MILLER STREET SPECIFIC PLAN

DESIGN STANDARDS
INTRODUCTION

The partial improvement of Miller Street from Stowell Road to the Orcutt Expressway was completed in the summer of 1980. The completion of the roadway has provided the City and the property owners along Miller Street with a unique opportunity to establish an attractive, comprehensive design along the Miller Street Corridor.

Under the direction of the City Council and the Planning Commission, the City Staff, with the cooperation of the property owners, has developed the following landscape and design standards for the Miller Street Corridor. The standards presented address the treatment of landscape areas, sidewalks and walls along approximately 2 miles of Miller Street.

PURPOSE

The Miller Street Landscape Design Standards are to be adopted by the City as a Specific Plan, in accordance with the provisions of Section 65450 of the California Government Code. The Design Standards establish City policy regarding the design of the walls, sidewalks, street landscaping, retardation basins and traffic medians.

The purpose of the Standards is to provide a uniform design theme for the Miller Street Corridor which will serve as a buffer between the street and adjacent land uses, and which will provide a pleasant visual experience for the pedestrian and motorist traveling along Miller Street.

IMPROVEMENTS

The property owners, at such time as they wish to develop their property, will provide a landscape and pedestrian easement along Miller Street. Within this easement the landscaping, sidewalk and wall will be installed. The installation will be required of the property owner through the subdivision process, the development process, or through the requirements of this Specific Plan.

The maintenance of the improvements along residential property and retardation basins will be funded through a Landscape Maintenance District established at the time of development. The maintenance of the landscaping along commercial property will be the obligation of the property owners.

SPECIFIC RECOMMENDATIONS

A. Residential Properties

1. Wall Treatment

   An 8-foot high slumpstone or splitface masonry wall is required to be installed along the residential properties adjacent to the Miller Street Corridor to separate the landscape and pedestrian access easement from interior private uses. Although this wall will create a formidable
noise barrier and protect the privacy of adjacent residents, it is recognized that, if designed improperly, a monotonous, unattractive streetscape could result.

In order to provide some variation and interest to the wall design, indentations are recommended at a depth of 5 feet and a width that is consistent with the width of the adjacent lot lines, which would be approximately 80 feet wide. The transition of the wall at the inset shall be constructed at a 45 degree angle, providing greater visibility from the street. This angle will also relate better to the informal design elements of the area, such as the meandering sidewalk. Each intersecting corner of the indentation shall be accented with a capped column that is constructed of a masonry material. The columnar material should be compatible both aesthetically and structurally with the rest of the wall composition. In addition to the columns and indentations, it is suggested that plant material of a vining nature be installed at the base of the wall in appropriate locations to provide further visual relief and discourage the occurrence of graffiti.

The landscape and pedestrian access easement line should be located next to the wall on the street side, which will vary for each development depending on the location of the indentations.

2. **Sidewalk System**

A curvilinear sidewalk system shall be implemented along the entire frontage of Miller Street. A minimum width of 5 feet is required, although the sidewalk may widen in some areas where appropriate. Long sweeping curves 90 to 100 feet in length are recommended for the majority of the sidewalk. Some curves in each continuous section may be shorter in length to provide some variation.

The sidewalk should be formed in relation to the rolling landform resulting in slight undulations on both a horizontal as well as a vertical plane. Moving with and around the landform will produce a more pleasurable walking experience for the pedestrian.

The sidewalk shall maintain a minimum distance of 18 inches from the curb or meet the curb completely in order to avoid inadequate space for root growth and irrigation materials.

In those areas where the wall is indented, the opportunity should be taken to place the sidewalk farther away from the street.

3. **Earthworks**

The earthworks should be formed so as to create a rolling effect and should have a strong relationship with the curvilinear sidewalk and informal planting layout.  Mounding shall be provided at a maximum
overall slope of 4:1 and shall not exceed 2 feet in height directly adjacent to the wall. Particular effort should be made to avoid a "bump garden" appearance by blending the entire landform together.

4. Planting Concept

a. Layout

The general planting concept for the Miller Street Corridor is to create an informal woodland setting that will provide an attractive view for pedestrians and motorists. In addition, it will provide a pleasing backdrop for adjacent properties.

In order to achieve the desired appearance, trees should be massed in groups of the same species. In addition, spacing of trees should vary from 8 to 12 feet apart. The use of variable plant sizes is also suggested in the following proportions:

- 5 gallon: 30 - 40%
- 15 gallon: 50%
- 24-inch box: 10 – 20%

Shrubs should also be massed in groups of the same species. The minimum container size recommended for all shrubs is 5 gallon.

The earthworks, trees and shrubbery should be coordinated to accentuate the vertical and emphasize the change in elevation.

b. Plant Groupings

To ensure the success and continuity of the overall planting scheme it is necessary to group individual plants into plant compositions. These compositions must consist of trees, shrubs, and ground covers that are compatible both aesthetically and ecologically. Therefore, individual designers for each project along Miller Street will be given the option to select specific plant groups rather than individual plants.

The following are the recommended plant groups:

**Group 1**

- Sequoia sempervirens (Coast Redwood)
- Liquidambar styraciflua (Sweet Gum)
- Tristania conferta (Brisbane Box)
- Raphiolepis indica (India Hawthorn)
- Hypericum Calycinum (Aaron's Beard)
Group 2

Pinus canariensis (Canary Island Pine)
Koeleuteria bipinnata (Evergreen Golden Raintree)
Eucalyptus nicholii (Nichol's Willow - Leafed Peppermint)
Grevillea 'Moellii' (Grevillea)
Hedera helix 'Hahnii' (Hahn's Ivy)

Group 3

Sequoia sempervirens (Coast Redwood)
Pistacia chinensis (Chinese Pistache)
Hymenosporum flavum (Sweetshade)
Juniperus chinensis 'Armstrongii' (Armstrong Juniper)
Vinca major (Common Periwinkle)

Group 4

Pinus muricata (Bishop Pine)
Liriodendron tulipifera (Tulip Tree)
Maytenus boaria (Chile Mayten Tree)
Xylosma congestum (Shiny Xylosma)
Hedera helix 'Hahnii' (Hahn's Ivy)

c. Irrigation System

All irrigation systems shall be fully automatic and designed so as to easily connect to an adjacent system. All controllers shall be of a Griswold make. All irrigation heads shall be Toro models. All backflow prevention devices shall be screened with landscaping and installed in accordance with local health codes.

B. Commercial Properties

The design recommendations relating to the curvilinear sidewalk, earthworks, and planting concept will apply, as previously discussed, to all commercial developments along Miller Street. A wall will not be required as part of the design standards unless otherwise required by the Zoning Ordinance. Landscape screening of parking shall be extensive yet allow for informal pedestrian routes into the commercial areas. Stepping stones are suggested to be placed along the desired pedestrian pathways. The on-site commercial landscaping shall be designed in such a way so as to blend in with the easement landscaping.

C. Retention Basins

All of the design recommendations previously discussed shall apply to the retention basins along Miller Street. However, the wall separating the basin from Miller Street shall be 3 feet high rather than 8 feet high. The wall separating the retention basin from adjacent properties shall be 8 feet high. No wall or fence will be required along boundaries separating the basin from the interior street frontages.
In order to permit multi-purpose recreational use on a year-round basis, the grading of the retardation basin should be designed in varying depths. The major portion of the basin should be at a higher elevation that would remain wet only on an occasional basis and would be useable most of the time. This area should be designed to drain to a lower elevation that would remain wet more often but would not interfere with the use of the area at the higher elevation.

D. **Street Medians**

All medians shall be landscaped and irrigated in accordance with specific landscape and irrigation plans prepared by the City of Santa Maria.

E. **Typical Drawings**

The typical drawings attached as exhibits to these standards are intended to illustrate the basic concepts recommended for the design and treatment of walls, curvilinear sidewalks, earthworks, and landscaping along the Miller Street Corridor. Specific plans, illustrating these concepts in detail, for each individual development shall be submitted by the developer at the same time as public improvement drawings to the Community Development Department for final review and approval.
IRRIGATION SYSTEM SPECIFICATIONS

1. Part - 1 General

   a. Scope: This section shall cover the installation of irrigation systems in commercial and residential subdivision developments, in public areas and city maintained easements, with particular concern for the South Miller Street/South College Landscape Maintenance District.

   1) Record Drawings. Furnish record drawings to the City, showing dimensioned location of all buried pipe and valves, control pilot wires to valves and controllers. Take dimensions prior to backfilling of trenches.

   2) Irrigation Plans. Detailed irrigation and landscape plans are required to be submitted to the Community Development Department. Irrigation plans will be required to show grading. Installations shall be according to approved plans.

   3) Maintenance Charts. On the inside surface of the cover of the automatic controller, the Contractor shall prepare and mount a chart showing the valves and sprinkler heads serviced by the controller. All valves shall be numbered to match the operation schedule and the drawings. Only those areas controlled by the controller shall be shown. This chart shall be a plot plan, entire or partial, showing curbs, mow strips, fences, etc. A photostatic print of this plan, reduced as necessary, and legible in all details, shall be made to a size that will fit into the controller cover. This print shall be approved by the City and shall be hermetically sealed in plastic. This shall then be secured to the inside of the cover.

   4) Miscellaneous Items to be Furnished by Contractor. Provide the following tools as a part of this contract:

      -- Two (2) quick coupler valve keys to fit type of couplers used (complete with hose swivel).

      -- One (1) set of automatic controller cabinet keys for each controller used.

      -- One (1) complete rotor pop-up of each type used on project, i.e., one part circle head for each type of arc, one full circle head.

      -- Spare wires leading to each direction of flow from the controller.
2. Part 2 - Materials

a. Specify by Name - Whenever any material is specified by name and number thereof, such specifications shall be deemed to be used for the purpose of facilitating a description of the materials and established quality, and shall be deemed and construed to be followed by the words "or approved equal." No substitution will be permitted which has not been submitted for approval to the City. Three (3) copies of descriptive literature, including pressure loss curbs, nozzle performance characteristics, etc., shall be furnished for any materials submitted as "equal" substitutes. No item will be considered as "equal" if it is constructed of different materials or alloy or is of a different principle of operation. Piping, tubing, conduit, valve, or any device through which the flow of water must pass shall not cause a greater resistance, turbulence, or pressure loss due to friction than that material as engineered and designed into this system. Pressure loss curves shall be certified by an impartial commercial testing laboratory with all costs for tests and reports being paid for by the Contractor wishing to make the substitution. Contractor shall submit letter (with material list) stating his reasons for any substitution and showing amount of credit offered if substitution should be acceptable.

b. General - All materials shall be new and of size and type as called out on the drawings. All materials of like kind shall be of one manufacture.

c. Shut-Off Valve - 1/2" through 2" shall be 200 lb. WOG bronze gate valves, non-rising stem, hand wheel, teflon impregnated packing gland, solid wedge disc.

The Contractor shall install a line sized compression coupling downstream of each shut off valve as detailed on the drawings.

d. Valve Boxes for Main Shut-Off Valves - Carson Model 910-12 with 910-2 HDPE cover (all green) marked "S.O.V." Install per detail on drawing.

e. Backflow Preventer - Backflow preventers shall be of size and type as called out on the drawings, complete with gate valves and test cocks provided by the manufacturer of the devices.

f. Pipe Compound - Pure lead base paste type. Use with screwed metal piping only.

g. PVC Pipe (General) - All pipe to be permanently and continuously marked with manufacturer's name, pipe size (IPS) and schedule (D-1785-68 for schedule pipe), manufacturer's lot number and NSF approval. Pipe with dents, ripples, wrinkles, die or head marks is not acceptable. Pipe shall be delivered to the site in 20 foot lengths.

h. Threaded PVC Nipples - Schedule 80, Type 1, 3 inch minimum length, except where detailed otherwise on drawings. Nipples to have machines threads, not pre-molded, E.A. Gray Co., or approved equal.
i. PVC Mainline - Shall be 1120/1220 normal impact, 1/2" through 1-1/2" use Schedule 40, solvent weld type. For 2" and over, use Class 315 PVC, solvent weld type.

j. PVC Laterals (Non-Pressure Piping) - (as specified above for PVC Mainline).

k. Fitting - PVC - For make-up shall be of same chemical compound as pipe on which it is installed. Use Schedule 40 medium-wall fittings for any "all socket" connections. Use Schedule 40 heavy-wall fittings for all fittings with one or more threaded outlets.

l. Pipe Compound for PVC - Threaded connections, including PVC to steel make-up, shall be best grade teflon tape.

m. Primer - For PVC solvent weld connections shall be as recommended by the manufacturer of the PVC pipe. Primer shall be chemically compatible with the pipe, fittings and solvent. No primer need be used if "Christy's Red Hot Blue Glue" is used as solvent material. Clear 705 weld-on is not to be used.

n. Quick Coupler Valves - Two piece cast bronze with self-closing metal cover. Single track with detente positions, replaceable seals at valve seat and throat, 1" size.

o. Couplers - Same manufacturer as quick coupling valve; cast bronze, machined shank, stainless steel or bronze lugs; coupler to include operating handle. Top of coupler equipped with 3/4" hose swivel.

p. Valve Boxes for Quick Coupling Valves - Carson Model 910-12 with 910-2 HDPE cover (all green), marked "Q.C.V." Installer detail on drawing.

q. Solvent - For PVC solvent weld connections shall be as recommended by the manufacturer of the PVC pipe. Solvent shall be chemically compatible with the pipe, fittings, and primer.

r. Sprinkler Head - Make, size, type and performances as called out on the drawings.

s. Automatic Controller (Pedestal Mount) - 117 volt AC, 60 Hz, single-phase controller, in weatherproof, hinged door cabinet. Controller shall be as specified on drawings and incorporate the following features:

The controller shall be combination solid state and mechanical, with three separate seven-day programs. Each program shall be capable of "ONCE" or multiple "REPEAT" watering to occur on selected "START" hours. Watering increments must be from 0 to 60 minutes at the "NORMAL" or standard setting. All operations and functions shall be visible on the face of the controller. Provide duplex outlet with removable three prong electrical plug on inside of controller to disconnect power to controller as detailed on the drawing.
t. Remote Control Valves - All bronze globe type, slow closing, 150 lb.; electrically operated, 24 volt, epoxy encapsulated waterproof solenoid to be an integral part of the unit; throttling device with cross arm on top; manual operating device to cause valve to open and close without use of electricity. Manual operator shall be provided by the factory and not fabricated by the Contractor. Remote control valves with factory-equipped pressure regulating device shall be provided and installed where indicated.

The Contractor shall install a line sized compression coupling downstream of each remote control valve as detailed on the drawings. The pipe leading into and out of the remote control valve shall be the same size as that indicated for the valve itself, except where shown otherwise on the drawings.

u. Valve Boxes for Remote Control Valves - Carson Model No. 1419-12 with 1419-2 hinged cover (all green), marked "R.C.V." Install per detail on drawing.

v. Electrical Requirements to Automatic Controllers (120v) - To be complete in every respect to City Electrical Code, ready for use and in accordance with manufacturer's requirements all wiring in galvanized conduit and fittings from source, no running threads accepted; use nipples. Conduit system shall be 660 volt insulation, NEC standard annealed copper wire and shall be minimum AWG #12 or TW or RW. Protect each controller by a code approved ground or as detailed. See Electrical Service Detail on the drawings.

w. Electrical Requirements from Automatic Controllers (24 volts) - To remote control valves shall be U.F. type U.L. approved, AWG number 14 (pilot wires) and AWG No. 12 (common wire) solid strand copper wire with minimum 4/64 PVC coating, 600 volt, 75°C "Common" wire to be white coated. "Pilot" wires to be of different solid color from the automatic controller.

x. Wire Connectors for Direct Burial Conductors (24 volts) - 600 volt 60°C., AWG-UF type, waterproof, epoxy or PVC compound filled containers. See "Splicing of Wire" under Part 3, Section p, following.

y. Concrete - 2,000 lb. strength at 28 days, class "C", 5 SK., per City Standard Specifications S-109.

3. Part 3 - Installations

a. General - Comply with all governing construction and plumbing ordinances for all work under this contract.

b. Verification of Dimensions - Verify all horizontal and vertical site dimensions prior to staking of heads. Do not exceed spacings shown on drawings for any given area. If such modified spacings demand additional or less materials than shown on drawings, notify city representative prior to installation.
c. Drawings of Record - Obtain blueline ozalid prints from the City and maintain daily records showing every change from the contract drawings of all locations of main lines, buried valves, conductors, and plugged or capped outlets. Locate each item from two points of architectural permanence, i.e., curbs, walls, light standards, etc. Do not dimension from sprinkler heads or other parts of the irrigation system. Keep record drawings on site for daily observation by the City. All dimensions to be taken prior to backfill. On date of final observation, deliver corrected drawings to the City.

Final drawings shall be prepared by the Contractor on sepias prints obtained from the City, showing all field notes in India ink finalized by a competent draftsperson. Delivery of prints does not relieve the Contractor of responsibility for providing any information that may be omitted from the prints.

d. Connected to Water Supply (POC) - Connect to water source as noted and detailed on the drawings.

e. Trenching - Do all excavation for installation of all work included in contract. Mechanical trenching machines shall be typed to cut trenches with straight, parallel sides. Trenches to be only wide enough as may be required to lay the pipe and control wires. "Pulling" of main line pipe and/or control wires will not be permitted.

f. Backfill Non-Pressure (Lateral) Lines - After the work has been installed to depths as detailed on the drawings, flushed, tested, and proven tight in the presence of the City, backfill with fine materials. Allow no rocks or other objects larger than one inch diameter to fall in the first 6" of cover. Backfill carefully and tamp properly to avoid any voids. Flooding of trenches shall be done only with the approval of the City; however, all sandy soils shall be flooded during the backfill compaction operation.

g. Pressure (Main) Lines - Backfill all pressure lines with 2" bedding, and 4" cover of coarse sand. Continue backfilling as called out for non-pressure lines.

After compacting backfill over all pipe lines to equal density of adjoining undisturbed soils, Contractor shall remove all remaining debris caused by his operation from the site and dispose of same in legal manner (See note below). All trenches shall be left flush to the adjoining undisturbed grades in preparation for reseeding work to be performed by the City. Any work covered prior to field observations by the City shall be uncovered at the expense of the Contractor to allow for such observations if demanded by the City.

**Note:** In the event that after backfilling and compaction operations are completed, there is a deficit of material, the Contractors are to import sufficient material to achieve a level surface with adjacent grades. Material shall have Parks department approval prior to import. Any trench subsidence during the maintenance period shall also be filled with approved import by the Contractor. All costs involved with the aforementioned work shall be included in the contract lump sum bid.
h. **Laying of Lines** - Lines shall be staked and installed in the locations shown on the drawings. Discrepancies between drawings and site shall be brought to the attention of the City prior to trenching. Do not exceed maximum spacings shown on the drawings, nor exceed the GPM on the pipe sizes shown. Assemble all pipes free from dirt and scale; ream and debar. If pipe must be laid under existing structures, it shall be done by jacking, boring, or hydraulic driving (under concrete only).

i. **Assembly of Metal Pipe** - Do not bend or spring pipe; make all offsets or changes in direction with fittings. Cut threads with sharp, clean dies to conform to ASA specifications B2. Make up joints by applying oil base compound to male threads only. Remove excessive compound after make-up.

j. **Assembly of PVC Pipe** - Handle with care when loading, unloading, transporting and storing to avoid damage. Store pipe and fittings under cover before using. Transport in vehicle with bed of sufficient length to carry pipe flat and fully supported. Store pipe in approved manner. Notify City when each pipe and fittings shipment reaches the site of observation. Rejected materials shall be immediately removed from the site and replaced with new shipment of different batch number.

k. **Thrust Blocks** - Concrete thrust blocks shall be provided at all points where mainline changes direction or thrust, as at ells, tees, reducers, deadends, or where the line changes direction greater than 10°. Pour blocks to leave valves and fittings accessible for repair. Thrust blocks to be of size and shape as prescribed in pipe manufacturer's installation manual which shall be a part of this specification, by reference and City Std. Drawing B-149.

l. **Joining by Solvent Weld** - Use non-synthetic brush to spread primer and solvent using no larger than pint-sized cans. Clean and refill cans each day. Cut pipe square, ream, chamfer outside end at 90°. Clean and dry pipe and fittings socket. Scrub full length of inside socket and pipe end with primer, prime inside socket again. Immediately apply solvent to pipe end. Bottom the pipe in socket and turn 90°. Hold joint together 30 seconds. Wipe off excess solvent. Allow to set 30 minutes before moving. Snake pipe side to side in trench bottom, keeping 4" horizontal clearance between two pipes in same trench. Do not lay pipe in trench containing water or at less than 32°F. Center load immediately leaving joints exposed.

m. **Flushing of Lines** - Mains shall be flushed before attaching remote control valves, and with pipe center loaded. All water being discharged shall be temporarily piped up and out of the trenches. Trenches to be kept dry for pressure tests to follow. Install all valves after approval of flushing procedure by the City.

**Laterals** shall be flushed before sprinkler heads are in place. Cap all risers, apply pressure, remove caps in sequence starting at the control valve. Replace caps before removing caps to follow. Continue to end of each lateral. Flush until all foreign matter and mud is cleared of the system. Contractor to provide all materials required for flushing operations.
n. Pressure Tests - Perform all hydrostatic tests in presence of the City after flushing lines. Maintain 150 psi on main lines for one (1) hour with all air expelled from line with all valves in place. Maintain normal system working pressure on lateral lines with all risers capped for one hour after flushing lines and expelling all air. All leaks shall be corrected in mechanical manner without use of epoxy fillers or other filler compounds. Provide all equipment for tests including force pump and pressure gauges.

o. Lay of Control Wire (24 volts) - Lay wires in common trenches with main lines. Splicing allowed only every 500 feet or as shown on plans. Use concrete electrical No. 3 1/2 junction box with bolt down lid at each splice point as detailed on plan. Use plastic electrical tape and bind all control wires in bundles at 10' foot intervals. Splices, including splice at remote control valves, shall be waterproof.

p. Splicing of wire to be as follows - Use Scotch connector sealing packs and connect the wire with Scotchlok connectors included with packs. Mix the "Scotcheast" brand resin in the "Unipak" brand container, and insert the connection into the bag. All splices shall be in valve boxes or pull boxes.

q. Site Cleaning - Clean all debris from site, remove all other constructions and make site ready for city reseeding work to follow.

r. Adjusting System - Adjust entire system prior to coverage test and again at conclusion of maintenance period.

1. Set all shut-off valves in the system to full open position.

2. Adjust all stationary heads to equal and uniform coverage using adjusting screws in each sprinkler head and by control of the throttle device in each remote control valve.
s. **Observations** - Observations will be performed by the City at the following times and at random visits when the observer may be on the site:

1. Pre-work conference. To be conducted prior to any irrigation work under this contract. A job time limit will be established at this time.

2. Observation of flushing.

3. Observation of pressure test.

4. Observation of coverage performance.

5. Final observations of the completed installation.

6. Contractor shall not cover any work prior to observation by the City.

7. All observances called for by the Contractor shall be requested in writing, at least 48 hours prior to the anticipated observation. This includes inspection of plant material.

8. Work will not be performed on weekends.

t. **Maintenance** - The sprinkler system in its entirety, including all work done under this contract, shall be maintained by the Contractor for a period of one (1) year from the date of acceptance of this project as a guarantee against all defects and faults of material and workmanship.

The Contractor shall adjust all sprinkler heads so that all turf or shrub areas are properly covered as intended by the sprinkler plan and the sprinkler heads shall be adjusted so as to prevent excessive overspray onto areas not intended to be watered. These adjustments are to be made to the satisfaction of the Recreation and Parks Department prior to acceptance of the job by the City and refined as necessary during the maintenance period.

**VII. OBSTRUCTIONS**

The Contractor shall remove from the sites all stones, debris, and other obstructions encountered.

**VIII. CONFORMITY WITH PLANS AND ALLOWABLE DEVIATION**

Finished work in all cases shall conform with the lines, grades and dimensions shown on the plans. Deviation from the approved plans and working drawings as may be required by the exigencies of construction will in all cases be approved by the Recreation and Parks Department and authorized in writing.
IX. COORDINATION OF PLANS

Irrigation and landscape plans shall be coordinated so as to prevent interference between irrigation lines and plant materials. Trees shall not be planted over irrigation lines. If the site deviates from the approved landscape and irrigation plans, notify the landscape architect before proceeding with the work.

X. SCHEDULE OF WORK

Contractor shall submit to the Recreation and Parks Department a written schedule of the work at least five days prior to the commencement of construction indicating approximate starting date.

XI. PROTECTION OF EXISTING FACILITIES

Existing lines, wires, mains, etc. will be protected and maintained in service at all times. Should any existing facility be damaged it shall be promptly restored to original condition. No existing facility may be taken out of service.

XII. EXAMINATION OF SITE

The Contractor shall visit the sites and check location of existing utilities, conditions, verify dimensions and locations shown on the drawings. The Contractor shall assume reasonable variations and minor omissions.

XIII. PUBLIC CONVENIENCE AND PUBLIC SAFETY

The Contractor's operation shall cause no unnecessary inconvenience and the travel rights of the public shall be maintained at all times.

Convenient access to structures, utilities, etc. along the line of the work shall be maintained and kept in good condition.

In order to expedite the passage of traffic through or around the work, and where ordered by the Recreation and Parks Department, the Contractor shall install signs, lights, flares, barricades, and other facilities for the sole convenience, safety and direction of said traffic.

XIV. CONTRACTOR'S RESPONSIBILITY

Layout - The Contractor shall perform and be responsible for the accurate layout of all portions of the work. He shall verify all dimensions and shall report to the Inspector any discrepancies before proceeding with related work.
XV. FINAL CLEAN UP

The Contractor shall clean up the sites of the work, remove all rubbish, excess materials and equipment and all areas shall be left in a neat and presentable condition.

XVI. FINAL INSPECTION

The final inspection shall be made after the final clean up is performed. The Contractor shall notify the Recreation and Parks Department at least 48 hours in advance when he desires the final inspection. The Recreation and Parks Department will, as soon thereafter as possible, make the necessary examination, and, if the work is found to be in compliance with the plans and specifications, shall establish the beginning of the one year maintenance period. If corrections are necessary, 30 days will be allowed. Contractor shall call to arrange for all follow-up inspections.

A representative of the Recreation and Parks department shall inspect the easement area at different intervals during the one year maintenance period to inspect the operational capacity of the system. At the end of the one year maintenance period a final inspection will be conducted; any deficiencies shall be required to be corrected at this time.

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NOTES:
1. WHEN INSTALLATION IS REQUIRED ADJACENT TO PAVEMENT INSTALL VALVE 12' FROM IT.
NOTE: PROVIDE ONE COUPLER KEY WITH HOSE RISER ATTACHED FOR EACH QUICK COUPLER VALVE INSTALLED.

VINYL COATED QUICK COUPLER VALVE

PVC COUPLING
PVC COUPLING 10', 1-1/2" I.D.
RED BRASS COUPLING
RED BRASS COUPLING
RED BRASS 90° KJ

PVC MAIN

Quick Coupler Valve shall be two piece type, bronze, integral flow control with yellow vinyl hubbed cap, locking type.

Specified: Quick Coupler Valve-Brass No. 350-L-VC-34"
Coupler Key - Rawlings No. 932
Hose Risers - Qualiton No. E-401-34"
BIROXY ENCAPSULATED 24 VOLT SOLENOID VALVE

STAMPED BRASS TAGS - 1" X 1/2"
WITH 1/4" HIGH SEQUENCE N9

80" EXPANSION LOOP

RVC COMPRESSED MALE ADAPTER

RVC PLASTIC PIPE

USE 2.43P ELLS TO TAKE PLEINS TO GREATER DEPTH

No Fitting within 18" or Adapter

18" AID

PILOT WIRE 7

SEA GRAVEL 6' DEEP

CORNER WIRE

CORNER WIRE

SPECIFIED: RYNO BIDG. MODEL EPA-CP SERIES

VALVE BOX - AMETEK NO. 10.170.001 W/ LOCKABLE LID

PLASTIC VALVE BOX W/ LOCKABLE COVER

1/2" IN LAWN, 2" IN GC.

FINISHED GRADE

EPoxy FILLED WIRE COnNECTORS

RVC SCH 80 THRD NIPPLE - 4" LRG

RVC THRD 90° ELL

RVC SCH 80 THRD NIPPLE

RED BRICK AT FOUR CORNERS

MAIN LINE

MAN WIRE
REduced PRESSuRE TyPE
Vacuum Breaker PER SPECIAL
PrOvisionS - FEBCO 535 B 1/2"

NOTE:
Right pipe & fittings SWILL be
FEB CO Brass or BRonze
12" N TURF, 2" N S.C. - FINISHED GRADE

CONCRETE VALVE BOX W/ LOCK UP COVER MARKED "IRRIGATION"

RED BRICK AT FOUR CORNERS

6" R/C CL 4160 PIPE
USE R/C COUPLING 10' LONG SIZED 1/2" TO 1/2" NIPPLE WHEN USING R/C MAIN

GATE VALVE W/HANDWHEEL 1/2" THRE 2"

SPECIFIED: GATE VALVE - NISCO-SCOTT NO T-113 SERIES
VALVE BOX - BOOKS NO 3TL
CITY OF SANTA MARIA
RECREATION & PARKS DEPARTMENT

INSTALLATION & MAINTENANCE PROCEDURES

FOR THE SOUTH MILLER ST & SOUTH COLLEGE DRIVE
LANDSCAPE MAINTENANCE DISTRICT

All installations shall be made according to approved landscape plans and City of Santa Maria irrigation and planting specifications. No substitutions are to be made without prior written consent.

Any necessary changes involving either irrigation or plant material shall be made on the approved irrigation or landscape plan. Changes must be signed by an authorized representative of the Recreation and Parks Department and a meeting will be held to discuss any changes.

All inspections prior to the one year maintenance period shall be initiated by the landscape contractor through the office of the park superintendent (925-0951, Ext. 346). Forty-eight (48) hours notice will be required. The maintenance period shall not begin until all inspections assure Recreation and Parks Department standards have been met.

1. Notification of irrigation installation shall be required prior to commencement of the work. An authorized representative of the Recreation and Parks Department shall observe the installation in progress. Failure to notify the Recreation and Parks Department prior to the commencement of work shall result in a shut down of installations until necessary inspections have been made.

2. A pre-planting inspection shall be initiated by the contractor before plant material is installed. An authorized representative shall be on site to inspect quality, quantity, size, and plant type. The city arborist shall inspect all trees prior to planting.

3. A final inspection shall be initiated by the contractor through the office the park superintendent after all irrigation and plant material has been installed and electricity is connected. If no deficiencies are found, the date of final inspection shall begin the one year maintenance period. If deficiencies are noted the contractor shall have 30 days to correct them, after which time, the one year maintenance shall begin. A 10% maintenance bond shall be held during the one year maintenance period.

The developer shall hold up final payment to the landscape contractor until the easement area has been accepted by the Recreation and Parks Department and the one year maintenance period has begun.
4. During the one year maintenance period the developer and the contractor shall be responsible for all maintenance of plant material and irrigation. Periodic inspections will be made by a representative of the Recreation and Parks Department. The contractor shall be advised of any deficiencies and will be required to correct them within 30 days.

5. The one year maintenance bond shall not be released until the site meets Recreation and Parks Department standards.
Soil Amendment Specifications
Turf Areas
Miller Street Landscape Easement

Soil Preparation

1. Remove from all planted areas rocks over 1" diameter, sticks and other trash, and any foreign growth of any kind.

2. All areas to be planted shall be kept moist for a period of 10 days to germinate seeds. Apply a post emergence herbicide to manufacturer's specifications, taking care to avoid any plants or vegetation that is to remain.

3. All planted areas shall be thoroughly ripped to a depth of 12", using a ripper with teeth no wider than 12 o.c. Where possible, the ripping should be done in separate directions to reduce the compaction that occurs as a result of construction.

4. To all planted areas apply the following per 1,000 sq. ft. and incorporate into the top 6" of soil:
   a. Grow Power Plus or Equal Turf areas . . . . 200 lbs
      Flattened Ground Cover Areas . . . . . . . . 150 lbs
   b. Nitroized Saw Dust . . . . . . . . . . . . . . 3 cu. yds.
   c. Agricultural Gypsum . . . . . . . . . . . . .200 lbs
   d. Agrosoki Water Release Polymers
      Turf Areas . . . . . . . . . . . . . . . . . . . 18 lbs
      Flattened Ground Cover Areas . . . . . . . 10 lbs

5. Wet soil thoroughly and allow to settle. Finished grades shall be 1" below grade of adjacent paved surfaces unless otherwise noted.

BH:ps
YS10R0.RP3
RESOLUTION NO. 79-4877

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SANTA MARIA ADOPTING A MAJOR ACCESS AND RIGHT-OF-WAY PLAN FOR THE MILLER STREET EXTENSION

WHEREAS, a major access and right-of-way plan for the Miller Street Extension has been prepared in response to numerous inquiries and because of impending development; and

WHEREAS, the plan establishes street improvements to be constructed by private development along the Miller Street alignment, the purpose of which is to provide adequate travel lanes, protected turn pockets, bike and pedestrian ways; and

WHEREAS, the plan is intended to be a conceptual plan showing the general location of major access points along Miller Street; and

WHEREAS, the City Planning Commission has reviewed the plan and has adopted Resolution No. 1355 recommending City Council adoption thereof as a concept, in order to facilitate orderly development;

NOW, THEREFORE, IT HEREBY RESOLVED as follows:

1. The major access and right-of-way plan for the Miller Street Extension is adopted and approved as a concept.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Santa Maria held October 16, 1979.

Mayor

ATTEST:

City Clerk

CONTENTS:

BY: [Signature]
DEPARTMENT HEAD

BY: [Signature]
CITY ADMINISTRATOR

APPROVED AS TO FORM:

BY: [Signature]
CITY ATTORNEY

File: 282, AN-68
STATE OF CALIFORNIA
COUNTY OF SANTA BARBARA
CITY OF SANTA MARIA

I, DOROTHY LYMAN, City Clerk of the City of Santa Maria and ex officio Clerk of the City Council, DO HEREBY CERTIFY that the foregoing is a full, true and correct copy of Resolution No. 79-4877 which was duly and regularly introduced and adopted by said City Council at a regular meeting held October 16, 1979 by the following vote:

AYES: Councilmen Allen Burke, Toru Miyoshi and Mayor Elwin E. Mussell.

NOES: None.

ABSENT: Councilman George Hobbs.

ABSTAINED: Councilman Jack Adam.

City Clerk of the City of Santa Maria and ex officio Clerk of the City Council
RESOLUTION NO. 80-186


WHEREAS, the extension of South Miller Street from Barcellus Drive to the Orcutt Expressway has provided access to property in the South Miller Street Corridor; and

WHEREAS, there is an interest in establishing specific design standards for the landscaping, sidewalks, walls and medians along the South Miller Street extension to improve the aesthetic qualities of South Miller Street, to incorporate noise barriers into the street landscaping, and to promote the public welfare; and

WHEREAS, the City Council, in observing the development activity in the South Miller Street Corridor, has expressed concern over the prospect of construction along Miller Street which would be incompatible and consequently lack the cohesive unity of design necessary to create a unified street landscape environment for the Miller Street extension; and

WHEREAS, it has been determined that a specific plan, as authorized by Sections 65450 of the California Government Code, could best implement the desire to create the needed design;

NOW, THEREFORE, IT IS HEREBY RESOLVED as follows:

The Miller Street Specific Plan Design Standards, SP-80-18 (E-80-104), as attached and made a part hereof, are hereby adopted.

FASSED AND ADOPTED at a regular meeting of the City Council of the City of Santa Maria held December 16, 1980.

Signature: Mayor

ATTEST:

DOROTHY LYMAN
City Clerk

By: \[signature\]
Deputy

APPROVED AS TO FORM:

By: [signature]
CITY ATTORNEY

CONTENTS:

By: [signature]
DEPARTMENT HEAD

By: [signature]
CITY ADMINISTRATOR
INTRODUCTION

The partial improvement of Miller Street from Stowell Road to the Orcutt Expressway was completed in the summer of 1980. The completion of the roadway has provided the City and the property owners along Miller Street with a unique opportunity to establish an attractive, comprehensive design along the Miller Street Corridor.

Under the direction of the City Council and the Planning Commission, the City Staff, with the cooperation of the property owners, has developed the following landscape and design standards for the Miller Street Corridor. The standards presented address the treatment of landscape areas, sidewalks and walls along approximately 2 miles of Miller Street.

PURPOSE

The Miller Street Landscape Design Standards are to be adopted by the City as a Specific Plan, in accordance with the provisions of Section 65450 of the California Government Code. The Design Standards establish City policy regarding the design of the walls, sidewalks, street landscaping, retardation basins and traffic medians.

The purpose of the Standards is to provide a uniform design theme for the Miller Street Corridor which will serve as a buffer between the street and adjacent land uses, and which will provide a pleasant visual experience for the pedestrian and motorist traveling along Miller Street.

IMPROVEMENTS

The property owners, at such time as they wish to develop their property, will provide a landscape and pedestrian easement along Miller Street. Within this easement the landscaping, sidewalk and wall will be installed. The installation will be required of the property owner through the subdivision process, the development process, or through the requirements of this Specific Plan.

The maintenance of the improvements along residential property and retardation basins will be funded through a Landscape Maintenance District established at the time of development. The maintenance of the landscaping along commercial property will be the obligation of the property owners.

SPECIFIC RECOMMENDATIONS

A. Residential Properties

1. Wall Treatment

An 8-foot high slumpstone masonry wall is required to be installed along the residential properties adjacent to the Miller Street Corridor to separate the landscape and pedestrian access easement from interior private uses. Although this wall will create a formidable
noise barrier and protect the privacy of adjacent residents, it is
recognized that, if designed improperly, a monotonous, unattractive
streetscape could result.

In order to provide some variation and interest to the wall design,
indentations are recommended at a depth of 5 feet and a width that
is consistent with the width of the adjacent lot lines, which would
be approximately 80 feet wide. The transition of the wall at the
inset shall be constructed at a 45 degree angle, providing greater
visibility from the street. This angle will also relate better to
the informal design elements of the area, such as the meandering
sidewalk. Each intersecting corner of the indentation shall be
accented with a capped column that is constructed of a masonry
material. The column material should be compatible both aestheti-
cally and structurally with the rest of the wall composition. In
addition to the columns and indentations, it is suggested that plant
material of a vining nature be installed at the base of the wall in
appropriate locations to provide further visual relief and discourage
the occurrence of graffiti.

The landscape and pedestrian access easement line should be located
next to the wall on the street side, which will vary for each develop-
ment depending on the location of the indentations.

2. Sidewalk System

A curvilinear sidewalk system shall be implemented along the entire
frontage of Miller Street. A minimum width of 5 feet is required,
although the sidewalk may widen in some areas where appropriate.
Long sweeping curves 90 to 100 feet in length are recommended for
the majority of the sidewalk. Some curves in each continuous sec-
tion may be shorter in length to provide some variation.

The sidewalk should be formed in relation to the rolling landform
resulting in slight undulations on both a horizontal as well as a
vertical plane. Moving with and around the landform will produce a
more pleasurable walking experience for the pedestrian.

The sidewalk shall maintain a minimum distance of 18 inches from the
curb or meet the curb completely in order to avoid inadequate space
for root growth and irrigation materials.

In those areas where the wall is indented, the opportunity should be
taken to place the sidewalk farther away from the street.

3. Earthworks

The earthworks should be formed so as to create a rolling effect and
should have a strong relationship with the curvilinear sidewalk and
informal planting layout. Mounding shall be provided at a maximum
overall slope of 4:1 and shall not exceed 2 feet in height directly adjacent to the wall. Particular effort should be made to avoid a "bump garden" appearance by blending the entire landform together.

4. Planting Concept

a. Layout

The general planting concept for the Miller Street Corridor is to create an informal woodland setting that will provide an attractive view for pedestrians and motorists. In addition, it will provide a pleasing backdrop for adjacent properties.

In order to achieve the desired appearance, trees should be massed in groups of the same species. In addition, spacing of trees should vary from 8 to 12 feet apart. The use of variable plant sizes is also suggested in the following proportions:

- 5 gallon: 30 - 40%
- 15 gallon: 50%
- 24-inch box: 10 - 20%

Shrubs should also be massed in groups of the same species. The minimum container size recommended for all shrubs is 5 gallon.

The earthworks, trees and shrubbery should be coordinated to accentuate the vertical and emphasize the change in elevation.

b. Plant Groupings

To ensure the success and continuity of the overall planting scheme it is necessary to group individual plants into plant compositions. These compositions must consist of trees, shrubs, and ground covers that are compatible both aesthetically and ecologically. Therefore, individual designers for each project along Miller Street will be given the option to select specific plant groups rather than individual plants.

The following are the recommended plant groups:

Group 1

Sequoia sempervirens (Coast Redwood)
Liquidambar styraciflua (Sweet Gum)
Tristania conferta (Brisbane Box)
Raphiolepis indica (India Hawthorn)
Hypericum calycinum (Aaron's Beard)
Group 2

Pinus canariensis (Canary Island Pine)
Koelreuteria bipinnata (Evergreen Golden Raintree)
Eucalyptus nicholii (Nichol's Willow - Leafed Peppermint)
Grevillea 'Noellii' (Grevillea)
Hedera helix 'Hahnii' (Hahn's Ivy)

Group 3

Sequoia sempervirens (Coast Redwood)
Pistacia chinensis (Chinese Pistache)
Hymenosporum flavum (Sweetshade)
Juniperus chinensis 'Armstrongii' (Armstrong Juniper)
Vinca major (Common Periwinkle)

Group 4

Pinus muricata (Bishop Pine)
Liriodendron tulipifera (Tulip Tree)
Maytenus boaria (Chile Mayten Tree)
Xylosma congestum (Shiny Xylosma)
Hedera helix 'Hahnii' (Hahn's Ivy)

**c. Irrigation System**

All irrigation systems shall be fully automatic and designed so as to easily connect to an adjacent system. All controllers shall be of a Griswald make. All irrigation heads shall be Toro models. All backflow prevention devices shall be screened with landscaping and installed in accordance with local health codes.

B. Commercial Properties

The design recommendations relating to the curvilinear sidewalk, earthworks, and planting concept will apply, as previously discussed, to all commercial developments along Miller Street. A wall will not be required as part of the design standards unless otherwise required by the Zoning Ordinance. Landscape screening of parking shall be extensive yet allow for informal pedestrian routes into the commercial areas. Stepping stones are suggested to be placed along the desired pedestrian pathways. The on-site commercial landscaping shall be designed in such a way so as to blend in with the easement landscaping.

C. Retardation Basins

All of the design recommendations previously discussed shall apply to the retardation basins along Miller Street. However, the wall separating the basin from Miller Street shall be 3 feet high rather than 8 feet high. The wall separating the retardation basin from adjacent properties shall be 8 feet high. No wall or fence will be required along boundaries separating the basin from the interior street frontages.
In order to permit multi-purpose recreational use on a year-round basis, the grading of the retardation basin should be designed in varying depths. The major portion of the basin should be at a higher elevation that would remain wet only on an occasional basis and would be useable most of the time. This area should be designed to drain to a lower elevation that would remain wet more often but would not interfere with the use of the area at the higher elevation.

D. Street Medians

All medians shall be landscaped and irrigated in accordance with specific landscape and irrigation plans prepared by the City of Santa Maria.

E. Typical Drawings

The typical drawings attached as exhibits to these standards are intended to illustrate the basic concepts recommended for the design and treatment of walls, curvilinear sidewalks, earthworks, and landscaping along the Miller Street Corridor. Specific plans, illustrating these concepts in detail, for each individual development shall be submitted by the developer at the same time as public improvement drawings to the Community Development Department for final review and approval.
BOUNDARY OF MILLER STREET DESIGN STANDARDS
STATE OF CALIFORNIA  
COUNTY OF SANTA BARBARA  
CITY OF SANTA MARIA  

I, DOROTHY LYMAN, City Clerk of the City of Santa Maria and ex officio Clerk of the City Council DO HEREBY CERTIFY that the foregoing is a full, true and correct copy of Resolution No. 80-186 which was duly and regularly introduced and adopted by said City Council at a regular meeting held December 16, 1980 by the following vote:

AYES:  Councilmen Jack Adam, Allen Burke, Toru Miyoshi, Donald Shaw and Mayor George S. Hobbs, Jr.

NOES:  None.

ABSENT:  None.

DOROTHY LYMAN  
City Clerk of the City of Santa Maria  
and ex officio Clerk of the City Council  

By:  [Signature]
Deputy