CITY OF TOLEDO, OHIO

Department of Public Utilities
Division of Engineering Services

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PART 'A' - STANDARDS - 2016

Covering City of Toledo Projects and
Private Site Projects Approved by the
City of Toledo

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T A B L E O F C O N T E N T S

PART 'A' STANDARDS – 2016
Specifications

The 2013 State of Ohio Department of Transportation, "Construction and Materials Specifications", as amended to below, shall govern for City of Toledo Projects.

All materials and construction shall also be in accordance with the **2016** City of Toledo Construction Standards. **Standards can be viewed and downloaded from the City of Toledo website www.toledo.oh.gov under Dept. of Public Utilities> Division of Engineering Services> Contractor Resources.**

This document shall remain in effect unless updated by the City of Toledo.

ADDENDA TO THE 2013 STATE OF OHIO, DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS

The following item numbers correspond to designations listed in the State of Ohio Department of Transportation, "Construction and Materials Specifications".

101 DEFINITIONS AND TERMS

101.01 Add -

"The definitions and abbreviations as contained in these specifications shall be construed as hereinafter mentioned. Any references in these definitions in the State of Ohio Specifications to qualification of bidders, contractors or subcontractors is subject to the stipulations of this Proposal."

101.02 Add -

The following supercede the abbreviations contained in the State of Ohio, Department of Transportation Construction and Material Specifications:

DCA - City of Toledo Construction Engineer

DDD - Commissioner of the Division originating the contract, or his authorized representative.

101.03 Delete reference to ORC sections in the definitions of "Bidder", "Contract Bond", "Contractor", "Extra Work Contract", **"Questionaire"**, and "Subcontractor".

Delete Questionnaire.

Add -

"The following supersede the definitions contained in the State of Ohio, Department of Transportation Construction and Material Specifications:"

Department. City of Toledo.

Director. Director of department originating the contract, City of Toledo, or his duly appointed representative.

District. City of Toledo.

Engineer. City of Toledo Project/Construction Engineer

Inspector. An authorized representative of the Engineer.

Laboratory. The person or company designated to perform material tests, or other tests, by the Engineer.

State. City of Toledo acting through its authorized representative."

Add to the current definitions –

Bid Documents: "Part A Standards, Part B Bid Book."

Contract Documents: "Part A Standards, Part B Bid Book, Construction Plans, and any other document incorporated into the contract on the executed Contract forms."

102 BIDDING REQUIREMENTS AND CONDITIONS

102.05.C Add to second paragraph–

D. If test borings, test excavations, or other subsurface investigations have been made that are not part of the contract documents, copies of the soil report(s) will be on file at the office of the Division of Engineering Services, Toledo, Ohio, and may be viewed during the hours of 8:00 a.m. to 4:45 p.m., Monday through Friday, excluding all holidays. Said test information is not warranted to show the actual subsurface conditions.

Delete the last paragraph and replace with-

Should a question arise at any time during the examination of the bid documents or investigation of the site the bidder may seek clarification by submitting a pre-bid question. Submit all pre-bid questions in writing as specified in the City of Toledo Part B Bid Book, Notice to Bidders no. 3. Pre-bid questions should be submitted four (4) working days prior to the bid opening. The City of Toledo will not delay bid openings or guarantee answers to bid questions due to questions asked with less than 4 working days prior to bid opening.

102.06 Delete the last sentence in the first paragraph.

Delete the last sentence in the second paragraph.

102.07 Delete and replace the first sentence of the second paragraph with the following-

Failure to provide the required notification four (4) working days prior to opening of bids shall constitute a waiver by the Contractor and does not obligate the City of Toledo for any costs based upon any apparent or patent ambiguity arising from insufficient data or obvious errors in the bid documents.

102.09 Delete first paragraph and replace with –

No proposal will be considered unless accompanied by a Bid Guaranty and in an amount not less than the amount indicated in the proposal form made payable to the City of Toledo.

102.10 Delete the first three sentences and replace with –

Place each completed Proposal and the Proposal/Bid Guaranty in a sealed envelope.

102.11 Delete the last sentence and replace with -

A bidder may withdraw their bid, by written request, any time after the City receives the bid and before bid opening. A bidder may, by written request, withdraw their bid within 48 hours after bid opening, if there is reasonable proof that an inadvertent mistake was made and the correction cannot be determined with reasonable certainty.

If the Department suspects that the lowest bid contains a mistake, it may ask the bidder for written confirmation of its bid. The Department may permit a bidder alleging an inadvertent error to correct its bid, after opening, only if the mistake and the correction are clearly evident from the bid and the correction does not affect the amount of the bid or otherwise give the bidder an unfair competitive advantage.

102.14 Delete items (I) and (M).

103 AWARD AND EXECUTION OF CONTRACT

103.02 Delete and replace the first sentence of the first paragraph with -

The award of contract, if it be awarded, will be made within forty-five (45) calendar days after the opening of proposals to the lowest and best bidder whose proposal complies with all the requirements prescribed.

Delete the second paragraph.

103.05 Delete "in the amount of the Department's estimate" and replace with -

in an amount equal to the awarded contract amount.

103.06 Delete "notice of award" in the first sentence and replace with "being requested".

Delete "within 20 days" and replace with "within 45 days"

104 SCOPE OF WORK

104.02.C Delete.

104.02.D.2 Delete paragraph four and replace with the following –

When the increase in quantity or decrease in quantity of any unit price contract item does not exceed the limits set forth in Tables 104.02-2 and 104.02-3, there is no significant change in the character of the work and the change is considered a minor change.

Add-

Contingency quantities will not be included in the quantity change calculation used for the Unit price adjustment factors shown in Tables 104.02-2 and 104.02-3. In addition, quantity changes related to items that the decrease/increase is due to an exchange of quantities on similar work items (i.e. Catch Basin Adjusted to grade vs. Reconstructed to grade or Manhole Adjusted to grade vs. Reconstructed to grade), will not be considered for a price adjustment.

105 CONTROL OF WORK

105.02 Change the Title of this section to:

"Plans, Working Drawings and Submittals"

At the end of the third paragraph, add-

SUBMITTALS
All submittals shall be directed from the Contractor to the Project Engineer, unless otherwise specified. Direct submittals from subcontractors or suppliers will not be accepted.

All submittals shall reference the appropriate contract item, the Contractor's name, the contract title and location, and the date of submission.

a. Information for the Record

1. The Contractor shall submit to the Engineer a copy of all certificates, licenses, and permits required by Local, State, and Federal laws.

2. Material Certificates. shall be submitted for materials such as, topsoil, seed, tack, etc. The certificate shall state that the products have been sampled and tested in accordance with the proper industrial and governmental standards and meet the requirements of the Specifications.

3. Progress Schedules. See 108.03(A)

4. Pipe laying schedules shall be submitted to the Engineer.

5. Shop Drawings. The Contractor shall submit shop drawings for the Engineer's project file. The contractor shall be responsible for approving shop drawings from their suppliers. In addition, the Contractor shall indicate all variances, if any, from the contract documents.

b. Information for Review and Approval

1. Concrete, asphalt, or other material mix designs must be submitted to the Engineer for review and approval prior to use.

2. Samples. shall be provided as required in the specifications. Samples shall be of the precise material proposed to be furnished. The number of samples and sample size shall be of industry standard unless otherwise stated.

Add –

Record drawing markups: Contractor shall keep a record copy of all Specifications, Drawings, Addenda, Modifications, Shop Drawings and samples, in good order and annotated to show all changes made during the construction process. Annotation shall be kept up to date on a daily basis at the site. Record drawing markups shall be available to the Engineer for examination and shall be delivered to Engineer upon the completion of the work. Annotation shall include but not be limited to:

a) Changes to the design or scope of the work.

b) Any site condition that has had an effect on the project or would be useful information, such as poor soils, base pavement type, location and type of utilities or obstructions.

c) Additional work performed.

d) Work deleted.

e) Relocation of any conflicting utilities or structures.

f) Repair of existing facilities.

g) Removed or abandoned facilities.

h) The following for new conduits:

a. inverts at manholes, catch basins, outlets, valves and fittings,

b. depth of cover (for water mains),

c. length, size, type, slope (for storm and sanitary),

i) Location (station and offset) of all new facilities (wyes, taps, manholes, catch basins, valves, hydrants, etc.)

No additional compensation will be provided for maintaining record drawing markups. The cost of keeping record drawing markups shall be included in the cost of other bid items.

Final retainage will not be released until the City of Toledo is in receipt of the above-mentioned items.

105.04 Delete Items A,B,C,D, E & F and add the following –

A. Addenda

B. Part B – Bid Book

C. Plans

D. Part A – Standards & Specifications

E. City of Toledo Standard Construction Drawings

F. Ohio Department of Transportation, Supplemental Specifications

G. Ohio Department of Transportation, Construction and Material Specifications

H. Ohio Department of Transportation, Standard Drawings

105.07 Add to paragraph 4 –

A listing of offices typically contacted is as follows:

Ohio Utilities Protection Service
(registered utility protection service)
4740 Belmont Avenue
Youngstown, OH 44505-1014
800-362-2764

AT&T
130 North Erie Street, Room 714
Toledo, OH 43604
419-245-6568

Toledo Edison Co.
(Electric & Steam)
Mail Stop 1832
6099 Angola Road
Holland, OH 43528
419-249-5218

City of Toledo
Division of Water Distribution
401 South Erie Street
Toledo, OH 43602
419-245-1825 (Service Taps)
419-242-5040 (Waterlines & hydrants)

City of Toledo
Division of Engineering Services
600 Jefferson Avenue
One Lake Erie Center, Suite 300
Toledo, OH 4360
419-936-2163 (Water Engineering)
419-936-2276 (Sanitary Engineering)
419-936-2848 (Storm Engineering & Paving)
419-936-2847 (Construction Inspection)

Columbia Gas of Ohio, Inc.
2901 E. Manhattan Boulevard
Toledo, OH 43611
419-539-6062

Verizon
DEPT/LOC 1105/642
2270 Lakeside Boulevard
Richardson, TX 75082
Attn: Investigations
800-526-0119

Buckeye Cablevision
4814 Angola Road
Toledo, OH 43615
419-724-9800

City of Toledo
Division of Transportation
110 N. Westwood Avenue
Toledo, OH 43607
419-245-1300
(Fire & Police Communications
Conduits, traffic signs & signals,
Road closures)

The Contractor shall be responsible for any destruction of or disarrangement of all property of the City and of all public service companies, due to careless operation of his equipment. The

Contractor shall not at any time, interfere with the operation of any public conveyance without special permission from the Engineer.

The utility companies, both private and public (hereinafter referred to as utilities), shall mark, stake or establish indicator markers for the approximate location of all lines, mains, pipes, conduits, and other appurtenances within the work limits, when requested in writing to do so by the Contractor. "Approximate location" shall mean the site of the underground utility facility including the width of the underground utility facility plus eighteen inches on each side of the facility. Notice shall be given to the utilities as required above. No guarantee is given as to the vertical locations of any utility facility.

It shall be the responsibility of the Contractor to take reasonable precautions in order to protect and preserve said stake and indicator markers. The Contractor shall be liable for any damages to property or facilities of the utilities, resulting from his operations. All damages resulting to property or facilities of the utilities, for which the Contractor is responsible and liable, shall be repaired according to existing standards and specifications and at the contractor's sole expense. Either the Contractor, or the appropriate utilities, as determined by the appropriate utility, shall make said repairs.

The Contractor shall not be liable for costs incurred by the utilities for the relocation of any lines, mains, pipes, conduits, and other fixtures and appurtenances thereto, where there is a conflict with a gravity sewer or other closed gravity water conduit, or where there is a conflict with manholes, inlets, catch basins, or curb lines, etc. Nor shall he be liable for costs incurred in order to repair utility lines which were damaged because the utility involved failed to mark, stake, or establish indicator markers on their facilities within the work limits, when proper notification was given. The Contractor shall minimize damage to utility facilities, and he shall be responsible for unreasonable or excessive damage even if unmarked or unrecorded on the plans.

The Contractor shall conduct his work and activities so that all valves and regulators are accessible in case of emergency. He shall also leave accessible and notify the utility of any leaks, suspected leaks, or damages to any facility of the utilities.

In no case shall the Contractor operate, disconnect or disturb any valve or appurtenance of the utilities without approval for each specific case.

Where excavations are made near or under any utility facilities, the Contractor shall make proper arrangements with the utilities involved, and provide evidence in writing from the utility that proper arrangements have been made for supporting the utility facility in an approved manner, and which is sufficiently substantial to insure against settlement when the trench is backfilled.

Utility manholes and/or valve boxes will be adjusted by their respective owners. Let it be known to all utility companies that proposed paving operations will necessitate vertical adjustments of existing utilities and/or appurtenances located within the project limits.

The contractor shall be responsible for contacting all appropriate utility companies to make arrangements for any required adjustments, reconstructions, removals, and/or relocations of existing facilities. The contractor shall also be responsible for the coordination of all construction activities with those mentioned above."

105.13 Add –

Haul Routes: TMC 339.01 (b)(1)(2)(3) requires contractors to establish haul routes if 300 cubic yards or more of excavation or fill materials are moved to or removed from a site. Haul route requests shall be submitted, in writing, for approval, to the Division of Transportation (fax 419-245-1310) as representative for the Director of Public Service.

Unless authorized by haul permit, the Contractor is prohibited from transporting equipment, materials and surplus excavation on boulevards or streets with posted load limits.

105.16 Change the title of this section to –

"Borrow, Waste Areas and Disposal of Material"

Add –

DISPOSAL OF MATERIAL

The Contractor shall make excess excavated materials, not required on the project, available to abutting properties at no cost to them, in amounts and kind determined by the Engineer. The Contractor shall not enter upon such abutting property until the owner thereof has given his written consent to enter his property, and holding both the City and the Contractor free from any liability for damages to the property caused by depositing dirt or other materials thereupon. Any materials not required for the project in excess of the above stipulation shall be disposed of as follows:

A. The Contractor will handle all environmentally sensitive materials in a manner consistent with all regulations that govern the treatment and disposal. The Contractor shall advise the City of the specific location(s) he intends to utilize in conjunction with the disposal of any potentially environmentally sensitive materials. The City reserves the right to approve or disapprove any such locations, and the Contractor shall provide whatever available information the City requests to aid the City's evaluation of the Contractor's proposed disposal site.

B. The Contractor may wish to make arrangements with the Manager of Solid Waste at 419-936-3077 for the disposal of any clean excavated materials such as sand, stone, bricks, or stone pavement materials to be used at City Landfill sites.

The Manager of Solid Waste reserves the right to limit, direct, and even prohibit the disposal of materials at such landfill sites at any time during the term of this contract, and such actions by the Manager of Solid Waste will be no cause for adjustment to any unit bid price in the Contractor's proposal, if the Contractor chooses this option.

C. Any material not to be disposed of as herein specified shall be the property of the Contractor and be disposed of by him in either case with no additional compensation than that set forth in the unit prices bid in the Contractor's Proposal, under the Unit Price Contract.

D. In any event, the Contractor shall comply with the provisions of Chapter 753, Toledo Municipal Code, "Waste Hauling Services", to the extent it is applicable. Chapter 753 of the

TMC says, in part, that dirt, rock, and concrete may be deposited upon private property with written approval of the property owner, and in accordance with applicable local, state, and federal law. If the material being deposited is to be reused, recycled, or reclaimed for the beneficial use of the private property or the contractor, then a waste hauler's license is not required. However, the Contractor, for itself and its related entities, agents, employees, subcontractors and the agents and employees of said subcontractors, agrees to and shall indemnify, hold harmless and defend Toledo, its successors, assigns, officers, employees, agents and appointed and elected officials, for any claim, cost, loss, damage or obligation whatsoever in nature (including reasonable attorneys fees and expenses) arising out of or through in any way from any contractor third party agreement regarding the handling of said materials. Should it be necessary to dispose of materials other than those excluded from consideration in TMC Chapter 753, the contractor shall provide to the Engineer, prior to conducting the work, the name, address, and phone number of the hauling subcontractor, the type of waste being hauled, and the location where the materials will be deposited. In such case, the contractor or subcontractor shall secure a waste hauler's license.

E. No material may be disposed of in a regulatory floodplain, floodway, wetland or streambed without obtaining the required permits from the City Division of Building Inspection and the Corps of Engineers and obtaining prior written approval from the Engineer.

REMOVAL OF EXCAVATED MATERIAL, CONSTRUCTION DEBRIS AND STORAGE OF MATERIAL

All excess excavated material that has been stockpiled at the work site and any construction debris, which will not be used for backfill or other fill purposes, must be removed from the project area within forty-eight (48) hours. In all cases, stockpiles of all excavated material and all construction materials shall be of limited size and shall be neatly maintained in such a manner that they will not inhibit drainage or be hazardous to pedestrian or vehicular traffic in any way. The size limitations of said stockpiled materials shall be as determined by the Engineer. The limitation relative to the stockpiling of all excavated material and all construction materials

shall be controlled by the Engineer. In the event the Contractor fails to remove excess excavated material as required above, or fails to satisfactorily modify his operations relative to the stockpiling of excavated or construction materials upon order of the Engineer, all work except cleanup operations will be stopped, and remain stopped, until the order of the Engineer has been complied with."

107 LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

107.01 Add –

PREVAILING WAGE RATES

Pay to all labor employed on the Contract, wages in accordance with the prevailing labor wage schedules of Toledo, Ohio, and in accordance with Ordinance No. 91-57, amending and supplementing Section 187.12 of the Toledo Municipal Code and with the provisions outlined under House Bill 1304 (O.R.C. Section 4115).

No contract award will be made until the successful bidder submits proof that he pays and will continue to pay, during the life of this contract, a minimum wage in accordance with the "Schedule of Prevailing Hourly Wage Rates Ascertained and Determined by the Department of Industrial Relations, State of Ohio, for the Toledo Area", in effect at the time of the contract bid advertising date, for the industry involved.

Contractors performing contracts within the City of Toledo are subject to the provisions of the Fair Labor Standards Act, as amended by Congress. All provisions within said Act are to be strictly adhered to by the contractor, particularly as to minimum wage and the maximum number of hours that may be worked before overtime wages are paid.

ANTI-DISCRIMINATION ORDINANCE

Any contract awarded must comply with the provisions of Ordinance No. 487-54, the 1964 Civil Rights Act, and the contractor "shall not refuse to employ any person on account of the race, color, sex, national origin, age, ancestry, sex or religion of such person."

TOLEDO INCOME TAX ORDINANCE

Contractors and their subcontractors performing contracts within the City of Toledo, are subject to the provisions of the Toledo

Income Tax ordinance requiring them to pay the current effective tax rate on net profits attributable to their activities in Toledo, and to withhold Toledo tax on wages paid to non-resident employees performing services within the City of Toledo, and to withhold Toledo tax on the entire wages paid to employees who are residents of the City of Toledo whether such residents are employed within or outside of the City of Toledo

107.10 Add after first paragraph-

The Contractor, where possible, shall limit access to the bare minimum to reduce construction dirt and debris and to protect both public and private property. All trees and shrubs not specifically shown to be removed shall be protected at the Contractors expense. **In addition, the contractor shall not park any vehicles or store equipment or materials in the grass area within the drip line of any trees.**

At no time will the Contractor enter private property without the express written consent of the property owner prior to entry. Any damage to public or private property shall be repaired immediately at the Contractor's expense.

Any sidewalk or driveway that is currently in existence shall be replaced promptly (48 Hrs) if removed due to inadvertent damage as part of the construction."

107.13 Delete and replace with -

When the City notifies the contractor that a motorist reported damage to its vehicle within the work zone either verbally or in writing, the Contractor shall respond to that motorist within three days of such notification to handle any potential claims.

107.16 Add –

When existing water mains, service lines, and/or appurtenances thereto constitute such an obstruction to the work contemplated herein, that without their removal or relocation, the work could not be completed in accordance with the plans and specifications; then, within a reasonable time prior to that when said obstruction or obstructions would delay the progress of the work, notify the Commissioner of the Division of Engineering Services in writing, specifying any such obstructions to be cut, removed, or relocated,

whereupon the City will move the same at its cost and expense. In all other instances where the Contractor for his, or its convenience, desires any water conduit and/or connection to be cut, removed or relocated the same will, after notice in the manner stated above, be done by the City at the Contractor's cost and expense.

107.19 Add –

PREVENTION OF AIR POLLUTION THROUGH DUST AND DIRT CONTROL

It shall be the responsibility of the Contractor to prevent air pollution through dust and dirt control on the project. This applies to the work areas within the limits of the contract as well as all haul roads leading to or away from the project that are used by the Contractor, his sub-contractors, and his material suppliers, and paved areas that could be subject to soil erosion from the project.

Control of Fugitive Dust: As required by the Toledo Municipal Code section 1783.01 and the Ohio Administrative Code 3745-17-08(B), the Contractor shall take all reasonable available control measures to prevent fugitive dust from becoming airborne.

At a minimum, the following methods of control shall be used:

A. The streets and haul roads shall be swept by an automatic self-contained mechanical sweeper meeting the requirement of Elgin-White Wing-Model 475, Wayne Model 475, Wayne Model 880, or an approved equal having a dust control water system.

B. Water or other suitable dust suppression chemicals shall be used for control of fugitive dust from grading of roads, demolition of existing buildings or structures, and construction operations including saw cutting.

C. Dust collection equipment, such as hoods and fans, shall be installed to adequately enclose, contain, capture and vent the fugitive dust emitted from operations when application of water and chemicals is not adequate to prevent dust from becoming airborne.

D. All excessive dirt on the pavement shall be removed by means of hand shoveling or appropriate mechanical equipment and the area swept as in Method A above.

E. Sidewalks and driveways shall be cleaned by means of shovels and hand brooms or approved mechanical equipment.

F. If authorized or directed by the Engineer, any dust remaining shall be controlled as per Section 616, State of Ohio, Department of Transportation "Construction and Materials Specifications".

The Contractor shall comply with the above requirements on a daily basis. If the Contractor fails to perform the above work in a satisfactory manner, all work, except cleanup operations, will be stopped immediately by the Engineer until the Contractor has complied with the above requirement to the satisfaction of the Engineer. If the Contractor is found to be in violation of the Toledo Municipal Code section 1783.01 and the Ohio Administrative Code 3745-17-08(B), the Contractor may be subject to a Notice of Violation and enforcement actions by the Ohio Environmental Protection Agency.

All costs incurred for the prevention of air & water pollution through dust and dirt control shall be included in the appropriate bid items.

OZONE ACTION DAYS

In order to prevent the release of ozone creating substances, this could put Lucas and Wood counties in violation of federal ozone standards, the City of Toledo requests that contractors suspend construction operations on declared Ozone Action Days. Contractors will be notified by the Construction Engineer of this status on the afternoon preceding the Ozone Action Day. The contract completion date will be extended by two days for each occurrence if the contractor decides to postpone operation by 4:30 pm the day prior to the Ozone Action Day; hence, liquidated damages will not be assessed for this delay.

STORM WATER CONTROL REQUIREMENTS

Refer to the project Storm Water Pollution Prevention Plan (SWPPP) shown on the contract drawings. The SWPPP Inspection Form is included in this document on pages SWP1 through SWP5.
Erosion control is critical to the proper completion of this project. The erosion control plan shown on the plans is a minimum control plan and the Contractor shall do all that is necessary to ensure that erosion is kept to a minimum. The grass planting is critical toward

this effort. Therefore, the timely completion of this work is required.

107.21 Delete.

108 PROSECUTION AND PROGRESS

108.02 Delete Entire first paragraph on Partnering

108.02.B Delete entire section.

108.02.C Delete the last sentence.

108.02.D Delete entire section.

108.02.E Delete entire section.

108.02.G Delete subsections 1, 2, 3, & 4 and add:

Dispute Resolution and Claims Process

Dispute Process

The City will accept disputes and claims from the Contractor on behalf of itself or its subcontractors and suppliers. Disputes and claims directly from subcontractors and suppliers will not be accepted. Disputes and claims include but are not limited to disagreements, matters in question, and differences of opinion between the City of Toledo's personnel and the Contractor and requests for additional money and/or time.

The process includes two steps; the first of which must be fully completed before the second step may be exercised. All work, including that in dispute, shall continue during this process and the City will continue to pay for work as it and this dispute process progress.

Step 1 (Initial Consideration)

Within two working days of receipt of the Contractor's Written Early Notice, as set forth in 108.02.F.2, the City's Project Engineer and supervising Senior Professional Engineer, or their alternates (the "City Team"), will meet with the Contractor's superintendent. They shall review all pertinent information and contract provisions applicable and attempt to reach a resolution. The City Team will issue a written decision of the Step 1 dispute within 14 calendar days of the meeting. If the dispute is not resolved the Contractor must either abandon or escalate the dispute to Step 2.

Step 2 (Review Committee)

Within seven calendar days of receipt of the Step 1 decision, the Contractor must

submit a written request for a Step 2 committee meeting to the Commissioner of the City's Division of Engineering Services. The Commissioner shall call together a Review Committee comprised of any City employees or agents needed to comprehensively analyze the dispute. Within 14 days of said request the Contractor shall submit an original and two copies of a dispute packet (the "Packet") to the Commissioner containing the following:

1. A cover page that clearly identifies the project title, Contractor name and any subcontractor or supplier name if applicable.

2. An explanation that clearly and, in sufficient detail, gives the required information including precise dollar amount, for each item of additional compensation sought and the precise amount of time extension requested.

3. A narrative of the disputed work or project circumstances at issue, which shall include applicable dates of the work or circumstances at issue and the date of the Written Early Notice.

4. Each issue identified above shall include a reference to the applicable provision of the plans, specifications, proposal or other Contract documents and a copy of the specific provision, specification, proposal or document.

5. All relevant correspondence, pertinent documents and cost and supporting documentation to justify the Contractor's dollar amounts sought and its position.

The Step 2 meeting shall take place within 14 days of receipt of the dispute packet, and the commissioner's written decision within 14 days after the Step 2 meeting.

108.02.H Delete entire section and replace with the following:

Post Construction Meeting. The City will conduct a Post Construction Meeting with the Contractor within 30 days after the completion of the project. The purpose of this meeting is to document and evaluate the project's challenges and successes and review the completed Contractor Evaluation Form (included in the bid documents). The intent of this evaluation is to provide feedback from the construction staff to the City Administration as well as provide an opportunity to communicate our expectations as it relates to providing timely, cost-effective, and quality work.

108.02.I Delete entire section.

108.03.A.3 Add –

The Contractor shall submit an updated schedule with each pay estimate during the duration of the project in order to show work completed and any changes to the schedule. Failure to submit this schedule could result in withholding the pay estimate until the updated schedule is supplied.

108.06.A **Delete the last sentence in the first paragraph and replace with-**

Any extension of the completion date will be agreed to on a change order, then executed through a supplemental agreement to the contract.

Delete the Sixth paragraph.

109 ACCEPTANCE, MEASUREMENT AND PAYMENT

109.05.A Replace the first sentence of the second paragraph-

In establishing the method of payment for contract changes or extra work, force account procedures shall ONLY be used, when strictly necessary, as authorized by the engineer and when the engineer has determined that a reasonable unit price is not attainable; such as when the extent of work is unknown or is of such character that a price cannot be determined to a reasonable degree of accuracy. The reason(s) for using force account procedures shall be documented.

109.05.B.2 **Delete the first sentence and replace with-**

Average unit price awarded for the item(s).

109.05.C.6 Delete and replace with-

Subcontract Work. For work performed by an approved subcontractor, the City will pay an amount to cover administrative costs of 5% as provided in 109.05.C.2 through 109.05.C.5. No additional mark-up is allowed for work of a sub-

subcontractor or trucking services employed by a subcontractor.

109.05.C.8.a Delete and replace with –

Trucking. Trucking firms and owner operators not subject to prevailing wage will be paid at the invoiced cost plus 5% to cover administrative costs.

109.05.D.2.f Delete entire section

109.09 Delete first sentence of the first paragraph and replace with –

If satisfactory progress is being made, the Contractor will receive monthly payments equaling 96% of the work and materials in place, with the balance being retainage. In addition, a Contractor Affidavit and DBE / MBE Affidavit shall be executed, on forms provided by the City, and submitted with each payment.

Add –

Execute on forms provided by the City and submit an affidavit for each pay estimate.

109.10 Delete the first sentence of the first paragraph and replace with-

When the contractor requests payment for stored materials, the City, at the discretion of the Engineer, may pay up to 75% of the applicable contract item, for the invoiced cost of the delivered and approved materials before they are incorporated in the work. Applicable items considered for payment will be large or special order items that represent a significant portion of the project cost and will not be incorporated into the project within 30 days of delivery. In addition, approved materials must be delivered, accepted, and properly stored on the project or stored in an acceptable storage place in the vicinity of the Project.

109.12.D Add -

In addition, a waiver of lien, a final wage payment affidavit, a maintenance bond and supplemental agreement, if applicable, will be required before the final payment will be made.

The date as specified on the "Final Inspection Report" shall be the date of acceptance of the project.

109.12.E Add -

MAINTENANCE BOND

Maintain the work for a period of TWO (2) years beginning on the date of the FINAL INSPECTION REPORT issued by the City for the work. Maintain the work in "good order and repair". The determination of what is "good order and repair" will be by the "Director", and his decision will be final and conclusive and binding upon the parties, subject to the provisions of this Proposal, bound herewith.

The Contractor shall execute a Maintenance Bond on the form provided by the City, in an amount equal to fifty percent (50%) of the final cost of the project, with sufficient Surety or Sureties to the satisfaction of the Mayor. Said Maintenance Bond shall be executed prior to the Final Payment for the work."

201 CLEARING AND GRUBBING

201.06 Add –

Trees indicated to be removed, or directed for removal by the Engineer, will be paid for under the appropriate unit price bid item. Additional tree removals requested by the Contractor must be approved by the Engineer and shall be performed at no additional cost. If City crews elect to perform tree removal, Contractor shall reimburse the City for the actual cost of any tree removal requested by the Contractor which is not indicated for removal on the plans or directed for removal by the Engineer.

202 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

202.12 Delete the first paragraph and replace with-

For all manholes, catch basins, pull boxes, etc. to be abandoned, remove existing structure to a minimum of 12 inches below any

pavement subgrade (incl. walk, drive, etc.) and fill remaining structure with low strength mortar backfill per Item 613, unless otherwise directed by the Engineer.

Add the following after the third paragraph-

For all pipes to be abandoned, fill with Low Strength Mortar Backfill per Item 613. Both ends of each pipe shall be sealed using concrete stoppers or masonry of a type and thickness to fill the pipe.

203 ROADWAY EXCAVATION AND EMBANKMENT

203.02 Add-

The Material Definition for Excavation is: The excavation and disposal of all Materials of whatever character encountered in the work.

203.06 Add –

F. Excavated areas that are to become subgrade under proposed pavement, paved shoulder, paved median, curb and gutter, or driveway shall be compacted in accordance with Item 204.03.

203.10 Add-

The Unit Price for excavation shall apply to all Materials, of whatever nature, to be excavated

204 SUBGRADE COMPACTION AND PROOF ROLLING

204.03 Add-

The Engineer will perform the compaction testing according to Supplement 1015.

Delete and replace the third sentence of the first paragraph with-

Determine the maximum dry density using AASHTO T 99.

Add to the fifth paragraph -

When subgrade compaction is not a separate bid item, the cost of compacting sub-grade to a depth of twelve inches (12") shall be included in the unit price bid for 203 Excavation.

204.06 Add –

When Proof Rolling is not a separate bid item, the work shall be considered to be performed under the bid item 203 Roadway Excavation.

204.09 Delete and replace the fourth paragraph with –

Subgrade compaction shall not be paid in areas requiring undercut and replacement in 204.04, 204.05, and 204.07, or in areas stabilized with lime or cement.

304 AGGREGATE BASE

304.05 Delete the first sentence of the fourth paragraph and replace with –

The Engineer will determine the maximum dry density using AASHTO T 99. The Engineer will use at least 100% of the maximum dry density for acceptance.

304.08 Add –

Failure to provide material tickets to the City within five (5) work days shall result in non-payment for the material.

305 PORTLAND CEMENT CONCRETE BASE

305.02 Delete the fourth paragraph and replace with-

The curing membrane shall be non-wax based, W.R. Meadows 1625, or approved equal.

401 ASPHALT CONCRETE PAVEMENTS - GENERAL

401.06 Delete the last paragraph.

401.17 Add after third paragraph -

Pavement having a width of 20 foot or less shall be paved full width

with a single unit paver unless otherwise authorized by the Engineer.

401.21 At the end of the first paragraph, add -

Failure to provide material tickets to the City within five (5) work days shall result in non-payment for the material.

407 Tack Coat

407.06 Replace the second sentence of the sixth paragraph with-

The Engineer will determine the exact application rate, which will be between 0.05 to 0.10 gallons per square yard.

Add-

Traffic should not be allowed over tacked surfaces unless aggregate cover is used to provide friction and prevent tack pick-up. The contractor shall make an effort to minimize the tracking of tack and/or asphalt onto adjacent or nearby streets. The application rate for cover aggregate, when necessary, will be between 4 to 8 lbs/sq yd, as determined by the Engineer. Cost associated with the above mentioned work shall be included in the unit price.

407.09 Add-

Provide material tickets to the Department the same day paving operations occurred. Material tickets will have certified weights converted to gallons. For weights that are questionable or unknown, a volume-measuring device is required before accepting the material.

Failure to provide material tickets to the City within five (5) work days shall result in non-payment for the material.

446 ASPHALT CONCRETE

446.05 Add to Table 446.05-2-

If more than two (2) cores have density results of less than 93% or greater than 96.9% compaction no bonus for compaction will be given.

446.07 Add –

The Department will pay for accepted quantities in accordance with the plans. Any asphalt placed over plan quantity and/or thickness specified shall be done only as directed by the Engineer.

448 ASPHALT CONCRETE

448.06 Add-

"The Department will pay for accepted quantities in accordance with the plans. Any asphalt placed over plan quantity and/or thickness specified shall be done at the approval of the Engineer."

451 REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

451.10 Delete the last paragraph.

451.11 Add –

"When the atmospheric temperature is 32°F (0°C) or less at the time concrete is placed, or it is predicted by weather forecasts to occur during the curing period, concrete pavement, base, curb, sidewalk, etc. shall be cured a minimum of five (5) days with straw and sheeting per 705.06 or burlap blankets per 705.05 as directed by the Engineer. A membrane curing compound shall not be used."

452.02 Add at the beginning of the third paragraph-

"When Specified,"

455 QUALITY CONTROL PLAN, TESTING AND ASSURANCE FOR QC/QA CONCRETE

455.01 -Add

City of Toledo testing is always considered quality assurance "QA" to verify at any time that the contractor provided product that meets specifications. The City may choose to test any concrete item at any time for quality assurance. This includes but is not limited to compressive strength from concrete cylinders, modulus of rupture from beam breaks, air tests, slump test, etc…

601 SLOPE AND CHANNEL PROTECTION

601.01 Wherever reference is made to approved designs or manufacturers on file with the Office of Hydraulic Engineering, replace with the following-

Submit designs, product information, and manufacturers to the Engineer for approval.

602 MASONRY

602.03 Wherever reference is made to “drawings are on file in the Office of Material Management” or “Submit drawings to or Approved from the Office of Hydraulic Engineering; replace with –

Submit designs, product information, and manufacturers to the Engineer for review.

602.03.F Delete and replace the last two paragraphs with-

Mortar shall be proportioned as follows: one (1) part Type 1A cement, two and one-half (2 1/2) parts mason sand and one twentieth (1/20) part hydrated lime by volume. The non-shrinking mortar shall be Five Star Grout, Grout Corp.; Sauereisen F-100 Grout, Sauereisen Cement Company or equal.

608 WALK, CURB RAMPS AND STEPS

608.03.C Delete and Replace "Saw or form" in the sixth sentence with "Tool"

Add -

Sidewalks on bridge decks shall be saw cut every 10 feet as a minimum.

Add -

"Tool longitudinal joints."

Delete and replace the last sentence with -

Construct transverse expansion joints per City of Toledo Construction Standards and in such a manner that the joint will be filled to within one-half inch (½") of the surface of the walk, at

intervals of not more than twenty-five feet (25'), unless otherwise specified by the Engineer. Place joints at the grooved division lines, truly normal to the grade. Whenever concrete sidewalks abut other walks, steps, curbs, manholes, catch basins, building foundations, utility poles, etc., provide one-half inch (1/2") thick expansion joints. Effectively separate walk at expansion end of bridge and approach. Clean all concrete from the top of the premolded joints and edge as specified above.

608.07 Add –

Construct curb ramps to meet City of Toledo and ADA Standards. The entire ramp, detectable warning, and landing areas shall be constructed to be 90˚ and/or perpendicular to the face of curb at the bottom of the ramp. A level landing area shall be constructed at the bottom and top of each curb ramp and each sidewalk ramp run. Prior to placing concrete, verify that the curb ramp is formed up to be in compliance with specifications including but not limited to slopes, landing area, grade at street, flares, and position of detectable warning. The contractor must have, on site, a level and a rod for this purpose. The Engineer shall be notified prior to placement of the concrete in the ramp and landing areas. If the completed ramp does not meet the specifications, the contractor shall remove and replace the ramp at no additional cost to the City.

When a new curb ramp is constructed adjacent to an existing asphalt pavement, the asphalt along the new curb and ramp shall be saw cut at a minimum distance of 2 feet from the face of curb, removed (milled) to a depth of 1-1/2 inches, and replaced with ODOT Item 448 Asphalt Concrete Surface Course, Type 1. This patch shall be sealed around the perimeter with asphalt cement. Cost for this work shall be included in the unit price bid for Item 608 Curb Ramp.

608.09 Add-

Detectable Warning devices shall be included in the Curb Ramp item. When the Detectable Warning for a Curb Ramp is the standard 2ft x 4ft size, the Curb Ramp item will be paid for on an Each basis. When the detectable Warning size is larger than the standard 2ft x 4ft size, the Curb Ramp item will be paid for on a Square Foot basis. Concrete walk and curb within the entire Curb Ramp area will be paid for separately under their respective walk

and curb items related to either Curb Ramp item.

609 CURBING, CONCRETE MEDIANS, AND TRAFFIC ISLANDS

609.04.A Add after the sentence of the fourth paragraph

Test the alignment of all exposed faces of the curb or curb and gutter for trueness during construction and after removal of the forms. Satisfactorily correct any variations or displacement that exceeds one-quarter inch (1/4") from the established line in a ten-foot (10') length or replace the curb or curb and gutter, as directed by the Engineer. Make height transitions from 6" curb to curbs of lesser-exposed height over a distance of 5 feet.

609.04.B Delete and Replace the Second Paragraph with -

Place concrete for curb that is integral with the concrete base or pavement at the same time that the pavement is placed. If this is not possible, as determined by the Engineer, installNo.5 (No.16M) tie bars vertically in the pavement at one-foot intervals and in a line 3 inches inside of and parallel to the edge forms. Install these tie bars 3-1/2 inches into the pavement and 2-½ inches above the pavement surface when placed. Water cure this horizontal construction joint between the concrete base or pavement and the curb, or membrane cure the concrete base or pavement and remove the membrane before placing the curb. Immediately before placing the concrete curb, brush mortar consisting of one part cement to one part sand and ½ part water into the surface of the pavement or base on which the concrete curb is to be placed. Place curb within 90 minutes. Do not allow the mortar to dry before placing the curb on top of it.

611 Pipe Culverts, Sewers, Drains, and Drainage Structures

611.01 Delete last sentence and add:

This work shall include excavating for pipe and foundations for same, including clearing and grubbing and the removal of all materials and obstructions necessary for placing the pipe except removals listed separately; furnishing and placing granular or concrete bedding, and initial backfill and backfill as required; supporting adjacent and crossing utilities; constructing and subsequently removing all necessary cofferdams, cribs and sheeting; pumping and dewatering; sealing or banding all pipe

joints where required; furnishing and installing all necessary pipe bends and branches of a type at least equal to the conduit of which they become a part; joining to existing and proposed appurtenances as required; performing leakage tests as specified; and restoration of disturbed facilities and surfaces when a separate bid item is not provided.

611.02 Delete all references to conduits listed under Type A, B, and C except for the following:

	Material Specs	Joint Specs
Reinforced concrete circular pipe	706.02	ASTM C-443
Reinforced concrete elliptical pipe	706.04	ASTM C-990, ASTM C-877
Precast reinforced concrete box sections	706.05	ASTM C-990, ASTM C-877
Vitrified clay pipe (extra strength only)	706.08	ASTM C-425
Polyvinyl chloride solid wall pipe	707.45, (Cell Class 12454-B)	ASTM D-3212
Polyvinyl chloride solid wall pipe (> 15-inch)	707.48, (PS115, Cell Class 12454-B)	ASTM D-3212

All pipes and fittings shall be appropriately marked in accordance to applicable ASTM Standards for the purpose of identification and shall be subject to inspection and rejection at the factory, project or other point of delivery.

Add the following table of pipes permissible for conduits Type A, B, and C (less than or equal to 30 inch size) for storm sewers on private projects, outside of the right-of-way.

	Material Specs
Aluminized CMP	707.21 or 707.22
Corrugated aluminum alloy pipe	707.25
Corrugated steel spiral rib pipe	707.12
Corrugated aluminum spiral rib pipe	707.24
Corrugated polyethylene smooth lined pipe	707.33
Polyvinyl chloride plastic pipe	707.41
Polyvinyl chloride corrugated smooth interior pipe	707.42
Polyvinyl chloride profile wall pipe	707.43

Delete section H and replace with-

Bedding and initial backfill materials shall be durable gravel, sand, slag, or crushed stone meeting the requirements of 703.11 Type 1, Type 2, Type 3, Table 6 or Table 7:

Backfill materials shall be the same material used in bedding and initial backfill excluding 703.11 Type 3. Suitable soil may be used in areas outside the pavement area as defined in 611.06**.**

TABLE 6
TOTAL PASSING PERCENT

Sieve	Grading AA	Grading BB	Grading CC	Grading DD
3 Inch	100	100	100	100
2 Inch	90-100	95-100	90-100	90-100
1 Inch	70-100		70-100	
No. 10	25-75	40-100	25-75	40-100
No. 200	0-10	0-10	5-15	5-15

TABLE 7

Table 7 materials, formerly known as 310.02 materials, shall be gravel, crushed slag, crushed stone, sand, granulated slag, a mixture of crushed and granulated slags or other types of suitable materials meeting the requirements in this table and having the

approval of the Engineer.

TOTAL PASSING PERCENT

Sieve	Grading A	Grading B
2 ½ Inch	100	100
1 Inch	70-100	70-100
No. 4	25-100	25-100
No. 40	5-50	10-50
No. 200	0-10	5-15

Granulated slag shall conform to 703.08.

The fraction of these materials passing a No. 40 sieve shall have a liquid limit not greater than 30 and a plasticity index not greater than 6.

The sodium sulfate soundness loss for all aggregates except sandstone shall not exceed 15 percent. However, where the major portion of the unsound material in a coarse aggregate acquires a mud-like condition when tested for soundness, the maximum loss shall be five percent for all uses. In addition, open-hearth and basic-oxygen furnace slag shall conform to stockpiling and aging requirements of 703.01.

In lieu of the above granular material, the Contractor may use, at his own expense, unless otherwise specified on the plans, Low Strength Mortar Backfill (LSMB) Type 1 **or Type 2** per Item 613. The LSMB shall be cement based fill material that can be deposited in a fluid state. It shall be composed of Portland cement, fly ash/fine aggregate material, and water.

Removed or excavated materials may be incorporated into the work when the material conforms to the specifications, is free of foreign matter or frozen fragments and approved by the Engineer; if not, then recycle or dispose of the material according to 105.16 and 105.17

Delete second to last paragraph starting with “If a precast reinforced concrete box…”

611.03 Definitions.

Delete ‘Backfill’ and replace with-

Backfill- Material used to fill the trench or excavation, not including the bedding or initial backfill material.

Add-

Initial Backfill- *For Rigid conduit*, the haunch and side-fill embedment material above the bedding to the pipe springline*. For Flexible conduit*, the haunch and side-fill embedment material above the bedding to 12" over the top of the pipe.

Long span structure- Includes all of the following material kinds: 706.05, 706.051.

Premium Joint- For rigid conduits resilient and flexible gasketed joints. For flexible conduit elastomeric gasketed joints.

Rise- The conduit rise is the vertical distance from outside wall to outside wall measured at the middle of the conduit.

611.04.A Delete the first three sentences of the first paragraph and replace with –

"Have a Registered Engineer prepare, sign, seal and date all shop drawings, and provide calculations when required below."

611.04.B Installation Plan – Delete this section in its entirety.

611.04.C Construction Inspection Forms – Delete this section in its entirety.

611.04.D Performance Report – Delete this section in its entirety.

611.05 Delete the entire section and replace with-

Measure trench width at the span of the conduit. Center the trench excavation about the centerline of the conduit.
Use Method A for a cut situation, and use Method B for a fill situation.

Method A. Excavate the trench for the conduit. Provide vertical trench walls to 1' over the top of the pipe.

If long span culvert is used, provide a minimum trench width of the span plus 2 feet on each side.

If rigid pipe is used, provide a minimum trench width of the span times 1.33.

If plastic or corrugated metal pipe is used, provide a minimum trench width of the span times 1.25 plus 1 foot.

Increase these minimums to a width that allows the jointing of the conduit, and the placement and compaction of the backfill.

Method B. Construct the embankment to a height at least half of the rise and to width on each side of the conduit two times the span of the conduit before excavating for the conduit. Excavate the trench in the constructed embankment to a width conforming to method A above.

Furnish a firm foundation for the conduit bed for its full length. The Engineer will require the removal of unsuitable material below the conduit bedding or below the bottom of the conduit if the bedding is not required for the width of the trench. Replace the unsuitable material with structural backfill. Remove rock or shale in the conduit foundation for at least 6 inches (150 mm) below the bottom of the bedding. Replace the rock or shale with structural backfill. Unless in the contract documents, the Department will pay for this work according to 109.05.

If the Engineer changes the flow line by more than one foot, the Department will pay according to 109.05.

611.06 Delete the entire section and replace with –

Type 1 bedding consists of structural backfill extending at least 6 inches below the bottom of the conduit for the full width of the trench.

Use type 1 bedding for 706.05 or 706.051.

Type 2 bedding consists of structural backfill extending at least 3 inches for all rigid pipe and 6 inches for all flexible pipe below the bottom of the conduit for the full width of the trench. Provide initial backfill extending up around the pipe for a depth of not less than 50 percent of its outside diameter or rise for rigid pipe, and a depth 12”

over the pipe for flexible conduits. Shape the bedding to fit the conduit with recesses shaped to receive the bell of bell and spigot pipe. Leave the bedding below the middle 1/3 of the pipe span uncompacted.

Use Type 2 bedding for Types A, B, C, and D conduits except for long span structures.

Below all drainage structures including manholes and catch basins, provide bedding consisting of a minimum of 8" of approved granular material that is level and allows uniform support of the entire area of the structure base. Construct bedding material for a minimum distance of 1' from the outside wall of the structure.

Place and compact backfill. Do not use compaction equipment exceeding 1 ton or hoe packs until 2 feet of backfill is compacted on top of the pipe. Do not use compaction equipment exceeding 8 tons until 4 feet of backfill is compacted on top of the pipe.

For Long Span Structures: Place and compact structural backfill over the top of the section to a minimum depth of 4' or to the subgrade elevation whichever is less and for a width of 2' on each side of the section. Use soil embankment, or structural backfill to construct the adjacent embankment and for the remaining depth to the subgrade. Construct the adjacent material according to Item 203.

For Type A and B Conduits (except for Long Span Structures): Place and compact approved granular material or LSMB above the initial backfill for the full depth and width of all trenches. Pavement shall include, but is not limited to roadways, curbs, sidewalks, service walks, driveway approaches, parking lots or any proposed paved surface or as defined in the City of Toledo Construction Standards.

For Type C and D Conduits: For flexible conduit, place and compact the initial backfill to 12" over the top of the pipe. Then place and compact approved excavated material for the full depth of the trench. For all other conduit, place and compact approved excavated material for the full depth of the trench. This material may only be used in areas outside the pavement area as defined above.

Place soil or granular material in lifts not to exceed 8". The City will perform all compacting testing. Compact soil and granular material

to 100 percent of its maximum dry density and in accordance to Supplement 1015. Compact using mechanical devices, hoe packs, jumping jacks, hand devices, vibrating plates, or other equipment that meets the restrictions in this section. Provide compaction equipment that compacts the material under the haunch. If the compaction equipment cannot fully compact the material under the haunch, supplement the compaction equipment by using shovel slicing, spud bars, or mechanical spud bars to compact the material under the haunch of the pipe. Use shovel slicing and spud bars in conjunction with the compaction operations to compact the material and to manipulate the material under the haunch of the pipe.
If using trench boxes, configure the trench box so that the bedding, initial backfill and backfill material is compacted directly against the trench walls.

Backfill all structures, regardless of location, unless otherwise approved by the engineer, with approved granular material or LSM. Extend the backfill material for a minimum distance of 1' from the outside wall of the structure.

Where drainage around structures is required, the drainage system should be installed and backfilled with a granular material before the placement of LSM mix.

The quality control test procedure for LSM by the manufacturer shall include: Test for Unit Weight, ASTM C-138, and Test for Compressive Strength, ASTM C-39. No special protection for the LSM is needed under normal construction conditions, except extremely early loading. When traffic will be maintained, the contractor shall furnish plates to bridge the trench for the first 24 hours, or as directed by the engineer. After 24 hours, or as directed by the Engineer, the Contractor may install permanent or temporary paving materials.

611.07 Delete the last three sentences of the second paragraph.

Delete the third paragraph and replace with-

Lay the conduit in the center of the trench at the invert elevation shown on the plans. Start at the outlet end with the bell or groove-end laid upgrade. Ensure that the conduit is in contact with the bedding for its full length and maintain the line and grade of the conduit. Rejoin, re-lay, or replace conduit that have settled, or that are damaged as determined by the Engineer.

Delete the 4th paragraph and replace with-

"Lay all conduits according to the following requirements."

Delete 611.07 "M" and replace with-

"Fill all lifting holes in rigid conduit with non-shrink mortar. Lift holes are not permitted for conduits designed for sanitary sewer applications."

Add new section 611.07 P. after section 611.07 O. –

P. **When a sewer conduit is installed** by the boring method, **a continuous steel casing pipe shall be used per 748.06.** The casing shall be of large enough diameter to provide a minimum clearance of 2 inches between the pipe bell and the inside of the casing, to allow the conduit to be blocked and/or wedged to prevent floatation. The casing shall then be filled with LSM commencing **in a manner to expel air** until the entire casing is filled.

611.08 Delete the second & third paragraph and replace with-

Assemble joints and install conduit in accordance with the pipe manufacturer's recommendations unless otherwise amended by this document. All completed premium joints shall provide a watertight seal. Fittings such as wyes, tees, bends, adaptors, etc.., shall be factory made in accordance with the approved manufacturer's shop drawings to equal dimensions and will provide equivalent strength and joints when assembled as compared to the mainline specifications.

Delete section B in it's entirely and replace with-

B. All Type A, B, C, D & E conduits used for construction of storm and sanitary sewer shall contain premium joints, (excluding long span structures and 706.04 pipe), and conform to the approved pipe materials listed under Item 611.02.

1. For all rigid conduit, (706.02, 706.04, and 706.08), seal the joint using the applicable method.

   a. For 706.04 pipe, apply 706.10 to the pipe in sufficient quantity to completely fill the joint once the pipe is placed

in its final position at a gap of 1" or less. After placing the pipe in its final position, point and trowel the 706.10 to form a smooth transition on the inside and a complete seal on the outside. Cover the exterior joint with a 12-inch wide strip of joint wrap in accordance with the manufacturer's recommendation. Center the joint wrap on the joint. Use a continuous length of joint wrap sufficient to extend around the top of the pipe to the bedding material on both sides.

-or-

Apply 706.14 to the pipe in sufficient quantity to seal the joint but not necessarily fill the joint once the pipe is in its final position at a gap of 1" or less. Before installing the joint sealant, prime both surfaces of the joint, (bell & spigot), with asphalt based primer according to the joint seal manufacturer's recommendations. Cover the exterior joint with a 12-inch wide strip of joint wrap in accordance with the manufacturer's recommendation. Center the joint wrap on the joint. Use a continuous length of joint wrap sufficient to extend around the top of the pipe to the bedding material on both sides.

b. For 706.02 and 706.08 pipe, use resilient and flexible gasket joints as specified in 611.02 with a maximum joint gap of 1".

2. After placing 706.05 or 706.051 in their final position with a maximum joint gap of 1", clean the joint gap or joint of all debris and perform the following:
   a. For 706.05 joints, fill the top exterior joint gap and the bottom and side interior joint gap with mortar. Next, for any exterior joint not covered by membrane waterproofing, cover the exterior joint with a 12" wide strip of joint wrap. Center the joint wrap on the joint. Use a continuous length of joint wrap sufficient to extend from the bottom of the vertical face on one side to the bottom vertical face on the other side.

   b. For 706.051, fill the top keyway joint with 705.22. The side or leg joints shall also be filled with 705.22 for the key way type joint or filled per 706.05 for a tongue and grove

type joint. Clean the joint of all debris immediately before installing the joint filling material. Prepare, place, and cure the 705.22 according to the manufacturer's recommendations. Wet all surfaces of the keyway joint, but do not allow excess water in the joint. Next, for any exterior joint not covered by membrane waterproofing, cover the exterior joint with a 12" wide strip of joint wrap. Center the joint wrap on the joint. Use a continuous length of joint wrap sufficient to extend from the bottom of the vertical face on one side to the bottom vertical face on the other side.

Delete section C and replace with-

Plastic Conduit. "Join plastic conduit using elastomeric gaskets. If using bell and spigot joints drive the spigot securely into the bell and ensure that the gasket is properly seated after joining."

Add Section E with-

When it becomes necessary to connect two (2) conduits of different size and/or dissimilar material, up to and including twenty-four inches (24"), for any reason, make the connection using a flexible coupling or donut as manufactured by the Fernco Joint Sealer Co., Ferndale, Michigan; Logan Clay Pipe Co., Logan, Ohio; Mission Clay Products Corp., Corona, California; or equal. For conduits in excess of twenty-four inches (24") in diameter, the construction of a masonry collar shall be required as shown on the plans or as directed by the engineer. The cost for the flexible connections and collars, including any extra excavation or labor for their placement, shall be included in the unit bid price for the appropriate 611 item.

611.10 Delete the last two sentences of the third paragraph beginning with "Use flat slab..."

Add to the third paragraph:

"Fill all lift holes with non-shrinking mortar. Joints between manhole sections shall conform to ASTM Specification C-443 (Rubber Gaskets) and shall also contain a 7/8-inch mastic bead."

Add to seventh paragraph with-

"Unless otherwise specified, sanitary sewer conduits shall be connected to new precast structures using a Kor-N-Seal boot, or

approved equal. Storm sewer conduits shall be connected to new precast structures using a waterstop gasket and non-shrinking mortar. When connecting a storm or sanitary conduit to an existing precast structure, the connection shall be core drilled, then use a waterstop gasket and non-shrinking mortar to make the connection. When a storm or sanitary sewer conduit is connected to an existing brick or block structure, use a waterstop and non-shrinking mortar to make the connection, unless otherwise stated on the plans or as directed by the engineer."

Approved waterstop gasket shall be Fernco Type Concrete Manhole Adapters or equal as approved by the Engineer.

Delete paragraph D.1 and replace with:

"Carefully remove and clean the existing casting, remove and repair/replace up to twelve inches (12") of the existing brick or block structure as necessary, adjust the height of the supporting walls and reset the casting in a bed of concrete mortar or structure concrete to the new grade."

Add-

"Whenever a structure is adjusted or reconstructed to grade in a pavement, the work shall include the removal and replacement of any necessary pavement and curb, and the installation of the concrete collar per City of Toledo Construction Standards. Type 3 and 3A Catch Basins adjusted or reconstructed shall also include providing and installing a new precast top section with beam. All costs associated with this work shall be included in the unit price bid for the appropriate 611 item.
Add –

Install internal chimney seals in all new sanitary and storm manholes and in all sanitary or storm manholes to be adjusted or reconstructed. The chimney seal shall cover the area from the casting to the precast concrete dome section. Cover all of the adjusting rings. Contact the City of Toledo for a current list of acceptable products. If H.D.P.E. adjusting rings are installed in accordance with the Current City of Toledo Construction Standards, in lieu of concrete adjusting rings, chimney seals will not be required.

Add –

After the work is done on any drainage structure, final acceptance by the City of Toledo will not occur until all construction materials and/or debris is removed from the structure and disposed of.

611.12 Delete entire section and replace with-

Performance Testing. Perform deflection testing on all flexible conduit for sanitary & storm sewers. **Test all sections between structures (i.e. manholes, catch basins, inlets, chambers, headwalls, etc.).** Deflection shall not exceed 5% of the pipe diameter. Test pipe at least 30 days after pipe installation.

Storm & Sanitary sewers shall be televised after installation. Dewater the conduit if the water level hinders the performance of the equipment. Pan and tilt type camera shall be used. Operator shall pan up all laterals. All construction debris shall be removed from the sewer. If construction debris is found, the sewer shall be cleaned and re-televised. This process shall be repeated until all construction debris is removed from the sewer. Any visible leakage shall be repaired. Structure numbers shall be displayed on the video indicating which structure the inspector is traveling from and to, regardless of flow direction. All video shall be recorded in a digital **(mpeg)** format and shall be accompanied by a written log. A separate file and log sheet shall be provided for each sewer segment televised, named with the corresponding structure numbers televised. Cost for all work under this item shall be included in the unit price for the sewer. One copy of the video shall be provided to the city.

Test type B and C conduits with premium joints for infiltration or exfiltration per ASTM C-969, or individual joint acceptance per ASTM C-1103, or ASTM F1417 time-pressure drop method for 1 psig pressure drop; except the leakage rate for sanitary sewers shall not exceed 100 gallons per inch of diameter, per mile of conduit, per 24 hours. The Engineer may waive this requirement if connections to active taps make it impractical. In this case the sewer shall be televised in accordance with the previous paragraph.
Vacuum test all new sanitary manholes per ASTM C-1244. Test from top of casting to invert. Provide documentation of test results.

611.13 Delete this section in its entirety.

611.14 Delete this section in its entirety.

611.15 Delete the second sentence.

611.17 Delete the third paragraph and replace with:

The City will pay for accepted quantities at the contract prices as follows:

Add –

If the “Basis of Payment” for Manholes is bid per Vertical Foot, the payment for the construction of the manholes will be as measured from the structure invert to the top of the casting.

613 LOW STRENGTH MORTAR BACKFILL

613.03 **Add-**

Provide mixes with an unconfined compressive strength between 50 and 100 pounds per square inch at 28 days when tested according to ASTM D 4832. Ensure that the long term (12-month) unconfined compressive strength is less than 100 pounds per square inch.

614 MAINTAINING TRAFFIC

614.03 Add –

Maintenance of Traffic shall conform to the requirements presented herewith:

General

Traffic shall be maintained at all times during the construction of the project. The maintenance of traffic, including furnishing of all labor, materials and equipment (including lights, barricades and signs) shall be the responsibility of the Contractor at no additional cost to the City of Toledo in accordance with the current Ohio Manual of Uniform Traffic Control devices, 2005 Edition, the Ohio Temporary

Traffic Control Manual, 2005 Edition. Performance shall be in accordance with Item 614. In addition, the contractor shall coordinate traffic control with the public utilities working in the right-of-way, such as but not limited to Columbia Gas, Toledo Edison, Ameritech, the Division of Water, Buckeye Cablevision and their subcontractors.

The above is not meant or to be construed to specifically exclude or absolve any agency of the responsibility for providing the necessary elements of traffic control to safely guide the public through the construction areas.

The Ohio Temporary Traffic Control Manual, 2005 Edition shall govern traffic control operations on this project, except as modified in this document.

Special emphasis will be placed on the following items:

Drum and Vertical Panel Spacing: Drum and Vertical panel spacing used in delineation applications shall be no further apart than 25 feet.

Arrow Boards: The Contractor will be required to supply arrow boards on all major streets during all construction phases according to “The Ohio Manual of Uniform Traffic Control Devices for Streets and Highways”, the Ohio Temporary Traffic Control Manual, 2005 Edition, or as directed by the Engineer.

Traffic Lanes: One ten-foot (10ft) traffic lane in each direction shall be provided at all times and a left turn lane shall be provided at all signalized intersections. The Commissioner of Transportation may allow further lane restrictions and/or lane closures when requested by the contractor for unusual or unforeseen circumstances, but may also require other conditions be met (i.e. use of arrow boards, flaggers, restricted hours, additional signage, etc.)

The use of one traffic lane with alternating 2-way traffic will be allowed ONLY when approved by the Commissioner of Transportation. If approved, then at least two flaggers must be used during work hours along with any other conditions necessary during non-working hours in accordance with the Ohio Temporary Traffic Control Manual, 2005 Edition.

Except as herein provided, paragraphs 107.07 and 108.04 of the

State of Ohio Construction and Material Specifications shall govern. The Contractor shall be required to adhere to the "Restricted Construction Area" listed as indicated in the "City of Toledo Manual for Uniform Traffic Control for Construction and Maintenance".

Maintaining work zone: Once a project work zone is set up, the contractor is responsible for maintenance of all items within the project limits (including existing pavement defects, dips, etc. in the traffic zone) that may be hazardous, and any obstructions or structures in the traffic lanes that could cause problems. Existing defects in the travel lanes within the project limits as mentioned above shall be temporarily patched or protected, to the satisfaction of the Engineer, to alleviate potential hazards to the travelling public during construction. The Contractor shall monitor said patches, protective devices, signage, etc. for any corrective action needed. Any costs associated with the above mentioned work shall be included the pertinent Maintenance of Traffic Item.

Openings and/or trenches in residential roadways need to be temporarily filled to the surface with compacted granular material over granular backfill as specified until the permanent pavement is placed. Openings and/or trenches in roadways other than residential streets will require a minimum of three inch (3”) temporary asphalt (or cold patch material) over compacted granular backfill as specified until the permanent pavement is placed. The contractor shall monitor and repair all temporary patches as needed. All work to install, maintain, and remove said patches shall be at no additional cost to the City of Toledo. Failure to properly maintain these patches will result in liquidated damages of $300 per calendar day.

The Contractor shall, at his own expense, place and maintain temporary accesses or walkways (i.e. boardwalks, driveways, bridges, crossings, etc.) deemed necessary by the Engineer to reasonably accommodate the public. If it becomes necessary for the Contractor to suspend work during winter months, he shall provide and maintain said items until work is resumed on the project. Should the Contractor fail to provide these items within a reasonable time after suspension of work, the City will do the work at the Contractor's expense. The Contractor shall provide lights and barricades necessary to protect the public and the work. The Contractor must maintain proper barricades and fences to properly protect persons, animals and property against injury. He shall also

furnish and maintain all required traffic control devices on all approaches leading to his work as may be directed by the Engineer. These statements of specific duties of the Contractor shall not be construed as a limitation on the general duties imposed by the specifications.

Existing signs and traffic control devices within the work limits shall remain in use during the construction period unless otherwise specified by the Engineer. If the Contractor needs to relocate or modify existing signs or other traffic control devices as a consequence of his work, he shall provide suitable supports and may modify the devices after obtaining approval from the Engineer and the City of Toledo Division of Transportation. The Contractor shall reinstall all signs to the position and condition, which existed prior to construction as directed by the Engineer.

If the Contractor desires to totally close a street or a traffic lane thereof, he shall notify, in writing, the Division of Transportation (fax 419-245-1310) AT LEAST SEVEN (7) DAYS prior to starting work and shall have obtained approval of his request from the Division of Transportation prior to commencing work. A copy of the closure request shall be provided to the Engineering Services Project Engineer. Road closures will not generally be permitted for the removal and/or installation of curb, walk, driveways or drainage structures on any street, unless necessary to provide a safe environment for traffic, as determined by the Commissioner of Transportation. During these types of construction activities, flaggers shall be used, where necessary, to provide safe access to traffic.

Road closures and major traffic lane modifications requiring Division of Transportation personnel support for traffic signal work, sign adjustments, and detour setup will be scheduled by Division of Transportation crews during normal working hours, which are from 7:00 a.m. to 3:30 p.m. Monday through Friday, excluding City holidays, unless otherwise approved by the Commission of the Division of Transportation.

The Contractor shall notify the Division of Transportation (419-245 –1300), at least forty eight (48) business hours prior to the need for removal of any sign(s)/post(s) within the project area. The Division of Transportation may choose to perform the removal of these signs/posts. The Contractor shall, under no circumstance, remove and/or relocate any Stop sign or Yield sign. The Division of

Transportation shall be notified immediately of any damage or disruption to such traffic control devices.

In the event that the Division of Transportation deems it necessary that no parking signs be erected on streets where construction is to take place, and that it would be in the best interest of the City of Toledo that the Contractor erect said signs; after giving a minimum of five (5) days notice to the Division of Transportation, the Contractor shall pick up the necessary signs from the Division of Transportation Sign Shop, 110 N. Westwood Avenue, (419-245-1300). The signs shall be placed by the Contractor 24 hours preceding the start of work and at maximum 200 foot spacing. The signs shall be removed immediately following completion of the roadway work or as determined by the City Construction Engineer.

Adjustments or reconstruction of structures and any road surface irregularities created by the Contractor shall be identified by warning signs giving notice thereof; i.e., the "Rough Road" sign (W8-8) with the appropriate advisory speed sign (OW13-1). Cost for said signs shall be included in the Maintenance of Traffic bid item.

The contractor shall provide sufficient barricades, signs, and other measures necessary to keep pedestrians, vendors and vehicles from marring and defacing new concrete curb, driveways, sidewalks, pedestrian curb ramps, etc. In the event concrete marring and acts of vandalism do occur prior to the concrete hardening, resulting concrete blemishes shall be completely repaired or replaced to the satisfactions of the Engineer at no additional cost to the City.

The Contractor shall designate a person whose primary responsibility will be to maintain all traffic control devices and to insure their proper functioning at all times. This person shall be available to begin repairs or replacement of any damaged, deficient, or improperly placed traffic control items within thirty (30) minutes of notification of said damage or deficiency. The Contractor shall also furnish the Project Engineer and City Line Information Center (CLIC) (419-245-1000) the name and telephone number where any traffic control difficulties may be reported, on a twenty-four (24) hour basis, any time the designated traffic control person is not on the project.
The Contractor shall be responsible for inspecting the placement, condition and operation of all traffic control devices at least once

per night between the hours of 11:00 p.m. and 4:00 a.m. including, but not limited to, weekends and holidays during the duration of the contract. If, on such inspection, the placement, condition and operation of any of the traffic control devices fails to comply with the requirements of the contract and the regulations outlined in the Ohio Temporary Traffic Control Manual, 2005 Edition, the Contractor shall take whatever immediate steps are necessary to correct any and all deficiencies in this regard.

The Contractor shall insure that each piece of heavy equipment and/or each work area is clearly marked in a conspicuous place with a sign giving the name(s) and telephone number(s) of the person(s) to call in the event of an emergency. Sufficient numbers should be listed to insure that a responsible person can be contacted at all times.

Access for residents and emergency vehicles shall be maintained where possible. Inconvenience to the adjacent residents shall be kept to a minimum.

The Contractor shall furnish, install, maintain, and remove proper temporary retro-reflective pavement markings on all pavements, within the work limits, exposed to traffic. Centerlines and lane lines shall consist of 12" x 4" segments spaced at a maximum 20 foot center to center. Double yellow segments shall be required at all intersections and as directed by the Engineer.

Markings shall be accurately laid out in conformance with 614.11 and shall be located in a true line on the centerline, lane line or channelizing line where normal permanent markings would be, unless otherwise specified in the plans or as directed by the Division of Transportation.

614.09 Add-

A Law Enforcement Officer (LEO) may be required for the following tasks:

-Lane closures during initial set-up periods, tear down periods, substantial shifts in traffic flow.

-During the advance preparation for a complete blockage of traffic when a closure sequence is required.

-During a traffic signal installation.

LEO's should not be used where OMUTCD calls for flaggers to be used. The LEO's are considered to be employed by the contractor and the contractor shall be responsible for their actions. However, the Engineer shall have control over their replacement if deemed necessary. The official patrol car shall be a public safety vehicle as required by the Ohio Revised Code.

The Contractor shall make arrangements for these services by contacting the following:

Lucas County Sheriff
1622 Speilbusch Ave.
Toledo, OH 43604
Phone: 419-245-4900

State Highway Patrol
Toledo Patrol Post
10391 Airport Hwy
Toledo, OH 43558
Phone: 4119-865-5544

The City of Toledo
Police Department
525 North Erie St.
Toledo, OH 43604
Phone: 419-245-3246

The hours paid shall include minimum show-up time required by the Law Enforcement Agency involved. LEO's, including patrol car, shall be paid for per hour under Item 614 – Law Enforcement Officer with Patrol Car.

If the contractor wishes to use utilize LEO's for flagging and traffic control other than for that required in these plans, he may do so at his own expense. Costs associated with the above mentioned additional use of LEO's shall be included under Item 614 Maintaining Traffic.

614.14 Add –

The Contractor shall furnish, install, maintain and remove proper temporary retro-reflective pavement markings on all pavements, within the work limits, exposed to traffic.

NON-COMPLIANCE IN PERFORMING MAINTENANCE OF TRAFFIC ITEMS: If the Contractor fails to immediately correct Maintenance of Traffic deficiencies after verbal notification from the City, the City may enforce liquidated damages in the amount of $750.00 per violation per calendar day. Violations may be identified as but not limited to: proper signage and barricading, height of signs, use of arrow boards, pavement markings, proper lane and/or road closures, etc.

Project/Phase Completion

As the contractor nears completion of a project or project phase, the re-opening of the roadway and/or traffic lanes must be anticipated and coordination of modifications to and/or re-installation of traffic control devices must occur. The contractor shall notify the Division of Transportation at least seven (7) days in advance of re-opening a roadway and/or traffic lanes. The Division of Transportation will perform the fabrication and installation of required permanent traffic control signs. The contractor shall ensure that all permanent pavement markings are installed prior to re-opening the roadway to traffic. The contractor shall be responsible for removal of all temporary traffic control pavement marking when determined to be no longer required.

Repair of Damages to Traffic Signal Installations

The Contractor shall perform his operations at all times to ensure that traffic signal facilities are not disturbed or disrupted as part of these operations. In the event that the Contractor damages traffic signal conduit, it is his responsibility to immediately contact the Division of Transportation (419-245-1300) during normal working hours or via CLIC (419-245-1000) after normal working hours for investigation and repair. This contact must be made independent of whether the traffic signal continues to function following the damage. Repairs will, at the City's discretion, either be made by the Division of Transportation at the earliest opportunity, or direction will be given to the contractor by the Division as to the repairs he will be required to make. The Contractor will be required to assist in the repair(s) by removing debris and/or backfill within the excavation area in order to provide proper access by City Personnel. The Division of Transportation reserves the right to invoice the Contractor for repair of any damages found to be directly attributable to the construction either during the

construction or at any time following contract completion.

Permanent Traffic Control Devices in Sidewalk and/or Median Areas.

At least one workday prior to placing any concrete for median areas or sidewalk areas directly adjacent to the curb, the Contractor shall contact the Division of Transportation (419-245-1300) to evaluate the need for and to mark locations of permanent signing to be located in these areas. The Division of Transportation will provide to the contractor, at no charge, PVC conduit "sleeves" to be installed by the contractor at these locations prior to placing concrete and/or decorative brick. In the event that the Contractor does not comply with this provision, the City will, at its sole discretion, either require the Contractor to perform core drilling to allow installation of signs, or will perform core drilling and invoice the Contractor for this work"

614.16 Add to the First Paragraph –

"F. Work zone pavement markings"

Delete last sentence from the fourth paragraph and replace with -

Aggregate and calcium chloride, authorized by the Engineer and used for maintaining traffic, will be included in payment for Item 614, 'Maintaining Traffic.' When the proposal unit price contract does not contain a bid item for maintaining traffic, include the cost of maintaining traffic, as described under Section 614, in the appropriate bid items.

616 DUST CONTROL

616.04 Add -

When the proposal unit price contract does not contain a bid item for Dust Control items, include the cost of dust control operations, as described under 107.19 and Section 616 in the appropriate bid items.

619 FIELD OFFICE

619.02 At the end of the first paragraph, add -

"But no later than seventeen (17) days from the date of Notice to Proceed"

Add –
"Location shall be approved by the Engineer prior to placement and shall not be on the Contractor's property. Field office shall be a trailer separate from the Contractor's field office, and shall be kept free of vermin for the duration of the contract"

Unless otherwise specified in the plans, a type A field office is to be assumed for bidding purposes. All items specified in Table 619.02-1 for a Type A Field Office shall be supplied. In addition a fax machine shall be supplied and the primary phone line shall be set up for DSL service.

619.03 Delete the last sentence.

623 Construction Layout Stakes and Survey Monuments

623.05 Add-

The Item - Provide and Install monument assembly shall include the removal of existing materials around the existing monument as necessary to install the monument box per standards and specifications." Without disturbing the existing monument. All existing monument box lids shall be returned to the City of Toledo Surveying Department. All costs associated with this work shall be included in the unit price bid for the applicable 623 item.

623.08 Add after third paragraph-

If the City of Toledo performs the construction layout stakes and surveying, the following will apply:

The City of Toledo will provide staking one time. The stakes will be at an interval of 50 feet on all straight sections of roadway and marking all horizontal/vertical changes. In a horizontal/vertical curve the stakes will be at an interval of 25 feet. The Contractor is responsible for the preservation of all stakes and marks. Lath will be provided when offset stakes are not visible from the proposed centerline of survey due to a vertical change of more than 3 feet. If any construction stakes, marks, or lath have been carelessly or

willfully destroyed or disturbed by the Contractor, the cost of replacing them will be deducted from the payment for the work.

Upon request of the Contractor, the City will stake right-of-way at changes in alignment and at intermediate intervals if necessary due to limited visibility along the right-of-way line.
If any portion of the project's construction layout is provided by electronic methods, the contractor must use equipment with a real time survey grade global positioning satellite (GPS) receiver or a Total Station and data collector. These devices must meet *ODOT Surveying & Mapping Specification 602.2 for Total Station and 602.3 for GNSS Receiver.*

623.09 Delete first paragraph and replace with-

If Electronic Instrumentation is used for measurement, the Contractor shall provide the data files used in the field for construction, including but not limited to: DEM's (digital elevation models), DTM's (digital terrain models), TIN's (triangulated irregular network), DXF's (drawing exchange formats), XML Files. DWG's (autocad files), DGN's (microstation), PRO's (terramodel), so that the City can verify the construction layout, perform check sections, and document pay items. All costs associated with the above shall be at no addition expense to the City of Toledo.

624 MOBILIZATION

624.04 Add -

"When the proposal unit price contract does not contain a bid item for 'Mobilization', the cost of Mobilization, as described under Section 624, shall be considered as a subsidiary cost obligation of the contractor under the various unit price bid items contained in the contract."

638 WATER MAINS AND SERVICE BRANCHES

638.01 At the end of the last paragraph, add –

"as amended by this addenda".

638.01.I Add –

"City of Toledo personnel will take bacteria samples."

638.01.M Add –

"as shown on the plans."

638.02 Under "Miscellaneous" –

Delete "Granular Material…..605.02"

Delete "Pipe bedding….611.02H" and replace with "Pipe Bedding…703.02, 703.05, 703.11 Type 3 Size No. 57"

Delete the first paragraph and replace with –

"The Engineer will allow Type 3 Structural Backfill, conforming to 703.11 Size No. 57, to be used as bedding below the pipe only when Pre-stressed Concrete Cylinder Pipe (PCCP) is used **or** when pumping operations do not control severe ground water problems. Place at least 12 inches (300 mm) of Structural Backfill Type 1, Item 304 on top of the Type 3 Structural Backfill to prevent piping.

638.03.B Add –

and any vertical clearances less than 18 inches (0.46 m) between new mains and existing pipes, sewers and structures.

638.04.B At the beginning of the second sentence, add –
"For ductile iron pipe"

After the second sentence, add –

"For Prestressed Concrete Cylinder Pipe, refer to the City of Toledo Construction Standards, Waterline Trench Details, for maximum trench widths.

638.05 Delete and replace with:

"Provide pipe bedding. For ductile iron pipe, use natural sand bedding meeting the requirements of 703.11 Type 2. The bedding material used in the hunching and initial backfill areas shall be of the same material and extend to a height of not less than six inches (6") above the pipe. For pre-stressed concrete cylinder pipe (PCCP), use granular bedding material meeting the requirements of

703.11 Type 3, Size No. 57, up to the springline of the pipe.

Provide a uniform and continuous support for the pipe. Use a minimum depth of 6 inches (150 mm). Compact bedding material as specified by 611.06, as amended in this addenda."

638.06.C Delete and replace with –

"Lay pipe a distance of at least 18 inches (366 mm) from any structure or underground utility, and maintain a minimum 10 feet (3 m) horizontal separation and 18 inches (366 mm) vertical separation from sanitary and storm sewers."

638.06.D Delete and replace with -

"Do not operate any valve, other control, hydrant, air valve or service stop unless a representative of the maintaining agency is present."

638.06.L In the first sentence, delete "unless suitably restrained joints are provided."

638.06.M Delete and replace with –

"Pipe joints shall be restrained per City of Toledo Construction Standards. Fittings shall be restrained by means of mechanical joints with wedge action restraint, and thrust blocking per City of Toledo Construction Standards.

638.07 Delete and replace the first sentence with –

"Furnish ductile iron pipe with either push-on joints, mechanical joints, boltless-restrained joints or ball-and-socket joints. Fittings shall be ductile iron, mechanical joint with wedge action restraint."

Add –

"Use bronze wedges at all push-on joints (two per joint for 4 thru 12 inches and four per joint for larger diameter pipe). Drive wedges into the push-on joint to provide electrical conductivity."

638.08 Delete the first paragraph and replace with –

Complete backfill from the initial backfill to the finished grade, or to

the subgrade surface in paved areas. All backfill under pavement shall be granular material. Backfill material and compaction for water mains and appurtenances shall meet, respectively, the requirements of 611.02 and 611.06**,** as amended by this addenda."

Add –

"Do not use controlled density fill unless the pipe is encased in polyethylene. Blast furnace slag will not be permitted."

638.09 Delete the following –

$$L = \frac{ND\sqrt{P}}{7400} \qquad (L = \frac{ND\sqrt{P}}{130{,}000})$$

Replace with the following –

In $$Lg = \frac{SD\sqrt{P}}{148{,}000} Gallons \qquad Lm = \frac{SD\sqrt{P}}{715{,}317} Liters$$

which

L = Allowable leakage in liters (gallons) per hour

S = Length of pipe in meters (feet) tested

D = Nominal diameter of pipe, in millimeters (inches)

P = Test pressure during leak test in K Pa (psi)

Pressure not to fall below 1000 K Pa (150 psi)

638.10 In the second paragraph delete "Make all necessary taps and".

Add –

City of Toledo personnel will take bacteria samples.

638.11 Delete the fourth and fifth paragraph and add –

Ensure that the inside diameter of the casing allows the water main to be removed without disturbing the casing or roadbed. Ensure that the inside diameter of the casing is at least 4 inches (100 mm)

greater than the largest outside diameter of the water main joints or couplings.

Install the main in the casing on hardwood blocking designed to remain fixed in position. Maintain a 1" maximum clearance between blocks and casing pipe for ease of installation.

After the main is installed in the casing, fill the void around the main by blowing clean dry sand into the casing from both ends. Close both ends of the casing with mortared 4-inch (100 mm) bricks or a concrete bulkhead.

638.12 Delete the first sentence and replace with–

Lay ductile iron pipe and fittings with a polyethylene encasement.

At the end of the paragraph, add –

Cost of polyethylene encasement shall be included in the unit price bid for Item 638 – Water Main, Ductile Iron Pipe.

638.13 In the third paragraph, delete the first sentence and replace with-

Install manholes or chambers on all valves unless otherwise specified on the plans or by the Engineer. Where valve boxes are used,

638.13.D Add –

The City of Toledo will furnish and install tapping sleeves and valves, and chlorination and air vent taps, at the Contractor's expense, unless otherwise specified on the plans. All excavation and backfill shall be performed by the Contractor.

638.14 Delete the last sentence of the first paragraph and replace with -

Cost of hydrant branch (including up to 20 feet of 6-inch diameter waterline), anchor couplings, fire hydrant, gate valve, and valve box shall be included in the unit price bid for Item 638 – Fire Hydrant Assembly.

638.14.A After the first sentence, add -

Hydrant drain holes will be required to be plugged if the hydrants

are located within ten (10) feet of a sanitary sewer, storm sewer, or storm drain. Where the drain holes are not plugged, a stone pocket shall be placed around the base of the hydrant.

638.14.C Delete and replace with -

Construct hydrant branches as shown in the City of Toledo Construction Standards.

638.15 Delete the last sentence of the first paragraph.

638.15.D Add -

"Deliver hydrants removed to the Division of Water Distribution, 401 South Erie Street stock yard on Collingwood Avenue near Erie Street.

638.20 Add-

Payment will be limited to 85% of the measured length of pipe installed until testing, compaction, and surface restoration work included in this item are complete.

653 TOPSOIL FURNISHED AND PLACED

653.02 Delete and replace with:

Furnish topsoil consisting of natural, fertile, sandy loam material capable of sustaining vigorous plant growth and of uniform composition throughout. Furnish topsoil that is free of stone, grass, brush, and roots.

Mechanical analysis shall be as follows:

	Range	Average
Sand (0.05 - 2.00 mm dia. range)	30 - 70%	50%
Silt (0.002 - 0.5 mm dia. range)	20 - 45%	33%
Clay (less than 0.002 mm dia. range)	5 - 30%	17%
90% of topsoil shall pass a 2.0 mm sieve		
Organic Matter	6 – 10%	8%
PH	6.0 – 7.5	

If topsoil that has been removed from the site and stockpiled by the Contractor is reused, modify it to meet these requirements:

Topsoil shall be free from stone, lumps, vegetation, plant parts, and

all deleterious material.

It shall also meet the same organic matter and PH requirements as for new topsoil.

Add –

The contractor shall provide certification that the topsoil to be used on the project meets the City of Toledo's specifications 14 days prior to placement of any topsoil on the project. (Test data in certification must be within 90 days of the date it is provided to the City) The contractor will be subject to liquidated damages in the amount of $100/day for failure to provide proper certification by the time specified above. The City reserves the right to perform random testing on all topsoil placed by the contractor. Any topsoil placed that fails to meet the City's specifications, shall be removed and replaced, reseeded and mulched at the contractor's expense. In addition, the contractor shall reimburse the City for all testing costs associated with this activity.

653.03 Add –

Unless otherwise specified on the plans, topsoil shall be placed at a thickness of 4 inches.

653.04 Delete and replace with -

The City will measure areas where Topsoil is Furnished and Placed. The number of cubic yards for payment will be computed utilizing the measured areas at the specified thickness. To convert topsoil ticket quantities from tons to cubic yards, a conversion factor of 1.3 tons per cubic yard will be used.

653.05 Add –

Failure to provide material tickets to the City within five (5) work days shall result in non-payment for the material.

659 SEEDING AND MULCHING

659.09 Table 659.09-1: Delete Class 1 and Replace with –

The seeding mixture for residential and other areas shall be as follows:

Turf Type Ryegrass, Calypso II Rye,	
Headstart Rye, Racer Rye	5 lbs/1000 SF (50%)
Creeping Red Fescue	3 lbs/1000 SF (30%)
Kentucky Bluegrass	2 lbs/1000 SF (20%)

All areas defined in Item 104.04 shall be seeded at the rate of not less than eight (8) pounds per 1,000 square feet nor more than ten (10) pounds per 1,000 square feet with the above percentages. All percentages are by weight.

Add-

The seeding mixture for parks and boulevards shall be as follows:

Masterpiece Tall Fescue (Turf Type)	3 lbs/1000 SF (30%)
Picasso Tall Fescue (Turf Type)	3 lbs/1000 SF (30%)
Rembrandt Tall Fescue (Turf Type)	3 lbs/1000 SF (30%)
Kentucky Bluegrass	1 lbs/1000 SF (10%)

All areas defined in Item 104.04 shall be seeded at the rate of not less than eight (8) pounds per 1,000 square feet nor more than ten (10) pounds per 1,000 square feet with the above percentages. All percentages are by weight.

A certificate of conformity shall be provided by the seed supplier to the City before any seed is placed.

659.10 Delete “of 3 inches (75 mm) or greater in any dimension”.

659.10 A. Delete “1 inch (25 mm) or greater in any dimension”.

659.12 In the third paragraph – replace “If broadcast seeding,” with “If broadcast seeding is approved by the Engineer,"

Delete the fourth paragraph and replace with –
Between March 1 and October 30, the Contractor **shall** use hydro-seeding, which applies the mulch, seed, water, and commercial fertilizer in the same operation, unless otherwise approved by the engineer.

In the fifth paragraph- replace “according to Item 207” with “according to the project Storm Water Pollution Prevention Plan (SWPPP).”

659.13 Delete the first two sentences and replace with –

For slopes 3:1 or flatter, mulch materials shall consist of wood fiber, or if approved by the Engineer, straw mulch with tackifier.

659.14 Add –

Mulch shall be clean oat or wheat straw, well seasoned before baling, free of mature seed bearing stalks or roots of prohibitive or noxious weed.

659.15 Add-

Mulch for hydro-seeding mixture shall be wood cellulose such as ConWed or Silva Fiber brands or an approved equal.

659.17 Replace at the end of the first paragraph “the mulch material” with -

“the seed, mulching material, or soil.”

659.23 Add before first paragraph –

The Contractor shall guarantee the production of a healthy, uniform, close stand of grass. The grass shall be free of weeds and insects. Bare spots of more than 2% of the total will be unacceptable and the Contractor shall reseed following the specification for the initial installation. All costs associated with growth of the grass shall be the Contractors’.

703 AGGREGATE

703.16.C.3 Delete entire section and Replace with the following-

Furnish a mixture consisting of 60% material meeting Size No. 1 & 2 per table under 703.19.A and 40% material meeting Item 304 per table 703.17.A.

706 CONCRETE AND CLAY PIPE

706.13 Add –

Supply a certificate from the manufacturer certifying compliance with this section.

748 WATER MAIN AND SERVICE BRANCH MATERIAL

748.00 Add -

Acceptance. For each shipment, furnish a manufacturer's sworn statement that the products furnished and all the materials used in the products' construction conform to the requirements of this specification. All material shall be manufactured in the United States of America. Disregard all statements in this section referring to a Departmental Qualified List (QFL).

748.01 Delete and replace the first sentence with -

Furnish ductile iron pipe conforming to ANSI/AWWA C151/A21.51, minimum Class 52, meeting the requirements of AWWA C151 Table 4 or Pressure Class 350 meeting the requirements of AWWA C151 Table 2. Pipe for horizontal directional bores shall be Class 52 ductile iron pipe, with flexible restrained joints – TRFLEX, SNAP-LOK, FLEX-RING, or SUPERLOK, or equal.

Delete the last sentence of the second paragraph.

At the end of the second paragraph, add -
"Restrained push-on joints shall be Tyton Joints with Field Lok gaskets, Fastite Joints with Fast-Grip gaskets, or equal."

In the second sentence of the fourth paragraph, delete –

"16-inches (406 mm) or larger"

Add to the fourth paragraph -

Ensure that fittings are a minimum Class of 250 with mechanical joints. Wedge action restraints shall be used on all mechanical joints. Wedge action restraints shall be EBAA Iron Megalug Series 1100, or equal. Wedge assembly coating system shall be MEGA-BOND by EBAA Iron, or approved equal. All T-bolts and nuts shall be Cor-Blue, XYLAN or equal. Pipe and fittings shall be furnished with a petroleum-asphaltic coating.

748.08 Delete and replace the first paragraph with –

Furnish gate valves conforming to either

1) AWWA C500, parallel seat and double disc with O-ring stuffing box; or

2) AWWA C509, resilient seated, or

3) AWWA C515, reduced-wall resilient seated

Delete and replace the second paragraph with–

Gate valves shall be designed for 250 psi working pressure and tested at 500 psi hydrostatic pressure. Gate valves shall open clockwise and shall be non-rising stem. Valves shall be furnished with a 2-inch square operating nut with the direction indicated by a clearly visible arrow cast into the valve. Valves shall be supplied with O-ring seals at all joints. No flat gaskets will be accepted. Nuts and bolts shall be 304 stainless steel. Use valves suitable for mechanical joints for ductile iron pipe, unless otherwise specified on the plans.

Add after the second paragraph –

Before shipping, submit 3 certified copies of performance tests, as specified in Section 6 of AWWA C509 or Section 5 of AWWA C500 or AWWA C515 to the Engineer for review.

Delete and replace the first two sentences in the third paragraph with –

Furnish valve boxes that are three-piece adjustable screw type, with a 5-1/4 inch shaft, with cast iron full flange ring and lid and a base corresponding to the size of the valve. For valve boxes in pavement, use Tyler Pipe 6860 Series, or equal, with cast iron body. For valve boxes outside of pavement, use Highline Roadway 5-245, or equal, with polyiron body.

Add –

Resilient-seated gate valves shall be non-rising stem valves manufactured by American, Kennedy, Mueller, U.S. Pipe, EJIW or Clow.

748.11 Delete the third sentence and replace with –

Tapping sleeves shall be stainless steel with a full circumferential gasket.

748.15 Add to the third paragraph –

The operating nut shall be pentagon shaped and have a tamper-resistant device as approved by the City of Toledo.

Delete and replace the fourth paragraph with –

The main valve port shall be at least 5 1/4 inch diameter. The valve shall be rubber faced.

Delete and replace the last sentence of the fifth paragraph with-

Furnish mechanical joint conforming to ANSI/AWWA C111/A21.11. Nuts and bolts exposed to soil shall be 304 stainless steel.

Delete and replace the first sentence of the sixth paragraph with –

Ensure that the hydrant has one center-front pumper nozzle of 5-inch internal diameter with Storz connector from Harrington, Inc. or Mueller Co. Storz connector shall be an integral part of the hydrant assembly. Add-on Storz-compatible adapters are not acceptable. Secure Storz caps to the hydrant using an 1/8-inch diameter, vinyl-coated, galvanized aircraft cable, with a minimum length of 18 inches.

Add to the end of the sixth paragraph –

Secure nozzle caps to the hydrant using welded, hot-dipped galvanized or plated chains with links of 3/16-inch diameter steel.

Delete and replace the seventh paragraph with –

Hydrant exterior shall be shop coated using Pittsburgh Paint Brilliant Red (Safety Red) 7-801 Industrial enamel with white bonnet. After the hydrant is installed, the Contractor shall paint the hydrant with one coat of paint. Storz connector and cap not to be painted.

Add to the eighth paragraph –

Furnish hydrants model Kennedy Guardian K-81-A, Mueller Super

Centurion 250 (A-423) or American-Darling B-62-B-5.

Add after eighth paragraph –

Hydrant drain holes will be required to be plugged if the hydrants are located within (10) ten feet of a sanitary sewer, storm sewer, or storm drain. Where the drain holes are not plugged, a stone pocket shall be placed around the base of the hydrant as shown on the City of Toledo Standard Hydrant Drawing."

PROPOSAL

GENERAL PROVISIONS

1. MISCELLANIOUS

a. The quantities shown in the proposal are estimated quantities. The Engineer reserves the right to increase or decrease the estimated quantity for any of the respective items throughout the life of the contract.

b. Deviations from the requirements and procedures outlined within the proposal can only be granted by written permission from the Commissioner of Engineering Services or his authorized representative.

c. When removing or replacing curb, driveway, or walk, if adjacent pavement is damaged due to the Contractor's operations, it is the Contractor's responsibility to repair said pavement at his own expense.

d. All sewer manhole castings or catch basin castings that are removed and/or replaced under this contract are to be delivered to the City of Toledo Division of Sewers and Drainage Services at 4032 Creekside Ave., between the hours of 7:30am and 2:30pm Monday through Friday (excluding City holidays). The cost of delivery shall be included in the applicable bid items. The contractor shall coordinate delivery with the Engineer.

e. All existing water manhole and valve box castings that are removed and/or replaced under this contract shall be delivered to the City of Toledo Division of Water Distribution, 401 South Erie St. stock yard on Collingwood Ave. near Erie St. Cost of delivery shall be included in the applicable bid items.

2. CONDUCT OF WORK

All work shall commence at such points as the Engineer may direct. If the work under this contract conflicts with other work to be done in the same territory for or by the City or public service corporations, utilities or companies, the Engineer will determine when and how the work shall proceed.

The Commissioner of the Division of Engineering Services, due to public necessity, adverse weather conditions or other reasons, may order all work to be suspended; whereas the Contractor must stockpile all material neatly, fill depressions, provide temporary boardwalks, crossings and take such other means as necessary to protect the public, the work, and to facilitate traffic. The completion date of the contract shall be extended in an amount equal to that lost

by the Contractor. During the progress of the work, the Contractor shall in a reasonable manner accommodate both vehicular and pedestrian traffic.

The Contractor shall at all times perform his work in a neat and proper manner, in accordance with the highest degree of workmanship as accepted in the industry. The Engineer may reject work which, in his/her opinion, does not meet these requirements and/or is considered as having unsatisfactory quality. In such cases, the Contractor shall then remove the deficient work and replace it with work of specified quality.

3. TIME FOR DOING WORK

The Contractor will be required to carry out all work under this contract between the hours of 6:00 a.m. and 8:00 p.m. on residential streets and between the hours of 5:00 a.m. and 9:00 p.m. on all other streets or as otherwise defined within the Maintenance of Traffic provisions in the plans and specifications. No work will be permitted outside of the aforementioned hours or on Sundays, except in cases of emergency, and then only on written permission of the Commissioner of Engineering Services.

4. PROPERTY TO BE SECURED BY THE CITY

It is the City's intent to provide and make available to the Contractor the real property specified in the plans and specifications in their present form.

5. SALES TAX AND FEDERAL TRANSPORTATION TAX

Contractor shall confer with City Purchasing Agent, who will give him authority to procure certificate, exempting him from sales tax on all materials entering into this contract.

All materials entering into this contract are exempt from Federal Transportation Tax under Internal Revenue code, Section 3475(b), as amended. The Contractor shall have all shipping papers clearly show that the construction material is consigned to the City of Toledo, in care of the Contractor. No certificates of exemption are required.

6. INSPECTION

The Construction Engineer (419-936-2847) and Best Management Practice Inspection (419-936-3015) shall be notified at least seven (7) days in advance of

any construction in order to arrange for inspection of the project.

No material of any kind can be used until it has been inspected and certified by the manufacturer, City representative or testing company designated by the Engineer and accepted by the Engineer. The Contractor must furnish all labor necessary in handling such material for inspection. The inspection and supervision by the City is intended to aid the Contractor in supplying all materials and in doing all work in accordance with plans and specifications, but such inspection shall not operate to release him from any of his contract obligations. Materials or workmanship found at any time to be defective shall be immediately remedied by the Contractor regardless of any previous inspection. If the Contractor fails to promptly comply with these requirements, the Engineer may authorize other parties to do this work and deduct the cost thereof from any money due or which may become due the Contractor.

7. BLASTING

Blasting will not be allowed unless the Contractor first obtains a permit from the Police Division, and then only on condition that all blasting powder, dynamite, etc., shall be kept in a secure and approved manner, shall be at all times under the special care of a watchman, and that each blast shall be covered with heavy timber or mats before firing, when so directed. The City reserves the right to revoke such permit at any time. All blasting shall be done in the most careful manner, so as not to endanger life or property; the blasts shall be fired only at such times as may be permitted, and whenever directed the number and/or the size of charge shall be reduced; no claim for loss or delay will be allowed on this account. The explosive to be used shall be subject to the approval of the Police Division. All laws and ordinances relative to the storage and use of explosives must be observed. The Contractor will be held responsible for any damage to the water, gas or drain pipes, sidewalks, conduits, etc.

8. MAINTENANCE OF SEWERS, PIPES, PAVEMENT AND BUILDINGS

Unless otherwise agreed upon in writing, the Contractor shall conduct his operations so that the flow of all sewers which are to remain in service shall be maintained at all times. The contractor shall leave in satisfactory condition any sewers, pipes, submarine power cables, or other conduits uncovered or disturbed by his operations; and, if necessary, he must remove the old ones and build new ones. Also, weep holes in existing retaining walls and abutments shall be opened and caused to flow. All costs associated with the above mentioned work with reference to maintaining sewers, necessary pumping, conduit repair/replacement, etc. shown on the plans or exposed to inspection shall be included in the appropriate contract bid item.

The contractor shall proceed with caution when working in areas adjacent to existing sewers. Any damage to existing sewers resulting from the contractor's operations or negligence, as determined by the Engineer, shall be immediately repaired by the Contractor at no additional cost to the City of Toledo.

The Contractor shall so conduct his work as to minimize disturbance to existing pavement and buildings, and shall repair and/or reconstruct, to the satisfaction of the Engineer, all such property affected by his operations. The cost of such work shall be included in the unit price bid for the respective construction item.

9. SOILS

The soils in northwestern Ohio, including those at the site of this project, contain background levels of naturally-occurring arsenic which may exceed certain regulatory standards. The reports listed below were used in evaluating this condition and are available for review at the Division of Engineering Services. It is the responsibility of the Contractor to dispose of all excess soils on this project in areas that will accept this soil with the background levels of naturally-occurring arsenic.

Report dated: July 2008
Prepared by: Mannik & Smith Group
Titled: 'Remedial Action Completion Report'

Report dated: June 21, 1996
Prepared by: Cox-Colvin & Associates
Titled: 'Evaluation of Background Metal Concentrations in Ohio Soils'

Report dated: February 1983
Prepared by: The Ohio State University - Ohio Agricultural Research and Development Center
Titled: 'Evaluation of Background Metal Concentrations in Ohio Soils'

10. SEWER AND DRAINAGE STRUCTURES

The Contractor shall be responsible for maintaining reasonably unrestricted access to all public sewer and drainage structures affected by construction. Access to said structures is required through castings that are not obstructed by lids/grates that are either sealed to their frame or covered with asphalt material. The Division of Sewer and Drainage Services response crews are not equipped to unseal, uncover, or clear obstacles from these structures in the event of an emergency. If this occurs, the contractor shall unseal, uncover, or remove obstructions in a timely manner at no additional cost to the City.

The Contractor must conduct all work on or around public manholes in the City of Toledo in a safe manner in accordance with ORD 338-99.

11. USE OF CITY WATER

The Contractor must secure a permit, rent a hydrant meter and wrench and pay for use of City water in this contract per the Department of Public Utilities Rules and Regulations.

12. PROPER SUPPORT OF WATER MAINS AND HOUSE SERVICE LINES

Whenever it becomes necessary to expose, undercut, or in any way disturb the soil supporting a water main or water service lines in the conduct of any of his operations, the Contractor shall be responsible for adequately supporting the water main or water service line, without deflection, during the period in which it is exposed. Proper care shall also be taken to insure that no deflection of the water line occurs during or after back-filling. Water lines may be supported by securing them to planks extending into and anchored in undisturbed ground. These planks shall be left in place during and after backfilling operations. Alternate methods of providing proper support for water mains or house services shall require the approval of both the Division of Water Distribution and the Division of Engineering Services.

13. REPAIRS/REMOVALS OF RESIDENTIAL AND COMMERCIAL TAPS (SERVICES), TAP BRANCHES, AND WATER MAINS

Only the Division of Water Distribution is permitted to make repairs to the tap or tap branch. When a tap or tap branch is damaged by a contractor, the full cost of repairs shall be borne by the contractor. When deemed advisable by the Division, the entire tap branch shall be replaced and the entire cost shall be borne by the contractor.

When a tap branch has to be removed, for the contractor's convenience, the Division of Water Distribution will remove and reinstall the branch at the contractor's expense. The Division shall be notified 2 hours in advance of disturbing. If the contractor hits the branch without notifying the City, the contractor shall be charged for the replacement of the entire tap branch, from the water main to the curb box at the right of way.

When a water main has to be removed, for the contractor's convenience, the Division of Water Distribution will remove and reinstall the water main at the

contractor's expense. The Division shall be notified 3 days in advance of disturbing.

14. EXISTING MONUMENTATION

All existing monuments in the City of Toledo are of permanent character and are a critical part of referencing all survey & design information. Therefore, the exact location of the existing monuments within the project limits must be properly documented, and it will be the contractor's responsibility to contact the City's Chief Surveyor (phone: 419-936-2685 or fax: 419-245-1260) at least 24 hours in advance of disturbing. This referencing will also include any monument that the contractor may locate that is not shown on the plans. Failure to properly document an existing monument will result in the contractor being held monetarily responsible for reestablishing that monument.

15. CLAIMS AGAINST CONTRACTOR

The Contractor hereby agrees that he will promptly pay all bills for labor and materials contracted by him on account of the work herein contemplated. If at any time during the progress of the work or before final payment of any money due the Contractor under the terms of this contract, any claim for labor and materials or for damages by reasons of any acts, omission or neglect of said Contractor in the prosecution of the work, shall be presented to the City, the City may retain such sum or sums from the monies due the Contractor under the contract as would be necessary to discharge all such claims whether for labor or materials or for damages as aforesaid until the validity of such claims shall be established and finally determined. And if established and finally determined as valid, all such claims shall be paid from the amount so retained if it be sufficient for that purpose; otherwise, or if at any time the City shall be satisfied that any of such claims are invalid and groundless, any amount so retained shall be paid to said Contractor, and neither the City nor any official thereof shall be liable to any individual, firm or corporation making such claims for failure or refusal to hold and retain any money due under this contract for the purpose of payment of such claim. If the monies so retained under this contract are insufficient to pay all such claims presented to the City and adjudged by any court of competent jurisdiction to be valid obligations of said Contractor, the party of the first part may, at its discretion, pay the same, and the Contractor shall repay said party of the first part all sums so paid. The said party of the first part may also, on the written consent of the Contractor, use any monies due or to become due under this contract for the purpose of paying any claims presented to the City for labor or materials used in the work.

The Contractor shall furnish waivers of all liens before the final payment, and at such other times as may be required by the Commissioner of Engineering

Services.

16. VERBAL STATEMENTS NOT BINDING

The written terms and provisions of this Agreement shall supersede all verbal statements of the Mayor, Director, or other representative of the City, and such statements shall not be effective or be construed as entering into, or forming a part of, or altering in any way whatsoever, the written Agreement.

17. DBE / MBE AFFIDAVIT

The Contractor shall execute a Disadvantaged Business Enterprise (DBE) and/or Minority Business Enterprise (MBE) affidavit, on forms provided by the City, before each partial payment and final payment. This requirement is in addition to the contractor affidavit requirements per the State of Ohio Construction and Material Specifications**.**

The City of Toledo has the right to deny payment until the contractor is in complete compliance with regard to their Affirmative Action Program.

18. MAYOR

The Mayor is the Mayor of the City of Toledo. Any other stipulation in this Proposal, in the contract, or the aforementioned State of Ohio specifications notwithstanding, the Mayor is the Contracting Office of the City of Toledo, and he shall have final authority on all questions arising under the contract subject to the stipulations of the contract in the settlement of disputes.

19. PROVIDE STORM DRAINAGE DURING CONSTRUCTION

In the event that an existing Catch Basin or Inlet is adjusted to grade for an extended period of time prior to paving, or the Contractor is directed to begin construction during the present construction season and to finish the work during the following spring, then it shall be the Contractor's responsibility to provide adequate roadway drainage at those locations where work has taken place; such as, radius cutbacks, catch basins/inlets adjusted to grade that are higher than the adjacent pavement, etc.

20. NOTIFICATION

Any legal notice permitted or required to be given under this Agreement shall be sufficient if deposited in the U.S. Mail, postage prepaid, addressed as follows:

Mayor Paula Hicks-Hudson
One Government Center, Suite 2200
Toledo, Ohio 43604-2293

Copy correspondence to the following:

Edward A. Moore, Director
Department of Public Utilities
420 Madison Avenue, Suite 100
Toledo, OH 43604

Douglas R. Stephens, P.E., Commissioner
Division of Engineering Services
One Lake Erie Center, Suite 300
Toledo, Ohio 43604

Bryan Benner, Commissioner
Division of Purchases and Supplies
One Government Center, Suite 1970
Toledo, Ohio 43604-2293

All other project correspondence shall be directed to the Project Engineer. Each Contractor and/or Subcontractor must submit a certified copy of their complete payroll for each date exhibited for each employee in which wages are paid to his or her name, current address, social security number, number of hours worked each day during the pay period, and the total for each week, his or her hourly rate of pay, job classification, fringe benefits, and deductions from his or her wages. The aforementioned information, in addition to a schedule of dates during the life of the contract on which wages are paid, are required from the Contractor and Subcontractors within ten days of payroll, and supplemental reports for each week thereafter until contract completion.

21. APPLICABLE LAW AND REGULATION/COMPLIANCE

Attention is hereby directed to the fact that all applicable and pertinent State of Ohio laws as well as City of Toledo ordinances, shall apply to this contract

throughout, and same will be deemed to be included in the contract as though herein written in full.

The Contractor will secure all necessary permits and/or licenses required to perform the duties and responsibilities pursuant to this contract. The Contractor and/or any sub-contractors shall possess a City of Toledo license for sewer and/ or sidewalk work prior to commencing that type of work under this contract.

22. SEVERABILITY CLAUSE

If any provisions, clause, sentence or paragraph of this contract shall be held invalid, such invalidity shall not affect the other provisions.

23. CONTRACT AWARD DISCLAIMER

The City of Toledo is a public entity that must comply with certain legal requirements and internal review procedures prior to awarding any contract. No party has a right to expect that he/she/it will be awarded a contract with the City absent adherence to these legal requirements and review procedures. All contracts with the City of Toledo must contain the signature of the Mayor or the Mayor's duly authorized designee. The City reserves the right to refuse to enter into a contract with any party until all legal requirements have been met, all internal review procedures have been adhered to, and the Mayor or the Mayor's duly authorized designee executes the contract.

24. O.S.H.A.

The contractor shall, throughout his involvement in this contract, comply with all rules, regulations, and provisions established by the Occupational Safety and Health Administration (O.S.H.A.) which are pertinent to his execution of any and all provisions contained within this contract.

25. OHIO NPDES CONSTRUCTION PERMIT

The contractor must comply with Ohio’s NPDES construction permit. Refer to the project Storm Water Pollution Prevention Plan (SWPPP) shown on the plan drawings.

26. CONSTRUCTION NEAR STREET TREES

Listed below are regulations governing construction activities in the vicinity of street trees. These regulations apply to all types of construction activity, being performed with or in close proximity to public rights-of-ways and easements.

A. For trees measuring thirty-eight inches (38") in circumference (equivalent to twelve inches (12") diameter) or less, soil excavation work or root cutting shall not occur closer than three feet (3') from the outer bark of the tree. The circumference of the tree here and elsewhere in these requirements shall be taken two feet (2') above the ground level. For multi-stemmed trees, the circumference shall be taken at the narrowest point within the first two feet (2') above the ground surface.

B. For trees measuring greater than thirty-eight inches (38") in circumference, soil excavation work or root cutting shall not occur closer than the distance measured by the circumference of the tree, or the maximum distance of six feet (6'), which ever is less.

C. Soil excavation work is permitted closer than the distance parameters established under the above two categories, provided all excavation of soil is accomplished by hand shovel or auger, and no roots greater than two inches (2") in diameter are severed.

D. If there is an inability to perform the requirements established under the aforementioned three situations, a representative from the Division of Forestry (telephone (419)-936-2988) shall be called to the tree site to make an inspection and recommendation pertaining to the need to remove the tree.

Additional costs that may be incurred by the contractor to comply with the aforementioned four requirements shall be included under the appropriate bid item. For trees that require complete removal, as approved by the Engineer, to accomplish certain construction activities, compensation will be authorized under the appropriate Item 201 Tree Removal and/or Clearing and Grubbing bid items.

27. SIDEWALK POLICY IN HISTORICAL DISTRICTS

Whenever sandstone sidewalk or curb in the right-of-way is to be removed within a City of Toledo Historic District, it is the policy of the City of Toledo that the sandstone materials remain with the respective abutting property owner for their use. The contractor and/or agency doing the work shall notify said property owner prior to the materials being removed. If the property owner wants the material, the contractor or agency will carefully place the material on the abutting property. The contractor or agency will not be responsible for securing sandstone materials left on the property after removal. Cost for said work shall be included in the applicable 202 removal Item.

However, if said property owner and/or Historic District representative states that they do not want the sandstone material, then the contractor or agency shall remove the sandstone walk or curb from the work site per Item 202.

In addition, when concrete sidewalk is replaced in a Historical District, it shall be cured with clear curing compound, having no white pigment.

28. CONTRACTOR EVALUATION FORMS

In order to provide the citizens of the City of Toledo with a cost effective and quality service, the Division of Engineering Services will be evaluating the performance of contractors and consultants. A sample form is included in this bid packet (section “E”). A post contract meeting may be set up to review the evaluation by the person directly responsible for overseeing the project with the contractor/consultant representative.

City of Toledo

CONTRACTOR/CONSULTANT EVALUATION FORM

PURPOSE:

To evaluate the performance of contractors and/or consultants who provide service to the City of Toledo. This document will also provide an avenue to communicate our expectations as it relates to providing timely, cost-effective, and quality service to the citizens of the City of Toledo.

This evaluation document is included in the contract documents (or request for proposal) to be completed by the City employee(s) that are directly responsible for overseeing the project. This evaluation is to be reviewed and/or discussed at the post-construction/contract meeting with the contractor/consultant. Each evaluation will be kept on file at the City of Toledo and placed in a database for use by all Divisions. The information may also be utilized in the award process when evaluating future bids with the City of Toledo.

Date: 1/1/2015

Project Name: _____

_____

Contractor: _____

SCORE

City of Toledo

Contractor/Consultant: _____

Contract Name: _____

Contract Start Date: _____ Contract End Date: _____

Name of Evaluator: _____

Post Construction Meeting: _____

Contract Number: _____

Contract Amount: _____

Instructions: Please rate all areas applicable to the project/contract just completed. For areas rated "Did not meet Expectation", please attach back-up documentation (i.e., inspector reports, etc.) to support the rating or provide information in comment section, as necessary. Be sure to adjust the final score based on the number of criteria being rated.

City of Toledo

A. ORGANIZATION AND MANAGEMENT

1. Were management personnel available with full authority to execute the directions of the engineer?

◯ Always	◯ Most of the time	◯ At least half of the time	◯ Some of the time	◯ Rarely	◯ N/A

Comments:

2. Were management personnel competent and effective in scheduling the work and organizing construction operations?

◯ Always	◯ Most of the time	◯ At least half of the time	◯ Some of the time	◯ Rarely	◯ N/A

Comments:

3. Were management personnel knowledgeable with respect to the plans, specifications, and contract documents?

◯ Always	◯ Most of the time	◯ At least half of the time	◯ Some of the time	◯ Rarely	◯ N/A

Comments:

City of Toledo

4. How adequately was the project staffed with appropriate skilled workers?

◯ Always ◯ Most of the time ◯ At least half of the time ◯ Some of the time ◯ Rarely ◯ N/A

Comments:

5. Did the contractor/consultant furnish the required documentation and/or reports in a timely manner (i.e., certification of materials, TE-24's, progress schedule, shop drawings, material tickets, etc.)?

◯ Always ◯ Most of the time ◯ At least half of the time ◯ Some of the time ◯ Rarely ◯ N/A

Comments:

6. Did the contractor/consultant inform project personnel in advance of scheduled day-to-day items of work?

◯ Always ◯ Most of the time ◯ At least half of the time ◯ Some of the time ◯ Rarely ◯ N/A

Comments:

7. Was the chain of authority in the City of Toledo respected by the contractor/consultant (positive attitude toward project personnel, etc.)?

◯ Always ◯ Most of the time ◯ At least half of the time ◯ Some of the time ◯ Rarely ◯ N/A

Comments:

City of Toledo

8. Did the contractor/consultant comply with the direction of project personnel without delay?

◯ Always	◯ Most of the time	◯ At least half of the time	◯ Some of the time	◯ Rarely	◯ N/A

Comments:

9. How well did the contractor/consultant coordinate/ cooperate with other contractors/consultants/agencies performing work on adjacent or related projects?

◯ Always	◯ Most of the time	◯ At least half of the time	◯ Some of the time	◯ Rarely	◯ N/A

Comments:

10. Did the contractor/consultant comply with all wage rates and labor regulations, and submitting accurate payrolls?

◯ Always	◯ Most of the time	◯ At least half of the time	◯ Some of the time	◯ Rarely	◯ N/A

Comments:

11. Did the contractor inform the adjacent residents/business owners of the construction operations?

◯ Always	◯ Most of the time	◯ At least half of the time	◯ Some of the time	◯ Rarely	◯ N/A

Comments:

12. Did the contractor/consultant effectively handle situations involving problem employees brought to their attention by the City of Toledo?

◯ Always	◯ Most of the time	◯ At least half of the time	◯ Some of the time	◯ Rarely	◯ N/A

Comments:

B. EQUIPMENT

1. Did the contractor provide the appropriate number and type of equipment necessary for performance of the work?

◯ Always	◯ Most of the time	◯ At least half of the time	◯ Some of the time	◯ Rarely	◯ N/A

Comments:

2. Did the contractor provide reliable equipment so as not to impede the progress of the project?

◯ Always	◯ Most of the time	◯ At least half of the time	◯ Some of the time	◯ Rarely	◯ N/A

Comments:

City of Toledo

B. WORK PERFORMANCE

1. Was the work site maintained in a safe, clean and orderly condition?

◯ Always	◯ Most of the time	◯ At least half of the time	◯ Some of the time	◯ Rarely	◯ N/A

Comments:

2. Did the contractor comply with maintenance of traffic items (signs, lights, barricades, flaggers, etc.) in accordance with Ohio Manual of Uniform Traffic Control Devices?

◯ Always	◯ Most of the time	◯ At least half of the time	◯ Some of the time	◯ Rarely	◯ N/A

Comments:

3. Did the contractor/consultant meet plan requirements and contract documents without instruction from the City of Toledo?

◯ Always	◯ Most of the time	◯ At least half of the time	◯ Some of the time	◯ Rarely	◯ N/A

Comments:

4. To what degree was the overall quality of work performed by the contractor/consultant?

◯ Excellent	◯ Very Good	◯ Average	◯ Fair	◯ Poor	◯ N/A

Comments:

City of Toledo

5. Did the contractor/consultant properly notify and coordinate work with other agencies/utility companies in protection of existing facilities?

◯ Always	◯ Most of the time	◯ At least half of the time	◯ Some of the time	◯ Rarely	◯ N/A

Comments:

6. Did the contractor/consultant minimize urgencies of construction that would require the City of Toledo to compromise the quality of work or abandon good construction/engineering practices in order to complete the project?

◯ Always	◯ Most of the time	◯ At least half of the time	◯ Some of the time	◯ Rarely	◯ N/A

Comments:

7. Did the contractor/consultant finish the work by the contract completion date? (including extensions granted by the City.)

◯ Yes	◯ No	◯ N/A

Comments:

City of Toledo

8. Was the contractor/consultant fair and professional with respect to contract scope of work changes?

○ Yes ○ No ○ N/A

Comments:

9. Did the contractor/consultant offer any value engineering to help control the cost of the project?

○ Yes ○ No ○ N/A

Comments:

10. Was final clean up and punch list items completed in a timely manner?

○ Yes ○ No ○ N/A

Comments:

City of Toledo

B. SUBCONTRACTOR MANAGEMENT

1. Did the contractor/consultant properly schedule/ coordinate the work of their subcontractors?

◯ Always ◯ Most of the time ◯ At least half of the time ◯ Some of the time ◯ Rarely ◯ N/A

Comments:

2. Did the contractor/consultant monitor their subcontractor(s) activities to ensure that approved materials were being used and that the work was being performed properly?

◯ Always ◯ Most of the time ◯ At least half of the time ◯ Some of the time ◯ Rarely ◯ N/A

Comments:

3. Did the contractor/consultant ensure that their subcontractor(s) complied with proper wage rates and submitted certified payrolls?

◯ Always ◯ Most of the time ◯ At least half of the time ◯ Some of the time ◯ Rarely ◯ N/A

Comments:

4. Did the contractor/consultant meet the MBE/DBE goal specified in the original contract?

◯ Yes ◯ No ◯ N/A

Comments:

SWPPP - INSPECTION FORM

Construction Site Inspection Checklist

Inspections shall be conducted by contractor once every 7 days and written within 24 hours of a 0.5" or greater rainfall. All sediment controls must be installed prior to grading and within 7 days of first grubbing records of inspections shall be kept by contractor on the following form:

Name of development: _____
_____
Location (city or twp.) _____
County: _____
NPDES permit #: _____
Date of inspection: _____
Name of inspection: _____
Weather conditions: _____
Has it rained 0.5" or more in the past 24 hours? ____yes ____ no

Temporary Stabilization Key Things To Look For…

1) Are there any areas of the site that are disturbed, but will likely lie dormant for 45 days longer? ____yes ____ no

2) Have all dormant, disturbed areas been temporarily stabilized in their entireties?
____yes ____no

3) Have disturbed areas outside the silt fence been seeded or mulched?
____ yes ____no

4) Have soil stockpiles that will sit for 45 days or longer been stabilized?
____yes ____no

5) Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs. per 1000 ft. And straw mulch is applied at 2-3 bales per 1000 ft.
____yes ____no

6) Has seed or mulch washed or blown away? If so repair. ____yes ____no

Note areas where repairs or maintenance is needed or where this practice needs to applied:
_____
_____
_____

Construction Entrances Key Things To Look For…

1) Has the drive been constructed by placing geotextile fabric under the stone? ____yes ____no

2) Is the stone 2-inches in diameter? ____yes ____no

3) Has the stone been placed to a depth of 6 inches, a width of 10 feet, and a length of at least 50 feet (30 feet for entrances onto individual sublots)? ____yes ____no

4) If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource? ____yes ___no

5) If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive? ____yes ___no

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

_____
_____
_____

Sediment Ponds Key Things To Look For…

1) Are concentrated flows of runoff directed to a sediment pond? ____yes ____no

2) Is sheet-flow runoff from drainage areas which exceed the capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond? ____yes ____no

3) Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms or channels? ____yes ____no

4) Is the sediment pond sized appropriately (67 cubic yards per acre of total drainage area)? ____yes ____no

5) Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized? ____yes ___no

6) For sediment basins which dewater 100% between storms, is the riser pipe wrapped with chicken wire and double-wrapped with geotextile fabric? Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically? For sediment basins which dewater 60% between storms, is the diameter of the dewatering hole per plan (see page 105 Rainwater Manual)? ____yes ___no

7) For sediment traps, is there geotextile under the stone spill-way saddle-shaped ? For sediment traps which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter perforated, and double-wrapped in geotextile? ____yes ___no

Is the length-to-width ratio between inlet(s) and outlet at least 2:1? ____yes ___no

Note: if not, a baffle should be added to lengthen the distance.

9) Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet? ____yes ___no

10) For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight? Was the basin installed prior to grading the site? ____yes ___no

11) Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half full. Stabilize the dredged sediments with seed and mulch. ____yes ___no

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

_____
_____
_____

Silt Fence Key Things To Look For…

1) Is the fence trenched at least 4" to 6" into the ground? ____yes ___no

2) Is the trench backfilled to prevent runoff from cutting underneath the fence? ____yes ___no

3) Is the fence pulled tight so it won't sag when water builds up behind it? ____yes ___no

4) Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends? ____yes __no

5) Is the fence placed on a level contour? If not, the fence will only act as a diversion. ____yes ___no

6) Have all gaps and tears in the fence been eliminated? ____yes ___no

7) Is the fence controlling and appropriate drainage area? Refer to page 119 of rainwater manual. ____yes ____no

Rule of thumb: no more than 0.25 acre should lie behind 100 feet of fence at 2% to 10% slope, i.e., the distance between the fence and the top of the slope behind it should be no more than 125 feet. The allowable distance increases on flatter slopes and decreases for steeper slopes.

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

_____
_____
_____

Inlet protection Key things to look for…

1) Does water pond around the inlet when it rains? ___yes ___no

2) Has the fabric been replaced when it develops tears or sags? ___yes ___no

3) For curb inlet protection, does the fabric cover the entire crate, including the curb window? For yard inlet protection, does the structure encircle the entire grate? ___yes ___no

4) Is the fabric properly entrenched or anchored so that water passes through it and not under it? ____yes ___no

5) For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales. ____yes ___no

6) Is sediment that has accumulated around the inlet removed on a regular basis? ____yes ___no

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

_____
_____
_____

Permanent Stabilization Key Things To Look For…

1) Are any areas at final grade? ____yes ____no

2) Has the soil been properly prepared to accept a permanent seeding? ___yes ___no

3) Has seed and mulch been applied at the appropriate rate (see page 169 of the rainwater manual)? ____yes ____no

4) If rainfall has been inadequate, are seeded areas being watered? ____yes ____no

5) For drainage ditches where flow velocity exceeds 3.5 ft/sec from a 10-year, 24-hour storm has matting been applied to the ditch bottom? If the flow velocity exceeds 5.0 ft/sec, has the ditch bottom been stabilized with rock rip-rap? ____yes ___no

Note: rock check dams may be needed to slow the flow of runoff.

6) Has rock rip-rap been placed under all storm water out-fall pipes to prevent scouring in the receiving street or erosion of the receiving channel? ____yes ____no

7) For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion? ____yes ____no

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

_____
_____
_____

Non-Sediment Pollution Control Key Things To Look For…

1) Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain. ____yes ____no

2) Is waste and packaging disposed of in a dumpster? Do not burn them at the site. ____yes ____no

3) Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain? ____yes ____no

4) Are streets swept as often as necessary to keep them clean and free of sediment? ____yes ____no

Note: sediment should be swept back onto the lot not down the storm sewers.

5) Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain? ____yes ____no

6) Have stream crossings been constructed entirely of non-erodible material? ____yes ____no

7) If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond ____yes ____no

Note: if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden runoff or to discharge it off site by passing it over disturbed ground.

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

_____
_____
_____