

# **INVITATION FOR BIDS**



**FOR CONSTRUCTING**

## **LOW IMPACT DEVELOPMENT AT MUNICIPAL SERVICES CENTER NORTH (MSCN)**

**CITY CONTRACT NUMBER  
C02391**

**ISSUED BY  
CAPITAL PROJECTS ENGINEERING DIVISION  
CITY OF SANTA ROSA, CALIFORNIA**

**2024**

**ATTENTION  
Prebid Conference  
See Page 1**



STATE OF CALIFORNIA

INVITATION FOR BIDS

CONTAINING:

NOTICE TO BIDDERS

SPECIAL PROVISIONS

BID FORMS

CONTRACT

FOR

**LOW IMPACT DEVELOPMENT AT MUNICIPAL  
SERVICES CENTER NORTH (MSCN)**

**City Contract No. C02391**

# LOW IMPACT DEVELOPMENT AT MUNICIPAL SERVICES CENTER NORTH (MSCN)

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CITY OF SANTA ROSA  
STATE OF CALIFORNIA

**NOTICE TO BIDDERS**

➤	For technical questions regarding this project, contact Felicia Ong at (707) 543-3864.
➤	For direct access to plans, specifications and plan holders' lists, go to <a href="http://www.srcity.org/bids">www.srcity.org/bids</a> and click on <u>Bid/Proposal Opportunities</u> .
➤	For direct access to bid results, go to <a href="http://www.srcity.org/bids">www.srcity.org/bids</a> . Under Link to Capital Projects, click on <u>Capital Projects Contracts</u> .

**- IMPORTANT -**

**Bid Acceptance Deadline**

Sealed bids will be accepted at the Transportation and Public Works Department, 69 Stony Circle, Santa Rosa, California 95401 until 2 p.m., August 28, 2024, for Low Impact Development at Municipal Services Center North (MSCN), Contract No. C02391 (Engineer's Estimate: \$440,016).

**Bids tendered after this deadline will not be accepted.** The official time clock for accepting bids will be an electric date and time stamping clock, located in the Transportation and Public Works Department, 69 Stony Circle, Santa Rosa, California. In order to be accepted, bids must be received prior to 2 p.m. Therefore, a bid stamped in at 1:59 p.m. will be accepted, but one delivered at or after 2 p.m. is late and will not be accepted.

**Bid Opening**

Prospective bidders, subcontractors, and materials suppliers are invited to attend the Bid opening via Zoom video/teleconference or in person at 69 Stony Circle, Santa Rosa, California. The bid opening is scheduled to be held at 2:00 p.m., August 28, 2024.

The teleconference can be accessed at:

<https://srcity-org.zoom.us/j/84777401830?pwd=uw1StbyQ4G2V5TCJadp7B8wOxRxpEs.1>

Phone: +1 669 219 2599

Meeting ID: 847 7740 1830

Passcode: 119268

Find your local number: <https://srcity-org.zoom.us/u/kbj8NaPWXk>

## **Mandatory Pre-Bid Meeting**

Prospective bidders are **required** to attend a **mandatory** pre-bid meeting via Zoom video/teleconference or in person at 69 Stony Circle, Santa Rosa, California. The pre-bid meeting is scheduled to be held at 2:00 p.m., August 15, 2024, in the Transportation and Public Works Department located at 69 Stony Circle, Santa Rosa, California.

The teleconference can be accessed at:

<https://srcity-org.zoom.us/j/89414692526?pwd=96tbsJhMh3LqPVyTT0URhQLJXfbwUX.1>

Phone: 1 669 219 2599

Meeting ID: 894 1469 2526

Passcode: 854029

Find your local number: <https://srcity-org.zoom.us/u/kbPsS0RINN>

## **Subcontractor Information; Department of Industrial Relations Registration**

Bidders shall provide the names, business addresses and license numbers of all subcontractors listed on bidder's List of Subcontractors. No contractor or subcontractor may be listed on a bid for this public works project unless registered with the Department of Industrial Relations (DIR) pursuant to Labor Code section 1725.5. No contractor or subcontractor may be awarded a contract for this public works project unless registered with the DIR pursuant to Labor Code section 1725.5. This public works project is subject to compliance monitoring and enforcement by the DIR.

## **Contract Award**

This Contract will be awarded to the lowest responsible and responsive contractor possessing the ability to successfully perform under the terms and conditions of the proposed contract, considering such matters as contractor integrity, compliance with public policy, record of past performance and financial and technical resources.

Firms or individuals that develop or draft specifications, requirements, statements of work, or invitations for bids or requests for proposals or quotes may not compete in this procurement.

## **Project Description/Scope of Work**

A bio-retention facility will be constructed in the corporation yard to provide stormwater treatment and retention for the existing parking lot, storage yard area, and surrounding buildings.

Contract #: C02391

Project Title: LOW IMPACT DEVELOPMENT AT MUNICIPAL SERVICES CENTER NORTH (MSCN)

Item No.	Description	Units	Quantity
1	TEMPORARY TRAFFIC CONTROL	LS	1
2	WATER POLLUTION CONTROL	LS	1
3	HAZARDOUS WASTE DISPOSAL	LS	1
4	MODIFY EXISTING SD INLETS TO GRADE	EA	2
5	REMOVE ASPHALT, BASE, AND SUBGRADE	SF	6,000
6	IRRIGATION	LS	1
7	PLANT ESTABLISHMENT	LS	1
8	BIORETENTION AREA	SF	4,367
9	6" PERFORATED PIPE - PVC	LF	97
10	HMA PLUG PAVE	TON	63
11	CURB AND GUTTER WITH RETAINING CURB	LF	283
12	FLEXIBLE DELINEATORS	EA	14
13	STRIPING	LS	1
14	REFLECTIVE WHITE PAINT ON CURB	LF	283

The foregoing quantities are approximate only, being given as a basis for the comparison of bids, and the City of Santa Rosa does not expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work, as may be deemed necessary or expedient by the Engineer.

Bids shall be made in accordance with the prevailing hourly rate of per diem wages for this locality and project as determined by the Director of the DIR pursuant to Labor Code sections 1770 *et seq.*

Contractor shall be responsible for compliance with the Immigration Reform Control Act of 1986.

If the project requires the employment of workers in any apprenticeable craft or trade, once awarded, Contractor and subcontractors must apply to the Joint Apprenticeship Council unless already covered by local apprentice standards (see Labor Code section 1777.5).

All bids are to be compared on the basis of the Engineer's estimate of the quantities of work to be performed. No bid will be awarded to a contractor who is not licensed in accordance with the provisions of Chapter 9 of Division 3 of the Business and Professions Code. Contractor must hold a Class A license, and a C-12 or C-32 license for this project.

Project plans, bid and contract forms for C02391 Low Impact Development at Municipal Services Center North (MSCN) may be obtained through PlanetBids at [www.srcity.org/bids](http://www.srcity.org/bids). These documents can no longer be obtained at the Transportation and Public Works Department.


No bid will be accepted unless it is made on the contract bid forms furnished by the Transportation and Public Works Department through PlanetBids. The original of the completed bid forms bearing original signatures must be submitted. A bid will not be accepted unless the bidder registers as a vendor through PlanetBids at [www.srcity.org/bids](http://www.srcity.org/bids), downloads documents/attachments, and is added to the prospective bidders list for this project. If there is an addendum, bidders must log into PlanetBids and acknowledge the addendum to be eligible for bidding.

The successful bidder will be required to hold a current City of Santa Rosa business tax certificate issued pursuant to Chapter 6.04 of the Santa Rosa City Code before commencing work on this project. For information regarding the business tax, contact Revenue and Collections at (707) 543-3170.

This Project is subject to the Community Workforce Agreement dated July 1, 2023, which is a Project Labor Agreement ("CWA" or "PLA") entered into between City, the North Bay Building and Construction Trades Council ("Council") and its affiliated local Unions that have executed this PLA, and the Contractors and subcontractors that perform work on this Project. Each Contractor and subcontractor must become signatory to the PLA by execution of a *Contractor Agreement To Be Bound* to the PLA in the form of Appendix A to the PLA. A copy of the PLA is available at [www.srcity.org/bids](http://www.srcity.org/bids). Your attention is directed to the Special Provisions, including, without limitation, Section 2.133A (Bid Forms), Section 3-1.18A (PLA/Community Workforce Agreement – Subcontractors), Section 3-1.20 (Failure to Execute Contract), Section 3.122A (PLA/Community Workforce Agreement – Subcontractors) and Article V of the Contract for additional details associated with the City's PLA requirements.

For any moneys earned by Contractor and withheld by the City of Santa Rosa to ensure the performance of the Contract, Contractor may, at its request and expense, substitute securities equivalent to the amount withheld in the form and manner and subject to the conditions provided in Section 22300 of the California Public Contract Code.

The City of Santa Rosa reserves the right to reject any or all bids and the right to waive minor irregularities or informalities in any bid or bond.

  
Gregory Mariscal (Aug 1, 2024 07:08 PDT)  
GREGORY MARISCAL  
Supervising Engineer

Aug 1, 2024

Date

# **SPECIAL PROVISIONS**

## **General Specifications**

### **CITY OF SANTA ROSA, CALIFORNIA**

#### **LOW IMPACT DEVELOPMENT AT MUNICIPAL SERVICES CENTER NORTH (MSCN)**

##### **1 GENERAL**

The work described herein shall be done in accordance with the “Contract Documents,” which are the:

1. Special Provisions
2. Project Plans, consisting of 14 sheets entitled Low Impact Development at Municipal Services Center North (MSCN), 2023-0028
3. City of Santa Rosa Design and Construction Standards (City Standards)
4. City of Santa Rosa Construction Specifications for Public improvements (City Specifications)
5. Sections 1-10 of the State of California Department of Transportation Standard Specifications 2015 and Revised Standard Specifications 2015 (collectively, the 2015 Standard Specifications) and Sections 11-134 of the State of California Department of Transportation Standard Specifications 2018 and Revised Standard Specifications 2018 (collectively, the 2018 Standard Specifications) (the 2015 Standard Specifications and the 2018 Standard Specifications are collectively the Standard Specifications)
6. State of California Department of Transportation Standard Plans 2010 (Standard Plans).

In the event of a conflict in any of these documents, the order of precedence shall be determined by Section 5-1.02 of these Special Provisions.

Whenever the Standard Specifications use the terms State of California, Department of Transportation, Director, Engineer, or Laboratory, the following terms shall be substituted therefor, and any reference to any of the foregoing terms shall be understood and interpreted to mean and refer to such substituted terms as follows:

For State of California - the City of Santa Rosa;

For Department - the City of Santa Rosa Department of Transportation and Public Works or the City of Santa Rosa Water Department;

For Director - the City Engineer of the City of Santa Rosa;

For Engineer - the City Engineer of the City of Santa Rosa or the City Engineer’s authorized agents;

For Laboratory – Materials Engineering of the City of Santa Rosa Transportation and Public Works Department, or such other laboratory as may be authorized by the City.

Unless otherwise provided, whenever in these Special Provisions attention is directed to specific provisions in the Standard Specifications, such direction shall not be interpreted as excluding other applicable provisions of the Standard Specifications.

Unless otherwise provided, when sections and subsections of the Standard Specifications are used in these Special Provisions, such use is not exclusive and shall not be interpreted as excluding other



applicable provisions of said sections and subsections but is only intended to add to or modify such sections or subsections.

Unless otherwise provided, full compensation for compliance with these Special Provisions is included in the contract price and no additional allowance will be made to Contractor therefor. The Standard Specifications are hereby modified to delete any reference or incorporation of provisions providing for or requiring arbitration of claims and disputes arising under this Contract.

## 2 BIDDING

**2-1.03 Registration with DIR:** No contractor or subcontractor may be listed on a bid for this public works project unless registered with the Department of Industrial Relations (DIR) pursuant to Labor Code section 1725.5. No contractor or subcontractor may be awarded a contract for this public works project unless registered with the DIR pursuant to Labor Code section 1725.5. This public works project is subject to compliance monitoring and enforcement by the DIR.

**2-1.06 Bid Documents:** Prospective bidders will be furnished with an Invitation for Bids which will state the location and description of the contemplated public works project and will show the approximate estimate of the various quantities and kinds of work to be performed and materials to be furnished with a schedule of items for which unit prices are requested.

**2-1.07 Examination of Project Plans, Specifications, City Standards, Invitation for Bids and Work Site:** Prior to submitting a bid, the bidder shall carefully examine the Invitation for Bids, City Standards and the proposed work site. If any person contemplating submitting a bid for this public works project is in doubt as to the meaning of any part of the Contract Documents, or finds discrepancies in or omissions from the Contract Documents, he or she may submit a written request for interpretation or correction to the Engineer. The written request must be received by the Engineer a minimum of 96 hours prior to bid opening. Any interpretation or correction of the Contract Documents prior to bid opening will be made only by written addendum issued by the City. Notification of addenda will be made through PlanetBids. The listed primary contact will receive an e-mail generated by PlanetBids informing them of a recently uploaded addendum. The City will not be bound by any other explanations or interpretations of the Contract Documents.

**2-1.08 Approximate Estimate:** The quantities given in the Contract Documents are approximate only, being given as a basis for the comparison of bids, and the City does not, expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or part of the work or to omit parts of the work, as may be deemed necessary or advisable by the Engineer.

**2-1.10 Subcontractors:** The Subletting and Subcontracting Fair Practices Act, Public Contract Code sections 4100-4113, inclusive (the "Act") shall apply to all subcontracts in excess of one-half of one percent of the total amount of a bid. The Act requires subcontractors, if used for such work, to be listed in the contractor's bid and prohibits the substitution of subcontractors, except as authorized by the Act. Each bidder shall, with respect to the work of any subcontractor in excess of one-half of one percent of the total amount of the bid, include as part of the bid on the bid form provided:

1. The name, business address and DIR registration number of each subcontractor who will perform work or labor or render services to the Contractor in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the Contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the Project Plans or other Contract Documents in an amount in excess of one-half of one percent of the Contractor's total bid; and
2. The portion of the work that will be done by each subcontractor. Only one subcontractor shall be listed for each portion.

The purchase of sand, gravel, crushed rock, batched concrete, aggregate, ready-mixed concrete, and/or any other materials produced and furnished by established and recognized commercial plants, together with the delivery of such materials to the work site by the source of the materials or by recognized commercial hauling companies, is not considered as subcontracting under this section.

**2-1.33 Bid Document Completion:** Any references to Opt Out of Payment Adjustments for Price Index Fluctuations in the Standard Specifications are deleted in their entirety.

**2-1.33A Bid Forms:** All bids shall be made on bid forms obtained from PlanetBids at [www.srcity.org/bids](http://www.srcity.org/bids). The bidder shall submit its bid on the original bid forms furnished by the City. Bids submitted on forms other than the forms furnished to the bidder by the City will not be considered.

The bid forms to be submitted at the time of and with the bid are:

1. Unit Price Schedule
2. List of Subcontractors
3. List of Previous Similar Jobs
4. Noncollusion Declaration
5. Bid Bond Affidavit and Bidder's Signature Page
6. Bid Guaranty (Bid Bond or alternate security)
7. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
8. Certification Regarding Lobbying
9. Contractor Agreement to be Bound to the PLA

All bids shall give the proposed prices and must bear the original signature of the bidder. Bidders shall fill in all blanks on the bid forms where required. A bid will not be accepted unless the bidder registers as a vendor through PlanetBids at [www.srcity.org/bids](http://www.srcity.org/bids) downloads documents/attachments, and is added to the prospective bidders list for this project. If there is an addendum, bidders must log into PlanetBids and acknowledge the addendum to be eligible for bidding.

**2-1.33E Rejection of Bids Containing Alterations, Erasures or Irregularities:** Bids may be rejected if they show any alterations of forms, additions not called for, conditional bids, incomplete bids, erasures or irregularities of any kind.

**2-1.34 Bidders' Security:** All bids shall be presented under sealed cover and shall be accompanied by cash, cashier's or certified check, or by a bidder's bond made payable to the City of Santa Rosa and executed as surety by a corporate surety authorized and admitted to transact a surety business in the State of California in an amount equal to ten percent of the amount of the bid. No bid shall be considered unless such cash, cashiers or certified check, or bidder's bond is enclosed with the bid. Any bidder's bond shall contain provisions for forfeiture consistent with California Public Contract Code section 20172.

**2-1.40 Withdrawal of Bid:** A bid may be withdrawn prior to, but not after, the hour fixed in the public notice for the opening of bids, provided that a written request to withdraw the bid, executed by the bidder or the bidder's authorized representative, is filed with the Engineer before this deadline. The withdrawal of a bid shall not prejudice the right of a bidder to submit a new bid.

**2-1.43 Public Opening of Bids:** Bids will be opened and read publicly at the time and place indicated in the Notice to Bidders. Bidders or their authorized agents are invited to be present.

**2-1.46 Department's Decision on Bid:** Serial bids from the same bidder will not be accepted. This section shall not be interpreted to mean that the same contractor may not be the contractor in one bid and listed as a subcontractor in another bid, provided that no collusion exists.

**2-1.48 Competency of Bidders:** No bid will be accepted from or contract awarded to a contractor that is not licensed in accordance with the law, that does not hold a license qualifying it to perform work under this contract, to whom a bid form has not been issued by the Engineer, or that has not successfully completed projects of similar character, scope and cost to the proposed project. Bidders will be required to provide a list of previous similar jobs with their bids.

### 3 CONTRACT AWARD AND EXECUTION

**3-1.04 Contract Award:** The City reserves the right to reject any or all bids. Bids are required for the entire work described herein. All bids will be compared with the Engineer's estimate of the quantities of work to be completed. Contract award, if any, will be made to the lowest responsible and responsive bidder within thirty days from the date bids are opened.

**3-1.05 Contract Bonds:** Within ten days after receipt of the Notice of Award, the successful bidder shall provide the following bonds to the City:

- a. Performance Bond: A performance bond to guarantee the faithful performance of the terms and conditions of the Contract by Contractor, which shall be executed in a sum of not less than 100% of the Contract price;
- b. Labor and Materials Bond: A labor and materials bond (payment bond) in accordance with Part 6 of Division 4, sections 8000 *et seq.* of the California Civil Code, to guarantee against any and all claims of subcontractors or other third parties furnishing labor, materials, or supplies for the Contract, which shall be executed in a sum of 100% of the Contract price; and
- c. Material Guaranty Bond: A material guaranty bond (warranty bond) to serve as surety for the guarantee requirements outlined in Section 6-3.01B, which shall be executed in a sum of not less than 50% of the Contract price.

The bond(s) shall be provided in a form acceptable to the City and issued by a corporate surety in good financial standing and authorized and admitted to transact a surety business in the state of California for the purposes and in the amount(s) stated above.

Whenever the financial or legal status of any surety on any such bond(s) is/are unacceptable to the City, it may make a demand to Contractor for further bond(s) or additional surety, not exceeding the sums originally required. Thereafter, no payment shall be made upon the Contract to Contractor or any assignees of Contractor until such bond(s) or additional surety has/have been provided to the City.

**3-1.06 Contractor License:** Contractor must be properly licensed as a contractor from Contract award through Contract acceptance (Pub Cont. Code § 10164).

**3-1.07 Indemnification and Insurance:** Indemnification: Contractor shall defend, hold harmless and indemnify City, its officers, agents and employees, and each and every one of them, from and against any and all actions, damages, costs, liabilities, claims, demands, losses, judgments, penalties, costs and expenses of every type and description, including, but not limited to, any fees and/or costs reasonably incurred by City's staff attorneys or outside attorneys and any fees and expenses incurred in enforcing this provision (hereafter collectively referred to as "Liabilities"), including but not limited to Liabilities arising from personal injury or death; damage to personal, real or intellectual property or the environment; contractual or other economic damages, or regulatory penalties, arising out of or in any way connected with the performance of or the failure to perform the Contract by Contractor, any subcontractor or agent, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, whether or not such Liabilities are caused in part by a party indemnified hereunder, or such Liabilities are litigated, settled or reduced to judgment; provided, that the foregoing indemnity does not apply to liability for any damage or expense for death or bodily injury to persons or damage to property to the extent arising from (i) the sole negligence, or willful misconduct of, or defects in design

furnished by City, its agents, servants, or independent contractors who are directly responsible to City (excluding Contractor), or (ii) the active negligence of City.

The existence of any of the insurance policies or coverages described in this Contract shall not affect or limit any of City’s rights hereunder, nor shall the limits of such insurance limit Contractor’s liability to the City hereunder. The provisions of this section shall survive any expiration or termination of the Contract.

**Insurance:** Contractor shall maintain in full force and effect all of the insurance coverage described in and in accordance with the insurance requirements set forth below. Maintenance of such insurance coverage during the entire performance of the Contract is a material element of the Contract. Failure by Contractor to (i) maintain or renew coverage, (ii) provide notice of any changes, modifications, or reductions in coverage, or (iii) provide evidence of renewal, if necessary, may be deemed a material breach of the Contract by Contractor, whereas the City shall be entitled to all rights and remedies at law or in equity. Notwithstanding the foregoing, any failure by Contractor to maintain required insurance coverage shall not excuse or alleviate Contractor from any of its other duties or obligations under the Contract. In the event Contractor retains or utilizes any subcontractors or sub-consultants in performance of the work, Contractor shall assure that any such subcontractor has first obtained, and shall maintain, all of the insurance coverage requirements herein set forth below.

**Insurance Requirements:**

**A. Insurance Policies:** Contractor shall maintain and keep in full force and effect, the following policies of insurance with minimum coverage as indicated below and issued by insurers with an AM Best rating of no less than A:VI or a rating otherwise acceptable to the City.

Insurance	Minimum Coverage Limits	Additional Coverage Requirements
1. Commercial general liability	\$5 million per occurrence \$5 million aggregate	Coverage must be at least as broad as ISO CG 00 01 and must include products liability and completed operations coverage which shall continue for a period of three years after acceptance of the work by the City. If insurance applies separately to a project/location, aggregate may be equal to per occurrence amount. Coverage may be met by a combination of primary and umbrella or excess insurance, but umbrella and excess shall provide coverage at least as broad as specified for underlying coverage. Completed Operations Coverage can be provided in the form of an endorsement to Contractor’s insurance (at least as broad as ISO Form CG 20 37 04 13. See endorsements below for other Additional Insured Requirements. Coverage shall not exclude subsidence.
2. Business auto coverage	\$3 million	Coverage at least as broad as ISO Form Number CA 00 01 covering any auto (Code 1). Insurance shall cover owned, non-owned and hired autos.

- |           |  |  |   |
|-----------|--|--|---|
| <b>B.</b> | 3. Workers' compensation and Employer's Liability  | \$1 million  | As required by the State of California, with Statutory Limits and Employer's Liability Insurance with limit of no less than \$1 million per accident for bodily injury or disease. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by Contractor, its employees, agents and subcontractors.         |
|           | 4. Contractor's pollution legal liability and/or asbestos legal liability and/or errors and omission (if the City determines, in its sole discretion, that the project involves environmental hazards) | \$1 million per occurrence or claim<br>\$2 million aggregate | If the work involves lead-based paint or asbestos identification/remediation, the pollution liability policy must not contain lead-based paint or asbestos exclusions. If the work involves mold identification, the pollution liability policy must not contain a mold exclusion and a definition of "Pollution" in said policy shall include microbial matter including mold. |

**Endorsements:**

1. All policies shall provide or be endorsed to provide that coverage shall not be canceled by either party, except after prior written notice has been provided to the City in accordance with the policy provisions.
2. Liability policies shall provide or be endorsed to provide the following:
  - a. For any claims related to this Contract, Contractor's insurance coverage shall be primary, and any insurance or self-insurance maintained by City shall be in excess of Contractor's insurance and shall not contribute with it. Endorsements at least as broad as 20 01 04 13 or evidence of policy language will be required in non-ISO CGL policies.
  - b. **The City of Santa Rosa, its officers, agents and employees are to be covered as additional insureds on the CGL policy.** Additional Insured Endorsements at least as broad as 20 10 04 13 or 20 38 04 13 are required.

**C. Verification of Coverage and Certificates of Insurance:** Contractor shall furnish City with original certificates and endorsements effecting coverage required above. Certificates and endorsements shall make reference to policy numbers. All certificates and endorsements are to be received and approved by the City before work commences and must be in effect for the duration of the Contract. The City reserves the right to require complete copies of all required policies and endorsements during the duration of the Contract and for a period of three years following City's acceptance of the work.

**D. Other Insurance Provisions:**

1. No policy required by this Contract shall prohibit Contractor from waiving any right of recovery prior to loss. Contractor hereby waives such right with regard to the indemnitees.
2. All insurance coverage amounts provided by Contractor and available or applicable to this Contract are intended to apply to the full extent of the policies. Nothing contained in this Contract limits the application of such insurance

- coverage. Coverage for an additional insured shall NOT be limited to the insured's vicarious liability. Defense costs must be paid in addition to coverage amounts.
3. Self-insured retentions above \$10,000 must be approved by the City. At the City's option, Contractor may be required to provide financial guarantees.
  4. City reserves the right to modify these insurance requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

**3-1.18 Contract Execution:** The fully executed Contract, original bonds and insurance certificates and endorsements required under the Contract shall be delivered to the City within ten calendar days of Contractor's receipt of the Notice of Award.

The Engineer will supply Contractor with up to ten sets of the Invitation for Bids and Project Plans. At least one complete set of the Invitation for Bids and Project Plans shall be kept at the construction site in good condition and made available to the Engineer at all times. Additional copies of the Invitation for Bids and Project Plans will be provided by the Engineer at Contractor's cost.

**3.1.18A PLA/Community Workforce Agreement – Subcontractors:** Within ten (10) calendar days after receipt of the Notice of Award, a successful bidder must deliver to the City executed *Contractor Agreement(s) to be Bound* to the PLA for all subcontractors subject to the PLA. The form of the *Contractor Agreement to be Bound* to the PLA is included in the Bid Forms and also is located in Appendix A to the PLA (entitled "Community Workforce Agreement"), a copy of which is available at [www.srcity.org/bids](http://www.srcity.org/bids)

**3-1.19 Bidders' Securities:** Within ten days after the opening of bids, the City will return the bid guarantees to all bidders except the three lowest responsible bidders. The bid guarantees of the three lowest responsible bidders will be retained until the Contract has been fully executed. In the event all bids are rejected, all bid guarantees will be returned to the respective bidders.

**3-1.20 Failure to Execute Contract:** Contractor's failure to deliver to the City the fully executed Contract within ten calendar days of Contractor's receipt of the Notice of Award shall be cause for the cancellation of the award and the forfeiture of the bid guaranty to the City. If the successful bidder refuses or fails to execute the Contract, the City may award the Contract to the second lowest responsible bidder. If the second lowest responsible bidder refuses or fails to execute the Contract, the City may award the Contract to the third lowest responsible bidder. The refusal or failure by the second or third lowest responsible bidder to deliver to the City the fully executed Contract within ten calendar days of receipt of the Notice of Award to the respective bidder shall likewise be cause for the cancellation of the award and the forfeiture of the bid guaranty of the respective bidder. In its discretion, the City may then re-advertise the project or construct it by day labor.

Contractor's failure to deliver to the City executed Contractor Agreement(s) to be Bound to the PLA for all subcontractors subject to the PLA in accordance with the deadlines and requirements of Section 3-1.18A and 3-1.22A shall also be cause for the cancellation of the award and the forfeiture of the bid guaranty to the City. If the successful bidder refuses or fails to executed Contractor Agreement(s) to be Bound to the PLA for all subcontractors subject to the PLA in accordance with the deadlines and requirements of Section 3-1.18A and 3-1.22A, the City may award the Contract to the second lowest responsible bidder. If the second lowest responsible bidder refuses or fails to executed Contractor Agreement(s) to be Bound to the PLA for all subcontractors subject to the PLA in accordance with the deadlines and requirements of Section 3-1.18A and 3-1.22A, the City may award the Contract to the third lowest responsible bidder. The refusal or failure by the second or third lowest responsible bidder to deliver to the City executed Contractor Agreement(s) to be Bound to the PLA for all subcontractors subject to the PLA in accordance with the deadlines and requirements of Section 3-1.18A and 3-1.22A shall likewise be cause for the cancellation of the

award and the forfeiture of the bid guaranty of the respective bidder. In its discretion, the City may then re-advertise the project or construct it by day labor.

**3-1.22 Subcontractors:** The successful bidder shall furnish a list of all subcontractors as required under Sections 2-1.10. The list shall include the name, business address, DIR registration number and the state contractor's license number of each subcontractor on the list and the names of the responsible managing employees whose names appear on the subcontractors' licenses.

**3-1.22A PLA/Community Workforce Agreement – Subcontractors.** In accordance with the deadline set forth in Section 3-1.18A, a successful bidder must deliver to the City executed *Contractor Agreement(s) to be Bound* to the PLA for all subcontractors subject to the PLA. The form of the *Contractor Agreement to be Bound* to the PLA is included in the Bid Forms and also is located in Appendix A to the PLA (entitled "Community Workforce Agreement"), a copy of which is available at [www.srcity.org/bids](http://www.srcity.org/bids)



## 4 SCOPE OF WORK

**4-1.05 Changes and Extra Work:** All changes to the Contract shall be made by written change order only.

All extra work shall be recorded by Contractor on a daily report signed by both the City and Contractor. The “daily reports” shall thereafter be considered the true record of extra work performed. A copy of the daily reports will be furnished to Contractor. Contractor is directed to Section 9-1.04 of this Invitation for Bids.

**4-1.05C Compensation for Altered Quantities:** Payment and compensation for altered quantities shall not conform to the provisions of Section 9-1.06 of the Standard Specifications, except as modified herein.

### **4-1.07 Value Engineering**

#### **4-1.07B Value Engineering Change Proposal (VECP):**

Contractor may submit a VECP to reduce any of the following:

1. Total cost of construction
2. Construction activity duration
3. Traffic congestion

Before preparing a VECP, meet with the Engineer to discuss:

1. Proposal concept
2. Permit issues
3. Impact on other projects
4. Project impacts, including traffic, schedule, and later stages
5. Peer reviews
6. Overall proposal merits
7. Review times required by the Department and other agencies

The VECP must not impair the project's essential functions or characteristics, including:

1. Service life
2. Operation economy
3. Maintenance ease
4. Desired appearance
5. Design and safety

The VECP must include:

1. Description of the Contract specifications and drawing details for performing the work and the proposed changes
2. Itemization of Contract specifications and plan details that would be changed
3. Detailed cost estimate for performing the work under the existing Contract and under the proposed change; Determine the estimates under section 9-1.04 of the Standard Specifications
4. Deadline for the Engineer to decide on the changes
5. Bid items affected and resulting quantity changes

The Department is not required to consider a VECP. If a VECP is similar to a change in the Project Plans or City Specifications being considered by the Department at the time the proposal is submitted or if the proposal is based on or similar to plans or City Specifications adopted by the Department before Contract award, the Department does not accept the VECP and may make these changes without VECP payments.

If the Department does not approve a Change Order before the deadline stated in the VECP or other date Contractor subsequently stated in writing, the VECP is rejected. The Department does not adjust time or payment for a rejected VECP.

The Department decides whether to accept a VECP and the estimated net construction-cost savings from adopting the VECP or parts of it.

The Department may require Contractor to accept a share of the investigation cost as a condition of reviewing a VECP. After written acceptance, the Department considers the VECP and deducts the agreed cost.

If the Department accepts the VECP or parts of it, the Department issues a Change Order that:

1. Incorporates changes in the Contract necessary to implement the VECP or the parts adopted
2. Includes the Department's acceptance conditions
3. States the estimated net construction-cost savings resulting from the VECP
4. Obligates the Department to pay Contractor 50 percent of the estimated net savings.

In determining the estimated net construction-cost savings, the Department excludes Contractor's VECP preparation cost and the Department's VECP investigation cost, including parts paid by Contractor. If a VECP providing for a reduction in working days is accepted by the Department, 50 percent of the reduction is deducted from the Contract time.

If a VECP providing for a reduction in traffic congestion or avoiding traffic congestion is accepted by the Department, the Department pays 60 percent of the estimated net savings in construction costs attributable to the VECP. Submit detailed traffic handling comparisons between the existing Contract and the proposed change, including estimates of the traffic volumes and congestion.

The Department may apply an accepted VECP for general use on other contracts.

If an accepted VECP is adopted for general use, the Department pays only the contractor who first submitted the VECP and only for the contracts awarded to that contractor before the submission of the accepted VECP.

If the Department does not adopt a general-use VECP, an identical or similar submitted proposal is eligible for acceptance.

## 5 CONTROL OF WORK

**5-1.02 Contract Documents:** In the event of a conflict in any of the Contract Documents, the order of precedence from highest to lowest shall be as follows:

1. Special Provisions
2. Project Plans, consisting of 14 sheets entitled Low Impact Development at Municipal Services Center North (MSCN), 2023-0028
3. City Standards
4. City Specifications
5. Standard Specifications
6. Standard Plans

provided, that in the event of a conflict between any Federal Requirement in Section 10 of these Special Provisions and any other provision in the Contract Documents, the more stringent provision shall control and prevail.

**5-1.05 Order of Work:** The work as shown on the Project Plans and as specified in the Invitation for Bids shall be constructed in a sequence that is satisfactory to and approved by the Engineer.

Contractor shall prepare a work schedule per Section 8-1.02 of the Standard Specifications.

With the exception of trenching, all existing street, street light base, curb and gutter, storm drain, water line, and sewer line work shall be completed before any existing street paving is removed.

Full compensation for the conformance to the requirements of this section is included in the Contract price and no additional allowance will be made to Contractor for this work.

**5-1.17 Character of Workers:** Attention is directed to Section 5-1.17 of the Standard Specifications which states:

“If a worker appears to the Engineer to be incompetent or acts disorderly or improperly, discharge the worker immediately upon request. Do not employ that worker again on the work.”

No additional compensation shall be granted to Contractor in the event City exercises any part of its rights under this section and any and all costs related to such exercise shall be borne by Contractor.

**5-1.20 Cooperation with Other Entities:** Attention is directed to Section 5-1.20 of the Standard Specifications.

Other construction including but not limited to utility, power, and pipe line relocation, may be in progress by other forces within and adjacent to the project area at the same time work is being performed under this Contract by Contractor. Contractor shall coordinate and cooperate with the forces performing other work, to the end that such forces may conduct their operations with as little inconvenience and delay as possible.

Each contractor or other entity performing work at or near the job or material site is responsible to the other for damage to work, persons, or property and for costs due to unnecessary delays.

**5-1.20B(4)(a) Offsite Staging Areas and Construction Yards:** Attention is directed to Santa Rosa City Code section 20-52.040, Temporary Use Permit.

A Temporary Use Permit shall be obtained for any offsite construction yard on private property to be used for any of the following:

1. Stockpiling of equipment and/or materials;
2. Staging of construction;
3. Placement of work trailers or mobile offices;
4. Storage of trench spoils; or
5. Other construction related activities not specifically enumerated above.

**5-1.26 Construction Surveys:** Contractor shall carefully preserve all bench marks, grade stakes, and all other survey markers. In the case of willful or careless destruction, Contractor shall bear the cost of replacing the markers.

Contractor shall contact the Engineer directly for coordination of survey staking. Written staking requests must be submitted at least two working days in advance of the date and time stakes are needed.

**5-1.27A Examination and Audit:**

Pursuant to California Government Code section 8546.7, any contract with the City involving expenditures in excess of \$10,000 shall be subject to the examination and audit of the California State Auditor for a period of three years after final payment is made to Contractor by City under this Contract. Any such examination and audit will be confined to those matters connected with the performance of this Contract.

**5-1.30A Inspection:** Contractor shall bear all costs associated with the re-inspection of any defective, rejected or unauthorized work as determined by the Engineer in Engineer's sole discretion. Such costs of re-inspection, including any costs incurred by the City for additional staff time or fees for third-party consultant inspectors, will be deducted from one or more progress payments hereunder.

**5-1.36D(a) Property and Facility Preservation:** Attention is directed to Section 5-1.36 of the Standard Specifications.

At Contractor's sole expense, all fences, gates, landscaping, drainage ditches, sidewalks, irrigation systems, storm drains and any other facilities that are damaged, removed or destroyed because of Contractor's operations, shall be replaced in accordance with City Standards at a minimum and restored to the same or better condition. Concrete surface treatment and score marks shall match adjacent existing concrete improvements.

**5-1.36E Obstructions:** Attention is directed to Section 5-1.36 of the Standard Specifications and to the possible existence of underground gas mains, high voltage lines, telephone ducts, storm drains and water and sewers systems, the locations of which are not shown on the Project Plans. The determination of the location of these facilities and the cost of repair or replacement in the event of damage to such facilities are the sole responsibility of Contractor.

Should Contractor alter any public utility or private improvements to facilitate its operations or for its sole benefit, which alteration would not be otherwise required, Contractor shall make whatever arrangements are necessary with the owner or controlling authorities and shall bear all expenses in connection therewith. Any damages to any public utility or private improvement caused by Contractor shall be repaired by Contractor at its sole expense and to the full satisfaction of the Engineer or the controlling authority.

Any subsurface information and data furnished under any part of this Contract are not intended as a representation or warranty but are furnished for information only. It is expressly understood that the

City will not be responsible for the accuracy thereof or for any deduction, interpretation or conclusion drawn therefrom by Contractor. The information is made available so that Contractor may have ready access to the same information available to the City and is not part of this Contract.

PRIOR TO STARTING ANY EXCAVATION, CONTRACTOR SHALL (AT LEAST TWO WORKING DAYS IN ADVANCE) CALL UNDERGROUND SERVICE ALERT (USA) toll free at (800) 227-2600 and provide USA with all necessary data relative to the proposed excavation. USA will accept calls and process information to participating agencies who have underground facilities in the area between the hours of 7:30 a.m. and 5:00 p.m. daily, except Saturdays, Sundays, and holidays. Between the hours of 5:00 p.m. and 7:30 a.m., calls will be recorded and then processed after 7:30 a.m. For emergency situations, after hours, and on Saturdays, Sundays and holidays, Contractor shall contact the owner of the affected facility.

Contractor shall coordinate all work with the appropriate City field personnel. When City work forces are required at the job site to perform Contract items of work, Contractor shall give a minimum of two working days advanced notification to the appropriate field office:

Water Division:	(707) 543-4200
Sewer Division:	(707) 543-4200
Street Division:	(707) 543-3880
Survey Division:	(707) 543-3834

**5-1.43 Potential Claims and Dispute Resolution:** "Claim" means a separate demand by Contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following: (A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by the City under the Contract; (B) Payment by the City of money or damages arising from work done by, or on behalf of, Contractor pursuant to the Contract and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled; or (C) Payment of an amount that is disputed by the City.

Upon receipt of a Claim, the City shall conduct a reasonable review of the Claim and, within a period not to exceed 45 days, shall provide Contractor a written statement identifying what portion of the Claim is disputed and what portion is undisputed, provided, the parties may extend the 45 day time period by mutual agreement.

If the City needs approval from the City Council to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the Claim, and the Council does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a Claim, the City shall have up to three days following the next duly publicly noticed meeting of the City Council after the 45-day period, or extension expires to provide Contractor a written statement identifying the disputed portion and the undisputed portion.

Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the City issues its written statement. If the City fails to issue a written statement, the Claim shall be deemed rejected in its entirety.

If Contractor disputes the City's written response, or if the City fails to respond to a Claim within the time prescribed, Contractor may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the City shall conduct a meet and confer conference within 30 days for settlement of the dispute. Within 10 business days following the conclusion of the meet and confer conference, if the Claim or any portion of the Claim remains in dispute, the City shall provide Contractor a written statement identifying the portion of the Claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the City issues its written statement. Any disputed portion of the Claim, as identified by Contractor in writing, shall be submitted to nonbinding mediation, with the City and Contractor sharing the associated costs equally. The City and Contractor shall mutually

agree to a mediator within 10 business days after the disputed portion of the Claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the Claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.

## 6 CONTROL OF MATERIALS

**6-2.01G Source of Supply and Quality of Materials:** All materials required to complete the work under the Contract shall be furnished by Contractor and shall be free of hazardous substances.

**6-2.01H General:** Statistical means will not be used by the City for determination of Standard Specification compliance. Whenever both operating range test results and Contract compliance requirements are specified in these special provisions, the operating range requirements shall apply to the individual test results.

**6-2.01I Material Submittals:** Upon award of the Contract by City, Contractor shall submit to the Engineer a list of all materials proposed to be used on this project and any supporting documentation and/or samples required and source of supply.

For material listed on the “Engineer’s List of Approved Items” which is located in the Sewer and Water sections only of the City Standards, the Engineer shall be provided with the name of the manufacturer and model/part number for all material proposed for this project, unless that item has been replaced as shown on the Project Plans or in the Invitation for Bids.

For all other materials used on this project, regardless of the type of work, Contractor shall provide to the Engineer the name of the manufacturer and model/part number along with supporting documentation and/or samples that will allow the Engineer to determine the material’s acceptability.

The Engineer reserves the right to reject any proposed material, whether on the City’s “Engineer’s List of Approved Items” or not. If the City obtains information indicating that a listed item is not performing satisfactorily or is found to be defective, that item will be rejected and Contractor shall submit a replacement for review at no additional cost to the City.

**6-3.01B Material Guarantee:** Before any contract is awarded, the bidder may be required to furnish samples of materials and detailed descriptions of equipment to be used in the construction of the project. The materials samples may be subjected to the tests provided for in the Standard Specifications or in this Invitation for Bids to determine their quality and fitness for the project. The successful bidder shall unconditionally guarantee project materials and workmanship for a period of one year from the date of recording of the Notice of Completion. The guarantee shall cover 100% of all costs of repairs within the one-year period, including all costs of labor, materials, equipment, and incidentals. Except as may be otherwise provided in Section 3-1.05, the successful bidder shall provide a surety bond executed by a corporate surety authorized and admitted to transact a surety business in the state of California in the minimum amount of one-half of the Contract price to cover this guarantee.

**6-2.03D Quality Assurance:** California Test 216 (Relative Compaction) testing will be modified as follows: A mechanical compactor (Ploog Engineering Co. Model M 100 or equivalent) with 10-pound hammer and split compaction molds shall be used in lieu of the specified manual compaction equipment.

California Test 231 (Nuclear Gage Determination of In-Place Density) will be modified as follows: In-place density and relative compaction may be determined on the basis of individual test sites in lieu of the area concept, at the discretion of the Engineer.

### **6-4 Water Utility**

**6-4.01A Construction Water:** All water required for the performance of the work shall be provided by Contractor. Prior to obtaining water from the City’s water system, Contractor shall obtain a Water

Use Permit from the City of Santa Rosa Water Department and rent a hydrant or bridge meter. Contractor is responsible for the cost of all water and the cost of all deposits, permits and fees.

Contractor is prohibited from operating gate valves or fire hydrants on the City system.

The acquisition of water from the City's water system through un-metered hydrants or other facilities is a violation of City ordinance and State law. The use of water from sources other than the City's water system must be approved by the Engineer in advance of the use.

Citations and fines will be levied for violation of these and other utility regulations and deductions will be made from payments consistent with Section 7-1.02A (1) of the Standard Specifications.

**6-4.01B Water Utility Notification:** Contractors or parties requiring work of any kind by the City of Santa Rosa Water Department forces shall request such services a minimum of 48 hours in advance of the time such services are desired. Work requests which will involve the City of Santa Rosa Water Department forces for more than eight hours or an extensive number of City parts shall be requested a minimum of seven calendar days in advance.

If it is necessary to terminate or disrupt utility service to any customer, Contractor shall make the request for such work by City forces an additional 72 hours (three additional working days for a total of five working days advance notice) in advance of the time such services are desired to allow affected customers a minimum of 72 hours' notice. Contractors who fail to keep field appointments will be billed for scheduled City of Santa Rosa Water Department crew standby time which was used and the Contractor shall bear the costs incurred by the City of Santa Rosa's Water Department for re-notification of customers.

City of Santa Rosa Water Department crews work a 9/80 schedule. This schedule may prohibit shutdowns for tie-ins on alternating Fridays. After hours work or weekend work may be performed if prior authorization from the Engineer is obtained.

Other than the hours specified in this Invitation for Bids, requests by Contractor for after hours or weekend work is to be avoided whenever possible. Any overtime costs incurred by City for such work shall be borne by Contractor.

Interruption of utilities service to commercial customers shall be coordinated with the customer to minimize disruption to the enterprise to the greatest extent practicable. After notification by the Contractor of the need, the City of Santa Rosa Water Department will contact all commercial customers and inform Contractor accordingly.

**6-4.01C Water Facility Damage:** All damage caused to the City's water system shall be immediately reported to the Engineer.

Damage caused to the City's water system by Contractor's operations shall be repaired by the Contractor at Contractor's sole expense in a manner satisfactory to the City of Santa Rosa Water Department. Such repairs shall not be charged to the City or any City project. All repair work shall be witnessed and approved by the City of Santa Rosa Water Department prior to backfilling the excavation. The City will require re-excavation if backfilling occurs prior to inspection, which costs shall be borne by Contractor.

Contractor is responsible for, at its sole cost and expense, the repair and remediation of damage to property and facilities caused by any of the following circumstances:

1. Contractor fails to make a written request for a markout or begins excavation without providing the City of Santa Rosa Water Department a reasonable opportunity to mark facilities;



2. Contractor destroys markouts;
3. Contractor fails to perform hand digging or probing for utilities near markouts; or
4. Contractor fails to use reasonable caution, regardless of whether markouts are present or clear. Reasonable caution includes any efforts to avoid damaging existing facilities, such as when excavating in the vicinity of water mains.

City may, in its discretion, opt to make the repairs for which Contractor is responsible with its own forces. In such cases, the repairs will be made at Contractor's expense in accordance with the emergency repair rate schedule of the City of Santa Rosa Water Department. The City may make repairs whenever restoration of service requires extraordinary speed or special equipment. Contractor will be billed accordingly and City shall have the right and option to withhold payment hereunder, or a portion thereof, for any such costs billed but not promptly paid by Contractor.

**6-4.02 Salvage:** All valves, hydrants, and other appurtenances of the water system that are the property of City and removed by Contractor shall be delivered to the City's Municipal Services Center (55 Stony Point Road) unless Contractor has obtained specific written approval from the City of Santa Rosa Water Department to otherwise dispose of the materials.

**6-4.03 Trade Names and Alternatives:** Material and equipment specifications that identify a particular patent, trade name or manufacturer, may be satisfied through substitute materials and equipment accepted by the City. Contractor may offer substitute materials and equipment of equal or better quality to the City. Any such offer shall be made in writing to the Engineer at least four weeks in advance of the time Contractor wishes to order the materials or equipment. Contractor shall include sufficient data which, together with any other information the Engineer may require, will enable the Engineer to determine the acceptability of the materials and equipment. When the substitute materials or equipment necessitate changes to any part of the work, the information shall include drawings and details showing all such changes and Contractor shall perform these changes as a part of any acceptance of substitute materials or equipment. The use of substituted materials and equipment will be permitted only after written acceptance of the materials and equipment by the Engineer. Such acceptance shall not relieve the Contractor from full responsibility for the sufficiency, quality and performance of the substitute materials and equipment.

## 7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

**7-1.02A (1) Forfeitures for Health and Safety Violations:** Contractor shall comply with all applicable provisions of the Santa Rosa City Code and any failure to do so shall constitute a breach of the Contract. In the event of any violation of the Santa Rosa City Code that may impact public health and safety, including, but not limited to Chapter 17-12, "Storm Water" and Chapter 13-04, "Street Encroachments," City shall have the right to impose a charge against Contractor in an amount equal to \$500.00 per violation per day. Prior to the imposition of any charge hereunder, City shall first provide a written notice to Contractor of the violation and setting forth a reasonable period of time for Contractor to cure the violation(s). In the event Contractor fails to cure any such violation within the time provided, City shall have the right, in addition to all other rights and remedies available to City, to deduct and withhold as a permanent forfeiture by Contractor the appropriate amounts from any payment otherwise due Contractor under this Contract.

**7-1.02K (2) Wages:** Pursuant to Labor Code sections 1770 *et seq.*, each laborer or mechanic of Contractor or any subcontractor engaged in work on the project under this Contract shall be paid not less than the hourly wage rate of per diem wages set forth in the prevailing wage rate schedule published by the Director of Industrial Relations, regardless of any contractual relationship which may be alleged to exist between Contractor or any subcontractor and such laborers and mechanics. A copy of the schedule of prevailing wage rates can be obtained online at [www.dir.ca.gov](http://www.dir.ca.gov) or from the Department of Transportation and Public Works at 69 Stony Circle, Santa Rosa.

Any laborer or mechanic employed to perform work on the public works project under this Contract, which work is not covered by any of the foregoing classifications, shall be paid not less than the prevailing wage rate of per diem wages specified herein for the classification which most nearly corresponds to the work to be performed by the worker.

The foregoing specified prevailing wage rates are minimum rates only, and Contractor may pay any wage rate in excess of the applicable rate.

Pursuant to Labor Code Section 1775, Contractor as a penalty to the owner shall forfeit not more than \$200.00 for each calendar day, or a portion thereof, for each worker paid less than the prevailing wage rate established by the Department of Industrial Relations for such work or craft in which such worker is employed. The difference between such prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which the worker was paid less than the prevailing wage rate shall be paid to each worker by Contractor.

Contractor shall only provide prevailing wage reports upon written request from City.

**7-1.02K (4) Apprentices:** Contractor agrees to comply with Chapter 1, Part 7, Division 2, sections 1777.5 *et seq.* of the California Labor Code. These sections require contractors and subcontractors to employ apprentices in apprenticeable occupations in a ratio of not less than one hour of apprentice work for each five hours of journeyman work (unless an exception is granted in accordance with Section 1777.5), and the contractors and subcontractors shall not discriminate among otherwise qualified employees as apprentices solely on the ground of sex, race, religion, creed, national origin, ancestry, or color. Only apprentices as defined in Labor Code section 3077, who are in training under apprenticeship standards and who have written apprentice agreements will be employed on public works in apprenticeable occupations. The responsibility for compliance with these provisions is fixed with the prime contractor for all apprenticeable occupations.

**7-1.02K(6)(a)(1) Notice to Vendors:** Attention is directed to the current OSHA Standards. All equipment, tools and materials which are furnished and/or installed as part of this Contract shall meet or exceed the aforementioned standards in order to be considered acceptable.

**7-1.02K(6)(b) Excavation Safety:** When the digging or excavation occurs during project construction, Contractor shall:

1. Promptly notify City in writing of the following conditions before any such conditions are disturbed:
  - a. Material that Contractor believes may be hazardous waste as defined in Health and Safety Code section 25117 that is required to be removed to a Class I, Class II or Class III disposal site in accordance with provisions of existing law;
  - b. Subsurface or latent physical conditions at the site differing from those indicated in the Invitation for Bids; and
  - c. Physical conditions at the site of any unusual nature, materially different from those ordinarily encountered and generally recognized as inherent in the type of work under the Contract.
2. The City will investigate the conditions and will issue a change order under the terms of the Contract if it finds that the conditions warrant it.
3. If a dispute arises between City and Contractor as to whether a change order is warranted, Contractor shall not be excused from any scheduled completion date provided for in the Contract but shall proceed with all work to be performed under the Contract.

**7-1.02K(6)(b)(1) Trench Excavation Safety Plans:** When the estimated cost for the excavation of any trench or trenches five feet or more in depth will exceed \$25,000.00, Contractor shall submit to the Engineer in advance of excavation a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards established by the construction safety orders, or if the trench is anticipated to be greater than 20 feet, the plan shall be prepared by a registered civil or structural engineer.

A permit to do the above described work shall be obtained from the State of California, Division of Industrial Safety. Proof of such permit shall be submitted to the Engineer prior to starting the trench work.

Full compensation for complying with the provisions of this section shall be considered as included in the Contract price and no additional allowance will be made for the work.

**7-1.02K(6)(d) Confined Space Safety:** Any confined space entry for this project, including but not limited to manhole or water storage tank entry, will require a confined space entry permit pursuant to Cal/OSHA regulations as set forth in title 8 California Code of Regulations (CCR) sections 5157 or 5158. Confined space entry shall have the meaning ascribed in title 8 CCR sections 5157 and 5158. For any confined space entry for construction operations regulated by title 8 CCR section 1502, Contractor shall comply with title 8 CCR section 5158, "Other Confined Space Operations." For any other confined space operations, Contractor shall comply with title 8 CCR section 5157, "Permit-Required Confined Spaces."

Attention is directed to the technical specifications in the Special Provisions for information regarding entry to any City maintained confined space. Pursuant to title 8 CCR section 5157, Contractor is required to obtain any available information regarding hazards and operations for any City maintained confined spaces. The City maintained Confined Space Entry Manual is available for viewing at the City of Santa Rosa Water Department or Transportation and Public Works Department office at 69 Stony Circle, Santa Rosa.

Contractor shall immediately inform the Engineer of any previously unidentified hazards confronted or created during confined space entry.

**7-1.02L (3) Patents and Royalties:** All fees, royalties, or claims for any patented invention, article, process or method that may be used upon or in any manner connected with the work under this Contract shall be paid by Contractor. Contractor and its sureties shall protect and hold harmless City and its officers, agents, and employees from any and all demands made for such fees royalties or claims brought or made by any third party, and before the final payment is made on the account of the Contract, Contractor shall, if requested by City, furnish acceptable proof of a proper release from all such claims and liabilities.

Should Contractor, its officers, agents, or employees, or any one of them be enjoined from furnishing or using any invention, article, material, or plans supplied or required to be supplied or used under the Contract, Contractor shall promptly substitute other articles, materials, or appliances in lieu thereof of equal efficiency, quality, finish, suitability, and market value, and satisfactory in all respects to the Engineer. In the event that the Engineer elects, in lieu of such substitution, to have supplied and to retain and use any such invention, article, materials, or plans as may be required to be supplied by the Contract, Contractor shall pay such royalties and secure such valid licenses as may be requisite and necessary for City, its officers, agents, and employees, or any one of them to use such invention, article, materials, or appliance without being disturbed or in any way interfered with by any proceeding in law of equity on account thereof. Should Contractor neglect or refuse to make the substitution promptly or to pay such royalties and secure such licenses as may be necessary, then in that event the Engineer shall have the right to make such substitutions or City may pay such royalties and secure such licenses and charge Contractor even though final payment under the Contract may have been made.

**7-1.02M (3) Mined Materials:** California Public Contract Code section 20676 prohibits surface mining operators which are subject to the Surface Mining and Reclamation Act of 1975 (SMARA) from selling California mined construction material to the City unless the operator is identified in a list referred as the **3098 List**. The List, which is maintained by the Department of Conservation's Office of Mine Reclamation (OMR), changes throughout the year and can be viewed at the OMR website: [http://www.consrv.ca.gov/OMR/ab\\_3098\\_list/index.htm](http://www.consrv.ca.gov/OMR/ab_3098_list/index.htm). To confirm whether or not a specific operator is on the List at any given time, Contractor shall call the OMR at (916)323-9198.

**7-1.03A Maintaining Traffic:** Attention is directed to Sections 7-1.04 of the Standard Specifications and to the following modifications thereof.

If construction is within City owned right-of-way, provisions shall be made for the safe passage of public traffic through the work site at all times consistent with the requirements of Santa Rosa City Code Chapter 13-04.

Except for projects to be performed under a minor contract, Contractor shall install and maintain project identification signs at each end of the project or as directed by the Engineer two weeks prior to any construction activity. City shall furnish the appropriate sign panels upon request from Contractor. To mount the sign panels, Contractor shall furnish and install 4" X 4" posts or mount by other appropriate methods as approved by the Engineer. These sign panels shall be returned to the City Corporation Yard at 55 Stony Point Road after completion of the project.

Two weeks prior to any construction activity, advance notice signs for road closures shall be furnished and installed by Contractor at each end of the project and shall remain in place throughout the duration of the subject closure. Details of panel construction and lettering shall be approved by the Engineer.

Contractor shall furnish, install, and maintain at its expense all barricades, signs, lights, and other devices necessary to adequately warn of any obstructions to the traveled and pedestrian way and provide flaggers as necessary for the safety of public traffic and pedestrians and to provide access to property adjacent to the work site and Contractor shall comply with the Americans with Disabilities Act of 1990 (42 U.S.C. 12101, *et seq.*) (ADA) and any regulations and guidelines issued pursuant to the ADA.

Contractor shall comply with the current edition of the California Manual of Uniform Traffic Control Devices (CA MUTCD) for all items related to traffic within the work site.

Rain and other occurrences that may cause the suspension or delay of the work shall in no way relieve Contractor of its responsibility to provide traffic control and public access through the work site as specified herein. At all times, Contractor shall keep at the work site such materials, forces and equipment as may be necessary to keep roads, streets, and driveways within the work site open to traffic and in good repair and shall expedite the passage of such traffic, using such forces and equipment as may be necessary.

Should Contractor fail, in the opinion of the Engineer, to provide all the materials, forces and equipment necessary to maintain traffic through the work site as set forth herein, City may take steps necessary to remedy any such failure, including but not limited to causing such work to be performed and/or suspending any further work under the Contract. Any such remedial cost and expense incurred by the City, plus an administrative charge of 15%, shall be immediately due and payable by Contractor and may be deducted from any amounts owed to Contractor hereunder. In the event there are insufficient sums owed to Contractor hereunder to cover the foregoing costs and charges, City shall have the right to pursue any other remedy to recover the same, including but not limited to, proceeding against any surety or bond in favor of City. City's rights under Section 7-1.02 are intended to be in addition to and not in lieu of any charges imposed by City against Contractor under Section 7-1.02A (1) above for violations of the Santa Rosa City Code.

Contractor shall be responsible for informing emergency response agencies operating within the area of the work of obstructions to either public or private roads caused by reason of Contractor's operations hereunder.

Contractor shall make provisions for the safe passage of pedestrians around the project work site at all times.

## 8 PROSECUTION AND PROGRESS

**8-1.01A Assignments:** Once awarded, this Contract shall not be transferred, assigned, or sub-contracted, except as herein expressly provided without the prior written consent of the City in the City's sole and absolute discretion. See Section 5-1.12 of the Standard Specifications.

**8-1.04B Standard Start:** Contractor shall begin work within ten calendar days after the date authorized in the Notice to Proceed and shall diligently prosecute the Contract to completion before the expiration of:

### 60 WORKING DAYS

**8-1.05 Time of Completion:** Working days will be counted beginning with the day the Contractor begins work or with the tenth day after the date authorized in the Notice to Proceed, whichever occurs first.

Unless otherwise directed by Engineer, Contractor shall not conduct any activities that generate noise earlier than 7:00 a.m. or later than 7:00 p.m.

**8-1.10 Liquidated Damages:** Contractor hereby agrees that Contractor shall pay to the City liquidated damages for each and every calendar day delay over and above the number of working days prescribed above for finishing the work in the amount shown in Section 8-1.10 of the Standard Specifications.

**8-1.13 Contractor's Control Termination:** Attention is directed to Section 8-1.13 of the Standard Specifications. City may terminate Contractor's control of the work for failure to include the Federal Requirements in Contractor's subcontracts.

**8-1.14. Contract Termination:** Attention is directed to Section 8-1.14 of the Standard Specifications.

## 9 MEASUREMENT AND PAYMENT

**9-1.04 Force Account Work:** All work done on a force account basis shall be recorded daily on report sheets prepared by Contractor and signed by both the Engineer and Contractor. Such reports shall thereafter be considered the true record of force account work performed during the project. Such reports shall be furnished to the Engineer and a copy retained by Contractor.

All extensions of labor, equipment, and material costs shall be completed by Contractor and submitted to the Engineer within 30 days of the completion of the extra work. Completed and extended extra work reports received later than the times herein prescribed may be deemed invalid and rejected without payment at the discretion of the Engineer.

**9-1.07 Payment Adjustments for Price Index Fluctuations:** Any references to Opt Out of Payment Adjustments for Price Index Fluctuations in the Standard Specifications are deleted in their entirety.

**9-1.16 Progress Payments:** Once each month for progress pay purposes, the City will prepare a written estimate of the total amount of completed work and accepted materials purchased by Contractor but not installed. The City shall retain five percent of such estimated value of the completed work and the unused materials and pay Contractor the balance after deducting all previous payments and all sums to be retained under the provisions of the Contract. No such estimate or payment shall be required to be made when, in the judgment of the Engineer, the work is not proceeding in accordance with the provisions of the Contract or when, in the Engineer's judgment, the total value of the completed work since the last estimate is less than \$500.00. No such estimate or payment shall be construed to be an acceptance of any defective work or improper materials.

After Contract acceptance, the Engineer will prepare a written proposed final estimate of the proposed final quantities of work completed under the Contract and the value of such work and will submit such estimate to Contractor. The City shall retain five percent of such estimated value of the work done and shall pay to Contractor the balance after deducting all amounts to be retained under the provisions of the Contract.

The City may, at its option and at any time, retain out of any amounts due Contractor sums sufficient to cover any unpaid claims of City or others, provided that sworn statements of all non-City claims shall have been filed with the Director of Finance.

**9-1.16E(6) Substitution of Securities for Withheld Amounts:** Pursuant to Public Contract Code section 22300, securities may be substituted for any moneys withheld by City to ensure performance under this Contract, provided that substitution of securities provisions shall not be required in contracts in which there will be financing provided by the Farmer's Home Administration of the United States Department of Agriculture pursuant to the Consolidated Farm and Rural Development Act (7 USC sections 1921 *et seq.*), and where federal regulations or policies or both do not allow the substitution of securities. At the request and expense of Contractor, securities equivalent to the amount withheld shall be deposited with the City, or with a state or federally chartered bank as the escrow agent, which shall then pay such moneys to Contractor. The Director of Finance is authorized to execute substitution of securities agreements on behalf of the City. The City will return the securities to Contractor upon satisfactory completion of the Contract as determined by City in its sole discretion and the resolution of all outstanding claims against the securities. Contractor shall be the beneficial owner of any securities substituted for moneys withheld and shall receive any interest thereon.

Securities eligible for investment under this section shall include those listed in Government Code section 16430, bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit or any other security mutually agreed to by Contractor and the City, provided that the substituted security is equal to or not less than five percent of the Contract amount.

Security substitutions must be submitted by Contractor and approved by City prior to the time of the first progress payment to be made under the Contract. No other method of substituting securities for retention will be accepted. The security substitution shall be done only upon execution of an agreement satisfactory to City which includes the following provisions:

- a. The amount of securities to be deposited;
- b. The terms and conditions of conversion to cash in case of the default of Contractor;  
and
- c. The procedure for return of securities upon completion of the Contract.

**9-1.17D Final Payment and Claims:** The processing of payment of the final estimate shall not be commenced less than 35 days after the date of recording of the Notice of Completion with the County Recorder's Office. Contractor is advised that it takes approximately ten days for a check to be issued following a request for payment.

Contractor shall submit its written statement of all claims for additional compensation under the Contract to the Engineer within 15 days after submission to Contractor of the proposed final estimate.

If Contractor does not file a claim within the 15-day period, or upon Contractor's approval, the Engineer will issue a final written estimate and the City shall pay to Contractor the entire sum due after deducting all previous payments, if any, and all amounts to be retained under the provisions of the Contract.

If Contractor files a claim within the 15-day period, the Engineer will furnish a semi-final estimate and pay the amount due under the semi-final estimate within 30 days. The semi-final estimate is conclusive as to the amount payable except as may be affected by claims and any amount retained. The Engineer shall then consider and investigate such claim and shall make such revision in the final quantities as the Engineer may find to be due and shall then make and issue a final written estimate. The City will pay the amount due, after deducting all previous payments, if any, and amounts to be retained under the provisions of the Contract.

Any and all prior partial estimates and payments shall be subject to correction in the final estimate and payment.

The final estimate shall be conclusive and binding against both parties to the Contract on all questions relating to the performance of the Contract and the amount of work done thereunder and compensation therefor, except in the case of gross error.

**9-1.17D (3) Final Determination of Claims:** Claims filed by Contractor shall be in sufficient detail to enable the Engineer to determine the basis and amount of the Claims. Contractor shall also furnish reasonable documentation to the City to support Claims. If additional information is required by the Engineer, Contractor shall provide such information to the Engineer no later than the 15<sup>th</sup> day after receipt of the written request from the Engineer. If the 15<sup>th</sup> day falls on a weekend, holiday, or day City offices are closed, then the information shall be provided to the Engineer no later than close of the next business day. Failure to submit the requested information to the Engineer within the time specified will be sufficient cause for denying the Claim.

Contractor shall keep full and complete records of the costs and additional time incurred for any work for which a claim for additional compensation is made. The Engineer or any designated Claim



investigator or auditor shall have access to those records and any other records as may be reasonably required by the Engineer to determine the facts or contentions in each Claim. Failure to grant access to such records shall be sufficient cause for denying the Claims.

**9-1.22 Arbitration:** Any references to Arbitration in the Standard Specifications are deleted in their entirety.

Claims submitted by Contractor shall be accompanied by a notarized certificate containing the following language:

Under the penalty of law for perjury or falsification and with specific reference to the California False Claims Act, Government Code sections 12650 *et seq.*, and the United States False Claims Act, title 31, United States Code sections 3729 *et seq.*, the undersigned,

\_\_\_\_\_  
(Name)

\_\_\_\_\_ of  
(Title)

\_\_\_\_\_  
(Contractor)

hereby certifies that the claim for additional compensation made herein is supported by a true statement of the actual costs incurred and time expended on this project and is fully documented by records maintained by Contractor.

Dated \_\_\_\_\_

/s/ \_\_\_\_\_

Subscribed and sworn before me this \_\_\_\_\_ day of

\_\_\_\_\_

\_\_\_\_\_  
Notary Public

My Commission Expires \_\_\_\_\_

Failure to submit the notarized certificate will be sufficient cause for denying the claim.

Any claim for overhead expenses, in addition to being certified as stated above, shall be supported by an audit report of an independent Certified Public Accountant. Any such overhead claim shall also be subject to audit by the City at its discretion.

Any costs or expenses incurred by the City in reviewing or auditing any claims that are not supported by Contractor's cost accounting or other records shall be deemed to be damages incurred by the City within the meaning of the California False Claims Act and the United States False Claims Act.



**TECHNICAL SPECIFICATIONS**

**FOR**

**LOW IMPACT DEVELOPMENT AT MUNICIPAL SERVICES CENTER NORTH (MSCN)**

**CONTRACT NO. C02391**



**7/28/2024**

**2024**

# 12 TEMPORARY TRAFFIC CONTROL

## **12-1 General**

**12-1.01 General:** Construction area traffic control devices shall be installed and maintained in accordance with the applicable sections of these Special Provisions, the Standard Specifications, the current Edition of the California Manual on Uniform Traffic Control Devices (CA MUTCD), the Americans with Disabilities Act (ADA) and as directed by the Engineer.

**12-1.03 Flagging Costs:** The first paragraph of Section 12-1.03, "Flagging Costs" is amended to read:

The cost of furnishing all flaggers, including transporting flaggers, to provide for passage of public traffic through the work under the provisions in Section 7-1.03, "Public Convenience", and Section 7-1.04, "Public Safety", shall be considered as included in the contract lump sum price paid for traffic control and no additional allowance will be made therefor.

## **12-3 Traffic-Handling Equipment and Devices**

**12-3.01 General:** Prior to commencing construction which will affect existing vehicular and pedestrian traffic, you shall submit for review by the Engineer, Traffic Control Plans on 11" x 17" sheets of paper which contains only information specifically related to work zone vehicular and pedestrian traffic control. If you propose to use the current edition of the CA MUTCD published by Caltrans in lieu of a traffic control plan, in specific work operations, they shall submit in writing for consideration which Typical Application Diagram will be used and how it will be applied for each work operation. Traffic Control Plans or proposals shall be submitted for review at least two weeks prior to implementation.

Traffic Control Plans shall contain a title block which contains your name, address, phone number, project superintendent's name, contract name, dates and hours traffic control will be in effect, and a space for review acknowledgment.

The content of the Traffic Control Plan shall include, but is not limited to, the following:

1. Show location and limits of the work zone.
2. Give dimensions of lanes affected by traffic control that will be open to traffic.
3. Indicate signing, cone placement, and other methods of delineation and reference to appropriate City or Caltrans Standards.
4. Dimension location of signs and cone tapers.
5. Identify side streets and driveways affected by construction and show how they will be handled.
6. Show how pedestrian traffic will be handled through the construction site. Pedestrian pathways through the work zone shall be in compliance with the requirements of ADA during and after work hours.
7. Demonstrate how two-way traffic will be maintained.

No work except for installation of project identification signs will be allowed to commence prior to approval of the Work Zone Traffic Control Plans.

**12-4.01 Maintaining Traffic:**

1. The full width of the traveled way shall be open for use when construction operations are not actively in progress, unless work has specifically been authorized by the Engineer.
2. The location of traffic control signing, barricades, and other facilities shall be monitored frequently (four to five times per day) by you to verify their proper location. All traffic signal and other traffic control devices shall be maintained at all times.
3. You shall conduct your operations to cause the minimum obstruction and inconvenience to traffic and to places of business, multiple dwelling units and residences adjacent to the work. You shall notify the Engineer of his planned work and utility service interruption at least five working days in advance to allow time to notify residents and businesses.
4. When construction activities will prevent vehicle access to individual driveways you shall notify and receive permission from the affected businesses and residents. Attention is directed to Section 7-1.03, "Public Convenience". **Full access shall be provided to all driveways during non-working hours.**
5. At locations where traffic is routed perpendicular to trench excavation, the excavation shall be conducted in a manner to always provide a surface reasonably satisfactory for traffic. Substructure installation or construction shall be conducted on only one-half the width of the roadway at a time, and that portion of the roadway being used by traffic shall be kept open and unobstructed until the opposite side of the roadway is ready for use. Upon completion of the rough grading, the surface of the roadbed shall be brought to a smooth, even condition free from humps and depressions and made satisfactory for traffic.

**12-4.01A Construction Traffic:** You shall submit a trucking route along with the traffic controls plans for approval by the Engineer. The route must minimize traffic on residential streets that are not part of the project.

Existing pavement damaged by your operations and not shown to be replaced shall be replaced at your expense, per City Standards and to the satisfaction of the Engineer.

You shall not park construction vehicles, contractor employee vehicles, stage materials or stockpiles in front of any business or residential driveway access and you shall maintain access to private parking lots within the block where work is in progress. Construction vehicles shall not be left running for any length of time if parked in front of a business or residential unit.

You shall keep the City of Santa Rosa Fire Department informed regarding the closure of any traveled way. At a minimum, you shall call the Fire Department at 543-3535 **and** the Communications Center at 543-3666 **daily** to report any traveled way closure. This means immediately upon closure for that day and again immediately after removal of the closure. For closures over multiple days, the daily notification still applies. This requirement does not apply for single lane closures on multiple lane streets.

You shall notify Santa Rosa City Bus at (707) 543-3922, and Santa Rosa Recycling and Collection at (707) 586-8234 5 calendar days prior to any lane closures or restrictions in turning movements.

If you have been given an approved Traffic Control Plan that includes road closures, they shall maintain vehicular access to homes and other properties where work is in progress within the closure area.

Where necessary, and only after receiving written approval from the Engineer, you may temporarily suspend curb side parking in their immediate work zone. Notification to businesses and residents shall be hand delivered at least 72 hours prior to construction in the affected areas.

Notification shall be as follows:

1. A notice placed on the front door of each home or business where curb side parking will be suspended and attempt made to notify each business or resident verbally that work will be underway within the block and that curb side parking will be suspended during stated working hours and request that vehicles be parked out of the roadway by 8:00 a.m. Service of notice shall not bar use of cars within the block, as individual plans change and emergencies arise.
2. Type 1 barricades every 50 feet adjacent to the curb where parking will be suspended with a notice posted on the barricade stating specific dates and times that curb side parking will be temporarily suspended. If work will not take place in the posted area, then you shall remove "No Parking" notices.

You shall maintain vehicle access to all homes and other properties along the work zone. During paving operations, you will be allowed to temporarily suspend vehicle access to a limited number of driveways when approved by the Engineer. When approved by the Engineer and at least 72 hours prior to suspending access to any driveway, you shall give both written and verbal notice to the affected businesses and residents and place barricades adjacent to the driveways with posted notices stating the specific dates and times of the suspension for that area. The notice shall also indicate an alternate parking location. Suspension of access to driveway will be permitted only as approved by the Engineer and only between the hours of 8:00 am and 4:30 pm.

Cross streets will require maintenance of at least one-half (1/2) width of each street for traffic purposes, unless a parallel route is approved by the Engineer. Flagging will only be allowed between the hours of 8:30 am and 4:00 pm.

Barricades and flaggers shall be positioned to allow safe turns at intersections and curves.

You shall maintain traffic control as necessary and as directed by the Engineer for "cat-tracking" operations by City Forces. Flaggers, barricades, signing, etc., shall remain in place for protection of City personnel until such time as all temporary lane delineation is complete.

**12-9.01 Payment:** Traffic Control shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, materials, tools and equipment, and doing all work involved in **vehicular and pedestrian** traffic control, including but not limited to, providing, placing, maintaining, and removal of temporary paths and/or ramps, temporary relocation of regulatory signs, changeable message boards, project and public notification signs, flagging, excavation, compaction, furnishing, and placement of asphalt concrete and/or PCC, barricades, toe-rails, hand rails, complying with CA MUTCD Standards for Pedestrian Safety, coordination efforts and any other items necessary for vehicle and pedestrian traffic control not specifically enumerated in the plans or these specifications, and no additional allowance will be made therefor.

## 13 WATER POLLUTION CONTROL

**13-1.01A Summary:** Water Pollution Control shall be performed in accordance with Section 13, Water Pollution Control, of the Standard Specifications and these technical specifications. In addition, construction activities shall comply with:

The current California Water Quality Control Board, North Coast Region Order No. National Pollutant Discharge Elimination System Municipal Storm Water Permit, commonly referred to as the "Storm Water Permit". A copy of the Storm Water Permit is available for review at the City of Santa Rosa Transportation and Public Works Department, 69 Stony Circle, Santa Rosa, CA, and at [www.srcity.org/stormwaterpermit](http://www.srcity.org/stormwaterpermit).

The California Stormwater Quality Association Storm Water BMP Handbook for Construction (CASQA Handbook). BMPs shall be selected, installed and maintained in accordance with the latest edition. A copy of the handbook can be viewed at the City of Santa Rosa Department of Transportation and Public Works office at 69 Stony Circle or downloaded from CASQA, <http://www.casqa.org/>.

In this technical specification the CASQA Handbook BMP numbers are appended to the associated Standard Specification sections. If a conflict occurs the CASQA Handbook BMPs shall govern.

**13-1.01B Definitions: Construction phase:** The construction phase starts at the start of job site activities and ends at Contract acceptance.

**13-1.01C(4)(c) Water Quality Monitoring Reports:** If the project is less than 1 acre you shall complete and sign the Storm Water Correction Notices (below) with the City as part of the Storm Water Permit.

# STORM WATER CORRECTION NOTICE

FAILURE TO CORRECT BY DUE DATE MAY RESULT IN STOP WORK NOTICE!

PROJECT NAME: \_\_\_\_\_

JOB ADDRESS: \_\_\_\_\_

PROJECT / PERMIT #: \_\_\_\_\_ DATE: \_\_\_\_\_

No storm water deficiencies identified.

**I HAVE INSPECTED THIS PROJECT SITE. THE FOLLOWING ISSUES AND DEFICIENCIES HAVE BEEN IDENTIFIED AND REQUIRE CORRECTIVE ACTION:**

## STORMWATER BMPs:

- Storm Drain Protection:**    Install                      Maintain                      Replace
- Perimeter Controls:**            Install                      Maintain                      Replace
- Housekeeping:**                      Sweep                      Clean                      Remove Garbage
- Stockpiles:**                      Cover                      Perimeter Controls            Remove
- Debris Bins:**                      Cover                      Perimeter Controls
- Tracking:**                      Clean-Up                      Install Tracking Controls
- Portable Toilet:**                      Secondary Containment Required
- Concrete:**                      Install BMPs for Pumper or Concrete Truck  
Cover / Maintain Concrete Washout Containers
- Sediment & Erosion:**            Install Appropriate Controls            Dust Controls
- Other:**

**\*ALL DEFICIENCIES MUST BE CORRECTED PRIOR TO NEXT RAIN EVENT OR NO LATER THAN DUE DATE, WHICHEVER IS SOONER.**

DATE REQUIRED (SEE NOTE\*):

INSPECTOR: \_\_\_\_\_ PH #: ( ) \_\_\_\_\_

CONTRACTOR SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

- Inspection Type:**
- Monthly** (Oct 1<sup>st</sup>-April 30<sup>th</sup>)
  - Pre-Rain** (Sept 1<sup>st</sup>-Oct 1<sup>st</sup>)
  - Deficiency Re-Inspection**
  - Following First 0.25" Rain** (within 2 business days)

## **13-2 Water Pollution Control Program**

**13-2.01C Submittals:** The program to control water pollution required to be submitted under this section of the Standard Specifications shall include a spill contingency plan that establishes clean-up procedures that will be followed in the event of a spill of potentially hazardous, toxic, or polluting materials.

**13-2.04 Payment:** The Water Pollution Control Program shall be considered as included in the contract **lump sum** price paid for **Water Pollution Control**.

## **13-3 Storm Water Pollution Prevention Plan**

**13-3.01A Summary:** This project is NOT exempt from the State Water Resources Control Board General NPDES Permit for the Discharge of Storm Water related to Construction Activities (Construction General Permit), and IS required to have a Storm Water Pollution Prevention Plan (SWPPP), therefore Section 13-3, Storm Water Pollution Prevention Plan, of the Standard Specifications does apply to this project. Risk Level 2 will apply to the Project SWPPP. The Project is part of the larger Fulton Road Widening Project WDID 149C397670-549902.

You shall be responsible for adhering to all document preparation, uploads to the SMARTS system, and inspection requirements. Filing a notice of intent, notice of termination, and annual report submission shall not be required for this contract. You shall prepare responses for all SMARTS Annual Report questions for the site included in this contractor and submit to the City Project Manager by August 15<sup>th</sup> every year construction was active under this contract. Should construction be complete on this contract earlier in the Construction General Permit (CGP) reporting year and the bioretention area meets the 51% or greater cover requirement, you can submit their final SMARTS Annual Report responses at the time the punch list process has been completed, all proposed work has been accepted by the City, and the site enters the warranty period. After all punch lists have been completed, all proposed work has been accepted by the City, and the site enters the warranty period, you won't be required to provide any further SMARTS Annual Reporting responses.

Due to the site's sensitive IGP compliance, construction shall take place during the dry season (April 30<sup>th</sup> – October 1<sup>st</sup>).

Your SWPPP shall include reference to the following:

The Project is located on an active Industrial General Permit (IGP) site. While you are not responsible for implementing the IGP, the site's assigned Qualified SWPPP Practitioner (QSP) must go through a mandatory brief initial training and site walk with the IGP site's Qualified SWPPP Developer (QSD), currently the Engineer for the Storm Water and Creeks Section. Your activities shall not negatively impact the status or sampling results of the IGP. The SWPPP must acknowledge that the construction activities are located on active IGP site WDID 1 49I011692, work shall be performed in a way that doesn't negatively impact the IGP status or sampling results, the IGP QSD must be immediately notified in the event of an issue that could impact water quality including what measures you are implementing to mitigate the threat, and comply with resolving issues deemed as a potential threat by the IGP QSD to the IGP status. The Construction General Permit



(CGP) QSD must submit any CGP SWPPP revisions to the IGP QSD as well as upload the amendments to SMARTS. If you need to modify or impacts any of the established IGP Best Management Practice measures (BMPs) not accounted for in the Contractor's SWPPP, you, Contractor's QSD, or Contractor's QSP must coordinate before a change if planned or immediately after in unintentionally impacted the IGP's BMPs. You shall prioritize immediately mitigating an active stormwater quality risk if coordination would delay protecting stormwater quality, but then must immediately follow up with coordination with the IGP QSD. The IGP site traditionally tends to have a high pH value, but within the permitted tolerances of the IGP. Therefore, concrete pouring shall not be performed when precipitation is in the weather forecast. Should precipitation occur within the 30-day standard curing period for traditional concrete regarding storm water quality, then the concrete shall be covered to prevent exposure or comingling with storm water. While the Project's CGP requirements allow a turbidity numeric action level (NAL) of 250 NTU, the sites IGP requirements allow an annual average turbidity NAL of 100 NTU from required four annual sampling wet weather events. Therefore, the sites IGP turbidity NAL requirements govern. This shall be reflected in the SWPPP and sampling protocols for this contract.

As the site has both CGP and IGP permit coverage, the stricter sampling requirements shall govern. Meaning, the governing numeric action levels (NAL) shall be between pH 6.5-8.5pH (CGP) and turbidity lower than 100 NTU (due to IGP turbidity annual average allowances). All exceedances of these NALs shall be immediately reported to the IGP QSD. Immediate action shall be taken to resolve any exceedances. The CGP sampling location(s) shall include a sample obtained from the documented IGP sample location for every sampling occurrence for qualifying storm events.

**13-3.04 Payment:** The Contractor-prepared Storm Water Pollution Prevention Plan shall be considered as included in the contract lump sum price paid for **Water Pollution Control**.

#### **13-4 Job Site Management**

**13-4.03B: Spill Prevention and Control:** You shall also comply with CASQA Spill Prevention and Control (BMP WM-4). If a spill occurs at the construction site and you do not take immediate and adequate steps to contain and clean up the spill, especially if rain is threatening or if a discharge to a storm drain or creek could occur, the City shall have the right, in its sole and absolute discretion, to clean up the spill using City forces or an independent contractor. The cost of any such cleanup, in addition to recovery of any penalty or fine imposed upon the City, plus an administrative charge of fifteen percent (15%) of the costs incurred by the City, shall be deducted from any amounts owed to you hereunder.

In the event there are insufficient amounts owed to you hereunder to cover the foregoing costs and charges, the City shall have the right to pursue any other remedy to recover same, including, but not limited to, proceeding against any surety or bond in favor of the City. The City's rights under this section are intended to be in addition to and not in lieu of any imposed by the City against you for violations of City Code Chapter 17-12, "Storm Water".

**13-4.03C(3): Stockpile Management:** You shall also comply with CASQA Stockpile Management (BMP WM-3). Do not block storm water flows.

**13-4.03D(1): General:** You shall also comply with Waste Management/CASQA Solid Waste Management (BMP WM-5). You shall dispose of all trash, rubbish, and waste materials of any kind generated by you, subcontractor, or any company hired by you on a daily basis.

**13-4.03D(3): Concrete Waste:** You shall also comply with CASQA Concrete Waste Management (BMP WM-8). Ensure the containment of concrete washout areas and other washout areas that may contain pollutants so there is no discharge into the underlying soil and onto the surrounding areas.

**13-4.03D(4): Sanitary and Septic Waste:** You shall also comply with CASQA Sanitary and Septic Waste Management (BMP WM-9). Sanitation facilities must be maintained periodically by a licensed service to keep them in good working order and prevent overflows. Portable toilets are required to have secondary containment.

**13-4.03D(5): Liquid Waste:** Liquid waste includes water generated from excavation dewatering. Minimize transfer piping by locating containers near the excavation to be dewatered while protecting the containers from moving vehicles and equipment.

**13-4.03E(1): Water Control and Conservation:**

You shall also comply with CASQA Water Conservation Practices (BMP NS-1 and NS-2).

**13-4.03E(3): Vehicle and Equipment Cleaning:**

You shall also comply with CASQA Vehicle and Equipment Cleaning (BMP NS-8).

**13-4.03E(4): Vehicle and Equipment Fueling and Maintenance:**

You shall also comply with CASQA Vehicle and Equipment Fueling (BMP NS-9), and CASQA Vehicle and Equipment Maintenance (BMP NS-10).

**13-4.03E(7): Paving, Sealing, Saw cutting, Grooving, and Grinding Activities:** As listed in Part 9, sections 4 and 5 of the Storm Water Permit, the following additional BMPs shall be implemented for street paving, repaving, reconstruction, patching, digouts or resurfacing.

1. Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall unless required by emergency conditions
2. Install BMPs at all susceptible storm drain inlets and manholes to prevent paving products and tack coat from entering
3. Prevent the discharge of release agents including soybean oil, other oils, or diesel to the storm water drainage system or watercourses
4. Minimize non-storm water runoff from water use for the roller and for evaporative cooling of the asphalt
5. Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly
6. Collect liquid waste in a container, with a secure lid, for transport to a maintenance facility to be reused, recycled, or disposed of properly 13-4.03D(5)

7. Collect solid waste by shoveling and vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled, or disposed of properly 13-4.03D(5)
8. Cover "cold-mix" asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm 13-4.03C(3)
9. Cover loads with tarp before haul-off to a storage site, ensuring that trucks are not overloaded
10. Minimize airborne dust by using water spray during grinding 14-9.03
11. Protect stockpiles with a cover or sediment barriers during a rain event and
12. Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near storm water drainage system or watercourses 13-4.03C(1)

**13-4.03F: Sweeping:** You shall also comply with CASQA Street Sweeping and Vacuuming (BMP SE-7).

### **13-6 Temporary Sediment Control**

**13-6.03C Temporary Drainage Inlet Protection:** You shall also comply with CASQA Storm Drain Inlet Protection (BMP SE-10).

**13-6.04 Payment:** Temporary Sediment Control shall be considered as included in the contract lump sum price paid for **Water Pollution Control** which includes all maintenance costs.

### **13-7 Temporary Tracking Control**

**13-7.01A: General:** You shall also comply with Stabilized Construction Entrance and Exit (BMP TC-1), Entrance Outlet Tire Wash (BMP TC-3).

**13-7.01C Construction:** You shall also comply with CASQA Stabilized Construction Site Entrance / Exit (BMP TC-1).

**13-7.03D Payment:** The City does not pay you 1/2 of that cost for maintaining a temporary construction entrance or roadway under section 9-1.04. You shall be responsible for the total cost of maintaining a temporary construction entrance or roadway. Maintaining a temporary construction entrance or roadway shall be considered as included in the contract lump sum price paid for **Water Pollution Control**.

### **13-8 Temporary Active Treatment System:**

Applicability: This section to apply in the case of discovery of contaminated water during construction activities.

**13-8.01A Summary:** Water removed from excavations will likely contain contaminants at levels requiring treatment prior to discharge. Analytical test results are in the report referenced in section 14-11.06, Department Generated Contaminated Soil, of these technical specifications. You shall design a treatment system to treat the water to levels compliant with discharge requirements according to section 13-8.02D Discharge Method.

**13-8.01C(2) Active Treatment System Plan:** You are responsible for having 21,000 gallon nominal capacity, “closed top” type mobile storage tank(s) available if groundwater is encountered and ensure it is secure from public access. The storage tank(s) shall be filled to the manufacturer’s recommended maximum water surface level prior to filling any additional tanks. Unused tanks brought to the site shall be at your expense.

Once water in any given tank has been sampled, no further uncharacterized water shall be pumped into the tank. You shall furnish a sufficient number of tanks on site at any given time to facilitate groundwater storage for continuous excavation operations. You shall assume 3 working days turnaround time for analytical test results.

The tanks shall not encroach into any travel lanes and shall be restricted to no more than a period of 5 days at the same location.

**13-8.01C(2) Active Treatment System Plan:** Allow 20 days for review after submittal. If revisions are required, the Engineer shall notify you of the date the review stopped and provide comments. You shall submit a revised ATS plan within 15 days of receiving the comments. The Department’s review resumes when a complete plan has been resubmitted.

Submit an electronic copy on a read-only CD, DVD, or other Engineer-authorized data storage device and 4 printed copies of the authorized ATS plan. Allow 15 days for the Engineer to submit the plan to the SWRCB and the RWQCB. If the Engineer requests revisions based on comments from the SWRCB or RWQCB, submit a revised plan within 5 business days.

**13-8.01D Quality Assurance:** The City will collect samples and perform the analytical testing of stored water.

**13-8.02D Quality Control:** Water removed from excavations shall be discharged to the publicly owned sanitary sewer under the conditions set forth in the discharge permit issued by the City, a copy of which is included in Section A, Fees and Permits, of these technical specifications.

**13-8.04: Payment:**

**Furnish Storage Tank** shall be paid for at the **monthly** cost per tank. The provisions of section 4-1.03(B), “Increased or decreased quantities”, of the Standard Specifications does not apply.

**Temporary Active Treatment System**, except for furnishing tanks, shall be paid for by **force account**.

**13-10 Temporary Linear Sediment Barrier**

**13-10.01A Summary:** You shall also comply with CASQA Silt Fence and Sandbag Barrier (BMP SE-1 and SE-8).

**13-10.04 Payment:** Temporary Linear Sediment Barrier shall be paid for at the lump sum price for **Water Pollution Control**. The contractor pays all maintenance costs.

# 14 ENVIRONMENTAL STEWARDSHIP

## **14-9.03 Dust Control**

**14-9.03A General:** Sweeping per section 14-9.03C shall also be performed to prevent and alleviate dust.

Sweeping, covering stockpiles, applying water, and/or dust palliative, to control dust caused by public traffic is not change order work.

**14-9.03C Construction:** All dust-producing work and unpaved construction sites shall require a minimum watering in the middle and ending of each workday. The frequency of watering shall increase if dust is airborne. Watering shall not produce runoff.

You shall maintain dust control to the satisfaction of the Engineer, 7 days a week, 24 hours per day.

At the end of each workday you shall thoroughly sweep all streets in the work zone to minimize airborne dust.

At the end of each work week you shall sweep all streets in the work zone with a commercial street sweeping truck equipped with a rear pick-up broom.

At the Engineer's discretion additional sweeping or watering may be required, including the use of a commercial street sweeping truck equipped with a rear pick-up broom, at any time or place.

**14-9.03D Payment:** Full compensation for conforming to this section shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed.

**14-10.01 General:** You shall dispose of all portland cement concrete and asphalt concrete, generated from removal or demolition activities on the project, at a recycler for these materials. You shall provide receipts verifying delivery and approximate quantity (in tons) of the material delivered to a material recycler.

All other excess materials from the project shall become the property of you and shall be disposed of by him, at his expense.

**14-10.02A(1) Submittals:** Submit a Solid Waste Disposal and Recycling Report prior to final acceptance of work performed under the Contract. Show the types and amounts of project-generated solid waste taken to or diverted from landfills or reused on the project.

**14-10.02D Payment:** Full compensation for material recycling as specified herein shall be considered as included in the contract prices paid for various items of work, and no additional compensation will be allowed therefor.

## **14-11 Hazardous Waste and Contamination**

**14-11.02F(3) Hazardous Waste Transport and Disposal:** All soil from excavations on this project may be considered contaminated and shall be transported to and disposed of at an approved landfill.

You will furnish completely filled out hazardous waste manifests ready for the Engineer's signature.

You are responsible for testing and disposal of contaminated soil, including trucking, disposal site fees, and additional testing if required by disposal sites. You shall comply with all disposal regulations, such as City, County, and/or State permits and licenses, as may be required.

Prior to disposal of any excess material from the work site, submit to the Engineer written authorization for such disposal and entry permission signed by the approved disposal site. You shall disclose in landfill applications the existing conditions and the written disposal and entry permission shall include acknowledgement of such disclosure.

You shall be responsible for separating asphalt, concrete, base rock, asbestos cement pipe, and other non-contaminated debris from the soil prior to loading the soil for transport to disposal sites. Dispose of asphalt, concrete, and base rock at a recycler of these materials as specified in Section 124 of these Special Provisions. Dispose of asbestos cement pipe as specified in Section 15-2.02N of these Technical Specifications.

**14-11.02F(4) Payment:** Full compensation of **Hazardous Waste Disposal** shall be paid for in **lump sum** for material recycling as specified herein shall be considered as included in the contract prices paid for various items of work, and no additional compensation will be allowed therefor.

**14-11.06: Department Generated Contaminated Soil:**

In general, the Contractor shall maintain awareness of potential signs of soil and groundwater contamination throughout the project limits and shall notify the City immediately upon discovery of any potential soil or groundwater contamination.

The Contractor shall provide 40-hour OSHA-HAZWOPER certified workers in the contaminated area and provide a field Site Safety Officer that is also an 8-hour OSHA-HAZWOPER Supervisor trained to directly oversee the contaminated materials removal and handling operation. All workers in this circumstance must have their initial and annual renewal refresher training, medical clearance and personal protection equipment in accordance with 8CCR Section 5192.

## 15 EXISTING FACILITIES

**15-1.03A General:** Existing facilities disturbed by construction shall conform to the applicable provisions of Section 5-1.36. All existing active utilities found to reside in excavated areas shall be supported in place with service maintained during construction. You shall be responsible for any damage caused by their operations and any needed repairs shall be completed to the Engineer's satisfaction.

Existing storm drains found to reside in excavated areas shall be supported, removed, or replaced at your option and at no additional cost to the City. You shall be responsible for maintaining the existing line and grade of the storm drains. If you elect to remove and replace, it shall be done per applicable City Standards and Specifications.

Existing utility trenches and/or structures that are in close proximity to proposed trenches shall be safeguarded in an appropriate manner from damage.

**15-1.04 Payment:** Full compensation for supporting, removal and disposal of existing utilities and their appurtenances is considered as included in the contract prices paid for various contract items of work and no additional allowance will be made therefor.

**15-2.02C Traffic Stripes and Pavement Markings:** All traffic stripes, pavement markings or any other traffic markings shall be removed by you to the satisfaction of the Engineer and in accordance with Sections 84 of the Standards, and the Plans.

**15-2.02D Pavement Markers:** All raised pavement markers shall be removed by you to the satisfaction of the Engineer and in accordance with Sections 85 of the Standard Specifications, City Standards, and the Plans.

**15-2.02N Asbestos Cement Pipe:** You are advised that asbestos cement pipe (ACP) may be encountered on the project and must be cut, handled, and disposed of according to the Contractor's State Licensing Law and all other applicable laws and regulations.

**15-2.02O Payment:** Full compensation for the cutting, removal and disposal of asbestos cement pipe shall be considered as included in the prices paid for various contract items of work and no additional allowance will be made therefor.

**15-2.08A General:** Reset existing City facility boxes and lids to grade. The City will furnish at no cost to you new material to replace existing boxes and lids that do not comply with current City Standards or damaged prior to your operations.

**15-2.10B Adjust Inlets:** Existing storm drain inlets adjusted to grade shall conform to City Standards.

All facilities on active systems shall always be accessible to City personnel unless otherwise stated in these Special Provisions or approved by the Engineer.

Storm drain inlets shall be accessible within 48 hours after they are covered.

All silt and debris shall be removed from finished structures. This shall include all existing silt and debris plus material caused by the your operation.

All grade rings shall be set in cement mortar the same day they are placed. All joints shall be smoothly plastered inside and out.

Existing grade rings removed in the adjustment of manhole frames shall become the property of you and if undamaged and thoroughly cleaned of mortar may be reused in the work. If not so used, they shall be disposed of away from the site of work at the expense of you.

**15-2.13 Payment: Modify Existing Storm Drain Inlets to Grade** shall be paid for at the contract unit price **each**, which price shall include full compensation for furnishing all labor, materials, tools and equipment, and doing all the work involved in adjust existing valve boxes, mainline cleanouts and monuments to grade, including but not limited to, required excavation and backfill, replacing to current City Standards, coordination, and removing silt and debris, as specified herein, and no additional allowance will be made therefor.

**15-3.03 Construction:** All removed concrete shall become the property of you and shall be immediately off-hauled. None of the removed concrete shall be dumped or stockpiled on the work site. You shall dispose of all removed concrete at a recycler for this material. Burying of broken concrete within the limits of the project will not be allowed.

All concrete which is to be removed from sidewalk, curb, gutter and driveway areas shall be removed to the nearest score mark or construction joint as directed by the Engineer unless otherwise noted on Project Plans. The edge of existing concrete to remain shall be neat and free of defects. Saw cutting may be required to achieve this.

Reinforcing steel may be encountered in portions of concrete to be removed and no additional allowance will be made for the removal of such steel.

Irrigation facilities may be encountered during concrete removal and replacement. You shall exercise care in this area and repair any damage done by their operations at no additional cost to the City.

Landscaping and other surfaces or structures shall be restored to original condition at no additional cost to the City.

**15-7 Utility Clearances:** *All items noted in this Section shall take place prior to any other construction activities.*

All pothole information provided on the Project Plans shall be for reference use only and shall not be considered as accurate information for any other areas within the project limits.

You shall investigate, confirm and/or determine the exact locations of existing utilities, and verify clearances between existing and proposed utilities at crossings and/or known potential conflicts. You shall determine elevations and alignments of existing utilities at connection points.

*You shall provide all relevant information in writing to the Engineer immediately upon discovery of any conflict. Any delay in notification to the Engineer may delay direction and/or corrective action and a delay claim due to this reason shall not be considered by the City. You shall not*



proceed with any work that is in conflict until direction is provided by the Engineer and shall redirect crews to other contract work. All the information required to be obtained per this Section and any other information not noted but relative to the project shall be provided to the Engineer on a set of Plans when the investigative effort is complete.

**15-7.01 Payment:** Utility Clearances investigation is considered as included in the prices paid for various contract items of work and no additional allowance will be made therefore, and shall include but not be limited to: potholing to verify potential conflicts, grades and alignments of existing facilities to be connected to; excavation; backfill; notification; and coordination and redirection of crews to other contract work *if required*, as specified herein, and no additional allowance will be made therefor.

# 19 EARTHWORK

## **19-1 General**

### **19-1.01 General:**

1. Contaminated site: Technical Specifications for handling and disposal of contaminated soil and water are included in Section 14-11.06, Department Generated Contaminated Soil, and Section 13-8, Temporary Active Treatment System, respectively.

### **19-1.01A Summary:**

Excavating for trenching.

### **19-1.03B Unsuitable Material:** Unsuitable material shall comply with the following provisions:

- A. Unsuitable material may be processed in place, may be excavated and placed on the grade or other locations suitable for further processing, or may be partially excavated and partially processed in place.
- B. Processing may consist of drying to provide a stable replacement material or mixing with lime per Section 24 of the Standard Specifications.
- C. Stabilized material shall be placed and compacted in layers as hereinafter specified for constructing embankments.

**19-1.03C Grade Tolerance:** When aggregate subbase or aggregate base are to be placed on the grading plane, the grading plane shall not vary more than 0.05' above or 0.1' below the grade established by the Engineer.

## **19-2 Roadway Excavation**

**19-2.03A General:** The Engineer shall provide reference points and cut sheets for the excavation of the roadway. You shall furnish an excavation and paving plan and a qualified grade setter to ensure that the subgrade conforms to the lines and grades established by the Engineer.

For roadway reconstruction, Roadway Excavation shall be performed with a pavement grinder. No other construction equipment including rubber-tired equipment shall be allowed on the subgrade.

**19-2.03B Surplus Material:** All surplus material shall become the property of you and shall be immediately off-hauled. None of the surplus material shall be dumped or stockpiled on the work site. It shall be the responsibility of you to arrange for suitable disposal of all surplus material.

**19-2.04 Payment: Remove Asphalt, Base, and Subgrade** shall be paid for at the contract price per **square foot**, which price shall include full compensation for doing all work involving excavation labor, materials, tools and equipment as specified herein.

## **19-5 Compaction**

**19-5.03B Relative Compaction (95 percent):** Relative compaction of not less than 95 percent shall be obtained for a minimum depth of 0.5-foot below the grading plane for the full width of the planned pavement structural section, whether in excavation or embankment.

Relative compaction of not less than 95 percent shall be obtained for embankment under bridge and retaining wall footings without pile foundations within the limits established by inclined planes sloping 1.5:1 out and down from lines one foot outside the bottom edges of the footing.

## 20 LANDSCAPE

### **20-1 GENERAL**

**20-1.02B Water:** You shall obtain water according to section 6-4.01A, construction water of these Special Provisions.

### **20-2 IRRIGATION**

#### **20-2.01B Materials:**

- A. Main lines (constant pressure) 2 inches and larger shall be polyvinyl chloride (PVC) 1120-160 psi with ring-tite connections; ½ inch to 1½ inch shall be PVC 1120 schedule 40.
  - 1. Join lengths of pipe by means of integrally formed bell end on pipe using rubber ring seal. Use schedule 40 PVC coupling on schedule 40 pipe.
  - 2. At changes in direction of branch mains and at QCV and RCV use appropriate schedule 40 PVC rubber ring seal fittings as approved by the Uniform Plumbing Code.
  - 3. At the location of QCV and RCV, asbestos-cement heavy tapped couplings for PVC pipe will be accepted; tapped couplings as manufactured by Johns-Manville.
- B. Lateral lines (non-pressure) shall be 1120-200 psi PVC plastic pipe with schedule 40 Type 1, Grade 1 PVC solvent weld fittings.
- C. Connections between main lines and RCV's shall be of schedule 40 hot-dipped galvanized steel nipples and fittings. Galvanized steel pipe and fittings shall be wrapped with a 40-mil thickness of self-adhesive polyethylene tape and coated with an epoxy material specifically formulated for such use.
- D. Riser stock shall be as follows:
  - 1. Risers connecting QCV's and sprinklers to PVC fitting shall be schedule 40 hot-dipped galvanized steel nipples and 90-degree ells as shown in construction details.
  - 2. Risers shall in no case be of smaller nominal diameter than the IPS size of joint provided on the head or QCV to be installed.
- E. Quick coupler valves (QCV) shall be Buckner 14LC or approved equal.
- F. Controllers
  - 1. Controllers and valves shall be the same manufacturer.
  - 2. Provide and install automatic irrigation controller in approximate location shown on the plans. The exact location will be determined on the site by the Engineer. Provide conduit, wire, and connection to 120 volt switch accessible to controller for ease of maintenance.
- G. Remote control valves (RCV)
  - 1. RCV and controllers shall be by the same manufacturer.
  - 2. RCV shall be Griswold 2000.
- H. Control wire shall be copper with UL-approval for direct burial in ground, size #14-1 AWG-UF. Common ground wire shall have white insulating jacket; control wire shall have jacket of color other than white. Splices shall be made with 3-M #3576 Scotchlok seal packs.

- I. Boxes for remote control valves shall be Brooks 37SP or equal. Rubber valve markers shall be Rainbird #63100.
- J. Sprinkler heads.
  - 1. Sprinklers shall be Thompson 186 and 187 or equal.
  - 2. Sprinklers shall be equipped with rubber caps and flange covers.
- K. Irrigation controller enclosure shall be wooden as detailed on the drawings.
- L. 120-volt service and connections shall be provided by the irrigation contractor. Install in conduit with Brooks 3½ pull boxes as required. Concrete pull boxes shall have locking covers marked "electrical".
- M. Gate valves shall be Kennedy 427 or equal. Locate in Brooks 1RB concrete valve box with concrete lid. Use concrete extensions as required.
- N. Drinking fountains shall be Western, Model 35, Steel vandal resistant with standard green scratch resistant epoxy finish. Heights shall be 30 inches with surface mounting.
- O. Vacuum breaker assembly shall be of the pressure type with gate valves. Check valve test cocks and vent to atmosphere. See plans for details of construction.
- P. Miscellaneous Installation Materials
  - 1. Solvent cement for solvent weld joints shall be of make and type approved by manufacturer(s) of pipe and fittings. Cement shall be maintained at proper consistency throughout use.
  - 2. Lubricant for assembling rubber ring seal joints shall be of make and type approved by manufacturer of pipe.
  - 3. Pipe joint compound shall be non-hardening, non-toxic materials designed specifically for use on threaded connections in water carrying pipe. Performance shall be same as teflon tape or approved equal.
- Q. Miscellaneous Equipment
  - 1. Provide all equipment called for by the plans.
  - 2. Provide to the City, at completion of the irrigation installation, three (3) each of all operating and servicing keys and wrenches required for complete maintenance and operation of all heads and valves. Include all wrenches necessary for complete disassembly of all heads and valves.

**20-2.01B Location Markers:** You shall stake out the irrigation system as shown on the plans, using a different color flagging for heads, valves, tie-in point and trench. These areas shall be checked by you and the Engineer before construction is started. Any changes, deletions or additions shall be determined at this check. Trenching shall be started only after layout check by you and approval by the Engineer.

**20-2.01C Construction:**

- A. Preparation. Schedule and coordinate placement of materials and equipment in a manner to effect earliest completion of work in conformance with construction and progress schedule.
- B. Protect work and materials from damage during construction and storage.
- C. Layout:
  - 1. Layout work as accurately as possible in accordance with diagrammatic plans.

2. Where site conditions do not permit locating piping, valves and heads where shown, notify the Engineer immediately and determine relocation in joint conference.
  3. Run pipelines and automatic control wiring in common trenches wherever practical.
- D. Install water lines in 1120-Schedule 40 PVC plastic sleeves at street crossings.
- E. Excavation and Trenching
1. Excavation shall be in all cases ample in size to permit the pipes to be laid at the elevations intended and to permit ample space for joining.
  2. Make trenches for pipelines deep enough to provide minimum cover from finish grade as follows:
    - a. 24-inch minimum cover over main lines to control valves and quick coupling valves.
    - b. 24-inch minimum cover over control wires from controller to valves.
    - c. 16-inch minimum cover over RCV-controlled lines to sprinkler heads.
    - d. 48-inch minimum cover over all lines inside street right of way.
  3. Restore surfaces, existing underground installations, etc., damaged or cut as result of excavations to original conditions in manner approved by Engineer.
  4. Where drainage line interferes with irrigation trenching and pipe work, adjust the trench depth as instructed by the Engineer.
- F. Assembling Pipelines
1. All pipe shall be assembled free from dirt and pipe scale. Field cut ends shall be reamed only to full pipe diameter with rough edges and burrs removed.
  2. Rubber ring seal joint:
    - a. Use factory-made male end or prepare field-cut male end to exact specifications of factory-made end. Beveling is to be done with a tool specifically designed for that purpose.
    - b. Carefully clean bell or coupling and insert rubber ring seal without lubricant. Position ring carefully, according to manufacturer's instructions.
    - c. Place a reference mark on each male end at the proper distance from the beveled end as indicated by the manufacturer's instructions. Lubricate male end according to manufacturer's instructions and insert male end to specified depth.
    - d. All ring-tite joints are to be left uncovered until after they have been inspected and the pressure test applied.
    - e. Form thrust blocks in such a manner to prevent any concrete from coming in contact with the pipe. Thrust blocks shall be between solid soil and the fitting.
  3. Solvent weld joint:
    - a. Prepare joint by first making sure the pipe end is square, then deburring the pipe end and cleaning pipe and fitting of dirt, dust and moisture.
    - b. Dry-insert pipe fitting to check for mis-sizing. Pipe should enter fitting 1/3 to 2/3 depth of socket.
    - c. Coat the inside socket surface of the fitting and the external surface of the male end of the pipe with P-70 Primer (manufactured by Weld-On). Then without delay, apply Weld-On 711 cement liberally to the male end of the pipe and also apply 711 cement lightly to the inside of the socket. At this time, apply a second coat of the cement to the pipe end.

- d. Insert pipe immediately into fitting and turn  $\frac{1}{4}$  turn to distribute cement and remove air bubbles. The pipe must seat to the bottom of the socket fitting. Check alignment of the fitting. Pipe and fitting shall be aligned properly without strain to either.
  - e. Hold joint still for approximately thirty (30) seconds and then wipe excess cement from the pipe and fitting.
  - f. Cure a minimum of thirty (30) minutes before handling and at least six (6) hours before allowing water in the pipe.
4. Threaded joint:
- a. Field-threading of plastic pipe or fittings is not permitted. Factory-formed threads only will be permitted.
  - b. Factory-made nipples shall be used wherever possible. Field-cut threads in metallic pipe will be permitted only where absolutely necessary. When field-threading, cut threads accurately on axis with sharp dies.
  - c. All threaded joints shall be made up with pipe joint compound. Apply compound to male threads only.
  - d. Where assembling metallic pipe to metallic fitting or valve, no more than three (3) full threads shall show when joint is made up.
  - e. Where assembling to threaded plastic fitting, take up joint no more than one full turn beyond hand tight.
  - f. Where assembling soft metal (brass or copper) to plastic pipe, use strap type friction wrench only; do not use metal jawed wrench.
5. Cap or plug openings as pipelines are assembled to prevent entrance of dirt or obstruction. Remove caps or plugs only when necessary to continue assembly.
6. Where pipes or control wires pass through sleeves, provide removable non-decaying plugs at ends of sleeve to prevent entrance of earth.
- G. Remote control valves:
- 1. Install where shown and group together where practical.
  - 2. Locate valves no closer than 24 inches from walk edges, buildings, and walls.
  - 3. Provide 6 inches of pea gravel in bottom of valve box. No soil shall be in contact with RCV.
  - 4. Support valve box with four (4) bricks (one at each corner). Maintain a minimum of 2 inches clearance between PVC pipe and valve box.
  - 5. Valve boxes to be located 4 inches below finished grade with a 3-inch clearance between the remote-control valve stem in the fully open position and the underside of the valve box lid.
  - 6. Center rubber valve marker overflow control stem.
- H. Automatic control wiring:
- 1. Run lines along mains wherever practical. Tie wires in bundles at ten (10) foot intervals. Run wires along the underside of mains and allow slack for expansion and contraction of wire.
  - 2. Loop a minimum of three (3) feet of extra wire in each valve box; both control wire and ground wire.
  - 3. Connections shall be made by crimping bare wires with brass connectors and sealing with epoxy resin sealer packs.

4. No splices shall be permitted between controllers and remote-control valves.
  5. Where control lines pass under paving, they shall pass through schedule 40 electrical PVC conduit.
  6. Where control lines do not parallel mains, wires shall be protected by being strapped at ten (10) foot intervals to the underside of 2- by 6-inch redwood boards.
- I. Automatic controller:
1. Locate controllers in general locations shown with exact placement to be determined by the Engineer.
  2. Connect control lines to controller in sequential arrangement according to assigned identification number of valves. Control lines shall be labeled at controller with permanent non-fading labels indicating identification number of valves controlled.
- J. Testing: Perform test as specified. Remake any faulty joints with all new materials. Use of cement or caulking to seal leaks shall not be permitted.
- K. Backfilling:
1. Backfill only after pipe has been inspected and approved.
  2. Main line and lateral line backfill to be a 4-inch minimum sand bed on all sides of the pipe. The remaining backfill material shall be native soil excavated from the trenches.
  3. Place backfill materials in 6-inch layers and compact by jetting or tamping to a relative compaction of 90 percent.
  4. Dress off areas to finish grades and remove excess soil, rocks or debris remaining after backfill is completed.
  5. In existing turf areas, after trenches have been compacted and settled, replace all sod within a 3-foot diameter of all sprinkler heads. Dress off all other trenches and seed with perennial rye grass.
  6. If settlement occurs along trenches, and adjustments in pipes, valves and sprinkler heads, soil, sod, or paving are necessary to bring the system, soil, sod, or paving to the proper level of the permanent grade, you, as part of the work under this Contract, shall make all adjustments without extra cost to the City.
- L. Sprinkler heads and quick coupler valves.
1. Thoroughly flush lines before installing heads and QCV's.
  2. Locate heads and QCV's as shown in the Drawings and details.
  3. Place heads and QCV's in lawn areas at 2 inches above grade at time of installation. The lowering of the sprinkler heads to finished grade will be done by you after the turf has become well established.
  4. Adjust sprinkler heads for proper distribution and trim.
- M. Drinking fountains: Construct as shown on the Drawings and connect to new domestic water line.

**20-2.06A Quality Assurance:** It shall be the responsibility of the irrigation contractor to fill and repair all depressions and replace all necessary lawn and planting-loss due to the settlement of irrigation trenches for one year following completion and acceptance of the job.

You shall also guarantee all materials, equipment, and workmanship furnished by you to be free of all defects of workmanship and materials, and shall agree to replace at his expense, at any time within one year after installation is accepted, any and all defective parts that may be found.

**20-2.13B(1)c) Submittals:**

- A. You shall maintain in good order in the field office one complete set of black line print record plans of all sprinkler plans which form a part of this Contract, showing all water lines, sprinklers, valves, controllers and stub-outs. In the event that any work is not installed as indicated on the plans, such work shall be corrected and dimensioned accurately from the building walls on these record plans.
- B. All underground stub-outs for future connections shall be located and dimensioned accurately from building walls on all record plans.
- C. Upon completion of the work, obtain reproducible prints from the Engineering Department and neatly correct the prints to show the as-built conditions and return to the Engineering Department.

**20-2.13C(4) Payment: Irrigation** shall be paid for at the contract **lump sum** price, which prices shall include full compensation for furnishing all labor, materials, tools and equipment and conforming to the requirements of the Special Provisions and no additional allowance will be made therefor.

**20-2.13(d)(iii) Quality Control:** Testing shall also include:

- 1. Notify the Engineer at least three (3) days in advance of testing.
- 2. Perform testing at your expense.
- 3. Center load piping with small amount of backfill to prevent arching or slipping under pressure. No fitting shall be covered.
- 4. Apply the following tests after welded plastic pipe joints have cured at least 24 hours.
  - a. Test live (constant pressure) and QCV lines hydrostatically at 125 psi minimum. Lines will be approved if test pressure is maintained for six (6) hours. The lines shall be restored to the original test pressure and the amount of water required to do so will be measured. Approved tables of allowable loss (Johns-Manville Installation Guide for ring-tite PVC pipe, pages 25 and 26) will be consulted, and the lines will be approved or not approved as such results may indicate. You shall make tests and repairs as necessary until test conditions are met.
  - b. Test RCV-controller lines with water at line pressure and visually inspect for leaks. Retest after correcting defects.

**20-3 PLANTING**

**20-3.01B Materials:**

- A. Plants
  - 1. Nomenclature: See list of plant materials on Landscape Planting plans.
  - 2. Conditions: Plant shall be symmetrical, typical for variety and species, sound, healthy, vigorous, free from plant disease, insect pests or their eggs, excessive abrasions, or other objectionable disfigurements, and shall have healthy, normal root systems, well filling their containers, but not to the point of being root bound. Tree trunks shall be sturdy and well hardened off. Plants shall not be pruned prior to delivery except as authorized by the Landscape Architect. In no case shall trees be topped or pruned



before delivery. Plants shall be grown in nurseries which have been inspected by the State Department of Agriculture and have complied with its regulations.

3. **Minimum Tree Sizes:** In addition to the preceding specifications, all trees shall conform to the following minimum specifications for height and caliper:

<u>Species</u>	<u>Size</u>	<u>Min. Ht.</u>	<u>Min. Caliper</u>
		Measured from soil level in can	Measured at a point four inches above soil level in can

You shall inform the City of the source of all plant material allowing adequate time so that inspections of plant material may be made at the source prior to delivery to site.

4. **Identification:** Plants shall be of the variety and size shown on the plans and shall conform to the requirements herein. One of each bundle or lot shall be tagged with plant name in accord with recommendations of the American Association of Nurserymen.
5. **Substitutions:** Substitutions for the indicated plant materials will be permitted, provided the substitute materials are approved in advance by the Landscape Architect and/or the City, and the substitutions are made at no additional cost to the City. Except for the variations so authorized, all substitute plant materials shall conform to the requirements of these specifications. If accepted substitute materials are of less value than those indicated or specified, the contract price will be adjusted in accordance with the provisions of the contract. Any plant substitutions must comply with both the City's *Water Efficient Landscape Ordinance 2015 Revision* AND the regional *Storm Water Impact Development Technical Design Manual* revised December 2020 approved planting list.
6. **Plant Inspection and Rejection:** Root condition of plants will be determined by the Landscape Architect and/or City through the removal of earth from the roots of at least two (2) plants but not more than 2 percent of the total number of species from each source.

**20-3.02C Construction:**

A. **Scheduling**

Planting shall not commence until completion of all construction work, grading, soil preparation, and sprinkler installation. All container stock shall be spotted on-site by you per plans prior to planting. Set out only quantity that can be reasonably planted in one workday. Plant pits shall not be excavated until the approval of plant locations by the Landscape Architect.

B. **Soil Preparation**

1. Rip in two directions all areas to be planted or seeded to a depth of at least 12 inches
2. Pre-germination of weed seeds: Before hydroseeding or planting, you shall water once daily using the irrigation system at the rate of 1 inch of water per week for two (2) weeks to germinate any weed seeds. Spray weeds with Phytar 560 per manufacturer's recommended rates and eight (8) ounces Surfactant in one hundred (100) gallons per

acre. All herbicide applications shall be handled by a licensed, registered, and experienced pest control operator.

3. At time of planting, all areas to be planted or seeded shall be free of weeds, stones, stumps, roots, or other deleterious matter 1 inch in diameter or larger and shall be free from all wire, plaster, or similar objections that would be a hindrance to planting or maintenance.

C. Spacing

When plant material is spaced in rows, the total dimension shall be verified, and the plants equally spaced within the designated area. Where plant material is shown in loose pattern, you shall space the material as shown on plans or as directed by the Landscape Architect and/or the City. Ground cover material shall be triangularly spaced per dimensions indicated on plans (where applicable).

D. Plant Pits

Plant pits shall be dug with level bottoms two times the diameter and two times the depth of root ball. Sides of excavated plant pits shall be scarified by pry bar or shovel.

E. Removal from Containers

All canned stock 5-gallon size and under shall be vertically cut on two opposite sides with approved instrument for the purpose. Fifteen (15) gallon size containers shall be cut on four opposite sides. Cutting with an axe or spade shall NOT be permitted.

F. Handling

No canned plant material shall be planted if the ball is broken or cracked either before or during the process of planting.

G. Setting

Plant shall be same relation to soil level when planted as it was when in container. Each plant shall be placed in center of plant pit.

H. Pit Backfill

Backfill material around plants shall be free from rocks or foreign material and shall consist of bioretention mix per plan:

I. Backfilling Procedure

1. Backfill pit with backfill mix halfway to finish grade and water thoroughly.
2. Backfill finish to grade. Backfill finish shall be tamped firm and a shallow basin formed at the perimeter of plant pit to hold enough water to saturate the root ball and backfill mix.
3. Water immediately to saturate entire root ball and backfill.
4. Remove watering basins prior to hydroseeding.

## **20-4 PLANT ESTABLISHMENT WORK**

**20-4.02A(1) Quantities:** In all cases, quantities of plant material shall be furnished as needed to complete work as indicated on plans, including reseeding, redressing, and maintenance (replacements) during the contract period.

**20-4.03A(1) Protection:** You shall carefully and continuously protect all areas included in the contract, including lawn areas, plant materials, supports, etc., until final acceptance of the work by the City.

**20-4.03H Cleanup:** After all planting operations are completed you shall remove all trash, excess soil, empty plant containers, or other accumulated debris from the site at no extra cost to City. You shall repair all scars, ruts, or mars in area caused by work operations. Areas shall be left in a neat and orderly condition.

**20-4.03I Inspections:**

- A. You shall give forty-eight (48) hour notice and set appointment for all inspections by the Landscape Architect and/or City.
- B. Inspections and/or field supervision by Landscape Architect and/or City shall be scheduled for the following operations:
  - 1. Approval of all plant material.
  - 2. Tree and shrub replacement PRIOR to digging holes and placement planting.
  - 3. Approval of ground cover and hydroseed lines PRIOR to planting.
  - 4. Final inspection.
- C. Inspection shall be called for at the end of all planting operations for the purpose of determining compliance with plans and specifications, intent, workmanship, and cleanup. You shall secure written verification of inspection data, any corrections required to work, and limits of inspected area before beginning the described maintenance work.
- D. A final inspection shall be made at the end of the maintenance period for full approval of the work area.
- E. In the event you requests inspection of work, and said work is substantially incomplete, you shall be responsible for inspection costs.

**20-4.03J Guarantee:**

- A. All shrubs, ground covers, and lawn areas shall be guaranteed as to growth and health for a period of ninety (90) days after final acceptance by the City.
- B. Plants which die or lose more than 30 percent of their original leaves shall be replaced under this section.
- C. You, within fourteen (14) days of written notification by the City, shall remove and replace all guaranteed plant materials which for any reason fail to meet the requirements of the guarantee. All plant material replaced shall be guaranteed for the original period, starting from the date of replacement.

**20-4.03K Payment: Plant Establishment** shall be paid for at the contract **lump sum** price for Plant Establishment, which prices shall include full compensation for furnishing all labor, materials, tools and equipment and conforming to the requirements of the Special Provisions and no additional allowance will be made therefor.

[Revised: 09/10/19-CDA STD2018]

## **20-10 BIORETENTION**

### **20-10 General**

#### **20-10.01A General:**

- A. This work shall consist of constructing bioretention areas, to the lines, grades, and dimensions shown on the plans in accordance with these special provisions. Bioretention areas shall include “structural soil”, a top layer of ground-up, composted mulch, underdrains, moisture barriers, conforming to the City Standards, the Standard Specifications, and these special provisions.
- B. Refer to related special provisions for concrete structures (e.g., drop inlets), concrete pipe, stormwater inlet trash protector units, and other appurtenances to the bioretention areas.
- C. All work shall be performed in compliance with the Low Impact Development Technical Design Manual dated May 2017 (Revised December 2020). Your attention is directed to Reference Document E regarding Structural Soil:

<https://www.srcity.org/DocumentCenter/View/14974/2017-Storm-Water-Technical-Design-Manual-Narrative-revised-1621>

- D. Reference the City of Santa Rosa and County of Sonoma Low Impact Development Technical Design Manual, most current edition.

#### **20-10.01B Submittals:**

- A. Submit Product Data for the following:
  - 1. Bioretention Soil Mix (BSM)
  - 2. CU-Soil (“structural soil”) or City approved equivalent
  - 3. Moisture barrier (PVC geomembrane)
  - 4. Perforated pipe
  - 5. Underdrain filter fabric
  - 6. Ground-up, composted mulch or arbor mulch

**20-10.01C Quality Assurance:** You shall conform to the quality control requirements of the product manufacturer, the City Standards, the Standard Specifications, the established reference documents, and these Special Provisions.

#### **20-10.02 Materials:**

- A. Bioretention soil shall achieve an initial infiltration rate of at least 8 inch per hour or no more than 20 inches per hour “insitu” and a long-term, in-place infiltration rate of at least 5 inches per hour. Bioretention soil shall also support vigorous plant growth. Bioretention Soil shall be a mixture of fine sand, and compost, measured on a volume basis:

65% Sand

20% Sandy Loam

15% Compost

- B. Structural soil shall be CU-Structural Soil ("CU-Soil"), or an equivalent material approved in writing and in advance by the City. CU-soil is a patented material and must be purchased from a licensed supplier.
- C. Plastic pipe underdrain for the bioretention areas shall be smooth-wall polyvinyl chloride (PVC) perforated plastic pipe underdrain and shall conform to AASHTO Designation M278, the provisions in Section 68, "Subsurface Drains," of the Standard Specifications, all Amendments.
- D. Permeable material for use with underdrains shall be Class 1, Type A, permeable material and shall conform to the provisions in Section 68, "Subsurface Drains," of the Standard Specifications, all Amendments.
- E. Filter fabric for use with underdrains shall conform to the provisions in Section 88, "Engineering Fabrics," and Section 68-1.03, "Installing Underdrains" of the Standard Specifications, all Amendments.
- F. Moisture barrier within the bioretention areas shall be a 20-mil minimum thickness non-reinforced polyvinyl chloride (PVC) geomembrane for use in buried applications and shall conform to ASTM Standard D7176, the Standard Specifications, all Amendments, and these special provisions.
- G. Finish surfacing of bioretention areas shall be ground-up, composted mulch in conformance with Section 20 Landscape and Section 21 "Erosion Control" of the Standard Specifications, all Amendments and these special provisions.

**20-10.03 Construction:**

- A. Bioretention areas shall not be constructed until all contributing drainage areas are stabilized as shown on the Contract Plans and to the satisfaction of the Engineer. Bioretention areas shall not be used as sediment control facilities. No heavy equipment shall operate within the perimeter of a bioretention facility during excavation, underdrain and moisture barrier placement, backfilling, or mulching of the bioretention areas.
- B. The bioretention areas shall be excavated to the dimensions, side slopes, and depths shown on the plans. The method of excavation shall minimize the compaction of the bottom of the bioretention areas. Excavators and backhoes, operating on the ground adjacent to the bioretention areas, shall be used to excavate the areas if possible. Low ground-contact pressure equipment may also be used for excavation. No heavy equipment shall be allowed on the bottom of the bioretention facility.
- C. Excavated materials shall be removed from the bioretention areas. Excavated

materials shall be used or disposed of in conformance with the Standard Specifications and these special provisions.

- D. Prior to placing the underdrain and the structural soil, the bottom of the excavation shall be scarified to a minimum depth of 6 inches to alleviate any compaction of the areas bottom. Any substitute method for scarifying must be approved by the Engineer prior to use. Any ponded water shall be removed from the bottom of the areas and the soil shall be friable before scarifying.
  
- E. The structural soil shall be placed and graded using low ground contact pressure equipment or by excavators and/or backhoes operating on the ground adjacent to the bioretention areas. No heavy equipment shall be used within the perimeter of the bioretention areas before, during, or after the placement of the structural soil. The structural soil shall be placed in horizontal layers not to exceed 12 inches for the entire area of the bioretention areas. The structural soil shall be compacted by saturating the entire bioretention areas after each lift of structural soil is placed. Water for saturation shall be applied by spraying or sprinkling. Saturation of each lift shall be performed in the presence of the Engineer. An appropriate sediment control device shall be used to treat any sediment-laden water discharged from the underdrain. If the structural soil becomes contaminated during the construction of the areas, the contaminated material shall be removed and replaced with uncontaminated material at no additional cost to the City. Final grading of the structural soil in the bioretention area shall be performed after a 24-hour settling period.
  
- F. The final grade of the structural soil in the bioretention area shall be inspected by the Engineer prior to placement of the ground-up, composted mulch and shall be within 1" of the lines and grades identified on the plan.

**20-10.04 Payment:** Full compensation for conforming to the requirements of this Section shall be paid for at the contract price per **square foot** as measured in the field for **Bioretention Area**. Payment shall include full compensation for doing all work involved, which price shall include full compensation for all material, equipment, labor and work required as specified herein.

Full compensation for installing **perforated pipe** shall be paid for at the contract price per **linear foot** as measured in the field, which shall include full compensation for furnishing all labor, materials, tools, and equipment and all worked involved in the installation.

## 26 AGGREGATE BASE

**26-1.01 Aggregate Base:** Aggregate base shall be Class 2 conforming to and placed in accordance with the requirements of Section 26 of the City Specifications, with the following modifications and additional requirements.

Rolling shall commence immediately after spreading of the damp material and before the material has dried sufficiently to allow separation between the fine and coarse particles.

**26-1.02B Quality Requirements:** The minimum sand equivalent shall be 31 for any individual test.

**26-1.03D Compacting:** The surface of the finished aggregate base shall be firm and unyielding. Any visible movement vertically or horizontally of the aggregate base under the action of construction equipment or other maximum legal axle loads shall be considered as evidence that the aggregate base does not meet this requirement.

**26-1.04 Payment:** Class 2 Aggregate Base is considered as included in the prices paid for various contract items of work and no additional allowance will be made therefor, which price shall include all compensation for furnishing all labor, materials, tools and equipment and doing all the work involved in furnishing and placing the base material as specified, including furnishing, hauling and applying water as specified and directed by the Engineer.

## 39 HOT MIX ASPHALT

### **39-1.01 General:**

**39-1.01A Summary:** Section 39 includes specific specifications for producing and placing Hot Mix Asphalt (HMA) by mixing aggregate and asphalt binder at a mixing plant and spreading and compacting the HMA mixture.

**39-1.01B Definitions:** For these specifications, HMA and asphalt concrete shall be the same.

Use Section 39-3 Method construction process of these specifications for HMA production and construction.

**39-1.01C Description:** If an area to be paved is wider than 4 feet and longer than 10 feet the asphalt concrete shall be placed in separate lifts as specified in the Standard Specifications.

Construction vehicles/equipment shall not be allowed on the newly placed asphalt concrete base until the day after it is placed. Super Dumps or other trucks with liftable trailing load bearing axles shall not be allowed on the newly placed asphalt concrete base at any time. All trucks or other construction equipment to be driven on the newly placed asphalt concrete base shall not exceed the surface load bearing capacity and shall not produce rutting or pumping at any time.

Temporary asphalt tapers and associated bond breaker material shall be removed prior to placement of the asphalt concrete surface lift. Where the bond breaker material adheres to the asphalt concrete base course it shall be fully removed with a method, approved by the Engineer that will in no way degrade the quality of the final product.

The Engineer shall provide reference points and cut sheets for the placing of asphalt concrete base and asphalt concrete surface.

A tack coat of SS-1h or SS-1 emulsified asphalt shall be applied to all asphalt concrete and concrete surfaces and allowed to break immediately in advance of placing all lifts of asphalt concrete. Unless otherwise shown on the Plans, tack coat shall also be applied to all vertical mating surfaces and conforms to existing pavement, curbs, gutters, and construction joints, and allowed to break immediately in advance of placing all lifts of asphalt concrete. The tack coat shall be reapplied 1) where it becomes contaminated, and 2) where it is significantly tracked (removed) from the surface.

The asphalt concrete base and asphalt concrete surface courses shall be allowed to cool to 160° F at mid depth before the roadway is opened to traffic each day.

At the end of each working day you shall place retro reflectorized signs and delineators, as required for nighttime use in accordance with the Standard Specifications and Section 12 of these Special Provisions to identify lanes unless temporary delineators are in place.

### **39-1.02 Materials**

**39-1.02B Tack Coat:** Tack coat must comply with the specifications for asphaltic emulsion or asphalts. Tack coat shall be diluted SS1 or SS1h.



**39-1.02C Asphalt Binder:** Asphalt binder in HMA must comply with the specifications for asphalts.

Asphalt binder to be mixed with aggregate for asphalt concrete surface, leveling and base shall be PG64-16 grade paving asphalt.

The amount of asphalt binder to be mixed with the aggregate shall be specified by the Engineer at the time of paving. Different asphalt binder content may be specified for each lift and each location.

Liquid anti-stripping agent (LAS) shall be added to the asphalt binder at a rate of 0.5 to 1.0% by weight of asphalt binder. The LAS shall be AD-here LOF 65-00 or equivalent, and shall be stored, measured, and blended with the asphalt binder in accordance with the anti-stripping agent manufacturer's recommended practice. The LAS can be added at the asphalt plant or at the refinery. When added at the asphalt plant, the equipment shall indicate and record the amount of LAS added. If added at the refinery, the shipping ticket from the refinery shall certify the type and amount of LAS added.

**39-1.02E Aggregate:** The aggregate grading of the various types of asphalt concrete shall conform to one of the following as directed by the Engineer:

- Surface or Leveling Course.....¾-inch HMA Type A, or  
½-inch Coarse HMA Type A,
- Base Course.....¾-inch HMA Type A

Aggregates should be of high abrasion resistance and durability. Excessively soft and friable aggregates are not allowed.

The specified aggregate gradation must be determined before the addition of asphalt binder and includes supplemental fine aggregate.

The proposed aggregate gradation must be within the TV limits for the specified sieve sizes shown in the following tables:

**Aggregate Gradation  
(Percentage Passing)  
HMA Types A**

3/4-inch HMA Type A

Sieve sizes	TV limits	Allowable tolerance
1"	100	--
¾"	95–100	TV ± 5
⅜"	65–80	TV ± 5
No. 4	49–54	TV ± 5
No. 8	36–40	TV ± 5
No. 30	18–21	TV ±5
No. 200	2.0–8.0	--

1/2-inch Coarse HMA Type A

Sieve sizes	TV limits	Allowable tolerance
3/4"	100	—
1/2"	94–100	--
3/8"	70–90	--
No. 4	55–61	TV ± 5
No. 8	40–45	TV ± 5
No. 30	20–25	TV ± 5
No. 200	2.0–8.0	--

Before the addition of asphalt binder and lime treatment, aggregate must have the values for the quality characteristics shown in the following table:

Quality characteristic	Test method	HMA Type A
Percent of crushed particles Coarse aggregate (% min.) One fractured face Two fractured faces	California Test 205	90 75
Fine aggregate (% min.) (Passing no. 4 sieve and retained on no. 8 sieve.) One fractured face		70
Los Angeles Rattler (% max.) Loss at 100 rev. Loss at 500 rev.	California Test 211	10 45
Sand Equivalent (min.) <sup>a</sup>		50 <sup>b</sup>
Fine aggregate angularity (% min.)	California Test 234	45
Flat and elongated particles (% max. by weight @ 5:1)	California Test 235	10

<sup>a</sup> Reported value must be the average of 3 tests from a single sample.

<sup>b</sup> Minimum Sand Equivalent of 45 for asphalt concrete base.

**39-1.02F Reclaimed Asphalt Pavement:** Reclaimed Asphalt Pavement (RAP) may be used at your option. If RAP is used, you shall provide the proposed mix design and the quality control for all HMA that includes RAP, in accordance with the following requirements:

1. You shall provide City with a mix design per California Test 384 for the proposed RAP HMA.
2. As part of City's evaluation of RAP HMA, You and the City shall perform bitumen ratio tests on at least six split samples of Contractor's RAP to establish correlation between respective binder ignition ovens.
3. RAP shall be processed from reclaimed Asphalt Concrete pavement only.
4. RAP pile(s) shall be separate from the stacker pile, not intermingled with other materials, and stored on smooth surfaces free from debris and organic material.
5. The project RAP pile shall be processed and mixed, identified, and of adequate quantity for the proposed project. "Live" piles shall not be permitted.
6. You shall sample the RAP pile and determine the bitumen ratio (using same binder ignition oven used in #2 above) and provide the test results to the City at least one week prior to producing RAP HMA.
7. A minimum of three samples shall be tested for bitumen ratio for RAP pile of 1500 tons, or portion thereof.

8. RAP pile shall be mixed such that individual bitumen ratio test results of RAP pile so not vary more than +/- 0.5%.
9. During RAP HMA production, RAP shall be sampled by you off of the belt (into the batch plant), per method established by the City, and samples provided to the City.
10. Bitumen ratio of RAP sampled off of the belt shall be 4.0% minimum, as determined by City binder ignition oven. City shall select binder content for RAP HMA mix per Specifications.
11. RAP content shall be no more than 25% by dry aggregate mass in the HMA. If proposing a change in the RAP content, you shall notify the Engineer. If the content changes more than 5%, you shall submit a new mix design.
12. Moisture content of RAP pile shall be 4.0% maximum and shall be tested the day prior to the day of paving and tested/monitored during each day of HMA production.
13. RAP pile(s) shall be protected from exposure to moisture.
14. RAP HMA shall comply with all the specifications for HMA.
15. If batch mixing is used, RAP shall be kept separate from the virgin aggregate until both ingredients enter the weigh hopper or pugmill. After introduction to the pugmill and before asphalt binder is added, the mixing time for the virgin aggregate and RAP shall not be less than five seconds. After asphalt binder is added, the mixing time shall not be less than 30 seconds.
16. If continuous mixing is used, the RAP shall be protected from direct contact with the burner flame with a device such as a shield, separator, or second drum.
17. If any of the above criteria are not satisfied, or if the RAP HMA test result determined by the City are inconsistent, RAP HMA production shall stop for City projects until the issue(s) are corrected.

### **39-1.03 HOT MIX ASPHALT MIX DESIGN REQUIREMENTS:**

#### **39-1.03E Job Mix Formula Verification: (Not Applicable)**

#### **39-1.08 Production**

**39-1.08A General:** During production, with approval of the Engineer, you may adjust hot or cold feed proportion controls for virgin aggregate and RAP.

#### **39-1.12 Smoothness**

**39-1.12A General:** Determine HMA smoothness with a straightedge. The completed surfacing shall be thoroughly compacted, smooth and free from ruts, humps, depressions or irregularities. Any ridges, indentations or other objectionable marks left in the surface of the asphalt concrete by blading or other equipment shall be eliminated by rolling or other means. The use of any equipment that leaves ridges, indentations or other objectionable marks in the asphalt concrete shall be discontinued, and acceptable equipment shall be furnished by you.

**39-1.14 Miscellaneous Areas and Dikes:** The aggregate grading for asphalt concrete placed on miscellaneous areas shall conform to that specified for the asphalt concrete placed on the traveled way, unless otherwise directed by the Engineer.

Dikes shall be shaped and compacted with an extrusion machine or other equipment capable of shaping and compacting the material to the required cross section.

#### **39-1.15 Minor Hot Mix Asphalt: (Not Applicable)**

### **39-3.02 Acceptance Criteria**

**39-3.02A Testing:** The acceptance testing requirement for Sand Equivalent shall be 50 (minimum) for asphalt concrete surface and 45 (minimum) for asphalt concrete base. HMA shall meet the following requirements.

Aggregate Micro-Deval (ASTM D6928-10) <sup>1</sup>	Tensile Strength Ratio, TSR (ASTM D7870) <sup>2</sup>
≤16.0%	Not Required
16.1-18.0%	70 (minimum)
18.1-21.0%	80 (minimum)

<sup>1</sup> Asphalt concrete with an aggregate Micro-Deval loss greater than 21.0% shall be removed and replaced at your expense. In addition, no single source of asphalt concrete aggregate shall have a Micro-Deval loss greater than 21.0%.

<sup>2</sup> TSR testing shall be performed on re-compacted asphalt concrete (per ASTM D7870), obtained from field cores, and tested within 30 days of asphalt concrete placement. Specimens tested shall include 1 unconditioned sample, and 2 conditioned samples as follows:

- a) 20.0 hour Adhesion cycle @ 60°C
- b) 3500 cycles @ 40 psi and 60°C

A single TSR test shall not represent more than 750 tons of asphalt concrete.

Asphalt concrete not meeting the above requirements shall be removed and replaced at your expense.

**39-6 Payment:** HMA Plug Pave shall be paid for at the contract price per **ton**, which price shall include full compensation for furnishing all labor, materials, tools, and equipment and doing all work involved in placing asphalt concrete surface and overlay, including tack coat and overlay conforms, and no additional allowance will be made therefor.

Full compensation for installing and removing temporary asphalt tapers shall be included in the contract price for asphalt concrete surface and no additional allowance will be made therefor.

Full compensation for removing existing asphalt concrete from top of gutters shall be included in the contract price for asphalt concrete surface and no additional allowance will be made therefor.

Full compensation for furnishing weigh master's certificates shall be considered as included in the contract price paid per ton for asphalt concrete and asphalt concrete base and no additional allowance will be made therefor.

## 73 CONCRETE CURBS AND SIDEWALKS

**73-1.01A Summary:** This work shall consist of curb and gutter with retaining curb and shall be constructed in accordance with the details and at the location shown on the plans and in conformance to the requirements of Section 73 of the City Specifications, and Standard Specifications.

**73-2.03 Construction:** Curb and gutter with retaining curb construction shall be in accordance with Section 73-1.05 of the City Standards. Curb construction shall be in conformance to the details and at the locations shown on the plans and in accordance with City Specifications.

Curb and gutter shall be constructed in conformance to City STD-241, the details and locations shown on the plans and in accordance with the City Specifications.

Curb openings shall be constructed at locations indicated on the plans or directed by the Engineer.

All concrete which is to be removed from curb, gutter, and driveway areas shall be removed to the nearest construction joint or as directed by the Engineer.

Curb and gutter and median curb shall be cured in accordance with the requirements of Section 90-1.03B of the Standard Specifications except that you may substitute other than a pigmented sealer upon the approval in writing of such substituted sealer by the Engineer.

All oil, paint, tire marks, and other discoloring shall be removed from the curb and gutter by sandblasting prior to acceptance by the Engineer. Cement mortar will not be an acceptable substitute for sandblasting. Vandalism to uncured concrete surface shall be removed. If it cannot be removed from the surface, then the vandalized concrete shall be removed and replaced to the nearest score mark.

No deduction in measured length of curb and gutter to be paid for will be made for curb openings.

**73-3.04 Payment:** **Curb and Gutter with Retaining Curb** shall be paid for at the contract price per **linear foot**, which price shall include full compensation for furnishing and applying curing materials, forming and constructing curb openings, removing discoloring, furnishing all labor, materials, tools and equipment and doing all the work involved in constructing curb and gutter complete in place as specified, including furnishing and placing expansion joint filler, constructing weakened plane joints, excavating, and backfilling.

## 82 MARKERS AND DELINEATORS

**82-1.01 General:** Flexible delineators shall be placed at the locations shown on the Plans and in accordance with the applicable provisions of Section 82 of the Standard Specifications, these Special Provisions, and the City of Santa Rosa Traffic Standards. Attention is directed to Section 15 “Existing Facilities” of these Special Provisions.

**82-1.02 Materials:** All flexible delineators shall conform to the most current State Specifications.

**82-1.03 Construction:** Existing raised pavement markers to remain, which are damaged by you, shall be replaced as determined by the Engineer, at your expense. This includes areas outside the immediate project limits.

The exact locations and limits of flexible delineators will be determined in the field by the Engineer.

You shall provide, install and maintain temporary markers on the same day that the existing permanent markers are removed, or as directed by the Engineer, and maintain this delineation until new permanent markers are in place. Temporary markers on non-ground surfaces shall be plastic adhesive retroreflective delineators.

Existing raised pavement markers conflicting with the proposed striping shall be removed immediately prior to placement of new markers.

Holes left in the pavement due to the removal of raised pavement markers shall be filled with enough adhesive to replace any asphalt which comes off with the removal of the pavement marker, leaving a level driving surface.

**82-1.04 Payment: Flexible Delineators** shall be paid for at the contract unit price **each**, which price shall include full compensation for furnishing all labor, materials, tools and equipment, and doing all work involved in placing flexible delineators, complete in place, including adhesives, removing existing pavement markers, and no additional allowance will be made therefor.

## 84 TRAFFIC STRIPES AND PAVEMENT MARKINGS

**84-1.01 General:** Attention is directed to Section 12 “Temporary Traffic Control” and Section 15 “Existing Facilities” of these Special Provisions. Traffic stripes and pavement markings shall conform to the applicable provisions of Section 84 of the Standard Specifications, The City Traffic Standards, and these Special Provisions and shall be placed at the locations shown on the Plans.

You shall provide and install temporary retro-reflective pavement markings on the same day as the existing permanent markings are removed or destroyed, or as directed by the Engineer, and maintain them until the new permanent markings are in place.

Temporary striping on all ground surfaces shall be paint (white and/or yellow) with retro-reflective glass beads or an approved equivalent and shall be installed the same day as the existing permanent striping is removed, or as directed by the Engineer. Temporary striping shall be maintained until new permanent striping is in place.

Existing pavement markings, including crosswalks, disturbed by construction activities shall be replaced in their entirety.

All striping to be replaced shall match existing sections in kind unless approved by the Engineer.

You shall remove all existing traffic striping and pavement marking in conflict with proposed improvements, as shown on the Plans, and as directed by the Engineer, and shall be responsible for the proper disposal of their grindings away from site work.

Permanent traffic stripes and pavement markings shall be installed after all iron has been raised for that particular street section, but no more than five days after final paving for that section of roadway.

Existing stripes and pavement markings to remain, which are damaged by the work shall be replaced at your expense. This includes areas outside the immediate project limits.

Painted curbs which are damaged or replaced as part of the work shall be repainted to match existing conditions.

**84-1.04 Payment: Striping** shall be paid for at the contract **lump sum** price, which price shall include furnishing all paint and glass beads, thermoplastic pavement marking material weather white or yellow, tape, and furnishing all equipment, tools, and labor, and doing all the work involved as herein specified, including but not limited to, eradication of existing traffic stripes and pavement markings, surface preparation, replacement of damaged stripes, temporary traffic stripes and pavement markings, all temporary traffic measures, and any other work required to install traffic stripes and pavement markings not specifically enumerated in the City Standards, these Special Provisions or on the Project Plans, and no additional allowance will be made therefor.

Full compensation for installing **reflective white paint on curb** shall be paid for at the contract price per **linear foot** as measured in the field, which shall include full compensation for furnishing all labor, materials, tools, and equipment and all worked involved in the installation.

## 90 CONCRETE

**90-1.01C(6) Mix Design:** The proportions of the water, sand and aggregate shall be regulated so as to produce a plastic, workable and cohesive mixture.

**90-1.01D(2) Cementitious Material Content:** Concrete shall contain a minimum of 564 pounds of cementitious material per cubic yard. The amount of cement by weight of the specified cementitious material shall be 75 to 85 percent.

**90-1.01D(5) Compressive Strength:** The 28-day compressive strength of concrete shall be 4000 pounds per square inch (psi) or greater.

**90-1.01D(6) Curing Compound:** Concrete shall be cured per Section 90-1.03B of the Standard Specifications. Pigmented curing compound or any other material that will leave a noticeable residue shall not be allowed.

**90-1.02E(2) Chemical Admixtures:** An admixture shall not be used to reduce the amount of cementitious material content.



## 124 MATERIAL RECYCLING

**124-1.01 Description:** You shall dispose of all portland cement concrete and asphalt concrete, generated from removal or demolition activities on the project, at a recycler for these materials. You shall provide receipts verifying delivery and approximate quantity (in tons) of the material delivered to a material recycler.

All other excess materials from the project shall become the property of you and shall be disposed of by him, at his expense.

**124-1.02 Payment:** Full compensation for material recycling as specified herein shall be considered as included in the contract prices paid for various items of work, and no additional compensation will be allowed therefor.

## C TESTS AND INSPECTIONS

All materials, equipment, installation, and workmanship included in this contract, if so required by the Engineer, shall be tested and inspected to prove compliance with the contract requirements.

All mechanical and electrical equipment shall be tested by you to the satisfaction of the Engineer before any facility is put into operation. Tests shall be as specified herein and shall be made to determine whether the equipment has been properly assembled, aligned, adjusted, and connected. Any changes, adjustments, or replacements required to make the equipment operate as specified shall be carried out by you as part of the work.

At least 60 days before the time allowed in this construction schedule for commencing testing and start-up procedures, you shall submit to the Engineer, in duplicate, details of the procedures he proposes to adopt for testing and start-up of all mechanical and electrical equipment to be operated singly and together, excepting when such procedures have been covered in the specifications. Tests on hydraulic or pumping equipment shall be conducted using clear potable water. The water required for such tests shall be provided by you.

During the testing of mechanical, instrumentation, and electrical equipment, you shall make available experienced factory trained representatives of the manufacturers of all the various pieces of equipment, or other qualified persons, who shall instruct the City's personnel in the operation and care thereof. Instruction shall include step-by-step troubleshooting procedures with all necessary test equipment.

If, under test, any portion of the work shall fail to fulfill the contract requirements and is altered, renewed, or replaced, tests on that portion when so altered, removed, or replaced, together with all other portions of the work as are affected thereby, shall, if so required by the Engineer, be repeated within reasonable time and in accordance with the specified conditions, and you shall pay to the City all reasonable expenses incurred by the City as a result of the carrying out of such tests.

Where, in the case of an otherwise satisfactorily installed test, any doubt, dispute, or difference should arise between the Engineer and you regarding the test results or the methods or equipment used in the carrying out of the test by you, then the Engineer may order the test to be repeated. If the repeat test, using such modified methods or equipment as the Engineer may require, substantially confirms the previous test, then all costs in connection with the repeat test will be paid by the City; otherwise, the costs shall be borne by you. Where the results of any installed test fail to comply with the contract requirements for such test, then such repeat tests as may be necessary to achieve the contract requirements shall be made by you at his own expense.

As soon as possible after each Contractor's submittal for equipment defined herein has been approved by the Engineer, and no later than the time of delivery of that equipment to the job site, a single copy of operating and maintenance instructions and procedures shall be presented to the Engineer for review and acceptance. Since such instructions are considered to be an integral part of the equipment provided, ten percent of the materials and labor costs for each such item of equipment will be withheld from payment to you until the instructions have been accepted by the Engineer.

Items or assemblies requiring operating and maintenance instructions shall include all mechanical equipment, electrical, and instrumentation equipment, and, in addition, any other items specifically noted in the specifications.

The operating and maintenance instructions shall include, as a minimum, the following data for each item of equipment.

- A. An itemized list of all data provided.
- B. Name and location of the manufacturer, the manufacturer's local representative, the nearest supplier, and spare parts warehouse.
- C. Approved submittal information applicable to operation and maintenance.
- D. Recommended installation, adjustment, start-up, calibration, and troubleshooting procedures.
- E. Recommended lubrication and an estimate of yearly quantity needed.
- F. Recommended step-by-step procedures for all modes of operation.
- G. Complete internal and connection wiring diagrams.
- H. Recommended preventive maintenance procedures and schedule.
  - I. Complete parts lists, by generic title and identification number, with exploded views of each assembly.
- J. Recommended spare parts.
- K. Disassembly, overhaul, and reassembly instructions.

Following completion of installation of an item of equipment, operating and maintenance instructions and procedures shall be modified by you to reflect field changes and corrections made by the Engineer. After corrections have been made, four complete copies shall be submitted.

BID FORMS

**CITY OF SANTA ROSA**

**STATE OF CALIFORNIA**

LOW IMPACT DEVELOPMENT AT MUNICIPAL SERVICES CENTER NORTH (MSCN)

The work to be performed and referred to herein is in the City of Santa Rosa, California and consists of improvements to be constructed in accordance with the provisions of the Invitation for Bids, containing the Notice to Bidders, the Special Provisions, the Project Plan(s), the Bid Forms and the Contract, all of which are by reference incorporated herein, and each Addendum, if any is issued, to any of the above which is also incorporated by reference herein.

TO THE AWARD AUTHORITY OF THE CITY OF SANTA ROSA

The undersigned, as bidder, declares that the only person or parties interested in this bid as principals are those named herein; that this bid is made without collusion with any other person, firm, or corporation; that Contractor has carefully examined the Project Plans, Invitation for Bids and conditions therefor, and is familiar with all bid requirements, that Contractor has examined this Contract and the provisions incorporated by reference herein, and Contractor hereby proposes, and agrees that if its bid is accepted by the City, Contractor will provide all necessary machinery, tools, apparatuses, and other means of construction, and to do all the work and furnish all the materials and services required to complete the construction in accordance with the Contract, the Special Provisions, the Project Plan(s), and Addenda to any of the above as incorporated by reference, in the time stated herein, for the unit prices and/or lump sum prices as follows:

NAME OF BIDDER: \_\_\_\_\_

Contract #: C02391

Project Title: LOW IMPACT DEVELOPMENT AT MUNICIPAL SERVICES CENTER NORTH (MSCN)

Item No.	Description	Units	Quantity	Unit Price	Total Price
1	TEMPORARY TRAFFIC CONTROL	LS	1	\$ _____	\$ _____
2	WATER POLLUTION CONTROL	LS	1	\$ _____	\$ _____
3	HAZARDOUS WASTE DISPOSAL	LS	1	\$ _____	\$ _____
4	MODIFY EXISTING SD INLETS TO GRADE	EA	2	\$ _____	\$ _____
5	REMOVE ASPHALT, BASE, AND SUBGRADE	SF	6,000	\$ _____	\$ _____
6	IRRIGATION	LS	1	\$ _____	\$ _____
7	PLANT ESTABLISHMENT	LS	1	\$ _____	\$ _____
8	BIORETENTION AREA	SF	4,367	\$ _____	\$ _____
9	6" PERFORATED PIPE - PVC	LF	97	\$ _____	\$ _____
10	HMA PLUG PAVE	TON	63	\$ _____	\$ _____
11	CURB AND GUTTER WITH RETAINING CURB	LF	283	\$ _____	\$ _____
12	FLEXIBLE DELINEATORS	EA	14	\$ _____	\$ _____
13	STRIPING	LS	1	\$ _____	\$ _____
14	REFLECTIVE WHITE PAINT ON CURB	LF	283	\$ _____	\$ _____
				Total:	\$ _____

In the case of any discrepancy between the unit price and the total set forth for the item, the unit price shall prevail; provided, however, that if the amount set forth as a unit price is ambiguous, unintelligible or uncertain for any reason, or is omitted, or in the case of lump sum items, is not the same amount as the entry in the "Total" column, then the amount set forth in the "Total" column for the item shall prevail in accordance with the following:

1. As to lump sum items, the amount set forth in the "Total" column shall be the unit price;
2. As to unit basis items, the amount set forth in the "Total" column shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price.

The Total Base Bid shall be the sum of the "Total" column. In case of discrepancy between the sum of the "Total" column and the amount entered as Total Base Bid, the sum of the "Total" column shall prevail. The bid comparison will be based on the sum of the "Total" column for each bidder.

If this Contract Bid is accepted by the City and the undersigned fails to execute the Contract and to give all the bonds required under the Contract, with a surety satisfactory to the Award Authority of the City of Santa Rosa, within ten calendar days after bidder has received the Notice of Award from the Engineer, then the Award Authority may, at its option, determine that the bidder has abandoned the Contract, and thereupon this bid and the acceptance thereof shall be null and void, and the forfeiture of the security accompanying this bid shall be in accordance with California Public Contract Code section 20172.

The undersigned understands and agrees that the City is not responsible for any error or omissions on the part of the undersigned in making this bid.

The bidder to whom the Contract is awarded agrees to execute the Contract in favor of the City, in the form attached, and to deliver any and all required bond(s) and insurance certificates within ten calendar days from the date of Contractor's receipt of the Notice of Award. Following the award of the Contract, Contractor shall commence work within ten calendar days from the day authorized in the Notice to Proceed and diligently prosecute the same to completion in accordance with Section 8-1.05.

## LIST OF SUBCONTRACTORS

**NAME OF BIDDER:** \_\_\_\_\_

The following is a list of each subcontractor who will perform work or labor or render services to the undersigned for the construction of the project in an amount in excess of ½ of 1% of the total amount of this bid.

The undersigned agrees that any portion of the work in excess of ½ of 1% of the total amount of this bid and for which no subcontractor is designated herein will be performed by the undersigned.

SUBCONTRACTOR NAME	SUBCONTRACTOR LICENSE NUMBER	SUBCONTRACTOR DIR REGISTRATION NUMBER	SUBCONTRACTOR BUSINESS ADDRESS	DESCRIPTION OF WORK (ITEM NO.)





**NONCOLLUSION DECLARATION  
TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID**

The undersigned declares:

I am the \_\_\_\_\_ of \_\_\_\_\_, the party making the foregoing bid. The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on \_\_\_\_\_ [date], at \_\_\_\_\_ [city], \_\_\_\_\_ [state].

**NOTE:** The above Noncollusion Declaration is part of the Contract Bid. Signing this Bid on the signature portion thereof shall also constitute signature of this Noncollusion Declaration.

BID BOND AFFIDAVIT AND BIDDER'S SIGNATURE PAGE

Accompanying this bid is a guaranty in the form of (Notice: Insert the words "cash \$," "Cashier's Check," "Certified Check," or "Bidder's Bond" as the case may be):

\_\_\_\_\_
in an amount equal to at least ten percent of the total of this bid.

The undersigned further agrees that if Contractor does not execute the Contract and deliver the necessary bonds to the City within the period of time specified in this Invitation for Bids, the proceeds of the security accompanying this bid shall become the property of the City of Santa Rosa, California, and this bid and the acceptance thereof may, at the option of the City, be considered null and void.

The undersigned is licensed in accordance with an act providing for the registration of Contractors, License No. \_\_\_\_\_, Class \_\_\_\_\_, expiration date \_\_\_\_\_.

The undersigned in registered with the Department of Industrial Relations, Registration No. \_\_\_\_\_.

IMPORTANT NOTICE: If bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary, treasurer, and manager of the corporation; if a partnership, state true name of partnership, also the names of all partners in the partnership; if the bidder is a sole proprietor, state the business name and the proprietor's name in full.

Secretary of State Business Entity Number: \_\_\_\_\_.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Business Address

\_\_\_\_\_  
Telephone Number

I declare under penalty of perjury that the foregoing is true and correct.

BIDDER'S SIGNATURE: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

**CITY OF SANTA ROSA COMMUNITY WORKFORCE AGREEMENT**

**CONTRACTOR AGREEMENT TO BE BOUND**

The undersigned, as a Contractor or Subcontractor ("Contractor") for the \_\_\_\_\_ Project, (hereinafter the "Covered Project"), for and in consideration of the award to it of a contract to perform work on said Covered Project, and in further consideration of the mutual promises made in the "City of Santa Rosa Community Workforce Agreement" (hereinafter "Agreement"), a copy of which was received and is acknowledged, hereby:

- (1) Accepts and agrees to be bound by the terms and conditions of the Agreement, together with any and all amendments and supplements now existing or which are later made thereto.
- (2) Agrees to be bound by the legally established local trust agreements as set forth in Article 17 of this Agreement.
- (3) Authorizes the parties to such local trust agreements to appoint trustees and successor trustees to administer the trust funds and hereby ratifies and accepts the trustees so appointed as if made by the Contractor;
- (4) Certifies that it has no commitments or agreements which would preclude its full and complete compliance with the terms and conditions of the Agreement.
- (5) Agrees to secure from any Contractor(s) (as defined in said Agreement) which is or becomes a subcontractor (of any tier) to it, a duly executed Agreement to be Bound in form identical to this document.

The obligation to be a party to and bound by the Agreement shall extend to all work for the Covered Project undertaken by the Contractor.

This letter shall constitute a subscription agreement, to the extent of the terms of the letter.

CONTRACTOR/SUBCONTRACTOR: \_\_\_\_\_

California Contractor State License No. or Motor Carrier (CA) Permit No.: \_\_\_\_\_

Name of Authorized Person (print): \_\_\_\_\_

Signature of Authorized Person:  
\_\_\_\_\_

Title of Authorized Person: \_\_\_\_\_

Telephone Number of Authorized Person: \_\_\_\_\_

Address of Authorized Person: \_\_\_\_\_

State Public Works Registration Number: \_\_\_\_\_

*[SIGNATURES APPEAR ON THE FOLLOWING PAGE]*

In witness whereof, the Parties have caused this Agreement to be executed as of the Effective Date.

**SIGNATURES**

CITY OF SANTA ROSA

NORTH BAY BUILDING AND  
CONSTRUCTION TRADES COUNCIL

By: \_\_\_\_\_

\_\_\_\_\_  
By: Michael Allen, Secretary/Treasurer

Title: \_\_\_\_\_

APPROVED AS TO FORM

\_\_\_\_\_  
City Attorney

**SIGNATORY UNIONS:**

\_\_\_\_\_

\_\_\_\_\_

**CONTRACT**

**CITY OF SANTA ROSA**

**CALIFORNIA**

**CITY CONTRACT NO. C02391**

**LOW IMPACT DEVELOPMENT AT MUNICIPAL SERVICES CENTER NORTH (MSCN)**

This Contract is made and entered into as of date to be added upon award at Santa Rosa, California, between the City of Santa Rosa ("City") and \_\_\_\_\_, of \_\_\_\_\_, California ("Contractor").

ARTICLE I - For and in consideration of the payment and agreement hereinafter mentioned, to be made and performed by City, and under the conditions expressed in the required bonds hereunto annexed, Contractor agrees that for the benefit of City, at its own cost and expense, to do all the work and furnish all the materials, except such as are mentioned in the Special Provisions to be furnished by City, necessary to construct and complete the work herein described in a good, workmanlike, and substantial manner.

The work embraced herein shall be done in accordance with Sections 1-9 of the State of California Department of Transportation Standard Specifications 2015 and Revised Standard Specifications 2015 (collectively, the 2015 Standard Specifications) and Sections 11-134 of the State of California Department of Transportation Standard Specifications 2018 and Revised Standard Specifications 2018 (collectively, the 2018 Standard Specifications) (the 2015 Standard Specifications and the 2018 Standard Specifications are collectively the Standard Specifications); in accordance with the City of Santa Rosa Construction Specifications for Public Improvements (City Specifications); in accordance with the City of Santa Rosa Design and Construction Standards, (City Standards); in accordance with the State of California Department of Transportation Standard Plans 2018 and Revised Standard Plans 2018 (collectively, Standard Plans), (collectively, "Contract Documents") and in accordance with the Special Provisions hereinabove set forth, all of which are hereby incorporated into and made part of this Contract.

The work to be performed is further shown upon a plan consisting of 14 sheets entitled, Low Impact Development at Municipal Services Center North (MSCN), File Number 2023-0028, approved by the Deputy Director of Transportation and Public Works, hereinafter referred to as the Project Plan(s).

ARTICLE II - Contractor agrees to receive and accept the following prices as full compensation for furnishing all materials and doing all the work contemplated and embraced in this Contract; also for all loss or damages arising out of the nature of the work aforesaid, or from the acts of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the work until its acceptance by City and for all expenses incurred by or in consequence of the suspension or discontinuance of work, and for well and faithfully completing the work, and the whole thereof in the manner and according to the Project Plans and Invitation for Bids therefor, and the requirements of the Engineer under them to wit:

ITEM NUMBER	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
			\$ _____	\$ _____
TOTAL BASE BID (SUM OF "TOTAL" COLUMN)			\$ _____	

**BID ITEMS IN THIS SECTION WILL BE INSERTED  
UPON AWARD OF THE CONTRACT AND SHALL BE  
THE SAME AS THOSE BID UPON.**

ARTICLE III - City and Contractor hereby promise and agree that Contractor shall provide the materials and do the work according to the terms and conditions herein contained and referred to, for the prices aforesaid, and City hereby agrees to pay for the same at the time, in the manner, and upon the conditions set forth; and the parties for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to full performance of the covenants herein stated.

ARTICLE IV - By execution of this Contract, Contractor hereby represents and certifies that Contractor is aware of the provisions of Labor Code section 3700 which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and Contractor hereby agrees to comply with such provisions before commencing the performance of the work of this Contract.

ARTICLE V - It is further expressly agreed by and between the parties hereto that the Invitation for Bids, containing the Notice to Bidders including any required Bonds, the Contract Documents, all required *Contractor Agreement(s) to be Bound* to the PLA executed by Contractor and all subcontractors to which the PLA is applicable, and any Addenda are all essential parts of this Contract and are specially referred to and by such reference made a part hereof. In the event of any conflict in the provisions thereof, the terms of said documents shall control each over the other, in the following order:

1. Special Provisions
2. Project Plans
3. City Standards
4. City Specifications
5. Standard Specifications
6. Standard Plans

provided, that in the event of a conflict between any Federal Requirement in Section 10 of the Special Provisions and any other provision in the Contract Documents, the more stringent provision shall control and prevail.

ARTICLE VI - Contractor agrees to commence work pursuant to this Contract within ten calendar days from the date authorized in the Notice to Proceed and to diligently prosecute the same to completion in accordance with Section 8-1.05 of the Special Provisions.

This Contract shall not be transferred or assigned without the prior written consent of City, which may be withheld by City in its sole and absolute discretion.

If Contractor is a corporation, two corporate officers of Contractor, one from each of the following two groups shall execute this Contract: a) the chairman of the board, president or any vice-president; b) the secretary, any assistant secretary, chief financial officer, or any assistant treasurer. The name and title of the corporate officers shall be printed under the signature.

In witness whereof, the parties hereto have executed this Contract as of the date first written above.

**City:**

City of Santa Rosa,  
a Municipal corporation

By: \_\_\_\_\_

Title: \_\_\_\_\_

ATTEST:

By: \_\_\_\_\_

Title: \_\_\_\_\_

Approved as to form:

By: \_\_\_\_\_

Office of City Attorney

**Contractor:**

Name of Contractor,  
Type of entity

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_