PLANNING COMMISSION
CITY OF PALM DESERT
MEETING AGENDA

Tuesday, January 7, 2025

6:00 p.m.

Council Chamber, City Hall

73-510 Fred Waring Drive

Palm Desert, California

Pursuant to Assembly Bill 2449, this meeting will be conducted as a hybrid meeting and there will be in-person access to this location.

- To participate via Zoom, use the following link: https://palmdesert.zoom.us/j/84739707419 or call (213) 338-8477, Zoom Meeting ID: 847 3970 7419

- Written public comment may also be submitted to PlanningCommission@palmdesert.gov. E-mails received by 3:00 p.m. prior to the meeting will be distributed to the Commission. Any correspondence received during or after the meeting will be distributed to the Commission as soon as practicable and retained for the official record. **Emails will not be read aloud** except as an ADA accommodation.

Pages

1. CALL TO ORDER
2. ROLL CALL
3. PLEDGE OF ALLEGIANCE
4. NONAGENDA PUBLIC COMMENTS

   This time has been set aside for the public to address the Planning Commission on issues that are not on the agenda for up to three minutes. Speakers may utilize one of the three options listed on the first page of the agenda. Because the Brown Act does not allow the Planning Commission to act on items not listed on the agenda, members may briefly respond or refer the matter to staff for a report and recommendation at a future meeting.

5. CONSENT CALENDAR

All matters listed on the Consent Calendar are considered routine and may be approved by one motion. The public may comment on any items on the Consent Agenda within the three-minute time limit. Individual items may be removed by the Planning Commission for a separate discussion.

RECOMMENDATION:
To approve the consent calendar as presented.

5.a APPROVAL OF MINUTES 5

RECOMMENDATION:
Approve the Minutes of December 17, 2024.

6. ACTION CALENDAR

The public may comment on individual Action Items within the three-minute time limit. Speakers may utilize one of the three options listed on the first page of the agenda.

None.

7. PUBLIC HEARINGS

Anyone who challenges any hearing matter in court may be limited to raising only those issues he or she raised at the public hearing described herein, or in written correspondence delivered to the Planning Commission at, or prior to, the public hearing. Remarks shall be limited to a maximum of three minutes unless the Planning Commission authorizes additional time.

7.a CONSIDERATION A MITIGATED NEGATIVE DECLARATION (SCH NO. 2023090542) AND A MITIGATION MONITORING AND REPORTING PROGRAM FOR THE HAYSTACK CHANNEL IMPROVEMENT PROJECT 9

RECOMMENDATION:
Adopt Planning Commission Resolution No. 2864 entitled “A RESOLUTION OF THE PALM DESERT PLANNING COMMISSION RECOMMENDING THAT THE CITY COUNCIL APPROVE ADOPTION OF A MITIGATED NEGATIVE DECLARATION (SCH NO. 2023090542) AND A MITIGATION MONITORING AND REPORTING PROGRAM FOR THE HAYSTACK CHANNEL IMPROVEMENT PROJECT IN ACCORDANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT”

7.b CONSIDERATION TO ADOPT RESOLUTION NO. 2888 APPROVING A PRECISE PLAN TO CONSTRUCT A DUPLEX DEVELOPMENT ON SAN JACINTO AND A NOTICE OF EXEMPTION PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT. 191

RECOMMENDATION:
Adopt Planning Commission Resolution No. 2888 entitled, “A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PALM DESERT, CALIFORNIA, ADOPTING A NOTICE OF EXEMPTION PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) AND APPROVING A PRECISE PLAN TO DEVELOP A DUPLEX NEAR THE NORTHWEST CORNER OF ALESSANDRO DRIVE AND SAN JACINTO (ASSESSOR’S PARCEL NUMBER 627-182-010)”

8. INFORMATIONAL REPORTS & COMMENTS

8.a SUMMARY OF CITY COUNCIL ACTIONS

8.b COMMITTEE MEETING UPDATES

8.b.1 Cultural Arts Committee

8.b.2 Parks and Recreation Committee

8.c PLANNING COMMISSIONERS

8.d CITY STAFF

8.e ATTENDANCE REPORT 225

9. ADJOURNMENT

The next Regular Meeting will be held on January 21, 2025, at 6:00 p.m.

10. PUBLIC NOTICES

Agenda Related Materials: Pursuant to Government Code §54957.5(b)(2) the designated office for inspection of records in connection with this meeting is the Office of the City Clerk, Palm Desert Civic Center, 73-510 Fred Waring Drive, Palm Desert. Staff reports for all agenda items considered in open session, and documents provided to a majority of the legislative bodies are available for public inspection at City Hall and on the City's website at www.palmdesert.gov.

Americans with Disabilities Act: It is the intention of the City of Palm Desert to comply with the Americans with Disabilities Act (ADA) in all respects. If, as an attendee or a participant at this meeting, or in meetings on a regular basis, you will need special assistance beyond what is normally provided, the City will attempt to accommodate you in every reasonable manner. Please contact the Office of the City Clerk, (760) 346-0611, at least 48 hours prior to the meeting to inform us of your needs and to determine if accommodation is feasible.

AFFIDAVIT OF POSTING

I hereby certify under penalty of perjury under the laws of the State of California that the foregoing agenda for the Planning Commission was posted on the City Hall bulletin board and City website not less than 72 hours prior to the meeting.

/S/ Michelle Nance
Acting Assistant City Clerk

PLANNING COMMISSION

CITY OF PALM DESERT

REGULAR MEETING MINUTES

December 17, 2024, 6:00 p.m.

Present: Commissioner Nancy DeLuna, Vice-Chair Lindsay Holt, Commissioner John Greenwood, Chair Ron Gregory

Staff Present: Director of Development Services Richard Cannone, Principal Planner Carlos Flores, Deputy City Attorney Daniel Trevino, Recording Secretary Michelle Nance

1. CALL TO ORDER

A Regular Meeting of the Planning Commission was called to order by Chairperson Gregory on Tuesday, December 17, 2024, at 6:00 p.m. in the Council Chamber, City Hall, located at 73-510 Fred Waring Drive, Palm Desert, California.

2. ROLL CALL

3. PLEDGE OF ALLEGIANCE

Commissioner Greenwood led the Pledge of Allegiance.

4. NON-AGENDA PUBLIC COMMENTS

None.

5. CONSENT CALENDAR

Motion by: Commissioner Greenwood
Seconded by: Commissioner DeLuna

To approve the consent calendar as presented.

Motion Carried (4 to 0)

5.a APPROVAL OF MINUTES

Motion by: Commissioner Greenwood
Seconded by: Commissioner DeLuna

Approve the Minutes of November 19, 2024.

Motion Carried

6. ACTION CALENDAR

None.

7. PUBLIC HEARINGS

7.a CONSIDERATION OF A RECOMMENDATION TO THE PALM DESERT CITY COUNCIL FOR APPROVAL OF A ZONING ORDINANCE AMENDMENT TO SECTIONS OF TITLE 25 OF THE PALM DESERT MUNICIPAL CODE AND FINDING THE ACTION EXEMPT PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

Principal Planner Flores presented a PowerPoint and responded to Commissioner inquiries.

Commissioner Greenwood discussed site posting requirements, suggesting a standardized template accessible on the City's website; addressed community engagement meeting schedules, advocating for meetings to occur only after applications are deemed complete to ensure alignment with code standards and avoid presenting incomplete projects to the public; recommended requiring pre-application reviews for projects needing community engagement or discretionary reviews to ensure completeness and streamline public input; further suggested notifying entire Homeowner Associations near project sites and using City facilities, like the Council Chamber, for hybrid in-person and virtual community meetings.

Vice Chair Holt raised concerns about community meeting notification timing, emphasizing the need for clear communication from staff and flexibility during the process's early stages; recommended adding language regarding site signage removal.

In response to inquiries, staff clarified the following:

- Notification by developers to residents for community meetings would follow the same 10-day notice to match the City's existing notification timing;
- Community meetings must be held within Palm Desert during non-business hours;
- Notices may be in flyer format or similar, provided by the applicant; and
- Notification radii are 1,000 feet for parcels over five acres and 500 feet for parcels under five acres.

Following discussion Director Cannone suggested extending the notification timeline to 20 days post-submittal and requiring signage removal within 10 days after the appeal period; clarified that community meetings do not count toward the five-meeting rule and proposed revisiting pre-application requirements during the Unified Development Code update.

Chair Gregory opened and closed the Public Hearing, with no public comments.

Motion by: Commissioner Greenwood
Seconded by: Vice-Chair Holt

Commissioner Greenwood moved to recommend revisions requiring signage removal within 10 days after the appeal period and adjusting community meeting

timelines to 30 days prior to application submittal, 20 days post-submittal, and 30 days after the application is deemed complete.

Adopt Planning Commission Resolution No. 2887 entitled: "A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PALM DESERT, CALIFORNIA RECOMMENDING APPROVAL OF A ZONING ORDINANCE AMENDMENT TO AMEND SECTIONS 25.60.080, 25.60.160, AND 25.78.020(C) OF PALM DESERT MUNICIPAL CODE TITLE 25 AND MAKING A FINDING THAT THE ACTION IS EXEMPT FROM FURTHER ENVIRONMENTAL REVIEW PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)," as amended.

Motion Carried (4 to 0)

8. INFORMATIONAL REPORTS & COMMENTS

8.a SUMMARY OF CITY COUNCIL ACTIONS

Director of Development Services Cannone provided an update on recent actions taken by City Council.

8.b COMMITTEE MEETING UPDATES

8.b.1 Cultural Arts Committee

Vice-Chair Holt provided an update on Cultural Arts Committee meeting of December 2024.

8.b.2 Parks and Recreation Committee

None.

8.c PLANNING COMMISSIONERS

In response to inquiry, staff provided an update on the following items:

- Digital agendas for future meetings; and
- Budget review for Planning Commission seminars.

8.d CITY STAFF

Director of Development Services expressed his appreciation to the Commission and wished everyone Happy Holidays.

8.e ATTENDANCE REPORT

Report provided; no action taken on this item.

9. ADJOURNMENT

The Planning Commission adjourned at 6:54 p.m.

Respectfully submitted,

_____

Michelle Nance, Acting Assistant City Clerk

Recording Secretary

_____

Richard Cannone, Director of Development Services

Staff Liaison

CITY OF PALM DESERT
PLANNING COMMISSION
STAFF REPORT

MEETING DATE: January 7, 2025

PREPARED BY: John D. Criste, AICP, Consulting Planner
Nick Melloni, AICP, Principal Planner

SUBJECT: CONSIDERATION A MITIGATED NEGATIVE DECLARATION (SCH NO. 2023090542) AND A MITIGATION MONITORING AND REPORTING PROGRAM FOR THE HAYSTACK CHANNEL IMPROVEMENT PROJECT

RECOMMENDATION:

Adopt Planning Commission Resolution No. 2864 entitled "A RESOLUTION OF THE PALM DESERT PLANNING COMMISSION RECOMMENDING THAT THE CITY COUNCIL APPROVE ADOPTION OF A MITIGATED NEGATIVE DECLARATION (SCH NO. 2023090542) AND A MITIGATION MONITORING AND REPORTING PROGRAM FOR THE HAYSTACK CHANNEL IMPROVEMENT PROJECT IN ACCORDANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT"

EXECUTIVE SUMMARY:

The item was continued from the Planning Commission's meeting of June 4, 2024, to allow a community scoping meeting on the project to be held. On June 26, 2024, an open house was held by City Public Works Department staff at St. Margaret's Episcopal Church to present information on pedestrian and cyclist safety and the stormwater channel rehabilitation. At this meeting, four stormwater channel rehabilitation options were presented: (1) maintaining the natural slopes of the existing channel, (2) stabilizing slopes with sand covered riprap (boulders) to allow for natural re-vegetation, (3) stabilizing slopes with riprap only, and (4) constructing the channel with vertical stack riprap walls. Residents provided feedback and support for options 1 and 2.

On November 7, 2024, City Public Works Department staff presented updates to the planned improvements to the Haystack channel and emergency improvements put into place following additional storm damage to the channel following an intense local storm that occurred on July 14, 2024. Several options were presented to approximately 25 members of the community and a variety of questions were addressed and considered, most focusing on a desire for an expedited return of channel vegetation.

Public Works staff conducted a thorough design and cost analysis of three channel rehabilitation options, including:

Option 1 - leaving the channel in a graded but otherwise "natural" state,

Option 2 - installing side slope armoring using boulders to resist channel scour and erosion, and

Option 3 - a modified slope armoring using boulders embedded in native channel soils to enhance natural channel revegetation.

On December 12, 2024, City staff presented these three options to the City Council at a study session. The City Council provided input and recommended staff proceed with Option 3.

BACKGROUND/ANALYSIS:

On May 7, 2024, the Planning Commission met to consider the adoption of the subject CEQA Negative Declaration/Mitigated Negative Declaration (IS/MND) for the Haystack Channel Improvement Project.

Staff provided a thorough review of the project and facilitated discussion of the CEQA analysis and the need for regulatory permits with the Commission. No specific issues were identified regarding the project except for its potential impact on the interesting and diverse habitat that has grown within the channel right of way.

Commissioners expressed concern for the post-construction appearance of the channel and adjoining Haystack Road parkway. Concerns were expressed about the loss of the smoke trees, Palo Verde and other vegetation that has grown in the now meandering channel bottom. As noted, the lack of side slope protection has allowed the shifting channel to cut into the left and right banks along this segment east of Heliotrope Drive.

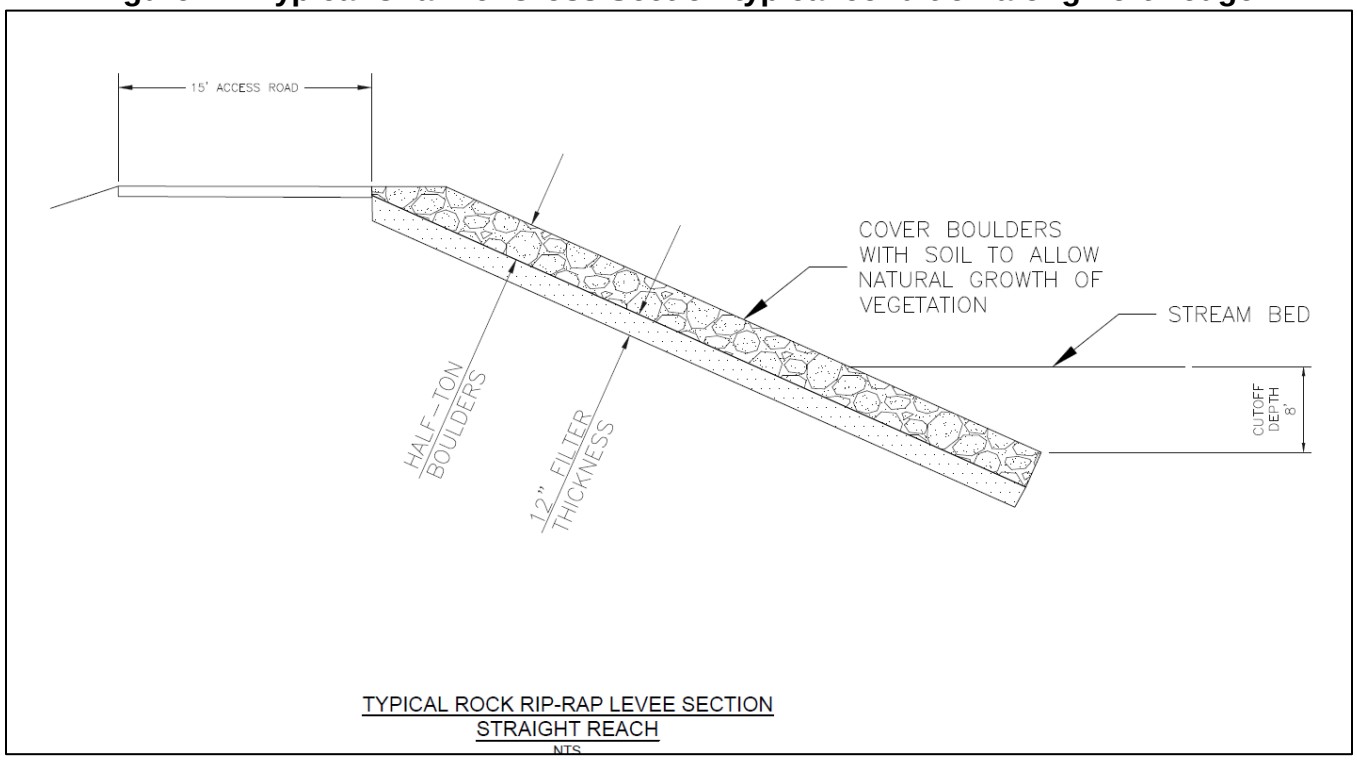
The segment of concern extends from Heliotrope Road to Portola Avenue on the east. The segment lies within a narrow band of land averaging 118± feet in width that lies between Haystack Road and its north parkway, and lands of the Marrakesh Country Club development. Plans and photos of the subject channel segment were reviewed and discussed. Concerns were raised regarding the possibility of protecting some of the existing channel vegetation, however, these concerns did not require revisions to the IS/MND as did not raise concerns about potential significant impacts. The concerns were primarily related to residents' preference to preserve existing vegetation within the channel.

Design and Construction Constraints

The design of the proposed channel improvements will restore the channel profile and cross section to its original geometry. The primary improvements along this segment include the installation of un-grouted riprap to be comprised of soil-embedded half-ton boulders laid along the restored channel sides at a slope of 2 to 1. The riprap lining will extend 8 feet below the soft channel bottom and will terminate at the top of the channel slope (see diagram below). Prior to this step, additional grading and replacement of channel soils will be conducted. The 15-foot channel service road will also be restored along the length of the north channel right-of-way leaving an average of 7 feet between the service road and the Marrakesh perimeter wall (see Figure 1 on the following page). Project construction, including channel reshaping and installation of the 8-foot to 10-foot riprap-lined toe-down (below grade), temporary soils stockpiling and staging, movement and use of construction equipment will effectively remove all or most existing vegetation from within and adjacent to the channel.

(Continued on next page)

Figure 1 – Typical Channel Cross Section typical condition along north edge



In addition to the major redistribution of channel soils, the channel itself will be reshaped to its original trapezoidal cross section. The ungrouted soil-embedded riprap areas will be underlain by a 12-inch layer of sand to act as a filter, that protects soils beneath the riprap from scour and the lining being undermined by flows. Compromising the riprap and liner would create serious vulnerabilities for the riprap lining.

Revegetation

All the existing plants in the subject channel segment are “volunteers” from seeds blown (or washed) into the channel. If left undisturbed once construction is complete, the channel will again naturally re-vegetate in a manner similar to what occurred over the past few years. Beyond the channel improvements, there will be opportunities to enhance existing vegetation within the Haystack right of way and within a portion of the southerly channel right of way outside of the channel proper. This would create a widened parkway landscape area, which could be continued north to within about five feet of the top of the channel, according to project engineers. Renderings showing the proposed channel improvements at installation and landscape maturity are provided for reference as Attachment No 8.

Regulatory Permits

In addition to the City’s CEQA review and project approval, the entire channel cross section, to the top of both side slopes, qualify as “waters of the State” and are subject to Section 1602 of the California Fish and Game Code. Therefore, before any work can proceed in the channel, the

City must secure a Section 1602 Streambed Alteration Agreement (permit), which typically includes a variety of terms and conditions, and requirements for mitigation of project impacts. For comparable projects, California Department of Fish and Wildlife (CDFW) requires replacement habitat at a 3 to 1 ratio.

Depending on the project, CDFW may allow the restoration of on-site habitat to serve as mitigation for project impacts but again at multiples of the area impacted. Current calculations of temporary and permanent impacts have not yet been reviewed by CDFW. Neither has any approach to on-site mitigation been discussed with CDFW. Alternatively, off-site mitigation is acceptable but is difficult, complex, and very costly; it is uncertain if off-site mitigation lands can be identified, which starts a long and complex process. At this juncture, it is recommended that on-site mitigation be offered as the most viable means of securing a permit from CDFW.

Project Landscape Planning

Outside the channel project area and adjacent to the Haystack Road parkway, the City will be able to install landscaping, as long as the vegetation complies with the Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP) guidelines. It is anticipated that the landscaping for the restored parkway will naturally follow once the channel improvements are completed. If the parkway landscaping can be integrated with an in-channel mitigation plan, it may enhance the likelihood of securing support from the California Department of Fish and Wildlife (CDFW) for channel impact mitigation.

In light of the Commission's concerns, staff recommends that these concerns be acknowledged and used to inform the landscape enhancements for the project. Additionally, staff recommends that the Commission adopt the Mitigated Negative Declaration prepared for this project.

CHANNEL BACKGROUND/ANALYSIS:

The Haystack Channel has been in place for several decades and was constructed to intercept north-flowing tributary flows crossing Haystack Road and to convey them to the Portola Avenue culvert and into a series of golf course drainage system systems farther east. These flows ultimately make their way to the Whitewater River approximately 1,400 feet west of Washington Street. The Project segment extends from State Highway 74 on the west to Portola Avenue on the east. The sub-segment planned for improvements extends from just west of Alamo Drive eastward to the Portola Avenue culvert.

The subject facility provides an outlet for a drainage area defined by Highway 74 and extending as far south as Indian Hills Way, Andreas Canyon Drive, Carriage Trail, and lrontree Drive and as far east as Portola Avenue. Today's Haystack Channel is a combination of improved and unimproved channel reaches that begins at Highway 74 and flows east to Portola Avenue and beyond. Three distinct reaches define the channel, including:

1. Highway 74 to Alamo Drive: This reach of channel is characterized by a shallow swale located within a turfed green belt. Two small diameter culverts cross under Alamo Drive at the low end of the reach. No changes to this segment of the channel are proposed.

2. Alamo Drive to Heliotrope Drive: Being the middle reach of the project area, this segment of channel is improved with inlets and other facilities. This segment is grass-lined with numerous mature trees along the upper channel slopes. Storm drain inlets are located on both sides of this channel reach and vary in size and geometry. Existing facilities also include a minimally functional subsurface nuisance water drain composed of 24-inch grated inlets, sporadic cleanouts, and a sub-grade 8-inch diameter perforated pipeline that runs the length of this channel reach. Four 48-inch diameter culverts cross under Heliotrope Drive at the downstream end of the reach.

3. Heliotrope Drive to Portola Avenue: The final Project reach of the Haystack Channel is generally unimproved with native soil bottom and side slopes. The slopes of this reach have sustained significant damage by erosion and pose concern for flooding, risk of damage to surrounding homes, roadways, sidewalks, and may potentially compromise utility infrastructure. There is evidence of decreased capacity in this reach. Two existing (visible) storm drain inlets are located along the south side of this reach. Each inlet includes minimal improvements. The downstream end of this reach of the channel is Portola Avenue. Surface and subsurface improvements at Portola Avenue indicate this roadway floods during larger return frequency storms. The low-level crossing here is a multiple cell reinforced concrete box culvert that is currently operating at greatly diminished capacity due to sedimentation.

The runoff tributary to the Haystack Channel is generated primarily in residential areas located south of Haystack Road. Minimal runoff is introduced to the channel from Calliandra Street via inlets located on Alamo Drive north of the channel. Review of aerial photography and field reconnaissance indicates four potential drainage areas in a larger tributary area south of Haystack Road. These drainage areas are tributary to the Haystack Channel at Alamo Road, Chia Road, downstream of the intersection of Silver Spur Trail and Sun Coral Trail, and Portola Avenue. According to the project engineer's technical memorandum, there are eight (8) storm drains that discharge into the subject channel, ranging from an 18-inch reinforced concrete pipe (RCP) to a 2-foot by 6-foot reinforced concrete box (RCB).

CEQA-Plus and Satisfying NEPA

The Project may involve permitting by the US Army Corps of Engineers ("USACE") pursuant to Section 404 of the Clean Water Act ("CWA"). The project may therefore be subject to federal environmental review requirements. All applicants seeking federal CWA permits must comply with CEQA and provide sufficient information pursuant to the National Environmental Policy Act ("NEPA") so that the USACE can document compliance with federal environmental laws. If subject to the federal CWA, the USACE will determine federal compliance based upon this "CEQA-Plus" environmental assessment.

This Initial Study/Mitigated Negative Declaration ("IS/MND") has been prepared to address the CEQA-Plus requirements to satisfy NEPA and USACE NEPA Guidelines. These requirements include documentation of compliance with applicable federal regulations, including the Endangered Species Act, the National Historic Preservation Act, the federal Clean Air Act, Environmental Justice, Farmland Protection Policy Act, Flood Plain Management, Migratory Bird

Treaty Act, Protection of Wetlands/Clean Water Act (Sec 404), and Safe Drinking Water Action, Sole Source Aquifer Protection.

No project alternatives have been evaluated. The proposed project is the reconstruction of an existing flood control channel, which currently serves an extended residential neighborhood.

CEQA IS/MND Comments
During the 30-day public comment period, the City received three comment letters which were reviewed and evaluated within the context of the subject CEQA analysis. Comments were received from the Riverside County Flood Control District, the Agua Caliente Band of Cahuilla Indians and the California Department of Fish and Wildlife (CDFW). Review and recommendations associated with these comments are set forth below. Letters from each commenting agency are included in the staff report packet.

Riverside County Flood Control
Comments from Riverside County Flood Control District, County Flood Control state that the proposed project will not have an adverse effect on any of their facilities and that they have no further comment.

Agua Caliente Band of Cahuilla Indians (ACBCI)
During the review and processing of the project, the ACBCI was contacted. In accordance with CEQA, the ACBCI was provided with a copy of the draft Initial Study/Mitigated Negative Declaration for comment, as well as the cultural/historical resources report prepared for the project. The ACBCI's letter states:

"The Mitigated Negative Declaration document included standard mitigation measures to address impacts to cultural resources. We found these measures to be sufficient." (Attachment 5, ACBCI Comment Letter).

The consultation with the ACBCI was conducted in compliance with AB 52 and was concluded upon receipt of the Tribe's letter dated September 25, 2023.

California Department of Fish and Wildlife (CDFW)
The CDFW provided a comment letter dated October 23, 2023, on the Draft IS/MND. Comments reflected a limited assessment by CDFW of the conditions at the site and vicinity and several "standard" recommendations were provided. CDFW comments included 1) extending the nesting bird survey period to any time of year instead of the standard February 1 through August 31st; 2) that nesting bird surveys be conducted within three days (rather than 7 to 10 days) of site disturbance; 3) that a burrowing owl avoidance survey be conducted no less than 60 days before start of work; 4) that spring and winter bat surveys are conducted pursuant to a highly prescriptive CDFW methodology; 5) that an application be filed with CDFW and approval secured for a Section 1602 streambed alteration agreement.

Mitigation measures set forth in the draft IS/MND and relevant to CDFW comments have been reviewed and have been revised and expanded in the January 2024 draft and to address issues raised in the CDFW's letter. The nesting bird survey season has not been revised but the 3 days

prior recommendation has been added. A mitigation measure to conduct a burrowing owl avoidance survey has been added, and a measure has been added to have a bat survey conducted in either the spring or fall, depending on when project construction commences. The revisions to the IS/MND do not require re-circulation pursuant to CEQA Guidelines Section 15073.5 as the mitigation measures were revised with equal or more effective measures in response to the comments raised by the CDFW and do not result in more significant impacts. The following are the revised mitigation measures drafted to protect biological resources:

BIO-1 Migratory Bird Treaty Act (MBTA)

If ground disturbance or tree or plant removal is proposed between February 1st and August 31st, a qualified avian biologist shall conduct a nesting bird survey within three (3) days of initiation of grading onsite, focusing on MBTA covered species, including burrowing owl. Surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified avian biologists will make every effort to avoid potential nest predation as a result of survey and monitoring efforts. If active nests are reported, then species-specific measures shall be prepared. At a minimum, grading in the vicinity of a nest shall be postponed until the young birds have fledged. For construction that occurs between September 1st and January 31st, no pre-construction nesting bird survey is required. In the event active nests are found, exclusionary fencing shall be placed around the nests until such time as nestlings have fledged. Avoidance buffers shall be 100 to 300 feet from the nests of unlisted songbirds, and 500 feet from the nests of birds-of-prey and listed species. If nests are detected, a smaller or larger buffer may be determined by the qualified avian biologist.

BIO-2 Burrowing Owl Habitat Assessment

No less than 60 days prior to the start of Project-related activities, a burrowing owl habitat assessment shall again be conducted by a qualified avian biologist and in conformance with Appendix C of the CDFW 2012 “Staff Report on Burrowing Owl Mitigation”. If the assessment identifies suitable burrowing owl habitat, then focused burrowing owl surveys shall be conducted by a qualified avian biologist in conformance with CDFW protocol. If burrowing owls are detected during focused owl surveys a burrowing owl management plan shall be prepared and submitted to CDFW for approval prior to implementation and commencement of Project activities.

BIO-3 Bats

While not previously detected, the potential exists for Project area vegetation, including desert fan palms located in the eastern portion of the project, to provide habitat for the western yellow bat. Therefore, if Project commencement occurs either between April and June or between November and January, a bat survey shall be conducted by a qualified bat biologist during favorable weather conditions. An appropriate time of day (before sunrise or at dusk). If occupied sites are identified in the work area (or within 500 feet if a maternity roost), an appropriate buffer shall be established, including a minimum of a 500-foot buffer around identified maternity roosting sites. If bat presence is established, Project construction shall not occur between 30 minutes before sunset or 30 minutes after sunrise.

BIO-4 Post-Construction Landscaping
For that portion of the Project extending east from Heliotrope Drive to Portola Avenue, if the reintroduction of landscaping is planned, it should be comprised of appropriate native and/or non-native, non-invasive drought tolerant vegetation. The Project landscape plans shall conform with the recommended and prohibited plant list found in the Coachella Valley MSHCP.

Monitoring and Reporting:

BIO-A If a nesting bird survey is required, the Project biologist shall provide the City with a letter report of findings regarding the occurrence of nesting birds and any prescribed exclusionary fencing and monitoring. The report shall be attached to the grading permit for the Project.
Responsible Parties: Project Biologist, City Project Manager
Schedule: If required, prior to issuance of any permits that result in ground disturbance

BIO-B If a burrowing owl habitat assessment survey is required, the Project biologist shall provide the City with a report of findings regarding the occurrence of burrowing owl and shall prepare and implement focused burrowing owl surveys. If burrowing owl are detected and occupied burrows identified, avoidance, minimization and mitigation shall be implemented in consultation with CDFW.
Responsible Parties: Project Biologist, City Project Manager
Schedule: If required, prior to issuance of any permits that result in ground disturbance

BIO-C If a bat survey is required, the Project biologist shall provide the City with a letter report of findings regarding the occurrence of bats and shall establish appropriate buffers.
Responsible Parties: Project Biologist, City Project Manager
Schedule: If required, prior to issuance of any permits that result in ground disturbance

Next Steps
No comments were received that would necessitate recirculation of the environmental analysis or the preparation of an Environmental Impact Report. Recommended Mitigation Measures have been incorporated into the Initial Study that will reduce any potentially significant impacts to less than significant levels. The Initial Study and associated Mitigated Negative Declaration meet the requirements of CEQA and the State CEQA Guidelines. Staff recommends the Planning Commission recommend adoption of the IS/MND to the City Council.

Once the CEQA IS/MND has been adopted, the City will file an application with the CDFW for a Section 1602 Streambed Alteration Agreement. Additional terms and conditions associated with this agreement may also affect project implementation.

Public Input:
Public Notification

Public noticing was conducted for January 7, 2025, Planning Commission meeting per the requirements of PDMC Section 25.60.060 and Government Code Sections 65090 to 65094. A public hearing notice was published on Friday, December 27, 2024, in The Desert Sun newspaper. Notices were mailed to all property owners within 1,000 feet of the Project site. Staff conducted community meetings for the project on June 26, 2024, and again on November 7, 2024.

Legal Review:
This report has been reviewed by the City Attorney's office.

Environment Review:
The environmental review is summarized in the attached Draft Resolution.

ATTACHMENTS:

1. Draft Resolution No. 2864
2. Exhibit B Resolution No. 2864 Draft Initial Study / Mitigated Negative Declaration and Technical Appendices
3. IS/MND Notice of Intent
4. CDFW Comment Letter
5. ACBCI Comment Letter
6. RCFC Comment Letter
7. Project Plans for Reference Only
8. Project Conceptual Renderings
9. City Council Study Session Presentation - December 12, 2024
10. Hearing Notice

PLANNING COMMISSION RESOLUTION NO. 2864

A RESOLUTION OF THE PALM DESERT PLANNING COMMISSION RECOMMENDING THAT THE CITY COUNCIL APPROVE ADOPTION OF AN INITIAL STUDY / MITIGATED NEGATIVE DECLARATION (SCH NO. 2023090542) AND A MITIGATION MONITORING AND REPORTING PROGRAM FOR THE HAYSTACK CHANNEL IMPROVEMENT PROJECT IN ACCORDANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

WHEREAS, the City of Palm Desert ("City") proposes to construct improvements to the existing Haystack Channel located generally between Alamo Drive and Portola Avenue to re-establish original channel capacity, improve runoff capture and percolation, and to limit the potential for future channel degradation on facilities (Project) located north of Haystack Road in the City of Palm Desert, Riverside County, California, and

WHEREAS, under Section 21067 of the Public Resources Code, Section 15367 of the State CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.), and the City of Palm Desert's ("City's") Local CEQA Guidelines, the City is the lead agency for the Project; and

WHEREAS, in accordance with State CEQA Guidelines Section 15063, the City prepared an Initial Study to determine if the Project may have a significant effect on the environment and to evaluate whether an Environmental Impact Report (EIR) was required; and

WHEREAS, pursuant to the requirements of the CEQA, the State Guidelines for Implementation of CEQA (State CEQA Guidelines), and the City of Palm Desert CEQA Implementation Requirements, an Initial Study/Mitigated Negative Declaration (IS/MND), SCH No. 2023090542 was prepared for the Project; and

WHEREAS, based on the information contained in the IS/MND, which concluded that the Project could have potentially significant impacts but that those impacts could be reduced to less than significant levels with the implementation of certain mitigation measures, the City prepared a Mitigation Monitoring and Reporting Program (MMRP) pursuant to Public Resources Code section 21081.6 and State CEQA Guidelines section 15074(d); and

WHEREAS, in accordance with State CEQA Guidelines section 15072, a Notice of Intent to Adopt a Mitigated Negative Declaration (NOI) was prepared and filed with the County Clerk of the County of Riverside on September 25, 2023, and the City provided and publicly posted the NOI in the manner required by CEQA on September 25, 2023; and

WHEREAS, in accordance with State CEQA Guidelines section 15073, the MND was circulated for a 30-day review period from September 25, 2023 to October 24, 2023 by: (1) filing a Notice of Intent to Adopt a Mitigated Negative Declaration ("NOI") with the State Clearinghouse; (2) filing a NOI with the Los Angeles County Clerk; (3) placing a NOI in the Desert Sun newspaper, a newspaper of general circulation; (4) mailing a NOI to various interested persons, agencies and tribes; and (5) posting a NOI on the City's website; and

WHEREAS, during the public comment period, copies of the Initial Study and technical appendices were available for review and inspection at the Palm Desert City Hall, 73-510 Fred Waring Drive, Palm Desert, CA 92260, and on the City's website; and

WHEREAS, during the public comment period, the City consulted with and requested comments from all responsible and trustee agencies, other regulatory agencies, and others pursuant to State CEQA Guidelines section 15073; and

WHEREAS, during the public comment period, the City received three (3) comment letters from the Riverside County Flood Control District, the Agua Caliente Band of Cahuilla Indians and the California Department of Fish and Wildlife (CDFW); and

WHEREAS, minor revisions were made to the IS/MND in response to CDFW comments and recirculation was not required as new information was added which made insignificant modifications of the IS/MND; and

WHEREAS, as contained herein, the City has endeavored in good faith to set forth the basis for its decision on the Project; and

WHEREAS all the requirements of the CEQA have been satisfied by the City in connection with the preparation of the Initial Study, which is fully detailed so that all of the potentially significant environmental effects of the Project have been fully evaluated; and

WHEREAS, the IS/MND prepared in connection with the Project fully analyzes both the feasible mitigation measures necessary to avoid or substantially lessen the Project's potential environmental impacts; and

WHEREAS, all of the findings and conclusions made by the City pursuant to this Resolution are based upon the oral and written evidence presented to it as a whole and the entirety of the administrative record for the Project, which are incorporated herein by reference, not based solely on the information provided in this Resolution; and

WHEREAS, on November 7, 2024, the City Public Works Department conducted a public scoping meeting on the Project design, at which time all persons wishing to speak were heard, comments on the Project were noted and fully considered; and

WHEREAS, on May 7, 2024, June 4, 2024, and January 7, 2025, the Planning Commission conducted duly noticed public meetings on this Resolution, at which time all persons wishing to testify were heard and the Project was fully considered; and

WHEREAS, prior to taking action, the Planning Commission has heard, been presented with, reviewed and considered all of the information and data in the administrative record, including the IS/MND, Mitigation Monitoring and Reporting Program, and all oral and written evidence presented to it during all meetings; and

WHEREAS, the IS/MND reflects the independent judgment of the Planning Commission and is fully adequate for purposes of making decisions on the merits of the Project and

WHEREAS, no comments submitted during the public review period, or made during the public hearings conducted by the Planning Commission, and no additional information submitted to the City require substantial revisions to the MND necessitating recirculation or additional environmental review of the Project under State CEQA Guidelines section 15073.5; and

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of the City of Palm Desert, California, as follows:

SECTION 1. Recitals. The Planning Commission hereby finds that the foregoing recitals are true and correct and are incorporated herein as substantive findings of this Resolution.

SECTION 2. Compliance With The California Environmental Quality Act. The Planning Commission has reviewed and considered the information contained in the revised IS/MND, comments received, and other documents contained in the administrative record for the Project. The Planning Commission recommends that the City Council find that the revised IS/MND contains a complete and accurate reporting of the environmental impacts associated with the Project. The Planning Commission further recommends that the City Council find that the revised IS/MND has been completed in compliance with CEQA, the State CEQA Guidelines, and the City's Local CEQA Guidelines.

SECTION 3. Findings On Environmental Impacts. Based on the whole record before it, including the revised IS/MND, the administrative record and all other written and oral evidence presented to the Planning Commission, the Planning Commission recommends that the City Council find that all environmental impacts of the Project are either less than significant or can be mitigated to less than significant levels with the mitigation measures outlined in the revised IS/MND, and the Mitigation Monitoring and Reporting Program. The Planning Commission further recommends that the City Council find that there is no substantial evidence in the administrative record supporting a fair argument that the Project may result in any significant environmental impact. The Planning Commission recommends that the City Council find that the revised IS/MND contains a complete, objective, and accurate reporting of the environmental impacts associated with the Project and reflects the independent judgment and analysis of the City.

SECTION 4. Project Description. The Haystack Channel has been in place for several decades and was constructed to intercept north-flowing tributary flows crossing Haystack Road and to convey them to the Portola Avenue culvert and into a series of golf course drainage system systems farther east. The Project proposes approximately one mile of improvements to rehabilitate the portion of the channel extending from Alamo Drive eastward to the Portola Avenue culvert. These improvements are intended to capture and convey storm runoff and nuisance water to drains located between Alamo Drive and Heliotrope Drive, to optimize the hydraulic capacity of the culverts crossing under Alamo Drive, Heliotrope Drive, and Portola Avenue, as well to remediate diminished channel capacity and protect storm drain outlets east of Heliotrope Drive.

SECTION 5. Findings. The Planning Commission makes the following findings:

a. The proposed Project is consistent and in conformity with the City's plans and policies specifically relating to the development of flood control facilities.

b. The subject property is suitable for the planned uses, in terms of access, size of parcel, relationship to similar or complementary uses, and other relevant considerations, including the surrounding land uses and public streets, and applicable policies of the Palm Desert General Plan, as amended.

c. The proposed Project is necessary and proper and is not likely to be detrimental to adjacent property or residents.

SECTION 6. Recommendation regarding adoption of Initial Study/Mitigated Negative Declaration. The Planning Commission hereby recommends that the City Council approve and adopts the Initial Study/Mitigated Negative Declaration, attached hereto as "EXHIBIT A".

SECTION 7. Adoption of Mitigation Monitoring and Reporting Program. The Planning Commission hereby recommends that the City Council approve and adopt the Mitigation Monitoring and Reporting Program attached to this Resolution as "EXHIBIT B" Implementation of the Mitigation Measures contained in the Mitigation Monitoring and Reporting Program is hereby made a condition of approval of the Project. In the event of any inconsistencies between the Mitigation Measures set forth herein and the Mitigation Monitoring and Reporting Program, the Mitigation Monitoring and Reporting Program shall control. In the event of any inconsistencies between the Mitigation Monitoring and Reporting Program and State, federal, and local laws, the State, federal, and local laws shall control.

SECTION 8. Custodian of Records. The documents and materials that constitute the record of proceedings on which these findings are based are located at the City's office at 73510 Fred Waring Drive, Palm Desert, CA 92260. Richard D. Cannone, AICP, the Secretary to the Palm Desert Planning Commission, is the custodian of the record of proceedings.

SECTION 9. Execution of Resolution. The Chairperson of the Planning Commission signs this Resolution, and the Secretary to the Commission shall attest and certify to the passage and adoption thereof.

ADOPTED ON January 7, 2025.

RONALD GREGORY
CHAIRPERSON

ATTEST:

RICHARD D. CANNONE, AICP
SECRETARY

I, Richard D. Cannone. AICP, Secretary of the City of Palm Desert Planning Commission, hereby certify that Resolution No. 2864 is a full, true, and correct copy, and was duly adopted at a regular meeting of the Planning Commission of the City of Palm Desert on January 7, 2025, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:
RECUSED:

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of Palm Desert, California, on January ___, 2025.

RICHARD D. CANNONE, AICP
SECRETARY

EXHIBIT A

ENVIRONMENTAL INITIAL STUDY

Haystack Stormwater Channel Rehabilitation Project

CEQA
Mitigation Monitoring and Reporting Program

Biological Resources

BIO-1 Migratory Bird Treaty Act

If ground disturbance or tree or plant removal is proposed between February 1st and August 31st, a qualified avian biologist shall conduct a nesting bird survey within three (3) days of initiation of grading onsite, focusing on MBTA covered species, including burrowing owl. Surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified avian biologists will make every effort to avoid potential nest predation as a result of survey and monitoring efforts. If active nests are reported, then species-specific measures shall be prepared. At a minimum, grading in the vicinity of a nest shall be postponed until the young birds have fledged. For construction that occurs between September 1st and January 31st, no pre-construction nesting bird survey is required. In the event active nests are found, exclusionary fencing shall be placed around the nests until such time as nestlings have fledged. Avoidance buffers shall be 100 to 300 feet from the nests of unlisted songbirds, and 500 feet from the nests of birds-of-prey and listed species. If nests are detected, a smaller or larger buffer may be determined by the qualified avian biologist.

BIO-2 Burrowing Owl Habitat Assessment

No less than 60 days prior to the start of Project-related activities, a burrowing owl habitat assessment shall again be conducted by a qualified avian biologist and in conformance with Appendix C of the CDFW 2012 “Staff Report on Burrowing Owl Mitigation”. If the assessment identifies suitable burrowing owl habitat, then focused burrowing owl surveys shall be conducted by a qualified avian biologist in conformance with CDFW protocol. If burrowing owls are detected during focused owl surveys a burrowing owl management plan shall be prepared and submitted to CDFW for approval prior to implementation and commencement of Project activities.

BIO-3 Bats

While not previously detected, the potential exists for Project area vegetation, including desert fan palms located in the eastern portion of the project, to provide habitat for the western yellow bat. Therefore, if Project commencement occurs either between April and June or between November and January, a bat survey shall be conducted by a qualified bat biologist during favorable weather conditions. An appropriate time of day (before sunrise or at dusk). If occupied sites are identified in

the work area (or within 500 feet if a maternity roost), an appropriate buffer shall be established, including a minimum of a 500-foot buffer around identified maternity roosting sites. If bat presence is established, Project construction shall not occur between 30 minutes before sunset or 30 minutes after sunrise.

BIO-4 Post-Construction Landscaping

For that portion of the Project extending east from Heliotrope Drive to Portola Avenue, if the reintroduction of landscaping is planned, it should be comprised of appropriate native and/or non-native, non-invasive drought tolerant vegetation. The Project landscape plans shall conform with the recommended and prohibited plant list found in the Coachella Valley MSHCP.

Monitoring and Reporting:

BIO-A If a nesting bird survey is required, the Project biologist shall provide the City with a letter report of findings regarding the occurrence of nesting birds and any prescribed exclusionary fencing and monitoring. The report shall be attached to the grading permit for the Project.

Responsible Parties: Project Biologist, City Project Manager

Schedule: If required, prior to issuance of any permits that result in ground disturbance

BIO-B If a burrowing owl habitat assessment survey is required, the Project biologist shall provide the City with a report of findings regarding the occurrence of burrowing owl and shall prepare and implement focused burrowing owl surveys. If burrowing owl are detected and occupied burrows identified, avoidance, minimization and mitigation shall be implemented in consultation with CDFW.

Responsible Parties: Project Biologist, City Project Manager

Schedule: If required, prior to issuance of any permits that result in ground disturbance

BIO-C If a bat survey is required, the Project biologist shall provide the City with a letter report of findings regarding the occurrence of bats and shall establish appropriate buffers.

Responsible Parties: Project Biologist, City Project Manager

Schedule: If required, prior to issuance of any permits that result in ground disturbance

Cultural Resources

CUL-1 If buried cultural materials are discovered during grubbing, grading, trenching, excavation, or any other earth-moving activities on the Project site, all work in the area must be halted until a qualified archaeologist can evaluate the nature and significance of the finds.

Monitoring and Reporting:

CUL-A A report of findings shall be filed with the City, including an itemized inventory of the identified cultural materials, and upon completion of the field and laboratory work, an analysis of any recovered artifacts.

Responsible Parties: Project applicant, Project archaeologist, Public Works Department, Development Services Department, City Engineer.

Schedule: Within 30 days of the completion of ground disturbing activities on the Project site.

Hydrology and Water Quality Resources

HYD-1 Project Plan Review
Prior to finalizing the hydraulic design and engineering plans for Haystack Channel improvements, said plans shall be reviewed and approved by the City Engineer to ensure that these improvements do not interfere with or adversely affect channel capacity or the ability of City to manage and maintain these facilities.

HYD-2 NPDES Requirements
The Project shall comply with the requirements of the National Pollution Discharge Elimination System (NPDES).

HYD-3 General BMPs
The implementation of BMPs during construction activities shall ensure that erosion and siltation from earthmoving and other construction activities is limited. Exposed soil from excavated areas, stockpiles, and other areas where ground cover is removed shall be stabilized by wetting or other approved means to avoid or minimize the inadvertent transport by wind or water. Temporary construction BMPs considered and incorporated into the project, as appropriate, would include:

- Soil stabilization (erosion control) techniques such as on-going site watering, soil binders, etc.;
- Sediment control methods such as detention basins, silt fences, and dust control;
- Temporary de-silting basins may be constructed incrementally along the channel, as needed, to store and clarify water adjoining de-watered areas in the channel, and will be backfilled as side slope lining progresses downstream.
- Contractor training programs;
- Material transfer practices;

- Waste management practices such as providing designated storage areas and containers for specific waste for regular collection;
- Concrete washout slurry shall be discharged and disposed of in an approved manner;
- Channel cleaning/tracking control practices;
- Vehicle and equipment cleaning and maintenance practices; and
- Fueling practices.

HYD-4 Stormwater Pollution Prevention Plan

The construction contractor shall implement a City-approved (SWPPP) during construction of the Project. The SWPPP shall identify specific best management practices (BMPs) that will be implemented during project construction. BMPs implemented as a part of the project will ensure that the project meets the requirements of the California State Water Resources Control Board NPDES Construction General Permit.

Construction-related erosion and sediment controls, including any necessary stabilization practices or structural controls, shall be implemented at and in all potentially affected drainages. General structural practices may include, but are not limited to, silt fences, earth dikes, drainage swales, sediment traps, check dams, reinforced soil retaining systems, temporary or permanent sediment basins and flow diversion.

Temporary erosion and sediment control measures shall be installed during or immediately after initial disturbance of the soil, maintained throughout construction (on a daily basis), and reinstalled until replaced by permanent erosion control structures or final grading and other site disturbances are complete. In addition, the following specific actions shall be taken to ensure that impacts are less than significant.

a) The construction shall be avoided within the limits of identified waterways as depicted on the Jurisdictional Delineation Report prepared for this IS/MND, except as authorized by federal, state or local permits.
b) Protect inlets and outlets of culverts from construction material intrusions using temporary berms to prevent channel incision, erosion, and sedimentation.
c) Erosion control measures appropriate for on-the-ground conditions, including percent slope, length of slope, and soil type and erosive factor, shall be implemented.
d) Temporary erosion controls such as straw bales and tubes, geotextiles and other appropriate diversion and impounding materials and facilities shall be properly maintained throughout construction (on a daily basis) and reinstalled (such as after backfilling) until replaced with permanent erosion controls or restoration is complete.
e) Where jurisdictional waters are adjacent to or within the construction area, the contractor shall install sediment barriers along the edge of the construction right-of-way to contain spoil and sediment within the construction area and limit discharge into jurisdictional areas or waters.

f) Ensure that all employees and contractors are properly informed and trained on how to properly install and maintain erosion control BMPs. Contractors shall require all employees and contractors responsible for supervising the installation and maintenance of BMPs and those responsible for the actual installation and maintenance to receive training in proper installation and maintenance techniques.
g) Project scheduling will include efficient staging of the construction that minimizes the extent of disturbed and destabilized work area and reduces the amount of soil exposed and the duration of its exposure to wind, rain, and vehicle tracking.
h) The use of a schedule or flow chart will be incorporated to lay out the construction plan and will allow proposed improvements to proceed in a manner that keep water quality control measures synchronized with site disturbance, concrete pours and other construction activities.
i) The sequencing and time frame for the initiation and completion of tasks, such as site clearing, grading, excavation, concrete and rip rap lining and other construction, shall be planned in advance to ensure minimization of potential impacts.

HYD-5 Petroleum BMPs

To prevent petroleum products from contaminating soils and water bodies in the channel, the following BMPs shall be implemented:

a) Construction equipment and vehicles shall be properly maintained to prevent leakage of petroleum products.
b) Vehicle maintenance fluids and petroleum products shall be stored, and/or changed in staging areas established at least 100 feet from delineated streams and other drainages. These products must be discarded at disposal sites in accordance with state and federal laws, rules, and regulations.
c) Drip pans and tarps or other containment systems shall be used when changing oil or other vehicle/equipment fluids.
d) Areas where discharge material, overburden, fuel, and equipment are stored shall be designed and established at least 100 vegetated (permeable) feet from the edge of delineated streams.
e) Any contaminated soils or materials shall be disposed of off-site in proper receptacles at an approved disposal facility.
f) All erosion control measures shall be inspected and repaired after each rainfall event that results in overland runoff. The project contractor shall be prepared year-round to deploy and maintain erosion control BMPs associated with the project.
g) Existing culverts shall be carefully maintained in place in order to ensure that they function properly. Considerations include: maintenance of inlet and outlet elevations, grade, adequate compacted material cover, and inlet/outlet protection.

Monitoring and Reporting:

HYD-A Project Plans shall be reviewed and approved by the City Engineer to ensure that these improvements do not interfere with or adversely affect channel capacity or the ability of City to manage and maintain these facilities.

Responsible Parties: Project Design Engineer, City Engineer

Schedule: Prior to finalizing the hydraulic design and engineering plans.

HYD-B The Project shall comply with the requirements of the National Pollution Discharge Elimination System (NPDES).

Responsible Parties: City Engineer, Contractor

Schedule: Prior to and during construction activities.

HYD-C Implement BMPs during construction activities by approved means to avoid or minimize the inadvertent transport by wind or water.

Responsible Parties: City Engineer, Contractor

Schedule: Prior to and during construction activities.

HYD-D Implement City-approved (SWPPP) with specific best management practices (BMPs) as a part of the project will ensure that the project meets the requirements of the California State Water Resources Control Board NPDES Construction General Permit.

Responsible Parties: City Engineer, Contractor

Schedule: Prior to and during construction activities.

HYD-E To prevent petroleum products from contaminating soils and water bodies in the channel, the HYD-5 BMPs shall be implemented.

Responsible Parties: City Engineer, Contractor

Schedule: Prior to and during construction activities.

CITY OF PALM DESERT
CEQA Environmental Checklist & Environmental Assessment

Project Title: Haystack Stormwater Channel Rehabilitation Project	
Lead agency name and address:	City of Palm Desert 73-510 Fred Waring Drive Palm Desert, CA 92260
Contact persons and phone number:	Nick Melloni Development Services Department City of Palm Desert 73-510 Fred Waring Drive Palm Desert, CA 92260 (760) 346-0611
Project location: East of State Highway 74, west of Portola Avenue, immediately north of Haystack Road. **APNs:** 630-025-050 & 052; 630-190- 051 & 054; 628-290-013 Portion of the SE ¼ of Section 30, portion of S1/2 of Section 29, Township 5 South, Range 6 East, San Bernardino Baseline and Meridian	
Project sponsor's name and address:	Public Works Department City of Palm Desert 73-510 Fred Waring Drive Palm Desert, CA 92260 (760) 346-0611
General Plan Designation: Open Space; Conventional Suburban Neighborhood; Golf Course & Resort Neighborhood	**Zoning:** Open Space

Description of Project: The Haystack Channel has been in place for several decades and was constructed to intercept north-flowing tributary flows crossing Haystack Road and to convey them to the Portola Avenue culvert and into a series of golf course drainage system systems farther east. These flows ultimately make their way to the Whitewater River approximately 1,400 feet west of Washington Street. The Project segment extends from State Highway 74 on the west to Portola Avenue on the east. The sub-segment planned for improvements extends from just west of Alamo Drive eastward to the Portola Avenue culvert.

The subject facility provides an outlet for a drainage area defined by Highway 74 and extending as far south as Indian Hills Way, Andreas Canyon Drive, Carriage Trail, and lrontree Drive and as far east as Portola Road. Today's Haystack Channel is a combination of improved and unimproved channel reaches that begins at Highway 74 and flows east to Portola Avenue and beyond. Three distinct reaches define the channel, including.

1. Highway 74 to Alamo Drive: This reach of channel is characterized by a shallow swale located within a turfed green belt. Two small diameter culverts cross under Alamo Drive at the low end of the reach. No changes to this segment of the channel are proposed.

2. Alamo Drive to Heliotrope Drive: Being the middle reach of the project area, this segment of channel is improved with inlets and other facilities. This segment is grass-lined with numerous mature trees along the upper channel slopes. Storm drain inlets are located on both sides of this channel reach and

vary in size and geometry. Existing facilities also include a minimally functional subsurface nuisance water drain composed of 24-inch grated inlets, sporadic clean outs, and a sub-grade 8-inch diameter perforated pipeline that runs the length of this channel reach. Four 48-inch diameter culverts cross under Heliotrope Drive at the downstream end of the reach.

3. Heliotrope Drive to Portola Avenue: The final Project reach of the Haystack Channel is generally unimproved with native soil bottom and side slopes. There is historic evidence of channel and bank erosion. There is also evidence of decreased capacity in this reach. Two existing (visible) storm drain inlets are located along the south side of this reach. Each inlet includes minimal improvements. The downstream end of this reach of the channel is Portola Avenue. Surface and subsurface improvements at Portola Avenue indicate this roadway floods during larger return frequency storms. The low-level crossing here is a multiple cell reinforced concrete box culvert that is currently operating at greatly diminished capacity due to sedimentation.

Runoff tributary to the Haystack Channel is generated primarily in residential areas located south of Haystack Road. Minimal runoff is introduced to the channel from Calliandra Street via inlets located on Alamo Drive north of the channel. Review of aerial photography and field reconnaissance indicate four potential drainage areas in a larger tributary area south of Haystack Road. These drainage areas are tributary to the Haystack Channel at Alamo Road, Chia Road, downstream of the intersection of Silver Spur Trail and Sun Coral Trail, and Portola Avenue. According to the project engineer's technical memorandum, there are eight (8) storm drains that discharge into the subject channel, ranging from 18-inch reinforced concrete pipe (RCP) to a 2-foot by 6-foot reinforced concrete box (RCB).

CEQA-Plus and Satisfying NEPA

The Project involves or may involve permitting by the US Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act (CWA). The project is therefore subject to federal environmental review requirements. All applicants seeking federal CWA permits must comply with CEQA and provide sufficient information pursuant to the National Environmental Policy Act (NEPA) so that the USACE can document compliance with federal environmental laws. The USACE will determine federal compliance based upon this "CEQA-Plus" environmental assessment.

This Mitigated Negative Declaration (MND) has been prepared to address the CEQA-Plus requirements to satisfy NEPA and USACE NEPA Guidelines. These requirements include documentation of compliance with applicable federal regulations, including the Endangered Species Act, the National Historic Preservation Act, the federal Clean Air Act, Environmental Justice, Farmland Protection Policy Act, Flood Plain Management, Migratory Bird Treaty Act, Protection of Wetlands/Clean Water Act (Sec 404), and Safe Drinking Water Action, Sole Source Aquifer Protection.

No project alternatives have been evaluated. The proposed project is the reconstruction of an existing flood control channel, which currently serves an extended residential neighborhood.

Project Objectives and Scope

The Haystack Channel Rehabilitation project considers numerous issues including nonoperational nuisance water drains, hydraulic capacity, impact of flood waters on existing utilities, erosion and sedimentation, and protection of existing storm drain outlets. More specifically, the project is to meet the following objectives.

- ► Capture and convey nuisance water to drains located between Alamo Drive and Heliotrope Drive.
- ► Optimize hydraulic capacity of culverts crossing under Alamo Drive, Heliotrope Drive and Portola Ave.
- ► Relocate existing SCE poles and overhead lines currently located approximately 140 feet east of Heliotrope Drive crossing the channel.
- ► Remediate sedimentation and diminished channel capacity east of Heliotrope Drive.
- ► Protect storm drain outlets east of Heliotrope Drive.

Construction Access and Staging

The Project proposes multiple points of access during construction, including along Portola Avenue and an existing access road located on the north side of the channel. Access will also be taken from within the channel and occasionally along the south side of the channel. Construction staging is planned on a City-owned parcel (APN 630-200-021) located at the eastern reach of the channel, approximately 225 feet north of the intersection of Haystack Road and Portola Avenue, and immediately south of Marrakesh Drive.

Project Description

The Project portion of the subject Haystack Channel extends from Alamo Road to Portola Avenue. On the west end of the Project, planned improvements will begin immediately east of Alamo Road with the removal of the existing nuisance water drain system located under the channel invert (channel centerline). This system will be replaced by four (4) underground, 48-inch diameter infiltration pipes and gravel beds with manhole access into each. The Project will also install underground chambers at each of the four storm drain outlets within this reach of the channel. Damaged irrigation will be removed and replaced. Existing trees and shrubs will be avoided to the greatest extent practicable, however, some loss or relocation of in-channel vegetation is expected. Disturbed portions of the grass-lined channel will be restored.

East of Heliotrope Drive the culverts passing upstream flows under Heliotrope Drive will discharge into a planned riprap energy dissipater and thence onto the native, soft bottom bed of the channel. The channel side slopes in this reach and extending to Portola Avenue will be regraded and shaped, and will be lined with rip-rap to a height of approximately 8 feet above the channel bed. A sub-grade side slope rip-rap cut-off wall will extend slope protection approximately 8 feet below the channel bed elevation. East of Heliotrope Drive approximately 39 to 68 feet of soft, sandy channel bottom will remain, similar to existing conditions. Existing trees and shrubs will be avoided to the greatest extent practicable, however, some loss or relocation of in-channel vegetation is expected.

Phasing

Project construction is expected to occur in one phase.

Utilities and Service Providers

The following agencies and companies serve the Project area:

1. Sewer: Coachella Valley Water District (CVWD)
2. Water: Coachella Valley Water District (CVWD)
3. Electricity: Southern California Edison (SCE)
4. Gas: Southern California Gas Company
5. Telephone/Cable: Frontier Communications/Spectrum
6. Storm Drains: City of Palm Desert

Surrounding Land Uses:

North: Single-family residential neighborhoods and Marrakesh resort residential community
South: Haystack Road with Single-family residential neighborhoods beyond
East: Continuation of channel, Living Desert Zoo & Botanical Gardens, Vintage Club residential community
West: State Highway 74, church/school complex beyond

Other public agencies whose approval is or may be required (e.g., permits, financing approval, or participation agreement.)

Coachella Valley Water District
Regional Water Quality Control Board
California Department of Fish & Wildlife
US Army Corps of Engineers

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Agriculture and Forestry Resources		Air Quality
	Biological Resources		Cultural Resources		Energy
	Geology /Soils		Greenhouse Gas Emissions		Hazards & Hazardous Materials
	Hydrology / Water Quality		Land Use / Planning		Mineral Resources
	Noise		Population / Housing		Public Services
	Recreation		Transportation		Tribal Cultural Resources
	Utilities/Service Systems		Wildfire		Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency) On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
✓	I find that although the proposed project could have a significant effect on the environment there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Nick Melloni
City of Palm Desert

Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross referenced).
5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9) The explanation of each issue should identify:
    a) The significance criteria or threshold, if any, used to evaluate each question; and
    b) The mitigation measure identified, if any, to reduce the impacts to less than significance.

RIVERSIDE COUNTY

N

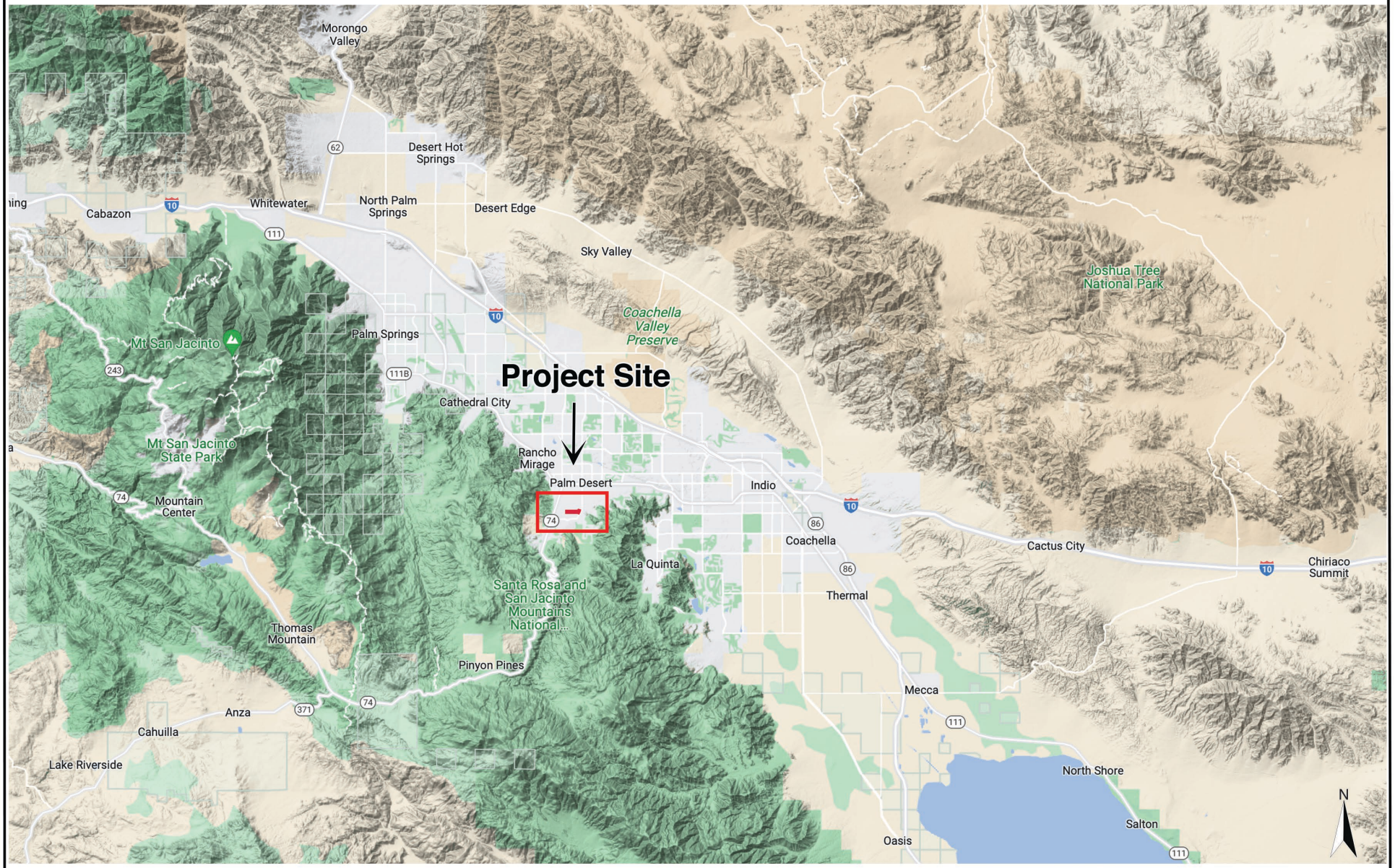
02.14.23

Exhibit

1

TERRA NOVA®
PLANNING & RESEARCH, INC.

Haystack Channel Improvement Project
Regional Location Map
Palm Desert, California



Source: Google Maps, 2023

02.14.23

Exhibit 2

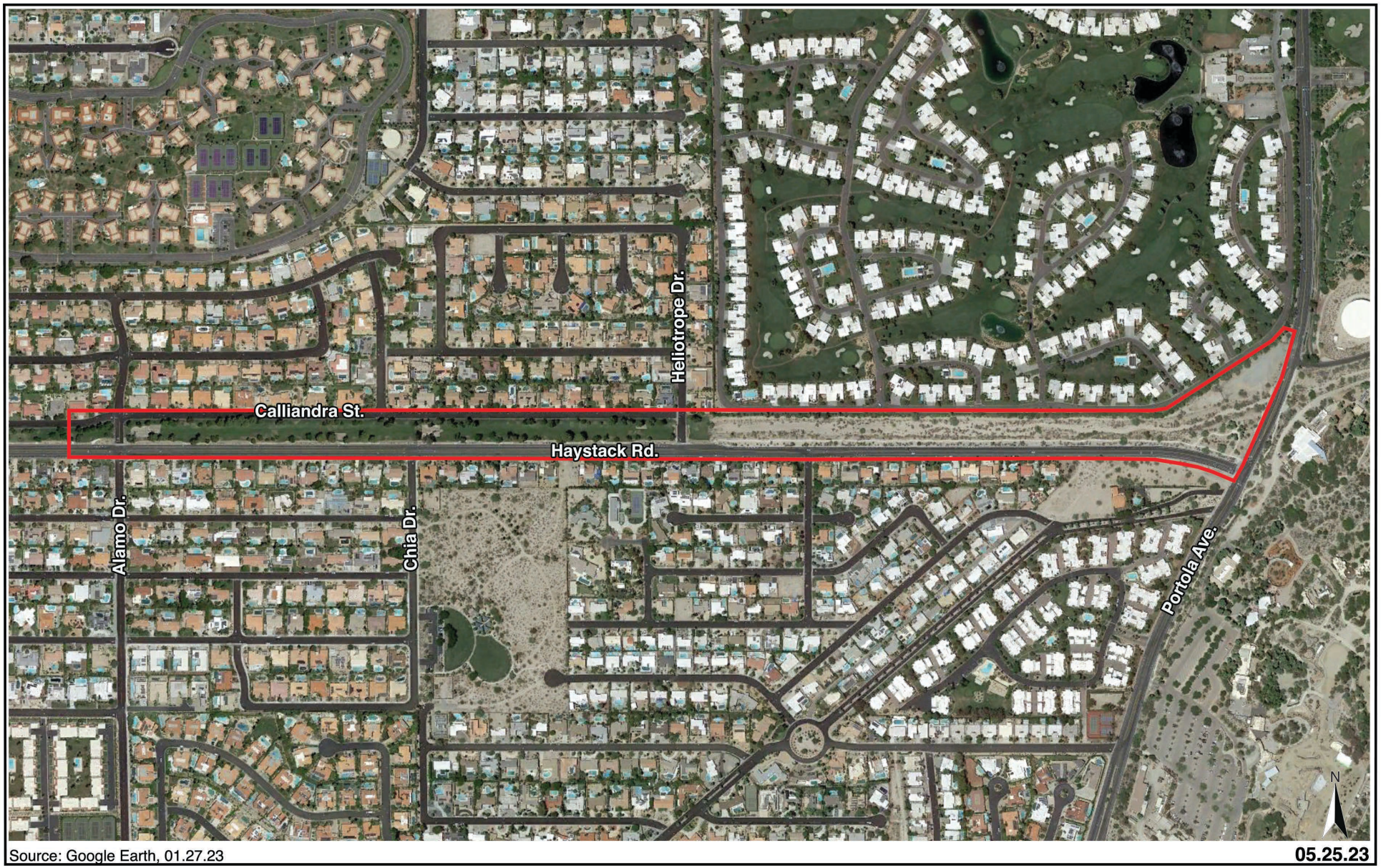
TERRA NOVA®
PLANNING & RESEARCH, INC.

Haystack Channel Improvement Project Initial Study
Vicinity Map
La Quinta, California

TERRA NOVA®
PLANNING & RESEARCH, INC.

Haystack Channel Improvement Project Initial Study
Project Location Map
Palm Desert, California

Exhibit
3



Source: Google Earth, 01.27.23

05.25.23

TERRA NOVA®
PLANNING & RESEARCH, INC.

Haystack Channel Improvement Project Initial Study
Project Site
Palm Desert, California

Exhibit
4

I. AESTHETICS **Except as provided in Public Resources Code Section 21099, would the project:**	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Have a substantial adverse effect on a scenic vista?			✓	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			✓	
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			✓	
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				✓

Sources: City of Palm Desert General Plan Update & Draft Environmental Impact Report, 2016 (SCH 2015081020); Palm Desert Municipal Code; Project development plan, ERSC, 2023; Terra Nova site visit and survey, 5.4.23.

Setting

The Project site is located in south Palm Desert, east of State Highway 74 and immediately north of Haystack Road in the central part of the Coachella Valley. The area is comprised of sloping terrain associated with expansive alluvial fans that emanate from the Santa Rosa Mountains to the south. The existing channel is a linear depression surrounded by lands that are at-grade, including Haystack Road to the south and a residential subdivision and streets to the north. The channel is in a turf and landscaping condition west of Heliotrope Drive and transitions to a dirt, soft-bottom channel east of Heliotrope and so extending to the Portola Drive culvert at the east end of the Project. Roads crossing the channel include decorative rail and fieldstone guard rails. Overhead utilities in the Project area are limited to two power/communications poles located on the east side of Heliotrope and trending north-south.

Both sides of the subject channel reaches are vegetated with both decorative trees and shrubs and native and other drought tolerant vegetation east of Heliotrope Drive. A pedestrian walkway extends the length of the Project immediately north of Haystack Road and south of the channel. The eastern portion of the project area also includes an enhanced, naturalized area with native fan palms and walkways. Privacy walls and landscaping separate the subject channel from adjoining residential development to the north.

Discussion of Impacts

a) **Less Than Significant Impact.** The proposed Project will not create any new or increased impacts on local or area-wide scenic resources. The Project will remediate existing channel deficiencies by installing new sub-grade drains and percolation boxes in the channel segment located west of Heliotrope Drive. There will be very limited disturbance to existing channel landscaping in this segment. Disturbance in this segment will involve the replacement of the existing drain system with four underground infiltrator pipes, as well as replacement of damaged irrigation. In addition to access points, disturbance associated with these improvements will primarily occur along the center of the channel, and existing trees and shrubs will be avoided to the greatest extent practicable. Once improvements are installed, conditions in these two-thirds of the channel project will be returned to essentially the same as existing conditions.

Along the Project channel segment located east of heliotrope Drive and extending to Portola Drive culverts, the channel will be restored to its original trapezoidal cross section. Side slopes will be lined with boulders (riprap) that will be visible along the side slopes of this channel reach and will extend to Portola Avenue. The riprap will not be grouted (will be dry laid) so vegetation will be able to emerge in at least some locations. This channel reach will have a soft (sandy) bottom where revegetation will occur and will within one or two years resemble the existing vegetation. Just east of Heliotrope Drive, a new energy dissipater comprised of riprap boulders will be constructed, replacing the existing eroded dissipater. Visually, the Project site will appear much the same and make the same very limited impact on area scenic resources. Therefore, Project impacts to scenic vistas would be less than significant.

b) **Less Than Significant Impact.** The Project site is located 1,850± feet east of State Highway 74, which is a designated scenic highway. The Project site is not visible to travelers on Highway 74 and therefore the project will have no effect on Highway 74 viewsheds. Neither will the project impact any historic structures located along this highway. As noted, existing trees will be largely preserved and impacts to existing landscaping west of Heliotrope Drive will be limited and less than significant. Channel vegetation east of Heliotrope Drive will be impacted by reshaping of the channel and the installation of side slope riprap erosion protection. The channel bottom will remain sandy and unlined, and both the channel bottom and ungrouted side slope riprap will naturally revegetate. No rock outcroppings or other natural scenic elements will be impacted. Therefore, Project impacts will be less than significant.

c) **Less Than Significant Impact.** The Project site is in an urban setting. The channel restoration and improvements will not significantly change the visual character of the site or vicinity, restoring the existing channel largely to its original condition with the inclusion of new riprap slope lining on the eastern channel segment. The channel will appear much as it does today when viewed from publicly accessible viewpoints. The Project is consistent with City policies regarding preservation of scenic resources. Therefore, the Project will have less than significant impacts to applicable regulations that address scenic quality.

d) **No Impact.** The Project does not include any new lighting, although on-site construction and staging area lighting may be required during the construction phase. No subsequent permanent lighting is planned. Therefore, the Project will have no impacts associated with increased light and glare.

Mitigation Measures: None required

Monitoring and Reporting: None required

II. AGRICULTURE RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✓
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				✓
d) Result in the loss of forest land or conversion of forest land to non-forest use?				✓
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				✓

Sources: City of Palm Desert General Plan Update & University Neighborhood Specific Plan Draft Environmental Impact Report, 2016; Palm Desert Municipal Code; California Important Farmland Finder, California Department of Conservation, https://maps.conservation.ca.gov.DLRP/CIFF/ (accessed March 2023).

Setting

Agriculture makes up a significant portion of the economy in the Coachella Valley. Palm Desert is predominantly built out with existing urban uses, and does not contain any land designated or zoned for agricultural uses. There are also no Williamson Act contracted lands or forestland within the City. Neither the General Plan nor the Zoning Ordinance include forestry or forest production designations.

Discussion of Impacts

a-e) **No Impact.** The Project proposes the rehabilitation of the Haystack Channel, which has been in place for several decades. The site is in a developed residential area in Palm Desert. It is not on or in proximity to any farm or forest lands. The California Important Farmland Finder, prepared for the Farmland Mapping and Monitoring Program of the Department of Conservation classifies the Project site and the surrounding area as Urban and Built-Up Land. The nearest designated important farmlands are on a 19.5-acre site in the City of Indian Wells, almost two miles northeast of the subject site.

Prime Farmland: The Project site is not located on or near Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The subject property is not located on or near any properties zoned or designated for agricultural use. The proposed Project would have not result in the conversion of any farmland or land designated as farmland to non-agricultural uses. There would be no impact.

Williamson Act: The subject property is not considered an agricultural preserve and it is not under a Williamson Act contract. The site is zoned for Open Space, and surrounding sites are zones for urban uses. There will be no conflict with existing zoning for agricultural use, or a Williamson Act contract. No impact would occur.

Forest Land: The Project site is located in an urbanized area on the desert floor. It is zoned as for Open Space, and is surrounded by residential developments. The site does not contain forest land, timberland, or timberland zoned for timberland production. The Project would not result in the rezoning or forest land or timberland as defined by the Public Resources Code §12220(g) or by Government code §51104(g). No impact would occur.

Mitigation Measures: None required

Monitoring and Reporting: None required

III. AIR QUALITY Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. **Would the project:**	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?				✓
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard			✓	
c) Expose sensitive receptors to substantial pollutant concentrations?			✓	
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?			✓	

Sources: SCAQMD AQMP, 2022; "Final Localized Significance Threshold Methodology," prepared by the South Coast Air Quality Management District, Revised, July 2008; "2003 Coachella Valley PM_{10} State Implementation Plan," August 1, 2003; CalEEMod Version 2020.4.0; Project materials.

Setting

The Coachella Valley is in the Salton Sea Air Basin (SSAB), which includes part of Riverside County and all of Imperial County. The SSAB is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). All development within the SSAB is subject to the 2022 SCAQMD Air Quality Management Plan (AQMP), and the Coachella Valley region is subject to the 2003 Coachella Valley PM_{10} State Implementation Plan (CV PM_{10} SIP). SCAQMD operates and maintains regional air quality monitoring stations at numerous locations throughout its jurisdiction. The Project site is within Source Receptor Area (SRA) 30, which includes monitoring stations in Palm Springs, Indio, and Mecca.

Criteria air pollutants are contaminants for which state and federal air quality standards (as shown in Table 1) have been established. The SSAB exceeds state and federal standards for fugitive dust (PM_{10}) and ozone (O_3), and is in attainment for $PM_{2.5}$, except the City of Calexico. Ambient air quality in the SSAB, including the Project site, does not exceed state and federal standards for carbon monoxide, nitrogen dioxides, sulfur dioxide, lead, sulfates, hydrogen sulfide, or vinyl chloride.

Table 1
State and National Ambient Air Quality Standards

Pollutant	**Averaging Time**	**California Standards**	**National Standards**	
		Concentrations[1]	**Primary**	**Secondary**
Ozone (O_3)	1 Hour	0.09 ppm	--	
	8 Hour	0.070 ppm	0.070 ppm	
Particulate Matter (PM_{10})	24 Hour	50 µg/m^3	150 µg/m^3	
	AAM[2]	20 µg/m^3	--	

Fine Particulate Matter ($PM_{2.5}$)	24 Hour	--	35 $\mu g/m^3$	
	AAM	12 $\mu g/m^3$	12.0 $\mu g/m^3$	15 $\mu g/m^3$
Carbon Monoxide	1 Hour	20 ppm	35 ppm	--
	8 Hour	9.0 ppm	9 ppm	--
Nitrogen Dioxide (NO_2)	1 Hour	0.18 ppm	100 ppb	--
	AAM	0.030 ppm	0.053 ppm	
Sulfur Dioxide (SO_2)	1 Hour	0.25 ppm	75 ppb	--
	3 Hour	--	--	0.5 ppm
	24 Hour	0.04 ppm	0.14 ppm	--
	AAM	--	0.030 ppm	--
Lead	30 Day Average	1.5 $\mu g/m^3$	--	--
	Calendar Quarter	--	1.5 $\mu g/m^3$	
	Rolling 3-Month Average	--	0.15 $\mu g/m^3$	
Visibility Reducing Particles	8 Hour	--	No National Standards	
Sulfates	24 Hour	25 $\mu g/m^3$		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 $\mu g/m^3$)		
Vinyl Chloride	24 Hour	0.01 ppm (26 $\mu g/m^3$)		

[1] *$\mu g/m^3$ = micrograms per cubic* meter of air
[2] *AAM = Annual Arithmetic Mean*
Source: California Air Resources Board, Ambient Air Quality Standards (May 2016)
https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf (accessed July 2023).

Buildout of the proposed Project will result in air quality impacts during construction and operation. The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was used to project air quality emissions that will be generated by the Project (Appendix A).

Discussion of Impacts

a) **No Impact**. The Project site is within the Salton Sea Air Basin (SSAB) and will be subject to SCAQMD's 2022 AQMP and the 2003 Coachella Valley PM_{10} SIP. These comprehensive plans establish control strategies and guidance on regional emission reductions for air pollutants.

A project is considered to be in conformity with adopted air quality plans if it adheres to the requirements of the SCAQMD Rule Book, AQMP, and adopted and forthcoming control measures, and is consistent with growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). The proposed channel rehabilitation project will maintain the existing use of the channel site and would not induce any population growth. Therefore, it would be consistent with the growth forecasts upon which SCAQMD's air quality planning is based.

The construction of the Project channel improvements would be conducted in accordance with all applicable air quality management plans to ensure impacts to air quality are reduced to the greatest extent possible. Standard dust control measures will be implemented to minimize the emissions of fugitive dust. The proposed Project would be implemented in accordance with all applicable rules and regulations contained in these plans to meet the applicable air quality standards. Overall, construction of the proposed Project would not prevent SCAQMD from implementing actions set forth in the applicable air quality plans. There will be no impacts.

b) **Less Than Significant Impact**. A project is considered to have significant impacts if there is a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard. As previously stated, the SSAB is currently a non-attainment area for PM_{10} and ozone. Therefore, if the Project's construction and/or operational emissions exceed SCAQMD thresholds for PM_{10} and ozone precursors, which include carbon monoxide (CO), nitrous oxides (NO_x), and volatile/reactive organic compounds/gases (VOC or ROG), then impacts would be cumulatively considerable and significant.

The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was used to project air quality emissions that will be generated by the proposed Project (Appendix A). The proposed channel rehabilitation would release criteria air pollutants during construction, from activities including earthwork and hauling. Once the proposed channel rehabilitation is complete, the Project would result in very limited pollutant emissions during operations and potential future maintenance.

Construction Emissions

Construction associated with the proposed rehabilitation of the Haystack Channel is expected to take approximately 9 months. The Project portion of the channel is approximately 5,060 feet long. Improvements to the between Alamo Drive and Heliotrope Drive will include the removal of the existing nuisance water drain system, and the replacement of this system with four underground 48-inch diameter infiltration pipe and gravel beds, as well as the installation of underground chambers at each of the four storm drain outlets. The Project will also install underground chambers at each of the four storm drain outlet within the eastern reach of the channel. Damaged irrigation will be removed and replaced. In the portion of the channel east of Heliotrope Drive, the side slopes will be regraded and lined with riprap.

For analysis purposes, it was assumed that construction would involve a disturbed area of 24.18 acres, including 3,500 square feet of concrete. Demolition during Project construction would involve the removal of four 24- by 24-inch concrete catch basins. Material import and export required during construction was estimated based on consultation with the Project engineers, as provided in Table 2, below.

Table 2
Project Construction Material Import/Export Estimates

Import Material Type	**Quantity (cubic yards)**
Rock (un-grouted riprap)	12,400 CY
Drop structure (1/4 ton stone)	200 CY
Concrete	89.75 CY
12-inch HDPE pipe	0.4 CY
Total Imports:	**12,690.15 CY**
Export Material Type	**Quantity (cubic yards)**
Soil	12,357 CY
Existing concrete	2.5 CY
Infiltrator equalizer system	3.2 CY
Total Exports:	**12,362.70 CY**

Based on the above material import and export quantities, it is projected that 1,586 hauling trips of up to 20 miles in length would be required during the grading phase of the Project. Assumptions regarding the equipment used across the demolition, site preparation, grading, and paving phases are based on the equipment types provided in CalEEMod and the equipment used in similar channel projects in the area. The Project's CalEEMod outputs are provided in Appendix A.

Based on these inputs, Table 3 shows the Project's maximum daily construction-related emissions.

Table 3
Maximum Daily Construction-Related Emissions Summary
(pounds per day)

Construction Emissions[1]	CO	NO_x	ROG	SO_x	PM_{10}	$PM_{2.5}$
Daily Maximum	28.77	33.78	3.33	0.07	8.72	5.08
SCAQMD Thresholds	**550.00**	**100.00**	**75.00**	**150.00**	**150.00**	**55.00**
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**

[1] PM_{10} and $PM_{2.5}$ account for assumed adherence to required dust control measures.
Source: CalEEMod Version 2020.4.0 (output tables provided in Appendix A).

As shown in the table above, SCAQMD daily thresholds for CO, NO_x, ROG, SO_x, PM_{10}, or $PM_{2.5}$ will not be exceeded during any phase of Project construction.

Operational Emissions

Operational emissions are ongoing emissions that would occur over the life of the Project. Operational emissions associated with the proposed Project would be nominal, and would be limited to negligible emissions resulting from the off gassing of materials and potential minor and temporary maintenance activities.

Cumulative Contribution

A significant impact could occur if the Project would make a considerable cumulative contribution to federal or state non-attainment pollutants. The Coachella Valley portion of the SSAB is classified as a "non-attainment" area for PM_{10} and ozone. Cumulative air quality analysis is evaluated on a regional scale (rather than a neighborhood or city scale, for example), given the dispersing nature of pollutant emissions and aggregate impacts from surrounding jurisdictions and air management districts. Any development project or activity resulting in emissions of PM_{10}, ozone, or ozone precursors will contribute, to some degree, to regional non-attainment designations of ozone and PM_{10}.

The SCAQMD does not currently recommend quantified analyses of construction and/or operational emissions from multiple development projects, nor does it provide methodologies or thresholds of significance to be used to assess the significance of cumulative emissions generated by multiple cumulative projects. However, it is recommended that a project's potential contribution to cumulative impacts be assessed utilizing the same significance criteria as those for project-specific impacts. Furthermore, SCAQMD states that if an individual development project generates less than significant construction or operational emissions, then the project would not generate a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment.

As shown in Table 3 above, Project-related PM_{10}, $PM_{2.5}$, CO, NO_x, SO_x and ROG emissions are projected to be well below the SCAQMD thresholds. Therefore, the proposed Project will result in incremental, but not cumulatively considerable impacts on regional PM_{10} or ozone levels.

Summary

As shown above, construction of the Project will result in criteria emissions below the SCAQMD significance thresholds. As previously stated, any operational emissions associated with the Project would be nominal. Neither construction nor operational emissions would violate any air quality standard or contribute substantially to an existing or projected air quality violation. Impacts related to construction and operation will be less than significant and are not cumulatively considerable.

c) **Less Than Significant Impact.** Localized Significance Thresholds (LSTs) can be used to determine whether a project may generate significant adverse localized air quality impacts in relation to the nearest exposed sensitive receptors. Sensitive receptor land uses include, but are not limited to, schools, churches, residences, hospitals, day care facilities, and elderly care facilities. The nearest sensitive receptors to the Project are the adjacent houses to the north, on Calliandra Street, as well as those on the south side of Haystack Road.

The use of LSTs is voluntary and designed for projects that are less than or equal to 5 acres. The maximum area of disturbance associated with the proposed Project is approximately 24 acres, and construction is expected to occur over the course of nine months. While the total Project area is larger than 5 acres, the maximum area of daily disturbance (for purposes of LST analysis only) is limited to five acres or less per day at any given location. As such, the five-acre look-up table is appropriate under the SCAQMD's methodology to screen for potential localized air quality impacts.[1]

The Mass Rate Look-Up tables for LST were used to determine if the Project would have the potential to generate significant adverse localized air quality impacts during construction. The LST for Source Receptors Area (SRA) 30 (Coachella Valley) was used to determine LST emission thresholds. The distance from the emission source and the maximum daily site disturbance also determines emissions thresholds. For analysis purposes, the worst-case scenario of a sensitive receptors being with 25 meters was used and is representative of the distance of the residential properties to the north and south of the Project site. Table 4 shows the results of the LST analysis, based on the construction emissions projected in CalEEMod.

Table 4
Localized Significance Thresholds
25 Meters, 5 Acres
(pounds per day)

	CO	**NO_x**	**PM_{10}**	**$PM_{2.5}$**
Construction Emissions	28.77	33.78	8.72	5.08
LST Threshold	2,292.00	304.00	14.00	8.00
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source of Emission Data: CalEEMod version 2020.4.0 (output tables provided in Appendix A).
Source of LST Threshold: LST Mass Rate Look-up Table, 25 meters, 5 acres, SCAQMD

As shown in the above table, construction emissions associated with the proposed channel rehabilitation project would not exceed the SCAQMD LST threshold for CO, NO_x, PM_{10}, or $PM_{2.5}$. Impacts to sensitive receptors will therefore be less than significant.

Health Impacts

As discussed above, under significance threshold (b), construction and operation of the proposed Project will result in criteria emissions that are below the SCAQMD significance thresholds, and neither would violate any air quality standard or contribute substantially to an existing or projected air quality violation.

It is not scientifically possible to calculate the degree to which exposure to various levels of criteria pollutant emissions will impact an individual's health. There are several factors that make predicting a Project-specific numerical impact difficult:

- Not all individuals will be affected equally due to medical history. Some may have medical pre-dispositions, and diet and exercise levels tend to vary across a population.

[1] South Coast Air Quality Management District, "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds."

- Due to the dispersing nature of pollutants, it is difficult to locate and identify which group of individuals will be impacted, either directly or indirectly.
- There are currently no approved methodologies or studies to base assumptions on, such as baseline health levels or emission level-to-health risk ratios.

Due to these limitations, the extent to which the Project poses a health risk is uncertain but unavoidable. However, construction of the proposed Project will result in limited and temporary criteria pollutant emissions below the SCAQMD thresholds, as shown in Table 3 and 4, and emissions during operation of the Project would be nominal. Emissions during construction or operation of the Project would not violate any air quality standards or contribute substantially to an existing air quality violation. Therefore, it is anticipated that the impacts and that health effects associated with criteria pollutant emissions will overall be less than significant.

d) **Less Than Significant Impact.** During buildout, the Project has the potential to result in short-term odors associated with excavation and grading, pouring of concrete, and other construction activities. However, any such odors would be short-term and quickly dispersed below detectable levels as distance from the construction site increases. Project buildout is estimated to occur over a 9-month period, and construction odors would be generated across various time periods and locations throughout the site such that odors would not be concentrated in one area for an extended duration. During long-term operation, the proposed drainage channel is not expected to generate any odors. Therefore, impacts from objectionable odors will be less than significant.

CEQA-Plus: Supplemental conformity analysis

The State and National Ambient Air Quality Standards are shown in Table 1, above.

Federal Air Conformity Rule

As previously discussed, the two primary pollutants of concern in the Coachella Valley are ozone (O_3) and particulate matter (PM_{10}). The Coachella Valley is considered "severe-15 nonattainment" for 8-Hour Ozone, and "serious-nonattainment" for the PM_{10} National Ambient Air Quality Standard under CAA Section 107.

The Federal Air Conformity Rule de minimis thresholds limit construction and operational emissions of criteria pollutants identified in the Federal Clean Air Act to 70 tons per year for PM_{10} and 25 tons per year for ozone. If the per year threshold were exceeded, the project proponent would be required to identify mitigation measures to reduce impacts to air quality. As shown in Table 5, the annual construction emissions resulting from the Project would not exceed the Federal Conformity Rule de minimis thresholds.

Table 5
Annual Construction-Related Emissions Summary
(tons per year)

Construction Emissions[1]	**CO**	**NO_x**	**ROG**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Construction year: 2024	2.24	2.79	0.28	0.006	0.39	0.24
Federal Thresholds	100	25	25	100	70	100
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**

[1] PM_{10} and $PM_{2.5}$ account for assumed adherence to required dust control measures.
Source: CalEEMod Version 2020.4.0 (output tables provided in Appendix A).

As previously stated, the Project's operational emissions would be nominal, and would be limited to negligible emissions resulting from the off gassing of materials and potential minor and temporary maintenance activities. It can therefore be concluded that operational emissions would not exceed the Federal Air Conformity Rule thresholds.

Overall, Section III (Air Quality) of this assessment demonstrates that construction-related and operational criteria pollutant emissions are anticipated to be well below SCAQMD and federal thresholds. In addition, BMPs and other standard measures will further reduce impacts to air quality. Therefore, the Project will not exceed applicable annual Federal Air Conformity Rule de minimis thresholds.

Mitigation Measures: None required

Monitoring and Reporting: None required

IV. BIOLOGICAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		✓		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				✓
c) Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				✓
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede use of native wildlife nursery sites?		✓		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓

Sources: Biological Resources Assessment & Coachella Valley Multiple Species Habitat Conservation Plan Compliance Report, Haystack Channel Improvement Project, WSP USA Environment and Infrastructure, Inc., April 28, 2023; Coachella Valley Multiple Species Habitat Conservation Plan, September 2008, as amended.

Setting

The Coachella Valley is located within the Sonoran Desert, a subdivision of the Colorado Desert. The Sonoran Desert contains a wide range of biological resources that are highly specialized and endemic to the region. The expansive alluvial fan areas of the valley, in which the Project site is located, are composed of gravelly and sandy soils of the Carsitas and Myoma series typical of alluvial fans, fan aprons, valley fills, and dissected remnants of alluvial fans and in drainageways.

The Project area is part of a west to east trending stormwater channel that extends east from Highway 74 to Portola Avenue and intercepts storm flows originating from the south. The area generally slopes from southwest to northeast and the elevation of the Project site ranges from approximately 317 to 334 feet above mean sea level. The subject portion of the channel extends from just west of Alamo Drive eastward to and inclusive of the reinforced concrete culverts that pass beneath Portola Avenue (see Channel Improvement Plans in Appendix D).

Coachella Valley MSHCP

The City and Project site are within the boundaries of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), a comprehensive regional plan encompassing approximately 1.1 million acres in the Coachella Valley that addresses the conservation needs of 27 native flora and fauna species and 27 natural vegetation communities. The City of Palm Desert is a CVMSHCP Permittee and subject to its provisions. The Project site is not located within or adjacent to any of the Conservation Areas established by the CVMSHCP. The nearest MSHCP Conservation Area is the Santa Rosa and San Jacinto Mountains CA the nearest portion of which is located approximately one mile to the east and is associated with the foothills of the Santa Rosa Mountains.

Project Site Conditions

A biological resources assessment was prepared for the Project by Senior Wildlife Biologist, Dale Hameister, who also conducted a streambed jurisdictional delineation for the Project. Field surveys were conducted on March 8, 2023 under fair and sunny conditions (see Appendix B). The Project site is surrounded by development, primarily residential development to the north and south. The eastern edge of the channel is adjacent the Living Desert Zoo and Gardens located on the east side of Portola Avenue. The subject drainage passes beneath Portola Avenue and continues through the Vintage Club residential development to the east.

The western section of the Project area contains an engineered swale which is covered in maintained turf grass and lined by landscaping trees. The swale has some concrete structures which collect nuisance waters from irrigation runoff and stormwater. The section of the channel east of Heliotrope Drive is an engineered sandy, natural bottom channel with a mix of native and non-native vegetation.

Site Vegetation

The western portion of the Project channel segment, generally between Alamo Drive and Heliotrope Drive, is comprised of a vegetated swale fully planted in turf grass with trees and shrubs planted along the channel slopes. In addition to Bermuda and annual bluegrass, existing vegetation includes Kurrajong (*Brachychiton populneus*), unknown pine (*Pinus sp.),* African sumac (*Searsia lancea*), olive (*Olea europaea*), Lantana (*Lantana camara*), and Spanish bayonet. Vegetation bordering the project site includes some native desert species not found in the immediate vicinity of the project site, including chuparosa (*Justicia californica*), fairy duster (*Calliandra eriophylla*), California barrel cactus (*Ferocactus cylindraceus*), Mexican palo verde (*Parkinsonia aculeata*), jojoba (*Simmondsia chinensis*), California fan palm (*Washingtonia filifera*), and Indian rice grass (*Stipa hymenoides*).

East of Heliotrope Drive the engineered channel segment currently exists as a sandy bottomed and side slope channel with mostly native vegetation and can be classified as a smoke tree wash dominated by smoke tree (*Psorothamnus spinosus*). Other native scrubs included burrobrush (Ambrosia salsola), sweetbush (Bebbia juncea), brittlebush (Encelia farinosa), and creosote bush (Larrea tridentata). Non-native species include sow thistle (Sonchus asper), Sahara mustard (Brassica tournefortii), London rocket (Sisymbrium irio), castor bean (Ricinus communis), common plantain (Plantago major), and old han schismus (Schismus barbatus). There is a small area of Fremont cottonwood (Populus fremontii) with an understory of umbrella plant (Cyperus involucratus) east of Portola Avenue, however, this area is outside of the project area. A total of 31 plant species were identified across the Project site during the assessment, including a mixture of native and non-native landscaping and weedy species, (54% were nonnative species). Also see Appendix B of this IS.

Special Status Species

Some plant and/or animal taxa are listed as threatened or endangered by the US Fish and Wildlife Service (USFWS) or by the California Department of Fish & Wildlife (CDFW) and are protected by the federal and state Endangered Species Acts (ESAs). Other species have also been identified with special status, and are managed as sensitive by the USFWS, CDFW, or by private conservation organizations, including the California Native Plant Society (CNPS), but have not been formally listed as threatened or endangered. Impacts to such species can still be considered significant under the CEQA, if not avoided, minimized and/or mitigated by specific project design and implementation. The literature review and field visit resulted in a list of 63 special status biological resources which occur or potentially occur on the Project site and/or vicinity (3-mile radius) of the project site. Tables 1-3 of the Project biological assessment provide a summary of these resources, their current conservation status, habitat associations and potential to occur on the Project site. No species listed as state or federal listed as threatened or endangered were observed on the site or vicinity.

Burrowing Owl

No burrows suitable for burrowing owl use were observed on or adjacent to the project site. Where accessible, adjacent vacant lands were surveyed within 500 feet of the site. No burrowing owls, their sign, or burrows capable of supporting owls were observed in this buffer area. The burrowing owl is not listed as threatened or endangered by the USFWS or CDFW. It is, however, managed as a Bird of Conservation Concern (BCC) by the USFWS and designated as a SSC by the CDFW. It is also protected from take by the MBTA and California Fish and Game Code. The burrowing owl is a covered species under the CVMSHCP; however, the federal permit for the CVMSHCP does not allow take of this species under the MBTA. No burrowing owls, owl sign, or suitable burrows were observed during the survey. Considering the isolation of the project site and the extent of surrounding residential development, burrowing owl are not expected to nest or forage at the project site.

Other Sensitive Species

Seven sensitive species not covered by the Coachella Valley MSHCP or the USFWS were considered to have at least some potential to occur on the Project site, although the potential was determined to be low to very low. These include Prairie falcon and golden eagle with a "rare" to low probability to forage over the site. Slender cotton heads (*Emakalims denudata var. gracilis*) were not observed during the survey are expected to have a low probability of growing on this site. None of the plant species are listed as threatened or endangered and are generally not expected to occur on the site considering the past history of disturbance, including grubbing and use of soil binders.

The loggerhead shrike (*Lanius ludovicianus*) is designated as a California Species of Special Concern (SSC) by the CDFW, has a moderate potential to utilize the site. This species is not expected to nest on the site due level of adjacent development. The USFWS IPAC report generated for this project lists six sensitive wildlife species and one plant as having potential to be affected by development of this project.

Site surveys also included habitat assessment for the occurrence of bats, including the western yellow bat (*Lasiurus xanthinus*), pocketed free-tail bat (*Nyctinomops femorosaccus*), and big free-tailed bat (*Nyctinomops macrotis*). No viable habitat was identified for the pocketed or big free-tail bats, and they were determined to be absent from the Project area. Viable on-site and nearby habitat for bats identified by the Project biologists is limited to 14± planted California fan palms that are a part of a small pocket park created at the northwest corner of Portola Avenue and Haystack Road. These trees and surrounding ground were surveyed to detect signs of use by bats; neither bats nor bat sign were identified during the site survey.[2] [3]

[2] Personal communication, Dale Hameister, Field Biologist/Principal Investigator, WSP. October 24, 2023.

[3] Haystack Channel Improvements Project – Biological Resources Assessment & Coachella Valley Multiple Species Habitat Conservation Plan Compliance, prepared by WSP. April 2023.

As discussed in the Project biological assessment, only Coachella Valley milk-vetch could be expected (low probability) to occur on this site. Monarch butterflies require milkweeds for larval development and other flowering plants for adult nectar sources. No milkweed were observed on the site, and flowering plants were mainly limited to a sparse growth along some of the street edges. Monarch butterflies are not expected to utilize this site apart from the occasional transient individual passing through. There is no habitat present for desert tortoise, Coachella Valley fringe-toed lizard, least Bell's vireo, southwestern willow flycatcher, or Peninsular bighorn sheep on the Project site.

Discussion of Impacts

a) **Less than Significant with Mitigation.** A comprehensive resource assessment was conducted on the Project site and adjoining lands. The assessment identified common and sensitive resources occurring or potentially occurring, their current conservation status and habitat associations. No species listed as state or federal listed as threatened or endangered were observed on the site or vicinity, nor are any listed species expected to occur there. Historic aerial photos indicate that the site was cleared of vegetation sometime in 2018. The Project site is a narrow, linear feature surrounded by paved roads on the east, west, and south and by development to the north, south, and west.

The local neighborhood street, Haystack Road, bounds the Project site on the south and carries relatively low to moderate traffic volumes. Lands beyond Haystack Road are comprised of single-family neighborhoods. There are no other vacant lands in the Project vicinity that are available for development. As noted in the above Setting discussion, no species listed as state or federal listed as threatened or endangered were observed on the site or vicinity nor are listed species expected to occur there.

Of the seven sensitive species evaluated and not covered by the Coachella Valley MSHCP or the USFWS, the Prairie falcon and golden eagle have a "rare" to low probability to forage over the site. Loggerhead shrike (*Lanius ludovicianus*) was determined to have a moderate potential to utilize the site.

Burrowing owl (*Athene cunicularia*) were determined to not occur on site or on adjoining lands, nor does the Project site provide suitable foraging or nesting habitat, including burrows or surrogate (small mammal) burrows. As noted, the project is adjacent to a built out residential neighborhood and surrounded by paved streets. Nonetheless, it is recommended that if construction is initiated during the nesting season (February 1 through August 31) and pre-construction nesting bird survey should be conducted.

Of the sensitive plants, only Coachella Valley milk-vetch could be expected (low probability) to occur on this site. Slender cottonheads (*Nemacaulis denudata var. gracilis*) were not observed during the survey are expected to have a low probability of growing on this site. Sensitive plant species are generally not expected to occur on the site considering the past history of disturbance, including grubbing and use of soil binders.

While the Project has limited potential to harbor or provide habitat for sensitive species, based on the site and resource assessment, the Project has a less than significant potential to impact, either directly or through habitat modifications, species identified as candidate, sensitive, or special status species. This less than significant potential will be further reduced by application of mitigation measure BIO-1, below with regard to adherence to the Migratory Bird Treaty Act (MBTA) and pre-construction nesting bird surveys.

b, c) **No Impact.** The vegetation community on the subject site is identified as turf grass in the western portion of the project and as desert dry wash, including smoke tree in that portion east of Heliotrope Drive. Fremont cottonwoods are located along the drainage east of Portola Drive and beyond the Project. The site survey did not identify any springs, seeps, or natural bodies of water or drainages on the Project site. Review of the National Wetlands Inventory (NWI) indicated that no known blue-line streams (drainages) traverse the subject property. The Project site does not contain any streams, riparian habitat, marshes, protected wetlands, vernal pools, or sensitive natural communities protected by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. No impact would occur.

d) **Less than Significant With Mitigation.** The Project site and all lands surrounding the Project site are developed. The subject channel begins just east of State Highway 74, a substantial barrier to wildlife movement. East of the Project site the subject drainage continues along and then within the developed portions of the Vintage Club golf course. No wildlife corridors or biological linkages are mapped, known, or expected on the Project site. Although it is used by several common species and may provide marginal habitat for migratory birds, the Project site is not identified as a nursery site. As described above, the site may offer limited nesting sites for birds protected by the Migratory Bird Treaty Act (MBTA). Compliance with the MBTA, provided in Mitigation Measure BIO-1, will ensure impacts to sensitive species are reduced to less than significant levels.

e) **No Impact.** The proposed Project will not conflict with any local ordinances protecting biological species. The Project site does not lie in proximity of a Conservation Area as designated by the Coachella Valley MSHCP. The Project will not conflict with the goals and objectives of the MSHCP or any other local policy or ordinance protecting biological resources.

f) **No Impact.** The subject property is within the boundaries of the CVMSHCP, and the City of Palm Desert is a Permittee to the CVMSHCP. The Project site is not located within or adjacent to any of the Conservation Areas (CA) established by the CVMSHCP. The nearest MSHCP Conservation Area is the Santa Rosa and San Jacinto Mountains CA the nearest portion of which is located approximately one mile to the east and is associated with the foothills of the Santa Rosa Mountains. The Project channel was constructed prior to 1996 and is an improvement project. Therefore, the Project proponent will not be required to pay the MSHCP's local development mitigation fee. The Project will not conflict with this or any other habitat conservation plan or natural community conservation plan. No impact will occur.

CEQA Plus: Supplemental Analysis

Federally Listed, Endangered, or Threatened Species
As described in a, above, biological resources surveys were conducted on the project site in March of 2023. The biological resource assessment conducted for this Project has determined that no adverse effects will occur to federally listed Endangered or Threatened species, proposed Endangered or Threatened species, or to state-designated listed or sensitive species.

Federally Designated Critical Habitat
The project site does not contain any federally designated critical habitat and, therefore, the subject project will not result in impacts to critical habitat.

Wetlands
As described above, the Project site does not contain any wetlands, marshes, vernal pools, or coastal or other riparian habitat. No impacts to wetlands will occur.

Magnuson-Stevens Fishery Conservation and Management Act
The project site does not contain, and is not located in proximity to, U.S. federal waters where marine fishery management is occurring. No impacts will occur.

Mitigation Measures:

BIO-1 Migratory Bird Treaty Act
If ground disturbance or tree or plant removal is proposed between February 1st and August 31st, a qualified avian biologist shall conduct a nesting bird survey within three (3) days of initiation of grading onsite, focusing on MBTA covered species, including burrowing owl. Surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified avian biologists will make every effort to avoid potential nest predation as a result of survey and monitoring efforts. If active nests are reported, then species-specific measures shall be prepared. At a minimum, grading in the vicinity

of a nest shall be postponed until the young birds have fledged. For construction that occurs between September 1st and January 31st, no pre-construction nesting bird survey is required. In the event active nests are found, exclusionary fencing shall be placed around the nests until such time as nestlings have fledged. Avoidance buffers shall be 100 to 300 feet from the nests of unlisted songbirds, and 500 feet from the nests of birds-of-prey and listed species. If nests are detected, a smaller or larger buffer may be determined by the qualified avian biologist.

BIO-2 Burrowing Owl Habitat Assessment
No less than 60 days prior to the start of Project-related activities, a burrowing owl habitat assessment shall again be conducted by a qualified avian biologist and in conformance with Appendix C of the CDFW 2012 "Staff Report on Burrowing Owl Mitigation". If the assessment identifies suitable burrowing owl habitat, then focused burrowing owl surveys shall be conducted by a qualified avian biologist in conformance with CDFW protocol. If burrowing owls are detected during focused owl surveys a burrowing owl management plan shall be prepared and submitted to CDFW for approval prior to implementation and commencement of Project activities.

BIO-3 Bats
While not previously detected, the potential exists for Project area vegetation, including desert fan palms located in the eastern portion of the project, to provide habitat for the western yellow bat. Therefore, if Project commencement occurs either between April and June or between November and January, a bat survey shall be conducted by a qualified bat biologist during favorable weather conditions. An appropriate time of day (before sunrise or at dusk). If occupied sites are identified in the work area (or within 500 feet if a maternity roost), an appropriate buffer shall be established, including a minimum of a 500-foot buffer around identified maternity roosting sites. If bat presence is established, Project construction shall not occur between 30 minutes before sunset or 30 minutes after sunrise.

BIO-4 Post-Construction Landscaping
For that portion of the Project extending east from Heliotrope Drive to Portola Drive, if the reintroduction of landscaping is planned, it should be comprised of appropriate native and/or non-native, non-invasive drought tolerant vegetation. The Project landscape plans shall conform with the recommended and prohibited plant list found in the Coachella Valley MSHCP.

Monitoring and Reporting:

BIO-A If a nesting bird survey is required, the Project biologist shall provide the City with a letter report of findings regarding the occurrence of nesting birds and any prescribed exclusionary fencing and monitoring. The report shall be attached to the grading permit for the Project.
Responsible Parties: Project Biologist, City Project Manager
Schedule: If required, prior to issuance of any permits that result in ground disturbance

BIO-B If a burrowing owl habitat assessment survey is required, the Project biologist shall provide the City with a letter report of findings regarding the occurrence of burrowing owl and shall prepare and implement focused burrowing owl surveys. If burrowing owl are detected and occupied burrows identified, avoidance, minimization and mitigation shall be implemented in consultation with CDFW.
Responsible Parties: Project Biologist, City Project Manager
Schedule: If required, prior to issuance of any permits that result in ground disturbance

BIO-C If a bat survey is required, the Project biologist shall provide the City with a letter report of findings regarding the occurrence of bats and shall establish appropriate buffers.
Responsible Parties: Project Biologist, City Project Manager
Schedule: If required, prior to issuance of any permits that result in ground disturbance

V. CULTURAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?			✓	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		✓		
c) Disturb any human remains, including those interred outside of formal cemeteries?			✓	

Sources: Identification and Evaluation of Historic Properties, Haystack Channel Rehabilitation Project, CRM TECH, July 16, 2023; City of Palm Desert Draft EIR Technical Background Report, August 27, 2015.

Setting

The Haystack Channel is in a residential neighborhood in the City of Palm Desert, within the Coachella Valley. The Coachella Valley has historically been a center for Native American settlement. As early as the Paleoindian period (ca. 8,000 to 10,000-12,000 years ago), small, mobile groups of hunters and gatherers are thought to have inhabited the area. Though the Coachella Valley is now an arid region, a series of lakes referred to as Lake Cahuilla covered much of the area throughout the Holocene period. During its presence, the shores of Holocene Lake Cahuilla attracted Native American settlements.

By the mid-19th century, U.S. surveyors noted large numbers of villages and rancherias occupied by the Cahuilla people. Anthropologists generally divide the Cahuilla into three groups based on their geographic setting: the Pass Cahuilla of the San Gorgonio Pass-Palm Springs area, the Mountain Cahuilla of the San Jacinto and Santa Rose Mountains and the Cahuilla Valley, and the Desert Cahuilla of the eastern Coachella Valley. Population estimates for the Cahuilla people prior to European contact range from 3,600 to 10,000 people. However, the population was decimated during the 19th century as a result of European diseases such as smallpox. Today, Native Americans of Pass or Desert Cahuilla heritage are mostly affiliated with one or more of the reservations in and near the Coachella Valley, including Agua Caliente, Morongo, Cabazon, Torres Martinez, and Augustine.

The first noted European explorers to travel through the Coachella Valley were led by José Romero, José Maria Estudillo, and Romualdo Pacheco in 18-23-1825. Few non-Native Americans ventured into the desert valley during the early 1800s, except those who traveled along established routes such as the Cocomaricopa Trail. This trail, which travels a similar course to that of present-day State Route 111, was an ancient Native American trading route, "discovered" by William Bradshaw in 1862 and thereafter known as the Bradshaw Trail.

Increasing settlement began in the 1870s with the establishment of Southern Pacific Railroad stations, and spread further with farming following the Homestead Act and the Desert Land Act. The introduction of date palms in the late 1910s and growth of the local tourism industry in the 1920s lead to further growth in the Coachella Valley. Palm Desert was founded in 1945-1946 by three brothers, Randall, Clifford, and Phil Henderson, and was officially incorporated in 1973.

The National Historic Preservation Act

The City of Palm Desert is the proponent and lead agency responsible for the proposed channel rehabilitation project. The following analysis of cultural resources will be subject to the definitions of historical and archaeological resources as provided in §15064.5 of the CEQA guidelines. However, because the Project is subject to oversight by the U.S. Army Corps of Engineers (USACE), it must also comply with Section 106 of the National Historic Preservation Act (NHPA). Pursuant to the NHPA, the Project's impacts to cultural resources would be considered significant if it would have an adverse effect on any "historic properties," as defined by 36 CFR 800.16(1).

The following discussion of impacts is primarily based on the findings of the historical/archaeological resources study conducted for the Project by CRM TECH in July, 2023.

Discussion of Impacts

a) Less Than Significant Impact.

Records Search

A records search was conducted for the Project at the Eastern Information Center (EIC) on June 22 and 23, 2023. According to EIC records, the Project's area of potential effects (APE) had not been surveyed for cultural resources prior to this study, and no cultural resources had been recorded within or adjacent to the APE. While 24 previous studies have been conducted within a one-mile radius of the Project, with findings including seven historic-period sites, none of these resources were found the in immediate vicinity of the APE. None of these previously identified resources have the potential to receive any impact from the Project, and therefore no further considered is required.

Historical Background Research

Historical background research for the Project included review of published literature in local history, as well as historical maps and aerial/satellite photographs of the Project area. Historic sources identified no evidence of any settlement or development activities within the APE during the historic period. Historic sources indicate that the APE has long been set aside for flood control and that the site has been in use for that purpose since at least the early 1980s. The landscaped channel in the western portion of the APE, as well as the channel crossings at Alamo Drive and Heliotrope Drive, were created in tandem with the adjacent residential development in the 1980s-1900s. As modern infrastructure features of standard design and construction, these features do not warrant further consideration.

Field Survey

The field survey of the Project's APE was conducted by CRM TECH staff on May 18, 2023. No potential cultural resources, buildings, structures, objects, sites, features, or artifacts more than 50 years of age were encountered within or adjacent to the APE. A small quantity of concrete debris and other refuse was observed on-site during the survey, however all of the items appear to be modern in origin and do not demonstrate any historical or archaeological value.

Summary of Impacts

The records search, historical background research, and field survey of the APE identified no "historic properties" pursuant to the National Historic Preservation Act, nor did it identify any "historical resources" as defined by California PRC pursuant to CEQA. The proposed Project therefore would not cause a substantial adverse change in the significance of a "historical resource" pursuant to § 15064.5 of the CEQA guidelines or to a "historic property" as defined by 36 CFR 800.16(1), and impacts would be less than significant.

b) Less Than Significant with Mitigation.

Sacred Lands File Search

CRM TECH submitted a request to the Native American Heritage Commission (NAHC) for a search in the Sacred Lands File on February 8, 2023. The results of the Sacred Lands File search were negative. CRM TECH also contacted the nearby Agua Caliente Band of Cahuilla Indians, as well as representatives of ten other tribes in the region, for input: Augustine Band of Cahuilla Mission Indians, Cabazon Band of Mission Indians, Cahuilla Band of Indians, Los Coyotes Band of Cahuilla and Cupeño Indians, Morongo Band of Mission Indians, Quechan Tribe of the Fort Yuma Reservation, Ramona Band of Cahuilla Indians, Santa Rosa Band of Cahuilla Indians, Soboba Band of Luiseño Indians, and the Torres-Martinez Desert Cahuilla Indians.

The Augustine Band requested notification if any resources are discovered during the Project. The Santa Rosa Band had no comments regarding the Project. The Quechan Tribe, Cahuilla Band, and the Soboba Band deferred to Native American groups closer in proximity to the Project site. The Agua Caliente Band, the nearest Native American group to the Project site, requested copies of all cultural resource documentation generated for the Project. The Agua Caliente were also invited to participate in the field survey of the APE, but were unable to attend.

Records Search

As previously stated, the Project's area of potential effects (APE) had not been surveyed for cultural resources prior to this study, and no cultural resources had been recorded within or adjacent to the APE. While previous studies within a one-mile radius of the Project identified nineteen prehistoric archaeological sites and eight isolates, none of these resources were found the in immediate vicinity of the APE. Therefore, none of these previously identified resources have the potential to receive any impact from the Project, and no further considered is required.

Field Survey

As previously stated, the field survey of the APE did not find any potential cultural resources, including buildings, structures, objects, sites, features or artifacts.

Geoarchaeological Analysis

A geoarchaeological analysis was conducted to assess the APE's potential for subsurface cultural deposits from the prehistoric period, and included review of geologic maps, soil surveys, and geotechnical reports for nearby properties. This analysis determined that the vertical APE is relatively low in archaeological sensitivity due to past disturbances, particularly in the landscaped western portion of the Haystack Channel. Likewise, sediments in the unimproved eastern section of the channel have undergone frequent water erosion since at least the early 1980s. Overall, given the disturbance of sediments in the channel, and the lack of known on-site prehistoric resources identified by the records search, the likelihood of encountering prehistorical cultural remains in the APE is low.

Summary of Impacts

Given that the subsurface sediments in the APE are low in archaeological sensitivity and the records searches indicated no prehistoric resources within the APE, archaeological resources are not expected to occur in the subject site. In the event that buried cultural materials are discovered during earth-moving operations associated with the proposed channel rehabilitation, all work in the immediate area should be halted or divert until a qualitied archaeological can evaluate the find (**CUL-1**). With implementation of this mitigation measure, it can be concluded that the Project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.

c) **Less Than Significant Impact.** It is not expected that any human remains would be present on the subject site, including those interred outside of formal cemeteries. However, in the event than any unanticipated remains are encountered during Project construction, California law requires that the coroner is contacted, and that all work must stop in the area of the find. The coroner is responsible for determining whether the remains are modern or of cultural significance, and if the latter, must contact the NAHC, who is responsible for identifying the Most Likely Descendant (MLD). The NAHC will then contact the appropriate local tribe, and coordinate the proper disposition of the remains. These standard legal requirements will ensure that construction activities associated with the proposed channel rehabilitation will have a less than significant impact on any unanticipated human remains in the APE.

CEQA-Plus Supplemental Analysis'

If cultural resource sites listed as eligible or potentially eligible for listing in the National Register of Historic Places are located within the proposed Project's geographic area for review the site must be reviewed for cultural resources. Because the project requires or may require oversight by the U.S. Army Corps of Engineers (USACE), it qualifies as a federal "undertaking" and thus also requires compliance with Section 106 of the National Historic Preservation Act (NHPA). The purpose of the cultural and historic resource study was to provide the City and the USACE with the necessary information and analysis to determine whether the project would have an adverse effect on any "historic properties," as defined by 36 CFR 800.16(l), or "historical resources," as defined by California PRC 5020.1(j), that may exist within or adjacent to the APE.

Through the various avenues of research, the project cultural resources assessment did not encounter any "historic properties" or "historical resources" within or adjacent to the APE, and the subsurface sediments within the APE appear to be relatively low in archaeological sensitivity. Based on these findings, and pursuant to 36 CFR 800.4(d)(1) and Calif. PRC §21084.1-2, the consulting archaeologist recommends to the City and the USACE a conclusion that no known "historic properties" or "historical resources" will be affected by the proposed project.

Mitigation Measures:

CUL-1 If buried cultural materials are discovered during grubbing, grading, trenching, excavation, or any other earth-moving activities on the Project site, all work in the area must be halted until a qualified archaeologist can evaluate the nature and significance of the finds.

Monitoring and Reporting:

CUL-A A report of findings shall be filed with the City, including an itemized inventory of the identified cultural materials, and upon completion of the field and laboratory work, an analysis of any recovered artifacts.
Responsible Parties: Project applicant, Project archaeologist, Public Works Department, Development Services Department, City Engineer.
Schedule: Within 30 days of the completion of ground disturbing activities on the Project site.

VI. ENERGY Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			✓	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			✓	

Sources: City of Palm Desert 2013-2033 Strategic Plan; City of Palm Desert Environmental Sustainability Plan (2010); South Coast Air Quality Management District, Rule Book http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book (accessed June 2023).

Setting

Primary energy sources, the energy contained in raw fuels, include fossil fuels (e.g. oil, coal, and natural gas), nuclear energy, and renewable sources such as wind, solar, geothermal, and hydropower. Secondary sources of energy, which is energy that has been converted or stored, include electricity, heat, biofuels, hydrogen, and gasoline. The City of Palm Desert receives electricity from Southern California Edison (SCE) and natural gas from the Southern California Gas Company (SoCalGas).

The 2010 Palm Desert Environmental Sustainability Plan provides guidelines to encourage the effective management and conservation of location resources. The City's 2013-2033 Strategic Plan includes Energy & Sustainability Priorities, such as reductions in per capita energy consumption and greater adoption of energy efficient building materials.

Discussion of Impacts

a, b) Less than Significant Impact.

The Project would consume energy during the construction phase to operate construction equipment and as a result of the manufacture of construction materials. During construction, the Project would use electricity to power construction trailers, power tools, and to light storage and work areas. Electricity is expected to be provided by Southern California Edison (SCE) on a temporary basis. A limited amount of fossil fuels would also be used for on-site construction equipment, including graders, compactors and jackhammers, for material-hauling trucks, as well as for vehicle trips associated with construction worker commutes.

Construction activities would be subject to SCAQMD rules and regulations, such as source-specific standards for engineers and limits on the duration of construction idling. Construction of the Project must also adhere to state Low Carbon Fuel Standards for construction equipment and heavy-duty vehicle efficiency standards. Compliance with these standards would reduce fuel consumption, maximize fuel efficiency, and ensure that the Project would not conflict with or obstruct state or local plans for energy efficiency. Overall, energy demand during construction of the Project would be temporary and limited.

Once operational, the Project would not result in any significant demand for energy. Potential periodic maintenance of the rehabilitated channel would generate a demand for energy, however energy use associated with these ongoing activities would be negligible.

Overall, given that energy use associated with the Project would mostly end with the completion of the construction to rehabilitate the channel, the consumption would not be wasteful, inefficient, or unnecessary, and impacts would be less than significant. Given that energy demand would be short term and limited, and would comply with state and SCAQMD fuel and equipment regulations it would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Mitigation Measures: None required.

Monitoring and Reporting: None required

VII. GEOLOGY AND SOILS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				✓
ii) Strong seismic ground shaking?			✓	
iii) Seismic related ground failure, including liquefaction?			✓	
iv) Landslides?			✓	
b) Result in substantial soil erosion or the loss of topsoil?			✓	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			✓	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			✓	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				✓
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				✓

Sources: City of Palm Desert General Plan (2016); City of Palm Desert General Plan Update & University Neighborhood Specific Plan EIR (2016); City of Palm Desert Draft Technical Background Report (2015); United States Department of Agriculture (USDA), Web Soil Survey https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx (accessed June 2023); California Department of Conservation EQ Zapp https://maps.conservation.ca.gov/cgs/EQZApp/app/ (accessed June 2023); South Coast AQMD Rule Book http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/regulation-iv (accessed June 2023); County of Riverside General Plan Amendment No. 960 Draft EIR No. 521 (February 2015).

Setting

Geology and Soils

Palm Desert is located in the Coachella Valley, within the Salton Trough, a large geographic depression caused by crustal extension associated with movement along the San Andreas Fault system. The Coachella Valley is boarded by mountains, including the Santa Rosa and San Jacinto Mountains to the south and southwest, and the Little San Bernardino Mountains to the north. The Coachella Valley is a seismically active region, due primarily to the strike-slip motion of the San Andrea Fault System. The area has experienced six seismic events with a Richter magnitude of 5.9 or greater in the past 100 years.

The City is mostly underlain by Quaternary deposits including surficial deposits (Qs), landslide deposits (Qls), alluvium (Q), non-marine sandstone, shale, and gravel depsoits (Qpc), Mesozoic mixed rocks consisting of granite, quartz monzonite, granodiorite, and quartz diorite (gr-m), Mesozoic plutonic rocks consisting of granite (grMz); and Paleozoic mixed rocks consisting of sedimentary rocks (m). According to the USDA Web Soil Survey, the Project site is underlain by three soil types: Carsitas gravelly sand (CdC), 0 to 9 percent slopes, Myoma fine sand (MaB), 0 to 5 percent slopes, and Carsitas cobbly sand (ChC), 2 to 9 percent slopes.

Paleontological Resources

Paleontological resources are the remains and/or traces of plant and animal life such as bones, teeth, shells, and wood that are found in geologic deposits. The Palm Desert General Plan (Chapter 6, Policy 10) requires development to avoid paleontological resources whenever possible. If complete avoidance is not possible, development is required to minimize and fully mitigate impacts to the resource. The Project site is located on the middle slope of a large alluvial fan emanating from canyons of the Santa Rosa Mountains to the south. The source bedrock to the south of the underlying alluvial deposits is identified as sensitive for paleontological resources and their occurrence is not expected on site or in the vicinity.

Discussion of Impacts

a.i) **No Impact.** Fault rupture occurs when movement in a deep fault in the earth breaks through to the surface. According to Alquist-Priolo Earthquake Fault Zoning mapping, as provided in Figure 8.1 of the City's General Plan, Palm Desert is not located in an active fault zone. The Project site is located approximately 9 miles from the nearest fault, the San Andreas Fault. Fault-related surface rupture therefore would not occur on the subject site. There will be no impact.

a.ii) **Less than Significant.** The City, including the Project site, is located in a seismically active region, surrounded by three active faults. The closest fault, the San Andreas Fault, is located approximately 9 miles northeast of the subject site. The San Jacinto Fault is approximately 14 miles southwest of the site, and the Elsinore Fault is approximately 34 miles southwest. Given its location in a seismically active region, the Project site could be subject to strong seismic ground shaking. The primary hazard associated with seismic ground shaking is the risk of collapse of buildings or other structures.

The proposed channel improvements will be subject to the California Building Code (CBC). Adherence to applicable structure and seismic requirements will minimize the potential for damage to the channel in the event of strong seismic ground shaking. Once operational, the Project site will not be occupied by any residents or staff, and therefore it would not expose any such individuals to the risk of strong shaking. Overall, provided the Project complies with all applicable seismic and structural design codes, impacts related to seismic ground shaking will be less than significant.

a.iii)

c) **Less than Significant Impact.** Seismically induced liquefaction is the loss of soil strength caused by a sudden increase in pore water pressure after an earthquake, particularly as a result of strong ground shaking. Loose sands and gravels have a higher risk of liquefaction. The subject site is primarily underlain by

Carsitas gravelly sand, Myoma fine sand, and Carsitas cobbly sand. According to the City's General Plan EIR Technical Background Report, the Project site is located in an area with moderate susceptibility to liquefaction.

Seismically induced liquefaction and settlement could result in lateral spreading of banks of the Haystack Channel. However, this potential hazard is not expected to cause potential substantial adverse effects, such as the risk of loss, injury, or death. The proposed Project will not include any structures that would be inhabited and will not create a substantial risk to loss, injury, or death. Impacts will therefore be less than significant.

a.iv) **Less than Significant Impact.** According to Figure 8.2 in the City's General Plan, areas susceptible to landslides are concentrated along the mountainous areas in the southern portion of the City. The subject site is not directly in an area identified as susceptible to landslides, but it is relatively close to at-risk areas – for example, the steep slopes on the west side of State Route 74. However, given that the Project will not result any long-term occupants on the subject site, the proposed channel rehabilitation will not result in substantial adverse effects, including the risk of loss, injury, or death, as a result of landslides. Impacts will be less than significant.

b) **Less than Significant Impact.** The southern portion of Palm Desert, including the subject site, has a high wind erodibility rating according to Figure 8.3 in the General Plan. The Project will result in ground disturbance, including excavation and grading, that would have the potential to increase soil erosion. During construction, standard measures to reduce erosion will be required, including compliance with SCAQMD Rule 403.1 to reduce the generation of fugitive dust during ground disturbing activities.

Given that proposed improvements are intended to reduce impacts related to erosion in the subject channel, it is not expected to exacerbate wind erosion or loss of topsoil long term. An objective of the Haystack Channel Rehabilitation project is to improve function of the channel while accounting for issues including erosion and sedimentation. The proposed channel rehabilitation includes slope stabilization and protection measures by design. Such measures include the installation of rip-rap lining side slopes of part of the channel, as well as the relocation and restoration of in-channel vegetation to the greatest extent practicable. Impacts related to soil erosion and loss of topsoil will therefore be less than significant.

d) **Less than Significant Impact.** Expansive soils are those which expand in volume when an increase in moisture content occurs. The City's General Plan EIR states that expansive clays or soils exhibiting shrink-swell characteristics are not known to underlie Palm Desert. Likewise, according to the USDA Web Soil Survey, the soils underlying the subject site are mainly sand and gravel, which are not prone to expansion. The proposed channel rehabilitation will not be inhabited, will not otherwise include businesses or other occupied structures. It will therefore not create a substantial risk to life or property, and impacts will be less than significant.

e) **No Impact.** The proposed channel rehabilitation project will not include septic tanks or other forms of wastewater disposal. There will be no impact.

f) **No Impact.** According to Figure 4.9.3 in the Riverside County General Plan EIR, the Project area is of low paleontological sensitivity. Given that the Haystack Channel already exists, the site has been disturbed. Paleontological resources are not expected to occur on the subject property, and thus would not be destroyed by the proposed channel rehabilitation. There will be no impact.

Mitigation Measures: None required.

Monitoring and Reporting: None required.

VIII. GREENHOUSE GAS EMISSIONS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			✓	

Sources: CalEEMod Version 2040.4.0; Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, prepared by SCAQMD, October 2008; Riverside County Climate Action Plan Update (2019); City of Palm Desert Environmental Initiatives Plan (2022); City of Palm Desert Environmental Sustainability Plan (2010); California Health and Safety Code.

Setting

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. GHGs are emitted during natural and anthropogenic (human-caused) processes. Anthropogenic emissions of these GHGs in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. The California Air Resources Board is required to monitor and regulate seven GHGs: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), nitrogen trifluoride (NF_3), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs).[4]

State laws, such as Assembly Bill 32 (AB 32) and Senate Bill 32 (SB 32), require cities to reduce greenhouse gas emissions to 1990 levels by the year 2020. SB 32 is the extension of AB 32 and requires the state to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030.

The City of Palm Desert adopted an Environmental Sustainability Plan (2010) that is consistent with the goals of AB 32 and S-3-05, which calls for a statewide GHG emission reduction to 80% below 1990 levels by 2050. The Palm Desert Environmental Initiatives Plan, adopted in August 2022, provides an updated inventory of the City's current sustainability projects.

On December 5, 2008, the SCAQMD formally adopted a greenhouse gas significance threshold of 10,000 $MTCO_2e$/yr for stationary source industrial uses where SCAQMD is the lead agency (SCAQMD Resolution No.08-35). This threshold was adopted based upon an October 2008 staff report and draft interim guidance document that also recommended a threshold for all projects using a tiered approach. It was recommended by SCAQMD staff that a project's greenhouse gas emissions would be considered significant if it could not comply with at least one of the following "tiered" tests:

- Tier 1: Is there an applicable exemption?
- Tier 2: Is the project compliant with a greenhouse gas reduction plan that is, at a minimum, consistent with the goals of AB 32?
- Tier 3: Is the project below an absolute threshold (10,000 $MTCO_2e$/year for industrial projects; 3,000 $MTCO_2e$/year for residential and commercial projects)?
- Tier 4: Is the project below a (yet to be set) performance threshold?
- Tier 5: Would the project achieve a screening level with off-site mitigation?

The analysis provided below is based on this tiered approach.

[4] California Health and Safety Code §38505 (g).

Discussion of Impacts

a, b) Less than Significant Impact.

Construction Emissions

Construction activities will result in short-term GHG emissions associated with operation of construction equipment, employee commutes, material hauling, and other ground disturbing activities. There are currently no construction related GHG emissions thresholds for projects of this nature. Therefore, to determine whether the Project's construction emissions will result in a cumulatively considerable impact, buildout GHG emissions were amortized over a 30-year period and added to annual operational emissions to be compared with applicable GHG thresholds.

The GHG emissions associated with channel rehabilitation activities will be temporary. As shown in Table 6, the estimated GHG emissions from construction of the proposed Project, amortized over 30 years, will be 16.08 metric tons of CO_2 equivalent.

Operational Emissions

GHG emissions associated with the operation of development projects are associated with five source categories. Area emissions (including pavement and architectural coating off-gassing), energy use, water use, solid waste disposal, and mobile source emissions (e.g., vehicle trips). Once operational, the proposed channel rehabilitation project will not result in additional vehicle trips, energy consumption, water consumption, or solid waste production. As shown in Table 6, the Project will result in a negligible amount (0.0001 $MTCO_2e$/year) of GHG emissions, associated with area sources. This is likely due to off gassing from concrete components that will be added to the channel during rehabilitation. While additional emissions may result from potential maintenance on the channel in the future, these emissions would be temporary and insignificant.

Table 6
Projected GHG Emissions Summary
(metric tons/year)

Phase	CO_2e (MT/YR)
Construction - 2024	504.08
Operational	
Area	0.0001
Energy	0
Mobile	0
Waste	0
Water	0
Construction, 30-year amortized[1]	16.80
Total (30-year amortized construction + operational)[1]	**16.08**
SCAQMD Threshold	**3,000.00**

[1] Buildout construction GHG emissions amortized over 30 years. 504.08/30 = 16.80
Emission Source: CalEEMod Version 2040.4.0

On December 5, 2008, the SCAQMD formally adopted an absolute greenhouse gas significance threshold of 3,000 MTCO2e/yr for residential and commercial projects, as well as a threshold of 10,000 MTCO2e/yr that for industrial uses, where SCAQMD is the lead agency (SCAQMD Resolution No. 08-35). This threshold was adopted based

upon an October 2008 staff report and draft interim guidance document that also recommended a threshold for all projects using a tiered approach.[5] As shown in Table 6, the Project's combined operational emissions and amortized construction emissions of 16.08 metric tons of CO2e per year would not exceed the adopted threshold of 3,000 metric tons of CO2e per year.

Consistency with SCAQMD GHG Thresholds

As previously stated, it is recommended by SCAQMD staff that a project's greenhouse gas emissions should be considered significant if it does not comply with at least one of the following "tiered" tests:

- Tier 1: Is there an applicable exemption?
- Tier 2: Is the project compliant with a greenhouse gas reduction plan that is, at a minimum, consistent with the goals of AB 32?
- Tier 3: Is the project below an absolute threshold (10,000 $MTCO_2e$/year for industrial projects; 3,000 $MTCO_2e$/year for residential and commercial projects)?
- Tier 4: Is the project below a (yet to be set) performance threshold?
- Tier 5: Would the project achieve a screening level with off-site mitigation?

The projected 16.08 MTCO2e of emissions associated with the proposed Project are significantly below the Tier 3 absolute threshold of 10,000 MTCO2e for industrial projects or 3,000 MTCO2e for residential Project. Therefore, based on the SCAQMD "tiered tests", the Project would not generate significant levels of GHGs, and associated environmental impacts would be less than significant.

Consistency with Local GHG Reduction Measures

The GHG emissions associated with channel rehabilitation activities will temporary and will not substantially affect climate or interfere with a GHG reduction plan, including both the Riverside County Climate Action Plan and the City of Palm Desert Environmental Initiatives Plan. All components of construction, including equipment, fuels, and materials will be subject to current regulations of GHGs and equipment efficiency standards. Overall, given that the proposed Project would only temporarily generate GHGs during construction, and that the annual emissions associated with the proposed channel rehabilitation activities are projected to be well below the SCAQMD threshold, impacts related to greenhouse gas emissions will be less than significant.

Mitigation Measures: None required.

Monitoring and Reporting: None required

[5] Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, prepared by SCAQMD, October 2008.

IX. HAZARDS AND HAZARDOUS MATERIALS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✓	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				✓
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				✓
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			✓	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.				✓

Sources: City of Palm Desert General Plan (2016); City of Palm Desert Local Hazard Mitigation Plan (2017); CalFire FRAP and FHSZ map https://calfire-forestry.maps.arcgis.com/apps/mapviewer/index.html?layers=31219c833eb54598ba83d09fa0adb346 (accessed June 2023); State Water Resources Control Board GeoTracker https://geotracker.waterboards.ca.gov (accessed June 2023); Department of Toxic Substances Control EnviroStor https://www.envirostor.dtsc.ca.gov/public/ (accessed June 2023);

Setting

According to the City's General Plan Safety Element, there are very few hazardous materials generators in the City. Most of the risk associated with potentially hazardous materials is the result of the transport of such materials through the City, on major corridors such as the I-10. The City is responsible for coordinating with the appropriate agencies in the identification of hazardous material sites and regulation of their timely cleanup.

The Project site is located in a residential neighborhood, with no hazardous materials sites, airports, or wildland in the immediate vicinity. The proposed channel rehabilitation may involve the use of hazardous materials related to the operation and maintenance of construction equipment, the use and on-site storage of which would cease upon completion of the channel rehabilitation.

Discussion of Impacts

a, b) **Less than Significant Impact.** Construction of the Project could temporarily involve the use of hazardous materials such as chemicals, oils, fuels, lubricants, paints, and solvents. These substances would primarily be involved in the operation and maintenance of heavy construction machinery involved in channel rehabilitation activities. A staging area for storing materials has been identified, and the handling, storage, and use of these materials would be subject to local, state, and federal laws, including California Occupational Health and Safety Administration (CalOSHA) requirements.

Given that the Project is the rehabilitation of the Haystack Channel, it will not involve the routine transport, use, and storage of hazardous materials during long-term operations. The Project would also not be expected to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Overall, impacts will be less than significant.

c) **No Impact.** The Project site is not within one-quarter mile of an existing or proposed school. The proposed channel rehabilitation project would thus have no impact associated with emitting or handling hazardous materials in proximity of a school. The closest school is St. Margaret's located 0.38± miles west of the Project site and on the west side of State Highway 74.

d) **No Impact.** The Project site is not listed as a hazardous materials site according to the California Department of Toxic Substances Control EnviroStor database and the State Water Resources Control Board GeoTracker database. The nearest hazardous material site listed in either database is LUST Cleanup Site at the Marrakesh Country Club approximately 3,800 feet northeast of the subject site, which is listed in the GeoTracker database as completed and case closed. No other hazardous material sites occur within the Project or in the immediate vicinity. Therefore, based on the EnviroStor and GeoTracker databases, the Project is not included on a list of hazardous materials sites compiles pursuant to Government Code Section 65962.5, and it would not create any significant hazards to the public or the environment as a result. No impact will occur.

e) **No Impact.** The Project is not located within an airport land use plan, nor is it within two miles of a public use airport. The Bermuda Dunes (Crown Aero) Airport is located approximately 7.5 miles northeast of the Haystack Channel site, and the Palms Springs International Airport is located approximately 9.5 miles northwest of the subject site. Therefore, the proposed Project would not result in any airport-related safety hazards or excessive noise for people residing or working within the Project area. There would be no impact.

f) **No Impact.** The City's Local Hazard Mitigation Plan (LHMP) was updated in 2017, and includes priority actions to mitigate hazards, as well as actions to coordinate plans and resources in the event of an emergency. The proposed Project would not impair or interfere with an adopted emergency response or evacuation plan. According to the City's General Plan, key evacuation routes in the city include Monterey Avenue, Portola Avenue, Cook Street, and Washington Street. While construction activities associated with the Project would involve temporary impacts to Haystack Road or Calliandra Street, neither of these streets are considered key evacuation routes. Furthermore, the construction would be temporary, and a construction access plan will be required by the City to assure the Project does not interfere with emergency access during construction. Overall, impacts will be less than significant.

g) **No Impact.** The City's General Plan classifies the fire hazard in the Project area as Urban Unzoned. According to CalFire, the subject site is in a Local Responsibility Area and is more than a mile from the nearest Very High Fire Hazard Severity Zone (VHFHSZ). The Project proposes the rehabilitation of a drainage channel and does not propose the development of any residential buildings or other occupied structures. It therefore would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. There will be no impact.

Mitigation Measures: None required.

Monitoring and Reporting: None required

X. HYDROLOGY AND WATER QUALITY Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			✓	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				✓
c) 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:				
(i) result in substantial erosion or siltation on- or off-site;			✓	
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;				✓
(iii) 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) impede or redirect flood flows?				✓
(d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				✓
(e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				✓

Source: Site field surveys; Project development plan; USGS Quad Maps; Technical Memorandum and Preliminary Hydrology Study for the Haystack Channel Improvements - Project No. 509-22e, ERSC, Inc., January 20, 2023; Project Improvement Plans, ERSC, Inc., February 8, 2023; FEMA Panel 2209 of 3805, Map No. 06065C2209H, April 19, 2017.

Setting

The Coachella Valley's geographic and geophysical isolation from marine influences to the west has resulted in a local subtropical climate with very limited rainfall through much of the year. While annual rainfall typically ranges from 4 to 6 inches on the desert floor, no measurable rainfall has been recorded in some years. The surrounding San

Jacinto, Santa Rosa and Little San Bernardino Mountains are generally subject to cooler temperatures and receive more rainfall than the valley floor. Runoff is channeled through large watersheds that drain into the valley below. In the Coachella Valley, most rainfall occurs between November and March, but occasional high-intensity thunderstorms may occur during late summer and early fall. Although the desert floor can be dry at the beginning of a rainstorm, the ground can quickly become saturated when exposed to sufficient amounts and intensities of rainfall, substantially decreasing percolation and increasing runoff. Increased runoff produced upstream can potentially result in significant damage downstream. Urban development, which creates large, impervious surfaces, also increases the amount of runoff produced in the valley.

Regional Surface Water Hydrology

The project planning area is located at the southwesterly boundary of the Colorado River Hydrologic Region (HR) in the Whitewater River Hydrologic Unit (HU), and falls under the jurisdiction of the Colorado River RWQCB (Region 7).[6] Within Whitewater River Hydrologic Unit, the Project site lies in the Whitewater River watershed. Much of the watershed consists of sparsely populated mountains, desert, and agricultural lands. Urbanized areas are principally located on the Coachella Valley floor between Banning and Indio along Interstate 10, and from Palm Springs to Coachella along State Highway 111.[7]

Benchmark storms and historic data are used by the US Army Corps of Engineers and other flood control agencies to gauge the potential for future flooding. In the Coachella Valley, these include two distinct storm events that occurred in 1939 and 1979. The 1939 storm event occurred on September 24, was centered over Indio and originated off the west coast of Mexico. This storm generated 6.45 inches of rain in a 6-hour period. The 1979 storm event was due to the Tropical Storm Kathleen, which impacted the area from September 9 through 11 and generated 6.81 inches of rain in the low-lying areas of the central valley, and as much as 14 inches in the surrounding mountains. The projected 100-year 24-hour storm event in the planning area is 5.42 inches (NOAA Atlas 14).[8]

Groundwater Resources

California Department of Water Resources (DWR) Bulletin 118 describes the local groundwater basin as being bounded on the north and northeast by the San Bernardino and Little San Bernardino Mountains and on the westerly side by the Santa Rosa and San Jacinto Mountains. Movement of groundwater within the basin is limited and controlled by fault barriers, physical and elevation constrictions in the basin profile, and areas of low permeability. Based on these physical factors, the basin has been subdivided into subbasins and subareas. The boundaries between subbasins are generally based upon faults that are effective barriers to the lateral movement of groundwater.

CVWD obtains groundwater from both the Whitewater River and the Mission Creek Subbasins of the Coachella Valley Groundwater Basin. The Whitewater River Subbasin is a common groundwater source which is shared by numerous public and private groundwater producers. None of the groundwater basins in the Coachella Valley are adjudicated, and there are no legal agreements limiting pumping from the Whitewater River and Mission Creek subbasins. CVWD works with local public water agencies and other Coachella Valley stakeholders to implement the water management plans identified above for the Whitewater River, Mission Creek, and Garnet Hill Subbasins.

The Coachella Valley Groundwater Basin has been used for urban and agricultural supply since the early 20th century. The basin was first identified by DWR as being in a condition of overdraft in the 1940s. Overdraft is defined as the condition of a groundwater basin in which the outflows (demands) exceed the inflows (supplies) to the groundwater basin over the long term. The overdraft condition has caused Coachella Valley groundwater levels to decline in some areas, and has raised concerns about water quality degradation and land subsidence.

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6 Colorado River Hydrologic Region; http://www.water.ca.gov/pubs/groundwater/bulletin_118/california%27s_groundwater__bulletin_118_-_update_2003_/bulletin118_10-cr.pdf; Accessed October 2017.

7 Whitewater River Watershed Municipal Stormwater Program (Stormwater Management Plan 2001 - 2006), prepared by Camp Dresser and McKee, Inc.

8 NOAA's National Weather Service Hydrometeorological Design Studies Center; accessed 07.08.2016.

In-lieu groundwater replenishment using imported Colorado River water began in 1949 when the first deliveries from the Coachella Canal were received in the eastern portion of the Coachella Valley. To further address the overdraft conditions, CVWD and DWA jointly operate direct groundwater replenishment programs in the basin. Recharge activities using imported water commenced in the western portion of Coachella Valley in 1973, at the Whitewater River Groundwater Replenishment Facility. Additionally, recharge activities in the eastern portion of Coachella Valley were commenced in 1997 at the Dike No. 4 pilot recharge facility and expanded by CVWD in 2009; this facility is now called the Thomas E. Levy Groundwater Replenishment Facility (CVWD 2006). CVWD and DWA also began replenishment of the Mission Creek Subbasin in 2003. The water management plans identify the continued use of these recharge facilities as a critical component of the Coachella Valley's water supply. As of 2019, CVWD operates a fourth groundwater replenishment facility located in Palm Desert. Once fully built out, the facility will have the capacity to recharge up to 25,000-acre feet annually.

Water Quality and Water Quality Standards

Water for construction and occasional channel maintenance will come from nearby fire hydrants connected to the CVWD's local domestic water system from wells extracting groundwater. CVDW complies with state (California Department of Public Health) and federal (U.S. Environmental Protection Agency) drinking water quality standards. Each year, CVWD monitors domestic water wells for regulated and unregulated chemicals that are not detected during regular, ongoing monitoring. The domestic water supply meets current state and federal standards; however, drinking water supplied to some service areas does contain low levels of naturally occurring hexavalent chromium (Cr6), arsenic, radon, and nitrate.[9]

Impaired Water Bodies

There are no identified "impaired waters" in the Project vicinity. The nearest impaired water body is that portion of the Coachella Valley Stormwater Channel south of the Valley Sanitary District outfall and is listed as being impaired for Toxaphene, DDT (Dichlorodiphenyltrichloroethane), Nitrogen, Dieldrin, ammonia (Total Ammonia), PCBs (Polychlorinated biphenyls), Toxicity and Indicator Bacteria under Section 303(d) of the Clean Water Act (CWA). Total Maximum Daily Loads (TMDLs) for these pollutants have been established.

Surface Water Quality Objectives/Standards and Beneficial Uses

Being located within the Colorado River Basin Region, the Coachella Valley's surface water quality objectives include meeting or exceeding standards for the appearance or aesthetic quality of surface waters, any tainting substances, toxicity, temperature, pH, dissolved oxygen, suspended and settleable solids, total dissolved solids, bacteria, bio-stimulatory substances, sediment, radioactivity, chemical constituents and pesticide wastes.

Project Channel Conditions

The subject Haystack Channel has been in place for many years (pre-1985) and was constructed to intercept and convey stormwater runoff originating from the south. The watershed has been divided into seven sub-areas. The drainage area tributary to the Haystack Channel encompasses approximately 1,591 acres and is generally bounded by State Highway 74 to the west and Portola Avenue to the east.

Modeling of baseline conditions along the Haystack Channel used the Rational Method for each watershed for the 100-year return frequency. The analysis indicates that at approximately the point of discharge under Portola Avenue indicated flow depths of 2.0 feet to 3.7 feet with associated velocities in the range of 7.5 to 9.5 feet per second. In the baseline condition, Portola Avenue is overtopped and runoff crosses the roadway, but is contained within highpoints located north and south of the culvert. The depth of flow immediately upstream (west) of the roadway is 4.53 feet and across the roadway the flow depth is approximately 1.0-foot. Analysis indicates that the roadway is designed to be overtopped by storm flows during significant storms. The design storm is unknown, however, the multiple cell reinforced box culvert under Portola Avenue is adequate to convey smaller return frequency storms.

[9] Coachella Valley Water District (2013-2014 Annual Review); http://www.cvwd.org/ Archive Center/ViewFile/ Item/59; Accessed 8.30.2016.

Upstream of Portola Avenue, the channel has the appearance of an unimproved earthen watercourse. However, the engineering assessment conducted for the subject channel improvement project indicates that at one time the channel was graded to a trapezoidal prismatic cross section. The section appears to have been altered over time through erosion and subsequent maintenance activities. Immediately upstream of Portola Avenue, the section appears to be in transition from a uniform section to the width of the multiple cell reinforced box culvert crossing. This reach of channel is approximately 500 feet long and exhibits flow depths between three and four feet and channel velocities up to 10.0 feet per second.

Upstream of this reach, the earthen channel cross section becomes more uniform but continues to show the effects of erosion mainly along the channel banks. There are three storm drain inlets in this channel reach all located on the south bank. Specific details related to these inlets are available in Tables 2 and 3 and Appendix A of the Technical memorandum (Appendix D of this document). Flow velocity in this reach is uniform and ranges between 6.5 and 8.5 feet per second and the depth of flow is uniform and slightly deeper that two feet.

Near Heliotrope Drive, the channel profile changes significantly with invert elevations increasing in an upstream direction approximately 7.5 feet due to a scour hole that has developed at the end of the grass lined section downstream (east) of Heliotrope Drive. At Heliotrope Drive, storm flows are conveyed under the roadway via four 48-inch reinforced concrete pipe culverts. At this location, the hydraulic model indicates that storm flows are contained within the channel. The depth of flow and velocity at the Heliotrope culvert outlet are 3.7 feet and 7.8 feet per second.

West of Heliotrope Street

Upstream of Heliotrope Drive the channel section changes significantly from the unlined and unimproved channel east of Heliotrope to a uniform, prismatic, and grass-lined section. At four locations along this reach of channel storm drains enter the Haystack channel with three outlets on the south bank and one on the north. These inlets are characterized by concrete headwalls, concrete invert (apron), and concrete slope protection. Flow velocity is this reach is uniform and ranges between 6.7 and 7.6 feet per second. Associated flow depths are typically on the order of 2.5 feet.

This channel reach terminates at Alamo Road. The crossing at Alamo Road consists of two 30-inch reinforced concrete pipes. The hydraulic model indicates the existing culverts have the capacity to safely convey the anticipated storm flow under the roadway. Upstream of Alamo Road, the study area becomes a greenbelt with a low flow swale rather than a well-defined channel. Depth of flow and velocity are minimal.

Discussion of Impacts

a) **Less Than Significant With Mitigation.** For the proposed Project, most of the construction activities will be occurring within the channel and atop the channel service road. Other activities will include the transport of materials into and out of the channel and the management of storm flows in the channel as construction progresses. Construction activities at the site would entail the use of heavy equipment and associated potentially hazardous materials, such as fuels (gasoline and diesel), oils and lubricants, and cleaners (e.g., solvents, corrosives, soaps, detergents), which are commonly used in construction projects. During construction, accidental spills could occur and potentially cause a discharge of hazardous materials to surface or groundwater and violating water quality standards. Preparation of staging areas and construction site prior to construction will require limited clearing and grubbing. All removal will be mechanical, and no use of herbicides is anticipated for this purpose.

Excavation in the channel bottom will be required to construct the toe-down/slope lining (sub-grade portions) of the channel side slope lining east of Heliotrope and will involve the dry installation of rip rap a minimum of 8 feet below the channel bottom. Project engineers plan to excavate and install the side slope lining in stages. Each phase of lining will proceed along the channel side slope and a new temporary

adjoining de-silting basin will be excavated if necessary to retain any incidental runoff. In this manner, excavation and temporary de-silting basins may be constructed and backfilled as lining progresses downstream.

Several components of the project would include construction with concrete within the channel with limited amounts of elastomeric sealant (conforms to ASTM C 920) used to bond pour segments and provide for expansion. Uncured concrete is extremely alkaline with a pH near 12 and this caustic material is harmful to plants and wildlife. Of particular concern is concrete washout from cleaning ready mixed concrete trucks and hoppers of concrete pump trucks, highly diluted concrete slurry. Concrete washout slurry can alter soil chemistry, inhibit plant growth, can degrade surface and groundwater, and result in violations of water quality standards.

Ground-disturbing activities during construction could result in increased soil erosion and input of sediment into water sources. It should be noted that in the existing channel soils are generally very dry and subject to fluvial and wind erosion. Under the proposed Project, grading, excavation and other ground-disturbing activities may contribute to near-term soil erosion. Project activities that could increase soil erosion and deposition into surface waters include:

- Demolition and excavation of existing concrete and earthen materials,
- Modifications to channel bed and slopes via excavation and grading of earthen material,
- Use of heavy equipment for hauling excess cut and debris, and
- Stockpiling of excavated materials or soils to be used for backfill.

The potential for natural erosion type hazards is high in areas with a combination of the following conditions: 1) moderately steep to steep slopes (greater than 15 percent), 2) loose to unconsolidated soils and sediments, 3) little or no vegetation cover, and 4) uncontrolled surface water runoff. Changes in any of these conditions can increase erosion potential. Additionally, an increase in erosion can increase downstream sediment loads.

Soils in the project area would be disturbed during construction as a result of material excavation along the channel bed and banks, and during construction and use of access roads. Erosion may also occur at the Project staging area planned along Portola Avenue immediate north of the channel, where initial grading and subsequent disturbance by construction equipment would destabilize soils, leaving them vulnerable to erosion. Soils stockpiling, hauling or backfill would be especially vulnerable to erosive effects of wind and rain. As soils in the project area are relatively easily erodible, even soils that are stockpiled properly may erode as a result of rain or high winds.

Impacts associated with excessive erosion include degraded water quality and excessive sedimentation. Erosion would be limited by application of a variety of methods and materials to stabilize disturbed surfaces, including on-going site watering, which is planned as part of project construction. While project construction has the potential to increase soil erosion and deposition into surface flows, it should be considered that the east channel segment's normal function is to transport bulked flood flows that convey silt, sand and gravels along the channel. Necessary periodic channel maintenance also destabilizes channel soils and exposes them to wind and water erosion. Therefore, erodible channel soils are an existing and on-going condition in the dry desert climate.

Temporary or portable sanitary facilities provided for construction workers could be a source of sanitary waste that could affect the human use environment if not properly managed. The use and maintenance of these facilities, however, is regulated, and any contractor engaged to provide the service will be subject to and must implement these regulations.

Construction BMPs referenced above and required by Mitigation Measures set forth below, will effectively reduce or avoid the discharge of any pollutants of concern that might enter nearby receiving waters by establishing limits of construction and the use of a variety of standard practices, including silt berms and fences, earth dikes, drainage swales, sediment traps, check dams, reinforced soil retaining systems, temporary sediment basins and flow diversion. In accordance with the Colorado River Basin Region NPDES Permit (NPDES No. CAS617002), the channel improvement project is not a Priority Development project. Therefore, no post-construction BMPs are required. With the application of mitigation set forth below the project will not exceed wastewater discharge requirements, and impacts to water quality will be less than significant.

To protect the water quality during construction, SWRCB's existing construction policy (Construction General Permit Order 2009-0009-DWQ) will require the development of a project specific construction SWPPP in compliance with the State's General Construction Permit. Temporary construction BMPs considered and incorporated into the project, as appropriate, would include:

- Soil stabilization (erosion control) techniques such as on-going site watering, soil binders, etc.;
- Sediment control methods such as detention basins, silt fences, and dust control;
- Contractor training programs;
- Material transfer practices;
- Waste management practices such as providing designated storage areas and containers for specific waste for regular collection;
- Concrete washout slurry shall be discharged and disposed of in an approved manner;
- Channel cleaning/tracking control practices;
- Vehicle and equipment cleaning and maintenance practices; and
- Fueling practices.

By following the procedures outlined in the mitigation measures set forth below, as well as SWPPP, impacts to water quality associated with construction activities would be less than significant because pollution, contamination or nuisance as defined in Section 13050 of the California Water Code (CWC) or violation of regulatory standards as defined in the applicable NPDES stormwater permit or Water Quality Control Plan for receiving water body would be minimized and less than significant with mitigation.

Operational Impacts

Channel operation and maintenance impacts that could affect water quality will be very limited and less than significant. City periodic channel inspections and annual channel maintenance will follow well-established protocols. Biological resources are dependent on aquatic resources downstream of the project site since the receiving waters have beneficial recreation uses. A wide range of project design elements, including inert and non-toxic paving materials, and regular maintenance, will ensure that post-construction the Project does not violate any water quality standards or wastewater discharge requirements, and will preclude adverse impacts to aquatic resources in the project area and downstream and therefore have a less than significant impact on water quality.

Impacts to the local and regional water quality would be less than significant with application of the mitigation measures set forth below.

Utility Relocation Component

The Project includes the relocation (or possible elimination) of one or two SCE power poles, one of which currently encroaches into the channel. As with the channel improvement portion of the Project, application of mitigation measures set forth below will ensure that construction activities associated with the utility relocation component of the project will not exceed wastewater discharge requirements and impacts to water quality will be less than significant.

To protect the water quality during construction, SWRCB's existing construction policy (Construction General Permit Order 2009-0009-DWQ) will require the development of a project specific construction SWPPP in compliance with the State's General Construction Permit. Temporary construction BMPs will be considered and incorporated as appropriate.

With the application of Best Management Practices set forth in the project Water Quality Management Plan the proposed project will not violate any water quality standards or waste discharge requirements. Construction at the site will be subject to all applicable water quality standards for waste discharge requirements of the City. A Storm Water Pollution Prevention Plan (SWPPP) maybe required because there is more than one acre of disturbed area. Compliance with existing regulations and requirements will result in a less than significant impact on water quality standards and waste discharge requirements.

By adhering to standard programmatic permits and work site management protocol, as well as adherence to the mitigation measures set forth below, the Project's impacts on water quality will be less than significant.

b) **No Impact.** The construction of the subject channel improvements will require very limited groundwater resources for site watering, hydroconsolidation of soils, dust control and incidental uses. Once completed, the project will require no groundwater use excepting possible use in conjunction with periodic channel maintenance. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

c) (i) **Less Than Significant.** The Project will involve excavation to remove and replace existing sub-surface drains in that portion of the existing channel located west of Heliotrope Drive. These portions of the channel are currently landscaped with grass, trees and shrubs and are well-irrigated. Excavation and replacement of the sub-grade drainage system in these reaches are not expected to generate silt or eroded soils, nor will this work or post-construction conditions result in substantial erosion or siltation on- or off-site. As discussed above (see X.a), above) a wide range of BMPs to control dust generation and soils erosion and discharge will be mitigated to less than significant levels. Therefore, impacts will be less than significant.

c) (ii) **No Impact.** The proposed Project involves the restoration of an existing stormwater channel, including the replacement of sub-grade drains and the re-shaping and rip rap lining of channel side slopes east of Heliotrope Drive to Portola Avenue. The channel will continue to serve and convey runoff from the same tributary watershed and there will be no net increase in channel flows. Therefore, the Project will not increase the rate or amount of surface runoff in a manner and will not induce flooding on- or off-site. Therefore, there will be no impacts regarding increases in the rate or amount of runoff.

c) (iii) **Less Than Significant.** As noted in section c) (ii), above, the Project is a channel restoration that is designed to address erosion issues on the easternly portion of the subject channel reach and to replace inadequate and failing sub-grade drains in the Project reach west of Heliotrope Drive. The Project will neither create nor contribute new runoff that would exceed the channel's design capacity. Neither is the Project expected to create additional sources of pollution once construction is completed. During construction, a range of BMPs will be applied to avoid and minimize the potential for Project construction to discharge additional polluted runoff. Therefore, impacts will be less than significant.

c) (iv) **No Impact.** As noted in section c) (ii) and c) (iii), above, the Project is a channel restoration that is designed to return the channel to its original condition while improving stormwater percolation and infiltration, and address and prevent or limit channel erosion in the unlined portion of the channel east of Heliotrope Drive. The Project will not create or contribute new runoff, nor will the Project impede or redirect flood flows. Therefore, the Project will have no impacts on impeded or redirected storm flows.

d) **Less than Significant Impact.** The proposed Project will restore the Haystack Channel to its original condition and upgrade the facility to restore stormwater capacity and infiltration and to eliminate or greatly reduce erosion in the easterly reach of the Project. The Project will address existing drainage facilities and will not create any new flood hazards, will not occur within or be susceptible to tsunami or seiche zones, nor is there a meaningful risk of release of pollutants due to project inundation. Therefore, Project impacts will be less than significant.

e) **No Impact.** The proposed Project will replace and improve existing sub-grade stormwater storage and infiltration facilities and will address existing erosion issues in the eastern segment of the channel through the installation of ungrouted channel slope protection and maintenance of the sandy channel bottom in this reach. The existing and improved channel serve to enhance runoff infiltration and bioremediation and will not **c**onflict with or obstruct implementation of any water quality control plan or sustainable groundwater management plan.

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Watershed and Water Quality

The project site is located in the Colorado River Basin Region (Region 7) watershed, as designated by the California Regional Water Quality Control Board (CRWQCB). CRWQCB implements and enforces federal and state regulations throughout the region to assure that water quality standards are met. Water quality is also monitored by CVWD through the National Pollutant Discharge Elimination System (NPDES) permit process. These requirements assure that runoff leaving the stormwater channel project site during and after construction, if any, is not polluted and does not contain silt or other materials. The City will secure a CWA 401 permit from the California Regional Water Quality Control Board (CRWQCB) prior to the initiation of the Project, and will require that the project contractor use best management practices (BMP) to assure that project-related water percolating into the ground is not contaminated.

The principal domestic (non-agricultural) water sources for the project area and the Coachella Valley are groundwater and imported Colorado River water. Direct precipitation makes a very limited contribution to valley groundwater supplies. All potable water is pumped from groundwater subbasins, and imported supplies are used for agriculture and landscape irrigation, and groundwater recharge. The Whitewater River subbasin underlies the project area and has the largest storage capacity of all Coachella Valley groundwater basins. According to CVWD's Urban Water Management Plan, the quality of local groundwater and treated and untreated Colorado River water is characterized as "good" and meets state and federal drinking water quality standards. These standards are projected to be met over the long-term and the project will have no adverse effects on local or regional groundwater resources.

100-Year Floodplain

As described above, the Project site is located in the Federal Emergency Management Agency (FEMA) Zone X, an area of 1% annual chance flood with average depth less than one foot (FEMA Panel 2209 of 3805, Map No. 06065C2209H, April 19, 2017). No adverse flooding effects are expected to result from the installation of the subject channel improvements.

Safe Drinking Water Act/Sole Source Aquifer Protection

The Project is not located within the boundaries of a sole source aquifer (SSA). The closest SSA is the Campo/Cottonwood Creek Aquifer SSA, located approximately 46 miles to the southwest.

Mitigation Measures:

The channel improvement design process has taken into consideration the relationship to and potential impacts on the existing and long-term water quality in the channel. Overall, the project will have a significant beneficial impact on area drainage, provide substantial improvements to infiltration facilities and maintain the existing soft channel

bottom in the east channel segment to support a wide range of vegetation and associated bioremediation. The following measures are set forth to ensure that project impacts are below levels of significance.

HYD-1 Project Plan Review

Prior to finalizing the hydraulic design and engineering plans for Haystack Channel improvements, said plans shall be reviewed and approved by the City Engineer to ensure that these improvements do not interfere with or adversely affect channel capacity or the ability of City to manage and maintain these facilities.

HYD-2 NPDES Requirements

The Project shall comply with the requirements of the National Pollution Discharge Elimination System (NPDES).

HYD-3 General BMPs

The implementation of BMPs during construction activities shall ensure that erosion and siltation from earthmoving and other construction activities is limited. Exposed soil from excavated areas, stockpiles, and other areas where ground cover is removed shall be stabilized by wetting or other approved means to avoid or minimize the inadvertent transport by wind or water. Temporary construction BMPs considered and incorporated into the project, as appropriate, would include:

- Soil stabilization (erosion control) techniques such as on-going site watering, soil binders, etc.;
- Sediment control methods such as detention basins, silt fences, and dust control;
- Temporary de-silting basins may be constructed incrementally along the channel, as needed, to store and clarify water adjoining de-watered areas in the channel, and will be backfilled as side slope lining progresses downstream.
- Contractor training programs;
- Material transfer practices;
- Waste management practices such as providing designated storage areas and containers for specific waste for regular collection;
- Concrete washout slurry shall be discharged and disposed of in an approved manner;
- Channel cleaning/tracking control practices;
- Vehicle and equipment cleaning and maintenance practices; and
- Fueling practices.

HYD-4 Stormwater Pollution Prevention Plan

The construction contractor shall implement a City-approved (SWPPP) during construction of the Project. The SWPPP shall identify specific best management practices (BMPs) that will be implemented during project construction. BMPs implemented as a part of the project will ensure that the project meets the requirements of the California State Water Resources Control Board NPDES Construction General Permit.

Construction-related erosion and sediment controls, including any necessary stabilization practices or structural controls, shall be implemented at and in all potentially affected drainages. General structural practices may include, but are not limited to, silt fences, earth dikes, drainage swales, sediment traps, check dams, reinforced soil retaining systems, temporary or permanent sediment basins and flow diversion.

Temporary erosion and sediment control measures shall be installed during or immediately after initial disturbance of the soil, maintained throughout construction (on a daily basis), and reinstalled until replaced by permanent erosion control structures or final grading and other site disturbances are complete. In addition, the following specific actions shall be taken to ensure that impacts are less than significant.

a) The construction shall be avoided within the limits of identified waterways as depicted on the Jurisdictional Delineation Report prepared for this IS/MND, except as authorized by federal, state or local permits.
b) Protect inlets and outlets of culverts from construction material intrusions using temporary berms to prevent channel incision, erosion, and sedimentation.
c) Erosion control measures appropriate for on-the-ground conditions, including percent slope, length of slope, and soil type and erosive factor, shall be implemented.
d) Temporary erosion controls such as straw bales and tubes, geotextiles and other appropriate diversion and impounding materials and facilities shall be properly maintained throughout construction (on a daily basis) and reinstalled (such as after backfilling) until replaced with permanent erosion controls or restoration is complete.
e) Where jurisdictional waters are adjacent to or within the construction area, the contractor shall install sediment barriers along the edge of the construction right-of-way to contain spoil and sediment within the construction area and limit discharge into jurisdictional areas or waters.
f) Ensure that all employees and contractors are properly informed and trained on how to properly install and maintain erosion control BMPs. Contractors shall require all employees and contractors responsible for supervising the installation and maintenance of BMPs and those responsible for the actual installation and maintenance to receive training in proper installation and maintenance techniques.
g) Project scheduling will include efficient staging of the construction that minimizes the extent of disturbed and destabilized work area and reduces the amount of soil exposed and the duration of its exposure to wind, rain, and vehicle tracking.
h) The use of a schedule or flow chart will be incorporated to lay out the construction plan and will allow proposed improvements to proceed in a manner that keep water quality control measures synchronized with site disturbance, concrete pours and other construction activities.
i) The sequencing and time frame for the initiation and completion of tasks, such as site clearing, grading, excavation, concrete and rip rap lining and other construction, shall be planned in advance to ensure minimization of potential impacts.

HYD-5 Petroleum BMPs

To prevent petroleum products from contaminating soils and water bodies in the channel, the following BMPs shall be implemented:

a) Construction equipment and vehicles shall be properly maintained to prevent leakage of petroleum products.
b) Vehicle maintenance fluids and petroleum products shall be stored, and/or changed in staging areas established at least 100 feet from delineated streams and other drainages. These products must be discarded at disposal sites in accordance with state and federal laws, rules, and regulations.
c) Drip pans and tarps or other containment systems shall be used when changing oil or other vehicle/equipment fluids.
d) Areas where discharge material, overburden, fuel, and equipment are stored shall be designed and established at least 100 vegetated (permeable) feet from the edge of delineated streams.
e) Any contaminated soils or materials shall be disposed of off-site in proper receptacles at an approved disposal facility.
f) All erosion control measures shall be inspected and repaired after each rainfall event that results in overland runoff. The project contractor shall be prepared year-round to deploy and maintain erosion control BMPs associated with the project.
g) Existing culverts shall be carefully maintained in place in order to ensure that they function properly. Considerations include: maintenance of inlet and outlet elevations, grade, adequate compacted material cover, and inlet/outlet protection.

Monitoring and Reporting:

HYD-A Project Plans shall be reviewed and approved by the City Engineer to ensure that these improvements do not interfere with or adversely affect channel capacity or the ability of City to manage and maintain these facilities.
Responsible Parties: Project Design Engineer, City Engineer
Schedule: Prior to finalizing the hydraulic design and engineering plans.

HYD-B The Project shall comply with the requirements of the National Pollution Discharge Elimination System (NPDES).
Responsible Parties: City Engineer, Contractor
Schedule: Prior to and during construction activities.

HYD-C Implement BMPs during construction activities by approved means to avoid or minimize the inadvertent transport by wind or water.
Responsible Parties: City Engineer, Contractor
Schedule: Prior to and during construction activities.

HYD-D Implement City-approved (SWPPP) with specific best management practices (BMPs) as a part of the project will ensure that the project meets the requirements of the California State Water Resources Control Board NPDES Construction General Permit.
Responsible Parties: City Engineer, Contractor
Schedule: Prior to and during construction activities.

HYD-E To prevent petroleum products from contaminating soils and water bodies in the channel, the HYD-5 BMPs shall be implemented.
Responsible Parties: City Engineer, Contractor
Schedule: Prior to and during construction activities.

XI. LAND USE AND PLANNING Would the project:	Potentially Significant Impact	Less Than Significant w/ Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				✓
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				✓

Sources: City of Palm Desert General Plan (2016); Palm Desert Municipal Code.

Setting

From Highway 74 to Heliotrope Drive, the Project site is designated as Open Space on the General Plan land use map. A single parcel, immediately to the east of Heliotrope Drive (APN 630-190-051) is designated as Conventional Suburban Neighborhood. The remaining eastern portion of the site, extending to Portola Avenue, is designated as Golf Course & Resort Neighborhood. This designation allows lower-intensity neighborhood development that features golf course activity, or similar recreational orientation, and limited commercial uses.

The Project site is zoned as Open Space, which is intended for areas reserved for parks, public or private recreation, protection of natural and developed open spaces, governmental public uses, or areas where a hazard to the public may exist.

Discussion of Impacts

a) **No Impact.** The Project proposes the rehabilitation of an existing drainage channel which has been in place for several decades. The channel runs parallel to Haystack Road from Highway 74 in the west to Portola Avenue in the east. The site is lined by existing residential developments on both the north and south sides. A meandering sidewalk runs parallel to the channel on the south side of the site. The Project site, including the sidewalk and the channel area, is used by residents of the adjacent neighborhoods as a public open space for walking and other activities.

The proposed improvements to the Haystack channel would not alter its course, nor would they prevent its use as an open space for the community. It would therefore not physically divide an established community. There would be no impacts.

b) **No Impact.** The Haystack Channel has been in place for decades and with the proposed improvements would continue to conform to the land use and zone designated for the site. The facility, which intercepts north-flowing runoff, is also used as an open green space for public recreation, consistent with the intended uses in the Open Space zone. Its use is consistent with General Plan policies for open space and parks, and is consistent with the greenway/trail park type provided in the plan.

A portion of the channel from Heliotrope Drive to Portola Avenue is designated for Golf Course & Resort Neighborhood use. While the suggested neighborhood and golf course uses do not occur on the subject site, the channel would provide an open space amenity for residents of the golf course neighborhood to the north of the Project. The General Plan parks and open space guidelines for the Golf Course & Resort Neighborhood designation recommend the inclusion of open spaces throughout the neighborhood, including the preservation of natural terrain and features of the desert. The proposed Project would conserve, to the extent practicable, the native desert plants and terrain currently present on the site.

The proposed Project therefore would not conflict with any land use plan, policy, or regulation, nor would it cause any significant environmental impacts as a result. There would be no impact.

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Formally Classified Lands

The proposed Project will occur within an historically disturbed and developed area. Today, the lands surrounding the project site are developed as single-family residences and local streets. None of the lands in the immediate project vicinity are formally classified lands, such as national parks or landmarks, and none are federally administered. Consultation with Native American tribes in the project vicinity is documented in Appendix C of this Initial Study. No direct, indirect, or cumulative impacts to formally classified lands will occur as a result of the proposed Project.

Coastal Management Zone

The Coachella Valley, in which the project is located, is an inland low-elevation desert region and is not in a Coastal Management Zone. The project will not result in environmental consequences to a Coastal Management Zone.

Mitigation Measures: None required.

Monitoring and Reporting: None required.

XII. MINERAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓

Sources: Soils Survey of Riverside County, California, Coachella Valley Area," U.S. Soil Conservation Survey, September 1980; Mineral Land Classification: Aggregate Materials in the Palm Springs Production-Consumption Region, Special Report 159 (Plate 15)," California Department of Conservation, Division of Mines and Geology, 1988; Palm Desert General Plan (2016); City of Palm Desert General Plan Update & University Neighborhood Specific Plan Draft Environmental Impact Report, 2016.

Setting

The California Surface Mining and Reclamation Act of 1975 (SMARA) was adopted to ensure both the preservation of mineral resources and the protection of the environment. Pursuant to SMARA, the state Mining and Geology Board designates mineral resource sectors within geographic areas where significant mineral resources of statewide importance and regional significance are located. The City of Palm Desert is in the Palm Springs Production-Consumption Region and in Mineral Resource Zone 3 (MRZ-3), which is defined as "areas containing known or inferred mineral occurrences of undetermined mineral resource significance."

The California Division of Mines and Geology determines the location of mineral resources of statewide or regional significance. Lands in the City of Palm Desert are located in Mineral Resource Zones 1 and 3 (MRZ-1, MRZ-3). The subject Project is located in MRZ-3 and is approximately 0.22 to 1.14 miles from the nearest point of contact with bedrock, and therefore has relatively shallow soils. Mineral resources in the Coachella Valley are largely limited to sand and gravels, and the lack of a fluvial regime and deposition in the area precludes such resources in the project area. Mining of potentially viable sand and gravel resources is also precluded by existing development.

Discussion of Impacts

a, b) **No Impact.** The entirety of Palm Desert, including the Project site, is in Mineral Resource Zone 3 (MRZ-3). According to the General Plan EIR, the significance of any mineral resource in MRZ-3 is considered speculative because no mining has historically occurred in the area. The Project proposes the rehabilitation of an existing drainage channel, and therefore would not result in the loss of availability of any known mineral resources. The Project site is not designated, used, or planned for mineral resource extraction or development. Therefore, the Project would have no impact on mineral resources.

Mitigation Measures: None required

Monitoring and Reporting: None required

XIII. NOISE Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			✓	
b) Generation of excessive groundborne vibration or groundborne noise levels?			✓	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓

Sources: City of Palm Desert General Plan (2016); Palm Desert Municipal Code; CA/T Equipment Noise Emissions and Acoustical Usage Factors Database, FHWA Roadway Construction Noise Model User's Guide (2006) by U.S. Department of Transportation (accessed June 2023); Caltrans Transportation and Construction Vibration Guidance Manual (September 2013); Federal Transit Administration, Transit Noise and Vibration Impact Assessment (May 2006).

Setting

The primary source of noise in Palm Desert is traffic noise, including from regional highways, such as California State Route 74 and major roadways such as Portola Avenue and Haystack Road, which adjoins the Project site. Other noise generators in the City include construction activities, commercial delivery activities, and landscape maintenance equipment. Residences, schools, libraries, and senior care facilities are considered noise-sensitive receptors. The Project site is located in a quiet residential neighborhood with limited traffic noise. The Bermuda Dunes (Crown Aero) Airport is within the City's sphere of influence, approximately 6.25 miles northeast of the Project site. The Palms Springs International Airport is approximately 9.6 miles from the subject site.

City Noise Standards

The Noise Element in the City's General Plan provides a Noise Compatibility Matrix which defines the acceptable noise level for different land uses in Palm Desert. The "Normally Acceptable" noise level range for single family residential land uses is 50 to 60 dBA CNEL. Chapter 9.24 of the City's Municipal Code provides noise control policies and regulations. According to §9.24.030, the ten-minute average sound level limit in all residential zones is 55 dBA from 7 a.m. to 10 p.m., and 45 dBA from 10 p.m. to 7 a.m. These noise level limits do not include temporary noise generated by construction activities. Pursuant to §9.24.070, construction activities must be limited to the following hours:

Table 7
City of Palm Desert – Permitted Hours for Construction Activity

	October 1st to April 30th	May 1st to September 30th
Monday to Friday	7:00 a.m. to 5:30 p.m.	5:30 a.m. to 7:00 p.m.
Saturday	8:00 a.m. to 5:00 p.m.	8:00 a.m. to 5:00 p.m.
Sunday and holidays	None	None

Source: City of Palm Desert Municipal Code §9.24.070

Discussion of Impacts

a) Less than Significant Impact.

Construction Noise: Project construction will require the use of heavy equipment that would temporarily increase noise levels in the vicinity of the site. Construction noise will be generated as a result of excavation and grading, as well as channel slope and bottom lining. These activities may involve equipment such as utility trucks, graders and excavators, water trucks, compactors, front-end loaders, trenchers, and haul trucks. Table 8 provides reference noise levels at 50 feet associated with construction equipment typical of a project of this nature:

Table 8
Typical Construction Equipment and Associated Noise Levels

Equipment Type	Reference Noise Level at 50 feet (dBA Lmax)
Flat Bed Truck	74.0
Rubber Tired Dozer	82.0
Tractor/Loader/Backhoe	79.0
Excavator	81.0
Grader	85.0
Auger Drill Rig	85.0
Drum Mixer	80.0
Jackhammer	89.0
Vibrator Plate Compactor	104.0

Source: CA/T Equipment Noise Emissions and Acoustical Usage Factors Database, FHWA Roadway Construction Noise Model User's Guide (2006) by U.S. Department of Transportation (accessed June 2023).

Given the Haystack Channel's location in a residential neighborhood, construction activities may exceed the City's noise limit for residential land uses. However, construction-related noise will be temporary, and high noise levels would be intermittent. Moreover, construction activities related to the proposed channel rehabilitation will be subject to the permitted hours pursuant to §9.24.070 of the Municipal Code, and as provided in Table 7, above. Provided the Project adheres to these hours, any construction-related noise temporarily increasing the ambient noise level in the vicinity of the subject site would not be in excess of the standards established in the local general plan or noise ordinance. Impacts would be less than significant.

Operational Noise: Once the proposed channel rehabilitation is complete, the Project site would not be expected to generate substantial noise. While occasional noise associated with maintenance activities is anticipated, these activities would be temporary and periodic. Moreover, maintenance of the channel would be exempt from the City's noise regulations in accordance with §9.24.060 of the Municipal Code, which applies to the operation and maintenance of public works projects. Therefore, operational noise associated with the Haystack Channel would not temporarily or permanently increase ambient noise levels in the vicinity of the Project site in excess of standards established in the local general plan or noise ordinance. There would be no impact.

b) Less than Significant Impact. In addition to noise generation, construction activities associated with the Project are expected to result in groundborne vibration. The City does not have established standards for vibration, including vibration generated by construction equipment. According to the Caltrans Transportation and Construction Vibration Guidance Manual, the threshold for building damage resulting from vibration is 0.3 in/sec peak particle velocity (PPV),[10] and the threshold for human annoyance is 0.01 in/sec PPV. Table 9 shows the vibration levels associated with typical construction equipment at 25 feet.

[10] Vibration damage potential threshold for older residential structures. Fragile and historic buildings may be damaged at lower vibration levels, but do not occur in the Project vicinity.

Table 9
Typical Construction Equipment and Associated Vibration Levels

Equipment Type	PPV (in/sec) at 25 feet
Small Bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large Bulldozer	0.089
Plate Compactor	0.23

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment (May 2006).

As shown in the table above, structures located more than 25 feet from construction operations would not experience groundborne vibration above the Caltrans thresholds. Given that the Haystack Channel is bound by residential streets on the north and south, most construction activities would occur more than 25 feet from any existing structures. While the vibration generated by plate compactors, if used, could exceed the Caltrans threshold for human annoyance, it is expected that most of such construction activity would occur more than 25 feet from occupied buildings. While residents in the immediately vicinity of the Project site may detect groundborne vibration during construction activities, impacts would be temporary and would end once construction is complete. As stated above, construction activities would also be limited by the daytime operations hours provided in §9.24.070 of the City's Municipal Code. Groundborne vibration will not be generated during long-term Project operation. Impacts would therefore be less than significant.

c) **No Impact.** The Project site is not located within the vicinity of a private airstrip or within two miles of a public airport or public use airport. The nearest airports are the Bermuda Dunes and Palms Springs Airports, located approximately 6.25 and 9.6 miles from the subject site, respectively. The Project would thus not expose people residing or working in the area to excessive noise levels related to airport operations. There would be no impact.

Mitigation Measures: None required.

Monitoring and Reporting: None required.

XIV. POPULATION AND HOUSING Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✓

Sources: E-5 City/County Population and Housing Estimates, California Department of Finance, January 1, 2022; 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), Demographics and Growth Forecast Technical Report, Southern California Association of Governments, September 2020.

Setting

The population of the City of Palm Desert was 50,889 as of January 2022. The Southern California Association of Governments (SCAG) projects it will grow to 64,100 by 2045. The housing stock includes 36,058 single-family, multi-family, and mobile home units, the majority of which (39.8%) are single-family detached homes. The average household size in the City is 2.05 persons.[11] The proposed Project is located in a residential neighborhood.

Discussion of Impacts

a) **No Impact.** The Project proposes the rehabilitation of an existing drainage channel which runs parallel to Haystack Road from State Highway 74 to Portola Avenue. No changes to the length or course of the existing Haystack Channel are proposed under the Project. Proposed improvements include the replacement of the existing drain system with infiltration pipe, the installation of underground storage/infiltration chambers at existing storm drains, and the replacement of damaged irrigation. Given that the channel already exists on the site and the nature of the proposed improvements, the proposed Project is not expected to indirectly induce any population growth. Given that no homes or businesses are proposed, the Project would also not directly induce growth. There will be no impacts.

b) **No Impact.** The Project property is occupied by the existing Haystack Channel and the walking path that runs parallel to it. The channel has existed on the subject site for decades. No housing occurs on the site. The Project would not displace any existing people or housing or necessitate replacement housing elsewhere. No impact will occur.

CEQA Plus: Supplemental Analysis

Socio-Economic/Environmental Justice Impacts to Minority or Low-Income Areas

The proposed Project will not result in disproportionate adverse environmental justice, socio-economic, or safety impacts to a minority or low-income population. The construction phase of the Project may result in temporary and short-lived inconveniences for residents, including disruptions due to construction diversions. Construction noise and other temporary impacts will be less than significant and are directed to substantial long-term improvements in the quality of life for current and future residents in this area.

[11] E-5 City/County Population and Housing Estimates, California Department of Finance, January 1, 2022.

This socio-economic segment of the population occupying the project area is generally middle and upper-middle-income. The proposed infrastructure improvements will provide families residing in the community with safe and reliable flood protection. The project, therefore, is expected to result in substantial direct long-term benefit to the local population.

Mitigation Measures: None required.

Monitoring and Reporting: None required.

XV. PUBLIC SERVICES **Would the project result in:** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
Fire protection?			✓	
Police protection?			✓	
Schools?				✓
Parks?			✓	
Other public facilities?			✓	

Sources: City of Palm Desert General Plan, 2016; City of Palm Desert General Plan Update & University Neighborhood Specific Plan Draft Environmental Impact Report, 2016.

Setting

Fire Protection

The City of Palm Desert contracts with the State of California (CalFire) and Riverside County Fire Department (RCFD) for fire protection services. Riverside County Fire Station 67 at 73200 Mesa View Drive in Palm Desert, approximately 2,600 square feet south of the subject site, serves the Project area. This station appears to be within a 5-minute response time. Palm Desert has a total Fire Department staff of 44 positions at the three stations within the City limits. Backup support is available from Station No. 55 in Indian Wells and Stations No.50 and No.69 in Rancho Mirage.

Police Protection

Police protective services are provided by the Palm Desert Police Department (PDPD) under contract with the Riverside County Sheriff Department. The City is served by the sheriff's station located at 73-705 Gerald Ford Drive, approximately 5.8 miles north of the Project site. The PDPD is staffed by 80 sworn deputy officers, 36 of which are dedicated to the patrol division, with the remaining dedicated to special assignments such as the Traffic Division, Special Enforcement Team, Motorcycle Enforcement Unit, K-9 Officer, Business District Team, School Resource Officers, Coachella Valley Violent Crime Gang Task Force, and Narcotics Enforcement. In 2016, when the City's general plan Update EIR was written, Palm Desert has an officer-to-population ratio of 1.4 sworn officers per 1,000 residents. In 2013, the response time to the highest priority calls was within 5.58 minutes.

Schools

Palm Desert is within the jurisdictions of two school districts: Desert Sands Unified School District (DSUSD) and Palm Springs Unified School District (PSUSD). The Project site is within the boundary of the DSUSD. The nearest elementary school is Washington Elementary School on Portola Avenue, approximately 5,000 feet northeast of the Project site.

Parks

The City currently operates and maintains 200 acres of park land in 12 parks. The nearest public park to the Project is the City of Palm Desert Ironwood Park, approximately 250 feet south of the subject site. The Project alignment and lands in the vicinity of Portola Drive are also important open space lands that provide linear multi-modal paths and an expanded and landscape open space area just west of Portola Drive and south of the channel alignment. Access to portions of the adjoining sidewalk and open space areas may be temporarily closed or restricted during construction. Once construction is completed access to the existing paths and sidewalks, and the existing open space areas near Portola Ave will not be significantly impacted by the proposed Project.

Other Public Facilities

Other public facilities in Palm Desert include the Palm Desert Library, Joslyn Center (senior services), City Hall, and other government facilities. None of these facilities will be affected by the proposed Project.

Discussion of Impacts

Fire Protection:

Less Than Significant Impact. The City will require the Project contractor to prepare a Construction Traffic Control Plan to ensure emergency access to the subject site and the surrounding residential neighborhoods is maintained throughout construction. Once rehabilitated is completed, the Haystack Channel will not adversely affect the provision of fire protection in this area of Palm Desert, nor would it result in the need for new or physically altered facilities. The Project will therefore have a less than significant impact on fire protection services.

Police Protection:

Less Than Significant Impact. As stated above, a Construction Traffic Control Plan will be prepared for the Project to ensure that emergency access and generally mobility is maintained in the Project area. The rehabilitation of the existing Haystack Channel will not generate a significant additional demand for policy protection. The Project would therefore have less than significant impacts on police protection.

Schools:

No Impact. The proposed channel rehabilitation does not include any residential units of habitable structures and would not result in a permanent increase in the local population. It would therefore not result in any impacts to school enrollment and would not require the provision of new or additional facilities. The Project will have no impact on schools.

Parks/ Other Public Facilities:

Less Than Significant Impact. The Project would not result in any land development or population increase that could generate long-term demand for parks or other public facilities. As discussed in Section XVI, below, the subject site is used by some residents as a walking trail and open space area. During construction, the site would be closed for public access, which may temporarily increase demand on other parks in the area. However, the disruption in use of the Haystack Channel site would be temporary, and any associated impacts to public parks would be expected to be marginal. Overall, the Project's impacts on public services and facilities are expects to be less than significant.

Mitigation Measures: None required

Monitoring and Reporting: None required

XVI. RECREATION Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			✓	

Sources: City of Palm Desert General Plan, 2016; City of Palm Desert website, accessed March 2023; City of Palm Desert General Plan Update & University Neighborhood Specific Plan Draft Environmental Impact Report, 2016 (SCH 2015081020); Project materials.

Setting

The City maintains and operates over 200 acres of parkland in 12 public parks, two community centers, an aquatic center, and over 25 miles of multi-purpose trails. The City also partners with the Desert Recreation District to provide recreational programs and activities. Other recreational facilities in Palm Desert include a municipally owned golf course and the Family YMCA of the Desert in Civic Center Park. The nearest public park to the Project is the City's Ironwood Park, approximately 250 feet south of the subject site The City boundaries also encompass or is in proximity to numerous public and private golf courses, large open space reserves, the Santa Rosa and San Jacinto Mountains National Monument, and other local and regional recreational resources.

A meandering sidewalk currently runs parallel to the channel along the entire 1.3 miles of the subject site. The Haystack Channel itself is also used as a walking trail and passive open space. Access to portions of the adjoining sidewalk and open space areas may be temporarily closed or restricted during construction. Once construction is completed access to the existing paths and sidewalks, and the existing open space areas near Portola Ave will not be significantly impacted by the proposed Project.

Discussion of Impacts

a, b) **Less Than Significant Impact.** During construction of the Project, all or portions of the channel and the associated sidewalk will temporarily be closed for recreational use. This could temporarily result in a marginal increase in the use of existing parks in the neighborhood. Long-term, however, the rehabilitation of the Haystack Channel is expected to have no impacts on its current use as a greenway. Its rehabilitation will therefore not significantly increase the use of existing neighborhood and regional parks in the long term, and no physical deterioration of such facilities is expected to occur as a result.

During construction on the Project, the existing sidewalk will remain in place, and the loss or relocation of in-channel vegetation will be minimized to the greatest extent practicable. The Project maintains the open space at Portola Ave and does not require the construction or expansion of recreational facilities which might have a significant adverse physical effect on the environment. Impacts will be less than significant.

Mitigation Measures: None required

Monitoring and Reporting: None required

XVII. TRANSPORTATION Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			✓	
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				✓
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				✓
d) Result in inadequate emergency access?				✓

Sources: City of Palm Desert General Plan (2016), City of Palm Desert Municipal Code.

Setting

Haystack Road abuts and runs parallel to the Haystack Channel project area on the south side of the site. According to the City's General Plan, Haystack Road is designated as a Collector Street, which consist of a two-lane undivided roadway. Haystack Road is designated for a Class 2 (Striped Lane) bicycle and golf cart facility (Genera Plan Figure 4.2). The road exists in its fully improved condition, with two lanes of traffic, as well as sidewalks, on-street parking, and striped bicycle lanes on both sides.

Other roadways in the Project vicinity include Calliandra Street and Amir/Marrakesh Drive, which both run parallel to the north side of the channel, as well as Alamo Drive, Heliotrope Drive, and Portola Avenue, which each intersect the Haystack Channel. With the exception of Portola Avenue, these roadways are all designated as Local Streets. South of the channel, Portola Avenue is designated as a Secondary Street, and north of the channel it is designated as a Balanced Arterial. Portola Avenue is also designated as a Class 2 (Striped Lane) bicycle and golf cart facility.

There are no transit routes in the Project vicinity.

The Haystack Channel currently does not generate any traffic, nor would it during future, post-rehabilitation operations. During the proposed channel rehabilitation, temporary traffic associated with construction activities may occur, as well as potential traffic disruptions. The Project staging area is planned for a CVWD-owned parcel located at the northwest corner of the channel and Portola Avenue, adjacent to the eastern portion of the channel project (see Sheet 7 of the Project Plans).

Discussion of Impacts

a) **Less Than Significant Impact.** The streets surrounding the Project site are fully built out, and the channel is bound on the south by existing active transportation facilities, including an on-street bicycle lane and meandering sidewalk. The Project is not expected to affect local intersection and roadway levels of service (LOS). Project traffic will focus on individual channel segments along its length and will terminate once the rehabilitation is completed. This would have a less than significant impact on LOS. The Project will not conflict with the goals and policies in the City General Plan Mobility Element.

Construction of the Project could involve temporary impacts to traffic flow on surrounding roadways. These impacts would be limited in scope and intensity, and would shift along the Project alignment as work is accomplished. Appropriate traffic management and control measures will be followed during construction period, including compliance with the policies provided in Chapter 12.04 of the Municipal Code. For example, permission of the director of public works is require prior to any temporary lane closures or other temporary encroachments on public streets. Adherence with these policies will ensure that the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system. Impacts would be less than significant.

b) **No Impact.** CEQA Guidelines section 15064.3, subdivision (b), which took effect in 2020, requires all lead agencies to adopt vehicle miles traveled (VMT) as a replacement for automobile delay-based level of service (LOS) for analyzing transportation impacts. A limited amount of vehicle trips, and associated VMT, would result from construction of the proposed Project. Upon completion of construction, the proposed channel rehabilitation would not generate VMT. Given that the Project would not generate VMTs during operations, it can be concluded that the channel rehabilitation will not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), and there will be no impacts related to VMT.

c, d) **No Impact.** The channel rehabilitation Project does not propose the construction of new roadways or improvements. It would therefore not result in any hazardous design features including sharp curves, dangerous intersections, or hazardous geometric features. Nor would any changes be made to the existing roadways in the area such that emergency access would be impeded. The Project will not generate vehicle trips during operations and, therefore, no hazards would result from incompatible uses.

As previously stated, appropriate traffic management and control measures will be followed during construction period, including compliance with the policies provided in Chapter 12.04 of the Municipal Code. This will ensure that no hazards result due to road conditions during construction of the proposed channel rehabilitation, including when construction equipment enters and leaves the site. Any construction activities that could temporarily disrupt circulation on surrounding roadways, including emergency access or evacuation, must be coordinated with the City. Overall, the Project will not increase hazards or result in inadequate emergency access, and impacts will be less than significant.

Mitigation Measures: None required.

Monitoring and Reporting: None required.

XVIII. TRIBAL CULTURAL RESOURCES a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	**Potentially Significant Impact**	**Less Than Significant with Mitigation**	**Less Than Significant Impact**	**No Impact**
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or		✓		
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		✓		

Sources: Identification and Evaluation of Historic Properties, Haystack Channel Rehabilitation Project, CRM TECH, July 16, 2023; City of Palm Desert Draft EIR Technical Background Report, August 27, 2015.

Setting

As discussed in Section V, Cultural Resources, the Coachella Valley is the traditional home of the Cahuilla people. Anthropologists generally divide the Cahuilla into three groups based on their geographic setting: the Pass Cahuilla of the San Gorgonio Pass-Palm Springs area, the Mountain Cahuilla of the San Jacinto and Santa Rose Mountains and the Cahuilla Valley, and the Desert Cahuilla of the eastern Coachella Valley.

Today, Native Americans of Pass or Desert Cahuilla heritage are mostly affiliated with one or more of the reservations in and near the Coachella Valley, including Agua Caliente, Morongo, Cabazon, Torres Martinez, and Augustine.

Tribal Cultural Resources

CEQA defines tribal cultural resources as a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is included on a local register of historical resources (PRC §5020.1(k)), or that is listed as a historical resource in the California Register (PRC §5024.1(c)).

The following discussion of impacts is primarily based on the findings of the cultural resources study conducted for the Project by CRM TECH in July, 2023 (see Appendix C of this IS/MND).

Discussion of Impacts

a. i, ii) Less Than Significant with Mitigation. As stated in Section V, Cultural Resources, the records search at the EIC found that the Project's area of potential effects (APE) had not been previously surveyed for cultural resources, and no cultural resources had been recorded within or adjacent to the APE. The field survey also did not find any potential cultural resources, including buildings, structures, objects, sites, features or artifacts. Furthermore, given the disturbance of sediments in the channel, and the distribution of known prehistoric resources identified by the records search, the geoarchaeological analysis concluded that the archaeological sensitivity of the vertical (subsurface) APE is relatively low.

The State of California Native American Heritage Commission (NAHC) conducted a search of the Sacred Lands File at the request of CRM TECH on February 8, 2023. The results of the Sacred Lands File search were negative.

CRM TECH contacted the nearby Agua Caliente Band of Cahuilla Indian, as well as representatives of ten other tribes in the region, for input: Agua Caliente Band of Cahuilla Indians, Augustine Band of Cahuilla Mission Indians, Cabazon Band of Mission Indians, Cahuilla Band of Indians, Los Coyotes Band of Cahuilla and Cupeño Indians, Morongo Band of Mission Indians, Quechan Tribe of the Fort Yuma Reservation, Ramona Band of Cahuilla Indians, Santa Rosa Band of Cahuilla Indians, Soboba Band of Luiseño Indians, and the Torres-Martinez Desert Cahuilla Indians.

The Augustine Band requested notification if any resources are discovered during the Project. The Santa Rosa Band had no comments regarding the Project. The Quechan Tribe, Cahuilla Band, and the Soboba Band deferred to Native American groups closer in proximity to the Project site. The Agua Caliente Band, the nearest Native American group to the Project site, requested copies of all cultural resource documentation generated for the Project. The Agua Caliente were also invited to participate in the field survey of the APE but were unable to attend.

Assembly Bill 52 (AB 52)
Consistent with the requirements of AB 52, the City conducted Tribal Consultation. This consultation included outreach to the Cabazon Band of Mission Indians, the Soboba Band of Luiseno Indians, the Torres-Martinez Desert Cahuilla Indians, and the Twenty-Nine Palms Band of Missions Indians. There were no responses within the 30-day period within which to request consultation.

Summary of Impacts
Overall, none of the sources consulted during the cultural resources survey found evidence of resources occurring within the Project's APE, including tribal cultural resources. In the event that buried cultural materials are discovered during earth-moving operations associated with the proposed channel rehabilitation, all work in the immediate area shall be halted or divert until a qualified archaeologist can evaluate the find (**CUL-1**). With implementation of this mitigation measure, it can be concluded that the Project would not cause a substantial adverse change in the significance of a tribal cultural resources. Impacts will be less than significant with mitigation.

Mitigation Measures:
See Section V, Cultural Resources.

Monitoring and Reporting:
See Section V, Cultural Resources.

XIX. UTILITIES AND SERVICE SYSTEMS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			✓	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				✓
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				✓
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			✓	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				✓

Sources: County of Riverside Integrated Waste Management Plan (1996). CalRecycle Solid Waste Information System (SWIS) https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/5189?siteID=4186 (accessed June 2023); Project Rehabilitation Plans prepared by ERSC, February 2023.

Setting

Domestic Water

The Project site is within the Coachella Valley Waste District (CVWD) service area for domestic water. CVWD has a 12-inch water line that lies beneath and passes perpendicular to the east segment of the channel. The primary water source for domestic water is groundwater extracted through a system of wells from the Whitewater River subbasin. CVWD is responsible, under the California Water Code, for analyzing its current and future water supply and assuring that sufficient supply is available to serve land uses within the District, through the preparation of an Urban Water Management Plan (UWMP).

Wastewater Treatment

CVWD provides sewer service to the City of Palm Desert, including the Project area. Effluent from the City is conveyed to CVWD's Cook Street treatment plant (Water Reclamation Plant No. 10).

Stormwater Management
CVWD is responsible for regional drainages in the City, while the City is responsible for and maintains smaller drainages such as the subject Haystack Channel. There are five stormwater channels in Palm Desert: Whitewater River Stormwater Channel and its tributaries, including Dead Indian Creek, the Deep Canyon Channel, the Palm Valley System, and the East Magnesia Channel. The Haystack Channel was constructed to intercept north-flowing tributary flows, including those delivered by sub-drainage areas and facilities, and flows crossing Haystack Road, and to convey them to the Portola Avenue culvert and into a series of golf course drainage system systems farther east. These flows ultimately make their way to the Whitewater River Stormwater Channel, approximately 1,400 feet west of Washington Street.

Electric Power and Natural Gas
Southern California Edison (SCE) provides electrical services to the Project area. Many neighborhoods were developed prior to the undergrounding of electric facilities and have overhead power lines. An existing overhead power line occurs on and crosses perpendicular to the Project site and at least one pole will require relocation out of the channel.

Natural gas is provided by the Southern California Gas Company (SoCalGas or SCG). SCG has both 2-inch and 3-inch distribution lines that cross and lie perpendicular to the channel, being carried across the channel bridge crossings.

Solid Waste
Burrtec Waste and Recycling Services, LLC (Burrtec) provides solid waste disposal to the City through a franchise agreement. Non-hazardous household, commercial, and most nonhazardous industrial solid waste collected is taken to the Edom Hill Transfer Station, which is permitted to receive 3,500 tons of waste per day. From there, solid waste is transported to the Lamb Canyon regional landfill, which is operated by the County of Riverside and had a remaining capacity of 19,242,950 cubic yards as of 2015 (latest available data as of June, 2023).

Discussion of Impacts

a-c) Less than Significant Impact.

Water
The proposed channel rehabilitation project will not generate any long-term water demand and Project water demand will be limited to that needed for site watering, hydroconsolidation and other construction purposes. Potholing will be conducted prior to finalization of the channel rehabilitation plans to ensure that water lies are protected in place. There will therefore be less than significant impacts on the local water supplier's ability to serve reasonably foreseeable future development during normal, dry, and multiple dry years.

The Project will not require a new connection to existing domestic water lines, nor will it otherwise require or result in the relocation or construction of new or expanded water facilities. Construction water is expected to be accessed from nearby fire hydrants. No environmental significant impacts to facilities or supplies will occur as a result.

Wastewater
The rehabilitation of the Haystack drainage channel will not generate any wastewater. It therefore will not require the relocation or construction of new or expanded wastewater treatment facilities, nor will it impact the available capacity of any wastewater treatment plants. There will be no impacts related to wastewater.

Stormwater Drainage

The Project proposes the rehabilitation of the existing Haystack Channel. It will therefore involve construction on the existing drainage facility. The Project will not involve any significant extensions or expansions of the channel, only improvements to the existing facilities. Impacts will therefore be limited to the subject site, which has previously been disturbed during the construction of the existing channel. As detailed in this Initial Study, no significant adverse effects will occur to the existing drainage facility as a result of the proposed channel rehabilitation. Impacts will therefore be less than significant.

Electricity

The proposed Project will require the relocation or elimination of an existing South California Edison power pole. The currently encroaching power pole does not appear to be necessary, as it occurs a short distance (approximately 33 feet) from a pole farther south. The current power line alignment is expected to be used by SCE.

Natural Gas

The Project will not use natural gas during construction or operations, nor will it require the relocation or construction of new or expanded natural gas facilities. There will be no impacts related to natural gas.

Telecommunications

The Project will not require the relocation or construction of new or expanded telecommunications facilities. However, poles carrying communication lines on the above referenced SCE power pole will be affected by the relocation or elimination on one pole. The effects of reconfiguring of SCE power poles, and the associated communication lines will be less than significant.

d, e) **Less than Significant Impact.** The proposed channel rehabilitation project will not generate solid waste during long-term operations. During construction of the proposed channel improvements, some construction-related waste may be generated, including concrete and wood framing, both of which are recyclable. The generation of this waste would be limited and temporary, and would not exceed any State or local standards, nor would it be in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. All construction debris must be disposed of in accordance with local and state requirements, including those provided in the County of Riverside Integrate Waste Management Plan. Impacts will be less than significant.

Mitigation Measures: None required

Monitoring and Reporting: None required

XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			✓	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			✓	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			✓	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			✓	

Sources: City of Palm Desert General Plan, 2016; Project materials; Google Earth Pro 7.3.3.7786; Fire Hazard Severity Map, CalFire, https://egis.fire.ca.gov/FHSZ/, accessed March 2022; Project Rehabilitation Plans prepared by ERSC, February 2023.

Setting

Wildfires can occur in undeveloped areas and spread to urban areas. The California Department of Forestry and Fire Protection (CalFire) has mapped areas of significant fire hazards in the state through its Fire and Resources Assessment Program (FRAP). These maps identify fire hazard severity zones (FHSZ) based on a hazard scoring system using subjective criteria for fuels, fire history, terrain influences, housing density, and occurrence of severe weather where urban conflagration could occur.

While the southernmost portions of Palm Desert border areas susceptible to the risk of wildland fires, the Project site is within a developed area. The subject property is designated as a local responsibility area (LRA) and is located approximately 1.3 miles from the nearest area as a very high fire hazard severity zone (VHFHSZ).

Discussion of Impacts

a-d) **Less Than Significant Impacts.** As noted in Section IX.f) above, the City's Local Hazard Mitigation Plan (LHMP) includes priority actions to mitigate hazards, as well as actions to coordinate plans and resources in the event of an emergency. The proposed Project would not impair or interfere with an adopted emergency response or evacuation plan. According to the City's General Plan, key evacuation routes in the city include Monterey Avenue, Portola Avenue, Cook Street, and Washington Street.

While construction activities associated with the Project would involve temporary impacts to Haystack Road or Calliandra Street, neither of these streets are considered key evacuation routes. Furthermore, the construction would be temporary, and a construction access plan will be required by the City to assure the Project does not interfere with emergency access during construction. Overall, impacts will be less than significant.

The subject site is a Local Responsibility Area and is more than a mile from the nearest VHFHSZ. The Project proposes the rehabilitation of a drainage channel and will not involve any residential buildings or other occupied structures. There will be no occupants potentially at risk of wildfire hazard. The channel will generally maintain the existing drainage pattern, and therefore would not be expected to expose people or structures to significant risks as a result of drainage changes. Impacts will be less than significant.

Mitigation Measures: None required

Monitoring and Reporting: None required

XXI. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		✓		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			✓	
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?		✓		

a) Less than Significant with Mitigation.

Biological Resources:

As discussed in Section IV above, a biological resources assessment was conducted for the Project and adjacent lands, which are comprised primarily of residential development to the north and south and local streets. The eastern edge of the channel is adjacent the Living Desert Zoo and Gardens located on the east side of Portola Avenue. The western section of the Project area contains an engineered swale which is covered in maintained turf grass and lined buy landscaping trees. The swale has some concrete structures which collect nuisance waters from irrigation runoff and stormwater. The section of the channel east of Heliotrope Drive is an engineered sandy, natural bottom channel with a mix of native and non-native vegetation.

No special status or sensitive plant or animal species were found or suspected on occupying the Project site or vicinity. As previously noted, the subject lands and the City are located within the development impact mitigation fee area of the Coachella Valley MSHCP. Mitigation Measure BIO-1 requires the conducting of pre-construction nesting bird surveys if construction is planned during the February 1 through August 31 nest season.

While neither burrowing owl nor their sign were identified during site surveys, Mitigation Measure BIO-2 requires that a burrowing owl habitat assessment be conducted no less than 60 days prior to the Project's start to further ensure that the owl is not impacted by the Project. Also included is BIO-3, which requires a

bat survey be conducted during sensitive times of the year. And Mitigation Measure BIO-4 requires that any post-construction landscaping use plant materials approved by the Coachella Valley MSHCP.

Therefore, the Project will not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal.

Cultural Resources:
As discussed in detail in Section V of this IS/MND, the Project site is not expected to harbor either sensitive cultural or historic resources. Mitigation Measure CUL-1 requires that if potential resources are identified during site disturbance, work shall be halted in that area and a qualified professional will be called in to evaluate and, if necessary, mitigate the find prior to continued work at that location. Therefore, the Project is not expected to eliminate or significantly impact important examples of the major periods of California history or prehistory.

b) Less than Significant Impact.

The Project is not expected to result in any impacts that are or may be considered to be cumulatively considerable. The Project is limited to the rehabilitation of an existing and long-established stormwater channel located within an urbanized portion of the City. Once rehabilitation work has been completed, the channel and vicinity will be left essentially in the same condition as it was before the Project is implemented. No cumulatively considerable impacts are expected to result from implementation of the Project.

c) Less than Significant with Mitigation.

There is a limited and less than significant risk that implementation of the proposed Project will result in or cause substantial adverse effects on human beings, either directly or indirectly. The rehabilitation project will re-establish full channel capacity and will stabilize those portions of the channel that are currently susceptible to scour and erosion. Construction will be conducted under the supervision of the City and is not expected to adversely impact local residents or the traveling public.

Appendix A

CalEEMOD Air Quality and GHG Modeling

(Available on City website)

Appendix B

Biological Resources Assessment Report

(Available on City website)

Appendix C

Cultural Resources Survey

"Reviewers wishing to review this report must contact the Project CEQA Planner, Nick Melloni at the following email address: nmelloni@palmdesert.gov".

Only qualified professionals can be provided a copy of this report."

Appendix D

Technical Memorandum and Channel Improvement Plans

(Available on City website)

CITY OF PALM DESERT

73-510 FRED WARING DRIVE

PALM DESERT, CA 92260

CITY OF PALM DESERT
NOTICE OF INTENT
TO ADOPT A MITIGATED NEGATIVE DECLARATION
Haystack Stormwater Channel Rehabilitation Project
Project No. CDR00003

LEAD AGENCY: City of Palm Desert
73510 Fred Waring Drive
Palm Desert, CA 92260

CONTACT PERSON: Nick Melloni,
Development Services Department
(760) 346-0611

PROJECT TITLE: Haystack Stormwater Channel Rehabilitation Project

PROJECT LOCATION: East of State Highway 74, west of Portola Avenue, immediately north of Haystack Road.
APNs: 630-025-050 & 052; 630-190- 051 & 054; 628-290-013
Portion of the SE ¼ of Section 30, portion of S ½ of Section 29, Township 5 South, Range 6 East, San Bernardino Baseline and Meridian

PROJECT DESCRIPTION: The Haystack Channel has been in place for several decades and was constructed to intercept north-flowing tributary flows crossing Haystack Road and to convey them to the Portola Avenue culvert and into a series of golf course drainage system systems farther east. The Project proposes approximately one mile of improvements to rehabilitate the portion of the channel extending from Alamo Drive eastward to the Portola Avenue culvert. These improvements are intended to capture and convey nuisance water to drains located between Alamo Drive and Heliotrope Drive, to optimize the hydraulic capacity of the culverts crossing under Alamo Drive, Heliotrope Drive, and Portola Avenue, as well to remediate diminished channel capacity and protect storm drain outlets east of Heliotrope Drive.

FINDINGS/DETERMINATION: In accordance with the California Environmental Quality Act (CEQA), the City has conducted an Initial Study for this Project which analyzes the potential impacts it may have on the environment. The result of this study shows that any potentially significant impacts of the Project on the environment be mitigated to a less-than-significant level and a draft Mitigated Negative Declaration has been prepared for this Project.

PUBLIC REVIEW PERIOD: A 30-day public review period for the Draft Mitigated Negative Declaration will commence at 8:00 a.m. on September 25, 2023, and end on October 24, 2023, at 5:00 p.m. for interested individuals and public agencies to submit written comments on the document. Any written comments on the Mitigated Negative Declaration must be received at the above address within the public review period. In addition, you may email comments to the following address: nmelloni@palmdesert.gov. Copies of the Mitigated Negative Declaration and Initial Study are available for review at the above address and on the City's website at https://www.palmdesert.gov/departments/planning/projects.

PUBLIC MEETING: This matter has been tentatively set for public hearing before the Palm Desert City Council on October 26, 2023, at 4:00 p.m. in the Council Chamber at 73510 Fred Waring Drive, Palm Desert.

State of California - Department of Fish and Wildlife

2023 ENVIRONMENTAL DOCUMENT FILING FEE CASH RECEIPT

DFW 753.5a (REV. 01/01/23) Previously DFG 753.5a

RECEIPT NUMBER: 23-265534

STATE CLEARINGHOUSE NUMBER *(If applicable)*

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY.

LEAD AGENCY	LEAD AGENCY EMAIL	DATE
CITY OF PALM DESERT	NMELLONI@PALMDESERT.GOV	09/22/2023

COUNTY/STATE AGENCY OF FILING	DOCUMENT NUMBER
RIVERSIDE	E-202301007

PROJECT TITLE

HAYSTACK STORMWATER CHANNEL REHABILITATION PROJECT

PROJECT APPLICANT NAME	PROJECT APPLICANT EMAIL	PHONE NUMBER
CITY OF PALM DESERT	NMELLONI@PAMDESERT.GOV	(760) 346-0611

PROJECT APPLICANT ADDRESS	CITY	STATE	ZIP CODE
73510 FRED WARING DRIVE,	PALM DESERT	CA	92260

PROJECT APPLICANT *(Check appropriate box)*

☒ Local Public Agency ☐ School District ☐ Other Special District ☐ State Agency ☐ Private Entity

CHECK APPLICABLE FEES:

☐ Environmental Impact Report (EIR)	$3,839.25	$
☐ Mitigated/Negative Declaration (MND)(ND)	$2,764.00	$
☐ Certified Regulatory Program (CRP) document - payment due directly to CDFW	$1,305.25	$
☐ Exempt from fee		
☐ Notice of Exemption (attach)		
☐ CDFW No Effect Determination (attach)		
☐ Fee previously paid (attach previously issued cash receipt copy)		
☐ Water Right Application or Petition Fee (State Water Resources Control Board only)	$850.00	$
☐ County documentary handling fee		$ $0.00
☐ Other		$

PAYMENT METHOD:

☐ Cash ☐ Credit ☐ Check ☒ Other **TOTAL RECEIVED** $ $0.00

SIGNATURE	AGENCY OF FILING PRINTED NAME AND TITLE
X J Rodriguez	Deputy Irma Rodriguez

ORIGINAL - PROJECT APPLICANT COPY - CDFW/ASB COPY - LEAD AGENCY COPY - COUNTY CLERK DFW 753.5a (Rev. 01/01/2023)

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

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

October 23, 2023
Sent via email

Nick Melloni
Principal Planner
City of Palm Desert
73-510 Fred Waring Drive
Palm Desert, CA 92260

Haystack Stormwater Channel Rehabilitation Project (PROJECT)
Mitigated Negative Declaration (MND)
SCH# 2023090542

Dear Nick Melloni:

The California Department of Fish and Wildlife (CDFW) received a Mitigated Negative Declaration (MND) from the City of Palm Desert (City) for the Project pursuant to 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.

[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.

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.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

Proponent: City of Palm Desert

Objective: The Project proposes the reconstruction of a flood control channel and ephemeral wash. The subject facility provides an outlet for a drainage area defined by Highway 74 and extending as far south as Indian Hills Way, Andreas Canyon Drive, Carriage Trail, and Irontree Drive, and as far east as Portola Road. For the portion of the Project between Alamo Road and Heliotrope Drive, the existing nuisance water drain system located under the channel invert (centerline) will be removed and replaced with four underground 48-in diameter infiltration pipes and gravel beds with manhole access into each. The Project will also install underground chambers at each of the four storm drain outlets within this reach of the channel. Damaged irrigation will be removed and replaced. Disturbed portions of the grass-lined channel will be restored. For the portion of the Project site east of Heliotrope Drive and west of Portola Avenue, the channel side slopes in this reach will be regraded and shaped, and will be lined with rip-rap to a height of approximately 8 feet above the channel bed. A sub-grade side slope rip-rap cut-off wall will extend slope protection approximately 8 feet below the channel bed elevation. A riprap energy dissipater will be installed downstream (east) of the culverts under Heliotrope Drive. Also, the Project will relocate Southern California Edison poles and overhead lines currently located approximately 140 feet east of Heliotrope Drive crossing the channel. Throughout the Project area, existing trees and shrubs will be avoided to the greatest extent practicable; however, some loss or relocation of in-channel vegetation is expected.

The Project proposes multiple points of access during construction, including along Portola Avenue and an existing access road located on the north side of the channel. Access will also be taken from within the channel and occasionally along the south side of the channel. Construction staging is planned on a City-owned parcel (APN 630-200-021) located at the eastern reach of the channel, approximately 225 feet north of the intersection of Haystack Road and Portola Avenue, and immediately south of Marrakesh Drive.

Location: The proposed Project is located east of State Highway 74, west of Portola Avenue, and immediately north of Haystack Road. APNs: 630-025-050 & 052; 630-190-051 & 054; 628-290-013. Portion of the SE ¼ of Section 30, portion of S1/2 of Section 29, Township 5 South, Range 6 East, San Bernardino Baseline and Meridian. Project segment extends from State Highway 74 on the west to Portola Avenue on the east. The sub-segment planned for improvements extends from just west of Alamo Drive eastward to the Portola Avenue culvert.

Timeframe: The MND indicates that construction is expected to take approximately 9 months.

COMMENTS AND RECOMMENDATIONS

CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (i.e., biological resources). 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. The MND has not adequately identified and disclosed the Project's impacts (i.e., direct, indirect, and cumulative) on biological resources and whether those impacts are reduced to less than significant.

CDFW's comments and recommendations on the MND are explained in greater detail below and summarized here. CDFW is concerned that the MND does not adequately identify or mitigate the Project's significant, or potentially significant, impacts to biological resources. CDFW also concludes that the MND lacks sufficient information to facilitate a meaningful review by CDFW, including a complete and accurate description of the existing environmental setting. CDFW requests that additional information and analyses be added to a revised MND, along with avoidance, minimization, and mitigation measures that avoid or reduce impacts to less than significant.

Existing Environmental Setting

Compliance with CEQA is predicated on a complete and accurate description of the environmental setting that may be affected by the proposed Project. CDFW is concerned that the assessment of the existing environmental setting has not been adequately analyzed in the MND. CDFW is concerned that without a complete and accurate description of the existing environmental setting, the MND likely provides an incomplete or inaccurate analysis of Project-related environmental impacts and whether those impacts have been mitigated to a level that is less than significant.

The MND lacks a discussion of the methods used for and findings from a habitat assessment and surveys for burrowing owl. In addition, the biological assessment for

the MND does not appear to have included analysis of potential direct and indirect impacts of the Project on bat species. To conduct a meaningful review and provide biological expertise on how to protect fish and wildlife resources, CDFW requires a complete and accurate description of the environmental setting.

Mitigation Measures

CEQA requires that an MND include mitigation measures to avoid or reduce significant impacts. CDFW is concerned that the mitigation measures proposed in the MND are not adequate to avoid or reduce impacts to biological resources to below a level of significance. To support the City in ensuring that Project impacts to biological resources are reduced to less than significant, CDFW recommends adding mitigation measures for burrowing owls, bats, Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) compliance, and CDFW's Lake and Streambed Alteration Program, as well as replacing the mitigation, monitoring, and reporting measures for nesting birds.

1) Nesting Birds

It is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Fish and Game Code sections 3503, 3503.5, and 3513 afford protective measures as follows: section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by Fish and Game Code or any regulation made pursuant thereto. Fish and Game Code section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by Fish and Game Code or any regulation adopted pursuant thereto. Fish and Game Code section 3513 makes it unlawful to take or possess any migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 703 et seq.).

Both the western and eastern sections of the Project site contain trees and shrubs that provide suitable habitat for nesting birds. Page 22 of the MND indicates that the western section of the project area consists of a vegetated swale with grass turf and landscaping including Kurrajong (*Brachychiton populneus*), unknown pine (*Pinus sp.*), African sumac (*Searsia lancea*), olive (*Olea europaea*), Lantana (*Lantana camara*), Spanish bayonet (*Yucca baccata*), Bermuda grass (*Cynodon dactylon*), and annual bluegrass (*Poa annua*). […] The eastern portion of the project, east of Heliotrope Drive, contains an engineered sand channel with mostly native vegetation. The classification of the wash vegetation is smoke tree wash. The dominant shrub within the wash is smoke tree (*Psorothamnus spinosus*). Other native scrubs included burrobrush (*Ambrosia salsola*), sweetbush (*Bebbia juncea*), brittlebush (*Encelia farinosa*), and creosote bush (*Larrea tridentata*)." Page 3 of the MND indicates that "existing trees and shrubs will be avoided

to the greatest extent practicable, however, some loss or relocation of in-channel vegetation is expected."

The MND includes Mitigation Measure BIO-1 for nesting birds, which indicates that "if ground disturbance or tree or plant removal is proposed between February 1st and August 31st, a qualified biologist shall conduct a nesting bird survey within 7 to 10 days of initiation of grading onsite, focusing on MBTA covered species, including burrowing owl. If active nests are reported, then species-specific measures shall be prepared. At a minimum, grading in the vicinity of a nest shall be postponed until the young birds have fledged. For construction that occurs between September 1st and January 31st, no preconstruction nesting bird survey is required. In the event active nests are found, exclusionary fencing shall be placed around the nests until such time as nestlings have fledged." Conducting work outside the peak nesting season is an important avoidance and minimization measure; however, CDFW recommends the completion of nesting bird surveys *regardless* of the time of year to ensure compliance with all applicable laws pertaining to nesting and migratory birds. The timing of the nesting season varies greatly depending on several factors, such as bird species, weather conditions in any given year, and long-term climate changes (e.g., drought, warming, etc.). In response to warming, birds have been reported to breed earlier, thereby reducing temperatures that nests are exposed to during breeding and tracking shifts in availability of resources (Socolar et al., 2017[2]). CDFW staff have observed that climate change conditions may result in the nesting bird season occurring earlier and later in the year than historical nesting season dates. CDFW recommends that disturbance of occupied nests of migratory birds and raptors within the Project site and surrounding area be avoided **any time birds are nesting on-site.** CDFW considers the Mitigation Measure BIO-1 and Monitoring and Reporting Measure BIO-A to be insufficient in scope and timing to reduce impacts to nesting birds to less than significant. CDFW recommends the City replace Mitigation Measure BIO-1 and Monitoring and Reporting Measure BIO-A with the following measure:

Mitigation Measure BIO-1: Nesting Birds

Regardless of the time of year, nesting bird surveys shall be performed by a qualified avian biologist no more than 3 days prior to vegetation removal or ground-disturbing activities. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified avian biologist will make every effort to avoid potential nest

[2] Socolar JB, Epanchin PN, Beissinger SR and Tingley MW (2017). Phenological shifts conserve thermal niches. Proceedings of the National Academy of Sciences 114(49): 12976-12981.

predation as a result of survey and monitoring efforts. If active nests are found during the pre-construction nesting bird surveys, a qualified biologist shall establish an appropriate nest buffer to be marked on the ground. Nest buffers are species specific and shall be at least 300 feet for passerines and 500 feet for raptors. A smaller or larger buffer may be determined by the qualified biologist familiar with the nesting phenology of the nesting species and based on nest and buffer monitoring results. Established buffers shall remain on site until a qualified biologist determines the young have fledged or the nest is no longer active. Active nests and adequacy of the established buffer distance shall be monitored daily by the qualified biologist until the qualified biologist has determined the young have fledged or the Project has been completed. The qualified biologist has the authority to stop work if nesting pairs exhibit signs of disturbance.

Pursuant to the CEQA Guidelines, section 15097(f), CDFW has prepared a draft mitigation monitoring and reporting program (MMRP) for revised MM BIO-1, as well as CDFW-recommended MM-BIO [A] and MM-BIO [B].

2) Burrowing Owl

Burrowing owl (*Athene cunicularia*) is a California Species of Special Concern. Take of individual burrowing owls and their nests is defined by Fish and Game Code section 86, and prohibited by sections 3503, 3503.5, and 3513. Fish and Game Code section 3513 makes it unlawful to take or possess any migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 703 et seq.). 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."

Page 20 of the Project's Biological Resources Assessment & Coachella Valley Multiple Species Habitat Conservation Plan Compliance Report (Biological Assessment) indicates that "no burrows suitable for burrowing owl use were observed on or adjacent to the project site. Where accessible, adjacent vacant lands were surveyed within 500 feet of the site. No burrowing owls, their sign, or burrows capable of supporting owls were observed in this buffer area." The Biological Assessment lacks a discussion of the habitat assessment and or survey methods for burrowing owl used during the field assessment on March 8, 2023—i.e., if a habitat assessment and survey methods were

consistent with the 2012 *Staff Report on Burrowing Owl Mitigation*[3]. Appendix B of the Project's Biological Assessment indicates that wildlife observed within the Project site includes California ground squirrel (*Otospermophilus beecheyi*), which live in underground burrows. In California, California ground squirrel burrows are frequently used by burrowing owls[4]. Additionally, in Coachella Valley CDFW staff have observed burrowing owls occupying areas with levees, berms, dikes and similar features, some of which are present within the Project site. Given these reasons, the Project site likely contains suitable habitat for burrowing owls. Give the lack of details in the MND on the methods used to conduct a habitat assessment and surveys for burrowing owl, CDFW is unable to conduct a meaningful review of the Project's potential impacts on biological resources. Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. CDFW recommends the MND is revised to include the findings of a recent habitat assessment and focused surveys, and impact assessment if surveys confirm occupied burrowing owl habitat within the Project site or surrounding area, per the guidelines provided in the 2012 *Staff Report on Burrowing Owl Mitigation*.

To support the City in reducing impacts to burrowing owl to less than significant, CDFW recommends that the City add Mitigation Measure BIO-[A] to a revised MND.

Mitigation Measure BIO-[A]: Burrowing Owl Avoidance

No less than 60 days prior to the start of Project-related activities, a burrowing owl habitat assessment shall be conducted by a qualified biologist according to the specifications of the *Staff Report on Burrowing Owl Mitigation* (Department of Fish and Game, March 2012 or most recent version).

If the habitat assessment demonstrates suitable burrowing owl habitat, then focused burrowing owl surveys shall be conducted by a qualified biologist according to the *Staff Report on Burrowing Owl Mitigation*. If burrowing owls are detected during the focused surveys, the qualified biologist and Project proponent shall prepare a Burrowing Owl Plan that shall be submitted to CDFW for review and approval prior to commencing Project activities. The Burrowing Owl Plan shall describe proposed avoidance, minimization, mitigation, and

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[3] California Department of Fish and Game (CDFG). 2012. Staff Report on Burrowing Owl Mitigation. State of California, Natural Resources Agency. Available for download at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843

[4] Ronan, N. A. 2002. Habitat selection, reproductive success, and site fidelity of burrowing owls in a grassland ecosystem. Thesis, Oregon State University, Corvallis, Oregon, USA.

monitoring actions. The Burrowing Owl Plan shall include the number and location of occupied burrow sites, acres of burrowing owl habitat that will be impacted, details of site monitoring, and details on proposed buffers and other avoidance measures if avoidance is proposed. If impacts to occupied burrowing owl habitat or burrow cannot be avoided, the Burrowing Owl Plan shall also describe minimization and relocation actions that will be implemented. Proposed implementation of burrow exclusion and closure should only be considered as a last resort, after all other options have been evaluated as exclusion is not in itself an avoidance, minimization, or mitigation method and has the possibility to result in take. If impacts to occupied burrows cannot be avoided, information shall be provided regarding adjacent or nearby suitable habitat available to owls along with proposed relocation actions. The Project proponent shall implement the Burrowing Owl Plan following CDFW and USFWS review and approval.

Preconstruction burrowing owl surveys shall be conducted no less than 14 days prior to the start of Project-related activities and within 24 hours prior to ground disturbance, in accordance with the *Staff Report on Burrowing Owl Mitigation* (2012 or most recent version). Preconstruction surveys should be performed by a qualified biologist following the recommendations and guidelines provided in the *Staff Report on Burrowing Owl Mitigation*. If the preconstruction surveys confirm occupied burrowing owl habitat, Project activities shall be immediately halted. The qualified biologist shall coordinate with CDFW and prepare a Burrowing Owl Plan that shall be submitted to CDFW and USFWS for review and approval prior to commencing Project activities.

3) Bats

The biological assessment for the MND does not appear to include analysis of bat species in the Project area or potential direct and indirect impacts to bat species resulting from Project activities. The California Natural Diversity Database (CNDDB)/Biogeographic Information and Observation System (BIOS) indicates potential for western yellow bat (*Lasiurus xanthinus*) to occur in the Project area. In addition, page 22 of the MND indicates that California fan palm (*Washingtonia filifera*) occurs on the Project site. Western yellow bats are strongly associated with native California fan palm (*Washingtonia fillifera*)[5] and Mexican fan palm (*Washingtonia robusta*)[7] in Coachella Valley. In California, western yellow bats appear to roost exclusively in the skirt of dead fronds of both native and non-native palm trees and

[5] Stokes, D., M. Combs, and K.B. Clark. 2023. Surveys for Western Yellow Bat in the Coachella Valley. 2022. Annual Report. February 8, 2023

appear to be limited in their distribution by availability of palm habitat.[6] Western yellow bats likely form small maternity groups in palm trees.[7] Some individuals or populations may be migratory, although some individuals appear to be present year-round, even in the northernmost portion of the range including southern California.

CDFW recommends that a revised MND include analysis of potential direct and indirect impacts to western yellow bat and other bat species from Project activities. To ensure that impacts are reduced to a level that is less than significant, CDFW also recommends inclusion of the following mitigation measure in a revised MND:

Mitigation Measure BIO-[B]: Bat Surveys

> **Prior to the initiation of Project activities within suitable bat roosting habitat, the City of Palm Desert shall retain a qualified biologist to conduct focused surveys to determine presence of daytime, nighttime, wintering (hibernacula), and maternity roost sites. Two spring surveys (April through June) and two winter surveys (November through January) shall be performed by qualified biologists. Surveys shall be conducted during favorable weather conditions only. Each survey shall consist of one dusk emergence survey (start one hour before sunset and last for three hours), followed by one pre-dawn re-entry survey (start one hour before sunrise and last for two hours), and one daytime visual inspection of all potential roosting habitat on the Project site. Surveys shall be conducted within one 24-hour period. Visual inspections shall focus on the identification of bat sign (i.e., individuals, guano, urine staining, corpses, feeding remains, scratch marks and bats squeaking and chattering). Bat detectors, bat call analysis, and visual observation shall be used during all dusk emergence and pre-dawn re-entry surveys. If active hibernacula or maternity roosts are identified in the work area or 500 feet extending from the work area during preconstruction surveys, for maternity roosts, Project construction will only occur outside of the maternity roosting season. Maternity roosts shall not be evicted, excluded, removed, or disturbed. A minimum 500-foot no-work buffer shall be provided around wintering roosts (hibernacula). The buffer shall not be reduced. Project-related construction and activities shall not occur within 500 feet of or directly under or adjacent to hibernacula. Buffers shall be left in place until the end of Project construction and activities or until a qualified bat biologist determines that the hibernacula**

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[6] Bolster, B.C., Bolster, B.C., (ed.). 1998. Terrestrial Mammal Species of Special Concern in California. Draft Final Report. May. Sacramento, CA. Prepared by Paul W. Collins. Prepared for California Department of Fish and Game, Nongame Bird and Mammal Conservation Program, Sacramento, CA.

[7] Life History Account for Western Yellow Bat, California Department of Fish and Wildlife, February 2008.

are no longer active. Project-related construction and activities shall not occur between 30 minutes before sunset and 30 minutes after sunrise.

4) Coachella Valley Multiple Species Habitat Conservation Plan

The Project is located within the CVMSHCP Plan area and outside of a Conservation Area. With regard to compliance with the CVMSHCP, per Section 5.2.1.1 of the CVMSHCP, "local jurisdictions will impose a mitigation fee on new Development within the Plan Area that impacts vacant land containing Habitat for Covered Species or any of the conserved natural communities in the Plan through adoption, or amendment of an existing fee ordinance. In addition to large vacant areas, this also applies to small vacant lots within urban areas that still contain natural open space. The species Habitat distribution models and natural communities map prepared for the Plan may not show Habitat or a natural community on those parcels; however, this is only a result of the resolution at which those models and the natural communities map were prepared." The Project site contains desert dry wash woodland, a covered natural community under the CVMSHCP that that provides habitat used in migration for CVMSHCP Covered Species including summer tanager (*Piranga rubra*), yellow warbler (*Setophaga petechia*), and yellow-breasted chat (*Icteria virens*). Therefore, the City is obligated to pay a Development Mitigation Fee for the Project. The MND lacks a mitigation measure for this CVMSHCP requirement. To ensure consistency with the CVMSHCP, CDFW recommends that the City include in a revised the MND the following mitigation measure:

Mitigation Measure BIO-[C]: CVMSHCP Compliance

Prior to construction and issuance of any grading permit, the City of Palm Desert shall ensure compliance with the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) and its associated Implementing Agreement and shall ensure the collection of payment of the CVMSHCP Local Development Mitigation Fee.

5) CDFW's Lake and Streambed Alteration Program

Page 24 of the MND indicates "the Project site does not contain any streams, riparian habitat, marshes, protected wetlands, vernal pools, or sensitive natural communities protected by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service." CDFW is concerned about the accuracy of this statement. Page 1 of the MND indicates that the Project area "provides an outlet for a drainage area defined by Highway 74 and extending as far south as Indian Hills Way, Andreas Canyon Drive, Carriage Trail, and Irontree Drive and as far east as Portola Road." Flows captured in the Project area are conveyed to the east and "into a series of golf course drainage system systems farther east. These flows ultimately make their way to the Whitewater River". Page 2 of the Biological Assessment states that "review of aerial photography

and field reconnaissance indicate four potential drainage areas in a larger tributary area south of Haystack Road. These drainage areas are tributary to the Haystack Channel at Alamo Road, Chia Road, downstream of the intersection of Silver Spur Trail and Sun Coral Trail, and Portola Avenue. According to the project engineer's technical memorandum, there are eight (8) storm drains that discharge into the subject channel, ranging from 18-inch reinforced concrete pipe (RCP) to a 2-foot by 6-foot reinforced concrete box (RCB)." The Project site conveys stormflows and nuisance flows captured from areas described above and convey these flows through the Project site where they eventually enter into the Whitewater River.

Fish and wildlife resources subject to Fish and Game Code section 1600 et seq., include the bed, channel, and bank of any river, stream, or lake. Please note that "any river, stream, or lake" includes those that are dry for periods of time as well as those that flow year-round. Fish and Game Code section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW prior to beginning any activity that may do one or more of the following: divert or obstruct the natural flow of any river, stream, or lake; change the bed, channel, or bank of any river, stream, or lake; use material from any river, stream, or lake; or deposit or dispose of material into any river, stream, or lake.

The Project will change the bed, channel, or bank of a stream; therefore, CDFW recommends that City submit a notification of streambed alteration. More information on the notification process for the Lake and Streambed Alteration Program is available here: https://wildlife.ca.gov/Conservation/Environmental-Review/LSA.

To support the City in complying with Fish and Game Code 1600 et seq., CDFW recommends that the City add the following mitigation measure to a revised MND:

MM BIO-[D]: CDFW Lake and Streambed Alteration Program

Prior to construction and issuance of any grading permit, the Project Sponsor shall obtain written correspondence from the California Department of Fish and Wildlife (CDFW) stating that notification under section 1602 of the Fish and Game Code is not required for the Project, *or* the Project Sponsor should obtain a CDFW-executed Lake and Streambed Alteration Agreement, authorizing impacts to Fish and Game Code section 1602 resources associated with the Project.

6) Landscaping

The MND includes limited information on any replacement of vegetation that is removed or disturbed during Project construction activities. To ameliorate the water demands of this Project, CDFW recommends incorporation of water-wise concepts in any Project landscape design plans. In particular, CDFW recommends xeriscaping with locally native California species and installing water-efficient and targeted irrigation systems

(such as drip irrigation). Native plants support butterflies, birds, reptiles, amphibians, small mammals, bees, and other pollinators that evolved with those plants. More information on native plants suitable for the Project location and nearby nurseries is available at Calscape: https://calscape.org/. Local water agencies/districts and resource conservation districts in your area may be able to provide information on plant nurseries that carry locally native species, and some facilities display drought-tolerant locally native species demonstration gardens. Information on drought-tolerant landscaping and water-efficient irrigation systems is available on California's Save our Water website: https://saveourwater.com/. CDFW also recommends that the MND include recommendations regarding landscaping from Section 4.0 of the CVMSHCP "Table 4-112: Coachella Valley Native Plants Recommended for Landscaping" (pp. 4-180 to 4-182; https://cvmshcp.org/plan-documents/).

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.)

CONCLUSIONS

CDFW appreciates the opportunity to comment on the MND to assist the City in identifying and mitigating Project impacts to biological resources. CDFW concludes that the MND does not adequately identify or mitigate the Project's significant, or potentially significant, impacts to biological resources. CDFW also concludes that the MND lacks sufficient information for a meaningful review of impacts to biological resources, including burrowing owl and bats. The CEQA Guidelines indicate that recirculation is required when insufficient information in the MND precludes a meaningful review (§

15088.5) or when a new significant effect is identified and additional mitigation measures are necessary (§ 15073.5). CDFW recommends that a revised MND, including the results of a habitat assessment, focused surveys, and impacts assessment (if needed) for burrowing owl, analysis of potential impacts to bat species, and accurate assessment of stream resources that may be impacted by the Project, be recirculated for public comment. CDFW also recommends that revised and additional mitigation measures and analysis as described in this letter be added to a revised MND.

CDFW personnel are available for consultation regarding biological resources and strategies to avoid and minimize impacts. Questions regarding this letter or further coordination should be directed to Jacob Skaggs, Environmental Scientist, at jacob.skaggs@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Kim Freeburn
84F92FFEEFD24C8...

Kim Freeburn
Environmental Program Manager

Attachment 1: MMRP for CDFW-Proposed Mitigation Measures

ec:

Heather Brashear, Senior Environmental Scientist (Supervisor), CDFW
Heather.Brashear@Wildlife.ca.gov

Office of Planning and Research, State Clearinghouse, Sacramento
state.clearinghouse@opr.ca.gov

ATTACHMENT 1: MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

Mitigation Measures	Timing and Methods	Responsible Parties
Mitigation Measure BIO-1: Nesting Birds **Regardless of the time of year, nesting bird surveys shall be performed by a qualified avian biologist no more than 3 days prior to vegetation removal or ground-disturbing activities. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified avian biologist will make every effort to avoid potential nest predation as a result of survey and monitoring efforts. If active nests are found during the pre-construction nesting bird surveys, a qualified biologist shall establish an appropriate nest buffer to be marked on the ground. Nest buffers are species specific and shall be at least 300 feet for passerines and 500 feet for raptors. A smaller or larger buffer may be determined by the qualified biologist familiar with the nesting phenology of the nesting species and based on nest and buffer monitoring results. Established buffers shall remain on site until a qualified biologist determines the young have fledged or the nest is no longer active. Active nests and adequacy of the established buffer distance shall be monitored daily by the qualified biologist until the qualified biologist has determined the young have fledged or the Project has been completed. The qualified biologist has the authority to stop work if nesting pairs exhibit signs of disturbance.**	**Timing**: No more than 3 days prior to vegetation removal or ground-disturbing activities. **Methods:** See Mitigation Measure	**Implementation**: Project Proponent and City of Palm Desert **Monitoring and Reporting**: City of Palm Desert

Mitigation Measure BIO-[A]: Burrowing Owl Avoidance **No less than 60 days prior to the start of Project-related activities, a burrowing owl habitat assessment shall be conducted by a qualified biologist according to the specifications of the *Staff Report on Burrowing Owl Mitigation* (Department of Fish and Game, March 2012 or most recent version).** **If the habitat assessment demonstrates suitable burrowing owl habitat, then focused burrowing owl surveys shall be conducted by a qualified biologist according to the *Staff Report on Burrowing Owl Mitigation*. If burrowing owls are detected during the focused surveys, the qualified biologist and Project proponent shall prepare a Burrowing Owl Plan that shall be submitted to CDFW for review and approval prior to commencing Project activities. The Burrowing Owl Plan shall describe proposed avoidance, minimization, mitigation, and monitoring actions. The Burrowing Owl Plan shall include the number and location of occupied burrow sites, acres of burrowing owl habitat that will be impacted, details of site monitoring, and details on proposed buffers and other avoidance measures if avoidance is proposed. If impacts to occupied burrowing owl habitat or burrow cannot be avoided, the Burrowing Owl Plan shall also describe minimization and relocation actions that will be implemented. Proposed implementation of burrow exclusion and closure should only be considered as a last resort, after all other options have been evaluated as exclusion is not in itself an avoidance, minimization, or mitigation method and has the possibility to**	**Timing: Habitat Assessment:** No less than 60 days prior to the start of Project-related activities. **Focused surveys:** Prior to vegetation removal or ground-disturbing activities. **Pre-construction surveys:** No less than 14 days prior to start of Project-related activities and within 24 hours prior to ground disturbance. **Methods:** See Mitigation Measure	**Implementation**: Project Proponent and City of Palm Desert **Monitoring and Reporting**: City of Palm Desert

result in take. If impacts to occupied burrows cannot be avoided, information shall be provided regarding adjacent or nearby suitable habitat available to owls along with proposed relocation actions. The Project proponent shall implement the Burrowing Owl Plan following CDFW and USFWS review and approval. **Preconstruction burrowing owl surveys shall be conducted no less than 14 days prior to the start of Project-related activities and within 24 hours prior to ground disturbance, in accordance with the *Staff Report on Burrowing Owl Mitigation* (2012 or most recent version). Preconstruction surveys should be performed by a qualified biologist following the recommendations and guidelines provided in the *Staff Report on Burrowing Owl Mitigation*. If the preconstruction surveys confirm occupied burrowing owl habitat, Project activities shall be immediately halted. The qualified biologist shall coordinate with CDFW and prepare a Burrowing Owl Plan that shall be submitted to CDFW and USFWS for review and approval prior to commencing Project activities.**		
Mitigation Measure BIO-[B]: Bat Surveys **Prior to the initiation of Project activities within suitable bat roosting habitat, the City of Palm Desert shall retain a qualified biologist to conduct focused surveys to determine presence of daytime, nighttime, wintering (hibernacula), and maternity roost sites. Two spring surveys (April through June) and two winter surveys (November through January) shall be performed by qualified biologists. Surveys shall be conducted during favorable weather conditions only. Each survey shall consist**	**Timing**: Prior to initiation of Project activities. **Methods:** See Mitigation Measure	**Implementation**: Project Proponent and City of Palm Desert **Monitoring and Reporting**: City of Palm Desert

of one dusk emergence survey (start one hour before sunset and last for three hours), followed by one pre-dawn re-entry survey (start one hour before sunrise and last for two hours), and one daytime visual inspection of all potential roosting habitat on the Project site. Surveys shall be conducted within one 24-hour period. Visual inspections shall focus on the identification of bat sign (i.e., individuals, guano, urine staining, corpses, feeding remains, scratch marks and bats squeaking and chattering). Bat detectors, bat call analysis, and visual observation shall be used during all dusk emergence and pre-dawn re-entry surveys. If active hibernacula or maternity roosts are identified in the work area or 500 feet extending from the work area during preconstruction surveys, for maternity roosts, Project construction will only occur outside of the maternity roosting season. Maternity roosts shall not be evicted, excluded, removed, or disturbed. A minimum 500-foot no-work buffer shall be provided around wintering roosts (hibernacula). The buffer shall not be reduced. Project-related construction and activities shall not occur within 500 feet of or directly under or adjacent to hibernacula. Buffers shall be left in place until the end of Project construction and activities or until a qualified bat biologist determines that the hibernacula are no longer active. Project-related construction and activities shall not occur between 30 minutes before sunset and 30 minutes after sunrise		
Mitigation Measure BIO-[C]: CVMSHCP Compliance **Prior to construction and issuance of any grading permit, the City of Palm Desert shall ensure compliance with the Coachella Valley**	**Timing**: Prior to construction and issuance of any grading permit.	**Implementation**: City of Palm Desert **Monitoring and Reporting**: City of Palm Desert

Multiple Species Habitat Conservation Plan (CVMSHCP) and its associated Implementing Agreement and shall ensure the collection of payment of the CVMSHCP Local Development Mitigation Fee.	**Methods:** See Mitigation Measure	
MM BIO-[D]: CDFW Lake and Streambed Alteration Program **Prior to construction and issuance of any grading permit, the Project Sponsor shall obtain written correspondence from the California Department of Fish and Wildlife (CDFW) stating that notification under section 1602 of the Fish and Game Code is not required for the Project, *or* the Project Sponsor should obtain a CDFW-executed Lake and Streambed Alteration Agreement, authorizing impacts to Fish and Game Code section 1602 resources associated with the Project.**	**Timing**: Prior to construction and issuance of any grading permit. **Methods:** See Mitigation Measure	**Implementation**: Project proponent and City of Palm Desert **Monitoring and Reporting**: City of Palm Desert

AGUA CALIENTE BAND OF CAHUILLA INDIANS

TRIBAL HISTORIC PRESERVATION

03-026-2023-001

September 25, 2023

[VIA EMAIL TO:nmelloni@cityofpalmdesert.org]
City of Palm Desert
Mr. Nick Melloni
73-510 Fred Waring Dr.
Palm Desert, CA 92260-2578

Re: Haystack Channel Rehabilitation Project

Dear Mr. Nick Melloni,

The Agua Caliente Band of Cahuilla Indians (ACBCI) appreciates your efforts to include the Tribal Historic Preservation Office (THPO) in the Haystack Channel Rehabilitation Project project. We have reviewed the documents and have the following comments:

> *The Mitigated Negative Declaration document included standard mitigation measures to address impacts to cultural resources. We found these measures to be sufficient.

Again, the Agua Caliente appreciates your interest in our cultural heritage. If you have questions or require additional information, please call me at (760) 423-3485. You may also email me at ACBCI-THPO@aguacaliente.net.

Cordially,

Xitlaly Madrigal
Cultural Resources Analyst
Tribal Historic Preservation Office
AGUA CALIENTE BAND
OF CAHUILLA INDIANS

5401 DINAH SHORE DRIVE, PALM SPRINGS, CA 92264
T 760/699/6800 F 760/699/6924 WWW.AGUACALIENTE-NSN.GOV

Nick Melloni

From: McNeill, Amy <ammcneil@RIVCO.ORG>
Sent: Tuesday, October 3, 2023 10:10 AM
To: Nick Melloni
Cc: McKinney, Elsa; Cornelius, William
Subject: Haystack Stormwater Channel Rehabilitation Project
Attachments: We sent you safe versions of your files; Haystack Ch rehabilitation project transmittal.pdf

Hello Nick,

Upon review of the site location, this project will not have any impacts to Riverside County Flood Control and Water Conservation District storm drain facilities. The project is not located with an Area Drainage Plan and therefore no fees are required to be paid. Please note the location of the channel and project limits are shown within the Coachella Valley Water District jurisdiction.

Thank you,

Amy

Amy McNeill, PE | Engineering Project Manager
Development Review
Riverside County Flood Control & Water Conservation District
1995 Market Street | Riverside, CA 92501
Direct: 951-955-1214 | Email: ammcneil@rivco.org

CITY OF PALM DESERT

NOTICE OF INTENT

TO ADOPT A MITIGATED NEGATIVE DECLARATION

Haystack Stormwater Channel Rehabilitation Project

Project No. CDR00003

LEAD AGENCY: City of Palm Desert
73510 Fred Waring Drive
Palm Desert, CA 92260

CONTACT PERSON: Nick Melloni,
Development Services Department
(760) 346-0611

PROJECT TITLE: Haystack Stormwater Channel Rehabilitation Project

PROJECT LOCATION: East of State Highway 74, west of Portola Avenue, immediately north of Haystack Road.
APNs: 630-025-050 & 052; 630-190- 051 & 054; 628-290-013
Portion of the SE ¼ of Section 30, portion of S ½ of Section 29, Township 5 South, Range 6 East, San Bernardino Baseline and Meridian

PROJECT DESCRIPTION: The Haystack Channel has been in place for several decades and was constructed to intercept north-flowing tributary flows crossing Haystack Road and to convey them to the Portola Avenue culvert and into a series of golf course drainage system systems farther east. The Project proposes approximately one mile of improvements to rehabilitate the portion of the channel extending from Alamo Drive eastward to the Portola Avenue culvert. These improvements are intended to capture and convey nuisance water to drains located between Alamo Drive and Heliotrope Drive, to optimize the hydraulic capacity of the culverts crossing under Alamo Drive, Heliotrope Drive, and Portola Avenue, as well to remediate diminished channel capacity and protect storm drain outlets east of Heliotrope Drive.

FINDINGS/DETERMINATION: In accordance with the California Environmental Quality Act (CEQA), the City has conducted an Initial Study for this Project which analyzes the potential impacts it may have on the environment. The result of this study shows that any potentially significant impacts of the Project on the environment be mitigated to a less-than-significant level and a draft Mitigated Negative Declaration has been prepared for this Project.

PUBLIC REVIEW PERIOD: A 30-day public review period for the Draft Mitigated Negative Declaration will commence at 8:00 a.m. on September 25, 2023, and end on October 24, 2023, at 5:00 p.m. for interested individuals and public agencies to submit written comments on the document. Any written comments on the Mitigated Negative Declaration must be received at the above address within the public review period. In addition, you may email comments to the following address: nmelloni@palmdesert.gov. Copies of the Mitigated Negative Declaration and Initial Study are available for review at the above address and on the City's website at https://www.palmdesert.gov/departments/planning/projects.

PUBLIC MEETING: This matter has been tentatively set for public hearing before the Palm Desert City Council on October 26, 2023, at 4:00 p.m. in the Council Chamber at 73510 Fred Waring Drive, Palm Desert.

Source: Google Earth Image, 06.11.21

05.25.23

TERRA NOVA®
PLANNING & RESEARCH, INC.

Haystack Channel Improvement Project Initial Study
Project Location Map
Palm Desert, California

Exhibit
3

IN THE CITY OF PALM DESERT, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

CHANNEL IMPROVEMENT PLAN

FOR

HAYSTACK CHANNEL REHABILITATION PROJECT

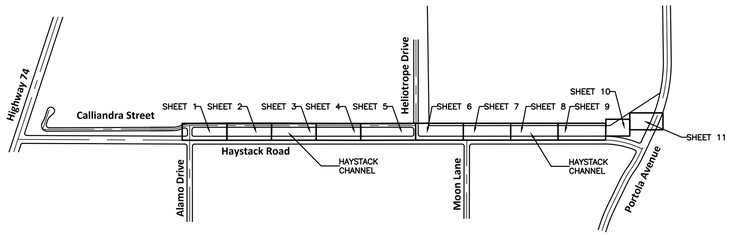
FROM SR-74 TO PORTOLA AVENUE

PALM DESERT GENERAL NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THIS PLAN, THE STANDARD DRAWINGS AND SPECIFICATIONS OF THE CITY OF PALM DESERT, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND THE CALTRANS STANDARD PLANS AND CALTRANS STANDARD SPECIFICATIONS WHEN APPLICABLE.
2. NO CONSTRUCTION IS AUTHORIZED WITHOUT THE APPROPRIATE PERMITS ISSUED BY THE CITY OF PALM DESERT.
3. THE ENGINEER-OF-WORK SHALL BE NOTIFIED WHEN CONSTRUCTION HAS COMMENCED.
4. IN THE EVENT OF DISCREPANCIES AND/OR DEVIATIONS ARISING DURING CONSTRUCTION, THE ENGINEER-OF-WORK SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY ENGINEER.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO ONSITE, OFFSITE AND ADJACENT UTILITIES, FACILITIES AND PROPERTIES.
6. THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTY OWNERS FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONJUNCTION WITH CONSTRUCTION OF THESE IMPROVEMENT PLANS.
7. THE CONTRACTOR, AT NO EXPENSE TO THE CITY, SHALL PROVIDE ALL NECESSARY SAMPLES AND TESTS THAT THE CITY ENGINEER MAY REQUIRE TO ASSURE THAT QUALITY OF MATERIAL AND WORKMANSHIP ARE IN ACCORDANCE WITH THE SPECIFICATIONS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK AND SHALL MAINTAIN ALL FACILITIES, COMPLETED AND UNCOMPLETED, UNTIL ACCEPTED BY THE CITY.
9. ALL SURVEY MONUMENTS WITHIN OR BOUNDING THE WORK LIMITS, WHETHER FOUND FROM RECORD OR BY INSPECTION, SHALL, PRIOR TO ANY CONSTRUCTION, BE LOCATED AND REFERENCED BY A LICENSED SURVEYOR OR A CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING. THE REFERENCED MONUMENTS DISTURBED OR REMOVED DURING CONSTRUCTION SHALL BE RESET IN ACCORDANCE WITH SECTION 8771 OF THE LAND SURVEYORS ACT AND CITY STANDARDS AND REQUIREMENTS AT THE CONTRACTOR'S EXPENSE.
10. THE CONTRACTOR SHALL NOTIFY THE ENGINEERING DIVISION IN PALM DESERT AT (760) 776-6450 AT LEAST 48 HOURS PRIOR TO COMMENCING ANY WORK.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UTILITIES. FOR THE LOCATION OF UNDERGROUND UTILITIES OR FOR EMERGENCY ASSISTANCE CALL:

WATER	COACHELLA VALLEY WATER DISTRICT	760-398-2651
SEWER	COACHELLA VALLEY WATER DISTRICT	760-398-2651
ELECTRIC	SOUTHERN CALIFORNIA EDISON	760-202-4291
GAS	THE GAS COMPANY	1-800-427-2200
TELEPHONE	VERIZON CALIFORNIA, INC.	1-800-483-1000
CABLE	TIME WARNER	760-340-1312
DIG ALERT		1-800-422-4133

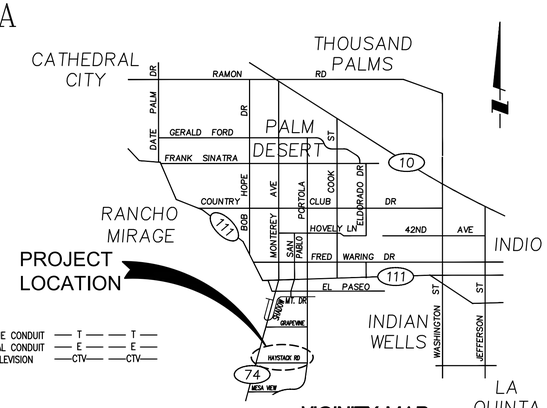
12. THE ENGINEERING DIVISION DOES NOT ASSUME ANY RESPONSIBILITY FOR THE ACCURACY OF THE QUANTITIES SHOWN HEREON.
13. THE STRUCTURAL SECTION SHALL BE AS PER THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, HIGHWAY DESIGN MANUAL TEST NO. 301-F FOR DETERMINATION BY THE R-VALUE METHOD.
14. THESE PLANS MAY BE SUBJECT TO REVIEW AND/OR REVISION BY THE CITY OF PALM DESERT ENGINEERING DIVISION, IF CONSTRUCTION HAS NOT COMMENCED WITHIN 12 MONTHS FROM THE DATE OF APPROVAL BY THE CITY ENGINEER.
15. ALL P.C.C. AND A.C. REMOVALS SHALL BE OUTLINED TO NECESSARY WORKING LIMITS AND SAWCUT TO A MINIMUM DEPTH OF 2 INCHES PRIOR TO REMOVAL. ALL DEBRIS CREATED BY THE REMOVAL OPERATIONS SHALL BE DISPOSED OF AWAY FROM THE JOB SITE IN A MANNER AND LOCATION ACCEPTABLE TO ALL CONCERNED AGENCIES AND ORGANIZATIONS.
16. ALL P.C.C. AND A.C. IMPROVEMENTS DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR AT NO COST TO THE CITY OF PALM DESERT.
17. STREETS IN THE CONSTRUCTION AREA SHALL BE KEPT CLEAN AT ALL TIMES.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING OF THE PROPOSED WORK AREA.
19. NO PUBLIC STREET SHALL BE CLOSED TO TRAFFIC WITHOUT PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
20. NO TRENCHES SHALL REMAIN OPEN OVERNIGHT WITHOUT PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
21. FAILURE TO COMPLY WITH ANY OF THE ABOVE ITEMS SHALL BE SUFFICIENT CAUSE FOR THE CITY TO ARRANGE FOR NECESSARY WORK TO BE COMPLETED BY OTHERS. COSTS TO COMPLETE THE WORK BY OTHERS WILL BE CHARGED TO THE CONTRACTOR.
22. ALL LANDSCAPING AND IRRIGATION THAT IS DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED OR REPLACED TO THE APPROVAL OF THE CITY AND THE PROPERTY OWNER.
23. CONTRACTOR MUST OBTAIN APPROVAL FOR ANY LANE CLOSURES A MINIMUM OF 48 HOURS IN ADVANCE.
24. CONTRACTOR SHALL CALL THE ENGINEERING DIVISION TO REQUEST INSPECTION A MINIMUM OF 24 HOURS PRIOR TO STARTING CONSTRUCTION. CONTRACTOR SHALL KEEP THE INSPECTOR INFORMED OF PROGRESS OF THE WORK ON A DAILY BASIS. IMPROVEMENTS PLACED WITHOUT INSPECTION MAY BE REJECTED AND ARE SUBJECT TO REMOVAL.



INDEX MAP
1"=600'

CONSTRUCTION NOTES		QTY. EST.
1	REMOVE AND DISPOSE ITEMS FROM SHEET 1 OF 4 OF AS-BUILT PLANS. (INFILTRATOR EQUILIZER 36 LEACHING SYSTEM W/ ROCK BED)	1 EA
2	INSTALL 12"PVC - C-900	200 LF
3	INSTALL 24"X24"GRATE INLETS PER BROOKS 2424 CB	2 EA
4	REMOVE INTERFERING PORTION OF EXISTING 8" PIPE AND CONNECT TO PROPOSED 12" PVC WITH 90° BEND.	2 EA
5	INSTALL UNDERGROUND INFILTRATION SYSTEM	4 EA
6	REMOVE AND REPLACE DAMAGED IRRIGATION SYSTEM	LS
7	INSTALL UNGROUTED ROCK RIP-RAP LEVEE PER LA COUNTY FLOOD CONTROL DISTRICT DESIGN MANUAL - LEVEE CRITERIA	10,000 CY
8	CONSTRUCT JUNCTION STRUCTURE NO. 6 PER RCFCD STD. NO. JS231	3 EA
9	CONSTRUCT 20' WIDE ACCESS ROAD ALONG NORTH SIDE OF CHANNEL PER RCFCD STD. CH323	2,700 LF
10	RELOCATE EXISTING POWERPOLES	3 EA
11	INSTALL ¼ TON RIP-RAP	200 CY

SHEET INDEX	
1	COVER SHEET
2-10	CHANNEL IMPROVEMENT PLAN
11-20	DETAILS



VICINITY MAP
NOT TO SCALE

EXISTING UNDERGROUND UTILITIES

SANITARY SEWER	8" S	TELEPHONE CONDUIT	T
WATER LINE	6" W	ELECTRICAL CONDUIT	E
STORM DRAIN	24" S.D.	CABLE TELEVISION	CTV
GAS LINE	2" G		

TOPOGRAPHY

WIRE FENCE		TOP OF SLOPE	
MANHOLE		TOE OF SLOPE	
TELEPHONE VAULT		PULL BOX	
FIRE HYDRANT		STREET LIGHT	
ELECTRICAL POLE		VALVE	
STREET NAME SIGN		MAIL BOX	

PROFILES

	PROPOSED CENTERLINE AND TOP OF BANKS
	EXISTING GROUND

	RIP-RAP		DECIDUOUS TREE
	BUILDING		SHRUBBERY
	UNDERGROUND STRUCTURE		
	OVERHANGING STRUCTURE		

ABBREVIATION	DEFINITION	ABBREVIATION	DEFINITION
AVE	AVENUE	RCP	REINFORCED CONCRETE PIPE
CFS	CUBIC FEET PER SECOND	RD	ROAD
DIA	DIAMETER	STA	STATION
DR	DRIVE	STD	STANDARD
N.T.S.	NOT TO SCALE	W/	WITH
RCB	REINFORCED CONCRETE BOX		

PROJECT INFO

PROJECT:
TRACT OR PARCEL MAP NUMBER AND LOT
PRECISE PLAN OR CUP CASE NUMBER
HAYSTACK CHANNEL REHABILITATION
PALM DESERT, CA 92260

FEMA FLOOD DATA:
FLOOD ZONE X, 06065C2209H, APRIL 19, 2017
AREA PROTECTED BY LEVEES.

TOPOGRAPHIC AND BOUNDARY SURVEY:
SURVEY PERFORMED BY: INLAND AERIAL SURVEYS, INC.
DATE OF SURVEY: 08/24/2022

EARTHWORK QUANTITIES:
RAW CUT: 12,640 CY
RAW FILL: 5,180 CY
SHRINKAGE:
IMPORT:
EXPORT: 7,460 CY

APN AND LEGAL DESCRIPTION:
630-190-054, 630-190-051, 630-250-050
LEGAL DESCRIPTION (I.E. LOT X OF TR XXXXX OR THE NW QUARTER OF THE SOUTH HALF OF SECTION XX, TOWNSHIP X SOUTH, RANGE X EAST, SAN BERNADINO BASE MERIDIAN.)

CIVIL ENGINEER:
JOHN M. BRUDIN
ERSC, INC.
1861 W. REDLANDS BLVD.
REDLANDS, CA 92373
PHONE 909-890-1255
FAX 909-890-0995

OWNER:
RYAN GAYLER
CITY OF PALM DESERT
73510 FRED WARING DR
PALM DESERT, CA 92260
PHONE 760-346-0611
FAX 760-340-0574

SOILS ENGINEER:
ALLEN D. EVANS, PE, GE
INLAND FOUNDATION ENGINEERING, INC.
1310 SOUTH SANTA FE AVE.
SAN JACINTO, CA 92583
PHONE 951-654-1555

REFERENCE DATA:
CIP-1196

SOILS ENGINEER'S CERTIFICATE

WE HAVE REVIEWED THIS GRADING PLAN AND FOUND IT TO BE IN SUBSTANTIAL CONFORMANCE WITH THE RECOMMENDATIONS OF OUR SOILS REPORT FILE DATED 08/03/2022.

REGISTERED PROFESSIONAL ENGINEER ALLEN D. EVANS NO. 2060 MAR 31, 2025 GEOTECHNICAL STATE OF CALIFORNIA

ALLEN D. EVANS, PE, GE DATE
EXP. DATE 03/31/2025
INLAND FOUNDATION ENGINEERING, INC.
1310 SOUTH SANTA FE AVENUE, SAN JACINTO, CA 92583

ANY MODIFICATION OF THIS PLAN MUST BE APPROVED BY THE CITY PRIOR TO CONSTRUCTION.

CITY PERMIT #:

CITY ISSUE DATE:

FOR CITY USE ONLY

DIGALERT — DIAL BEFORE YOU DIG — TWO WORKING DAYS BEFORE YOU DIG — TOLL FREE 1-800-422-4133 — A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

BENCHMARK: CITY OF PALM DESERT BM118. A 2" BRASS DICK STAMPED "CITY OF P.D. BM 118" LOCATED ON THE SOUTHEAST CORNER OF CONCRETE BRIDGE ON HWY 111 OVER PALM VALLEY STORMWATER CHANNEL AT THE EAST END OF CONC. STEM WALL, FLUSH WITH TOP OF WALL.

BASIS OF BEARINGS: THE BASIS OF BEARING FOR THIS SURVEY IS THE STATE PLANE COORDINATE SYSTEM NAD83 ZONE 6, AS DETERMINED LOCALLY BY THE LINE BETWEEN USC&GS STATIONS ACS161 AND DX0739.
THE LINE BETWEEN SAID POINTS BEARS: NORTH 18°54'09" EAST, 2010.00 EPOCH.

ENGINEER MARK	BY	DATE	REVISIONS	CITY APPR.	CITY DATE
1					

ENGINEERS SEAL — REGISTERED PROFESSIONAL ENGINEER JOHN M. BRUDIN No. 41836 CIVIL STATE OF CALIFORNIA

ERSC Engineering Resources of Southern California — 1861 West Redlands Blvd. Redlands, CA 92373 P: 909.890.1255 F: 909.890.0995

PREPARED UNDER THE DIRECT SUPERVISION OF:
JOHN M. BRUDIN, R.C.E. 41836 DATE: EXP. 03/31/24

CITY OF PALM DESERT
DEPARTMENT OF DEVELOPMENT SERVICES
APPROVED BY:
JOHN D. TANNER III, P.E. DATE
ACTING CITY ENGINEER
R.C.E. 60132, EXP. 6/30/2022
REVIEWED AND RECOMMENDED BY: DATE

PLAN CHECKED BY:
CIVIL
TRAFFIC
LANDSCAPE

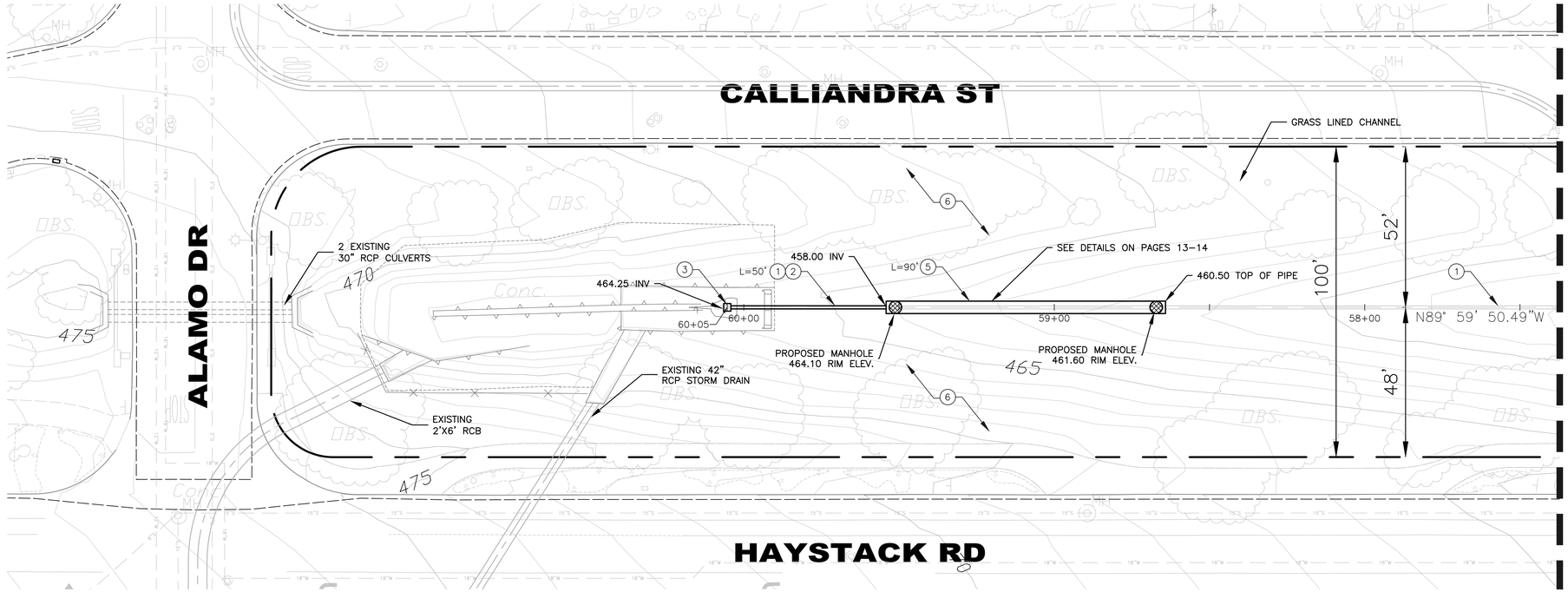
CITY OF PALM DESERT

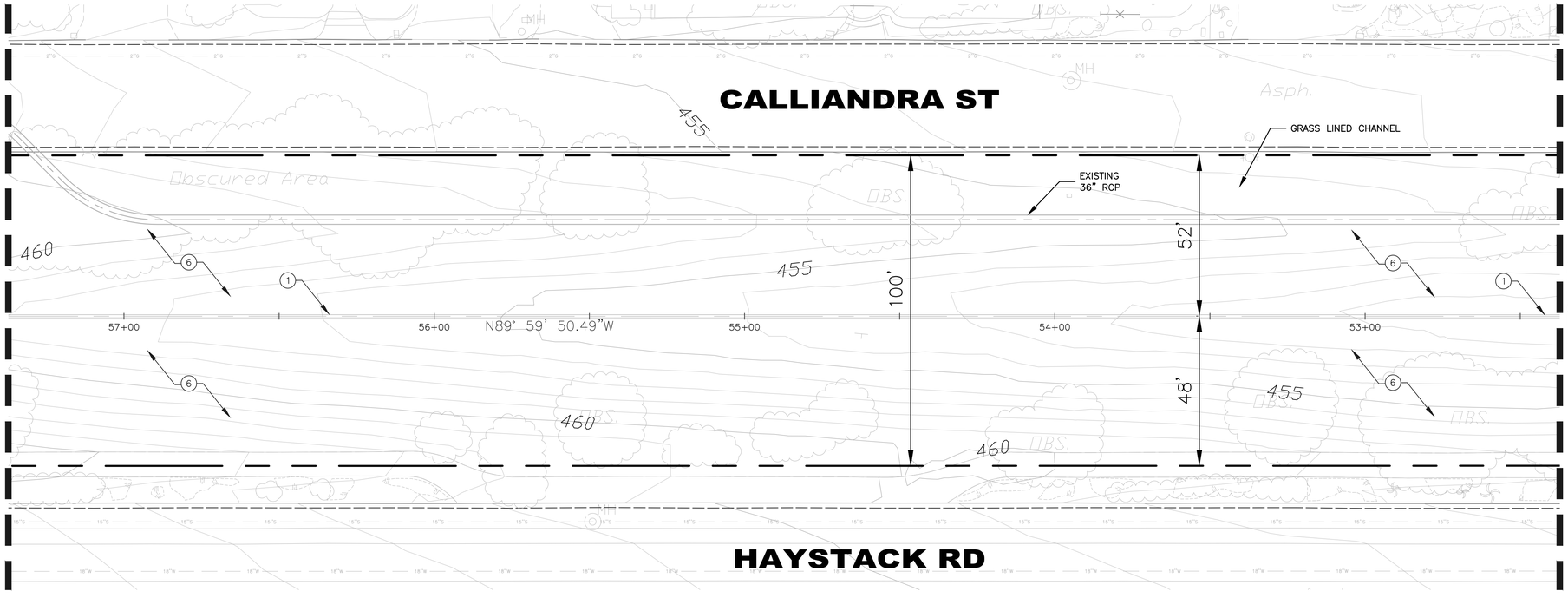
HAYSTACK CHANNEL REHABILITATION
CHANNEL IMPROVEMENT PLAN

LEGAL DESCRIPTION (I.E. LOCATED IN A PORTION OF THE NW 1/4 OF SECTION 19, T5S, R6E, SBBM

SHEET 1 OF SHEETS 20

CITY FILE NUMBER





CONSTRUCTION NOTES

1. REMOVE AND DISPOSE ITEMS FROM CITY OF PALM DESERT, CHANNEL IMPROVEMENTS PROJECT NUMBER 5008-97, SHEET 1 OF 4. (INFILTRATOR EQUILIZER 36 LEACHING SYSTEM W/ ROCK BED)
2. INSTALL 12"PVC - C-900
3. INSTALL 24"X24"GRATE INLETS PER BROOKS 2424 CB
5. INSTALL 48" DIA. UNDERGROUND INFILTRATION SYSTEM PER DETAILS, SHEETS 13-20
6. REMOVE AND REPLACE DAMAGED IRRIGATION SYSTEM

HYDROLOGY DATA

STATION RANGE	Q100
60+05-52+00	322 CFS
52+00-47+50	348 CFS
47+50-38+50	543 CFS
38+50-34+50	595 CFS
34+50-15+50	600 CFS
15+50-10+50	826 CFS
10+50-10+00	930 CFS

N

0' 10' 20' 40'
FEET
SCALE: 1"=20'

DIGALERT
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TWO WORKING DAYS BEFORE YOU DIG
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A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

BENCHMARK: CITY OF PALM DESERT BM118. A 2" BRASS DICK STAMPED "CITY OF P.D. BM 118" LOCATED ON THE SOUTHEAST CORNER OF CONCRETE BRIDGE ON HWY 111 OVER PALM VALLEY STORMWATER CHANNEL AT THE EAST END OF CONC. STEM WALL, FLUSH WITH TOP OF WALL.

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ENGINEER			REVISIONS	CITY	
MARK	BY	DATE		APPR.	DATE
1					

ENGINEERS SEAL
REGISTERED PROFESSIONAL ENGINEER
JOHN M. BRUDIN
No. 41836
CIVIL
STATE OF CALIFORNIA

ERSC
Engineering Resources of Southern California
1861 West Redlands Blvd.
Redlands, CA 92373
P: 909.890.1255
F: 909.890.0995

PREPARED UNDER THE DIRECT SUPERVISION OF:
JOHN M. BRUDIN, R.C.E. 41836 DATE: EXP. 03/31/24

CITY OF PALM DESERT
DEPARTMENT OF DEVELOPMENT SERVICES
APPROVED BY:
MARIA FRASERI, P.E. DATE
RCE #56005
CITY ENGINEER
REVIEWED AND RECOMMENDED BY: DATE

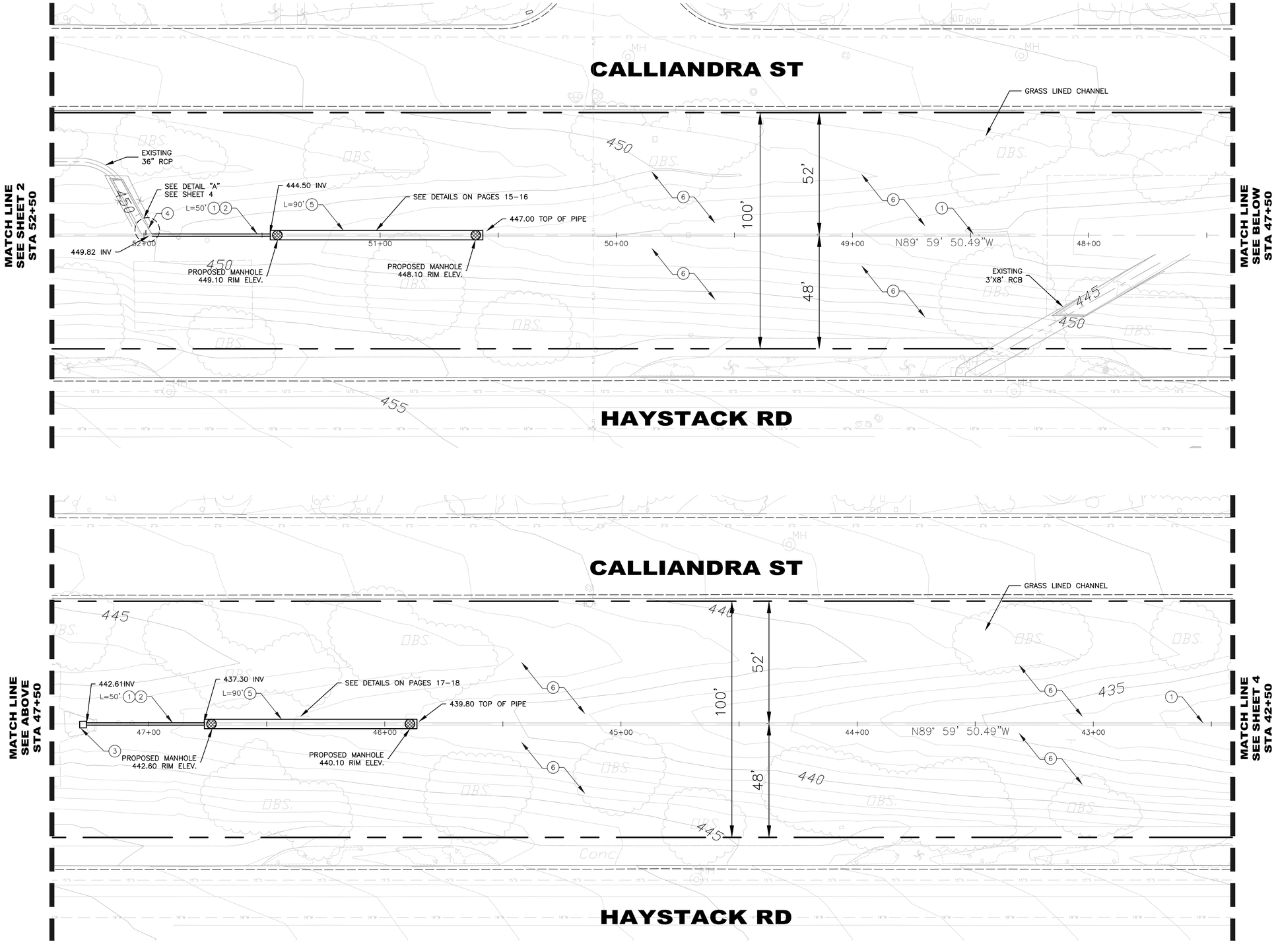
PLAN CHECKED BY:
CIVIL
TRAFFIC
LANDSCAPE

CITY OF PALM DESERT

HAYSTACK CHANNEL REHABILITATION CHANNEL IMPROVEMENT PLAN

STATION 60+05 TO 52+50

SHEET 2
OF
SHEETS 20
CITY FILE NUMBER



CONSTRUCTION NOTES

1. REMOVE AND DISPOSE ITEMS FROM CITY OF PALM DESERT, CHANNEL IMPROVEMENTS PROJECT NUMBER 5008–97, SHEET 1 OF 4. (INFILTRATOR EQUILIZER 36 LEACHING SYSTEM W/ ROCK BED)
2. INSTALL 12"PVC – C–900
3. INSTALL 24"X24"GRATE INLETS PER BROOKS 2424 CB
4. REMOVE INTERFERING PORTION OF EXISTING 8" PIPE AND CONNECT TO PROPOSED 12" PVC WITH 90° BEND.
5. INSTALL 48" DIA. UNDERGROUND INFILTRATION SYSTEM PER DETAILS, SHEETS 13–20
6. REMOVE AND REPLACE DAMAGED IRRIGATION SYSTEM

HYDROLOGY DATA

STATION RANGE	Q100
60+05–52+00	322 CFS
52+00–47+50	348 CFS
47+50–38+50	543 CFS
38+50–34+50	595 CFS
34+50–15+50	600 CFS
15+50–10+50	826 CFS
10+50–10+00	930 CFS

N

0' 10' 20' 40'
FEET
SCALE: 1"=20'

DIGALERT
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A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

BENCHMARK: CITY OF PALM DESERT BM118. A 2" BRASS DICK STAMPED "CITY OF P.D. BM 118" LOCATED ON THE SOUTHEAST CORNER OF CONCRETE BRIDGE ON HWY 111 OVER PALM VALLEY STORMWATER CHANNEL AT THE EAST END OF CONC. STEM WALL, FLUSH WITH TOP OF WALL.

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THE LINE BETWEEN SAID POINTS BEARS: NORTH 18°54'09" EAST, 2010.00 EPOCH.

ENGINEER			REVISIONS	CITY	
MARK	BY	DATE		APPR.	DATE
1					

ENGINEERS SEAL
REGISTERED PROFESSIONAL ENGINEER
JOHN M. BRUDIN
No. 41836
CIVIL
STATE OF CALIFORNIA

ERSC
Engineering Resources of Southern California
1861 West Redlands Blvd.
Redlands, CA 92373
P: 909.890.1255
F: 909.890.0995

PREPARED UNDER THE DIRECT SUPERVISION OF:
JOHN M. BRUDIN, R.C.E. 41836 DATE: EXP. 03/31/24

CITY OF PALM DESERT
DEPARTMENT OF DEVELOPMENT SERVICES
APPROVED BY:
MARIA FRASERI, P.E. DATE
RCE #56005
CITY ENGINEER
REVIEWED AND RECOMMENDED BY: DATE

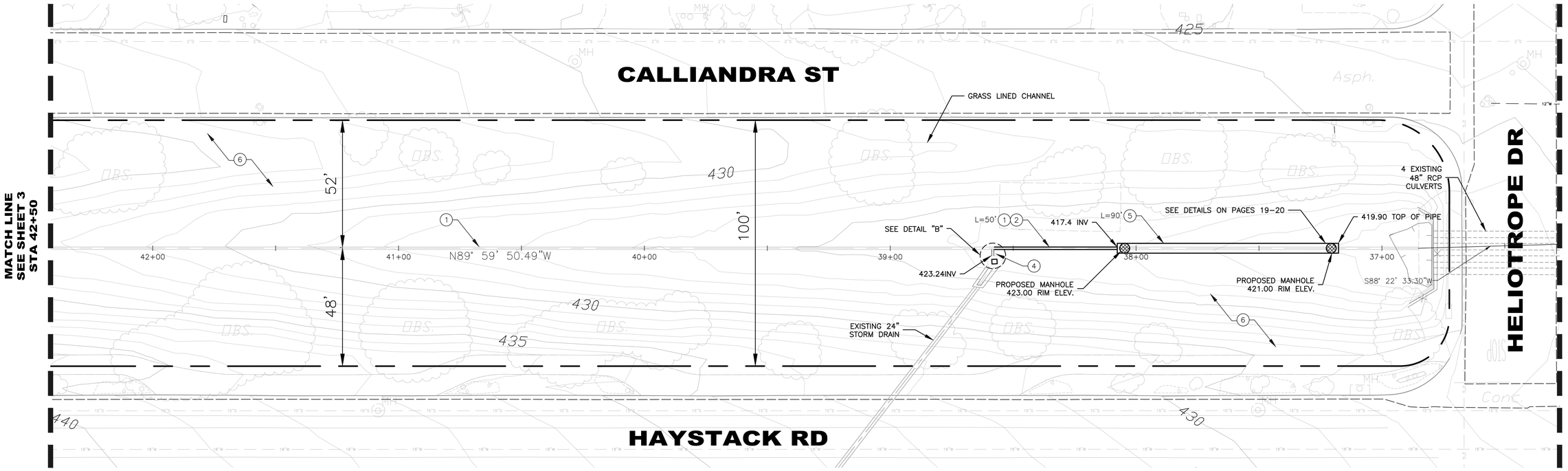
PLAN CHECKED BY:
CIVIL
TRAFFIC
LANDSCAPE

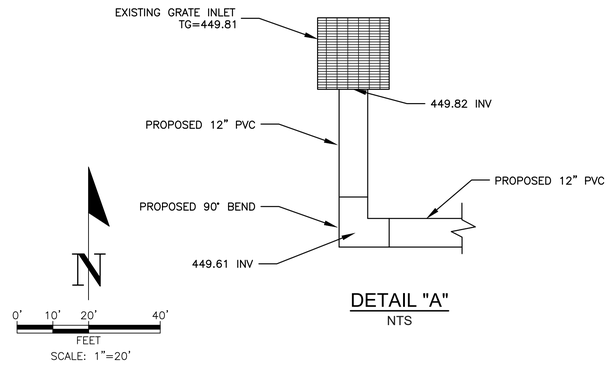
CITY OF PALM DESERT

HAYSTACK CHANNEL REHABILITATION CHANNEL IMPROVEMENT PLAN

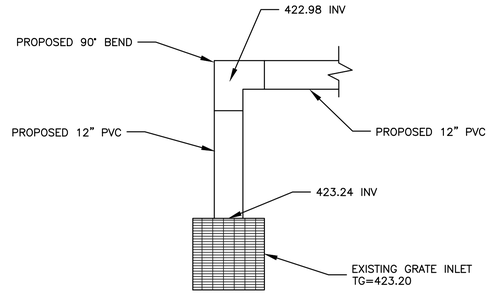
STATION 52+50 TO 42+50

SHEET 3 OF SHEETS 20
CITY FILE NUMBER





DETAIL "A"
NTS



DETAIL "B"
NTS

HYDROLOGY DATA

STATION RANGE	Q100
60+05–52+00	322 CFS
52+00–47+50	348 CFS
47+50–38+50	543 CFS
38+50–34+50	595 CFS
34+50–15+50	600 CFS
15+50–10+50	826 CFS
10+50–10+00	930 CFS

CONSTRUCTION NOTES

1. REMOVE AND DISPOSE ITEMS FROM CITY OF PALM DESERT, CHANNEL IMPROVEMENTS PROJECT NUMBER 500B–97, SHEET 1 OF 4. (INFILTRATOR EQUILIZER 36 LEACHING SYSTEM W/ ROCK BED)
2. INSTALL 12"PVC – C–900
4. REMOVE INTERFERING PORTION OF EXISTING 8" PIPE AND CONNECT TO PROPOSED 12" PVC WITH 90° BEND.
5. INSTALL 48" DIA. UNDERGROUND INFILTRATION SYSTEM PER DETAILS, SHEETS 13–20
6. REMOVE AND REPLACE DAMAGED IRRIGATION SYSTEM

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BENCHMARK: CITY OF PALM DESERT BM118. A 2" BRASS DICK STAMPED "CITY OF P.D. BM 118" LOCATED ON THE SOUTHEAST CORNER OF CONCRETE BRIDGE ON HWY 111 OVER PALM VALLEY STORMWATER CHANNEL AT THE EAST END OF CONC. STEM WALL, FLUSH WITH TOP OF WALL.

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THE LINE BETWEEN SAID POINTS BEARS: NORTH 18°54'09" EAST, 2010.00 EPOCH.

ENGINEER MARK	ENGINEER BY	ENGINEER DATE	REVISIONS	CITY APPR.	CITY DATE
1					

ENGINEERS SEAL
REGISTERED PROFESSIONAL ENGINEER — JOHN M. BRUDIN — No. 41836 — CIVIL — STATE OF CALIFORNIA

ERSC
Engineering Resources of Southern California
1861 West Redlands Blvd.
Redlands, CA 92373
P: 909.890.1255
F: 909.890.0995

PREPARED UNDER THE DIRECT SUPERVISION OF:
JOHN M. BRUDIN, R.C.E. 41836 — DATE: — EXP. 03/31/24

CITY OF PALM DESERT
DEPARTMENT OF DEVELOPMENT SERVICES
APPROVED BY:
MARIA FRASERI, P.E. — DATE
RCE #56005
CITY ENGINEER
REVIEWED AND RECOMMENDED BY: — DATE

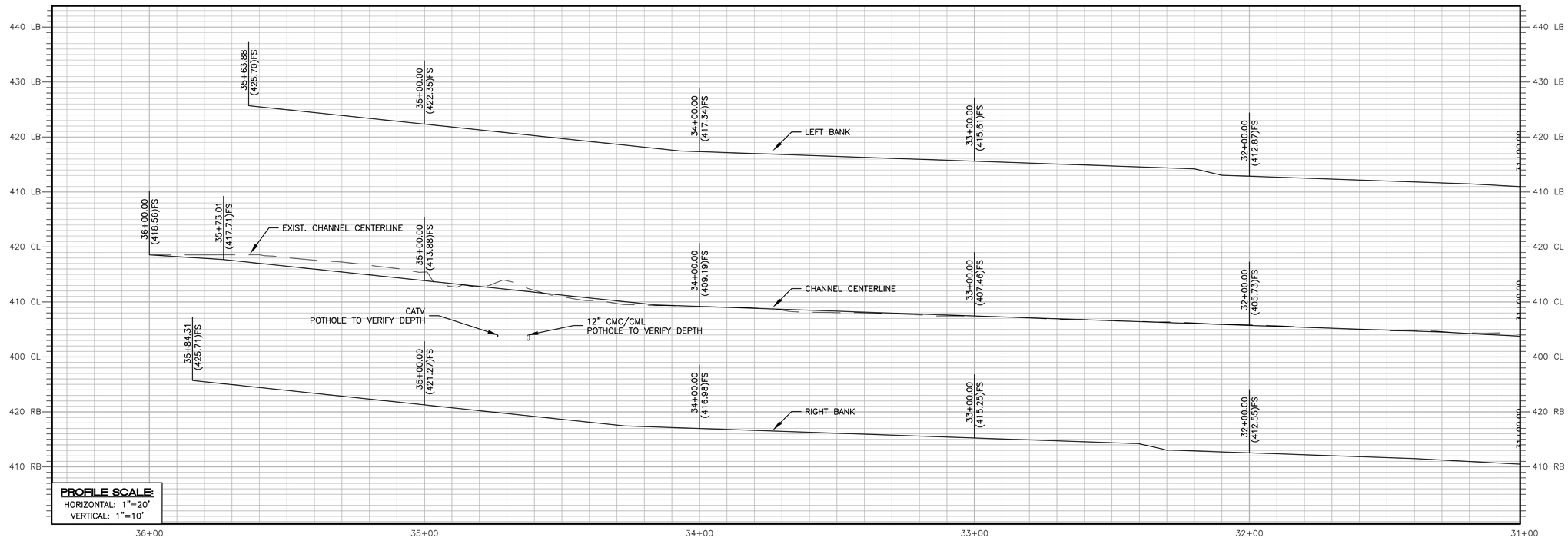
PLAN CHECKED BY:
CIVIL
TRAFFIC
LANDSCAPE

CITY OF PALM DESERT

HAYSTACK CHANNEL REHABILITATION CHANNEL IMPROVEMENT PLAN

STATION 42+50 TO 36+50

SHEET 4 OF SHEETS 20
CITY FILE NUMBER



PROFILE SCALE:
HORIZONTAL: 1"=20'
VERTICAL: 1"=10'

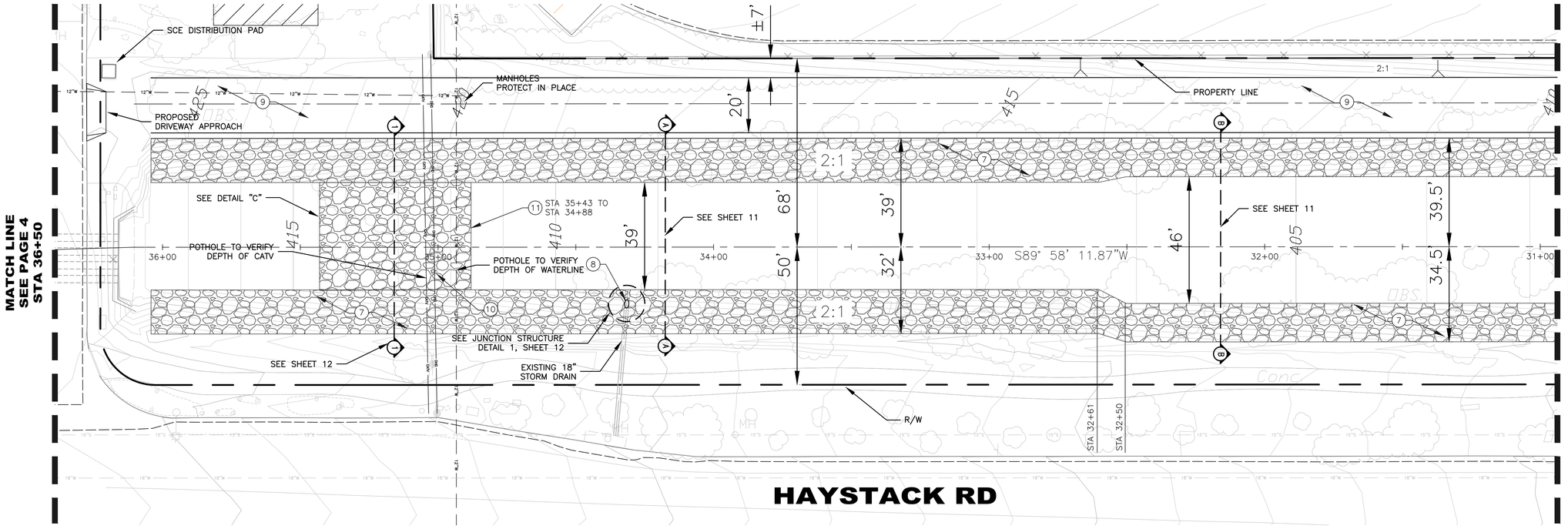
MATCH LINE SEE SHEET 6 STA 31+00

CONSTRUCTION NOTES

7. INSTALL UNGROUTED 12" ROCK RIP-RAP LEVEE PER LA COUNTY FLOOD CONTROL DISTRICT DESIGN MANUAL
8. CONSTRUCT JUNCTION STRUCTURE NO. 6 PER RCFCD STD. NO. JS231
9. CONSTRUCT 20' WIDE ACCESS ROAD ALONG NORTH SIDE OF CHANNEL PER RCFCD STD. CH323
10. RELOCATE EXISTING POWERPOLES (SCE)
11. INSTALL ¾ TON RIP-RAP PER DETAIL C

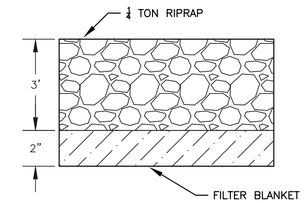
HYDROLOGY DATA

STATION RANGE	Q100
60+05-52+00	322 CFS
52+00-47+50	348 CFS
47+50-38+50	543 CFS
38+50-34+50	595 CFS
34+50-15+50	600 CFS
15+50-10+50	826 CFS
10+50-10+00	930 CFS



MATCH LINE SEE PAGE 4 STA 36+50

MATCH LINE SEE SHEET 6 STA 31+00



DETAIL "C"
NTS

N

0' 10' 20' 40'
FEET
SCALE: 1"=20'

DIGALERT
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A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

BENCHMARK: CITY OF PALM DESERT BM118. A 2" BRASS DICK STAMPED "CITY OF P.D. BM 118" LOCATED ON THE SOUTHEAST CORNER OF CONCRETE BRIDGE ON HWY 111 OVER PALM VALLEY STORMWATER CHANNEL AT THE EAST END OF CONC. STEM WALL, FLUSH WITH TOP OF WALL.

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THE LINE BETWEEN SAID POINTS BEARS: NORTH 18°54'09" EAST, 2010.00 EPOCH.

ENGINEER MARK	BY	DATE	REVISIONS	CITY APPR.	DATE
1					

ENGINEERS SEAL — JOHN M. BRUDIN — No. 41836 — REGISTERED PROFESSIONAL ENGINEER — CIVIL — STATE OF CALIFORNIA

ERSC Engineering Resources of Southern California
1861 West Redlands Blvd.
Redlands, CA 92373
P: 909.890.1255
F: 909.890.0995

PREPARED UNDER THE DIRECT SUPERVISION OF:
JOHN M. BRUDIN, R.C.E. 41836 — DATE: — EXP. 03/31/24

CITY OF PALM DESERT
DEPARTMENT OF DEVELOPMENT SERVICES
APPROVED BY:
MARIA FRASERI, P.E. — DATE
RCE #56005
CITY ENGINEER
REVIEWED AND RECOMMENDED BY: — DATE

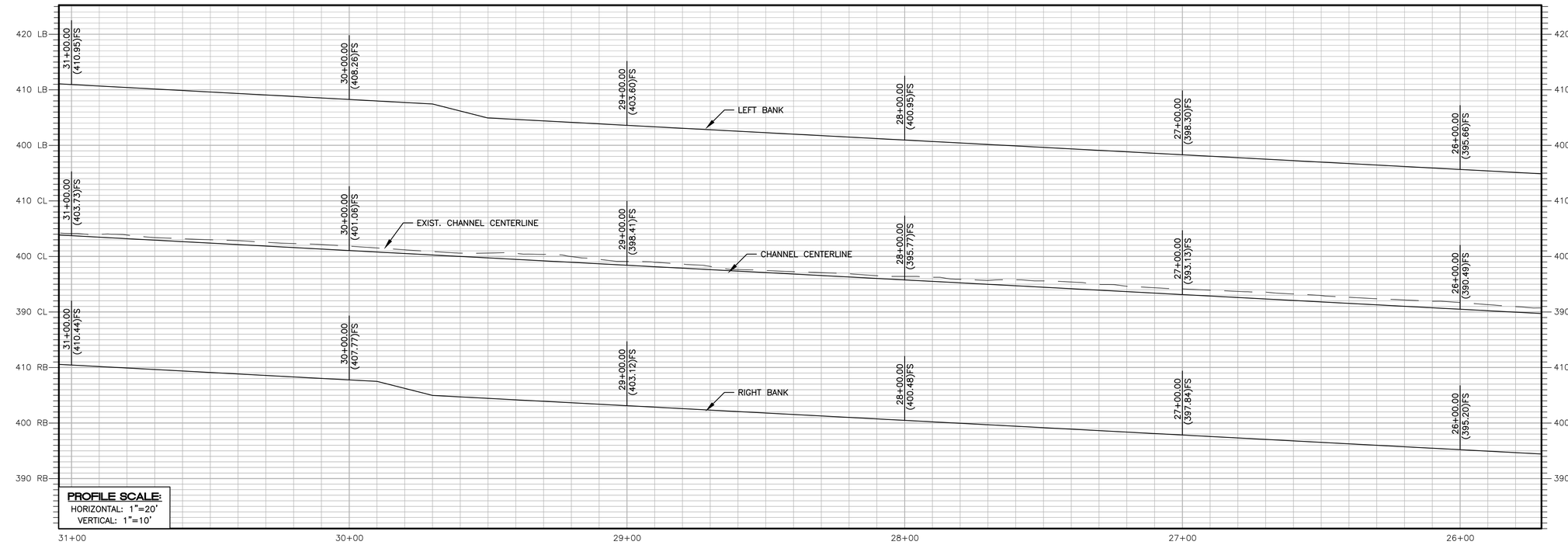
PLAN CHECKED BY:
CIVIL
TRAFFIC
LANDSCAPE

CITY OF PALM DESERT

HAYSTACK CHANNEL REHABILITATION CHANNEL IMPROVEMENT PLAN

STATION 36+50 TO 31+00

SHEET 5 OF SHEETS 20
CITY FILE NUMBER



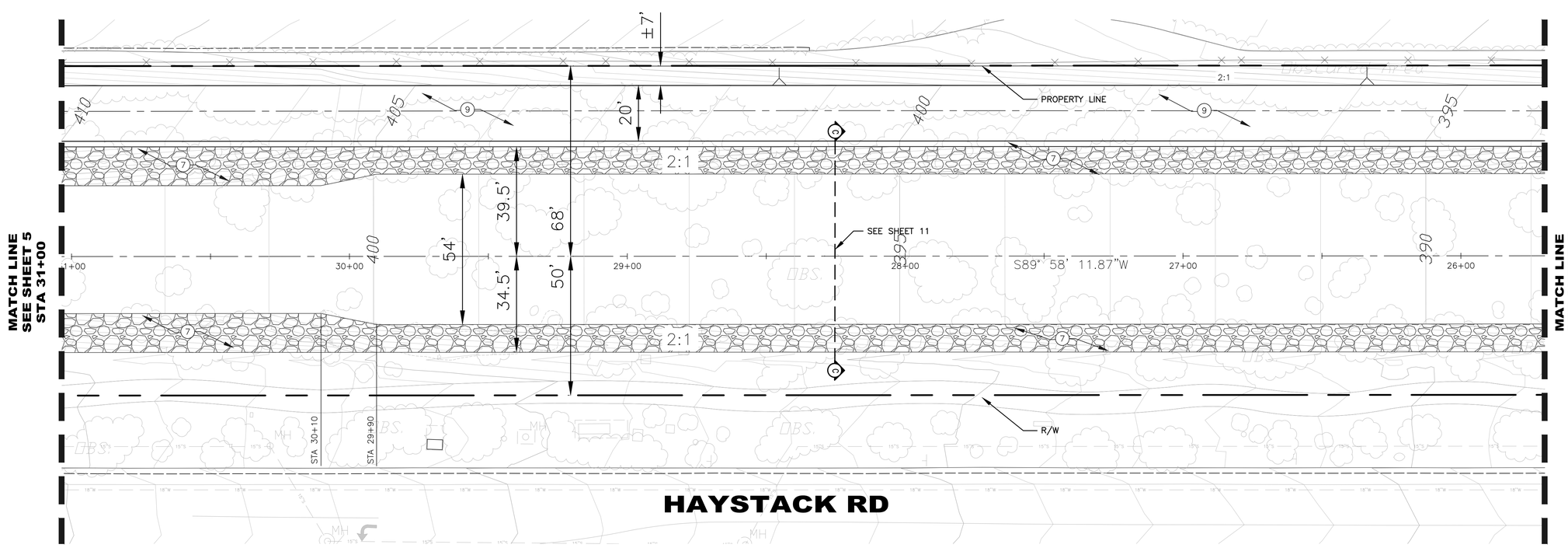
CONSTRUCTION NOTES

(7) INSTALL UNGROUTED 12" ROCK RIP-RAP LEVEE PER LA COUNTY FLOOD CONTROL DISTRICT DESIGN MANUAL

(9) CONSTRUCT 20' WIDE ACCESS ROAD ALONG NORTH SIDE OF CHANNEL PER RCFCD STD. CH323

HYDROLOGY DATA

STATION RANGE	Q100
60+05–52+00	322 CFS
52+00–47+50	348 CFS
47+50–38+50	543 CFS
38+50–34+50	595 CFS
34+50–15+50	600 CFS
15+50–10+50	826 CFS
10+50–10+00	930 CFS



N

0' 10' 20' 40'
FEET
SCALE: 1"=20'

DIGALERT
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BENCHMARK: CITY OF PALM DESERT BM118. A 2" BRASS DICK STAMPED "CITY OF P.D. BM 118" LOCATED ON THE SOUTHEAST CORNER OF CONCRETE BRIDGE ON HWY 111 OVER PALM VALLEY STORMWATER CHANNEL AT THE EAST END OF CONC. STEM WALL, FLUSH WITH TOP OF WALL.

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ENGINEER MARK	BY	DATE	REVISIONS	CITY APPR.	DATE
1					

ENGINEERS SEAL
REGISTERED PROFESSIONAL ENGINEER JOHN M. BRUDIN No. 41836 CIVIL STATE OF CALIFORNIA

ERSG Engineering Resources of Southern California
1861 West Redlands Blvd.
Redlands, CA 92373
P: 909.890.1255
F: 909.890.0995

PREPARED UNDER THE DIRECT SUPERVISION OF:
JOHN M. BRUDIN, R.C.E. 41836 DATE: EXP. 03/31/24

CITY OF PALM DESERT
DEPARTMENT OF DEVELOPMENT SERVICES
APPROVED BY:
MARIA FRASERI, P.E. DATE
RCE #56005
CITY ENGINEER
REVIEWED AND RECOMMENDED BY: DATE

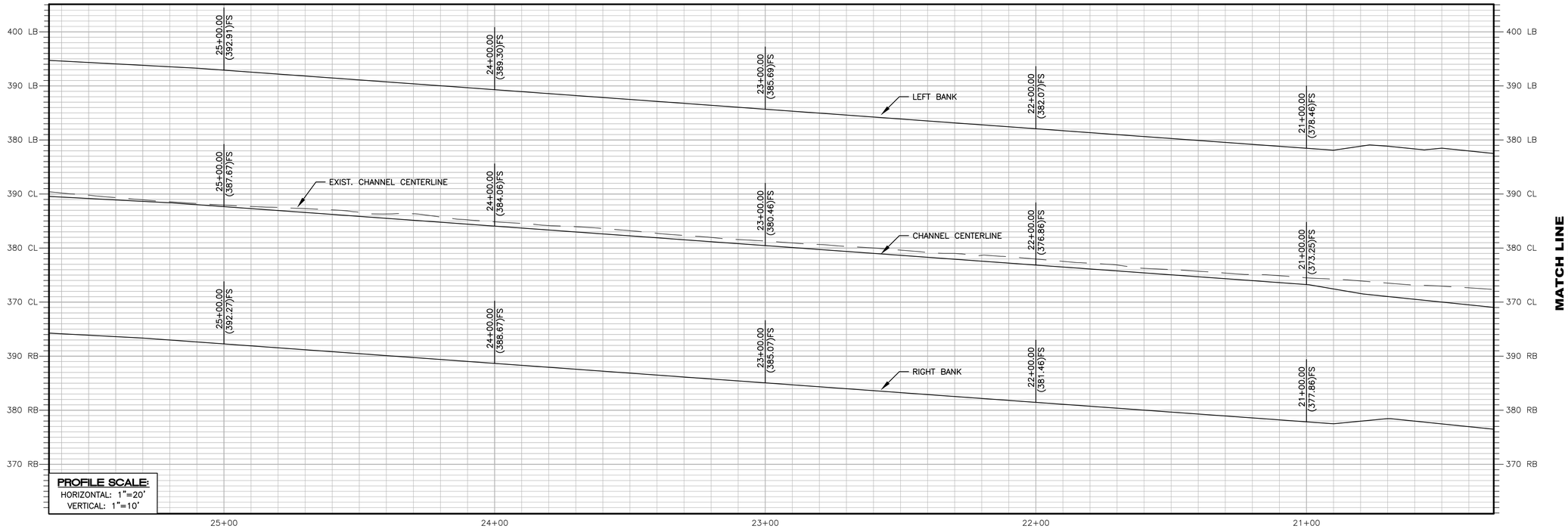
PLAN CHECKED BY:
CIVIL
TRAFFIC
LANDSCAPE

CITY OF PALM DESERT

HAYSTACK CHANNEL REHABILITATION CHANNEL IMPROVEMENT PLAN

STATION 31+00 TO 25+50

SHEET 6 OF SHEETS 20
CITY FILE NUMBER



MATCH LINE SEE SHEET 6 STA 25+50

MATCH LINE SEE SHEET 8 STA 20+50

PROFILE SCALE:
HORIZONTAL: 1"=20'
VERTICAL: 1"=10'

CONSTRUCTION NOTES

(7) INSTALL UNGROUTED 12" ROCK RIP-RAP LEVEE PER LA COUNTY FLOOD CONTROL DISTRICT DESIGN MANUAL

(9) CONSTRUCT 20' WIDE ACCESS ROAD ALONG NORTH SIDE OF CHANNEL PER RCFCD STD. CH323

HYDROLOGY DATA

STATION RANGE	Q100
60+05-52+00	322 CFS
52+00-47+50	348 CFS
47+50-38+50	543 CFS
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34+50-15+50	600 CFS
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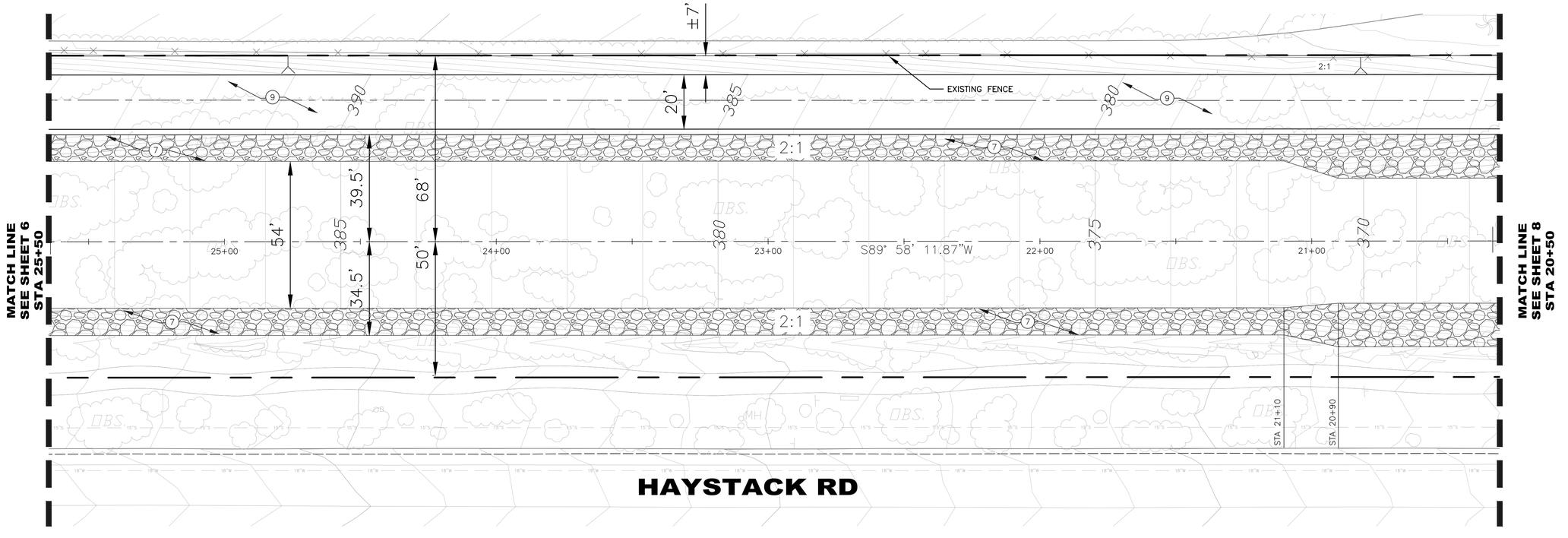
10+50-10+00	930 CFS



MATCH LINE SEE SHEET 6 STA 25+50

MATCH LINE SEE SHEET 8 STA 20+50

N

0' 10' 20' 40'
FEET
SCALE: 1"=20'

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ENGINEER			REVISIONS	CITY	
MARK	BY	DATE		APPR.	DATE
1					

ENGINEERS SEAL
REGISTERED PROFESSIONAL ENGINEER — JOHN M. BRUDIN — No. 41836 — CIVIL — STATE OF CALIFORNIA

ERSC Engineering Resources of Southern California
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F: 909.890.0995

PREPARED UNDER THE DIRECT SUPERVISION OF:
DATE:
JOHN M. BRUDIN, R.C.E. 41836 EXP. 03/31/24

CITY OF PALM DESERT
DEPARTMENT OF DEVELOPMENT SERVICES
APPROVED BY:
MARIA FRASERI, P.E. DATE
RCE #56005
CITY ENGINEER
REVIEWED AND RECOMMENDED BY: DATE

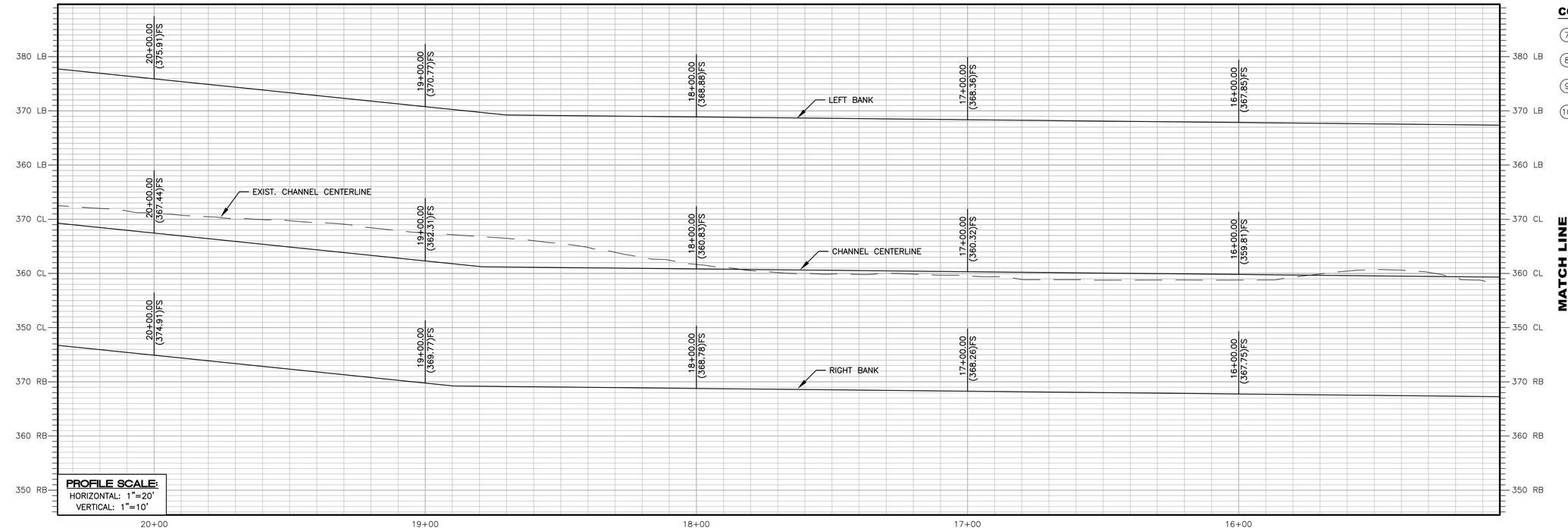
PLAN CHECKED BY:
CIVIL
TRAFFIC
LANDSCAPE

CITY OF PALM DESERT

HAYSTACK CHANNEL REHABILITATION CHANNEL IMPROVEMENT PLAN

STATION 25+50 TO 20+50

SHEET 7 OF SHEETS 20
CITY FILE NUMBER



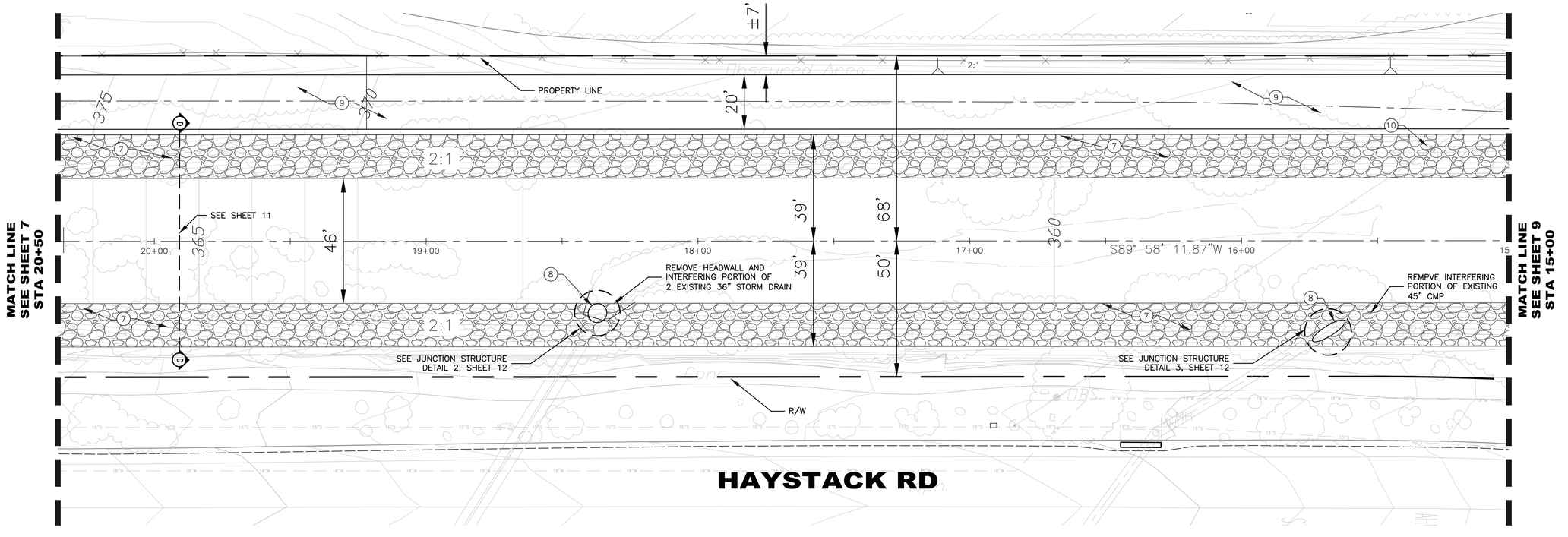
PROFILE SCALE:
HORIZONTAL: 1"=20'
VERTICAL: 1"=10'

CONSTRUCTION NOTES

7. INSTALL UNGROUTED 12" ROCK RIP-RAP LEVEE PER LA COUNTY FLOOD CONTROL DISTRICT DESIGN MANUAL
8. CONSTRUCT JUNCTION STRUCTURE NO. 6 PER RCFCD STD. NO. JS231
9. CONSTRUCT 20' WIDE ACCESS ROAD ALONG NORTH SIDE OF CHANNEL PER RCFCD STD. CH323
10. RELOCATE EXISTING POWERPOLES (SCE)

HYDROLOGY DATA

STATION RANGE	Q100
60+05-52+00	322 CFS
52+00-47+50	348 CFS
47+50-38+50	543 CFS
38+50-34+50	595 CFS
34+50-15+50	600 CFS
15+50-10+50	826 CFS
10+50-10+00	930 CFS



N

0' 10' 20' 40'
FEET
SCALE: 1"=20'

DIGALERT
DIAL BEFORE YOU DIG
TWO WORKING DAYS BEFORE YOU DIG
TOLL FREE 1-800-422-4133
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

BENCHMARK: CITY OF PALM DESERT BM118. A 2" BRASS DICK STAMPED "CITY OF P.D. BM 118" LOCATED ON THE SOUTHEAST CORNER OF CONCRETE BRIDGE ON HWY 111 OVER PALM VALLEY STORMWATER CHANNEL AT THE EAST END OF CONC. STEM WALL, FLUSH WITH TOP OF WALL.

BASIS OF BEARINGS: THE BASIS OF BEARING FOR THIS SURVEY IS THE STATE PLANE COORDINATE SYSTEM NAD83 ZONE 6, AS DETERMINED LOCALLY BY THE LINE BETWEEN USC&GS STATIONS AC5161 AND DX0739.
THE LINE BETWEEN SAID POINTS BEARS: NORTH 18°54'09" EAST, 2010.00 EPOCH.

ENGINEER			REVISIONS	CITY	
MARK	BY	DATE		APPR.	DATE
1					

ENGINEERS SEAL
REGISTERED PROFESSIONAL ENGINEER
JOHN M. BRUDIN
No. 41836
CIVIL
STATE OF CALIFORNIA

ERSG
Engineering Resources of Southern California
1861 West Redlands Blvd.
Redlands, CA 92373
P: 909.890.1255
F: 909.890.0995

PREPARED UNDER THE DIRECT SUPERVISION OF:
DATE:
JOHN M. BRUDIN, R.C.E. 41836 EXP. 03/31/24

CITY OF PALM DESERT
DEPARTMENT OF DEVELOPMENT SERVICES
APPROVED BY:
MARIA FRASERI, P.E. DATE
RCE #56005
CITY ENGINEER
REVIEWED AND RECOMMENDED BY: DATE

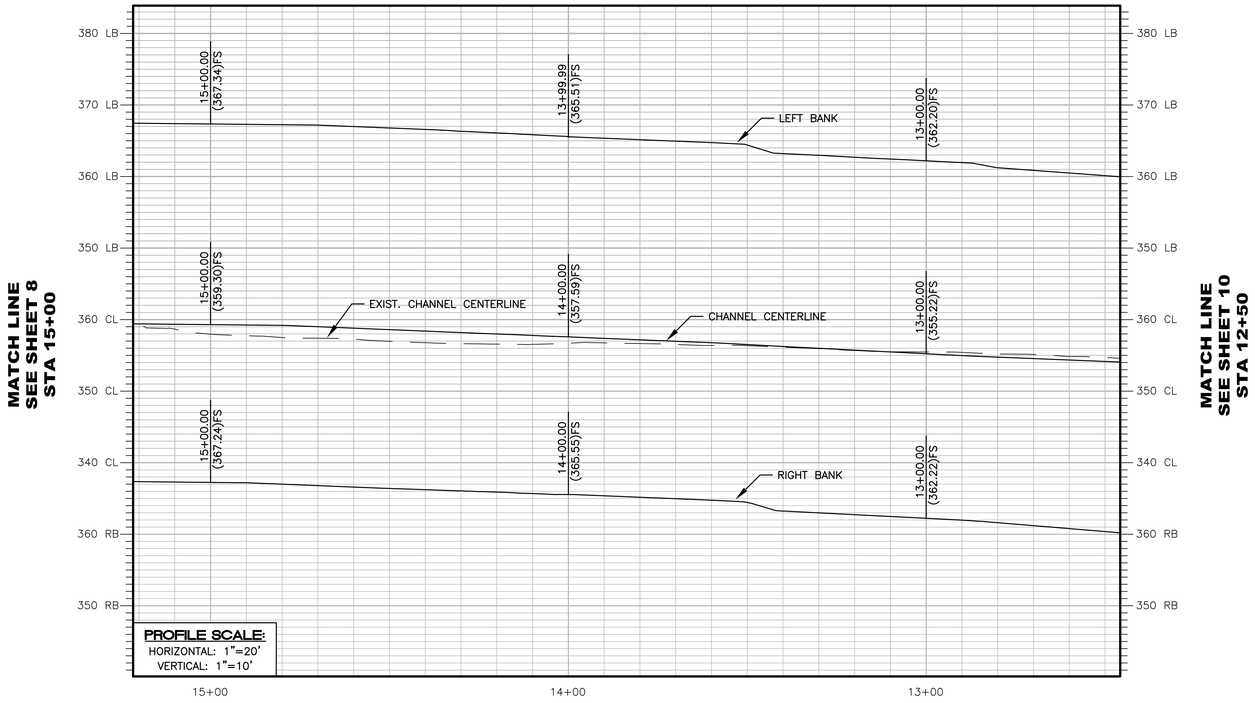
PLAN CHECKED BY:
CIVIL
TRAFFIC
LANDSCAPE

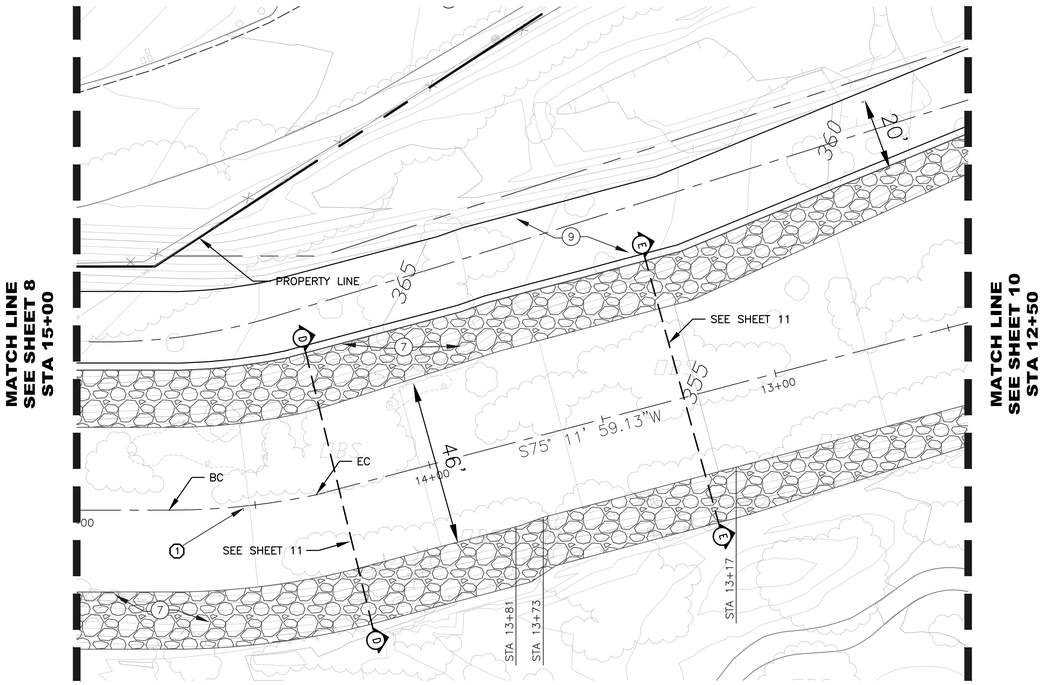
CITY OF PALM DESERT

HAYSTACK CHANNEL REHABILITATION CHANNEL IMPROVEMENT PLAN

STATION 20+50 TO 15+00

SHEET 8 OF SHEETS 20
CITY FILE NUMBER





CONSTRUCTION NOTES

(7) INSTALL UNGROUTED 12" ROCK RIP-RAP LEVEE PER LA COUNTY FLOOD CONTROL DISTRICT DESIGN MANUAL

(9) CONSTRUCT 20' WIDE ACCESS ROAD ALONG NORTH SIDE OF CHANNEL PER RCFCD STD. CH323

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38+50-34+50	595 CFS
34+50-15+50	600 CFS
15+50-10+50	826 CFS
10+50-10+00	930 CFS

CURVE DATA					
NO.	DELTA OR BRG.	RADIUS	LENGTH	BC	EC
(1)	11.89	200.00	41.49	31+36.11	31+77.60

N

0' 10' 20' 40'
FEET
SCALE: 1"=20'

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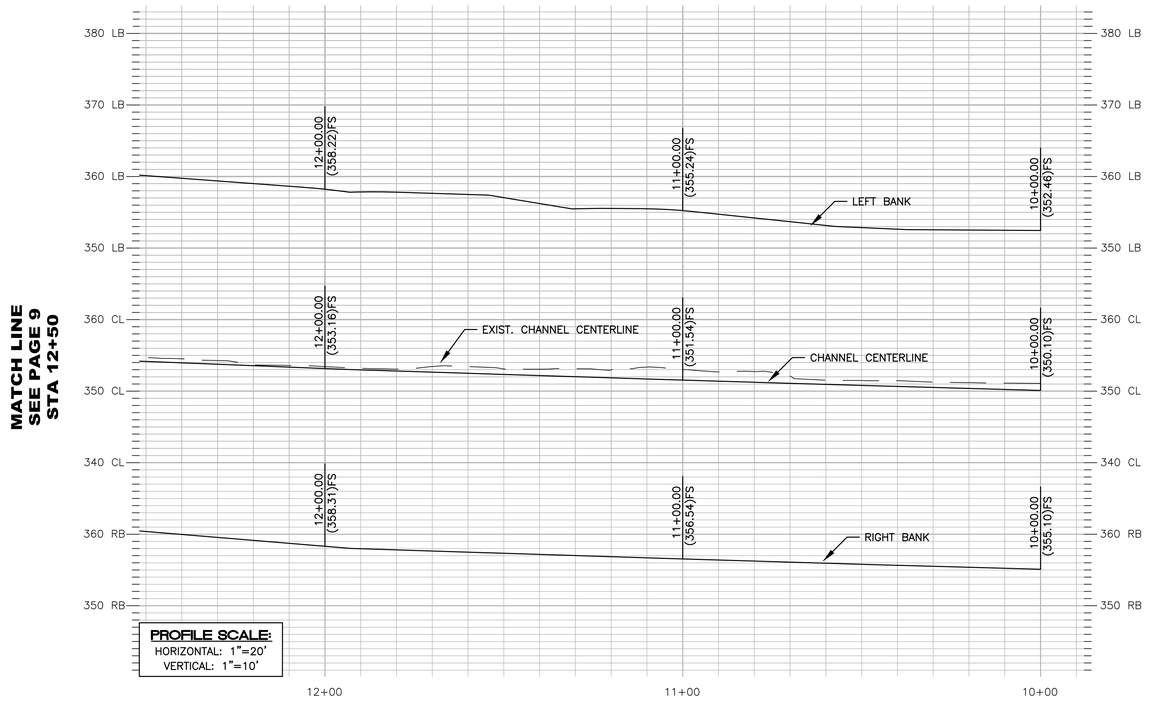
CIVIL
TRAFFIC
LANDSCAPE

CITY OF PALM DESERT

HAYSTACK CHANNEL REHABILITATION
CHANNEL IMPROVEMENT PLAN

STATION 15+00 TO 12+50

SHEET 9 OF SHEETS 20
CITY FILE NUMBER



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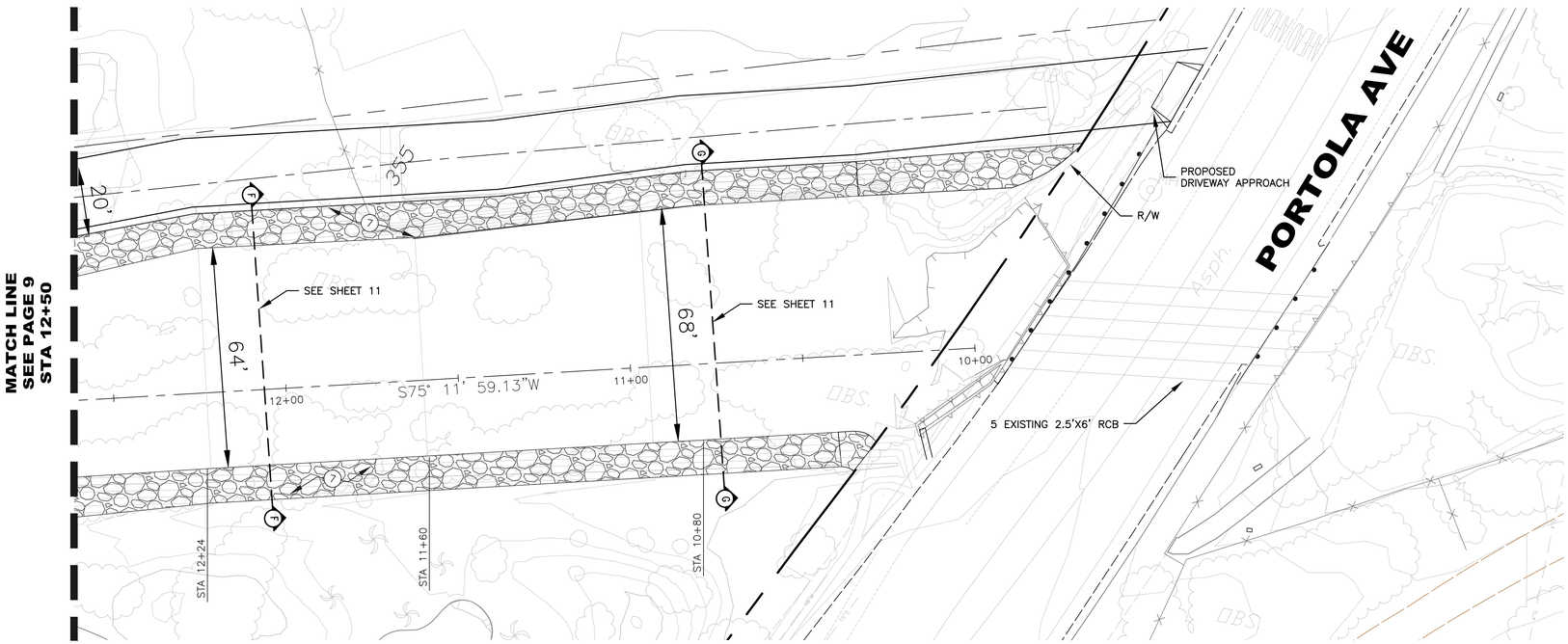

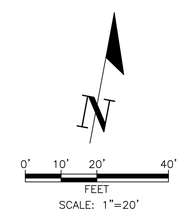

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ENGINEER MARK	BY	DATE	REVISIONS	CITY APPR.	DATE
1					

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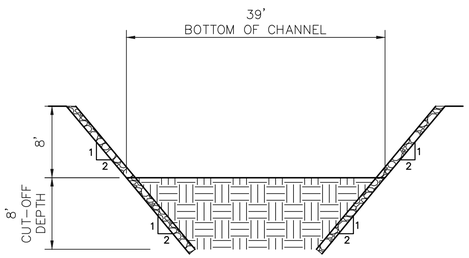
CIVIL
TRAFFIC
LANDSCAPE

CITY OF PALM DESERT

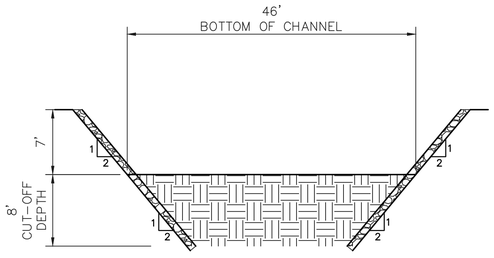
HAYSTACK CHANNEL REHABILITATION CHANNEL IMPROVEMENT PLAN

STATION 12+50 TO 10+00

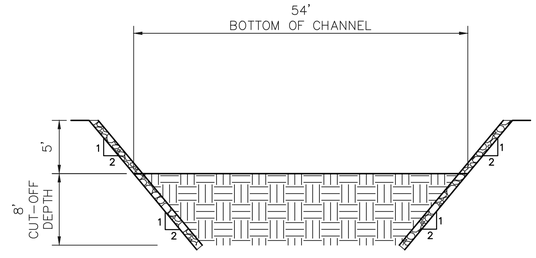
SHEET 10 OF SHEETS 20
CITY FILE NUMBER



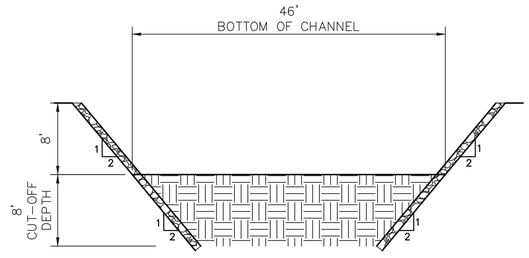
TYPICAL CROSS SECTION A-A
STATION 36+04-32+60
N.T.S.



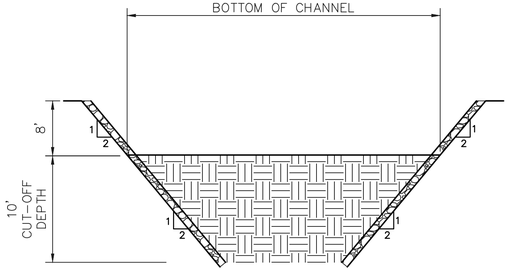
TYPICAL CROSS SECTION B-B
STATION 32+50-30+10
N.T.S.



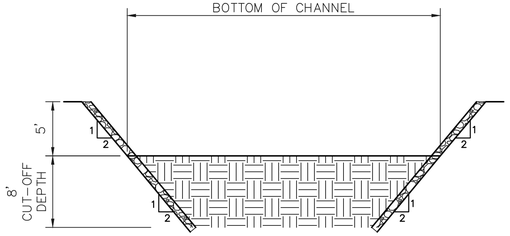
TYPICAL CROSS SECTION C-C
STATION 29+90-21+10
N.T.S.



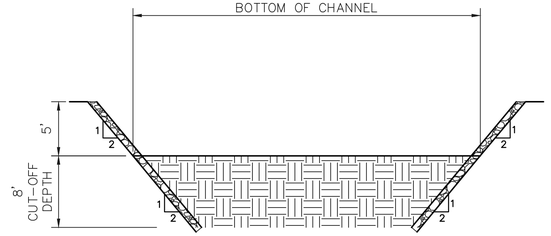
TYPICAL CROSS SECTION D-D
STATION 20+90-13+81
N.T.S.



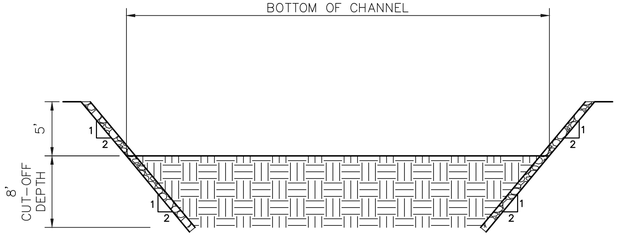
TYPICAL CROSS SECTION D-D
(CURVED REACH)
STATION 14+74-14+33 ONLY
N.T.S.



TYPICAL CROSS SECTION E-E
STATION 13+73-13+17
N.T.S.



TYPICAL CROSS SECTION F-F
STATION 12+24-11+60
N.T.S.



TYPICAL CROSS SECTION G-G
STATION 11+02-10+00
N.T.S.

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MARK	BY	DATE		APPR.	DATE
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CITY ENGINEER
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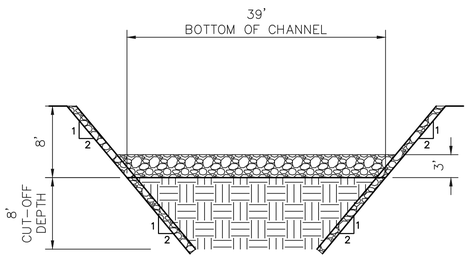
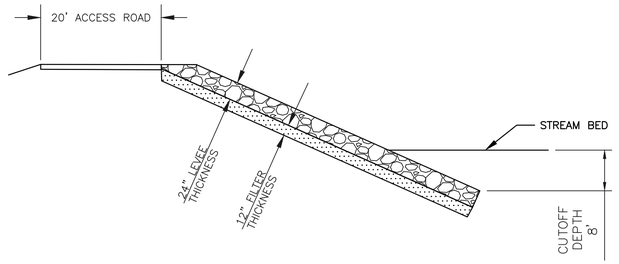
CIVIL
TRAFFIC
LANDSCAPE

CITY OF PALM DESERT
HAYSTACK CHANNEL REHABILITATION
CHANNEL IMPROVEMENT PLAN
CHANNEL CROSS SECTIONS

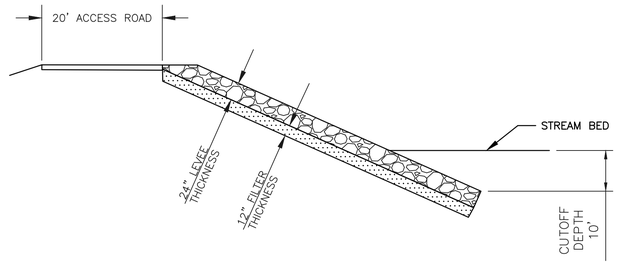
SHEET 11
OF
SHEETS 20
CITY FILE NUMBER



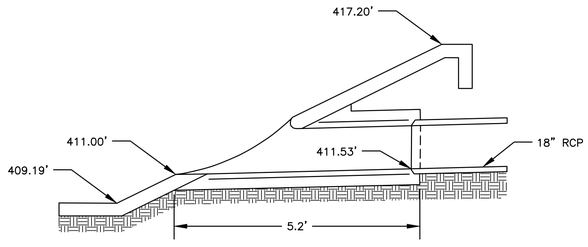
CROSS SECTION 1
STA 35+43 TO 34+88
SEE SHEET 5
NTS



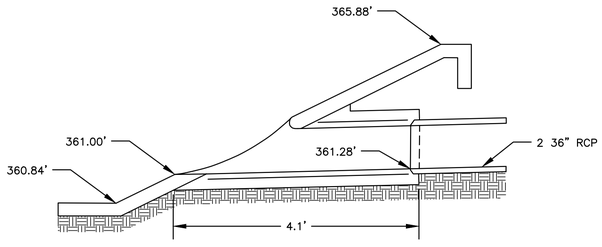
LA COUNTY DESIGN MANUAL
TYPICAL ROCK RIP-RAP LEVEE SECTION
STRAIGHT REACH
NTS



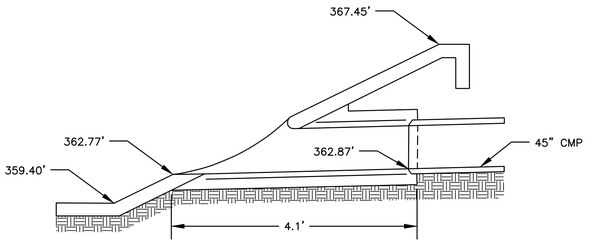
LA COUNTY DESIGN MANUAL
TYPICAL ROCK RIP-RAP LEVEE SECTION
CURVED REACH
NTS



DETAIL 1
JUNCTION STRUCTURE DETAIL
STA 11+79
NTS



DETAIL 2
JUNCTION STRUCTURE DETAIL
STA 27+73
NTS



DETAIL 3
JUNCTION STRUCTURE DETAIL
STA 30+42
NTS

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LANDSCAPE

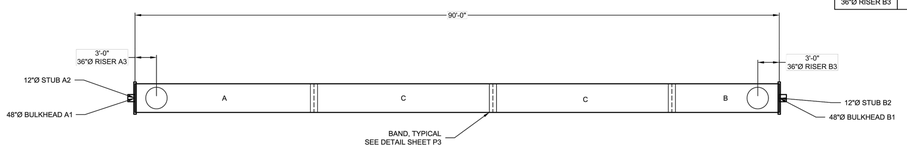
CITY OF PALM DESERT

HAYSTACK CHANNEL REHABILITATION CHANNEL IMPROVEMENT PLAN DETAILS

SHEET 12
OF
SHEETS 20
CITY FILE NUMBER

STUB INFORMATION		
PIECE	STUB INVERT	SYSTEM INVERT
12"Ø STUB A2	TBD	TBD
12"Ø STUB B2	TBD	TBD

RISER INFORMATION		
PIECE	RIM ELEV.	SYSTEM INVERT
36"Ø RISER A3	TBD	TBD
36"Ø RISER B3	TBD	TBD



ASSEMBLY

SCALE: 1" = 10'
LOADING: H20
PIPE INV. = TBD'±

NOTES

- THE PIPE SHOULD BE FULLY PERFORATED IN ACCORDANCE WITH AASHTO M 36, SECTION 8.3.2.2, AND USING CLASS 2 PERFORATIONS. THE TOTAL OPEN AREA OF THE PERFORATIONS WILL BE A MINIMUM OF 2.3% OF THE PIPE SURFACE AREA.
- BULKHEADS SHALL BE 12-GAGE OR HEAVIER STEEL AND THE COATING WILL MATCH THE SPECIFIED CMP COATING. BULKHEAD PLATES SHALL BE FULLY WELDED ONTO THE CMP WITH STEEL REINFORCEMENT AS REQUIRED. THE STEEL REINFORCEMENT SHALL BE POST COATED WITH ZINC RICH PAINT PER AASHTO M 36. BULKHEAD DESIGNS SHALL SATISFY THE REQUIREMENTS SHOWN IN CHAPTER 8 OF THE NCSPA CSP DESIGN MANUAL AND CALCULATIONS SHALL BE PROVIDED TO THE ENGINEER OF RECORD (EOR) FOR APPROVAL UPON REQUEST.
- ALL FITTINGS SHALL BE STRUCTURALLY CHECKED FOR REINFORCEMENTS PER ASTM A998 AND PROVIDED TO THE EOR FOR APPROVAL UPON REQUEST.
- CONNECTING BANDS FOR INFILTRATION SYSTEMS SHALL BE ANY TYPE, BUT MUST BE AT LEAST 12" WIDE. BANDS SHALL MATCH THE SPECIFIED CMP COATING AND MEET THE REQUIREMENTS OF AASHTO M 36.
- ALL METALLIC COATINGS AFFECTED BY MANUFACTURING FABRICATION SHALL BE REPAIRED PER AASHTO M 36 SECTION 11 REQUIREMENTS (E.G. ZINC-RICH PAINT ON ALL WELDS). IF POLYMER COATINGS ARE USED THE REPAIR OF DAMAGED COATINGS WILL BE IN CONFORMANCE WITH AASHTO M 245 SECTION 11 REQUIREMENTS.
- ACCESS LADDERS SHALL BE ATTACHED BY THE MANUFACTURER PRIOR TO DELIVERY, NOT INSTALLED ON THE JOBSITE.

THE UNDERSIGNED HEREBY APPROVES THE ATTACHED (P5) PAGES INCLUDING THE FOLLOWING:

- **PIPE STORAGE = 1,131 CF**
- **MAINLINE PIPE GAGE = 16**
- **WALL TYPE = PERFORATED**
- **DIAMETER = 48"**
- **FINISH = ALT2**
- **CORRUGATION = 2 2/3x1/2**

CUSTOMER _____ DATE _____

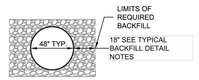
MARK	DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH **PROPOSAL** DRAWING

48"Ø PERFORATED UNDERGROUND RETENTION SYSTEM - 737057-010
HAYSTACK CHANNEL REHABILITATION
PALM DESERT, CA
SITE DESIGNATION:

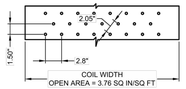
PROJECT No.:	SEQ. No.:	DATE:
737057	010	5/1/2023
DESIGNED: RLH	DRAWN: RLH	
CHECKED:	APPROVED:	
SHEET NO.: P1	OF P5	



TYPICAL SECTION VIEW

NOT TO SCALE

EDGE SPACING EQUAL ON BOTH SIDES



NOTES:
1. PERFORATIONS MEET AASHTO AND ASTM SPECIFICATIONS.
2. PERFORATION OPEN AREA PER SQUARE FOOT OF PIPE IS BASED ON THE NOMINAL DIAMETER AND LENGTH OF PIPE.
3. DIMENSIONS SUBJECT TO MANUFACTURER'S TOLERANCES.
4. ALL HOLES 3/8"Ø.

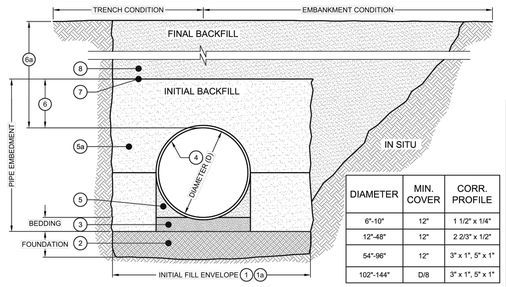
EXFILTRATION AREA
STANDARD PERFORATION PATTERNS

APPROXIMATE AREA PER LINEAR FOOT OF PIPE				
PIPE	CORRUGATION PATTERN			
	2 2/3" x 1/2"	3" x 1"	5" x 1"	ULTRA FLO
48"Ø	48.9 SQ. IN.	51.6 SQ. IN.		

NOTES:
- GAGE AND COATING LIMITATIONS APPLY. 5" x 1" IS NOT AVAILABLE IN ALUMINUM.
- DIMENSIONS SUBJECT TO MANUFACTURER'S TOLERANCES.

TYPICAL PERFORATION DETAIL

NOT TO SCALE



DIAMETER	MIN. COVER	CORR. PROFILE
6"-10"	12"	1 1/2" x 1/4"
12"-48"	12"	2 2/3" x 1/2"
54"-96"	12"	3" x 1", 5" x 1"
102"-144"	D/8	3" x 1", 5" x 1"

BACKFILL REQUIREMENTS FOLLOW THE GUIDELINES OF AASHTO LRFD BRIDGE DESIGN (SEC 12) AND CONSTRUCTION (SEC 26)

1 MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE.
THE MINIMUM TRENCH WIDTH (12.6.6.1):
PIPE ≤ 12": D + 16"
PIPE > 12": 1.5D + 12"

1a MINIMUM EMBANKMENT WIDTH (IN FEET) FOR INITIAL FILL ENVELOPE (12.6.6.2):
PIPE < 24": 3.0D
PIPE 24" - 144": D + 4'0"
PIPE > 144": D + 10'0"

2 THE FOUNDATION UNDER THE PIPE AND SIDE BACKFILL SHALL BE ADEQUATE TO SUPPORT THE LOADS ACTING UPON IT (26.5.2).

3 BEDDING MATERIAL SHALL BE A RELATIVELY LOOSE GRANULAR MATERIAL THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE, AND A MINIMUM OF TWICE THE CORRUGATION DEPTH IN THICKNESS, WITH THE MAXIMUM PARTICLE SIZE OF ONE-HALF OF THE CORRUGATION DEPTH (26.3.8.1, 26.5.3).

4 PERFORATED CORRUGATED STEEL PIPE (CSP / HEL-COR).

5 HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION (26.5.4).

5a BACKFILL MATERIAL SHALL BE A CLEAN, CRUSHED STONE MEETING SIZE NO. 3 OR 4, PER AASHTO M 43. IT IS RECOMMENDED THAT LIFTS NOT EXCEED AN 8" UNCOMPACTED LIFT HEIGHT TO PREVENT UNEVEN LOADING, AND THE LESSER OF 1/3 THE DIAMETER OR 24" AS THE MAXIMUM DIFFERENTIAL SIDE-TO-SIDE, COMPACTION OF ALL PLACED FILL MATERIAL IS NECESSARY AND SHALL BE CONSIDERED ADEQUATE WHEN NO FURTHER YIELDING OF THE MATERIAL IS OBSERVED UNDER THE COMPACTOR, OR UNDER FOOT, AND THE PROJECT ENGINEER, OR THEIR REPRESENTATIVE, IS SATISFIED WITH THE LEVEL OF COMPACTION (26.5.4).

6 INITIAL BACKFILL ABOVE PIPE MAY INCLUDE ROAD BASE MATERIAL (AND RIGID PAVEMENT IF APPLICABLE). SEE TABLE ABOVE.

6a TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT (12.6.6.3).

7 GEOTEXTILE SHALL BE USED TO WRAP TRENCH SIDES AND TOP ONLY TO PREVENT SOIL MIGRATION INTO VARYING SOIL TYPES (PROJECT ENGINEER).

8 FINAL BACKFILL MATERIAL SELECTION AND COMPACTION REQUIREMENTS SHALL FOLLOW THE PROJECT PLANS AND SPECIFICATIONS PER THE ENGINEER OF RECORD (26.5.4.1).

NOTES:
- FOR MULTIPLE BARREL INSTALLATIONS THE RECOMMENDED STANDARD SPACING BETWEEN PARALLEL PIPE RUNS SHALL BE PIPE DIA./2 BUT NO LESS THAN 12", OR 36" FOR PIPE DIAMETERS 72" AND LARGER. CONTACT YOUR CONTECH REPRESENTATIVE FOR NONSTANDARD SPACING (TABLE C12.6.7-1).

TYPICAL BACKFILL DETAIL

NOT TO SCALE

MARK	DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH **PROPOSAL** DRAWING

48"Ø PERFORATED UNDERGROUND RETENTION SYSTEM - 737057-010
HAYSTACK CHANNEL REHABILITATION
PALM DESERT, CA
SITE DESIGNATION:

PROJECT No.:	SEQ. No.:	DATE:
737057	010	5/1/2023
DESIGNED: RLH	DRAWN: RLH	
CHECKED:	APPROVED:	
SHEET NO.: P2	OF P5	

DIGALERT
DIAL BEFORE YOU DIG — TWO WORKING DAYS BEFORE YOU DIG
TOLL FREE 1-800-422-4133
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

BENCHMARK: CITY OF PALM DESERT BM118. A 2" BRASS DICK STAMPED "CITY OF P.D. BM 118" LOCATED ON THE SOUTHEAST CORNER OF CONCRETE BRIDGE ON HWY 111 OVER PALM VALLEY STORMWATER CHANNEL AT THE EAST END OF CONC. STEM WALL, FLUSH WITH TOP OF WALL.

BASIS OF BEARINGS: THE BASIS OF BEARING FOR THIS SURVEY IS THE STATE PLANE COORDINATE SYSTEM NAD83 ZONE 6, AS DETERMINED LOCALLY BY THE LINE BETWEEN USC&GS STATIONS AC5161 AND DX0739.
THE LINE BETWEEN SAID POINTS BEARS: NORTH 18°54'09" EAST, 2010.00 EPOCH.

ENGINEER MARK	BY	DATE	REVISIONS	CITY APPR.	DATE
1					

ENGINEERS SEAL
REGISTERED PROFESSIONAL ENGINEER — JOHN M. BRUDIN — No. 41836 — CIVIL — STATE OF CALIFORNIA

ERSC Engineering Resources of Southern California
1861 West Redlands Blvd.
Redlands, CA 92373
P: 909.890.1255
F: 909.890.0995

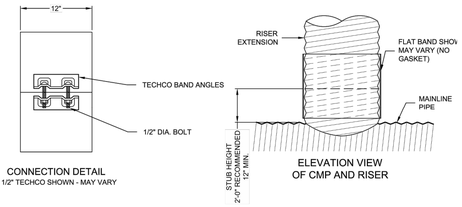
PREPARED UNDER THE DIRECT SUPERVISION OF:
JOHN M. BRUDIN, R.C.E. 41836 DATE: EXP. 03/31/24

CITY OF PALM DESERT
DEPARTMENT OF DEVELOPMENT SERVICES
APPROVED BY:
MARIA FRASERI, P.E. DATE
RCE #56005
CITY ENGINEER
REVIEWED AND RECOMMENDED BY: DATE

PLAN CHECKED BY:
CIVIL
TRAFFIC
LANDSCAPE

CITY OF PALM DESERT
HAYSTACK CHANNEL REHABILITATION
CHANNEL IMPROVEMENT PLAN
INFILTRATION SYSTEM 1

SHEET 13
OF SHEETS 20
CITY FILE NUMBER



CONNECTION DETAIL
7 1/2" TECHCO SHOWN - MAY VARY

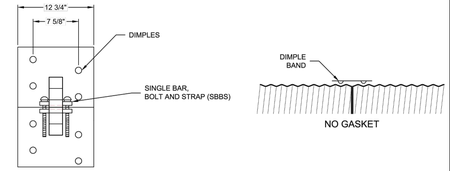
ELEVATION VIEW
OF CMP AND RISER

PLAIN END CMP RISER PIPE

GENERAL NOTES:

1. **DELIVERED BAND STYLE AND FASTENER TYPE MAY VARY BY FABRICATION PLANT.**
2. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
3. BAND MATERIAL AND GAGE TO BE SAME AS RISER MATERIAL.
4. IF RISER HAS A HEIGHT OF COVER OF 10' OR MORE, USE A SLIP JOINT.
5. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
   - 12" THRU 48" 1-PIECE
   - 54" 2-PIECES
6. ALL RISER JOINT COMPONENTS WILL BE FIELD ASSEMBLED.
7. MANHOLE RISERS IN APPLICATIONS WHERE TRAFFIC LOADS ARE IMPOSED REQUIRE SPECIAL DESIGN CONSIDERATIONS.
8. DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.

12" RISER BAND DETAIL
NOT TO SCALE



CONNECTION DETAIL
(SBBS)

PLAIN END CMP PIPE

GENERAL NOTES:

1. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
2. BAND MATERIALS AND/OR COATING CAN VARY BY LOCATION. CONTACT YOUR CONTECH REPRESENTATIVE FOR AVAILABILITY.
3. BANDS ARE SHAPED TO MATCH THE PIPE-ARCH WHEN APPLICABLE.
4. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
   - 12" THRU 48" 1-PIECE
   - 54" THRU 96" 2-PIECES
   - 102" THRU 144" 3-PIECES
5. BAND FASTENERS ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDS.
6. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
7. ORDER SHALL DESIGNATE GASKET OPTION, IF REQUIRED (SEE DETAILS ABOVE).

D-12 DIMPLE BAND DETAIL
NOT TO SCALE

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9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH
PROPOSAL
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48"Ø PERFORATED UNDERGROUND RETENTION SYSTEM - 737057-010
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PALM DESERT, CA
SITE DESIGNATION:

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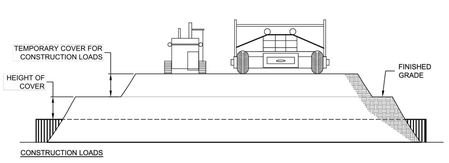
737057	010	5/1/2023
DESIGNED: RLH	DRAWN: RLH	
CHECKED:	APPROVED:	
SHEET NO.: P3 OF P5		



CONSTRUCTION LOADS

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
	MINIMUM COVER (FT)			
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

CONSTRUCTION LOADING DIAGRAM
NOT TO SCALE

SPECIFICATION FOR CORRUGATED STEEL PIPE-ALUMINIZED TYPE 2 STEEL

SCOPE

THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE CORRUGATED STEEL PIPE (CSP) DETAILED IN THE PROJECT PLANS.

MATERIAL

THE ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M274 OR ASTM A929.

PIPE

THE CSP SHALL BE MANUFACTURED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF AASHTO M36 OR ASTM A760. THE PIPE SIZES, GAGES AND CORRUGATIONS SHALL BE AS SHOWN ON THE PROJECT PLANS.

ALL FABRICATION OF THE PRODUCT SHALL OCCUR WITHIN THE UNITED STATES.

HANDLING AND ASSEMBLY

SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE NATIONAL CORRUGATED STEEL PIPE ASSOCIATION (NCSPA)

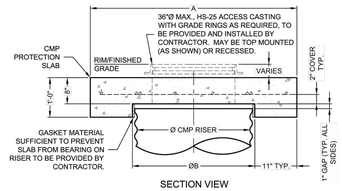
INSTALLATION

SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II OR ASTM A798 AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.

ANTI-FLOTATION PROVISIONS DUE TO HIGH GROUNDWATER OR OTHER FLOTATION CONCERNS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.

MATERIAL SPECIFICATION
NOT TO SCALE

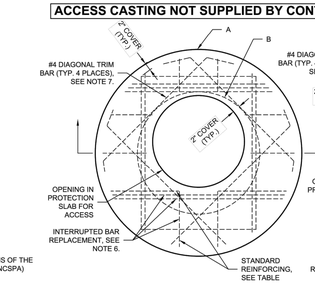


SECTION VIEW

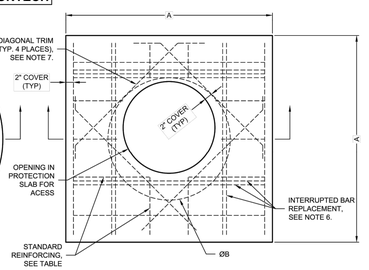
REINFORCING TABLE				
Ø CMP RISER	A	B Ø	REINFORCING	**BEARING PRESSURE (PSF)
24"	4'Ø 4'x4'	26"	#5 @ 10" OCEW #5 @ 10" OCEW	2,540 1,900
30"	4'-6"Ø 4'-6" x 4'-6"	32"	#5 @ 10" OCEW #5 @ 9" OCEW	2,260 1,670
36"	5'Ø 5' x 5'	38"	#5 @ 9" OCEW #5 @ 8" OCEW	2,060 1,500
42"	5'-6"Ø 5'-6" x 5'-6"	44"	#5 @ 8" OCEW #5 @ 8" OCEW	1,490 1,370
48"	6'Ø 6' x 6'	50"	#5 @ 7" OCEW #5 @ 7" OCEW	1,210 1,270

** ASSUMED SOIL BEARING CAPACITY

ACCESS CASTING NOT SUPPLIED BY CONTECH



ROUND OPTION PLAN VIEW



SQUARE OPTION PLAN VIEW

NOTES:

1. DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION AND ACI 350.
2. DESIGN LOAD HS25.
3. EARTH COVER = 1' MAX.
4. CONCRETE STRENGTH = 4,000 psi
5. REINFORCING STEEL = ASTM A615, GRADE 60.
6. PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.
7. TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
8. PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
9. DETAIL DESIGN BY DELTA ENGINEERS, ARCHITECTS AND LAND SURVEYORS, ENDWELL, NY.

MANHOLE CAP DETAIL
NOT TO SCALE

MARK	DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH
PROPOSAL
DRAWING

48"Ø PERFORATED UNDERGROUND RETENTION SYSTEM - 737057-010
HAYSTACK CHANNEL REHABILITATION
PALM DESERT, CA
SITE DESIGNATION:

PROJECT No.:	SEQ. No.:	DATE:
737057	010	5/1/2023
DESIGNED: RLH	DRAWN: RLH	
CHECKED:	APPROVED:	
SHEET NO.: P4 OF P5		

DIGALERT
DIAL BEFORE YOU DIG — TWO WORKING DAYS BEFORE YOU DIG
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A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

BENCHMARK: CITY OF PALM DESERT BM118. A 2" BRASS DICK STAMPED "CITY OF P.D. BM 118" LOCATED ON THE SOUTHEAST CORNER OF CONCRETE BRIDGE ON HWY 111 OVER PALM VALLEY STORMWATER CHANNEL AT THE EAST END OF CONC. STEM WALL, FLUSH WITH TOP OF WALL.

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THE LINE BETWEEN SAID POINTS BEARS: NORTH 18°54'09" EAST, 2010.00 EPOCH.

ENGINEER			REVISIONS	CITY	
MARK	BY	DATE		APPR.	DATE
1					

ENGINEERS SEAL
REGISTERED PROFESSIONAL ENGINEER — JOHN M. BRUDIN — No. 41836 — CIVIL — STATE OF CALIFORNIA

ERSC Engineering Resources of Southern California
1861 West Redlands Blvd.
Redlands, CA 92373
P: 909.890.1255
F: 909.890.0995

PREPARED UNDER THE DIRECT SUPERVISION OF:
JOHN M. BRUDIN, R.C.E. 41836 DATE: EXP. 03/31/24

CITY OF PALM DESERT
DEPARTMENT OF DEVELOPMENT SERVICES
APPROVED BY:
MARIA FRASERI, P.E. DATE
RCE #56005
CITY ENGINEER
REVIEWED AND RECOMMENDED BY: DATE

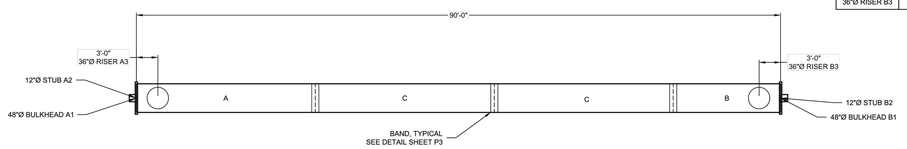
PLAN CHECKED BY:
CIVIL
TRAFFIC
LANDSCAPE

CITY OF PALM DESERT
HAYSTACK CHANNEL REHABILITATION
CHANNEL IMPROVEMENT PLAN
INFILTRATION SYSTEM 1

SHEET 14
OF SHEETS 20
CITY FILE NUMBER

STUB INFORMATION		
PIECE	STUB INVERT	SYSTEM INVERT
12"Ø STUB A2	TBD	TBD
12"Ø STUB B2	TBD	TBD

RISER INFORMATION		
PIECE	RIM ELEV.	SYSTEM INVERT
36"Ø RISER A3	TBD	TBD
36"Ø RISER B3	TBD	TBD



THE UNDERSIGNED HEREBY APPROVES THE ATTACHED (P5) PAGES INCLUDING THE FOLLOWING:

- **PIPE STORAGE = 1,131 CF**
- **MAINLINE PIPE GAGE = 16**
- **WALL TYPE = PERFORATED**
- **DIAMETER = 48"**
- **FINISH = ALT2**
- **CORRUGATION = 2 2/3x1/2**

CUSTOMER _____ DATE _____

ASSEMBLY
SCALE: 1" = 10'
LOADING: H20
PIPE INV. = TBD'±

NOTES

- THE PIPE SHOULD BE FULLY PERFORATED IN ACCORDANCE WITH AASHTO M 36, SECTION 8.3.2.2, AND USING CLASS 2 PERFORATIONS. THE TOTAL OPEN AREA OF THE PERFORATIONS WILL BE A MINIMUM OF 2.3% OF THE PIPE SURFACE AREA.
- BULKHEADS SHALL BE 12-GAGE OR HEAVIER STEEL AND THE COATING WILL MATCH THE SPECIFIED CMP COATING. BULKHEAD PLATES SHALL BE FULLY WELDED ONTO THE CMP WITH STEEL REINFORCEMENT AS REQUIRED. THE STEEL REINFORCEMENT SHALL BE POST COATED WITH ZINC RICH PAINT PER AASHTO M 36. BULKHEAD DESIGNS SHALL SATISFY THE REQUIREMENTS SHOWN IN CHAPTER 8 OF THE NCSPA CSP DESIGN MANUAL AND CALCULATIONS SHALL BE PROVIDED TO THE ENGINEER OF RECORD (EOR) FOR APPROVAL UPON REQUEST.
- ALL FITTINGS SHALL BE STRUCTURALLY CHECKED FOR REINFORCEMENTS PER ASTM A998 AND PROVIDED TO THE EOR FOR APPROVAL UPON REQUEST.
- CONNECTING BANDS FOR INFILTRATION SYSTEMS SHALL BE ANY TYPE, BUT MUST BE AT LEAST 12" WIDE. BANDS SHALL MATCH THE SPECIFIED CMP COATING AND MEET THE REQUIREMENTS OF AASHTO M 36.
- ALL METALLIC COATINGS AFFECTED BY MANUFACTURING FABRICATION SHALL BE REPAIRED PER AASHTO M 36 SECTION 11 REQUIREMENTS (E.G. ZINC-RICH PAINT ON ALL WELDS). IF POLYMER COATINGS ARE USED THE REPAIR OF DAMAGED COATINGS WILL BE IN CONFORMANCE WITH AASHTO M 245 SECTION 11 REQUIREMENTS.
- ACCESS LADDERS SHALL BE ATTACHED BY THE MANUFACTURER PRIOR TO DELIVERY, NOT INSTALLED ON THE JOBSITE.

MARK	DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
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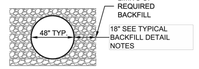
9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH **PROPOSAL** DRAWING

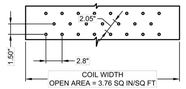
48"Ø PERFORATED UNDERGROUND RETENTION SYSTEM - 737057-015
HAYSTACK CHANNEL REHABILITATION
PALM DESERT, CA
SITE DESIGNATION:

PROJECT No.:	SEQ. No.:	DATE:
737057	015	5/1/2023
DESIGNED: RLH	DRAWN: RLH	
CHECKED:	APPROVED:	
SHEET NO.: P1 OF P5		



TYPICAL SECTION VIEW
NOT TO SCALE

EDGE SPACING EQUAL ON BOTH SIDES



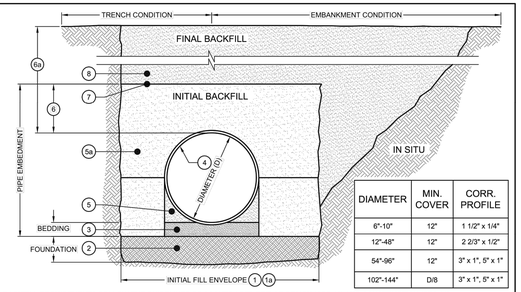
NOTES:
1. PERFORATIONS MEET AASHTO AND ASTM SPECIFICATIONS.
2. PERFORATION OPEN AREA PER SQUARE FOOT OF PIPE IS BASED ON THE NOMINAL DIAMETER AND LENGTH OF PIPE.
3. DIMENSIONS SUBJECT TO MANUFACTURER'S TOLERANCES.
4. ALL HOLES 3/8"Ø.

EXFILTRATION AREA
STANDARD PERFORATION PATTERNS

APPROXIMATE AREA PER LINEAR FOOT OF PIPE				
PIPE	CORRUGATION PATTERN			
	2 2/3" x 1/2"	3" x 1"	5" x 1"	ULTRA FLO
48"Ø	48.9 SQ. IN.	51.6 SQ. IN.		

NOTES:
- GAGE AND COATING LIMITATIONS APPLY. 5" x 1" IS NOT AVAILABLE IN ALUMINUM.
- DIMENSIONS SUBJECT TO MANUFACTURER'S TOLERANCES.

TYPICAL PERFORATION DETAIL
NOT TO SCALE



DIAMETER	MIN. COVER	CORR. PROFILE
6"-10"	12"	1 1/2" x 1/4"
12"-48"	12"	2 2/3" x 1/2"
54"-96"	12"	3" x 1", 5" x 1"
102"-144"	D/8	3" x 1", 5" x 1"

BACKFILL REQUIREMENTS FOLLOW THE GUIDELINES OF AASHTO LRFD BRIDGE DESIGN (SEC 12) AND CONSTRUCTION (SEC 26)

1 MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE.
THE MINIMUM TRENCH WIDTH (12.6.6.1):
PIPE ≤ 12": D + 16"
PIPE > 12": 1.5D + 12"

1a MINIMUM EMBANKMENT WIDTH (IN FEET) FOR INITIAL FILL ENVELOPE (12.6.6.2):
PIPE < 24": 3.0D
PIPE 24" - 144": D + 4'0"
PIPE > 144": D + 10'0"

2 THE FOUNDATION UNDER THE PIPE AND SIDE BACKFILL SHALL BE ADEQUATE TO SUPPORT THE LOADS ACTING UPON IT (26.5.2).

3 BEDDING MATERIAL SHALL BE A RELATIVELY LOOSE GRANULAR MATERIAL THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE, AND A MINIMUM OF TWICE THE CORRUGATION DEPTH IN THICKNESS, WITH THE MAXIMUM PARTICLE SIZE OF ONE-HALF OF THE CORRUGATION DEPTH (26.3.8.1, 26.5.3).

4 PERFORATED CORRUGATED STEEL PIPE (CSP / HEL-COR).

5 HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION (26.5.4).

5a BACKFILL MATERIAL SHALL BE A CLEAN, CRUSHED STONE MEETING SIZE NO. 3 OR 4, PER AASHTO M 43. IT IS RECOMMENDED THAT LIFTS NOT EXCEED AN 8" UNCOMPACTED LIFT HEIGHT TO PREVENT UNEVEN LOADING, AND THE LESSER OF 1/3 THE DIAMETER OR 24" AS THE MAXIMUM DIFFERENTIAL SIDE-TO-SIDE. COMPACTION OF ALL PLACED FILL MATERIAL IS NECESSARY AND SHALL BE CONSIDERED ADEQUATE WHEN NO FURTHER YIELDING OF THE MATERIAL IS OBSERVED UNDER THE COMPACTOR, OR UNDER FOOT, AND THE PROJECT ENGINEER, OR THEIR REPRESENTATIVE, IS SATISFIED WITH THE LEVEL OF COMPACTION (26.5.4).

6 INITIAL BACKFILL ABOVE PIPE MAY INCLUDE ROAD BASE MATERIAL (AND RIGID PAVEMENT IF APPLICABLE). SEE TABLE ABOVE.

6a TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT (12.6.6.3).

7 GEOTEXTILE SHALL BE USED TO WRAP TRENCH SIDES AND TOP ONLY TO PREVENT SOIL MIGRATION INTO VARYING SOIL TYPES (PROJECT ENGINEER).

8 FINAL BACKFILL MATERIAL SELECTION AND COMPACTION REQUIREMENTS SHALL FOLLOW THE PROJECT PLANS AND SPECIFICATIONS PER THE ENGINEER OF RECORD (26.5.4.1).

NOTES:
- FOR MULTIPLE BARREL INSTALLATIONS THE RECOMMENDED STANDARD SPACING BETWEEN PARALLEL PIPE RUNS SHALL BE PIPE DIA./2 BUT NO LESS THAN 12", OR 36" FOR PIPE DIAMETERS 72" AND LARGER. CONTACT YOUR CONTECH REPRESENTATIVE FOR NONSTANDARD SPACING (TABLE C12.6.7-1).

TYPICAL BACKFILL DETAIL
NOT TO SCALE

MARK	DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH **PROPOSAL** DRAWING

48"Ø PERFORATED UNDERGROUND RETENTION SYSTEM - 737057-015
HAYSTACK CHANNEL REHABILITATION
PALM DESERT, CA
SITE DESIGNATION:

PROJECT No.:	SEQ. No.:	DATE:
737057	015	5/1/2023
DESIGNED: RLH	DRAWN: RLH	
CHECKED:	APPROVED:	
SHEET NO.: P2 OF P5		

DIGALERT
DIAL BEFORE YOU DIG — TWO WORKING DAYS BEFORE YOU DIG
TOLL FREE 1-800-422-4133
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

BENCHMARK: CITY OF PALM DESERT BM118. A 2" BRASS DICK STAMPED "CITY OF P.D. BM 118" LOCATED ON THE SOUTHEAST CORNER OF CONCRETE BRIDGE ON HWY 111 OVER PALM VALLEY STORMWATER CHANNEL AT THE EAST END OF CONC. STEM WALL, FLUSH WITH TOP OF WALL.

BASIS OF BEARINGS: THE BASIS OF BEARING FOR THIS SURVEY IS THE STATE PLANE COORDINATE SYSTEM NAD83 ZONE 6, AS DETERMINED LOCALLY BY THE LINE BETWEEN USC&GS STATIONS AC5161 AND DX0739.
THE LINE BETWEEN SAID POINTS BEARS: NORTH 18°54'09" EAST, 2010.00 EPOCH.

ENGINEER			REVISIONS	CITY	
MARK	BY	DATE		APPR.	DATE
1					

ENGINEERS SEAL
REGISTERED PROFESSIONAL ENGINEER — JOHN M. BRUDIN — No. 41836 — CIVIL — STATE OF CALIFORNIA

ERSC
Engineering Resources of Southern California
1861 West Redlands Blvd.
Redlands, CA 92373
P: 909.890.1255
F: 909.890.0995

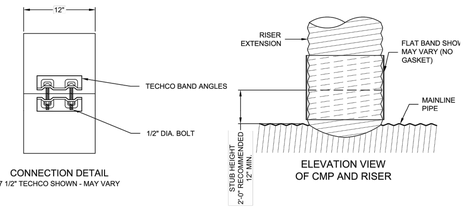
PREPARED UNDER THE DIRECT SUPERVISION OF:
JOHN M. BRUDIN, R.C.E. 41836 DATE: EXP. 03/31/24

CITY OF PALM DESERT
DEPARTMENT OF DEVELOPMENT SERVICES
APPROVED BY:
MARIA FRASERI, P.E. DATE
RCE #56005
CITY ENGINEER
REVIEWED AND RECOMMENDED BY: DATE

PLAN CHECKED BY:
CIVIL
TRAFFIC
LANDSCAPE

CITY OF PALM DESERT
HAYSTACK CHANNEL REHABILITATION
CHANNEL IMPROVEMENT PLAN
INFILTRATION SYSTEM 2

SHEET 15
OF SHEETS 20
CITY FILE NUMBER



CONNECTION DETAIL
7 1/2" TECHCO SHOWN - MAY VARY

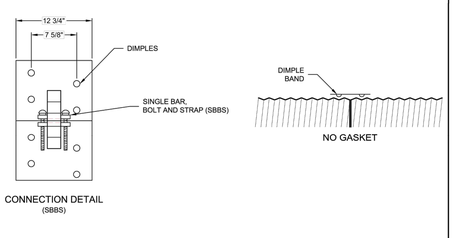
ELEVATION VIEW
OF CMP AND RISER

PLAIN END CMP RISER PIPE

GENERAL NOTES:

1. **DELIVERED BAND STYLE AND FASTENER TYPE MAY VARY BY FABRICATION PLANT.**
2. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
3. BAND MATERIAL AND GAGE TO BE SAME AS RISER MATERIAL.
4. IF RISER HAS A HEIGHT OF COVER OF 10' OR MORE, USE A SLIP JOINT.
5. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
   - 12" THRU 48" 1-PIECE
   - 54" 2-PIECES
6. ALL RISER JOINT COMPONENTS WILL BE FIELD ASSEMBLED.
7. MANHOLE RISERS IN APPLICATIONS WHERE TRAFFIC LOADS ARE IMPOSED REQUIRE SPECIAL DESIGN CONSIDERATIONS.
8. DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.

12" RISER BAND DETAIL
NOT TO SCALE



CONNECTION DETAIL
(SBBS)

PLAIN END CMP PIPE

GENERAL NOTES:

1. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
2. BAND MATERIALS AND/OR COATING CAN VARY BY LOCATION. CONTACT YOUR CONTECH REPRESENTATIVE FOR AVAILABILITY.
3. BANDS ARE SHAPED TO MATCH THE PIPE-ARCH WHEN APPLICABLE.
4. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
   - 12" THRU 48" 1-PIECE
   - 54" THRU 96" 2-PIECES
   - 102" THRU 144" 3-PIECES
5. BAND FASTENERS ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDS.
6. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
7. ORDER SHALL DESIGNATE GASKET OPTION, IF REQUIRED (SEE DETAILS ABOVE).

D-12 DIMPLE BAND DETAIL
NOT TO SCALE

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PALM DESERT, CA
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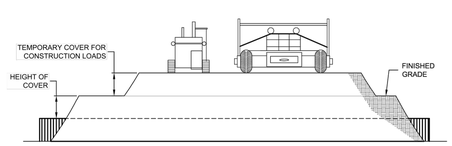
RLH	RLH	
CHECKED:	APPROVED:	

SHEET NO.: P3 OF P5



CONSTRUCTION LOADS

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
	MINIMUM COVER (FT)			
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

CONSTRUCTION LOADING DIAGRAM
NOT TO SCALE

SPECIFICATION FOR CORRUGATED STEEL PIPE-ALUMINIZED TYPE 2 STEEL

SCOPE

THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE CORRUGATED STEEL PIPE (CSP) DETAILED IN THE PROJECT PLANS.

MATERIAL

THE ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M274 OR ASTM A929.

PIPE

THE CSP SHALL BE MANUFACTURED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF AASHTO M36 OR ASTM A760. THE PIPE SIZES, GAGES AND CORRUGATIONS SHALL BE AS SHOWN ON THE PROJECT PLANS.

ALL FABRICATION OF THE PRODUCT SHALL OCCUR WITHIN THE UNITED STATES.

HANDLING AND ASSEMBLY

SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE NATIONAL CORRUGATED STEEL PIPE ASSOCIATION (NCSPA)

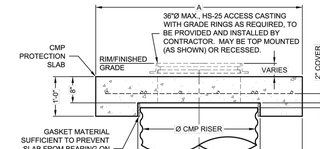
INSTALLATION

SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II OR ASTM A798 AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.

ANTI-FLOTATION PROVISIONS DUE TO HIGH GROUNDWATER OR OTHER FLOTATION CONCERNS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.

MATERIAL SPECIFICATION
NOT TO SCALE

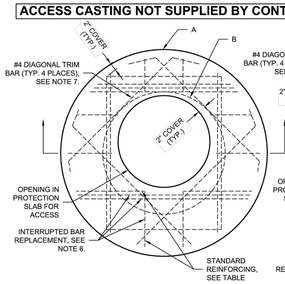


SECTION VIEW

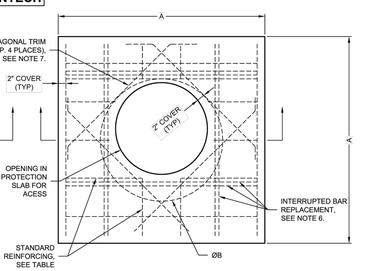
REINFORCING TABLE				
Ø CMP RISER	A	B Ø	REINFORCING	**BEARING PRESSURE (PSF)
24"	4'Ø 4'x4'	26"	#5 @ 10" OCEW #5 @ 10" OCEW	2,540 1,900
30"	4'-6"Ø 4'-6" X 4'-6"	32"	#6 @ 10" OCEW #5 @ 9" OCEW	2,260 1,670
36"	5'Ø 5' x 5'	38"	#5 @ 9" OCEW #5 @ 8" OCEW	2,060 1,500
42"	5'-6"Ø 5'-6" x 5'-6"	44"	#5 @ 8" OCEW #5 @ 8" OCEW	1,490 1,370
48"	6'Ø 6' x 6'	50"	#5 @ 7" OCEW #5 @ 7" OCEW	1,210 1,270

** ASSUMED SOIL BEARING CAPACITY

ACCESS CASTING NOT SUPPLIED BY CONTECH



ROUND OPTION PLAN VIEW



SQUARE OPTION PLAN VIEW

NOTES:

1. DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION AND ACI 350.
2. DESIGN LOAD HS25.
3. EARTH COVER = 1' MAX.
4. CONCRETE STRENGTH = 4,000 psi
5. REINFORCING STEEL = ASTM A615, GRADE 60.
6. PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.
7. TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
8. PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
9. DETAIL DESIGN BY DELTA ENGINEERS, ARCHITECTS AND LAND SURVEYORS, ENDWELL, NY.

MANHOLE CAP DETAIL
NOT TO SCALE

MARK	DATE	REVISION DESCRIPTION	BY

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DESIGNED:	DRAWN:	
RLH	RLH	
CHECKED:	APPROVED:	

SHEET NO.: P4 OF P5

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A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

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ENGINEER			REVISIONS	CITY	
MARK	BY	DATE		APPR.	DATE
1					

ENGINEERS SEAL
JOHN M. BRUDIN — No. 41836 — REGISTERED PROFESSIONAL ENGINEER — CIVIL — STATE OF CALIFORNIA

ERSC — Engineering Resources of Southern California
1861 West Redlands Blvd.
Redlands, CA 92373
P: 909.890.1255
F: 909.890.0995

PREPARED UNDER THE DIRECT SUPERVISION OF:
JOHN M. BRUDIN, R.C.E. 41836 DATE: EXP. 03/31/24

CITY OF PALM DESERT
DEPARTMENT OF DEVELOPMENT SERVICES
APPROVED BY:
MARIA FRASERI, P.E. DATE
RCE #56005
CITY ENGINEER
REVIEWED AND RECOMMENDED BY: DATE

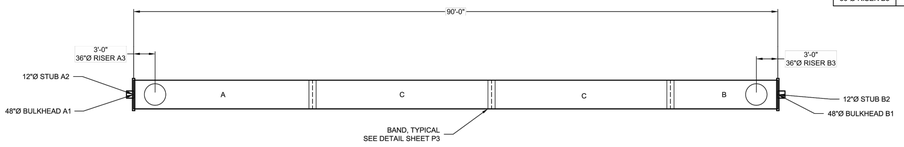
PLAN CHECKED BY:
CIVIL
TRAFFIC
LANDSCAPE

CITY OF PALM DESERT
HAYSTACK CHANNEL REHABILITATION
CHANNEL IMPROVEMENT PLAN
INFILTRATION SYSTEM 2

SHEET 16 OF SHEETS 20
CITY FILE NUMBER

STUB INFORMATION		
PIECE	STUB INVERT	SYSTEM INVERT
12"Ø STUB A2	TBD	TBD
12"Ø STUB B2	TBD	TBD

RISER INFORMATION		
PIECE	RIM ELEV.	SYSTEM INVERT
36"Ø RISER A3	TBD	TBD
36"Ø RISER B3	TBD	TBD



THE UNDERSIGNED HEREBY APPROVES THE ATTACHED (P5) PAGES INCLUDING THE FOLLOWING:

- **PIPE STORAGE = 1,131 CF**
- **MAINLINE PIPE GAGE = 16**
- **WALL TYPE = PERFORATED**
- **DIAMETER = 48"**
- **FINISH = ALT2**
- **CORRUGATION = 2 2/3x1/2**

CUSTOMER _____ DATE _____

ASSEMBLY
SCALE: 1" = 10'
LOADING: H20
PIPE INV. = TBD'±

NOTES

- THE PIPE SHOULD BE FULLY PERFORATED IN ACCORDANCE WITH AASHTO M 36, SECTION 8.3.2.2, AND USING CLASS 2 PERFORATIONS. THE TOTAL OPEN AREA OF THE PERFORATIONS WILL BE A MINIMUM OF 2.3% OF THE PIPE SURFACE AREA.
- BULKHEADS SHALL BE 12-GAGE OR HEAVIER STEEL AND THE COATING WILL MATCH THE SPECIFIED CMP COATING. BULKHEAD PLATES SHALL BE FULLY WELDED ONTO THE CMP WITH STEEL REINFORCEMENT AS REQUIRED. THE STEEL REINFORCEMENT SHALL BE POST COATED WITH ZINC RICH PAINT PER AASHTO M 36. BULKHEAD DESIGNS SHALL SATISFY THE REQUIREMENTS SHOWN IN CHAPTER 8 OF THE NCSPA CSP DESIGN MANUAL AND CALCULATIONS SHALL BE PROVIDED TO THE ENGINEER OF RECORD (EOR) FOR APPROVAL UPON REQUEST.
- ALL FITTINGS SHALL BE STRUCTURALLY CHECKED FOR REINFORCEMENTS PER ASTM A998 AND PROVIDED TO THE EOR FOR APPROVAL UPON REQUEST.
- CONNECTING BANDS FOR INFILTRATION SYSTEMS SHALL BE ANY TYPE, BUT MUST BE AT LEAST 12" WIDE. BANDS SHALL MATCH THE SPECIFIED CMP COATING AND MEET THE REQUIREMENTS OF AASHTO M 36.
- ALL METALLIC COATINGS AFFECTED BY MANUFACTURING FABRICATION SHALL BE REPAIRED PER AASHTO M 36 SECTION 11 REQUIREMENTS (E.G. ZINC-RICH PAINT ON ALL WELDS). IF POLYMER COATINGS ARE USED THE REPAIR OF DAMAGED COATINGS WILL BE IN CONFORMANCE WITH AASHTO M 245 SECTION 11 REQUIREMENTS.
- ACCESS LADDERS SHALL BE ATTACHED BY THE MANUFACTURER PRIOR TO DELIVERY, NOT INSTALLED ON THE JOBSITE.

MARK	DATE	REVISION DESCRIPTION	BY

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CONTECH CMP DETENTION SYSTEMS
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48"Ø PERFORATED UNDERGROUND RETENTION SYSTEM - 737057-020
HAYSTACK CHANNEL REHABILITATION
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SITE DESIGNATION:

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737057	020	5/1/2023
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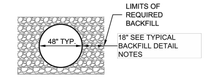
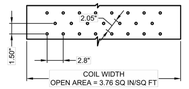


TYPICAL SECTION VIEW
NOT TO SCALE

EDGE SPACING EQUAL ON BOTH SIDES



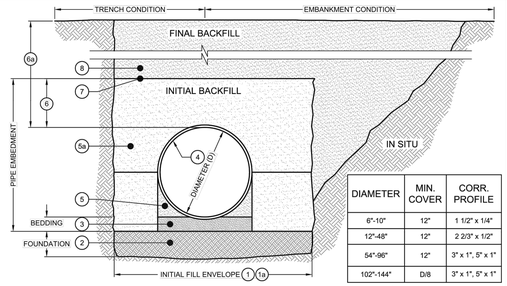
NOTES:
1. PERFORATIONS MEET AASHTO AND ASTM SPECIFICATIONS.
2. PERFORATION OPEN AREA PER SQUARE FOOT OF PIPE IS BASED ON THE NOMINAL DIAMETER AND LENGTH OF PIPE.
3. DIMENSIONS SUBJECT TO MANUFACTURER'S TOLERANCES.
4. ALL HOLES 3/8"Ø.

EXFILTRATION AREA
STANDARD PERFORATION PATTERNS

APPROXIMATE AREA PER LINEAR FOOT OF PIPE				
PIPE	CORRUGATION PATTERN			
	2 2/3" x 1/2"	3" x 1"	5" x 1"	ULTRA FLO
48"Ø	48.9 SQ. IN.	51.6 SQ. IN.		

NOTES:
- GAGE AND COATING LIMITATIONS APPLY. 5" x 1" IS NOT AVAILABLE IN ALUMINUM.
- DIMENSIONS SUBJECT TO MANUFACTURER'S TOLERANCES.

TYPICAL PERFORATION DETAIL
NOT TO SCALE



DIAMETER	MIN. COVER	CORR. PROFILE
6"-10"	12"	1 1/2" x 1/4"
12"-48"	12"	2 2/3" x 1/2"
54"-96"	12"	3" x 1", 5" x 1"
102"-144"	D/8	3" x 1", 5" x 1"

BACKFILL REQUIREMENTS FOLLOW THE GUIDELINES OF AASHTO LRFD BRIDGE DESIGN (SEC 12) AND CONSTRUCTION (SEC 26)

1 MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE.
THE MINIMUM TRENCH WIDTH (12.6.6.1):
PIPE ≤ 12": D + 16"
PIPE > 12": 1.5D + 12"

1a MINIMUM EMBANKMENT WIDTH (IN FEET) FOR INITIAL FILL ENVELOPE (12.6.6.2):
PIPE < 24": 3.0D
PIPE 24" - 144": D + 4'0"
PIPE > 144": D + 10'0"

2 THE FOUNDATION UNDER THE PIPE AND SIDE BACKFILL SHALL BE ADEQUATE TO SUPPORT THE LOADS ACTING UPON IT (26.5.2).

3 BEDDING MATERIAL SHALL BE A RELATIVELY LOOSE GRANULAR MATERIAL THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE, AND A MINIMUM OF TWICE THE CORRUGATION DEPTH IN THICKNESS, WITH THE MAXIMUM PARTICLE SIZE OF ONE-HALF OF THE CORRUGATION DEPTH (26.3.8.1, 26.5.3).

4 PERFORATED CORRUGATED STEEL PIPE (CSP / HEL-COR).

5 HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION (26.5.4).

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PROJECT No.:	SEQ. No.:	DATE:
737057	020	5/1/2023
DESIGNED: RLH	DRAWN: RLH	
CHECKED:	APPROVED:	
SHEET NO.: P2 OF P5		

DIGALERT
DIAL BEFORE YOU DIG — TWO WORKING DAYS BEFORE YOU DIG
TOLL FREE 1-800-422-4133
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

BENCHMARK: CITY OF PALM DESERT BM118. A 2" BRASS DICK STAMPED "CITY OF P.D. BM 118" LOCATED ON THE SOUTHEAST CORNER OF CONCRETE BRIDGE ON HWY 111 OVER PALM VALLEY STORMWATER CHANNEL AT THE EAST END OF CONC. STEM WALL, FLUSH WITH TOP OF WALL.

BASIS OF BEARINGS: THE BASIS OF BEARING FOR THIS SURVEY IS THE STATE PLANE COORDINATE SYSTEM NAD83 ZONE 6, AS DETERMINED LOCALLY BY THE LINE BETWEEN USC&GS STATIONS AC5161 AND DX0739.
THE LINE BETWEEN SAID POINTS BEARS: NORTH 18°54'09" EAST, 2010.00 EPOCH.

ENGINEER			REVISIONS	CITY	
MARK	BY	DATE		APPR.	DATE
1					

ENGINEERS SEAL
REGISTERED PROFESSIONAL ENGINEER — JOHN M. BRUDIN — No. 41836 — CIVIL — STATE OF CALIFORNIA

ERSC Engineering Resources of Southern California
1861 West Redlands Blvd.
Redlands, CA 92373
P: 909.890.1255
F: 909.890.0995

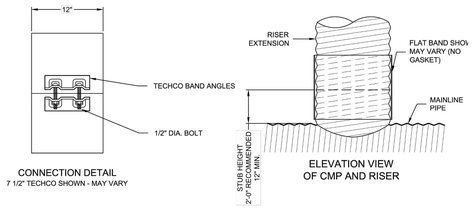
PREPARED UNDER THE DIRECT SUPERVISION OF:
JOHN M. BRUDIN, R.C.E. 41836 DATE: EXP. 03/31/24

CITY OF PALM DESERT
DEPARTMENT OF DEVELOPMENT SERVICES
APPROVED BY:
MARIA FRASERI, P.E. DATE
RCE #56005
CITY ENGINEER
REVIEWED AND RECOMMENDED BY: DATE

PLAN CHECKED BY:
CIVIL
TRAFFIC
LANDSCAPE

CITY OF PALM DESERT
HAYSTACK CHANNEL REHABILITATION
CHANNEL IMPROVEMENT PLAN
INFILTRATION SYSTEM 3

SHEET 17 OF SHEETS 20
CITY FILE NUMBER



CONNECTION DETAIL
7 1/2" TECHCO SHOWN - MAY VARY

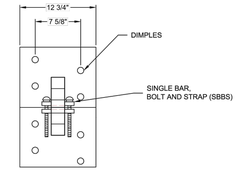
ELEVATION VIEW OF CMP AND RISER

PLAIN END CMP RISER PIPE

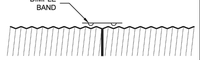
GENERAL NOTES:

1. **DELIVERED BAND STYLE AND FASTENER TYPE MAY VARY BY FABRICATION PLANT.**
2. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
3. BAND MATERIAL AND GAGE TO BE SAME AS RISER MATERIAL.
4. IF RISER HAS A HEIGHT OF COVER OF 10' OR MORE, USE A SLIP JOINT.
5. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
   - 12" THRU 48" 1-PIECE
   - 54" 2-PIECES
6. ALL RISER JOINT COMPONENTS WILL BE FIELD ASSEMBLED.
7. MANHOLE RISERS IN APPLICATIONS WHERE TRAFFIC LOADS ARE IMPOSED REQUIRE SPECIAL DESIGN CONSIDERATIONS.
8. DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.

12" RISER BAND DETAIL
NOT TO SCALE



CONNECTION DETAIL
(SBBS)



PLAIN END CMP PIPE

GENERAL NOTES:

1. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
2. BAND MATERIALS AND/OR COATING CAN VARY BY LOCATION. CONTACT YOUR CONTECH REPRESENTATIVE FOR AVAILABILITY.
3. BANDS ARE SHAPED TO MATCH THE PIPE-ARCH WHEN APPLICABLE.
4. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
   - 12" THRU 48" 1-PIECE
   - 54" THRU 96" 2-PIECES
   - 102" THRU 144" 3-PIECES
5. BAND FASTENERS ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDS.
6. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
7. ORDER SHALL DESIGNATE GASKET OPTION, IF REQUIRED (SEE DETAILS ABOVE).

D-12 DIMPLE BAND DETAIL
NOT TO SCALE

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CONTECH CMP DETENTION SYSTEMS
CONTECH PROPOSAL DRAWING

48"Ø PERFORATED UNDERGROUND RETENTION SYSTEM - 737057-020
HAYSTACK CHANNEL REHABILITATION
PALM DESERT, CA
SITE DESIGNATION:

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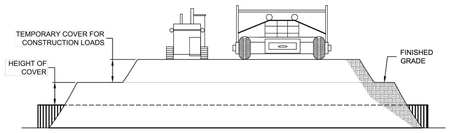


CONSTRUCTION LOADS

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
	MINIMUM COVER (FT)			
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

CONSTRUCTION LOADING DIAGRAM
NOT TO SCALE

SPECIFICATION FOR CORRUGATED STEEL PIPE-ALUMINIZED TYPE 2 STEEL

SCOPE

THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE CORRUGATED STEEL PIPE (CSP) DETAILED IN THE PROJECT PLANS.

MATERIAL

THE ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M274 OR ASTM A929.

PIPE

THE CSP SHALL BE MANUFACTURED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF AASHTO M36 OR ASTM A760. THE PIPE SIZES, GAGES AND CORRUGATIONS SHALL BE AS SHOWN ON THE PROJECT PLANS.

ALL FABRICATION OF THE PRODUCT SHALL OCCUR WITHIN THE UNITED STATES.

HANDLING AND ASSEMBLY

SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE NATIONAL CORRUGATED STEEL PIPE ASSOCIATION (NCSPA)

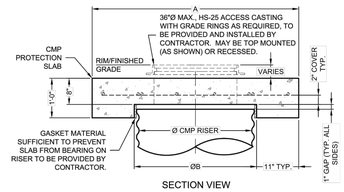
INSTALLATION

SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II OR ASTM A798 AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.

ANTI-FLOTATION PROVISIONS DUE TO HIGH GROUNDWATER OR OTHER FLOTATION CONCERNS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.

MATERIAL SPECIFICATION
NOT TO SCALE

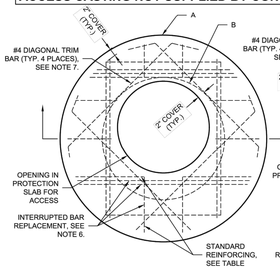


SECTION VIEW

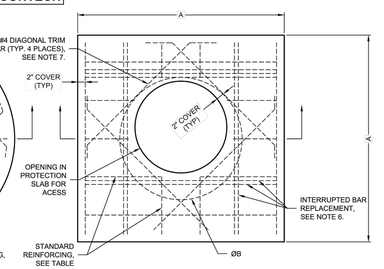
REINFORCING TABLE				
Ø CMP RISER	A	B Ø	REINFORCING	**BEARING PRESSURE (PSF)
24"	4'Ø 4'x4'	26"	#5 @ 10" OCEW #5 @ 10" OCEW	2,540 1,900
30"	4'-6"Ø 4'-6" x 4'-6"	32"	#5 @ 10" OCEW #5 @ 9" OCEW	2,260 1,670
36"	5'Ø 5' x 5'	38"	#5 @ 9" OCEW #5 @ 8" OCEW	2,060 1,500
42"	5'-6"Ø 5'-6" x 5'-6"	44"	#5 @ 8" OCEW #5 @ 8" OCEW	1,490 1,370
48"	6'Ø 6' x 6'	50"	#5 @ 7" OCEW #5 @ 7" OCEW	1,210 1,270

** ASSUMED SOIL BEARING CAPACITY

ACCESS CASTING NOT SUPPLIED BY CONTECH



ROUND OPTION PLAN VIEW



SQUARE OPTION PLAN VIEW

NOTES:

1. DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION AND ACI 350.
2. DESIGN LOAD HS25.
3. EARTH COVER = 1' MAX.
4. CONCRETE STRENGTH = 4,000 psi
5. REINFORCING STEEL = ASTM A615, GRADE 60.
6. PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.
7. TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
8. PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
9. DETAIL DESIGN BY DELTA ENGINEERS, ARCHITECTS AND LAND SURVEYORS, ENDWELL, NY.

MANHOLE CAP DETAIL
NOT TO SCALE

MARK	DATE	REVISION DESCRIPTION	BY

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9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH PROPOSAL DRAWING

48"Ø PERFORATED UNDERGROUND RETENTION SYSTEM - 737057-020
HAYSTACK CHANNEL REHABILITATION
PALM DESERT, CA
SITE DESIGNATION:

PROJECT No.:	SEQ. No.:	DATE:
737057	020	5/1/2023
DESIGNED: RLH	DRAWN: RLH	
CHECKED:	APPROVED:	
SHEET NO.: P4 OF P5		

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ENGINEER			REVISIONS	CITY	
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ERSC Engineering Resources of Southern California
1861 West Redlands Blvd.
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PREPARED UNDER THE DIRECT SUPERVISION OF:
JOHN M. BRUDIN, R.C.E. 41836 DATE: EXP. 03/31/24

CITY OF PALM DESERT
DEPARTMENT OF DEVELOPMENT SERVICES
APPROVED BY:
MARIA FRASERI, P.E. DATE
RCE #56005
CITY ENGINEER
REVIEWED AND RECOMMENDED BY: DATE

PLAN CHECKED BY:
CIVIL
TRAFFIC
LANDSCAPE

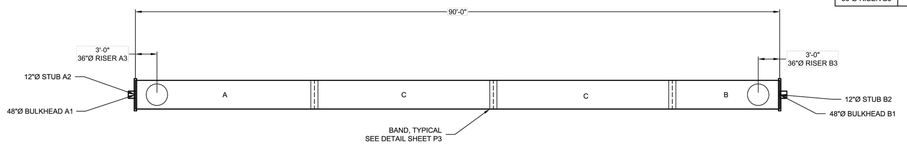
CITY OF PALM DESERT

HAYSTACK CHANNEL REHABILITATION
CHANNEL IMPROVEMENT PLAN
INFILTRATION SYSTEM 3

SHEET 18
OF
SHEETS 20
CITY FILE NUMBER

STUB INFORMATION		
PIECE	STUB INVERT	SYSTEM INVERT
12"Ø STUB A2	TBD	TBD
12"Ø STUB B2	TBD	TBD

RISER INFORMATION		
PIECE	RIM ELEV.	SYSTEM INVERT
36"Ø RISER A3	TBD	TBD
36"Ø RISER B3	TBD	TBD



ASSEMBLY
SCALE: 1" = 10'
LOADING: H20
PIPE INV. = TBD'±

NOTES

- THE PIPE SHOULD BE FULLY PERFORATED IN ACCORDANCE WITH AASHTO M 36, SECTION 8.3.2.2, AND USING CLASS 2 PERFORATIONS. THE TOTAL OPEN AREA OF THE PERFORATIONS WILL BE A MINIMUM OF 2.3% OF THE PIPE SURFACE AREA.
- BULKHEADS SHALL BE 12-GAGE OR HEAVIER STEEL AND THE COATING WILL MATCH THE SPECIFIED CMP COATING. BULKHEAD PLATES SHALL BE FULLY WELDED ONTO THE CMP WITH STEEL REINFORCEMENT AS REQUIRED. THE STEEL REINFORCEMENT SHALL BE POST COATED WITH ZINC RICH PAINT PER AASHTO M 36. BULKHEAD DESIGNS SHALL SATISFY THE REQUIREMENTS SHOWN IN CHAPTER 8 OF THE NCSPA CSP DESIGN MANUAL AND CALCULATIONS SHALL BE PROVIDED TO THE ENGINEER OF RECORD (EOR) FOR APPROVAL UPON REQUEST.
- ALL FITTINGS SHALL BE STRUCTURALLY CHECKED FOR REINFORCEMENTS PER ASTM A998 AND PROVIDED TO THE EOR FOR APPROVAL UPON REQUEST.
- CONNECTING BANDS FOR INFILTRATION SYSTEMS SHALL BE ANY TYPE, BUT MUST BE AT LEAST 12" WIDE. BANDS SHALL MATCH THE SPECIFIED CMP COATING AND MEET THE REQUIREMENTS OF AASHTO M 36.
- ALL METALLIC COATINGS AFFECTED BY MANUFACTURING FABRICATION SHALL BE REPAIRED PER AASHTO M 36 SECTION 11 REQUIREMENTS (E.G. ZINC-RICH PAINT ON ALL WELDS). IF POLYMER COATINGS ARE USED THE REPAIR OF DAMAGED COATINGS WILL BE IN CONFORMANCE WITH AASHTO M 245 SECTION 11 REQUIREMENTS.
- ACCESS LADDERS SHALL BE ATTACHED BY THE MANUFACTURER PRIOR TO DELIVERY, NOT INSTALLED ON THE JOBSITE.

THE UNDERSIGNED HEREBY APPROVES THE ATTACHED (P5) PAGES INCLUDING THE FOLLOWING:

- **PIPE STORAGE = 1,131 CF**
- **MAINLINE PIPE GAGE = 16**
- **WALL TYPE = PERFORATED**
- **DIAMETER = 48"**
- **FINISH = ALT2**
- **CORRUGATION = 2 2/3x1/2**

CUSTOMER _____ DATE _____

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9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH PROPOSAL DRAWING

48"Ø PERFORATED UNDERGROUND RETENTION SYSTEM - 737057-025
HAYSTACK CHANNEL REHABILITATION
PALM DESERT, CA
SITE DESIGNATION:

PROJECT No.:	SEQ. No.:	DATE:
737057	025	5/1/2023
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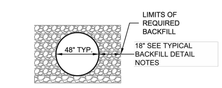
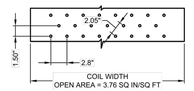


TYPICAL SECTION VIEW
NOT TO SCALE

EDGE SPACING EQUAL ON BOTH SIDES



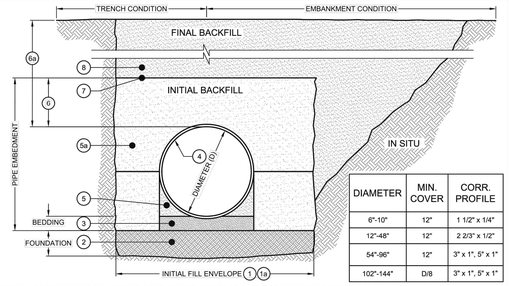
NOTES:
1. PERFORATIONS MEET AASHTO AND ASTM SPECIFICATIONS.
2. PERFORATION OPEN AREA PER SQUARE FOOT OF PIPE IS BASED ON THE NOMINAL DIAMETER AND LENGTH OF PIPE.
3. DIMENSIONS SUBJECT TO MANUFACTURER'S TOLERANCES.
4. ALL HOLES 3/8"Ø.

EXFILTRATION AREA
STANDARD PERFORATION PATTERNS

APPROXIMATE AREA PER LINEAR FOOT OF PIPE				
PIPE	CORRUGATION PATTERN			
	2 2/3" x 1/2"	3" x 1"	5" x 1"	ULTRA FLO
48"Ø	48.9 SQ. IN.	51.6 SQ. IN.		

NOTES:
- GAGE AND COATING LIMITATIONS APPLY. 5" x 1" IS NOT AVAILABLE IN ALUMINUM.
- DIMENSIONS SUBJECT TO MANUFACTURER'S TOLERANCES.

TYPICAL PERFORATION DETAIL
NOT TO SCALE



DIAMETER	MIN. COVER	CORR. PROFILE
6"-10"	12"	1 1/2" x 1/4"
12"-48"	12"	2 2/3" x 1/2"
54"-96"	12"	3" x 1", 5" x 1"
102"-144"	D/8	3" x 1", 5" x 1"

BACKFILL REQUIREMENTS FOLLOW THE GUIDELINES OF AASHTO LRFD BRIDGE DESIGN (SEC 12) AND CONSTRUCTION (SEC 26)

1 MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE.
THE MINIMUM TRENCH WIDTH (12.6.6.1):
PIPE ≤ 12": D + 16"
PIPE > 12": 1.5D + 12"

1a MINIMUM EMBANKMENT WIDTH (IN FEET) FOR INITIAL FILL ENVELOPE (12.6.6.2):
PIPE < 24": 3.0D
PIPE 24" - 144": D + 4'0"
PIPE > 144": D + 10'0"

2 THE FOUNDATION UNDER THE PIPE AND SIDE BACKFILL SHALL BE ADEQUATE TO SUPPORT THE LOADS ACTING UPON IT (26.5.2).

3 BEDDING MATERIAL SHALL BE A RELATIVELY LOOSE GRANULAR MATERIAL THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE, AND A MINIMUM OF TWICE THE CORRUGATION DEPTH IN THICKNESS, WITH THE MAXIMUM PARTICLE SIZE OF ONE-HALF OF THE CORRUGATION DEPTH (26.3.8.1, 26.5.3).

4 PERFORATED CORRUGATED STEEL PIPE (CSP / HEL-COR).

5 HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION (26.5.4).

5a BACKFILL MATERIAL SHALL BE A CLEAN, CRUSHED STONE MEETING SIZE NO. 3 OR 4, PER AASHTO M 43. IT IS RECOMMENDED THAT LIFTS NOT EXCEED AN 8" UNCOMPACTED LIFT HEIGHT TO PREVENT UNEVEN LOADING, AND THE LESSER OF 1/3 THE DIAMETER OR 24" AS THE MAXIMUM DIFFERENTIAL SIDE-TO-SIDE. COMPACTION OF ALL PLACED FILL MATERIAL IS NECESSARY AND SHALL BE CONSIDERED ADEQUATE WHEN NO FURTHER YIELDING OF THE MATERIAL IS OBSERVED UNDER THE COMPACTOR, OR UNDER FOOT, AND THE PROJECT ENGINEER, OR THEIR REPRESENTATIVE, IS SATISFIED WITH THE LEVEL OF COMPACTION (26.5.4).

6 INITIAL BACKFILL ABOVE PIPE MAY INCLUDE ROAD BASE MATERIAL (AND RIGID PAVEMENT IF APPLICABLE). SEE TABLE ABOVE.

6a TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT (12.6.6.3).

7 GEOTEXTILE SHALL BE USED TO WRAP TRENCH SIDES AND TOP ONLY TO PREVENT SOIL MIGRATION INTO VARYING SOIL TYPES (PROJECT ENGINEER).

8 FINAL BACKFILL MATERIAL SELECTION AND COMPACTION REQUIREMENTS SHALL FOLLOW THE PROJECT PLANS AND SPECIFICATIONS PER THE ENGINEER OF RECORD (26.5.4.1).

NOTES:
- FOR MULTIPLE BARREL INSTALLATIONS THE RECOMMENDED STANDARD SPACING BETWEEN PARALLEL PIPE RUNS SHALL BE PIPE DIA./2 BUT NO LESS THAN 12", OR 36" FOR PIPE DIAMETERS 72" AND LARGER. CONTACT YOUR CONTECH REPRESENTATIVE FOR NONSTANDARD SPACING (TABLE C12.6.7-1).

TYPICAL BACKFILL DETAIL
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ENGINEER			REVISIONS	CITY	
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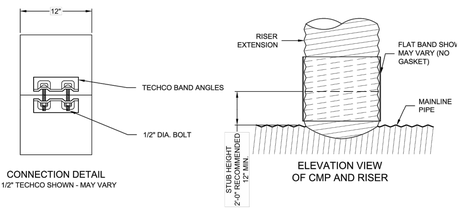
CITY OF PALM DESERT
HAYSTACK CHANNEL REHABILITATION
CHANNEL IMPROVEMENT PLAN
INFILTRATION SYSTEM 4

SHEET 19 OF SHEETS 20
CITY FILE NUMBER



CONNECTION DETAIL
7 1/2" TECHCO SHOWN - MAY VARY

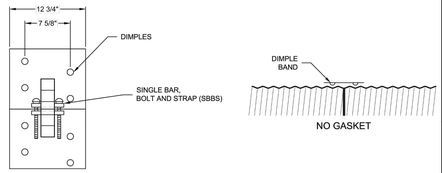
ELEVATION VIEW
OF CMP AND RISER

PLAIN END CMP RISER PIPE

GENERAL NOTES:

1. **DELIVERED BAND STYLE AND FASTENER TYPE MAY VARY BY FABRICATION PLANT.**
2. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
3. BAND MATERIAL AND GAGE TO BE SAME AS RISER MATERIAL.
4. IF RISER HAS A HEIGHT OF COVER OF 10' OR MORE, USE A SLIP JOINT.
5. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
   - 12" THRU 48" 1-PIECE
   - 54" 2-PIECES
6. ALL RISER JOINT COMPONENTS WILL BE FIELD ASSEMBLED.
7. MANHOLE RISERS IN APPLICATIONS WHERE TRAFFIC LOADS ARE IMPOSED REQUIRE SPECIAL DESIGN CONSIDERATIONS.
8. DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.

12" RISER BAND DETAIL
NOT TO SCALE



CONNECTION DETAIL
(SBBS)

PLAIN END CMP PIPE

GENERAL NOTES:

1. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
2. BAND MATERIALS AND/OR COATING CAN VARY BY LOCATION. CONTACT YOUR CONTECH REPRESENTATIVE FOR AVAILABILITY.
3. BANDS ARE SHAPED TO MATCH THE PIPE-ARCH WHEN APPLICABLE.
4. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
   - 12" THRU 48" 1-PIECE
   - 54" THRU 96" 2-PIECES
   - 102" THRU 144" 3-PIECES
5. BAND FASTENERS ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDS.
6. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
7. ORDER SHALL DESIGNATE GASKET OPTION, IF REQUIRED (SEE DETAILS ABOVE).

D-12 DIMPLE BAND DETAIL
NOT TO SCALE

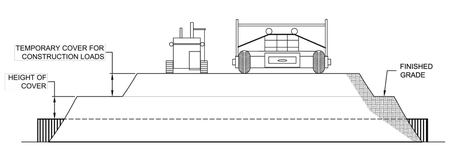
MARK	DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH PROPOSAL DRAWING

48"Ø PERFORATED UNDERGROUND RETENTION SYSTEM - 737057-025
HAYSTACK CHANNEL REHABILITATION
PALM DESERT, CA
SITE DESIGNATION:

PROJECT No.:	REQ. No.:	DATE:
737057	025	5/1/2023
DESIGNED: RLH	DRAWN: RLH	
CHECKED:	APPROVED:	
SHEET NO.: P3 OF P5		



CONSTRUCTION LOADS

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
	MINIMUM COVER (FT)			
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

CONSTRUCTION LOADING DIAGRAM
NOT TO SCALE

SPECIFICATION FOR CORRUGATED STEEL PIPE-ALUMINIZED TYPE 2 STEEL

SCOPE

THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE CORRUGATED STEEL PIPE (CSP) DETAILED IN THE PROJECT PLANS.

MATERIAL

THE ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M274 OR ASTM A929.

PIPE

THE CSP SHALL BE MANUFACTURED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF AASHTO M36 OR ASTM A760. THE PIPE SIZES, GAGES AND CORRUGATIONS SHALL BE AS SHOWN ON THE PROJECT PLANS.

ALL FABRICATION OF THE PRODUCT SHALL OCCUR WITHIN THE UNITED STATES.

HANDLING AND ASSEMBLY

SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE NATIONAL CORRUGATED STEEL PIPE ASSOCIATION (NCSPA)

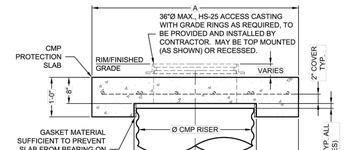
INSTALLATION

SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II OR ASTM A798 AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.

ANTI-FLOTATION PROVISIONS DUE TO HIGH GROUNDWATER OR OTHER FLOTATION CONCERNS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.

MATERIAL SPECIFICATION
NOT TO SCALE

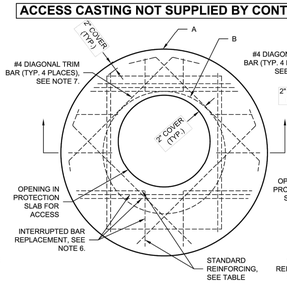


SECTION VIEW

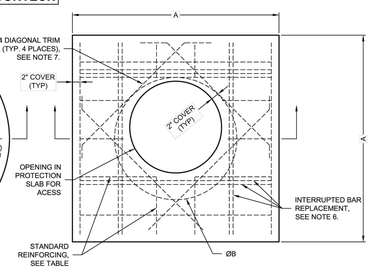
REINFORCING TABLE				
Ø CMP RISER	A	B Ø	REINFORCING	**BEARING PRESSURE (PSF)
24"	4'Ø 4'x4'	26"	#5 @ 10" OCEW #5 @ 10" OCEW	2,540 1,900
30"	4'-6"Ø 4'-6" x 4'-6"	32"	#5 @ 10" OCEW #5 @ 9" OCEW	2,260 1,670
36"	5'Ø 5' x 5'	38"	#5 @ 9" OCEW #5 @ 8" OCEW	2,060 1,500
42"	5'-6"Ø 5'-6" x 5'-6"	44"	#5 @ 8" OCEW #5 @ 8" OCEW	1,490 1,370
48"	6'Ø 6' x 6'	50"	#5 @ 7" OCEW #5 @ 7" OCEW	1,210 1,270

** ASSUMED SOIL BEARING CAPACITY

ACCESS CASTING NOT SUPPLIED BY CONTECH



ROUND OPTION PLAN VIEW



SQUARE OPTION PLAN VIEW

NOTES:

1. DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION AND ACI 350.
2. DESIGN LOAD HS25.
3. EARTH COVER = 1' MAX.
4. CONCRETE STRENGTH = 4,000 psi
5. REINFORCING STEEL = ASTM A615, GRADE 60.
6. PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.
7. TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
8. PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
9. DETAIL DESIGN BY DELTA ENGINEERS, ARCHITECTS AND LAND SURVEYORS, ENDWELL, NY.

MANHOLE CAP DETAIL
NOT TO SCALE

MARK	DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH PROPOSAL DRAWING

48"Ø PERFORATED UNDERGROUND RETENTION SYSTEM - 737057-025
HAYSTACK CHANNEL REHABILITATION
PALM DESERT, CA
SITE DESIGNATION:

PROJECT No.:	REQ. No.:	DATE:
737057	025	5/1/2023
DESIGNED: RLH	DRAWN: RLH	
CHECKED:	APPROVED:	
SHEET NO.: P4 OF P5		

DIGALERT
DIAL BEFORE YOU DIG — TWO WORKING DAYS BEFORE YOU DIG
TOLL FREE 1-800-422-4133
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

BENCHMARK: CITY OF PALM DESERT BM118. A 2" BRASS DICK STAMPED "CITY OF P.D. BM 118" LOCATED ON THE SOUTHEAST CORNER OF CONCRETE BRIDGE ON HWY 111 OVER PALM VALLEY STORMWATER CHANNEL AT THE EAST END OF CONC. STEM WALL, FLUSH WITH TOP OF WALL.

BASIS OF BEARINGS: THE BASIS OF BEARING FOR THIS SURVEY IS THE STATE PLANE COORDINATE SYSTEM NAD83 ZONE 6, AS DETERMINED LOCALLY BY THE LINE BETWEEN USC&GS STATIONS AC5161 AND DX0739.
THE LINE BETWEEN SAID POINTS BEARS: NORTH 18°54'09" EAST, 2010.00 EPOCH.

ENGINEER			REVISIONS	CITY	
MARK	BY	DATE		APPR.	DATE
1					

ENGINEERS SEAL
JOHN M. BRUDIN — No. 41836 — CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

ERSC Engineering Resources of Southern California
1861 West Redlands Blvd.
Redlands, CA 92373
P: 909.890.1255
F: 909.890.0995

PREPARED UNDER THE DIRECT SUPERVISION OF:
JOHN M. BRUDIN, R.C.E. 41836 DATE: EXP. 03/31/24

CITY OF PALM DESERT
DEPARTMENT OF DEVELOPMENT SERVICES
APPROVED BY:
MARIA FRASERI, P.E. DATE
ROE #56005
CITY ENGINEER
REVIEWED AND RECOMMENDED BY: DATE

PLAN CHECKED BY:
CIVIL
TRAFFIC
LANDSCAPE

CITY OF PALM DESERT
HAYSTACK CHANNEL REHABILITATION
CHANNEL IMPROVEMENT PLAN
INFILTRATION SYSTEM 4

SHEET 20 OF SHEETS 20
CITY FILE NUMBER

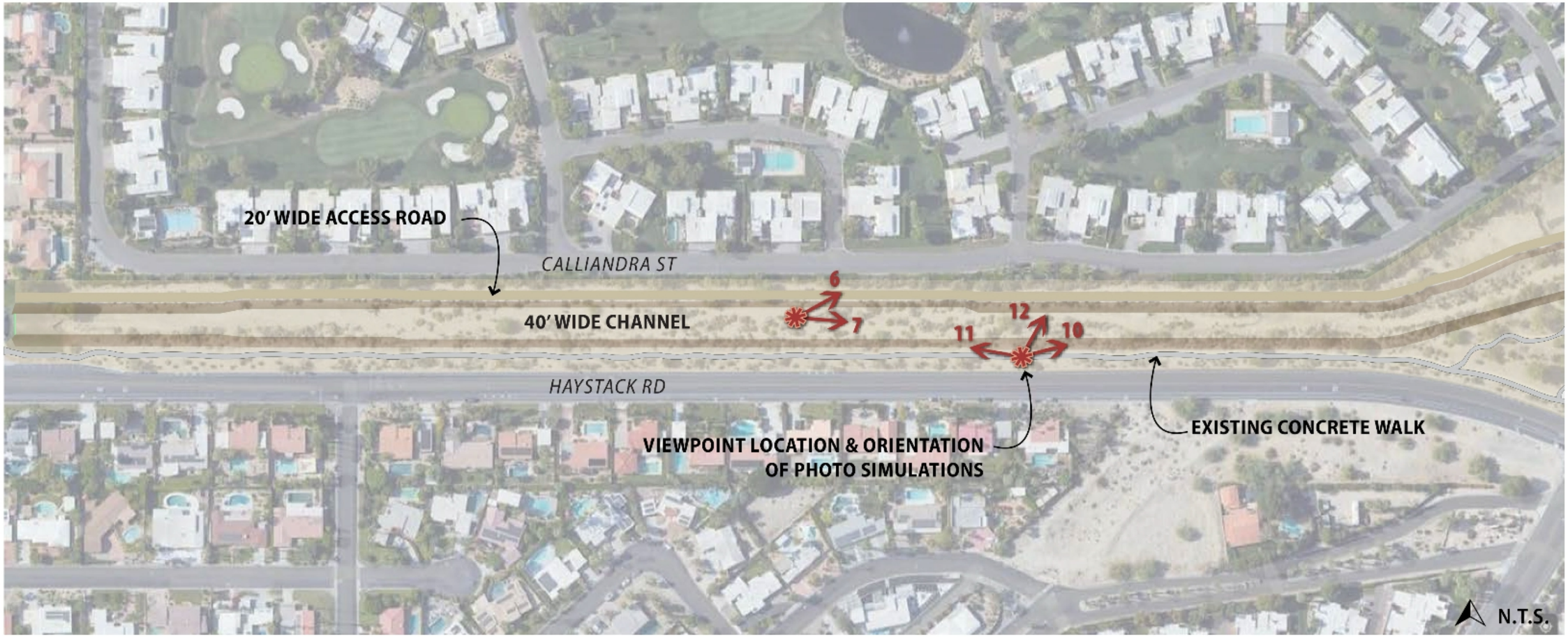


PHOTO VIEWPOINTS KEY MAP

October 21, 2024

HAYSTACK CHANNEL REHABILITATION

PALM DESERT

PHOTO 6 EXISTING CONDITIONS

OCTOBER 24, 2024

HAYSTACK CHANNEL REHABILITATION

PALM DESERT

COMMUNITY WORKS DESIGN GROUP

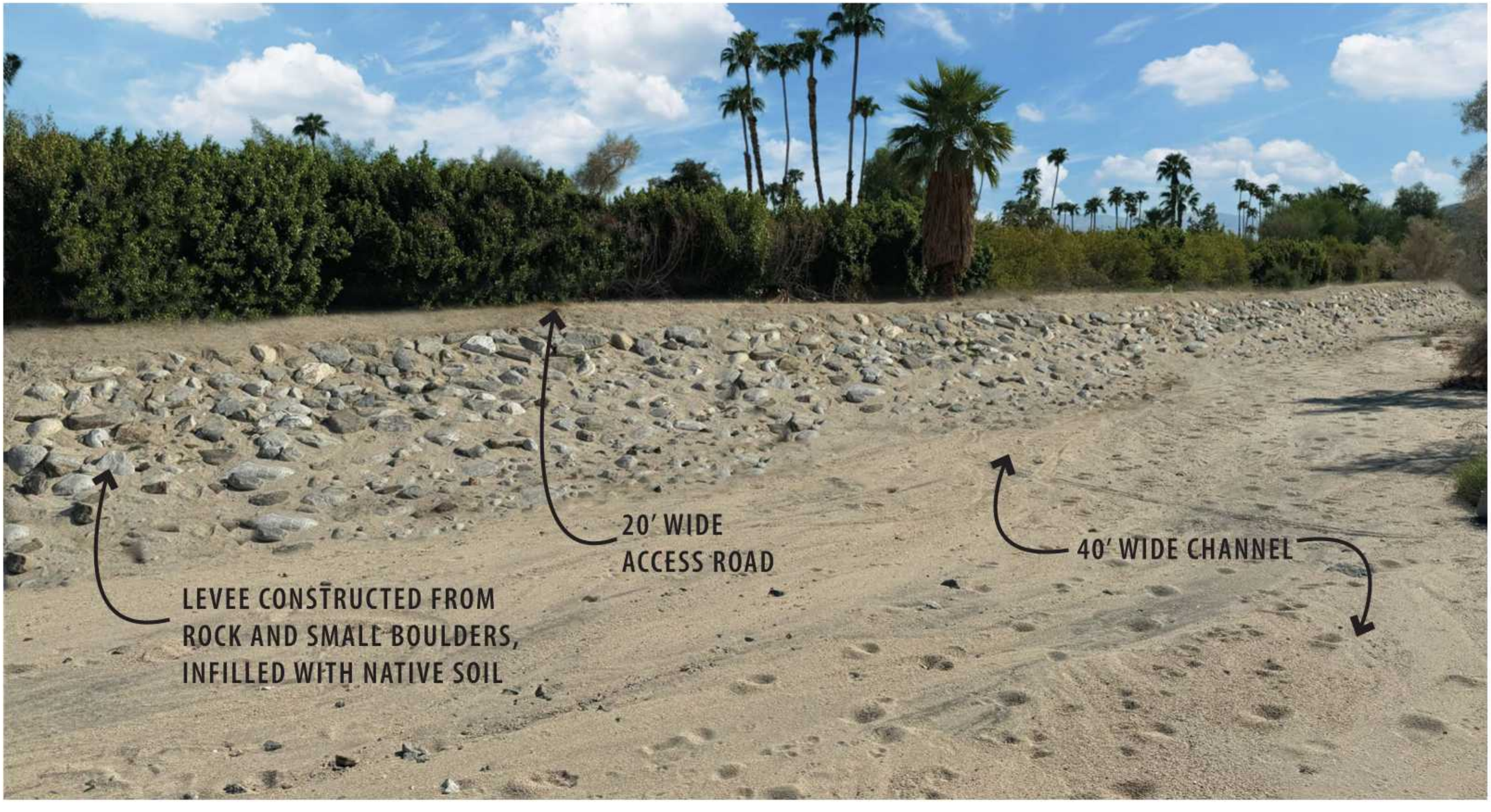


PHOTO 6 PROPOSED CHANNEL IMPROVEMENTS AT INSTALL

OCTOBER 24, 2024

HAYSTACK CHANNEL REHABILITATION

PALM DESERT

COMMUNITY WORKS DESIGN GROUP

PHOTO 6 PROPOSED CHANNEL IMPROVEMENTS AT MATURITY

OCTOBER 24, 2024

HAYSTACK CHANNEL REHABILITATION

PALM DESERT

COMMUNITY WORKS DESIGN GROUP

PHOTO 7 EXISTING CONDITIONS

OCTOBER 24, 2024

HAYSTACK CHANNEL REHABILITATION

PALM DESERT

COMMUNITY WORKS DESIGN GROUP

PHOTO 7 PROPOSED CHANNEL IMPROVEMENTS AT INSTALL

OCTOBER 24, 2024

HAYSTACK CHANNEL REHABILITATION

PALM DESERT

COMMUNITY WORKS DESIGN GROUP

PHOTO 7 PROPOSED CHANNEL IMPROVEMENTS AT MATURITY

OCTOBER 24, 2024

HAYSTACK CHANNEL REHABILITATION

PALM DESERT

COMMUNITY WORKS DESIGN GROUP

PHOTO 10 EXISTING CONDITIONS

OCTOBER 24, 2024

HAYSTACK CHANNEL REHABILITATION

PALM DESERT

COMMUNITY WORKS DESIGN GROUP

PHOTO 10 PROPOSED CHANNEL IMPROVEMENTS AT INSTALL

OCTOBER 24, 2024

HAYSTACK CHANNEL REHABILITATION

PALM DESERT

COMMUNITY WORKS DESIGN GROUP

PHOTO 10 PROPOSED CHANNEL IMPROVEMENTS AT MATURITY

OCTOBER 24, 2024

HAYSTACK CHANNEL REHABILITATION

PALM DESERT

COMMUNITY WORKS DESIGN GROUP

PHOTO 11 EXISTING CONDITIONS

OCTOBER 24, 2024

HAYSTACK CHANNEL REHABILITATION

PALM DESERT

COMMUNITY WORKS DESIGN GROUP

PHOTO 11 PROPOSED CHANNEL IMPROVEMENTS AT INSTALL

OCTOBER 24, 2024

HAYSTACK CHANNEL REHABILITATION

PALM DESERT

COMMUNITY WORKS DESIGN GROUP

PHOTO 11 PROPOSED CHANNEL IMPROVEMENTS AT MATURITY

OCTOBER 24, 2024

HAYSTACK CHANNEL REHABILITATION

PALM DESERT

COMMUNITY WORKS DESIGN GROUP

PHOTO 12 EXSITING CONDITIONS

OCTOBER 24, 2024

HAYSTACK CHANNEL REHABILITATION

PALM DESERT

COMMUNITY WORKS DESIGN GROUP

PHOTO 12 PROPOSED CHANNEL IMPROVEMENTS AT INSTALL

OCTOBER 24, 2024

HAYSTACK CHANNEL REHABILITATION

PALM DESERT

COMMUNITY WORKS DESIGN GROUP

PHOTO 12 PROPOSED CHANNEL IMPROVEMENTS AT MATURITY

OCTOBER 24, 2024

HAYSTACK CHANNEL REHABILITATION

PALM DESERT

COMMUNITY WORKS DESIGN GROUP

HAYSTACK ROAD CHANNEL IMPROVEMENTS

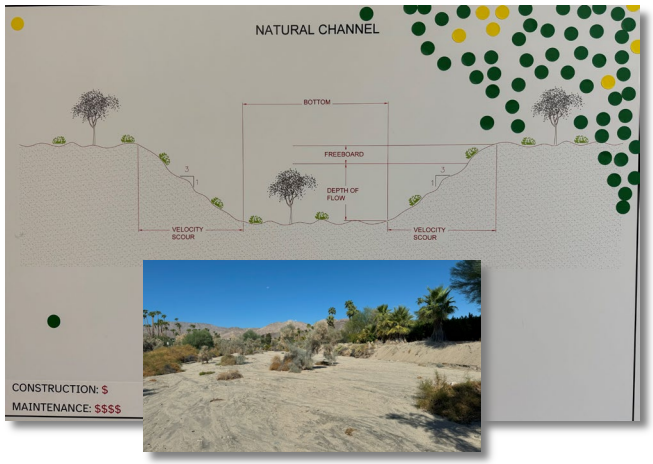
City Council Study Session

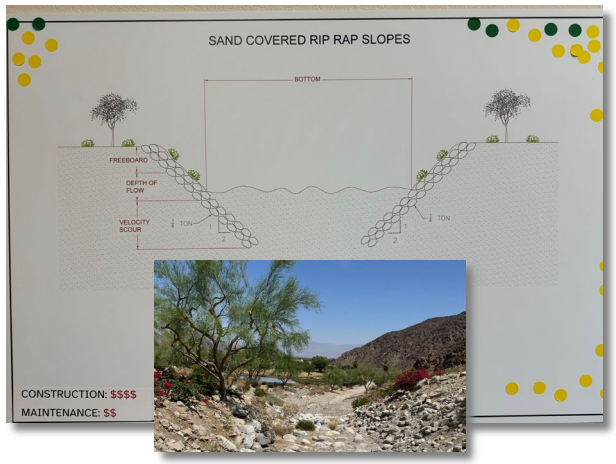
December 12, 2024

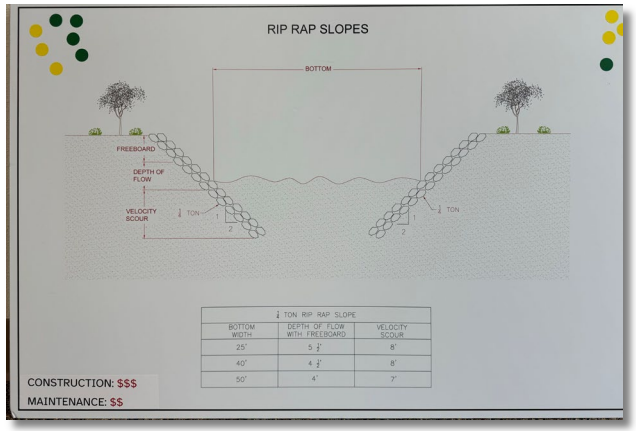
PALM DESERT

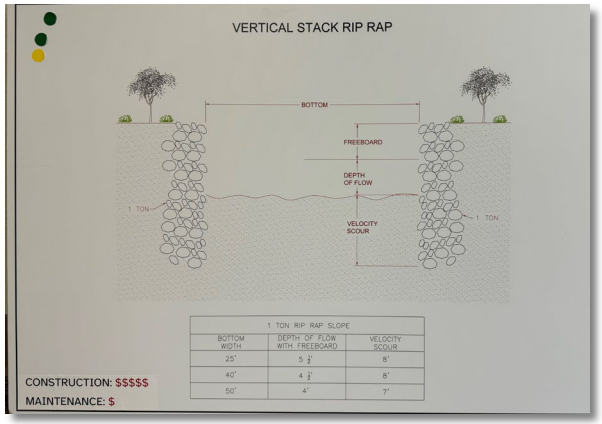
PROJECT PURPOSE

- General Manager of Marrakesh Country Club contacted the City about channel erosion concerns
- Capital Improvement Project is created by the City
- City hires Engineering and Environmental Consultants
- Project presented to Planning Commission May 7, 2024
- Project re-presented to Planning Commission June 4, 2024
- Community Engagement Meeting June 26, 2024
  - 4 options presented









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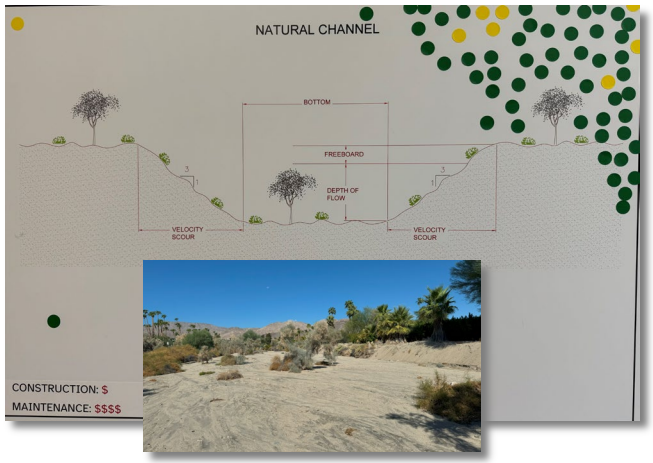
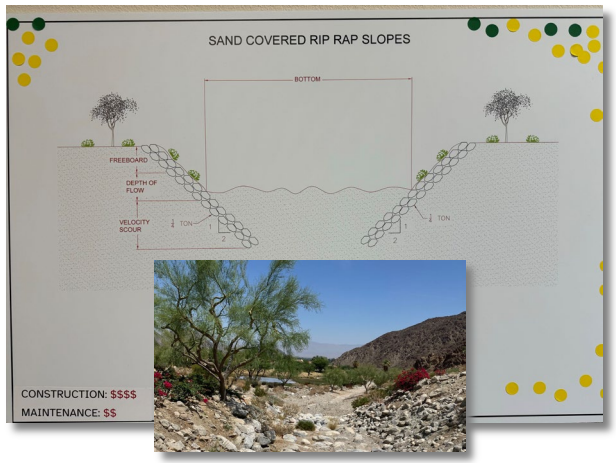
  - 2 preferred options





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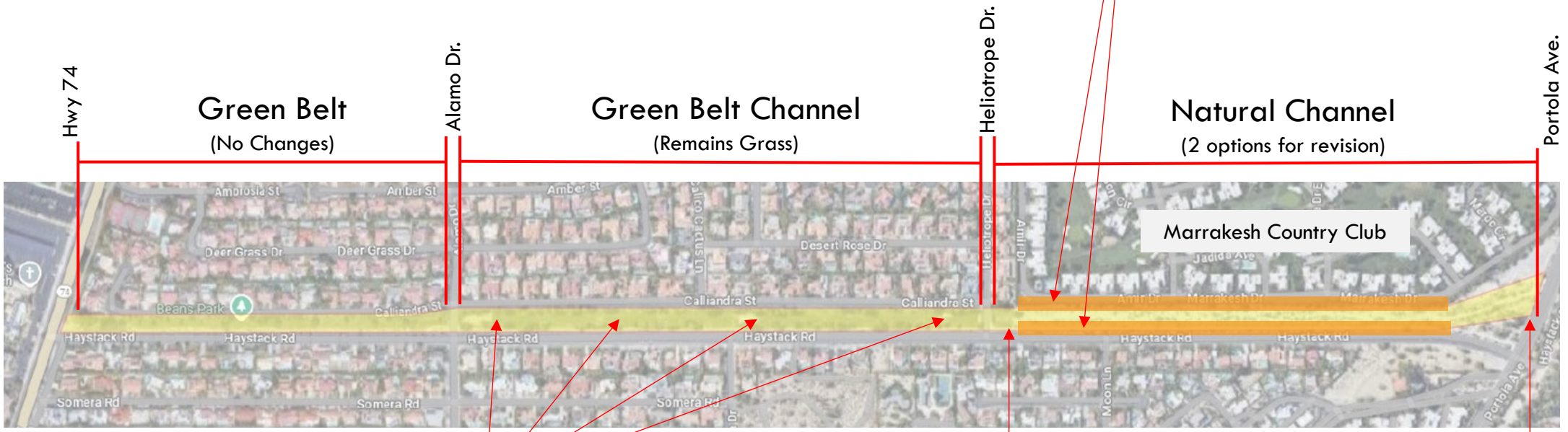
- Community Engagement Meeting June 26, 2024
  - 4 options presented
  - 2 preferred options
- July 14, 2024 – Heavy rain causes damage requiring immediate emergency repairs
- Community Engagement Meeting November 7, 2024
  - Presented analysis of the 2 preferred options

PROJECT LOCATION

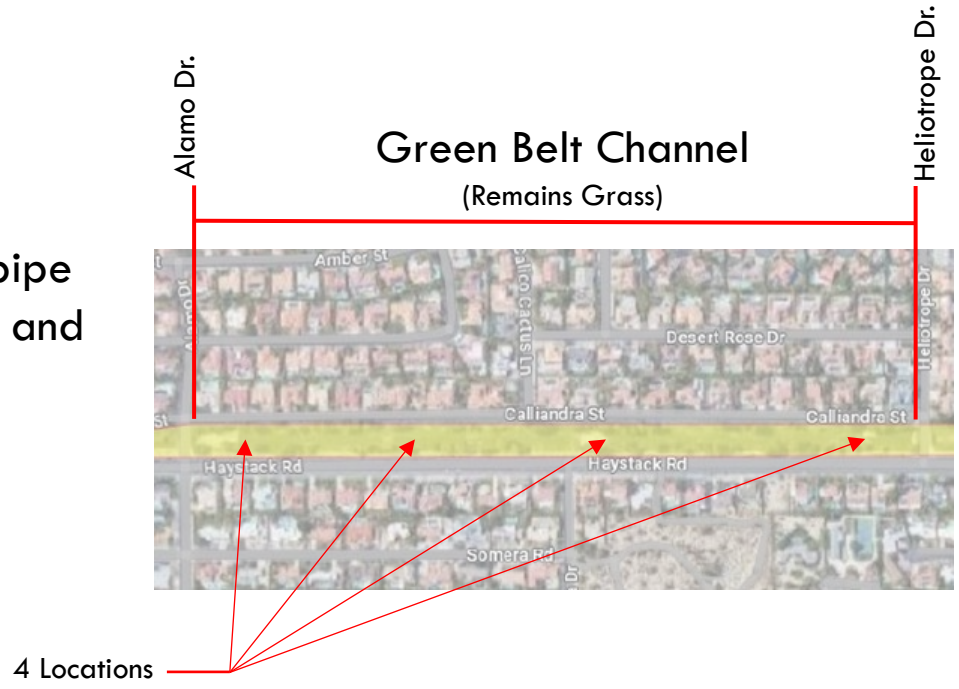
Areas of concern for flooding

- Surrounding homes at risk of damage
- Public safety concerns (pedestrian and roads)
- Compromised utility infrastructure



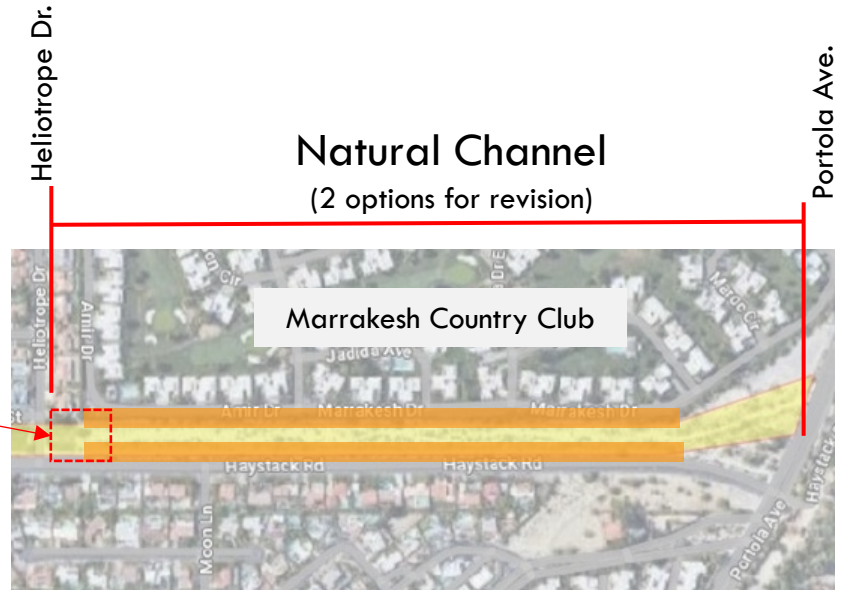
GREEN BELT IMPROVEMENTS

- Underground perforated pipe will help to reduce erosion and standing water that invites mosquitos
- **Grass will be replaced following installation**



HEAVY RAIN

July 2024



CHANNEL EROSION

Looking South: SCE Power Pole

Looking East: Marrakesh CC on left

Looking East: Haystack Rd. on right

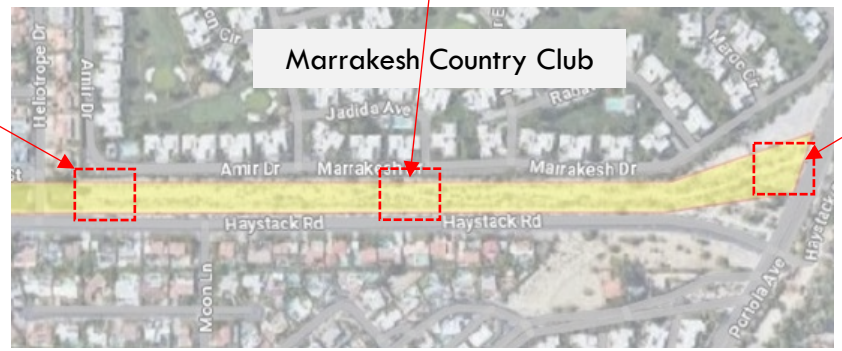
Looking South-East toward Haystack Rd.

- Private property at risk
- Public safety concerns
- Compromised utility infrastructure

EMERGENCY REPAIRS

Aug.-Sep. 2024 ($200,000)

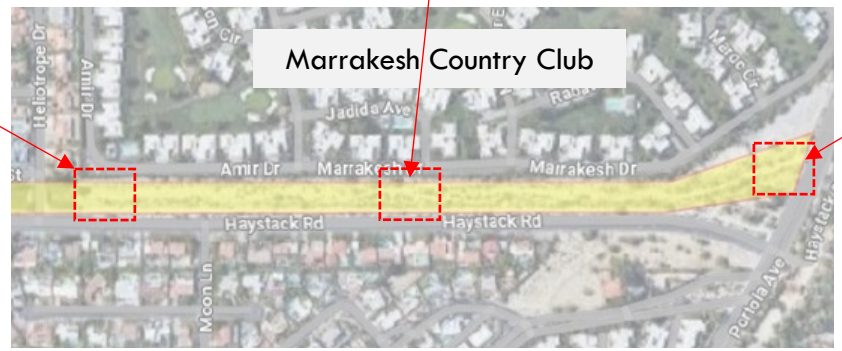
Before:



EMERGENCY REPAIRS

Aug.-Sep. 2024 ($200,000)

After:



2 OPTIONS FOR CONSIDERATION

Natural Slopes

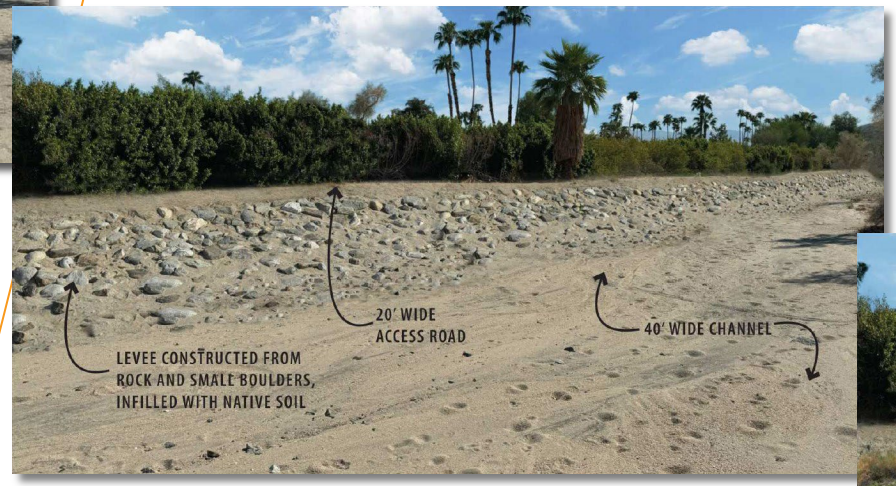
Boulders & Soil Slopes

NATURAL OPTION

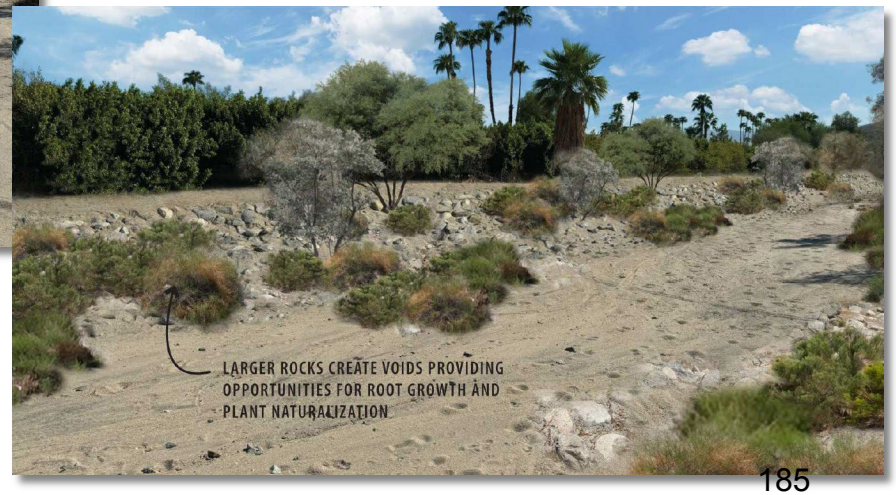
- Sand moved through the channel and onto slopes to repair erosion
- Consequence of continued maintenance is destruction of vegetation

BOULDER & SOIL OPTION

Before Repairs



After Repairs



Improvements at Maturity

COMPARISONS

Channel repairs East of Heliotrope Dr.

Natural Slopes

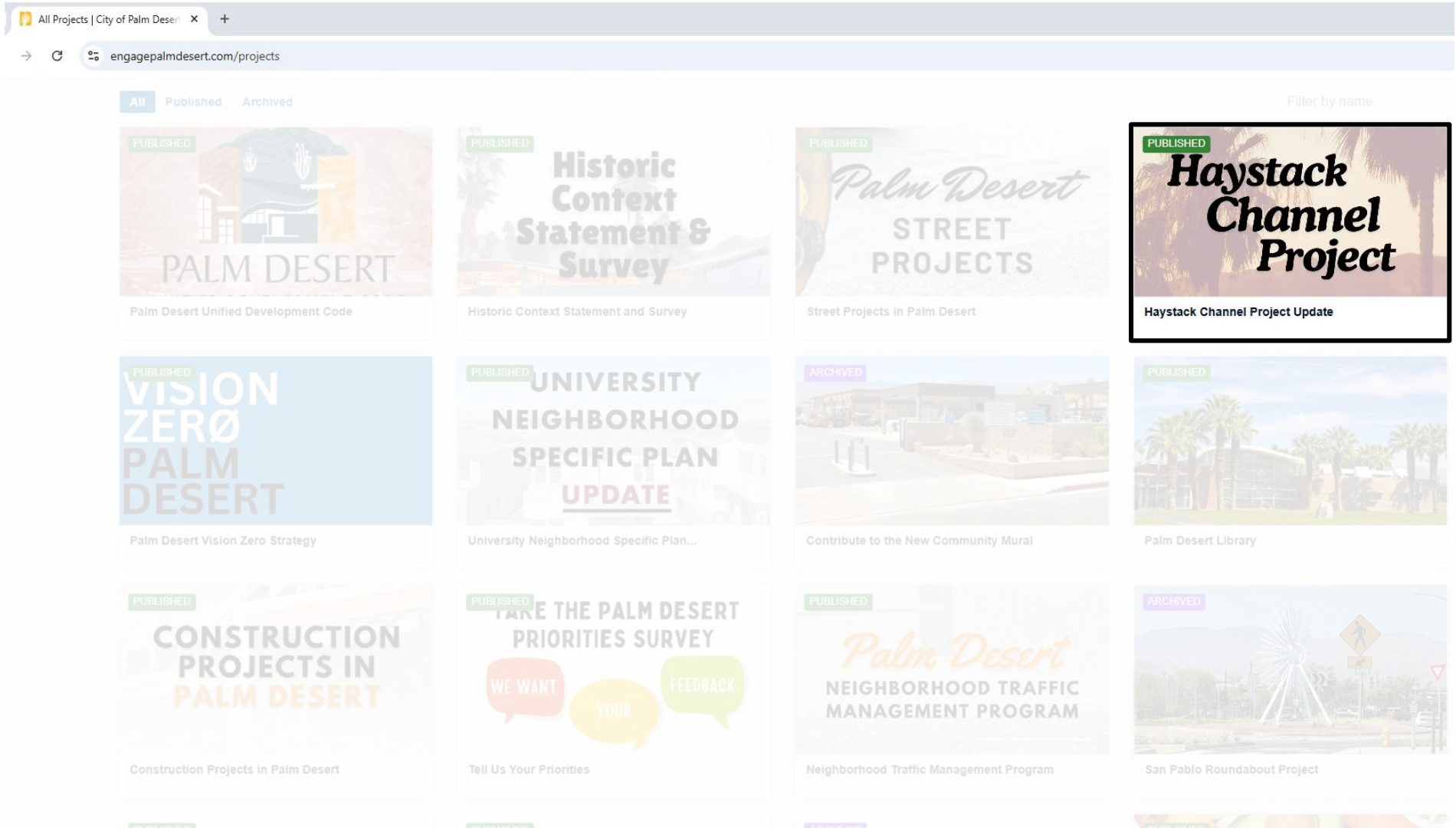
- Level of protection:
  - 100-year storm or larger presents a significant threat to channel functionality and integrity
  - Unmitigated erosion at channel walls within feet of significant damage to private property and public infrastructure
- No Access Road for maintenance
- Lower upfront costs - Construction Cost Estimate: $500K
- More Maintenance: $150K annually
- Plant impact: Less initially, but more long term with ongoing repairs

Boulder Slopes

- Level of protection:
  - 100-year storm would present minimal threat to channel functionality and integrity
  - Controlled and predictable outcomes due to more robust channel walls
- Access Road for maintenance
- Higher upfront costs - Construction Cost Estimate: $3.3M
- Less Maintenance: $50K-$75K annually
- Plant Impact: More initially, but less long term due to more robust side slopes requiring less repairs

ENGAGE PALM DESERT

engagepalmdesert.com/projects



CITY OF PALM DESERT

73-510 FRED WARING DRIVE
PALM DESERT, CALIFORNIA 92260-2578
TEL: 760-346-0611
PLANNING@PALMDESERT.GOV

CITY OF PALM DESERT
PUBLIC HEARING NOTICE

NOTICE IS HEREBY GIVEN THAT A PUBLIC HEARING WILL BE HELD BEFORE THE PLANNING COMMISSION OF THE CITY OF PALM DESERT, CALIFORNIA, FOR CONSIDERATION OF A RECOMMENDATION TO THE CITY COUNCIL TO ADOPT A MITIGATED NEGATIVE DECLARATION (SCH NO. 2023090542) OF ENVIRONMENTAL IMPACT AND A MITIGATION MONITORING AND REPORTING PROGRAM FOR THE HAYSTACK CHANNEL IMPROVEMENT PROJECT LOCATED EAST OF STATE HIGHWAY 74, WEST OF PORTOLA AVENUE, NORTH OF HAYSTACK ROAD.

The City of Palm Desert (City), in its capacity as the Lead Agency for this project and pursuant to the California Environmental Quality Act (CEQA), has conducted an initial study concluding that the project would not have significant adverse environmental impacts. The City intends to adopt a Mitigated Negative Declaration pursuant to Public Resources Code Section 21080(c) and CEQA Guidelines sections 15070 et seq.

PROJECT LOCATION: East of State Highway 74, west of Portola Avenue, north of Haystack Road.
Assessor's Parcel Numbers: 630-025-050 & 052; 630-190- 051 & 054; 628-290-013 Portion of the SE ¼ of Section 30, portion of S1/2 of Section 29, Township 5 South, Range 6 East, San Bernardino Baseline and Meridian

PROJECT DESCRIPTION: The Planning Commission will consider a recommendation to the Palm Desert City Council for the adoption of a Mitigated Negative Declaration (MND) with a Mitigation Monitoring and Reporting Program (MMRP) for the Haystack Channel Improvement Project. The Haystack Channel Improvement Project will generally consist of the repair, and reconstruction of an existing flood control channel, which currently serves an extended residential neighborhood.

PUBLIC HEARING: NOTICE IS HEREBY GIVEN that the Planning Commission of the City of Palm Desert, California, will hold a Public Hearing on Tuesday, January 7, 2025. The Planning Commission meeting begins at 6:00 p.m. in the Council Chamber at 73510 Fred Waring Drive, Palm Desert, California. Pursuant to Assembly Bill 2449, this meeting may be conducted as a hybrid meeting, allowing public access via teleconference or in person. Options for remote participation will be listed on the Posted Agenda for the meeting at: https://www.palmdesert.gov/connect/city-council.

PUBLIC REVIEW: Information concerning the project is available for public review in the Development Services – Planning Division office at 73510 Fred Waring Drive, Palm Desert, California, during regular business hours. Written comments may be submitted to the Planning Commission by letter to the address below or by email at planning@palmdesert.gov. Emails received by 3:00 p.m. prior to the meeting will be distributed to the Commission. Any correspondence received during or after the meeting will be distributed to the Commission as soon as practicable and retained for the official record.

Any challenge of the proposed project in court may be limited to raising only those issues raised at the public hearing described in this notice, or in written correspondence delivered to the Planning Division at, or prior, to the public hearing. (Government Code Section 65009[b][2]).

Nick Melloni, AICP, Principal Planner
City of Palm Desert
73510 Fred Waring Drive
Palm Desert, CA 92260
(760) 346-0611, Extension 479
nmelloni@palmdesert.gov

PUBLISH: THE DESERT SUN
December 27, 2024

RICHARD D. CANNONE, AICP, SECRETARY
PALM DESERT PLANNING COMMISSION

CITY OF PALM DESERT
PLANNING COMMISSION
STAFF REPORT

MEETING DATE: January 7, 2025

PREPARED BY: Carlos Flores, AICP, Principal Planner

SUBJECT: CONSIDERATION TO ADOPT RESOLUTION NO. 2888 APPROVING A PRECISE PLAN TO CONSTRUCT A DUPLEX DEVELOPMENT ON SAN JACINTO AND A NOTICE OF EXEMPTION PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT.

RECOMMENDATION:

Adopt Planning Commission Resolution No. 2888 entitled, "A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PALM DESERT, CALIFORNIA, ADOPTING A NOTICE OF EXEMPTION PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) AND APPROVING A PRECISE PLAN TO DEVELOP A DUPLEX NEAR THE NORTHWEST CORNER OF ALESSANDRO DRIVE AND SAN JACINTO (ASSESSOR'S PARCEL NUMBER 627-182-010)"

BACKGROUND/ANALYSIS:

The proposal is a request by Nader Iskander (Applicant/Owner) for consideration of a Precise Plan (PP) to construct a duplex development consisting of two (2) attached units on an 8,135 square-foot parcel located on San Jacinto Avenue, just north of Alessandro Drive within the Mixed Residential District (R-2). Each unit will be a three (3) bed, three (3) bathroom unit with 1,034 square feet (sf) of living area and 408 sf of garage area.

Architectural Review Commission:

The Architectural Review Commission of the City of Palm Desert considered the project request and took the following action at its meeting of April 23, 2024:

Following discussion, MOTION BY CHAIR VUKSIC, SECOND BY COMMISSIONER SANCHEZ, CARRIED 5-0 (COMMISSIONERS COLVARD and MCINTOSH ABSENT); to approve Case No. PP23-0008 with the following conditions:

1. Entry and South elevations shall be further enhanced. Proposed enhancements by applicant shall be reviewed by staff.
2. Roof tile shall be changed from asphalt shingles to concrete flat tiles; to be reviewed by staff.
3. Artificial turf shall be changed to a more substantial artificial turf product; to be reviewed by staff.
4. If applicant chooses to keep the stone veneer enhancement on the south elevation, it shall be returned on sides at least 5 feet.

These were incorporated into the latest drawings for this PP and have been incorporated as conditions of approval.

Project Description:

A. Property Description:

The project site is an 8,135 square foot vacant parcel located on San Jacinto Avenue, just north of Alessandro Drive (Project Site). The Project Site is located within the Mixed Residential District (R-2) zoning district which allows for residential duplex dwellings. The Project Site is adjacent to existing single-family residential dwellings, as outlined in Table 1 below.

B. Zoning, General Plan and Adjacent Uses

Table 1 – Adjacent Land Use and Designations

	Existing Uses	General Plan	Zoning
Project Site	Vacant	Small Town Neighborhood	R-2
North	Existing Residential	Small Town Neighborhood	R-2
South	Existing Residential	Small Town Neighborhood	R-2
East	Existing Residential	Small Town Neighborhood	R-2
West	Existing Residential	Small Town Neighborhood	R-2

C. Project Description

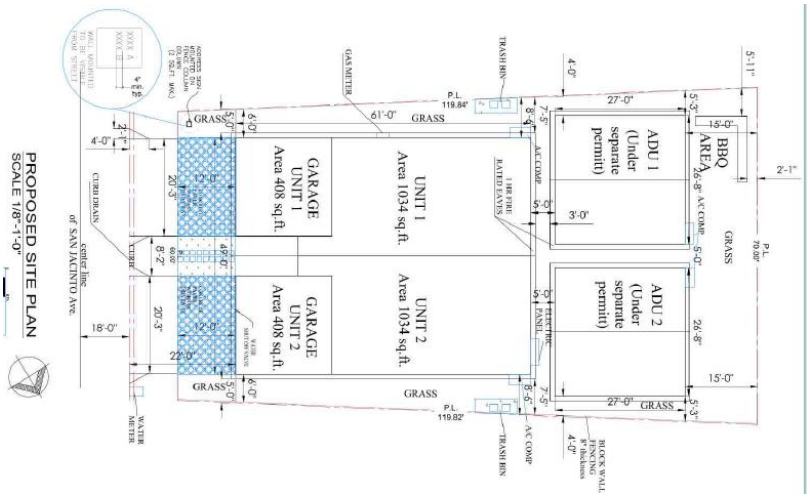
The following entitlement application has been submitted for the project:

- Precise Plan: PP approval is for the review of the architecture and landscaping of the proposed units and site design. The plan proposes two (2) attached units. Each unit is single-story and comprised of 1,034 sf of living area, 408 sf of garage area, and backyard area.

Site Plan

The Site Plan (Figure 1 below) shows the building orientation, vehicle access, site walls, pool area, backyards, and landscaping. Vehicular access to the site will be available from a 20'-3" foot wide driveway for each unit off San Jacinto Avenue. Each unit will have a two car, 408-sf garage accessed off this driveway. Future plans for the Project Site include construction of two (2) Accessory Dwelling Units (ADUs) and a "BBQ Area" which would be reviewed through the building permit process and would be required to conform with Palm Desert Municipal Code (PDMC) Section 25.34.030. The ADUs are not being considered as part of this project approval and will be reviewed as part of the construction permits by City staff. The project has a 12' front yard setback, 6' side yard setbacks, and 47' rear yard setback, all of which meet the requirements of the R-2 zone. Each unit would include three (3) bedrooms, three (3) bathrooms, a living room, dining room, and kitchen area.

Figure 1 – Proposed Site Plan (Sheet A-1)



Architecture

The proposed architecture includes a symmetrical, mirrored design for both units, incorporating a gray and white color palette, shared sloped roof with cool roof, Spring Creek gray faux stone and smooth stucco finish. The maximum height to the top of the roof is 15 feet from finish floor, which meets the standards of the underlying R-2 zoning district. The exterior material palette will consist of white smooth plaster finish and faux stone veneer on the front elevation.

Landscaping

The applicant proposes landscaping throughout the project site including the front, side, and rear yards. The landscape palette includes drought tolerant landscaping and will include a combination of trees, shrubs, ground cover, pavers, and artificial turf. There are a total of seven (7) trees proposed, with two (2) in the front yard, including Palo Verdes, Crepe Myrtles, and a Lemon Tree. The project proposes a total of 2,463 sf of landscaping throughout the site.

Environment Assessment/Environmental Review:
The City of Palm Desert Development Services Department finds the Project is exempt from CEQA pursuant to Section 15332 Infill Development (Class 32) of the State CEQA guidelines. Class 32 consists of projects characterized as infill development meeting the following conditions as described in the CEQA Guidelines:

1. The Project is consistent with the applicable General Plan designation and all applicable General Plan policies, as well as with applicable zoning designation and regulations. The proposed residential duplex use is consistent with the Small Town Neighborhood General Plan land use designation and the Mixed Residential zoning designation. The Project does not conflict with General Plan policies and meets all regulations of the PDMC.
2. The proposed development occurs within city limits on a Project site of no more than five (5) acres substantially surrounded by urban uses. The Project site is a 0.31-acre site within the City of Palm Desert.

3. The Project site has no value as a habitat for endangered, rare, or threatened species.
4. Approval of the Project would not result in any significant effects relating to traffic, noise, air quality, or water quality.
5. The site can be adequately served by all required utilities and public services.

Findings of Approval:
Findings of approval can be found in draft Planning Commission Resolution No. 2888.

ATTACHMENTS:

1. PC Draft Resolution No. 2888
2. Project Plans
3. ARC Notice of Action
4. Public Hearing Notice

PLANNING COMMISSION RESOLUTION NO. 2888

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PALM DESERT, CALIFORNIA, ADOPTING A NOTICE OF EXEMPTION PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) AND APPROVING A PRECISE PLAN TO DEVELOP A DUPLEX DEVELOPMENT NEAR THE NORTHWEST CORNER OF ALESSANDRO DRIVE AND SAN JACINTO (ASSESSOR'S PARCEL NUMBER 627-182-010) CASE NOS. PP/EA 23-0008

WHEREAS, Nader Iskander ("Applicant"), submitted applications for an Environmental Assessment (EA) and Precise Plan (PP) for duplex development on an 8,135 square foot parcel located on San Jacinto Avenue, just north of Alessandro Drive near the southeast corner of Fred Waring Drive and San Luis Drive; and

WHEREAS, the Project site has a land use designation of Small Town Neighborhood in the Palm Desert General Plan adopted on November 10, 2016, and a zoning designation of Mixed Residential (R-2); and

WHEREAS, under Section 21067 of the Public Resources Code, Section 15367 of the State California Environmental Quality Act (CEQA) Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.) and the City of Palm Desert's ("City's") Local CEQA Guidelines, the City is the lead agency for the Project; and

WHEREAS, the Architectural Review Commission (ARC) of the City of Palm Desert, California, did on the 23rd day of April 2024, approve a design review for the Project, subject to conditions that have been incorporated into the Project plans and as conditions of approval in this Resolution; and

WHEREAS, pursuant to the requirements of the CEQA, the State Guidelines for Implementation of CEQA (State CEQA Guidelines), and the City of Palm Desert CEQA Implementation Requirements, the City of Palm Desert Development Services Department has determined that the Project will not have a significant impact on the environment and that the Project is categorically exempt under Article 19, Section 15332 Infill Development (Class 32) of the CEQA Guidelines; therefore, no further environmental review is necessary; and

WHEREAS, the Planning Commission of the City of Palm Desert, California, did on the 7th day of January 2025, hold a duly noticed public hearing to consider the request by the Applicant for approval of the above-noted Project request; and

WHEREAS, at the said public hearing, upon hearing and considering all testimony and arguments, if any, of all interested persons desiring to be heard, the Planning Commission did find the following facts and reasons, which are outlined in the staff report, exist to justify approval of said request:

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of the City of Palm Desert, California, as follows:

SECTION 1. Recitals. The Planning Commission hereby finds that the foregoing recitals are true and correct and are incorporated herein as substantive findings of this Resolution.

SECTION 2. Findings on Precise Plan. As required by Palm Desert Municipal Code "PDMC" Section 25.72.030 (E), the Planning Commission makes the following findings to approve the PP:

1. *Consideration is given and restrictions are imposed to the extent necessary, given the size and shape of the parcel and the present and proposed zoning and use of the subject property and the surrounding property, to permit the same degree of enjoyment of the subject property, but subject to the same degree of protection of adjoining properties, as would be accorded in normal circumstances by the standard restrictions imposed by Chapter 25.72.030. The project, as conditioned, meets all the requirements of the underlying zoning designation and provides this project the with same allowances that its surrounding properties would be governed by.*

2. *The proposed precise plan is not found to substantially depreciate property values in the vicinity, nor would the plan unreasonably interfere with the use or enjoyment of property in the vicinity by the occupants thereof for lawful purposes or would endanger the public peace, health, safety, or general welfare, as conditioned.*

3. *The Architectural Review Commission approved a design review on April 23, 2024.*

SECTION 3. CEQA Determination. The Planning Commission finds the Project is exempt from CEQA pursuant to Section 15332 Infill Development (Class 32) of the State CEQA guidelines. Class 32 consists of projects characterized as infill development meeting the following conditions as described in the CEQA Guidelines:

1. The Project is consistent with the applicable General Plan designation and all applicable General Plan policies, as well as with applicable zoning designation and regulations. The proposed residential duplex use is consistent with the Small Town Neighborhood General Plan land use designation and the Mixed Residential zoning designation. The Project does not conflict with General Plan policies and meets all regulations of the PDMC.
2. The proposed development occurs within city limits on a Project site of no more than five (5) acres substantially surrounded by urban uses. The Project site is a 0.31-acre site within the City of Palm Desert.
3. The Project site has no value as a habitat for endangered, rare, or threatened species.
4. Approval of the Project would not result in any significant effects relating to traffic, noise, air quality, or water quality.
5. The site can be adequately served by all required utilities and public services.

SECTION 3. Project Recommendations. The Planning Commission hereby approves Case No(s) PP/EA23-0008, subject to the findings and Conditions of Approval attached herein as Exhibit "A."

SECTION 4. Custodian of Records. The documents and materials that constitute the record of proceedings on which these findings are based are located at the City's office at 73510 Fred Waring Drive, Palm Desert, CA 92260. Richard D. Cannone, AICP, the Secretary to the Palm Desert Planning Commission, is the custodian of the record of proceedings.

SECTION 5. Execution of Resolution. The Chairperson of the Planning Commission signs this Resolution, and the Secretary to the Commission shall attest and certify to the passage and adoption thereof.

SECTION 6. Recitals. The Planning Commission hereby finds that the foregoing recitals are true and correct and are incorporated herein as substantive findings of this Resolution.

ADOPTED ON January 7, 2025.

RON GREGORY
CHAIRPERSON

ATTEST:

RICHARD D. CANNONE, AICP
SECRETARY

I, Richard D. Cannone. AICP, Secretary of the City of Palm Desert Planning Commission, hereby certify that Resolution No. 2888 is a full, true, and correct copy, and was duly adopted at a regular meeting of the Planning Commission of the City of Palm Desert on January 7, 2025, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:
RECUSED:

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of Palm Desert, California, on January ___, 2025.

RICHARD D. CANNONE, AICP
SECRETARY

EXHIBIT A

CONDITIONS OF APPROVAL
CASE NOS. PP/EA23-0008

PLANNING DIVISION:

1. The development of the property shall conform substantially with exhibits on file with the Development Services Department, except as modified by the following conditions. Any variation from the approved plans must be reviewed and approved by the Planning Division prior to the building permit issuance and may require review and approval by the Architectural Review Commission, Planning Commission, and/or City Council.

2. The Applicant agrees that in the event of any administrative, legal, or equitable action instituted by a third party challenging the validity of any of the procedures leading to the adoption of these Project Approvals for the Project or the Project Approvals themselves, the Developer and City each shall have the right, in their sole discretion, to elect whether or not to defend such action. The Developer, at its sole expense, shall defend, indemnify, and hold harmless the City (including its agents, officers, and employees) from any such action, claim, or proceeding with counsel chosen by the City, subject to the Developer's approval of counsel, which shall not be unreasonably denied, and at the Developer's sole expense. If the City is aware of such an action or proceeding, it shall promptly notify the Developer and cooperate in the defense. The Developer, upon such notification, shall deposit with City sufficient funds in the judgment of the City Finance Director to cover the expense of defending such action without any offset or claim against said deposit to assure that the City expends no City funds. If both Parties elect to defend, the Parties hereby agree to affirmatively cooperate in defending said action and to execute a joint defense and confidentiality agreement in order to share and protect the information under the joint defense privilege recognized under applicable law. As part of the cooperation in defending an action, City and Developer shall coordinate their defense in order to make the most efficient use of legal counsel and to share and protect information. Developer and City shall each have sole discretion to terminate its defense at any time. The City shall not settle any third-party litigation of Project approvals without the Developer's consent, which consent shall not be unreasonably withheld, conditioned, or delayed unless the Developer materially breaches this indemnification requirement.

3. The development of the property described herein shall be subject to the restrictions and limitations set forth herein, which are in addition to the approved development standards listed in the PDMC and state and federal statutes now in force, or which hereafter may be in force.

4. The PP shall expire if construction of the said Project shall not commence within 24 months from the date of final approval unless an extension of time is granted by the Palm Desert Planning Commission; otherwise, said approval shall become null, void, and of no effect whatsoever.

5. The approved PP shall only be modified with written City approval per PDMC Chapter 25.72.030. Any proposed changes to this PP will require an amendment to the application, which may result in a new public hearing.

6. All construction documentation shall be coordinated for consistency, including, but not limited to, architectural, structural, mechanical, electrical, plumbing, landscape and irrigation, grading, and street improvement plans. All such plans shall be consistent with the approved entitlement plans on file with the Development Services Department.

7. Prior to the issuance of a building permit for the construction of any use or structure contemplated by this approval, the Applicant shall first obtain permits and or clearance from the following agencies:

   Coachella Valley Water District (CVWD)
   Riverside County Fire Department
   City of Palm Desert Building and Safety Division
   City of Palm Desert Land Development Division
   City of Palm Desert Planning Division
   City of Palm Desert Public Works Department

   Evidence of said permit or clearance from the above agencies shall be presented to the Building & Safety Division at the time of issuance of a building permit for the use contemplated herewith.

8. This Project is subject to the Art in Public Places requirements in Chapter 4.10 of the PDMC.

9. Final lighting plans shall be submitted per PDMC Section 24.16 for any landscape, architectural, street, or other lighting types within the Project area.

   All exterior lighting sources shall be fully shielded and directed downwards and are subject to approval by the Development Services Department. Luminaries with total lamp lumens above 16,000 lumens shall not be used. Prior to the building permit issuance, the Applicant shall submit plans for outdoor lighting as required by PDMC Section 24.16.030 and include glare ratings and color temperature for all exterior light fixtures.

10. Prior to the building permit issuance, the Applicant shall submit a landscape construction application for approval by the Development Services Department and Coachella Valley Water District. Final landscape and irrigation documents shall be prepared by a landscape architect registered with the State of California and shall be submitted to the Development Services Department and the CVWD for review and approval. All sheets shall be signed by the landscape architect and shall include the license number and the expiration date. The landscape plan shall conform to the preliminary landscape plans prepared as part of this application and shall include dense plantings of live landscape material. All plants shall be a minimum of five (5) gallons in size, and all trees shall be a minimum 24-inch box in size.

A. The Applicant shall submit final landscape construction plans to the Palm Desert Development Services Department for review and acceptance prior to submittal to CVWD.

11. All Project irrigation systems shall function properly, and landscaping shall be maintained in a healthy and thriving condition. The maintenance of landscaping and the irrigation system shall be permanently provided for all areas of the Project site, as well as walkways and the portion of public right-of-way abutting the Project site (parkways). Furthermore, the plans shall identify responsibility for the continued maintenance.

12. Prior to the issuance of the Certificate of Occupancy, the Project landscape architect shall submit written certification to the Public Works Department or Planning Division that the landscaping and irrigation have been installed per the approved landscape plan.

13. All ground-mounted utility structures including, but not limited to, transformers, HVAC equipment, and backflow prevention valves shall be located out of view from any public street or adequately screened using landscaping and/or permanent screening devices.

14. Exterior building elevations showing building wall materials, roof types, exterior colors, and appropriate vertical dimensions shall be included in the development construction drawings.

15. The Applicant or any successor in interest shall comply with all applicable local, state, and federal laws and regulations.

16. A copy of the herein-listed Conditions of Approval shall be included in the construction documentation package for the Project, which shall be continuously maintained on-site during Project construction.

17. Prior to a permit issuance, the Applicant shall submit plans for the final design of all site fences and walls subject to review and approval by the Palm Desert Development Services Department. The design of the walls shall be consistent with the height, material, and design on the approved conceptual site plan. The proposed walls shall use a footing that does not require encroaching into the City right-of-way and ensures the entirety of the wall and footings are within the owner's property.

18. Future modifications to site walls or fences shall require approval by the Director of Development Services. The use of barbed wire, razor wire, and spiked pickets for fencing is prohibited.

19. The Applicant shall comply with the recommendations made by the City's ARC, as referenced in the April 23, 2024, Notice of Action.

FIRE DEPARTMENT:

20. Fire Hydrants and Fire Flow: Prior to the issuance of building permits, water availability for fire protection shall be confirmed. The minimum required fire flow is 500 GPM at 20 psi for a 1-hour duration. The maximum distance from a fire hydrant to all portions of the exterior

building walls is 600 feet, as measured by an approved route around the buildings. Reference 2019 California Fire Code (CFC) 507.5.1, Appendices B and C.

21. Prior to building permit issuance, an application for a Fire Department review of the residential building shall be submitted to the Office of the Fire Marshal along with a site plan, general building information and water supply information.

22. Residential Fire Sprinklers: Residential fire sprinklers are required in all new one and two-family dwellings, including accessory dwelling units per the California Residential Code (CRC). Each dwelling unit shall have an individual control valve that serves the fire sprinkler system in that dwelling unit and the owner shall have access to the valve that controls the sprinkler system in their unit. Plans must be submitted to the Office of the Fire Marshal for review and approval prior to installation. Ref. CRC 313.2, NFPA 130: 6.2.3

23. Addressing: All residential dwellings shall display street numbers and/or unit designators. Address numbers shall be a minimum height of 6" with contrasting color of the background and be visible from the addressed street. Ref. CFC 505.1

LAND DEVELOPMENT DIVISION/PUBLIC WORKS DEPARTMENT:

24. The following plans are hereby referenced: conceptual Grading Plan prepared by Mourad Aziz and dated July 2nd, 2024; and Site Plan prepared by NDC Design & Construction and dated July 2nd, 2024.

25. It is assumed that easements shown on the preliminary grading plan are shown correctly and include all the easements that encumber the subject property. A current preliminary title report for the site shall be submitted during technical plan review. The Applicant shall secure approval from all easement holder for all grading and improvements, which are proposed over respective easements, if any, or provide evidence that the easement has been relocated, quitclaimed, vacated, abandoned, easement holder cannot be found, or is otherwise of no effect. Should such approvals or alternative actions regarding the easements not be provided and approved by the City, the Applicant may be required to amend or revise the proposed site configuration as may be necessary.

26. It is understood that the conceptual exhibits correctly show acceptable centerline elevations, all existing easements, traveled ways, and drainage courses with appropriate Q's, and that the omission or unacceptability may require that the Applicant amend or revise the proposed site configuration as may be necessary.

27. All utility extensions within the site shall be placed underground unless otherwise specified or allowed by the respective utility purveyor.

28. Prior to issuance of the grading permit for the development, the Applicant shall pay all appropriate signalization fees in accordance with the City's Resolution No. 79-17 and 79-55.

29. The Applicant shall comply with Palm Desert Ordinance No. 843, Section 24.20 Stormwater Management and Discharge Ordinance.

30. Prior to a grading permit, the Applicant shall prepare a final grading plan for the site. No grading or other improvements shall be permitted until a final grading plan has been approved by the City Engineer. Grading plans and all grading shall conform to the approved Conceptual Grading Plan, the California Building Code, Palm Desert Municipal Code (PDMC) Title 27 Grading, and all other relevant laws, rules, and regulations governing grading in the City of Palm Desert.

31. The final grading plans shall show and identify all proposed onsite improvements in accordance with the approved conceptual grading exhibit.

32. Design shall be in compliance with the accessibility standards in the California Building Code (current) and Americans with Disability Act (ADA) regulations. Plans shall show running and cross slopes within public right-of-way pedestrian facilities.

33. Run-off to San Jacinto Avenue shall be directed as sheet flow over driveway(s). Curb drains are not allowed.

34. All private improvements shall be kept within private property. Non-standard encroachments into proposed public right-of-way will not be permitted, unless clearly identified on these conditions of approval.

35. The project's Geotechnical Engineer shall sign the final grading plans.

36. The grading plan shall provide for acceptance and proper disposal of all offsite drainage flowing onto or through the site.

37. All drainage and storm drain improvements shall be designed per PDMC Title 24, Riverside County Flood Control and Water Conservation District's standards for the Drainage Element of the Palm Desert General Plan, and all other relevant rules, and regulations governing grading in the City of Palm Desert.

38. Proposed onsite storm drains shall keep minimum of 0.4% slope at all segments.

39. Grading surrounding proposed Accessory Dwelling Units (ADUs) shall meet California Building Code requirements.

40. Pad elevations, as shown on the conceptual grading plan, are subject to review and modification per the City of Palm Desert Municipal Code Title 27.

41. Prior to grading permit it shall be the sole responsibility of the Applicant to obtain any and all proposed or required easements and/or permissions necessary to perform the grading shown on the grading plan exhibit. Proof shall be provided to the Land Development Department prior to issuance of grading permit.

42. Written authorization for work proposed within the public utility easement will be required at submittal of grading permit application.

43. Prior to the issuance of a grading permit, the Applicant shall submit a PM10 application for review and approval. The Applicant shall comply with all provisions of PDMC Section 24.12 regarding Fugitive Dust Control.

44. Prior to issuance of grading permit and in compliance with the City of Palm Desert Municipal Code Chapter 27.24, the Applicant shall enter into an agreement and post financial security guarantee for all grading work related to this project.

45. Prior to the start of grading activities, the Applicant shall install all erosion and dust control mechanisms for the site as approved by the City.

46. Upon completion of grading work, the project's Geotechnical Engineer shall certify to the completion of grading in conformance with the approved grading plans and the recommendations of the geotechnical report approved for this project. A licensed land surveyor shall certify to the completion of grading in conformance with the lines and grades shown on the approved grading plans.

47. Additional right-of-way dedication at project driveways required to accommodate ADA-compliant public infrastructure within public right-of-way shall be dedicated by a separate instrument. If require, dedications shall be approved prior to issuance of building permit.

48. Prior to occupancy, the Applicant shall submit improvement plans for required improvements along San Jacinto Avenue as outlined in these conditions of approval. The plans are required to be approved by the City Engineer prior to map approval.

49. Driveway(s) shall be design per City of Palm Desert standard No. 304, providing minimum clearance of 2 feet between the property line and start of driveway approach, minimum width of 12 feet and maximum width of 30 feet.

50. All utility connections to existing infrastructure within San Jacinto Drive will require an encroachment permit.

51. Approved water and sewer plans by Coachella Valley Water District shall be submitted for conformance and reference during City improvement plan review.

52. The Applicant shall guarantee all(any) improvements within the public right-of-way for a period of one year form the date of final acceptance and the improvement guarantee shall be backed by a bond or cash deposit in the amount of ten percent of the surety posted for improvements.

53. Prior to the issuance of a building permit, the final grade certification shall be submitted in conformance with the approved grading plans. A licensed land surveyor shall certify the completion of grading in conformance with the lines and grades shown on the approved grading plans.

54. Prior to building final inspection, the Applicant is responsible for the completion of all grading for which plans are required.

55. Prior to occupancy, the Applicant shall complete all improvements on San Jacinto Avenue.

56. Prior to occupancy, the Applicant shall provide as-built drawings and drawing files (CAD .dwg) for all public infrastructure. As-built drawings shall be stamped, signed, and dated by the Engineer of Record.

END OF CONDITIONS OF APPROVAL

DESIGN & CONSTRUCTION

DUPLEX
APN# 627-182-010
San Jacinto Ave, Palm Desert, CA 92260

Project Description
Address: xxxx San Jacinto Ave,
Palm Desert, CA 92260
Assessor's ID No: 627182010
Occupancy, group: R3
Number of Stories: 1
Type of Construction: V-B
zoning: R2,
General Plan: Small Town
Neighborhood

Fire Sprinklers: yes
New ADU (under separate permitt)Fire sprinkler : not required
Solar System: yes

Legal Description :
TRACT # 18-184 LOT 11
BLK:182
Lot Area: 8,135 sq.ft.

SCOPE OF WORK:
New Duplex 1034 sf. 3Bed & 3Bath with 408 sf 2 car garage each

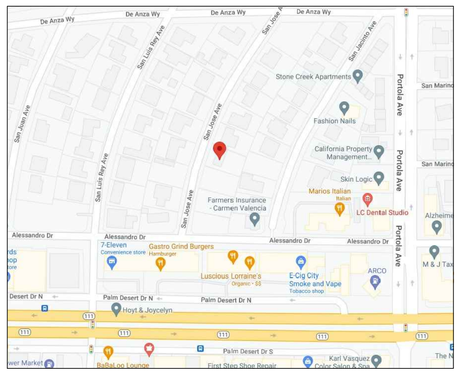
Area Calculation :
Each Duplex unit and garage Area:
1034+408 = 1,442 sq.ft.

Lot Coverage:
Total Duplex units and garage Area:
2 x 1,442 = 2,738 sq.ft.
2x719 = 1,438 sq.ft.
107sq.ft. common entrance area
total lot coverage =4,283 sq.ft.

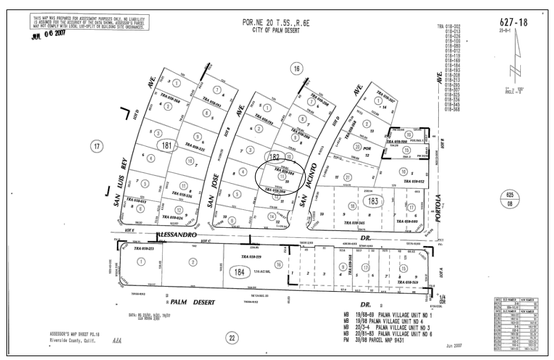
4,283/7,800 = 54.9% lot covarage

Owner info:
Nader Iskander
Address: 10614 Scott Ave
Whittier CA 90603
Phone : (714) 330-1634

Designer & Coordinator:
NDC Design & Construction
Address: 6131 Orangethorpe Ave
Suite 260B, Buena Park, CA 90620
Phone : (714) 330-1634



VICINITY MAP



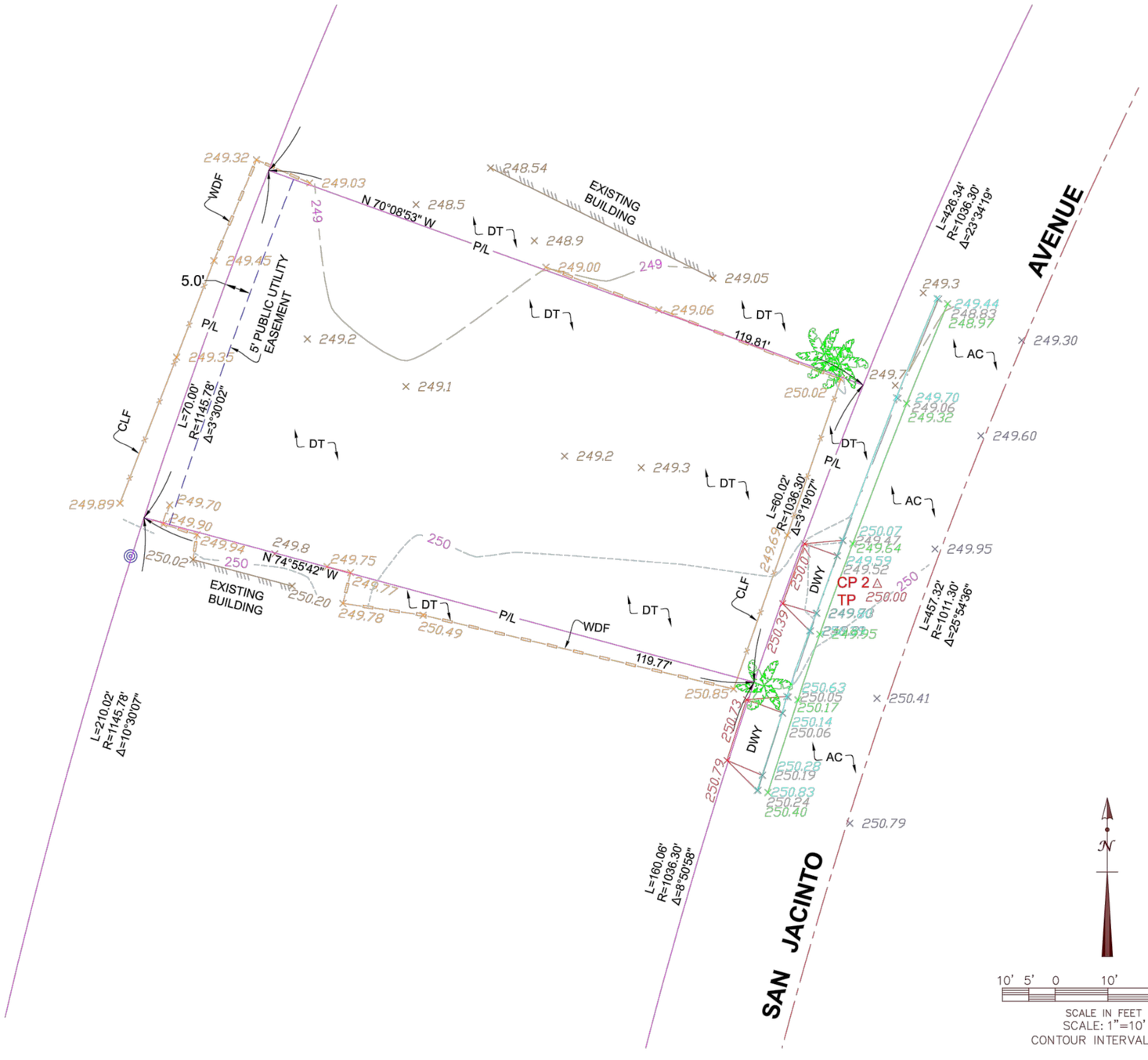
ASSESSOR MAP

SHEET INDEX :

CODES REFERENCES :

2022 California Administrative Code
2022 California Building Code
2022 California Residential Code
2022 California Mechanical Code
2022 California Plumbing Code
2022 California Electrical Code
2022 California Energy Code
2022 California Existing Building Code
2022 California Green Building Standards Code
2022 Palm Desert Municipal Code

A-0



LEGEND LINE TYPE

- ABUTMENT
- BUILDING
- BUILDING OVERHANG
- STREET CONTROL LINE
- CONTOUR LINE
- CONTOUR INDEX LINE
- CURB
- FLOW LINE
- CONCRETE GUTTER
- SIDE WALK
- DRIVEWAYS
- EDGE OF CONCRETE
- EDGE OF PAVEMENT
- EDGE OF BRICK
- BERM
- TOP
- TOE
- GRADE CHANGE
- WALL
- GUARD RAIL
- CHAIN LINK FENCE
- WOOD FENCE
- WROUGHT IRON FENCE
- TREE DRIP LINE
- TRAFFIC CONTROL STRIPING
- RAILROAD
- STAIRS
- POWER LINE
- TELEPHONE LINE
- WATER LINE
- GAS LINE
- PIPE
- GAS PIPE
- WATER PIPE
- VAULT
- PROPERTY LINE
- EASEMENT LINE

SYMBOL LEGEND

- MAINTENANCE HOLE
- SEWER MAINTENANCE HOLE
- STORM DRAIN MAINTENANCE HOLE
- POWER MAINTENANCE HOLE
- TELEPHONE MAINTENANCE HOLE
- SEWER LAMP HOLE
- MAINTENANCE HOLE LARGE
- PULLBOX
- TRAFFIC SIGNAL PULLBOX
- STREET LIGHT PULLBOX
- ELECTRIC PULLBOX
- TELEVISION PULLBOX
- IRRIGATION CONTROL BOX
- WATER METER
- GAS VALVE
- WATER VALVE
- VALVE
- SPRINKLER
- GAS METER
- STAND PIPE
- BOREHOLE
- NEWS STAND
- MAIL BOX
- DRINKING FOUNTAIN
- PHONE
- POST
- SURFACE DRAIN
- COLUMN
- LIGHT STANDARD
- TRAFFIC STANDARD
- LIGHT & TRAFFIC STANDARD
- PARKING METER
- VENT
- SIGN
- FIRE HYDRANT
- GUARD POST
- POWER POLE
- GUY WIRE
- CLEAN OUT
- CONTROL POINT
- MONITORING POINT
- MONITORING STATION
- MONITORING WELL
- OAK TREE
- TREE
- PALM TREE
- SHRUB
- BILLBOARD
- CONCRETE

LEGEND ABBREVIATIONS

AC	ASPHALT CONCRETE
AVE	AVENUE
BLDG	BUILDING
BLVD	BOULEVARD
BO	BAD ORDER
BOB	BASIS OF BEARINGS
C/L	CONTROL LINE
CALC'D	CALCULATED
CB	CATCH BASIN
CD	CURB DRAIN
CEFB	CITY ENGINEER FIELD BOOK
CLF	CHAIN LINK FENCE
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CP	CONTROL POINT
CT	COURT
D	DIAMETER
DT	DIRT
DR	DRIVE
DWY	DRIVE WAY
E	EASTING
EL	ELEVATION
ELEC	ELECTRIC
EUC	EUCALYPTUS
FB	FIELD BOOK
FD	FOUND
FF	FINISHED FLOOR
H	HEIGHT
IP	IRON PIPE
IN	INLET
INT	INTERSECTION
INV	INVERT
L	LENGTH
L&T	LEAD AND TAC
L&TAG	LEAD AND TAG
LACE	LOS ANGELES CITY ENGINEER
LACS	LOS ANGELES CITY SURVEYOR
LS	LICENSE SURVEYOR
MEA	MEASURE
MON	MONUMENT
N	NORTHING
NLA	NAVIGATE LA
NO	NUMBER
OH	OVERHANG
P/L	PROPERTY LINE
PA	PLANTER AREA
PG	PAGE
PL	PLACE
PM	PUNCH MARK
R	RADIUS
RCE	REGISTER CIVIL ENGINEER
RD	ROAD
REC	RECORD
REF	REFERENCE
RR	RAILROAD
RS	RECORD OF SURVEY
S&W	SPIKE AND WASHER
SMHM	SEWER MAINTENANCE HOLE MONUMENT
SPK	SPIKE
SSDM	STANDARD SURVEY DISK MONUMENT
SSM	STANDARD SURVEY MONUMENT
ST	STREET
TR	TRACT
TYP	TYPICAL
VAR	VARIES
VLT	VAULT
VNT	VENT
W	WIDTH
WDF	WOOD FENCE
WIF	WROUGHT IRON FENCE
WT	WALL TOP
#	NUMBER
Ø	DIAMETER
Δ	DELTA

PREPARED BY:

MAGDI SOLIMAN

19246 BENSION DR.
SANTA CLARITA, CA 91350
(818) 497-7006

PROFESSIONAL LAND SURVEYOR — MAGDI SOLIMAN — NO. 8822 — STATE OF CALIFORNIA

PREPARED FOR:

NDC DESIGN AND CONSTRUCTION INC.

6131 ORANGETHORPE AVE
260B
BUENA PARK, CA 90620

BASIS OF BEARINGS:

THE BEARINGS SHOWN HEREON ARE BASED ON THE BEARING N 89° 20' 00" W OF THE CENTER LINE OF ALESSANDRO DRIVE, AS SHOWN ON PALMA VILLAGE UNIT NO. 1 PER MAP RECORDED IN BOOK 19 PAGES 68 & 69 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER, RECORDS OF RIVERSIDE COUNTY.

BENCH MARK:

AN ASSUMED ELEVATION OF = 250.00 FEET OVER A SET SPIKE NEAR DENOTED AS "CP2 TP" 10.67 FEET SOUTH 38°21'12" EAST FROM THE NORTHERLY TOP OF "X" OF THE PROPERTY IN QUESTION'S DRIVEWAY WAS TAKEN AS THE BASIS OF ELEVATIONS ON THIS SURVEY

LEGAL DESCRIPTION:

LOT 9 OF PALMA VILLAGE UNIT NO. 1 PER MAP RECORDED IN BOOK 19 PAGES 68 & 69 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER, RECORDS OF RIVERSIDE COUNTY..

REMARK:

SHEET 1 OF 1

SCALE
1" = 10'

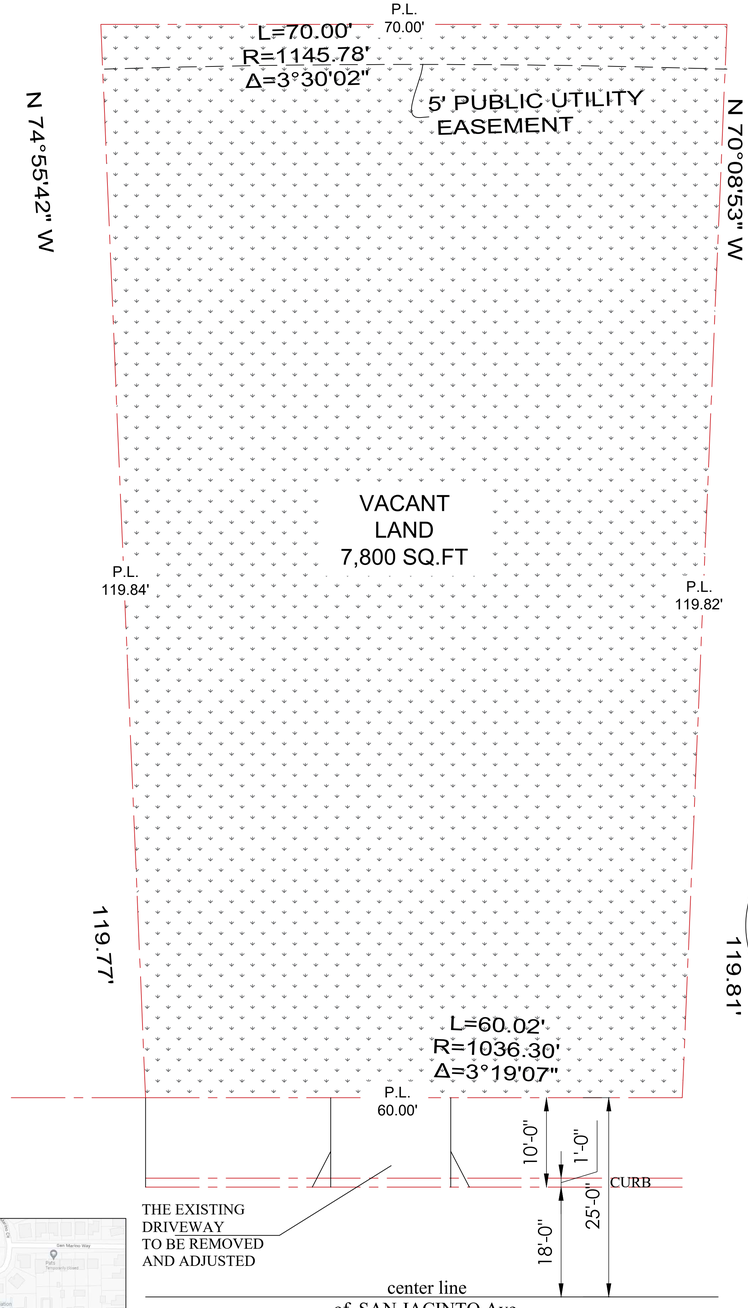
DATE
08/31/2024

BOUNDARY TOPOGRAPHIC SURVEY MAP

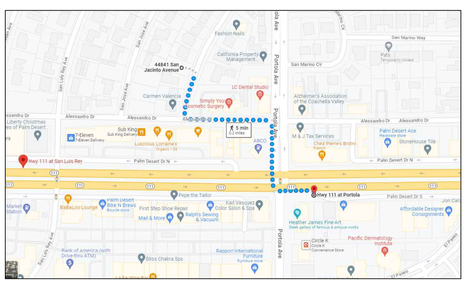
FOR THE PROPERTY OF
THE VACANT LOT ADJACENT TO
44841 SAN JACINTO AVE.
PALM DESERT, CA 91607

APN # 627-182-010

A-0.1

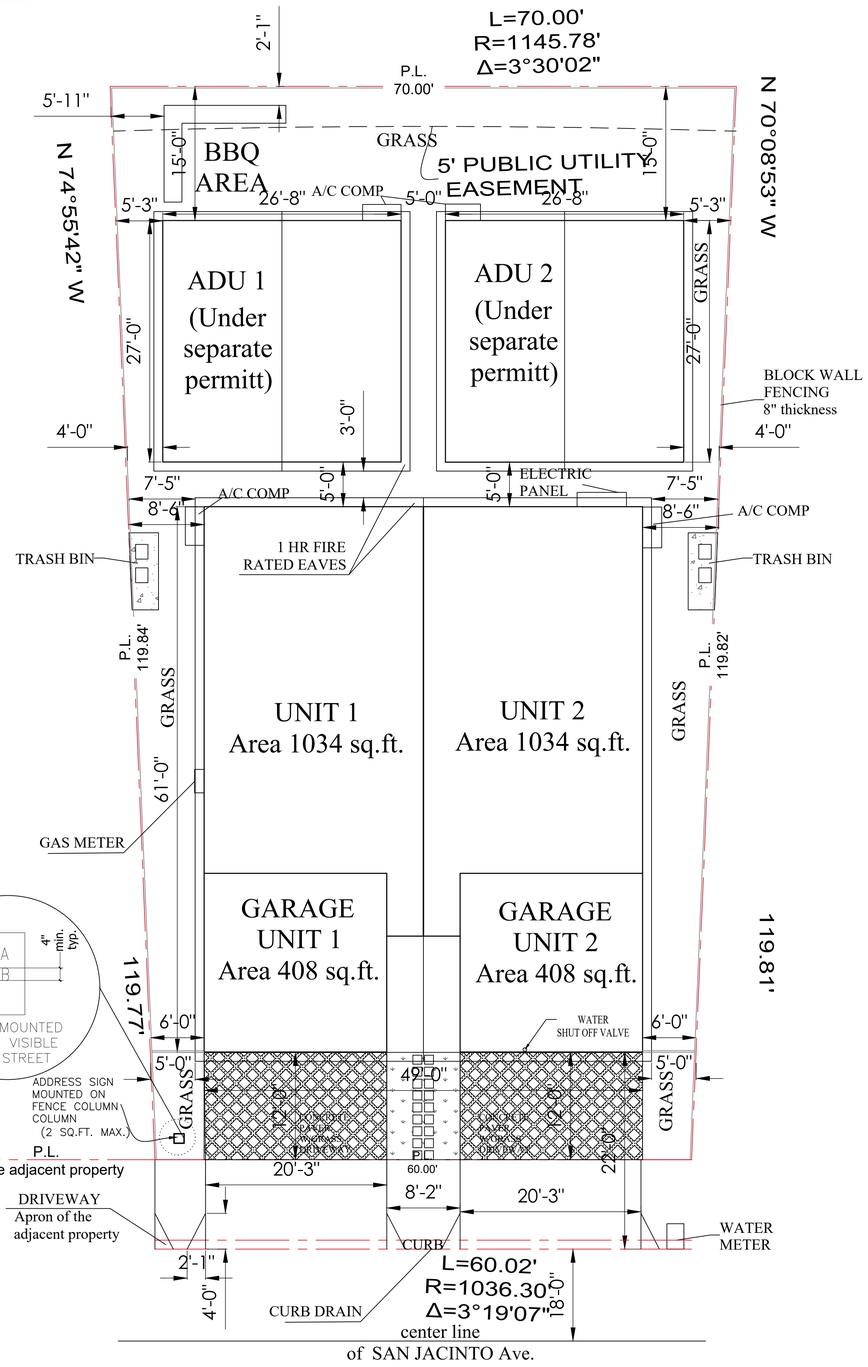


EXISTING SITE PLAN
SCALE 1/8"-1'-0"



300 FEET RADIUS MAP

NOTE:
An encroachment permit shall be obtained prior to the commencement of any work within the public right of way.



PROPOSED SITE PLAN
SCALE 1/8"-1'-0"

SYMBOL & LEGEND :

- PROPERTY LINE
- WALLS BETWEEN BUILDINGS
- ROOF AND EAVES LINE
- FENCE
- GRASS
- CONCRETE

NOTE:
ADA requirement is for improvements within the public right-of-way such as the driveway approach not within private property.

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NATIONAL COUNCIL
BUILDING DESIGNER
CERTIFICATION
Nader Iskander
CERTIFICATION
NO.03-644
V T H

OWNER INFORMATION:

NADER ISKANDER
10614 Scott Ave
Whittier CA 90603

PROJECT ADDRESS:

APN# 627-182-010

SHEET CONTENT

SITE PLAN

REVISIONS

Prepared by:
Nader Iskander

Project Number: 2023-01
Date: 07/02/2024

Sheet:
A-1

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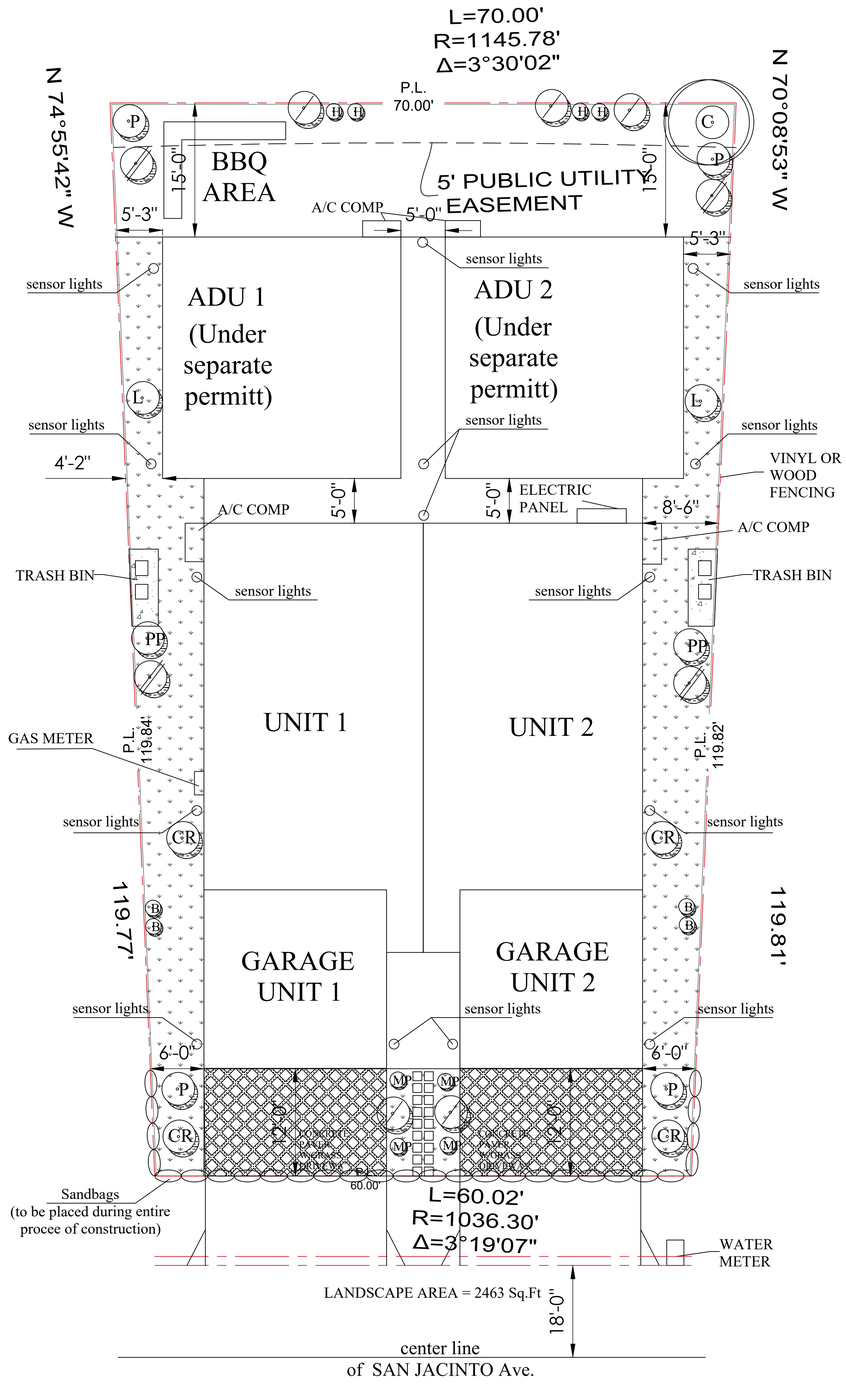
NOTE:
AUTOMATIC SPRINKLERS ARE USED FOR IRRIGATION SYSTEM

LANDSCAPE LEGEND			
TREES			
SYMBOLS	NAME	SIZE	QTY
P	CERCIDIUM 'DESSERT MUSEUM' (PALO VERDE TREE)	24" box	4
L	LAGERSTROMIA INDICA (CREPE MYRTLE)	24" box	2
C	CITRUS LIMON (LEMON TREE)	4" box	1
SHRUBS / VINES			
SYMBOLS	NAME	SIZE	QTY
⊘	CARISSA MACROCARPA (GREEN CARPET)	5 gal	5
⊘	EVOLVULUS GLOMERATUS (BLUE DAZE)	5 gal	4
H	HESPERALOE (RED YUCCA)	5 gal	4
PP	CHRYSACTINIA MEXICANA (DAMIANITA)	1 gal	2
CR	LEUCOPHYLLUM LAEVIGATUM (CHIHUAHUAN SAGE)	5 gal	4
B	BOUGAIN VILLEA (BARBARA KARST)	5 gal	4
MP	RUELLIA SIMPLEX (MEXICAN PETUNIA)	1 gal	4
GROUND COVER: GRAVEL 3/4 in. Golden Honey Quartz			

NOTE:
SENSOR LIGHTS
BRAND : OREIN Led Flood Light Outdoor Motion Sensor,
450° Wide Adjustable 12W(150W Equiv)
5000K Security Lights with 3 Modes,
IP65 Waterproof Motion Detector Light for Outside.
Color: White
Material: Polycarbonate
Style: Modern



PROPOSED LANDSCAPE PLAN
SCALE 1/8"-1'-0"

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Whittier CA 90603

PROJECT ADDRESS:

APN# 627-182-010

SHEET CONTENT

LANDSCAPING PLAN

REVISIONS

Prepared by:
Nader Iskander

Project Number: 2023-01
Date: 07/02/2024

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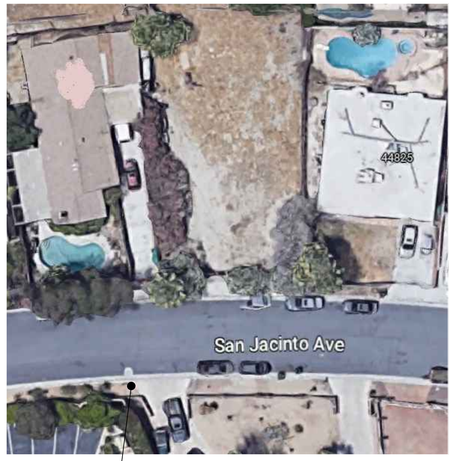
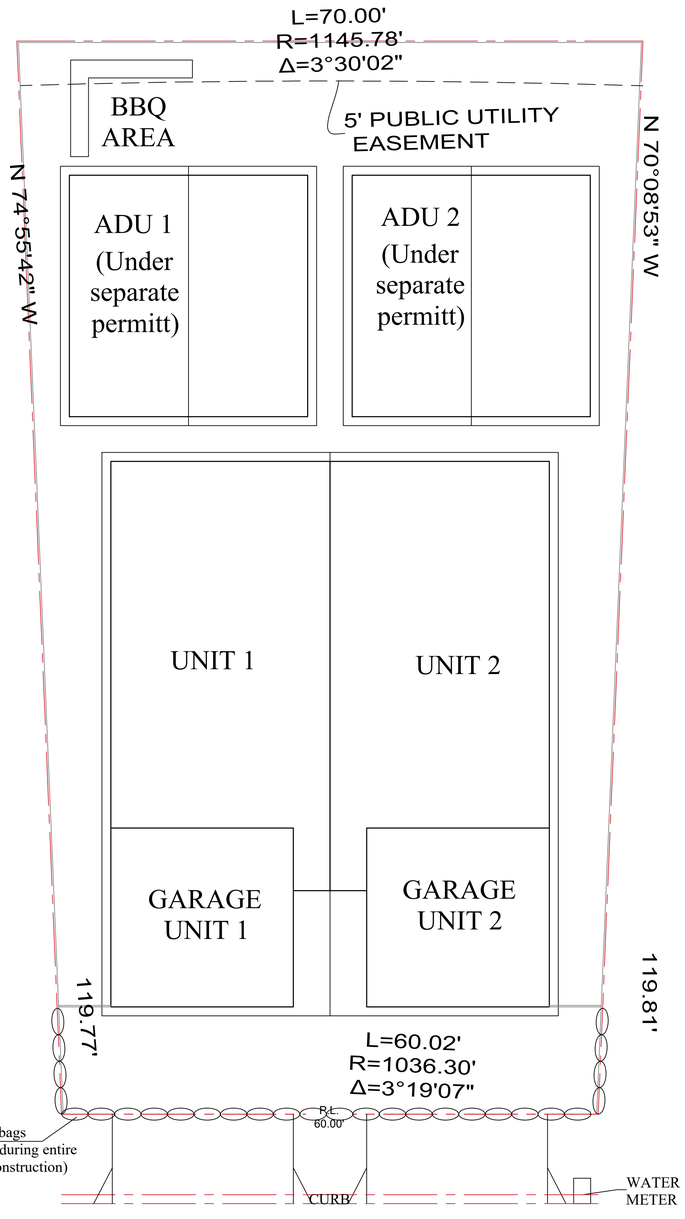


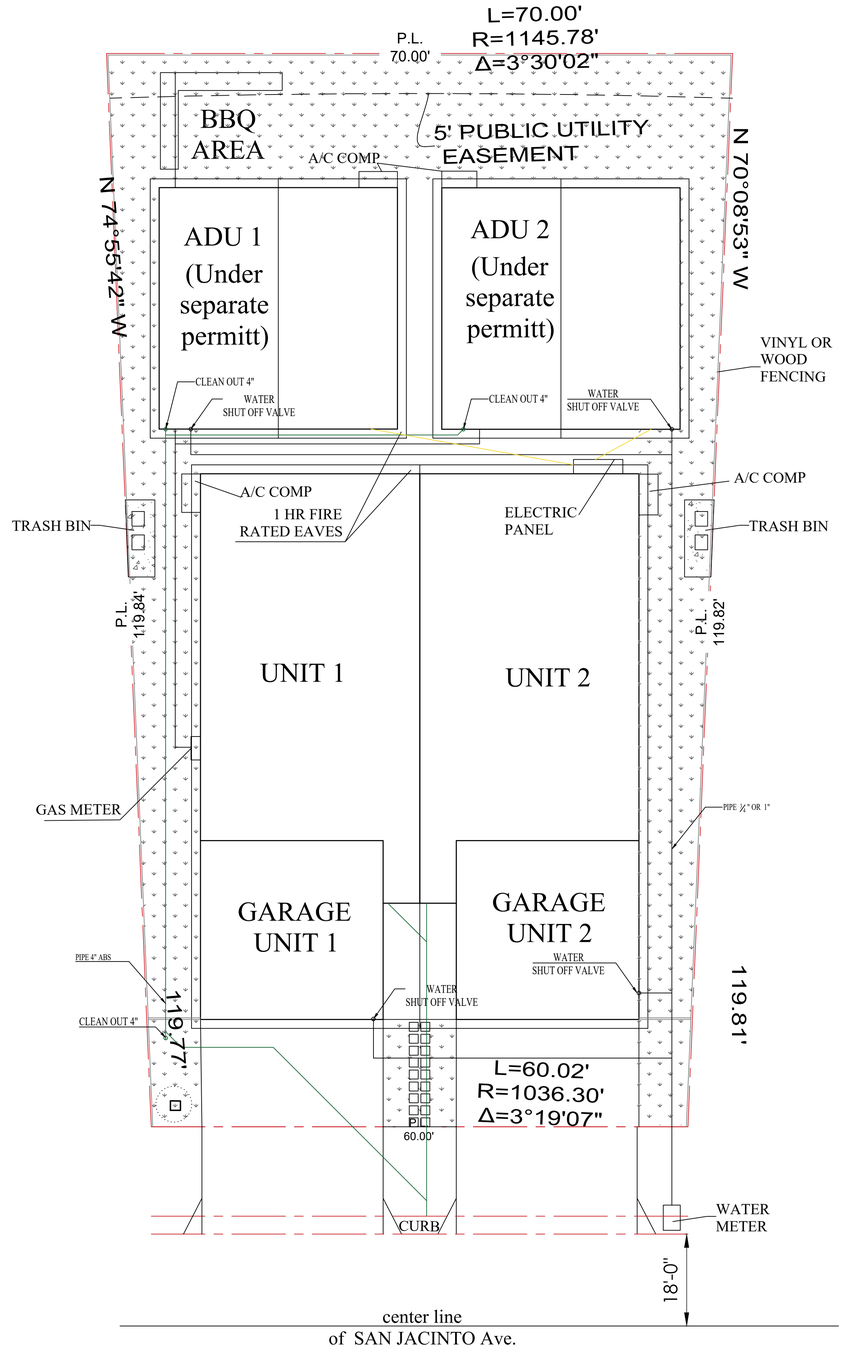
FIRE HYDRANT

Fire hydrant location



SITE PLAN SECURITY
During Construction

SCALE 1/8"-1'-0"



PROPOSED UTILITY PLAN
SCALE 1/8"-1'-0"

NOTE:
-All utility extensions within the site shall be placed underground unless otherwise specified or allowed by the respective utility purveyor.

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APN# 627-182-010

SHEET CONTENT

UTILITY PLAN

REVISIONS

**CONTRACTOR TO VERIFY ALL DIMENSIONS, CONDITIONS, ETC. PERTAINING TO THE WORK AT THE SITE BEFORE PROCEEDING WITH THE WORK AS INSTRUMENT OF SERVICE

Prepared by:
Nader Iskander

Project Number: 2023-01
Date: 07/02/2024

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A-1.2

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RETAINING OR SLOUGH WALL (4'-0" HIGH OR LESS)

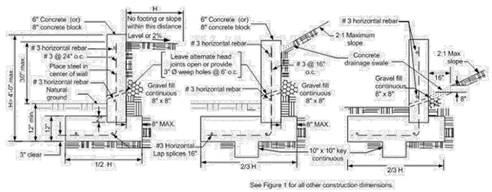


FIG. 1 FIG. 2 FIG. 3 (SLOUGH WALL)

(NO BUILDING PERMIT IS REQUIRED FOR FIG. 1[1) (2)] (PERMIT IS REQUIRED FOR FIG. 2 AND FIG. 3)

These walls are designed for the average condition and may not be suitable in all cases. Where the proposed wall construction is extensive, a licensed civil or structural engineer should be consulted.

Notes:

1) The wall shown in Figure 1 shall not be constructed where the existing slope below or beneath the wall is steeper than 1 vertical to 5 horizontal (20 percent slope) per code section 101.5 (4). The 30" maximum in Figure 1 applies when there is a walkway behind the retaining wall.
2) In the case of Figure 1, if more than one wall is constructed to replace an existing slope, a building permit will be required if the existing slope is steeper than 1 vertical to 5 horizontal (20 percent).

GENERAL SPECIFICATIONS

1. All footings to be 12" into natural ground.
2. Concrete mix for footing and concrete wall shall be 2,500 psi minimum, or if site mixed: 1 part Portland cement, 2 parts sand, 3 parts 1" rock with a maximum of 7 gallons of water per sack of cement.
3. Grout mix for concrete block wall shall be 2,000 psi, 1 part Portland cement, 3 parts sand to which may be added not more than 1/10 part lime. Sufficient water to be added to produce consistency for pouring without segregation of the constituents. Grout may contain pea gravel to a maximum size of 3/8".
4. Mortar mix for concrete blocks shall be 1 part cement to 1/4 lime putty or hydrated lime to 3½ parts damp loose sand.
5. Concrete block units shall be standard 8"x8"x16" units conforming to ASTM C55.
6. Reinforcing steel shall be deformed steel conforming to ASTM Specification A-615, Grade 40. Lap all steel 16".
7. Concrete block units shall be staggered (running bond).
8. Concrete block units shall have vertical continuity of the cells unobstructed. All cells containing reinforcing shall be filled solid with grout.
9. All surface drainage that is concentrated or re-directed by the walls shall be directed to the public street via non-erosive devices. No cross-property drainage is permitted.
10. The walls and the required subdrains shall be within the property and they shall not encroach into the adjacent properties. No grading work is permitted on the adjacent properties.
11. Walls constructed using alternate methods or materials, such as wood, rubble or stacked blocks, including pre-manufactured blocks that are stacked upon each other, are not allowed unless they have a current Research Report from the Engineering Research Section of the Department of Building and Safety or an Evaluation Report from an approved report publishing agency.

NOTE:
-The applicant shall comply with all applicable city ordinances and resolutions including the city's Municipal Code.

-Prior to the issuance of a grading permit, the applicant shall be responsible to obtain any and all required easements and/or permissions necessary to grade offsite and submit written permission from adjacent property owners.

- Prior to the issuance of a grading permit, securities shall be submitted as a guarantee of the completion of the grading operations and implementation and maintenance of the erosion control measures.

-Prior to the issuance of a grading permit, the applicant shall submit improvements plans for san jacinto avenue for review and approval. The applicant shall guarantee the completion of all related improvements required for this project by executing a subdivision improvement agreement with the city and posting the required security.

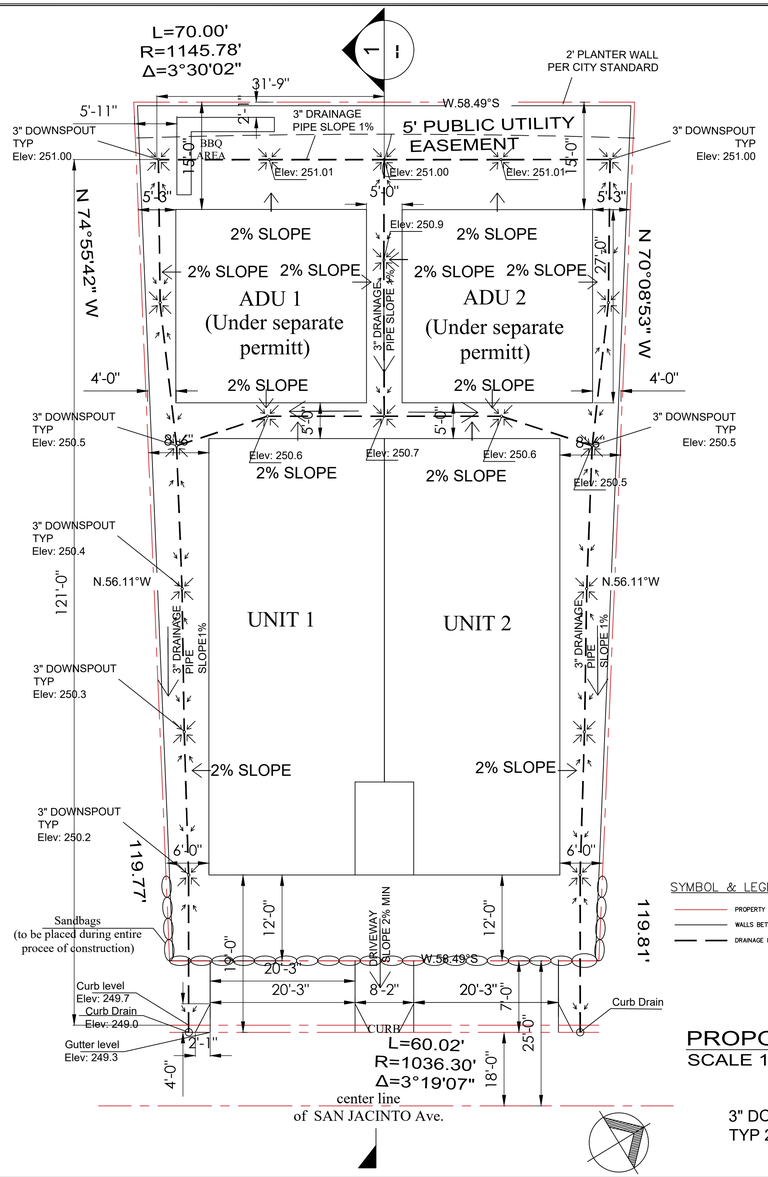
-Prior to the issuance of a building permit, all grading shall be completed in conformance with the approved plans and to the satisfaction of the city Engineer.

- Prior the issuance of a building permit, the final grade certification shall be submitted in conformance with the approved grading plans. A licensed land surveyor shall certify the completion of grading in conformance with the lines and grades shown on the approved grading plans.

-Prior to issuance of a building permit, the final parcel map shall be recorded.

-Prior to issuance of a certificate of occupancy, the Applicant shall provide clearance letters from Coachella valley water district.

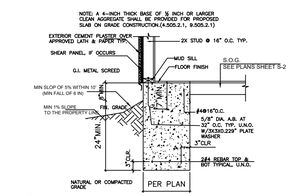
- Prior to the issuance of a certificate of occupancy, all related improvements required for this project within the public right of way shall be completed and required as built plans shall be submitted for review and approval of the City Engineer.



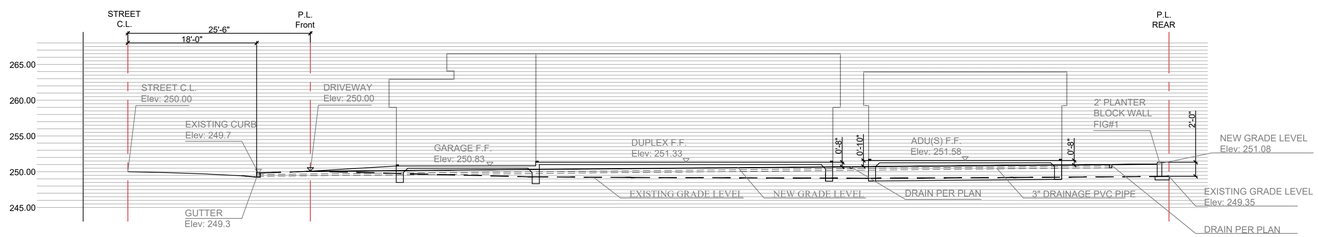
SYMBOL & LEGEND :
- PROPERTY LINE
- WALLS BETWEEN BUILDINGS
- DRAINAGE PIPE

PROPOSED GRADING PLAN
SCALE 1":10'

3" DOWNSPOUT TYP 2% SLOPE



Ⓐ EXTERIOR WALL FOOTING



GRADING SECTION (1)
SCALE 1":10'

EXISTING GRADE
PROPOSED PAD/CONCRETE
NEW GRADE
BUILDING LIMITS
3" DRAINAGE PVC PIPE

10 5 0 10 20 30
SCALE 1":10'

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Nader Iskander CERTIFICATION NO.05-644

REGISTERED PROFESSIONAL ENGINEER MOURAD AZIZ C 76916 CIVIL STATE OF CALIFORNIA

OWNER INFORMATION:

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10614 Scott Ave
Whittier CA 90603

PROJECT ADDRESS:

APN# 627-182-010

SHEET CONTENT

GRADING PLAN

REVISIONS

**CONTRACTOR TO VERIFY ALL DIMENSIONS, CONDITIONS, ETC. PERTAINING TO THE WORK AT THE SITE BEFORE PROCEEDING WITH THE WORK AS INSTRUMENT OF SERVICE

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Prepared by:
Nader Iskander

Project Number: 2023-01 Date: 07/02/2024

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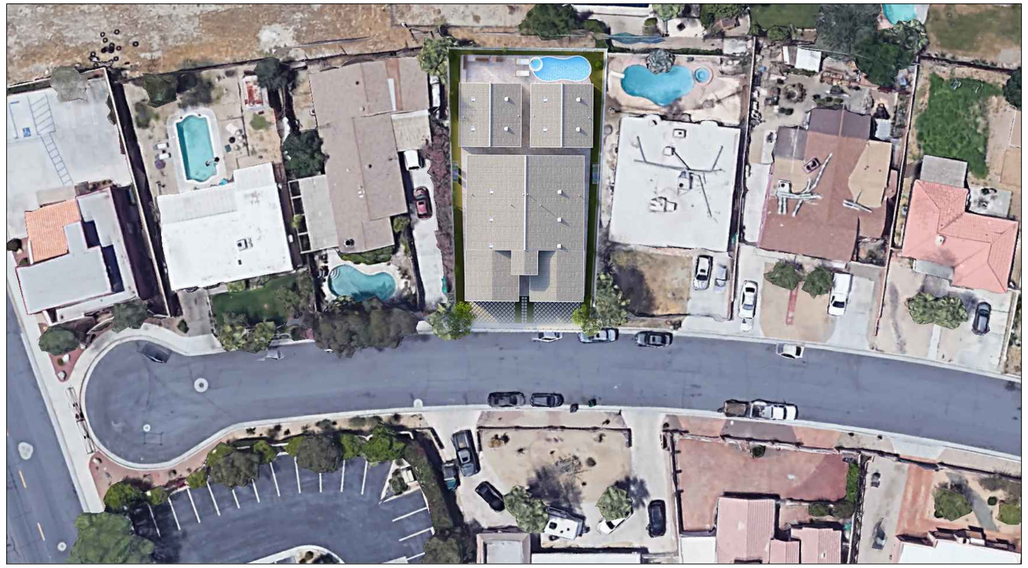
EXISTING SITE PLAN



PROPOSED SITE PLAN

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CERTIFICATION
NO 05-644

OWNER INFORMATION:

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Whittier CA 90603

PROJECT ADDRESS:

APN# 627-182-010

SHEET CONTENT

SITE PLAN
&
3D MODELING

REVISIONS

Prepared by:
Nader Iskander

Project Number: 2023-01
Date: 07/02/2024

Sheet:
A-1.4

From: 6
To: 22

PROPOSED DUPLEX FLOOR PLAN

DESIGN & CONSTRUCTION

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PROJECT ADDRESS:

APN# 627-182-010

SHEET CONTENT

3D FLOOR PLAN

REVISIONS

Prepared by:
Nader Iskander

Project Number: 2023-01
Date: 07/02/2024

Sheet:
A-1.5

From: 7
To: 22

SECURITY REQUIREMENTS:
1.Exterior doors, doors between a house and a garage, windows and their hardware shall conform to the Security Provisions of Chapter 67 of the County of Los Angeles Building Code:
a.Single swinging doors, active leaf of a pair of doors,and the bottom leaf of Dutch doors shall be equipped with a latch and a deadbolt. If the latch has a key-locking feature, a dead latch shall be used.The deadbolt lock shall be key operated from the exterior side of the door, and operated from the interior side of the door by a device not requiring a
key, tool, or excessive force. Deadbolts shall have a hardened insert with 1" minimum throw and 5/8" minimum embedment into the jamb.

b.Inactive leaf of a pair of doors and the upper leaf of Dutch doors shall have a deadbolt as per paragraph "a", unless it is not key operated from the exterior, or has a hardened deadbolt at top and bottom with ½" embedment.

C. Swinging wood doors) shall be solid core not less than 1-3/8" thick.

d. Panels of wood doors shall be 9/16" thick and not more than 300 sq. inches. Stiles and rails to be 1-3/8" thick and 3" minimum width.

e. Door hinge pins accessible from the outside shall be non-removable.

f. Door stops of wood jambs of in-swinging doors shall be one piece construction or joined by a rabbet.

g. Windows and door lights within 40" of the locking device of the door shall be fully tempered/approved burglary resistant/protected by bars, screens or grills.

h. Overhead and sliding garage doors shall be secured with a cylinder lock, a padlock with a hardened steel shackle, or equivalent when not otherwise locked by electric power operation. Jamb locks shall be on both jambs for doors exceeding 9 feet in width

i.Sliding glass doors and sliding glass windows shall be capable of withstanding the tests set forth in Section 6706 and 6707 of the Los Angeles County Building Code and shall bear a label indicating compliance with these tests. Locking devices on sliding glass doors complying with Section 1010 and 1030, and emergency egress windows complying with Section 1030, shall be releasable from the inside without the use of a key, tool, or excessive force.

CONSTRUCTION REQUIREMENTS
2.Notching of studs in exterior or bearing walls shall not exceed 25% of its width. Notching of studs in non-bearing walls shall not exceed 40% of its width. Bored holes in studs shall not exceed 60% of its width, shall not be closer than 5/8" to the edge of the stud, and shall not be located in the same section as a cut or notch. Studs located in exterior or bearing walls shall be doubled if bored over 40% and up to 60% of its width.(R 602.6)

3.Wall and Ceiling finishes shall have a flame spread index of not greater than 200, and a smoke-developed index not greater than 450. Insulation materials shall have a flame spread index not to exceed 25, and a smoke-developed index not to exceed 450. (R 302.9. 302.10)

4. Provide fire blocking in concealed spaces of combustible stud walls, partitions, including furred spaces, at the ceiling and floor level, at 10-foot intervals both vertical and horizontal, and between stair stringers at the top and bottom. (R 302.11)

5.Ducts installed under a floor in a crawl space shall not prevent access to an area of the crawl space. Where it is required to move under ducts for access to areas of the crawl space, a vertical clearance of 18" minimum shall be provided. (MC 603.1)

6.Where flashing is of metal, the metal shall be corrosion resistant with a thickness of not less than .019 inch (No.26 galvanized sheet). (R 903.2.1)

7.Roof diaphragm nailing to be inspected before covering.Wood structural panel sheathing shall comply with Section R803.2. (R 803)

8.End joints in lumber used as subflooring shall occur over supports, unless end-matched lumber is used, in which case each piece shall bear on not less than two joists.Wood structural panel sheathing used for structural purposes shall comply with Section R503.2.(R 503)

GLAZING REQUIREMENTS
9.The following shall be considered specific hazardous locations requiring safety glazing per Section R308:

a.Glazing in fixed and operable panels of swinging,

b.sliding, and bifold doors.Glazing in fixed or operable panels adjacent to a door where the bottom exposed edge of the glazing is less than 60 inches above the walking surface and it meets either of the following

conditions:
1.Where the glazing is within 24 inches of either side of the door in the plane of the door in closed position.

2.Where the glazing is on a wall perpendicular to the plane of the door in a closed position and within 24 inches of the hinge side on an in-swinging door.

C.Window glazing in an individual fixed or operable panel, that meets all of the following conditions:
1.The exposed area of an individual pane is larger than 9 square feet.
2.The bottom edge is less than 18 inches above the floor.
3.The top edge is more than 36 inches above the floor.
4.One or more walking surfaces are within 36 inches, measured horizontally and in a straight line, of the glazing.

d.Glazing in guards, railings, structural baluster panels, and nonstructural in-fill panels, regardless of area or height above a walking surface.

e.Glazing in walls, enclosures or fences containing or facing hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers, and indoor or outdoor swimming pools, where all of the following conditions are present:
1.The bottom edge of the glazing is less than 60 inches above any standing or walking surface.
2.The glazing is within 60 inches, measured horizontally and in a straight line, from the water's edge of a hot tub, spa, whirlpool, bathtub, or swimming pool, or from the edge of a shower, sauna or steam room.

g.Glazing adjacent to stairs and ramps where the bottom exposed edge is less than 36 inches above the plane of the adjacent walking surface stairways, landings between flights of stairs, and ramps, unless the glazing is 36 inches or more measured horizontally from the walking surface, or a rail is designed per Section R308.4.6. Glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 36 inches above the landing and within a 60-inch horizontal arc less than 180 degrees from the bottom tread nosing, unless the glazing is more than 18 inches from a protective guard per Section R312.

MECHANICAL/PLUMBING/ELECTRICAL CODE REQUIREMENTS

10. Dwelling shall be provided with comfort heating facilities capable of maintaining a room temperature of 68 degrees F at a point 3 feet above the floor and 2 feet from exterior walls.
(R303.9)

11.The following are required for central heating furnaces and low-pressure boilers in a compartment:
a.Listed appliances shall be installed with clearances in accordance with the terms of their listings and the manufacturer's installation instructions.(MC 904.2(1))

used.Unlisted appliances shall meet both the clearances in Table 904.2, and the clearances allowed by the manufacturer's installation instructions. (MC 904.2(2))

C.When combustion air is taken from inside, the free area of combustion air openings shall be 1 sq. inch per 1,000 BTU (100 sq. inch minimum) per opening.One Opening shall be within 12 inches of the top of the enclosure and the second shall be within 12 inches of the bottom of the enclosure. The dimension shall not be less than 3 inches. (MC 701.5(1))

d. Not less than 1/4 of an inch screen mesh is required at openings where combustion air is taken from the outside.(MC 701.10(1))

e.Separate ducts shall be used for upper and lower combustion air openings, and maintained to the source of combustion air. (MC 701.11(4))

12.The following are required for appliances installed in an attic:
a.An opening and passageway shall not be less than 22 inches by 30 inches, and not less than the size of the largest component of the appliance.(MC 304.4)

b.Where the passageway height is less than 6 feet, the distance from access to the appliance shall not exceed 20 feet, as measured along the centerline.(MC 304.4.1)

C. Passageway shall be unobstructed and shall have solid flooring not less than 24 inches wide from entrance to appliance.(MC 304.4.2)

d.A level working platform not less than 30 inches by 30 inches is required in front of the service side of the appliance.(MC 304.4.3)

e.A permanent 120V receptacle outlet and a lighting fixture shall be installed near the appliance. Light switch shall be located at the entrance to the passageway.(MC 304.4.4)

f.A type B or L gas vent shall terminate not less than 5 feet above the highest connected appliance flue collar or draft hood. (MC 802.6.2.1)

g.Appliance installation shall meet all listed clearances.(MC 303.1)

13. Clothes dryer exhaust duct shall terminate on the outside of the building in accordance with Section 502.2.1 and shall be equipped with a back-draft Screens shall not be installed at the duct termination. (MC 504.4)

14.Clothes dryer moisture exhaust duct shall be 4 inches in diameter and is limited to a total combined horizontal and vertical length of 14 feet, including two 90 degree elbows from the clothes dryer to point of termination. Duct length shall be reduced by 2 feet for each 90 degree elbow in excess of two.(MC 504.4.2)

15.Appliances (water heater, furnace, etc.) located in the garage shall be installed so that burners and burner-ignition devices are located not less than 18 inches above the floor, unless listed as flammable vapor ignition resistant. (MC 305.1)

16.Ducts shall be sized per Chapter 6 of the Mechanical Code.

17.Flush volumes of plumbing fixtures and flow rates of plumbing fittings shall comply with Section 4.303 of the Green Code.

18.ABS and PVC DWV piping installations are limited to not more than two stories of areas. (PC 701.2(2))

19.All showers and tub-showers shall have a pressure balance, thermostatic, or combination pressure balance/thermostatic mixing type valve. (PC 408.3)

20.All new, replacement and existing water heaters shall be strapped to the wall in two places. One on the upper 1/3 of the tank, and one on the lower 1/3 of the tank.The lower point shall be a minimum of 4 inches above the controls.(PC 507.2)

21.Plumbing plan check and approval is required for2 inchand larger water lines, 2 inch and larger gas lines, or any gas line with a pressure of 2psi and higher.

22.Ground-fault circuit-interruption (GFCI) for personnel shall be provided in bathrooms, garages, non-habitable accessory structures at or below grade level, outdoor locations, crawl spaces at or below grade level, non-habitable basements, kitchens where the receptacles
serve countertop surfaces, locations within 6ft of the outside edge of sinks/bathtubs/showers, boathouses, and laundry areas. The GFCI shall be installed in areadily accessible location.
(EC 210.8(A))

23.Arc-fault circuit-interruption (AFCI) protection shall be provided in all 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets or devices installed in kitchens, habitable rooms, sunrooms, recreation rooms, closets, hallways, laundry areas, or similar rooms or areas, by any means described in 210.12(A). (EC 210.12(A))

24.In any of the areas specified in item 23, where existing branch-circuit wiring is modified, replaced, or extended by more than 6ft and/or adds any outlet or device, the branch circuit shall be protected by one of the following:

a.A listed combination-type AFC located at the origin of the branch circuit.

b.A listed outlet branch-circuit type AFC located at the first receptacle outlet of the existing branch circuit. (EC 210.12(B))

25.Tamper-resistant receptacles shall be installed in all areas specified in 210.52, all nonlocking-type 12-volt, 15- and 20-ampere receptacles shall be listed tamper-resistant receptacles.(EC 406.12)

26.Where NM cable (Romex) is run across the top of joists and/or where the attic is not accessible by permanent stairs or ladders, protection within 6 feet of the nearest edge of the scuttle or attic entrance shall be provided. (EC 334.23, 320.23(A))

DESIGN & CONSTRUCTION
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N C B D C
NATIONAL COUNCIL
BUILDING DESIGNERS
CERTIFICATIONS
Nader Iskander
CERTIFICATION
NO.05-644
V TM

OWNER INFORMATION:

NADER ISKANDER
10614 Scott Ave
Whittier CA 90603

PROJECT ADDRESS:

APN# 627-182-010

SHEET CONTENT

GENERAL NOTES

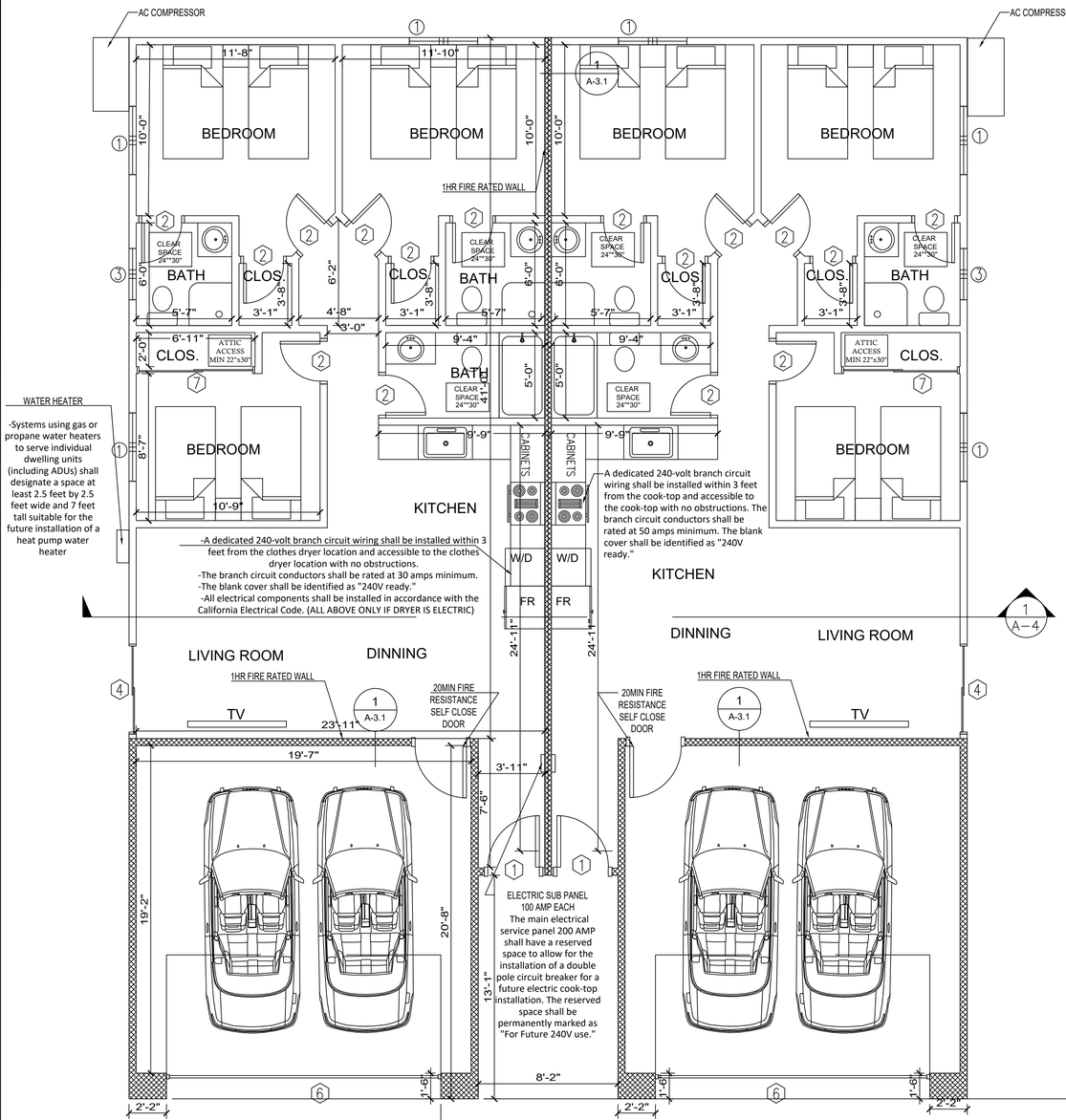
REVISIONS

Prepared by:
Nader Iskander

Project Number: 2023-01
Date: 07/02/2024

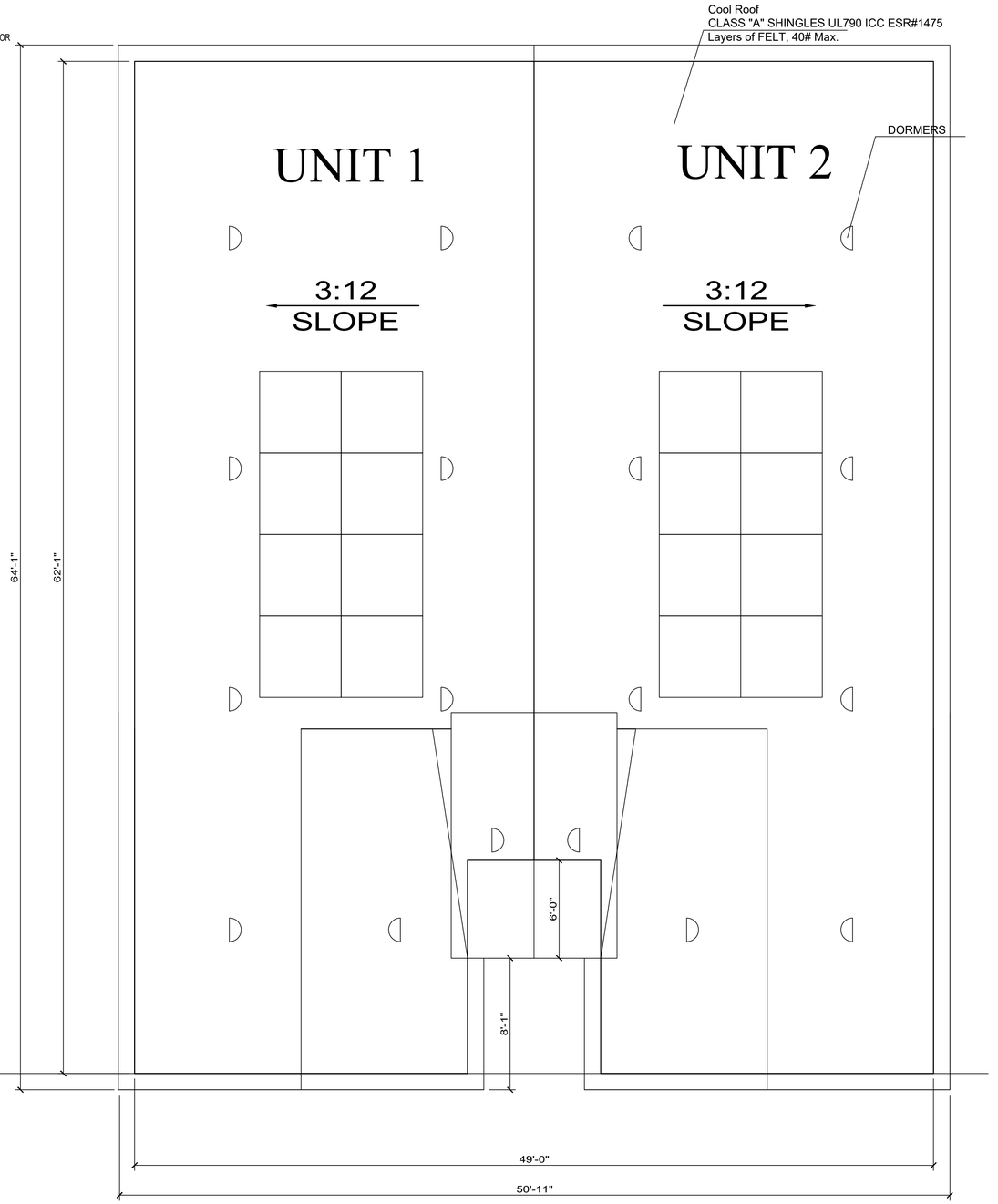
Sheet:
A-2

From: 8 To:22



PROPOSED DUPLEX FLOOR PLAN
SCALE 1/4"-1'-0"

SYMBOL & LEGEND :
NEW WALL 2x4 @ 16" O.C.
1-HR FIRE RATED WALL



ROOF PLAN
SCALE 1/4"-1'-0"

DOOR AND FRAME SCHEDULE

NO.	SIZE WD	SIZE HGT	SIZE THK.	MATERIAL FACE	MATERIAL CORE	TYPE	QTY.	REMARKS
①	36"	80"	1 3/4	WOOD	HC	HINGED	1	EXTERIOR/ENTRY (U-FACTOR 0.3)
②	32"	80"	1 3/8	WOOD	HC	HINGED	3	INTERIOR/ BEDROOM #1, 2 BATHROOM 1
③	60"	80"	1 3/8	WOOD	HC	SLIDER	2	INTERIOR/ BEDROOM #1, 2CLOSET
④	60"	80"	1 3/8			SLIDER	1	EXTERIOR / KITCHEN.

NOTE: NFRC window labels to be removed only by the owners after final building inspection.

WINDOW SCHEDULE

NO.	WxH	QTY.	MATERIAL	VISIBLE FROM STREET?	OPERATION	TEMPERED GLASS	REMARKS	U-FACTOR	SHGC
①	4X4	2	VINYL	N	SLIDER	N	DBL GLAZED	0.30	0.23
②	3X3	1	VINYL	N	SLIDER	N	DBL GLAZED	0.30	0.23
③	3X1	2	VINYL	N	SLIDER	N	DBL GLAZED	0.30	0.23

ATTIC VENTILATION CALCS:
NEW ATTIC AREA: 2991 Sq.Ft.
VENT AREAREQUIRED=2991X144/150=2,871sq.in.

THE VENT AREA USING A DORMER=2,871/135=21.26

THE VENT FREE AREA using the louver (18"X24")=
141 Sq.inch=2,871/141=20.36

we need 4 louvers (18"X24")
and 18 dormers (low profile vents)
All vents shall have screen with max opening of 1/4" and minimum of 1/16"for all vents including restrooms vents

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N◦C◦B◦D◦C NATIONAL COUNCIL BUILDING DESIGNERS CERTIFICATION
Nader Iskander
CERTIFICATION NO.05-644

OWNER INFORMATION:

NADER ISKANDER
10614 Scott Ave
Whittier CA 90603

PROJECT ADDRESS:

APN# 627-182-010

SHEET CONTENT

FLOOR & ROOF PLANS

REVISIONS

Prepared by:
Nader Iskander

Project Number: 2023-01
Date: 07/02/2024

Sheet:
A-3

From: 9 To:22

GENERAL NOTES:

a.The construction shall not restrict a five-foot clear and unobstructed access to any water or power distribution facilities (Power poles, pull-boxes, transformers, vaults, pumps, valves, meters, appurtenances, etc.) or to the location of the hook-up. The construction shall not be within ten feet of any power lines-whether or not the lines are located on the property. Failure to comply may cause construction delays and/or additional expenses.

b.An approved Seismic Gas Shutoff Valve will be installed on the fuel gas line on the downstream side of the utility meter and be rigidly connected to the exterior of the building or structure containing the fuel gas piping. (Per Ordinance 170,158) (Separate plumbing permit is required).

c.Plumbing fixtures are required to be connected to a sanitary sewer or to an approved sewage disposal system (R306.3).

d.Kitchen sinks, lavatories, bathtubs, showers, bidets, laundry tubs and washing machine outlets shall be provided with hot and cold water and connected to an approved water supply (R306.4).

e.Bathtub and shower floors, walls above bathtubs with a showerhead, and shower compartments shall be finished with a nonabsorbent surface. Such wall surfaces shall extend to a height of not less than 6 feet above the floor (R307.2).

f.Provide ultra-low flush water closets for all new construction. Existing shower heads and toilets must be adapted for low water consumption.

g.Unit Skylights shall be labeled by a LA City Approved Labeling Agency. Such label shall state the approved labeling agency name, product designation and performance grade rating. (Research Report not required). (R308.6.9)
h.Water heater must be strapped to wall. (Sec. 507.3, LAPC)

i.For existing pool on site, provide an alarm for doors to the dwelling that form a part of the pool enclosure. The alarm shall sound continuously for a min. of 30 seconds when the door is opened. It shall automatically reset and be equipped with a manual means to deactivate (for 15 secs. max.) for a single opening. The deactivation switch shall be at least 54" above the floor. (6109 of LABC)

j.For existing pool on site, provide anti– entrapment cover meeting the current ASTM or ASME for the suction outlets of the swimming pool, toddler pool and spa for single family dwellings per Assembly Bill (AB) No. 2977. (3162B)

k. Automatic garage door openers, if provided, shall be listed in accordance with UL 325. (R309.4)

l.Smoke detectors shall be provided for all dwelling units intended for human occupancy, upon the owner's application for a permit for alterations, repairs, or additions, exceeding one thousand dollars ($1,000). (R314.6.2)
m.Where a permit is required for alterations, repairs or additions exceeding one thousand dollars ($1,000), existing dwellings or sleeping units that have attached garages or fuel-burning appliances shall be provided with a carbon monoxide alarm in accordance with Section R315.2. Carbon monoxide alarms shall only be required in the specific dwelling unit or sleeping unit for which the permit was obtained. (R315.2.2)

n. Every space intended for human occupancy shall be provided with natural light by means of exterior glazed openings in accordance with Section R303.1 or shall be provided with artificial light that is adequate to provide an average illumination of 6 foot-candles over the area of the room at a height of 30 inches above the floor level. (R303.1)

o. A copy of the evaluation report and/or conditions of listing shall be made available at the job site

p.Openings from a private garage directly into a room used for sleeping purposes are not permitted (R302.5.1).

q.Doors between garage and the dwelling unit shall have a minimum fire protection rating of 20 minutes and self-closing and self-latching devices, or solid wood or solid or honeycomb core steel not less than 1 3/8 inches thick. (R302.5.1)

r.The garage shall be separated from the dwelling and its attic area in accordance with Table R302.6 (R302.6).

s.Ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum No. 26 gage sheet steel or other approved material and shall not have openings into the garage (R302.5.2).

t.Garage floor surfaces shall be of an approved noncombustible material, and the area used to park vehicles shall be sloped to a drain or toward the main vehicle entry doorway. (R309.1)

FLOOR PLAN NOTES:
1–WALL HEATER/ CENTRAL GAS FURNACE, HEATING EFFICIENCY AFUE–80/ CENTRAL SPLIT HP, HSPF/COP 9.5,CAP 47 12000, CAP 17 7500, SEER 16, EER/CEER 10.5
2–TANKLESS WATER HEATER/ CONSUMER INSTANTANEOUS, ENERGY FACTOR OR EFFICIENCY 0.92–UEF, INPUT RATING OR PILOT <= 200 KBTU/HR.
3.EXHAUSTED FAN DUCTED TO OUTSIDE 100 cmf FOR KITCHEN HOOD ABOVE RANGE.
4.KITCHEN SINKS, LAVATORIES, BATHTUB, SHOWERS AND WASHING MASHINE OUTLETS SHALL BE PROVIDED WITH HOT AND WATER AND CONNECTED TO AN APPROVED WATER SUPPLY (All VENTILATION shall have screen with maximum opening of 1/4" and minimum of 1/16" for all vents including restrooms vents)
5.Bathtub floor and wall above bathtubs with shwerhead shall be finished with nonabsorbent surface. such wall surfaces shall extend to hight of not less than 6ft above the floor (R307.2) (NO TILES ON TUB/SHOWER WALLS)

6.All branch circuits that supply 125volt, single phase, 15 &20 amps outlets installed in dwelling units shall be protected by arc–fault circuits interrupter(s) (for entire circuits)

7.Smoke alarms and smoke detectors shall not be installed within a 36 in. (910 mm) horizontal path from the supply registers of a forced air heating or cooling system and shall be installed outside of the direct airflow from those registers.(R314.3.3(6)

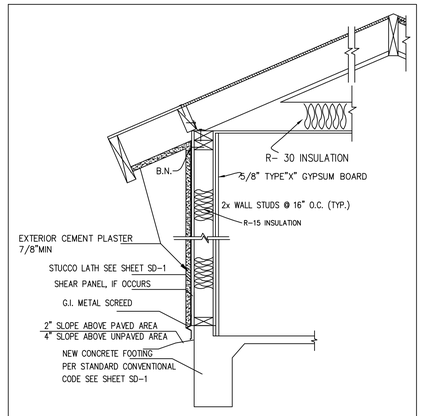
8.Smoke alarms or smoke detectors shall be installed a minimum of 20 feet horizontal distance from a permanently installed cooking appliance or meet exception.

9.Due to proximity of the cooking appliance. Photoelectric smoke alarms shall be permitted to be installed greater than 6 feet (1.8 m) from a permanently installed cooking appliance where the kitchen or cooking area and adjacent spaces have no clear interior partitions and the 10 ft distances would prohibit the placement of a smoke alarm or smoke detector required by other sections of the code. Smoke alarms listed for use in close proximity to a permanently installed cooking appliance. (CRC R314.3.3)

10.All 120–volt, single–phase, 15– and 20–ampere branch circuits supplying outlets or devices installed in dwelling unit kitchens, family rooms, dining rooms, living rooms, bedrooms, closets, hallways, laundry areas, or similar rooms or areas shall be AFCI protected by any of the means described in 210.12(A)(1) through (6). Specify AFCI receptacles where required. At kitchen counters, specify combination AFCI/GFCI.

11.In bathrooms, at least one luminaire in each of these spaces must be controlled by an occupant sensor or a vacancy sensor providing automatic–off functionality. If an occupant sensor is installed, it must be initially configured to manual–on operation using the manual control required under Section 150.0(k)2I.

NOTES:
1. Penetrations shall be installed as tested in approved fire–resistance rated assembly.
2. Penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E814 or UL 1479, with a positive pressure differential of not less than 0.01 inch of water (3 Pa) and shall have an F rating of not less than the required fire–resistance rating of the wall assembly penetrated. Provide construction detail and listing for penetration protection. (CRC R302.4)



DETAIL # 1: 1HR FIRE EXTERIOR WALL

NOTE:
Minimum 1–inch clearance shall be provided between the attic insulation and the roof sheathing where eave or cornice vent and installed. Blocking bridging and insulation shall not block airflow (R806.3 CRC)

NOTE:
* NEW FLAT ROOF CLASS "A" ROOFING W/2 Layers of FELT, 40# Max.
ICC# ESR–1841
Note:Installation of roofing shall be in accordance with manufacture's specifications
reflectance 0.1 & emittance of 0.85
* Minimum 1–inch clearance shall be provided between the attic insulation and the roof sheathing where eave or cornice vent and installed. Blocking bridging and insulation shall not block airflow (R806.3 CRC)

DETAIL #1 WALLS AND INTERIOR PARTITIONS, WOOD FRAMED

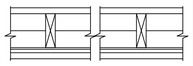
GA FILE NO.WP3240	PROPRIETARY*	1 HOUR FIRE	50 TO 54 FSTC SOUND

GYPSUM WALLBOARD, RESILIENT CHANNELS, MINERAL FIBER INSULATION, WOOD STUDS

Resilient channels 24° o.c. attached at right angles to ONE SIDE of 2x 4 wood studs 16" or 24" o.c. with 1-1/4" Type S drywall screws. One layer 5/8" proprietary type X gypsum wallboard or gypsum veneer base applied parallel to channels with 1° Type S drywall screws 12' O.c. End joints back blocked with; resilient channels. 3' mineral fiber insulation, 2.0 pcf, in stud space.
OPPOSITE SIDE: One layer 5/8" proprietary type X gypsum wallboard or gypsum veneer base applied at right angles to studs with 1-1/4' Type W drywall screws 12" O.C.
Vertical joints staggered 48" on opposite sides. Sound tested with studs 16° 0.c. and open face of mineral fiber insulation blankets toward resilient channel-side of stud space. (LOAD-BEARING)

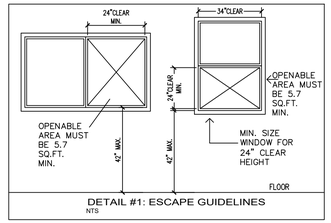
PROPRIETARY GYPSUM BOARD

United States Gypsum Company.....5/8' SHEETROCK® Brand FIRECODE® C Core Gypsum Panels



Thickness: 5-1/4"
Approx. weight: 7 psf
Fire Test: ULR 1319-93,94,129; 8-10-66;
UL Design U311;
ULC Design U311;
Field sound Test: BBN 760903, -17-76

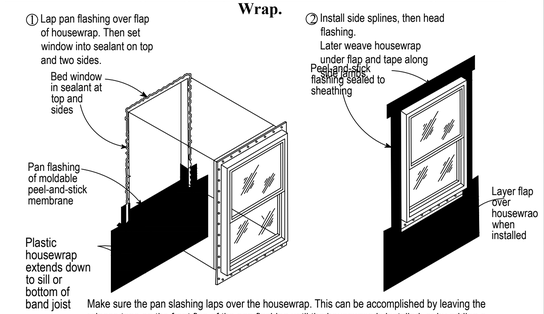
AC COMPRESSOR NOTE:
-220-volt disconnect box for the air conditioning compressor unit shall be located within sight from and readily accessible from the air-conditioning.
The width of the working space in front of the electric equipment shall be the width of the equipment or 30-inches
- a GFCI/weatherproof receptacle servicing the air conditioning unit. The receptacle outlet shall be located within the same level and within 25-feet from the unit.



DETAIL #1: ESCAPE GUIDELINES
NTS

NATURAL LIGHT AND VENTILATION CALCULATIONS:
M. Bedroom 1: The Area 68.6 sq.ft. and it has window 4'x4'
(Total Area of 16 sf > 8% x68.6sf=5.5)
and with opining 2'x4' (Area of 8 sf > 4% x68.6 sf=2.74sf).
Bedroom 2: The Area 68.5 sq.ft. and it has window 4'x4'
(Total Area of 16 sf > 8% x68.5 sf=5.5)
and with opining 2'x4' (Area of 8 sf > 4% x68.5 sf=2.74sf).
Living+KIT+HW:
The Area 249.18 sq.ft. and it has window 5'x4'
(Total Area of 28 sf = 8% x249.18 sf=19.93)
and with opining 5'x4'
(Area of 20sf = 4% x273.67 sf=9.97 sf).

FIGURE 3-15 Installing Flange - Type Windows Before Sheathing Wrap.



Make sure the pan slashing laps over the housewrap. This can be accomplished by leaving the release tape on the front flap of the pan flashing until the housewrap is installed, or by adding a flap of housewrap, as shown, to be woven in later. The moldable type of flashing tape, shown here, can be for med into a pan with no corner cut.

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& Construction Management
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N·C·B·D·C NATIONAL COUNCIL BUILDING DESIGNER CERTIFICATION
Nader Iskander
CERTIFICATION NO.03-644

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NADER ISKANDER
10614 Scott Ave
Whittier CA 90603

PROJECT ADDRESS:

APN# 627-182-010

SHEET CONTENT

GENERAL NOTES

REVISIONS

**CONTRACTOR TO VERIFY ALL DIMENSIONS, CONDITIONS, ETC. PERTAINING TO THE WORK AT THE SITE BEFORE PROCEEDING WITH THE WORK
AS INSTRUMENT OF SERVICE

Prepared by:
Nader Iskander

Project Number: 2023-01
Date: 07/02/2024

Sheet:
A-3.1

From:10 To:22

SUMMARY OF INTERIOR LIGHTING REQUIRMENTS

ALL FIXTURES WITHIN THE RESIDENTIAL UNIT SHALL BE HI EFFICACY AND QUALIFY PER TABLE 6-6 JA8.
ALL RECESSED FIXTURES SHALL BE AT/IC RATED.

6.3.1
REQUIREMENTS OF CONTROLS DEVICES
MANUAL-ON/AUTOMATIC-OFF OCCUPANT SENSORS (ALSO KNOWN AS VACANCY SENSORS), MOTION SENSORS, PHOTO-CONTROL ASTRONOMICAL TIME CLOCK CONTROLS (USED FOR OUTDOOR LIGHTING), AND DIMMERS INSTALLED TO COMPLY WITH §150.0(K) MUST HAVE BEEN CERTIFIED TO THE ENERGY COMMISSION BY THEIR MANUFACTURER, PURSUANT TO THE PROVISIONS OF THE TITLE 20 APPLIANCE EFFICIENCY REGULATIONS (TITLE 20 CALIFORNIA CODE OF REGULATIONS, §1606),AS REQUIRED BY §110.9.

6.3.1.1
REQUIREMENTS FOR DIMMERS IN ADDITION TO MEETING THE APPLICABLE REQUIREMENTS OF THE APPLIANCE STANDARDS, ALL FORWARD PHASE CUT DIMMERS MUST COMPLY WITH NEMA SSL 7A THIS DESIGNATION IS TYPICALLY NOTED ON EQUIPMENT CUT SHEETS OR DIMMER PACKAGING AND ENSURES COMPATIBILITY WITH SOLID STATE LIGHTING (INCLUDING LEDS).

6.3.2
GENERAL CONTROLS REQUIREMENTS
FOLLOWING ARE GENERAL CONTROL REQUIREMENTS THAT APPLY IN ALL ROOM TYPES AND FOR ALL LUMINAIRE TYPES:

A. READILY ACCESSIBLE MANUAL CONTROL SHALL PERMANENTLY INSTALLED LUMINAIRES SHALL HAVE READILY ACCESSIBLE CONTROLS THAT PERMIT THE LUMINAIRES TO BE MANUALLY SWITCHED ON AND OFF.

B. EXHAUST FANS
THERE ARE TWO OPTIONS FOR THE LIGHTING ASSOCIATED WITH EXHAUST FANS:
1. ALL LIGHTING SHALL BE SWITCHED SEPARATELY FROM EXHAUST FANS.
2. FOR AN EXHAUST FAN WITH AN INTEGRAL LIGHTING SYSTEM, IT SHALL BE POSSIBLE FOR THE LIGHTING SYSTEM TO BE MANUALLY TURNED ON AND OFF WHILE ALLOWING THE FAN TO CONTINUE TO OPERATE FOR AN EXTENDED PERIOD OF TIME.

C. MANUFACTURER INSTRUCTIONS
ALL LIGHTING CONTROLS AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

D. MULTIPLE SWITCHES
THIS REQUIREMENT APPLIES TO ALL 3-WAY, 4-WAY, AND OTHER LIGHTING CIRCUITS CONTROLLED BY MORE THAN ONE SWITCH. A LIGHTING CIRCUIT CONTROLLED BY MORE THAN ONE SWITCH WHERE A DIMMER OR VACANCY SENSOR HAS BEEN INSTALLED TO COMPLY WITH §150.0(K) SHALL MEET ALL OF THE FOLLOWING CONDITIONS:
1. NO CONTROLS SHALL BYPASS THE DIMMER OR VACANCY SENSOR FUNCTION.
2. THE DIMMER OR VACANCY SENSOR SHALL BE CERTIFIED TO THE ENERGY COMMISSION THAT IT COMPLIES WITH THE APPLICABLE REQUIREMENTS OF §110.9.

E. LIGHTING CONTROL SYSTEMS AND ENERGY MANAGEMENT CONTROL SYSTEMS(EMCS)
LIGHTING CONTROLS MAY BE EITHER INDIVIDUAL DEVICES OR SYSTEMS CONSISTING OF TWO OR MORE COMPONENTS. LIGHTING CONTROL SYSTEMS AND EMCS MUST MEET THE REQUIREMENTS OF §110.9.
THERE IS NO NEED FOR LIGHTING CONTROL SYSTEMS TO BE CERTIFIED TO THE COMMISSION. HOWEVER, WHEN INSTALLING A LIGHTING CONTROL SYSTEM, A LICENSEE OF RECORD MUST SIGN A LIGHTING CONTROL CERTIFICATE OF INSTALLATION.6.3.3SPACES
REQUIRED TO HAVE VACANCY SENSORS MANUAL-ON/AUTOMATIC-OFF OCCUPANT SENSORS, ALSO KNOWN AS VACANCY SENSORS, AUTOMATICALLY TURN LIGHTS OFF IF AN OCCUPANT FORGETS TO TURN THEM OFF WHEN A ROOM IS UNOCCUPIED.

ADDITIONALLY, THESE SENSORS ARE REQUIRED TO PROVIDE THE OCCUPANT WITH THE ABILITY TO MANUALLY TURN THE LIGHTS:

PAGE 6-12
RESIDENTIAL LIGHTING - INDOOR LIGHTING CONTROLS REQUIREMENTS
1. OFF UPON LEAVING THE ROOM.
2. OFF WHILE STILL OCCUPYING A ROOM.
3. ON UPON ENTERING THE ROOM.

THE ENERGY STANDARDS REQUIRE VACANCY SENSORS TO CONTROL AT LEAST ONE LUMINAIRE IN THE FOLLOWING ROOM TYPES:
1. BATHROOMS.
2. UTILITY ROOMS.
3. LAUNDRY ROOMS.
4. GARAGES.

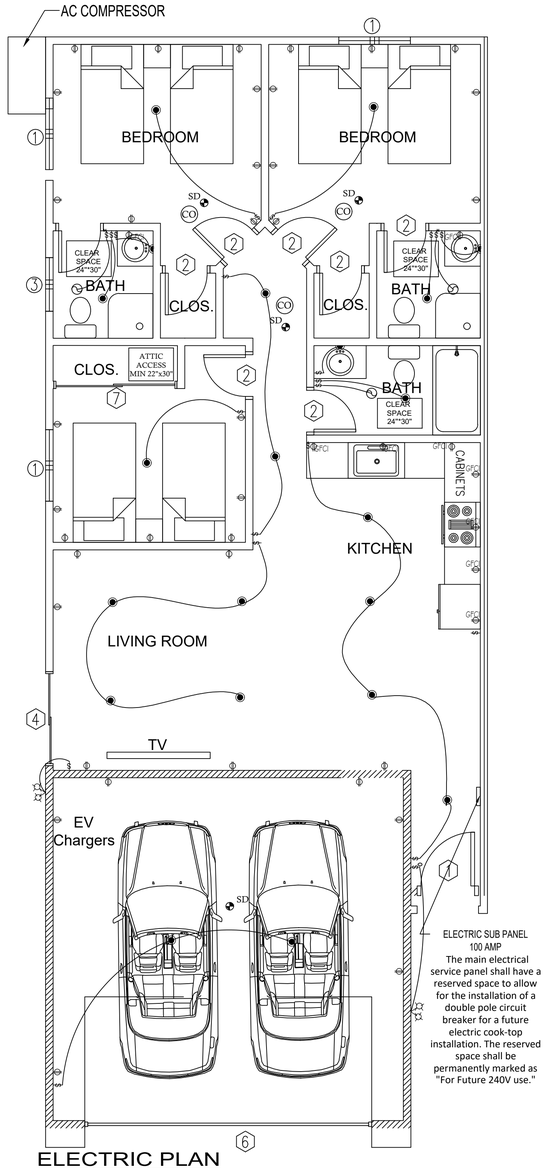
IF THERE ARE ROOMS OR AREAS WHERE THERE ARE SAFETY CONCERNS REGARDING THE USE OF VACANCY SENSORS, THEN THE USE OF "DUAL TECHNOLOGY"(INFRA-RED PLUS ULTRASONIC) MAY BE DESIRABLE, OR THE VACANCY SENSOR MAY BE STAGED TO PARTIALLY SHUT OFF THE LIGHTING BEFORE SWITCHING IT OFF COMPLETELY.

EVERY OTHER ROOM SHOULD BE EQUIPPED WITH DIMMING SWITCH

6.3.4
LUMINAIRES REQUIRED TO HAVE DIMMERS OR VACANCY SENSORS ALL LUMINAIRES THAT ARE INSTALLED WITH JA8-CERTIFIED LIGHT SOURCES ARE REQUIRED TO BE CONTROLLED BY EITHER A DIMMER OR VACANCY SENSOR. IN ADDITION, ALL BLANK ELECTRICAL BOXES MORE THAN FIVE FEET ABOVE THE FLOOR MUST BE CONTROLLED BY A DIMMER, VACANCY SENSOR, OR FAN SPEED CONTROL.

DIMMERS OR VACANCY SENSORS ARE NOT REQUIRED ON ANY LUMINAIRES LOCATED IN CLOSETS LESS THAN 70 SQUARE FEET, OR IN HALLWAYS.ALTHOUGH NOT REQUIRED FOR ALL LUMINAIRES OR SPACE TYPES, THE USE OF DIMMERS AND/OR VACANCY SENSORS IS RECOMMENDED FOR ANY APPLICATION WHERE THEY CAN PROVIDE ADDITIONAL ENERGY SAVINGS OR ADDITIONAL AMENITY FOR THE HOMEOWNER OR OCCUPANT.

UTILITY LEGEND	
◉	RECESSED LIGHT FIXTURE HIGH EFFICIENCY
$D	SINGLE POLE LIGHT SWITCH W/ DIMMER
$H	SINGLE POLE LIGHT SWITCH W/ HUMIDITY SENSOR
$O	SINGLE POLE LIGHT SWITCH W/ VACANCY SENSOR
AFCI	I 20V DUPLEX CONVENIENCE RECEPTABLE
GFCI	DUPLEX RECEPTABLE GROUND FAULT CIRCUIT INTERRUPTER
	FLOOD LIGHT LITHONIA 2 LAMP OUTDOOR MOTION SENSOR Water Proof
CO	CARBON MONOXIDE DETECTOR UL2034/2075 W/BATTERY BACKUP (HARD WIRE) AND INTERCONNECTED PER NFPA 72
SD	SMOKE DETECTOR UL217 (HARD WIRE) AND INTERCONNECTED PER NFPA 72W/BATTERY BACKUP
	EXHAUST FAN 50 or (100 CFM for Kitchen) CONTROLLED BY HUMIDISTAT FANS SHALL BE ENERGY STAR COMPLIANT AND BE DUCTED TO TERMINATE OUTSIDE THE BUILDING. (Switch separately) Manufacture "NuTone" Model # 696N



ELECTRIC PLAN
NTS

LOAD SUMMARY - FOR THE ADU: — TOTAL AREA OF UNIT: 996 S.F. — **5260 ALLISON LN RIVERSIDE, CA 92509**

			(VA):	(VA):
A. LIGHTING AND RECEPTACLE AND REQUIRED APPLIANCE LOADS FOR RESIDENTIAL:				
1. LIGHTING AND RECEPT.:	996 S.F. @	3.0 VA PER S.F.:	2,987	
2. SMALL APPLIANCE CCTS:	2 CIRCUITS @	1500 VA PER CCT.:	3,000	
3. LAUNDRY CIRCUIT(S):	2 CIRCUITS @	1500 VA PER CCT.:	3,000	
SUBTOTAL:			8,987	
N.E.C. DEMAND FOR ABOVE LOADS (PER N.E.C. TABLE 220-11):				
1. FIRST 3,000 VA @ 100%:	3,000 VA x 100%:		3,000	
2. NEXT 117,000 VA @ 35%:	5,987 VA x 35%:		2,096	
3. REMAINING LOAD @ 25%:		VA x 25%:		
SUBTOTAL OF RESIDENTIAL LTG, REC & SMALL APPLIANCE LOADS:				5,096
B. FIXED APPLIANCES:				
HOOD FAN	1 UNIT @	500 VA PER UNIT x 75% DEMAND:	375	
GARBAGE DISPOSAL:	1 UNIT @	1,200 VA PER UNIT x 75% DEMAND:	900	
DISHWASHER:	1 UNIT @	1,200 VA PER UNIT x 75% DEMAND:	900	
REF & FREZ	1 UNIT @	800 VA PER UNIT x 75% DEMAND:	600	
SUBTOTAL OF FIXED APPLIANCE LOADS:				2,775
C. SPACE HEATING AND COOLING EQUIPMENT				
HVAC/FAN UNIT :	8 VA/S.F.x	996 S.F. =		7,966
TOTAL UNITS LOAD				**15,837**
TOTAL UNITS LOAD IN AMPS:				**66**
PROPOSED SIZE:	**100 AMPS AT 120/240V, 1 PHASE , 3W**			

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6131 Orangethorpe Ave Suite 260B,
Buena Park, CA 90620
Email: info@ndccal.com
Tel: (714) 330 1634

N·C·B·D·C NATIONAL COUNCIL OF BUILDING DESIGNERS CERTIFICATION
Nader Iskander
CERTIFICATION NO.05-644
V TM

OWNER INFORMATION:

NADER ISKANDER
10614 Scott Ave
Whittier CA 90603

PROJECT ADDRESS:

APN# 627-182-010

SHEET CONTENT

ELECTRIC PLAN

REVISIONS

**CONTRACTOR TO VERIFY ALL DIMENSIONS, CONDITIONS, ETC. PERTAINING TO THE WORK AT THE SITE BEFORE PROCEEDING WITH THE WORK
AS INSTRUMENT OF SERVICE

Prepared by:
Nader Iskander

Project Number: 2023-01 Date: 07/02/2024

Sheet:
A-4

From: 11 To: 22

1.Plumbing fixtures and fixture fittings on the plans shall comply with the following flow rates:
a.Water Closets - 1.28 GPF
b.Urinals - 0.5 GPF
C.Wall-mounted urinal - 0.125 GPF
d.Single showerhead - 2.0 GPM at 80psi
e.Multiple showerheads - 2.0 GPM at 80psi for allcombined showerheads
f.Lavatory faucets - 1.2 GPM at 60psi
g.Lavatory faucets in public use areas - 0.5 GPMat 60psi
h.Metering faucets - .25 gallons per cycle
i.Kitchen faucets - 1.8 GPM at 60psi(4.303.1)

2.Annular spaces around pipes, electrical cables, conduits, or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry, or a similar method acceptable to the enforcing agency. (4.406.1)

3.Fireplaces shall be direct vent sealed combustion type. Indicate on the plans the manufacturer name and model number. (4.503.1)

4.At the time of rough installation, during storage on the construction site, and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal, or other acceptable methods to reduce the amount of water, dust and debris which may enter the system. (4.504.1)

5.Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19% moisture content. Insulation products which are visibly wet or have high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. (4.505.3)

6. All mechanical exhaust fans in rooms with a bathtub or shower shall comply with the following:
a.Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.
b.Fans must be controlled by a readily accessible humidistat unless functioning as a component of a whole house ventilation system. Humidity control shall be capable of adjustment between a relative humidity range of 50% and 80%. (4.506.1)

7.Adhesives, sealants and caulks shall meet or exceed the standards outlined in Section 4.504.2.1 and comply with the VOC limits in Tables 4.504.1 and 4.504.2 as applicable.
(4.504.2.1)

8. Paints and coatings shall meet or exceed the standards outlined in Section 4.504.2.2 and comply with the VOC limits in Table 4.504.3. (4.504.2.2)

9. Aerosol paints and coatings shall meet or exceed the standards outlined in Section 4.504.2.3. (4.504.2.3)

10.All carpet installed in the building interior shall meet all the testing and product requirements of one of the following:

a.Carpet and Rug Institute's Green Label Plus Program OR

b.California Department of Public Health Standard Method for the testing of VOCE missions (Specification 01350) OR

C. NSF/ANSI 140 at the Gold Level OR

d. Scientific Certifications Systems Indoor Advantage Gold (4.504.3)

11. All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label Program. Carpet adhesives shall not exceed a VOC limit of 50 g/L. (4.504.3.1, 4.504.3.2)

12. A minimum of 80% of floor area receiving resilient flooring shall comply with one of the following:

a.Products certified as a Low-Emitting Material in the CHPS High Performance Products Database, OR

b. Products certified under UL GREEN GUARD Gold (Formerly the Greenguard Children & Schools program), OR

C. RFCI FloorScore program, OR

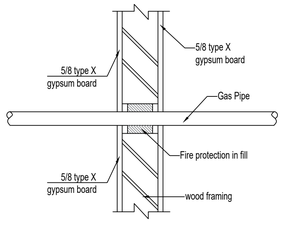
d. Meet the California Department of Public Health Standard Method for the testing of VOC Emissions (Specification 01350) (4.504.4)

13.Composite wood products (hardwood plywood, particle board, and MDF) installed on the interior or exterior of the building shall meet or exceed the standards outlined in Table 4.504.5. Verification of compliance with these sections must be provided at the time of inspection. (4.504.5)

PLUMPING NOTES:

1. Water closets shall have an average water consumption of not more than 1.28 gallons per flush.(411.2 CPC)
2. shower heads shall have a water flow not to exceed 2.0 gallons per minute at 80psi.(408.2 CPC)
3. the maximum flow rate of lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi.(403.7 CPC)
4. faucets in kitchens shall have a water flow not to exceed 1.8 gallons per minute at 60 psi and may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute, and must default to a maximum flow rate 1.8 gallons per minute. (407.2.1.1 CRC)

DETAIL#1 OF GAS PIPE PROTECTION AT THE 1 HR.FIRE RATED WALL :



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Email: info@ndccal.com
Tel: (714) 330 1634

N·C·B·D·C NATIONAL COUNCIL BUILDING DESIGNER CERTIFICATION
Nader Iskander
CERTIFICATION
NO.05-644

OWNER INFORMATION:

NADER ISKANDER
10614 Scott Ave
Whittier CA 90603

PROJECT ADDRESS:

APN# 627-182-010

SHEET CONTENT

MECHANICAL PLAN

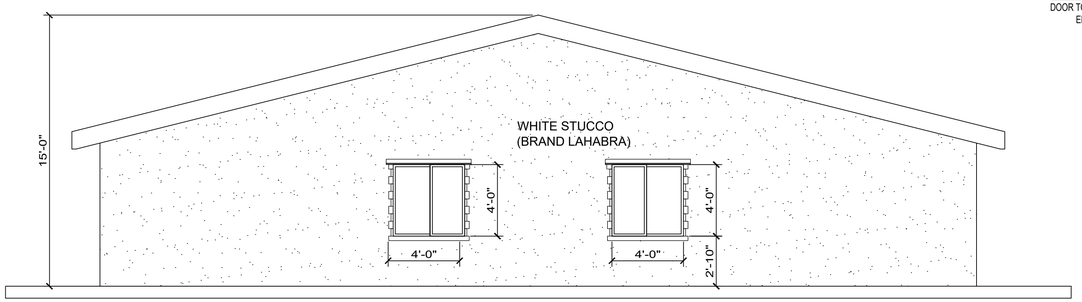
REVISIONS

Prepared by:
Nader Iskander

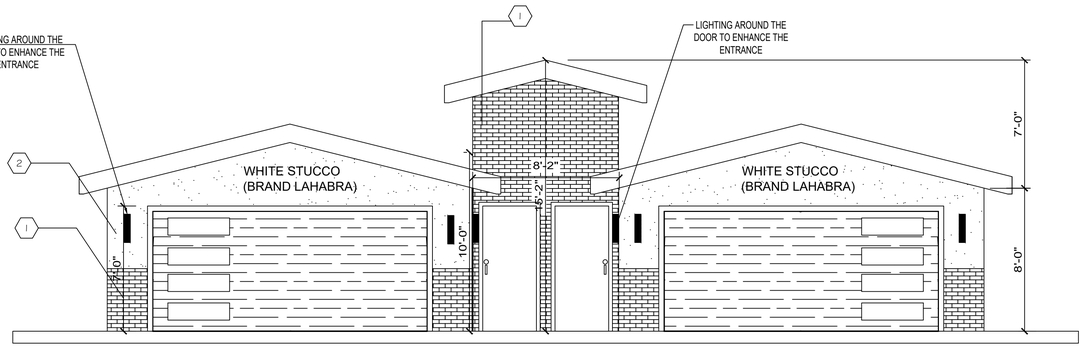
Project Number: 2023-01
Date: 07/02/2024

Sheet:
A-5

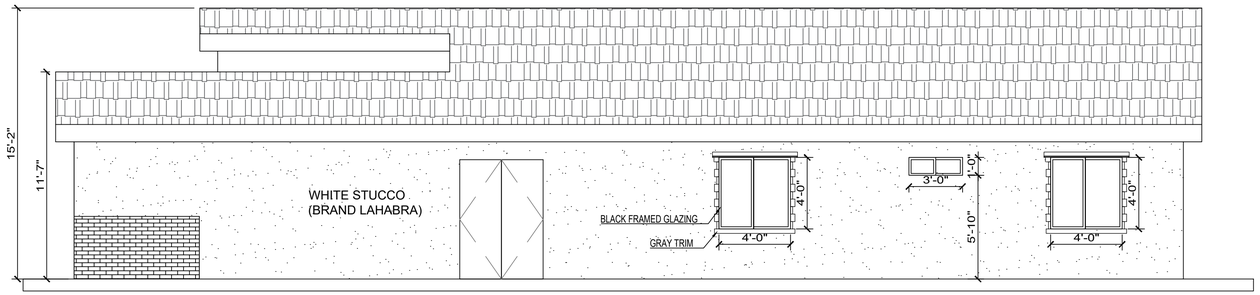
From:12 To:22



DUPLEX NORTH ELEVATION
SCALE 1/4" : 1'- 0"

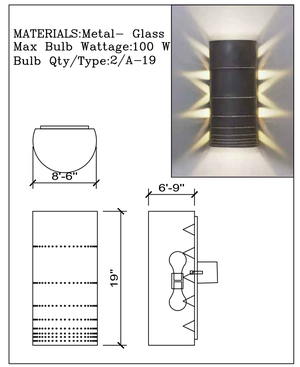


DUPLEX SOUTH ELEVATION
SCALE 1/4" : 1'- 0"



2 White STUCCO

1 AirStone Spring Creek 8-sq ft Gray Faux Stone
Item #4903501 ,Model #CLSCFIO,Supplier: lowe's,
thickness: between ½" and 1 ½"

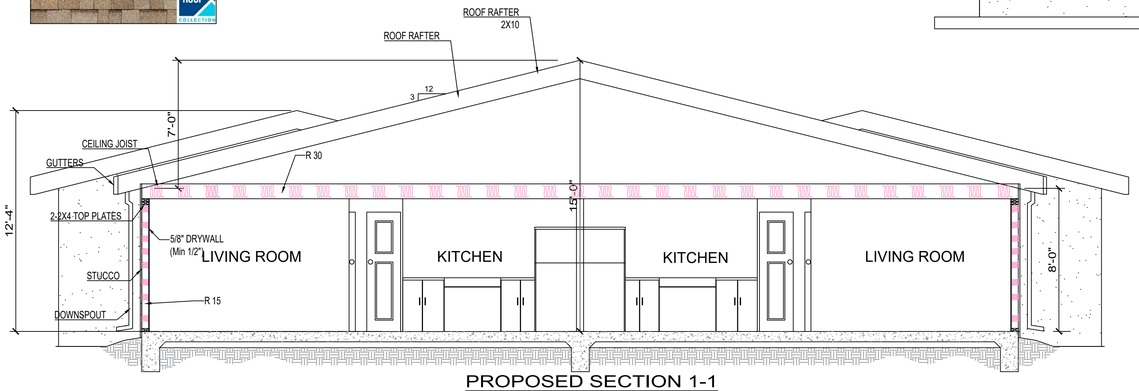


EXTERIOR WALL
LIGHTING DETAIL

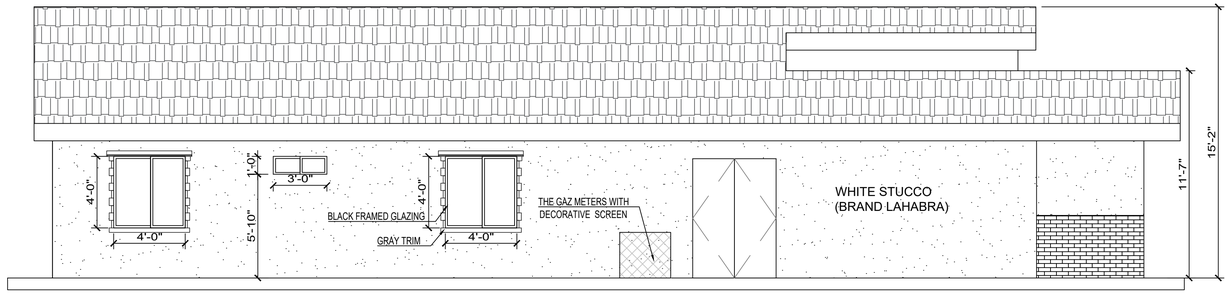
NOTE:
-FOR ELEVATION :
MATERIAL: WHITE STUCCO
(BRAND: LAHABRA)
COLOR: AMBER ARCHIRECTURAL

-FOR ROOF:
MATERIAL:COOL ROOF

DUPLEX EAST ELEVATION
SCALE 1/4" : 1'- 0"



PROPOSED SECTION 1-1
SCALE 1/4"=1'-0"



DUPLEX WEST ELEVATION
SCALE 1/4" : 1'- 0"

GAS METER
SCREEN

color :light grey
material: wooden screen

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6131 Orangethorpe Ave Suite 260B,
Buena Park, CA 90620
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Tel: (714) 330 1634

N·C·B·D·C NATIONAL COUNCIL BUILDING DESIGNERS CERTIFICATIONS
Nader Iskander
CERTIFICATION
NO.05-644

OWNER INFORMATION:

NADER ISKANDER
10614 Scott Ave
Whittier CA 90603

PROJECT ADDRESS:

APN# 627-182-010

SHEET CONTENT

ELEVATIONS
&
SECTIONS

REVISIONS

Prepared by:
Nader Iskander

Project Number: 2023-01
Date: 07/02/2024

Sheet:
A-6

From: 13 To: 22

SOUTH ELEVATION
SCALE 1/4" : 1'- 0"

WEST ELEVATION
SCALE 1/4" : 1'- 0"

EAST ELEVATION
SCALE 1/4" : 1'- 0"

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NATIONAL COUNCIL
BUILDING DESIGNER CERTIFICATION
Nader Iskander
CERTIFICATION
NO.05-644
TM

OWNER INFORMATION:

NADER ISKANDER
10614 Scott Ave
Whittier CA 90603

PROJECT ADDRESS:

APN# 627-182-010

SHEET CONTENT

COLORED RENDER ELEVATIONS

REVISIONS

Prepared by:
Nader Iskander

Project Number: 2023-01
Date: 07/02/2024

Sheet:
A-6.1

From:14 To:22

CITY OF PALM DESERT

73-510 FRED WARING DRIVE
PALM DESERT, CALIFORNIA 92260-2578
TEL: 760-346-0611
PLANNING@PALMDESERT.GOV

ARCHITECTURAL REVIEW COMMISSION

NOTICE OF ACTION

May 7, 2024

Nader Iskander
10614 Scott Avenue
Whittier, CA 90603

Subject: Consideration to approve a Design Review related to a Precise Plan (PP) to construct a duplex development; near the northwest corner of Alessandro Drive and San Jacinto (Assessor's Parcel Number 627-182-010).

The Architectural Review Commission of the City of Palm Desert considered your request and took the following action at its meeting of April 23, 2024:

> Following discussion, MOTION BY CHAIR VUKSIC, SECOND BY COMMISSIONER SANCHEZ, CARRIED 5-0 (COMMISSIONERS COLVARD and MCINTOSH ABSENT); to approve Case No. PP23-0008 with the following conditions:
> 1. Entry and South elevations shall be further enhanced. Proposed enhancements by applicant shall be reviewed by staff.
> 2. Roof tile shall be changed from asphalt shingles to concrete flat tiles; to be reviewed by staff.
> 3. Artificial turf shall be changed to a more substantial artificial turf product; to be reviewed by staff.
> 4. If applicant chooses to keep the stone veneer enhancement on the south elevation, it shall be returned on sides at least 5 feet.

Pursuant to Palm Desert Municipal Code Section 25.60.080, any appeal of the above action may be made in writing to the City Clerk, City of Palm Desert, within 15 days of the date of the decision.

If you have any questions, please contact Principal Planner, Carlos Flores, at (760) 776-6478 or cflores@palmdesert.gov.

Sincerely,

CARLOS FLORES, SECRETARY
ARCHITECTURAL REVIEW COMMISSION
cc: File

CITY OF PALM

73-510 FRED WARING DRIVE
PALM DESERT, CALIFORNIA 92260-2578
TEL: 760-346-0611
PLANNING@PALMDESERT.GOV

CITY OF PALM DESERT
PUBLIC HEARING NOTICE
CASE NO. PP/EA23-0008

NOTICE IS HEREBY GIVEN THAT A PUBLIC HEARING WILL BE HELD BEFORE THE PLANNING COMMISSION OF THE CITY OF PALM DESERT, CALIFORNIA, TO CONSIDER THE ADOPTION OF A NOTICE OF EXEMPTION AND A REQUEST FOR A PRECISE PLAN TO DEVELOP A DUPLEX DEVELOPMENT NEAR THE NORTHWEST CORNER OF ALESSANDRO DRIVE AND SAN JACINTO

The City of Palm Desert (City), in its capacity as the Lead Agency for this project and pursuant to the California Environmental Quality Act (CEQA), finds that the proposed project is categorically exempt under Article 19 Section 15332 Infill Exemption (Class 32) of the CEQA Guidelines; therefore, no further environmental review is necessary, and a notice of Exemption can be adopted as part of this project.

PROJECT LOCATION/DESCRIPTION:

PROJECT LOCATION: Near the southeast corner of Alessandro Drive and San Jacinto (APN 627-182-010).

PROJECT DESCRIPTION: The applicant proposes a Precise Plan to construct a duplex development of two attached 1,034 square foot units on a vacant parcel located on San Jacinto Avenue, just north of Alessandro Drive.

PUBLIC HEARING: NOTICE IS HEREBY GIVEN that the Planning Commission of the City of Palm Desert, California, will hold a Public Hearing at its meeting on January 7, 2025. The Planning Commission meeting begins at 6:00 p.m. in the Council Chamber at 73510 Fred Waring Drive, Palm Desert, California. Pursuant to Assembly Bill 2449, this meeting may be conducted as a hybrid meeting allowing public access via teleconference or in person. Options for remote participation will be listed on the Posted Agenda for the meeting at: https://www.palmdesert.gov/our-city/committees-and-commissions/commission-information.

PUBLIC REVIEW: The plans and related documents are available for public review Monday through Friday from 8:00 a.m. to 5:00 p.m. by contacting the project planner, Carlos Flores. Please submit written comments to the Planning Division. If any group challenges the action in court, issues raised may be limited to only those issues raised at the public hearing described in this notice or in written correspondence at or prior to the Planning Commission hearing. All comments and any questions should be directed to:

Carlos Flores, Senior Planner
City of Palm Desert
73-510 Fred Waring Drive
Palm Desert, CA 92260
(760) 776-6478
cflores@palmdesert.gov

PUBLISH: THE DESERT SUN
DECEMBER 20, 2024

RICHARD D. CANNONE, AICP, SECRETARY
PALM DESERT PLANNING COMMISSION

CITY OF PALM DESERT
ATTENDANCE REPORT

Advisory Body: PLANNING COMMISSION

Prepared By: Michelle Nance

Year	2024		2024		2024		2024		2024		2024		2024		2024		2024		2024		2024		2024		Total	Total
Month	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec		Total	Unexcused
Date	2	16	6	20	5	19	2	16	7	21	4	18	2	19	6	20	3	17	1	29	5	17	3	17	Absences	Absences
DeLuna, Nancy	-	-	P	P	P	P	P	-	P	P	P	P	-	E	-	P	P	-	P	P	-	P	-	P	1	0
Greenwood, John	-	-	P	E	P	P	P	-	P	P	P	E	-	E	-	P	P	-	P	P	-	E	-	P	4	0
Gregory, Ron	-	-	P	P	P	P	P	-	P	P	E	P	-	P	-	E	E	-	P	P	-	P	-	P	3	0
Holt, Lindsay	-	-	P	P	E	P	E	-	P	P	P	P	-	P	-	P	P	-	P	E	-	P	-	P	3	0
Pradetto, Joseph	-	-	P	P	P	P	P	-	P	P	P	P	-	P	-	P	P	-	P	P	-	P	-	N/A	0	0

Palm Desert Municipal Code 2.34.010:

Twice Monthly: Six unexcused absences from regular meetings in any twelve-month period shall constitute an automatic resignation of members holding office on boards that meet twice monthly.

P Present
A Absent
E Excused
- No meeting
R Remote