

DESIGN STANDARDS
Division 16 – Electrical

16001 Design Information - Electrical

General. This section includes general electrical information not specific to any one Division 16 section. See other Division 16 sections for additional electrical requirements. Refer to this Building Dept Clarification for discussion synopsis with the Building Department related to interpretations and discussions of typical items found to be deficient in building design related to the Electrical Code.

Low Voltage Conduit. All wiring including low voltage must be in conduit, except for direct burial irrigation controller wiring as allowed by Section 02810 Irrigation Systems.

Copper vs. Aluminum conductors.

Aluminum conductors may only be used for Nevada Power's incoming line feed to the meter. All other wiring must be copper.

Irrigation Controls. Provide isolated panel circuits for the irrigation controls.

Lighting Controls. Provide user timers with shutoff warning lights for all activity lighting such as tennis courts, skateboard areas, etc. Ball field and all general site lighting shall be controllable by City phone controlled system. Reference Section 16520 Exterior Lighting for requirements.

Lighting Levels. Interior and exterior lighting must meet minimum recognized illumination level standards for horizontal, vertical, and uniformity. Reference Section 16510 Interior Lighting and Section 16520 Exterior Lighting for the required lighting levels.

Receptacles. Do not provide convenience outlets for use by the public in restrooms or other areas except one 20 amp receptacle at maximum ADA reach height in group reservable ramadas (25 occupant minimum, which is also the minimum for lighted ramadas). This circuit needs to be controlled from a secure remote on-site location such as the restroom plumbing chase. Reference Section 02875 Site Shelters.

Conduit and Pull Boxes. Use concealed conduit in the occupied structures, restrooms, bath-houses, and park ramadas. Reference Section 02875 Site Shelters.

MC and Armored Cable is not acceptable anywhere. Flex conduit allowed only per NEC, which is only in certain locations and not more than six feet in length. Site lighting conduits may be run at a shallow depth under sidewalks as allowed by code.

Exterior. The minimum requirements for conduit and pull boxes referenced in Section 16520 Exterior Lighting of these Design Standards shall apply to all site electrical work, not just the exterior lighting, and shall be so specifically indicated on the drawings.

Interior. Specify 1" minimum conduit size for all interior homeruns, ¾" minimum size elsewhere.

Transformers and Switchgear. No electrical transformers inside buildings. Use of freestanding site pad mounted transformers and equipment is generally acceptable, and preferred over a walled enclosure that only houses the electrical equipment. Avoid placing cabinets against the outside of building walls. Placement inside block wall screen enclosures otherwise required for irrigation pumps is acceptable, possibly in combination with the dumpster enclosure.

Shunt Trips. Locate shunt trips inside steel enclosures, 16-gauge minimum, galvanized, hinged cover, padlockable, designed for exterior use, Milbank HC3R or equal. Conceal conduit, minimize the size of the box and paint the exterior to match the adjacent surface. Label the cover "SHUNT TRIP" with 1" high black letters on a yellow background. <http://www.milbankmfg.com/>. Shunt Trips are no longer allowed under CLV's adoption of the 2002 National Electric Code. See main disconnect below.

DESIGN STANDARDS
Division 16 – Electrical

Main Disconnect. An accessible main disconnect is required for all buildings and should be placed in a non-conspicuous location on the exterior of buildings or in a 1 hour rated room with outside access.

Exterior – See photo for typical example of a 400 amp fused disconnect. Whenever possible, specify a side hinged breaker type disconnect when placed on the exterior of buildings.

Interior - An exterior door to the space is required, a Knox Box must be installed adjacent to the door, the room must be 1 hour fire rated, the door must have panic hardware and be labeled on the outside, and if the panel size is 1200 amps or larger, it must have 2 exit doors (NEC Article II, 102.6).

Security for Controls and Systems.

Provide access to controls/systems for the following groups, and restrict access to all others:

Detention & Enforcement (D&E) has access to all listed.

	General Public	City Employees (Facility Occupants)	Field Operations (Facilities Management and Parks)	Information Technologies (IT, see Section 16742)	Locks Provided by	DO NOT BLOCK ACCESS Sign Required IF storage in front of controls is possible
Electrical Panels	No	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	Contractor, for panels in a public area (or equipment room door)	X
Time Clocks (exterior lighting)	No	<u>Yes</u>	<u>Yes</u>	No Restriction	Contractor (equipment room door)	X
Phone Board	No	No	No	<u>Yes</u>	Contractor if in a separate room, None required if in an IT wall cabinet	X
Computer Network - Patch Panel (on board separate from the phones) and Switch/Router (shelf or rack mounted)	No	No	No	<u>Yes</u>	Contractor if in a separate room, None required if in an IT wall cabinet	X
Video Security Camera System - Switch/Router and Phone Line or Transmitter	No	No	No	<u>Yes</u>	Contractor if in a separate room, None required if in an IT wall cabinet	X
Security System (general building intruder security - Alarmco)	No	No	<u>Yes</u>	No	Cam-locks provided and master keyed by D&E	X
Fire Alarm Panels	No	No	<u>Yes</u>	No	Provided by Contractor, master keyed by D&E	X
Access Control Panel/System/Power Supplies (for card readers & video camera / intercom systems)	No	No	No	No	Provided by vendor or D&E, master keyed by D&E	X

Note that the location of these controls may be combined in rooms by restricting access with wall-mounted cabinets (ventilated as needed and room equipment heat loads removed).

DESIGN STANDARDS

Division 16 – Electrical

See 16742 Communication & Data Processing Equipment for wall cabinet information.
See 08710 Door Hardware for master keying of cabinets.

Protection. Provide wire guards or equal protection of lights, exit signs, detectors, speakers, assistive listening devices and other fixtures in gymnasiums and recreational activity areas. Protection must be mechanically attached so impacts will not release the protection.

Signage – Aluminum.

General. Signs shall meet the specification requirements (aluminum gauge, background sheeting, silk screening, UV coating and protective coating) as outlined in Section 10426 Signage and Graphics – Sign Specifications for On-site Regulatory – Informational – Warning Signage - Non-vehicular Signage. It is anticipated that these signs will be provided by the same supplier as the other aluminum on-site signs being provided for the project.

Electrical Meter Address Sign(s). Install identifying sign(s) adjacent to each electrical meter. CLV Project Manager shall provide actual address to be used upon application for electrical service.

- Black letters on white background.
- Text size 1" height, Arial font.
- Uniform sign size to coordinate with maximum amount of text.
- Provide attachment with double-sided stick tape over a minimum of 50 percent of the backside of the sign (3M 200MP or equal). Do not drill into or penetrate in any way the meter panel.

Main Disconnect Sign. Mount one sign adjacent to the main electrical disconnect for each structure. If the disconnect is located inside the building, provide an additional sign adjacent to the exterior door leading to the disconnect. Reference the standard drawing in this section for the sign design.

Signage – Engraved Plastic.

General. Signs shall be engraved on three-layer plastic, colors as specified, attached with double-sided stick tape (3M 200MP or equal). It is anticipated that these signs will be provided by the electrical contractor, regardless of who provides the device/box to be identified.

Electrical Equipment overall UL listed labels. NEC requires that all packaged equipment be UL rated and labeled as such for the overall unit. Providing UL listed components is not adequate. There existing different UL listing numbers for overall UL rating for different type of equipment. An example is for air compressors it is UL 1450 standards. NEC Article 110.3 (B) requires that all equipment shall be listed or labeled. Other equipment such as HVAC units etc. have specific UL numbers for overall ratings and must be specified for each piece of equipment on City of Las Vegas projects.

Electrical Identification Nameplates. Provide signs identifying all equipment, devices, switchgear, controls, equipment enclosures, communication cabinets, disconnects, main panels, sub panels, and similar electrical system components.

- White letters on black background.
- Use 1/4" letter height, except inside breaker panels use 1/8" letters for identifying individual breaker number, function, equipment and loads.
- Uniform sign size to coordinate with maximum amount of text.
- Text: Label text with common name of each piece and additionally with the unique identifier lettering shown on the as-built electrical drawings.
- Mount on or adjacent to each device for interior items. Mount on the inside of access panels for exterior located items.

DESIGN STANDARDS

Division 16 – Electrical

Do Not Block Access Signs. Mount one sign on or adjacent to each control/system indicated in the proceeding table "Security for Controls and Systems", IF the equipment is located in a closet or storage room capable of being blocked:

- White text on red background.
- Text size 1" height, Arial font.
- Text: DO NOT BLOCK ACCESS.

Special Door Hardware Requirements.

Under certain circumstances identified in the 2002 edition of the National Electrical Code, as adopted, special door hardware requirements are prescribed for doors serving electrical equipment rooms or spaces. Such requirements are not included in the Building Code, and may not be widely known by design consultants relying strictly on the Building Code for door hardware minimum requirements. Nor will the applicability of these special requirements be apparent unless specifically identified by the electrical engineering consultant. Normally, electrical engineering consultants do not specify door hardware, so there is great potential for code non-compliance that may not be known until late in the construction when identified by governing authority code inspection unless this item is carefully coordinated by the design team. Specific reference is made to NEC 110.26(C)2 and generally applies when electrical equipment rated 1200 amperes or more is provided in a space. Familiarity with other provisions of NEC 110 related to locating electrical gear is necessary to avoid potential change orders or otherwise unacceptable design solutions.

NETA Testing. Provide the following testing requirements in all projects utilizing new electrical gear. Verify the specific project requirements with the City Project Manager. This partial specification is provided as a convenient reference to the City's intent, with the consultant's standard specification in substantially this form also being acceptable to use. Also reference additional testing requirements in Section 16520 Exterior Lighting.

DIVISION 16 - ELECTRICAL INSPECTION AND TESTING

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 RELATED REQUIREMENTS
- 1.3 SUBMITTALS
- 1.4 QUALITY ASSURANCE
 - 1.4.1 Qualifications
 - 1.4.2 Acceptance Tests and Inspections Reports
 - 1.4.3 Acceptance Test and Inspections Procedure

PART 2 PRODUCTS

PART 3 EXECUTION

- 3.1 ACCEPTANCE TESTS AND INSPECTIONS
- 3.2 SYSTEM ACCEPTANCE
- 3.3 PLACING EQUIPMENT IN SERVICE

NOTE: This specification covers electrical inspection and testing and shall be used on project specifications where NETA testing is required. This section shall also be used for specification sections containing low-voltage or medium voltage generator control switchboards or switchgear, pad-mounted air switches, and medium voltage circuit breakers. Provide the section numbers and titles in this section, and add NETA testing requirements to the applicable section. Coordinate the sections in your contract documents with paragraph entitled "Acceptance Tests and Inspection" in PART 3 of this specification.

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

DESIGN STANDARDS
Division 16 – Electrical

INTERNATIONAL ELECTRICAL TESTING ASSOCIATION (NETA)
NETA ATS (2003) Acceptance Testing Specifications

1.2 RELATED REQUIREMENTS

1.3 SUBMITTALS

NOTE: Submittals must be limited to those necessary for adequate quality control. The importance of an item in the project should be one of the primary factors in determining if a submittal for the item should be required.

The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

Test Reports

Acceptance tests and inspections;

Certificates

Qualifications of organization, and lead engineering technician;

Acceptance test and inspections procedure;

1.4 QUALITY ASSURANCE

1.4.1 Qualifications

Contractor shall engage the services of a qualified testing organization to provide inspection, testing, calibration, and adjustment of the electrical distribution system and generation equipment listed in paragraph entitled "Acceptance Tests and Inspections" herein. Organization shall be independent of the supplier, manufacturer, and installer of the equipment. The organization shall be a first tier subcontractor. No work required by this section of the specification shall be performed by a second tier subcontractor.

a. Submit name and qualifications of organization. Organization shall have been regularly engaged in the testing of electrical materials, devices, installations, and systems for a minimum of 5 years. The organization shall have a calibration program, and test instruments used shall be calibrated in accordance with NETA ATS.

b. Submit name and qualifications of the lead engineering technician performing the required testing services. Include a list of three comparable jobs performed by the technician with specific names and telephone numbers for reference. Testing, inspection, calibration, and adjustments shall be performed by an engineering technician, certified by NETA or the National Institute for Certification in Engineering Technologies (NICET) with a minimum of 5 years' experience inspecting, testing, and calibrating electrical distribution and generation equipment, systems, and devices.

1.4.2 Acceptance Tests and Inspections Reports

Submit certified copies of inspection reports and test reports. Reports shall include certification of compliance with specified requirements, identify deficiencies, and recommend corrective action when appropriate. Type and neatly bind test reports to form a part of the final record. Submit test reports documenting the results of each test not more than 10 days after test is completed.

1.4.3 Acceptance Test and Inspections Procedure

Submit test procedure reports for each item of equipment to be field tested at least 45 days prior to planned testing date. Do not perform testing until after test procedure has been approved.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 ACCEPTANCE TESTS AND INSPECTIONS

Testing organization shall perform acceptance tests and inspections. Test methods, procedures, and test values shall be performed and evaluated in accordance with NETA ATS, the manufacturer's recommendations, and paragraph entitled "Field Quality Control" of each applicable specification section. Tests identified as optional in NETA ATS are not required unless otherwise specified. Equipment shall be placed in service only after completion of required tests and evaluation of the test results have been completed. Contractor shall supply to the testing organization complete sets of shop drawings, settings of adjustable devices, and other information necessary for an accurate test and inspection of the system prior to the performance of any

DESIGN STANDARDS
Division 16 – Electrical

final testing. City Representative shall be notified at least 14 days in advance of when tests will be conducted by the testing organization. Perform acceptance tests and inspections on applicable equipment and systems specified in the following sections:

NOTE: Select applicable sections for each project. Ensure each equipment section includes the following information.

1. NETA ATS listed in the references.
2. The words "and Section 16..., "Electrical Inspection and Testing" apply" added to paragraph entitled "Related Requirements."
3. Submittals with "Acceptance checks and tests" added in PART 1.
4. Appropriate paragraphs from the NETA manual added under "Field Quality Control" in PART 3.
5. Add any job section numbers and titles containing low-voltage or medium voltage generator control switchgear or switchboards, pad-mounted air switches, or medium voltage circuit breakers. Provide the NETA tests required in the applicable section.

[Section 16... SINGLE-OPERATION GENERATOR SETS. Functional engine shutdown tests, vibration base-line test, and load bank test shall not be performed by the testing organization. These tests shall be performed by the start-up engineer.]

- [b. Section 16... THREE-PHASE PAD-MOUNTED TRANSFORMERS]
- [c. Section 16... SINGLE-PHASE PAD-MOUNTED TRANSFORMERS]
- [d. Section 16... OVERHEAD TRANSMISSION AND DISTRIBUTION]
- [e. Section 16... UNDERGROUND TRANSMISSION AND DISTRIBUTION]
- [f. Section 16... PAD-MOUNTED SF6 INSULATED INTERRUPTER SWITCHES]
- [g. Section 16... SECONDARY UNIT SUBSTATIONS]
- [h. Section 16... PRIMARY UNIT SUBSTATIONS]
- [i. Section 16... AUTOMATIC TRANSFER SWITCHES]
- [j. Section 16... SWITCHBOARDS AND SWITCHGEAR]

3.2 SYSTEM ACCEPTANCE

Final acceptance of the system is contingent upon satisfactory completion of acceptance tests and inspections.

3.3 PLACING EQUIPMENT IN SERVICE

A representative of the approved testing organization shall be present when equipment tested by the organization is initially energized and placed in service.

-- End of Section --

DESIGN STANDARDS
Division 16 – Electrical

16510 Interior Lighting

Lighting Motion-Sensing Controllers. All building rooms should be considered for motion-sensing light controllers as an energy saving feature. Consider how often and how the room is utilized in determining if such a controller is worth the expense for the energy savings; always install in offices. Consider using zoned motion sensors to control the lighting in common areas.

Manufacturer. Specify Hubbell-UNENCO sensors only, no substitutions allowed (Facilities stocks the most common ones for immediate replacement), wall or ceiling mount, consider daylight override, dimming and dual switching. <http://www.hubbell-automation.com/>

Locking Wall Switches. Provide locking wall switches for all light switches located in areas where inappropriate switching by the public is possible and where lighting control by authorized personnel only is required.

Manufacturer. Specify Leviton Single-Pole Locking, Double-Pole Locking, model series 1201-2L, 1221-2L, 3031-2L, 1202-2L, 1222-2L, 3032-2L as appropriate to the condition, no substitutions allowed (Facilities stocks 1221-2L 20 Amp Single-Pole Locking switches, which should be specified whenever possible).

Provide 10 Locking Switch Keys, Leviton 55500-PRT, per building to the Owner. Place one key in each Fire Department Knox Box. (Leisure Services and Facilities prefer all wall switches keyed the same throughout City facilities, and the City locksmith does not require these to be master keyed to the City key system.)

Public Restrooms. For public restrooms located in buildings, either install locking switches or motion sensors. If using locking switches, verify with the building operators that someone will be responsible for turning the switch on and off each day. When using motion sensors, wire some light fixtures to remain on at all times the building is occupied so people do not have to enter a dark room to activate the motion sensor.

Light Fixtures. The City stocks T8 lamps for ceiling fixtures, although other lamps may be specified if justified. The City does not have a standard lay-in ceiling fixture although Lithonia SP is common. Specify electronic ballasts (20% THD).

Gym Lighting. Specify lamp protection from balls, mechanically fastened (no spring clip designs), with safety straps. Unless otherwise directed, gymnasiums require dual lighting levels to accommodate various uses.

Exit Signs. Specify LED type, green unless matching existing color.

Lighting Levels. Provide the following maintained horizontal foot-candles of light in the activity areas (measured without daylight; maintained after 100 hours).

	<u>Where Measured</u>	<u>Average</u>	<u>Allowable Range</u>	<u>Standard Derived From:</u>
Arts & Crafts:	table level	75 Fc	50-100 Fc	Site Measurements
Art Gallery:	bench height	35	17-52	Site Measurements
Classroom:	desk level	60	40-80	Site Measurements
Computer Room:	desk level	60	30-90	Site Measurements
Conference Rooms:	desk level	60	30-90	Site Measurements
Dance Rooms:	floor level	60	30-90	Site Measurements
Game Rooms:	table level	60	30-90	Site Measurements
Green Rooms:	Extra lighting required over pool tables, foosball tables, air hockey, card tables, etc. counter height	35	17-52	Site Measurements

DESIGN STANDARDS
Division 16 – Electrical

Gymnasiums:	floor level	50	25-75	IESNA Lighting Handbook Class III (Basketball)
Gymnastics:	floor level	50	25-75	IESNA Lighting Handbook Class III
Halls:	floor level	15	5-25	Site Measurements
Kitchen:	counter level	75	50-100	Site Measurements
Lobby:	counter height	35	17-52	Site Measurements
Martial Arts Rooms:	floor level	45	22-67	Site Measurements
Pool	deck level	30	20-40	IESNA Lighting Handbook Class III (See NAC 444.142)
	pool surface	15 candelas per sq meter	3:1	IESNA Lighting Handbook Class III /public_bathing.pdf
Restrooms:	counter height	35	17-52	Site Measurements
Weight Rooms:	equipment level	60	30-90	Site Measurements

For other uses not indicated above, design to values recommended in the IESNA Lighting Handbook-2000 and best practice.

Seniors: Provide additional lighting levels beyond the above standards for activity areas used by seniors.

Facility lighting survey from February 2004: [LightingSurvey.xls](#)

DESIGN STANDARDS
Division 16 – Electrical

16520 Exterior Lighting

Light Fixture Type.

Provide Metal Halide (MH) fixtures in any outdoor activity area requiring accurate color including swimming pools, performance stages, flag lighting, group picnic shelters and also, when they are scheduled to be lighted, sports fields, tennis courts, skateparks, bocce courts, athletic activity areas, tot lots, splash pads and similar areas.

Provide Metal Halide (MH) or High Pressure Sodium (HPS) fixtures for pedestrian pathways, parking lots and other general site lighting. Note that HPS light levels are required to be twice that of MH.

Building flood/wash, landscape up lighting and exterior exitway fixtures attached to the building may be either MH or HPS to coordinate with the over all lighting design.

The site lighting within larger complexes, such as the city service yards, needs to continue specifying high pressure sodium to match the existing lighting.

Monument Signs. Do not provide lighting for the city's standard precast park name monument signage. Building or facility monument signs will likely require lighting; verify requirements with city project manager.

Flagpole Lighting. Reference Section 10350 Flagpoles for requirements.

Landscape and Building Up/Flood/Wash Lighting. Do not place fixtures in sidewalks, concrete flatwork, or pedestrian areas. Fixtures must be low temperature and vandal resistant, which specifically includes the lens material, fixture housing, fixture support and providing lens stone guards if available.

Exterior Emergency Power Egress Illumination. The city does not normally provide emergency powered illumination for the exit discharge pathway to the right-of-way. Verify requirement with the city project manager for your project. Note that the building department has taken the interpretation that the required exterior emergency powered illumination in the area of the exit must continue until one is no longer under a rooftop, covered patio, overhang or similar building projection.

Site Lighting & Electrical. (Pedestrian pathways, parking lots, etc.)

Note: The City of Las Vegas, Department of Building & Safety "Bolted Light Pole Base Detail" sometimes issued with its plan review comments does not meet the following design standards. The consultant must provide adequate detail and structural calculations for light pole foundations meeting the below standards.

Note: The City of Las Vegas, Planning & Development Department standard conditions for the Site Development Review limit lighting poles to 20 feet high. There may be situations where a variance to this standard will be requested. Consultant needs to verify such situations with the City project manager.

Foundations (see Section 03001 for additional requirements).

- In parking areas, extend 30 inches above finish grade, with rebar cage.
- For pathway and area lights, extend 12 inches above finish grade.
- Pour entire base in one pour to base plate (no grout capping and shaping later).
- Bare #4 cu wire to ground pole and all anchor bolts.
- Extend anchor bolts 1 inch of thread above nut.
- Provide matching metal crash cap.
- Use 3000-psi minimum concrete.
- Add the following note to the drawings: "Pour entire base in one pour to base plate and slope top away from pole. Strip Sonotube forms off while concrete is still green (approximately four hours after pour) and stone rub to provide a smooth, seamless

DESIGN STANDARDS

Division 16 – Electrical

surface appearance, and then a light broom finish. Wet cure base for seven days. Attempts to fill and shape poured bases will not be allowed; improperly poured bases must be demolished and repoured."

- BUILDING AND SAFETY will only accept twenty feet of copper wire for grounding.

Poles.

- Provide manufactured poles of a minimum size that allows for and specifies a manufactured minimum access hand hole of 4 inches by 6-1/2 inches. The access hand hole may have radius corners such that the hand hole is oval in shape. Access hand hole reinforcement shall provide a bending strength equal to that of the pole without an opening. Field cutting, welding, or other adjustments of the access hole will not be allowed. This minimum hand hole size shall be provided regardless of the required pole height or usage. (This often requires specifying a larger diameter pole than may otherwise be required for loads.)
- Provide a minimum of 15 feet high, 6-inch minimum diameter.
- Install pole plumb using leveling nuts, no shims.
- Extend wires 18 inches out of hand hole.
- Specify steel poles, no aluminum.
- Hand hole cover shall be stainless steel tamper proof bolted.

Light Fixtures.

- High Pressure Sodium lamps (or Metal Halide see above).
- Use #10 UF with ground wire to each fixture.
- Provide a fuse holder for each fixture in base of pole, Buss with a 10A fuse.
- Use a single fuse holder for 120v or 277v.
- Use a double fuse holder for 208v, 240v or 480v.
- Fuse holders shall have #10 cu stranded THW wire on line side. Connection to feed wires shall be with a split bolt. No wire nuts.
- Level all fixtures.

Time Clock and Photocells.

- All lighting set for dusk to dawn will be controlled by photocell facing north.
- Photocell to be mounted on nearest pole to service.
- Provide a photocell by-pass switch at the service.
- Specify photocell Tork 2007, no substitutions.
- All lighting set for dusk to park/facility closing will be controlled by a photocell on and a time clock off.
- Specify time clock Internatic ET70115C, no substitutions.

Service Pedestals.

- 200A service to be fed by three #3/0 cu THW wires minimum.
- 125A service to be fed by three #1/0 cu THW wires minimum.
- Bare cu ground wire shall be continuous to neutral buss.
- A photo eye by-pass switch shall be mounted in the service and marked on/off.
- All splices on by-pass shall be crimp type and taped. No wire nuts.
- One wire per breaker.

Pull Boxes. (Also applies to all site electrical.)

- All pull boxes in grass, dirt or asphalt shall have an 8-inch minimum concrete collar with #4 rebar.
- All boxes 2' by 3' and larger shall have torsion assisted lids.
- Covers shall be factory imprinted "Lighting" or "Electric".
- Conduits shall be 3 inches above the bottom of the box.

DESIGN STANDARDS

Division 16 – Electrical

- Splices shall be waterproof with split bolt, rubber tape, vinyl electrical tape and 3M Skotchkote Electrical Coating or approved equal.
- Secure lids with brass tie downs.
- Lids shall be an approved non-metallic Polymer type material (no concrete, no metal, no Fiberlite, no other materials – no substitutions, including traffic areas).
- Wires shall extend 24 inches outside of box.

Conduit. (Also applies to all site electrical.)

- Shall be 1-1/4 inches or larger in size, PVC Schedule 40.
- Specify all exterior conduit at least one standard size larger than that required by code. The City project manager may waive this requirement during the design if this larger size conduit requires a larger or nonstandard light pole or other terminating device/fixture for a proper termination.
- Extend conduits continuous through and above pole bases to within 3 inches below bottom of pole hand hole.
- Conduits shall be placed to a depth of not less than 24 inches below finished grade.
- Vinyl warning markers shall be placed above conduits at 12" below the ground surface.
- Conduit runs shall have no more than 270 degree bends (two 90 and two 45).
- Conduit runs shall not exceed 300 feet between pull boxes.
- A polyester pull tape having a continuous durable footage markings, with a min, 1,200 lbs of pull strength, shall be installed in each completed conduit run.
- Conduits shall be proven free and clear of dirt and debris by use of an appropriately sized mandrel no less than 1/4" smaller than the inside diameter of the conduit.
- Natural backfill shall be free of stones, caliche, or lumps of material exceeding 3" and free from sod, frozen earth and organic materials.

Additional spare conduit for future camera surveillance (verify when required).

- Provide a 2" conduit with pull string running from the electrical room to a light pole on the street side of the building. Verify with the City of Las Vegas the location of the pole. Cap and identify as future surveillance.
- Provide a 2" conduit with pull string running from the electrical room to a light pole on the back side of the building. Verify with the City of Las Vegas the location of the pole. Cap and identify as future surveillance.

Additional spare conduit for other future uses.

- Provide 2-1" conduits with pull strings running from the electrical/phone room to 5 feet outside the building. Cap and identify as spares.

Wire and Splices.

- Use THW cu wire only.
- No wire smaller than #10 cu.
- Wire size #6 and smaller shall be continuous in color. No phase tape.
- All connections shall be with a split bolt, no wire nuts.
- Fuse holders shall have two crimps and rubber boots.
- Wire will be sized to prevent a voltage drop exceeding 3 percent at the farthest lighting load.

The City's TEFO Section, 229-6331, has provided the above standards in this Site Lighting & Electrical section.

DESIGN STANDARDS

Division 16 – Electrical

User Controlled Activity Lighting in Parks (Skateparks, tennis courts, basketball courts, bocce ball courts, etc.)

Provide for lighting of park activities for night use only when specifically requested by the City. User controlled lighting systems are to be provided on dedicated electrical circuits and in no way share circuits with the irrigation controller system.

Electronic Time Switch. ET70115C by Intermatic Incorporated, no substitutions. Used to coordinate the lighting available times with the hours of darkness and park hours. One timer may control multiple user-controlled activities. Must be mounted in a remote secure location such as a park restroom plumbing chase, locked switchgear cabinet, or locked booster pump enclosure. A locked pedestal cabinet is NOT acceptable. A remote location is critical since any equipment in the area of the lighting will be thoroughly investigated by the users trying to keep the lighting on beyond park closing.

<http://www.intermatic.com/comind/et70000c.htm>

General Purpose Timer. 9050 JCK70 V20 by Square D (Schneider Electric), no substitutions. Used to program and control the user controls. Same secure remote location mounting requirements as the Electronic Time Switch.

[http://www.squared.com/us/products/relays.nsf/07a0210021262d45862564b5006e4f84/f04a58b2c4495d0c85256650005fb668/\\$FILE/9050CT9601_R8-00.pdf](http://www.squared.com/us/products/relays.nsf/07a0210021262d45862564b5006e4f84/f04a58b2c4495d0c85256650005fb668/$FILE/9050CT9601_R8-00.pdf)

Push Button. MPB.02-ADA by McCain Traffic Supply, no substitutions (ADA 2" pushbutton with 9"x12" integral sign above, custom text, adjustable diameter back mounting). Used by the user to turn on the lights for the activity. Mount button at 40 inches above the finished surface, weather tight, on the side of the light pole specified below.

<http://www.mccaintraffic.com/oroducts/signal14.html>

Warning Light. JB10G with Red Polycarbonate Globe VPG-1RE by Appleton Electric Company, no substitutions. Locate on top of the light pole specified below, weather tight.

<http://www.appletonelec.com/>

Pushbutton/Warning Light Pole. Valmont CA 1A or equal, freestanding pole per Regional Transportation Commission of Clark County (RTC), Uniform Standard Drawing Volume 2, Section 404 Traffic Signals, Drawing 404.402, 10'-0" high pole, 3" x 6" hand hole, adjacent pull boxes NOT allowed. Pole to be provided primed and finish painted to coordinate with the park colors. (Note: Disregard note 3 on drawing 404.402 and use the button height and reach dimensions shown here or in the proposed Federal Access Board Right-Of-Way requirements, whichever are more restrictive.) <http://www.valmont.com/asp/poles/poles2.shtml>

Location. Pole must be located along and accessible from the on-site ADA accessible path to the activity. Push button shall be located adjacent to a clear level landing, and provide for an 18 inch maximum SIDE reach only (no front reach). Pushbutton location must provide for the continuing usage by all users of the activity being lighted, without interrupting the other users. Warning light must be visible by all users. Pole location must not interrupt the normal play of the activity nor be a potential hazard, including the signage edges. The pole location may be integrated into the face of a fence line (such as a tennis court enclosure) as long as the other design criteria are maintained.

Lighting Instructions Signage. Reference drawings in this section for the following signs (see section 10426 for additional mounting requirements):

- **User Controlled Lighting.** Locate one sign at each user controlled lighting push button.

DESIGN STANDARDS

Division 16 – Electrical

Sports Field Lighting.

General. Use an open performance specification, although the performance required by these standards and the project parameters may limit the number of known manufacturers. Specify that the manufacturer and contractor warranty lamps for 2 years and entire field lighting system (except lamps) for 10 years. All steel components shall be hot-dipped galvanized inside and out, with proper separation to other materials to prevent galvanic action. Specify two spares of each type and wattage of lamp and ballast installed.

Energy Efficient Fixtures. Include provisions in the specifications for energy efficient fixtures per the attached criteria, [click here to view](#).

Fields Near Residential. Following the criteria for how to handle fields near residential property lines where traditional sport floodlights may have a problem meeting the requirements for spill, glare, etc., [click here to view](#).

Manufacturer. Lighting system manufacturer shall submit in writing a minimum of five similar lighting projects in the State of Nevada where the specifications outlined have been met (project name, contact person and telephone number), and evidence that they are a company specializing in manufacturing such lighting systems for at least the last three years. The Owner may entertain reviewing this pre-qualification process during the bidding period, up to 10 days prior to bid opening, in order to clarify for bidders the acceptable manufacturers to utilize in their bids. Verify with the City Project Manager for each project whether to include pre-qualification in the specifications (currently the City Purchasing & Contracts Section is opposed to pre-qualifications in general). The standard 10-day substitution period required by NRS and stated in the General Conditions would still apply.

Poles. All poles shall be steel bolt down design, sealed top, weather-tight. Mount ballasts on light pole 15 feet above grade, and provide for truck access to poles. Dimension the horizontal location of each pole on the drawings. Provide lightning protection meeting NFPA 780. Do not specify poles taller than 80 feet without consulting with the City's TEFO Division.

The City maintains its Sports Field Lighting with the use of an 85-foot boom truck. The 85 feet is measured from the ground to the bottom of the platform when fully extended. It is desired that the boom truck is able to back up to the base of the pole from the lamp side (field side), both sides of the pole for double masted arrangements. The boom truck is a double axle 35-foot long vehicle, 11 feet high with the boom in the travel position. Access to the fields must be able to accommodate this vehicle. Avoid planting major trees in near vicinity to the Sports Field Lights in order to reduce boom access. **The weight of the boom truck is 50,000 lbs. Design hardscape features such as sidewalks that provide a boom truck path to sports lighting to support such a load.**

Pole Foundations (ballfield lights only).

- In parking areas, extend 30 inches above finish grade.
- In pedestrian sidewalk areas between or adjacent to fields, extend 30 inches above finish grade.
- In landscape areas, extend 12 inches above finish grade.

Fixtures. Metal Halide lamps. Consider using controlled optic sports lights instead of traditional round symmetrical floodlights with louvers particularly where light spill is an issue.

Light Trespass. The lighting design shall meet the following minimum light trespass restrictions. Ambient light levels may be subtracted from each test station in meeting the respective foot-candle spill readings.

Spill Light. Maximum allowed spill light along all residential property lines:

.15 Fc Horizontal Maintained

.3 Fc Vertical Maintained (meter aimed toward light bank at five feet above grade)

Glare Analysis. Designer will review candlepower curves and determine the appropriate luminaire

DESIGN STANDARDS.
Division 16 – Electrical

mounting height and optical system so that no greater than 12,000 candlepower from any given luminaire is visible from residential property lines. All luminaire aiming points, pole locations, and number of fixtures on each pole, fixture types and NEMA beam patterns shall be shown on the drawings.

Sky Glow. The lighting level above the light fixture shall not exceed five percent of the maintained, calculated average lighting level on the field surface to reduce sky glow.

Egress Illumination. When designing field lighting, also provide a secondary lighting system to allow a safe and ADA legal pathway(s) from the playing fields and spectator areas to the parking areas with power supplied by the premises' electrical supply, to provide for player and spectator exiting should the field lighting system fail during an event.

Controller. Sports field lighting is controlled via the City's standard MUSCO Lighting "Control-Link" Wireless Control System, no substitutions or exceptions.

MUSCO Local Representative: Shane White, 801-446-8391, Cell 801-201-2536.

MUSCO Sports Lighting, Inc.
Corporate Office: 100 1st Avenue West, P.O. Box 808, Oskaloosa, Iowa 52577,
800-825-6030
West Regional Office: 800-659-0117, Fax 714-540-9344
www.musco.com

Provide connection to the on-site controller through a phone modem via a dedicated phone line connection. Design the system so that each field can be lighted separately. The City Project Manager will make the service application for this dedicated phone line connection, and the monthly service charge paid by the City. (MUSCO has discontinued the option of a cell phone connection at the site modem currently in use at many facilities. Any continued use of the existing cell phone connections must be digital.)

The City does not utilize the following available options: wireless satellite control (satellite dish), on-site schedule override cabinet (user control for early turn-off), or remote manual switch cabinet (switches located other than at the switchgear cabinet location).

MUSCO equipment cabinets shall be mounted inside lockable electrical switchgear cabinets adjacent to the incoming electrical switchgear.

The City will utilize its current PC hardware and software setup for controlling via the PC/Internet access method.

Click here for links to a MUSCO standard specification, modified for City options, and literature on the system.

The following crossed-out specification is listed here for reference only. This was the City's previous field lighting controller standard, which may be encountered on renovation projects.

~~Sports field lighting is controlled via a dedicated phone line to the City's standard Theta Labs LC-2 controller system with one zone for each field, no substitutions allowed (Theta Labs, Inc., 10040 Monroe Dr., Dallas, TX 75229, available locally through Custom Controls of Nevada, 4535 W. Russell Road, #2, Las Vegas, NV 89118, 702 362 1350, Fax 702 362 1337, www.ccnlv.com). A controller cabinet needs to be located in a secure accessible location such as the plumbing chase of a park restroom. Specify a weather proof cabinet if exterior mounted. The City is not currently utilizing the warning horn feature of the controller.~~

~~Click here for a technical description of the LC-2. (Note that this technical description contains~~

DESIGN STANDARDS
Division 16 – Electrical

~~sample language for usage on tennis courts. Typically the City utilizes a different system for controlling tennis court lighting, NOT the LG 2 controller, see below. Comply with the specific lighting instructions and requirements for your particular project.)~~

Testing. (Applies to all Site Lighting including User Controlled Activity Lighting and Sports Field Lighting)

Prior to completion of the work, the Contractor shall cause the following tests to be made on all lighting circuits, in the presence of the Owner's design Consultant:

- (a) Test for continuity of each circuit.
- (b) Test for grounds in each circuit with a 500-volt megohmmeter with a minimum acceptable reading of 200 megohms.
- (c) A functional test in which it is demonstrated that each and every part of the system functions as specified or intended herein.

Following construction, the Owner's design Consultant shall provide the following testing and report:

- (d) The Consultant shall measure and record all illumination levels (including spill light restrictions) in accordance with IESNA LM-5 at nighttime without moon. Measurements need to be taken after 100 hours of operation to determine maintained levels. If the measurements do not meet the specified standards, the Consultant will determine which adjustments need to be made and re-measure the levels after the adjustments are made. A 1:30 or larger drawing of the field being illuminated with 10 foot spaced grid points shall be delivered to the Owner. Spill light will be measured at 20-foot intervals, 5-foot above grade and shown on the drawing. The initial and maintained lighting level at each grid point shall be shown on an accompanying chart. The chart will also summarize the average and range of the lighting levels. The Consultant shall provide these documents and a letter of compliance to the Owner.

DESIGN STANDARDS

Division 16 – Electrical

Lighting Levels. Provide the following maintained horizontal foot-candles of light in the activity areas (measured at night without moon; maintained after 100 hours). Lighting levels may be upgraded to Class III levels for projects designed for tournament play.

The light spill requirements along residential property lines shown above for Field Lighting applies to all projects, regardless of whether there are field lights.

	Average Horz. Footcandle	Max. to Min. Allowable Range	Standard Derived From
Baseball Infields	30 fc	48 to 12 fc	IESNA Lighting Handbook, Class IV
Baseball Outfields	20	32 to 8 fc	IESNA Lighting Handbook, Class IV
Basketball Court	20	32 to 8 fc	IESNA Lighting Handbook, Class IV
Bocce Ball Court	20	32 to 8 fc	IESNA Lighting Handbook, Class IV
Dog Run Walks	2 if HPS 1 if MH	4:1 ratio 4:1 ratio	IESNA Lighting Handbook, Figure 22-10
Football Fields	20	32 to 8 fc	IESNA Lighting Handbook, Class IV
Hockey, Roller	20	32 to 8 fc	IESNA Lighting Handbook, Class IV
Horseshoe Pits	20	32 to 8 fc	IESNA Lighting Handbook, Class IV
Walking (Jogging) Paths	2 if HPS 1 if MH	4:1 ratio 4:1 ratio	IESNA Lighting Handbook, Figure 22-10
Parking Lots	2 if HPS 1 if MH	15:1 ratio 5:1 avg. to min. ratio 15:1 ratio 5:1 avg. to min. ratio	2 fc is from a lawsuit at Sam's Town IESNA Lighting Handbook, Figure 11-21 footnotes 2 and 3
Tot-lot/Splash Pad	20	32 to 8 fc	Site measurements
Pool Deck	30	48 to 12 fc	IESNA Lighting Handbook, Class IV
Pool Surface	15 candelas per sq meter	4:1 ratio	IESNA Lighting Handbook, Class IV
Ramada	10	15 to 5 fc	Site measurements
Restroom, Inside	20	30 to 10 fc	Site Measurements
Restroom, Outside	5	10 to 2 fc	Architectural Graphic Standards (Building entrances)
Sidewalk	2 if HPS 1 if MH	4:1 ratio 4:1 ratio	IESNA Lighting Handbook, Figure 22-10
Skate Park	20	32 to 8 fc	IESNA Lighting Handbook, Class IV (Similar to Roller Hockey)
Soccer Fields	50	4:1 ratio	IESNA Lighting Handbook, Class IV
Tennis	50	80 to 20 fc	IESNA Lighting Handbook, Class IV
Trail	2 if HPS 1 if MH [.5 if away from streets & other light sources, IESNA DG-5-1994, Table 2]	4:1 ratio 4:1 ratio	IESNA Lighting Handbook, Figure 22-10
Trail in Tunnel	5	4:1 ratio	IESNA Lighting Handbook, Figure 22-10
Volleyball	20	32 to 8 fc	IESNA Lighting Handbook, Class IV (Similar to Bocce and Horseshoes)

For other uses not indicated above, design to values recommended in the IESNA Lighting Handbook-2000 and best practice.

February 2004 Facility Survey Data [SURVEY DATA site.xls](#)

DESIGN STANDARDS

Division 16 - Electrical

16742 Communication & Data Processing Equipment

Reference Section 13700 "Security Access and Surveillance" for telephone backboard, modem and other related requirements.

Communication & Data Standards

Project documents are to include a complete system including all wire pulls and jacks, except as specifically stated herein.

[Modular Building Exception: The only exception is when constructing modular factory built buildings, in which case the conduit runs are to be provided by the modular manufacturer, with the City Department of Information Technologies contracting to provide all wire pulls and jacks. This is due to the nature of the modular being pieced together on-site, making factory wire pulls and splicing difficult. The project budget must provide for funding this separate wiring contract, generally estimated at \$4,000 per modular.]

The following information is provided by the City Department of Information Technologies:

1. Work Station (drop).

- A. 2 Phone Jacks & 2 Data Jacks per Workstation
- B. Phone Wire - Cat. 3, 4/24 UTP (AT&T) *
- C. Data Wire - Cat. 6, 4/24 UTP (Commscope Ultramedia 75N4 Blue)**
- D. Phone Jack - Hubbell HXJUGY*
- E. Data Jack - Hubbell HXJ6B (T568B)**
- F. Wall Plate - Hubbell IMF1W frame w/ (2) IM2KA15W modules or Hubbell AFP14W
- G. Conduit - 3/4" min. drop size
 - a. 1" H.R.- max. 3 drops
 - b. 1 1/4" H.R.- max. 5 drops
- H. Outlet Boxes -- Outlet boxes installed in existing walls (cut-in boxes) for the purpose of terminating Cat. 6 cables, shall be DOUBLE GANG, to provide adequate minimum bend radius.

* Phone Jack Wiring Color Codes

<u>Cable Colors</u>	<u>Jack#1</u>	<u>Jack#2</u>
a. White/Blue-----	White/Blue	
b. Blue/White-----	Blue/White	
c. White/Orange-----	White/Orange	
d. Orange/White-----	Orange/White	
e. White/Green-----		White/Blue
f. Green/White-----		Blue/White
g. White/Brown-----		White/Orange
h. Brown/White-----		Orange/White

** Some installations will require that new wiring be installed to match existing. In such cases, Cat. 5E Commscope 55N4R (NOT BLUE) UTP cable & Black Hubbell HXJ5EBK data jacks will be used and tested to Cat. 5E standards.

DESIGN STANDARDS
Division 16 - Electrical

2. General.

- A. The work covered by this section includes, but is not limited to, furnishing and installing a telephone and data wiring system as specified herein.
- B. The installation shall include UTP cable (unshielded twisted pair copper), connectors (copper), jumpers (twisted pair copper), wiring blocks, telecommunications outlets and any other equipment necessary for a complete system. Contractor shall provide labor and any incidental material required for installation. All copper station cables shall be terminated on patch panels (MDF end) and data communications outlets (work station end). All copper backbone cables shall be terminated on wiring blocks at each end. Upon completion of installation, Contractor shall test all copper pathways and record the test results, as specified in the following.
- C. The work performed under this specification shall be of good quality and be performed in a workmanlike manner. In this context, "good quality" means the work shall meet industry technical standards and have a quality appearance. The City of Las Vegas reserves the right to reject all or a portion of the work performed, either on technical or aesthetic grounds.
- D. All new or newly renovated facilities shall accommodate Telephone & CATV entrance concerns with a minimum of two (2) two inch (2") conduits w/ large radius bends and pull strings, to the Main Telephone Board (TTB) location. In addition, a three quarter inch (3/4") fire retardant plywood backboard (unpainted so Building & Safety can inspect the material), size commensurate to the site's telephone, data, CATV, fire and intrusion alarm requirements, will be installed; along with a #6 ground wire long enough to reach anywhere on the backboard (TTB).

3. Applicable Standards.

- A. EIA/TIA-569A-"Commercial Building Standards for Telecommunications Pathways and Spaces".
- B. EIA/TIA-568A-"Commercial Building Telecommunications Cabling Standard".
- C. EIA/TIA-TSB-36-"Technical Systems Bulletin, Additional Cable Specifications for Unshielded Twisted-Pair Cables".
- D. EIA/TIA-TSB-67-"Transmission Performance Specifications for Field Testing of UTP cabling systems".
- E. EIA/TIA-607-"Commercial Building Grounding and Binding Requirements for Telecommunications".
- F. EIA/TIA-606-"Administration Standards for Telecommunications Infrastructure of Commercial Buildings".
- G. All cabling systems, either conforming to this standard or deviating from this standard, must be proposed in writing and be approved by the City of Las Vegas.
- H. NEC-National Electric Code, Chapter 8.
- I. Local and National Building and Electrical codes.

DESIGN STANDARDS

Division 16 - Electrical

4. Contractor Qualifications.

- A. In order to qualify for installation of the data communications system, Contractor must possess the required license classification, a performance history and a minimum of two (2) years experience in the installation and termination of Category 6 UTP and Fiber Optic Systems. Certifications of training shall be presented with the submittals.

5. Definitions.

- A. Main Distribution Facility (MDF): The MDF is the location(s), within a building, where the entire telecommunications system originates. It may include: the physical location, enclosure, wire and cable management hardware, termination hardware, distribution hardware and equipment racks. The MDF shall be located with the telephone utility demarcation point.
- B. Backboard: Backboard generally refers to the plywood sheeting lining the walls of telecommunications facilities. Backboard may also refer to the entire wall-mounted assembly, including wire management, wiring blocks and equipment racks.

6. Submittals.

- A. Provide 1/8" scale drawings indicating point-to-point wiring requirements, elevations of racks and equipment.

7. Products.

- A. Throughout this specification, Hubbell and other manufacturers are cited, along with specific part numbers. These citations are for the purpose of establishing quality and performance criteria.
- B. Unless specified otherwise, in the following, the equipment furnished shall fall into six (6) classes, and with the exception of class four, all of the material within a single class shall be the standard product of one (1) manufacturer. The six (6) classes are as follows:
 - a. Class One: Copper cable, copper jumpers, interconnection devices, connectors (copper), and wiring blocks. All material covered in Class One shall be equal in quality and performance to that manufactured by AT&T/Lucent.
 - b. Class Two: Nineteen by eighty four inch (19"x 84") Equipment racks. All material covered in Class Two shall be equal in quality and performance to that manufactured by Hubbell, as required.
 - c. Class Three: Communications Cabinets, Patch Panels, Wire Management Panels and Communications Outlets (jacks). All material covered in Class Three shall be manufactured by Hubbell.
 - d. Class Four: Wire ties, labels, "D" rings, nuts, bolts, screws and other miscellaneous hardware.
 - e. Class Five: Category 3 UTP shall be 4 pair cable, 24 AWG, solid copper, unshielded twisted pair, manufactured by AT&T/Lucent.

DESIGN STANDARDS

Division 16 - Electrical

- f. Class Six: Category 6 UTP shall be 4 pair round cable, 24 AWG, solid copper, unshielded twisted pair, Blue Ultramedia 75N4, manufactured by Commscope.

8. Equipment Racks.

- A. Floor standing racks are preferred for data equipment, but when space considerations do not allow for the use of a rack, provide a backboard and Hubbell RE4X wall cabinet, no substitutions allowed. It comes with a NSQ tool that is used to turn recessed bolts in the door and does not require a keyed lock for security.
<http://www.hubbell-premise.com/Pdf/Catalog/CABINETS/REBOX.PDF>
- B. Reference Section "16001 Design Information - Electrical", "Security for Controls and Systems" of these Design Standards for security information on controls, racks, wall cabinets, and their location/security relationship to other facility controls.
- C. Equipment racks shall be assembled in accordance with the manufacturer's instructions and recommendations.

9. Wire Management Components.

- A. Where required, patch panels and wire management components shall be mounted to the equipment racks or the plywood backboard. Each device shall be mounted such that its horizontal dimension is level. In cases where more than one device is mounted, they shall be aligned vertically. A minimum of four (4) of the mounting holes provided shall be utilized for fastening. Screws shall be tightened to the extent that they hold the device snug to the rack or backboard, but not so tight as to damage the device. Patch panels shall be terminated in accordance with the manufacturer's recommendations. Installation of accessories shall be conducted in accordance with the manufacturer's instructions and recommendations.

10. Copper Cable.

- A. Where copper cable enters MDF, it shall be affixed to the rack or backboard via "D" rings and cable ties. All cable runs, within the MDF, shall be horizontal or vertical while maintaining the minimum cable bend radius.

11. Labeling.

- A. All labels shall be machine printed on clear or white tape, stenciled onto adhesive labels or typewritten onto adhesive labels. The font shall be at least one-eighth inch (1/8") in height, block characters and legible. The text shall be of a color contrasting with the label such that it may be easily read. If labeling tape is utilized, the font color shall contrast with the background. Patch panels shall exhibit workstation jack numbers, in sequential order, for all workstations served by the MDF. A numbering scheme will be approved by the City of Las Vegas, prior to labeling.

12. Combination Voice/Data Outlets.

- A. Provide two (2) RJ-11 jacks for voice and two (2) RJ-45 jacks for data at each combination voice/data outlet. The RJ-11 voice jacks shall be wired according to the USOC standard and the RJ-45 data jacks shall be wired to the EIA/TIA T568B standard. All installation/termination of cabling shall comply with code as specified by the EIA/TIA Standards Documents pertaining to the category of cable being installed. Faceplates shall be Hubbell, white, with a minimum of four (4) jacks. Identification of the jacks shall be Gray for voice and Blue for data.

DESIGN STANDARDS
Division 16 - Electrical

13. Workstation Cable.

- A. Description: From the MDF, provide two (2) 4 pair, 24 AWG, Category 6 UTP cables and (1) 4 pair, 24 AWG, Category 3 UTP cable to each workstation/office served by the MDF.
- B. Installation: Installation shall be conducted in accordance with guidelines established by the product manufacturer and industry standards. Wall plates shall be mounted such that their vertical dimension is plumb. Each wall plate shall be labeled with appropriate Voice & Data jack numbers.
- C. Patch Cables: Two (2) Blue Hubbell Category 6 patch cables shall be provided for each workstation served, one (1) 6' and one (1) 12'.

14. Building Interconnect Wiring/Fiber.

- A. Provide a minimum of six (6) pairs of fiber optic cable to be pulled between buildings and to each phone closet and left terminated to patch panels in equipment racks and labeled according to EIA/TIA 606 standards as closet interconnects.
- B. Depending on the requirements of the location in question, any combination of the following types of fiber optic cable & connectors may be specified:
 - a. Singlemode Fiber w/ ST or Yellow SC connectors
 - b. 50/125 Multimode Fiber w/ Orange SC connectors
 - c. 62.5/125 Multimode Fiber w/ ST or Blue SC connectors
- C. Fiber connectors shall be affixed using Epoxy & Polish or Fusion Splicing Only.
(NO CRIMP-ONS)

15. Wiring Closets.

- A. In the wiring closet, all Category 3 UTP cabling will be terminated on 66 blocks.
- B. Category 6 UTP data cabling will terminate in the wiring closet on Category 6 compliant patch panels utilizing the 110-termination system (T568B). The patch panels will be mounted in 19" equipment racks.

16. Specialty Communications Outlets.

- A. Wall mount phones shall comply with ADA requirements and may be whatever faceplate is convenient to the telco contractor.

17. Category 3 & 6 Testing.

- A. Contractor shall test each pair of each twisted pair cable. The City of Las Vegas reserves the right to have a representative present during all or a portion of the testing process. If the City elects to be present during testing, test results will only be acceptable when conducted in the presence of the City.
- B. All data cables will be tested with approved Category 6 test equipment meeting EIA/TIA-TSB 67 requirements from the faceplate to the termination point in the wiring closets and comply with the EIA/TIA 568B and Category 6 Standards. Fiber optic cable will be tested with an

DESIGN STANDARDS

Division 16 - Electrical

approved Fiber tester or an Optical Time Domain Refractometer (OTDR) with attenuation not to exceed 3db/Km and meet FDDI specifications. Each cable will be tested, documented and labeled in accordance with the EIA/TIA 606 standard and provided to the City of Las Vegas.

- C. Workstation Cable: Each workstation cable shall be tested from the Jack Panel to the data outlet jack.
 - a. Test Equipment: Wirescope 350 or equivalent.
 - b. Tests: Attenuation, Noise, Near End Cross-talk, Far End Cross-talk, Length, Power Sum Next, Power Sum ACR, DC loop back resistance, and pair-by-pair continuity.
 - c. Test Criteria: The system shall be tested to Category 6 specifications. The test path shall include workstation jacks, station cables, jack panels and patch cables.
 - d. All voice cables shall be tested to Category 3 specifications and documented.

18. Documentation.

- A. Contractor shall provide documentation in electronic format, including test results and as-built drawings within fourteen (14) days of job completion.
- B. Test Results: The results of the workstation cable and fiber optic, if applicable, tests shall be in the form of pinouts from the test equipment, in a comma delimited format.
- C. As-Built Drawings: Contractor will be provided with clean copies of the Electrical Drawings depicting data outlet location. The Contractor shall update the drawings depicting network drop locations and numbers as they were installed and return a copy to the City, in AutoCADLT format.

19. Acceptance.

- A. Acceptance of the Datacommunications System, by the City of Las Vegas, shall be based on the test results, functionality and the receipt of documentation. With regard to Category 6 functionality, Contractor must demonstrate to the City that gigabit data signals can be successfully transmitted, bi-directionally, from the MDF to and from all individual data outlets. With regard to Fiber cabling, Contractor must demonstrate to the City that it was installed according to standards and passed specific tests. With regard to documentation, all required documentation shall be submitted to the City of Las Vegas.

20. Warranty.

- A. A complete cabling system warranty of no less than 15 years shall be provided to cover applications and components, as well as labor associated with the change out of any non-performing product. Warranty shall cover all installed components from entrance point to workstation outlets. Contractor will correct any problems resulting from their workmanship or the provided material failure, providing that there have been no alterations or changes to the installation by personnel other than the Contractor. Contractor will respond to warranty repair calls within 48 hours.

21. Cable Termination.

- A. Maximum distance for any single Category 6 data run shall not exceed 90 meters.
- B. Category 6 data cables shall be terminated in accordance with standards and practices governing the installation of such cable. This includes proper termination techniques to ensure

DESIGN STANDARDS

Division 16 - Electrical

minimum near end cross talk (NEXT). Contractor may be asked to verify that the installed cable meets Category 6 requirements and is capable of GIGABIT data transmission speeds.

- C. Category 6 data cables shall be terminated on RJ-45 jacks that are wired to the T568-B standard. Jacks shall be rated and clearly designated Category 6 compliant (Cat.6). All pairs shall be terminated on each jack.
- D. Category 3 voice cables shall be terminated on RJ-11 jacks that are wired to the USOC standard. Two (2) pairs shall be terminated on each jack.
- E. In locations where voice and data jacks are required, such jacks shall be combined into a double gang outlet box with single gang mounting plate. Each jack must be labeled VOICE or DATA.
- F. All cables, jacks, patch panels and wiring blocks shall be clearly marked with a unique number designation identifying the cable termination at the jack location and the corresponding termination in the wiring closet.

22. Raceways.

- A. All voice and data cable must be installed in conduit or approved raceway systems. Cable trays and conduit systems shall comply with a minimum bend radius and separation from power cabling and fluorescent lighting requirements as specified in the EIA/TIA 568A and 569A standards. Where conduit is installed, the bend radius shall be a minimum of 10X the diameter of the conduit.
- B. Minimum conduit size for systems installed under this section shall be ¾".

Telecommunications Standards for Parks and Open Spaces

Parks and Open Spaces Categories:

- Parks without buildings or walled enclosures.
- Parks with irrigation pump or other walled enclosures (but no buildings).
- Parks with rest room facilities and sports field lighting.
- Parks with multiple buildings, sports field and other sports facilities lighting.
- Single or multiple buildings with irrigation controllers and/or sports field lighting controls separate from the building TTB.

23. Basic Sprint Service Requirements

- A. These design standards do not attempt to list all Sprint requirements. Reference the Sprint standards and Sprint design engineer for standards and required variations from the following standards.
- B. Provide two 2" buried conduits originating from the nearest Sprint designated telephone cable facilities to the park's designated point of termination, aka - telephone board (TTB), per Sprint Engineer's specifications.
 - a. Provide one pull string per conduit end to end.
 - b. All bends shall consist of not less than 24" sweeps.
 - c. No buried elbows of any degree shall be used.

DESIGN STANDARDS
Division 16 - Electrical

- C. Provide one 30" pull box for every 400' of buried conduit length and/or for each 270 degrees of bends.
- D. Provide one unpainted ¾" fire-retardant plywood backboard of not less than 24" X 24" mounted 40" above grade (unpainted so Building & Safety can inspect the material).
- E. Provide one #6 ground located at the backboard.
- F. The TTB shall be placed to allow easy access by Sprint Technicians.

24. Parks without buildings or walled enclosures.

- A. Provide one 24" X 24" X 6" locking outdoor cabinet as the TTB.
- B. This cabinet shall be mounted on a free-standing pedestal. This pedestal may be a portion of a CMU wall or other solid structure. Do not mount to steel posts. Locate and paint out the cabinet so it is not generally noticable by the public. Sprint must have direct and exclusive access to the cabinet; other equipment may not be included within the same cabinet, such as lighting timers, irrigation controls, etc.
- C. This cabinet shall be mounted 40" above grade.
- D. Provide full size ¾" plywood backboard within the cabinet.
- E. Provide #6 ground within the cabinet.
- F. Provide one 1" conduit using 12" sweeps for all bends, with a pull string end to end, from this cabinet to the Irrigation CPU (Central Processing Unit).

25. Parks with irrigation pump or other walled enclosures (but no buildings).

- A. Provide one 24" X 24" X 6" locking outdoor cabinet as the TTB.
- B. This cabinet shall be mounted to the outside wall of pump enclosure wall. Locate and paint out the cabinet so it is not generally noticeable by the public. Sprint must have direct and exclusive access to the cabinet; other equipment may not be included within the same cabinet, such as lighting timers, irrigation controls, etc.
- C. This cabinet shall be mounted 40" above grade.
- D. Provide full size ¾" plywood backboard within the cabinet.
- E. Provide #6 ground within the cabinet.
- F. Provide one 1" conduit using 12" sweeps for all bends, with a pull string end to end, from this cabinet to the Irrigation CPU (Central Processing Unit).

26. Parks with rest room facilities and sports field lighting.

- A. Provide one 24" X 24" X ¾" (minimum) plywood backboard as the TTB (or this minimum dedicated area of a larger backboard as detailed on the city restroom drawings).
- B. This backboard shall be mounted within the rest room plumbing chase whenever possible.

DESIGN STANDARDS
Division 16 - Electrical

- C. This backboard should be mounted 40" from the floor.
- D. Provide one 1" conduit using 12" sweeps for all bends, with a pull string end to end, from the TTB to the Irrigation CPU (Central Processing Unit).
- E. Provide one 1" conduit using 12" sweeps for all bends, with a pull string end to end, from the TTB to the Lighting Control Cabinet.

27. Parks with multiple buildings, sports field and other sports facilities lighting.

- A. Provide one 48" X 48" X 3/4" plywood backboard for the TTB.
- B. This backboard should be mounted within a building's utility room whenever possible.
- C. This backboard should be mounted 24" from the floor.
- D. Provide one 1" conduit using 12" sweeps for all bends, with a pull string end to end, from the TTB to the Irrigation CPU (Central Processing Unit).
- E. Provide one 1" conduit using 12" sweeps for all bends, with a pull string end to end, from the TTB to the Lighting Control Cabinet.
- F. Provide one 2" conduit using 24" sweeps for all bends, with a pull string end to end, from the TTB to the utility room of each building to be occupied.
- G. Any building that requires telephone or data equipment to be installed shall comply with City of Las Vegas Design Standards for the installation of conduit and communication jacks.

28. Single or multiple buildings with irrigation controllers and/or sports field lighting controls separate from the building TTB.

- A. Provide one 2" conduit using 24" sweeps for all bends, with a pull string end to end, from the TTB to the Irrigation CPU (Central Processing Unit).
- B. Provide one 2" conduit using 24" sweeps for all bends, with a pull string end to end, from the TTB to the Lighting Control Cabinet.
- C. Provide one 30" pull box for every 400' of buried conduit length and/or for each 270 degrees of bends.

Telecommunications Standards for Elevator Emergency Telephones

29. Types of Communications.

- A. Analog voice via programmable automatic-dial telephones.
- B. Analog voice via Telco provided automatic ring-down service.

30. Elevator Categories.

- A. New buildings with single or multiple elevators.
- B. Existing buildings with existing single or multiple elevators.
- C. Existing buildings being upgraded by adding elevators.

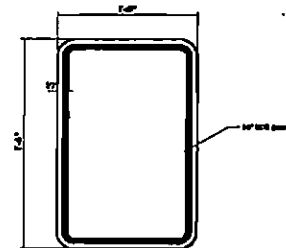
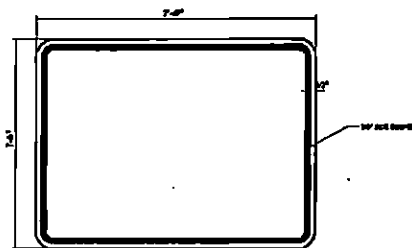
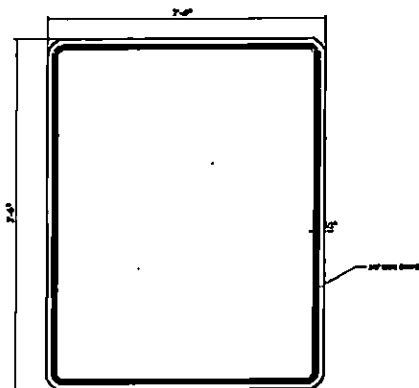
DESIGN STANDARDS
Division 16 - Electrical

31. Basic Elevator Requirements.

- A. Each elevator car shall be pre-wired with a voice grade wire/cable to the nearest telephone facilities.
- B. One dedicated telephone line per each elevator car.
- C. Provide one analog voice two-way emergency telephone per car.
- D. Emergency Elevator Telephone Types:
 - a. Programmable Touchtone Automatic Dialing telephones.
 - b. Standard no-dial telephones connected to a Telco provided Automatic Ring-Down Service.
- E. All emergency telephones will automatically dial Fire Control at 382-3000 when the receiver is taken off-hook.
- F. All emergency telephones shall be capable of receiving incoming calls from emergency services personnel.
- G. All elevator emergency telephones shall be accessible from a prone position from the floor of the car.

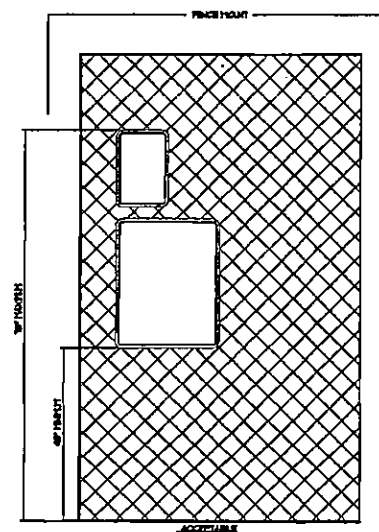
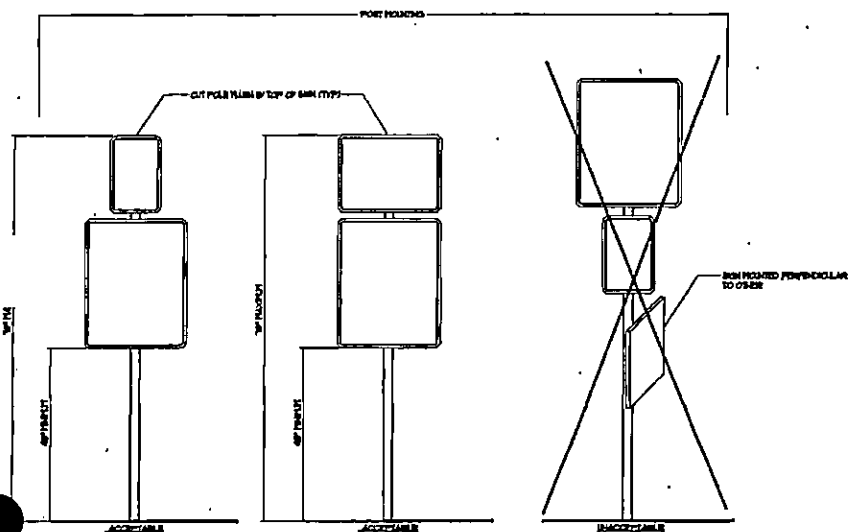
32. Contacts.

- A. If you have any questions or concerns, please feel free to contact Datacom Doug @ (702) 229-6097 or Dick Reithel at (702) 229-6636.



Standard Sign Sizes

Units: 1/2" = 1'

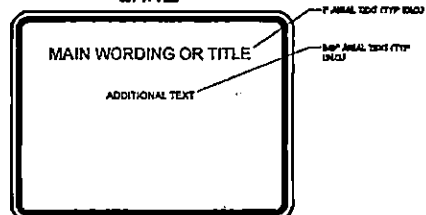


Typical Mounting

Units: 1/2" = 1'

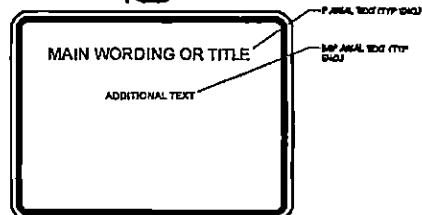
1. Signs attached to fence shall be left side, facing the back fence.
2. Signs attached to fence shall be supported by fence of fence.
3. No post mounted signs shall be installed perpendicular to back fence.
4. Signs attached to fence shall be the same size and shape.

WHITE



MAIN WORDING AND PLANE ACTIVITY IDENTIFICATION
WHITE BACKGROUND
TEXT AND STRIPS TO BE BLACK (BLACK)

RED

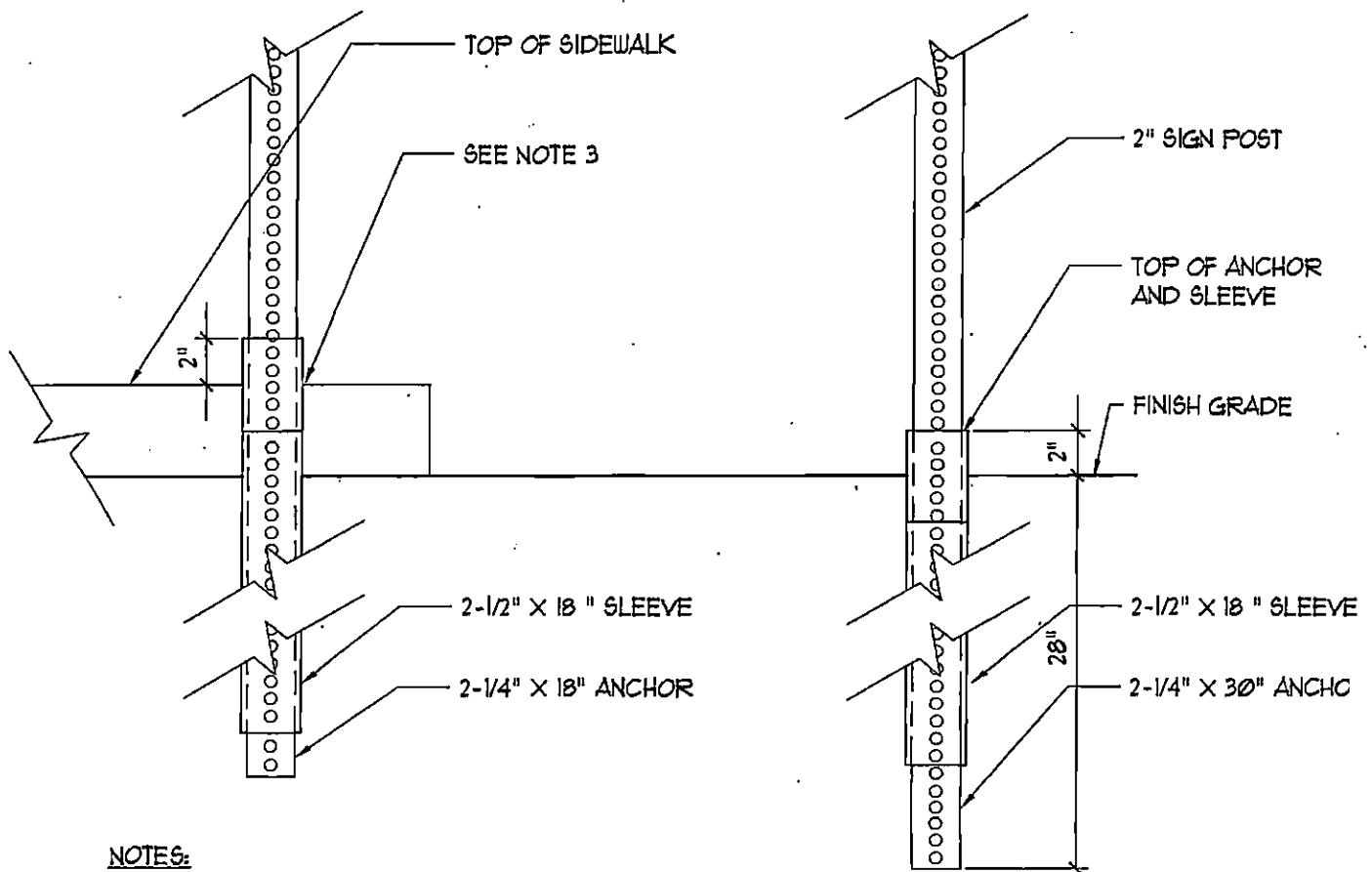


MAIN WORDING
RED BACKGROUND
TEXT AND STRIPS TO BE WHITE (BLACK)

Standard Sign Colors

Units: 1/2" = 1'

REVISED 4/20/04



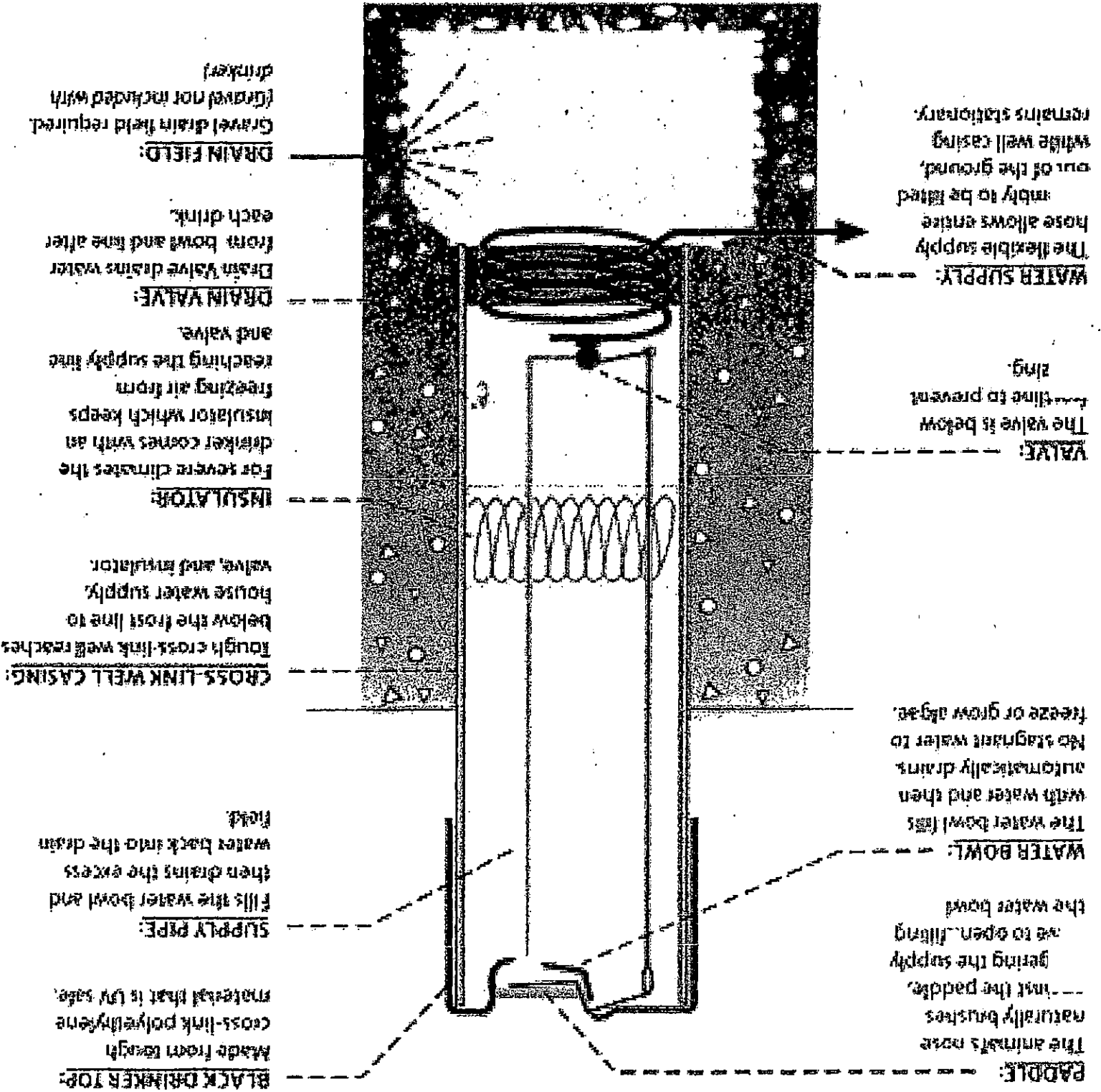
NOTES:

1. ALL COMPONENTS SHALL BE SQUARE POST, PERFORATED ON ALL FOUR SIDES.
2. ATTACH ANCHOR AND SLEEVE TOGETHER PRIOR TO DRIVING INTO GROUND. LEAVE AT LEAST ONE HOLE, BUT NO MORE THAN TWO, ABOVE GROUND OR ABOVE SIDEWALK.
3. FOR SIDEWALK INSTALLATION, DRILL SIDEWALK WITH A 3" HOLE, THE CENTER TO BE 6" FROM BACK OF SIDEWALK.
4. ATTACH POST TO ANCHORING SYSTEM BY USING AT LEAST TWO 3/8" DIA DRIVE RIVETS.
5. PROVIDE 4" MINIMUM LAP BETWEEN POST AND THE ANCHOR/SLEEVE ASSEMBLY.

Sign Post Installation

Scale: 1-1/2" = 1'-0"

REVISED 8/21/03 ST10426-04



NOTE:

- GATE IS TO BE CONNECTED INTO BUILDING ALARM SYSTEM
- ALL WELDS TO BE GRIND SMOOTH
- ALL CONDUIT TO BE CONCEALED IN FRAME
- ALL HOLES TO BE PREDRILLED IN POLYCARBONATE
- ALL STEEL TO BE GALVANIZED
- ALL TAMPERPROOF HARDWARE TO BE STAINLESS STEEL

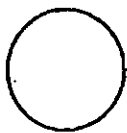
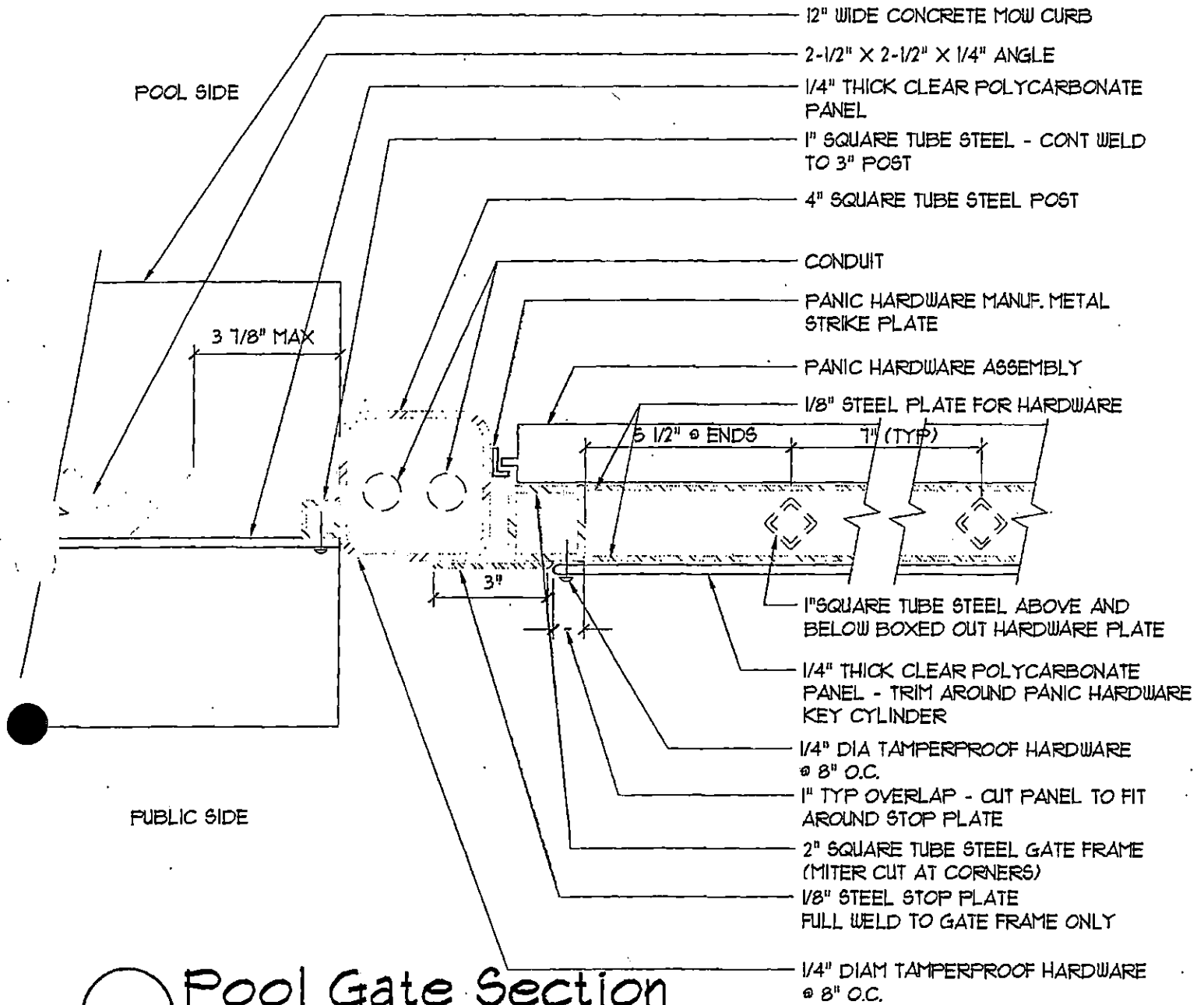
LEGEND / COMPONENTS:

- 1/4" THICK CLEAR POLYCARBONATE PANEL
- 1/8" STEEL STOP PLATE WELDED TO GATE TRIM POLYCARBONATE PANEL AROUND PLATE
- 3/16" BENT PLATE FRAME HEADER - SEE DETAIL INDICATED
- BATTERY BACKUP EXTERIOR EXIT SIGN
- BOX OUT AREA AS SHOWN W/ 1/8" STEEL FOR HARDWARE
- PANIC HARDWARE - "VON DUPRIN" #99 NLOP - TRIM POLYCARBONATE PANEL AROUND KEY CYLINDER
- SELF CLOSING SPRING PIVOTS PROVIDE (2) PER GATE
- (3) GATE HINGES WELDED TO POST AND GATE FRAME PROVIDE GREASE FITTINGS

DIMENSIONS & DETAILS:

- 7" (TYP)
- 28" MIN
- 3'-2 1/2"
- 6'±
- ABOVE CURB
- FULL-TO-GO PUSHBAR
- CONCRETE MOW CURB AND FOOTINGS FOR GATE FRAME AND STEEL ANGLES TO BE DESIGNED BY STRUCTURAL ENGINEER

ST13152-01

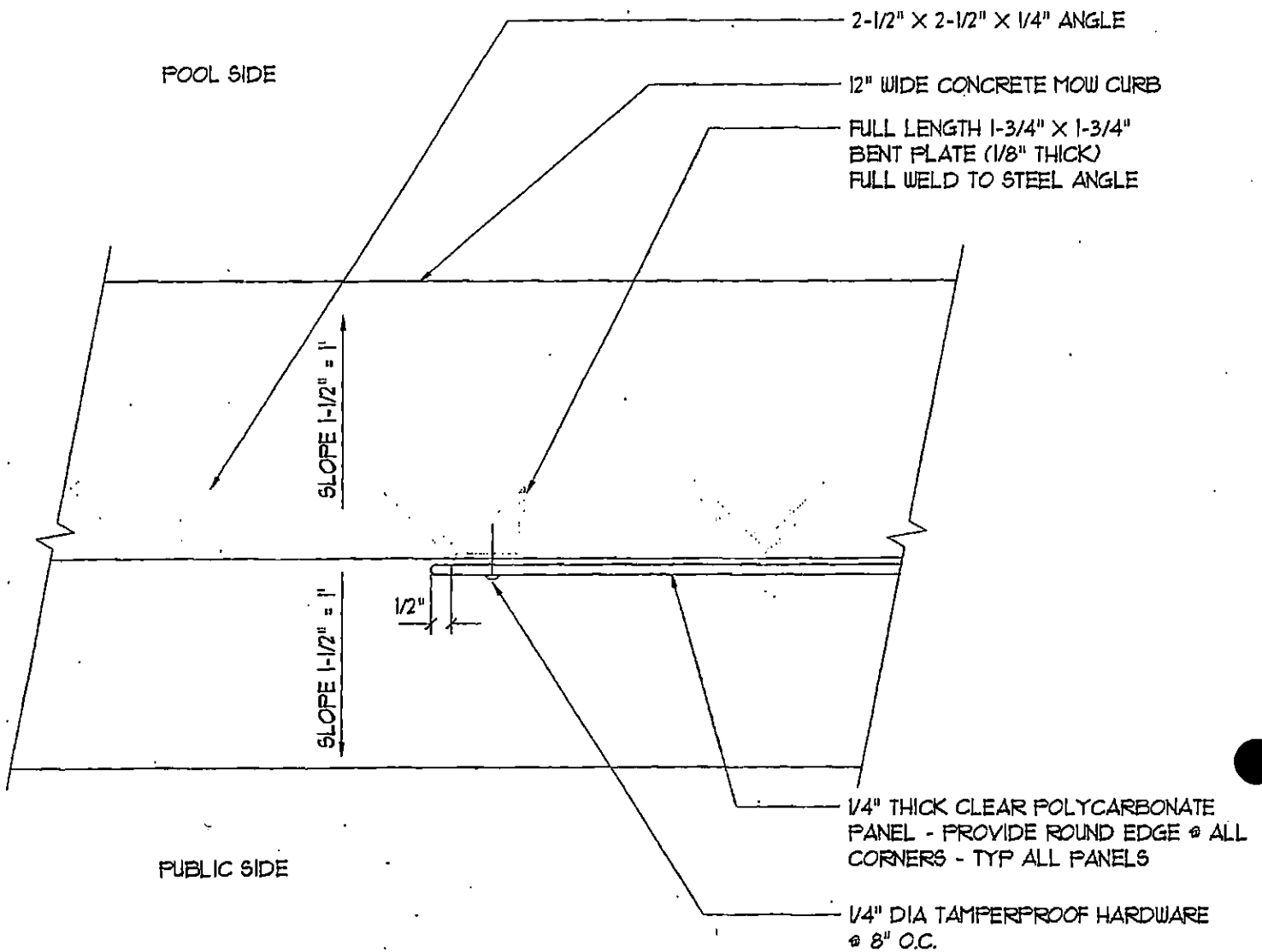


Pool Gate Section

Scale: 3" = 1'-0"

Revised 12/10/04

ST13152-02

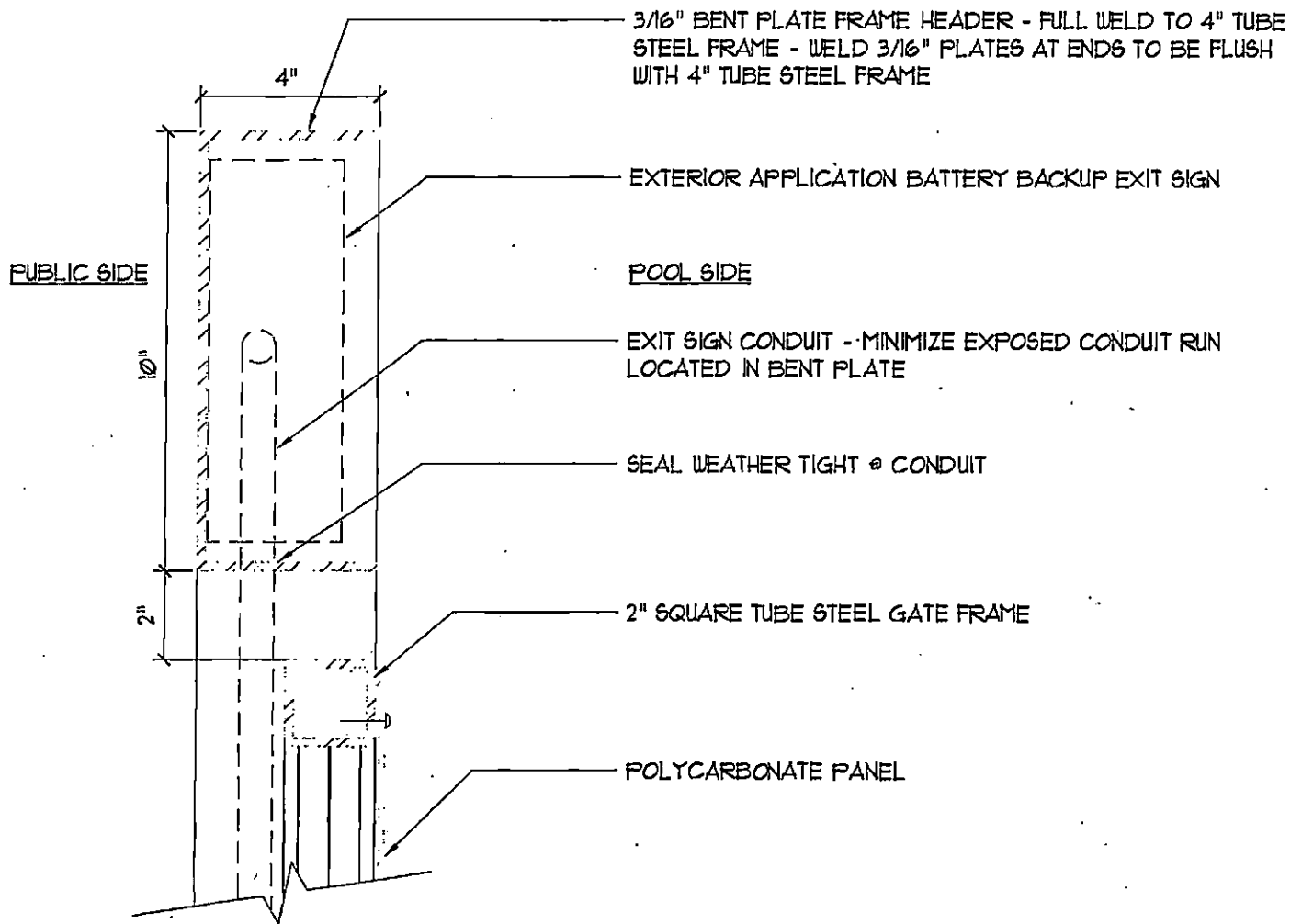


Pool Gate Section

Scale: 3" = 1'-0"

Revised 12/10/04

ST13152-03

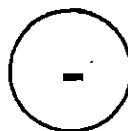
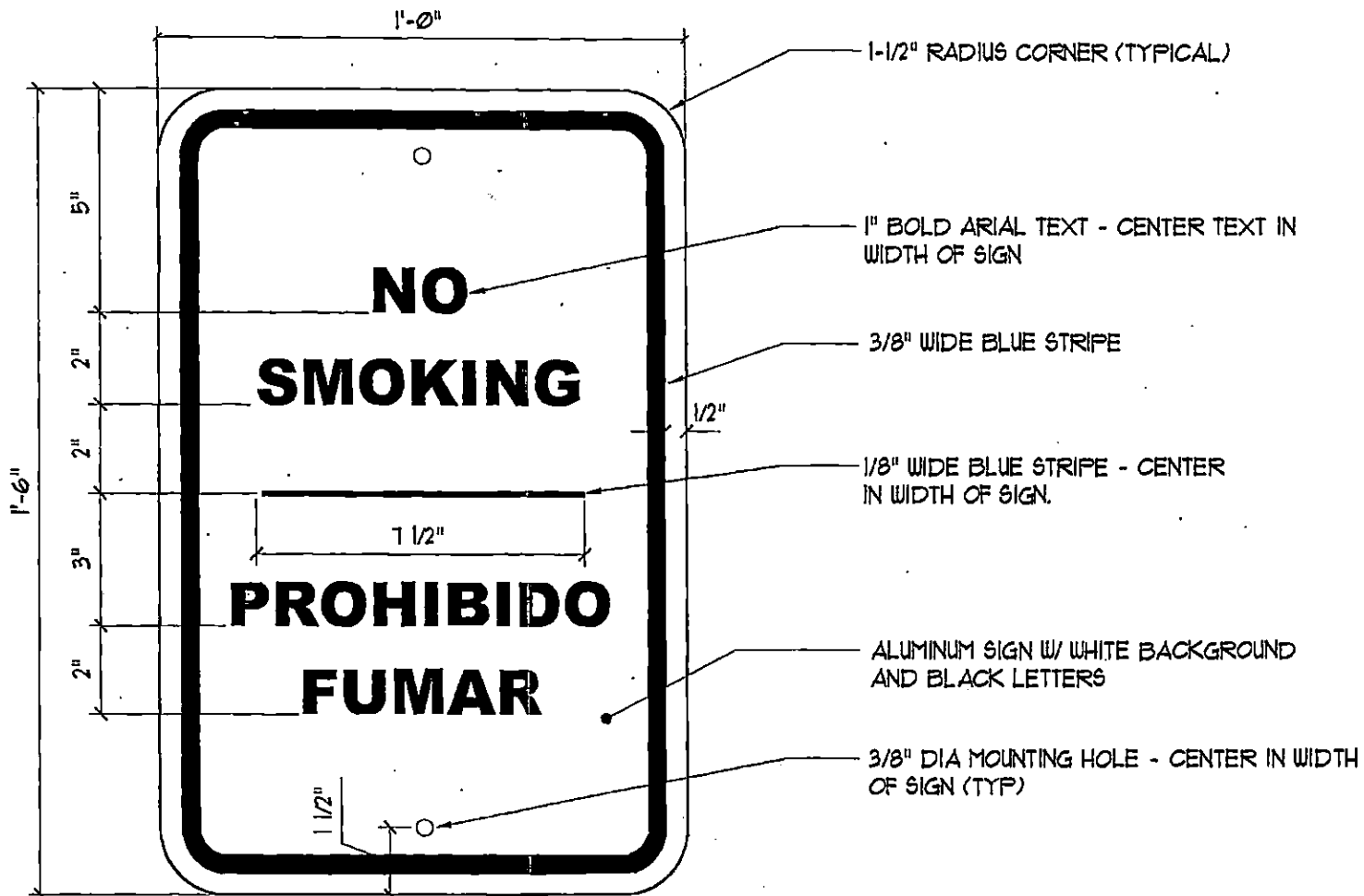


Pool Gate Section

Scale: 3" = 1'-0"

Revised 5/20/04

ST13152-04

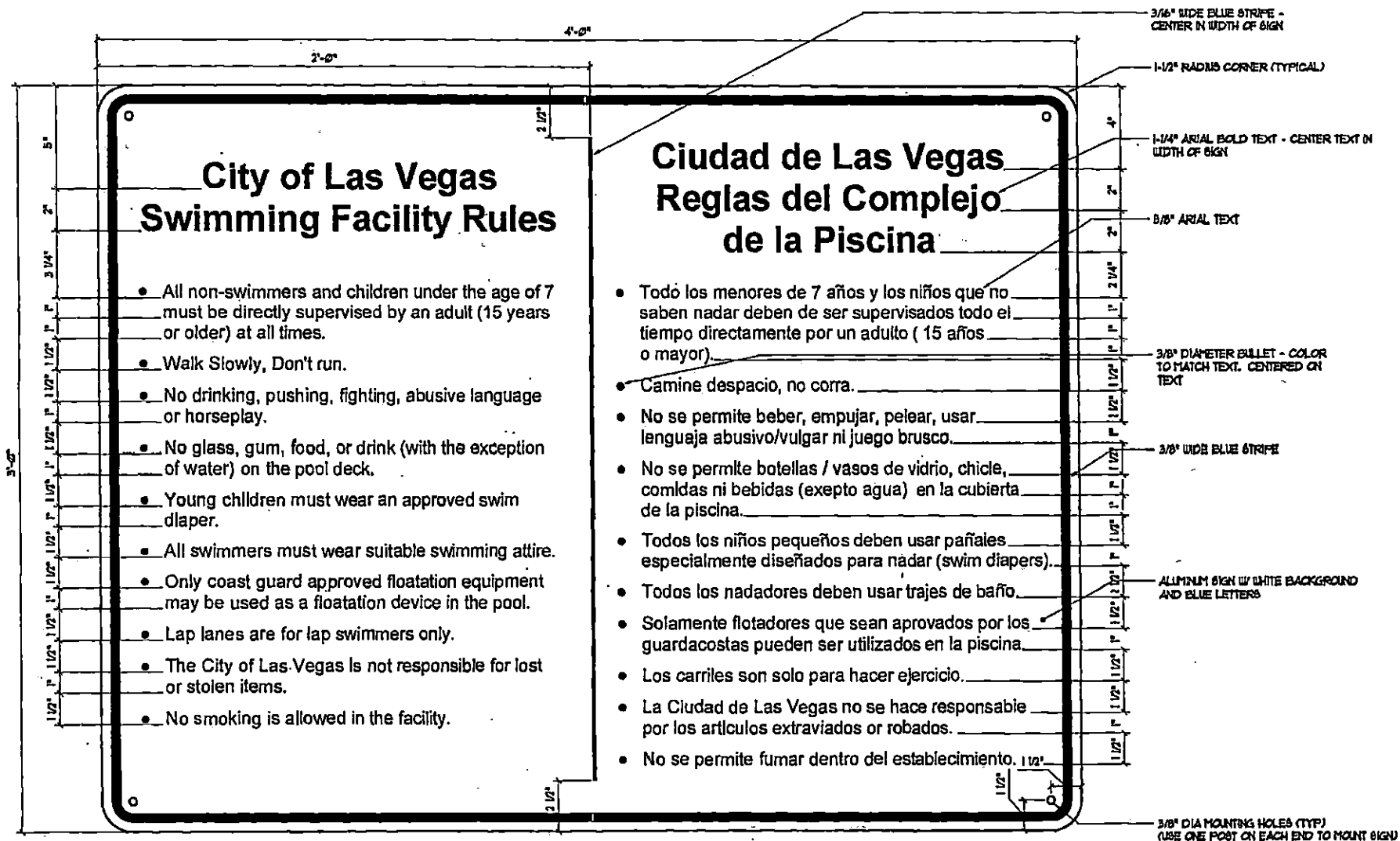


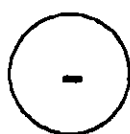
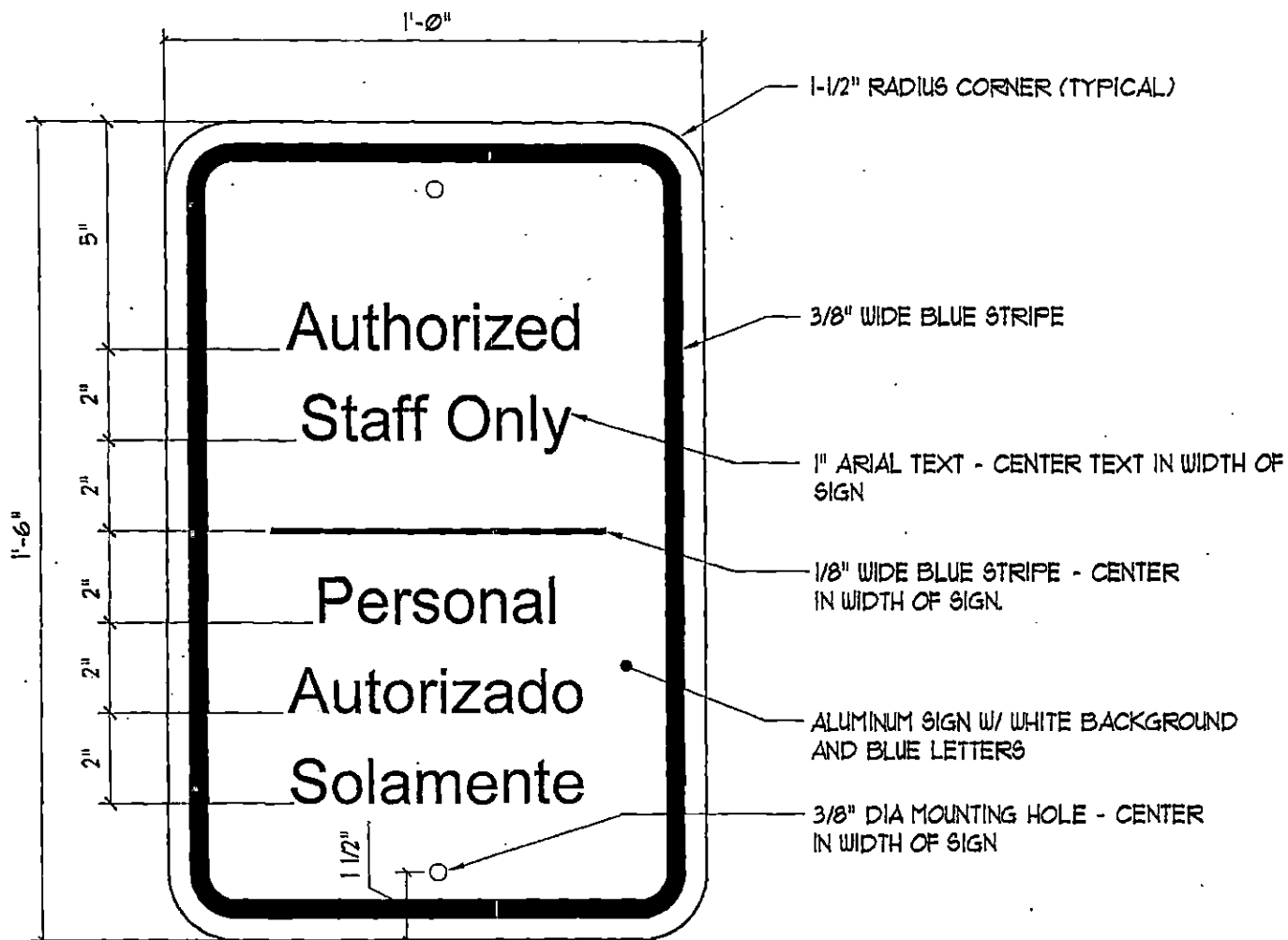
No Smoking Sign

Scale: 3" = 1'-0"

REVISED 4/13/05

6T13152-06



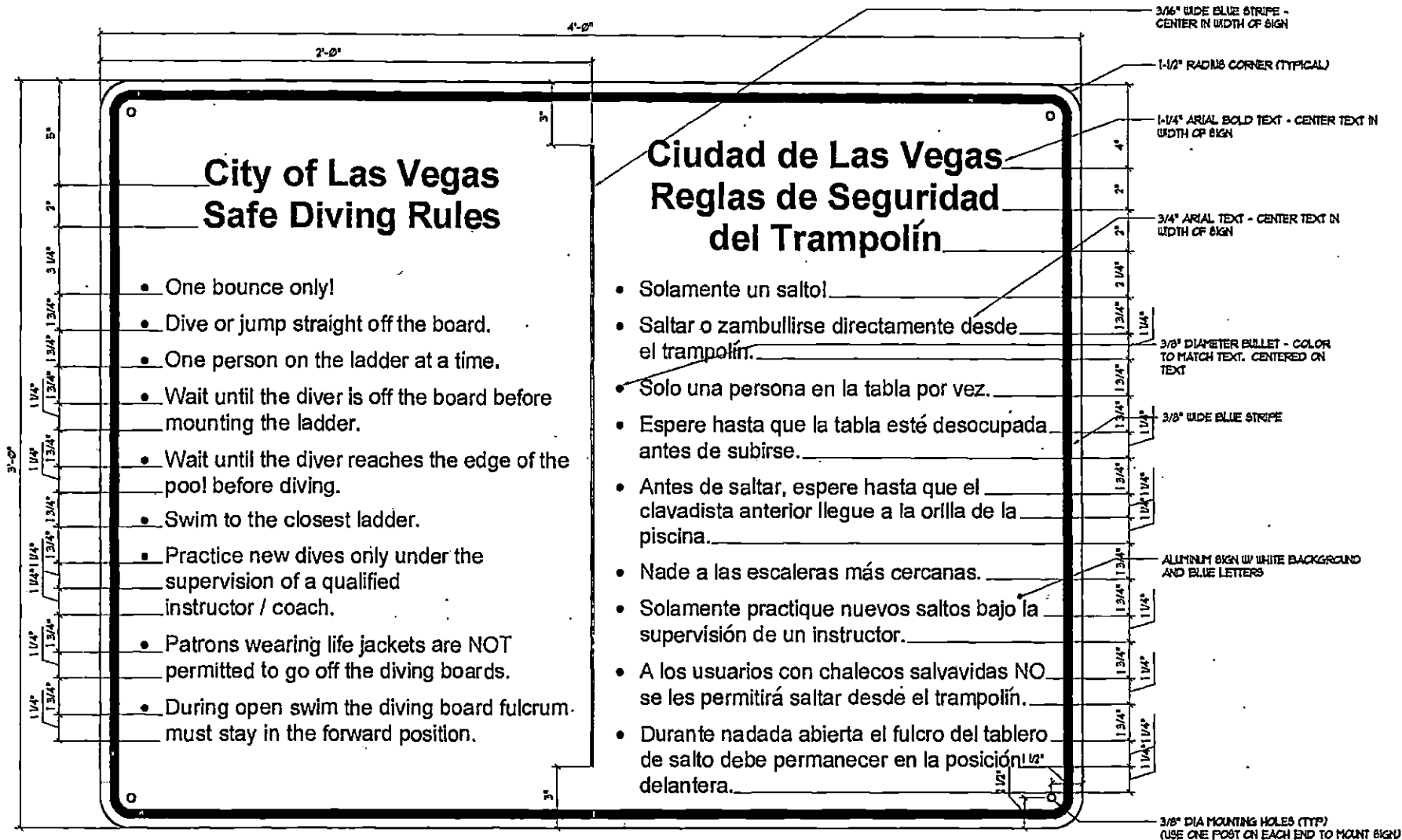


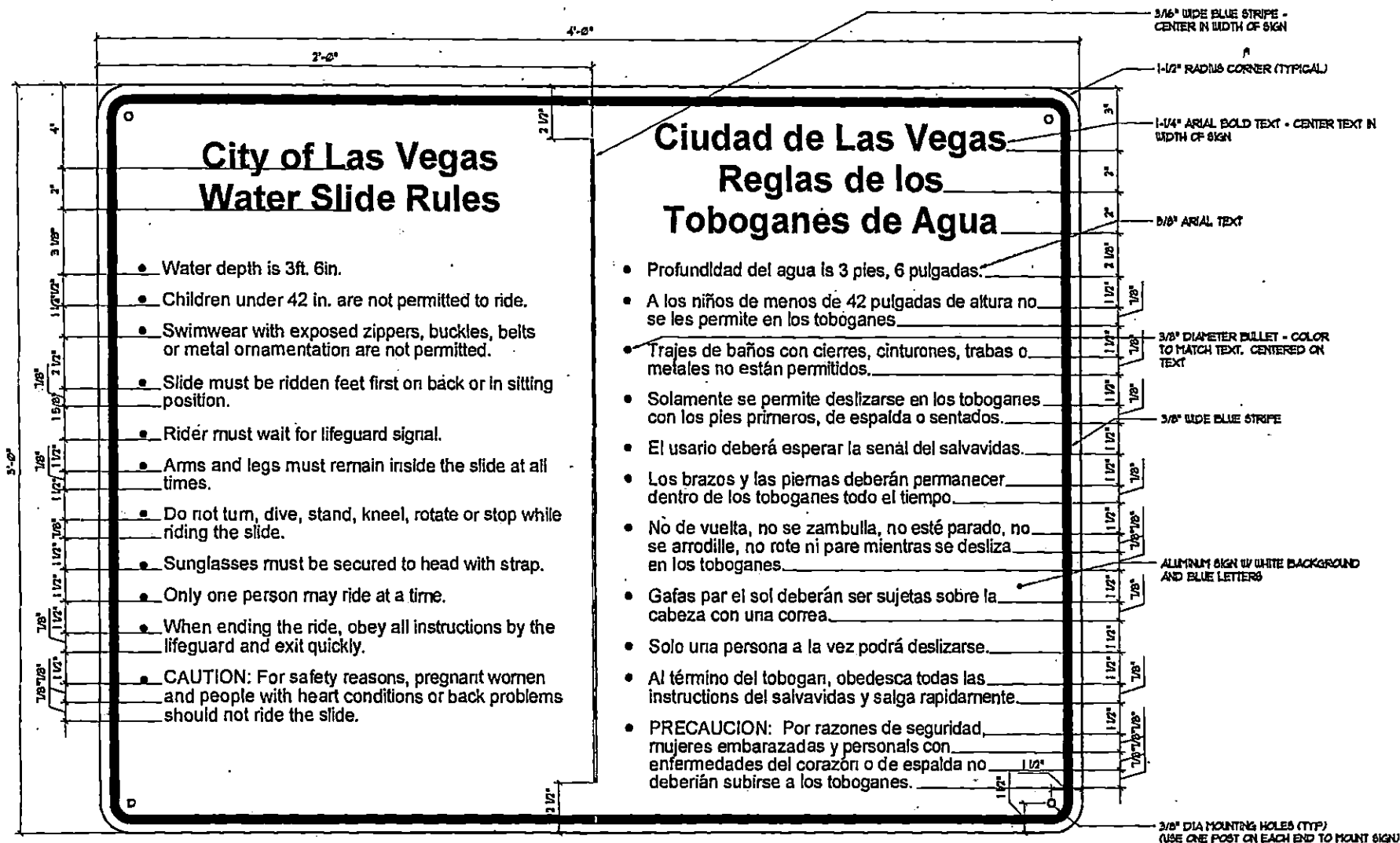
Authorized Staff Only Sign

Scale: 3" = 1'-0"

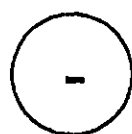
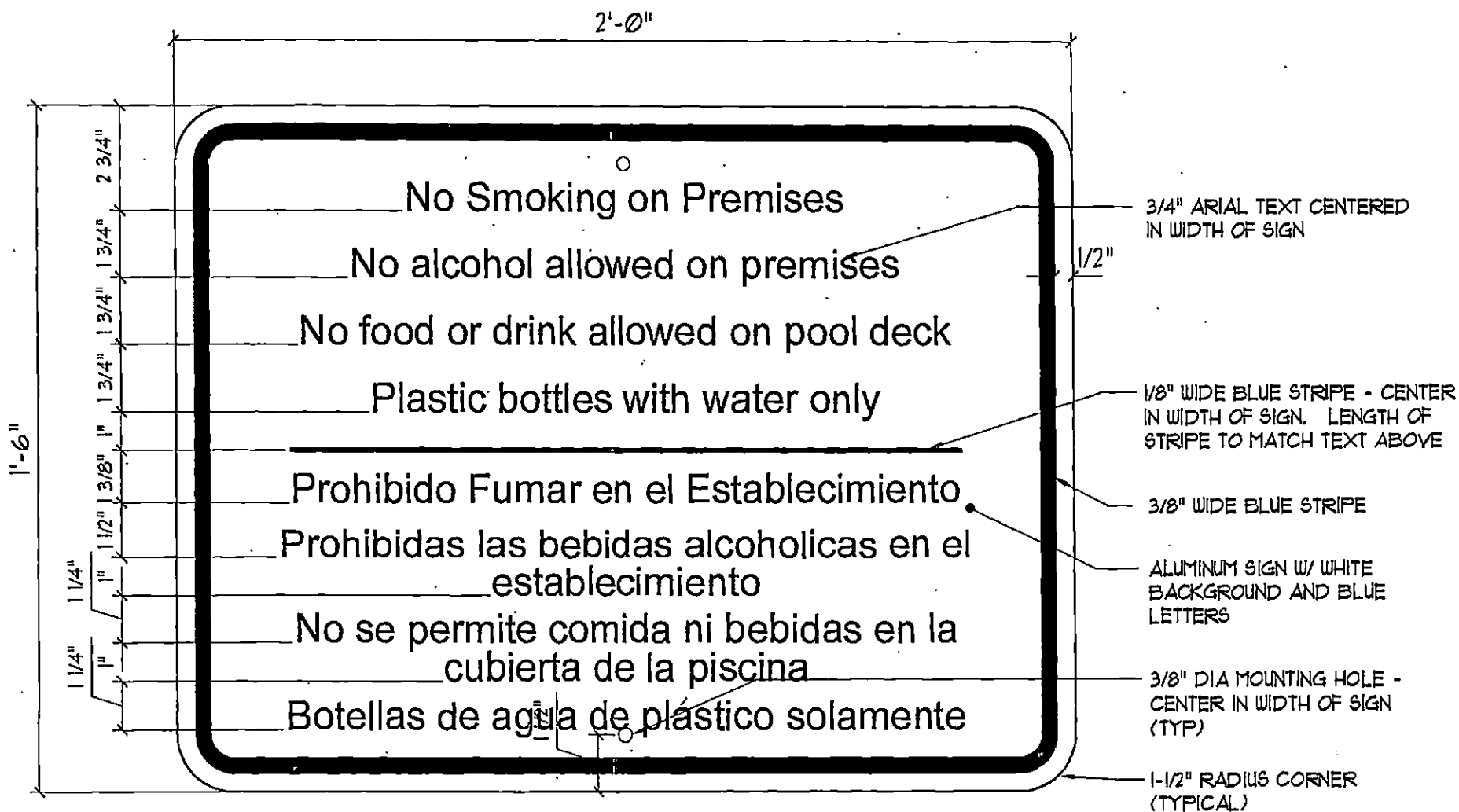
REVISED 4/13/05

ST13152-03





Water Slide Rules Sign
Scale: 3" = 1'-0"

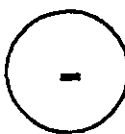
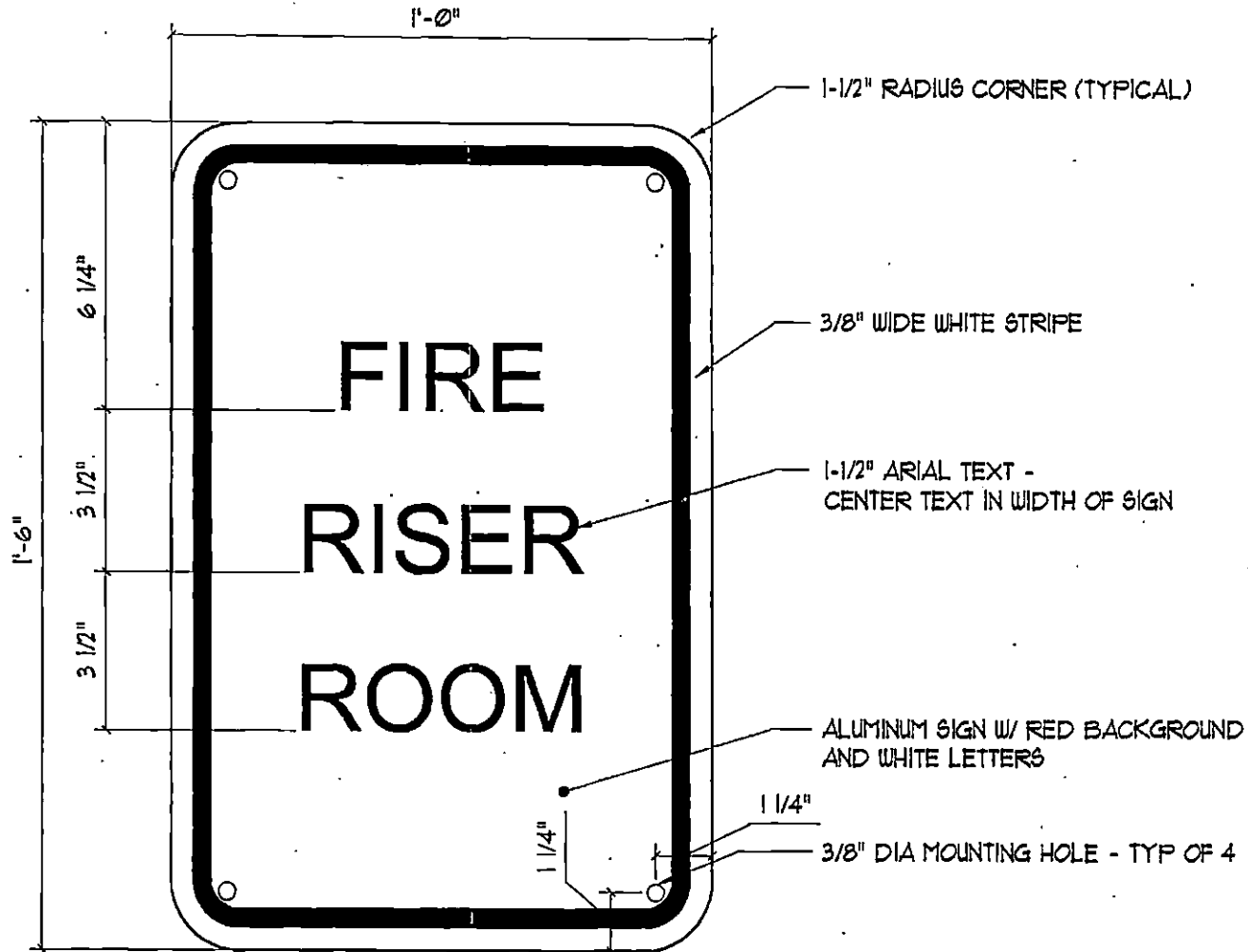


No Smoking on Premises Sign

Scale: 3" = 1'-0"

REVISED 4/14/05

ST13152-12

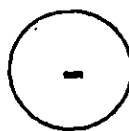
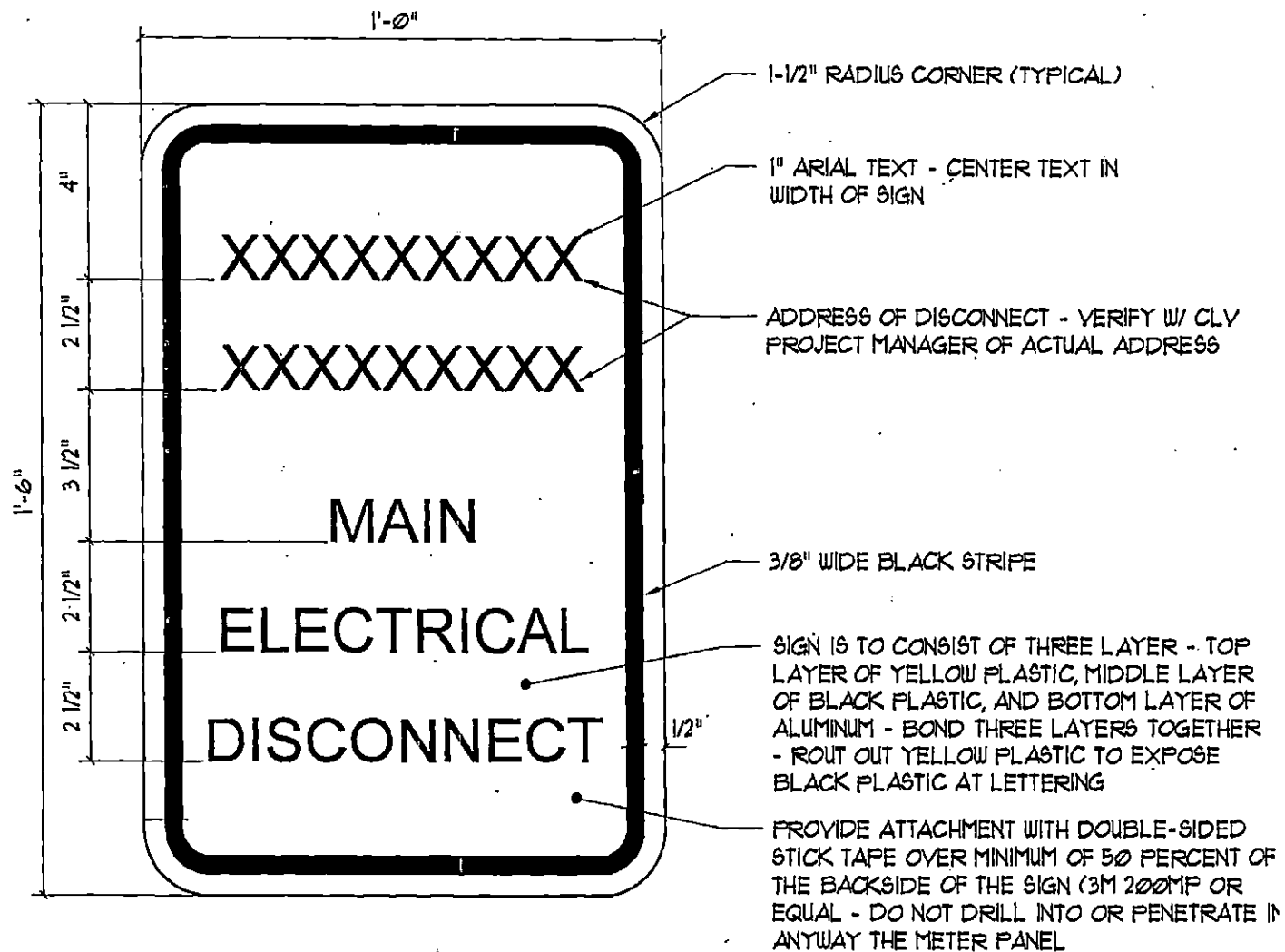


Riser Room Sign

Scale: 3" = 1'-0"

REVISED 1/9/04

6T13910-01

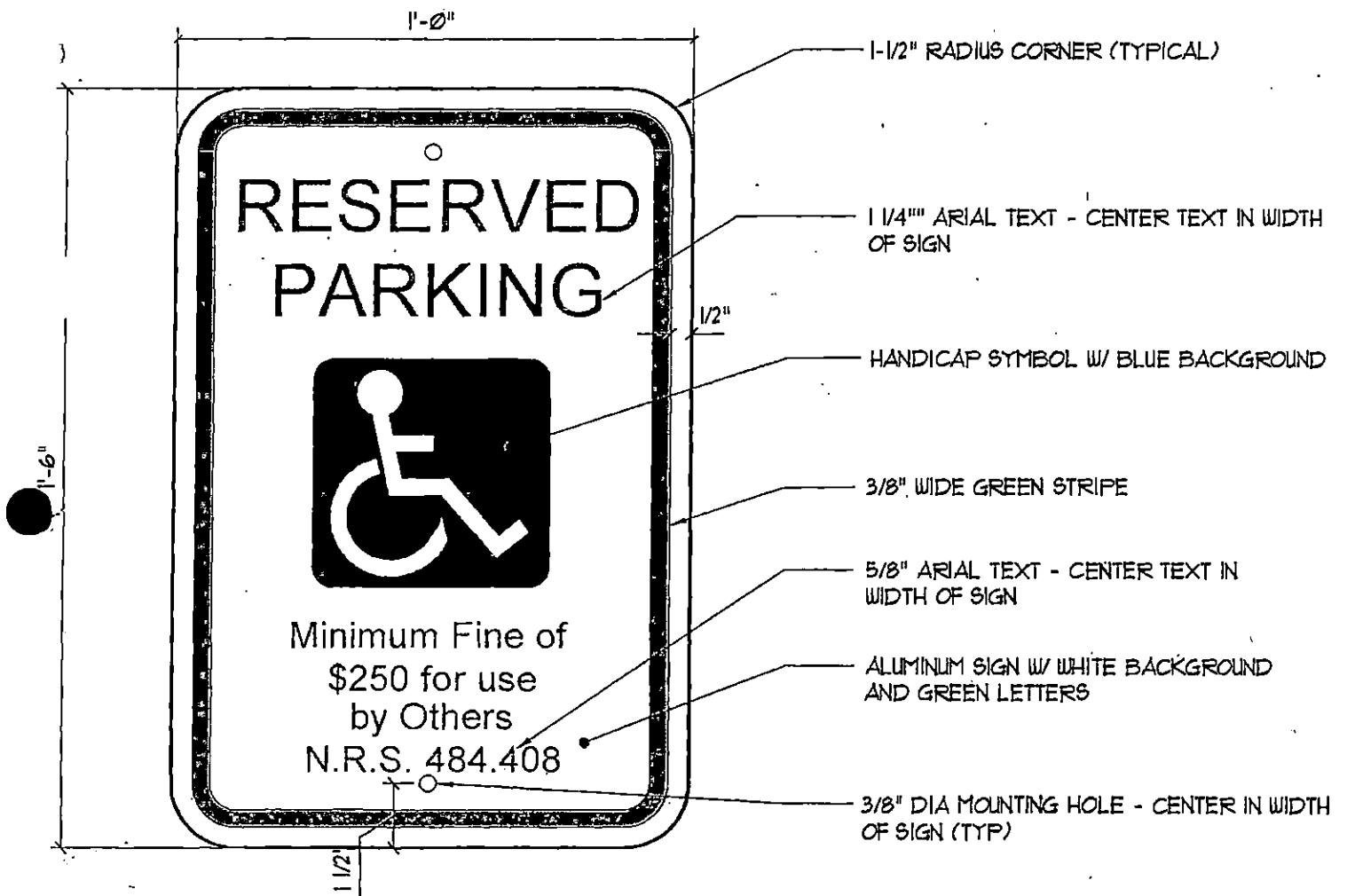


Main Disconnect Sign

Scale: 3" = 1'-0"

REVISED 3/21/05

ST02882-38

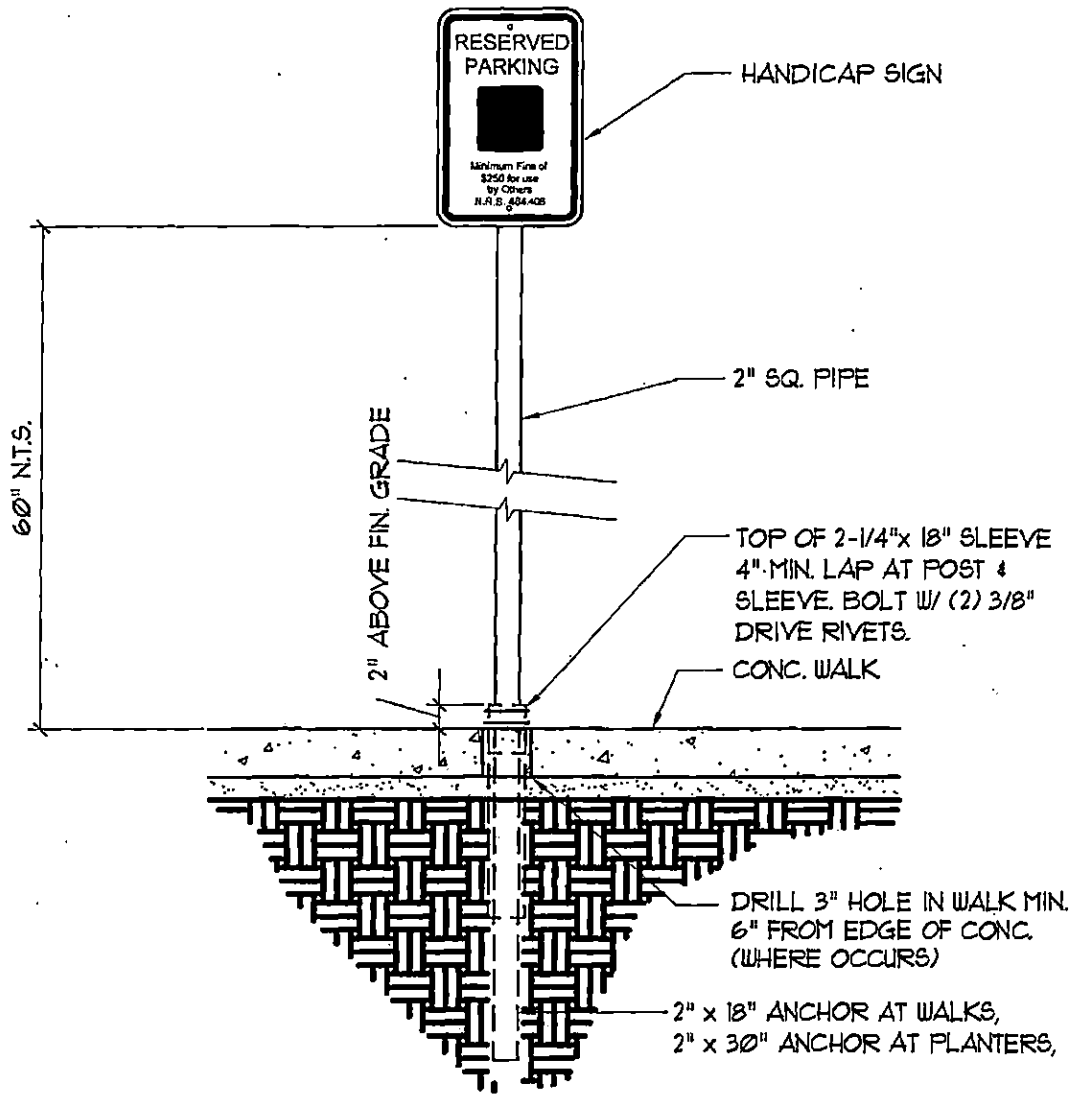


Handicap Sign

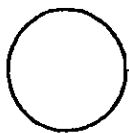
Scale: 3" = 1'-0"

REVISED 82.05

ST01030-5



ALL COMPONENTS TO BE GALVANIZED SQUARE POST. ATTACH ANCHOR TO SLEEVE PRIOR TO DRIVING INTO GROUND.

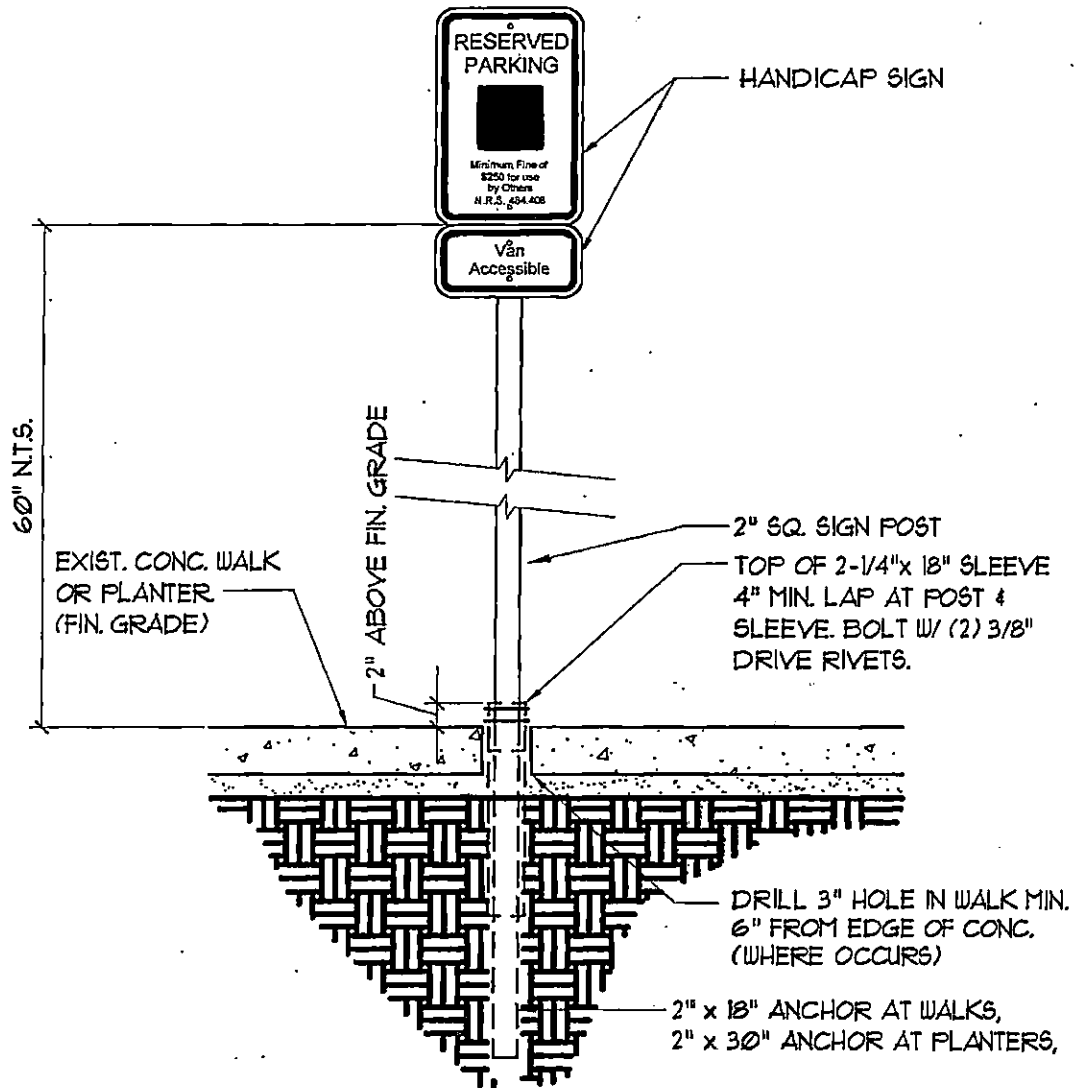


Handicap Parking Signage

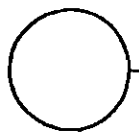
Scale: 3/4"=1'-0"

REVISED 8/2/05

ST01030-1a



ALL COMPONENTS TO BE GALVANIZED SQUARE POST. ATTACH ANCHOR TO SLEEVE PRIOR TO DRIVING INTO GROUND.

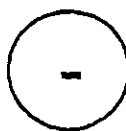
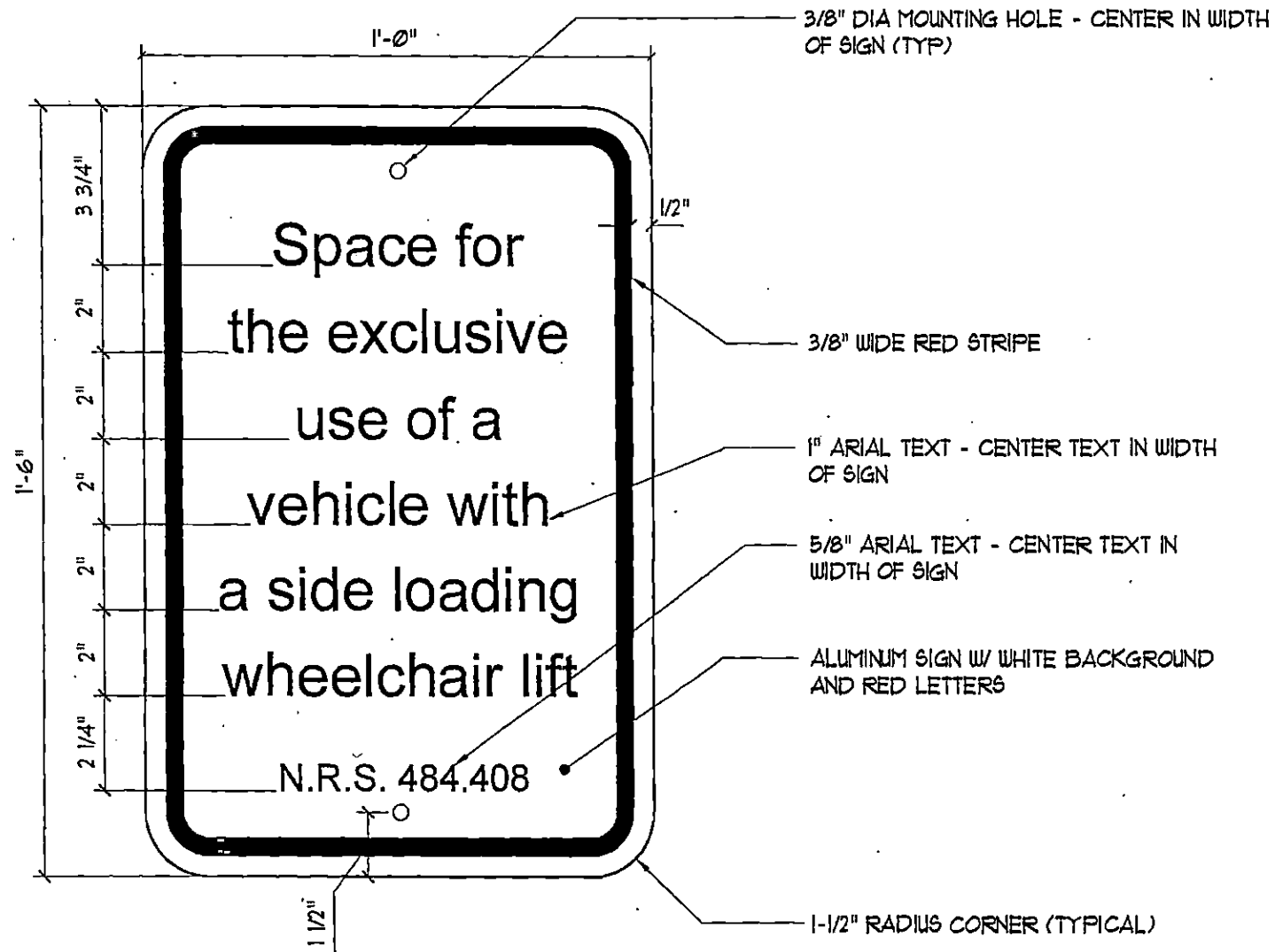


Handicap Parking Signage

Scale: 3/4"=1'-0"

REVISED 8/2/05

ST01030-2a

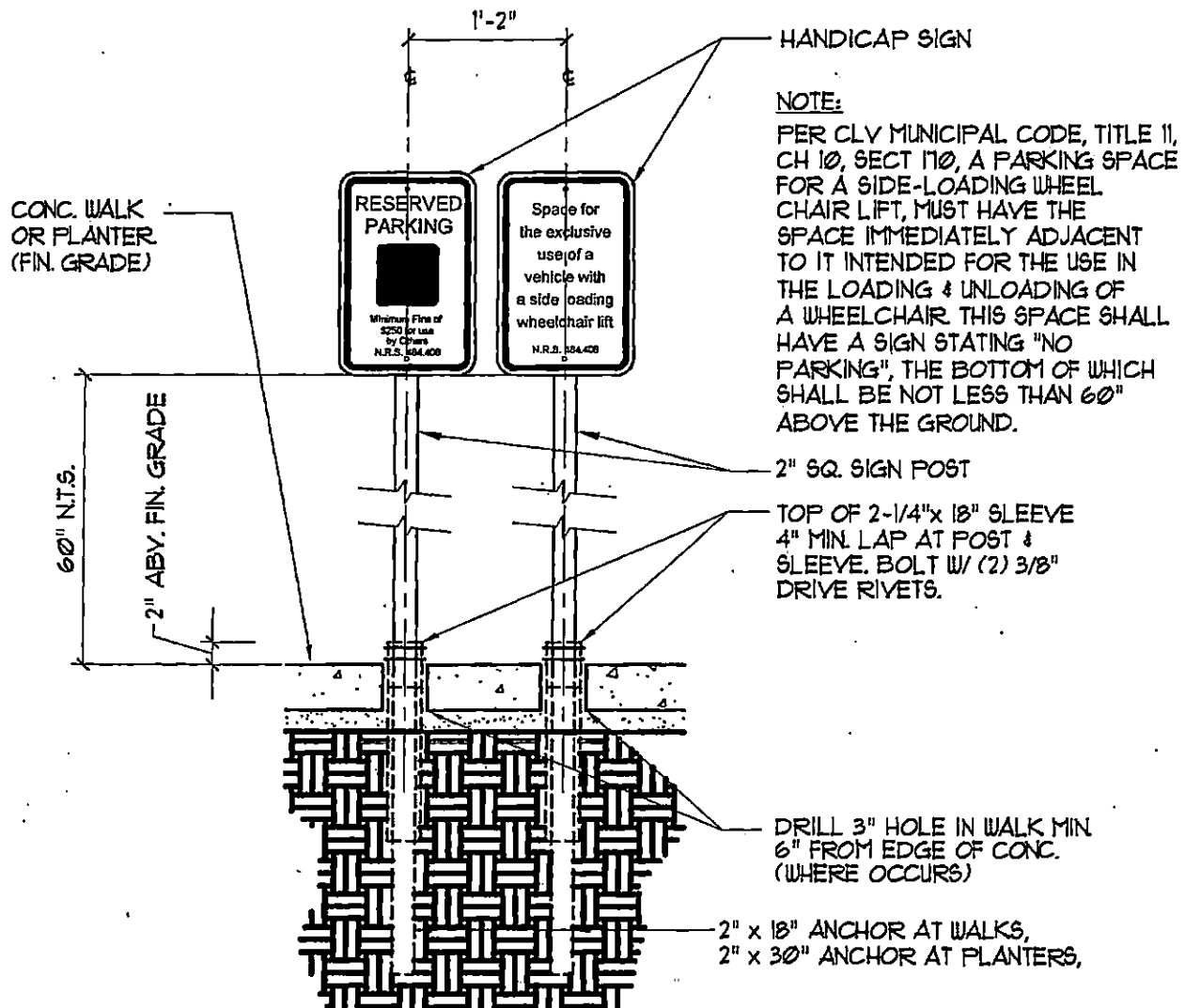


Handicap Sign

Scale: 3" = 1'-0"

REVISED 8/21/03

ST01030-3



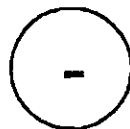
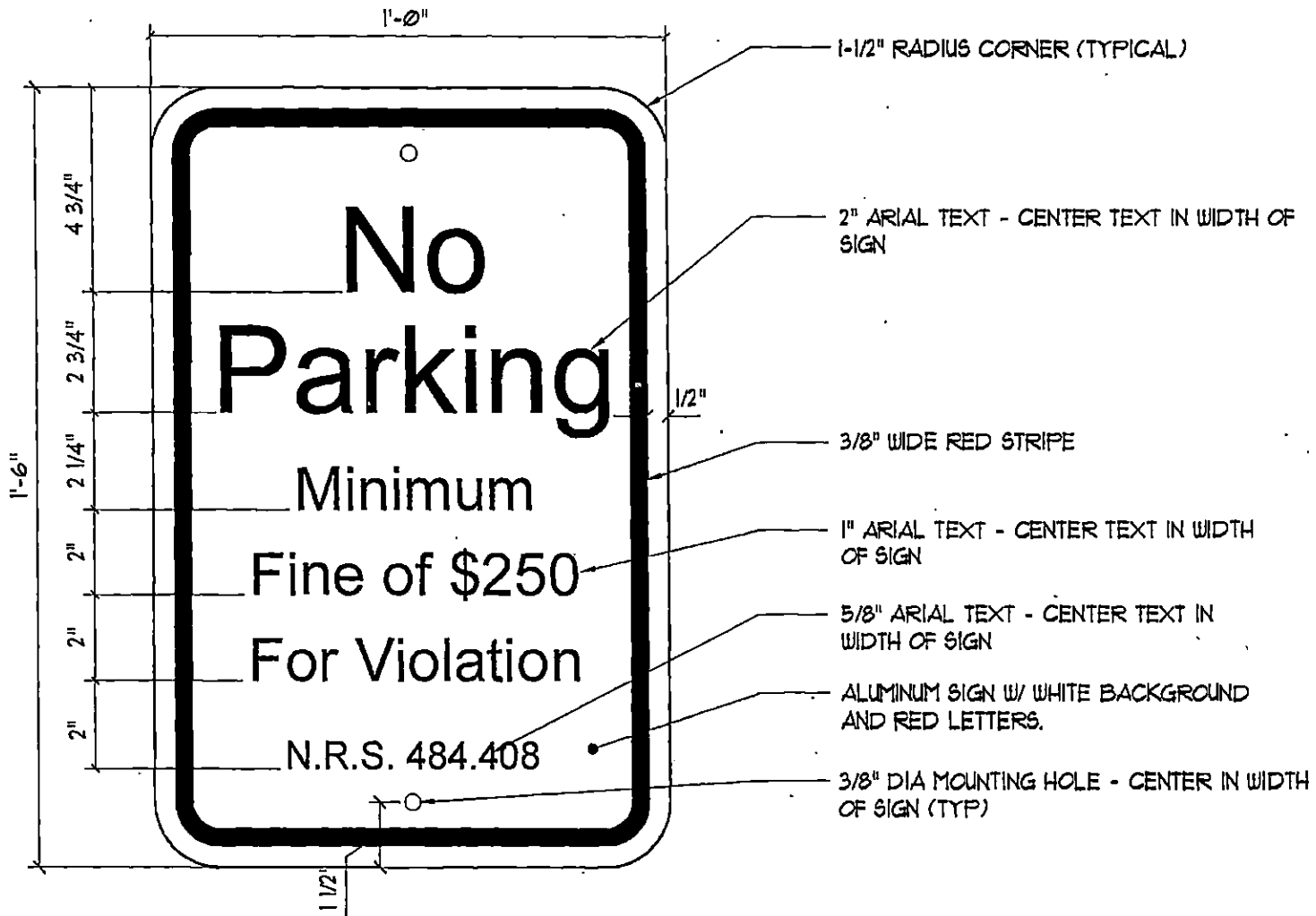
ALL COMPONENTS TO BE GALVANIZED SQUARE POST. ATTACH ANCHOR TO SLEEVE PRIOR TO DRIVING INTO GROUND.

Handicap Parking Signage

Scale: 3/4"=1'-0"

REVISED 8/2/05

ST01030-3a

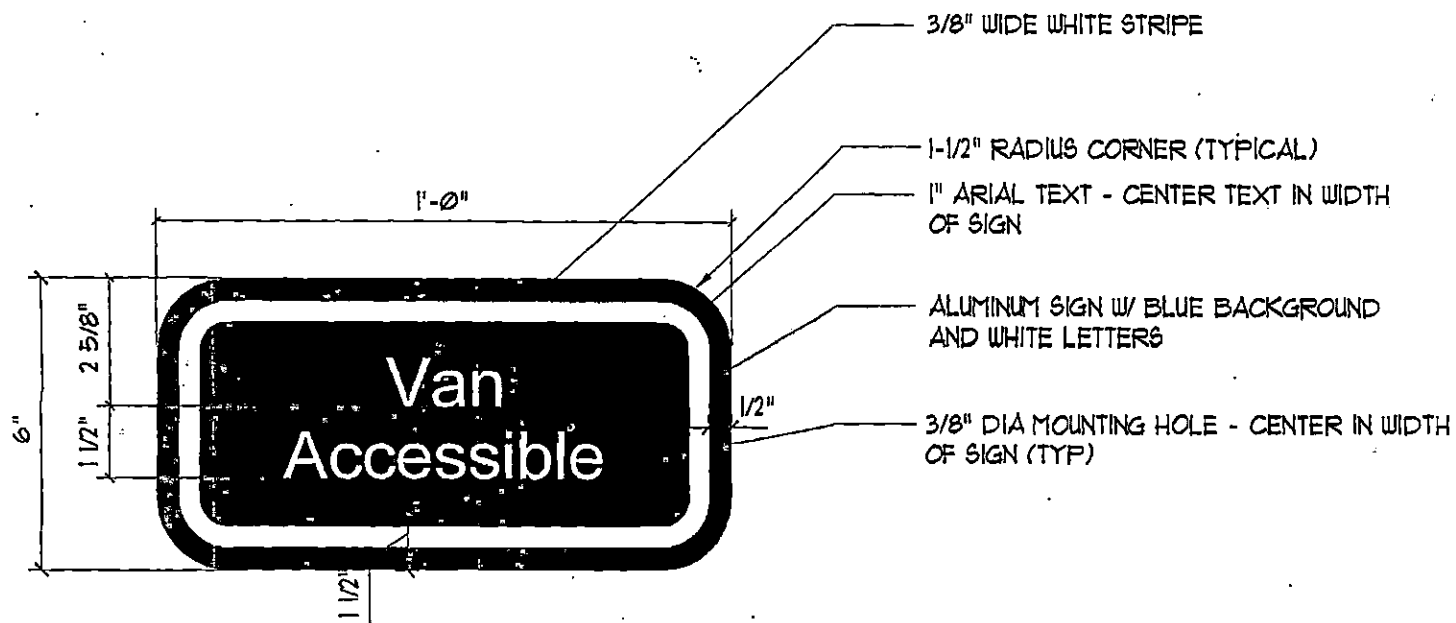


Handicap Sign

Scale: 3" = 1'-0"

REVISED 8.2.05

ST01030-4

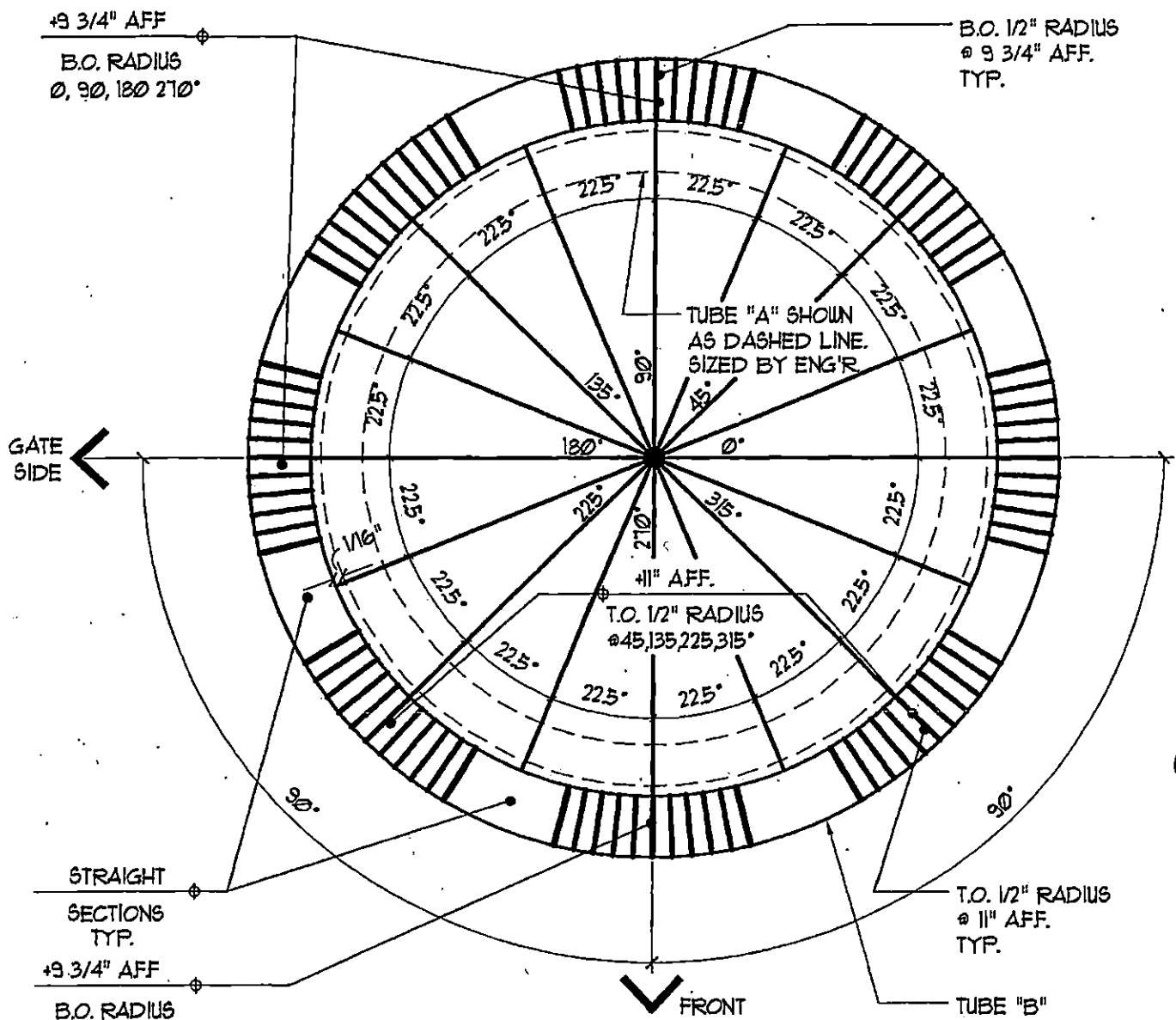


1 Handicap Sign

Scale: 3" = 1'-0"

REVISED 8/27/03

ST01030-2Color



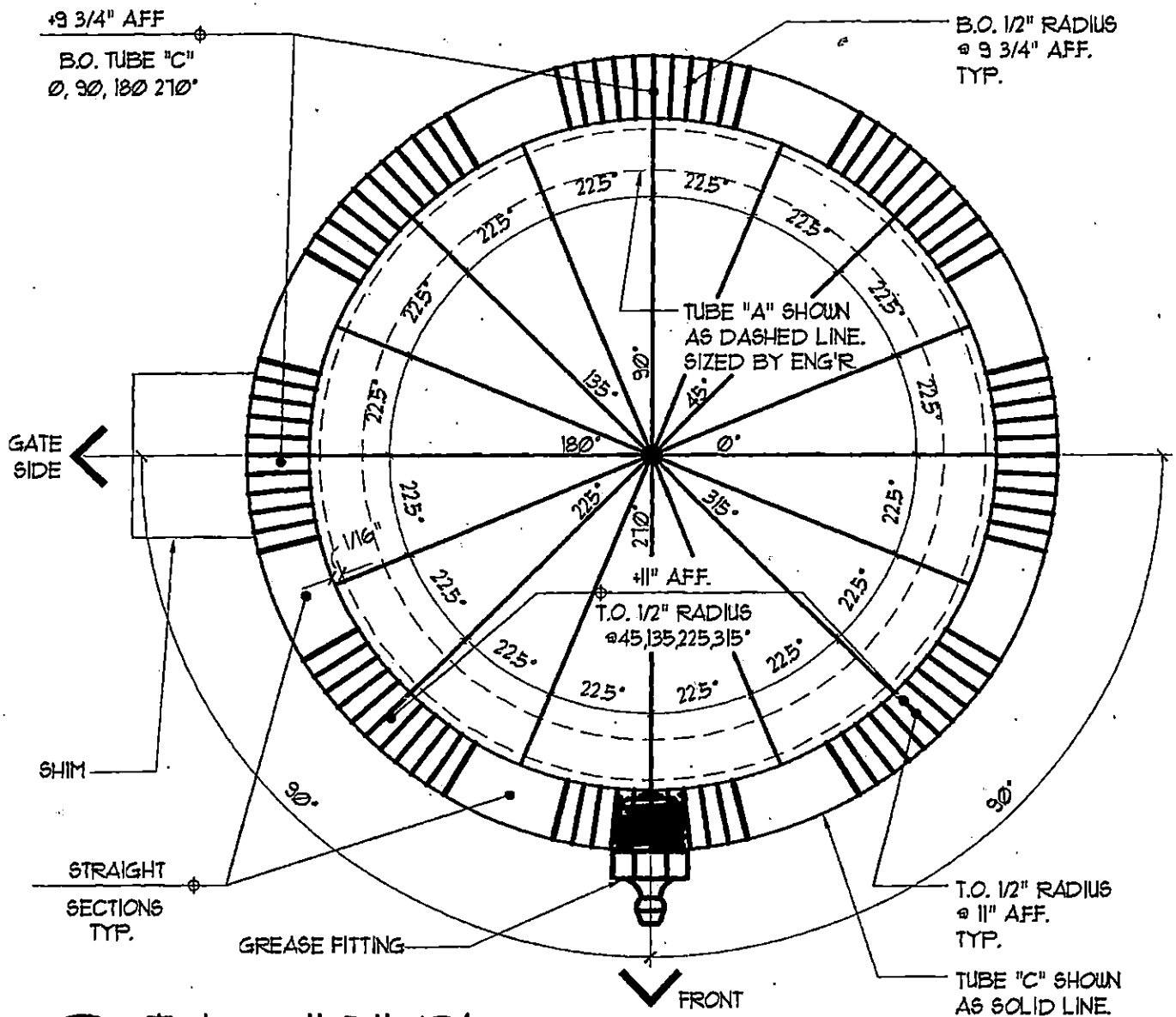
1

Tube "B" Plan (Closed Position)

Scale: Full

REVISED 10/21/04

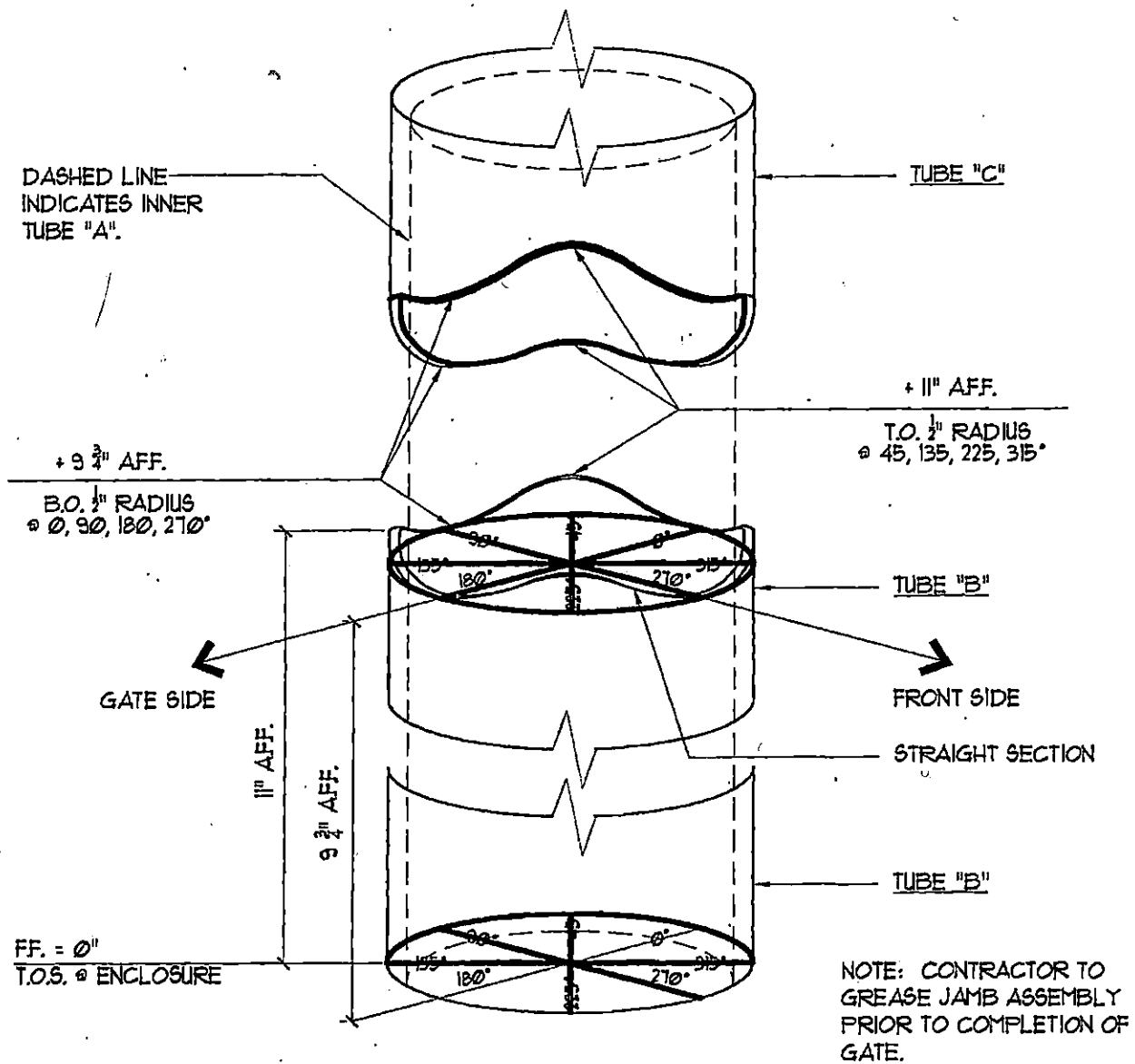
ST01040-TGI



2 Tube "C" Plan View

Scale: Full

REVISED 7/5/05 ST01040-TG2



3 Tube "B" (Axonometric)

Scale: Full

REVISED 7/5/05

ST01040-TG3

DASHED LINE
INDICATES INNER
TUBE "A".

+1'-6" AFF.
CENTER OF SHIM

METAL SHIM,
WELDED TO TUBE &
GATE FRAME.

TUBE "C"

GATE SIDE

FRONT SIDE

GREASE FITTING
LOCATION

+ 9 ³/₄" AFF.

B.O. TUBE

+ 11" AFF.

+ 9 ³/₄" AFF.

B.O. ¹/₂" RADIUS
@ 0, 90, 180, 270°

T.O. ¹/₂" RADIUS
@ 45, 135, 225, 315°

TUBE "B"

NOTE: CONTRACTOR TO
GREASE JAMB ASSEMBLY
PRIOR TO COMPLETION OF
GATE.

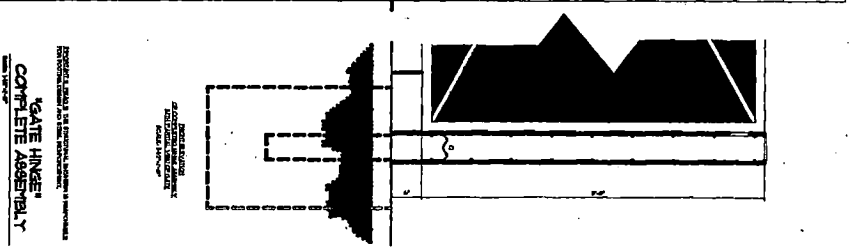
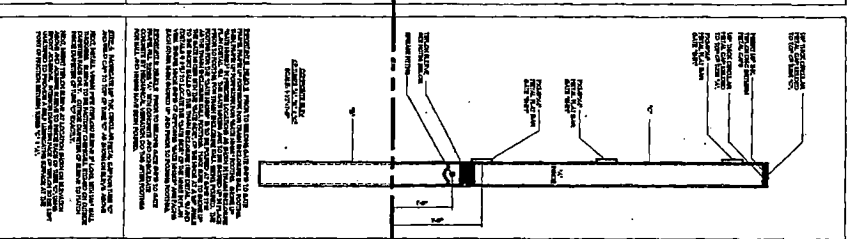
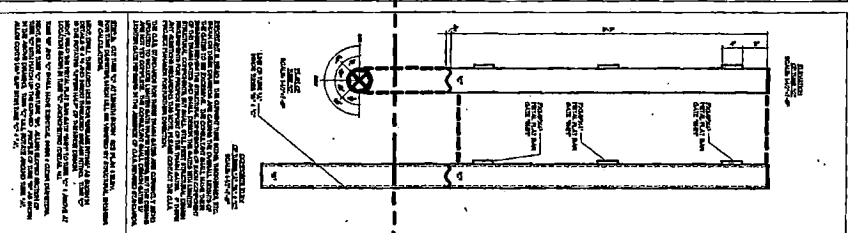
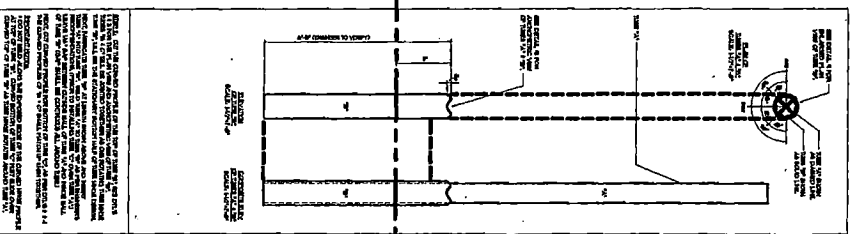
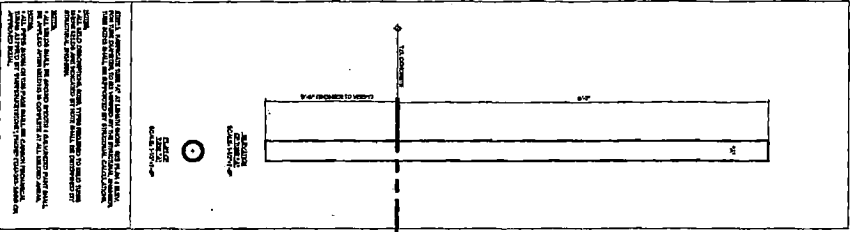
4

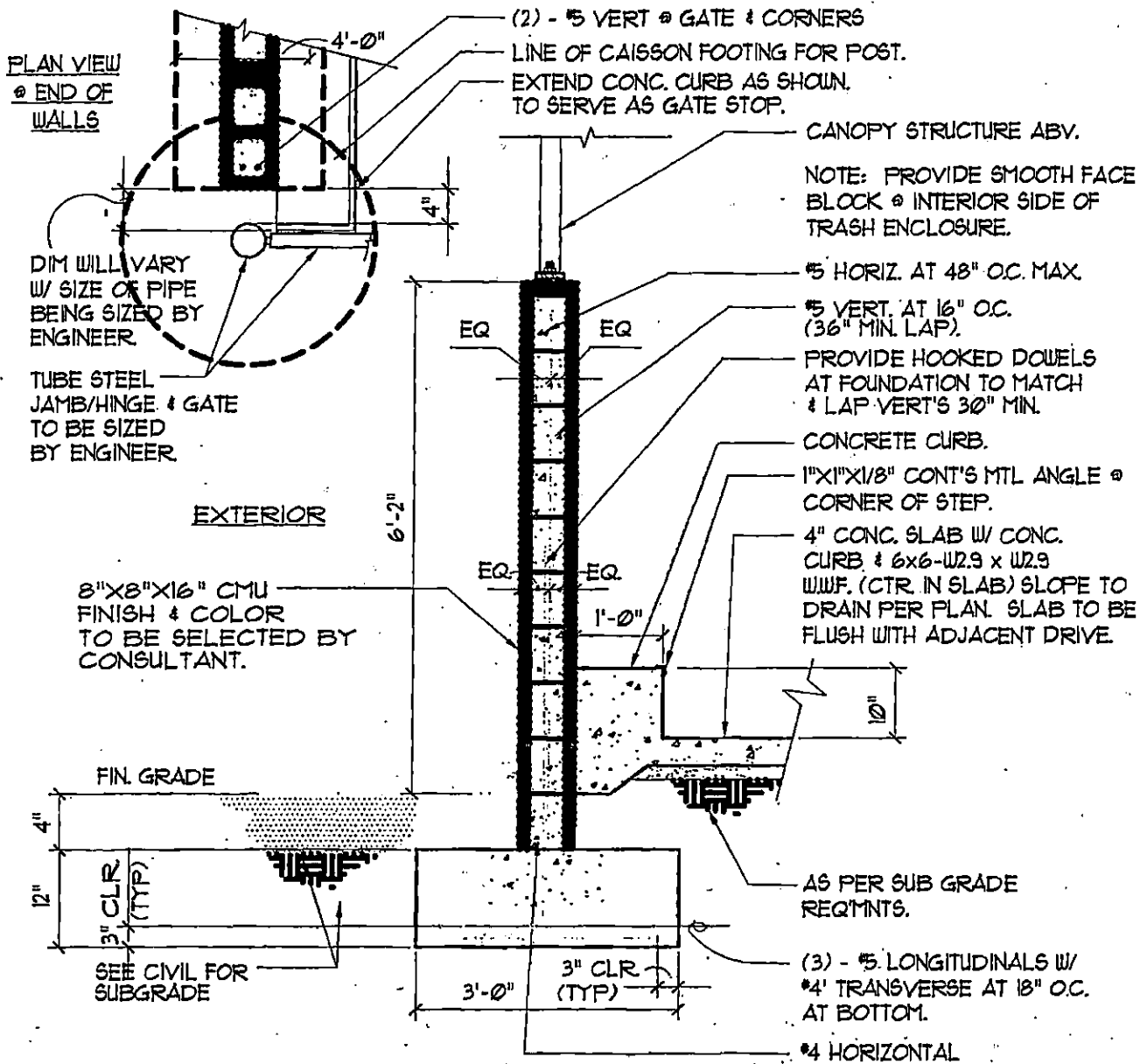
Tube "C" (Axonometric)

Scale: NTS

REVISED 7/5/04

ST01040-TG4





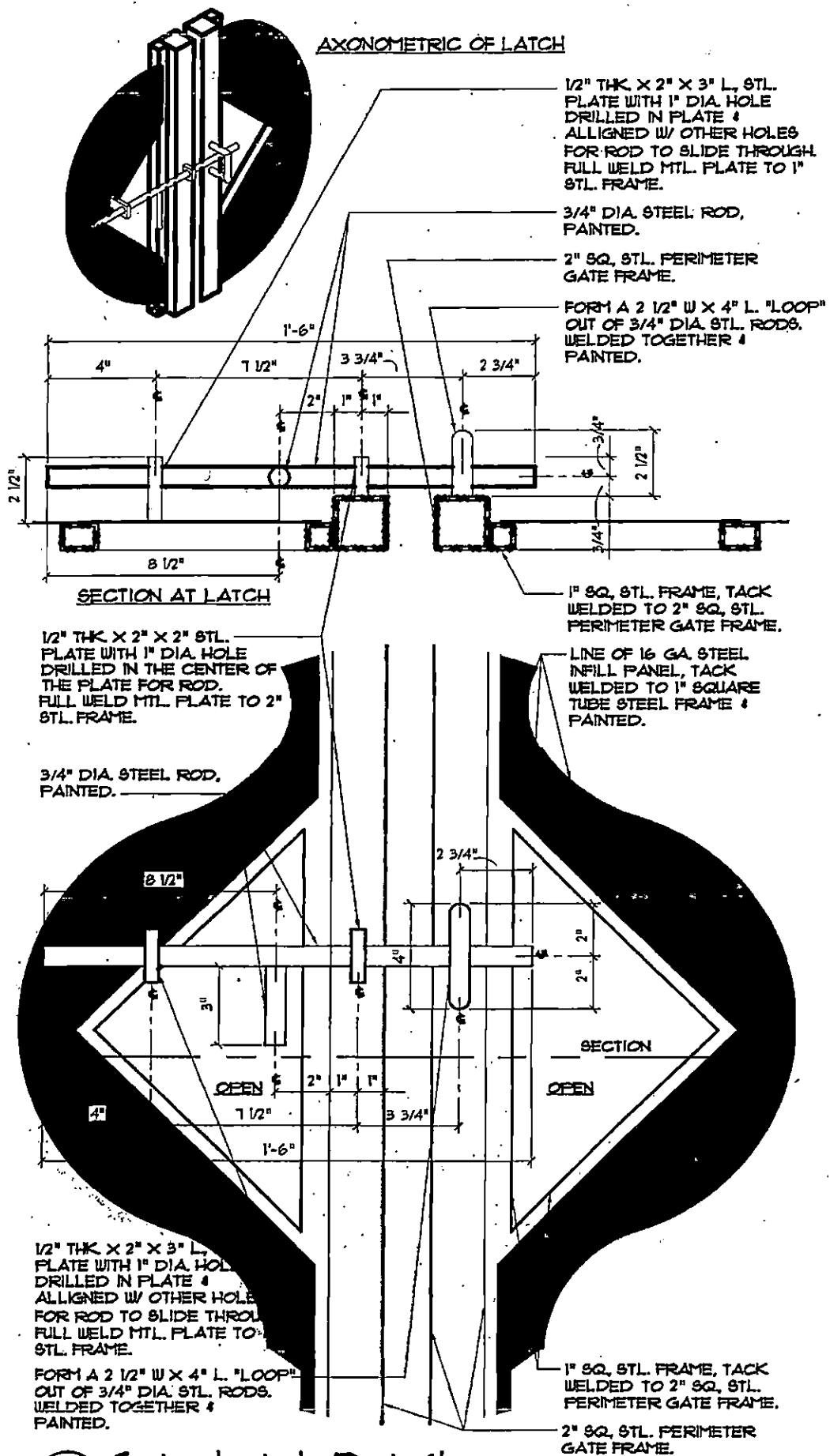
B Trash Enclosure Wall

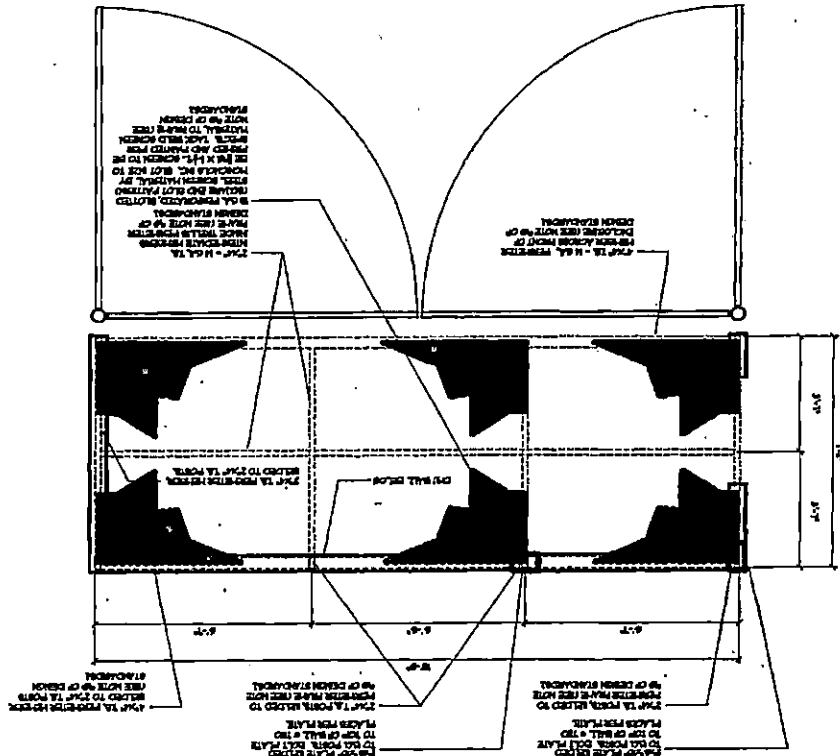
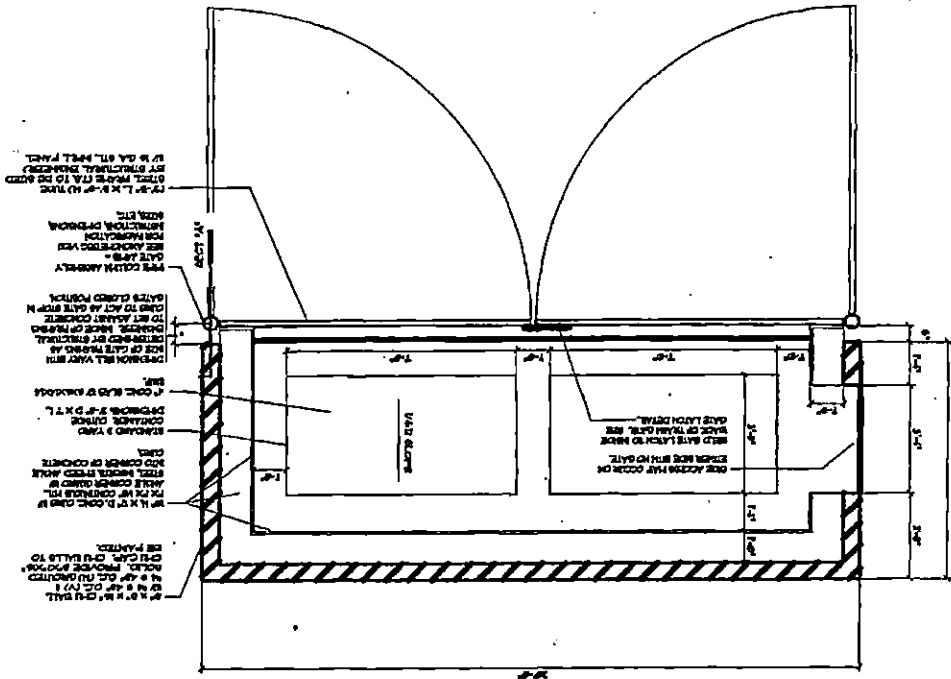
Scale: 1/2" = 1'-0"

02830-05

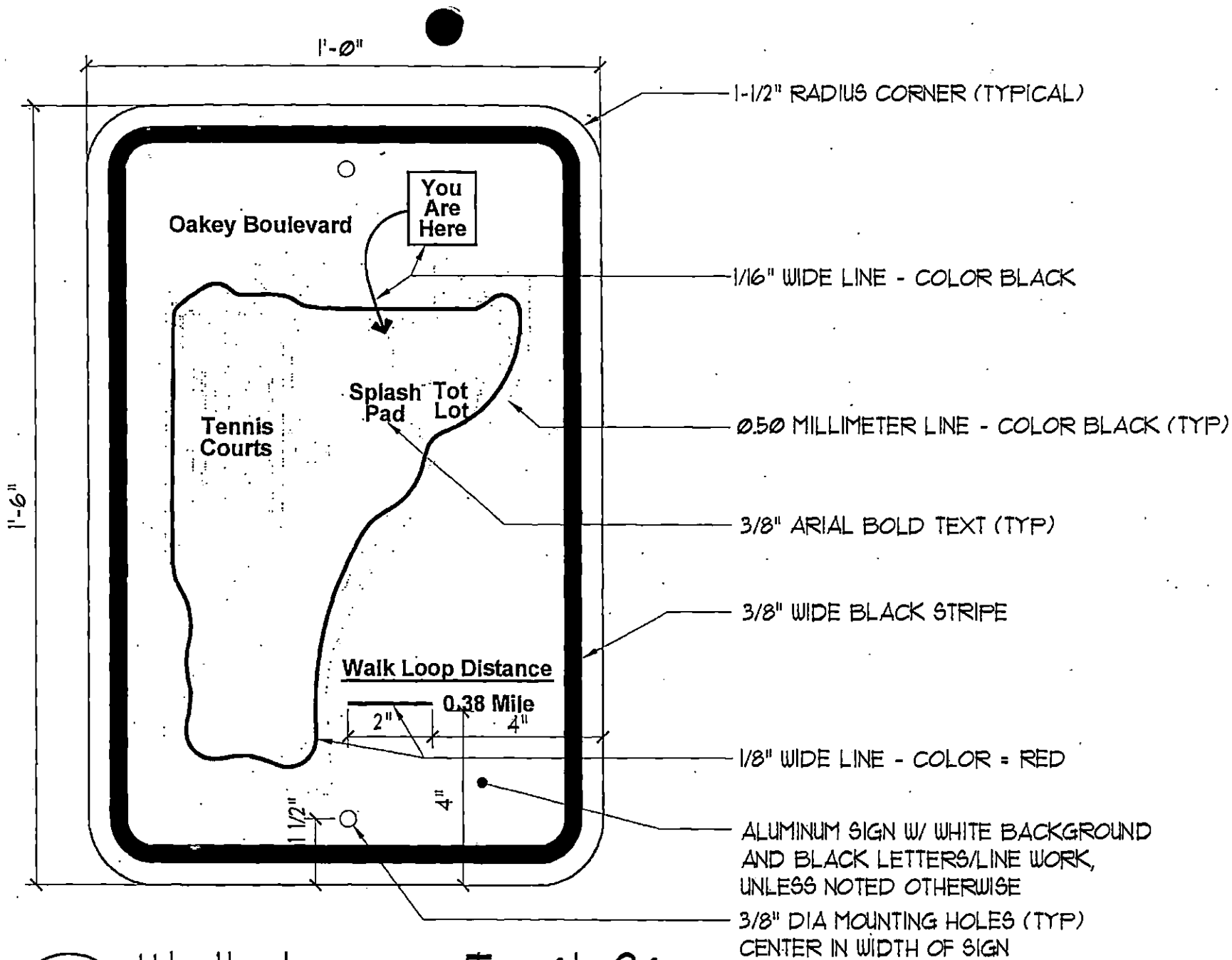
AS2-07R

AXONOMETRIC OF LATCH





1. THE DESIGN OF THE GATE SHALL BE THE RESPONSIBILITY OF THE DESIGNER. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE, INCLUDING THE DESIGN OF THE GATE FRAME, THE GATE LATCH, AND THE GATE LATCH MECHANISM. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE FRAME, THE GATE LATCH, AND THE GATE LATCH MECHANISM. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE FRAME, THE GATE LATCH, AND THE GATE LATCH MECHANISM.
2. THE DESIGN OF THE GATE FRAME SHALL BE THE RESPONSIBILITY OF THE DESIGNER. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE FRAME, INCLUDING THE DESIGN OF THE GATE FRAME, THE GATE LATCH, AND THE GATE LATCH MECHANISM. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE FRAME, THE GATE LATCH, AND THE GATE LATCH MECHANISM.
3. THE DESIGN OF THE GATE LATCH SHALL BE THE RESPONSIBILITY OF THE DESIGNER. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE LATCH, INCLUDING THE DESIGN OF THE GATE LATCH, THE GATE LATCH MECHANISM, AND THE GATE LATCH MECHANISM. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE LATCH, THE GATE LATCH MECHANISM, AND THE GATE LATCH MECHANISM.
4. THE DESIGN OF THE GATE LATCH MECHANISM SHALL BE THE RESPONSIBILITY OF THE DESIGNER. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE LATCH MECHANISM, INCLUDING THE DESIGN OF THE GATE LATCH MECHANISM, THE GATE LATCH MECHANISM, AND THE GATE LATCH MECHANISM. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE LATCH MECHANISM, THE GATE LATCH MECHANISM, AND THE GATE LATCH MECHANISM.
5. THE DESIGN OF THE GATE LATCH MECHANISM SHALL BE THE RESPONSIBILITY OF THE DESIGNER. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE LATCH MECHANISM, INCLUDING THE DESIGN OF THE GATE LATCH MECHANISM, THE GATE LATCH MECHANISM, AND THE GATE LATCH MECHANISM. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE LATCH MECHANISM, THE GATE LATCH MECHANISM, AND THE GATE LATCH MECHANISM.
6. THE DESIGN OF THE GATE LATCH MECHANISM SHALL BE THE RESPONSIBILITY OF THE DESIGNER. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE LATCH MECHANISM, INCLUDING THE DESIGN OF THE GATE LATCH MECHANISM, THE GATE LATCH MECHANISM, AND THE GATE LATCH MECHANISM. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE LATCH MECHANISM, THE GATE LATCH MECHANISM, AND THE GATE LATCH MECHANISM.
7. THE DESIGN OF THE GATE LATCH MECHANISM SHALL BE THE RESPONSIBILITY OF THE DESIGNER. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE LATCH MECHANISM, INCLUDING THE DESIGN OF THE GATE LATCH MECHANISM, THE GATE LATCH MECHANISM, AND THE GATE LATCH MECHANISM. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE LATCH MECHANISM, THE GATE LATCH MECHANISM, AND THE GATE LATCH MECHANISM.
8. THE DESIGN OF THE GATE LATCH MECHANISM SHALL BE THE RESPONSIBILITY OF THE DESIGNER. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE LATCH MECHANISM, INCLUDING THE DESIGN OF THE GATE LATCH MECHANISM, THE GATE LATCH MECHANISM, AND THE GATE LATCH MECHANISM. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE LATCH MECHANISM, THE GATE LATCH MECHANISM, AND THE GATE LATCH MECHANISM.
9. THE DESIGN OF THE GATE LATCH MECHANISM SHALL BE THE RESPONSIBILITY OF THE DESIGNER. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE LATCH MECHANISM, INCLUDING THE DESIGN OF THE GATE LATCH MECHANISM, THE GATE LATCH MECHANISM, AND THE GATE LATCH MECHANISM. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE LATCH MECHANISM, THE GATE LATCH MECHANISM, AND THE GATE LATCH MECHANISM.
10. THE DESIGN OF THE GATE LATCH MECHANISM SHALL BE THE RESPONSIBILITY OF THE DESIGNER. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE LATCH MECHANISM, INCLUDING THE DESIGN OF THE GATE LATCH MECHANISM, THE GATE LATCH MECHANISM, AND THE GATE LATCH MECHANISM. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN OF THE GATE LATCH MECHANISM, THE GATE LATCH MECHANISM, AND THE GATE LATCH MECHANISM.

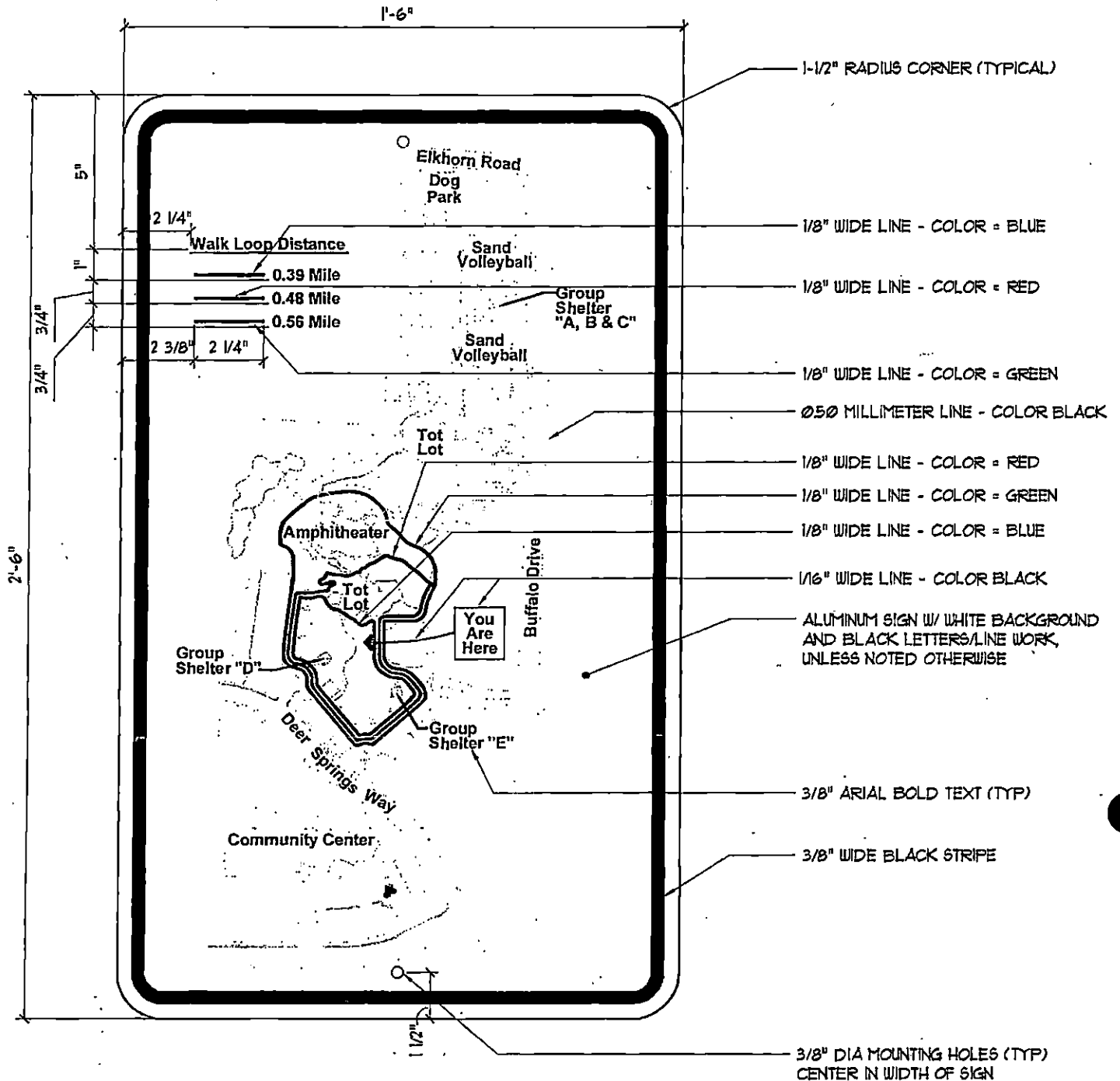


Walk Loop Trail Sign

Scale: 3" = 1'-0"

REVISED 11/6/06

Baskin



Walk Loop Trail Sign

Scale: 3" = 1'-0"

REVISED 11/6/06

Centennial Hills

City of Las Vegas Prototype Concession Building Standards

Prepared by City of Las Vegas Architectural Services

FOOD

EQUIPMENT

REQUIREMENTS

CONCESSIONAIRE OPTION 1

Allowed as Designed	Included in Construction Documents	It is the concessionaire's responsibility to:
- sealed beverages (canned soda, bottled water, bottled juices, etc.) - prepackaged foods (pretzels, potato chips, candy, etc.) - merchandise (T-shirts, hats, etc.)	- 3 compartment sink - wire shelving - hand sink - janitors sink - stainless steel countertop - janitors sink - hot water heater - floor sink - fire extinguisher & cabinet	- apply and pay for a health district¹ permit and grade card. (Architectural Services² will provide drawings to the concessionaire) (Note: the facility has been pre-reviewed for this option through the Health District.) - apply and pay for a City of Las Vegas business license.³

low cost

CONCESSIONAIRE OPTION 2

Requires Added Equipment by Concessionaire	Included in Construction Documents	It is the concessionaire's responsibility to:
- hot dogs - cotton candy - pop corn - fountain sodas (discouraged by Health District) - prepackaged microwave food - prepackaged ice cream products - nachos - prepackaged condiments	- see option (1)	- apply and pay for a Health District permit and grade card. (It will be the concessionaire's responsibility to provide drawings) - purchase and install extra equipment. - apply and pay for a building permit through the Las Vegas Department of Building and Safety,⁴ if required. (Note: it is the concessionaire's responsibility to determine with Building and Safety if the plan needs to be reviewed.) - apply and pay for a City of Las Vegas business license.
	Provided by Concessionaire - hot dog warmer - pop corn machine - cotton candy machine - fountain soda equipment - microwave - ice machine - refrigerator - freezer - warmer (holding cabinets) - cheese dispenser (all food service equipment shall meet design, material, and construction standards of the National Sanitation Foundation International NSF! All equipment shall be approved by the Health District)	

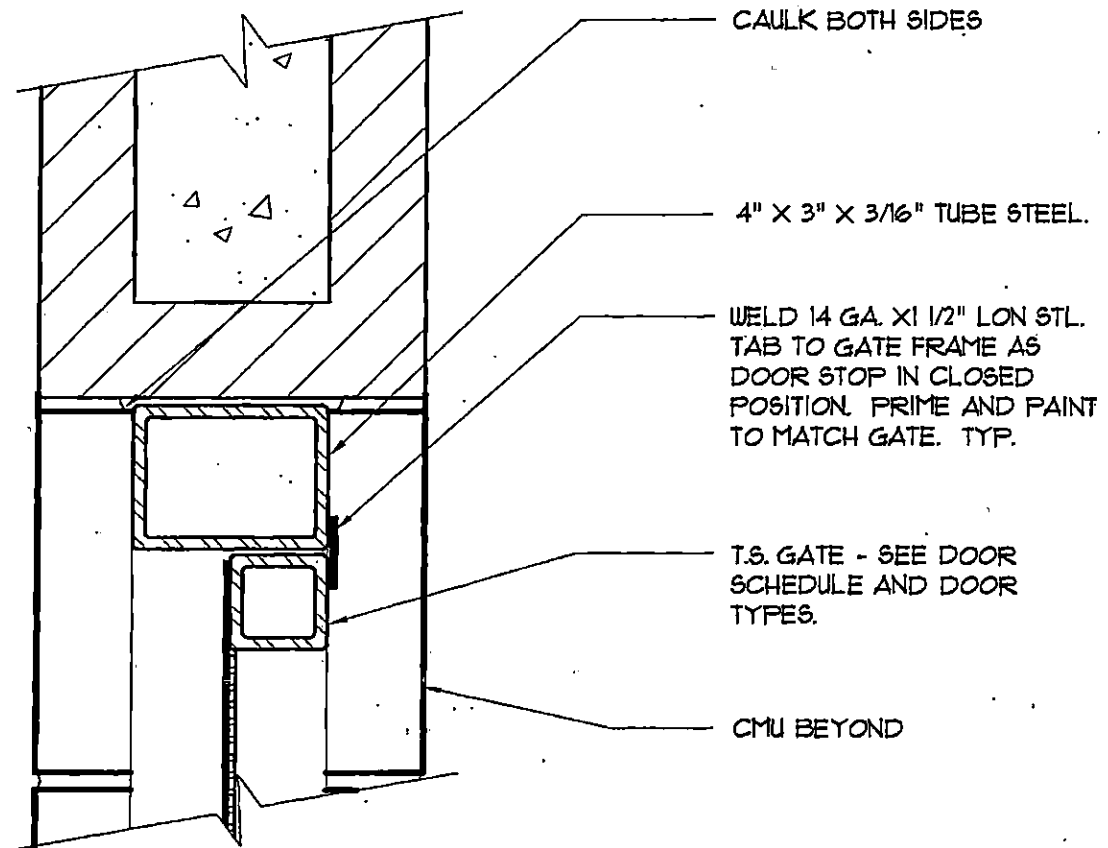
CONCESSIONAIRE OPTION 3

Requires Additional Permits & Construction	Included in Construction Documents	It is the concessionaire's responsibility to:
- grilled food (hamburgers, chicken, etc.) - breakfast items (pancakes, eggs, bacon) - any type of fried foods (french fries, onion rings, etc.) - pizza (oven type)	- see option (1)	- apply and pay for a Health District permit and grade card. (It will be the concessionaire's responsibility to provide drawings) - gain approval of design with Public Works. - pay all costs associated w/ additional equipment including, but not limited to: design fees, review fee's, permit's, inspection fee's, and maintenance. - apply and pay for a building permit through the Las Vegas Department of Building and Safety. - apply and pay for a City of Las Vegas business license.
	Provided by Concessionaire (building not designed to accommodate) - grease interceptor - exhaust vent hood - grill/griddle - any type of fryer - dishwasher - hot plate - cooker, crock pot - range - stove - oven (all food service equipment shall meet design, material, and construction standards of the National Sanitation Foundation International NSF! All equipment shall be approved by the Health District)	

high cost

¹ Southern Nevada Health District - 625 Shadow Lane (383-1258)
² Architectural Services - 420 N. 4th St (229-6535)
³ Business Services Division - 400 Stewart Avenue - 3rd floor (229-6281)
⁴ Department of Building and Safety - 731 South 4th Street (229-6251)

Revision 9/15/06

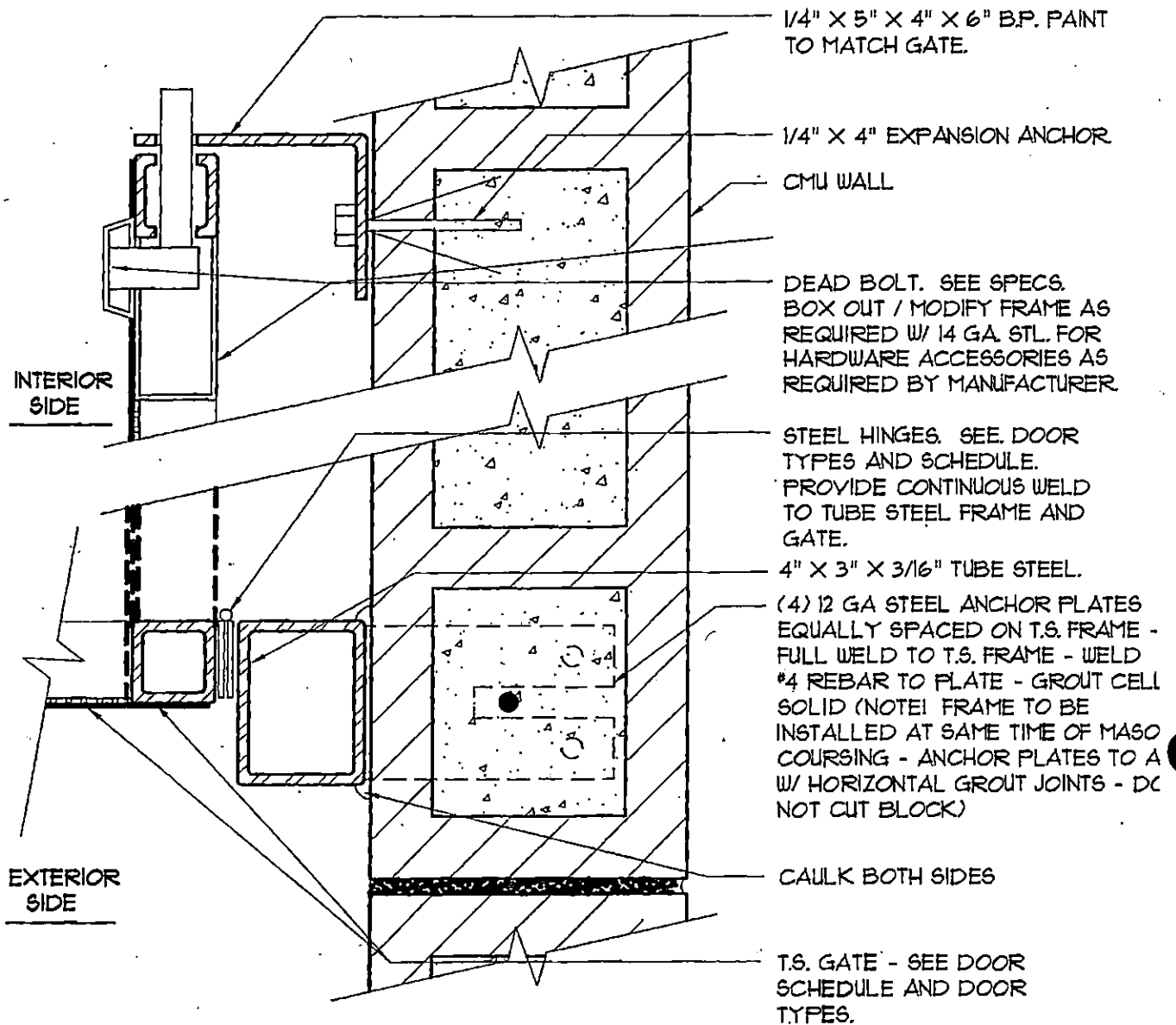


1 Head @ T.S. Gate

Scale: 3"=1'-0"

REVISED 8/21/03

ST01050-RRG1



2

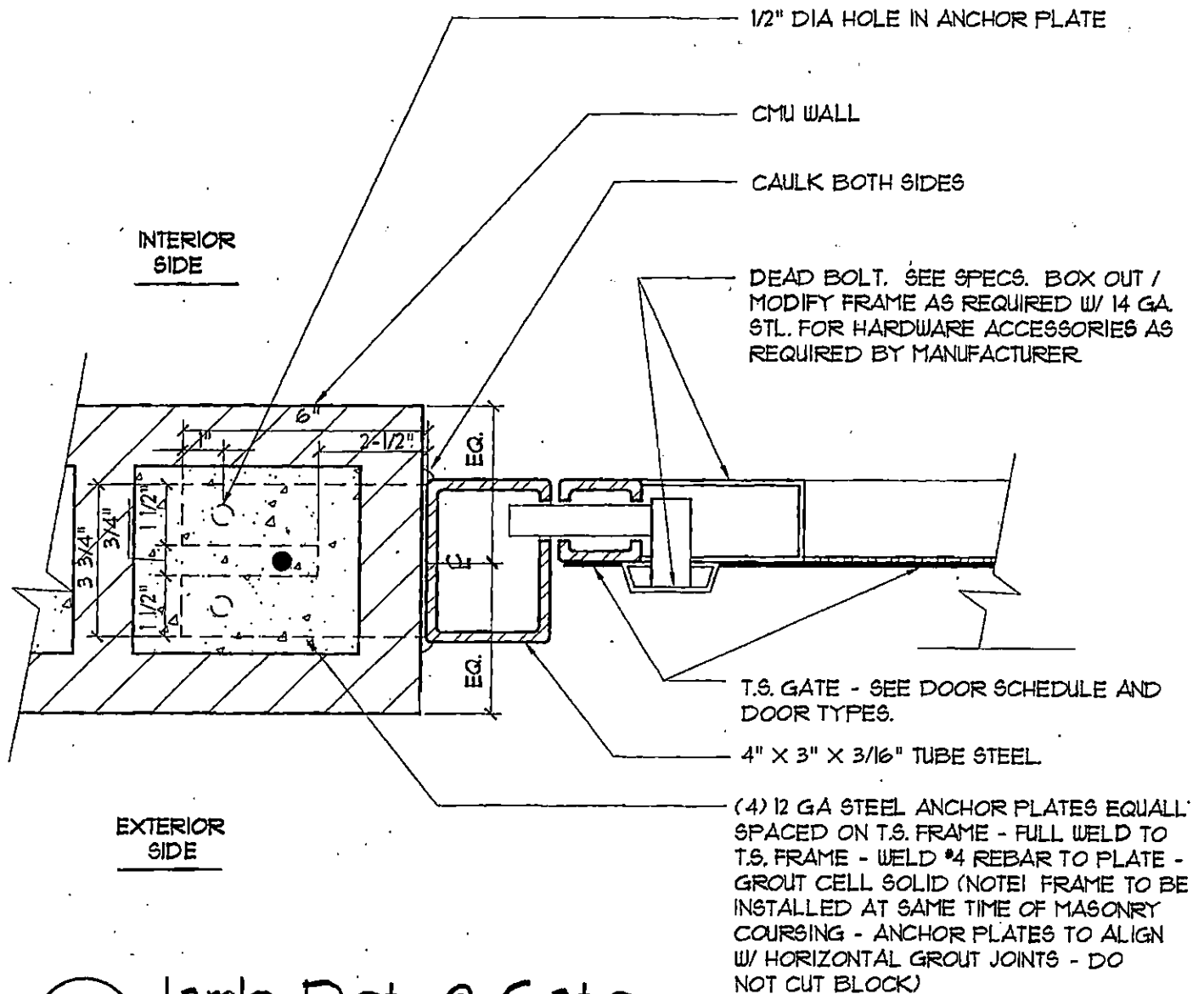
Jamb Det. @ Gate Hinge

Scale: 3/8"=1'-0"

HINGE SIDE

REVISED 4/27/04

STO1050-RRG2



3

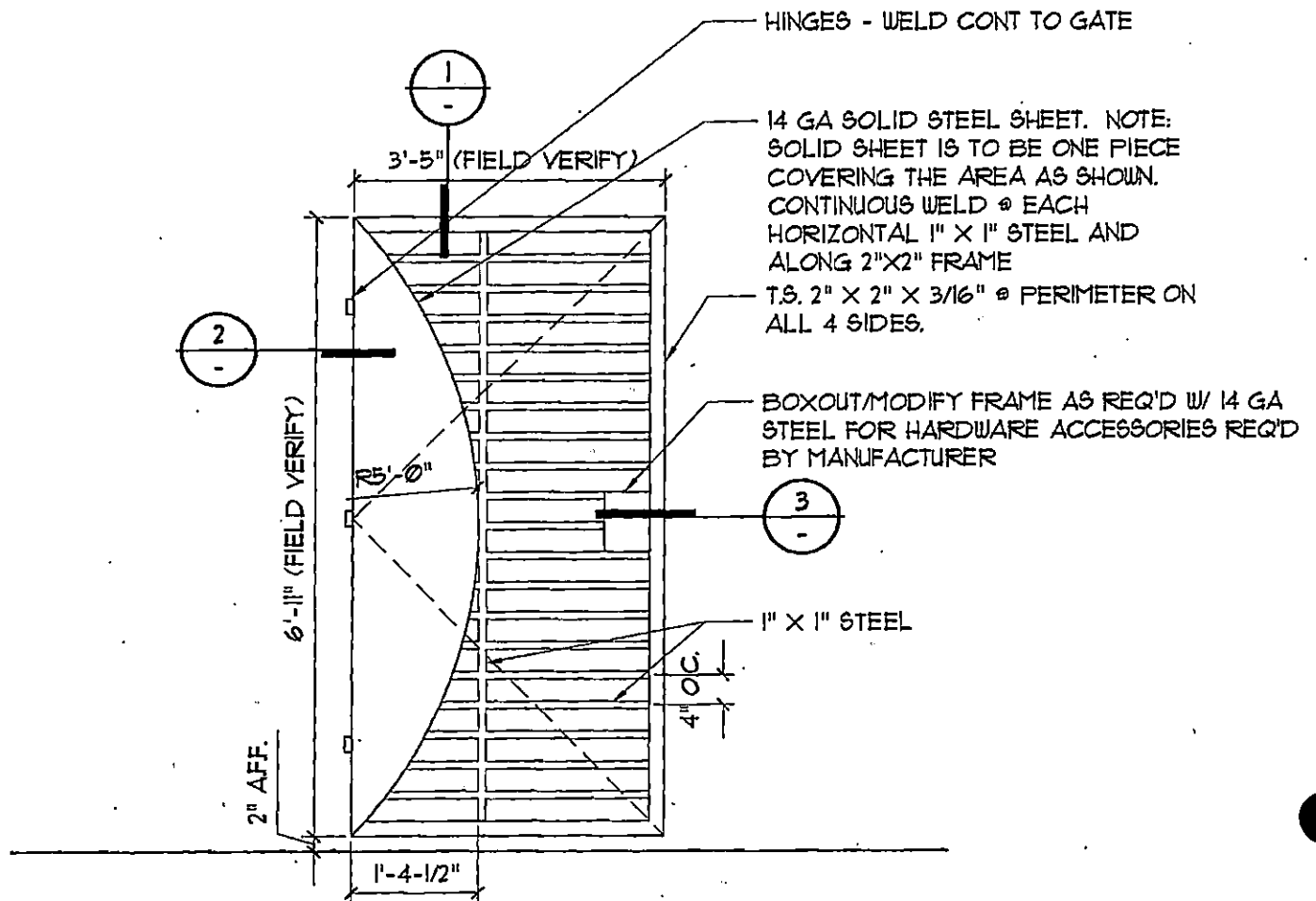
Jamb Det. @ Gate

Scale: 3"=1'-0"

LATCH SIDE

REVISED 4/21/04

ST01050-RRG3



NOTE: CORNERS OF 2" X 2" T.S. ARE TO BE MITERED JOINTS AND TO HAVE FULL WELDS. GROUND ALL WELDS SMOOTH. PRIME AND PAINT. PROVIDE FULLY DIMENSIONED AND DETAILED SHOP DRAWINGS PRIOR TO FABRICATION.

NOTE: REFERENCE ELEVATIONS FOR LEFT OR RIGHT HAND PATTERN. GATES ARE MIRROR IMAGE OF EA. OTHER.

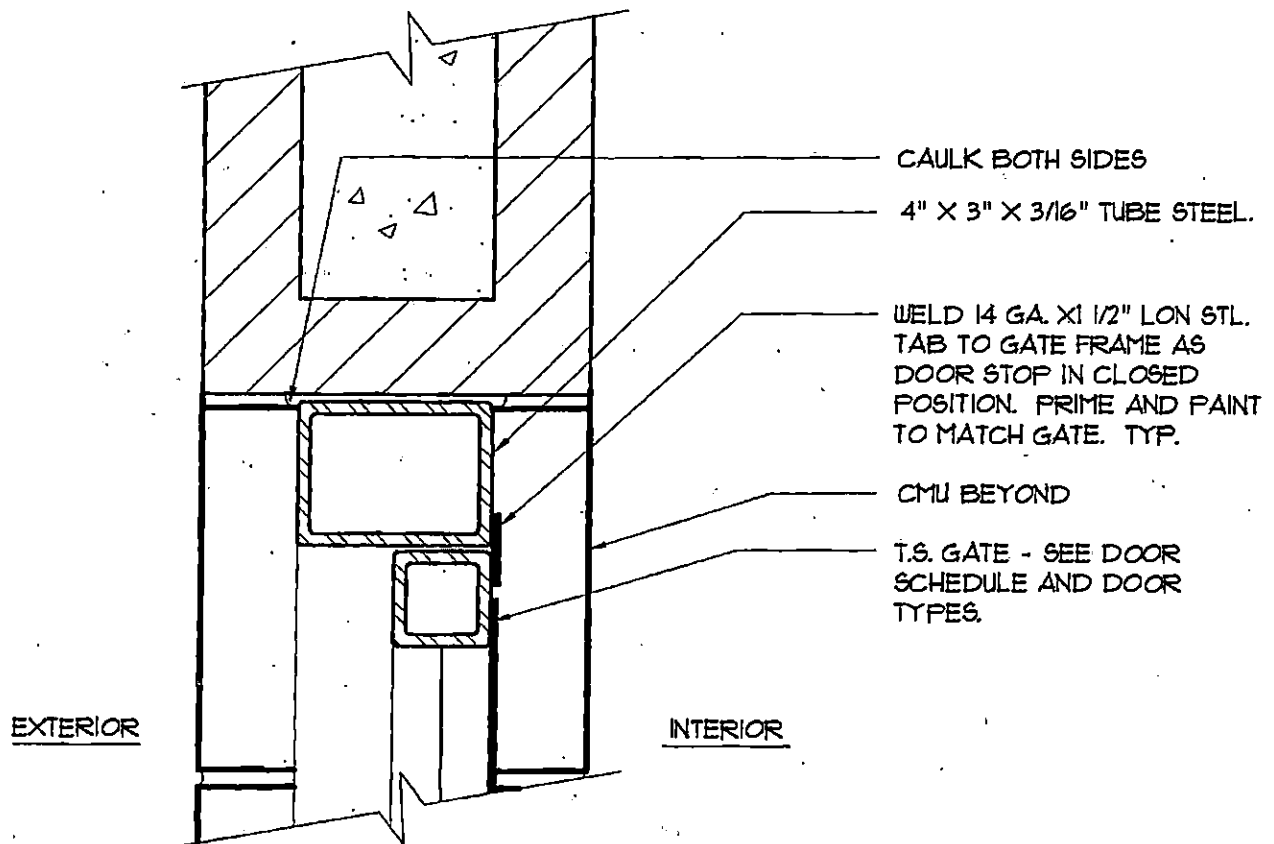
4

Gate - Enlarged Elevation

Scale: 1/2"=1'-0"

REVISED 4/21/04

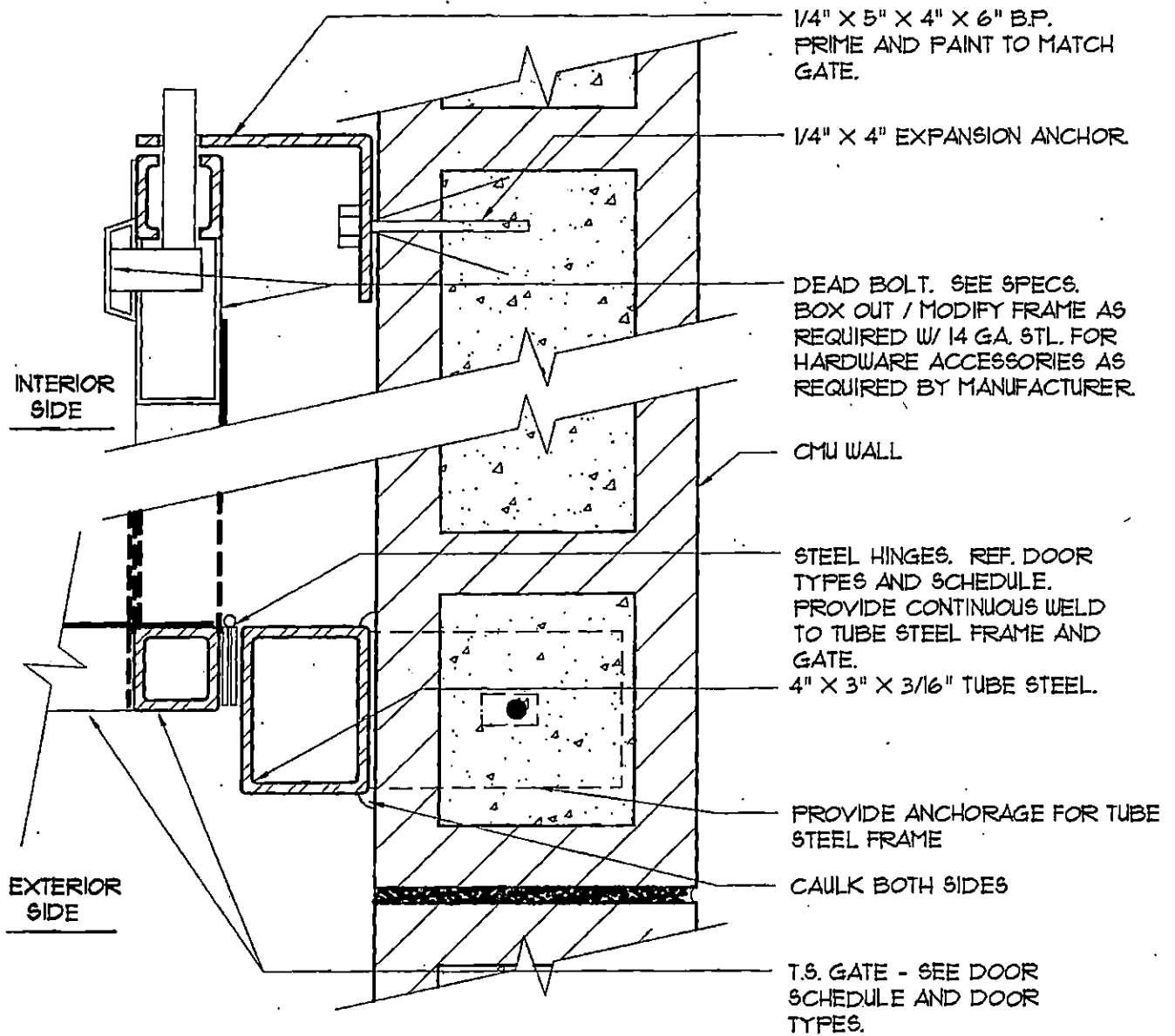
ST01050-RRG4



1 Head @ T.S. Gate

Scale: 3/8" = 1'-0"

REVISED 8/27/03 ST01050-UG1

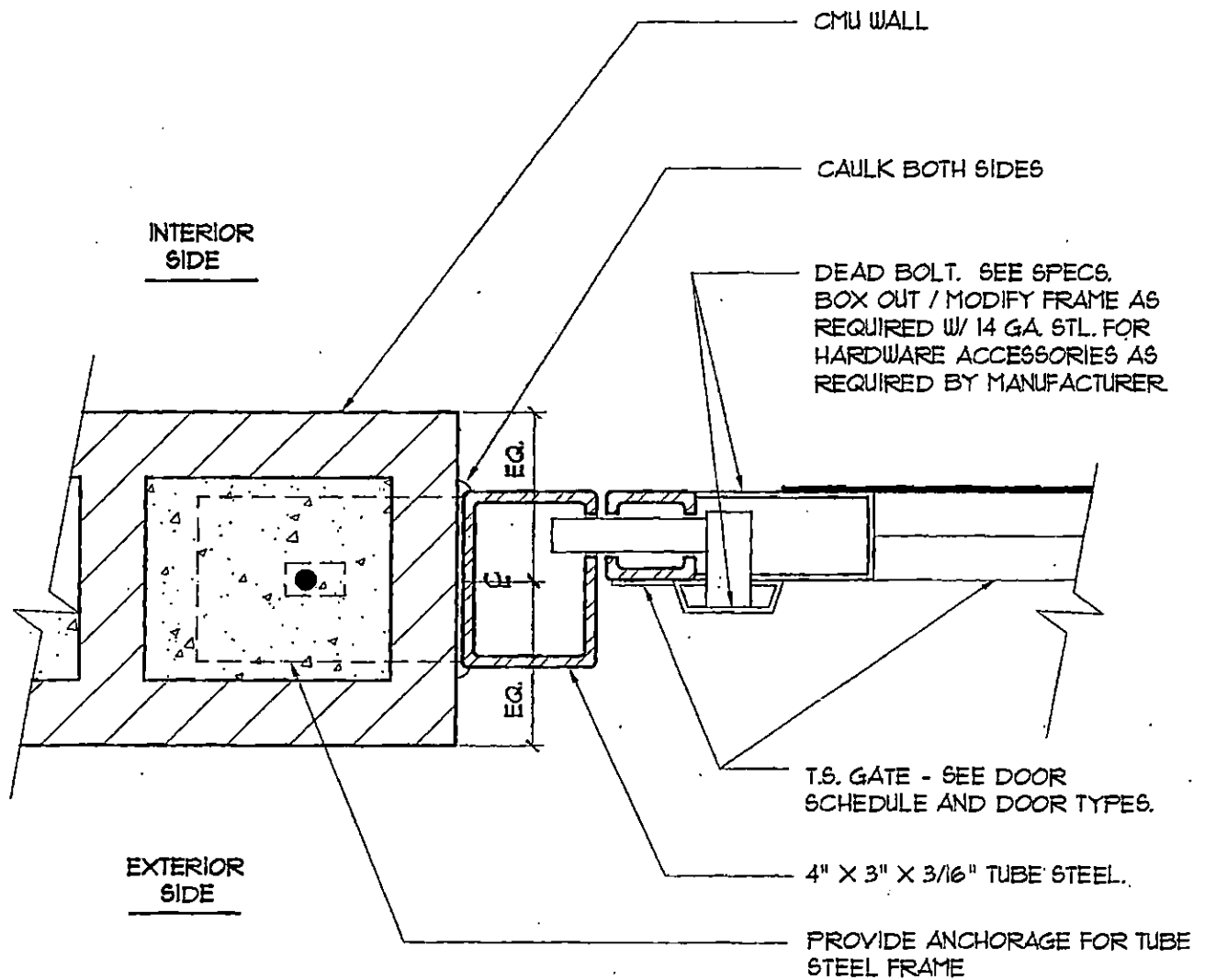


2 Jamb Det. @ Gate Hinge

Scale: 3"=1'-0"

HINGE SIDE

REVISED 8/27/03 ST01050-UG2

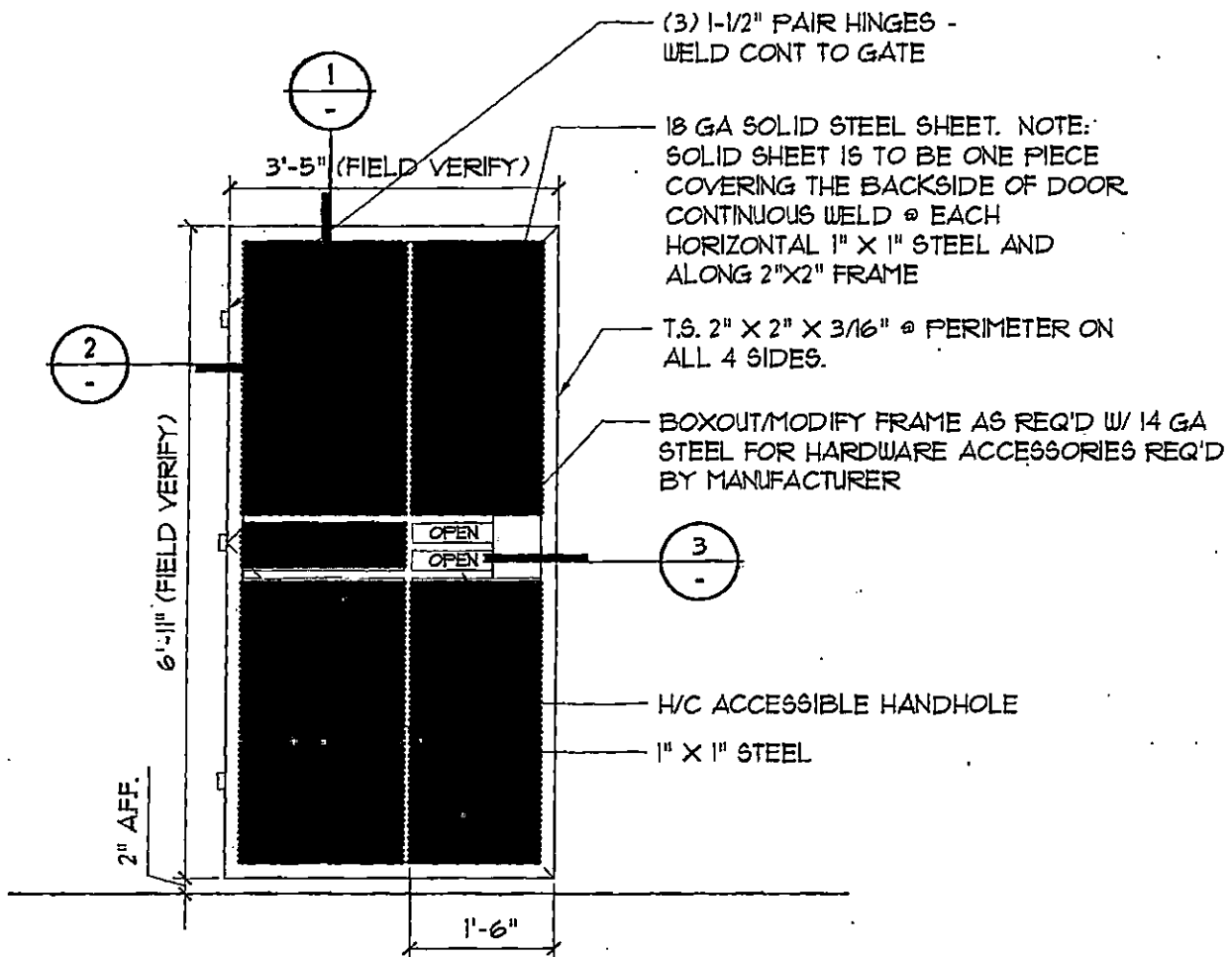


3 Jamb Det. @ Gate

Scale: 3"=1'-0"

LATCH SIDE

REVISED 8/27/03 ST01050-UG3

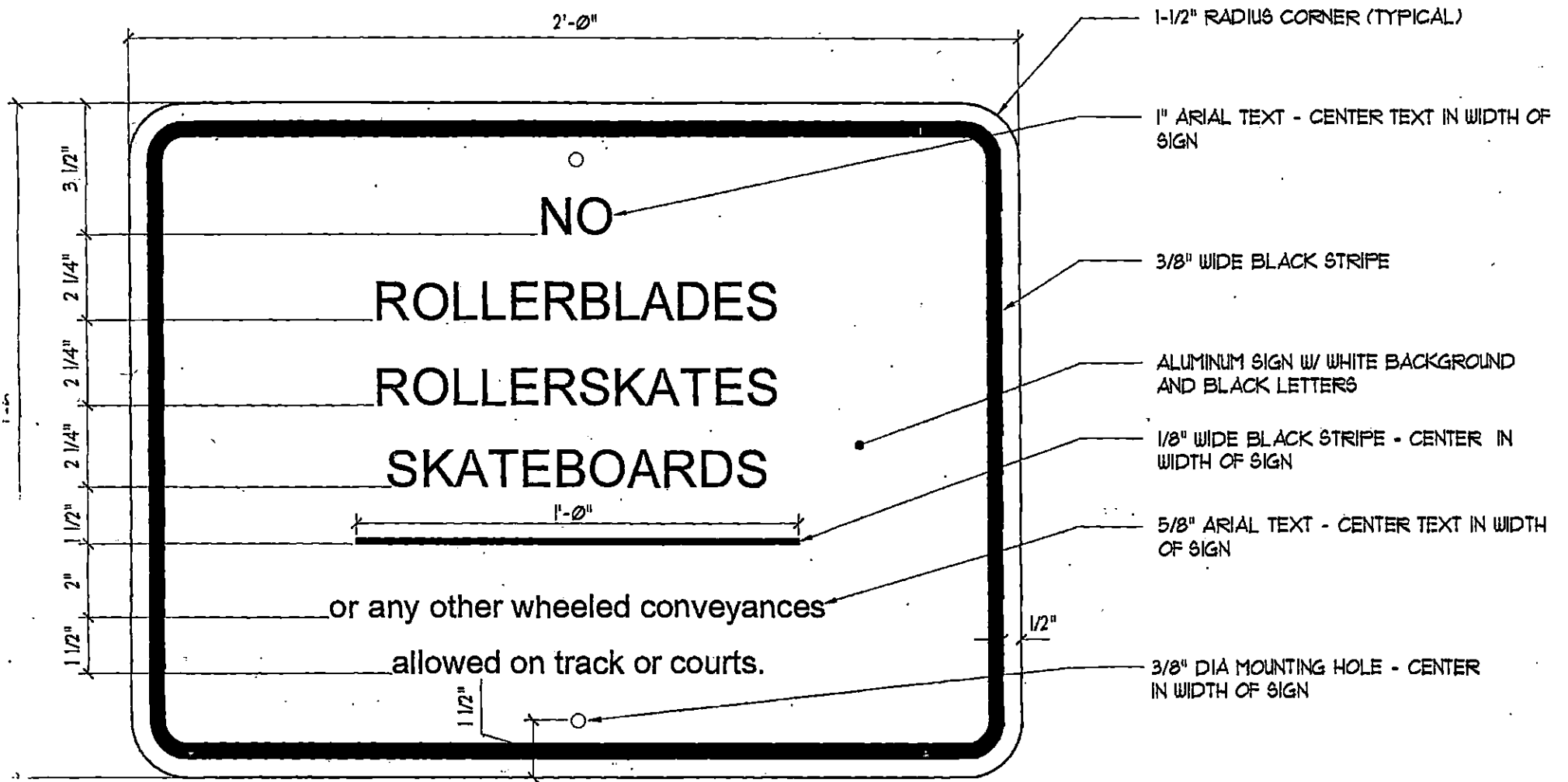


NOTE: CORNERS OF 2" X 2" T.S. ARE TO BE MITERED JOINTS AND TO HAVE FULL WELDS. GROUND ALL WELDS SMOOTH. PRIME AND PAINT. PROVIDE FULLY DIMENSIONED AND DETAILED SHOP DRAWINGS PRIOR TO FABRICATION.

Gate - Enlarged Elevation

Scale: 1/2"=1'-0"

REVISED 8/27/03 ST01050-UG4

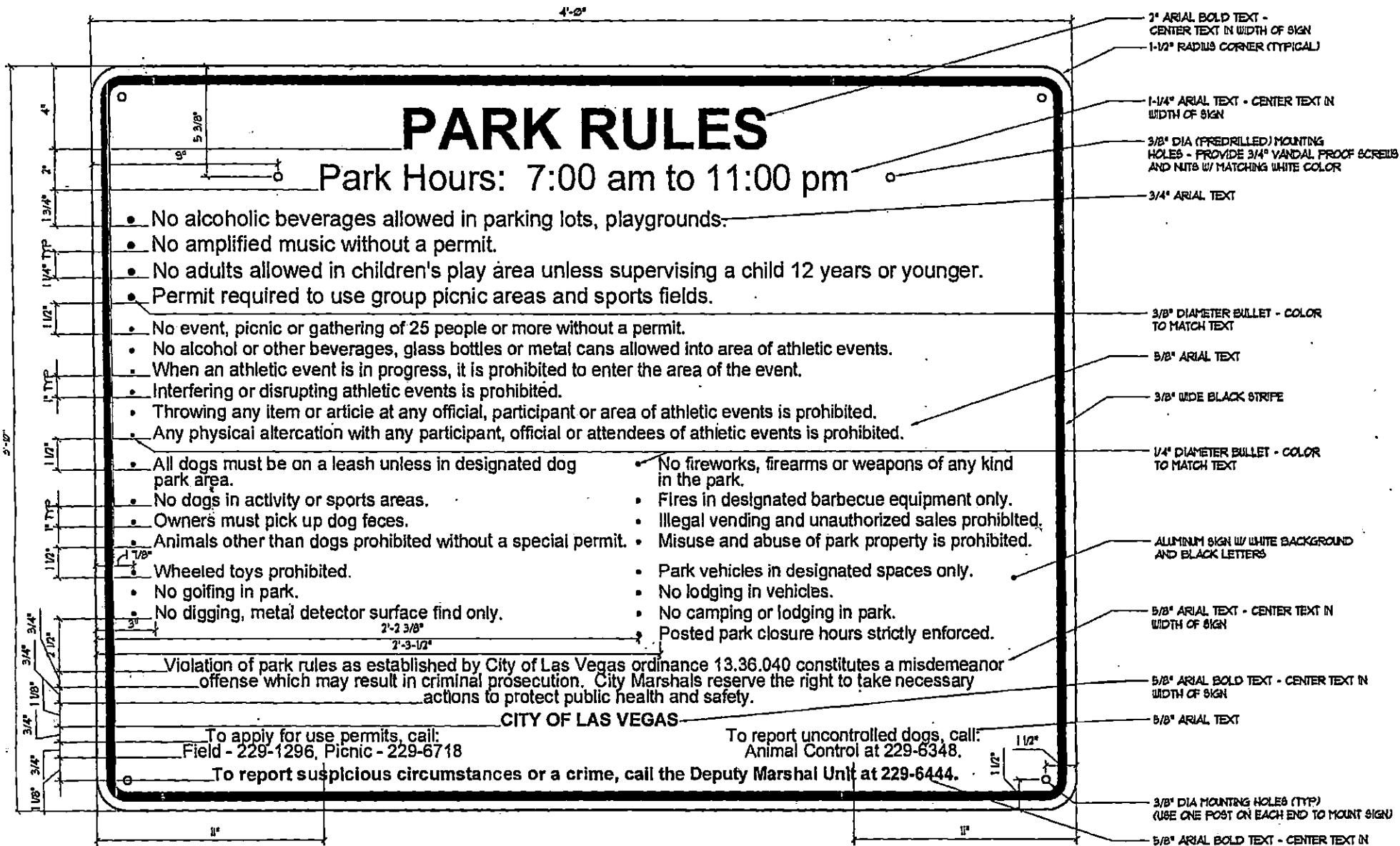


Track/Court Sign

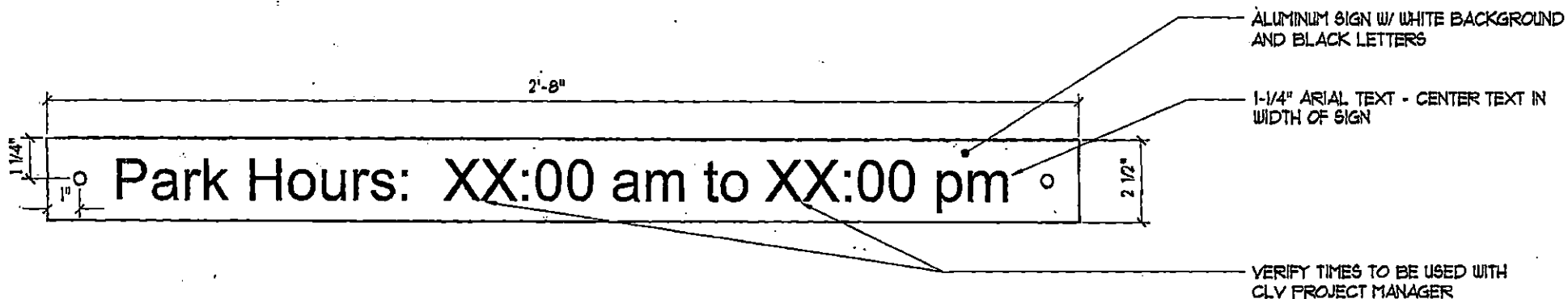
Scale: 3" = 1'-0"

REVISED 8/27/03

ST02882-17



Park Rules Sign
Scale: 3" = 1'-0"

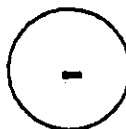
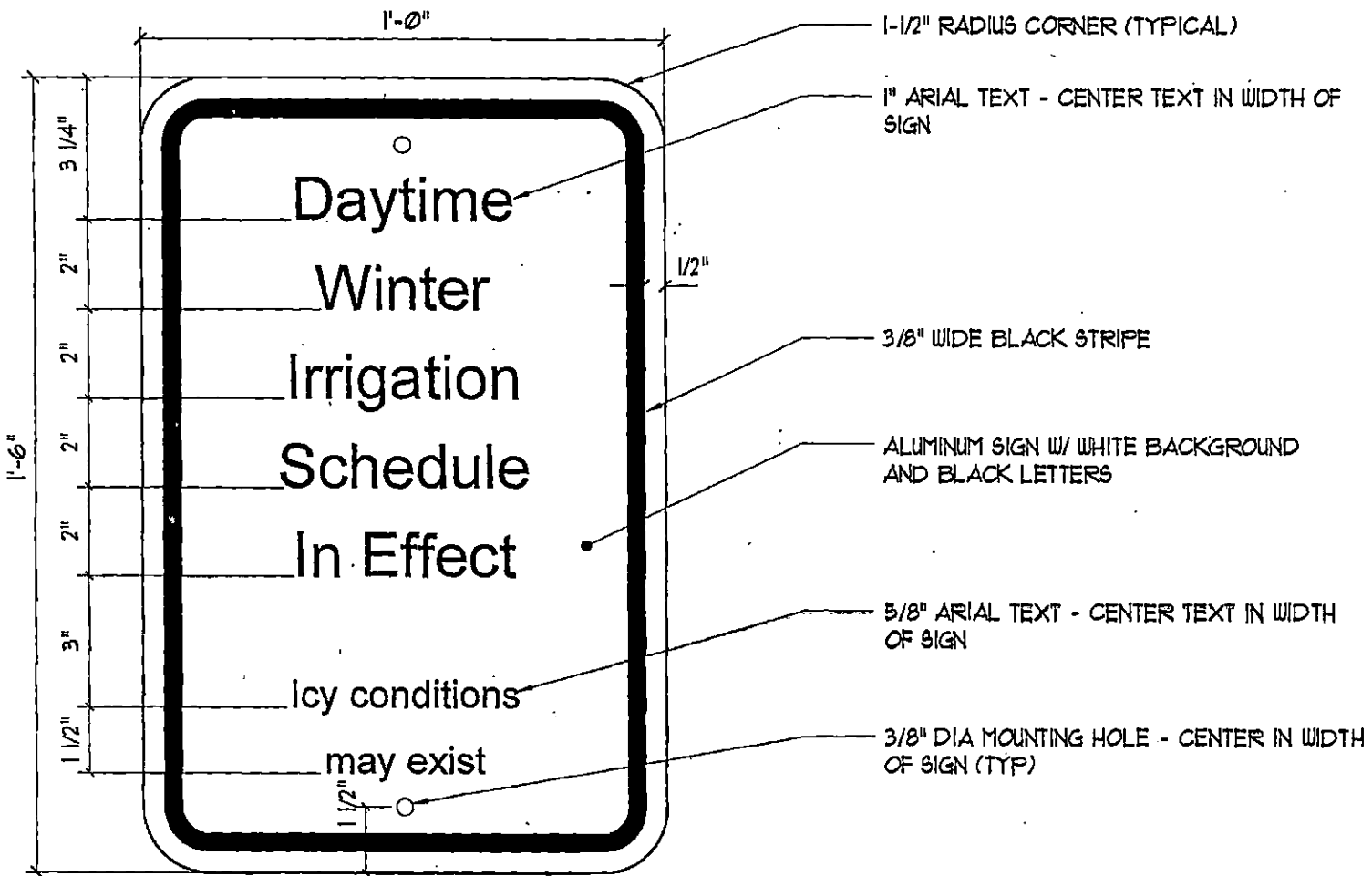


 Optional Park Hours Sign

Scale: 3" = 1'-0"

REVISED 4/12/04

STO2882-20a

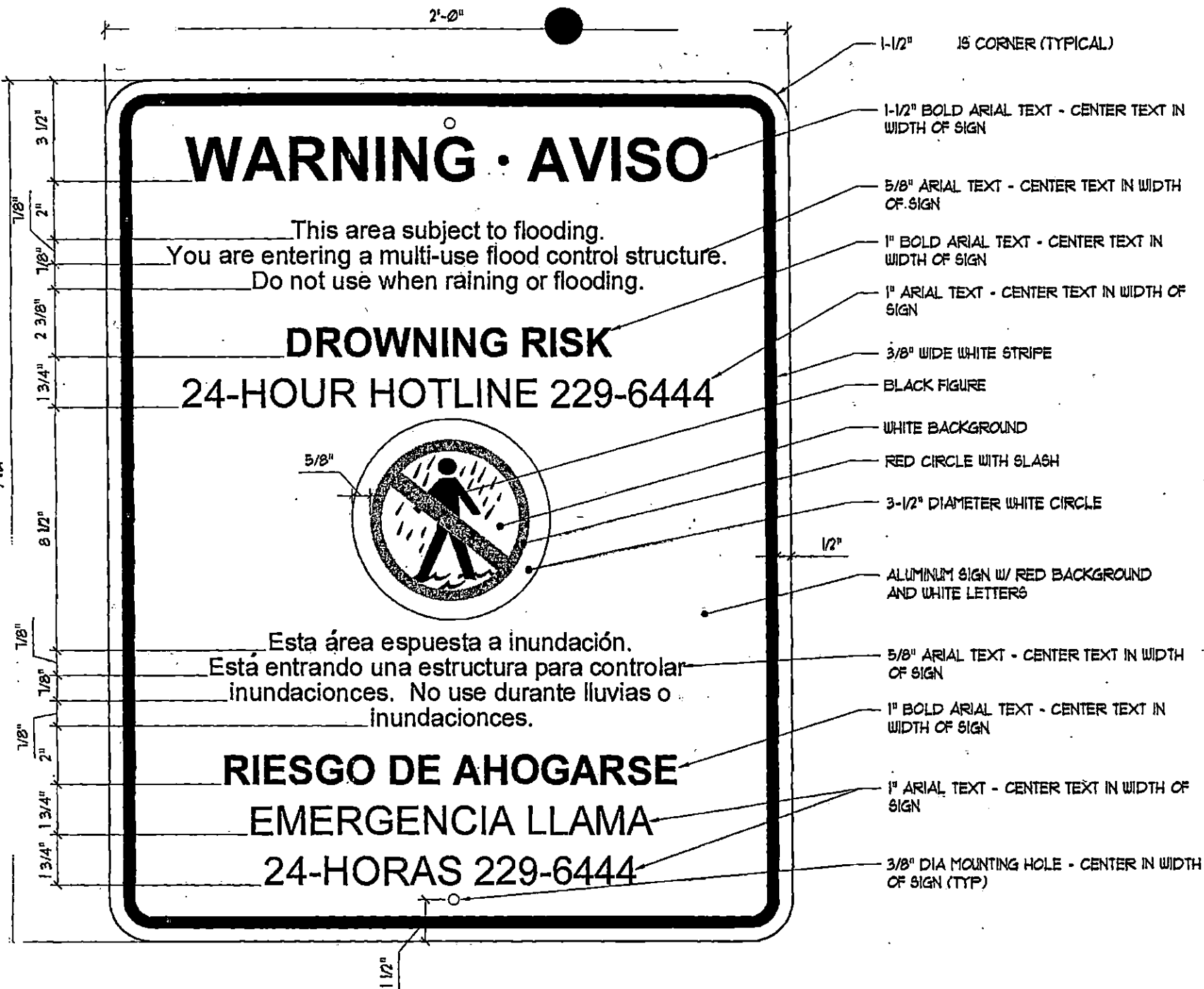


Winter Irrigation Sign

Scale: 3" = 1'-0"

REVISED 7/9/04

ST02882-24

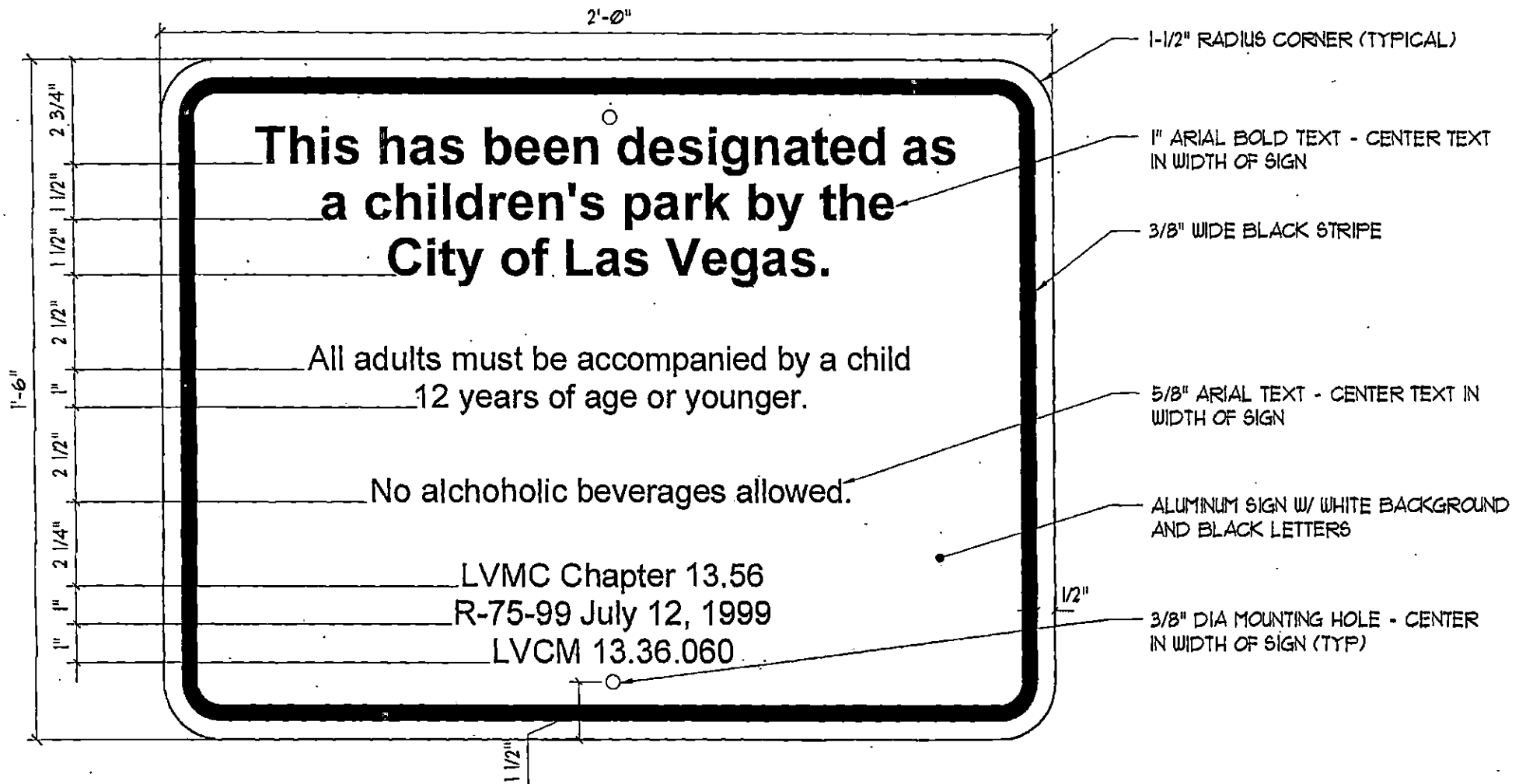


Multi-use Facility Sign

Scale: 3" = 1'-0"

REVISED 8/21/03

STO2882-29

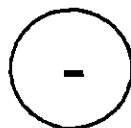
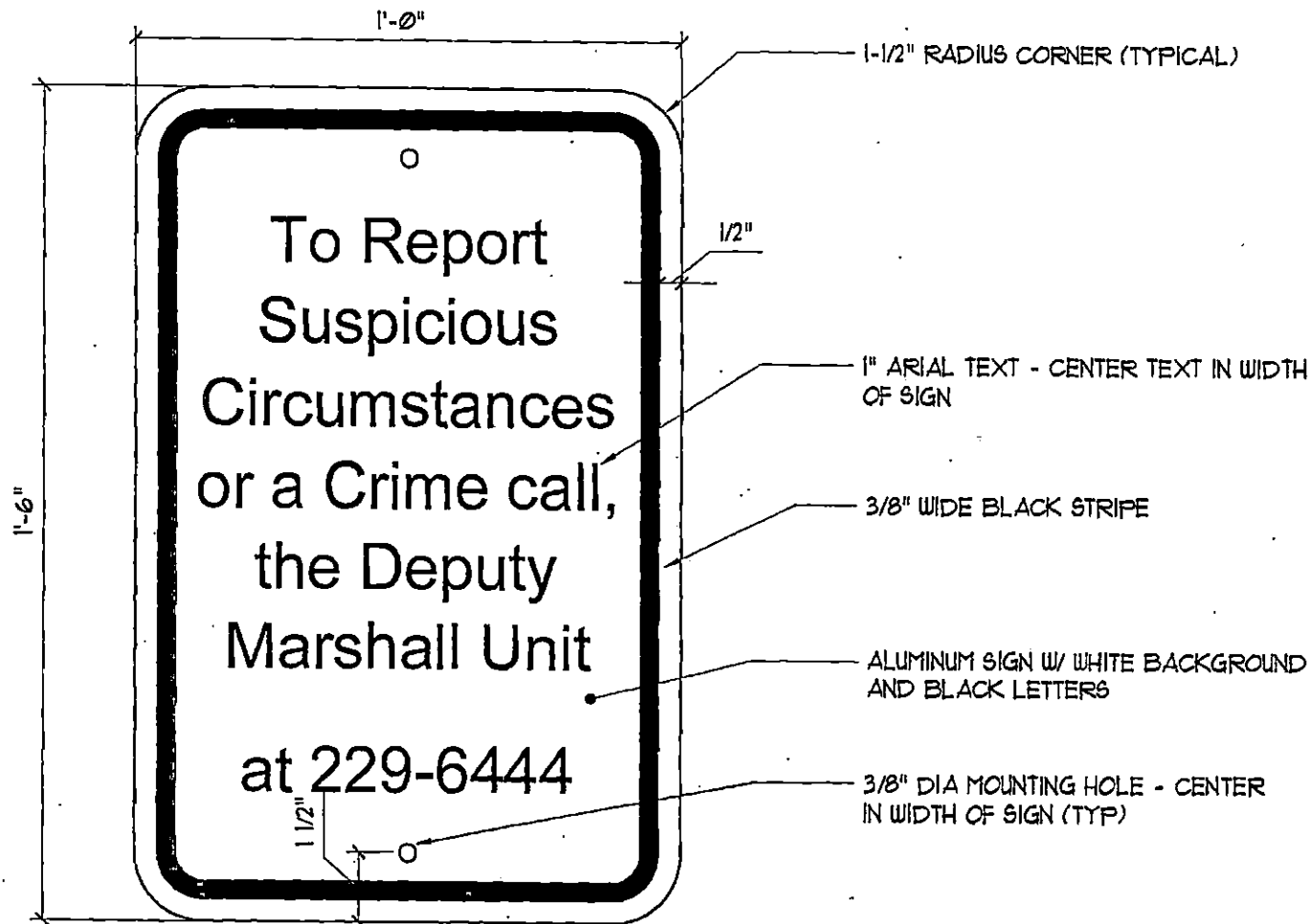


Childrens Park Sign

Scale: 3" = 1'-0"

REVISED 8/27/03

ST02882-35

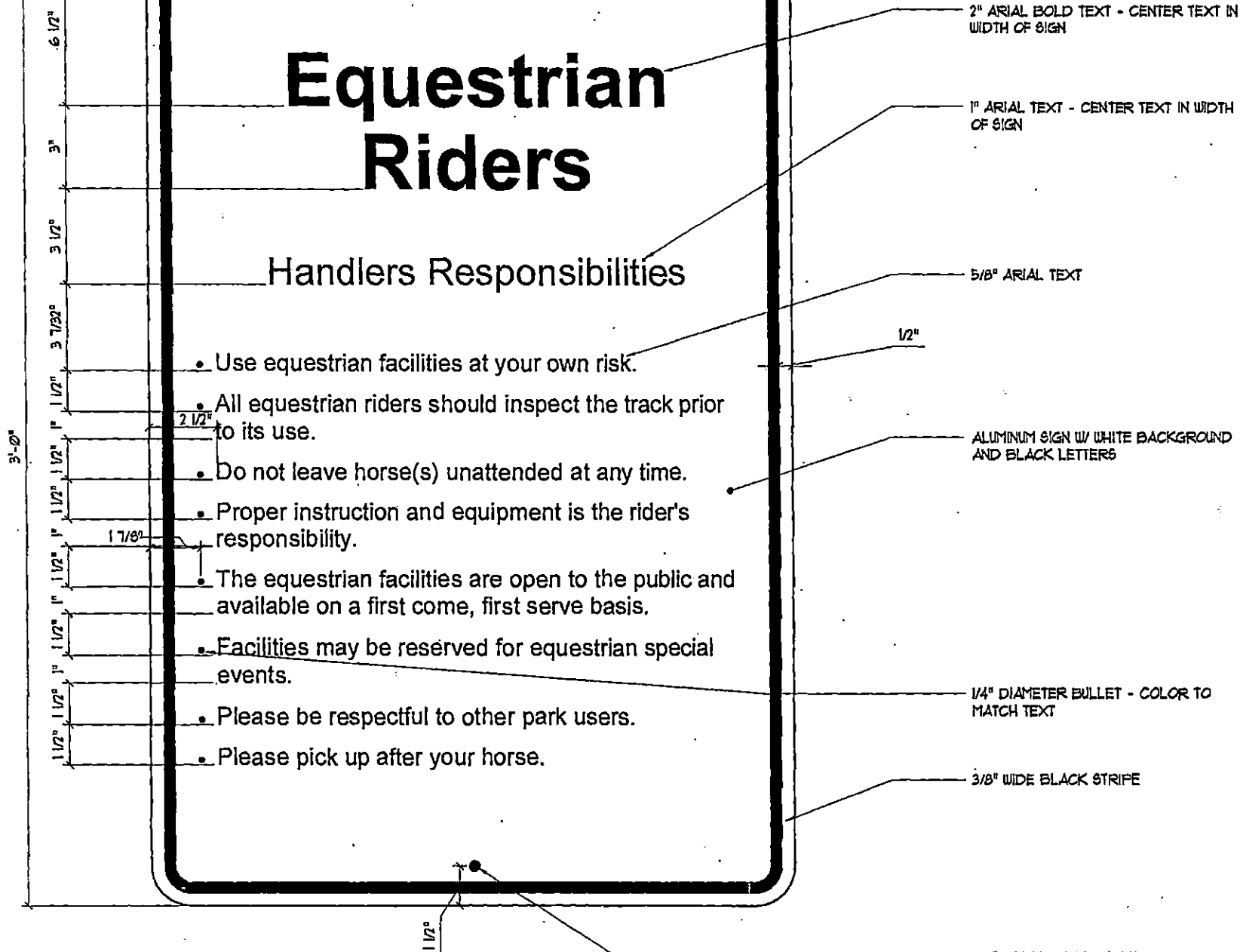


Report Vandalism Sign

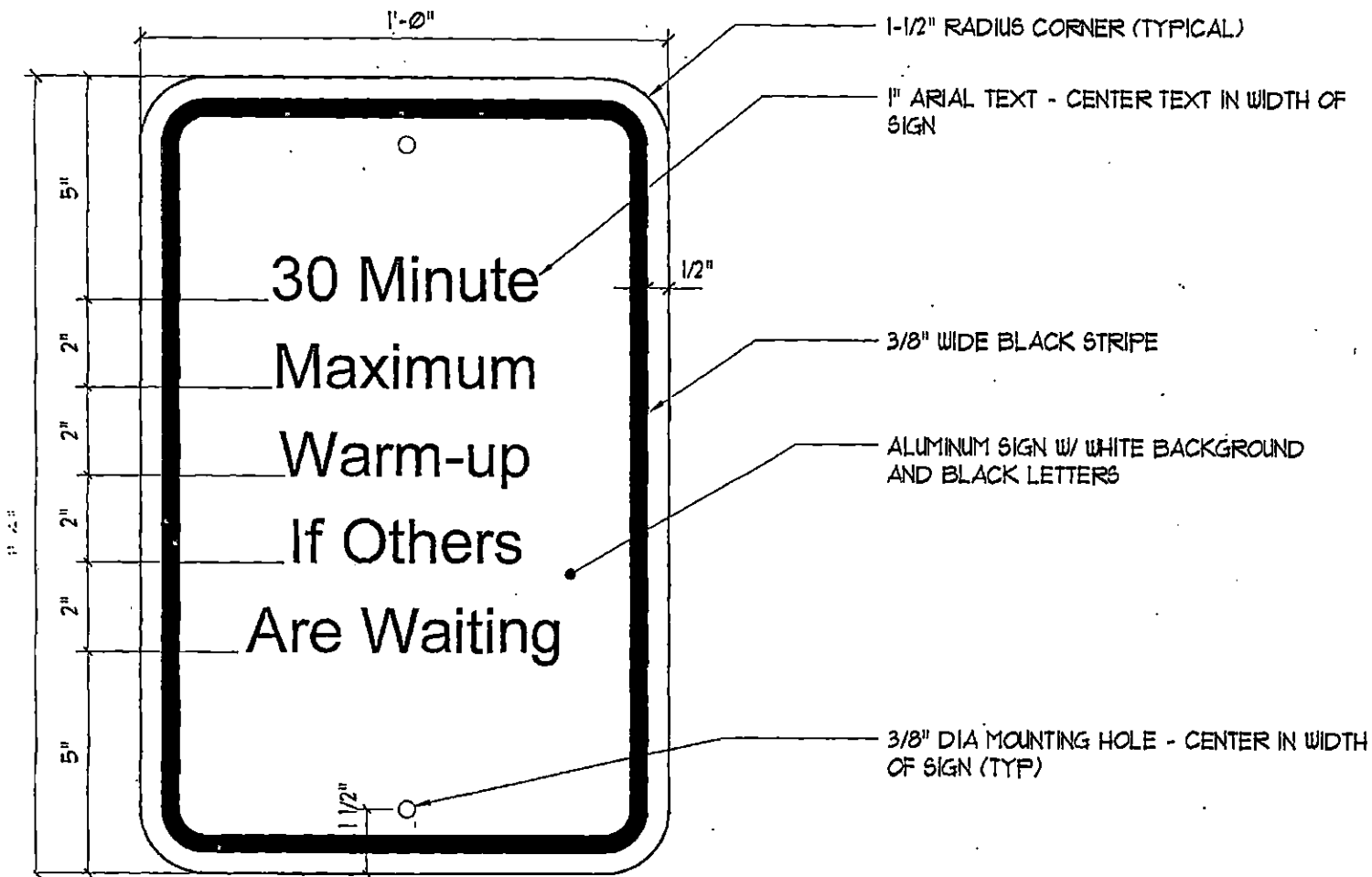
Scale: 3" = 1'-0"

REVISED 4/14/04

STO2882-52



Equestrian Park Sign

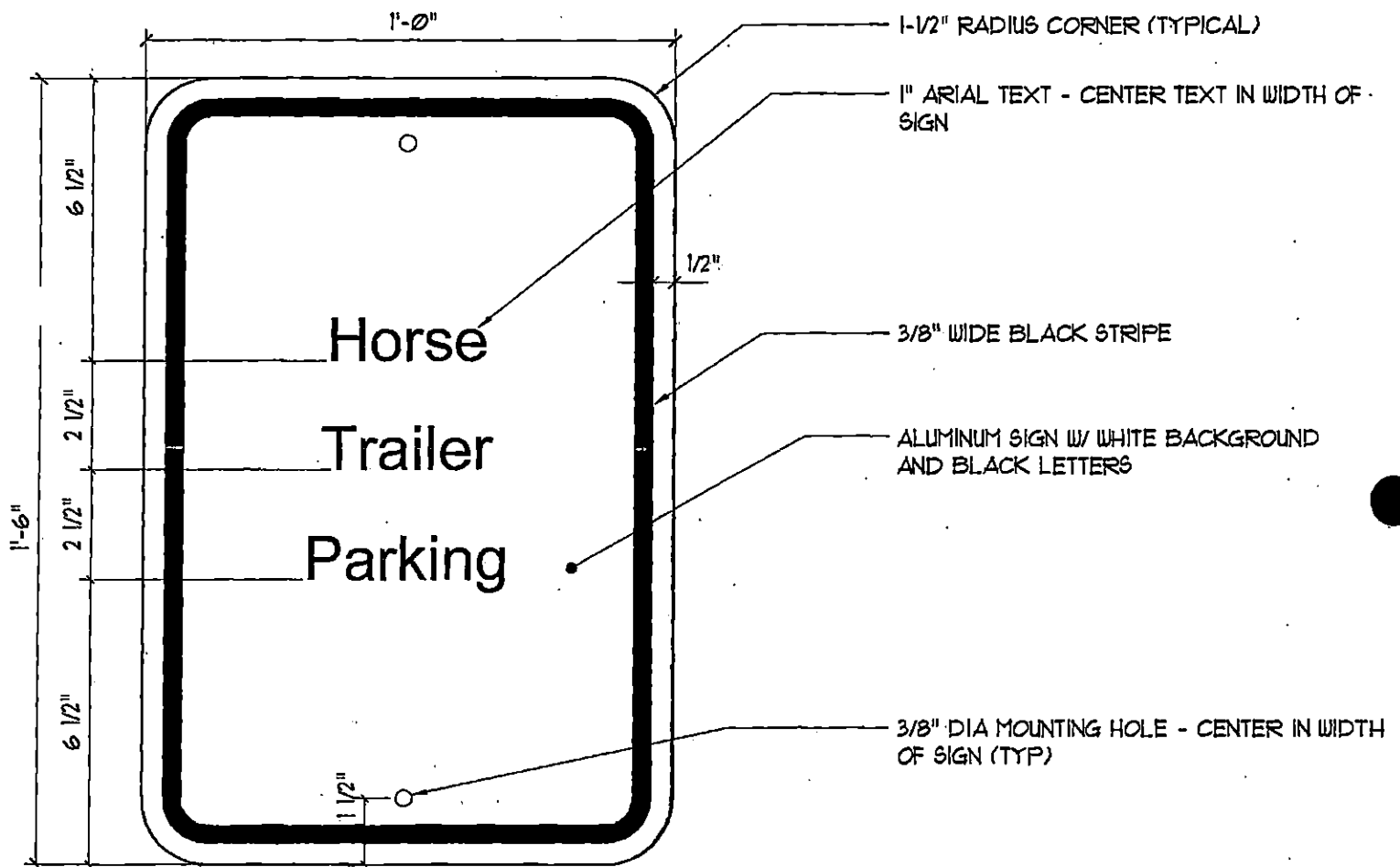


1 Equestrian Warm-up Sign

Scale: 3" = 1'-0"

REVISED 7/9/04

ST01052-02



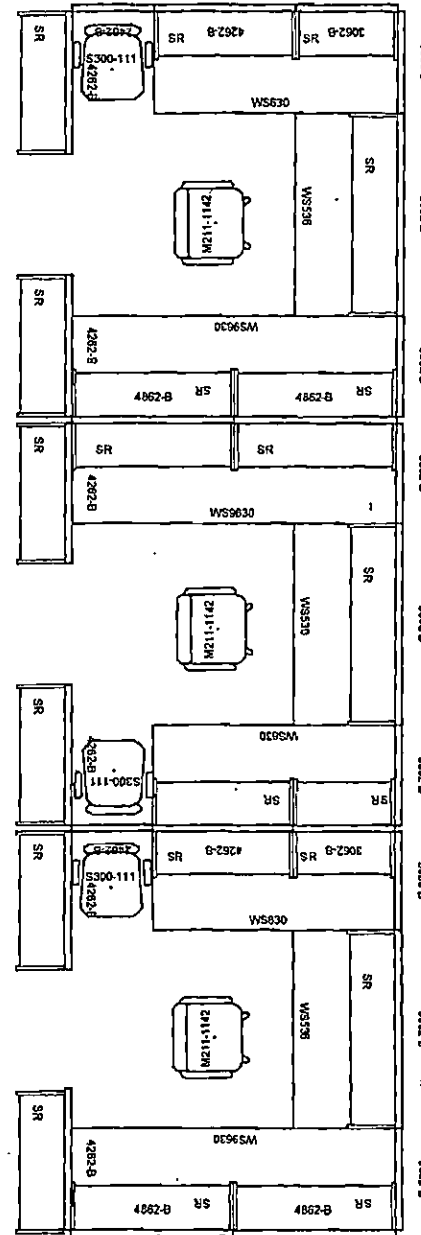
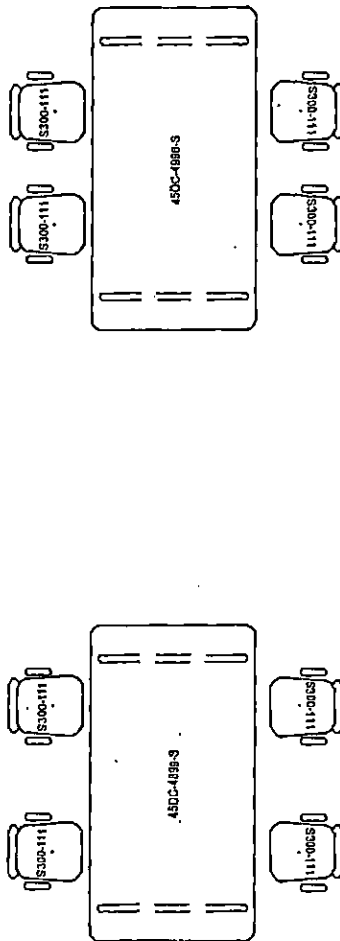
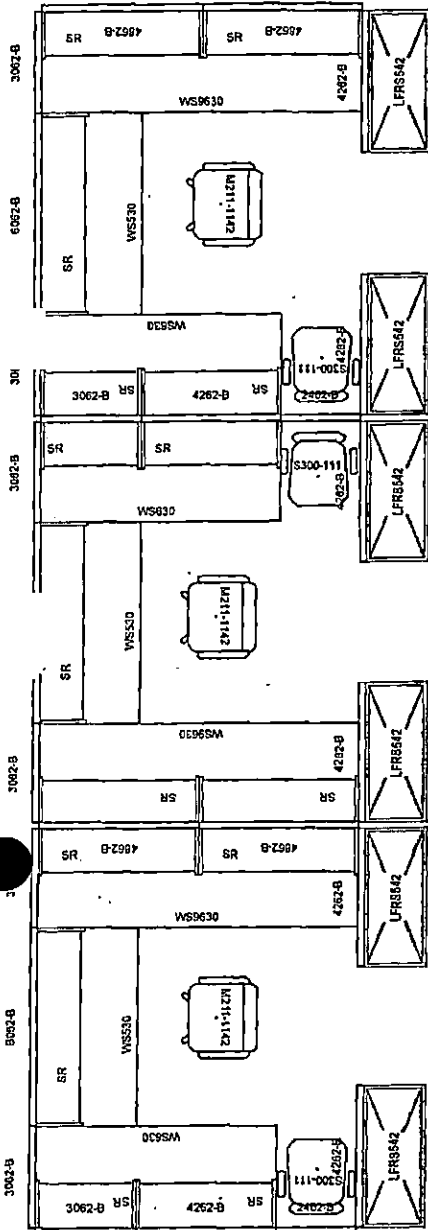
Equestrian Parking Sign

Scale: 3" = 1'-0"

REVISED 6/28/05

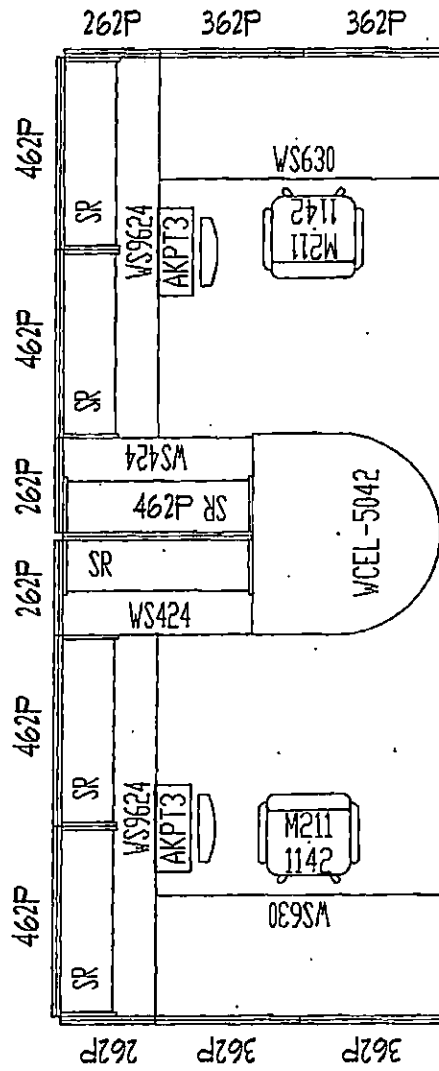
ST01052-03

8' x 10' CLUSTER & WORK AREA

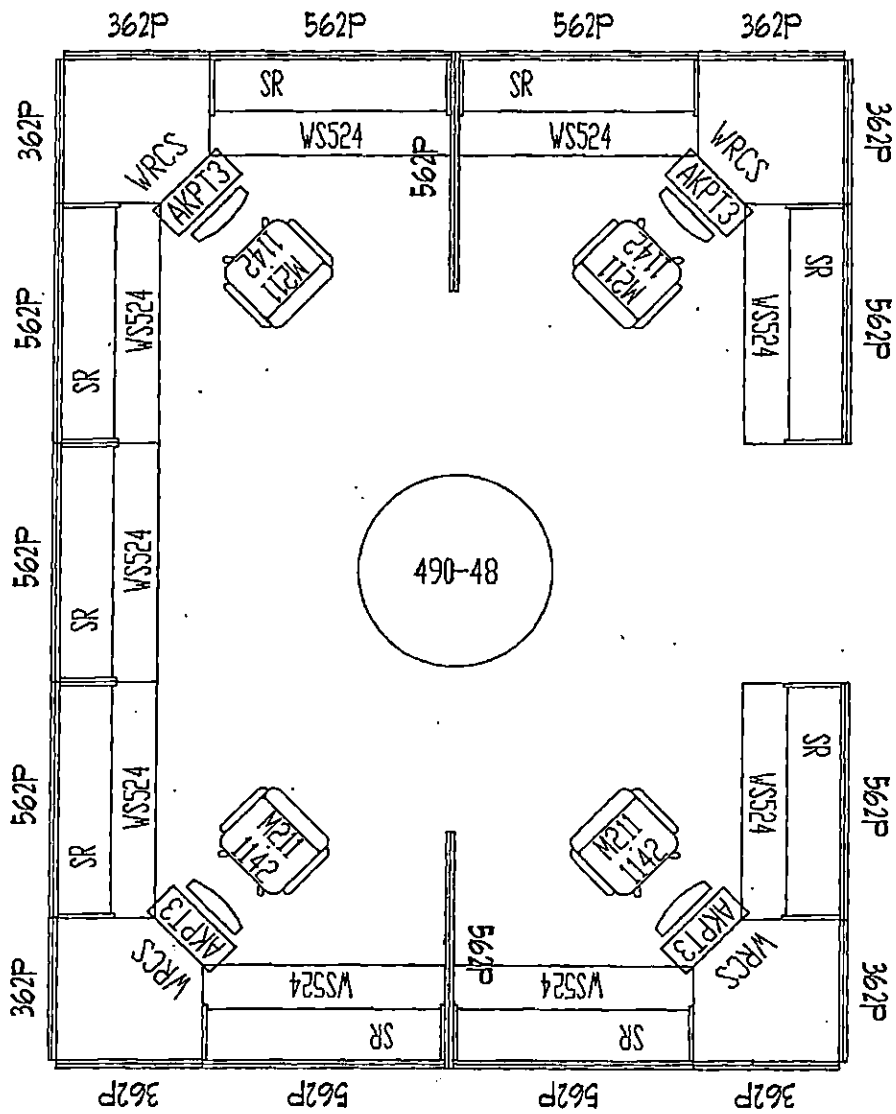


8' x 10' CLUSTER & WORK AREA

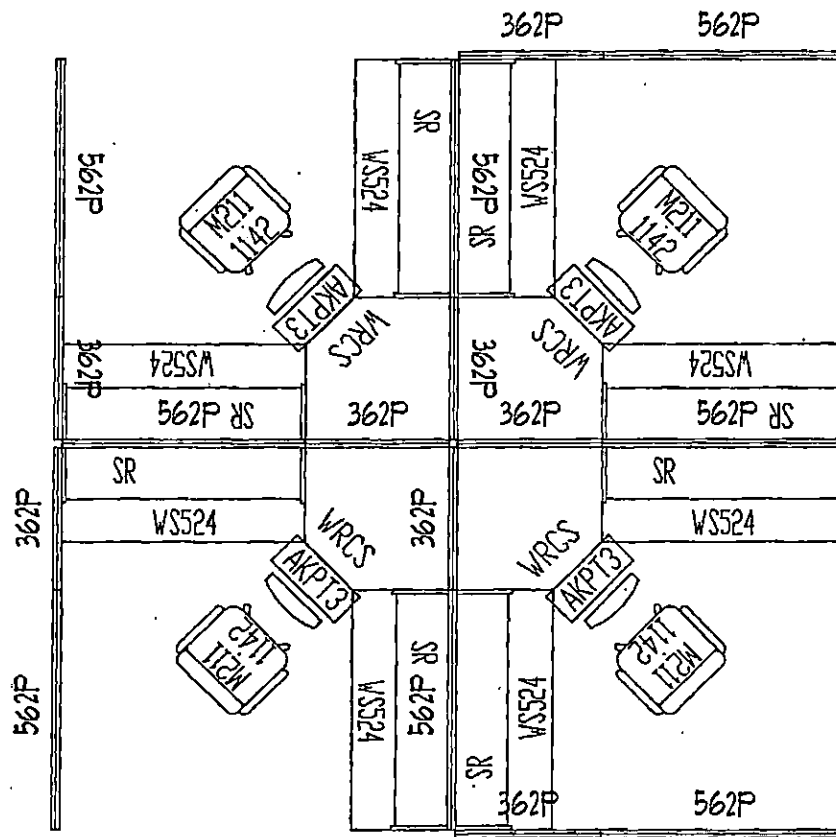
8' x 10' CLUSTER



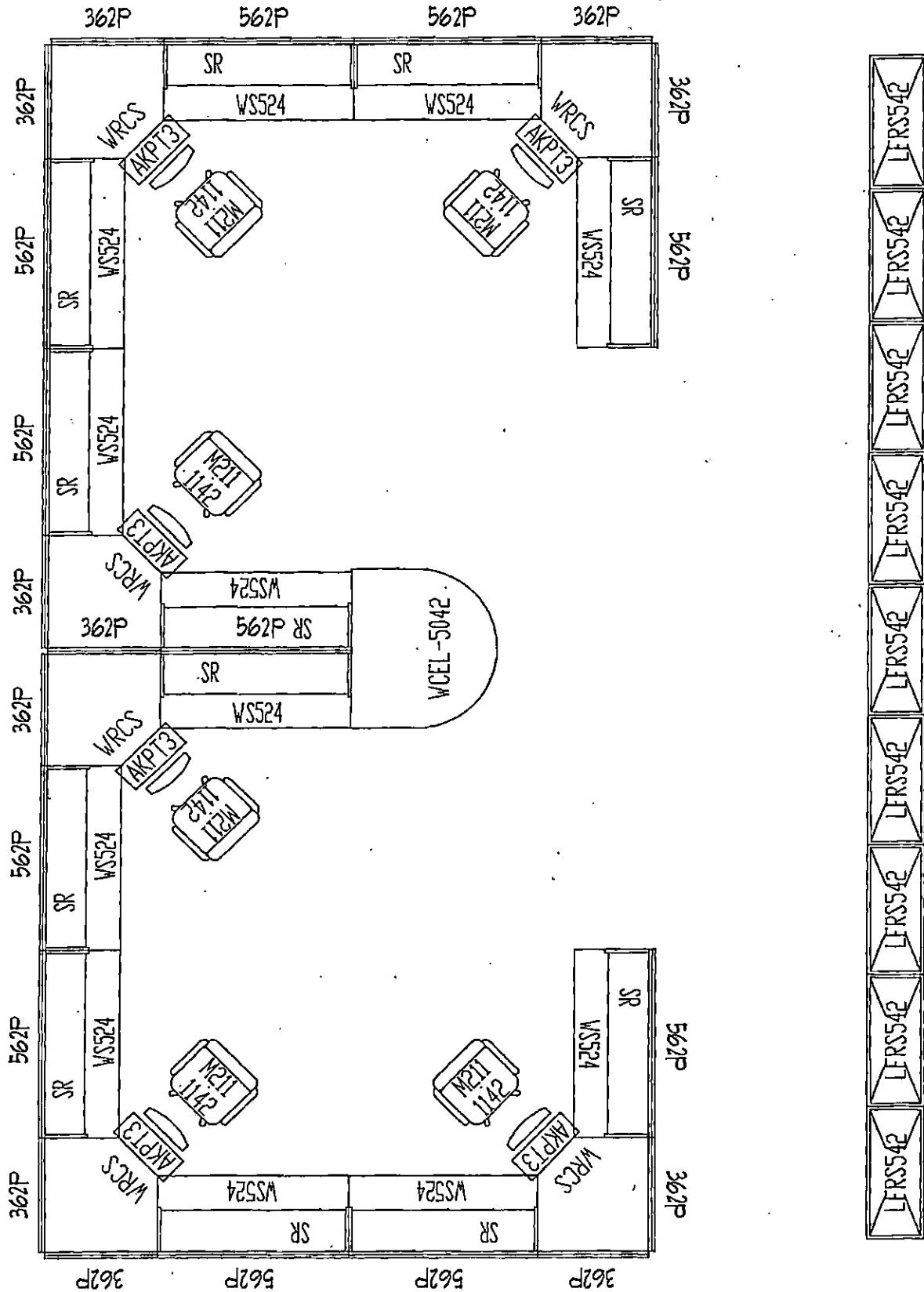
8' x 8' CLUSTER #2



8' x 8' CLUSTER #2



8' x 8' CLUSTER WITH FILE BANK



CHANGES IN BILLING

As of February 28, 2007, the following changes have been made in the monthly billing process:

1. Time will be now be invoiced through the last day of each month, or February 28, 2007 instead of the last Friday of the month which would have been February 23rd.
2. The CCIL2 reports will be "live" - the labor incurred, consultant, expenses, billed and received will be current, reflecting all activity current to the day on which the report is run.
3. All write-offs \$2,500 or greater (over contract by phase) must be approved and signed by the PM's organizational Principal.
4. PM's will need to mark the total percent to invoice on the draft. A statement of bill what is incurred will result in no increase in the % and all time will remain on hold.
5. PM's must acknowledge and write the dollar amount you want to be written off.
Example:

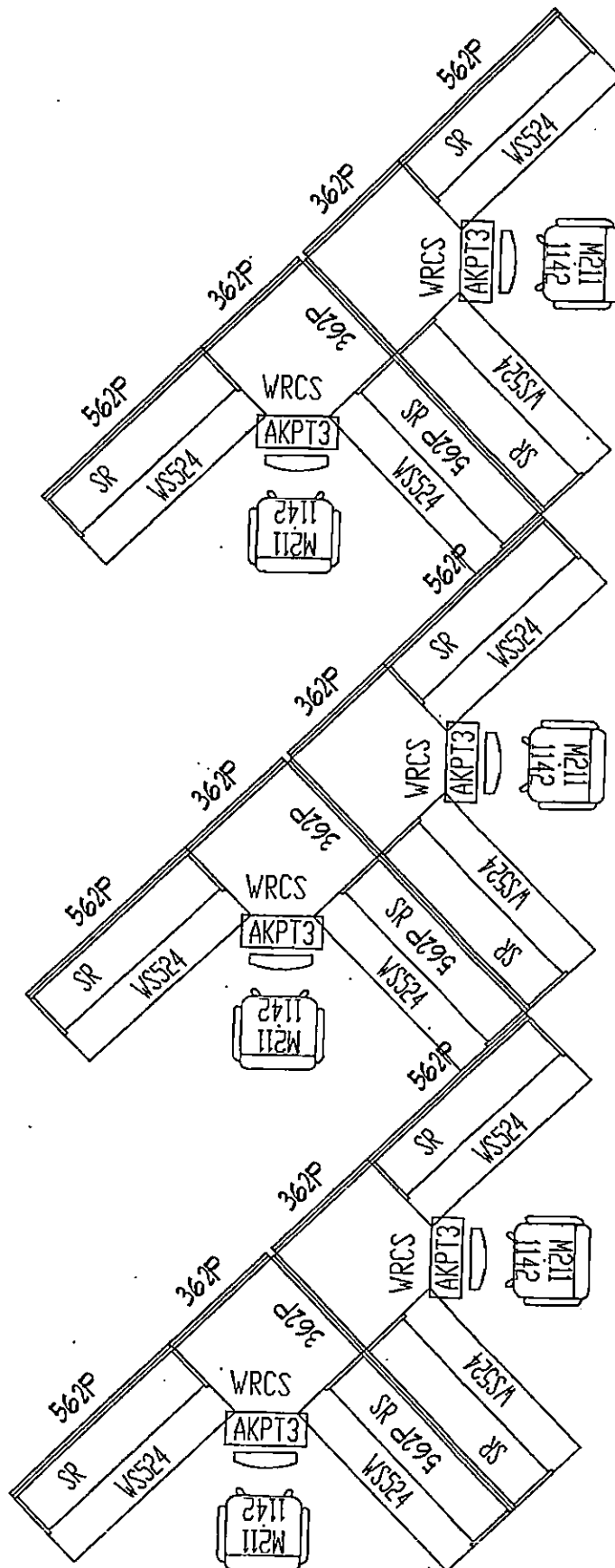
- a notation to bill to 100% and to write-off the remainder is no longer acceptable

- a notation to bill to 100% and to write-off \$562.00 - is acceptable. This documents that the amount of the write-off is recognized and authorized.

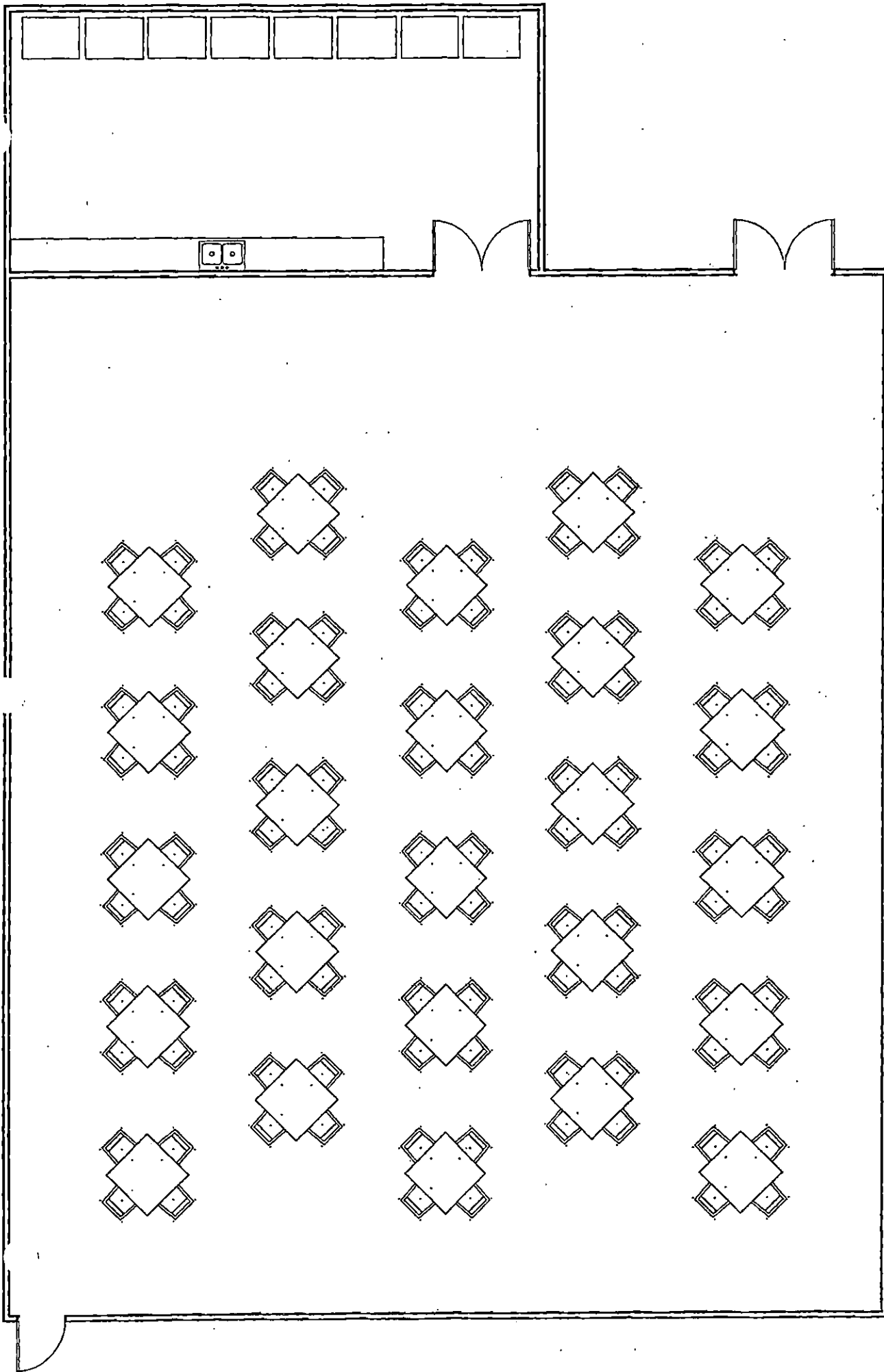
However, you do not have to mark each line item "W".

As always, your billing coordinator is available to answer questions and to assist you with these changes.

8' x 8' CLUSTER



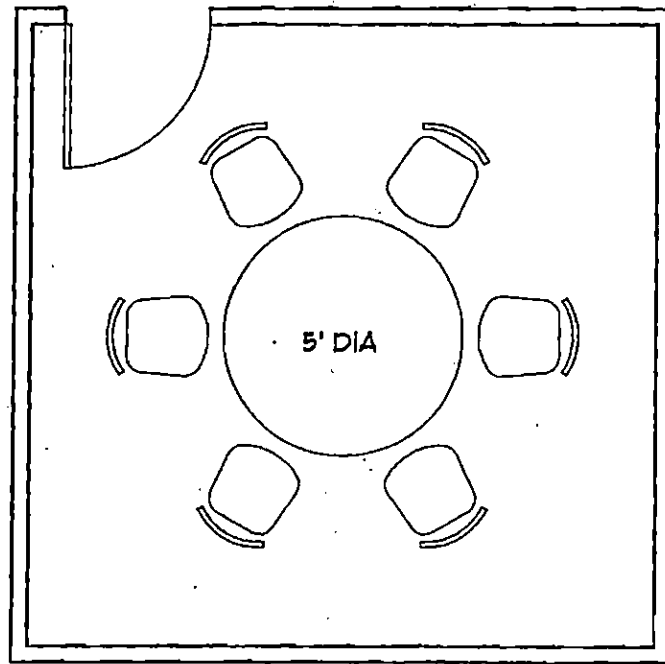
8' x 8' CLUSTER



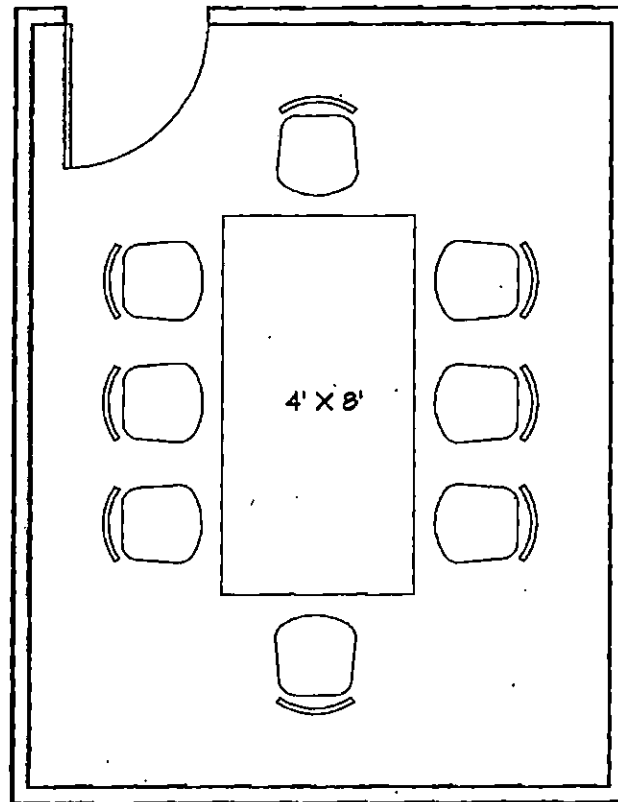
Cafeteria (53' x 63') w/ Vending Room (16' x 32')

Scale 1/4" = 1'-0"

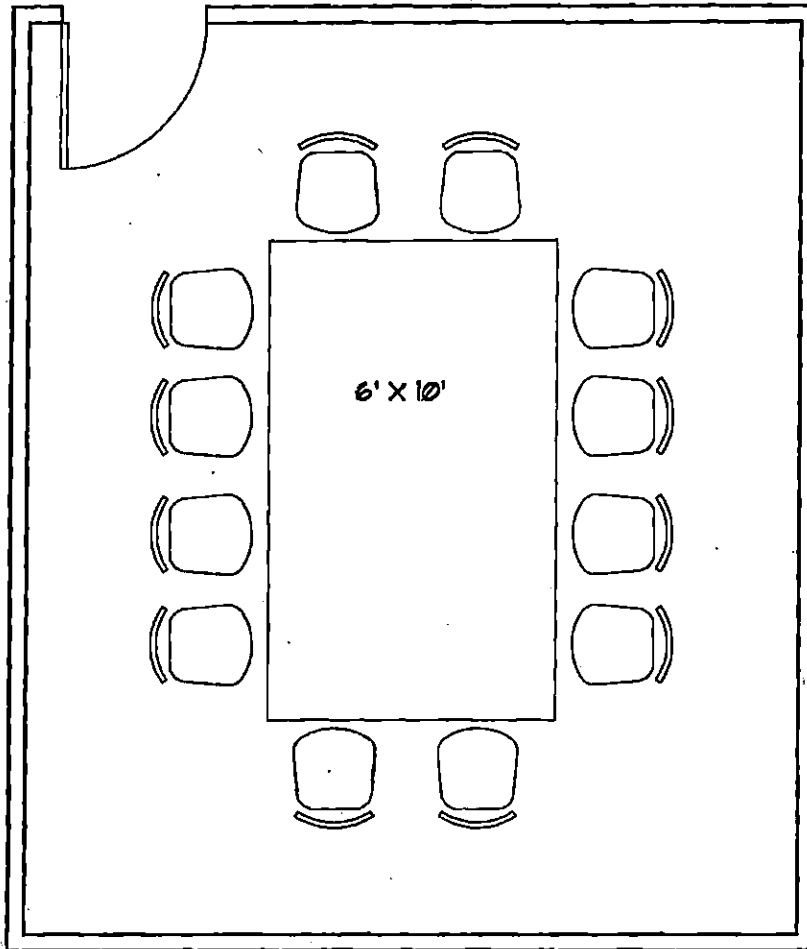
CONFERENCE ROOM #1 (13' X 13')



CONFERENCE ROOM #2 (12' X 16')

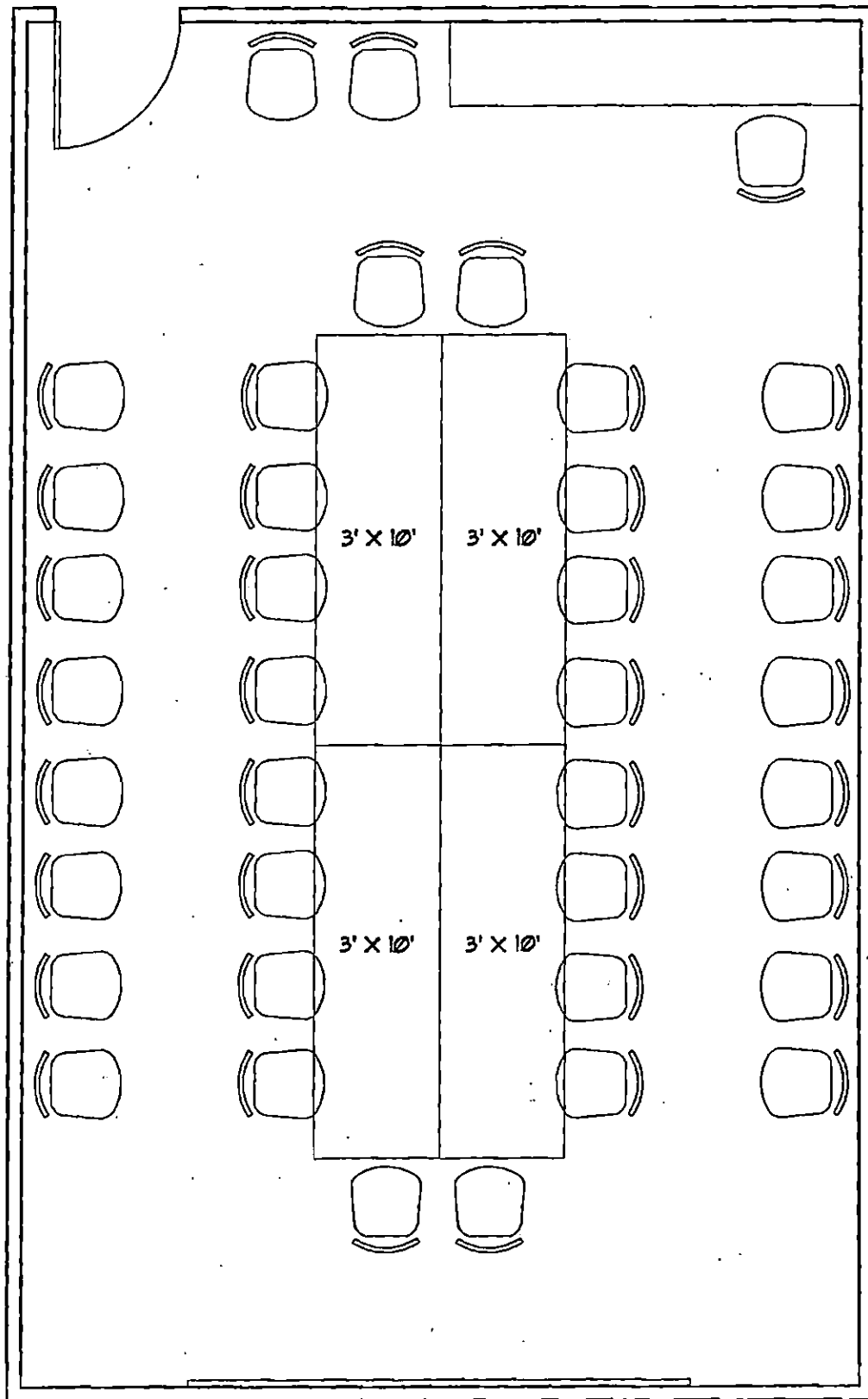


CONFERENCE ROOM #3 (16' X 19')



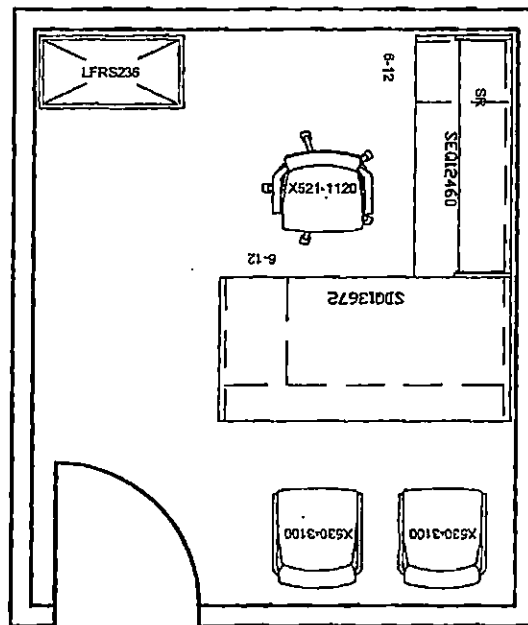
CONFERENCE ROOM #3

CONFERENCE ROOM #4 (20' X 33')



CONFERENCE ROOM #4

OFFICE #1 (10' X 12')



JOB CLASSIFICATIONS

Administrative Secretary
Administrative Project Specialist
Assistant Deputy City Clerk
Classification/Compensation Assistant
Council Liaison I
Council Liaison II
Crisis Intervention Administrator
Deputy City Marshal Sergeant
Development Project Analyst
Employee Benefits Specialist
Enterprise Project Manager
Field Supervisor
Financial Analyst I
Financial Analyst II
Internal Auditor I
Internal Auditor II
Legal Assistant
Management Analyst I
Management Analyst II
Nurse Case Manager

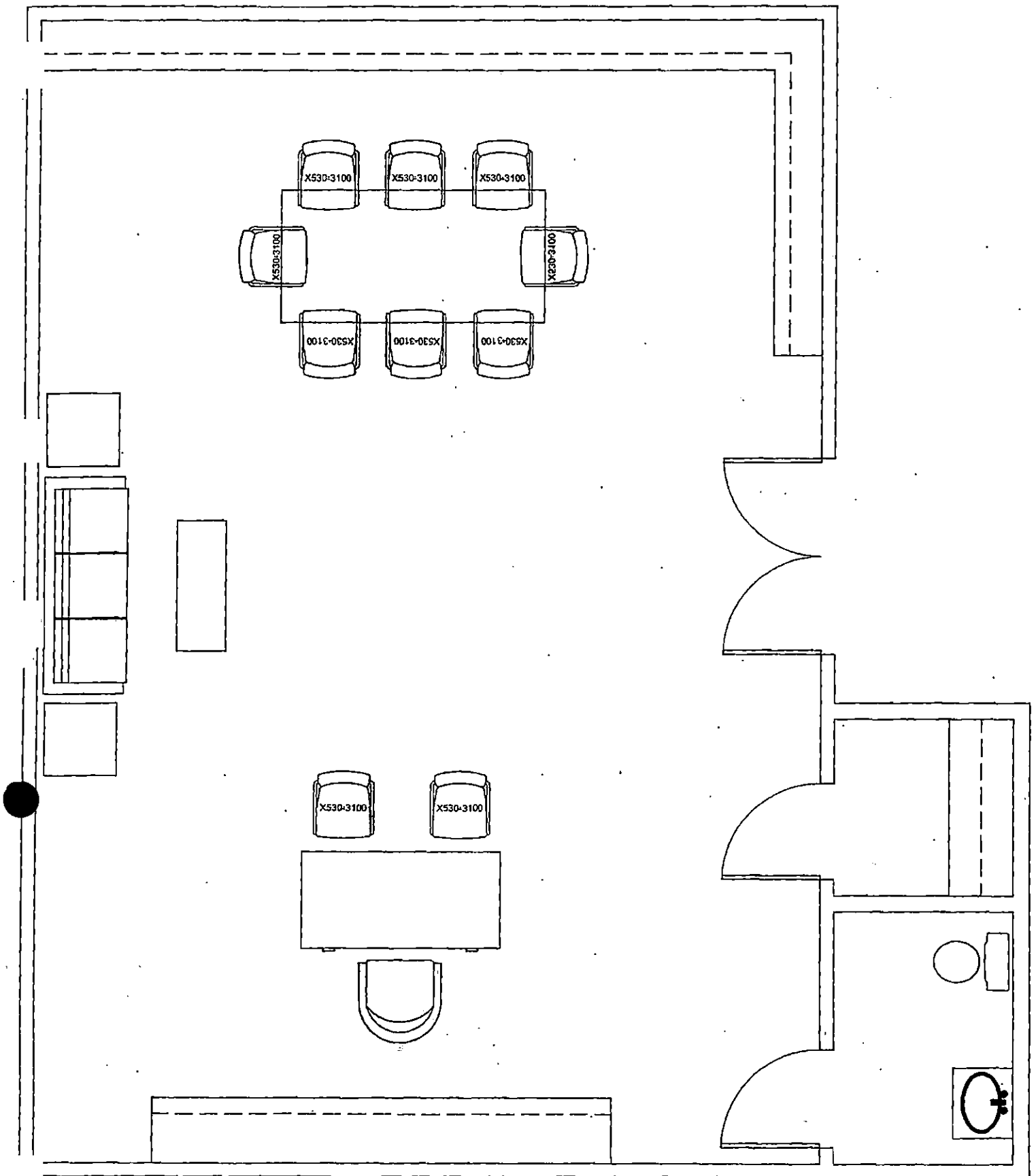
Personnel Analyst I/II
Personnel Services Administrator
Producer/Writer
Public Information Officer
Records Administrator
Safety Liability Specialist
Safety Officer
Senior Financial Analyst
Senior Housing Rehab Specialist
Senior Internal Auditor
Senior Management Analyst
Senior Personnel Analyst
Senior Production Specialist
Senior Public Information Officer
Video Production Engineer
Video Production Specialist
Workers Comp Assistant
Workers Comp Specialist

Floor plan of a room with the following labeled items:

- Top Left:** L624, 12/12/12
- Top Center:** SR, SR, STQ12472
- Top Right:** SKQ12436
- Center:** 6-12 (large rectangular table)
- Right Side:** STQ12472 (vertical label), LBR536 (vertical label)
- Bottom Left:** LBR536 (horizontal label)
- Seating:**
 - Two chairs labeled X521-1120 near the top center.
 - Two chairs labeled X530-3100 near the center table.
 - Four chairs labeled X530-3100 arranged in a square near the bottom center.
- Windows:** A large window unit on the left wall and a smaller window on the right wall.

City Councilman

OFFICE #11 (900 Sq. Ft.)

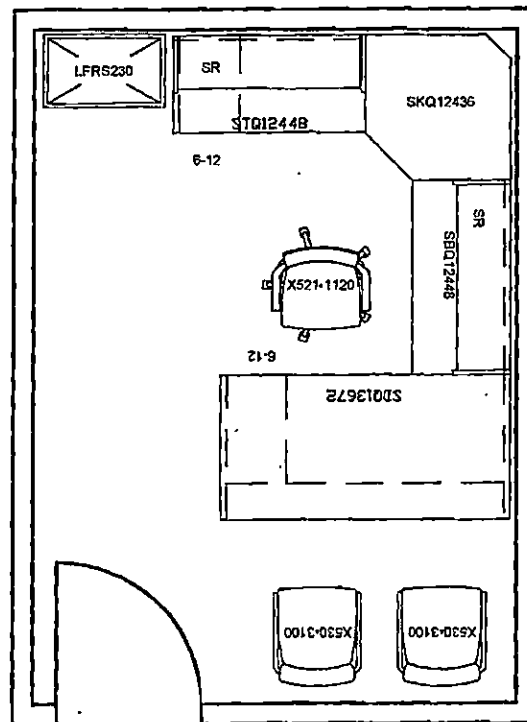


JOB CLASSIFICATIONS

Mayor

OFFICE #11

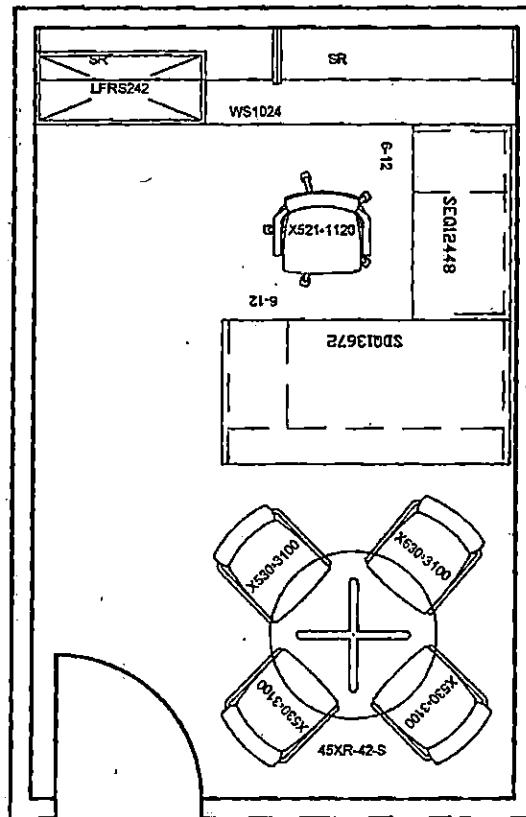
OFFICE #2 (10' X 14')



JOB CLASSIFICATIONS

Administrative Officer	Land Development Coordinator
Architectural Project Manager	Landscape Architect
Battalion Chief	Leisure Activities Supervisor
Budget Analyst	Microcomputer Support Supervisor
Business Services Supervisor	Minority Business Officer
Cable Station Administrator	Neighborhood Development Supervisor
Central Stores Supervisor	Neighborhood Planning Supervisor
Chief Deputy City Clerk	Permits Supervisor
Classification & Compensation Administrator	Planning Supervisor
Code Enforcement Supervisor	Plans Examination Supervisor
Computer Systems Supervisor	Principal Designer
Database Administrator	Principal Engineer
Database Architect	Public Fire Education Officer
Deputy Fire Marshal	Public Information Officer - Fire
Detention Lieutenant	Publicity Supervisor
Emergency Management Officer	Purchasing Initiatives Officer
Employee Benefits Administrator	Quality Assurance Administrator
EMS Coordinator	R/W & Real Property Supervisor
Engineering Project Manager	Redevelopment Officer
Executive Assistant	Safety/Loss Control Officer
Fire Inspections Supervisor	Senior Information Technology Auditor
Franchise Officer	Sewer Services Supervisor
Grants Specialist	SID Supervisor
Graphic Operations Supervisor	Software Architect
I.T. Development Supervisor	Supervisor
Information Security & Contingency Administrator	Workers Comp Administrator

OFFICE #3 (10' X 16')

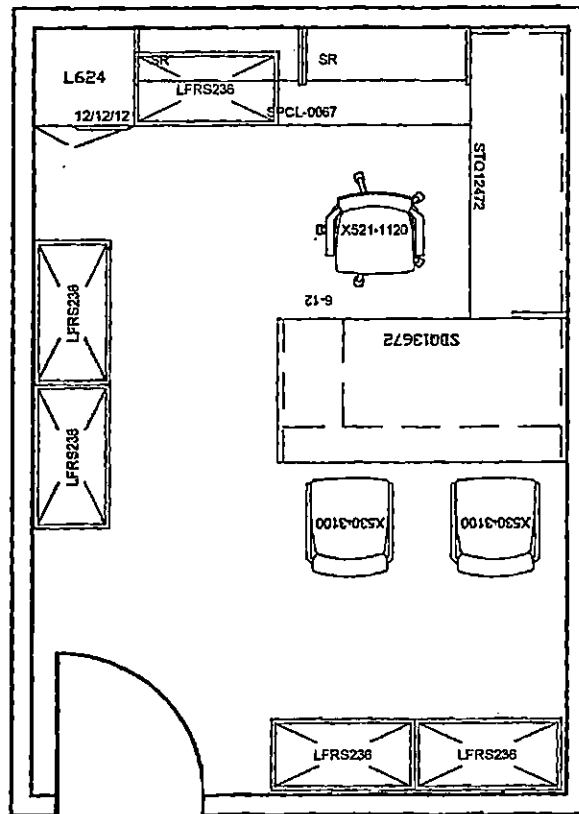


JOB CLASSIFICATIONS

Accounting Manager
 Adaptive Manager
 Administrative Manager
 Architectural Superintendent
 Assistant City Traffic Engineer
 Assistant Fire Chief
 Budget & Finance Manager
 Business Services Manager
 City Treasurer
 Cultural Manager
 Deputy City Attorney
 Economic Development Manager
 Employee Relations Manager
 Engineering Program Manager
 Fire Protection Engineer
 Human Resources Manager

I.T. Manager
 Insurance Services Manager
 Land Development Superintendent
 Neighborhood Development Manager
 Neighborhood Initiaves Manager
 Neighborhood Response Manager
 Organizational Development & Training Manage
 Personnel Services Manager
 Planning Manager
 Purchasing & Contracts Manager
 Real Estate Superintendent
 Recreation Manager
 Redevelopment Manager
 Senior Citizens Manager

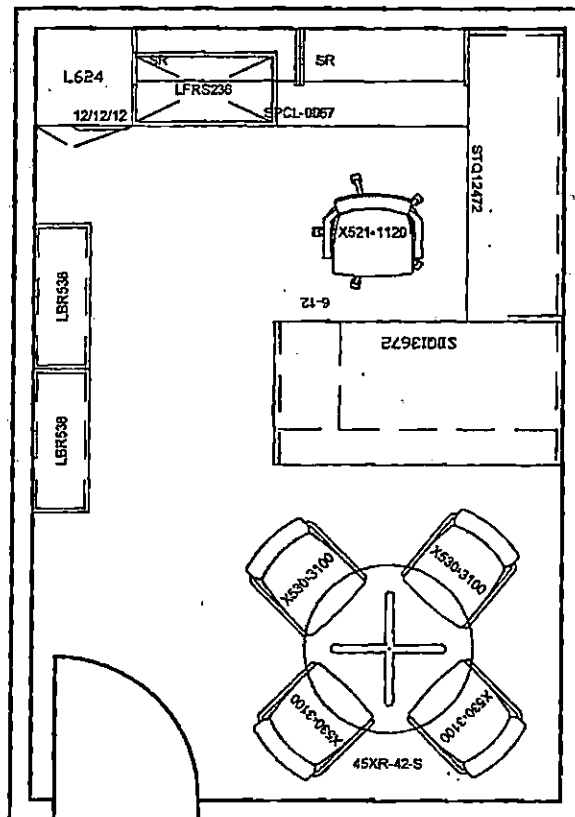
OFFICE #4 (11' X 16')



JOB CLASSIFICATIONS

Senior Executive Assistant

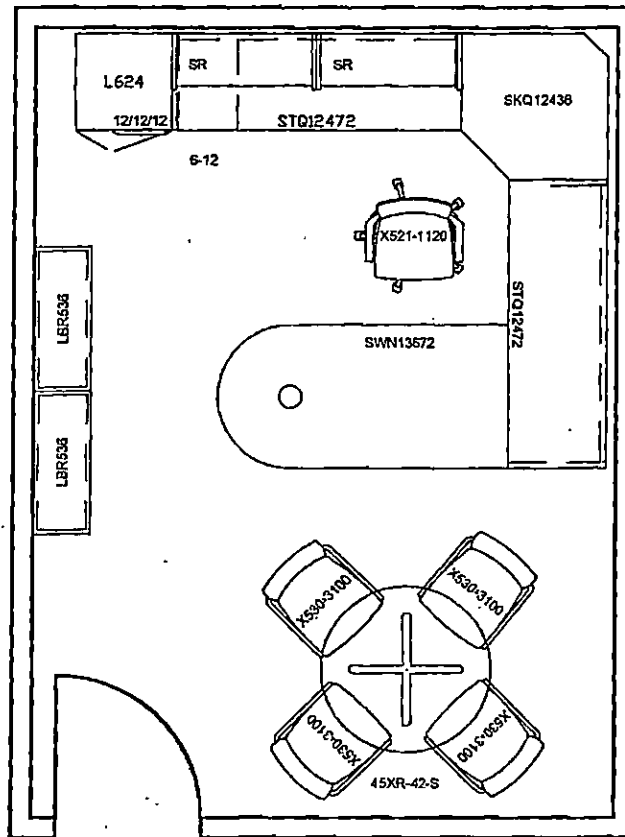
OFFICE #5 (11' X 16')



JOB CLASSIFICATIONS

Assistant City Engineer
City Traffic Engineer

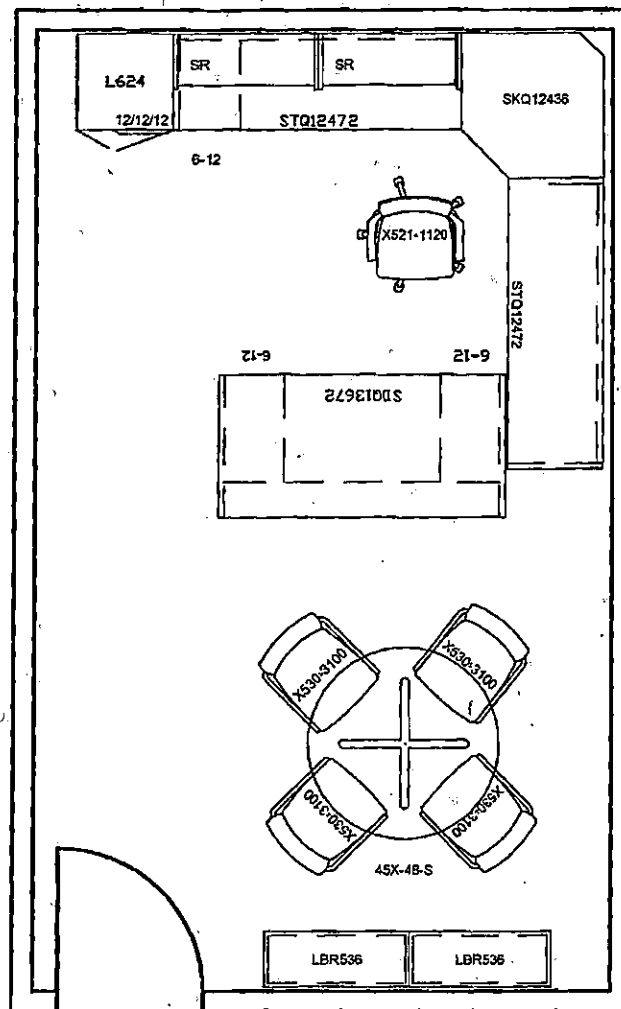
OFFICE #6 (12' X 16'-6")



JOB CLASSIFICATIONS

Assistant City Attorney
Deputy Director
Deputy Fire Chief

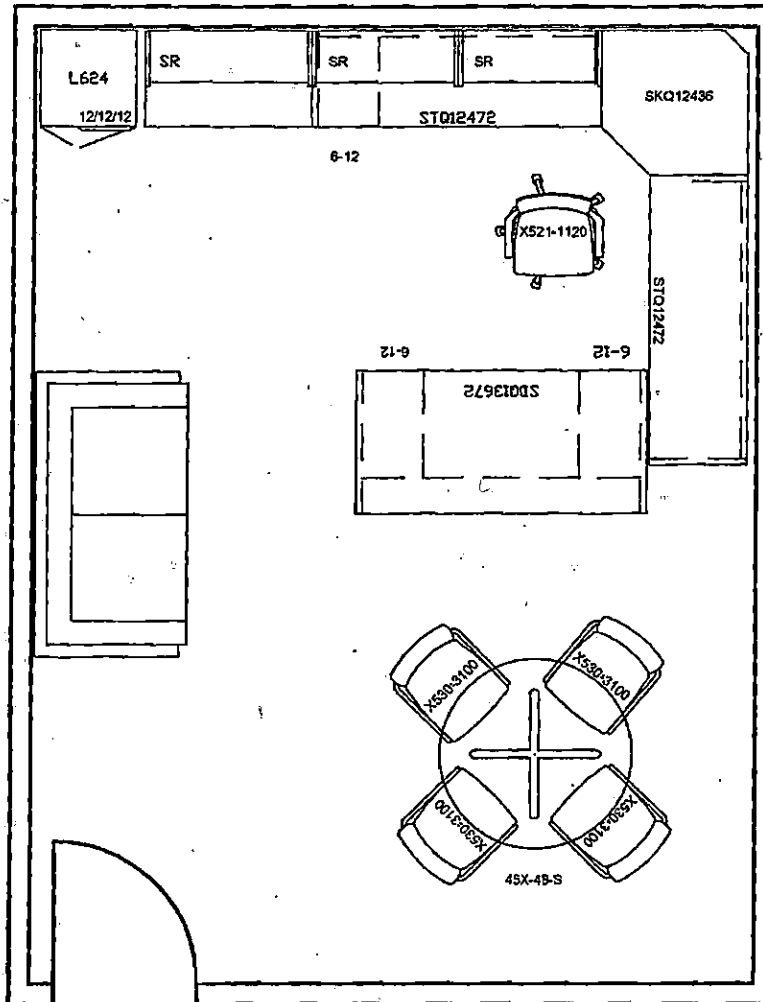
OFFICE #7 (12' X 20')



JOB CLASSIFICATIONS

City Auditor
City Clerk
Director
Fire Chief

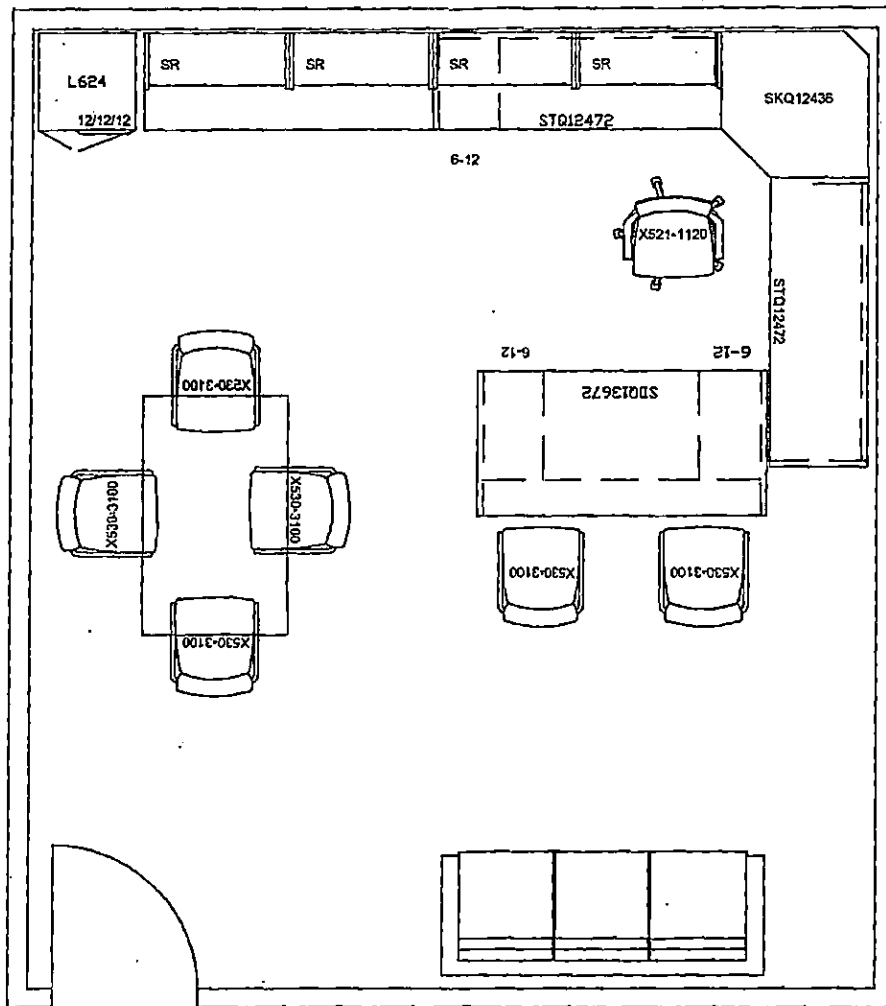
OFFICE #8 (15' X 20')



JOB CLASSIFICATIONS

Deputy City Manager

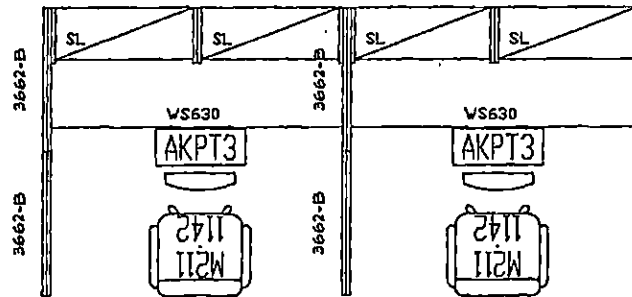
OFFICE #9 (17'-6" X 20')



JOB CLASSIFICATIONS

City Manager
City Attorney

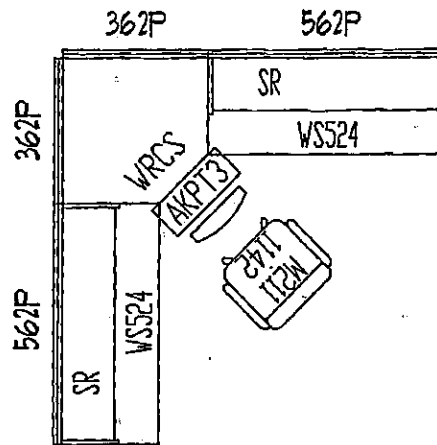
WORK STATION #1 (6' X 6')



JOB CLASSIFICATIONS

Audio Visual Production Specialist
Video Programming Technician
Videographer

WORK STATION #2 (8' X 8')

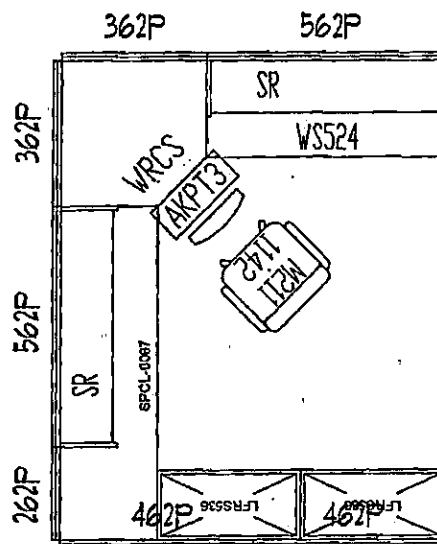


JOB CLASSIFICATIONS

Account Clerk
Code Enforcement Inspector
Code Enforcement Officer I/II
Computer Systems Technician
Customer Services Rep
Graphic Arts Clerk
Graphic Services Technician
Inventory Control Clerk
Mail Courier
Micro Computer Specialist I
Micro Computer Specialist II
Office Specialist I

Office Specialist II
Programmer II
Records Courier
Senior Intern/Intern
Senior Technician
Senior Tradesman
Support Desk Technician
Technical Document Writer
Technician/Specialist
Volunteer Coordinator
Workers' Comp Assistant

WORK STATION #3 (8' X 10')

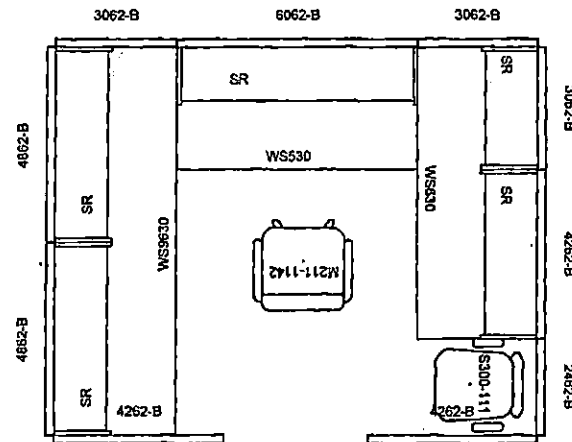


JOB CLASSIFICATIONS

Accounting Technician I
 Accounting Technician II
 Agenda Technician II
 Collection Officer
 Contract Safety Officer
 Cultural Center Coordinator
 Cultural Leader I
 Cultural Leader II
 Electronic Records Specialist
 Graphic Artist I
 Housing Rehab Technician
 Internet Developer/Analyst
 Inventory Control Clerk
 License Technician I
 License Technician II
 Neighborhood Technician
 Payroll Assistant I
 Payroll Assistant II
 Payroll Specialist
 Personnel Technician
 Planning Technician
 Public Information Specialist

Publicity Specialist
 Publicity Specialist II
 Purchasing Technician
 Records Technician
 Recreation Leader II
 Sanitation Billing Inspector
 Sanitation Billing Technician
 Secretary
 Senior Communications Technician
 Senior Microcomputer Specialist
 Sr. Adaptive Recreation Leader
 Sr. Cultural Activities Specialist
 Sr. Office Specialist
 Sr. Personnel Technician
 Sr. Publicity Specialist
 Systems Analyst I
 Systems Analyst II
 Technical Systems Analyst

WORK STATION #4 (8' X 10')

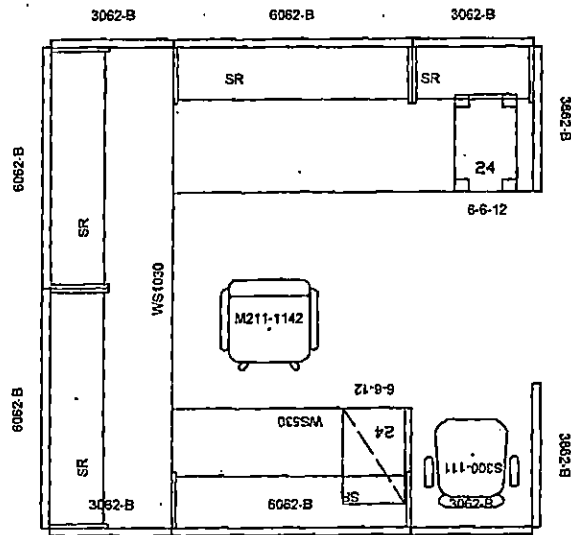


JOB CLASSIFICATIONS

Accreditation Coordinator
Architectural Technician I/II
Auditor
Buyer I
Buyer II
Construction Control Specialist
Construction Project Assistant
Construction Project Representative
Corrections Officer
Deputy City Clerk II
Deputy City Marshal
Designer
Engineering Associate I/II
Engineering Technician II
Fire Inspector
GIS Analyst I/II
GIS Programmer/Analyst
GIS Technician
Graphic Artist II
Graphic Illustrator
Human Resources Specialist
Legal Secretary

License Officer I
License Officer II
Neighborhood Planner
Neighborhood Programs Officer
Neighborhood Services Specialist
Planner I/II
Real Property Appraiser
Right of Way Agent I/II
Senior Auditor
Senior Buyer
Senior Code Enforcement Officer
Senior Designer
Senior Development Officer
Senior Electrical Construction Inspector
Senior Engineering Associate
Senior Engineering Technician
Senior Graphic Artist
Senior Graphic Illustrator
Senior License Officer
Senior Neighborhood Programs Officer
Statistical Analyst I
Traffic Barricade Inspector/II/I

WORK STATION #5 (10' X 10')



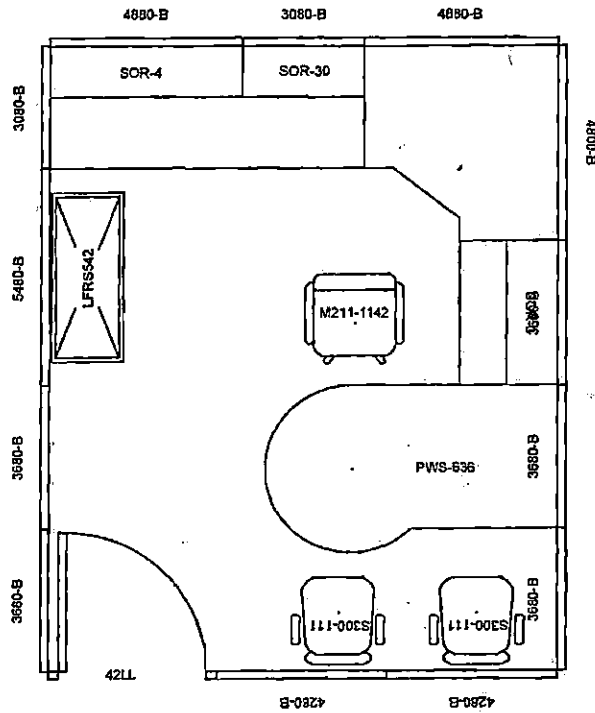
JOB CLASSIFICATIONS

Assistant Fire Protection Engineer
Civil Engineer
Construction Management Coordinator
Environmental Officer
Grant Research Coordinator
Information Systems Coordinator
Information Technologies Project Coordinator
Plans Examiner
Senior GIS Analyst
Senior Planner
Senior Systems Analyst
Structural Plans Examiner
Systems Administration Specialist

[illegible]

Administrative Assistant
Business Specialist I
Business Specialist II
Collection Supervisor
Office Supervisor

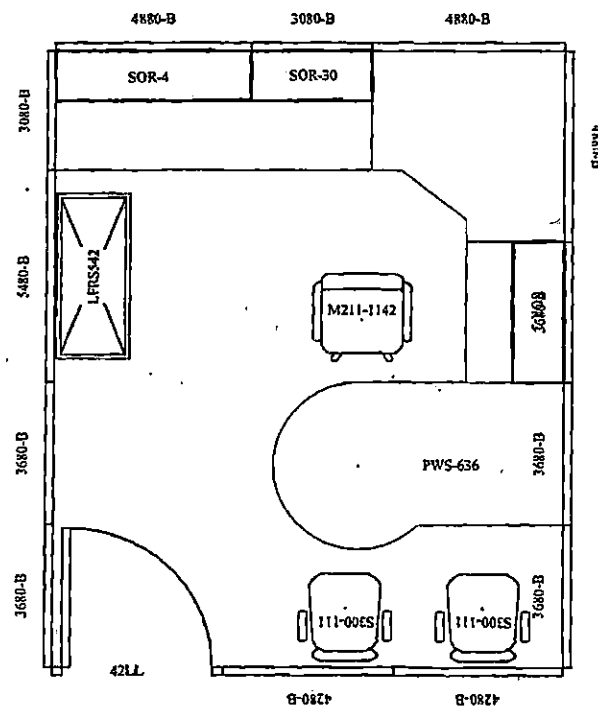
WORK STATION #7 (10'-6" X 13')



JOB CLASSIFICATIONS

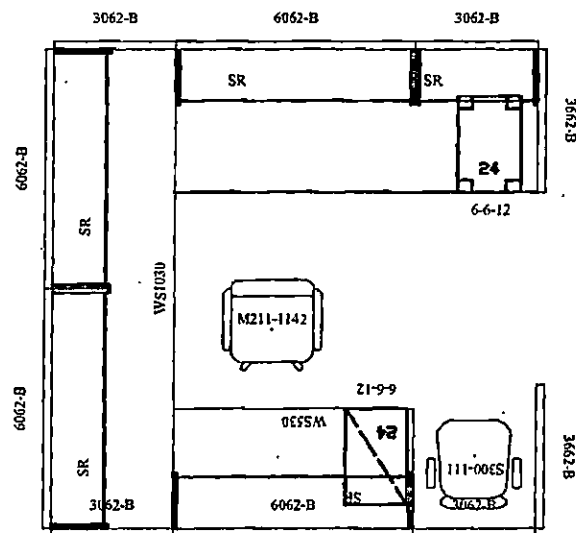
Construction Project Administrator
Contract Specialist
Project Engineer
Senior Neighborhood Services Specialist
Senior Statistical Analyst
Urban Design Coordinator

Urban Design Coordinator
Project Engineer
Senior Statistical Analyst



10'-6" x 13' WORK STATION

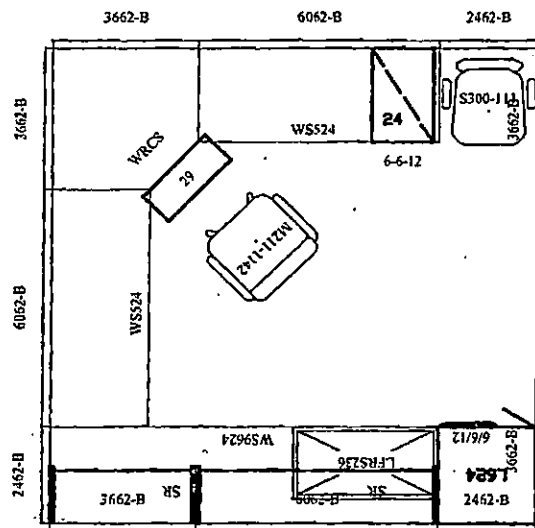
Structural Plans Examiner
Plans Examiner
Civil Engineer
Construction Management Coordinator
Environmental Officer
Senior Planner
Assistant Fire Protection Engineer



10' x 10' WORK STATION

JOB CLASSIFICATIONS:

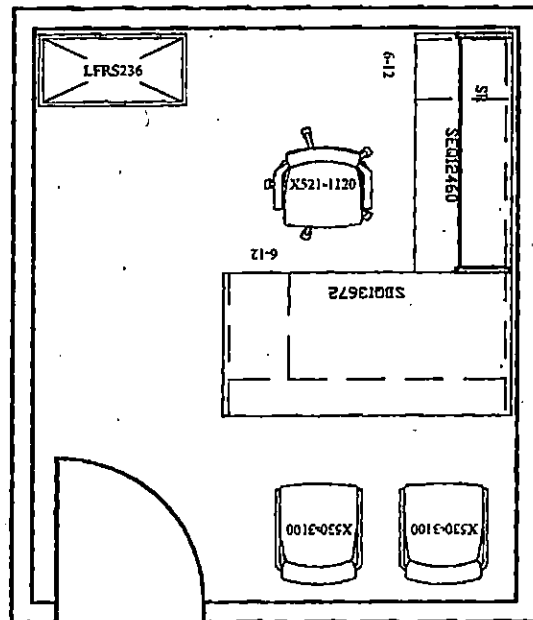
Office Supervisor
Administrative Assistant
Contract Specialist



10' x 10' WORK STATION B

JOB CLASSIFICATIONS:

Senior Management Analyst
Management Analyst II
Management Analyst I
Public Information Officer
Field Supervisor
Administrative Secretary

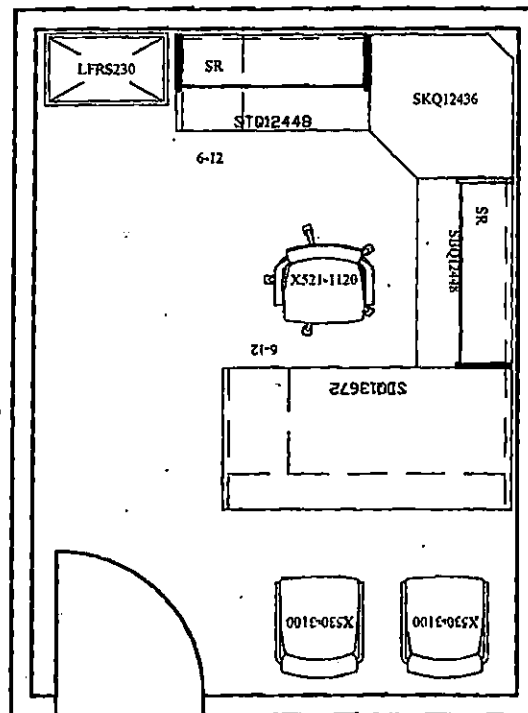


10' x 12' PRIVATE OFFICE

JOB CLASSIFICATIONS:

Planning Supervisor
Plans Examination Supervisor
Permits Supervisor
Administrative Officer
R/W & Real Property Supervisor
SID Supervisor
Publicity Supervisor
Supervisor
Quality Assurance Administrator
Minority Business Officer

Purchasing Administrator
Sewer Services Supervisor
Franchise Officer
Engineering Project Manager
Architectural Project Manager
Landscape Architect
Principal Designer
Principal Engineer
Land Development Coordinator

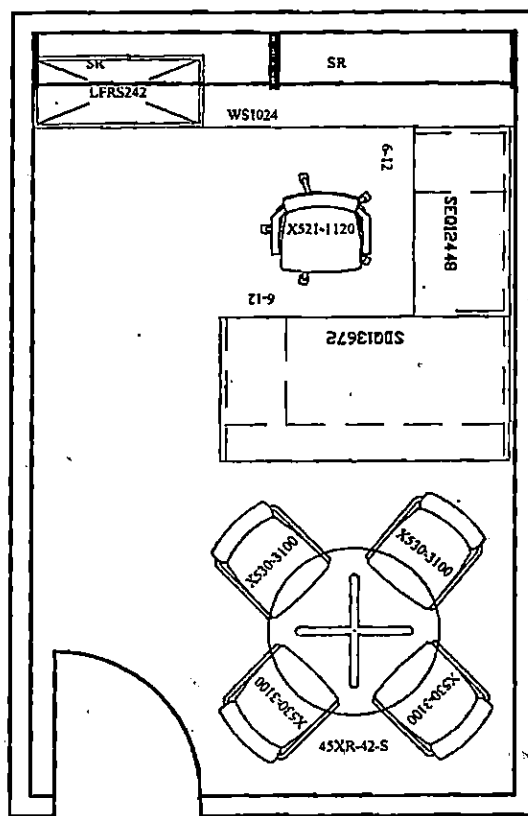


10' x 14' PRIVATE OFFICE

JOB CLASSIFICATIONS:

Planning Manager
Land Development Superintendent
Real Estate Manager
Assistant City Traffic Engineer
Administrative Manager
Recreation Manager
Cultural Manager
Adaptive Manager

Senior Citizen Manager
Fire Protection Engineer
Engineering Program Manager
Purchasing & Contracts Manager
Architectural Superintendent
Business Services Manager

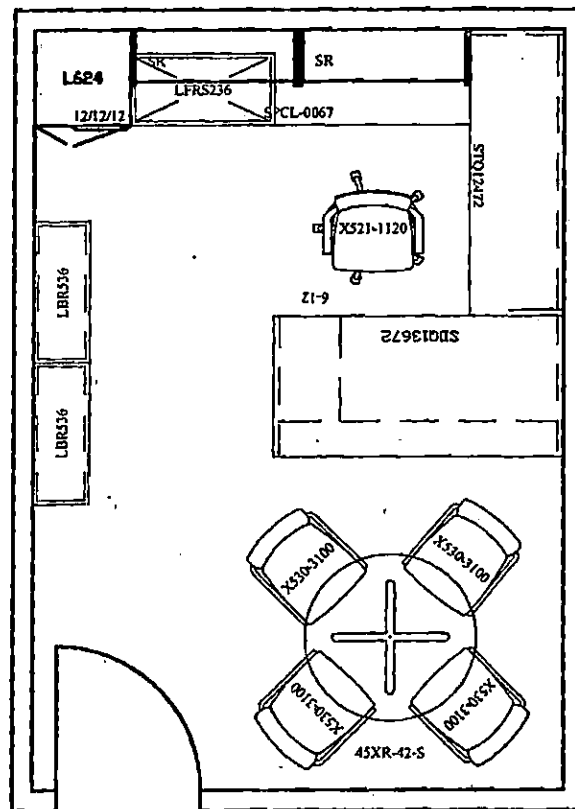


10' x 16' PRIVATE OFFICE

JOB CLASSIFICATIONS:

City Traffic Engineer

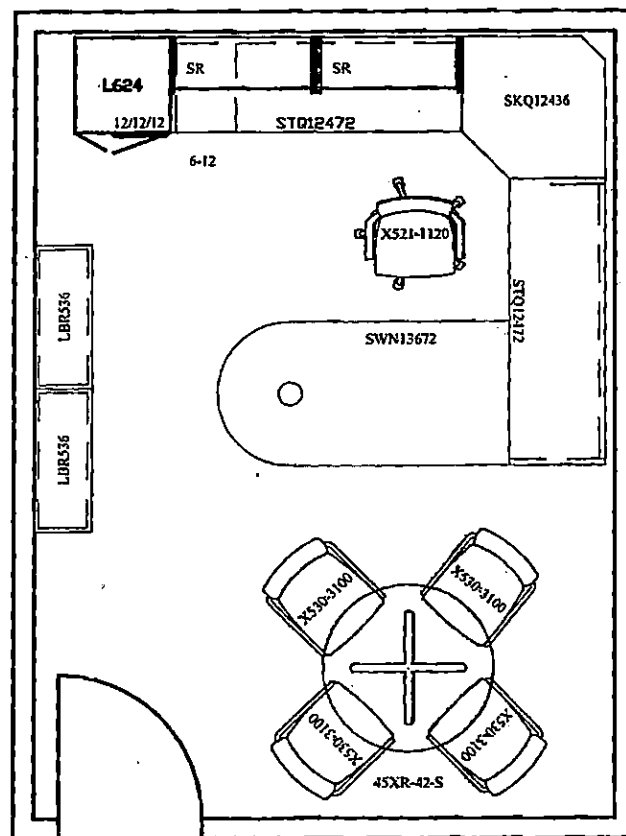
Assistant City Engineer



11' x 16' PRIVATE OFFICE

JOB CLASSIFICATIONS:

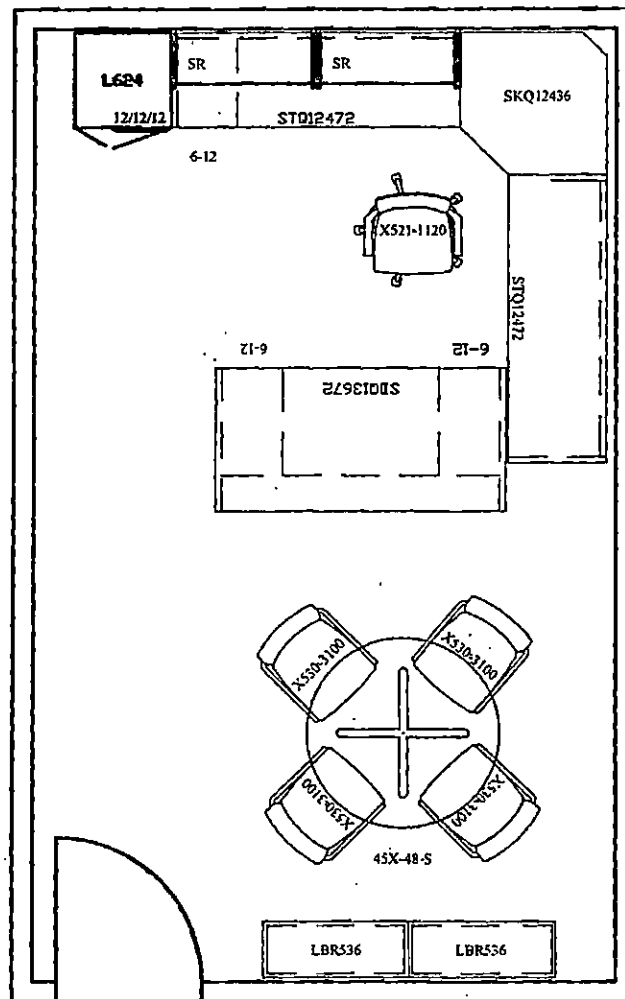
Deputy Director



12' x 16'-6" PRIVATE OFFICE

JOB CLASSIFICATIONS:

Director

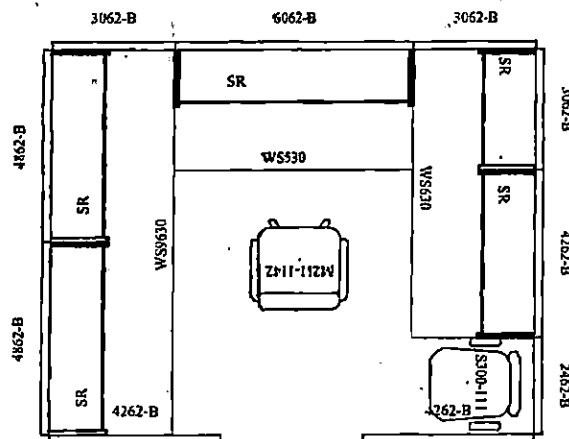


12' x 20' PRIVATE OFFICE

JOB CLASSIFICATIONS:

Designer
Senior Designer
Engineering Associate I / II
Right of Way Agent I / II
Senior Engineering Associate
Engineering Technician II
Senior Engineering Technician
Architectural Technician II/I
Traffic Barricade Inspector II/I
Construction Project Representative
Senior Electrical Construction Inspector
Planner I / II
GIS Analyst I / II

Statistical Analyst I
Graphic Artist II
GIS Technician
Construction Control Specialist
Real Property Appraiser
Sr. Graphic Illustrator
Graphic Illustrator
Buyer II
Senior Buyer
License Officer II
Auditor
Senior License Officer
Senior Auditor

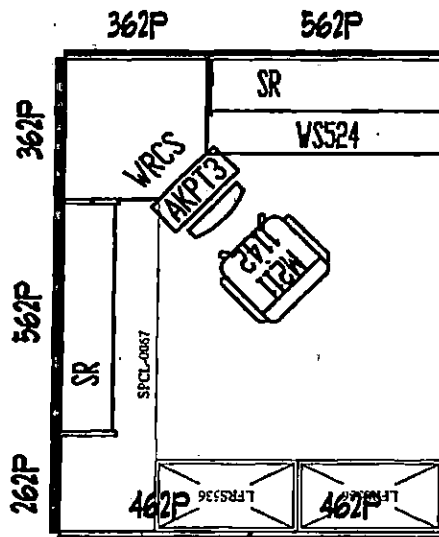


8' x 10' WORK STATION

JOB CLASSIFICATIONS:

Secretary
Publicity Specialist II
Sr. Office Specialist
Sr. Publicity Specialist
Sr. Cultural Activities Specialist
Coordinator
Sr. Adaptive Recreation Leader
Publicity Specialist
Accountant Technician I

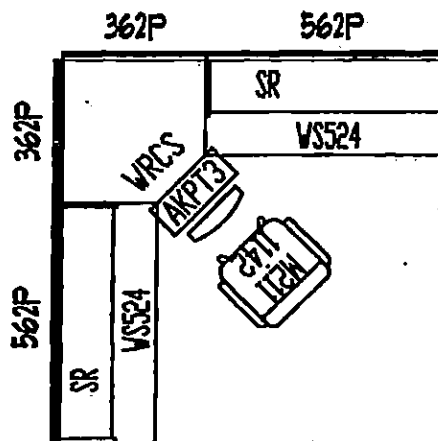
Recreation Leader II
Graphic Artist I
Cultural Leader I
Agenda Technician II
Planning Technician
Technical Systems Analyst
Sanitation Billing Technician
License Technician
Sanitation Billing Inspector



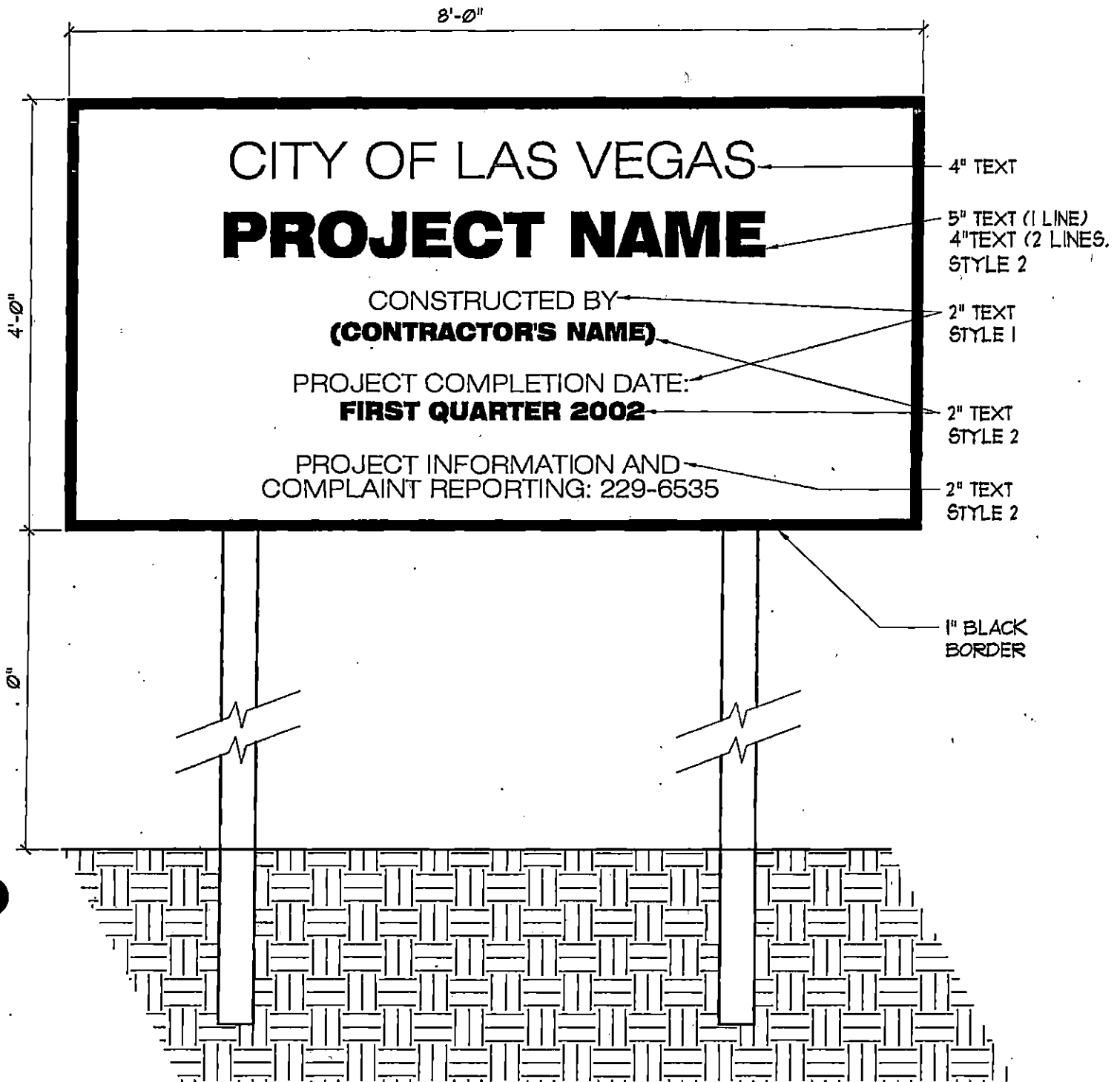
8' x 10' WORK STATION

JOB CLASSIFICATIONS:

Office Specialist I
Office Specialist II
Technician / Specialist
Mail Courier
Senior Technician
Senior Tradesman
Senior Intern/Intern
Customer Service Rep
Volunteer Coordinator



8' x 8' WORK STATION



1. SIGN SHALL BE PAINTED WHITE WITH 1" BLACK BORDER

2. ALL SIGN LETTERING TO BE PAINTED BLACK.
STYLE 1 TO BE SWIS721 LT EX BT. (LIGHT)
STYLE 2 TO BE SWIS 721 BLK EX BT. (BOLD)

3. SIGN SHALL BE PLACED SO AS NOT TO OBSTRUCT VEHICULAR SIGHT LINES AND
SHALL NOT OBSTRUCT ANY PEDESTRIAN WAY.

4. FINAL SIGN LOCATIONS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO
INSTALLATION.

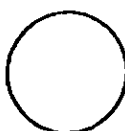
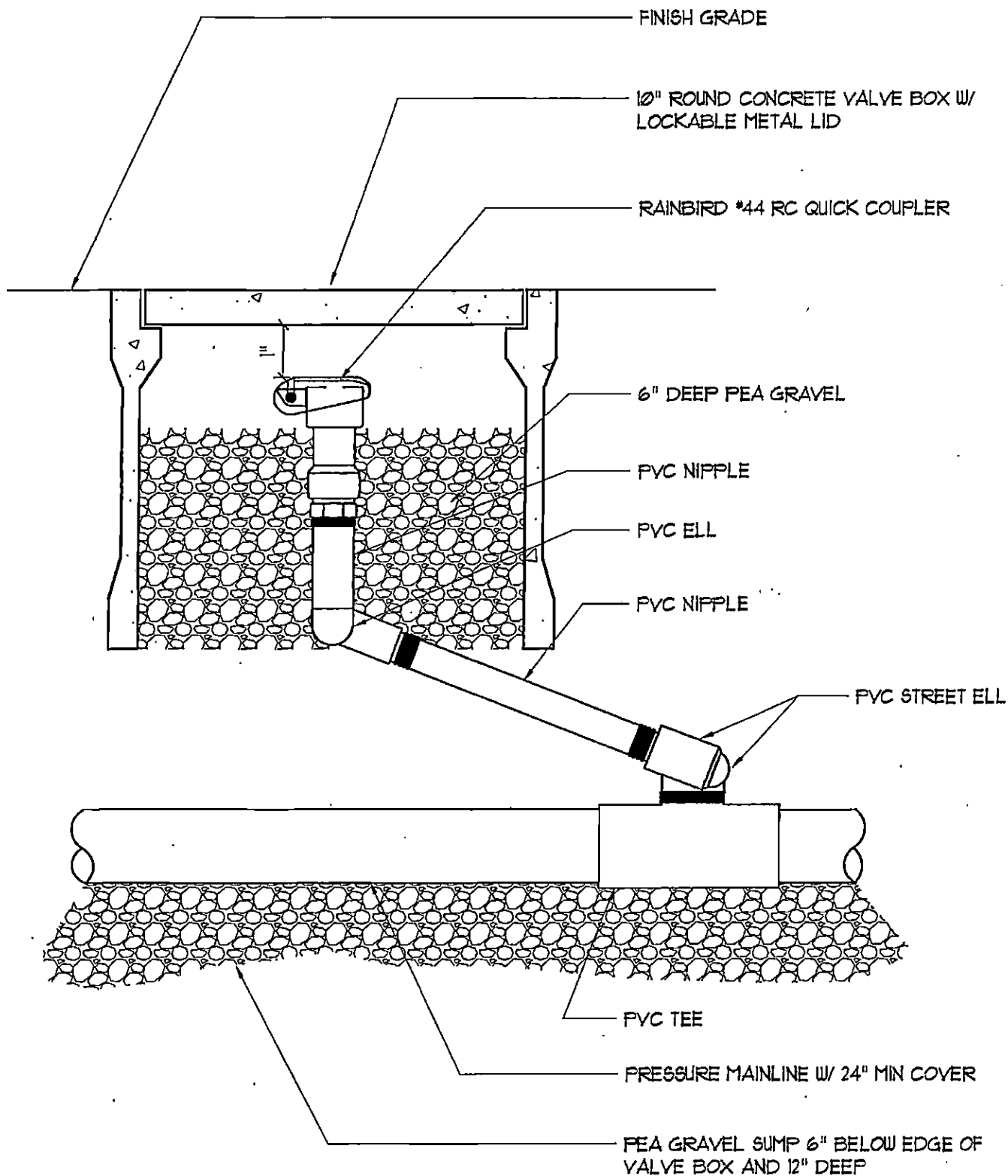


PROJECT SIGN

Scale: 3/4" = 1'-0"

REVISED 2/15/07

ST01500-01



Quick Coupler Valve

Scale: N.T.S.

Revised 12/13/04 ST02810-01

NOTE:
CONSULTANT TO PROVIDE ALL REQUIRED
STRUCTURAL CALCULATIONS FOR FENCE
AND GATES, FOOTINGS, ETC.

NOTE:
ALL FRAMING FOR FENCE
AND GATES SHALL BE PAINTED
AS PER CLV OAS STANDARDS.

INTERMEDIATE/TOP RAIL
SEE CLV STANDARDS FOR
SIZE & VERIFY SIZE W/
CONSULTANT ENGINEER.
1" W X 1/4" STABILIZER BAR
WELD TO BACK OF EACH PICKET

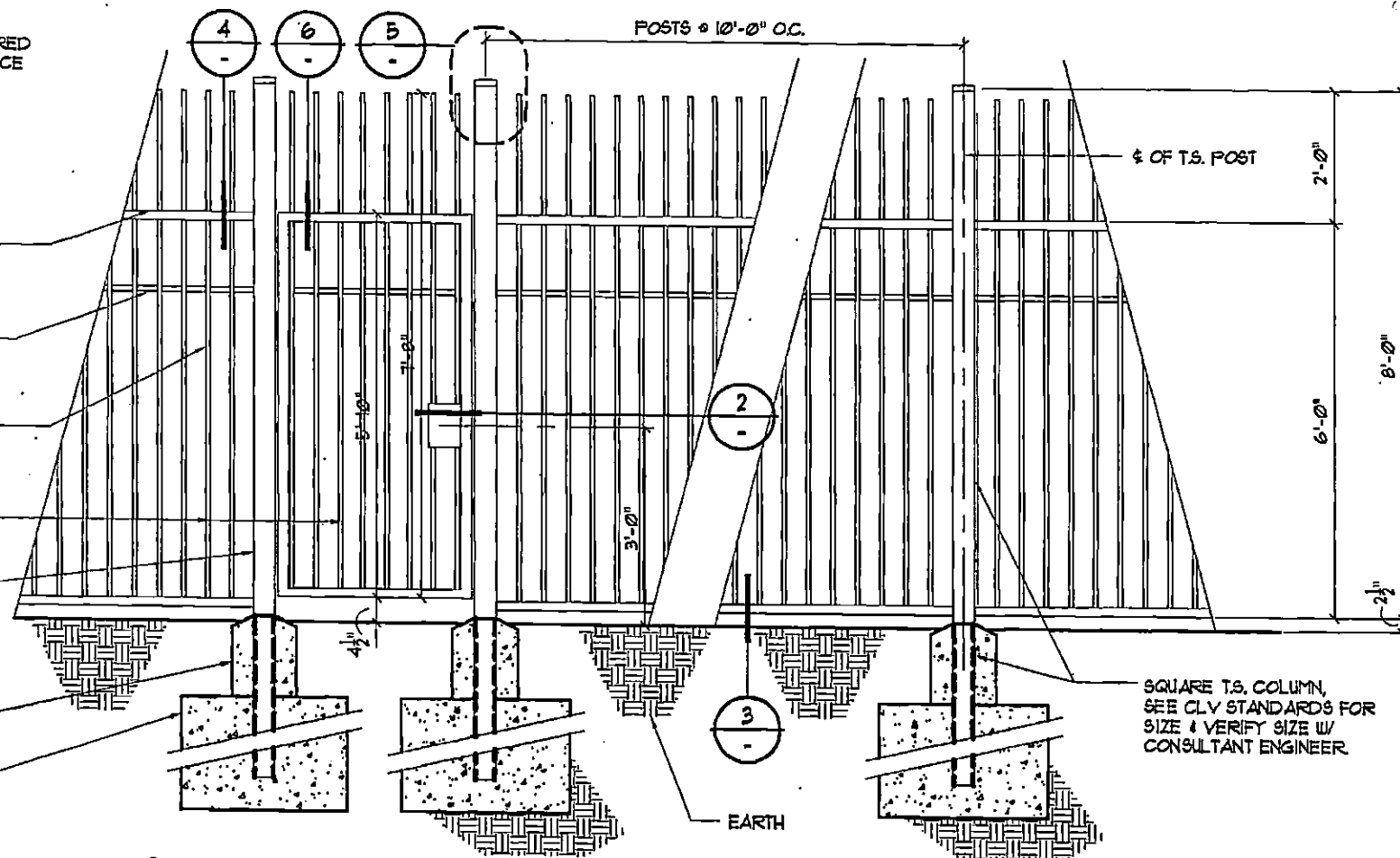
FENCE PICKETS,
SEE CLV STANDARDS FOR
SIZE & VERIFY SIZE W/
CONSULTANT ENGINEER.

T.S. FENCE & GATE.
SEE PLAN VIEW.

T.S. FENCE WELDED TO
GATE FRAME. CONSULTANT TO
ENGINEER ALL WELDS,
FRAMING MEMBER SIZES, ETC.

CONCRETE PEDESTAL &
COLLAR AROUND POST,
CONSULTANT TO DESIGN.

CONCRETE FOOTING,
CONSULTANT TO DESIGN.

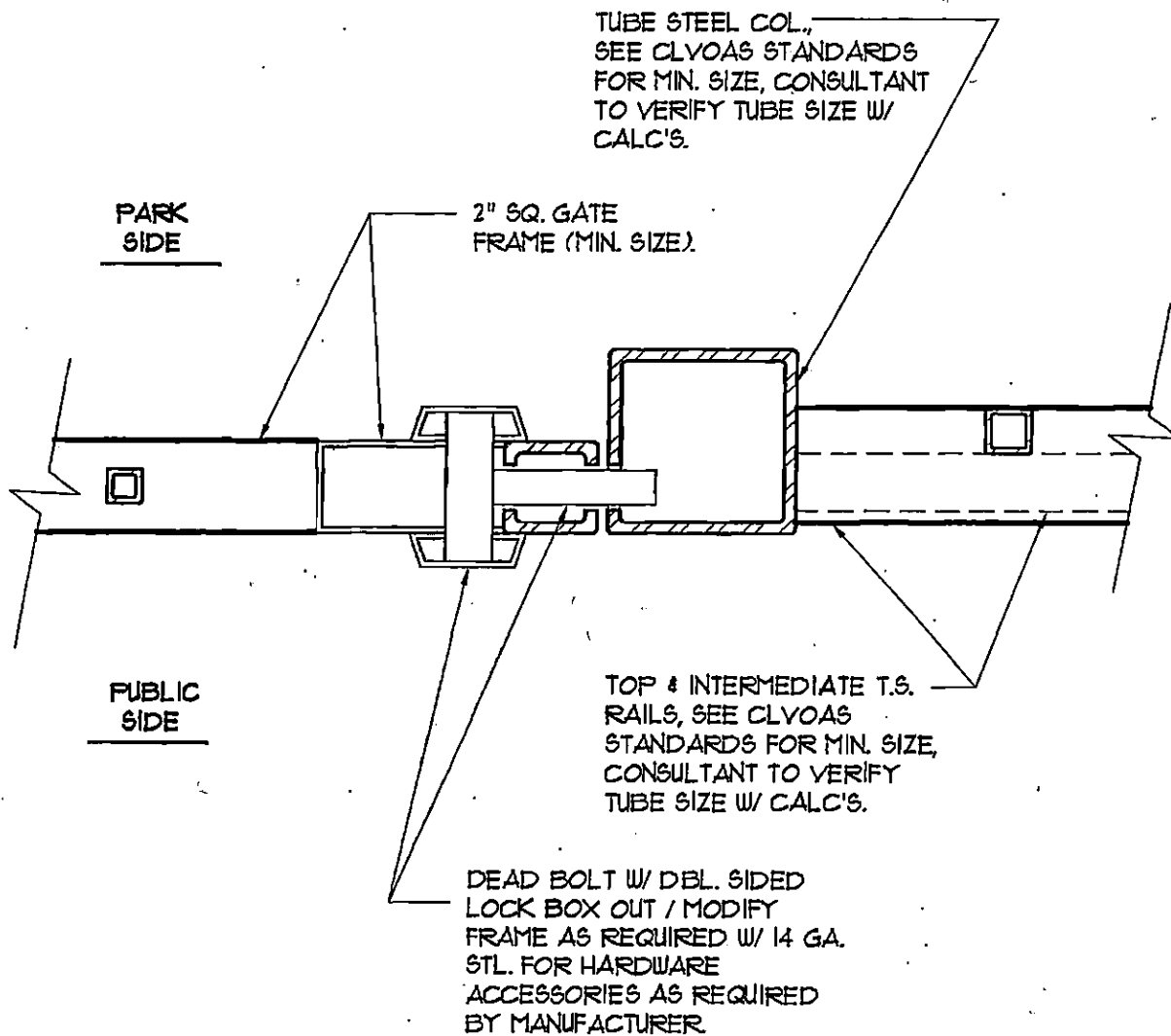


1 Fence Elevation/Section

Scale: 1/2" = 1'-0"

REVISED 12/1/03

ST02825-01



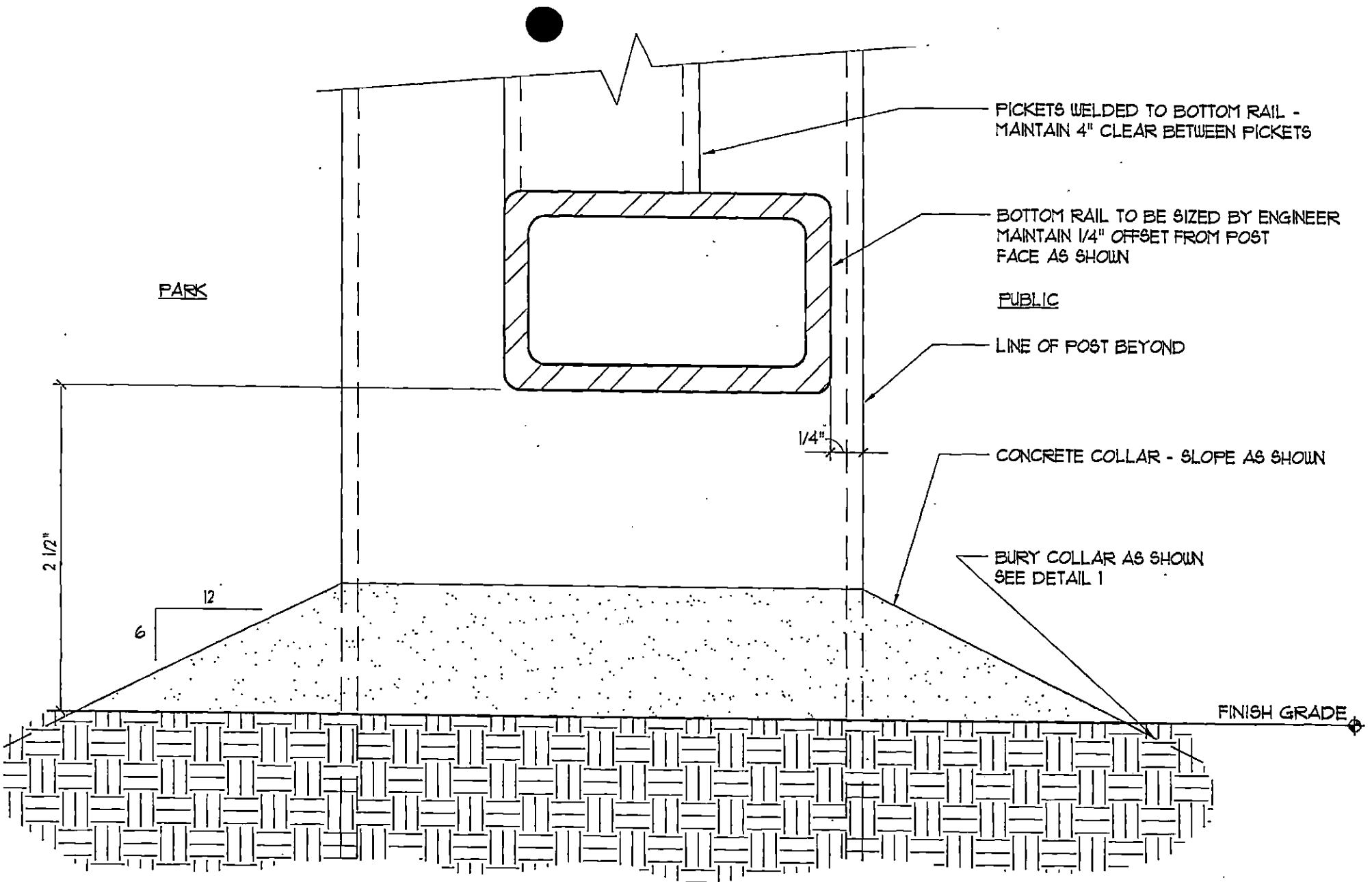
6

Jamb Det. @ Gate

Scale: 3"=1'-0"

LATCH SIDE

REVISED 8/27/03 ST02825-02

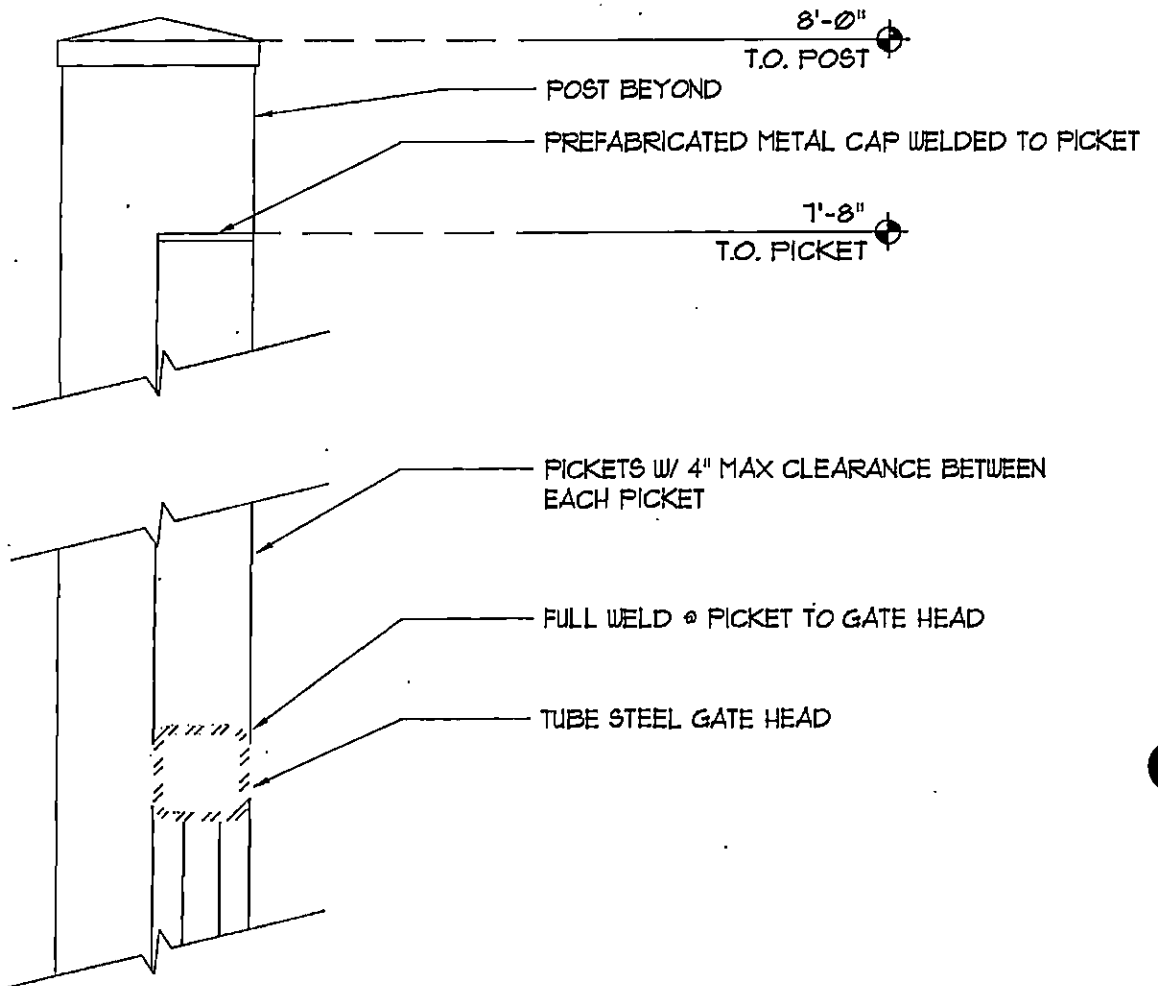


3

Bottom Rail Detail

Scale: Full

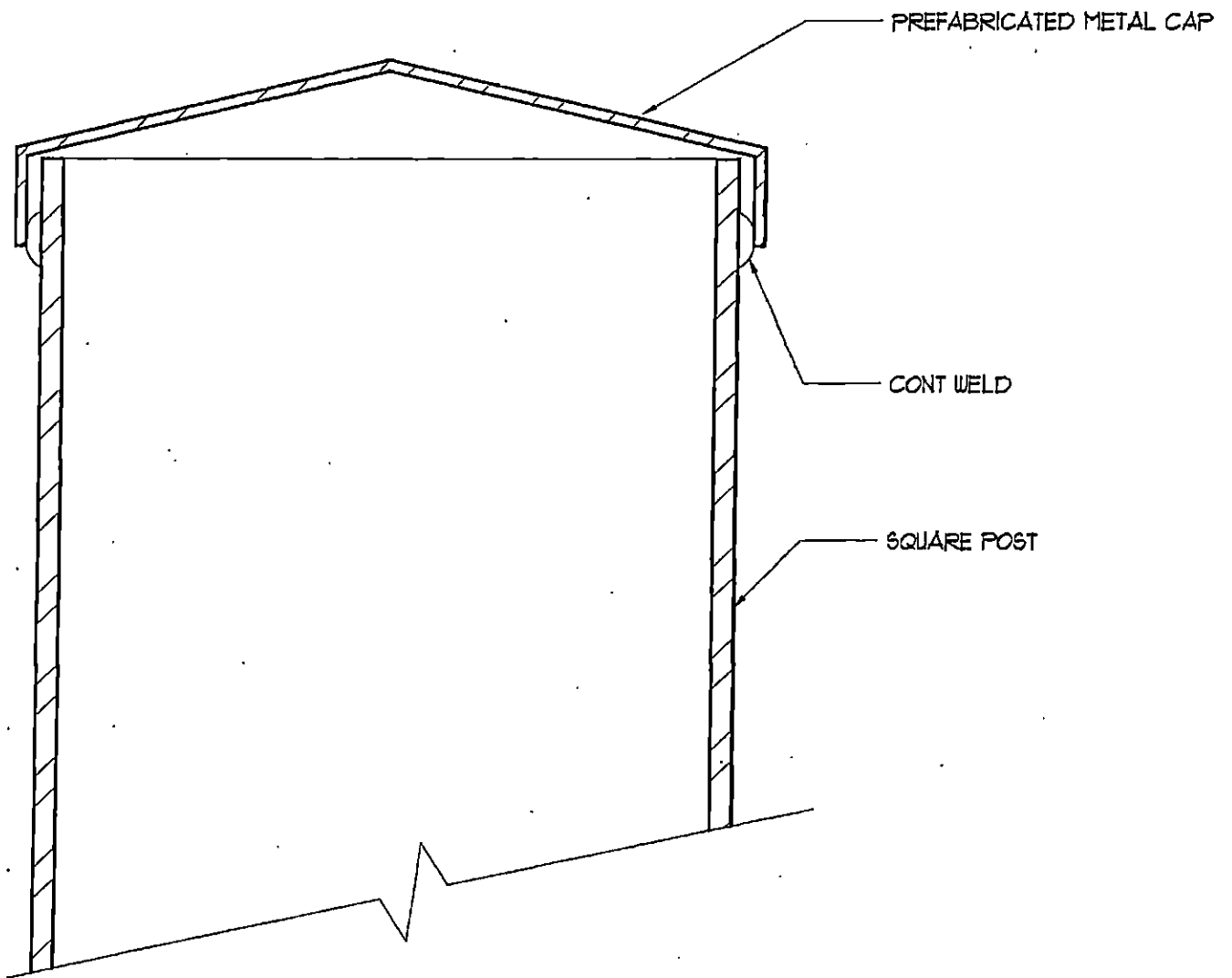
REVISED 8/27/03 STO2825-03



4 Gate Head Dtl @ Fence

Scale: 3" = 1'-0"

REVISED 8/27/03 ST02825-04



5 Post Cap Detail

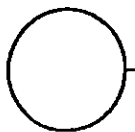
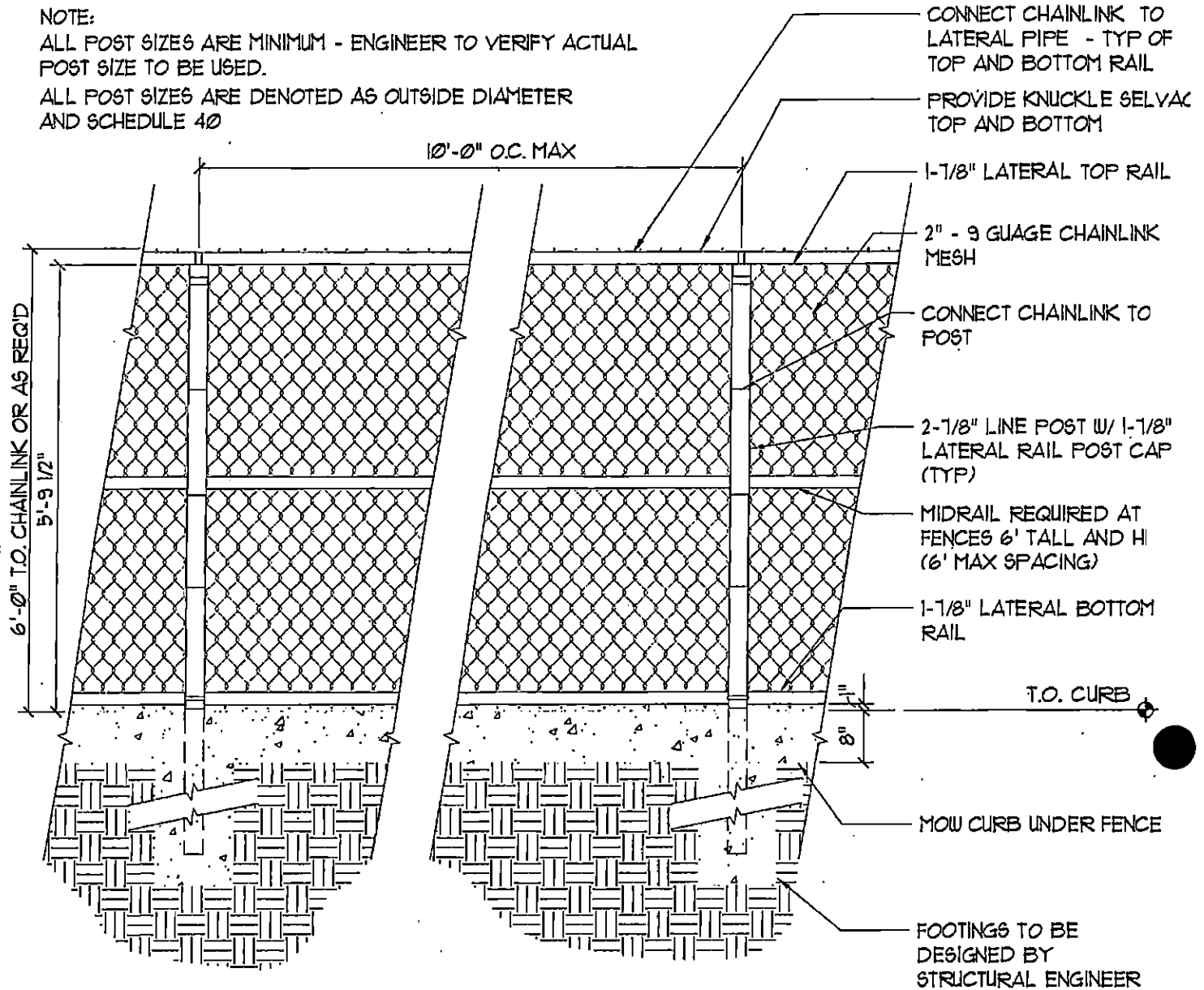
Scale: Full

REVISED 8/27/03 ST02825-05

NOTE:

ALL POST SIZES ARE MINIMUM - ENGINEER TO VERIFY ACTUAL POST SIZE TO BE USED.

ALL POST SIZES ARE DENOTED AS OUTSIDE DIAMETER AND SCHEDULE 40



Chain Link Fence Elevation

Scale: 1/2" = 1'-0"

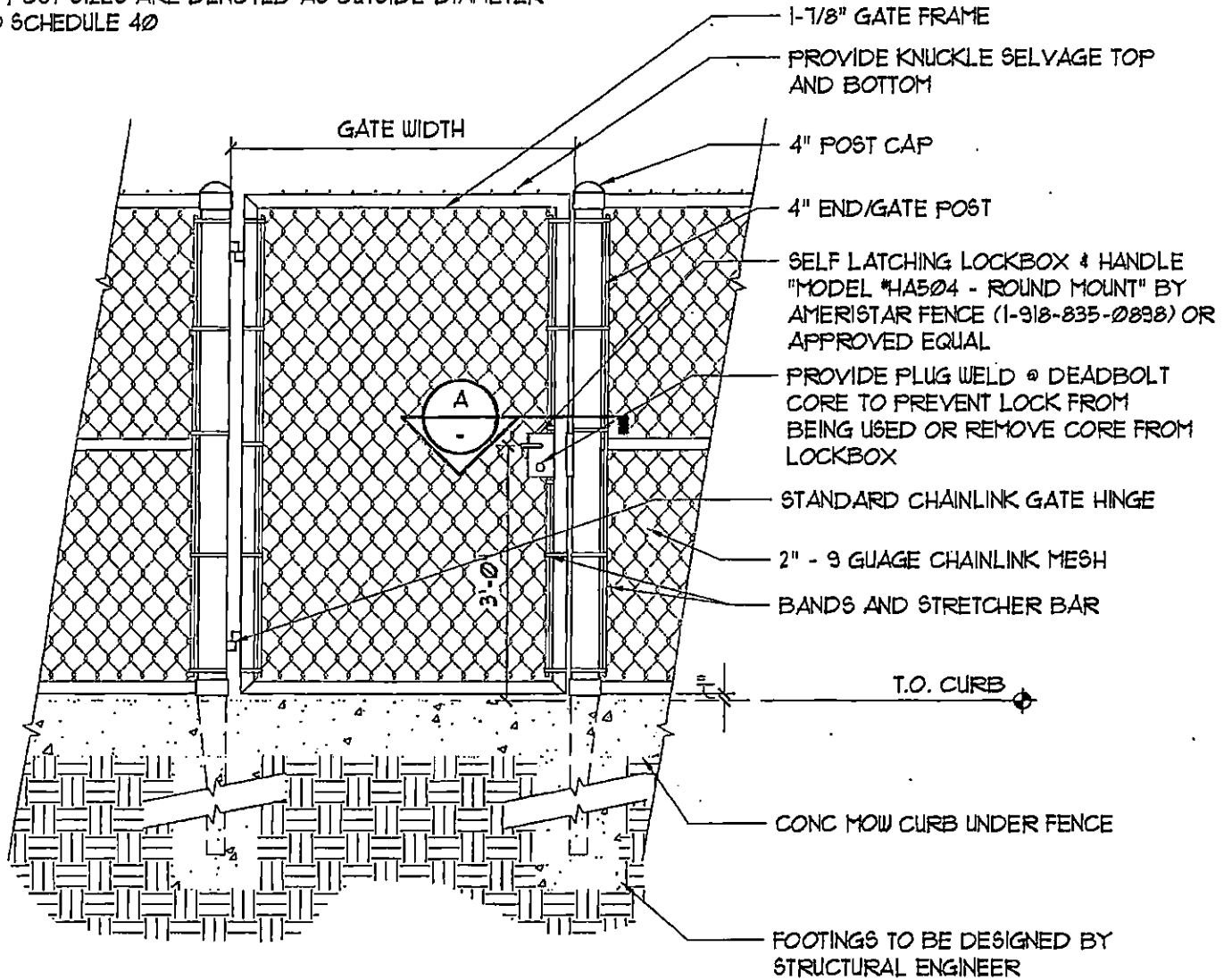
REVISED 12/11/03

ST02825-06

NOTE:

ALL POST SIZES ARE MINIMUM - ENGINEER TO VERIFY ACTUAL POST SIZE TO BE USED.

ALL POST SIZES ARE DENOTED AS OUTSIDE DIAMETER
AND SCHEDULE 40



Chain Link Fence Gate Elevation

Scale: 1/2" = 1'-0"

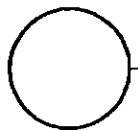
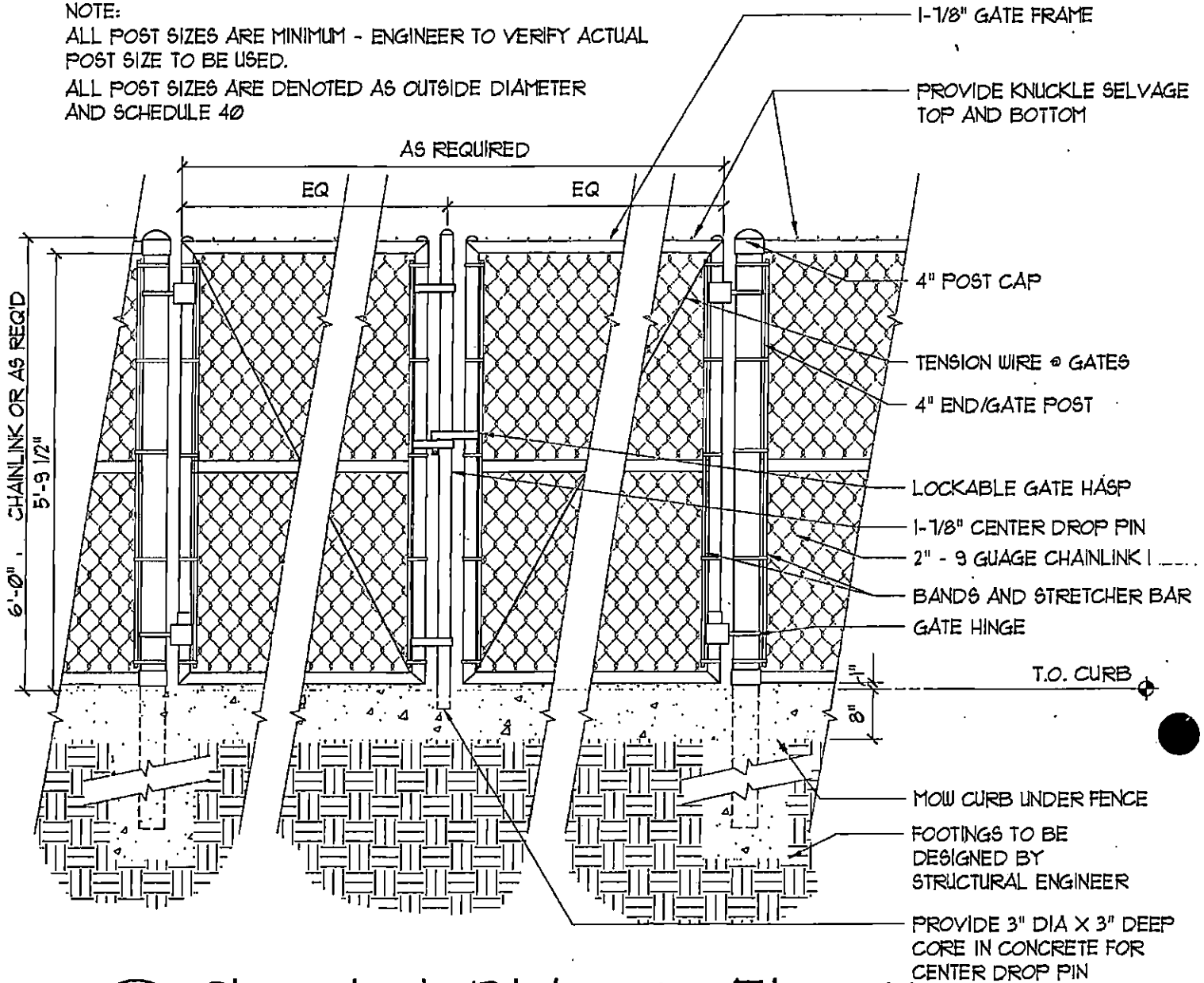
REVISED 12/11/03

ST02825-01

NOTE:

ALL POST SIZES ARE MINIMUM - ENGINEER TO VERIFY ACTUAL POST SIZE TO BE USED.

ALL POST SIZES ARE DENOTED AS OUTSIDE DIAMETER AND SCHEDULE 40

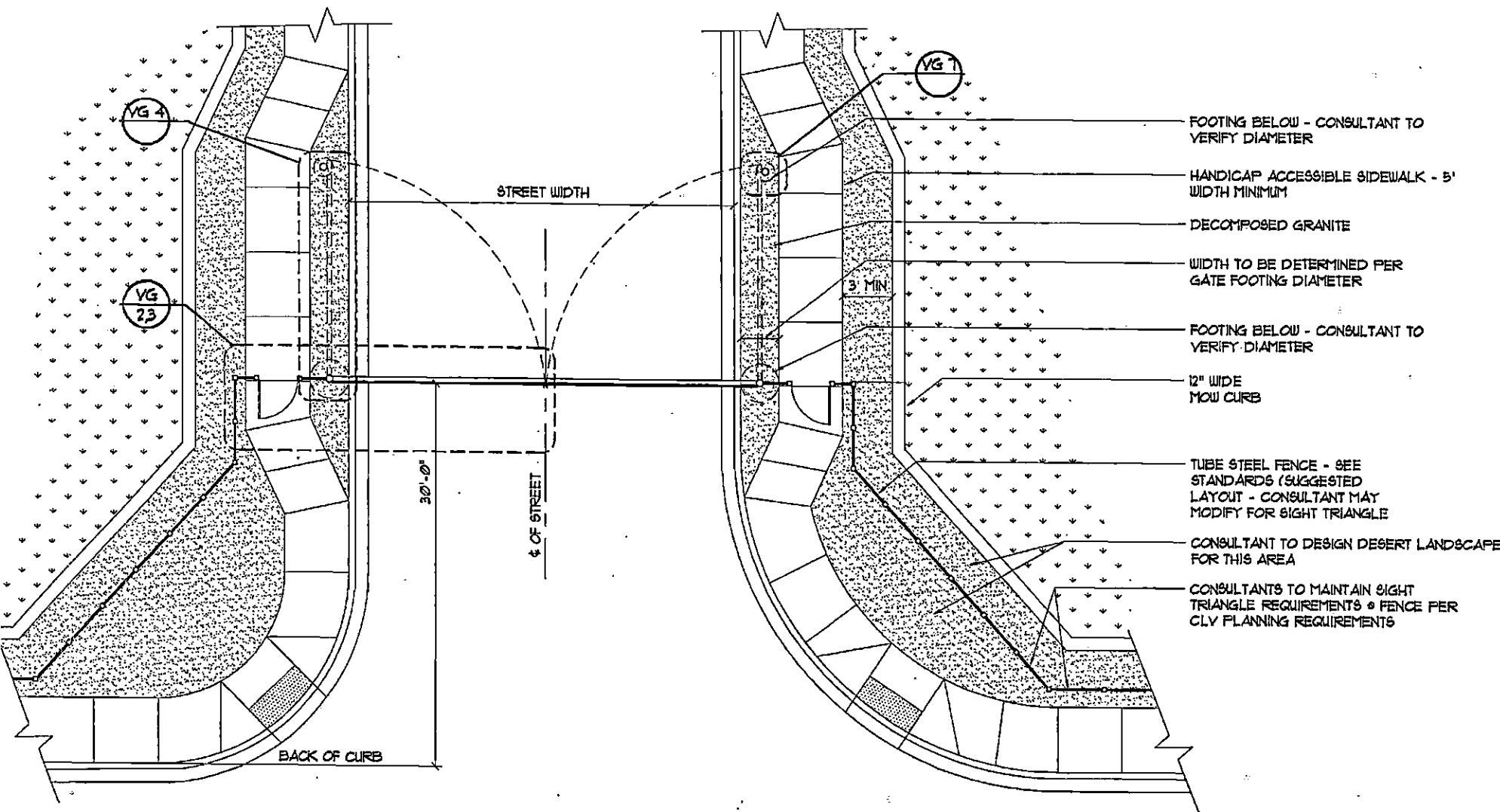


Chain Link Dbl gate Elevation

Scale: 1/2" = 1'-0"

REVISED 12/11/03

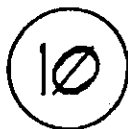
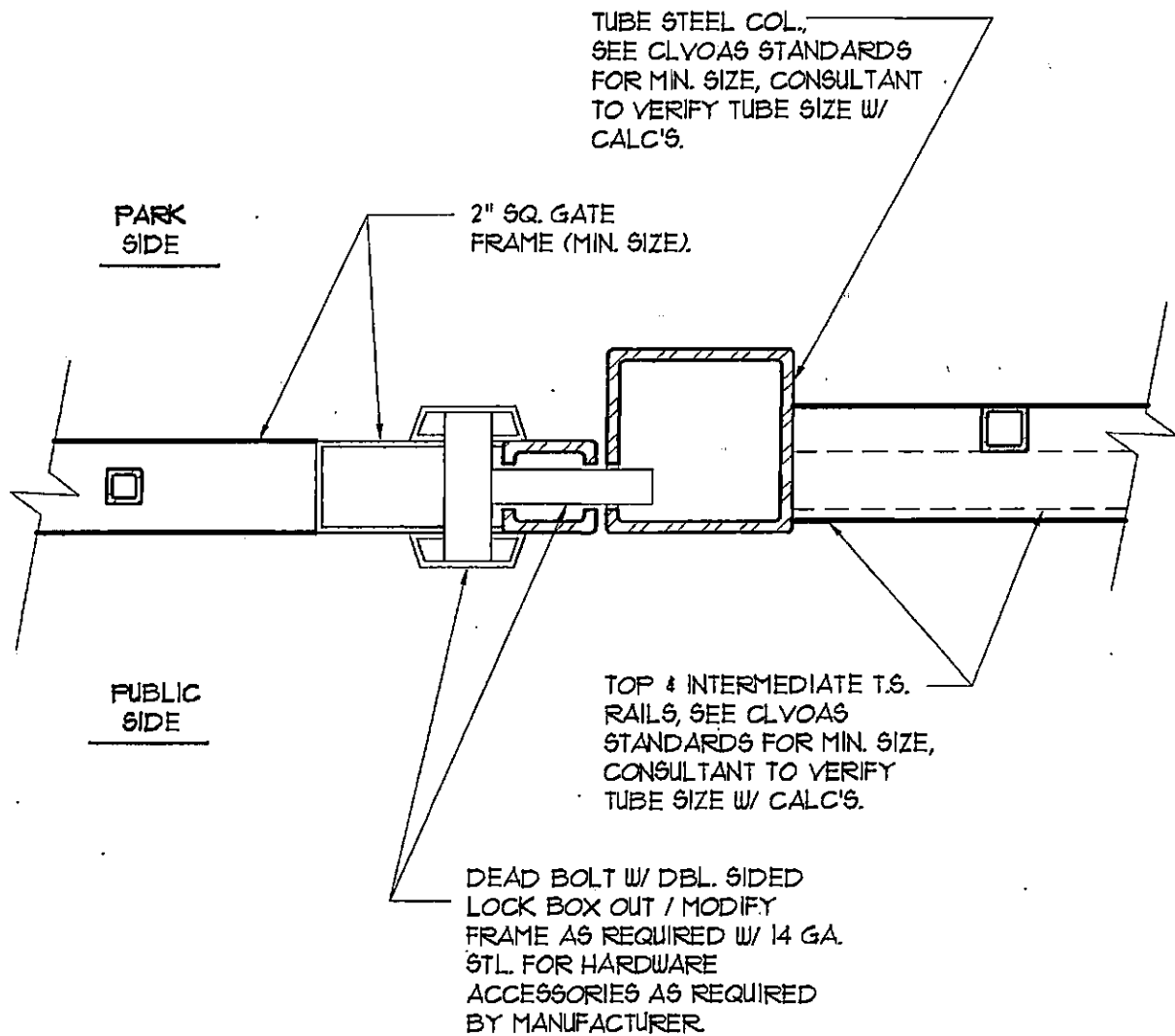
ST02825-06



1 Vehicle Gate Entrance Plan
Scale: 1/8" = 1'-0"

REVISED 12/4/03

ST02025-VGI



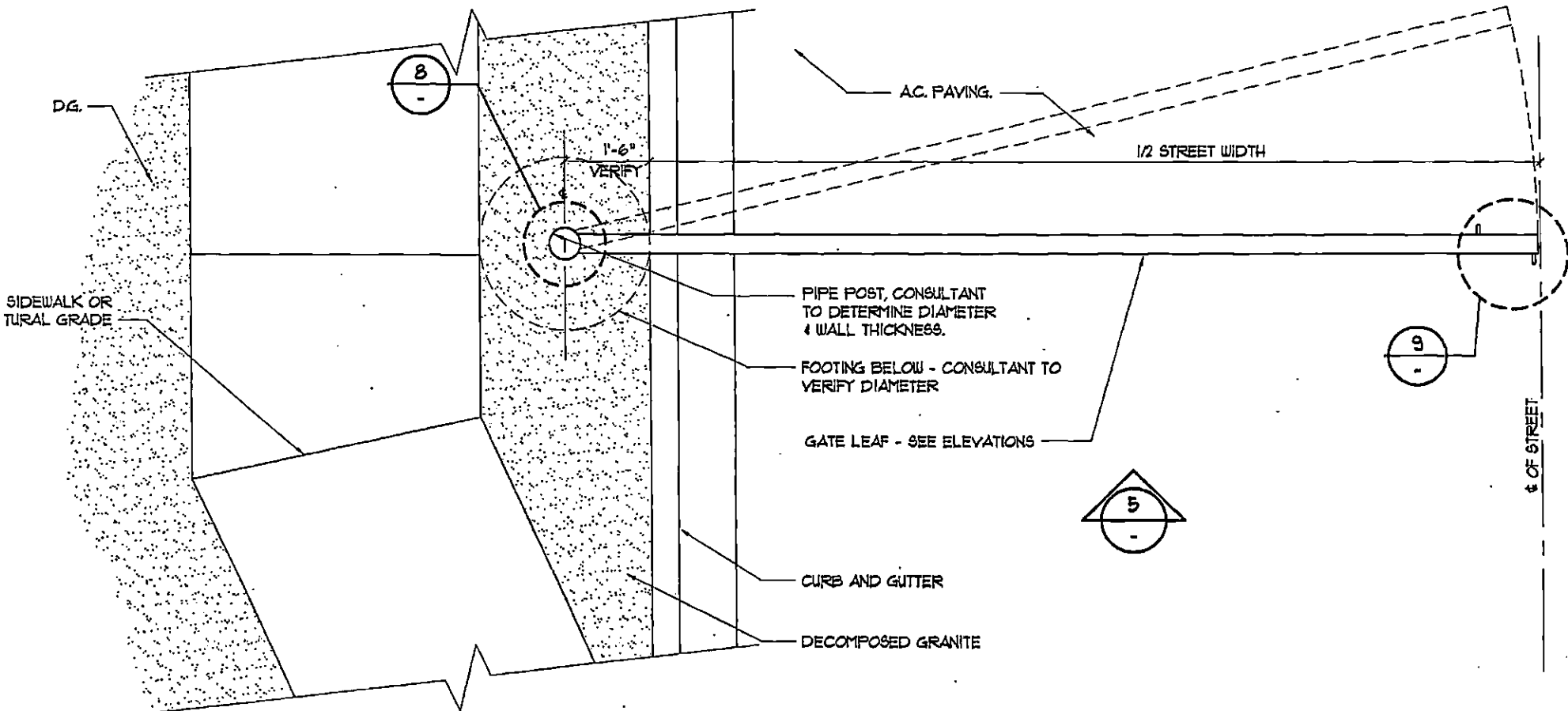
Jamb Det. @ Man Gate

Scale: 3"=1'-0"

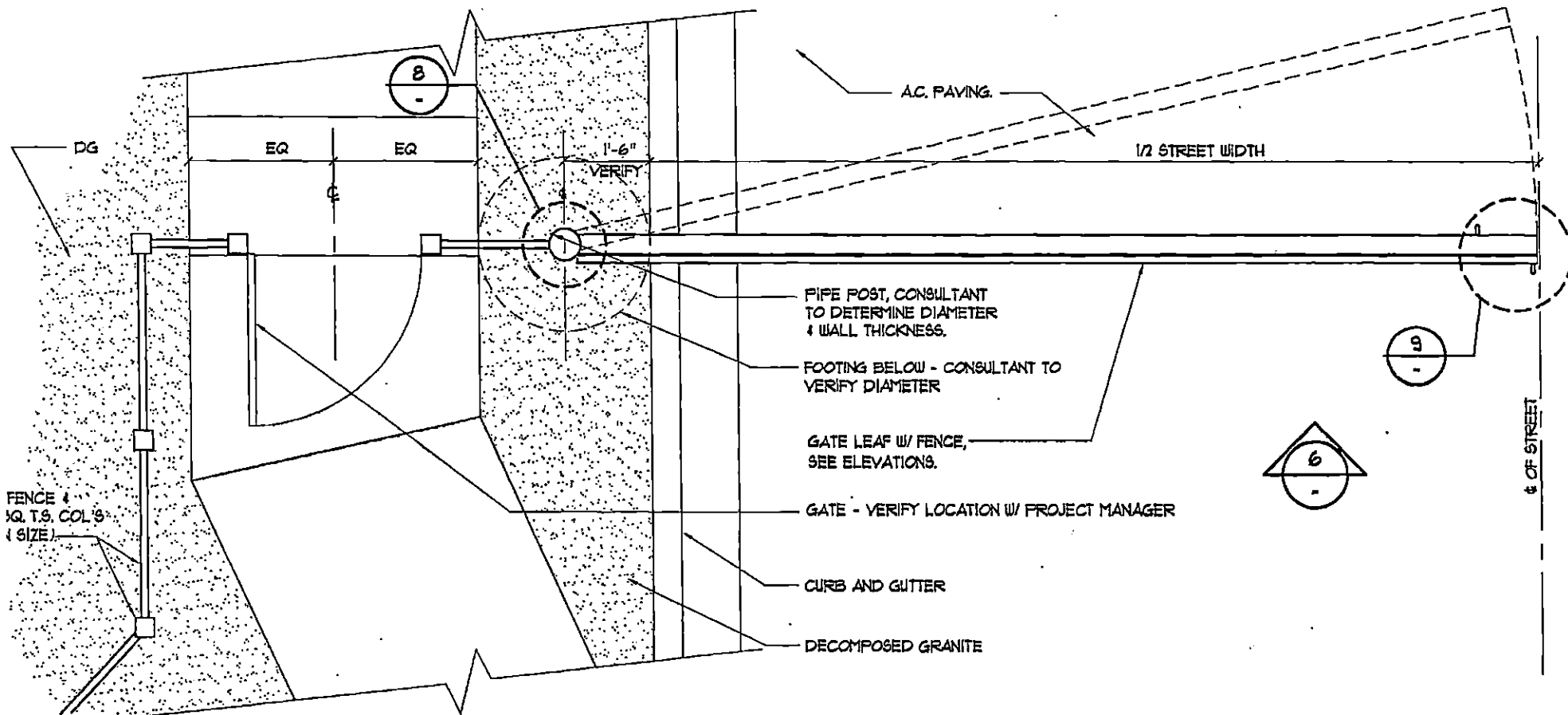
LATCH SIDE

REVISED 12/4/03

ST02825-10



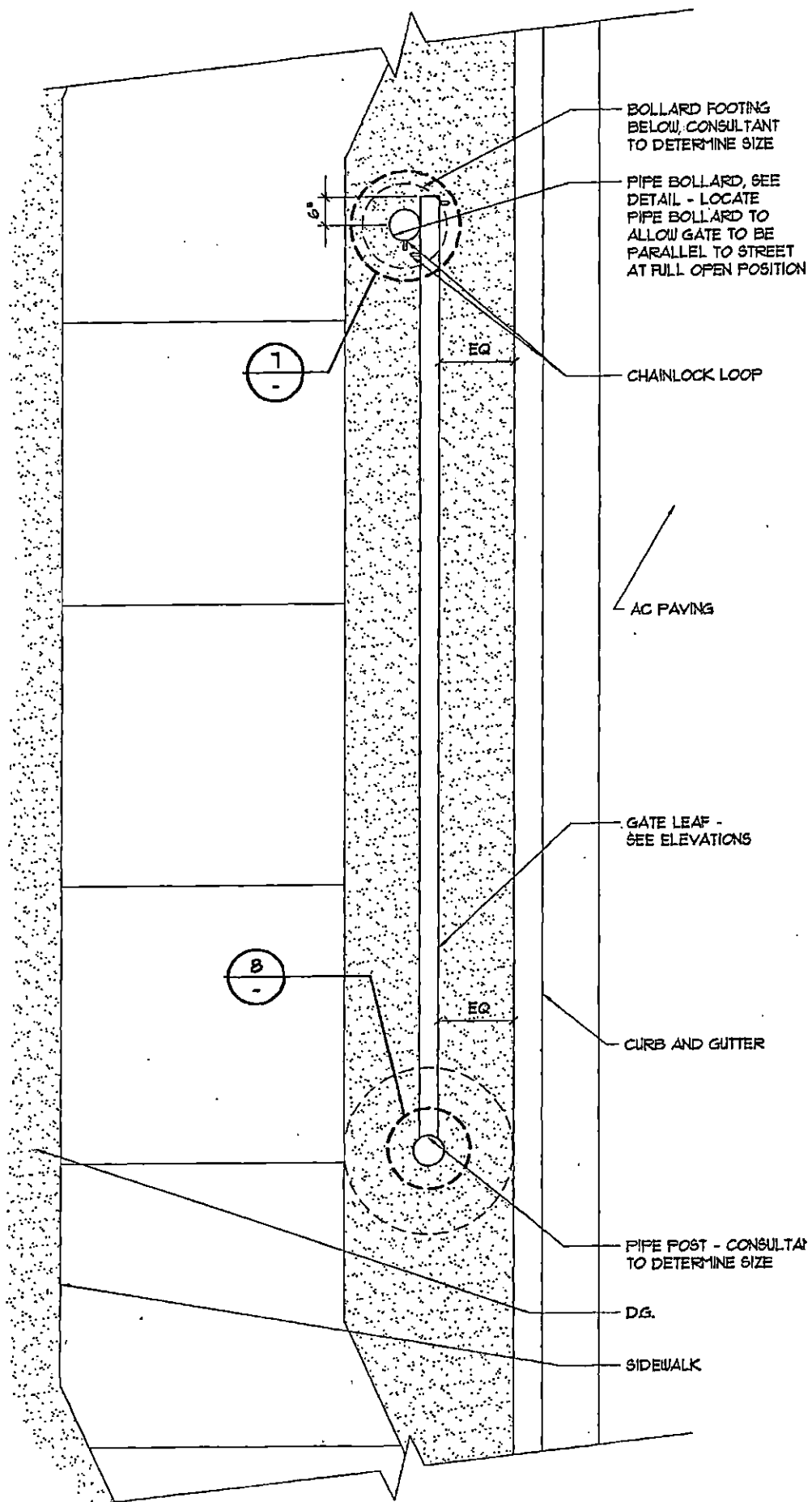
2 Vehicle Gate Plan - Closed Position
 Scale: 1/2"=1'-0"



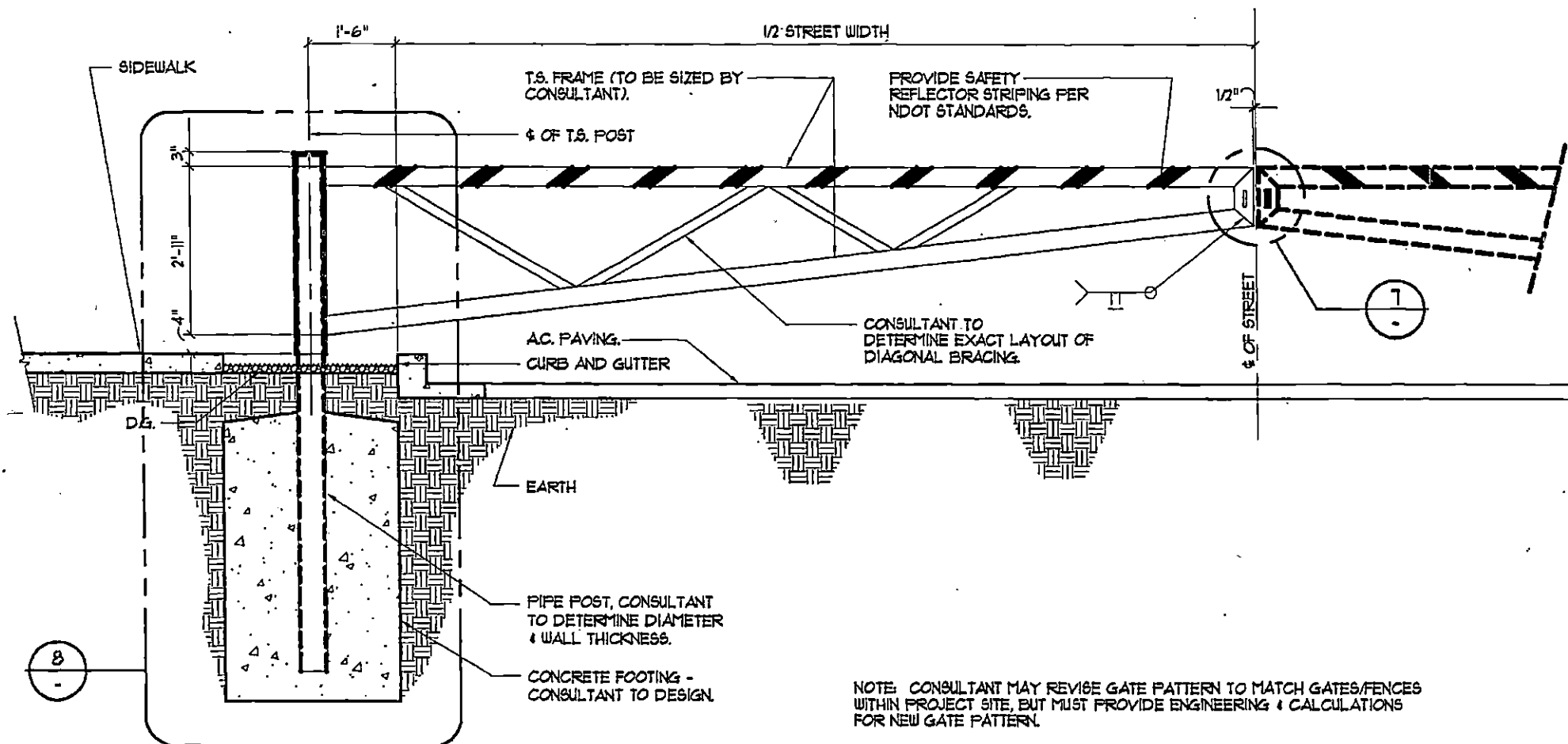
3 Vehicle Gate Plan - Closed Position (w/ Man Gate & Fence)

Scale: 1/2" = 1'-0"

REVISED 12/4/03 ST02825-VG3



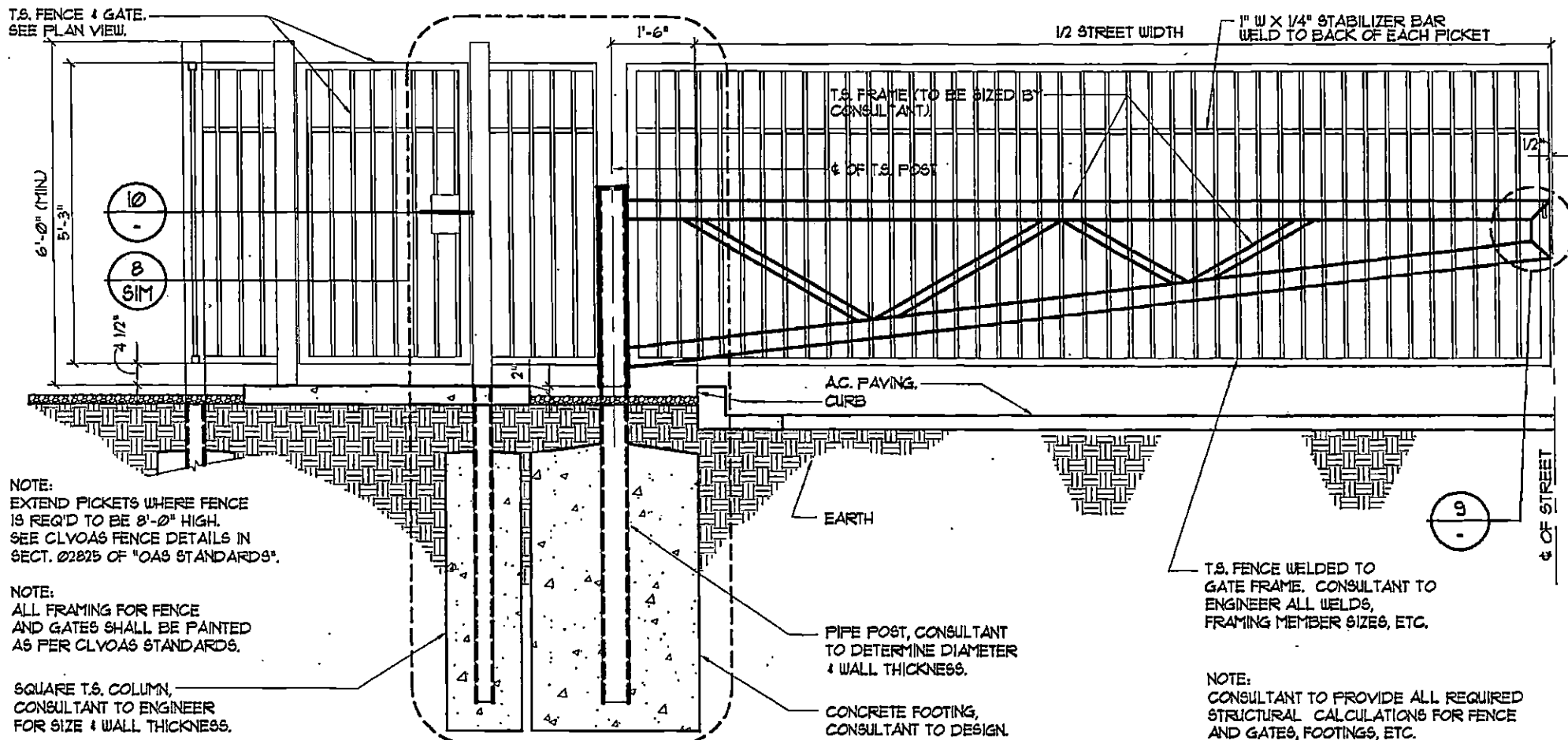
NOTE: SEE DETAIL 4/- TO SEE VEHICLE GATE LAYOUT WHERE PROPERTY REQUIRES FENCE & MANGATES.



5 Vehicle Gate Elevation - Closed Position

Scale: 1/2" = 1'-0"

REVISED 12/14/03 9T02825-VG5



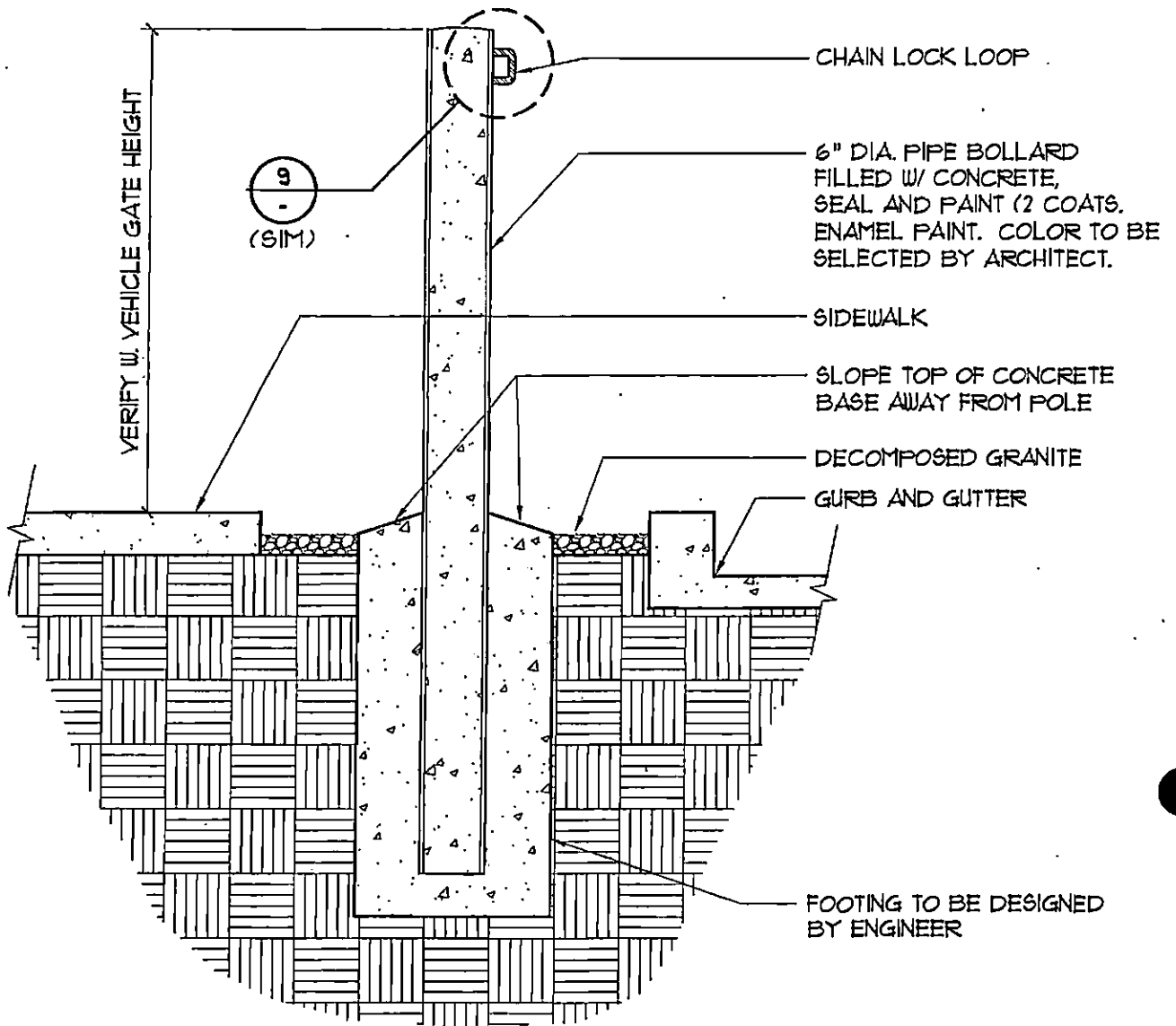
6

Vehicle Gate Elevation - Closed Position (w/ Man Door & Fence)

Scale: 1/2" = 1'-0"

REVISED 12/11/03

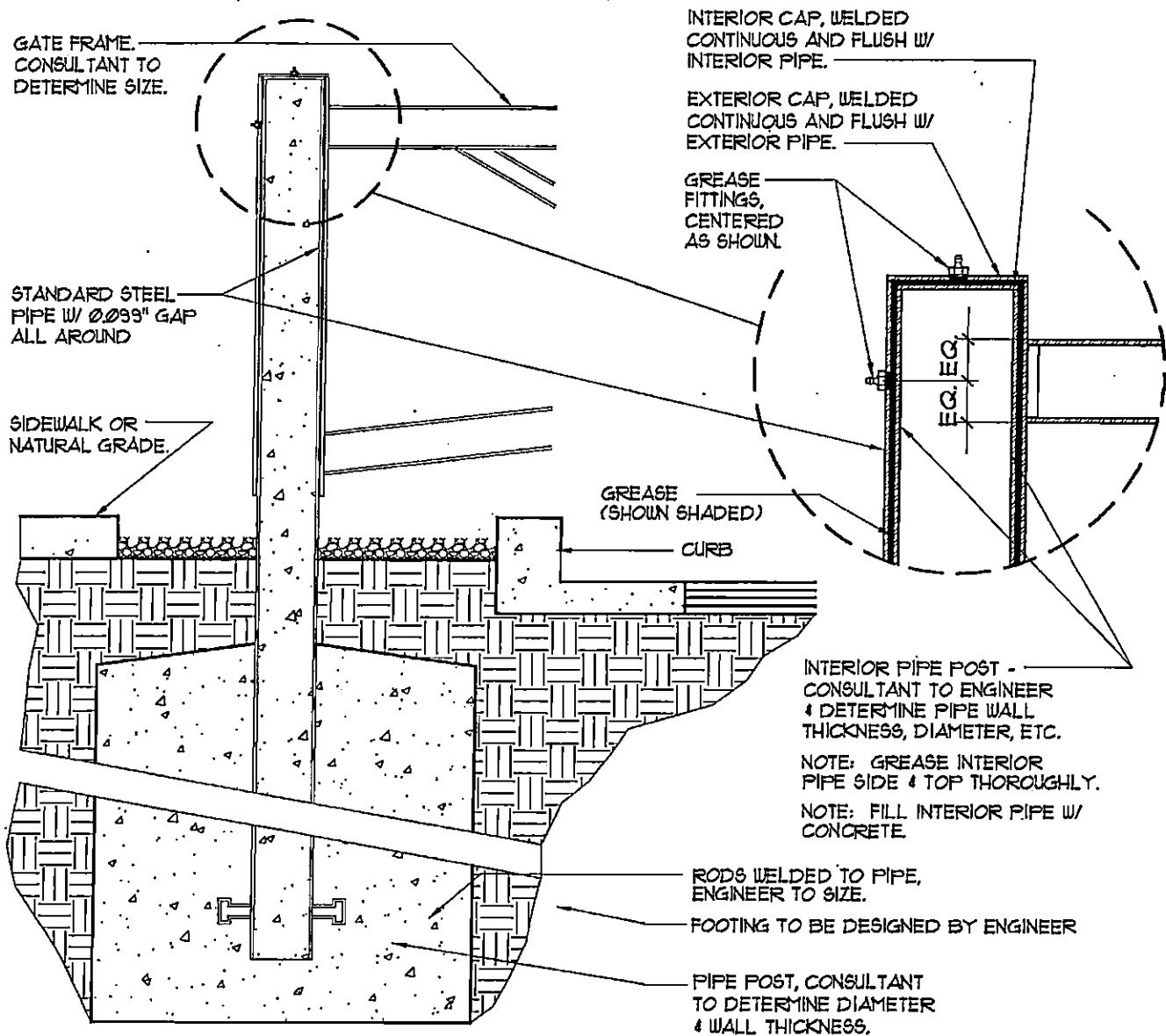
ST02825-VG6



7 Vehicle Gate Steel Pipe Bollard

Scale: 3/4"=1'-0"

REVISED 12/30/03 ST02825-VG1



8

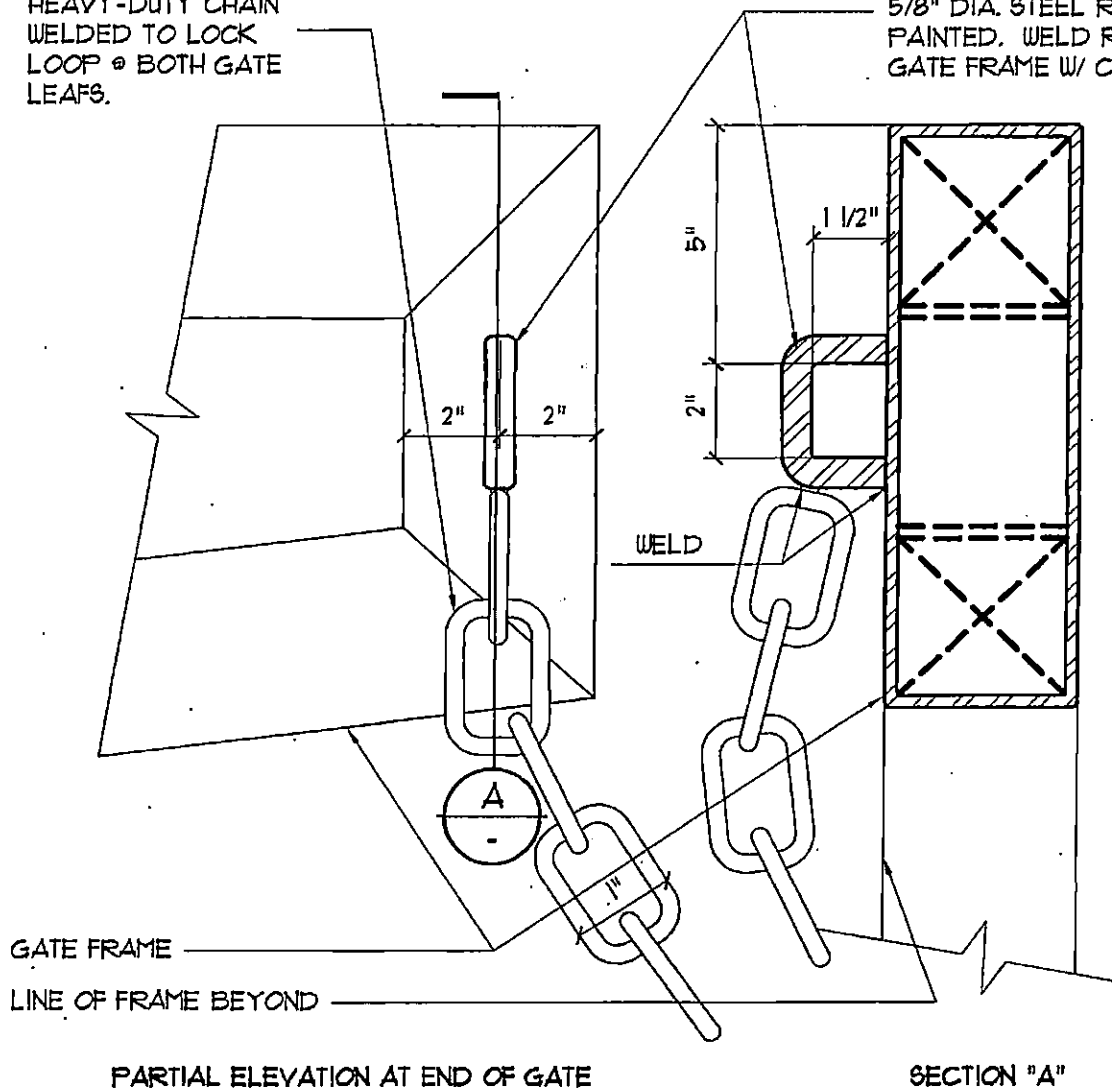
Hinge Detail @ Vehicle Gate

Scale: 3/4" = 1'-0"

REVISED 3/22/05 ST02825-VG8

HEAVY-DUTY CHAIN
WELDED TO LOCK
LOOP @ BOTH GATE
LEAFs.

5/8" DIA. STEEL ROD,
PAINTED. WELD ROD TO
GATE FRAME W/ CONT'S WELD.

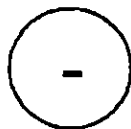
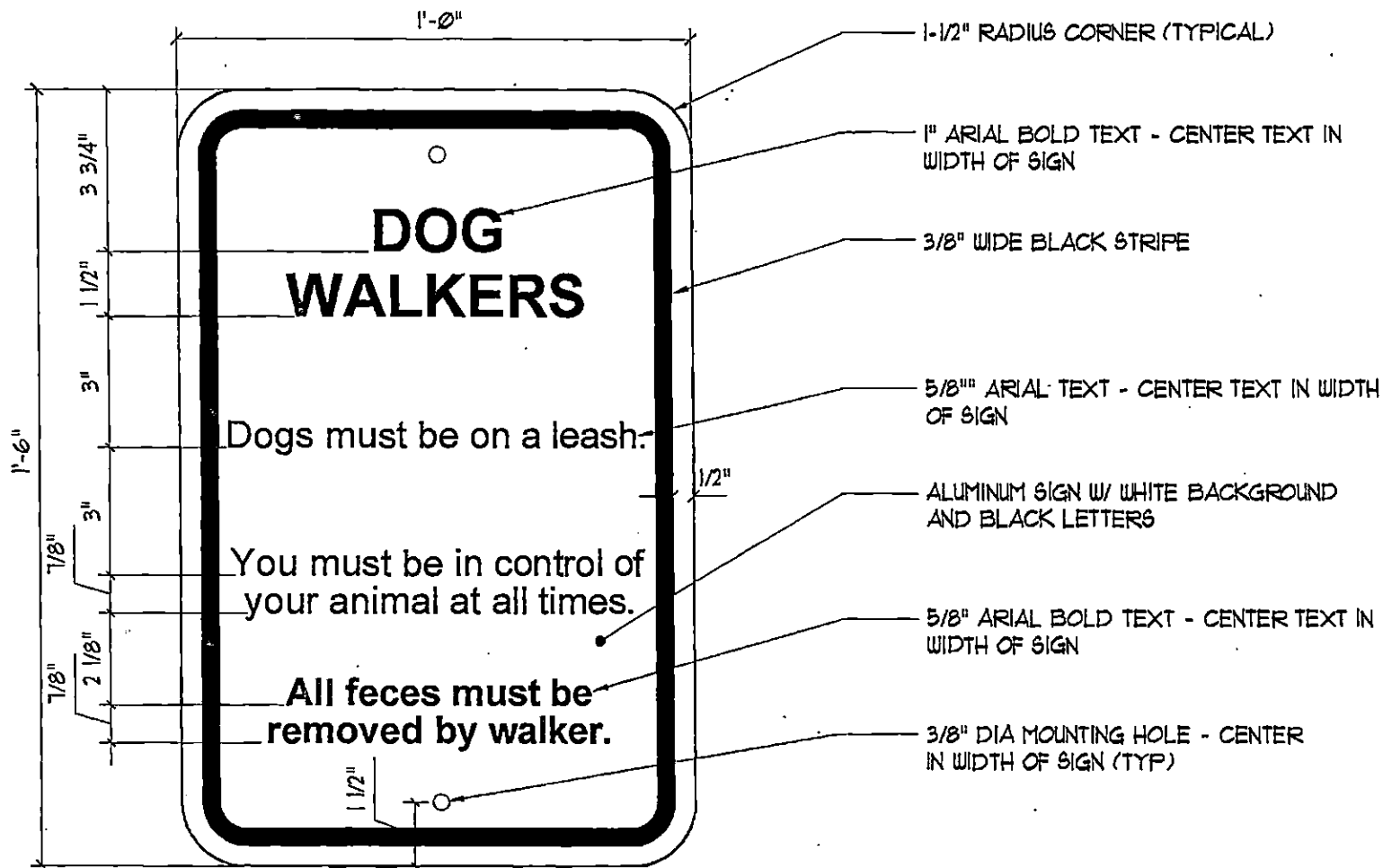


9

Vehicle Gate Chain Lock Loop

Scale: 3"=1'-0"

REVISED 12/4/03 ST02825-VG9

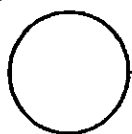
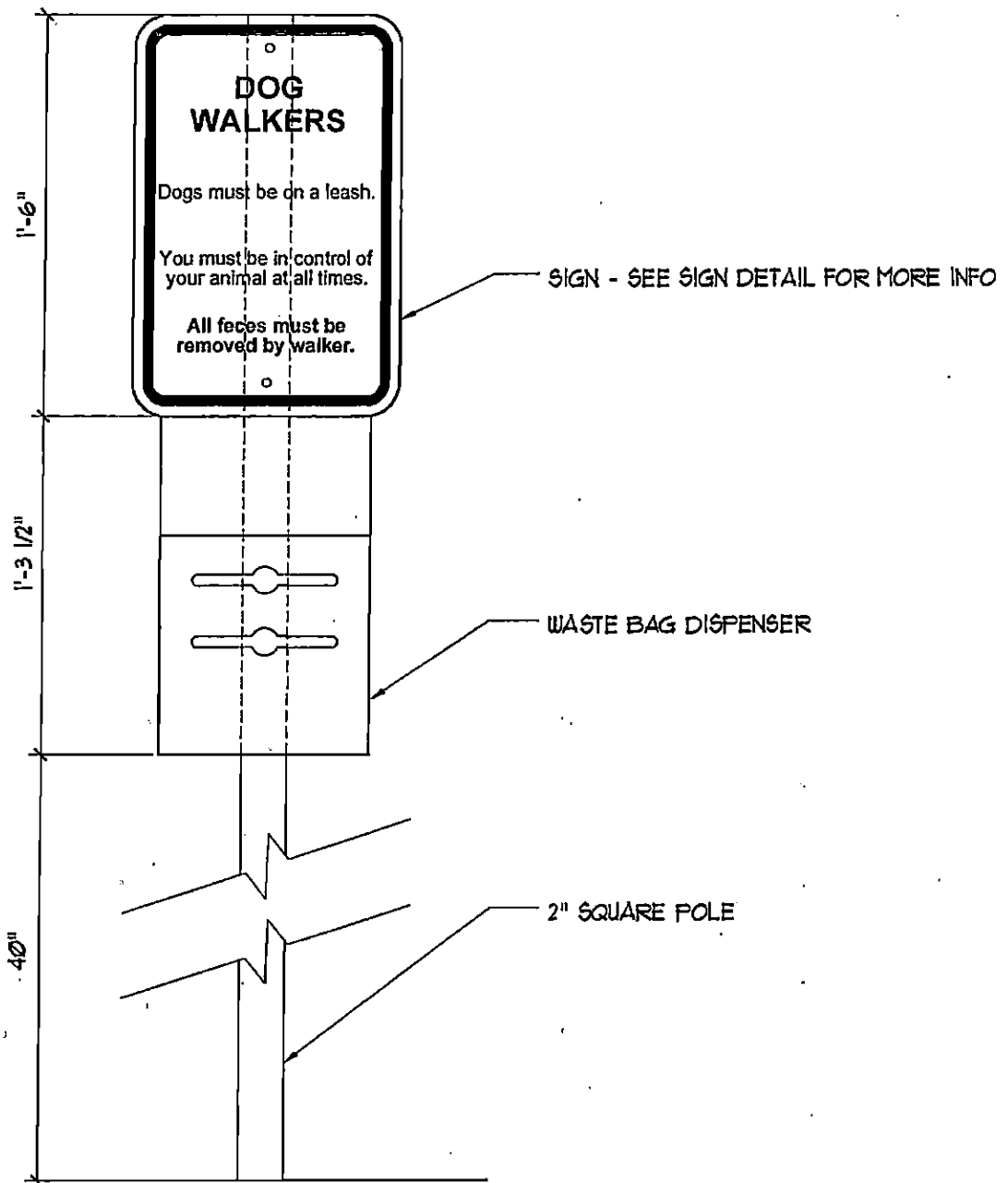


Dog Sign

Scale: 3" = 1'-0"

REVISED 8/27/03

STO2882-10

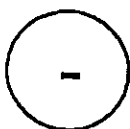
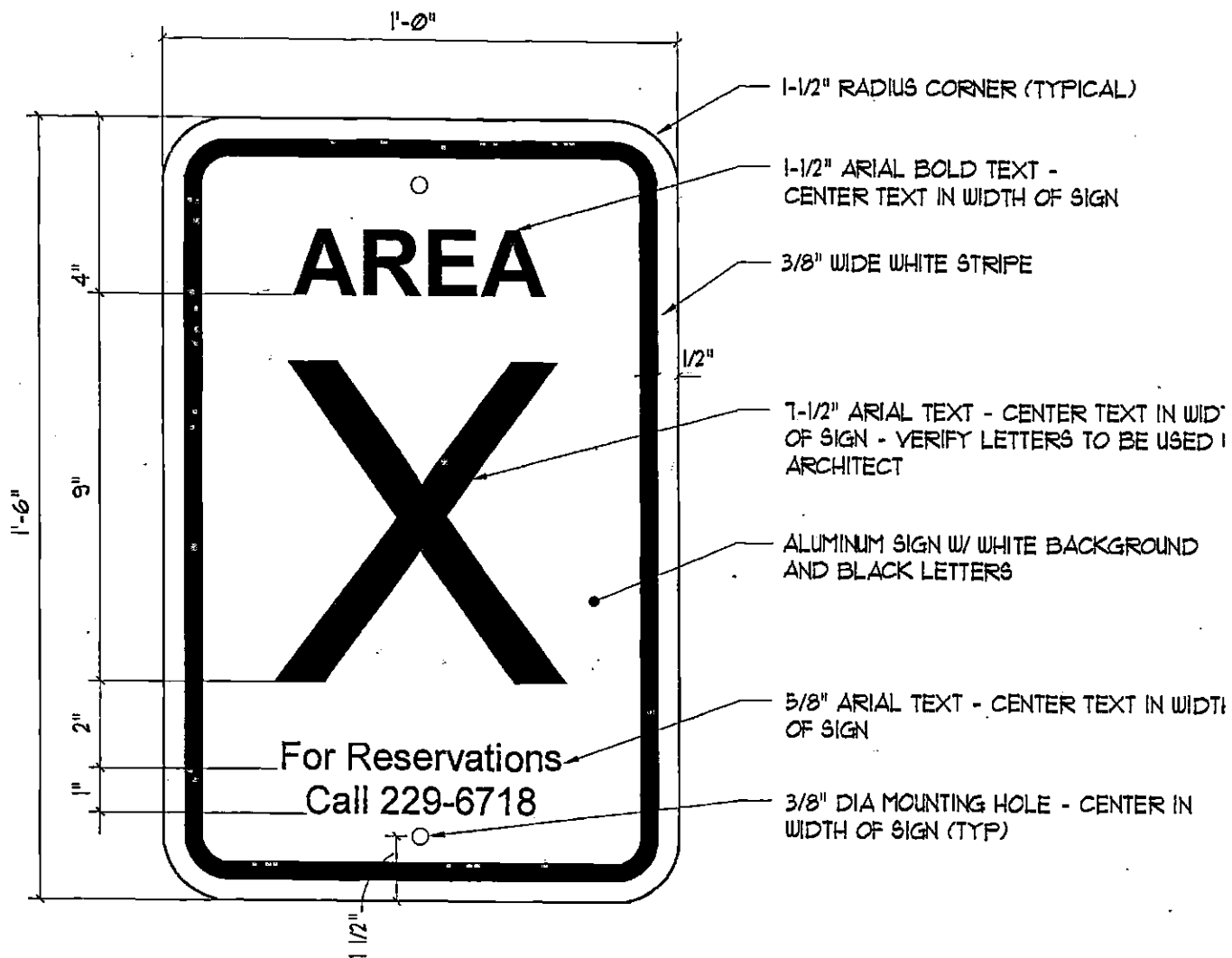


Sign W/ Waste Bag Disp Mounting

Scale: 1-1/2" = 1'-0"

REVISED 7/3/04

ST02882-10a

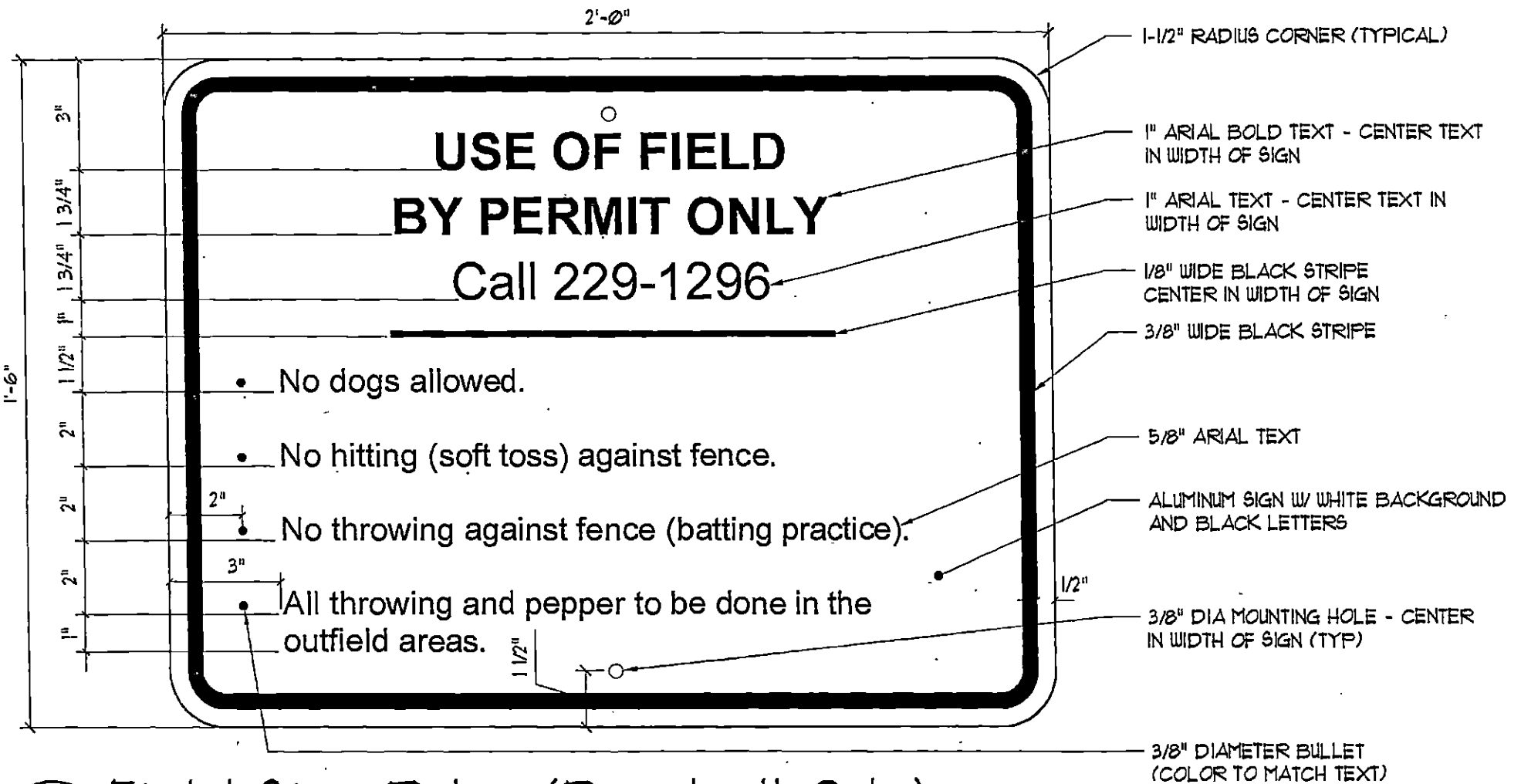


Site Shelter Reservation Sign

Scale: 3" = 1'-0"

REVISED 8/21/03

STO2882-39

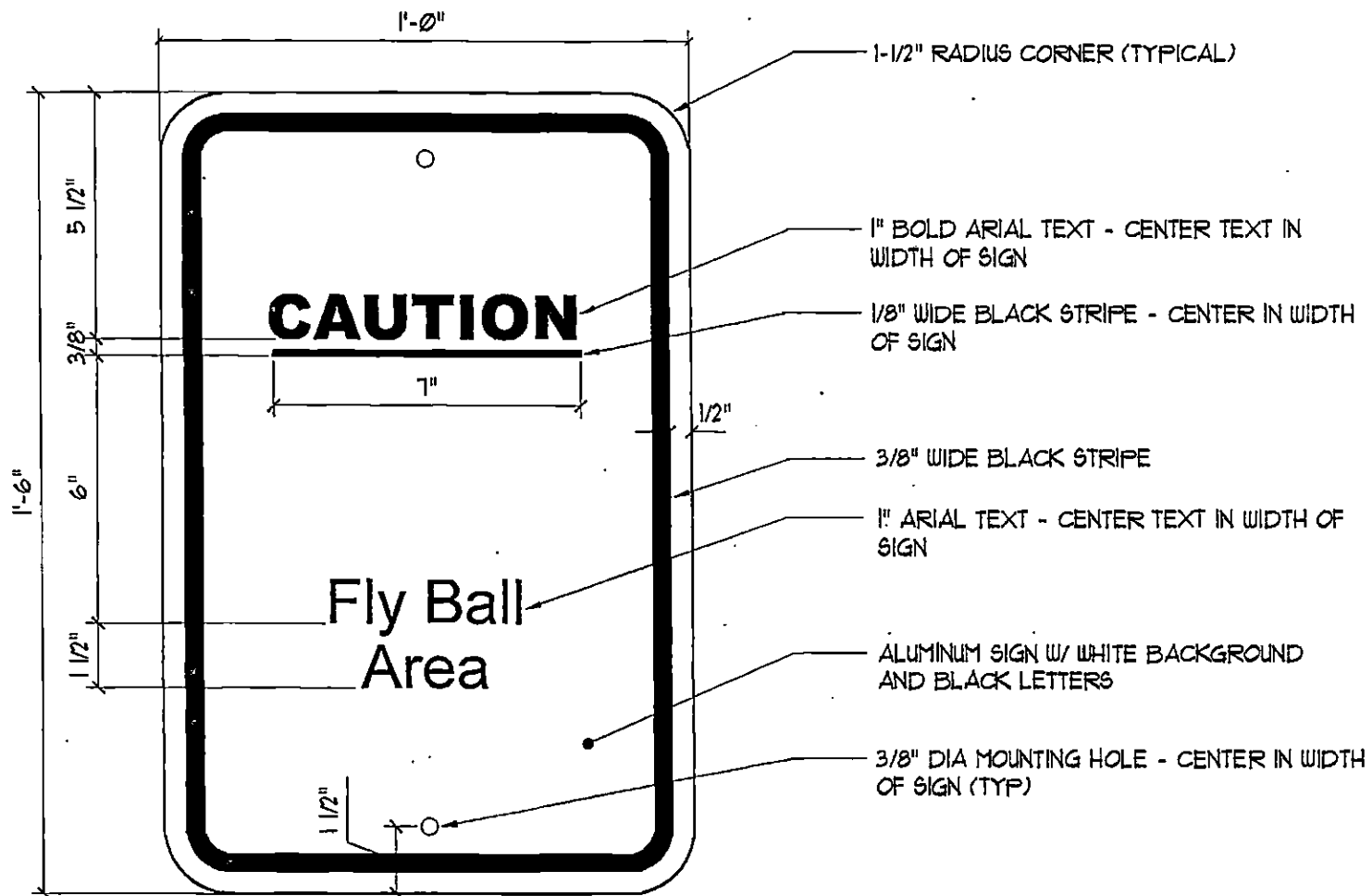


Field Sign Rules (Baseball Only)

Scale: 3" = 1'-0"

REVISED 4/14/04

ST02882-01

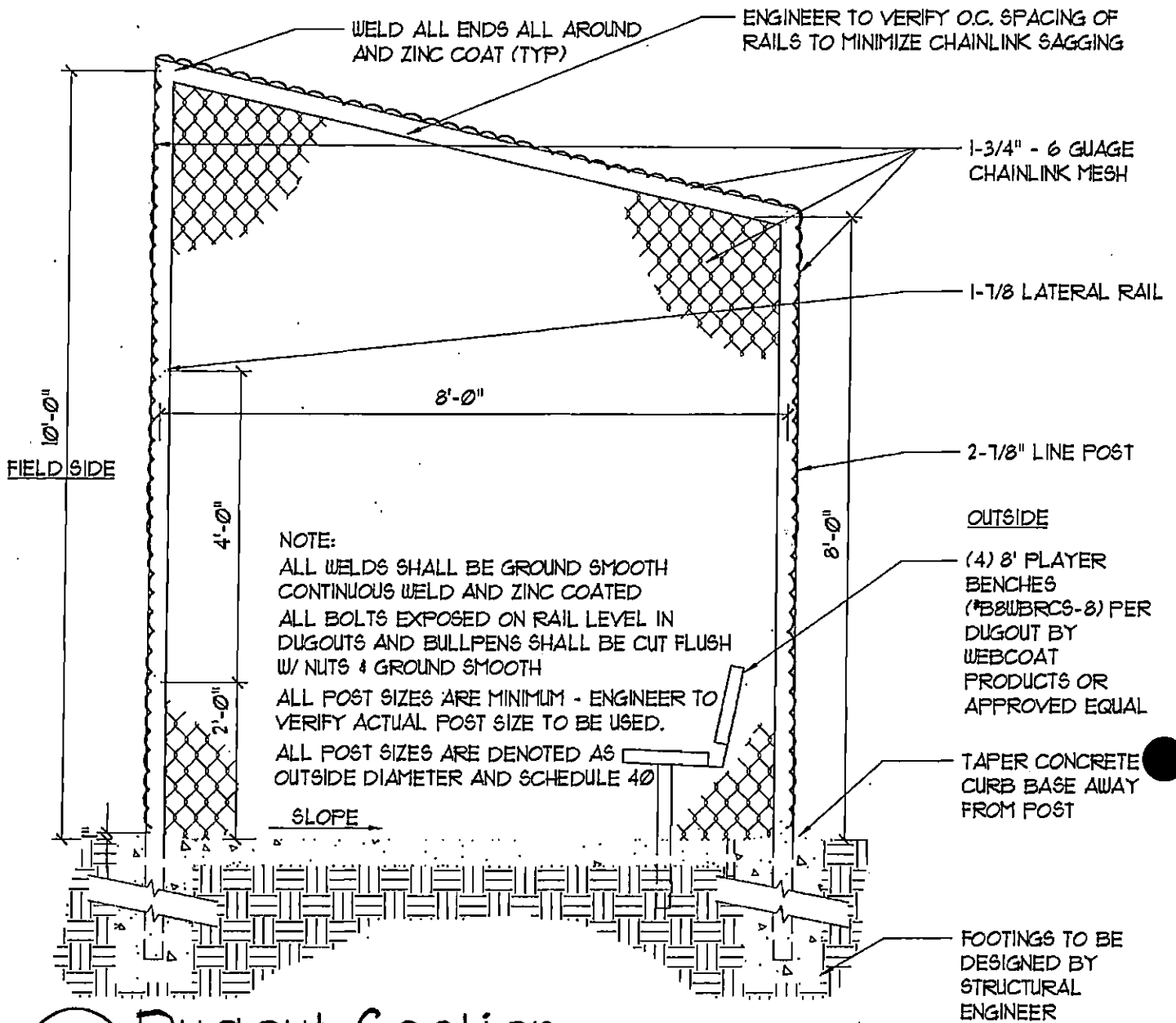


Baseball Sign

Scale: 3" = 1'-0"

REVISED 8/27/03

ST02882-26

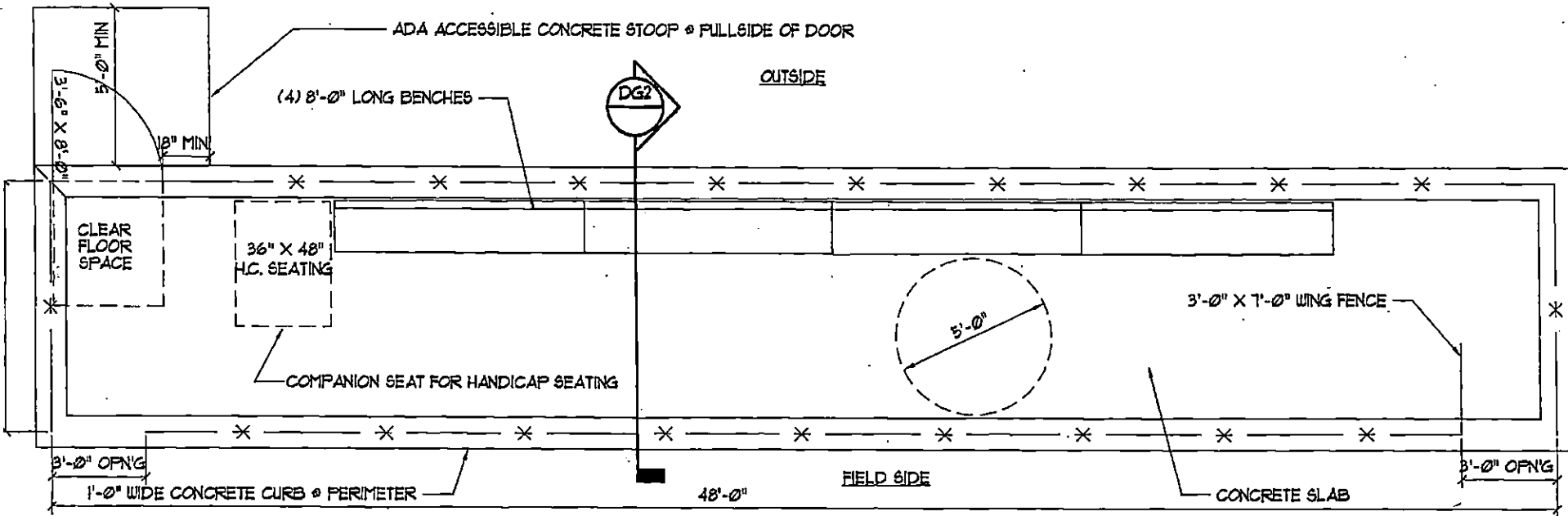


DG2 Dugout Section

Scale: 1/2" = 1'-0"

REVISED 12/16/04

ST02882-44



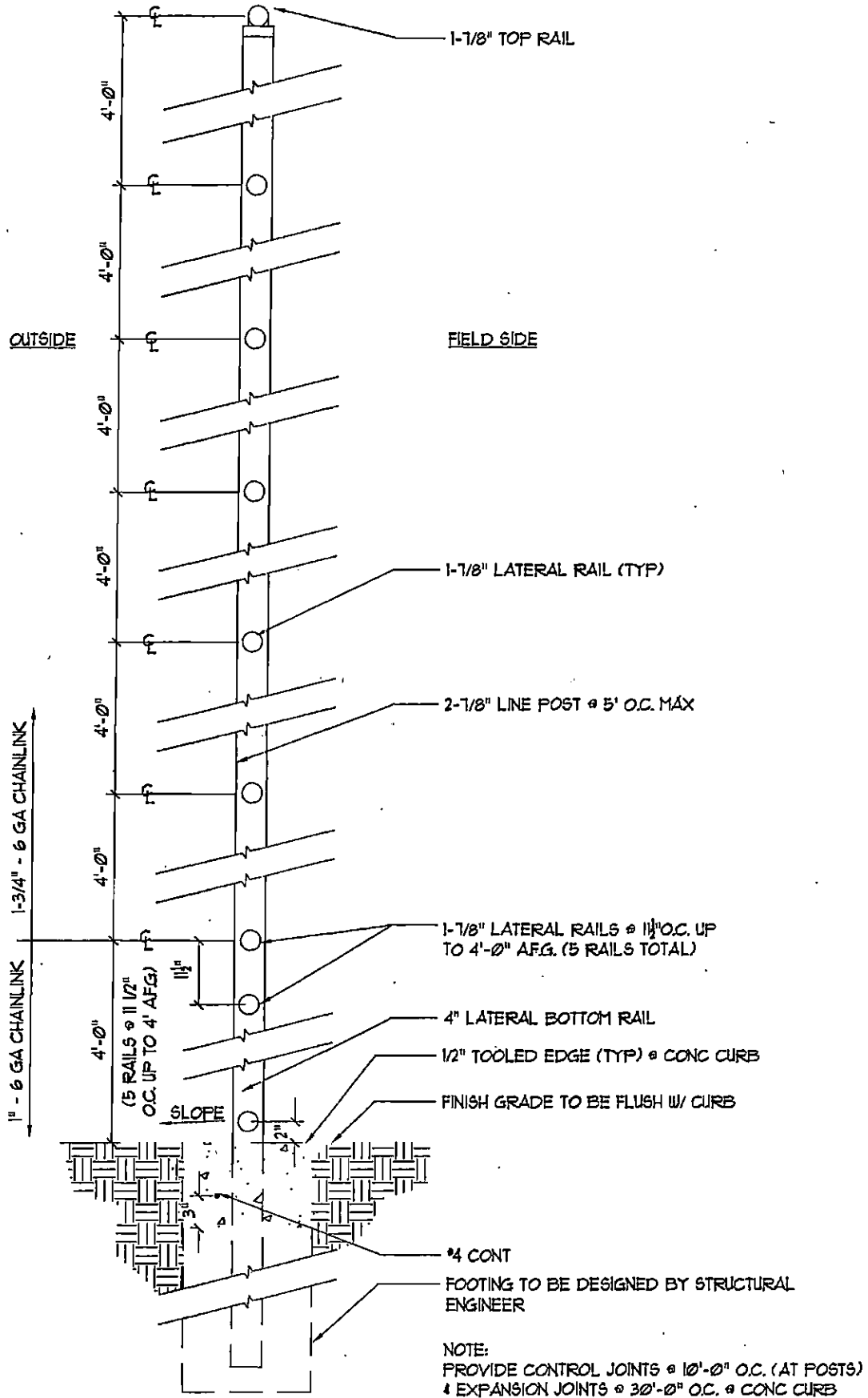
DG1 Dugout Layout

Scale: 1/4" = 1'-0"

REVISED 12/11/03

ST02882-45

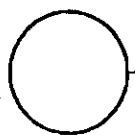
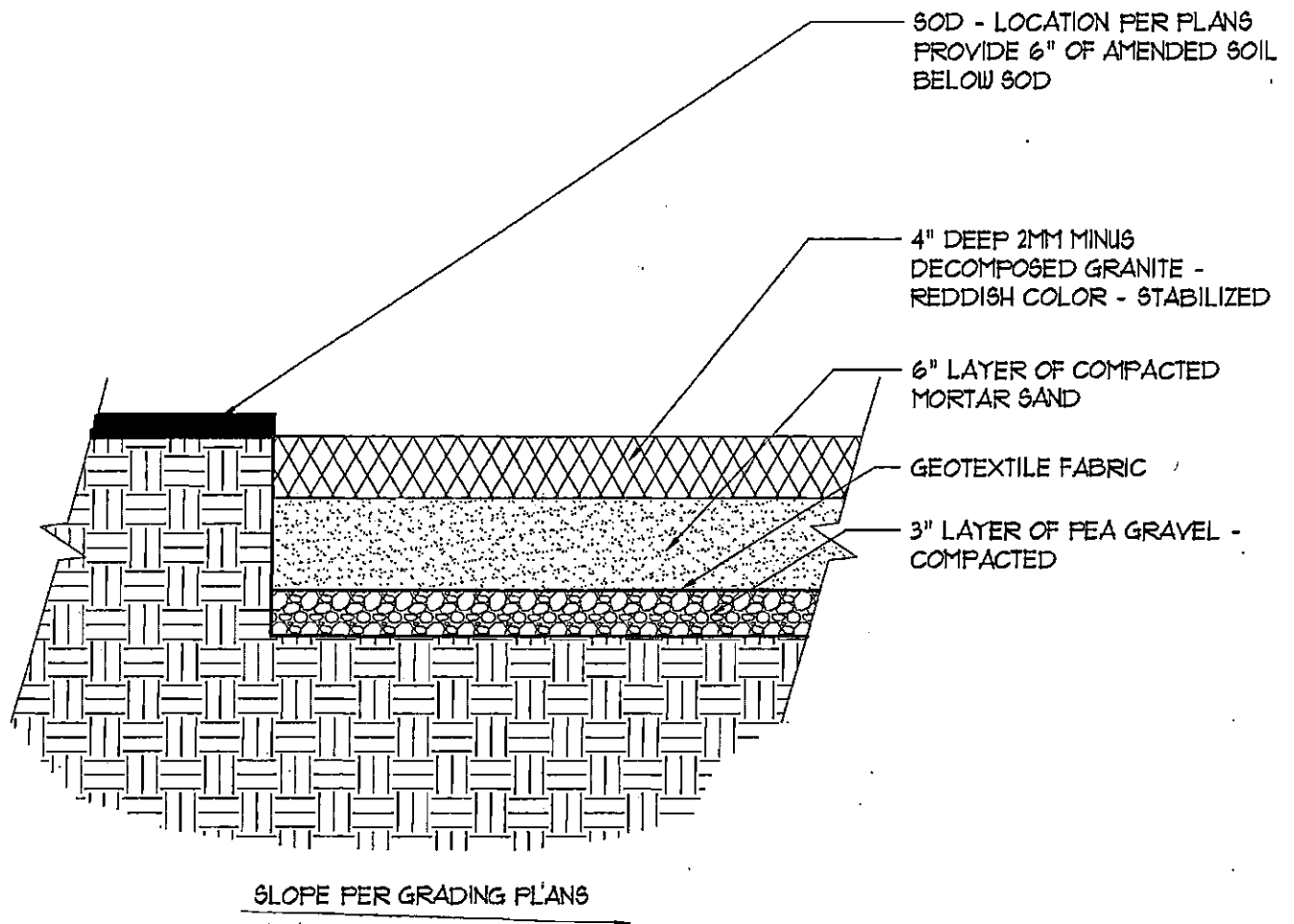
NOTE:
ALL POST SIZES ARE MINIMUM - ENGINEER TO VERIFY ACTUAL POST SIZE TO BE USED.
ALL POST SIZES ARE DENOTED AS OUTSIDE DIAMETER AND SCHEDULE 40



BS 28' Tall Backstop Fence
Scale: 1" = 1'-0" RE

REVISÉD 12/16/04

STØ2882-46

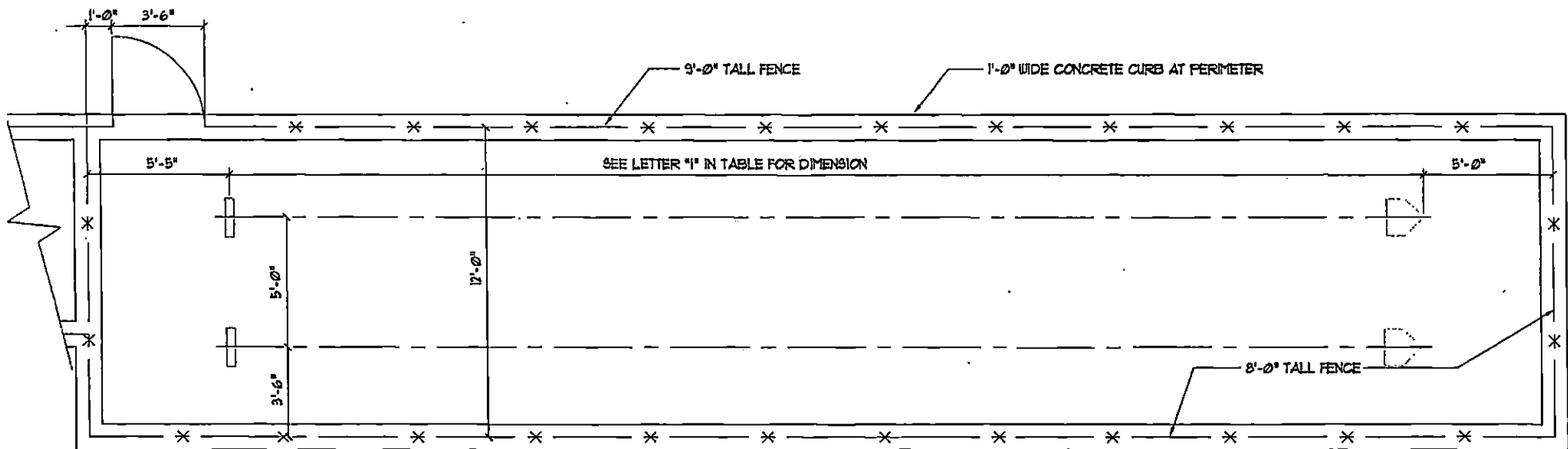


Baseball Infield Surface Section

Scale: 1" = 1'-0"

REVISED 12/11/03

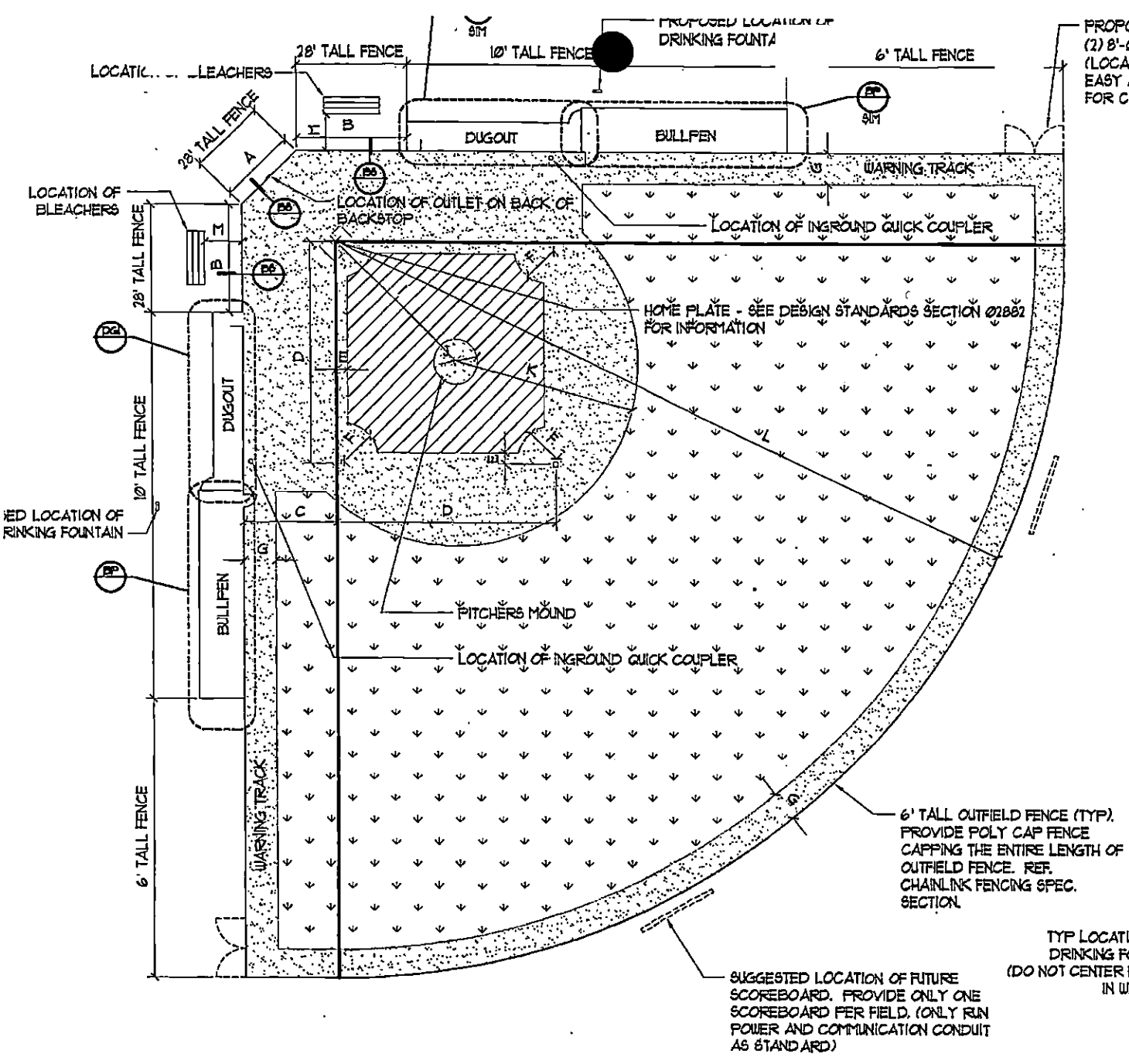
ST02882-48



Bullpen Layout
Scale: 1/4" = 1'-0"

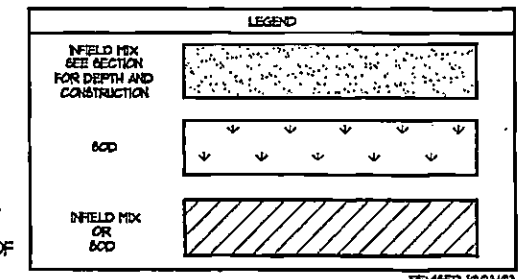
REVISED 12/11/03

ST02882-49

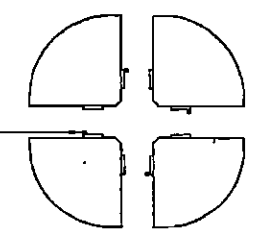


BASEBALL FIELD DIMENSION SCHEDULE				
MARK	DESCRIPTION	LITTLE LEAGUE	SOFTBALL	BASEBALL
A	BACKSTOP	20'-0"	20'-0"	30'-0"
B	BACKSTOP WING	30'-0"	30'-0"	45'-0"
C	MIN DIM TO BACKSTOP	15'-0"	25'-0"	35'-0"
D	BASE PATH	60'-0"	60'-0"	90'-0"
E	INFIELD TURF DIM	3'-0"	3'-0"	3'-0"
F	INFIELD TURF BASE RADIUS	N/A	N/A	14'-0"
G	WIDTH OF WARNING TRACK	8'-0"	10'-0"	12'-0"
H	HOME PLATE RADIUS	N/A	N/A	N/A
I	PITCHING LENGTH	46'-0"	46'-0"	60'-0"
J	PITCHER'S MOUND RADIUS	6'-0"	6'-0"	9'-0"
K	OUTFIELD RADIUS	30'-0"	65'-0"	95'-0"
L	CENTERFIELD FENCE RADIUS	200'-0"	250' to 300'	VARIABLE
M	BLEACHER SETBACK	3'-0"	5'-0"	5'-0"
N/A	INFIELD SURFACE	SKINNED	SKINNED	GRASS

NOTE: DIMS TO VARY PER SITE CONSTRAINTS



REVISED 10/23/03

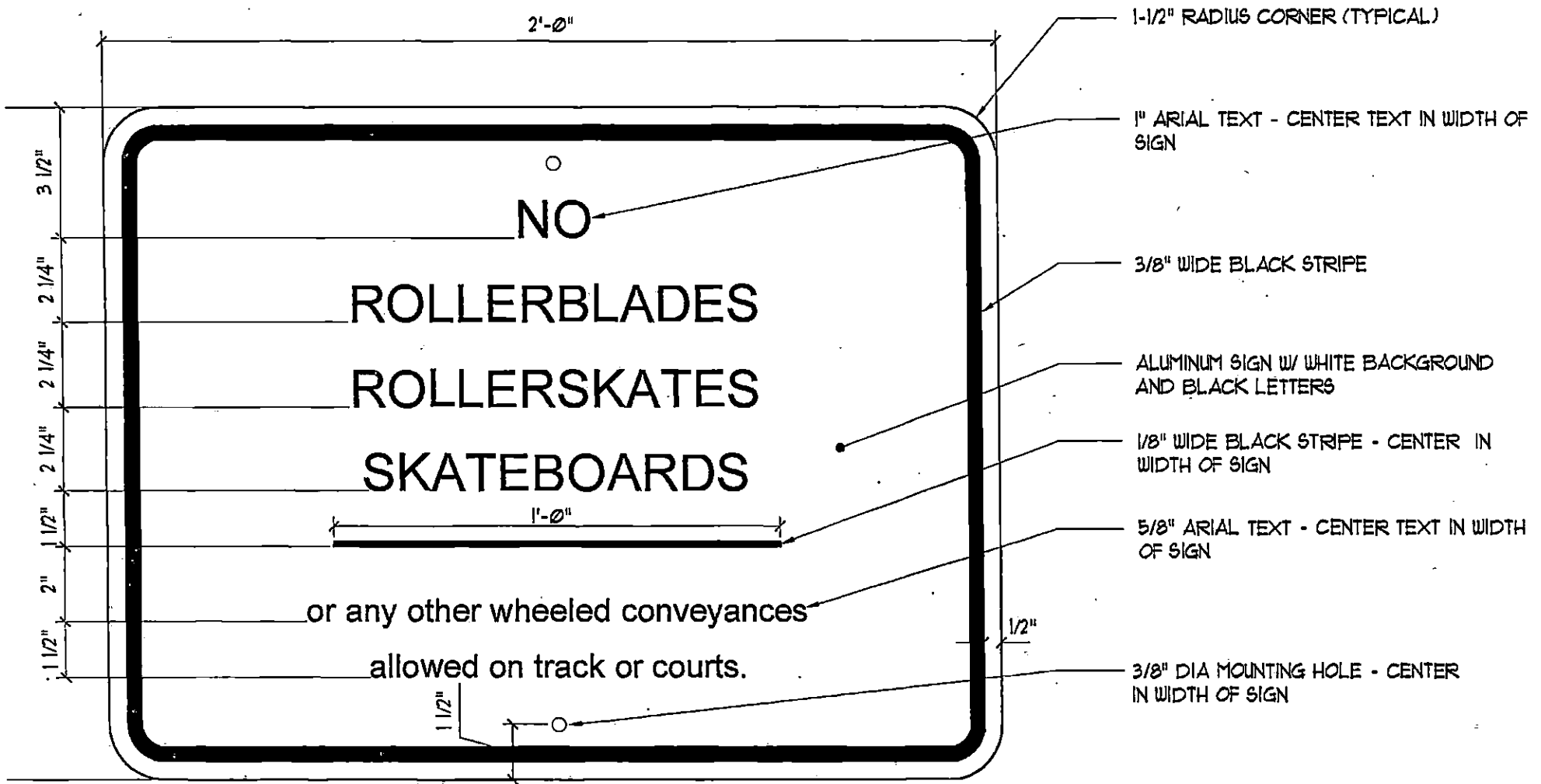


Baseball Field Layout

Scale: N.T.S.

REVISED 03/20/04

STC02802-01

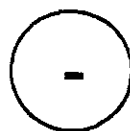
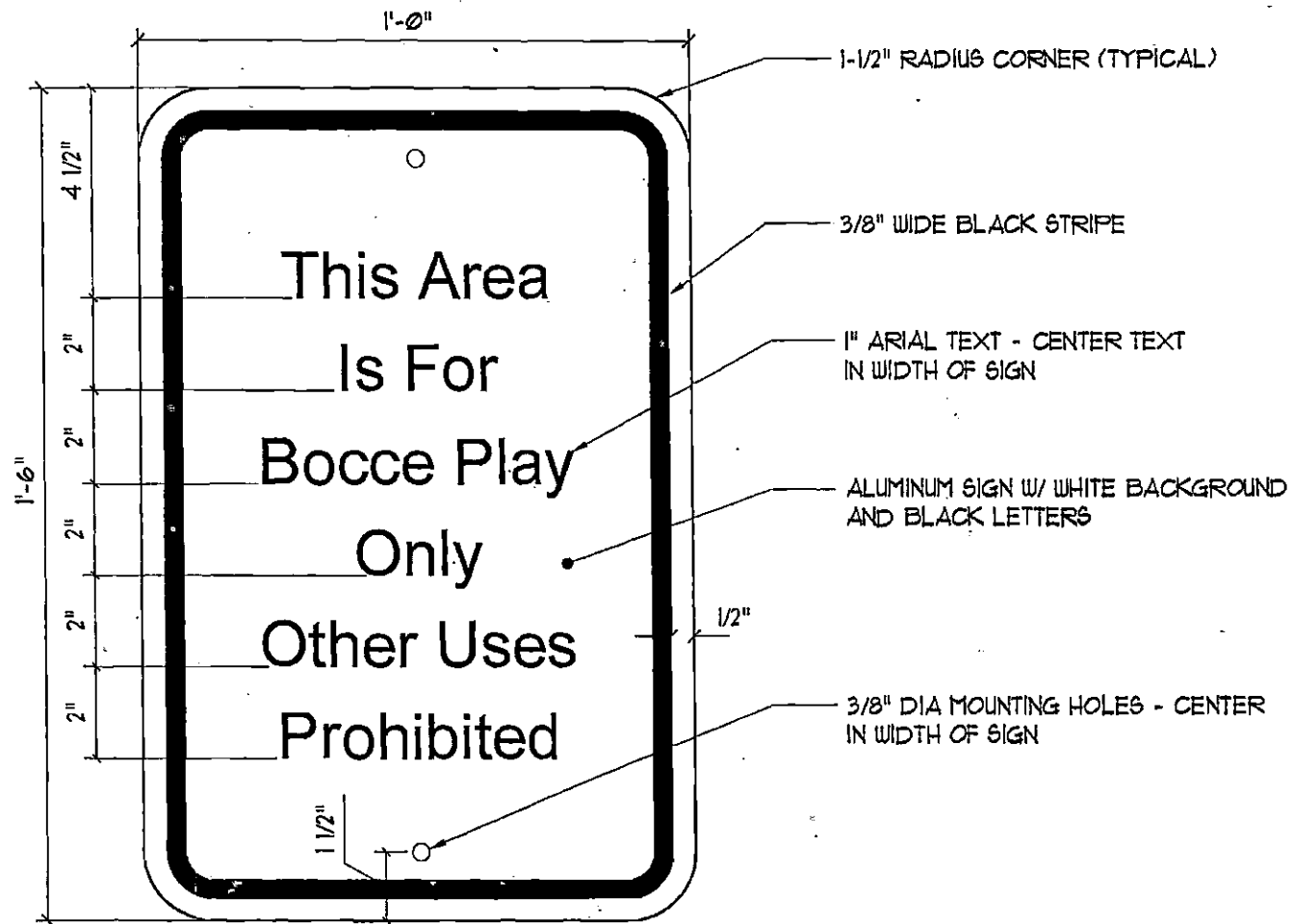


Track/Court Sign

Scale: 3" = 1'-0"

REVISED 8/21/03

ST02882-17

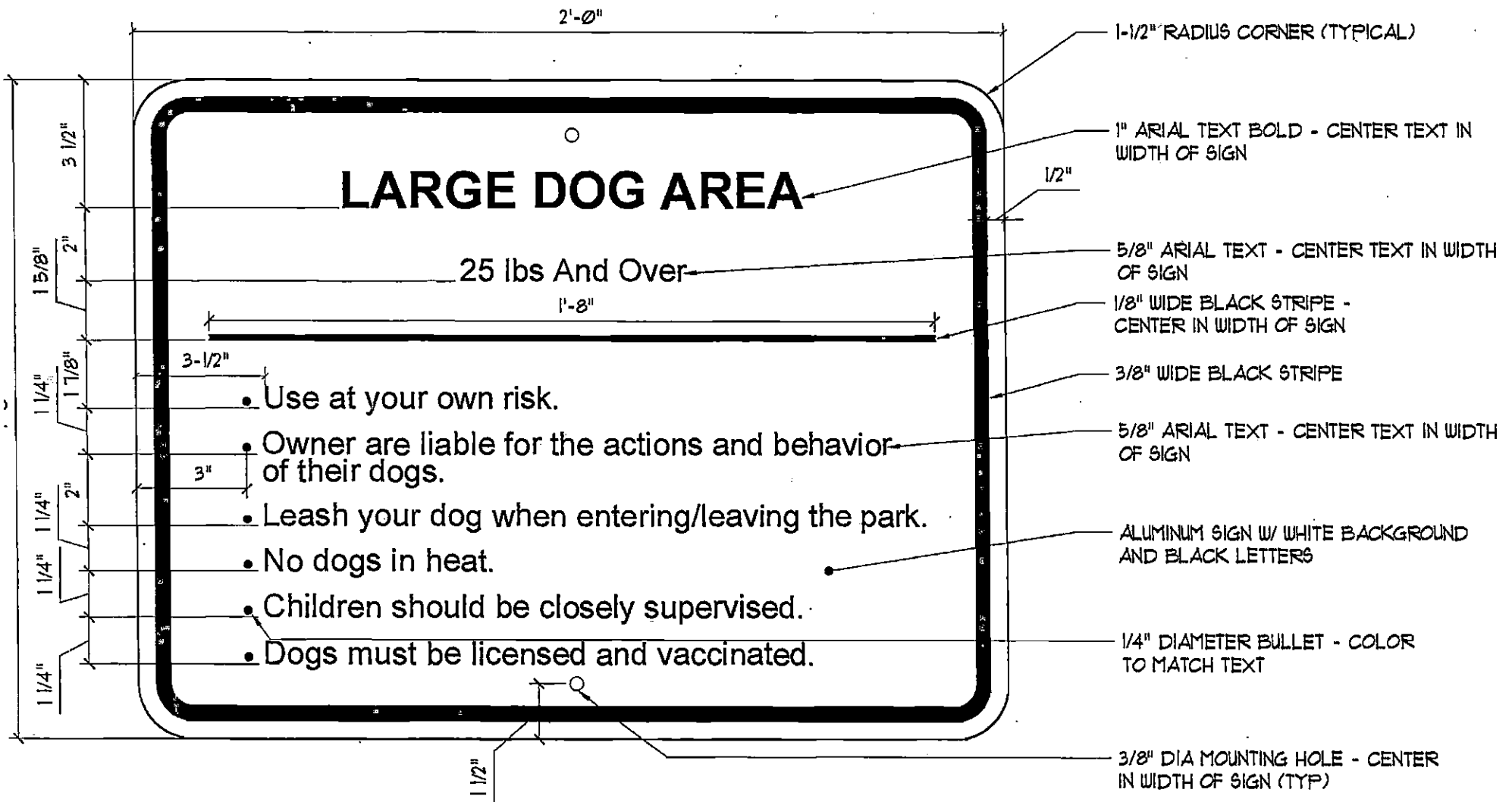


Bocce Sign

Scale: 3" = 1'-0"

REVISED 8/27/03

ST02882-06

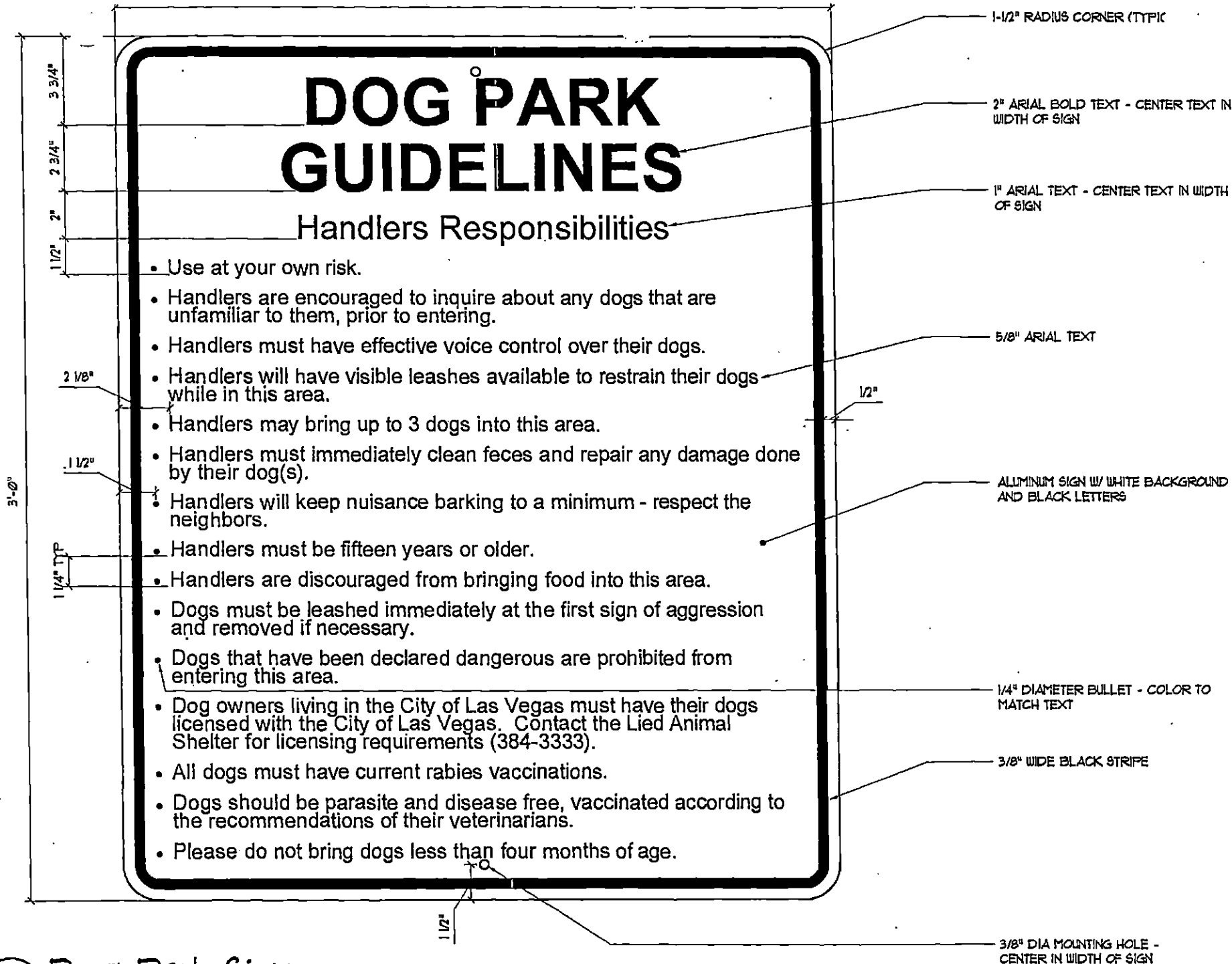


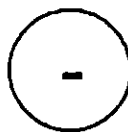
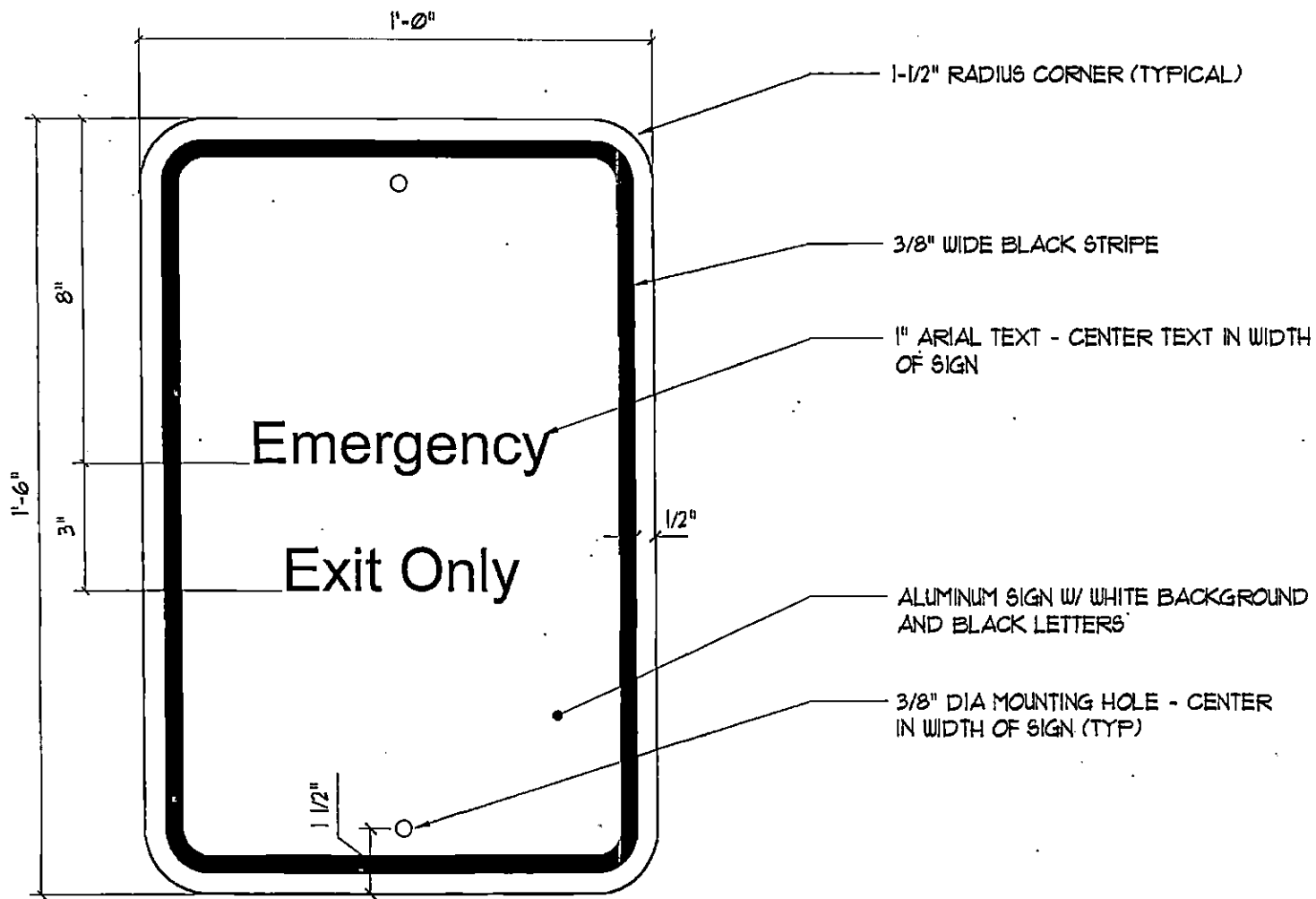
Dog Park Sign

Scale: 3" = 1'-0"

REVISED 4/12/04

STO2882-11



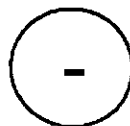
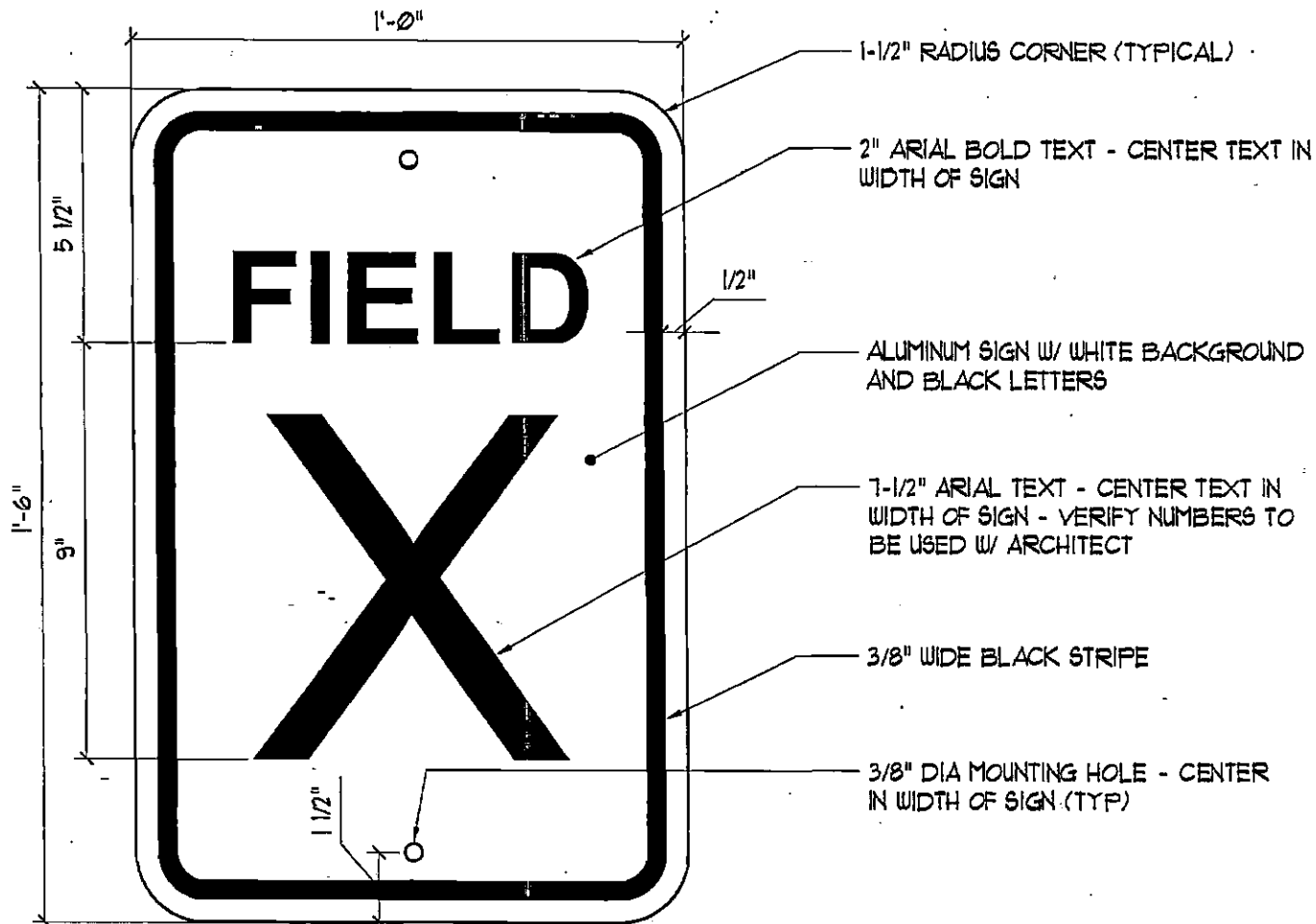


Dog Park Sign

Scale: 3" = 1'-0"

REVISED 8/27/03

STO2882-23

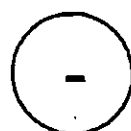
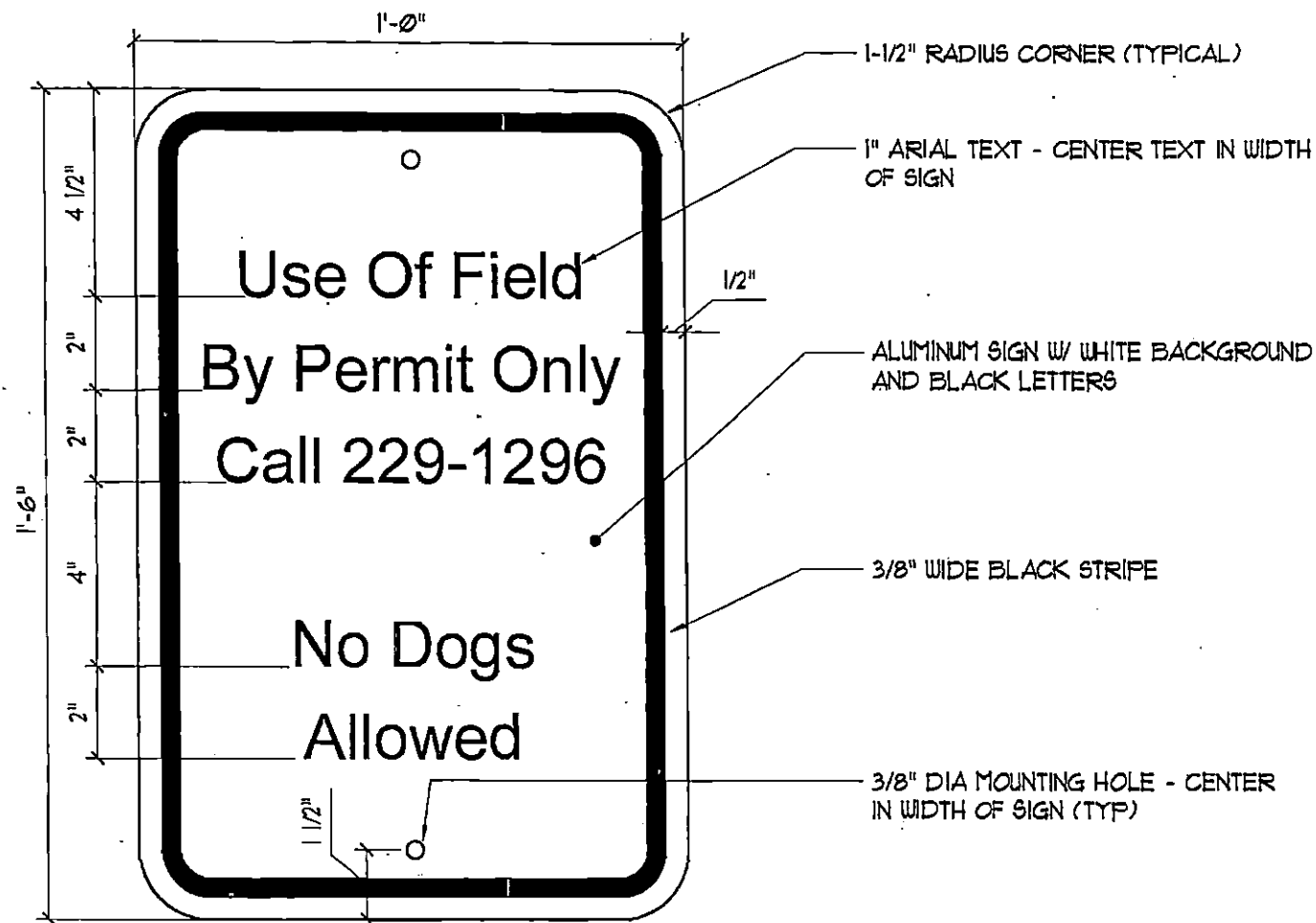


Field I.D. Sign

Scale: 3" = 1'-0"

REVISED 4/14/04

ST02882-08



Field Rules Sign

Scale: 3" = 1'-0"

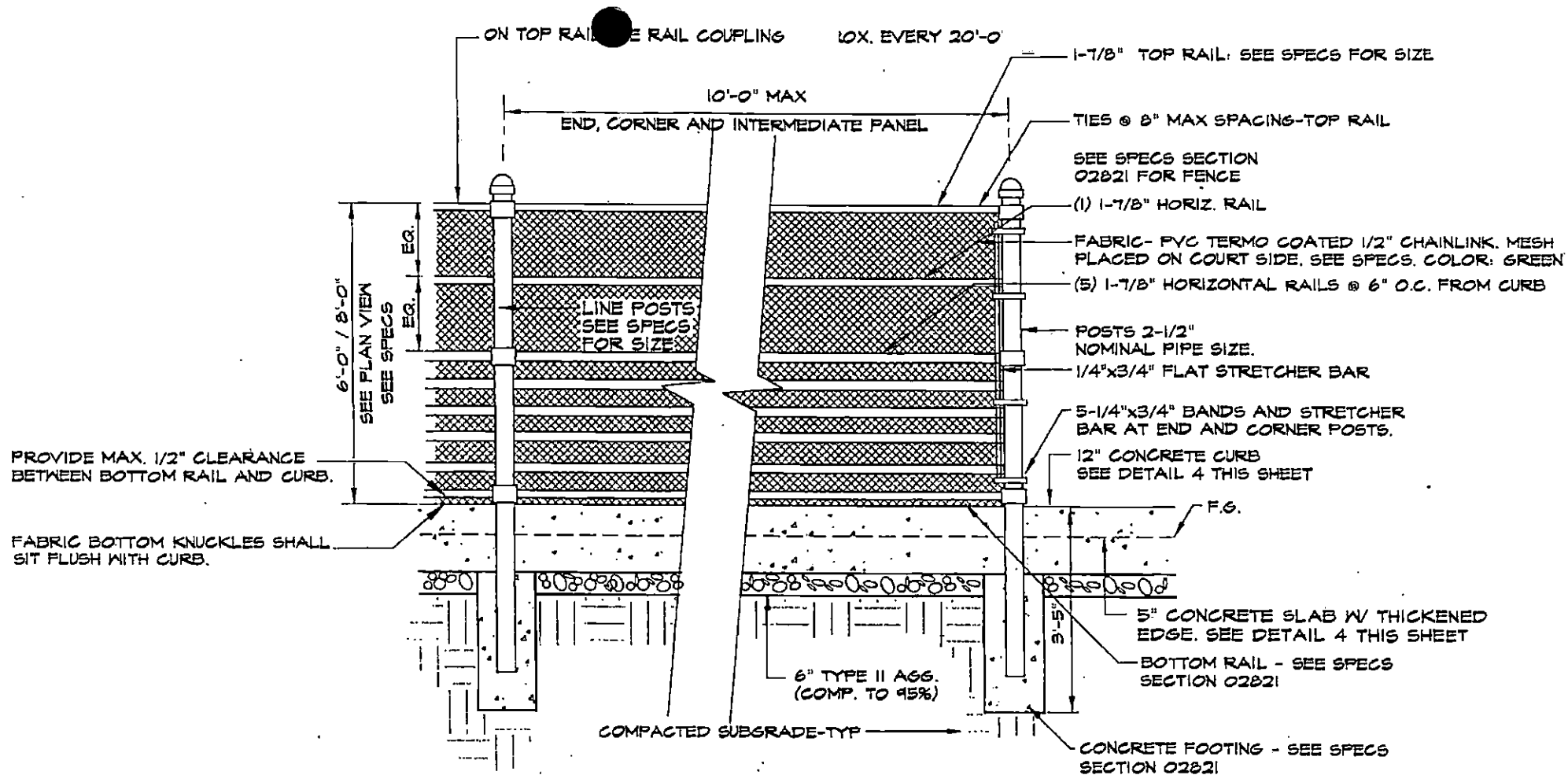
REVISED 4/14/04

STO2882-52

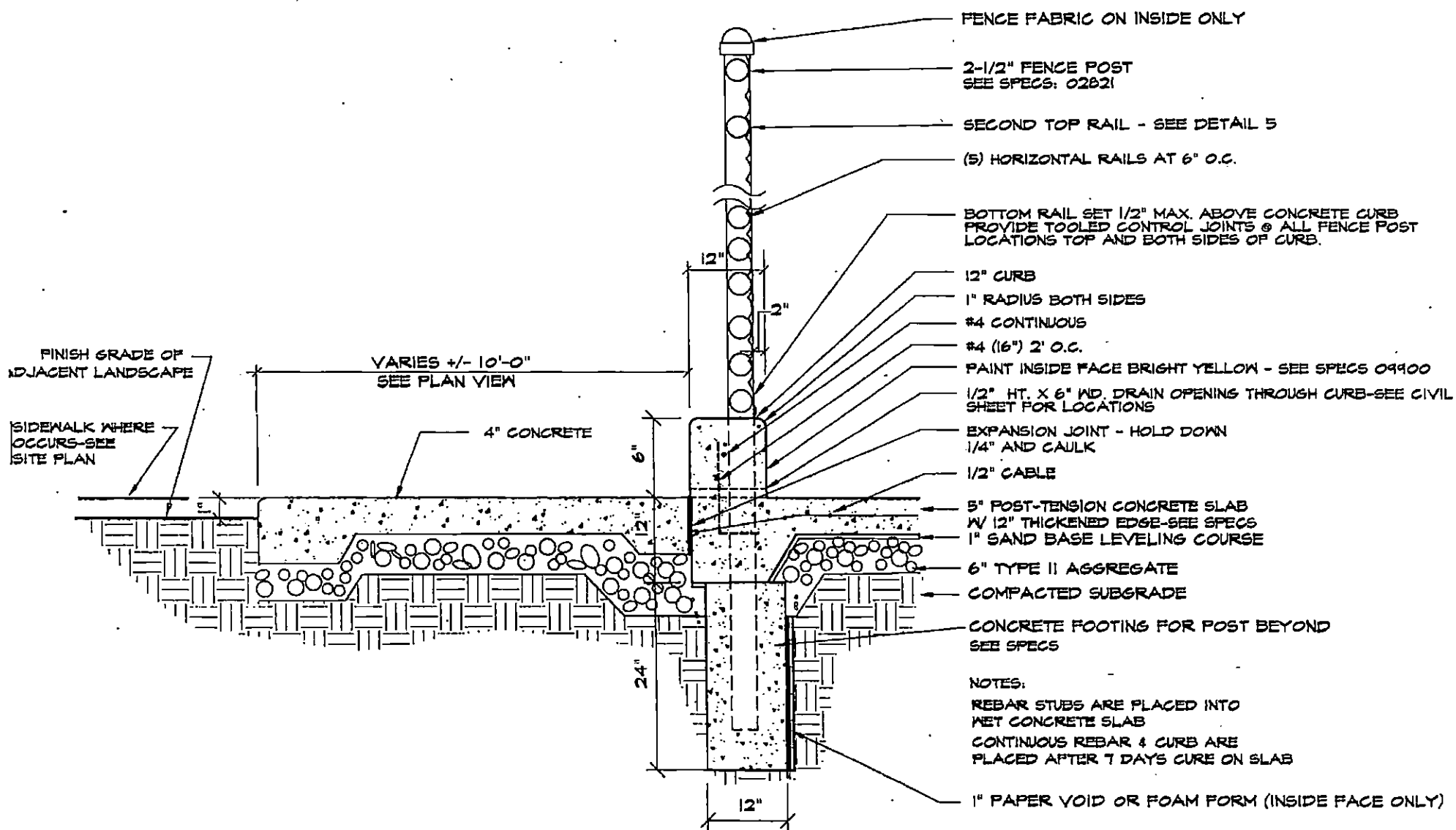


Handicapped Horseshoe Court Layout

REVISÉD 8/27/03



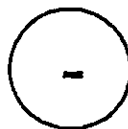
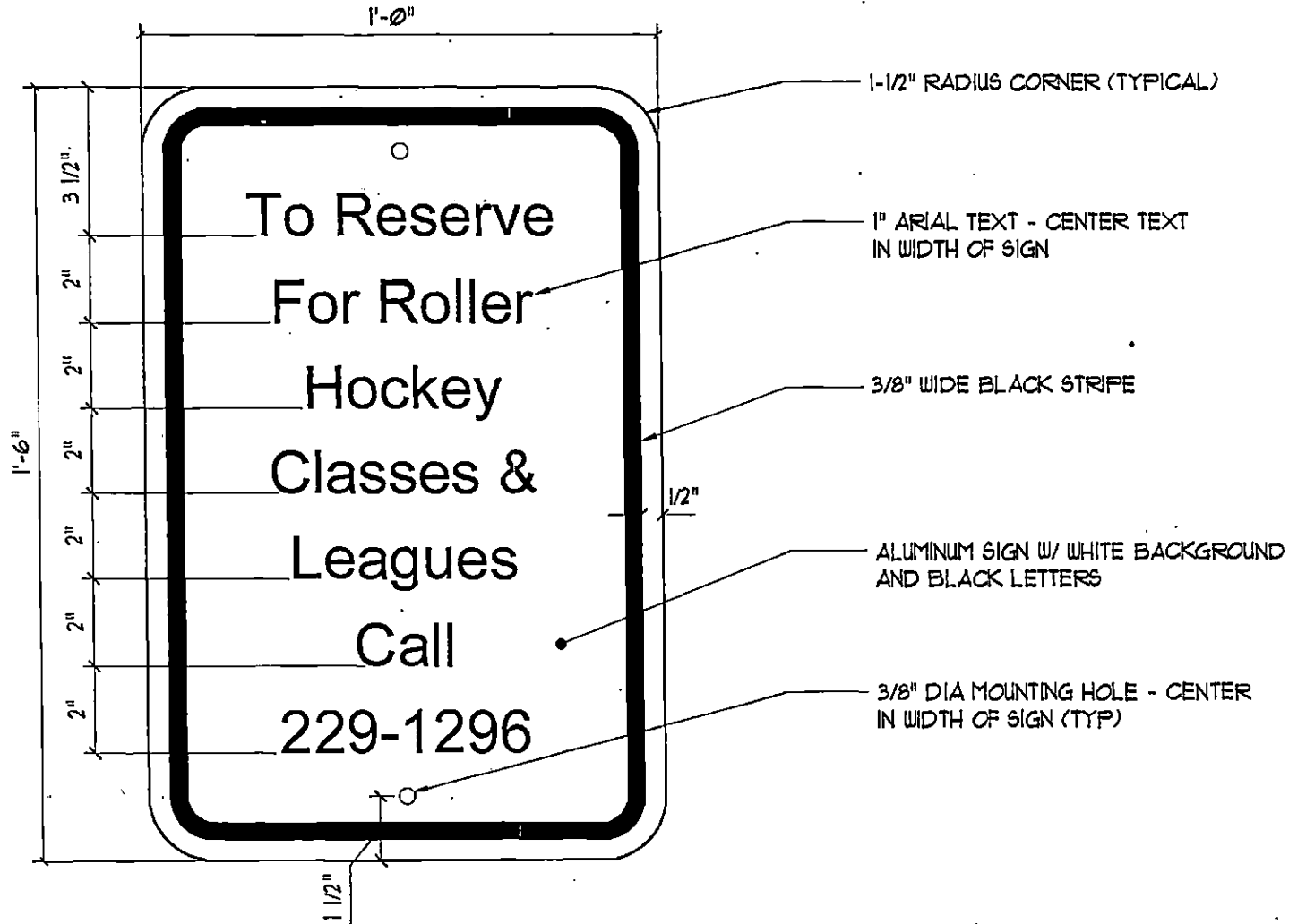
3 6' & 8' HT CHAIN LINK FENCE W/ HEADER NTS AT ROLLER HOCKEY



**④ 6' & 8' HT CHAINLINK FENCE W/ HEADER
AT ROLLER HOCKEY - SECTION**

NTS

truction\02882\RollerHockey\RollerHockeyFenceSection.jpg"



Roller Hockey Sign

Scale: 3" = 1'-0"

REVISED 8/21/03

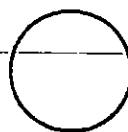
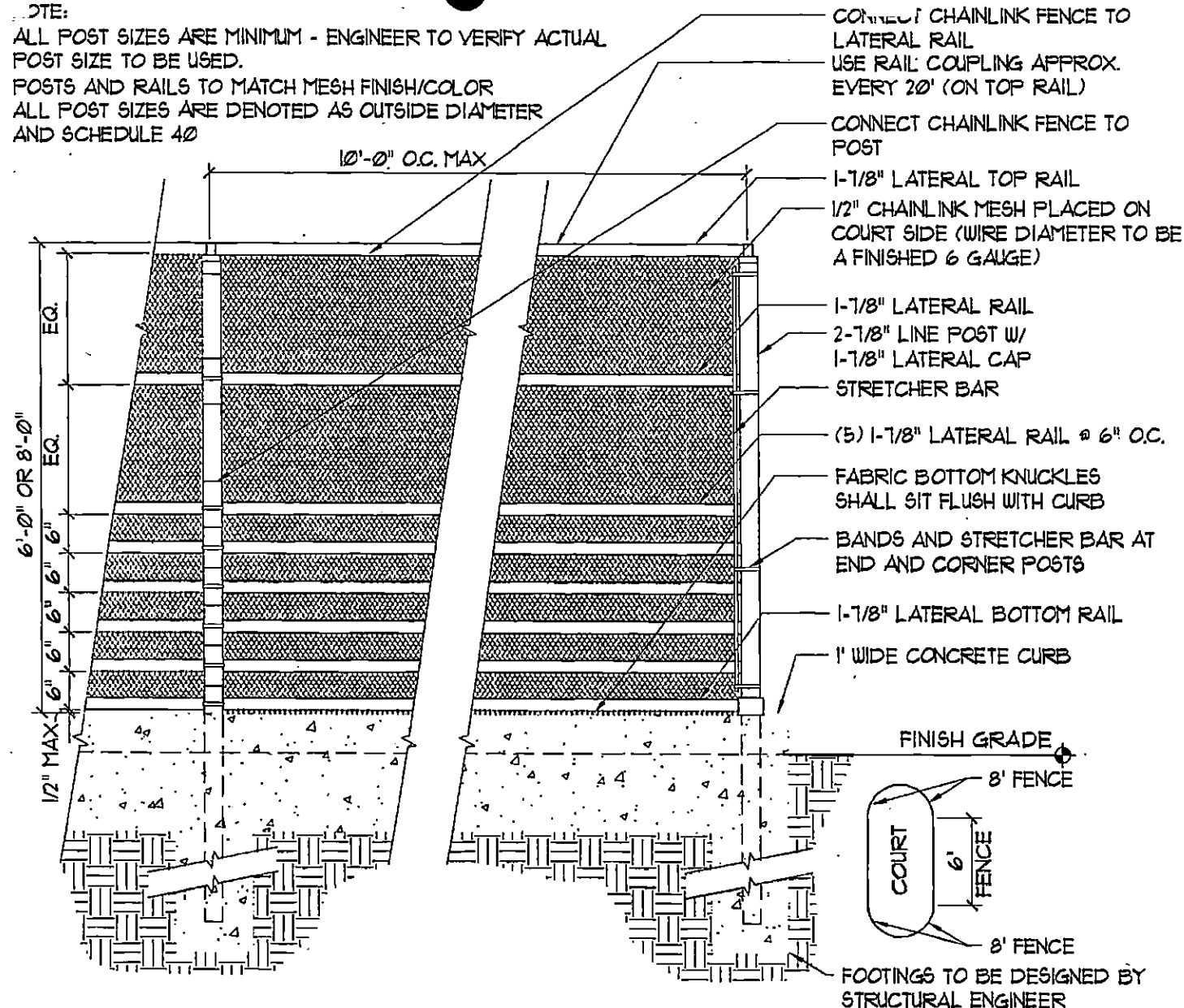
STO2882-13

NOTE:

ALL POST SIZES ARE MINIMUM - ENGINEER TO VERIFY ACTUAL POST SIZE TO BE USED.

POSTS AND RAILS TO MATCH MESH FINISH/COLOR

ALL POST SIZES ARE DENOTED AS OUTSIDE DIAMETER AND SCHEDULE 40



Roller Hockey Chain Link Fence Elev.

Scale: 1/2" = 1'-0"

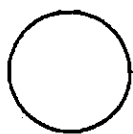
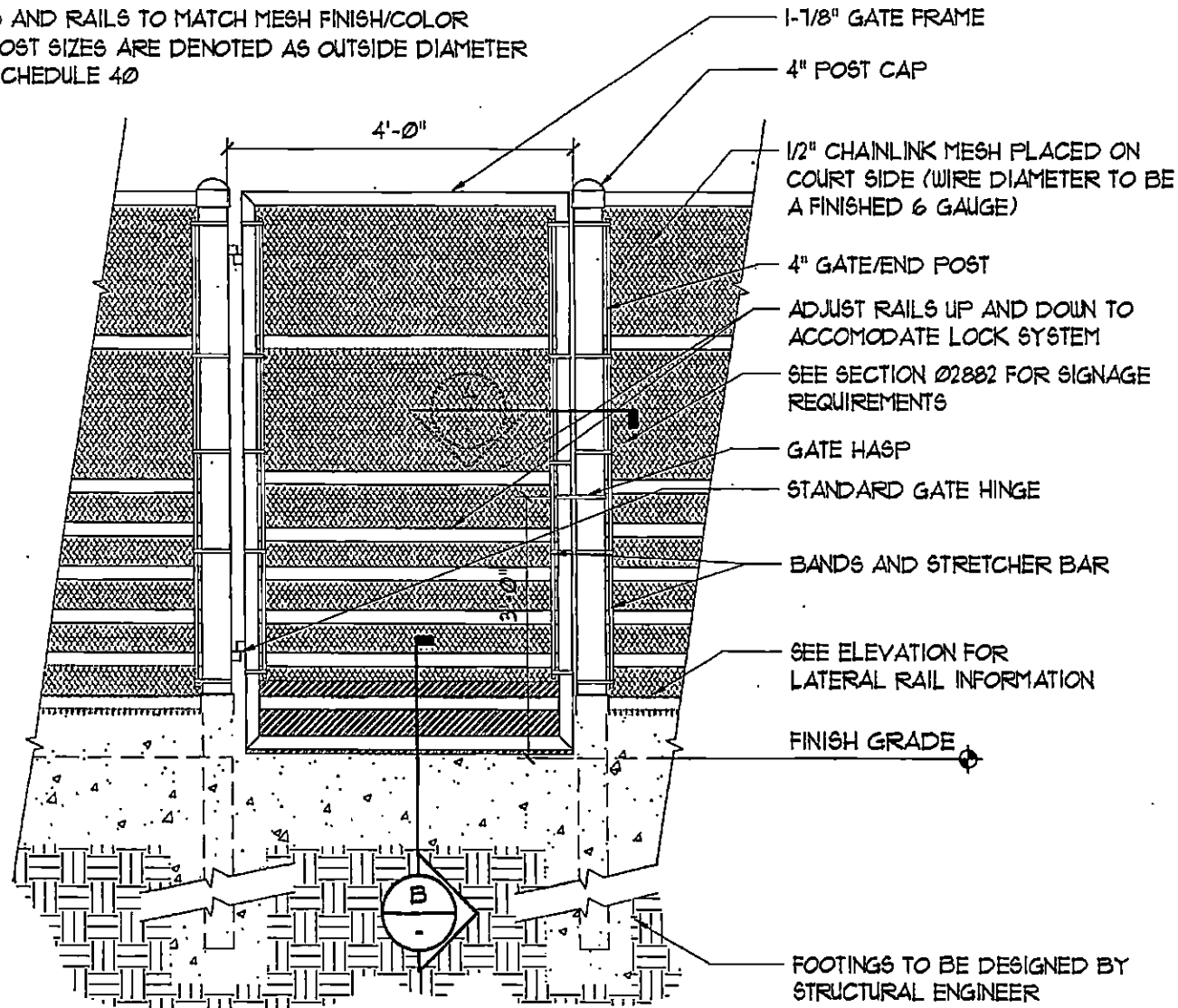
REVISED 12/11/03 ST02882-37

NOTE:

ALL POST SIZES ARE MINIMUM - ENGINEER TO VERIFY ACTUAL
POST SIZE TO BE USED.

POSTS AND RAILS TO MATCH MESH FINISH/COLOR

ALL POST SIZES ARE DENOTED AS OUTSIDE DIAMETER
AND SCHEDULE 40

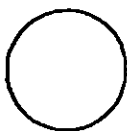
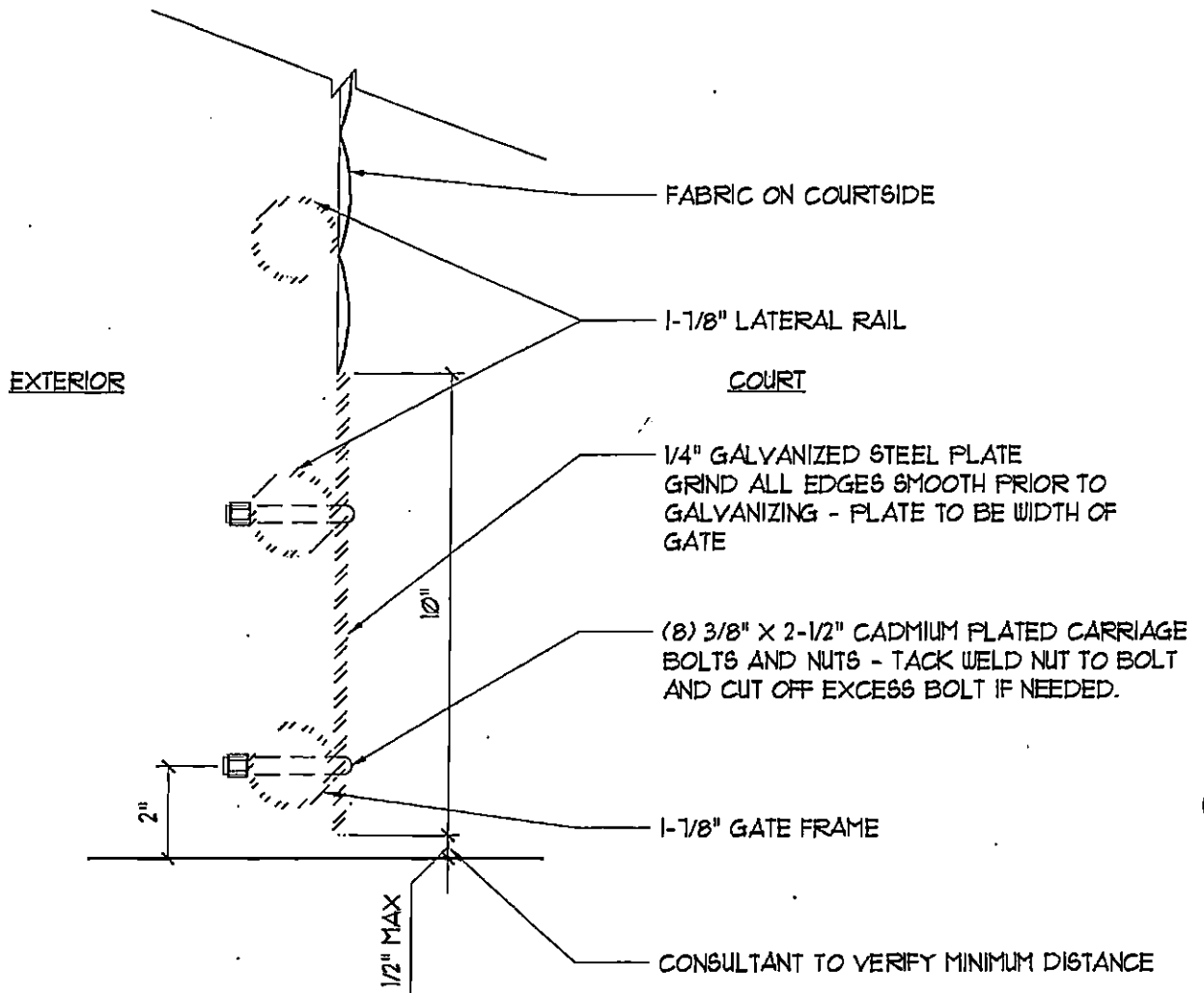


Roller Hockey Fence Gate Elevation

Scale: 1/2" = 1'-0"

REVISED 12/11/03

ST02882-38

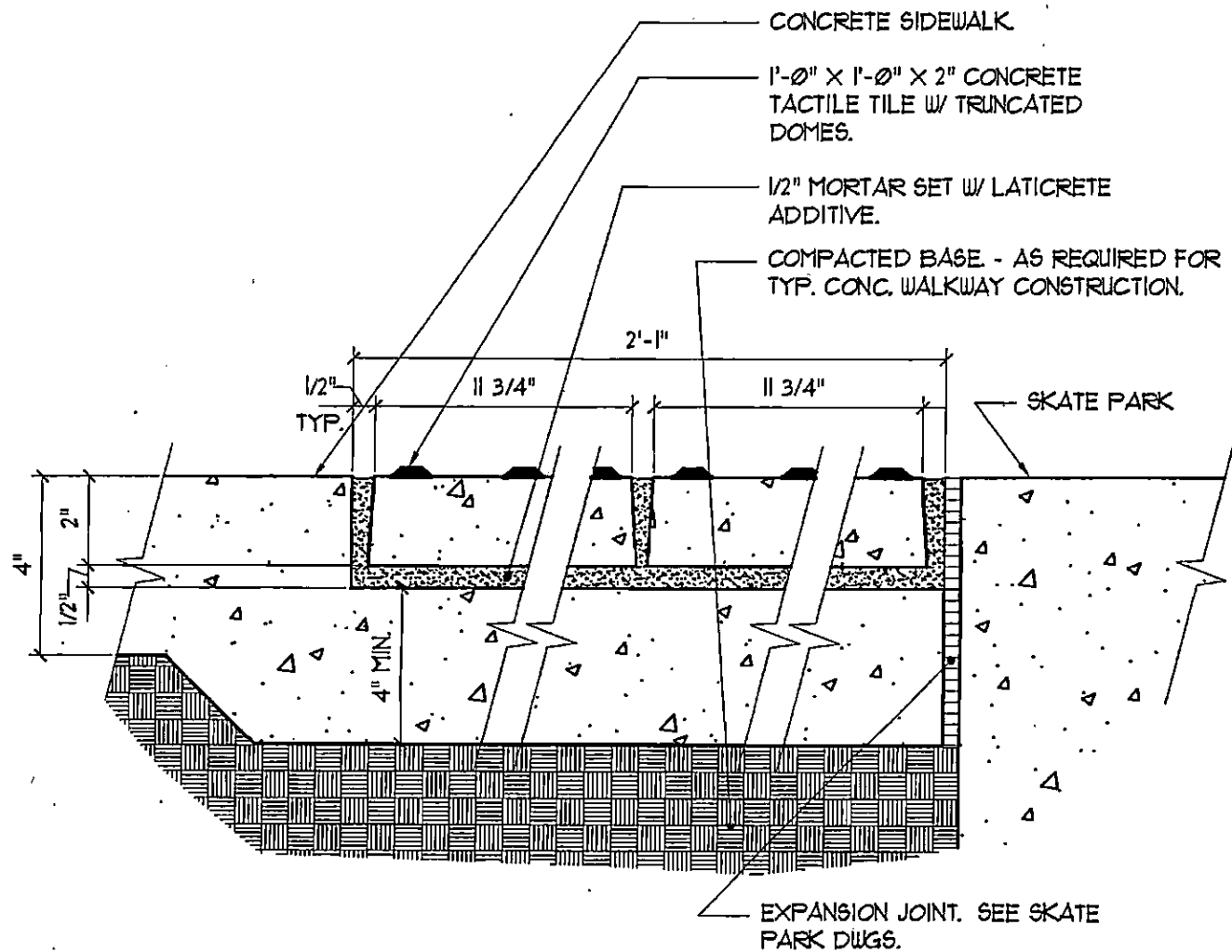


Roller Hockey Gate Section

Scale: 3" = 1'-0"

REVISED 9/2/03

ST02882-40

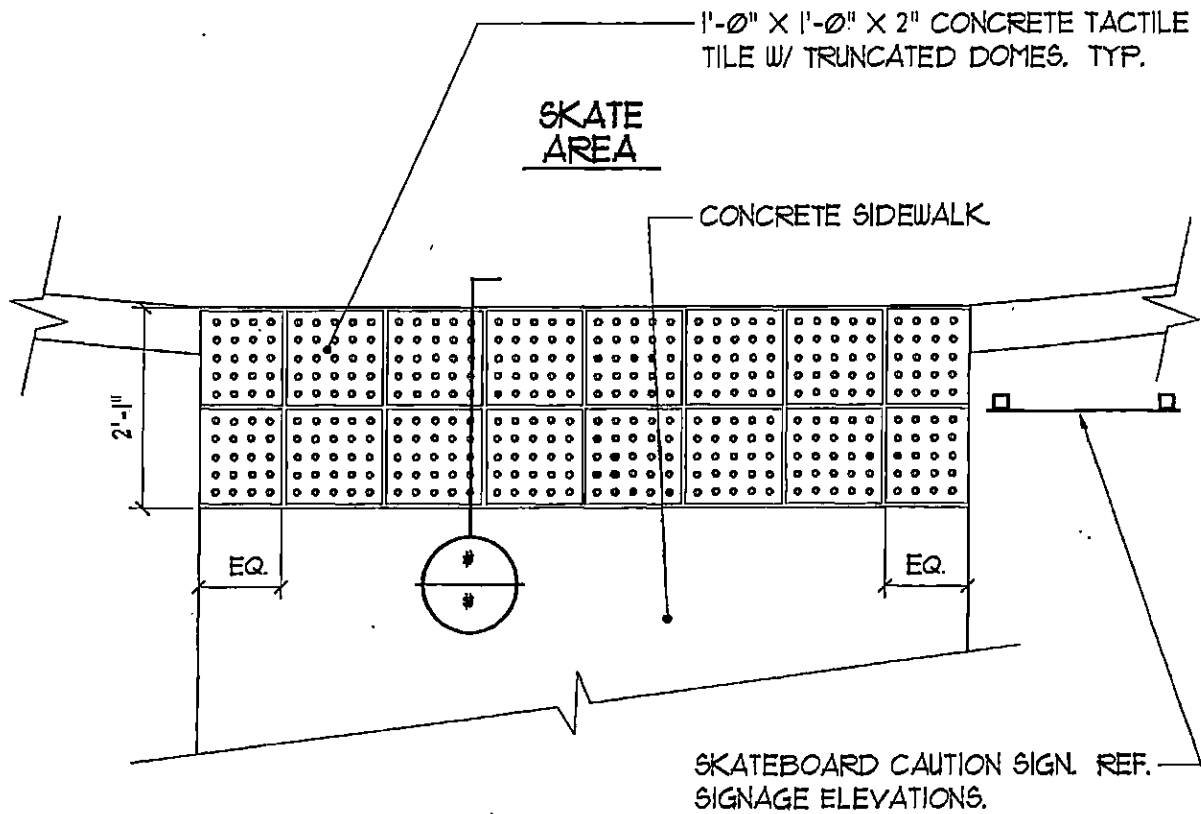


○ Detectable Warning @ Skate Park

Scale: 3" = 1'-0"

REVISED 6/1/01

ST02882-01



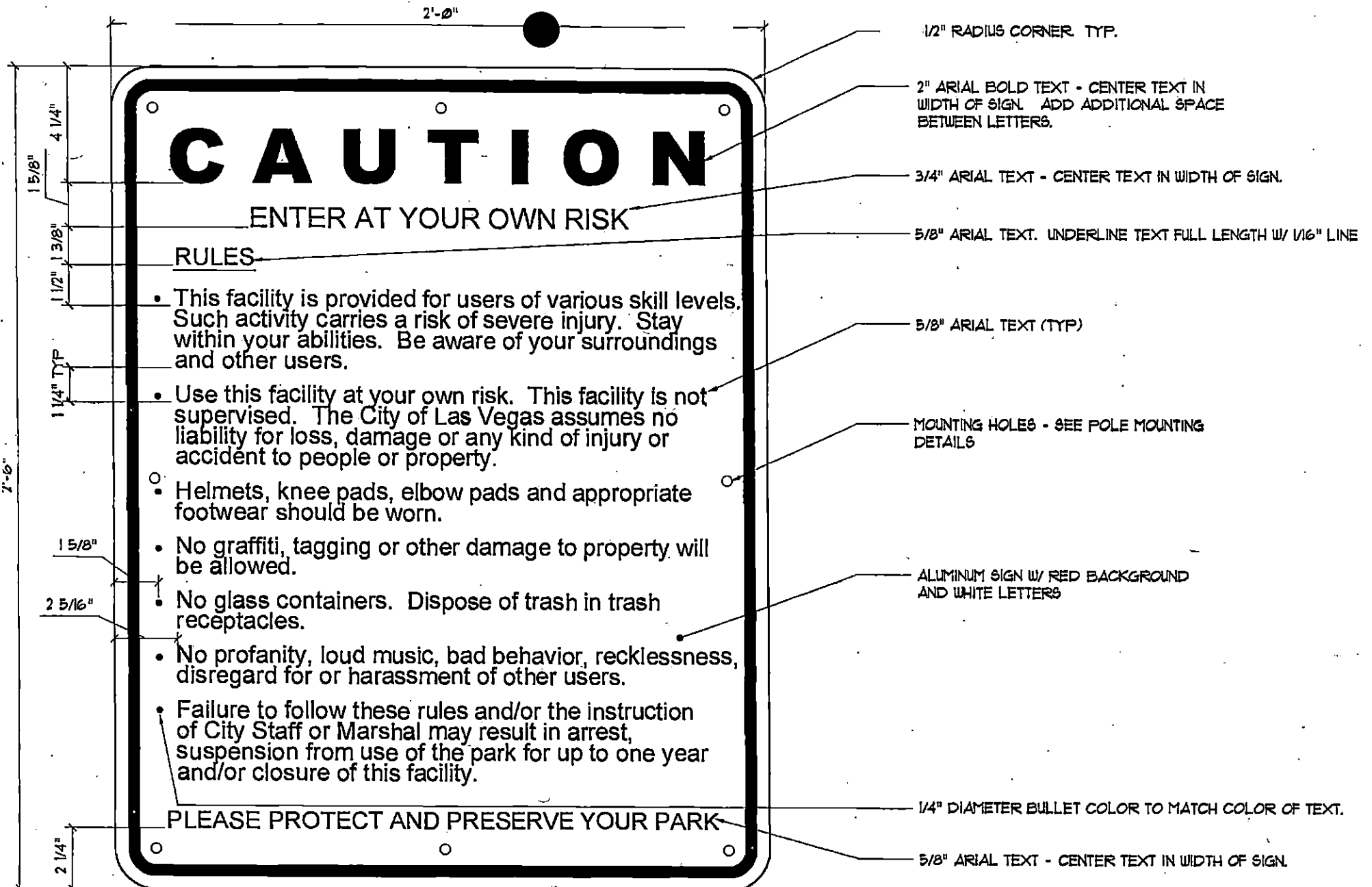
NOTE: LAYOUT TILES CENTERED ON WALK WITH NO EDGE TILES LESS THAN HALF THE WIDTH OF A TILE.

○ SkatePark Entry Paver View

Scale: 1/2" = 1'-0"

REVISED 6/1/03

ST02882-02

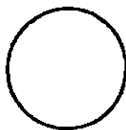
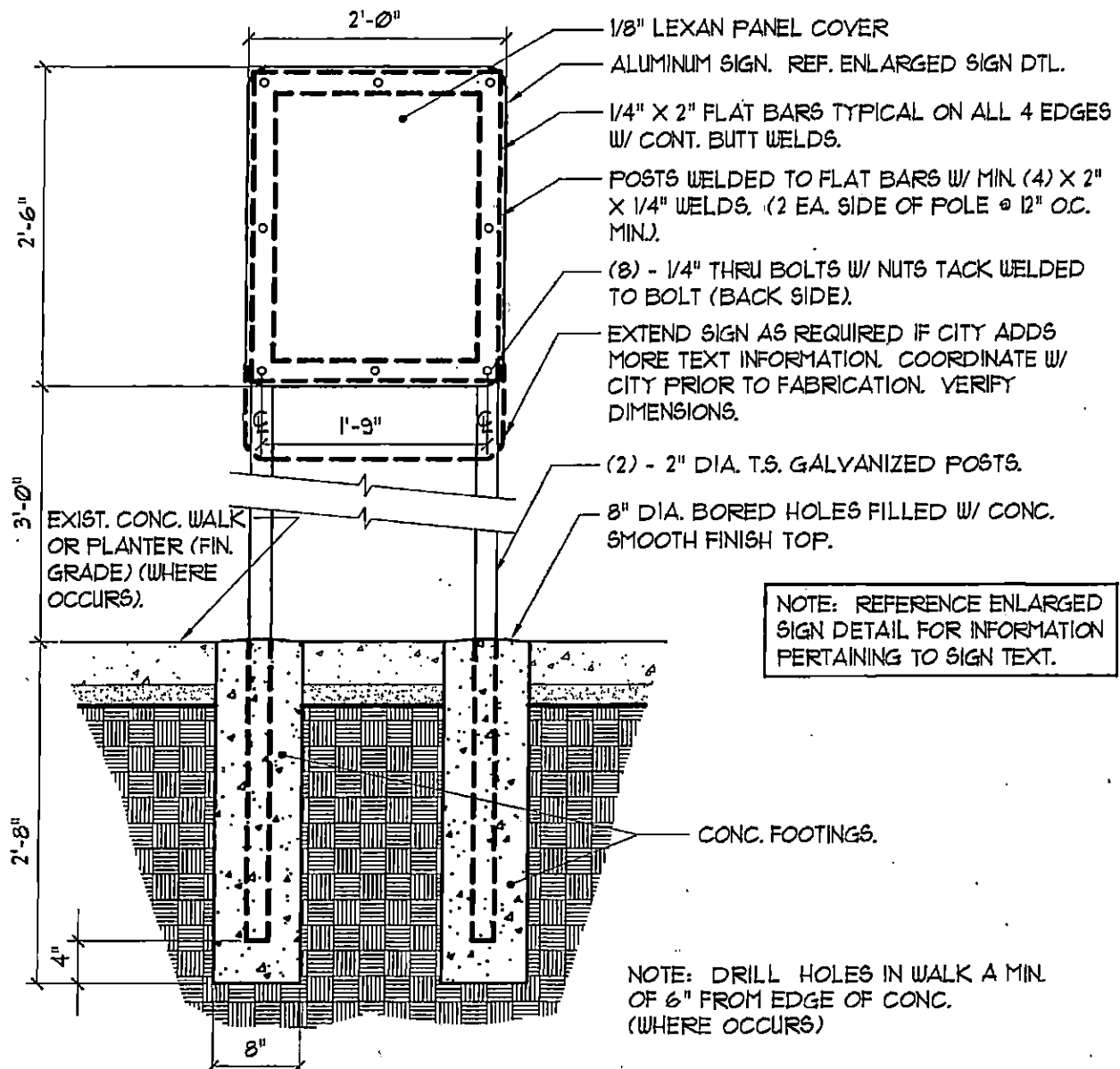


Skate Park Rules/Caution Sign

Scale: 3" = 1'-0"

REVISED 4/12/04

ST02882-03



Skate Park Pole Mt'd. Detail

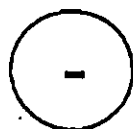
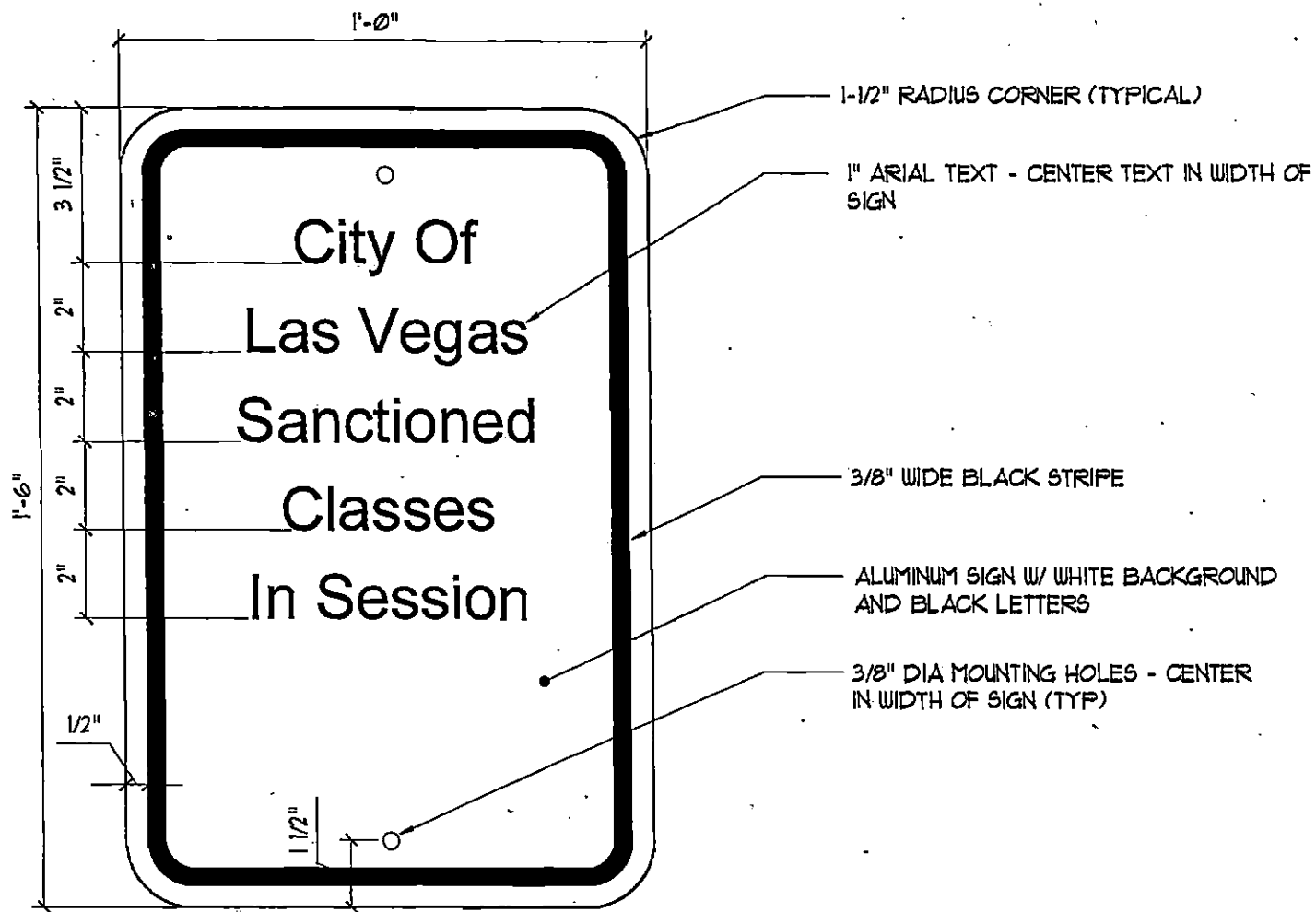
Scale: 3/4" = 1'-0"

REVISED 5/1/04 ST02882-04



Scale: 3/4"=1'-0"

ST02882-05

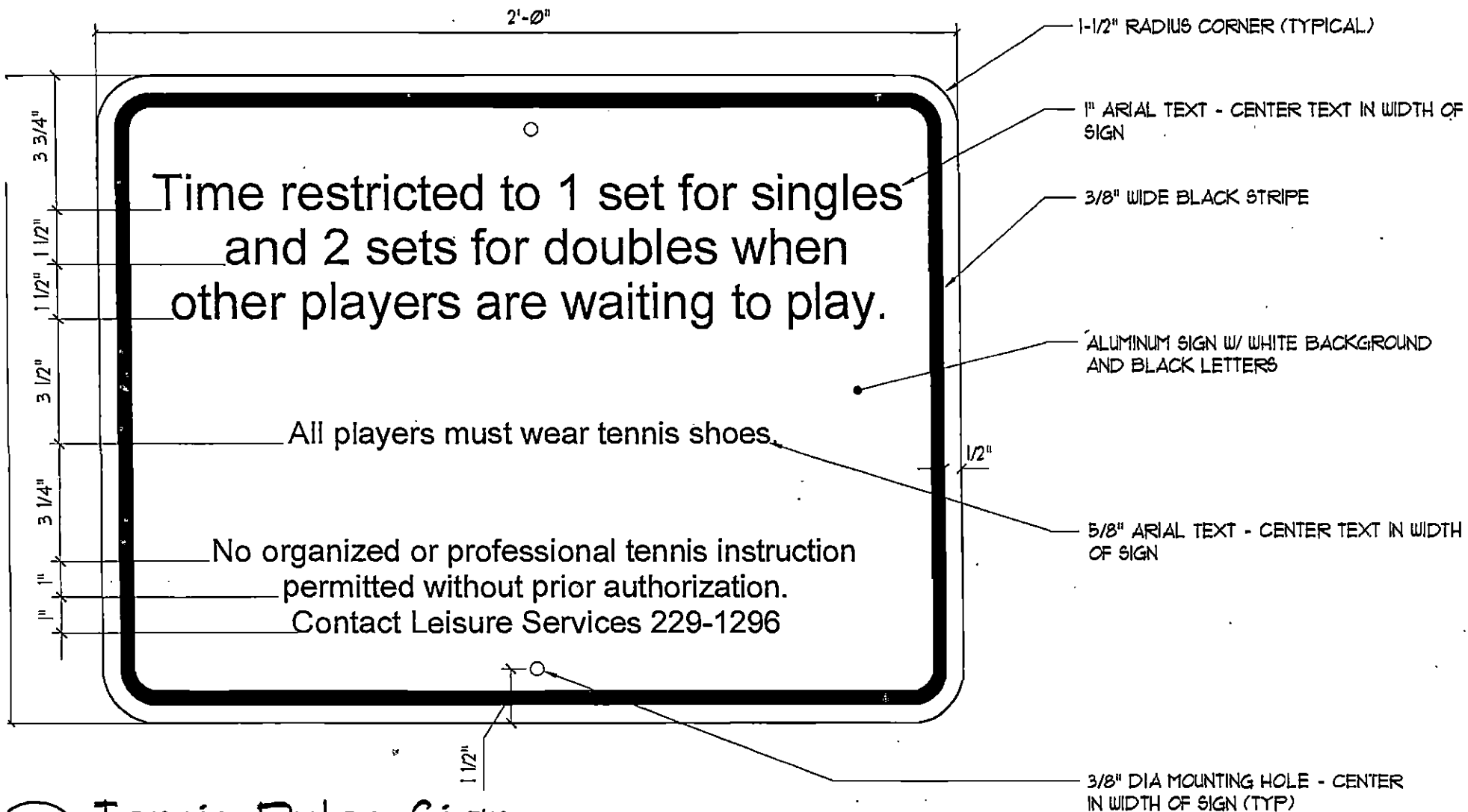


Tennis Class Sign

Scale: 3" = 1'-0"

REVISED 8/27/03

ST02882-15

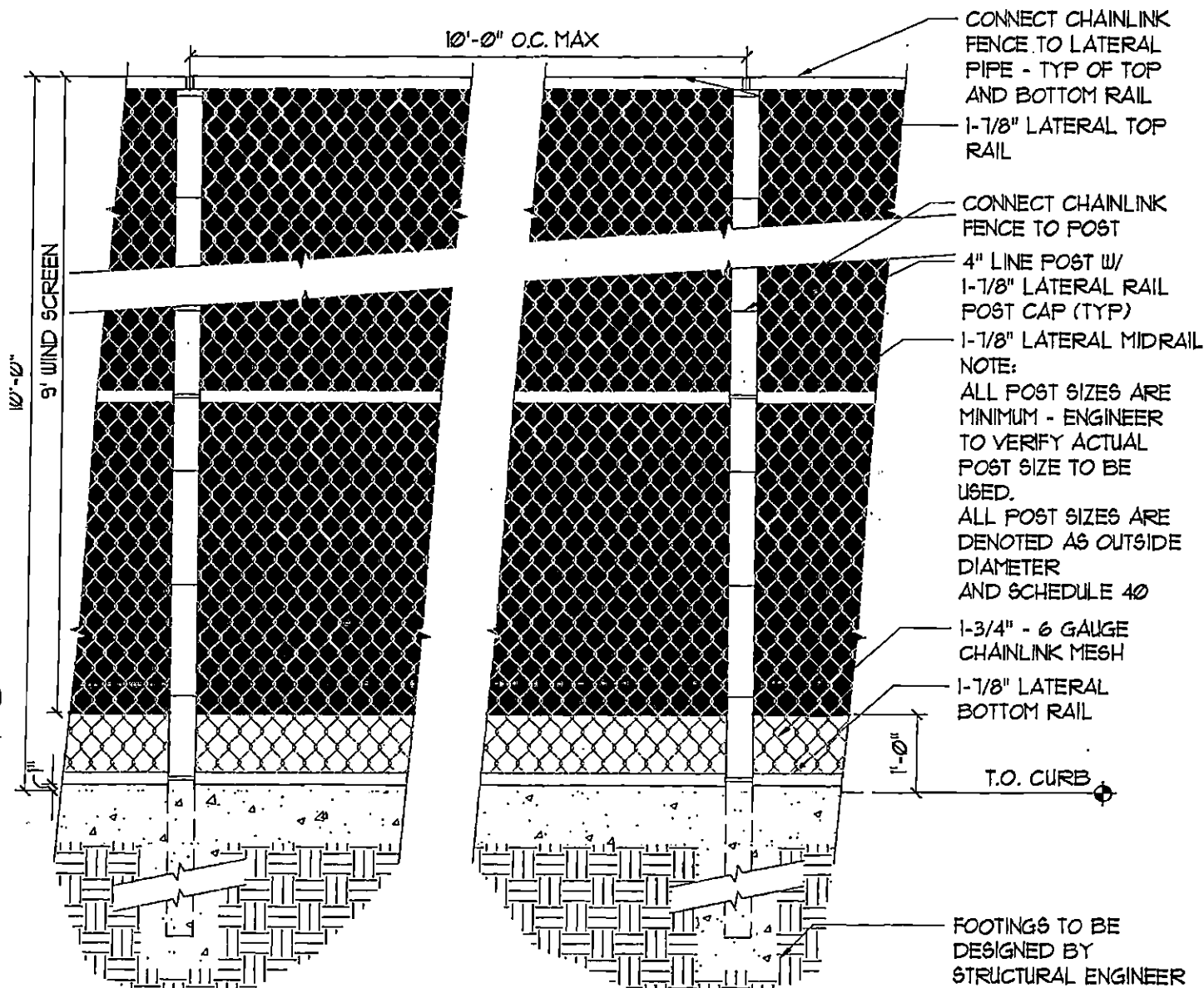


Tennis Rules Sign

Scale: 3" = 1'-0"

REVISED 4/1/04

STO2882-16

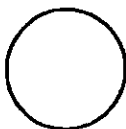
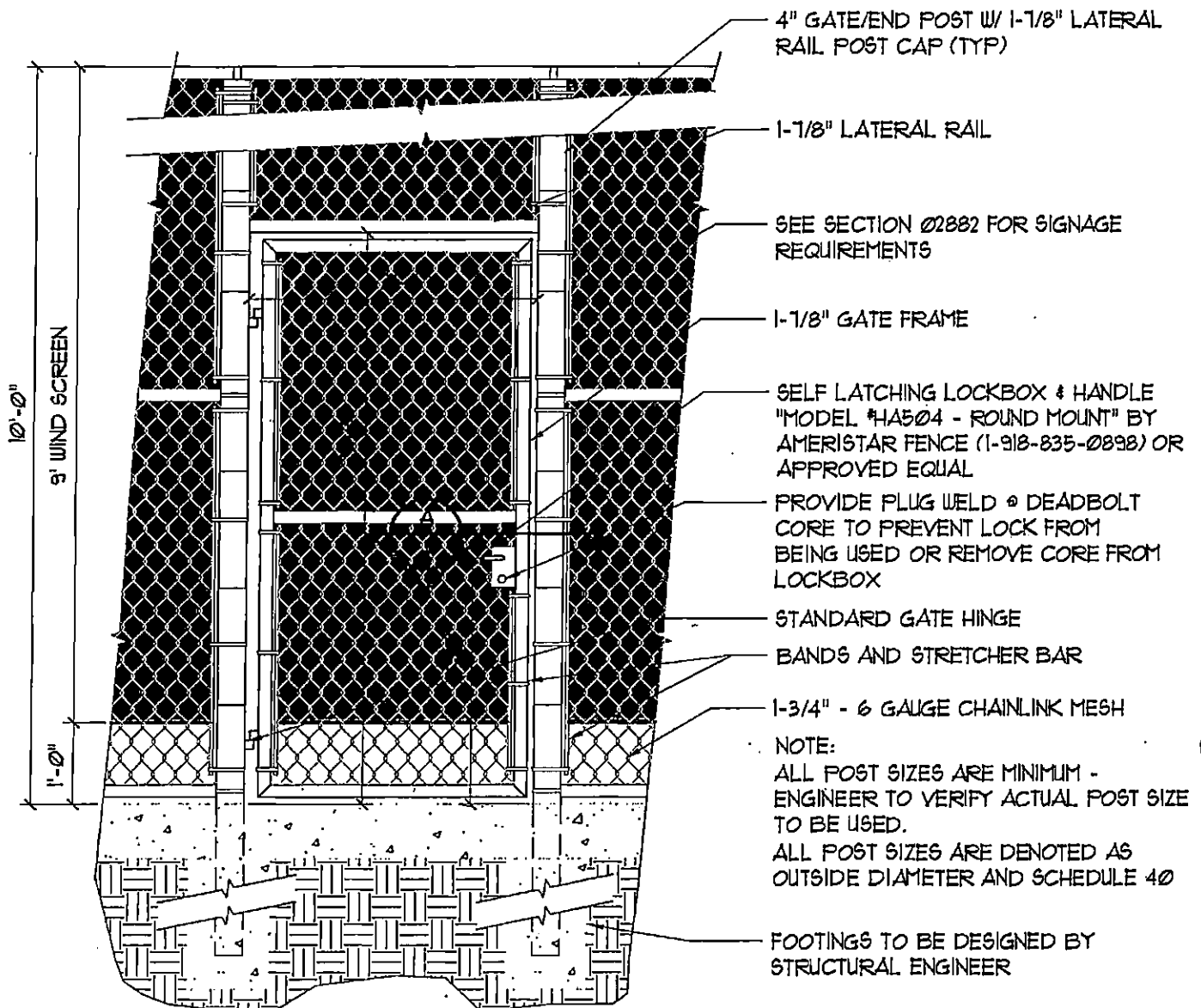


Tennis Court Fence Elevation

Scale: 1/2" = 1'-0"

REVISED 2/12/04

ST02882-41

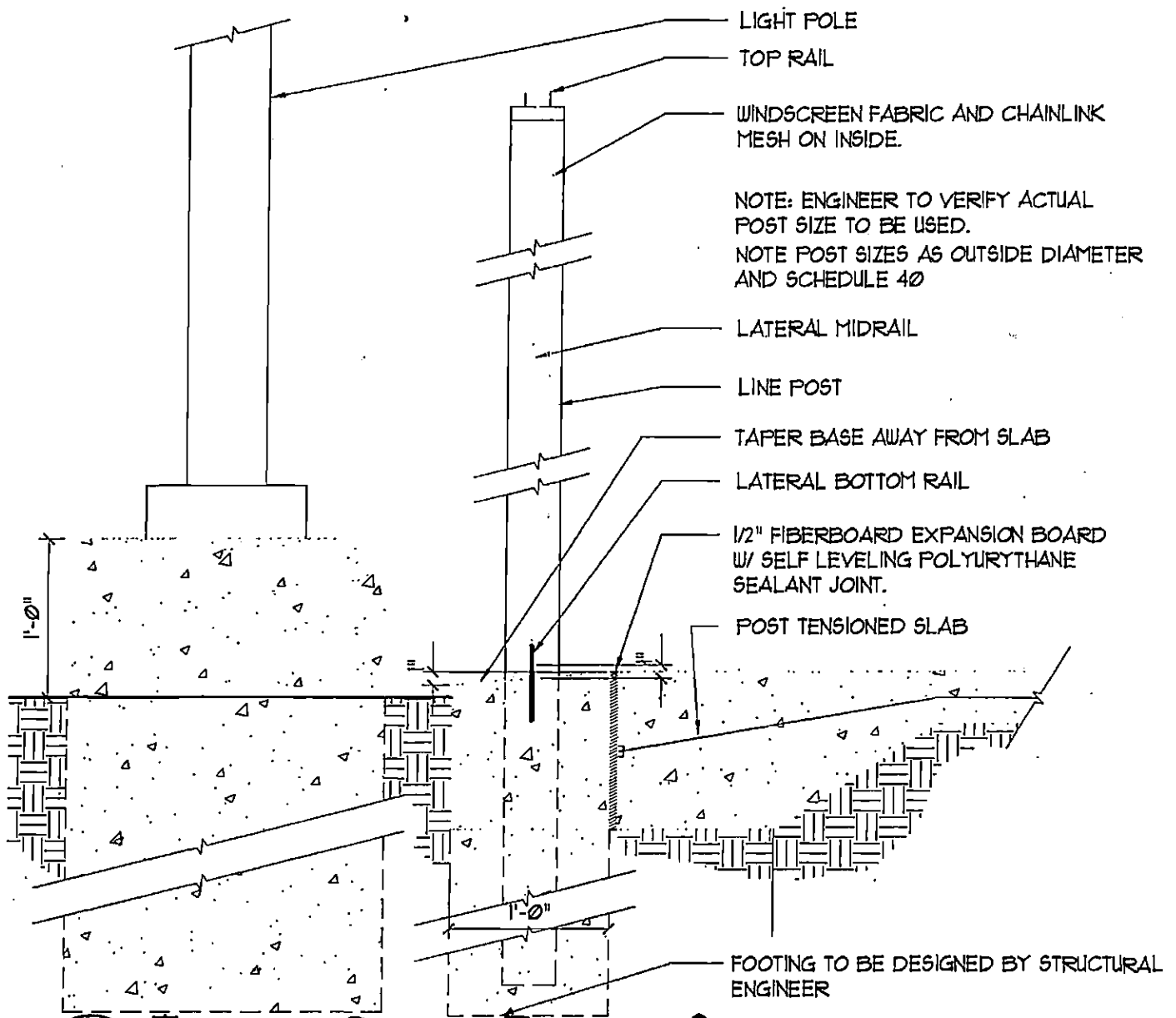


Tennis Court Fence Gate Elevation

Scale: 1/2" = 1'-0"

REVISED 4/12/04

ST02882-42



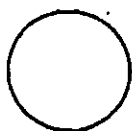
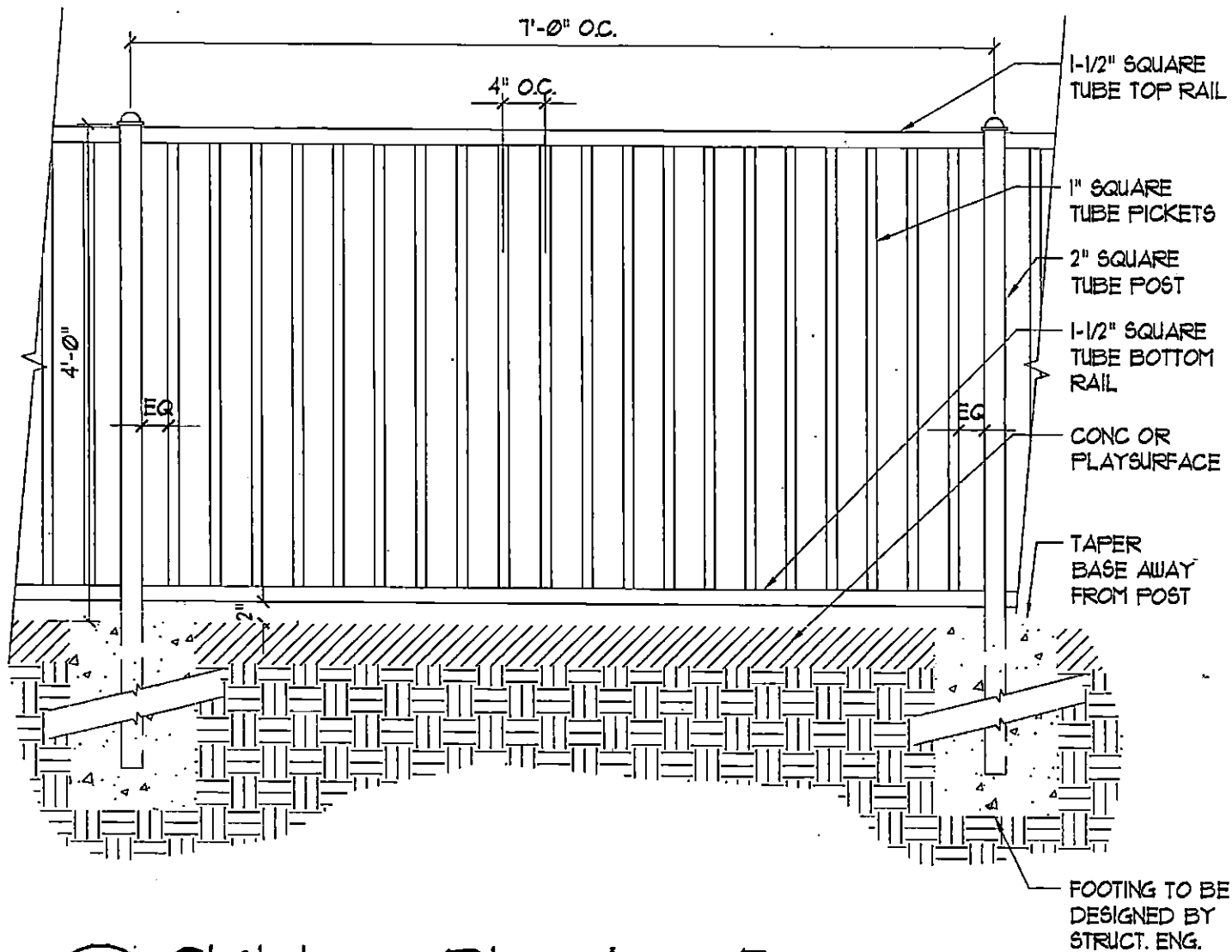
Tennis Court Fence Section

Scale: 1" = 1'-0"

REVISED 02/13/07 ST02882-43

NOTE:

1. PROVIDE WHEN INSTRUCTED, NOT ALWAYS REQUIRED.
2. CONSULTANT CAN SUGGEST ALTERNATE PICKET DESIGN TO MATCH ADJACENT PARK
3. STEEL TUBE SIZES ARE MINIMUMS, ENGINEER TO VERIFY SIZE AND TUBE THICKNESS

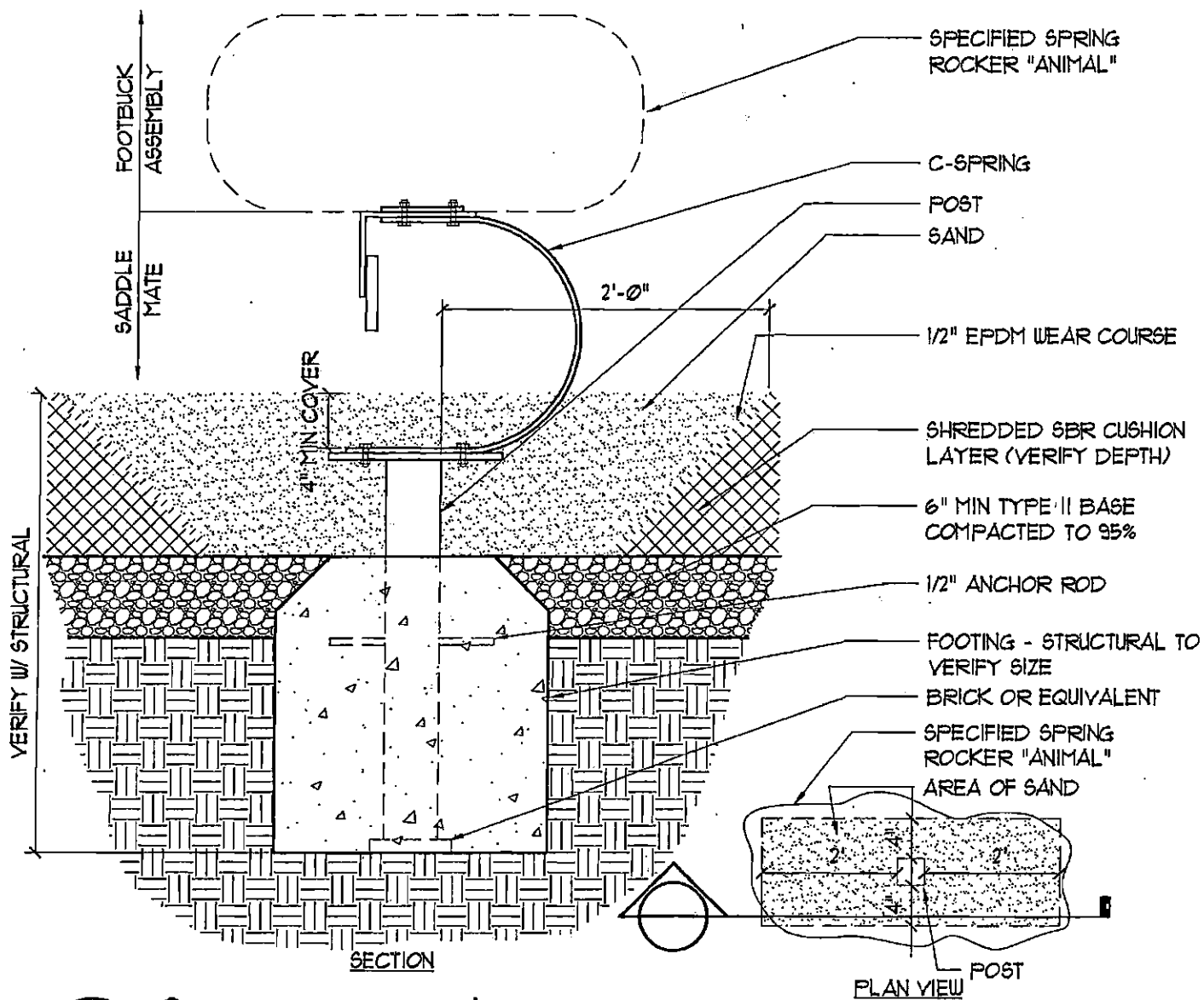


Childrens Play Area Fence

Scale: 3/4" = 1'-0"

REVISED 9/2/03

ST02882-36

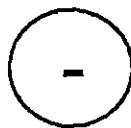
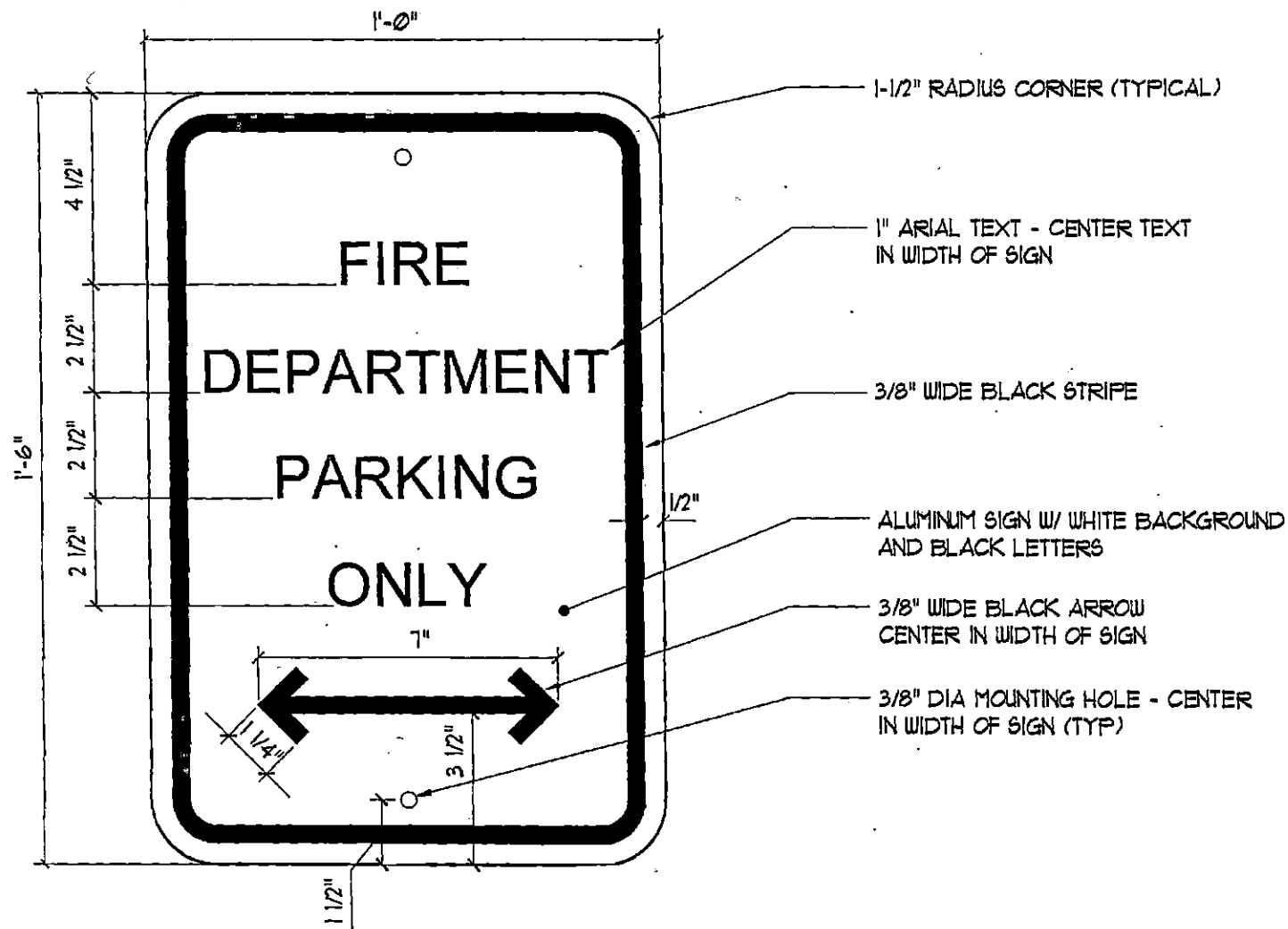


Spring Rocker

Scale: 1" = 1'-0"

REVISED 9/26/03

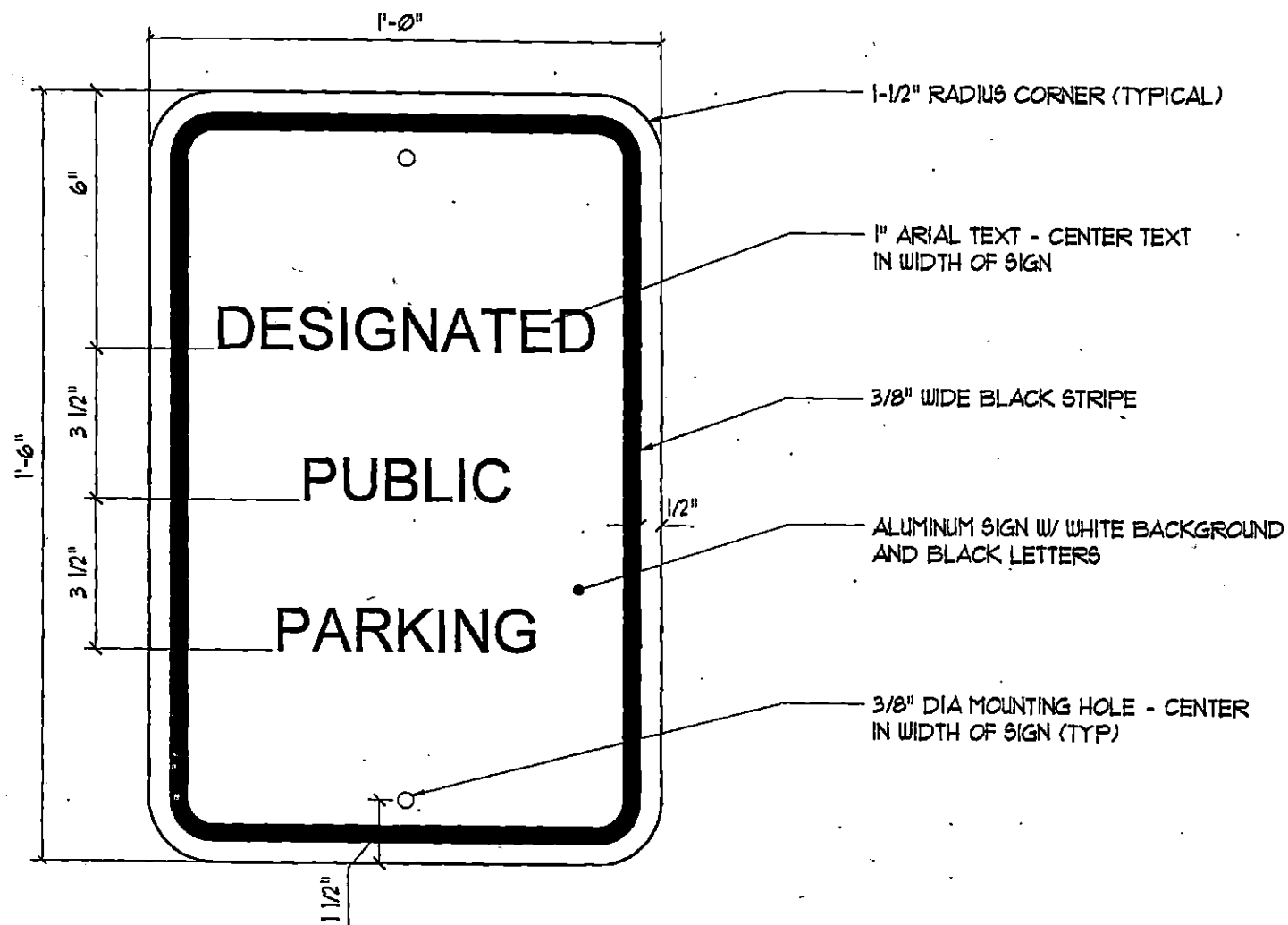
ST02882-31



Fire Department Parking Sign

Scale: 3" = 1'-0"

FDSIGN-1



1 Fire Department Parking Sign

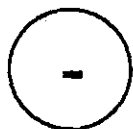
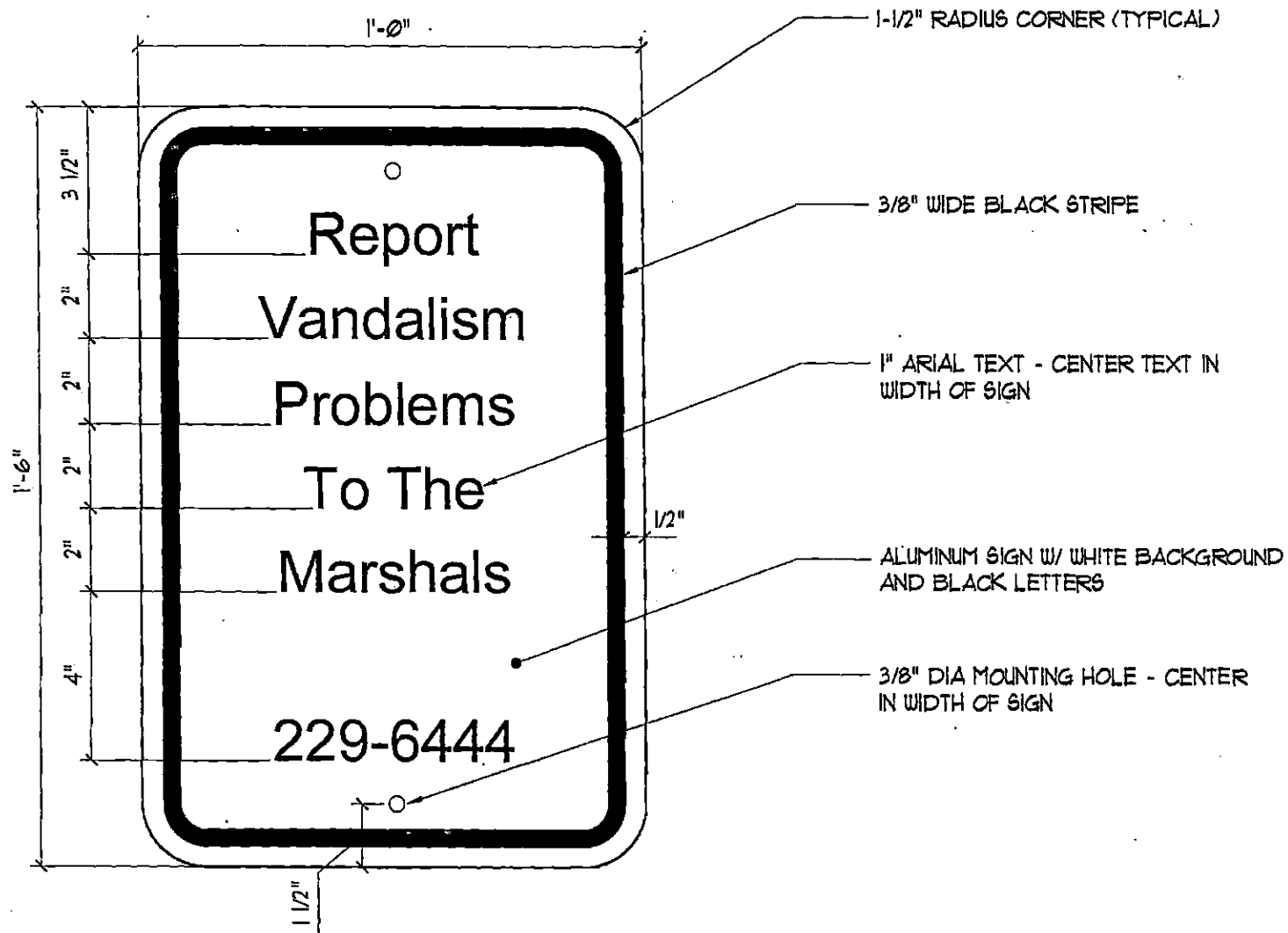
Scale: 3" = 1'-0"

FDSIGN-2



Fire Department Parking Sign

Scale: 3" = 1'-0"

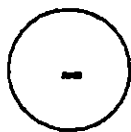
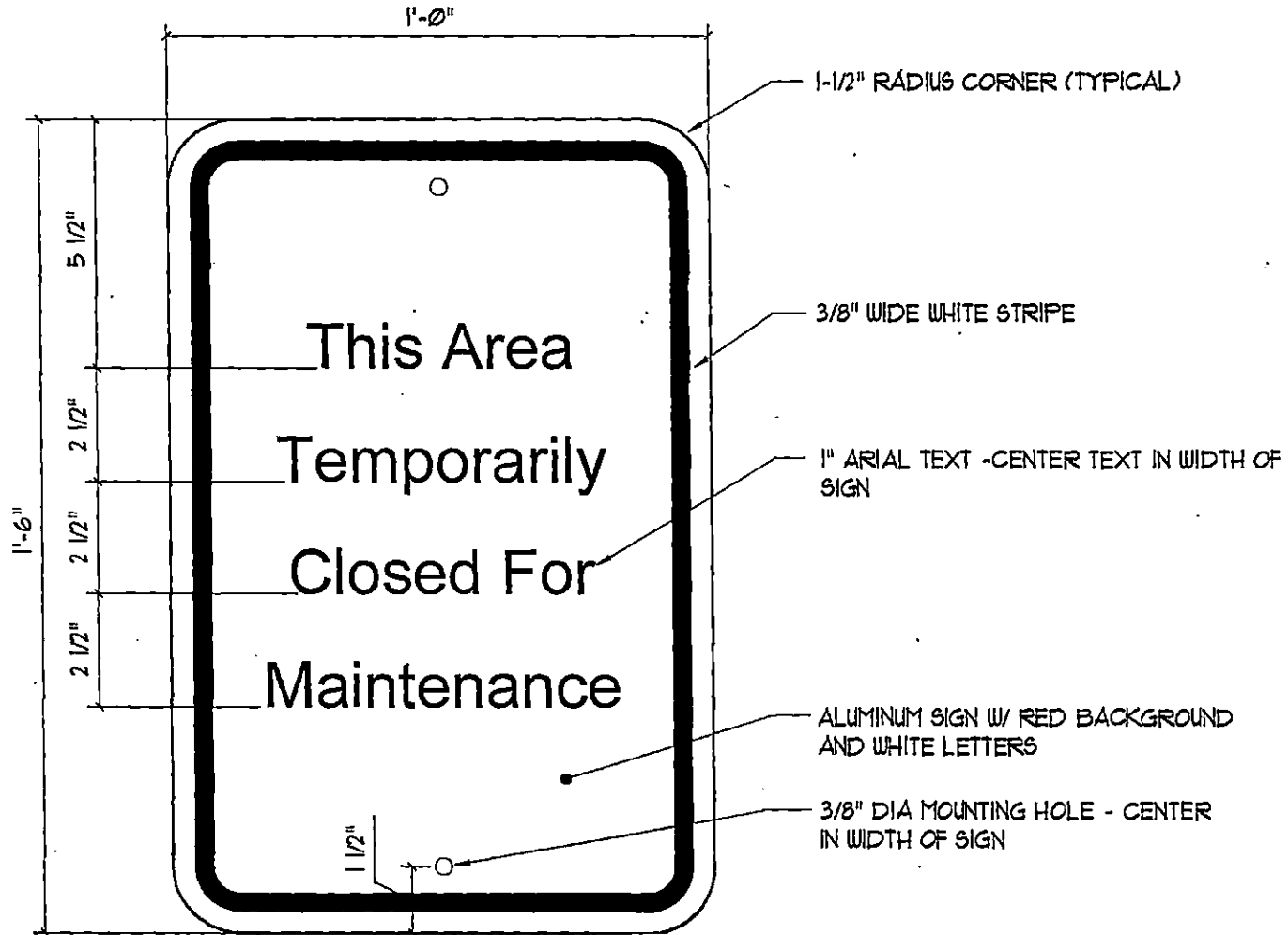


General Sign

Scale: 3" = 1'-0"

REVISED 7/21/04

STO2882-31

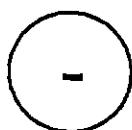
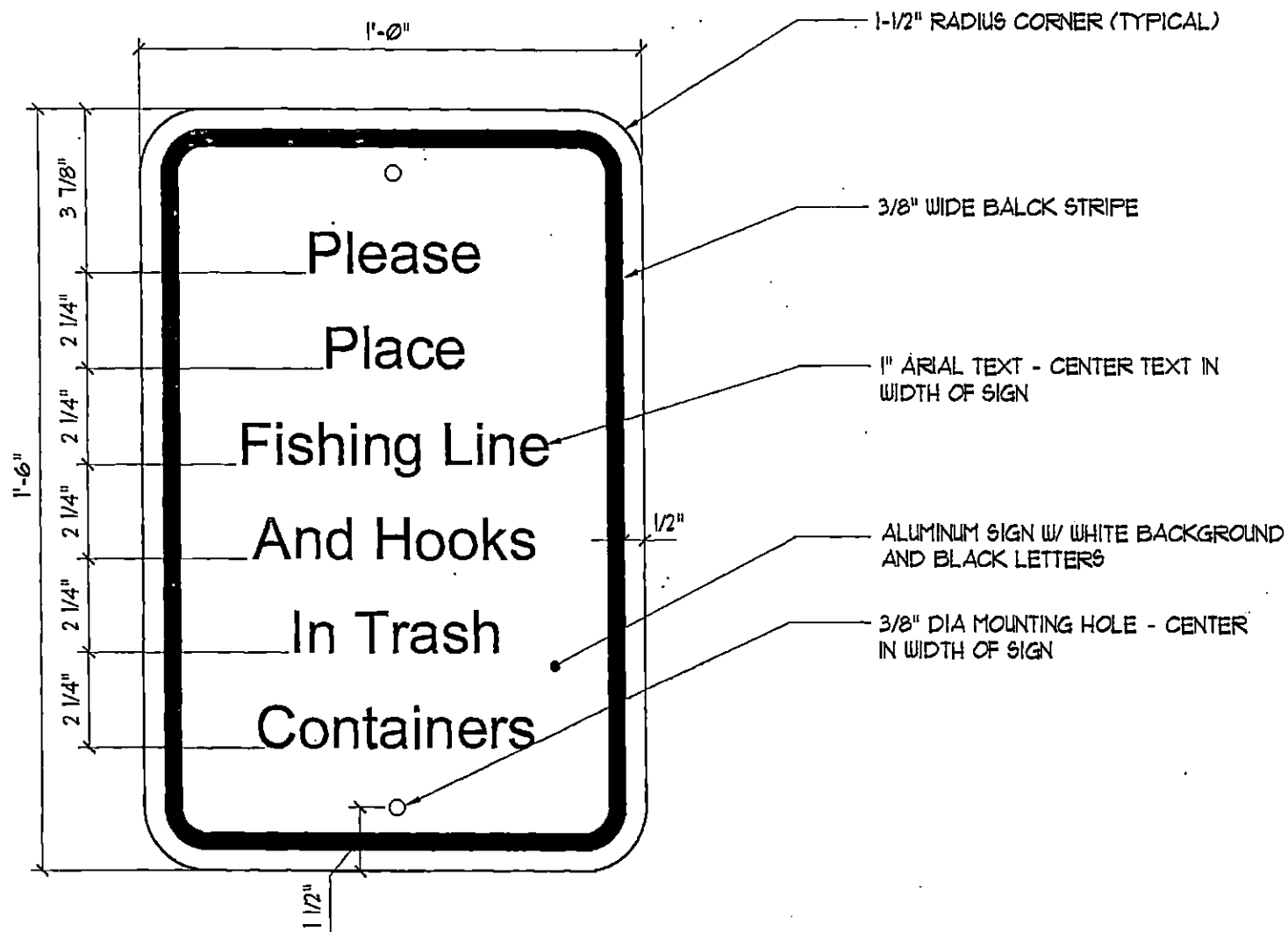


Area Closed Sign

Scale: 3" = 1'-0"

REVISED 7/21/04

ST02882-40

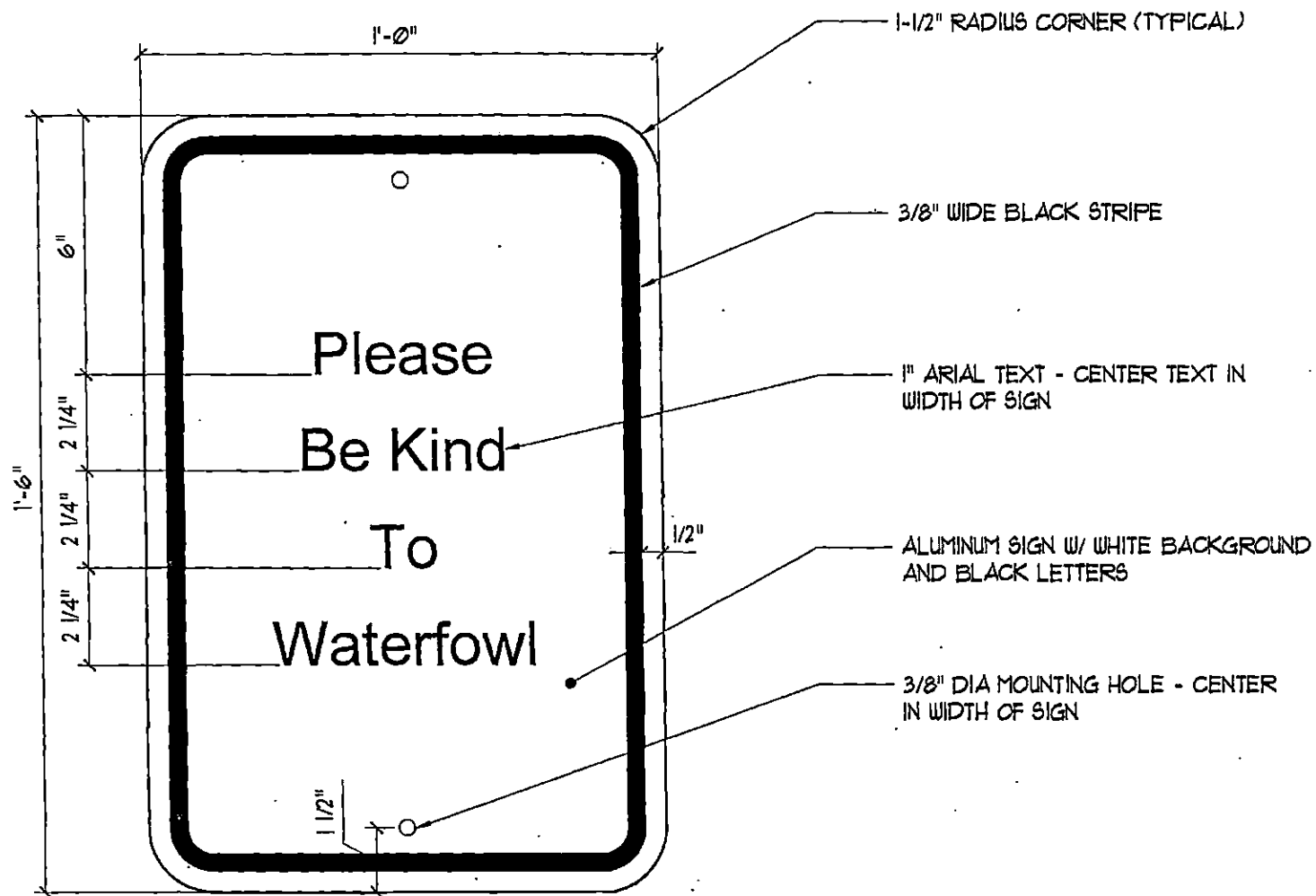


General Sign

Scale: 3" = 1'-0"

REVISED 7/21/04

STO2882-32

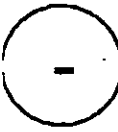
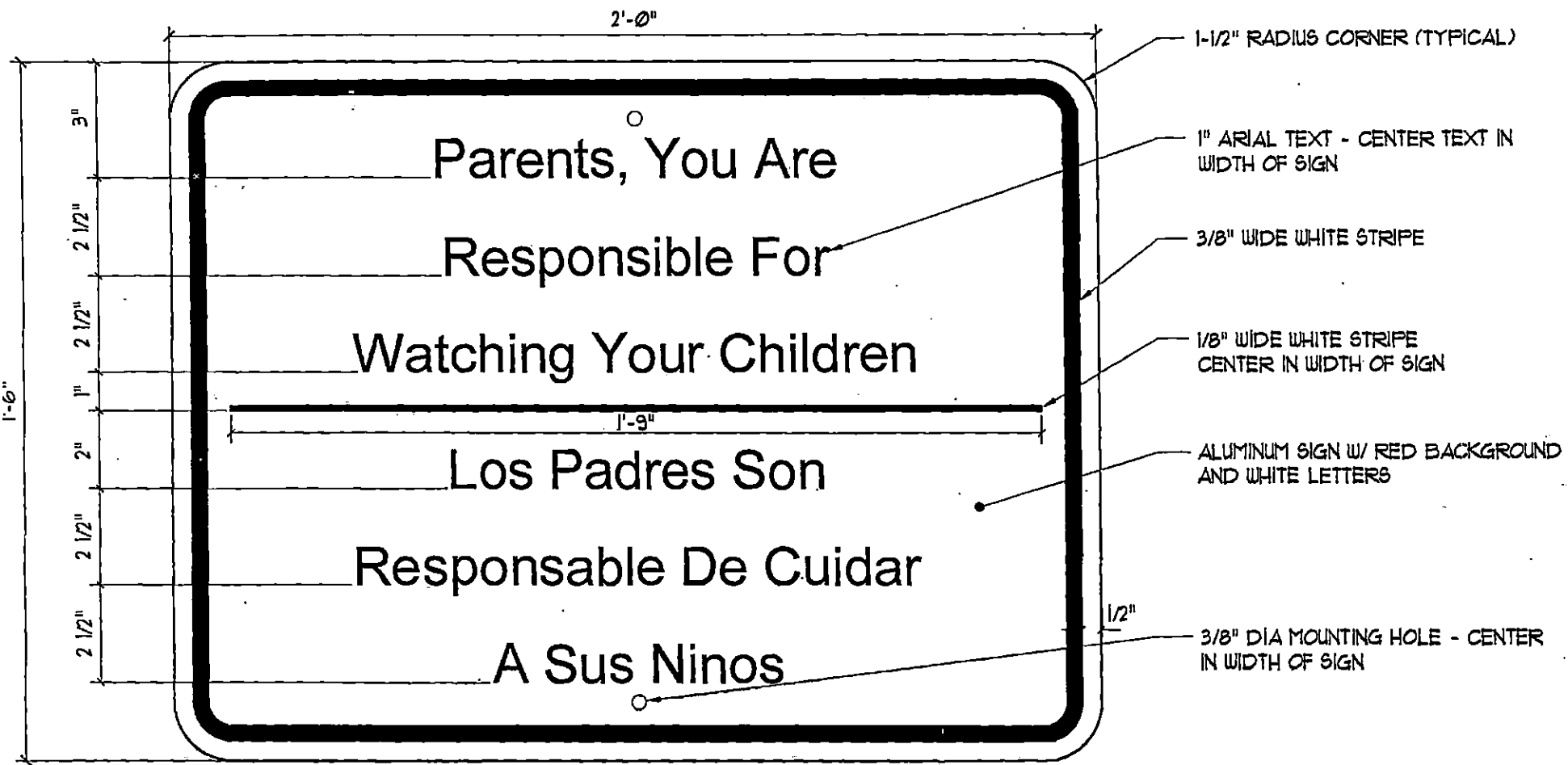


General Sign

Scale: 3" = 1'-0"

REVISED 7/21/04

ST02882-33

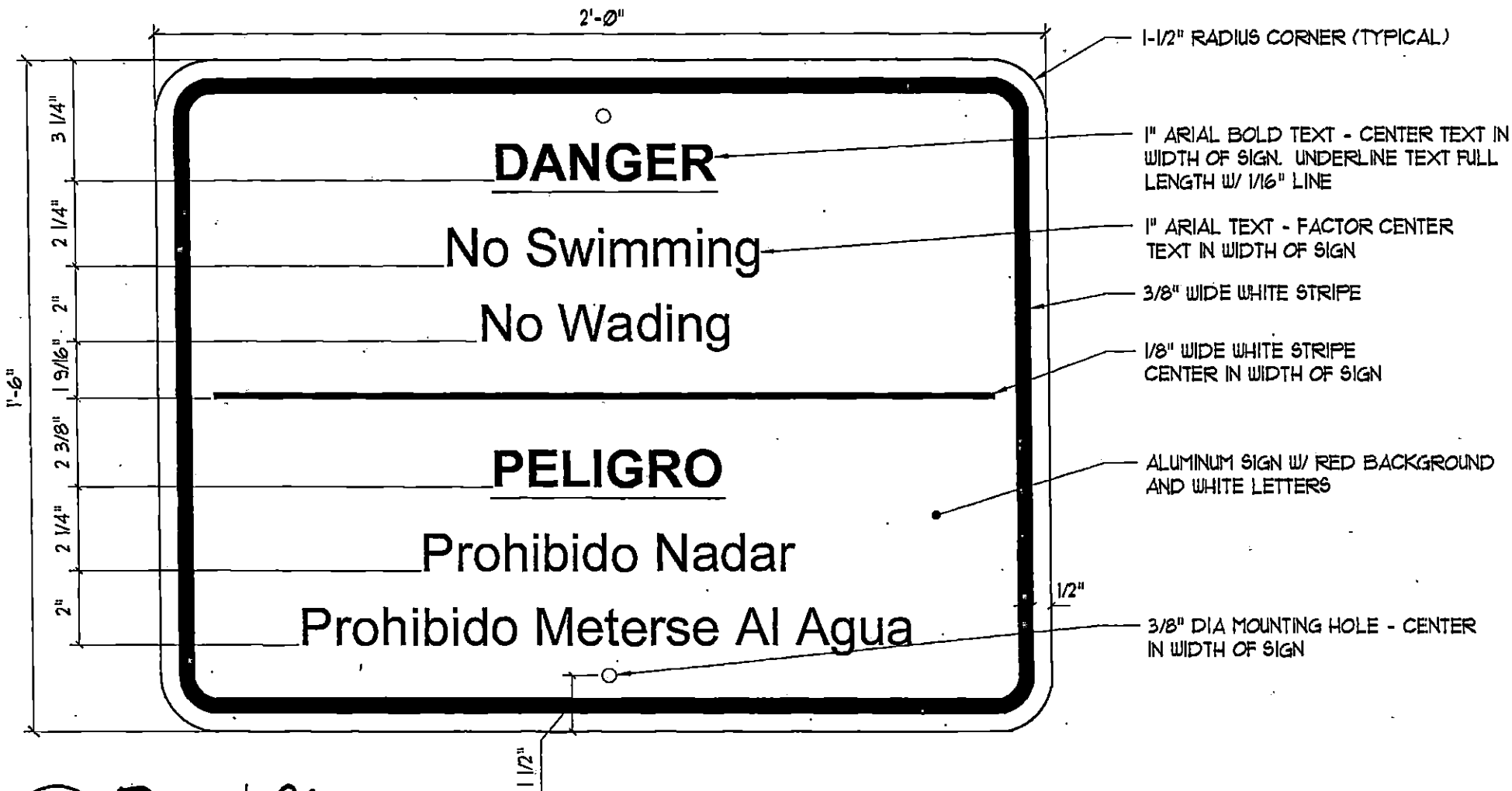


Pond Sign

Scale: 3" = 1'-0"

REVISED 7/21/04

STO2882-34

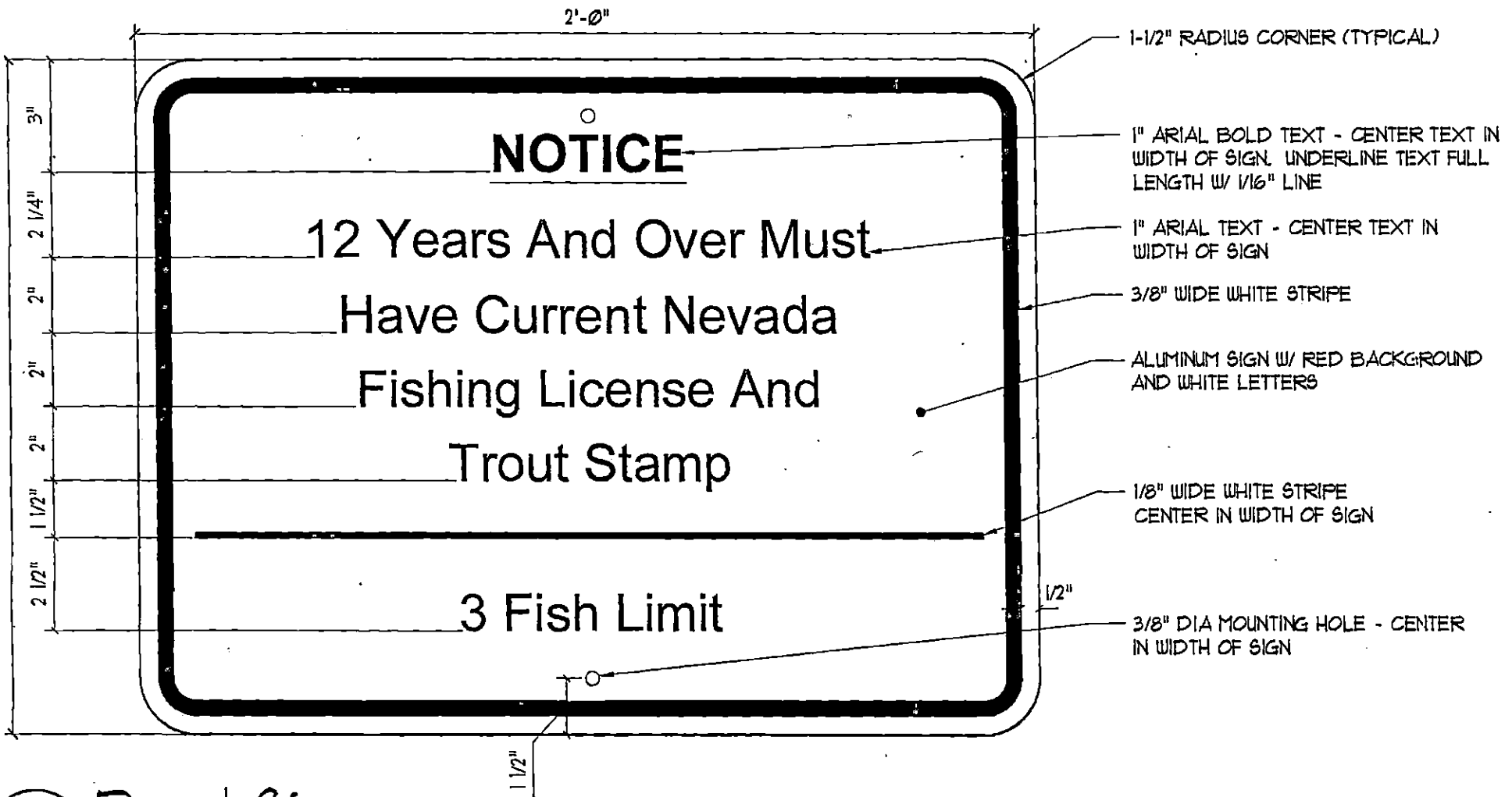


Pond Sign

Scale: 3" = 1'-0"

REVISED 7/21/04

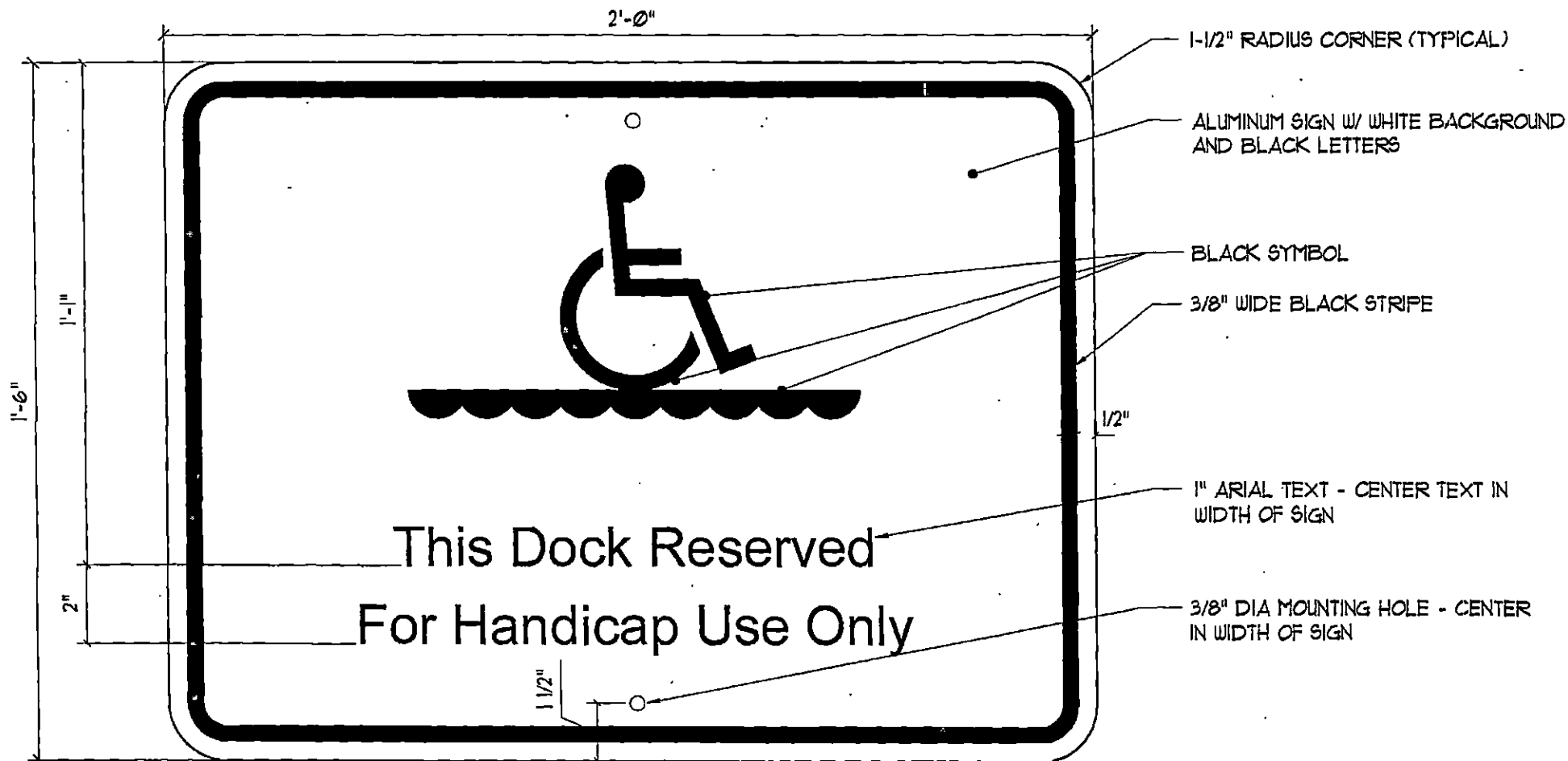
STO2882-36



Pond Sign
 Scale: 3" = 1'-0"

REVISED 7/21/04

STO2882-37

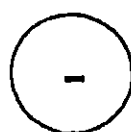
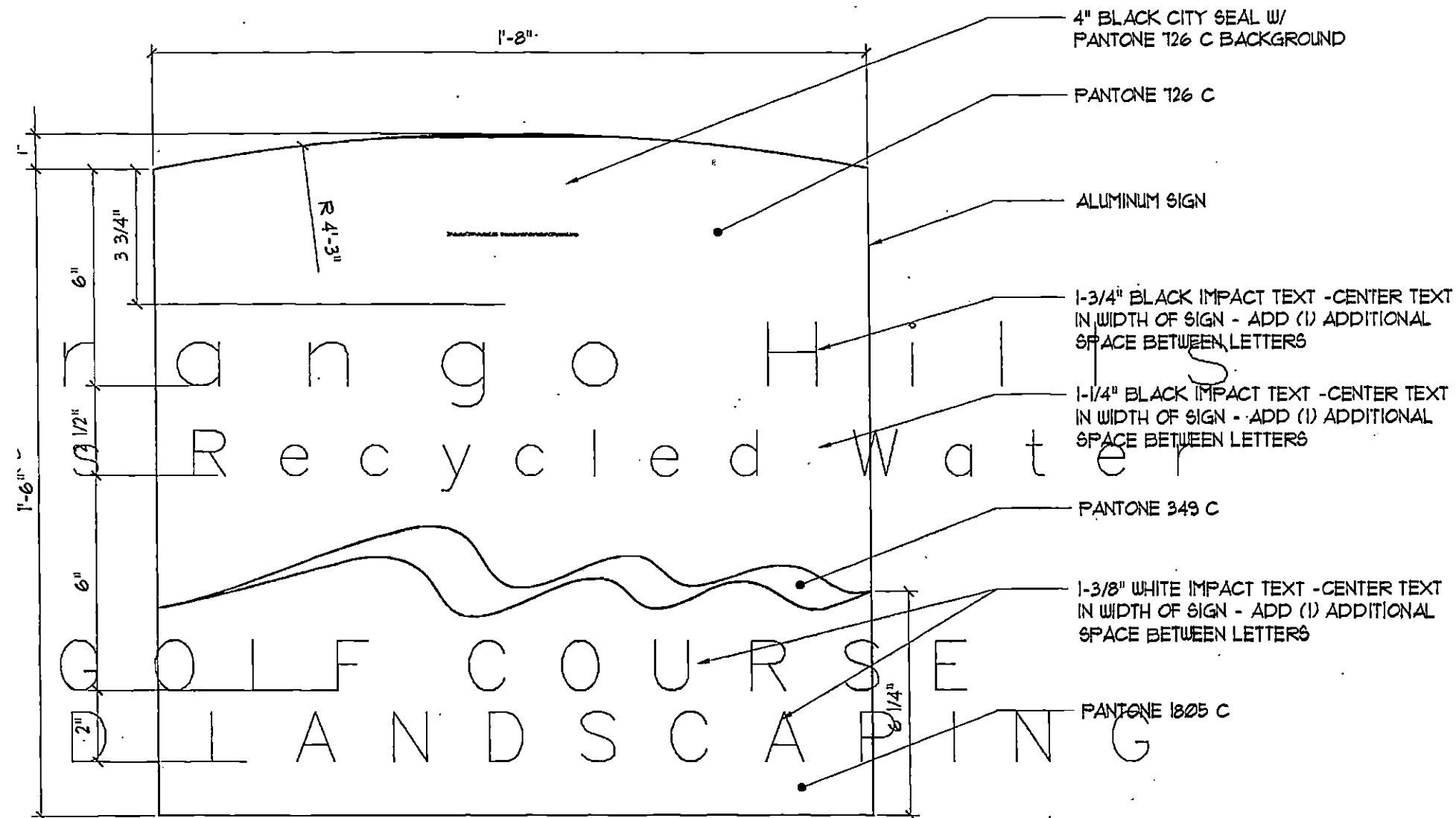


Pond Sign

Scale: 3" = 1'-0"

REVISED 7/21/04

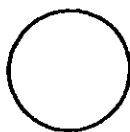
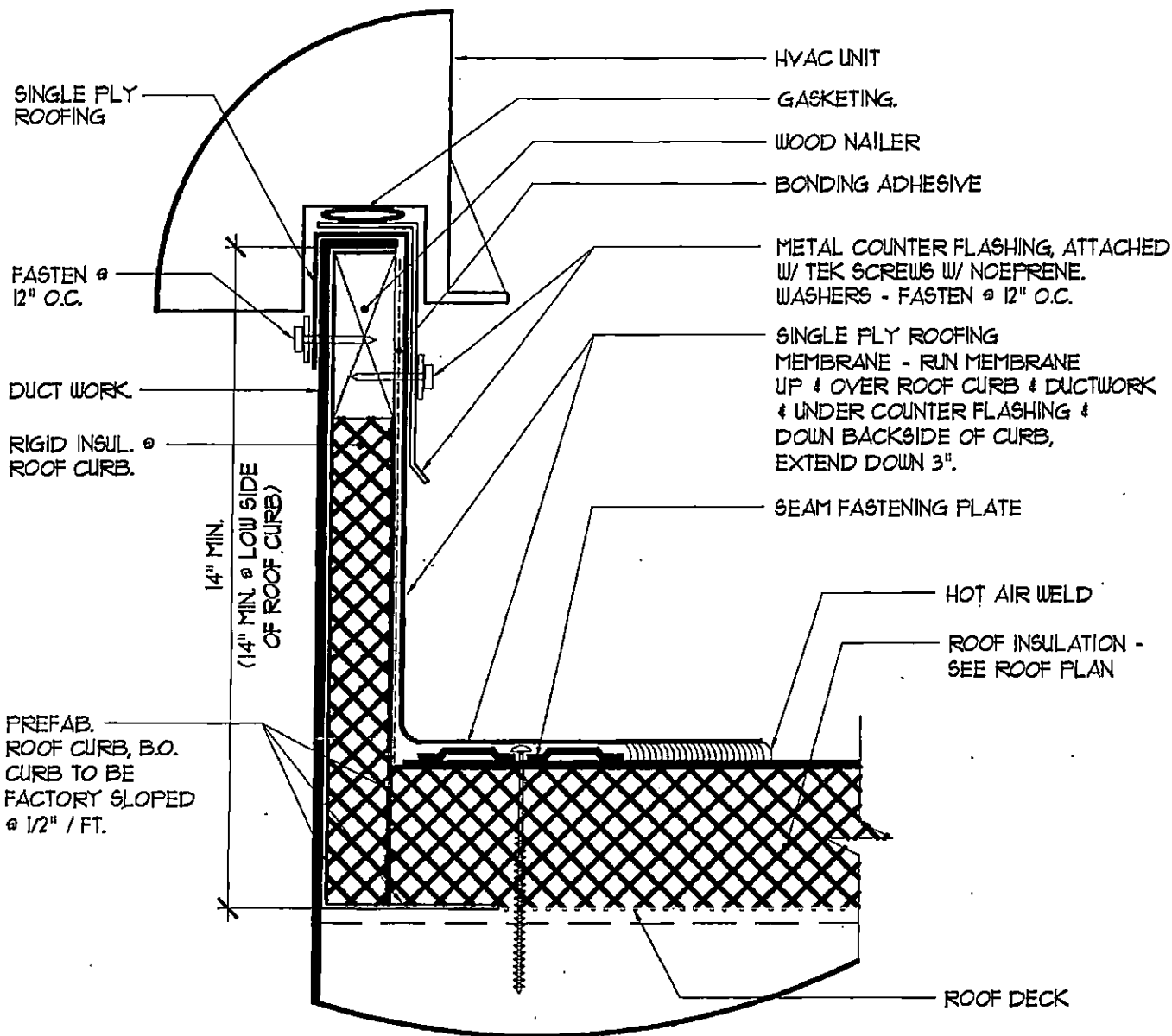
STO2882-41



Recycled Water Sign

Scale: 3" = 1'-0"

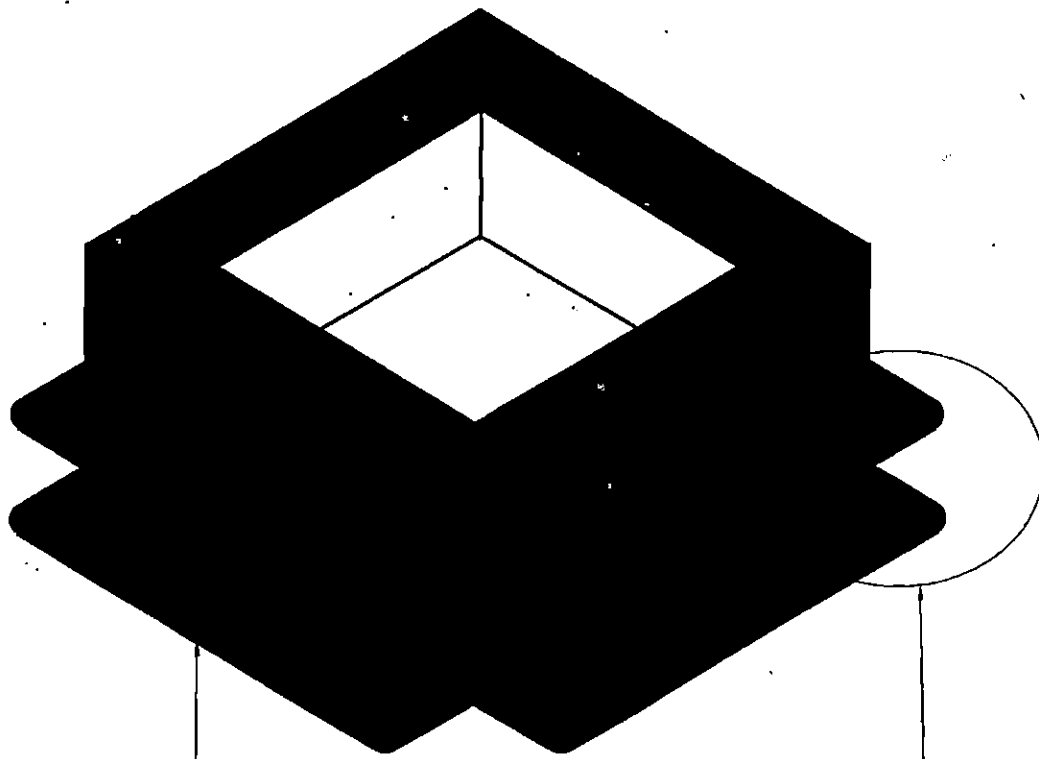
STO2882-41



Roof Curb Detail

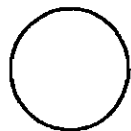
Scale: 6"=1'-0"

ST01300-01



INSTALL PREFABRICATED OUTSIDE
CORNERS

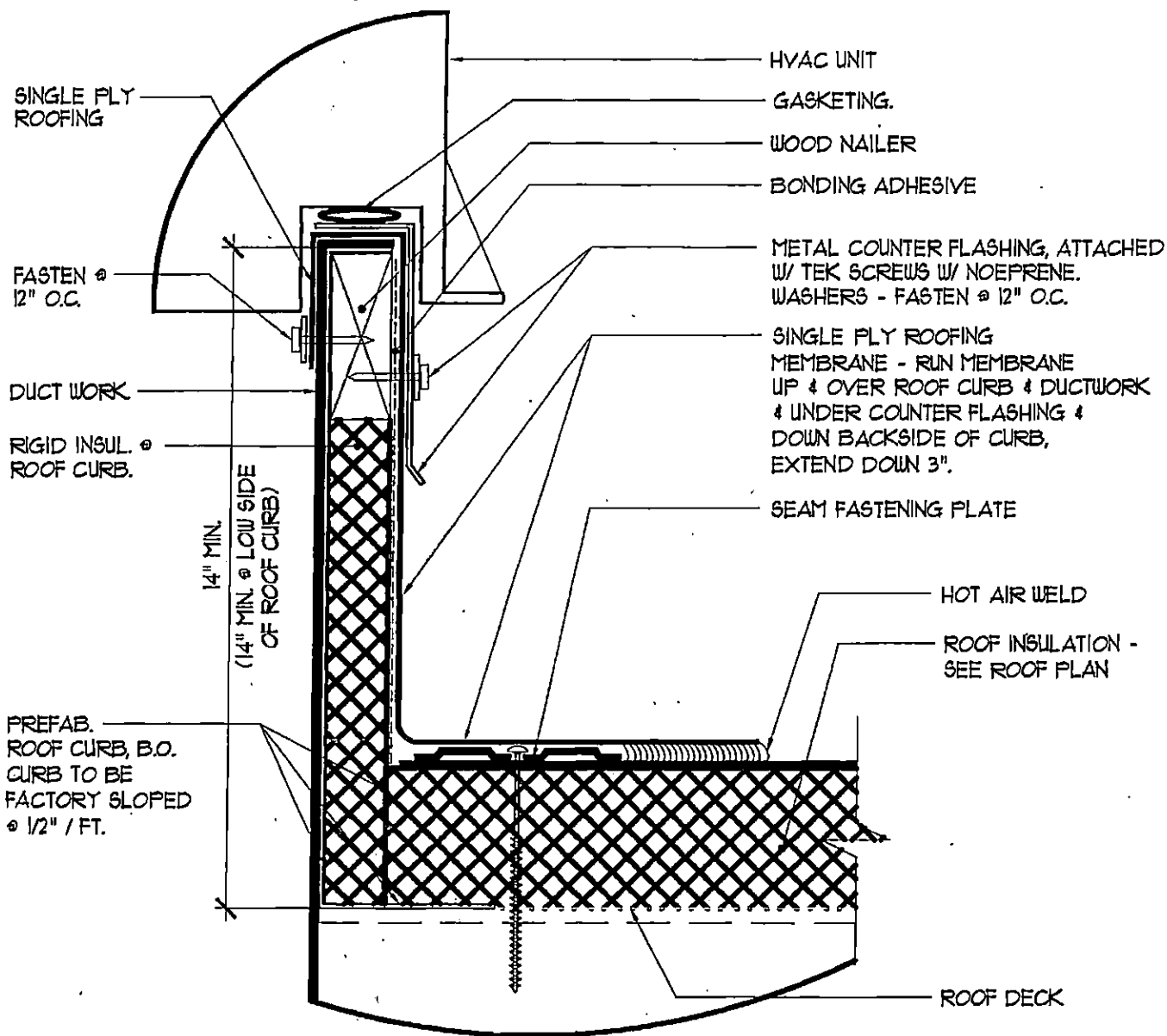
USE ONE CONTINUOUS SHEET OF SINGLE-PLY
REINFORCED MEMBRANE TO WRAP AROUND
CURB OR FORM FROM COATED METAL



Roof Curb Axonometric

Scale: 6"=1'-0"

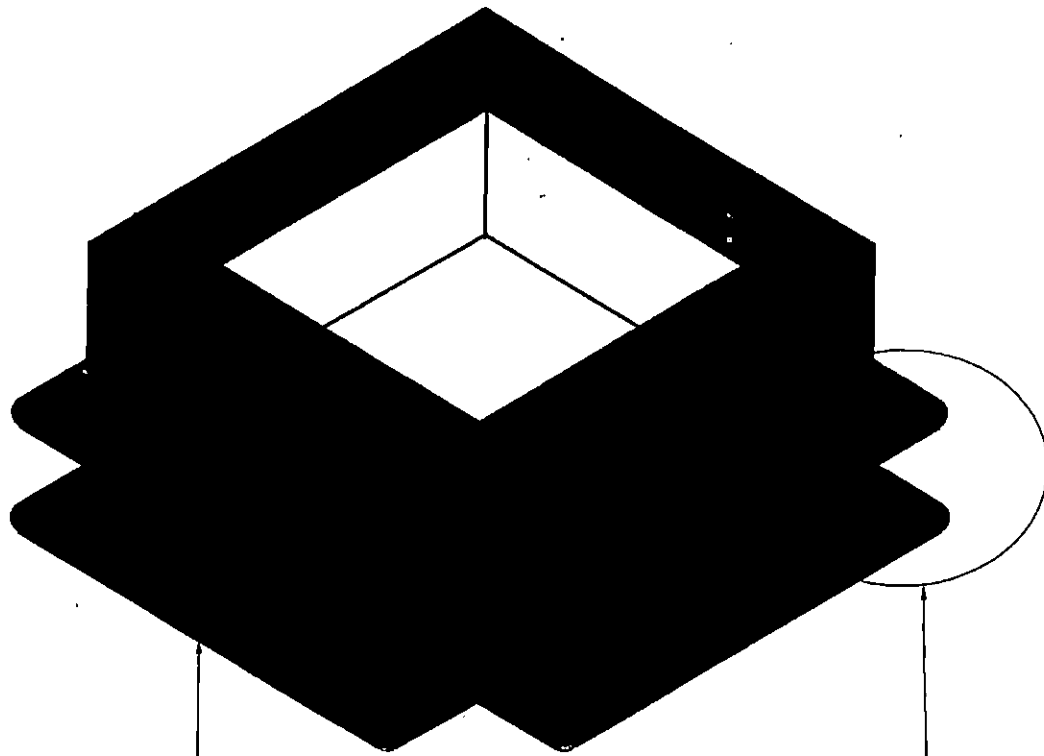
ST07300-02



Roof Curb Detail

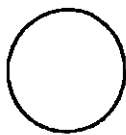
Scale: 6"=1'-0"

ST01300-01



INSTALL PREFABRICATED OUTSIDE
CORNERS

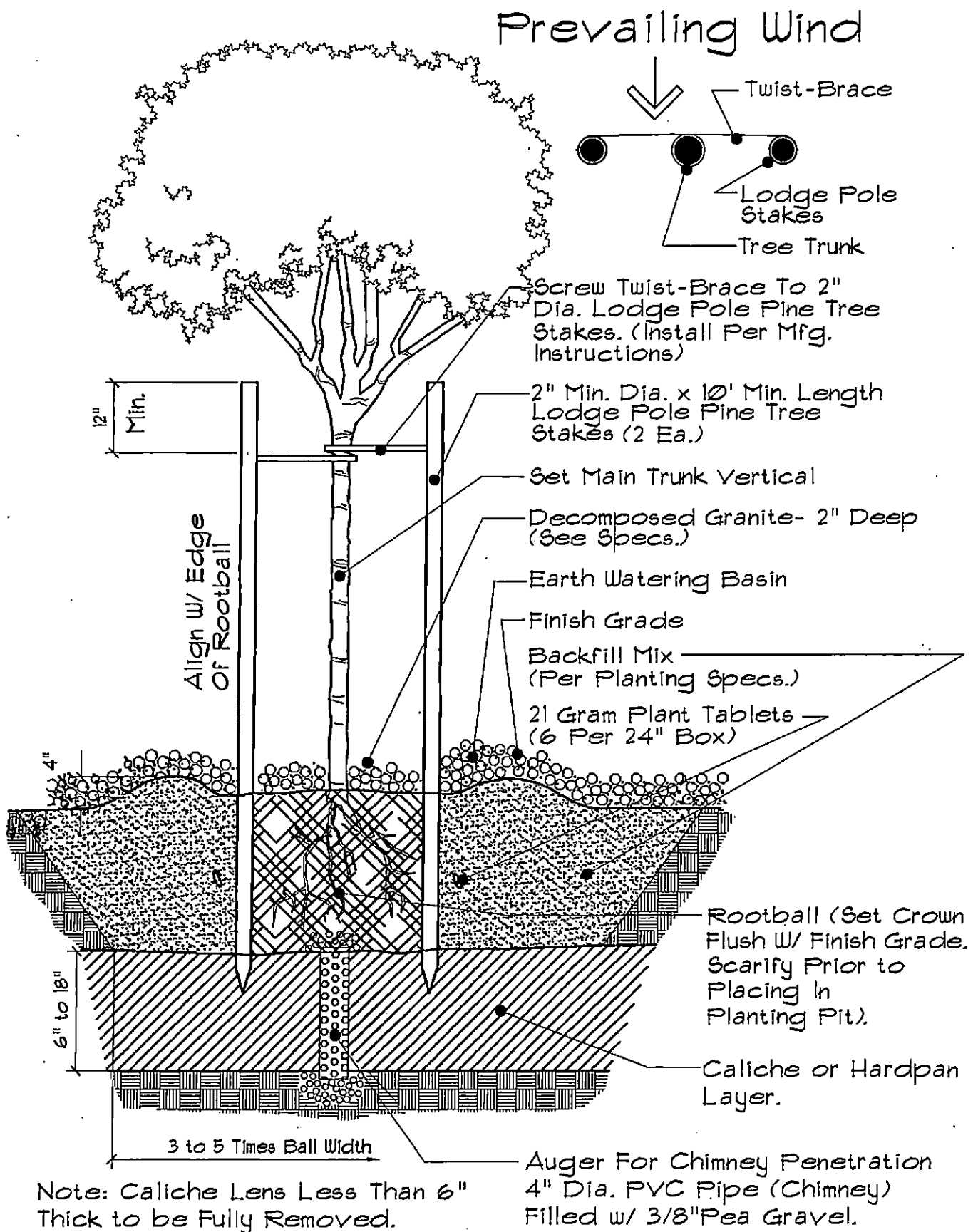
USE ONE CONTINUOUS SHEET OF SINGLE-PLY
REINFORCED MEMBRANE TO WRAP AROUND
CURB OR FORM FROM COATED METAL



Roof Curb Axonometric

Scale: 6"=1'-0"

ST07300-02



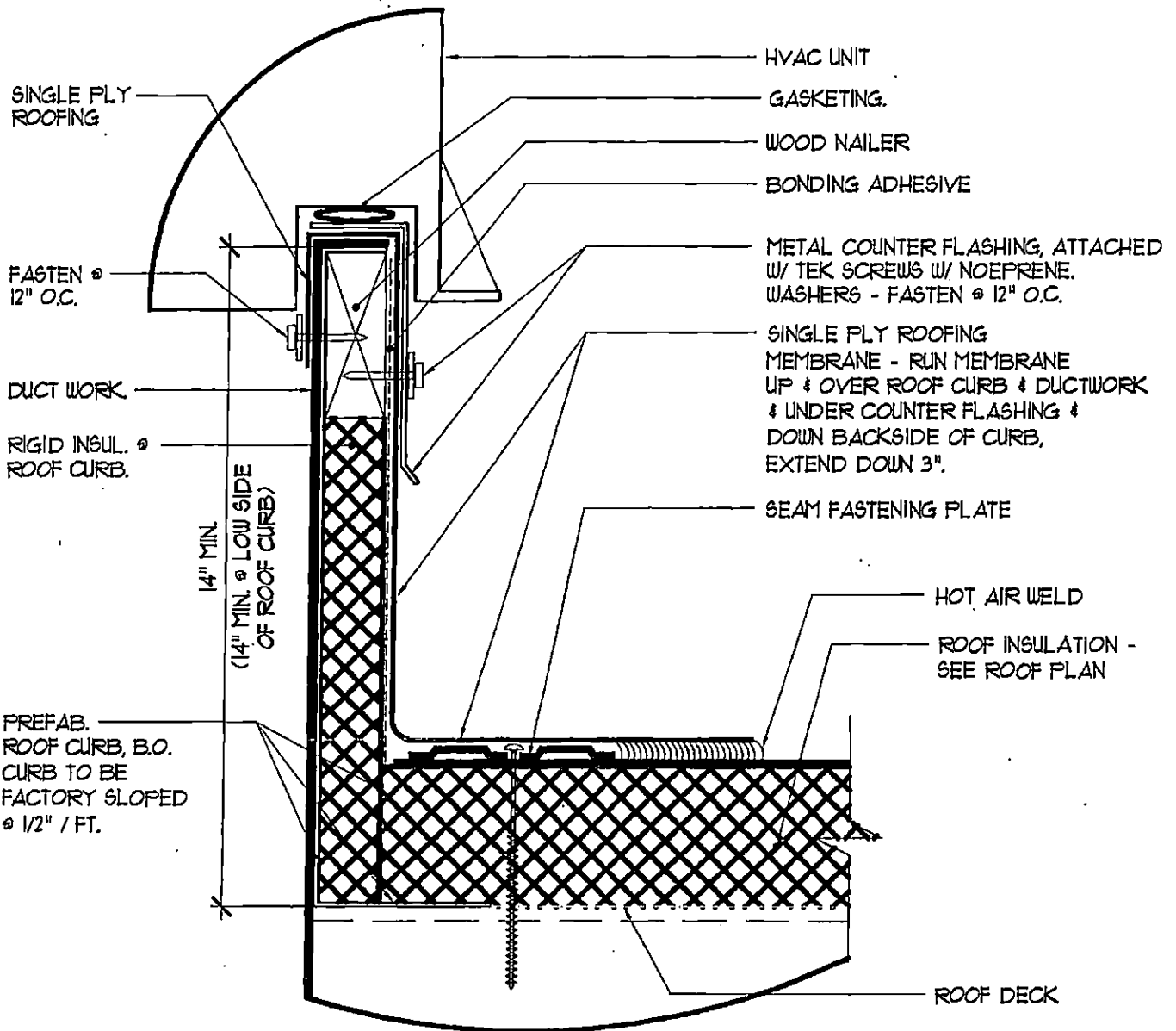
#

Tree Planting (In Caliche)

Scale: N.T.S.

02900-11

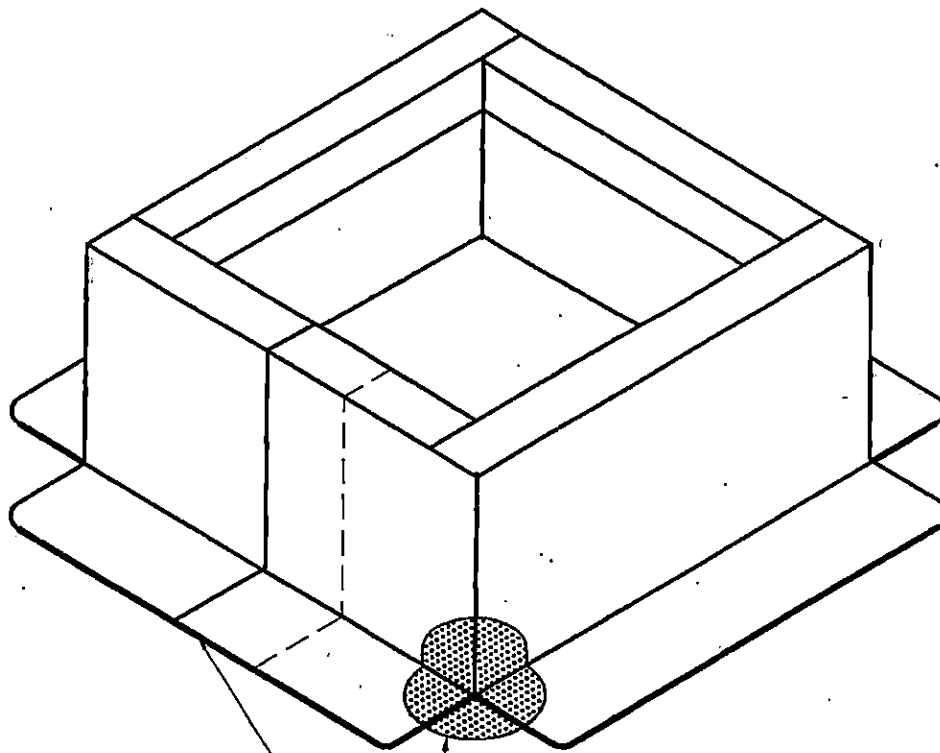
##_##



Roof Curb Detail

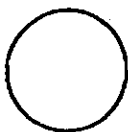
Scale: 6"=1'-0"

ST07300-015P



INSTALL PREFABRICATED INSIDE/OUTSIDE
CORNERS

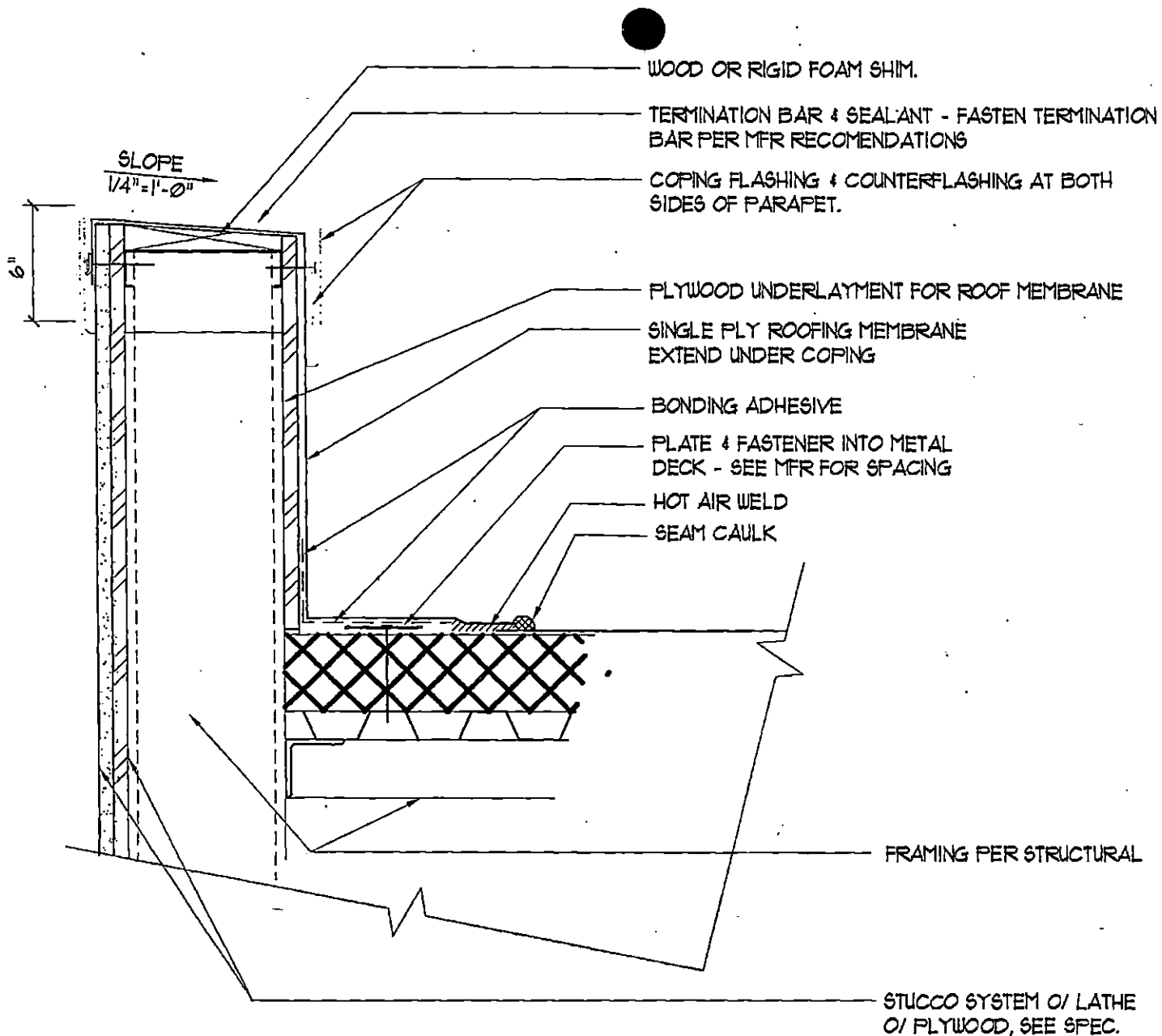
USE ONE CONTINUOUS SHEET OF SINGLE-PLY
REINFORCED MEMBRANE TO WRAP AROUND
CURB OR FORM FROM COATED METAL



Roof Curb Axonometric

Scale: 6"=1'-0"

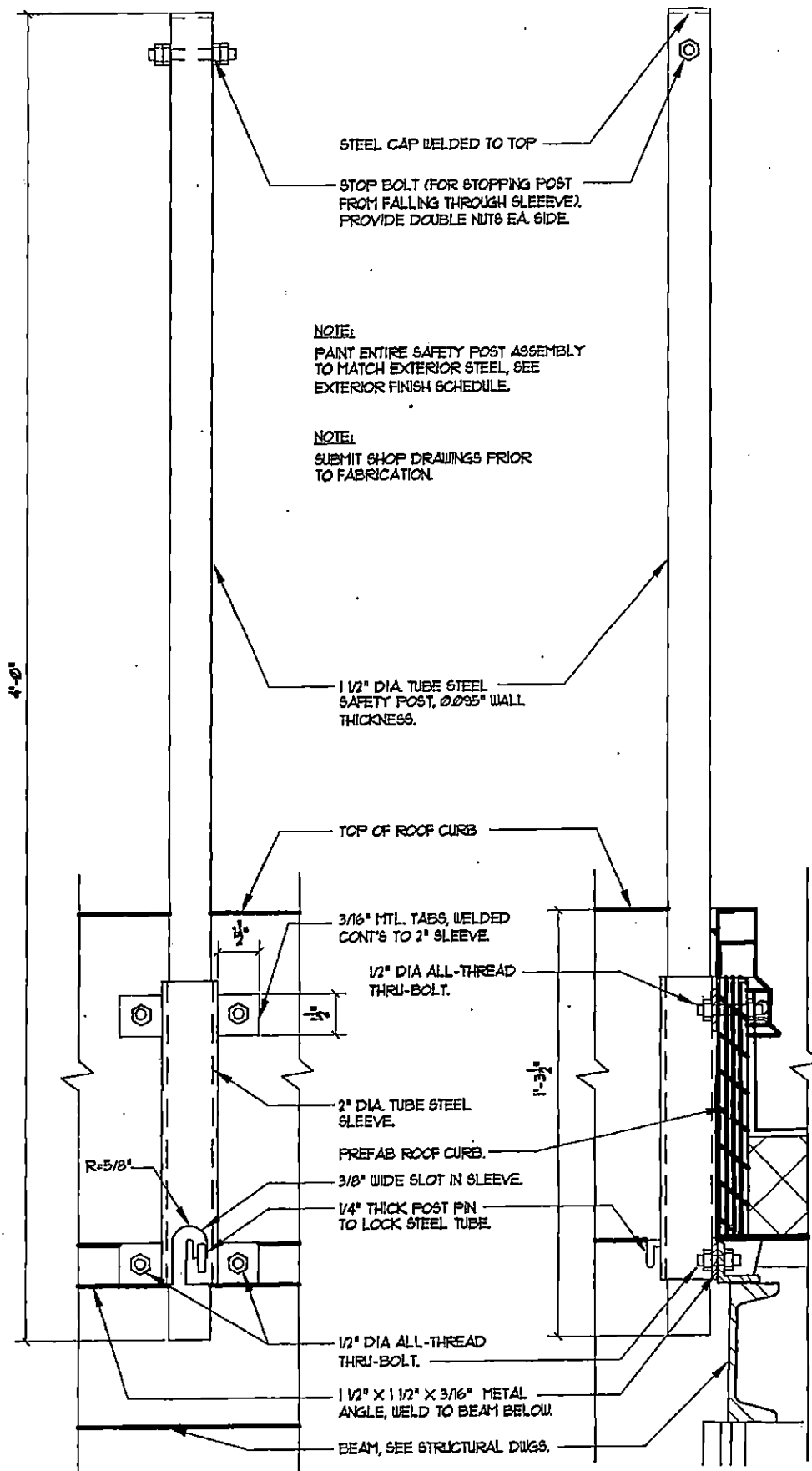
ST07300-02



Detail @ Parapet

Scale: $1/2'' = 1' - 0''$

ST07300-03SP



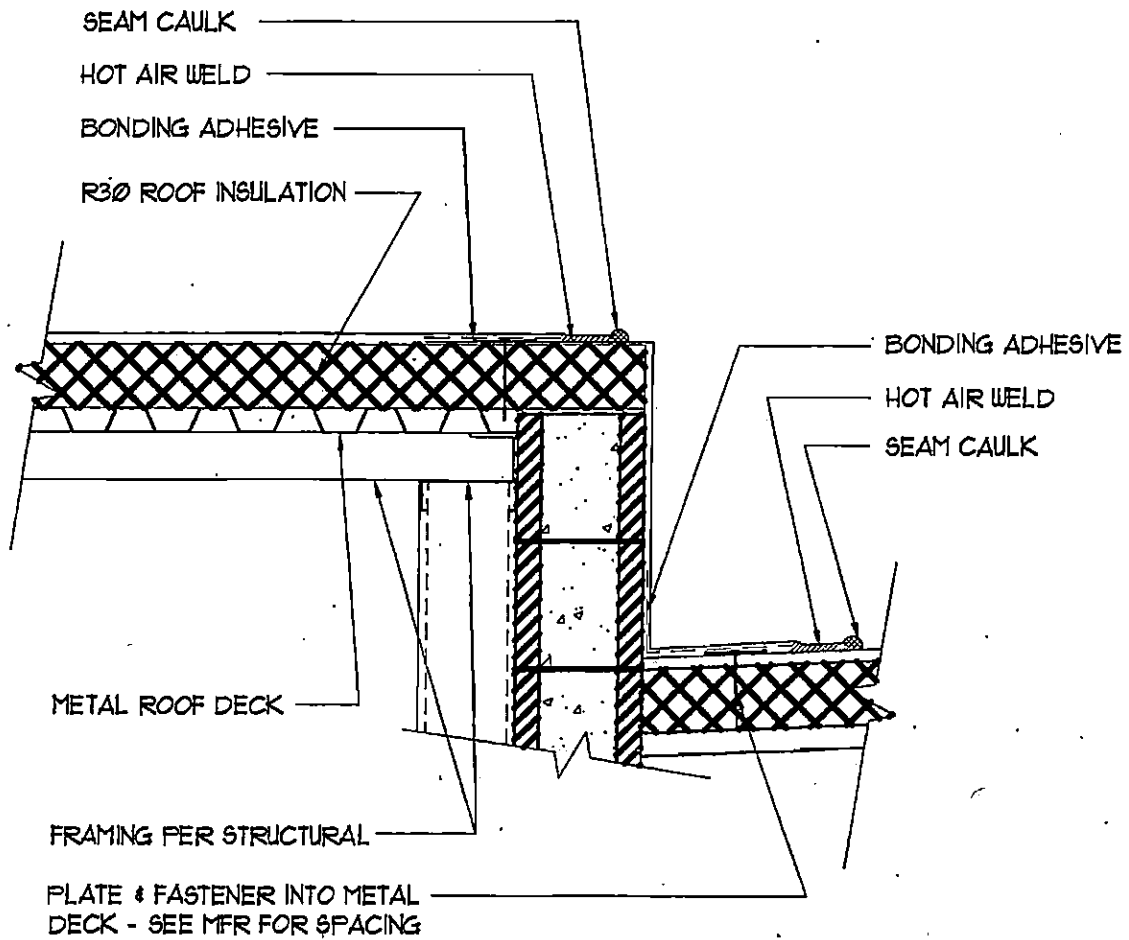
SAFETY POST ELEVATION

SAFETY POST SECTION

Telescoping Safety Post Detail

Scale: 3/4"=1'-0"

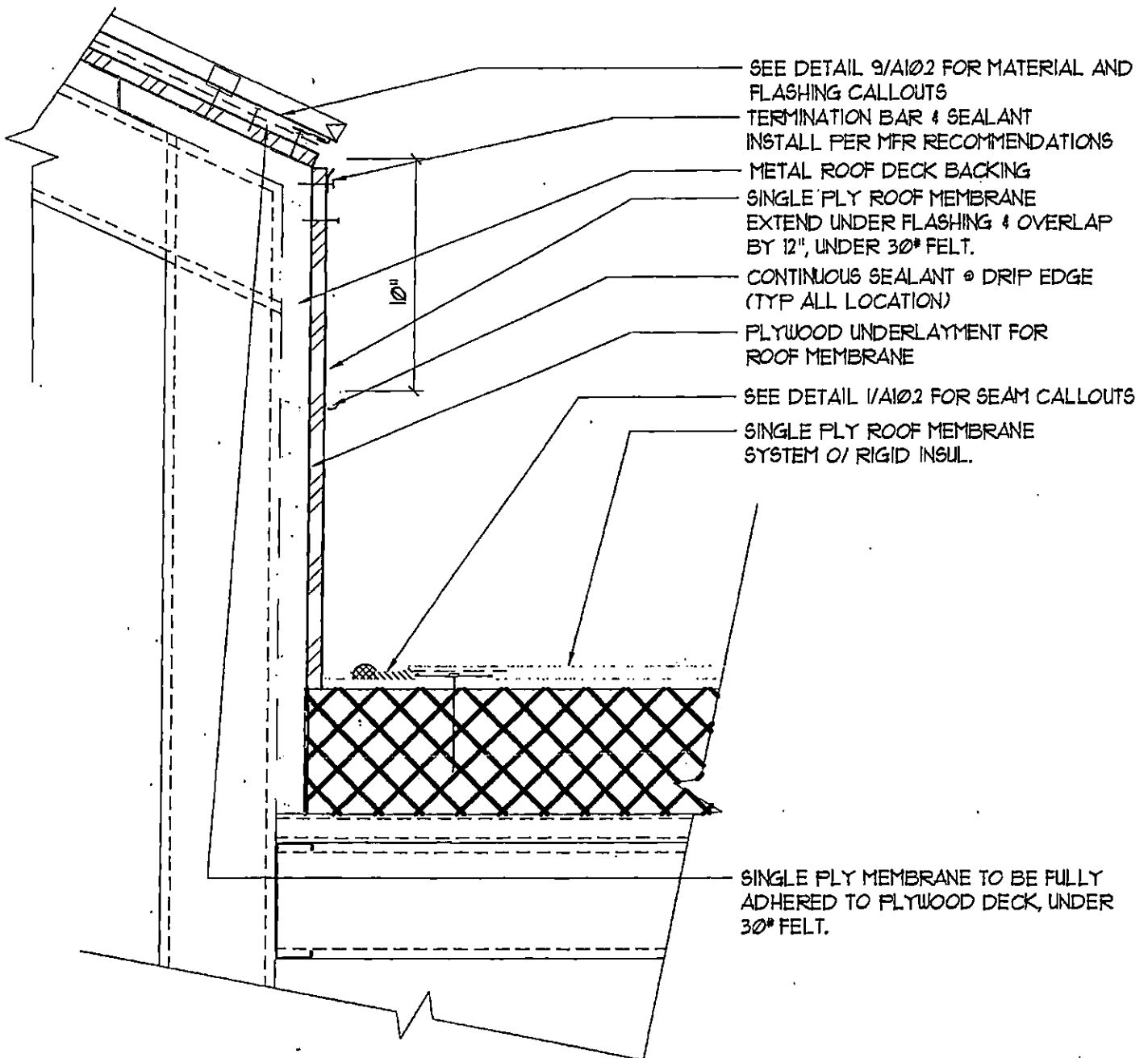
ST07300-045P



Detail @ Roof Step

Scale: 1"=1'-0"

ST01300-055P

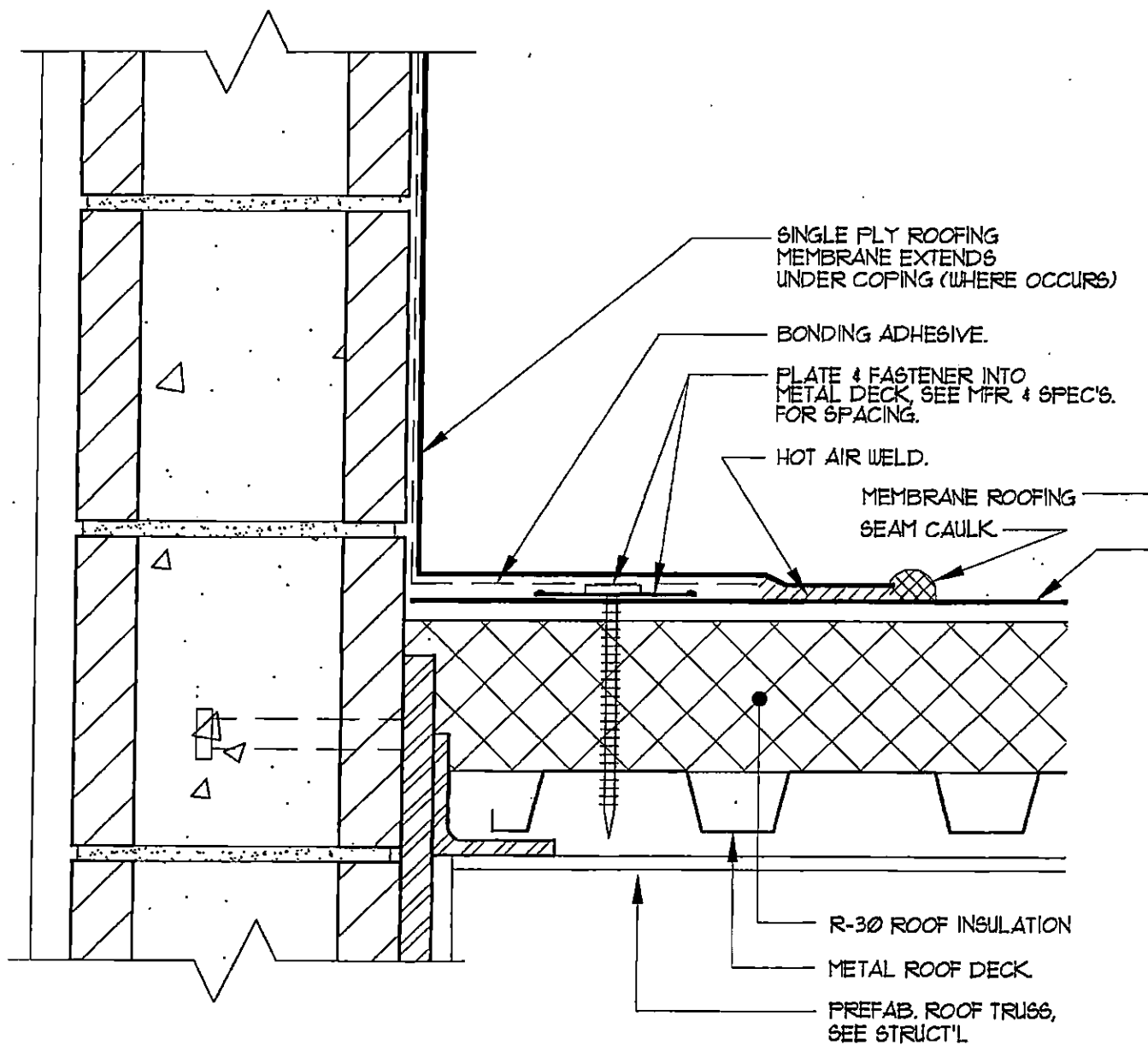


#

Detail @ Roof Transition

Scale: 1-1/2"=1'-0"

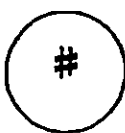
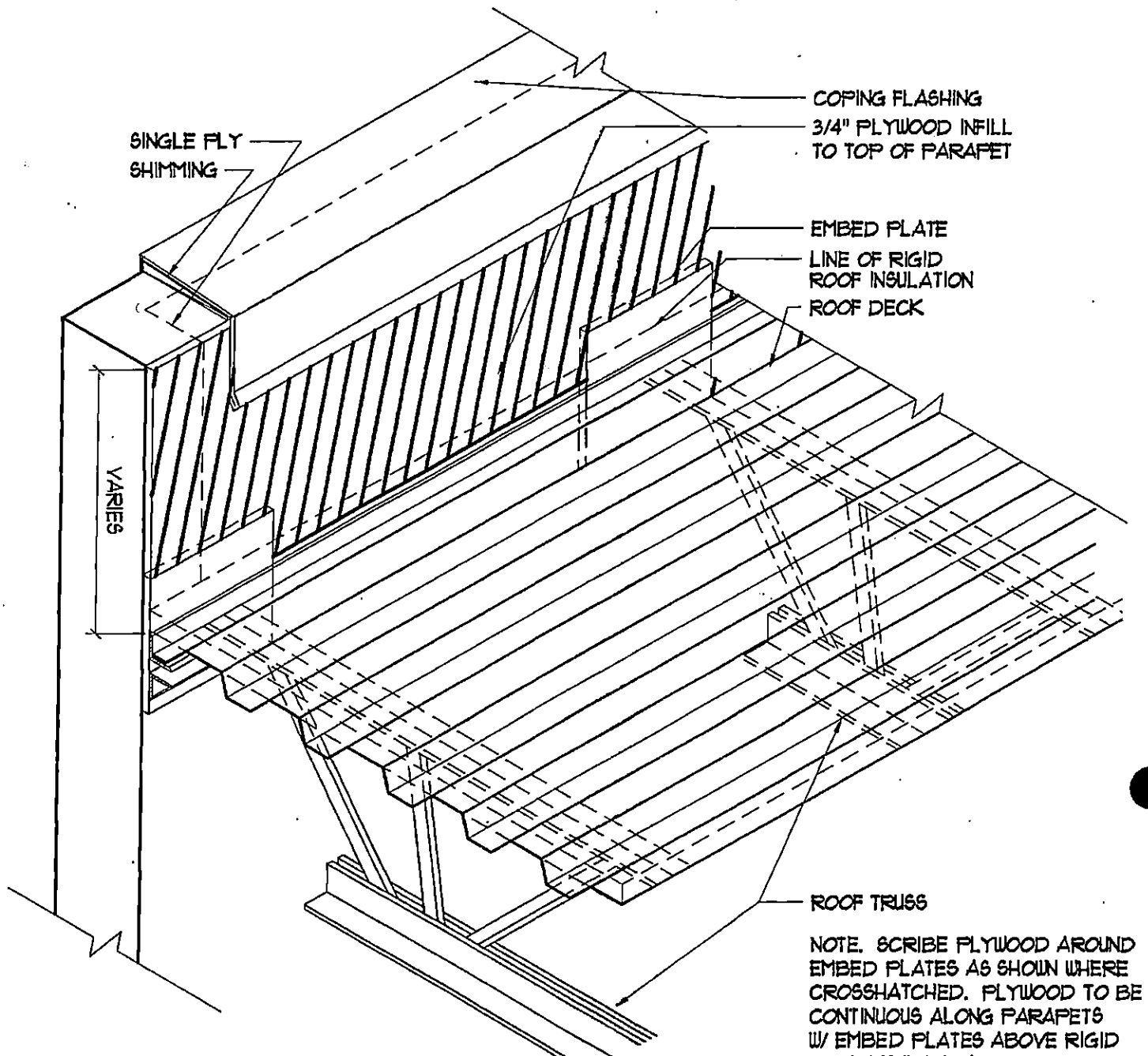
ST07300-06SP



Flashing Detail

Scale: 3"=1'-0"

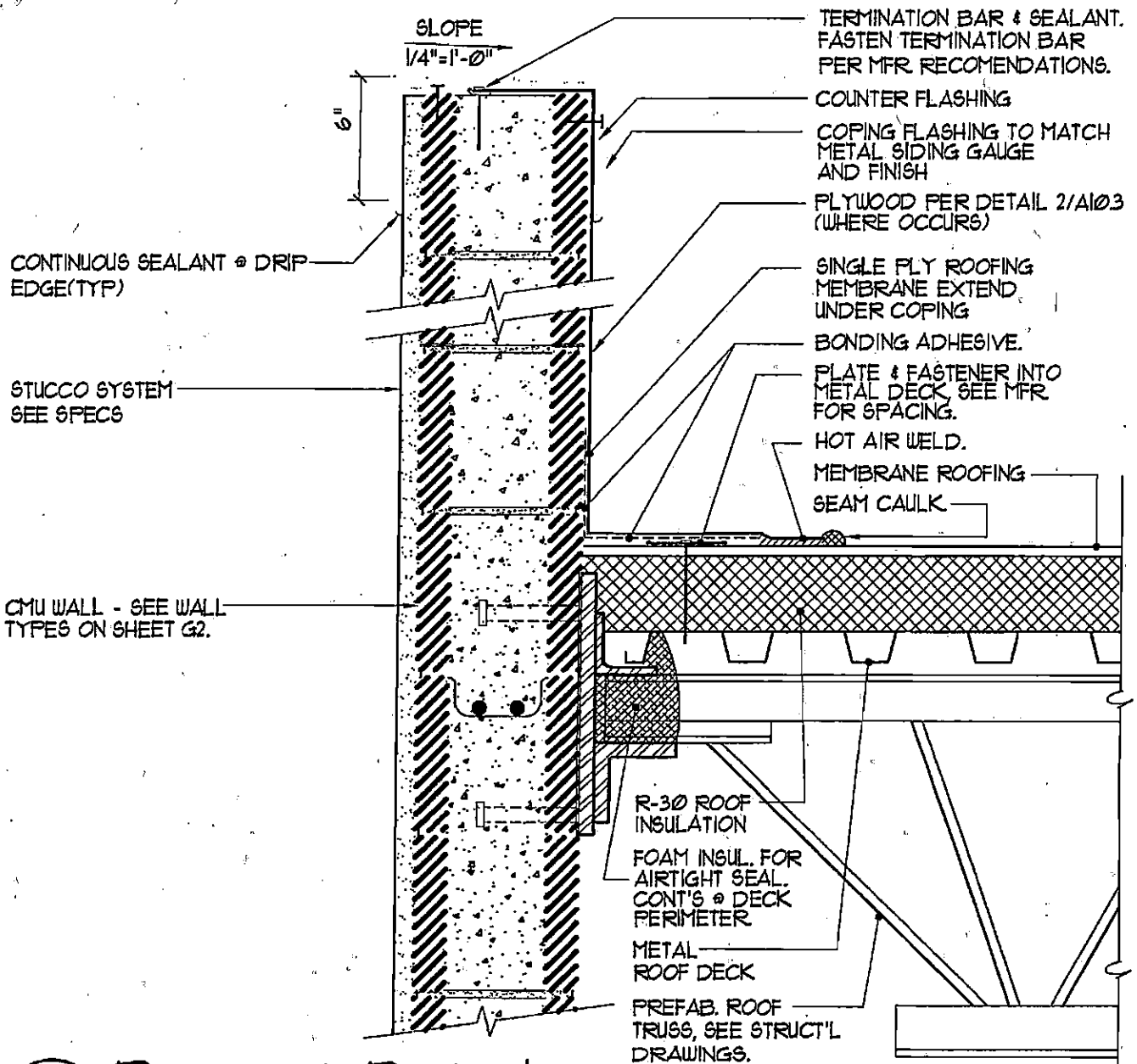
ST07300-016P



Plywood Infill Isometric

Scale: Isometric

ST01300-08SP
LAST REVISED 1-13-01



Parapet Detail

Scale: 1-1/2"=1'-0"

ST07300-095P

LINE OF PARAPET
BEYOND. (MTL. COPING @
BOTH SIDES OF OPENING).

TERMINATION BAR AND SEALANT
FASTEN TERMINATION BAR PER
MFR RECOMMENDATIONS

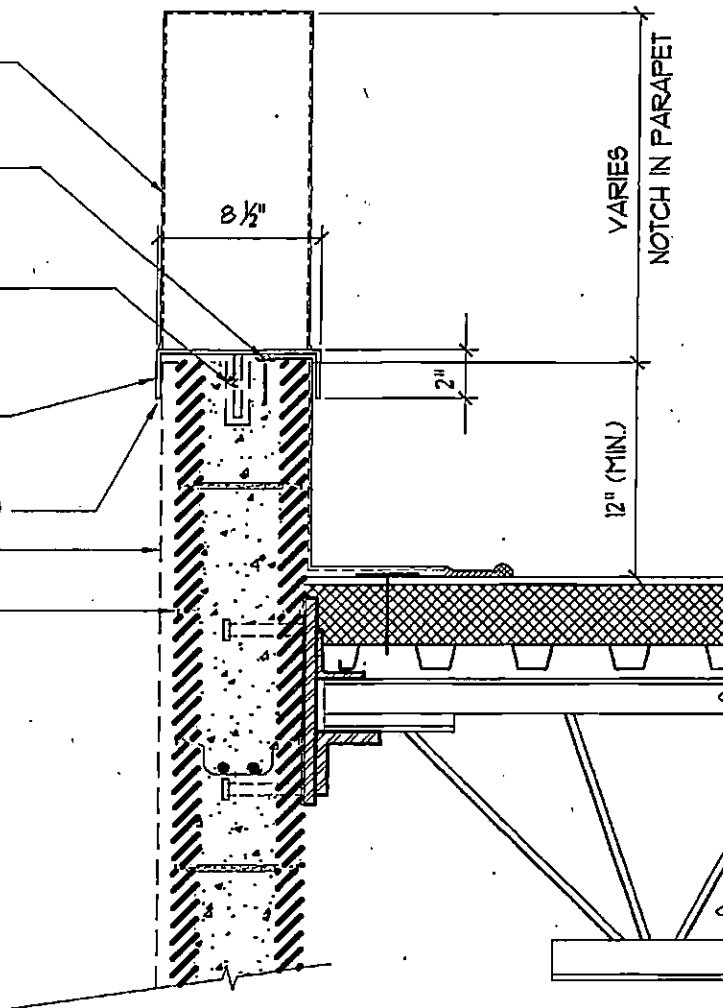
1/4" DIA. EPOXY BOLT,
MIN. EMBED 4". WELD TO
UNDERSIDE OF MTL. PLATE.
(1) - 2" FROM EA. END OF PLATE.

1/8" THICK, BENT MTL. PLATE
FULL WIDTH OF NOTCH IN
PARAPET.

CONT. SEALANT @ DRIP EDGE (TYP)

LINE OF STUCCO FINISH
OR EXPOSED CMU.

8" x 8" x 16" CMU W/ METAL
SIDING, OR CMU WALL W/ STUCCO
FINISH. SEE WALL
TYPES ON SHT G2.

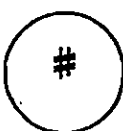
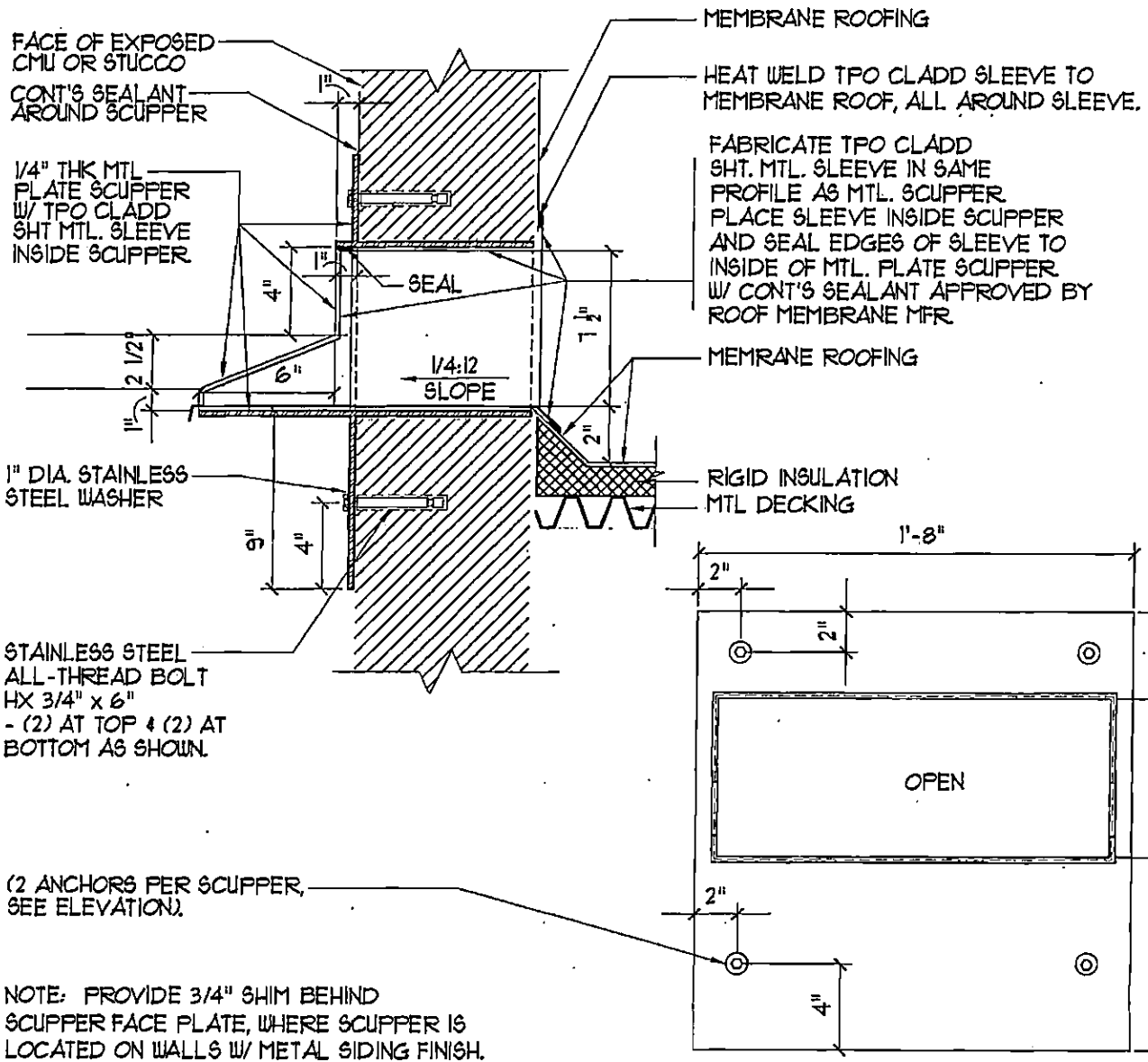


#

Parapet Notch Detail

Scale: 1"=1'-0"

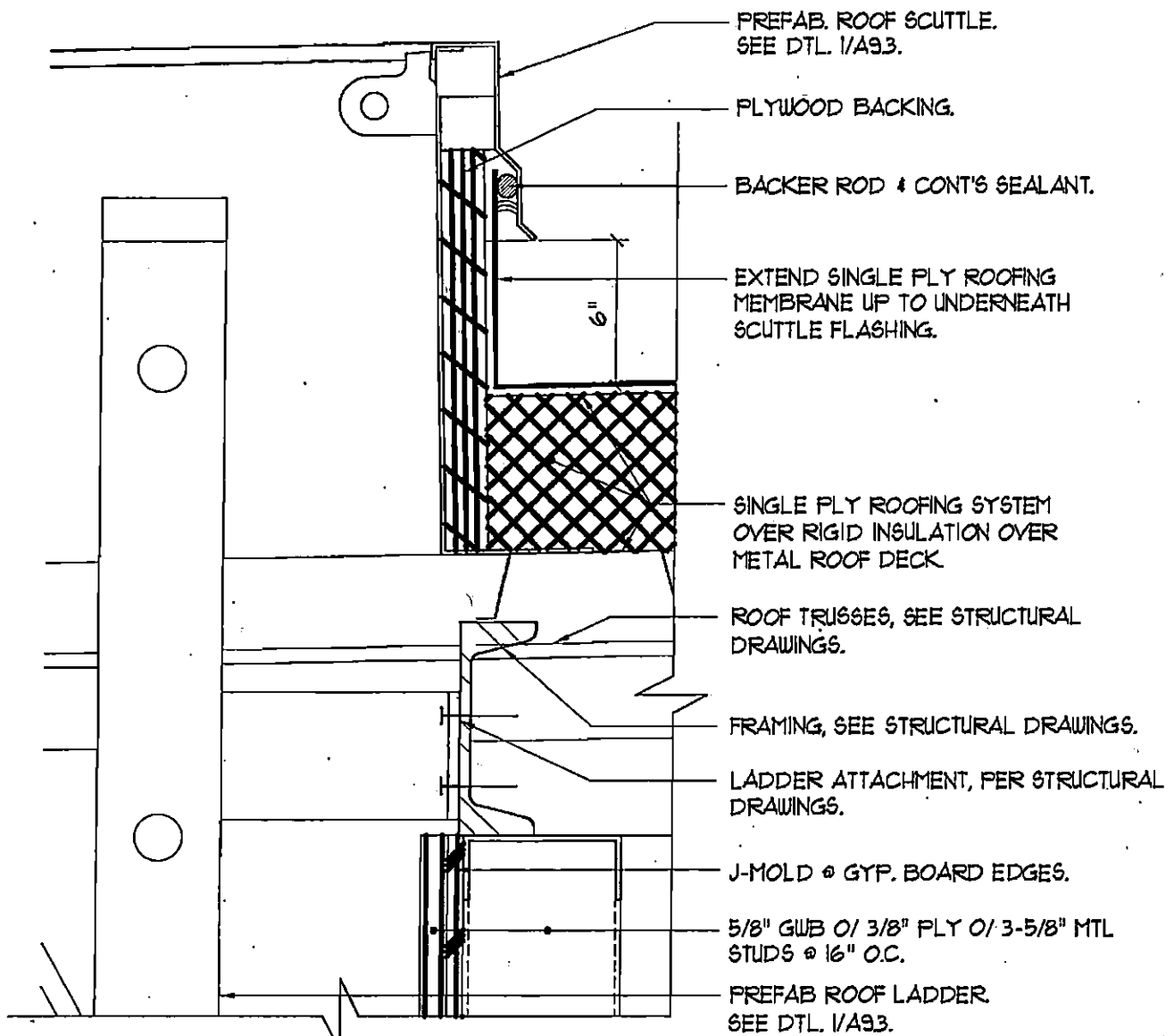
ST01300-106F



Overflow Scupper Detail

Scale: 1-1/2"=1'-0"

ST07300-11SP

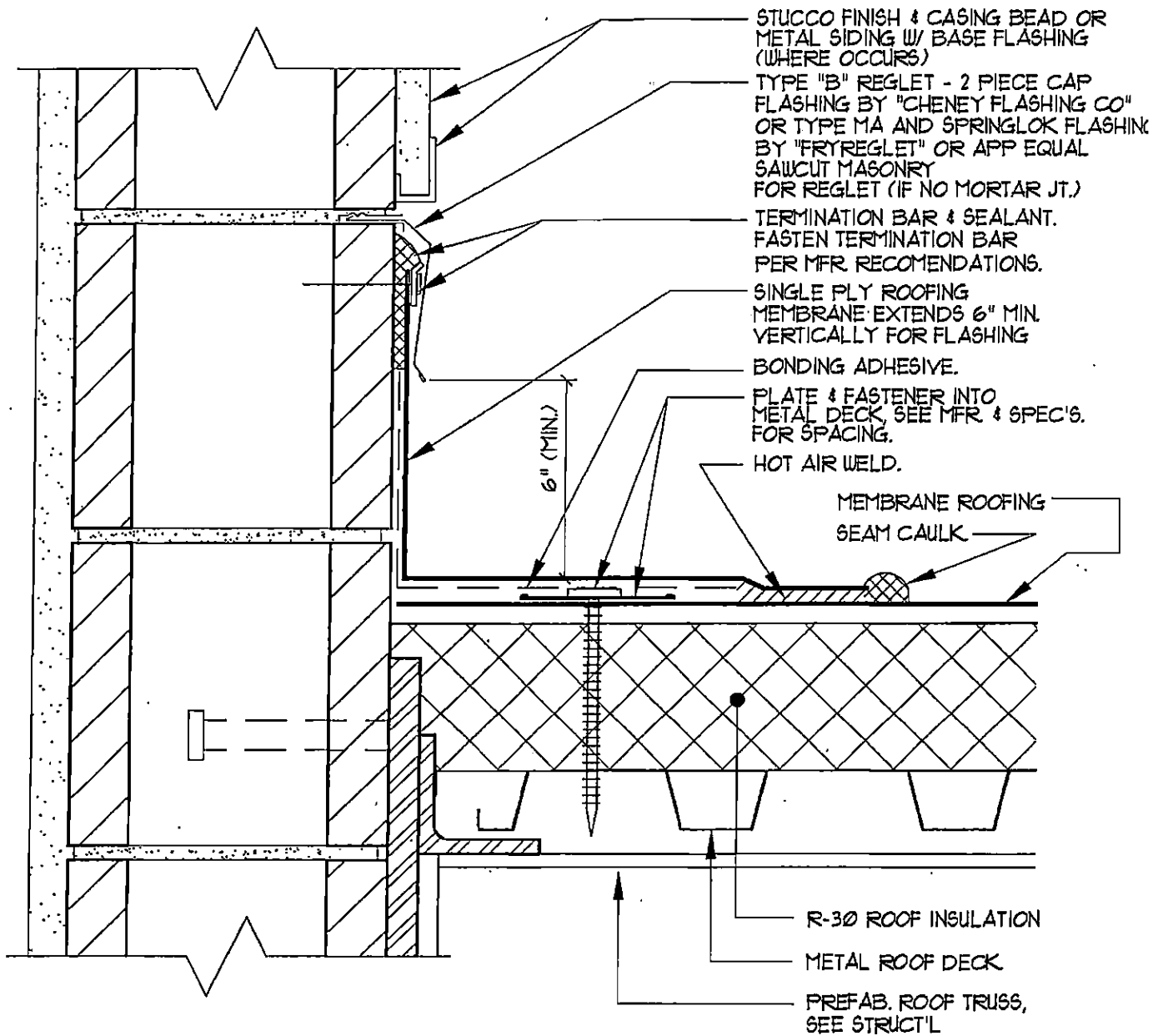


#

Roof Scuttle Detail

Scale: 3"=1'-0"

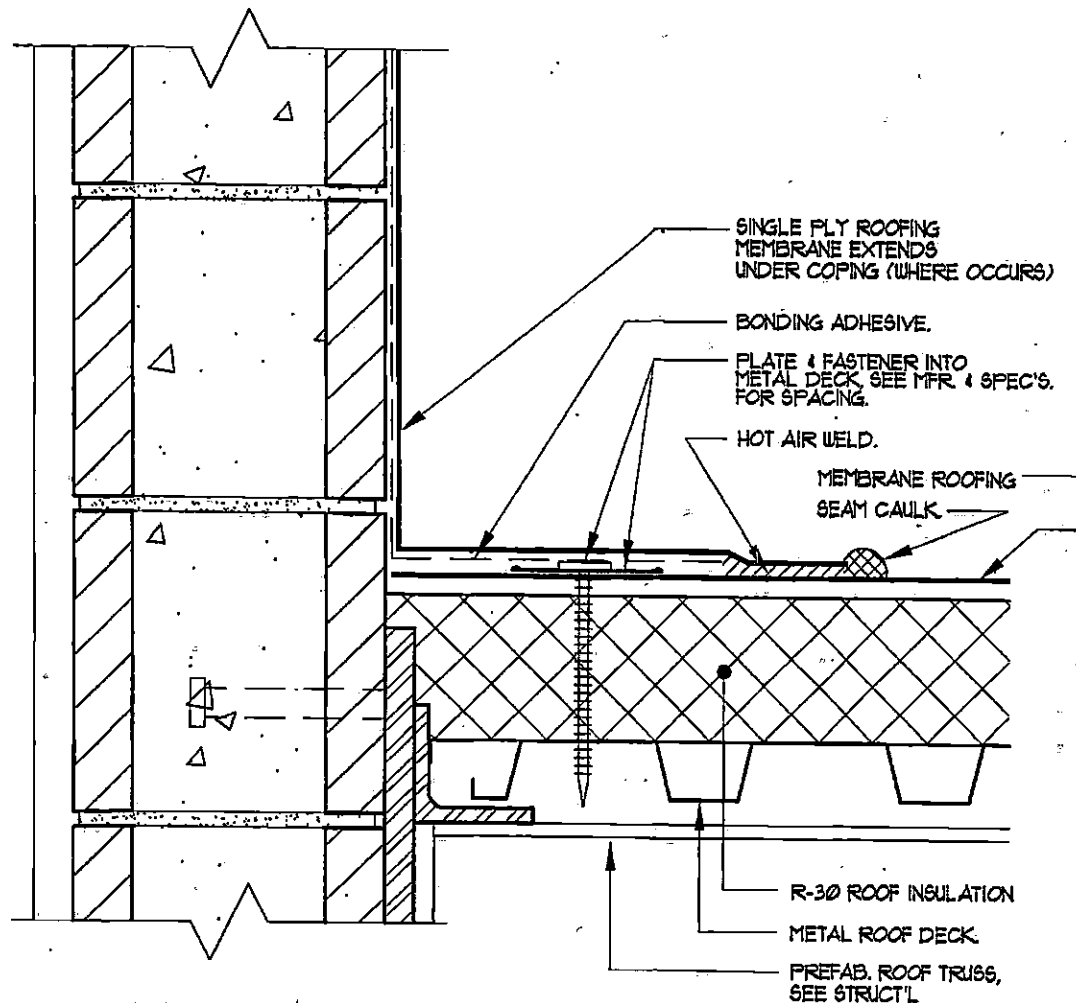
ST01300-126P



Flashing Detail

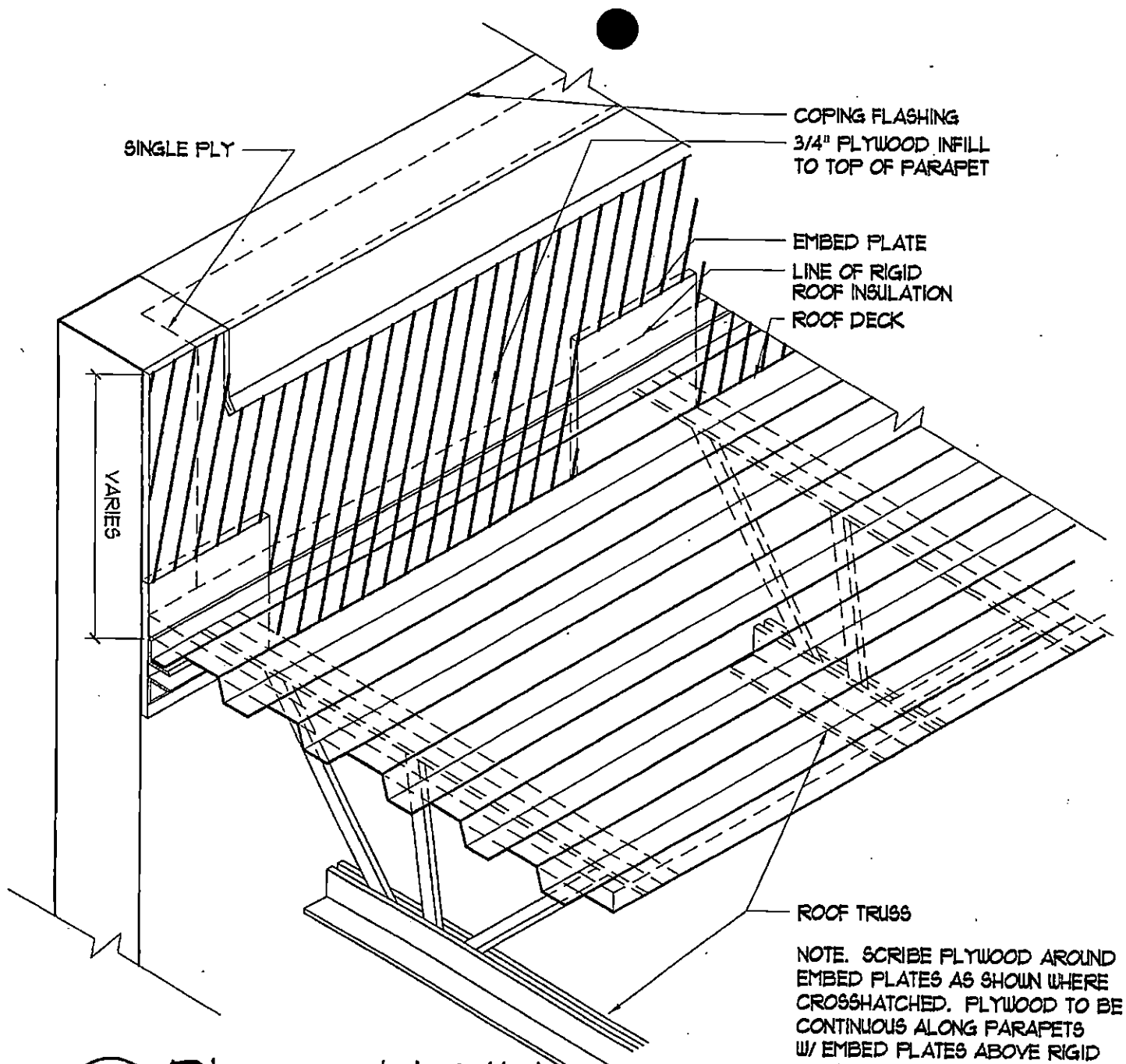
Scale: 3"=1'-0"

ST07300-136P



1 Flashing Detail

Scale: 3/4"=1'-0"



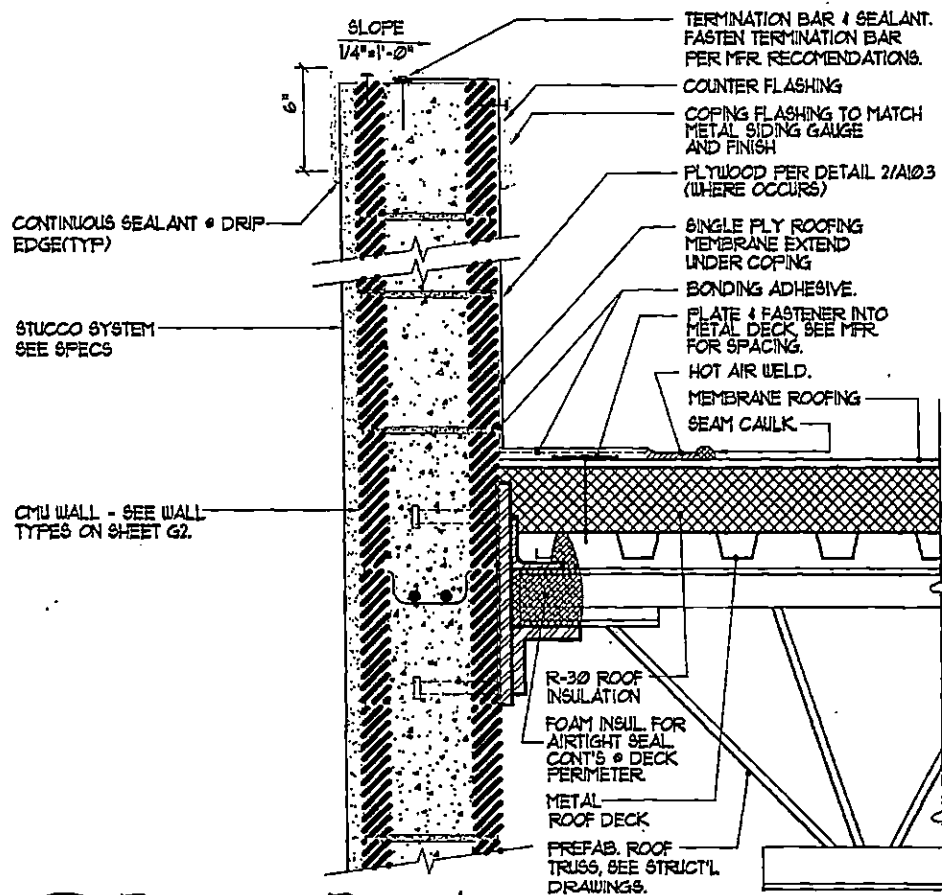
2 Plywood Infill Isometric

Scale: Isometric

ROOF TRUSS

NOTE. SCRIBE PLYWOOD AROUND
EMBED PLATES AS SHOWN WHERE
CROSSHATCHED. PLYWOOD TO BE
CONTINUOUS ALONG PARAPETS
W/ EMBED PLATES ABOVE RIGID
ROOF INSULATION

A10-3-2r



9 Parapet Detail

Scale: $\frac{1}{2}" = 1'-0"$

A10-3-9

LINE OF PARAPET
BEYOND. (MTL. COPING @
BOTH SIDES OF OPENING).

TERMINATION BAR AND SEALANT
FASTEN TERMINATION BAR PER
MFR RECOMMENDATIONS

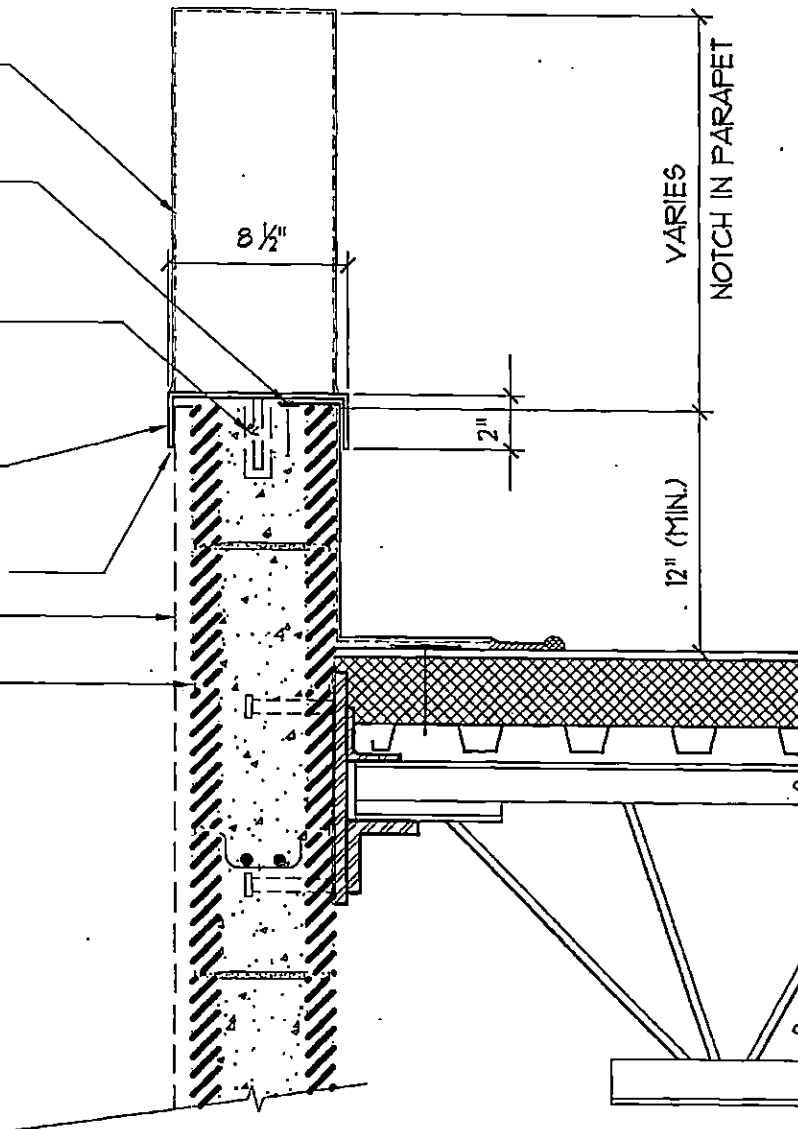
1/4" DIA. EPOXY BOLT,
MIN. EMBED 4". WELD TO
UNDERSIDE OF MTL. PLATE.
(1) - 2" FROM EA. END OF PLATE.

1/8" THICK, BENT MTL. PLATE
FULL WIDTH OF NOTCH IN
PARAPET.

CONT. SEALANT @ DRIP EDGE (TYP)

LINE OF STUCCO FINISH
OR EXPOSED CMU.

8" x 8" x 16" CMU W/ METAL
SIDING, OR CMU WALL W/ STUCCO
FINISH.) SEE WALL
TYPES ON SHT G2.

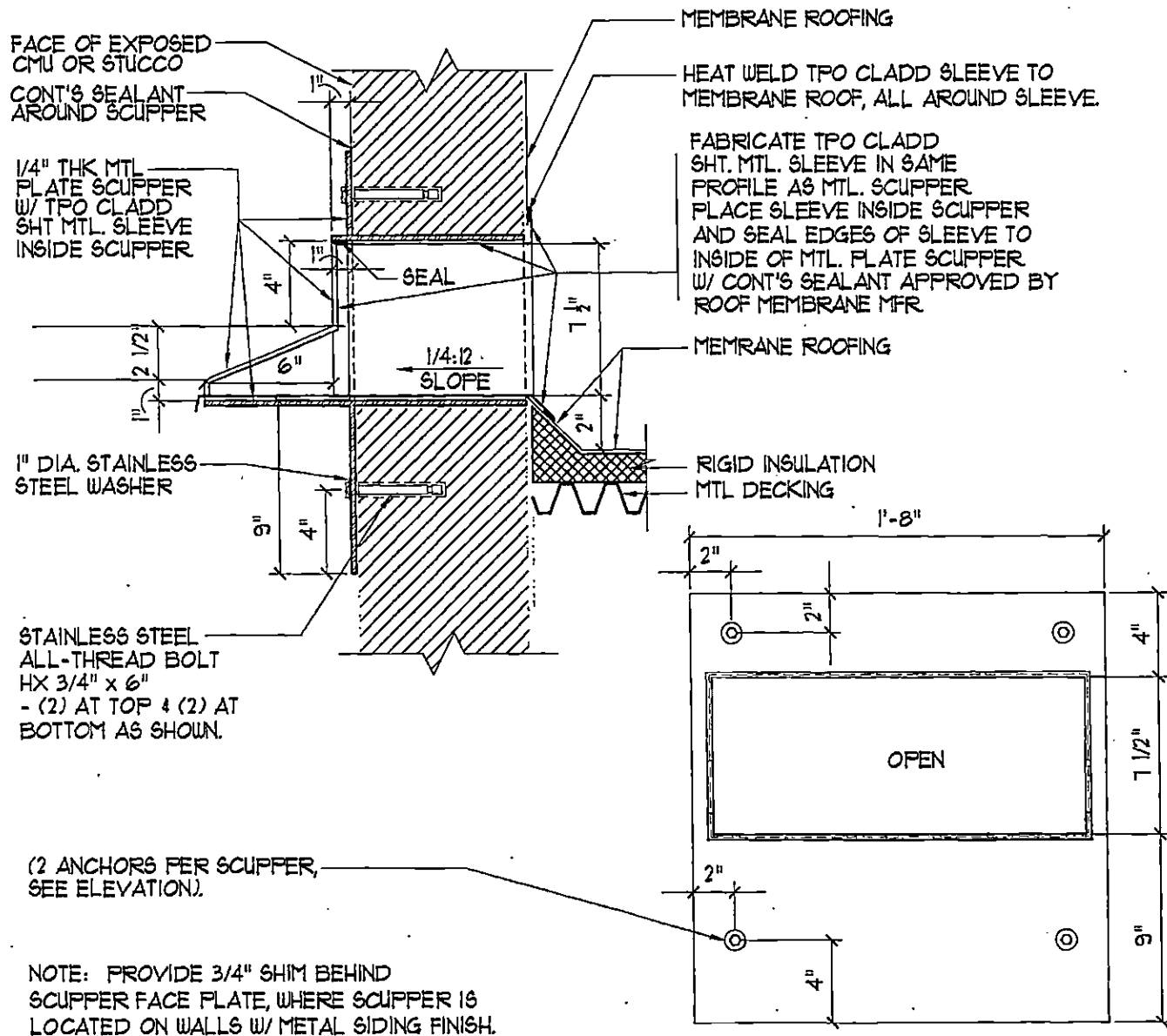


11

Parapet Notch Detail

Scale: 1"=1'-0"

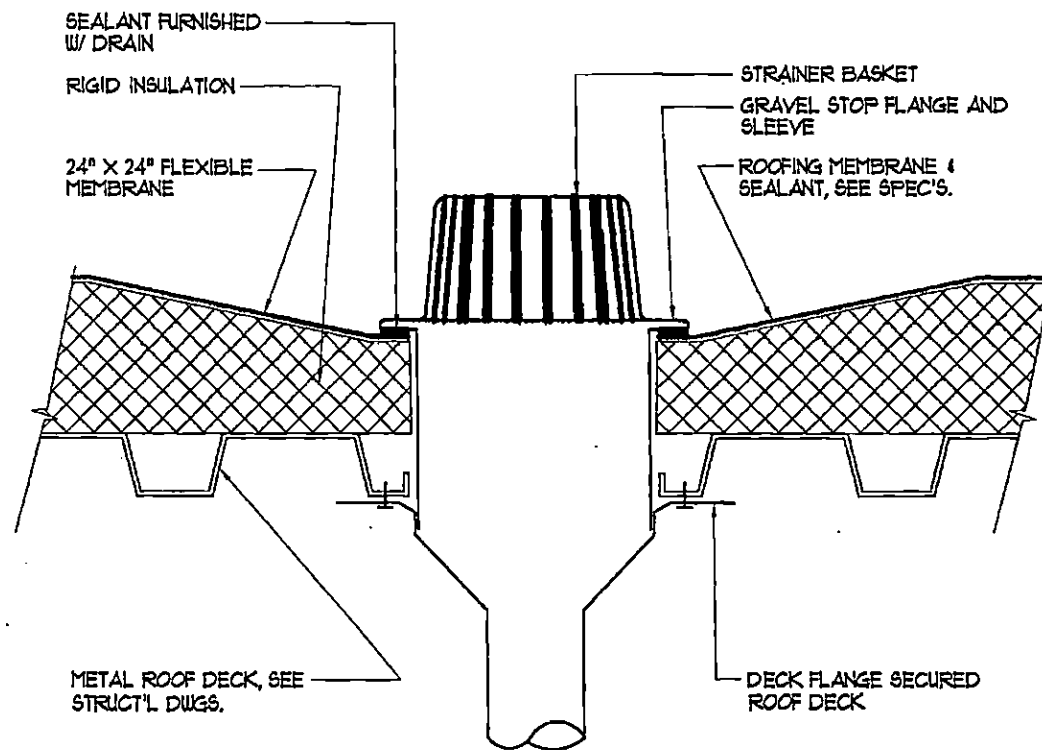
A10-3-11



4 Overflow Scupper Dtl.

Scale: 1-1/2" = 1'-0"

A10-5-4newest



NOTE:
SEE DTL. 4/A105 FOR OVERFLOW SCUPPER.

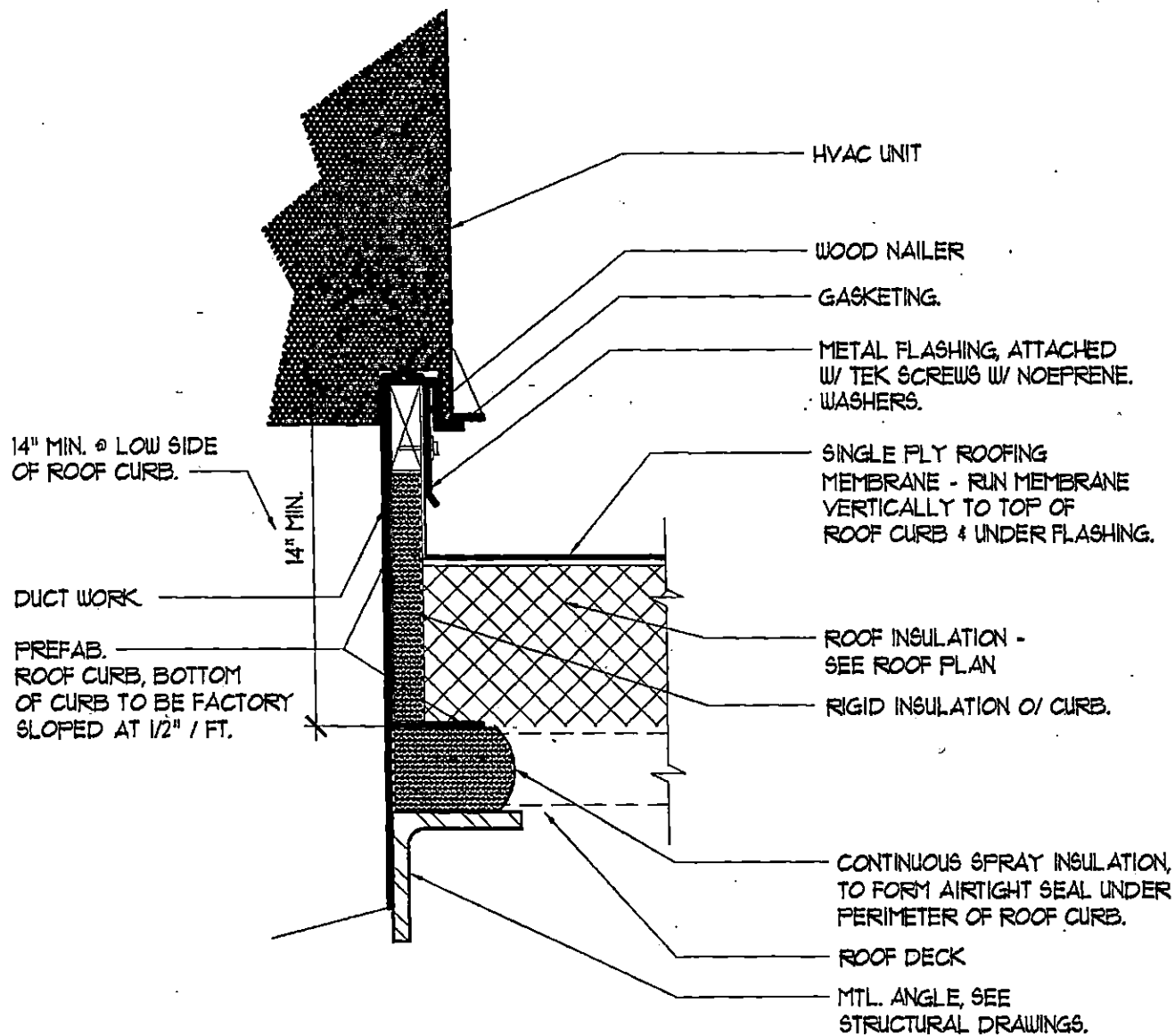


Roof Drain

Scale: 3"=1'-0"

DT10-04

A10-5-10

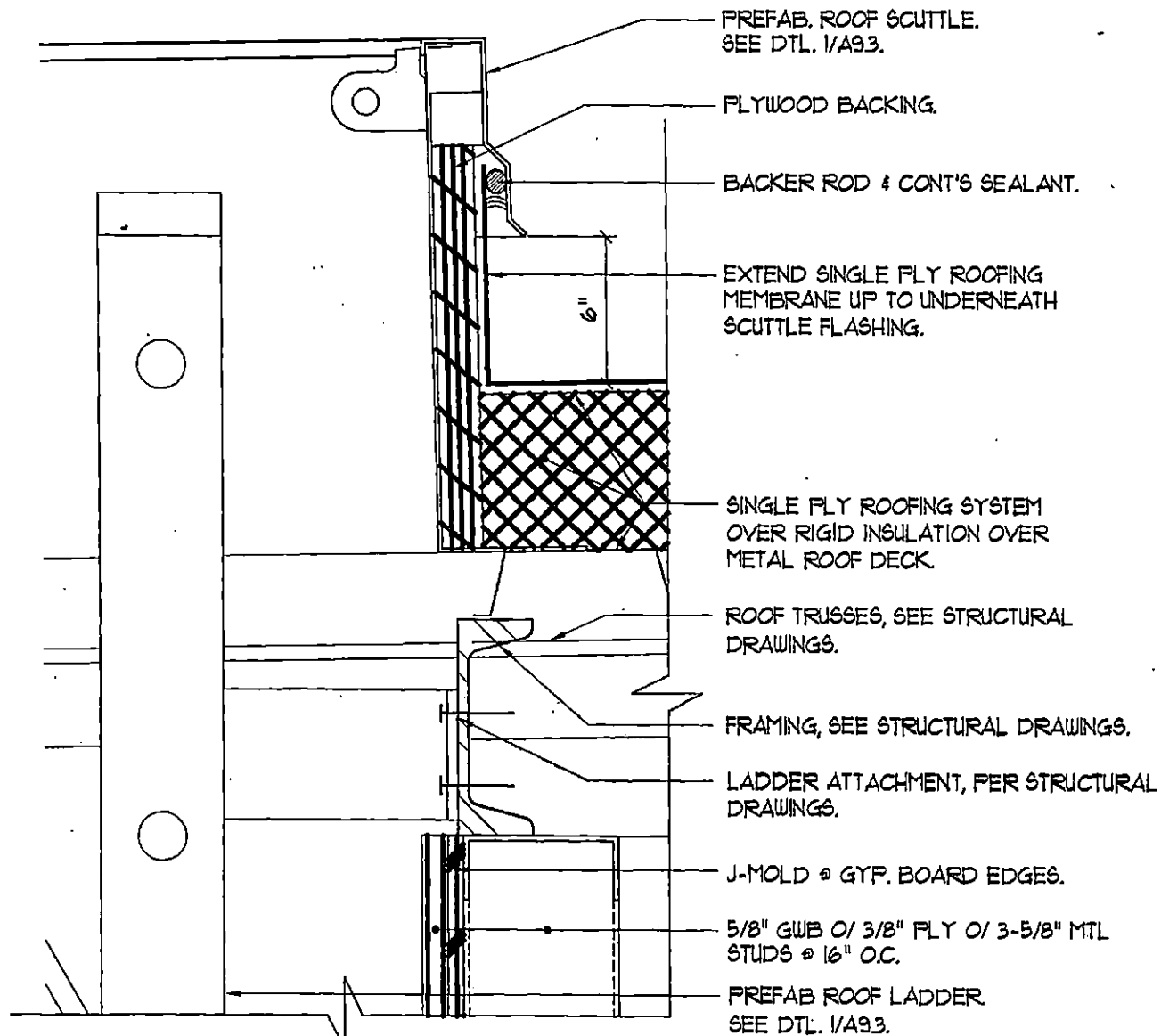


10

Mechanical Roof Curb Detail

Scale: 3" = 1'-0"

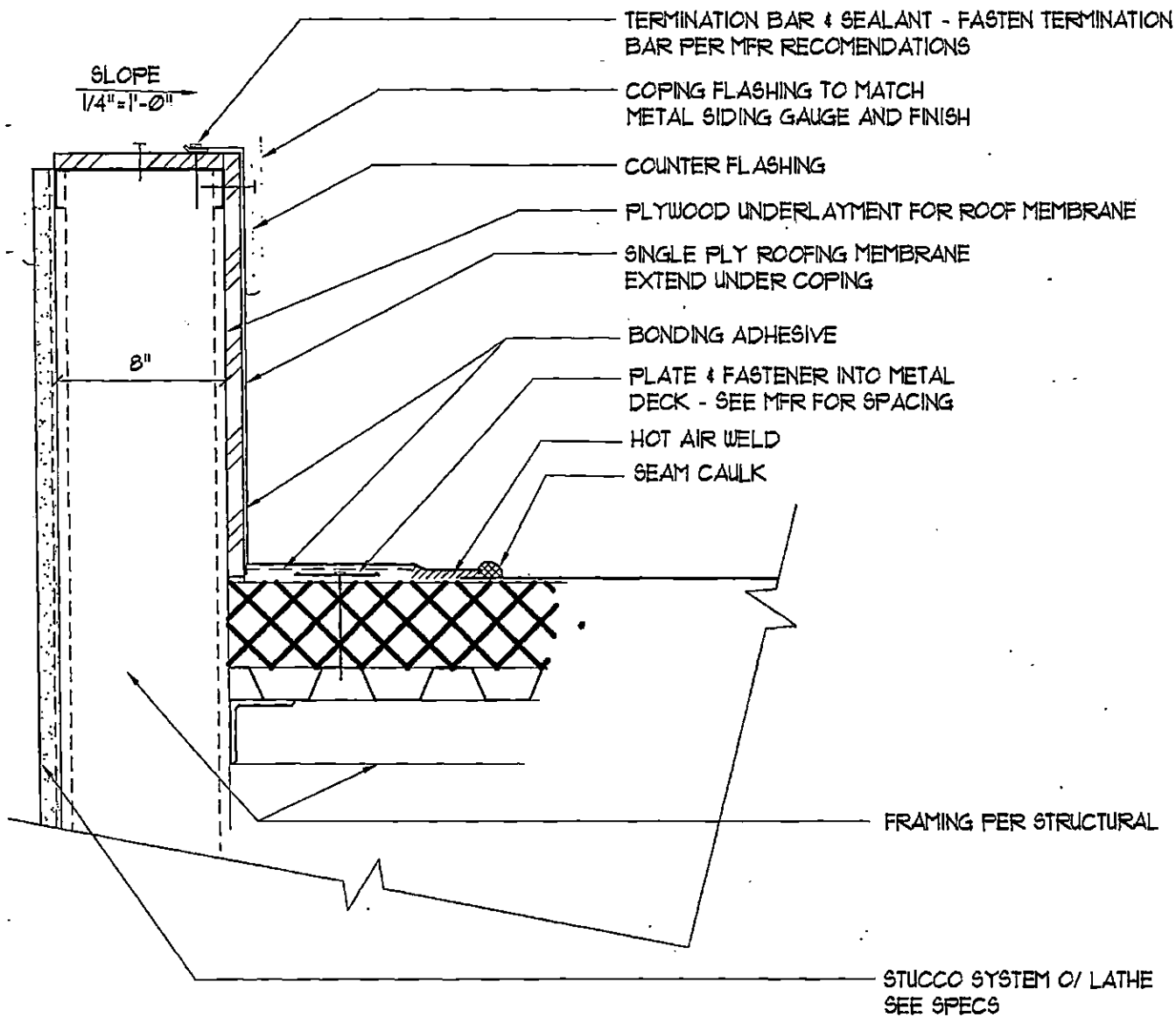
A10-7-10newest



11 Roof Scuttle Detail

Scale: 3" = 1'-0"

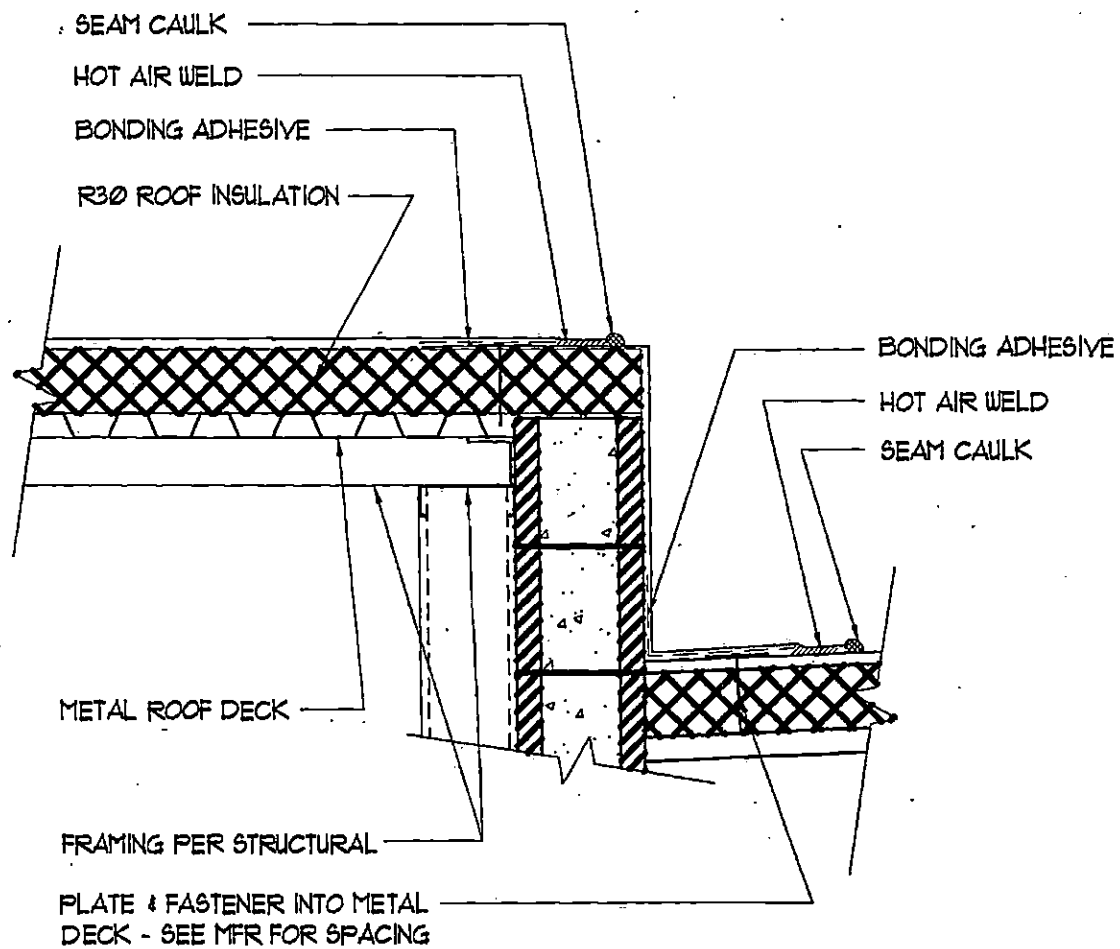
A10-1-11



1 Detail @ Parapet

Scale: $1-1/2'' = 1'-0''$

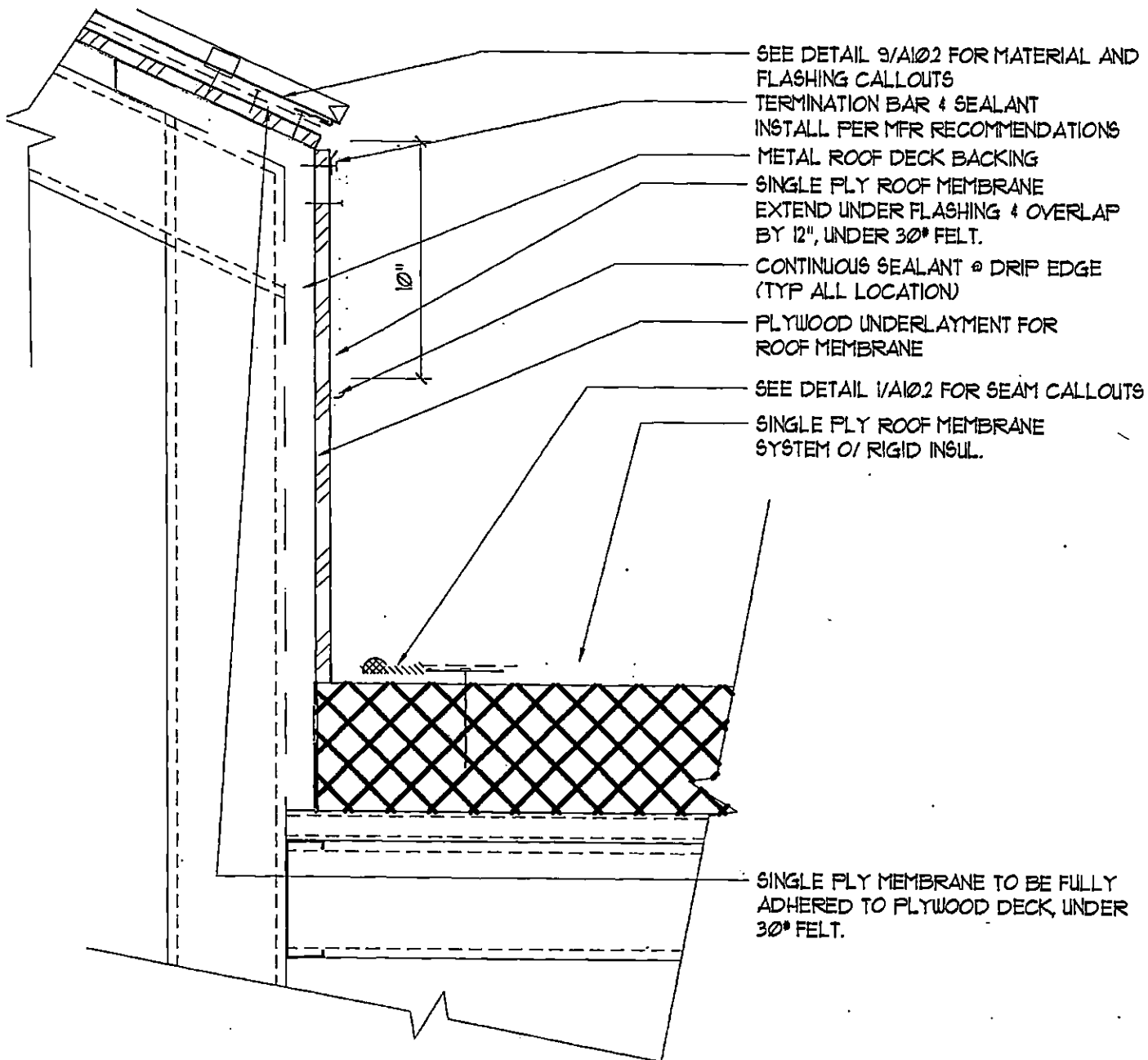
A10-10-1



2 Detail @ Roof Step

Scale: 1" = 1'-0"

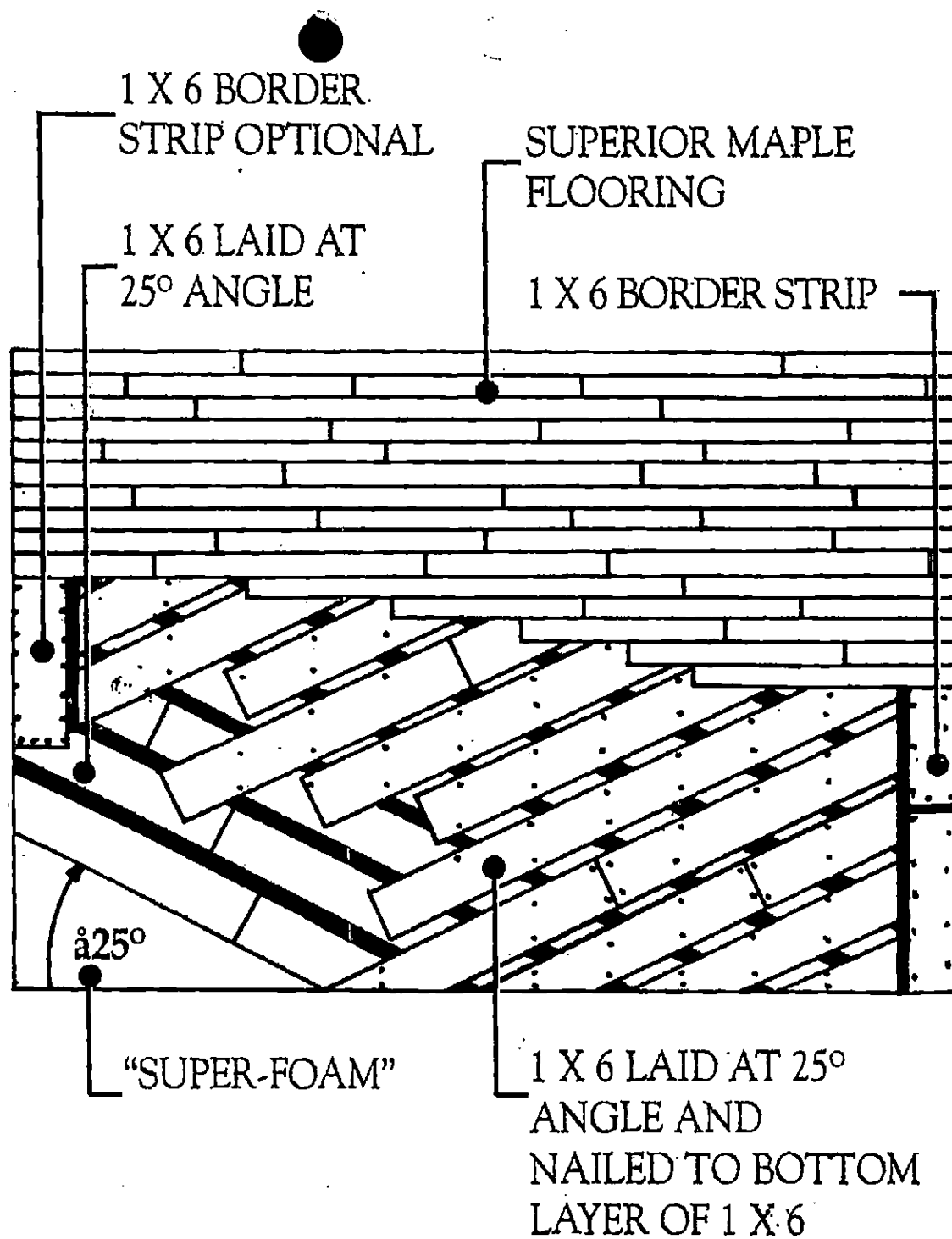
A10-10-2

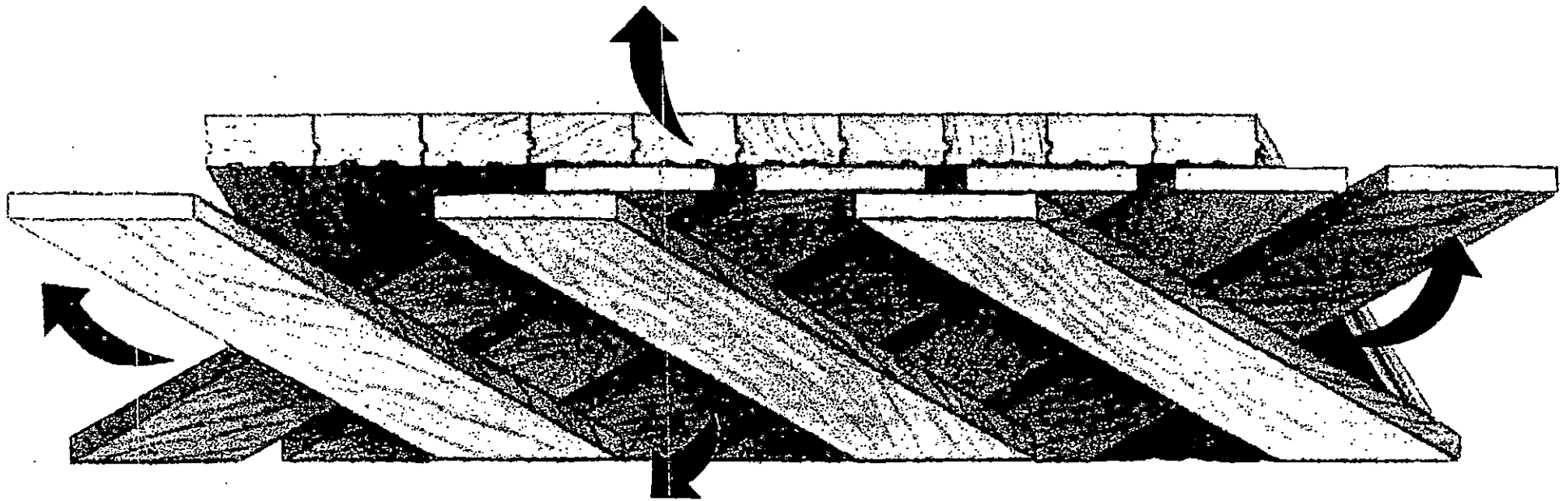


3 Detail @ Roof Transition

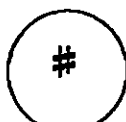
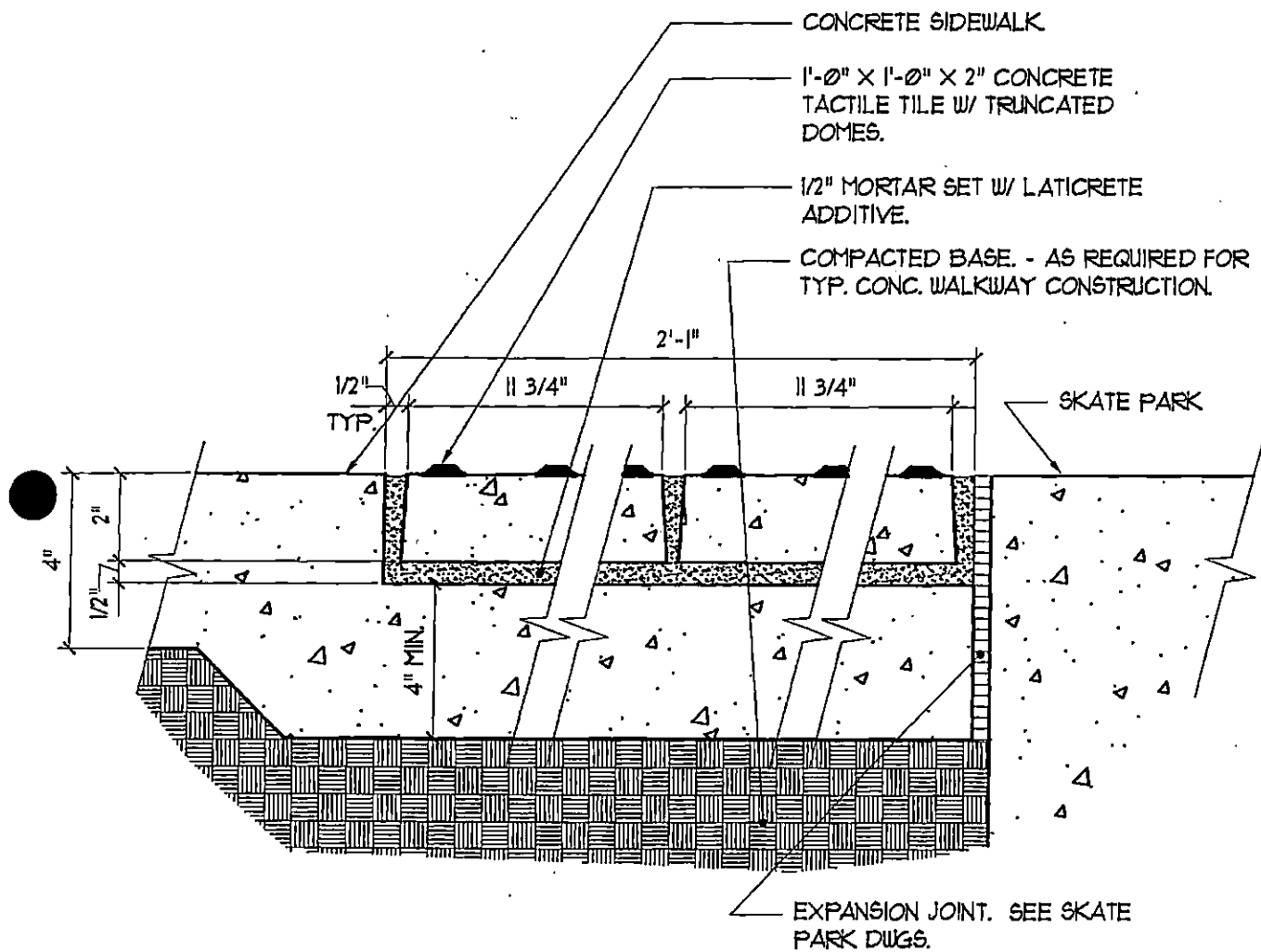
Scale: 1/2" = 1'-0"

A10-10-3





Self-Ventilating/ Self-Drying



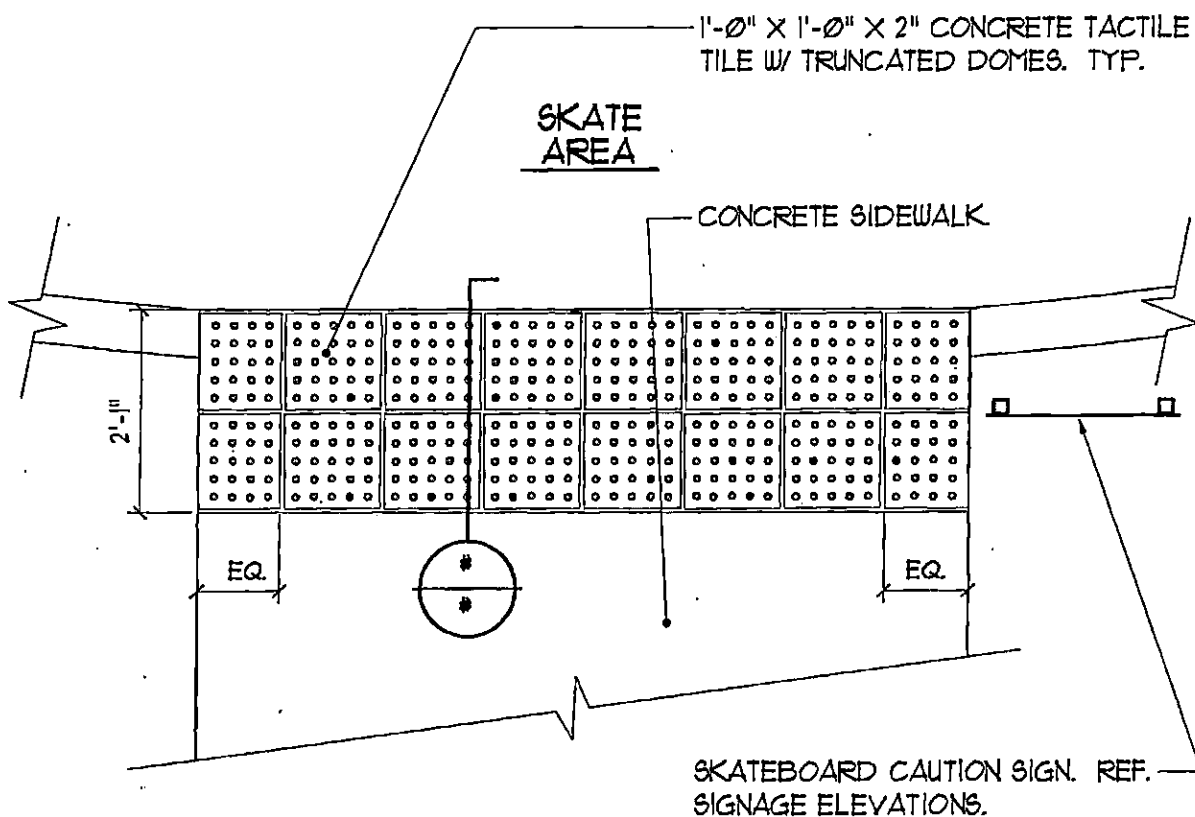
Detectable Warning @ Skate Park

Scale: 3"=1'-0"

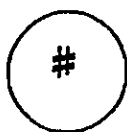
DATE: 6/1/01

ST02882-01

00.00



NOTE: LAYOUT TILES CENTERED ON WALK WITH NO EDGE TILES LESS THAN HALF THE WIDTH OF A TILE.



SkatePark Entry Paver View

Scale: 1/2" = 1'-0"

DATE: 6/1/01

ST02882-02

#1-#8

CAUTION

ENTER AT YOUR OWN RISK

Rules:

- This facility is provided for users of various skill levels. Such activity carries a risk of severe injury. Stay within your abilities. Be aware of your surroundings and other users.
- Use this facility at your own risk. This facility is not supervised. The City of Las Vegas assumes no liability for loss, damage or any kind of injury or accident to people or property.
- Helmets, knee pads, elbow pads and appropriate footwear should be worn.
- No graffiti, tagging or other damage to property will be allowed.
- No glass containers. Dispose of trash in trash receptacles.
- No profanity, loud music, bad behavior, recklessness, disregard for or harassment of other users.
- Failure to follow these rules and/or the instructions of City staff or Marshals may result in suspension from use of the park for up to one year and/or arrest and/or closure of this facility.

PLEASE PROTECT AND PRESERVE YOUR PARK

2" ARIAL BLACK TEXT W/ FULL WIDTH FACTOR CENTERED IN WIDTH OF SIGN. ADD ADDITIONAL SPACE BETWEEN LETTERS.

NOTE: "CAUTION" - TEXT COLOR TO BE PRIMARY RED

5/8" ARIAL TEXT W/ 80 WIDTH FACTOR CENTERED IN WIDTH OF SIGN.

5/8" ARIAL TEXT W/ 80 WIDTH FACTOR

1/2" ARIAL TEXT W/ 80 WIDTH FACTOR UNDERLINE TEXT - FULL LENGTH - 1/16" THICK LINE.

WHITE BACKGROUND COLOR

1/4" DIAMETER BULLET COLOR TO MATCH COLOR OF TEXT.

3/8" ARIAL TEXT W/ 80 WIDTH FACTOR

5/8" ARIAL TEXT W/ 80 WIDTH FACTOR CENTERED IN WIDTH OF SIGN.

2" RADIUS CORNER TYP.

NOTE: 2063 ALUMINUM SIGN. BAKED ON WHITE ENAMEL W/ SILK-SCREEN ENAMEL TEXT. ALL TEXT TO BE BLACK. TYPICAL UNLESS NOTED OTHERWISE.

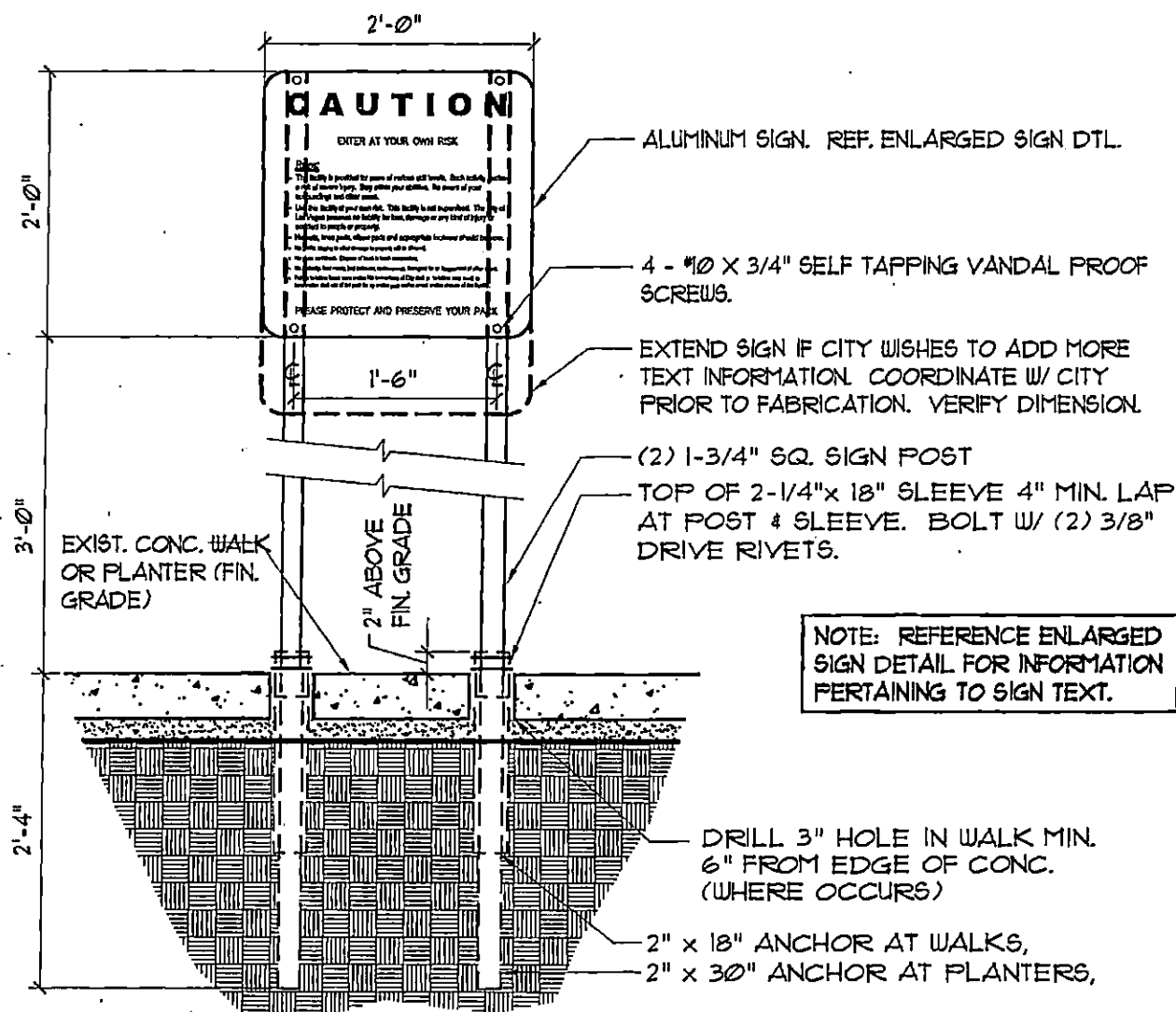
Skate Park Rules/Caution Sign

Scale: 3/4" = 1'-0"

DATE: 6/1/01

ST02882-03

22-00



NOTE: ALL COMPONENTS TO BE GALVANIZED SQUARE POST. ATTACH ANCHOR TO SLEEVE TO DRIVE INTO GROUND.

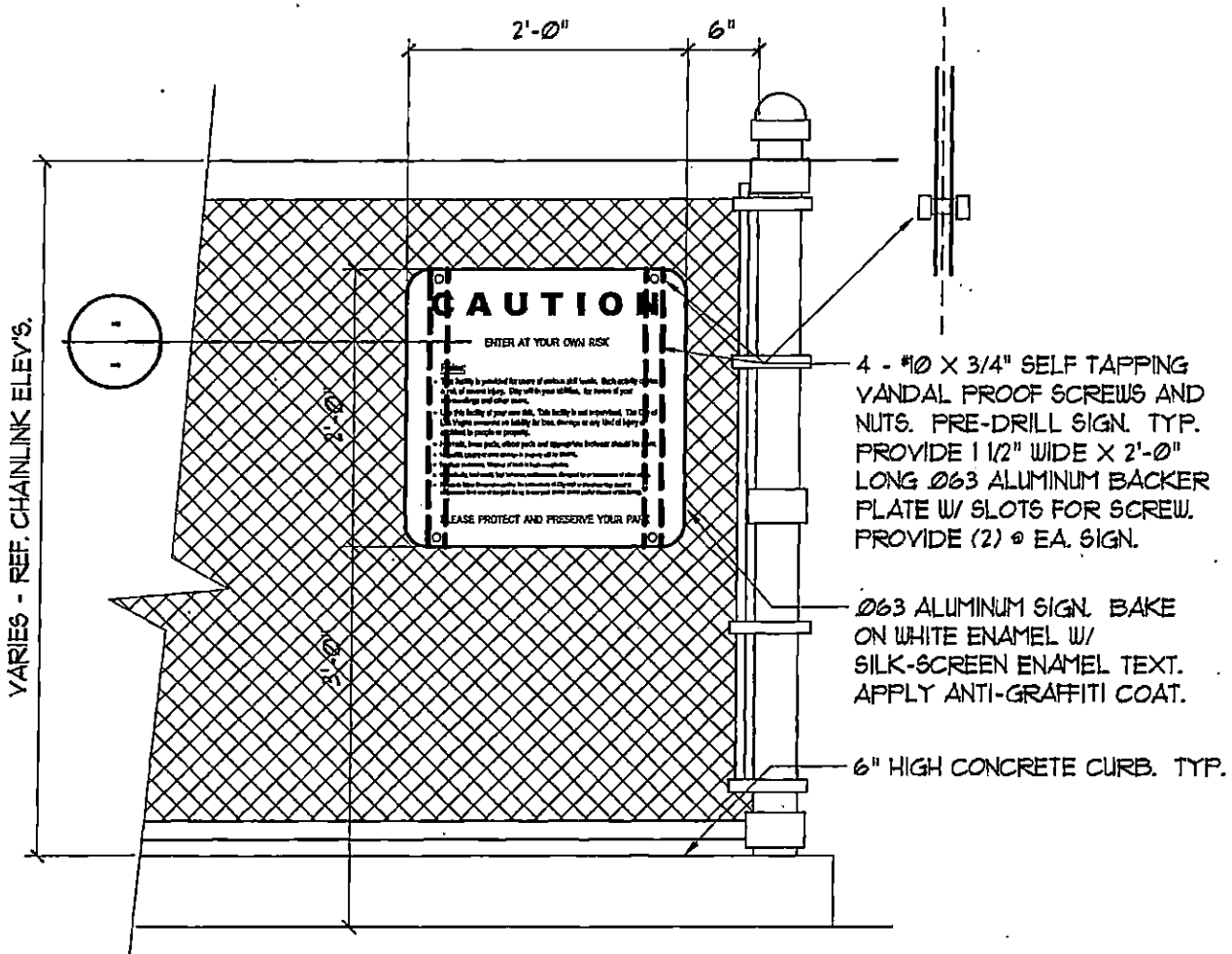
Skate Park Pole Mt'd. Detail

Scale: 3/4" = 1'-0"

DATE: 6/1/01

ST02882-04

#9_03



NOTE: REFERENCE ENLARGED SIGN DETAIL FOR INFORMATION PERTAINING TO SIGN TEXT.

#

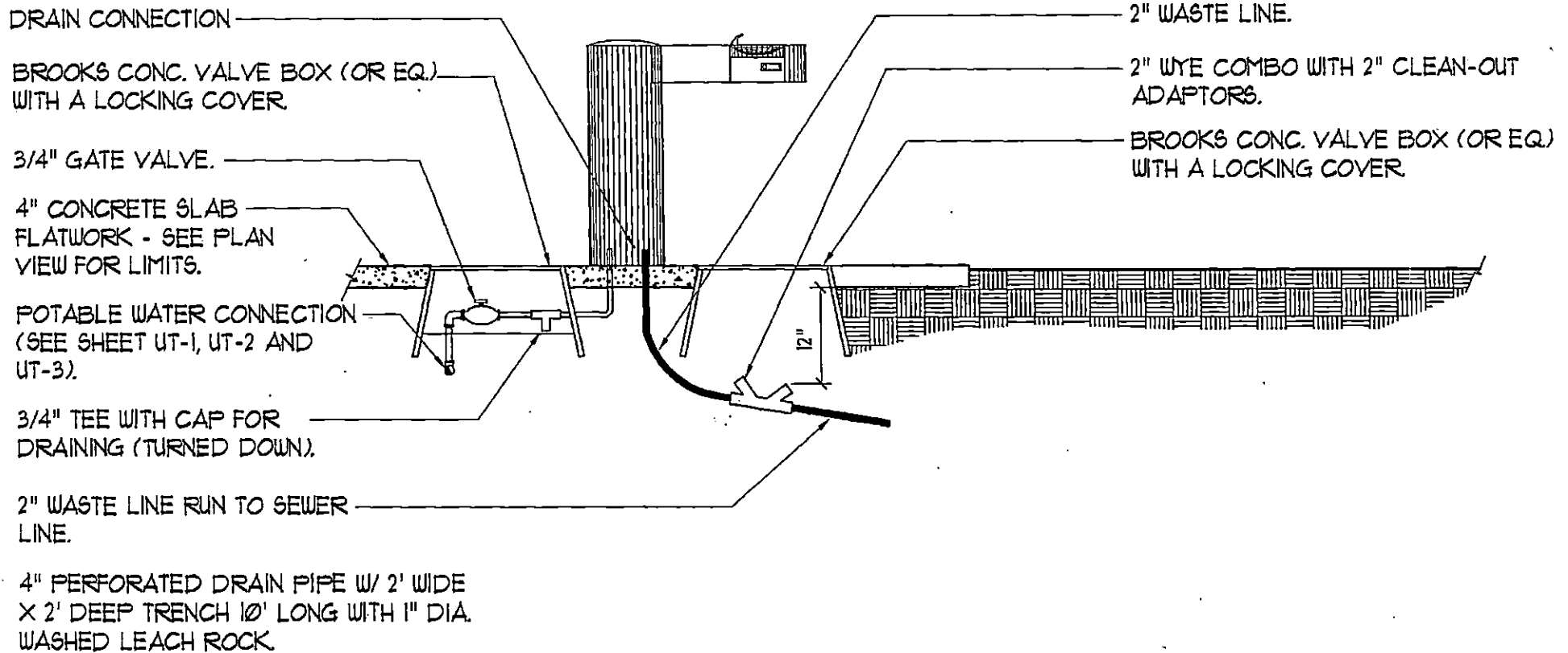
Skate Park Fence Mt'd. Detail

Scale: 3/4"=1'-0"

DATE: 6/1/01

ST02882-05

##_##



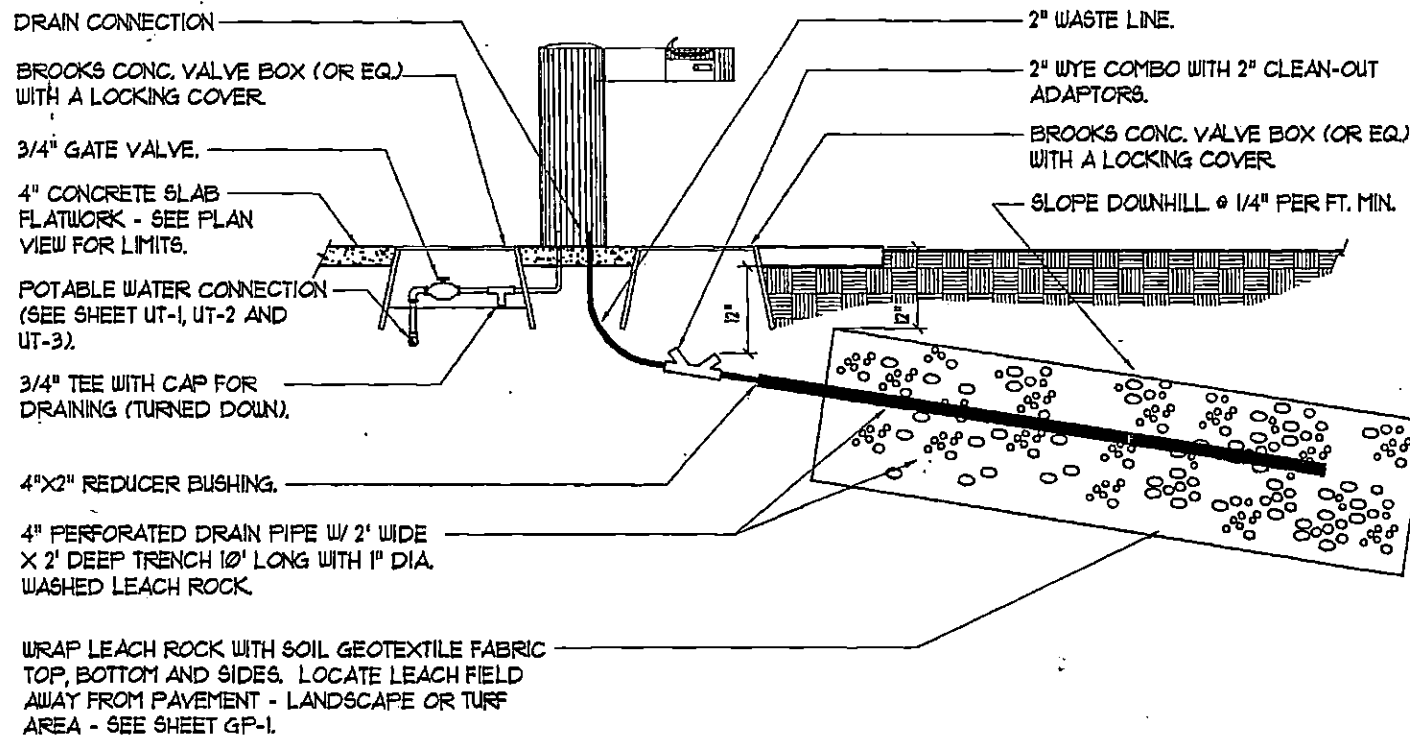
WRAP LEACH ROCK WITH SOIL GEOTEXTILE FABRIC TOP, BOTTOM AND SIDES. LOCATE LEACH FIELD AWAY FROM PAVEMENT - LANDSCAPE OR TURF AREA - SEE SHEET GP-1.

DRINKING FOUNTAIN: MOST DEPENDABLE FOUNTAINS #440DB, COLOR: SELECTED BY OWNER (800) 552-6331 - SEE SPEC. SECTION 02810

#

Drinking Fountain - Drainage Detail

Scale: Not To Scale



DRINKING FOUNTAIN: MOST DEPENDABLE FOUNTAINS *440DB, COLOR: SELECTED BY OWNER (800) 552-6331 - SEE SPEC. SECTION 02810

Drinking Fountain - Drainage Detail

Scale: Not To Scale

st15412-02

00_00

EXHIBIT F
TO THE KYLE CANYON PARKS AGREEMENT
MAINTENANCE PLAN

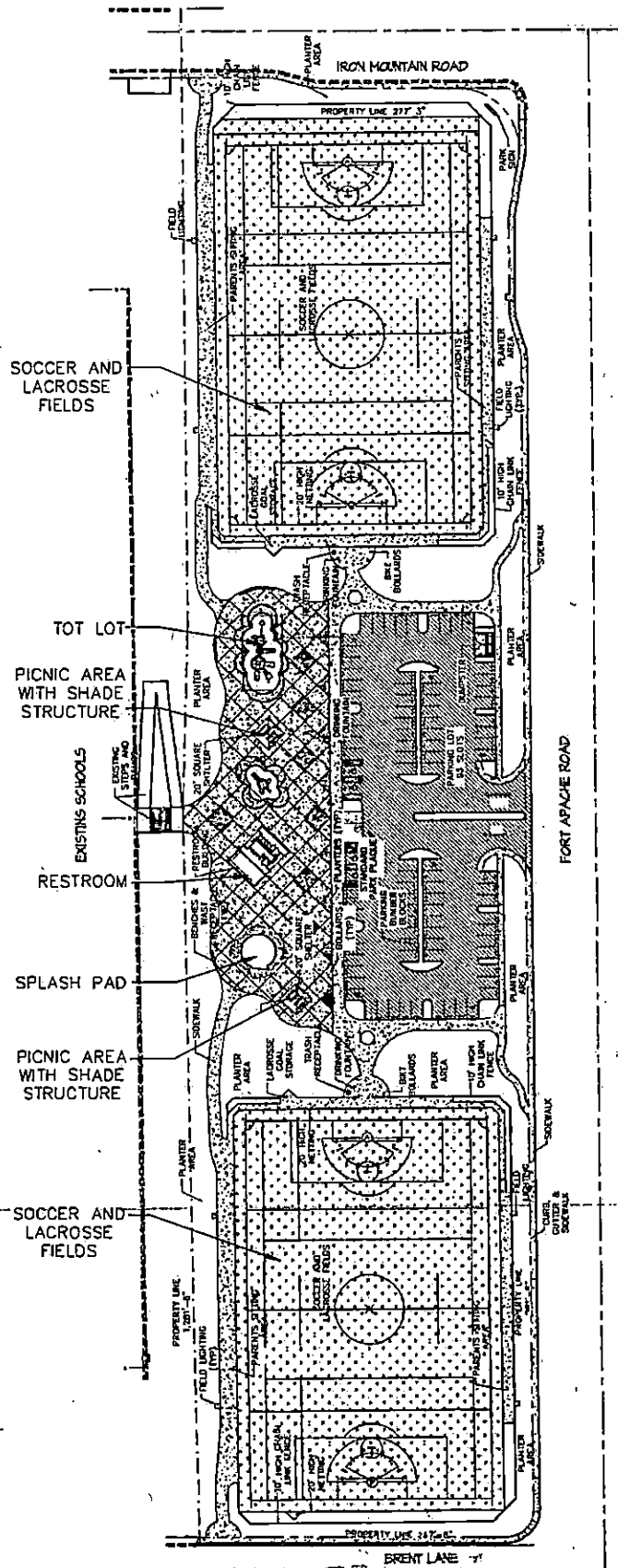
EXHIBIT F

MAINTENANCE PLAN FOR ALL PRIVATELY MAINTAINED PARKS, FACILITIES AND OTHER COMMON AREAS

1. The Plan for Maintenance of Public and Common Areas (the "Plan") must be approved by the City and must contain provisions that outline the proposed standards and level of maintenance and/or frequency of maintenance to be provided with respect to:
 - a) Common area landscaping and sidewalks;
 - b) Parks, trails, paseos, open spaces, and other recreational areas and the related Required Facilities described in the Park Agreement;
 - c) Temporary and/or interim drainage facilities including riprap lined channels and natural arroyos as determined by the approved Master Drainage Study, but excluding all temporary detention basins identified in the Master Drainage Study;
 - d) All landscaping and landscaping appurtenances located within City- dedicated public rights-of-way.
2. The Plan will include provisions for maintenance of common area lighting and for walls and fences located within common areas, but excluding any walls or fences located on an individual unit or lot.
3. The Plan will include provisions for periodic inspection, maintenance and repair of the improvements in such a manner and with such frequencies so as to maintain the improvements to prevent deterioration, to avoid unsightliness, and maintain the aesthetic appearance, the function, the safety and look of the improvements as originally intended. Any significant deviation from those standards may be implemented only after consultation with and the approval of the City. The required levels of maintenance and repair shall be defined for the following components, including, without limitation:
 - a) Requirements for maintenance of all the following items in a healthy, safe and aesthetically acceptable condition:
 - Non-Sports Field Turf (All allowable types)
 - Sports Field Turf (All allowable types)
 - Landscape and planting components, trees, shrubs, groundcover, etc. (All allowable types)
 - Color plantings (All allowable types)
 - b) Requirements for maintenance of all the following items in an operable, healthy, safe and aesthetically acceptable condition:
 - Irrigation and all associated components
 - Playground equipment
 - Exercise or Par-Course equipment
 - Picnic Areas, including all appurtenances in the area
 - Shade Structures
 - Water features, including all splash pads, fountains, drinking fountains
 - Skate park areas, including all appurtenances
 - Restroom facilities
 - Dog park areas, including all appurtenances

- Lighting (All allowable types)
 - Sports Courts (All allowable types)
 - Walkways, pathways and roadways, with or without hardscape improvements
 - Fencing, walls and gates (All allowable types)
 - Signage (All allowable types)
 - Amenities, including all benches, trash receptacles, trash dumpsters and picnic tables
 - All parking lot or other paved areas
4. The Plan will include a provision that the Plan can be amended by the governing board of the Master Home Owners Association ("HOA") but only with the written consent of the City.
5. The Plan will include a provision that, in the event the Master HOA fails to maintain any or all of the improvements in accordance with the provisions of the Plan, the City may exercise its rights under the declaration, including the right of the City to make assessments for costs incurred by the City in maintaining the improvements, which assessments shall constitute liens against the Property and individual lots within subdivisions which may be executed upon and which shall have the same priority as liens for real estate taxes.

EXHIBIT G
TO THE KYLE CANYON PARKS AGREEMENT
CONCEPTUAL LAYOUT FOR INDIAN HILLS PARK DESIGN



R-PDS

CONCEPTUAL LAYOUT FOR INDIAN HILLS PARK 11 ACRES(±)

NTS

EXHIBIT E

**TO THE KYLE CANYON DEVELOPMENT AGREEMENT
DEVELOPER SPECIAL IMPROVEMENT GUIDELINES**

5/1/2006 7:33:48 AM

JoAnn Crolli

City of Las Vegas

Page 2

CITY OF LAS VEGAS

DEVELOPER SPECIAL IMPROVEMENT DISTRICT GUIDELINES



December 2, 1992

TABLE OF CONTENTS

CITY OF LAS VEGAS
Developer Special Improvement District Guidelines

	Page
Eligible Improvements	1
Regional Improvements	1
Public Ownership Requirements	2
Benefit	2
Subdivision Improvements	2
Size	2
Environmental Matters	2
Development	2
Property Owner Experience	3
Financing Completion; Equity	3
Land Use	3
Water, Sewer, and Other Utilities	3
Other Permits	3
Assessment Bonds and Bond Security	3
Primary Security	3
Reserve Fund	4
Appraisal Valuation	4
Additional Security	5
Payment of Assessments; Capitalized Interest	5
Absorption Study	5
Floating Rate Bonds	5
No Pledge of General Fund or Taxing Power	5
Bond Underwriting Commitment	6
Consultants	6
Expenses	6
Project Acquisition	6
Cost Overruns	6
Procedure	6
Pre-Application Meeting	7
Application	7
Council Approval	7
Security for Costs	7

CITY OF LAS VEGAS

Developer Special Improvement District Guidelines

Under chapter 271 of Nevada Revised Statutes (NRS), the City is authorized to acquire street, sidewalk, water, sewer, curb, gutter, flood control and other publicly-owned "infrastructure" improvements that benefit new development by the creation of a special improvement district as specified in NRS 271.265. The purpose of these guidelines is to outline the circumstances under which the city will consider this type of financing for new developments involving one or a small number of private property owners who intend on developing their property for residential, commercial, industrial, or other beneficial use.

These guidelines apply to all assessment districts financed under NRS 271.710 through 271.730 and to all other assessment districts which both involve 15 or fewer property owners and involve properties 80% or more of which are unimproved, unless 50% or more of the cost of the project proposed to be funded is being funded from a governmental source other than special assessments or the proceeds of special assessment bonds (e.g., RTC).

The City Council reserves the right, on a case by case basis, to impose additional requirements or waive specific requirements listed herein. Such waived requirements shall be noted in the approval of any petition together with a finding that the deviation from this policy is in the best interest of the City. Additional requirements shall be noted in the approval.

A. Eligible Improvements.

1. Regional Improvements. The City will consider financing only regional infrastructure improvements i.e., regional improvements are those streets, storm drains, water systems, sewer and other utilities, which will provide benefit to the entire project. Such projects are those with respect to which the City Council has made a finding of regional benefit which benefit the general area in which the development is located as opposed to improvements which exclusively benefit a particular subdivision. (Only the portion of the total cost that benefits the special improvement district will be assessed.) Thus, an arterial street or highway or major sewers, storm drains and water lines which provide benefit to the entire project and are found to be of general or regional benefit by the council, would be considered for financing.

2. Public Ownership Requirements. Only publicly owned infrastructure is eligible for financing. Privately-owned improvements such as electric, gas, and cable television improvements, streets or roads which are not dedicated to the City, and private portions of other improvements, such as water and sewer service lines from the property lines to the home or other structure are not eligible for financing.

3. Benefit. The improvements proposed to be constructed must benefit the property assessed by an amount at least equal to the amount of the assessment.

4. Subdivision Improvements. The City will not consider financing "subdivision" or "in-tract" improvements, that is, improvements within a subdivision that benefit only the land within a subdivision such as neighborhood streets.

5. Size. Generally, the City will not consider stand alone assessment districts which involve less than \$2,500,000.

B. Environmental Matters.

1. A Phase 1 environmental assessment (hazardous waste assessment) on the property to be assessed, property on which the improvements are to be located and on any property dedicated to the City, must be provided by the property owner prior to the bonds being issued by the City. The property owner must also provide the City with an indemnification agreement in a form acceptable by and provided by the City, promising to indemnify the City against any and all liability and/or costs associated with any environmental hazards located on property assessed. With respect to abating environmental hazards that are located on property on which improvements financed with the assessment district are proposed to be located or on any property dedicated to the City, the City and the property owner will reach an accord before the bonds are issued. Where the Phase 1 assessment indicates that there may be an environmental hazard on any of the assessed property, the property owner will be required to abate the problem or to post security for environmental clean up costs prior to the City proceeding with the district. The environmental assessment shall be performed by an environmental engineer acceptable to the City.

2. The developer must undertake all steps required by the "Habitat Conservation Plan Compliance Report" or other future federal requirements in the project area and other areas owned by the same developer which are used in connection with the project.

C. Development.

1. Property Owner Experience. The property owner must demonstrate to the City that it has the expertise to develop the property involved in the assessment district. In order to demonstrate its ability to develop, the property owner should furnish the City with the following: (a) its last three years prior audited financial statements, (b) a list of prior development of similar or larger size which the property owner has completed, and (c) a list of references consisting of the names of officials of other political subdivisions in which the property owner has completed similar or larger size developments. The City will accept, in place of financial statements stated in (a) above, a comfort letter from a mutually acceptable CPA firm indicating for the past three

(3) years: (1) that a minimum level of net worth, acceptable to the City, has been maintained; (2) whether or not there have been any material adverse changes in operations; and (3) whether or not there have been any exceptions in the accountant's opinion letter on the property owner's financial statements. If this alternative is utilized, the property owner shall also provide such other financial information as the City and its consultants request.

2. Financing Completion; Equity. The property owner must provide the City with its plan for financing the development to completion and advise the City of the amount of equity it has invested in the development.

3. Land Use. The proposed development must be consistent with the City's General Plan. The property owner must demonstrate that it reasonably expects to obtain the required discretionary development permits (e.g. subdivision) in sufficient time to proceed with the development in completion as proposed. Proper zoning must have been obtained for the development.

4. Water, Sewer, and Other Utilities. The property owner must provide "will serve" or similar letters from the entities providing water, sewer and other utility (e.g., electricity, gas, telephone) services to the development stating that capacity is then in existence and reserved (otherwise to be made available) for the development in a sufficient quantity for the development to proceed to completion as proposed.

5. Other Permits. The property owner must demonstrate that there are no significant permitting requirements (i.e. permitting requirements which could result in substantial delay or alteration in the project as proposed, e.g., wetlands permits, archeological permits, etc.) applicable to the project or other governmental impediments to development which have not yet been satisfied and which are required to be satisfied for the development to proceed to completion as proposed.

D. Assessment Bonds and Bond Security.

1. Primary Security. The primary security for bonds will be the assessment lien on the land proposed to be assessed. A preliminary title report indicating that the petitioners are the owners of all of the assessed property must accompany the petition. The City may also require title insurance on a case by case basis.

2. Reserve Fund. A reserve fund in an amount equal to the lesser of one year's principle and interest on the bonds or 10% of the proceeds of the bonds must be funded at the time bonds are issued.

3. Appraisal Valuation. The property owner must obtain and provide to the City an appraisal of the property which will be assessed which in the case of the appraised value of the property "as is" (prior to further subdivision and without considering the installation of the improvements) is at least equal to the amount of bonds proposed to be issued, and that the value of the property after the improvements financed with the assessment bonds are installed is at least three (3) times the amount of the bonds proposed to be issued. The appraiser must be acceptable to the City.

4. Additional Security. The property owner must demonstrate to the City that there is not significant financial risk to the City in issuing the bonds. If the City determines that it is not adequately protected by the security that is described in section D.1, 2, and 3 above, the City can require additional security. This additional security can be satisfied in one or a combination of the following ways:

(a) Providing a source of security that is acceptable to the City Council and the property owner. The determination of the acceptability of the security shall be discussed with the property owner on a case by case basis.

(b) Providing an irrevocable letter of credit drawn on an acceptable bank in a form and an amount and with a term acceptable to the City.

(c) Pledging marketable securities in which form the City is permitted to invest City funds pursuant to Chapters 355 and 356 of NRS and which are acceptable to the City (e.g., U.S. Treasury obligations) and in an amount that is acceptable to the City. The City must obtain the sole first priority security interest in the pledged securities, and those securities must be held by the City or a City Agent. Interest paid on the pledged securities, if there is not default in paying the assessment, will be paid to the owner of the securities.

A pro-rata portion of the foregoing additional security will be released with respect to any parcel assessed (1) which has been improved in any manner if the appraised value (as determined by an appraiser acceptable to the City) of the parcel is 5.0 or more times the amount of the unpaid assessment on such parcel or (2) on which a substantial improvement (e.g., a home or commercial building) has been completed if the parcel has a size of one acre or less or (3) to the extent that property is conveyed to one or more third-party property owners, then a proportionate amount of the foregoing additional security shall be released with respect to such conveyed property so long as such conveyed property does not exceed, in the aggregate, thirty percent (30%) of the entire property included within the district; provided, however, that any individual parcel conveyed to each such third-party property owner shall have a minimum value-to-lien ratio of 3:1.

5. Payment of Assessments: Capitalized Interest. The assessments shall be payable over not more than 20 years in substantially equal semiannual installments (excluding variable rate bonds with regards to equal payments) commencing within one year of the levy of assessments. The City will allow not more than two years of interest or the maximum permitted under federal tax laws, whichever is less, to be capitalized.

6. Absorption Study. The property owner must provide the City with funds with which to have an expert to prepare an absorption study. The City and property owners shall mutually agree upon the expert who is to prepare this study illustrating the economic feasibility of the project based upon supply and demand trends and estimated conditions in the market area for the proposed product mix. Provided, however, that if the appraiser of the real property for the project conducts his or her own absorption analysis, such absorption study may be accepted in lieu of this requirement.

7. Floating Rate Bonds. The City will consider applications for floating rate assessment bonds only if those bonds and the assessments underlying those bonds automatically convert to a fixed interest rate at or before the time the initial property owner sells property, regardless of whether the sale is wholesale sale to a merchant builder or a developer or a sale to a potential homeowner. Floating rate bonds must be secured by a letter of credit issued by a bank acceptable to the City.

8. No Pledge of General Fund or Taxing Power. The City will not pledge its general fund or taxing power to bonds.

9. Bond Underwriting Commitment. The property owner must demonstrate to the City and its financial advisor that bonds proposed to be issued for the financing are saleable. Prior to the time the City commences work on the assessment district, the property owner must provide the City with a letter from a reputable underwriter or bond buyer, acceptable to the City, which states that the underwriter has completed a due diligence review of the project and the property owner and believes that the bonds are marketable at an interest rate acceptable to the property owner based on then prevailing market conditions and that is willing, subject to reasonable conditions precedent, to contract with the City to underwrite the bonds on a best efforts basis, or that the bond buyer has completed a due diligence review of the project and the property owner and intend to acquire the bonds at an interest rate which the bond buyer and property owner agree is acceptable and that it is willing, to contract with the City to so acquire the bonds.

E. Consultants. The City will permit the property owner to choose the consulting engineers and underwriter provided that the entities chosen are acceptable to the City. The City will select the assessment engineer, project management engineer, its financial consultants, bond counsel and bond trustee. The payment of all fees and expenses of these consultants (selected by the City) shall be the responsibility of the property owner; however, these consultants will be responsible to, and will act as consultants to, the City in connection with the district.

F. Expenses. The property owner will be required to pay out of its own pocket all of costs of the project prior to the time bonds are issued, including the costs of consulting engineers, assessment engineers, project management engineers, underwriters, the City's financial consultants, the City's bonds counsel, the cost of preparing the appraisals, absorption study, environmental review and other matters listed above. These items will be eligible for reimbursement from bond proceeds if the bonds are ultimately issued; however, the property owner must agree to pay these costs even if bonds are not issued. At the time of application, the City will provide an estimate for these expenses in order to enable the developer to more precisely anticipate costs associated with the process.

G. Project Acquisition. The City will acquire completed projects after final inspection by the City, an audit by the City assessment engineer and City staff, and acceptance by the City. Alternatively, the City will expend bond proceeds through a City-established progress payment system on uncompleted projects utilizing a construction payment management system. If this alternative is used, performance and payment bonds from a bonding company acceptable to the city, each in an amount at least equal to 100% of the cost of the project, and otherwise in such form as is approved by the Department of Public Works and the City Attorney must be provided to the City and must each indicate that the City is a beneficiary of those bonds. Additional construction security, as determined appropriate by the Department of Public Works and City Attorney, may be required.

H. Cost Overruns. The property owner must agree to fund all project costs which exceed the amount available from the proceeds of the bonds issued for the project. The City will not commit to issue additional bonds or otherwise provide funding for any such cost overruns.

I. Procedure.

1. Pre-Application Meeting. Initially, the property owner shall schedule a meeting with such representatives of the City as are designated by the City Manager to review the proposed development to discuss whether the development is one which may be eligible for financing under these guidelines.

5/1/2006 7:38:17 AM

JoAnn Crolli

City of Las Vegas

Page 10

2. Application. If the property owner decides to proceed after the initial meeting, all owners of record of property in the proposed district must sign a petition for the district and file the petition and an application which contains sufficient information and exhibits to demonstrate that the proposed district will comply with parts A-H of these guidelines. Copies of the petition and application must be filed with the office of the Director of Finance and the office of the Director of Public Works.

3. Council Approval. If after an initial review, the City staff believes the application satisfies parts A-H hereof, an item will be placed on the Council's agenda authorizing negotiations with respect to the proposed project. If this item is approved by the Council, it is anticipated that staff will be authorized to begin negotiating the particulars of the financing with the property owner and other appropriate parties.

4. Security for Costs. Prior to entering negotiations, the property owner must post a letter of credit, surety bonds, cash or other acceptable form of security for payments of the costs described in F above in an amount determined by the Director of Finance. The interest on the security will be paid to the developer. The City shall invest such security according to NRS 355 and 356.

EXHIBIT F
TO THE KYLE CANYON DEVELOPMENT AGREEMENT
RESIDENTIAL LAND USE TABLE
AND
PLANNING AREA MAP



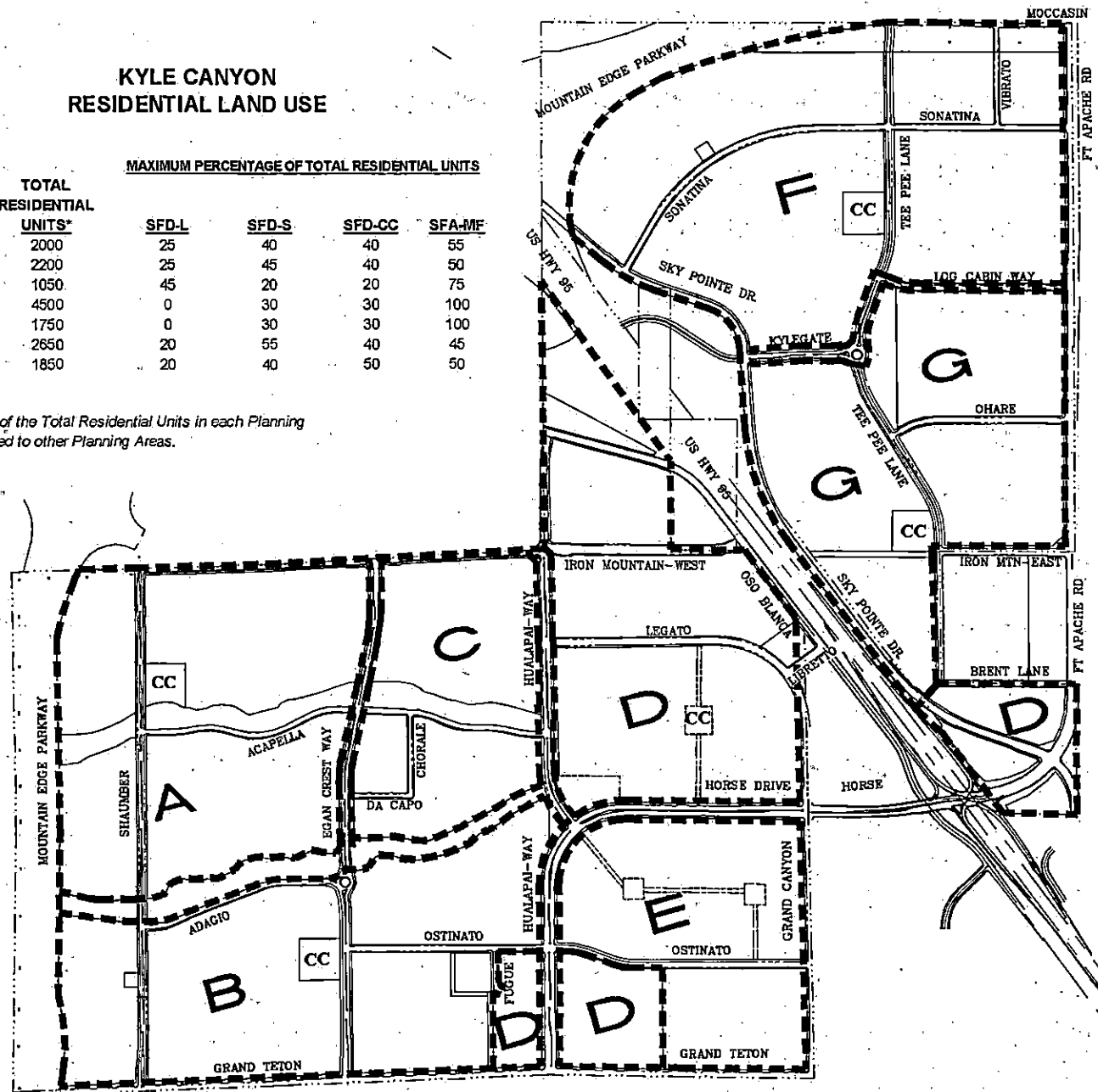
LEGEND

- A** PLANNING AREA
- CC** COMMUNITY CENTER
- PLANNING AREA
- SFD-L** Single Family Detached - Large Lot
Estate Lot
Standard Lot
- SFD-S** Single Family Detached - Small Lot
Compact Lot
- SFD-CC** Single Family Detached - Court and Cluster
Green Court
Paseo Court
Cluster Single Family
- SFA-MF** Attached Single Family and Multi-family
Mansion Home
Townhome
Tuckunder Multi-Family
Embedded Garage Multi-Family

KYLE CANYON RESIDENTIAL LAND USE

PLANNING AREA	TOTAL RESIDENTIAL UNITS*	MAXIMUM PERCENTAGE OF TOTAL RESIDENTIAL UNITS			
		SFD-L	SFD-S	SFD-CC	SFA-MF
A	2000	25	40	40	55
B	2200	25	45	40	50
C	1050	45	20	20	75
D	4500	0	30	30	100
E	1750	0	30	30	100
F	2650	20	55	40	45
G	1850	20	40	50	50

*Up to 10 percent of the Total Residential Units in each Planning Area may be shifted to other Planning Areas.



KYLE CANYON PLANNING AREAS AND RESIDENTIAL LAND USE

EXHIBIT G

TO THE KYLE CANYON DEVELOPMENT AGREEMENT

DRAINAGE, TRAFFIC AND WASTEWATER

MASTER STUDIES

[ON DISK]

EXHIBIT H

TO THE KYLE CANYON DEVELOPMENT AGREEMENT

NORTHERN BELTWAY

SECTION 1 LAND

NORTHERN BELTWAY

OWNER	ACRES
FOCUS - BELTWAY	56.1

Note: Acreages are approximate

BLM PROPERTY

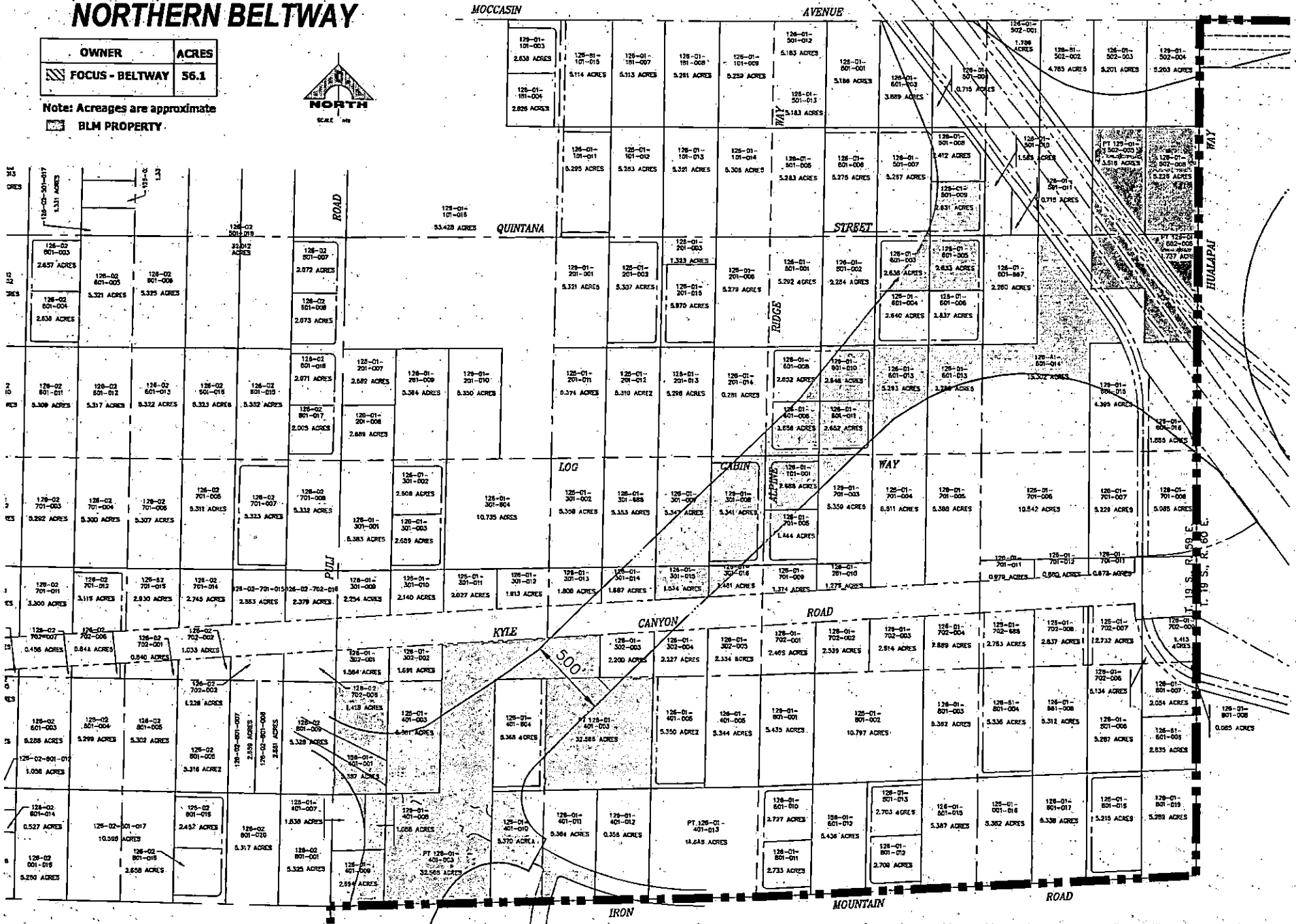


EXHIBIT H - SECTION 1 LAND

EXHIBIT I
TO THE KYLE CANYON DEVELOPMENT AGREEMENT
NORTHERN BELTWAY
PROVIDENCE LAND

NORTHERN BELTWAY

KYLE CANYON MASTER PLANNED COMMUNITY

GRAND TETON

LEGEND



NORTHERN BELTWAY RIGHT OF WAY
AFFECTING PROVIDENCE PROPERTY



CLIFFS EDGE, LLC HOA COMMON AREA PARCEL
AFFECTED BY NORTHERN BELTWAY

126-13-
117-077

126-13-
110-015

KB HOME

SHAUMBER

PROVIDENCE
MASTER
PLANNED
COMMUNITY

EXHIBIT I - PROVIDENCE LAND

EXHIBIT J
TO THE KYLE CANYON DEVELOPMENT AGREEMENT
NORTHERN BELTWAY
ON - PROPERTY LAND

NORTHERN BELTWAY

LEGEND

-  KYLE
-  NORTHERN BELTWAY DEDICATION
-  NDOT - US 95

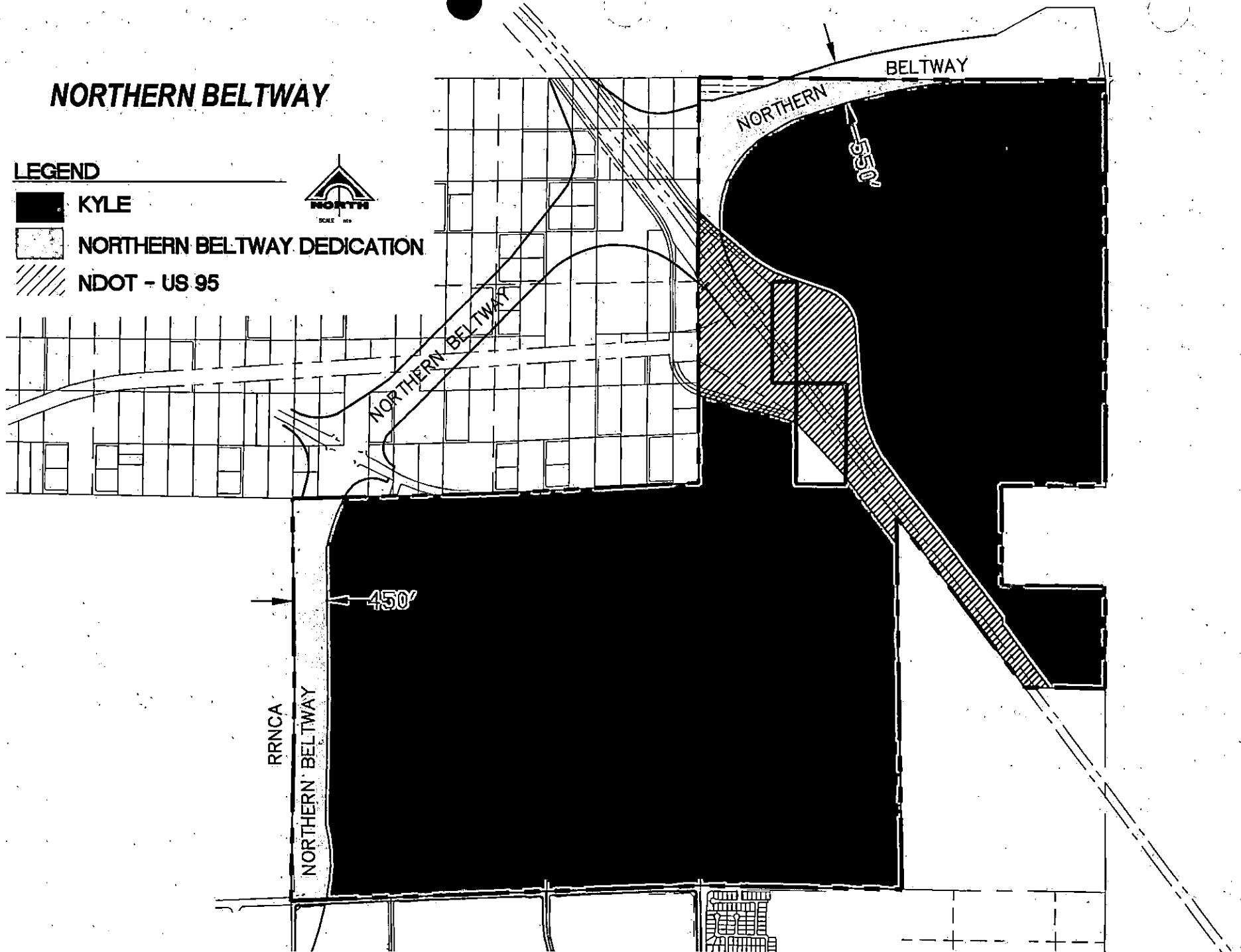


EXHIBIT J - ON-PROPERTY LAND

EXHIBIT K
TO THE KYLE CANYON DEVELOPMENT AGREEMENT
NORTHERN BELTWAY
ROW

LEGEND



**KYLE CANYON
DEVELOPMENT STANDARDS
AND
DESIGN GUIDELINES**

("DESIGN GUIDELINES")

May 8, 2007

KYLE CANYON DESIGN GUIDELINES

Table of Contents

	Page No.		
Section 1 – Introduction	1	5.2 Residential Lot Criteria	132
1.1 Purpose and Intent	1	5.3 Neighborhood Landscaping Requirements	137
1.2 Definitions	1	5.4 Multi-Family Parcels	138
1.3 Responsibility of Review	1	5.5 Community Lighting, Telecommunication	
1.4 Housing Mix	1	Facilities and Public Utilities	139
1.5 Conservation and Preservation	1	5.6 Wall Standards	142
1.6 Environmental Compatibility	2	5.7 Community Irrigation Standards	157
Section 2 – Community Design Concept	5	Section 6 Street System, Drainage &	
2.1 Diverse Land Uses	5	Infrastructure Development	168
2.2 Open Space	6	6.1 Roadway Classifications	168
2.3 Pedestrian and Vehicular Circulation	10	6.2 Traffic Study	169
2.4 The Town Center and Town Center Park	10	6.3 Street Off-sets	169
Section 3 – Neighborhood Design Guidelines	11	6.4 Drainage	169
3.1 Overall Structure and Design	11	6.5 Engineered Drawings	170
3.2 Neighborhood Street Layout and Connectivity	11	Section 7 – Color	280
3.3 Residential Parcel Type Guidelines	28	7.1 Community Color Program	280
3.4 Edge Conditions	31	7.2 Color Design Fan Decks	280
3.5 Residential Building Type Standards	34	7.3 Color & Materials – Selection & Application	280
Section 4 – Architectural Guidelines	71	7.4 Color Plotting Criteria	282
4.1 Overview and Goals	71	7.5 Color Package Evaluation	282
4.2 Single Family Architectural Standard	71	7.6 Color Package Submittal	282
4.3 Single Family Detached Architectural Criteria	74	Section 8 – Permitted Uses	316
4.4 Multi Family Architectural Criteria	85	8.1 Generally	316
4.5 Architectural Styles	97	8.2 Definitions	332
Section 5 – Landscape Guidelines	131	8.3 Conditional Use Standards	350
5.1 Residential Streetscapes Criteria	131	8.4 Special Use Standards	359
		8.5 Temporary Use Standards	363
		Section 9 – Design Review	364
		9.1 Introduction	364

9.2 I _ ements Requiring Review	364
9.3 Master Developer Review	364
9.4 Submittal Requirements	364
9.5 Design Review and Approval Process	374
9.6 Administration	374
Section 10 – Glossary	376
Section 11 – Exhibits	378
A. Water Smart Home Standards As of July 1, 2006	
B. 2006 International Energy Conservation Code As Adopted by the City of Las Vegas	

Section 1

Introduction

1.1 PURPOSE AND INTENT

Kyle Canyon is a new master planned community in the northwestern portion of the Las Vegas Valley. The location of Kyle Canyon is shown on Figure 1-1. These Design Guidelines provide the standards for, among other things, intensity and type of use, residential density, building design, layout, configuration, height, coverage, spacing, bulk and setback requirements, commercial uses and signage, open space and landscaping, on-site vehicular and pedestrian circulation and parking, urban design elements and features, and site amenities for development within Kyle Canyon.

An extraordinary amount of time, resources, and capital will be expended to develop infrastructure, landscaping and other site improvements at Kyle Canyon that are integral to the creation of a strong sense of identity. The Design Guidelines are intended to provide a vehicle to protect and maintain the long-term quality and value of the community. Accordingly, the Design Guidelines apply to all construction within Kyle Canyon; residential and non-residential, including new construction, remodeling and additions, landscaping, signage, and neighborhood amenities.

Where noted, the sketches and graphic representations contained herein are for conceptual purposes only, and are to be used as general visual aids in understanding the basic intent of the guidelines. They are not meant to depict any actual lot or building design.

1.2 DEFINITIONS

Certain defined terms that are used throughout the Kyle Canyon Design Guidelines are described in the Glossary in Section 10 at the end of this document.

1.3 RESPONSIBILITY OF REVIEW

The Master Developer's purpose in plan review is to ensure that each project meets the intent of the Design Guidelines and Development Declarations. All projects within Kyle Canyon require review and approval by the Master Developer prior to submittal to the City of Las Vegas or any other public agency.

1.4 HOUSING MIX

A diverse mix of land uses, housing types and densities will make up the neighborhoods of Kyle Canyon. The broad range of Residential Building Types described in Section 3.5 will all be allowed in Kyle Canyon, ranging from high density single family attached and multi-family stacked residential in an urban Mixed-Use environment to more "traditional" single family detached homes. Some homes will be alley loaded or in clusters or surrounding green courts while others will load from the front with garages de-emphasized by recesses or front yard porches and courtyards. The intent of the variety in Residential Building Types is to allow a wide segment of the diverse, growing population of the City of Las Vegas to find a home that serves its needs. Supplementing this product variety are the architectural styles of Kyle Canyon, which will allow for a high quality of streetscape and individuality of homes with a common thread of cohesion.

1.5 CONSERVATION AND PRESERVATION

Conservation and preservation of natural resources and environmentally sensitive areas is a key component of the land plan for Kyle Canyon. It is a fundamental tenet of design in Kyle Canyon that residential quality of life is greatly increased by including accessible

open space as a usable and accessible amenity. Reservation of open space will occur throughout Kyle Canyon in the form of:

- The natural arroyos that are a dominant landform and valuable natural feature running through the site as shown on Figure 2-3.
- Public gathering spaces such as the Town Center Park shown on Figure 2-3.
- Passive and active parks throughout the development.
- Extensive streetscapes with drought tolerant plantings.
- An integrated and connected system of pedestrian, bicycle and natural trails running along streets and through natural open spaces as shown on Figure 2-3.

1.6 ENVIRONMENTAL COMPATIBILITY

Kyle Canyon will be responsive to the existing environment and the future needs of the area. Planning major circulation systems and neighborhoods to respect the topography of the site will allow pathways throughout Kyle Canyon to connect neighborhoods to each other, open spaces, the arroyos and Community park areas. These pathways make pedestrian and vehicular traffic compatible with each other, while tying the natural features of the site to everyday life at Kyle Canyon.

The following Principles of Green Building will direct and inform all development within the community. Kyle Canyon will meet or exceed the following:

SITE AND AREA ENHANCEMENT

- Reserve selected natural open space areas for active and passive recreation, visual relief, habitat preservation, nature observation, hiking and biking, and flood control
- Retain the natural arroyos that are an important landform feature of the area

- Develop pedestrian, bicycle, and interpretive trails along the arroyos
- Provide an equestrian trail along the right-of-way of Grand Teton Boulevard
- Provide for outdoor living spaces such as courtyards, porches, balconies and miradors
- Develop night sky preservation standards for street lighting and outdoor lighting for buildings, focusing beams down toward the streets and buildings, and minimizing stray lighting while still providing adequate lighting for pedestrian and vehicular convenience.

ENERGY EFFICIENCY

- Ensure that all residences are energy efficient:
 - Ensure that all home designs are independently verified by a licensed Mechanical/Electrical/Plumbing Engineer to be in compliance with the 2006 International Energy Conservation Code as adopted by the City of Las Vegas.
- Provide as an option to homebuyers, a total fluorescent lighting system with electronic ballasts, and indoor motion activated lighting
- Provide information and referrals to homebuyers on the purchase and installation of solar energy systems, including photo-voltaic roof tiles.
- Select and locate deciduous shade trees in front yards, wherever practical, to optimize shading of southerly and westerly exposures of homes
- Provide lighter colors of roofing as described in Section 7 to reduce solar heat gain
- Builders will offer consumers, as an option, appliances that meet Energy Star eligibility requirements.
- Use external shading devices where feasible to minimize unwanted heat gain such as trellises, roof overhangs, awnings, shade screens, and low-e window coatings
- Properly seal and insulate ducts

- Select energy efficient heating/cooling equipment (Minimum SEER 13) and appliances
- Require programmable thermostats
- Construct at least one community center in accordance with Leadership in Energy and Environmental Design (LEED) Certification requirements (Silver Level).

IMPROVED INDOOR AIR QUALITY

Materials, paints and coatings used in the construction process can be selected to improve the indoor air quality of new homes. Bearing in mind that consumers are cost conscious and that certain materials, paints and coatings may not be as durable or others more commonly used in the building process, the following shall be implemented:

- Builders will offer consumers, as an option, a package of paints and coatings for the inside of residences that meet or exceed the VOC and chemical component limits of Green Seal requirements
- Builders will offer consumers, as an option, carpeting in residential buildings that meets the Carpet and Rug Institute Green Level Indoor Air Quality Test Program
- Builders will offer consumers, as an option, alternative formaldehyde-free insulations

REDUCE WATER USAGE

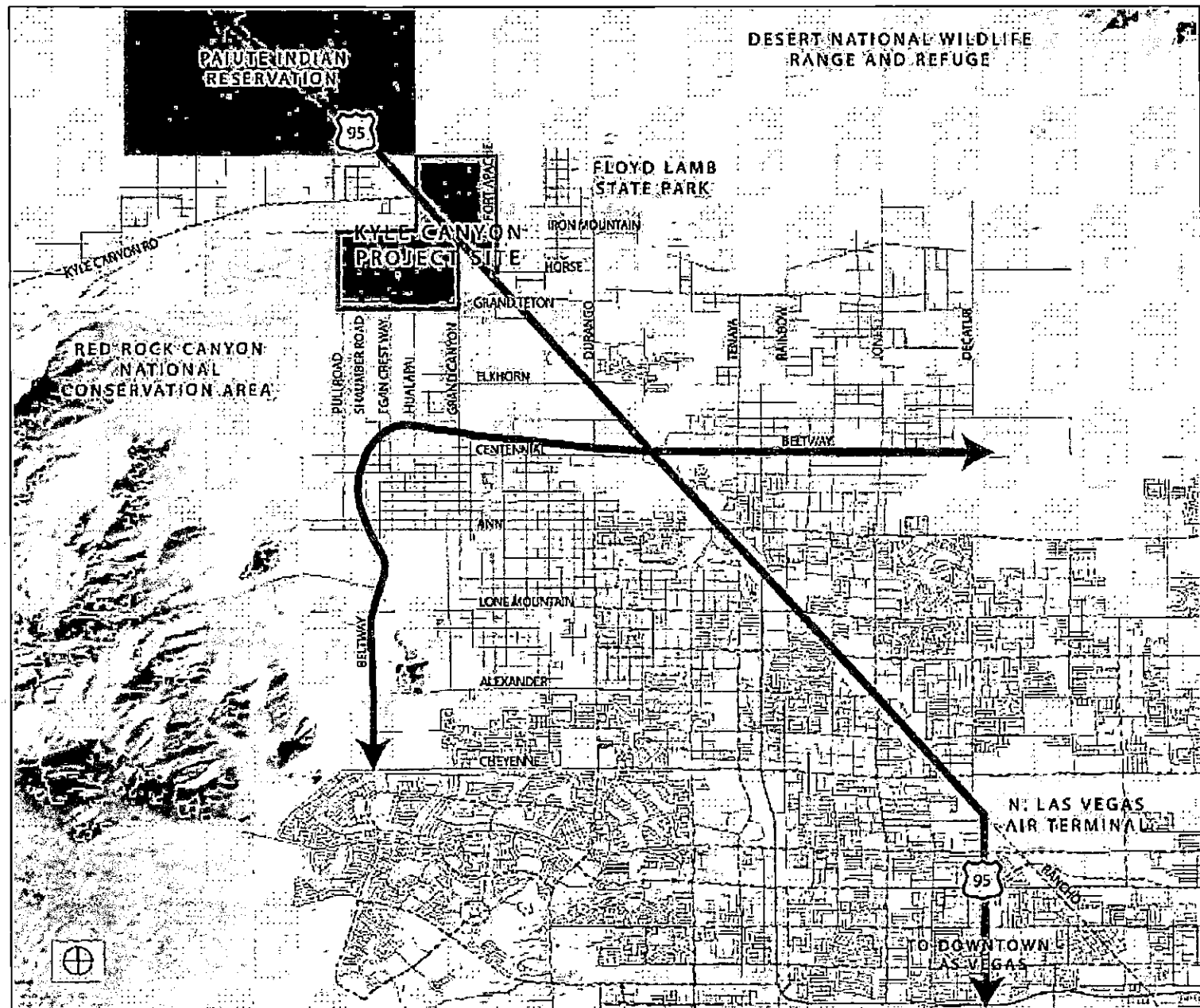
- Cooperate with the Southern Nevada Water Authority to create and participate in a Water Smart Community program in which all homes and commercial structures adhere to the Authority's Water Smart standards
 - All single family residences within Kyle Canyon shall meet the Southern Nevada Water Authority's Water Smart Home Standards as they existed on July 1, 2006:
- Common area natural turf is allowed only in functional recreational areas that are at least 50' wide and the sprinkler system must meet a distribution uniformity standard of 65%

- Provide a central control irrigation system linked to an on-site weather station for natural turf multi-use fields, soccer fields, and baseball/softball fields.
- Offer evapo-transporative irrigation monitors to all homeowners as an option
- Comply with or exceed all current landscaping guidelines and drought related restrictions on water use enacted by the City and the SNWA
- Use low-flow plumbing fixtures as defined in the SNWA Water Smart Home Program
- Use a hot water recirculating system or alternate that is acceptable within SNWA Water Smart Home Program standards
- Provide desert responsible landscaping (xeriscape)
- Install and maintain a demonstration garden in conjunction with a community information center to educate homeowners on drought tolerant plants.

IMPLEMENTATION OF ENVIRONMENTAL COMPATIBILITY CONCEPTS

The Master Developer's design review procedure described in Section 9 will assure compliance with the required elements of environmental compatibility design. In addition Master Developer will require that each builder provide the Master Developer with a semi-annual report on units sold with options selected by homebuyers that enhance energy conservation, improve indoor air quality, and reduce water usage beyond minimum requirements. The semi-annual report will also include information on compliance with the Environmental Compatibility requirements of Section 1.6 and the Energy Conservation requirements of Sections 4.3.2 and 4.4.2. Compliance information will be based on inspection of five percent of the units constructed in the reporting period. Master Developer will compile aggregate information on environmental compatibility and provide reports to the City of Las Vegas.

FIGURE 1-1 [This figure is conceptual and does not necessarily accurately depict actual development]



Section 2

Community Design Concept

The central design concept behind Kyle Canyon is to create a community that is diverse in uses and residents, is walkable, and provides a strong sense of community. Kyle Canyon will be made up of a set of neighborhoods with pedestrian friendly streets and trail systems. While Kyle Canyon will have much architectural variation, its key streets and public spaces will establish a sense of continuity and shared identity. A large range of residential building types and lifestyles will be permitted within each development parcel as well as throughout the Community. Kyle Canyon's retail, employment, commercial and Mixed-Use centers will create common destinations that have a strong community and pedestrian character.

Kyle Canyon is a master planned community uniquely situated to provide the benefits of both classic suburban neighborhoods and more urban living environments, with easy access to nearby services. This spectrum of lifestyle and design choices has its roots in the sheer expanse of the site and the diverse terrain it covers.

Public areas will be a dominant feature of Kyle Canyon. The premier example of this is the Community's urban pedestrian plazas and pathways that extend through the Town Center Mixed-Use District, connecting residents with amenities and shopping.

The arroyos, which extend from the eastern edge of the proposed Mountain Edge Parkway to the Town Center Mixed-Use District, will be highlighted and enhanced as an attraction. The arroyos, community parks, open space corridors, boulevards and walkable

streets within the neighborhoods will all contribute to the high quality of the public realm.

2.1 DIVERSE LAND USES

The land use plan for Kyle Canyon (Figure 2-1) identifies the land use districts, including Neighborhood Residential, a hierarchy of commercial uses, Mixed-Use centers, school sites, open space elements, and parks. The neighborhood types range from higher density multi-family areas within the Mixed-Use Districts, through a diverse group of neighborhoods that contain attached and detached single family homes and some multi-family homes, to lower-density neighborhoods that feature mostly detached single family homes. These will incorporate a range of housing opportunities from traditional single family, through cluster and attached, to innovative green court housing and multi-family mid to high rise buildings.

The Town Center Mixed-Use District west of the Horse Drive interchange on U.S. 95 will be a walkable, Mixed-Use center of activity with residential, retail, employment, resort and office uses linked by trails and a network of streets and sidewalks.

The Neighborhood Residential and Urban Mixed-Use parcels round out the remainder of the site, with open space and school sites woven into the neighborhood fabric. The intention of these parcels is to permit a wide variety of Residential Building Types, both attached and detached and medium-density multi-family products.

A mix of different Residential Building Types is allowed in every Kyle Canyon neighborhood. Rather than segregate different residential building types, Kyle Canyon will allow the development of lifestyle options that are intermingled within the same neighborhoods.

Figure 2-2 displays the planned mix of residential building types for seven planning areas of Kyle Canyon.

2.2 OPEN SPACE

Open space areas include the arroyos, as well as community parks, larger areas for active play, a Town Center Park, boulevard green spaces, and landscape areas along major arterials. (Figure 2-3) The open space system is designed to form a continuous network, with trails throughout the Community that connect to the adjacent Red Rock Canyon National Conservation Area.

The arroyos are the backbone of the open space system. They interconnect the whole western side of the site and are connected by the trail system to the Town Center Mixed-Use District.

An interconnected system of trails and pedestrian pathways extends throughout Kyle Canyon and permits walking access to all parts of the community.

The community parks are key gathering points located throughout Kyle Canyon. These parks will incorporate a variety of facilities, including playgrounds, tot-lots, community facilities, and in some cases, swimming pools.



NORTH

SCALE: NTS

DATE: 4/24/2007

LEGEND

-  NEIGHBORHOOD RESIDENTIAL
-  TOWN CENTER MIXED-USE
-  URBAN MIXED-USE
-  COMMUNITY FACILITIES / SCHOOLS
-  PARKS / OPEN SPACE
-  PARKS / OPEN SPACE - (LOCATION AND DESIGN TO BE DETERMINED)
-  CC COMMUNITY CENTER
-  TRAILS
-  60' WIDE FORT APACHE BUFFER

NOTE: COMMERCIAL USES SUBJECT TO THE LIMITATIONS OF SECTION 8 OF THE DESIGN GUIDELINES

	ESTATE LOT	STANDARD LOT	COMPACT LOT	GREEN CORSET	PASCO CORSET	CLUSTER SINGLE FAMILY	MANSION HOME	TOWNHOUSE	TOWNHOMER MULTIFAMILY	PODIUM MULTIFAMILY	WEAVERDOR GARAGE MULTIFAMILY	LIVABLE WORK	COMMERCIAL/RESIDENTIAL MIXED-USE	COMMUNITY CENTER	UTILITIES/PUBLIC/CULTURAL INSTITUTIONS	COMMERCIAL USES *
NEIGHBORHOOD RESIDENTIAL	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
URBAN MIXED-USE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
TOWN CENTER MIXED-USE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PARKS / OPEN SPACE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
COMMUNITY FACILITIES	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

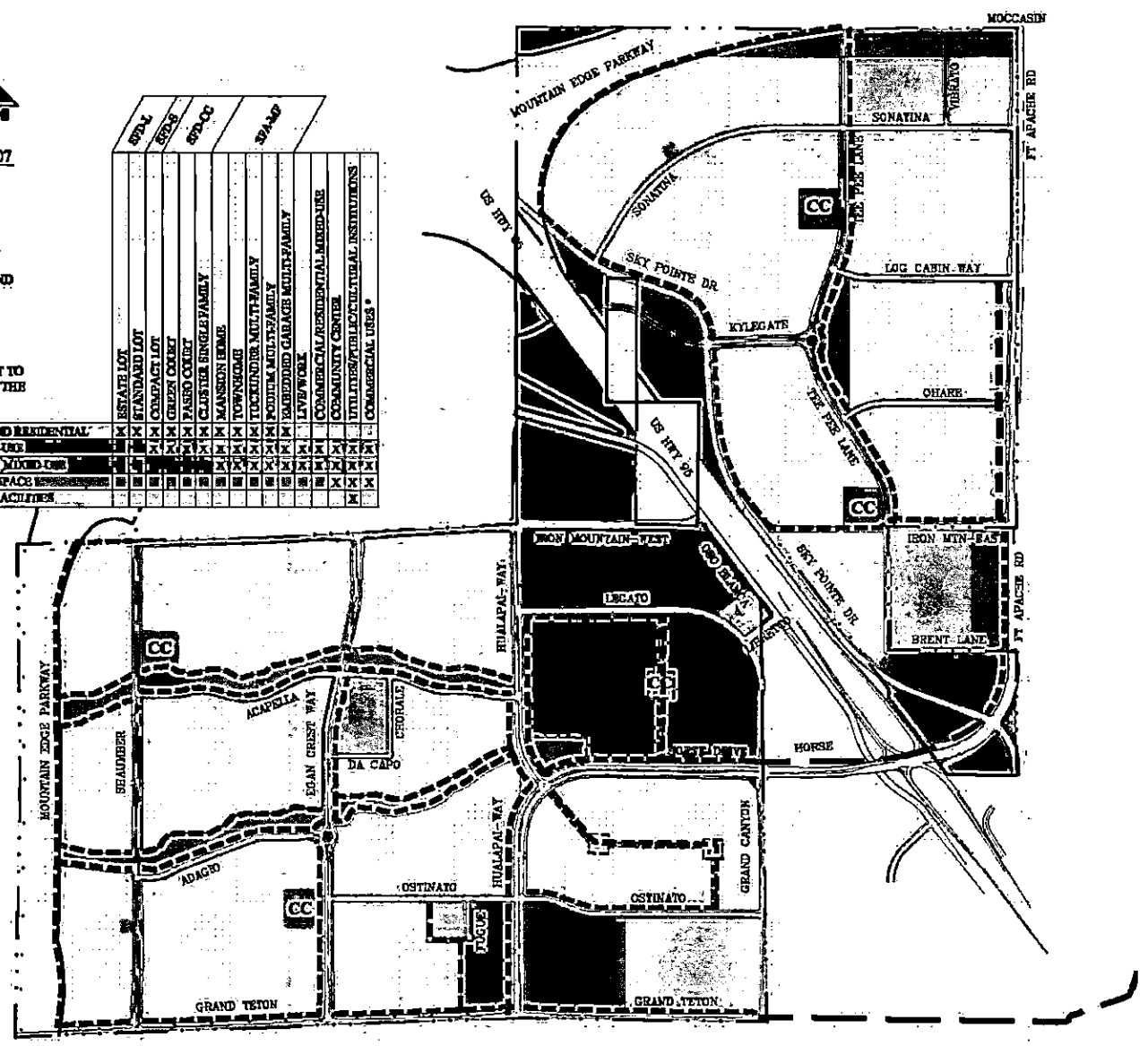


FIGURE 2-1 KYLE CANYON LAND USE PLAN



LEGEND

- A** PLANNING AREA
- CC** COMMUNITY CENTER
- PLANNING AREA**
- SFD-L** Single Family Detached - Large Lot
Estate Lot
Standard Lot
- SFD-S** Single Family Detached - Small Lot
Compact Lot
- SFD-CC** Single Family Detached - Court and Cluster
Green Court
Paseo Court
Cluster Single Family
- SFA-MF** Attached Single Family and Multi-family
Mansion Home
Townhome
Tuckunder Multi-Family
Embedded Garage Multi-Family

KYLE CANYON RESIDENTIAL LAND USE

PLANNING AREA	TOTAL RESIDENTIAL UNITS	MAXIMUM PERCENTAGE OF TOTAL RESIDENTIAL UNITS			
		SFD-L	SFD-S	SFD-CC	SFA-MF
A	2000	25	40	40	55
B	2200	25	45	40	50
C	1050	45	20	20	75
D	4500	0	30	30	100
E	1750	0	30	30	100
F	2650	20	55	40	45
G	1850	20	40	50	50

**Up to 10 percent of the Total Residential Units in each Planning Area may be shifted to other Planning Areas.*

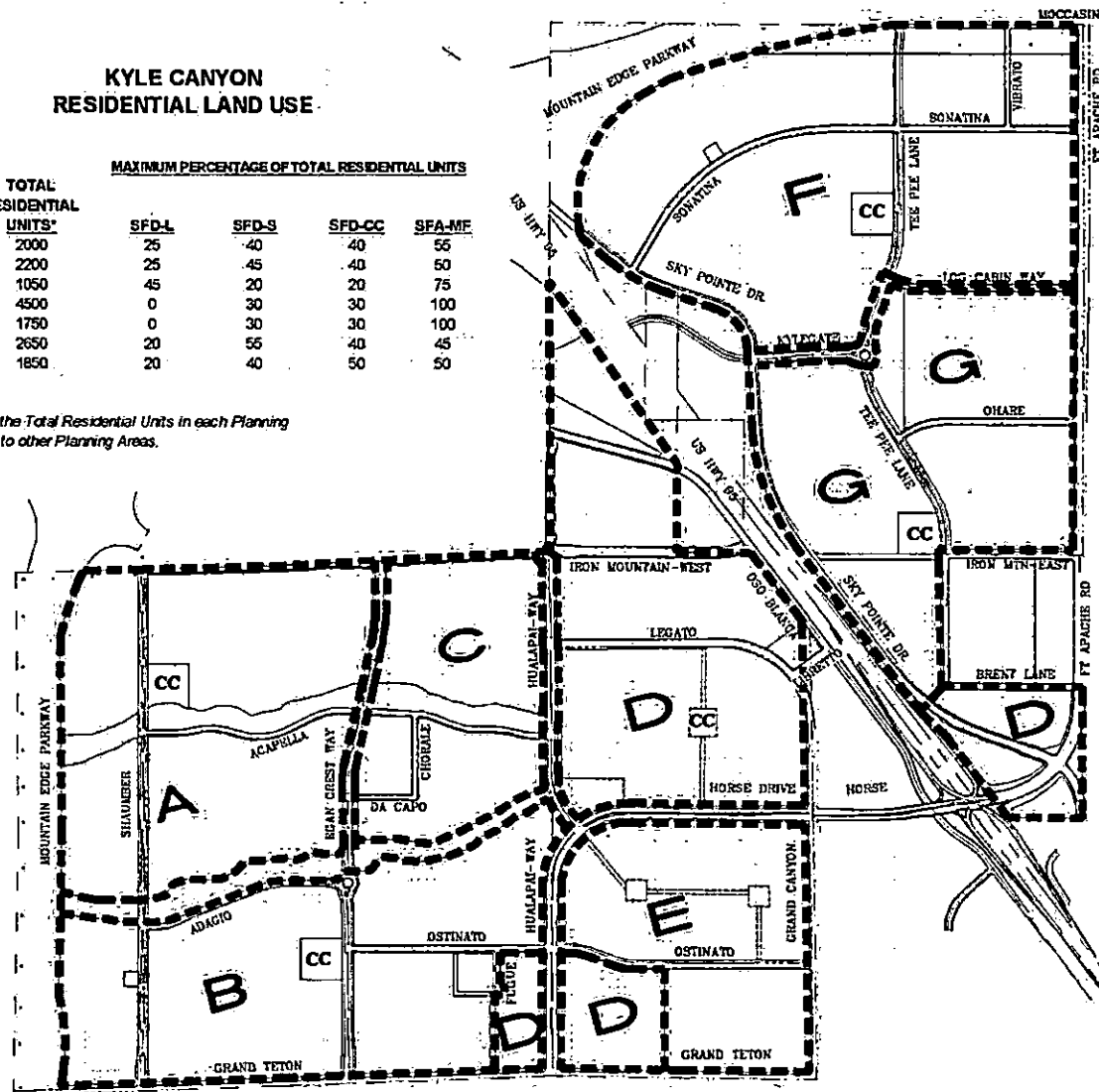


**FIGURE 2-2 KYLE CANYON PLANNING AREAS
AND RESIDENTIAL LAND USE**

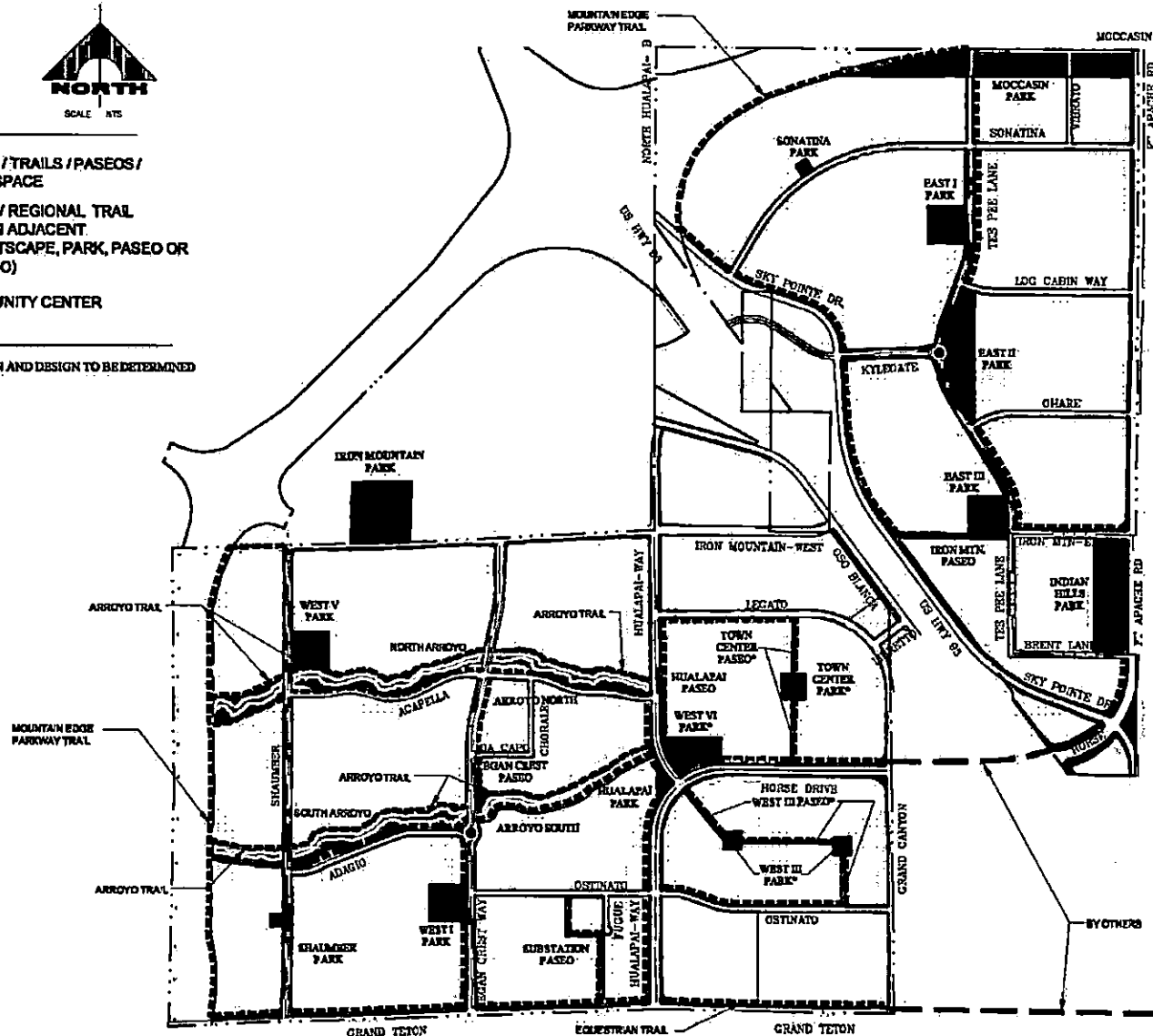
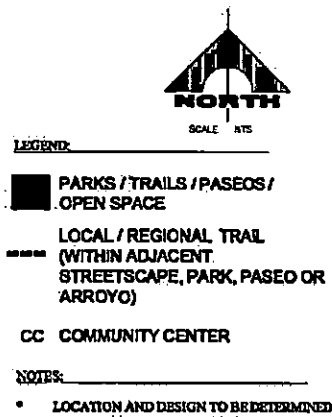


FIGURE 2-3 KYLE CANYON PARKS, TRAILS, AND OPEN SPACE PLAN

2.3 PEDESTRIAN AND VEHICULAR CIRCULATION

The design of Kyle Canyon will feature a network of walkable streets and trails to enhance access for residents and visitors and provide multiple routes to any destination to make walking pleasant and interesting.

The circulation concept for Kyle Canyon is discussed further in Section 6. The network of walkable streets at Kyle Canyon will form the connective tissue of the Community's public realm. Houses will be allowed to back-on Village Streets only in the locations within Kyle Canyon as shown on Figure 3-15. Typical streets will have sidewalks, planting strips, on-street parking, and buildings with front doors, windows and porches that face onto the street. All these features help to create an environment that encourages walking and bicycling for short local trips as well as recreation.

A hierarchy of streets of different character will ensure efficient circulation that balances the needs of all modes of travel - auto, pedestrian, bicycle and public transit.

Horse Drive and Hualapai Way will have arterial boulevard configurations which minimize their impact on pedestrians while preserving their capacity to accommodate higher traffic volumes. In order to accommodate greater traffic flows, driveways from individual homes will not be permitted on certain arterial and collector streets, which are identified on Figure 3-15; instead, garages along these streets will be accessed from alleys or side streets and homes will either front or side onto these arterial and collector streets.

Secondary circulation routes will provide landscaped medians that add to the Community's urban charm. Residences will have porches and entries fronting the street rather than backyards and screen walls. Their frequency will insure that traffic volumes are dispersed and each street is pedestrian friendly. These streets and adjacent

sidewalks will also be the primary pedestrian and bicycle routes between neighborhoods.

2.4 THE TOWN CENTER AND TOWN CENTER PARK

The Town Center is the urban focus of the Community where high density residential development will be mixed with a variety of commercial uses including retail, restaurants and entertainment, resort, and office uses. Designed to allow gatherings and performances as well as casual use, the Town Center Park is a human-scaled space that may contain such uses as amphitheaters, civic buildings and spaces, recreation and open spaces, community centers, retail shops, and restaurants.

Section 3

NEIGHBORHOOD DESIGN GUIDELINES

3.1 OVERALL STRUCTURE AND DESIGN

The goal of the Design Guidelines is to develop a community that has a visual and functional sense of continuity—it is one place with many elements, rather than a grouping of private subdivisions. Community amenities will be accessible to pedestrians and the primary community circulation system will be pedestrian friendly.

The Community's streets and public places must be diverse and human scaled. There should be architectural variety along each street and within each neighborhood. The primary amenities of the site, the arroyos, and community parks, must have homes fronting or siding to them and active walkable streets leading to them.

The following design standards are unified by the simple desire to use appropriate site planning and building design to enhance the community character and pedestrian experience of Kyle Canyon's neighborhoods.

3.2 NEIGHBORHOOD STREET LAYOUT AND CONNECTIVITY

Site planning of neighborhoods and street layout are dependent on one another to create neighborhoods that interact with the street frontage and maximize pedestrian and automobile circulation. The street layout, including pedestrian access, shall complement the Community's overall network of connectors and boulevards. The

vehicular and pedestrian connections throughout the Community are described below and are conceptually displayed on Figure 3-1.

VEHICULAR CONNECTIVITY BETWEEN DEVELOPMENT PARCELS

At least one vehicular connection incorporating pedestrian access is required between adjacent non-gated development parcels; however, additional vehicular connections incorporating pedestrian access between adjacent development parcels is encouraged. Points of connection may be designed in conjunction with required engineering connections such as drainage, water, and sewer. Builders of adjacent development parcels shall coordinate the exact location such connection points. However, where the street pattern of one development parcel has been established to at least a preliminary project plan level of approval, then the adjacent development parcel shall design its street pattern to meet such existing or approved connection.

PEDESTRIAN CONNECTIVITY BETWEEN NEIGHBORHOOD STREETS AND VILLAGE STREETS

Pedestrian access between Neighborhood Streets and Village Streets shall be maximized through the use of open cul-de-sac design, paseo connections, and pedestrian access for gated neighborhoods (refer to Figures 3-2 and 3-3). Pedestrian access in one of the aforementioned conditions shall occur, at a minimum, at the following frequency:

Village Street Frontage	Pedestrian Access
0' - 1000'	No access required
1000' - 1500'	1 point of access required
1500' - 2500'	2 points of access required

PEDESTRIAN CONNECTIVITY BETWEEN ADJACENT DEVELOPMENT PARCELS

At least one pedestrian access connection is required between adjacent development parcels unless both development parcels are Gated Areas. Gated Areas shall provide resident access gates to enable pedestrian connections to adjacent non-gated development parcels. Pedestrian access to an adjacent Development Parcel shall be a walking distance of 500' or greater from a pedestrian access point to the Village Street.

PEDESTRIAN CONNECTIVITY BETWEEN ADJACENT PARKS AND TRAILS

At least one pedestrian access connection is required between a development parcel and an adjacent public park, paseo, and the following trails and walking paths:

- Mountain Edge Parkway Trail
- Grand Teton Trail
- Trails in the arroyos and paseos
- Iron Mountain Walking path West of Hualapai

LEGEND

ALL SYMBOL LOCATIONS ARE SCHEMATIC
PRELIMINARY BUILDER POD ACCESS POINTS

- FULL LEFT IN LEFT OUT ACCESS
- SHARED LEFT IN LEFT OUT ACCESS
- R/R - RIGHT IN RIGHT OUT ACCESS
- REQUIRED VEHICULAR CONNECTION
- PEDESTRIAN ACCESS CONNECTION
- G - GATED PARCELS
- - - PLANNING AREA BOUNDARY

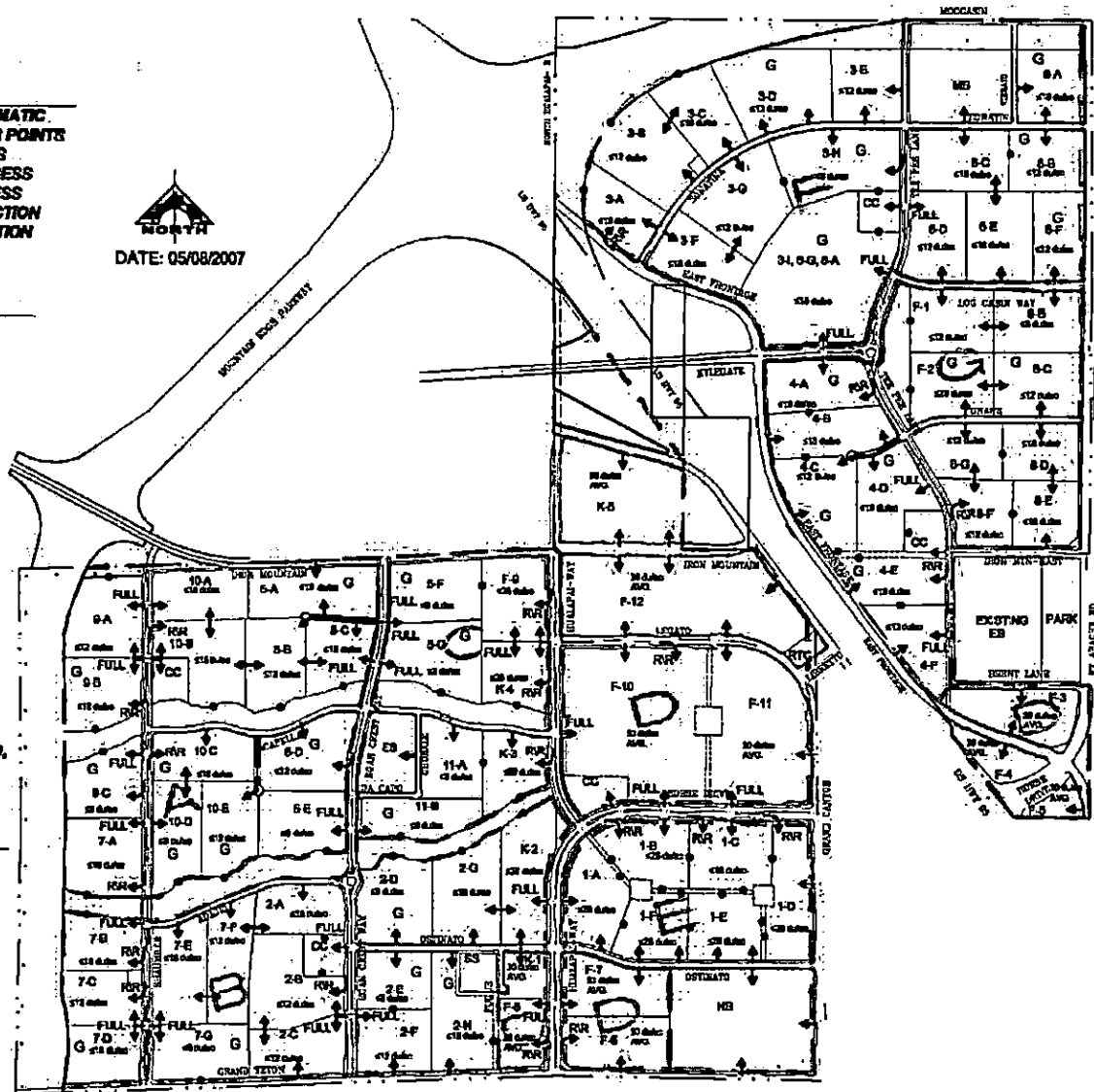


NOTES:

- 1). VEHICULAR AND PEDESTRIAN CONNECTIVITY SHOWN BETWEEN PODS IS APPROXIMATE AND SUBJECT TO GRADING, DRAINAGE, AND UTILITY CONSTRAINTS.
- 2). CONNECTIONS WILL REQUIRE BUILDER COORDINATION DURING DESIGN.
- 3). POD ENTRANCE LOCATIONS AND BOUNDARIES WILL BE FINALIZED PRIOR TO SUBMITTAL OF PARENT FINAL MAP FOR RECORDATION.
- 4). SIGNIFICANT CHANGES TO POD ACCESS LOCATIONS AND/OR INCREASE IN DENSITY ON A POD MAY REQUIRE APPROVAL OF CLV TRAFFIC.
- 5). EXCEPT IN PLANNING AREA "D" DENSITIES ARE MAXIMUM ALLOWED, PER POD.

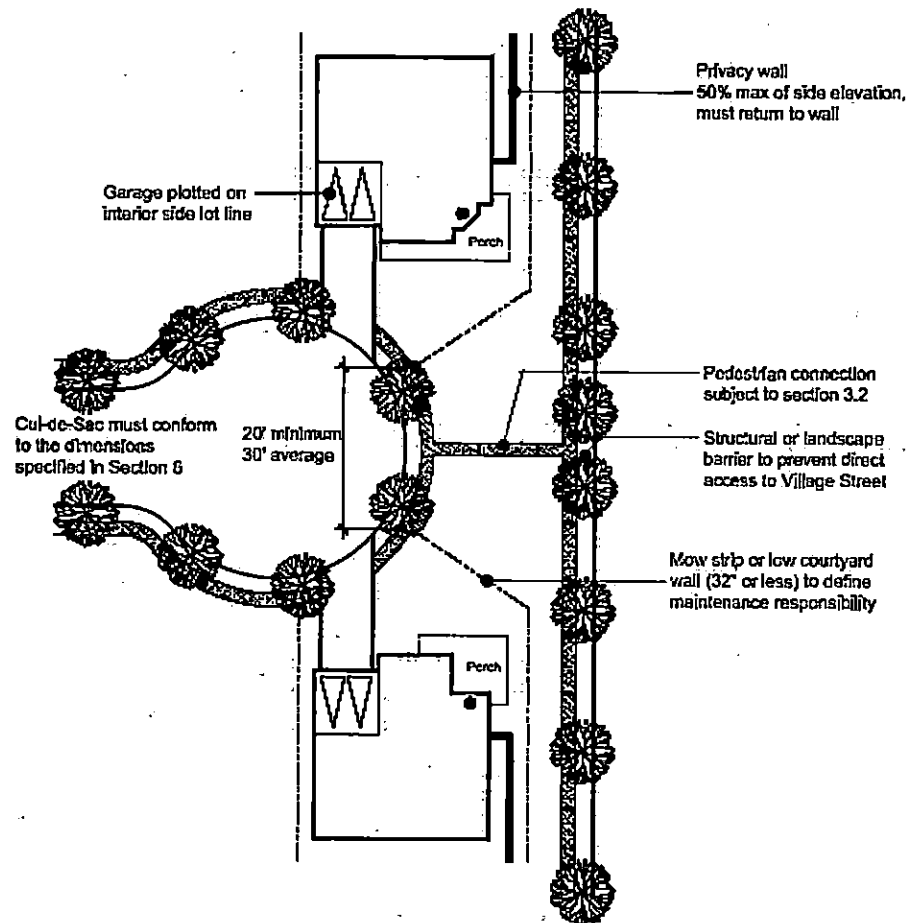
PLANNING AREA	TOTAL RESIDENTIAL UNITS*
A	2,000
B	2,200
C	1,050
D	4,600
E	1,750
F	2,650
G	1,650

* UP TO 10% OF THE TOTAL RESIDENTIAL UNITS IN EACH PLANNING AREA MAY BE SHIFTED TO OTHER PLANNING AREAS. OVERALL UNIT COUNT CAN NOT EXCEED 16,000 UNITS



ACCESS AND CONNECTIVITY FIGURE 3-1

NON-GATED CUL-DE-SAC



GATED CUL-DE-SAC

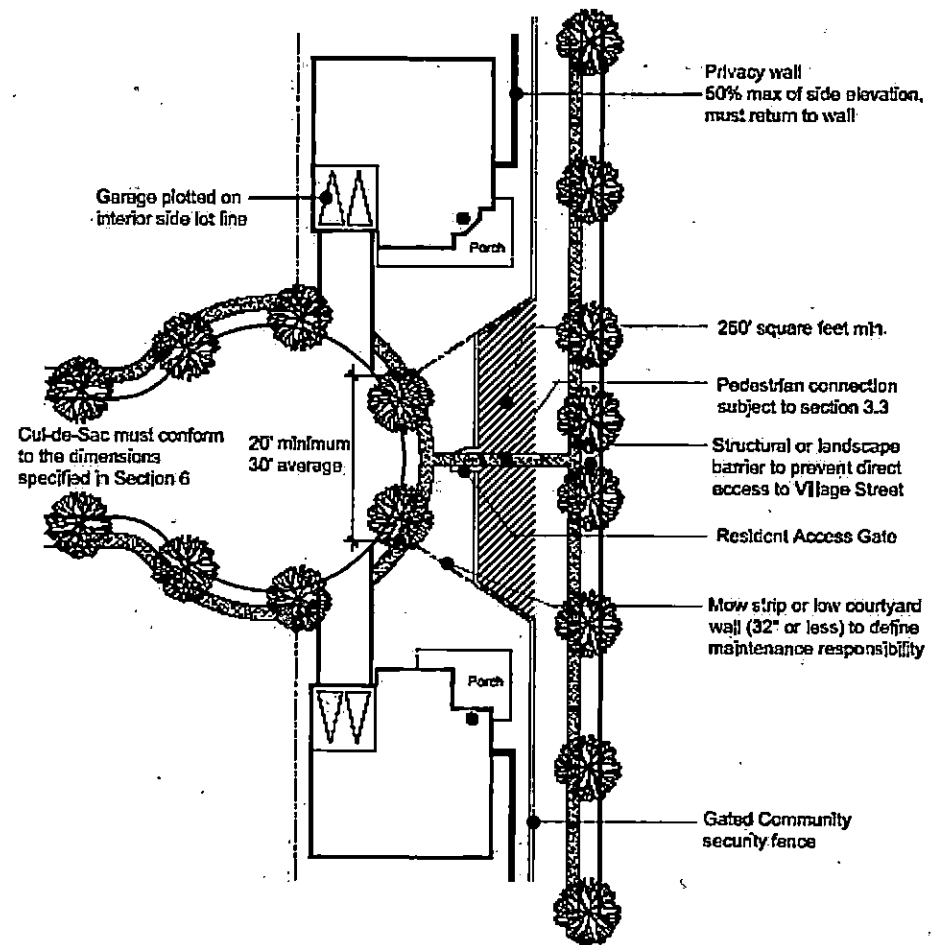
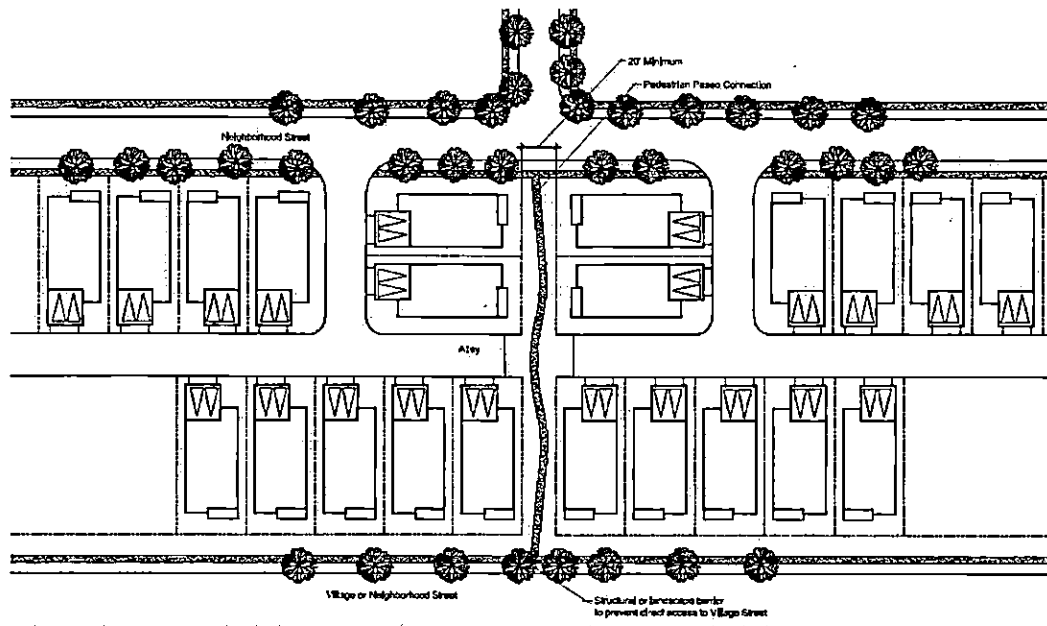
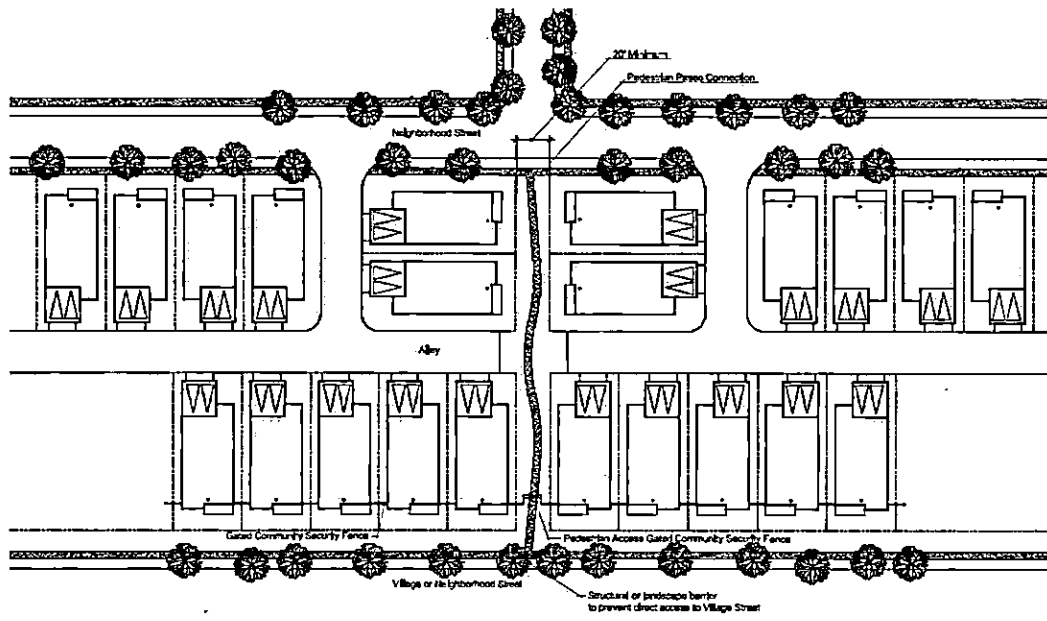


Figure 3-2 CUL-DE-SAC Tree placement and buildings are conceptual and do not necessarily accurately depict actual development. All dimensions and notes are requirements.



Non-Gated Paseo Connection

All streets, alleys, and drive aisles must conform to the dimensions specified in Section 6.



Gated Paseo Connection

All streets, alleys, and drive aisles must conform to the dimensions specified in Section 6.

Figure 3-3 PEDESTRIAN PASEO CONNECTION Buildings and street/alley/drive aisle locations are conceptual and do not necessarily accurately depict actual development. All dimensions and notes are requirements.

Where a gated development parcel is adjacent to a park, paseo, or the above-listed trails and walking paths, resident access shall be provided to such common area.

Vehicular and pedestrian connections may be accomplished in a variety of ways. Figures 3-4 through 3-10 are representative examples that may be used in the design of vehicular and pedestrian connections.

CUL-DE-SAC STREETS

Cul-de-Sac Streets shall be limited to no more than 50 percent of the streets within a builder parcel, subject to the following provisions:

- At a perimeter edge of a development parcel that abuts a street, open space, or common element, the Cul-de-Sac Street must terminate at the development parcel edge with a pedestrian connection to a sidewalk or multi-use trail. (Refer to Figure 3-2) Closed-ended Cul-de-Sac Streets with lots that fan around the bulb of the cul-de-sac (Refer to Figure 3-13) are not allowed in this condition.
- When located on the interior of a development parcel (not abutting a development parcel perimeter edge having a street, open space, or common element), 75% of the interior Cul-de-Sac Streets that are longer than 300' in length shall have a pedestrian connection to a street or paseo. (Refer to Figures 3-11 and 3-12)
- When located on the interior of a development parcel (not abutting a development parcel perimeter edge having a street, open space, or common element), Cul-de-Sac Streets that are 300' or less in length may have a closed-ended cul-

de-sac design with lots that fan around the bulb of the cul-de-sac. (Refer to Figure 3-13)

- In certain cases, site conditions or constraints such as topography, grading, site shape and easements, may dictate the use of closed-ended Cul-de-Sac Streets where otherwise not permitted. Such conditions shall be considered on a case-by-case basis by the Master Developer, and approved by the City.

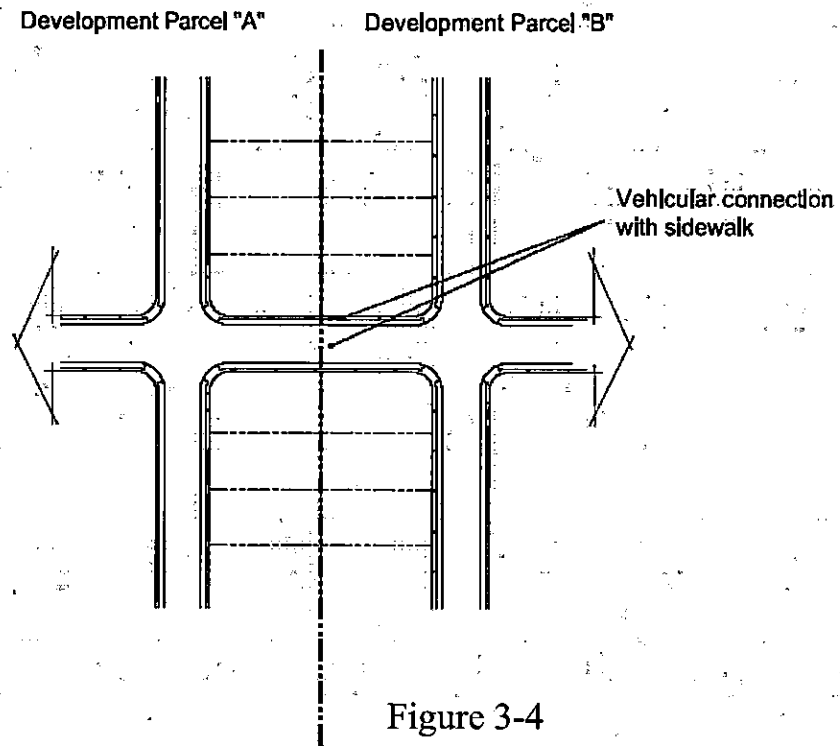


Figure 3-4
Vehicular Connection

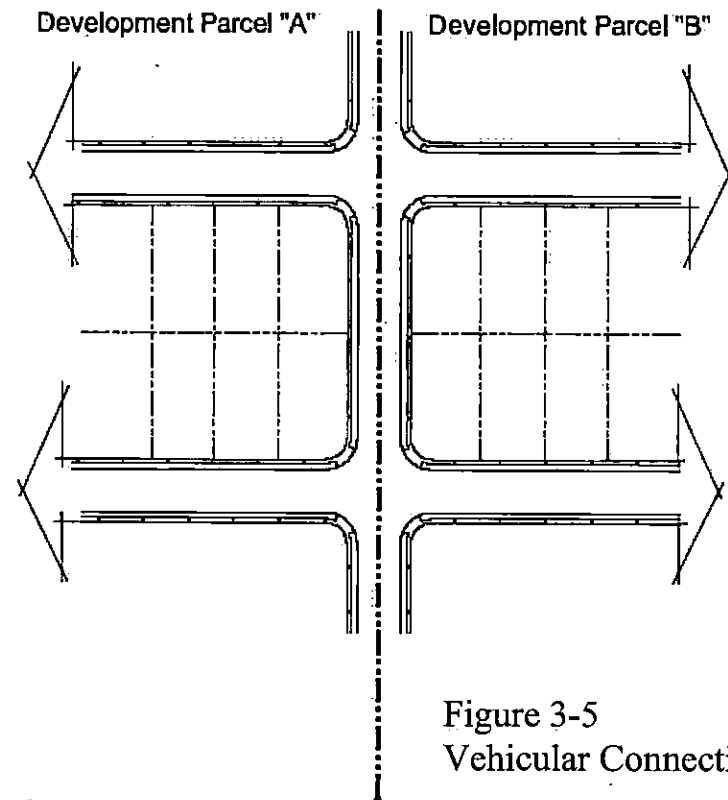


Figure 3-5
Vehicular Connection

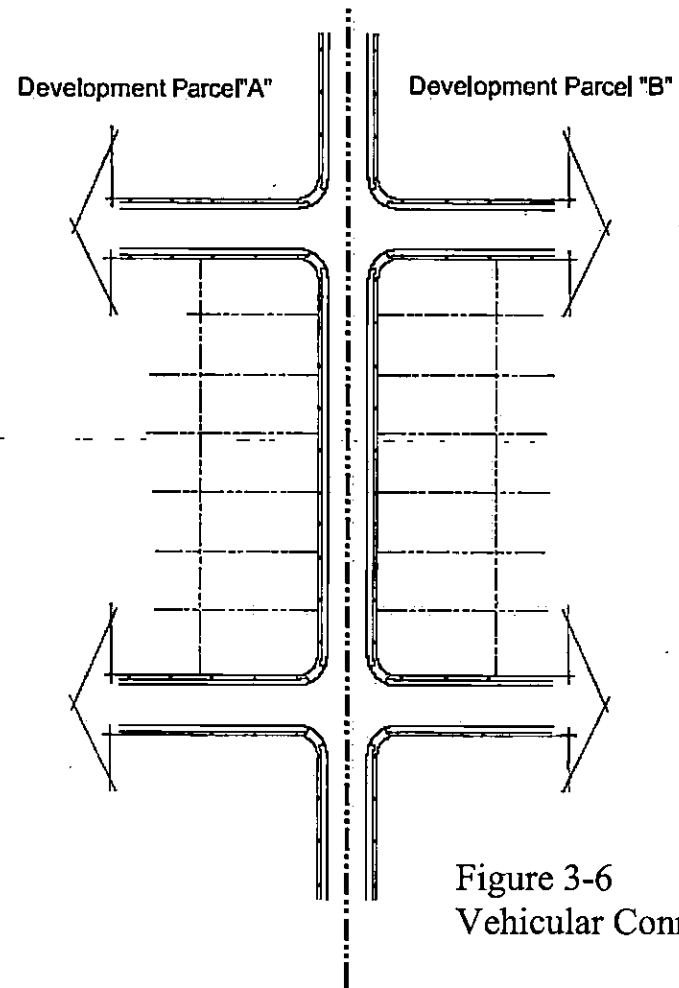


Figure 3-6
Vehicular Connection

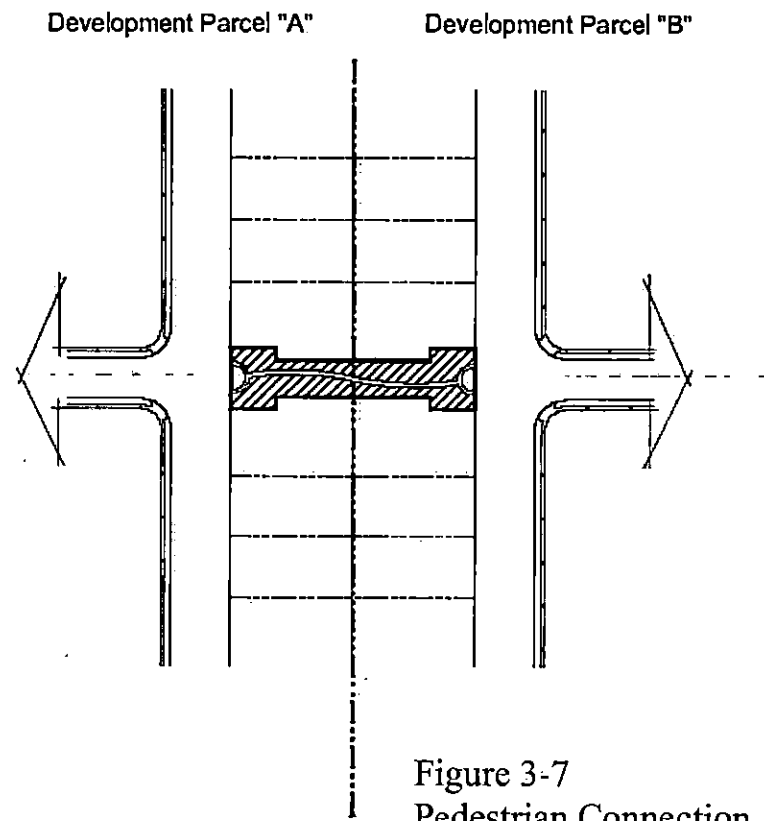


Figure 3-7
Pedestrian Connection

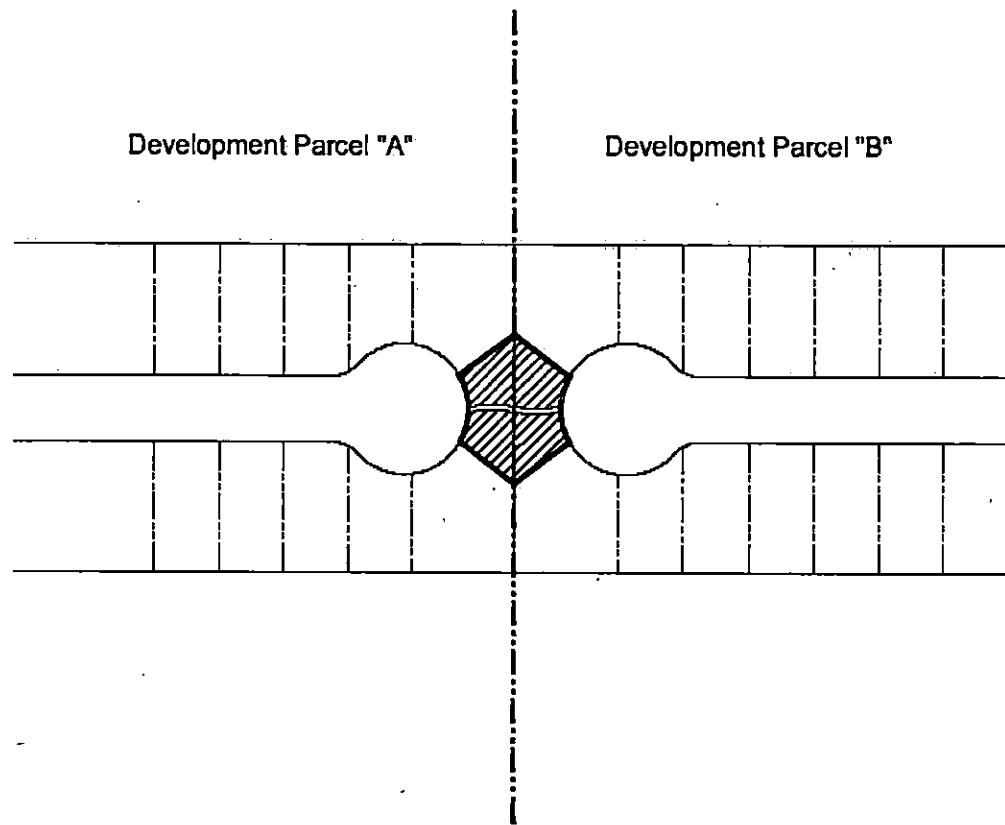


Figure 3-8
Pedestrian Connection

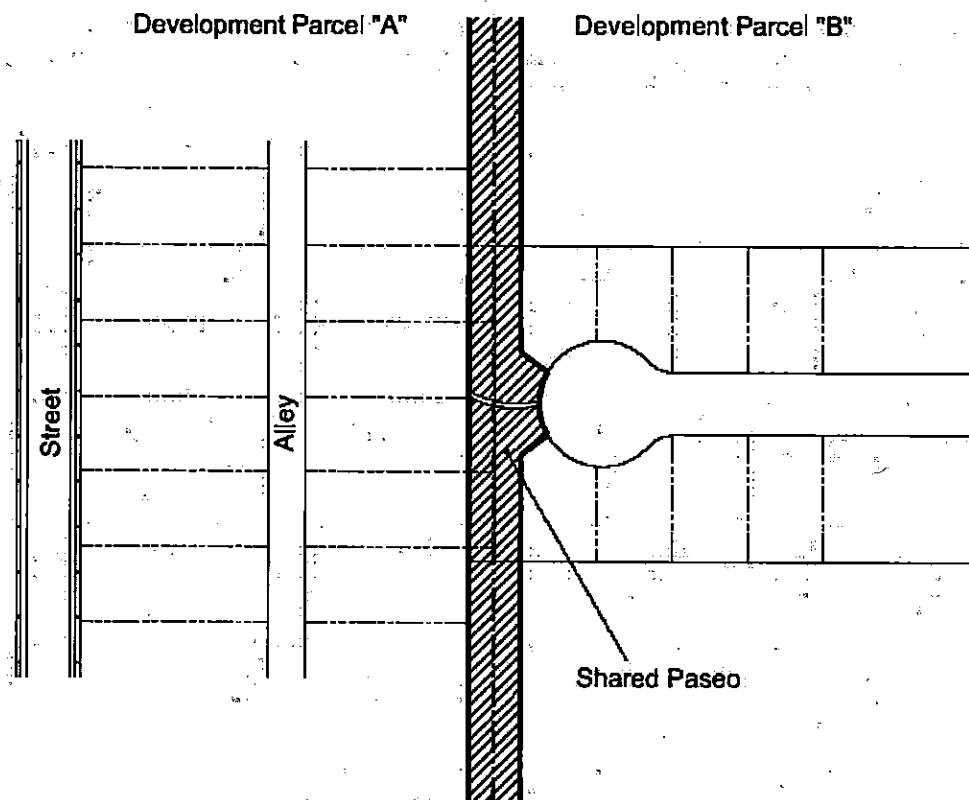


Figure 3-9
Pedestrian Connection

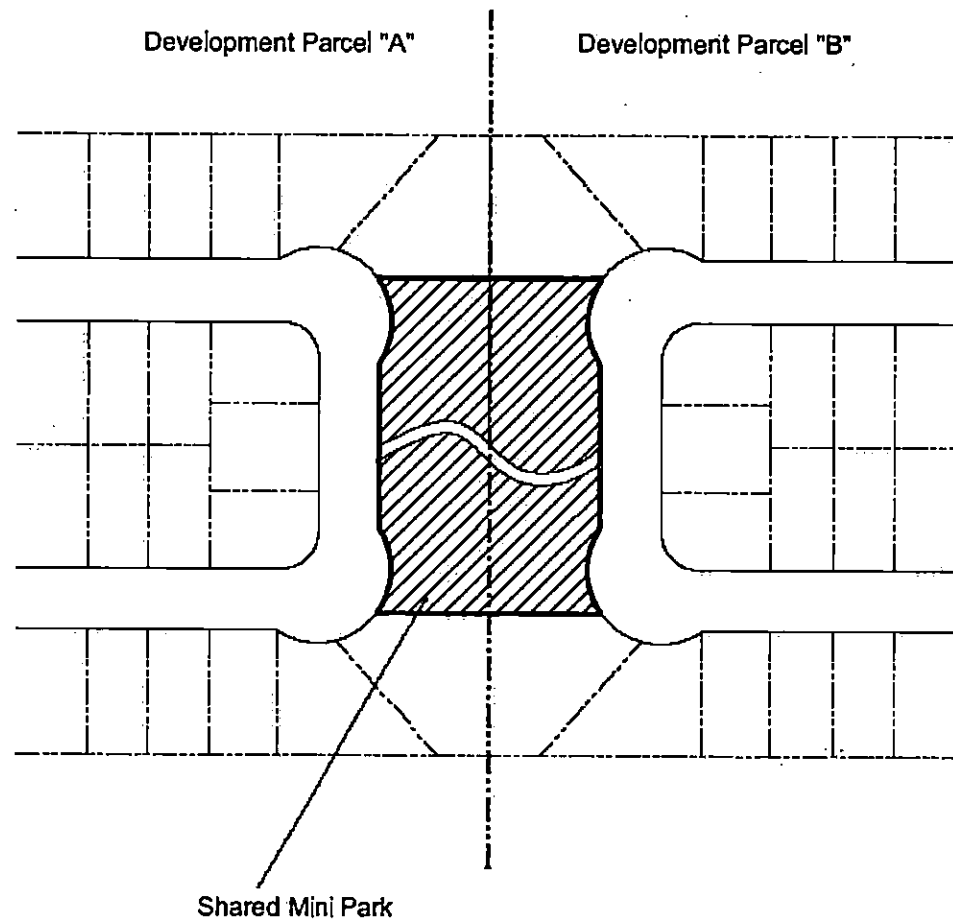


Figure 3-10
Pedestrian Connection

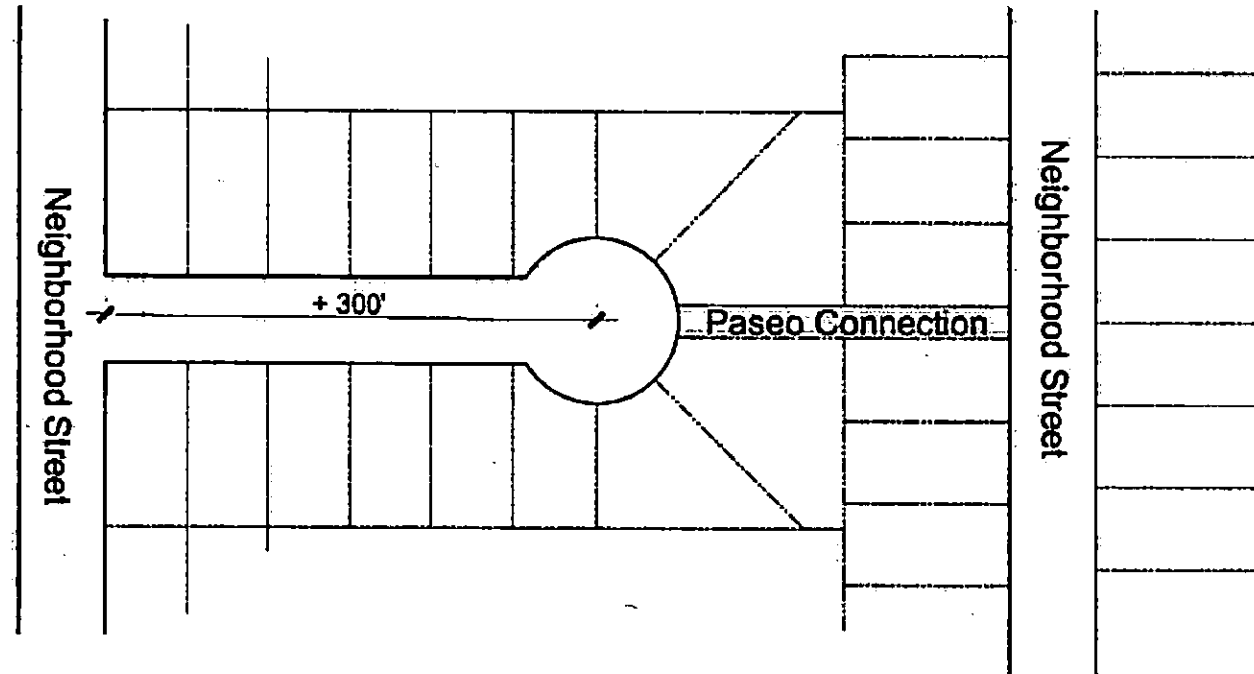


Figure 3-11

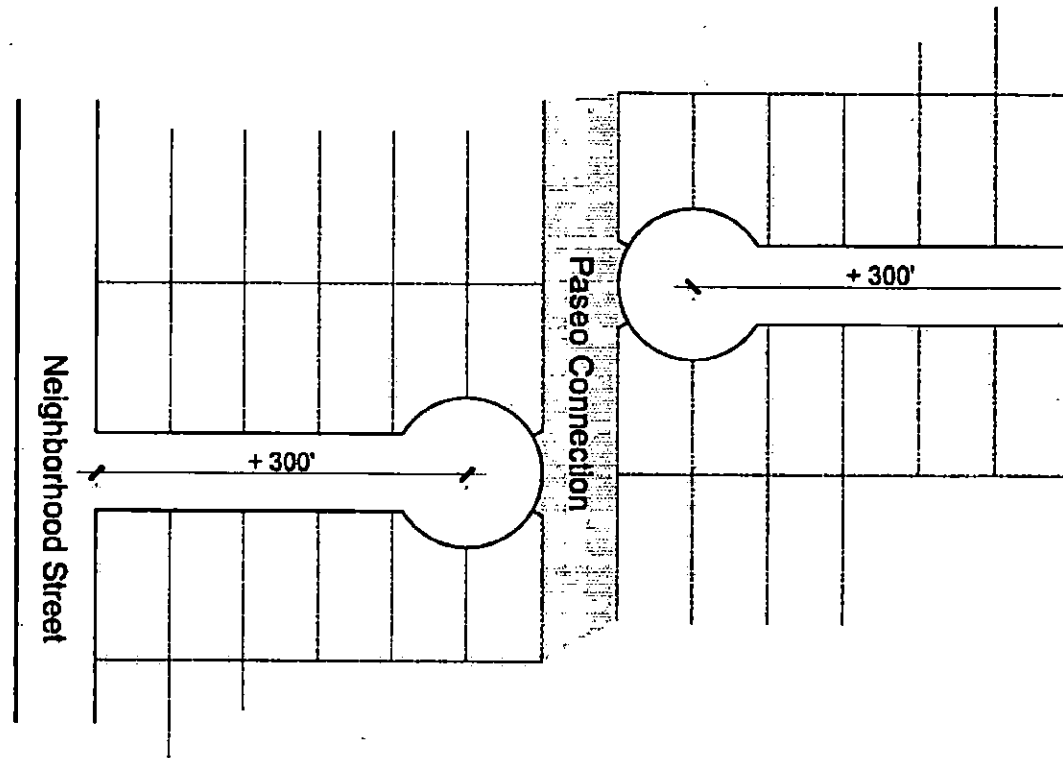


Figure 3-12

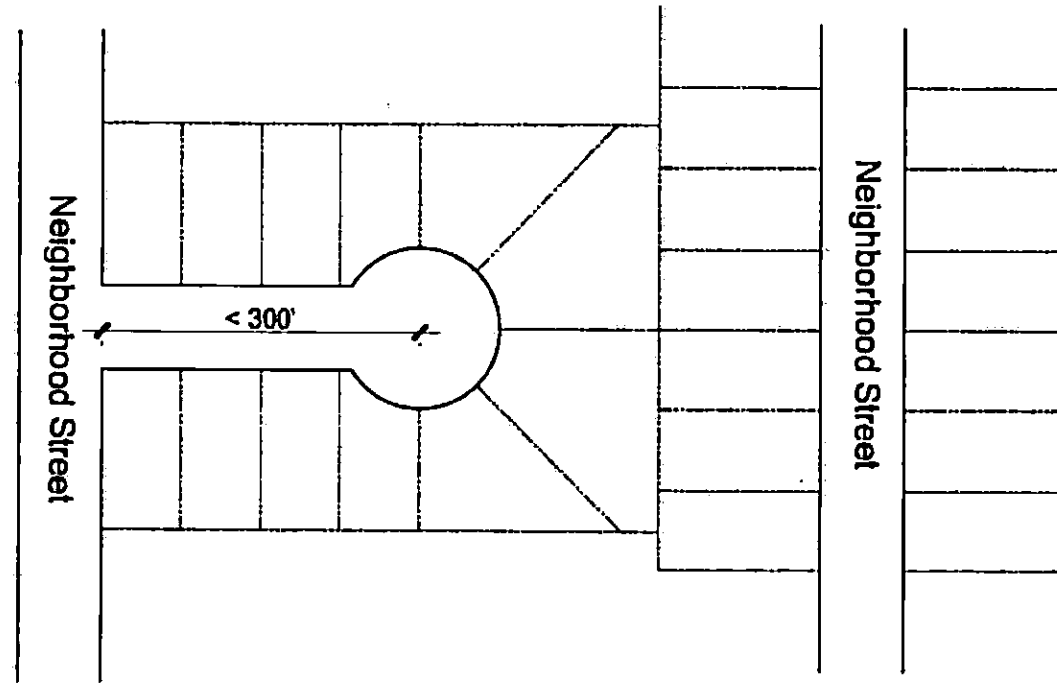


Figure 3-13

ALLEYS

Alley loaded homes have the additional amenity of street frontage in the front and usable alley frontage in the rear of the home. To enhance the standard of living in this space, all alley loaded home designs shall incorporate at least two items from the list below.

-
• A trellis element projecting 18" forward of the garage door wall plane on a minimum of 50% of the units along the alley. • A principal window treatment on all alley facing elevations. • Articulation in building massing such as ○ Second floor stepped back a minimum of 2' for at least 50% of the elevation width. ○ Second floor cantilevered a minimum of 2' forward of the first floor wall plane for at least 50% of the elevation width. • Use of upgraded carriage style doors on at least 50% of the elevations.	• Enhanced coach lighting at garage door • Accent materials and details from front brought around to alley elevation. • Use of window lites on at least 50% of the garage doors along the alley.
-

No parking is allowed on an alley or on a driveway apron less than 20' long accessed from an alley. The Master Home Owners Association or sub-association shall enforce parking restrictions on alleys and driveway aprons accessed from an alley.

3.3 RESIDENTIAL PARCEL TYPE GUIDELINES

There are three types of Residential Parcels in Kyle Canyon: Neighborhood Residential, Urban Mixed-Use, and Town Center Mixed-Use.

Neighborhood Residential Parcels represent the majority of Kyle Canyon's neighborhoods and will contain a majority of the housing. They allow a great range of Residential Building Types; from all varieties of detached Single Family Homes, including Green Court and Cluster styles, to the full range of attached Single Family Homes and Multi-Family Homes up to four (4) stories in height. Multi-Family Residential Building Types up to five (5) stories high are allowed on Neighborhood Residential Parcels if adjacent to or directly accessible from a Village Street (see Figure 3-14). The Village Streets are all of the streets identified on Figure 6-1.

Urban Mixed-Use Parcels allow all types of Residential Building Types except Estate, Standard, and Compact Lots. The Urban Mixed-Use Parcels permit a wide variety of Residential Building Types, both detached and attached single family products and medium-density multi-family products.

The **Town Center Mixed-Use Parcels** are located north of Horse, east of Hualapai, and west of US Highway 95. These Development Parcels permit denser forms of apartments and condominiums close to services and shopping. Their Residential Building Types range from Mansion Homes and Townhomes to high density multi-family buildings employing either below or above grade parking structures. These neighborhoods are designed to ensure a pedestrian friendly urban environment.

Gated Areas are allowed on all Residential Parcels only under the following guidelines:

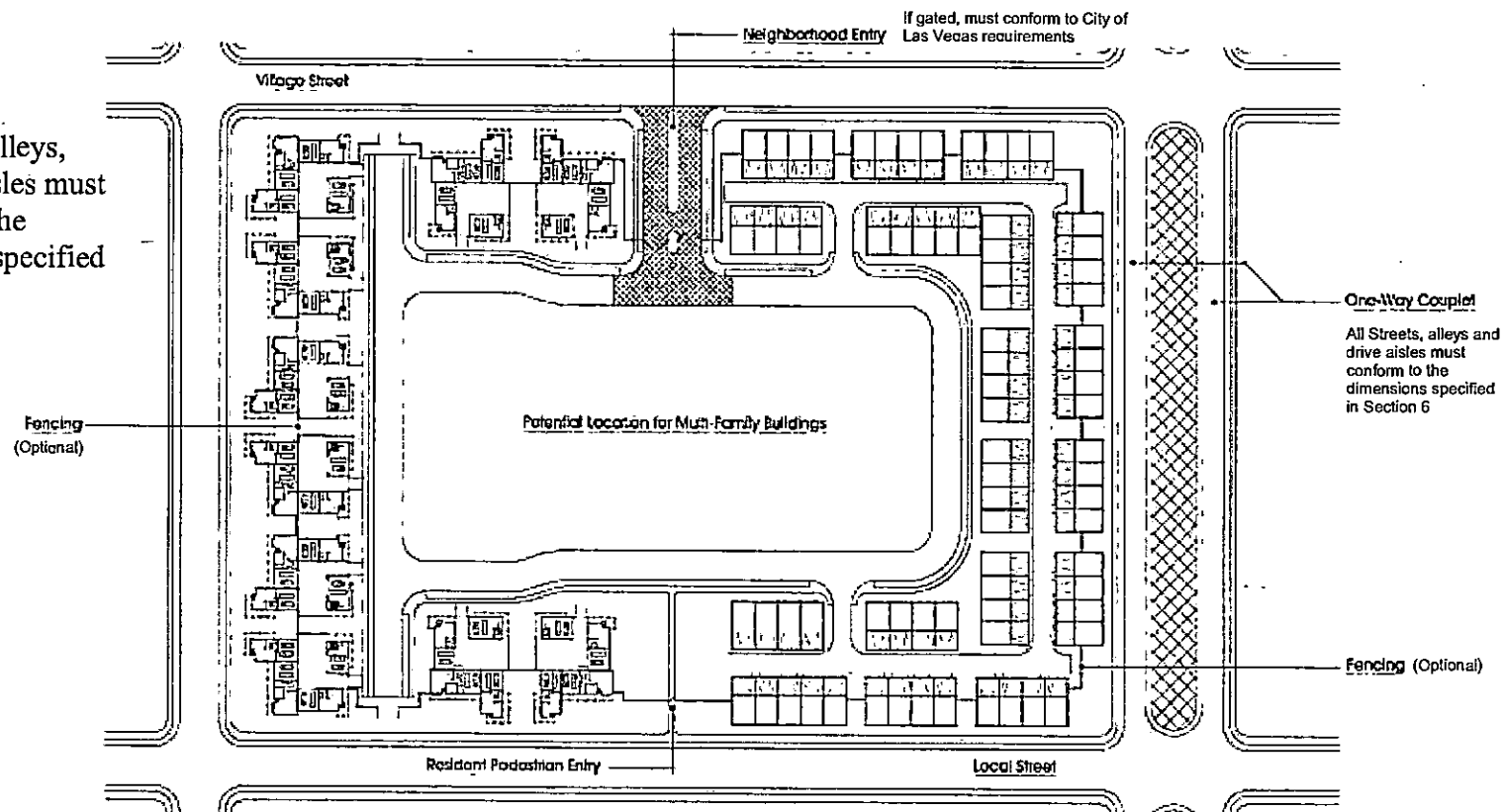
- Gated Areas may be created from all or a portion of a Development Parcel but a Gated Area may not be larger than a single Development Parcel (i.e., may not overlap adjacent Development Parcels)
- Gated Areas shall contain a minimum of 20 units
- Gated Areas may contain any of the Residential Building Types permitted on the Neighborhood Residential Parcels, the Urban Mixed-Use Parcels, or the Town Center Mixed-Use Parcels where the Gated Area is located.
- Entry gates will not exceed ten feet (10') in height to minimize their appearance from streets
- Both manned and un-manned gate systems are allowed
- Entries to Gated Areas will comply with all existing requirements of the City
- All costs associated with the Gated Area such as maintenance of private roads and gates and common landscape improvements within the gates will be the sole responsibility of the homeowners within the Gated Area either through a sub-association or neighborhood assessment to the Master HOA
- The perimeter edge conditions specified in Section 3.4 will apply to all Gated Areas
- The use of solid privacy walls should be minimized except where used to provide privacy to an individual home owner's lot - other security fencing should be a view fence where possible. The use of solid perimeter walls that completely surround development parcels is not permitted.

- Where cul-de-sacs terminate at development parcel perimeter edge abutting a street, open space, or common element, such conditions shall feature open fencing with controlled pedestrian access gates. (Refer to Figure 3-2). In certain cases, site conditions or constraints such as topography, grading, site shape and easements, may make the use of open fencing with controlled pedestrian access gates impractical. Such conditions shall be considered on a case-by-case basis by the Master Developer.

At cul-de-sacs and drive isle terminations that abut Village Streets, the view fencing should be pushed back to create a landscaped common area of at least 250 square feet in front of the fence that is available to public access. These areas will be maintained by the Master HOA.

- Though the majority of neighborhoods within Kyle Canyon will be non-gated, up to 25% of the units within the Community (4000 units) may be within Gated Areas.
- Plotting of units with front doors that face the perimeter streets is preferred. In such cases, solid or open fencing shall occur between buildings only. Though within a Gated Area, the units with front doors facing the perimeter streets shall not be counted toward the 25% cap community wide.
- Parking structures for multi-family products (podium and embedded garage) may have individual controlled access gates for the parking structure itself. Any units served by such controlled access parking structures shall not be counted toward the 25% cap community wide, so long as there is open and unimpeded pedestrian access between perimeter streets, open space, or common element and the front door(s) of the building.

All streets, alleys, and drive aisles must conform to the dimensions specified in Section 6.



Multi-family building vehicular ingress and egress via interior drive aisles.
Neighborhood streets not used for access to parking provided for multi-family building.

Figure 3-14 MULTI FAMILY RESIDENTIAL BUILDING ADJACENT TO OR DIRECTLY ACCESSIBLE FROM A VILLAGE STREET Buildings and street/alley/drive aisle locations are conceptual and do not necessarily accurately depict actual development. All dimensions and notes are requirements.

3.4 EDGE CONDITIONS

In order to maintain the overall quality and identity of the community, the streetscapes and open space edges along the perimeter of each Development Parcel must be developed with care.

In all cases where homes side onto a street or the side or rear elevation of a home is Adjacent to and Visible from a Public Place, such elevation will be articulated in a manner similar to the front elevation of the home.

In order to balance traffic considerations with the desire for a walkable neighborhood character, the following three types of edge treatment are required in various locations throughout the site (see Figure 3-15). Back-out driveways are not permitted on streets with projected average daily traffic greater than 1500 vehicles.

"Back-on-Allowed" edge treatments are those areas where the back of a home is allowed to face a street on the perimeter of a Development Parcel. In all cases other than the "Back-on-Allowed" perimeters shown on Figure 3-15, homes will not be allowed to back on to a street on the perimeter of a Development Parcel. This means that the perimeter of each Neighborhood Residential Parcel must employ either homes that front or side onto the perimeter streets.

"Minimal Curb Cut" edge treatments apply along select boulevards and arterials that carry the most traffic. The intention is to ensure that these roadways are lined with buildings with doors and windows that face onto the Village Street, creating a walkable environment and to ensure that traffic flows on these roadways are not compromised by residents backing out of driveways. Consequently, driveway curb cuts are minimized in these edge conditions and back-out driveways are not allowed. A maximum of one curb cut per block face or one curb cut per 150 Multi-Family Units, whichever is the greater number of curb cuts, is permitted along these edges. Garages or parking structures may be accessed from the Village Street at one of the permitted curb cuts or from alleys or side streets. These streets may include a full range of Residential Building Types consistent with the Land Use Plan.

"Open Space" edge treatments apply only in designated areas adjacent to the open space of the arroyos. In these locations, the perimeter of the Development Parcel must be treated in one of the following ways:

- A continuous local **frontage road** along such edges, with homes orienting to the open space.
- **Alley loaded homes** with front facades facing the open space, or
- A **Loop Street System** (see Figure 3-16) in which local street segments are required along a portion of the open space frontage. Residences adjacent to the open space boundary are required to have their front doors or an elevation articulated in a manner similar to the front elevation facing the open space. Front doors may be accessed either from the loop street or from a pedestrian walkway connecting loop streets along the open space frontage. Alley access is required for the homes fronting onto the pedestrian walkway; for homes facing the loop street, Alley Loaded, Front Drive or Side Drive Garage treatments are permitted.

"Fort Apache Buffer" edge treatment applies to the area adjacent to the common element along Fort Apache between Log Cabin Way and Iron Mountain Road. All structures within 60' of the common element shall not exceed 35' in height.



LEGEND

- NEIGHBORHOOD RESIDENTIAL
- TOWN CENTER MIXED-USE
- URBAN MIXED-USE
- COMMUNITY FACILITIES / SCHOOLS
- PARKS/OPEN SPACE
- PARKS/OPEN SPACE - (LOCATION AND DESIGN TO BE DETERMINED)
- CC COMMUNITY CENTER
- 67' WIDE PORT APACHE BUFFER
- BACK-ON CONDITION
- MINIMAL CURB CUT CONDITION
- OPEN SPACE EDGE CONDITION

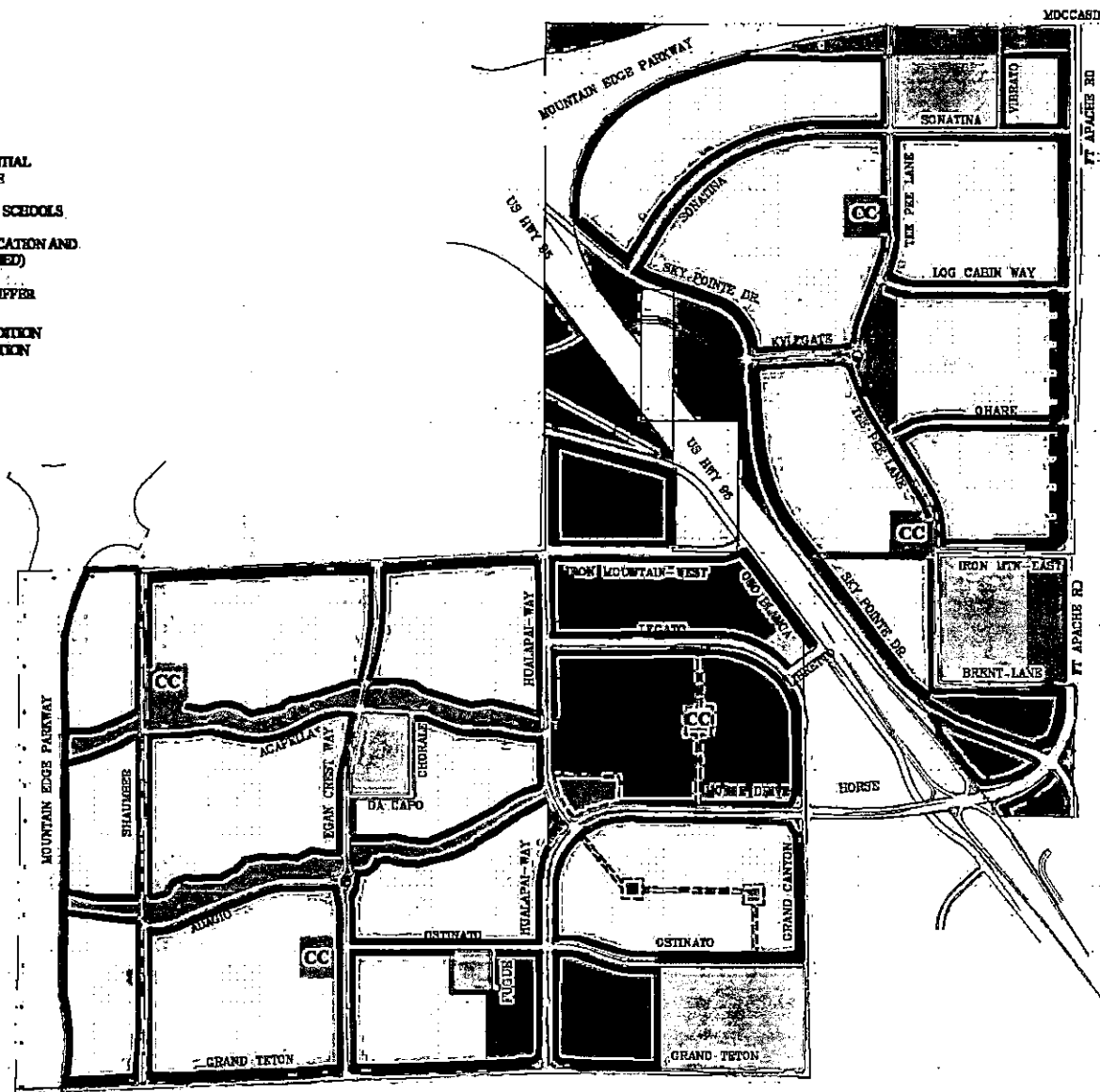


FIGURE 3-15 KYLE CANYON EDGE CONDITION MAP

All streets, alleys, and drive aisles must conform to the dimensions specified in Section 6.

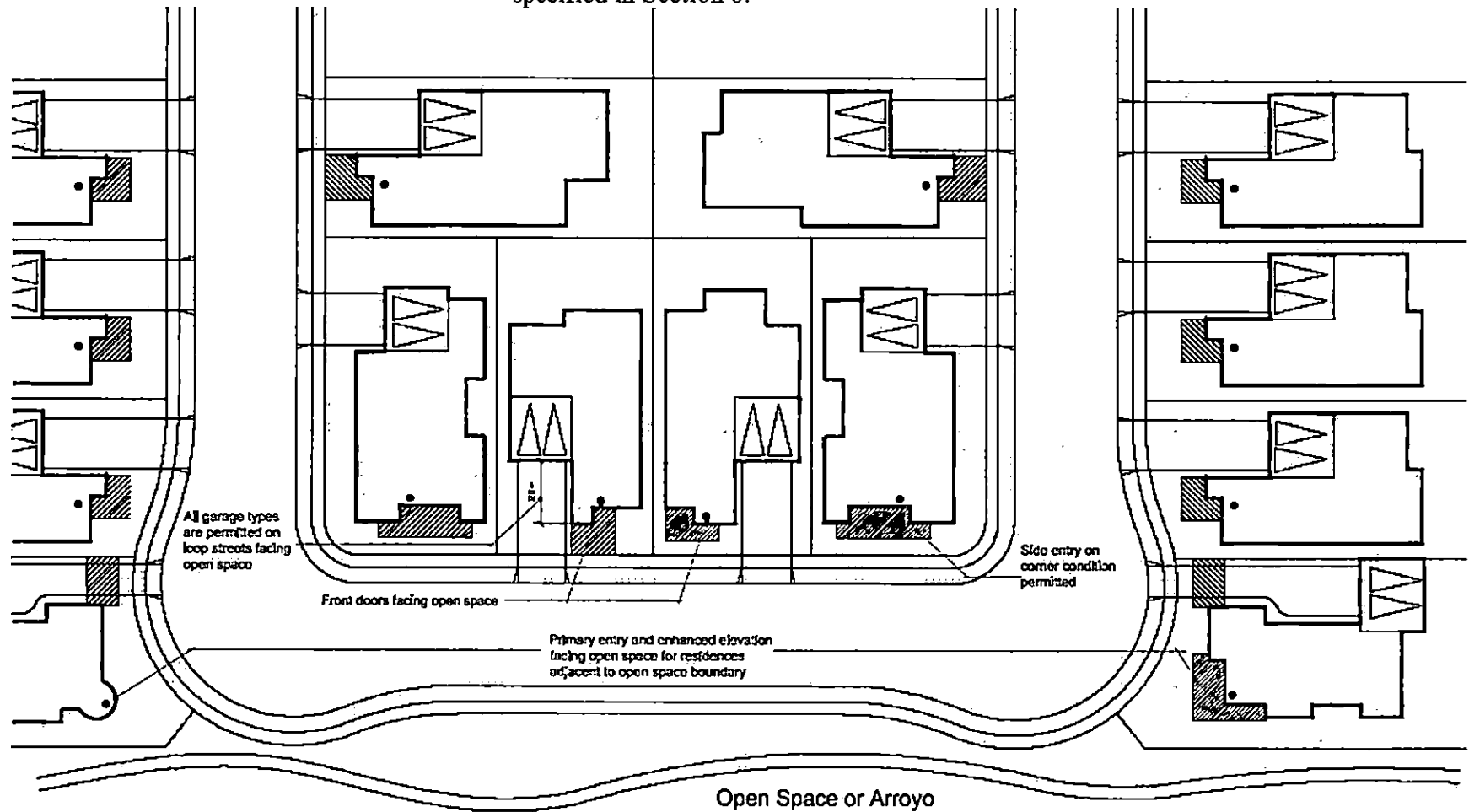


Figure 3-16 LOOP STREET Street location and buildings are conceptual and do not necessarily accurately depict actual development. All dimensions and notes are requirements.

3.5 RESIDENTIAL BUILDING TYPE STANDARDS

The following section illustrates the character of homes in Kyle Canyon's neighborhoods. Standards for each Residential Building Type include setbacks, building separation, building height, minimum open space, and parking requirements. Single Family and Court and Cluster Residential Building Types shall have a minimum of 2 ½ parking spaces per lot, including garage parking, driveway parking and on-street parking. Tandem parking shall be considered as a single parking space. Annotated diagrams illustrate many of the lot layout options. Other possible arrangements will be reviewed by the Master Developer to ensure compliance with the intent of the standards.

Figure 3-19 is a summary of the Residential Building Types allowed on Neighborhood and Village Streets in the Neighborhood Residential, Urban Mixed-Use, and Town Center Mixed-Use Districts. Figure 3-20 summarizes additional information regarding the permitted Residential Building Types.

Single Family Detached Residential Building Types

Estate Lot

Estate Lot homes are detached single family homes on larger than average lots. Estate Lots are sufficiently wide to allow for garages to be accommodated near the front façade of the main building in a variety of configurations. Garages may be accessed from a Front or Side Drive or from an alley, and garages may be attached or detached in either condition. If more than two garage doors are provided, turn-in or split garage treatments or one of the three car garage treatments described below in Section 4.3.2 must be used to reduce their visual impact.

Standard Lot

Standard Lot homes are the mainstay of the traditional family home market, with lots at least 45' feet wide that offer residents the

quintessential neighborhood lifestyle with private space. As with Estate lots, front door entries and outdoor spaces should be visible from the street. Garages may be accessed from rear alleys or from a Front or Side Drive and garages may be attached or detached in either condition.

Compact Lot

Compact Lot homes offer a strong community environment in desirable locations. Double Front Drive Garages are not permitted on Compact Lots unless the lot is at least 44' in width. Single Front Drive Garages with tandem parking and Side Drive Garages are permitted on lots of at least 36' in width. Garages may be accessed from rear alleys or from a Front or Side Drive and garages may be attached or detached in either condition.

Court and Cluster Residential Building Types

Court and Cluster Residential Building Types are relatively new types that have proven to be a popular option, especially for couples, young families and empty nesters that don't have a need for a large home or big yard. Buffered from the street by shared open spaces, Court and Cluster homes create a micro-community within the larger neighborhood for their residents.

Green Court

Green Courts are clusters of up to 16 detached single family homes that face onto three sides of a shared green. The shared greens provide a controlled environment for younger children and a park-like atmosphere in which to play without crossing any streets, as the court-facing homes allow easy supervision by parents or community members. Green Courts also serve as a setting for informal interaction and gatherings. At least one side of the green is adjacent to a street, making front entrances visible from the street and providing on-street guest parking opportunities. Because the homes face a common green space, garages must be accessed from rear alleys or common drives. In order to accommodate partial clusters at the ends of a string of green court clusters, up to 30% of the

homes in a product line may face a street. Because the common green substitutes for rear yard private space, natural turf will be permitted subject to SNWA Water Smart guidelines.

Paseo Court

Paseo Courts are a variant of Green Courts in which a shared green forms a landscaped common front yard and pedestrian link. As with Green Courts, front doors and porches of homes face onto the paseo and alleys or court streets must be used to access garages. In order to accommodate partial clusters at the ends of a string of green court clusters, up to 10% of the homes in a product line may face a street.

Paseo Court products may be mapped in two ways. If an HOA common area is created between two rows of homes, the minimum width of such common area will be 10', porches or courtyard will be set back at least 3' from the common area and the principal building wall plane will be at least 10' from the common area. Alternatively, the front lot lines of the homes may be in the middle of the paseo and front porches will be a minimum of 8' from the property line, principal wall planes a minimum of 15' from property line and the minimum distance between front wall planes of homes will be 30'. In the latter case, a reciprocal easement area will be created between rows of homes that is at least 10' wide.

Cluster Single Family

Builders have developed a variety of Single Family Cluster options. Detached single family homes are clustered around "court streets" which provide access to front-loaded garages. All parking must be accessed from the court streets. Since many homes' front doors will face onto the interior parking court, special care must be taken to create street-friendly elevations, with front doors and windows facing the street on the homes closest to the street.

Single Family Attached Housing Residential Building Types

Attached Residential Building Types combine privacy and convenience with easy access to neighborhood amenities. Attached Single Family

Homes are permitted on all Neighborhood Residential Parcels, Urban Mixed-Use Parcels and Town Center Mixed-Use Parcels. As such, these types can form an appropriate residential edge to active uses such as community centers and community parks. This affords the greatest possible number of people the option of accomplishing many local trips on foot or bicycle.

Townhomes

Each Townhome unit will have an individual ground-floor entry addressing a street, green court, paseo or open space, and a private garage. The individual outside entrance maybe elevated no more than half level above the ground floor. Garages are Alley Loaded and may be either attached to or detached from the main building. Townhomes may have a tuck-under garage similar to the Tuck-Under multi-family product.

Mansion Homes

The Mansion Home combines several residences within one structure designed to resemble a large single family home. Different-sized Mansions Homes up to a maximum of ten (10) units per building may be combined along a block face for greater architectural interest. When located on corners, Mansion Homes will provide entries and a porch, mirador or balcony on both elevations facing the street. When located on the block interior, a "family" of entrances between two buildings may provide gracious access to upper-floor residences that do not have a ground floor entry. The examples illustrated here include four- and six-unit buildings with attached garages, accessed from rear alleys. Front-loaded Mansion Home configurations are permitted, provided that each curb cut serves at least four units and all parking areas are screened from view of the street by courtyard walls, landscaping, or similar features.

Multi-Family Residential Building Types

Multi-Family Homes are allowed in all of Kyle Canyon's Residential Parcels. Such products will not exceed four (4) stories in the Neighborhood Residential Parcels and Urban Mixed-Use Residential Parcels unless adjacent to or directly accessible from a Village street where five (5) stories are permitted. Higher density Multi-Family Homes are located in the Town Center Mixed-Use District. Several Multi-Family site planning options are illustrated in this section. While parking treatments vary, in every case, Multi-Family buildings must be designed to address the street, with each façade treated as a front elevation.

Tuck Under

Tuck Under Multi-Family types offer convenient attached parking with the potential for direct, private interior access to units from garages. Parking is accessed from alleys or private drives, allowing building entries to face the street. This medium-density Multi-Family type is well-suited to ordinary wood-frame construction. Units may face onto streets, green courts, paseos or open space.

Podium

Podium Multi-Family types accommodate parking in a concrete structure, or podium, with residences above. Wood- or metal-frame buildings are built atop the parking podium and wrap around its edges, with landscaped open space provided between the buildings on top of the podium. Special care must be taken to ensure the parking podium edges present an attractive face to the street.

Embedded-Garage

A recent development in high-density Multi-Family design is the embedded garage design, in which a multilevel concrete parking structure in the interior of the block is wrapped by a wood- or steel-frame residential structure. This strategy allows residents to park on the same level as their unit and simply walk down an interior hallway or exterior cat-walk to their unit entry. Landscaped interior courtyards on one or

two sides of the parking structure provide a pleasant outlook for units that face into the interior of the block.

Reciprocal Use Easement

Reciprocal use easements (Refer to Figure 3-17 and 3-18) may be used in all Residential Parcels. The side of a unit which forms the "0" setback side of the house shall not have any doors or primary windows on the ground floor that face into the use easement area. The use easement area, if provided, may be used when calculating the private rear or side area requirement, subject to the minimum dimensions.

Maintenance Easement

In-lieu of reciprocal use easements described above, Residential Parcels may be plotted with true "0" lot lines at the builder's discretion and subject to International Building Code requirements. Minimum building separations shall be ten feet (10') for Estate Lots and Standard Lots and six feet (6') for Compact Lots.

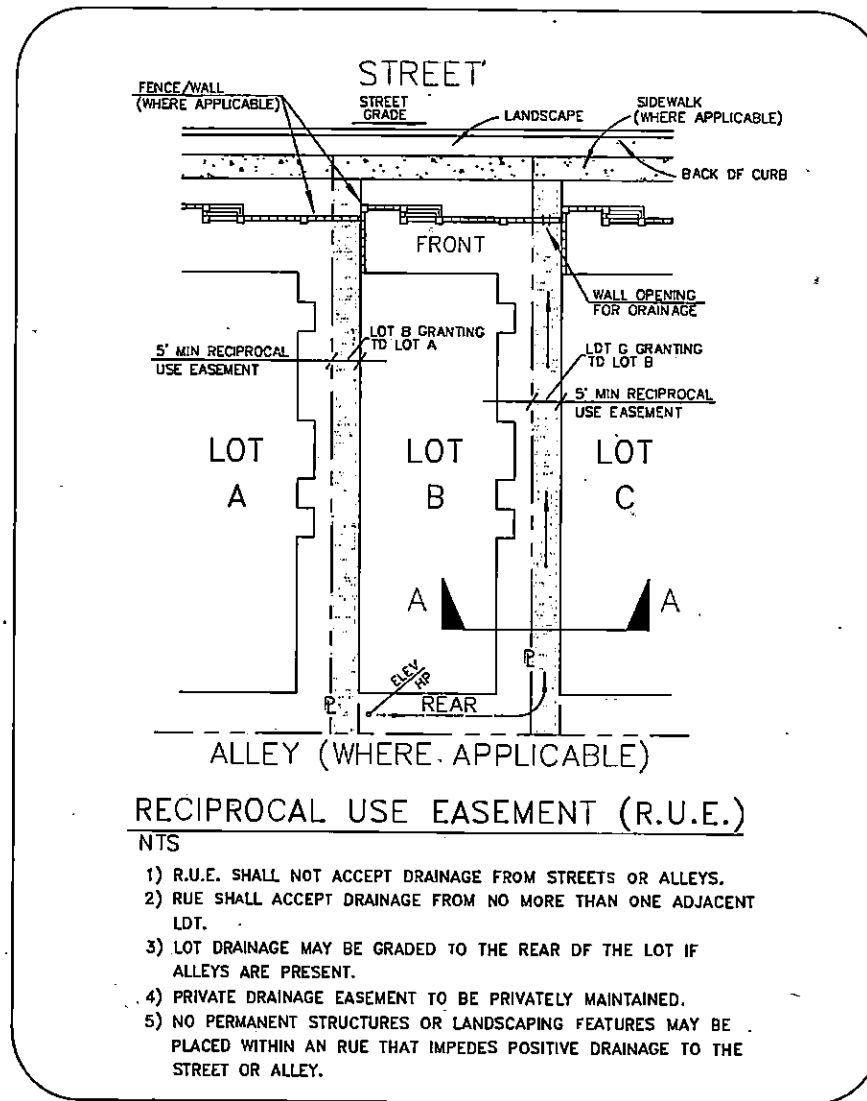
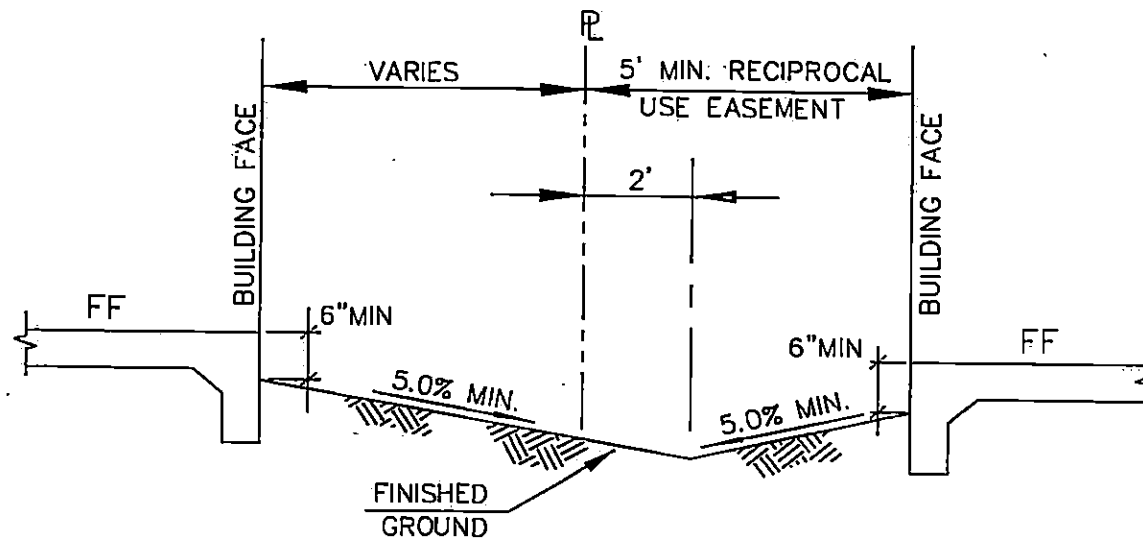


Figure 3-17 RECIPROCAL USE EASEMENT All plans and diagrams are conceptual and do not necessarily accurately depict actual development. All dimensions and notes are requirements.



RECIPROCAL USE EASEMENT (R.U.E.)
SIDE YARD SECTION
 NTS

Figure 3-18 RECIPROCAL USE EASEMENT All plans and diagrams are conceptual and do not necessarily accurately depict actual development. All dimensions and notes are requirements.

Projections

An architectural projection is defined as an element that articulates the building elevation such as a media niche, bay window, chimney, balcony, and other similar elements. The encroachment may be supported by a foundation. Architectural projections may project a maximum of 3 feet into any required setback or building separation area. In no case shall such projection be closer than 3 feet to any property line, subject to IRC requirements. Architectural projections shall have a maximum length of 14 feet along the articulated wall plane. In no case shall architectural projections comprise more than fifty percent (50%) of the articulated wall plane. Architectural projections beyond exterior walls shall comply with minimum building separation and material requirements set forth by the applicable IRC requirements, Section R302. Projections for eaves (see architectural checklists), window and door pop out surrounds, pot shelves, enhanced window sills, shutter details, window trim, entry gates, material veneers and wainscoting shall be governed by the provisions of the applicable IRC requirements.

FIGURE 3-19 ALLOWABLE RESIDENTIAL BUILDING TYPES

Building Type	Neighborhood Residential		Urban Mixed-Use		Town Center Mixed-Use	
	Neighborhood Street	Village Street	Neighborhood Street	Village Street	Neighborhood Street	Village Street
Estate Lot	3 Stories Max.	3 Stories Max.				
Standard Lot	3 Stories Max.	3 Stories Max.				
Compact Lot	3 Stories Max.	3 Stories Max.				
Green Court	3 Stories Max.	3 Stories Max.	3 Stories Max.	3 Stories Max.		
Paseo Court	3 Stories Max.	3 Stories Max.	3 Stories Max.	3 Stories Max.		
Cluster Single Family	3 Stories Max.	3 Stories Max.	3 Stories Max.	3 Stories Max.		
Mansion Home	3 Stories Max.	3 Stories Max.	3 Stories Max.	3 Stories Max.	3-5 Stories	3-5 Stories
Townhome	4 Stories Max.	4 Stories Max.	4 Stories Max.	4 Stories Max.	3-5 Stories	3-5 Stories
Tuckunder Multi-Family	4 Stories Max.	5 Stories Max.*	4 Stories Max.	5 Stories Max.*	110' Max.	110' Max.
Podium Multi-Family	4 Stories Max.	5 Stories Max.*	4 Stories Max.	5 Stories Max.*	110' Max.	110' Max.
Embedded Garage Multi-Family	4 Stories Max.	5 Stories Max.*	4 Stories Max.	5 Stories Max.*	110' Max.	110' Max.
* Must Be Adjacent to or Directly Accessible From a Village Street. See Figure 3-14 for an example of a building location that is directly accessible from a Village Street.						

Figure 3-20. Residential Building Types Table. The following Table summarizes the permitted Residential Building Types.

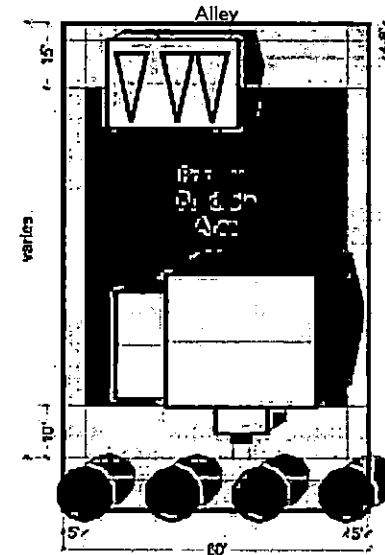
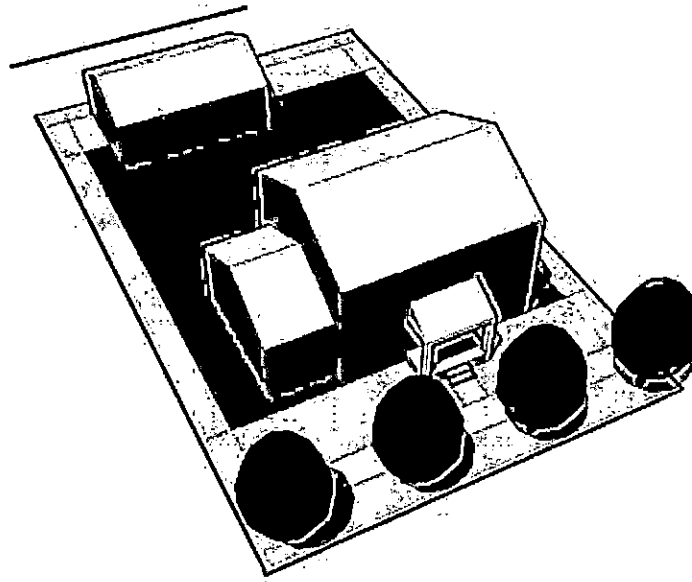
Single or Multi-Family	Attached /Detached	Residential Building Type	Garage Placement Options	Permitted	Maximum Heights
Single	Detached	Estate Lot	Alley-Loaded	All Neighborhood Residential Parcels	3 Stories 45'
Single	Detached	Estate Lot	Side Drive	All Neighborhood Residential Parcels	3 Stories 45'
Single	Detached	Estate Lot	Side Drive Detached	All Neighborhood Residential Parcels	3 Stories 45'
Single	Detached	Estate Lot	Front Drive	All Neighborhood Residential Parcels	3 Stories 45'
Single	Detached	Standard Lot	Alley-Loaded	All Neighborhood Residential Parcels	3 Stories 45'
Single	Detached	Standard Lot	Side Drive	All Neighborhood Residential Parcels	3 Stories 45'
Single	Detached	Standard Lot	Side Drive Detached	All Neighborhood Residential Parcels	3 Stories 45'
Single	Detached	Standard Lot	Front Drive	All Neighborhood Residential Parcels	3 Stories 45'
Single	Detached	Compact Lot	Alley-Loaded	All Neighborhood Residential Parcels	3 Stories 45'
Single	Detached	Compact Lot	Side Drive	All Neighborhood Residential Parcels	3 Stories 45'
Single	Detached	Compact Lot	Side Drive Detached	All Neighborhood Residential Parcels	3 Stories 45'
Single	Detached	Compact Lot	Front Drive	All Neighborhood Residential Parcels	3 Stories 45'

Building Type	Neighborhood Street	Village Street	Neighborhood Street	Village Street	Neighborhood Street
Single	Detached	Green Court	Alley-Loaded	All Neighborhood Residential and Urban Mixed-Use Parcels	3 Stories 45'
Single	Detached	Paseo Court	Alley-Loaded	All Neighborhood Residential and Urban Mixed-Use Parcels	3 Stories 45'
Single	Detached	Cluster Single Family	Alley-Loaded	All Neighborhood Residential and Urban Mixed-Use Parcels	3 Stories 45'
Single	Attached	Mansion Home	Alley-Loaded/Court	All Neighborhood Residential and Urban Mixed-Use Parcels	3 Stories 45'
				All Town Center Mixed-Use Parcels if at least 3 stories	5 Stories 75'
Single	Attached	Townhomes, Standard Width, Attached Garage		All Neighborhood Residential and Urban Mixed-Use Parcels	4 Stories 60'
				All Town Center Mixed-Use Parcels if at least 3 stories	5 Stories 75'
Single	Attached	Townhome, Standard Width, Detached Garage		All Neighborhood Residential and Urban Mixed-Use Parcels	4 Stories 60'
				All Town Center Mixed-Use Parcels if at least 3 stories	5 Stories 75'
Single	Attached	Townhome, Narrow Lot, Tandem Garage		All Neighborhood Residential and Urban Mixed-Use Parcels	4 Stories 60'
				All Town Center Mixed-Use Parcels if at least 3 stories	5 Stories 75'

Building Type	Neighborhood Street	Village Street	Neighborhood Street	Village Street	Neighborhood Street
Multi	Attached	Tuckunder		All Neighborhood and Urban Mixed-Use Residential Parcels.	4 Stories 60' or 5 Stories 75' if adjacent to or directly accessible from a Village Street.
				All Town Center Mixed-Use Parcels.	110'
Multi	Attached	Podium		All Neighborhood and Urban Mixed-Use Residential Parcels.	4 Stories 60' or 5 Stories 75' if adjacent to or directly accessible from a Village Street.
				All Town Center Mixed-Use Parcels	110'
Multi	Attached	Embedded Garage		All Neighborhood and Urban Mixed-Use Residential Parcels.	4 Stories 60' or 5 Stories 75' if adjacent to or directly accessible from a Village Street.
				All Town Center Mixed-Use Parcels.	110'

ESTATE LOT

Alley Load



Garage Setback

Note: Dimensions shown are
Minimums unless Noted

Lot Characteristics

Lot width: 60' minimum
Lot size: 6,000 sq. ft. min

Front Porch / Courtyard

Front setback: 3' min.
Corner side setback: 3' minimum
Wraparound porches are permitted at end lots and corners.

Carriage Unit or Casita

Percentage allowed: 100%
Size: 1,000 sq. ft. max.

Principal Building

Front setback: 10' minimum
Side setback: 5' minimum, 10' at corner
Rear setback: 15' minimum (4' min at Casita; 4'-8' or 20'+ at Carriage Unit)

Garage (Both Attached and Detached Allowed)

Side setback: 0' min, 10' at corner
Rear setback: 4-8' or 20'+
Spaces required: min 2 spaces per lot, including tandem spaces. Note: See Section 3.5 for total required parking per lot.
Garage access may be from alley or side street

Courtyard Walls

Front setback: 3' min
Side setback: 0' (3' at corner lots)
Height: 2' minimum; 4' maximum from finished floor

Building Mass

Maximum height: 3 stories
Maximum lot coverage: 70% (excluding overhangs)

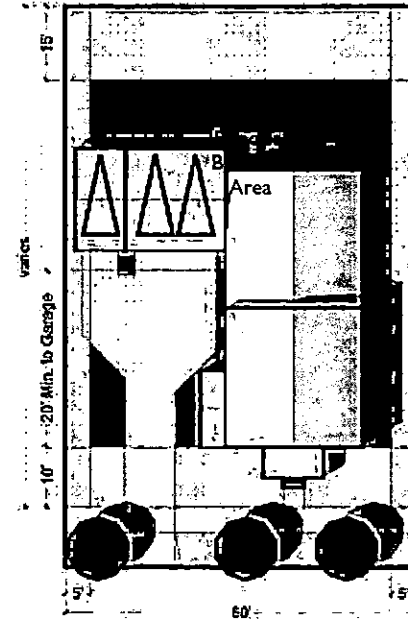
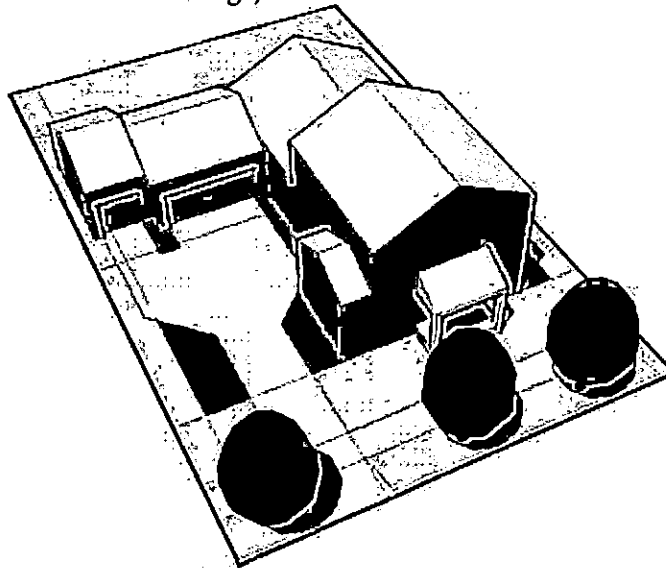
Private Outdoor Space

50% of lots per block must feature at least one outdoor living space visible from and facing the street, selected from the following:

- Front porch: 98 sq. ft. minimum with 7' minimum dimension, 5' minimum at wrap-around portion on corner lots, when provided
- Courtyard: 98 sq. ft. minimum with 7' minimum dimension - minimum 75% open to the sky
- 2nd Story Mirador: 60 sq. ft. minimum with 5' minimum dimension

ESTATE LOT

Side Drive (Attached or Detached Garage)



Note: Dimensions shown are Minimums unless Noted

Lot Characteristics

Lot width: 60' minimum
Lot size: 6,000 sq. ft. min

Front Porch / Courtyard

Front setback: 3' min.
Corner side setback: 3' minimum
Wraparound porches are permitted at end lots and corners.

Carriage Unit or Casita

Percentage allowed: 100%
Size: 1,000 sq. ft. max.

Principal Building

Front setback: 10' minimum
Side setback: 5' minimum, 10' at corner
Rear setback: 15' minimum (to 8' min and 20' max at Carriage Unit or Casita)

Garage (Both Attached and Detached Allowed)

Front Setback: 20' minimum behind front wall plane of residence
Side setback: 0'
Rear setback: 3'
Corner side setback: 10' (drive must be on interior side lot line)
Spaces required: min 2 spaces per lot, including tandem spaces. Note: See Section 3.5 for total required parking per lot.

Courtyard Walls

Front setback: 3' min
Side setback: 0' (3' at corner lots)
Height: 2' minimum; 4' maximum from finished floor

Building Mass

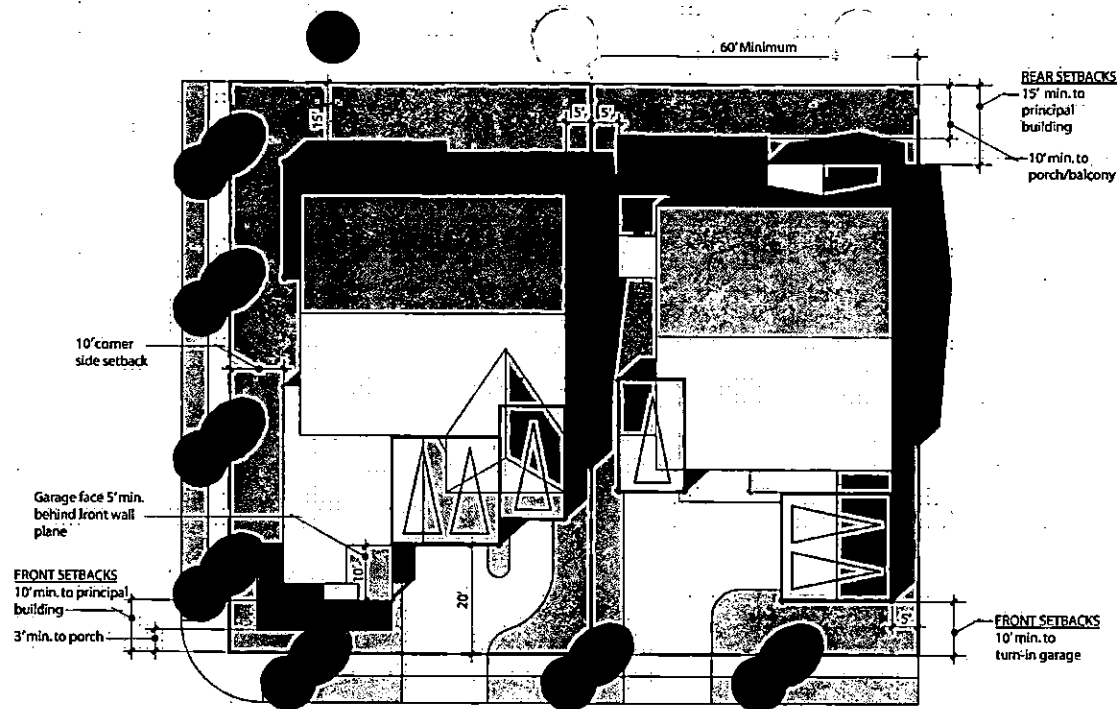
Maximum height: 3 stories
Maximum lot coverage: 70% (excluding overhangs)

Private Outdoor Space

50% of lots per block must feature at least one outdoor living space visible from and facing the street, selected from the following:

- Front porch: 98 sq. ft. minimum with 7' minimum dimension, 5' minimum at wrap-around portion on corner lots, when provided
- Courtyard: 98 sq. ft. minimum with 7' minimum dimension - minimum 75% open to the sky
- 2nd Story Mirador: 60 sq. ft. minimum with 5' minimum dimension

Front Drive



Estate Lot - front drive

Lot width: 60' minimum
Lot size: 6,000 sq. ft. min

Front setback: 3' minimum
 Corner side setback: 3' minimum
 Rear setback: 10' minimum
 Wraparound porches are encouraged at end lots and corners.

Percentage allowed: 100%
Size: 1,000 sq. ft. max.

Front setback: 10' minimum
Side setback: 5' minimum, 10' at corner
Rear setback: 15' minimum (4' min at Casita; 4'-8' or 20+
at Carriage Unit)

Front setback: 20' minimum (needed to avoid apron parking problems); 5' minimum behind front wall plane of residence; 10' minimum from back of sidewalk for turn-in configuration.

Side setback: 5'

Corner side setback: 10' (drive must be on interior side lot line)

Spaces required: min 2 spaces per lot, including tandem spaces. Note: See Section 3.5 for total required parking per lot.

3 car garage subject to terms of 4.3.2.

Front setback: 3' min
Side setback: 0' (3' at corner lots)
Height: 2' minimum; 4' maximum from finished floor

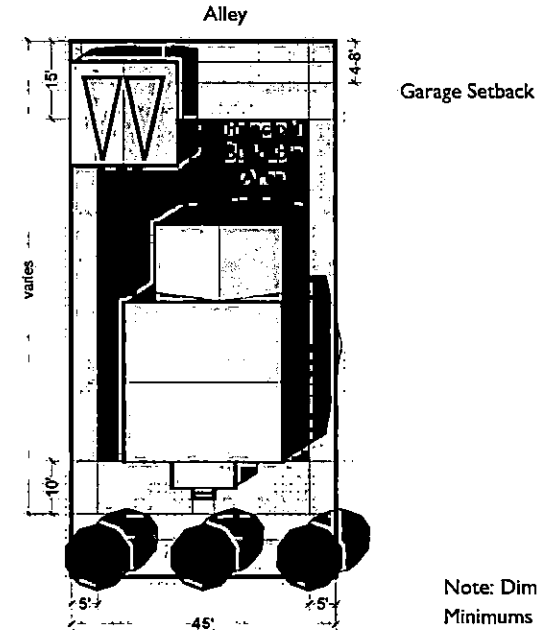
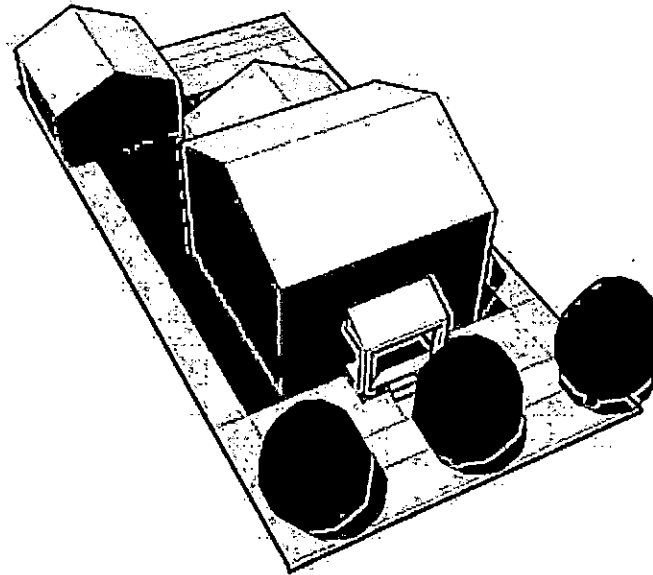
Maximum height: 3 stories
Maximum lot coverage: 70% (excluding overhangs)

50% of lots per block must feature at least one outdoor living space visible from and facing the street, selected from the following:

- Front porch: 98 sq. ft. minimum with 7' minimum dimension, 5' minimum at wrap-around portion on corner lots, when provided
- Courtyard: 98 sq. ft. minimum with 7' minimum dimension - minimum 75% open to the sky
- 2nd Story Mirador: 60 sq. ft. minimum with 5' minimum dimension

STANDARD LOT

Alley Load



Lot Characteristics

Lot width: 45' minimum
Lot size: 4,000 sq. ft. min

Front Porch / Courtyard

Front setback: 3' min
Corner side setback: 3' minimum
Wraparound porches are permitted at end lots and corners.

Carriage Unit or Casita

Size: 1,000 sq. ft. max.

Principal Building

Front setback: 10' minimum
Side setback: 5' minimum, 10' at corner
Rear setback: 15' minimum (4' min at Casita; 4'-8" or 20'+ at Carriage Unit)

Garage (Both Attached and Detached Allowed)

Side setback: 0' min, 10' at corner
Rear setback: 4-8' or 20'+
Spaces required: min 2 spaces per lot, including tandem spaces. Note: See Section 3.5 for total required parking per lot.
Garage access may be from alley or side street

Courtyard Walls

Front setback: 3' min
Side setback: 0' (3' at corner lots)
Height: 2' minimum; 4' maximum from finished floor

Building Mass

Maximum height: 3 stories
Maximum lot coverage: 70% (excluding overhangs)

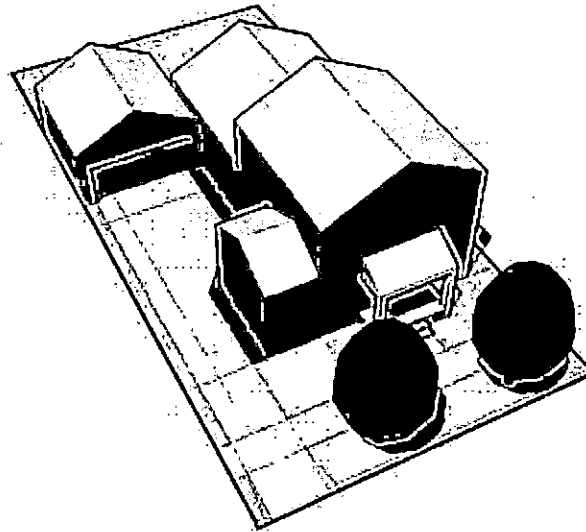
Private Outdoor Space

50% of lots per block must feature at least one outdoor living space visible from and facing the street, selected from the following:

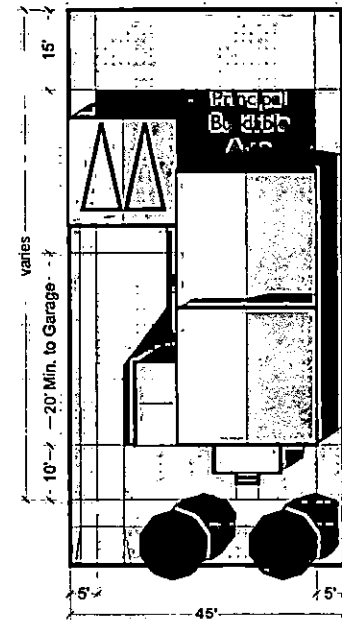
- Front porch: 72 sq. ft. minimum with 7' minimum dimension, 5' minimum at wrap-around portion on corner lots, when provided
- Courtyard: 72 sq. ft. minimum with 7' minimum dimension - minimum 75% open to the sky
- 2nd Story Mirador: 50 sq. ft. minimum with 5' minimum dimension

STANDARD LOT

Side Drive (Attached or Detached Garage)



Note: Dimensions shown are
Minimums unless Noted



Lot Characteristics

Lot width: 45' minimum
Lot size: 4,000 sq. ft. min

Front Porch / Courtyard

Front setback: 3' min
Corner side setback: 3' minimum
Wraparound porches are permitted at end lots and corners.

Carriage Unit or Casita

Size: 1,000 sq. ft. max.

Principal Building

Front setback: 10' minimum
Side setback: 5' minimum, 10' at corner
Rear setback: 15' minimum (4' min at Casita; 4'-8' or 20+ at Carriage Unit)

Garage (Both Attached and Detached Allowed)

Front setback: 20' minimum behind front wall plane of residence
Side setback: 0' min, 10' at corner (drive must be on interior side lot line)
Rear setback: 0'
Spaces required: min 2 spaces per lot, including tandem spaces. Note: See Section 3.5 for total required parking per lot.

Courtyard Walls

Front setback: 3' min
Side setback: 0' (3' at corner lots)
Height: 2' minimum; 4' maximum from finished floor

Building Mass

Maximum height: 3 stories
Maximum lot coverage: 70% (excluding overhangs)

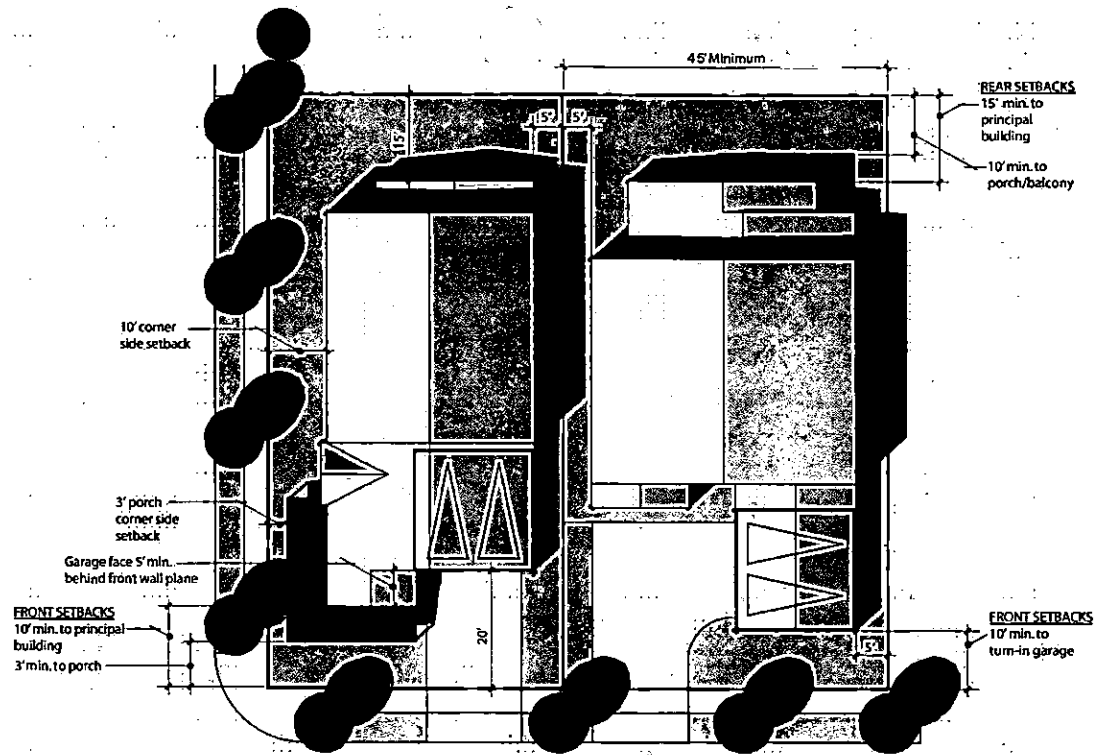
Private Outdoor Space

50% of lots per block must feature at least one outdoor living space visible from and facing the street, selected from the following:

- Front porch: 72 sq. ft. minimum with 7' minimum dimension, 5' minimum at wrap-around portion on corner lots, when provided
- Courtyard: 72 sq. ft. minimum with 7' minimum dimension - minimum 75% open to the sky
- 2nd Story Mirador: 50 sq. ft. minimum with 5' minimum dimension

STANDARD LOT

Front Drive



Standard Lot - front drive

Lot Characteristics

Lot width: 45' minimum
Lot size: 4,000 sq. ft. min

Porch / Courtyard

Front setback: 3' min
Corner side setback: 3' minimum
Rear setback: 10' minimum
Wraparound porches are permitted at end lots and corners.

Carriage Unit or Casita

Size: 1,000 sq. ft. max.

Principal Building

Front setback: 10' minimum
Side setback: 5' minimum, 10' at corner
Rear setback: 15' minimum (4' min at Casita; 4'-8' or 20+ at Carriage Unit)

Garage (Both Attached and Detached Allowed)

Front setback: 20' minimum (needed to avoid apron parking problems); 5' minimum behind front wall plane of residence; 10' minimum from back of sidewalk for turn-in configuration.
Side setback: 5' minimum, 10' minimum at corner (drive must be on interior side lot line)
Spaces required: min 2 spaces per lot, including tandem spaces. Note: See Section 3.5 for total required parking per lot.
No more than 2 garages spaces may face the street

Courtyard Walls

Front setback: 3' min
Side setback: 0' (3' at corner lots)
Height: 2' minimum; 4' maximum from finished floor

Building Mass

Maximum height: 3 stories
Maximum lot coverage: 70% (excluding overhangs)

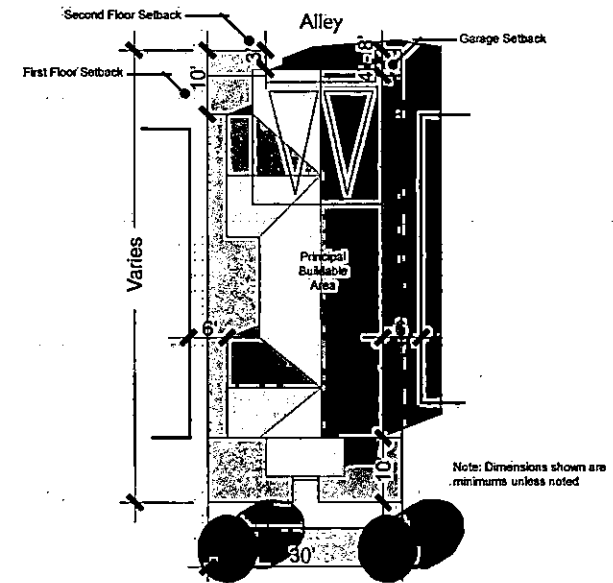
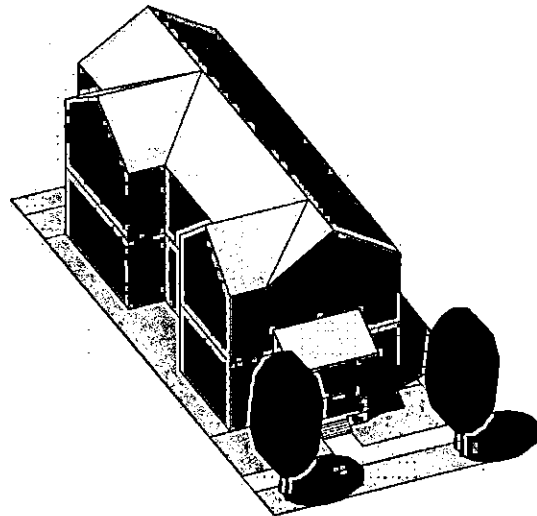
Private Outdoor Space

50% of lots per block must feature at least one outdoor living space visible from and facing the street, selected from the following:

- Front porch: 72 sq. ft. minimum with 7' minimum dimension, 5' minimum at wrap-around portion on corner lots, when provided
- Courtyard: 72 sq. ft. minimum with 7' minimum dimension - minimum 75% open to the sky
- 2nd Story Mirador: 50 sq. ft. minimum with 5' minimum dimension

COMPACT LOT

Alley Load



Lot Characteristics

Lot width: 30' minimum
Lot size: 2,500 sq. ft. min

Front Porch / Courtyard

Front setback: 3' min
Corner side setback: 3' minimum

Carriage Unit or Casita

Size: 800 sq. ft. max.

Principal Building

Front setback: 10' minimum
Side setback: 0' minimum to principal building, 10' at corner. 6' minimum aggregate; 0' to non-living elements
Rear Setback: 1st Floor Living: 10' min.
2nd Floor Living: 3' min.
Carriage Unit or Casita: 5' min.

Garage (Both Attached and Detached Allowed)

Side setback: 0' minimum, 6' at corner
Rear setback: 4'-8' or 20'+
Spaces required: min 2 spaces per lot, including tandem spaces. Note: See Section 3.5 for total required parking per lot
Garage access may be from alley or side street

Courtyard Walls

Front setback: 3' min
Side setback: 0' (3' at corner lots)
Height: 2' minimum; 4' maximum from finished floor

Building Mass

Maximum height: 3 stories
Maximum lot coverage: 80% (excluding overhangs)

Private Outdoor Space

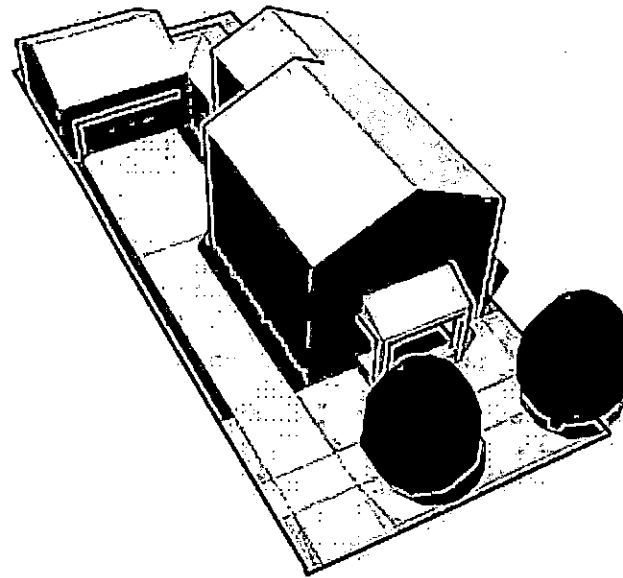
50% of lots per block shall feature at least one outdoor living space visible from and facing the street, selected from the following:

- Front porch: 50¹ sq. ft. minimum with 7' minimum dimension, 5' minimum at wrap-around portion on corner lots, when provided
- Courtyard: 50¹ sq. ft. minimum with 7' minimum dimension - minimum 75% open to the sky
- 2nd Story Mirador: 40¹ sq. ft. minimum with 5' minimum dimension

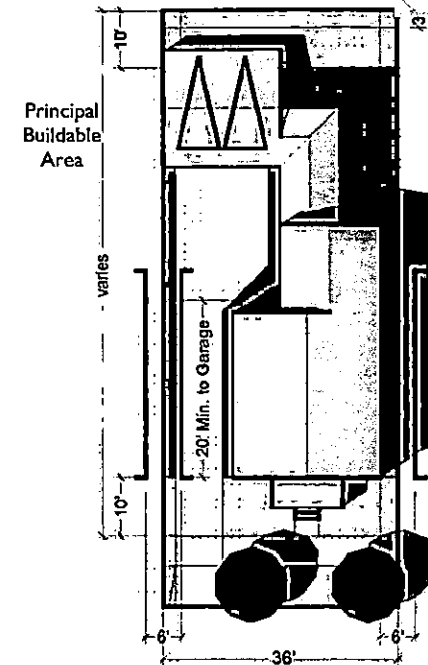
¹If 100% of lots feature at least one outdoor living space, minimum requirements shall be reduced to 36 sq. ft.

COMPACT LOT

Side Drive (Attached or Detached Garage)



Note: Dimensions shown are
Minimums unless Noted



Lot Characteristics

Lot width: 36' minimum
Lot size: 2,500 sq. ft. min

Front Porch / Courtyard

Front setback: 3' min
Corner side setback: 3' minimum

Carriage Unit or Casita

Size: 800 sq. ft. max.

Principal Building

Front setback: 10' minimum
Side setback: 0' minimum to principal building, 10' at corner. 6' minimum aggregate; 0' to non-living elements
Rear setback: 10' minimum (5' min at Carriage Unit or Casitas)

Garage (Both Attached and Detached Allowed)

Front setback: 20' minimum behind front wall plane of residence
Side setback: 0' minimum, 6' at corner (drive must be on interior side lot line)
Rear setback: 0'
Spaces required: min 2 spaces per lot, including tandem spaces. Note: See Section 3.5 for total required parking per lot.

Courtyard Walls

Front setback: 3' min
Side setback: 0' (3' at corner lots)
Height: 2' minimum; 4' maximum from finished floor

Building Mass

Maximum height: 3 stories
Maximum lot coverage: 80% (excluding overhangs)

Private Outdoor Space

50% of lots per block shall feature at least one outdoor living space visible from and facing the street, selected from the following:

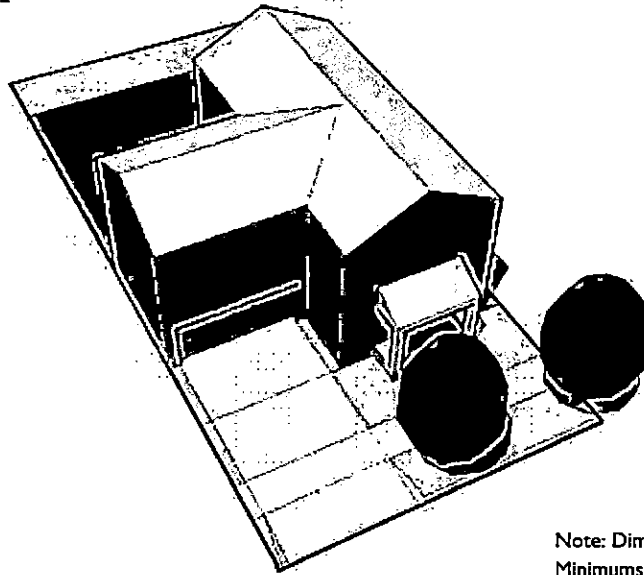
- Front porch: 50¹ sq. ft. minimum with 7' minimum dimension, 5' minimum at wrap-around portion on corner lots, when provided
- Courtyard: 50¹ sq. ft. minimum with 7' minimum dimension – minimum 75% open to the sky
- 2nd Story Mirador: 40¹ sq. ft. minimum with 5' minimum dimension

¹If 100% of lots feature at least one outdoor living space, minimum requirements shall be reduced to 36 sq. ft.

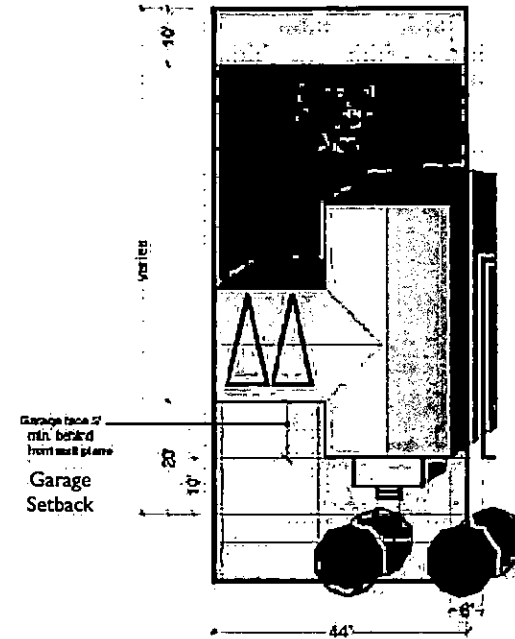
COMPACT LOT

Front Drive

(Double Garage)



Note: Dimensions shown are
Minimums unless noted



Lot Characteristics

Lot width: 44' minimum
Lot size: 2,500 sq. ft. min

Front Porch / Courtyard

Front setback: 3' min.
Corner side setback: 3' minimum

Carriage Unit or Casita

Size: 800 sq. ft. max.

Principal Building

Front setback: 10' minimum
Side setback: 0' minimum to principal building, 10' at corner. 6' minimum aggregate; 0' to non-living elements
Rear setback: 10' minimum (5' min at Carriage Unit or Casitas)

Garage (Both Attached and Detached Allowed)

Front setback: 20' minimum (needed to avoid apron parking problems); 5' minimum behind front wall plane of residence; 10' minimum from back of sidewalk for turn-in garage configuration.
Side setback: 0' minimum, 6' at corner
Rear setback: 4'-8' or 20'+
Spaces required: min 2 spaces per lot, including tandem spaces. Note: See Section 3.5 for total required parking per lot.
Garage access may be from alley or side street

Courtyard Walls

Front setback: 3' min
Side setback: 0' (3' at corner lots)
Height: 2' minimum; 4' maximum from finished floor

Building Mass

Maximum height: 3 stories
Maximum lot coverage: 80% (excluding overhangs)

Private Outdoor Space

50% of lots per block shall feature at least one outdoor living space visible from and facing the street, selected from the following:

- Front porch: 50¹ sq. ft. minimum with 7' minimum dimension, 5' minimum at wrap-around portion on corner lots, when provided
- Courtyard: 50¹ sq. ft. minimum with 7' minimum dimension - minimum 75% open to the sky
- 2nd Story Mirador: 40¹ sq. ft. minimum with 5' minimum dimension

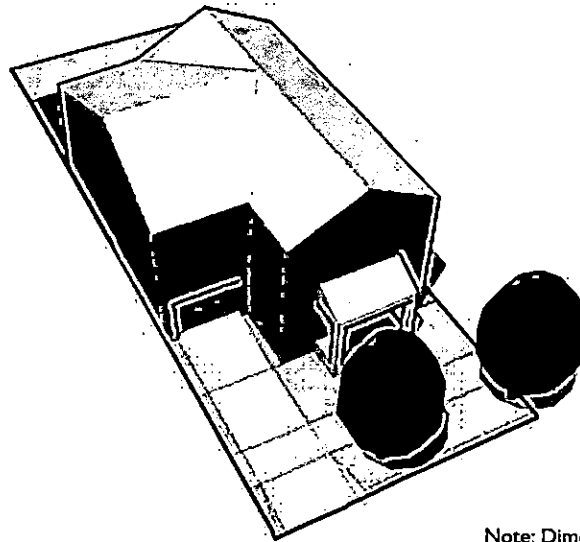
¹If 100% of lots feature at least one outdoor living space, minimum requirements shall be reduced to 36 sq. ft.

COMPACT LOT

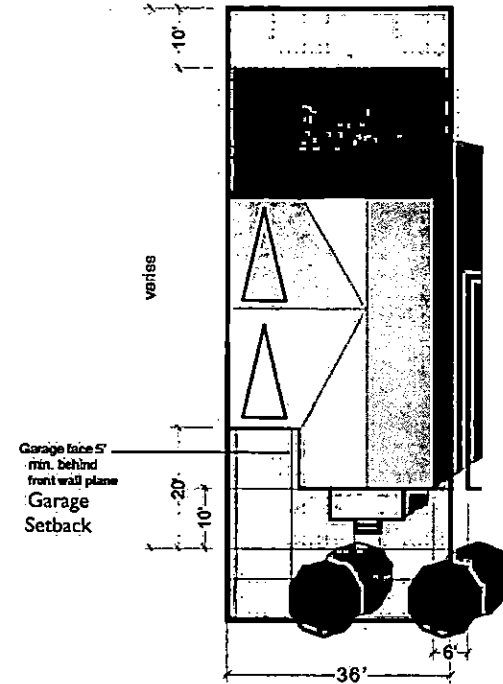
Front Drive

(Single Garage

Tandem Parking)



Note: Dimensions shown are Minimums unless Noted



Lot Characteristics

Lot width: 36' minimum
Lot size: 2,500 sq. ft. min

Front Porch / Courtyard

Front setback: 3' min
Corner side setback: 3' minimum

Carriage Unit or Casita

Size: 800 sq. ft. max.

Principal Building

Front setback: 10' minimum
Side setback: 0' minimum to principal building, 10' at corner. 6' minimum aggregate; 0' to non-living elements
Rear setback: 10' minimum (5' min at Carriage Unit or Casitas)

Garage(Both Attached and Detached Allowed)

Front setback: 20' minimum (needed to avoid apron parking problems); 5' minimum behind front wall plane of residence.
Side setback: 0' minimum, 6' at corner
Rear setback: 4'-8' or 20'+
Spaces required: min 2 spaces per lot, tandem spaces.
Note: See Section 3.5 for total required parking per lot.

Courtyard Walls

Front setback: 3' min
Side setback: 0' (3' at corner lots)
Height: 2' minimum; 4' maximum from finished floor

Building Mass

Maximum height: 3 stories
Maximum lot coverage: 80% (excluding overhangs)

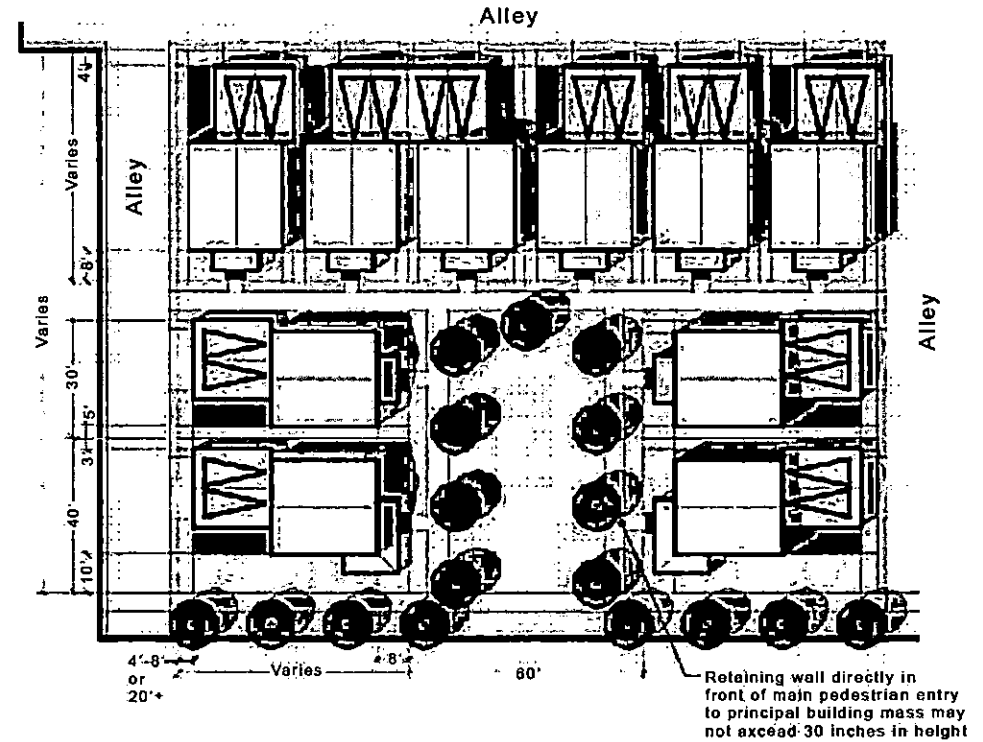
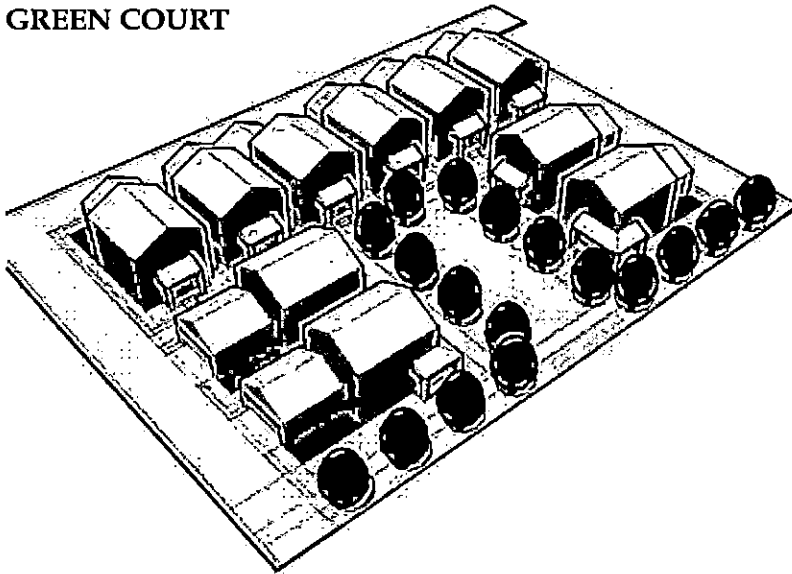
Private Outdoor Space

50% of lots per block shall feature at least one outdoor living space visible from and facing the street, selected from the following:

- Front porch: 50¹ sq. ft. minimum with 7' minimum dimension, 5' minimum at wrap-around portion on corner lots, when provided
- Courtyard: 50¹ sq. ft. minimum with 7' minimum dimension - minimum 75% open to the sky
- 2nd Story Mirador: 40¹ sq. ft. minimum with 5' minimum dimension

¹If 100% of lots feature at least one outdoor living space, minimum requirements shall be reduced to 36 sq. ft.

GREEN COURT



Lot Characteristics

Lot width: 30' min (40' at corner lots)
Lot size: 1,800 sq. ft. min

Private Outdoor Space

Setback at green: 4' min. Setback at street: 6' min
50% of lots per block must feature at least one outdoor living space visible from and facing the street or green, selected from the following:

- Front porch: 50¹ sq. ft. minimum with 6' minimum dimension, 5' minimum at wrap-around portion on corner lots, when provided
- Courtyard: 50¹ sq. ft. minimum with 6' minimum dimension - minimum 75% open to the sky

2nd Story Mirador: 40 sq. ft. minimum with 5' minimum dimension

¹ If 100 percent of lots feature at least one outdoor living space, minimum requirements shall be reduced to 40 sq. ft.

Principal Building

Front setback: 8' from green, 10' from street
Side setback: 3' minimum, 10' at corner
Rear setback: 4' minimum

Garage

Side setback: 0' minimum
Rear setback: 4'-8' or 20'+
Permitted orientation: alley
Spaces required: min 2 spaces per lot, including tandem spaces. Note: See Section 3.5 for total required parking per lot.
Parking space footprints may not exceed 12 by 24 feet

Building Mass

Maximum height: 3 stories
Maximum lot coverage: 70% aggregate for grouping of homes (excluding overhangs)

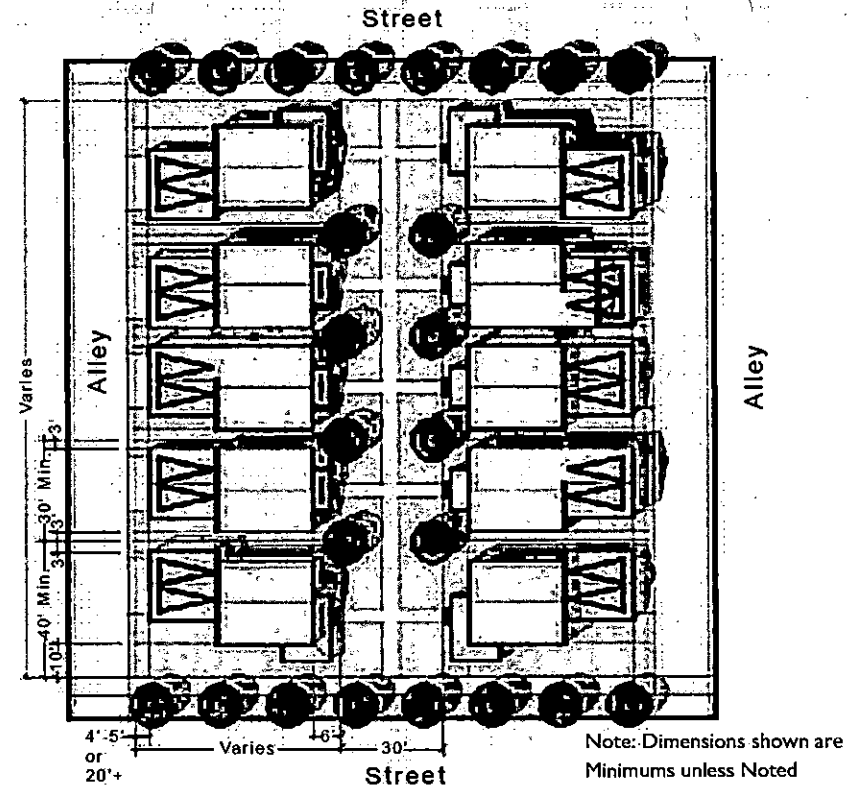
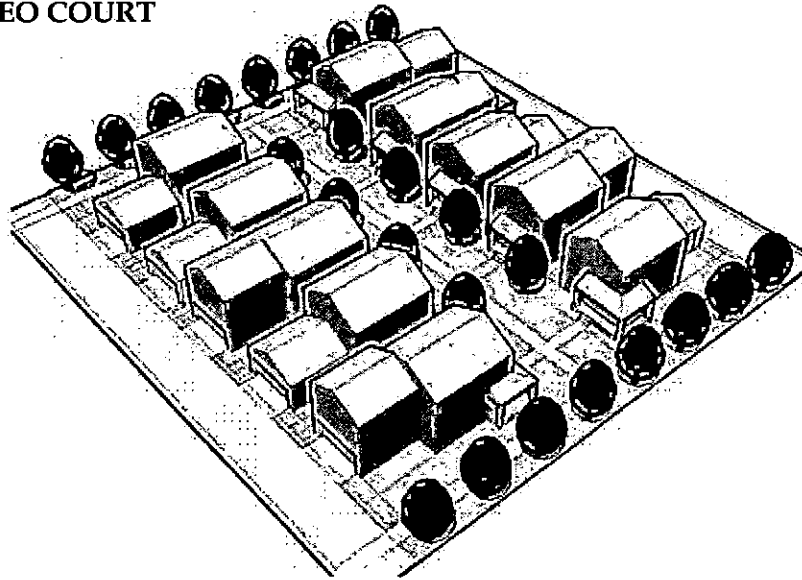
Carriage Unit or Casita

Max 50% of units in group may have carriage unit
Max 50% of units in group may have casita

Common Open Space (Green Court)

125 sq. ft. per unit in a group minimum

PASEO COURT



Lot Characteristics

Lot width: 30' min (40' at corner lots)
Lot size: 1,800 sq. ft. min

Front Porch

See note below-for paseo setback requirements.
Depth: 6' min
Square feet: 48 minimum
Percentage of homes required to have porch: 50%
Wraparound porches are allowed at end lots and corners.

Principal Building

See note below-for paseo setback requirements.
Front setback from street: 10'
Side setback: 3' minimum, 10' at corner
Rear setback: 4' minimum

Garage

Side setback: 0' minimum
Rear setback: 4'-8' or 20'+
Permitted orientation: alley
Spaces required: min 2 spaces per lot, including tandem spaces. Note: See Section 3.5 for total required parking per lot.

Building Mass

Maximum height: 3 stories
Maximum lot coverage: 70% of lot plus share of common open space (excluding overhangs)

Carriage Unit or Casita

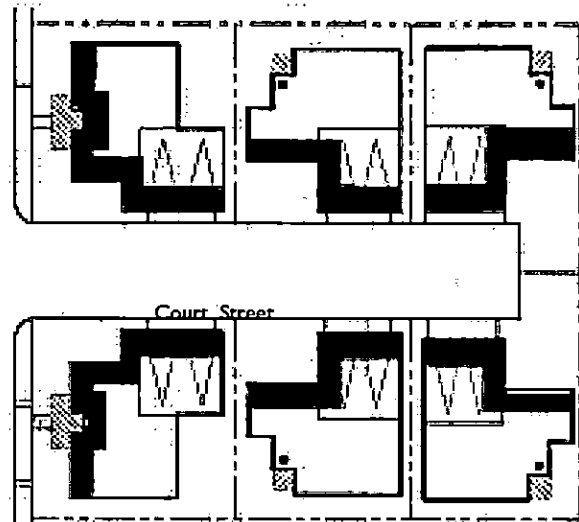
Max 50% of units in group may have carriage unit
Max 50% of units in group may have casita

Common Open Space

125 sq. ft. per unit minimum

Note: Paseo Court products may be mapped in two ways. If an HOA common area is created between two rows of homes, the minimum width of such common area will be 10', porches or courtyards will be set back at least 3' from the common area and the principal building wall plane will be at least 10' from the common area. Alternatively, the front lot lines of the homes may be in the middle of the paseo and front porches will be a minimum of 8' from the property line, principal wall planes a minimum of 15' from property line and the minimum distance between front wall planes of homes will be 30'. In the latter case, a reciprocal easement area will be created between rows of homes that is at least 10' wide.

CLUSTER SINGLE FAMILY



Lot Characteristics

Lot width: 30' min (40' at corner lots)
Lot size: 1,800 sq. ft. min

Porch

Setback at court street: 3' min
Setback at street: 6' min
Depth: 6' min
Square feet: 96 minimum
Percentage of homes required to have front or side entry porch: 50%
Wraparound porches are permitted at end lots and corners.

Elevations

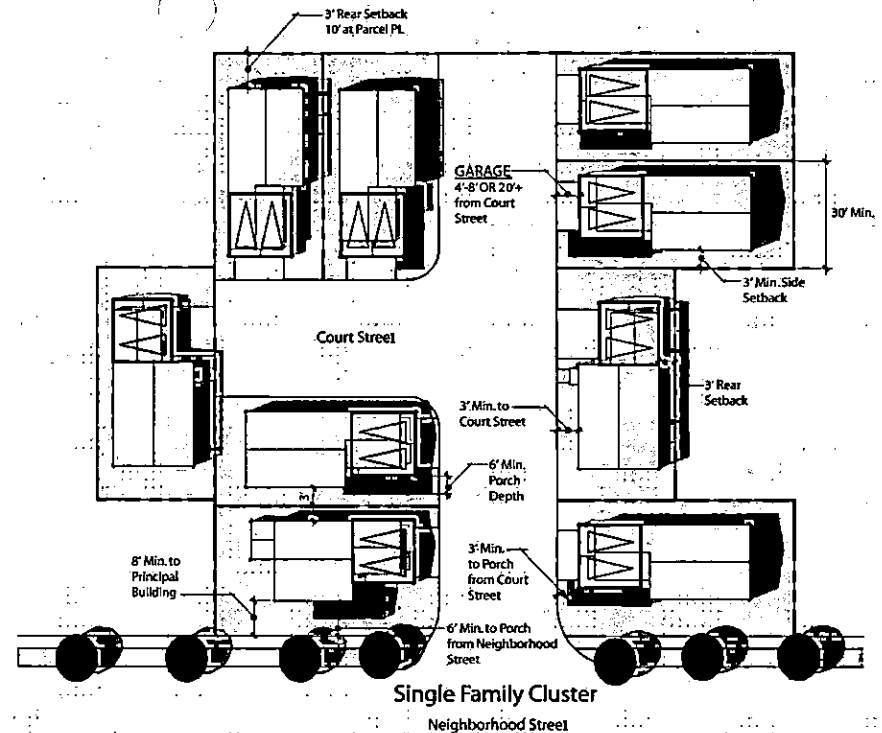
At least 1/3 of the cumulative elevation lengths that front onto a court street shall be devoted to the ground level "living" portion of the residences. (Not every house is subject to the 1/3 criteria, rather it is a cumulative total for all residences on the motor court.

Principal Building

Front setback: 8' minimum from neighborhood street, 3' minimum to court street
Side setback: 3' minimum
Rear setback: 3' (10' at parcel property line)

Garage

Front setback (from court street): 4'-8' or 20'+
Side setback: 0' minimum
Rear setback: 3' minimum
Permitted orientation: court street
Spaces required: min 2 spaces per lot, including tandem spaces. Note: See Section 3.5 for total required parking per lot.
Notes: All garages must be accessed from court street
3-car garages not allowed



Building Mass

Maximum height: 3 stories
Maximum lot coverage: 70% (excluding overhangs)

Carriage Unit or Casita

Not allowed

Private Open Space

150 sq. ft per unit
10' minimum dimension
Note: May be in front, side or rear yard

Planting

Planting areas should be sufficiently sized to accommodate at least one 15 gal. tree visible from the court street per residence. (Not every house requires a tree on its lot, so long as the cumulative total of 1 tree per residence is achieved within each court.

MANSION HOME

Porch

Front setback: 6' minimum
Side setback: 6' at corner
Rear setback: 6' minimum
Depth: 6' min (5' minimum for wrap-around portion at corners)
Size: at least 1/3 the width of the front of the building

Principal Building

Front setback: 10' minimum
Side setback: 5' minimum, 15' aggregate
Rear setback:
 Between abutting lots: 15'
 Adjacent to open space or street: 10'

Garage

Side setback: 10' minimum (attached garage), 4' minimum (detached garage)
Garage Face setback: 4-8' or 20'+.
Permitted orientation: alley or interior motor court accessed from alley or neighborhood street
Spaces required: 1 space per studio or 1BR unit, 2 spaces per 2-3 BR unit, ½ additional space for each bedroom over 3 (Including tandem spaces)

Building Mass

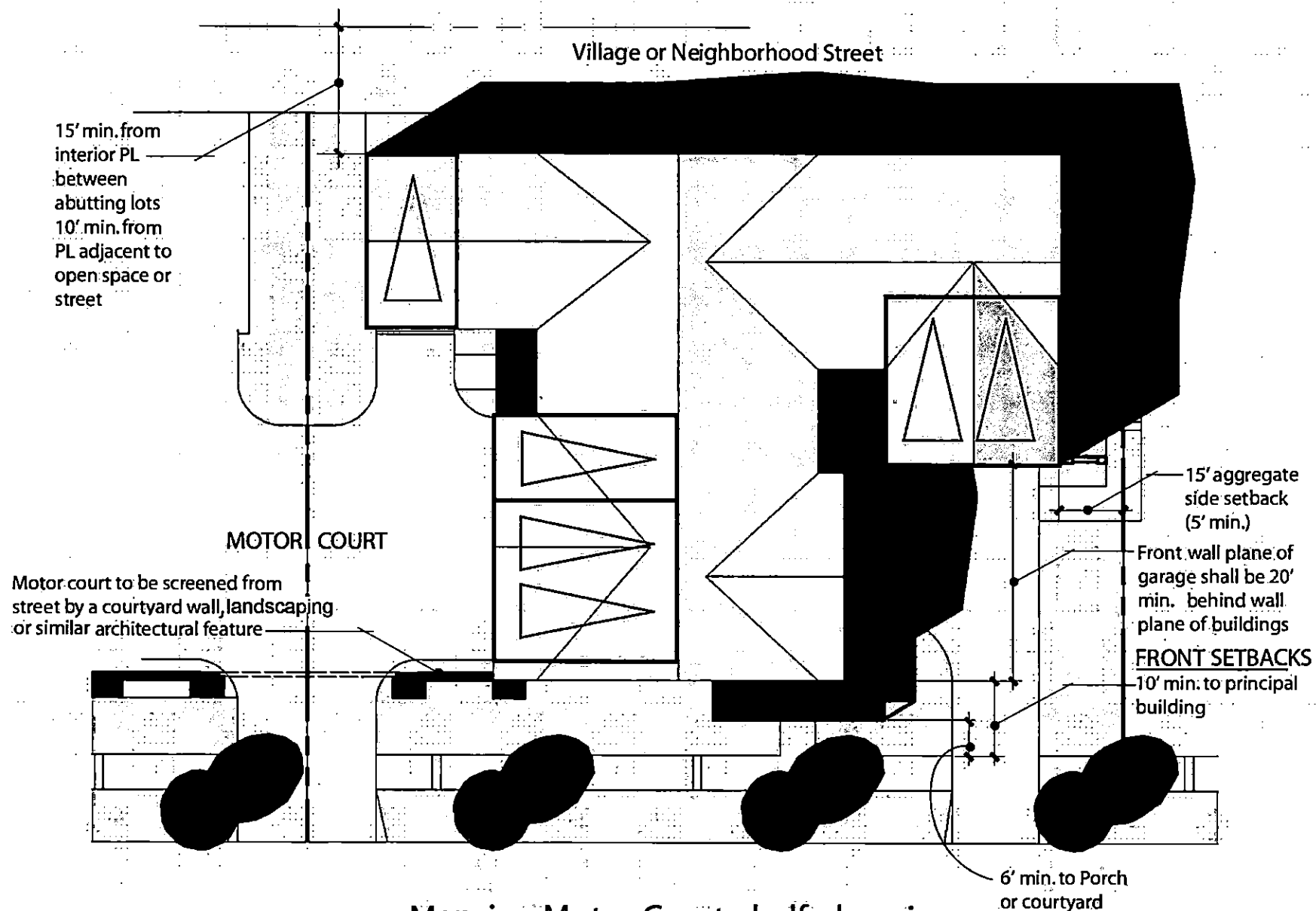
Maximum height:
Neighborhood Residential and Urban Mixed-Use Parcels: 3 stories
Town Center Mixed-Use Parcels: 5 stories
Maximum lot coverage: 70% (excluding overhangs)

Private Outdoor Space

Each unit shall provide at least one of the following:

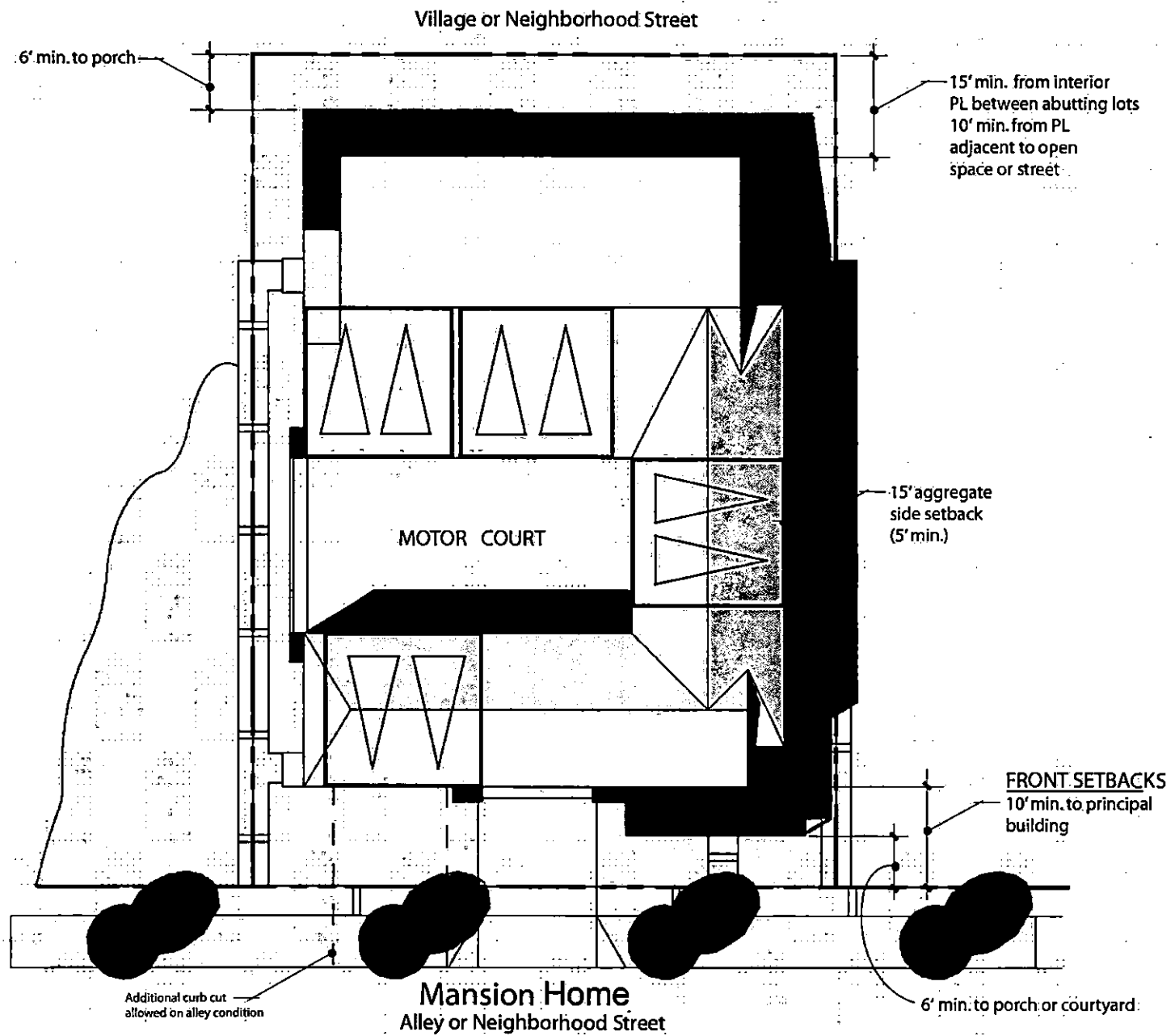
- Covered porch: 50 sq. ft. minimum with 6' minimum dimension, 5' minimum at wrap-around portion on corner lots when provided
- Courtyard: 50 sq. ft. minimum with 6' minimum dimension – minimum 75% open to the sky
- 2nd Story Mirador: 40 sq. ft. minimum with 5' minimum dimension

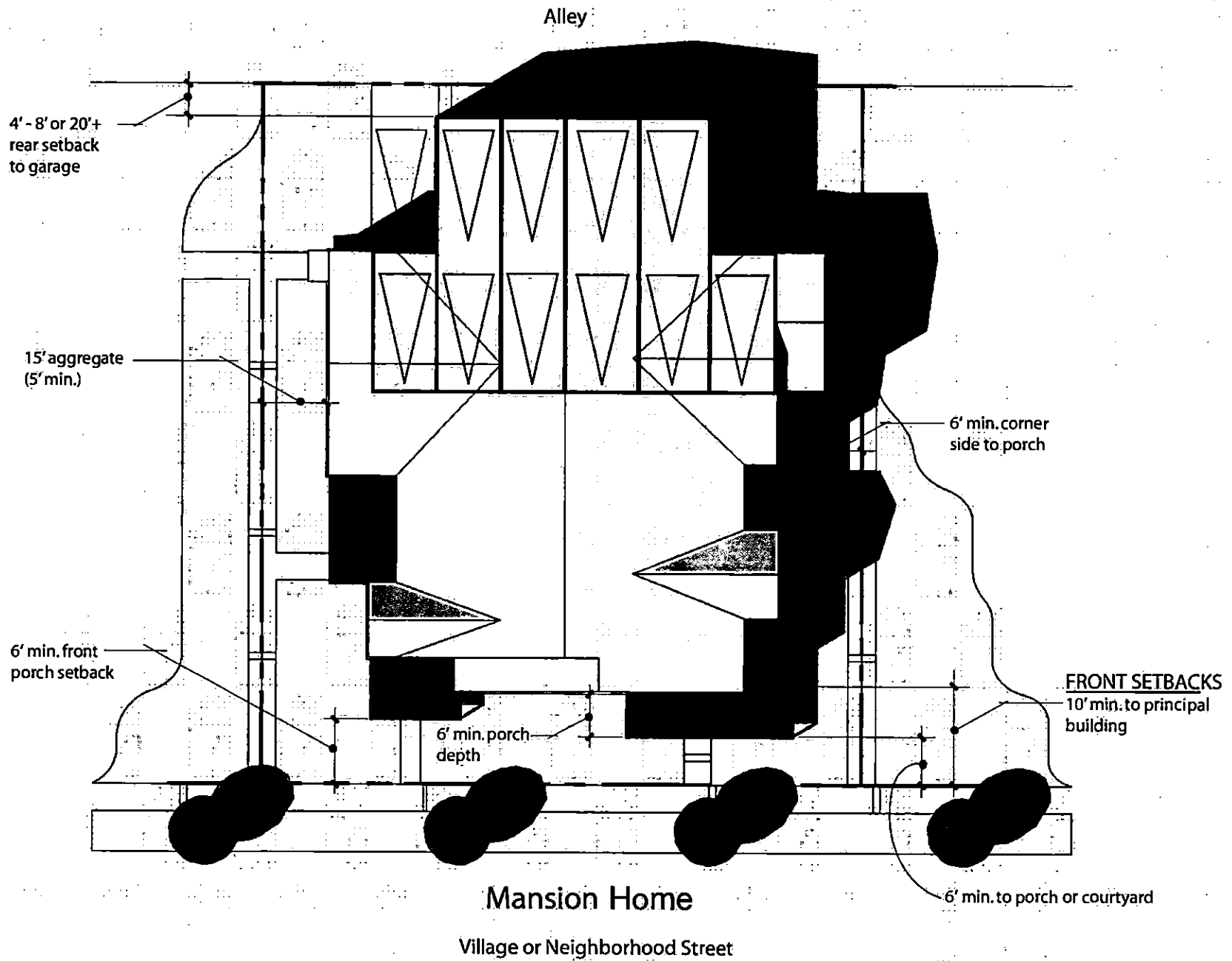
Individual entry porches or courtyards are required for all ground-floor units



Mansion Motor Court - half plan view

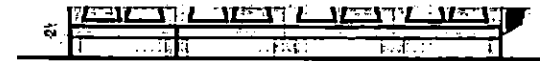
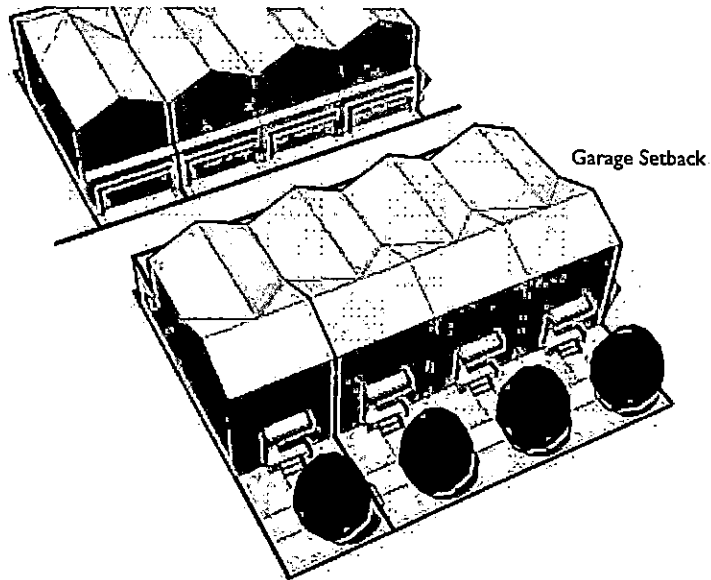
Neighborhood Street



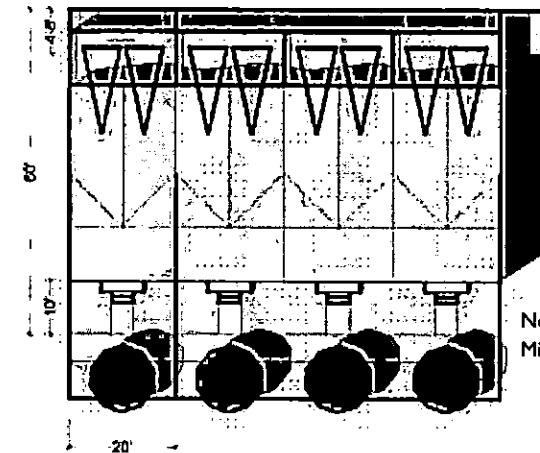


TOWNHOME

Standard Width, Attached Garage



Alley or Court Street



Note: Dimensions shown are Minimums unless Noted

Note: Dimensions shown are Minimums unless Noted

Lot Characteristics

Lot width: 20' minimum
Lot size: 1,200 sq. ft. min

Front Porch / Courtyard

Front setback: 3' minimum
Corner side setback: 0' minimum (openings and architectural projections permitted into public right of way subject to International Building Code Section 32)

Private Open Space

All units must have a porch, courtyard or mirador facing street, paseo or open space.
50 sq. ft per unit
6' minimum dimension

Principal Building

Front setback: 10' minimum
Side setback: 0'
Corner side setback: 0' (openings and architectural projections permitted into public right of way subject to International Building Code Section 32)
Rear setback: 5' minimum with 2' offset from garage

Garage

Side setback: 0' minimum
Rear setback: 4-8' or 20'+
Permitted orientation: alley or court street
Spaces required: 1 space per studio or 1 BR unit, 2 spaces per 2-3 BR unit, ½ additional space for each bedroom over 3 (including tandem spaces)
Tuck-under garage permitted

Note: 1 space of guest parking per 6 units required if on-street parking is not available.

Building Mass

Maximum height:
Neighborhood Residential and Urban Mixed-Use
Parcels: 4 stories.
Town Center Mixed-Use Parcels: 5 stories.

Carriage Unit or Casita

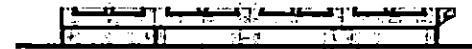
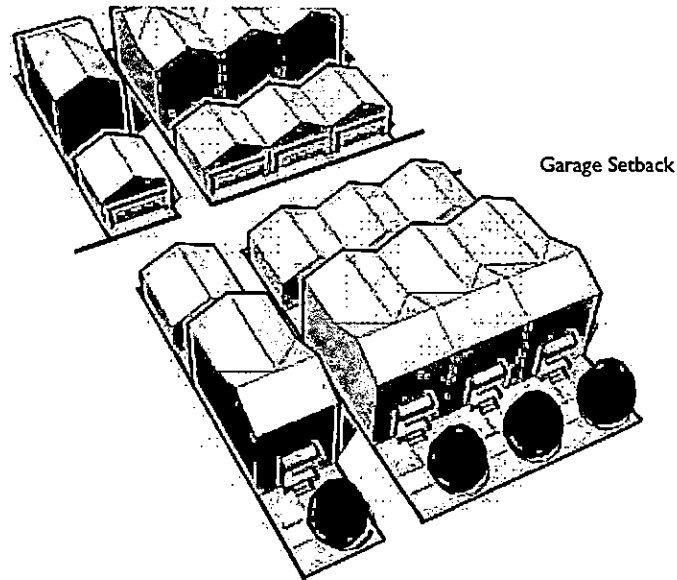
Not allowed

Building Separation

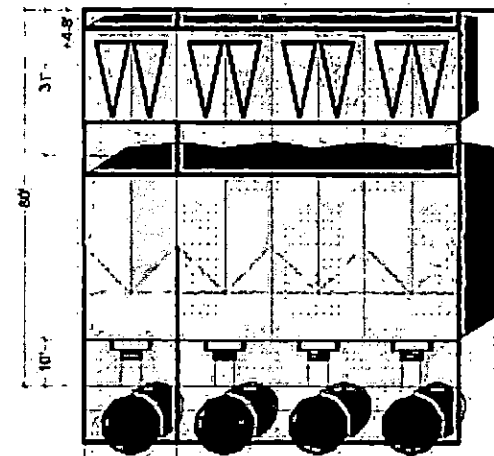
Separation between principal buildings: 20' for every 200' of building length or every 10 units.

TOWNHOME

Standard Width, Detached Garage



Alley or Court Street



Note: Dimensions shown are
Minimums unless Noted

Lot Characteristics

Lot width: 20' minimum
Lot size: 1,200 sq. ft. min

Front Porch / Courtyard

Front setback: 3' minimum
Corner side setback: 0' minimum (openings and architectural projections permitted into public right of way subject to International Building Code Section 32)

Private Open Space

All units must have a porch, courtyard or mirador facing street, paseo or open space,
50 sq. ft per unit
6' minimum dimension

Principal Building

Front setback: 10' minimum
Side setback: 0'
Corner side setback: 0' (openings and architectural projections permitted into public right of way subject to International Building Code Section 32)
Rear setback: 31' minimum

Garage

Side setback: 0' minimum
Rear setback: 4-8' or 20'+
Permitted orientation: alley or court street
Spaces required: 1 space per studio or 1BR unit, 2 spaces per 2-3 BR unit, ½ additional space for each bedroom over 3 (including tandem spaces)
Min 6' building separation

Note: 1 space of guest parking per 6 units required if on-street parking is not available.

Building Mass

Maximum height:
Neighborhood Residential and Urban Mixed-Use
Parcels: 4 stories.
Town Center Mixed-Use Parcels: 5 stories.

Carriage Unit or Casita

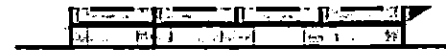
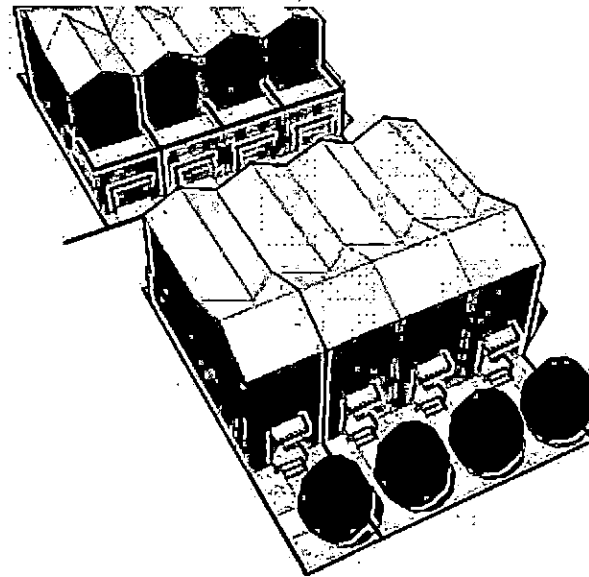
Not allowed

Building Separation

Separation between principal buildings: 20' for every 200' of building length or every 10 units.

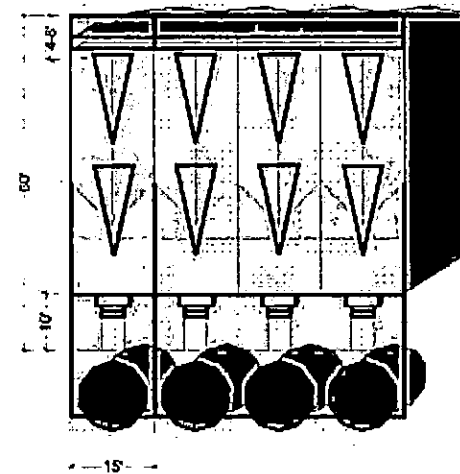
TOWNHOME

Narrow Lot



Alley or Court Street

Garage Setback



Lot Characteristics

Lot width: 15' minimum
Lot size: 750 sq. ft. min

Front Porch / Courtyard

Front setback: 3' minimum
Corner side setback: 0' minimum (openings and architectural projections permitted into public right of way subject to International Building Code Section 32)

Private Open Space

All units must have a porch, courtyard or mirador facing street, paseo or open space.
50 sq. ft per unit
6' minimum dimension

Principal Building

Front setback: 10' minimum
Side setback: 0'
Corner side setback: 0' (openings and architectural projections permitted into public right of way subject to International Building Code Section 32)
Rear setback: 5' minimum with 2' offset from garage

Garage

Side setback: 0' minimum
Rear setback: 4-8' or 20'+
Permitted orientation: alley or court street
Spaces required: 1 space per studio or 1BR unit, 2 spaces per 2-3 BR unit, 1/2 additional space for each bedroom over 3 (including tandem spaces)

Note: 1 space of guest parking per 6 units required if on-street parking is not available.

Building Mass

Maximum height:
Neighborhood Residential and Urban Mixed-Use
Parcels: 4 stories.
Town Center Mixed-Use Parcels: 5 stories.

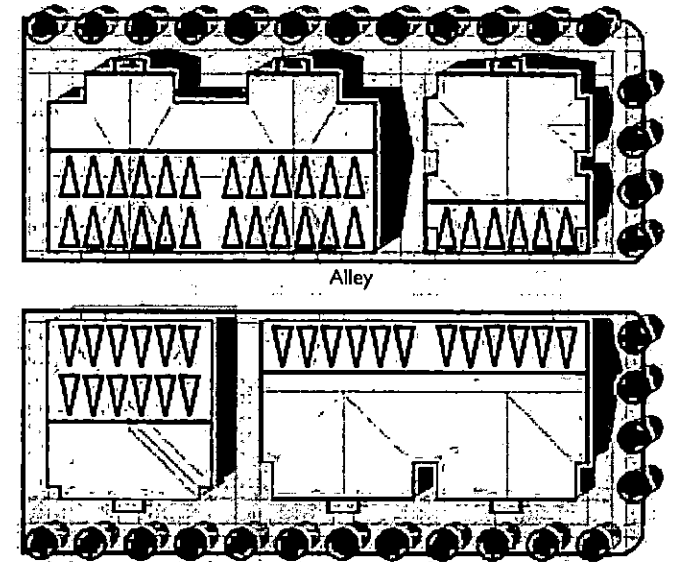
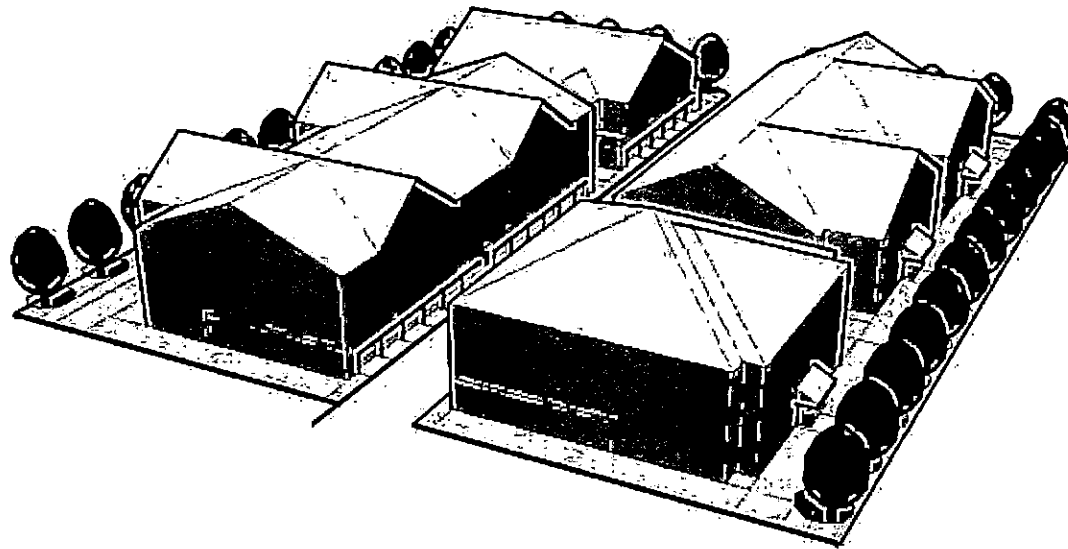
Carriage Unit or Casita

Not allowed

Building Separation

Separation between principal buildings: 20' for every 200' of building length or every 10 units.

TUCKUNDER MULTI-FAMILY-NEIGHBORHOOD RESIDENTIAL AND URBAN MIXED-USE DISTRICTS



Lot Characteristics

Variable

Principal Building

Front setback: 10' minimum
Side setback: 10' minimum
Rear setback: 4-8' or 20'+

Building Mass

Maximum height: 4 stories or 5 stories if adjacent to or directly accessible from a Village Street.
Maximum lot coverage: 75% (excluding overhangs)

Front or Side Entry Porch

Front setback: 6' minimum
Side setback: 5' at corner
Depth: 7' min (5' minimum for wrap-around portion at corners)
Size: at least 1/3 the width of the front of the building

Percentages of buildings required to have front or side entry porches: 100%
Note: Individual entry porches are required for 50% of ground-floor units

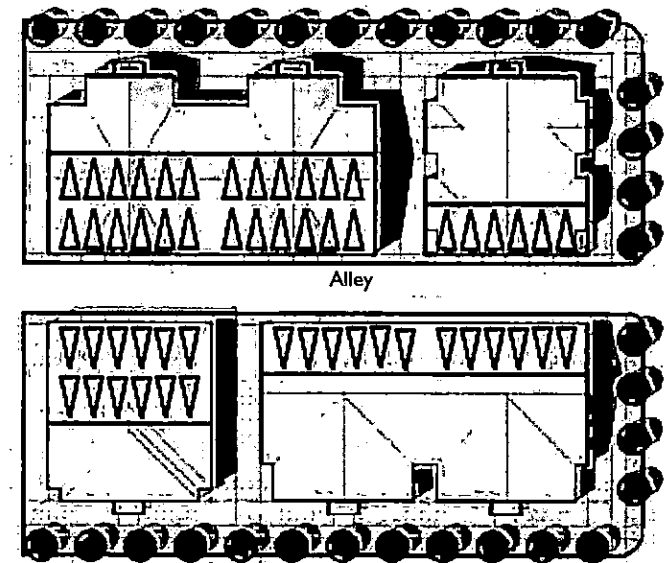
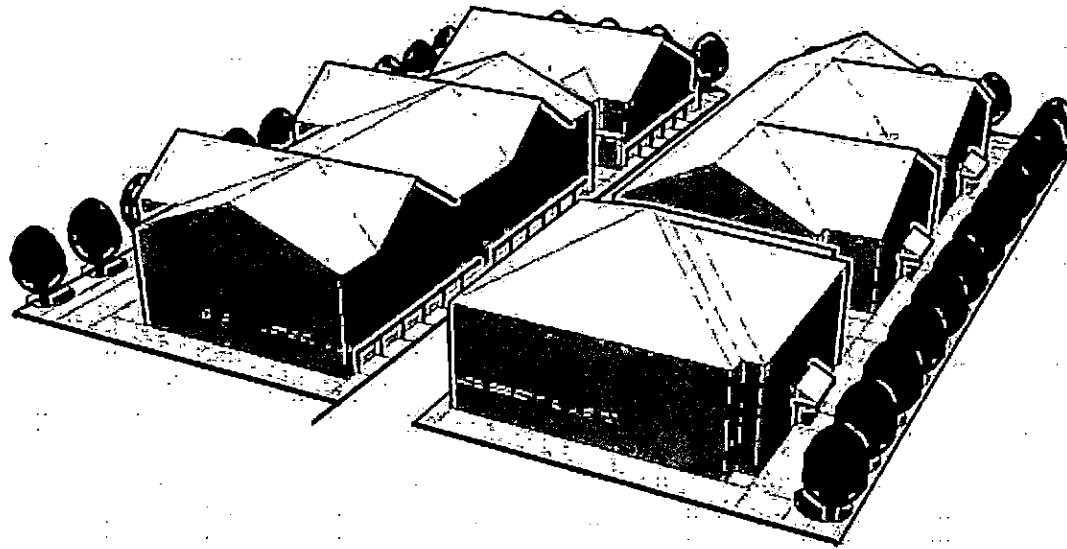
Garage

Side setback: 10' minimum
Rear setback: 4-8' or 20'+.
Permitted orientation: alley
Spaces required (aggregate for building including tandem parking): 1.25 space per studio or 1BR unit, 1.75 spaces per 2BR unit, 2 spaces per 3+BR unit. Senior housing: 1 covered or enclosed space per unit.

Common Outdoor Space

100 sq. ft. per unit including footprint of any recreational building.

TUCKUNDER MULTI-FAMILY TOWN CENTER MIXED USE DISTRICT



Lot Characteristics

Variable

Principal Building

Front setback: 0' minimum. Special Town Center Mixed-Use District sidewalk/ landscape area treatments required. See Figure 3-21.

Side setback: 10' minimum

Rear setback: 4-8' or 20'+

Building Mass

Maximum height: 110'.

Maximum lot coverage: 75% (excluding overhangs)

Front or Side Entry Porch

Front setback: 6' minimum

Side setback: 5' at corner

Depth: 7' min (5' minimum for wrap-around portion at corners)

Size: at least 1/3 the width of the front of the building

Percentages of buildings required to have front or side entry porches: 100%

Note: Individual entry porches are required for 50% of ground-floor units

Garage

Side setback: 10' minimum

Rear setback: 4-8' or 20'+

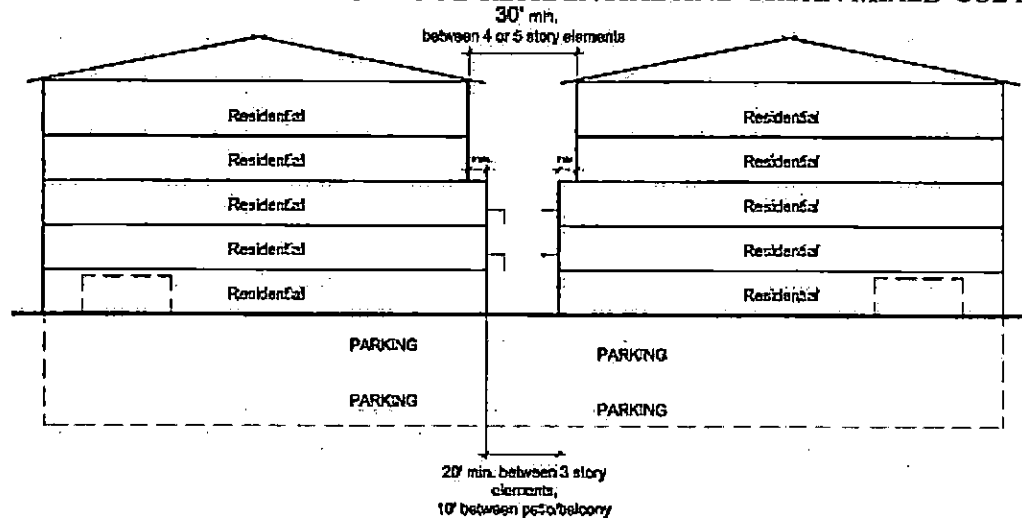
Permitted orientation: alley

Spaces required (aggregate for building including tandem parking): 1.25 space per studio or 1BR unit, 1.75 spaces per 2BR unit, 2 spaces per 3+BR unit. Senior housing: 1 covered or enclosed space per unit.

Common Outdoor Space

100 sq. ft. per unit including footprint of any recreational building.

PODIUM MULTI-FAMILY-NEIGHBORHOOD RESIDENTIAL AND URBAN MIXED-USE DISTRICTS



Lot Characteristics

Varies

Principal Building

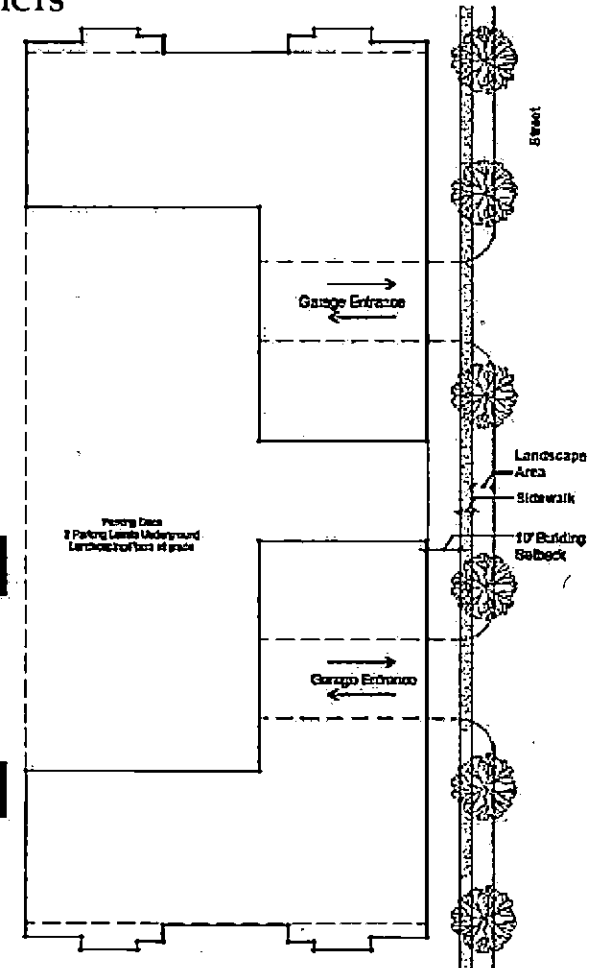
Front setback: 10' minimum
 Side setback: 10' minimum
 Rear setback: 10' minimum
 Building Separation: both buildings require 5' min. offsets
 3 story elements: 20' minimum
 4-5 story elements: 30' minimum

Porch/Balcony

Front setback: 6' minimum
 Side setback: 5' at corner; 10' minimum between elements
 Depth: 7' min (5' minimum for wrap-around portion at corners)
 Size: at least 1/4 the width of the front of the building
 Percentages of buildings required to have front or side entry porches: 100%
 Note: Individual entry porches are required for all ground-floor units

Parking Structure

Front setback: 10' minimum above grade, 0' minimum below-grade
 Side setback: 10' minimum above grade, 5' minimum below grade
 Rear setback: 10' minimum above grade, 5' minimum below grade
 Permitted orientation: alley, side or front entry to parking structure permitted (max. one curb cut per block face).
 Spaces required: 1.25 space per studio or 1BR unit, 1.75 spaces per 2BR unit, 2 spaces per 3+BR unit. Senior housing: 1 covered or enclosed space per unit.
 Note: Parking structure must be visually screened from view from public streets and parks, either fully below grade or concealed from view by habitable space at perimeter or shielded by landscaping



Common Outdoor Space

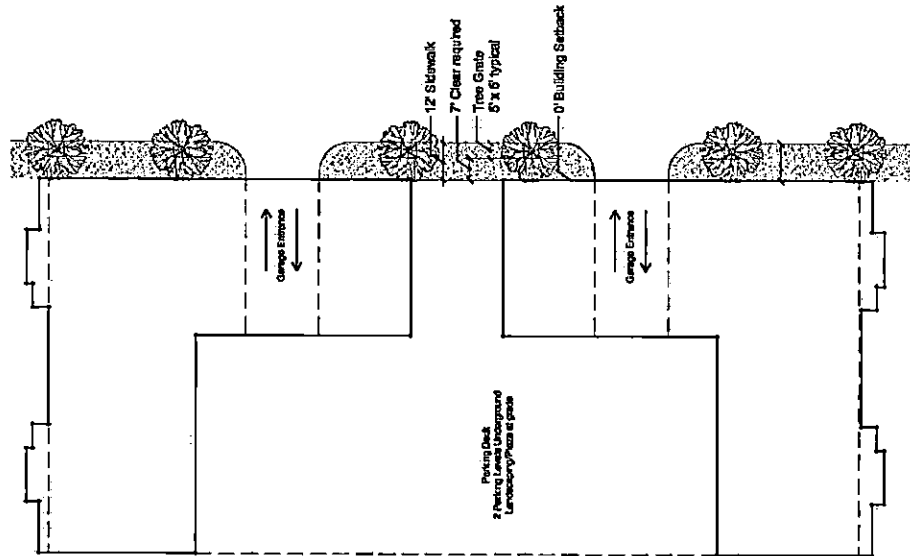
100 sq. ft. per unit including footprint of any recreational building.

Building Mass

Maximum height on top of podium garage: 4 stories or 5 stories when adjacent to or directly accessible from a Village Street.

Maximum lot coverage: 75% (excluding overhangs)

PODIUM MULTI-FAMILY TOWN CENTER MIXED-USE DISTRICT



Lot Characteristics

Varies

Porch/Balcony

Front setback: 6' minimum
 Side setback: 5' at corner; 10' minimum between elements
 Depth: 7' min (5' minimum for wrap-around portion at corners)
 Size: at least 1/4 the width of the front of the building
 Percentages of buildings required to have front or side entry porches: 100%
 Note: Individual entry porches are required for all ground-floor units

Common Outdoor Space

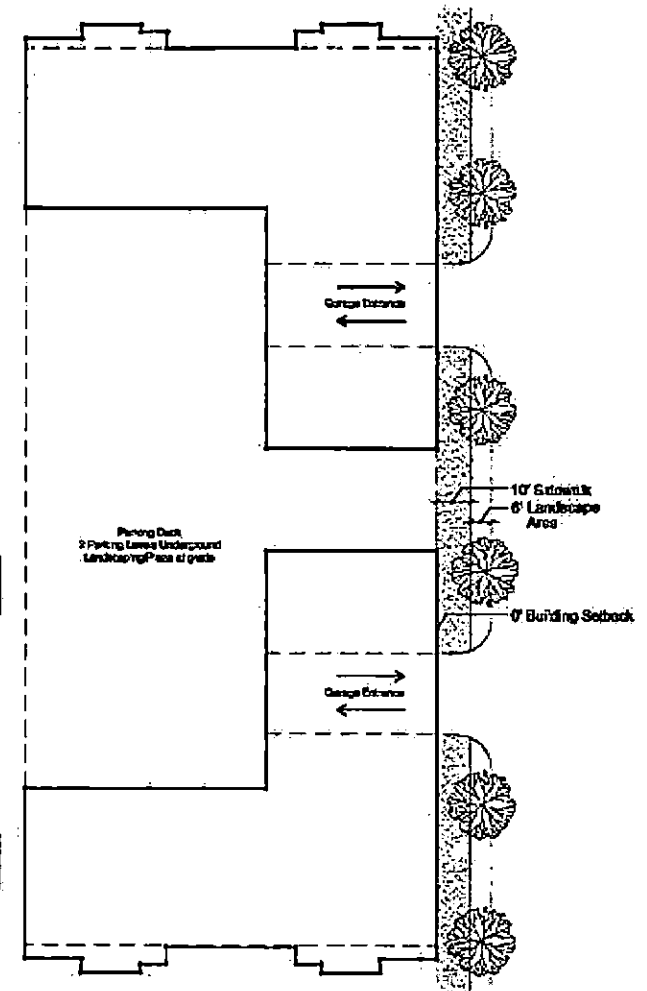
100 sq. ft. per unit including footprint of any recreational building.

Principal Building

Front setback: 0' minimum. Special Town Center Mixed-Use District sidewalk/landscape area treatments required. See Figure 3-21 and exhibits on this page.
 Side setback: 10' minimum
 Rear setback: 10' minimum
 Building Separation: both buildings require 5' min. offsets
 3 story elements: 20' minimum
 4-5 story elements and higher: 30' minimum

Parking Structure

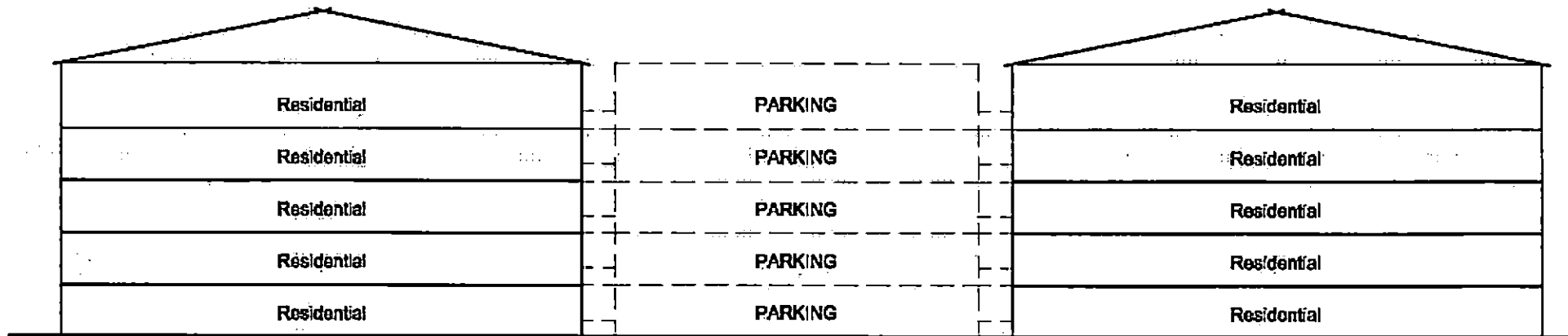
Front setback: 0' min. above or below grade
 Side setback: 0' min. above grade, 5' min. below grade
 Rear setback: 10' minimum above grade, 5' minimum below grade
 Permitted orientation: alley, side or front entry to parking structure permitted (max. one curb cut per block face).
 Spaces required: 1.25 space per studio or 1BR unit, 1.75 spaces per 2BR unit, 2 spaces per 3+BR unit. Senior housing: 1 covered or enclosed space per unit.
 Note: Parking structure must be visually screened from view from public streets and parks, either fully below grade or concealed from view by habitable space at perimeter or shielded by landscaping



Building Mass

Maximum height: 110'
 Maximum lot coverage: 75% (excluding overhangs)

EMBEDDED-GARAGE MULTI-FAMILY- NEIGHBORHOOD RESIDENTIAL AND URBAN MIXED-USE DISTRICT



Lot Characteristics

Varies

Principal Building

Front setback: 10' minimum
Side setback: 10' minimum
Rear setback: 20' minimum

Building Mass

Maximum height: 4 stories or 5 stories if adjacent to or directly accessible from a Village Street
Maximum lot coverage: 75% (excluding overhangs) (not including parking structure)

Front or Side Entry Porch

Front setback: 6' minimum
Side setback: 5' at corner
Depth: 7' min (5' minimum for wrap-around portion at corners)
Size: at least 1/4 the width of the front of the building

Percentages of buildings required to have front or side entry porches: 100%
Note: Individual entry porches are required for all ground-floor units

Common Outdoor Space

Parking Structure

Front setback: 30' minimum
Side setback: 30' minimum
Rear setback: 40' minimum
Permitted orientation: alley, side or front entry to parking structure permitted (max. one curb cut per block face).
Spaces required: 1.25 space per studio or 1BR unit, 1.75 spaces per 2BR unit, 2 spaces per 3+BR unit. Senior housing: 1 covered or enclosed space per unit.
Note: Parking structure must be visually screened from view by habitable space at perimeter, except at interior courtyards

EMBEDDED-GARAGE MULTI-FAMILY TOWN CENTER MIXED-USE DISTRICT

Lot Characteristics

Varies

Front or Side Entry Porch

Front setback: 6' minimum

Side setback: 5' at corner

Depth: 7' min (5' minimum for wrap-around portion at corners)

Size: at least 1/4 the width of the front of the building

Percentages of buildings required to have front or side entry porches: 100%

Note: Individual entry porches are required for all ground-floor units

Principal Building

Front setback: 0' minimum. Special Town Center Mixed-Use District sidewalk/landscape area treatments required. See Figure 3-21 and exhibits on this page.

Side setback: 10' minimum

Rear setback: 20' minimum

Building Separation: buildings require 5' min. wall plane offsets

3 story elements: 20' minimum

4-5 story elements and higher: 30' minimum

Parking Structure

Front setback: 30' minimum

Side setback: 30' minimum

Rear setback: 40' minimum

Permitted orientation: alley, side or front entry to parking structure permitted (max. one curb cut per block face).

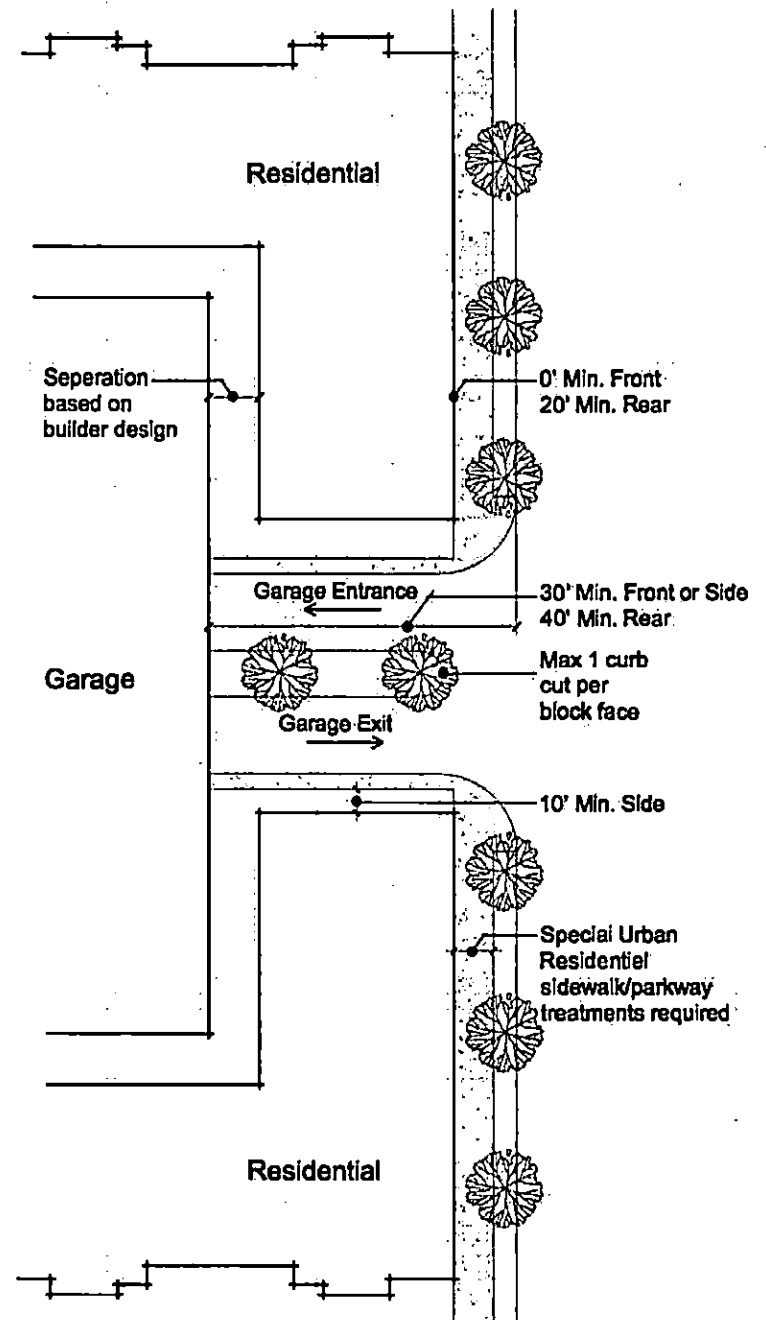
Spaces required: 1.25 space per studio or 1BR unit, 1.75 spaces per 2BR unit, 2 spaces per 3+BR unit. Senior housing: 1 covered or enclosed space per unit.

Note: Parking structure must be visually screened from view by habitable space at perimeter, except at interior courtyards

Building Mass

Maximum height: 110'

Maximum lot coverage: 75%
(excluding overhangs) (not including parking structure)



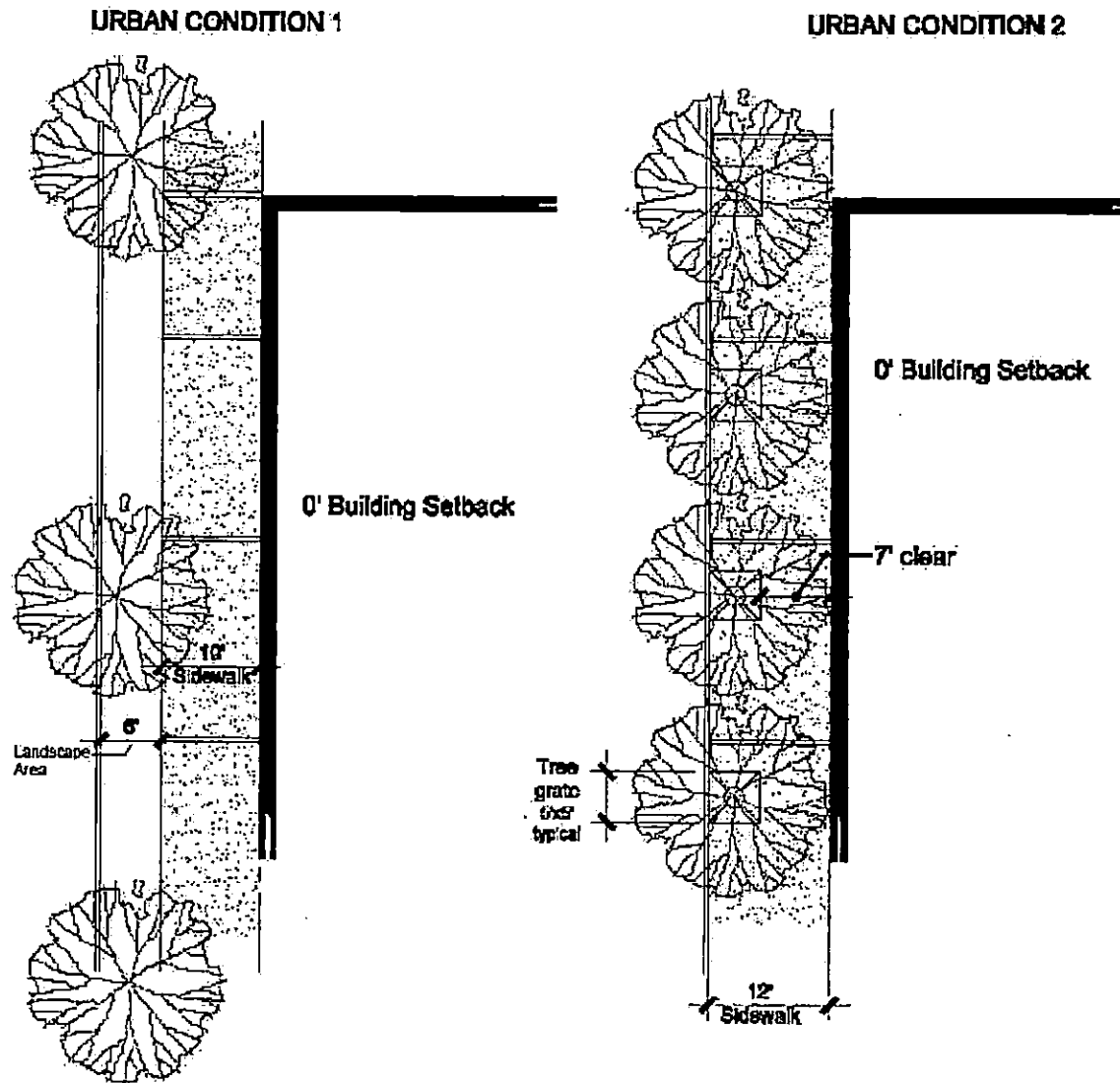


Figure 3-21 SPECIAL SETBACKS FOR MULTI-FAMILY BUILDINGS IN TOWN CENTER MIXED USE DISTRICTS Tree separation and buildings are conceptual and do not necessarily accurately depict actual development. All dimensions and notes are requirements.

SECTION 4 ARCHITECTURAL GUIDELINES

4.1 OVERVIEW AND GOALS

The Architectural Guidelines for the residential areas of Kyle Canyon are intended to facilitate the creation of diverse and varied walkable streetscapes. Key elements that will be incorporated into the design of residences include architectural details that provide visual interest to the street scene, de-emphasis of garages, and authenticity of architectural details.

A variety of architectural styles and elements focusing on human scale details will enhance the pedestrian friendly character of the neighborhoods within Kyle Canyon. Such elements may include the use of front porches, courtyards and miradors, enhanced entries, a mix of materials and textures, and authentic detailing on features such as columns, balconies, windows, doors, shutters, flower boxes, and lighting. Furthermore, a variety of garage designs will be integrated into the massing, design and styling of each home to present an enhanced street frontage. Together, such design features enliven the street scene and promote the friendly interaction of neighbors.

The architectural styles permitted within the community are Craftsman, Prairie Ranch, American Traditional, Spanish Colonial, Country European, Andalusian, Tuscan, Mediterranean, Southern Italian, Brownstone, and Contemporary. The architectural styles may be applied to single family detached, attached and multi-family products.

An architectural checklist and image board of each style is presented in this section. The checklists contain primary identifying characteristics of each style and the requirements of each style. The image boards provide visual examples of each style and their primary identifying characteristics.

Section 4.2 contains the general architectural requirements for all Single Family Homes, attached and detached, regardless of the architectural style selected.

Section 4.3 contains the general architectural requirements for all multi-family buildings within the community regardless of the architectural style selected.

4.2 SINGLE FAMILY ARCHITECTURAL STANDARDS

Well-planned, Neighborhood Residential Parcels contain consistent streetscape elements coupled with a diversity of architecture. While the whole composition is unified, individual homes present considerable variation in style, massing, detail, and color. Streetscape diversity can be achieved through varying setbacks, articulated building massing, variable lot widths, de-emphasized garages, and enhanced elevations and/or single story elements on corner lots. The following standards are designed to create diversity while respecting the needs of today's building process. Figure 4-3 summarizes the residential diversity requirements for the community.

4.2.1 PRODUCT MIX STANDARDS

- In each of the Neighborhood Residential Parcels, each builder will produce a minimum of two of the following Single Family Residential Building Types (No single Residential Building Type, except Alley Loaded, may exceed 60 percent of the dwelling units in a Development Parcel):
 - Estate Lot – Alley Loaded
 - Estate Lot – Front Drive or Side Drive
 - Standard Lot – Alley Loaded
 - Standard Lot – Front Drive or Side Drive
 - Compact Lot – Alley Loaded
 - Compact Lot – Front Drive or Side Drive
 - Green Court
 - Paseo Court
 - Cluster
 - Townhome – Neighborhood Residential

- Mansion Home – Neighborhood Residential

An exception to this rule is that a Development Parcel may contain just one Single Family Residential Building Type if there are 150 or fewer detached dwelling units or 200 or fewer attached dwelling units in the Development Parcel.

4.2.2 PLAN VARIATION

Each builder will produce a minimum of three plans for each single family detached Residential Building Type they build. Different plans are defined as those with significant variation in floor plan, garage access (i.e., Front-Drive, Side-Drive, Side Drive Detached or Alley-Loaded), or massing.

- Each plan must have a minimum of three exterior architectural treatments, defined as variation in primary siding material, roof material, window design, architectural style, or porch/courtyard treatment.
- No more than two dwelling units with the same floor plan shall be plotted adjacent to one another along the same street to avoid a repetitious street scene.

4.2.3 Architectural Variety

In addition to the product mix requirements, the design and placement of homes on lots shall be designed to avoid a monotonous street presence. Variation may be achieved in any of the following ways:

- Single Story Elements. Single story homes, when part of the builder's product program, may be plotted between two two-story elevations to create a diversity of building height and massing.
- Porches and Patios. On two-story dwellings, single story elements such as porches or patios may be used to provide articulation and visual interest to the street elevation.
- Variation Of Roof Planes. A variety of roof forms may be employed, including gable, cross-gable, hip, and shed elements.

- Variation of Primary Materials. Within a Development Parcel a variety of primary facade finishes and roofing materials may be used. If stucco is the only primary facade finish for a Residential Product Type, the stucco must be of two discernibly different textures and trim elements shall be smoother than the primary facade.
- Rear and Side Enhancements. As required by Section 4.3.1, the rear or side elevations Adjacent to and Visible from a Public Place shall be sufficiently articulated to provide visual interest, including:
 - Principal Window Treatments
 - Offset wall planes (Minimum offset: 2')
 - Roof Plane Breaks
 - Color Blocking
 - Introduction of accent building materials and colors.
 - Introduction of accent elements such as clay vents, out lookers, and decorative grille work consistent with the front elevation

4.2.4 Corner Treatments

The relationship of buildings to one another and the street is especially important at corners. Homes plotted on corner lots shall feature enhancements that provide a similar level of detail to corner side elevations as the front elevation.

All corner lot side elevations must have:

- At least one principal window, and
- Window trim similar to front elevations.

In addition, corner lot side elevations must have at least one of the following elements:

- Wrap-around porches or courtyards
- Open side yard landscape treatments

- Roof plane breaks
- Accent colors, materials and detailing

4.2.5 MINIMUM NUMBER OF ARCHITECTURAL TREATMENTS

Each plan must have at least three architectural treatments, defined as variation in primary siding material, roof material, window design, trim details, architectural style, and/or porch treatment.

Two primary siding material treatments must be selected from the following five primary exterior wall options:

1. Light Lace or smoother Stucco
2. Dash or smoother Stucco
3. Cementitious Shingles
4. Cementitious Siding
5. Board & Battan (Hardi-Plank)
6. Masonry

Within each treatment, variation in roofing material or profile and color is required. Porches, courtyards, balconies, or other focal architectural elements are required on each Residential Building Type in varying proportions as described in Section 4.3.

4.2.6 COLOR VARIATION

The following color variation standards apply to all residential construction in Kyle Canyon. See Section 7, Color, for additional color standards and approved color palettes.

A. NUMBER OF COLOR PACKAGES

A unique color package shall be developed for each Residential Building Type within a Development Parcel.

B. NUMBER OF COLOR SCHEMES WITHIN A COLOR PACKAGE

Each color package for single family neighborhoods shall have a minimum of six (6) color schemes. Not more than 35% of the homes in any Development Parcel shall use the same color scheme.

Each color package for Urban Residential Parcels shall have a minimum of three color schemes. Not more than 40% of the buildings in any Development Parcel shall use the same color scheme.

C. ROOF COLORS

Single family neighborhoods shall have at least four different roof colors. The same roof color in a different profile shall count for two colors.

D. BUILDING COLORS

Each color scheme shall contain a minimum of four different colors, not including the roof color. Masonry may be substituted for one of the required colors on those styles that allow it.

E. COLOR SELECTION CRITERIA

All single family neighborhoods shall conform to the following criteria:

- All primary field colors shall be discernibly different from each other.
- No more than one third of the selected schemes may use the same fascia color.
- No more than one third of the selected schemes may use the same trim color.
- Each scheme shall have a different accent color.
- Fascia and trim colors may be the same within a scheme.

All Urban Residential Parcels shall conform to the following criteria:

- All primary and secondary field colors shall be discernibly different from all other field colors.
- The same fascia color may be used throughout.
- The same trim color may be used throughout.
- Fascia and trim colors may be the same within a scheme.

F. COLOR PLOTTING CRITERIA

The two houses on either side of a specific lot and the lot across from it must all use different color schemes than that specific lot. This requirement applies to all detached neighborhoods. Adjacent multi-family buildings may not employ the same color scheme.

G. MASONRY

Masonry is required on at least one of the elevations for each plan and at least 20% of the front face of the plan excluding doors and windows will contain a masonry element.

4.3 SINGLE FAMILY DETACHED ARCHITECTURAL CRITERIA

4.3.1 ARCHITECTURAL ELEMENTS

The architecture of a house consists of three basic elements regardless of its architectural style. These architectural elements are Building Facades, Roofs, and Detail Elements. Together, when these elements are designed appropriately, a cohesive yet diverse residential neighborhood environment will be realized, consistent with the goals and objectives of the Kyle Canyon master plan.

BUILDING FORM

Variety in building forms provides diversity and visual interest to the neighborhood street scene. The following shall be incorporated into the design of residential structures:

- Articulation of wall planes
- Projections and recesses to provide shadow and depth
- Simple bold forms
- Combinations of one, two and three story elements on a single building as appropriate to the architectural style of the home.

Building wall planes, particularly on the front elevation, shall be staggered to create interest along the street scene, to provide a desirable human scale, and to avoid visual monotony.

Residential design shall provide articulation and detail to the rear and side of the dwelling when Adjacent to and Visible from a Public Place.

The use of outdoor living space along the front elevation is required as described in the Residential Building Types Requirements in Section 4.3 to provide visual interest to the street scene.

Uninterrupted 3 story wall planes on front or rear elevations, greater than 1/3 the elevation, are not permitted. Vertical and horizontal wall plane breaks must be offset a minimum of 2'.

BUILDING MATERIALS AND COLORS

The design of residences shall use building materials that are consistent with the architectural styles as identified on the architectural checklist for each style. All surface treatments or materials shall be designed to appear as an integral part of the design, and not merely applied. All materials shall wrap columns and the exterior faces of porches or balconies in their entirety.

Changes in wall material should clarify, not clutter, the design. One or two siding materials per residence are preferred and no more than three materials may be used per building without Master Developer approval.

Wall material changes should occur only in the following places:

- Between the body of a building and its gable ends.
- At horizontal and vertical inside corners between component parts of a building such as additions, garages, chimneys, bays or porches. Mark horizontal wall material changes with a significant change in wall plane or a pronounced trim detail such as a water table or string course.
- At functional details such as sills, headers, posts, etc.

- Material breaks at garage corners shall have a return dimension equal to or greater than the width of the material on the front elevation.
- Material breaks should occur at inside corners, where feasible. In cases where materials wrap an outside corner, it should extend to a logical termination point related to rooflines or building massing when they are available, otherwise returns shall be 3 feet minimum.
- Between the base and the top of a building along a sill line, floor line, porch rail line or plate line.

STUCCO

Traditionally, stucco was a finish coat applied over masonry walls: stone, brick, adobe and later block. Although it is now commonly used over wood frame construction, it still has masonry at its roots and looks best when applied in a simple manner over large planar wall surfaces.

Recessed windows and broad overhangs emphasize the play of light and shadow, one of stucco's most beautiful qualities. Delicate details such as wrought iron railings, exposed rafter tails, inset panels of contrasting color and finish such as ceramic tile, and trellises also cast beautiful shadows.

Stucco finished window trim and bands, when used, shall be light dash finish or smoother.

MASONRY

Masonry elements, when used, must be integral to the building's architecture and not have the appearance of wallpaper. Plans using masonry should be designed with modular dimensions.

Take advantage of the myriad decorative patterns possible using Masonry. Combinations of soldiers, headers, stringers, etc. form delightful patterns which create cornices, wall caps, water tables, and other details with little additional effort beyond the imagination of the designer and/or mason. When employing

decorative patterns within a Masonry wall, always do so in a logical manner consistent with the material and function.

SIDING

Highlighting architectural style through the use of siding elements is effective and encouraged, as consistent with the architectural style of the residence. The most common form of siding is a cement-based product that resembles various traditional siding patterns.

Siding should terminate at inside corners or otherwise be properly trimmed at corners. Avoid very small sections of siding between openings, at columns and at corners.

ROOF FORM AND SLOPE

Roof treatments shall be consistent with the architectural style of the dwelling.

Variety of roof design and treatment is encouraged to provide visual interest to the neighborhood roofscape throughout Kyle Canyon, including the use of gable, cross-gable, hip, flat roof with parapet, or a combination of these roof forms.

Likewise, variety in roof lines is required to avoid a common roof line along neighborhood streets. Rooflines of adjoining residences are required to vary ridge heights, roof forms, or direction of gables.

Repetitious gable ends framed side to side on rear elevations are not permitted along perimeter edges of residential neighborhoods. No more than three adjacent residences may have primary gable end roof forms Adjacent to and Visible from a Public Place.

Minimum overhangs shall be as identified on the architectural checklist for each style.

Roof slopes shall be consistent with the architectural style of the residence as indicated on the architectural checklist for each style.

Broken roof pitches extending over porches, patios or other similar features are encouraged where appropriate to the architectural style.

ROOF MATERIALS

A variety of roof materials are allowed throughout the neighborhoods of Kyle Canyon in order to avoid a monotonous roofscape appearance.

Roof materials shall be compatible with the architectural style of the residence as indicated on the architectural checklist for each style.

Roof materials shall have a matte finish to minimize glare.

Fascias may be either stucco, wood, or tile. If wood is used, it shall be stained or painted.

Skylights are permitted, but shall be designed as an integral part of the roof. "Bubble" skylights (except solar tubes) are not permitted. Skylight framing material shall be bronze anodized or colored to match the adjacent roof. Solar tubes or tubular skylights are preferred.

- Permitted Materials
 - Clay or Concrete Barrel Tiles
 - Clay or Concrete Flat Tiles
 - Clay or Concrete Shakes
 - Metal Tiles
 - Metal Shakes
 - Metal Shingles/Slate
 - Metal Panel
 - Slate
 - Low profile S-tiles on single family lots
 - Photo-Voltaic roof tiles, when used, are subject to the design criteria below

If all homes on a block face use the same roof material, not more than 70% may use one profile.

- Prohibited Materials
 - Wood Shake
 - Fiberglass Shingles
 - Rolled roofing material, except on flat patio covers or in places not Adjacent to and Visible from a Public Place.

Solar panels, if offered, are to be integrated into the roof design, flush with the roof slope. Frames must be colored to complement the roof. Mill finish aluminum frames are prohibited. Solar equipment shall be enclosed and screened from view.

Photo-voltaic roof tiles, when used, shall conform to the following criteria:

- Located on rear or side roof planes only. Photo-voltaic tiles are not permitted on front roof planes or any other roof plane that is Adjacent to and Visible from a Public Place.
- Photo-voltaic roof tiles shall be used in conjunction with flat roof tiles only. The use of barrel shaped tiles in conjunction with photo-voltaic roof tiles is prohibited.
- The color of the roof tiles shall not unduly contrast with the photo-voltaic roof tiles.
- Installation of photo-voltaic roof tiles shall result in an overall shape that is square or rectangular.
- An uneven edge where the photo-voltaic roof tiles meet the primary roofing material is not permitted.

4.3.2 ARCHITECTURAL FEATURES AND ACCENTS

ENTRIES

The entry of a residential dwelling shall be articulated through the appropriate use of roof elements, columns, porticos, recesses or projections, window or other architectural features.

COURTYARDS

Courtyards provide a transition from the public space of the street to the entrance of the dwelling. Courtyard walls, when provided, shall be finished to match the house and may be embellished with stone, ceramic tiles, steps, recesses, cut-outs, or wrought iron accents appropriate to the architectural style of the residence.

PORCHES

Porches and balconies, when provided, shall be designed as an integral component of the building's architecture.

Porches may have railings or screen walls and be fully covered in one of the following ways:

- Roof element and tile matching the residence
- Trellis structure
- Second floor mirador or overhang

Second story balconies are encouraged to provide further visual interest to the street scene, and to increase the perceived front setback of the second story.

COLUMNS AND ARCHWAYS

The use of columns and archways adds articulation to the character of the residence and is encouraged where appropriate to the architectural style. Columns and archways shall be scaled appropriately to provide a sense of strength and support that is compatible with the architectural style of the dwelling.

TRELLIS AND ARBORS

Trellises and arbors, when used, must be designed to maintain their appearance considering the climatic conditions of the valley.

PATIO COVERS AND BALCONIES

The use of rear patio covers and second story balconies provide an excellent opportunity for the articulation of rear facades, particularly along visible perimeter conditions and is encouraged. Such elements are required on a minimum of 25% of the dwellings that are Adjacent to and Visible from a Public Place.

Such patio covers and balconies shall be designed as an integral component of the architecture.

ROOFTOP DECKS

Rooftop decks are permitted in any residential category, subject to the following requirements:

- All components of the rooftop deck shall be designed consistent with the architectural style of the residence.
- Rooftop decks, including parapet walls, rails, stair or elevator towers, trellis or other overhead elements shall not exceed the permitted maximum height of the building.
- Stair or elevator towers that provide access to the rooftop deck shall be designed as an integral component of the architectural composition of the elevation.
- Parapets may be solid wall to match the architecture of the residence or open rail in a design that is compatible with the architecture of the residence.
- Rooftop decks enclosed by solid parapet walls must use scuppers and/or internal drains for drainage.
- Exposed parapet walls on front elevations (and visible rear elevations, if any) are permitted on Spanish Colonial, Mediterranean, Andalusian, Italian, Brownstone and Contemporary architectural styles only.
- An exposed parapet wall on front elevations (and visible rear elevations, if any) is not permitted on Craftsman, Prairie, American Traditional, Country European, and Tuscan architectural styles. These styles must feature a sloped roof to disguise the parapet element.
- Exposed parapet walls to enclose the rooftop decks are not allowed on corner side elevations regardless of architectural style. When rooftop

decks are plotted on corner lots, a sloped roof must be used to disguise the parapet element.

- Side facing parapets are permitted for the full length of the rooftop deck on interior side lot lines, regardless of architectural style.
- Roof-mounted mechanical equipment such as air conditioners, heaters, and other such devices are not permitted. Such devices shall be ground mounted and located behind side yard privacy return walls or screened by walls at least 1' higher than the unit(s).

WINDOW OPENINGS

At least one principal window is required on front elevations. Principal windows are defined as one of the following:

- A prominent window recessed a minimum of 12" or having a minimum 12" pop-out surround.
- All other windows on the front elevation and exposed side or rear elevations must be trimmed or recessed a minimum of 2" or having a minimum 6" pop-out surround.
- A bay window with a minimum 24" projection and detailing appropriate to the architectural style of the residence.
- A primary window in conjunction with a porch qualifies as a principal window and does not need to be recessed in the wall plane. Trim detail is required.
- A minimum 12" deep pot-shelf with corresponding roof element and corbels.
- An overhead trellis element projecting a minimum of 12"
- Decorative iron window grille projecting forward of the wall plane a minimum of 12" if appropriate to the architectural style

Rear and side elevations that are Adjacent to and Visible from a Public Place require the use of at least one principal window as defined above. The use of shutters is an acceptable principal window treatment on visible elevations when used in conjunction with a minimum 12" deep pot-shelf or other form of articulation.

All other windows on the front elevations and side and rear elevations Adjacent to and Visible from a Public Place shall feature trim surrounds, or headers and sills. The minimum reveal for trim elements on small decorative windows is 1 1/2". All other windows require a minimum reveal on trim elements of 2"

The design of header, sill and trim elements must be consistent with the architectural style of the residence.

The style of windows shall be compatible with the architectural style of the residence with the following recommendations:

- Aluminum or vinyl extruded frame windows shall be appropriately colored to match or complement the house or trim colors.
- Glazing may be either clear or tinted. Reflective glass is not permitted.

WINDOW SHADING (ENERGY CONSERVATION CRITERIA)

For energy conservation, all southerly and westerly facing windows must be shaded in one of the following ways:

- An overhang that is at least 24" and otherwise adequate to provide shade from summer afternoon sun, as reasonably determined by the Master Developer
- An adjacent building situated in a manner adequate to provide shade from summer afternoon sun, as reasonably determined by the Master Developer
- For first story windows only, a deciduous shade tree (at least 36" box size) planted within 10' of the window and located to shade at least 50% of the window at mid-afternoon
- Awnings or trellis structures
- Low-e windows
- Solar Screens externally mounted
- Window Tinting
- External, operable shutters

DETAIL ELEMENTS

Detail Elements such as shutters, exposed rafter ends or cross beams, decorative grille work, decorative stucco or clay pipe vents, decorative ceramic tile and / or other similar features shall be used to provide visual interest to the residential architecture consistent with the architectural style.

Exposed gutters and downspouts shall be colored to match or complement the surface to which they are attached.

GARAGES

Except for Alley-Loaded Single Family Detached Residential Building Types (See Figure 3-20) builders must incorporate at least two different Garage Placement Options (See Figure 4-1) for each Single Family Detached Residential Building Type.

A. Garage Placement

Residential garages shall be positioned to de-emphasize their visual presence on the street. This will allow the active, visually interesting features of the house, to dominate the streetscape. Driveways adjacent to intersections shall be a minimum of 12' from the end of the intersection curb return. The following Garage Placement Options are permitted in Kyle Canyon (see Figure 4-1):

- Front Drive Garages. Front Drive Garages are permitted subject to a minimum recess of five feet (5') from the front wall plane of the residence to the garage door and a minimum setback of 20' from back of sidewalk to the garage door. The driveway width at the street for a double garage is eighteen feet (18'). The driveway width at the street for a single garage with tandem parking is ten feet (10').
- Side Drive Garages. Side Drive Garages are allowed with a minimum recess of twenty feet (20') from the front wall plane of the residence to the garage door depending on the Residential Building Type as described in the Residential

Building Type Guidelines in Section 3.5. The driveway width at the street is ten feet (10').

- Alley Loaded Garages. Alley Loaded Garages are permitted on all homes.
- Side Entry Garages. Side Entry garages are permitted on corner lots subject to a minimum setback of 20' from back of sidewalk to the garage door. Driveway widths are the same as for Front Drive Garages.
- Split Garages. Split Garages are permitted only on Standard and Estate Lots.
- Turn-In Garages. Turn-In Garages are permitted on all residential lots that are at least 44 feet (44') in width.

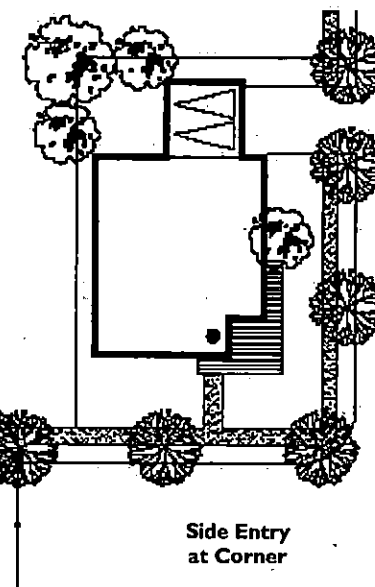
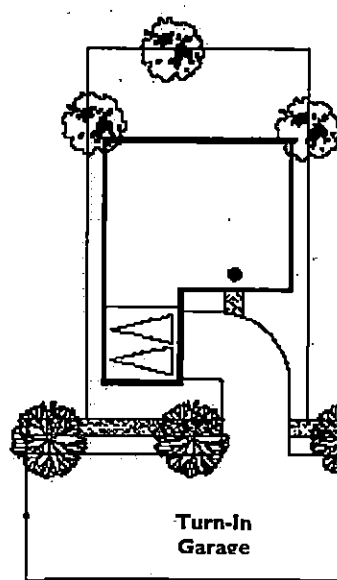
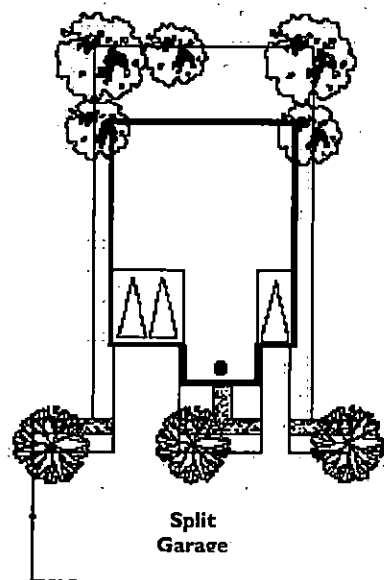
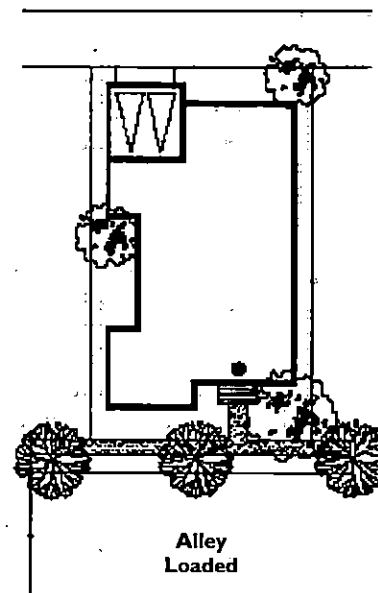
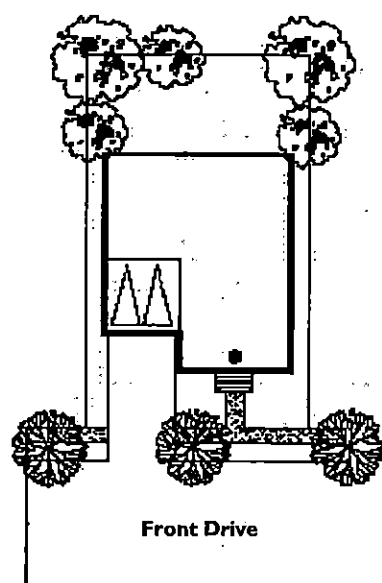
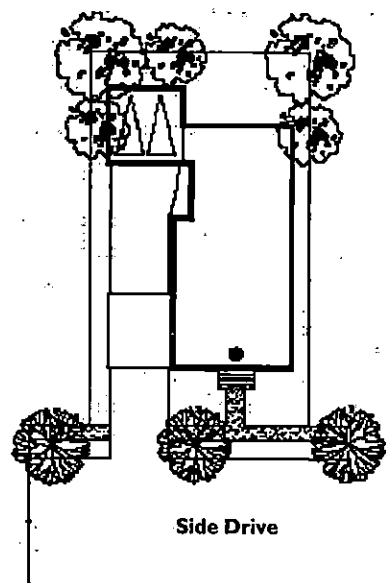


Figure 4-1 GARAGE TREATMENTS

B. Front Entry Garages.

All garages that face a Neighborhood or Village Street will be enhanced or de-emphasized in one of the following ways:

- A porch or courtyard in the front yard projecting beyond the front face of the garage doors
- Second floor living space above the garage either projecting forward or set back from the face of the garage doors
- A trellis mounted above the garage doors, extending the entire width of the doors and projecting at least 18" in front of the face of the doors
- All single garage doors (no double doors)
- Enhanced driveway materials as described below in this section
- Other similar, appropriate enhancement

No more than two front facing garage spaces are permitted on any single family lot less than 60' in width. Where three garage doors face the street, the builder must enhance the driveway with one of the following:

- pavers
- stamped concrete
- scoring patterns
- landscape strip between one and two car garage openings

Additional garages spaces, if provided, must be in a turn-in configuration, tandem, pushed back with a long driveway or motor-court. No more than three front facing garage doors are permitted on any single family detached product.

C. Variation in Set-Backs

Where garages are adjacent to one another along interior lot lines, a 3' difference in setback to garage faces is required except on Side-Drive and Alley-Loaded Garages. On Neighborhood Streets, the face of garage doors shall be offset a minimum of 12" from surrounding wall planes. On court streets or drive aisles, the face of garage doors shall be offset a minimum of 6" from surrounding wall planes.

D. Variation in Garage Doors

Varying garage door appearance by varying garage door pattern windows and/or color (as appropriate to individual architectural styles), and using

two single doors instead of a large one is encouraged. Use of sectional carriage style garage doors, or similar upgraded garage door, is encouraged.

Porch/courtyard elements extending in front of the front wall plane of the garage are encouraged.

In lieu of pop-out surrounds, a trellis element projecting a minimum of 18" forward of the garage door wall plane and extending the entire length of the garage door, may be used.

Garage doors shall be compatible with the architectural style of the residence. In order to avoid the impact of garage doors, they shall be appropriately treated with decorative relief cuts, panels, small decorative windows, etc. The use of sectional carriage style roll-up garage doors, or similar upgraded garage door is encouraged.

FRONT FACING THREE-CAR GARAGES

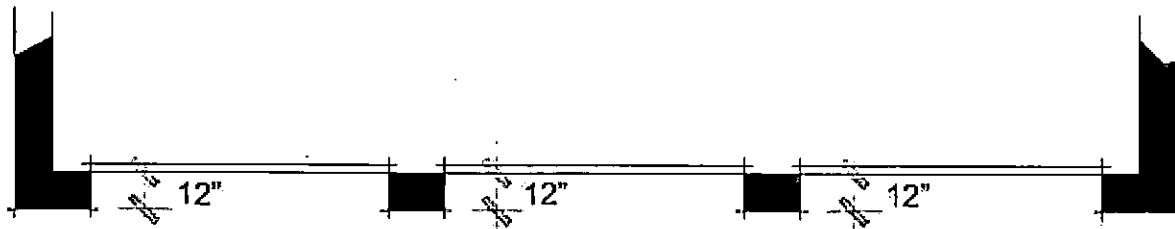
Front facing three-car garages are allowed in Neighborhood Residential Parcels only on lots that are a minimum of sixty feet (60') in width. In all Neighborhood Residential Parcels, 3 car garages, if used, must be designed in one of the following ways: (Please refer to Figure 4-2)

- **OFFSET SINGLE AND DOUBLE GARAGES:** one door must be a minimum of 3' behind the front façade of the residence; the second door must be a minimum of 2' behind the forward-most garage door.
- **THREE SINGLE GARAGE DOORS IN A SINGLE PLANE:** all three garage doors must be a minimum of 5' behind the front façade of the residence and be recessed at least 12" behind the front face of the garage.
- **SINGLE AND DOUBLE GARAGE DOORS IN SAME PLANE:** both doors must be recessed at least 24" behind the front face of the garage.

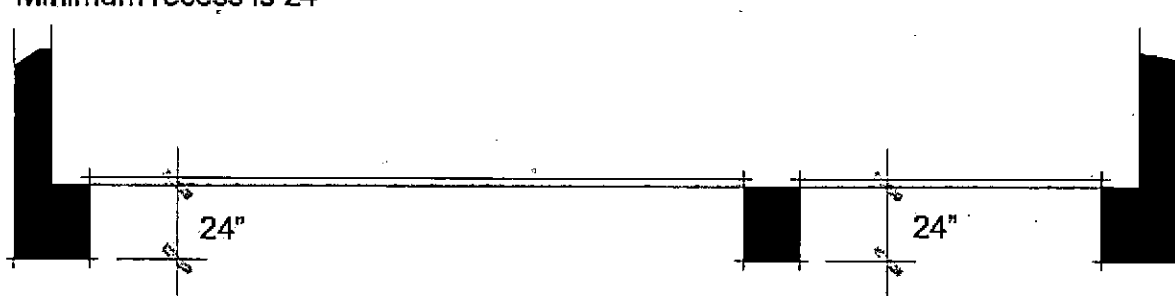
PARKING

Dedicated on street parking spaces shall be counted in establishing the total unit count in any Neighborhood Residential Parcel.

Single Garage Doors in Same Plane
Minimum recess is 12"



Single and Double Garages in Same Plane
Minimum recess is 24"



Offset Single and Double Garages
Minimum offset is 24"
Minimum recess is 12"

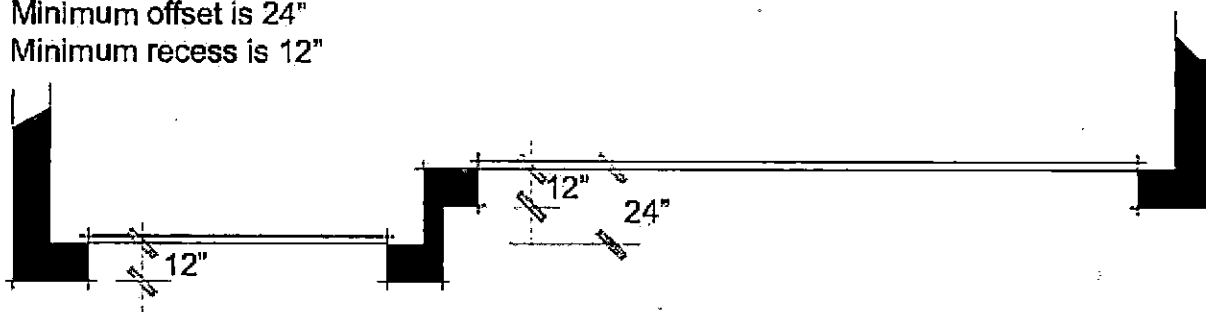


Figure 4-2 THREE CAR GARAGE OPTIONS

CHIMNEYS

Chimneys are not required but, if used shall be simple in design, so as not to distract from the building. The design of chimneys shall be compatible with the architecture of the building. The following features are appropriate:

- Tile caps, brick or tile banding
- Elaborated chimney tops for Spanish Eclectic style.
- Decorative metal caps that match trim colors.

The following features are prohibited

- Exposed flues.
- Extravagant metal fireplace caps.

EXTERIOR LIGHTING

The level of on-site lighting as well as lighting fixtures, shall comply with any and all applicable requirements of the City of Las Vegas. Energy conservation shall be emphasized when designing any lighting system.

The style of exterior lighting fixtures shall be consistent with the architectural style of the residence. Manufacturer's cut sheets shall be provided in the design review submittal package for all proposed exterior lighting fixtures.

ACCESSORY STRUCTURES

Casitas, guesthouses, detached garages, greenhouses, and other similar accessory structures shall be compatible in design, materials, and color with the main residence. Such structures must be visually related to the main residence through the use of courtyards, garden walls, or other landscape elements.

MECHANICAL EQUIPMENT

Mechanical equipment such as air conditioners, heaters, evaporative coolers, television and radio antennas, satellite dishes, and other such devices Adjacent to and Visible from a Public Place must be located or mounted below the top plate of the first floor or hidden behind a parapet on the roof. Placement plans must be submitted for review and approval of the Master Developer and are subject to all federal regulations currently in effect.

Mechanical devices such as exhaust fans, vents and pipes shall be painted to match adjacent roof surfaces.

Ground mounted air conditioning units must be located behind side yard privacy return walls or screened by walls at least 1' higher than the unit(s).

All antenna and satellite dishes Adjacent to and Visible from a Public Place or adjacent lot must be submitted for review and are subject to the Development Declaration and all federal regulations.

TRIM

The design of header, sill and trim elements must be consistent with the architectural style of the residence.

All window and door openings on the front elevations shall feature trim surrounds or headers and sills. The minimum reveal for trim elements is 2", except for small decorative windows which may have a 1 1/2" minimum reveal.

Stucco finished trim elements, when used, shall be sand finish or smoother.

FOUNDATIONS

At raised footing conditions, all foundation stem walls must be stuccoed and painted to within six inches (6") of finished grade or otherwise finished to match the façade of the residence.

FIGURE 4-3 SUMMARY OF RESIDENTIAL DIVERSITY

DIVERSITY ELEMENT	DIVERSITY MEASUREMENT	PERMITTED	REQUIRED	NOTES
Building Product Type	15 Single Family Detached 4 Single Family Attached 3 Multi-Family	Permitted Permitted Permitted		All Building Product Types Allowed in All Neighborhood Residential Parcels. All Building Product Types Except Single Family Detached Allowed in All Mixed-Use Parcels (See Figures 3-19 and 3-20).
Building Product Mix	2 (Minimum)		Required	Section 4.2.1
Architectural Styles	11	Permitted		Section 4.1
Plan Variation	3 (Minimum)		Required	Section 4.2.2
Architectural Treatments	3 (Minimum)		Required	Section 4.2.5
Garage Placement	2 (Minimum)		Required	4.3.2
Color Schemes	6 (Minimum)		Required	4.2.6 (B)
Roof Colors	4 (Minimum)		Required	4.2.6 (C)
Building Colors	4 (Minimum)		Required	4.2.6 (D)

4.4 MULTI FAMILY ARCHITECTURAL CRITERIA

The following architectural standards apply to all structures that contain Multi-Family Homes, meaning structures that are divided into more than one dwelling unit and in which one household or family lives above another or in which dwelling units do not have separate outside entrances.

4.4.1 ARCHITECTURAL ELEMENTS

BUILDING FACADES

The scale of multi-family buildings shall be broken down through the use of varied building massing and materials on a single structure.

Buildings shall incorporate significant offsets both horizontally and vertically, minimizing expansive uninterrupted wall planes.

All elevations of a multi-family building shall be treated as a "front" elevation and shall include:

- A minimum of one principal window per floor per elevation, with remaining windows featuring trim surrounds, or headers and sills consistent with the architectural style of the building.
- Recessed or covered entry doors
- Window groupings
- Sufficient articulation of building walls to provide interest

HEIGHT

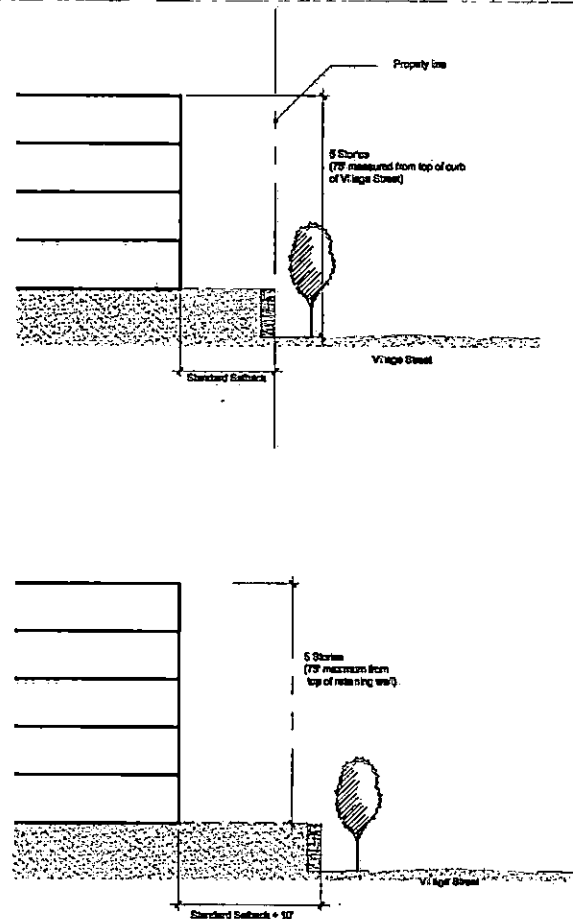
The following requirements apply to multi-family buildings on Neighborhood Residential parcels.

- Adjacent to Village Streets, multi-family buildings may be up to 5 stories. Maximum height is 75' measured from top of the adjacent curb of the Village Street. In conditions where building pads are at a higher elevation than the Village Street, the building height may be measured from the finish grade at the top of the retaining wall only if the buildings are setback an additional 10', otherwise the building

height shall be measured from top of the adjacent curb of the Village Street. (Figure 4-4).

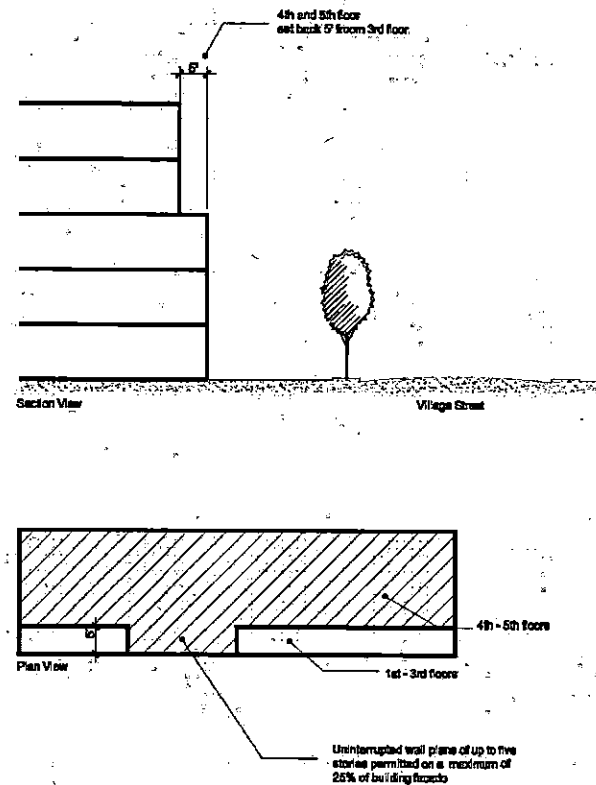
- Adjacent to Village Streets, 4th and 5th floors (when provided) shall be setback an additional 5' from the 3rd floor, except that an uninterrupted wall plane of up to 5 stories is permitted on a maximum of 25% of the building façade for elements such as tower elements or other architectural features that provide articulation to the wall plane. (Figure 4-5).
- Adjacent to Village Streets, a maximum of 75% of the building facades lining the street may be a full 5 stories. The calculation for this requirement shall be on a cumulative basis so that all of an individual building may be a full 5 stories so long as the cumulative total of all buildings combined does not exceed the 75% maximum. (Figure 4-6).
- Adjacent to a common development parcel boundary line, multi-family buildings shall be limited to 4 stories (60') in height and the fourth floor shall be setback at least 5' from the 3rd floor, except that an uninterrupted wall plane of up to 4 stories is permitted on a maximum of 25% of the building façade for elements such as tower elements or other architectural features that provide articulation to the wall plane. (Figure 4-7).
- All multi-family buildings of more than 3 stories, regardless of location, shall incorporate significant offsets both horizontally and vertically, minimizing expansive uninterrupted wall planes. No more than one third (1/3) of a primary exposure elevation may be comprised of an uninterrupted 3-story wall plane. Vertical and horizontal wall plane breaks must be offset a minimum of 2'. (Figure 4-8).
- Height reducing elements such as eroding prominent corners is encouraged. (Figure 4-9).

Figure 4-4



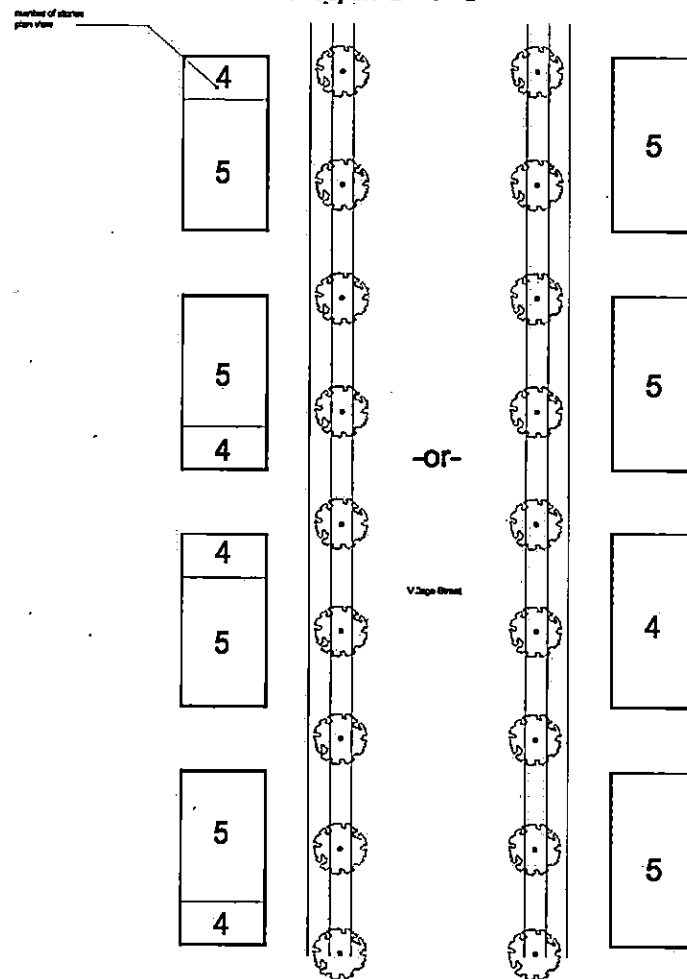
Adjacent to Village Streets, multi-family buildings, may be up to 5 stories. Maximum height is 75' measured from top of the adjacent curb of the Village Street. In conditions where building pads are at a higher elevation than the Village Street, the building height may be measured from the finish grade at the top of the retaining wall only if the buildings are setback an additional 10', otherwise the building height shall be measured from top of the adjacent curb of the Village Street.

Figure 4-5



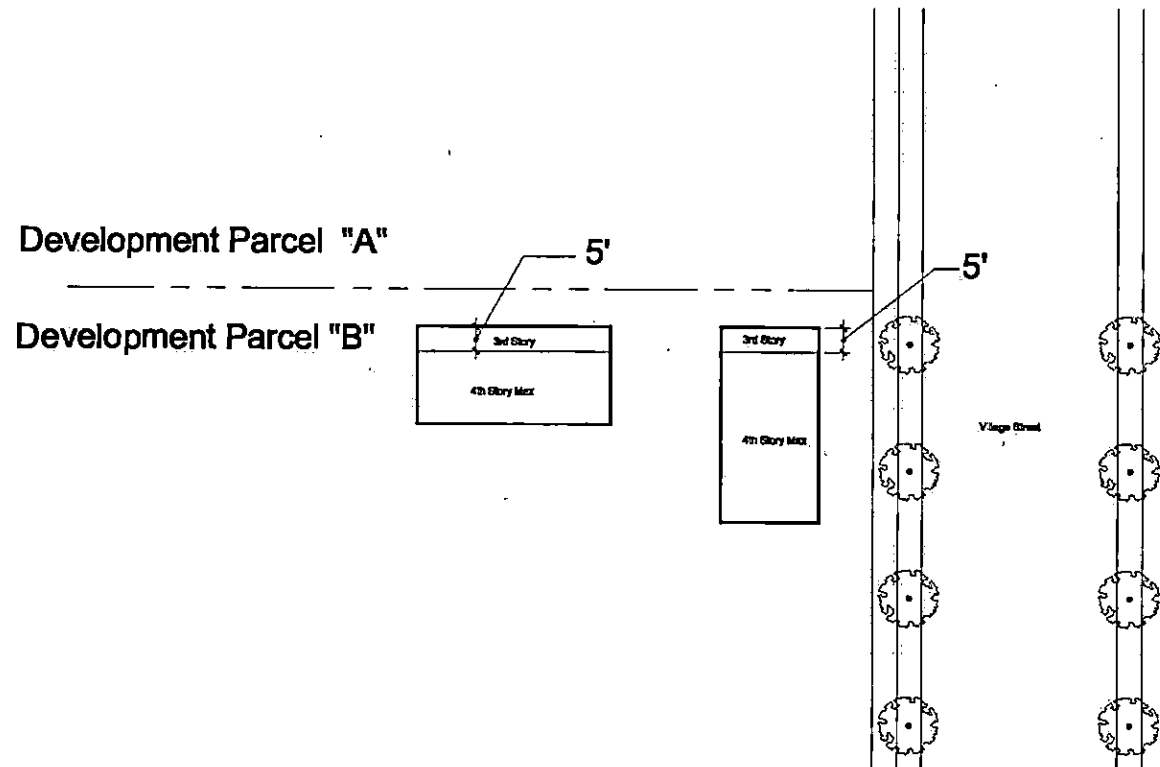
Adjacent to Village Streets, 4th and 5th floors (when provided) shall be setback an additional 5' from the 3rd floor, except that an uninterrupted wall plane of up to 5 stories is permitted on a maximum of 25% of the building façade for elements such as tower elements or other architectural features that provide articulation to the wall plane.

Figure 4-6



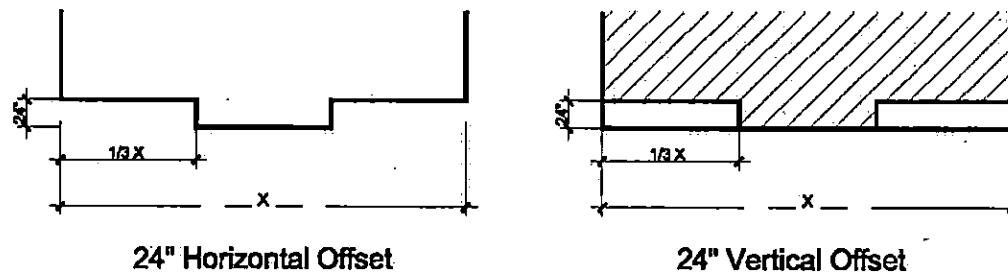
Adjacent to Village Streets, a maximum of 75% of the building facades lining the street may be a full 5 stories. The calculation for this requirement shall be on a cumulative basis so that all of an individual building may be a full 5 stories so long as the cumulative total of all buildings combined does not exceed the 75% maximum.

Figure 4-7



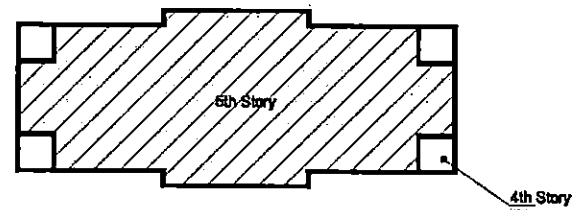
Adjacent to a common development parcel boundary line, multi-family buildings shall be limited to 4 stories (60') in height and the fourth floor shall be setback at least 5' from the 3rd floor, except that an uninterrupted wall plane of up to 4 stories is permitted on a maximum of 25% of the building facade for elements such as tower elements or other architectural features that provide articulation to the wall plane.

Figure 4-8



All multi-family buildings of more than 3 stories, regardless of location, shall incorporate significant offsets both horizontally and vertically, minimizing expansive uninterrupted wall planes. No more than one third ($1/3$) of a primary exposure elevation may be comprised of an uninterrupted 3 story wall plane. Vertical and horizontal wall plane breaks must be offset a minimum of 2'.

Figure 4-9



Height reducing elements such as eroding prominent corners is encouraged.

BUILDING MATERIALS

The design of residences shall use building materials that are consistent with the architectural styles as identified on the architectural checklist for each style. All surface treatments or materials shall be designed to appear as an integral part of the design, and not merely applied. All materials shall wrap columns, porches, or balconies in their entirety.

Changes in wall material should clarify, not clutter, the design. One or two siding materials are preferred and no more than three materials may be used per building.

Wall material changes should occur only in the following places:

- Between the body of a building and its gable ends.
- At horizontal and vertical inside corners between component parts of a building such as additions, garages, chimneys, bays or porches. Mark horizontal wall material changes with a significant change in wall plane or a pronounced trim detail such as a water table or string course.
- At functional details such as sills, headers, posts, etc.
- Between the base and the top of a building along a sill line, floor line, porch rail line or plate line.

ROOFS

Roof treatments shall be consistent with the architectural style of the building.

Variety in roof forms, ridge heights and direction of gables is required in order to avoid monotonous roof lines along master planned streets and paseos.

Minimum overhangs shall be as identified on the architectural checklist for each style.

Roof slopes shall be consistent with the architectural style of the building as indicated on the architectural checklist for each style.

Broken roof pitches extending over porches, patios or other similar features are encouraged where appropriate to the architectural style.

ROOF MATERIALS

A variety of roof materials is encouraged throughout the neighborhoods of Kyle Canyon in order to avoid a monotonous roofscape appearance.

Roof materials shall be compatible with the architectural style of the residence as indicated on the architectural checklist for each style.

Roof materials shall have a matte finish to minimize glare.

Fascias may be either stucco, wood, or tile. If wood is used, it shall be stained or painted.

Skylights are permitted, but shall be designed as an integral part of the roof. "Bubble" skylights (except solar tubes) are not permitted. Skylight framing material shall be bronze anodized or colored to match the adjacent roof. Solar tubes or tubular skylights are preferred.

• Permitted Materials

- Clay or Concrete Barrel Tiles
- Clay or Concrete Flat Tiles
- Clay or Concrete Shakes
- Metal Tiles
- Metal Shakes
- Metal Shingles/Slate
- Metal Panel
- Slate
- Photo-Voltaic roof tiles subject to the design criteria below

• Prohibited Materials

- Wood Shake
- Fiberglass Shingles
- Rolled roofing material, except on flat patio covers or in places not Adjacent to and Visible from a Public Place.

Solar panels, if offered, are to be integrated into the roof design, flush with the roof slope. Frames must be colored to complement the roof. Mill finish aluminum frames are prohibited. Solar equipment shall be enclosed and screened from view.

Photo-voltaic roof tiles, when used, shall conform to the following criteria:

- Located on rear or side roof planes only. Photo-voltaic tiles are not permitted on front roof planes or any other roof plane that is Adjacent to and Visible from a Public Place.
- Photo-voltaic roof tiles shall be used in conjunction with flat roof tiles only. The use of barrel shaped tiles in conjunction with photo-voltaic roof tiles is prohibited.
- The color of the roof tiles shall not unduly contrast with the photo-voltaic roof tiles.
- Installation of photo-voltaic roof tiles shall result in an overall shape that is square or rectangular.
- An uneven edge where the photo-voltaic roof tiles meet the primary roofing material is not permitted.

4.4.2 ARCHITECTURAL FEATURES AND ACCENTS

WINDOWS

At least one "principal window" is required per floor per elevation. Principal windows are defined as one of the following:

- A prominent window recessed a minimum of 12" or having a minimum 12" pop-out surround.

- A bay window with a minimum 24" projection and detailed appropriate to the architectural style of the building.
- A minimum 12" deep pot-shelf with roof element and corbels
- An overhead treillage element projecting a minimum of 12"
- A decorative iron window grille projecting a minimum of 12" if appropriate to the architectural style
- An enhanced window surround

All other windows and openings shall be trimmed or otherwise treated. Stucco trim elements, when used, shall be sand or smooth finish. The minimum reveal for trim elements on small decorative windows is 1 ½". All other windows require a minimum reveal on trim elements of 2".

Windows must be grouped or located near strong architectural elements and shall be proportional to the building massing of the structure.

Reflective glass is not permitted.

WINDOW SHADING (ENERGY CONSERVATION CRITERIA)

For energy conservation, all southerly and westerly facing windows must be shaded in one of the following ways:

- An overhang that is at least 24" and otherwise adequate to provide shade from summer afternoon sun, as reasonably determined by the Master Developer
- An adjacent building situated in a manner adequate to provide shade from summer afternoon sun, as reasonably determined by the Master Developer
- For first story windows only, a deciduous shade tree (at least 36" box size) planted within 10' of the window and located to shade at least 50% of the window at mid-afternoon
- Awnings or trellis structures
- Low-e windows
- Solar Screens externally mounted
- Window Tinting
- External, operable shutters

GARAGE DOORS

All garage doors shall be recessed 12" or be surrounded with 12" minimum pop-outs.

Minimum garage door widths for garages served by an alley shall be 9' for one-car and tandem parking garages and 18' for two-car garages.

Door lights, when used, shall be appropriate to the architectural style of the building.

FRONT ENTRY DOORS

Front entry doors and entryways where access is provided from the exterior shall provide a focal point to each residential unit and shall be sun protected with overhangs, recesses, porches, or trellises.

COURTYARDS

Courtyards are encouraged on multi-family buildings and, when used, shall appear as an extension of the architecture of the main building.

Courtyard walls shall be finished to match the building and may be embellished with stone, ceramic tiles, steps, recesses, cut-outs, or wrought iron accents appropriate to the architectural style of the building.

BALCONIES

Balconies, when provided, shall be designed to be in scale and proportion with the architecture of the adjoining building. Covered or trellised balconies are preferred.

ROOFTOP DECKS

Rooftop decks are permitted on multi-family buildings, subject to the following requirements:

- All components of the rooftop deck shall be designed consistent with the architectural style of the building.
- Rooftop decks, including parapet walls, rails, stair or elevator towers, trellis or other overhead elements shall not exceed the permitted maximum height of the building.

- Stair or elevator towers that provide access to the rooftop deck shall be designed as an integral component of the architectural composition of the elevation.
- Parapets may be solid wall to match the architecture of the residence or open rail in a design that is compatible with the architecture of the building.
- Rooftop decks enclosed by solid parapet walls must use scuppers and/or internal drains for drainage.
- Exposed parapet walls on front elevations (and visible rear elevations, if any) are permitted on Spanish Colonial, Mediterranean, Andalusian, Italian, Brownstone and Contemporary architectural styles only.
- An exposed parapet wall on front elevations (and visible rear elevations, if any) is not permitted on Craftsman, Prairie, American Traditional, Country European, and Tuscan architectural styles. These styles must feature a sloped roof to disguise the parapet element.
- Exposed parapet walls to enclose the rooftop decks are not allowed on corner side elevations regardless of architectural style. When rooftop decks are plotted on corner lots, a sloped roof must be used to disguise the parapet element.
- Side facing parapets are permitted for the full length of the rooftop deck on interior side lot lines, regardless of architectural style.

CHIMNEYS

Chimneys, when provided, shall be compatible in design, material, and color with the adjoining building. Chimneys caps shall be compatible with the architecture of the building.

VENTS

B' type vents for gas appliances, water heaters, and heating units shall be painted to match the roof color. Such elements shall be located to minimize visual impact to building elevations.

EXTERIOR STAIRS

Exterior stairs must be designed as an integral part of the architecture.

Stairs are included in the setback calculation.

Stair guardrail design must be consistent with the architecture of the building.

AWNINGS

Awnings, when provided, must be designed as an integral part of the architecture.

Unacceptable awning treatments include metal louvers (except for Bermuda style shutters), untreated fabric, and project names, texts, or logos.

MECHANICAL EQUIPMENT

No mechanical equipment (air conditioning/heating units, etc.) shall be mounted on, or attached to, any sloped roof. Mechanical equipment, when mounted on flat roofs, must be completely screened by parapet walls at least as tall as the equipment screened.

Ground mounted air conditioning units must be screened by walls or permanent screening materials at least 1' higher than the unit(s) and located away from pedestrian paths and project amenities.

Mechanical devices such as exhaust fans, vents, and pipes shall be painted to match adjacent roof surfaces.

METERS

Natural gas meters shall be grouped and screened behind walls or permanent screening materials. Builders shall contact Southwest Gas for minimum clearances.

Electrical meters shall be ganged and located behind doors. Builders shall contact Nevada Power Company for minimum clearances.

Screen walls and electrical enclosures shall be designed integral to the project's architecture.

SOLAR PANELS

Panels shall be mounted directly to a sloped roof plane and be integral to the roof design.

Roof mounted solar panel equipment shall be similar to the roof in color and appearance and have a reflectivity value of 20% or less.

Non-camouflaged solar panel equipment shall be located behind parapet walls of equal height to the equipment.

GUTTERS AND DOWNSPOUTS

Exposed gutters and downspouts, when used, shall be colored to either match or complement the surface to which they are attached.

4.4.3 ACCESSORY STRUCTURES

CLUBHOUSE AND RECREATION BUILDINGS

Clubhouses, recreation buildings, and other support buildings shall match the architectural style and detailing of the residential buildings.

STORAGE BUILDINGS

Storage buildings must have the same level of architectural detailing as the residential buildings within the project.

DETACHED GARAGES

Detached garages, when provided, must use a similar roof treatment and building material as the residential buildings they serve.

Six-car detached garage structures are preferred as a maximum. Detached garage structures with more than six parking spaces shall have a minimum 2' garage door offset within the length of the structure.

CARPORTS

Free-standing metal carports shall be cantilever type and must have a minimum 6" tall fascia wrapping all four sides of the roof.

Carports shall have end walls or other screening devices with architectural detailing similar to the residential buildings.

Carport length shall not exceed the width of 8 parking spaces.

Carport color, including roofs, must complement the development.

PARKING

Dedicated on street parking spaces shall be counted in establishing the ratio of guest parking spaces to total unit count in any Urban Residential Parcel.

TRASH ENCLOSURES

Trash enclosures shall be constructed of concrete masonry units finished similar to buildings in the development.

All trash enclosures shall have opaque metal gates that are designed consistent with the development.

Each trash enclosure shall have a lighted access that meets federal accessibility standards.

4.5 ARCHITECTURAL STYLES

The following pages describe the wide variety of architectural styles that are permitted in Kyle Canyon. The goal is to create the memorable character, identity and appeal that these neighborhoods display, not to produce exact replicas of historic buildings.

4.5.1 CRAFTSMAN

IDENTIFYING CHARACTERISTICS

- Low-pitched gable roofs, occasionally hipped
- Wide projecting eaves with exposed rafter tails, and decorative beams or braces added under the gables
- Broad windows and doors
- Walls of stucco, siding, shingles, brick, stone or other masonry



4.5.1 CRAFTSMAN

BUILDING FORM

Horizontal character through the use of one and/or two story boxed massing with vertical and horizontal offsets.

ROOFS

Roof Form: Low-pitched gabled roofs

Minimum Overhang:	<u>Rake or Eave</u>
Estate Lots	24"
Standard Lots	18"
Compact Lots	18"

Roof Slope: 4:12 Preferred
5:12 Maximum

Roof Material: Flat concrete or metal tile to simulate wood shakes

WALLS

Stucco walls combined with other accent materials such as simulated siding or shingles, river rock stone, brick or other masonry.

Stucco, when used, shall be as follows

Primary Walls: Light lace or smoother

Trim, Stucco Eaves, Etc.: Sand or smoother

WINDOWS

At least one principal window with a minimum recess or surround of 12"

All other windows on front and visible side and rear elevations to have header, sill, or trim surrounds

Vertical proportion to windows

Typically, multi-paned upper sash with single pane below

Ribbon windows – 3 or more ganged

ENTRIES

Entry sheltered within front porch

DOORS

Entry doors should feature basic geometric patterns, and or multi-paned windows with wood trim surround

DETAIL ELEMENTS

Broad front porches

Heavy square or tapered columns resting on stone or brick piers

Wide projecting eaves with exposed rafter tails, and decorative beams or braces added under the gables

Generous use of river rock stone, brick or other masonry as an accent material

Arts and Crafts style lighting fixtures

Shutters, when used, that are plank or panel

COLORS

Light to medium earth tone colors with contrasting trim and accent colors



CRAFTSMAN

Low-pitched gable roofs, occasionally hipped with wide projecting eaves and exposed rafter tails, decorative beams or braces also added under the gables. broad windows and doors and walls of brick siding, stucco, or stone.

Broad Front Porches



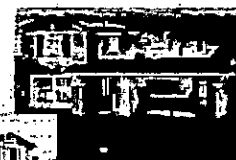
Exposed rafter tail and braces



Windows with Multi-pane upper sash and single pane below



Horizontal emphasis of building forms



KTCV GROUP, INC.
© 1999 KTCV



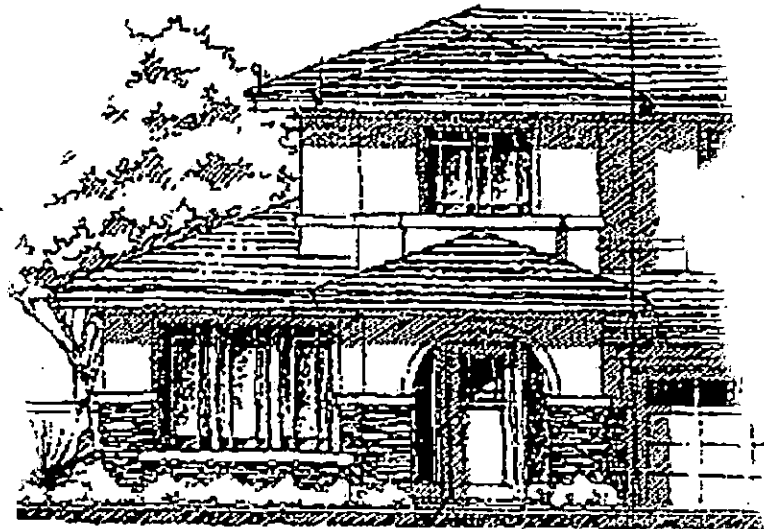
Tapered columns



4.5.2 PRAIRIE RANCH

IDENTIFYING CHARACTERISTICS

- Lower pitched roofs with wide overhanging eaves
- Detailing emphasizing horizontal lines
- Horizontal massing
- Stone horizontal base
- Ganged articulated windows with breaks



• 4.5.2 PRAIRIE RANCH

BUILDING FORM

A horizontal character achieved through the use of single-story elements and plate lines, along with low roof pitches

ROOFS

Roof Form: Primary roof form shall be hipped to emphasize the horizontality of the building. Low-pitched gable roofs may be used as secondary elements only

Roof Material: Flat concrete or metal tile

Roof pitch: 4:12 Preferred 3:12 to 5:12 Permitted

Minimum Overhang:

Estate Lots:	24"
Standard Lots	18"
Compact Lots	18"

WALLS

Stucco and / or stone are the primary wall materials.

Stone, when used, may be applied to an entire wall surface or as a wainscot to emphasize horizontality.

Stucco, when used, shall be as follows

Primary Walls: Light lace or smoother

Trim, Stucco Eaves, Etc.: Sand or smoother

• WINDOWS

Windows arranged as horizontal bands immediately below the eave line

Trim used to unify window bands

Window boxes or plant shelves

Muntins shall be used consistently with the style

ENTRIES

An articulated entry is typical of the style, and may be achieved in many ways, such as with a portico element, front porch, or arch element.

The entry should be covered and incorporate the veneer base if applicable

DOORS

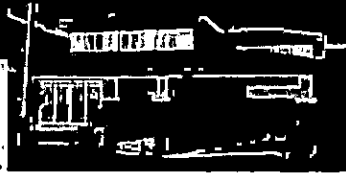
Decorative geometric door windows or other ornamentation should be used.

DETAIL ELEMENTS

Contrasting wall materials or trim emphasizing horizontality.

COLORS

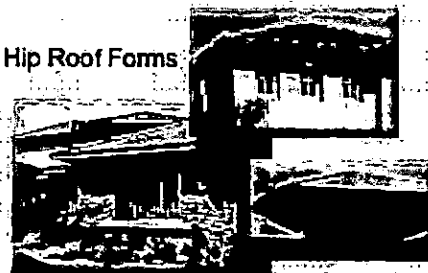
Natural colors with contrasting colors on eaves and trim



PRAIRIE RANCH

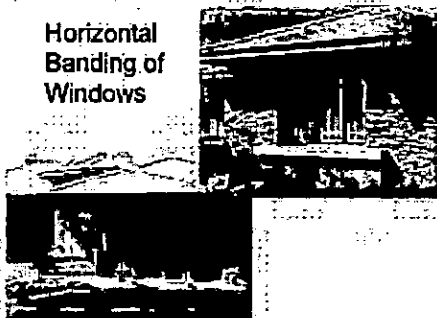
Lower pitched roofs with wide overhanging eaves and detailing emphasizing horizontal lines creates distinct angle for this style. Horizontal massing with stone bases are further detailed with grouped articulated multi-paned windows

Hip Roof Forms

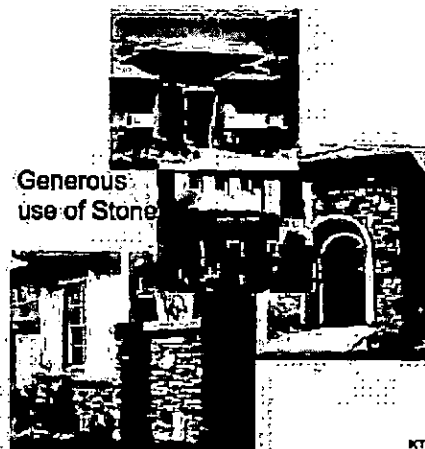


Broad Overhangs

Horizontal Banding of Windows



Generous use of Stone



KTOY GROUP, INC.
A Division of KTOY GROUP, INC.

4.5.3 AMERICAN TRADITIONAL

IDENTIFYING CHARACTERISTICS

- Flat roof tiles
- Predominant front porch or entry
- Traditional columns or posts
- Generous use of siding or brick
- Decorative Elements, such as window boxes and oculi.



4.5.3 AMERICAN TRADITIONAL

BUILDING FORM

Formal box-like massing

ROOFS

Roof Form: Predominantly gable framed front to back. Front facing cross-gables permitted

Roof Material: Flat concrete or metal tiles

Minimum Overhangs: 12" or greater

Roof Slope: 4:12 to 6:12

WALLS

The predominant material on front elevations shall be cementitious siding or brick. If stucco is used, it shall not comprise more than 50% of the front elevation wall surface

Stucco Walls:	Light lace or smoother
Trim, Eaves, Etc.:	Stucco; sand or smoother
	Wood; painted or stained

WINDOWS

At least one principal window with a minimum recess or surround of 6".

Principal window treatment to feature traditionally detailed trim element

All other windows on front and visible side and rear elevations to have trim surrounds, or headers and sills

DOORS

Entry door shall be a raised panel design or other traditionally detailed door

Entry shall be formal with traditional detailing

DETAIL ELEMENTS

The following elements in the next column describe typical elements characteristic of American Traditional architecture. Elevations will be designed using combinations of these elements as indicated. Other elements (combination of elements), meeting the intent of the style may be used subject to approval by the Master Developer.

Three or more of these elements are required on front elevations:

- ✓ Color blocking on front elevation
- ✓ Dash or sand finish on stucco surfaces
- ✓ Entry door with a minimum recess or surround of 12"
- ✓ Use of sidelights
- ✓ Traditionally detailed square columns or posts on front elevation
- ✓ Traditionally detailed headers in conjunction with 12" projecting window boxes
- ✓ Picket fence elements connected to/ close relation to the front elevation of home
- ✓ At least 2 segmented arch elements
- ✓ Panel or louver shutters proportional in size to window opening.
- ✓ Traditional detail elements such as oculii, gable end vents, etc.

Two or more of these elements are required on front elevations:

- ✓ Over scaled front porch supported by traditionally detailed square posts or columns (2 story porch heights permitted)
- ✓ Over scaled entry featuring classical detailing
- ✓ Pediment columns
- ✓ Window dormers on the roof or breaking the eave line
- ✓ Exposed rafter tails
- ✓ Wall plane offset of at least 2' vertical or horizontal
- ✓ Entry door of upgraded detail and design consistent with the architectural style
- ✓ Garage door of upgraded detail and design consistent with the architectural style
- ✓ Smooth steel trowel finish on stucco surfaces
- ✓ Additional use of upgraded stone on front elevation, 25% minimum
- ✓ Substantially enhanced front landscaping, submitted with elevations, to be approved by the Master Developer



AMERICAN TRADITIONAL

Asymmetrical massing with wood porches and classical square railings. Simplified cornice trim at gable ends and louvered shutters. Wall are siding and stucco.

Front Porches and Accentuated Entries



Windows



Classical
Detailing

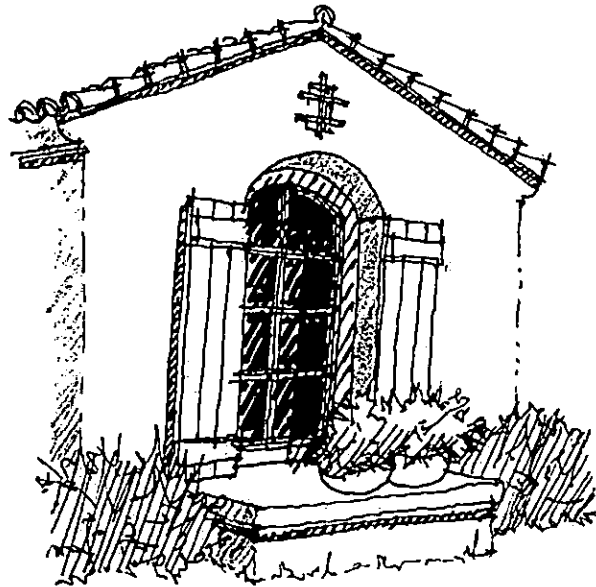


KTEV GROUP, INC.
Atlanta, Georgia

4.5.4 SPANISH COLONIAL

IDENTIFYING CHARACTERISTICS

- Red Barrel Tile Roofs
- Fully Rounded Arch Elements
- Entry Courtyards with Gates
- Arcades
- Deep Recessed Windows/Doors
- Decorative Elements, including Wrought Iron, Clay Vents, Ceramic Tiles, Etc.



4.5.4 SPANISH COLONIAL

BUILDING FORM

Asymmetrical 1 and/or 2 story building forms

ROOFS

Roof Form: Primarily gable with at least one intersecting gable or hip element

Roof Material: Clay or Concrete Barrel or "S" tiles only

Minimum Overhangs	<u>Rakes</u>	<u>Eaves</u>
Estate Lots	12"	18"
Standard Lots	12"	12"
Compact Lots	12"	12"

Roof Slope: 4:12 Preferred. 5:12 Maximum

WALLS

Primary Walls: Light lace or smoother
Trim, Stucco Eaves, Etc.: Sand or smoother

WINDOWS

At least one principal window with a minimum recess or surround of 12"

All other windows on front and visible side and rear elevations to have header, sill, or trim surrounds

Generally, windows on front elevations should have a tall, narrow appearance

Grid or horizontal mullion patterns appropriate

ENTRIES

Entry should be articulated through the use of a porch, tower element, courtyard, arch or other similar element to accentuate the sense of arrival

DOORS

If entry is not covered, the front door should have a minimum recess or surround of 12"

DETAIL ELEMENTS

The front elevation shall feature fully rounded arch element in conjunction with the entry door, porch element, principal window, or garage. Minimum requirements are as follows:

Estate Lots	At least 3 arch elements
Standard Lots	At least 2 arch elements
Compact Lots	At least 1 arch element

An arcade of arches is encouraged in conjunction with a porch or courtyard

The use of shutters is required as described below. All shutters shall be plank, consistent with this architectural style:

Estate Lots	At least 3 pairs
Standard Lots	At least 2 pairs
Compact Lots	At least 1 pair

Decorative iron shall be used on front elevations and may include wrought iron railing or decorative iron grille-work. Railings shall have simple straight or curved vertical pickets, consistent with Spanish Colonial architecture
Front elevations shall feature decorative clay vents at gable ends or decorative grid design (recessed or projecting) on wall planes.

COLORS

Light stucco body colors with contrasting trim and accent colors..



SPANISH COLONIAL

This style is defined by fully round arch elements, red barrel tile roofs and entry courtyards with gate. Details the facade include colonnaded arcades, deep recessed primary windows or doors as well as wrought iron, clay vents and ceramic tiles.



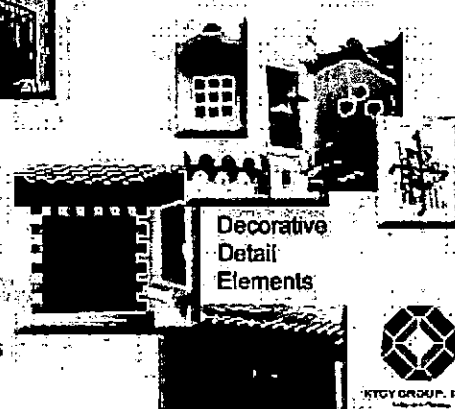
Wrought
Iron Railing



Plank &
Panel Shutters



Rounded
Arch
Elements



Decorative
Detail
Elements

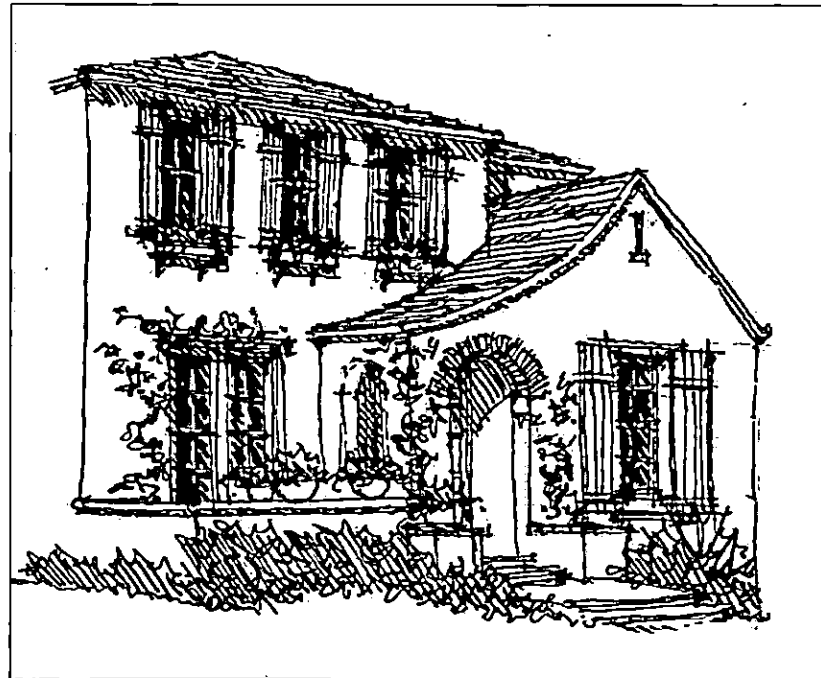


KTY GROUP, INC.
KING OF THE HILL

4.5.5 COUNTRY EUROPEAN

IDENTIFYING CHARACTERISTICS

- Informal arrangement of building forms
- Predominantly flat tile roof
- Mostly hip roofs, with cross gables
- Rural character through use of fieldstone and rustic materials
- Rich earthy color tones
-



4.5.5 COUNTRY EUROPEAN

BUILDING FORM

Asymmetrical 1 and 2 story massing with both vertical and horizontal breaks

ROOFS

Roof Form: main roof hip or gable with intersecting hip or gable secondary roofs.

Rooflines sloping down from second story to first story at front elevation are typical

Roof Material: Flat concrete roof tiles

Roof Slope: Varies from 5:12 to 12:12

A minimum 6:12 roof slope required on a portion of the elevation. This may occur on the entire roof form, or on a significant portion of the roof visible from the street, such as at an entry element, projecting wing, etc.

Minimum Overhangs	<u>Rakes*</u>	<u>Eaves</u>
Estate Lots	12" +	24"
Standard Lots	12" +	18"
Compact Lots	8" +	12"

*Tight rakes are allowed as long as they are compatible with the design of the building; otherwise 8" or 12" as described above.

WALLS

Stucco, when used, shall be as follows

Primary Walls: Light lace or smoother

Trim, Stucco Eaves, Etc: Sand or smoother

A portion of the front wall plane shall consist of stone or brick as follows:

Estate Lots	30% of the front wall plane*
Standard Lots	20% of the front wall plane*
Compact Lots	10% of the front wall plane*

*Excludes the area devoted to windows and doors

WINDOWS

At least one principal window with a minimum recess or surround of 12"

All other windows on front and visible side and rear elevations to have header, sill, or trim surrounds

Segmented arches at special openings

Bay window as a feature element

ENTRIES

Entry should be sufficiently articulated to accentuate the sense of arrival.

DOORS

If entry is not covered, the front door should have a minimum recess or surround of 12"

DETAIL ELEMENTS

Soft arch elements in conjunction with the front entry door, porch, or feature window.

Quoins and keystones are typically used

Reverse arch shutters

Decorative wrought iron balcony railings

Window boxes or plant ledges projecting at least 12" from the wall plane.

Wrought iron or wooden window boxes

Chimneys, when used, with simple tapered lines

Use of turrets and dormer windows

COLORS

Light body colors with contrasting trim.



Bay Windows & Dormers



Segmented Arches



Steeper Roof Pitches on all or Portions of Roof



Accentuated Openings



Turret or Tower Element



Reverse Arch Shutters

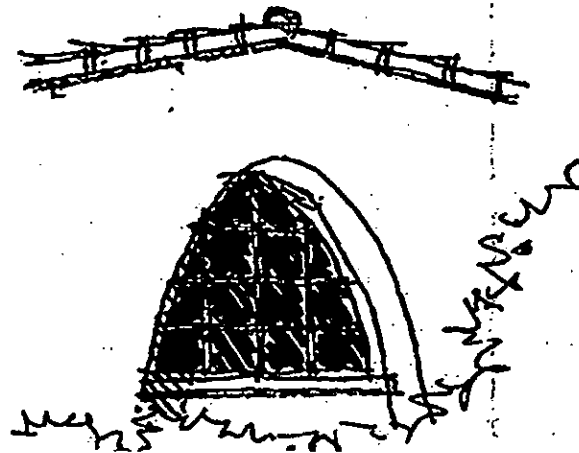


HERSHMAN, INC.

4.5.6 Andalusian

IDENTIFYING CHARACTERISTICS

- Asymmetrical building masses
- Entry forecourts or courtyards
- Ogee shaped trim elements
- Abundant use of colorful tile accents



4.5.6 ANDALUSIAN

BUILDING FORM

Asymmetrical building forms; occasional 2nd floor cantilevered elements

ROOFS

Roof Form: Hip, gable or a combination of both

Roof Material: Clay or Concrete Barrel or "S" tiles only

Minimum Overhangs

Rakes 0" or 6"

Eaves 6" or greater

Roof Slope: 4:12 to 5½:12

WALLS

Primary Walls: Stucco; light lace or smoother

Trim, Eaves, Etc.: Stucco; sand or smoother

Wood; painted or stained

WINDOWS

At least one feature window with a minimum recess or surround of 6", or as described in Section 3.1.3

All visible side and rear elevations shall have trim surrounds, or headers and sills

DETAIL ELEMENTS

The following elements below and in the next column describe typical elements characteristic of Andalusian architecture. Elevations will be designed using combinations of these elements as indicated. Other elements (combination of elements), meeting the intent of the style may be used subject to approval by the Master Developer.

Three or more of these (A category) elements are required on front elevations:

- ✓ Use of a parabolic shaped feature window
- ✓ The use of an ogee-shaped surround or comparably ornate element on an entry, door opening, feature window, or etc.
- ✓ Use of colorful decorative tile in such elements as trims and decorative recesses
- ✓ Fully round or segmented arch elements, required in conjunction with porch or second story windows

- ✓ Use of round and arched stacked tile accents, especially as wall accents or at gabled ends
- ✓ Over scaled stucco trim surround for emphasis, particularly on feature windows, minimum surround width 8"
- ✓ Dash or sand finish on stucco surfaces
- ✓ Color blocking on front elevation

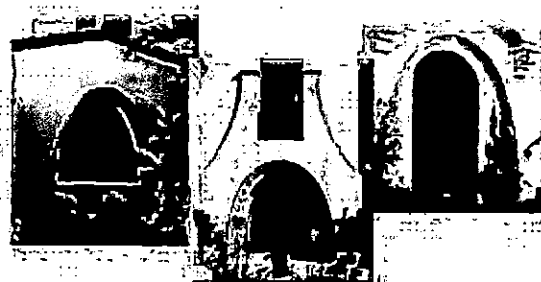
Two or more of these elements are required on front elevations:

- ✓ Projecting balcony supported on large corbels or brackets
- ✓ Use of square columns on balcony or porch elements, minimum 18" square-stucco columns
- ✓ Balustrades with an "X" motif of clay tiles used on balcony or porch rails and repeated as decorative ornamentation on other elements or wall surfaces as appropriate
- ✓ Exterior staircase with "stepped" balustrades
- ✓ A small "Mirador" or covered 2nd outdoor room set in a square tower form
- ✓ Entry door of upgraded detail and design or fully round arched entry door
- ✓ Entry articulated as a focal element through the use of a courtyard, portico, tower element, or other element to accentuate the sense of arrival
- ✓ Wall plane offset of at least 2' vertical or horizontal
- ✓ Over scaled precast trim surround for emphasis, particularly on feature windows, minimum surround width 8"
- ✓ Courtyard space defined by low courtyard walls consistent with architectural style
- ✓ Decorative tile on exterior stair risers
- ✓ Awnings with decorative/substantial supports and brackets.
- ✓ Entry door of upgraded detail and design consistent with the architectural style
- ✓ Garage door of upgraded detail and design consistent with the architectural style
- ✓ Smooth steel trowel finish on stucco surfaces
- ✓ Substantially enhanced front landscaping, submitted with elevations, to be approved by the Master Developer



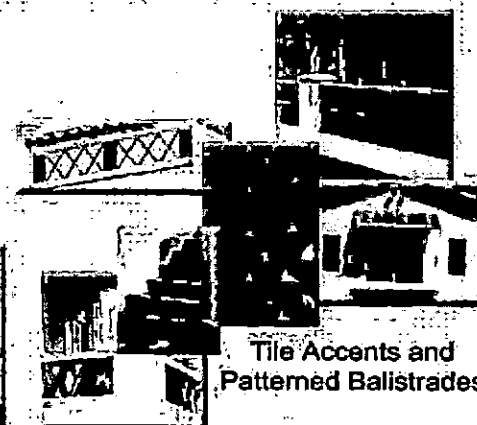
ANDALUSIAN

Asymmetrical one and two story buildings are the basis for this style. Entrys are monumented by forecourts or courtyard with shaped trim elements. Abundant use of colorful tile accents nicely details the style.

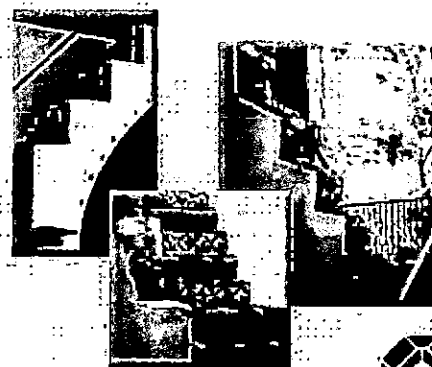


Parabolic Accented Windows & Doors

Large Corbels or Brackets



Tile Accents and
Patterned Balistrades



Stepped Balistrades
on Staircase



KTOY GROUP, INC.
Lansing, Michigan

4.5.7 Tuscan

IDENTIFYING CHARACTERISTICS

- Informal arrangement of building forms
- Mostly hip roofs with occasional gable or cross gables
- Predominantly barrel tile roofs
- Rural character through the use of fieldstone or other rustic materials
- Rich earthy color tones



4.5.7 TUSCAN

BUILDING FORM

Informal, asymmetrical arrangement of one and two story building forms.

ROOFS

Roof Form: Primarily hipped with secondary cross gables or hips

Roof Material: Clay or Concrete barrel or "S" tiles

Minimum Overhang: Rake or Eave

Estate:	18"
Standard:	12"
Small:	12"

Roof Slope: 4:12 to 5:12

WALLS

Use of fieldstone is required on 25% of the front elevation

Primary Walls: Stucco; light lace or smoother

Trim, Eaves, Etc.: Stucco; sand or smoother
Wood; painted or stained

WINDOWS

At least one feature window with a minimum recess or surround of 12" or as described in Section 3.1.3

All other windows on front and visible side and rear elevations shall have trim surround or header and sill

Window mullions, if used, shall be grid pattern

DETAIL ELEMENTS

The following elements below and in the next column describe typical elements characteristic of Tuscan architecture. Elevations will be designed using combinations of these elements as indicated. Other elements (combination of elements), meeting the intent of the style may be used subject to approval by the Master Developer.

Three or more of these (A category) elements are required on front elevations:

- ✓ Fully rounded or segmented arch elements on front elevation
- ✓ "Lacy" wrought iron grille work
- ✓ Entry door with a minimum recess or surround of 24"

- ✓ Plank shutters
- ✓ Two or more exaggerated vertical windows, 1: 2½ proportion (width/height)
- ✓ Enhanced stucco trim element
- ✓ Decorative column detail at window, door, porch, or garage door
- ✓ Enhanced stucco trim elements
- ✓ Dash or sand finish on stucco surfaces
- ✓ Color blocking on front elevation

ONE or more of these (B category) elements are required on front elevations:

- ✓ Bermuda style shutters
- ✓ Entry articulated as a focal element through the use of a porch, courtyard, tower element, arch, strong surround, or other element to accentuate the sense of arrival
- ✓ Header or sill in conjunction with a 2" recess on all front elevation windows
- ✓ Precast stone or concrete trim element
- ✓ Additional use of upgraded stone on front elevation, 50% minimum
- ✓ Entry door of upgraded detail and design consistent with the architectural style
- ✓ Garage door of upgraded detail and design consistent with the architectural style
- ✓ Smooth steel trowel finish on stucco surfaces
- ✓ Substantially enhanced front landscaping, submitted with elevations, to be approved by the Master Developer
- ✓ Wall plane offset of at least 2' vertical or horizontal
- ✓ Juliet or false balconies on second story windows with ornamental iron work



TUSCAN

Informal arrangement of building forms with mostly hipped roof, accented by the occasional gable or cross-gable. Red tile roofs above tall narrow windows with or without shutters. Use of fieldstone or other rustic material completes the rural appearance of this style.



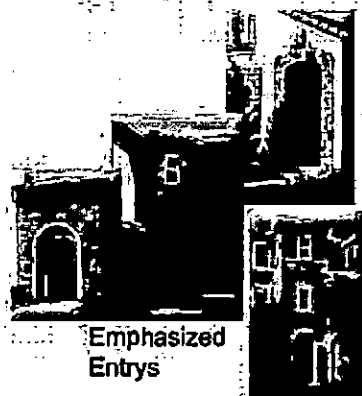
Use of
Field Stone



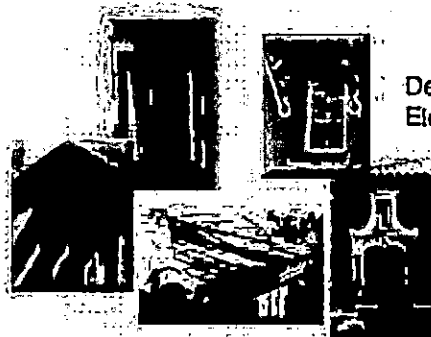
Decorative Wrought
Iron Railing



Detail
Elements



Emphasized
Entrys



KTOY GROUP, INC.
The Art of Living

4.5.8 MEDITERRANEAN

IDENTIFYING CHARACTERISTICS

- Asymmetrical building masses
- Refined use of details and materials
- Low pitched red tile roofs
- Use of arch elements at doors or feature windows



4.5.8 MEDITERRANEAN

BUILDING FORM

Asymmetrical building forms

Often "L" or "U" shape to form an entry courtyard

Height of 1st floor plate should be proportionately taller than the 2nd floor plate

Characteristically features a turret or tower element with separate roof

ROOFS

Roof Form: Combination of hip and gable roofs

Roof Material: Clay or Concrete Barrel or "S" tiles only

Minimum Overhangs

Rakes 0" or 12"

Eaves 12" or greater

Roof Slope: 4:12 to 5:12

WALLS

Primary Walls: Stucco; light lace or smoother

Trim, Eaves, Etc.: Stucco; sand or smoother

Wood; painted or stained

WINDOWS

At least one feature window with a minimum recess or surround of 12".

Windows on front elevations shall have a tall, narrow appearance

Windows should be grouped to achieve a classic rhythm. Window groupings should be connected with implied columns and strong, continuous sills

DETAIL ELEMENTS

The following elements below and in the next column describe typical elements characteristic of Mediterranean architecture. Elevations will be designed using combinations of these elements as indicated. Other elements (combination of elements), meeting the intent of the style may be used subject to approval by the Master Developer.

Three or more of these (A category) elements are required on front elevations:

- ✓ Entry door with a minimum recess or surround of 24"
- ✓ Decorative wrought iron railing or decorative grille-work. (Standard tubular steel is not considered decorative.)

- ✓
- ✓ Use of colorful decorative tile in such elements as trims and decorative recesses
- ✓ Over scaled stucco trim surround for emphasis, particularly on feature windows, minimum surround width 8"
- ✓ Fully round or segmented arch windows on second floor
- ✓ Front facing gable ends detailed with elements such as decorative clay vents, recessed or projecting stucco grid, ceramic tiles, etc.
- ✓ Panel or plank shutters
- ✓ Dash or sand finish on stucco surfaces
- ✓ Color blocking on front elevation

Two or more of these (B category) elements are required on front elevations:

- ✓ A significantly scaled wood or iron balcony, minimum depth 2'
- ✓ Fully round arch elements in conjunction with the entry door, porch element, principal window.
- ✓ Decorative tile on exterior stair risers
- ✓ Over scaled precast trim surround for emphasis, particularly on feature windows, minimum surround width 8"
- ✓ Entry articulated as a focal element through the use of a porch, courtyard, tower (round or square) element, arch, strong surround, or other element to accentuate the sense of arrival
- ✓ Bermuda shutters or awnings with decorative/substantial supports and brackets
- ✓ Header or sill in conjunction with a 2" recess or surround on all front or visible front elevation windows
- ✓ Entry door of upgraded detail and design consistent with the architectural style
- ✓ Garage door of upgraded detail and design consistent with the architectural style
- ✓ Smooth steel trowel finish on stucco surfaces
- ✓ Substantially enhanced front landscaping, submitted with elevations, to be approved by the Master Developer
- ✓ Wall plane offset of at least 2' vertical or horizontal
- ✓ Juliet or false balconies on second story windows

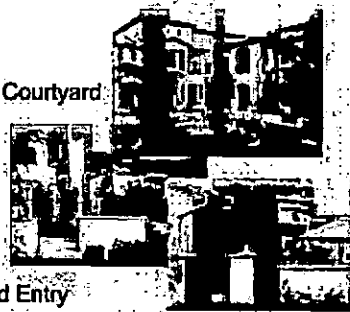


MEDITERANEAN

Asymmetrical combination of 1 and 2 story building masses articulated with tower elements or arcades. Low pitched gable-roof forms are predominant with occasional hips done in red tile. Use of arch elements at doors or featured windows and abundant use of decorative elements such as patterned tiles, grille work and shutters.



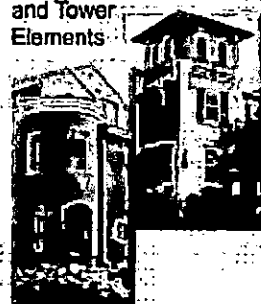
Entry Courtyard



Vertically Proportional
& Rounded Windows



Accentuated Entry
and Tower
Elements



Decorative Tile

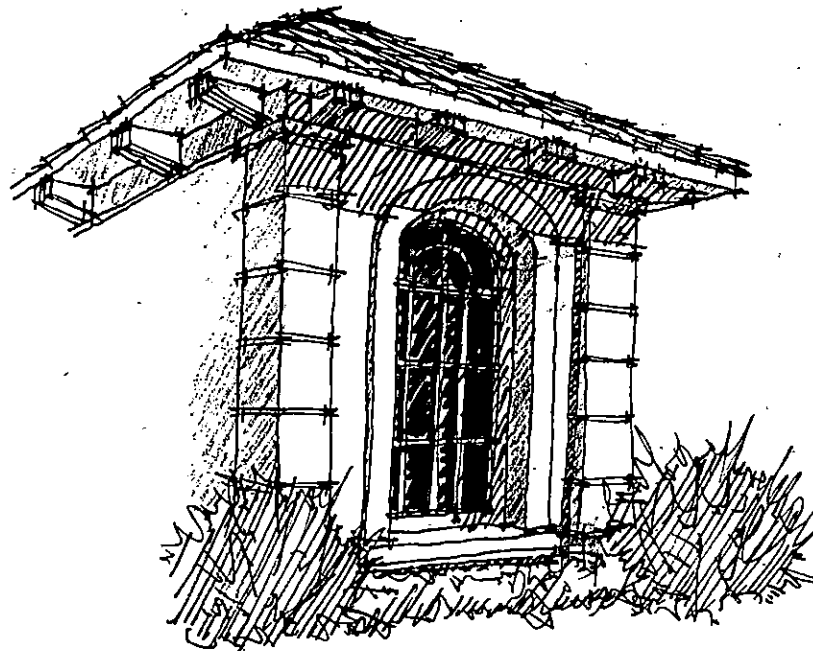


NTGY GROUP, INC.

4.5.9 Southern Italian

IDENTIFYING CHARACTERISTICS

- Formal box-like massing
- Low-pitched hipped roofs with barrel shaped or flat tiles
- Wide overhangs w/ decorative brackets
- Arched windows & doors common on 1st floor
- Entry columns accentuated with classic



4.5.9 SOUTHERN ITALIAN

BUILDING FORM

Formal, symmetrical nature to front facade

ROOFS

Roof Form: Primarily hipped

Roof Material: Clay or concrete barrel or "S" tiles or flat tiles

Minimum Overhang Rake or Eave

Estate Lots: 18"

Standard Lots 12"

Compact Lots: 12"

Roof Slope: 4:12 to 5:12

WALLS

Primary Walls: Stucco; light lace or smoother

Trim, Eaves, Etc. Stucco; sand or smoother
 Wood; painted or stained

WINDOWS

At least one feature window with a minimum recess or surround of 12 or as described in Section 3.1.3

All other windows on front and visible side and rear elevations shall have trim surround or header and sill

Windows shall be tall and narrow in proportion

DETAIL ELEMENTS

The following elements below and in the next column describe typical elements characteristic of Southern Italian architecture. Elevations will be designed using combinations of these elements as indicated. Other elements (combination of elements), meeting the intent of the style may be used subject to approval by the Master Developer.

Three or more of these elements are required on front elevations:

- ✓ Recessed or projecting round stucco accents in conjunction with windows or doors
- ✓ Entry door with a minimum recess or surround of 12"

- ✓ Grouping of windows (2 or 3) with strong horizontal projecting sills
- ✓ Quoins Enhanced horizontal banding at first and second story plate height, cast concrete appearance
- ✓ Two or more exaggerated vertical windows, 1: 2½ proportion (width/height)
- ✓ Palladian windows
- ✓ Use of shutters
- ✓ Arched windows, fully round or segmented
- ✓ Decorative column detail at window, door, porch, or garage door
- ✓ Dash or sand finish on stucco surfaces
- ✓ Color blocking on front elevation

Two or more of these elements are required on front elevations:

- ✓ Stucco soffits with paired eave brackets or dentil detailing
- ✓ Entry articulated as a focal element through the use of a courtyard, portico, tower element, or other element to accentuate the sense of arrival
- ✓ Header or sill in conjunction with a 2" recess on all front elevation windows
- ✓ Entry door of upgraded detail and design consistent with the architectural style
- ✓ Garage door of upgraded detail and design consistent with the architectural style
- ✓ Smooth steel trowel finish on stucco surfaces
- ✓ Substantially enhanced front landscaping, submitted with elevations, to be approved by the Master Developer
- ✓ Wall plane offset of at least 2' vertical or horizontal

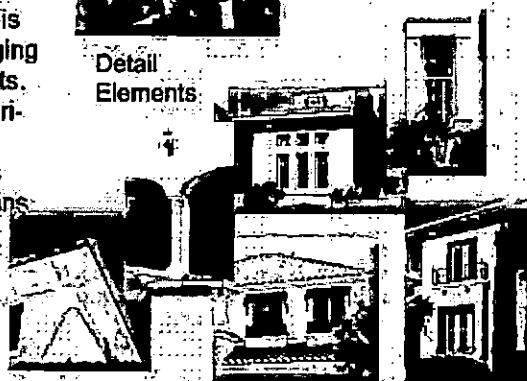


SOUTHERN ITALIAN

This style begins with formal box-like massing topped with low-pitched hip roof with barrel shaped or flat roof tiles. This roof line spills over with wide overhanging eaves supported by decorative brackets. Facade treatment is generally symmetrical with arched windows and doors common on the first floor. The entry is often accentuated with classical columns.



Detail Elements



Accentuated Entry



Rounded Arch Elements



KTYG GROUP, INC.
Architects/Interior Designers

4.5.10 Brownstone

IDENTIFYING CHARACTERISTICS

- Streetscape vista as important as individual house
- Simple building forms enhanced with bold elements
- Recessed entry doors
- Projecting stoops/ stairs
- Elaborate cornice



BUILDING FORM

- Symmetrical building forms up to 3 stories
- Architectural massing and building elements should create a sense of symmetry and rhythm to the streetscene
- Main living floor plate height should be at least 1' greater in height than upper floors

ROOFS

- Roof Form: Generally low pitch or flat roofs with parapets on front elevation
- Hip roof with tight eaves strong detailing of cornice permitted
- Boldly protruding cornice, supported by brackets. Minimal change in cornice elevation from house to house (site grades permitting).
- Clay or concrete barrel or "S" tiles or flat tiles on pitched roofs
(Low Profile "S" tiles permitted on Village and Garden Homes only)

Walls

- Primary wall material shall be dark colored brick or stone. (Stone should have an appearance of cut stone. Fieldstone is not permitted).
- Stucco, if used shall be light lace or smoother
- Trim, Eaves, Etc.:
 - Stucco; sand or smoother
 - Wood; painted or stained
 - Pre-cast veneer
 - Cut-stone veneer

DETAIL ELEMENTS

The next column describe typical elements characteristic of Brownstone architecture. Elevations will be designed using combinations of these elements as indicated. Other elements (combination of elements), meeting the intent of the style may be used subject to approval by the Design Review Committee.

Three or more of these (A category) elements are required on front elevations:

- Belt course of stone or brick between 2nd and 3rd floor on 3 story buildings
- Two or more exaggerated vertical windows, 1: 2½ proportion (width/height)
- Entry featuring transom or fanlight over door
- Front doorway recessed from the adjacent wall plane a minimum of 24"
- Stoop at raised entry, where feasible
- Segmented arch elements
- Panel shutters
- Header and window box on upper floors
- Enhanced flat work (brick or paving) at entry walk
- Dash or sand finish on stucco surfaces
- Color blocking on front elevation

Two or more of these (B category) elements are required on front elevations:

- Vertically proportioned bay windows contributing to the overall symmetry of the streetscene
- Entry elaborately detailed with a door hood or pediment supported by corbels
- Traditionally detailed columns on front elevation
- Stoop railing of decorative iron or concrete balustrade
- Elaborate cornices
- Exposed rafter tails
- Added stone or brick braces under cantilevered balcony
- Interior window coverings on front elevations; 2" wood blinds, plantation shutters or equivalent
- Entry door of upgraded detail and design consistent with the architectural style
- Garage door of upgraded detail and design consistent with the architectural style
- Smooth steel trowel finish on stucco surfaces
- Substantially enhanced front landscaping, submitted with elevations, to be approved by the Design Review Committee
- Wall plane offset of at least 2' vertical or horizontal



BROWNSTONE

This style relies on a streetscape vista that is as important as the individual house. Simple building forms are enhanced with bold elements and recessed entry doors. Stoops and stairs project in a symmetrical repeating pattern. Elaborate cornices top the details.

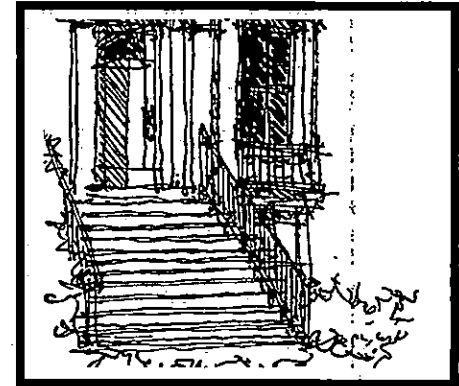


©2006 GROUP, INC.

3.2.11 Contemporary

IDENTIFYING CHARACTERISTICS

- A contemporary adaptation of traditional vernaculars, executed with a fresh, contemporary approach
- Exploration of modern architectural vocabulary that best embodies a unique urban character



BUILDING FORM

- Asymmetrical arrangement of multiple story building forms

ROOFS

- Roof Form: Strong use of the roof as a design statement, including shed roof forms, flat roofs, parapets, along with over-scaled gable or hip roof forms.
- Roof Material: Clay or concrete flat or "S" tiles, metal seam
- Minimum Overhangs: 0" at rake or eave. Broad overhangs encouraged to highlight unique building form or design element (30" or more) with stylized external supports if necessary.
- Roof Slope: Varies from flat with parapet to 12:12

Walls

A mix of materials is encouraged on each residence or building, including but not limited to:

- Stucco
- Brick
- Stone
- Metal
- Cementitious Siding
- Concrete

Windows

- Contemporary architecture features generous use of glazing
- At least one window or window grouping should be significantly larger than the other windows on the elevation
- Commercial grade window and door systems are encouraged
- Windows shall be recessed a minimum of 2" have or have a trim element with a minimum 2" reveal
- Large scale window panes with minimal use of mullions

DETAIL ELEMENTS

The next column describe typical elements characteristic of Contemporary architecture. Elevations will be designed using combinations of these elements as indicated. Other elements (combination of elements), meeting the intent of the style may be used subject to approval by the Design Review Committee.

Three or more of these (A category) elements are required on front elevations:

- Metal rails, and/or screens on porch or balconies
- Cable rails
- Metal rails with mesh infill
- Other metal rails or infill panels with contemporary flavor
- Metal awnings-cable or brace supported
- Creative solutions for shading glazed surfaces
- Bold use of color to accentuate building forms and elements (subject to Material and Color Palette Schedule)
- Use of reveals or riglets on wall surfaces

Two or more of these (B category) elements are required on front elevations:

- Unique composition of multiple building forms
- Finished floor elevation of the first raised 30" minimum above finish grade or sidewalk to create a raised stoop at the entry
- Seam metal roof on at least 25% of the visible roof
- Over-scaled roof overhangs on all or significant portion of the building
- Operable windows that are other than standard sliders or single/double hung.
- Use of commercial grade window and door system



CONTEMPORARY

A contemporary adaptation of traditional vernaculars, executed with a fresh, contemporary approach.

Contemporary architecture is an exploration of modern architectural vocabulary that best embodies a unique urban character.



**Bold Building
Form, Wall
Materials, & Color**



**Metal Railing and
Window Shade
Structures**



RTGY GROUP, INC.
ARCHITECTS

SECTION 5

Landscape Guidelines

INTRODUCTION

The landscape guidelines consist of three zones, each with its own palette of desert adaptive plant materials:

- Residential Streetscapes
- Residential Neighborhoods
- Multi-Family Developments

All landscaping materials used in Kyle Canyon will be selected from a list of plants that are drought-tolerant or adapted to the desert climate (See Master Plant Palette, Section 5.7.10). The landscaping of all public areas will be designed to minimize the use of precious water resources.

All landscaping improvements in Kyle Canyon will comply with the Southern Nevada Water Authority's Water Smart Home Standards.

All landscaping in Kyle will be installed and maintained to comply with City of Las Vegas street visibility standards described in Section 6.

5.1. RESIDENTIAL STREETSCAPES CRITERIA

All Neighborhood Streets shall include a landscape area with five-foot sidewalk. The area from back of curb to sidewalk is referred to here as the "Residential Streetscape". The width of the Residential Streetscape varies as shown in the Street Sections described in Section 6 below. The maximum slope in the Residential Streetscape is 4:1.

Builders will develop a master street tree program for the Residential Streetscapes using the Master Plant Palette. The Residential Streetscapes are to be designed and installed as one system that will be maintained by the Master HOA. The trees will be placed at regular

intervals of not more than 30'-0" on center, centered in the Residential Streetscape between curb and sidewalk. Tree spacing in excess of 30' on center will only be allowed when hardscape structures and or utility services impede the maximum tree spacing interval. In no case shall any tree be installed closer than 15' on center.

Builders will be responsible for the procurement and installation of the Residential Streetscapes including the necessary irrigation systems. The Master HOA will accept and maintain all Residential Streetscapes.

The palette of shrub species on any block face of a Neighborhood Street will be limited to twelve different species in order to encourage plant massings and well-designed simplicity. Special attention should be paid to layering of differing heights and textures of plants to create an interesting composition. Turf will not be allowed in any form (artificial or real) in the Residential Streetscapes.

Builders will be required to submit planting plans to the Master Developer for approval based on the attached exhibits and plant palettes. Calculations showing the proper density must be provided on the plans.

Shrubs may not be planted closer than one foot (1') from adjacent concrete sidewalk or back of curb.

The following are the minimum requirements for Residential Streetscapes:

Street Trees	24" box, 30'-0" o.c. (centered between back of curb and sidewalk)
Shrub density	1 plant per 15 square feet 5-gallon (75%) 1-gallon (25%)
Concrete Sidewalk	5'-0" min
Turf	Not allowed
Mulch	Full coverage of granite mulch, pavers, stamped concrete or other suitable materials per drainage requirements

5.2 RESIDENTIAL LOT CRITERIA

5.2.1 ARCHITECTURAL COMPATIBILITY

The planting associated with individual home lots is to be dictated by the architectural forms and by the surrounding parks and streetscapes.

5.2.2 PLANTING DESIGN

The front yards are intended to be an extension of the houses. Outdoor living environments should be created to enhance this experience. The use of smaller, pedestrian friendly plantings and limited hardscapes are encouraged.

While there are several approaches to take with the residential planting, the main principle is to reinforce the urban feel of the community with the use of complementary plantings that define the neighborhoods.

Trees should be spaced at least 15 feet apart. If trees need to be spaced more closely, they should be of the same small tree species. Trees must be set back a minimum of three feet on center from hardscape structures such as sidewalks, curbs, driveways, fences and walls.

Flower beds or planting beds requiring overhead sprays shall be limited to rear yards only or in pots on drip irrigation systems.

Informal plantings are appropriate in typical front yards; however, plant selections should be based on massing and layering. Species should be selected to provide layers of structure and accents with densities that are consistent with the neighboring parks and residences.

5.2.3 MASSING/LAYERING

The massing of planting is encouraged to create more structure within the yards. The landscape designs should incorporate grouping of similar plant materials and layering shrubs and accents based on heights, color and texture to create sweeping forms and plant hierarchy.

A combination of planting techniques should be utilized in the planting designs. Screen planting incorporates hedges and espaliers to provide relief to large expanses of hardscape, as well as to provide separation or privacy from neighboring uses. Mass planting of one species is used to create fields of color or texture. Planting will be required to screen the areas of the house just above the finished grade as well as large expanses of wall.

5.2.4 TURF

Natural turf is limited to rear yards only and will meet the Water Smart standards of the SNWA. The minimum dimensions for back yard natural turf areas are six feet width and ten feet length. Natural turf shall be kept at least three feet (3') from a building face or wall, including side yard retaining walls.

Only artificial turf will be allowed in the front yards. SynLawn products or an alternate equal will be submitted to the Master Developer for review.

All turf, natural or artificial, must be bordered with a product that ties into the architectural detailing. This border should be a minimum four inches of either concrete, grouted stone, masonry product or steel edging that is flush to grade.

5.2.5 BOULDERS/COBBLE

Boulders and cobble can provide interesting accents to a desert landscape. They are to be used in natural patterns and clusters to accent grade changes and land patterns. Boulders shall be set two-thirds of their height in the ground to appear as natural as possible. The use of manufactured or faux boulders is not allowed in the front yards.

Boulders and river/cobble beds will not be allowed in the multi-family zones or along Connector Streets as they are not consistent with the formal garden character that is being emphasized in these locations as well as the limited planting areas.

5.2.6 INERT MATERIALS

The minimum width of an entry walk and the minimum separation from a building is defined in Sections 5.2.14 through 5.2.17. Entry walks must be separated from a building wall by a planting strip that is fully planted unless geotechnical analysis prohibits irrigation. In such case, the separation will be treated with pavers or stamped concrete in a contrasting color from the walkway.

All planting areas must have a decomposed granite cover of 2" minimum. The Master Developer will establish the allowable granite colors. Granite colors are to maintain consistency between lots and neighborhoods. If an adjacent property has an existing granite color, this color must be maintained until there is a natural transition formed by a hardscape feature such as a street or sidewalk. Concrete headers are not allowed to separate granite colors from lot to lot. Rear yard granite colors may vary. River rock beds are discouraged; using alternates such as natural granite cobble is encouraged.

5.2.7 LANDSCAPE GRADING

Drainage patterns established by the engineering requirements, shall be maintained, but shaped into natural forms when possible. Lots located within urban areas will need to follow a more simplistic grading approach with flat levels and architectural grade changes and subsurface drainage where appropriate. The maximum allowable slope on a residential lot is 2:1.

Treatment of the area where the landscapes of two lots abut should be similar; to create a unified and more expansive landscape feeling. Hard edges (i.e. mow strips, edging, walls, etc.) between lots will not be allowed except where needed for grading conditions.

Where drainage swales are required along the side yards of adjacent lots, the two swales should be joined into a single swale that is less noticeable. Planting or hardscape shall not impede drainage patterns. Cross lot drainage is permitted subject to a reciprocal use easement (see Section 3.5).

5.2.8 POTS AND PLANT CONTAINERS

Pots and planters provide a good location for color and accents as well as structure in the landscape. All pots and plant containers shall be selected in colors and materials that complement the architecture and hardscape forms. Irrigation must be provided to pot locations with the use of drip irrigation.

5.2.9 LANDSCAPE INSTALLATION AND MAINTENANCE

All landscaping shall be installed according to sound nursery practices in a manner designed to encourage vigorous growth. All visible landscape material and irrigation improvements shall be in place prior to issuance of the final certificate of occupancy.

Either the Master HOA or the homeowner, based on the ownership of the property, will be required to do regular maintenance of all landscaping and irrigation improvements. Regular maintenance includes: weeding, watering, fertilizing, pruning, mowing, edging, mulching, and keeping the landscape areas free from disease, pests, and weeds.

Any vegetation in conflict with traffic control signs or accessibility shall be corrected within 3 days of notice from the City.

5.2.10 CORNER LOTS

Corner lots shall be landscaped as an extension of the front yard zone. Consistent plant species and densities should be used including the extension of artificial turf, where used, to wrap the corner. All exposed walls must be screen planted to break up expanses of the wall.

5.2.11 ALLEY ZONE

For purposes of this section, an "Alley" is any road that meets the cross section definition of an Alley in Section 6 and the "Alley Zone" is the landscapeable common area (excludes garage aprons and areas required for utility boxes and equipment) adjacent to the alley curbs. All areas between a product and Alley shall be planted using a palette consistent with the parcel theme, and using plants shown in the Alley Zone on the Master Plant Palette (Section 5.7.10). Screen planting shall be used whenever possible to hide expanses of walls with hedging and espaliers.

The lot owner or a homeowners' association must maintain landscape areas between walls and edge of pavement. This planting area must be irrigated by the individual lot irrigation system. All landscape in the Alley Zone must be designed and installed on each lot prior to close of escrow.

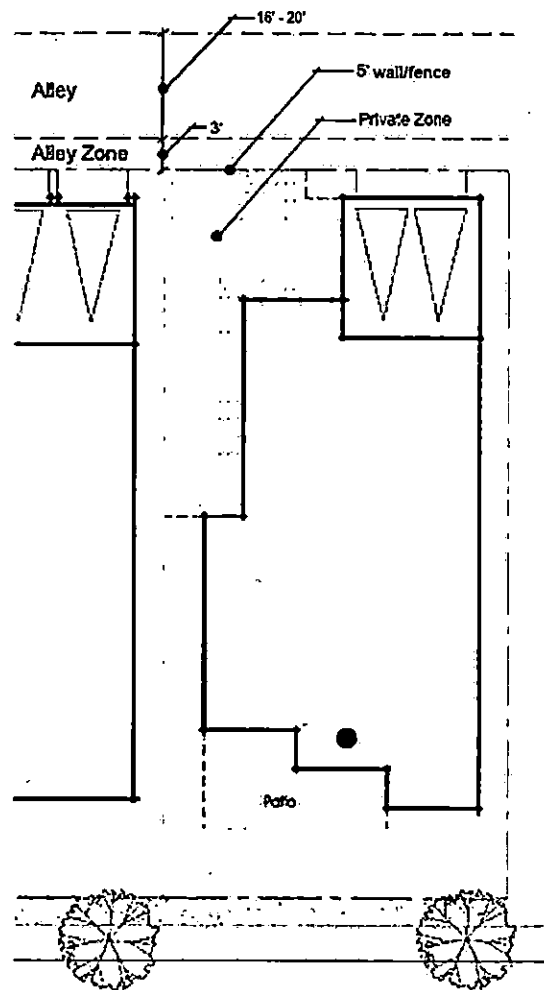
Minimum requirements for the Alley Zone are as follows, subject to the requirements of a builder's geotechnical report and recommendations:

- Shrub Density: 1 plant per 20 square feet. 5-gallon (25%). 1-gallon (75%).
- Lawn: Not allowed
- 8" Maximum height groundcovers in first three feet adjacent to alley curbs
- Full coverage of granite mulch, paver or stamped concrete

5.2.12 PRIVATE ZONE

The Private Zone is a private use area of an individual dwelling enclosed by a 5' minimum wall that is not visible from public areas, and is for the private use and enjoyment of occupant(s). Private zone planting is encouraged, but not required, to follow the approved Master Plant Palette. Areas with view fencing are not included in private zones, and must follow the same criteria for front yards. Any plants in the private zones that will grow to a height of six feet at maturity shall be selected from the Typical Front Yard palette.

Turf areas located in rear yards must be setback from adjacent walls by a minimum of five feet in order to minimize damage to neighbor walls. The aggregate size of the turf area and surface area of swimming pools may not exceed 40% of the rear yard area or 1,000 square feet, whichever is less. Trees must be set back a minimum of three feet from sidewalks, curbs, driveways, fences and walls.



5.2.13 FRONT YARD LANDSCAPING

To ensure similar coverage of plant materials and smooth transitions between streetscapes and adjacent lots, planting densities are based on landscapable areas, not including artificial turf areas. In order to

achieve this effect, the palette of plant species is limited to no less than five and no more than ten.

5.2.14 FRONT YARD- ESTATE LOTS

- 24" Large Tree:
 - 2 per lot
- Shrub Density:
 - 1-5 gallon plant per 40 square feet.
 - 1-1 gallon plant per 40 square feet.
 - 1-1 gallon accent plant per 125 square feet
- Entry Walk:
 - 4'-0" min with 5'-0" max. Minimum 2'-0" off set from house.
- Lawn:
 - Artificial turf only in areas that are 250 s.f. minimum
- Full coverage of granite mulch.
- Maintain access to rear yards at side yards.
- Trees must be set back a minimum of 3 feet from sidewalks, curbs, driveways, fences and walls

5.2.15 FRONT YARD- STANDARD LOTS, COMPACT LOTS, CLUSTER HOMES

- 24" Large Tree:
 - 1 per lot.
- 15 gallon Small Tree:
 - 1 per lot + 1 per lot on corner lots.
- Shrub Density:
 - 1-5 gallon plant per 100 square feet.
 - 1-1 gallon plant per 75 square feet.
 - 1-1 gallon accent plant per 170 square feet.
- Entry Walk:
 - 3'-0" min with 5'-0" max. Minimum 2'-0" off set from house.
- Lawn:
 - Artificial turf only in areas that are 250 s.f. minimum.

- Full coverage of granite mulch.
- Maintain access to rear yards at side yards.
- Plantings to be clustered in public spaces. Areas between units can be left open if edges are screened with plantings.
- Trees must be set back a minimum of 3 feet from sidewalks, curbs, driveways, fences and walls.

5.2.16 GARDEN COURT

- 24" Large Tree:
 - 24" box: 0 per lot
- 15 gallon Small Tree:
 - 2 per lot + 1 per lot on corner lots
- Shrub Density (lot):
 - 5 gallon plant: 1 per 100 square feet.
 - 1 gallon plant: 1 per 75 square feet.
 - 1 gallon accent: 1 per 170 square feet.
- Shrub/Tree Density (common area):
 - 24" box tree: 1 per 750 square feet.
 - 15 gallon tree: 1 per 750 square feet.
 - 5 gallon plant: 1 per 125 square feet.
 - 1 gallon plant: 1 per 100 square feet.
 - 1 gallon accent: 1 per 175 square feet.
- Entry Walk:
 - 3'-0" min with 5'-0" max. Minimum 2'-0" off set from house.
- Lawn:
 - Artificial turf only in areas that are 250 s.f. minimum.
- Full coverage of granite mulch.
- Maintain access to rear yards at side yards.
- Plantings to be clustered in public spaces. Areas between units can be left open if edges are screened with plantings
- All utilities and irrigation equipment must be screened
- Trees must be set back a minimum of 3 feet from sidewalks, curbs, driveways, fences and walls

5.2.17 MANSION HOMES

- Large Tree:
 - 36" box: 1 per 1,000 square feet.
 - (Alley Loaded) 24" box: 1 per 650 square feet
- Small Tree:
 - 15 gallon: 1 per 250 square feet.
 - (Alley Loaded): 24" box: 1 per 500 square feet
- Shrub Density:
 - 5 gallon plant: 1 per 100 square feet
 - 1 gallon plant: 1 per 75 square feet
 - 1 gallon accent: 1 per 170 square feet
- Entry Walk:
 - 4'-0" min with 5'-0" max
 - Minimum 2'-0" off set from house
- Lawn:
 - Artificial turf only in areas that are 250 s.f. minimum
- Full coverage of granite mulch.
- Maintain access to rear yards at side yards, where accessible.
- Trees must be set back a minimum of 3 feet from sidewalks, curbs, driveways, fences and walls

5.2.18 FRONT YARD- TOWNHOME

- Large Tree:
 - 24" box: 0 per lot
- Small Tree;
 - 15 gallon: 1 per lot (small patio type tree)
- Shrub Density:
 - 5 gallon plant: 1 per 60 square feet
 - 1 gallon plant: 1 per 17 square feet.
- Lawn;
 - None allowed
- Full coverage of granite mulch.
- Maintain access to rear yards at side yards.
- Trees must be set back a minimum of 3 feet from sidewalks, curbs, driveways, fences and walls. Trees may be planted in paving areas with tree grates.

5.3 NEIGHBORHOOD LANDSCAPING REQUIREMENTS

5.3.1 OPEN SPACE LANDSCAPE

Any interior areas within individual builder parcels will need to be landscaped and tied to a main Master HOA irrigation system. These areas should follow the streetscape and front yard characteristics. They may also allow for pocket parks that include items such as shade ramadas, tot lots, open turf play areas, benches, barbeques, and other similar amenities. Planting selections should follow those of the Residential Streetscape Palette. These areas will need to be designed and submitted for review by the Master Developer with the following standards:

- Shade Trees:
 - 1-24" box tree per 650 square feet.
- Shrub Density:
 - 1 plant per 20 square feet.
 - 5-gallon (50%).
 - 1-gallon (50%).
- Lawn:
 - Common area turf is allowed only in functional recreational areas that are at least 50' wide
 - Sprinkler system must meet a distribution uniformity standard of 65%
 - No turf within five feet of a building face or wall
 - No turf within eighteen inches of back of curb.
 - Full coverage of granite mulch.
- Streetscape section must remain consistent across open space frontage
- Trees must be set back a minimum of three feet from sidewalks, curbs, fences and walls.
- An automatic irrigation system with an irrigation meter, power source and controller

5.3.2 MODEL COMPLEXES

Model home landscape areas shall be consistent with the parcel theme and must follow the restrictions and intent of the residential guidelines. Builders are encouraged to maximize landscape quantity and size in a manner that doesn't distract from the model's architecture. This criteria applies to both single family and multi-family developments.

5.3.3 SWIMMING POOLS

Back yard swimming pools are subject to the following requirements:

- An enclosed sewer cleanout must be provided with convenient access and clearly marked as the appropriate location for pool drainage.
- The combined pool and spa surface area will be deducted from the maximum back yard turf area
- Pools may not feature decorative water features that drop or propel water more than 24-inches above the main water surface

5.3.4 ROCK MULCH

Rock and granite mulch will be at least 2-inches (2") deep and in one of the approved colors selected by the Master Developer. Different sizes of the same rock color are encouraged. In general, sizes ranging from 3/8 inch to 3/4 inch are most appropriate. All landscape areas will contain either vegetative cover or granite mulch; no bare dirt is allowed.

5.4 MULTI-FAMILY PARCELS

5.4.1 PARKING LOTS

Parking lots within multi-family parcels shall be landscaped to reduce their visual impact. Landscape in and around parking lots shall consist of two categories:

A. Perimeter landscape that surrounds the interior parking lots to an average depth of ten feet (10') and a minimum depth of two feet (2'), including walks. A minimum of one 24-inch box tree shall be planted for every 400 s.f. of landscape area and no less than 30' O.C.

B. Interior landscape within parking lots that reduces the paving mass of a parking lot and provides shade. A minimum of one 24-inch box tree shall be planted for every six parking spaces in a manner that accomplishes this goal either in landscape islands or in a planter extending the length of the parking row. Interior parking lot trees will be canopy trees that provide maximum shade and not accent trees. Each parking island shall be planted with one 24" box tree and 50% minimum vegetative cover at the ground plane and rock mulch.

All non-paved areas within the perimeter and interior of parking lots shall be landscaped with a combination of plant materials and rock mulch. These plant materials shall be selected from the palette applicable to the zone they are planted in. Turf will not be allowed in parking lots.

Parking lot tree requirements must be met even when covered shade structures are used. Accent trees may be substituted for canopy trees next to covered shade structures.

Parking Adjacent to and Visible from a Public Place shall be screened with a combination of berms, low walls or landscape areas. Low walls and berms shall be a maximum height of three feet from the top of curb of the parking area. The wall style and color are subject to approval of the Master Developer.

5.4.2 AMENITY AND OPEN SPACE LANDSCAPING

Recreation areas shall be landscaped to the following minimum requirements:

- One 24" box tree for every 600 square feet of total landscape area.
- 50% minimum vegetative cover for all non-paved areas
- Turf, when used, may not exceed 40% of the total landscape area and is allowed only in functional recreational areas that are at least 50' wide and the sprinkler system must meet a distribution uniformity standard of 65%
- Swimming pools may not exceed 20 square feet per dwelling unit (or a minimum of 1000 square feet if less than 50 dwelling units)

Open space areas other than parking lots, street frontage areas and recreation areas shall be landscaped to the following minimum standards:

- One 24" box tree for every 750 square feet of total landscape area.
- 50% minimum vegetative cover for all non-paved areas
- Turf is not allowed except as provided above for recreation areas
- Decorative fountains are not permitted

5.5 COMMUNITY LIGHTING, TELECOMMUNICATION FACILITIES, AND PUBLIC UTILITIES

5.5.1 COMMUNITY LIGHTING

Lighting shall be designed to provide functional illumination in an aesthetically pleasing and visually unobtrusive manner. Lighting in HOA common areas shall be maintained by the HOA.

Light fixtures with cutoff or concealed light sources are preferred. This type of fixture may include wall sconces, recessed lighting, soffit lighting, and directional lighting. Lighting which produces excessive glare or shines on an adjacent lot will not be allowed.

Every light fixture over seven feet from grade to its highest point (either on a light pole or attached to a structure), shall be designed to reduce illumination spilling beyond sidewalk and road areas and to protect the view of the night sky.

5.5.1.1 STREET LIGHTING

Lighting systems shall be designed and installed in a manner that promotes the convenience of pedestrian and vehicular movement. Area illumination must be provided for alley, parking areas, entry areas, walkways, and other people gathering areas. Lighting on HOA common areas shall be maintained by the HOA.

Street pole fixtures will be selected to compliment the community theme. These fixtures will be used on all Residential Streetscapes and within the individual builder parcels. Any fixture, other than the standard styles selected by the Master Developer, must be approved by the Master Developer. See Section 6 for requirements for street lights on public streets dedicated to the City.

5.5.1.2 LANDSCAPE LIGHTING

The use of landscape lighting is encouraged. Lighting that will cause glare or discomfort, or disrupts the visual environment of neighboring units or adjacent parcels, is not permitted. Floodlights are also prohibited.

Fixtures shall be constructed and mounted to withstand and discourage abuse. Above-ground plastic housings and connections are prohibited.

5.5.2 TELECOMMUNICATION TOWERS AND ANTENNAS

Free-standing telecommunication towers and antennas are discouraged. Rather such facilities shall be designed in conjunction with project architectural elements such as:

- Building architecture, i.e., worship site steeples, etc.
- Project monumentation or signage elements
- Landscape elements

If used as a landscape element, the tower should be designed as part of an overall landscape plan, using trees of the same species and relative height of the tower and antenna.

Ground equipment related to the telecommunication facility must be screened from view with walls that are compatible in design and materials with the architecture of the surrounding area. Such walls shall be of sufficient height to completely screen the equipment from view. Walls in excess of 6' in height shall be landscaped with shrub plantings.

5.5.3 PUBLIC UTILITIES

The following requirements apply to every utility box and above-ground utility structure, other than utility poles, exceeding 27 cubic feet in volume ("Utility Structure"). Utility Structures abutting public right of way or common element areas adjacent to Neighborhood Streets and Village Streets are subject to the following requirements:

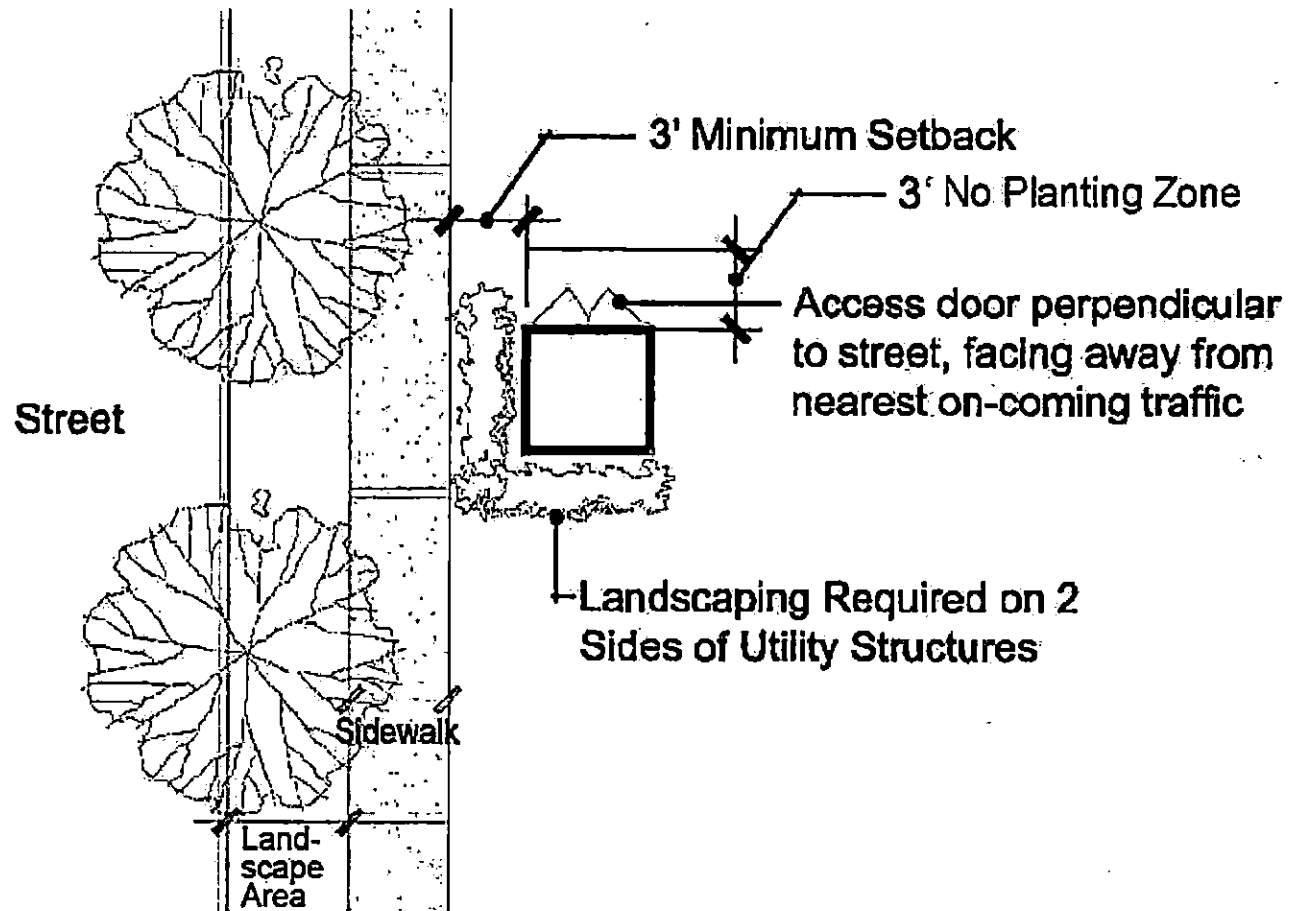
1. A landscape area not less than three feet (3') in width shall be provided between any sidewalk or trail and the Utility Structure.
2. A second landscape area not less than three feet (3') in width shall be provided along the side of the Utility Structure facing toward the nearest on-coming traffic on the street.

3. The side of the Utility Structure facing away from the nearest on-coming traffic on the street shall be available for access by the utility companies. Access doors shall be placed on this side of the Utility Structure with the doors installed perpendicular to the street. No landscape plantings (trees or shrubs) are permitted within three feet (3') of the Utility Structure access doors. One species of the shrub selected from the shrub palette listed below must be used to screen the Utility Structure on two sides. Upon completion of planting installation, 75% of the area of the two sides of the Utility Structure must be screened from view from the street. Within one year of installation, 100% of the area of the two sides of the Utility Structure shall be screened from view from the street.

The following plants constitute the approved shrub palette for Utility Structure screening

Botanical Name	Common Name
• <i>Dodonaea viscosa</i>	Hopseed Brush
• <i>Nerium oleander</i> 'Petite Pink'	Dwarf Oleander 'Pink'
• <i>Rosmarinus officinalis</i> 'Tuscan Blue'	Rosemary
• <i>Senna nemophila</i>	Desert Cassia
• <i>Simmondsia chinensis</i>	Jobba
• <i>Vaquelinia californica</i>	Arizona Rosewood

UTILITY STRUCTURE SCREENING



5.6 KYLE WALL STANDARDS

5.6.1 VILLAGE WALLS

Village Walls are the walls abutting common areas adjacent to any of the Village Streets, as shown on Figure 6-1. Village Walls are subject to the following requirements:

1. The minimum landscape area from back of curb is 5'
2. The maximum slope within the landscape areas, including planter areas and the landscape area adjacent to on-street parking is 4:1. (Refer to Figures 5-1 and 5-2).
3. The solid block portion of a Village Wall shall not exceed an exposed height of seven feet, four inches (7'4"), of which six feet (6') maximum is screen wall or two feet (2') maximum is retaining wall. (Refer to Figure 5-1)
4. In the event that the elevation difference from back of sidewalk to the finished pad elevation of the adjacent parcel is such that more than two feet (2') of retaining is required, a planter wall that may not exceed five feet (5') in height may be used to take up grade. If more than seven feet (7') of retaining is required in addition to the grade that can be made up in the landscaping area between the sidewalk and planter wall (at 4:1 slope), then all or a portion of the 7'4" exposed Village Wall may be used as retaining wall and a wrought iron view fence may be placed on top of the Village Wall. The wrought iron view fence must be 5'4" tall when abutting residential parcels and may be a maximum of 5'4" tall (or shorter) when abutting non-residential parcels. Wherever a wrought iron view fence is placed on top of a Village Wall, the Village Wall shall extend not more than eighteen inches (18") higher than the finished pad elevation. (Refer to Figure 5-2).
5. Additional grade may be taken up with planter walls that may not exceed five feet (5') in height.
6. Planter walls must be offset a minimum of four feet (4') from the front face of the planter wall to the front face of the Village Wall. (Refer to Figure 5-2). Planter walls may be used in tandem to take up additional grade subject to the same limitations on height and offset between walls.
7. Village Walls and planter walls must be separated from public sidewalks by at least five feet (5'). (Refer to Figure 5-2).
8. If a planter wall is used to take up grade, the first (lowest) planter wall and planter area between walls may be constructed in the Master HOA common area. All other planter walls and planter areas between walls will be located within the boundaries of a Development Parcel. (Refer to Figure 5-2).
9. In all circumstances, pilasters may exceed the maximum wall or wrought iron view fence height by up to two feet (2') and may encroach up to 18" into the set back areas described above in 5.6.1.6 and 7. (Refer to Figure 5-3).
10. One or more Wall Palettes, including pilaster design and spacing, will be approved by the Master Developer to achieve and maintain a complimentary design throughout the Community.

5.6.2 PRODUCT WALLS

Product Walls are all of the walls in the project other than the Village Walls, including common walls between subdivisions, all walls interior to a subdivision, walls between home lots, side yard return walls, walls adjacent to public facilities and walls between subdivisions, pods and/or parcels. One or more Wall Palettes will be approved by the Master Developer to achieve and maintain a complementary design throughout the Community, while allowing for individuality of certain districts, villages or Development Parcels. Wall Palettes will specify pilaster spacing and design. Product Walls are subject to the following requirements:

1. Except as noted below where alternate standards apply, the exposed solid portion of a Product Wall shall not exceed fourteen feet (14'), of which six feet (6') maximum may be solid block screen wall and eight feet (8') maximum may be retaining wall. (Refer to Figure 5-4). Alternatively, a Product Wall may consist of a five foot four inch (5'4") wrought iron view fence and a maximum of ten feet (10') of retaining wall (Refer to Figure 5-5). Under particular circumstances described in subsections 5.6.2.2B and 2C below, additional grade may be taken up with planter walls.
2. In the following circumstances Product Walls will be subject to the following alternate standards:

- A) Where Adjacent to and Facing a Public Place, the height of side yard return walls and the side yard walls of corner lots shall not exceed ten (10) feet, of which five feet four inches (5'4") maximum is solid block screen wall and four feet eight inches (4'8") maximum is retaining wall. (Refer to Figure 5-6).
- B) With respect only to Product Walls that separate two Development Parcels, the exposed solid portion of the Product Wall may be up to eighteen feet (18'), of which six feet (6') maximum is solid block screen wall and twelve feet (12') maximum is retaining wall. (Refer to Figure 5-7). Planter Walls and/or a 2:1 slope may be used in addition to the eighteen foot Product Wall, provided the Planter Walls are subject to subsection 5.6.2.3 below.
- C) With respect only to Product Walls that separate two adjacent rear yards of home lots, the exposed solid portion of the Product Wall may be up to fourteen feet (14'), of which six feet (6') maximum is solid block screen wall and eight feet (8') maximum is retaining wall. (Refer to Figure 5-8). This subsection 2C does not, however, apply to Product Walls that separate two Development Parcels as described in subsection 2B above. Planter Walls and/or a 2:1 slope may be used in addition to the fourteen foot Product Wall, provided the Planter Walls are subject to subsection 5.6.2.3 below.
- D) Except as set forth in subsections 2B and 2C above, where a Product Wall and/or a 2:1 slope is constructed between two adjacent home lots the maximum height of the retaining portion of such Product Wall shall vary in relation to the width (or the maximum width in the case of an irregularly shaped lot) of the home lot at the lower elevation of two adjacent home lots (i.e., the lot to which the retaining portion of the wall is visible) as follows:

Width of Lower Lot (in feet)		Max Retaining (in feet)
at least	up to	
---	30	2.00
30	45	3.00
45	60	4.00
60	80	5.00
80	---	6.00

The maximum solid block screen wall between two adjacent home lots is six (6) feet on top of the retaining wall. The foregoing restriction does not apply to the side yard wall of a home lot that abuts the back yard wall of an adjacent home lot, the maximum height of which will be as described in subsections 2B or 2C above, as the case may be.

- E) On a common boundary between Development Parcels any retaining wall exceeding three feet must be approved by the owner of the adjacent parcel prior to design acceptance by the Master Developer. This requirement does not apply if the owner of the adjacent parcel is a public, governmental or quasi-governmental agency or a public utility.
3. Additional grade may be taken up with planter walls that may not exceed five (5) feet in height and a minimum of four (4) feet from front face of planter wall to front face of Product Walls. (Refer to Figure 5-9)
 4. Planter walls may be used in tandem to take up additional grade subject to the same limitations on height and offset between walls.
 5. The maximum slope within the landscape area between a planter wall and a Product Wall is 3:1
 6. In all circumstances, pilasters may exceed the maximum wall or wrought iron view fence height by up to two (2) feet) and may encroach up to 18" into the set back areas described herein.

5.6.3. FRONT YARD WALLS

The following three alternate treatments are acceptable for walls located in or abutting the front yards of residences shall be subject to the following requirements:

1. A wall not exceeding thirty- inches (30") in height may be constructed to abut the back of sidewalk. All of the 30" height may be used as retaining. (Refer to Figure 5-10).
2. A wall not exceeding five feet, four inches (5'4") in height may be constructed at least three feet (3') from the back of sidewalk. In such case the wall may consist of a solid block wall up to 30" used for retaining and the balance of the wall may be a balustrade or railing. The slope between the retaining wall and the sidewalk may not exceed 3:1. (Refer to Figure 5-11).

3. A wall not exceeding five feet, four inches (5'4") in height may be constructed at least 5 feet behind the back of sidewalk, in which case all of the wall may be used for retaining. The slope between the retaining wall and the sidewalk may not exceed 3:1. When the retaining wall exceeds thirty inches (30") in height a wrought iron view fence forty-two inches (42") in height must be placed on top of the retaining wall (Refer to Figure 5-12).
4. Front yard walls shall not impair access to or typical use of a driveway. Where a front wall exists across an entire lot, a front driveway is not allowed.

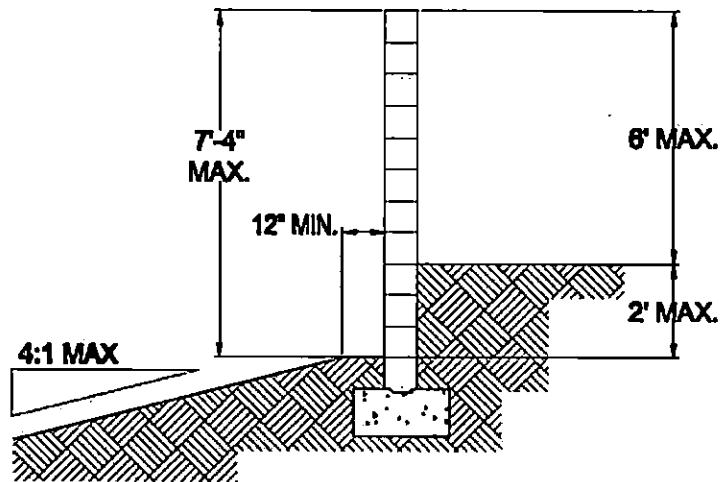


FIGURE 5-1 VILLAGE WALLS

N.T.S.

FOOTING DESIGNS AND DIMENSIONS ARE CONCEPTUAL AND DO NOT NECESSARILY ACCURATELY DEPICT ACTUAL CONSTRUCTION. ALL DIMENSIONS AND NOTES ARE REQUIREMENTS.

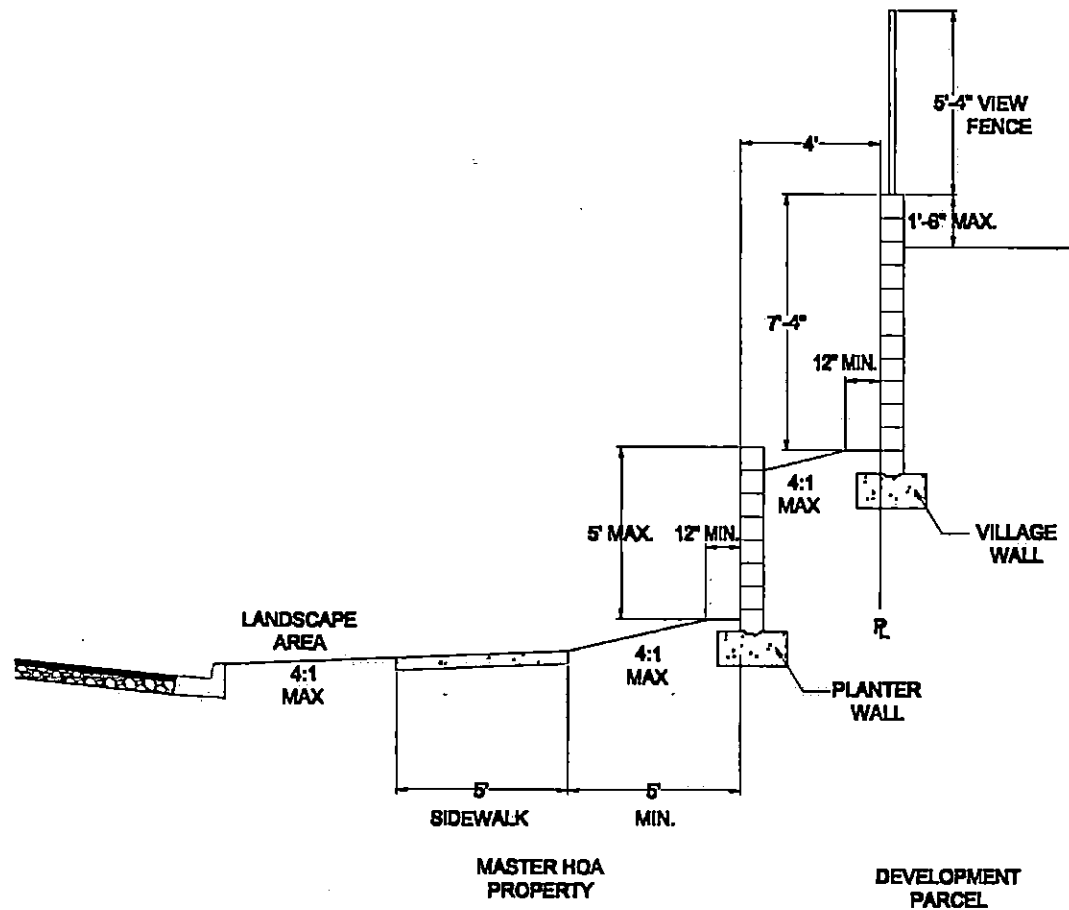


FIGURE 5-2 VILLAGE WALLS

N.T.S.

FOOTING DESIGNS AND DIMENSIONS ARE CONCEPTUAL AND DO NOT NECESSARILY ACCURATELY DEPICT ACTUAL CONSTRUCTION. ALL DIMENSIONS AND NOTES ARE REQUIREMENTS.

IF MORE THAN 2'-6" OF WALL IS USED FOR RETAINING, THEN TOP OF WALL OR TOP OF VIEW FENCE MUST BE AT LEAST 3'-6" ABOVE THE FINISHED PAD ELEVATION

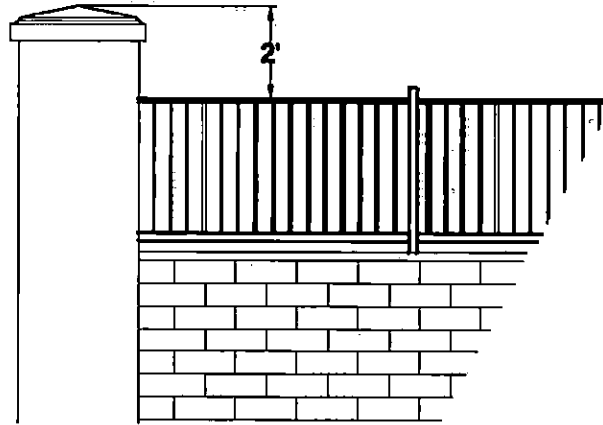


FIGURE 5-3 VILLAGE WALLS

N.T.S.

**FOOTING DESIGNS AND DIMENSIONS ARE CONCEPTUAL AND DO NOT
NECESSARILY ACCURATELY DEPICT ACTUAL CONSTRUCTION. ALL
DIMENSIONS AND NOTES ARE REQUIREMENTS.**

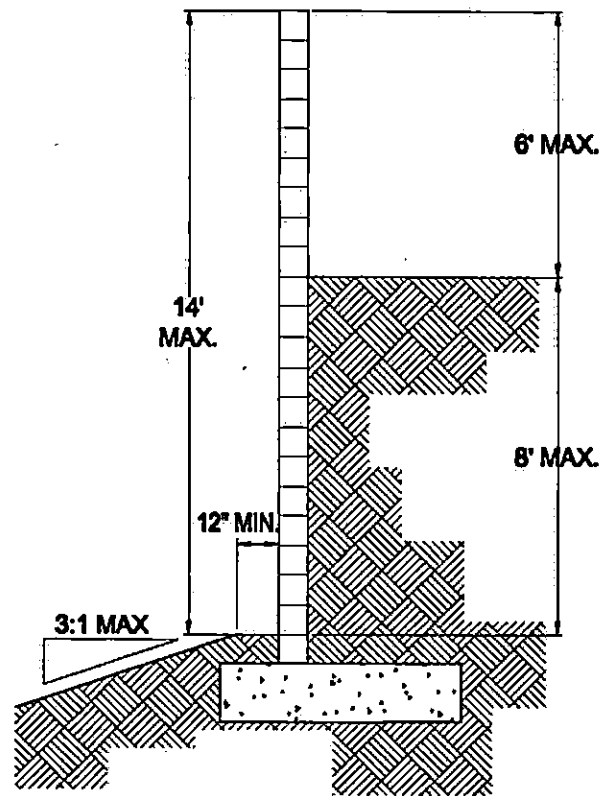


FIGURE 5-4 STANDARD PRODUCT WALLS

N.T.S.

FOOTING DESIGNS AND DIMENSIONS ARE CONCEPTUAL AND DO NOT NECESSARILY ACCURATELY DEPICT ACTUAL CONSTRUCTION. ALL DIMENSIONS AND NOTES ARE REQUIREMENTS.

IF MORE THAN 2'-6" OF WALL IS USED FOR RETAINING, THEN TOP OF WALL MUST BE AT LEAST 3'-6" ABOVE THE FINISHED PAD ELEVATION

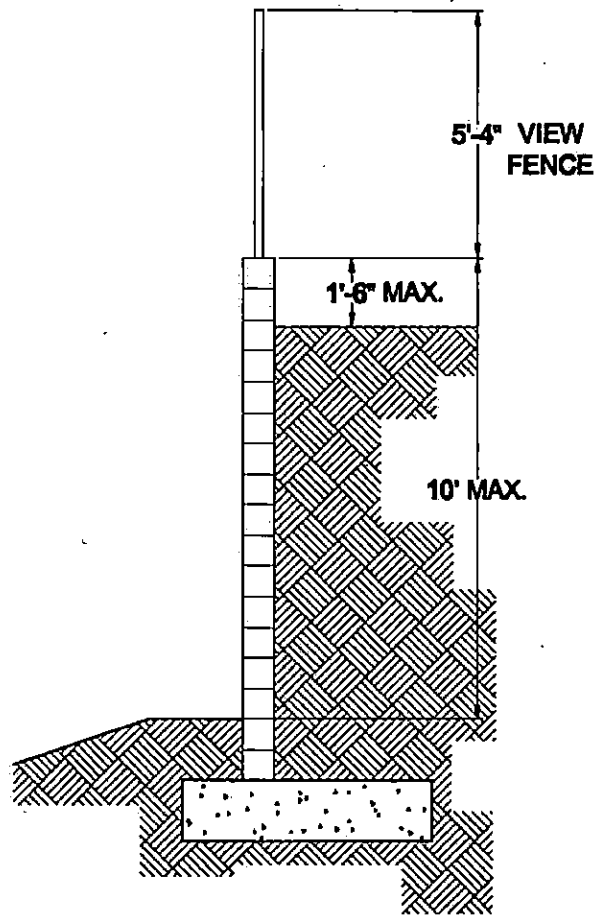


FIGURE 5-5 PRODUCT WALLS

N.T.S.

FOOTING DESIGNS AND DIMENSIONS ARE CONCEPTUAL AND DO NOT NECESSARILY ACCURATELY DEPICT ACTUAL CONSTRUCTION. ALL DIMENSIONS AND NOTES ARE REQUIREMENTS.

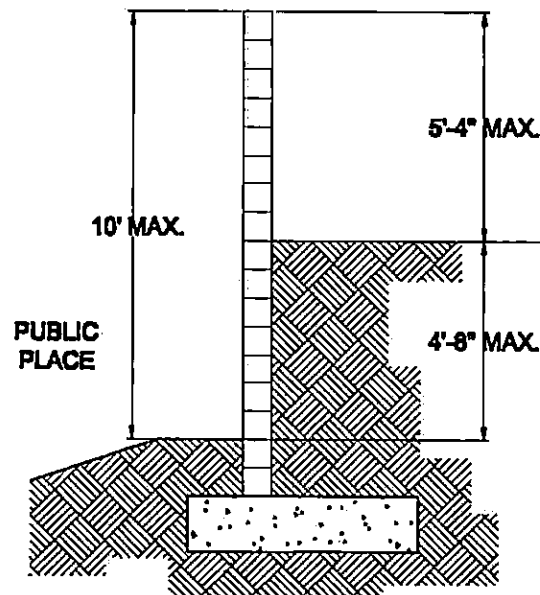


**FIGURE 5-6 PRODUCT WALLS ADJACENT TO AND
FACING A PUBLIC PLACE** N.T.S.

FOOTING DESIGNS AND DIMENSIONS ARE CONCEPTUAL AND DO NOT NECESSARILY ACCURATELY DEPICT ACTUAL CONSTRUCTION. ALL DIMENSIONS AND NOTES ARE REQUIREMENTS.
IF MORE THAN 2'-6" OF WALL IS USED FOR RETAINING, THEN TOP OF WALL MUST BE AT LEAST 3'-6" ABOVE THE FINISHED PAD ELEVATION

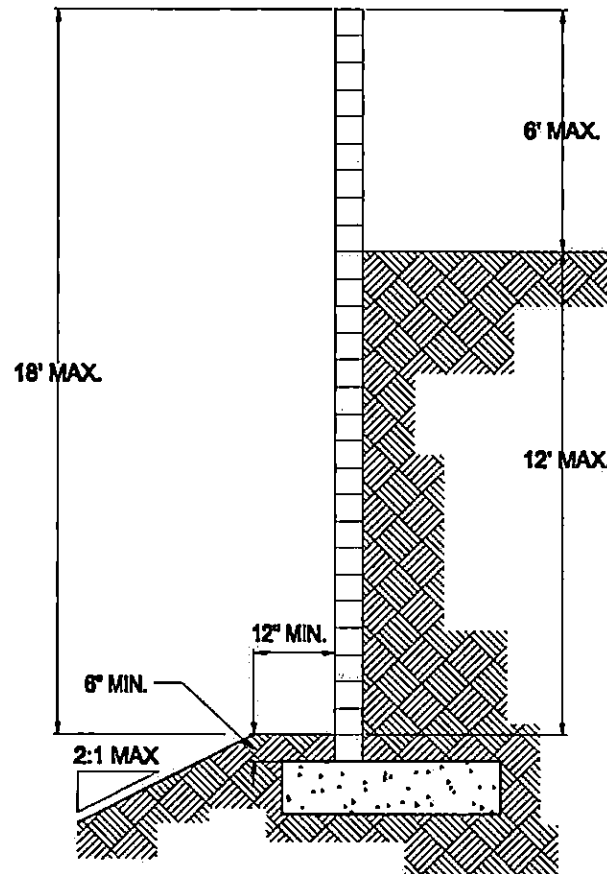


**FIGURE 5-7 PRODUCT WALLS BETWEEN
TWO DEVELOPMENT PARCELS**

N.T.S.

FOOTING DESIGNS AND DIMENSIONS ARE CONCEPTUAL AND DO NOT NECESSARILY ACCURATELY DEPICT ACTUAL CONSTRUCTION. ALL DIMENSIONS AND NOTES ARE REQUIREMENTS.

IF MORE THAN 2'-6" OF WALL IS USED FOR RETAINING, THEN TOP OF WALL MUST BE AT LEAST 3'-6" ABOVE THE FINISHED PAD ELEVATION



FOOTING DESIGNS AND DIMENSIONS ARE CONCEPTUAL AND DO NOT NECESSARILY ACCURATELY
DEPICT ACTUAL CONSTRUCTION. ALL DIMENSIONS AND NOTES ARE REQUIREMENTS.
IF MORE THAN 2'-6" OF WALL IS USED FOR RETAINING, THEN TOP OF WALL MUST BE AT
LEAST 3'-6" ABOVE THE FINISHED PAD ELEVATION

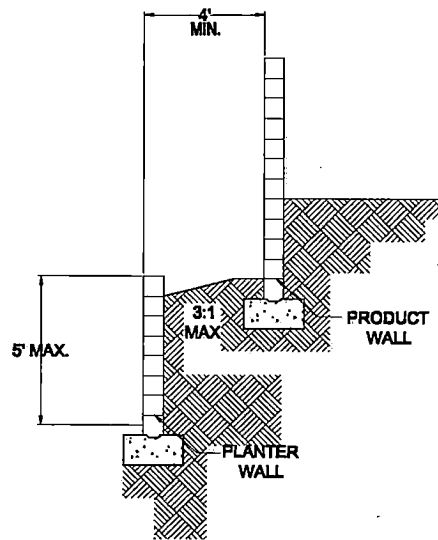


FIGURE 5-9 PLANTER WALLS

N.T.S.

FOOTING DESIGNS AND DIMENSIONS ARE CONCEPTUAL AND DO NOT NECESSARILY ACCURATELY DEPICT ACTUAL CONSTRUCTION. ALL DIMENSIONS AND NOTES ARE REQUIREMENTS.

IF MORE THAN 2'-6" OF WALL IS USED FOR RETAINING, THEN TOP OF WALL MUST BE AT LEAST 3'-6" ABOVE THE FINISHED PAD ELEVATION

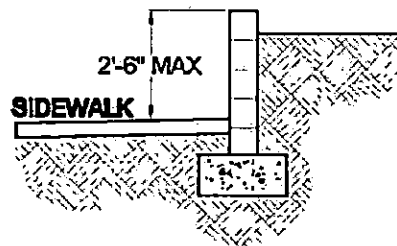


FIGURE 5-10 FRONT YARD WALLS

N.T.S.

FOOTING DESIGNS AND DIMENSIONS ARE CONCEPTUAL AND DO NOT NECESSARILY ACCURATELY DEPICT ACTUAL CONSTRUCTION. ALL DIMENSIONS AND NOTES ARE REQUIREMENTS.

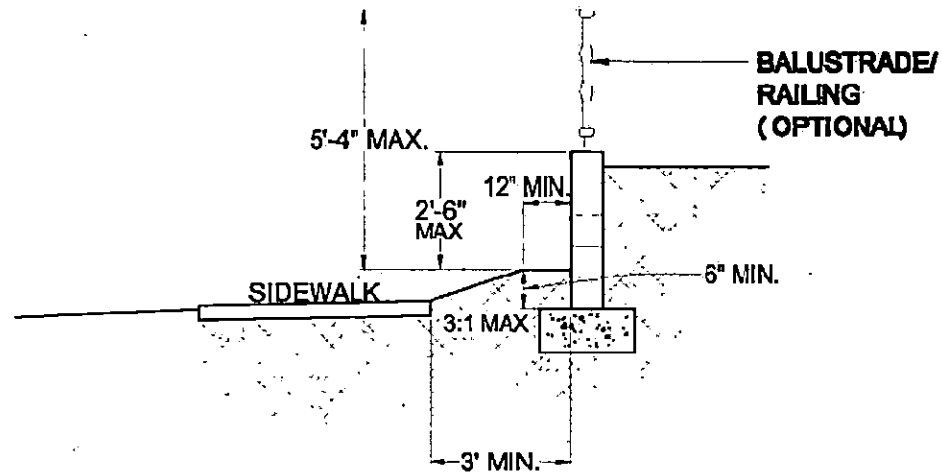


FIGURE 5-11 FRONT YARD WALLS

N.T.S.

FOOTING DESIGNS AND DIMENSIONS ARE
CONCEPTUAL AND DO NOT NECESSARILY
ACCURATELY DEPICT ACTUAL CONSTRUCTION.
ALL DIMENSIONS AND NOTES ARE
REQUIREMENTS.

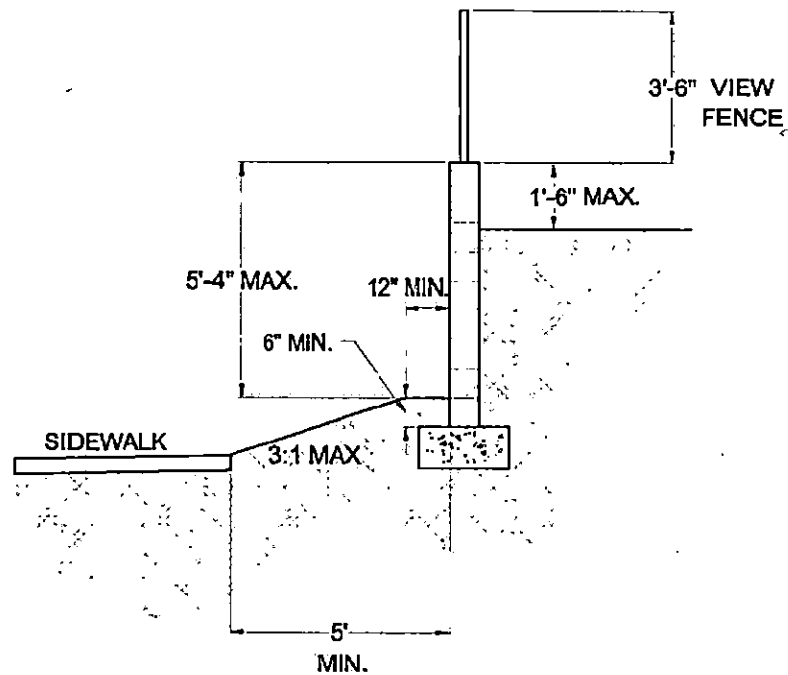


FIGURE 5-12 FRONT YARD WALLS

N.T.S.

FOOTING DESIGNS AND DIMENSIONS ARE
CONCEPTUAL AND DO NOT NECESSARILY
ACCURATELY DEPICT ACTUAL CONSTRUCTION.
ALL DIMENSIONS AND NOTES ARE
REQUIREMENTS.

5.6.3 MATERIALS

The exterior face of Product Walls shall be of a type specified in the Wall Palette. Wrought iron view fencing will be allowed on Community and Product Walls subject to the standards herein.

5.6.4 PRODUCT WALL HEIGHTS AND STEPS

In all cases, wall heights and wrought iron view fences are measured from finished grade on the lowest (most exposed) side of the fence or wall to the top of the fence or wall.

The maximum step along the top of walls is sixteen inches with a minimum of thirty-two inches horizontal area between steps.

5.6.5 PRODUCT WALL TO VILLAGE WALL CONNECTIONS

Where a Product Wall meets a Village Wall, the Product Wall must meet the elevation of the Village Wall at the point of connection or be lower than the Village Wall. Taller Product Walls shall be held at the Village Wall elevation for at least eight feet back from the Village Wall before stepping up to the Product Wall elevation.

5.6.8 WATERPROOFING

All retaining walls must be designed to minimize the transition of water through the walls. Walls must also be adequately drained on the surcharge side in accordance with the written recommendations of a geotechnical or structural engineer.

5.6.9 ACCEPTABLE MATERIALS

All Product Walls that front and are adjacent to roadways and/or common elements must be designed and built with materials and colors that complement the architecture of the homes. Both faces of a Product Wall must be of one of the following materials or finishes:

- integral color split faced block
- integral color smooth faced block
- stone or faux stone
- painted or integral color stucco
- wrought iron view fencing as described below in Section 5.6.11.

5.6.10 PROHIBITED MATERIALS

Unfinished or painted concrete block, wood, vinyl and chain link fence are not permitted.

5.6.11 VIEW FENCES

All view fences will be constructed of wrought iron in a color and finish approved by the Master Developer. All wrought iron view fencing abutting residential parcels will be 5'4" in height except for Front Yard Walls where the view fence is 3'6" in height. Where abutting a non-residential parcel, the view fence may be any height up to but not exceeding 5'4". Where a Product Wall meets a Village Wall that consists of wrought iron view fencing, the Product Wall must also consist of wrought iron view fencing at the same height as the Village Wall for a distance of at least five feet from the junction of the two walls.

5.7 COMMUNITY IRRIGATION STANDARDS

The main principle behind the landscape and irrigation of the Kyle Canyon Master Plan is to incorporate principals based on water conservation and water harvesting techniques. Therefore, a highly efficient automatic irrigation system will be required for all planting areas. Spray irrigation may only be used on natural turf areas, where permitted; however, subsurface irrigation is preferred.

5.7.1 WATER DEMAND

Peak flow demands shall be based on applying peak weekly irrigation requirements in six hours (12:00am-6:00am). Design shall be based on available static pressure minus 10% for fluctuations.

5.7.2 WATER APPLICATION

Natural turf will only be allowed in the rear yards of residential lots and in highly usable common areas associated with parks and playing fields. Usable turf areas should be at least 50' in width.

Front yards will have drought tolerant plantings. Artificial turf will be allowed as a substitute for natural turf in front yards.

Annual plantings must be placed in potted planters and small-contained areas. Drip or underground irrigation shall be used for these areas.

Overhead and drip irrigation systems must be zoned for exposure (south and west exposures together, north and east exposures together), topography, and varying water requirements of the plant material. Trees, shrubs and potted planters shall be on separate valves.

Overhead sprays are to be used interior to parcels in pocket park areas or residential rear yard lots on natural turf only.

5.7.3 OVERHEAD IRRIGATION

Spray heads on natural turf next to roadways and walkways must have low angle (10%) nozzles. Pop-up heads must be a minimum of 4". Spray heads may not throw water directly onto any roadway, walkway or paved surface. Large radius rotor heads (twenty-five foot radius or greater) are not allowed abutting roadway or walkway edges.

All spray heads (fifteen foot radius or less) shall be spaced no further than 40% of the spray diameter to account for area wind conditions. Spacing for large radius rotors (twenty-five foot radius or greater) shall not exceed 60% of the spray diameter.

- Common area
- Spray irrigation is allowed only in functional recreational turf areas that are at least 50' wide and in which the sprinkler system meets a distribution uniformity standard of 65%

Overhead irrigation heads may not throw water directly onto any roadway, walkway, or paved surface.

5.7.4 DRIP IRRIGATION

Drip irrigation shall be used in all tree, shrub and groundcover areas except as noted above. The minimum quantity of emitters per plant

should be in accordance with the following table. Some variation may occur due to differences in water demand between plant materials.

Plant Size	Emitter Volume	Quantity
1 gallon material	1 GPH	1 each
5 gallon material	½-1 GPH	2 each
15 gallon material	2 GPH	3-4 ea
24" box material	2 GPH	4-5 ea
36" box material	2 GPH	6-7 ea
48" box material	2 GPH	7-8 ea
54" box material	2 GPH	9-12 ea
60" box material	2 GPH	12-16 ea

5.7.5 ZONING

Irrigation systems must be zoned for exposure (south and west exposures together, north and east exposures together), topography and varying water requirements of plant material. Turf, flower beds, shrubs, trees and decorative pots must be on separate valves.

5.7.8 SUBTERRANEAN IRRIGATION

Subterranean irrigation is encouraged in all turf areas in lieu of overhead irrigation.

5.7.9 IRRIGATION CONTROL EQUIPMENT

Irrigation controllers shall use a system based on evapo-transpiration rates or weather systems in order to respond to the climate and environmental factors. These controllers shall have the following minimum capabilities:

- three independent operating programs

- four start times per program.
- Station run times of 0-99 minutes in one-minute increments.
- Watering schedules that are selectable per program for any day of the week from daily to every fourteen days.
- Non-volatile memory for program data (no battery required to maintain the program).

5.7.10 Community Plant Materials

The following list represents the different amenity areas and neighborhood zones within the Kyle Canyon Master Plan. The trees on this list are the only allowable species to be used in any public or private area. The Master Developer must approve any variations. The shrubs on this list are the only allowable species to be used in public areas. Private areas may have variations, but only if the variations are approved by the Master Developer.

PROHIBITED PLANT MATERIALS LIST

Baccharis sarothroides/Desert Broom

Olea europea/Olive (fruit producing)

Pennisetum setaceum/Fountain Grass (green variety)

Morus alba/Fruiting Mulberry

Tamrix spp./Tamarisk

Palm Trees (all species)

Master Plant Palette		Resid. Street- scapes	Front Yard	Alleys
BOTANICAL NAME	COMMON NAME			
Trees				
Acacia aneura	Mulga Tree	X	X	X
Acacia jenerae	Coonivitta Wattle	X	X	X
Acacia pendula	Weeping Acacia	X	X	X
Acacia salicina	Willow Acacia	X	X	X
Acacia schaffneri	Twisted Acacia	X	X	X
Acacia smallii (farnesiana)	Sweet Acacia	X	X	X
Acacia stenophylla	Shoestring Acacia	X	X	X
Arbustos onedo	Strawberry Tree	X	X	
Bauhinia congesta	Orchid Tree	X	X	
Cercidium floridum	Blue Palo Verde	X	X	X
Cercidium hybrid	Palo Verde Hybrid	X	X	X
Cercidium microphyllum	Foothills Palo Verde	X	X	X
Cercidium parkinsonian	Desert Museum Palo Verde	X	X	X
Cercidium praecox	Palo Brea	X	X	X
Chilopsis linearis	Desert Willow	X	X	X
Chilopsis linearis	'Lucretia Hamilton'	X	X	X
Chitalpa tashkentosis	Chitalpa	X	X	X
Cordia boissieri	Texas Olive	X	X	X
Cupressus glabra	Smooth Arizona Cypress	X	X	
Eleocarpus decipens	Japanese Blueberry	X	X	
Feijoa sellowiana	Pineapple Guava	X	X	
Fraxinus oxycarpa 'Raywood	Raywood Ash	X	X	
Fraxinus velutina 'Rio Grande'	Fan-Tex Ash	X	X	
Fraxinus velutina 'Fan West	Fan-West Ash	X	X	
Olea 'Swan Hill' or 'Wilsonii'	Fruitless Olive	X	X	
Pinus eldarica	Mondel Pine	X	X	X
Pinus halepensis	Aleppo Pine	X	X	X

Master Plant Palette		Resid. Street-scapes	Front Yard	Alleys
<i>Pinus pinea</i>	Stone Pine	X	X	X
<i>Pinus roxburghii</i>	Chir Pine	X	X	X
<i>Pistacia chinensis</i>	Chinese Pistache	X	X	
<i>Pithecellobium flexicaule</i>	Texas Ebony	X	X	X
<i>Pithecellobium mexicanum</i>	Mexican Ebony	X	X	X
<i>Platanus racemosa</i>	California Sycamore	X	X	X
<i>Prosopis alba</i>	Argentine Mesquite	X	X	X
<i>Prosopis alba</i>	Colorado Mesquite	X	X	X
<i>Prosopis chilensis</i>	Thornless Chilean Mesquite	X	X	X
<i>Prosopis glandulosa</i>	Texas Honey Mesquite	X	X	X
<i>Prosopis glandulosa</i>	Western Honey Mesquite	X	X	X
<i>Prosopis hybrid</i>	Mesquite hybrids	X	X	X
<i>Prosopis pubescens</i>	Screwbean Mesquite	X	X	X
<i>Prosopis velutina</i>	Velvet Mesquite	X	X	X
<i>Prunus caroliniana</i>	Carolina Cherry Laurel	X	X	
<i>Prunus cerasifera</i>	Cherry Plum	X	X	
<i>Prunus cerasifera</i> 'Atropurpurea'	Purple Leaf Plum	X	X	
<i>Pyrus kawakamii</i> 'Bradford'	Bradford Pear	X	X	
<i>Quercus ilex</i>	Holly Oak	X	X	
<i>Quercus muhlenbergia</i>	Chinquapin Oak	X	X	X
<i>Quercus texana</i>	Texas Red oak	X	X	
<i>Quercus virginiana</i>	Southern Live Oak	X	X	X
<i>Rhus lancea</i>	African Sumac	X	X	X
<i>Sophora secundiflora</i>	Texas Mountain Laurel	X	X	X
<i>Ulmus parvifolia</i>	Evergreen Elm	X	X	
<i>Vitex agnus-castus</i>	Monks Pepper	X	X	X
Shrubs				
<i>Acacia greggii</i>	Cat-Claw Acacia			
<i>Alyogyne huegelii</i>	Blue Hibiscus	X	X	X

Master Plant Palette		Resid. Street- scapes	Front Yard	Alleys
Ambrosia deltoidea	Triangle Leaf Bursage			X
Anisacanthus quadrifidus-wrightii	Mexican Flame	X	X	X
Aristida purpurea	Purple Three Awn	X	X	X
Atriplex canescens	Four Wing Saltbush			
Buddleia marrubifolia	Wooly Butterfly Bush			X
Caesalpinia cacalaco	Cascalote			X
Caesalpinia gilliesii	Yellow Bird of Paradise	X	X	X
Caesalpinia mexicana	Mexican Bird of Paradise	X	X	X
Caesalpinia pulcherrima	Red Bird of Paradise	X	X	X
Calliandra californica	Baja Fairy Duster			X
Calliandra eriophylla	Native Fairy Duster			X
Calylopus hartwegii	Sierra Sundrop	X	X	X
Celtis pallida	Desert Hackberry			
Chrysothamnus nauseosus	Golden Rabbit Brush			
Cordia boissieri	Texas Olive	X	X	X
Cordia parvifolia	Little Leaf Cordia	X	X	X
Cottoneaster lacteus	Red Clusterberry	X	X	
Dalea bicolor	Silver Dalea	X	X	X
Dalea frutescens	Black Dalea	X	X	X
Dalea pulchra	Indigo Bush			
Dietes bicolor	Fortnight Lily	X	X	
Dodonea viscosa	Purple Hopseed Bush	X	X	X
Elaeagnus ebbingei	Ebbings's Silverberry	X	X	X
Encelia farinosa	Brittlebush	X	X	X
Ephedra nevadensis	Morman Tea			X
Eremophila species	'Summertime Blue'	X	X	X
Eremophila species	Valentine	X	X	X
Ericameria laricifolia	Turpentine Bush	X	X	X
Eupatorium greggii	'Boothill' Eupatorium			X

Master Plant Palette		Resid. Street-scapes	Front Yard	Alleys
Fraxinus greggii	Gregg Ash	X	X	X
Gaura lindheimeri	Gaura	X	X	X
Hemerocallis	Daylily	X	X	X
Justicia californica	Chuparosa			
Justicia spicigera	Mexican Honeysuckle	X	X	X
Larrea tridentata	Creosote			
Leucophyllum candidum	Sierra Boquet	X	X	X
Leucophyllum candidum	Silver Cloud	X	X	X
Leucophyllum frutescens 'Compacta'	Compact Texas Ranger	X	X	X
Leucophyllum frutescens 'Green Cloud'	Green Cloud Sage	X	X	X
Leucophyllum laevigatum	Chihuahuan Sage	X	X	X
Leucophyllum langmaniae 'Rio Bravo'	Rio Bravo Ranger	X	X	X
Leucophyllum pruniosum 'Sierra Bouquet'	Sierra Boquet	X	X	X
Leucophyllum revolutum 'Sierra Magic'	Sierra Magic Mix	X	X	X
Leucophyllum x Heavenly Cloud	Heavenly Cloud Sage	X	X	X
Leucophyllum zygophyllum	Blue Ranger	X	X	X
Leucophyllum zygophyllum 'Cimarron'	Cimarron	X	X	X
Myrtus communis 'Boetica'	Twisted Myrtle	X	X	X
Myrtus communis 'Compacta'	Compact Myrtle	X	X	X
Nandina domestica	Heavenly Bamboo	X	X	
Nandina domestica 'Nana'	Dwarf Heavenly Bamboo	X	X	X
Nerium oleander 'Petite Pink'	Dwarf Oleander 'Pink'	X	X	X
Pittosporum tobira varieties	Mock Orange	X	X	X

<i>Rhus microphylla</i>	Little Leaf Sumac	X	X	X
<i>Rhus trilobata</i>	Squaw Bush	X	X	X
<i>Rosmarinus officinalis</i> 'Tuscan Blue'	Tuscan Blue Rosemary	X	X	X
<i>Ruellia brittonia</i>	Ruellia	X	X	X
<i>Salvia clevelandii</i>	Chaparral Sage	X	X	X
<i>Salvia coccinea</i>	Scarlet Sage	X	X	X
<i>Salvia greggii</i>	Autumn Sage	X	X	X
<i>Senna artemisioides</i>	Feathery Cassia	X	X	X
<i>Senna nemophila</i>	Desert Cassia	X	X	X
<i>Senna phyllodenea</i>	Silver leaf Cassia	X	X	X
<i>Tecoma Stans</i>	'Gold Star' Yellowbells	X	X	X
<i>Tecoma</i> x 'Sunrise'	<i>Tecoma</i> x Sunrise	X	X	X
<i>Vauquelinia californica</i>	Arizona Rosewood	X	X	X
<i>Viquiera deltoidea</i>	Goldeneye	X	X	X
<i>Zauschneria californica</i>	Hummingbird Flower	X	X	X
<i>Zinnia grandiflora</i>	Prarie Zinnia	X	X	X
Groundcovers				
<i>Acacia redolens</i> 'Desert Carpet'	Desert Carpet Acacia	X	X	X
<i>Baccharis</i> 'Centennial'	Centennial Coyote Bush	X	X	X
<i>Baileya multiradiata</i>	Desert Marigold	X	X	X
<i>Chrysactinia mexicana</i>	Damianita	X	X	
<i>Convolvulus cneorum</i>	Bush Morning Glory	X	X	X
<i>Dalea capitata</i> 'Sierra Gold'	Sierra Gold Dalea	X	X	X
<i>Dalea greggii</i>	Prostrate Indigo Dalea			X
<i>Dyssodia pentachaeta</i>	Golden Dyssodia	X	X	X
<i>Gazania rigins</i>	Gazania	X	X	X
<i>Hymenoxys acaulis</i>	Angelita Daisy	X	X	X
<i>Lantana montevidensis</i>	Trailing Lantana	X	X	X
<i>Lantana</i> sp 'New Gold'	New Gold Lantana	X	X	X
<i>Liriope muscari</i>	Liriope	X	X	
<i>Lonicera japonica</i> 'Halliana'	Hall's Honeysuckle	X	X	X
<i>Melampodium leucanthum</i>	Blackfoot Daisy	X	X	X

<i>Oenothera berlandieri</i>	Mexican Evening Primrose	X	X	X
<i>Oenothera caespitosa</i>	White Evening Primrose	X	X	X
<i>Penstemon baccharifolius</i>	Del Rio Penstemon (Red)	X	X	X
<i>Penstemon cobaea</i>	Foxglove (White)	X	X	X
<i>Penstemon eatonii</i>	Firecracker (Red)	X	X	X
<i>Penstemon palmeri</i>	Scented (Light Pink)	X	X	X
<i>Penstemon parryi</i>	Parry Penstemon (Pink)	X	X	X
<i>Penstemon pseudospectabilis</i>	Canyon (Rose)	X	X	X
<i>Penstemon strictus</i>	Rocky Mountain (Blue)	X	X	X
<i>Psilostrophe cooperi</i>	Paper Flower	X	X	X
<i>Pyracantha koidsumii</i> 'Santa Cruz'	Santa Cruz Pyracantha	X	X	X
<i>Rosa banksiae</i>	Lady Bank's Rose	X	X	X
<i>Rosmarinus officinalis</i> 'Prostratus'	Trailing Rosemary	X	X	X
<i>Ruellia brittonia</i> 'Katie'	Dwarf Ruellia	X	X	X
<i>Teucrium chamaedrys</i>	Germander	X	X	X
<i>Verbena gooddingii</i>	Gooddingii Verbena	X	X	X
<i>Verbena rigida</i>	Sandpaper Verbena	X	X	X
Accents				
<i>Agave Americana</i>	Century Plant	X	X	X
<i>Agave colorata</i>	Mexcal Ceniza	X	X	X
<i>Agave geminiflora</i>	Twin Flowered Agave	X	X	X
<i>Agave murpheyi</i>	Murphy's Agave	X	X	X
<i>Agave parryi-huachucensis</i>	Parry's Agave	X	X	X
<i>Agave vilmoriniana</i>	Octopus Agave	X	X	X
<i>Agave weberi</i>	Weber's Agave	X	X	X
<i>Dasyliron acrotriche</i>	Green Desert Spoon	X	X	X
<i>Dasyliron longissimum</i>	Mexican Grass Tree	X	X	X
<i>Dasyliron wheeleri</i>	Desert Spoon	X	X	X
<i>Euphorbia rigida</i> (biglandulosa)	Gopher Plant	X	X	X
<i>Ferocactus acanthodes</i>	Compass Barrell			X
<i>Ferocactus wislizenii</i>	Fishhook Barrell			X
<i>Fouqueria splendens</i>	Ocotillo			

Hesperaloe parviflora	Red Yucca	X	X	X
Hesperaloe parviflora	Yellow Yucca	X	X	X
Muhlenbergia capillaris	Regal Mist Deer Grass	X	X	X
Muhlenbergia lindheimeri	Autumn Glow Deer Grass	X	X	X
Muhlenbergia rigens	Deer Grass	X	X	X
Nolina microcarpa	Bear Grass	X	X	X
Opuntia basilaris	Beavertail Prickly Pear			
Opuntia microdasys	Bunny Ears Prickly Pear	X	X	
Opuntia violacea 'santa rita'	Purple Pancake	X	X	
Pedilanthus macrocarpus	Slipper Plant	X	X	X
Yucca baccatta	Banana Yucca			
Yucca brevifolia	Joshua Tree			
Yucca elata	Soaptree Yucca			
Yucca rigida	Blue Yucca			
Yucca schidigera	Mojave Yucca			
Yucca schottii	Yucca			
Yucca rostrata	Beaked Yucca			
Vines				
Antigonon leptopus	Queen's Wreath	X	X	
Campsis radicans	Common Trumpet Creeper	X	X	X
Feijoa sellowiana	Pineapple Guava	X	X	X
Gelsemium sempervirens	Carolina Jasmine	X	X	X
Hardenbergia violacea	Lilac Vine	X	X	X
Jasminium mesnyi	Primrose Jasmine	X	X	X
Lonicera japonica 'Halliana'	Hall's Honeysuckle	X	X	X
Macfadyena unguis-cati	Cat's Claw	X	X	X
Pyracantha coccinea	Firethorn	X	X	X
Pyracantha graberii	Pyracantha	X	X	X
Rosa banksiae	Lady Bank's Rose	X	X	X
Solanum jasminoides	Potato Vine	X	X	X
Trachelosperum jasminoides	Star Jasmine	X	X	X

Section 6 – STREET SYSTEM, DRAINAGE & INFRASTRUCTURE DEVELOPMENT

The network of walkable streets at Kyle Canyon will form the connective tissue of the community's public realm. Consequently, there will be no "back-on" streets in Kyle Canyon except as shown on Figure 3-15. Typical streets will have sidewalks, planting strips, on-street parking, and buildings with front doors, windows and porches that face onto the street. All these features help to create an environment that encourages walking and bicycling for short local trips as well as recreation.

A hierarchy of streets of different characters will ensure efficient circulation that balances the needs of all modes of travel - auto, pedestrian, bicycle and transit. The "Village Streets" consist of Boulevard Arterials, Arterial Streets and Frontage Roads, Boulevards, and Connectors (Figure 6-1). The following pages contain descriptions of the street classifications, specifications of the street dimensions, and illustration of typical street landscaping concepts.

6.1 ROADWAY CLASSIFICATIONS

Boulevard Arterials are major regional arterials and will have a boulevard treatment. Horse Drive and Hualapai Way will have two travel lanes in each direction and will be separated by a landscaped median. The median width will also provide for future expansion of the roadway to accommodate potential increase in traffic. Residential buildings will face onto Horse and Hualapai with windows and front entries facing the street. Parking for these residences will be accessed from side streets or rear alleys, since curb cuts will be minimized. On-street parking, landscaping and sidewalks will contribute to the pedestrian-friendly environment by

buffering pedestrians from moving cars and providing guest parking and walking access to residences. (Refer to Figure 6-2)

Arterial Streets and Frontage Roads will form the perimeter streets of the Community. These roadways four or six travel lanes with a 14' shared outside travel lane to accommodate bicycles. Shoulders 10' wide are provided on Fort Apache and an equestrian trail will be constructed on the north side of Grand Teton. Landscape areas and a sidewalk or multi-use trail will provide a buffer between these high volume streets and residential areas. (Refer to Figure 6-3).

Boulevards will form important connections between activity centers and open spaces at Kyle Canyon. These community roadways will include single or multiple travel lanes and a landscaped median. Landscaping and sidewalks will contribute to the pedestrian-friendly environment by providing walking access to residences. (Refer to Figure 6-4)

Connector Streets relieve the arterials of local trips. Connector streets have two travel lanes and on-street parking. Where they run alongside the arroyos or other open space, connector streets will have homes facing or siding onto them on one side of the street, with a detached sidewalk, landscaping, and on-street parking. On the opposite side, pedestrian and bicycle paths will run through the open space. This configuration provides a premium location for homes facing onto the open space and also allows access to open space for all residents. In other areas where the Connector is not adjacent to the arroyos or open space, homes can face the road on both sides of the street with a detached sidewalk, landscaping, and on-street parking. (Refer to Figure 6-5).

Neighborhood Streets within the Neighborhood Residential Districts are planned with sidewalks on both sides, landscaping and pedestrian-scaled street lighting.

Alongside parks and open spaces, Neighborhoods Streets will have front doors facing onto them on one side of the street, with a detached sidewalk, landscaping and on-street parking. On the opposite side, pedestrian and bicycle paths will run through the open space. This configuration provides a premium location for homes facing onto the open space and also allows views of the open space for all residents as they travel through the community. (Refer to Figure 6-6).

Alleys shall be provided in conformance with the standards set forth in the design guidelines. All alleys and other forms of lot access that do not meet public street standards shall be private. All private alleys shall be mapped as a common element and privately maintained. Alleys will have 16' to 20' of drivable surface (including drivable curbs) and 3' landscape buffers adjacent to both curbs. Garages will be set back an additional 4' (minimum) on each side to permit landscaping as required by Section 5.2.11. (Refer to Figure 6-7). Alignment of garages on opposite sides of alleys is encouraged. Alleys shall be posted to prohibit parking.

Access Road configuration adjacent to the Mountain Edge Parkway Right of Way, west of Fort Apache will be provided. This access road will provide circulation for the proposed school site.

6.2 TRAFFIC STUDY

A Master Traffic Study has been completed which evaluated the adequacy of the proposed street system and the surrounding streets. This analysis established criteria, for roadway and intersection geometrics, traffic control, and parcel entrances. The Master Traffic Study identified the necessary roadway alignments and cross-sections for the infrastructure streets. Individual neighborhood street networks, land uses, and final pod densities have not been specifically identified. Updates to the Master Traffic Study may be required, based on individual site plans and land use information submitted as the development progresses.

The need for a site specific traffic study shall be determined by the City. Where pod development is determined to be in conformance with the recommendation and assumptions in the Master Traffic Study no additional site specific traffic study is required. If the builder's density is significantly greater than what was assumed, or access to the Village Streets significantly deviates from the Master Study, then that builder may be responsible for a site specific traffic study which shall be processed and approved by the City of Las Vegas.

6.3 STREET OFF-SETS

Neighborhood streets shall not have centerline intersection offsets of less than 125' unless approved by the City.

6.4 DRAINAGE

A Master Drainage Study has been completed which evaluates the required storm drain infrastructure based on a proposed street network and development plan. The Master Drainage Study identifies drainage flows that impact the Community and how those flows should be routed through and around the site in accordance with local design criteria. Technical Drainage Studies will be completed

per phase, utilizing the Master Drainage Study as a basis to refine the drainage infrastructure requirements.

Builders will be required to submit site specific Technical Drainage Studies for review and approval through the City of Las Vegas. The builder will reference the Master Technical Drainage Study as a basis of design. Updates to the Master Technical Drainage Study shall be required if the builder substantially deviates from the assumptions that are approved within the Master Technical Study. Technical Drainage Studies or updates shall be processed through the City of Las Vegas for approval.

Drainage Facilities shall be designed to meet criteria as outlined in the "Clark County Regional Flood Control District Hydrologic Criteria and Drainage Design Manual", unless otherwise detailed in the design guidelines. Facilities shall also be in accordance with the Kyle Master Drainage Study and all addendums.

6.4.1 VALLEY GUTTERS

Valley gutters with a minimum width of 6 feet shall be constructed across street intersections where required by drainage requirements. Valley gutters will not be allowed to cross roadways shown on the City's Master Streets and Highways Plan and/or Boulevards, Arterials, Frontage Roads, or Boulevard Arterials. In addition, no valley gutter will be allowed to cross a Connector or lesser street at an intersection with a major street where drainage facilities exist in the major street. In addition, valley gutters will typically not be allowed to occur in absence of stop control and thus, proper planning and design is necessary to insure that valley gutters occur in conjunction with stop controlled intersections. For private alleys

and commercial driveways, valley gutters with a minimum width of 4 feet are allowed. The construction shall comply with the area standards and the details included in the design guidelines with exception of noted widths.

6.4.2 DRAINAGE EASEMENTS

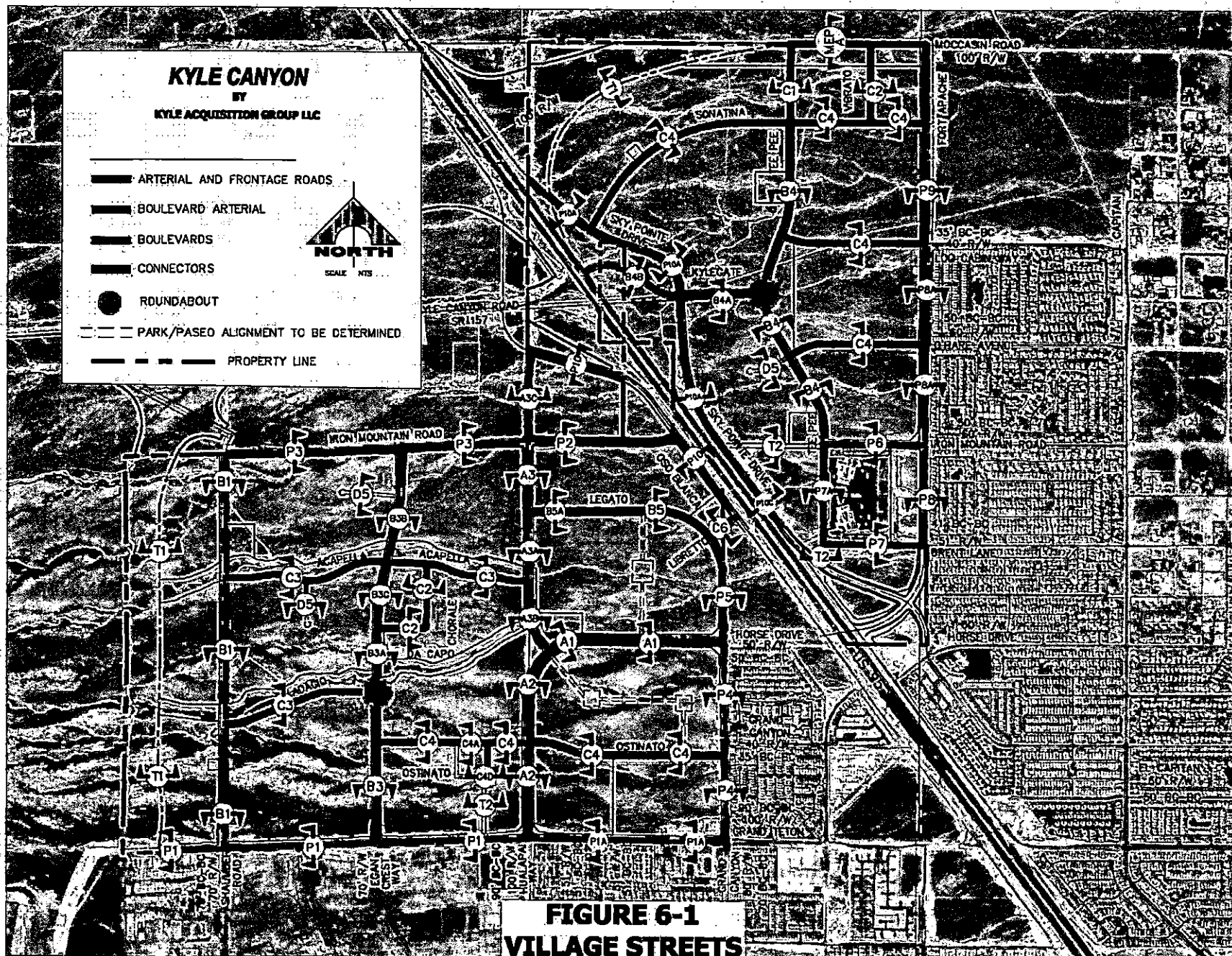
Public drainage easements ten feet (10') wide are permitted for flows of less than 20 cfs, if privately maintained.

6.4.3 FINISHED FLOOR ELEVATION

Finished Floor elevations of buildings in non special flood hazard zones shall be set a minimum of 6 inches above the highest adjacent top of curb for which lots front or twice the depth of flow in the gutter for the 100 yr storm event, whichever is greater to a maximum of 18 inches above the water surface.

6.5 ENGINEERED DRAWINGS

The Engineered Drawings included in this Section have been developed to fulfill the needs and conditions unique to this Community. Unless otherwise allowed by the design guidelines and where practical, the Uniform Standards Drawings for Public Works; Construction, Off-Site Improvements, Clark County Area, Nevada, Volumes I and II, Uniform Designs and Construction Standards for Potable Water Systems (2003), Design and Construction Standards for Wastewater Collection System (1997), and Nevada Department of Transportation (NDOT) Standard Plans (2003) will be used



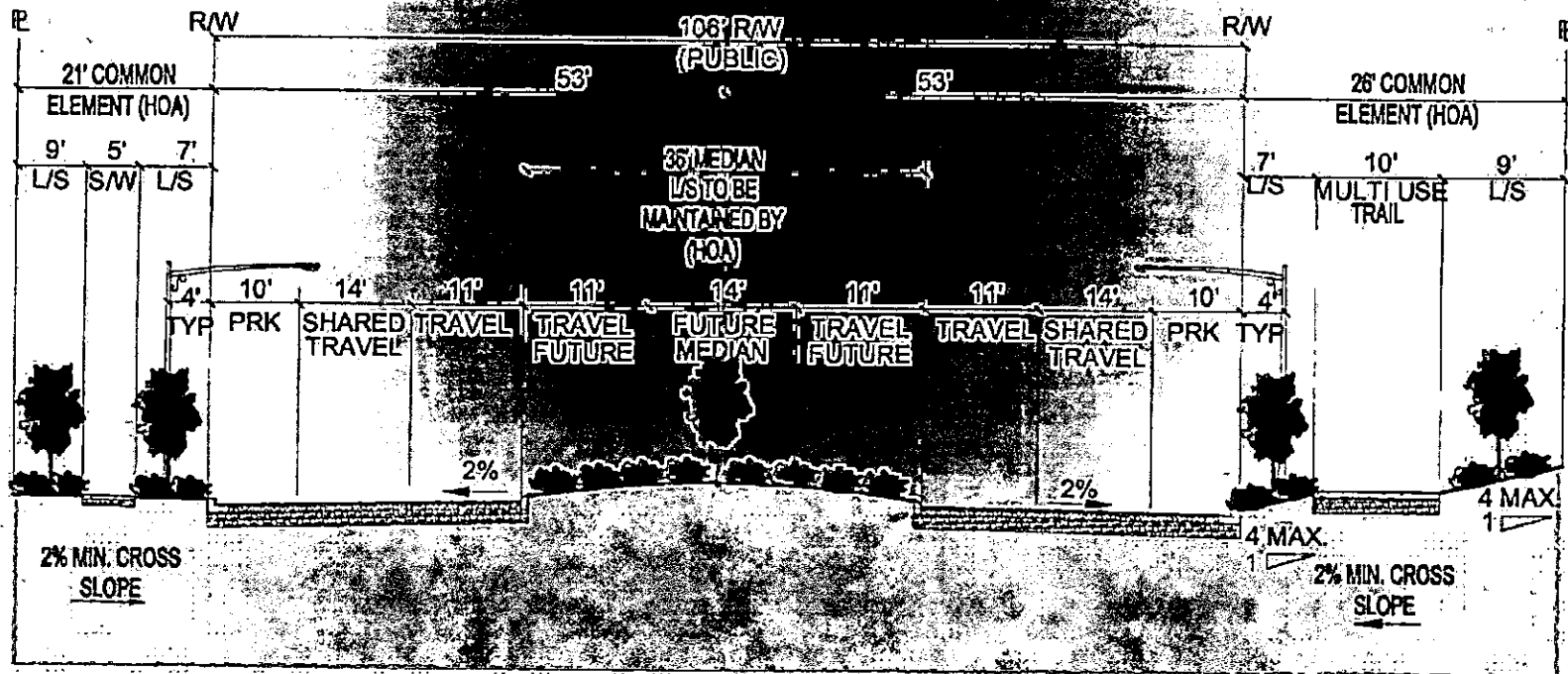


FIGURE 6-2
BOULEVARD ARTERIALS

Boulevard Arterials are major regional arterials and will have a boulevard treatment. Horse Drive and Hualapai Way will have two travel lanes in each direction and will be separated by a landscaped median. The median width will also provide for future expansion of the roadway to accommodate potential increase in traffic. Residential buildings will face onto Horse and Hualapai with windows and front entries facing the street. Parking for these residences will be accessed from side streets or rear alleys, since curb cuts will be minimized. On-street parking, landscaping and sidewalks will contribute to the pedestrian-friendly environment by buffering pedestrians from moving cars and providing guest parking and walking access to residences.

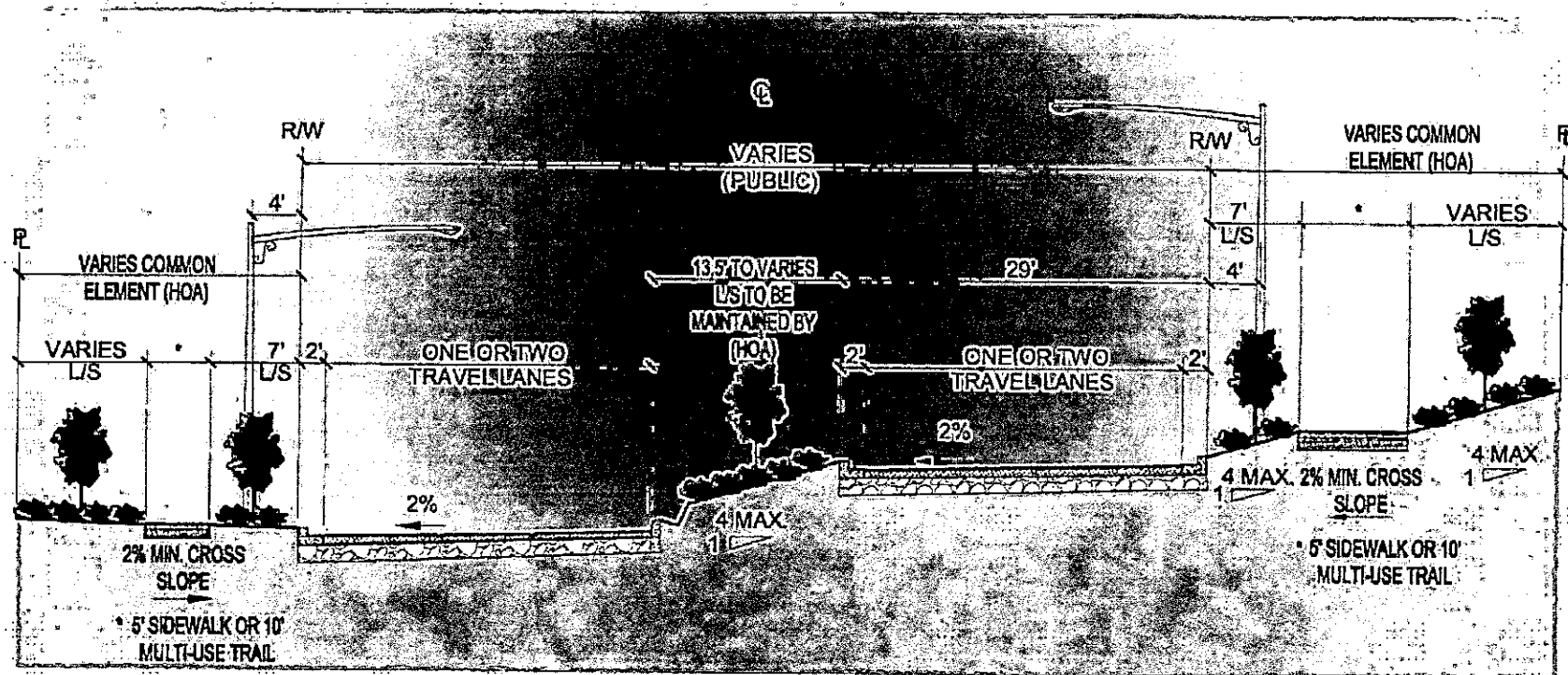


FIGURE 6-4
BOULEVARDS

Boulevards will form important connections between activity centers and open spaces at Kyle Canyon. These community roadways will include single or multiple travel lanes and a landscaped median. Landscaping and sidewalks will contribute to the pedestrian-friendly environment by providing walking access to residences.

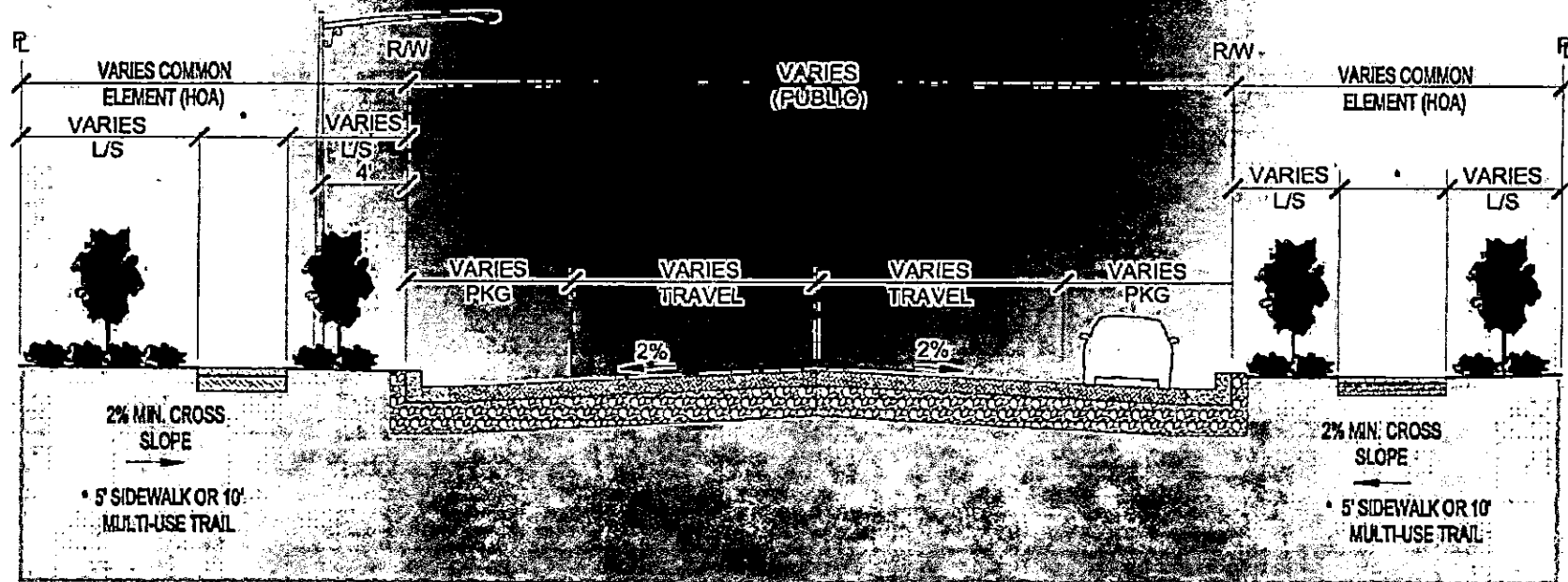


FIGURE 6-5
CONNECTOR STREETS

Connector Streets relieve the arterials of local trips. Connector streets have two travel lanes and on-street parking. Where they run alongside the arroyos or other open space, connector streets will have homes facing or siding onto them on one side of the street, with a detached sidewalk, landscaping, and on-street parking. On the opposite side, pedestrian and bicycle paths will run through the open space. This configuration provides a premium location for homes facing onto the open space and also allows access to open space for all residents. In other areas where the Connector is not adjacent to the arroyos or open space, homes can face the road on both sides of the street with a detached sidewalk, landscaping, and on-street parking.

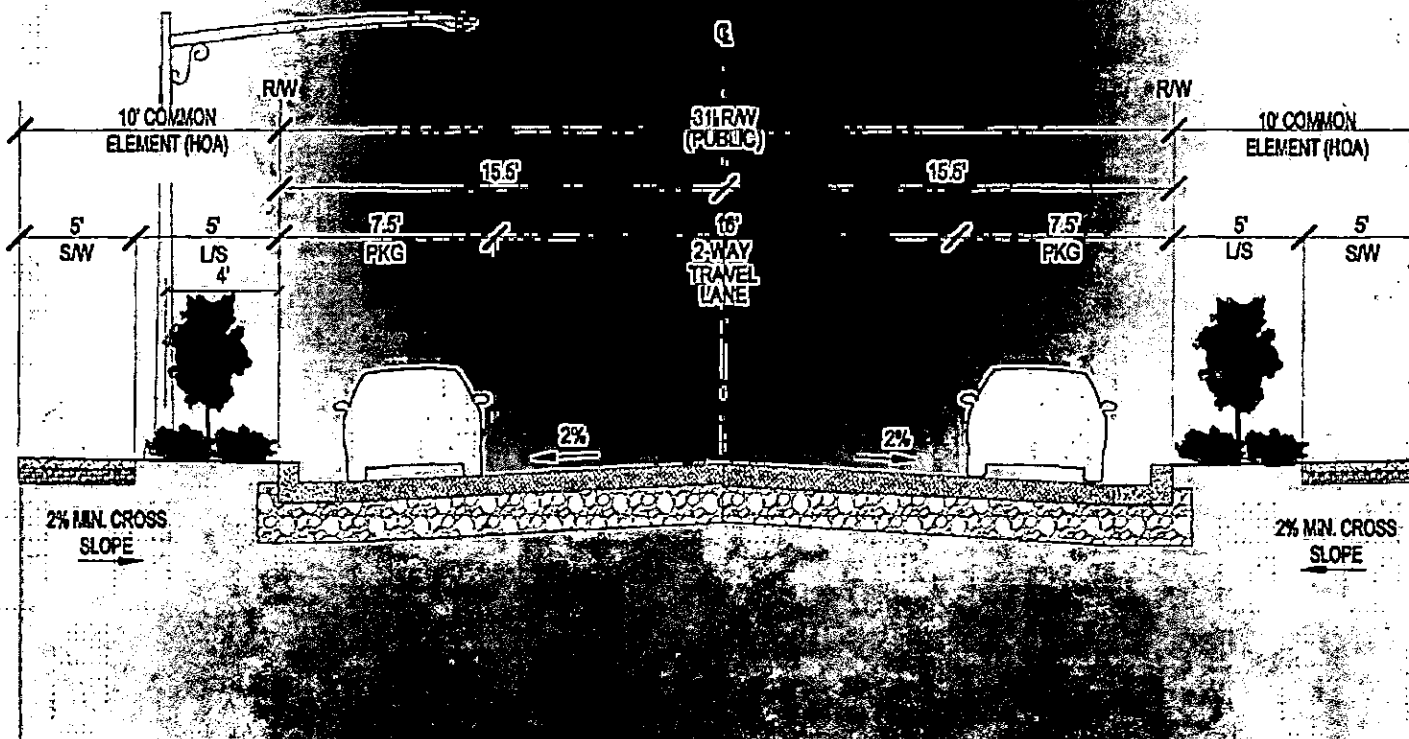


FIGURE 6-6
NEIGHBORHOOD STREETS

Neighborhood Streets within the Neighborhood Residential Districts are planned with sidewalks on both sides, landscaping and pedestrian-scaled street lighting.

Alongside parks and open spaces, Neighborhoods Streets will have front doors facing onto them on one side of the street, with a detached sidewalk, landscaping and on-street parking. On the opposite side, pedestrian and bicycle paths will run through the open space. This configuration provides a premium location for homes facing onto the open space and also allows views of the open space for all residents as they travel through the community.

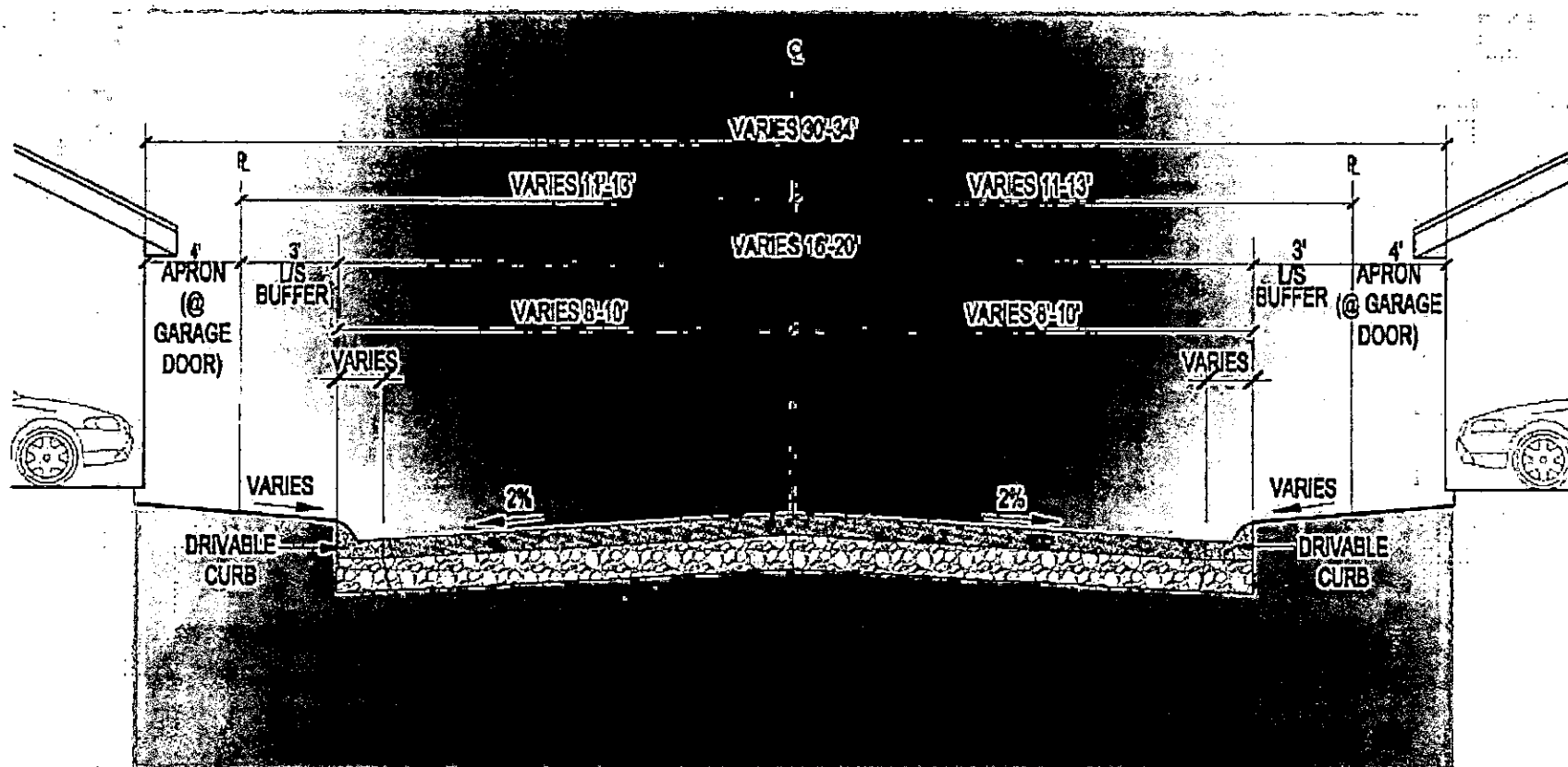


FIGURE 6-7
ALLEYS

Alleys shall be provided in conformance with the standards set forth in the design guidelines. All alleys and other forms of lot access that do not meet public street standards shall be private. All private alleys shall be mapped as a common element and privately maintained. Alleys will have 16' to 20' of drivable surface (including drivable curbs) and 3' landscape buffers adjacent to both curbs. Garages will be set back an additional 4' (minimum) on each side to permit landscaping as required by Section 5.2.11. Alignment of garages on opposite sides of alleys is encouraged. Alleys shall be posted to prohibit parking.

KYLE CANYON GATEWAY
Standard Drawings

<u>NUMBER</u>	<u>STREET SECTIONS</u>
DG-S-A1	Horse Drive – 106' Section (Public) Hualapai to Grand Canyon
DG-S-A2	Hualapai Way – 107.5' Section (Public) Grand Teton to Horse
DG-S-A3	Hualapai Way – 85.5' Section (Public) Legato to Iron Mountain
DG-S-A3A	Hualapai Way – 85.5' Section (Public) Acapella to Legato
DG-S-A3B	Hualapai Way – 85.5' Section (Public) Horse to Acapella
DS-S-A3C	Hualapai Way – 75' Section (Public) Iron Mountain to Oso Blanca
DG-S-B1	Shaumber Road – 62' Section (Public)
DG-S-B3	Egan Crest Way – 69.5' Section (Public) Grand Teton to Adagio
DG-S-B3A	Egan Crest Way – 69.5' Section (Public) Adagio to Da Capo
DG-S-B3B	Egan Crest Way – 69.5' Section (Public) Acapella to Iron Mountain
DG-S-B3C	Egan Crest Way – 69.5' Section (Public) De Capo to Acapella
DG-S-B4	Boulevard Tee Pee – 55' Section (Public) Iron Mountain to Sonatina-Brent to Sky Point
DG-S-B4A	Kylegate – 68' Section (Public) Tee Pee to Sky Pointe
DG-S-B4B	Boulevard Kylegate Street 68' Section (Public) US-95 to Sky Pointe
DG-S-B5	Connector Street – 70' Section (Public) Paseo to Libretto
DG-S-B5A	Connector Street – 70' Section (Public) Hualapai to Paseo
DG-S-C1	Connector Street – 38' Section (Public)
DG-S-C2	Connector Street – 38' Section (Public)
DG-S-C3	Connector Street – 53' Section (Public) Adjacent to Arroyo
DG-S-C4	Connector Street – 53' Section (Public) W/2-Way Left Turn
DG-S-C4A	Connector Street – 53' Section (Public) At Substation
DG-S-C4D	Connector Street – 41' Section (Public) At Substation
DG-S-C6	Connector Street – 80' Section (Public) Libretto
DG-S-D1	Neighborhood Street – 31' Section (Public)
DG-S-D2	Loop Street – 28' Section (Public) At Arroyos/Internal Parks
DG-S-D3	Court Street – 32' Section (Private)
DG-S-D4	Motor Court Street – 24' Section (Private)
DS-S-D5	Neighborhood Streets – 37' Section (Public)
DG-S-E1	Alley – (Private)
DG-S-E2	Alley – (Private)
DG-S-E3	Alley – (Private)

DG-S-P1	Grand Teton Drive – 95' Section (Public) Mountain Edge to Hualapai
DG-S-P1A	Grand Teton Drive – 95' Section (Public) Hualapai to Grand Canyon
DG-S-P2	Iron Mountain Road – 90' Section (Public) East of Hualapai
DG-S-P3	Iron Mountain Road – 95' Section (Public) West of Hualapai
DG-S-P4	Grand Canyon Drive – 75' Section (Public) Grand Teton to Horse
DG-S-P5	Grand Canyon Drive – 75' Section (Public) Horse to Libretto
DG-S-P6	Iron Mountain Road – 75' Section (Public) Fort Apache to Tee Pee
DG-S-P7	Brent Lane – 58' Section (Public) Adjacent to Existing Elementary School
DG-S-P7A	Tee Pee Lane – 60' Section (Public) Iron Mountain to Brent
DG-S-P8	Fort Apache Road – 120' Section (Public) South of Iron Mountain
DG-S-P8A	Fort Apache Road – 120' Section (Public) Iron Mountain to Log Cabin
DG-S-P9	Fort Apache Road – 120' Section (Public) North of Log Cabin
DG-S-P10	Frontage Road (Oso Blanca) – 75' Section (Public)
DG-S-P10A	Frontage Road (Sky Pointe) – 80' Section (Public) North of Iron Mountain (extended)
DG-S-P10B	Frontage Road (Sky Pointe) – 80' Section (Public) Tee Pee to Fort Apache
DG-S-P10C	Frontage Road (Sky Pointe) – 80' Section (Public) Iron Mountain to Tee Pee
DG-S-T1	Trail Section – Mountain Edge Parkway
DG-S-T2	Paseo Trail Section
DG-S-T3	Multi-Use Trail
DS-S-T4	Arroyo Trail
DG-S-MEP-A	Mountain Edge Parkway Access Road (Public) (Alt. A)

KYLE CANYON GATEWAY Standard Drawings

NUMBER

DG-1
DG-2
DG-3
DG-4
DG-5
DG-6
DG-7

INTERSECTION GEOMETRICS

Minimum Back of Curb Radius
"T" Intersection w/Parking on Mainline
"T" Intersection w/No Parking
"T" Intersection w/Parking on both Legs
4 – Way Intersection w/Parking all Legs
4 – Way Intersection w/Parking on 3 Legs
"T" Intersection w/Parking on Leg

NUMBER

DG-8
DG-8.1
DG-8.2
DG-9
DG-10
DG-11
DG-12
DG-13
DG-14
DG-15
DG-16
DG-17
DG-17.1
DG-18.1
DG-18.2
DG-19.2
DG-19.3
DG-20
DG-20.1
DG-21
DG-22
DG-23
DG-24
DG-25
DG-25.1
DG-25.2
DG-25.3
DG-25.4
DG-26

MISCELLANEOUS

Sidewalk Ramp at Returns
Sidewalk Trail Connection – Option A
Sidewalk Trail Connection – Option B
Sidewalk Ramp at Mid Block
Parkway/Landscape Sidewalk Underdrain
30" Wedge Curb and Gutter
Parking Tree Well
Dry Utility Trench Location
Utility Pad Location (Residential Subdivision)
Landscape Irrigation Sleeving
Fire Hydrant Location (At Intersection)
Fire Hydrant Location (Along Roadway)
Street Light Location (Along Roadway)
Driveway Approach – Residential (Option "A")
Driveway Approach – Residential (Option "B")
Driveway Approach – Commercial (Option B")
Driveway Approach – Alley
Traffic Signal Equipment – (Located at Intersection)
Traffic Signal Pole Size
Neighborhood Street-Bulb Out Detail
RTC Bus Turnout Adjacent to Parking Areas
Neighborhood Street – Cul-De-Sac
Neighborhood Loop Street – Knuckle
Typical Street Light
Streetlight Location
Streetlight Location at Intersections * 1, 4/2 Right of Way
Streetlight Location at Intersections *1, 3/3 Right of Way
Streetlight Location at Intersections * 2/3 Right of Way
Typical Builder Entry

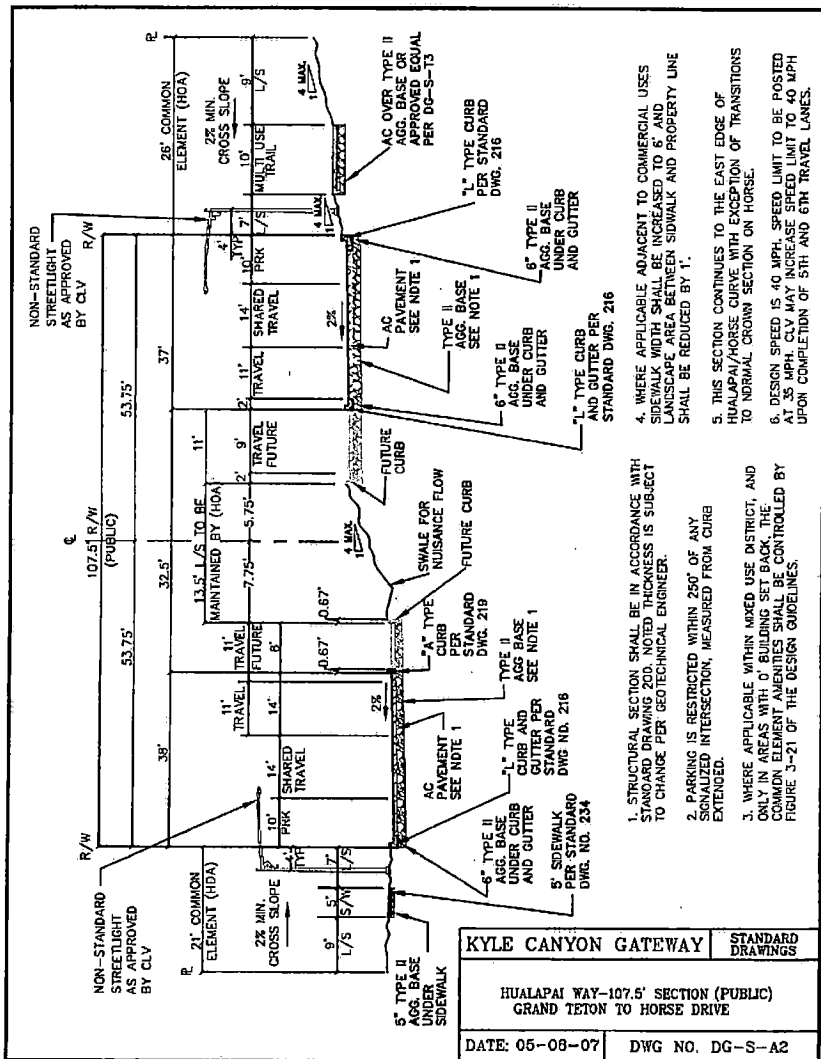
PREFACE

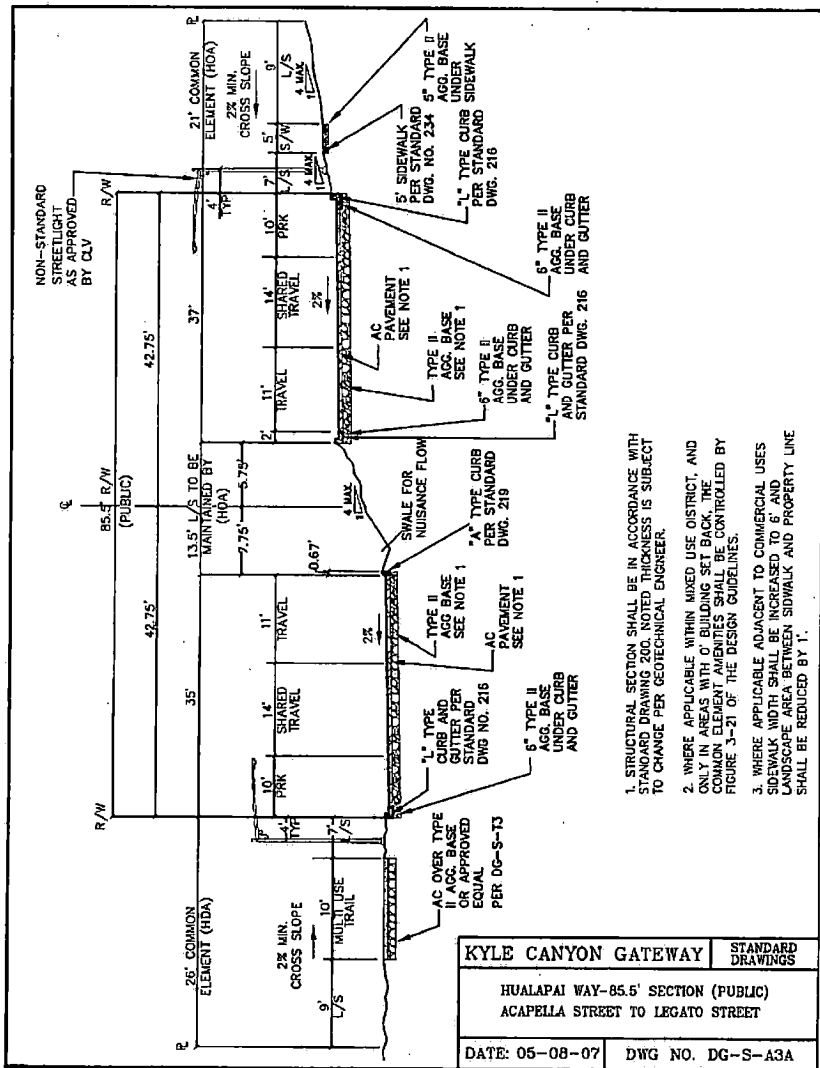
The intent of this document is for the design and construction of improvements within the Kyle Canyon Gateway Development. These standards should be used as a guideline for the design and preparation of engineering drawings for roadways, drainage facilities, utilities, and other related improvements within the planned community.

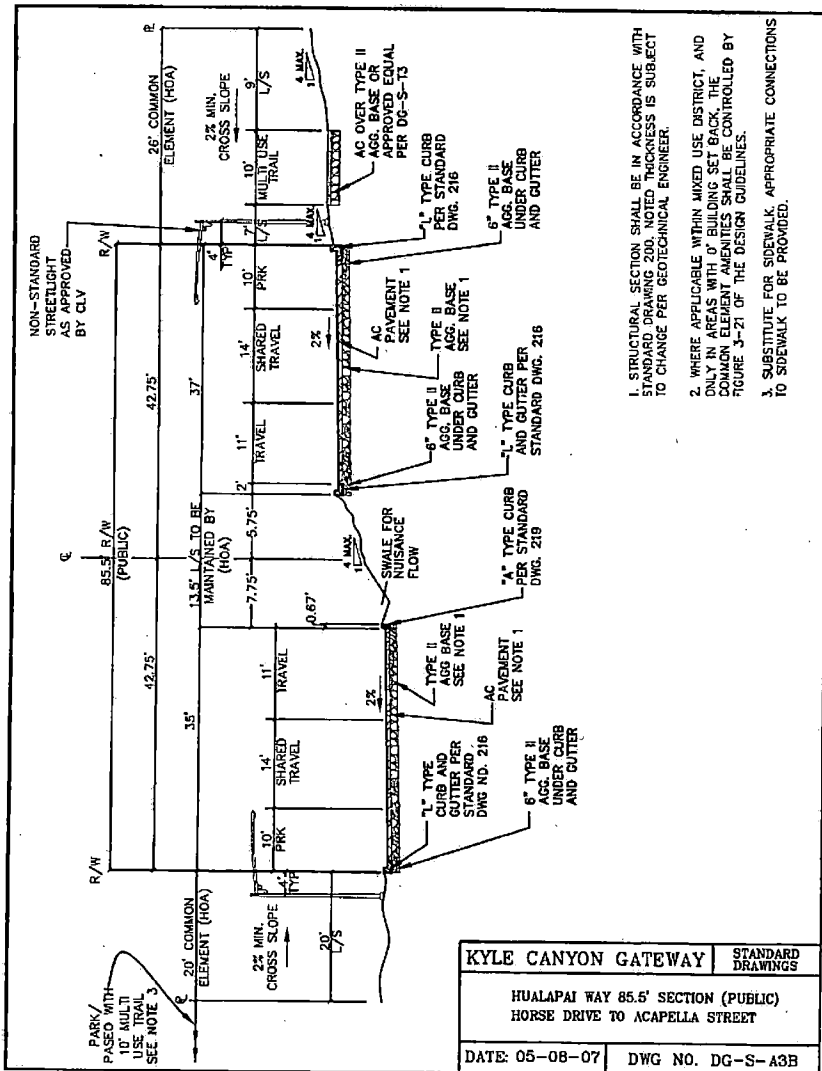
Where practical, the *Uniform Standard Drawings for Public Works; Construction, Off-Site Improvements, Clark County Area, Nevada, Volumes I and II, Uniform Design and Construction Standards for Potable Water Systems (2003), Design and Construction Standards for Wastewater Collection Systems (1997)*, Clark County Regional Flood Control District's *Hydrologic Criteria and Drainage Design Manual (1999)* and Nevada Department of Transportation (NDOT) Standard Plans (2003) will be used. Standards that have been modified to fulfill the needs of the planned community have been reviewed and approved.

Although it is not possible to anticipate all circumstances and conflicts that may occur while implementing these standards, acceptable engineering practice has been used to resolve all known issues. If it should become necessary to modify these standards, they may be modified or amended through future submittals to the City of Las Vegas.

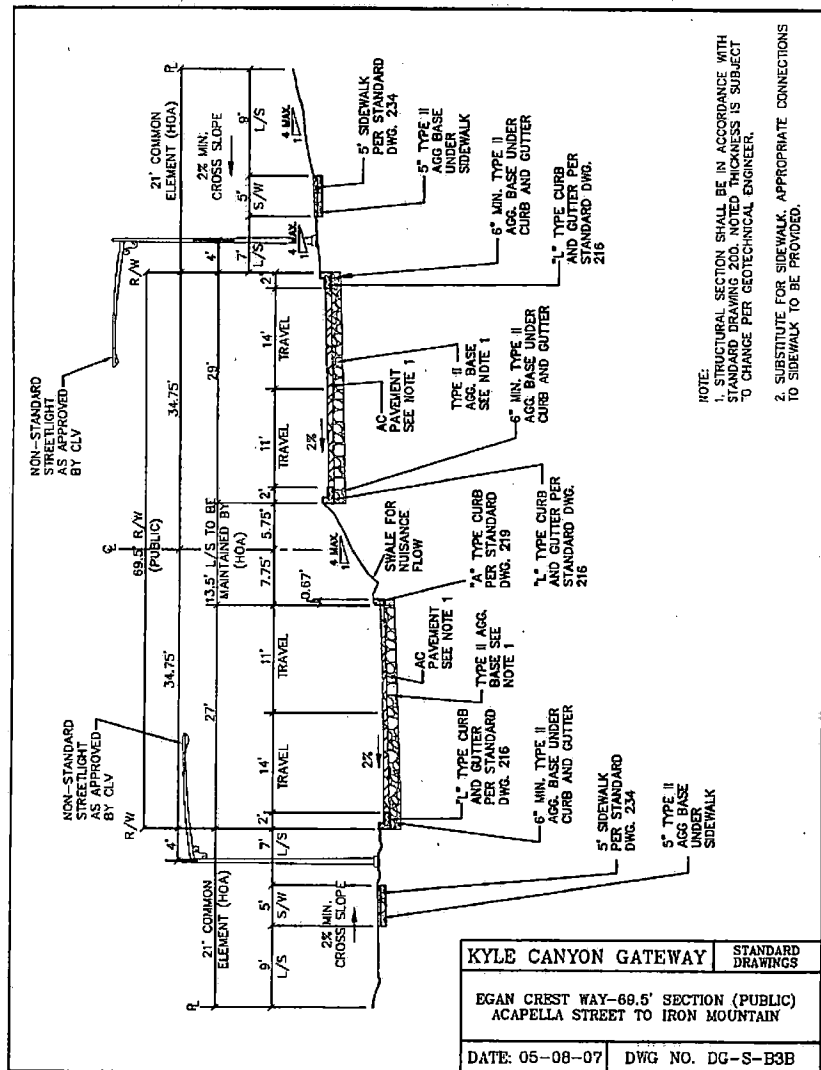
Note: These Exhibits are not to scale.

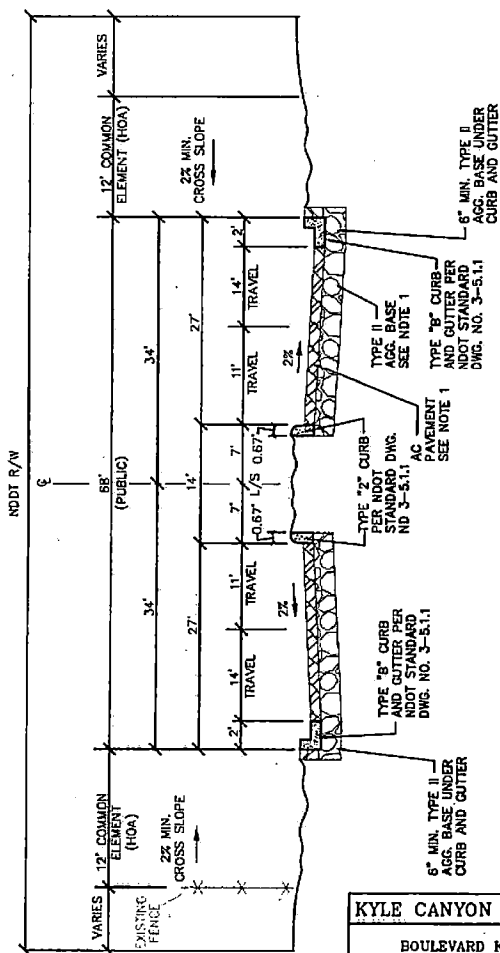




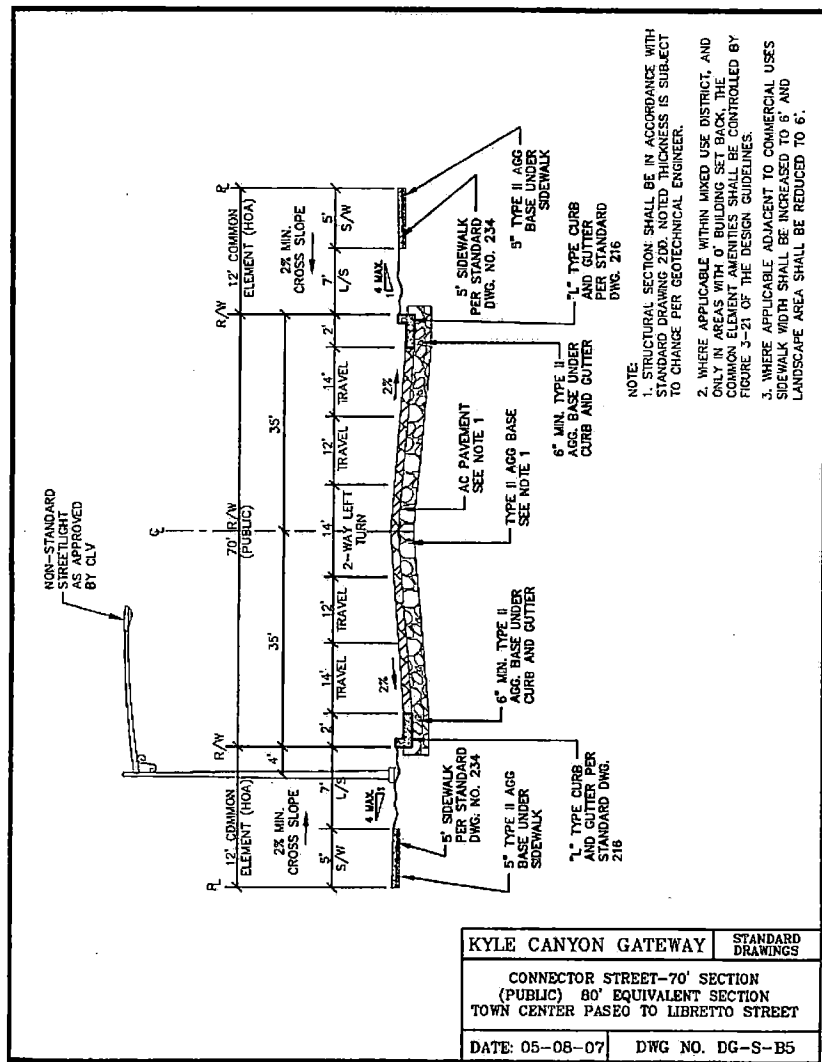






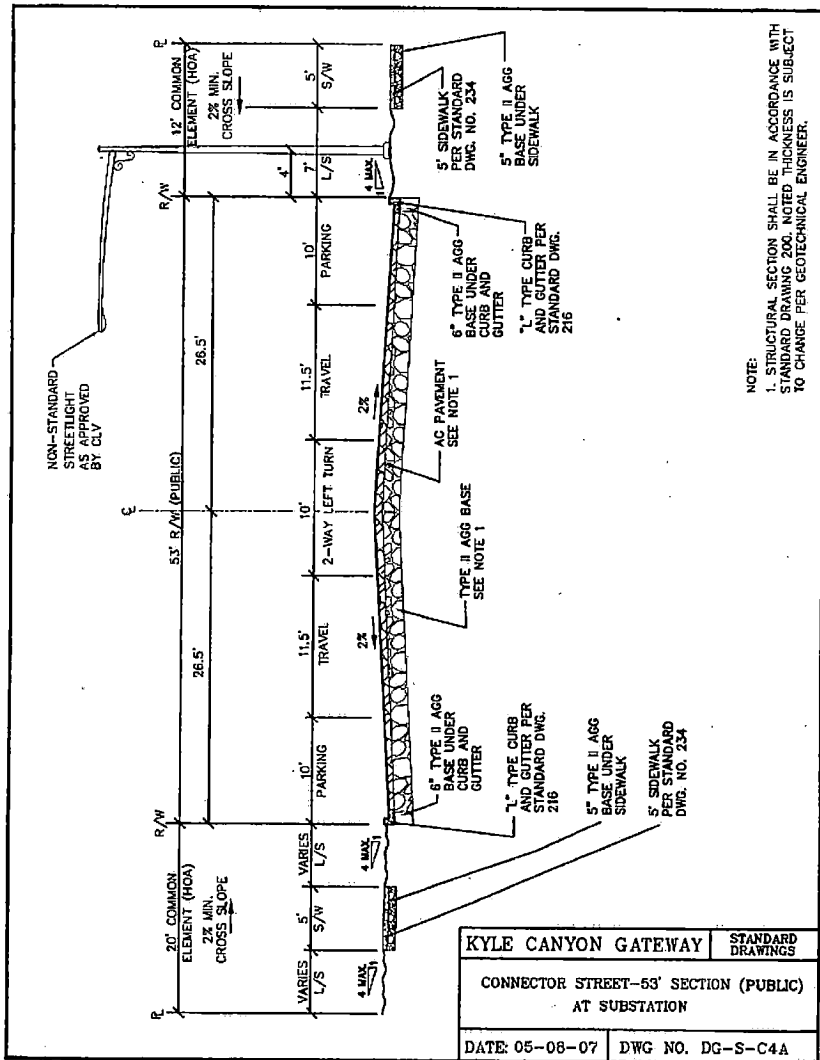


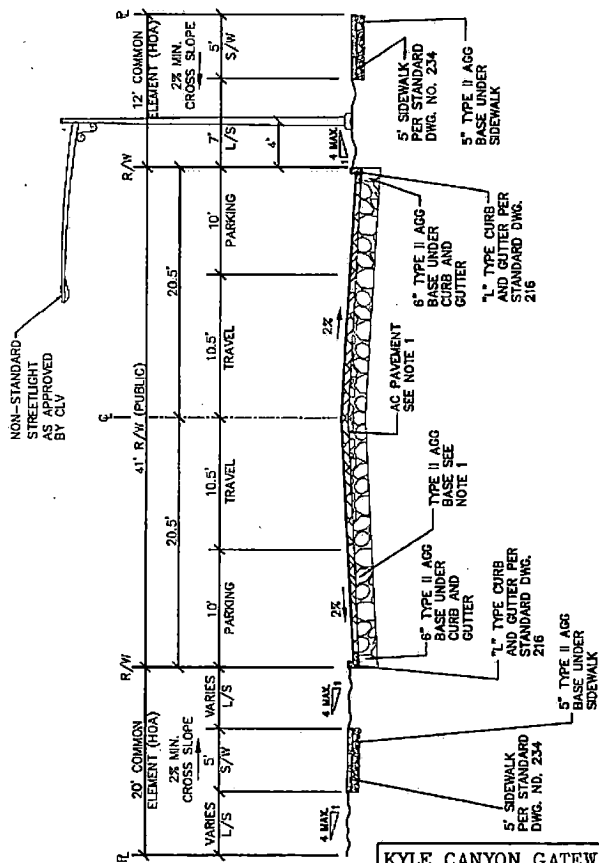
NOTE:
1. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH AISC STEEL CONSTRUCTION MANUAL, 13TH EDITION. NOTED THICKNESS IS SUBJECT TO CHANGE PER GEOTECHNICAL ENGINEER.





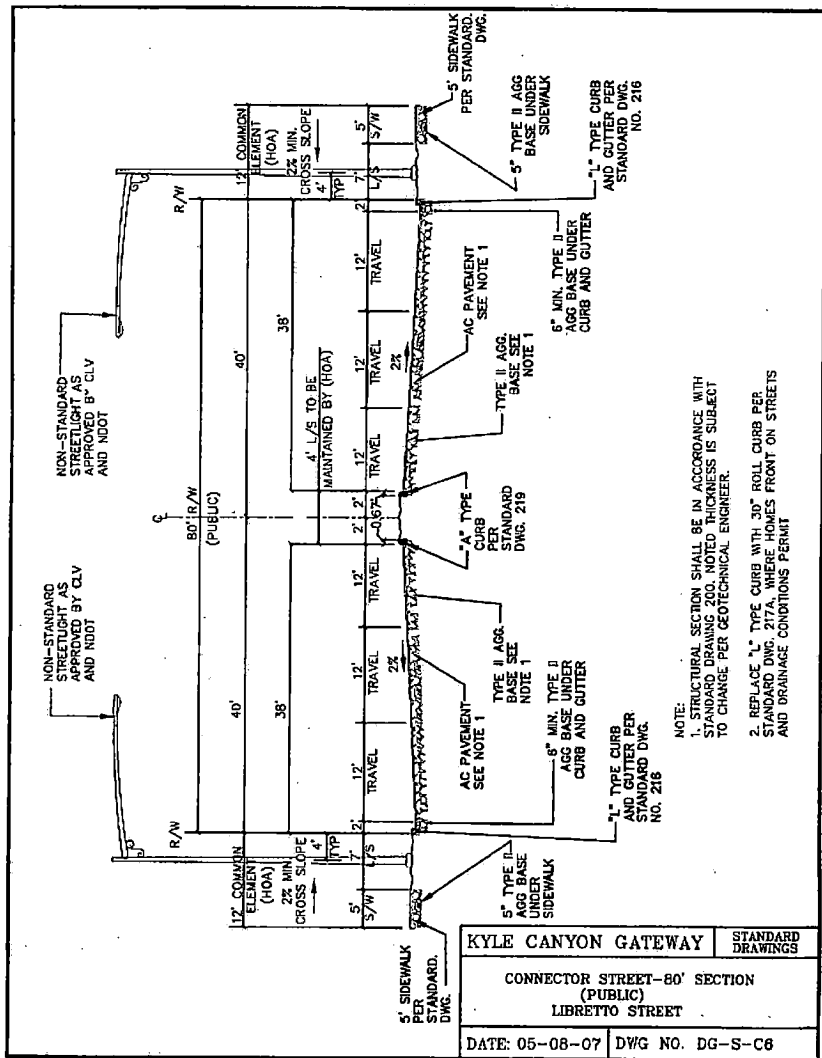


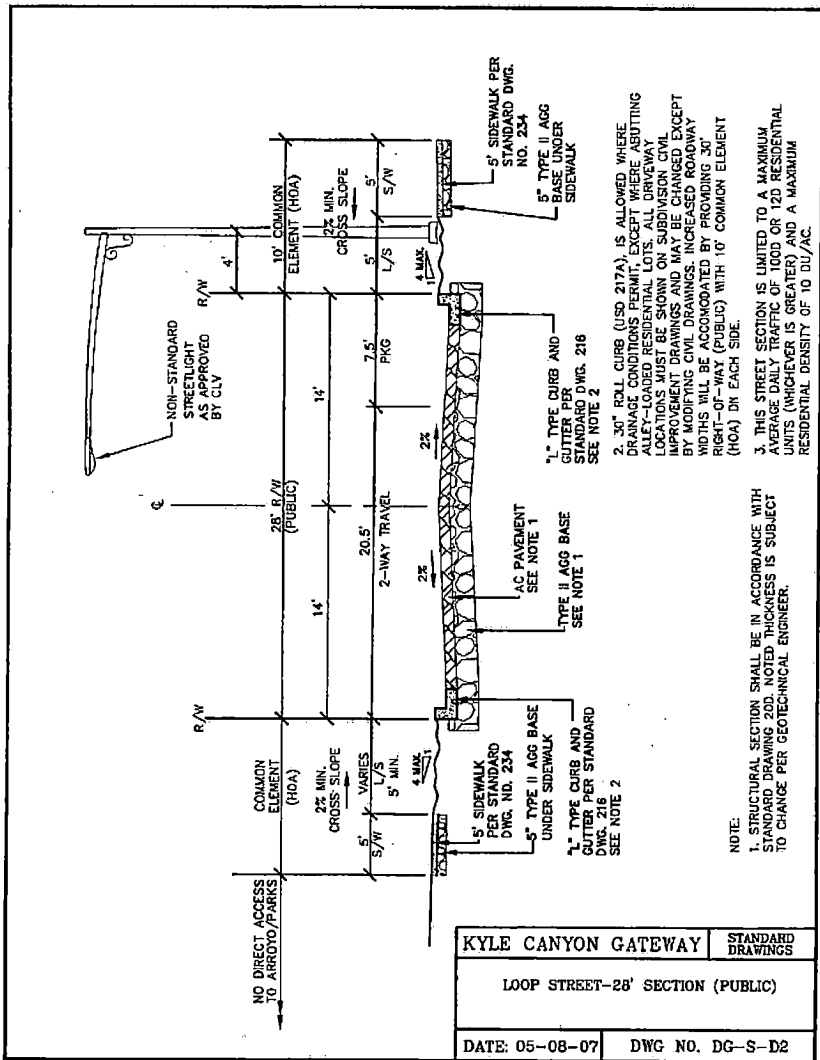




NOTE:

1. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD DRAWING 200. NOTED THICKNESS IS SUBJECT TO CHANGE PER GEOTECHNICAL ENGINEER.





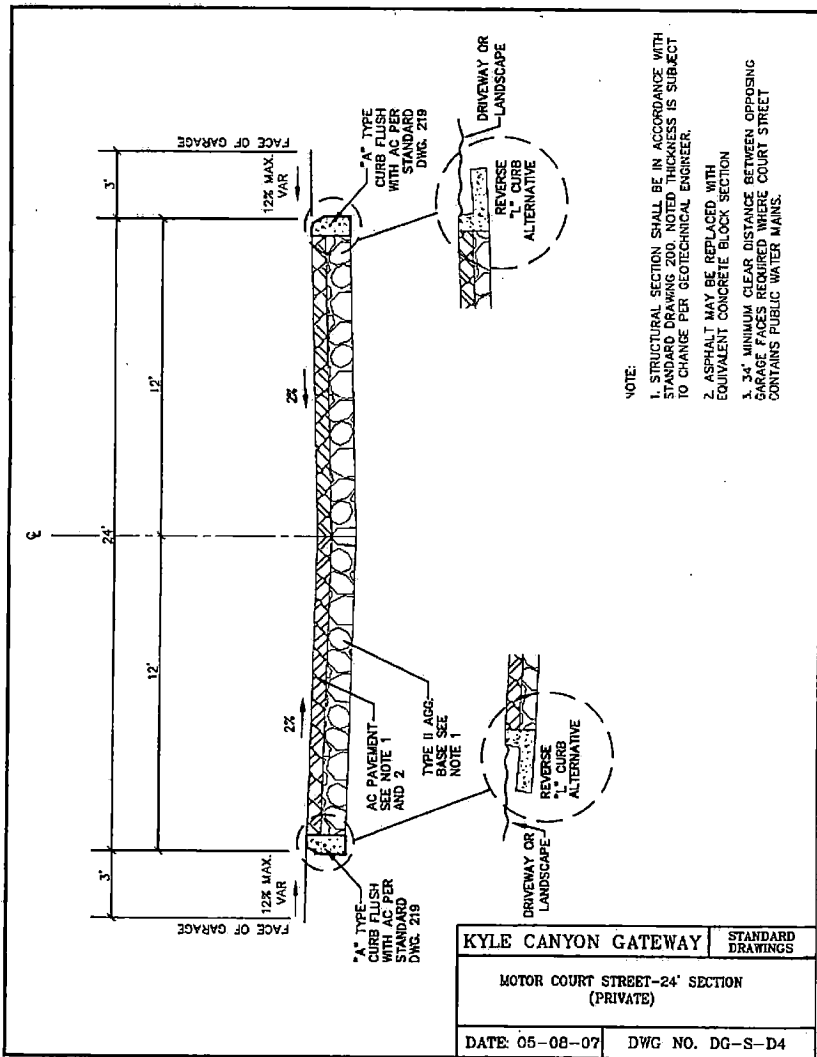
KYLE CANYON GATEWAY

STANDARD DRAWINGS

LOOP STREET-28' SECTION (PUBLIC)

DATE: 05-08-07

DWG NO. DG-S-D2



NOTE:

1. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD DRAWING 200. NOTED THICKNESS IS SUBJECT TO CHANGE PER GEOTECHNICAL ENGINEER.
2. ASPHALT MAY BE REPLACED WITH EQUIVALENT CONCRETE BLOCK SECTION
3. 3'-0" MINIMUM CLEAR DISTANCE BETWEEN OPPOSING GARAGE FACES REQUIRED WHERE COURT STREET CONTAINS PUBLIC WATER MAINS.

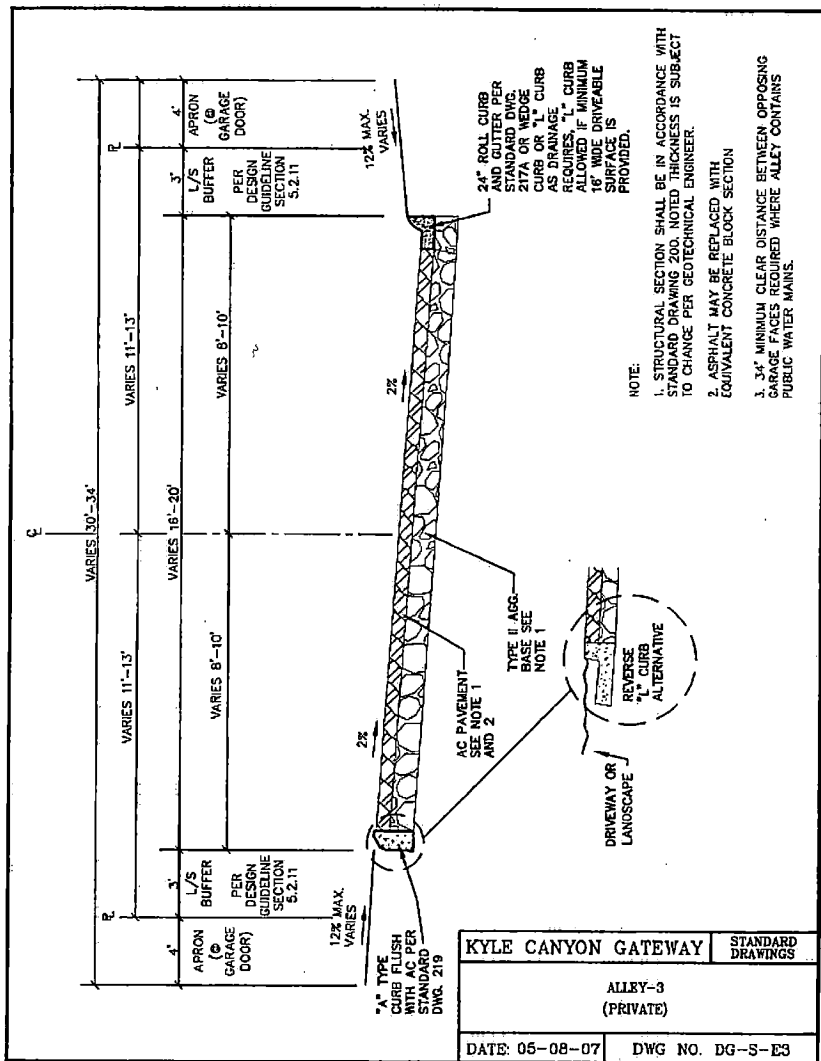
KYLE CANYON GATEWAY

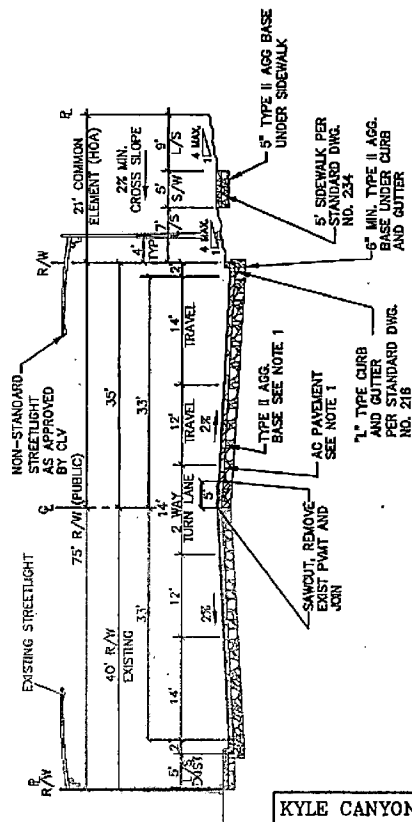
STANDARD DRAWINGS

MOTOR COURT STREET-24' SECTION
(PRIVATE)

DATE 05-08-07

DWG NO. DG-S-D4

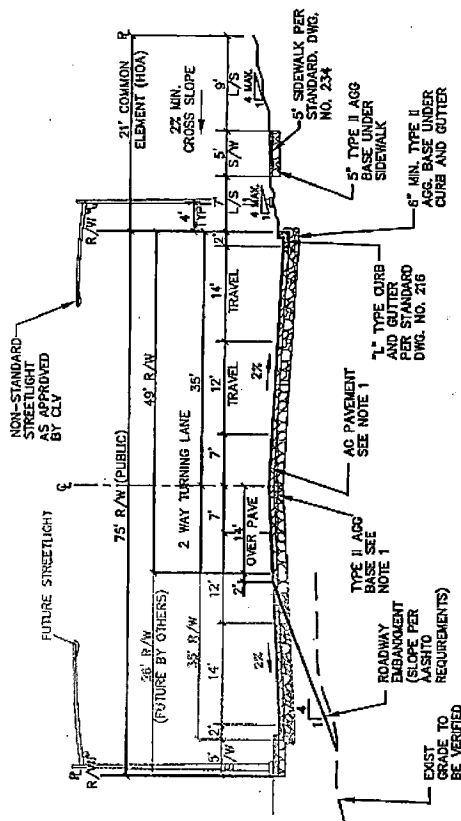




NOTE:

1. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD DRAWING 200. NOTED THICKNESS IS SUBJECT TO CHANGE PER GEOTECHNICAL ENGINEER.
2. WHERE APPLICABLE ADJACENT TO COMMERCIAL USES SIDEWALK WIDTH SHALL BE INCREASED TO 6' AND LANDSCAPE AREA BETWEEN SIDEWALK AND PROPERTY LINE SHALL BE REDUCED BY 1'.

KYLE CANYON GATEWAY		STANDARD DRAWINGS
GRAND CANYON DRIVE-75' SECTION (PUBLIC) 80' EQUIVALENT SECTION GRAND TETON DRIVE TO HORSE DRIVE		
DATE: 05-08-07	DWG NO. DG-S-P4	



NOTE:

1. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD DRAWING 200. NOTED THICKNESS IS SUBJECT TO CHANGE PER GEOTECHNICAL ENGINEER.
2. WHERE APPLICABLE WITHIN MIXED USE DISTRICT, AND ONLY IN AREAS WITH 'O' BUILDING SET BACK, THE COMMON ELEMENT AMENITIES SHALL BE CONTROLLED BY FIGURE J-21 OF THE DESIGN GUIDELINES.
3. WHERE APPLICABLE ADJACENT TO COMMERCIAL USES SIDEWALK WIDTH SHALL BE INCREASED TO 5' AND BUFFER AREA BETWEEN SIDEWALK AND PROPERTY LINE SHALL BE REDUCED BY 1'.

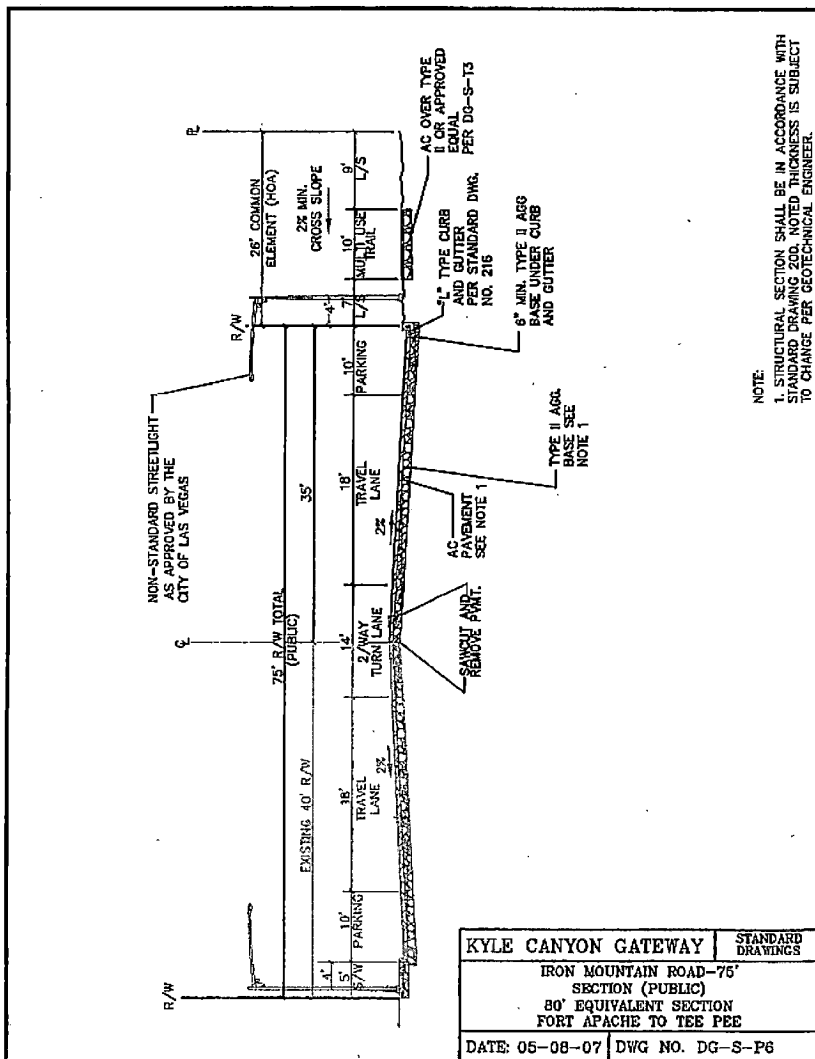
KYLE CANYON GATEWAY

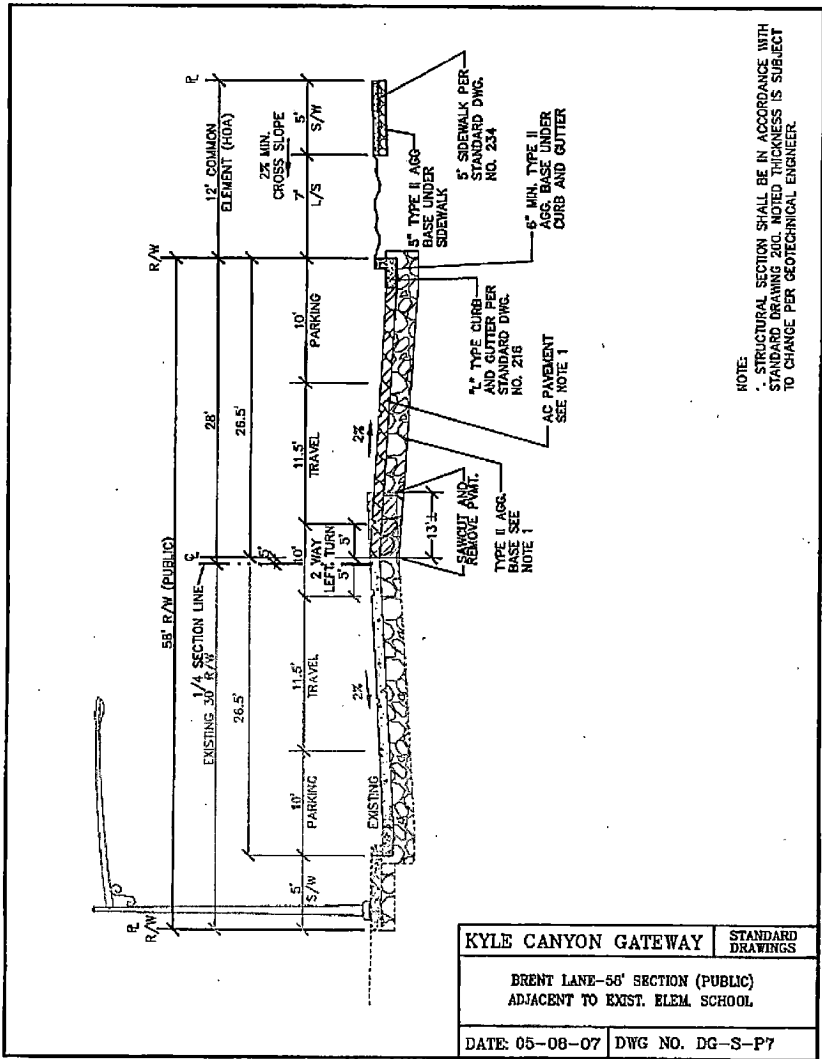
STANDARD DRAWINGS

GRAND CANYON DRIVE-75' SECTION (PUBLIC)
80' EQUIVALENT SECTION HORSE DRIVE
TO LIBRETTO STREET

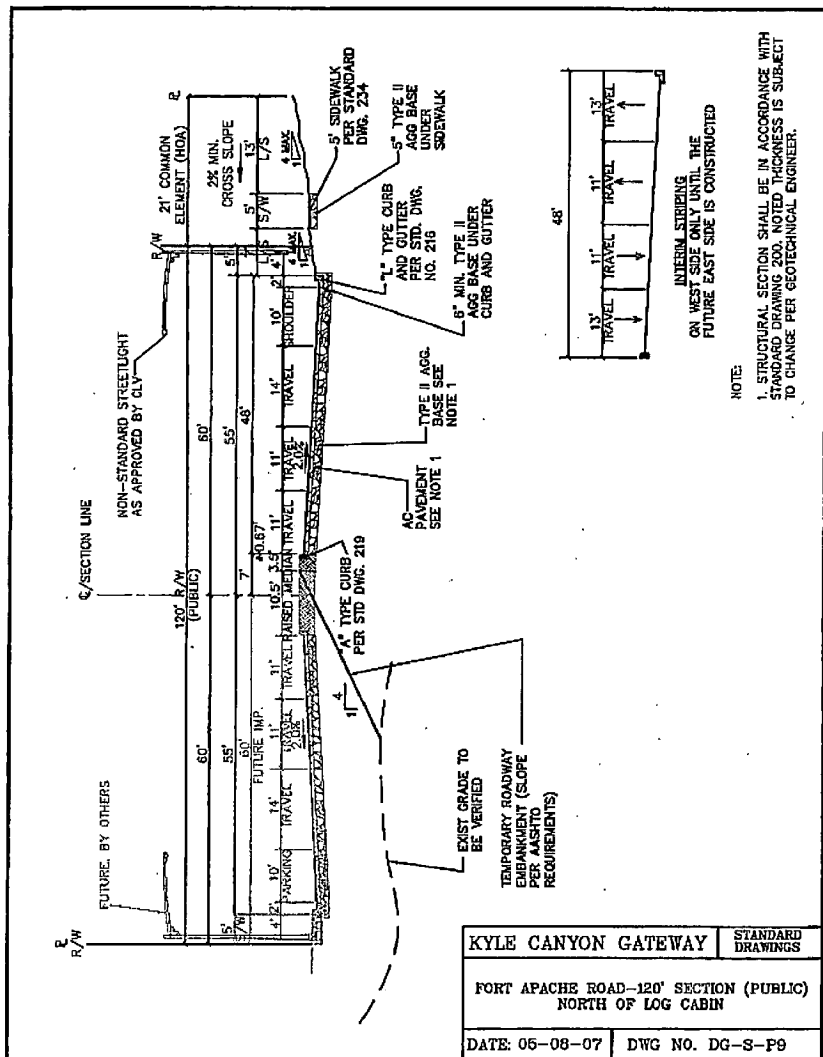
DATE: 05-08-07

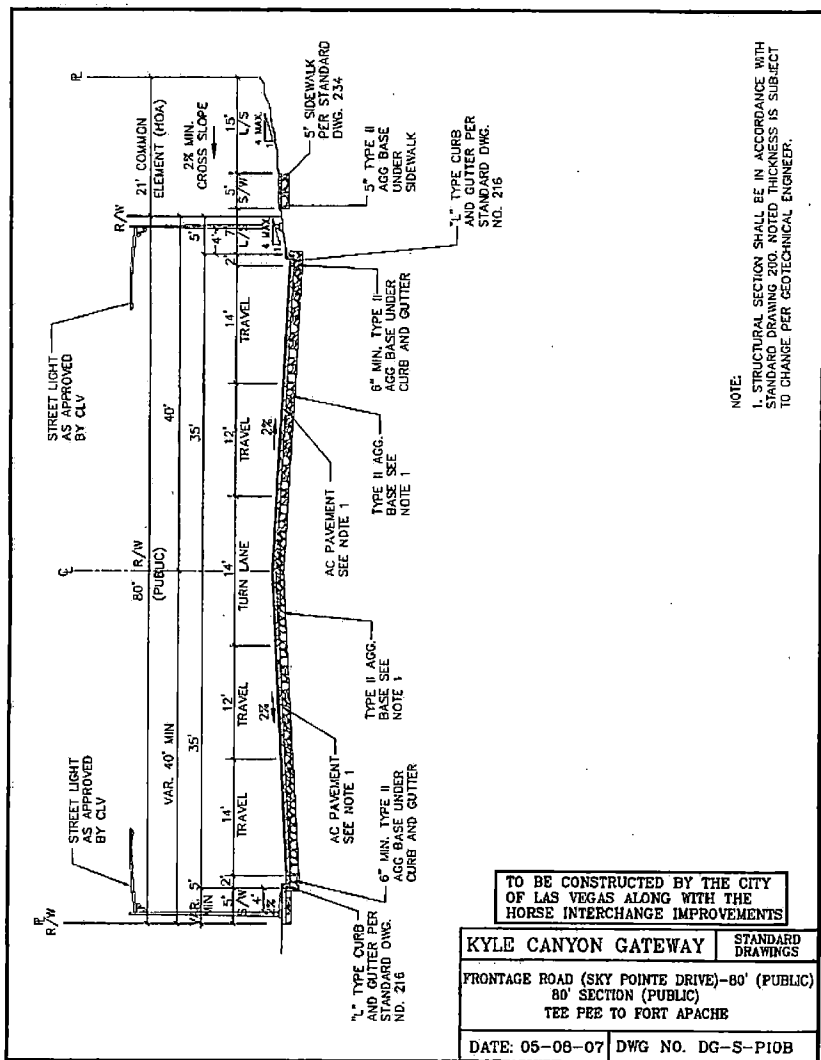
DWG NO. DG-S-P5





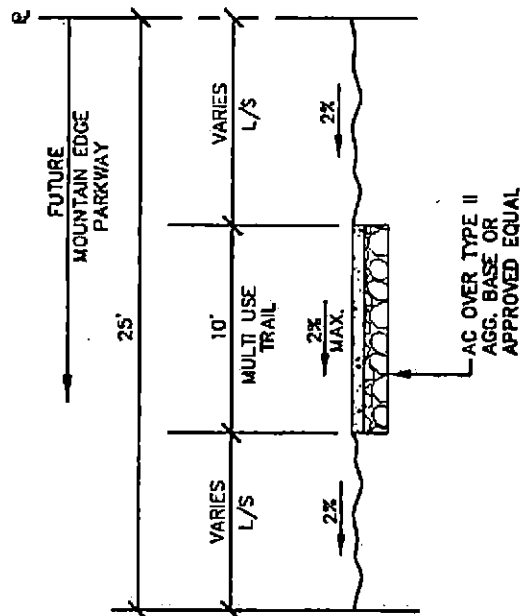
KYLE CANYON GATEWAY	STANDARD DRAWINGS
BRENT LANE-56' SECTION (PUBLIC) ADJACENT TO EXIST. ELEM. SCHOOL	
DATE: 05-08-07	DWG NO. DG-S-P7



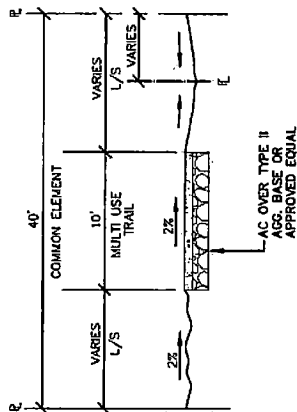


1. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH DOT STANDARDS. NOTED THICKNESS IS SUBJECT TO CHANGE PER GEOTECHNICAL ENGINEER.

KYLE CANYON GATEWAY		STANDARD DRAWINGS
FRONTAGE ROAD (SKY POINTE DRIVE) 80' SECTION (PUBLIC) IRON MOUNTAIN (EXTENDED) TO TEE PEE		
DATE: 05-08-07	DWG NO. DG-S-P10C	

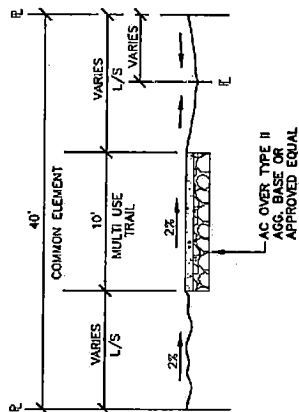


KYLE CANYON GATEWAY	STANDARD DRAWINGS
TRAIL SECTION MOUNTAIN EDGE PARKWAY	
DATE: 05-08-07	DWG NO. DG-S-T1



NOTE:
 * FOR THE PORTION BETWEEN SKY PONTE DRIVE AND BRENT LANE, THE TRAIL IS REDUCED TO 5' WIDE. THE COMMON ELEMENT IS REDUCED TO 20' AND A 20' LIVING PUBLIC WATER LINE EASEMENT IS TO BE LOCATED WITHIN THE COMMON ELEMENT.

KYLE CANYON GATEWAY	STANDARD DRAWINGS
PASEO TRAIL SECTION	
DATE: 05-08-07	DWG NO. DG-S-T2



NOTE:
 * FOR THE PORTION BETWEEN SKY POINTE DRIVE AND BRENT LANE, THE TRAIL IS REDUCED TO 5'. THE COMMON ELEMENT IS REDUCED TO 20' AND A 20' L/VWD PUBLIC WATER LINE EASEMENT IS TO BE LOCATED WITHIN THE COMMON ELEMENT.

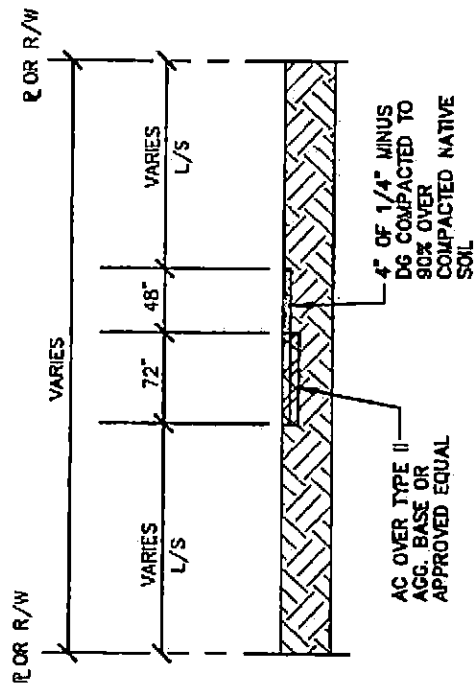
KYLE CANYON GATEWAY

STANDARD
DRAWINGS

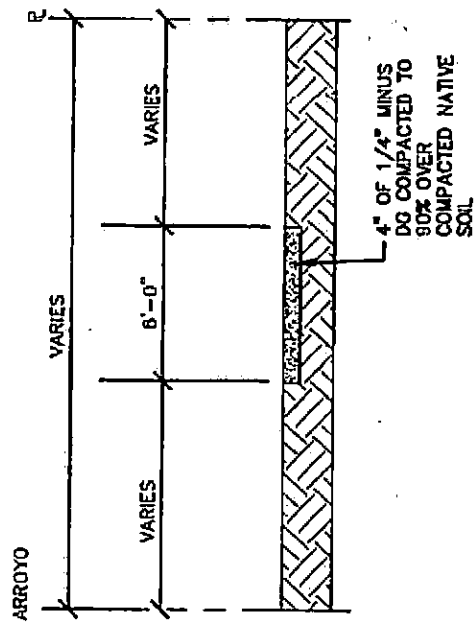
PASEO TRAIL SECTION

DATE: 05-08-07

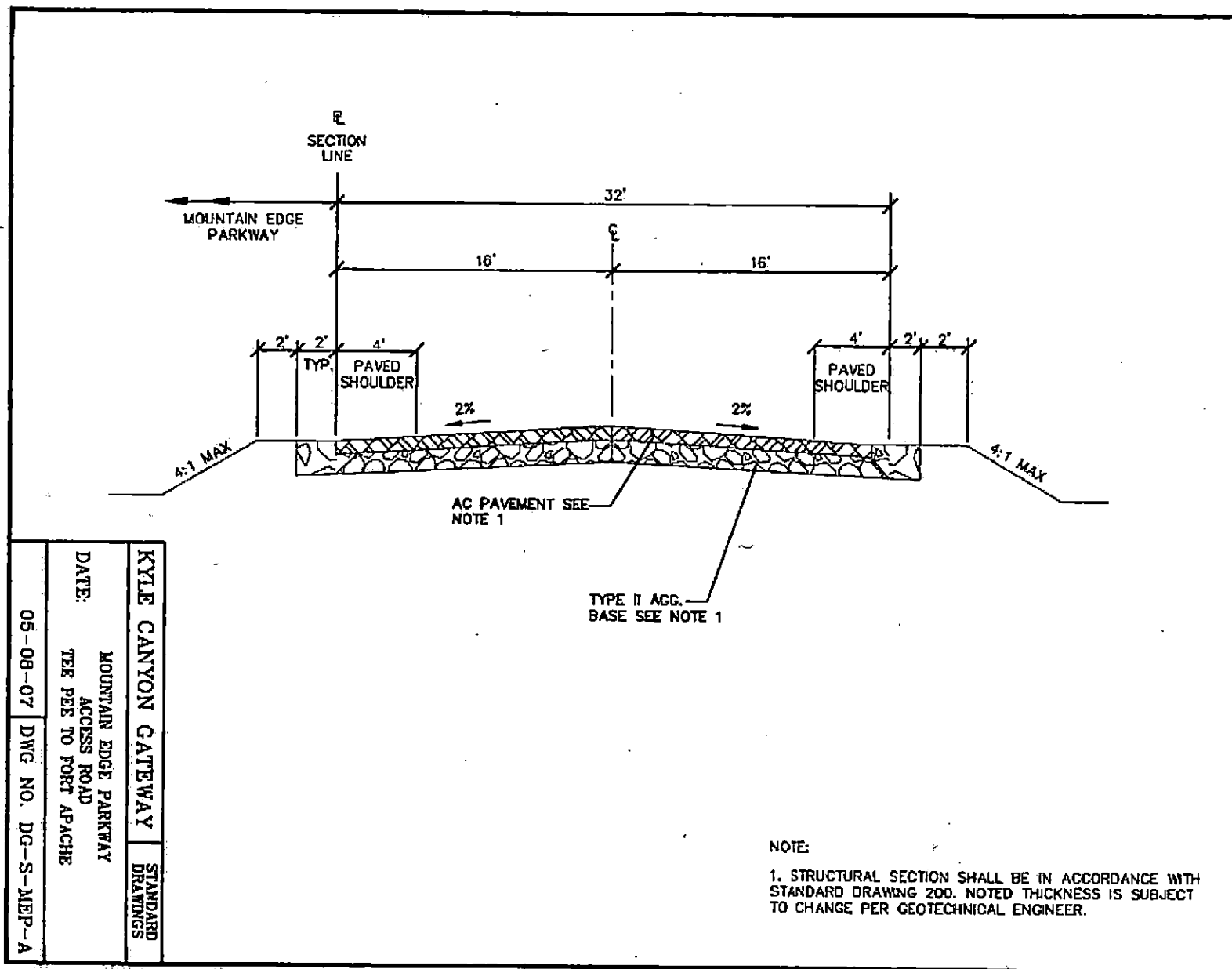
DWG NO. DG-S-T2

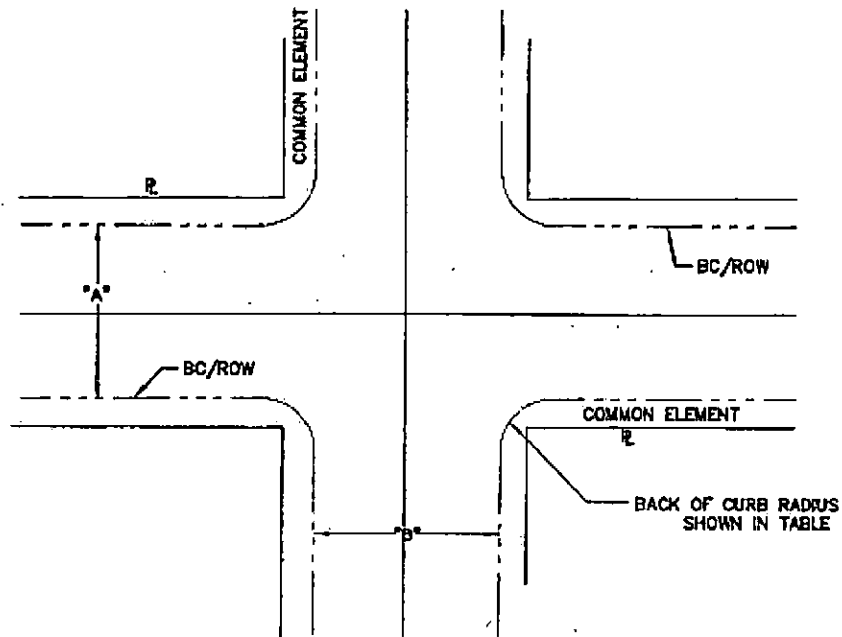


KYLE CANYON GATEWAY	STANDARD DRAWINGS
MULTI-USE TRAIL	
DATE: 05-08-07	DWG NO. DG-S-T3



KYLE CANYON GATEWAY	STANDARD DRAWINGS
ARROYO TRAIL	
DATE: 05-08-07	DWG NO. DG-S-T4



**STREET CLASSIFICATION**

1. MULTI-LANE BOULEVARD
2. MULTI-LANE BOULEVARD
3. MULTI-LANE BOULEVARD
4. TWO LANE BOULEVARD
5. MULTI-LANE BOULEVARD
6. MULTI-LANE COLLECTOR
7. TWO LANE CONNECTOR
8. THREE LANE CONNECTOR
9. CONNECTOR STREET AT SUBSTATION
10. CONNECTOR STREET
11. NEIGHBORHOOD STREET
12. NEIGHBORHOOD STREET AT PARKS
13. ARTERIAL AND FRONTAGE ROADS

STREET SECTIONS

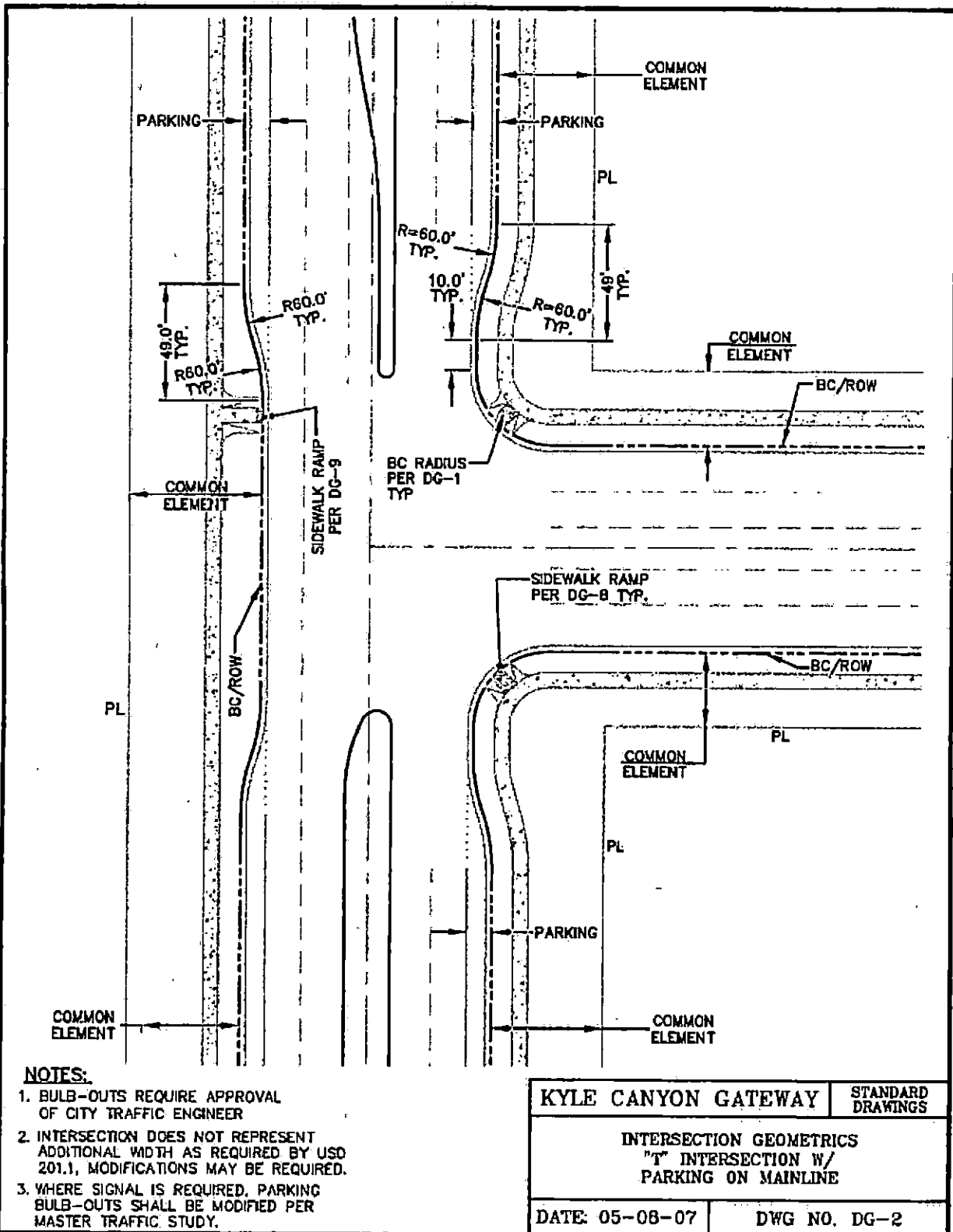
- HORSE DRIVE (A1)
- NORTH HUALAPAI WAY (A2)
- HUALAPAI WAY (A3)(A3A)(A3B)
TEE PEE LANE (P7A)(B4)
- SHAUMBER ROAD (B1)
BRENT LANE (P7)
IRON MOUNTAIN (P6)
- EGAN CREST (B3)(B3A)(B3B)
KYLEGATE (B4)(B4B)
- (B5)(B5A)(A3C)
- NORTH TEE PEE LANE (C1)
VIBRATO (C2)
- (C3)(C4)
O'HARE (C4)
LOG CABIN DRIVE (C4)
- (C4D)
- (C6)
- WITHIN NEIGHBORHOODS (D1)
- WITHIN NEIGHBORHOODS (D2)
- GRAND TETON (P1)(P1A)
IRON MOUNTAIN (P2)(P3)
GRAND CANYON (P4)(P5)
FORT APACHE (P8)(P8A)(P9)
OSO BLANCA (P10)
SKY PONTE (P10A)(P10B)(P10C)

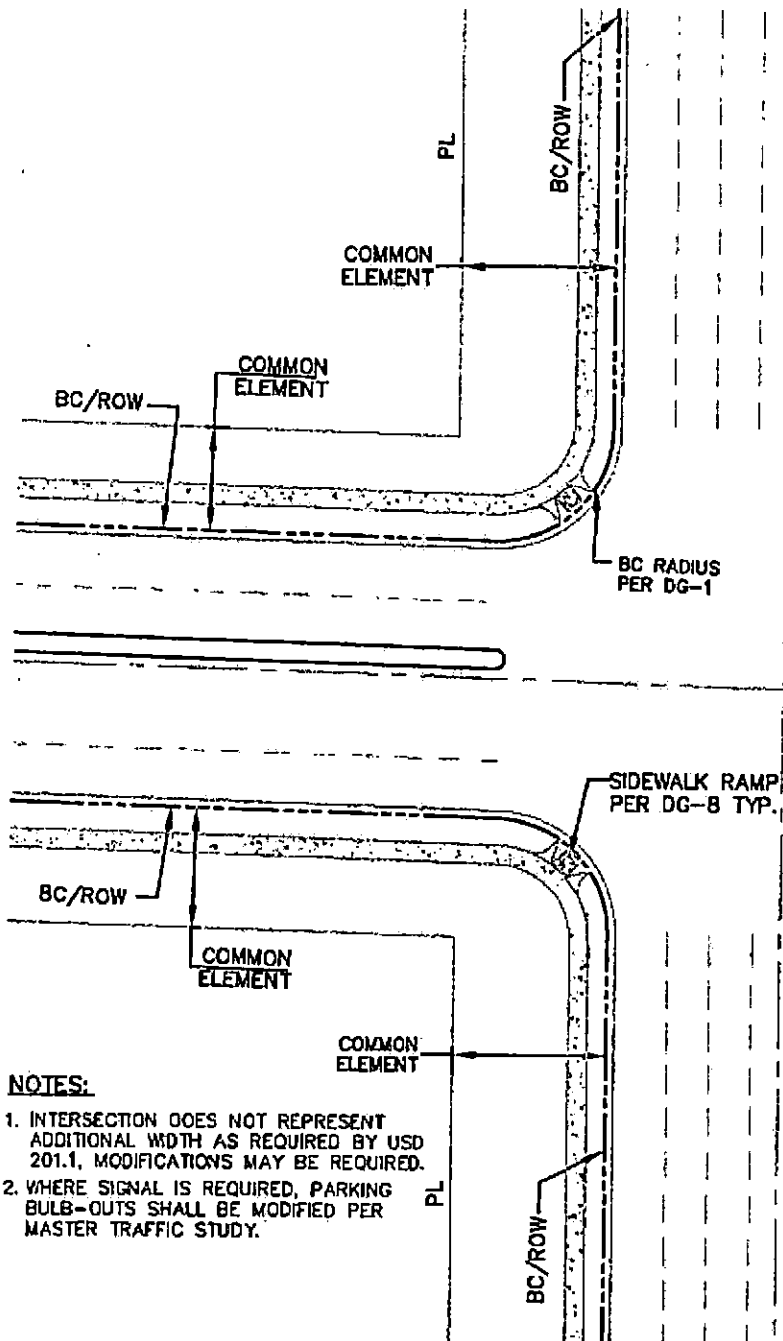
		STREET CLASSIFICATION		
STREET CLASSIFICATION	"B"	7, 8, 9, 11, 12	2, 3, 4, 5, 6, 10	1, 13
	"A"			
	7, 8, 9, 11, 12	20'	25'	30'
	2, 3, 4, 5, 6, 10	25'	30'	30'
	1, 13	30'	30'	30'

KYLE CANYON GATEWAY**STANDARD
DRAWINGS****MINIMUM BACK OF CURB RADIUS**

DATE: 05-08-07

DWG NO. DG-1



**NOTES:**

1. INTERSECTION DOES NOT REPRESENT ADDITIONAL WIDTH AS REQUIRED BY USD 201.1, MODIFICATIONS MAY BE REQUIRED.
2. WHERE SIGNAL IS REQUIRED, PARKING BULB-OUTS SHALL BE MODIFIED PER MASTER TRAFFIC STUDY.

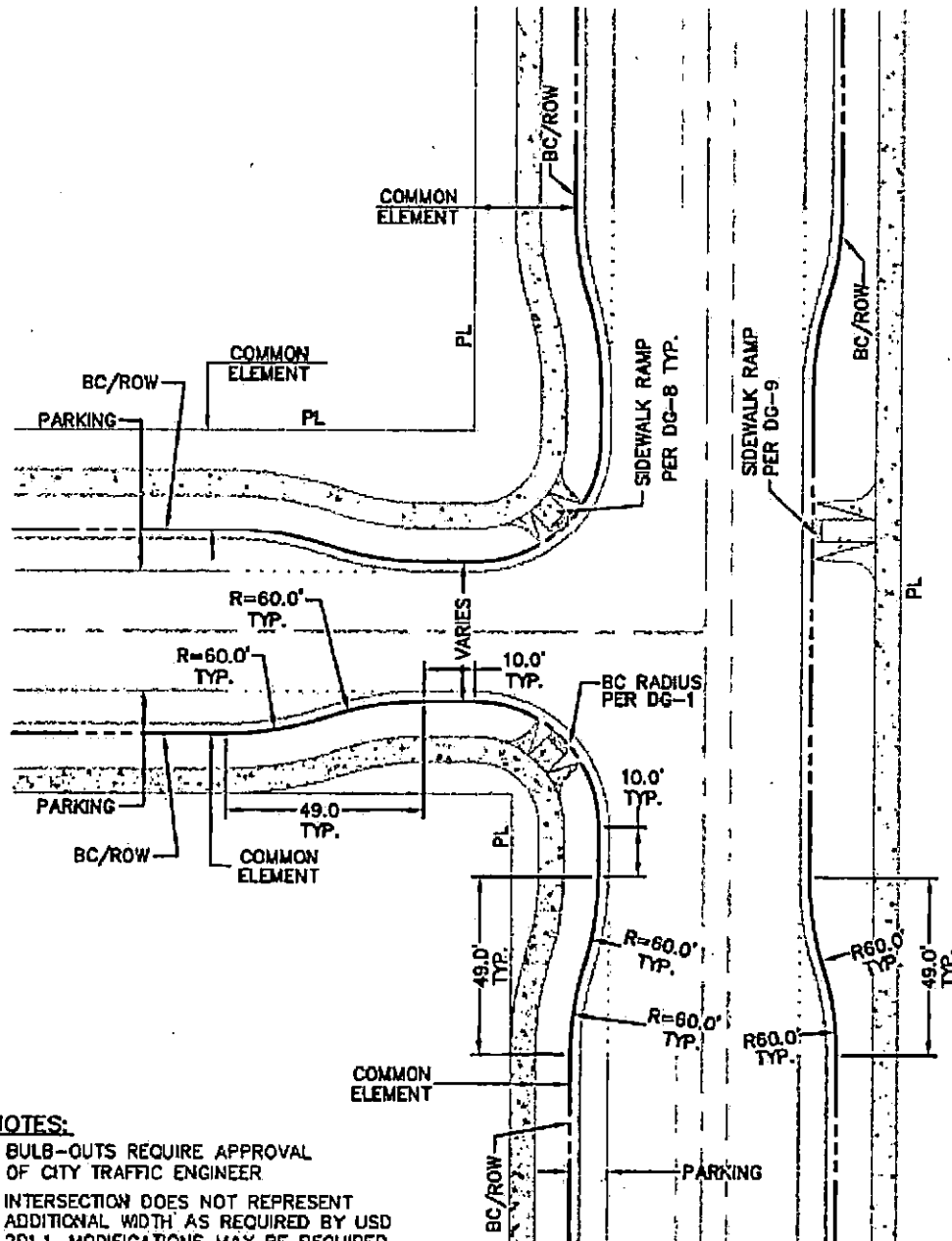
KYLE CANYON GATEWAY

STANDARD
DRAWINGS

INTERSECTION GEOMETRICS
"T" INTERSECTION W/
NO PARKING

DATE: 05-08-07

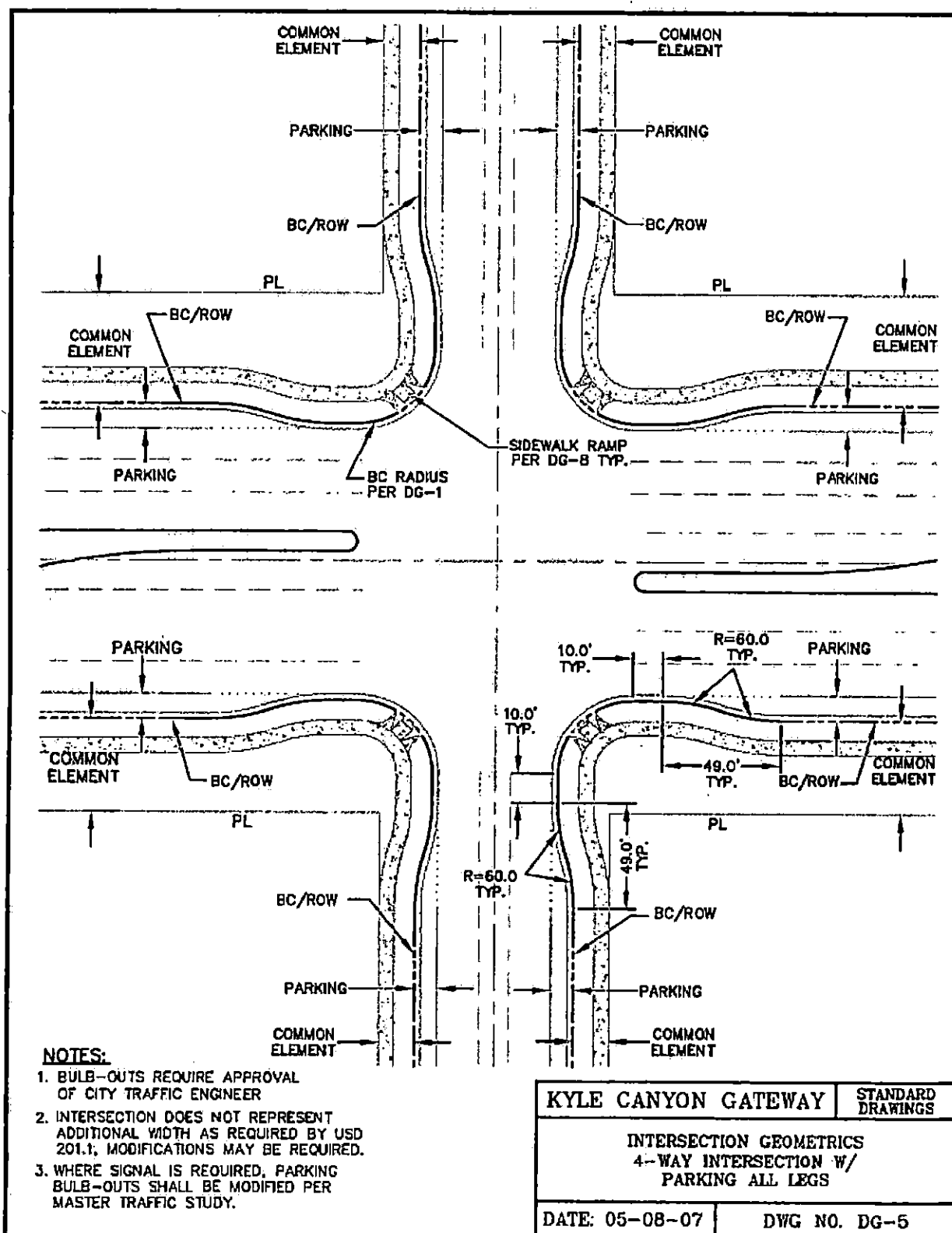
DWG NO. DG-3

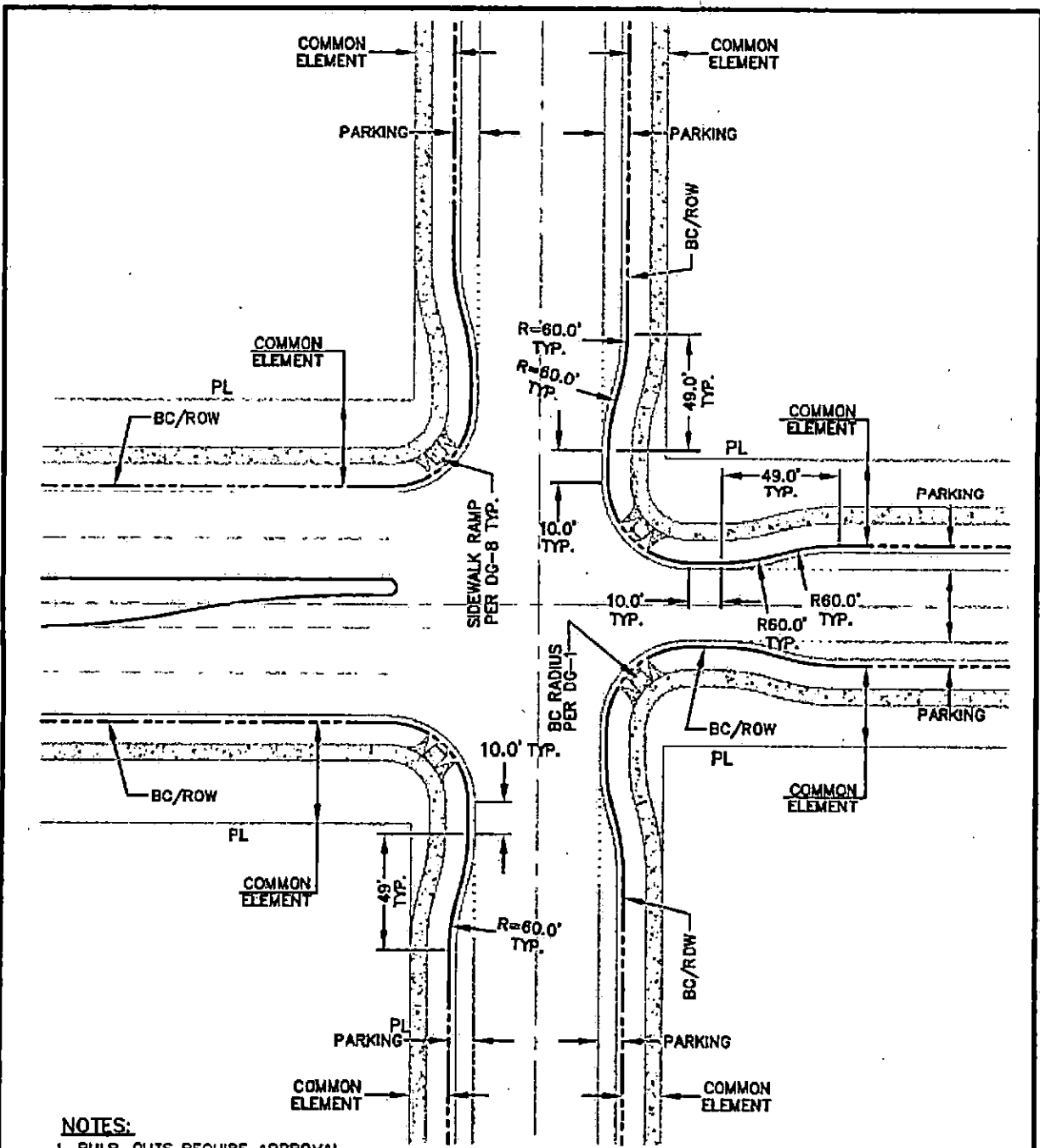


NOTES:

1. BULB-OUTS REQUIRE APPROVAL OF CITY TRAFFIC ENGINEER
2. INTERSECTION DOES NOT REPRESENT ADDITIONAL WIDTH AS REQUIRED BY USD 201.1, MODIFICATIONS MAY BE REQUIRED.
3. WHERE SIGNAL IS REQUIRED, PARKING BULB-OUTS SHALL BE MODIFIED PER MASTER TRAFFIC STUDY.

KYLE CANYON GATEWAY	STANDARD DRAWINGS
INTERSECTION GEOMETRICS "T" INTERSECTION W/ PARKING ON BOTH LEGS	
DATE: 05-08-07	DWG NO. DG-4

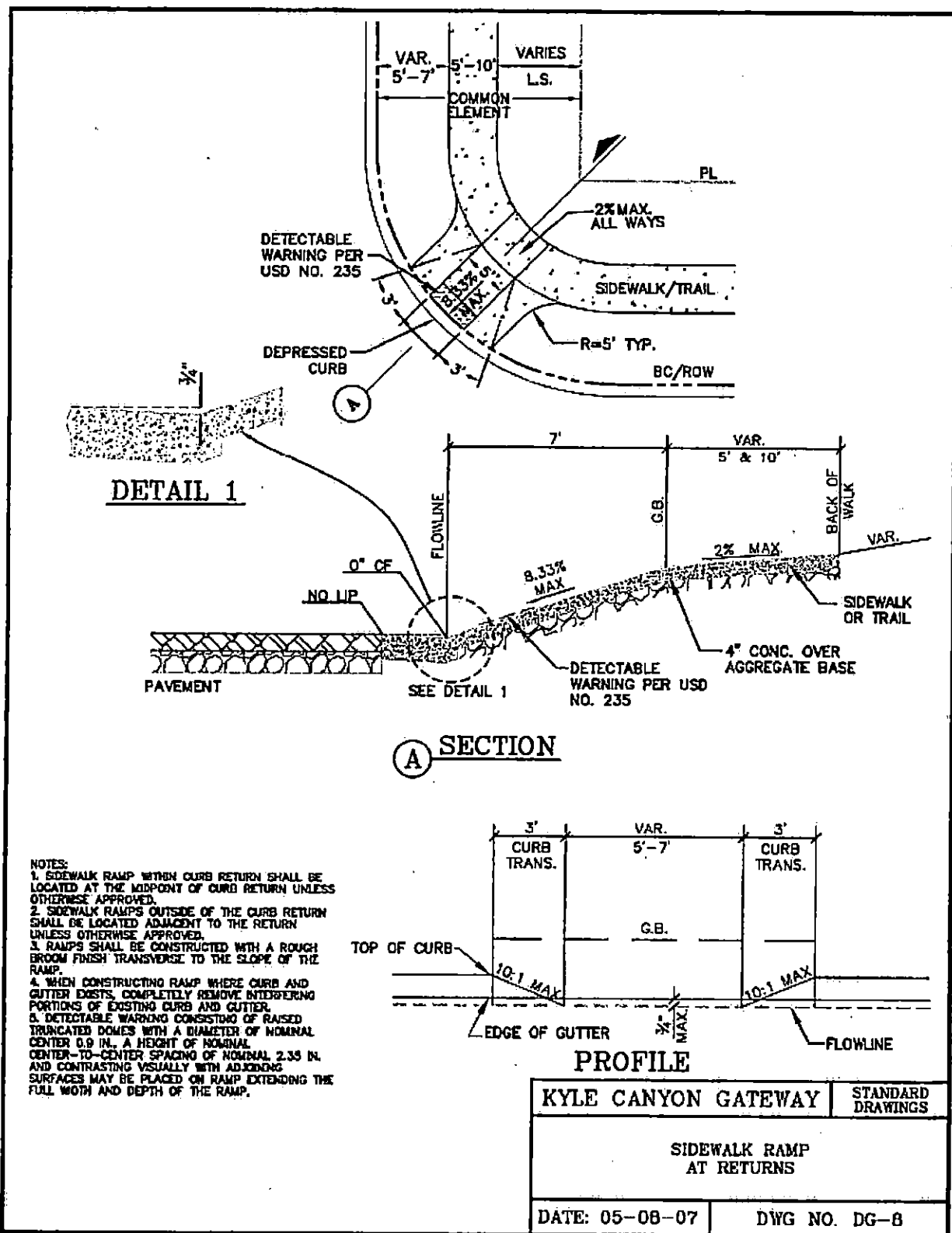


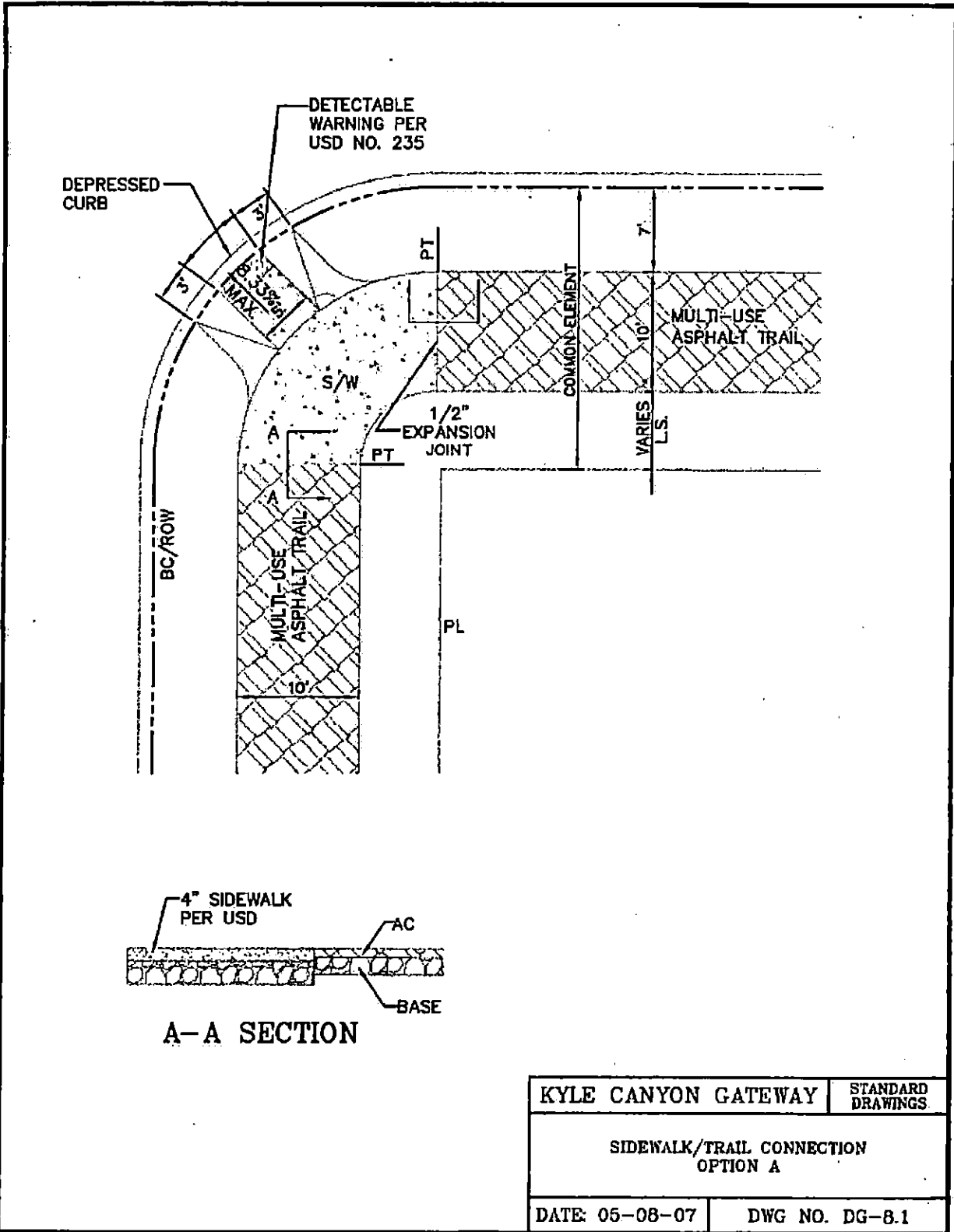


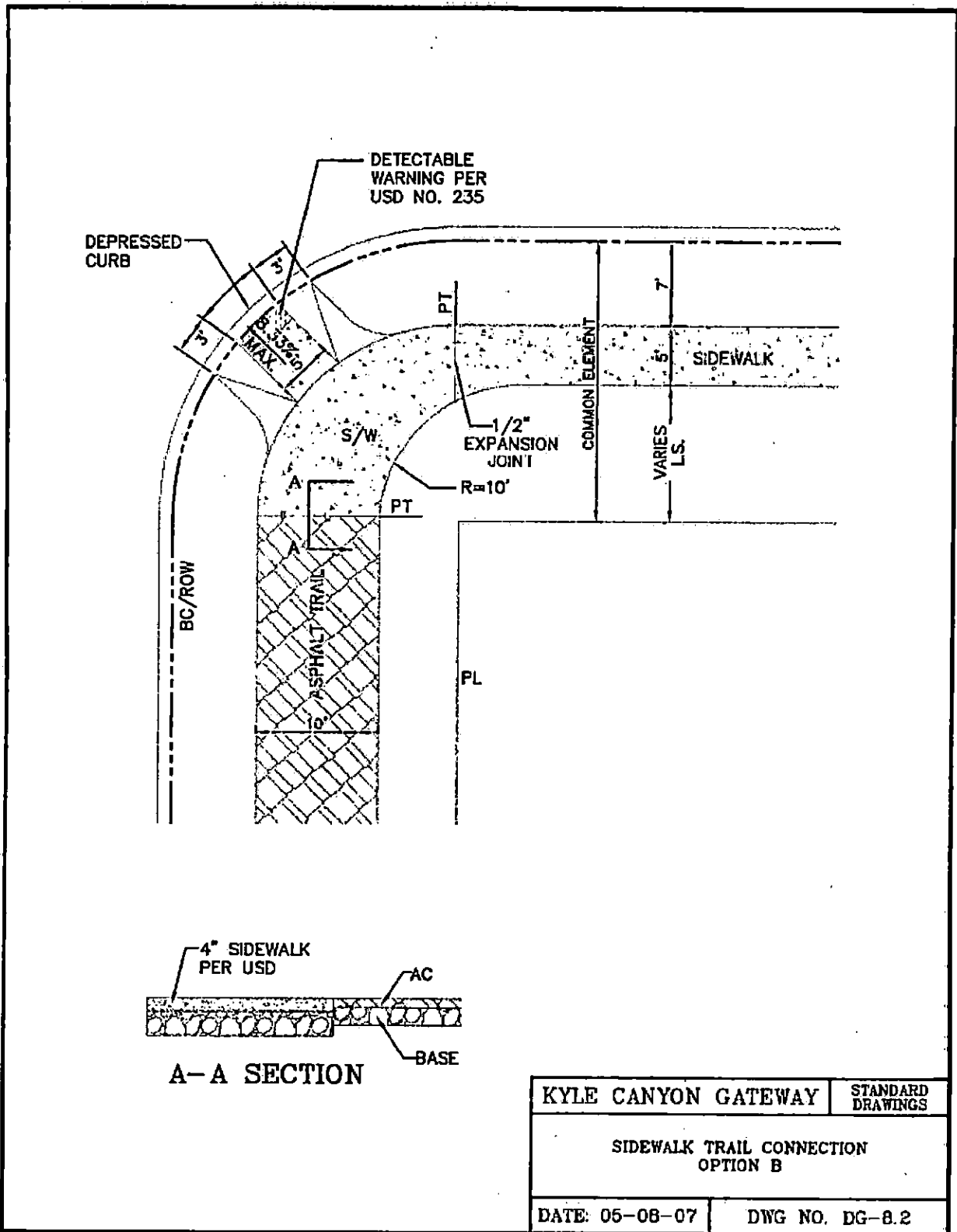
NOTES:

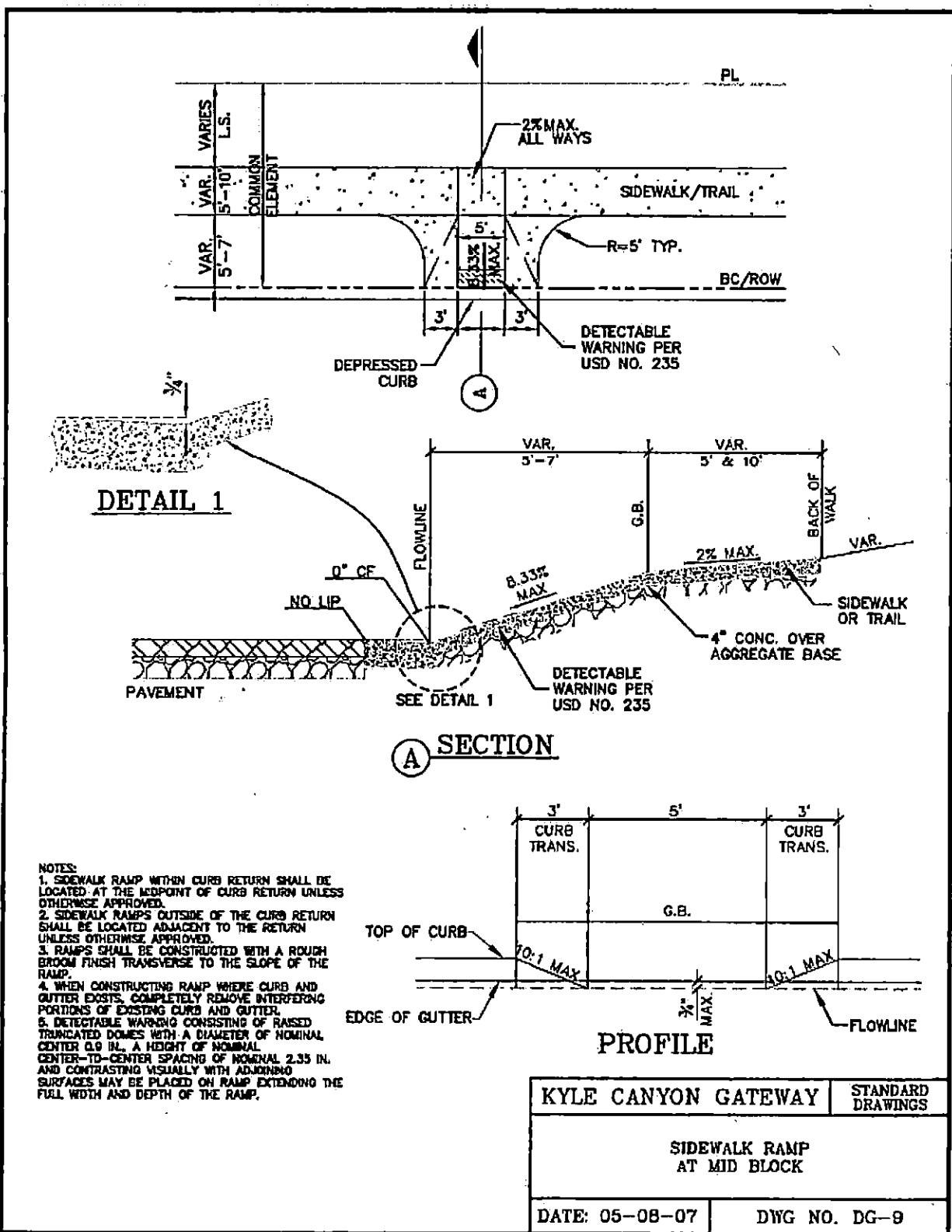
1. BULB-OUTS REQUIRE APPROVAL OF CITY TRAFFIC ENGINEER
2. INTERSECTION DOES NOT REPRESENT ADDITIONAL WIDTH AS REQUIRED BY USD 201.1, MODIFICATIONS MAY BE REQUIRED.
3. WHERE SIGNAL IS REQUIRED, PARKING BULB-OUTS SHALL BE MODIFIED PER MASTER TRAFFIC STUDY.

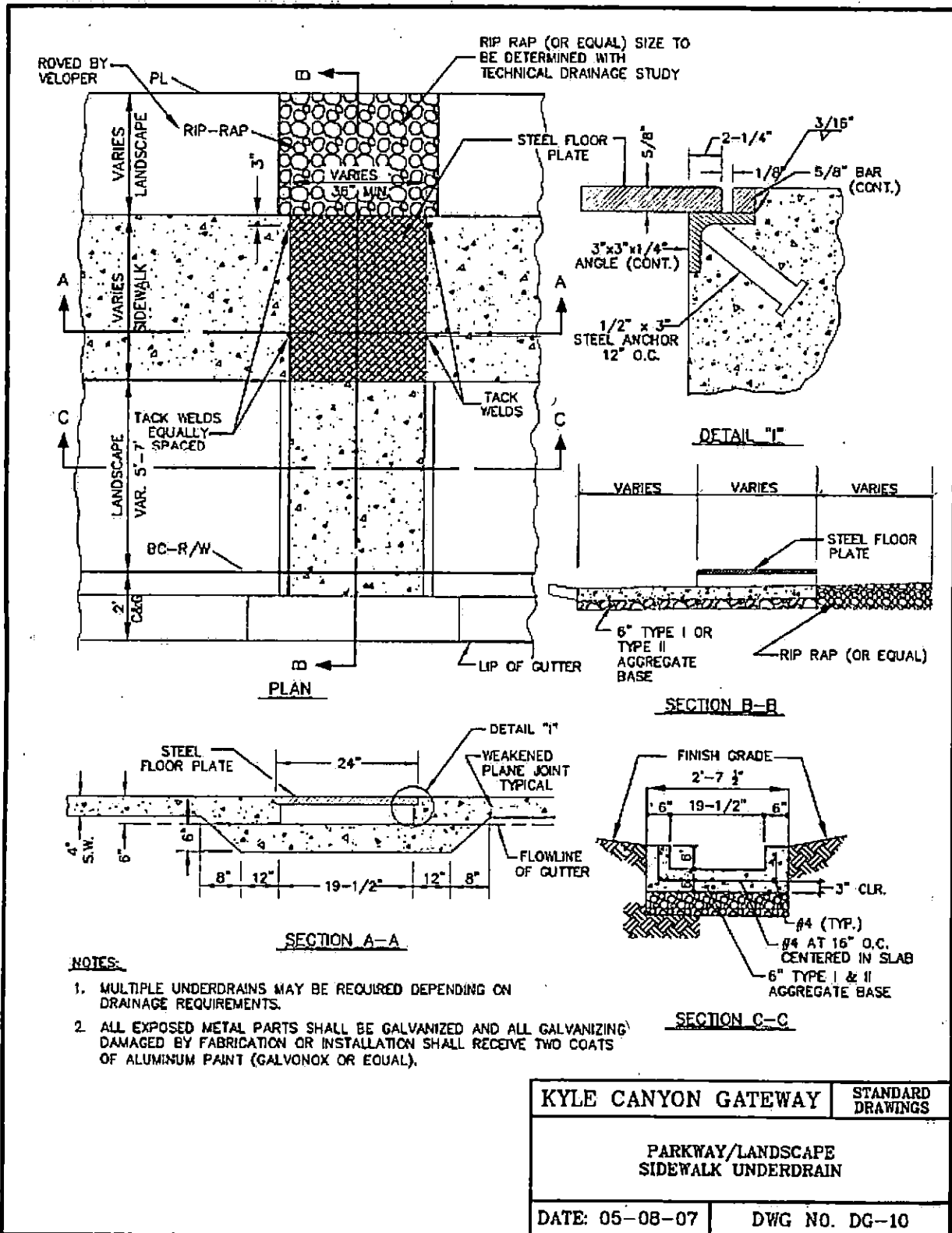
KYLE CANYON GATEWAY		STANDARD DRAWINGS
INTERSECTION GEOMETRICS 4-WAY INTERSECTION W/ PARKING ON 3 LEGS		
DATE: 05-08-07	DWG NO. DG-6	

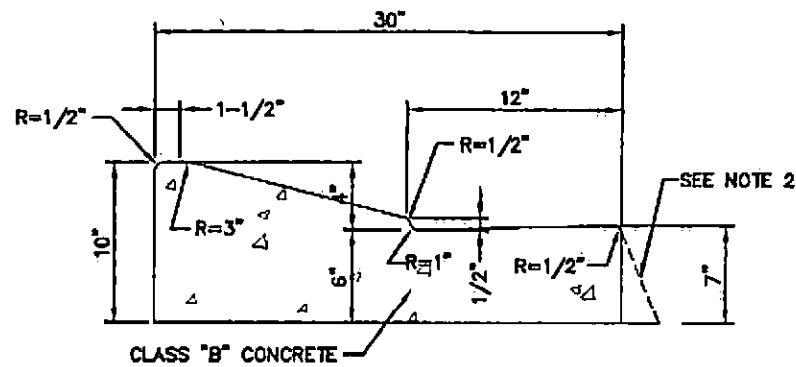












NOTES:

1. CONSTRUCT 1/2" EXPANSION JOINT AT ALL COLD JOINTS, AT BEGINNING AND END OF CURB RETURNS, AND AT 300 FT. MAX. INTERVALS FOR FORMED CURB. FOR JOINT DETAILS, SEE USD DWG. NO. 234.
2. ONE INCH BATTER AT CURB FACE IS OPTIONAL.
3. INSTALL 6" TYPE II AGGREGATE BASE UNDER CURB AND GUTTER, TYP.

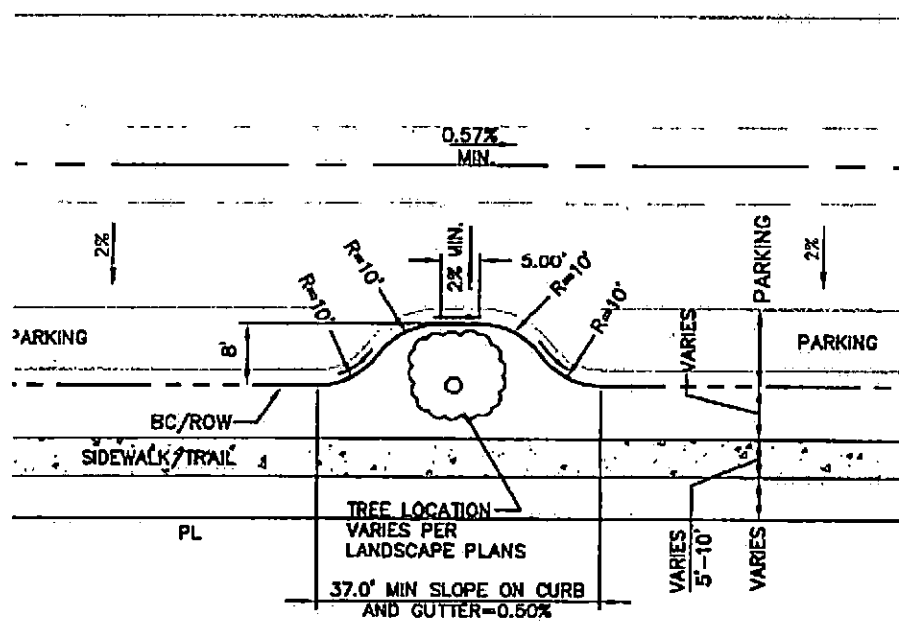
KYLE CANYON GATEWAY

STANDARD
DRAWINGS

30" WEDGE CURB
AND GUTTER

DATE: 05-08-07

DWG NO. DG-11

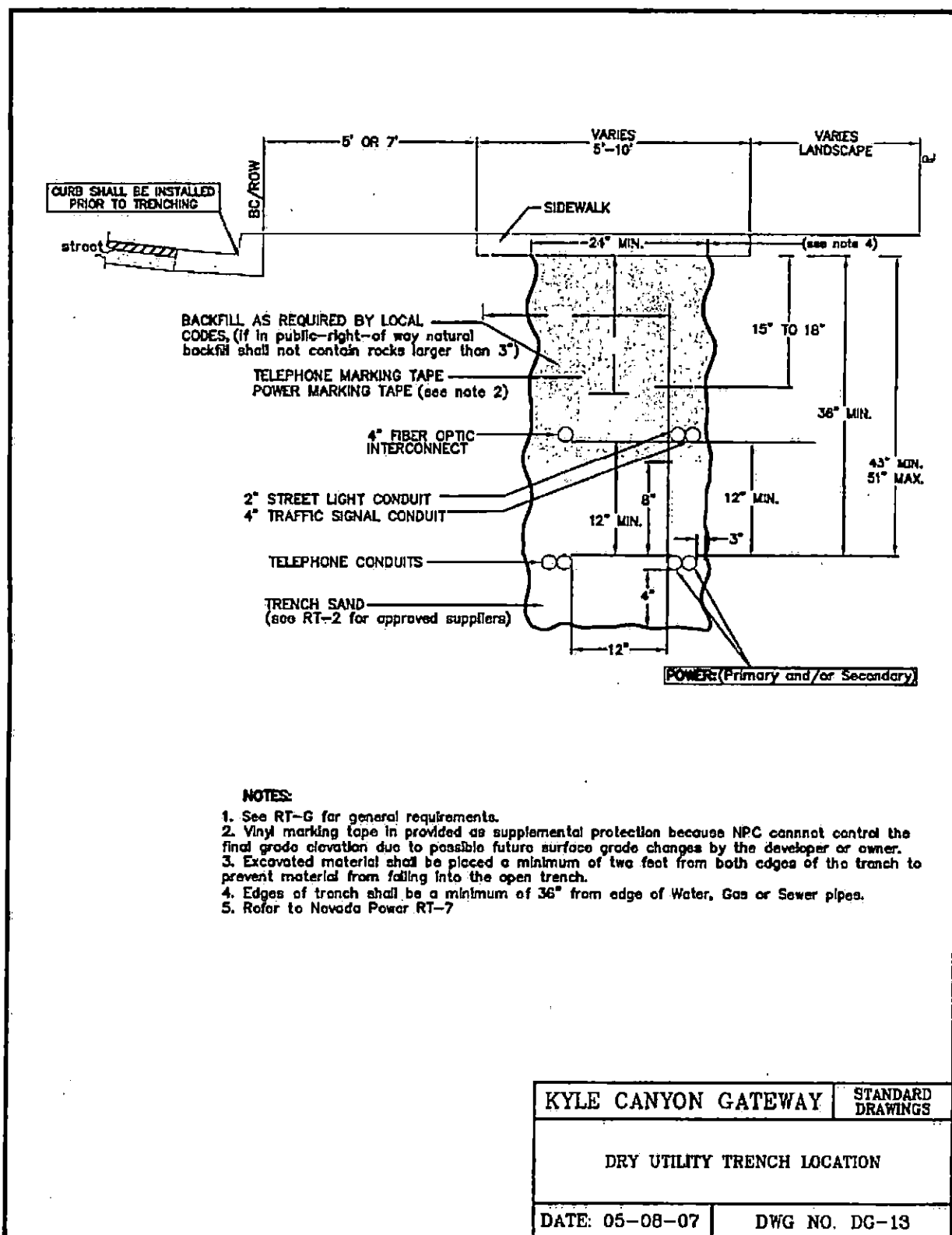


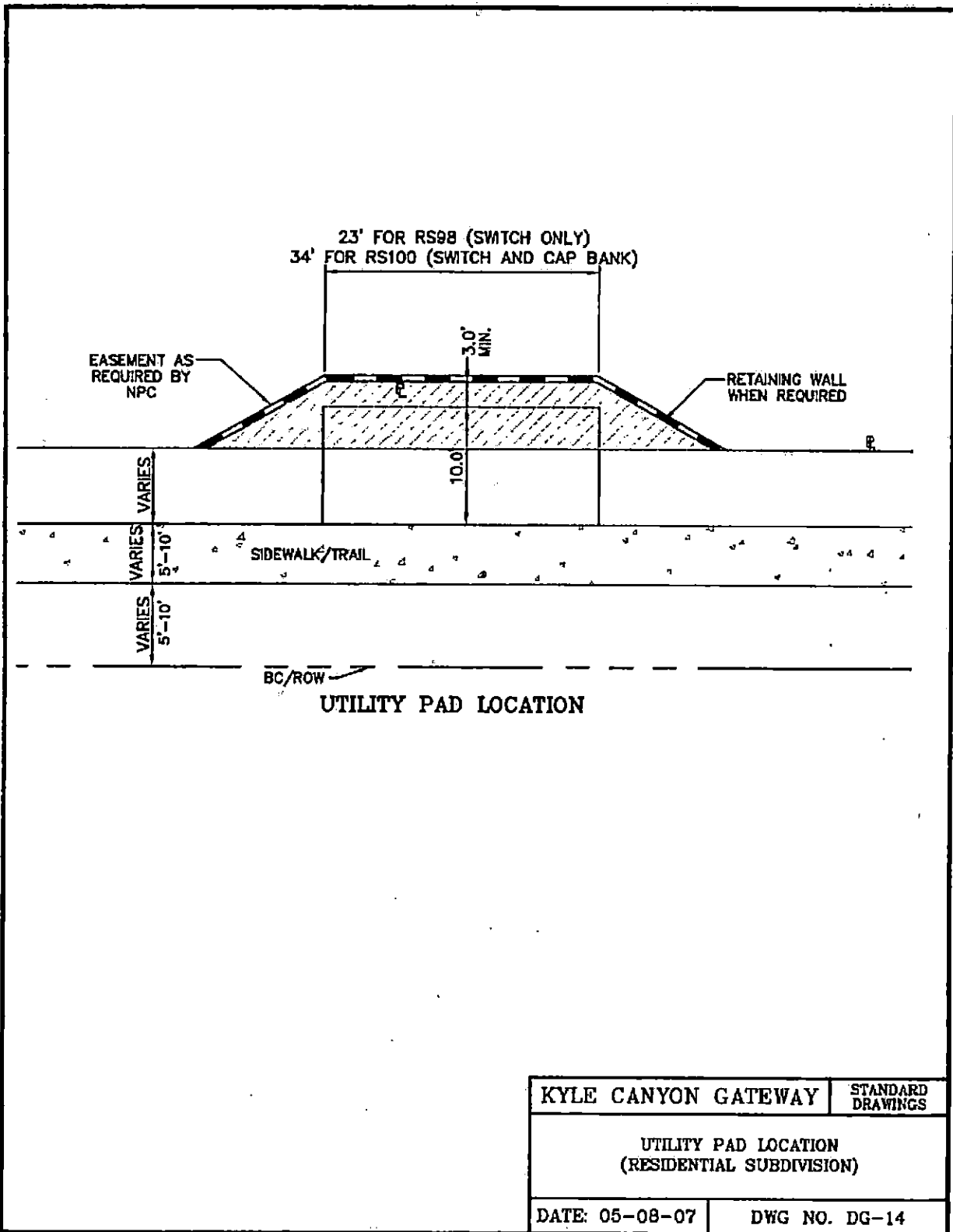
NOTE:
MIN. STREET GRADE WHERE TREE
WELLS ARE ALLOWED IS 0.57%

NOTES:

1. "BULB-OUTS REQUIRE APPROVAL
OF CITY TRAFFIC ENGINEER"

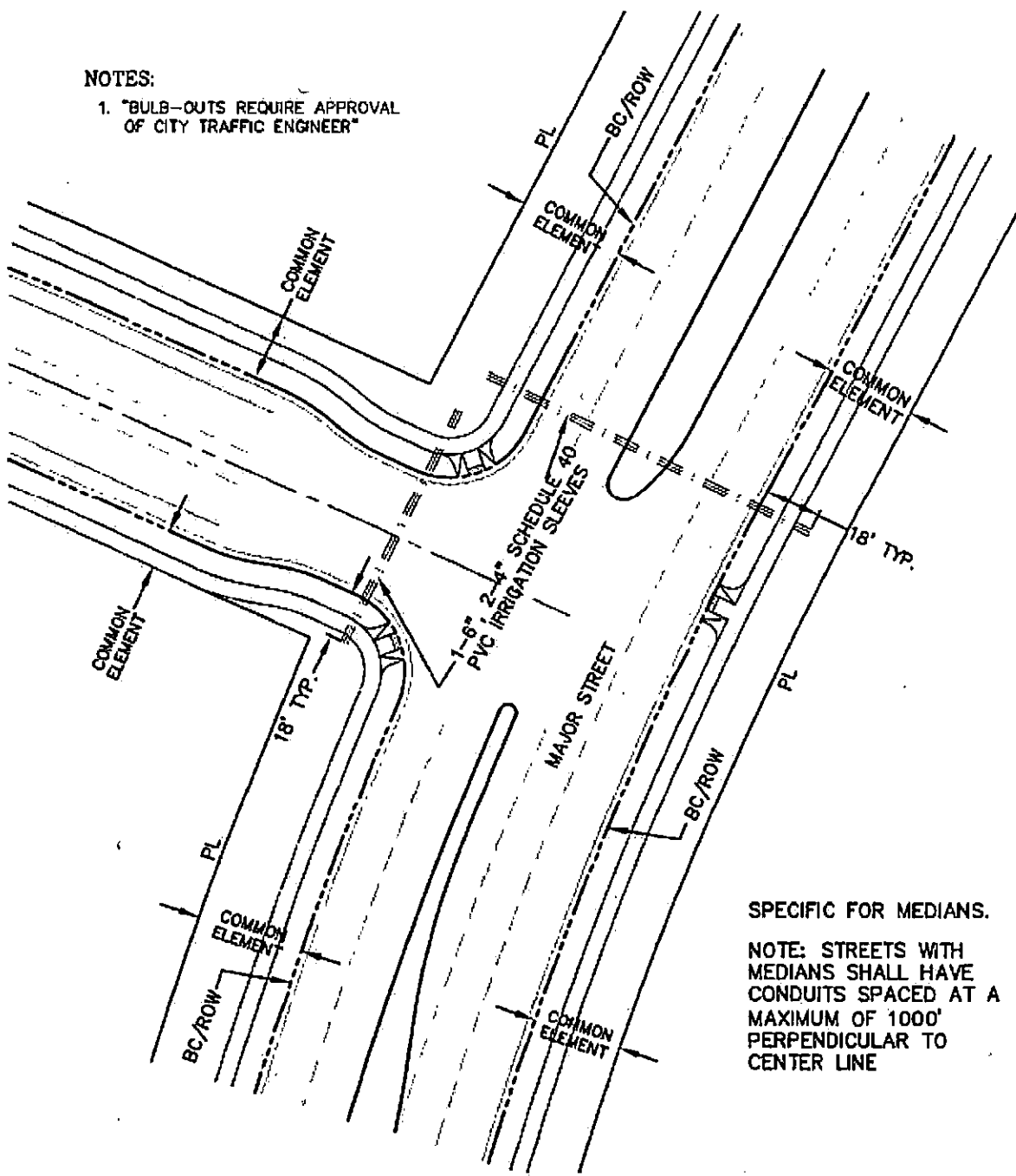
KYLE CANYON GATEWAY	STANDARD DRAWINGS
PARKING TREE WELL	
DATE: 05-08-07	DWG NO. DG-12





NOTES:

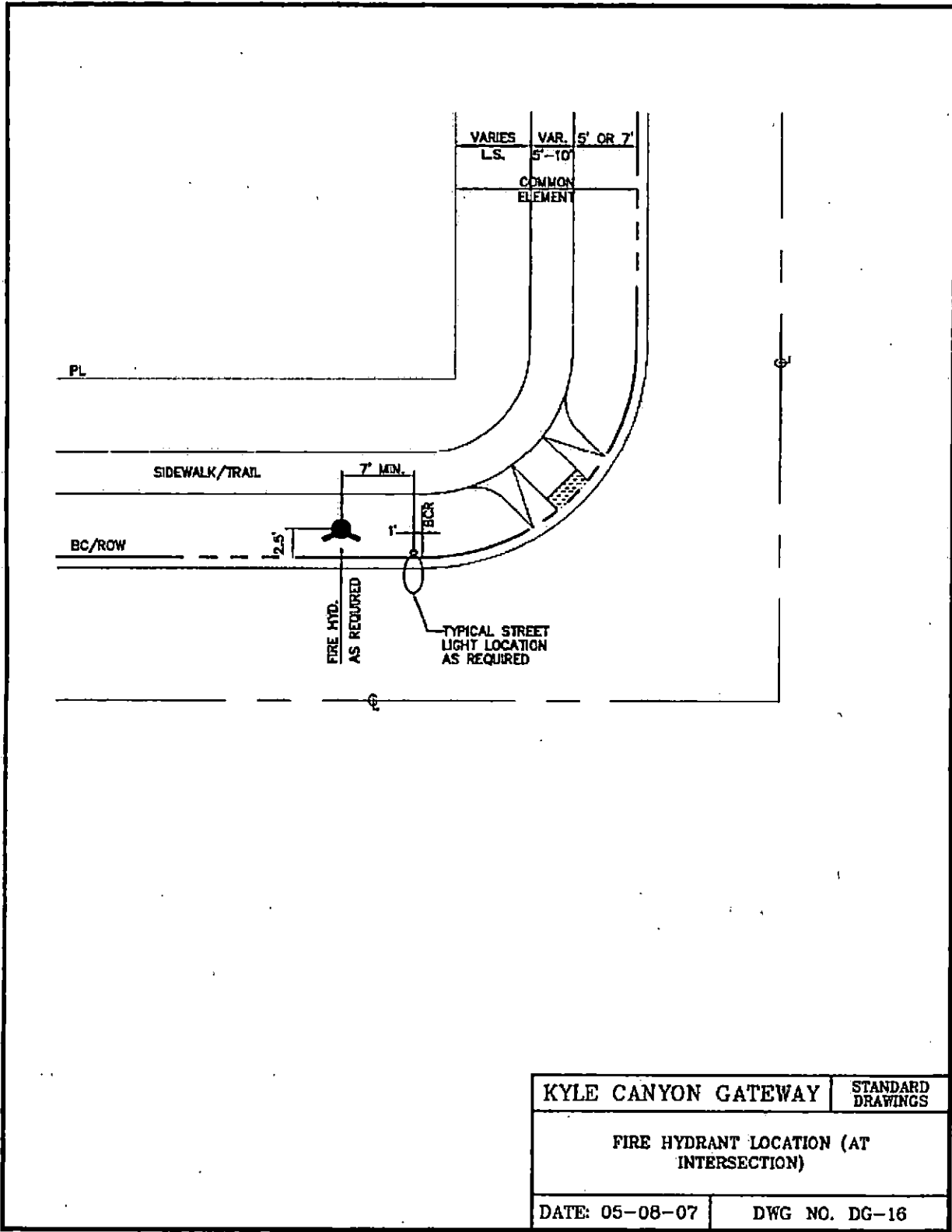
1. "BULB-OUTS REQUIRE APPROVAL OF CITY TRAFFIC ENGINEER"

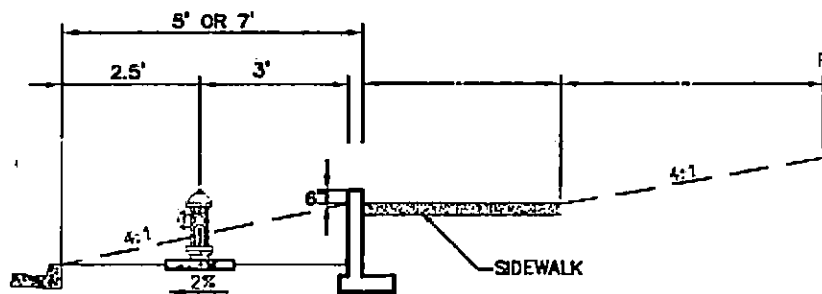
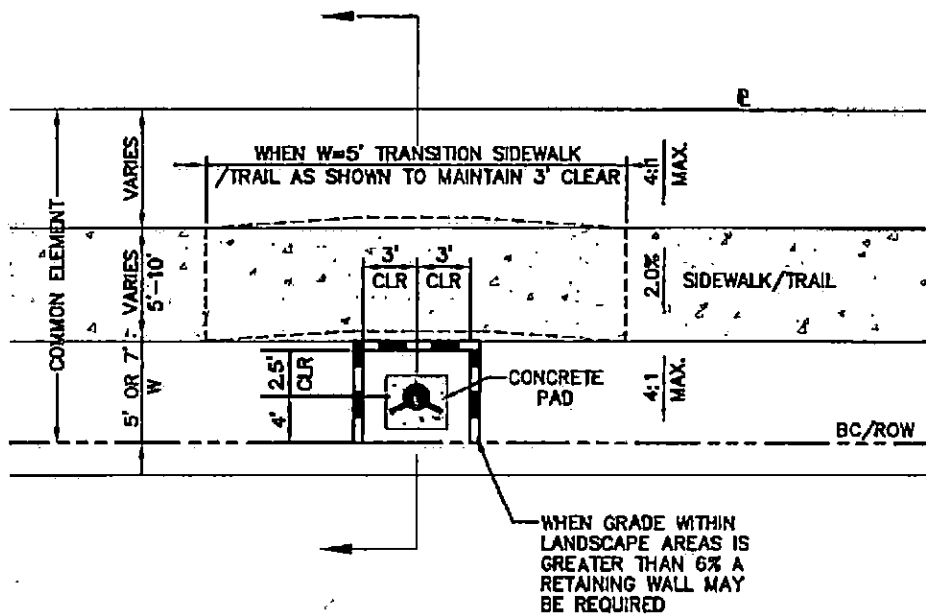


SPECIFIC FOR MEDIANS.

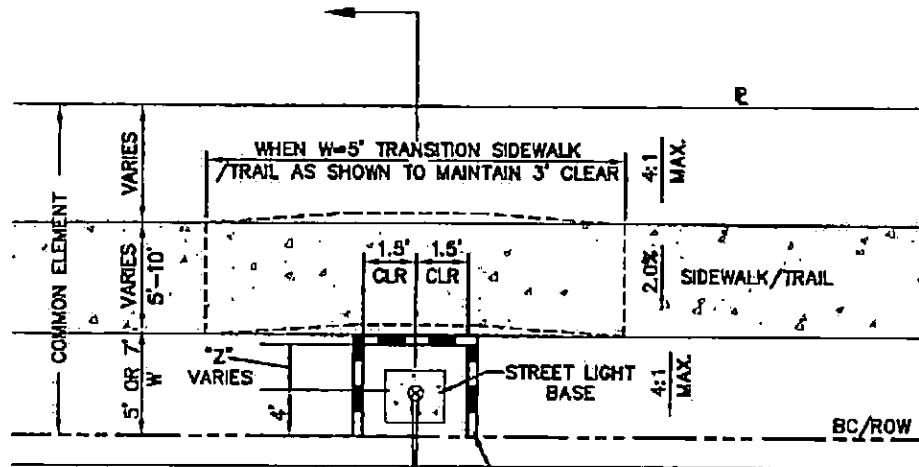
NOTE: STREETS WITH MEDIANS SHALL HAVE CONDUITS SPACED AT A MAXIMUM OF 1000' PERPENDICULAR TO CENTER LINE

KYLE CANYON GATEWAY	STANDARD DRAWINGS
LANDSCAPE IRRIGATION SLEEVING	
DATE: 05-08-07	DWG NO. DG-15

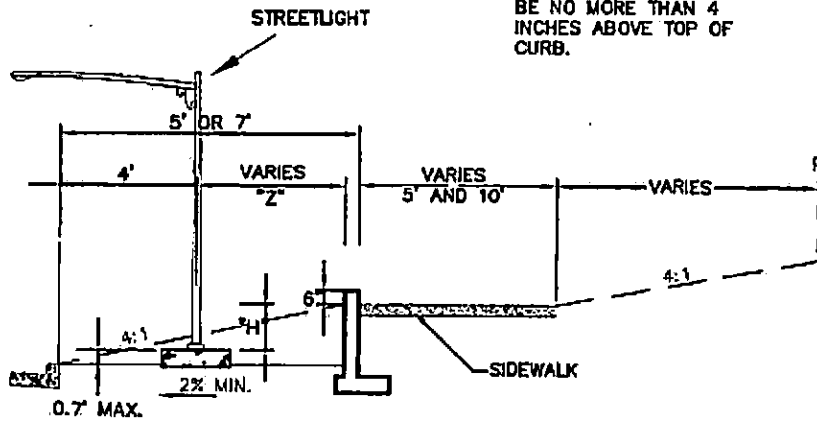




KYLE CANYON GATEWAY	STANDARD DRAWINGS
FIRE HYDRANT LOCATION (ALONG ROADWAY)	
DATE: 05-08-07	DWG NO. DG-17



RETAINING WALL, WHEN NECESSARY, REFERENCE NOTE 1 WHEN ELEVATION OF STREET LIGHT BASE DIFFERS FROM SIDEWALK ELEVATION. STEP WALL TO BE NO MORE THAN 4 INCHES ABOVE TOP OF CURB.



NOTES:

1. RETAINING WALL IS REQUIRED, AS SHOWN UNDER THE FOLLOWING CONDITIONS:
 A-"Z" IS 1.0 FOOT OR LESS AND "H" IS GREATER THAN 2.0 INCHES.
 B-"Z" IS GREATER THAN 1.0 FOOT AND SLOPE BETWEEN STREETLIGHT BASE AND TOP OF SIDEWALK EXCEEDS 4:1.
 WHERE SIGNAL IS REQUIRED, PARKING BULB-OUTS SHALL BE MODIFIED PER MASTER TRAFFIC STUDY.

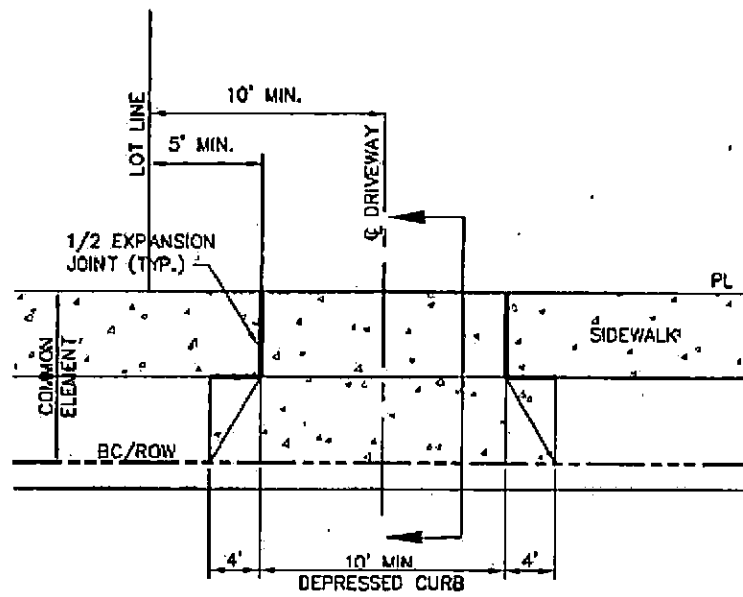
KYLE CANYON GATEWAY

STANDARD
DRAWINGS

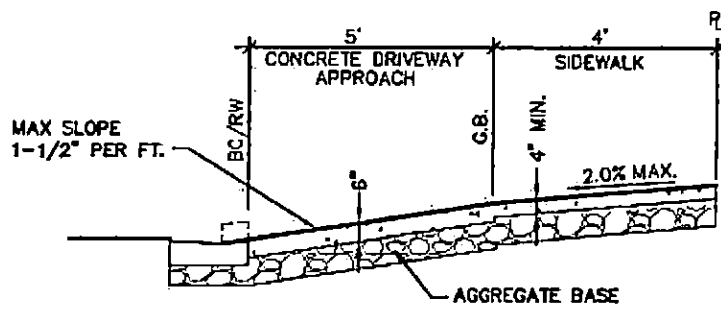
STREETLIGHT LOCATION
(ALONG ROADWAY)

DATE: 05-08-07

DWG NO. DG-17.1



PLAN



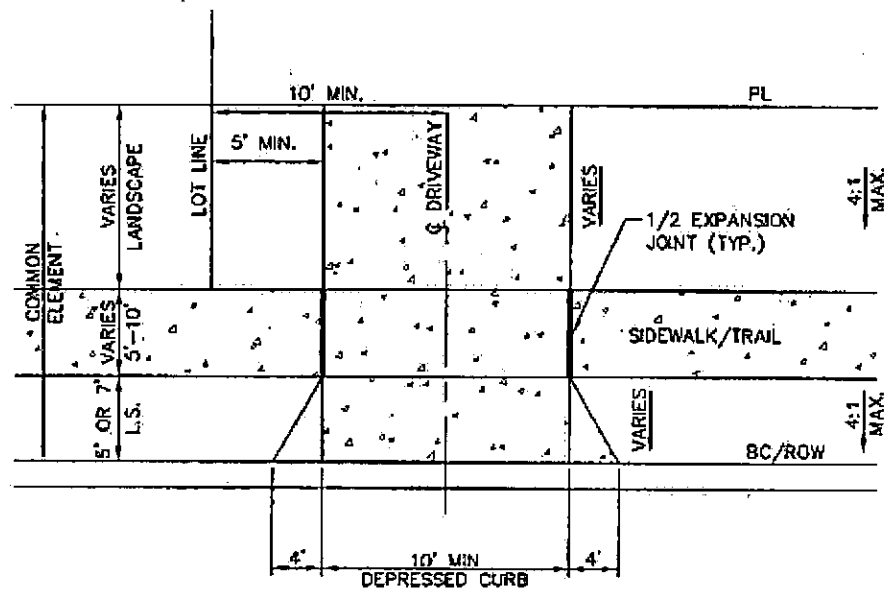
SECTION

KYLE CANYON GATEWAY	STANDARD DRAWINGS

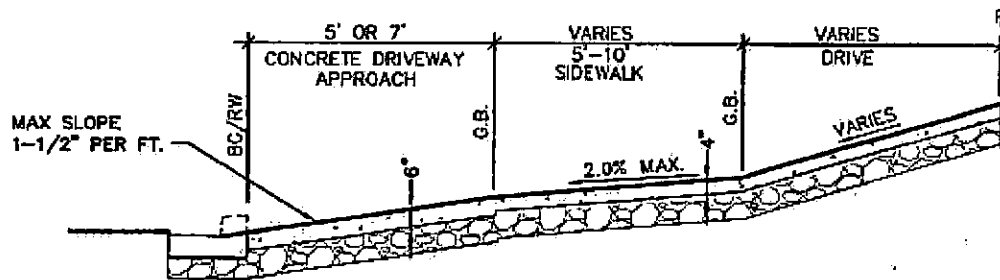
DRIVEWAY APPROACH - RESIDENTIAL (OPTION "A") (REFER TO USD #223)

DATE: 05-08-07

DWG NO. DG-18.1

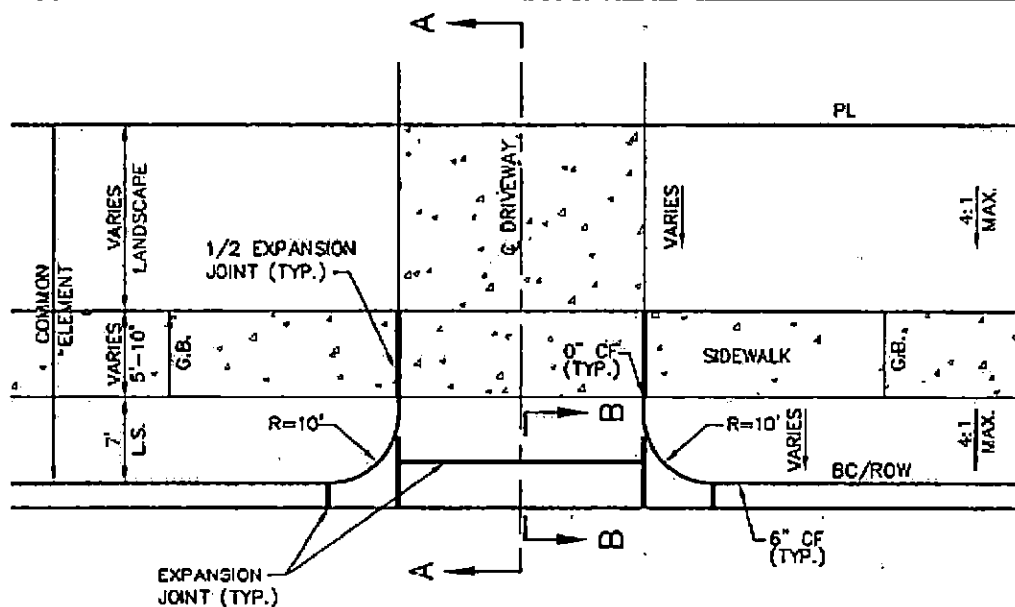


PLAN

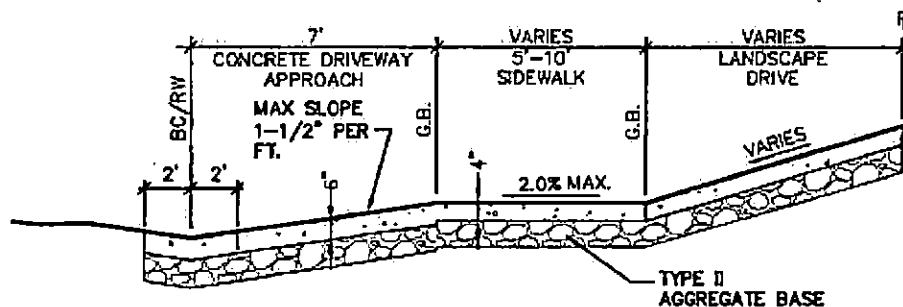


SECTION

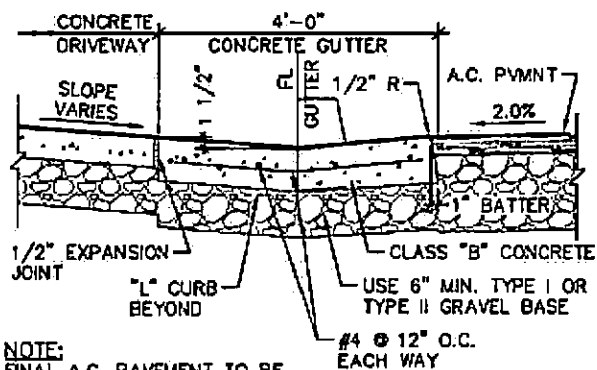
KYLE CANYON GATEWAY	STANDARD DRAWINGS
DRIVEWAY APPROACH - RESIDENTIAL (OPTION "B") (REFER TO USD #223)	
DATE: 05-08-07	DWG NO. DG-18.2



PLAN



SECTION A



NOTE:
FINAL A.C. PAVEMENT TO BE
FLUSH WITH LIP OF GUTTER
AFTER COMPACTION

SECTION B

NOTES:

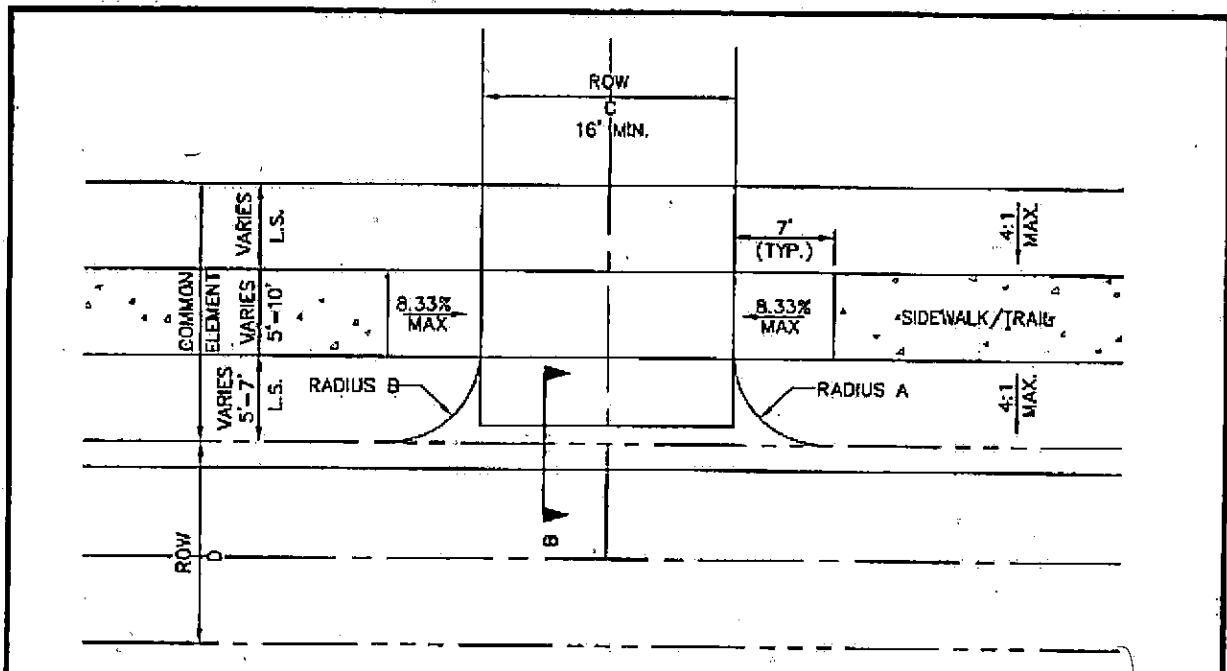
1. 32' MINIMUM DRIVEWAY WIDTH AND 25' MIN. CURB RADIUS PER CCAUSD #222A WIDTH IS REQUIRED IF DRIVEWAY SERVES MORE THAN 77 PARKING STALLS.

KYLE CANYON GATEWAY

STANDARD
DRAWINGSDRIVEWAY APPROACH - COMMERCIAL
(OPTION "B")

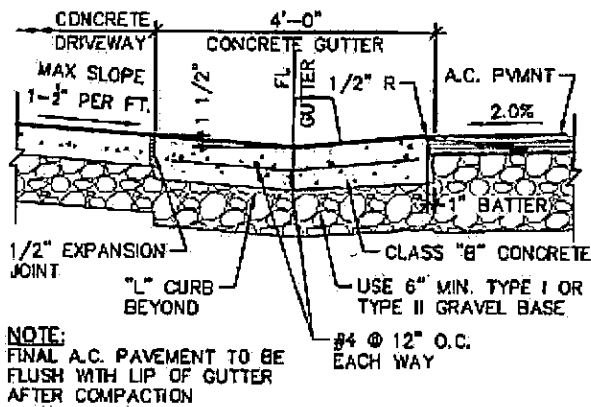
DATE: 05-08-07

DWG NO. DG-19.2



NOTES:

1. GRADE BREAK MUST BE LOCATED AT POINT OF CURVATURE OF RETURN. GRADE CHANGES TO COMPLY WITH CURRENT TRB ACCESS MANAGEMENT MANUAL.



SECTION B

- *INDICATES UPSTREAM FLOW
- **INDICATES DOWNSTREAM FLOW

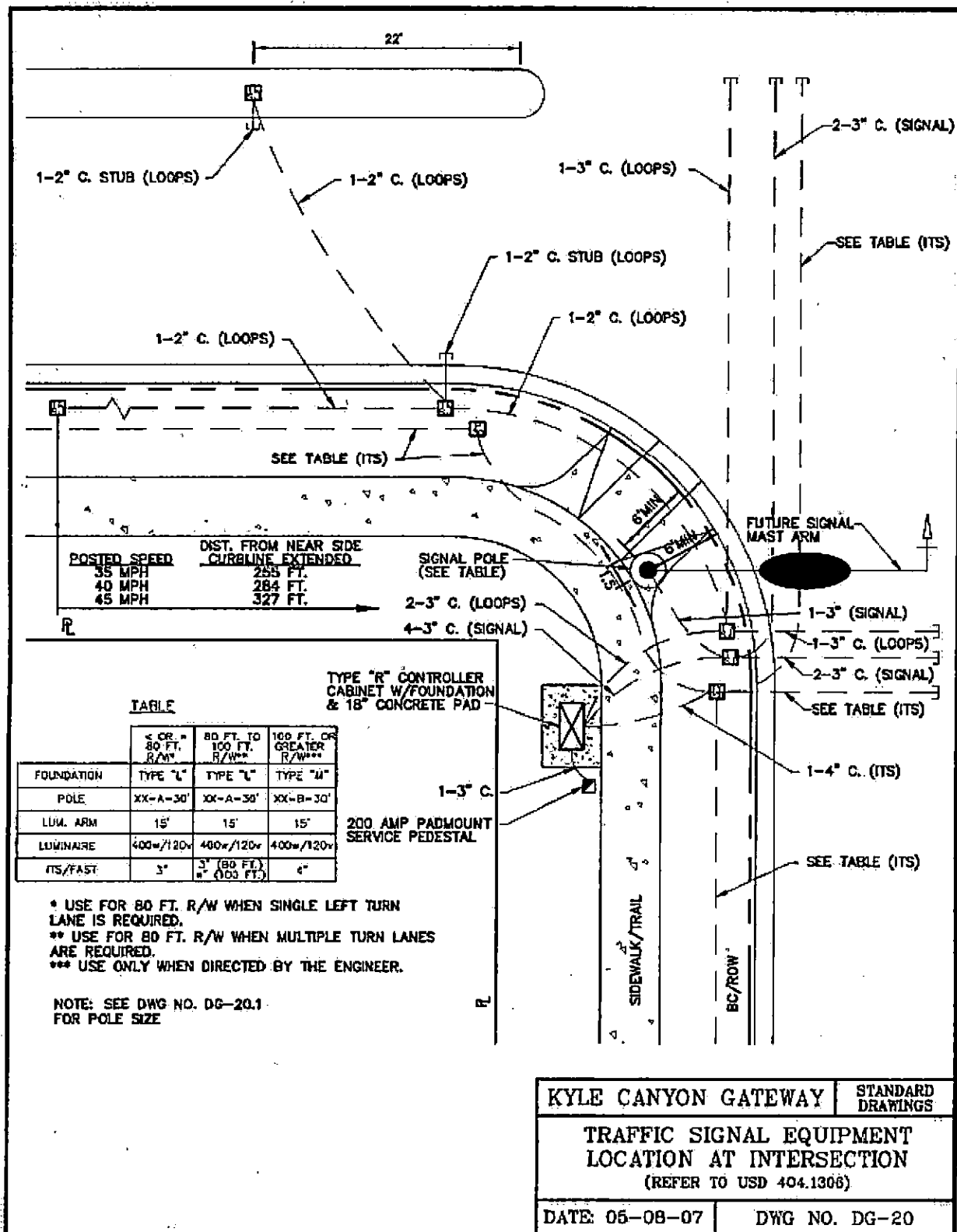
ROW		RADIUS	
C	D	*A	**B
20' ALLEY	37' STREET	15'	15'
20' ALLEY	31' STREET	15'	15'
16' ALLEY	37' STREET	15'	15'
16' ALLEY	31' STREET	20'	15'
20' ALLEY	20' ALLEY	15'	15'
16' ALLEY	16' ALLEY	25'	25'

KYLE CANYON GATEWAY STANDARD DRAWINGS

DRIVEWAY APPROACH ALLEY

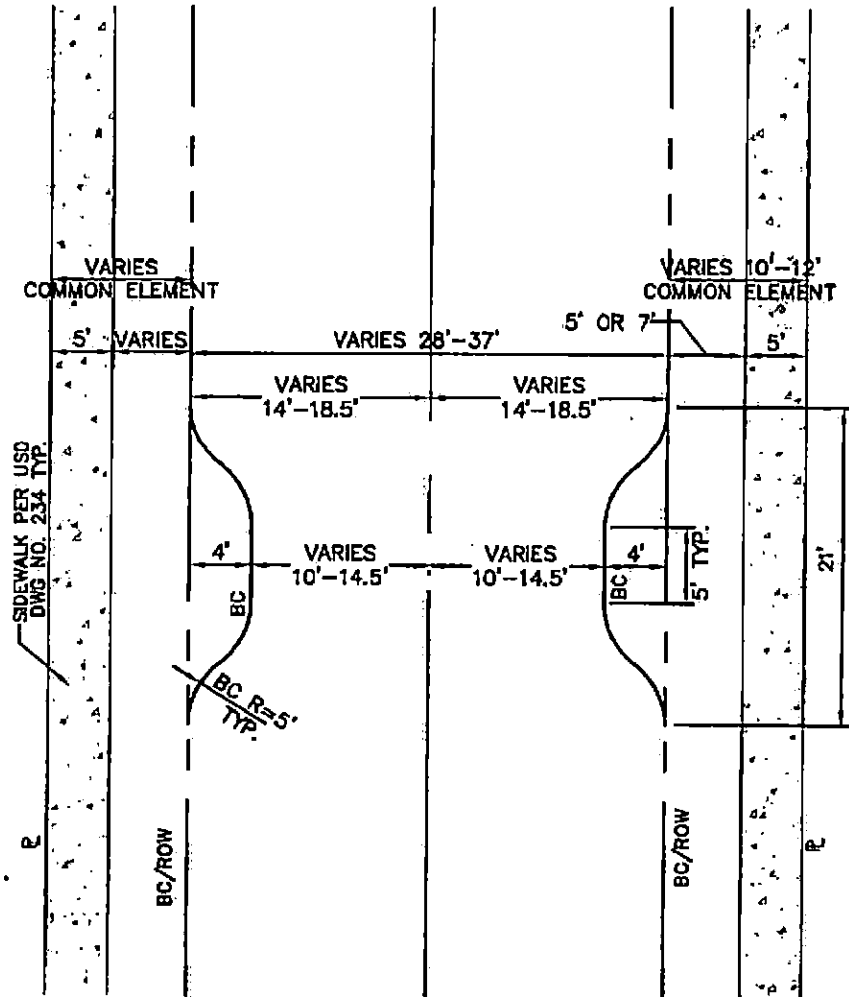
DATE: 05-08-07

DWG NO. DG-19.3



POLE SIZE TO BE DETERMINED
DETERMINED BY THE TRAFFIC
STUDY AND INTERSECTION
REQUIREMENTS

KYLE CANYON GATEWAY	STANDARD DRAWINGS
TRAFFIC SIGNAL POLE SIZE	
DATE: 05-08-07	DWG NO. DG-20.1

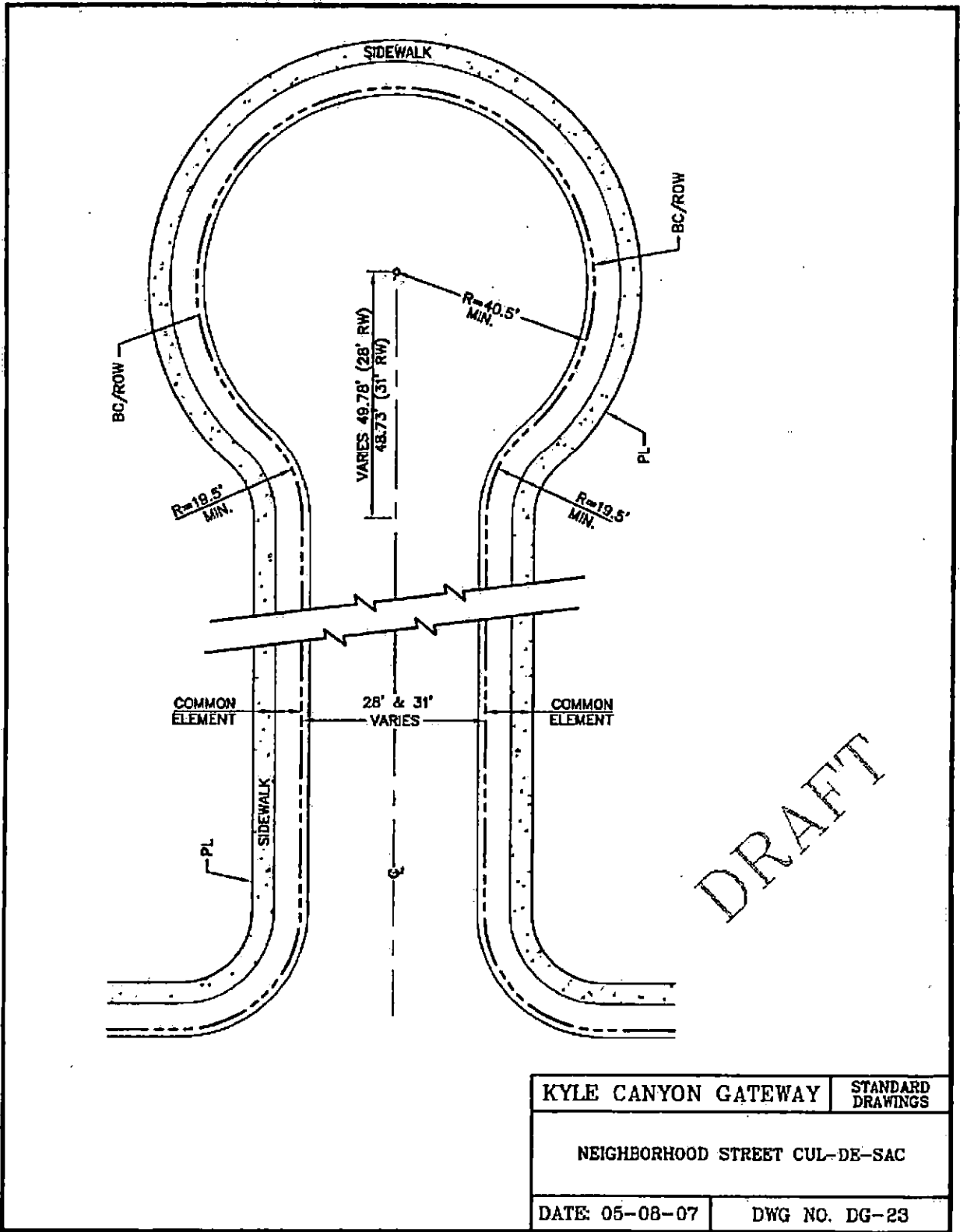


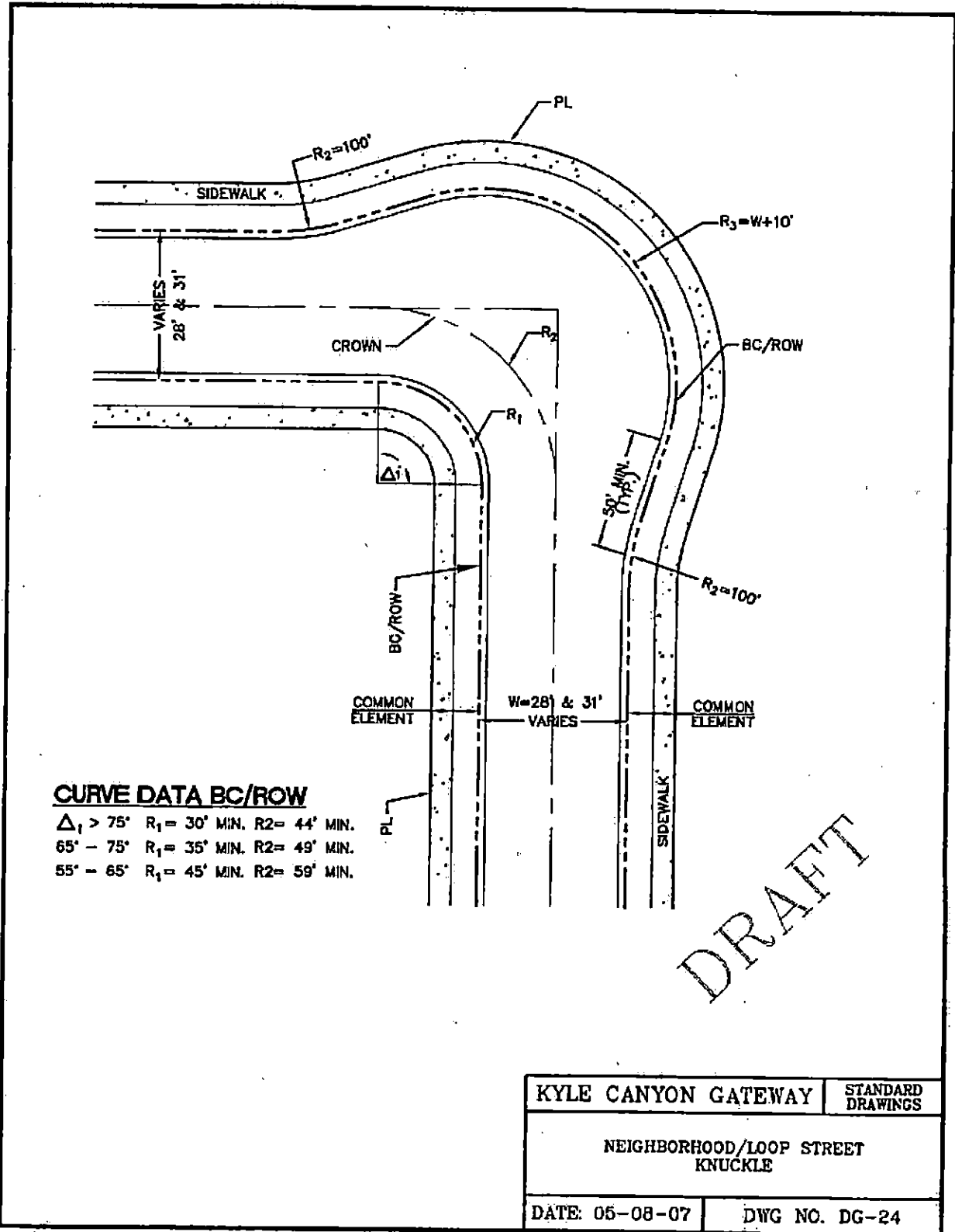
NOTES:

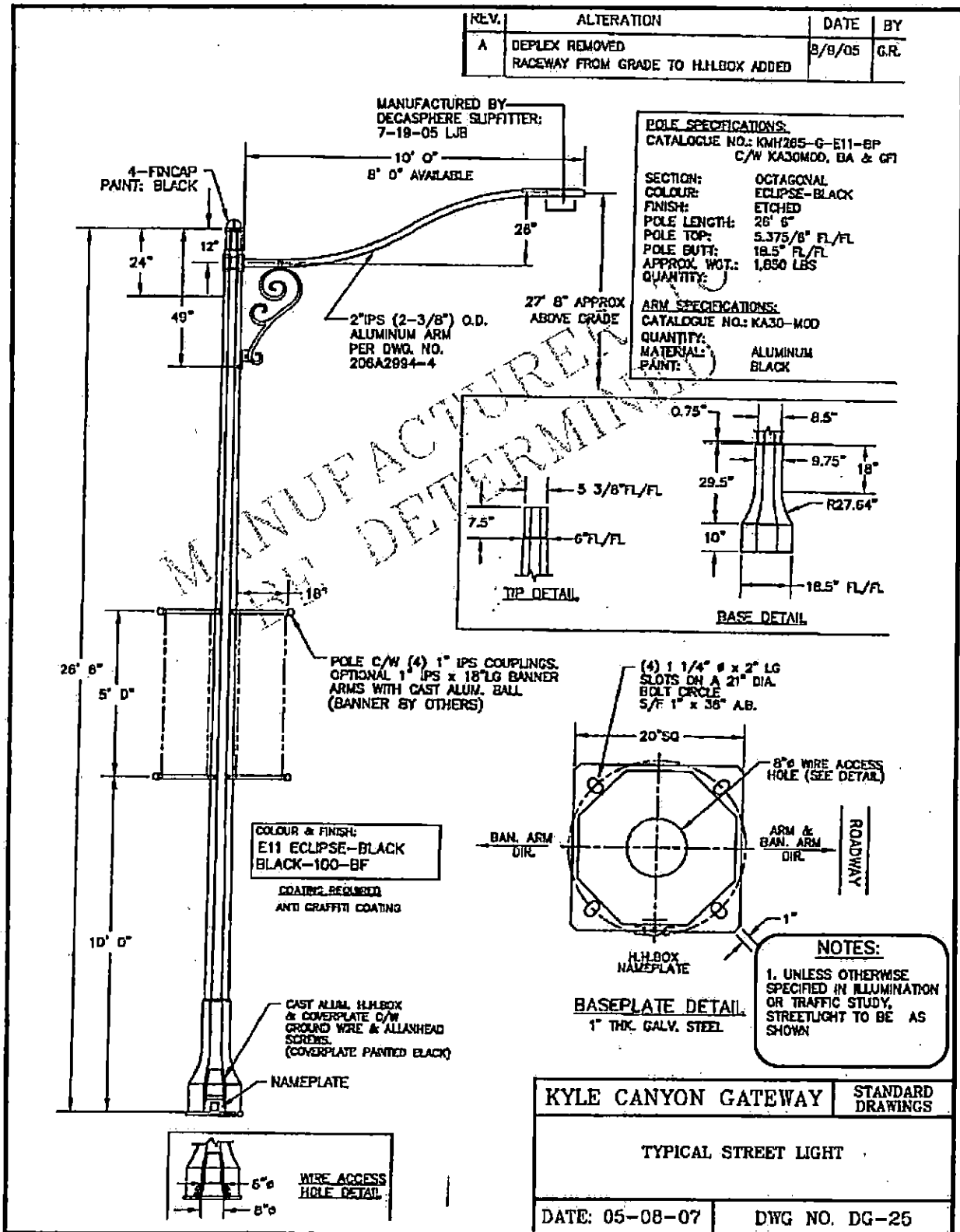
1. "BULB-OUTS REQUIRE APPROVAL OF CITY TRAFFIC ENGINEER"

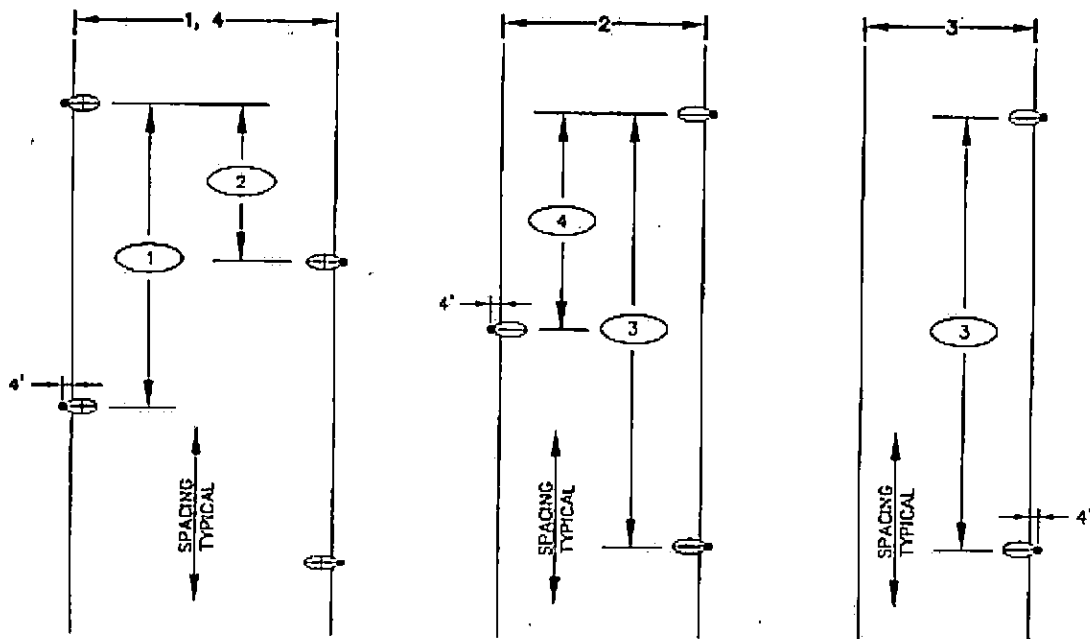
LOCATION TO BE DETERMINED BY DESIGN GUIDELINES

KYLE CANYON GATEWAY	STANDARD DRAWINGS
NEIGHBORHOOD STREET BULB OUT DETAIL	
DATE: 05-08-07	DWG NO. DG-21









STREET CLASSIFICATION

	STREET SECTION	ROW WIDTH	CLASSIFICATION
1	HORSE DRIVE (A1)	106'	BOULEVARD ARTERIAL
	HUALAPAI WAY (A2)	107.5'	BOULEVARD ARTERIAL
2	SHAUMBER ROAD (B1)	62'	BOULEVARD
	EGAN CREST WAY (B3) (B3A) (B3B)	69.5'	BOULEVARD
	HUALAPAI WAY (A3) (A3A) (A3B)	85.5'	BOULEVARD
	TEE PEE LANE (B4)	55'	BOULEVARD
	KYLEGATE (B4A)	68'	BOULEVARD
	IRON MOUNTAIN ROAD (P6)	75'	CONNECTOR
	(P1D8)	80'	FRONTAGE
	(C6)	80'	CONNECTOR
3	(C2) (C3) (C4A) (C4D)	38', 53', 41'	CONNECTOR
	BRENT LANE (P7)	58'	CONNECTOR
	(B5) (B5A)	70'	CONNECTOR
	TEE PEE LANE (C1) (P7A)	38', 60'	CONNECTOR
	OHARE AVENUE (C4)	53'	CONNECTOR
	LOG CABIN WAY (C4)	53'	CONNECTOR
	(D1) (D2)	31', 28'	NEIGHBORHOOD
4	GRAND TETON DRIVE (P1) (P1A)	95'	ARTERIAL
	IRON MOUNTAIN ROAD (P2) (P3)	90', 95'	ARTERIAL
	GRAND CANYON ROAD (P4) (P5)	75'	ARTERIAL
	FORT APACHE ROAD (P8) (P8A) (P9)	120'	ARTERIAL

POLE LOCATION TABLE	
KEYED NOTE	
1	160'
2	80'
3	170'
4	85'

NOTES:

1. SEE GENERAL NOTES STANDARD DRAWING NO. 300.
2. AN APPROVED ILLUMINATION STUDY PER NOTE 2, STANDARD DRAWING NO. 300, IS REQUIRED FOR RIGHT-OF-WAY GREATER THAN 100 FEET.
3. SPACING TO BE AS SHOWN UNLESS OTHERWISE SPECIFIED IN ILLUMINATION OR TRAFFIC STUDY

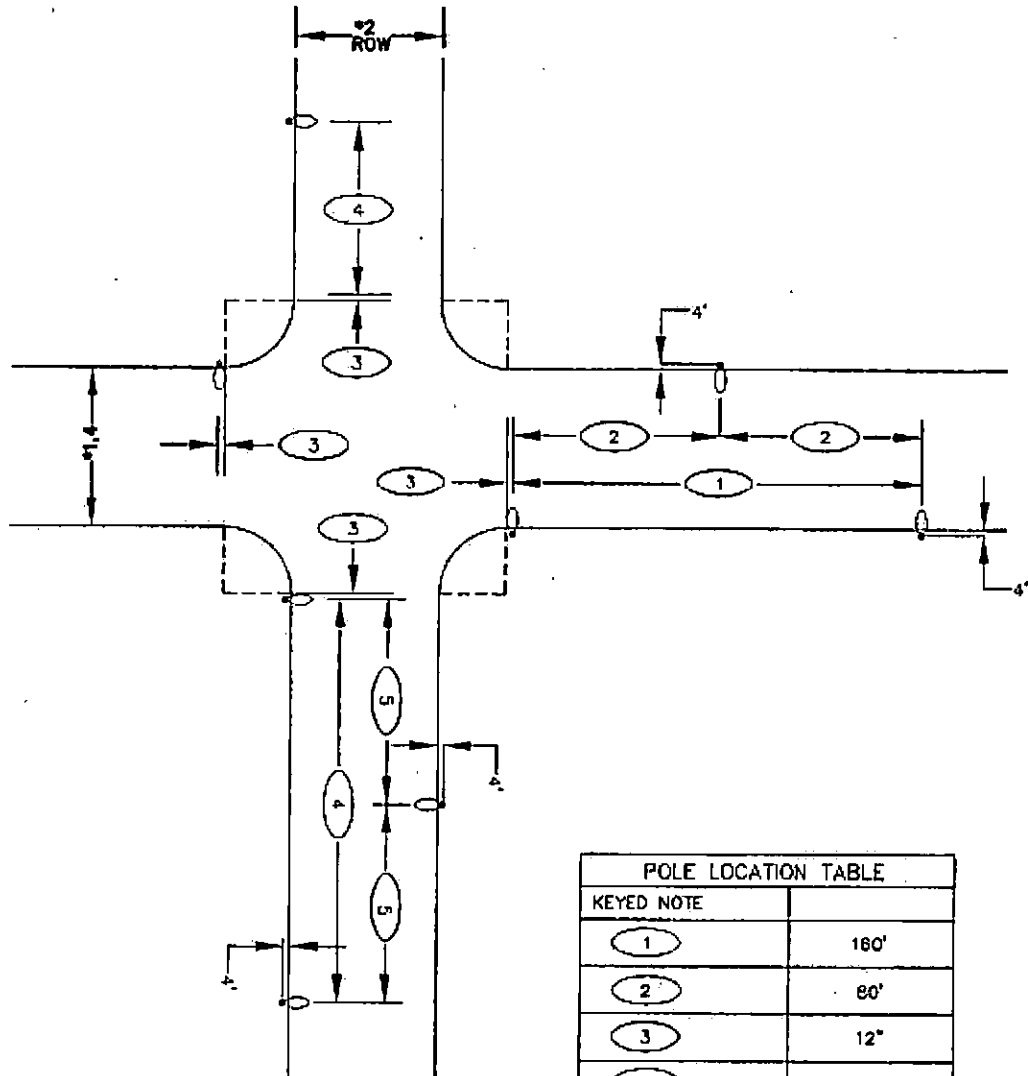
KYLE CANYON GATEWAY

STANDARD
DRAWINGS

STREETLIGHT LOCATION MAXIMUM SPACING

DATE: 05-08-07

DWG NO. DG-25.1

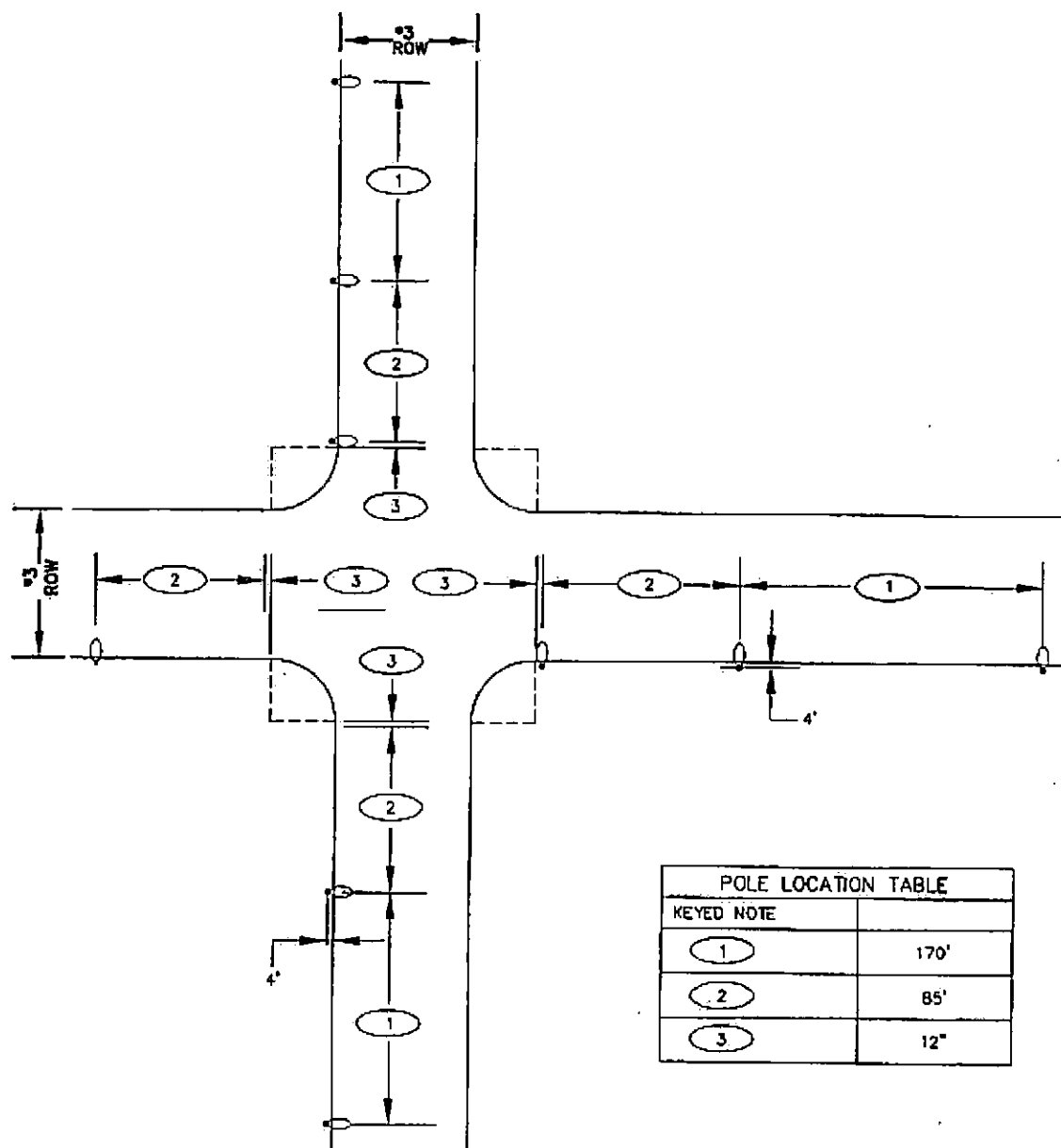


POLE LOCATION TABLE	
KEYED NOTE	
1	160'
2	80'
3	12'
4	170'
5	85'

NOTES:

1. SEE GENERAL NOTES STANDARD DRAWING NO. 300.
2. AN APPROVED ILLUMINATION STUDY PER NOTE 2, STANDARD DRAWING NO. 300, IS REQUIRED FOR RIGHT-OF-WAY GREATER THAN 100 FEET.
3. *SEE DG-25.1 FOR STREET CLASSIFICATION
4. SPACING TO BE AS SHOWN UNLESS OTHERWISE SPECIFIED IN ILLUMINATION OR TRAFFIC STUDY

KYLE CANYON GATEWAY	STANDARD DRAWINGS
STREETLIGHT LOCATION AT INTERSECTIONS *1.4/2 RIGHT OF WAY	
DATE: 05-08-07	DWG NO. DG-25.2

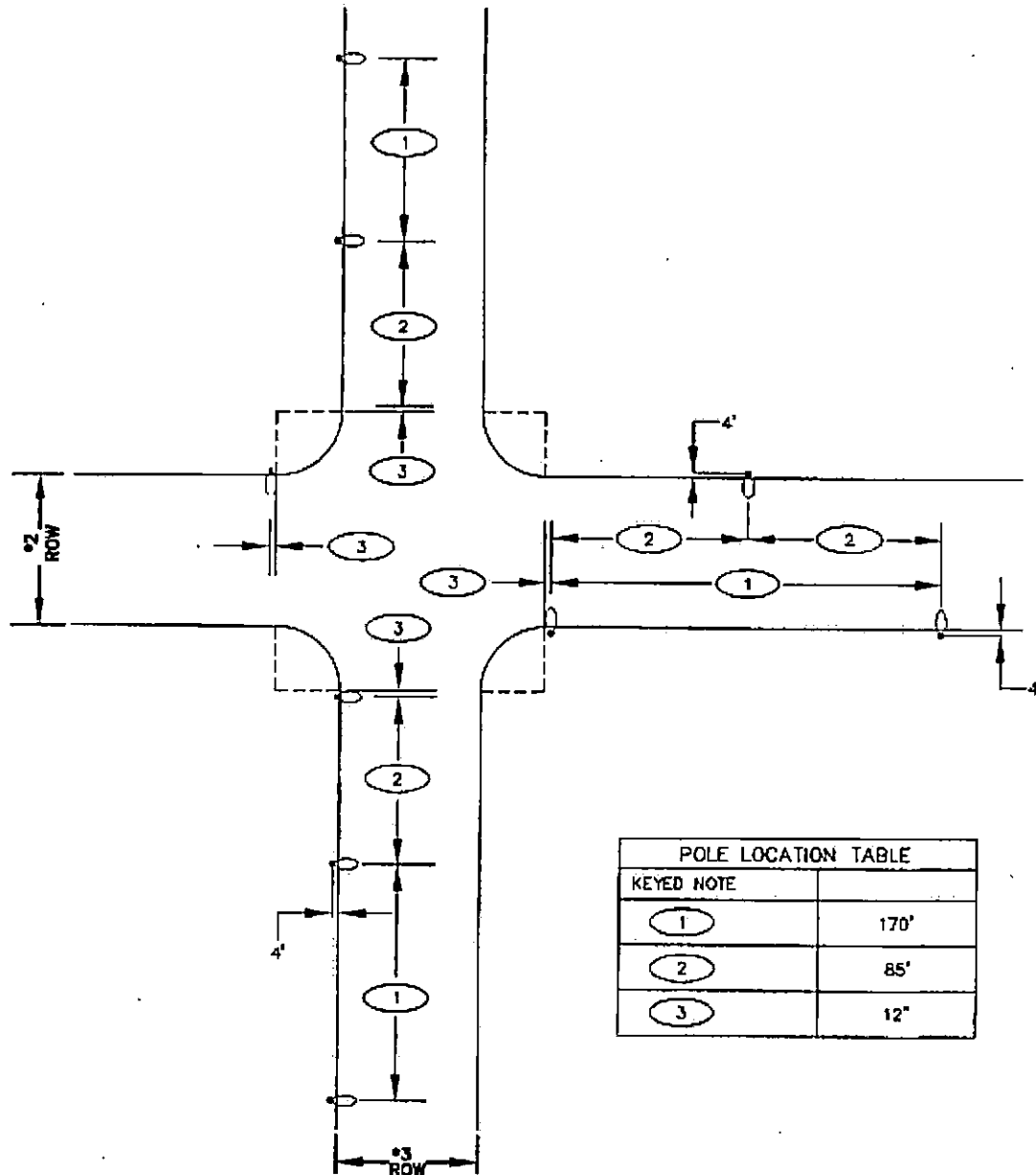


POLE LOCATION TABLE	
KEYED NOTE	
1	170'
2	85'
3	12"

NOTES:

1. SEE GENERAL NOTES STANDARD DRAWING NO. 300.
2. AN APPROVED ILLUMINATION STUDY PER NOTE 2, STANDARD DRAWING NO. 300, IS REQUIRED FOR RIGHT-OF-WAY GREATER THAN 100 FEET.
3. *SEE DG-25.1 FOR STREET CLASSIFICATION
4. SPACING TO BE AS SHOWN UNLESS OTHERWISE SPECIFIED IN ILLUMINATION OR TRAFFIC STUDY

KYLE CANYON GATEWAY	STANDARD DRAWINGS
STREETLIGHT LOCATION AT INTERSECTIONS *3/3 RIGHT OF WAY	
DATE: 05-08-07	DWG NO. DG-25.3



NOTES:

1. SEE GENERAL NOTES STANDARD DRAWING NO. 300.
2. AN APPROVED ILLUMINATION STUDY PER NOTE 2, STANDARD DRAWING NO. 300, IS REQUIRED FOR RIGHT-OF-WAY GREATER THAN 100 FEET.
3. *SEE DG-25.1 FOR STREET CLASSIFICATION
4. SPACING TO BE AS SHOWN UNLESS OTHERWISE SPECIFIED IN ILLUMINATION OR TRAFFIC STUDY

KYLE CANYON GATEWAY	STANDARD DRAWINGS
STREETLIGHT LOCATION AT INTERSECTIONS	
*2/3 RIGHT OF WAY	
DATE: 05-08-07	DWG NO. DG-25.4

