



PLACER COUNTY WATER AGENCY  
SINCE 1957

BUSINESS CENTER  
144 Ferguson Road  
MAIL  
P.O. Box 6570  
Auburn, CA 95604

PHONE  
530.823.4850  
800.464.0030  
WWW.PCWA.NET

May 7, 2018  
File No.: PD/Loomis  
Map No.: 30-A-13

Robert King  
Town of Loomis  
Planning Department  
P.O. Box 1327  
Loomis, CA 95650

**SUBJECT:** Application #18-03 (Master Development Plan) to convert an existing house to office use

Dear Mr. King:

Thank you for the opportunity to review and comment on Application #18-03. This letter is written in response to your Request for Comment dated April 23, 2018 and is intended to provide a preliminary design review of the plans and documents provided with the request from the Town of Loomis regarding the proposed development located at 5847 Brace Road, Loomis, California; APN 044-150-047. The Agency does not reserve water for prospective customers and this letter in no way confers any right or entitlement to receive water service in the future. The Agency makes commitments for service only upon execution of a Facilities Agreement and the payment of all fees and charges required by the Agency. All water availability is subject to the limitations described below and the prior use by existing customers.

**Prior to issuing a Water Availability letter, the owner and/or the owner's representative will need to schedule a meeting with Agency staff to discuss the project and determine specific Agency requirements.**

The Agency is currently serving treated water to the above mentioned parcel by an existing 5/8-inch meter connected to the Agency's 12-inch treated water main in Brace. In order to obtain service, the developer will have to enter into a facilities agreement with the Agency to provide any on site or off site pipelines or other facilities if they are needed to supply water for domestic or fire protection purposes and pay all fees and charges required by the Agency, including the Water Connection Charges.

All public treated water facilities shall be designed and constructed in accordance with the California State Water Resources Control Board Division of Drinking Water and the Agency's standards, which include but are not limited to the following:

- 1) Separation of treated water lines from other utilities. All dimensions are from the outside of pipes and structures.
  - a) Water facilities and sanitary sewer facilities must maintain a minimum separation of 10 feet horizontal and 1 foot vertical with water above.
  - b) Water facilities and storm drain facilities must maintain a minimum separation of 4 feet horizontal and 1 foot vertical with water above.
  - c) Water facilities and dry utility trench must have a minimum separation of 2 feet between trench walls.
  - d) Water facilities must cross above all wet utilities with a maximum 45 degree crossing angle from what would be perpendicular.
- 2) The distribution system shall be designed with looping pipelines such that all points within the distribution system are connected to a minimum of two source pipelines.
- 3) Treated water mains shall be located within public rights-of-way or easement, and out of residential lots and landscape areas. Structures, trees, and large shrubs shall be kept outside of easements containing water mains.
- 4) The Agency's minimum easement width is 20 feet centered over public facilities, with 10 feet minimum each side of the facilities.
  - a) Clearly show and label all easements and rights-of-ways on all plans showing water facilities.
- 5) Water mains within roadways, alleyways, parking lot drive isles, and other travel ways shall be located under pavement and at a minimum 3' from the edge of pavement.
- 6) Treated water main sizing for the distribution systems is based on the Agency's velocity maximum of 5 feet per second (fps) for maximum day demand in gallons per day (gpd) and 7 fps for fire flow demand.
  - a) Fire hydrant placement, spacing, and flow rate requirements are dictated by the local fire protection district and reviewed by the Agency to ensure compliance with the Agency's maximum pipe velocity standards.
    - i) Verify with the local fire protection district any fire hydrant spacing and flow rate requirements as well as fire sprinkler flow rate requirements.
- 7) Residential water services shall be located on the parcel for the house they serve.
- 8) Commercial water services shall be located adjacent to the building they serve.
  - a) All domestic services shall have reduced pressure principle (RP) backflow device constructed to Agency standards.
  - b) All fire services shall have a double check detector assembly (DCDA) backflow device constructed to Agency standards.
- 9) Site landscaping greater than 5,000 square feet requires a separately metered landscape service from the domestic service.
  - a) The landscape architect's calculations in conformance with the State of California's Model Water Efficient Landscape Ordinance (MWELO) are required to determine maximum day demand (in gpd) for the landscape service.
- 10) The Agency's standards are available online <http://www.pcwa.net/business/new-development>.

If you have any questions, please call me at the Engineering Department at (530) 823-4886.

Sincerely,



Josh Leiko  
Engineering Technician

JL:sw

pc: Daryl Hensler  
Ken Yunk  
Field Services  
Customer Service

Enc: Map No. 30-A-13

## Robert King

---

**From:** Carie Huff <[chuff@spmud.ca.gov](mailto:chuff@spmud.ca.gov)>  
**Sent:** Tuesday, May 8, 2018 8:00 AM  
**To:** Robert King  
**Subject:** 5847 Brace Road - #18-03  
**Attachments:** 5847 Brace Road comment letter 5-7-18.pdf; SPMUD - District Map.pdf

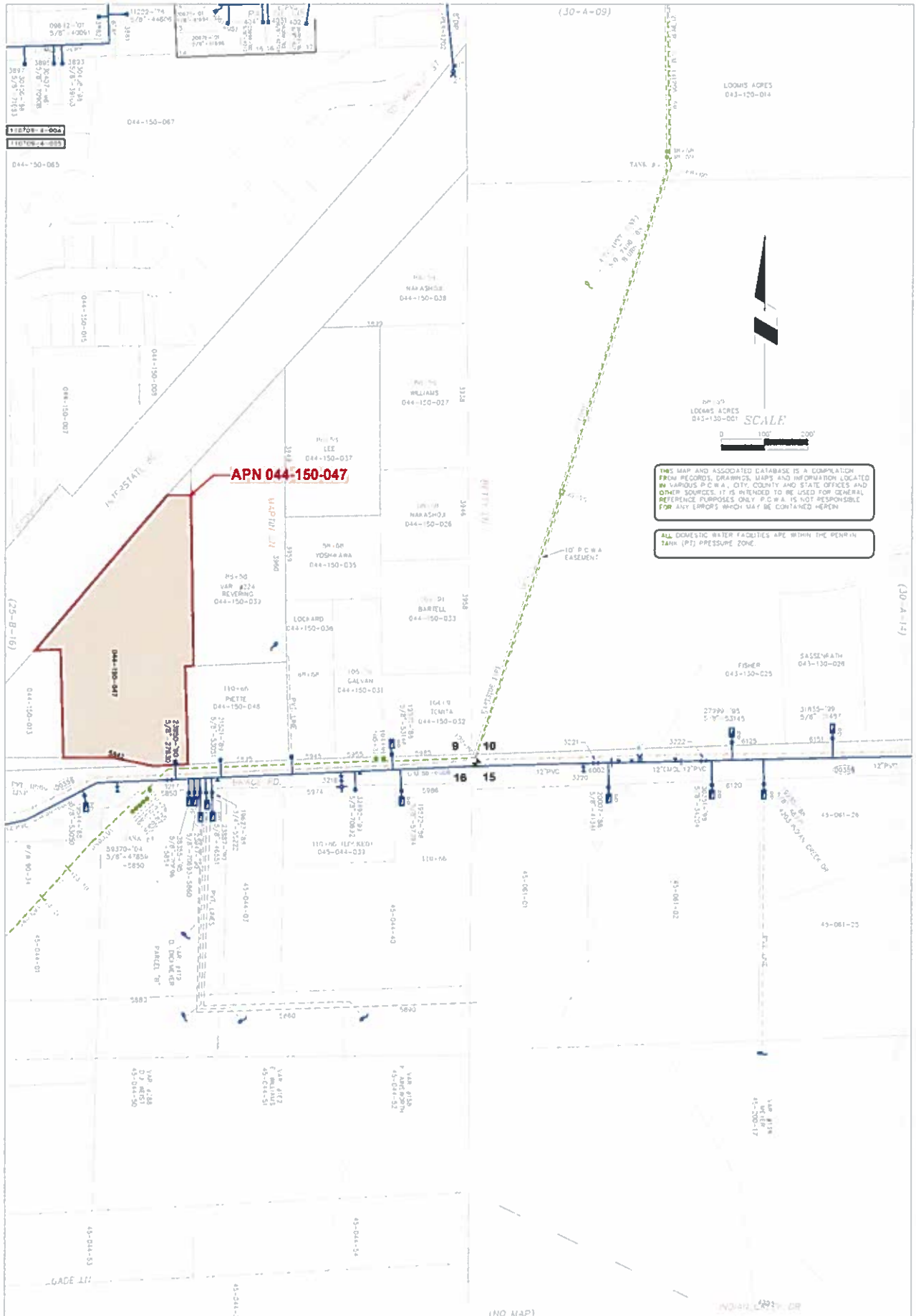
Good morning,

Attached is the District's response regarding 5847 Brace Road along with a copy of the District's facility map. Please note that the orange sewer lines depicted in the facility map are sewer lines that are in construction and are not currently in service.

Please let me know if you have any questions or need additional information.

Regards,

Carie Huff, P.E.  
Associate Engineer - Technical Services  
South Placer Municipal Utility District  
5807 Springview Drive  
Rocklin, CA 95677  
Tel: (916) 786-8555 x311  
[chuff@spmud.ca.gov](mailto:chuff@spmud.ca.gov)



THIS MAP AND ASSOCIATED DATABASE IS A COMPILATION FROM RECORDS, DRAWINGS, MAPS AND INFORMATION LOCATED IN VARIOUS P.C.W.A., CITY, COUNTY AND STATE OFFICES AND OTHER SOURCES. IT IS INTENDED TO BE USED FOR GENERAL REFERENCE PURPOSES ONLY. P.C.W.A. IS NOT RESPONSIBLE FOR ANY ERRORS WHICH MAY BE CONTAINED HEREIN.

ALL DOMESTIC WATER FACILITIES ARE WITHIN THE PENNIN TANK (PT) PRESSURE ZONE.



PROJECT	DISCIPLINE	TITLE
MAPS	WATER DISTRIBUTION	
PLACER COUNTY WATER AGENCY		

**BRACE ROAD AREA  
LOOMIS**

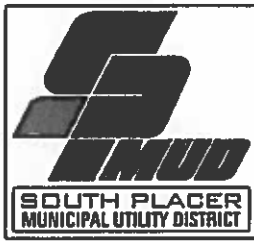
REFERENCES	DATE	BY	CHKD BY
PLACER COUNTY RECORDS	11/15/2010	JAS	NOTES

DATE OF CED/ICH	DATE OF MAP	DATE OF REV	DATE OF REV	DATE OF REV	DATE OF REV	DATE OF REV	DATE OF REV	DATE OF REV	DATE OF REV

DRAWING NO. **30-A-13**  
 SHEET NO. **0**

(NO MAP)

INDUSTRIAL ZONE



**South Placer Municipal Utility District**

5807 Springview Drive  
Rocklin, CA 95677  
(916) 786-8555

May 7, 2018

Town of Loomis  
Planning Department  
P.O. Box 1330  
Loomis, CA 95650

Attention: Robert King, Town Planner  
Subject: #18-03 Master Development Plan  
5847 Brace Road  
APN: 044-150-047-000

Dear Mr. King,

Thank you for the opportunity to comment on the application for a conversion of a single-family dwelling (SFD) to an office at 5847 Brace Road. The site and adjacent properties, northeast of I-80 and Brace Road are zoned CT Tourist Commercial. The existing SFD is currently on septic.

The property is not proposing to connect to sewer at this point. If the property elects to connect to public sewer in the future, the design and construction of all on-site and off-site facilities which may be required as a result of this project, including the acquisition and granting of sewer easements, will be the responsibility of the developer/owner. All work shall conform to the Standard Specifications of SPMUD. A copy of the District's facility map has been provided for your use. Please refer to Ordinance 09-02 for information regarding participation fees.

If the property elects to connect to public sewer in the future, the following comments apply:

1. Sewer easements and all-weather access is required over all public sewer in the future.
2. Each parcel/building shall have its own independent sewer lateral.
3. A two-way cleanout shall be located within two feet of the building.
4. A property line cleanout for each parcel shall be located at the edge of the right-of-way or easement.
5. Minimum separation between utility laterals is required. Sewer and storm drain shall be 5-feet from outside of pipe/structure to outside of pipe/structure. The minimum separation between water and sewer is 10-feet from outside of pipe/structure to outside of pipe/structure.
6. The property is located within the boundary area of four current refund agreements for sewer improvements. The refund agreement fees may be due at the time of plan approval and are as follows:
  - a. Croftwood - \$95/EDU
  - b. Rocklin 60 Phase 1 - \$68.32/EDU



**South Placer Municipal Utility District**

5807 Springview Drive  
Rocklin, CA 95677  
(916) 786-8555

- c. Rocklin 60 Phase 2 - \$139.76/EDU
- d. Sierra College Lift Station - \$1,788/EDU
- 7. Trees, including the drip line, shall not be located within the easement area.
- 8. Please contact the District for information regarding relevant fees.

Additional requirements may be required as design information is provided.

If the property intends to connect to sewer and would like a will-serve letter from the District, the owner and/or owner's representative will need to schedule a meeting with District staff in order to discuss the project and to determine specific requirements.

Please note that the District's Standard Specifications and Improvement Standards for Sanitary Sewers can be viewed at SPMUD's website: <http://spmud.ca.gov/developer-resources/standards-specifications/>.

Please do not hesitate to contact me at (916) 786-8555 extension 311 or [chuff@spmud.ca.gov](mailto:chuff@spmud.ca.gov) if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink that reads 'Carie Huff'.

Carie Huff, P.E.

Cc: File



Find Address, District Project, Parcel

SPMUD - District Map



## Robert King

---

**From:** Joseph Scarbrough <JScarbro@placer.ca.gov>  
**Sent:** Monday, May 7, 2018 11:49 AM  
**To:** Robert King  
**Subject:** #18-03 Placer County Environmental Health Memo  
**Attachments:** #18-03 House to Office EH Memo.pdf

Hello Mr. King,

Attached is our memo, we have no concerns with this project.

Thank you,

**Joey Scarbrough, Technical Specialist**  
Environmental Health  
Health and Human Services  
3091 County Center Drive  
Auburn, CA 95603  
(530) 745-2346 | [jscarbro@placer.ca.gov](mailto:jscarbro@placer.ca.gov)



Notice: This e-mail message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.



**Placer County  
Health and Human Services Department**

**Jeffrey S. Brown, M.P.H., M.S.W.**  
Department Director

**Wesley G. Nicks, R.E.H.S.**  
Environmental Health, Director

## **MEMORANDUM**

**DEPARTMENT OF HEALTH & HUMAN SERVICES  
DIVISION OF ENVIRONMENTAL HEALTH**

**To: Robert King, Town Planner**

**From: Joey Scarbrough, Technical Specialist  
Land Use and Water Resources Section**

**Date: May 7, 2018**

**Subject: #18-03, To Convert Existing House to an Office, APN's 044-150-047**

Placer County Environmental Health (PCEH) has reviewed the 1<sup>st</sup> submittal of the subject project application and has comments or conditions of approval.

*NO*

*Perspective, Hope, and Opportunity*

## Robert King

---

**From:** David Mohlenbrok <David.Mohlenbrok@rocklin.ca.us>  
**Sent:** Tuesday, May 1, 2018 9:12 AM  
**To:** Robert King  
**Cc:** Dave Palmer; Laura Webster; Bret Finning  
**Subject:** Town of Loomis Application # 18-03 (Master Development Plan) to convert an existing house to office use

Hello Robert – thanks again for the opportunity to review the above-referenced project application. City of Rocklin staff have reviewed the application materials and we have no comments.

Thank you, David



**David Mohlenbrok** | Deputy Director  
Public Services Department | City of Rocklin  
4081 Alvis Court | Rocklin, CA 95677  
**Direct:** (916) 625-5162 | **Fax:** (916) 625-5501  
**Website:** [www.rocklin.ca.us](http://www.rocklin.ca.us)

 Please consider the environment before printing this email.

## Robert King

---

**From:** Katrina Hoop <khoop@southplacerfire.org>  
**Sent:** Thursday, May 3, 2018 1:12 PM  
**To:** Robert King  
**Subject:** Application #18-03 Comments  
**Attachments:** E Commerical Building Plan Notes 2016.doc; D Commerical Site Plan Notes 2016.doc

Robert,

South Placer Fire will approve the conversion of a vacant residence to be an office with these requirements.

- 1) Site plans will be required for approval. Must submit to South Placer Fire 2 sets and a check for \$125.00 for the review process.
  - \*Fire access in compliance with appendix E (attached).
- 2) Floor plans will be required for approval. Must submit to South Placer Fire 2 sets with the site plans.
  - \*Address posted
  - \*Exit signs posted
  - \* Fire extinguishers every 75 feet (2A10BC)
- 3) Address must be posted on the dwelling facing the street as indicated
- 4) No fire alarm will be required for the proposed existing dwelling.
- 5) No fire sprinklers will be required for the proposed existing dwelling.
- 6) Since this will be a B occupancy they will be entered into our system and will receive Bi-Annual Inspections by the Engine Company assigned to that address.

If you have any questions please let me know.

Thank you,

Katrina Hoop  
Prevention Division  
South Placer Fire District  
6900 Eureka Road  
Granite Bay, CA 95746  
916-791-7059  
916-791-2199 (Fax)  
khoop@southplacerfire.org

## APPENDIX E

**South Placer Fire Protection District**  
6900 Eureka Road, Granite Bay CA. 95746 (916) 791-7059

The following are general requirements of the South Placer Fire Protection District for new commercial buildings. These comments are for new commercial buildings only. Plans submitted for approval shall reflect all requirements that apply. All of the following comments shall be printed on a comment sheet attached to the plans submitted for approval. Prior to final approval, all applicable fees must be paid.

### Commercial Building

#### **Fire Safety During Construction, Alteration or Demolition of a Building**

Buildings undergoing construction, alteration or demolition shall be in accordance with Chapter 33 of the most current California Fire Code.

#### **Address**

All new and existing buildings shall place and maintain approved numbers or address identification on the buildings so as to be plainly visible and legible from both directions of travel on the street or roadway fronting the property. Approved numbers or address identification shall be placed prior to occupancy on all new buildings. Said numbers shall contrast with their background and shall be visible at all hours of the day and night by way of internal or external illumination. Illuminated numbers shall be a minimum of 4 inches high with a minimum stroke width of 1/2 inch. External source illumination shall have an intensity of not less than 5.0 foot-candles. All numbers will be visible from a distance of at least 100 feet.

#### **Buildings under construction**

Approved numbers or addresses shall be placed at each fire access road entry into and on each building within construction sites.

#### **Multiple tenant buildings**

Tenant spaces within new or existing multi-tenanted buildings shall have approved numbers or addresses displayed at secondary access doors into the tenant space as required by the fire code official.

#### **Exiting**

Provide approved panic hardware at all required exit doors. Flush, edge or surface bolts or any other type of device that may be used to close or restrain the doors other than operation of the panic hardware-locking device are prohibited. Provide appropriate illuminated exit signs at all required exits. Exit and exit directional signs shall be illuminated per Section 1008, California Building Code.

Provide exits signs at every required exit doorway and wherever otherwise required to clearly indicate that direction of egress, an exit sign with letters having a principal stroke not less than 3/4 inches wide and at least 6 inches high.

#### **Fire Alarm System**

##### **Where required – new buildings and structures.**

An approved fire alarm system installed in accordance with the provisions of the California Fire Code and NFPA 72 shall be provided in new buildings and structures in accordance with Sections 907.2.1 through 907.2.23 and provide occupant notification in accordance with Section 907.5.

Except for Group R and Group U occupancies, all new unsprinklered buildings shall have an approved automatic fire alarm system installed when the total fire area is equal to or greater than 1500 square feet. In addition, Group A, E, and M occupancies in buildings of any square footage, sprinklered or unsprinklered, shall be provided with an approved automatic fire alarm system.

Not less than one manual fire alarm box shall be provided in an approved location to initiate a fire alarm signal for fire alarm systems employing automatic fire detectors or water-flow detection devices. Where other sections of the California Fire Code allow elimination of fire alarm boxes due to sprinklers or automatic fire alarm systems, a single fire alarm box shall be installed at a location approved by the fire code official.

## APPENDIX E

### Fire Alarm Indication Panel

An approved illuminated indicator board shall be provided at an approved location or locations when more than one building or zone will be monitored at the same site.

### Monitoring

Fire alarm systems required by this chapter or by the California Building Code, shall be monitored by an approved Central Station Protective Signaling Service (UUFX) that is listed in the current edition of the UL Online Certifications Directory unless otherwise required by the California Fire Code.

### Alarms

One exterior approved audible alarm and visual strobe device, located on the exterior of the building in an approved location, shall be connected to each automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system. Visible alarm notification appliances shall not be required except when required by Section 907. A single approved audible/visual device shall be provided in the interior of the building in a normally occupied location.

### Fire Control Room

An approved fire control room shall be provided for buildings protected by an automatic sprinkler system. The room shall contain all sprinkler system risers, fire alarm control panels, and other fire equipment required by the chief. Fire control rooms shall be located within the building on an outside wall at a location approved by the chief and shall be provided with a means to access the room directly from the exterior with an approved door of minimum dimensions of 36" X 80". Durable signage reading "FIRE CONTROL ROOM" with letters not less than three inches in height shall be affixed to the exterior of the door. A key box complying with section 506 shall be installed adjacent to the door.

### Dimensions

Fire control rooms shall have a minimum dimension of five feet and shall be not less than 35 square feet in usable area. The fire sprinkler riser shall be located between 12 inches and 18 inches from the exterior wall and at least 12 inches from any other wall. The fire control room may contain other building service equipment. No other storage will be permitted.

### Fire Department Rapid Entry System

An approved rapid access system shall be provided on all commercial buildings. Buildings equipped with sprinklers, alarm or other system components that will be utilized in the event of an emergency shall install the Knox Box in an approved location by near the FIRE CONTROL ROOM. Knox-Box installation requirements: Maximum height, 6 foot to the top of the Knox-Box; Minimum height, 5 foot to the bottom of the Knox-Box (measured from finished floor elevation). The approved rapid entry system is provided by the Knox Company. The 3200 Series or 4400 Series is acceptable. The recessed version is recommended. Knox Company products may be ordered on the Internet at [www.knoxbox.com](http://www.knoxbox.com).

### Roof access identification

Doors leading to roof access ladders or stairs shall be labeled with signage reading "Roof Access" as required by the fire code official.

### Fire Extinguishers

Provide and maintain portable fire extinguishers with a minimum rating of 2A10BC. Maximum travel distance to portable fire extinguishers shall not exceed 75 feet. In large open areas, there shall be one extinguisher per 3,000 square feet. The maximum travel distance from laundry rooms shall not exceed 50 feet. One 40BC rated extinguisher shall be provided in each kitchen area. If the kitchen is provided with a Hood Fire Suppression System, the fire extinguisher agent shall be compatible with the extinguishing agent in the Hood System. Fire extinguishers shall be mounted so that the top of the extinguisher is not higher than 5 feet from the ground. Fire extinguishers shall be serviced as required by code, serviced after each use, and inspected every month.

## APPENDIX E

### Fire Sprinkler System

#### Where required in existing buildings and structures.

An automatic sprinkler system shall be provided in existing buildings and structures where required in Chapter 11. In addition, except for Group U and R-3 occupancies, when the area of an existing building is increased to 3600 square feet or more, the addition and existing building shall be provided with an approved automatic fire sprinkler system throughout.

Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in the California Fire Code Sections 903.2.1 through 903.2.19 and as follows:

1. For all new buildings and structures, except Group R-3 and U occupancies, when the total fire area is 3600 square feet or greater.
2. Automatic sprinkler protection shall be provided in all accessible combustible and non-combustible attic spaces, sub-floors, or areas above ceilings, which are greater than six inches in height, in a fire sprinklered structure.
3. For new buildings having no designated use or tenant, the minimum sprinkler design shall be Ordinary Hazard Group 2 or as prescribed by the fire code official.

### Height

In other than Group R-3 and R3.1 occupancies, Class III standpipe systems shall be installed throughout at each floor where any of the following occur:

1. Buildings where the floor level of the highest story is located more than 30 feet (9144 mm) above the lowest level of fire department vehicle access.
2. Buildings that are three or more stories in height.
3. Buildings where the floor level of the lowest story is located more than 30 feet (9144 mm) below the highest level of fire department vehicle access.
4. Buildings that are two or more stories below the highest level of fire department vehicle access.

### Exceptions:

1. Class I standpipes are allowed in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1
2. Class I manual standpipes are allowed in open parking garages where the highest floor is located not more than 150 feet (45720mm) above the lowest level of fire department vehicle access.
3. Class I manual dry standpipes are allowed in open parking garages that are subject to freezing temperatures, provided that the hose connections are located as required for Class II standpipes in accordance with Section 905.5.
4. Class I standpipes are allowed in basements equipped throughout with an automatic sprinkler system.
5. In determining the lowest level of fire department vehicle access, it shall not be required to consider:
  - 5.1. Recessed loading docks for four vehicles or less, and
  - 5.2. Conditions where topography makes access from the fire department vehicle to the building impractical or impossible.

## APPENDIX E

### **Fire Department Connections**

With respect to hydrants, driveways, buildings and landscaping, fire department connections shall be so located that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other fire apparatus. Fire department connections shall be located on the street side of buildings, fully visible and recognizable from the street or nearest point of fire department vehicle access. Locking fire department connections caps are required on fire department connections for water-based fire protection systems. A metal sign with raised letters at least 1 inch in size shall be mounted on all fire department connections serving automatic sprinklers, standpipes. Such signs shall read: AUTOMATIC SPRINKLERS or STANDPIPES or TEST CONNECTION or a combination thereof as applicable.

### **Hood System**

Provide an approved hood extinguishing system for cooking surfaces in all commercial building kitchens per the latest edition of NFPA 96. Two sets of plans and specifications shall be submitted to this office for review and approval before construction.

### **Identification (Hazards and hazardous materials)**

Approved regulatory safety signs that meet the latest edition of NFPA shall identify hazards and hazardous materials. Fire protection devices or other components that will be utilized in the event of an emergency shall be marked in an approved manner; areas to be labeled with 4-inch letters contrasting with the background to assure good visibility.

### **Occupancy**

Maximum occupant load sign must be posted in a conspicuous place near the main exit.

### **Final Plans Accepted**

The final plans shall be approved only when stamped and/or signed by authorized the South Placer Fire Protection District personnel.

### **Commercial Building Final Acceptance**

Final acceptance of the project is subject to inspection and testing from the South Placer Fire Protection District. 72 hour notice required previous to inspection and testing.



## APPENDIX D

**South Placer Fire Protection District**  
6900 Eureka Road, Granite Bay CA. 95746 (916) 791-7059

The following are general requirements of the South Placer Fire Protection District for new commercial building sites. These comments are for site plans only. Plans submitted for approval shall reflect all requirements that apply. All of the following comments shall be printed on a comment sheet attached to the plans submitted for approval. Prior to final approval, all applicable fees must be paid.

### Commercial Building Site Infrastructure

#### **Fire Safety During Construction, Alteration or Demolition of a Building**

Buildings undergoing construction, alteration or demolition shall be in accordance with **Chapter 33** of the most current California Fire Code.

#### **Fire Alarm System**

**Where required – new buildings and structures.** An approved fire alarm system installed in accordance with the provisions of the California Fire Code and NFPA 72 shall be provided in new buildings and structures in accordance with Sections 907.2.1 through 907.2.23 and provide occupant notification in accordance with Section 907.5.

Except for Group R and Group U occupancies, all new unsprinklered buildings shall have an approved automatic fire alarm system installed when the total fire area is equal to or greater than 1500 square feet. In addition, Group A, E, and M occupancies in buildings of any square footage, sprinklered or unsprinklered, shall be provided with an approved automatic fire alarm system.

Not less than one manual fire alarm box shall be provided in an approved location to initiate a fire alarm signal for fire alarm systems employing automatic fire detectors or water-flow detection devices. Where other sections of the California Fire Code allow elimination of fire alarm boxes due to sprinklers *or automatic fire alarm systems*, a single fire alarm box shall be installed *at a location approved by the fire code official*.

#### **Monitoring**

Fire alarm systems required by this chapter or by the California Building Code, shall be monitored by an approved Central Station Protective Signaling Service (UUFX) that is listed in the current edition of the UL Online Certifications Directory unless otherwise required by the California Fire Code.

**Alarms.** One exterior approved audible alarm and visual strobe device, located on the exterior of the building in an approved location, shall be connected to each automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system. Visible alarm notification appliances shall not be required except when required by Section 907. A single approved audible/visual device shall be provided in the interior of the building in a normally occupied location.

#### **Fire Control Room**

An approved fire control room shall be provided for buildings protected by an automatic sprinkler system. The room shall contain all sprinkler system risers, fire alarm control panels, and other fire equipment required by the chief. Fire control rooms shall be located within the building on an outside wall at a location approved by the chief and shall be provided with a means to access the room directly from the exterior with an approved door of minimum dimensions of 36" X 80". Durable signage reading "FIRE CONTROL ROOM" with letters not less than three inches in height shall be affixed to the exterior of the door. A key box complying with section 506 shall be installed adjacent to the door.

## APPENDIX D

### Dimensions

Fire control rooms shall have a minimum dimension of five feet and shall be not less than 35 square feet in usable area. The fire sprinkler riser shall be located between 12 inches and 18 inches from the exterior wall and at least 12 inches from any other wall. The fire control room may contain other building service equipment. No other storage will be permitted.

### Fire Sprinkler System

#### Where required in existing buildings and structures.

An automatic sprinkler system shall be provided in existing buildings and structures where required in Chapter 11. In addition, except for Group U and R-3 occupancies, when the area of an existing building is increased to 3600 square feet or more, the addition and existing building shall be provided with an approved automatic fire sprinkler system throughout.

Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in the California Fire Code Sections 903.2.1 through 903.2.19 and as follows:

1. For all new buildings and structures, except Group R-3 and U occupancies, when the total fire area is 3600 square feet or greater.
2. Automatic sprinkler protection shall be provided in all accessible combustible and non-combustible attic spaces, sub-floors, or areas above ceilings, which are greater than six inches in height, in a fire sprinklered structure.
3. For new buildings having no designated use or tenant, the minimum sprinkler design shall be Ordinary Hazard Group 2 or as prescribed by the fire code official.

### Bridges

Bridges designed for major ingress/egress roads serving subdivisions or used as part of a fire apparatus access road shall be constructed and designed to meet standard, AASHTO HB-17. Bridges shall be no narrower than the driving portion of the road serving each end. The bridge or culvert crossing shall be designed for a live load of a minimum of 75,000 pounds gross vehicle weight. Vehicle load limits shall be posted at both entrances to bridges and culvert crossings.

### Building Access

Access roadways shall extend to within 150 feet of all portions of the exterior walls of the first story of any building.

### Dead End Access Roads

Dead-end fire apparatus access roads more than 150 feet in length shall be provided with an approved turnaround for fire apparatus. (See Attached Details)

### Gate Entrances

Gate entrances shall be at least two feet wider than the width of the traffic lane serving that gate. All gates providing access from a road to a driveway or private road shall be located at least 30 feet from the roadway and open to allow a vehicle to stop without obstructing traffic on that road. Gates shall be accessible to the fire district by approved electric key switch; strobe entry, person gate and standard key pad access code. Gates shall be provided with an emergency power source that will open the gates in the event of a power failure. During a power emergency, gates shall automatically open and remain open during the period when the primary source of power is not available.

Electronically opened access gates located across fire apparatus access roads shall be provided with an approved strobe switch access system that interfaces with the TOMAR Model 780-1228-PRE or 3M OPTICOM traffic preemption optical signal emitter provided on all District emergency vehicles. An acceptance test of the emergency vehicle strobe switch system shall be witnessed by the fire department prior to final approval. Gates shall be coded to allow a minimum of fifteen (15) minutes of open access time when activated by the strobe entry device.

## APPENDIX D

All electronically opened perimeter access gates located across fire apparatus access roads shall be provided with a vehicle detection loop on the out-bound drive aisle from the site. The vehicle detection loop shall be placed a minimum of ten-feet from the gate to permit fire apparatus to activate the detection loop without interference from the gate. The vehicle detection loop shall be provided with a 30-second delay prior to closing the gate.

### Hydrants

Hydrants shall be wet barrel type with two 2-½ inch discharges and one 4-½ inch discharge, with individual valves for each discharge. (RICH 960 or equivalent). Two-way blue reflective pavement markers shall be placed in the roadway (eight inches from the center line on the hydrant side) at each hydrant location. The area around the hydrant will be kept clear of obstructions including fences, trees and shrubs so as to provide for clear access to the hydrant from the roadway. The center of the lowest discharge shall be a minimum of 18 inches and a maximum of 28 inches off the ground. Hydrant setback location shall meet the appropriate water agency standards, but shall not be greater than 6' from the face of curb or edge of pavement if no curb is present. Water supply and hydrants to be provided before any building construction is allowed. Final acceptance of the water supply system shall be granted only after testing and inspection by the fire district.

### Hydrant Spacing

Hydrants shall be spaced a maximum of 300 feet apart. One hydrant shall be placed within 40 feet of each fire department connection when the building is protected by an automatic fire sprinkler system. Ballards shall be provided to protect appliances from vehicle damage when necessary.

### Water Supply

On site water supply for firefighting shall be as follows for new commercial buildings: The minimum number of fire hydrants and amount of available water for commercial buildings shall be determined by the size of the building, the planned use for the building and the fire protection proposed for the building. Fire flow for new commercial buildings shall be no less than those amounts specified in Appendix B, Section B105.1(2) of the 2016 California Fire Code. All proposed water supplies shall come from a reliable source such as a fixed underground water distribution system or a static water system equaling or exceeding the National Fire Protection Association (NFPA) Standard 1142, "Standard on Water Supplies for Suburban and Rural Fire Fighting". (A reduction in fire flow may be allowed when the building is provided with an approved automatic sprinkler system, but in no case shall the fire flow be less than 1,500 gallons per minute at 20 pounds residual pressure). THE FIRE FLOW FOR THE PROPOSED BUILDING SHALL BE DETERMINED BY THE FIRE DISTRICT AND INDICATED ON THE FINAL APPROVED PLANS.

### Road Width

Driveways, thruways, entrances and fire access roads shall be 26 feet in width for commercial buildings 2 stories or less in height and 28 feet for commercial building 3 stories or more in height where aerial apparatus is required. Vertical clearance shall be 15 feet for the width of the road. For the purpose of this section, roadway width shall mean driving surface to face of curb or flow line of rolled curb. Emergency access roadways shall be marked with approved signs stating 'EMERGENCY FIRE ACCESS ROAD'. All roadways and access roads shall be completed before any building construction. (See Attached Details)

### Parking

When provisions for parallel parking are included in the width of a street or roadway, a minimum eight (8) foot width shall be allocated for the parking space.

There shall be no parking on fire access roadways less than 34 ft. in width or in required fire apparatus turnaround areas. Parking will only be allowed in designated parking areas. Parking will be allowed on one side of the road on roadways 34 ft. to 42 ft. On roadways, over 42 ft. parking will be allowed on both sides.

When the roadway width restricts parking, 'NO PARKING FIRE LANE' signs shall be posted every 200 ft and curbs to be painted red with 'NO PARKING FIRE LANE' stenciled on them every 25 feet.

## APPENDIX D

### **Roadways and Access Routes**

The minimum number of access roads serving new commercial buildings shall be determined by the size of the building, the planned use for the building and the fire protection proposed for the building.

### **Roadway Grades**

Fire Apparatus access roads and response routes shall not exceed 10 percent in grade.

**Exception:** Grades steeper than 10 percent as approved by the fire chief, when the road is surfaced with asphalt or concrete.

The grade for all private lanes and driveways over 16% shall be approved by the Fire Marshal.

In order to accommodate grades in excess of sixteen (16) percent, the access road shall be designed to have a finished surface of grooved concrete or rough asphalt to hold a 45,000 lb. traction load. The concrete grooves shall be ¼ inch wide by ¼ inch deep and ¾ inch on center. The road design shall be certified by a registered engineer and approved by the chief.

### **Roadway Radius**

The inside turning radius for an access road shall be 30 feet or greater. The outside turning radius for an access road shall be 50 feet or greater. (See Attached Details)

### **Road Surface**

Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete, or other all-weather driving surface capable of supporting the imposed loads of fire apparatus weighing at least 75,000 pounds

### **Roadway Turnarounds**

Turnarounds are required on driveways and dead end roads as specified. Cul-de-sac's radius shall be 42 feet of driving surface. Radius is measured from face of curb or flow line of rolled curb. If a hammerhead/T is used, the top of the (T) shall be a minimum of 80 feet in length. (See Attached Details)

## **Final Plans Accepted**

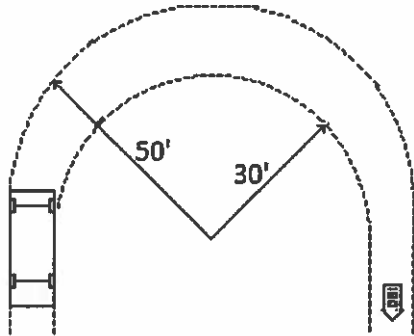
The final plans shall be approved only when stamped and/or signed by authorized the South Placer Fire Protection District personnel.

## **Commercial Building Final Acceptance**

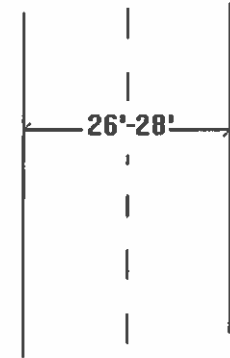
Final acceptance of the project is subject to inspection and testing from the South Placer Fire Protection District. 72-hour notice required previous to inspection and testing.

# APPENDIX D

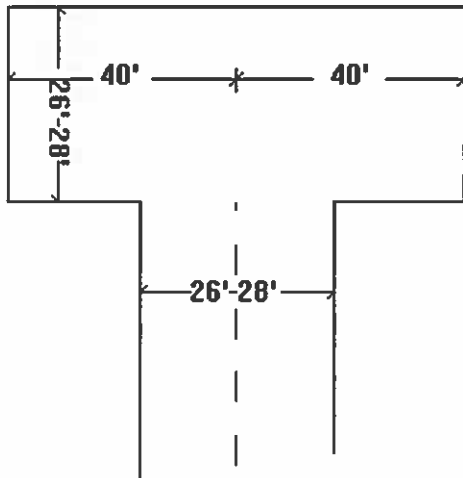
Attached Details Not Drawn To Scale:



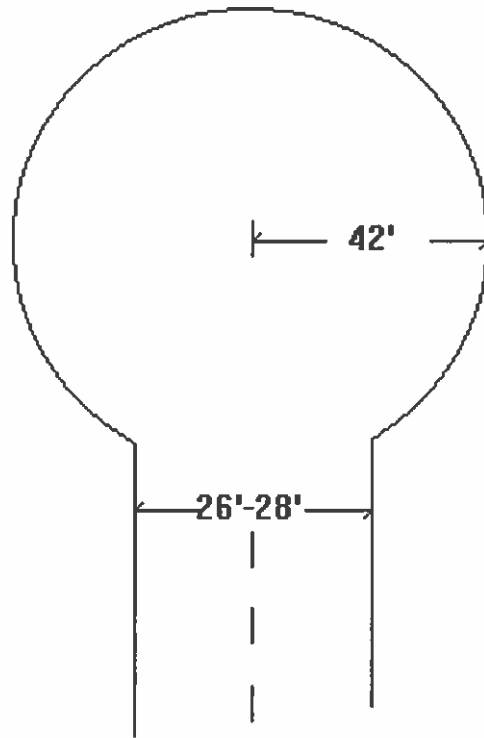
50' Outside; 30' Inside  
Turning Radius



Commerical Building  
Access Road

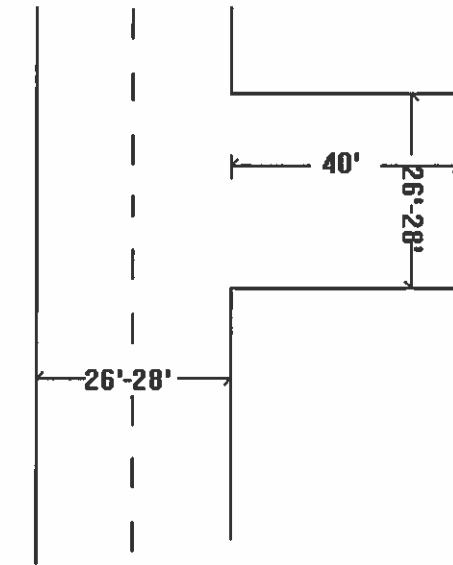


80' Hammerhead  
Turnaround  
Commerical Roadway

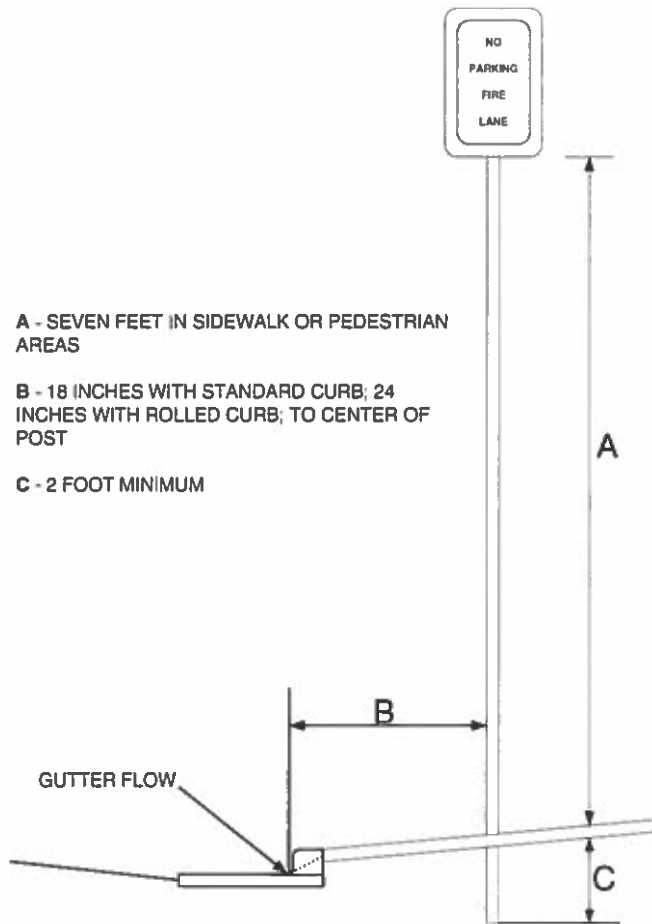


Turnaround

# APPENDIX D



Turnaround  
Commercial Roadway

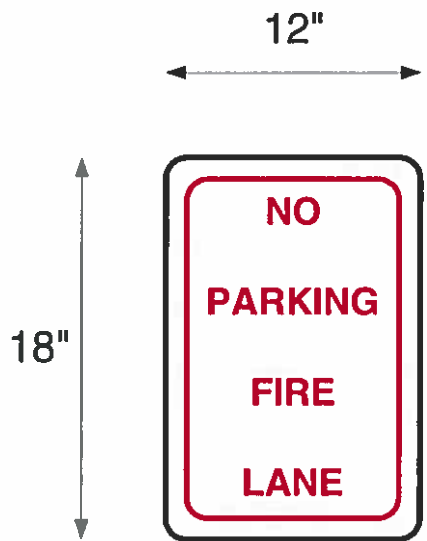


**A** - SEVEN FEET IN SIDEWALK OR PEDESTRIAN AREAS

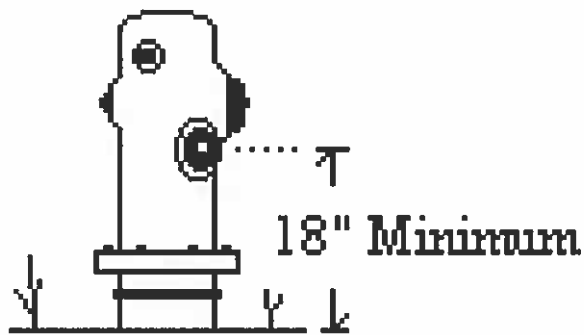
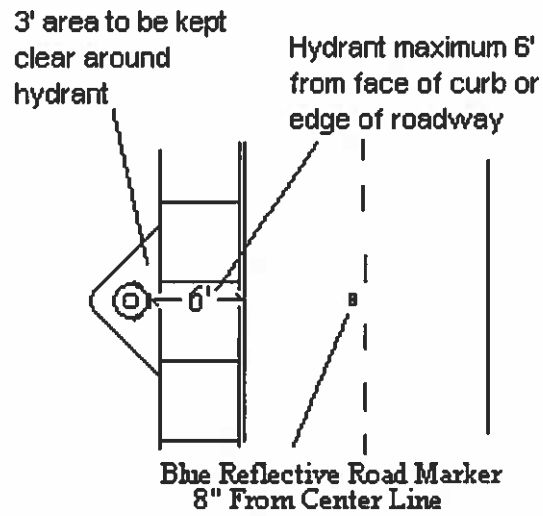
**B** - 18 INCHES WITH STANDARD CURB; 24 INCHES WITH ROLLED CURB; TO CENTER OF POST

**C** - 2 FOOT MINIMUM

APPENDIX D



## APPENDIX D





## APPENDIX D

