

## Alternate Routes For The Pipeline

Several alternate routes for the pipeline to reduce construction impacts were studied. These alternate routes are covered in Exhibit C. The alternate routes are found to be affected by limited right-of-way access or limited room within the right-of-way which would hinder construction.

### PIPELINE DESIGN FEATURES AND CONSTRUCTION

The new portions of the proposed pipeline are planned to be constructed with 16 inch outer diameter x 0.250 inch wall thickness API-5LX grade 60 steel pipe and with 12.75 inch O.D. X 0.250 wall API-5LX/60. pipe east of the Wickland manifolds. The pipe sections will be protected with an external coating equivalent to 40 mils of polypropylene. An additional precaution of electric cathodic protection will be employed upon completion. The pipe will be delivered to the right-of-way in lengths of approximately 40 feet and will be joined together alongside the trench by electric welding. The field welding will be conducted in accordance with API Code 1104 and will be 100 percent radiographically inspected.

The pipeline will be designed, constructed and installed in strict accordance with the requirements set forth in Title 49, Code of Federal Regulations (CFR), Part 195 and in accordance with applicable sections of section I, Chapter 5.5 of the California Pipeline Safety Act, paragraphs 51010 - 51020. Construction and installation will be done by a qualified independent contractor selected through competitive bidding. Inspection will be performed by SFPP.

The pipeline will be constructed within prescribed rights-of-way with provisions with the respective landowners for additional temporary work space for construction purposes. A typical right-of-way cross-section is shown in Exhibit D. The right-of-way widths will vary depending upon the physical requirements of the ROW and the construction equipment required for the differing conditions along the ROW.

These ROW conditions for this project will vary between three major types depending upon the physical situation through which the pipeline route will pass and the construction machinery needed for each section. The three major ROW types will include:

- (1). Cross country (open); which includes the rangelands north of Cummings Skyway and outside of railroad right-of-way. Construction ROW width will be no more than 50 feet.
- (2). Railroad Right-of-way; includes lands with existing trackage where the project will lie between the track and the adjacent railroad property line. Normal construction ROW width will be 35 feet wide.
- (3). Roadways; includes portions of the route which is located on city streets or county roadways. The construction ROW

EXHIBIT C

The following routes were investigated, including:

Alternate A

- leaving the proposed route with SPTCo railroad right-of-way immediately prior to crossing Refugio Creek, traversing open land, paralleling Refugio Creek to the east and northeast. This alternate was selected to parallel an existing sewer line easement which runs southeasterly through the portion of Refugio Valley west of San Pablo Avenue. When the sewer line easement turns northeasterly, the route continues southeasterly, crossing first a tributary to Refugio Creek and then San Pablo Avenue. On the east of San Pablo Avenue, the alternate route turns southerly and parallels San Pablo Avenue to its intersection with Sycamore Street, at which point the route turns southeasterly and runs along the north edge of Sycamore Street. At Sycamore Street's intersection with Willow Street, the route crosses Willow Street and enters onto Santa Fe Railway railroad right-of-way, headed easterly, and then continues in the railroad right-of-way until the railroad overpass at Willow Street, at which point the route moves into Willow Street, continuing in Willow Street and then easterly in Franklin Canyon Road. The route then continues to a point immediately east of Franklin Canyon Road's turn into its intersection with State Highway 4, at which point the route crosses State Highway 4. Once on the north side of State Highway 4 immediately east of the highway's intersection with Franklin Canyon Road, the alternate routing continues easterly through open fields, crossing Rodeo Creek before turning east-northeast to parallel an existing pipeline easement as it crosses hills to the northeast to a point south of Cummings Skyway. From this point the route proceeds southeasterly, paralleling a second existing pipeline easement parallel and to the south of Cummings Skyway. Continuing on this southeasterly course, the routing crosses Cummings Skyway, turning easterly to align itself with yet a third existing pipeline easement, rejoining the proposed pipeline right-of-way north of Cummings Skyway. This alternate was not chosen because of loose soils in the hills area and therefore less than desirable right-of-way operation and maintenance conditions.

Alternate B

- leaving the proposed route within railroad right-of-way in northern Pinole, entering city streets in the vicinity of the Hazel Street intersection with Pinon Avenue, continuing southeasterly in city streets to the vicinity of the Park Street intersection with Tennent Avenue, then northeasterly along San Pablo Avenue, entering upon Santa Fe Railway right-of-way and crossing the avenue through the railroad tunnel to

EXHIBIT C

the south, remaining on railroad right-of-way, and then continuing easterly within Santa Fe Railway right-of-way to rejoin alternate "A" at a point east of the Sycamore Street intersect with Willow Street. This alternate was not chosen because of the restricted railroad right-of-way as Santa Fe Railway crosses under San Pablo Avenue, making it virtually impossible to remain in railroad right-of-way, continuing on to the east.

Alternate C

- leaving the proposed route within railroad right-of-way at its crossing of Pinole Creek, turning southeasterly into the creek's northeast service road, and then continuing southeasterly to a point of intersection with alternate "B" described above. This alternative was not chosen for the same reason as alternate "B"; restricted right-of-way within which to cross San Pablo Avenue.

Alternate D

- leaving alternate "A" within the railroad right-of-way adjacent to Willow Street, crossing Sycamore Street to the east, and entering into an existing eastbound pipeline corridor over hills immediately south of Franklin Canyon Road and State Highway 4, turning north across State Highway 4 to rejoin alternate "A". This alternate was not chosen because it was determined upon research of the existing pipeline corridor that no additional room remained within the corridor.

Alternate E

- leaving the proposed route in the Davis Point vicinity, moving southeasterly through Unocal's San Francisco Refinery, and immediately east of Interstate Highway 80, turning east and southeast parallel and adjacent to existing pipeline easements, rejoining the proposed pipeline route north of Cummings Skyway. This alternate was not chosen due to restricted right-of-way both on the railroad right-of-way in the Rodeo area and on the refinery property, in addition to future planned recreational and urban development east and south of Interstate Highway 80 and Cummings Skyway.

Alternate F

- leaving the proposed pipeline right-of-way at its intersection with McEwan Road as it parallels the existing pipeline easement north of Cummings Skyway, turning south into McEwan Road and then east into Franklin Canyon Road, continuing easterly within Franklin Canyon Road to rejoin the proposed pipeline route as it enters Franklin Canyon Road further to the east. This alternate was not chosen due to the generally narrow and winding nature of Franklin Canyon Road and the availability of alternate suitable right-of-way east of McEwan

EXHIBIT C

Road (the proposed route).

Alternate G

- leaving the proposed pipeline route at a point approximately 6.5 miles east of the Interstate Highway 80 interchange, turning southwesterly and crossing under State Highway 4 and Franklin Canyon Creek, and then turning east into Franklin Canyon Road, joining alternate "F". This alternate was not chosen due to relatively restricted existing and planned residential and commercial buildup, and the availability of already existing pipeline easements north of State Highway 4 (the proposed route).

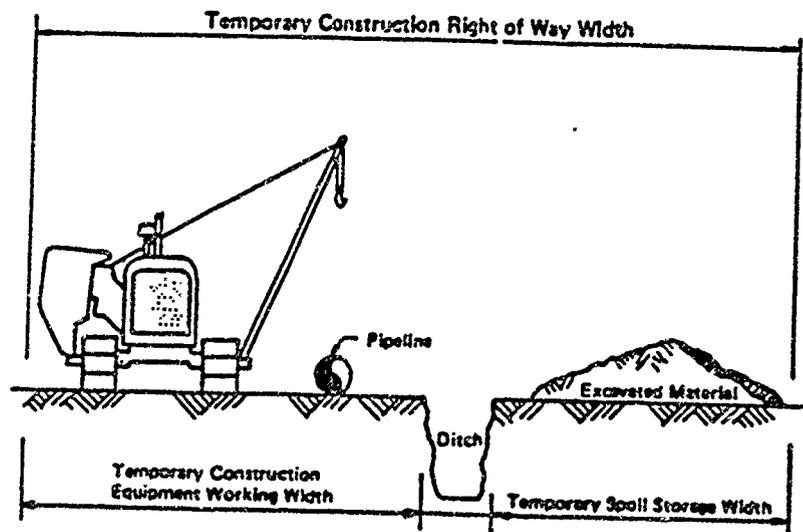
Alternate H

- leaving the proposed pipeline route in the vicinity of its intersection with Center Avenue in the City of Martinez, entering upon Santa Fe Railway right-of-way and continuing within the railroad right-of-way northeasterly to a point beyond its overpass of Interstate Highway 680, at which point the alternate turns southeast toward the SPPL Concord Station on Solano Way, crossing Walnut Creek immediately downstream of its confluence with Grayson Creek. This alternate was not chosen due to unstable slopes on railroad right-of-way.

In the comparison of the alternate routes to the proposed pipeline route, no differences in known occurrences of state of federally listed plants or animals exist, with the one exception of the potential presence (a "non-specific" siting in the California Department of Fish and Game's Natural Diversity Data Base survey information) of the Salt Marsh Harvest Mouse, Reithrodontomys raviventris, on a portion of alternate "H".

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EXHIBIT D



Construction Right-of-Way Cross Section

will usually be 30 feet wide or less, depending upon local jurisdictional permitting and construction requirements.

Upon completion of construction, the ROW's will revert back to different final states. In the first two situations, upon completion of construction, the final ROW will revert to a 10 foot permanent easement width for inspection and maintenance during pipeline operation. In the third situation, the ROW will revert back to its previous condition (road and associated facilities) in accordance with all permit specifications and agency rules and regulations. Maintenance responsibility of the street or roadway returns to the responsible governing agency.

Only one construction spread (crew and equipment needed to prepare the ROW, lay the pipe, install and bury it) will be used for the entire 25 mile length of the pipeline project. Several individual crews will be involved for the various steps along the spread requiring approximately 100 persons and the following pieces of equipment:

- 2 Pneumatic tired motor patrols
- 12 Crawler side-boom tractors, equivalent of Cat D-7
- 2 Crawler trenching machines
- 2 Crawler D-7 bulldozers
- 5 Backhoes - rubber tired or crawler
- 1 Boom truck
- 12 Truck mounted welding machines
- 4 Pipe transport trucks
- 15 Pickup trucks
- 1 Pipe bending machine
- 2 Boring (horizontal) machines

It is expected the construction contractor will most likely have one mainline crew for pipeline installation in the dirt portions of the ROW, one street and special crossings crew (for streams, etc.), one street boring crew and two tie-in crews. The construction will proceed at approximately 1/2 mile per day assuming the following construction procedure is followed:

- (1) Clearing the ROW; Involves preparing the ROW for the construction operations with removal of shrubs, logs, rocks and other debris which might interfere with safe movement of crews and equipment along the ROW.
- (2) Ditching; Including all excavation work required to provide a trench of specified width and depth. This involves trenching machines and backhoes.
- (3) Hauling and Stringing; Delivery and placement of all pipe sections onto the ROW along with all the necessary valves, fittings and factory bends.

- (4) Bending; Custom bending of specific sections of pipe to conform to minor changes in the direction of pipeline alignment and ditch contours.
- (5) Welding; The cleaning, clamping and ultimate joining of sections of pipe by electric welding involving three passes (steps) in the process:
  - a. Root pass - tying the sections together.
  - b. Hot pass - with additional passes as needed.
  - c. Cover pass or cap - the finishing layer.All welds are radiographically inspected.
- (6) Cleaning/priming, protecting; this step involves cleaning priming and applying polypropylene sheeting or equivalent material of minimum 40 mil thickness to the exposed welded joints.
- (7) Electrical inspection of coating; Involves grounding the pipeline and passing an electronic sensor over the coating to check for wrinkles, tears or pinhole punctures in the plastic coating. When found, the imperfections are repaired.
- (8) Lowering in; The welded sections of pipe are lowered into the trench with side boom tractors.
- (9) Backfilling; Once the pipe is laid the excavated soils are replaced in the trench and compacted. The ROW is restored to pre-project condition with replacement of original features, contours, etc.

Exhibit E illustrates a typical pipeline spread as proposed for this project. SFPP proposes to begin construction upon acquisition of all necessary permits and rights-of-way. It is anticipated the project will require four months to construct.

Upon completion of construction, the pipeline will be hydrostatically tested to a minimum of 90 percent of the specified minimum yield strength of the pipe. The maximum operating pressure will be 72 percent of the specified minimum yield strength.

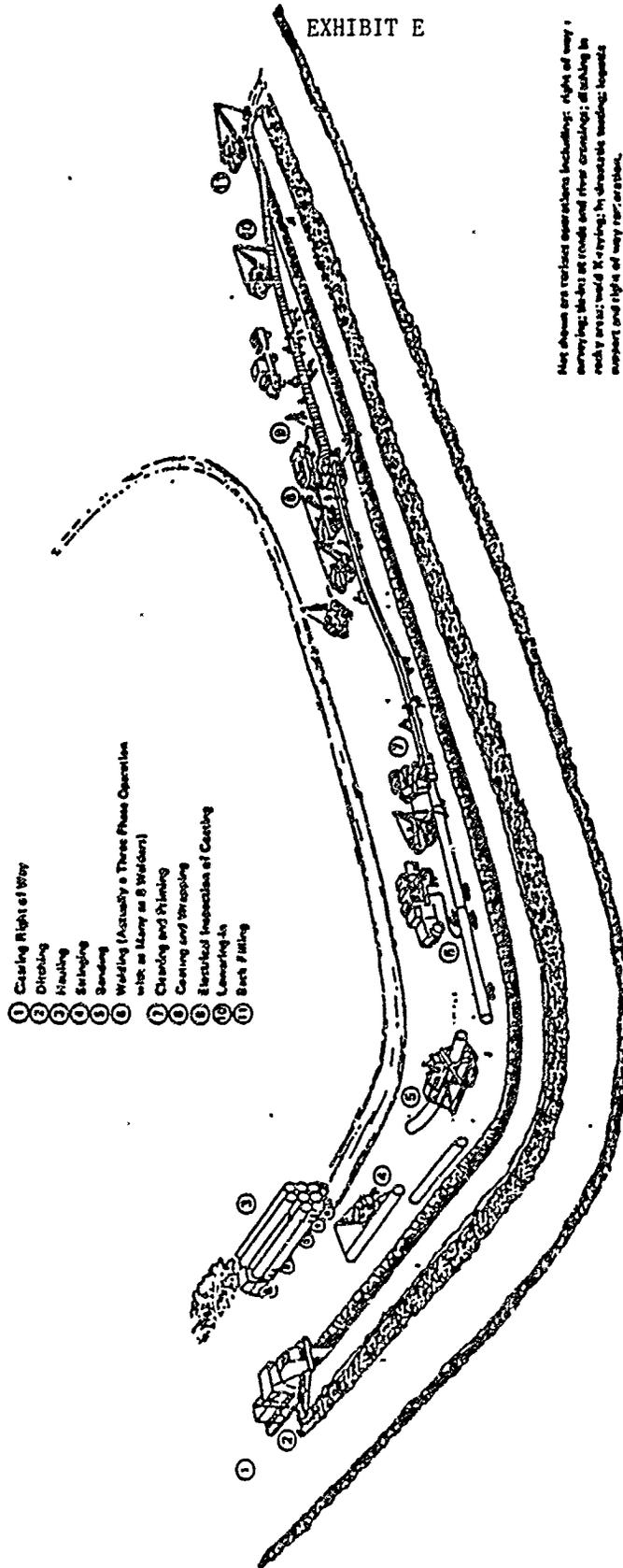
#### SPECIAL CROSSING SITUATIONS

##### Road Crossings

For the majority of the pipeline route where it follows along roadways, the construction will involve trenching with the subsequent emplacement of the pipe into the trench and reburial.

Traffic control will be maintained to minimize disruptions to vehicle movements. Steel plates will be placed across driveways and intersections to allow continued traffic flow over the trench in both directions.

EXHIBIT E



- ① Clearing Right of Way
- ② Ditching
- ③ Hauling
- ④ Setting
- ⑤ Splicing
- ⑥ Welding (Actually a Three Phase Operation with as Many as 8 Welders)
- ⑦ Coating and Wrapping
- ⑧ Electrical Inspection of Casting
- ⑨ Lowering in
- ⑩ Back Filling

Map shows one radius operation including: right of way surveying; stakes at route and river crossings; ditching in rocky areas; road X-coring; by streamside banking; layout; support and right of way re-creation.

Typical Pipeline Construction Spread

However, where site specific conditions make simple trenching across roadways infeasible, the crossings will be bored. Exhibits F, G and H illustrate typical uncased and cased pipeline/road crossings. All major interstate and highway crossings and mainline railroad crossings will be bored and cased. All other crossings will be bored and uncased or open trenched unless physically impossible or if not allowed by local governing agency. Casing of bores will be done only if absolutely necessary to complete the bore or when required by a governing agency. Casing is avoided for two reasons:

- (1). Casing introduces a space between the outer casing pipe and the inner carrier pipe which allows moisture to collect. This accelerates corrosion to the outer surface of the carrier pipe within the casing.
- (2). The carrier pipe must be installed within the casing using insulators for electrical protection. These insulators isolate the cased section of carrier pipe from the electric cathodic protection system which protects the pipeline from corrosion. This further accelerates corrosion to the outside of the carrier pipe within the casing.

The trenching operations will be conducted to minimize interference or obstruction to traffic flow and safety and all precautions will be taken to protect human life and property. The contractor will be required to give written notice to the proper authorities at least 48 hours prior to commencing construction of the crossing.

#### Water Crossings

The proposed pipeline will cross fourteen waterways, six of which are crossings beneath SPTCo. railroad tracks (Exhibit I). Several of these waterways are small with only minimal flow. Others are intermittent and become dry during portions of the year. These channels can be open trenched and then backfilled with the native soil once the pipe is installed.

In creeks with excessive or rapid flows, bypassing possible stream water around the trenching site is conducted with fluming pipes. The fluming process involves placing one or more large diameter (18-30 inch) steel pipes 30 to 40 feet in length along the stream alignment. A sandbag diversion dam is placed across the stream flow, around the pipes at their upstream end directing the water flow into the steel "flume" pipes. This process allows the water to be diverted past the construction without picking up any transportable soil. A small sandbag barrier is placed across the channel at the downstream end of the pipes to prohibit soils stirred by the construction from silting into the stream at the downstream end. The trenching operation is conducted between the two sandbag barriers. Once the pipeline is installed, the trench is backfilled and graded and the streambanks restored.

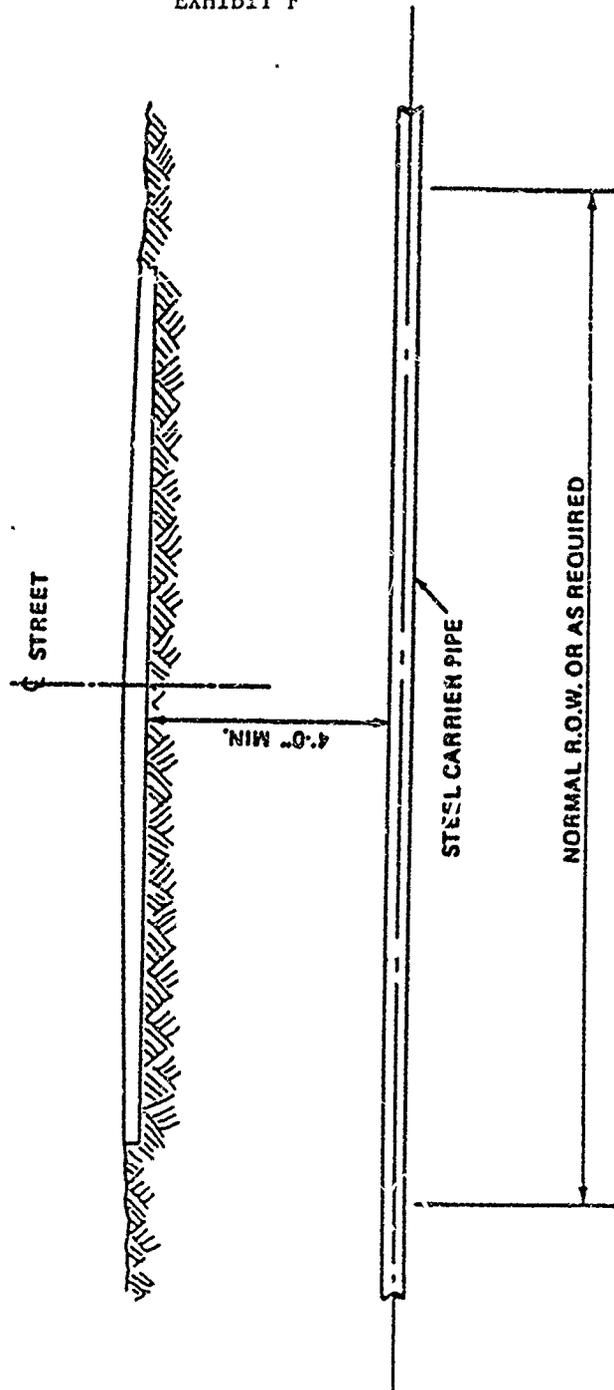
NOTES :

1. IT IS REQUIRED THAT NO WORK AT ANY TIME SHALL UNDULY INTERFERE, OBSTRUCT OR ENDANGER TRAFFIC AT ANY STREET CROSSING AND THAT ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PROTECT HUMAN LIFE AND PROPERTY.

2. THE CONTRACTOR SHALL GIVE THE PROPER AUTHORITIES AT LEAST 48 HOURS NOTICE IN WRITING PRIOR TO CONSTRUCTION.

3. BACKFILL SHALL BE COMPACTED PER SPECIFICATIONS.

EXHIBIT F



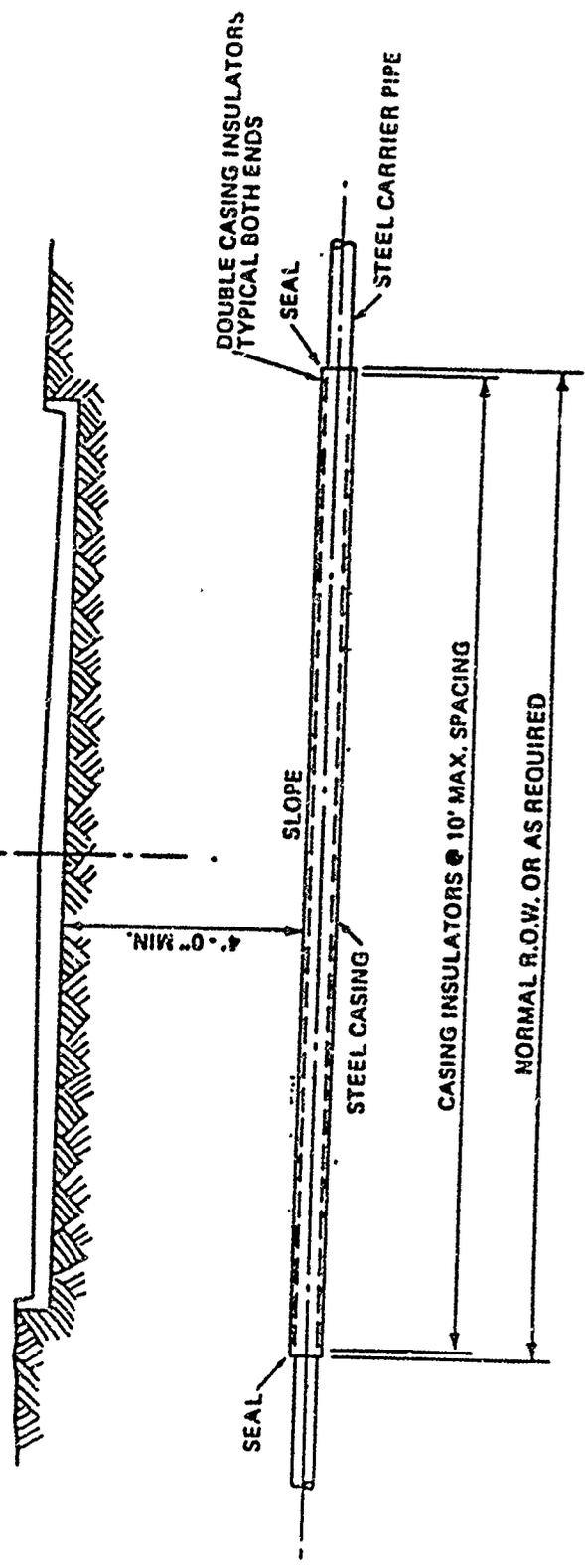
PROFILE

Typical Uncased Street Crossing Detail

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EXHIBIT G

- NOTES:
1. IT IS REQUIRED THAT NO WORK AT ANY TIME SHALL UNDULY INTERFERE, OBSTRUCT OR ENDANGER TRAFFIC AT ANY STREET CROSSING AND THAT ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PROTECT HUMAN LIFE AND PROPERTY.
  2. THE CONTRACTOR SHALL GIVE THE PROPER AUTHORITIES AT LEAST 48 HOURS NOTICE IN WRITING PRIOR TO CONSTRUCTION.
  3. BACKFILL SHALL BE COMPACTED PER SPECIFICATIONS.
  4. INSTALL TWO INSULATORS AT EACH END OF CASING AND FLUSH WITH END OF CASING.
  5. INSTALL TEST LEAD AT ONE END OF CASING.



PROFILE

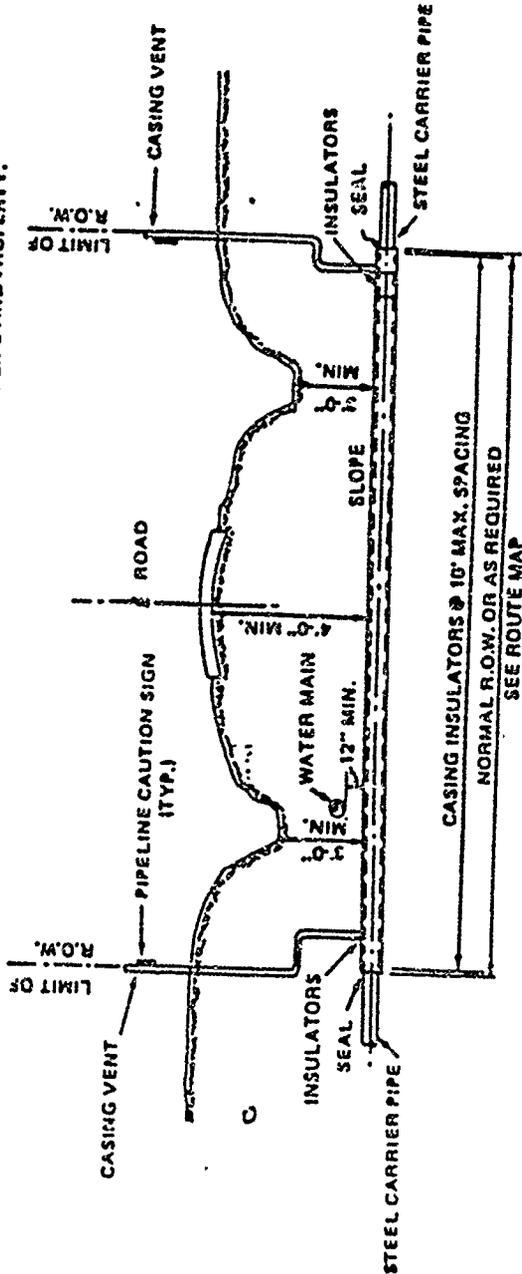
Typical Cased Street Crossing Detail

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EXHIBIT H

NOTES :

1. CASING JOINTS TO BE ALIGNED AND COMPLETELY WELDED IN ACCORDANCE WITH GOOD PIPELINE PRACTICE.
2. CASING MAY BE INSTALLED BY EITHER BORING &/OR JACKING UNDER THE ROAD EMBANKMENT. AFTER PLACING OF CASING UNDER THE ROAD EMBANKMENT THE BORE HOLE SHALL BE BACKFILLED AND COMPACTED TO PREVENT ANY SETTLEMENT OF THE ROAD GRADE.
3. CASING PIPE SHALL BE SO CONSTRUCTED AS TO PREVENT ANY LEAKAGE UNDER THE ROAD.
4. CASING PIPE SHALL BE INSTALLED TO SLOPE TO ONE END WITH AN EVEN BEARING THROUGHOUT ITS LENGTH SO AS TO PREVENT THE FORMATION OF A WATERWAY ALONG IT.
5. PIPELINE AND CASING PIPES SHALL BE AT LEAST 4 FEET VERTICALLY FROM AERIAL ELECTRIC WIRES AND SHALL BE SUITABLY INSULATED FROM UNDERGROUND CONDUITS CARRYING ELECTRIC WIRES.
6. CASING SEAL BUSHINGS AND INSULATORS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND GOOD PIPELINE PRACTICE.
7. IT IS REQUIRED THAT NO WORK AT ANY TIME SHALL UNDULY INTERFERE, OBSTRUCT OR ENDANGER TRAFFIC AT ANY ROAD CROSSING AND THAT ALL NECESSARY PRECAUTIONS BE TAKEN TO PROTECT HUMAN LIFE AND PROPERTY.
8. THE CONTRACTOR SHALL GIVE THE PROPER AUTHORITIES AT LEAST 48 HOURS NOTICE IN WRITING PRIOR TO CONSTRUCTION.
9. INSTALL TWO INSULATORS AT EACH END OF CASING FLUSH WITH END OF CASING.
10. INSTALL TEST LEAD AT EACH END OF CASING.



PROFILE

Typical Cased Road Crossing Detail

EXHIBIT I

WATERCOURSES CROSSED BY THE PROPOSED ROUTE

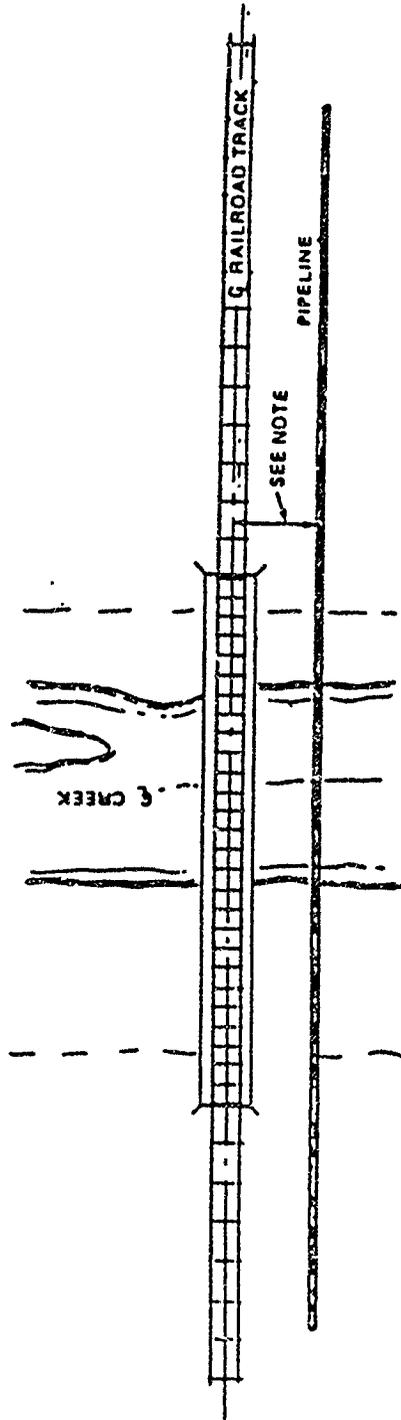
Watercourse	Method	Location
Wildcat Creek	Trenching	On SPTCo railroad right-of-way
San Pablo Creek	Bored	On SPTCo railroad right-of-way
Rheem Creek	Trenching	On SPTCo railroad right-of-way
Garrity Creek	Trenching	On SPTCo railroad right-of-way
Pinole Creek	Bored	On SPTCo railroad right-of-way
Refugio Creek	Spanned (concrete box culvert)	On SPTCo railroad right-of-way
Rodeo Creek	Spanned (concrete box culvert)	As it passes under San Pablo Avenue
Tributary to Canada del Cierbo	Roadway crossing over Creek	As it passes under Cummings Skyway
Tributary to Franklin Canyon Creek	Trenching	North of State Highway 4, parallel to existing pipeline easement
Tributary to Franklin Canyon Creek	Trenching	North of State Highway 4, parallel to existing pipeline easement
Franklin Canyon Creek	Roadway crossing over creek	As it passes under Franklin Canyon Road
Arroyo del Hambre	Roadway crossing over creek	As it passes under Muir Station Road
Grayson Creek	Trenching	Southeast of the State Highway 4 interchange with Interstate Highway 680
Walnut Creek	Trenching	Southwest of the State Highway 4 interchange with Solano Way

The sandbag dams and flume pipes are removed. This operation is a standard pipeline construction procedure and creates little siltation when done by an experienced work crew.

Other channels such as concrete lined channels, other buried pipes or special sensitive stream environments may require no impacts from construction of the pipeline. These channels will be crossed using spanning, tunneling or boring techniques. Exhibits J, K and L display the special crossings for streams, etc.

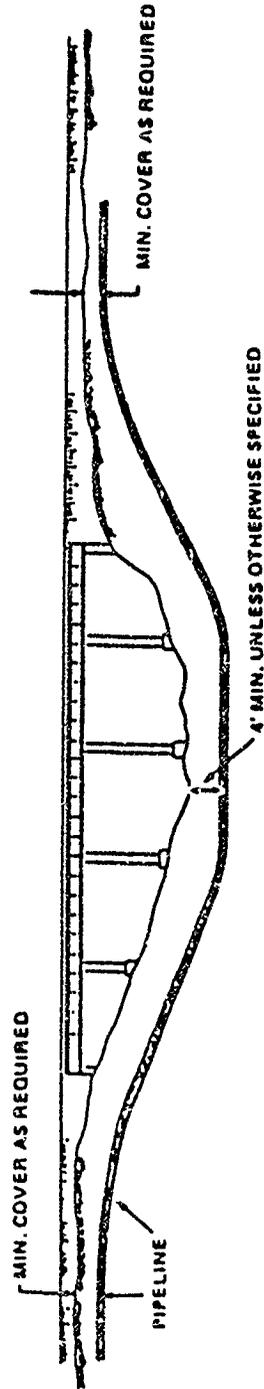
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EXHIBIT J



PLAN

G



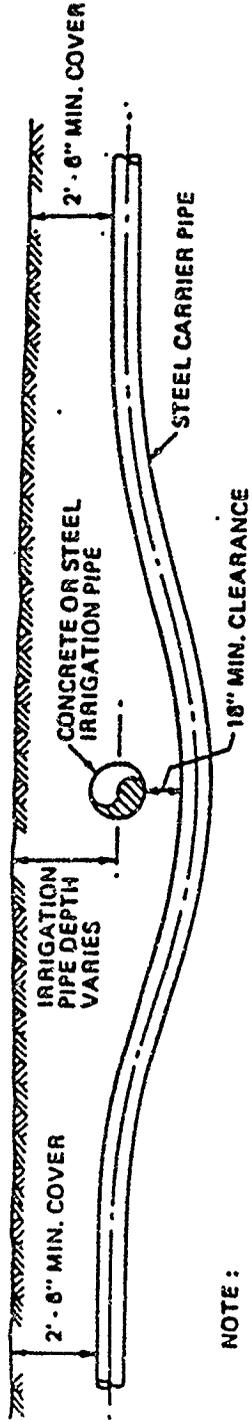
PROFILE

NOTE:  
PIPELINE ALIGNMENT VARIES TO SUIT SPECIFIC CROSSING

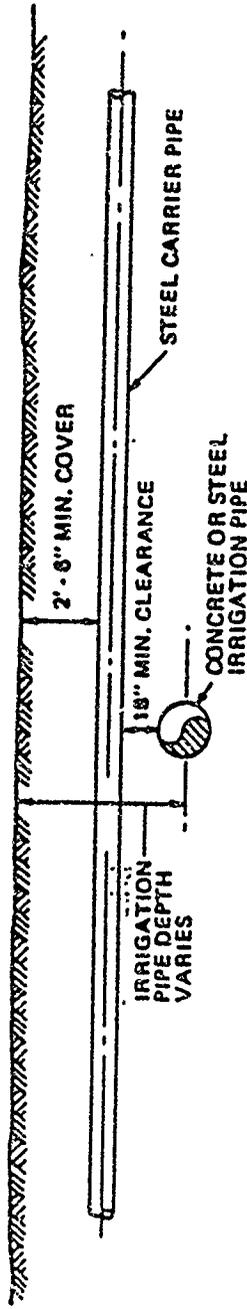
Typical Crossing Detail for Minor Creeks, Sloughs and Ravines

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EXHIBIT K



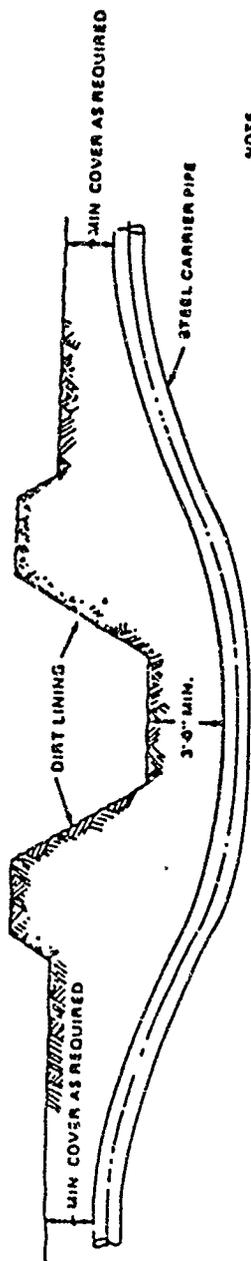
NOTE :  
DO NOT DISTURB FLOW OF WATER.



NOTE :  
INDIVIDUAL DESIGN DRAWINGS HAVE BEEN  
PREPARED FOR CERTAIN CROSSINGS.  
CLEARANCES SHOWN ON SUCH INDIVIDUAL  
DESIGN DRAWINGS WILL GOVERN AT THOSE  
LOCATIONS.

Typical Crossing Detail for Concrete and Steel  
Irrigation pipe

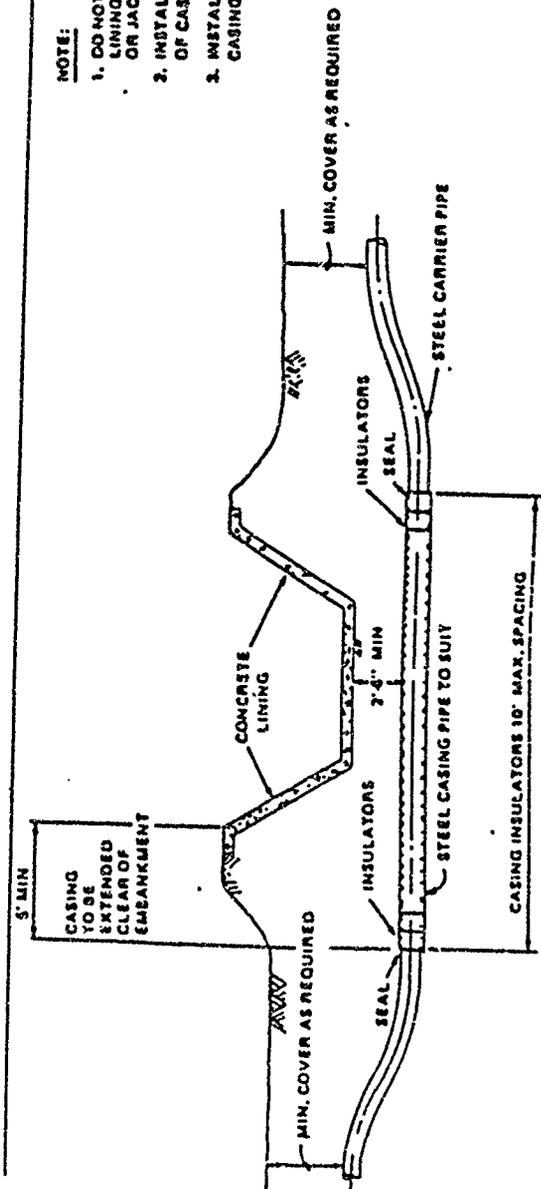
EXHIBIT L



NOTE

THOROUGHLY COMPACT BACKFILL IN TRENCH AND CAREFULLY RECONSTRUCT BANKS. DO NOT DISRUPT THE FLOW OF WATER

DIRT LINED IRRIGATION DITCH, CANAL OR FLUME



NOTE:

1. DO NOT DISTURB BANKS OR CONCRETE LINING. INSTALL CASING BY BORING AND OR JACKING.
2. INSTALL TWO INSULATORS AT EACH END OF CASING FLUSH WITH END OF CASING.
3. INSTALL TEST LEAD AT EACH END OF CASING.

CONCRETE LINED IRRIGATION DITCH, CANAL OR FLUME

Typical Crossing Detail for Irrigation Ditches, Canals and Flumes

ENVIRONMENTAL IMPACT ASSESSMENT CHECKLIST - PART II

Form 13.20 (7/82)

File Ref.: WP 5439

I. BACKGROUND INFORMATION

A. Applicant: Santa Fe Pacific Pipeline Partners, L.P. (SFPP)

B. Checklist Date: 5 / 28 / 92

C. Contact Person: Mary Griggs
Telephone: (916) 322-0354

D. Purpose: Transport Refined Petroleum Products

E. Location: Richmond to Concord, Contra Costa County

F. Description: Proposed construction of a 25-mile refined petroleum products pipeline (12" + 16") from the SFPP Richmond facility to the SFPP facility located on Solano Way near Concord, CA

G. Persons Contacted: Contra Costa County, City of Hercules, City of Martinez, City of Concord, City of Richmond, City of San Pablo, California Dept. of Fish and Game - Brian Hunter, East Bay Regional Park District, City of Pinole, East Bay Municipal Utility District

II. ENVIRONMENTAL IMPACTS. (Explain all "yes" and "maybe" answers)

Table with 3 columns: Question, Yes, Maybe, No. Contains 7 rows of environmental impact questions with checkboxes.

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- |   | Yes                      | Maybe                               | No                                  |
|---|--------------------------|-------------------------------------|-------------------------------------|
| <b>B Air.</b> Will the proposal result in:  |                          |                                     |                                     |
| 1 Substantial air emissions or deterioration of ambient air quality? . . . . .  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 2 The creation of objectionable odors? . . . . .  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3 Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally? . . . . .  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>C Water.</b> Will the proposal result in:  |                          |                                     |                                     |
| 1 Changes in the currents, or the course or direction of water movements, in either marine or fresh waters? . . . . .   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 2 Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff? . . . . .   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3 Alterations to the course or flow of flood waters? . . . . .  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 4 Change in the amount of surface water in any water body? . . . . .  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5 Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity? . . . . .                | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 6 Alteration of the direction or rate of flow of ground waters? . . . . .   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 7 Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations? . . . . .                | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 8 Substantial reduction in the amount of water otherwise available for public water supplies? . . . . .   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 9 Exposure of people or property to water-related hazards such as flooding or tidal waves? . . . . .  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 10 Significant changes in the temperature, flow or chemical content of surface thermal springs? . . . . .   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>D Plant Life.</b> Will the proposal result in:   |                          |                                     |                                     |
| 1 Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, and aquatic plants)? . . . . .                                   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 2 Reduction of the numbers of any unique, rare or endangered species of plants? . . . . .   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3 Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species? . . . . .  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 4 Reduction in acreage of any agricultural crop? . . . . .  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>E Animal Life</b> Will the proposal result in:   |                          |                                     |                                     |
| 1 Change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, or insects)? . . . . . | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 2 Reduction of the numbers of any unique, rare or endangered species of animals? . . . . .  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3 Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals? . . . . .  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 4 Deterioration to existing fish or wildlife habitat? . . . . .   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <b>F Noise.</b> Will the proposal result in:  |                          |                                     |                                     |
| 1 Increase in existing noise levels? . . . . .  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2 Exposure of people to severe noise levels? . . . . .  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <b>G Light and Glare.</b> Will the proposal result in:  |                          |                                     |                                     |
| 1 The production of new light or glare? . . . . .   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>H Land Use</b> Will the proposal result in:  |                          |                                     |                                     |
| 1 A substantial alteration of the present or planned land use of an area? . . . . .   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>I Natural Resources.</b> Will the proposal result in:  |                          |                                     |                                     |
| 1 Increase in the rate of use of any natural resources? . . . . .   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 2 Substantial depletion of any nonrenewable resources? . . . . .  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

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- J *Risk of Upset.* Does the proposal result in:
- |   | Yes                      | Maybe                               | No                                  |
|---|--------------------------|-------------------------------------|-------------------------------------|
| 1. A risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals, or radiation) in the event of an accident or upset conditions? ..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Possible interference with emergency response plan or an emergency evacuation plan? .....  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
- K. *Population.* Will the proposal result in:
- |   |                          |                          |                                     |
|---|--------------------------|--------------------------|-------------------------------------|
| 1. The alteration, distribution, density, or growth rate of the human population of the area? ..... | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|
- L. *Housing.* Will the proposal result in:
- |   |                          |                          |                                     |
|---|--------------------------|--------------------------|-------------------------------------|
| 1. Affecting existing housing, or create a demand for additional housing? ..... | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|
- M. *Transportation/Circulation.* Will the proposal result in:
- |   |                          |                          |                                     |
|---|--------------------------|--------------------------|-------------------------------------|
| 1. Generation of substantial additional vehicular movement? .....                           | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Affecting existing parking facilities, or create a demand for new parking? .....         | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Substantial impact upon existing transportation systems? .....                           | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Alterations to present patterns of circulation or movement of people and/or goods? ..... | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Alterations to waterborne, rail, or air traffic? .....                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians? .....         | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
- N. *Public Services.* Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:
- |   |                          |                          |                                     |
|---|--------------------------|--------------------------|-------------------------------------|
| 1. Fire protection? .....                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Police protection? .....                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Schools? .....   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Parks and other recreational facilities? .....           | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Maintenance of public facilities, including roads? ..... | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. Other governmental services? .....                       | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
- O. *Energy.* Will the proposal result in:
- |   |                          |                          |                                     |
|---|--------------------------|--------------------------|-------------------------------------|
| 1. Use of substantial amounts of fuel or energy? .....  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Substantial increase in demand upon existing sources of energy, or require the development of new sources? ..... | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
- P. *Utilities.* Will the proposal result in a need for new systems, or substantial alterations to the following utilities:
- |                                    |                          |                          |                                     |
|------------------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. Power or natural gas? .....     | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Communication systems? .....    | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Water? .....                    | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Sewer or septic tanks? .....    | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Storm water drainage? .....     | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. Solid waste and disposal? ..... | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
- Q. *Human Health.* Will the proposal result in:
- |  |                          |                                     |                                     |
|--|--------------------------|-------------------------------------|-------------------------------------|
| 1. Creation of any health hazard or potential health hazard (excluding mental health)? ..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Exposure of people to potential health hazards? .....                                     | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
- R. *Aesthetics.* Will the proposal result in:
- |  |                          |                                     |                                     |
|--|--------------------------|-------------------------------------|-------------------------------------|
| 1. The obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of an aesthetically offensive site open to public view? ..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|-------------------------------------|-------------------------------------|
- S. *Recreation.* Will the proposal result in:
- |   |                          |                                     |                                     |
|---|--------------------------|-------------------------------------|-------------------------------------|
| 1. An impact upon the quality or quantity of existing recreational opportunities? ..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|-------------------------------------|-------------------------------------|

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