1.100 GENERAL

All streets shall be designed in accordance with accepted engineering principles and shall conform to these Design Standards.

1.200 STREET RIGHTS OF WAY

Right-of-way widths and typical sections for various classes of streets, including private roads, shall conform to the latest edition of the City of Morgan Hill Standard Details For Construction.

1.300 ALLEY RIGHTS OF WAY

The minimum width of an alley shall be 20 feet with a 20-foot paved roadway.

1.400 STRUCTURAL SECTION

1.401 Subgrade Relative compaction for at least the top 8 inches of subgrade shall be 95%. In areas of fill, a minimum of 24 inches from finished grade shall be compacted to 95% relative compaction.

1.402 Pavement Pavement shall be designed in accordance with the procedures contained in the State of California Department of Transportation Highway Design Manual.

The Traffic Index shall be established by the Public Works Department.

A certified soils laboratory shall conduct the necessary soils report and shall recommend the pavement section and address the relative expansiveness of the soil.

The minimum structural section shall be 4-inches of asphalt concrete over 8-inches of aggregate base or an alternative full-depth asphalt concrete section of 7-inches, if approved by City.

1.500 HORIZONTAL ALIGNMENT

1.501 Intersection Angle Streets shall intersect at right angles. Curved streets shall have at least 50 feet of centerline tangent from the projected curb line of the intersecting street.

1.502 Opposing Streets All streets entering upon opposite sides of any given street shall have their centerline directly opposite each other or separated by at least 150 feet.

1.503 Street Curvature Design of curved arterial and collector streets shall be based on the State of California Department of Transportation Highway Design Manual. The minimum radius of curvature of centerline shall be 750 feet on arterials and 500 feet on collectors. Minimum radius on other streets shall be 250 feet, except hillside streets may have a minimum radius of 150 feet.

There shall be a tangent between reversing curves of at least 150 feet on arterial and collector streets, and 50 feet on all others streets.

1.504 Cul-de-sac The maximum length of a cul-de-sac street, from center of intersecting street to center of turn-around, shall be 600 feet.

1.505 Curb Return Radii

Residential and Non-Residential – Minimum radius shall be 30 feet.

Commercial – In the downtown area the minimum radius shall be 25 feet. In other areas the radius shall be determined by the City Engineer.

Industrial – Minimum radius shall be 35 feet.

1.506 Minor Streets Minor streets shall be laid out in such a way that their use by through traffic is discouraged.

1.600 VERTICAL ALIGNMENT

1.601 Top of Curb Grades Grades shall not be less than 0.25 percent and not greater than 20 percent point grade – 15 percent average. Where matching existing controls, the minimum grade may be reduced with the approval of the City Engineer.

Grades on opposite sides of the street shall be the same wherever practical.

1.602 Curves Where the curb radius is less than 100 feet it shall have a grade of not less than 0.50 percent.

1.603 Curb Returns The minimum fall around returns shall be 0.20 feet.

1.604 Cross Slope The standard cross slope of the street shall be 2.5 percent. Where necessary when matching existing facilities, the cross slope may vary between 2 percent and 4 percent.

1.605 Vertical Curves Vertical parabolic curves shall be used to connect grade profiles where the algebraic difference in grade rates exceeds one percent. The length of vertical curve required shall be determined by the following:

Class of Street	Minimum Stopping Sight Distance	Minimum Length of Curve
Arterial and Industrial	350 feet	200 feet
Collector	200 feet	100 feet
Minor	100 feet	100 feet
Cul-de-Sac	100 feet	100 feet

1.700 CURB, GUTTER AND SIDEWALK

Curb, gutter and sidewalk shall be installed in conformance with the City of Morgan Hill Standard Details For Construction.

1.701 Curb and Gutter

Square-type curb and gutter rather than rolled curb shall be installed along frontages.

Depressed-type curb and gutter, 1" minimum height, shall be installed at all driveway locations.

1.702 Sidewalk Minimum sidewalk widths shall be 5 feet (Monolithic curb, gutter and sidewalk; measured from face of curb) in residential and industrial/commercial areas and 10 feet in the downtown core, unless specified otherwise by the Planning Division. Sidewalk widths should provide a 4 foot clearance around street lights and fire hydrants for disability access.

1.703 Pedestrian Ramp for the Handicapped Pedestrian ramps for the handicapped shall be installed according to the latest Americans with Disabilities Act (ADA Standard.

1.704 Replacement and Repair Where existing curb, gutter, sidewalk and driveways do not meet the current City standards and are in need of repairs, it shall be the developer's responsibility to remove and replace the deficient curb, gutter and sidewalk. Where curb, gutter, sidewalk and/or driveways are removed, the concrete shall be removed to the nearest expansion, weakened plane or construction joint or sawed at the nearest score line to a minimum depth of 1-1/2 inches.

1.800 DRIVEWAY APPROACH STANDARDS

The following driveway approach standards are not applicable to freeway or controlled access highways where access is limited by deed restrictions or other controls.

The number and width of permitted driveway approaches is regulated by the Public Works Department and shall be based on the needs of the parcel served. They shall not be detrimental to the abutting street's capacity, safety, and/or efficiency. Secondary driveways shall not be permitted within cul-de-sacs. Secondary driveways are only allowed upon approval by the City Engineer.

Driveway approach width is measured at the curb line and includes only the width of the fully depressed section.

The City Engineer may modify any of the following standards to improve traffic flow or because of special or unusual conditions.

1.801 Width

Industrial/Commercial – Maximum driveway approach width is 36 feet. Minimum driveway approach width is 16 feet.

Residential – Maximum driveway approach width is 24 feet. Minimum driveway approach width is 16 feet.

1.802 Distance From Curb Returns

Intersecting Streets – Driveway transitions are not permitted closer than 10 feet from the nearest BCR/ECR on residential streets.

Industrial/Commercial – Driveway approaches on arterials may be prohibited within 100 feet from the projected right-of-way line of the intersecting street where the intersection is presently signaled or is planned for signalization, or where intersection capacity is critical.

1.803 Distance From Utility or Safety Devices The driveway transition shall clear all public facilities such as electroliers, traffic signal standards, utility poles, fire hydrants, and street trees by a minimum of 3 feet. Any relocation of public facilities required to maintain such clearance shall be at the expense of the owner who is installing the driveway.

1.804 Distance Between Driveways A minimum of 4 feet of full curb height shall be maintained between the transitions of adjoining driveways. No driveway approach shall be constructed which results in a curb length between transitions of 14 feet to 22 feet. Where practical, the total space between driveway transitions shall be in multiples of 22 feet, plus 4 feet (S=22X+4).

1.805 Distance From Property Line A minimum of 2 feet of full curb height shall be maintained between the property line and driveway transition.

1.806 Common Use Driveways Common use driveways may be permitted in special cases.

1.807 Parking Lots Parking lot driveways shall be designed in such a manner as to preclude the use of the abutting public street for vehicular circulation solely related to the parking lot.

1.808 Grade Driveway grades shall be designed to keep the automobile from dragging or "bottoming out" on the street or driveway. The algebraic sum of the street cross slope and driveway apron slope shall not exceed 15 percent.

1.900 STREET LIGHTING

All electroliers shall consist of a high pressure sodium luminaire with eletrolier ownership dedicated to the City of Morgan Hill. Any proposed deviation on street light type must be approved by the City.

1.1000 EROSION CONTROL

An erosion control plan shall be required prior to any physical development of a property planned between October 15th and May 1st. Said plan shall meet the minimum standards and specifications of the Loma Prieta Resource Conservation District.