE 2-4 - LANDSCAPE TRIANGLE

RESIDENTIAL STREETSCAPING STANDARDS

- Plants will be selected from the Developed Plant Palette (see Appendix).
- Trees will be a minimum 1½" caliper size, measured 6" above the rootball, at the time of planting.
- One tree will be planted for every forty (40) lineal feet of street frontage. Gaps between trees will not exceed fifty (50) feet except at intersections.
- Trees will be planted in formal rows within the six (6) foot wide landscape strip. Trees may be clustered in cases of extreme topography or for placement of utilities.
- A single tree species will be used within the landscape strip along each individual street. Tree species may be repeated throughout the project, but multiple species will not be used on an individual street, except where accent trees are used to highlight intersections, etc. Different cultivars of the same species may be used on a single street.



- These trees will be maintained by each lot owner to a standard set for the project at the Final Map stage and enforced by the Owner's Association.
- Parking, and a minimum 6-foot parkway section with sidewalks on both sides of the street, shall be provided for all street sections except for single loaded streets and streets accessing estate lots. Single loaded streets and streets accessing estate lots shall have sidewalk paralleling homes with a standard parkway, and a landscaping strip of six feet for the other side of the street.

MAJOR ENTRIES & INTERSECTIONS

Dramatic landscaping that reinforces the community image will be planted at major entries and intersections.

STANDARDS:

- Clear views for traffic safety will be maintained.
- Entry and intersection planting schemes will reflect the level of development of the adjacent streetscape. For example, intersections located at the entry points of the development will feature more formal plantings with plants selected from the Developed Palette. Those located in outlying areas will feature rugged, naturalistic plantings with plants selected from the Transitional Palette in Book 2, Appendix J, Landscape Planting Palette.
- At least one tree will be provided for every 300 square feet of area devoted to the entry statement.
- At least 40% of the trees will be evergreen.
- Deciduous canopy trees will be sized with 50% having a minimum caliper of two inches and 50% having a minimum caliper of three inches at the time of planting measured six (6) inches above the root ball.
- Deciduous accent trees will have a minimum caliper of two inches at the planting measured six (6) inches above the root ball.
- Evergreen trees will consist of the following height mix at the time of planting: 40% at 6' height, 40% at 8' height, and 20% at 10' height (measured from finished grade to tree apex).
- Evergreen trees will be planted informally in areas where sufficient room is available to avoid conflicts with trucks, pedestrians, or required sight distance.
- A minimum of 50% of the shrubs installed will be 5 gallon size or larger at a minimum rate of 5 shrubs per required tree.

STREETS

Street Sections for residential streets and emergency access ways are proposed. Standards are identified below. In addition, any standard City of Reno, street section may be used as is appropriate. These sections call for proper paved widths to safely and adequately convey the anticipated traffic loads while providing ample planting strips and detached paths to reinforce the community's village like image.

Minimum design values for streets shall be as specified in the ensuing table:



MINIMUM DESIGN PARAMETERS FOR SBE STREETS

| Street Classification | Minimum Horizontal Radius of Centerline | Minimum k Value for Vertical Curves | Maximum Average Daily Traffic Volume |
|-----------------------|---|-------------------------------------|--------------------------------------|
| Local | 100 feet | 20 | 2000 trips |
| | | | |
| | | | |

Notes:

1. On local and residential streets lesser radii shall be permitted as listed above with appropriate signage.
2. Curb returns at street intersections shall have minimum face of curb radii per City Code except for cluster development where 15 feet radii are permitted.
3. Minimum distances between intersections shall meet City Code except for cluster and attached home development where 100 feet minimum shall be permitted.

No tangent is required between horizontal curves on residential and local streets.

Additional lighting could also be used where appropriate. Superelevated roadways should be avoided at intersections. If superelevation is necessary, sufficient detail should be designed to ensure proper drainage. Refer to Drainageway/Detention/Wetland Areas for development standards for Drainageway Crossings.

With the approval of a Final Map or Special Use Permit, on-street parking lanes may be omitted from streets when the result is a decrease in cutting and/or filling of land. These streets may be reduced to 28 feet in width.

The minimum lot frontage on a cul-de-sac shall be 25 feet.

Sidewalks shall be required for both public and private streets unless otherwise approved with a Final Map or in cul-de-sacs serving less than 10 lots in Estate neighborhoods (ref. bullet-points under Residential Street Standards).

TRAFFIC DEVICES, CONSTRUCTION TRAFFIC CONTROL, AND TRAFFIC CALMING

- All longitudinal striping shall be paint.
- Where there is a stop or yield control on a local street only a 12-inch white stop bar shall be installed.

STORM DRAINAGE

- Cut-off swales shall be installed on uphill side of all lots as required by City Staff and shall be appropriately sized to contain the 100-year storm. The type of cut-off swale used shall be determined by the following:

| | |
|---------------------|--|
| Concrete | $V_{100} < 4 \text{ fps}$ |
| Rock riprap | $4 \text{ fps} < V_{100} < 12 \text{ fps}$ |
| Grouted rock riprap | $V_{100} > 12 \text{ fps}$ |

- Horizontally curved storm drain shall be allowed and shall meet the manufacturer's recommendations for curved alignment, and will require the installation of a trace wire.
- Access prevention grates on storm drains shall be required per the Design Manual with the locks on top if possible.
- Permanent access with easements will be provided to all inlet and outlet structures. Twelve foot wide access roads for inlets 24" or larger will be constructed of 6-8 inch cobble laid to be a "drivable" surface to the satisfaction of the city with hammerhead vehicle turnarounds.



SANITARY SEWER

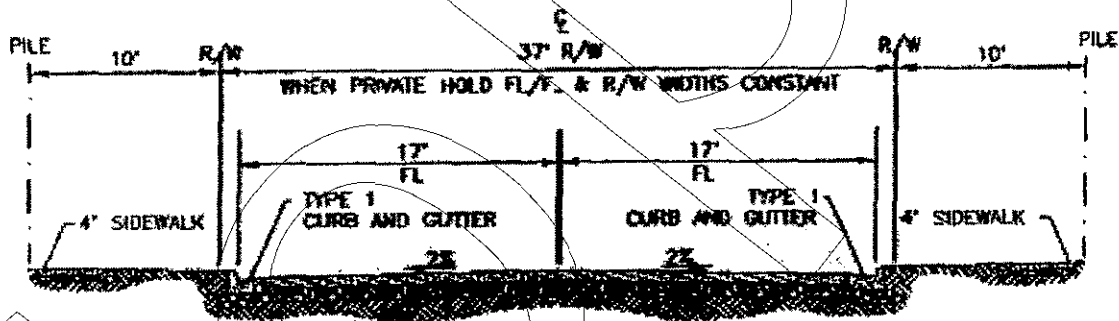
Horizontally curved sanitary sewer shall be allowed and shall meet the manufacturer's recommendations for curved alignment, and will require the installation of a trace wire.

PRIMARY/SECONDARY ACCESS PLAN, AND FIRE DEPARTMENT POLICY

Primary access is provided by Somerset Parkway and Back Nine Trail, which shall be constructed as an ungated Major Parkway and Collector Street, respectively. Secondary access shall be provided by both ungated routes and by gated routes (which also serve as emergency access) with further requirements as follows:

1. Gating, either manned or unmanned will be determined at the time of Final Map or Special Use Permit. Provision for a permanently gated future emergency access, from Village 2 east to a point on the west property line of the adjacent parcel, will be required. Additional improvements on the adjacent property shall not be required for the development of SBE. Permanent all weather gated fire access roads shall be allowed to interconnect both public and private roads. The access roads shall be owned and maintained by the SBE HOA. The access road gates shall be designed by the SBE AGC and operate utilizing approved strobe opening devices.
2. When parking is not permitted on access or public roads, a sign that prohibits parking shall be provided at the entrance of the road or the general area. The SBE AGC shall design this sign. This sign shall replace the "NO PARKING-FIRE LANE" signs and the red curbing normally required.
3. No red curbing other than for fire hydrants shall be allowed. The spacing for "NO PARKING-FIRE LANE" shall be 300 feet.

PILE - Public Improvement Landscape Easement.



**LOADED RESIDENTIAL STREET (LOCAL)
FIGURE 2-19**

NOTES:

1. TYPE 10 ROLLED CURB & GUTTER IS ALLOWED WHEN PRIVATE.
2. THERE WILL BE A MINIMUM OF 6' OF LANDSCAPING BETWEEN BACK OF CURB AND SIDEWALK

RESIDENTIAL STREET STANDARDS

- Sidewalks may be eliminated on cul-de-sac streets servings less than 10 lots in custom neighborhoods through the Final Map process where appropriate.
- Residential street sections will be per Figures 2-19 through 2-26
- The basic standard includes a six (6) foot planting strip and detached four (4) foot minimum width sidewalk will be provided on both sides of residential streets abutting one quarter acre

and smaller size lots. For estate lots and larger lots and along "single-loaded" streets, a six-foot planting strip will be provided on both sides of the street with a four (4) foot minimum width sidewalk on one side only. Alternate street sections for residential streets may be requested with the Final Map. If a street is unloaded or if grading is significantly minimized in areas of extreme terrain, the sidewalk may be placed at back of curb and the landscape strip omitted.

- Sidewalks maybe asphalt.
- The posted speed limit on residential streets shall be 25 mph.
- The minimum lot frontage on a cul-de-sac shall be 25 feet.

EMERGENCY ACCESS

- Emergency access will be per Figure 2-23, Emergency Access section.

STREET LIGHTING

"Dark Skies" shall be defined by the following location and spacing parameters:

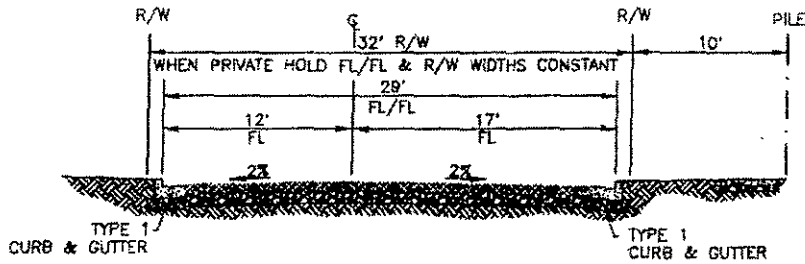
- Residential - The minimum spacing of streetlights shall be at the intersections.
- Other locations shall be permitted with AGC and City Staff approval.

PEDESTRIAN PATHS AND BIKEWAYS

SBE's paths and trails are provided for multi-purpose pedestrian and bicycle, linking the common areas within the project area. Pathways will meander within open space areas and link major natural and landscaped open spaces, schools, and parks to residential uses. The pedestrian/bike trail system will provide an alternative to automobile transportation. Where practical, paths and trails should be located and aligned to provide views of surrounding natural features and community open space. See Figure 2-27, Multi-Purpose Trail.

The path and trails criteria are intended to provide safe, functional, and aesthetically pleasing walkways within and between development parcels. Paths are a minimum of 4-6' in width. Connections will be created for the overall walkway system to allow all residents optimal pedestrian access throughout the area. Paths will be kept separate from roadways where possible, with crossings preferred at controlled intersections or at tangent road sections where adequate sight distance is provided for. Some paths are combined with utility access drives and emergency access roads. To the extent practical, all paved walkways should be handicapped accessible. Existing foot/bike paths will be utilized where possible and upgraded to SBE standards. The trail system will be designed to connect to existing off site trails where possible, see Figure 2-28.

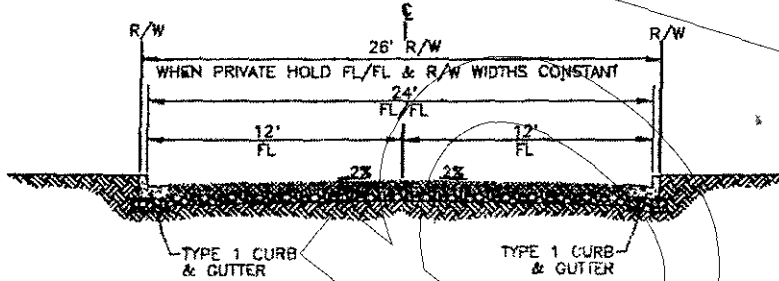
The type, location, construction methods, and grading for all trails will be provided with each Final Map application that demonstrates connection with the overall system. Trails associated with each Final Map will be constructed with the development of each Final Map to the satisfaction of staff. Of course, trails will be routed around gated projects.



LOCAL SINGLE LOADED STREET
LOCAL UNLOADED STREET
FIGURE 2-21

NOTES:

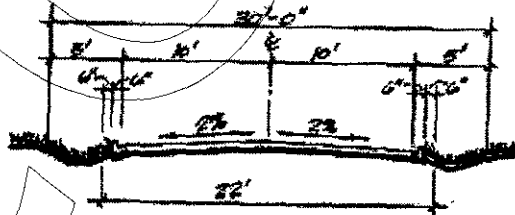
1. TYPE 1B ROLLED CURB & GUTTER IS ALLOWED WHEN PRIVATE.
2. AN UNLOADED LOCAL STREET HAS THE SAME R/W TO R/W AND FLOW LINE TO FLOW LINE WIDTH AS SHOWN, BUT HAS SYMETRIC TRAVEL LANES AND NO PILE.
3. SIDEWALK IS REQUIRED PER THE DESIGN MANUAL UNLESS OTHERWISE SPECIFIED BY THE PUD HANDBOOK.



LOCAL STREET (USED ONLY AS CONNECTOR)
FIGURE 2-22

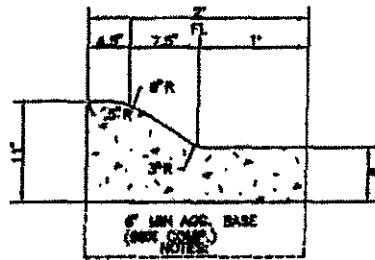
NOTES:

1. TYPE 1B ROLLED CURB & GUTTER IS ALLOWED WHEN PRIVATE.
2. THIS STREET IS TO BE USED TO CONNECT DEVELOPMENTS WITHIN SOMERSET AND PARKING SHALL NOT BE ALLOWED.
3. A SIDEWALK ADJACENT TO THE CURB SHALL BE PROVIDED UNLESS OTHERWISE SPECIFIED BY THE PUD HANDBOOK.



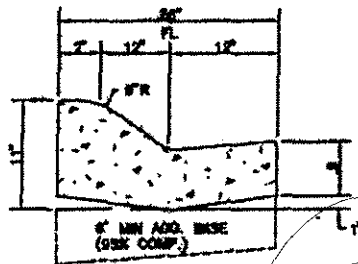
• Curb and gutter may be required if necessary for drainage and to reduce grading.

FIGURE 2-23 - EMERGENCY ACCESS SECTION



TYPE 1A PCC ROLL CURB & GUTTER

FIGURE 2-24



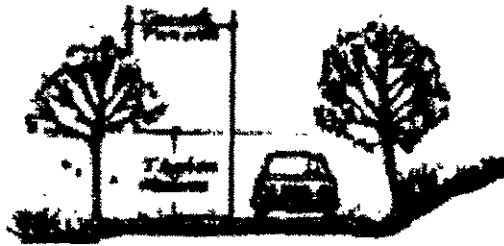
TYPE 1B PCC ROLL CURB & GUTTER

FIGURE 2-25

- 1) SIDEWALKS MAY BE ASPHALT IF SHOWN AND APPROVED WITH THE TENTATIVE MAP AND OR SPECIAL USE PERMIT.
- 2) THE PUBLIC UTILITY EASEMENTS SHOWN AND NOTED ON THIS PLAN INCLUDE THE USE, INSTALLATION AND MAINTENANCE OF CABLE TELEVISION FACILITIES AND ALSO INCLUDE USE, INSTALLATION AND MAINTENANCE OF TELECOMMUNICATION AND ELECTRIC COMMUNICATION LINES AND ASSOCIATED FACILITIES GRANTED TO SOMERSETT TECHNOLOGY, LLC.
- 3) THE PUBLIC IMPROVEMENT AND LANDSCAPE EASEMENT (P.A.L.E.) SHALL INCLUDE CITY OF RENO ACCESS FOR REPAIR OR REPLACEMENT OF PUBLIC IMPROVEMENTS SUCH AS CURB, GUTTER, SIDEWALK, AND TRAFFIC SIGNS. P.A.L.E. INCLUDES PUBLIC USE OF SIDEWALK PER RENO MUNICIPAL CODE 12.20.
- 4) THE OWNER HEREBY GRANTS TO SOMERSETT TECHNOLOGY, LLC A BLANKET EASEMENT FOR THE PURPOSE FOR USE, INSTALLATION AND MAINTANCE OF TELECOMMUNICATION AND ELECTRIC COMMUNICATION LINES ASSOCIATED FACILITIES WITHIN THE PROPERTY OFFERED FOR DEDICATION AND WITHIN ALL AREAS BOUND BY A PUBLIC UTILITY EASEMENT. ANY TELECOMMUNICATION AND ELECTRIC COMMUNICATION LINES PLACED UNDERNEATH IMPROVED SURFACES WITHIN PROPERTY OFFERED FOR DEDICATION SHALL BE PLACED WITHIN A SLEEVE APPROVED BY THE CITY OF RENO OR SOMERSETT TECHNOLOGY, LLC. SHALL BE AT THE FULL EXPENSE OF SOMERSETT TECHNOLOGY, LLC. AND SHALL BE PROVIDED USING SAID LINES AND FACILITIES AN AGREEMENT ON SAID MATTER, AND OTHER ISSUES RELEVANT THERETO BETWEEN THE CITY OF RENO AND SOMERSETT TECHNOLOGY, LLC IS EXCUSED TO THE CITY'S SATISFACTION.

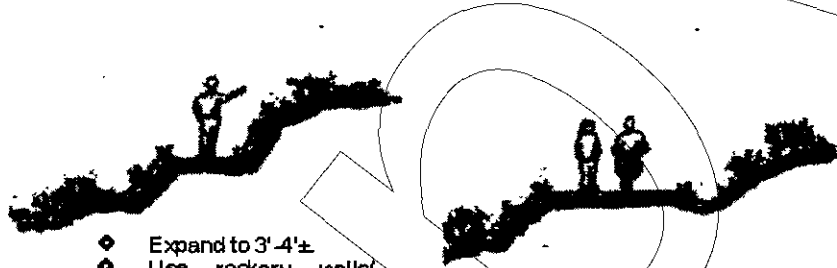
TYPICAL NOTES FOR ALL STREET SECTIONS

FIGURE 2-26



- ◆ Minimum 7' width
- ◆ Can be utilized & combined with maintenance road.
- ◆ Use either A.C. or leave natural depending on use or slope.
- ◆ Revegetate disturbed areas as necessary w/native plants.
- ◆ Provide turnouts every 1/2 mile.
- ◆ Maintain 7' high clearance.

FIGURE 2-27 - MULTI-PURPOSE TRAIL



- ◆ Expand to 3'-4'±
- ◆ Use rocky walls/native landscape.

- ◆ Expand to 4'-8'
- ◆ Use either A.C. or leave natural depending on use or slope.
- ◆ Can be utilized & combined with maintenance road.
- ◆ Revegetate disturbed areas as necessary w/native plants.

FIGURE 2-28 - FOOT/BIKE PATHS

OPEN SPACE & TRAIL SYSTEMS

SBE will offer its residents substantial open space (Figures 2-29, Open Space and Trails System Map). Open space will be owned and maintained by the Owner's Association. SBE's trails will be open to the public, as defined in appropriate agreements and/or public use easements, at the time of Final Map or Building Permit approval.

Enforcement activities related to required common area maintenance shall remain with the Owners Association. A network of regional trails will provide both residents and non-residents with access to open space. The trails will tie into the system of paths and sidewalks providing residents with convenient access to recreational and other site amenities. Such regional trails will be routed around lots, and through open space, subject to staff approval.

The type, location, construction methods, and grading for all trails will be provided with each Final Map application that demonstrates connection with the overall system. Trails will be constructed with the development of each Final Map to the satisfaction of staff.



A signed disclosure notice shall be required alerting future residents to the public trails system, and that all trails, and their access are to remain public at all times with no restrictions, including gates. Future residents will be required to sign a disclosure notifying them that the trails are to remain public in perpetuity.

NATURAL OPEN SPACE

- Undisturbed common areas will be maintained in their natural state and will be designated with each map, SUP, or building permit, as appropriate.

Areas designated as natural open space that are disturbed during construction of roads, trails, and utilities will be enhanced/revegetated with plants selected from the Natural High Desert plant palettes, (see Exhibit E). Plants will be conducive to an increase in deer and wildlife habitat value. These areas will be designated with each Final Map, building permit, or Special Use Permit, as appropriate.

TRAILS

- Trails will meander within open space, designed as sweeping curves that create visually appealing landscape forms and follow the natural grade. Abrupt or irregular curves and jogs are not permitted. Curved paths will not be used in areas too narrow to allow a sweeping curve.
- The Owners Association will maintain all trails.
- Trails will be routed around gated projects to the extent possible.
- As much as practical, trails will follow existing dirt roads and jeep trails. New trails cut through natural, undisturbed terrain will include minimal removal of vegetation and grading as required to provide a smooth, safe traveling surface.
- A Conceptual Trails Plan for general public use is shown in Figure 2-29. Trail improvements include grading, revegetation, and enhancements, which will be implemented and constructed by the Master Developer with adjacent Final Maps.
- Individual developments will connect to the trail system with sidewalks or trails.
- Completion of trails shall be the responsibility of the Master Developer. The parcel developer shall construct the improvements as Final Maps are approved. The C of O's for the last five units for each map will be held until all trail construction is completed. In the even the parcel developer does not complete the trails, the Master Developer shall complete installation of them.
- Where trails cross roads, "Road Crossing" signs and/or safety striping will be constructed.
- Access to historic/existing trails shall be continued if safety permits as determined by City Staff. During construction, alternate routes and temporary/permanent signage shall be installed with each phase. The Master Developer will provide City Staff with aerials identifying existing trails.

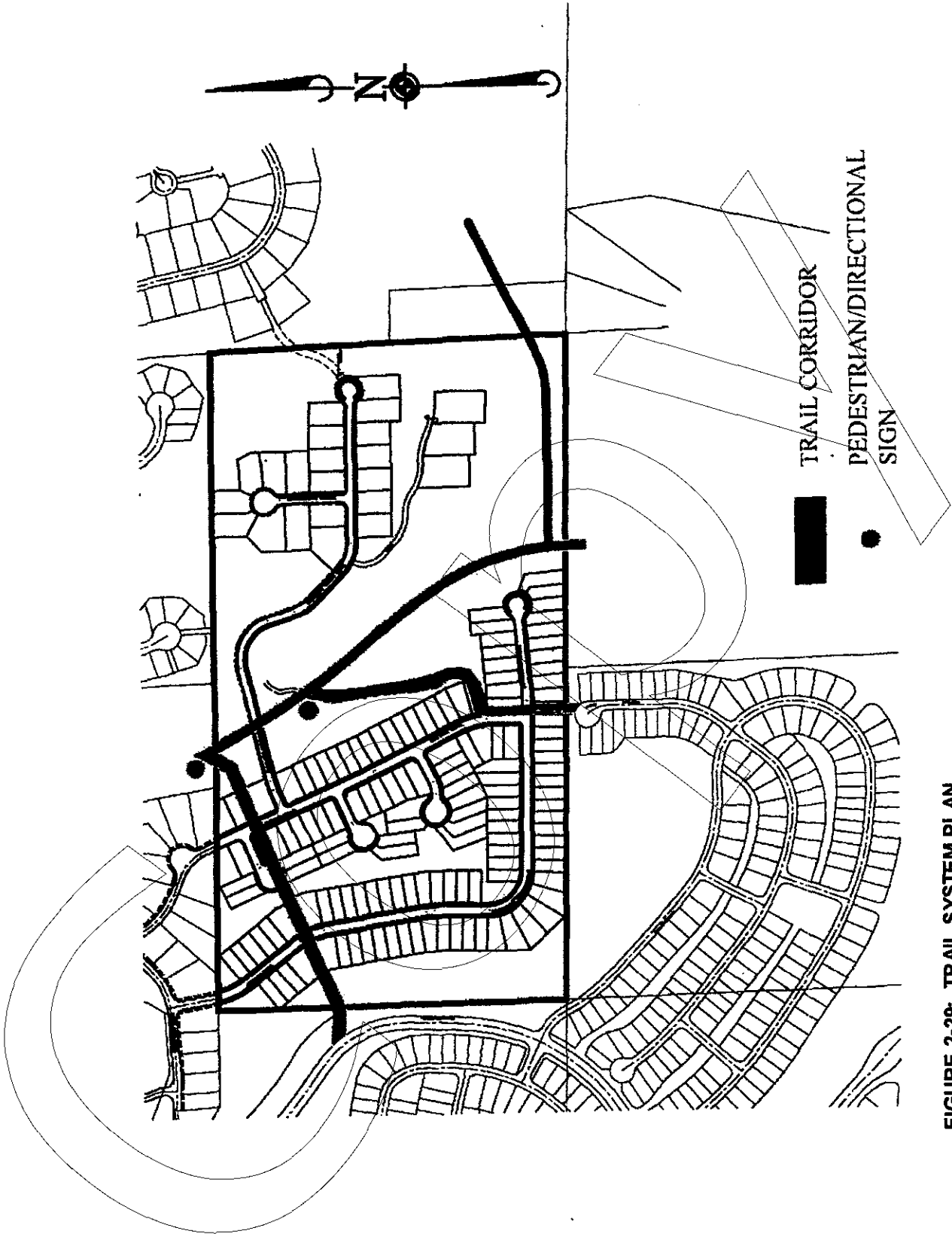


FIGURE 2-29: TRAIL SYSTEM PLAN



SITE GRADING PRINCIPLES

The overall grading concept for SBE is to create buildable pads and pleasant streets while maintaining the underlying integrity of the landform. Cut and fill will be balanced, to the extent practical, over the entire site. Views will be considered while maintaining a low visual impact to surrounding properties.

STANDARDS

- All disturbed areas will be revegetated or restored. Proper erosion, dust control, and reseeding techniques will be used as described in the most recent edition of "Handbook of Best Management Practices," by the State of Nevada Division of Environmental Protection Bureau of Water Quality Planning.
- Seeding and possibly plantings of plugs will be performed after finish grading has been completed, in the early spring or fall, whichever comes first. All seeded areas within developed areas will be permanently irrigated. Seeding areas within transitional areas will, at a minimum, be irrigated for two (2) growing seasons or until plantings are established, pursuant to 18.06 and 18.09 of the Public Works Design Manual.
- Transitions at top and toe of graded slopes will be rounded to blend with the natural terrain. Abrupt, squared off transitions are not permitted, except where part of a traditional/symmetrical landscape design, or where less than 4-5' in height.
- Naturalistic grading will be used where complex recontouring and revegetation must occur. Continuous expanses of landforms will be created to look natural as opposed to contrived or manmade. Where used, architectural or structured berms (i.e., retaining walls, earth buildings, sculptural land forms, etc.) will be an integral part of the architectural and landscape theme of the project, including consideration of color. Darker colors are preferred except where native materials are used.
- Retaining walls consisting of materials such as native stone are encouraged when grading dictates. Wall colors must be consistent within a given area or Permeon stain applied. Walls will generally be terraced if higher than six feet. Bench width approximately equals the adjacent wall height. See Hardscape Fences and Walls for additional information.
- Individual parcels will be graded to direct runoff away from buildings and into drainage facilities or roads.
- All grading will follow City of Reno requirements. Slopes 3:1 or less steep are preferred. Slopes with grades between 3:1 and 2:1 will be stabilized with a geotextile fabric and planted material, upon authorization by the soils engineers and City Staff, or with rip rap or other forms of armoring. Slopes of 2:1 will be armored or rip rapped and possibly top soiled and seeded to establish a finished condition, which looks like a planted slope, per authorization of City Staff. Armored slopes will be enhanced through the incorporation of live plantings, with at least one tree provided for every 500 square feet of armored area. The color of the 2:1 slope armoring materials must be consistent with the area in which they will be placed or Permeon stain applied.
- In the estate lot areas, hillside adaptive architecture will be required to lessen the need for grading.
- Construction of accessory structures and solid view fencing is prohibited on slopes 3:1 or greater.
- Building rooflines shall be located below the ridgeline whenever possible so that views to the hillside retain the natural ridgeline.



- Cut buildings into the hillside to reduce effective visual bulk and to provide energy efficient and environmentally desirable spaces. The visual area of the buildings can be minimized through a combined use of regrading and landscaping techniques.
- Split pads, stepped footings, pier and grade beam foundations to permit the structure to step up the slope. Avoid large single form structures.

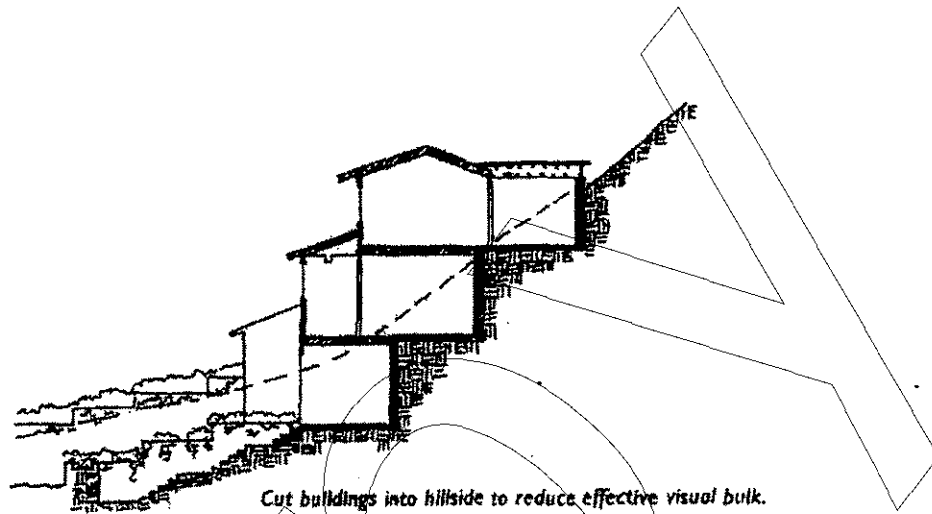
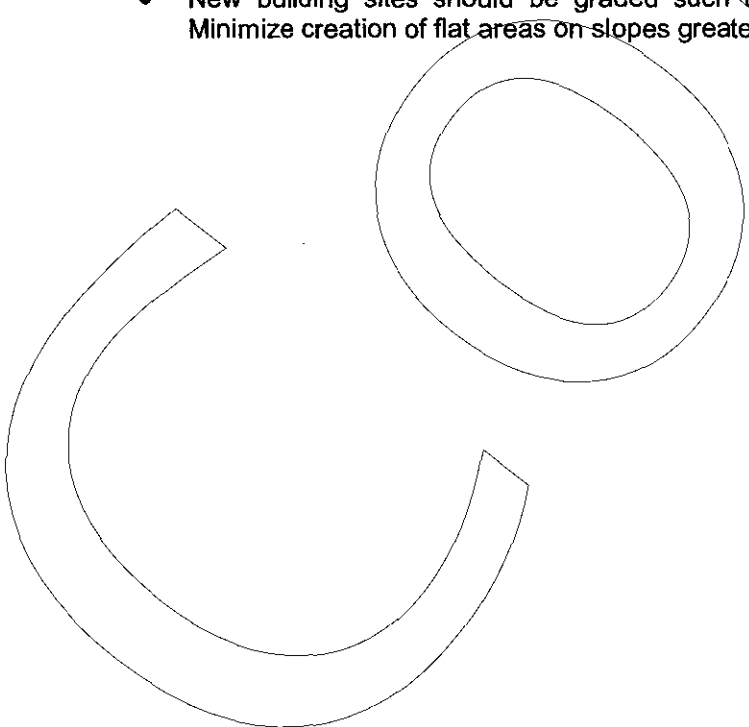


FIGURE 2-30 - ADAPTING ARCHITECTURE TO HILLSIDES

- New building sites should be graded such that they appear to emerge from the slope. Minimize creation of flat areas on slopes greater than 25%.



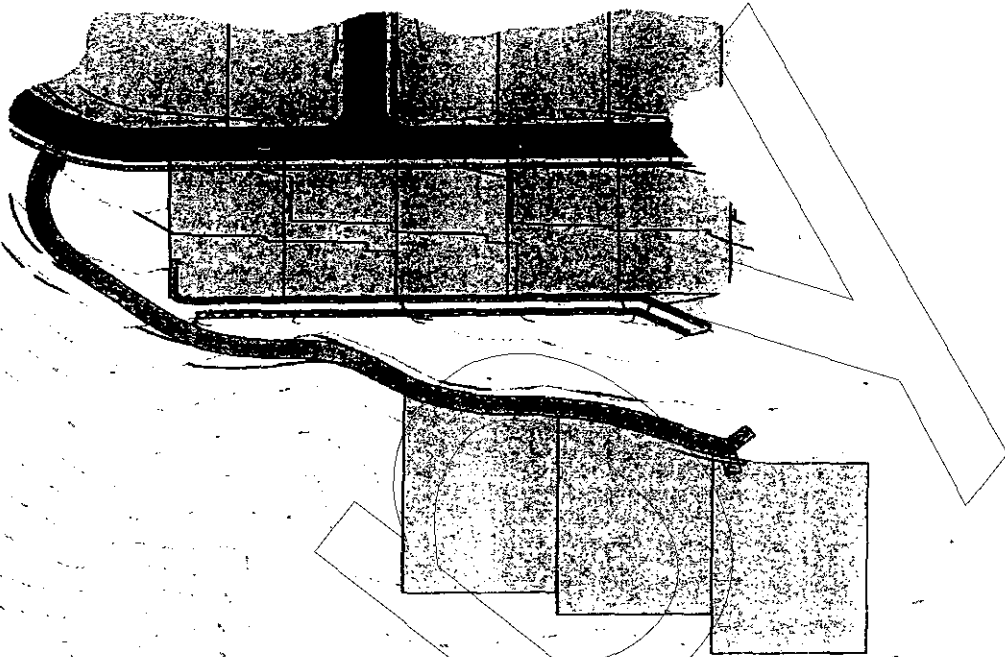


FIGURE 2-31 - USE OF SHARED DRIVEWAYS ENCOURAGE TERRACING

- Allow shared driveways to encourage terracing of buildings while minimizing roadway cut and fill.



Use of natural materials in man-made drainage channel.

FIGURE 2-32 - DRAINAGE DEVICES

- Drainage devices such as terrace drains, benches or downdrains should be placed in locations of least visibility on slopes. The side of a drain may be bermed to conceal it. Natural swales leading downhill area a good location for downdrains. Visible concrete drains should be color tinted and revegetated with planting to be less obtrusive.
- Avoid a manufactured appearance by creation smooth flowing contours of varying gradients, preferably with slopes 2:1 to 5:1. Avoid sharp cuts and fills and long linear slopes that have uniform grade.

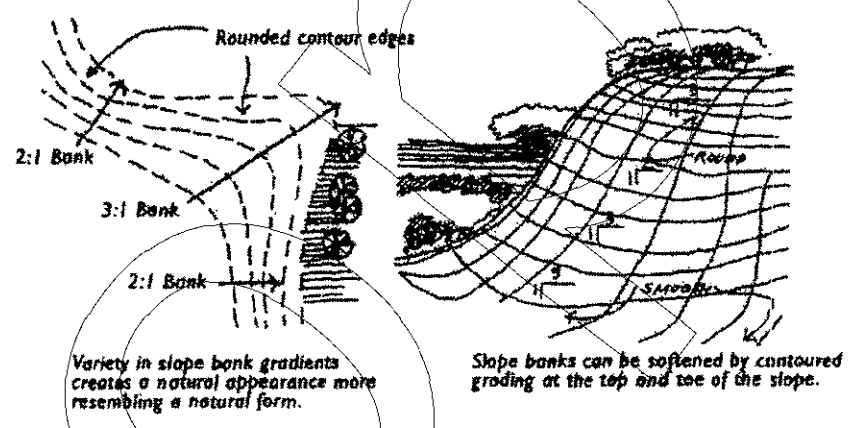


FIGURE 2-33- BUILDING SITES ON SLOPES

- Allow front and side setback requirements to be flexible (including zero lot line conditions) subject to Environment and Design Review, to promote cluster of building if this will protect existing slopes or minimize grading.
- Varied and staggered front building setbacks are encouraged in hillside residential subdivision layout. This is consistent with the natural hillside character and will reduce the monotony of repetitive setbacks.

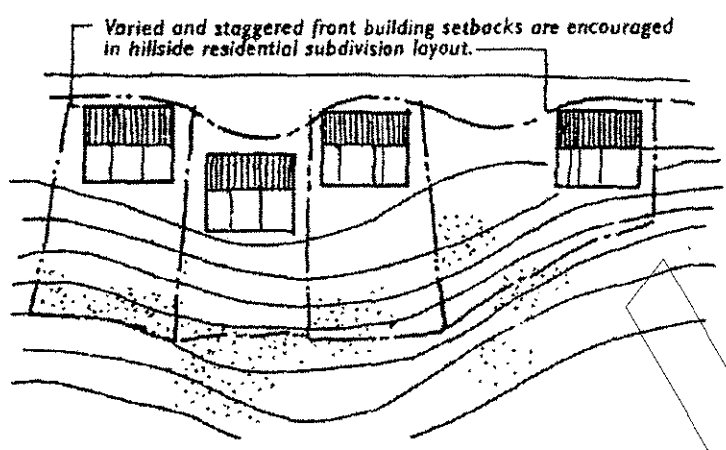


FIGURE 2-34 - STAGGERED SETBACKS

- A large building's bulk may be reduced by breaking the roof form into smaller parts, reflecting the irregular forms of the surroundings. There should be a consistency of roof pitch and design among separate roof components. Abrupt changes in eave heights require plan offsets to make transitions between building components.

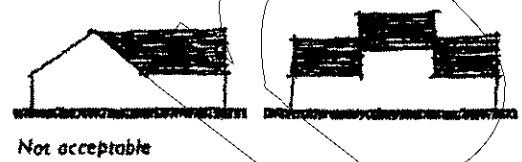
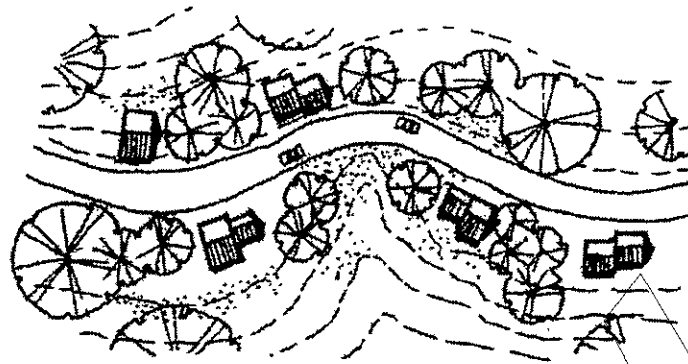


FIGURE 2-35 - REDUCING BULK THROUGH ROOF DESIGN

- Streets, drives, parking and emergency vehicle access should be aligned to conform, as closely as possible, to the existing grades and minimize the need for the grading of slopes. They should not greatly alter the physical and visual character of the hillside by creating large notches in ridgelines or by defining wide straight alignments on hillsides. Natural landforms may often be retained by introducing gently horizontal and vertical curves in road alignments. Straight roads should be utilized if grading can be reduced, as determined in the Final Map public hearing process.



Street layout shall be aligned to conform to the natural grades as much as possible. Long stretches of straight road should be avoided by introducing gentle horizontal and vertical curves.

FIGURE 2-36 - DESIGNING STREETS AND DRIVES WITH GRADES

SUPPLEMENTAL HILLSIDE DEVELOPMENT STANDARDS

SBE will be developed to meet the requirements stated in the revised 2004 City of Reno Hillside Ordinance (see Exhibits).

A Special Use Permit shall be required when cuts exceed 20 feet, the following standards shall apply:

- Cut slope angles shall be determined in relationship to the type of materials of which they are composed. Steep cut slopes shall be retained with stacked rock, retaining walls, or functional equivalent to control erosion and provide slope stability when necessary. Revegetation may be considered as an alternative through the Final Map, Special Use Permit and building permit stage.
- Exposed cut slopes, such as those for streets, driveway accesses, or yard areas, greater than 20 feet in height shall be terraced. Cut faces on a terraced section shall not exceed a maximum height of 20 feet. Terrace widths shall be a minimum of five feet to allow for the introduction of vegetation for erosion control, with a preferred width of ten feet where landscaped.
- Revegetation of cut slope terraces shall include the provision of a planting plan, introduction of topsoil where necessary, and the use of irrigation if necessary as determined by Reno Community Development. The vegetation used for these areas shall help reduce the visual impact of the cut slope, and assist in providing long-term slope stabilization. Trees, shrub plantings and cascading vine-type plantings may be appropriate. Cut slope terraces close to the roadway, within the drivers visual scope (60') will be more heavily vegetated than those farther up or down the slope (>60').

A Special Use Permit shall be required when fills exceed 10 feet, the following standards shall apply:

- The toe of the fill slope area not utilizing structural retaining shall be a minimum of six feet from the nearest property line, ideally 1:1 setback based on height of fill.
- Fill slopes steeper than 3:1 shall be protected with an erosion control netting, blanket, or functional equivalent. Netting or blankets shall only be used in conjunction with organic mulch such as straw or wood fiber. The blanket must be applied so that it is in complete contact with



the soil so that erosion does not occur beneath it. Erosion netting or blankets shall be securely anchored to the slope in accordance with manufacturer's recommendations.

- Revegetation of fill slopes shall utilize vegetation, which will survive and stabilize the surface. Irrigation may be provided to ensure growth if necessary. Evidence shall be required indicating long-term viability of the proposed vegetation for the purposes of erosion control on disturbed areas.

If necessary, rock used for grading application shall be treated with a chemical stain to blend with the surrounding landscape. Chemical stains shall be applied to bedrock surfaces that are exposed as a result of grading activity.

Revegetation requirements. Vegetation shall be installed in such a manner as to be substantially established within one year of installation.

Maintenance. All measures installed for the purposes of long-term erosion control, including but not limited to vegetative cover, rock walls, and landscaping, shall be maintained in perpetuity on all areas which have been disturbed, including public rights-of-way. The applicant shall provide evidence indicating the mechanisms in place to ensure maintenance measures.

Building Design. To reduce hillside disturbance through the use of slope responsive design techniques, buildings on Hillside lands shall incorporate the following into the building design and indicate features on the required building permits:

- Cut buildings into hillsides to reduce visual bulk. Split pad or stepped footings shall be incorporated into building design to allow the structure to more closely follow the slope.
- A building step back shall be required on all downhill building walls greater than one story in height, as measured above natural grade. No vertical walls on the downhill elevations of new buildings shall exceed a maximum height of 20 feet above natural grade.
- It is recommended that roof forms and roof lines for new structures be broken into a series of smaller building components to reflect the irregular forms of the surrounding hillside. Long, linear unbroken rooflines are discouraged. Large gable ends on downhill elevations should be avoided, however smaller gables are permitted.
- It is recommended that roofs of lower floor levels be used to provide deck or outdoor space for upper floor levels. The use of overhanging decks with vertical supports in excess of 12 feet on downhill elevations should be avoided.
- It is recommended that color selection for new structures be coordinated with the predominant colors of the surrounding landscape to minimize contrast between the structure and the natural environment.

Stabilization of soil mantle conditions where existing grades are steeper than 2:1 must be considered.

Areas of the development will be retained in a natural state and evaluated per City of Reno Code 18.06.804, Section F, and per Truckee Meadows Regional Plan.

Administrative Variance from Development Standards for Hillside lands. A variance may be granted by the Zoning Administrator with respect to the development standards for Hillside lands if all of the following circumstances are found to exist:

- There is demonstrable difficulty in meeting the specific requirements due to a unique or unusual aspect of the site or proposed use of the site;



- The variance will result in equal or greater protection of natural resources.
- The variance is necessary to alleviate the difficulty.

BUILDING SITING/ENVELOPES

POLICY 1 GENERAL CONSIDERATIONS

All building siting will be such that disruption to the environment will be minimized, important site features are protected and the use and enjoyment of neighboring properties is not unduly impaired. A prime consideration is "matching" building and access to the particular piece of property under consideration.

POLICY 2 ELEVATION CRITERIA

As a part of the Compliance Statements required by this Handbook, any deviation from the PUD setback requirements must be noted along with the reasoning for the deviation. The evaluation criteria specified in this policy will often conflict with one another. Thus, the objectives of each criterion must be weighted against those of the other criteria.

The developer, the AGC and the City Staff will be responsible for determining building locations, using the following criteria:

- Fit of building plans to the terrain. Finished grades surrounding buildings should match the existing, natural grades to minimize exposed cut and fill slopes.
- Degree of slope/topography in general. The more gentle a slope is and the more even the topography in general is, the more suitable an area is for building.
- Existing vegetation and natural features. The less vegetation and/or unique land forms of other natural features and area has, the more suitable it is for building because retention of these features is integral.
- Views from the proposed structures. View sheds from a building site should be retained to the degree possible.
- Effects on views from neighboring properties. When established building envelopes, their relationships between envelopes, where one building site can affect the views from other envelopes, will be considered.
- Retention of useable open space. Usable open space includes, but is not limited to: areas that protect views, and areas that create space between homes, between differing land uses or between roadways and buildings.
- Vehicular access. Access to the building envelope should be such that the amount of land disturbed required for such access is minimal.

This section of the Development Standards Handbook presents the evaluation criteria that form the basis for establishing building envelopes and thus, the basis for the AGC considering a variance request. No variance may be granted by the AGC that would be contrary to any setback requirements of the City unless expressly permitted by the City of Reno.

Tentative subdivision maps will include building envelope locations. The Final Map application will also address how the above criteria's were applied. Any special height restrictions designed to protect views and/or solar access will also be shown on the Final Map.



WILDLIFE MANAGEMENT

SBE is located in the southeast portion of an area where mule deer stay during extreme winters. A key project concept is to establish a program that informs buyers about the projects natural resources and to create a resource ethic among residents.

SBE will follow the Somerset's PUD Wildlife Management Standards established measures to protect and enhance wildlife habitat, particularly that of the mule deer, while allowing for harmonious, quality development. Wildlife seed enhancements will be included within the native area as described in the Plant Palette Map.

REGULATION/ENFORCEMENT

- The Owner's Association (OA) manager or equivalent entity will be the point-of contact for residents with wildlife concerns or questions. Wildlife issues will be handled by the OA with input as appropriate by wildlife/natural resource agencies.
- The OA will:
 - Circulate ongoing newsletters that provide information to SBE residents about habitat improvements, critical times of the year when residents need to be acutely considerate of wildlife needs, community/volunteer groups that participate in enhancement or public awareness projects and other community/wildlife issues.
 - Serve as the "alerting and enforcement" entity during critical times of the year or during critical years, when wildlife needs are at their greatest. During these times, SBE residents will be asked to take extra care in avoiding sensitive areas, controlling their pets and educating others to do likewise.

DRAINAGEWAY/WETLAND AREAS

DRAINAGEWAY

One drainageway occurs within SBE, which will convey runoff and form the backbone of the open space plan.

- This drainageway is natural and undisturbed except for the existing utility crossing. The roadway connection between the patio homes and the estate homes will be located in the existing disturbed area of the drainageway. The existing disturbed area of the drainageway will be enhanced with landscaping per the Major Drainageways Ordinance. The remaining drainage way will remain natural and undisturbed.

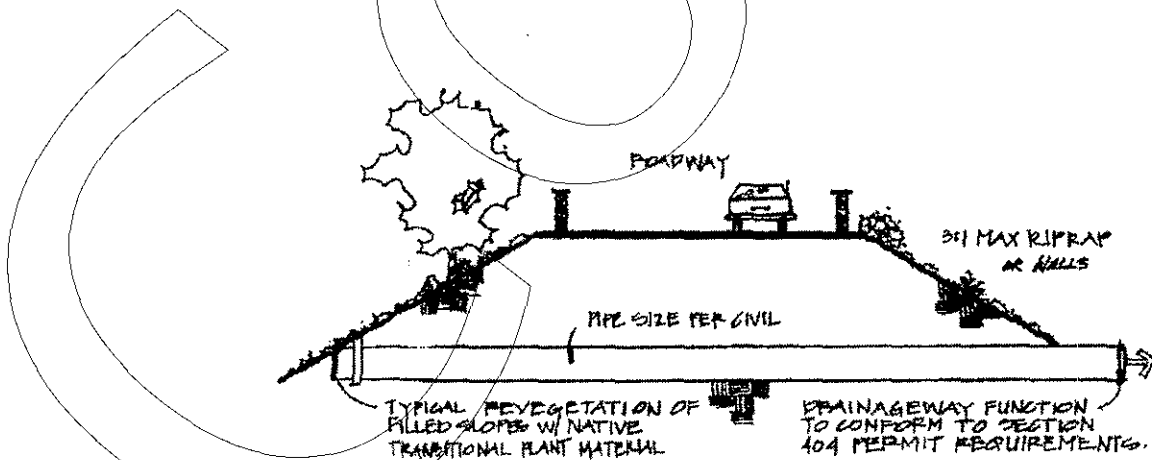


FIGURE 2-37 - TYPICAL MAJOR DRAINAGEWAY CROSSING CROSS SECTION

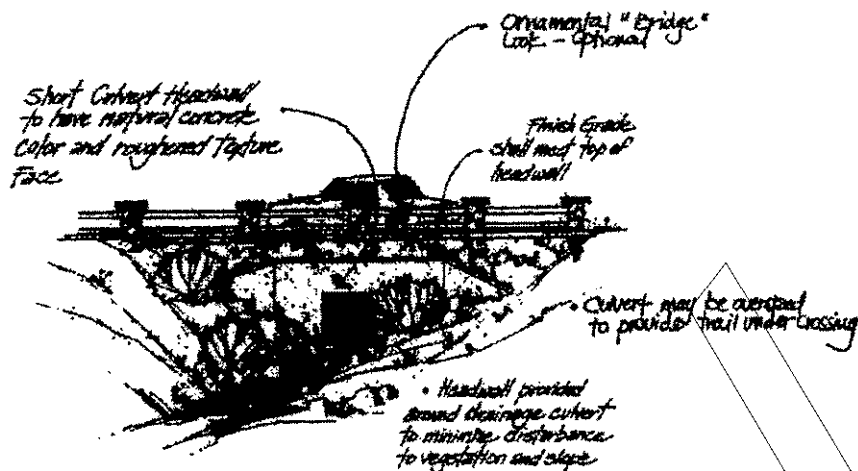


FIGURE 2-38 - VERTICAL CULVERT END TREATMENT AT MAJOR DRAINAGEWAY CROSSING CROSS SECTION

When the Major Drainageway Plan was adopted by the City of Reno, it was recognized that, from a recreation perspective, enhanced/landscaped drainageways can be more environmentally, aesthetically, and functionally beneficial than natural drainageways.

In general, it is desirable to have as little disturbance to the major drainageways, including the 15' setback, as possible. Grading and landscaping will be evaluated with the appropriate Final Map. Consideration will be given to the desirability of proposed grading, slope surface treatments, plant material, and the end result of the design from an environmental and recreational perspective. The report dated 1999 called "Survey of Wetlands, Stream Environment Zones and Waters of the United States" by Western Botanical Services includes an analysis of the major drainageways as required by the City's Major Drainageways ordinance.

- Detention areas will be approved by the City of Reno and in compliance with the City's Major Drainageway Plan prior to implementation.
- Major Drainageways may contain trails.
- Lots will not extend into the Major Drainageways including the 15' setbacks.
- Any proposed channel modifications, landscape enhancements and/or grading within a major drainageway (including the 15' setback) and its 100-year floodplain shall be addressed in the major drainageways S.U.P.
- Any proposed landscape and grading within the 100-year flow line should be designed for a character similar to the existing condition, or an improvement.
- Roadways crossing major drainageways will be aesthetically treated with rock, which may be stained to match the surrounding landscape. Landscaping and grading will be designed to blend and transition to the surrounding channel and banks. Channel bottom landscaping shall be designed to equal or improve the adjacent drainage vegetation.
- Drainageway crossings shall conform to the intent illustrated in Figures 2-37 and 2-38.
- Where appropriate, the culvert/box headwall treatment proposed in Figure 2-38 provides a method to limit the fills needed to place a roadway over a drainageway. With the headwall approach to design, existing vegetation and slopes can be retained and preserved.



Additionally, the culvert can be sized to accommodate both drainage and trail access where needed. Where limited disturbance occurs, new landscaping and ground surface design will be prepared to look like the surrounding landscape character, or improved.

- Any disturbance to the drainageways during construction of road, trail, and utility crossings will be enhanced/revegetated with plantings to increase deer and wildlife habitat value.

WETLANDS

No wetlands have been found within the site. However, if during construction if wetlands are found then all work surrounding shall comply with all City of Reno ordinances.

SPRINGS

No springs have been found within the site. However, if during construction if springs are found then all work surrounding shall comply with all City of Reno ordinances.

FUEL MODIFICATION ZONES/DEFENSIBLE SPACE

SBE is located in a Sagebrush Steppe community, the driest and most widespread vegetative community in this region. Big sagebrush (*Artemisia tridentata*) is the most characteristic species. The risk of wild land fires in the Sagebrush Steppe community has increased since an exotic plant called cheat grass (*Bromus tectorum*), has become dominant. Cheat grass grows fast and then dries up creating perfect tinder for fires ignited by lightning.

With acreage in SBE being devoted to open space, there is a potential threat of wildfires on the surrounding hillsides. As a defense against wildfires within SBE, parcels containing or abutting natural open space will be required to establish fuel modification zones as required by the Reno Fire Department prior to approval of a Final Map or building permit. Defensible space refers to a zone surrounding structures that is managed to reduce fire hazard. Within the defensible space, fuel modification measures, such as reducing fuel load and increasing the moisture content of the vegetation will be used to promote fire safe buffers. This zone serves as a physical barrier reducing the threat of wildfire and provides a visual transition between developed areas and open space.

STANDARDS

- A landscape maintenance program will be established by the Master Developer, incorporated into the CC&R's, and implemented/enforced by the OA. The program shall be incorporated into the CC&R's and recorded with the first Final Map. The purpose of the program shall be to remove dried and dead fuel and any other combustible debris from the perimeter of any inhabited building per Table 2-1. See Figure 2-41, Defensible Space Concept.
- An irrigation system will be used to increase moisture content of the living vegetation within fifty (50') feet of any structure or parking area. See Figure 2-42, Fuel Modification Zones.
- Paved parking areas can provide the required fuel buffer to buildings, although in most cases the siting of parking areas should be such that they do not interfere with views from buildings into open space.

TABLE 2-1 - DEFENSIBLE SPACE DISTANCE PERCENTAGE

| | | | |
|--------------|----------|----------|----------|
| Level to 20% | 100 Feet | 100 Feet | 100 Feet |
| 21% to 40% | 150 Feet | 150 Feet | 200 Feet |
| 41% to 60% | 200 Feet | 200 Feet | 400 Feet |

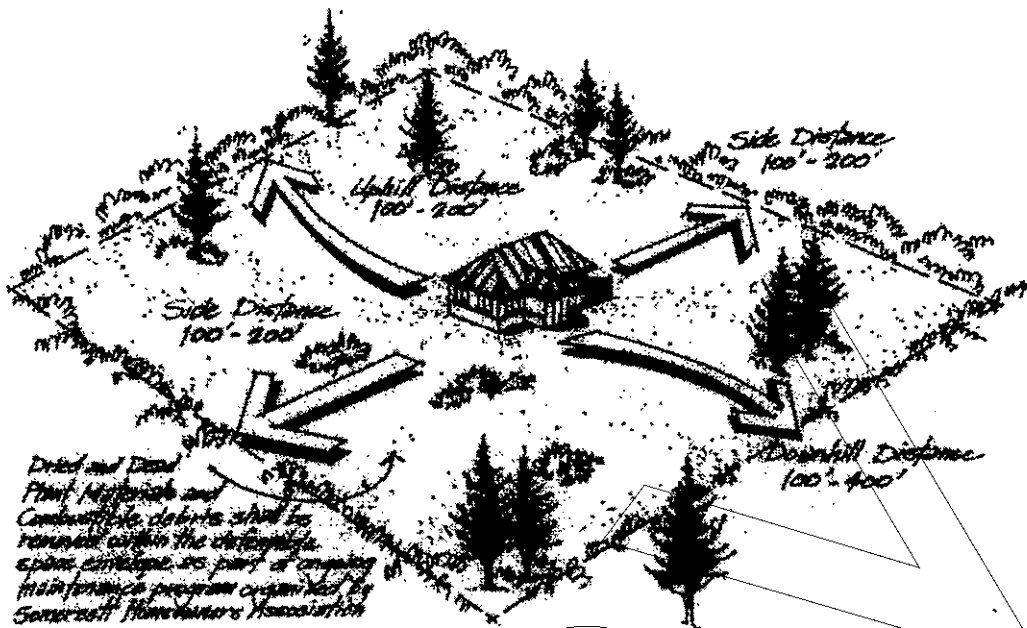


FIGURE 2-41 - DEFENSIBLE SPACE CONCEPT

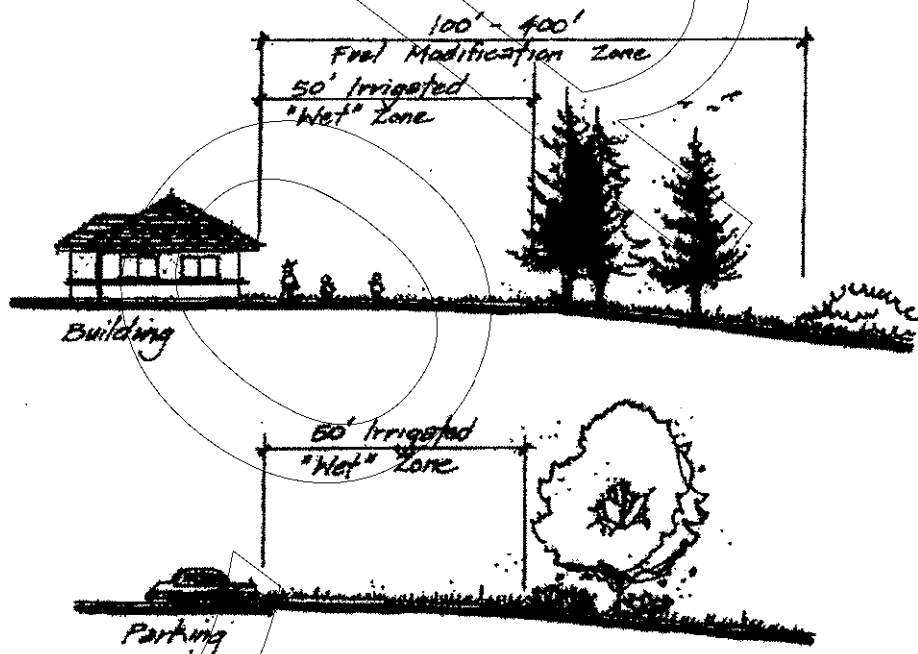


FIGURE 2-42 - FUEL MODIFICATION ZONES

LANDSCAPE FOR RESIDENTIAL AREAS

The Residential home products are defined in Chapter 2, Land Use Designation/Design Standards. At a minimum, all disturbed or graded areas within SBE shall be landscaped/revegetated in accordance with the native High Desert Plant Palette (see Appendix).



PATIO HOME STANDARDS

- Front yard landscaping and irrigation equipment will be installed by the builder, prior to issuance of the Certificate of Occupancy for said home.
- Front yard plant material will be selected from the Developed Plant Palette.
- Prototypical front yard landscaping plan(s) will be submitted with Final Mapping.
- All landscaping plans will be subject to approval by the AGC. All plans must be stamped for approval by the AGC before being submitted to the City of Reno.

ESTATE HOME STANDARDS

- Landscaping and irrigation will be installed by the owner within 8 months of close of escrow for said home.
- Front yard plant material will be selected from the Developed Plant Palette.
- All landscaping plans will be subject to approval by the AGC. All plans must be stamped for approval by the AGC before being submitted to the City of Reno.

HARDSCAPE

SBE's hardscape palette includes signs, paving, site furnishings, lighting, walls, and fences. These elements will strengthen project identity by establishing a cohesive look, reflecting circulation hierarchies, and creating focal points within the community. The hardscape palette will work with the project landscaping to reinforce SBE's fit and complementary contrast with its natural site.

Two levels of treatment are defined for hardscaping. The first level, the Core Treatment, prescribes specific designs to be used for all hardscaping elements that are located within common open space. The second level, the Complementary Treatment applies to all hardscaping not located in core areas, i.e., individual villages, residential streets, and land to be dedicated to public entities and private parcels. Hardscaping in these areas is required to match or coordinate with the styles, materials and colors of the Core Treatment. This approach permits the establishment of unique yet related identities for distinct areas within SBE.

SIGNS

The sign standards provide for a cohesive, coordinated means to promote community image and identity, and to provide direction.

GENERAL SIGN STANDARDS

All signs will comply with the following standards. All signs must be approved by the AGC. All plans must be stamped for approval by the AGC before being submitted to the City of Reno. Sign standards specific to different treatment areas within the Community are described later. A uniform common area graphic and signs system will be designed for all signs related to major entries and identification, public common areas and the path/trail system with the approval of the first Final Map. See Lighting Standards, for lighting information relating to signs.

- Where specific standards are not found here, signs will comply with any City Sign Code and RTC sign requirements.
- The following signs are prohibited in addition to those prohibited by City Code:
 - Any revolving beacon, flashing and/or rotating sign, any sign with intermittent lighting (with the exception of flashing school crossing signs or temporary construction or other safety signs). Decorative holiday lighting may be used on SBE roadways.



- Signs will comply with the provisions of Table 2-2.
- Signs will not obstruct the visibility of traffic directional signs, or traffic control devices.
- Signs will not interfere with traffic visibility triangles.

Special community event signs will be permitted sixty (60) days prior to and seven (7) days following the event.

- Signs and sign structures will be maintained at all times in good repair, with supports and fastenings free from deterioration, rust or loosening. Signs will be designed to withstand wind pressures in the area in which they are located.

COMMUNITY ENTRY

- The community entry will incorporate monument type signs, with elements such as boulder grouping and outcropping. It will identify SBE with regular focal points and create opportunities for individual identity by varying the complementary materials and colors.
- The community entry materials may be:
 - Monument: A structure using natural stone or stone veneer, wood timbers, and/or stucco walls to coordinate with community architecture.
 - Lettering/Logo: Ornamental iron treated with muriatic acid to achieve a rust-brown patina, or alternate metal lettering/logotypes.
- The community entry monument will be located within the common area near the project boundary, outside of any traffic visibility triangles.
- The community entry monument will be integrated into the entry landscaping.
- Lighting will be incorporated into the project entry, per the Lighting section.

WILDLIFE MANAGEMENT SIGNS

- Wildlife management signs will comply with the uniform graphics package to be developed prior to approval of the first Final Map.
- Wildlife management signs will be located at all trail heads and access points into wildlife enhancement areas.
- Wildlife management signage will include signs that describe restrictions to open space use that protect wildlife and informative/interpretive signs. See Figure 2-44, Wildlife Management Signs.
- Wildlife management sign materials will be:
 - Post and Frame: Wood (Redwood or Treated Wood) or Metal
 - Sign Face: To be developed as part of uniform graphics system.

DIRECTIONAL/INFORMATIONAL SIGNS

Vehicular signs include street signs, traffic signs, and directional signs that control vehicular traffic and/or are intended to be viewed from a vehicle.

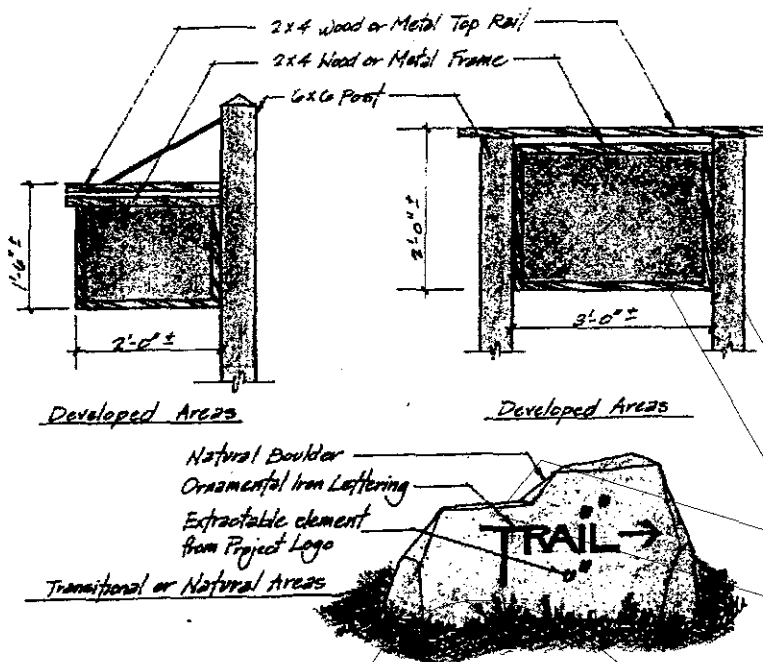


FIGURE 2-43 - CORE PEDESTRIAN SIGNS

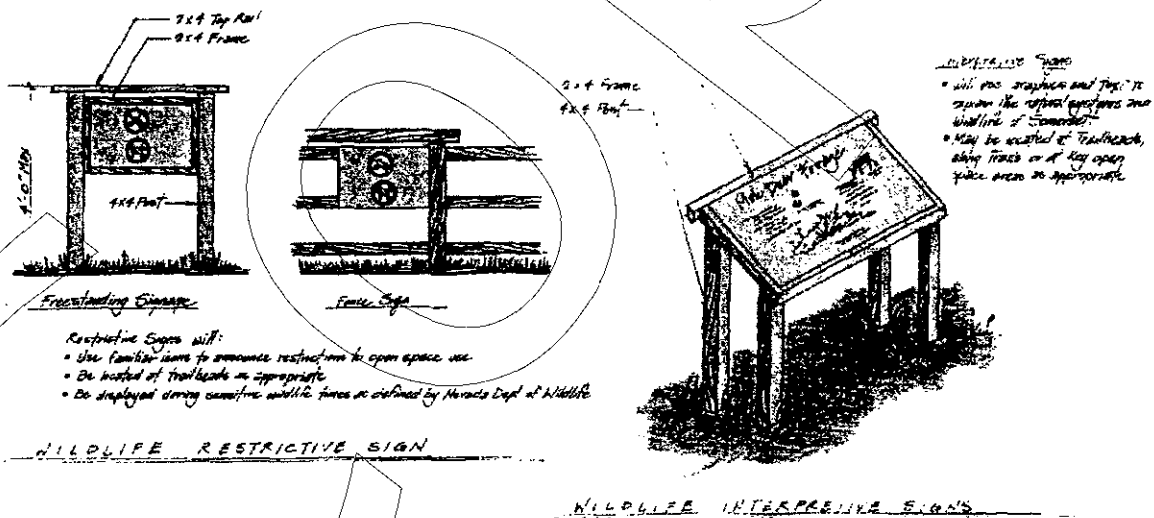


FIGURE 2-44 - WILDLIFE MANAGEMENT SIGNS

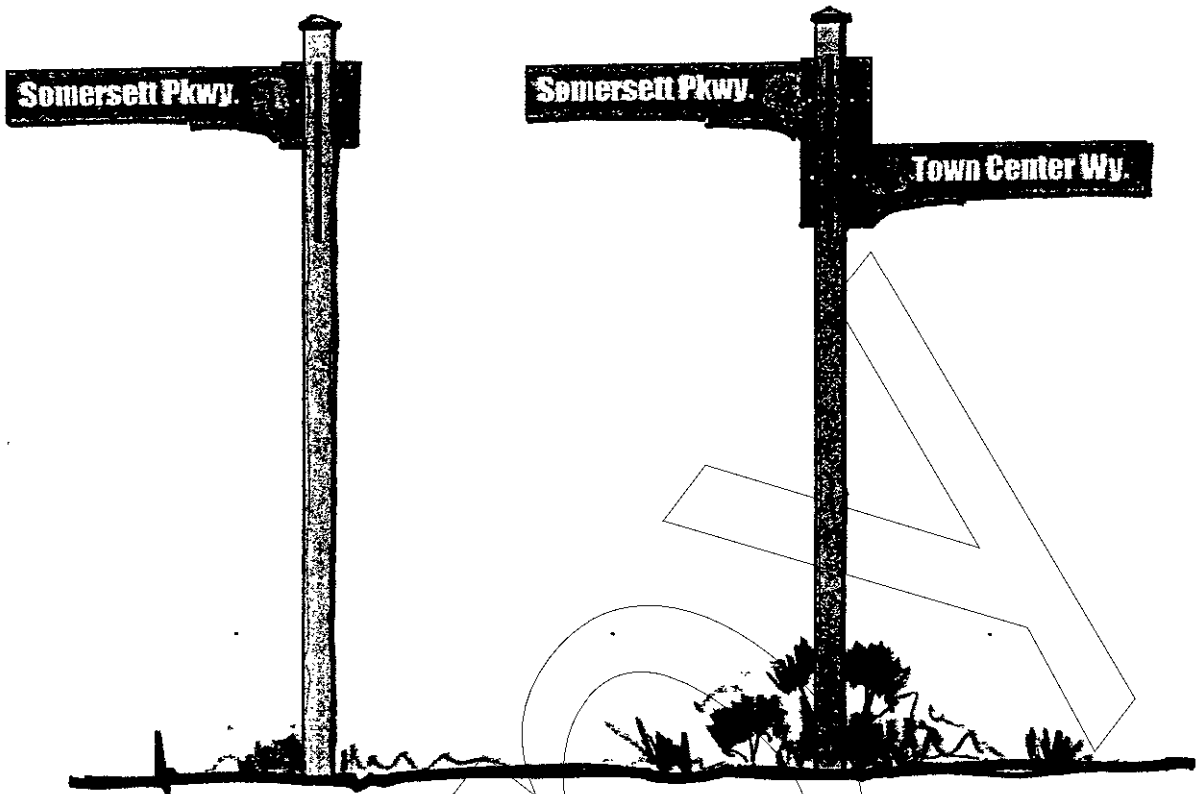


FIGURE 2-45 - STREET NAME SIGNS

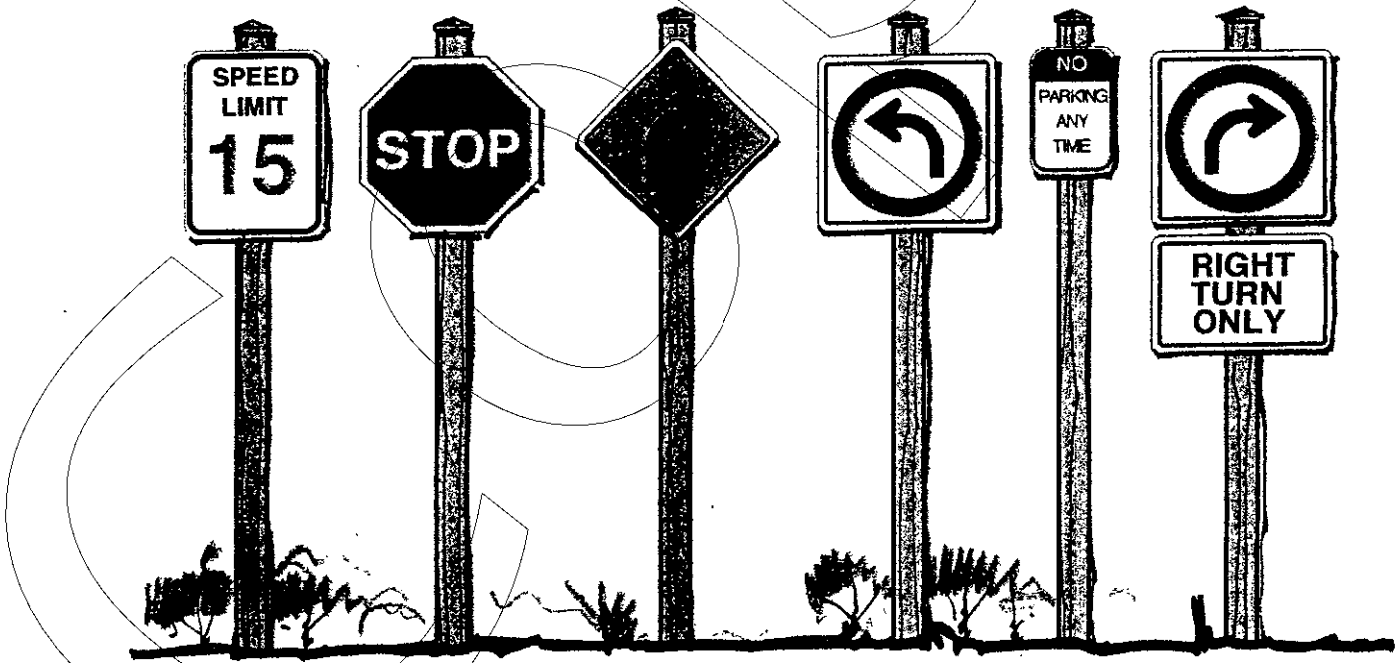


FIGURE 2-46 - REGULATORY SIGNS



- All public street/traffic safety signs will comply with City and MUTCD standards and will be installed per the Orange Book.
- Non-traffic regulatory vehicular signs will comply with the uniform graphics package to be developed during Final Mapping.

PEDESTRIAN SIGNS

Pedestrian sign materials will be:

- **Developed Areas:**
 - Post and Frame: Square tubular steel painted to match lights or other material approved by the AGC.
- **Transitional Areas:**
 - Post and Frame: Square tubular steel, painted to match lights or other material.
- **Sign Face:**
 - To be developed as part of uniform graphics system.

Pedestrian signs will comply with the uniform graphics package to be developed prior to approval of Final Mapping. See Figure 2-43, Core Pedestrian Signs.

COMPLEMENTARY TREATMENT SIGN STANDARDS

The Complementary Treatment includes builder project signs, signs located on private, and signs on property to be dedicated to public entities.

- Complementary signs will match or coordinate with the style, colors, and materials of the Core signs, subject to the approval of the Architectural Control Committee and the Community Development Department, and will comply with the uniform graphics system to be developed during Final Mapping.
- Complementary signs will comply with Table 2-2.

BUILDER PROJECT SIGNS

- Project entry signs will be monument type signs that identify the residential project name, or an individual non-residential project.
- Builder Project signs must match or coordinate with the style, colors, and materials of the Somerset PUD Town Center entry signs, subject to the approval of the Community Development Department and the Architectural Control Committee.
- Signs will include the SBE logo or an approved extractable element of the logo.
- Signs will be smaller than the Somerset PUD Community and Town/Village entry signs. See Table 2-2 for size restrictions.
- Project wildlife icons may be incorporated into Builder Project entries.
- Lighting may be incorporated into Builder Project entries, per the Lighting section.
- Temporary sales or directional signs are allowed to direct traffic to project and community facilities during construction and sales in compliance with City Code (refer to Table 2-2).



TABLE 2-2 - SIGN STANDARDS (INCLUDING BOTH CORE & COMPLEMENTARY SIGNS)

| BUILDER/PROJECT SIGNS | | | | | | |
|---|--------------------------|---|-----------|-----------|------------------------------------|---|
| Residential Project Entry / | 2 at Each Point of Entry | Project Logo 36" Max. Letter Height | 8' | 80 sf | Per Lighting Section and City Code | Comply w/ Complimentary Core Treatment Requirements |
| WILDLIFE MANAGEMENT SIGNS | | | | | | |
| Wildlife Enhancement | As Needed | Project Logo, Restrictive, Informational, Interpretive Information or Icons | 8' | 10 sf | Per Lighting Section and City Code | Comply w/ Project Uniform Graphics System. |
| DIRECTIONAL/INFORMATIONAL SIGNS | | | | | | |
| Vehicular Signs | As Needed | Traffic Regulatory & Directional Information, Street Names | Per MUTCD | Per MUTCD | None | Non-Standard Signs to Comply w/ Project Uniform Graphics System |
| Pedestrian Sign | As Needed | Project Logo Pedestrian Orientation / Directional Information | 8' | 10 sf | None | Comply w/ Project Uniform Graphics System |
| SALES/CONSTRUCTION/TEMPORARY SIGNS | | | | | | |
| Off-Site Sales (not within a project, but within Somerset, i.e. Somerset Blvd.) | One Per Village | Product Name Builder's Name Price | 8' | 24 sf | None | Comply with Project Uniform Graphics System. Remove within 15 Days of Final Model Home Sale |
| On-Site Directional | As Needed | Traffic Regulatory & Directional with Project / Village | N/A | 4 sf | None | Comply with Project Uniform Graphics System. Remove within 15 Days of Final Model Home Sale |
| Custom Home | 2 Per Home | Builder's Name, Architect, Realtor, Owner, Marketing Info. | 6' | 6 sf | None | Comply with Project Uniform Graphics System. Remove within 10 Days of Final Model Home Sale |
| Model Home Sign (directional; within individual subdivisions) | 2 Per Complex | Subdivision Name "Model Homes" | 6' | 6 sf | None | Comply with Project Uniform Graphics System. Remove when final home is occupied. |

PAVING

The suggested project-wide paving palette described in Table 2-3 unifies SBE while allowing for creation of special areas and focal points. Paving will range from very simple approaches to related, yet richly detailed treatments for use in limited areas. All paving, except paving located on individual single-family residential lots, must comply with these paving standards and City Code.



TABLE 2-3 - PAVING PALETTE OPTIONS

| | | |
|---------------------|--|---|
| Vehicular Paving | A.C. Paving Over Engineered Aggregate Base and Subgrade | All Project Roadways & Bicycle Paths |
| Pedestrian Paving A | Unimproved Dirt | Existing Trails to Remain |
| Pedestrian Paving B | Decomposed Granite Over Engineered Aggregate Base | New Pedestrian Trails |
| Pedestrian Paving C | Uncolored Concrete, Sacked with Smooth Trowel Edge. Hand-tooled Score Joints at 8' Maximum Spacing | Sidewalks, Parks and Schools |
| Pedestrian Paving D | Integrally-Colored Concrete with Contrasting Colors and/or Finishes | Crosswalks, Plazas, Village Entries |
| Pedestrian Paving E | Unit Pavers Over Concrete Sub-Slab, with Contrasting Concrete Bands/Accents | Town Center, Special Event Areas, Plazas, Entries |

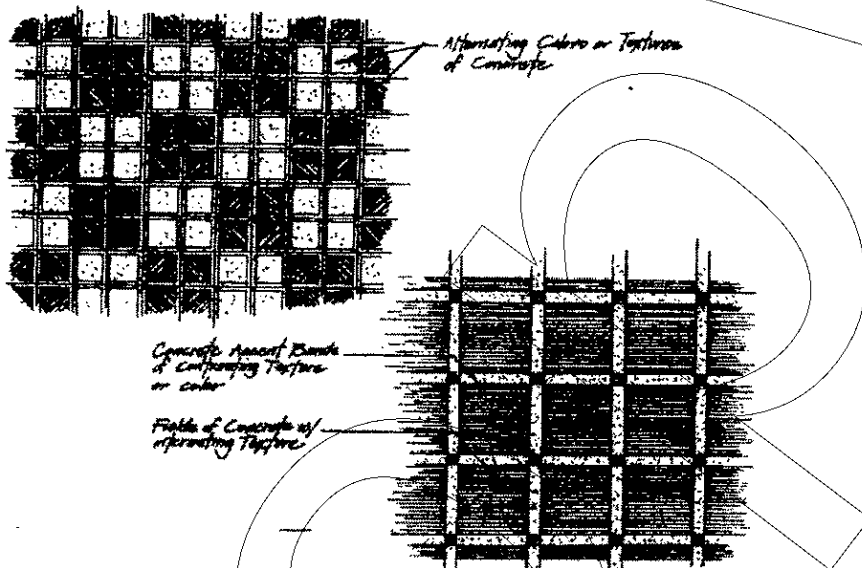
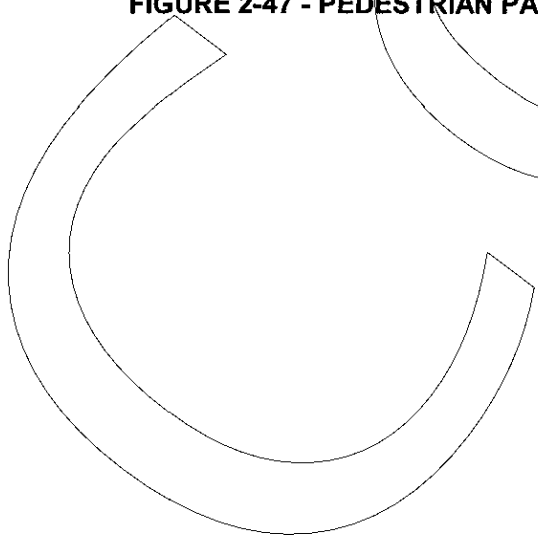


FIGURE 2-47 - PEDESTRIAN PAVING CONCEPT D



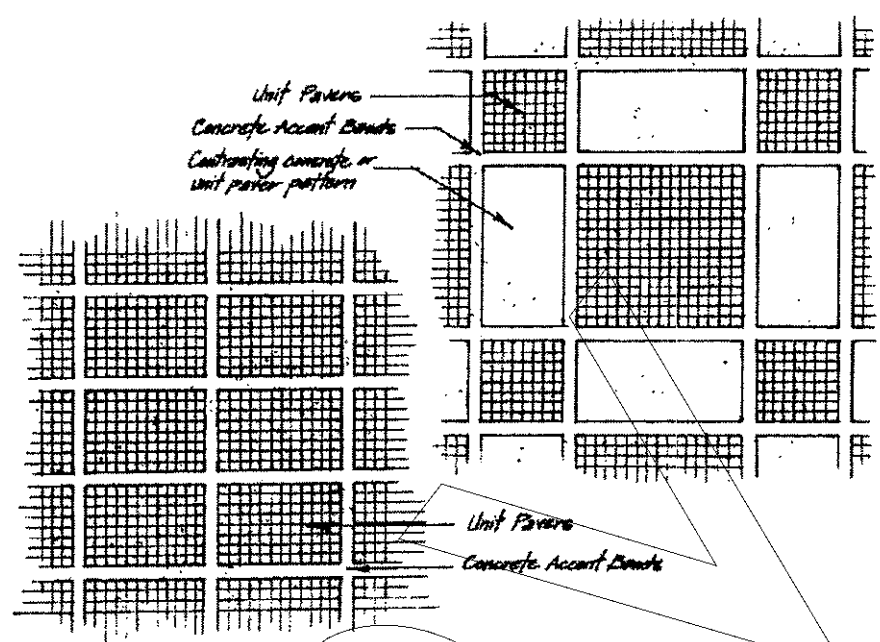


FIGURE 2-48 - PEDESTRIAN PAVING CONCEPT E

LIGHTING

SBE's lighting enhances safety and function while promoting aesthetics. The lighting package is a related family of fixtures that coordinates with the Site Furnishings package to strengthen the project image. Lighting will vary from larger scale roadway lighting to more intimate pedestrian scale lighting. Lighting will be used to create mood and reinforce the character of distinct areas within the project. Lighting will also be designed to be minimal, from the perspective of nurturing "dark sky" in most project areas.

GENERAL LIGHT STANDARDS

All lighting will comply with the following standards. Standards that apply to specific treatment areas are described later.

- Lighting levels should be limited to effect "dark skies".
- Unless otherwise specified herein, lighting will comply with City Code.
- Fixture scale and illumination levels will be consistent with the specific use.
- Lighting will not extend beyond its tasks. Fixtures will employ cut-off features, refractors, or housing shields to eliminate lighting spillover onto adjoining uses where the light would be a nuisance.
- Use energy efficient lighting design.

LANDSCAPE LIGHTING

- Landscape lighting will be used where appropriate to create mood and to accent focal points.
- When used, landscape lighting will be soft and unobtrusive. Light will be directed and/or shielded to prevent glare.



- Existing and manmade boulder grouping, outcropping, etc. may be accented by low voltage lighting across the surfaces, in a manner not posing a nuisance to adjacent properties. The light source will be concealed mechanically or with plant materials or smaller rock groupings.

SIGN LIGHTING

- Where sign lighting is provided, it will be unobtrusive and will relate to the design and character of the sign.
- Internally lighted signs are prohibited.
- Sign lighting will be shaded, shielded, or directed to prevent the light from adversely affecting surrounding or facing properties or adversely affecting safe vision of pedestrians or operations of moving vehicles.
- Recessed lights will have rock guards to prevent injury to pedestrians touching hot glass and to minimize vandalism. For directional light cut off and glare control, half shields will be used on above grade fixtures where adjacent land uses or motorists could be affected.

CORE TREATMENT LIGHT STANDARDS

The Core Treatment includes street lighting. As with the site-furnishing package, different levels of detailing are provided to reflect the different levels of development in the community. See Figure 2-49 and 2-50 - Outdoor Decorative Lighting.

Light fixtures located within street rights of way and common areas will be selected from the Core Treatment package.

STREETLIGHTS

Locate streetlights to provide safe illumination of roadways and to minimize glare. At a minimum, streetlights will be located at all intersections, pedestrian crossings, bus stops, and traffic circles.

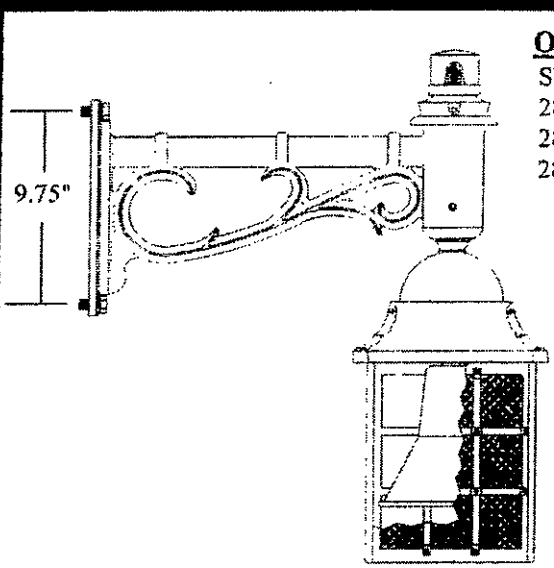
- The scale and spacing of streetlights will reflect the street hierarchy.
- Care will be taken to ensure the project's street lighting is unobtrusive and optimized to afford views of the night sky.
- Streetlights will be submitted for approval and inclusion in the Sierra Pacific Power Company streetlight program prior to approval of the first Final Map.
- Streetlights will have individual photo control units.

PEDESTRIAN LIGHTS

- Pedestrian lighting will reflect the level of activity intended for the specific area. Higher light levels are appropriate in intensive use areas such as shopping district or plazas. Low light levels are appropriate in more natural areas. Where little or no light will be provided in adjacent areas, low lighting levels will be used to prevent "blind spots" at the interface between lit and unlit areas.
- When bollard lights are used along pathways, they will generally be located on a single side of the path rather than staggered on both sides of the path.

COMPLEMENTARY TREATMENT LIGHT STANDARDS

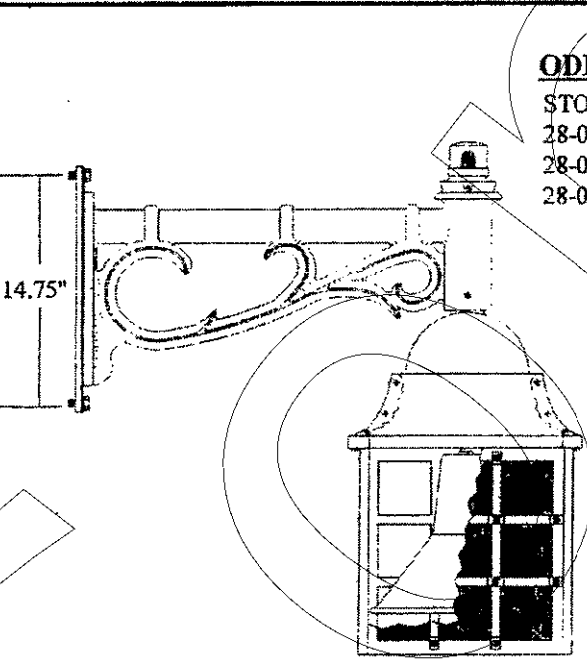
- Lighting used in all non-core areas must match or coordinate with the style, colors, and materials of the Core Treatment package, subject to the approval of the Community Development Department and the AGC. Lighting on private residential property is excluded from this standard.



ODL84U: 100W HPS 120V Lantern Fixture

| STOCK # | QTY | DESCRIPTION |
|---------|-----|--|
| 28-0380 | 1.0 | Lamp 100W HPS Medium Base |
| 28-0240 | 1.0 | Photo Control Multi Volt |
| 28-0495 | 1.0 | Luminaire Decorative Lantern Style Single Side Mount 100W HPS |

NOTE: Use in conjunction with ODL80U,
Monterrey 14' pole stk# 28-0785
Photo control mounted on top of
Monterrey pole



ODL82U: 150W HPS 120V Lantern Fixture

| STOCK # | QTY | DESCRIPTION |
|---------|-----|--|
| 28-0386 | 1.0 | Lamp 150W Sodium Vapor 16000 |
| 28-0240 | 1.0 | Photo Control Multi Volt |
| 28-0492 | 1.0 | Luminaire Decorative Lantern Style Single Side Mount 150W HPS |

NOTE: Use in conjunction with
ODL80U Monterrey 14' pole 28-0785
or ODL99U Square 21'3" 28-0750

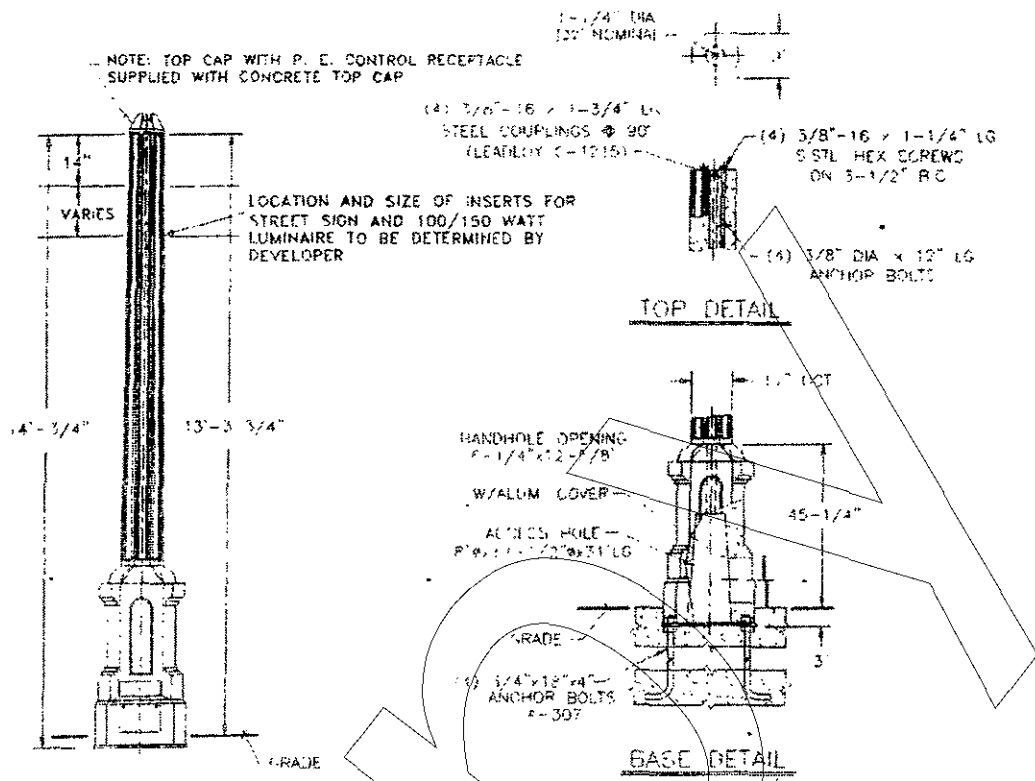
Photo control mounted on top
of Monterrey pole

| | | | | | ENGINEERING & CONSTRUCTION STANDARD | | SHEET 1 OF 2 | | | | | | | |
|--|--------|--------|------|------|-------------------------------------|--|--------------|----|----|----|------|---|----------------|--|
| | | | | | OUTDOOR DECORATIVE LIGHTING | | VOLUME 5 | | | | | | | |
| <table border="1"> <thead> <tr> <th>DRAWN</th> <th>DESIGN</th> <th>SUPR</th> <th>DATE</th> <th>REV</th> </tr> </thead> <tbody> <tr> <td>JV</td> <td>JV</td> <td>CR</td> <td>8/01</td> <td>2</td> </tr> </tbody> </table> | DRAWN | DESIGN | SUPR | DATE | | | REV | JV | JV | CR | 8/01 | 2 | DRAWING NUMBER | |
| DRAWN | DESIGN | SUPR | DATE | REV | | | | | | | | | | |
| JV | JV | CR | 8/01 | 2 | | | | | | | | | | |

FIGURE 2-49 - OUTDOOR DECORATIVE LIGHTING



14' MONTERREY BOLTED BASE POLE



NOTES:
 CONCRETE TO BE 6,000 PSI COMPRESSION
 MINIMUM IN 28 DAYS.
 MANUFACTURED TO ASTM C 1089-88.
 PRESTRESSED WITH (8) #4 @ 16" DIA
 A-416 WIRE.

ODL80U: Monterrey concrete pole 14'

| STOCK # | QTY | DESCRIPTION |
|---------|-----|---|
| 28-0785 | 1.0 | Pole Concrete Street Light Bolted Base 14 Ft. Monterrey Style |
| 17-0170 | 40' | Wire #10 19 STR CU THHN 600V Black |
| 17-0180 | 40' | Wire #10 19 STR CU THHN 600V White |
| 28-0240 | 1.0 | Control Photo Electronic Multi-Volt Blue |

Field Determined Items: Add as additional stock item or structure

| | | |
|---------|-----|-----------------------------------|
| 51-0060 | 10' | 3/4" water pipe |
| SRT02U | 1.0 | N-9 box with 4 way URD connectors |

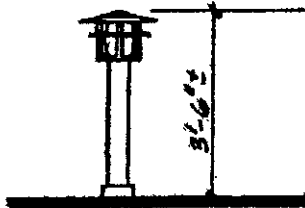
| | | | | | | | | |
|------------------------------------|---------------------|-------------------|---------------------|-----------------|--|--|---|--|
| | | | | | ENGINEERING & CONSTRUCTION STANDARD | | SHEET 2 OF 2 | |
| OUTDOOR DECORATIVE LIGHTING | | | | | VOLUME 5 | | DRAWING NUMBER ODL80U ODL80U ODL80U | |
| DRAWN JV | DESIGN JV | SUPR CR | DATE 8/01 | REV 2 | | | | |

FIGURE 2-50 - OUTDOOR DECORATIVE LIGHTING



Notes:

- Light design concepts shown are based on LUMINE Lighting Candela Series Lights
- Light Pole, Arm, and Brackets to be Cast or extruded aluminum or steel
- All exposed metal to be powder coated. Color(s) to be determined during first final mapping



Bollards

FIGURE 2-51 - BOLLARD LIGHTING

- Service area lighting will be contained within the service area boundaries and enclosure walls.
- Locate lighting fixtures to reduce shadow or interference from trees and other objects in the landscape.
- Parking lot lights will clarify vehicular and pedestrian circulation routes.
- Parking lot light standards will not exceed 25' in height.
- A lighting plan is required adjacent to residential areas showing pole height and locations, fixture type, and photometrics at ground level.

RESIDENTIAL LIGHTING STANDARDS

- Exterior fixtures mounted on buildings will be no higher than the line of the first story eave or, where no eave exists, no higher than 12 feet above finished grade.
- Building lights will be shielded to prevent light spillage onto adjacent property or streets.

FENCES AND WALLS

SBE's fences and walls will reinforce the project's image and provide buffering, enclosure, and separation of uses. It is not practical or realistic to provide an overall fencing/wall plan because this sort of thing is strongly related to individual building/project design. Appropriate plans will be provided with subdivision maps and building permit plans.

GENERAL FENCE AND WALL STANDARDS

All fences and walls will comply with the following standards. Standards that apply to specific treatment areas are described later. All residential fencing and wall plans will require the approval of the AGC.

- All site triangles at intersections will be maintained. Adequate sight distances will be maintained along roadways and intersections according to City Code, accepted engineering practices and roadway design speeds.
- Fences/walls will not exceed six feet in height, except where necessary to accommodate grade change. The maximum height at grade changes is 7'-6". Pilasters may not exceed eight feet in height except where wall height is increased to accommodate grade change. See Figure 2-52 Fences/Walls on Slopes.



- Fences/walls will not abut sidewalks. A minimum three-foot landscaped separation is required between fences/walls and sidewalks. Five or more feet of separation is preferred. The minimum three-foot separation is only allowed where necessary for other considerations to the approval of City Staff. See Figure 2-53 Landscape Separation at Fences/Walls.
- Retaining walls will match the Core Treatment walls described below or will be constructed of natural stone. In addition, manufactured concrete block systems are only permitted in side or rear yards facing the building on Patio Homes. Wood retaining walls are not permitted. All retaining walls must meet City Code height requirements.
- To maximize views, no fencing or transparent fencing is preferred over opaque fencing. Fencing and walls will be used to reinforce the project image, define boundaries, provide privacy or retain graded slopes (ie.: for lots that abut open space/drainage ways, open fencing is required adjacent to said areas).

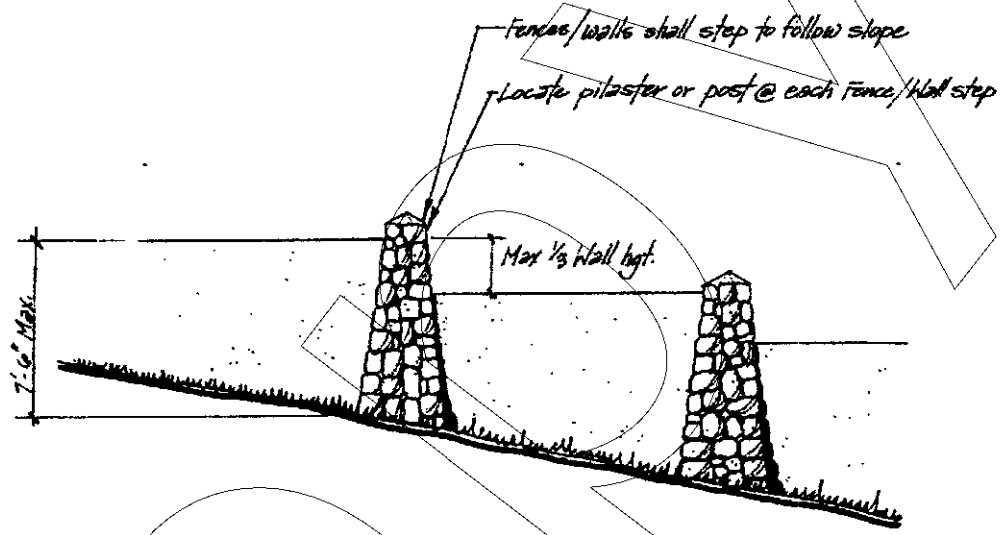


FIGURE 2-52 - FENCES/WALLS ON SLOPES

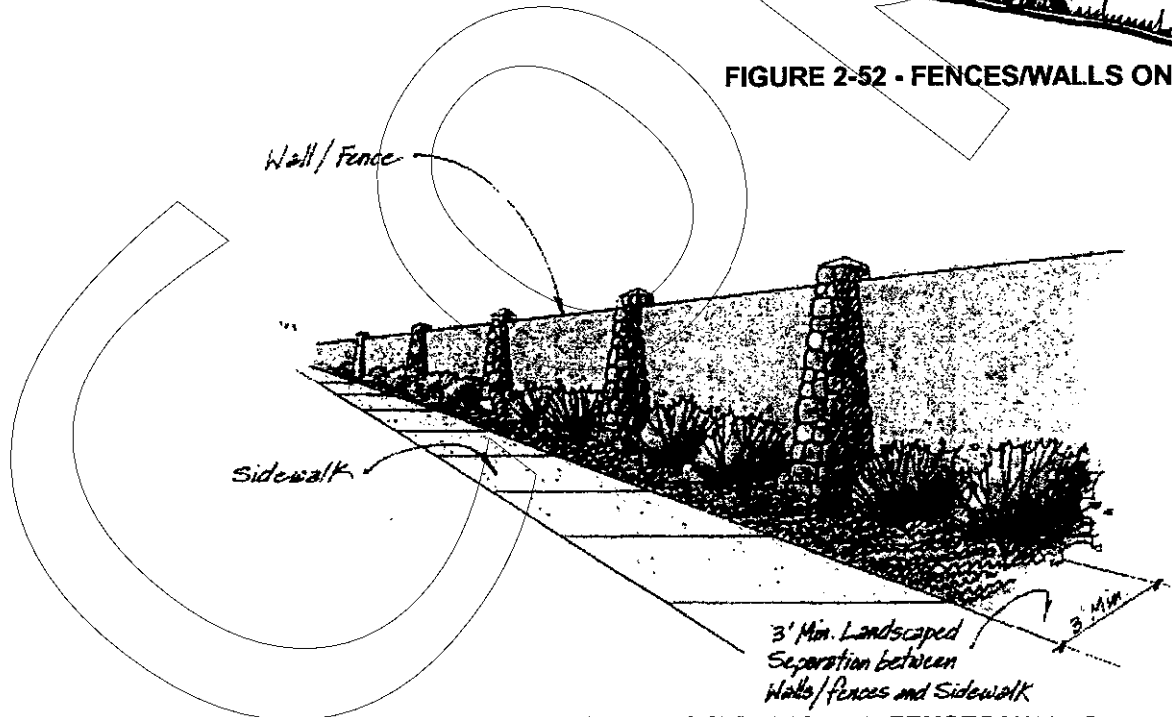


FIGURE 2-53 - LANDSCAPED SEPARATION AT FENCES/WALLS



CORE TREATMENT FENCE AND WALL STANDARDS

- Fences/walls in project and village entries, and parkway and collector streetscapes will conform to the Core Treatment Fence/Wall standards. See Figure 2-54 through 2-57 Core Treatment Fences/Walls.
- Wall materials may be:
 - Wall: Concrete or concrete block faced with stucco.
 - Pilasters: Concrete or concrete block faced with stucco and/or natural stone. Maximum pilaster spacing is 40 feet.
 - Cap: Natural stone.

6' CAPPED CEDAR FENCE

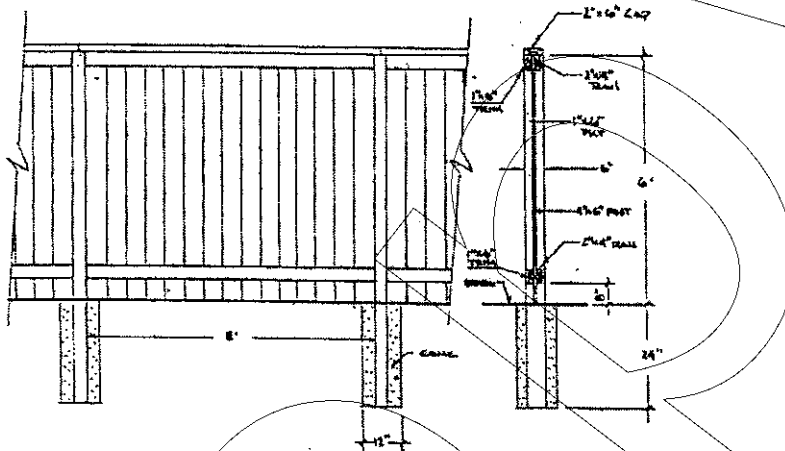


FIGURE 2-54 - CAPPED CEDAR FENCE



2 - RAIL SPLIT RAIL FENCE

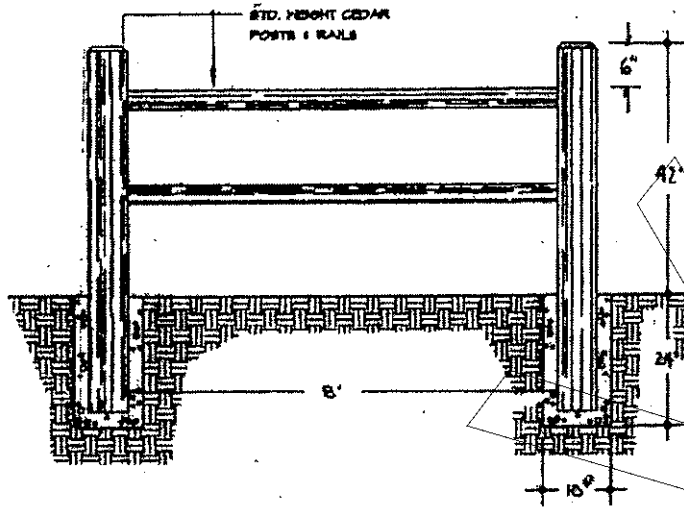


FIGURE 2-55 - SPLIT RAIL FENCE

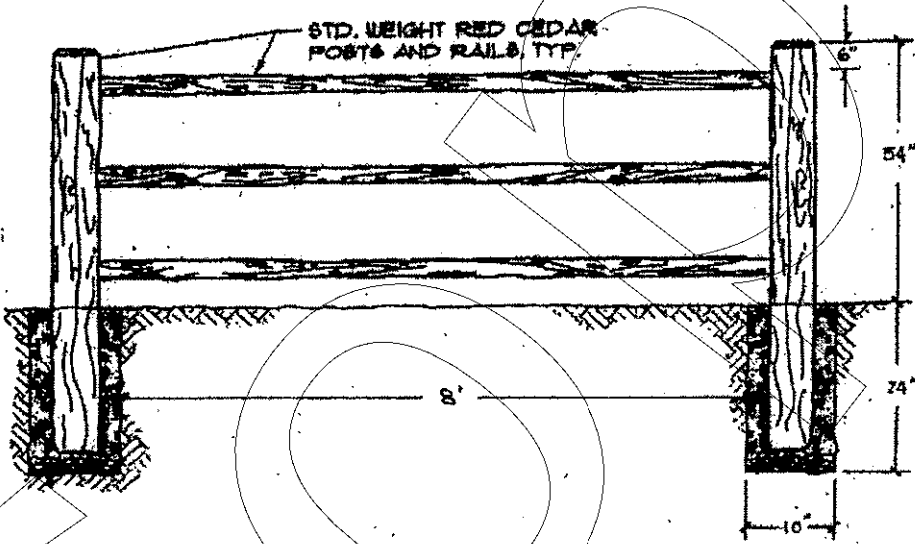


FIGURE 2-56 - 3 RAIL SPLIT FENCE

WELDED WIRE (16ga) Green Vinyl (2"x2 1/2")

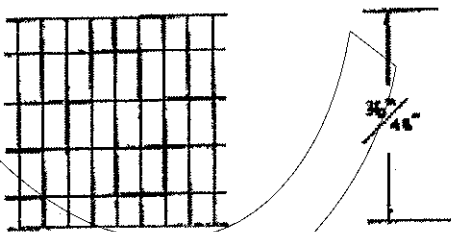


FIGURE 2-57 - VINYL COATED WELDED WIRE CONTAINMENT FENCING



- Fence materials may be:
 - Railings/Pickets: Wood in board and batten style or dimensional lumber rails.
 - Pilasters: Concrete or concrete block faced with stucco and/or natural stone (40 ft. maximum spacing).
- Fences and walls will step, rather than slope, to accommodate grade changes. Pilasters will be used at steps.

COMPLEMENTARY TREATMENT FENCE AND WALL STANDARDS

NEIGHBORHOOD FENCES AND WALLS

Neighborhood fences/walls are those used within individual builder villages. They will relate to the Core Treatment fences/walls while creating distinct project identities.

- A consistent fencing/wall program is required within each project, to be submitted at the time of the first Final Map within a project.
- Neighborhood fences and walls will coordinate with the styling, detailing, materials, and colors of the Core Treatment, fences/walls per the approval of the AGC and the Community Development Department.
- Pilasters will match or complement those used for Core Treatment walls and fences.
- Maximum pilaster spacing is 80 feet.
- Fences/walls will relate directly to the project architecture.
- Solid Fences and walls will step, rather than slope, to accommodate grade changes. Opaque fence shall be informally aligned to follow topography so that it blends into the landscape and reflects traditional ranch fencing.

HOME FENCES

Home fences may define individual lots and provide security, privacy, and enclosure.

- Rear and/or side yard fences adjacent to parkway and collector streets will be designed per the Core Treatment standards.
- Fence supports, such as pilasters and posts, will be well defined and in scale with the purpose and context of the fence. They will be coordinated in design and materials with neighborhood fences/walls.
- When used, pilasters will match or complement those used for Core Treatment walls and fences.
- Fences will be finished consistently/attractive from both sides.
- No fencing is allowed in front yard areas.
- No fencing may be erected on talus or rock slopes and/or slopes greater than 3:1. Where rear yards slope away from the house, the fence shall be located at the top of slope; where rear yard areas slope towards the house, the fence shall be located at the bottom of slope.



Capped Cedar Fence

- Capped Cedar fencing may be a maximum of six feet in height to provide privacy between houses. In the case of corner lots where side yards face a street, or when abutting the parks, trails or common area, the two rail split fencing is required. Fence must be built of #2 western red cedar or better and stained with the approval of SBE full-body stain specified for your neighborhood. (refer to Figure 2-54)

Standard Grade Split Rail Fence

- This fence is a low, 42-inch high two rail fence to be used along rear property lines, side yards which face the street, park, trail or common area and in side yards to connect from privacy fence to rear fence. This fence shall be informally aligned to follow the topography so that it blends into the landscape and reflects traditional ranch fencing. This fence may not be stained or sealed, but should be allowed to age to a rustic color to blend with the landscaping. Split rail fence must be standard grade. Pony or jumbo grade is prohibited. Standard grade three-rail (48") split rail may be allowed in some neighborhoods with prior approval of SBE Aesthetic Design Committee. (refer to Figure 2-55 and 2-56)

Placement of Fencing

- Solid fencing may be built generally along side property lines from a point 5 feet back of the front façade of the building, extending to the rear setback line of the Building envelope. At the rear setback line, the fence may transition to the split rail fence according to the following criteria.
- The solid fence shall step down to a height of 4 feet, a minimum of 8 feet back of the rear setback line. Based on usage of a 6-foot high section of fence, the transition to a 4-foot high section at the rear setback line must be achieved by first stepping down to an intermediate 5-foot high section, continuing for a minimum of 8 linear feet. At the rear setback line, the fence may transition to (split rail) and generally follow the side and rear property lines provided that it follows the terrain.
- Fence shall incorporate both horizontal and vertical offsets to avoid long straight lines in the landscape. Fencing shall not slope with the terrain, but step with the grade. The maximum run of fence (without offsets) shall be 24 feet. When incorporating an offset, a minimum of a 20foot offset shall be used. The minimum length of a stepped section of fence shall be 6 feet, and the minimum vertical offset shall be 12 inches.
- Fences shall transition at gate locations and at property corners by utilizing a 4" x 6" post.

ARCHITECTURE

ARCHITECTURAL THEME / ELEMENTS

The intent of the architectural design character of SBE is to provide a unique contrast between neighborhoods with a traditional feel and the site's natural endowments.

Ornamentation is not necessary. Simplicity in shape, composition and utilization of materials is desired. The shape and composition is of primary importance. Proper composition of building massing can create depth and interesting shadow lines. For this reason there is no limitation on type or style of roof (simple gable or otherwise). A simple gable roof is acceptable if it is integrated into a house that shows thoughtful composition and details. Porches, extended overhangs, pergolas, trellises, and balconies are elements that are encouraged. They create outdoor spaces symbolic of a turn of the century vernacular homes. In addition they strengthen composition and create long and interesting shadow patterns.



FIGURE 2-68 - PORCHES

In the past, before we had the means of copying (faux) or transporting architectural materials and designs from afar (i.e. French Country) the designer and builder had to utilize materials within their grasp or rather from the land around them. With this concept in mind; stone, stucco, timber, and wood shingles (subject to Fire Department approval) are the primary material sources. Other materials acceptable are:

- Horizontal wood and wood product siding
- Board and batten vertical siding (or the look of)
- Paned Windows (exposed aluminum and grids set between glass are not acceptable)
- Exposed timber framed posts and bracing
- Concrete roof tiles
- Standing searn metal roofs

Detailing of the residences should reflect the construction of the home and not be ornamental like the "Victorian" style.



FIGURE 2-69 - ROOFS



Ideas for detailing may include:

- Upsizing rafter tails and exposing rafters at the fascia edge.
- Heavy timber posts and diagonal bracing at porches, decks and extended eaves.
- Windows in stucco wall to be recessed, creating a shadow line and giving the appearance of a thick adobe wall.
- Mixing stucco and wood siding (horizontal or shingles; subject to Fire Department approval) on the same elevation or on different masses of the residence.
- Grouping windows instead of individual placement.
- Attention to window grid patterns.
- Cantilever upper floor mass over lower floor. .
- Banding clerestory windows to create a divide between materials.
- Massing ideas: turn garage away from street or locate garage in rear of lot to de-emphasize the automobile.



FIGURE 2-70 - ARCHITECTURAL DETAILS

RESIDENTIAL CHARACTER

Four distinct single-family housing products are provided within SBE. Although architecture with traditional character will be used, several specific architectural features will be incorporated into the project to provide a unique architectural style. An architectural vocabulary is incorporated into the Development Standards Handbook (see Appendix). Each application for building permit must contain AGC approval, including a statement from the AGC explaining how the building complies with requirements.

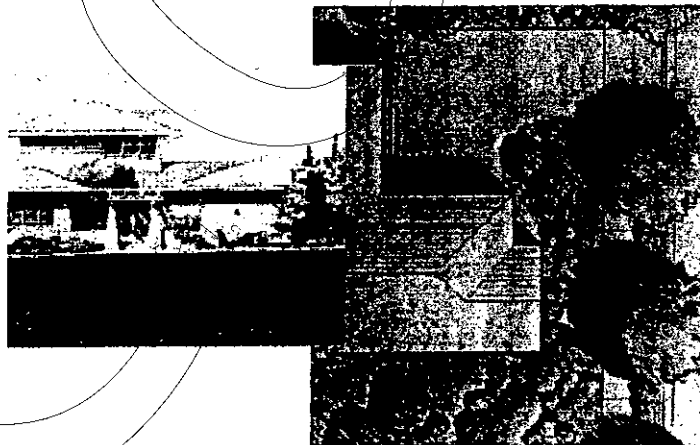


FIGURE 2-71 - ARCHITECTURAL DETAILS



The first housing type is "Estate" homes, which will be custom homes situated on 10,000 sq. ft. minimum size lots. The second housing type will be "patio" homes will be constructed on minimum lot sizes of 2,500 sq. ft. Prior to approval of the first final map for any patio or house plans, and exterior elevations consistent with these required PUD standards. Homes on patio lots will be "designed to the lot", with the architectural theme, including rooflines and fenestration provided on all four sides to eliminate blank walls.

GENERAL REQUIREMENTS (RESIDENTIAL)

- Site and floor plans for estate homes (10,000 sq. ft. minimum lots) will respond to the individual orientation, access, views, and privacy requirements of adjacent lots.
- All building colors will be reviewed by the AGC. Colors must relate to the selected architectural style. Bright colors such as pink, lavender, and purple are not allowed. Bright blues, yellows, and reds (except brick homes) shall only be allowed as accent colors. Subtle variation in colors shall be a requirement throughout the residential portion of the development.
- Final approval of architectural elevation plans for each house shall have AGC approval and must be consistent with the PUD architectural standards vocabulary to the satisfaction of City Staff prior to the issuance of a building permit.
- The final architectural features shall be used for homes constructed within SBE
 - Two or more distinct roof masses shall be used.
 - Covered porches, recessed entry ways, or projecting steps with architectural elements such as columns, archways, or pergolas shall be used on a minimum of 75% of the homes within each phase of the development, with one item selected from the following list:

| | | |
|--------------------------|-------------------|-----------------|
| Covered Front Yard Porch | Recessed Entryway | Arches/Archways |
| Columns/Pilasters | | Pergola |

- One of the items from the following list is required. Note that no exposed aluminum colored windows are allowed.

| | | |
|--------------------|---------------|--------------|
| Bay Windows | Paned Windows | Shed Dormers |
| Clerestory Windows | | |

- Stucco should not be highly textured and should use a desert color.

- Garages that project out in front of the main structure are only allowed in up to 40% of the units constructed in a phase, unless the garage doors do not face the street (eg. side-loaded garages) and they are architecturally treated to complement the main structure's rooflines and fenestration. The remaining 60% of the units will include walled patios or courtyards with a minimum height of 31 inches or covered porches that are at the same plane or forward of the garage.

- In addition to the above requirements, a minimum of one of the following architectural elements will be incorporated into one-half of the homes within each phase.

| | | |
|----------------------|------------------------|----------------|
| Exposed rafter tails | Horizontal Wood Siding | Shingle Siding |
| Lattice work | Native Stone Work | Courtyard |
| Balcony | Extended Eaves | Stucco |



- Exterior Siding: Appropriate materials include: Horizontally or vertically applied wood boards or wood products, wood shingles, stucco, masonry, brick, or similar materials. Composite and vinyl siding are not allowed.
- Roofing-appropriate materials that will be required for the Estate homes include: clay tile, concrete tile, slate or simulated slate, metal standing seam roofs, slate, tile, wood shakes or shingles High definition composition architectural shingles may be allowed on multi-family product.
- Warm colors will be favored. Production housing color palettes shall be submitted with each building permit.
- The use of traditional materials such as rough-hewn beams, stone, wood, and adobe or stucco will be required for accent materials. Cultured stone or brick will need to be approved by the AGC.

DESIGN GUIDELINES (RESIDENTIAL)

The following items provide specific illustrations and guidelines regarding building materials, colors, and design elements expressive of the SBE architectural design theme. Both appropriate and inappropriate examples are given. The ideas presented are not meant to be absolutes or exhaustive.

- Exterior elements and materials shall be limited in number and be compatible with one another, while being in scale with the building. Care should be taken so that materials do not detract from the building's overall appearance or become visually complicated.
- Siding materials shall be continued down close to finished grade on any elevation visible from public areas to eliminate large areas of exposed foundation, or foundation may be covered with stone, brick, rubble or similar materials.
- A mix of 3 to 4 models each having three elevations and material change variations is required for the Patio homes. Estate homes will be custom built. Building elevations, setback variation, and setback requirements are discussed in detail under lot standards.
- Detailing of fascia and eaves can provide richness to the architectural composition. Extended eaves and exposed oversized rafter tails are encouraged. All of these features shall be considered in the final design.
- Interior walls, fences, and the courtyards they create shall be considered in the final design. The colors and materials should match or complement the finishes of the adjoining buildings. Patios and front yard porches should be an extension of the interior spaces. Creating courtyards in lieu of garage driveways is encouraged. These features shall be considered in the final design.
- Roof form and building massing provide variety and texture to a project's overall appearance.
- Overhead screens, shade covers, patio roofs, and other similar structures shall be constructed of materials and colors to match or complement the main roof.



FIGURE 2-72 - COURTYARDS

ATTACHED HOUSING/TOWNHOME STANDARDS

All multiple family units will be designed with an architectural style that is compatible with the residential requirements with respect to roof pitch, materials (including composite), colors, and basic design elements.

MINOR PLAN AMENDMENT PROCESS

If the final location or design of a project affects the distribution of acreage or units from one project to another, the units or density in a village area may be redistributed to or from another village. The total maximum number of units proposed for SBE will, however, remain the same (162 dwelling units). Unit yield adjustments will be limited to less than ten percent of the total units allowed in the village(s) that is/are receiving the redistributed units. Any unit yield adjustments between different property owners within the SBE project must be agreed upon in writing and must be reviewed and approved as part of the Final Map, special use permit or site plan review process. Note that areas, which are immediately adjacent to the edges of SBE, may not receive any redistributed units without providing adequate buffers or transitionals through the Special Use Permit or Final Map process.

Additional administrative variances limited to less than 10% to the Development Standards Handbook may be granted by the administrator, when in the opinion of the administrator, the variance does not impact the health, safety, and welfare of the general public, that site circumstances or site topography would constitute undue hardship to the applicant if the variance is not granted, that the intent of the development standards handbook is still met with approval of the variance, and that granting of the variance does not violate City Codes and ordinances. All changes to the Handbook shall be reviewed by Engineering. No standard that affects engineering concerns shall be changed without Engineering approval.

Additions or supplements to the Development Standards Handbook as required herein shall be added as an appendix to the Handbook and recorded as such. Any minor changes or additions to the Appendices which are in substantial conformance with the standards contained in this P.U.D. may be approved administratively by staff. Any substantial change to the Development Standards Handbook or Appendices will require approval of an Amendment as determined by the administrator.

All maps in the PUD must reflect current approvals, including trails and trailheads, landscaping, house type, or the Final Map must be amended to reflect changes.



EXHIBIT A

**PRELIMINARY SEWER
REPORT**

COPY



SANITARY SEWER CALCULATIONS FOR BENNETT

For land in a residential zoning, the following information is used:

3.0 capita per dwelling unit
350 GPCD for mains (8 inches) peak flow

The site will consist of 184 dwelling units; therefore the following equations are used:

Peak flow = num. of dwellings * capita/dwelling * GPCD (peak)

Peak flow = 162 * 3.0 * 350 = 170,100 GPD = 0.17 MGD = 0.263 cfs

Average flow = Peak flow / peak factor

Assumed peak factor = 3.5

Average flow = 170,100 / 3.5 = 48,600 GPD = 0.049 MGD = 0.075 cfs

The design shall be for the peak flow; therefore the design flow is 0.263 cfs

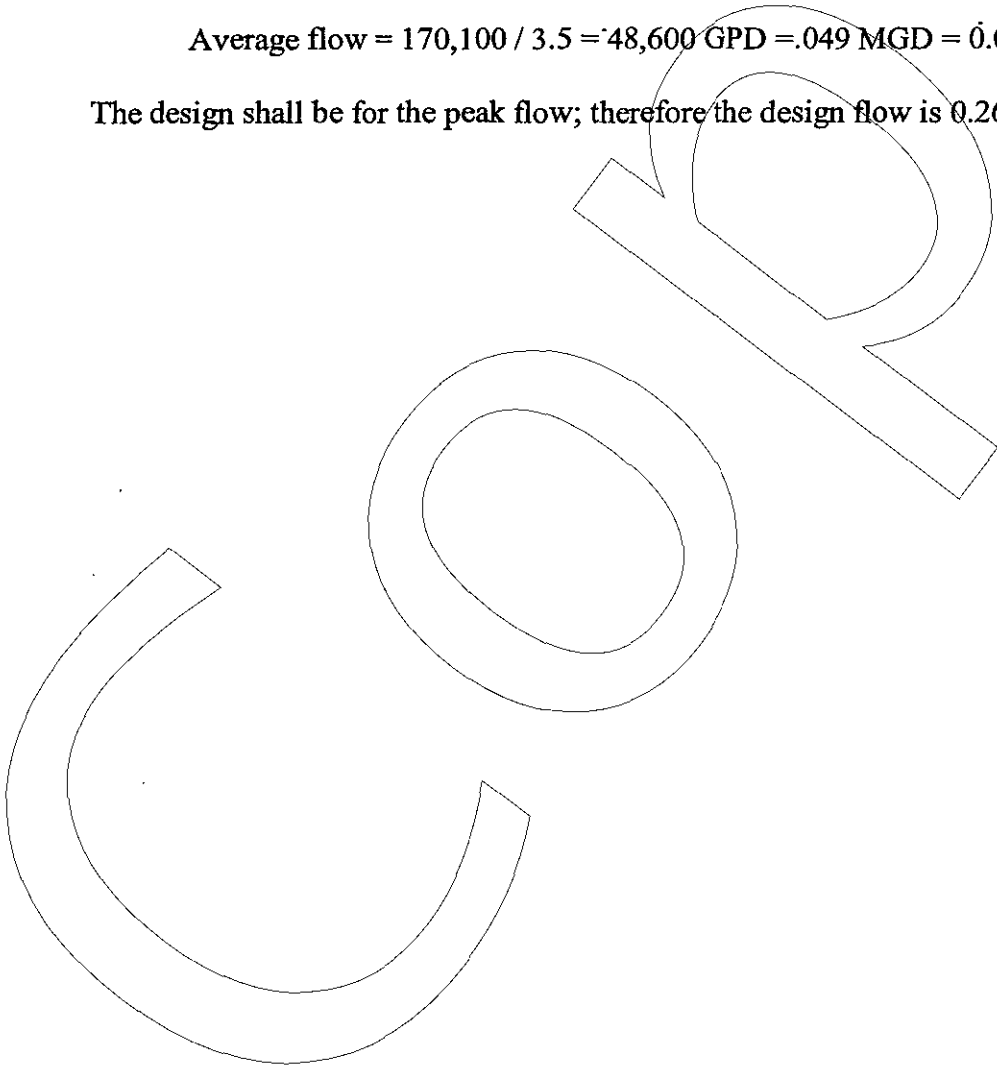




EXHIBIT B

MASTER HYDROLOGY STUDY

**PREPARED BY:
MANHARD CONSULTING LTD.
UNDER A SEPARATE COVER**



EXHIBIT C

**TRAFFIC IMPACT
STUDY**

DRAFT



SOLAEGUI
ENGINEERS

July 28, 2004

Mr. Barron Caronite, P.E.
City of Reno
P.O. Box 1900
Reno, NV 89505

RE: Bennett Subdivision

Dear Barron:

This letter report represents our traffic analysis for the Bennett Subdivision. The project site is located south of Somerset Village 5E in the City of Reno, Nevada. The Bennett Subdivision will include the construction of 184 single family attached dwelling units and 3 custom lots for a total of 187 residential dwelling units. The information presented in this letter includes a review of ultimate traffic loadings on Somerset Parkway and local, collector and private streets in the vicinity of the project.

Ultimate traffic volumes on Somerset Parkway were reviewed based on buildout of the Somerset, Bennett and the Winter Creek developments. Somerset will include the construction of 1,292 single family homes, 850 active adult homes and 506 townhouses for a total of 2,648 residential dwelling units. Winter Creek is located north of the Bennett site and will include the construction of 142 single family homes. The Bennett Gildone property will include 187 single family homes. Trips generated by these residential land uses were calculated based on information taken from the Sixth Edition of *ITE Trip Generation* for Land Uses 210: Single Family Detached Housing, 230: Residential Condominium/Townhouse, and 251: Detached Elderly Housing. Table 1 shows a summary of the average daily traffic volumes generated by these developments.

TABLE 1
TRIP GENERATION

| <u>DEVELOPMENT</u> | <u>LAND USE/VARIABLE</u> | <u>AVERAGE DAILY TRAFFIC</u> |
|--------------------|---------------------------|------------------------------|
| SOMERSETT | Single Family/1,292 D.U. | 12,364 |
| | Townhouse/506 D.U. | 2,965 |
| | Elderly Housing/ 850 D.U. | 3,154 |
| BENNETT | Single Family/187 D.U. | 1,790 |
| WINTER CREEK | Single Family/142 D.U. | 1,359 |



The average daily traffic volumes generated by these projects were subsequently assigned to Somerset Parkway based on the locations of the residential dwelling units and the roadway network. Table 2 shows a summary of the average daily traffic volumes on Somerset Parkway.

TABLE 2
 SOMERSETT PARKWAY AVERAGE DAILY TRAFFIC VOLUMES

| <u>SECTION</u> | <u>SOMERSETT</u> | <u>BENNETT</u> | <u>WINTER CREEK</u> | <u>TOTAL</u> |
|-----------------------|------------------|----------------|---------------------|--------------|
| East of Village 5B | 5,282 | 0 | 0 | 5,282 |
| East of Village 5A | 6,967 | 1,790 | 0 | 8,757 |
| East of Village 4A | 8,584 | 1,790 | 0 | 10,374 |
| East of Village 2I | 10,039 | 1,790 | 1,359 | 13,188 |
| East of Village 3C | 10,603 | 1,790 | 1,359 | 13,752 |
| East of Village 3B | 11,637 | 1,790 | 1,359 | 14,786 |
| East of Village 2A | 12,163 | 1,790 | 1,359 | 15,312 |
| East Logan Pass Trail | 15,167 | 1,790 | 1,359 | 18,316 |

The average daily traffic volumes shown in Table 2 indicate that the existing four-lane section of Somerset Parkway east of Logan Pass trail will operate below the 36,500 ADT level of service C threshold for an RTC moderate access control arterial. The section between Logan Pass Trail and the roadway serving Village 3B will also need to be four lanes in order to serve the projected traffic volumes. A two-lane moderate access control arterial, serving a level of service C capacity of 14,350 ADT, is needed between the roadway serving Village 3B and the roadway serving Village 5A. A two-lane City of Reno collector street with a capacity of 8,000 vehicle per day will serve the anticipated traffic volumes west of the roadway serving Village 5A.

The site plan for the Bennett Subdivision indicates that primary access will be provided from two roadways at the project's north property line and a gated, emergency access at the project's east property line. The emergency access will connect with the roadway network serving Somerset Village 2E. Both of the primary access roadways will run through Somerset Village 5E and connect with the roadway that serves Somerset Villages 2H and 5A. Traffic volumes on this roadway were subsequently reviewed based on buildout of the Somerset and Bennett developments. Table 3 shows a summary of the average daily traffic volumes on the roadway that serves Somerset Village 5A.



TABLE 3
AVERAGE DAILY TRAFFIC VOLUMES
BACK NINE TRAIL

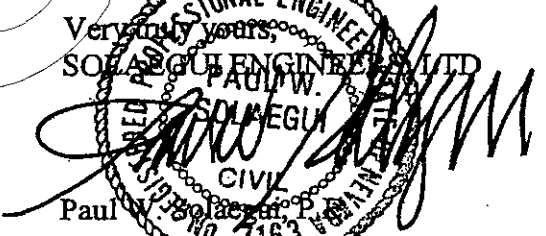
| <u>SECTION</u> | <u>SOMERSETT</u> | <u>BENNETT</u> | <u>WINTER CREEK</u> | <u>TOTAL</u> |
|-------------------------|------------------|----------------|---------------------|--------------|
| South of Somerset Pkwy. | 1,168 | 1,790 | 0 | 2,958 |
| South of Village 5A | 1,053 | 1,790 | 0 | 2,843 |
| North of Village 2H | 572 | 1,790 | 0 | 2,362 |
| South of Village 2H | 380 | 1,790 | 0 | 2,170 |
| West of Village 5C | 220 | 1,790 | 0 | 2,010 |
| West of Village 5D | 0 | 0 | 0 | 0 |

As shown in Table 3, Back Nine Trail that serves Somerset Village 5A is anticipated to carry more than 2,000 vehicles per day. This roadway will therefore need to be a two-lane collector street based on City of Reno and Somerset policy. In addition, both of the project access roadways are anticipated to serve less than 2,000 vehicles per day which indicate the need for local streets per Somerset design parameters.

A final point of concern regarding Back Nine Trail is the fact that it is shown on the attached Somerset circulation plan as a full street connection to Del Webb Parkway. As shown in Table 3, the connecting segment is not expected to load from a traffic carrying standpoint. The project developers request that the segment of Back Nine Trail between Del Webb Parkway and the Village 5D access be gated and function as an emergency/utility access only. In our opinion, this segment is not required to serve residential traffic and that the gated emergency/utility access function is adequate.

We trust that this information will meet your requirements. Please call if you have any questions or comments.

CC Keith Lockard
Gil Calvillo
Enclosures
LETTERS\RENO\Bennett Subdivision

Very truly yours,

 PAUL SOLAEQUI, P.E.
 PROFESSIONAL ENGINEER
 SOLAEQUI ENGINEERING LTD
 1130 S. KAGAN BLVD.
 SUITE 100
 RENO, NV 89502
 (775) 786-7163
 CIVIL

7-28-04
EXP 6-30-06

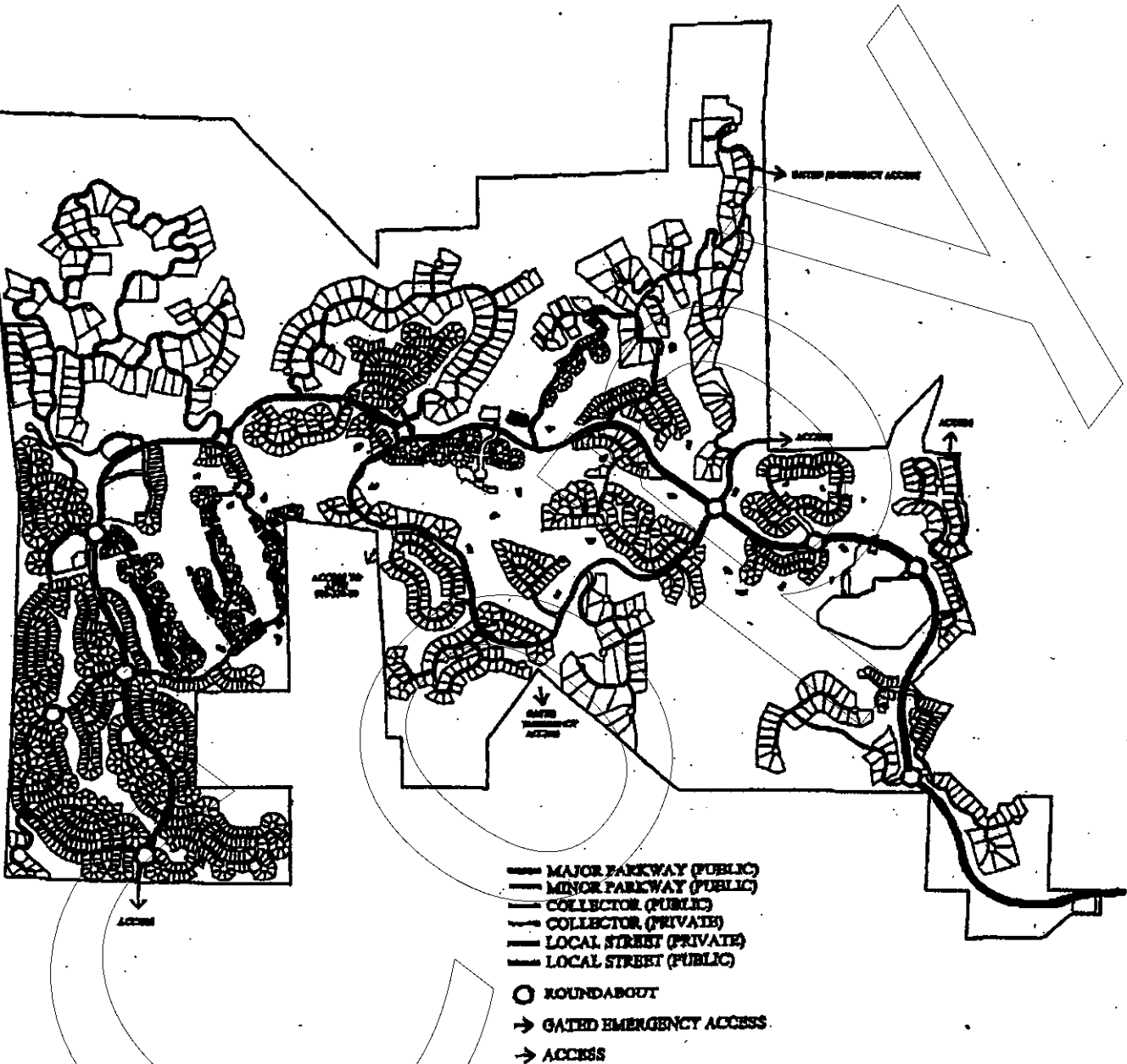


FIGURE 2-13 - PRIMARY AND SECONDARY ACCESS ~ CIRCULATION PLAN





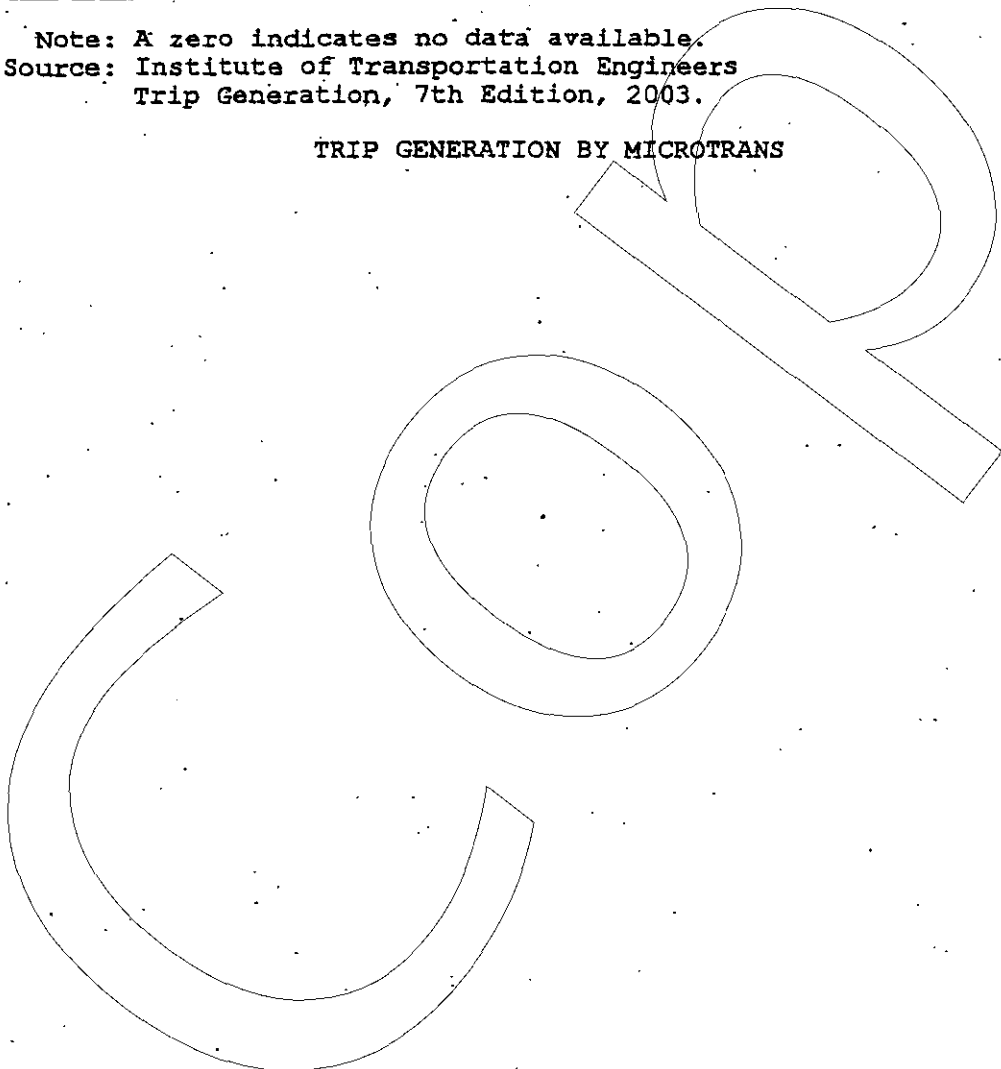
Summary of Average Vehicle Trip Generation
For 1292 Dwelling Units of Single Family Detached Housing
June 30, 2004

| | 24 Hour Two-Way Volume | 7-9 AM Pk Hour | | 4-6 PM Pk Hour | |
|-----------------|------------------------------|----------------|------|----------------|------|
| | | Enter | Exit | Enter | Exit |
| Average Weekday | 12364 | 245 | 724 | 827 | 478 |

| | 24 hour Two-Way Volume | Peak Hour | |
|----------|------------------------------|-----------|------|
| | | Enter | Exit |
| Saturday | 13049 | 659 | 556 |
| Sunday | 11344 | 594 | 517 |

Note: A zero indicates no data available.
Source: Institute of Transportation Engineers
Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS



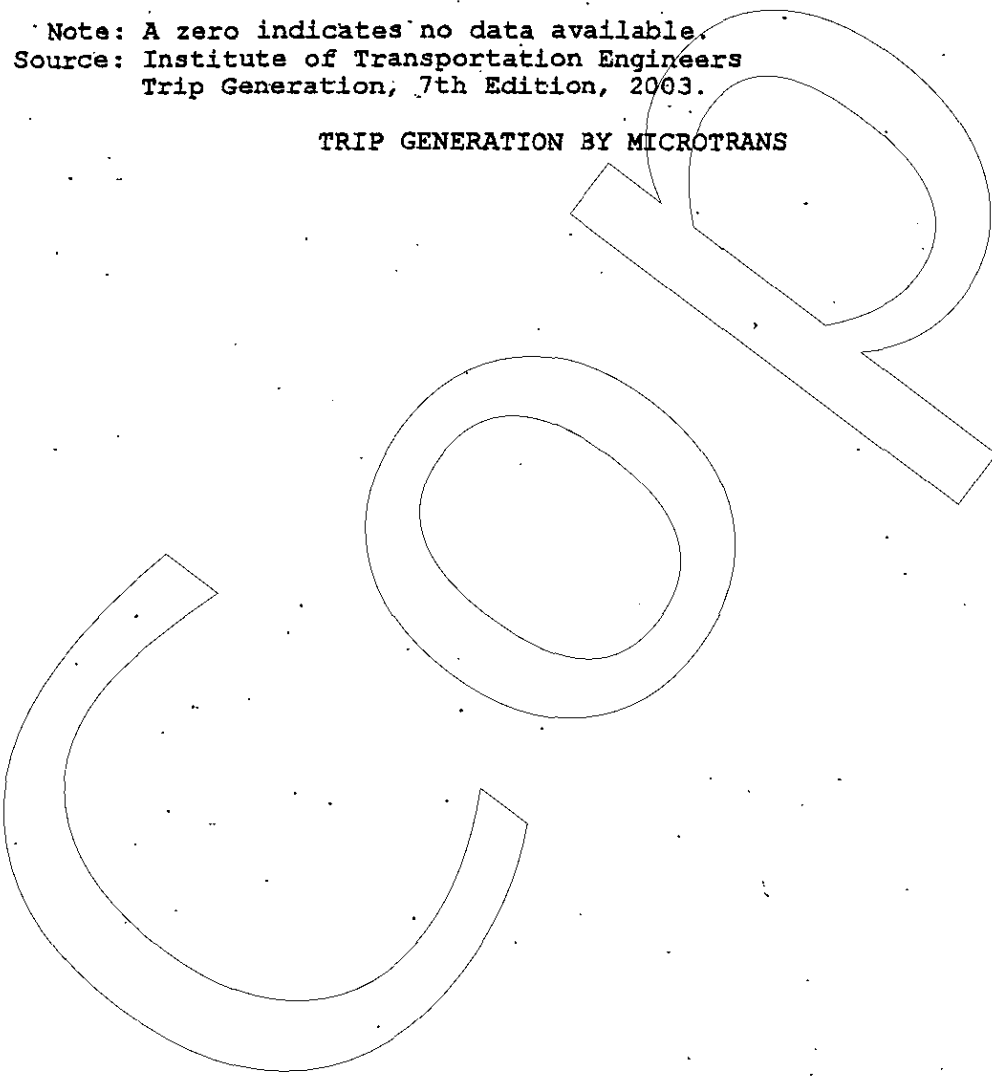


Summary of Average Vehicle Trip Generation
For 506 Dwelling Units of Residential Condominium / Townhouse
June 30, 2004

| | 24 Hour Two-Way Volume | 7-9 AM Pk Hour | | 4-6 PM Pk Hour | |
|-----------------|------------------------------|----------------|------|----------------|------|
| | | Enter | Exit | Enter | Exit |
| Average Weekday | 2965 | 35 | 187 | 177 | 86 |
| | 24 hour Two-Way Volume | Peak Hour | | | |
| | | Enter | Exit | | |
| Saturday | 2869 | 127 | 111 | | |
| Sunday | 2449 | 111 | 116 | | |

Note: A zero indicates no data available.
Source: Institute of Transportation Engineers
Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS



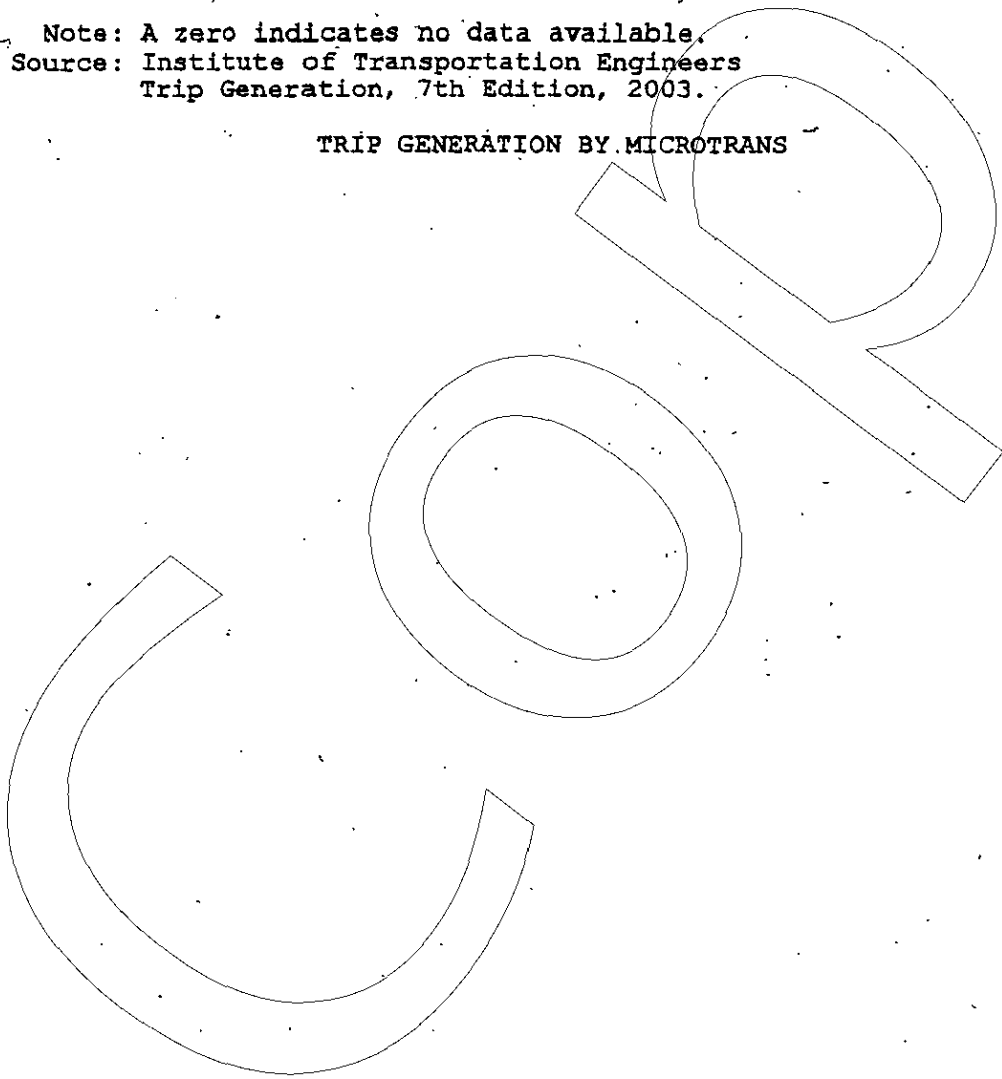


Summary of Average Vehicle Trip Generation
For 850 Dwelling Units of Elderly Housing - Detached
June 25, 2004

| | 24 Hour Two-Way Volume | 7-9 AM Pk Hour | | 4-6 PM Pk Hour | |
|-----------------|------------------------------|----------------|------|----------------|------|
| | | Enter | Exit | Enter | Exit |
| Average Weekday | 3154 | 68 | 102 | 136 | 85 |
| | 24 hour Two-Way Volume | Peak Hour | | | |
| | | Enter | Exit | | |
| Saturday | 2355 | 111 | 119 | | |
| Sunday | 1981 | 94 | 85 | | |

Note: A zero indicates no data available.
Source: Institute of Transportation Engineers
Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS



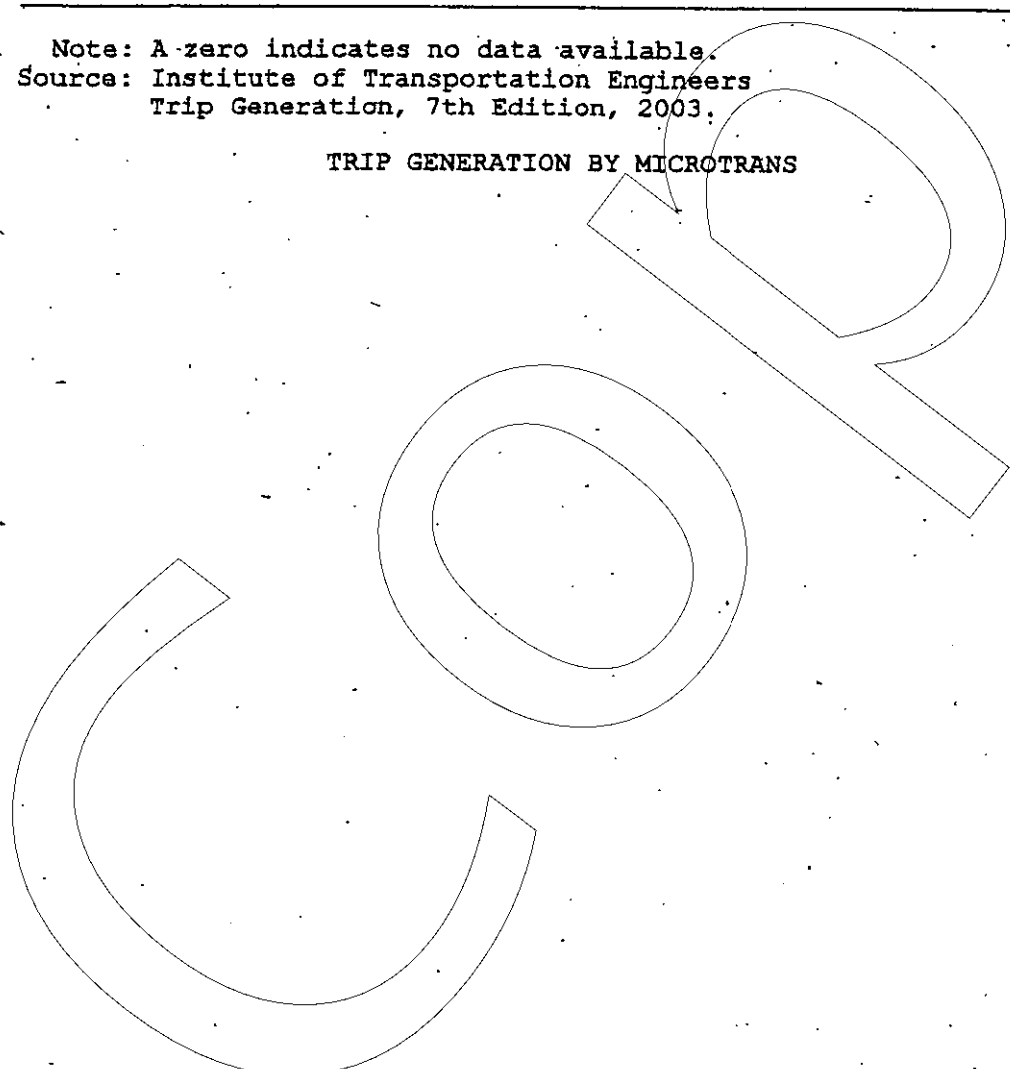


Summary of Average Vehicle Trip Generation
 For 187 Dwelling Units of Single Family Detached Housing
 June 25, 2004

| | 24 Hour Two-Way Volume | 7-9 AM Pk Hour | | 4-6 PM Pk Hour | |
|-----------------|------------------------------|----------------|------|----------------|------|
| | | Enter | Exit | Enter | Exit |
| Average Weekday | 1790 | 36 | 105 | 120 | 69 |
| | 24 hour Two-Way Volume | Peak Hour | | | |
| | | Enter | Exit | | |
| Saturday | 1889 | 95 | 80 | | |
| Sunday | 1642 | 86 | 75 | | |

Note: A zero indicates no data available.
 Source: Institute of Transportation Engineers
 Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS





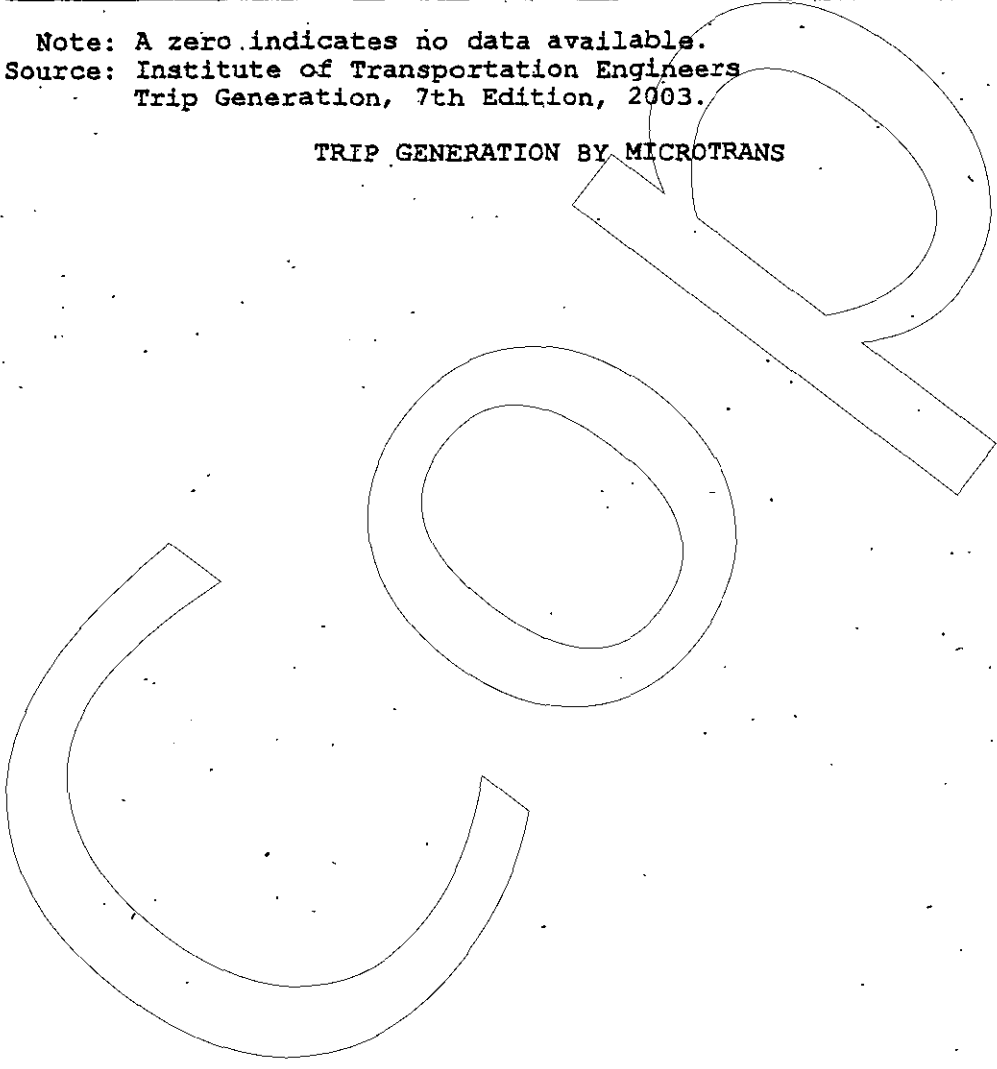
Summary of Average Vehicle Trip Generation
 For 142 Dwelling Units of Single Family Detached Housing
 June 30, 2004

| | 24 Hour Two-Way Volume | 7-9 AM Pk Hour | | 4-6 PM Pk Hour | |
|-----------------|------------------------------|----------------|------|----------------|------|
| | | Enter | Exit | Enter | Exit |
| Average Weekday | 1359 | 27 | 80 | 91 | 53 |

| | 24 hour Two-Way Volume | Peak Hour | |
|----------|------------------------------|-----------|------|
| | | Enter | Exit |
| Saturday | 1434 | 72 | 61 |
| Sunday | 1247 | 65 | 57 |

Note: A zero indicates no data available.
 Source: Institute of Transportation Engineers
 Trip Generation, 7th Edition, 2003.

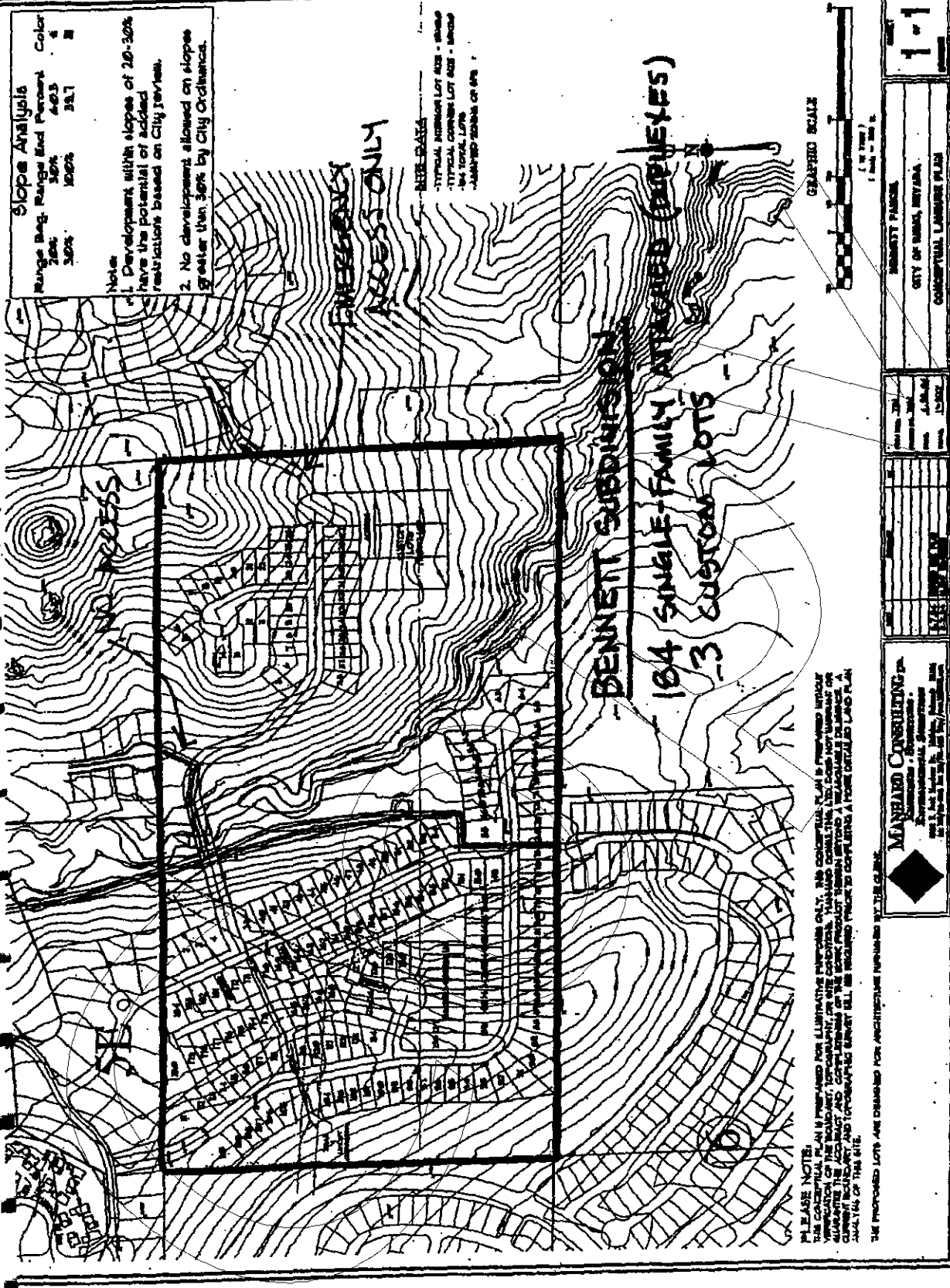
TRIP GENERATION BY MICROTRANS



Slope Analysis

| | | | | | | |
|-------|----|-----|-----|-----|-----|-----|
| Range | 5% | 10% | 15% | 20% | 25% | 30% |
| Color | 4 | 4.5 | 5 | 5.5 | 6 | 6.5 |

Note:
 1. Development with slopes of 20-30% have the potential of access restrictions based on City Review.
 2. No development allowed on slopes greater than 30% by City Ordinance.



PLEASE NOTE:
 THIS CONCEPTUAL PLAN IS PREPARED FOR ILLUSTRATIVE PURPOSES ONLY. THE CONCEPTUAL PLAN IS PREPARED WITHOUT VERIFICATION OF THE BOUNDARY, TOPOGRAPHY, OR SITE CONDITIONS. MANHARD CONSULTING, LTD. DOES NOT WARRANT OR GUARANTEE THE ACCURACY AND COMPLETENESS OF THE INFORMATION PROVIDED HEREON. A PROFESSIONAL SURVEYOR'S SURVEY SHALL BE REQUIRED PRIOR TO DEVELOPING A FORMAL SUBDIVISION PLAN FOR THE SITE.

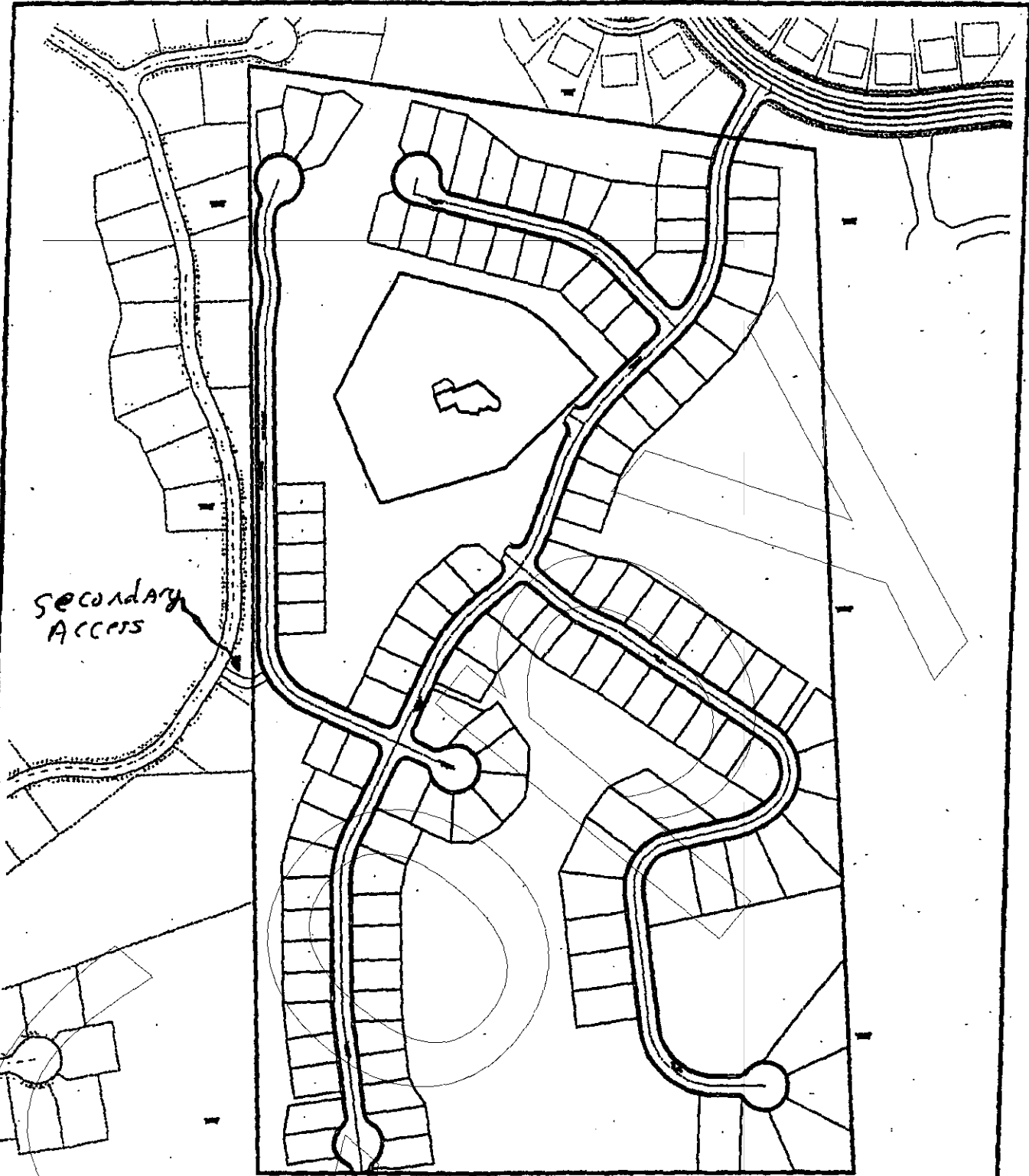
MANHARD CONSULTING, INC.
 PROFESSIONAL ENGINEERS
 1015 14TH AVENUE, SUITE 100
 DENVER, COLORADO 80202
 (303) 733-1100

| | |
|------------------------|--------------------------|
| DATE | 12/15/03 |
| PROJECT | BENNETT PHASE |
| CITY | CITY OF DENVER, COLORADO |
| CONCEPTUAL LAYOUT PLAN | |

1:1

(2)





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Secondary Access / offsite sewer / Access Road



JEFF CODEGA
 PLANNING/DESIGN, INC.
 planners • landscape architects
 engineers • surveyors
 construction services

RENO WASHOE COUNTY NEVADA

Date:
 Scale:
 Job No:
 FIGURE #



- At least 40% of the trees will be evergreen.
- Deciduous canopy trees will be sized with 50% having a minimum caliper of two inches and 50% having a minimum caliper of three inches at the time of planting measured six (6) inches above the root ball.
- Deciduous accent trees will have a minimum caliper of two inches at the planting measured six (6) inches above the root ball.
- Evergreen trees will consist of the following height mix at the time of planting: 40% at 6' height, 40% at 8' height, and 20% at 10' height (measured from finished grade to tree apex).
- Evergreen trees will be planted informally in areas where sufficient room is available to avoid conflicts with trucks, pedestrians, or required sight distance.
- A minimum of 50% of the shrubs installed will be 5 gallon size or larger at a minimum rate of 5 shrubs per required tree.

STREETS

Street Sections for various types of streets - arterials, collector streets, commercial rotary, residential rotary, town square, residential streets, and emergency access ways are proposed, including parkways. Standards are identified below. In addition, any standard City of Reno, street section may be used as is appropriate. These sections call for proper paved widths to safely and adequately convey the anticipated traffic loads while providing ample planting strips and detached paths to reinforce the community's village like image.

Minimum design values for streets shall be as specified in the ensuing table:

MINIMUM DESIGN PARAMETERS FOR SOMERSETT STREETS

| Street Classification | Minimum Horizontal Radius of Centerline | Minimum k Value for Vertical Curves | Maximum Average Daily Traffic Volume |
|-----------------------|---|-------------------------------------|---|
| Parkway | 820 feet | $k_{avg}=60$ $k_{crag}=70$ | 30,000 trips |
| Collector | 185 feet | 25 | 8,000 trips (no driveway access allowed) 4,000 trips (driveway access allowed) |
| Local | 100 feet | 20 | 2000 trips |

Notes:

1. On local and residential collector streets lesser radii shall be permitted as listed above with appropriate signage.
2. Curb returns at street intersections shall have minimum face of curb radii per City Code except for cluster development where 15 feet radii are permitted.
3. Minimum distances between intersections shall meet City Code except for cluster and attached home development where 100 feet minimum shall be permitted.

No tangent is required between horizontal curves on collector and local streets.

Additional lighting could also be used where appropriate. Superelevated roadways should be avoided at intersections. If superelevation is necessary, sufficient detail should be designed to ensure proper drainage. Refer to Drainageway/Detention/Wetland Areas for development standards for Drainageway Crossings.

With the approval of a Tentative Map or Special Use Permit, on-street parking lanes may be omitted from streets when the result is a decrease in cutting and/or filling of land; in which case, offstreet parking areas shall be provided based upon the scale and type of housing product proposed. These streets may be reduced to 24 feet in width.



The minimum lot frontage on a cul-de-sac shall be 25 feet.

Sidewalks shall be required for both public and private streets unless otherwise approved with Tentative Map or in cul-de-sacs serving less than 10 lots in Estate neighborhoods (ref. bullet-points under Residential Street Standards).

TRAFFIC DEVICES, CONSTRUCTION TRAFFIC CONTROL, AND TRAFFIC CALMING

- All longitudinal striping shall be paint.
- Where there is a stop or yield control on a local street only a 12-inch white stop bar shall be installed.

STORM DRAINAGE

- Cut-off swales shall be installed on uphill side of all lots as required by City Staff and shall be appropriately sized to contain the 100-year storm. The type of cut-off swale used shall be determined by the following:

| | |
|---------------------|-----------------------|
| Concrete | V100 < 4 fps |
| Rock riprap | 4 fps < V100 < 12 fps |
| Grouted rock riprap | V100 > 12 fps |

- Horizontally curved storm drain shall be allowed and shall meet the manufacturer's recommendations for curved alignment.
- Access prevention grates on storm drains shall be required per the Design Manual with the locks on top if possible.
- Permanent access with easements will be provided to all inlet and outlet structures. Twelve foot wide access roads for inlets 24" or larger will be constructed of 6-8 inch cobble laid to be a "drivable" surface to the satisfaction of the city with hammerhead vehicle turnarounds. A backhoe must be able to scrape off the trash racks. A Jeep Wrangler or equivalent access will be allowed for inlets less than 24" and all outlets. The access road will be 6' in width and constructed of "drivable" 6-8 inch cobble. Somerset will provide a Jeep Wrangler or equivalent to the City of Reno permitting of Phase IV of Somerset Parkway. Footpaths as permanent access will be allowed only for secondary overflow outlets in detention structures.

SANITARY SEWER

Horizontally curved sanitary sewer shall be allowed and shall meet the manufacturer's recommendations for curved alignment.

PRIMARY/SECONDARY ACCESS PLAN, FIRE STATION, AND FIRE DEPARTMENT POLICY

Primary access is provided by Somerset Boulevard and Logan Ridge, which shall be constructed as an ungated Major Parkway and Collector Street, respectively. Secondary access shall be provided by both ungated routes and by gated routes (which also serve as emergency access) with further requirements as follows:

1. Prior to issuance of the 300th building permit, the Beaumont Parkway connection will be graded and based to city standards for an emergency access. Utilities will not be required. Gating will be permitted as an interim measure until paved pursuant to condition 2 below.
2. Prior to issuance of the 400th building permit, the Beaumont Parkway connection will be constructed, in accordance with the full City Street Standards, and gates will be removed.

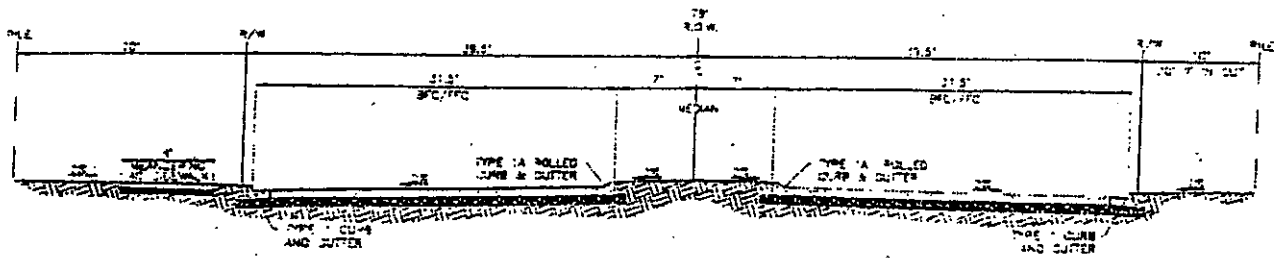


3. Gating, either manned or unmanned will be determined at the time of Tentative Map or Special Use Permit. Provision for a permanently gated future emergency access, from the upper portion of Village 3 east to a point on the west property line of the adjacent parcel, will be required. Additional improvements on the adjacent property shall not be required for the development of Somerset.
4. No gating will be allowed in Village 2, where in doing so it would eliminate the un-gated parallel access to Somerset Parkway.
5. The Dakota Ridge access from Somerset Parkway to Northgate may not be gated.
6. The fire station will be constructed prior to issuance of the 1,400th building permit.
7. Somerset will not develop any road connection to existing roads in the Mogul area.
8. Permanent all weather gated fire access roads shall be allowed to interconnect both public and private roads. The access roads shall be owned and maintained by the Somerset HOA. The access road gates shall be designed by the Somerset AGC and operate utilizing approved strobe opening devices.
9. When parking is not permitted on access or public roads, a sign that prohibits parking shall be provided at the entrance of the road or the general area. The Somerset AGC shall design this sign. This sign shall replace the "NO PARKING-FIRE LANE" signs and the red curbing normally required.
10. No red curbing other than for fire hydrants shall be allowed. The spacing for "NO PARKING-FIRE LANE" shall be 300 feet.
11. Access to APN 032-370-20 from development areas 2E, 2F, 2G and 2H shall be provided if reasonably feasible, when developed. The property owners and City Staff shall mutually agree to these access points during the Tentative Map or Special Use Permit process.
12. Prior to the issuance of a building permit for the 2,200th dwelling unit, the applicant shall obtain a re-locatable access easement that connects the southwest collector street to an existing public roadway.

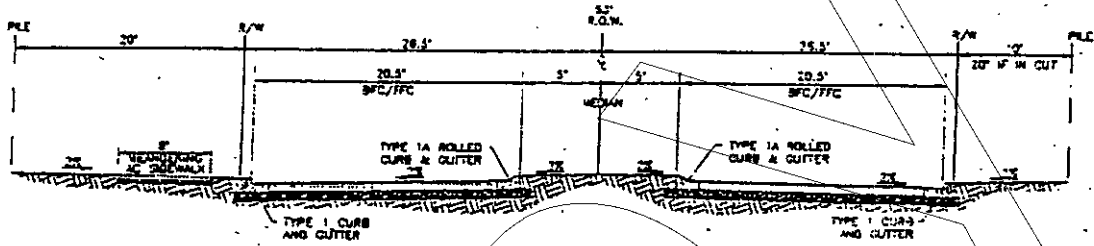
PARKWAY STANDARDS

The following standards apply where parkways abut open space or undeveloped areas.

- The parkway street section within the transitional areas will be per Figure 2-10, Transitional Parkway Cross Section.
- The parkway median will vary in width with a minimum width of 14 feet. However, portions of the approved Somerset Boulevard do not vary in median width.
- An eight-foot minimum width detached pathway will be provided on one side of parkways. Accessible routes will be provided regularly to allow access to the pathway. The pathway will be separated from vehicular traffic by a minimum six foot wide planting strip except where a narrower width is required to accommodate special circumstances, i.e., at pedestrian crossings, to lessen grading, or at conflicts with utilities.
- Parking is not permitted, unless an additional 8-foot parking lane is provided.



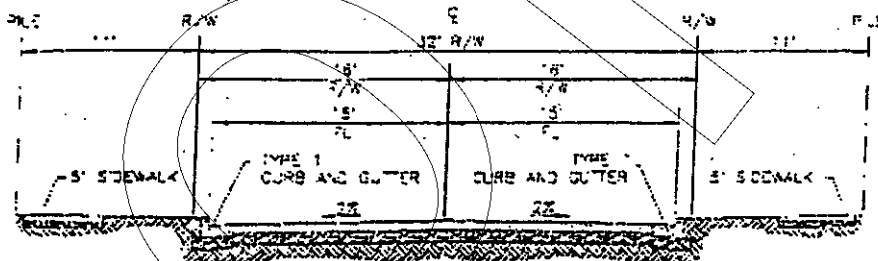
MAJOR PARKWAY
FIGURE 2-14



MINOR PARKWAY
FIGURE 2-15

NOTE: The 20 foot setback in cuts may be reduced through the Special Use Permit or Tentative Map process for areas that contain slopes of 25% or greater and if it can be shown that grading will be reduced.

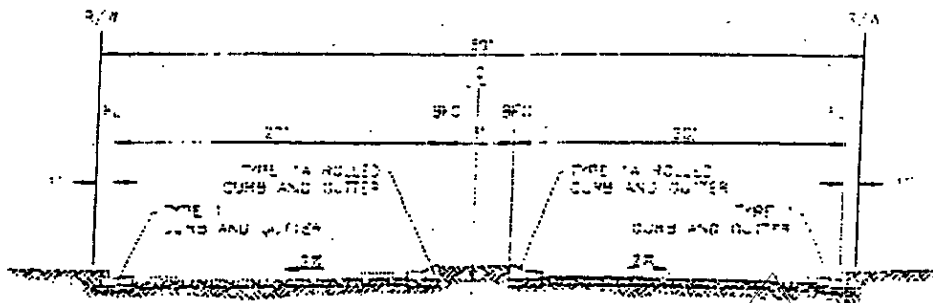
PILE - Public Improvement Landscape Easement.



COLLECTOR
FIGURE 2-16

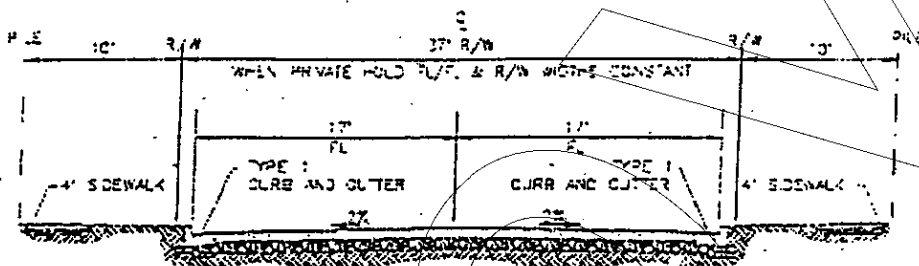
NOTES:

1. IF LOTS FRONT ON A COLLECTOR STREET, THEN PARKING WILL BE PROVIDED ADJACENT TO THE LOTS ADDING 2 FT. TO THE R/W WIDTH FOR PARKING ON ONE SIDE AND ADDING 4 FT. TO THE R/W WIDTH FOR PARKING ON BOTH SIDES.



COMBINED PRIMARY/SECONDARY ACCESS SECTION

FIGURE 2-18



LOADED RESIDENTIAL STREET (LOCAL)

FIGURE 2-19

NOTES:

- 1. TYPE 1B ROLLED CURB & GUTTER IS ALLOWED WHEN PRIVATE.
- 2. THERE WILL BE A MINIMUM OF 6" OF LANDSCAPING BETWEEN BACK OF CURB AND SIDEWALK

Figure 2-17 has been omitted

There are different roundabout designs that may be used for Somerset based on their function within the planned area. The design of roundabouts shall comply with "Roundabouts: An Information Guide, USDOT Publication No. FHWA-RD-00-067". All pedestrian crosswalks on any roundabout shall have integrally colored concrete with contrasting colors and/or finishes or pavers. (See Paving Table 2-8 for additional design details). Any colored concrete stamped or patterned concrete or pavers or tiles located within a public right of way shall be maintained by the Homeowner Association. Internal village roundabouts on local streets are designed as a traffic calming management device to improve safety. This is accomplished by controlling vehicular speed, and creating a deterrent to large vehicles and high traffic volumes. Along with discouraging high traffic speeds, they provide a neighborhood focal center and help to enhance the environmental goals set for Somerset.

The second situation where roundabouts will be used for Somerset, are certain intersections along Somerset Boulevard. Roundabouts will be used instead of either a four way stop or a signalized intersection to provide the same function as either the above as well as creating a gateway image that could not be accomplished with traditional traffic solutions. Additional landscaped areas, better visual aesthetics, reduction of automobile emissions based on a continuous flow of vehicles, added safety for pedestrians and bicycles based on reduced traffic speeds, and a cost that is comparable with traditional solutions combine to make a strong argument for the roundabout solution.



- The minimum lot frontage on a cul-de-sac shall be 25 feet.

RESIDENTIAL STREET STANDARDS

- Sidewalks may be eliminated on cul-de-sac streets serving less than 10 lots in custom neighborhoods through the Tentative Map process where appropriate.
- Residential street sections will be per Figures 2-19 through 2-26
- The basic standard includes a six (6) foot planting strip and detached four (4) foot minimum width sidewalk will be provided on both sides of residential streets abutting one quarter acre and smaller size lots. For larger lots and along "single-loaded" streets, a six-foot planting strip will be provided on both sides of the street with a four (4) foot minimum width sidewalk on one side only. Alternate street sections for residential streets may be requested with the Tentative Map. If a street is unloaded or if grading is significantly minimized in areas of extreme terrain, the sidewalk may be placed at back of curb and the landscape strip omitted.
- The posted speed limit on residential streets shall be 25 mph.

EMERGENCY ACCESS

- Emergency access will be per Figure 2-21D, Emergency Access section.

STREET LIGHTING

"Dark Skies" shall be defined by the following location and spacing parameters:

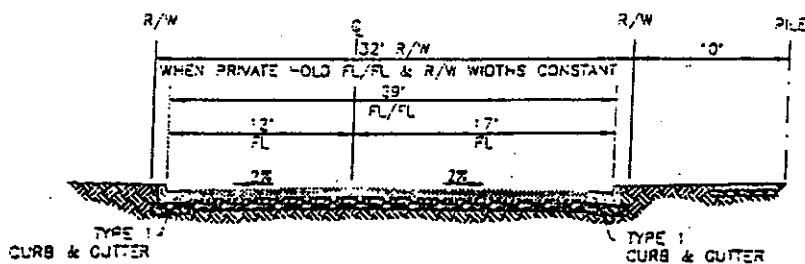
- Residential - The minimum spacing of streetlights shall be at the intersections of parkways and collectors.
- Commercial - Lighting in parking lots and other similar uses shall be designed in the spirit of "dark skies" and be approved by the AGC and City Staff.
- Other locations shall be permitted with AGC and City Staff approval.

PEDESTRIAN PATHS AND BIKEWAYS

Somerset's paths and trails are provided for multi-purpose pedestrian and bicycle, linking the common areas within the project area. Pathways will meander within open space areas and link major natural and landscaped open spaces, schools, and parks to residential and commercial uses. The pedestrian/bike trail system will provide an alternative to automobile transportation. Where practical, paths and trails should be located and aligned to provide views of surrounding natural features and community open space. See Figure 2-27, Multi-Purpose Trail.

The path and trails criteria are intended to provide safe, functional, and aesthetically pleasing walkways within and between development parcels. Paths are a minimum of 4-6' in width. Connections will be created for the overall walkway system to allow all residents optimal pedestrian access throughout the area. Paths will be kept separate from roadways where possible, with crossings preferred at controlled intersections or at tangent road sections where adequate sight distance is provided for. Some paths are combined with utility access drives and emergency access roads. To the extent practical, all paved walkways should be handicapped accessible. Existing foot/bike paths and Jeep trails will be utilized where possible and upgraded to Somerset standards. See Figure 2-30.

The type, location, construction methods, and grading for all trails will be provided with each Tentative Map application that demonstrates connection with the overall system. Trails associated with each Tentative Map will be constructed with the development of each Final Map to the satisfaction of staff. Of course, trails will be routed around gated projects.

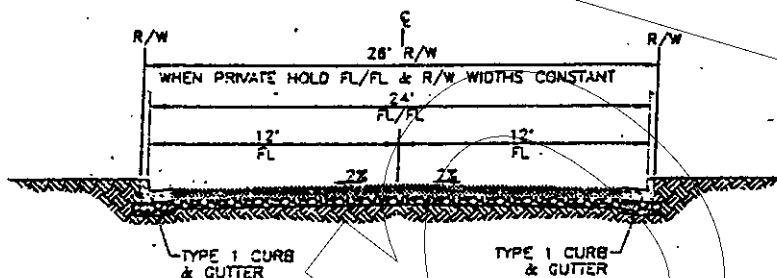


LOCAL SINGLE LOADED STREET LOCAL UNLOADED STREET

FIGURE 2-21

NOTES:

1. TYPE 1B ROLLED CURB & GUTTER IS ALLOWED WHEN PRIVATE.
2. AN UNLOADED LOCAL STREET HAS THE SAME R/W TO R/W AND FLOW LINE TO FLOW LINE WIDTH AS SHOWN, BUT HAS SYMMETRIC TRAVEL LANES AND NO PILE.
3. SIDEWALK IS REQUIRED PER THE DESIGN MANUAL UNLESS OTHERWISE SPECIFIED BY THE PUD HANDBOOK.

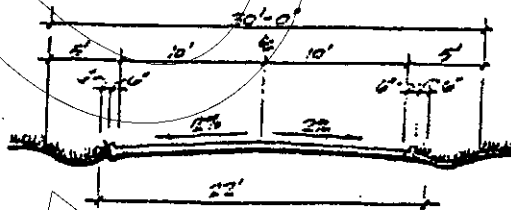


LOCAL STREET (USED ONLY AS CONNECTOR)

FIGURE 2-22

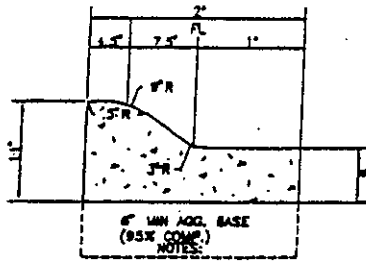
NOTES:

1. TYPE 1B ROLLED CURB & GUTTER IS ALLOWED WHEN PRIVATE.
2. THIS STREET IS TO BE USED TO CONNECT DEVELOPMENTS WITHIN SOMERSET AND PARKING SHALL NOT BE ALLOWED.
3. A SIDEWALK ADJACENT TO THE CURB SHALL BE PROVIDED UNLESS OTHERWISE SPECIFIED BY THE PUD HANDBOOK.



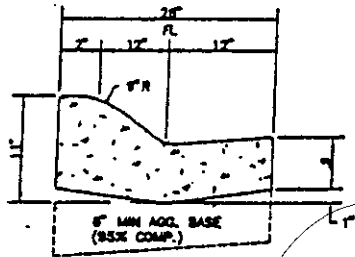
• Curb and gutter may be required if necessary for drainage and to raise grading.

FIGURE 2-23 - EMERGENCY ACCESS SECTION



TYPE 1A PCC ROLL CURB & GUTTER

FIGURE 2-24



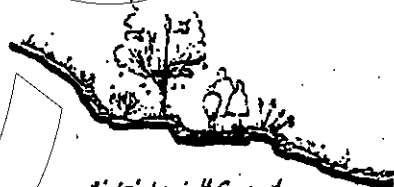
TYPE 1B PCC ROLL CURB & GUTTER

FIGURE 2-25

- 1) SIDEWALKS MAY BE ASPHALT IF SHOWN AND APPROVED WITH THE TENTATIVE MAP AND OR SPECIAL USE PERMIT.
- 2) THE PUBLIC UTILITY EASEMENTS SHOWN AND NOTED ON THIS PLAT INCLUDE THE USE, INSTALLATION AND MAINTENANCE OF CABLE TELEVISION FACILITIES AND ALSO INCLUDE USE, INSTALLATION AND MAINTENANCE OF TELECOMMUNICATION AND ELECTRIC COMMUNICATION LINES AND ASSOCIATED FACILITIES GRANTED TO SOMERSETT TECHNOLOGY, LLC.
- 3) THE PUBLIC IMPROVEMENT AND LANDSCAPE EASEMENT (P.I.L.E.) SHALL INCLUDE CITY OF RENO ACCESS FOR REPAIR OR REPLACEMENT OF PUBLIC IMPROVEMENTS SUCH AS CURB, GUTTER, SIDEWALK, AND TRAFFIC SIGNS. P.I.L.E. INCLUDES PUBLIC USE OF SIDEWALK PER RENO MUNICIPAL CODE 12.20.
- 4) THE OWNER HEREBY GRANTS TO SOMERSETT TECHNOLOGY, LLC A BLANKET EASEMENT FOR THE PURPOSE FOR USE, INSTALLATION AND MAINTANCE OF TELECOMMUNICATION AND ELECTRIC COMMUNICATION LINES ASSOCIATED FACILITIES WITHIN THE PROPERTY OFFERED FOR DEDICATION AND WITHIN ALL AREAS BURNED BY A PUBLIC UTILITY EASEMENT. ANY TELECOMMUNICATION AND ELECTRIC COMMUNICATION LINES PLACED UNDERNEATH IMPROVED SURFACES WITHIN PROPERTY OFFERED FOR DEDICATION SHALL BE PLACED WITHIN A SLEEVE APPROVED BY THE CITY OF RENO OR SOMERSETT TECHNOLOGY, LLC. SHALL BE AT THE FULL EXPENSE OF SOMERSETT TECHNOLOGY, LLC, AND SERVE SHALL BE PROVIDED USING SAID LINES AND FACILITIES AN AGREEMENT ON SAID MATTERS, AND OTHER ISSUES RELEVANT THEREIN BETWEEN THE CITY OF RENO AND SOMERSETT TECHNOLOGY, LLC IS EXECUTED TO THE CITY'S SATISFACTION.

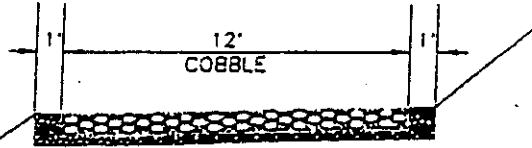
TYPICAL NOTES FOR ALL STREET SECTIONS

FIGURE 2-26



• 8-10' Asphalt Concrete (AC)
• Irrigated Landscape over Disturbed Area

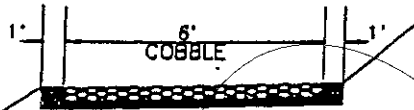
FIGURE 2-27 - MULTI-PURPOSE TRAIL



12' WIDE 6" - 8" COBBLE STONE
TO CITY SATISFACTION W/HAMERHEAD
TURNAROUNDS

ACCESS TO SD INLETS 24"Ø & LARGER

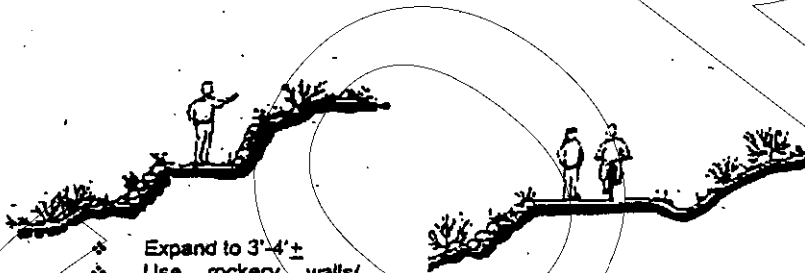
FIGURE 2-28



6' WIDE 6" - 8" COBBLE STONE
TO CITY SATISFACTION

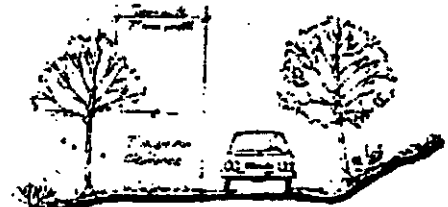
ACCESS ROAD SD INLET SMALLER THAN 24"Ø AND ALL OUTLETS

FIGURE 2-29



Expand to 3'-4'±
Use rocky walls/
native landscape.

- ❖ Expand to 8'-10'
- ❖ Use either A.C. or leave natural depending on use or slope.
- ❖ Can be utilized & combined with maintenance road.
- ❖ Revegetate disturbed areas as necessary w/native plants.



- ❖ Minimum 7' width
- ❖ Can be utilized & combined with maintenance road.
- ❖ Use either A.C. or leave natural depending on use or slope.
- ❖ Revegetate disturbed areas as necessary w/native plants.
- ❖ Provide turnouts every ½ mile.
- ❖ Maintain 7' high clearances.

FIGURE 2-30 - FOOT/BIKE PATHS AND JEEP TRAILS



EXHIBIT D

PRELIMINARY GEOTECHNICAL REPORT

**PREPARED BY:
STANTEC CONSULTING INC.
UNDER A SEPARATE COVER
JULY 2004**



EXHIBIT E
LANDSCAPE APPENDICES

COPY



APPENDIX

LANDSCAPE PLANTING PALETTES

The following lists provide opportunity for creative landscape design within the parameters of the overall project design theme. See Figure 3-1 Plant Palette Location Map, for appropriate locations of each palette.

DEVELOPED AREA PLANT PALETTE

The Developed plant palette will be used in common open space within residential neighborhoods, in the Town Center, and along streets that are bordered by residential or commercial development.

LARGE SHADE TREES

- Acer platanoides Norway Maple
- Acer pseudoplatanoides Sycamore Maple
- Carpinus betuloides European Hornbeam
- Fraxinus spp. Autumn Purple, Urbanite, or Blue Ash
- Plantanus acerifolia London Plane Tree (*Not Suitable For Street Tree Planting*)
- Quercus robur English Oak
- Quercus rubra Red Oak
- Quercus macrocarpa Bur Oak
- Zelcova serrata Zelcova

EVERGREEN TREES

- Calocedrus deccurrens Incense Cedar
- Picea abies Norway Spruce
- Picea pungens glauca Colorado Blue Spruce
- Pinus spp. Pine
- Pseudotsuga menziesii glauca Rocky Mtn. Douglas Fir

MEDIUM-SMALL DECIDUOUS TREES

- Acer tartaricum Tartarian Maple
- Cercis canadensis Eastern Redbud
- Cornus mas Cornelian Cherry
- Crataegus sp. Hawthorn
- Koelreuteria panniculata Golden Rain Tree
- Prunus sp. Cherry
- Pyrus calleryana Bradford et al. Ornamental Pear
- Sorbus aucuparia Blackhawk et al. European Mt. Ash
- Syringa reticulata Japanese Tree Lilac
- Tilia cordata Little-leaf Linden



EVERGREEN SHRUBS

- Thuja spp. Arborvitae
- Cotoneaster sp. Cotoneaster
- Juniperus sp. Juniper
- Mahonia sp. Oregon Grape
- Picea abies 'Nidiformis' Nest Spruce

DECIDUOUS SHRUBS

- Berberis Barberry
- Euonymus alatus Winged Euonymus
- Hibiscus syriacus Rose of Sharon
- Philadelphus lewisii Mock Orange
- Potentilla sp. Cinquefoil
- Ribes aureum Golden Currant
- Spiraea sp. Spiraea
- Viburnum sp. Viburnum

GROUNDCOVERS/VINES

- Ajuga reptans Ajuga
- Antennaria dioica Pussytoes
- Campsis radicans Trumpet Vine
- Clematis jackmanii Jackman Clematis
- Cotoneaster dammeri Bearberry
- Euonymus fortunei Winter Creeper
- Hypericum calycinum St. Johns Wort
- Juniperus sp. Juniper
- Lonicera japonica Honeysuckle
- Parthenocissus quinquefolia Virginia Creeper
- Polygonum aubertii Silver Lace Vine
- Sedum sp. Sedum
- Vinca major Periwinkle
- Vinca minor Dwarf Periwinkle

PERENNIALS

Any perennials that are hardy to Sunset Zone 3 are approved for use in the Developed palette.

TURF GRASS

- Festuca arundinacea Tall Fescue
- Poa pratensis Kentucky Bluegrass



TRANSITIONAL PLANTING PALETTE

The Transitional Planting Palette will be used at the interface between developed areas and undisturbed areas, along parkway and collector streets fronted by open space, and at trail heads.

The Transitional Palette consists of species that complement the form, color, and size of the existing sagebrush community. Plantings in this zone require limited irrigation to survive. Landscape beds in the Transitional Zone consist of primarily an aggregate or wood mulch ground plane with dispersed ground covers, shrubs, and possibly trees.

The plants recommended for use in this zone are as follows:

LARGE SHADE TREES

- Celtis occidentalis Hackberry
- Gleditsia triacanthos inermis Thornless Honeylocust
- Robinia pseudoacacia 'Purple Robe' .Purple Robe Locust

EVERGREEN TREES

- Cercocarpus betuloides Western Mt. Mahogany
- Cercocarpus ledifolius Curl-leaf Mtn. Mahogany
- Juniperus scopulorum Rocky Mountain Juniper
- Juniperus v. "Skyrocket" Skyrocket Juniper
- Pinus edulis Pinyon Pine
- Pinus jeffreyi Jeffrey Pine
- Pinus ponderosa Ponderosa Pine
- Pinus sylvestris Scotch Pine

MEDIUM-SMALL DECIDUOUS TREES

- Acer ginnala Amur Maple
- Eleagnus angustifolia Russian Olive
- Eleagnus umbellatum Buffalo Berry
- Koelreuteria paniculata Golden Rain Tree
- Robinia idahoensis Idaho Locust
- Tamarix Tamarisk

EVERGREEN SHRUBS

- Arctostaphylos patula Greenleaf Manzanita
- Artemisia tridentata Big Sage
- Chrysothamnus nauseosus Rabbit Brush
- Cytisus sp. Broom
- Juniperus sp. Junipers
- Yucca sp. Yucca



DECIDUOUS SHRUBS

- Artemisia schmidtiana Silver Mound
- Berberis mentorensis Mentor Barberry
- Berberis thunbergii Barberry
- Caragana spp. Siberian Peashrub
- Caryopteris incana Blue Mist
- Cotinus coggygria Green Smoketree
- Cotoneaster sp. Cotoneaster
- Forestiera neomexicana New Mexico Privet
- Genista lydia Dwarf Broom
- Holodiscus discolor Ocean Spray
- Perovskia atriplicifolia Russian Sage
- Potentilla fruticosa Bush Cinquefoil
- Prunus besseyi Sand Cherry
- Purshia tridentata Bitterbrush
- Rhus spp. Sumac

GROUNDCOVER/VINES

- Arctostaphylos uva ursi Kinnikinnick
- Juniper sp. Juniper (many)
- Parthenocissus quinquefolia Virginia Creeper
- Phlox subulata Creeping Phlox
- Santolina chamaecyparissus Lavender Cotton
- Santolina virens Green Lavendar Cotton

PERENNIALS

Any perennials hardy to Sunset Zone 1 which can survive with limited supplemental irrigation are approve for use in this palette.

MEADOW GRASSES

- Elymus glaucous Blue Wild Rye
- Festuca ovina 'Glaucia' Blue Fescue
- Helictotrichon sempervirens Blue Oat Grass
- Miscanthus sinensis 'Gracillimus' Maiden Grass
- Pennisetum setaceum Fountain Grass
- Stipa gigantea Giant Feather Grass

TURF GRASSES

- Buchloe dactyloides Buffalo Grass
- Festuca ovina duriuscula Hard Fescue
- Durar/covar



NATURAL HIGH DESERT PLANT PALETTE

The Natural High Desert plant palette will be used to revegetate disturbed areas within portions of the open space that are to remain in native vegetation. These species are native to the site or the Great Basin. Plants within this zone can survive with no supplemental irrigation once established.

Plants which are recommended for use in this zone include:

EVERGREEN SHRUBS

- Artemisia tridentata Big Sagebrush
- Atriplex canescens Four Wing Saltbush
- Arctostaphylos nevadensis Pine-mat manzanita
- Cercocarpus Mountain mahogany
- Ephedra viridis Mormon Tea

DECIDUOUS SHRUBS

- Chamaebatiaria millefolium Fern Bush
- Chrysothamnus nauseosus Rabbitbrush
- Cowania mexicana Cliffrose
- Fallugia paradoxa Apache Plume
- Prunus andersonii Desert Peach
- Purshia tridentata Bitterbrush

PERENNIALS/ANNUALS

Any Great Basin native perennials that are hardy to Sunset Zone 1 are approved for use in this zone.

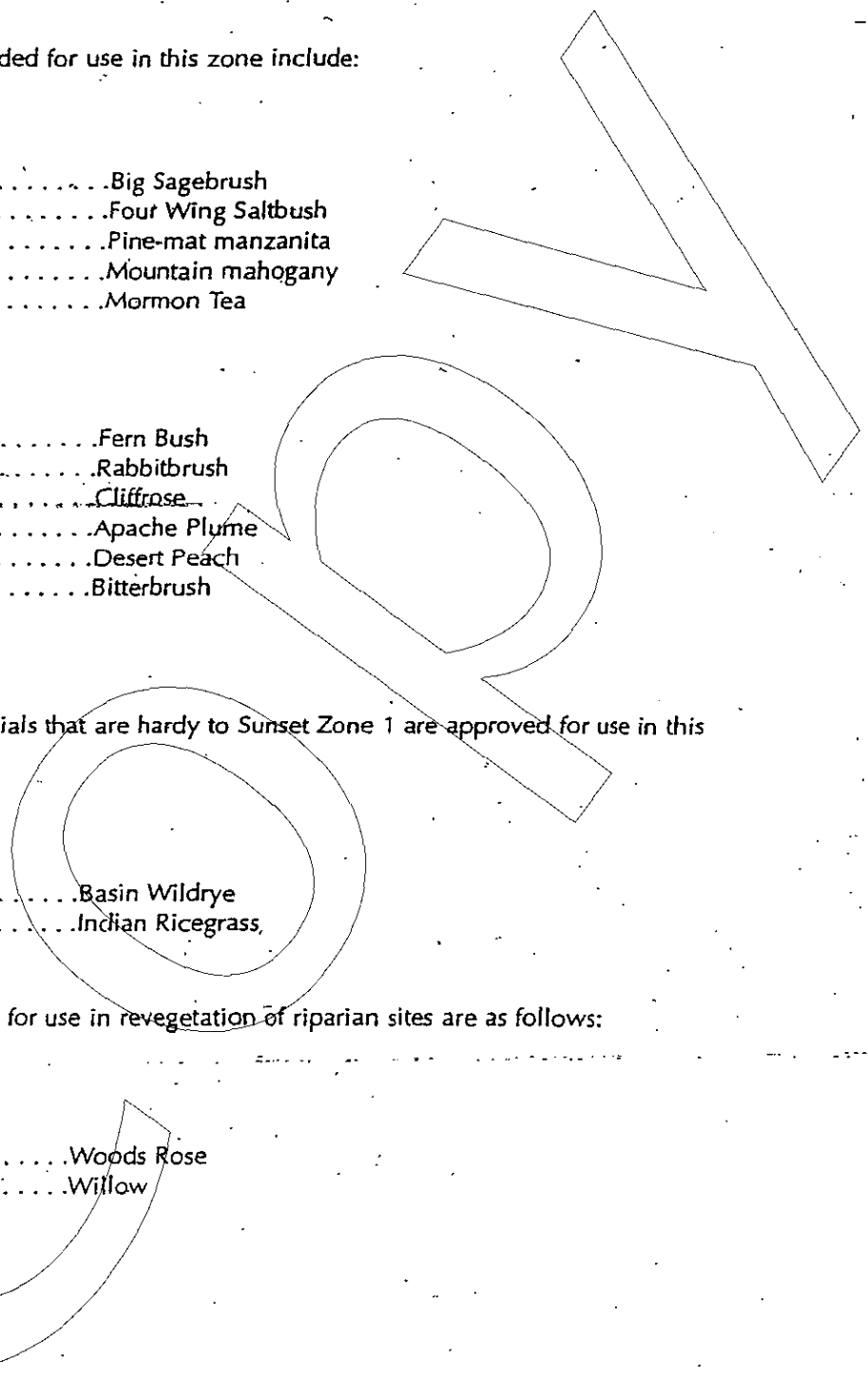
GRASSES

- Elymus conereus Basin Wildrye
- Oryzopsis hymenoides Indian Ricegrass,
- Poa nevadensis

Plants which are recommended for use in revegetation of riparian sites are as follows:

SHRUBS

- Rosa woodsii Woods Rose
- Salix exigua Willow





FORBES

- Epilobium exaltatus
- Lepidium latifolium

GRASSES

- Carex nebrascensis
- Juncus balticus
- Muhlenbergia asperifolia
- Poa sp.
- Polypogon nomospliensis
- Typha latifolium

WILDLIFE SEED MIX

The wildlife enhancement/open space area seed mix will be used in portions of the open space that are to be enhanced as wildlife forage areas. These areas are not intended to be used by humans.

Plants in this zone can survive on natural precipitation once established.

SPECIES

PLS LBS/ACRE

| | |
|--|-----|
| Festuca 'covar'/Covar Fescue | .3 |
| Lupinus sericeus/Silky Lupine | .3 |
| Linum lewisii/Lewis Flax | .2 |
| Chrysanthemum leucathemum/Oxeye Daisy | .2 |
| Lupinus perennis/Perennial Lupine | .2 |
| Coreopsis tinctoria/Plains Coreopsis | .2 |
| Artemesia tridentata/Big Sagebrush | .3 |
| Penstemon rydbergii/Sierra Penstemon | .1 |
| Eschscholzia C. lifornica/California Poppy | .2 |
| Castilleja sp./Indian Paintbrush | .1 |
| Fallugia paradoxa/Apache Plume | .3 |
| Purshia tridentata/Lassen Antelope Bitterbrush | .3 |
| Chrysothamnus nauseosus/Rubber Rabbitbrush | .3 |
| Total LBS Pure Live Seed per acre | .30 |

All seeding or planting will be performed using Best Management Practices as developed by the Nevada Division of Environmental Protection and the Nevada Division of Conservation Districts. On slopes 3:1 or less, a range drill or equivalent means will be used to apply seed

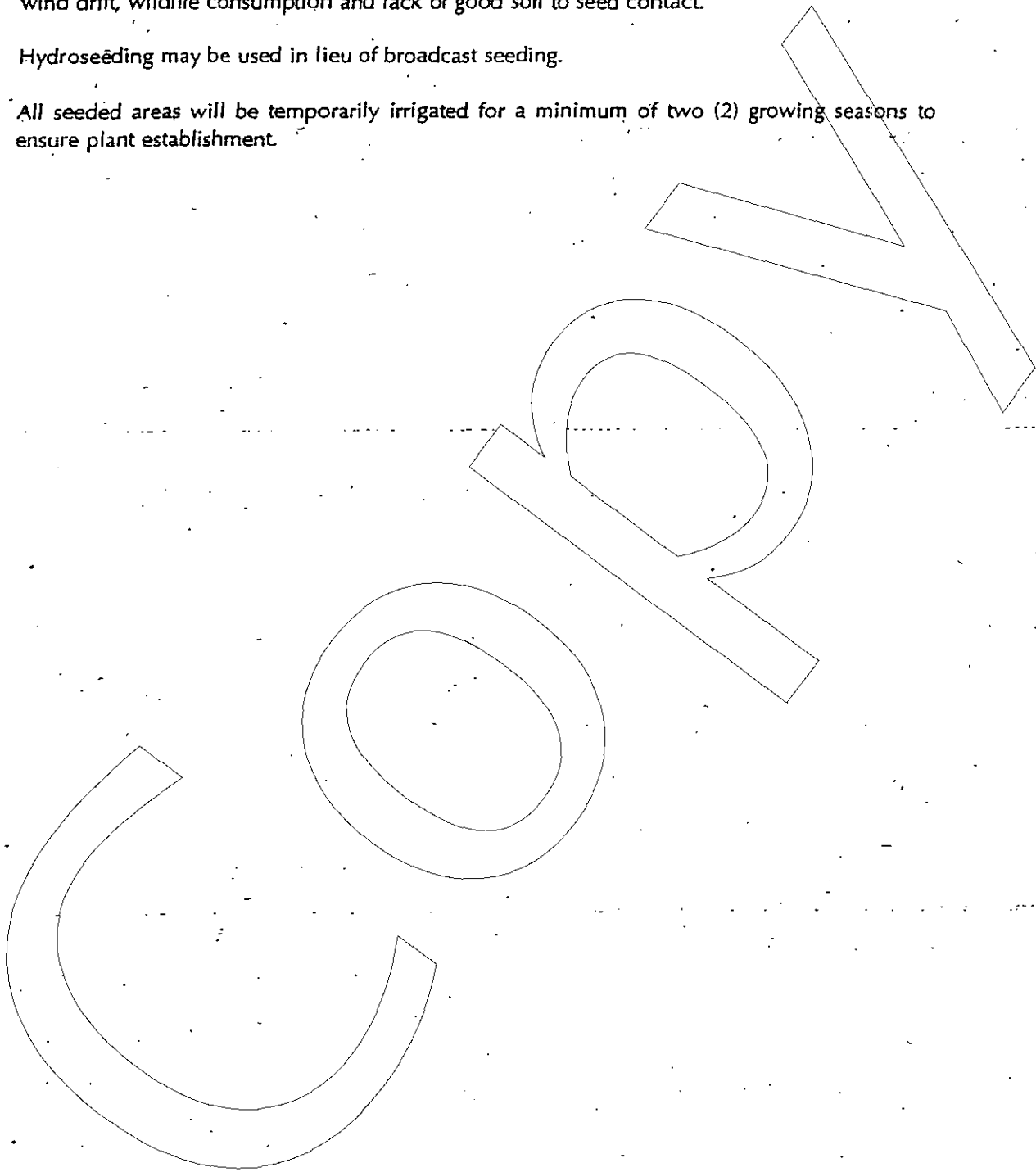


blend to soil. Drill seeding provides the best seed to soil contact and correspondingly the highest success rate.

Broadcast seed may be used on steep slopes inaccessible to a drill seeder. Broadcast seeding will require twice the amount of seed (60 lbs./acre) as required when a drill seeder is used due to wind drift, wildlife consumption and lack of good soil to seed contact.

Hydroseeding may be used in lieu of broadcast seeding.

All seeded areas will be temporarily irrigated for a minimum of two (2) growing seasons to ensure plant establishment.





VEGETATIVE

BMP 3-1 SEEDING PRACTICES

DEFINITION

Seeding practices include a variety of techniques which result in the sowing or planting of seeds. Common practices include broadcast seeding (hand or mechanical), drill seeding, aerial seeding and hydroseeding.

PURPOSE

The primary purpose of seeding a site is for soil stabilization through the establishment of a vegetative cover. Related objectives include: to reduce raindrop impacts and surface water flow, to reduce erosion from wind and water and to enhance aesthetics and the natural environment.

APPLICABILITY

Seeding practices are applicable to any surface disturbance site requiring revegetation or reclamation. Slopes must be mechanically stabilized prior to seeding as vegetation alone will not stabilize a slope. ~~Drilling seeding is typically limited to slopes of 3:1 or flatter, but it is the most successful practice.~~ Hydroseeding is most effective in steep slope situations which have little or no access (e.g. road cut or fill slopes, mine waste dumps, etc). Broadcast seeding is less expensive but requires approximately twice the amount of seed over drill seeding. Aerial seedings are typically applied on large areas with no access, such as forest or rangeland fires.

PLANNING CRITERIA

The establishment of vegetation is the most efficient and cost effective form of erosion control and soil stabilization. Once established vegetation absorbs raindrop impact and prevents the mobilization of soil particles. Vegetation prevents erosion while other treatments such as filter fabric, sediment basins or filter strips only treat the sediment mobilization process.

Seeding practices should be selected based upon the specifics of the site and the expertise of a qualified professional should be consulted. Typically economics, site topography and/or access are controlling factors in the selection process. Seeding practices should also be tailored to the plant material seed being applied (i.e. grasses, forbs, shrubs). Tree species are typically planted from container stock after establishment of a grass/forb/shrub cover. Seeding practices are usually incorporated within a combined structural and vegetative approach to soil stabilization. Vegetation alone will not stabilize a slope. Other nonvegetative techniques are also utilized to enhance the success of a seeding such as mulches, netting,



matting and chemical tacifiers.

Irrigation will assist in achieving a good seed/soil contact and is critical to plant establishment on dry sites. Over watering will cause washing and runoff, thus potentially transporting seed down gradient.

METHODS AND MATERIALS

Vegetation or reclamation specialists should be consulted regarding mulch application rates, plant species selection, seeding rates, etc. to ensure a successful project.

Broadcast seeding (hand or mechanical): Broadcast seeding can be accomplished by hand held seeders or a mechanically driven seeder typically mounted on a tractor or ATV vehicle. The seed mix is placed in a hopper, adjustments are made for the size of the seed and rate of application, and the seeder is operated by a hand crank or motor while walking or driving over the areas to be seeded. Broadcast seeding typically requires twice the amount of seed to cover the same given area as a drill seeder due to wind drift, wildlife consumption and lack of good soil to seed contact.

Drill seeding: Drill seeding requires the use of a Range drill or equivalent depending on the condition of the site. Drill seeders are pulled behind a tractor or bulldozer and actually place the seed to a pre-determined depth. The seed is then covered by the drill mechanism or a chain drag is utilized to cover the seed behind the drill. Drill seeding provides the best seed to soil contact and correspondingly the highest success rate.

Aerial seeding: Aerial seeding is conducted by helicopter or fixed wing aircraft and can cover large areas of inaccessible terrain. It is the most efficient method for large disturbance areas such as forest or rangeland fires. Germination success is usually low given wind drift, soil conditions, and poor seed to soil contact, but application timing can greatly improve success. If seeding can occur shortly after a wildland fire and before a soil crust is formed, success is greatly improved.

Hydroseeding: The wood fiber and water mixture are well agitated in a large tank and then blown through a hose and nozzle by compressed air. The apparatus is typically truck or trailer mounted and has sufficient capacity to complete several acres at a time. Mulch application rates and/or seeding rates depend upon the site specifics of the project area and the project goals. Typically irrigation is necessary to successfully establish a vegetative cover with hydroseeding.



MAINTENANCE

Seeded areas require regular inspection and potentially reapplication if necessary. The treatment areas should be protected from foot or vehicle traffic until vegetation is well established. This may require fencing, barriers and signing.

EFFECTIVENESS

Selection of the appropriate seeding practice for a specific site coupled with proper plant material selection, application rates, application timing and maintenance will result in the most effective method of soil stabilization. Coupled with other revegetation techniques seeding and the resulting vegetation will provide long term soil stability.

COPY



EXHIBIT F

**RENO HILLSIDE
ORDINANCES**

COPY

ARTICLE XVI: HILLSIDE DEVELOPMENT

Section 18.12.1601 Purpose

The purpose of regulations regarding hillside development in to:

- (a) Acknowledge that as slope increases so does the potential for environmental degradation including slope failure, increased erosion, sedimentation, and stormwater run-off.
- (b) Preserve and enhance the beauty of the landscape by encouraging retention of natural topographic features, including but not limited to prominent ridgelines, major drainageways and significant rock outcrops.
- (c) Encourage innovative grading practices which are more appropriate in hillsides, and hide from public view unsightly scarring.
- (d) Take into account that hillside development sites have unique topographic, landscape and geotechnical settings and thus require site-specific design solutions.
- (e) Promote the preservation of significant topographic features by retaining portions of development sites as undisturbed open space.

Section 18.12.1602 Applicability and Exemptions

- (a) Hillside development regulations apply to developments that have an average slope, as calculated below, equal to or greater than 10 percent or slopes that exceed 15 percent on 25 percent or more of the site.
- (b) Hillside developments shall be subject to the approval of a special use permit according to Section 18.06.405 of this title.
- (c) Development of one single-family house, permitted accessory structures, activities typically associated with and accessory to legally established uses, and trails shall be exempt from this article's regulations.

Section 18.12.1603 Computation of Slope

- (a) Slope shall be computed on the existing slope of the land before any grading for the proposed development has commenced, as determined from a topographic map having a scale of not less than one inch equals 100 feet, and a contour interval of not more than two feet. Average slope of a development and slope cell sizes shall not be derived from lower resolution topographic data.
- (b) Percent slope for cells shall be computed by dividing the contour interval by the horizontal distance between contour intervals then multiplying by 100%, or by a comparable digital slope analysis.
- (c) For purposes of determining the applicability of a project to this article's standards, the average slope formula below or a comparable digital slope analysis shall be used.

$$S = (0.0023)(I)(L) A$$

Where:

S = Average percent slope

I = Contour interval in feet

L = Summation of length of contours in scale feet

A = Area in acres of parcel being considered



Chapter 18.12 General Development and Design Standards
Article XVI: Hillside Development
Section 18.12.1604 Required Plans

- (d) Contours as they existed prior to earlier grading activities shall be used or estimated in areas where the administrator determines that pre-application grading activities meeting the following standards have altered the natural slope:
- (1) Pre-application grading activities would result in increased allowable density or decreased required open space when evaluated according to this article.
 - (2) Pre-application grading activities appear, based on grading permit records or the opinion of the administrator, to be less than ten years old.
 - (3) Pre-application grading activities were not approved as a hillside development special use permit.

Section 18.12.1604 Required Plans

- (a) Plans for a hillside development shall depict existing contours, proposed finish contours, representative cross sections showing existing and proposed conditions, ridgelines and their proposed treatment, proposed erosion control and slope stabilization techniques, structure siting criteria, building envelopes, any height limitations, any solar orientation considerations, locations of all six (6) inch caliper or larger trees proposed to be maintained or removed with development, grading treatments necessary to provide access to building envelopes, vehicular circulation routes and pedestrian circulation routes.
- (b) Additional grading plans and site improvement plans shall be superimposed over a color slope cell map that groups pre-grading slopes into categories identified in Table 18.12-19 (Hillside Density Calculation).
- (c) All projects containing hills or mountains, as shown on the map entitled "Map 1: Visually Prominent Ridgelines and Related Landforms" (incorporated by reference herein and available at the community development department), shall provide a minimum of three (3) photo-simulations of the proposed development from highly traveled locations with views of the site (i.e. from freeways, arterial streets, regional centers, etc.) and from other locations most likely to be visually affected by development of the site, as determined by the administrator. In determining appropriate viewing sites for photo-simulations, the administrator shall consider how visible the project site is from potential viewing sites, the activity level at potential viewing sites, typical travel directions, if any, at potential viewing sites, existing residential areas that may be visually affected, and similar considerations.

Section 18.12.1605 Calculation of Density

To retain the natural features of hillsides, the maximum number of dwelling units shall be reduced as slope increases in accordance with Table 18.12-19 (Hillside Density Calculation), and the following standards:

- (a) Each property to be developed shall be divided into cells of similar slope, utilizing the slope ranges listed in Table 18.12-19.
- (b) The 100-year floodplain of major drainageways plus a 15 foot wide buffer on both sides shall be excluded from density calculations and shall not be allocated any development for purposes of hillside density calculations. (See Article XIX (Drainageway Protection Standards) for applicable major drainageway standards.) Notwithstanding the above, the area excluded from density calculations shall not exceed 80 feet in width along each major drainageway.
- (c) In zoning districts without residential base density standards, allowable development density shall be based on other applicable provisions of this Title 18.
- (d) The maximum number of dwelling units allowed by Table 18.12-19 may only be realized if the proposed development complies with all other applicable provisions of this article.



Chapter 18.12 General Development and Design Standards
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| TABLE 18.12-19: HILLSIDE DENSITY CALCULATION (1) | | | | |
|---|---|--|---|---|
| SLOPE RANGE | COLUMN A: DENSITY REDUCTION FACTOR | COLUMN B: BASE ZONING DENSITY (UNITS/ACRE) (2)(3) | COLUMN C: ACRES WITHIN SLOPE RANGE (3) | COLUMN D: DWELLING UNIT ALLOCATION (3) (4) (5) (6) |
| 0-15% | 1.0 (No Reduction) | | | |
| 15.1-20% | 0.6 | | | |
| 20.1-25% | 0.2 | | | |
| 25.1-30% | 0.1 | | | |
| Greater than 30% | 0 (No Density Allocation) | | | |
| | | | | Sum of Column D Entries = Maximum Dwelling Units for the Project |

Table 18.12-19 Notes:

(1) Allowable dwelling units are determined at the project level – the dwelling unit allocation for each slope range is for calculations purposes only.

(2) Base zoning density is identified in Table 18.12-1 of Section 18.12.102 for single-family residential zoning districts and in Table 18.12-2 of Section 18.12.103 for multi family residential zoning districts.

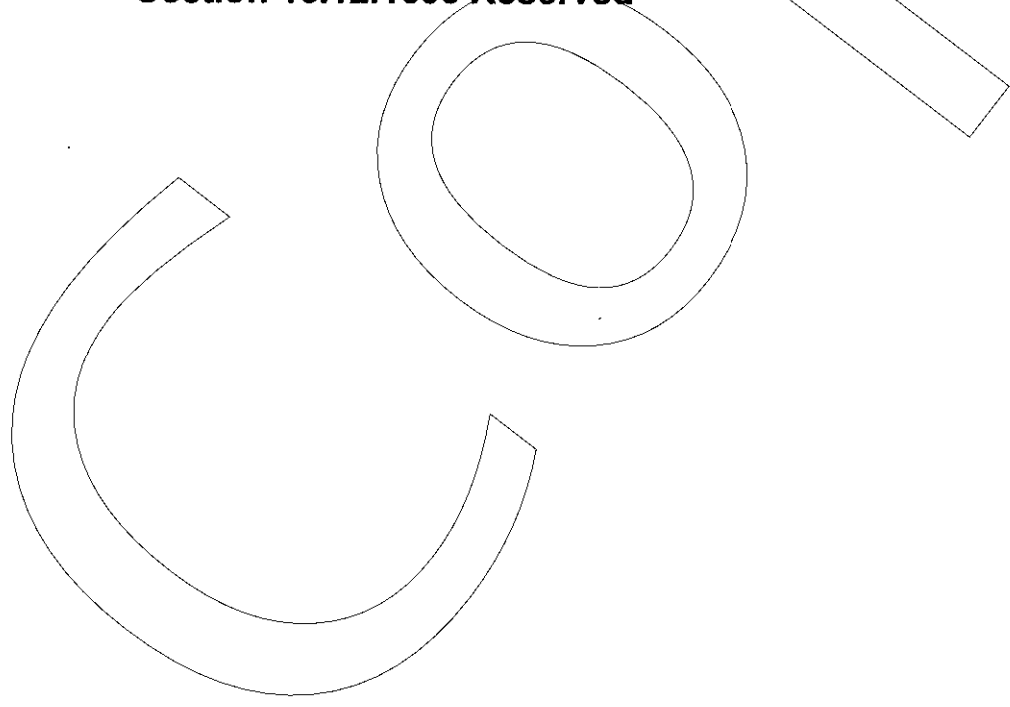
(3) Base zoning density, acres within each slope range, and the unit allocation for each slope range shall be rounded to two decimal points.

(4) For each row, columns A, B and C are multiplied to determine the number of dwelling units allocated to each slope range (column D).

(5) The sum of allowable units within each slope range represents the maximum number of dwelling units for each project.

(6) Maximum dwelling units for the project shall be rounded down to the next whole number.

Section 18.12.1606 Reserved





Chapter 18.12 General Development and Design Standards
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Section 18.12.1607 Required Open Space

Section 18.12.1607 Required Open Space

(a) Open space shall be preserved in accordance with Table 18.12-20 (Required Open Space).

| TABLE 18.12-20: REQUIRED OPEN SPACE IN HILLSIDE DEVELOPMENTS (1) | | | |
|---|---|---|--|
| SLOPE RANGE | COLUMN A: MINIMUM OPEN SPACE (%) | COLUMN B: ACRES WITHIN SLOPE RANGE (2) | COLUMN C: REQUIRED OPEN SPACE WITHIN EACH SLOPE RANGE (ACRES) (2) (3) (4) |
| 0-15% | None | | |
| 15.1-20% | 25% | | |
| 20.1-25% | 50% | | |
| 25.1-30% | 75% | | |
| Greater than 30% | 100% | | |
| | | | Sum of Column C Entries: Open Space Required for the Project |

Table 18.12-20 Notes:
 (1) Required open space determined at the project level – the open space required for each slope is for calculation purposes only.
 (2) Acres within each slope range and required open space shall be rounded to two decimal points.
 (3) For each row, columns A and B are multiplied together then divided by 100% to determine the required open space for each slope range in acres (column C).
 (4) The sum of allowable units within each slope range represents the minimum amount of open space required for the project.

- (b) Open space required by other subsections of this article's hillside regulations shall be added to open space required by Table 18.12-20 and may be provided within any slope range.
- (c) Property that is zoned to open space in conjunction with a hillside development shall qualify towards open space required by Table 18.12-20.
- (d) Required open space areas shall be strategically located to include some of the site's environmental, recreational, or scenic areas. Environmental, recreational or scenic amenities include, but are not limited to, major drainageways, wetlands, riparian vegetation, high value groundwater recharge areas, prominent ridgelines, recreational amenities, rock outcrops and viewpoints. In determining the appropriate location of open space areas, priority shall be given to parks, trail corridors and open spaces that provide off-site connectivity; to preserving drainageway corridors; and to preserving visually prominent areas, including but not limited to the ridgelines shown on Map 1, "Visually Prominent Ridgelines and Related Landforms."
- (e) Required open space shall be retained in a natural state without clearing, grading, or other construction-related disturbance, or shall be restored or improved with landscaping or recreational amenities.
- (f) At its sole discretion, the decision-making body may allow some or all of the required open space to be incorporated within private lot lines if the project site meets the following standards:
 - (1) The site does not include a major drainageway;
 - (2) The site does not abut an existing or planned open space or public recreational area;
 - (3) Visual impacts in any sensitive viewshed area are mitigated using alternative means; and
 - (4) The alternative site layout is determined to be more compatible with nearby development.



Chapter 18.12 General Development and Design Standards
Article XVI: Hillside Development
Section 18.12.1608 Visually Prominent Ridgelines

Section 18.12.1608 Visually Prominent Ridgelines

Minimum requirements for visually prominent ridgelines identified on Map 1, "Visually Prominent Ridgelines and Related Landforms" are:

- (a) Primary structure colors shall be consistent with colors found in the natural environment, such as beige, brown, green, gray, terra cotta and similar colors;
- (b) Building heights shall not extend above the elevation of the ridgeline crest at the location closest to the proposed structure unless proposed structures are demonstrated to not be visible from at least two (2) of the three (3) required sight-line analysis viewpoints; and
- (c) Additional site design, structure location and architecture requirements that are deemed appropriate by the decision-making body based on submitted sight-line analyses and the open space location requirements outlined in Section 18.12.1606 above.

Section 18.12.1609 Development on 30 Percent and Greater Slopes

Development on natural slopes greater than 30 percent shall only be permitted in accordance with subsections (a) and (b) below.

- (a) The following developments may be allowed on 30 percent or greater slopes in accordance with other provisions of this Title 18:
 - (1) Communication facilities;
 - (2) Recreational facilities;
 - (3) Utilities;
 - (4) Agriculture;
 - (5) Forestry;
 - (6) Mining; and
 - (7) Residential development at a maximum density of one unit per 40 acres.
- (b) All other development on 30% or greater slopes shall comply with the requirements of this article, Title 18, and the following conditions:
 - (1) A 2:1 ratio of property with slopes under 30 percent shall be added to the project open space requirement for all encroachments of development into 30 percent or greater slopes; and
 - (2) Encroachments are determined to improve or not significantly impact the open space network, based on the standards in Section 18.12.1606 above.

Section 18.12.1610 Slope Treatment

- (a) Where possible, without significantly increasing the amount of cut and fill, angles at the edge of cut and fill slopes shall be rounded off in a natural manner.
- (b) Cut and fill slopes over ten (10) feet in height shall be designed with natural appearing variations in slope, aspect, and surface treatment to minimize the engineered appearance of these slopes.
- (c) Retaining walls with landscaping shall be incorporated into cut and fill slopes that require mechanical stabilization, are over ten feet in height, and are within or adjacent to areas with public access. Retaining walls shall be constructed with decorative materials such as natural rock, brick, stamped and tinted concrete, stucco-faced concrete, or similar materials.



Chapter 18.12 General Development and Design Standards
Article XVI: Hillside Development
Section 18.12.1611 Pedestrian Circulation

Section 18.12.1611 Pedestrian Circulation

- (a) Sidewalks or walkways shall be provided in accordance with a total pedestrian circulation plan that addresses projected needs, including those of school children.
- (b) Safe pedestrian access shall be provided between occupied structures and recreational facilities on or adjacent to the site.
- (c) Sidewalk standards may be modified to minimize grading disturbances.
- (d) The pedestrian circulation plan shall be evaluated with respect to safety, accessibility and recreational value.

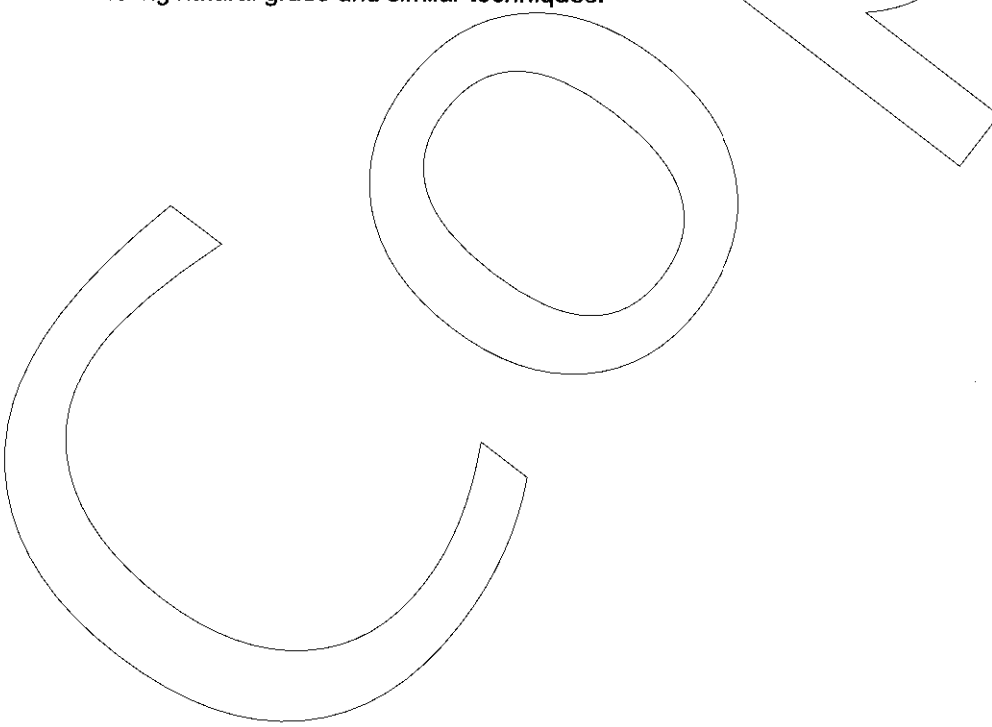
Section 18.12.1612 Reserved

Section 18.12.1613 Reduction of Street Width

On-street parking lanes may be omitted from streets when the result is a substantial decrease in cutting and/or filling. Off-street parking areas shall provide one (1) additional space for each dwelling unit that does not front an on-street parking lane. Local streets may be reduced to 20 feet in width for one-way travel, 24 feet in width for two-way travel (with no on-street parking), or 28 feet in width (with on-street parking on one side of the street).

Section 18.12.1614 Hillside Architecture

Hillside adaptive architectural features shall be strategically utilized to reduce grading disturbances in areas where standard construction methods would generate major grading disturbances and deviations from standard construction methods would not prevent effective utility and service delivery. Examples of major grading disturbances include but are not limited to cut or fill slopes that generally exceed 30 feet in height, cut or fill slopes that generally exceed 15 feet in height within or adjacent to areas with public access and fill depths that generally exceed ten feet at project edges and interfaces with major drainageways. Hillside adaptive architectural features include but are not limited to, multi-level foundations, height restrictions, view corridor provisions, construction of structures on the existing natural grade and similar techniques.





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