# **101 Definitions and Terms**

**Drip Line.** An imaginary circle that could be <u>drawn</u> on the <u>soil</u> around a tree directly under the tips of its outermost <u>branch</u>es.

**NRC.** An abbreviation for no root cutting that will be marked on the sidewalk, driveway, or curb that is being repaired or removed. No root cutting shall occur until reviewed by City Forester.

Root Flare. A swelling where tree roots join the trunk and are visible at the soil surface.

**Street Tree.** A tree located within a terrace (between the curb and sidewalk) or on public right of way.

# **102.1 Prequalification of Bidders**

Bidders' annual prequalification period has been changed from April 1 through March 31 to February 1 through January 31. The date in which a bidder must submit an Affirmative Action Plan or Certificate of Compliance within 10 days has been changed to February 1.

## **102.4 Proposals**

The requirement of acknowledging the number of addenda on the outside of the bid envelope (or envelope #1, the monetary bid) has been added. This is in addition to acknowledging the number of addenda on the proposal page (page p-1).

# **106.4** Storage of Materials

Added language to stress that equipment shall not be secured to street trees.

# 107.2 Protection and Restoration of Property and Property Monuments

Added language to stress protection of street trees in paragraph six.

# **107.7 Maintenance of Traffic**

The contractor shall adhere to peak hour restrictions when working in the ROW.

# 201 Excavation Cut

Clarify the payment of unclassified excavation. On suitable on-site fill is typically incidental to excavation cut and fill (borrow) is a typically a separate pay item.

# 202 Fill

Clarify the different types of fill and select fill, where they can be used and how they are to be paid for and measured.

#### 203.2(e) Backfilling

All trenches, holes and pits resulting from the removal or abandoning <u>and other</u> miscellaneous structures (clarification of specifications)

## 203.3 Method of Measurement

Item 14: Abandon sanitary sewer pipe with slurry will be measured by the cubic yard of slurry required to completely fill the void. Payment quantity shall not exceed the calculated void area. (clarification of specifications)

## 203.4 Basis of Payment

The contract price for removing or abandoning pipe <u>and other</u>, miscellaneous structures... (clarification of specifications)

Paragraph pertaining to Select Fill deleted. (Select fill is considered incidental)

If the contract does not include a separate item for removal <u>or abandonment</u> of <u>miscellaneous</u> pipes, the removal <u>or abandonment</u> of existing <u>miscellaneous</u> pipes shall be (clarification of specifications)

No additional compensation shall be made for removal of concrete encased sewer pipe. (clarification of specifications)

When there is no unit price for Concrete Pavement Removal in the contract, it shall be understood and agreed that the contractor shall be paid \$5.00 per square yard of concrete pavement removed. The void shall be backfilled with select fill and paid for under the appropriate bid item.

# 207.2 Seed Materials

Revised temporary seed mixes. Temporary seed mixes will be oats, wheat or rye depending on the time of year.

# 207.3 Seeding

The type of terrace seed will be specified in the field by the engineer unless otherwise specified.

# 207.5 Basis of Payment

"Seeding" and payment thereof shall now also include the act of ... <u>furnishing</u>, <u>hauling</u> and <u>placing soil stabilizers</u>. (clarification of specifications)

# 210.1 Description of Erosion Control

Additional types of erosion control measures added.

# 210.3 Construction Methods (Erosion Control)

Clarification on type and rate of seeding shall be per section 207. Clarification of erosion control requirements.

# 210.4 Method of Measurment

Clarify measurement of inlet protection measurement.

## 210.5 Basis of Payment

Clarification of specification and payment for erosion control measures

## 301.1 General

Item Number 4 pertaining to fly ash has been deleted.

## 301.5 Placing and Finishing

Concreting operations may not be resumed until an ascending air temperature in the shade and away from artificial heat reaches 32 degrees Fahrenheit. (clarification of specifications)

## **301** Concrete Curb and Gutter

Added typical language for cold weather protection.

## 302.2(h) Special Waterway

New item.

#### **302.3 Measurement and Payment**

Item 302.3(a) Method of Measurement added for Special Waterway.

## **302.3(b) Basis of Payment**

New paragraph added to address payment of Special Waterways.

# 302 Concrete Sidewalks, Concrete Driveways, Concrete Traffic Islands and Steps of Concrete Masonry

Added typical language for cold weather protection.

#### **303.2(d)** Joints

Added language to clarify caulking of joints for exposed aggregate concrete sidewalk (clarification of specifications)

#### 303.2(n) Curb Ramp Detectable Warning

Materials: "Paint color shall be safety yellow or approved equal."

Construction: New requirement. Curb ramp detectable warning field shall be painted within ten (10) working days of being placed.

#### 303.3 (h) Basis of Payment

Concrete under detectable warning field shall be paid for separately under appropriate bid item...ie concrete under detectable warning field shall not be considered incidental to warning field.

# 305 – Sidewalk Replacement Program

New article. Language is regularly included in special provisions of Sidewalk Ordered Replacement and Request Contracts

#### 401.3 Measurement and Payment

Truck drivers required to provide last four digits of social security number. Now they can provide last four digits of driver's license on tickets for loads of crushed aggregate.

## 402.3 Asphalt Pavement

Approved commercial mixes are approved in driveways and terraces.

Asphalt yields were changed from 120#/in./sy (min) & 128#/in./sy (max) to 115# and 120# respectively.

## 402.6 Measurement and payment

Truck drivers required to provide last four digits of social security number. Now they can provide last four digits of driver's license on tickets for loads of crushed aggregate.

## Article 403 – Resurfacing

**403.1 General** Section edited for clarification.

## 403.8 – Asphalt Base Patching

Clarified temperature in which base patching can be completed. Minimum air temperature is 32 degrees.

# 403.16 Adjust Valve Casting, Method #1 – Resurfacing, Adjust Valve Casting

403.16(a) Method #1 – Section edited for clarification.

#### 404.1 General

Adds a reference to Part III of the City of Madison Standard Specifications.

# 404.4 Concrete Speed Hump

New section

#### 404.5 Concrete Pavement Reconstruction

Moved from section 404.4 to 404.5

# 404.5 (c), (d)

Revised unit of measurement to correspond with bid item unit (correct unit should be square yard)

# 502.1(c) Trench Excavation, Bedding and Backfill

Revised dewatering practice selection matrix

## 502.1(f) Utility Trench Patches

Additional language added to last paragraph to better define when pavement had to be restored. Arterials and collectors restored the same day, local streets within 3 days.

Clarified temperature in which base patching can be completed. Minimum air temperature is 32 degrees.

## 503.2 (e) Sanitary Sewer Marker Disks

Effective Dec. 31, 2006, Act 425, Chapter 182.0715(2r) of the Wisconsin State Statutes requires that all non-metallic building sewers (including sanitary laterals, private sanitary sewers and storm sewer laterals) installed within the City Right of Way, shall be accompanied by a means of locating the newly installed underground pipe. Sewer mains that have manhole or inlet structures on both ends within the City Right of Way are considered exempt from this legislation.

The City of Madison has selected a marker system that includes the installation of disks over the sanitary sewer facilities, which after construction provide a signal that can be located by the city's utility locator after construction is complete.

The 3M ScotchMark Electronic Marker System Full-Range Marker (model #1253) <u>http://www.solutions.3m.com/en\_US/</u> shall be considered an acceptable marker device for this specification. If an alternate equivalent marker is selected, contractor shall provide specifications and data sheets of the selected device to City Engineering prior construction in order for the City to confirm that the proposed marker device is compatible with the City's marking equipment.

Each sanitary lateral shall have a minimum of 2 marker disks: one shall be located above the wye on the sewer main and one shall be located above the lateral at the property line. Please note that the range on this locator device is from 0-8' in depth. Taking this into account, contractors shall backfill the trench above the facilities in the desired location (above wye, at property line) so that the device is no deeper than 8'. The device shall be placed flat and horizontal in the trench.

Upon completion, the City will test each sanitary lateral marker disk to confirm that it is installed and functioning properly. If it is determined that the sanitary lateral marker disk has not been installed, the contractor will be responsible for the installation of Sanitary Lateral Disks in the locations where it is determined that the disk were not installed or not functioning properly. No additional compensation will be provided for additional disks installed at the same location.

# 503.2 (f) Sanitary Sewer Force Main Tracer Wire and Box.

Effective Dec. 31, 2006, Act 425, Chapter 182.0715(2r) of the Wisconsin State Statutes requires that all non-metallic building sewers (including sanitary laterals, private sanitary sewers and storm sewer laterals) installed within the City Right of Way, shall be

accompanied by a means of locating the newly installed underground pipe. All new force mains (pressure sewer systems) shall be in accompanied by tracer wire location system.

The conductor shall be a minimum of 12 gauge solid copper wires with a plastic coating to prevent corrosion. The conductor itself will be one continuous loop with the two wire ends shall be connected to the to the tracer wire access box.

The covered access device (tracer wire access box) may be a terminal box, valve box, a small diameter PVC conduit or a cleanout. Within the covered access device, the contractor shall provide an extra 18 inches of wire. The lid of the covered access device shall have "SEWER" permanently engraved on it by the manufacturer. The lids shall be cast iron accompanied with connection holes where the contractor shall connect the tracer wire with stainless steel terminal bolts. The lid shall be bolted with a standard pentagonal head key.

The Valco Tracer Wire Access Box <u>http://www.cptest.com</u> and the Bingham & Taylor Cathodic Test Box <u>http://www.binghamandtaylor.com/cathodic.htm</u> are considered acceptable devices for this specification.

#### 503.3(c) Sanitary Sewer Laterals

**Item Number 1, General**: Section edited for clarification. Last paragraph with reference to contractor marking top of the curb has been deleted.

Add language for installation of marker disk for locating.

#### 503.3(d) Sanitary Sewer Wyes

Saddle wyes require a rubber gasket.

#### 503.3(e) Sanitary Sewer Risers

Clarified difference between riser and standard lateral.

#### 503.3 (h) Sanitary Sewer Force Main Tracer Wire and Box

A pipe locator conductor (tracer wire) shall be installed on all new sanitary sewer force mains (pressure sewer mains). The conductor shall be placed along the top of the sanitary force main taped to the pipe at minimum 10-ft. intervals. Wrapping tracer wire around the pipe is prohibited. Below grade splices are prohibited.

The Tracer wire shall be brought to the surface at the property line or at a location directed by the Engineer within a covered access device (tracer wire access box).

Each tracer wire shall be field tested after installation is complete.

## **503.4 Measurement and Payment**

## 503.4(a) Sanitary Sewer Pipes

Reference to wyes deleted in second paragraph.

Second paragraph, <u>delete</u> the words "except wyes" to have first sentence read: "The contract price shall include furnishing all materials including wyes necessary to perform the work...

## 503.4(b) Sanitary Sewer Laterals

Reconnect doesn't include the wye. The wye is included in the price of the main.

Add language for installation of marker disk for locating.

## 503.4(c) Sanitary Sewer Wyes

This section deleted entirely wyes are included in price of the main.

## 503.4 (f) Sanitary Sewer Force Main Tracer Wire and Box

Sanitary sewer Force Main Tracer Wire and Box shall be measured by the lineal foot. Contractor will only be compensated for tracer wire installed in full working order. The contract price shall be full payment for all work, materials and incidentals required to complete the work in accordance with the description.

# 504.2(a) Reinforced Concrete Pipe

In the third paragraph a correction has been made to the reference of "Using Rubber Gaskets, ASTM C". The correct reference is ASTM C 443.

#### 504.2(b) Corrugated Polyethylene with Smooth Inner Liner Pipe.

Revised to be current with correct ASTM numbers.

# 504.2(i) Joint Ties

Joint ties shall be required on all size pipes on last two downstream joints. Old specification only required joint ties on pipes over 36" diamater.

#### 504.2(j) Marker Disks

New section for marker disk for locating required for all non-conductive pipe.

# 504.3(d), 504.4(e) Marker Disks

New section for marker disk for locating required for all non-conductive pipe.

# 504.4(a) Measurement and Payment

#### 504.4 (a) Storm Sewer Pipes

In the second paragraph, add the word "furnishing". The sentence reads, "The contract price shall include <u>furnishing</u> all materials... (clarification of specification)

## 504.4(e) Marker Disk for Locating

New section for marker disk required for locating for all non-conductive pipe.

## 504.4(f) Plastic Storm Pipe

New section to mandrell plastic storm pipe at the discretion of the engineer.

## 507.1, 507.2, 507.3, 507.4 Sewer Structures

Added reference to cleanouts.

Added sections to reference new SAS lids, inlets in cul-de-sacs and alleys.

## PART 6

No revisions

## PART 7

#### 702.5 Materials for Service Lateral Installation

Added language to service box description to clarify which model box top is required.

#### **703.12 Installation of Copper Services**

Added language about contractor being required to respond to property problems after copper service is replaced.

#### **DETAILS**

SDD 1.06	NEW DETAIL. Inlet Protection Type D
SDD 3.02	Clarify size of expansion joints for driveways.
SDD 3.03	Clarify size of expansion joints for sidewalk ramps.
SDD 3.04	Clarify placement of curb ramp detectable warning fields at cross walks
SDD 3.14	NEW DETAIL for bike path ramps
SDD 4.01	Change upper layer pavement thickness from 1.5" to 1.75" as recommended by WDOT
SDD 4.02	Change upper layer pavement thickness from 1.5" to 1.75" as recommended by WDOT
SDD 4.03	Change upper layer pavement thickness from 1.5" to 1.75" as recommended by WDOT

- SDD 4.06 Change upper layer pavement thickness from 1.5" to 1.75" as recommended by WDOT
- SDD 4.07 NEW DETAIL. Typical Alley With Curb & Gutter
- SDD 4.08 Clarify asphalt aggregate size for bikepaths
- SDD 5.1.3 NEW DETAIL. Typical Section SAS Access Road Temporary
- SDD 5.1.4 NEW DETAIL. Typical Section SAS Access Road Permanent
- SDD 5.2.1 Title Changed to 'Pipe Bedding & Backfill', revised title in drawing to 'Bedding for sanitary sewer pipes as well as metal, ADS, and PVC storm pipes'
- SDD 5.2.1A NEW DETAIL. HDPE Bedding and Backfill
- SDD 5.3.1 Revised Riser Detail
- SDD 5.3.2 Added marker Disk note. Clarify location of laterals for duplex lots.
- SDD 5.4.13 NEW DETAIL. Bio-Retention Detail
- SDD 5.7.1 Added Note #5 to clarify roof thickness.
- SDD 5.7.3 Added 'Field Poured' to the title. Added note #5 to clarify roof thickness.
- SDD 5.7.3A NEW DETAIL. Storm Sewer Field Poured Saddled SAS
- SDD 5.7.5 Added an alternate roof detail
- SDD 5.7.6A NEW DETAIL. Storm Sewer Precast Saddled SAS
- SDD 5.7.10 Epoxy coated dowels added to base and embedded into base. Some repetitious notes removed. 'DRAWING NOT TO SCALE' note added. Added 'Storm Sewer' to the title
- SDD 5.7.11 Some repetitious notes removed
- SDD 5.7.16 New SAS frame & cover with Engineering logo.
- SDD 5.7.19 DELETED
- SDD 5.7.22 Title change only. Deleted "EL CURB BOX", changed to "-7004". Refers inlet with "Drains to lake" stamp.

- SDD 5.7.27 Detail dimensions have changed. Added inlet casting side view and a note
- SDD 5.7.34 NEW DETAIL. Ditch Inlet Structure
- SDD 5.7.35 NEW DETAIL. Terrace Flume
- SDD 5.7.36 NEW DETAIL. Sidewalk Drain
- SDD 5.7.37 NEW DETAIL. Ribbon Curb Casting (Neenah R-3382)
- SDD 5.7.38 NEW DETAIL. Curb head detail for converting 'H' inlet to a driveway inlet without changing the frame. R-3067-7000