Summary of Administrative Revisions to Standard Specifications 100 Series

0 1	B
Section	Description of Revision
ALL	Formatting in accordance with CSI standards
7	 All Paragraphs identified by a letter
	Sub-paragraphs identified by a number
	Replace pronouns with appropriate noun references
	Delete number word references and retain numeric number only
	Modify grammar structure for clarity
	Edit cross-references
	Delete references to self (Uniform Standard Specifications)
	Delete metric units
	Delete references to design and procedural guidelines
	Delete implied agreement language (e.g. "it is expressly understood and agreed")
101	Add definition for "DRAWINGS" and "HYDRAULIC CEMENT"
102	 102.05.E & F - Clarification that "Materials Information" is informational only and not part of the Contract
	102.05.C - Remove implied agreement "expressly understood and agreed" language
103	103.B.3 – Add Guarantee Bond language to clarify warranty limitations
106	 106.02.E, 106.03.E, and 106.03.K - Delete reference to Materials Information section and simply refer to Special Provisions.
	106.10.C – Modify guidance language for clarity
	106.10.D – Delete reference to procedural guidelines
107	107.07.J, K, & L – Delete paragraphs since they are duplicated in Section 106.08.D, E, and F

DIVISION I

GENERAL REQUIREMENTS

SECTION 101

DEFINITIONS AND TERMS

101.01 BLANK

101.02 ADDENDUM

A. A supplemental addition or deletion to the contract documents prior to the advertised bid opening.

101.03 ADVERTISEMENT

A. The public announcement, as required by law, inviting bids for work to be performed or materials to be furnished.

101.04 ASSESSMENT ACT CONTRACT

A. A contract financed by special assessments authorized under, or implemented by, an act of the Legislature of the State or procedural ordinance of a City or the County.

101.05 AWARD

A. The acceptance by the Contracting Agency of a bid. Refer to Subsection 103.02.

101.06 BASE COURSE

A. The layer or layers of specified or selected material of designated thickness on a sub-base or a subgrade to support a surface course.

101.07 BIDDER

A. An individual, partnership, firm, corporation, or any acceptable combination thereof, or joint venture, submitting a bid for the advertised work.

101.08 BOARD

A. The officer or body constituting the awarding authority for the Contracting Agency.

101.09 BRIDGE

- A. A structure, including supports, erected over a depression or an obstruction, as water, highway, or railway, and having a track or passageway for carrying traffic or other moving loads and having a length measured along the center of roadway of more than twenty (20) feet between under copings of abutments or extreme ends of openings for multiple boxes.
- B. **Length:** The length of a bridge structure is the overall length measured along the line of survey stationing back to back of back walls of abutments, if present, otherwise end to end of the bridge floor; but in no case less than the total clear opening of the structure.
- C. Roadway Width: The clear width measured at right angles to the longitudinal centerline of the bridge between the bottom of curbs or guard timbers or in the case of multiple

height of curbs, between the bottoms of the lower risers and in the case of no curbs or guard timbers, between the inner faces of parapet or railing at the bottom.

101.10 CALENDAR DAY

A. Every day shown on the calendar.

101.11 CONTRACT CHANGE ORDER OR FIELD CHANGE ORDER

A. A written order issued by the Engineer or Contracting Agency as provided in the contract documents, to the Contractor, covering changes in the plans, specifications or quantities or both, within the scope of the contract and establishing the basis of payment and time adjustments for the work affected by the change.

101.12 CHANNEL

A. A natural or artificial water course.

101.13 CONTRACT

- A. The written agreement between the Contracting Agency and the Contractor setting forth the obligations of the parties thereunder, including, but not limited to the performance of the work, the furnishing of labor and materials, and the basis of payment.
- B. The contract includes the invitation for bids, proposal, contract form and contract bond, standard specifications, supplemental specifications, special provisions, general and detailed plans, notice to proceed, and any <u>addenda</u>, change orders, and supplemental agreements that are required to complete the construction of the work in an acceptable manner, including authorized extensions and basis of payment thereof, all of which constitute one instrument.

101.14 CONTRACTING AGENCY

A. The party of the first part to a contract which may be any of the following entities: Boulder City, Nevada; City of Henderson, Nevada; City of Las Vegas, Nevada; City of North Las Vegas, Nevada; City of Mesquite, Nevada; Las Vegas Valley Water District, Las Vegas, Nevada; Clark County Sanitation Water Reclamation District, Las Vegas, Nevada; Southern Nevada Water Authority, Las Vegas, Nevada; and Clark County, Nevada.

101.15 CONTRACT ITEM (PAY ITEM)

- A. An item of work specifically described and for which a price, either Unit or Lump Sum, is provided. It includes the performance of all work and the furnishing of all labor, equipment, and materials described in the text of a specific item included in the contract or described in the Standard Specifications, Supplemental Specifications, or Special Provisions of the contract. Contract items are numbered so that the first three digits of the item number corresponds to the section of the same number. Thus, in Item No. 203.01.00, which is the item number for roadway excavation, the number 203 is the section number and corresponds to Section 203 of the Standard Specifications, Supplemental Specifications and Special Provisions.
- B. Each contract item shall be constructed under the specifications contained in the section of the same number, i.e., the number proceeding preceding the aforementioned last fourtwo digits.

101.16 CONTRACTOR

A. The person, firm, partnership, corporation, permittee, subdivider, or other entity who has entered into a contract or agreement with the Contracting Agency. Where work is done under permit issued by the Contracting Agency, the permittee shall be construed to be the Contractor. Also, a subdivider who does land development and other work under contract with the Contracting Agency.

101.17 CONTRACT TIME

A. The number of days allowed for completion of the contract, including authorized time extensions.

101.18 CULVERT

A. Any structure not classified as a bridge which provides an opening under the roadway.

101.19 **DETOUR**

A. A temporary route for traffic around a closed portion of road.

101.20 DIVIDED HIGHWAY

A. A highway with separated roadways for traffic in opposite directions.

101.21 DRAWINGS

A. That part of the Contract Documents prepared or approved by the Contracting Agency which graphically shows the scope, intent, and character of the Work to be performed by the Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.

101.21101.22 EMPLOYEE

A. Any person working on the project mentioned in the contract of which these specifications are a part, and who is under the direction and control, or received compensation from the Contractor or histhe Contractor's subcontractor.

101.22101.23 ENGINEER

A. The Chief Engineer of the Contracting Agency or other person designated by the Board acting directly and through hist-the Chief Engineer's duly authorized representative.

101.23101.24 EQUIPMENT

A. All machinery and equipment, together with the necessary supplies for upkeep and maintenance, also tools and apparatus necessary for the proper construction and acceptable completion of the work.

101.24101.25 EXTRA WORK

A. An item of work not provided for in the contract as awarded, but found essential by the Contracting Agency, to the satisfactory completion of the contract within its intended scope.

101.25101.26 FRONTAGE ROAD OR FRONTAGE STREET

A. A local street or road auxiliary to and located generally on the side of an arterial highway for service to abutting property and adjacent areas and for control of access.

101.26101.27 GUARANTEE BOND

A. The approved form of security executed by the Contractor and histhe Contractor's surety efor sureties guaranteeing the work against defect and failures.

101.27101.28 HIGHWAY

A. A general term denoting a public way for purposes of vehicular travel, including the entire area within the right-of-way.

101.28101.29 HOLIDAYS

A. Any day established by law or agreed as a holiday for employees of the Contracting aAgency.

101.29101.30 INSPECTOR

A. The Engineer's or Contracting Agency's authorized representative assigned to make detailed inspections of contract performance.

101.30101.31 INTERAGENCY QUALITY ASSURANCE COMMITTEE (IQAC)

A. An ad hoc multi-jurisdictional and agency committee established for the purpose of simplifying the material approval process and promoting the consistent enforcement of the Uniform Standard Specifications and Drawings, Clark County Area, Nevada.

101.31101.32 LABORATORY

A. The testing laboratory of the Contracting Agency or of any other testing laboratory which may be designated by the Engineer.

101.32101.33 MAJOR CONTRACT ITEM

A. A "Major Item" shall be construed to be any individual bid item included in the proposal that has a total cost equal to or greater than \$50,000 or 5 percent of the total contract cost, whichever is the lesser amount. The total contract cost shall be computed on the basis of the proposal quantities and contract unit prices.

101.33101.34 MATERIALS

A. Any substances specified for use in the construction of the project and its appurtenances.

101.34101.35 MEDIAN

A. That portion of a divided highway separating the travel ways for traffic, generally in opposite directions.

101.35101.36 NOTICE TO BIDDERS

A. The official notice inviting bids for the proposed work or materials.

101.36101.37 NOTICE TO PROCEED

A. A written notice to the Contractor to proceed with the contract work including, when applicable, the date of beginning of contract time.

101.37101.38 PAVEMENT STRUCTURE

A. The combination of base course and surface course placed on a subgrade to support the traffic load and distribute it to the roadbed.

101.38101.39 LABOR AND MATERIAL **PAYMENT** BOND

A. The approved form of security executed by the Contractor and histhe Contractor's surety or sureties to guarantee the payment of persons furnishing materials or persons performing labor under the contract.

101.39101.40 PERFORMANCE BOND

A. The approved form of security executed by the Contractor and histhe Contractor's surety or sureties to guarantee the faithful performance of all work under said contract within the prescribed time limit and that materials and workmanship will be free from original or developed defects.

101.40101.41 PLANS

- A. The approved project plans and Standard Drawings, profiles, typical cross sections, working drawings, and supplemental drawings, or exact reproductions thereof, which show the location, character, dimensions, and details of the work to be performed. All such documents are to be considered as a part of the plans whether or not noted in the Special Provisions.
- B. In the above definition, the following terms are defined as follows:
 - 1. Standard Drawings The Standard Drawings of the Contracting Agency.
 - 2. Project Drawings The Project Drawings are specific details and dimensions peculiar to the work and are supplemented by the Standard Plans Drawings insofar as the same may apply.

101.41101.42 PROFILE GRADE

A. The trace of a vertical plane intersecting the top surface of the proposed structural section as shown on the plans. Profile grade means either elevation or gradient of such trace according to the context.

101.42101.43 PROJECT

A. The specific improvement to be constructed together with all appurtenances and construction to be performed thereon at the prices quoted.

101.43101.44 PROPOSAL

A. The offer of a bidder, on the prescribed form, to perform the work and to furnish the labor and materials at the prices quoted.

101.44101.45 PROPOSAL FORM

A. The approved form on which the Contracting Agency requires bids to be prepared and submitted for the work.

101.45101.46 PROPOSAL GUARANTEE

A. The security furnished with a bid to guarantee that the bidder will enter into the contract if hisbidder's bid is accepted.

101.46101.47 QUALITY ASSURANCE (QA)

A. Planned and systematic operations conductsed to ensure that the operations and/or product meets specifications. QA encompasses the Engineer's review and oversight of the Contractor's "Quality Control"; verifying the results of "Quality Control"; and inspecting for conformance to plans and specifications. QA is the responsibility of the "Engineer."

101.47101.48 QUALITY CONTROL (QC)

A. Planned and specified operations necessary to construct items that will meet the requirements for quality and performance as specified. QC includes, but should not be limited to controlling the quality of raw materials, produced materials assemblies, components, finished product, and construction process. QC is the responsibility of the "Contractor."-

101.48101.49 RIGHT-OF-WAY OR EASEMENT

A. A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to a highway or other improvements.

101.49101.50 ROAD

A. A general term denoting a public way for purposes of vehicular travel, including the entire area within the right-of-way.

101.50101.51 ROADBED

A. The graded portion of a highway within top and side slopes, prepared as a foundation for the pavement structure and shoulders.

101.51101.52 ROADSIDE

A. A general term denoting the area adjoining the outer edge of the roadway. Extensive areas between the roadways of a divided highway may also be considered roadside.

101.52101.53 ROADSIDE DEVELOPMENT

A. Those items necessary to the complete improvement which provides for the preservation of landscape materials and features; the rehabilitation and protection against erosion of all areas disturbed by construction through seeding, sodding, mulching, and the placing of other ground covers; such suitable planting and other improvements as may increase the effectiveness and enhance the appearance of the improvement.

101.53101.54 ROADWAY

A. The portion of a highway within limits of construction.

DEFINITIONS AND TERMS

101.54101.55 SHOULDER

A. The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses.

101

101.55101.56 SIDEWALK

A. That portion of the roadway primarily constructed for the use of pedestrians.

101.56101.57 SPECIAL PROVISIONS

A. Additions and revisions to the standard and supplemental specifications covering conditions peculiar to an individual project.

101.57101.58 SPECIFICATIONS

A. The directions, provisions, and requirements contained in the Standard Specifications and supplemental specifications as modified by the Special Provisions. Whenever the term "these specifications" is used in this book, it means the provisions set forth in this book.

101.58101.59 STREET

A. A general term denoting a public way for purposes of vehicular travel, including the entire area within the right-of-way.

101.59101.60 SUBCONTRACTOR

A. Any individual, firm, or corporation to whom the Contractor, with the consent of the Contracting Agency, sublets any part of the contract.

101.60101.61 SUBGRADE

A. The top of a roadbed upon which the base courses and/or the pavement structure and shoulders are constructed.

101.61101.62 SUBSTRUCTURE

A. All of that part of the structure below the bearings of simple and continuous spans, skewbacks or arches, and tops of footings or rigid frames, together with backwall, wingwalls, and wing protection railings.

101.62101.63 SUPERINTENDENT

A. The Contractor's authorized representative in responsible charge of the work, present on the work at all times during the progress to supervise and direct the construction, to receive and fulfill instructions from the Engineer, and to accept orders for changed and extra work.

101.63101.64 SUPERSTRUCTURE

A. The entire structure except the substructure.

101.64101.65 SUPPLEMENTAL AGREEMENT

A. A written agreement within the scope of the project made and entered into by and between the Contractor and the Contracting Agency covering work not otherwise provided for, revisions in or amendments to the terms of the contract, or conditions specifically

prescribed in the specifications as requiring supplemental agreements. Such supplemental agreements become a part of the contract when approved and properly executed.

101.65101.66 SUPPLEMENTAL SPECIFICATIONS

A. Additions and revisions to the Standard Specifications that are <u>adopted approved</u> subsequent to the issuance of the <u>printed book published specifications</u>.

101.66101.67 SURETY

A. The corporation, partnership, or individual, other than the Contractor, executing a bond furnished by the Contractor.

101.67101.68 SURFACE COURSE

A. The top layer of an improvement.

101.68101.69 TRAFFIC LANE

A. The portion of a traveled way for the movement of a single line of vehicles.

101.69101.70 TRAVELED WAY

A. That portion of roadway for the movement of vehicles, exclusive of shoulders and auxiliary lanes.

101.70101.71 UTILITY

A. Tracks, overhead or underground wires, pipelines, conduits, ducts, or structures, sewers, or storm drains owned, operated, or maintained in or across a public right-of-way or private easement.

101.72BLANK

101.72 WORK

A. Work will mean furnishing all labor, materials, equipment, and other incidentals necessary or convenient to the successful completion of the project and the carrying out of all of the duties and obligations as imposed by the contract.

101.73 WORKING DAY

- A. A day on which weather and other conditions not under the control of the Contractor will permit construction operations to proceed for the major part of the day (five (5)_hours) with the normal working force engaged in performing the controlling item or items of work which would be in progress at that time, exclusive, however, of Saturdays, Sundays, holidays, and any day that is incumbent upon the Contractor, by means of a labor union, to observe as a holiday. However, if the Contractor elects to work on such days, those days will be considered as a working day.
- B. Attention is directed to Subsections 108.04, "Limitation of Operations," and 108.08, "Determination and Extension of Contract Time."

101.74 WORKING DRAWINGS

- A. Stress sheets, shop drawings, erection plans, falsework plans, framework plans, cofferdam plans, bending diagrams for reinforcing steel, or any other supplementary plans or similar data which the Contractor is required to submit to the Engineer for approval.

 Working Drawings are not part of the Contract Documents.
- B. In order to avoid cumbersome and confusing repetition of expressions in these specifications, it is provided that whenever anything is, or is to be, done, if, as, or, when, or where "contemplated, required, determined, directed, specified, authorized, ordered, given, designated, indicated, considered necessary, deemed necessary, permitted, reserved, suspended, established, approval, approved, disapproved, acceptable, unacceptable suitable, accepted, satisfactory, unsatisfactory, sufficient, insufficient, rejected, or condemned," it shall be understood as if the expression were followed by the words "by the Contracting Agency."

SECTION 102

BIDDING REQUIREMENTS AND CONDITIONS

102.01 NOTICE TO CONTRACTORS

A. After the date is fixed for the bid opening for the work, the Contracting Agency will give notice to Contractors. The Notice to Contractors will contain a description of proposed work, together with information to the bidder regarding access to the proposal forms, plans, and specifications, the amount and nature of proposal guarantee, and the reservation of the right of the Contracting Agency to reject any or all bids. A time, date, and place for a Pre-Bid Conference may be included in the "Notice to Contractors."

102.02 PREQUALIFICATION OF BIDDERS

- All prospective bidders for public works projects in Clark County are urged to prequalify Α. with each local government at least on an annual basis. Applications for pregualification must be completed and submitted on forms and following instructions furnished by the respective local government. This will facilitate the awarding of contracts by giving local governments some basis to consider the financial responsibility, experience, adequacy of equipment and ability of each bidder to complete performance of public works contracts as required by Chapter 332 of the Nevada Revised Statutes (Local Government Purchasing Act). The director of public works or managing engineer of each local government considering such applications shall verify and evaluate the information contained therein and advise each applicant as to any prequalification or disqualification. Each prequalification shall indicate the type of work eligible to be bid and the maximum contract amount. Any applicant who is dissatisfied with such decision will have seven days from the receipt of such decision to submit a written request for a hearing thereon before the governing body of the respective local governmental entity and such entity must hold such hearing at their regularly scheduled meeting after the receipt of such written request.
- B. This section shall not preclude any other licensed contractor from bidding on public works contracts in Clark County, however, the same forms and instructions for prequalification must, if required by the Contracting Agency, be completed and submitted with all such bids or such bids may be rejected at the sole discretion of the governing body of the respective local governmental entity. The governing body of the respective local governmental entity shall also have the discretion to determine whether sufficient time may be taken to verify and evaluate the bidder's qualifications before the contract must be awarded and if such the bidder's qualifications can not be determined within such time to reject the respective bid.
- C. Nothing contained in this section shall be construed as depriving any local government of its discretion in the matter of determining the lowest responsive and responsible bidder as set forth in NRS 332.065.

102.03 CONTENTS OF PROPOSAL FORMS

A. Upon request, the Contracting Agency shall furnish the prospective bidder with a proposal form. This form will state the location and description of the contemplated construction and will show the approximate estimate of the various quantities and kinds of work to be performed or materials to be furnished, and will have a schedule of items for which unit or lump sum bid prices are invited.

- B. The proposal form will state the time in which the work must be completed, the amount of the proposal guarantee, and the date, time, and place of the opening of proposals. The form will also include any special provisions or requirements which vary from or are not contained in the Standard Specifications.
- C. All papers bound with or attached to the proposal form are considered a part thereof and must not be altered when the proposal is submitted.
- D. The plans, specifications, supplemental notices to contractors and other documents designated in the proposal form will be considered a part of the proposal whether attached or not.
- E. The prospective bidder or interested non-bidder will be required to pay the Contracting Agency the sum stated in the advertisement and "Notice to Contractors" for each copy of proposal form and each set of plans.
- F. Checks in payment for plans and specifications will be made payable to the Contracting Agency.
- G. The Contracting Agency may invite the plan holders to a Pre-Bid Conference.

102.04 INTERPRETATION OF QUANTITIES IN THE PROPOSAL

- A. The quantities given in the notice to contractors Notice to Contractors and in the proposal and contract forms are approximate only, being given as a basis for the comparison of bids, and the Contracting Agency does not, expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to make such alterations, deviations, additions to or omissions from the plans and specifications, including the right to increase or decrease the quantity of any item or portion of the work or to omit any item or portion of the work, as may be deemed by the Engineer to be necessary or advisable and to require such extra work as may be determined by the Engineer or Contracting Agency to be required for the proper completion or construction of the whole work contemplated.
- B. Any such changes will be set forth in a contract change order which will specify, in addition to the work to be done in connection with the change made, adjustment of contract time, if any, and the basis of compensation for such work. A contract change order will not become effective until approved by the Contracting Agency.

102.05 EXAMINATION OF PLANS, SPECIFICATIONS, CONTRACT DOCUMENTS, AND SITE OF WORK

- A. The Contracting Agency will prepare plans and specifications giving such directions as will enable a competent mechanic or Contractor to carry them out. The bidder is expected to examine carefully the site of the proposed work, the proposal, plans, specifications, supplemental specifications, special provisions, and contract forms before submitting a proposal. The submission of a bid shall be considered prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the plans, specifications, supplemental specifications, special provisions, and contract documents.
- B. When a pay item is shown on the plans and not in the proposal, and such pay item is not specifically excluded from payment either in these specifications or in the contract documents, the pay item shall then be considered an obvious omission in the proposal and payment will be made according to the provisions of Subsection 104.03, "Extra Work."

BIDDING REQUIREMENTS AND CONDITIONS

- C. If the Contracting Agency acquires subsurface information for study and design, it may be obtained from-the-Contracting Agency as "Materials Information." While such data will have been collected with reasonable care, there is no expressed or implied guarantee that conditions so indicated are exact or entirely representative of those actually existing and the Contracting Agency will in no way be responsible for the accuracy therein contained. It is expressly understood and agreed that information obtained as "Materials Information" is not a part of the contract.
- D. Information derived from such inspection of records of investigations made by the Contracting Agency will not in any way relieve the Contractor from fulfilling the terms of the contract.
- E. When a log of test borings, showing a record of the data obtained by the Contracting Agency's investigation of subsurface conditions, is included with the contract plans, said record is the Contracting Agency's opinion of such borings and there is no expressed or implied guarantee that conditions so indicated are exact or entirely representative of those actually existing. Such a log is included in the plans only for information and its use is subject to all of the conditions and limitations as set forth in this section.
- F. If a mass diagram has been prepared for a project, it will be available to the bidders upon the following conditions: The swell or shrinkage of excavated material and the direction and quantities of haul or overhaul as shown on said mass diagram are for the purpose of design purposes only, and as in the case of "Materials Information" the Contracting Agency assumes no responsibility whatever in the interpretation or exactness of any of the information shown on the mass diagram, and does not, either expressed or implied, make any guarantee of the same.

102.06 PREPARATION OF PROPOSAL

- A. The bidder shall submit histhe proposal upon the forms furnished by the Contracting Agency. The bidder shall specify a unit price in figures and words for each pay item for which a quantity is given, and shall also show the products of the respective unit prices and quantities, written in figures in the column provided for that purpose, and the total amount of the proposal obtained by adding the amount of the several items. All the words and figures shall be in ink or typed. In case of a discrepancy between the prices written in words and those written in figures, the prices written in words shall govern and the bid total shall be computed from the prices given in words.
- B. When an item in the proposal contains a choice to be made by the bidder, the bidder shall indicate histhe choice in writing, in accordance with the specifications for that particular item, and thereafter no further choice will be permitted.
- C. The bidder's proposal must be signed with ink by the individual, by one or more members of the partnership, by one or more members or officers of each firm representing a joint venture, or by one or more officers of a corporation, or by an agent of the Contractor, legally qualified and acceptable to the Contracting Agency. If the proposal is made by an individual, histhe individual's name and post office address must be shown; by a partnership, the name and post office address of each partnership member must be shown; as a joint venture, the name and post office address of each member or officer of the firms represented by a joint venture must be shown; by a corporation, the name of the corporation and the business address of its corporate officials must be shown.

102.07 IRREGULAR PROPOSALS

A. Proposals will be considered irregular and may be rejected for the following reasons:

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- 1. If the proposal is on a form other than that furnished by the Contracting Agency, or if the form is altered or any part thereof is detached.
- 2. If there are unauthorized additions, conditional or alternate bids, or irregularities of any kind which may tend to make the proposal incomplete, indefinite, or ambiguous as to its meaning.
- 3. If the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
- 4. If the individual bid items or a prospective bidder's proposal are unbalanced in the sense that the listed price of any bid item departs by more than twenty (20)_percent from the Engineer's cost estimate for that item.
- 5. If the proposal does not contain a unit price for each pay item listed.

102.08 PROPOSAL GUARANTEE

A. No proposal will be considered unless accompanied by a proposal guarantee, in the amount equal to five (5) percent of the Contractor's bid, made unconditionally payable to the Contracting Agency, which guarantee, at the bidder's option, may be cash, cashier's check, certified check, postal money order, bank money order, express money order, bank draft, or five (5) percent bid bond. No other guarantee will be acceptable. Such proposal guarantee is to be forfeited to the Contracting Agency should the bidder to whom the contract is awarded fail to enter into the contract within fifteen (15) days after notice of award.

102.09 DELIVERY OF PROPOSALS

A. Each proposal shall be submitted in an envelope. The envelope shall clearly indicate the contents and the name and address of the Contractor submitting the proposal. When sent by mail, the sealed proposal shall be addressed to the Contracting Agency at the address and in care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the advertisement and "Notice to Contractors." Proposals received after the time for opening of bids will be returned to the bidder unopened.

102.10 WITHDRAWAL OR REVISION OF PROPOSALS

A. A bidder may withdraw or revise a proposal after it has been deposited with the Contracting Agency, provided the request for such withdrawal or revision is received by the Contracting Agency, in writing or by telegram, before the time set for the opening of proposals. The withdrawal of a proposal shall not prejudice the right of the bidder to file a new proposal provided it is received prior to the time set for opening of proposals.

102.11 PUBLIC OPENING OF PROPOSALS

A. Proposals will be opened and read publicly at the time and place indicated in the advertisement and "Notice to Contractors." Bidders, their authorized agents, and other interested parties are invited to be present.

102.12 DISQUALIFICATION OF BIDDERS

A. Any of the following reasons may be considered as sufficient for the disqualification of a bidder and the rejection of hisbidder's proposal or proposals:

BIDDING REQUIREMENTS AND CONDITIONS

- 1. More than one proposal for the same work from an individual, firm, or corporation under the same or different name.
- 2. Evidence of collusion among bidders. Participants in such collusion will receive no recognition as bidders for any future work of the Contracting Agency until any such participants shall have been reinstated as a qualified bidder.
- 3. Unsatisfactory performance record as shown by past work for the Contracting Agency judged from the standpoint of workmanship and progress.
- 4. Uncompleted work which in the judgment of the Contracting Agency might hinder or prevent the prompt completion of additional work if awarded.
- 5. Failure to pay or satisfactorily settle all bills due for labor or material on former contracts in force at the time of letting.
- 6. Failure to hold a valid license of a class corresponding to the work to be done as required by the State Contractor's License Law.
- 7. Failure to comply with any qualification regulations of the Contracting Agency.
- 8. Any or all bids received in response to a request for bids may be rejected by the governing body or its authorized representative if such governing body or its authorized representative determines that any such bidder is not responsive or responsible or that the quality of the services, supplies, materials, equipment, or labor offered does not conform to requirements or if the public interest would be served by such a rejection.
- 9. Failure to list all subcontractors who will be employed by the bidder.
- Omission of bid bond.

102.13 MATERIAL GUARANTEE

A. The successful bidder may be required to furnish a complete statement of the origin, composition, and manufacture of any or all materials to be used in the construction of the work together with samples, which samples may be subject to the tests provided for in these specifications to determine their quality and fitness for the work.

SECTION 103

AWARD AND EXECUTION OF CONTRACT

103.01 CONSIDERATION OF PROPOSALS

- A. Proposals will be opened and read publicly at the time and place indicated in the Advertisement for Bids. Bidders, their authorized agents and other interested parties are invited to be present.
- B. The total sum read shall be subject to the provisions of determination of the lowest proposal requirements.
- C. No responsibility will attach to the Owner or any official or employee thereof for the preopening of, post-opening of, or the failure to open, a proposal not properly addressed and identified.
- D. The lowest proposal shall be the lowest total sum for which the entire work wellwill be performed, including all items as specified on the proposal form. The lowest proposal shall be determined on the basis of the exact lowest total sum for which the entire work will be performed, arrived at by a correct computation by the econtracting Agency of all items specified in the proposal based on the unit prices contained therein. In the event of a discrepancy between written prices and numerical unit prices, the written unit prices shall govern. The Contracting Agency reserves the right to reject any proposal that omits prices for any unit price bid item on the proposal form.
- E. The right is reserved to reject any or all proposals, to waive technicalities, or to advertise for new proposals, if in the <u>judgementjudgment</u> of the awarding authority, the best interest of the Contracting Agency will be promoted thereby.

103.02 AWARD OF CONTRACT

- A. The award of the contract, if it by awarded, will be to the lowest responsible bidder whose proposal complies with all the requirements prescribed. The award, if made, will be made within forty-five (45)—calendar days after the opening of the proposals or as otherwise provided for. The successful bidder will be notified by letter, mailed to the address shown on histhe bidder's proposal, that histhe bidder's proposal has been accepted and that hethe bidder has been awarded the contract.
- B. Bidders submitting a proposal to <u>a</u> public body for a public work shall bear the responsibility to ascertain the relevancy of the "preference for certain contractors and other matters relating thereto" as provided by Nevada Revised Statute 338.147, as amended by <u>eChapter 713</u> of the 1991 Nevada Legislative Session, as it relates to a Nevada Public Body awarding a contract for a public work.
- C. The date of the award of the contract shall be the date of the "Notice to Award."
- D. Five sets of the contract plans and drawings will be provided to the successful bidder without charge.

103.03 CANCELLATION OF AWARD

A. The Contracting Agency reserves the right to cancel the award of any contract at any time before the execution of said contract by all parties without any liability against the Contracting Agency.

103.04 RETURN OF PROPOSAL GUARANTEE

A. All proposal guarantees, shall be retained until the award of the contract. The retained proposal guarantee of the unsuccessful bidders will be returned within ten (10)—days following the award of the contract and that of the successful bidder will be returned after the required bonds have been furnished and the contract has been executed.

103.05 REQUIREMENTS OF CONTRACT BONDS

- A. Prior to the execution of the contract by the Contracting Agency, the Contractor shall file with the Contracting Agency surety bonds in the amounts and for the purposes noted below, duly executed by a responsible corporate surety authorized to issue such bonds in the State of Nevada and secured through an authorized agent satisfactory to the Contracting Agency. The Contractor shall pay all premiums and costs thereof and incidental thereto.
- B. Each bond must be signed by both the Contractor and surety and the Contractor shall give surety bonds with good and sufficient sureties; in the sum of not less thatthan 100% percent of the contract price or as specified in the sspecial pprovisions: First to assureensure the claims of material men supplying materials to himthe Contractor, and of mechanics and laborers employed by himthe Contractor on the work required under these specifications'; the second to assureensure the faithful performance of the contract; the and third to guarantee the work.
 - 1. The "Labor and Material Bond" shall be so conditioned as to insureensure the benefit of persons furnishing materials to the Contractor and/or performing labor under the contract. This bond shall be maintained by the Contractor in full force and seffect until the work is completed and accepted by the Contracting Agency and until all claims for materials and labor are paid.
 - 2. The "Performance Bond" shall be so conditioned as to assureensure the faithful performance by the Contractor of all work under said contract within the time limit prescribed in a manner that is satisfactory and acceptable to the Contracting Agency; and that all materials and workmanship supplied by himthe Contractor will be free from original or developed defects.
 - 3. The "Guarantee Bond" shall be so conditioned that should original of developed defects or failure to failures appear within a period of one year from the date of acceptance of the work by the Contracting Agency, the Contractor shall, at his own expense no additional cost to Contracting Agency, make good such defects and failures and make all replacements and adjustments required, within a reasonable time after being notified by the Contracting Agency to do so, and to the approval of the Engineer. This bond shall be maintained by the Contractor in full force and effect for a period as specified after the date of acceptance of the work by the Contracting Agency. This guarantee bond shall not limit the Contracting Agency's rights with respect to latent defects, gross mistakes, or fraud.
- C. Should any surety become insufficient. Said, the Contractor shall renew saidthe bond or bonds within ten (10)—days after receiving notice from the Contracting Agency that the surety is insufficient.
- D. Should any surety be deemed unsatisfactory at any time by the Contracting Agency, notice will be given the Contractor to that effect, and heterocolor: bed deemed unsatisfactory at any time by the Contracting Agency, notice will be given the Contractor to that effect, and heterocolor: bed deemed unsatisfactory at any time by the Contracting Agency, notice will be given the Contractor to that effect, and heterocolor: bed deemed unsatisfactory at any time by the Contracting Agency, notice will be given the Contractor to that effect, and heterocolor: bed deemed unsatisfactory to the Contractor shall forthwith substitute a new surety satisfactory to the Contracting Agency. No further payment shall

be deemed due or will be made under the contract until the new surety shall qualify and be accepted by the Contracting Agency.

103.06 EXECUTION AND APPROVAL OF CONTRACT

A. The contract shall be signed by the successful bidder and returned, together with the contract bonds, within 15 calendar days after the contract has been mailed to the bidder. If the contract is not executed by the Contracting Agency within forty-five (45)_calendar days or as otherwise provided for following receipt from the bidder of the signed contract and bond, the bidder shall have the right to withdraw histhe bid without penalty. No contract shall be considered as effective until it has been fully executed by all parties thereto.

103.07 FAILURE TO EXECUTE CONTRACT

A. Failure to properly sign the contract and file acceptable bonds shall be just cause for the annulment of the award and the forfeiture of the proposal guarantee which shall become the property of the Contracting Agency, not as a penalty, but as liquidation of damages sustained. Award may then be made to the next lowest responsible bidder as provided in Subsection 103.02, "Award of Contract," or the work may be readvertised and constructed under contract or otherwise, as the Contracting Agency may decide.

SECTION 104

SCOPE OF THE WORK

104.01 INTENT OF THE CONTRACT

A. The intent of the contract is to provide for the construction and completion in every detail of the work described. The Contractor shall furnish all labor, material, equipment, tools, transportation, and supplies required to complete the work in accordance with the plans, specifications, and terms of the contract.

104.02 INCREASED OR DECREASED QUANTITIES AND CHANGE IN CHARACTER OF WORK

- A. The Contracting Agency reserves the right to make by written order and without notice to surety, such alterations in the plans <u>and specifications</u> or character or quantity of the work which may be considered necessary or desirable from time to time during the progress of the work to complete satisfactorily the proposed construction. Such alterations shall not be considered as a waiver of any conditions of the contract or invalidate any of the provisions thereof.
- B. Whenever an alteration in character of work on the project involves a substantial change in the nature of the design or in the type or extent of construction which materially increases or decreases the cost of the performance, the work shall be performed in accordance with the <u>plans and</u> specifications and as directed, provided however, that before such work is started, a supplemental agreement acceptable to both parties to the contract shall be executed.
- C. The right is reserved to increase or decrease any or all of the items in the estimate of approximate quantities as shown in the proposal. The length of the project may be increased or decreased by adding or omitting sections or by relocation. Under no circumstances shall alterations of plans or of the nature of the work, involve work beyond the termini of the proposed construction except as may be necessary to satisfactorily complete the project.
- D. If it is found that the quantity of any major item required to complete the work underruns or overruns less than twenty-five (25)—percent of the proposed quantity, payment for the work performed will be made at the contract unit price for the quantity of work actually performed.
- E. Whenever the termini of the project are changed or whenever any change or combination of changes results in increasing or decreasing the original contract amount as calculated from the bid quantities and contract unit prices by more than twenty-five (25)_percent, a supplemental agreement acceptable to both parties to the contract shall be executed in advance of performing the affected work.
- F. Whenever an overrun or underrun of more than twenty-five (25)_percent of the original bid quantity for one or more major contract items occurs, either party to the contract may demand a supplemental agreement to be negotiated satisfactory to both parties.
- G. Revision of any unit price requested by the Contractor shall be negotiated on the basis of actual cost plus a reasonable allowance for profit and overhead. Written request for supplemental agreement shall set forth in detail the particulars and character by which the work was changed and by what amount the unit price of the proposal item will be altered. Failure of the Contractor to file a request for a supplemental agreement within ten (10)

104 SCOPE OF THE WORK

- _calendar days after any of the above outlined conditions are encountered shall be considered as a waiver thereof on the part of the Contractor and payment shall be made at the contract unit price for the actual quantity of work performed.
- H. If a supplemental agreement satisfactory to both parties cannot be agreed upon, the Contracting Agency may order the work in dispute to be performed and the controversy shall be settled as provided in Subsection 105.17, "Claims for Adjustments and Disputes."
- I. Changes not requiring negotiated agreements, except as to extra work involved, shall be ordered by means of a contract change order, and acceptance by the Contractor, as evidenced by hisContractor's signature, shall constitute agreement that the change does not involve any adjustment of contract unit prices. Attention is directed to Subsection 108.08, "Determination and Extensions of Contract Time." Work shall not be started on any such change until the change order has been delivered to and accepted by the Contractor-and accepted by him.
- J. In case the Contractor refuses to accept a change order, the Contracting Agency may order the work to proceed while proceeding as expeditiously as possible with settlement of the disputed points.

104.03 EXTRA WORK

A. The Contractor shall perform unforeseen work, for which there is no price included in the contract, whenever it is deemed necessary or desirable in order to complete fully the work as contemplated. Such work shall be performed in accordance with the specifications and as directed, and will be paid for as agreed unit prices, force account, or a combination of the two. Agreed unit prices together with the estimated quantities of each unit shall be shown. Orders involving extra and force account work shall be as detailed in Subsection 109.03, "Extra and Force Account Work," and conform to the requirements contained therein.

104.04 MAINTENANCE OF TRAFFIC

- A. While undergoing improvements, all roads upon or within which any work is being done shall be kept open to all traffic by the Contractor unless otherwise provided for in the contract documents. If the useable roadway is not sufficient to safely accommodate two-way traffic, the Contractor shall adequately maintain one-way traffic. Wherever one-way traffic is in effect, the distance shall be as set forth in writing by the Engineer.
- B. Where controlled traffic is necessary for protection of the work or for the safety of public travel, it shall be in accordance with the provisions of Subsection 624.03.02, "Flaggers," and 624.03.03, "Pilot Cars," of these specifications. The Contractor shall also provide and maintain in a safe condition, temporary approaches or crossings and intersections with trails, roads, streets, businesses, parking lots, residences, garages, and farms. The Contractor shall bear all expense of maintaining all roads upon or within which any work is being done and of constructing and maintaining such approaches, crossings, intersections, and other features as may be necessary, without direct compensation, except as provided in Subsection 107.15, "Relief from Maintenance and Responsibility," or in (a)1.
 - The Contractor shall be responsible for the maintenance of the roadway during suspension of the work when such suspension is due to the Contractor's negligence. Attention is directed to Subsection 108.06, "Temporary Suspension of the Work." During any other suspension, the Contractor shall make passable and shall open to traffic such portions of the project and temporary roadways or portions thereof as may be ordered by the Engineer for the temporary accommodation of traffic during the anticipated period of suspension. Thereafter, and until issuance of

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an order for the resumption of construction operations, the maintenance of the temporary route or line of travel agreed upon will be by and at the expense of the Contracting Agency. Such Contractor's maintenance and responsibility will include and be restricted to: the traveled roadway for the convenience of public travel; opening plugged pipes and roadway ditches and drains or correcting any other hazard which may be detrimental to adjacent property owners or the traveling public. When work is resumed, it shall be the Contractor's responsibility to replace, renew, and repair any work or materials lost or damaged because of such temporary use of the project regardless of the cause of such damage or loss, except as provided in Subsection 107.15, "Relief of from Maintenance and Responsibility." It is herewith expressed that the Contracting Agency is in no way responsible to the Contractor to maintain the roadway and appurtenances in any certain condition or state of repair. It is incumbent upon the Contractor to complete the project in every respect as though its persecution prosecution had been continuous and without interference.

- C. Where construction of a project is staged in the plans, or otherwise outlined by the contract documents, and if a change in the staging or sequence of operations is desirable, the Contractor may submit such change in writing to the Contracting Agency. Consideration will be given to each such proposal and may be rejected, modified, or accepted <u>as is deemed best</u> by the Contracting Agency <u>as he deems best</u>. The Contractor will not proceed with any such change in the staging until permission is granted by the Contracting Agency in writing.
- D. When detours, temporary connections, crossovers, connection roads, and frontage roads are constructed by the item "Equipment Hours," such items shall be full compensation for excavating, hauling, overhaul, and compacting of the material complete and in place and for all labor involved to complete the detour. Base and surface courses will be paid for at the contract unit price for the particular type of material required. All of the above mentioned roadways will be constructed to the same standards and qualities and subject to the same tests and specifications as the main roadway, unless otherwise ordered by the Engineer. Attention is directed to Section 624, "Accommodations for Public Traffic."
- E. When a detour is requested by the Contractor, hethe Contractor shall make a written request to the Engineer for the establishment of a detour around all or certain designated sections of work. If arrangements for such a detour can be made which are satisfactory to the Contracting Agency, and to the Contractor, the Engineer will designate that road as a detour, subject to the following conditions:
 - 1. The Contractor shall provide and maintain the necessary route marking signs.
 - 2. The Contractor shall construct and maintain in good condition such a detour. If the Contractor fails to maintain the detour in a condition satisfactory to the Engineer, the Contracting Agency will make such repairs as is deemed suitable and will deduct the cost thereof from money due or to become due to the Contractor.
 - 3. Provisions for handling traffic will be subject to the conditions of Subsection 624.03.02, "Flaggers," and 624.03.03, "Pilot Cars," of these Standard Specifications.
 - 4. Upon abandoning the detour, the Contractor shall obliterate and dispose of such detour and restore as nearly as possible the condition of the ground to its original form to the satisfaction of the Engineer.
 - 5. All of the above work will be at the sole expense of the Contractor.

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104.05 RIGHTS IN AND USE OF MATERIALS FOUND ON THE WORK

- A. The Contractor with the approval of the Engineer, may use on the project such stone, gravel, sand, or other material determined suitable by the Engineer, as may be found in the excavation and will be paid for both the excavation of such materials at the corresponding contract unit price and also at the contract unit price for the pay item for which the excavated material is used. At no additional cost to the Contracting Agency, Hethe Contractor shall replace at his own expense with other acceptable material all of that portion of the excavation material so removed and used which was needed for use in the embankments, backfills, approaches, or otherwise. No charge for the materials so used will be made against the Contractor. The Contractor shall not excavate or remove any material from within the project location which is not within the grading limits, as indicated by the slope and grade lines, without written authorization from the Engineer.
- B. Unless otherwise provided, the material from any existing old structure may be used temporarily by the Contractor in the erection of the new structure. Such material shall not be cut or otherwise damaged except with the approval of the Engineer.

SECTION 105

CONTROL OF THE WORK

105.01 AUTHORITY OF THE ENGINEER

- A. The Engineer will decide all questions whichthat may arise as to the quality and acceptability of materials furnished and work performed and as to the rate of progress of the work; and all questions whichthat may arise as to the interpretation of the plans and specifications.
- B. The Engineer will have the authority to suspend the work wholly or in part due to the failure of the Contractor to correct conditions unsafe for the workmen or the general public; for failure to comply with the technical provisions of the contract; for failure to carry out orders; for such periods as <a href="heter:hete
- C. Whenever the Contractor fails to carry out orders of the Engineer, the Engineer will have executive authority to enforce such orders and histhe Engineer's decision willshall be final. In the event the Contractor fails to execute work ordered by the Engineer within a reasonable period of time, the Engineer may, after giving notice in writing to the Contractor, proceed to have such work performed as deemed necessary and the cost thereof shall be deducted from compensation due or which may become due the Contractor on the contract.
- D. Decisions of the Engineer shall be subject to appeal to the Board, whose decisions shall be final and conclusive. Such appeal shall be in writing and shall be made within ten (10) calendar days, but in the meantime the Contractor shall diligently proceed with the work.

105.02 PLANS AND WORKING DRAWINGS

- A. The contract plans and drawings do not purport to show all the details of the work.
 They These documents are intended to illustrate the character and extent of the
 performance desired under the contract; therefore, they may be supplemented or revised
 from time to time, as the work progresses, by the Engineer or (subject to approval of the
 Engineer) by the Contractor. The Contractor will keep one set of plans available on the
 work at all times.
- B. The plans willmay be supplemented by such working drawings as are necessary to adequately control the work. Working drawings for structures shall be furnished by the Contractor. TheyWorking Drawings shall include stress sheets, shop drawings, erection plans, fabrication sheets, falsework plans, cofferdam plans, bending diagrams for reinforcing steel, or any other supplementary plans or similar data required by the Engineer. Unless otherwise specified, all working drawings mustshall be submitted in triplicate ten (10) days prior to start of related work and approved by the Engineer. Such approval shall not relieve the Contractor of any of histhe Contractor's responsibility under the contract for the successful completion of the work. It is mutually agreed that the Contractor shall be responsible for agreement of dimensions and details as well as for conformity of histhe Contractor's working drawings with the approved plans and specifications.
- C. The contract price will include the cost of furnishing all working drawings.

105.03 CONFORMITY WITH PLANS AND SPECIFICATIONS

- A. Work performed and materials furnished shall be in conformity with the lines, grades, cross sections, dimensions, and materials requirements, including tolerances, shown on the plans or indicated in the specifications.
- B. In the event the Engineer finds the materials or the finished product in which the materials are used not in conformity with the plans and specifications, but that acceptable work has been produced, heterogineer shall then make a determination if the work shall be accepted and remain in place. In this event, the Engineer will document the basis of acceptance by contract modification concurred in by the Contracting Agency which will provide for an appropriate adjustment in the contract price for such work or materials as hethe Engineer deems necessary to conform to histhe Engineer's determination based on engineering judgment.
- C. In the event the Engineer finds the materials or the finished product in which the materials are used or the work performed are not in conformity with the plans and specifications and have resulted in an inferior or unsatisfactory product, the work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor at no additional cost to the Contracting Agency.

105.04 COORDINATION OF PLANS, SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, AND SPECIAL PROVISIONS

- A. The specifications, supplemental specifications, plans, special provisions, and all supplementary documents are essential parts of the contract, and a requirement occurring in one is as binding as though occurring in all. <u>TheyThese documents</u> are intended to be complementary and to describe and provide for a complete work. In case of discrepancy, the following precedence will govern:
 - 1. Permits from other agencies as may be required by law.
 - 2. Special Provisions.
 - 3. Plans.
 - 4. Standard Drawings.
 - 5. Standard Specifications.
 - 6. Reference Specifications.
- B. Change orders, supplemental agreements, and approved revisions to plans and specifications will take precedence over Items 2, 3, 4, 5, and 6 listed above. Detailed plans shall have precedence over general plans.
- C. The Contractor shall take no advantage of any apparent error or omission in the plans or specifications. In the event the Contractor discovers such an error or omission, hethe Contractor shall immediately notify the Engineer. The Engineer will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the plans and specifications.

105.05 COOPERATION BY CONTRACTOR

A. The Contractor will be supplied with a minimum of four (4)_sets of approved plans and contract assemblies including special provisions, one set of which the Contractor shall keep available on the work at all times. Additional copies of plans and special provisions may be obtained by the Contractor upon written request to the Contracting Agency.

- B. The Contractor shall give the work constant attention necessary to facilitate the progress thereof, and shall cooperate with the Engineer, histhe Engineer's inspectors, and other contractors in every way possible.
- C. The Contractor shall maintain a telephone for the duration of the contract, at his/the contractor authorized representative may be reached directly or by message at all times
- D. The prime Contractor shall have on the work at all times, as histhe Contractor's agent, a competent superintendent capable of reading and thoroughly understanding the plans and specifications and thoroughly experienced in the type of work being performed, who shall receive instructions from the Engineer or histhe Engineer's authorized representatives. Such superintendent shall be designated in writing before starting work. The superintendent shall have full authority to execute orders or directions of the Engineer without delay, and to promptly supply such materials, equipment, tools, labor, and incidentals as may be required. Such superintendent shall be furnished irrespective of the amount of work sublet.
- E. Whenever the Contractor or histhe Contractor's authorized representative is not present on any particular part of the work where it may be desired to give direction, orders will be given by the Engineer to the Contractor's superintendent, foreman, or other person in charge of the operation, who is present, and these orders shall have the same force and effect as if given to the Contractor or histhe Contractor's designated representative.
- F. Any order given by the Engineer, not otherwise required by the specifications to be in writing, will on request of the Contractor be given or confirmed by the Engineer in writing.

105.06 COOPERATION WITH UTILITIES

- A. The Permittee, in the case of private contract, and the Contracting Agency, in the case of cash contract or Special Improvement District contract, will search known substructure records which describe the location of utility substructures, and will indicate on the plans for the project those substructures, except for service connections, which may affect the work. Information regarding removal, relocation, abandonment, or installation of new utilities will be furnished to prospective bidders.
- B. Where underground main distribution conduits such as water, gas, sewer, electric power, telephone, or cable television are shown on the plans, the Contractor, for the purpose of preparing histhe Contractor's bid, shall assume that every property parcel will be served by a service connection for each type of utility.
- C. At least two (2) working days before entering on the work, the Contractor shall notify all the utility owners to mark or otherwise indicate the approximate location of their subsurface facilities including, but not limited to, structures, main conduits, and service connections. This requirement will not apply to sewer and storm drain installations where their location and depth are shown on the plans for the project.
- D. It shall be the Contractor's responsibility to determine the location and depth of all utilities, including service connections, for which approximate locations have been marked by the respective owners and which hethe Contractor believes may affect or be affected by histhe Contractor's operations. If no pay item is provided in the contract for this work, full compensation for such work shall be considered as included in the prices bid for other items of work.

- E. The Contractor shall not interrupt the service function or disturb the supporting base of any utility without authority from the owner or an order from the Contracting Agency.
- F. Where protection is required to <u>insureensure</u> support of utilities, the Contractor shall, unless otherwise provided, furnish and place the necessary protection at <u>his expenseno</u> additional cost to the Contracting Agency.
- G. Upon learning of the existence and location of any utility omitted from or shown incorrectly on the plans, or not properly marked, the Contractor shall immediately notify the Engineer in writing. When authorized by the Engineer, support or protection of the utility will be paid for as provided in Subsection 104.03, "Extra Work."
- H. The Contractor shall immediately notify the Engineer and the utility owner if hethecontractor disturbs or damages any utility. The Contractor shall bear the costs of repair or replacement of any utility damaged if properly located as provided.
- I. When placing concrete around or contiguous to any utility installation, the Contractor, at his own expense of additional cost to the Contracting Agency, shall (1) furnish and install a two2-inch cushion of expansion joint material or other similar resilient material; or (2) provide a sleeve or other opening which will result in a two2-inch minimum clear annular space between the concrete and the utility; or (3) provide other acceptable means to prevent embedment in or bonding to the concrete. The standards of the affected utility company shall prevail. Where concrete is used for backfill or for structures which would result in embedment, or partial embedment, of a metallic utility installation, or where the coating, bedding, or other cathodic protection system is exposed or damaged by the Contractor's operations, or as may be required by the work, the Contractor shall notify the Engineer and arrange to secure the advice of the affected utility owner regarding the procedures required to maintain or restore the integrity of the system.
- J. Unless otherwise specified, the Contractor shall remove all interfering portions of utilities shown on the plans or indicated in the bid documents as "abandoned" or "to be abandoned in place." Before starting removal operations, the Contractor shall ascertain from the Contracting Agency whether the abandonment is complete, and the costs involved in the removal and disposal shall be absorbed in the bid for the items of work necessitating such removals.
- K. When feasible, the owners responsible for utilities within the area affected by the work shall complete their necessary installations, relocations, repairs or replacements before commencement of work by the Contractor. When the Special Provisions or plans indicate that a utility installation is to be relocated, altered, or constructed by others, the Contracting Agency will conduct all negotiations with the owners and the work will be done at no cost to the Contractor, except as provided in Subsection 107.17, "Contractor's Responsibility for Utility Property and Service." Utilities whichthat are relocated in order to avoid interference with the proposed permanent work shall be protected in their relocated position and the cost of such protection shall be absorbed in the various items of the contract.
- L. A utility company installing a new line is responsible for relocation of other utility company facilities if the new line conflicts with existing locations.
- M. When the plans or specifications provide for the Contractor to alter, relocate, or reconstruct a utility, all costs for such work shall be included in the bid for the items of work necessitating such work. Temporary or permanent relocation or alteration of utilities requested by the Contractor for histhe Contractor's own convenience shall be histhe Contractor's responsibility, and hethe Contractor shall make all arrangements and bear all costs.

- N. The utility owner will relocate service connections as necessary within the limits of the work or within temporary construction or slope easement unless otherwise specified. When directed by the Engineer, the Contractor shall arrange for the relocation of service connections as necessary between the meter and property line, or between a meter and the limits of temporary construction or slope easements. The relocation of such service connections will be paid for in accordance with provisions of Subsection 104.03, "Extra Work." Payment will include the restoration of all existing improvements which may be affected thereby. The Contractor may, for histhe Contractor's own convenience or to expedite the work, agree with the owner of any utility to disconnect and reconnect interfering service connections. The Contracting Agency will not be involved in any such agreement.
- O. The Contractor shall notify the Contracting Agency of histhe Contractor's construction schedule insofar as it affects the protection, removal, or relocation of utilities. SaidThis notification shall be in writing and shall be included as a part of the construction schedule required by Subsection 108.03, "Prosecution and Progress." He The Contractor shall notify the Contractor shall notify any subsequent changes in histhe Contractor's construction schedule which will affect the time available for protection, removal, or relocation of utilities.
- P. The Contractor will not be entitled to damages or additional payment for delays attributable to utility relocations or alterations if correctly located, noted, and completed. The Contractor may be given an extension of time for unforeseen delays attributable to utility relocations or alterations not shown or incorrectly shown on the plans, or for unreasonably protracted interference by utilities in performing work correctly shown on the plans. If the Contractor sustains loss due to delays attributable to interferences, relocations, or alterations which could not have been avoided by the judicious handling of forces, equipment, or plant, there shall be paid to the Contractor such amount as the Contracting Agency may find to be fair and reasonable compensation for such part of the Contractor's actual loss as was unavoidable as provided in Subsection 108.12, "Right-of-Way Delays."
- Q. When necessary, the Contractor shall so conduct histhe Contractor's operations as to permit access to the work site and provide time for utility work to be accomplished during the progress of the contract work.

105.07 COOPERATION BETWEEN CONTRACTORS

- A. The Contracting Agency reserves the right at any time to contract and perform other or additional work on or near the work covered by the contract.
- B. When separate contracts are let within the limits of any one project, each Contractor shall conduct hisContractor's work so as not to interfere with or hinder the progress or completion of the work being performed by the other Contractors. Contractors working on the same project shall cooperate with each other as directed.
- C. Each Contractor involved shall assume all liability, financial or otherwise, in connection with <u>hisContractor's</u> contract and shall protect and save harmless the Contracting Agency from any and all damages or claims that may arise because of inconvenience, delay, or loss experienced by <u>himContractor</u> because of the presence and operations of other Contractors working within the limits of the same project.
- D. The Contractor shall arrange <u>hisContractor's</u> work and shall place and dispose of the materials being used so as not to interfere with the operations of other Contractors within the limits of the same project. <u>HeContractor</u> shall join <u>hisContractor's</u> work with that of the

others in an acceptable manner and shall perform it work in proper sequence to that of the others.

105.08 CONSTRUCTION STAKES, LINES AND GRADES

- A. The Contractor shall notify the Engineer at least seven (7)—days before starting work in order that the Engineer may take necessary measures to insureensure the preservation of survey monuments and bench marks. The Contractor shall not disturb permanent survey monuments or bench marks without the consent of the Engineer, and shall bear the expense of replacing any that may be disturbed without permission. Replacement shall be done only by the Engineer.
- B. When a change is made in the finished elevation of the pavement of any roadway in which a permanent survey monument is located, the Contractor shall adjust the monument cover to the new grade unless otherwise specified.
- C. The Contractor shall preserve property line and corner survey markers except where their destruction is unavoidable, and the Contractor is proceeding in accordance with accepted practice. Markers that otherwise are lost or disturbed by hisContractor's operations shall be replaced at the Contractor's expense by a Registered Land Surveyor.
- D. Except for private contracts, the Engineer will perform and be responsible for the accuracy of surveying adequate for construction. The Contractor shall be responsible for preserving construction survey stakes and marks for the duration of their usefulness. If any construction survey stakes are lost or disturbed and need to be replaced, such replacement shall be by the Engineer at the expense of the Contractor.
- E. The Contractor shall notify the Engineer at least two (2) working days before heContractor will require survey services in connection with the laying out of any portion of the work. The Contractor shall dig all holes necessary for line and grade stakes.
- F. The Engineer will furnish and set construction stakes establishing lines and grades for street excavation, finished base gravel, curb and gutter, walks, structures, and utilities, and will furnish the Contractor all the necessary information relating to the lines and grades. These stakes and marks shall constitute the field control by and in accordance with which the Contractor shall govern and execute the work.
- G. The line and grade stakes will be off-setoffset from the construction area. They The stakes will show the off-setoffset distance, stationing, and required cut or fill to the finished grade or flow line as indicated on the plans. Grade stakes shall be set by the Engineer to the finished grade of the subgrade and also of the base gravel and the tops of these stakes marked blue or red. All stakes and grade shall be set with a surveyor's level or transit.
- H. The Contractor shall construct the work in accordance with the Engineer's stakes and marks, making use of them before they are disturbed, and shall be charged with full responsibility for conformity and agreement of the work with such stakes and marks. The Contractor shall be held responsible for the preservation of all stakes and marks, and if, in the opinion of the Engineer, any of the stakes or marks have been carelessly or willfully destroyed or disturbed by the Contractor, the cost of replacing them shall be charged against, and deducted from, the payment for the work.
- I. Surveying by private engineers on work under the control of the Contracting Agency shall conform to the quality and practice required by the Engineer.
- J. Work upon completion shall conform to the lines, elevations, and grades shown on the plans, or as ordered by the Engineer.

- K. Three consecutive points set on the same slope shall be used together so that any variation from a straight grade can be detected. Any such variation shall be reported to the Engineer. In the absence of such report, the Contractor shall be responsible for any error in the grade of the finished work.
- L. Grades for underground conduits will be set at the surface of the ground. The Contractor shall transfer them to the bottom of the trench.

105.09 BLANK

105.10 DUTIES OF THE INSPECTOR

A. Inspectors for the Contracting Agency will be authorized to inspect all work done and all materials furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used. The inspector will not be authorized to issue instructions contrary to the plans and specifications, or to act in any capacity for the Contractor.

105.11 INSPECTION

- A. All materials and each part or detail of the work shall be subject to inspection by the Engineer. The Engineer shall be provided acceptable access to all parts of the work and shall be furnished with such information and assistance by the Contractor as required to make a complete and detailed inspection.
- B. Any work done or materials used without inspection by an authorized Contracting Agency representative may be ordered removed unless the material meets the specifications and shall be replaced at the-Contractor's expense no additional cost to the Contracting Agency unless the Contracting Agency representative failed to inspect after having been given notice in writing that the work was to be performed. If the noninspected work or material proves acceptable the work or material may remain, but any expenses entailed in a late inspection shall be the Contractor's.
- C. If the Engineer requests it, the Contractor, at any time before acceptance of the work, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examined prove acceptable, the uncovering, or removing and the replacing of the covering, or making good of the parts removed will be paid for as extra work; but should the work so exposed or examined prove unacceptable, the uncovering, or removing and replacing of the covering, or making good of the parts removed will be at the Contractor's expense no additional cost to the Contracting Agency.
- D. When facilities of any unit of government or political subdivision or of any railroad corporation or public utility corporation are adjusted or constructed as a part of the work covered by this contract, its respective representatives shall have the right to inspect the work. Such inspection shall in no sense make any unit of government or political subdivision or any railroad corporation or public utility corporation a party to this contract, and shall in no way interfere with the rights of either party thereunder.

105.12 REMOVAL OF UNACCEPTABLE AND UNAUTHORIZED WORK

- A. All work which does not conform to the requirements of the contract will be considered as unacceptable work, unless otherwise determined acceptable under the provisions in Subsection 105.03, "Conformity with Plans and Specifications."
- B. Unacceptable work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause, found to exist prior to the final acceptance of the work, shall be removed immediately and replaced in an acceptable manner.
- C. Work done contrary to the instructions of the Engineer, work done beyond the lines shown on the plans, or as given except as herein specified, or any extra work done without authority, will be considered as unauthorized and will not be paid for under the provisions of the contract. Work so done may be ordered removed or replaced at the Contractor's expenseno additional cost to the Contracting Agency.
- D. Upon failure on the part of the Contractor to comply forthwith with any order of the Engineer, made under the provisions of this article, the Contracting Agency will have authority to cause unacceptable work to be remedied or removed or replaced and unauthorized work to be removed and to withhold the costs from any money due or to become due to the Contractor.

105.13 LOAD AND SPEED RESTRICTIONS

- A. The Contractor shall be responsible for all damage to the work caused by his-Contractor's hauling equipment.
- B. In hauling material for incorporation in portions of the project, loads which are in excess of the limits set by the Contracting Agency will not be permitted on any existing bridge or new and existing bituminous base and surface, cement treated base, or Portland cement concrete paving which is to remain in place for vehicular traffic within the project or between the project and the pits or other sources of materials. Load limits established by the Contracting Agency for the project shall be complied with regardless of the source of materials, whether from described pits, approved pits, or commercial sources. Unless otherwise stated in the sepecial perovisions, the maximum loads shall not exceed the limits set forth in Chapter 484, "Traffic Laws," of the Nevada Revised Statutes and all acts amendatory thereto or supplementary thereofto.
- C. Construction loads greater than legal loads may be carried over any new bridge structure within the project providing the Contractor complies with all of the following limitations and provisions:
 - 1. Concrete in any such structure <u>mustshall</u> have attained designed strength as shown on the structure plans.
 - 2. The gross load of the vehicle shall not exceed 108,000 pounds (49,000 kilograms).
 - Gross load on any individual axle shall not exceed 48,000 pounds (21,800 kilograms).
 - 4. The gross load on any individual set of tandem axles spaced not more than six (6) feet (180 centimeters) apart shall not exceed 72,000 pounds (32,700 kilograms).
 - 5. The center to center spacing of individual axles or center to center spacing of pairs of tandem axles shall not be less than fourteen (14) feet (427 centimeters).

- 6. No more than one lane of vehicles shall operate over any structure.
- 7. The speed of any vehicle approaching or traveling on any structure shall not exceed ten (10)_mph-(16 kilometers per hour).
- 8. The roadway surface approaching any structure shall be kept smooth and uniformly graded for one hundred fifty (150)_feet (46 meters) each side of the structure and shall be maintained to provide a uniform transition onto the structure.
- 9. A cover of six 6 inches (6") (15 centimeters) ± one 1 inch (1") (2.5 centimeters) shall be placed and maintained on the decks of all structures. Cover material shall not include rocks of diameter greater than two 2 inches (2") (5 centimeters).
- D. The limitations, specified in items (b,c,d,e,f,i)2, 3, 4, 5, 6, 7, 8, and 9 above may be waived for all Rreinforced Cconcrete Bbox Cculverts providing that the depth of fill compacted and in place over the Rreinforced Cconcrete Bbox Cculvert is equal to or greater than the distance between inside faces of outside walls measured along center line of roadway. Fill may be placed not to exceed profile grade elevation.
- E. Construction loads greater than legal loads may be carried over structures within the project which have spans of ten (10)—feet (3 meters)—to twenty (20)—feet (6 meters)—only when the Contractor complies with the above items, letters (c) to (i), inclusive; however, the limitations as set forth in paragraphs (c) to (e), inclusive, may be waived by the Engineer for reinforced concrete box structures which are adequately supported by shoring. —The Contractor shall submit hisContractor's proposed shoring details and the actual loads and axle spacings to the Engineer for review prior to the planned hauling. Approval will be based on a review of the shoring details and a physical inspection of the shoring complete and in place.
- F. The <u>e</u>Engineer shall make sufficient checks to satisfy <u>himself</u>Engineer that the Contractor is complying with all limitations, and any violation shall result in denying the Contractor use of the structure until the violation has been corrected to the satisfaction of the Engineer.
- G. The provision that the Contractor may haul construction loads greater than legal loads on new structures shall not relieve the Contractor of hisContractor's responsibility for all damage caused by hisContractor's hauling equipment.
- H. The Engineer may, for the protection of the traveling public, establish speed limits on or adjacent to the project. Such limitations of speed shall be strictly observed by the Contractor.

105.14 MAINTENANCE DURING CONSTRUCTION

- A. The Contractor shall maintain the work during construction and until the project is accepted, except as provided for in Subsection 104.04, "Maintenance of Traffic," and 107.15, "Relief from Maintenance and Responsibility." This maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces to the end that the roadway and structures are at all times, to be kept in a condition satisfactory to the Engineer.
- B. In the case of a contract for the placing of a course upon a course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations.
- C. Except as provided for in Subsection 104.04, "Maintenance of Traffic," and 107.15 "Relief from Maintenance and Responsibility," all costs of maintenance work during construction

and before the project is accepted shall be included in the unit prices bid on the various pay items and the Contractor will not be paid an additional amount for such work.

105.15 FAILURE TO MAINTAIN ROADWAY OR STRUCTURE

- A. If the Contractor, at any time, fails to comply with the provisions of Subsection 105.14, "Maintenance During Construction," the Engineer will immediately notify the Contractor in writing of such noncompliance. If the Contractor fails to remedy unsatisfactory maintenance within twenty-four (24)—hours after receipt of such notice, the Engineer may immediately proceed to maintain the project, and the entire cost of this maintenance will be deducted from money due or to become due the Contractor.
- B. If a condition develops that is dangerous to public safety in the opinion of the Engineer, such condition may be immediately remedied with whatever means is available and the cost of this maintenance will be deducted from money due or to become due to the Contractor.

105.16 FINAL ACCEPTANCE

A. Upon due notice from the Contractor of presumptive completion of the entire project, the Engineer will make an inspection and if all construction and final cleanup provided for and contemplated by the contract isare found completed to hisEngineer's satisfaction, that inspection shall constitute the final inspection and the Engineer will so advise the governing body or commission, who will notify the Contractor in writing of the acceptance of the contract as of the date of the final inspection. Such notice will not be given to the board or commission until all work has been completed to the satisfaction of the Engineer.

105.17 CLAIMS FOR ADJUSTMENT AND DISPUTES

- A. If, in any case, the Contractor deems that additional compensation is due himContractor for work or material not clearly covered in the contract or not ordered by the Engineer as extra work as defined herein, the Contractor shall notify the Engineer in writing of hisContractor's intention to make claim for such additional compensation before heContractor begins the work on which heContractor bases the claim. If such notification is not given, and the Engineer is not afforded proper facilities by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor, and the fact that the Engineer has kept account of the cost as aforesaid, shall not in any way be construed as proving or substantiating the validity of the claim. If the claim, after consideration by the Engineer, is found to be just, it will be paid as extra work as provided herein for "Force Account" work. Nothing in this subsection shall be construed as establishing any claim contrary to the terms of Subsection 104.02, "Increased or Decreased Quantities and Change in Character of Work."
- B. For all claims, the Contractor shall certify in writing that the claim is made in good faith, that the supporting data are accurate and complete to the best of Contractor's knowledge and belief, and that the amount requested accurately reflects the Contract adjustment for which the eContractor believes the OwnerContracting Agency is liable. Subcontractor claims shall not be considered except as submitted by the Contractor as the Contractor's claims.
- C. Any controversy or claim arising out of or relating to this contract which cannot be resolved by mutual agreement shall be settled by arbitration in accordance with the Rules of the American Arbitration Association.

SECTION 106

CONTROL OF MATERIALS

106.01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS

- A. The Contractor shall furnish all materials required to complete the work, except materials that are designated in the Special Provisions to be furnished by the Contracting Agency as specified in Subsection- 106.11, "Contracting Agency Furnished Materials."
- B. No materials or supplies under this contract shall be purchased by the Contractor or by any subcontractor subject to any chattel mortgage, conditional sale contract or other security interest, or other agreement by which an interest is retained by the seller. The successful bidderContractor warrants that heContractor has good title to all materials and supplies used by himthe Contractor in the work, free from all liens, claims, or encumbrances.
- C. Only materials conforming to the requirements of the specifications shall be incorporated in the work except as provided in Subsection—105.03 "Conformity With Plans and Specifications."-
- D. The materials furnished and used shall be new, except as may be provided elsewhere in these specifications, on the plans or in the Special Provisions. The materials shall be manufactured, handled, and used in a workmanlike manner to ensure completed work in accordance with the plans and specifications.
- E. The Contractor shall furnish the Engineer a list of his the Contractor's sources of materials. The list shall be submitted to the Engineer prior to any official "Notice to Proceed" and in sufficient time to permit proper inspecting and testing of materials to be furnished from such listed sources in advance of their use.
- F. The listings of materials that are posted on the Interagency Quality Assurance Committee (IQAC) web page are automatically considered a qualified source. However, this does not remove the responsibility of the eContractor to provide inspection and testing on the project as designated the RTCSN specifications. Uniform Standard Specifications for Public Works' Construction Off-site improvements, Clark County Area, Nevada, subsequently referred to as the Uniform Standard Specifications specified herein. The address for the IQAC webpage is:

http://www.accessclarkcounty.com/depts/public_works/pages/iqac.aspx

- G. If it is found after trial that sources of supply for previously approved materials do not produce uniform and satisfactory products, or if the product from any source proves unacceptable at any time, which includes IQAC listed materials, the Contractor shall furnish satisfactory materials from other sources.
- H. The Contractor shall furnish without charge such samples as may be required by the Engineer. The primary Inspection and testing shall be made by the Contractor or histhe Contractor's designated representative, with Engineer oversight. However, it is understood that such inspections and tests, if made at any point other than the point of incorporation in the work, in no way shall be considered as a guarantee of acceptance of such materials nor of continued acceptance of material presumed to be similar to that upon which inspections and tests have been made.
- I. Manufacturer's warranties, guarantees, instruction sheets, and parts lists, which are furnished with certain articles or materials incorporated in the work, shall be delivered to the Engineer before acceptance of the completed contract.

J. Contractor's reports and records of inspections made and tests performed shall be submitted to the Engineer as required in these specifications. Uniform Standard Specifications. The Engineer's inspection and testing records, when available at the site of the work, may be examined by the Contractor.

106.02 LOCAL MATERIALS

- A. Local material is defined as rock, sand, gravel, earth, or other mineral material, other than local borrow or selected material, obtained or produced from sources in the vicinity of the work specifically for use on the project. Local material does not include materials obtained from established commercial sources.
- B. Local materials shall be furnished by the Contractor from any source the Contractor may elect, except when a mandatory source is designated in the Special Provisions.
- C. Aggregates for base, surface, and concrete may be the products of approved commercial producers, provided they meet specification requirements.
- D. The furnishing of local materials from any source is subject to the provisions of Subsection _102.05, "Examination of Plans, Specifications, Contract Documents, and Site of Work," and <u>Subsection</u> 106.03, "Possible Local Material Sources." Material deposits shall not be excavated at locations where their resulting scars will present an unsightly appearance from any street or highway, unless such excavation is approved in writing by the Engineer.
- E. Generally, local material deposits other than those indicated in the "Materials Information" packet as referred to in Subsection 102.05, "Examination of Plans, Specifications, Contract Documents, and Site of Work," will not be approved if located within one thousand (1,000)—feet of right-of-way line. In any case the Contractor's pit operations shall not encroach within twenty-five (25)—feet of the right-of-way. Payment will not be made on material obtained in violation of these provisions.
- F. The Contractor shall, at his own expense no additional cost to the Contracting Agency, make any and all arrangements necessary for hauling over local, public, or private roads or property from any source. Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, for doing all the work involved in conforming to the provisions in this Ssubsection; and for furnishing and producing materials from any source shall be considered as included in the price paid for the contract item of work involving such material and no additional compensation will be allowed.
- G. The Contractor or theirthe Contractor's representative shall attest to the content of the submitted materials that have been reviewed against the Contract Documents, and that the materials are in compliance thereto. Submitted materials that are to be evaluated as "Or Equal" or "Substitution" shall include sufficient information to enable the Engineer to make the determination for approval.

106.03 POSSIBLE LOCAL MATERIAL SOURCES

A. If the Contractor desires to use materials from local sources other than those described in the-Section-102.05, "Examination of Plans, Specifications, Contract Documents, and Site of Work," "Materials Information," the Contractor shall, at their own expense no additional cost to the Contracting Agency, acquire the necessary right to take material and shall obtain all other necessary permits and approvals and shall comply with all the requirements and stipulations in effect by other governing agencies having jurisdiction over the area, and pay all costs involved, including any which may result from an increase in length of haul. All costs of exploring and developing, including inspection and testing

- such alternate sources, shall be borne by the Contractor and the use of material from such sources will not be permitted until representative samples taken by the Engineer have been approved and written authority issued for the use thereof.
- B. The Contractor's attention is especially directed to the new Part 23 of Title 43, "Code of Federal Regulations," Part 23, titled "Surface Exploration, Mining and Reclamation of Lands," which pertains to all exploration, developing, and obtaining material from said alternate deposits located upon land under the jurisdiction of the Bureau of Land Management.
- C. Where the Contracting Agency has made arrangements with owners of land in the vicinity of a project for obtaining material from an owner's property, such arrangements are made solely for the purpose of providing all bidders an equal opportunity to obtain material from such property. Bidders or contractors may, upon written request, inspect the documents evidencing such arrangements between property owners and the Contracting Agency. The Contractor may, if hethe Contractor so elects, exercise any rights that have been obtained, which may be exercised by a Contractor under such arrangements, subject to and upon the conditions hereinafter set forth.
- D. Such arrangements are not a part of the contract and it is expressly understood and agreed that the Contracting Agency assumes no responsibility to the bidder or Contractor whatsoever in respect to the Contracting Agency's arrangements made with the property owner to obtain materials there–from and that the Contractor shall assume all risks in connection with the use of such property, and there is no warranty or guarantee, either expressed or implied, as to the quality or quantity of materials that can be obtained or produced from such property or the type or extent of processing that may be required in order to produce material conforming to the requirements of the specifications.
- E. In those instances in which the Contracting Agency has compiled "Materials Information" as referred to in Subsection 102.05, "Examination of Plans, Specifications, Contract Documents and Site of Work," said compilation designated optional or mandatory local material sources in the Special Provisions, this may include the documents setting forth the arrangements made with some of the property owners for obtaining material from such owners' properties. The inclusion of such documents therein shall not in any respect operate as a waiver of any of the provisions in this section concerning said documents.
- F. The bidder or Contractor is cautioned to make such independent investigation and examination as het-bidder or Contractor as to the quality and quantity of materials available from such property, the type and extent of processing that may be required in order to produce material conforming to the requirements of the specifications and the rights, duties, and obligations acquired or undertaken under such an arrangement with the property owner.
- G. Notwithstanding that the Contractor may elect to obtain materials from any such property owner's property, no material may be obtained from such property unless the Contractor has first either:
 - Executed a document that will guarantee to hold such owner harmless from all claims for injury to persons or damage to property resulting from the Contractor's operations on the property owner's premises and also agreed to conform to all other provisions set forth in the arrangement made between the Contracting Agency and the property owner. Said document will be prepared by the Engineer for execution by the Contractor, or

- 2. Entered into an agreement with the owner of the material source on any terms mutually agreeable to the owner and the Contractor, provided that the Contractor shall furnish to the Engineer a release, in a form satisfactory to the Engineer, executed by the owner, relieving the Contracting Agency of any and all obligations under the Contracting Agency's arrangements with the owner.
- H. If the Contractor elects to obtain material under <u>G.1(a)</u>, the use of such site shall be subject to the terms, conditions, and limitations of the arrangement made between the property owner and the Contracting Agency and the Contractor shall pay such charges as are provided for in the arrangement made by the Contracting Agency with the property owner.
- I. If the Contractor elects to obtain material under <u>G.2(b)</u>, <u>hethe Contractor</u> shall pay such charges as are provided for in the agreement between the owner and the Contractor.
- J. Unless otherwise provided and before execution of the contract, the Contractor shall submit written evidence that the owner of the material source is satisfied that the Contractor has satisfactorily complied with the provisions of either (a), the arrangement between the Contracting Agency and the owner, or (b), the agreement between the owner and the Contractor as the case may be.
- K. Where the Contracting Agency has obtained the right to remove materials from lands owned or controlled by the U.S. Government, by withdrawal or otherwise, and these areas are set forth in the "Materials Information" for the projectas optional or mandatory local material sources in the Special Provisions, the successful bidderContractor on the project may enter and remove materials for use on subject project only without further permission. The Contractor may not enter on or remove materials from any other areas withdrawn or otherwise obtained by the Contracting Agency from the U.S. Government which isare not set forth in the "Materials Information" specifically designated for the project without prior written approval from the Contracting Agency.
- L. Should the Contractor enter upon any of the areas withdrawn or otherwise obtained by the Contracting Agency from the U.S. Government, it shall be <u>histhe Contractor's</u> responsibility to determine the rights of others in the area. The Contractor shall not encroach on easements of others without their written permission and shall assume the responsibility for any damages due to <u>histhe Contractor's</u> entering said area. In addition, the Contractor shall be bound by the terms, conditions, and reservations contained in the approved application for withdrawal.
- M. Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing and producing specified materials from possible local material sources, including the construction of any access roads or fences and any clearing, grubbing, and stripping of material sources, and all processing of whatever nature and extent required, shall be considered as included in the price paid for the contract item of work involving such material and no additional compensation will be allowed.

106.04 SAMPLES AND TESTS

A. Sampling for final acceptance of materials will be as required in the appropriate Uniform Standard Sspecifications sections and in general mustshall comply with the AASHTO requirements, where applicable, and with the following exceptionsampling criteria:

- 1. Aggregates for roadmix bituminous mixtures (including base or surface) will be sampled after the material has been placed on the roadbed and processed and prior to adding the bituminous binder.
- 2. Aggregate for plantmix bituminous open-graded will be sampled from the laydown machine, or by "belt-cut" sample at the production plant at the Engineer's discretion.
- 3. Aggregate for screenings will be sampled from the loaded truck just prior to placing, or by "belt-cut" sample at the production plant at the Engineer's discretion.
- 4. Aggregate for plantmix bituminous mixtures (base or surface) will be sampled for acceptance behind the paver. Samples for plasticity tests will be taken at the bins.
- 5. Sampling of bituminous materials, intended for use in prime, tack or seal coats, surface treatments, and base, binder, or surface course mixtures, shall be done after the bituminous material has arrived at job destination and before, or at the time of unloading the materials.
 - a. Two samples shall be taken from each railroad tank car or truck transport of material by the Contractor or histhe-Contractor's designated representative under the observation of and per-complying with the requirements of AASHTO T-40 in a manner approved by the Engineer. Where delivery is made in smaller hauling units than those cited above such as a distributor, or where the contents of a storage tank are sampled, the required two-2 samples shall be taken to represent a maximum of ten-thousand-(10,000)-gallons-(38,000-liters). The Contractor shall take the samples during the established job working hours, unless arrangements are made for a representative of the Contracting Agency to witness the taking of the samples at another time.
 - b. All sampling devices and sample containers shall be furnished by the Contractor of Material Source. Immediately after filling the sample container, it shall be tightly sealed, properly marked for identification, and presented to the Engineer.
 - c. One of the two2 samples, taken from each load, shall be submitted to the Contractor's Material Source laboratory for testing and the other sample retained by the Engineer. If the first sample tested complies with requirements, the second may be discarded.
 - d. Where less than eighty 80 percent of the asphalt deliveries are used on the project, samples shall be taken just prior to delivery to the mixer. Samples shall be taken for every twenty five (25) tons of asphalt delivered to the project.
- 6. Tests for the aforementioned materials produced under conditions other than contemplated herein shall be taken at the time and place deemed by the Engineer to be most appropriate.

106.05 CERTIFICATE OF COMPLIANCE

A. The Engineer may permit the use of certain materials or assemblies prior to sampling and testing if accompanied by a Certificate of Compliance stating that the materials involved comply in all respects with the requirements of the specifications. The certificates shall be signed by the manufacturer of the material or the fabricator of assembled materials. A Certificate of Compliance must shall be furnished with each lot of material delivered to the

- work and the lot so certified <u>must shall</u> be clearly identified in the certificate with attached applicable test results for that lot in accordance with the specification section.
- B. All materials used on the basis of a Certificate of Compliance may be sampled and tested at any time. The fact that material is used on the basis of a Certificate of Compliance shall not relieve the Contractor of responsibility for incorporating material in the work which conforms to the requirements of the plans and specifications and any such material not conforming to such requirements will be subject to rejection whether in place or not.
- C. The Contracting Agency reserves the right to refuse to permit the use of material on the basis of a Certificate of Compliance.
- D. The form of the Certificate of Compliance and its disposition shall be as directed by the Engineer.

106.06 CITED SPECIFICATIONS

- A. The Nevada Department of HighwaysTransportation has developed test methods for testing the quality of materials and work. These test methods are identified by the prefix Nev. followed by the serial number. Copies of individual test methods are available at the Materials <a href="https://doi.org/10.1007/enable-
- B. Whenever a reference is made in the specifications to a test method by Nev. or Cal. number, it shall mean the test method in effect on the date of the advertisement for bid.
- C. Whenever a reference is made in the specifications to a specification or test designation either of the American Society of Testing and Materials ASTM International, the AASHTO, Federal specifications, or any other recognized national organization, and the number or other identification accompanying the test designation representing the year of adoption or latest revision of the test is omitted, it shall mean the test method in effect on the date of advertisement for bid.
- D. When requested by the Engineer, the Contractor shall furnish, without charge, samples of all materials entering into the work, and no material shall be used prior to approval by the Engineer, except as provided in Subsection—106.05, "Certificate of Compliance." Samples of material from local sources shall be taken by or in the presence of the Engineer; otherwise, the samples will not be considered for testing.

106.07 PLANT INSPECTION

- A. The Engineer may inspect the production of material or the manufacture of products at the source of supply. The Contractor and material producer shall assure the Engineer of their cooperation and assistance to perform plant inspection prior to production of materials for the project. The Engineer or histhe Engineer's authorized representative shall have free entry at all times to such parts of the plant as concerns the manufacture or production of the materials. Adequate facilities shall be furnished free of charge to make the necessary inspection.
- B. It is understood that the Contracting Agency reserves the right to retest all materials prior to incorporation into the work which have been tested and accepted at the source of supply after the same have been delivered and to reject all materials which, when retested, do not meet the requirements of these specifications, or the requirements of the contract documents.

106.08 STORAGE OF MATERIALS

- A. Materials shall be so stored as to <u>assureensure</u> the preservation of their quality and fitness for the work. When considered necessary by the Engineer, <u>they materials</u> shall be stored in waterproof buildings, placed on wooden platforms or other hard, clean surfaces, and not on the ground, and shall be covered when directed.
- B. Stored materials, even though approved for use before storage, may be inspected prior to their use in the work, and they-materials shall meet the requirements of the specifications at the time of this proposed use. Stored materials shall be located so as to facilitate their prompt inspection.
- C. Upon approval of the Engineer, that portion of the right-of-way not required for public travel may be used for storage purposes and for placing of the Contractor's plant and equipment, but any additional space required therefor <u>mustshall</u> be provided by the Contractor at <u>his expenseno additional cost to the Contracting Agency</u>. Private or public property shall not be used for storage purposes without written permission of the owner or lessee.
- D. All storage sites shall be restored to their original condition by the Contractor at his expense no additional cost to the Contracting Agency. This shall not apply to the stripping and storing of top soil or to other material salvaged from the work or specifically prescribed under the specifications. Construction materials may not be stored in streets, roads, or highways for more than five (5)_days after unloading. All materials or equipment not installed or used in the construction within five (5)_days after unloading shall be stored elsewhere by the Contractor at his expense no additional cost to the Contracting Agency unless hethe Contractor is authorized additional storage time.
- E. Construction equipment shall not be stored at the work site before its actual use on the work nor for more than five (5) days after it is no longer needed on the work unless hethe Contractor is authorized additional storage time. Time necessary for repair or assembly of equipment may be authorized by the Engineer.
- F. Excavated material, except that which is to be used as backfill in the adjacent trench, may not be stored in public streets, roads, or highways unless otherwise permitted. After placing backfill, all excess material shall be removed immediately from the site.

106.09 HANDLING MATERIALS

- A. All materials shall be handled in such manner as to preserve their quality and fitness for the work.
- B. Aggregates shall be transported from the storage site to the work in tight vehicles so constructed as to prevent loss or segregation of materials after loading and measuring in order that there may be no inconsistencies in the quantities of materials intended for incorporation in the work as loaded, and the quantities as actually received at the place of operation.

106.10 GUIDANCE ANALYSIS OF NONCOMPLYING MATERIALS

A. In the event of a non-compliance of a produced or placed material, the Source and/or Contractor is responsible for the submitting of a recommendation report to the Engineer for the determination of the basis of acceptance of the material by the Engineer based on AASHTO R-9, this section, and/or other industry practices as approved by the Engineer. This report must shall be performed by a Nevada Professional Engineer. The receiving of

- the report by the Agency Engineer does not imply acceptance of the report recommendations.
- B. The policy of the Engineer is that a project mustshall have been constructed "... in reasonably close conformity with the approved plans and specifications..." to be eligible for full payment of the material and installation. However, there will be instances when test results, as a result of the above noted variability may indicate apparent nonconformance to the specification limits, yet the construction product may be acceptable for the use intended at full or reduced pay. In these cases, an analysis of the materials and/or materials test results will be necessary by the Contractor through a Pprofessional Fengineer before payment is made.
- C. As a general guidance and Uunless stipulated in other specification sections or contract sSpecial pProvisions, there are no exact rules which can be applied to the acceptance at full pay or the acceptance at some reduced pay for any specific construction product since the final analysis should be based on equitable payment for the value of the product. However, as a general guidance, if more than ten (10)—percent of the test values for any construction product are outside of the applicable specifications, there may be a question of "reasonably close conformity." In these cases, an analysis of the test values should be made to determine the magnitude and extent of the nonconforming materials.

D.For more detailed information on this subject, refer to Federal Highway Administration report number FHWA-RD-02-095 "Optimal Procedures for Quality Assurance Specifications"

106.11 CONTRACTING AGENCY FURNISHED MATERIAL

- A. The Contractor shall furnish all materials required to complete the work, except those specified to be furnished by the Contracting Agency. Material furnished by the Contracting Agency will be delivered or made available to the Contractor at the points specified in the Special Provisions.
- B. The cost of handling and placing all materials after they are deliverfurnished to the Contractor shall be considered as included in the contract price for the item in connection with which they are used.
- C. The Contractor will be held responsible for all material deliverfurnished to himthe Contractor, and deductions will be made from any money due to himthe Contractor to make good any shortages and deficiencies, from any cause whatsoever, and for any damage which may occur after such delivery and for any demurrage charges. The responsibility by the Contractor includes any project inspection and testing that is required per the Uniform Standard Sin these specifications.

SECTION 107

LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

107.01 LAWS TO BE OBSERVED

A. The Contractor shall keep fully informed of all federal and state laws, all local bylaws, ordinances, and regulations, and all orders and decrees of bodies or tribunals having jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. HeThe Contractor shall at all times observe and comply with all such laws, bylaws, ordinances, regulations, orders, and decrees, and shall protect and indemnify the Contracting Agency and its representative against any claim or liability arising from or based on the alleged violation of any such law, bylaw, ordinance, regulation, order, or decree, whether by himselfthe Contractor, or histhe Contractor's employees, or agents.

107.02 PERMITS, LICENSES, AND TAXES

A. The Contractor shall obtain all permits and licenses, and give all notices necessary and incident to the due and lawful prosecution of the work, including vehicular registration or prorate registration and carrier licensing as applicable. Privilege taxes are in addition to the above fees.

107.03 PATENTED DEVICES, MATERIALS, AND PROCESSES

A. If the Contractor employs any design, device, material, or process covered by letters of patent or copyright, hethe Contractor shall provide for such use by suitable legal agreement with the patentee or owner. The Contractor and the surety shall indemnify and save harmless the Contracting Agency, and affected third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright, and shall indemnify the Contracting Agency for any costs, expenses, and damages which <a href="https://example.com/ttps://e

107.04 RESTORATION OF SURFACES OPENED BY PERMIT

- A. The right to construct or reconstruct any utility service in the public right-of-way, or to grant permits for same, at any time, is hereby expressly reserved by the Contracting Agency or the proper authorities of the municipality or other political subdivision in which the work is done and the Contractor shall not be entitled to any damages either for the digging up of the street or for any delay occasioned thereby.
- B. Any individual, firm, or corporation wishing to make an opening in the highway or street must secure a permit from the proper authority. The Contractor shall allow parties bearing such permits, and only those parties, to make openings in the highways or streets. The Contractor shall, when ordered by the Engineer, make in an acceptable manner, all necessary repairs due to such openings, and such necessary work will be paid for as extra work, or as provided in these specifications, and will be subject to the same conditions as original work performed.
- C. The Contracting Agency, the Contractor, and each of such workmen, contractors, and others, shall coordinate their operations and cooperate to minimize interference.

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- D. The Contractor shall absorb in histhe Contractor's bid all costs involved in-on-histhe Contractor's work with others. The Contractor will not be entitled to additional compensation from the Contracting Agency for damages resulting from such simultaneous, collateral, and essential work. If necessary to avoid or minimize such damage or delay, the Contractor shall redeploy histhe Contractor's work force to other parts of the work.
- E. Should the Contractor be delayed by the Contracting Agency, and such delay could not reasonably have been foreseen and prevented by the Contractor, the Engineer will determine the extent of the delay, the effect of the delay on the project as a whole, and recommend to the Board any time extension indicated.

107.05 BLANK:

107.06 SANITARY PROVISIONS

A. The Contractor shall provide and maintain in a neat, sanitary condition, such accommodations for the use of histhe-Contractor's employees as may be necessary to comply with the requirements and regulations of the Southern Nevada Health- District Board of Health- and of other bodies or tribunals having jurisdiction thereover. He_The-Contractor shall commit no public nuisance.

107.07 TRAFFIC AND ACCESS

- A. The Contractor's operations shall cause no unnecessary inconvenience. The access right of the public shall be considered at all times. Unless otherwise authorized, traffic shall be permitted to pass through the work, or an approved detour shall be provided.
- B. Safe and adequate pedestrian and vehicular access shall be provided and maintained to fire hydrants, commercial and industrial establishments, churches, schools, parking lots, service stations, motels, fire and police stations, hospitals, and establishments or of similar nature. Access to these facilities shall be continuous and unobstructed unless otherwise approved by the Engineer.
- C. Safe and adequate pedestrian zones and pedestrian crossings of the work at intervals not exceeding 300 feet shall be maintained unless otherwise approved by the Engineer.
- D. Safe and adequate access shall be maintained to existing bus or transit stops throughout duration of road construction in accordance with the following minimum requirements:
 - 1. Unless otherwise specified in the Special Provisions, no public bus or transit stop shall be temporarily closed without the written consent of the Regional Transportation Commission of Southern Nevada (RTC) Director General Manager or histhe RTC General Manager's designee. The RTC shall be notified at least 10 working days prior to the proposed temporary closure of any bus or transit stop, including those listed in the Special Provisions.
 - 2. No bus stops at transfer points shall be closed during construction. Bus stops at transfer points can, however, be temporarily relocated with the approval of the RTC Director or his designee.
 - 3. If bus or transit stop is temporarily relocated, the existing bus or transit stop sign panels shall be relocated to temporary bus or transit stops and shall remain until temporary stop is removed. Temporary relocation of sign panels shall conform to Subsection -627.03.05, "Relocation."

LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

- 4. The Contractor shall maintain access which that is in conformance to the requirements of the Americans with Disabilities Act to and from bus or transit stops which remain open at all times during construction.
- E. Vehicular access to residential driveways shall be maintained to the property line except when necessary construction precludes such access for reasonable periods of time. If backfill has been completed to such extent that safe access may be provided, and the street is opened to local traffic, the Contractor shall immediately clear the street and driveways and provide and maintain access.
- F. The Contractor shall cooperate with the various parties involved in the delivery of mail and the collection and removal of trash and garbage to maintain existing schedules for these services.
- G. Grading operations, roadway excavation, and fill construction shall be conducted by the Contractor in a manner to provide a satisfactory surface for traffic. When rough grading is completed, the roadbed surface shall be brought to a smooth, even condition satisfactory for traffic.
- H. Unless otherwise authorized, work shall be performed in only one half the roadway at one time. One half shall be kept open and unobstructed until the opposite side is ready for use. If one half a street only is being improved, the other half shall be conditioned and maintained as a detour.
- I. The Contractor shall absorb in histhe Contractor's bid all costs for the above requirements.
- J.Construction materials may not be stored in streets, roads, or highways for more than five (5) days after unloading. All materials or equipment not installed or used in the construction within five (5) days after unloading shall be stored elsewhere by the Contractor at his expense unless he is authorized additional storage time.
- K.Construction equipment shall not be stored at the work site before its actual use on the work nor for more than five (5) days after it is no longer needed on the work. Time necessary for repair or assembly of equipment may be authorized by the Engineer.
- L.Excavated material, except that which is to be used as backfill in the adjacent trench, may not be stored in public streets, roads, or highways unless otherwise permitted. After placing backfill, all excess material shall be removed immediately from the site.
- J. The Contractor shall comply with all applicable state, county, and city requirements for closure of streets. Traffic work zone technicians on the project shall be certified in the work zone traffic control at least at the "Technician" level by ATSSA, IMSA, or NICET. HeThe Contractor shall provide barriers, guards, lights, signs, temporary bridges, flagmen, and watchmen, advising the public of detours and construction hazards. HeThe Contractor shall also be responsible for compliance with additional public safety requirements which that may arise during construction. HeThe Contractor shall furnish and install, and upon completion of the work, promptly remove all temporary signs and warning devices.
- K. At least forty-eight (48)—hours in advance of closing, or partially closing, or of reopening, any street, alley, or other public thoroughfare, the Contractor shall notify the Police, Fire, Traffic and Engineering Departments having jurisdiction and comply with their requirements, and notify the Regional Transportation Commission of Southern Nevada. Deviations must shall first be approved in writing by the Engineer.

L. All costs involved shall be absorbed in the Contractor's bid. All barricades, warning signs, lights, temporary signals, and other protective devices must_shall conform with the Traffic Control Plans for Highway Work Zones for the Clark County Area and the current edition of the Manual fonr Uniform Traffic Control Devices.

107.08 RELATIONS WITH RAILROADS

- A. **Definitions:** The following definitions shall apply to the terms as herein used:
 - 1. **Railroad:** The railway or railroad company whose tracks are crossed or whose property is adjacent to the work or upon whose property the work is performed.
 - 2. **Chief Engineer:** The Chief Engineer of the railroad or his the Chief Engineer's authorized representatives.
 - 3. Railroad Crossing: A crossing at grade of the tracks of a railroad and the highway.
 - 4. **Grade Separation:** A permanent structure to <u>affect_effect_the</u> separation of grade between the highway and the railroad.

B. Work or Operations:

- 1. Work or operations on grade separations, railroad crossings, or upon railroad property shall be subject to inspection by the Chief Engineer and shall be conducted and performed in a manner satisfactory to the Chief Engineer.
- Construction operations shall be so arranged and conducted as to insureensure safe and uninterrupted operation of the railroad traffic. The Contractor shall be responsible for any damages which result either directly or indirectly from the Contractor's operations.
- 3. The Contractor shall notify the Chief Engineer in writing, at least forty-eight (48) _hours before starting any work in the proximity of the tracks, setting forth specifically the time at which it is planned to start such work.
- 4. Unless otherwise provided, the Contractor shall not pile or store any material, or park or use Contractor's equipment closer than ten (10) feet from the centerline of the tracks.
- The track zone shall be kept clean of all loose material or debris at all times. The Contractor shall be responsible for any fouling of railroad ballast resulting from sandblasting and painting operations and shall reimburse the railroad for the replacement of all ballast so fouled.
- 6. In advance of any blasting, the Contractor shall notify the Chief Engineer in order that proper flagging protection may be provided by the railroad. Excavations in the proximity of the tracks shall be sheeted in a manner satisfactory to the Chief Engineer and plans therefor shall be submitted to and approved by <a href="https://hief.chief.com/hief.c
- 7. The Contractor shall make arrangements with the railroad for crossing railroad tracks at locations other than existing public crossings and shall bear all costs relative thereto.
- 8. The Contractor shall submit detail plans of falsework and of forms for track spans and piers or abutments to the Chief Engineer and no work thereon shall be commenced unless and until such plans have been approved by the Chief Engineer. Falsework plans thus approved shall not be deviated from without permission of the Chief Engineer. The temporary vertical and horizontal clearances specified by the

Chief Engineer in approving the plans shall be maintained at all times. In the case of impaired vertical clearances above the top of rail, the railroad shall have the option to install telltales, or other such protective devices the railroad deems necessary, for the protection of trainmen or rail traffic.

- 9. The Contractor shall comply with the rules and regulation of the railroad with respect to the Contractor's work or operation on or adjacent to railroad property. The Contractor shall arrange with the railroad for the services of such qualified railroad employees as the Chief Engineer may prescribe to protect and safeguard the railroad's property, engines, trains, and cars. The costs incurred for the services of such railroad employees as may be prescribed by the Chief Engineer for necessary safeguard and protection and the costs of installing telltales or other protective devices in the case of impaired vertical clearance, shall be borne by the Contractor without expense to the Contracting Agency or railroad. Payment for such services, including compensation, insurance, vacation and holiday time, railroad retirement and unemployment taxes, health and welfare, accounting and billing charges, may be paid by the Contracting Agency directly to the railroad and the amount thereof shall be deducted by the Contracting Agency from money due or which may become due the Contractor under the awarded contract. Rates of pay for qualified railroad employees will be the railroad's rates for the various classes of labor customarily used and in effect at the time the work is performed. The Contractor's reimbursement for personnel and protective devices required as set forth herein shall be considered as included in the contract unit prices bid for other items of work.
- 10. Upon completion of the work covered by the awarded contract to be performed by the Contractor upon railroad's property, the Contractor shall promptly remove from the railroad's property all tools, equipment, and other materials, whether brought upon said property by the Contractor or any subcontractor, and shall cause said property to be left in a clean and presentable condition.

C. Work or Operations Performed by Railroad:

- The railroad may undertake certain work or operations incident to the project which are the subject of an agreement between the Contracting Agency and the railroad. Details of such work or operations will be set forth in the Special Provisions and the Contractor shall discuss such items with the Chief Engineer in order to develop a plan whereby the Contractor and the railroad accomplish the work or operations in their logical sequence and order.
- 2. Movement or adjustment of telephone, telegraph, or signal facilities owned, operated, or maintained by the railroad and not otherwise provided for on the plans or in the Special Provisions shall be at the cost and expense of the Contractor.
- D. **Insurance:** The Contractor shall provide and maintain during the effective life of the awarded contract such special or additional insurance as is required by Subsection 107.11, "Responsibility for Damage Claims," herein. The Contractor shall furnish such evidence as may be required that such insurance has been provided.
- E. **Qualification:** As a prerequisite to award, the Contractor shall be satisfactory as to responsibility to perform work upon the railroad's property.
- F. **Reference:** The provisions of Subsections 624.03.02, "Flaggers," and 624.03.03, "Pilot Cars," Subsection 107.11, "Responsibility for Damage Claims," and the Special Provisions shall inure directly to the benefit of the railroad.

107.09 LIABILITY INSURANCE

A. Contractor's Public Liability and Property Damage Liability Insurance:

- 1. The Contractor shall provide and maintain during the effective life of the awarded contract, regular Contractor's Public Liability and Property Damage Liability Insurance, the limits for which may be set by the Special Provisions to protect the Contractor and all of the Contractor's construction subcontractors from claims for personal injury, accidental death, and damage to property, which may arise from operations under said contract, whether such operations be by the Contractor or by such subcontractor or by anyone directly or indirectly employed by either of them. The Successful Bidder shall furnish the Contracting Agency a policy or certificate of liability insurance in which the Contracting Agency shall be named insured or be named as an additional insured with the Contractor. The Successful Bidder shall also furnish a Certificate of Workman's Compensation Insurance, Nevada Industrial Commission.
- Whenever construction operations covered under said contract are to be performed upon or in proximity to railroad property, the Contractor's Public Liability and Property Damage Insurance shall provide for limits of coverage not less than specified in the Railroad Protective Insurance Endorsement appended to the Special Provisions.
- 3. The Contractor shall furnish the Contracting Agency with one (1)_certified copy of all insurance required under this paragraph.

B. Railroad's Protective Public Liability and Property Damage Insurance:

- In all cases where construction operations covered by the awarded contract are to be performed upon or adjacent to the property of the railroad, the Contractor shall furnish evidence to the Contracting Agency that, with respect to the operations the Contractor or any of the Contractor's subcontractors perform, the Contractor has provided for and in favor of the railroad a policy of Public Liability and Property Damage Insurance, to which is attached an endorsement, in the same form and with the same limits of coverage as the Railroad Protective Insurance Endorsement appended to the Special Provisions.
- 2. **General.** The insurance required under paragraph (b) above Such insurance shall apply only to that portion of the project upon or adjacent to the railroad property.
- 3. Railroad's Protective Public Liability and Property Damage Insurance shall be subject to approval by the railroad before any work is commenced on or adjacent to the railroad property.
- 4. Such insurance shall be carried, and the premiums therefor paid by the Contractor until all work required to be performed under the terms of said contract is satisfactorily completed as evidenced by the formal acceptance of the Contracting Agency and thereafter until all said tools, equipment, and materials have been removed from the property of the railroad and such property left in a clean and presentable condition. The insurance shall be non-cancelable and non-alterable for any cause whatsoever (including failure to pay premiums) either by the Contractor or by the insurance company without 30 days' written notice to the railroad and the Contracting Agency. In the event such insurance is canceled as herein provided, the Contractor shall provide other insurance, subject to the same conditions as provided herein, which shall be effective as of the day of such cancellation and cover the unexpired period of the term herein required. The Contractor shall furnish

the Contracting Agency at the time of execution of said contract, 3 copies of each policy to which is attached an endorsement the same as the Railroad Protective Insurance Endorsement appended to the Special Provisions. Two copies of each of such policies shall be forwarded by the Contracting Agency to the Chief Engineer for the railroad's approval.

107.10 EXPLOSIVES

- A. Explosives may be used only when authorized in writing by the Engineer, or as otherwise stated in the Special Provisions. Explosives shall be handled, used, and stored in accordance with all applicable regulations.
- B. The Engineer's approval of the use of explosives shall not relieve the Contractor from histhe Contractor's liability for claims caused by histhe Contractor's blasting operations.
- C. All explosives shall be stored in a secure manner in compliance with all laws and ordinances, and all such storage places shall be clearly marked. Where no local laws or ordinances apply, storage shall be provided satisfactory to the Engineer and in general not closer than 1,000 feet (300 meters) from the road or from any building or camping area or place of human occupancy.
- D. The Contractor shall notify each public utility company having structures or pipelines in proximity to the site of the work of histhe Contractor's intention to use explosives. Such notice shall be given in writing a week in advance to enable the companies to take such steps as they may deem necessary to protect their property from injury.

107.11 RESPONSIBILITY FOR DAMAGE CLAIMS

- The Contractor shall indemnify and save harmless the Contracting Agency, its officers, Α. and its employees, from all suits, actions, claims, losses, or expenses of any character brought because of any injuries or damages alleged to have been received or sustained by any person, persons, or property on account of the operations of the Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any claims or amount recovered under the "Nevada Industrial Insurance Act," or any other law, ordinance, order, or decree; and so much of the money due the Contractor under and by virtue of his the contract as may be considered necessary by the Contracting Agency for such purpose, may be retained for the protection of the Contracting Agency; or in case no money is due, histhe Contractor's surety may be held until all such suits, actions, claims, losses, or expenses for the injuries or damages as aforesaid shall have been settled and suitable evidence to that effect furnished to the Contracting Agency; except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that hethe Contractor is adequately protected by public liability and property damage insurance.
- B. Reimbursement to the Contractor by the Contracting Agency in whole or in part for costs of protecting traffic shall not serve to relieve the Contractor of <a href="https://histor.org/histor.com/h
- C. The Contractor guarantees the payment of all just claims for materials, supplies, and labor, and all other just claims against himthe Contractor or any subcontractor, in accordance with this contract.

107.12 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE

- A. The Contractor shall be responsible for the preservation from injury or damage resulting directly or indirectly from the work under histhe contract of all public and private property, crops, trees, vegetation, monuments, fences, highway signs and markers, etc., along and adjacent to the project, and shall use every precaution necessary to prevent damage to water-lines, sewers, and other underground structures, to poles, wires, cables, and other overhead structures, whether shown on the plans or not, shall protect carefully from disturbance or damage all land monuments and property marks until the Engineer has witnessed or otherwise referenced their location, and shall not remove them until directed. The Contractor shall not willfully or maliciously injure or destroy trees or shrubs, and hether trees or shrubs without proper authority.
- B. HeThe Contractor shall be responsible for all damage or injury to property of any character during the prosecution of the work resulting from any act, omission, neglect, or misconduct in histhe Contractor's manner or method of executing said work, or at any time due to defective work or materials, and such responsibility shall not be released until the project shall have been completed and accepted.
- C. The Contractor shall be responsible for the preservation of archeological and paleontological objects, including all ruins, sites, buildings, artifacts, fossils, or other objects of antiquity encountered during construction. When such objects are encountered, the Contractor shall immediately cease operations and notify the Engineer that such objects exist. Construction operations shall be rescheduled to avoid the section until the removal of the artifacts or the gathering of historical data has been accomplished by the appropriate authority. When directed by the Engineer, the Contractor shall excavate the site in such a manner as to preserve the artifacts encountered and shall remove them for delivery to the custody of the proper authorities. Such excavation will be considered and paid for in accordance with Subsection 104.03, "Extra Work."
- D. Extension of contract time will be allowed for any delay to the Contractor due to preservation of archeological and paleontological objects.
- E. When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect or misconduct in the execution of the work, or in consequence of the non-execution thereof on the part of the Contractor or https://www.nisthe.contractors agents, suppliers, or subcontractors, hethe Contractor shall restore at his expense no additional cost to the Contracting Agency such property to a condition similar or equal to that existing before such damage or injury was done by repairing, rebuilding, or otherwise restoring as may be directed, or hethe Contractor shall make good such damage or injury in an acceptable manner. In case of failure on the part of the Contractor to restore such property or make good such damage or injury within ten_10_days, the Contractor <a href="https://www.nisthe.contractors.contractor
- F. The Contractor shall restrict the movement of histhe Contractor's vehicles and other construction equipment and personnel to the construction area and designated roads. Every precaution shall be taken to prevent the marking of the natural ground with equipment tracks or other means outside of the staked area and in median areas where it is not required to disturb the existing ground. Where such markings of the natural ground are caused either by the Contractor's equipment, personnel, or operations, the Contractor,

- at his own expenseno additional cost to the Contracting Agency, shall eradicate such marks to the satisfaction of the Engineer.
- G. All roads <u>used for construction operations shall be spaced at least 1,000 feet apart from</u> flat bottom ditches and material deposits shall be spaced at least 1,000 feet (300 meters) apart, except that such roads may also be located in ditch and dike areas. When roads are located in ditch and dike areas, equipment shall not be allowed to travel outside the area to be occupied by said ditch or dike, except as provided for in Subsection 203.03.123, "Channels." The crossing of median areas shall be at structures or areas approved by the Engineer.
- H. Where there is a high potential for erosion and subsequent water pollution, the area of erosive land that may be exposed by construction operations at any one time shall be held to a minimum, and the duration of the exposure of the uncompleted construction to the elements shall be as short as practicable. Erosion control features shall be constructed concurrently with other work and at the earliest practicable time.
- I. Disturbance of the lands and of waters that are outside the limits of the construction as staked is prohibited, except as may be found necessary and approved by the Engineer.

107.13 FIRE PROTECTION

A. There shall be no open burning unless approval has been given in writing by the Clark County Air Pollution Control Officer and the Engineer has concurred in by the Engineer. Before setting any fires whatsoever, the Contractor shall notify the responsible agency having jurisdiction for the area concerned. The Engineer shall have authority to enforce correction of any condition which is, in histhe Engineer's opinion, unsafe.

107.14 DISPOSAL OF MATERIAL OUTSIDE PROJECT RIGHT-OF-WAY

- A. The Contractor shall make his the Contractor's own arrangements for disposal of materials outside the project right-of-way and he shall pay all costs involved at no additional cost to the Contracting Agency.
- B. When any material is to be disposed of outside the project right-of-way, the Contractor shall first obtain a written permit from the property owner on whose property the disposal is to be made, and <a href="heterocolor: bedding: heterocolor: bedding: b
- C. When material is disposed of as above provided and the disposal location is visible from the project, the Contractor shall dispose of the material in a neat and uniform manner to the satisfaction of the Engineer.
- D. Unless otherwise provided in the Special Provisions, full compensation for all costs involved in disposing of material as specified in this section, including all costs of hauling, shall be considered as included in the price paid for the contract items of work involving such materials and no additional compensation will be allowed therefore.

107.15 RELIEF FROM MAINTENANCE AND RESPONSIBILITY

A. Upon the written request of the Contractor, or upon order of the Engineer, the Contractor may be relieved of the duty of maintaining and protecting certain portions of the work as described below, which have been completed in all respects in accordance with the requirements of the contract and to the satisfaction of the Engineer, and thereafter except

with histhe Engineer's consent, the Contractor will not be required to do further work thereon. In addition, such action by the Engineer will relieve the Contractor of responsibility for injury or damage to said completed portions of the work resulting from use by the public traffic or from the action of the elements or from any other cause, but not from injury or damage resulting from the Contractor's own operations or from histhe-Contractor's negligence.

- B. Portions of the work for which the Contractor may be relieved of the duty of maintenance and protection as provided in the above paragraph include but are not limited to the following:
 - 1. A bridge or other structure of major importance.
 - 2. A complete unit of a traffic control signal system or of a highway or street lighting system.
 - 3. Non-project facilities constructed for other agencies.
- C. However, nothing in this subsection providing for relief from maintenance and responsibility will be construed as relieving the Contractor of full responsibility for making good defective work or materials found at any time before the formal written acceptance of the entire project by the Contracting Agency.

107.16 CONTRACTOR'S RESPONSIBILITY FOR THE WORK AND MATERIALS

- A. Until the acceptance of the contract, the Contractor shall have the charge and care of the work and of the materials to be used therein (including materials for which hethe Contractor has received partial payment as provided in Subsection 109.06, "Partial Payments," or materials which have been furnished by the agency) and shall bear the risk of injury, loss, or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work, except as provided in Subsection_107.15, "Relief from Maintenance and Responsibility."
- B. The Contractor shall rebuild, repair, restore, and make good all injuries, losses, or damages to any portion of the work or the materials occasioned by any cause before its completion and acceptance and shall bear the expense thereof, except as otherwise expressly provided in Subsection_203.03.101, "Slides and Slip-outs," and Subsection_619.05.01, "Payment," for Object Markers and Guide Posts, and except for such injuries, losses, or damages as are directly and proximately caused by acts of the federal government or the public enemy. The Contractor shall, at his expense no additional cost to the Contracting Agency, provide suitable drainage for the project and erect such temporary structures as are necessary to protect the work or materials from damage.
- C. The suspension of the work from any cause whatever shall not relieve the Contractor of histhe Contractor's responsibility for the work and materials as herein specified. If ordered by the Engineer, the Contractor shall, at his expense no additional cost to the Contracting Agency, properly store materials which have been fully or partially paid for and furnished by the Contracting Agency. Such storage by the Contractor shall be on behalf of the Contracting Agency and the Contracting Agency shall at all times be entitled to the possession of such materials, and the Contractor shall promptly return the same to the site of the work when requested. The Contractor shall not dispose of any of the materials so stored except on written authorization from the Engineer.

107.17 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICE

- A. At points where the Contractor's operations are adjacent to properties of railroad, telegraph, telephone, and power companies, or are adjacent to or in conflict with other property or utilities, damage to which might result in considerable expense, loss, or inconvenience, work shall not be commenced until all arrangements necessary for the protection thereof have been made.
- B. The Contractor shall not begin any operations which may interfere with or impair the normal service being rendered by public or private utility operations, until such operators have been notified, and shall cooperate with the owners of any underground or overhead utilities in their removal and rearrangements operations in order that these operations may progress in a reasonable manner, and that duplication of rearrangements work may be reduced to a minimum, and that services rendered by those parties will not be unnecessarily interrupted. The Contractor will be held responsible for the protection of the property of public or private utilities within the limits of the work.
- C. In general, the repair and adjustment of street structures such as water-lines, sewers, telephone, telegraph, gas, and electric lines, above or below the ground, will be made by the owners thereof as specified in Subsection—105.06, "Cooperation with Utilities, Paragraph 11." When included in the proposal, the adjustment of sewer manhole frames and covers, inlets and catch basin frames and covers and the like, will be within the Contractor's responsibility. The Contractor shall see that they are adjusted to conform to the lines, grades, and typical cross sections as shown on the plans, or as prescribed, without respect to whether the repairs and the roughing-in work have been performed by the Contractor or others.
- D. Pipes or other construction shall be maintained in continuous service as far as practicable and shall be properly protected and supported. In no case shall interruption of the water service be allowed to exist outside of working hours.
- E. Fire hydrants shall be accessible at all times to the fire department. No material or other obstruction shall be placed closer to a fire hydrant than permitted by ordinances, rules, or regulations, or within 15 feet (4.6 meters) of the fire hydrant in the absence of such ordinances, rules, or regulations.
- F. The Contractor shall give notice in writing to the proper authorities in charge of streets, gas, water pipes, sewer lines, electric, and other conduits, railroads, poles, manholes, catch basins, and all other property that may be affected by the Contractor's operations, at least forty-eight (48) hours before breaking ground.
- G. In the event of interruption to water or utility services as a result of accidental breakage, the Contractor shall promptly notify the proper authority. He The Contractor shall cooperate with said authority in the restoration of service as promptly as possible.
- H. Attention is directed to Subsection- 105.06, "Cooperation with Utilities."

107.18 FURNISHING RIGHT-OF-WAY

A. The Contracting Agency will be responsible for the securing of all right-of-ways shown in the plans. Any exceptions will be indicated in the contract.

107.19 PERSONAL LIABILITY OF PUBLIC OFFICIALS

A. In carrying out any of the provisions of these specifications or in exercising any power or authority granted to them by or within the scope of the contract, there shall be no liability

upon the officers or employees of the Contracting Agency, either personally or as officials of the County or Municipality, it being understood that in all such matters they act solely as agents and representatives of the Political Subdivision.

107.20 NO WAIVER OF LEGAL RIGHTS

Α. The Contracting Agency shall not be precluded or estopped by any measurements, estimate, or certificate made either before or after the completion and acceptance of the work and payment therefor, from showing the true amount and character of the work performed, and materials furnished by the Contractor, nor from showing that any such measurement, estimate, or certificate is untrue or is incorrectly made, nor that the work or materials do not in fact conform to the contract. The Contracting Agency shall not be precluded or estopped, notwithstanding any such measurement, estimate, or certificate. and payment in accordance therewith, from recovering from the Contractor or histhe Contractor's sureties, or both, such damages as it may sustain by reason of his the Contractor's failure to comply with the terms of the contract. Neither the acceptance by the Contracting Agency, or any representative of the Contracting Agency, nor any payment for or acceptance of the whole or any part of the work, nor any extension of time, nor any possession taken by the Contracting Agency, shall operate as a waiver of any portion of the contract or of any power herein reserved, or of any right to damages. A waiver of any breach of the contract shall not be held to be a waiver of any other or subsequent breach.

107.21 DUST CONTROL

- A. Dust that originates from the Contractor's operations, either inside or outside the right-of-way, shall be controlled at all times by the Contractor in accordance with Federal, State, and local laws, ordinances, and regulations at the sole expense of the Contractor.
- B. A permit from the Clark County Air Pollution Officer shall be obtained by the Contractor prior to the start of construction operations.
- C. Reference is made to Section- 637, "Pollution Control."

107.22 VIBRATORY EQUIPMENT OPERATIONS

A. All construction activities involving vibratory equipment shall be conducted by the eContractor on a performance basis. The eContractor may be required to conduct impact assessment tests of their Contractor's vibratory equipment prior to initiation or during construction. The frequency and amplitude of the vibratory equipment shall be calibrated and used to measure ground velocity for conformance to the current regulatory limit of 0.5 inch per second peak ground velocity at the nearest affected structure. The measurements shall comply with the recommendations of the "Office of Surface Mining, Blasting Guidance Manual, published in 1987 by the Office of Surface Mining and Enforcement."

SECTION 108

PROSECUTION AND PROGRESS

108.01 SUBLETTING OF CONTRACT

- A. If the bidder intends to sublet any portion of the work, hethe-bidder shall furnish a list of the subcontractors as a material part of histhe-bidder's sealed proposal on the form provided, listing a description of the work to be performed by each subcontractor. If the bidder does not intend to sublet any part of the work, hethe-bidder shall insert the word "NONE" on the form provided. In the event that the prospective bidder fails to complete the subcontractor's list, either with the insertion of histhe-bidder's proposal shall be rejected without consideration. The Contractor shall not sublet, sell, transfer, assign, or otherwise dispose of the contract or contracts or any portion thereof, or of histhe-Contractor's right, title, or interest therein, without prior written consent of the Contracting Agency and of the surety.
- B. Requests for permission to sublet, assign, or otherwise dispose of any portion of the contract shall be in writing and accompanied by a letter showing that the organization which will perform the work is particularly experienced for such work.
- C. Consent to sublet, assign, or otherwise dispose of any portion of the contract shall not be construed to relieve the Contractor of <u>histhe Contractor's</u> liability under the contract and bonds.
- D. All subcontractors and assignees of the prime or general Contractor shall be required to comply with the provisions of NRS 408.910373, NRS Chapter 338, and all other applicable federal, state, and local laws or regulations in the same manner as the Pprime or General Contractor.
- E. Contract bid prices will prevail for purposes of computing the monetary value of all subcontracts.
- F. The Contractor shall perform with his the Contractor's own organization, unless otherwise authorized by the Special Provisions, work amounting to not less than twenty-five (25) percent of the combined value of all items of the work covered by the contract except as follows:
 - 1. Should the Contractor elect to furnish materials for work to be performed by an approved subcontractor, and the materials are not obtained from the same firm that is to perform the work of incorporating <u>saidthese</u> materials into the project, the cost of <u>saidthe</u> materials, when set forth in a written statement accompanying the subcontract agreement or contained therein, will be excluded from amounts applicable to the subcontracted percentage.
- G. When a firm both sells materials to a Contractor and performs the work of incorporating the materials into the project, these two phases of work must necessarily be considered a single subcontract.
- H. Roadside production of materials is construed to be the production of crushed stone, gravel, or other material with portable or semi-portable crushing, screening, or washing plants, established or reopened in the vicinity of the work for the purpose of supplying materials to be incorporated into the work on a designated project or projects. Roadside production of materials shall be considered subcontracting if performed by other than the Contractor.

I. The Contracting Agency will not recognize any subcontractor on the work as a party to the contract. Nothing contained in any subcontract shall create any contractual relation between the subcontractor and the Contracting Agency. The Contractor will be held responsible for the progress of the work in accordance with the contract progress required.

108.02 NOTICE TO PROCEED

- A. The successful bidder agrees to conform to the following which shall govern the physical Notice to Proceed for this project:
 - 1. Authorization to commence actual physical work shall be issued by the Contracting Agency.
 - 2. The authorization to proceed shall be given verbally to the successful bidder. The Contracting Agency shall confirm this authorization in writing.
 - 3. The verbal authorization to proceed shall have an actual start date for physical work to commence and a scheduled completion date.
 - 4. After the verbal Notice to Proceed has been issued by the Contracting Agency, failure of the successful bidder to commence work by the actual start date shall be grounds for breach of contract.
- B. A "MATERIAL NOTICE TO PROCEED" Material Notice to Proceed may be issued by the Contracting Agency subject to the same conditions as items 1, 2, and 3 of the pPhysical Notice to Proceed requirements. The maximum time allowed for acquisition of materials shall be the number of calendar days specified in the contract after verbal authorization has been given by the Contracting Agency.
- C. At the successful bidder's option, hethe successful bidder may elect to start work during the "MATERIAL NOTICE TO PROCEED" Material Notice to Proceed time. If the successful bidder elects to commence physical work prior to the calendar days of the "MATERIAL NOTICE TO PROCEED" Material Notice to Proceed expiration, the following shall apply:
 - Once the actual date the successful bidder elects to enter the project and commence physical work, the time allotted for "PHYSICAL WORK" Physical Work shall commence.
 - 2. No stop orders shall be issued due to lack of materials that have not arrived.
 - 3. Any time remaining under the calendar day "MATERIAL NOTICE TO PROCEED" Material Notice to Proceed shall expire automatically at the end of the last calendar day for physical work to be completed.

108.03 PROSECUTION AND PROGRESS

A. When required by the Engineer, the Contractor shall furnish the Engineer with a "Progress Schedule" for histhe Engineer's approval. The progress schedule may be used as the basis for establishing major construction operations and as a check on the progress of the work. The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the project in accordance with the plans and specifications within the time set forth in the Special Provisions. Should the prosecution of the work for any reason be discontinued, the Contractor shall notify the Engineer at least twenty-four (24)_hours in advance of resuming operations.

108.04 LIMITATION OF OPERATIONS

- A. The Contractor shall conduct the work in such a manner and in such sequence as will assureensure the least interference with traffic. HeThe Contractor shall have due regard to the location of detours and to the provisions for handling traffic. He The Contractor shall not open up work to the prejudice or detriment of work already started. The Engineer may require the Contractor to finish a section on which the work is in progress before work is started on any additional sections if the opening of such section is essential to public convenience.
- B. No productive work will be required on Saturdays, Sundays, or holidays unless otherwise provided for in the Special Provisions. If, however, the Contractor elects to work on such days, those days worked will be charged as working days. The Contractor shall give the Engineer notice of histhe Contractor's intention to work on the aforementioned days at least forty-eight (48)_hours in advance of such work. Holidays are defined in Subsection 101.2829, "Holidays." of these specifications.
- C. The Engineer is authorized to notify the Contractor in writing and require the Contractor to cease construction operations the day before, during, and the day after said holidays, or at any other time if the Contractor's operations are of such nature, the project is so located, or the traffic is of such volume that it is deemed expedient to do so.

108.05 CHARACTER OF WORKMEN; METHODS AND EQUIPMENT

- A. The Contractor shall at all times employ sufficient labor and equipment for prosecuting the several classes of work to full completion in the manner and time required by these specifications.
- B. Workmen shall have sufficient skill and experience to perform properly the work assigned to them. Workmen engaged in special or skilled work shall have sufficient experience in such work and in the operation of the equipment required to perform the work satisfactorily.
- C. Any person employed by the Contractor or by a subcontractor who, in the opinion of the Engineer, does not perform his the Contractor's or subcontractor's work in a proper manner or is intemperate or disorderly, shall, at the written request of the Engineer, be removed forthwith by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without the approval of the Engineer.
- D. Should the Contractor fail to remove such person or persons as required above, or fail to furnish suitable and sufficient personnel for the proper prosecution of the work, the Contracting Agency may suspend the work by written notice until such orders are complied with.
- E. All equipment which is proposed to be used on the work shall be of sufficient size and in such mechanical condition as to meet requirements of the work and to produce a satisfactory quality of work. Equipment used on any portion of the project shall be such that no injury to the roadway, adjacent property, or other improvement will result from its use.
- F. When the methods and equipment to be used by the Contractor in accomplishing the construction are not prescribed in the contract, the Contractor is free to use any methods or equipment that hethecontractor demonstrates to the satisfaction of the Engineer will accomplish the contract work in conformity with the requirements of the contract.

G. When the contract specifies that the construction be performed by the use of certain methods and equipment, such methods and equipment shall be used unless others are authorized by the Engineer. If the Contractor desires to use methods or types of equipment other than those specified in the contract, hethe Contractor may request authority from the Engineer to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed to be used and an explanation of the reasons for desiring to make the change. If approval is given, it will be on the condition that the Contractor will be fully responsible for producing work in conformity with contract requirements and with the concurrence of the Contracting Agency. If, after trial use of the substituted methods or equipment, the Engineer determines that the work produced does not meet contract requirements, the Contractor shall discontinue the use of the substituted method or equipment and shall complete the remaining construction with the specified methods and equipment. The Contractor shall remove the deficient work and replace it with work of specified quality, or take such other corrective action as the Engineer may direct. No change will be made in basis of payment for the construction items involved nor in contract time as a result of authorizing a change in methods or equipment under these provisions.

108.06 TEMPORARY SUSPENSION OF WORK

- B. In the event that a suspension of work is ordered as provided above, and should such suspension be ordered by reason of the failure of the Contractor to carry out orders or to perform any provision of the contract, or by reason of weather conditions being unsuitable for performing any item or items of work, which work, in the sole opinion of the Engineer, could have been performed prior to the occurrence of such unsuitable weather conditions had the Contractor diligently prosecuted the work when weather conditions were suitable, the Contractor, at <a href="https://doi.org/10.2007/nie.200
- C. In the event that a suspension of work is ordered by the Contracting Agency due to unsuitable weather conditions, and in the sole opinion of the Engineer, the Contractor has prosecuted the work with energy and diligence prior to the time that operations were suspended, the cost of providing a smooth, and unobstructed passageway through the work will be paid for as extra work as provided in Subsection-104.03, "Extra Work," or at the option of the Contracting Agency such work will be performed by the Contracting Agency at no cost to the Contractor.

- D. If the Engineer orders a suspension of all the work or a portion of the work which is the current controlling operation or operations, due to unsuitable weather or to such conditions as are considered unfavorable to the suitable prosecution of the work, the days on which the suspension is in effect shall not be considered working days as defined in Subsection-_101.7073, "Working Day." If a portion of work at the time of such suspension is not a current controlling operation or operations, but subsequently does become the current controlling operation or operations, the determination of working days will be made on the basis of the then current controlling operation or operations.
- E. If a suspension of work is ordered by the Contracting Agency, due to the failure on the part of the Contractor to carry out orders given to perform any provision of the contract, the days on which the suspension order is in effect shall be considered working days if such days are working days within the meaning of the definition set forth in Subsection _101.7073, "Working Day."
- F. In the event of a suspension of work under any of the conditions set forth in this section, such suspension of work shall not relieve the Contractor of <a href="https://histor.com/hist

108.07 PRECONSTRUCTION CONFERENCE

A. After the contract has been awarded and prior to commencing work, the Contracting Agency may designate a time and place satisfactory to the Contractor for a preconstruction conference. At such time the Engineer will outline detailed requirements to be followed in performance of the contract.

108.08 DETERMINATION AND EXTENSION OF CONTRACT TIME

- A. The contract time for completion will be fixed by the Contracting Agency, and will be stated in the Special Provisions, either as a calendar date, or based on a number of working days, or on a specified number of calendar days. Attention is directed to Subsection_101.7073, "Working Day."
- B. The Contractor shall perform the work in an acceptable manner within the time stated in the contract except that the contract time for completion may be adjusted as follows:
 - 1. If the satisfactory completion of the contract shall require performance of work in greater quantities than those set forth in the proposal, the time allowed for performance shall be increased in the same ratio as the final estimate bears to the original contract amount, except that the final monetary amount of any supplemental agreement or contract change order for which an extension of contract time was previously allowed shall be deducted from the final estimate prior to making the prorata time adjustment. The final monetary amount of supplemental agreements or contract change orders for which an extension of contract time has not been allowed will be included in the final estimate for making the pro-rata time adjustment. The amount for asphalt cements and liquid asphalts will not be considered in the original or the final estimates for determining time extensions.
 - 2. If delays beyond the Contractor's control are caused solely by action or inaction by the Contracting Agency, such delays will entitle the Contractor to an extension of time which will be based upon the effect of delays to the project as a whole and will not be granted for noncontrolling delays to minor included portions of work, unless it can be shown that such delays did, in fact, delay the progress of the product as a whole.

- 3. When delays occur due to unforeseen causes beyond the control and without the fault or negligence of the Contractor, including, but not restricted to acts of God, acts of the public enemy, acts of government agency, fires, floods, epidemics, strikes, and freight embargoes, the time for completion shall be extended an amount determined by the Contracting Agency to be equivalent to the delays; provided, however, written request for such extension of time is made by the Contractor within ten (10) calendar days after the beginning of such delay. No allowance shall be made for delay or suspension of the work due to fault of the Contractor.
- C. Certain critical materials such as steel, copper, aluminum, and bituminous products may be difficult to obtain due to a nationally recognized shortage or defense needs. The Contractor shall make every reasonable effort necessary to order and procure all such critical materials sufficiently in advance so as not to delay the completion of the project. Should a delay occur in obtaining critical materials that were properly ordered by the Contractor, the time for completion of the contract may be extended an amount determined by the Contracting Agency to be equivalent to the delay in project progress due to said delay in obtaining critical materials provided that:
 - 1. The delay in furnishing critical materials was due to defense needs or nationally recognized shortage.
 - 2. The Contractor furnishes evidence to the Engineer's satisfaction that hethecontractor had taken adequate steps for a guaranteed delivery date from histhecontractor's supplier.
 - 3. The evidence mustshall contain certification of adequate steps for a guaranteed delivery by not less than three (3) suppliers of the material or if three (3) suppliers are not available, the Contractor shall so certify and supply certification from such suppliers as there are.
 - 4. That the Contracting Agency does not find a source when notified of the shortage by the Contractor.
 - 5. That the Contractor obtains such material from the first source available after such certification.
- D. The contract time shall begin as set forth in Subsection_108.02, "Notice to Proceed." When the final acceptance has been duly made by the Engineer as prescribed in Subsection_105.16, "Final Acceptance," the daily time charge shall cease.

108.09 FAILURE TO COMPLETE THE WORK ON TIME

- A. Time is an essential element of the contract and it is important that the work be pressed vigorously to completion. The cost to the Contracting Agency of the administration of the contract, including engineering, inspection, and supervision will be increased as the time occupied in the work is lengthened. The public is subject to detriment and inconvenience when full use cannot be made of a project.
- B. Should the Contractor fail to complete the work within the time agreed upon in the contract or within such extra time as may have been allowed by increases in the contract or by formally approved extensions granted by the Contracting Agency, there shall be deducted from any money or amounts due or that may become due the Contractor, the sum set forth in the Special Provisions for each day the work shall remain uncompleted. This sum shall be considered and treated not as a penalty but as liquidated damages due the Contracting Agency from the Contractor by reason of inconvenience to the public, added cost of engineering and supervision, and other items which have caused an expenditure

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- of public funds resulting from <u>histhe Contractor's</u> failure to complete the work within the time specified in the contract.
- C. Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the Contracting Agency of any of its rights under the contract.
- D. The Contracting Agency may waive such portions of the liquidated damages as may accrue after all work is completed, except "Final Clean-Uup" and seeding gravel pit and borrow areas and haul roads.

108.10 DEFAULT AND TERMINATION OF CONTRACT

- A. If for any cause whatsoever, the Contractor fails to carry on the work in an acceptable manner, the Contracting Agency will give notice in writing to the Contractor and histhe-contractor's surety of such delay, neglect, or default. The Contractor shall be considered in default and the contract may be terminated if any of the following shall occur:
 - Fails to begin the work under the contract within the time specified in the Notice [∓]to Proceed, or
 - 2. Fails to perform the work with sufficient workmen and equipment or with sufficient materials to <u>assureensure</u> the prompt completion of <u>saidthe</u> work, or
 - 3. Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, or
 - 4. Discontinues the prosecution of the work, or
 - 5. Fails to resume work which has been discontinued after notice to do so, or
 - 6. Becomes insolvent or is declared bankrupt or commits any act of bankruptcy or insolvency, or
 - 7. Allows any final <u>judgement judgment</u> to stand against <u>himthe Contractor</u> unsatisfied for a period of <u>five (5)</u> days, or
 - 8. Makes an assignment for the benefit of creditors, or
 - For any other cause whatsoever, fails to carry on the work in an acceptable manner, the Engineer will give notice in writing to the Contractor and histhe Contractor's surety of such delay, neglect, or default.
- B. If the Contractor or surety, within a period of ten (10)—days after such notice, does not proceed in accordance therewith, then the Contracting Agency shall have full power and authority without violating the contract, to take the prosecution of the work out of the hands of the Contractor. The Contracting Agency may, at histhe Contracting Agency's option, call upon the surety to complete the work in accordance with the terms of the contract; or hethe Contracting Agency may take over the work, including any or all materials and equipment on the project as may be suitable and acceptable, and may complete the work by force account, or may enter into a new agreement for the completion of saidthe contract according to the terms and provisions thereof, or use such other methods as, in histhe Contracting Agency's opinion, will be required for the completion of saidthe contract in an acceptable manner.
- C. All costs and charges incurred by the Contracting Agency, together with the cost of completing the work under the contract, shall be deducted from any money due or which may become due said the Contractor. In case the expense so incurred by the Contracting

Agency shall be less than the sum which would have been payable under the contract if it had been completed by saidthe Contractor, then saidthe Contractor shall be entitled to receive the difference, and in case such expense shall exceed the sum which would have been payable under the contract, then the Contractor and histhe-contractor's surety shall be liable and shall pay to the Contracting Agency the amount of said excess.

108.11 TERMINATION OF THE CONTRACTOR'S RESPONSIBILITY

A. Whenever the improvement contemplated and covered by the contract shall have been completely performed on the part of the Contractor and all parts of the work have been approved and accepted by the Contracting Agency according to the contract, and the final estimate paid, the Contractor's obligations shall then be considered fulfilled, except as set forth in https://linear.com/his_the_Contractor's_contract_bond_and_as_provided_in_Subsection_107.11, "Responsibility for Damage Claims."

108.12 RIGHT-OF-WAY DELAYS

- A. The Contractor may be compensated for delays caused solely by the failure of the Contracting Agency to furnish necessary rights-of-way, failure to deliver materials shown on the contract documents to be furnished by the Contracting Agency, or for the suspension of the work by the Contracting Agency for its own convenience or benefit. If the Contractor sustains loss which could not have been avoided by the judicious handling of forces, equipment, or plant, there shall be paid to the Contractor such amount as the Engineer may find to be fair and reasonable compensation for such part of the Contractor's actual loss as was unavoidable.
- B. If performance of the Contractor's work is delayed as the result of the failure of the Contracting Agency to acquire or clear right-of-way, an extension of time determined pursuant to the provisions of Subsection—108.08, "Determination and Extension of Contract Time," will be granted.

108.13 TERMINATION OF CONTRACT

- A. The Contracting Agency may, upon 30 days' written notice, terminate the contract or a portion thereof.
- B. When contracts, or any portion thereof, are terminated before completion of all items of work in the contract, payment will be made for the actual number of units or items of work completed at the contract unit price, or as mutually agreed for items of work partially completed or not started. No claim for loss of anticipated profits shall be considered.
- C. Reimbursement for organization of the work (when not otherwise included in the contract) and moving equipment to and from the job will be considered where the volume of work completed is too small to compensate the Contractor for these expenses under the contract unit prices, the intent being that an equitable settlement will be made with the Contractor.
- D. Acceptable materials, obtained by the Contractor for the work, that have been inspected, tested, and accepted by the Contracting Agency and that are not incorporated in the work may, at the option of the Engineer, be purchased from the Contractor at actual cost as shown by receipted bills and actual cost records, at such points of delivery as may be designated by the Contracting Agency.
- E. Termination of the contract or a portion thereof shall not relieve the Contractor's surety of its obligation for any just claims arising out of the work performed.

SECTION 109

MEASUREMENT AND PAYMENT

109.01 MEASUREMENT OF QUANTITIES

- A. The measurements and determination of the number of units of each pay item will be made in general as prescribed hereinafter and specifically as set out under "Method of Measurement" and "Basis of Payment" in the specification of each pay item.
- B. After the items of work are completed and before final payment is made, the Engineer will determine the quantities of the various items of work performed as the basis for final settlement for all other than lump sum contracts. In the case of unit price items, the Contractor will be paid for the actual amount of work performed and materials used in accordance with these specifications, as shown by the final measurements, unless otherwise specified.
- C. Actual authorized quantities of work satisfactorily completed under the contract, shall be measured by the Engineer in accordance with United States Standard Measures, and well recognized engineering practices. Unauthorized wastings of material will be deducted and only such quantities as are actually incorporated in the completed work will be included in the final estimate. The planimeter shall be considered an instrument of precision adapted to the measurement of areas, but other acceptable methods may be used.
- D. Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures having an area of nine (9) square feet (1 square meter) or less. Unless otherwise specified, transverse measurements for area computation will be the neat dimensions shown on the plans or ordered in writing by the Engineer.
- E. In computing volumes of excavation, embankment, and borrow, the average end area method will be used unless otherwise specified.
- F. All items which that are measured by the linear foot such as pipe culverts, underdrains, guardrails, etc., shall be measured parallel to the base or foundation upon which such structures are placed, unless otherwise shown on the plans.
- G. Items may be measured by surface area, either square foot or square yard (square meter). The term "gage" when used in connection with the measurement of plates, shall mean the U.S. Standard Gage. When reference is made, however, to the measurements of galvanized sheets used in the manufacture of corrugated metal pipe, metal plate pipe culverts and arches, and metal cribbing, the term "gage" shall mean that specified in the respective test designation for the material as described in the "Materials" section of these specifications.
- H. When the term "gage" refers to the measurement of wire, it shall mean the wire gage specified in the AASHTO—Designation—M_-32 for cold drawn steel wire for concrete reinforcement.
- I. Unless otherwise specified, water meters shall be accurate to within two (2)_percent of the indicated amount. The frequency of checking water meters will be determined by the Engineer.
- J. The term ton shall mean the short ton consisting of two thousand (2,000) pounds avoirdupois (metric ton of 1,000 kilograms, 2205 pounds). All materials which that are

specified for measurement by ton shall be weighed on accurate, approved scales set at locations designated by the Engineer. All materials shall be weighed on platform scales with the following exception: In lieu of platform scales, the Contractor may provide an automatic printer system whichthat will print the weights of the material delivered, provided the system is used in conjunction with an approved automatic batching control system. Such a system shall issue a weigh ticket for each load. The Contractor shall have on hand not less than ten (10) fifty (50)-pound (20 kilograms) standards weights for testing the scales.

K. Scales:

- 1. All scales shall be furnished by and at the expense of the Contractor and shall have a certificate of inspection by the Bureau of Weights and Measures. The scales shall be tested and inspected by the Bureau of Weights and Measures and a new inspection certificate required as often as the Engineer may deem necessary, and after each scale move, in order to insureensure the accuracy of the scales. The cost of inspecting the scales shall be borne by the Contracting Agency.
- 2. Platform scales shall be of sufficient size and capacity to weigh, in one operation, the entire loaded vehicle. Combination vehicles may be weighed as separate units, provided the connecting device between vehicles is so constructed that no weight other than that of the device itself is transmitted to either vehicle. When combination vehicles are used, approaches to and from the scale platform shall be level for sufficient distance to accommodate that portion of the combination vehicle that is off the scale platform. In instances where combination vehicles are weighed, the approaches to and from the scale platform mustshall be level with the scale platform for a minimum distance of fifty (50) feet (15 meters) from each end of the scale platform.
- 3. If combination vehicles are utilized, provisions mustshall be made to insureensure that all braking devices are disengaged during weighing operations as insurance against stresses being transmitted between either vehicle.
- 4. The scale pit mustshall be of sufficient width to permit access to all scale components for purposes of inspection, repair, cleaning, and adjusting.
- 5. Support members for platform scales shall consist of twelve by twelve inch (12" X 12")12-inch by 12-inch or six by sixteen inch (6" X 16")6-inch by 16-inch (minimum) timbers placed on a firm gravel foundation. Scales consisting of more than one section shall be supported with twelve by twelve inch (12" X 12")12-inch by 12-inch or six by sixteen inch (6" X 16")6-inch by 16-inch (minimum) timbers at each end of each section to avoid settlement of the scale platform. Concrete support members conforming to the minimum timber size requirements may be utilized in lieu of timber at the Contractor's option.
- 6. Platform scales shall be equipped with weatherproof housing so constructed as to protect the recording device and permit the weighmaster convenient access to all beams and dials. The housing shall not be less than six (6) feet (1.8 meters)6 feet wide, eight (8) feet (2.4 meters)8 feet long, and seven (7) feet (2.1 meters)7 feet high,; and shall have two2 windows, adjustable for ventilation with one facing the scales,; and shall be equipped with an adequate shelf suitable to the Engineer. The Contractor shall provide heat and electric lights when requested by the Engineer.
- 7. Conveyor scales of an approved type may be used. The conveyor scales shall be furnished with one (1) master counter to run continuously and one (1) remote

counter which will print the weight in individual loads, then reset to zero automatically. The remote unit shall be placed in a weatherproof house with two (2) windows. One (1) window shall face the point of loading and the conveyor scales. This window shall also be equipped with a shelf two (2) feet (0.6 meters) 2 feet wide and six (6) feet (1.8 meters) 6 feet long. A controlled method of heating shall be supplied for cold weather operations.

- 8. A locked door shall be provided on the access to the conveyor balances (where fine adjustment must be made). tThe key toshall be in the hands of the Engineer and tothe door shall be opened only for maintenance and adjustment of conveyor scales to meet the accuracy of the platform scales. This door shall be locked at all times during the operation of the conveyor scales. If conveyor weighing equipment is used, the following procedures shall be followed:
 - a. The conveyor scales shall be calibrated against the platform scales, which must shall have a certificate of inspection.
 - b. At the beginning and middle of each shift, or as requested by the Engineer, two2-consecutive loads of material weighed over the conveyor scales shall be reweighed on the platform scales. The total weight indicated by the conveyor scales on the two-2 loads mustshall check with the platform scale weight within one half of one 0.5 percent. If the conveyor scales weigh out of this tolerance, all loads shall be weighed on the platform scales until the condition is rectified.
 - c. Consecutively numbered, individual weigh tickets <u>mustshall</u> be used with conveyor scale weights stamped by the remote counter.
- L. Unless otherwise specified, materials shipped by rail shall be weighed over the authorized project scales before incorporation into the work.
- M. Cement will be measured by the barrel or ton—(kilogram). The term "barrel" will mean three hundred seventy-six (376)—pounds of cement.
- N. Timber will be measured by the thousand feet board measure (Mfbm) actually incorporated in the structure with no allowance for any waste except beveled ends. Measurement will be based on nominal widths and thicknesses, and the extreme length of each piece.
- O. When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.
- P. All materials for which measurements are obtained by the cubic yard "loose measurement" or "measured in the vehicle" shall be hauled in approved vehicles and measured therein at the point of delivery. No allowance will be made for the settlement of material in transit. Vehicles for this purpose may be of any size or type acceptable to the Engineer, provided that the body is of such shape that the actual delivered contents may be readily and accurately determined and will remain constant. Unless all approved vehicles on the work are of uniform capacity, each vehicle must hall bear a plainly legible identification mark, indicating its specified approved capacity. All vehicles must hall be loaded to at least waterlevel capacity. Loads not hauled in approved vehicles or of a quantity less than the specified approved quantity for the hauling vehicle will be subject to rejection and no compensation will be allowed for the hauling of the material.
- Q. Liquid Asphalts, Asphalt Cement, and Asphaltic Emulsions:

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- 1. The unit of measurement for liquid asphalts, asphaltic emulsions, and paving asphalts shall be a ton (kilogram) or gallon (liter) at 60 degrees F. (15.5 degrees Celsius).
- Quantities of bituminous binders wasted or disposed of in a manner not called for under these specifications, or remaining on hand after completion of the work, will not be paid for.
- 3. When permitted by the Engineer, pay quantities of bituminous binder may be determined from volumetric measurements of the bituminous binder, in which case the bituminous binder shall be delivered in calibrated tanks and each tank shall be accompanied by its proper measuring stick and a calibration card signed by a sealer of weight and measures, and pay quantities shall be determined in accordance with the following procedure.
- 4. Volumetric measurements at any temperature shall be reduced to the volume the material would occupy at sixty (60)—degrees F. (15.5 degrees Celsius), before converting the volumetric measurements to weight.
- 5. The following tables shall be used to convert volumes from gallons to weight. All types, SC, MC, and RC of the same grade shall be considered to have equal weights and volume.

AVERAGE WEIGHTS AND VOLUMES OF LIQUID ASPHALT AT 60 DEGREES FAHRENHEIT (15.5 DEGREES CELSIUS)

Grade of	Gallons	Liters	Pounds	Kilogram
Liquid Asphalt	Per Ton	Per Metric Ton	Per Gallon	Per Liter
70	253	1054	7.90	0.94
250	249	1036	8.03	0.96
800	245	1020	8.16	0.98
3000	241	1003	8.30	1.00

AVERAGE WEIGHTS AND VOLUMES OF LIQUID ASPHALT AT 60 DEGREES FAHRENHEIT

Grade of Liquid Asphalt	Gallons Per Ton	Pounds Per Gallon
<u>70</u>	<u>253</u>	<u>7.90</u>
<u>250</u>	<u>249</u>	<u>8.03</u>
<u>800</u>	<u>245</u>	<u>8.16</u>
<u>3000</u>	<u>241</u>	<u>8.30</u>

AVERAGE WEIGHTS AND VOLUMES OF ASPHALT CEMENT AT 60 DEGREES FAHRENHEIT (15.5 DEGREES CELSIUS)

Grade	Gallon	Liters	Pounds	Kilograms
	Per Ton	Per Metric Ton	Per gallon	Per Liter
AC-40	233	991	8.59	1.03
AC-30	235	980	8.51	1.02
AC-20	235	980	8.51	1.02
AC-10	237	990	8.43	1.01

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AVERAGE WEIGHTS AND VOLUMES OF ASPHALT CEMENT AT 60 DEGREES FAHRENHEIT

<u>Grade</u>	Gallon Per Ton	Pounds Per Gallon
AC-40	<u>233</u>	<u>8.59</u>
AC-30	<u>235</u>	<u>8.51</u>
AC-20	<u>235</u>	<u>8.51</u>
<u>AC-10</u>	<u>237</u>	<u>8.43</u>

AVERAGE WEIGHTS AND VOLUMES OF ASPHALTIC EMULSION AT 60 DEGREES FAHRENHEIT (15.5 DEGREES CELSIUS)

Type of	Gallon	Liters	Pounds	Kilograms
Emulsion	per Ton	Per Metric Ton	Per Gallon	Per Liter
All Grades	240	1,000	8.33	1.00

AVERAGE WEIGHTS AND VOLUMES OF ASPHALTIC EMULSION AT 60 DEGREES FAHRENHEIT

Type of Emulsion	Gallon Per Ton	Pounds Per Gallon
All Grades	240	8.33

- 6. When converting the volume of liquid asphalt, asphalt cement, or asphaltic emulsion at any temperature to the -volume of sixty (60) degrees F., a conversion factor for correlation shall be used. Said conversion factors shall be those prescribed in The Asphalt Institute (Pacific Coast Division) publication "Asphalts -- Paving Liquids and Emulsions" (PCD-7).
- R. Rental of equipment will be measured by time within one-half (1/2) hour of actual working time and necessary traveling time of the equipment within the limits of the project. If equipment has been ordered on the job on a standby basis by the Engineer, half-time rates for the equipment will be paid.
- S. When equipment has been ordered by the Engineer in connection with force account work, travel time and transportation to the project will be measured as hereinafter outlined: For the use of equipment moved in on the work and used exclusively for extra work paid for on a force account basis, the Contractor will be paid the rental rates listed in the Special Provisions or determined as provided in Subsection_-109.03, "Extra and Force Account Work," and for the cost of transporting the equipment to the location of the work and its return to its original location, all in accordance with the following provisions:
 - 1. The original location of the equipment to be hauled to the location of the work shall be agreed to by the Engineer in advance.
 - 2. The Contracting Agency will pay the costs of loading and unloading such equipment.
 - 3. The cost of transporting equipment in low bed trailers shall not exceed the hourly rates charged by established haulers.
 - 4. The rental period shall begin at the time the equipment is unloaded at the site of the extra work, shall include each day that the equipment is at the site of extra work, excluding Saturdays, Sundays, and legal holidays unless the extra work is

performed on such days, and shall terminate at the end of the day on which the Engineer directs the Contractor to discontinue the use of such equipment. The rental time to -be paid per day will be in accordance with the following:

Hours Equipment Is In Operation	Hours To Be Paid
0	4
0.5	4.25
1	4.5
1.5	4.75
2	5
2.5	5.25
3	5.5
3.5	5.75
4	6
4.5	6.25
5	6.5
5.5	6.75
6	7
6.5	7.25
7	7.5
7.5	7.75
8	8
Over 8	Hours In Operation

- a. When hourly rates are listed, less than thirty (30)—minutes of operation shall be considered to be one-half (1/2)—hour of operation.
- b. When daily rates are listed, payment for ene-half (1/2)-day will be made if the equipment is not used. If the equipment is used, payment will be made for ene-1 day.
- 5. Should the Contractor desire the return of the equipment to a location other than its original location, the Contracting Agency will pay the cost of transportation in accordance with the above provisions, provided such payment shall not exceed the cost of moving the equipment to the work.
- 6. Payment for transporting and loading and unloading equipment as above provided will not be made if the equipment is used on the work in any other way than upon extra work paid for on a force account basis.
- 7. Material wasted or disposed of in a manner not called for under the contract, material not unloaded from the transporting vehicle, material placed outside of the limits indicated or given on the plans, or material remaining on hand after completion of the work will not be paid for except as otherwise provided.

109.02 SCOPE OF PAYMENT

A. Unless otherwise provided under "Basis of Payment," payments to the Contractor will be made for the actual quantities of contract items performed in accordance with the plans and specifications, and if, upon completion of the construction, these actual quantities

show either an increase or decrease from the quantities given in the bid schedule, the contract unit prices will still prevail, except as provided in Subsection_-109.04, "Eliminated Items," and Subsection_104.02, "Increased or Decreased Quantities and Change in Character of Work." Except as provided in Subsection_107.16, "Contractor's Responsibility for the Work and Materials," the Contractor shall accept the compensation, as herein provided, in full payment for the following:

- 1. The work complete, including all supervision, labor, material, tools, equipment, and incidentals necessary for all work contemplated and embraced under the contract;
- 2. Any loss or damage to the nature of the work, the action of the elements, strikes or lockouts:
- 3. Accidents to employees or the public, or both;
- 4. Unforeseen difficulties or obstructions—which_that may arise or be encountered during the prosecution of the work;
- 5. All risks whatsoever connected with the work under contract until it is accepted by the Contracting Agency.
- 6. All expenses incurred by or in consequence of, the suspension or discontinuance of the prosecution of the work as herein specified, and in completing the work and the whole thereof, including the carrying out of all the requirements of these "general requirements and covenants" in an acceptable manner according to the plans and specifications.
- B. If the "Basis of Payment" clause in the specifications relating to any unit price in the bid schedule required the said unit price cover and be considered compensation for certain work or material essential to the item, this same work or material will not also be measured or paid for under any other pay item except as provided for in Subsection _104.05, "Rights in and Use of Materials Found oin the Work."
- C. The payment of any partial estimate or of any retained percentage, except by and under the approved final estimate and voucher, in no way shall affect the obligation of the Contractor to repair or renew any defective parts of the construction or to be responsible for all damages due to such defects.
- D. In case of a lump sum contract, when required by the Special Provisions or requested by the Contracting Agency, the Contractor shall submit to the Contracting Agency within fifteen (15)_days after award of contract, a detailed schedule in triplicate, to be used only as a basis for determining progress payments on a lump sum contract or any designated lump sum bid item. This schedule should equal in total the lump sum bid and shall be in such form and sufficiently detailed as to satisfy the Contracting Agency that it correctly represents a reasonable apportionment of the lump sum.

109.03 EXTRA AND FORCE ACCOUNT WORK

- A. Extra work shall be paid for in accordance with the accepted contract change order. Work specified in the order to be performed at agreed unit prices shall be paid for in the same manner as proposal items.
- B. When extra work paid for on a force account basis is performed by forces other than the Contractor's organization, the Contractor shall reach agreement with such other forces as to the distribution of the payment by the Contracting Agency for such work.
- C. Specialized Work:

- Whenever the Contractor is required to perform originally unanticipated work of a specialized nature (electrical, plumbing, landscaping, etc.,) for which hethe Contractor is not properly equipped, hethe Contractor may upon approval of the Contracting Agency have the work performed by a local firm or specialist who is proficient in the type of work to be performed.
- 2. Payment for this work shall be the Contractor's actual cost as evidenced by copies of invoices from the person or firm who performed the work. To the Contractor's actual cost shall be added the sum of ten (10) percent for the Contractor's profit and overhead with no further compensation therefor.
- D. **Owner-Operators:** Whenever the Contractor is authorized by the Contracting Agency to utilize bona_fide owner-operators on Force Account work, payment shall be at the lump sum rate shown on the Contractor's payrolls which include wages and equipment rental. To this lump sum rate shall be added the sum of ten_(10)_percent for the Contractor's profit and overhead with no further compensation therefor.
- E. Work specified and performed on a force account basis should be paid for as follows:

1. Labor:

- a. Contractor will be paid the cost of labor for the workmen (including foremen when authorized by the Engineer), used in the actual and direct performance of the work. The cost of labor, whether the employer is the Contractor, subcontractor, or other forces, will be the sum of the following:
 - Actual Wages Plus Vacation Pay: The actual wages paid, plus vacation pay, which shall not includinge any employer payments to, or on behalf of, workmen for health and welfare, pension, and similar purposes.
 - 2) **Labor Surcharge:** To the actual wages, plus vacation pay, as defined above, will be added a labor surcharge set forth in the <u>sSpecial pP</u>rovisions, which labor surcharge shall constitute full compensation for all payments imposed by <u>Sstate</u> and <u>Ffederal laws</u>.
 - 3) **Fringe Benefits:** All other payments made to or on behalf of the workmen as required by collective bargaining agreements, or as otherwise provided in the <u>sS</u>pecial <u>pP</u>rovisions.
 - 4) **Subsistence and Travel Allowance:** Subsistence and travel allowance paid to such workmen as required by collective bargaining agreements.
- b. To the total of the direct costs computed above, there will be added a markup of twenty (20) percent.
- 2. **Materials:** For materials accepted by the Engineer and used in the work, the Contractor shall receive the actual cost of such materials, to which cost shall be added an amount equal to fifteen (15) percent of the sum thereof.

3. Equipment:

a. For any machinery or special equipment, the use of which has been authorized by the Engineer, the Contractor will be paid for the use of equipment at rental rates for such equipment which shall be determined as follows:

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- 1) The base rates shall be those established in publications and revisions thereto entitled "Rental Rate Blue Book for Construction Equipment, Volumes 1-3," published by EquipmentWatch, a division of PRIMEDIA Business Magazines and Media, a PRIMEDIA company, which is a part of the contract.
- 2) The hourly rate to be paid shall be the sum of the weekly Blue Book rate divided by forty (40)_plus the estimated operating cost per hour shown therein.
- 3) Attachments (e.g., tractor with ripper and dozer or tractor with loader and backhoe) will be included in the hourly rate only when deemed essential to the work as determined by the Engineer. When multiple attachments are approved for use and are being used interchangeably, the attachment having the higher rental rate shall be the only one included for payment.
- 4) The total established rental rate per hour shall be rounded to the nearest ten (10) cents.
- 5) Rental rates shall not be adjusted for regional differences.
- 6) No compensation shall be allowed for shop tools having a daily rental rate of less than ten (10)—dollars as set forth in Section—18 of the Rental Rate Blue Book.
- b. If it is deemed necessary by the Engineer to use equipment not listed in the Rental Rate Blue Book, a suitable rental rate for such equipment will be established by the Engineer based on the rate of a comparable model or unit. The Contractor may furnish any cost data which that might assist the Engineer in the establishment of such rental rate including an adequate description, trade or manufacturer's name, model, capacity, horsepower, years of manufacture, and purchase price.
- c. Payment will be made for actual time, to which rental sum of fifteen (15) percent shall be added.
- d. The rental rates paid as above provided shall include the cost of fuel, oil lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance and all incidentals, but not labor costs for the operation of the equipment.
- 4. **Supervision and Tools:** No additional allowance shall be made for general superintendents, the use of small tools, or other costs for which no specified allowance is herein provided.
- 5. **Records:** At the end of each day the Contractor's representative and the Engineer shall compare records of the cost of the work to be done as ordered on a force account basis.

6. **Documentation:**

a. Labor: No payment will be made for labor performed on force account work until the Contractor shall furnish to the Contracting Agency certified copies of payrolls covering that period when the force account work was performed. The payrolls shall indicate name, classification, dates, daily hours, and hourly rate for each workman employed on the force account work.

b. **Materials:** Copies of the suppliers invoices, including transportation charges, shall be furnished the Contracting Agency. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of invoices, the Contractor shall furnish an affidavit certifying that such materials were taken from histhe-contractor's stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor. The Contracting Agency may request additional documents to substantiate histhe-contractor's claims.

109.04 ELIMINATED ITEMS

A. Should any items contained in the proposal be found unnecessary for the proper completion of the work, the Contracting Agency may, upon written order to the Contractor, eliminate such items from the contract, and such action shall in no way invalidate the contract. When https://example.com/attentation-not/ Contractor is notified of the elimination of items, hethe Contractor will be reimbursed for actual work done and all costs incurred, including mobilization of materials prior to said notification.

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109.06 PARTIAL PAYMENT

- A. The Engineer will, after award of contract, establish a monthly progress bill submittal date. Each month, the Contractor will make an approximate measurement of the work performed to that date, estimate its value based on the contract unit prices and/or approved schedule of values, and submit a progress bill on that date. The quantities and value estimates mustshall have the concurrence of the Engineer and the billing mustshall include supporting documentation such as material receipts and storage verifications. In accordance with NRS-_338.525, the Engineer may withhold from a progress payment, with timely notice and a detailed explanation, a sufficient amount to compensate for failure(s) by the Contractor to comply with a contract requirement or applicable building code, law_or regulation.
- B. Monthly certified payroll records must_shall be submitted as required by NRS_338.070. If the record submittals scheduled for the previous month have not been received, the Contracting Agency may withhold funds in accordance with NRS_338.060 and NRS 338.515.
- C. From each progress bill submittal, ten (10) percent will be deducted and retained by the Contracting Agency, and the remainder less the amount of all previous payment(s) will be paid to the Contractor. After fifty (50) percent of the work has been completed and if progress on the work is and remainsing satisfactory, the deduction to be made from the remaining progress billing submittals and from the final payment may be reduced or eliminated by the Contracting Agency.
- D. The Contracting Agency shall pay to the Contractor at the end of each quarter the interest earned on the amount retained under the contract during the quarter as provided in NRS 338.515.
- E. The Contracting Agency's payment to the Contractor shall be made no later than 30-days after the receipt of an approved progress bill or retainage bill. Interest shall be paid on late payments as provided in NRS- 338.530.

- F. Partial payments may be made to the extent of the delivered cost of materials to be incorporated in the work, provided that such materials meet the requirements of the Contract, plans, and specifications, and are delivered to acceptable sites on the project or at other sites in the vicinity that are acceptable to the Engineer. Such delivered costs of stored or stockpiled material may be included in the next progress bill submittal after the following conditions are met:
 - 1. The material shall have been stored or stockpiled in a manner acceptable to the Engineer, at the project site or a site approved by the Engineer.
 - 2. The Contractor shall have furnished the Engineer with acceptable evidence of the quantity and quality of such stored or stockpiled materials.
 - 3. The Contractor shall have furnished the Contracting Agency legal title (free of liens or encumbrances of any kind) to the material so stored or stockpiled.
 - 4. The Contractor shall have furnished the Contracting Agency evidence that the material so stored or stockpiled is insured against loss, due to damage or to disappearance of such materials, at any time prior to use in the work.
- G. Public Works Projects requiring a performance <u>bond</u> and <u>payment bond</u> and a labor and material <u>payment</u> bond shall be exempt from the provisions of (cF.3) and (dF.4) immediately <u>proceeding</u>. If materials are not specifically purchased for the work, but are taken from the Contractor's stock, then in lieu of invoices, there shall be submitted to the Engineer, statements accompanied by an affidavit of the Contractor, certifying such materials were taken from <u>histhe Contractor's</u> stock and the price and transportation claimed represent the actual cost to the Contractor.—
- H. It is understood and agreed that the transfer of title to, and the Contracting Agency's payment for such stored or stockpiled materials shall in no way relieve the Contractor of histhe Contractor's responsibility for furnishing and placing such materials in accordance with the requirements of the Contract, plans, and specifications.
- In no case shall the amount of a progress billing submittal for material on hand exceed the Contract price for such material nor the Contract price for the Contract item in which the material is intended to be used.
- J. The Contractor shall bear all costs associated with the progress payment of stored or stockpiled materials in accordance with the provisions of this <u>Ss</u>ubsection.

109.07 ACCEPTANCE AND FINAL PAYMENT

- A. When the final inspection and final acceptance have been duly made by the Engineer, as provided in Subsection 105.16, "Final Acceptance," and subject to the terms of Subsection 108.09, "Failure to Complete the Work on Time," the Contractor shall prepare the final estimate of the quantities of the various classes of work performed under the contract. The Engineer shall examine such estimate and notify the Contractor in writing of histhe Engineer's agreement or disagreement, including any amounts to be withheld in accordance with NRS 338.525.
- B. Final acceptance of the work by the Contracting Agency shall be withheld until the Contractor furnishes all certificates, guaranties, releases, certified payroll records, affidavits, etc., required by these specifications or the Special Provisions.
- C. The acceptance by the Contractor of final payment shall be and shall operate as a release to the Contracting Agency of all claims and all liability by the Contractor for all things done or furnished in connection with this work and for every act and neglect of the Contracting

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Agency and others relating to or arising out of this work. No payment, however, final or otherwise shall operate to release the Contractor or histhe Contractor's sureties from any obligations under this contract or the performance and labor and material payment bond.

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SECTION 110

WAGES, HOURS AND CONDITIONS OF EMPLOYMENT

110.01 WAGES, HOURS AND EMPLOYMENT PRACTICES

- A. The Contractor and histhe-contractor's subcontractors shall conform in all respects to the Federal Fair Labor Standards Act, as amended, and to Chapter-_338 of Nevada Revised Statutes pertaining to wages, hours, and employment on public works projects and shall forfeit amounts and be subject to fines set forth therein for noncompliance with the provisions of the statute.
- B. The Contractor shall pay for the overtime of all employees of the <u>c</u>ontracting <u>aAgency</u> who, as a result of the Contractor's operation, are required to perform inspections or testing beyond the normal hours of the established working day hours, and in accordance with Subsection_105.11, "Inspection."
- C. The Contractor will be billed at the base overtime rate, including fringe benefits, equipment costs, and administrative costs.
- D. Failure on the part of the Contractor to reimburse the Contracting Agency for these overtime costs, as described in this section, will result in retention monies being held until such time as full reimbursement is made.
- E. In no way shall the reimbursement of overtime costs of the Contracting Agency, as a result of the Contractor's operation, be intended to give authorization to the Contractor to perform normal work beyond the normal hours of the established working day hours as stated herein.

110.02 SAFETY REQUIREMENTS

A. The Contractor's construction materials, equipment, methods, and workmanship shall be in accordance with applicable local ordinances, State laws including the Industrial Safety, Nevada Occupational Safety and Hazard and Act, Nevada Industrial Commission, and federal requirements.

110.03 STATE MUSEUMS

- A. The <u>cC</u>ontractor <u>will be required to shall</u> comply with all provisions of Nevada Revised Statutes, Chapter 381, "State Museums," Section 17, as follows:
 - 1. All departments, commissions, boards, and other agencies of the State and its political subdivisions shall cooperate with the survey in order to salvage or preserve historic, pre-historic, or paleoenvironmental evidence located on property owned or controlled by the United States, the State of Nevada, or its political subdivisions.
 - 2. When any agency of the State or its political subdivisions is preparing or has contracted to excavate or perform work of any kind on property owned or controlled by the United States, the State of Nevada, or its political subdivisions which may endanger historic, prehistoric, or paleoenvironmental evidence found by the survey to be on the property or when any artifact, site, or other historic or pre-historic evidence is discovered in the course of such excavation or work, the agency or the contractor hired by the Aagency shall notify the survey and cooperate with the survey to the fullest extent practicable to preserve or permit study of such evidence before its destruction, displacement, or removal.

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- 3. The provisions of this <u>Ssection</u> shall be made known to all private contractors performing such excavation or work for any agency of the <u>Sstate</u> or its political subdivisions.
- 4. The <u>eC</u>ontractor shall also, immediately, report any historic, prehistoric, or paleoenvironmental evidence found on the site to the <u>ownerContracting Agency</u> or <u>owner's representative the Engineer.</u>

SECTION 111

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