



THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

Office of the General Manager

April 8, 2013

**Via E-Mail and Federal Express**

Mr. Mark Gross  
Senior Planner  
City of Moreno Valley  
Community & Economic Development Department, Planning Division  
14177 Frederick Street  
Moreno Valley, CA 92552-0805

Dear Mr. Gross:

Notice of Availability of the  
Draft Environmental Impact Report for the World Logistics Center Project

The Metropolitan Water District of Southern California (Metropolitan) has received the Notice of Availability of the Draft Environmental Impact Report (EIR) for the World Logistics Center Project (proposed project). The proposed project covers 3,918 acres in eastern Moreno Valley, generally located east of Redlands Boulevard, south of State Route 60 (SR60), west of Gilman Springs Road, and north of the San Jacinto Wildlife Area. The project proposes a maximum of 41.4 million square feet of high-cube logistics warehouse distribution uses classified as "Logistics Development" and 200,000 square feet of warehousing-related uses classified as "Light Logistics." Also included in the proposed project is a General Plan Amendment that will designate 2,635 acres for logistics development, 20 acres for public utility uses, and 1,159 acres for permanent open space. The remaining 104 acres will be used for utility extensions to serve the proposed project. Within the proposed project area, 2,710 acres are included in a proposed World Logistics Center Specific Plan (specific plan) which contains all of the 2,635 acres of proposed logistics land uses and 75 acres of the Open Space. Off-site infrastructure improvements, including construction of debris basins, water reservoirs and access roads, SR60 interchange modifications, and other road and utility modifications, are also proposed. This letter contains Metropolitan's response to the Notice of Availability as a potentially affected public agency.

Metropolitan owns property and owns and operates facilities on and adjacent to the site of the proposed project. As shown on the attached map, Metropolitan's irregularly shaped fee-owned property (APN 422-040-009 and 422-040-015), Inland Feeder Tunnel, and appurtenant tunnel access structure are located within the proposed specific plan area. In addition, Metropolitan's 145-inch-inside-diameter Inland Feeder pipeline and appurtenant structures extend through the specific plan area in the street rights-of-way for Eucalyptus Avenue, Theodore Street, and Davis

Road. Metropolitan also has a 110-foot-wide easement along Davis Road. While Metropolitan's property is referenced in Sections 3.3.1 and Section 4.4.1 of the Draft EIR, the Inland Feeder pipeline is not mentioned in the document.

Metropolitan is concerned with the potential impacts to its fee property, the Inland Feeder pipeline, and associated facilities resulting from future excavation, construction, utilities or any development that may occur as a result of proposed project activities. Please note that Metropolitan does not allow any structures within its fee property or easement. Development associated with the proposed project must not restrict any of Metropolitan's day-to-day operations and/or access to its facilities. Metropolitan must be allowed to maintain its rights-of-way and requires unobstructed access to its facilities and properties at all times in order to repair and maintain its system. Detailed prints of drawings of Metropolitan's pipelines and rights-of-way may be obtained by calling Metropolitan's Substructures Information Line at (213) 217-6564. To assist in preparing plans that are compatible with Metropolitan's facilities, easements and properties, we have enclosed a copy of the "Guidelines for Developments in the Area of Facilities, Fee Properties, and /or Easements of The Metropolitan Water District of Southern California." Please note that all submitted designs or plans must clearly identify Metropolitan's facilities and rights-of-way.

In order to avoid potential conflicts with Metropolitan's facilities and rights-of-way, Metropolitan requires that detailed design plans for any activities within the vicinity of our facilities, fee property or rights-of way be submitted prior to construction for review and written approval. Approval of the proposed project where it could impact Metropolitan's property should be contingent on Metropolitan's approval of design plans for the proposed project. Metropolitan requests that the text of the EIR be revised to acknowledge the presence of the Inland Feeder pipeline and appurtenant facilities within the boundaries of the proposed project and that the text also state that Metropolitan will need to approve any development plans that have the potential to impact Metropolitan's property or facilities.

Additionally, Metropolitan is concerned about limiting other potential uses for its fee-owned property through the proposed specific plan land use designation discussed in the Draft EIR and respectfully requests that its fee-owned property be excluded from this Specific Plan. The property lends itself to not only high cube distribution but to other industrial type uses as well. By allowing more diverse uses, the city can achieve its objective of providing employment opportunities for a wide range of companies and residents as well as enhance the city's tax base by providing a wide variety of employment opportunities for both skilled and semi-skilled workers. In addition, the 500,000 square feet and 24-foot or greater height requirements specified for the logistics development (LD) land use designation (identified in Sections 3.4.2 and 3.4.6 of the Draft EIR) also limits future users of the property. We recommend that the Specific Plan provide adequate flexibility for economically viable uses based on market segmentation dynamics and configuration of developable parcels impacted by topographical and geographical conditions.

Mr. Mark Gross

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April 8, 2013

We appreciate the opportunity to provide input to your planning process and we look forward to receiving future environmental documentation and design plans regarding this proposed project. If you have any questions, please contact Ms. Jennifer Harriger at (213) 217-7658.

Very truly yours,

A handwritten signature in black ink, appearing to read "Deirdre West". The signature is fluid and cursive, with a large initial "D" and a stylized "W".

Deirdre West

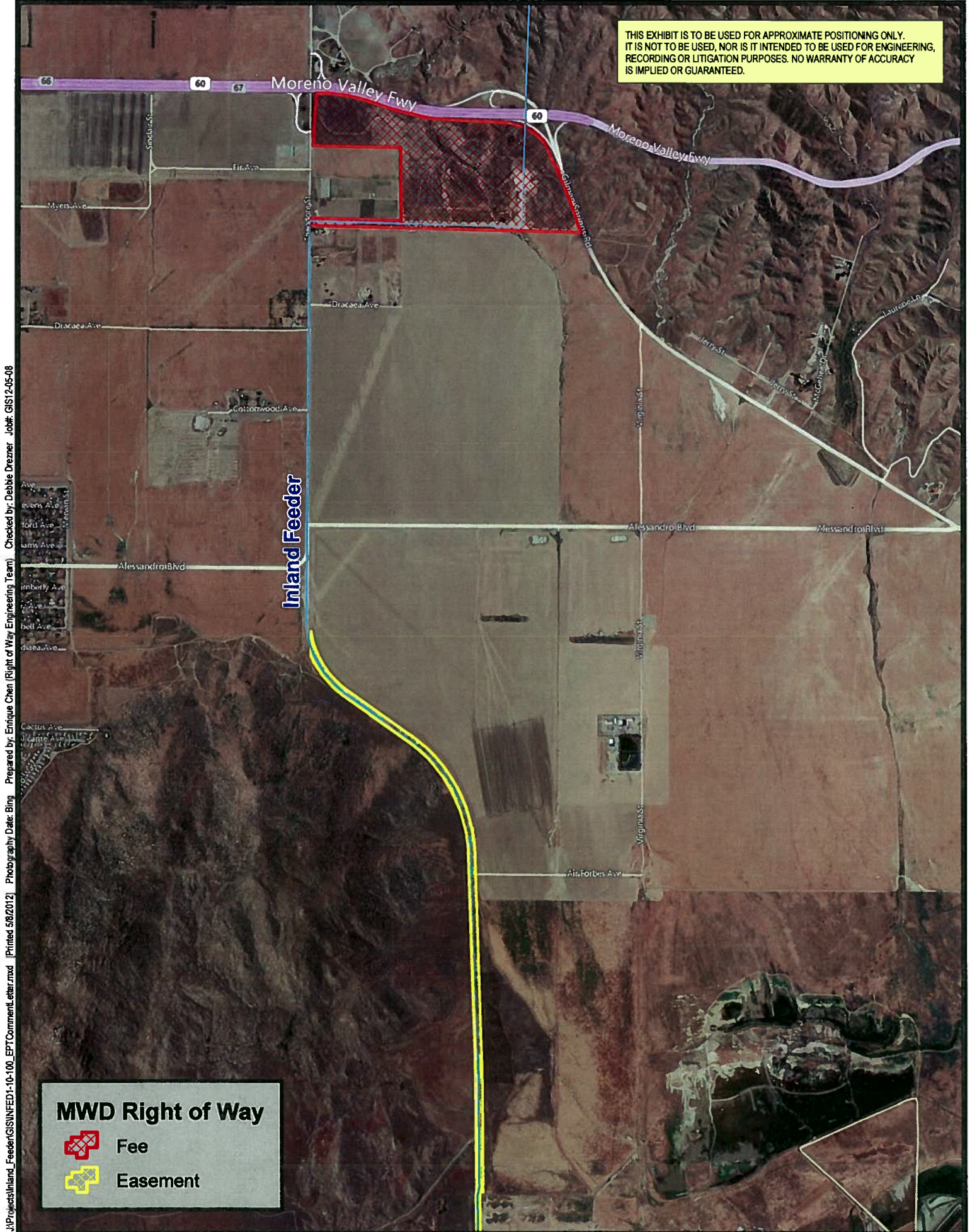
Manager, Environmental Planning Team

JH/jh

(J:\Environmental-Planning & Compliance\COMPLETED JOBS\2012\Folders\May 2012\Job No. 2012050303 \World Logistics Center Letter.docx)

Enclosures: Map of Metropolitan's Fee Property and Inland Feeder Alignment  
Planning Guidelines

THIS EXHIBIT IS TO BE USED FOR APPROXIMATE POSITIONING ONLY. IT IS NOT TO BE USED, NOR IS IT INTENDED TO BE USED FOR ENGINEERING, RECORDING OR LITIGATION PURPOSES. NO WARRANTY OF ACCURACY IS IMPLIED OR GUARANTEED.



J:\Projects\Inland\_Feeder\GIS\INFEED1-10-100\_EPTCommentLetter.mxd [Printed 6/6/2012] Photography Date: Bing Prepared by: Enrique Chen (Right of Way Engineering Team) Checked by: Debbie Drezner Job#: 61612-05-08

**MWD Right of Way**

-  Fee
-  Easement



Guidelines for Developments in the  
Area of Facilities, Fee Properties, and/or Easements  
of The Metropolitan Water District of Southern California

1. Introduction

a. The following general guidelines should be followed for the design of proposed facilities and developments in the area of Metropolitan's facilities, fee properties, and/or easements.

b. We require that 3 copies of your tentative and final record maps, grading, paving, street improvement, landscape, storm drain, and utility plans be submitted for our review and written approval as they pertain to Metropolitan's facilities, fee properties and/or easements, prior to the commencement of any construction work.

2. Plans, Parcel and Tract Maps

The following are Metropolitan's requirements for the identification of its facilities, fee properties, and/or easements on your plans, parcel maps and tract maps:

a. Metropolitan's fee properties and/or easements and its pipelines and other facilities must be fully shown and identified as Metropolitan's on all applicable plans.

b. Metropolitan's fee properties and/or easements must be shown and identified as Metropolitan's with the official recording data on all applicable parcel and tract maps.

c. Metropolitan's fee properties and/or easements and existing survey monuments must be dimensionally tied to the parcel or tract boundaries.

d. Metropolitan's records of surveys must be referenced on the parcel and tract maps.

3. Maintenance of Access Along Metropolitan's Rights-of-Way

a. Proposed cut or fill slopes exceeding 10 percent are normally not allowed within Metropolitan's fee properties or easements. This is required to facilitate the use of construction and maintenance equipment, and provide access to its aboveground and belowground facilities.

b. We require that 16-foot-wide commercial-type driveway approaches be constructed on both sides of all streets crossing Metropolitan's rights-of-way. Openings are required in any median island. Access ramps, if necessary, must be at least 16-foot-wide. Grades of ramps are normally not allowed to exceed 10 percent. If the slope of an access ramp must exceed 10 percent due to the topography, the ramp must be paved. We require a 40-foot-long level area on the driveway approach to access ramps where the ramp meets the street. At Metropolitan's fee properties, we may require fences and gates.

c. The terms of Metropolitan's permanent easement deeds normally preclude the building or maintenance of structures of any nature or kind within its easements, to ensure safety and avoid interference with operation and maintenance of Metropolitan's pipelines or other facilities. Metropolitan must have vehicular access along the easements at all times for inspection, patrolling, and for maintenance of the pipelines and other facilities on a routine basis. We require a 20-foot-wide clear zone around all above-ground facilities for this routine access. This clear zone should slope away from our facility on a grade not to exceed 2 percent. We must also have access along the easements with construction equipment. An example of this is shown on Figure 1.

d. The footings of any proposed buildings adjacent to Metropolitan's fee properties and/or easements must not encroach into the fee property or easement or impose additional loading on Metropolitan's pipelines or other facilities therein. A typical situation is shown on Figure 2. Prints of the detail plans of the footings for any building or structure adjacent to the fee property or easement must be submitted for our review and written approval as they pertain to the pipeline or other facilities therein. Also, roof eaves of buildings adjacent to the easement or fee property must not overhang into the fee property or easement area.

e. Metropolitan's pipelines and other facilities, e.g. structures, manholes, equipment, survey monuments, etc. within its fee properties and/or easements must be protected from damage by the easement holder on Metropolitan's property or the property owner where Metropolitan has an easement, at no expense to Metropolitan. If the facility is a cathodic protection station it shall be located prior to any grading or excavation. The exact location, description and way of protection shall be shown on the related plans for the easement area.

4. Easements on Metropolitan's Property

a. We encourage the use of Metropolitan's fee rights-of-way by governmental agencies for public street and utility purposes, provided that such use does not interfere with Metropolitan's use of the property, the entire width of the property is accepted into the agency's public street system and fair market value is paid for such use of the right-of-way.

b. Please contact the Director of Metropolitan's Right of Way and Land Division, telephone (213) 250-6302, concerning easements for landscaping, street, storm drain, sewer, water or other public facilities proposed within Metropolitan's fee properties. A map and legal description of the requested easements must be submitted. Also, written evidence must be submitted that shows the city or county will accept the easement for the specific purposes into its public system. The grant of the easement will be subject to Metropolitan's rights to use its land for water pipelines and related purposes to the same extent as if such grant had not been made. There will be a charge for the easement. Please note that, if entry is required on the property prior to issuance of the easement, an entry permit must be obtained. There will also be a charge for the entry permit.

5. Landscaping

Metropolitan's landscape guidelines for its fee properties and/or easements are as follows:

a. A green belt may be allowed within Metropolitan's fee property or easement.

b. All landscape plans shall show the location and size of Metropolitan's fee property and/or easement and the location and size of Metropolitan's pipeline or other facilities therein.

c. Absolutely no trees will be allowed within 15 feet of the centerline of Metropolitan's existing or future pipelines and facilities.

d. Deep-rooted trees are prohibited within Metropolitan's fee properties and/or easements. Shallow-rooted trees are the only trees allowed. The shallow-rooted trees will not be permitted any closer than 15 feet from the centerline of the pipeline, and such trees shall not be taller than 25 feet with a root spread no greater than 20 feet in diameter at maturity. Shrubs, bushes, vines, and ground cover are permitted, but larger shrubs and bushes should not be planted directly over our pipeline. Turf is acceptable. We require submittal of landscape plans for Metropolitan's prior review and written approval. (See Figure 3).

e. The landscape plans must contain provisions for Metropolitan's vehicular access at all times along its rights-of-way to its pipelines or facilities therein. Gates capable of accepting Metropolitan's locks are required in any fences across its rights-of-way. Also, any walks or drainage facilities across its access route must be constructed to AASHTO H-20 loading standards.

f. Rights to landscape any of Metropolitan's fee properties must be acquired from its Right of Way and Land Division. Appropriate entry permits must be obtained prior to any entry on its property. There will be a charge for any entry permit or easements required.

## 6. Fencing

Metropolitan requires that perimeter fencing of its fee properties and facilities be constructed of universal chain link, 6 feet in height and topped with 3 strands of barbed wire angled upward and outward at a 45 degree angle or an approved equal for a total fence height of 7 feet. Suitable substitute fencing may be considered by Metropolitan. (Please see Figure 5 for details).

## 7. Utilities in Metropolitan's Fee Properties and/or Easements or Adjacent to Its Pipeline in Public Streets

Metropolitan's policy for the alinement of utilities permitted within its fee properties and/or easements and street rights-of-way is as follows:



a. Permanent structures, including catch basins, manholes, power poles, telephone riser boxes, etc., shall not be located within its fee properties and/or easements.

b. We request that permanent utility structures within public streets, in which Metropolitan's facilities are constructed under the Metropolitan Water District Act, be placed as far from our pipeline as possible, but not closer than 5 feet from the outside of our pipeline.

c. The installation of utilities over or under Metropolitan's pipeline(s) must be in accordance with the requirements shown on the enclosed prints of Drawings Nos. C-11632 and C-9547. Whenever possible we request a minimum of one foot clearance between Metropolitan's pipe and your facility. Temporary support of Metropolitan's pipe may also be required at undercrossings of its pipe in an open trench. The temporary support plans must be reviewed and approved by Metropolitan.

d. Lateral utility crossings of Metropolitan's pipelines must be as perpendicular to its pipeline alignment as practical. Prior to any excavation our pipeline shall be located manually and any excavation within two feet of our pipeline must be done by hand. This shall be noted on the appropriate drawings.

e. Utilities constructed longitudinally within Metropolitan's rights-of-way must be located outside the theoretical trench prism for uncovering its pipeline and must be located parallel to and as close to its rights-of-way lines as practical.

f. When piping is jacked or installed in jacked casing or tunnel under Metropolitan's pipe, there must be at least two feet of vertical clearance between the bottom of Metropolitan's pipe and the top of the jacked pipe, jacked casing or tunnel. We also require that detail drawings of the shoring for the jacking or tunneling pits be submitted for our review and approval. Provisions must be made to grout any voids around the exterior of the jacked pipe, jacked casing or tunnel. If the piping is installed in a jacked casing or tunnel the annular space between the piping and the jacked casing or tunnel must be filled with grout.

g. Overhead electrical and telephone line requirements:

1) Conductor clearances are to conform to the California State Public Utilities Commission, General Order 95, for Overhead Electrical Line Construction or at a greater clearance if required by Metropolitan. Under no circumstances shall clearance be less than 35 feet.

2) A marker must be attached to the power pole showing the ground clearance and line voltage, to help prevent damage to your facilities during maintenance or other work being done in the area.

3) Line clearance over Metropolitan's fee properties and/or easements shall be shown on the drawing to indicate the lowest point of the line under the most adverse conditions including consideration of sag, wind load, temperature change, and support type. We require that overhead lines be located at least 30 feet laterally away from all above-ground structures on the pipelines.

4) When underground electrical conduits, 120 volts or greater, are installed within Metropolitan's fee property and/or easement, the conduits must be incased in a minimum of three inches of red concrete. Where possible, above ground warning signs must also be placed at the right-of-way lines where the conduits enter and exit the right-of-way.

h. The construction of sewerlines in Metropolitan's fee properties and/or easements must conform to the California Department of Health Services Criteria for the Separation of Water Mains and Sanitary Services and the local City or County Health Code Ordinance as it relates to installation of sewers in the vicinity of pressure waterlines. The construction of sewerlines should also conform to these standards in street rights-of-way.

i. Cross sections shall be provided for all pipeline crossings showing Metropolitan's fee property and/or easement limits and the location of our pipeline(s). The exact locations of the crossing pipelines and their elevations shall be marked on as-built drawings for our information.

j. Potholing of Metropolitan's pipeline is required if the vertical clearance between a utility and Metropolitan's pipeline is indicated on the plan to be one foot or less. If the indicated clearance is between one and two feet, potholing is suggested. Metropolitan will provide a representative to assist others in locating and identifying its pipeline. Two-working days notice is requested.

k. Adequate shoring and bracing is required for the full depth of the trench when the excavation encroaches within the zone shown on Figure 4.

l. The location of utilities within Metropolitan's fee property and/or easement shall be plainly marked to help prevent damage during maintenance or other work done in the area. Detectable tape over buried utilities should be placed a minimum of 12 inches above the utility and shall conform to the following requirements:

1) Water pipeline: A two-inch blue warning tape shall be imprinted with:

"CAUTION BURIED WATER PIPELINE"

2) Gas, oil, or chemical pipeline: A two-inch yellow warning tape shall be imprinted with:

"CAUTION BURIED \_\_\_\_\_ PIPELINE"

3) Sewer or storm drain pipeline: A two-inch green warning tape shall be imprinted with:

"CAUTION BURIED \_\_\_\_\_ PIPELINE"

4) Electric, street lighting, or traffic signals conduit: A two-inch red warning tape shall be imprinted with:

"CAUTION BURIED \_\_\_\_\_ CONDUIT"

5) Telephone, or television conduit: A two-inch orange warning tape shall be imprinted with:

"CAUTION BURIED \_\_\_\_\_ CONDUIT"

m. Cathodic Protection requirements:

1) If there is a cathodic protection station for Metropolitan's pipeline in the area of the proposed work, it shall be located prior to any grading or excavation. The exact location, description and manner of protection shall be shown on all applicable plans. Please contact Metropolitan's Corrosion Engineering Section, located at Metropolitan's F. E. Weymouth Softening and Filtration Plant, 700 North Moreno Avenue, La Verne, California 91750, telephone (714) 593-7474, for the locations of Metropolitan's cathodic protection stations.

2) If an induced-current cathodic protection system is to be installed on any pipeline crossing Metropolitan's pipeline, please contact Mr. Wayne E. Risner at (714) 593-7474 or (213) 250-5085. He will review the proposed system and determine if any conflicts will arise with the existing cathodic protection systems installed by Metropolitan.

3) Within Metropolitan's rights-of-way, pipelines and carrier pipes (casings) shall be coated with an approved protective coating to conform to Metropolitan's requirements, and shall be maintained in a neat and orderly condition as directed by Metropolitan. The application and monitoring of cathodic protection on the pipeline and casing shall conform to Title 49 of the Code of Federal Regulations, Part 195.

4) If a steel carrier pipe (casing) is used:

(a) Cathodic protection shall be provided by use of a sacrificial magnesium anode (a sketch showing the cathodic protection details can be provided for the designers information).

(b) The steel carrier pipe shall be protected with a coal tar enamel coating inside and out in accordance with AWWA C203 specification.

n. All trenches shall be excavated to comply with the CAL/OSHA Construction Safety Orders, Article 6, beginning with Sections 1539 through 1547. Trench backfill shall be placed in 8-inch lifts and shall be compacted to 95 percent relative compaction (ASTM D698) across roadways and through protective dikes. Trench backfill elsewhere will be compacted to 90 percent relative compaction (ASTM D698).

o. Control cables connected with the operation of Metropolitan's system are buried within streets, its fee properties and/or easements. The locations and elevations of these cables shall be shown on the drawings. The drawings shall note that prior to any excavation in the area, the control cables shall be located and measures shall be taken by the contractor to protect the cables in place.

p. Metropolitan is a member of Underground Service Alert (USA). The contractor (excavator) shall contact USA at 1-800-422-4133 (Southern California) at least 48 hours prior to starting any excavation work. The contractor will be liable for any damage to Metropolitan's facilities as a result of the construction.

8. Paramount Right

Facilities constructed within Metropolitan's fee properties and/or easements shall be subject to the paramount right of Metropolitan to use its fee properties and/or easements for the purpose for which they were acquired. If at any time Metropolitan or its assigns should, in the exercise of their rights, find it necessary to remove any of the facilities from the fee properties and/or easements, such removal and replacement shall be at the expense of the owner of the facility.

9. Modification of Metropolitan's Facilities

When a manhole or other of Metropolitan's facilities must be modified to accommodate your construction or reconstruction, Metropolitan will modify the facilities with its forces. This should be noted on the construction plans. The estimated cost to perform this modification will be given to you and we will require a deposit for this amount before the work is performed. Once the deposit is received, we will schedule the work. Our forces will coordinate the work with your contractor. Our final billing will be based on actual cost incurred, and will include materials, construction, engineering plan review, inspection, and administrative overhead charges calculated in accordance with Metropolitan's standard accounting practices. If the cost is less than the deposit, a refund will be made; however, if the cost exceeds the deposit, an invoice will be forwarded for payment of the additional amount.

10. Drainage

a. Residential or commercial development typically increases and concentrates the peak storm water runoff as well as the total yearly storm runoff from an area, thereby increasing the requirements for storm drain facilities downstream of the development. Also, throughout the year water from landscape irrigation, car washing, and other outdoor domestic water uses flows into the storm drainage system resulting in weed abatement, insect infestation, obstructed access and other problems. Therefore, it is Metropolitan's usual practice not to approve plans that show discharge of drainage from developments onto its fee properties and/or easements.

b. If water must be carried across or discharged onto Metropolitan's fee properties and/or easements, Metropolitan will insist that plans for development provide that it be carried by closed conduit or lined open channel approved in writing by Metropolitan. Also the drainage facilities must be maintained by others, e.g., city, county, homeowners association, etc. If the development proposes changes to existing drainage features, then the developer shall make provisions to provide for replacement and these changes must be approved by Metropolitan in writing.

11. Construction Coordination

During construction, Metropolitan's field representative will make periodic inspections. We request that a stipulation be added to the plans or specifications for notification of Mr. \_\_\_\_\_ of Metropolitan's Operations Services Branch, telephone (213) 250-\_\_\_\_\_, at least two working days prior to any work in the vicinity of our facilities.

12. Pipeline Loading Restrictions

a. Metropolitan's pipelines and conduits vary in structural strength, and some are not adequate for AASHTO H-20 loading. Therefore, specific loads over the specific sections of pipe or conduit must be reviewed and approved by Metropolitan. However, Metropolitan's pipelines are typically adequate for AASHTO H-20 loading provided that the cover over the pipeline is not less than four feet or the cover is not substantially increased. If the temporary cover over the pipeline during construction is between three and four feet, equipment must be restricted to that which

imposes loads no greater than AASHTO H-10. If the cover is between two and three feet, equipment must be restricted to that of a Caterpillar D-4 tract-type tractor. If the cover is less than two feet, only hand equipment may be used. Also, if the contractor plans to use any equipment over Metropolitan's pipeline which will impose loads greater than AASHTO H-20, it will be necessary to submit the specifications of such equipment for our review and approval at least one week prior to its use. More restrictive requirements may apply to the loading guideline over the San Diego Pipelines 1 and 2, portions of the Orange County Feeder, and the Colorado River Aqueduct. Please contact us for loading restrictions on all of Metropolitan's pipelines and conduits.

b. The existing cover over the pipeline shall be maintained unless Metropolitan determines that proposed changes do not pose a hazard to the integrity of the pipeline or an impediment to its maintenance.

### 13. Blasting

a. At least 20 days prior to the start of any drilling for rock excavation blasting, or any blasting, in the vicinity of Metropolitan's facilities, a two-part preliminary conceptual plan shall be submitted to Metropolitan as follows:

b. Part 1 of the conceptual plan shall include a complete summary of proposed transportation, handling, storage, and use of explosions.

c. Part 2 shall include the proposed general concept for blasting, including controlled blasting techniques and controls of noise, fly rock, airblast, and ground vibration.

### 14. CEQA Requirements

#### a. When Environmental Documents Have Not Been Prepared

1) Regulations implementing the California Environmental Quality Act (CEQA) require that Metropolitan have an opportunity to consult with the agency or consultants preparing any environmental documentation. We are required to review and consider the environmental effects of the project as shown in the Negative Declaration or Environmental Impact Report (EIR) prepared for your project before committing Metropolitan to approve your request.

2) In order to ensure compliance with the regulations implementing CEQA where Metropolitan is not the Lead Agency, the following minimum procedures to ensure compliance with the Act have been established:

a) Metropolitan shall be timely advised of any determination that a Categorical Exemption applies to the project. The Lead Agency is to advise Metropolitan that it and other agencies participating in the project have complied with the requirements of CEQA prior to Metropolitan's participation.

b) Metropolitan is to be consulted during the preparation of the Negative Declaration or EIR.

c) Metropolitan is to review and submit any necessary comments on the Negative Declaration or draft EIR.

d) Metropolitan is to be indemnified for any costs or liability arising out of any violation of any laws or regulations including but not limited to the California Environmental Quality Act and its implementing regulations.

b. When Environmental Documents Have Been Prepared

If environmental documents have been prepared for your project, please furnish us a copy for our review and files in a timely manner so that we may have sufficient time to review and comment. The following steps must also be accomplished:

1) The Lead Agency is to advise Metropolitan that it and other agencies participating in the project have complied with the requirements of CEQA prior to Metropolitan's participation.

2) You must agree to indemnify Metropolitan, its officers, engineers, and agents for any costs or liability arising out of any violation of any laws or regulations including but not limited to the California Environmental Quality Act and its implementing regulations.

15. Metropolitan's Plan-Review Cost

a. An engineering review of your proposed facilities and developments and the preparation of a letter response



giving Metropolitan's comments, requirements and/or approval that will require 8 man-hours or less of effort is typically performed at no cost to the developer, unless a facility must be modified where Metropolitan has superior rights. If an engineering review and letter response requires more than 8 man-hours of effort by Metropolitan to determine if the proposed facility or development is compatible with its facilities, or if modifications to Metropolitan's manhole(s) or other facilities will be required, then all of Metropolitan's costs associated with the project must be paid by the developer, unless the developer has superior rights.

b. A deposit of funds will be required from the developer before Metropolitan can begin its detailed engineering plan review that will exceed 8 hours. The amount of the required deposit will be determined after a cursory review of the plans for the proposed development.

c. Metropolitan's final billing will be based on actual cost incurred, and will include engineering plan review, inspection, materials, construction, and administrative overhead charges calculated in accordance with Metropolitan's standard accounting practices. If the cost is less than the deposit, a refund will be made; however, if the cost exceeds the deposit, an invoice will be forwarded for payment of the additional amount. Additional deposits may be required if the cost of Metropolitan's review exceeds the amount of the initial deposit.

16. Caution

We advise you that Metropolitan's plan reviews and responses are based upon information available to Metropolitan which was prepared by or on behalf of Metropolitan for general record purposes only. Such information may not be sufficiently detailed or accurate for your purposes. No warranty of any kind, either express or implied, is attached to the information therein conveyed as to its accuracy, and no inference should be drawn from Metropolitan's failure to comment on any aspect of your project. You are therefore cautioned to make such surveys and other field investigations as you may deem prudent to assure yourself that any plans for your project are correct.

17. Additional Information

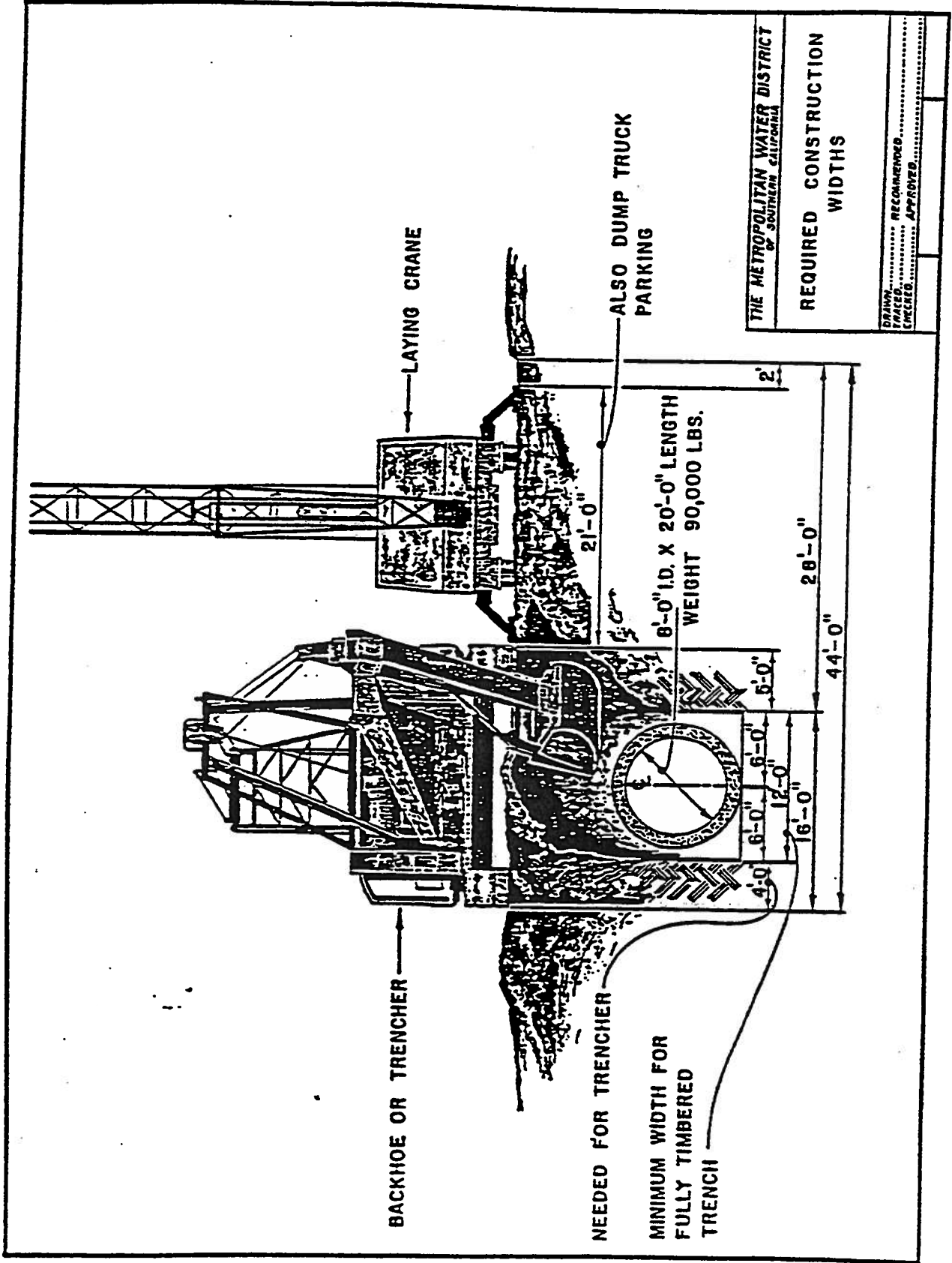
Should you require additional information, please contact:

Civil Engineering Substructures Section  
Metropolitan Water District  
of Southern California  
P.O. Box 54153  
Los Angeles, California 90054-0153  
(213) 217-6000

JEH/MRW/lk

Rev. January 22, 1989

Encl.



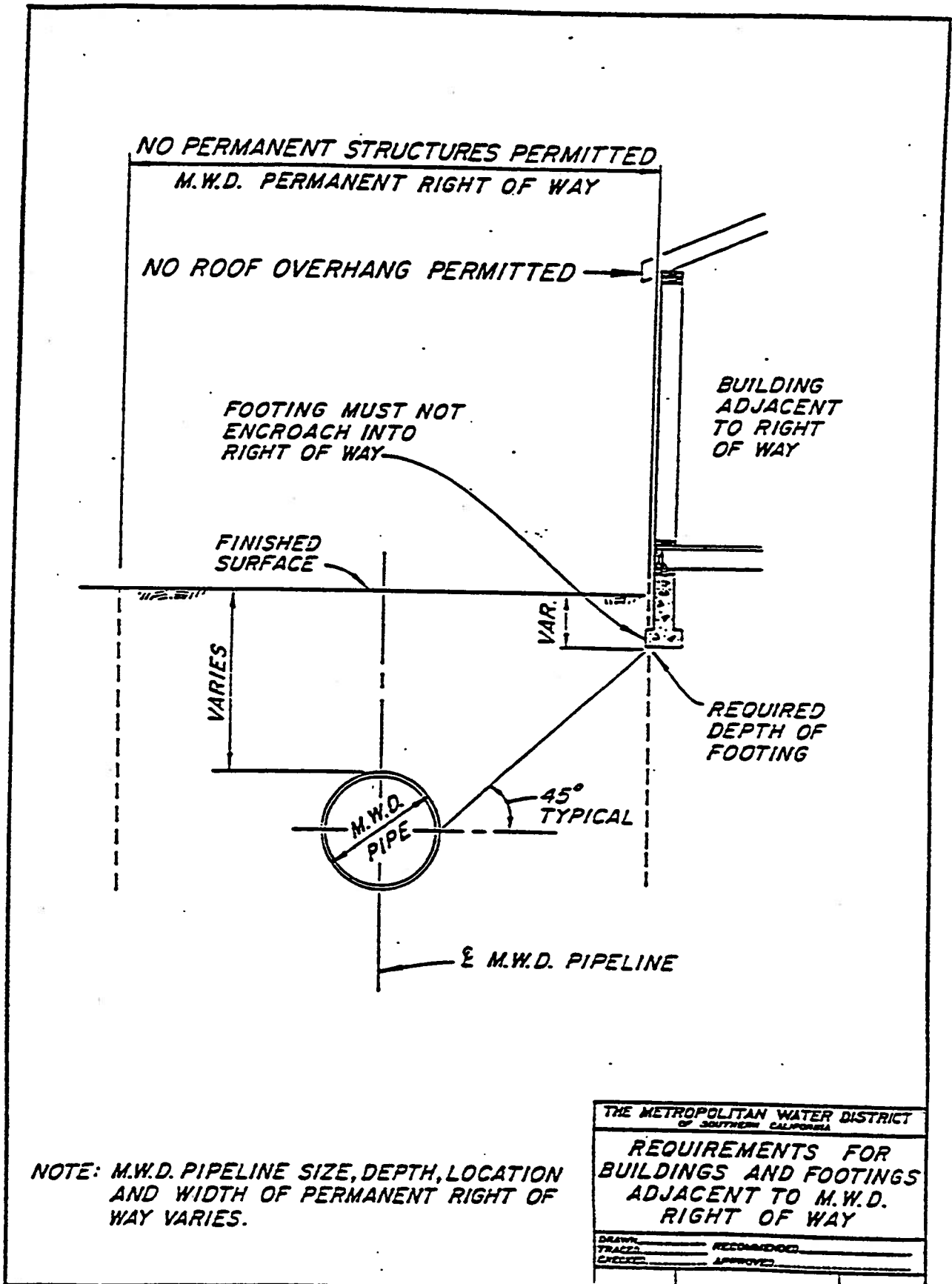
THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

REQUIRED CONSTRUCTION  
WIDTHS

DESIGNED ..... RECOMMENDED .....  
 DRAWN ..... CHECKED .....  
 APPROVED .....

FIGURE 1

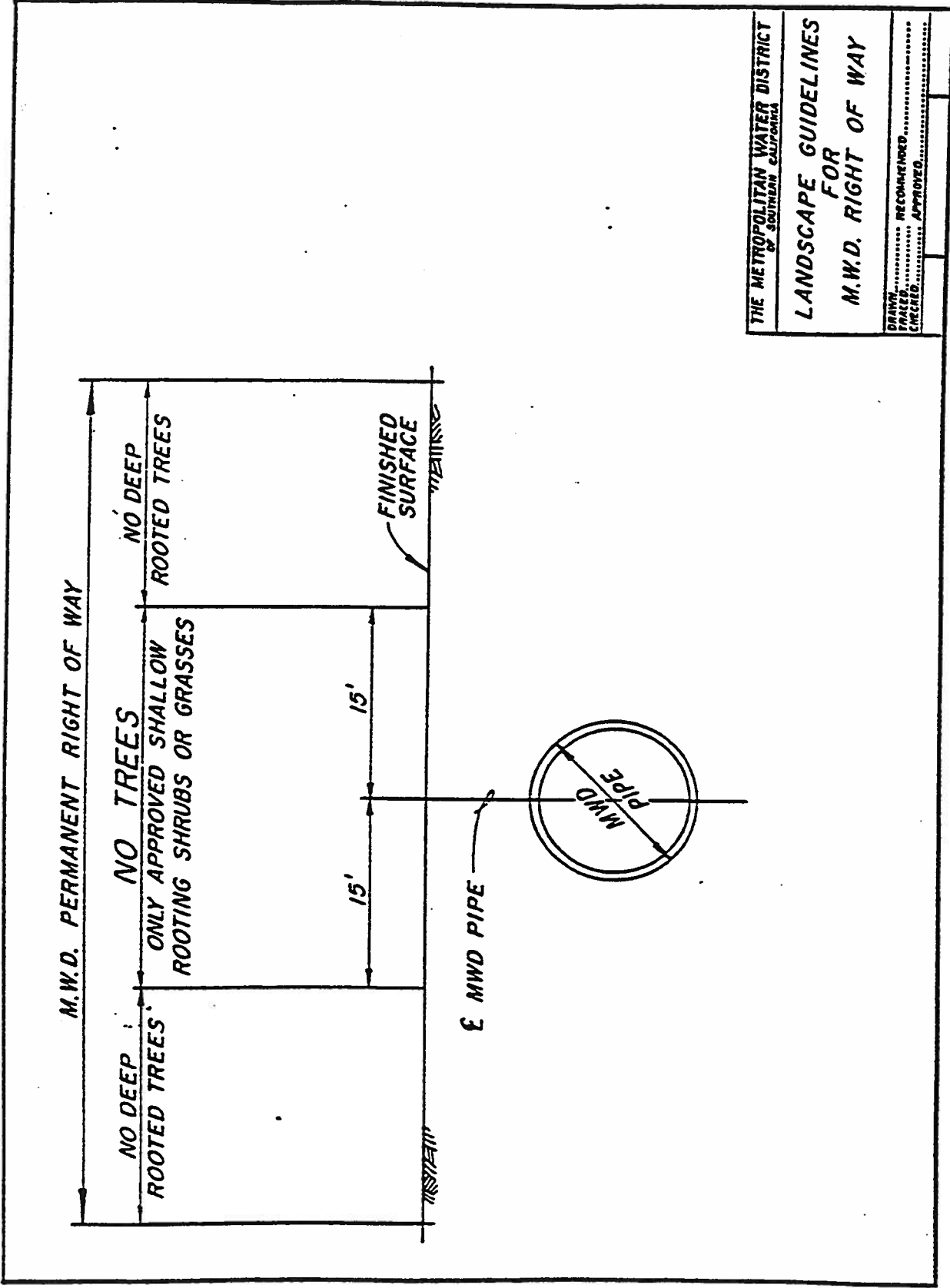
FORM NO. 88 & 1000 (11-67) P. 6. 07-8714



NOTE: M.W.D. PIPELINE SIZE, DEPTH, LOCATION AND WIDTH OF PERMANENT RIGHT OF WAY VARIES.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA	
REQUIREMENTS FOR BUILDINGS AND FOOTINGS ADJACENT TO M.W.D. RIGHT OF WAY	
DRAWN _____	RECOMMENDED _____
TRACED _____	APPROVED _____
CHECKED _____	

FIGURE 2

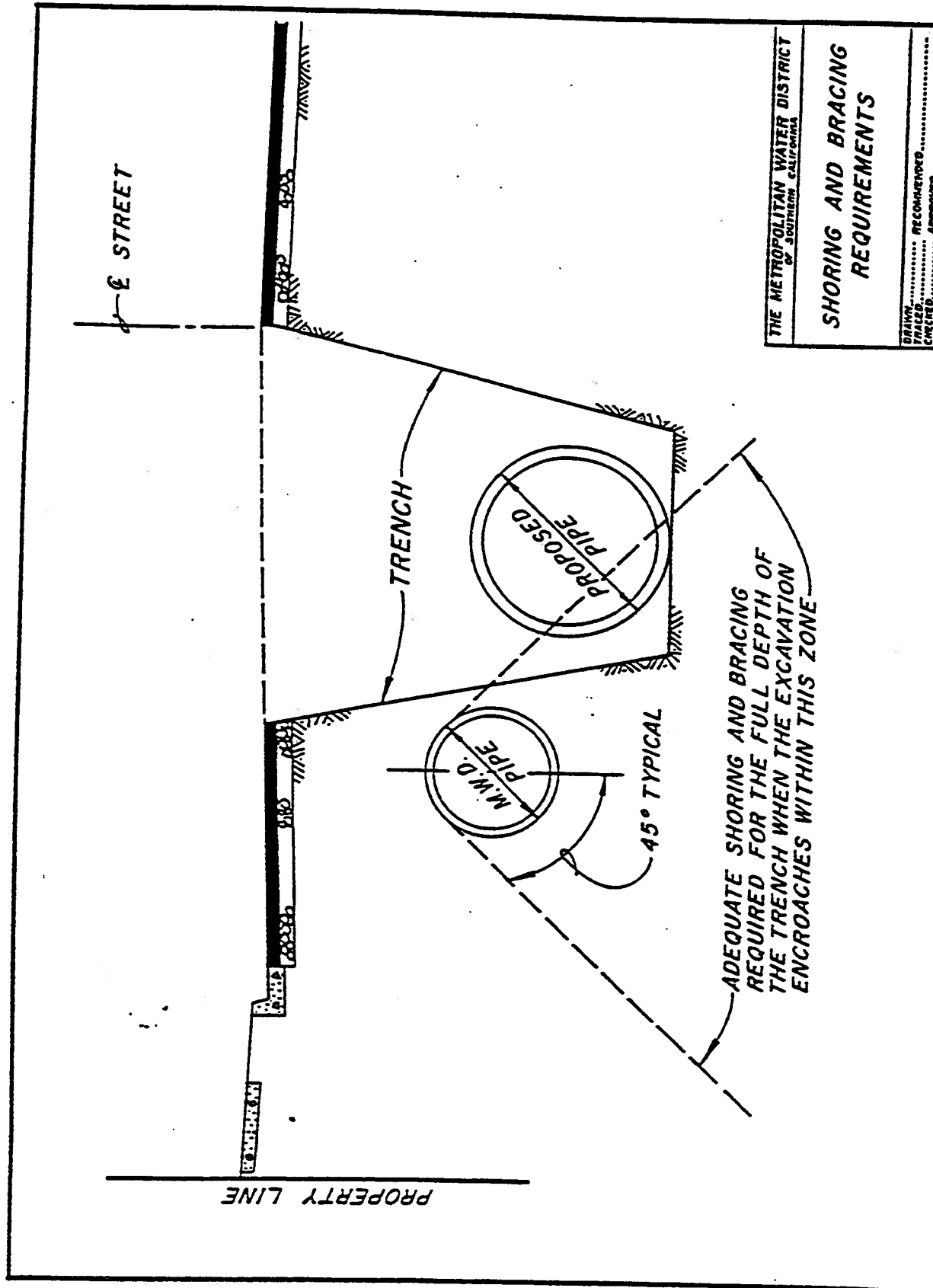


THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

LANDSCAPE GUIDELINES  
FOR  
M.W.D. RIGHT OF WAY

DRAWN ..... RECOMMENDED .....  
CHECKED ..... APPROVED .....

FIGURE 3



THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

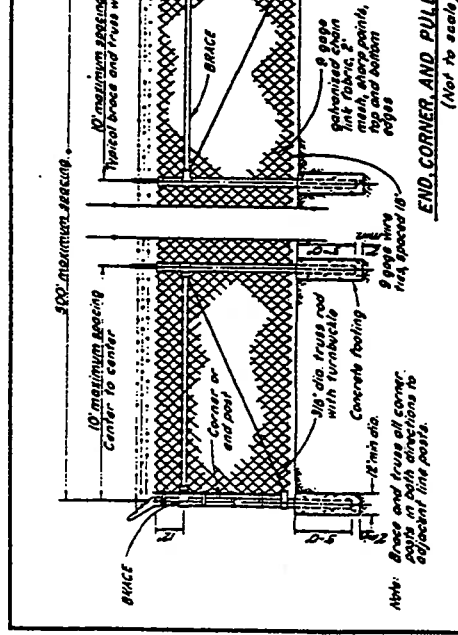
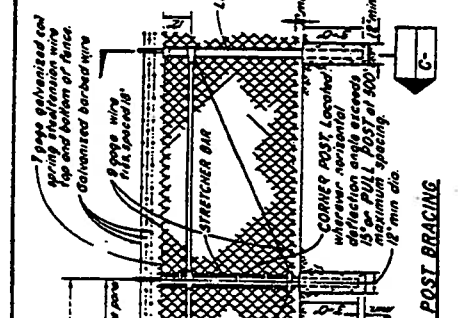
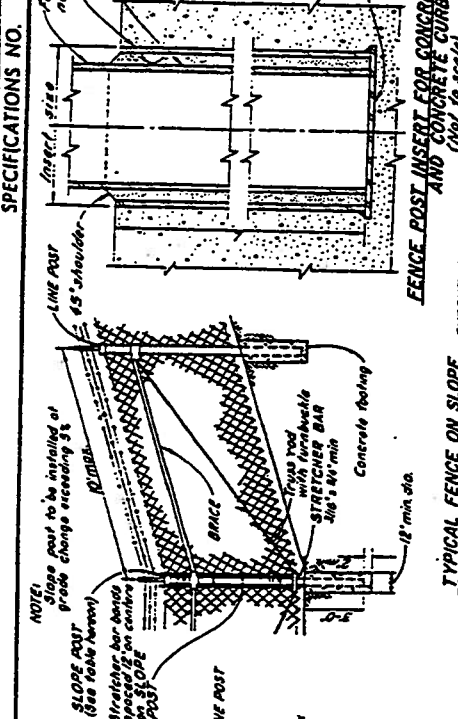
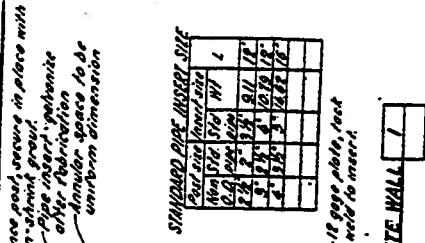
**SHORING AND BRACING  
REQUIREMENTS**

DESIGNED BY: ..... RECOMMENDED BY: .....

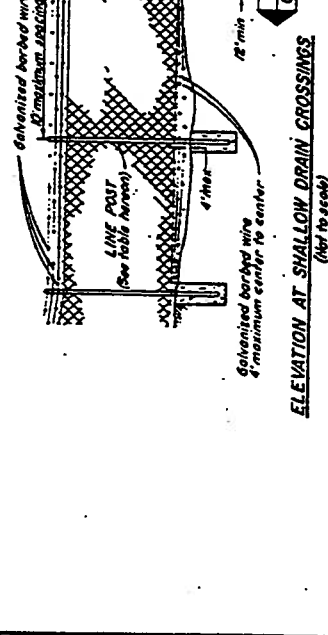
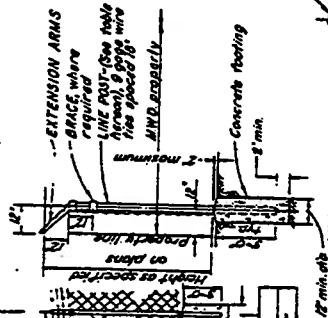
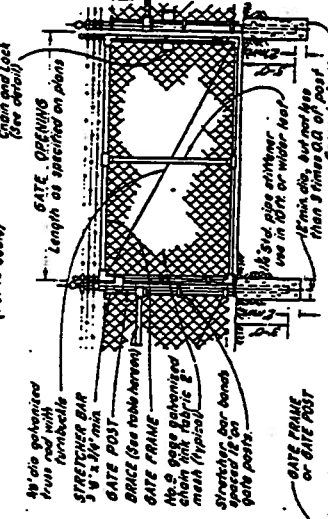
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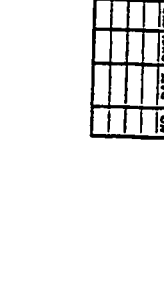
FIGURE 4



Type	Use	Vertical S/C (inches)	Height O.P. (feet)	Weight (pounds)
Pipe	End, corner slope, pull and gage posts for single gage posts. 3/4" dia. in width for chain link fabric 27" mesh or higher. 5/8" dia. in width for single gage posts over 5 feet but not over 18 feet in width and 25 feet in height over 26 feet in width.	2 1/2"	2.875	2.19
Pipe	Gate posts for single swing gates over 18 feet in width and 25 feet in height over 26 feet in width.	2 1/2"	2.875	2.65
Pipe	Gate posts for single swing gates over 18 feet in width and 25 feet in height over 26 feet in width.	5/8"	4.000	9.11
Pipe	Gate posts for single swing gates over 18 feet in width and 25 feet in height over 26 feet in width.	5/8"	6.085	18.97
Pipe	Gate posts for single swing gates over 18 feet in width and 25 feet in height over 26 feet in width.	6"	8.825	24.70
Pipe	Gate posts for single swing gates over 18 feet in width and 25 feet in height over 26 feet in width.	2 1/2"	2.315	2.65
Pipe	Gate posts for chain link fabric less than 27 inches in mesh.	1 1/2"	1.890	2.72
Pipe	Gate posts for chain link fabric less than 27 inches in mesh.	1 1/2"	2.10	2.87
Pipe	Gate posts for chain link fabric less than 27 inches in mesh.	1 1/2"	2.600	3.37
Pipe	Gate posts for chain link fabric less than 27 inches in mesh.	1 1/2"	2.800	3.72
Pipe	Gate posts for chain link fabric less than 27 inches in mesh.	1 1/2"	3.200	4.27



- GENERAL NOTES**
- All fence posts shall be heavy duty malleable iron or steel, service type, 2 1/2" diameter swing or approved quality and design.
  - Secure cap to post with 1/2 inch round head rivet.
  - Adjustable tighteners shall be furnished after fabrication.
  - Gate frame shall be fabricated of 18" dia. pipe with 3/4" min. dia. gate posts.
  - Extension arms for barbed wire shall be fabricated of 18" dia. pipe with 3/4" min. dia. gate posts.
  - Line posts for chain link fabric shall be fabricated of 18" dia. pipe with 3/4" min. dia. gate posts.
  - Line posts for chain link fabric shall be fabricated of 18" dia. pipe with 3/4" min. dia. gate posts.
  - Line posts for chain link fabric shall be fabricated of 18" dia. pipe with 3/4" min. dia. gate posts.
  - Line posts for chain link fabric shall be fabricated of 18" dia. pipe with 3/4" min. dia. gate posts.



THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA  
DISTRIBUTION SYSTEM

CHAIN LINK FENCE DETAILS

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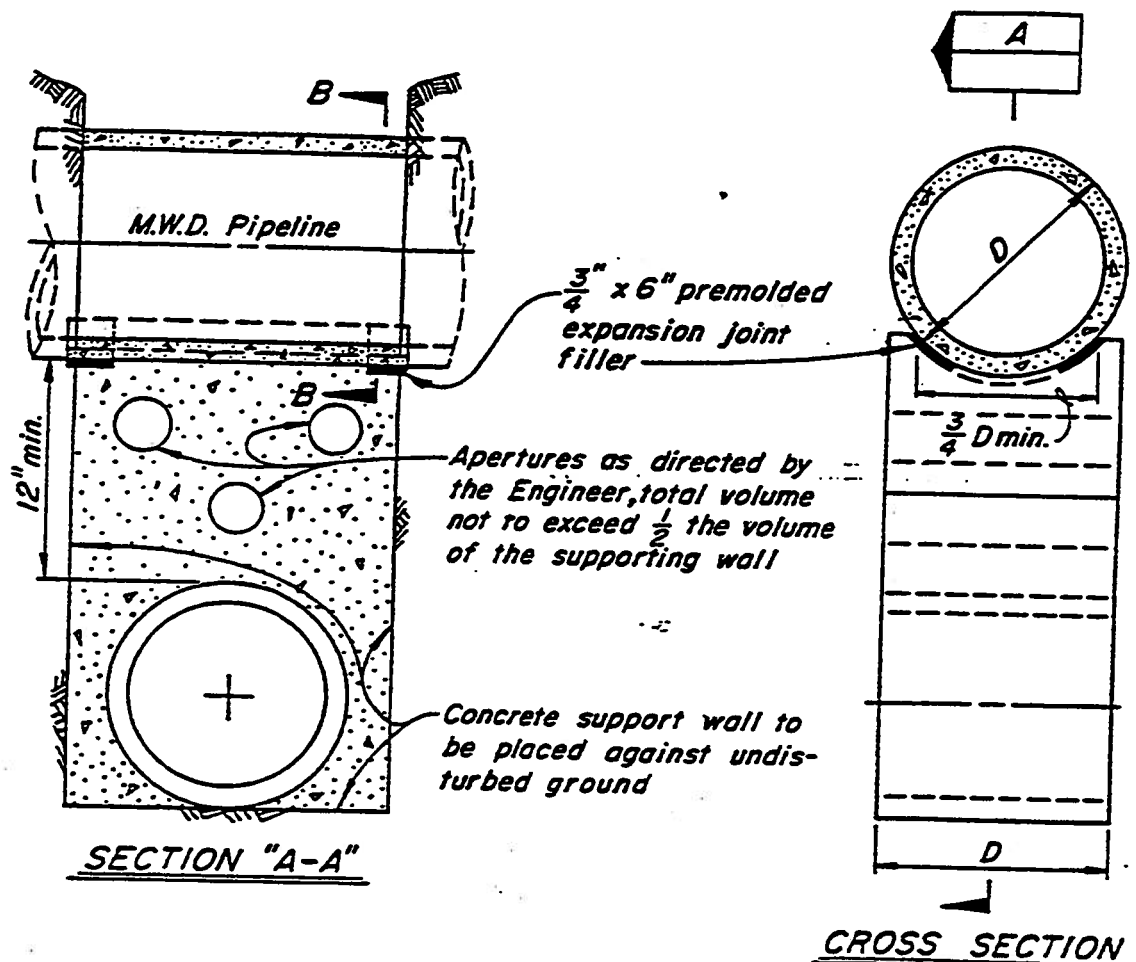
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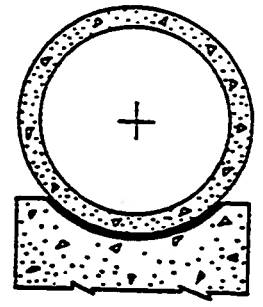
REVISED BY: [Signature]

DATE: [Date]

FORM NO. 926 (000 11-97 P.O. 97-9714



1. Supporting wall shall have a firm bearing on the subgrade and against the side of the excavation.
2. Premolded expansion joint filler per ASTM D-1751-73 to be used in support for steel pipe only.
3. If trench width is 4 feet or greater, measured along centerline of M.W.D. pipe, concrete support must be constructed.
4. If trench width is less than 4 feet, clean sand back-fill, compacted to 90% density in accordance with the provisions of ASTM Standard D-1557-70 may be used in lieu of the concrete support wall.



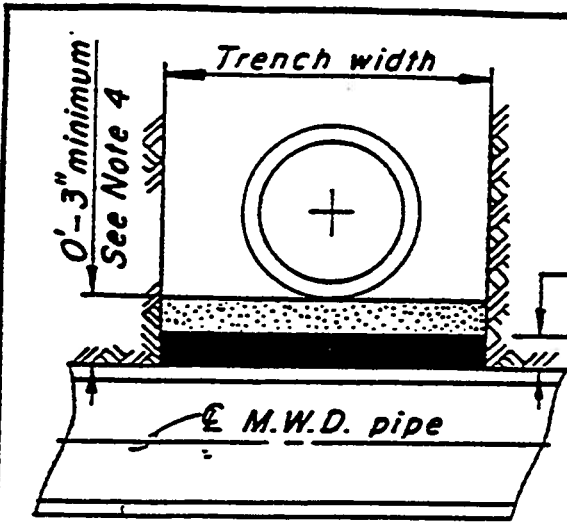
**THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA**

**TYPICAL SUPPORT FOR  
M.W.D. PIPELINE**

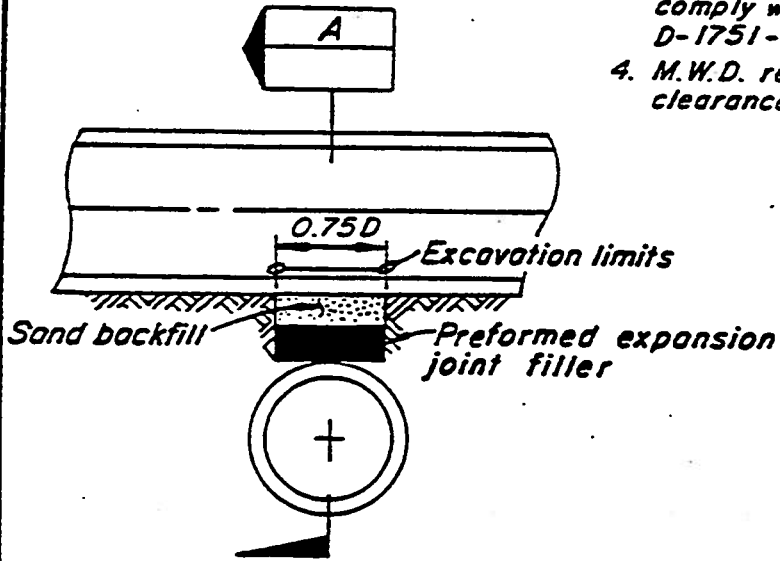
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C-9547





**SECTION A**



**CROSS SECTION**

**3" Preformed expansion joint filler**

**NOTES**

1. This method to be used where the utility line is 24" or greater in diameter and the clearance between the utility line and M.W.D. pipe is 12" or less.
2. Special protection may be required if the utility line diameter is greater than M.W.D. pipe or if the cover over the utility line to the street surface is minimal and there is 12" or less clearance between M.W.D. pipe and the utility line.
3. Preformed expansion joint filler to comply with ASTM designation D-1751-73.
4. M.W.D. requests 12" minimum clearance whenever possible.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA	
<b>TYPICAL EXPANSION JOINT FILLER PROTECTION FOR OVERCROSSING OF M.W.D. PIPELINE</b>	
DRAWN _____	RECOMMENDED _____
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C-11632	