ATTACHMENT 4

From: Sean Noonan
To: Edgar Gonzalez
Subject: Comment on IS/MND for Tentative Tract Map 20637 (TT23-00004)
Date: Wednesday, February 18, 2026 4:03:47 PM

Hi Edgar - I am reaching out to provide the following comments on the IS/MND for this project. I understand that the public review period is underway with completion on March 12, 2026 at 5pm. I appreciate your time in reviewing my comments on the IS/MND.

- The Project's IS/MND states: "*Screening Criteria 2 – Low VMT Area Screening: The City's guidelines include a screening threshold for projects located in a low VMT generating area. Low VMT generating area is defined as traffic analysis zones (TAZs) with a total daily VMT/Service Population (employment plus population) that is less than the current City of Hesperia VMT/Service Population (noted to be 26.4 in the guidelines). The project site was evaluated using the SBCTA VMT Screening Tool (SBCTA VMT Screening Tool (arcgis.com)). According to the results of the online tool, the Countywide VMT/Service Population of the project TAZ is 23.6 which is lower than the City average. Therefore, the project would meet this screening criteria and can be screened from further VMT analysis.*
- *Because the project would meet Screening Criteria 2 – Low VMT Area Screening, the project's impact on VMT would be considered less than significant and an analysis of VMT would not be required. As a result, the impacts will be less than significant.*"
- The Project's IS/MND concludes that this project would have less than significant impacts related to VMT given that the project is proposed in a Low VMT Area of the City.
- Comment #1. The City's TIA guidelines allow developers to use VMT screening criteria that were struck down in 2025 - particularly, the practice of exempting projects just because they are listed in the 2018 OPR Technical Advisory, which itself was not supported by any actual data or rationale. Just because a project is in a Low VMT Area or just because a project is "locally-serving" does not mean it does not have VMT impacts. The City has to actually analyze VMT to know if there are impacts.
- Comment #2. The City's IS/MND and supporting technical studies do not provide any justification as to why a project in a Low VMT Area of the City would have less than significant impacts related to VMT. There is no information provided whatsoever that analyzes this project in particular beyond the screening step. This leads to the topic of VMT not being adequately analyzed and VMT mitigation measures not being prescribed that may actually be warranted for this project. We don't know if there are VMT impacts until you actually study it! The City has an obligation under CEQA to analyze and mitigate a project's impacts. I believe that the information I have provided to the City herein constitutes a fair argument that the project's environmental effects have not been fully evaluated as required by CEQA.
- Further supporting analysis follows...
- My comment references the published opinion filed March 27, 2025 by the Fourth District Court of Appeal (Div. 1) that reversed an earlier trial court's judgment denying a writ petition. In the published decision, the Fourth District Court of Appeal held that two screening thresholds of significance for VMT

impacts adopted by the County of San Diego as part of its 2022 Transportation Study Guide were invalid because they were unsupported by any substantial evidence. *Cleveland National Forest Foundation, et al. v. County of San Diego* (2025) 109 Cal.App.5th 1257.

- It is my opinion that the City is improperly depending upon the very same screening thresholds that were struck down in this case within the Project's IS/MND. As a result of this deficiency in the VMT analysis conducted for this project, the IS/MND is incomplete.
- As such, I request that the City please update the VMT assessment for this project to actually include an analysis of the project's VMT effects and apply VMT mitigation if needed.
- Also, once this information is prepared, I request that the IS/MND be updated and recirculated for public review in accordance with the requirements contained in State CEQA Guidelines Section 15162, which requires recirculation of an Initial Study when new information of substantial importance is raised that was not included in the public review document.

If you have any questions on these comments, feel free to reach out.

Thanks,
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Sean Noonan

Mojave Desert Air Quality Management District
Brad Poiriez, *Executive Director*
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 • Fax 760.245.2022
www.MDAQMD.ca.gov • @MDAQMD

February 26, 2026

Edgar Gonzales, Planner
City of Hesperia, Planning Department
9700 Seventh Avenue
Hesperia, CA 92345

Project: Hesperia Tentative Tract Map 20637

Dear Mr. Gonzales:

The Mojave Desert Air Quality Management District (District) has reviewed the Project Notice for Tentative Tract Map 20637. The project proposes the construction of 22 single family homes on a 4.18 gross acre site. The proposed project site is located on the southwestern corner of Oak Valley Street and Fuente Avenue in the northwestern portion of the City of Hesperia, California.

We have reviewed the project as proposed and based on the information available to us at this time, the District requires that fugitive dust best management practices (including but not limited to applicable provisions of District Rule 403) are implemented on all non-paved transport roads, access points, and parking areas. The District also requires that the proponent obtain District permits for any miscellaneous process equipment that may not be exempt under District Rule 219 including, but not limited to; fuel storage and dispensing equipment, and internal combustion engines with a manufacture's maximum continuous rating greater than or equal to 50 brake horsepower. An asbestos checklist is required for any demolition or renovation of existing buildings. MDAQMD asbestos informational flowchart and notification forms are available at: https://www.mdaqmd.ca.gov/permitting/asbestos-information.

Thank you for the opportunity to review this project. If you have any questions regarding this letter, please contact me at (760) 245-1661, extension 1846, or Bertrand Gaschot at extension 4020.

Sincerely,

Chris Anderson
Planning and Air Monitoring Supervisor

CA/bg

Hesperia TTM 20637 CEQA Cmt 2026 26 Feb

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Blvd. C-220
Ontario, CA, 91764
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
MEGHAN HERTEL, Director

March 3, 2026
Sent via email

Edgar Gonzalez
Senior Planner
City of Hesperia
9700 Seventh Avenue
Hesperia, CA 92345
egonzalez@hesperiaca.gov

Tentative Tract Map 20637 (PROJECT)
MITIGATED NEGATIVE DECLARATION (MND)
SCH# 2026020360

Dear Edgar Gonzalez:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt an MND from the City of Victorville for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

PROJECT DESCRIPTION SUMMARY

Proponent: Ken Tang. Hesperia Canyon, LLC.

Objective: The Project will construct 22 single family homes on the 4.189-acre undeveloped project site. The lots would range from approximately 5,299 square feet to 7,721 square feet. The Project will also include a retention basin, landscaping and the construction of a new street in the center of the tract.

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Location: The Project site is located on the southwestern corner of Oak Valley Street and Fuente Avenue in the City of Hesperia, San Bernardino County, State of California. The corresponding Assessor Parcel Numbers are 3057-051-25-0000 and 3057-051-26-0000 at latitude 34.41673 N and longitude -117.36477 W. Residential properties border the site to the north, east and west with undeveloped land to the south.

Timeframe: Construction will commence in July 2026, and last for approximately 12 months.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document. Based on the Project's avoidance of significant impacts on biological resources with implementation of mitigation measures, including those CDFW recommends in Attachment A, CDFW concludes that a Mitigated Negative Declaration is appropriate for the Project.

COMMENT #1 Burrowing Owl (*Athene cunicularia)* and Bio Mitigation No. 1

IS/MND page 32, Biological Resources Assessment pages 5-9

Issue: Western burrowing owl is a candidate listed species under CESA, as such is granted the full protection of a threatened species under CESA. The Project has the potential to result in permanent loss, degradation, and impacts to burrowing owl habitat.

Specific impact: Project related activities may result in direct or indirect take of burrowing owl by reducing/eliminating suitable habitat for the species, restricting species movement, or causing injury or mortality.

Why impact would occur: Although no evidence of burrowing owls was detected within the Project site, the Project site is within potential burrowing owl habitat and suitable habitat is present on site as stated in the General Biological Resources Assessment. CDFW is concerned that Mitigation Measure BIO-1, as currently written, is not sufficient to prevent impacts to burrowing owls. Project activities include vegetation removal, grading, and construction, and the Project may result in take of burrowing owl during Project activities. Burrowing owls have been known to use highly degraded and marginal habitats where existing burrows are available.

Evidence impact would be significant: Habitat loss is a threat to burrowing owls (CDFG, 2012). As a candidate species, western burrowing owl is granted full protection of a threatened or endangered species under CESA. Take is defined in Fish and Game Code section 86 as "hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill." CESA allows CDFW to authorize project proponents to take state-listed threatened, endangered, or candidate species if certain conditions are met. Take must be incidental to an otherwise lawful activity. The issuance of an incidental take permit (ITP) cannot jeopardize the continued existence of the species, and the impacts must be minimized and fully mitigated.

Recommended Potentially Feasible Mitigation Measure to reduce impacts to less than significant: CDFW appreciates that the IS/MND provided mitigation measure MM BIO-1. CDFW offers the following revisions to MM BIO-1 (edits are in strikethrough and **bold)**:

Biological Resources Mitigation Measure No. 1 (MM BIO-1)

Pre-construction surveys for burrowing owls, desert tortoise, and nesting birds ~~protected under the Migratory Bird Treaty Act and Section 3503 of the California Fish and Wildlife Code may need to~~ **shall** be conducted prior to the commencement of ~~future~~ ground disturbance. Appropriate survey methods and time frames shall be established, to ensure that chances of detecting the target species are maximized. **For western burrowing owl the CDFW Staff Report on Burrowing Owl Mitigation (CDFG, 2012 or most recent version) shall be used**. In the event that listed **or candidate** species, such as the desert tortoise **or western burrowing owl**, are encountered, authorization **for impacts** from the USFWS and CDFW must be

obtained. **If burrowing owls or suitable burrowing owl burrows with sign (e.g., whitewash, pellets, feathers, prey remains) are identified on the Project site during the pre-construction clearance surveys or during construction, Project activities shall be immediately halted. The Project Proponent shall consult with CDFW on the next steps, including obtaining an Incidental Take Permit (ITP) for burrowing owl prior to the start of Project activities.** If nesting birds are detected, avoidance measures**, such as an appropriate buffer determined by a qualified biologist** shall be implemented to ensure that nests are not disturbed until after **the qualified biologist confirms that the** young have fledged. Pre-construction surveys shall encompass all areas within the potential footprint of disturbance for the project, as well as a reasonable buffer around these areas.

COMMENT #2 Crotch's Bumble Bee *(Bombus crotchii)*

Issue: The Project has the potential to impact Crotch's bumble bee; a candidate species protected under CESA.

Specific impact: According to CDFW's Crotch's Bumble Bee Range Dataset (CDFW 2026), the Project area is within the current range for Crotch's bumble bee. However, the IS/MND does not consider potential impacts to Crotch's bumble bee or provide avoidance, minimization or mitigation measures to ensure that the project impacts are less than significant.

Why impact would occur: Crotch's bumble bee occurs primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley and adjacent to foothills through most of southwestern California (Williams et. al 2014). The plant families most commonly associated with Crotch's bumble bee observations or collections from California include *Fabaceae*, *Apocynaceae*, *Asteraceae*, *Lamiaceae*, and *Boraginaceae* however Crotch's bumble bee are generalist foragers and have been reported visiting a wide variety of flowering plants.

CDFW would like to note that the general biological survey was conducted in January which is outside the blooming period for most flowering plants. Absent appropriate surveys and avoidance, minimization, and mitigation measures, the Project may result in mortality and/or injury of undetected Crotch's bumble bees that may be present during Project activities. The Project's ground and/or vegetation disturbance activities could result in significant impacts to Crotch's bumble bee, including loss of foraging resources, changes in foraging behavior, burrow collapse, nest abandonment, reduced nest success, reduced health and vigor of eggs, young, and/or queens, and direct mortality.

Evidence impact may be significant: Crotch's bumble bee is a candidate species protected under CESA, and, as such, is granted full protection under CESA. The California Fish and Game Commission accepted a petition to list the Crotch's bumble bee as endangered under CESA, determining the listing "may be warranted" and advancing the species to the candidacy stage of the CESA listing process. Take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9). CDFW considers impacts to species that are candidates for CESA listing to be significant, under CEQA. Crotch's bumble bee meets the CEQA definition of rare, threatened, or endangered (CEQA Guidelines, § 15380). Therefore, take of Crotch's bumble bee could require a mandatory finding of significance by PWD (CEQA Guidelines, § 15065).

Recommended Potentially Feasible Mitigation Measure to reduce impacts to less than significant: CDFW offers the following Mitigation Measure:

Biological Resources Mitigation Measure No. 4 (MM BIO-4)

Prior to vegetation removal and/or grading, a Designated Biologist shall conduct a habitat assessment to determine whether Crotch's bumble bee habitat is present or absent in the Project site and adjoining area. The habitat assessment shall be performed according to the 2023 CDFW Survey Considerations for CESA Candidate Bumble Bees.pdf

If habitat for Crotch's bumble bee is present, a Designated Biologist shall conduct focused surveys prior to vegetation removal and/or grading for the presence/absence of Crotch's bumble bee. Survey methodology shall follow the 2023 CDFW Survey Considerations for Candidate Bumble Bee. Surveys shall be conducted during the flying season when the species is most likely to be detected above ground, between March 1 to September 1, by an approved Designated Biologist familiar with Crotch's bumble bee behavior and life history. Surveys shall be conducted within the Project site and areas adjacent to the Project site where suitable habitat exists. Survey results including negative findings shall be submitted to CDFW at least 30 days prior to Project-related vegetation removal and/or ground-disturbing activities. If the species is identified on site, Project Proponent shall fully avoid the species absent take authorization. If the Project may result in take of Crotch's bumble bee through either nest destruction or destruction of potential nests hidden in bunch grasses or other nesting habitat, or if complete avoidance of Crotch's bumble bee cannot be achieved, Project activities shall be postponed until appropriate authorization (i.e., a finalized CESA ITP under Fish and Game Code section 2081) is obtained.

ADDITIONAL COMMENTS AND RECOMMENDATIONS

Western Joshua Tree and Bio Mitigation No.3: CDFW appreciates that the IS/MND includes Bio Mitigation No. 3, which states the requirement of an Incidental Take Permit for take of western Joshua tree, a candidate species under CESA. Please note that mitigation fees are subject to change annually, please visit Western Joshua Tree Conservation Act Incidental Take Permit page to view the current fee schedule.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

ENVIRONMENTAL DOCUMENT FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the MND to assist the City of Hesperia in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Lydia Rodriguez, Senior Environmental Scientist via email lydia.rodriguez@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Alisa Ellsworth
84FBB8273E4C480...

Alisa Ellsworth,
Environmental Program Manager

ec: Office of Planning and Research, State Clearinghouse, Sacramento
State.Clearinghouse@opr.ca.gov

ATTACHMENTS

Attachment A: MMRP for CDFW-Proposed Mitigation Measures

REFERENCES

California Department of Fish and Game (CDFG). 2012. Staff report on burrowing owl mitigation. State of California, Natural Resources Agency. Available for download at: Microsoft Word - BUOW Staff Report_final_030712 REV 1.doc

California Department of Fish and Wildlife. 2023. Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species. Available from: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline

[CDFW] California Department of Fish and Wildlife. 2026. Crotch's Bumble Bee Range Dataset 3095. Available at CDFW's Biogeographic Information and Observation System: Biogeographic Information and Observation System (BIOS)

Williams, Paul H et al. *Bumble Bees of North America : An Identification Guide*. Course Book. Princeton: Princeton University Press, 2014. Web.

Attachment A

Draft Mitigation and Reporting Program and Draft Recommendations

Draft Mitigation Monitoring and Reporting Program (MMRP)
CDFW provides the following language to be incorporated into the MMRP for the Project.

Biological Resources (BIO)		
Mitigation Measure (MM) Description	**Implementation Schedule**	**Responsible Party**
MM BIO-1: Pre-construction surveys for burrowing owls, desert tortoise, and nesting birds shall be conducted prior to the commencement of ground disturbance. Appropriate survey methods and time frames shall be established, to ensure that chances of detecting the target species are maximized. For western burrowing owl the CDFW Staff Report on Burrowing Owl Mitigation4 (CDFG, 2012 or most recent version) shall be used. In the event that listed or candidate species, such as the desert tortoise or western burrowing owl, are encountered, authorization for impacts from the USFWS and CDFW must be obtained. If burrowing owls or suitable burrowing owl burrows with sign (e.g., whitewash, pellets, feathers, prey remains) are identified on the Project site during the pre-construction clearance surveys or during construction, Project activities shall be immediately halted. The Project Proponent shall consult with CDFW on the next steps, including obtaining an Incidental Take Permit (ITP) for burrowing owl prior to the start of Project activities. If nesting birds are detected, avoidance measures, such as an appropriate buffer determined by a qualified biologist shall be implemented to ensure that nests are not disturbed until after the qualified biologist confirms that the young have fledged. Pre-construction surveys shall encompass all areas within the potential footprint of disturbance for the project, as well as a reasonable buffer around these areas.	Prior to commencing ground or vegetation disturbing activities	Project Proponent
MM BIO-4: Prior to vegetation removal and/or grading, a Designated Biologist shall conduct a habitat assessment to determine whether Crotch's bumble bee habitat is present or absent in the Project site and adjoining area. The habitat assessment shall be performed according to the 2023 CDFW Survey Considerations for CESA Candidate Bumble Bees.pdf If habitat for Crotch's bumble bee is present, a Designated Biologist shall conduct focused surveys prior to vegetation removal and/or grading for the presence/absence of Crotch's bumble bee. Survey methodology shall follow the 2023 CDFW Survey Considerations for Candidate Bumble Bee. Surveys shall be conducted during the flying season when the species is most likely to be detected above ground, between March 1 to September 1, by an approved Designated Biologist familiar with Crotch's bumble bee behavior and life history. Surveys shall be conducted within the Project site and areas adjacent to the Project site where suitable habitat exists. Survey results including negative	Prior to commencing ground or vegetation disturbing activities	Project Proponent

findings shall be submitted to CDFW at least 30 days prior to Project-related vegetation removal and/or ground-disturbing activities. If the species is identified on site, Project Proponent shall fully avoid the species absent take authorization. If the Project may result in take of Crotch's bumble bee through either nest destruction or destruction of potential nests hidden in bunch grasses or other nesting habitat, or if complete avoidance of Crotch's bumble bee cannot be achieved, Project activities shall be postponed until appropriate authorization (i.e., a finalized CESA ITP under Fish and Game Code section 2081) is obtained.		

DEPARTMENT OF WATER RESOURCES
P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791

VIA EMAIL

3/12/2026

Edgar Gonzales
Senior Planner
9700 Seventh Avenue
Hesperia California, 92345
egonzales@hesperiaca.gov

Subject: The draft Initial Study and Proposed Mitigated Negative Declaration for Tentative Tract Map 20637 (TT23-00004) SCH# 2026020360

Dear Mr. Gonzales,

Dear Mr. Gonzales,
The California Department of Water Resources (DWR) has reviewed the Draft Initial Study and Proposed Mitigated Negative Declaration for the Proposed Tentative Tract Map 20637 Project (TTM) and provides the following comments for consideration.

Project Description

The Proposed Project is the approval of a Tentative Tract Map for a development of 22 single-family homes and two lettered lots on a 4.18-acre gross project site. Improvements include an 18-inch-deep retention basin, a landscaped area along Fuente Street and the construction of street improvements along with a new internal street, to be named *Canyon View Avenue*, located at the center of the tract. Lot sizes will range from approximately 5,299 square feet to 7,721 square feet. The project site is zoned Residential (R1-4500).

The proposed project site is located on the southwest corner of Oak Valley Street and Fuente Avenue in the northwestern portion of the City of Hesperia, approximately 0.3 mile west of the CA Aqueduct. This area drains from west to east. The closest DWR Facilities to the proposed project located at southwest lot of Oak Valley St and Fuente Ave intersection. The DWR facilities includes the following:

1. MP396.1 Overchute crossing over the Aqueduct located at the north end of Fuente Ave. See attached DWR As-built Drawing No. N-29F1-17, N-29C22-1, N-29C91-30.

2. MP396.4 Overchute crossing over the Aqueduct located at east end of Sultana St and DWR right of way west boundary. See attached DWR As-built Drawing No. N-29F1-18, N-29C24-1, N-29C91-31.

3. MP396.8 Overchute crossing over the Aqueduct located at east end of Pinellia St and DWR right of way west boundary. See attached DWR As-built Drawing No. N-29F1-18, N-29C23-1, N-29C91-31.

4. Drainage Ditch along DWR right of way west boundary which conveys runoff flows into the Overchutes listed above. The earthen drainage ditch measures 10 feet wide at bottom with 2 to 1 side slopes. See attached DWR As-built Drawing No. N-29C91-30 and N-29C91-31.

5. Drainage Basin located at east end of Mayapple St which drains into DWR MP396.8 Overchute through concrete lined channel.

Comments:

3.10 Hydrology and Water Quality

This section begins with the CEQA Guidelines' Appendix G Environmental Checklist Form for Hydrology and Water Quality.

The Guidelines' Hydrology and Water Quality Environmental Issue Area Examined C asks: would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which:

i. Would result in substantial erosion or siltation on-or off-site;

ii. Would substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site;

iii. Would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv. Would impede or redirect flood flows?

THRESHOLDS OF SIGNIFICANCE AND METHODOLOGY

This section restates the environmental issues areas examined C in narrative form.

The proposed project would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or offsite; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or, impede or redirect flood flows.

ANALYSIS OF ENVIRONMENTAL IMPACTS

Thie analysis for the question raised in section C begins with C.

C. Would the project substantially alter the existing drainage pattern of the site or area,

including through the alteration of the course of a stream or river or through the addition of impervious surfaces? ● Less than Significant Impact.
The analysis explains:

The project site is currently vacant though disturbed and the site's natural drainage patterns have been altered as a result of the previous construction within the adjacent properties and development. No streams or rivers run through the project site. The proposed project would implement BMPs in order to manage stormwater onsite. As previously mentioned, the applicant would be required to adhere to Section 8.30 Surface and Groundwater Protection of the Municipal Code. As a result, the potential impacts would be less than significant.

Unfortunately, the analysis does not provide adequate information to conclude the potential impact as less than significant. DWR requests that the following issues be addressed.

The analysis explains that the site's natural drainage patterns have been altered as a result of the previous construction within the adjacent properties and development. Considering Hesperia's natural drainage patterns are sheet flows from east to west, it is reasonable to state that the site's natural drainage patterns have been altered for the reasons described. However, the impact analysis is based on the existing drainage patterns of the site or area, and not natural drainage patterns. Not only have the surrounding developments altered the natural drainage patterns of the area, the California Aqueduct (Aqueduct) has as well. Considering it is unknown how the existing Proposed Project site drainage patterns of the area may flow through the Aqueduct, a hydraulic analysis of the Proposed Project's existing drainage patterns in the *area* and a model the projected drainage pattern after the Proposed Project is complete. Such a hydraulic analysis will provide data that either supports the current less than significant impacts conclusion or will support a different conclusion. Without technical data, there is not sufficient evidence to support a less than significant impact for impact C.

The section C analysis concludes by referring to the requirement that the applicant must adherence to Chapter 8.30 Surface and Groundwater Protection of the City of Hesperia Municipal Code. That chapter is known as the "Surface and Groundwater Protection: NPDES Permit Implementation Ordinance," NPDES stands for National Pollutant Discharge Elimination System, and applies to pollutants from a point source, such as municipal waste discharge or agricultural was discharged from a ditch. The NPDES program does not regulate stormwater runoff. Consequently, compliance with Chapter 8.30 is not a mitigation measure for this impact.

i. Would result in substantial erosion or siltation on-or off-site

The hydrology and water quality section does not describe whether the Proposed Project diverts any drainage flows to this concrete lined ditch or the DWR Overchutes located at MIle Post 396.1, 396.4 or 396.8. In addition, there is a concrete lined drainage ditch located along west side of Fuente Ave at the north end where residential runoff drains into DWR MP396.1 Overchute through concrete lined channel. The hydrology and water quality section does not describe whether the Proposed Project diverts any drainage

flows to this concrete lined ditch or the DWR Overchutes located at MIle Post 396.1, 396.4 or 396.8. All the Overchutes located along Aqueduct convey drainage flows from west to east side of the Aqueduct. Currently there is erosion on the outlet side of these Overchutes from the concentrated drainage flows from existing drainage basins listed above. This is mainly due to absence of concrete lined channel at the Outlet Side because concrete lined channels were only constructed up to the inlet structure as part of the adjacent development projects. The impact analysis for off-site erosion and siltation impacts needs to explain whether any potential overflow from proposed retention basin located at Lot A may flow to any of the drainage basins or DWR Overchutes listed above.

If the proposed development will divert drainage flows towards a nearby DWR Overchutes which currently receive concentrated flows from a development adjacent to the Proposed Project, additional Proposed Project flows are likely to increase the existing erosion within DWR right of way on the outlet side. Concrete lined channels on the downstream end may be needed to mitigate the Proposed Project erosion impacts. See attachment for DWR Hydrologic & Hydraulic Data which shows the structural capacities (cfs) of all the DWR Overchutes listed above. Hydrology and Drainage Analysis for proposed development is also needed to assess the flows (cfs) and flow velocities through DWR Overchutes to determine if energy dissipation structures or any improvements are needed on the inlet side within DWR right of way to prevent erosion, scour or damage to DWR Overchute Structures.

See attachment for DWR Hydrologic & Hydraulic Data which shows the structural capacities (cfs) of all the DWR Overchutes listed above. Hydrology and Drainage Analysis for proposed development is also needed to assess the flows (cfs) and flow velocities through DWR Overchutes to determine if energy dissipation structures or any improvements are needed on the inlet side within DWR right of way to prevent erosion.

Mitigation Measures

Page 51 "*The proposed project would implement BMPs including a retention basin, seepage pit, and catch basins. The proposed retention basin would be located on Lot A and would include six seepage pits. The proposed catch basin on the south side of Oak Valley Street would connect to the existing catch basin and storm drain on the north side of Oak Valley Street. The lots would be designed such that stormwater would percolate through the unpaved surfaces. Stormwater would be designed to percolate in the unpaved surfaces and caught within the inlets and diverted to the retention basin".*

1. In the event the proposed Retention Basin overflows, where is the overflow routed and what are impacts to nearby DWR cross drainage structures (Overchutes) listed in comment no. 1.

2. Clarify the statement *"The proposed catch basin on the south side of Oak Valley Street would connect to the existing catch basin and storm drain on the north side of Oak Valley Street".* It is not clear what is meant by this statement. Does the exiting catch basin or storm drain on north side of Oak Valley Street divert or contribute flows to any of DWR Overchutes? Clarify or provide an exhibit illustrating what this statement means especially if there is any impact to DWR

cross drainage structures as a result of this connection.

2. The applicant shall provide hydrology/drainage study or report for this proposed development showing the pre and post developments impacts to DWR right of way.

    1. The "Hydrology & Water Quality" factor is not checked on Page 4 of Initial Study Mitigated Negative Declaration suggesting Hydrology Study may not be planned for this project. However, applicant needs to provide a study confirming that there will be no adverse impacts to DWR right of way from off-site flows (surface runoff currently draining to the project site) or the on-site flows (overflow from proposed Retention Basin collecting all on-site flows).

    2. Page 49 of Initial Study Mitigated Negative Declaration Section 3.10 Hydrology & Water Quality checks all impact related to drainage as Less Than Significant Impact however no hydrology study or analysis is provided to confirm this.

    3. Page 49 and 50 of Initial Study Mitigated Negative Declaration states "*According to Appendix G of the CEQA Guidelines, a project may be deemed to have a significant adverse impact on hydrology and water quality if it results in any of the following:… The proposed project would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or offsite; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or, impede or redirect flood flows".* Provide hydrology/drainage study analyzing pre and post development flows to confirm this CEQA Guideline and to check if the project has any significant adverse impact CA Aqueduct right of way. The analysis needs to assess the impact to all nearby DWR Cross Drainage Structures listed in comments no. 1.

    4. The Study shall also analyze the impacts (if any) to DWR right of way from the altered runoff drainage in this area. The concerns are uncontrolled runoff directed towards DWR right of way causing ponding, erosion and scour. Any drainage runoff directed towards DWR right of way shall be analyzed to verify if any drainage improvements are required within DWR right of way or up to DWR Cross Drainage Structures to properly direct drainage through the existing Overchutes to east side of CA Aqueduct.

3. The County/Project Applicant shall ensure that no runoff from the proposed development enters DWR Right of Way and that any modifications to the natural discharge flows through DWR Overchutes do not result in backing-up of stormwater flows onto the DWR right of way.

Encroachment Permit

Please note that per CA Code of Regulations § 605(f) the activities that require

Encroachment Permit from DWR which obstruct any natural watercourse in a manner that does any of the following:

1. Prevents, impedes, or restricts the natural flow of waters onto any portion of the Department's right-of-way into and through the watercourse or State Water Project cross drainage structures, unless the Department determines that the change to the natural watercourse will not result in damage to any portion of the State Water Project or the Department's right-of-way.

2. Causes waters to be impounded within the Department's right-of-way that damages the State Water Project or the Department's right-of-way, except where the water naturally drains onto the Department's right-of-way.

3. Damages Department's right-of-way, or impedes or makes hazardous the operation, maintenance, and rehabilitation of the State Water Project right-of-way or facilities.

4. Stores or distributes water in a manner that causes the water to flow onto, obstructs or damages any portion of the State Water Project or the Department's right-of-way.

Thank you for considering these comments.

Sincerely,

Nancy E Finch

Nancy Finch, Attorney III
Office of the General Counsel
Department of Water Resources
Post Office Box 899
Sacramento, California 95812-0899
(916) 820-8124
Nancy.Finch@water.ca.gov

Figure 3. Project Aerial Photo
Tentative Tract Map 20637, Hesperia

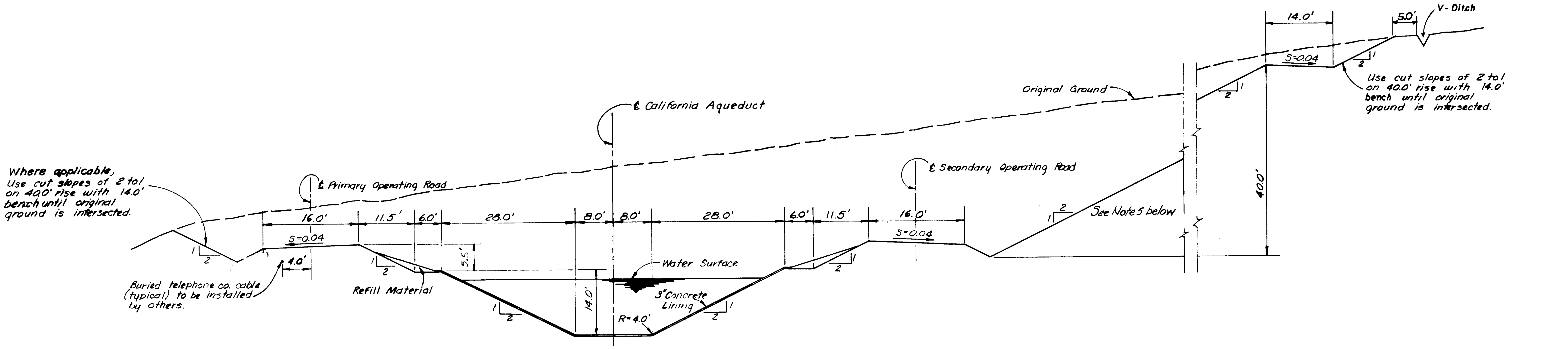
DUKE CRM

Project Area

0 300 600 Feet

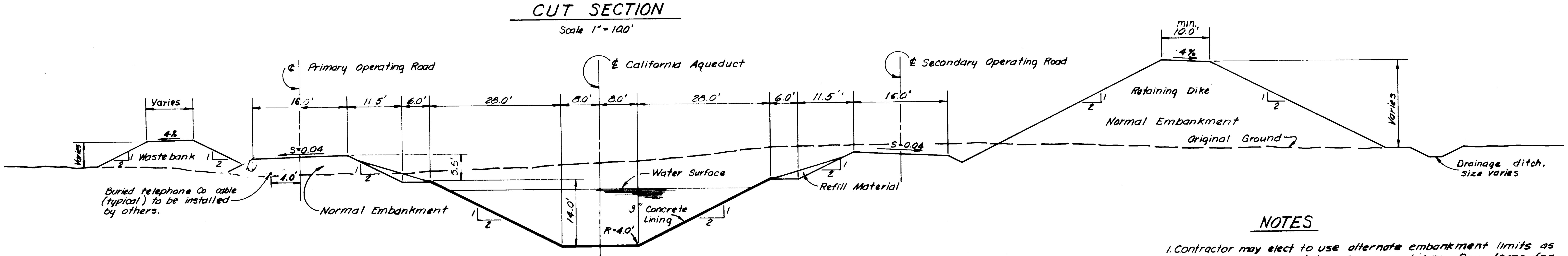
N

1 inch equals 600 feet 1:7,200



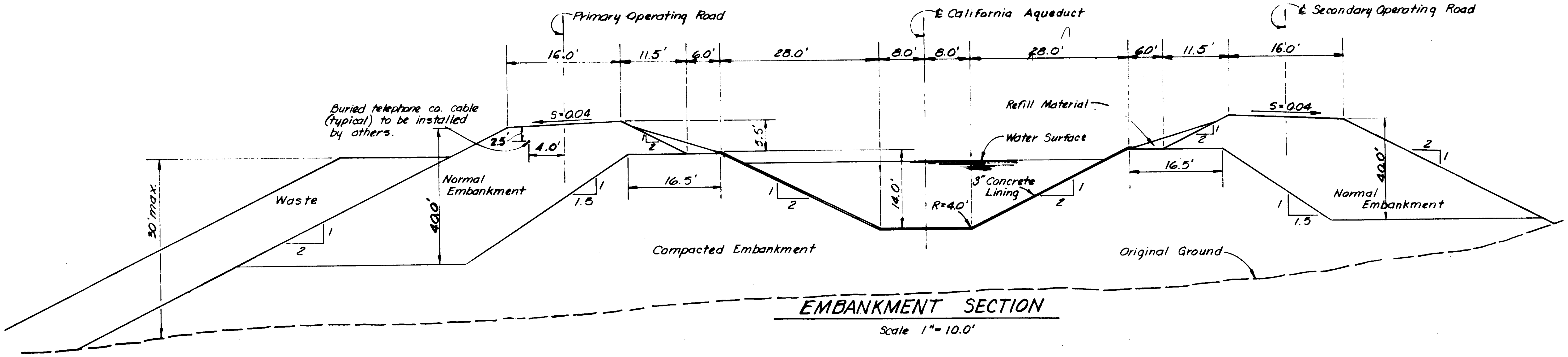
CUT SECTION

Scale 1" = 10.0'



DIKE SECTION

Scale 1" = 10.0'

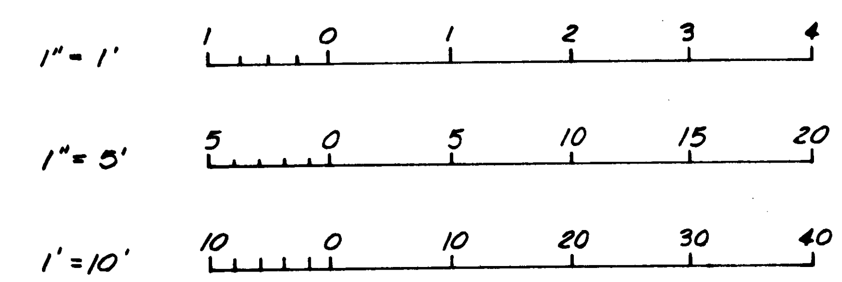


EMBANKMENT SECTION

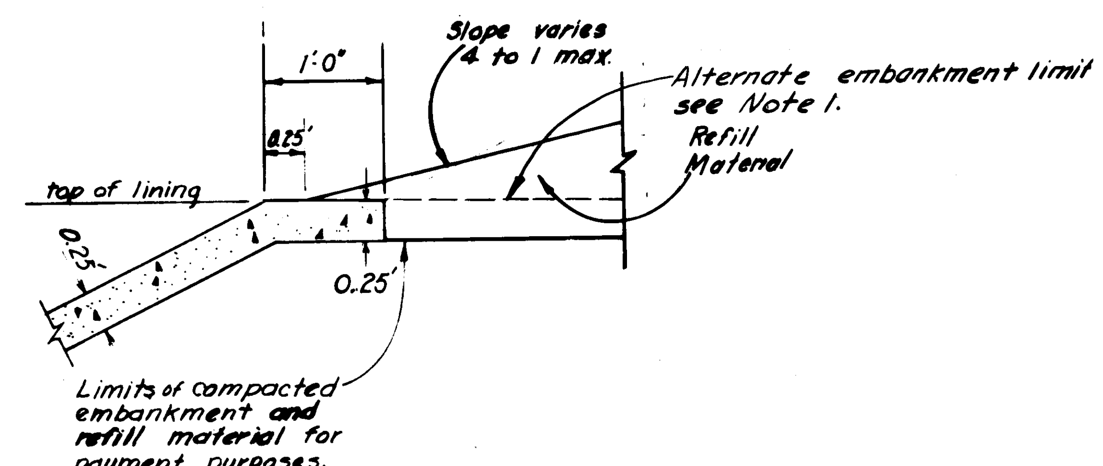
Scale 1" = 10.0'

NOTES

1. Contractor may elect to use alternate embankment limits as designated prior to trimming operations. Pay items for compacted embankment and refill material will be as designated on Lip Detail.
2. Downhill waste bank shall be terminated 100' minimum on each side of all structures unless otherwise shown.
3. Normal embankment shall have a maximum height of 40 ft. For fill heights greater than 40 ft, use compacted embankment limits as shown in the "Embankment Section", this sheet.
4. Catch lines or toe of waste banks shall be a minimum of 16' from R/W lines, except as noted on the drawings or as directed by the Engineer.
5. Cut slope shall be 1.5 to 1.0 where indicated on drawings.



SCALE OF FEET



LIP DETAIL

Scale 1" = 1'

SAFETY — as Necessary as WATER

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF DESIGN AND CONSTRUCTION

AS BUILT APR 30 1977

STATE WATER FACILITIES
CALIFORNIA AQUEDUCT
MOJAVE DIVISION

CANAL - STA. 864+70 TO STA. 2216+70
TYPICAL CANAL SECTIONS

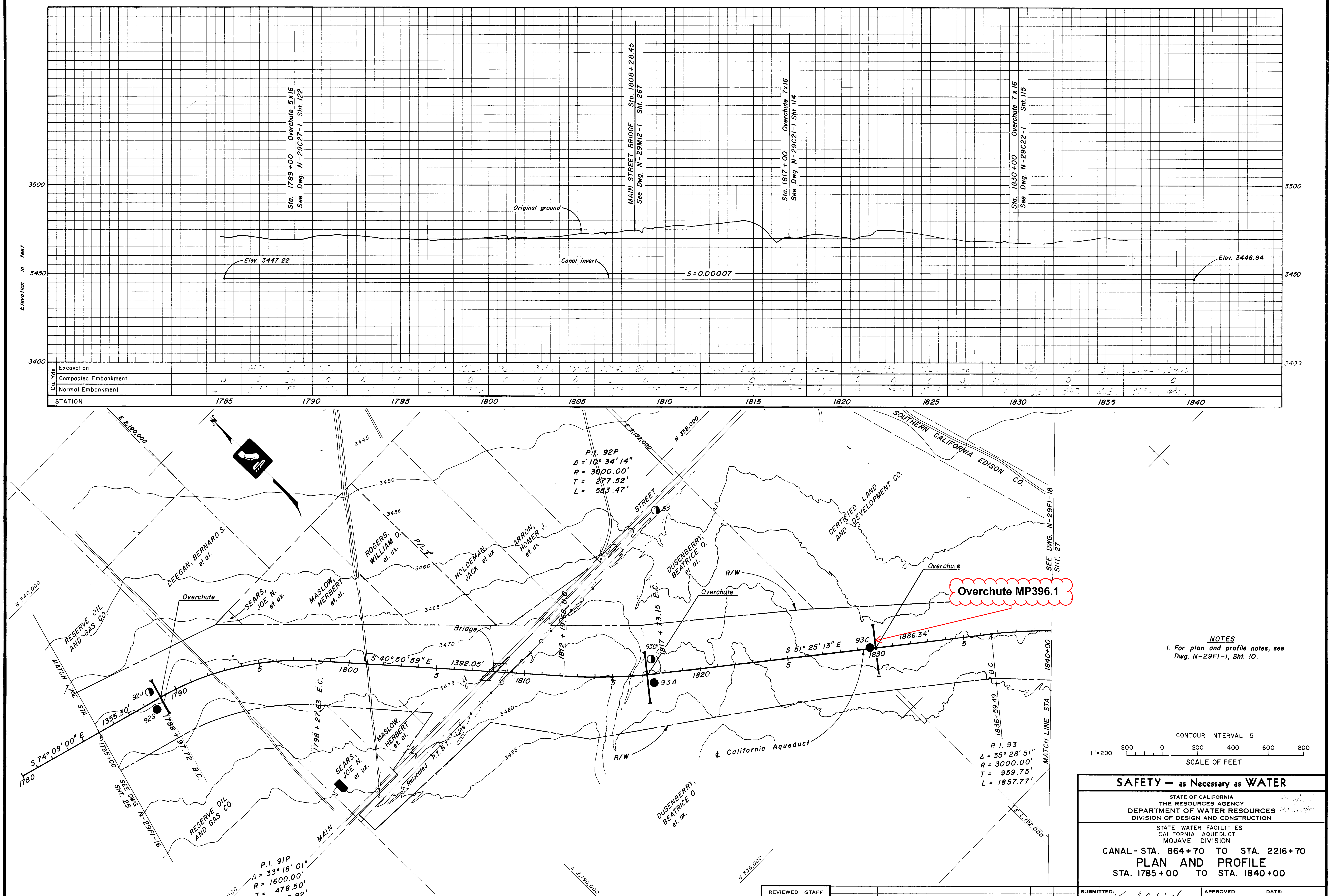
REVIEWED—STAFF ENGINEERING, BR.				
REV.	DATE	DESCRIPTION	SUB.	APP'D
	1-21-77	REVIEWED BY DESIGN		
DESIGNED	DRAWN	CHECKED	REVIEWED	
H.K., U.B., C.H.	D.R. Zamrzla	M.G. Revilla		

SUBMITTED: [signature]
APPROVAL RECOMMENDED:
APPROVED: [signature] DATE: MAY 16 1969

DRAWING NO. N-29B1-1 SHEET NO. 7

SHEET NO. 7 DRAWING NO. N-29B1-1

SPEC. NO. 69-17



Sta. 1789+00 Overchute 5x16
See Dwg. N-29C27-1 Sht. 122
MAIN STREET BRIDGE Sta. 1808+28.45
See Dwg. N-29M12-1 Sht. 267
Sta. 1817+00 Overchute 7x16
See Dwg. N-29C21-1 Sht. 114
Sta. 1830+00 Overchute 7x16
See Dwg. N-29C22-1 Sht. 115
Original ground
Elev. 3447.22
Canal invert
S=0.00007
Elev. 3446.84
Elevation in feet
3500
3450
3400
Cu. Yds.
Excavation
Compacted Embankment
Normal Embankment
STATION
1785
1790
1795
1800
1805
1810
1815
1820
1825
1830
1835
1840
SOUTHERN CALIFORNIA EDISON CO.
CERTIFIED LAND AND DEVELOPMENT CO.
DUSENBERRY, BEATRICE O. et. al.
DEEGAN, BERNARD S. et. al.
SEARS, JOE N. et. ux.
MASLOW, HERBERT et. al.
ROGERS, WILLIAM O. et. ux.
HOLDEMAN, JACK et. ux.
ARRON, HOMER J. et. ux.
RESERVE OIL AND GAS CO.
P.I. 92P
Δ = 10° 34' 14"
R = 3000.00'
T = 277.52'
L = 553.47'
STREET
MAIN
Overchute
Overchute MP396.1
R/W
Bridge
S 40° 50' 59" E 1392.05'
S 51° 25' 13" E 1886.34'
S 74° 09' 00" E 1355.30'
1812+19.68 B.C.
1817+73.15 E.C.
1798+27.63 E.C.
1788+97.72 B.C.
1836+59.49 B.C.
1840+00
1785+00
MATCH LINE STA.
SEE DWG. N-29F1-18 SHT. 27
SEE DWG. N-29F1-16 SHT. 25
℄ California Aqueduct
Relocated P.T. & T. Line
P.I. 93
Δ = 35° 28' 51"
R = 3000.00'
T = 959.75'
L = 1857.77'
P.I. 91P
Δ = 33° 18' 01"
R = 1600.00'
T = 478.50'
L = 929.92'
92J
92G
93B
93A
93C
93
E 2,190,000
E 2,192,000
N 338,000
N 336,000
N 340,000
CONTOUR INTERVAL 5'
1" = 200'
200 0 200 400 600 800
SCALE OF FEET

NOTES

1. For plan and profile notes, see Dwg. N-29F1-1, Sht. 10.

SAFETY — as Necessary as WATER

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF DESIGN AND CONSTRUCTION

STATE WATER FACILITIES
CALIFORNIA AQUEDUCT
MOJAVE DIVISION

CANAL - STA. 864+70 TO STA. 2216+70

PLAN AND PROFILE

STA. 1785+00 TO STA. 1840+00

REV.	DATE	DESCRIPTION	SUB.	APP'D
1	8/15/69	Added relocated P.T. & T. line - Addendum 4	J.Y.S.	F.R.

REVIEWED—STAFF ENGINEERING BR.
BY
DATE

DESIGNED: C. Matsumoto
DRAWN: C.M.
CHECKED: Joe Van Loeble
REVIEWED

SUBMITTED: Kenneth G. Wilkes — CHIEF, D&C BRANCH, SO. DIST., REG. C.E. NO. 7193
APPROVAL RECOMMENDED: J.J. Doody — DISTRICT ENGR., SO. DIST., REG. C.E. NO. 6500
APPROVED: DATE:
CHIEF, DESIGN BRANCH, D&C REG. C.E. NO. 7287

SHEET No. 26 DRAWING No. N-29F1-17

DRAWING NO. N-29F1-17 SHEET NO. 26

Elevation in feet

3500
3450
3400

Sta. 1842+50 Overchute 7'x16' See Dwg. N-29C23-1 Sht. 116

Sta. 1864+50 Overchute 7'x16' See Dwg. N-29C24-1 Sht. 117

Sta. 1890+00 Overchute 7'x16' See Dwg. N-29C25-1 Sht. 118

Sta. 1900+23.40 Bk. = Station Equation

Original ground

Elev. 3446.88

Canal invert

S = 0.00007

Elev. 3446.32

Cu. Yds.	1836	1840	1845	1850	1855	1860	1865	1870	1875	1880	1885	1890	1895	1900
Excavation	190													
Compacted Embankment	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Normal Embankment	4													

STATION

E 2,194,000

N 334,000

N 332,000

N 330,000

N 336,000

E 2,196,000

E 2,192,000

N 334,000

N 332,000

E 2,194,000

CERTIFIED LAND AND DEVELOPMENT CO.

Overchute MP396.4

Overchute MP396.8

R/W

SOUTHERN CALIFORNIA EDISON COMPANY

Overchute

Overchute

Overchute

SEE DWG. N-29FI-17 SHT. 26

230

93E

93F

94B

94A

1840

1850

1860

1870

1880

1890

1900

S 15°56'25" E 3076.20'

1855 + 17.26 E.C.

1885 + 93.46 B.C.

1900+23.40 E.C. AH

1900+49.64 E.C. BK

MATCH LINE

SEE SHT. 28

SEE DWG. N-29FI-19

SO. CALIF. EDISON CO. EASEMENT

EASEMENT

P.I. 94
Δ = 42° 40' 17"
R = 1920.00'
T = 749.96'
L = 1429.93'

DIEHL, DAVID WILLIS & HERGEL, ANGELA DIEHL

CERTIFIED LAND AND DEVELOPMENT CO.

PENCE, CHESTER A. et ux.

McLENNAN, DOLLY M. DOYLE

JUDSON, VIRGIL B. & ZENDA G.

TURNER, VEVA L.

WALLACE, LILLIAN G.

℄ California Aqueduct

BARTLETT, THELMA & FELSON-DOROTHY

FEE, DOROTHY & HARRY

MATCH LINE STA.

P.I. 93
Δ = 35° 28' 51"
R = 3000.00'
T = 959.75'
L = 1857.77'

3445
3450
3455
3460
3465
3470
3475
3480
3485
3490
3495
3500

NOTES

1. For plan and profile notes, see Dwg. N-29FI-1, Sht. 10.

CONTOUR INTERVAL 5'

1"=200' 200 0 200 400 600 800

SCALE OF FEET

SAFETY — as Necessary as WATER

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF DESIGN AND CONSTRUCTION

STATE WATER FACILITIES
CALIFORNIA AQUEDUCT
MOJAVE DIVISION

CANAL - STA. 864+70 TO STA. 2216+70

PLAN AND PROFILE

STA. 1840+00 TO STA. 1900+00

REVIEWED—STAFF ENGINEERING. BR.

BY_____

DATE_____

REV.	DATE	DESCRIPTION	SUB.	APP'D

DESIGNED C. Matsumoto | DRAWN C.M. | CHECKED Joe Tom Liddle Reg. C.E. 16752 | REVIEWED T. Fujii

SUBMITTED: Kenneth B. Wilkie
CHIEF, O&C BRANCH, SO. DIST., REG. C.E. NO. 7192

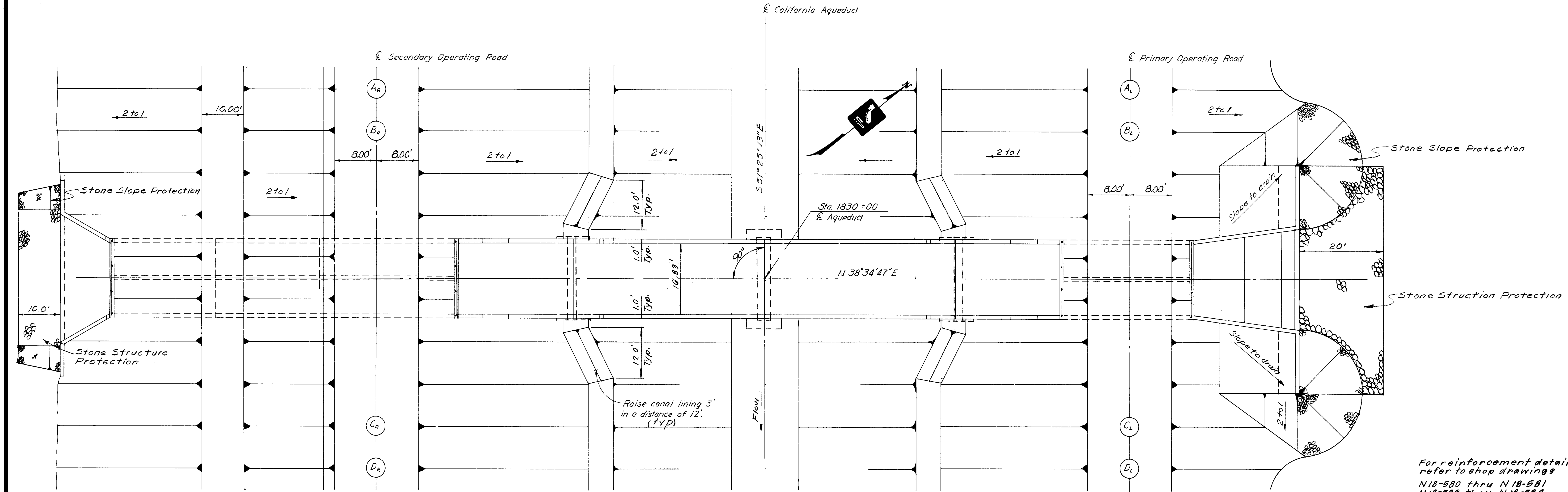
APPROVAL RECOMMENDED: J.J. Doody
DISTRICT ENGR., SO. DIST., REG. C.E. NO. 6500

APPROVED: DATE:
CHIEF, DESIGN BRANCH, D&C REG. C.E. NO. 7267

DRAWING NO. N-29FI-18

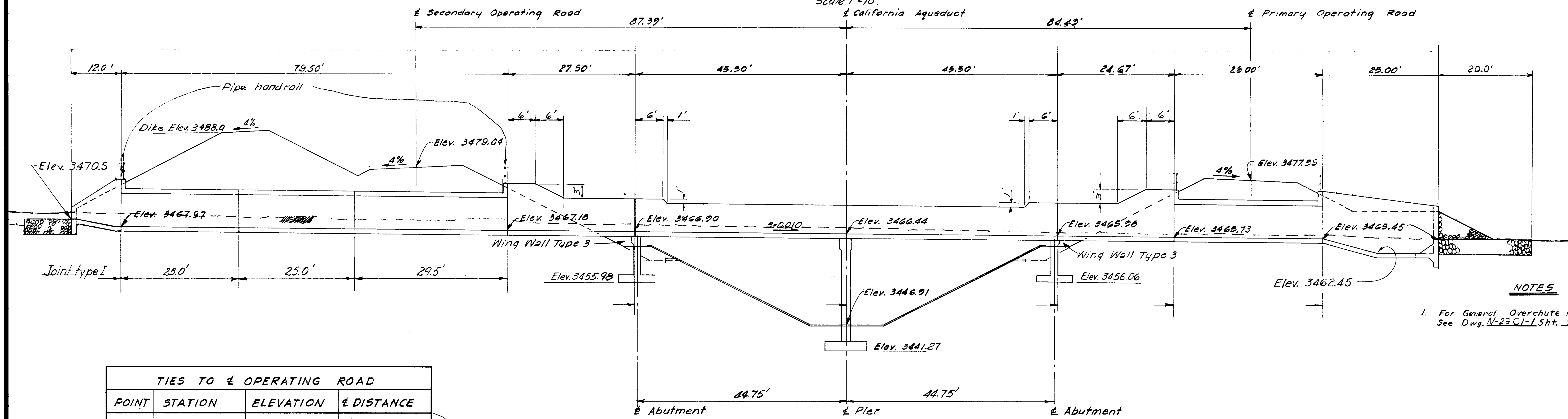
SHEET NO. 27

SHEET No. | DRAWING No.



PLAN
Scale 1"=10'

For reinforcement details refer to shop drawings
N18-580 thru N18-581
N18-583 thru N18-584
N18-586 thru N18-588
N18-600 thru N18-602
N18-606
N18-851 thru N18-853
N18-991 thru N18-992
N18-908 thru N18-909



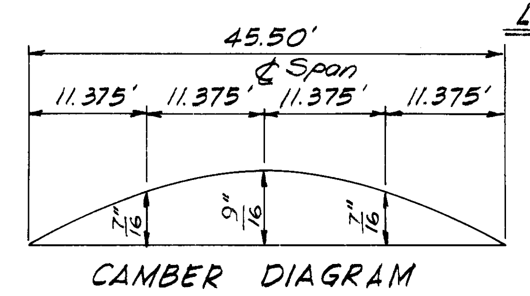
LONGITUDINAL SECTION
Scale: 1=10

NOTES

1. For General Overchute Notes, See Dwg. N-29C1-1 Sht. 92

TIES TO ℄ OPERATING ROAD			
POINT	STATION	ELEVATION	℄ DISTANCE
A_L	~~1827+00~~	~~3466.11~~	~~61.50'~~
B_L	~~1829+50~~	~~3477.59~~	~~84.49'~~
C_L	~~1830+50~~	~~3471.59~~	~~84.49'~~
D_L	~~1833+00~~	~~3466.07~~	~~61.50'~~
A_R	1827+00	3466.11	61.50'
B_R	1829+50	3479.04	87.39'
C_R	1830+50	3479.04	87.39'
D_R	1833+00	3466.07	61.50'

See Note 15 Sht. No. 92



CAMBER DIAGRAM
Not to Scale

For deflection values at time of falsework removal, divide value shown by 4. Additional camber for falsework shall be as approved by the Engineer.

1" = 10' SCALE OF FEET (10 0 10 20 30 40)

SAFETY — as Necessary as WATER

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF DESIGN AND CONSTRUCTION

AS BUILT APR 30 1977

STATE WATER FACILITIES
CALIFORNIA AQUEDUCT
MOJAVE DIVISION
CANAL - STA. 864+70 TO STA. 2216+70
16' OVERCHUTE
STA. 1830+00
PLAN AND LONGITUDINAL SECTION

SUBMITTED: CHIEF, DESIGN SECTION
APPROVAL RECOMMENDED: CHIEF, DESIGN BRANCH
APPROVAL RECOMMENDED: DISTRICT ENGINEER
APPROVED: DATE: MAY 16 1969
CHIEF, DESIGN BRANCH, D & C

REVIEWED—STAFF ENGINEERING, BR.
BY ______
DATE ______

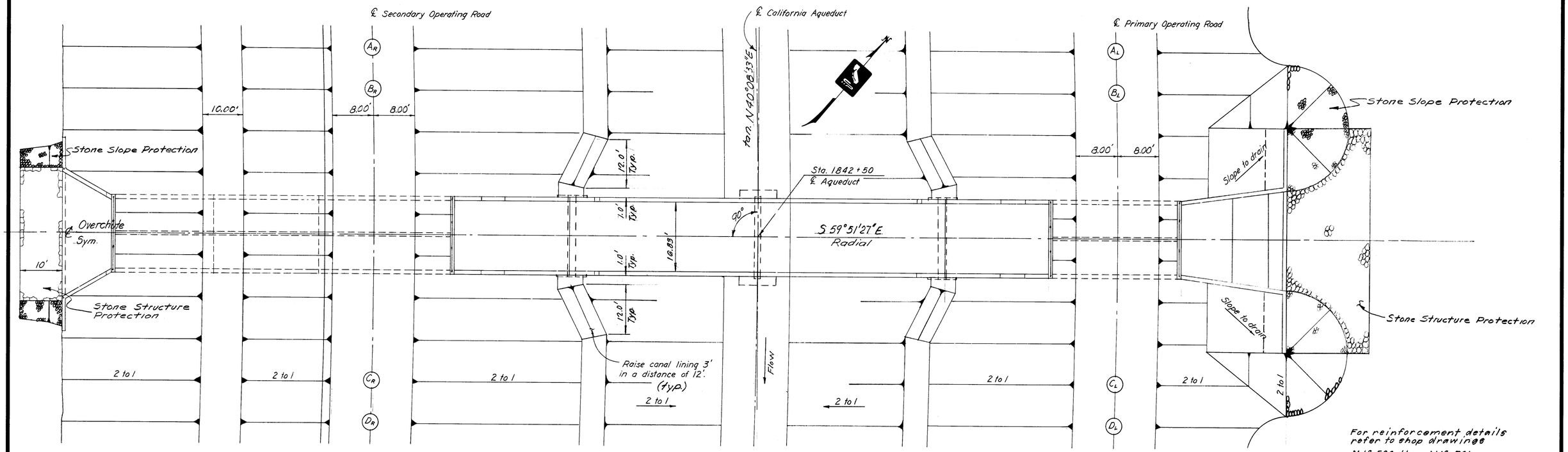
REV.	DATE	DESCRIPTION	SUB.	APP'D
	1-21-77	REVIEWED BY DESIGN		

DESIGNED: C. Matsumoto | DRAWN: C.M. | CHECKED: Joe Van Sickle | REVIEWED: T. Pyms

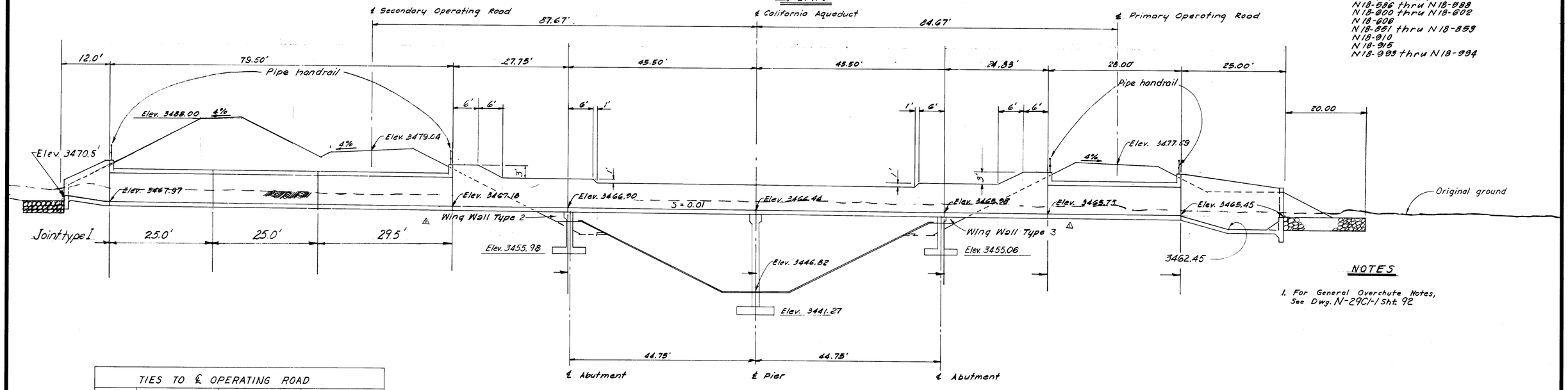
DRAWING NO. N-29C22-1 | SHEET NO. 115

SHEET NO. 115 | DRAWING NO. N-29C22-1

SPEC. NO. 69-17



PLAN



LONGITUDINAL SECTION

Scale : 1" = 10'

For reinforcement details refer to shop drawings

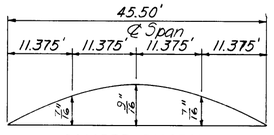
N18-580 thru N18-581
N18-583 thru N18-584
N18-586 thru N18-588
N18-600 thru N18-602
N18-606
N18-851 thru N18-859
N18-910
N18-916
N18-993 thru N18-994

NOTES

1. For General Overchute Notes, See Dwg. N-29C1-1 Sht. 92

TIES TO ℄ OPERATING ROAD			
POINT	STATION	ELEVATION	℄ DISTANCE
A_L	~~1839+50~~	~~3466.02~~	~~61.50'~~
B_L	~~1842+00~~	~~3477.59~~	~~84.67'~~
C_L	~~1843+00~~	~~3477.59~~	~~84.67'~~
D_L	~~1845+50~~	~~3465.98~~	~~61.50'~~
A_R	1839+50	3466.02	61.50'
B_R	1842+00	3479.04	87.57'
C_R	1843+00	3479.04	87.57'
D_R	1845+50	3465.98	61.50'

See Note 15, Sht. No. 92



CAMBER DIAGRAM
Not to Scale

For deflection values at time of false-work removal, divide value shown by 4. Additional camber for falsework shall be as approved by the Engineer.

1" = 10'

10 0 10 20 30 40
SCALE OF FEET

SAFETY — as Necessary as WATER

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF DESIGN AND CONSTRUCTION

AS BUILT
APR 30 1977

STATE WATER FACILITIES
CALIFORNIA AQUEDUCT
MOJAVE DIVISION

CANAL - STA. 864+70 TO STA. 2216+70
16' OVERCHUTE
STA. 1842+50
PLAN AND LONGITUDINAL SECTION

REV.	DATE	DESCRIPTION	SUB.	APP'D
	1-21-72	REVIEWED BY DESIGN		
△	6-23-70	Type of wing wall changed	T.R	

REVIEWED—STAFF ENGINEERING, BR.
BY
DATE

DESIGNED C. Matsumoto | DRAWN C.M. | CHECKED Joe Van Sickle, REG. C.E. NO. 14952 | REVIEWED T. Lyons, REG. C. E. NO. 10893

SUBMITTED: [signature] CHIEF, DESIGN SECTION, REG. C. E. NO. 8477

APPROVED: DATE: MAY 16 1969 [signature] CHIEF, DESIGN BRANCH, D & C REG. C. E. NO. 7282

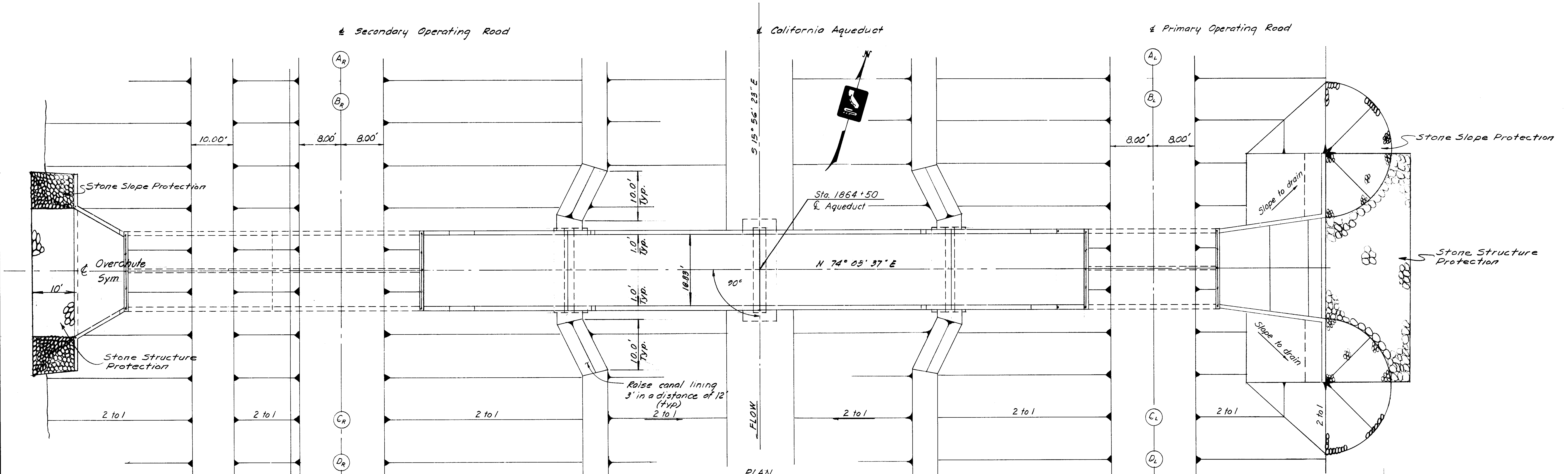
APPROVED RECOMMENDED: [signature] MGR., D & C BRANCH, SO. DIST., REG. C. E. NO. 7196

APPROVED RECOMMENDED: [signature] DISTRICT ENGINEER, SO. DIST. REG. C. E. NO. 8500

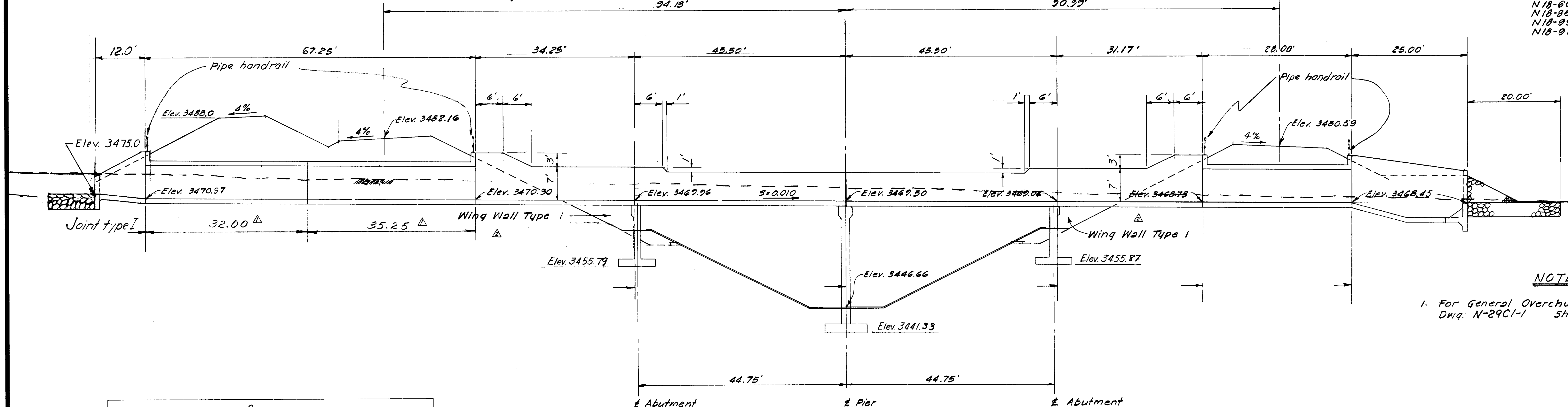
DRAWING NO. N-29C23-1 | SHEET NO. 116

SHEET NO. 116 | DRAWING NO. N-29C23-1

SPEC. NO. 69 - 17



PLAN
Scale: 1"=10'



LONGITUDINAL SECTION
Scale: 1"=10'

For reinforcement details refer to shop drawings

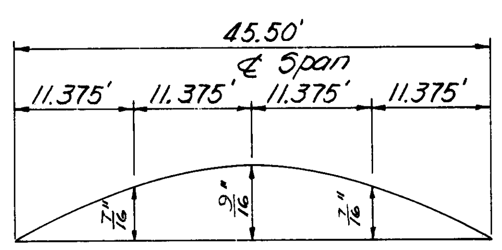
N18-589 thru N18-593
N18-600 thru N18-602
N18-606
N18-851 thru N18-852
N18-895 thru N18-896
N18-911 thru N18-913

NOTES

1. For General Overchute notes, see Dwg. N-29C1-1 Sht. 92

TIES TO ℄ OPERATING ROAD			
POINT	STATION	ELEVATION	℄ DISTANCE
A_L	~~1861+00~~	~~3465.86~~	~~61.50'~~
B_L	~~1864+00~~	~~3480.59~~	~~90.99'~~
C_L	~~1865+00~~	~~3480.59~~	~~90.99'~~
D_L	~~1868+00~~	~~3465.82~~	~~61.50'~~
A_R	1861+00	3465.86	61.50'
B_R	1864+00	3482.16	94.13'
C_R	1865+00	3482.16	94.13'
D_R	1868+00	3465.82	61.50'

See Note 15 Sht. No. 92



CAMBER DIAGRAM
Not to Scale

For deflection values at time of falsework removal, divide value shown by 4. Additional camber for falsework shall be as approved by the Engineer.

1" = 10' — SCALE OF FEET (10, 0, 10, 20, 30, 40)

SAFETY — as Necessary as WATER

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF DESIGN AND CONSTRUCTION

AS BUILT APR 30 1977

STATE WATER FACILITIES
CALIFORNIA AQUEDUCT
MOJAVE DIVISION

CANAL–STA. 864+70 TO STA. 2216+70
16' OVERCHUTE
STA. 1864+50
PLAN AND LONGITUDINAL SECTION

REV.	DATE	DESCRIPTION	SUB.	APP'D
	1-21-77	REVIEWED BY DESIGN		
2	6-23-70	Type of wing wall changed	T.R.	
1	12-15-69	Revised joint spacing for inlet box	T.R.	

REVIEWED—STAFF ENGINEERING, BR. BY ____ DATE ____

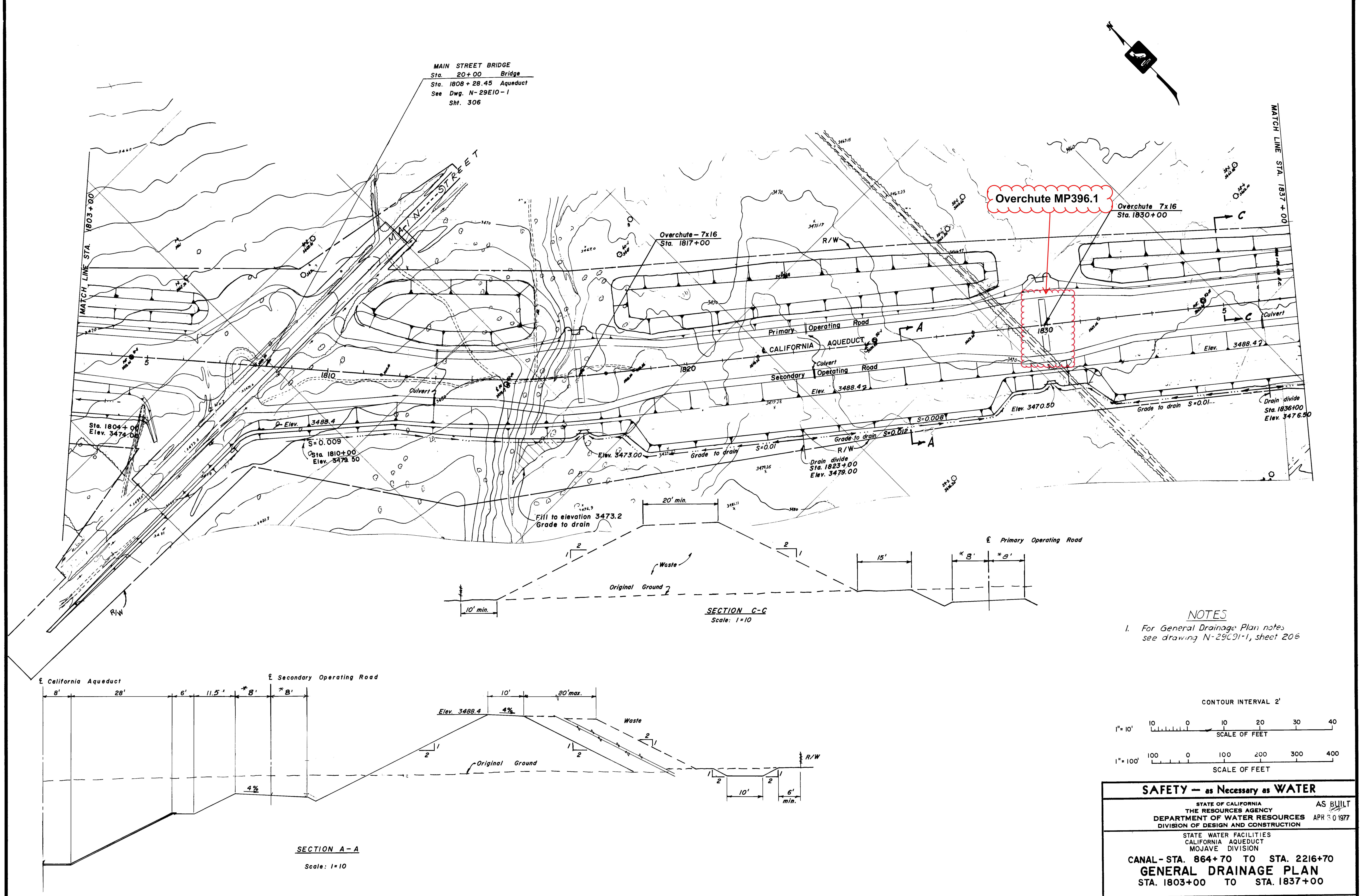
DESIGNED C. Matsumoto | DRAWN C.M. | CHECKED Joe Van Sickle REG. C.E. NO. 16952 | REVIEWED T. Lyons REG. C.E. NO. 10893

SUBMITTED: CHIEF, DESIGN SECTION, REG. C.E. NO. 8477
APPROVAL RECOMMENDED: CHIEF, D & C BRANCH, SO. DIST. REG. C.E. NO.
APPROVAL RECOMMENDED: DISTRICT ENGINEER, SO. DIST. REG. C.E. NO. 6500
APPROVED: CHIEF, DESIGN BRANCH, D & C REG. C.E. NO.
DATE: MAY 16 1969

DRAWING NO. N-29C24-1 SHEET NO. 117

SHEET NO. 117 DRAWING NO. N-29C24-1

SPEC. NO. 69-17


MAIN STREET BRIDGE
Sta. 20+00 Bridge
Sta. 1808+28.45 Aqueduct
See Dwg. N-29E10-1
Sht. 306
MAIN STREET
MATCH LINE STA. 1803+00
MATCH LINE STA. 1837+00
Overchute MP396.1
Overchute 7x16
Sta. 1830+00
Overchute - 7x16
Sta. 1817+00
R/W
Primary Operating Road
CALIFORNIA AQUEDUCT
Secondary Operating Road
Culvert
Elev. 3488.4
Elev. 3488.42
Elev. 3470.50
Sta. 1804+00
Elev. 3474.00
S=0.009
Sta. 1810+00
Elev. 3479.50
Elev. 3473.00
Grade to drain S=0.01
Grade to drain S=0.012
S=0.008
Drain divide
Sta. 1823+00
Elev. 3479.00
Drain divide
Sta. 1836+00
Elev. 3476.50
Grade to drain S=0.01
Fill to elevation 3473.2
Grade to drain
1810
1820
1830
20' min.
Waste
Original Ground
10' min.
15'
*8'
℄ Primary Operating Road
SECTION C-C
Scale: 1=10
℄ California Aqueduct
℄ Secondary Operating Road
8'
28'
6'
11.5'
10'
30' max.
Elev. 3488.4
4%
Waste
Original Ground
R/W
6' min.
SECTION A-A
Scale: 1=10
CONTOUR INTERVAL 2'
SCALE OF FEET
SCALE OF FEET

NOTES

1. For General Drainage Plan notes see drawing N-29C91-1, sheet 206

SAFETY — as Necessary as WATER

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF DESIGN AND CONSTRUCTION

AS BUILT
APR 30 1977

STATE WATER FACILITIES
CALIFORNIA AQUEDUCT
MOJAVE DIVISION

CANAL - STA. 864+70 TO STA. 2216+70

GENERAL DRAINAGE PLAN

STA. 1803+00 TO STA. 1837+00

REV.	DATE	DESCRIPTION	SUB.	APP'D
	1-21-77	REVIEWED BY DESIGN		

REVIEWED—STAFF ENGINEERING, BR.

DESIGNED: C. Matsumoto
DRAWN: D. Zamzlo - T. Tice
CHECKED: Joe Van Sickle
REVIEWED

SUBMITTED / APPROVAL RECOMMENDED / APPROVED / DATE

SHEET NO.	DRAWING NO.
235	N-29C91-30

SPEC. NO. 69-17

Overchute MP396.4

Overchute 7x16
Sta. 1842+50

Overchute MP396.8

Overchute 7x16
Sta. 1864+50

SOUTHERN CALIFORNIA COMPANY EASEMENT

R/W

Primary Operating Road

℄ CALIFORNIA AQUEDUCT

Secondary Operating Road

Culvert

Elev. 3488.47

Elev. 3470.50

Elev. 3475.00

Grade to drain S=0.02

Grade to drain S=0.007

Grade to drain S=0.01

Grade to drain S=0.004

Drain divide
Sta. 1858+00
Elev. 3473.00

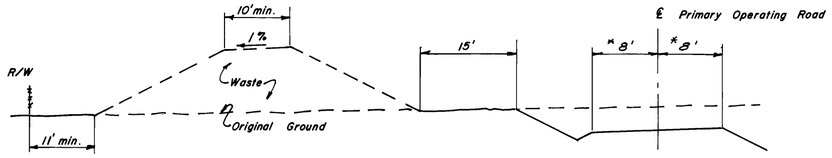
Drain divide

MATCH LINE STA. 1837+00

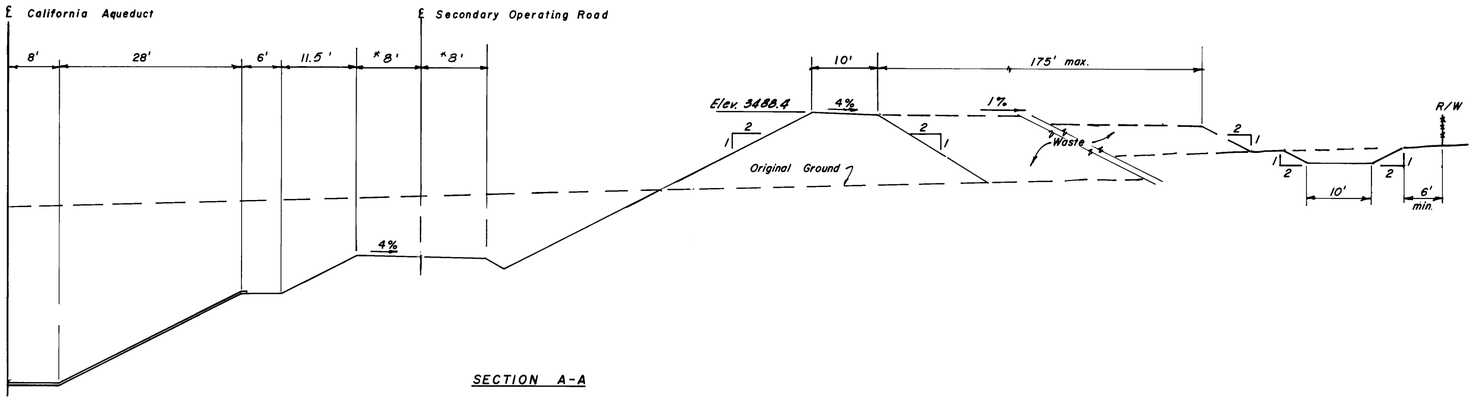
MATCH LINE STA. 1872+00

1840 1850 1860 1870

3470 3480 3490



SECTION B-B
Scale: 1=10



SECTION A-A
Scale: 1=10

NOTES

1. For General Drainage Plan notes see drawing N-29C91-1, sheet 206

CONTOUR INTERVAL 2'

1"= 10' 10 0 10 20 30 40 SCALE OF FEET

1"= 100' 100 0 100 200 300 400 SCALE OF FEET

SAFETY — as Necessary as WATER

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF DESIGN AND CONSTRUCTION

AS BUILT
APR 30 1977

STATE WATER FACILITIES
CALIFORNIA AQUEDUCT
MOJAVE DIVISION

CANAL - STA. 864+70 TO STA. 2216+70

GENERAL DRAINAGE PLAN
STA. 1837+00 TO STA. 1872+00

REVIEWED—STAFF ENGINEERING, BR.
BY
DATE

REV.	DATE	DESCRIPTION	SUB.	APP'D
1	1-21-77	REVIEWED BY DESIGN		

DESIGNED C. Matsumoto
DRAWN D. Zamzilo - T. Tice
CHECKED Joe Van Sickle Reg. C.E. 16952
REVIEWED T. Ly

SUBMITTED: Chief, Design Section, Reg. C.E. No. 8477
APPROVAL RECOMMENDED: Chief, D & C Branch, So. Dist., Reg. C.E. No. 7182
APPROVAL RECOMMENDED: District Engr., So. Dist., Reg. No. C.E. 6500
APPROVED: DATE: Chief, Design Branch, D & C Div., C.E. No. 7387

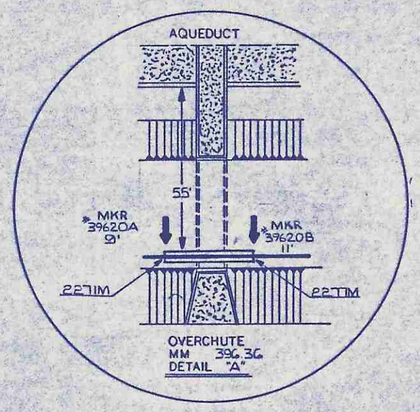
DRAWING NO. N-29C91-31
SHEET NO. 236

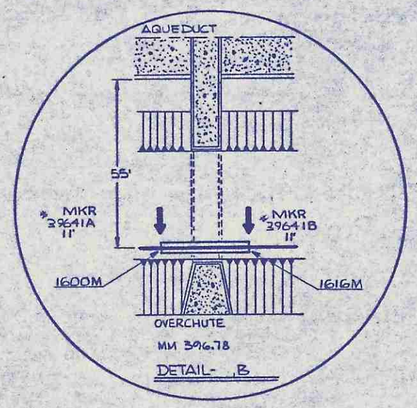
SHEET NO. 236 | DRAWING NO. N-29C91-31

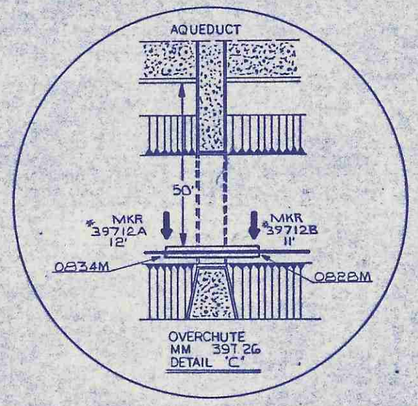
238 SPEC. NO. 69-17

MM# - MM#	STA TO STA	OFFSET
396.00 - 397.00	19+97	55'
396.00 - 397.00	23+58 36+84	29'
396.00 - 397.00	41+40	55'
396.00 - 397.00	44+45	29'
397.00 - 398.00	00+00 00+47	29'
397.00 - 398.00	12+09	50'
397.00 - 398.00	15+81 21+89	29'

NOTES:
1. ALL MEASUREMENTS TAKEN FROM EDGE OF AQUEDUCT.
2. CONTRACTOR RESPONSIBLE FOR LOCATING AND PROBING ALL UNDERGROUND STRUCTURES, PRIOR TO EXCAVATING.
3. SEE TYPICAL L-1 SHT 4A FOR PLOWING
4. CALL USA 800-422-4133 FOR LOCATION OF UTILITIES

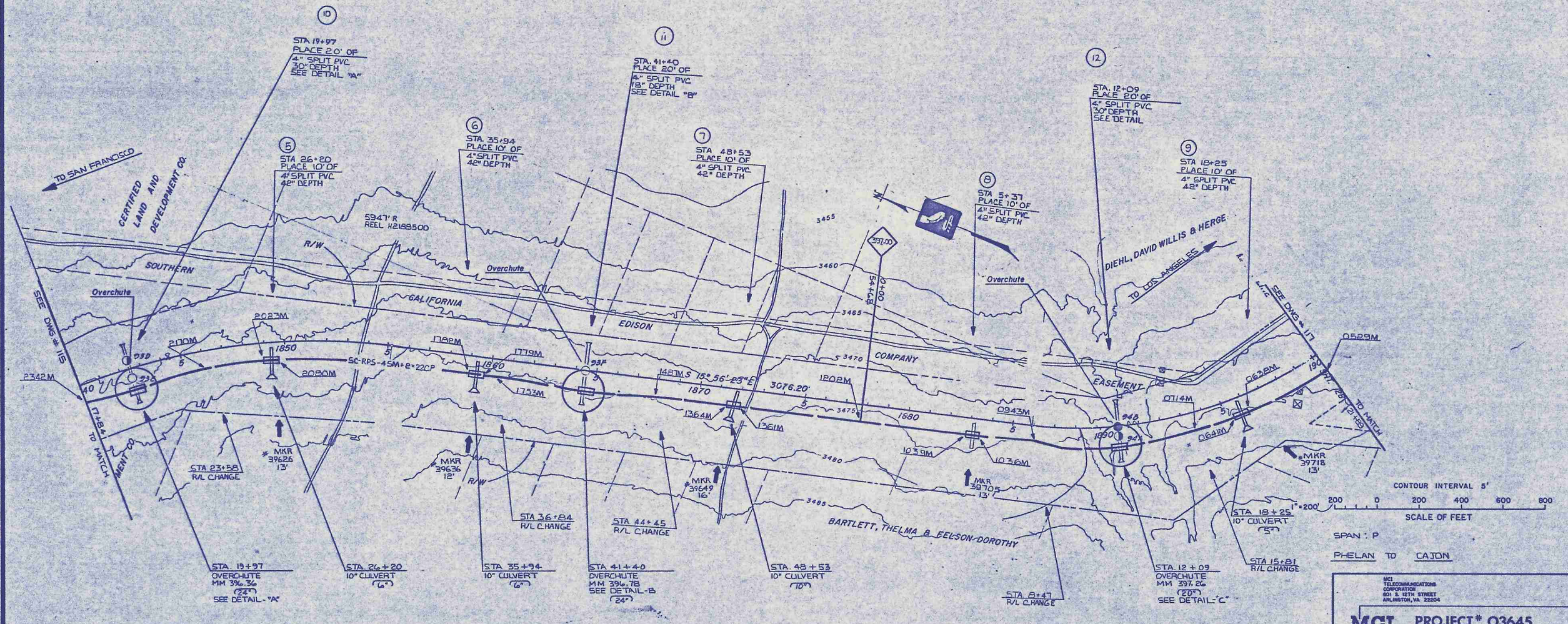






MAP FOOTAGE		
SURVEY	5873'	LF
DWR	6023'	LF

MATERIAL LIST	QUANTITY
CABLE	5947'
GIP 2"	
GIP 4"	
PVC 1 3/8"	
PVC 4"	
SPLIT PVC 4"	110'
HH 3'x5'x4'	
BUR CA MKRS	11
STRAND	
ANCHORS & GUYS	
DOWN GUYS	
POLE TAGS	
10" CORR PIPE	
POLES	



SPAN : P
PHELAN TO CAJON

APPROVALS - DATE	
ENGINEER	H & M INC.
SR. MGR	
CONSTR. MGR	
D.W.R.	

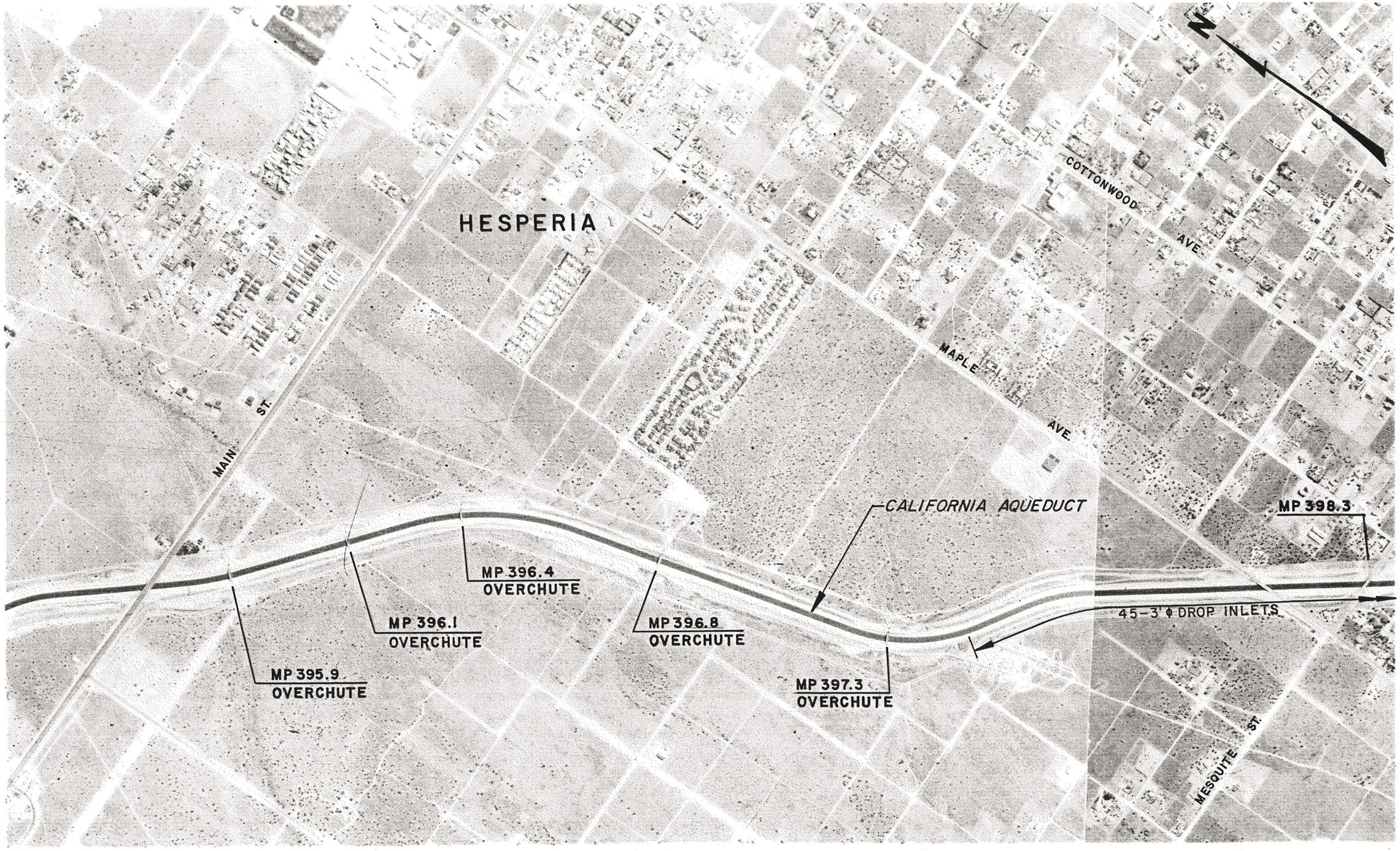
MCI TELECOMMUNICATIONS CORPORATION
601 S. 15TH STREET
ARLINGTON, VA 22204

MCI PROJECT* 03645

DEPT ID 059 LOC ID 081

TITLE
FIBER OPTIC CABLE ROUTE SAN FRANCISCO, CA. TO L.A. CA. MM. 396.34 TO MM. 397.41

SIZE	DWG NO. (MCI)	DRAWING NO.	SHEET NO.
D	116	N-29FI-18	27



1000 0 1000 2000 3000

SCALE OF FEET

AERIAL SURVEYS: I.K. CURTIS SERVICES, INC. (1990)

DEPARTMENT OF WATER RESOURCES

SWP CROSS DRAINAGE

EAST BRANCH

MILE POST 395.9 TO MILE POST 398.3

SWP CROSS DRAINAGE
EAST BRANCH
Mile Post 303.9 to Mile Post 403.4
HYDROLOGIC & HYDRAULIC DATA
TABLE B-9

Mile-Post	Station	Type of Structure	No.Of Bays or Pipes	Size w x h or Dia	Runoff Area	Struct. Cap.	RETURN PERIOD 100 YEAR			RETURN PERIOD 500 YEAR			C1,C2..
							Peak Inflow	Routed Outflow	Routed W. S. Elv.	Peak Inflow	Routed Outflow	Routed W. S. Elv.	
mile	feet			feet	sq. miles	cfs	cfs	cfs	feet	cfs	cfs	feet	
389.9	1503+30	O	3	12 x 5	1.00	2050	415	415	3473.8	560	560	3474.2	C1
390.2	1517+90	O	2	12 x 5	2.11	1320	750	750	3476.1	1015	1015	3477.4	C2
390.5	1532+60	O	2	12 x 5	0.86	1380	385	380	3478.3	530	520	3479.8	C1
390.7	1543+65	O	3	12 x 5	3.00	2070	1300	1275	3478.3	1765	1730	3479.8	C2
390.9	1553+25	O	3	12 x 5	2.26	2070	920	905	3478.3	1230	1230	3479.8	C3
391.4	1580+25	O	2	12 x 7	2.53	1900	1188	850	3478.0	1560	875	3481.2	C1
391.9	1604+70	O	2	12 x 7	2.62	1900	1057	850	3478.0	1400	875	3481.2	C2
392.2	1623+00	BC	4	8 x 8	6.29	7550	2440	2370	3437.8	3280	3090	3440.0	
392.6	1645+00	O	1	10 x 7	1.31	990	640	640	3477.3	870	870	3480.0	
393.0	1664+40	BC	4	6 x 8	3.64	3270	1620	1620	3459.5	2175	2175	3461.0	
393.1	1672+60	O	1	10 x 7	0.71	800	250	230	3475.8	350	320	3476.9	
394.0	1716+27	O	1	10 x 7	1.34	790	490	425	3477.4	680	555	3478.8	
394.5	1744+87	BC	2	6 x 6	4.59	2265	1900	1500	3421.0	2520	1610	3425.4	
394.8	1762+70	O	1	10 x 7	1.14	990	420	420	3475.1	580	570	3476.9	
395.1	CHECK #64												
395.3	1789+00	O	2	8 x 5	0.70	995	240	240	3469.3	330	330	3470.1	
395.9	1817+00	O	2	8 x 7	4.05	1920	2410	830	3478.6	3125	1010	3480.0	C1
396.1	1830+00	O	2	8 x 7	0.87	2115	435	1090	3478.6	570	1100	3480.0	C2
396.4	1842+50	O	2	8 x 7	0.87	2115	435	1090	3478.6	570	1100	3480.0	C3
396.8	1864+50	O	2	8 x 7	0.67	1790	415	1125	3480.5	555	1520	3483.0	C1
397.3	1890+00	O	2	8 x 7	5.25	2115	2311	1600	3480.5	3130	1790	3483.0	C2
397.6	1909+50	DI	1	3		100							
397.7	1912+50	DI	1	3		100							
398.0	1929+00	DI	1	3		100							

Legend
BC=Box Culvert
PC=Pipe Culvert O = Overchute
DI =Drop Inlet C1, C2..=Structures Discharging Collectively

Note: Inflow, Outflow and Elevations may vary due to future urban development
4/20/95

TABLE B-9