

CITY OF JUNCTION CITY
Public Works Construction Standards

Division 1

General Requirements and Procedures

DIVISION 1

GENERAL REQUIREMENTS AND PROCEDURES

1.1 GENERAL

- a. These Public Works Construction Standards will be cited routinely in the text as the "Standards."
- b. Wherever specific supplementary standards are indicated (ie. AWWA C-150, ASTM C-857), it shall be understood to mean the latest revision thereof.
- c. In interpreting these Standards, it is understood that: (1) if the context so requires: (a) the singular pronoun shall be taken to mean and include the plural pronoun; (b) the masculine pronoun shall be taken to mean the feminine and the neuter pronoun; and (2) all captions used therein are intended solely for the convenience of reference and shall in no way limit any of the provisions of these Standards.
- d. These Standards shall apply to all improvements within existing and proposed public right-of-way and public utility easements, to all improvements to be maintained by the City, and to all improvements for which the Development Code requires approval by the City, or which must be designed to meet the provisions of the Public Works Design Standards. The provisions of these Standards are binding on contractors and developers in the performance of any work covered under the categories outlined above. Where minimum values are stated, greater values should be used whenever practical; where maximum values are stated, lesser values should be used whenever practical.
- e. Requests for variances to these Standards shall be based on the criteria and procedures outlined in Section 1.11 of the Public Works Design Standards.
- f. In the case of conflicts between the text of these construction standards and the standard details in the PWDS, or between the provisions of these construction standards and the PWDS, the more stringent as determined by the Director of Public Works shall apply.
- g. All other utility improvements, including telephone, electrical power, gas and cable TV shall meet the current standards of the appropriate agency as well as City standards.
- h. Traffic Control Devices shall meet the standards of the current Manual on Uniform Traffic Control Devices, including Oregon amendments.
- i. All other work not covered by the above standards shall conform to the Oregon State Highway Division (OSHD) Standard Specifications for Highway Construction and Standard Drawings for Design and Construction.

1.2 PURPOSE

- a. The purpose of these Standards is to provide a consistent policy under which certain physical aspects of public utility construction will be implemented. Most of the elements contained in this document are Public Works oriented and most are related to the development or platting process. However, it is intended that they apply to both public and private work designated herein.
- b. These Standards cannot provide for all situations. They are intended to assist but not to substitute for competent work by experienced contractors. The Standards are also not intended to limit unreasonably any innovative or creative effort which could result in better quality, better cost savings, or both. Any proposed departure from the Standards will be judged on the likelihood that such variance will produce a compensating or comparable result, in every way adequate for the user and City resident.
- c. The objective is to develop Standards which will:
 - 1) be consistent with current City Ordinances and the PWDS.
 - 2) set forth uniform material and workmanship standards under which all public works facilities shall be constructed within the City.
 - 3) supplement and complete the requirements of the City's development ordinances, Public Works Design Standards, and other prevailing ordinances as they relate to the physical construction of public works facilities within the City.
 - 4) clarify and streamline the administration and construction of public works facilities within the City.
 - 5) provide public and private utility improvements constructed in a manner to allow economical future maintenance.
- d. These Standards specifications shall relate only to public works construction in the City and are not to be intended to replace building codes, development or zoning ordinances and other regulations for which procedures and standards have been established. Planning, zoning and related matters shall be satisfied prior to submitting an application for a public works construction permit.

1.3 DEFINITIONS AND TERMS

- a. Unless otherwise defined in these Standards, the definitions, terms and abbreviations contained in the Public Works Design Standards shall apply whenever used. The following additional definitions, terms and abbreviations shall also apply.

- 1) **City:** The City of Junction City, Oregon.
- 2) **Construction drawings:** Drawings prepared by a registered professional engineer, including site plans, plan and profile views of utilities, cross sections, detailed drawings, etc., or reproductions thereof, approved by the Public Works Director, which show the location, character, dimensions and details for the work to be done.
- 3) **Contractor:** Any individual, firm, co-partnership, corporation or any combination thereof who has or have been named on a public works construction permit as the person responsible for the construction of the subject work, or who have entered into a Contract with the City for a particular project.
- 4) **Cut Sheets:** Construction submittals as required by Division 2, Section 01300 of these standards.
- 5) **Day:** Calendar day, any and every day shown on the calendar, Sundays and holidays included.
- 6) **Definition of Words:** Wherever, in these Standards, the words directed, required, permitted, ordered, designated or words of like importance are used, they shall be understood to mean the direction, requirement, permission, order or designation of the Director. Similarly, the words approved, acceptable, satisfactory, shall mean approved by, acceptable to, or satisfaction to the Director.
- 7) **Design Engineer:** The engineer licensed by the State of Oregon as a Civil Engineer under whose direction plans, profiles and details for work are prepared and submitted to the City for review and approval.
- 8) **Director:** The Director of Public Works of the City of Junction City or his/her authorized representative.
- 9) **Easement:** Areas along the line of public utilities which are outside of dedicated right-of-way. Easements shall be prepared on City forms granting rights along the public utility line to the City.
- 10) **Improvement:** General term encompassing all phases of the work to be performed under the construction permit and is synonymous to the term project.
- 11) **Inspector:** The authorized representative of the City whose instructions and decisions shall be limited to the particular duties and responsibilities entrusted to him/her in making detailed inspections of any or all portions of the work or materials therefor.
- 12) **Plans:** See Construction Drawings.

- 13) **Standard Details:** The drawings of structures or devices commonly used on City work and referred to on the construction drawings. Also called Standard Plans. The Standard Details in these standards and in the PWDS shall apply to all public works construction within the City.
- 14) **Survey Cut Sheets:** Sheets of tabulated survey data, indicating stationing, structures, fittings, angel points, beginning of curve, points on curve, end of curves, staking offset, various elevations and offset utility cuts.
- 15) **Work:** All material, labor, tools, equipment, and all appliances, machinery, transportation, and appurtenances necessary to perform and complete the Contract, and such additional items not specifically indicated or described which can be reasonably inferred as belonging to the item described or indicated and as required by good practice to provide a complete and satisfactory system or structure.

1.4 PERMITS REQUIRED

- a. No person shall begin to construct, reconstruct, cut, excavate, repair, alter, or grade any sidewalks, curb, curb-cut, driveway, street, or to lay and install any sewer pipeline or service lateral, water mainline or service lateral, storm sewer, or other private or franchise utility within any public right-of-way or public utility easement within the jurisdiction of the City of Junction City without first obtaining the required permits from the Director of Public Works as required by this ordinance, paying any required plan review and construction permit fees, depositing any required security, and obtaining a construction permit therefor as provided in this ordinance.
 - 1) **Streets.** A permit covering any work on public street, sidewalk, curb, curb-cut, driveway within any public right-of-way or within any existing or proposed public easement.
 - 2) **Storm sewer.** A permit covering all work to lay and install any storm sewer and storm sewer appurtenances within any public right-of-way or within any existing or proposed public utility easement.
 - 3) **Sewer.** A permit covering all work to lay and install any sanitary sewer pipeline and appurtenances within any public right-of-way or within any existing or proposed public utility easement.
 - 4) **Water.** A permit covering all work to lay and install any water main and appurtenances within any public right-of-way or within any existing or proposed public utility easement, or any improvements attached to the City water system.
 - 5) **Street Closure.** In the event any of the above activities, or any activities related to the construction of a building, structure, or parking lot, which requires the temporary closure of a street, alley, lane of traffic, or sidewalk to

vehicle or pedestrian flow, a permit shall be obtained from the City for said closure.

- 6) **Franchise Utilities.** A permit covering any work on underground franchise utilities within any improved area of any public street, including sidewalks, or within any existing or proposed public utility easements. Permits will not be required for work on overhead or above grade franchise utilities which do not involve excavation within the areas specified herein.
- b. Approval of Construction Drawings is required prior to beginning construction.

1.5 APPROVAL OF CONSTRUCTION DRAWINGS REQUIRED

- a. Construction drawings (plans) shall be submitted for permits required by these Standards and shall have the written approval of the Director of Public Works or his designated representative prior to issuance of permit to permittee. For subdivisions and other developments requiring improvements to multiple public utility systems, improvement plans for sewer, water, streets, and storm drains shall be submitted simultaneously to facilitate checking for conflicts.
- b. Such plans for approval shall be subject to the standards, specifications, policies and procedures, plan check, and permit fees of the Department of Public Works in effect at the time of application or reapplication for plan check.
- c. Except as provided in Subsection (e) of this section, such plan approval shall be void upon expiration of six months from the date of said written plan approval in Subsection (a) of this section.
- d. Upon a written finding that the facts upon which the plan approval was based have not changed to an extent sufficient to warrant refiling of construction plans, the Director of Public Works may extend the approval for a period not to exceed 6 months. No more than two such six month extensions shall be granted for any one development or project, resulting in a maximum time extension of one year. Reapplication for plan check must be made with the Director of Public Works or his designated representative upon expiration of said six month period in Subsection (c) of this section, or extension periods provided herein, if the permit is not issued in said approval or extension period.
- e. All plans, reports, or documents for public utility improvements required by this ordinance or the City development ordinances or other City ordinances shall be prepared by and certified by a registered professional civil engineer licensed by the State of Oregon.

1.6 PLAN REVIEW PROCESS

- a. All plans shall be reviewed in general conformance with the procedures outlined in Section 1.9 of the Public Works Design Standards. The submittal for plan check shall

be filed by the responsible party (the design engineer for any public improvements) with the Director of Public Works for any permit or permits required by this ordinance. Such submittal for plan check shall include the following as applicable.

- 1) Name and address of the owner or owners of the property;
- 2) Name and address of the developer of the property;
- 3) Name, address, and phone number of the designer (design engineer for public improvements);
- 4) Description of the work area location;
- 5) Attached three sets of preliminary plans showing a vicinity map and details of the proposed project, including street widths and property lines, existing and proposed utility locations. In the case of public improvements, preliminary plans shall include all applicable information outlined under Section 1.10 of the Public Works Design Standards.
- 6) Evidence that all federal and state laws and regulations have been complied with including a copy of permits required by federal, state, or county agencies;
- 7) Estimated construction cost of the proposed project, or estimates based on the construction cost estimate schedule established by the Director of Public Works;
- 8) Plan check fees as prescribed by resolution of the City Council (for franchise utilities, see Section 1.8e).
- 9) Fees provided in Subsection (8) of this section are nonrefundable, and are required to support permit plan review.
- 10) Such other information as the Director of Public Works shall find reasonably necessary for the determination of whether plans should be approved for permit.

1.7 CONSTRUCTION PERMIT APPLICATION

- a. Following review and approval of the plans by the City, any applicant for a construction permit or permits as required by this ordinance shall file an application with the Director of Public Works. Such applications shall be in the form prescribed by the City and shall include the following as a minimum:
 - 1) Name and address of the owner or owners of the property;
 - 2) Name and address of the developer of the property;
 - 3) Name and address of the designer (design engineer for public improvements);

- 4) Name and address of the party doing the work, including subcontractors;
 - 5) Location of the work area;
 - 6) Attached approved plans (10 sets for public improvements, 4 sets for private and franchise utility improvements), specifications, and easements required. Easements shall be accompanied by a drawing showing area covered by the easement legal description.
 - 7) Evidence that all federal and state laws and regulations have been complied with;
 - 8) Proposed work schedule, provided that any changes in this work schedule shall be filed with the City;
 - 9) Estimated cost of the proposed project (see Section 1.8c);
 - 10) Such other information as the Director of Public Works, as the case may be, shall find reasonably necessary for the determination of whether a permit should be issued therefor.
- b. As outlined in Section 1.9(h) of the PWDS, prior to issuance of the public utility construction permits, the Developer shall provide the City with the following:
- 1) Copy of an approved (by City Attorney) Developer/City Agreement for Improvements signed and notarized by the Developer and the Developer's engineer.
 - 2) Any required permit fees.
 - 3) Recorded copies of all off-site easements. Executed and notarized copies of easements for all public utilities which are constructed prior to the recording of a final plat.
 - 4) Proposed project construction schedule.
 - 5) Certificates of insurance, minimum limits as outlined in the Appendix. City of Junction City shall be named as additional insured.
 - 6) Evidence of Workman's Compensation coverage from contractor performing the work.
 - 7) Any required Waiver of Remonstrance agreements.
 - 8) Signed certification that the Developer has copies of and will conform to requirements of the most current revision of the Junction City Public Works Construction Standards (PWS).

- 9) Other submittals specific to the project.

1.8 CONSTRUCTION PERMIT FEES

- a. Accompanying the application required by this ordinance shall be a construction permit fee as prescribed by resolution of the City Council.
- b. Permit fees required by this ordinance are nonrefundable, and are required to support permit issuance, testing, and inspection.
- c. In computing the construction permit fees, the estimated value of proposed construction shall be comparable with current bid prices for City contract projects and approved prior to issuing the permit.
- d. Work being done under contract with the City shall be exempt from permit fees.
- e. Work being done by franchise utilities shall be exempt from permit fees to the extent provided by the franchise agreements with the City.
- f. Where work for which a permit is required by this ordinance is commenced or proceeded with prior to obtaining said permit, the construction permit fees specified in Subsection (a) of this section shall be doubled, but the payment of such double fee shall not relieve any person from fully complying with the requirements of this ordinance and other applicable City codes, standards and ordinances in the execution of the work nor from any other penalties prescribed herein.
- g. Permits required by this ordinance shall be nontransferable. Any change in applicant, such as a subdivision sale, will require reapplication for permit. If six months has elapsed since plan approval, reapplication for plan check shall be made.

1.9 PERFORMANCE SECURITY

- a. Before the issuance of any construction permit, the applicant shall execute an improvements agreement and provide a security guarantee satisfactory to the City that all improvements will be constructed in conformance with all City standards and ordinances and all conditions of construction permit approval will be satisfied.
- b. Work being done under by franchise utilities shall be exempt from performance security requirements only to the extent provided by the franchise agreements with the City.
- c. The amount of the security guarantee shall not be less than \$500 or the amounts specified below, whichever is greater. The security guarantee may consist of one of the following, and shall be in a form as required by the City.
 - 1) A surety bond executed by a surety company authorized to transact business in the State of Oregon, in a form approved by the city attorney. The amount

of the performance surety bond shall be as established by the Director of Public Works, but shall not be less than 120% of the estimated construction cost of required improvements, as verified by the City. The performance surety bond shall insure the full and faithful performance of all proposed work and shall guarantee that the applicant will conform to all provisions of the improvements agreement, if any, and immediately upon the completion of work, remove all surplus earth, rubbish or other material, replace or restore all existing streets and utilities to a condition as good as or better than existed prior to the work. The performance surety bond shall be replaced with a maintenance bond of not less than 40% of the estimated construction cost prior to acceptance of the work by the City. The maintenance bond shall require the applicant to keep the improvements in good repair at the applicant's own expense for during the warranty period. The length of the warranty period shall be as prescribed by the City Council, and shall not be less than 1 year nor exceed two years from the written acceptance of said work by the City.

- 2) An irrevocable letter of credit assigned to the City of Junction City in an amount equal to 120% the estimated construction cost of required improvements, as verified by the City. The letter of credit shall be subject to the same conditions as set forth above in the case of surety bonds.
 - 3) An agreement between developer and the City that the final plat for the subdivision will not be approved nor recorded, and no building permits for any structures within the subdivision will be issued until all improvements have been completed by the applicant and accepted by the City. Such agreement shall be in a form approved by the City Attorney and recorded in the deed records of the appropriate county by the applicant.
- d. If the applicant fails to complete all improvements for which a performance surety bond or letter of credit were provided, the City shall estimate the cost of completing any required improvement, call on the bond or letter of credit for the funds necessary to complete the improvement, and complete the improvement to the extent of the funds obtained upon call of the bond or deposit. If the amount obtained from the bond or deposit is insufficient to complete the improvement, the City may either hold the collected funds until additional funds are authorized for the improvement or expend the collected funds on a revised improvement or on a portion of the improvement as determined reasonable by the Director of Public Works.

1.10 CONDUCT OF THE WORK

- a. All work under said permits shall be completed in conformity with the provisions of this ordinance, the terms of the applications and construction permits, and under the supervision and subject to the approval of the Director of Public Works. Immediately upon completion of work, all surplus earth, debris, rubbish or other materials shall be removed immediately and the street and utilities restored to a condition as good as or

- better than existed prior to the work.
- b. The contractor is responsible for the coordination with the various utilities and agencies during construction.

1.11 ADHERENCE TO AND EXHIBITION OF PERMITS

- a. No work shall be undertaken other than that specified in the application and permit for the particular cut or excavation. Upon demand of the Director of Public Works or his designate or any city police officer, the permits shall be produced at the place where the work is in progress, or such work will be stopped until the permit is produced.

1.12 SUSPENSION OF PERMIT; STOP WORK ORDER; APPEAL

- a. At any time after the issuance of a construction permit required by this ordinance, the Director of Public Works may suspend the same upon a finding that any of the following grounds exist:
- 1) False, misleading, or erroneous data or information submitted by the applicant in connection with securing the permit.
 - 2) Materials or workmanship which do not meet specification for the construction or installation of the permitted improvement; or construction or installation which varies from the approved plan or design of the improvements.
 - 3) Violation of any of the provisions of the City development ordinances governing the work being done under the permit.
- b. Upon suspension of a construction permit as provided in Subsection (a) of this section, the Director shall cause to be issued a written "stop work order," one copy of which shall be sent by regular mail to the permittee at the address shown on the permit application, one copy of which shall be sent by regular mail to the permittee's engineer overseeing the work, if known, and one copy of which shall be personally delivered to the person in charge of any work in progress.
- c. It shall be unlawful for any person to cause, suffer, or permit any work to be done for which a permit is required by this ordinance when a "stop work order" has been issued as provided in Subsection (b) of this section.
- d. Any person whose permit has been suspended as provided in Subsection (a) of this section may appeal such action to the City Administrator through the City's established appeal process. Notwithstanding the provisions for appeal to the City Administrator, the filing of an appeal shall not stay the effect of a "stop work order" issued under Subsection (b) of this section.

1.13 NOTICE OF COMPLETION OF WORK

- a. Within 48 hours of completion of the work for which a permit was required under this ordinance, the person or organization to whom the permit to do such work was issued shall submit written notice to the Director of Public Works stating that such work has been completed and give such other information as may be required by the City, and request a final inspection of the work. In no case shall the City issue final written acceptance of the work until as-built drawings (for public improvements), maintenance bonds (if required) are submitted to and accepted by the City.

1.14 PENALTY; CONTINUING VIOLATIONS

- a. Failure to comply with any provision of this ordinance, or with any restrictions or conditions imposed hereunder, or failure to comply with the conditions of a construction permit issued by the City, shall subject the person, firm or corporation who violates, disobeys, omits, neglects, or refuses to comply with any of the provisions of the Ordinance to civil penalties as prescribed in this ordinance.
- b. Offenses defined in this ordinance shall be punishable by a fine not to exceed \$250 per violation. Each and every day a violation is permitted to exist shall constitute a separate offense.
- c. A violation of the provisions of this ordinance is declared to be an offense, but not a crime. It is intended to be an offense which can be disposed of in all respects as a civil proceeding and not governed by procedural, evidentiary, substantive, and constitutional rules applicable to criminal charges and proceedings. A person adjudged responsible for an infraction shall not be deemed "guilty" of the infraction and a judgment of responsibility shall not be deemed a "conviction" for any purpose.
- d. Notwithstanding anything in this section or any other ordinance to the contrary, no greater penalty shall be imposed for any violation of city ordinance than the maximum penalty prescribed under Oregon statute for the same act or omission.

1.15 PRECONSTRUCTION CONFERENCE

A preconstruction conference shall be scheduled before issuance of the public utility construction permits, and as outlined in Section 1.12 of the PWDS and as summarized below.

- a. A preconstruction conference shall be scheduled before issuance of the public utility construction permits. The meeting is to include the developer's representative, developer's engineer and prime contractor, and all affected utility companies. The purpose of the conference is to discuss the construction schedule and times of the work which require special coordination.
- b. The Developer shall be responsible for notifying the private utility companies of the time and location of the preconstruction conference, and requesting that a

representative of each utility be present. The Developer may be required to submit proof of notification to the City prior to the preconstruction conference. Copies of notification letters sent to the utility companies by the Developer are acceptable.

1.16 VARIANCES TO CONSTRUCTION STANDARDS

Requests for variances to these Standards shall be based on the criteria and procedures outlined in Section 1.11 of the Public Works Design Standards and as summarized below.

a. Request for Variance to Specifications/Standards

- 1) Variances to specifications or standards may be requested as outlined below. It is to be noted that if the requested variance involves public safety, the City will rule in favor of safety.

b. Variance Process

1) Submittal

- a) Requests for variance shall be submitted in writing to the Public Works Director. This written request shall state the desired variance, the reason for the request and a comparison between the specification/standard and the variance as far as performance, etc.
- b) Any variance of these Standards should be documented and referenced to a nationally accepted specification/standard. The use thereof shall not compromise public safety or intent of the City's Standards.

2) City's Review

- a) The variance request shall be reviewed by the Public Works Director who shall make one of the following decisions:
 - (1) Approve as is,
 - (2) Approve with changes, or
 - (3) Deny with an explanation.
- b) Approval of a request shall not constitute a precedent.

3) Appeal

- a) Applicant may appeal the Public Works Director's decision to the City Council.

c. Criteria for Variance of Specification Standards

- 1) The Public Works Director may grant a variance to the adopted specifications or Standards when all of the following conditions are met:
 - a) Topography, right-of-way or other geographic conditions impose an economic hardship on the applicant and an equivalent alternative which can accomplish the same intent is proposed. Variances to self-imposed hardships shall not be allowed. The variance requested shall be the minimum variance which alleviates the hardship.
 - b) A minor change to a specification or standard is required to address a specific design or construction problem which, if not enacted, will result in an undue hardship.
 - c) An alternative design is proposed which will provide a plan equal or superior to these Standards. In considering the alternative, the Public Works Director shall consider appearance, durability, cost of maintenance, public safety and other appropriate factors.

1.17 CONSTRUCTION INSPECTION

Construction inspection shall generally conform to the procedures outlined in Section 1.13 of the PWDS and as summarized below.

a. General

- 1) All public construction shall be inspected by a professional engineer licensed in the State of Oregon or a qualified individual under his supervision as required in the Developer-City Agreement.
- 2) An engineer whose firm, or any member of the firm, has a corporate, partnership or any form of real property interest in the development for which the improvements are required cannot be designated inspecting engineer. The inspecting engineer's relationship to the project must be solely that of a professional nature.
- 3) It shall be the policy of the City not to provide full inspection services for non-public funded public improvements. It shall be the Developer's responsibility to provide an engineer to perform these services.
- 4) These inspection requirements are not applicable to individual sidewalk, driveway or service lateral permits for single residences. If the project scale is such that the retention of an independent inspecting engineer is not warranted, the Developer may request that the City provide these services. If the City agrees to provide these services, the Developer shall be responsible to reimburse the City for any costs incurred for these inspection services.

b. City Activities

- 1) Inspection services provided by the City shall include:
 - a) Liaison between the inspection engineer and the City;
 - b) Monitoring of work progress and performance testing as deemed desirable;
 - c) The performance of administrative and coordination activities as required to support the processing and completion of the project;
 - d) The issuance of stop work orders upon notifying the inspection engineer of the City's intention to do so.
 - e) Operate all valves, including fire hydrants, on existing waterlines.
- 2) In addition, the City shall be notified a minimum of 48 business hours (2 business days) prior to the following tests and inspections so that a City representative may be present to witness the inspections or tests.
 - a) Streets
 - (1) Curb inspection;
 - (2) Subgrade testing or proof rolls;
 - (3) Base rock testing;
 - (4) AC pavement placement and testing;
 - b) Sanitary Sewers
 - (1) Mandrel testing of mainlines;
 - (2) Air testing of mainlines;
 - (3) Vacuum testing of manholes;
 - (4) Video inspection of mainlines;
 - c) Storm Drains
 - (1) Mandrel testing of flexible pipe storm drains;
 - d) Water Distribution System
 - (1) Pressure tests;

(2) Disinfection.

c. Developer's Inspecting Engineer's Activities

- 1) The inspecting engineer of record must be registered to practice engineering in the State of Oregon. Material testing not performed by the inspecting engineer must be accomplished by a recognized testing firm or another registered engineer.
- 2) ***The engineer must personally perform all activities marked by an (*) and must supervise all individuals performing other delegated activities.**
- 3) The following minimum activities are required of the designated inspecting engineer:
 - a) ***Execute a form accepting responsibility;**
 - b) ***Attend preconstruction conference and distribute approved construction drawings to contractor, subcontractors and utility companies.**
 - c) Obtain and use a copy of City-approved construction drawings and specifications;
 - d) Notify the City 48 business hours (2 business days) before the start of construction or resumption of work after shutdowns, except for normal resumption of work following Sundays or holidays.
 - e) Call to the City's attention within two (2) working days all drawing changes, material changes, stop work orders or errors or omissions in the approved drawings or specifications.
 - f) Maintain records which contain at least the following information and submit copies to the City on a weekly basis:
 - (1) Site Visits
 - (a) Date and time of site visits
 - (b) Weather conditions, including temperature
 - (c) A description of construction activities
 - (2) Statement of directions to change drawings, specifications, stop work, reject materials or other work quality actions;
 - (3) Public agency contacts which result in drawing changes or other significant actions;
 - (4) Perceived problems and action taken;

- (5) Final and staged inspections;
- (6) Records of all material, soil and compaction tests.
- g) Provide all surveying services necessary to stake the project prior to and during construction.
- h) Review and approve all pipe, aggregate, concrete, A.C. and other materials to ensure their compliance with City Standards;
- i) *Approve all drawing or specification changes in writing and obtain City approval prior to the performance of the work;
- j) Monitor and concur in construction activities to ensure end products meet City specifications;
- k) *Perform or have performed material, compaction and other tests required to ensure City specifications are met;
- l) Periodically check that curb, storm drain work and pavement grades are in accordance with approved drawings;
- m) For pavement construction, perform the following stage inspections and record date of each:
 - (1) Curbs are built to line and grade;
 - (2) Subgrade meets grade and compaction specifications;
 - (3) Base rock meets grade and compaction specifications;
 - (4) Leveling course meets grade and compaction specifications;
 - (5) Wearing course meets grade and compaction specifications.
- n) For sanitary and storm drain construction, perform the following stage inspections and record the date of each:
 - (1) Sewers are installed to proper line and grade;
 - (2) Trenches are properly backfilled and compacted;
 - (3) Construction staking is adequate to ensure that the sewer is properly installed with respect to easement, right-of-way and property lines;
 - (4) Air testing and video inspections are performed according to standard procedures.

- o) For grading, ensure that the grading plan, as staked, will result in acceptable slopes along exterior property lines, proper onsite and offsite drainage, and erosion control.**
- p) File a completion report which contains:**

 - (1) The original of the project completion certification;**
 - (2) A complete set of blue-line or black-line as-built drawings;**
 - (3) The results of sewer and manhole tests, video inspections, waterline tests, material tests, compaction tests and soil analysis.**
- q) Submit final reproducible as-built drawings conforming to the requirements outlined herein.**

