


2024-25 Road Improvements

	City of Rio Dell Issued by Kyle Knopp, City Manager knoppk@cityofriodell.ca.gov	Issue Date: August 30, 2024 Due Date: September 27, 2024 Description: Grinding, Pavement Overlay, Utility Covers Addendum:
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Summary: The City of Rio Dell is seeking bids from responsive and responsible contractors to conduct grind out and overlay work on Elm Street, Pacific Avenue and Wildwood Avenue. Work includes utility and manhole covers.

REQUIRED LICENSING:

A “Class-A” license issued by the State of California is required for this project.

☐ Contractor has a Class “A” general contractor’s license. **Contractor’s License #**
_____ **Expires:** _____

☐ Contractor has registered with the State of California’s DIR (Department of Industrial Relations) website:

DIR Registration Number: _____

TIME OF COMPLETION:

Bidder agrees to complete the project on or before a date specified in a signed contract. The City work will need to be completed by June 30, 2025.

MANDATORY SITE VISIT:

Questions about the project are encouraged to be submitted in writing to knoppk@cityofriodell.ca.gov and all questions and responses will be published on the City’s website by 5:00pm September 23, 2024.

Mandatory site visits are waived for bidders who have been awarded City construction contracts on or after January 1, 2016.

All other interested Class A contractors are required to schedule and complete a site visit by emailing jensenr@cityofriodell.ca.gov for a walkthrough of the project prior to September 20, 2024.

TIMELINE:

TIMELINE	DATES
RELEASE OF REQUEST FOR BID	August 30, 2024
MANDATORY SITE VISITS	
DEADLINE FOR SUBMISSION OF QUESTIONS Email: knoppk@cityofriodell.ca.gov	September 20, 2024 @ 5:00pm
CITY RESPONSE TO QUESTIONS DUE DATE	September 23, 2024 @ 5:00pm
DEADLINE FOR BIDS TO BE RECEIVED	September 27, 2024 @ 8:45am
OPENING OF SEALED BIDS	September 27, 2024 @ 9:00am
RECOMMENDATION OF AWARD TO CITY COUNCIL (AGENDA ITEM)	October 1, 2024
CONTRACT FINALIZATION / NEW CONTRACT START DATE	After October 1, 2024

Original copies of the bid are to be received by 8:45 a.m. on **September 27, 2024**, Pacific Standard Time, at 675 Wildwood Avenue, Rio Dell CA 95562. Late, faxed, emailed, or unsigned bids will be rejected. Post marks do not count. No additional information or documentation will be accepted from proposers after the bid due date.

SCOPE OF SERVICES:

The City of Rio Dell requires an overlay project primarily located on Elm Street. Work will include grinding the existing surfaces, new utility covers, and utility box adjusted to grade and two manhole covers adjusted to grade with related minor concrete work. Some work is required on Pacific Avenue and on Wildwood Avenue.

Special Notes:

All AC overlays shall be completed without rock pockets and drain the surface free of water, with no bird baths or similar deformations after rain.

For asphalt overlay repairs, the contractor shall conform grind areas matching existing pavement, existing curbs, driveways and drainage features with sweeping and cleaning of the surface, and then overlay and compact asphalt to the specified thickness. In areas of severe pavement degradation, contractor will level, smooth and compact sub base prior to applying overlay.

Contractor is responsible to verify all conditions at the worksite; ANY inconsistencies shall be brought to the City's attention before proceeding with any work. The actual limits of work for each item will be identified (painted) by the City or their representative prior to starting any work. The approximate locations and extents are identified in Appendix B (Project Location Maps). Actual locations and limits of work are subject to change. All work shall be in accordance with the specifications provided in Appendix C (Technical Specifications).

For asphalt patch repairs, the contractor shall remove existing pavement, inspect and compact underlying base material, apply a tack coat, place and compact asphalt to the original surface for a smooth end product.

All work shall be in accordance with the State of California Department of Transportation (Caltrans) Standard Specifications and Standard Plans.

All work shall be in accordance with the specifications provided in Appendix C (Technical Specifications).

BID BOND

Each bid must be submitted on the prescribed form and accompanied by a certified check or Bid Bond in an amount of not less than 10 percent of the amount bid. Successful bidders will be required to furnish both a Payment Bond and Performance Bond in the full amount of the Contract Price.

Each bid must be accompanied by a bid bond payable to the Owner, for ten percent of the total amount of the bid. As soon as the bid prices have been compared, the Owner will return the bonds of all except the three lowest responsible bidders. When the Agreement is executed, the bonds of the two remaining unsuccessful bidders will be returned. The bid bond of the successful bidder(s) will be retained until the

payment bond and performance bond have been executed and approved, after which it will be returned. A certified check may be used in lieu of a bid bond.

A performance bond and a payment bond, each in the amount of 100 percent of the contract price, with a corporate surety approved by the Owner, will be required for the faithful performance of the contract.

Attorneys-in-fact who sign bid bonds or payment bonds and performance bonds must file with each bond a certified and effective dated copy of their power of attorney.

The party to whom the contract is awarded will be required to execute the Agreement and obtain the performance bond and payment bond within **seven (7) calendar days** from the date when Notice of Award is delivered to the bidder. The Notice of Award shall be accompanied by the necessary Agreement and bond forms. In case of failure of the bidder to execute the Agreement, the Owner may at his option consider the bidder in default, in which case the bid bond accompanying the proposal shall become the property of the Owner.

The Owner, within **fifteen (15) calendar days** of receipt of an acceptable performance bond, payment bond and Agreement signed by the party to whom the Agreement was awarded shall sign the Agreement and return to such party an executed duplicate of the Agreement. Should the Owner not execute the Agreement within such period, the bidder may submit a written notice to withdraw his signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the Owner.

SUBMISSION

All bids must be submitted in a sealed envelope clearly marked with the title of 2022 STREET MAINTENANCE

- Late bids will not be accepted.
- Post marks do not count.
- All bids, whether selected or rejected, shall become the property of the City of Rio Dell.

Bids are to be sent to:

2024-25 ROAD IMPROVEMENTS
ATTN: CITY MANAGER
675 Wildwood Avenue
Rio Dell CA 95562

PREVAILING WAGE REQUIREMENT

Pursuant to the provisions of the Labor Code of the State of California, the Department of Industrial Relations has made a determination of the rate of per diem wages to be paid on

the prevailing rate of pay for regular, holiday and overtime work in the locality in which the public work is to be performed, for each craft, classification, or type of workman needed to execute the contract. All City of Rio Dell projects greater than \$1,000 requires that contractors adhere to Prevailing Wage requirements (California Labor Code, Sections 1770 through 1775). The rates can be found online here:

<http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>

CERTIFIED PAYROLL RECORDS

Per Labor Code Section 1776 each contractor and subcontractor shall keep accurate payroll records. A certified copy of all payroll records for work performed under this contract shall be furnished upon request to a representative of the awarding body. Per SB 854 contractors and subcontractors are required to furnish certified payroll reports directly to the Department of Industrial Relations

PUBLIC RECORDS AND TRADE SECRETS

All Bids and materials submitted become the property of the City and are subject to disclosure under the Public Records Act, Government Code section 6250 *et seq.*

This Request for Bid and all responses are considered public information, except for trade secrets specifically identified, which will be handled according to State statutes or other laws. Any information that contains trade secrets shall be communicated to city by the Bid. Any page of the Bid that is deemed to be a trade secret by the Bid shall be clearly marked "PROPRIETARY INFORMATION" at the top of the page in at least one-half inch (1/2") size letters. In the event that the city receives a request for disclosure of any such specifically identified information, prior to release of any such specifically identified information, the city will contact the Bid and will not release the specifically identified information if the Bid agrees to indemnify, defend, and hold harmless the city in any action brought to disclose such information. The Bid, by submitting such information, agrees that the failure of city to contact Bid prior to the release of such information will not be a basis for liability by City or any City employee to Bid.

EXCEPTIONS TO SPECIFICATION

Bids taking the exception to any part or section of these specifications shall indicate such exceptions in the Bid. Failures to indicate any exceptions shall be interpreted as the Bid's intent to fully comply with the specifications as written. However, conditional or qualified Bids are subject to rejecting in whole or in part.

EXPENSES INCURRED IN PREPARING THE BID

The city accepts no responsibility for any expense incurred by Bid in the preparation

and presentation of a Bid, such expenses to be borne exclusively by the Bid.

BID INVESTIGATIONS

Before submitting a Bid, each Bid shall make all investigations and examinations necessary to ascertain the full performance of the contract and to verify any representations made by the city that the Bid will rely upon. No pleas of ignorance of such conditions and requirements resulting from failure to make such investigations and examinations will relieve the successful Bid from its obligation to comply with every detail of all provisions and requirements of the contract documents or will be accepted as a basis for any claim whatsoever for any monetary consideration on the part of the Bid.

QUALIFICATIONS OF BIDS

Each Bid shall possess a valid Class A General Contractor's License.

BID WITHDRAWAL

No Bid can be withdrawn after it is filed unless the Bid makes a request in writing to the city prior to the time set for the opening of Bids or unless the city fails to accept a Bid within ninety (90) days after the date fixed for opening Bids.

APPLICABLE LAW

The solicitation and any contract resulting from this solicitation shall be governed in all respects by the laws of the State of California and any litigation with respect thereto shall be brought in the courts of this State in the County of Humboldt. The successful Bid shall comply with all applicable federal, state, and local laws and regulations.

SELECTION PROCESS

The award of contracts shall be at the sole discretion of the City. Selection shall be based on the lowest responsive responsible bid received. The Bids should be submitted on the most favorable terms that the Bid can propose. It is the intent to make an award to one bid for all services required, although the City reserves the right to make multiple awards, depending on the needs and best interests of the City. The City may accept or reject any or all Bids in whole or in part and may waive informalities in the process. The contents of the Bid of the selected bid will become the basis for a contractual obligation when the award is made.

Final contract award will be subject to approval by the City Council. The City reserves the right to award a contract or contracts to Contractor that presents a Bid which, in the sole judgment of the city, serves the best interest of the city.

The city reserves the right to reject any and all Bids, to waive minor irregularities in said Bids, or to negotiate deviations with the successful Bid.

CONFLICT OF INTEREST

Bid warrants and covenants that no official or employee of the city, nor any business entity in which an official of the city has an interest, has been employed or retained to solicit or assist in the procuring of the resulting contract, nor any such person will be employed in the performance of such contract without immediate divulgence of such fact to the city.

CONTRACT

If a Bid is accepted, the successful Bid will be required to sign a contract. Any executed contract will be substantially similar.

PERIOD OF AWARD

The project is expected to be awarded on or around **October 1, 2024**.

INSURANCE REQUIREMENTS:

Bid agrees to indemnify and hold harmless the City, its elected or appointed officials, employees, consultants, and volunteers against any claims, actions, or demands against them, or any of them, and against any damages, liabilities or expenses, including costs of defense and attorney's fees, for personal injury or death, or for the loss or damage to the property, or any or all of them, to the extent alleged or actually arising out of or related to this Request for Contractor Bid or any of the work related thereto.

Bid affirms that s/he is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for the Workers' Compensation or to undertake self-insurance in accordance with the provisions of the Code and Bid further assures that s/he will comply with such provisions before commencing work under any agreement with the City. Bid shall furnish to City certificate(s) of insurance evidencing Worker's Compensation Insurance coverage to cover its employees, and Bid shall require all subcontractors similarly to provide Workers' Compensation Insurance as required by the Labor Code of the State of California for all employees including subcontractor's employees.

The successful Bid will be required to satisfy the insurance requirements, as set forth by the City. The Bid shall furnish the city with certificates and original endorsements affecting the required insurance coverage prior to execution of a contract by the city. In addition, the city may require additional insurance requirements dependent upon Bid's proposed services.

Coverage shall be at least as broad as:

1. **Commercial General Liability** (CGL): Insurance Services Office (ISO) Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than **\$5,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability**: Insurance Services Office Form CA 0001 covering Code 1 (any auto), with limits no less than **\$5,000,000** per accident for bodily injury and property damage.
3. **Workers' Compensation** insurance as required by the State of California, with Statutory Limits, and Employers' Liability insurance with a limit of no less than **\$1,000,000** per accident for bodily injury or disease.
4. **Builder's Risk** (Course of Construction) insurance utilizing an "All Risk" (Special Perils) coverage form, with limits equal to the completed value of the project and no coinsurance penalty provisions.
5. **Surety Bonds** as described below.
6. **Professional Liability** (if Design/Build), with limits no less than **\$2,000,000** per occurrence or claim, and **\$2,000,000** policy aggregate.

Surety Bonds

Contractor shall provide the following Surety Bonds:

1. Bid Bond
2. Performance Bond
3. Payment Bond
4. Maintenance Bond

The Payment Bond and the Performance Bond shall be in a sum equal to the contract price. If the Performance Bond provides for a one-year warranty a separate Maintenance Bond is not necessary. If the warranty period specified in the contract is for longer than one year a Maintenance Bond equal to 10% of the contract price is required. Bonds shall be duly executed by a responsible corporate surety, authorized to issue such bonds in the State of California and secured through an authorized agent with an office in California.

OWNERSHIP AND CONTROL:

The successful Bid will be required to provide information on its ownership and control as provided in 42 Code of Federal Regulations sections 455.101 and 455.104.

ASSIGNMENT:

Any contract resulting from this Bid and any amendments or supplements shall not be

assignable by the successful Bid.

RESERVATION OF RIGHTS:

The City of Rio Dell reserves the right to:

- Cancel this Request for Contractor Bids
- Amend this Request for Contractor Bids
- Extend the deadline for submitting Bids
- Waive minor irregularities or failures to conform to the Request for Contractor Bids

NEGOTIATIONS:

The city reserves the right to negotiate prior to contract execution with any Bid. Items that may be negotiable include, but are not limited to, types and scope of services and activities, performance criteria, start date and project completion date. Negotiable items must be consistent with the original Bid submitted, including proposed costs. Bids may not change the terms of their Bid after bid opening.

INQUIRY:

Direct all questions regarding the 2024-25 Road Improvements to:

City of Rio Dell
Attn: City Manager
675 Wildwood Avenue
Rio Dell, CA 95562

knoppk@cityofriodell.ca.gov

Project Web Address with current addendums:

<http://cityofriodell.ca.gov/bids>

ATTACHMENTS:

- A. Bid Sheet for the 2024-25 Road Improvements Projects
- B. Project Location Maps and Description
- C. Technical Specifications

Attachment A

BID SCHEDULE: 2024-25 Road Improvements Projects

Item No.	Est. Quantity	Unit	Description	Unit Price	Total
1	1	EA	Mobilization	\$(_____)	\$(_____)
2	1	EA	Temp. Traffic Control	\$(_____)	\$(_____)
3	1195	SY	Asphalt Grinding Surface Preparation	\$(_____)	\$(_____)
4	5	EA	Adjust new Utility Covers to Grade	\$(_____)	\$(_____)
5	2	EA	Adjust Manhole Cover to Grade	\$(_____)	\$(_____)
6	1	EA	12" x 18" New Utility Box to Grade	\$(_____)	\$(_____)
7	202	TN	Hot Mix Asphalt (Type A) 3" Overlay	\$(_____)	\$(_____)
8	200	LF	Shoulder Backing Material Compacted	\$(_____)	\$(_____)
9	Total Bid			\$(_____)	\$(_____)

EXCEPTION TO SPECIFICATION: List all exceptions to specification on a separate piece of paper, attached to the bid.

2024-25 Road Improvements

Site Location

Legend



Google Earth

Image © 2024 Airbus
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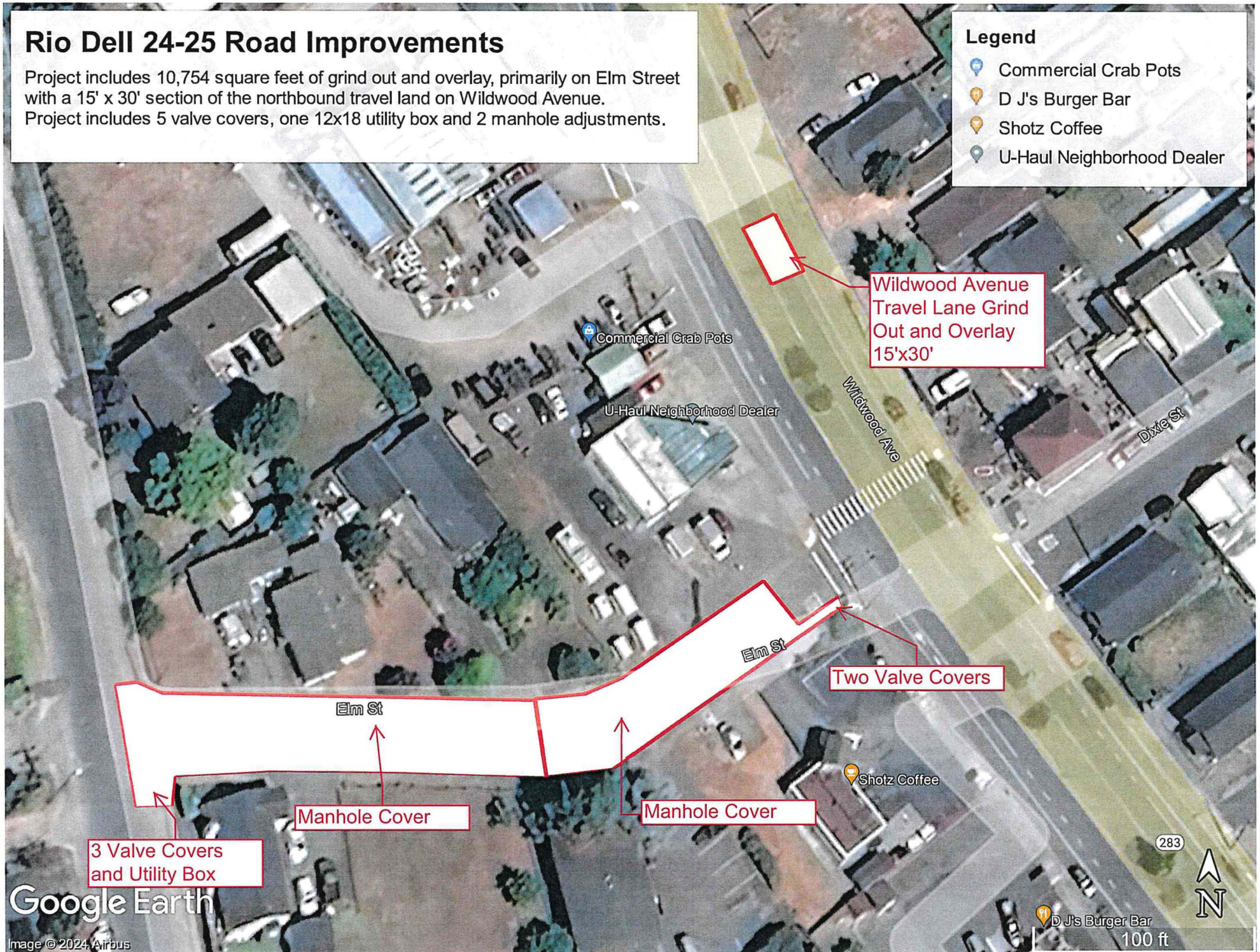
Rio Dell 24-25 Road Improvements

Project includes 10,754 square feet of grind out and overlay, primarily on Elm Street with a 15' x 30' section of the northbound travel lane on Wildwood Avenue.

Project includes 5 valve covers, one 12x18 utility box and 2 manhole adjustments.

Legend

- Commercial Crab Pots
- D J's Burger Bar
- Shotz Coffee
- U-Haul Neighborhood Dealer



ATTACHMENT C

Technical Specs

TECHNICAL SPECIFICATIONS
Special Provisions to the
Caltrans Standard Specifications, 2018

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1.0 GENERAL

A. PROJECT DESCRIPTION

The project includes all work included in the Plans, General Provisions, Technical Specifications, Standard Plans and Standard Specifications, to produce a complete and functional project, as determined by the City of Rio Dell.

B. SCOPE OF WORK

Contractor shall provide all materials, supervision, labor, equipment and supplies for construction of the 2022 Rio Dell Road Improvement Project. The project includes but is not limited to: removal of existing asphalt pavement, removal of existing sewer line, concrete sidewalk, concrete curb, concrete curb and gutter, and drainage facilities; and the placement/construction of concrete sidewalk, curb ramps, curb and gutter, asphalt pavement, signage, sewer and drainage improvements.

C. LOCATION OF WORK

Cherry Lane and Orchard Lane (adjacent to Monument Road), and Riverside Drive (from Eagle Prairie Road to North Fern Street) in Rio Dell, State of California.

D. CONTRACTOR'S LICENSE REQUIREMENTS

The Contractor's license needed for this project is A - General Engineering.

E. OWNER'S AUTHORIZED REPRESENTATIVES

- Kyle Knopp, City Manager, City of Rio Dell
- Randy Jensen, Water/Roadways Superintendent, City of Rio Dell

Additional authorized representatives will be identified prior to construction.

F. STANDARDS

All work shall adhere to California Department of Transportation (Caltrans) 2018 Standard Specifications (with the exception Sections 1 through 9 unless specific references are made thereto) and Standard Plans and the Special Provisions contained herein and the latest edition of the California Building Code (CBC), Local, State and Federal regulations, all of which are incorporated into this Contract by reference. If in conflict, the Special Provisions will take precedence.

G. CONFLICTS

Whenever a conflict arises between any of the referenced specifications, the plans take precedence with detail drawings having precedence over State Standard Plans in all cases. The Special Provisions take precedence over the State Standard Specifications.

H. PERMITS AND LICENSES

The Contractor is responsible for obtaining all permits and licenses needed for this project, and paying associated fees. The Contractor required to obtain a "no cost" encroachment permit from the City.

I. CONTRACTOR'S USE OF PREMISES

1. Public Safety, traffic safety and worker safety shall be maintained in compliance with Federal, State and Local Law. It shall be the applicant's responsibility and liability to comply with all applicable laws including: Cal-OSHA; State Department of Transportation Construction Safety, and the State Construction Safety Orders administered by the State Department of Industrial Relations, available through the State of California. Safety and warning devices shall be installed and maintained for all

work within the Public Right of Way, within trenches, excavations, and around obstructions. No Public access shall be permitted under overhead construction work. Traffic control signs, flags, lights and other warning and safety procedures shall conform to these cited State requirements, including the Manual of Traffic Safety in Construction Work Zones published by the State Department of Transportation. Continuous vehicle and pedestrian access shall be maintained unless advanced, written authorization has been provided by the City.

2. No concrete shall be place or poured; or asphalt paving placed; or pipeline trenches back-filled; or structures back-filled until the designated City inspector has made an inspection and the work has been approved. Required inspections must be scheduled at least 24 hours in advance.
3. Access to fire hydrants and public facilities shall be maintained at all times.
4. Refuse, trash, waste materials or unused materials shall be removed from the Public Right-of-Way within 4 hours after completion of work.
5. No street shall be closed without first notifying the following agencies, a minimum of 24 hours in advance :
 - Rio Dell City Hall: 764-3532
 - Rio Dell School District: 764-5694
 - Rio Dell Police Department: 764-5642
 - Rio Dell Fire Department: 764-3329
 - City Ambulance: 725-8020
 - Humboldt County Sheriff's Department: 445-7251
 - California Highway Patrol Dispatch Center: 268-2000
 - California Department of Forestry - Fortuna Office: 725-4413
6. The Contractor shall take all reasonable precautions to restrict operations to the least area of work possible and shall not disturb private property beyond the areas of work or easements for the project.
7. The Contractor shall post temporary "No Parking" signs with dates and time restrictions described in work areas a minimum of forty-eight (48) hours prior to commencement of work. However, if the intended work does not commence within 24 hours of the scheduled work, all "No Parking" signs shall be removed from the site unless otherwise directed by the City's Representative. See "Traffic Control" section regarding coordinating work.
8. The Contractor shall provide equipment-staging space at their own expense and shall occur within paved or graveled areas or a designated, previously disturbed corporation yard. No spoils or materials will be permitted to be stored on site.
9. The Contractor shall be cognizant of all utilities that cross the work area and take adequate measures to protect the utilities from damage. The City of Rio Dell assumes no liability of the location of utilities marked or otherwise, and the Contractor is encouraged to examine the site and contact the utilities via USA to determine if conflicts exist.
10. The Contractor is responsible for arranging hook-up of temporary power and is responsible for power hookup and power usage costs. It is the Contractor's responsibility to ensure the compatibility of power sources for their equipment.
11. The Contractor is responsible for furnishing and installing all required temporary buildings with sanitary toilets for use of all workmen; comply with all minimum requirements of the

Health Department or other public agency having jurisdiction; maintain in a sanitary condition at all times.

J. DIFFERING SITE CONDITIONS

Attention is directed to Section 4-1.06, "Differing Site Conditions," of the Standard Specifications. During the progress of the work, if subsurface or latent conditions are encountered at the site differing materially from those indicated in the "Materials Information," borings, other geotechnical data obtained by the City of Rio Dell's investigation of subsurface conditions, or an examination of the conditions above ground at the site, the party discovering those conditions shall promptly notify the other party in writing of the specific differing conditions before they are disturbed and before the affected work is performed.

The Contractor will be allowed 15 days from the notification of the City's determination of whether or not an adjustment of the contract is warranted, in which to file a notice of potential claim in conformance with the provisions of Section 5-1.43, "Potential Claims and Dispute Resolution" of the Standard Specifications and as specified herein; otherwise the decision of the City's Representative shall be deemed to have been accepted by the Contractor as correct. The notice of potential claim shall set forth in what respects the Contractor's position differs from the Engineer's determination and provide any additional information obtained by the Contractor, including but not limited to additional geotechnical data. The notice of potential claim shall be accompanied by the Contractor's certification that the following were made in preparation of the bid: a review of the contract, a review of the "Technical Data," a review of the borings and other records of geotechnical data to the extent they were made available to bidders prior to the opening of bids, and an examination of the conditions above ground at the site.

K. INCREASED OR DECREASED QUANTITIES

Sections 9-1.06 "Changed Quantity Payment Adjustments" of the Standard Specifications is amended as follows:

Section 9-1.06B "Increases of More than 25%."

Does not apply to this project. No adjustment in unit prices will be allowed for increases in quantities. The unit bid price shall be the unit price paid.

Section 9-1.06C "Decreases of More than 25%."

Does not apply to this project. No adjustment in unit prices will be allowed for decreases in quantities. The unit bid price shall be the unit price paid.

L. WORK SAFETY

The Contractor shall assume sole and complete responsibility for job site conditions for the duration of the project including, but not limited to, the safety and health conditions on the work site. This requirement shall apply continuously and shall not be limited to normal working hours. Contractor shall comply with all applicable provisions of law including the standards, rules, regulations and orders established by the California Division of Industrial Safety. Contractor shall furnish and use safety devices and safeguards and shall adopt and use practices, means, methods, operations, and processes which are reasonably adequate to render the work site safe and healthful. Contractor shall take all steps necessary to ensure that any hazardous condition is corrected promptly either by the Contractor or by assigning such responsibility to the appropriate subcontractor and ensuring that the corrections are completed. The City of Rio Dell, the engineer-of-record, construction manager and the officers, agents, employees and consultants, shall not have charge of or responsibility for construction or safety means, methods, techniques, procedures, as these are solely the responsibility of Contractor.

M. CONFINED SPACES

For any work that is to take place in a confined space, the Contractor shall comply with all CAL/OSHA regulations concerning entry into confined spaces. Confined space for the purpose of this Article shall mean the interior of storm drains, sewers, vaults, utility pipelines, manholes,

reservoirs, and any other such structure which is similarly surrounded by confining surfaces so as to permit the accumulation of dangerous gases or vapors. Tests for the presence of combustible or dangerous gases shall be made with an approved device immediately prior to a worker entering a confined space and at intervals frequent enough to ensure a safe atmosphere during the time a worker is in such a structure. A record of such tests shall be kept at the job site. Sources of ignition, including smoking, shall be prohibited in any confined space until after the atmosphere within the confined space has been tested and found safe. No employee shall be permitted to enter or remain within a confined space until such confined space is free of concentrations of harmful gases, and lack of oxygen, unless the employee is wearing suitable and approved respiratory equipment. Confined spaces that contain or that have last been used as containers of toxic gases, light oils, hydrogen sulfide, corrosives, or poisonous substances, shall, in every case, be tested by means of approved devices or chemical analysis before being entered without wearing approved respiratory equipment. Reservoirs, vessels, or other confined spaces having openings or manholes in the side as well as in the top shall be entered from the side openings or manholes when practicable.

N. RECORD DRAWINGS

Using colored ink, the Contractor shall make changes on a set of clean prints of the contract drawings. Indicate all changes and revisions to the original design that affect the permanent structures/facilities. Reference underground utilities to semi-permanent or permanent physical objects. Reference water, sewer, telephone, and electrical lines to corners of buildings and survey markers. Drawings shall be kept current with all work instructions, change orders and construction adjustments. Drawings shall be subject to the inspection of the City's Representative at all times. Progress payments, or portions thereof, may be withheld if drawings are not accurate and current. Project record drawings are the property of the City of Rio Dell. Prior to acceptance of the work, the Contractor shall deliver to the City one (1) set of neatly marked record drawings, accurately showing all the information required above. Full compensation for furnishing all labor, tools, equipment, material and incidentals and for doing all the work involved with conforming to the requirements of this section shall be considered as included in the contract prices paid for the various items of work and no additional compensation will be allowed therefor.

O. SUBMITTALS

General

Submit samples, drawings, and data for the City's approval which will demonstrate fully that the construction, and all materials and equipment to be furnished will comply with the provisions and intent of this specification. Submit all samples, drawings and data, unless specified otherwise, in the quantity required for return to the Contractor, plus three, which the City will retain. Label each sample, naming the project, the source of the material, and the proposed location of use on the project. Restrict each submittal to only one Specification Section or portion thereof. Unless otherwise specifically permitted by the City, make all submittals in groups containing all associated items for complete systems. The City may reject partial submittals as not complying with the provisions of the contract documents.

Specific items to be covered by submittals shall include, but not limited to, the following:

Designation of Authorized Representative	Hot Mix Asphalt Mix Designs
Emergency Contact List	Concrete Mix Design
Injury and Illness Prevention Plan	Concrete Reinforcement
Personnel & Equipment List	Detectable Warning Surface
Traffic Control Plan	Storm Drainpipe and Fittings
Class 2 Aggregate Base	Drain Inlets

Where the specifications indicate that the Contractor must follow manufacturer's instructions for installation of materials or equipment, those instructions shall be submitted to the City of Rio Dell prior to the start of work whether or not instructions are listed specifically as a submittal. When

referenced, the manufacturers printed installation instructions shall have the same effect as if printed in the contract documents. Make all shop drawings accurately to a scale sufficiently large to show all pertinent features of the item and its method of connection to the work. Make all shop drawing prints in blue or black line on white background. Reproductions of City of Rio Dell's drawings are not acceptable. The Contractor shall not use red color marks on submittals. Duplicate all marks on all copies submitted and ensure marks are photocopy reproducible. Include legible scale details, sizes, dimensions, performance characteristics, capacities, test data, anchoring details, installation instructions, storage and handling instructions, color charts, layout drawings, parts catalogs, rough-in diagrams, wiring diagrams, controls, weights, and other pertinent data. Provide, at a minimum, the detail provided in the Contract Documents. Prior to submittal for City's review, use all means necessary to fully coordinate all materials, including the following procedures:

1. Determine and verify all field dimensions and conditions, materials, catalog numbers, and similar data.
2. Coordinate as required with all trades and with all public agencies involved.
3. Secure all necessary approvals from public agencies and others and signify by stamp, or other means, that they have been secured.

The Contractor shall make all submittals far enough in advance of scheduled dates of installation to provide all required time for reviews, for securing necessary approvals, for possible revision and resubmittal, and for placing orders and securing delivery. In scheduling, allow at least seven (7) calendar days for the City's review, plus the transit time.

At least one copy of each submittal will be returned to the Contractor marked "No Exceptions Taken", "Make Corrections Noted", "Revise and Resubmit", or "Rejected." Submittals marked "No Exceptions Taken" or "Make Corrections Noted" need not be resubmitted, but the notes shall be followed. If a submittal is rejected, it will be marked to indicate what is unsatisfactory. Resubmit revised drawings or data as indicated, in number of copies specified above.

Approval of each submittal by the City will be general only and shall not be construed as:

1. Permitting any departure from the contract requirements.
2. Relieving the Contractor of the responsibility for any errors and omissions in details, dimensions, or of other nature that may exist.
3. Approving departures from additional details or instructions previously furnished by the City.
4. Relieving the Contractor from verifying all field conditions and dimensions.

Any submittals which are returned to the Contractor for resubmittal due to incompleteness or noncompliance more than once will cause additional review time and expense for the City of Rio Dell. The Contractor shall reimburse the City of Rio Dell for all costs associated with the third and subsequent review of any submittals. The City of Rio Dell reserves the right to deduct resubmittal review costs from amounts due the Contractor.

The contract is based on the materials, equipment, and methods described in the contract documents. Any proposed substitutions by the Contractor are subject to the City's approval. The City will consider proposals for substitution of materials, equipment, and methods only when such proposals are accompanied by full and complete technical data, and all other information required by the City to evaluate the proposed substitution. Requests for substitutions shall be accompanied by a cover letter stating the reason for the substitution and any cost difference between the specified and proposed material. Any deviations from the plans and specifications shall be clearly identified on the submittal.

Certificate of Compliance

Certificates of Compliance may be required for any material incorporated into the project at the City's sole discretion.

Form of Submittal

Before submitting materials, Contractor shall provide the City a proposed submittal form for the City's review and approval or the Contractor shall use the sample form designated by the City.

Contractor shall completely identify each submittal and re-submittal by using the form approved by the City's Representative and number submittals consecutively beginning with 1. Re-submittals shall retain the original number with an added suffix starting with "A." Said form shall include the name of the City's Representative and the Project Name. It shall also clearly indicate the Item Description, Manufacturer, Specification Section Reference and Drawing Sheet Number(s) Reference. All submittals shall be certified by the Contractor for completeness and for compliance with the contract documents with the following Certification:

I hereby certify that all material submitted has been checked for completeness, for correctness, and for compliance with the drawings and specifications, that field dimensions and conditions have been verified, and that exceptions, if any are clearly noted. Allow a 3" x 4" space on the form for the City's Submittal Stamp. Transmit all submittals to City's designated representative.

Measurement and Payment

When the bid schedule or Engineer's estimate does not contain a pay item for work shown in the plans or called for in the Contract Documents, no direct payment for work will be made, but the work will be considered paid under other contract items. Items of work or other services which the Contractor is required to supply, such as clean-up or other incidental items, and which are not listed as separate bid items shall be included in the related bid items and shall be considered as paid in those items, whether or not specifically identified in the descriptions. Also included in such contract costs are any costs associated with the repair of damage, which may occur to existing improvements as a result of these construction operations.

Unless otherwise specified, measurement for work is in place, complete, and accepted.

Except for final pay item quantities, the Engineer measures quantities for payment.

The contract price paid shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved as detailed in the Standard Specifications, these Special Provisions, and the plans. No additional compensation will be allowed therefor.

Final Pay Item Quantities

The City shows a bid item quantity as a final pay item for payment purposes only. For a final pay item, accept payment based on the Bid Item List quantity, regardless of actual quantity used unless dimensions are changed by the Engineer.

2.0 ORDER OF WORK AND PROGRESS SCHEDULE

- A. The first order of work will be for the Contractor to prepare and submit an As-Planned (Baseline) Schedule, Public Notifications, Traffic Control Plan, and Submittals, for review and acceptance by the City of Rio Dell.

The Contractor shall allow ten (10) working days each for the City's Representatives' review of the above submittals which will be counted concurrently if all items are submitted simultaneously.

No work may begin under the Contract until the Public Notices, Work Plan, Schedule, and Traffic Control Plan have been approved by the City. Time required for review and approval of these items shall not constitute a basis for Contract time extension.

- B. The second order of work shall be the distribution of approved public notices by the Contractor no later than 72 hours in advance of the work as noted on the plans and in accordance with the noticing requirements in the "Traffic Control," section and elsewhere in these Special Provisions. Public notification(s) shall be sent by the Contractor to all affected residents, utility companies, school districts, fire districts, US Postal Service, and police/sheriff directly involved in this project. Contractor shall provide a copy of the public notification distribution list to the City of Rio Dell for review and approval.
- C. The third order of work, prior to commencing work, shall include obtaining an Underground Service Alert (USA) utility locate.
- D. The fourth order of work shall include implementing traffic control devices.
- E. The fifth order of work shall include the installation of water pollution control BMP's.
- F. The sixth order of work shall include clearing and grubbing, the removing of existing asphalt pavement, striping and markings, and the demolition of existing concrete facilities.
- G. The seventh order of work shall include grading/excavation for new curbs, curb and gutters, sidewalks, curb ramps, driveways and the installation of storm drainage facilities.
- H. The eighth order of work shall include completing construction of curbs and gutters, sidewalks, curb ramps, and driveways.
- I. The ninth order of work shall include the preparation of asphalt concrete structural section including subgrade and base preparation, and placement of asphalt concrete pavement.
- J. The tenth order of work shall include placement of pavement markings, striping, markers and signage.
- K. The eleventh order or work shall include removal of traffic control.
- L. The twelfth order or work shall include removal of water pollution control BMP's. Additional traffic control may be necessary if this work takes place after the initial traffic control has been removed.

Measurement and Payment

Full compensation for complying with the above provisions shall be considered as included in the contract price for the various bid items and no separate payment will be made.

3.0 EXISTING FACILITIES

Attention is directed to 5-1.36D "Non-highway Facilities" of the Standard Specifications and these Special Provisions.

It is not the intent of the plans to show exact locations of existing utilities, and the City of Rio Dell assumes no responsibility therefor. The Contractor shall be responsible for verifying their actual location and depth in the field. Where excavation is anticipated, the Contractor shall notify Underground Service Alert at (800) 642-2444 prior to excavation. It should be understood that various utilities are indicated on the Plans to show only the approximate location and must be verified in the field by the Contractor. It may be expected that there will be variation in location from that as shown on the Plans to the actual location. Actual location can best be determined in the field after pre-marking by the various utilities affected. The various utilities will cooperate with the Contractor to endeavor to familiarize the Contractor with all known underground utilities obstructions, but this will not relieve the Contractor from assuming full responsibility in anticipating and locating their actual location with respect to utilities which the Contractor must locate and identify under the provisions hereof.

- A. Gas and Electric
PG&E provides the gas and electrical service in the project area. It should be noted that where overhead service to an existing structure does not exist, then underground power service shall be assumed to exist. PG&E can be contacted at (800) 743-5000.
- B. Telephone & Fiberoptic Lines
AT&T maintains telephone lines and fiberoptic lines in the project area. AT&T can be contacted at (707) 445-4069. Suddenlink Communication maintains fiberoptic lines in the project area. Suddenlink can be contacted at (877) 443-3127.
- C. Telephone
AT&T maintains telephone lines in the project area. AT&T can be contacted at (707) 445-4069.
- D. Cable Television
Suddenlink Communication maintains cable television lines in the project area. Suddenlink can be contacted at (877) 443-3127.
- E. Roads and Streets
The City of Rio Dell Public Works has jurisdiction over roads and streets within the public right-of-way. They may be contacted at (707) 764-3532.
- F. Sewer
The City of Rio Dell Public Works provides sanitary sewer facilities in the project area. They may be contacted at (707) 764-5754.
- G. Water
The City of Rio Dell Water Department supplies domestic water in the project area. They may be contacted at (707) 764-3532.

Measurement and Payment

Full compensation for protection of existing utility facilities shall be considered as included in the various bid items and no separate payment will be made.

4.0 HAZARDOUS WASTE AND CONTAMINATION

General

Attention is directed to the provisions in Section 14-11 "Hazardous Waste and Contamination", of the Standard Specifications, and these Special Provisions.

In accordance with Section 7104 of the State Public Contract Code, the Contractor shall promptly, and before the following conditions are disturbed, notify the City, in writing, of any: (i) material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law; (ii) Subsurface or latent physical conditions at the site differing from those indicated; or (iii) unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract. The City shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the Work shall issue a change order under the procedures described herein. In the event that a dispute arises between the City and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the Work, the Contractor shall not be excused from any scheduled completion date provided for herein, but shall proceed with all Work to be performed hereunder. The Contractor shall retain any and all rights provided

either by contract or by law which pertain to the resolution of disputes and protests between the City and Contractor.

Measurement and Payment

Notification and initial coordination with the City shall be considered as included in the various bid items and no separate payment will be made. If hazardous waste or contaminated material is found that requires disposal, a change order for the additional work will be issued in accordance with this contract.

5.0 PRESERVATION OF PROPERTY

General

Attention is directed to the provisions in Section 5-1.36 "Property and Facility Preservation", of the Standard Specifications, and these Special Provisions.

The Contractor will make a thorough investigation of the job site and size equipment accordingly. The Contractor shall select equipment to avoid damaging existing facilities, which include, but are not limited to: street paving, pipes, traffic controls, sidewalks, plants and trees, landscaping, curbs and gutters, retaining walls, drainage facilities, fencing etc. The Contractor shall restore any damage to the existing facilities to the satisfaction of the City or owner. Restoration costs shall be the sole responsibility of the Contractor and shall be at no cost to the City or Owner.

Measurement and Payment

Full compensation for complying with the above provisions shall be considered as included in the contract price for the various bid items and no separate payment will be made.

6.0 MOBILIZATION/DEMOBILIZATION

General

Mobilization and Demobilization shall consist of preparatory work and operations including, but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to the project site; for the establishment of all offices, buildings and other facilities necessary for work on the project; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site. Also included are final site cleanup, removal of all unused construction waste and demobilization of equipment from the site.

Measurement and Payment

Payment for Mobilization/Demobilization shall be made on a lump sum basis. This work covers all Contractor costs and effort associated with mobilizing equipment, materials, and labor to the project site as well as demobilization of same for both the base bid schedule and any additive bid schedules if awarded. Items covered by this include, but are not limited to, bonds, insurance, contracting and administrative costs, costs associated with temporary facilities and utilities, punch list items, repairs of damaged property, site cleanup, and project maintenance and warranty. Payment for mobilization/demobilization will be paid for as "Mobilization/Demobilization." Partial Payments will be made in accordance with the following:

Percent of Original Contract Amount Earned	Allowable Percentage of Lump Sum Price for the Item
5%	10%
10%	25%
25%	50%
50%	75%
75%	90%
100%	100% (Contract Acceptance)

7.0 TEMPORARY TRAFFIC CONTROL

General

The Contractor shall refer to the current California Manual of Uniform Traffic Control Devices, and shall furnish, erect, maintain and remove all necessary signs and devices during the length of this contract.

The applicable sections of Section 7-1.03 "Public Convenience", Section 7-1.04 "Public Safety", and Section 12, "Temporary Traffic Control", and Section 12-1.03 "Flagging Costs" regarding flagging costs are further revised to provide that all flaggers shall be provided by the Contractor at his expense. Flaggers shall be properly equipped and trained in accordance with "Instructions to Flaggers," published by the California Department of Transportation. Flaggers are expected to be required for the project.

The Contractor is responsible for developing and submitting to the City of Rio Dell a Traffic Control Plan for review and approval prior to commencement of construction activity.

Materials

Portable construction area signs shall comply Section 12-3.11B(3) of the Standard Specifications.

The base material of construction area signs shall be aluminum sheeting.

Construction

Maintaining Traffic

Public traffic shall be maintained on public roadways adjacent to the work, except during short temporary delays (5 minutes maximum closure) when proper signage and flagmen are provided as necessary to complete the work. Any road closures shall be approved in advance by the Engineer.

Contractor shall expedite the passage of public and private traffic through and around the work except as specified above. The Contractor shall furnish and install signs, detours, lights, flares, barricades, and shall furnish flagmen and other facilities for the convenience and direction of public traffic.

The contractor is responsible for site security and safety throughout the project and shall maintain appropriate barricades, K-rail and other features as needed to protect the work site and public safety.

All temporary signs and warning devices, including warning signs placed beyond the limit of work, shall be provided by the Contractor and shall become the Contractors property after completion of the contract.

Prior to the start of work, the Contractor shall provide the City of Rio Dell with a Traffic Control Plan. During the contract period, the Contractor shall coordinate their activities daily with the City of Rio Dell and make every effort to minimize the disruption of normal traffic and parking. Traffic Control Plan shall include temporary traffic control for pedestrian access around the work being performed. Alternative routes shall be provided for pedestrians when work affects existing facilities (e.g. sidewalks, curb ramps, etc.). Multiple curb ramps at single intersection shall not be demolished and/or removed unless an alternative route (detour) is provided.

The Contractor shall post temporary NO PARKING signs as described in the "GENERAL" section of these Special Provisions. Written notice shall be approved by the City prior to any posting. It shall be the responsibility of the Contractor to maintain signs and barricades overnight and on weekends and until the completion of the contract. It will be the responsibility of the Contractor to arrange for the towing and removal of any vehicles which have not been removed by the owner and which interfere with any operations

At the end of any working day when work operations have obscured existing traffic striping, the striping shall be restored via reflective painting, markers or other interim materials subject to the approval of the City of Rio Dell.

At the end of each day's work, and at other times when construction operations are suspended, all equipment and other obstructions shall be removed from that portion of roadway open for use by public traffic.

If any component in the traffic control system is displaced, or ceases to operate or function as specified, from any cause, during the progress of the work, the Contractor shall immediately repair said component to its original condition or replace said component and shall restore the component to its original location.

Public Convenience

Contractor shall conduct his operation as to offer the least possible obstruction and inconvenience to the public, and he shall have under construction no greater amount of work than he can prosecute properly with due respect to the rights of the public. The contractor shall notify all affected parties a minimum of two weeks prior to any road or driveway closures.

The Contractor shall provide pedestrian access to homes/residences at all times. The Contractor shall be prepared to remove closures and provide emergency vehicle access at all times. The Contractor will not be entitled to compensation for the delays of work resulting from a closure needing to be opened in order to provide emergency vehicle access.

Personal vehicles of the Contractor's employees shall not be parked on the traveled way or shoulders including sections closed to public traffic.

During approved lane closure using flaggers, all side streets within the closure area shall have flaggers to control traffic. The use of stationary signs to control traffic on side streets with the closure are shall not be permitted.

Detours

Under no circumstances shall traffic on any street be held up more than five minutes at any one time. The contractor may coordinate with property and business owners to schedule work so that longer delays do not adversely affect residents or business owners to their satisfaction. In addition, Contractor shall give personal notice to all affected property owners as specified above under Public Convenience. Before closing any street to through traffic, Contractor shall obtain prior approval from the Engineer 7 calendar days in advance of closure. Contractor shall at all times provide access to public facilities such as schools, etc. and make provisions for passage of emergency vehicles. Pedestrian detours shall follow the requirements of accessible pedestrian routes per the California MUTCD.

Measurement and Payment

Measurement and payment for this item shall be on a lump sum basis. The contract price shall include full compensation for furnishing all labor (including flagging costs), materials, tools, equipment, and incidentals, and for doing all the work involved including but not limited to: notifications, placing, removing, storing, maintaining, moving to new locations, replacing, and disposing of the components of the traffic control system as shown on the plans, including portable construction area signs, as specified in the Standard Specifications and these Special Provisions, and as directed by the City's Representative. Payment for temporary traffic control shall be paid for as "Traffic Control." Partial Payments will be made therefore in accordance with the following:

Percent of Original Contract Amount Earned	Allowable Percentage of Lump Sum Price for the Item
5%	10%
10%	25%
25%	50%
50%	75%
75%	90%
100%	100% (Contract Acceptance)

8.0 DUST CONTROL

General

Dust control shall conform to the provisions in Section 14-11.04, "Dust Control" of the Standard Specifications and these Special Provisions.

Construction

The following on-site mitigation measures shall be implemented for the duration of clearing and grubbing, demolition, excavation, concrete and paving activities to control dust:

1. Trucks hauling dirt or other loose materials that exceed the top of the sides of the bed shall be covered.
2. A water truck shall be available as needed to prevent a dust nuisance or as directed by the City's Representative.

This list is not inclusive and Contractor is responsible and liable for controlling dust at all times from all activities in the project area.

Measurement and Payment

Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

9.0 DEMOLITION OF EXISTING FACILITIES, REMOVAL OF CONCRETE AND ASPHALT CONCRETE SURFACING

General

The work performed in connection with various existing facilities shall conform to the provisions in Section 15, "Existing Facilities," of the Standard Specifications and these Special Provisions.

Construction

Prior to removing concrete and asphalt surfacing, all utility covers shall be marked and identified to avoid causing damage to the lid or frame. Contractor will be responsible for maintaining any temporary asphalt fill material over these facilities until the final paving surface is installed.

If asphalt concrete has not been placed to the level of existing pavement before the pavement is to be opened to public traffic a temporary asphalt concrete taper shall be constructed. Asphalt concrete for temporary tapers shall be placed to the level of the existing pavement and tapered on a slope of 1:200 (Vertical: Horizontal) or flatter to the level of the planed area.

All material removed shall be considered the property of the Contractor and shall be removed and disposed of in accordance all applicable laws at the Contractor's expense.

The material planed or removed from the roadway surface, including material deposited in existing gutters or on the adjacent traveled way, shall be disposed of in accordance with the Standard Specifications and applicable regulations. Before disposing material on non-City property, the Contractor shall obtain any required legal permissions from property owner.

The Contractor shall take all necessary measures to avoid the dispersion of dust. Attention is directed to Section 14-11.04, "Dust Control" of the Standard Specifications and these Special Provisions.

Existing concrete structures, drainage inlets, pipe culverts, waterlines, signs, posts, striping, markings, pavement markers, and other miscellaneous items where specified on the plans shall be removed and disposed or salvaged, in accordance with the provisions of Section 15 of the Standard Specifications.

All material removed shall be considered the property of the Contractor and shall be removed and disposed of in accordance all applicable laws at the Contractor's expense. Demolished materials shall be disposed of outside the right of way in accordance with the Standard Specifications and applicable regulations. Before disposing material on non-City property, the Contractor shall obtain any required legal permissions from property owner. The Contractor shall restore at their expense all landscaping including sod, irrigation lines, miscellaneous concrete and/or other item of work to preconstruction status, in like kind or better, damaged by their operations.

Measurement and Payment

Measurement and payment for demolition of existing facilities shall include furnishing all labor, materials, tools, equipment and incidentals for doing all the work involved in removing, disposing and salvaging concrete structures, drainage inlets, sewer line, sewer vaults/manholes, pipe culverts, waterlines, water valves, signs, posts, striping, markings, pavement markers, and other miscellaneous items where specified on the plans including necessary sawcut, as specified herein and in the Standard Specifications and as directed by the City's Representative. Payment for demolition of existing facilities shall be on a lump sum basis and will be paid for as "Miscellaneous Demolition and Removal". No additional allowance will be made unless the dimensions as shown on the plans are changed by the City's Representative.

10.0 COLD PLANE ASPHALT CONCRETE

General

Existing asphalt concrete pavement shall be cold planed at the locations and to the dimensions shown on the plans and shall conform to the provisions in Section 15 "Existing Facilities."

Cold planing shall include all work necessary to remove existing asphalt to a predetermined depth as indicated on the drawings or these specifications.

Planing asphalt concrete pavement shall be performed by the cold planing method. Planing of the asphalt concrete pavement shall not be done by the heater planing method.

The machine used for planing shall have performed satisfactorily on similar work and shall meet the following requirements herein.

The planing machine shall be specifically designed and built for the planing of bituminous pavements without the addition of heat. Cold planing machines shall be equipped with a cutter head not less than 30 inches in width and shall be operated so that no fumes, dust or smoke will be produced.

The machine shall be capable of removing the paving material next to curbs or gutters and be designed such that the operator thereof can at all times observe the planning operation without leaving the controls.

Construction

Prior to cold planing, on streets to have a uniform depth of the existing surface removed, all utility covers shall be lowered such that the cutting teeth of the planing machine passes over the adjusted lid without causing damage to the lid or frame. Contractor will be responsible for maintaining any temporary asphalt fill material over these facilities until the final paving surface is installed. The Contractor shall clearly mark or reference lowered utility covers in case emergency access is required by the agency responsible for operation of the utility system.

The depth, width, and shape of the cut shall be as shown on the typical cross sections or as designated by the City's Representative. The final cut shall result in a uniform surface conforming to the typical cross sections. The outside lines of the planed area shall be neat and uniform. Planing asphalt concrete pavement operations shall be performed without damage to the surfacing to remain in place.

Planned widths of pavement shall be continuous except for intersections at cross streets where the planing shall be carried around the corners and through the conform lines. Following planing operations, a drop-off of more than 0.15-foot will not be allowed between adjacent lanes open to public traffic.

Pavement to be cold planed may contain existing pavement fabric.

Where transverse joints are planed in the pavement at conform lines no drop-off shall remain between the existing pavement and the planed area when the pavement is opened to public traffic. If asphalt concrete has not been placed to the level of existing pavement before the pavement is to be opened to public traffic a temporary asphalt concrete taper shall be constructed. Asphalt concrete for temporary tapers shall be placed to the level of the existing pavement and tapered on a slope of 1:200 (Vertical: Horizontal) or flatter to the level of the planed area.

During the cold planing operation, the Contractor shall sweep the roadway with mechanical equipment and remove all loosened material from the project site until completion of the removal work. In addition to removing the cold planned asphalt concrete, the Contractor shall remove any slurry seal or asphalt concrete which is adhered to the top of the adjacent gutter or cross gutter.

The material planed from the roadway surface, including material deposited in existing gutters or on the adjacent traveled way, shall be disposed of in accordance with the Standard Specifications and applicable regulations. Before disposing material on non-City property, the Contractor shall obtain any required legal permissions from property owner. Removal operations of cold planed material shall be concurrent with planing operations and follow within 50 feet of the planer, unless otherwise directed by the City's Representative.

The Contractor shall take all necessary measures to avoid the dispersion of dust. Attention is directed to Section 14-11.04, "Dust Control" of the Standard Specifications and these Special Provisions.

Asphalt concrete for temporary tapers shall be commercial quality and may be spread and compacted by any method that will produce a smooth riding surface. Temporary asphalt concrete tapers shall be completely removed, including the removal of loose material from the underlying surface, before placing the permanent surfacing. The removed material shall be disposed of in accordance with the Standard Specifications and applicable regulations. Before disposing material on non-City property, the Contractor shall obtain any required legal permissions from property owner.

Operations shall be scheduled so that not more than seven (7) calendar days shall elapse between the time when transverse joints are planed in the pavement at the conform lines and the permanent surfacing is placed at the conform lines.

Measurement and Payment

Cold plane asphalt concrete pavement to the depth shown on the plans will be measured based on a square yard basis. The quantity to be paid for will be the actual area of surface cold planed irrespective of the number of passes required to obtain the depth shown on the plans. The contract price paid per square yard for cold plane asphalt concrete pavement shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in cold planing asphalt concrete surfacing and disposing of planed material, including removing and disposing of existing pavement markings and pavement markers, and furnishing the asphalt concrete for constructing, maintaining, removing, and disposing of temporary asphalt concrete tapers, as specified in the Standard Specifications and these Special Provisions and as directed by the City's Representative. Payment for cold planning asphalt concrete shall be paid for as "Cold Plane Asphalt Concrete".

11.0 EARTHWORK

General

Earthwork shall conform to the provisions in Section 19-2 "Roadway Excavation" and Section 19-6 "Embankment Construction" of Section 19 "Earthwork," of the Standard Specifications and these special provisions. Earthwork activities should be conducted during dry-weather conditions only, unless approved in advance by the City.

Materials

Embankment material shall be from excavations or from local sources on the jobsite. Imported borrow shall comply with Section 19-7 "Borrow Material" of the Standard Specifications.

Imported topsoil (sidewalk backfill) shall consist of fertile, friable soil of loamy character that contains organic matter in amounts natural to the region and be capable of sustaining healthy plant life. Imported topsoil must be free from deleterious substances such as litter, refuse, toxic waste, stones larger than ½ inch in size, coarse sand, heavy or stiff clay, brush, sticks, grasses, roots, weeds, and other substances detrimental to plant, animal, and human health.

Construction

Earthwork consist of all excavation (cut) and embankment (fill) necessary for the grading and construction of curbs, gutters, sidewalks, driveways, curb ramps roads, trails, staging area connections, slope rounding, benching, planters, rain gardens, and ditches regardless of the nature or characteristics of material encountered during construction. Work also includes the removal of existing sub-base and base as well as subgrade preparation.

The upper 6 inches of subgrade shall be scarified and recompact to a minimum of 95 percent relative compaction.

In addition to required testing, the City's Representative may require the Contractor to demonstrate compliance with subgrade requirements by proof rolling (in addition to compaction testing), which shall be conducted with a fully loaded 10 yard dump truck with a minimum rear axle load of 8 tons or equivalent. The subgrade surface should provide a firm and unyielding surface under the load of the dump truck. Unsuitable soils identified during proof rolling shall be removed and replaced in accordance with this section.

Embankment (fill) construction includes:

1. Preparing areas to receive embankment material
2. Placing and compacting embankment material including:
 - a. Suitable material within roadway areas where unsuitable material has been removed
 - b. Material in holes, pits, and other depressions within the roadway and trail areas

All embankment fill material shall be compacted to a minimum of 90 percent of the maximum dry density except for the upper 6" beneath a concrete or asphalt surface. This material shall be compacted to a minimum of 95 percent. Fill should be placed in loose lifts (less than approximately 8-inches-thick) on a prepared subgrade.

Unrestrained cutslopes should be sloped at 2:1 (Horizontal:Vertical) or flatter.

Before disposing of any excess material, the Contractor shall obtain any required legal permissions from property owner.

Curbs (excluding warning curbs), sidewalks, driveways and curb ramps shall be backfilled to within 2 inches of finished walking surface grade. The top 3 inches of backfill material shall be loosely compacted import topsoil. Topsoil shall be hydroseeded per these Special Provisions.

Measurement and Payment

The lump sum price paid shall be considered full compensation for furnishing all labor, materials (including import borrow and import topsoil), tools, equipment, transportation, and incidentals; and for performing placement, compaction, and all of the work involved as detailed in the Standard Specifications, these Special Provisions, and the plans. Payment of excavation and embankment shall be paid for as "Earthwork."

12.0 AGGREGATE BASE**General**

This work shall consist of furnishing, grading, and compacting aggregate base for gravel access driveways and for shoulder backing where called for in the plans and these Special Provisions.

Materials

Aggregate base shall conform to Subsection 26-1.02B, "Class 2 Aggregate Base", of the Standard Specifications. The grading shall be as indicated on the plans, or as directed by the City's Representative.

Construction

Grading shall comply with the requirements of Section 19, "Earthwork", of the Standard Specifications, and these Special Provisions. During any grading operations, the Contractor is specifically directed to "Preservation of Property" of these Special Provisions. The Contractor shall protect any items, facilities, or improvements, as necessary, in order to avoid causing damage.

Measurement and Payment

Measurement for Aggregate Base shall be based on the lines and grades shown on the plans, furnished and compacted in-place. Payment of Aggregate Base shall be paid on a cubic yard basis. The above contract unit cost shall be considered full compensation for furnishing all labor, materials, tools, equipment, transportation, and incidentals; and for performing placement, compaction, and all of the work involved as detailed in the Standard Specifications, these Special Provisions, and the plans.

Payment for aggregate base within the roadway structural asphalt paving sections shall be paid for as "Class II Aggregate Base" and quantities shall be final pay quantities stated in the Bid Schedule. No additional allowance will be made unless the dimensions as shown on the plans are changed by the City's Representative.

Aggregate base used for drain inlets, junction boxes, trench backfill, base for minor concrete items, and other structures will not be paid directly but will be considered paid under their respective contract items.

13.0 ADJUST UTILITY AND MANHOLE COVERS TO GRADE**General**

This work shall consist of raising or adjusting existing water meter boxes, sewer manhole covers, utility valve covers and cleanouts to the finished grade (of the resurfaced asphalt pavement, new concrete or vegetated areas) and shall conform to the provisions in Section 15 "Existing Facilities" of the Standard Specifications, these Special Provisions, the plans, and as directed by the City's Representative.

Materials

Contractor to provide new utility boxes and covers if existing box/cover is damaged or cannot be salvaged and reused.

New materials shall be in accordance with local standards.

Aggregate Base shall conform to Aggregate Base, of these Special Provisions.

Concrete used to adjust utility covers to grade shall conform to Minor Concrete, of these Special Provisions.

Construction

Unless specifically allowed by the City's Representative, grade rings shall not be used to adjust utility covers.

The Contractor shall properly locate and mark all existing facilities to be raised in advance of paving operation. The Contractor shall adjust all boxes in advance of concrete operations.

Care shall be taken to keep frames and covers clean. The Contractor shall completely protect with heavy plastic or other suitable material all utility covers or other items which are visible on the surface and will be covered by their operations. This shall be completed prior to the start of operations and approved by the City's Representative. Any materials that adhere to the frames and covers shall be removed.

Contractor shall exercise care during the work of lowering and raising covers to avoid any construction debris from entering into the manhole chamber. Any material which enters the manhole or connecting pipes shall be removed at the expense of the Contractor to the satisfaction of the City. In the event that a problem is reported, Contractor shall have on hand the necessary equipment and manpower, including traffic control devices and crew if deemed necessary, to open lids that are requested for review by the City's Representative, at no additional cost to the City.

Facilities damaged by the Contractor shall be replaced at the Contractor's expense. Facilities (box and lid or frame and cover) found existing in a damaged condition, and reported to the City's Representative before disturbing, shall be replaced by the Contractor with materials furnished by the Owner.

The surface of the adjusted facilities shall be true to the new pavement or concrete surface to within one-eighth (1/8") inch deviation. This tolerance shall apply in a single direction only, either up or down. In addition, the adjusted facility shall not vary to the high tolerance on one side and the low tolerance on the other (i.e., the total aggregate tolerance on both sides shall be limited to the 1/8"-inch variation). This variation shall apply to the adjacent patch paving around the facility as well such that neither the paving nor facility vary by more than the stated tolerances.

All facilities shall be adjusted to finish grade within 48 hours after the placement of the final surface paving. If several lifts of pavement are to be placed, the facilities shall be raised if the paving operation ceases for more than 48 hours.

Measurement and Payment

Measurement for Adjust Utility and Manhole Cover to Grade shall be on a unit basis for each unit adjusted. The above contract unit cost shall be considered full compensation for furnishing all labor, materials, tools, equipment, transportation, and incidentals; and for performing all of the work involved as detailed in the Standard Specifications, these Special Provisions, and the plans and typical sections. Payment for adjust utility and manhole cover to grade shall be paid for as "Adjust Utility Cover to Grade" and "Adjust Existing Manhole Cover to Grade."

14.0 STORM DRAIN INLETS

General

This work shall consist of modifications to existing storm drain inlets where called for in the plans and these Special Provisions.

Materials

Storm Drain Inlets shall be precast concrete, with minimum 4-inch thick walls, and 6-inch thick bottom or as specified on the plans. Storm Drain Inlets shall conform to the provisions of Section 70 "Miscellaneous

Drainage Facilities" and these Special Provisions. Modify Storm Drain inlets to be cast-in-place where called for in the plans.

Flat grates for Storm Drain Inlets, unless notes otherwise on the plans, shall be galvanized steel, ADA compliant, Bicycle proof, with H-20 loading.

Construction

Excavation and embankment operations shall comply with the manufacturer's recommendations and the requirements of Section 19, "Earthwork", of the Standard Specifications. During any excavation and backfilling operations, the Contractor is specifically directed to "Preservation of Property" of these Special Provisions. The Contractor shall protect any items, facilities, or improvements, as necessary, in order to avoid causing damage.

Measurement and Payment

Measurement and payment for modifications to existing storm drain inlets shall be paid on a unit cost basis as identified in the Bid Schedule and specified below:

- Drainage inlet modifications will be measured and paid for on a unit basis for each inlet modified, complete and in place. Payment for inlet modifications shall be paid for as "Modify Storm Drain Inlet" and "Drainage Inlet Grate Replacement".

The above contract unit cost shall be considered full compensation for all work involved including, but not limited to lay out, measuring and evaluating existing or new pipes to determine the final dimensions and alignment, excavation, subgrade preparation, bedding, backfill, aggregate base, compaction, concrete, connection of piping, frames and grates, and site cleanup. This item covers all labor, materials, tools, equipment, transportation, and incidentals; and other expenses to provide a finished product and all of the work involved as detailed in the Standard Specifications, these Special Provisions, and the plans.

15.0 STORM DRAIN PIPE AND STRUCTURES

General

This work shall consist of furnishing and installing new storm drain pipe and drainage inlets where called for in the plans and these Special Provisions.

Materials

Prior to ordering storm drainage inlets, catch basins or pipes, Contractor shall pothole to verify depth and location of existing underground utilities which may affect the depth and location of new storm drainage facilities.

HDPE storm drain pipe shall be corrugated HDPE pipe, dual wall, smooth interior wall with annular exterior corrugations and shall conform to the provisions of Section 64, Plastic Pipe of the Standard Specifications. Pipe shall be joined using a bell & spigot joint meeting ASTM F2648. The joint shall be soil-tight and gaskets, when applicable, shall meet the requirements of ASTM F477. Gaskets shall be installed by the pipe manufacturer and covered with a removable wrap to ensure the gasket is free from debris. A joint lubricant supplied by the manufacturer shall be used on the gasket and bell during assembly.

Drainage inlets shall be precast concrete, with minimum 4-inch thick walls, and 6-inch thick bottom or as specified on the plans. Storm Drain Inlets shall conform to the provisions of Section 70 "Miscellaneous Drainage Facilities" and these Special Provisions. Flat grates for Storm Drain Inlets, unless notes otherwise on the plans, shall be galvanized steel, ADA compliant, Bicycle proof, with H-20 loading.

Construction

Excavation and embankment operations shall comply with the requirements of Section 19, "Earthwork", of the Standard Specifications. During any excavation and backfilling operations, the Contractor is

specifically directed to "Preservation of Property" of these Special Provisions. The Contractor shall protect any items, facilities, or improvements, as necessary, in order to avoid causing damage.

Place bedding material at trench bottom, level materials in continuous layer. No pipe shall be laid until the trench subgrade and bedding have been inspected and approved. Laying of lines shall begin at the lowest point in the direction of flow. All piping, fittings, and accessories shall be assembled per manufacturer's recommendations. Pipe deflections shall be kept to a minimum, any deflection in piping shall be per manufacturer's requirements. Before lowering pipe into the trench, the pipe shall be inspected. Cracked, chipped, broken, or otherwise defective pipe will be rejected and removed from the job site. Where sewer lines are being crossed, pipelines of 20 foot lengths shall be used with the length centered to provide 10 feet of distance from the sewer line to the nearest joint.

Drainage inlets and other structures shall be placed as shown on the plans. Drainage inlet units shall be installed on a minimum 6" pad of level class II aggregate base. Wall sides to be plumb. Establish elevations and pipe inverts for inlets and outlets as indicated on plans. All penetrations and joints shall be grouted smooth. The catch basin rim elevations shall be installed within the tolerance of +0.00' and -0.10' from the rim elevations shown on the plans. The finish grade around the catch basin inlet must slope to drain storm water into the catch basin, refer to the grading plan. No depressions resulting in the ponding of water will be permitted adjacent to the catch basin grate.

Protect drainage inlet, pipe, and aggregate cover from damage or displacement until backfilling operation is in progress. Take care not to damage or displace installed pipe and joints during construction of pipe supports, backfilling, testing, and other operations. Repair or replace pipe that is damaged or displaced from construction operations.

Connect new pipe to existing storm drain catch basins, manhole or other structures at the locations shown on the plans. Remove only enough material from the existing structure as necessary to accommodate the new pipe. Grout gap around pipe penetration to form a smooth and watertight seal.

Modify existing structures as called for on the plans.

Measurement and Payment

Measurement and payment for Storm Drain Pipe and Structure items shall be paid on a unit cost basis as identified in the Bid Schedule and specified below:

- New storm drain pipe required for the completed installation of the storm drainage system will be measured and paid for on a unit basis for the lineal foot of installed, complete and in place storm drain pipe. Payment for new storm piping shall be paid for as "6" Corrugated Drain Pipe," "12" HDPE Pipe," and "18" CMP."
- Drainage Inlets will be measured and paid on a unit basis for each assembly installed, complete and in place. Payment for new storm drain catch basins shall be paid for as "New Drainage Inlet, G1 Type," or "New Drainage Inlet, Jensen Type."

The above contract unit cost shall be considered full compensation for laying out the drainage inlets, measuring and evaluating existing or new pipes to determine the final dimensions and alignment, excavation, subgrade preparation, bedding, backfill, aggregate base, compaction, concrete, connection of piping, frames and grates, and site cleanup. This item covers all labor, materials, tools, equipment, transportation, and incidentals; and other expenses to provide a finished product and all of the work involved as detailed in the Standard Specifications, these Special Provisions, and the plans.

16.0 SANITARY UTILITY SEWERAGE PIPING

General

This work shall consist of adding sanitary sewer utility piping and shall conform to the Design and Construction Standards for Sanitation Facilities City of Arcata Sanitation District (September 2013), these Special Provisions, the plans, and as directed by the City of Arcata's Representative

Materials

Gravity Sewer Pipe (Solid Wall) shall meet ASTM D3034, SDR 35, Polyvinylchloride (PVC) material, inside nominal diameter as indicated on the Drawings, bell and spigot style rubber ring sealed gasket joint. Joints shall meet ASTM F477, for elastomeric gaskets.

Construction

- A. Lay pipes true to line and grade. Gravity flow sewer shall be laid with bells facing upgrade.
- B. Do not lay pipe on unstable material, in wet trench or when trench and weather conditions are unsuitable for the work.
- C. Support pipe on compacted bedding material. Excavate bell holes only large enough to properly make the joint.
- D. Inspect pipes and fittings, for defects before installation. Defective materials shall be plainly marked and removed from the site. Cut pipe shall have smooth regular ends at right angles to axis of pipe.
- E. Clean interior of all pipe thoroughly before installation. When work is not in progress, open ends of pipe shall be closed securely to prevent entrance of storm water, dirt or other substances.
- F. Lower pipe into trench carefully and bring to proper line, grade, and joint. After jointing, interior of each pipe shall be thoroughly wiped or swabbed to remove any dirt, trash or excess jointing materials.
- G. Do not lay sewer pipe in same trench with another pipe or other utility, unless noted otherwise on the Drawings. Sanitary sewers shall cross at least 1 foot below water lines.
- H. Do not walk on pipe in trenches until covered by layers of bedding or backfill material to a depth of 12 inches over the crown of the pipe.
- I. Warning tape shall be continuously placed 12 inches above sewer pipe
- J. Install tracer wire on pipe and attach at minimum 5-foot intervals using approved tape or other attachment method. The tracer wire shall be installed so that electrical continuity is maintained throughout the pipe system. As few connections as possible shall be made in the tracer wire. Connections will be made by stripping the insulation back one inch and joining the two ends using an approved mechanical connector and a split bolt connector. Twisting of copper wire will not be acceptable. To complete this connection, wrap all exposed wire thoroughly with electrical tape. A minimum 2 foot of additional tracer wire will be coiled, buried and terminate at the ends of the pipeline, inside cleanouts and other boxes. Of the 2-foot tracer wire section at the ends of the pipeline, one foot of insulation will be stripped back, prior to burial.
- K. All abandoned sewer lines shall be plugged with concrete and abandoned in-place.
- L. The Contractor shall comply with all OSHA confined space requirements while working within existing manholes and structures.

- M. When the limit of the abandonment terminates in an existing manhole to remain, the flow line in the bench of the manhole to the abandoned line shall be filled with concrete and shaped to maintain the flowline of the lines to remain.
- N. Testing of sanitary sewer piping shall conform to the following requirements
1. All sewer mains and laterals shall be cleaned and free of debris by means of an approved method, such as rubber ball washed through or hydro-cleaner, prior to tests for leakage and deflection.
 2. Pipe Deflection Test: Pipe deflection shall be tested by use of a steel mandrel.
 - a) Polyvinyl chloride (PVC) sewers shall be tested for deflection after final backfill and compaction has been completed, but before paving is placed. A rigid mandrel having an outside diameter of 95% of the "average inside diameter" of the pipe, as defined in ASTM D 3034, shall be pulled through the pipeline. The minimum length of the circular portion of the mandrel shall be equal to the nominal diameter of the pipe.
 - b) If the mandrel does not pass freely through the pipe, the pipe shall be re-excavated, bedded and backfilled to adequately support the pipe and reduce the deflection to 5% or less of the average inside diameter of the pipe. The pipeline shall then be retested for both leakage and deflection.
 - c) Should tests performed by the Owner, within one year of the original testing and acceptance, show deflection in excess of 7.5% of the average inside diameter of the pipe, the contractor shall re-excavate, bed and backfill the pipe to provide adequate support and reduce the deflection to 5% or less. The pipeline shall be retested for deflection. The contractor shall reimburse the Owner's cost of testing for all lines which require repair.
 3. Pipe Leak Test: Sewer mains and laterals shall be tested for leakage (exfiltration) by the use of a low-pressure air test or a hydrostatic test. Contractor shall provide all materials and equipment to perform the leak test.
 - a) All testing is to be conducted after backfilling, prior to resurfacing and after service connections are made.
 - b) Exfiltration Test Using Water:
 - (1) A minimum head of six feet (6') of water above the crown at the upper end of the test section shall be maintained for a period of four (4) hours during which time it will be presumed that full absorption of the pipe body has taken place and thereafter for a further period of one (1) hour for the actual test of leakage. During this one-hour period, the measured loss shall not exceed the rate of fifty (50) gallons per inch diameter per mile per twenty-four (24) hours.
 - (2) The maximum length of sanitary sewer for the above allowable leakage test shall be one thousand feet (1,000'). If it is not apparent that leakage test results between any two (2) manholes is satisfactory, then the Engineer may require subsequent tests to establish the more exact location of the leakage areas. Any section of sanitary sewer between any two (2) manholes that does not meet the above requirements shall be rejected and the Contractor, at his expense, shall make the necessary repairs to the sanitary sewer to meet the requirements, and shall make subsequent tests after repairs to assure compliance with the Specifications.

Measurement and Payment

Measurement and payment for this item shall be paid on a unit basis for the lineal foot of installed, complete and in place sanitary sewer pipe. The contract unit cost shall be considered full compensation for laying out the sewer line, measuring and evaluating existing or new pipes to determine the final dimensions and alignment, excavation, subgrade preparation, bedding, backfill, aggregate base, compaction, concrete, abandonment of existing lines, connection of piping to existing lines and/or manholes, and site cleanup. This item covers all labor, materials, tools, equipment, transportation, and incidentals; and other expenses to provide a finished product and all of the work involved as detailed in the Standard Specifications, these Special Provisions, and the plans.

17.0 MINOR CONCRETE**General**

Minor Concrete shall conform to the provisions of Section 51-7 "Minor Structures", Section 90-2 "Minor Concrete", Section 73 "Concrete Curbs and Sidewalks", Section 52 "Reinforcement", all of the Standard Specifications, and applicable portions of these Special Provisions.

Concrete curbs, gutters, curb ramps, sidewalks, median noses, driveways, and driveway conforms shall conform to Section 73 "Concrete Curbs and Sidewalks" of the Caltrans Standard Specifications.

Materials

Concrete shall be minor concrete conform to the provisions of Section 90-2 of the Standard Specifications and these Special Provisions.

Admixtures shall comply with the provisions of Section 90-1.02E of the Standard Specifications.

Reinforcement steel shall conform to the provisions in Section 52, "Reinforcement," of the Standard Specifications and these Special Provisions.

Class 2 aggregate base shall conform to Section 26-1.02B of the Standards Specifications.

Drilling and bonding of reinforcement into existing concrete shall conform to the provisions in Section 51-1.03E(3), "Drill and Bond Dowels" of the Standard Specifications and these Special Provisions.

Construction

The Contractor shall protect existing facilities from damage, and discoloration from concrete splash. Adjacent concrete facilities shall be covered during concrete placement to prevent concrete splash and excess concrete from staining the adjacent concrete. After initial placement, strikeoff and finishing, the protection shall be removed and the adjacent concrete cleaned.

After the subgrade is prepared, moisture conditioned, and compacted to the relative compaction shown in the plans, the Contractor shall continuously maintain the subgrade in a uniform condition at the moisture content obtained during subgrade compaction until the concrete is placed.

The maximum variation from design elevation shall not exceed +/- 0.02 feet. In some instances, particularly in critical drainage areas, tolerances may be reduced to zero.

Concrete facilities shall be installed to maintain or provide positive drainage. The ponding of water in excess of 1/8" will not be allowed. Concrete placed that results in the ponding of water in excess of 1/8" shall be removed and replaced at Contractors expense. At City's request, Contractor shall provide and apply sufficient water to concrete pavement to determine whether pavement provides adequate surface drainage.

In general, adding water to the surface of the concrete to assist in finishing operations shall not be permitted.

Before final finishing is completed and before the concrete has taken its initial set, the edges shall be carefully finished with the radius shown on the plans or a radius to match the existing construction.

Concrete shall be thoroughly consolidated against and along the faces of all forms and adjacent concrete. After the forms are removed, excess concrete below the form surface shall be removed to be flush with the form face.

The Contractor shall always have materials available to protect the surface of the fresh concrete against rain. These materials shall consist of burlap, curing paper, or plastic sheeting. If plastic sheeting is used, it shall not be allowed to contact finished concrete surfaces.

The Contractor shall also protect the concrete against damage from traffic and vandalism. If the concrete is damaged or vandalized, the Contractor shall make the necessary repairs at its own expense. The repair procedure for damaged or vandalized concrete shall be approved in advance by the City's Representative. Grinding the surface of vandalized concrete will not be considered an approved method of repair.

Concrete shall be cured by protecting it against loss of moisture, rapid temperature change, and mechanical injury. The concrete shall be allowed to cure for 72 hours prior to placing adjacent asphalt concrete.

After the concrete is placed, cured, and the forms have been removed, the Contractor shall clean the site of all concrete and forming debris. Any gaps remaining between the new curbs, gutters, driveways, etc., shall be filled with full depth hot mix asphalt concrete. The total thickness of the restored pavement shall match that of the existing pavement.

Concrete smoothness test may be required at City's sole discretion. Test and correct both high and low points as determined by a straightedge. A 12-foot straightedge shall be used to determine deficiencies parallel to the direction of travel and shall not exceed 3/8 of an inch. A 4-foot straightedge shall be used to determine deficiencies perpendicular to the direction of travel and shall not exceed 1/4 of an inch. The smoothness test results shall be independent of any grade requirements. Acceptance of smoothness test does not necessarily guarantee final acceptance.

Curbs (excluding warning curbs), sidewalks, driveways and curb ramps shall be backfilled to within 2 inches of finished walking surface grade. The top 3 inches of backfill material shall be loosely compacted import topsoil. Topsoil shall be hydroseeded per these Special Provisions.

Measurement and Payment

Measurement and payment for minor concrete shall be paid on a unit cost basis as identified in the Bid Schedule and specified below:

- Vertical curbs, warning curbs, valley gutter, and curb and gutter will be measured and paid on a lineal foot basis measured along the top or flowline of curb. Payment shall include incidental items associated with curbs including but, not limited to curb cuts, saw cutting and 12" wide AC edge patch.
- Sidewalks (including retaining curbs) will be measured and paid on the square foot basis.
- Curb ramps (including curb and gutter transitions/drop curbs and retaining curbs), Driveways (including curb and gutter transitions/drop curbs and retaining curbs) and concrete Driveway Conforms (including retaining curbs) will be measured and paid on the square foot basis.

All work shall be performed as shown on the plans and described here. The price paid shall be considered full compensation for furnishing all labor, materials and equipment necessary to complete the work, including but not limited to: layout of forms, aggregate base grading and compaction, concrete and concrete placement and finishing, curing of concrete, striping of forms, site and area cleanup, disposal of waste material and waste concrete, and all other work necessary for completion of minor concrete work.

No additional compensation will be allowed therefor. Payment for minor concrete shall be paid for under the respective payment items for "Minor Concrete."

Pedestrian facilities are required to comply with the Americans with Disabilities Act (ADA). Actual field conditions and/or contractor construction methods may affect compliant construction. If questions arise, the contractor shall notify the project engineer, the Owner or their representative before the affected work is performed. Installation of permanent pedestrian facilities will be inspected using standard measurement tools and practices in accordance with the State of California Department of Transportation's Permanent Pedestrian Facilities ADA Compliance Handbook, which can be found at: [http://www.dot.ca.gov/construction/docs/Permanent Pedestrian Facilities ADA Compliance Handbook.pdf](http://www.dot.ca.gov/construction/docs/Permanent_Pedestrian_Facilities_ADA_Compliance_Handbook.pdf). No payment will be made for the correction of deficiencies in construction.

18.0 HOT MIX ASPHALT

General

This work includes producing and placing Hot Mix Asphalt (HMA), in accordance with Section 39 of the Standard Specifications, these Special Provisions, and the plans. Work to be performed under this Section covers all labor, materials, tools, equipment, transportation and incidentals necessary to construct asphalt concrete pavements. This shall include asphalt concrete overlays, leveling courses, and driveway transitions, as specified on the plans.

Material

All asphalt concrete materials shall be as specified in Section 39, "Hot Mix Asphalt", of the State Standard Specifications; these Special Provisions; and the plans and typical sections.

1/2 inch, Type A asphalt concrete mix (Caltrans approved) shall be used and shall not include crumb rubber unless modified by the City's Representative. Provide Caltrans approved mix design for review by City.

The asphalt binder grade shall be PG 64-16 conforming to Section 92, "Asphalts", of the State Standard Specifications.

Tack coat shall be emulsified asphalt Grade RS-1, SS-1, or SS-1h and shall conform to Section 94, "Asphaltic Emulsions", of the State Standard Specifications.

Each delivery ticket shall include information on the material type, binder type, oil content, and the mix design number. Material delivered to the project without such annotations shall be subject to rejection.

Construction

A minimum 2 days prior to paving operations, the paving foreman shall attend a meeting with the Owner's construction management team to review Contractors planned paving operations, including traffic control.

Prior to paving, Contractor shall mark all existing utility boxes using an approved marker. Spread and compact hot mix asphalt in accordance with Section 39 of the Standard Specifications and these Special Provisions, to the thickness specified on the plans.

Asphalt pavement shall be installed to maintain or provide positive drainage. The ponding of water in excess of 1/8" will not be allowed. Asphalt pavement placed that results in the ponding of water in excess of 1/8" shall be removed and replaced at Contractors expense. At City's request, Contractor shall provide and apply sufficient water to pavement to determine whether pavement provides adequate surface drainage.

Provide tack coat to all vertical surfaces (curbs, gutters, construction joints existing pavements, etc.) against which new asphalt concrete paving is placed. Failure to provide tack coat as required may result in a reduction of payment made for Hot Mix Asphalt.

Smoothness may be tested by the City using a 12-foot straightedge, and shall conform to Section 39 of the Standard Specifications and these special provisions.

Measurement and Payment

Hot Mix Asphalt for roadway will be measured by the mass (TON) as determined from certified weigh tickets delivered to and signed by the City's Representative on site. The contract price for asphalt concrete shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing asphalt concrete, complete in place, and placement of temporary raised pavement markers, as shown on the plans and as specified in the State Standard Specifications and these Special Provisions, and as directed by the City's Representative and no additional compensation will be allowed therefor. Payment for hot mix asphalt shall be paid for under the respective payment items for "Hot Mix Asphalt."

No payment will be made for the correction of deficiencies in construction. No payment will be made for over-run quantities unless pre-approved by City's Representative. The collection and signing of weight tickets shall not either constitute or construe acceptance or approval of over-run quantities.

19.0 DETECTABLE WARNING SURFACES

General

Detectable warning surface shall conform to section 73-1.02B of the Standard Specifications, applicable portions of these Special Provisions, and the requirements established by the Department of General Services, Division of State Architect.

Material

Detectable warning surfaces shall be by Armor-Tile, ADA Solutions, Armorcast Products, or approved equal. The manufacturer shall provide a written 5-year warranty for prefabricated detectable warning surfaces, guaranteeing replacement when there is defect in the dome shape, color fastness, sound-on-cane acoustic quality, resilience, or attachment. Any detectable warning surface equivalent specification will be submitted in writing for approval to the City's Representative. The color of detectable warning surfaces shall be Federal Yellow.

Detectable warning mats shall be used at the full width, to the maximum extent possible using the largest standard size available for each specific location. The contractor shall limit the number of cuts or splices necessary and shall only splice mats as needed to conform to the shape of the curb ramp or crossing. If a mat must be cut and joined, the splice shall be flush, gap-free and shall maintain the dome spacing as specified on the plans.

Construction

Install detectable warning surface in accordance with the manufacturer's written recommendations. Detectable warning surfaces shall be installed at a 1.5% maximum slope, and shall be installed to maintain or provide positive drainage. The ponding of water in excess of 1/8" will not be allowed. Detectable warning surfaces placed that results in the ponding of water in excess of 1/8" shall be removed and replaced at Contractors expense. At City's request, Contractor shall provide and apply sufficient water to concrete pavement to determine whether installed mat provides adequate surface drainage.

Measurement and Payment

Measurement of Detectable Warning Surface will be measured on a square foot basis. The contract price paid per square foot for detectable warning surface shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all of the work involved installing detectable

warning surfaces new concrete, complete and in place, as shown on the plans, in accordance with the manufacturer's recommendations, and as directed by the City's Representative. Payment for detectable warning surfaces shall be paid for as "Detectable Warning Surface" and quantities shall be final pay quantities stated in the Bid Schedule. No additional allowance will be made unless the dimensions as shown on the plans are changed by the City's Representative.

Pedestrian facilities are required to comply with the Americans with Disabilities Act (ADA). Actual field conditions and/or contractor construction methods may affect compliant construction. If questions arise, the contractor shall notify the project engineer, the Owner or their representative before the affected work is performed. Installation of permanent pedestrian facilities will be inspected using standard measurement tools and practices in accordance with the State of California Department of Transportation's Permanent Pedestrian Facilities ADA Compliance Handbook, which can be found at:

[http://www.dot.ca.gov/construction/docs/Permanent Pedestrian Facilities ADA Compliance Handbook.pdf](http://www.dot.ca.gov/construction/docs/Permanent_Pedestrian_Facilities_ADA_Compliance_Handbook.pdf). No payment will be made for the correction of deficiencies in construction.

20.0 FINAL CLEAN-UP

General

Before final inspection of the work, the Contractor shall clean the work and all ground occupied in connection with the work, of all rubbish, excess materials (including liquid asphalt), and equipment. The roads and driveways shall be thoroughly swept clean of all dirt, dust and foreign material. All parts of the work shall be left in neat and presentable condition. All existing landscaped and unpaved areas which are disturbed by construction or earthwork operations shall be returned to original existing conditions.

Measurement and Payment

Payment for clean-up in general, shall be considered as included in the unit bid price for other contract items and no additional payment shall be made.

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