

SECTION 009100 – ADDENDUM NO. 1

Issued to All Bid Document Holders of Record

Date: September 21, 2015
Project Name: Northwest Sewer & Outfall
Village Bid No.: VRNTL-16-B-03
Project No.: 78333

This Addendum forms a part of the Contract described above. The original Contract Documents and any prior Addenda remain in full force and effect except as modified by the following which shall take precedence over any contrary provisions in the prior documents.

The following items are attached for the Bidder's information:

- Pre-bid meeting agenda
- Pre-bid meeting sign-in sheet
- Canadian National License Agreement

PROJECT MANUAL:

1. Document 004000 - Bid Form
 - a. Revisions have been made to the Bid Form. See the attached document.
2. Section 330524 - Utility Casings
 - a. 2.01 Materials. The minimum casing thickness has been revised. See the attached section.
3. Section 333150 - Pipe Installation (Open Cut Construction)
 - a. 3.06 Field Testing. The Leakage Test requirement has been removed. See the attached section.

PLANS:

1. Drawing G003
 - a. Quantities have been revised. See attached drawing.
2. Drawing C007
 - a. Additional tree removal has been called out. See attached drawing.
3. Drawing C008
 - a. Additional tree removal has been called out. See attached drawing.
4. Drawing C011
 - a. Additional chain link fence removal and replacement is shown. See attached drawing.

QUESTIONS FROM BIDDERS:

1. Where is the Seeding, Class 2A located on the drawings?

Seeding, Class 2A will be used on C013, C015, and C016. It is to be used for all roadside areas requiring restoration.

2. In regards to Pay Item No. 14, Preparation of Base, are we going to need to till the existing oil and chip prior to the new A-2 oil and chip?

No, the existing surface shall be prepared and repaired per Section 358 of the IDOT Standard Specifications. All failures in the existing surface shall be removed to sufficient depth and 6-inches of CA-6 aggregate base shall be used to bring the surface to the required cross section.

3. Can you confirm that the owner is responsible for obtaining “Owner Proactive Liability” at their expense?

Yes.

4. Is the Contractor required to provide Railroad Insurance?

Yes, it is the Contractor’s responsibility to obtain insurance required by CN Railroad. This shall be included in the pay item, Coordination with Canadian National.

5. Can the lake water elevation be pumped down to facilitate construction of the piping and man-holes south of the CN railroad?

Yes.

6. What is the potential award date?

The potential award date is the second week of October.

7. Will the chisel plowing only be required in farm fields?

Yes.

8. Is Builders Risk Insurance required because this is a utility project?

No, Builders Risk Insurance is not required.

SECTION 009100 – ADDENDUM NO. 1: continued

9. Can an IDOT Certification be sent in place of a Financial Statement as required by Document 001153, Bidder's Qualification Statement?

Yes.

10. If we install temporary fence on both sides of the railroad will Canadian National flagging be required?

The Contractor is required to coordinate requirements with Canadian National Railroad.

11. Can you clarify the requirements of the Stormwater Pollution Prevention Plan and IEPA Stormwater permit?

Please see Specification 011100 Summary of Work 1.10 and Specification 012000 Measurement and Payment AAA. All costs associated with these tasks shall be included in the Contractor's bid. IEPA requirements can be found at this link: <http://www.epa.illinois.gov/topics/forms/water-permits/storm-water/construction/index>

12. How long is the warranty on this project?

One year.

13. Is this a tax exempt project? If so, will the tax number be provided?

This is a tax exempt project. The Village of Rantoul's Tax Exempt Number is E9998-5799-07.

14. In locations where the existing pipe is below the proposed pipe, is there a certain material or way the backfill should be placed?

Existing pipe shall be removed and bedding shall be placed to allow installation of the new storm sewer at proposed grade.

15. On Drawing C002 will the sanitary sewer be running through MH #18?

A sanitary lateral from the Anderson property connects to the sanitary sewer and will cross the proposed storm sewer. The exact location is unknown. The Contractor shall pothole and confirm the location of the lateral. The sanitary lateral shall be installed through MH#18 as indicated on drawing C002.

16. On the south end of the project at the pond, do the existing PVC Pipes get tied back into the new manhole at Station 10+07?

SECTION 009100 – ADDENDUM NO. 1: continued

No, the pipes shall be abandoned as indicated on drawing C001.

17. Does the Village require the contractor to be registered with them?

No.

18. Do the banks of the drainage ditch need to be sloped in addition to cleaning and dredging?

Only to re-establish the bank where the existing outfall is removed, and as required to allow installation of the new outfall.

19. What is the name of the drainage district?

Big Slough Special Drainage District, Docket No. 41

20. Can mastic joints be used for the 60” x 38” elliptical pipe instead of rubber gaskets?

No.

21. Can the east side of the drainage ditch be used for equipment staging when cleaning the drainage ditch?

Yes.

22. Is there a minority subcontractor participation requirement on this project.

No.

Each Bidder shall acknowledge receipt of this Addendum by affixing his signature below, by noting this Addendum on his Bid Form, and by attaching this Addendum to his Bid.

Burns & McDonnell Engineering Company
1431 Opus Place, Suite 400
Downers Grove, IL 60515

SECTION 009100 – ADDENDUM NO. 1: continued

ACKNOWLEDGEMENT

The undersigned acknowledges receipt of this Addendum and the Bid submitted is in accordance with information, instructions and stipulations set forth herein.

Bidder: _____

By: _____

Date: _____

END OF SECTION 009100

Meeting Agenda



Meeting Subject: Pre-Bid Meeting
Meeting Date: September 17, 2015
Start Time: 10 AM
End Time: 11 AM
Location: 333 South Tanner, Rantoul, IL 61866

Project Name: Northwest Sewer & Outfall
Project No.: 78333

Agenda:

1. Project Contacts
 - a. Village of Rantoul
 - i. Pete Passarelli 217-892-2178 (primary)
 - ii. Greg Hazel, PE 217-892-2178
 - b. Engineer: Burns & McDonnell Engineering Co.
 - i. Joe Darlington, PE 630-724-3809 (primary)
 - ii. Tara Dunseith, EIT 630-724-3856
 - iii. Randy Patchett, PE 630-724-3276
 - c. Lines of Communication – Contractor to Burns & McDonnell to Village of Rantoul
2. Project Description
 - a. 5,250 feet of reinforced concrete pipe storm sewer; manholes and catch basins.
 - b. Removal of existing storm sewer.
 - c. Steel casing pipe under Canadian National railroad spur.
 - d. Box culvert installation at Moraine Drive.
 - e. Resurface Cemetery Road by chip & seal.
3. Instructions to Bidders
 - a. Bids Due:
3pm (central time), October 1, 2015
333 South Tanner
Rantoul, Illinois 61866
 - b. Bid Security of 10%
 - c. Bids valid for 60 days
4. Bidding
 - a. Unit Price Contract
 - b. Documents to be submitted with bid:
 - i. Bidder's Qualification Statement
 - ii. Bid Form
 - iii. List of subcontractors
 - iv. Addenda

Meeting Agenda *(cont'd)* **BURNS** **MCDONNELL**

September 17, 2015

Page 2

v. Bid Security

5. Project Duration
 - a. Substantial Completion – 180 calendar days after NTP
 - b. Final Completion – 210 calendar days after NTP
6. Bonds and Insurance – see Contracting Requirements in Division 00.
 - a. Performance Bond
 - b. Labor and Material Payment Bond
 - c. As required by Canadian National Railroad
7. Project Components
 - a. Liquidated Damages - \$1,500 per day
8. Open Meeting for Comments / Questions

Meeting Attendance Sheet



Meeting Subject: Pre-Bid Meeting
 Meeting Date: September 17, 2015
 Project Name: Northwest Sewer & Outfall
 Project No.: 78333

Meeting Start Time: 10 AM Central

Name / Title	Organization Name	Phone Number	E-Mail Address
Greg Hazel	VILLAGE OF RANTOUL	217-892-6526	g-hazel@myrantoul.com
DENNIS RETTKE	GENE WREN CONST.	m.815-376-2542 815-634-2445	info@genewrenconstruction.com
STEVE BLAIR	FEUTZ CONTRACTORS, INC	o-217-465-9402 c-217-202-5003	steve@Feutz.us
Tara Dunsith	Burns + McDonnell	630-724-3856	tdunsith@burnsmcd.com
Joe Darlington	Burns + McDonnell	630-724-3809	jdarlington@burnsmcd.com
Kevin Henderson	Duce Construction	217-355-0222	khenderson@duce-construction.com
JUSTIN BATES	CROSS CONSTRUCTION	217-367-3524	justin@crossconstructioncorp.com
AZ WAGNER	SCHOMBURG	217-304-3576	AZWAGNER@SCHOMBURG.ME.COM
TOM BRIDWELL	AIR SERVICES, INC	217-367-4227	BRIDWELL@AIR-MECK.COM
MIKE STROSS	STARK EXCAVATING, INC	x204 217-355-5054	mstross@starkcompanies.com
Sean Kernis	Efficiency Shoring & Supply	815-395-6231	skernis@tprco.com
JACK ANDERSON	RESIDENT OF RANTOUL	217-419-3595	N/A
JEFF SCHLUETER	CENTRAL ILL. TRAILER CO	217-359-7945	cschl@volo.net



www.cn.ca

Southern Region

CN
Joseph Wojcik
IC Track Design Technician
17641 S Ashland Ave.
Homewood, IL. 60430

T 708-332-4739
F 708-332-5474

August 31, 2015

File P-10637

Village of Rantoul
200 W. Grove Avenue
Rantoul, IL 61866

RE: 30" RCP Storm sewer in a 42" Steel Casing
M. P. 32.70
Preparation fee \$750.00 paid
Charge \$6,000.00

Attached hereto in duplicate is agreement covering the above-described subject matter, which has been prepared pursuant to your request. Please have both copies executed and return to me for my further handling for execution on behalf of the Railroad Company. Acceptance of the agreement is not to be assumed until a fully executed copy has been returned.

Please note that payment of \$6,000.00 is to be made upon execution of the agreement. To avoid delay in our handling, the required remittance should be made with the return of the agreement.

This office shall receive 5 days notice, exclusive of weekends and holidays, before any work is performed in the vicinity of the track. Such notice shall only be accepted from the owner or their duly authorized agent. Once execution of the agreement is complete and you have submitted a completed flagging and cable request form, you must call Maryellen Carmody at 734-783-4533 to set up flagging and signal locate before any work. The Utility must prepay the railroad for all anticipated flagging and cable location costs, which are to be calculated pursuant to the Request for Flagging Services and Cable Location form.

Sincerely,

Joseph Wojcik
IC Track Design Technician

LICENSE FOR UNDERGROUND PIPELINES, CABLES AND CONDUITS

THIS AGREEMENT made in duplicate this 31th of August, 2015, between ILLINOIS CENTRAL RAILROAD COMPANY, party of the first part, hereinafter called the Railroad, and

File P-10637

Village of Rantoul
200 W. Grove Avenue
Rantoul, IL. 61866

Party or parties of the second part, hereinafter called the Licensee,

WITNESSETH:

1. In consideration of a one time fee of \$6,000.00 in hand paid by the Licensee to the Railroad, the receipt whereof is hereby acknowledged and the faithful performance by the Licensee of the covenants herein contained, the Railroad, insofar as it lawfully may, hereby grants to the Licensee license and permission to construct and maintain a 30" RCP storm sewer in a 42" steel casing (see attachment) (whether one or more pipes, cables or conduits hereinafter referred to as the "pipeline") across, along and underneath the property of the Railroad at M.P. 32.7 in Rantoul, IL, said pipeline being more particularly shown upon the exhibits hereto attached and made a part hereof, subject to the following conditions and specifications:
2. The license and permission herein granted to Licensee are subject and subordinate; however, to the rights in Railroad, its successors and assigns, its grantees, lessees and licensees, to construct, reconstruct, operate, use, maintain, repair and renew on, beneath or above the property covered hereby, any structures, improvements or facilities of similar or different character as are now or in the future may be located on, beneath or above said properties.
3. Licensee shall, except in emergencies, give not less than 72 hours written notice to Railroad of the day, hour and location that it proposes to undertake any construction or maintenance work and in the event of an emergency shall notify Railroad as soon as possible.

Licensee shall require each of its contractors and subcontractors to observe and conform to the conditions and requirements specified herein; and for the purposes of the safety, protective and indemnification provisions hereof, such contractors and subcontractors, their agents, servants and employees, and other persons on the Railroad property at the invitation of the Licensee, its contractors or subcontractors, shall be deemed the agents or employees of the Licensee.

4. Licensee shall, at no expense to Railroad, obtain all permits and approvals required to exercise this license and Licensee shall install, maintain and operate its facilities in accordance with all requirements of lawful public authority. Licensee shall be responsible for any taxes, assessments and charges made against the pipeline or other of Licensee's facilities on Railroad's property or the operation of any of them.
5. The pipeline shall be installed at least 6.76 feet below the tracks of the Railroad, measured from base of rail to top of pipeline or, if no tracks are located on the property, at least 3.5 feet below natural ground. Said pipeline shall be constructed of such material and in such a manner as will assure the safety of Railroad. Railroad's authorized representative shall have the right, but not the duty, to require certain materials or procedures to be used or to supervise the construction, maintenance, restoration or other work on Railroad's property. If in the opinion of Railroad's authorized representative casing of the pipeline is required at the time of installation or at any time subsequent thereto, Licensee shall promptly arrange for such casing at its own risk and expense.
6. If, in the opinion of the authorized representative of Railroad the work to be done by the Licensee pursuant to this agreement will make necessary or desirable any change in the Railroad's facilities, or those of the Railroad's tenants or licensees, on the Railroad's property, the Railroad shall have the right, but not the duty, to make such changes, the expense thereof to be borne by the Licensee.

Railroad shall have the right, but not the duty, to furnish flagging or other protection or to perform work to support its tracks or otherwise protect its property or facilities at any time, at Licensee's sole risk and expense.

7. Licensee agrees at any time, or from time to time, at its own risk and expense, upon request of the authorized representative of the Railroad, to make such change or changes as may be necessary in the opinion of said representative to accommodate any change or improvements which Railroad may desire to make in or upon its property. In case Licensee shall fail within thirty (30) days after notice from Railroad to make such change or changes, Railroad shall have the right, but not the duty, to make such change or changes, or remove Licensee's facilities from said property at the risk and expense of Licensee.

8. Licensee shall at its expense take such measures as may be necessary and adequate in connection with its property or the property of railroad to protect facilities of Railroad and those of others using Railroad's property from interference by induction, conduction, physical contact or otherwise attributable to the exercise by Licensee of the license granted to it.

In the event Railroad advises Licensee to take any action to protect Railroad, its facilities or facilities on Railroad's property, Licensee shall promptly take the indicated action, including, but not limited to, stopping the operation of the pipeline. If Licensee fails to do so, Railroad shall have the right, but not the duty, to perform on behalf of Licensee at the sole risk and expense of Licensee.

9. In the event Railroad elects to renew, replace, repair or alter any tracks or other facilities or to construct new facilities or to make other use of the property covered by this license, and in connection therewith requires the removal of any facilities placed by Licensee on Railroad's property or should any facilities of Licensee need renewal or repair, Licensee shall, within 30 days of receipt of notice, arrange for such removal, renewal or repair at Licensee's risk and expense. In the event removal is required, the facilities shall be relocated at such location on Railroad's property as is designated by Railroad, provided that Railroad's authorized representative determines that a location is reasonably available. Renewal or repair shall be to such condition as is indicated by Railroad's authorized representative. If Licensee fails to comply with the foregoing, Railroad shall have the right, but not the duty, to remove, renew or repair such facilities at the sole risk and expense of Licensee.
10. Cost and expense for work performed by the Railroad pursuant to this agreement shall consist of the direct cost of labor and material plus Railroad's standard additives in effect at the time the work is performed. All payments required of Licensee under this agreement shall be made promptly upon presentation of a bill.
11. Licensee, as a further consideration and as a condition without which this license would not have been granted, agrees to indemnify and save harmless Railroad, its officers, employees and agents and to assume all risk, responsibility and liability for death of, or injury to, any persons, including, but not limited to, officers, employees, agents, patrons and licensees of the parties hereto, and for loss, damage or injury to any property, including but not limited to, that belonging to the parties hereto (together with all liability for any expense, attorneys' fees and costs incurred or sustained by the Railroad, whether in defense of any such claims, demands, actions and causes of action or in the enforcements of the indemnification rights hereby conferred) arising from, growing out of, or in any manner or degree directly or indirectly caused by, attributable to, or resulting from the grant or exercise of this license or the construction, maintenance, repair,

renewal, alteration, change, relocation, existence, presence, use, operation, or removal of any structure incident thereto, or from any activity conducted on or occurrence originating on the area covered by the license regardless of the negligence of Railroad, its officers, employees and agents. Licensee further agrees to release and indemnify and save harmless Railroad, its officers, employees, agents, patrons or invitees from all liability to Licensee, its officers, employees, agents or patrons, resulting from railroad operations at or near the area in which the license is to be granted whether or not the death, injury or damage resulting therefrom may be due to the negligence of the Railroad, its officers, employees or agents or otherwise. At the election of Railroad, the Licensee, upon receipt of notice to that effect, shall assume or join in the defense of any claim based upon allegations purporting to bring said claim within the coverage of this section.

12. Licensee shall secure, and maintain in place so long as this agreement is in effect, Commercial General Liability Insurance (Occurrence Form) in an amount not less than \$5,000,000 per occurrence, with an aggregate of not less than \$10,000,000 per annual period. The policy must name Railroad and its parent company, Canadian National Railway Company, as additional insured's in the following form:

Illinois Central Railroad Company, and its Parent Corporation,
Canadian National Railway Company
17641 S Ashland Ave
Homewood, Il 60430

The policy must not contain any provisions excluding coverage for injury, loss or damage arising out of or resulting from (a) doing business on, near, or adjacent to railroad track or facilities, or (b) surface or subsurface pollution, contamination or seepage, or from handling, treatment, disposal or dumping of waste materials or substances. Before commencing work, Licensee shall deliver to Railroad a certificate of insurance evidencing the foregoing coverage's and true and complete copies of the policies described above. Each policy shall include a waiver by the insurer of any right of subrogation against any recovery by or on behalf of any insured. Each policy shall provide for not less than thirty days prior written notice to Railroad of cancellation of or any material change in that policy.

13. If a contractor is to be employed by the Licensee for the installation of Facilities pursuant to this License, then, Before commencing work, the contractor shall provide and maintain the following insurance, in form and amount and with companies satisfactory to, and as approved by, the RAILROAD.
 - A. Statutory Workers' Compensation and Employer's Liability insurance.

- B. Automobile Liability in an amount not less than \$1,000,000 dollars combined single limit.
 - C. An Occurrence Form Railroad Protective Policy with limits of not less than \$5,000,000 dollars per occurrence for Bodily Injury Liability, Property Damage Liability and Physical Damage to Property with \$10,000,000 dollars aggregate for the term of the policy with respect of Bodily Injury Liability, Property Damage Liability and Physical Damage to Property. The Policy must name the appropriate RAILROAD as the insured, and shall provide for not less than ten (10) days prior written notice to the RAILROAD'S as cancellation of, or any material change in the policy.
14. It is expressly understood Railroad does not warrant title to the premises and Licensee accepts the grant of privileges contained herein subject to all lawful outstanding existing liens and superior rights. Licensee agrees it shall not have to make any claim against Railroad for damages on account of any deficiency in title and agrees that in the event of failure or insufficiency of such title the sole remedy of Licensee shall be the right to return of the consideration paid in advance, provided for herein, or a proportionate part thereof in the event of a partial deficiency or insufficiency of title. Licensee further agrees to indemnify and save harmless the Railroad and to assure all risk, responsibility and liability (including any expenses, attorneys' fees and costs incurred or sustained by Railroad) arising from, growing out of, or in any manner or degree directly or indirectly attributable to or resulting from any deficiency or insufficiency of its title affecting the right of the Railroad to make this grant.
15. This agreement shall continue in force indefinitely from and after the date hereof, subject, however, to the right of either party to terminate this agreement as to the entire pipeline and all of the facilities of Licensee, or any part thereof, at any time or from time to time, as it may require, upon giving the other party ninety (90) days notice in writing of its desire to terminate this agreement, and indicating in said notice the extent of said line and facilities to which such termination shall apply. When this agreement shall be terminated as to the entire line and all of the facilities of Licensee or as to any part thereof, Licensee within thirty (30) days after the expiration of the time stated in said notice, agrees at its own risk and expense to remove said facilities from the property of Railroad, or such portion thereof as Railroad shall require removed, and to restore the railroad premises to a neat and safe condition, and if Licensee shall fail to do so within said time, Railroad shall have the right, but not the duty, to remove and restore the same, at the risk and expense of Licensee. Nothing herein contained shall be construed as conferring any property right on Licensee.

16. In case Railroad shall at any time, or from time to time, require the removal of only a portion of said pipeline, this agreement shall continue in force and be applicable to the portion of portions of said pipeline and other facilities remaining from time to time until said entire pipeline has been removed and the rental shall be adjusted accordingly.
17. Nothing in this agreement shall be construed to place any responsibility on Railroad for the quality of the construction, maintenance or other work performed on behalf of Licensee hereunder or for the condition of any of Licensee's facilities.

Any approval given or supervision exercised by Railroad hereunder, or failure of Railroad to object to any work done, material used or method of construction, reconstruction or maintenance, shall not be construed to relieve Licensee of its obligations under this Agreement.

18. This Agreement shall not be binding on either party hereto until all parties have executed the space provide below.
19. This agreement shall be binding on the successors and assigns of the parties hereto, but no assignment hereof by the Licensee, its successors, legal representatives or assigns, shall be binding upon the Railroad without its written consent in each instance.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed in duplicate, the day and year first above written.

ILLINOIS CENTRAL RAILROAD COMPANY

By:

Arthur L. Spiros - Senior Manager, Business Development & Real Estate – Southern Region

VILLAGE OF RANTOUL

By:

Name and Title

INITIAL NOTIFICATION OF INTENT TO CONSTRUCT PIPELINE CROSSING/ENCROACHMENT

Complete this form and return it along with a non-refundable preparation fee of \$750 made out to CN.

DATE: 07/29/2015

1. Owner/Applicant Information

Name and Address: Village of Rantoul, 200 W. Grove Avenue, Rantoul, IL 61866

Authorized Representative: Joe Darlington Title Civil Engineer

Phone Number: (630) 724-3809 Fax Number (630) 724-3201 Email jdarlington@burnsmcd.com

2. Location Of Pipeline

Pipeline Location Mile Post: 32.7 plus 0 feet (if parallel) to Mile Post: _____ plus _____ feet

At or Near Rantoul, Illinois (Name of City, Town, Village)

3. Commodity to be transmitted in pipe line: Storm

(steam, air, water, gasoline or other petroleum products, chemical-specify: natural or artificial gas. If sewer, identify as to force or gravity line, sanitary, storm or chemical waste – specify)

4. Pipe Data

	CARRIER PIPE	CASING PIPE
A. Inside Diameter:	<u>24"</u>	<u>40.750"</u>
B. Outside Diameter:	<u>30"</u>	<u>42"</u>
C. Wall Thickness:	<u>3"</u>	<u>0.625"</u>
D. Pipe Material:	<u>RCP</u>	<u>Steel</u>
E. Specification/Grade or class:	<u>ASTM C76, CL 4</u>	<u>ASTM A36 or A570</u>
F. Min. Yield Point of Material	<u>N/A</u>	<u>36,000 psi</u>
G. Process of Manufacture	<u>Cast</u>	<u>Rolled</u>
H. Name of Manufacturer	<u>TBD</u>	<u>TBD</u>
I. Type of Joint	<u>Rubber Gasket</u>	<u>Welded</u>
J. Working Pressure	<u>N/A</u>	<u>N/A</u>
K. Maximum operating pressure in pipeline:	<u>N/A</u> (psi by gauge)	
L. Length of Casing pipe:	<u>60</u> Feet	
M. Will casing pipe/uncased carrier pipe be cathodically protected:	<u>No</u>	
N. Hydrostatic pressure carrier pipe will be tested with before using	<u>N/A</u> (psi)	
O. Will casing pipe be vented? <u>No</u> Size: <u>N/A</u>		
P. Will casing pipe/uncased carrier pipe have a protective coating? <u>Yes</u> Type: <u>Iron Oxide Primer</u>		
Q. Depth of top of casing or uncased carrier pipe below base of rail or top of ground <u>6.76'</u> feet. (Minimum at closest point)		
R. Method of installing casing pipe /uncased carrier pipe <u>dry bore & jack</u> (dry bore & jack, directional, tunnel, other – specify)		

Attach to this application (3 copies) showing north arrow and a location sketch with crossings measured from the nearest railroad mile post and a profile sketch of actual situations showing relationship of tracks, contour of ground, the buried pipe, etc. Distance from each facility (encroachment) to the centerline of nearest road, crossing, bridge or other Railroad structures, must be clearly indicated. Right of way lines of railroad and labeled Street or highway, if involved, should also be shown.



BURNS MEDONNELL
 151 SOUTH LAKE DRIVE
 DOWNERS GROVE, ILLINOIS 60540
 (630) 724-3300
 LICENSE NO. 0430001310

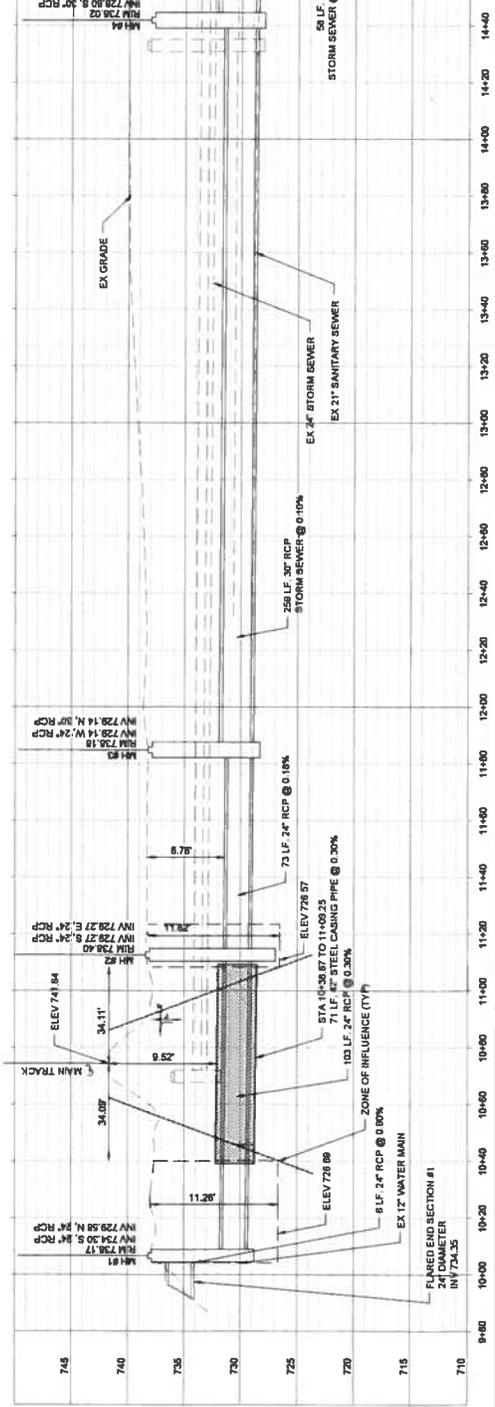
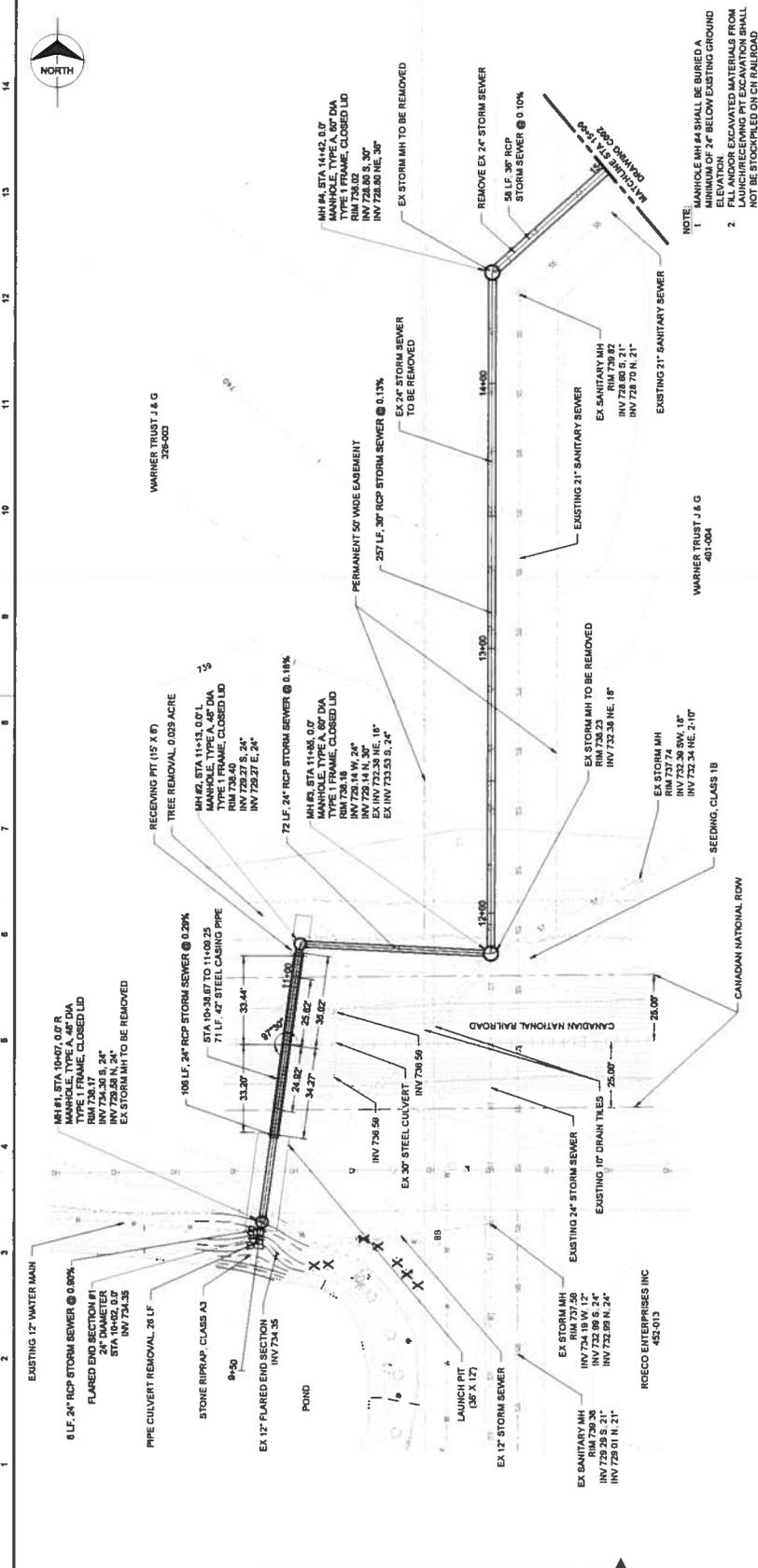
DATE: AUGUST 2015
 DESIGNED BY: J. DARLINGTON
 CHECKED BY: R. PATCHETT
 PROJECT: 78333
 CONTRACT: -
 DRAWING: C001
 REV: -
 SHEET: 4 OF 29
 FILE: 78333C001.DWG

Northwest Sewer and Outfall
 PLAN AND PROFILE
 STA. 9+50 TO 15+00

CHAMPAIGN COUNTY, ILLINOIS

PRELIMINARY - NOT FOR CONSTRUCTION

NOTE:
 1. MANHOLE MH #4 SHALL BE BURIED A MINIMUM OF 2'-0" BELOW EXISTING GROUND.
 2. ALL AND/OR EXCAVATED MATERIALS FROM LAUNCH/RECEIVING PIT EXCAVATION SHALL NOT BE STOCKPILED ON CH RAILROAD PROPERTY.



DOCUMENT 004000 - BID FORM

Project Name: Northwest Sewer and Outfall
Project No. 78333

BID TO:

Owner: Village of Rantoul
Attn: Scot Brandon, Comptroller
333 South Tanner
Rantoul, IL 61866

BID FROM:

Bidder: _____

ARTICLE 1 - BIDDER'S INTENT

1.01 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an agreement with Owner in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Bid price and within the Bid time indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.

ARTICLE 2 - TERMS AND CONDITIONS

2.01 Bidder accepts all of the terms and conditions of the Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 90 days after the day of Bid opening. Bidder will sign and deliver the required number of counterparts of the Agreement with the Bonds and other documents required by the Bidding Requirements within 15 days after the date of Owner's Notice of Award.

ARTICLE 3 - BIDDER'S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents, as more fully set forth in the Agreement, that:

A. Bidder has examined and carefully studied the Bid Documents, and the following Addenda, receipt of all which is hereby acknowledged:

<u>Number</u>	<u>Date</u>
_____	_____
_____	_____
_____	_____
_____	_____

PORTIONS OF THIS DOCUMENT, COPYRIGHT, BY ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE (EJCDC), 1983 THROUGH 1996 AND BY BURNS & MCDONNELL ENGINEERING COMPANY, INC., 1974 THROUGH 2008. CAUTIONARY NOTE: MANY PARTS OF THIS DOCUMENT VARY SIGNIFICANTLY FROM EJCDC STANDARD DOCUMENTS.

DOCUMENT 004000 - BID FORM: continued

- B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, performance, and furnishing of the Work.
- C. Bidder is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, performance, and furnishing of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site. Bidder acknowledges that such reports and drawings are not Contract Documents and may not be complete for Bidder's purposes. Bidder acknowledges that Owner and Engineer do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Bid Documents with respect to Underground Facilities at or contiguous to the Site.
- E. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all such additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site or otherwise which may affect cost, progress, performance, or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder and safety precautions and programs incident thereto.
- F. Bidder does not consider that any additional examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performing and furnishing of the Work in accordance with the times, price, and other terms and conditions of the Contract Documents.
- G. Bidder is aware of the general nature of Work to be performed by Owner and others at the Site that relates to Work for which this Bid is submitted as indicated in the Contract Documents.
- H. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports, and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
- I. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- J. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.
- K. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm, or a corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.

ARTICLE 4 - BID PRICE

4.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

A. UNIT PRICE SCHEDULE:

Item No:	Description	Unit	Number of Units	Price Per Unit	Extension
1	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNITS	144.0		
2	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNITS	160.0		
3	TREE REMOVAL, ACRES	ACRE	0.029		
4	TEMPORARY FENCE	FOOT	1,500.0		
5	TRENCH BACKFILL	CU YD	270.0		
6	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	14,865.0		
7	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	30.0		
8	GRADING & SHAPING DITCHES	FOOT	1,092.0		
9	SEEDING, CLASS 1B	ACRE	0.381		
10	SEEDING, CLASS 2A	ACRE	0.219		
11	SEEDING, CLASS 3	ACRE	0.811		
12	STONE RIPRAP, CLASS A3	SQ YD	100.0		
13	STONE RIPRAP, CLASS A5 A6	SQ YD	215.0		
14	PREPARATION OF BASE	SQ YD	2,341.0		
15	AGGREGATE BASE REPAIR	TON	192.5		
16	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1,288.0		
17	BITUMINOUS MATERIALS (COVER AND SEAL COATS)	GALLON	2,341.0		
18	COVER COAT AGGREGATE	TON	29.0		
19	SEAL COAT AGGREGATE	TON	29.0		
20	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	180.0		
21	PAVEMENT REMOVAL, FULL DEPTH	SQ YD	733.2		
22	SIDEWALK REMOVAL	SQ FT	135.0		
23	CLASS B PATCHES, TYPE IV, 8 INCH	SQ YD	38.0		
24	CLASS D PATCHES, TYPE IV, 4 INCH	SQ YD	717.2		
25	PIPE CULVERT REMOVAL	FOOT	164.0		
26	PRECAST CONCRETE BOX CULVERTS 4' X 2'	FOOT	86.0		
27	PIPE CULVERT, CLASS D,	FOOT	78.0		

DOCUMENT 004000 - BID FORM: continued

Item No:	Description	Unit	Number of Units	Price Per Unit	Extension
	TYPE 1 12"				
28	PRECAST CONCRETE FLARED END SECTIONS 24"	EACH	1.0		
29	CONCRETE END SECTION, STANDARD 542011, 48", 1:3 1:2	EACH	1.0		
30	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 1, 18", RCP	FOOT	109.0		
31	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 1, 24" RCP	FOOT	49.0		
32	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 2, 24" RCP	FOOT	70.0		
33	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 2, 30", RCP	FOOT	259.0		
34	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 2, 36", RCP	FOOT	1,731.0		
35	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 2, 48", RCP	FOOT	1,593.0		
36	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 4, 24", RCP	FOOT	106.0		
37	STORM SEWER, CLASS A, TYPE 2 EQUIVALENT ROUND-SIZE 48"	FOOT	1,285.0		
38	STORM SEWER REMOVAL 24"	FOOT	4,714.0		
39	STORM SEWER REMOVAL 30"	FOOT	103.0		
40	ADJUSTING SANITARY SEWERS, 8-INCH DIAMETER OR LESS	FOOT	40.0		
41	CATCH BASIN, TYPE A, 4' DIAMETER, TYPE 8 GRATE	EACH	2.0		
42	MANHOLE, TYPE A, 4' DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2.0		
43	MANHOLE, TYPE A, 5' DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	6.0		
44	MANHOLE, TYPE A, 6' DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1.0		
45	MANHOLE, TYPE A, 6' DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2.0		
46	MANHOLE, TYPE A, 6'	EACH	2.0		

DOCUMENT 004000 - BID FORM: continued

Item No:	Description	Unit	Number of Units	Price Per Unit	Extension
	DAIMETER, TYPE 8 GRATE				
47	MANHOLE, TYPE A, 7' DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	4.0		
48	MANHOLE, TYPE A, 8' DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2.0		
49	REMOVING MANHOLES	EACH	14.0		
50	REMOVING INLETS	EACH	3.0		
51	NON-SPECIAL WASTE DISPOSAL	CU YD	270.0		
52	MOBILIZATION	L SUM	1.0		
53	CONSTRUCTION LAYOUT	L SUM	1.0		
54	STEEL CASINGS 42"	FOOT	71.0		
55	TRAFFIC CONTROL AND PROTECTION	L SUM	1.0		
56	FIELD TILE CONNECTION TO PROPOSED SEWER 8" DIA AND LESS	EACH	5.0		
57	FIELD TILE CONNECTION TO PROPOSED SEWER GREATER THAN 8" DIA	EACH	2.0		
58	FIELD TILE REPAIR 8" DIA AND LESS	EACH	5.0		
59	FIELD TILE REPAIR GREATER THAN 8" DIA	EACH	2.0		
60	CHANNEL CLEANING AND DREDGING	FOOT	884.0		
61	CLOSING INVERT, BRICK & MORTAR	EACH	11.0		
62	CHISEL PLOWING	L SUM	1.0		
63	STORMWATER POLLUTION PREVENTION PLAN	L SUM	1.0		
64	POTHOLE EXISTING UTILITY	EACH	2.0		
65	CHAIN LINK FENCE TO BE REMOVED AND REPLACED	FOOT	156.0	43.0	
66	COORDINATION WITH CANADIAN NATIONAL	L SUM DAY	1.0	16.0	

Total Bid Price -

_____ dollars (\$_____).

B. SUBCONTRACTORS: This Bid is based upon use of the following Subcontractors:

No.	Trade	Subcontractor
1	_____	_____

DOCUMENT 004000 - BID FORM: continued

2	_____	_____
3	_____	_____
4	_____	_____

ARTICLE 5 - CONTRACT TIMES

- 5.01 Bidder agrees that the Work will be completed within the following time(s):
- A. The Work will be Substantially Completed within 180 calendar days of the date of the Notice to Proceed. Substantial Completion shall be defined as the completion of all items other than landscape restoration. Final Completion shall be within 210 days of the date of the Notice to Proceed.
 - B. Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work within the times specified in the Agreement.

ARTICLE 6 - BID CONTENT

- 6.01 The following documents are attached to and made a condition of this Bid:
- A. Required Bid security in the form of a Bid Bond in the amount of 10% of the total Bid price.
 - B. Required Bidder's Qualification Statement with supporting data.
 - C. A tabulation of Subcontractors and other persons and organizations required to be identified in this Bid.

ARTICLE 7 - COMMUNICATIONS

- 7.01 Communications concerning this Bid shall be addressed to the Bidder as follows:
- Mr. Joe Darlington, PE
Civil Engineer
Burns & McDonnell
1431 Opus Place, Suite 400
Downers Grove, IL 60515
(630) 724-3809
jdarlington@burnsmcd.com

ARTICLE 8 - TERMINOLOGY

- A. The terms used in this Bid which are defined in the GENERAL CONDITIONS or Instructions to Bidders will have the meanings assigned to them.

SUBMITTED on _____, 20_____.

State Contractor License No. _____. (If applicable)

If Bidder is:

An Individual

Name (type or printed): _____

By: _____ (SEAL)
(Individual's Signature)

Doing business as: _____

Business address: _____

Phone No.: _____ FAX No.: _____

A Partnership

Partnership Name: _____ (SEAL)

By: _____
(Signature of general partner – attach evidence of authority to sign)

Name (type or printed): _____

Business address: _____

Phone No.: _____ FAX No.: _____

A Corporation

Corporation Name: _____ (SEAL)

State of Incorporation: _____

Type (General Business, Professional, Service, Limited Liability): _____

By: _____
(Signature – attach evidence of authority to sign)

Name (type or printed): _____

Title: _____

(CORPORATE SEAL)

Attest _____
(Signature of Corporate Secretary)

Business address: _____

Phone No.: _____ FAX No.: _____

END OF DOCUMENT 004000

SECTION 012000 – MEASUREMENT AND PAYMENT

PART 1 - GENERAL INFORMATION

1.01 MEASUREMENT AND PAYMENT:

- A. This Section describes the measurement and payment for the Work to be done under the items included in this Contract.
- B. Each unit or lump-sum price stated in the Bid shall constitute full compensation as herein specified for each item of work completed in accordance with the Contract Documents. The price shall be full compensation for furnishing all materials and for all labor, equipment, fees, tools and incidentals necessary to complete the item as included in the Contract Documents.
- C. No separate measurement and payment shall be made for Work not specifically listed in this Section. It shall be understood that all Work necessary to complete the Contract as included in the Contract Documents shall be included in cost of the unit and lump sum items included in the Contract.

1.02 PAY ITEMS:

- A. Tree Removal (6 to 15 Units Diameter) – Pay Item No. 1
 - 1. This work shall consist of the clearing and removal of trees (6 to 15 Units Diameter), and other vegetation as shown on the plans and as directed by the Engineer. This work shall be in accordance with Section 201 of the IDOT Standard Specifications for Road and Bridge Construction.
 - 2. The cost of this work shall be paid for at the unit price per each of Tree Removal (6 to 15 Units Diameter).
- B. Tree Removal (Over 15 Units Diameter) – Pay Item No. 2
 - 1. This work shall consist of the clearing and removal of trees (Over 15 Units Diameter), and other vegetation as shown on the plans and as directed by the Engineer. This work shall be in accordance with Section 201 of the IDOT Standard Specifications for Road and Bridge Construction.
 - 2. The cost of this work shall be paid for at the unit price per each of Tree Removal (Over 15 Units Diameter).
- C. Tree Removal, Acres – Pay Item No. 3
 - 1. This work shall consist of the clearing and removal of trees, and other vegetation as shown on the plans and as directed by the Engineer. This work shall be in accordance with Section 201 of the IDOT Standard Specifications for Road and Bridge Construction.
 - 2. The cost of this work shall be paid for at the unit price per acre of Tree Removal, Acres.
- D. Temporary Fence – Pay Item No. 4
 - 1. This work shall consist of the installation of silt fence as indicated on the plans and around the soil stockpile located on West WWTP property and/or adjacent to trench excavation within the easement limits. Contractor shall maintain and repair silt fence as required and as directed by the Engineer throughout the duration of the project. The Contractor shall conduct daily inspections during construction to ensure that the silt fence is properly installed.
 - 2. The cost of this work shall be paid for per linear foot of Temporary Fence.
- E. Trench Backfill – Pay Item No. 5
 - 1. This work shall be in accordance with Section 208 of the IDOT Standard Specifications for Road and Bridge Construction.
 - 2. The cost of this work shall be paid for at the unit price per cubic yard of Trench Backfill.
- F. Topsoil Excavation and Placement – Pay Item No. 6
 - 1. This work shall be in accordance with Section 211 of the IDOT Standard Specifications for Road and Bridge Construction. Prior to sewer installation the Contractor shall strip all

SECTION 012000 – MEASUREMENT AND PAYMENT: continued

- topsoil from agricultural areas within easement limits to a depth of 18 inches minimum and stockpile it at the West WWTP and adjacent to trench excavation within the easement limits. Stockpile shall not be located on CN Railroad property. After backfilling sewer, topsoil shall be applied to existing grade. This work includes surface preparation, application of topsoil, rough grading, and final grading.
2. The cost of this work shall be paid for at the unit price per cubic yard of Topsoil Excavation and Placement.
- G. Topsoil Furnish & Place – Pay Item No. 7
1. This work includes all labor and materials necessary to apply a 4-inch layer of topsoil to all non-paved, non-agricultural areas disturbed as a result of the Contractor’s activities. This work includes surface preparation, application of topsoil, rough grading, and final grading.
 2. This work will be paid for at the contract unit price per square yard for Topsoil, Furnish and Place, 4”.
- H. Grading & Shaping Ditches – Pay Item No. 8
1. This work includes all labor and materials necessary to shape and grade the ditches as indicated on the plans. This work includes surface preparation, removal and disposal of unsuitable material, rough grading, and final grading. This work shall be in accordance with Section 214 of the IDOT Standard Specifications for Road and Bridge Construction.
 2. This work will be paid for at the contract unit price per foot for Grading & Shaping Ditches.
- A. Seeding, Class 1B – Pay Item No. 9
1. This work includes all labor and materials necessary to seed, fertilize, and water grassy areas disturbed as a result of the Contractor’s operations. This work includes all necessary, grass seed, fertilizer, mulch, june netting, soil preparation, application of materials, watering, protection of seeded areas, and maintenance as required for installation of this item. This work shall be completed per section 329200 of these specifications.
 2. This work will be paid for at the contract unit price per square yard for Seeding, Class 1B.
- B. Seeding, Class 2A – Pay Item No. 10
1. This work includes all labor and materials necessary to seed, fertilize, and water grassy areas disturbed as a result of the Contractor’s operations. This work includes all necessary, grass seed, fertilizer, mulch, june netting, soil preparation, application of materials, watering, protection of seeded areas, and maintenance as required for installation of this item. This work shall be completed per section 329200 of these specifications.
 2. This work will be paid for at the contract unit price per square yard for Seeding, Class 1B.
- C. Seeding, Class 3 – Pay Item No. 11
1. This work includes all labor and materials necessary to seed, fertilize, and water grassy areas disturbed as a result of the Contractor’s operations. This work includes all necessary, grass seed, fertilizer, mulch, june netting, soil preparation, application of materials, watering, protection of seeded areas, and maintenance as required for installation of this item. This work shall be completed per section 329200 of these specifications.

SECTION 012000 – MEASUREMENT AND PAYMENT: continued

2. This work will be paid for at the contract unit price per square yard for Seeding, Class 1B.
- D. Stone Riprap, Class A3 – Pay Item No. 12
 1. This work includes all labor and materials necessary to install riprap in the locations indicated on the plans. This work includes all necessary surface preparation, application of materials, grading, bedding material, and maintenance as required for installation of this item. This work shall be in accordance with Section 281 of the IDOT Standard Specifications for Road and Bridge Construction.
 2. This work will be paid for at the contract unit price per square yard for Stone Riprap, Class A3.
- E. Stone Riprap, Class ~~A5 A6~~ – Pay Item No. 13
 1. This work includes all labor and materials necessary to install riprap in the locations indicated on the plans. This work includes all necessary surface preparation, application of materials, grading, bedding material, and maintenance as required for installation of this item. This work shall be in accordance with Section 281 of the IDOT Standard Specifications for Road and Bridge Construction.
 2. This work will be paid for at the contract unit price per square yard for Stone Riprap, Class ~~A5-A6~~.
- F. Preparation of Base – Pay Item No. 14
 1. This work includes all labor and materials necessary to prepare the base. All work shall conform to the appropriate articles of Section 358 of the IDOT Standard Specifications for Road and Bridge Construction.
 2. This work will be paid for at the contract unit price per square yard for Preparation of Base.
- G. Aggregate Base Repair – Pay Item No. 15
 1. This work includes all labor and materials necessary to repair all failures (potholes, deep depressions, or ruts) in the existing surface. All work shall conform to the appropriate articles of Section 358 of the IDOT Standard Specifications for Road and Bridge Construction.
 2. This work will be paid for at the contract unit price per ton for Aggregate Base Repair.
- H. Bituminous Materials (Prime Coat) – Pay Item No. 16
 1. Bituminous Materials (Prime Coat) shall be applied to oil and chip roadways designated as Bituminous Surface Treatment, Class A-2. All work shall conform to the appropriate articles of Section 403 of the IDOT Standard Specifications for Road and Bridge Construction and shall include all necessary bituminous coats, grading, placement of materials, and compaction as required for installation of this item.
 2. This work will be paid for at the contract unit price per gallon for Bituminous Materials (Prime Coat).
- I. Bituminous Materials (Cover & Seal Coats) – Pay Item No. 17
 1. Bituminous Materials (Cover & Seal Coats) shall be applied to oil and chip roadways designated as Bituminous Surface Treatment, Class A-2. All work shall conform to the appropriate articles of Section 403 of the IDOT Standard Specifications for Road and Bridge Construction and shall include all necessary bituminous coats, grading, placement of materials, and compaction as required for installation of this item.
 2. This work will be paid for at the contract unit price per gallon for Bituminous Materials (Cover & Seal Coats).
- J. Cover Coat Aggregate – Pay Item No. 18

SECTION 012000 – MEASUREMENT AND PAYMENT: continued

1. Cover Coat Aggregate shall be applied to oil and chip roadways designated as Bituminous Surface Treatment, Class A-2. All work shall conform to the appropriate articles of Section 403 of the IDOT Standard Specifications for Road and Bridge Construction and shall include all necessary aggregates, grading, placement of materials, and compaction as required for installation of this item.
2. This work will be paid for at the contract unit price per ton for Cover Coat Aggregate.
- K. Seal Coat Aggregate – Pay Item No. 19
 1. Seal Coat Aggregate shall be applied to oil and chip roadways designated as Bituminous Surface Treatment, Class A-2. All work shall conform to the appropriate articles of Section 403 of the IDOT Standard Specifications for Road and Bridge Construction and shall include all necessary aggregates, grading, placement of materials, and compaction as required for installation of this item.
 2. This work will be paid for at the contract unit price per ton for Seal Coat Aggregate.
- L. Portland Cement Concrete Sidewalk, 5” – Pay Item No. 20
 1. All work shall conform to the appropriate articles of Section 424 of the IDOT Standard Specifications for Road and Bridge Construction and shall include all necessary aggregate leveling courses, concrete pavement courses, grading, placement of materials, and compaction as required for installation of this item.
 2. This work will be paid for at the contract unit price per square foot for Portland Cement Concrete Sidewalk 5”.
- M. Pavement Removal, Full Depth – Pay Item No. 21
 1. All paved areas disturbed as a result of construction operations shall be restored as specified. This work includes all necessary sawcutting, pavement removal, and disposal of materials.
 2. This work will be paid for at the contract unit price per square yard for Pavement Removal, Full Depth.
- N. Sidewalk Removal – Pay Item No. 22
 1. This work includes all labor and materials necessary to remove existing sidewalk. This work shall be in accordance with Section 440 of the IDOT Standard Specifications for Road and Bridge Construction.
 2. This work will be paid for at the contract unit price per square foot for Sidewalk Removal.
- O. Class B Patches, Type IV, 8 inch – Pay Item No. 23
 1. All paved areas disturbed as a result of construction operations shall be restored as specified. This work includes all necessary pavement courses, grading, placement of materials, and compaction as required for installation of this item.
 2. This work will be paid for at the contract unit price per square yard for Class B Patches, Type IV, 8 inch.
- P. Class D Patches, Type IV, 4 inch – Pay Item No. 24
 1. All paved areas disturbed as a result of construction operations shall be restored as specified. This work includes all necessary bituminous pavement courses, grading, placement of materials, and compaction as required for installation of this item.
 2. This work will be paid for at the contract unit price per square yard for Class D Patches, Type IV, 4 inch.
- Q. Pipe Culvert Removal – Pay Item No. 25
 1. This work shall consist of all labor and materials necessary to remove an existing culvert. This work shall conform to the appropriate articles of Section 501 of the IDOT Standard

SECTION 012000 – MEASUREMENT AND PAYMENT: continued

Specifications for Road and Bridge Construction. The Contractor shall excavate and expose the existing culvert; this excavation shall not be paid for separately but shall be included in the unit price.

2. This work will be paid for at the contract unit price per foot for Pipe Culvert Removal.
- R. Precast Concrete Box Culverts 4' X 2' – Pay Item No. 26
1. This work shall consist of all labor and materials necessary to install 4' X 2' box culverts. This work includes all necessary excavation of material, grates, and any necessary fittings as required for installation of this item.
 2. This work will be paid for at the contract unit price per each for Precast Concrete Box Culverts 4' X 2'.
- S. Pipe Culvert, Class D, Type 1 12" – Pay Item No. 27
1. This work shall consist of all labor and materials necessary to install 12-inch diameter CMP culvert. This work includes all necessary trenching, sheeting, bracing, dewatering, storm sewer, gaskets, pipe embedment, and trench backfill as required for installation of this item. This work shall conform to the appropriate articles of Section 542 of the IDOT Standard Specifications for Road and Bridge Construction.
 2. This work will be paid for at the contract unit price per foot for Pipe Culvert, Class D, Type 1 12".
- T. Precast Concrete Flared End Sections 24" – Pay Item No. 28
1. This work shall consist of all labor and materials necessary to install 24" flared end sections. This work includes all necessary excavation of material, grates, and any necessary fittings to assemble and attach to the storm sewer as required for installation of this item.
 2. This work will be paid for at the contract unit price per each for Precast Concrete Flared End Sections 24".
- U. Concrete End Section, Standard 542011, 48", 1:3 1:2 – Pay Item No. 29
1. This work shall consist of all labor and materials necessary to install a concrete headwall. This work includes all necessary excavation of material, grading, grates, and any necessary fittings to assemble and attach to the storm sewer as required for installation of this item. This work shall conform to the appropriate articles of Section 542 of the IDOT Standard Specifications for Road and Bridge Construction.
 2. This work will be paid for at the contract unit price per each for Concrete End Section, Standard 542011, 48", 1:3 1:2.
- V. Storm Sewer, Rubber Gasket, Class A, Type 1 18" RCP – Pay Item No. 30
1. This work shall consist of all labor and materials necessary to install 18-inch diameter RCP storm sewer. This work includes all necessary trenching, sheeting, bracing, dewatering, storm sewer, gaskets, pipe embedment, and trench backfill as required for installation of this item.
 2. This work will be paid for at the contract unit price per foot for Storm Sewer, Rubber Gasket, Class A, Type 1 18" RCP.
- W. Storm Sewer, Rubber Gasket, Class A, Type 1 24" RCP – Pay Item No. 31
1. This work shall consist of all labor and materials necessary to install 24-inch diameter RCP storm sewer. This work includes all necessary trenching, sheeting, bracing, dewatering, storm sewer, gaskets, pipe embedment, and trench backfill as required for installation of this item.
 2. This work will be paid for at the contract unit price per foot for Storm Sewer, Rubber Gasket, Class A, Type 1 24" RCP.

SECTION 012000 – MEASUREMENT AND PAYMENT: continued

- X. Storm Sewer, Rubber Gasket, Class A, Type 2 24” RCP – Pay Item No. 32
 - 1. This work shall consist of all labor and materials necessary to install 24-inch diameter RCP storm sewer. This work includes all necessary trenching, sheeting, bracing, dewatering, storm sewer, gaskets, pipe embedment, and trench backfill as required for installation of this item.
 - 2. This work will be paid for at the contract unit price per foot for Storm Sewer, Rubber Gasket, Class A, Type 2 24” RCP.
- Y. Storm Sewer, Rubber Gasket, Class A, Type 2 30” RCP – Pay Item No. 33
 - 1. This work shall consist of all labor and materials necessary to install 30-inch diameter RCP storm sewer. This work includes all necessary trenching, sheeting, bracing, dewatering, storm sewer, gaskets, pipe embedment, and trench backfill as required for installation of this item.
 - 2. This work will be paid for at the contract unit price per foot for Storm Sewer, Rubber Gasket, Class A, Type 2 30” RCP.
- Z. Storm Sewer, Rubber Gasket, Class A, Type 2 36” RCP – Pay Item No. 34
 - 1. This work shall consist of all labor and materials necessary to install 36-inch diameter RCP storm sewer. This work includes all necessary trenching, sheeting, bracing, dewatering, storm sewer, gaskets, pipe embedment, and trench backfill as required for installation of this item.
 - 2. This work will be paid for at the contract unit price per foot for Storm Sewer, Rubber Gasket, Class A, Type 2 36” RCP.
- AA. Storm Sewer, Rubber Gasket, Class A, Type 2 48” RCP – Pay Item No. 35
 - 1. This work shall consist of all labor and materials necessary to install 48-inch diameter RCP storm sewer. This work includes all necessary trenching, sheeting, bracing, dewatering, storm sewer, gaskets, pipe embedment, and trench backfill as required for installation of this item.
 - 2. This work will be paid for at the contract unit price per foot for Storm Sewer, Rubber Gasket, Class A, Type 2 48” RCP.
- BB. Storm Sewer, Rubber Gasket, Class A, Type 4 24” RCP – Pay Item No. 36
 - 1. This work shall consist of all labor and materials necessary to install 24-inch diameter RCP storm sewer. This work includes all necessary trenching, sheeting, bracing, dewatering, storm sewer, gaskets, pipe embedment, and trench backfill as required for installation of this item.
 - 2. This work will be paid for at the contract unit price per foot for Storm Sewer, Rubber Gasket, Class A, Type 4 24” RCP.
- CC. Storm Sewer, Rubber Gasket, Class A, Type 2 Equivalent Round Size 48” – Pay Item No. 37
 - 1. This work shall consist of all labor and materials necessary to install 60-inch by 38-inch diameter elliptical RCP storm sewer. This work includes all necessary trenching, sheeting, bracing, dewatering, storm sewer, gaskets, pipe embedment, and trench backfill as required for installation of this item.
 - 2. This work will be paid for at the contract unit price per foot for Storm Sewer, Rubber Gasket, Class A, Type 2 Equivalent Round Size 48”.
- DD. Storm Sewer Removal 24” – Pay Item No. 38
 - 1. This work shall consist of all labor and materials necessary to remove 24-inch diameter RCP storm sewer. This work shall conform to the appropriate articles of Section 551 of the IDOT Standard Specifications for Road and Bridge Construction. The Contractor

SECTION 012000 – MEASUREMENT AND PAYMENT: continued

- shall excavate and expose the existing pipe; this excavation shall not be paid for separately but shall be included in the unit price.
2. This work will be paid for at the contract unit price per foot for Storm Sewer Removal 24”.
- EE. Storm Sewer Removal 30” – Pay Item No. 39
1. This work shall consist of all labor and materials necessary to remove 30-inch diameter RCP storm sewer. This work shall conform to the appropriate articles of Section 551 of the IDOT Standard Specifications for Road and Bridge Construction. The Contractor shall excavate and expose the existing pipe; this excavation shall not be paid for separately but shall be included in the unit price.
 2. This work will be paid for at the contract unit price per foot for Storm Sewer Removal 30”.
- FF. Adjusting Sanitary Sewers, 8-Inch Diameter or Less – Pay Item No. 40
1. This work shall consist of all labor and materials necessary to adjust a sanitary service lateral, 8” diameter or less including the removal and replacement of the existing lateral with pipe of equivalent diameter and type. The notification of customers of the interruption of services shall be included in the cost. This work shall conform to the appropriate articles of Section 563 of the IDOT Standard Specifications for Road and Bridge Construction.
 2. Lateral to be constructed through a proposed manhole. Lateral piping through the manhole shall be Class 52 ductile iron pipe (DIP) as specified in Section 333100. DIP through manhole shall be considered included in the cost of Adjusting Sanitary Sewers, 8-Inch Diameter or Less.
 3. This work will be paid for at the contract unit price per foot for Adjusting Sanitary Sewers, 8-Inch Diameter or Less.
- GG. Catch Basin, Type A, 4’ Diameter, Type 8 Grate – Pay Item No. 41
1. This work shall consist of all labor and materials necessary to install 4-foot catch basins. This work includes all necessary trenching, excavation, sheeting, bracing, dewatering, catch basin, Hilti anchors, bolting frame to slab, pipe embedment, pipe connections, and trench backfill as required for installation of this item.
 2. This work will be paid for at the contract unit price per each for Catch Basin, Type A, 4’ Diameter, Type 8 Grate.
- HH. Manhole, Type A, 4’ Diameter, Type 1 Frame, Closed Lid – Pay Item No. 42
1. This work shall consist of all labor and materials necessary to install 4-foot manholes. This work includes all necessary trenching, excavation, sheeting, bracing, dewatering, manhole, Hilti anchors, bolting frame to slab, pipe embedment, pipe connections, and trench backfill as required for installation of this item. Manholes located in farmland shall be buried a minimum of 24” below existing ground elevation as called out in the plans.
 2. This work will be paid for at the contract unit price per each for Manhole, Type A, 4’ Diameter, Type 1 Frame, Closed Lid.
- II. Manhole, Type A, 5’ Diameter, Type 1 Frame, Closed Lid – Pay Item No. 43
1. This work shall consist of all labor and materials necessary to install 5-foot manholes. This work includes all necessary trenching, excavation, sheeting, bracing, dewatering, manhole, Hilti anchors, bolting frame to slab, pipe embedment, pipe connections, and trench backfill as required for installation of this item. Manholes located in farmland shall be buried a minimum of 24” below existing ground elevation as called out in the plans.

SECTION 012000 – MEASUREMENT AND PAYMENT: continued

2. This work will be paid for at the contract unit price per each for Manhole, Type A, 5' Diameter, Type 1 Frame, Closed Lid.
- JJ. Manhole, Type A, 6' Diameter, Type 1 Frame, Open Lid – Pay Item No. 44
1. This work shall consist of all labor and materials necessary to install 6-foot manholes. This work includes all necessary trenching, excavation, sheeting, bracing, dewatering, manhole, Hilti anchors, bolting frame to slab, pipe embedment, pipe connections, and trench backfill as required for installation of this item.
 2. This work will be paid for at the contract unit price per each for Manhole, Type A, 6' Diameter, Type 1 Frame, Open Lid.
- KK. Manhole, Type A, 6' Diameter, Type 1 Frame, Closed Lid – Pay Item No. 45
1. This work shall consist of all labor and materials necessary to install 6-foot manholes. This work includes all necessary trenching, excavation, sheeting, bracing, dewatering, manhole, Hilti anchors, bolting frame to slab, pipe embedment, pipe connections, and trench backfill as required for installation of this item. Manholes located in farmland shall be buried a minimum of 24" below existing ground elevation as called out in the plans.
 2. This work will be paid for at the contract unit price per each for Manhole, Type A, 6' Diameter, Type 1 Frame, Closed Lid.
- LL. Manhole, Type A, 6' Diameter, Type 8 Grate – Pay Item No. 46
1. This work shall consist of all labor and materials necessary to install 6-foot manholes. This work includes all necessary trenching, excavation, sheeting, bracing, dewatering, manhole, Hilti anchors, bolting frame to slab, pipe embedment, pipe connections, and trench backfill as required for installation of this item.
 2. This work will be paid for at the contract unit price per each for Manhole, Type A, 6' Diameter, Type 8 Grate.
- MM. Manhole, Type A, 7' Diameter, Type 1 Frame, Closed Lid – Pay Item No. 47
1. This work shall consist of all labor and materials necessary to install 7-foot manholes. This work includes all necessary trenching, excavation, sheeting, bracing, dewatering, manhole, Hilti anchors, bolting frame to slab, pipe embedment, pipe connections, and trench backfill as required for installation of this item. Manholes located in farmland shall be buried a minimum of 24" below existing ground elevation as called out in the plans.
 2. This work will be paid for at the contract unit price per each for Manhole, Type A, 7' Diameter, Type 1 Frame, Closed Lid.
- NN. Manhole, Type A, 8' Diameter, Type 1 Frame, Closed Lid – Pay Item No. 48
1. This work shall consist of all labor and materials necessary to install 8-foot manholes. This work includes all necessary trenching, excavation, sheeting, bracing, dewatering, manhole, Hilti anchors, bolting frame to slab, pipe embedment, pipe connections, and trench backfill as required for installation of this item. Manhole frames located in farmland shall be buried a minimum of 24" below existing ground elevation as called out in the plans.
 2. This work will be paid for at the contract unit price per each for Manhole, Type A, 8' Diameter, Type 1 Frame, Closed Lid.
- OO. Removing Manholes – Pay Item No. 49
1. This work shall consist of all labor and materials necessary to remove manholes. This work shall conform to the appropriate articles of Section 605 of the IDOT Standard Specifications for Road and Bridge Construction
 2. This work will be paid for at the contract unit price per each for Removing Manholes.

SECTION 012000 – MEASUREMENT AND PAYMENT: continued

- PP. Removing Inlets – Pay Item No. 50
1. This work shall consist of all labor and materials necessary to remove inlets. This work shall conform to the appropriate articles of Section 605 of the IDOT Standard Specifications for Road and Bridge Construction
 2. This work will be paid for at the contract unit price per each for Removing Inlets.
- QQ. Non-Special Waste Disposal – Pay Item No. 51
1. This work shall consist of the segregation, hauling and satisfactory disposal outside the limits of the job of all contaminated excavated material necessary for construction of the project. All work shall be in accordance with Section 669 of the Standard Specifications and as specified herein.
 2. Contaminated waste shall be defined as any excavated material with contaminants exceeding levels that prohibit disposal at a CCDD or SOH only receiving facility.
 3. It is the contractor's responsibility to locate a receiving facility for the contaminated material and to provide the facility with any required paperwork and/or analysis. Any paperwork or analysis required will be at the expense of the contractor. The contractor shall provide the engineer (not limited to) copies of said paperwork/analysis, load tickets and receiving facility sign-offs for each load of contaminated soil disposed.
 4. This work will be paid for at the contract unit price per cubic yard for Non-Special Waste Disposal.
- RR. Mobilization – Pay Item No. 52
1. Mobilization will be paid for at the contract lump sum price for the mobilization of all equipment to and from the site. The lump sum price for this item shall constitute full compensation for all equipment, materials, labor, fees, tools and incidentals necessary to complete this item.
- SS. Construction Layout – Pay Item No. 53
1. Construction staking and marking shall conform to article 105.09 of the Standard Specifications. The Engineer will provide survey / project control points. The Contractor shall set all construction information stakes that mark the location, alignment, elevation and grade of the work. Requests for control information must be made 48 hours prior to the date needed.
 2. The cost of construction staking will be paid for at the contract lump sum price for Construction Layout. No additional compensation shall be given for re-staking any aspect of the work for any reason.
- TT. Steel Casings 42” – Pay Item No. 54
1. Forty-two (42) inch diameter steel casing pipe will be measured for payment in place in feet. This work shall include all necessary launch and/or receiving pit excavation, trenching, sheeting, bracing, jacking pits, dewatering, boring and auguring, steel casing pipe, welding, primer application, fittings, ports, lubrication, intermediate pipes, adapters/cutting shoes, spoil removal from new casing pipe, written logs, and pipe supports of size and material specified, casing spacers, spacer bands, pipe embedment, trench backfill, brick and mortar end seals, all submittals, vibration control, and all system design as required for installation of the pipe.
 2. This work will be paid for at the contract unit price per foot for Steel Casings 42”.
- UU. Traffic Control and Protection – Pay Item No. 55
1. This work shall be done in accordance with Part IV of Illinois Department of Transportation Reprint of the "Manual on Uniform Traffic Control Devices" published by the Federal Highway Administration, the appropriate articles of Section 1084 of the

SECTION 012000 – MEASUREMENT AND PAYMENT: continued

Standard Specifications and the Standard Specification for Traffic Control Devices adopted April 1, 2013 by the Illinois Department of Transportation. All applicable state standards for traffic control devices, lane closures and traffic control staging shall conform to current IDOT standards at all times.

- a. This item of work shall include the furnishing, installing; maintaining, relocating and removing all traffic control devices used for the purpose of regulating, warning, or directing traffic during the construction or maintenance of this improvement.
- b. When traffic is to be directed over a detour route, the Contractor shall furnish, erect, maintain and remove all applicable traffic control devices and signing along the detour route according to the details shown in the plans.
- c. The governing factor in the execution and staging of work for this project is to provide the motoring public, residents, and business owners with the safest possible conditions along the roadway and in the construction zone. The Contractor shall so arrange his operations as to keep the closing of any lane of the roadway to a minimum.
- d. All operations which require a reduction in the number of lanes of traffic shall comply with the aforementioned standards including a flagman posted at each end of the lane closure at all times. "stop" and "slow" paddles shall be used to control traffic. Flags will NOT be allowed as the sole means of traffic control. Minimum lane widths shall be 10 feet. Single lane roads will not be allowed without flagmen, and under no circumstances will a one lane condition remain overnight unless approved by the Village of Rantoul.
- e. Type II barricades with working steady burn light units shall be used whenever the change in pavement height exceeds 2 inches due to any construction activity and at all butt joints. The Engineer reserves the right to stop any construction activity when traffic control is neglected.
- f. Traffic control devices include signs and their supports, signals, pavement markings, barricades (with sandbags if necessary), channelization devices, warning lights, arrow boards, flaggers, or any other device used for the purpose of guiding traffic through or detouring around the construction zone.
- g. The Contractor will be responsible for the proper location, installation, and arrangement of all traffic control devices. Special attention shall be given to advance warning signs during construction operations in order to keep lane assignment consistent with barricade placement at all times/ The Contractor shall cover or remove all traffic control devices which are inconsistent with detour or lane assignment patterns during the transition from one construction stage to another.
- h. The Contractor shall ensure that all traffic control devices installed by him are operational 24 hours a day, including Sundays and Holidays.
- i. The Contractor shall be reachable on a 24 hour a day basis to receive notification of any deficiencies regarding traffic control and protection and shall dispatch personnel, materials, and equipment to correct any such deficiencies. The Contractor shall respond to any call from the Village of Rantoul concerning a request for improving or correcting traffic control devices and begin making the requested repairs within two hours from the time of notification.
- j. When traveling in lanes open to public traffic, the Contractor's vehicles shall always move with and not against the flow of traffic. These vehicles shall enter and leave

SECTION 012000 – MEASUREMENT AND PAYMENT: continued

work areas in a manner which will not be hazardous to or interfere with traffic and shall not park or stop except within designated work areas. Those vehicles belonging to the Contractor or his employees shall remain on public property area only and shall not pull into, park, or block any access to private property.

- k. Any drop off greater than three inches, but less than six inches, within eight feet of the pavement edge shall be protected by Type I or II barricades equipped with mono-directional steady burn lights at 100-foot center to center spacing. If the drop off within eight feet of the pavement edge exceeds six inches, the barricades mentioned above shall be placed at 50-foot center to center spacing. Barricades that must be placed in excavated areas shall have leg extensions installed such that the top of the barricade is in compliance with the height requirement of Standard 702001. Vertical panels or other delineating devices may be substituted for Type I or Type II barricades with the approval of the Engineer.
- l. Delays to the Contractor caused by complying with these requirements will be considered included in the price of the pay item Traffic Control & Protection and no additional compensation will be allowed.
2. This work will be paid for at the contract lump sum price for Traffic Control and Protection.

VV. Field Tile Connection – Pay Item No. 56, 57

1. To the Best of the Engineer's knowledge, there are no known or reported existing field tiles or sewers within the limits of this project, except as shown on the plans. However this special provision shall also apply, should an unrecorded or unknown field tile be discovered during construction. This item shall consist of furnishing all labor, materials, machinery, tools and supervision for the removal, plugging and backfilling of existing drain tiles that maybe encountered during construction operations in accordance with these Special Provisions. Existing drain tiles flowing toward the project shall be intercepted and connected to the proposed storm sewer. When connected to the storm sewer the existing drain tile shall be plugged downstream from this connection point as herein described. Existing drain tile to be plugged shall be plugged with precast concrete or masonry units mortared in place or with poured in place concrete. Existing drain tile to be connected to the proposed storm system shall be connected by coring the RCP Storm Sewer and using saddle-type fitting with an elastomeric ring-gasketed bell-end service connection and minimum wall thickness of SDR 26. Saddle-type fitting to be supplied with a rubber sealing gasket and stainless steel straps for connection to pipe. Pipe shall be PVC SDR 26.
2. This work will be paid for at the contract unit price per each for Field Tile Connection to Proposed Sewer 8" Dia and Less or Field Tile Connection to Proposed Sewer Greater than 8" Dia.

WW. Field Tile Repair – Pay Item No. 58, 59

1. To the Best of the Engineer's knowledge, there are no known or reported existing field tiles or sewers within the limits of this project, except as shown on the plans. However this special provision shall also apply, should an unrecorded or unknown field tile be discovered during construction. This item shall consist of furnishing all labor, materials, machinery, tools and supervision for the repair and backfilling of damaged existing drain tiles caused by construction operations in accordance with these Special Provisions. Pipe shall be PVC SDR 26.

SECTION 012000 – MEASUREMENT AND PAYMENT: continued

2. This work will be paid for at the contract unit price per each for Field Tile Repair 8” Dia and Less or Field Tile Repair Greater than 8” Dia.
- XX. Channel Cleaning and Dredging – Pay Item No. 60
1. This work shall consist of all labor and materials necessary to dredge the drainage ditch. Contractor shall dredge and remove debris from County Road 3100N to the north property line of the West Wastewater Treatment plant. Contractor shall legally dispose of all dredge waste and debris. Legal disposal of waste material shall be included in the cost of Channel Dredging. This item shall consist of furnishing all labor, materials, machinery, tools, supervision and disposal.
 2. This work will be paid for at the contract unit price per foot for Channel Dredging.
- YY. Closing Invert, Brick and Mortar – Pay Item No. 61
1. This work shall consist of all labor and materials necessary to closing an invert. Contractor shall close off the invert using brick and mortar. This item shall consist of furnishing all labor, materials, machinery, tools and supervision.
 2. This work will be paid for at the contract unit price per each for Closing Invert, Brick and Mortar.
- ZZ. Chisel Plowing – Pay Item No. 62
1. This work shall consist of all labor and materials necessary to chisel plow disturbed agricultural areas. After sewer has been installed, backfilled, and topsoil has been spread, Contractor shall chisel plow all areas of agricultural fields where construction traffic has occurred.
 2. This work will be paid for at the contract lump sum price for Chisel Plowing.
- AAA. Stormwater Pollution Prevention Plan – Pay Item No. 63
1. This work shall consist of all labor and materials necessary to prepare the Stormwater Pollution Prevention Plan and acquire approval of stormwater permit from the IEPA.
 2. This work will be paid for at the contract lump sum price for Stormwater Pollution Prevention Plan.
- BBB. Pothole Existing Utility – Pay Item No. 64
1. This work will be measured per each Pothole Existing Utility performed. This work includes all necessary sawcutting, excavation, sheeting, bracing, dewatering, and trench backfill as required for performance of this item. Excavations in turf areas shall be backfilled with excavated material. All excess excavated material shall be disposed of by the Contractor and is considered incidental to the cost of this item.
 2. This work will be paid for at the contract unit price per each for Pothole Existing Utility.
- CCC. Chain Link Fence To Be Removed and Replaced – Pay Item No. 65
1. This work includes all necessary labor and materials to remove and install a section of chain link fence.
 2. This work will be paid for at the contract unit price per foot for Chain Link Fence To Be Removed and Replaced.
- DDD. Coordination with Canadian National Railroad – Pay Item No. 66
1. This work includes coordination with Canadian National Railroad as required to complete the project. Specific requirements for Pipeline Installations can be found at: <http://www.cn.ca/en/delivering-responsibly/safety/erailsafe/utility-installations> The Pipeline Crossing Form has been filled out, submitted to Canadian National, and approved. Contractor is responsible for securing flagging and cable locate services, as well as providing insurance (statutory worker’s compensation, employer’s liability, automobile liability, railroad protective, and any other policies) as required by Canadian

SECTION 012000 – MEASUREMENT AND PAYMENT: continued

National and in accordance with the General Conditions. Costs associated with these services and any other coordination required should be included in this pay item.

2. This work will be paid for at the contract lump sum price for Coordination with Canadian National Railroad.

END OF SECTION 012000

SECTION 330524 - UTILITY CASINGS

PART 1 - GENERAL

1.01 SUMMARY: This Section includes casing pipe, installed by boring and jacking, carrier pipe alignment skids, and end seals where indicated or where constructed at Contractor's option. Use when required to pass other utilities, streets, highways, railroads or obstructions without open excavation.

1.02 REFERENCES:

- A. Applicable Standards:
 - 1. American Petroleum Institute (API):
 - a. API RP1102 - Recommended Practice for Liquid Petroleum Pipelines Crossing Railroads and Highways.
 - b. API 1104 - Standard for Welding Pipelines and Related Facilities.
 - 2. American Society for Testing and Materials (ASTM):
 - a. A36 - Carbon Structural Steel.
 - b. A570 - Hot-Rolled Carbon Steel Sheet and Strip, Structural Quality.
 - c. C32 - Sewer and Manhole Brick (Made from Clay or Shale).
 - d. C270 - Mortar for Unit Masonry.
 - 3. American Water Works Association (AWWA):
 - a. C200 - Steel Water Pipe 6 Inches and Larger.
 - b. C206 - Field Welding of Steel Water Pipe.
 - 4. Society for Protective Coatings (SSPC):
 - a. SP-3 - Power Tool Cleaning.

1.03 SUBMITTALS:

- A. Submit as specified in DIVISION 1.
- B. Submit the following for acceptance prior to shipment:
 - 1. Pipe alignment guides.
 - 2. Guide spacer bands.
- C. Affidavits:
 - 1. Furnish for acceptance prior to shipment to jobsite.
 - 2. Certify compliance with applicable standards for the following:
 - a. Casing material.
 - b. Casing paint coating/lining system.

PART 2 - PRODUCTS

2.01 MATERIALS:

- A. Casing Pipe: New, smooth wall, welded steel pipe fabricated from ASTM A36 plate or ASTM A570 sheet with a minimum yield point of 36,000 psi, conforming to AWWA C200. Furnish pipe with minimum wall thickness as follows:
 - 1. Minimum Casing Thicknesses:

<u>Casing Diameter</u>	<u>Wall Thickness</u>	
	<u>Under Highways</u>	<u>Under Railroads</u>
<u>in.</u> 42"	<u>in.</u> 0.344"	<u>in.</u> 0.625"

SECTION 330524 - UTILITY CASINGS: continued

2. Minimum casing inside diameter shall exceed outside diameter of carrier pipe joints or couplings by 4 inches.
3. Schedule:

<u>Location</u>	<u>Carrier Pipe Diameter</u>	<u>Carrier Pipe Material</u>	<u>Carrier Joint Diameter</u>	<u>Casing Diameter</u>	<u>Casing Min. Thickness</u>
Dwg C001 <u>0.563"</u>	24"	RCP	35.625"	42"	<u>0.625"</u>

- B. Coatings and Linings:
 1. Coat exterior and line interior of all casing pipe with iron oxide primer applied at 1.5 mils minimum thickness.
 2. Hold coatings back from end joints to be welded at least 2 inches each side of joint.
- C. Joints:
 1. All joints in steel pipe casings shall be field welded to conform to API 1104 or AWWA C206.
 2. Clean to SSPC-SP3 and apply iron oxide field coating to all exterior joints after field welding.
 3. Clean to SSPC-SP3 and apply iron oxide field coating to all interior joints on casings 24-inch diameter and larger after field welding.

PART 3 - EXECUTION

3.01 INSTALLATION:

- A. All Work shall, as a minimum, meet the requirements of API RP1102 and the highway, railroad, or utility having jurisdiction, and shall be subject to their inspection and approval.
- B. Install Casing Pipes:
 1. By boring with continuous flight auger, pneumatic or hydraulic jacking, or other acceptable method. Reinforce leading end of casing with jacking band.
 2. Including measures for maintaining indicated line and grade for casings less than 24-inch diameter within a plus or minus tolerance of 0.5%. Maintain indicated line and grade for casings 24-inch and larger within a plus or minus tolerance of 3 inches over length of casing.
 3. With working pits of adequate size to provide safe working conditions. Install sheeting and bracing to conform to DIVISION 31.
 4. In such a manner as not to disrupt traffic or damage the roadway grade or surface.
 5. Casings rejected due to misalignment or other failures to conform to Specifications shall be abandoned in place and filled with concrete grout. Casing pipe shall not be recovered for reuse.

3.02 PIPE ALIGNMENT SKIDS:

- A. Furnish skids for pipe alignment guides as indicated for all carrier pipe to be installed in casing.
 1. Minimum spacing of skids shall be 5 feet or every pipe joint, whichever is the lesser.
 2. Size to fit outside diameter of carrier pipe and inside diameter of casing pipe.
 3. Skids to be sized slightly larger than carrier pipe's outside joint diameter.
- B. Provide either of the following:
 1. Stainless steel casing spacers with plastic runners, Cascade Waterworks Style CCS or Engineer-approved equal.

SECTION 330524- UTILITY CASINGS: continued

3.03 SAND FILL AND END SEALS:

- A. Do not fill annular space between carrier pipe and casing pipe with sand or grout.
- B. Construct end seals between carrier pipe and casing with brick and mortar as indicated and as follows:
 - 1. After inside of casing has been thoroughly cleaned and approved by Engineer.
 - 2. After carrier pipe has been permanently placed inside casing, tested, and approved.
- C. Brick end seals shall conform to ASTM C32, Grade MS. Mortar shall conform to ASTM C270, Type M, with Type II portland cement and Type S lime.

END OF SECTION 330524

SECTION 333150 - PIPE INSTALLATION (OPEN CUT CONSTRUCTION)

PART 1 - GENERAL

1.01 SUMMARY:

- A. This Section includes handling, installation and testing of pipe, fittings, specials, and appurtenances as indicated or specified.
- B. Related Work Specified Elsewhere:
 - 1. Utility Structures: SECTION 333900.
 - 2. Gravity Pipe: SECTION 333100.
 - 3.

1.02 REFERENCES:

- A. Applicable Standards:
 - 1. American Society for Testing and Materials (ASTM):
 - a. F1417 - Installation Acceptance of Plastic Gravity Sewer Lines Using Low-Pressure Air.
 - 2. American Water Works Association (AWWA):
 - a. C206 - Field Welding of Steel Water Pipe.
 - 3. Federal Specifications (FS):
 - a. SS-S-00210 - Sealing Compound, Preformed Plastic, For Expansion Joints and Pipe Joints.

1.03 DELIVERY, STORAGE AND HANDLING:

- A. Handle in a manner to ensure installation in sound and undamaged condition.
 - 1. Do not drop or bump.
 - 2. Use slings, lifting lugs, hooks, and other devices designed to protect pipe, joint elements, linings, and coatings.
- B. Ship, move, and store with provisions to prevent movement or shock contact with adjacent units.
- C. Handle with equipment capable of work with adequate factor of safety against overturning or other unsafe procedures.

PART 2 - PRODUCTS Specified in respective Sections, this Division.

PART 3 - EXECUTION

3.01 INSTALLATION - GENERAL:

- A. Use equipment, methods, and materials ensuring installation to lines and grades indicated.
 - 1. Maintain within tolerances specified or acceptable laying schedule.
 - a. Alignment: ± 1 inch per 100 feet in open cut or tunnel.
 - b. Grade: ± 1 inch per 100 feet.
 - 2. Do not lay on blocks unless pipe is to receive total concrete encasement.
 - 3. Accomplish horizontal and vertical curve alignments with bends, bevels, and joint deflections.
 - a. Limit interior joint opening in concrete pipe except for open side on deflected joints to:
 - (1) 3/8-inch in laying schedule.
 - (2) 1/2-inch in actual installation.

SECTION 333150 – PIPE INSTALLATION (OPEN CUT CONSTRUCTION): continued

- b.
- 4. Obtain acceptance of method proposed for transfer of line and grade from control to the Work.
- B. Install pipe of size, materials, strength class, and joint type with embedment indicated for plan location.
- C. Insofar as possible, commence laying at downstream end of line and install pipe with bell ends in direction of flow. Obtain Engineer approval for deviations therefrom.
- D. Clean interior of all pipe, fittings, and joints prior to installation. Exclude entrance of foreign matter during installation and at discontinuance of installation.
 - 1. Close open ends of pipe with snug-fitting closures.
 - 2. Do not let water fill trench. Include provisions to prevent flotation should water control measures prove inadequate.
 - 3. Remove water, sand, mud, and other undesirable materials from trench before removal of end cap.
- E. Brace or anchor as required to prevent displacement after establishing final position.
- F. Perform only when weather and trench conditions are suitable. Do not lay in water.
- G. Observe extra precaution when hazardous atmospheres might be encountered.

3.02 JOINTING:

- A. General Requirements:
 - 1. Locate joint to provide for differential movement at changes in type of pipe embedment, impervious trench checks, and structures.
 - 2. Perform conforming to manufacturer's recommendations.
 - 3. Clean and lubricate all joint and gasket surfaces with lubricant recommended.
 - 4. Use methods and equipment capable of fully seating or making up joints without damage.
 - 5. Check joint opening and deflection for specification limits.
- A. Special Provision for Jointing Concrete Pipe:
 - 1. With rubber gaskets to concrete joint: Check gasket position with feeler gauge prior to installation of next section.

3.03 CUTTING:

- A. Cut in neat manner without damage to pipe.
- B. Observe Specifications regarding joint locations.
- C. Cut cast-iron, ductile-iron, and steel pipe with carborundum saw or other acceptable method per manufacturer's instructions.
 - 1. Smooth cut by power grinding to remove burrs and sharp edges.
 - 2. Repair lining as required and approved.

3.04 CLOSURE PIECES:

- A. Connect two segments of pipeline or a pipeline segment and existing structure with short sections of pipe fabricated for the purpose.
- B. Observe Specifications regarding location of joints, type of joints, and pipe materials and strength classifications.
- C. Field-fabricated closures, where required, shall be concrete encased between adjacent flexible joints.
- D. May be accomplished with sleeve coupling:
 - 1. Of length such that gaskets are not less than 3 inches from pipe ends.

SECTION 333150 – PIPE INSTALLATION (OPEN CUT CONSTRUCTION): continued

3.05 CONNECTIONS TO EXISTING STRUCTURES:

- A. Connect pipe to existing structures and pipelines where indicated.
- B. Prepare structure by making an opening with at least 3 inches clearance all around fitting to be inserted.
- C. Observe pertinent articles of Specifications pertaining to joint locations and closures.
- D. Repair wall opening with nonshrinking grout.

3.06 FIELD TESTING:

A. Acceptance Tests for Gravity and Low-Pressure Pipelines:

1. Alignment:

- a. Sewer shall be inspected by flashing a light between manholes or by physical passage where space permits.
- b. Contractor shall clean pipe of excess mortar, joint sealant, and other dirt and debris prior to inspection.
- c. Determine from Illumination or Physical Inspection:
 - (1) Presence of any misaligned, displaced, or broken pipe.
 - (2) Presence of visible infiltration or other defects.
- d. Correct defects as required prior to conducting leakage tests.

~~2. Leakage Test:~~

- ~~a. Contractor shall perform by exfiltration method on all pipe installed (except where air tests permitted at Contractor's option).~~
- ~~b. Furnish water and all facilities required including:
 - (1) Necessary piping connections.
 - (2) Test pumping equipment.
 - (3) Water meter.
 - (4) Pressure gauge.
 - (5) Bulkheads.
 - (6) All miscellaneous items required.~~
- ~~c. Obtain approval of equipment and acceptance of methods proposed for use.~~
- ~~d. Conduct initial test on first section of pipe laid by each crew.
 - (1) Include a minimum of 10 lengths of pipe but not to exceed 300 feet.
 - (2) Perform before backfilling.
 - (3) Satisfactorily complete test before crew is permitted to continue pipe installation.~~
- ~~e. Test remaining pipe in sections determined by Contractor and approved by Engineer.~~
- ~~f. Perform at test pressures specified as measured: Ductile iron, vitrified clay, RCP, PVC, and Composite Pipe, not less than 4 feet of water above the invert of the sewer at the upstream manhole nor more than 20 feet of water.~~
- ~~g. Maintain test as necessary to locate all leaks but not less than two hours.~~
- ~~h. Repeat as necessary after repair of leaks and defects until leakage as measured does not exceed limits listed in liters per 25 mm (gallons per inch) of internal diameter per hour per 30 m (100 feet) of pipe length:~~

Liters ~~(Gallons)~~

- ~~(1) Sanitary and industrial waste sewer.....0.57.....(0.15)~~
- ~~(2) Other gravity lines:
 - (a) Reinforced concrete with circular cross section rubber~~

SECTION 333150 – PIPE INSTALLATION (OPEN CUT CONSTRUCTION): continued

	gasket joint.....	0.76	(0.2)
(b)	Reinforced concrete with noncircular cross section rubber gasket joint.....	0.76	(0.2)
(c)	Reinforced concrete with plastic joint.....	1.14	(0.3)
(d)	Reinforced concrete with mortar joint.....	No test	
(e)	Clay with compression- type joint.....	0.76	(0.2)
(f)	PVC and Composite Pipe with gasket type joint.....	0.76	(0.2)
i.	Protect manholes and other structures by means of bulkheads to prevent bursting pressures from being applied inside the structure.		
j.	Dewater pipe and manholes upon completion of testing.		
k-c.	Repeat test as necessary after all leaks and defects have been repaired.		

END OF SECTION 333150

PROJECT QUANTITIES
NORTHWEST SEWER AND OUTFALL, VILLAGE OF RANTOUL

PAY ITEM	DESCRIPTION	UNIT	QUANTITY
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNITS	144
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNITS	160
20100200	TREE REMOVAL, ACRES	ACRE	0.038
20101000	TEMPORARY FENCE	FOOT	1,500
20800150	TRENCH BACKFILL	CU YD	270
21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	14,865
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	30
21400100	GRADING & SHAPING DITCHES	FOOT	1,092
25000115	SEEDING, CLASS 1B	ACRE	0.381
25000210	SEEDING, CLASS 2A	ACRE	0.219
25000300	SEEDING, CLASS 3	ACRE	1
28100105	STONE RIPRAP, CLASS A3	SQ YD	100
28100109	STONE RIPRAP, CLASS A5	SQ YD	215
35800100	PREPARATION OF BASE	SQ YD	2,341
35800200	AGGREGATE BASE REPAIR	TON	193
40300100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1,288
40300300	BITUMINOUS MATERIALS (COVER AND SEAL COATS)	GALLON	2,341
40300500	COVER COAT AGGREGATE	TON	29
40300600	SEAL COAT AGGREGATE	TON	29
42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	180
44000100	PAVEMENT REMOVAL, FULL DEPTH	SQ YD	733
44000600	SIDEWALK REMOVAL	SQ FT	135
44200944	CLASS B PATCHES, TYPE IV, 8 INCH	SQ YD	38
44201696	CLASS D PATCHES, TYPE IV, 4 INCH	SQ YD	717
50105220	PIPE CULVERT REMOVAL	FOOT	164
54010402	PRECAST CONCRETE BOX CULVERTS 4' X 2'	FOOT	86
542D0217	PIPE CULVERT, CLASS D, TYPE 1 12"	FOOT	78
54213669	PRECAST CONCRETE FLARED END SECTIONS 24"	EACH	1
54263348	CONCRETE END SECTION, STANDARD 542011, 48", 1:3	EACH	1
550A2340	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 1, 18", RCP	FOOT	109
550A2360	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 1, 24" RCP	FOOT	49
550A2560	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 2, 24" RCP	FOOT	70
550A2580	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 2, 30", RCP	FOOT	259
550A2600	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 2, 36", RCP	FOOT	1,731
550A2620	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 2, 48", RCP	FOOT	1,593
550A2960	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 4, 24", RCP	FOOT	106
550A5510	STORM SEWER, CLASS A, TYPE 2 EQUIVALENT ROUND-SIZE 48"	FOOT	1,285
55101200	STORM SEWER REMOVAL 24"	FOOT	4,714
55101400	STORM SEWER REMOVAL 30"	FOOT	103
56300100	ADJUSTING SANITARY SEWERS, 8-INCH DIAMETER OR LESS	FOOT	40
60200805	CATCH BASIN, TYPE A, 4' DIAMETER, TYPE 8 GRATE	EACH	2
60218400	MANHOLE, TYPE A, 4' DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2
60221100	MANHOLE, TYPE A, 5' DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	6
60223700	MANHOLE, TYPE A, 6' DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1
60223800	MANHOLE, TYPE A, 6' DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2
60224005	MANHOLE, TYPE A, 6' DIAMETER, TYPE 8 GRATE	EACH	2
60224446	MANHOLE, TYPE A, 7' DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	4
60224459	MANHOLE, TYPE A, 8' DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2
60500040	REMOVING MANHOLES	EACH	14
60500060	REMOVING INLETS	EACH	3
66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	270
67100100	MOBILIZATION	L SUM	1
Z0013798	CONSTRUCTION LAYOUT	L SUM	1
Z0068400	STEEL CASINGS 42"	FOOT	71
	TRAFFIC CONTROL AND PROTECTION	L SUM	1
	FIELD TILE CONNECTION TO PROPOSED SEWER 8" DIA AND LESS	EACH	5
	FIELD TILE CONNECTION TO PROPOSED SEWER GREATER THAN 8" DIA	EACH	2
	FIELD TILE REPAIR 8" DIA AND LESS	EACH	5
	FIELD TILE REPAIR GREATER THAN 8" DIA	EACH	2
	CHANNEL CLEANING AND DREDGING	FOOT	884
	CLOSING INVERT, BRICK & MORTAR	EACH	11
	CHISEL PLOWING	L SUM	1
	STORMWATER POLLUTION PREVENTION PLAN	L SUM	1
	POTHOLE EXISTING UTILITY	EACH	2
	CHAIN LINK FENCE TO BE REMOVED AND REPLACED	FOOT	156
	COORDINATION WITH CANADIAN NATIONAL	L SUM	1



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no.	date	by	ckd	description
0	09/03/15	TRD	JMD	ISSUED FOR BID
1	09/21/15	TRD	JMD	ADDENDUM NO. 1

**BURNS
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1431 OPUS PLACE SUITE 400
 DOWNERS GROVE, IL 60515
 630-724-3200
 LICENSEE NO. 184.001310

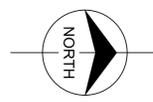
date	SEPTEMBER 2015	detailed	T. DUNSEITH
designed	J. DARLINGTON	checked	R. PATCHETT



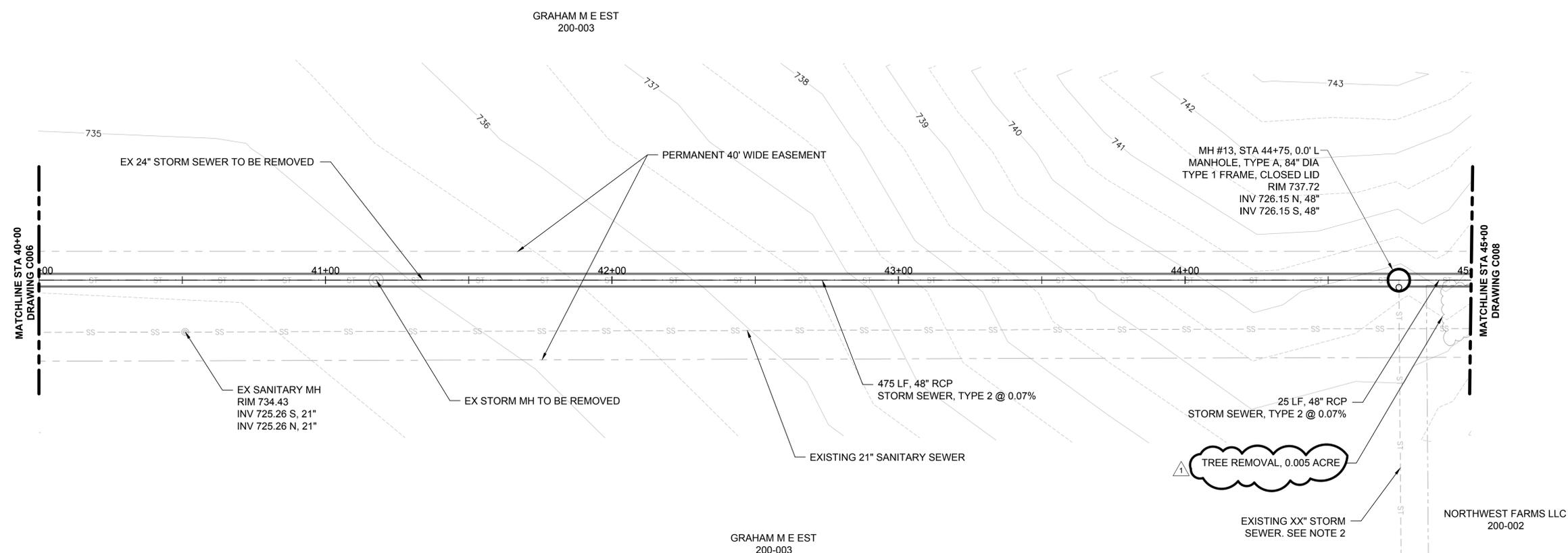
**NORTHWEST SEWER AND OUTFALL
 SUMMARY OF QUANTITIES**

project	78333	contract	-
drawing	G003	rev.	1
sheet	3	of	29 sheets
file 78333G003.DWG			

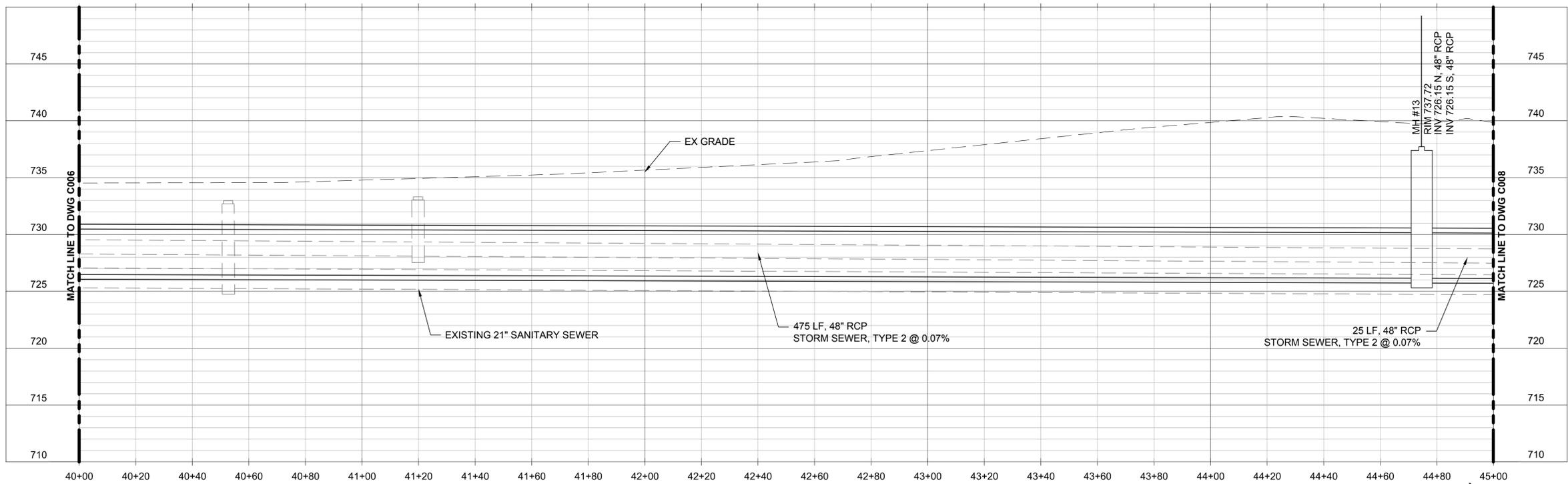
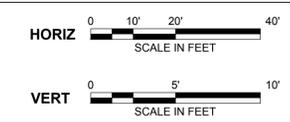
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no.	date	by	ckd	description
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1	09/21/15	TRD	JMD	ADDENDUM NO. 1



- NOTE:**
1. MANHOLE MH #13 SHALL BE BURIED A MINIMUM OF 24" BELOW EXISTING GROUND ELEVATION.
 2. CONTRACTOR SHALL FIELD VERIFY SIZE AND HORIZONTAL AND VERTICAL LOCATION OF EXISTING XX" STORM SEWER BY POTHOLING PRIOR TO FABRICATION OF MH #13.



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date	SEPTMBER 2015	detailed	T. DUNSEITH
designed	J. DARLINGTON	checked	R. PATCHETT



NORTHWEST SEWER AND OUTFALL
PLAN AND PROFILE
STA. 40+00 TO 45+00

project	78333	contract	-
drawing	C007	rev.	1
sheet	10	of	29
file	78333C007.DWG		

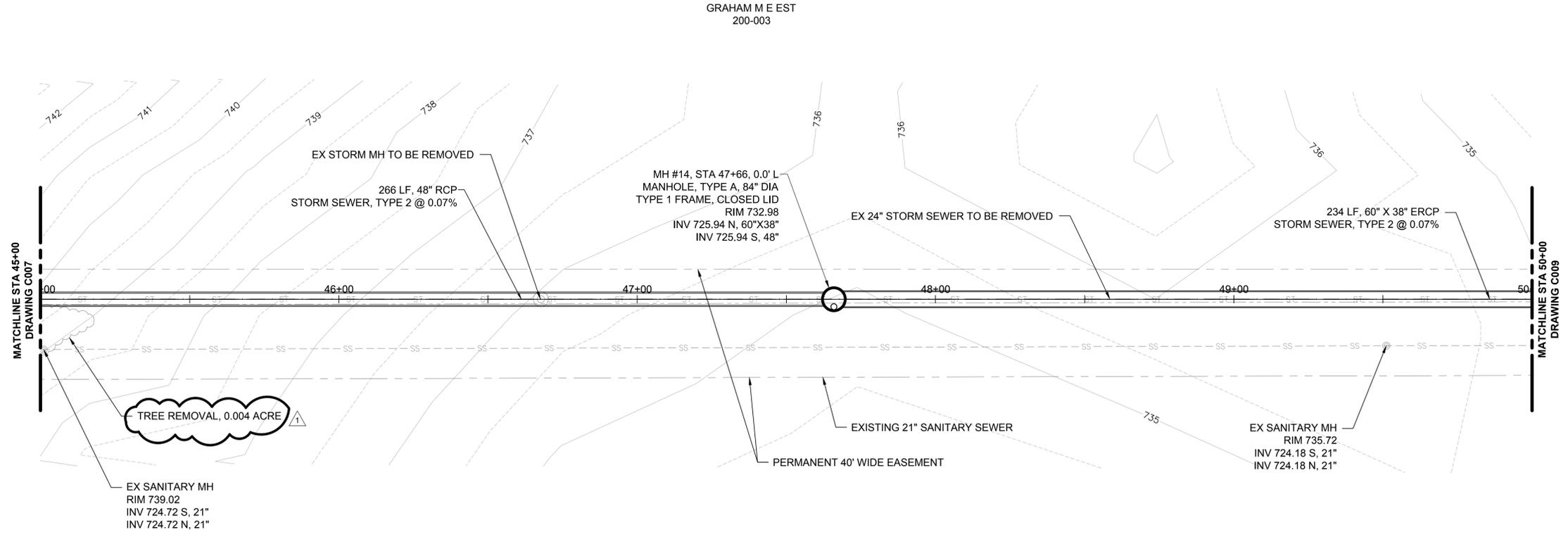
Scale for Microfitting
Millimeters
Inches

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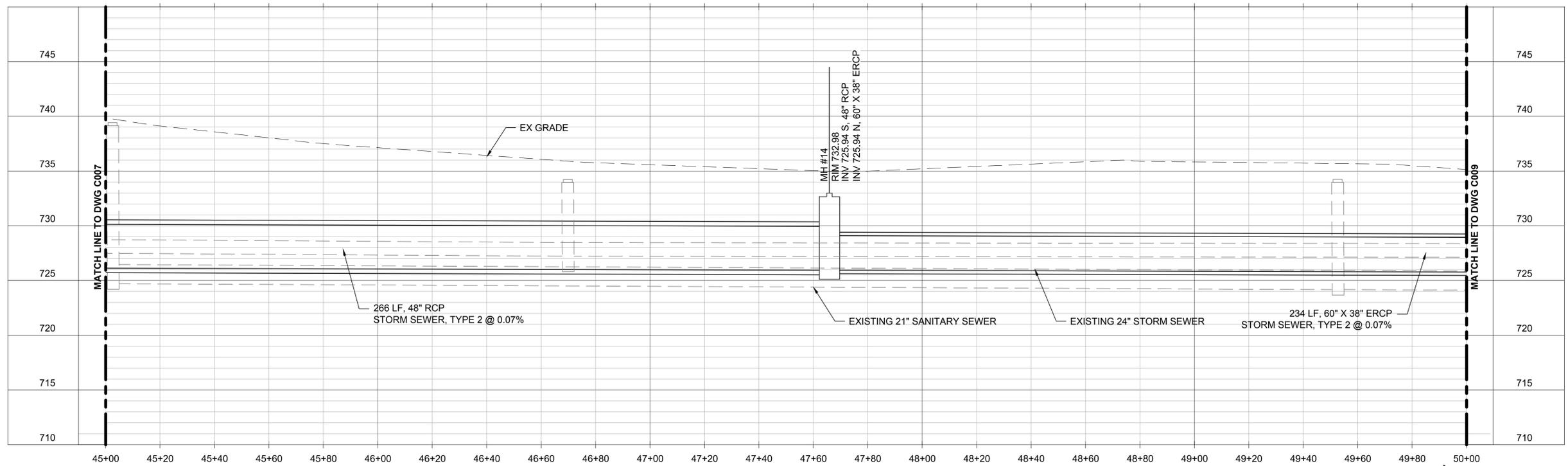
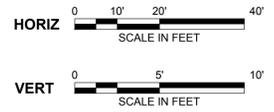
no.	date	by	ckd	description
0	09/03/15	TRD	JMD	ISSUED FOR BID
1	09/21/15	TRD	JMD	ADDENDUM NO. 1



GRAHAM M E EST
200-003

NORTHWEST FARMS LLC
200-002

NOTE:
1. MANHOLE MH #14 SHALL BE BURIED A MINIMUM OF 24" BELOW EXISTING GROUND ELEVATION.



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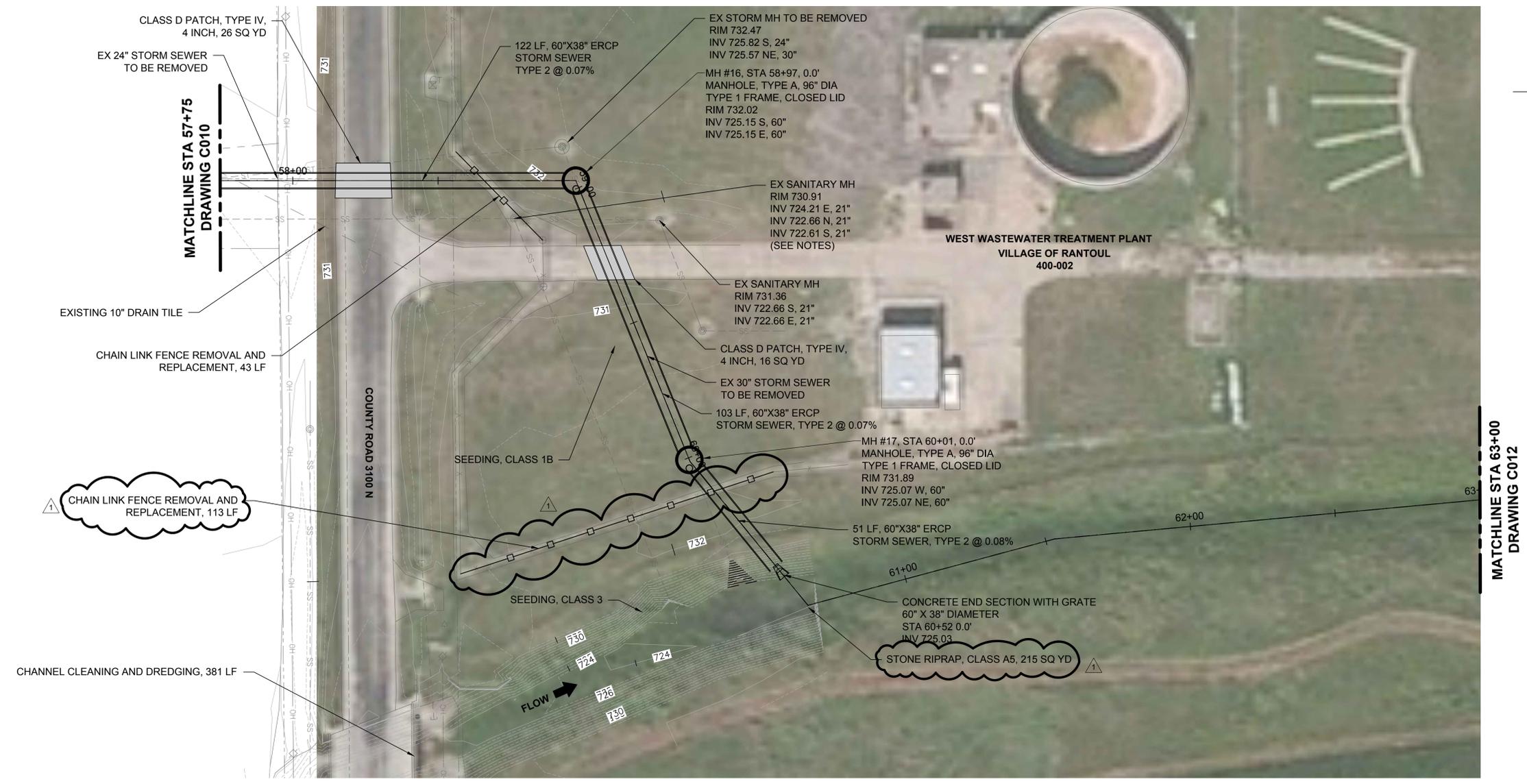
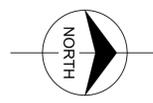
date	SEPTEMBER 2015	detailed	T. DUNSEITH
designed	J. DARLINGTON	checked	R. PATCHETT



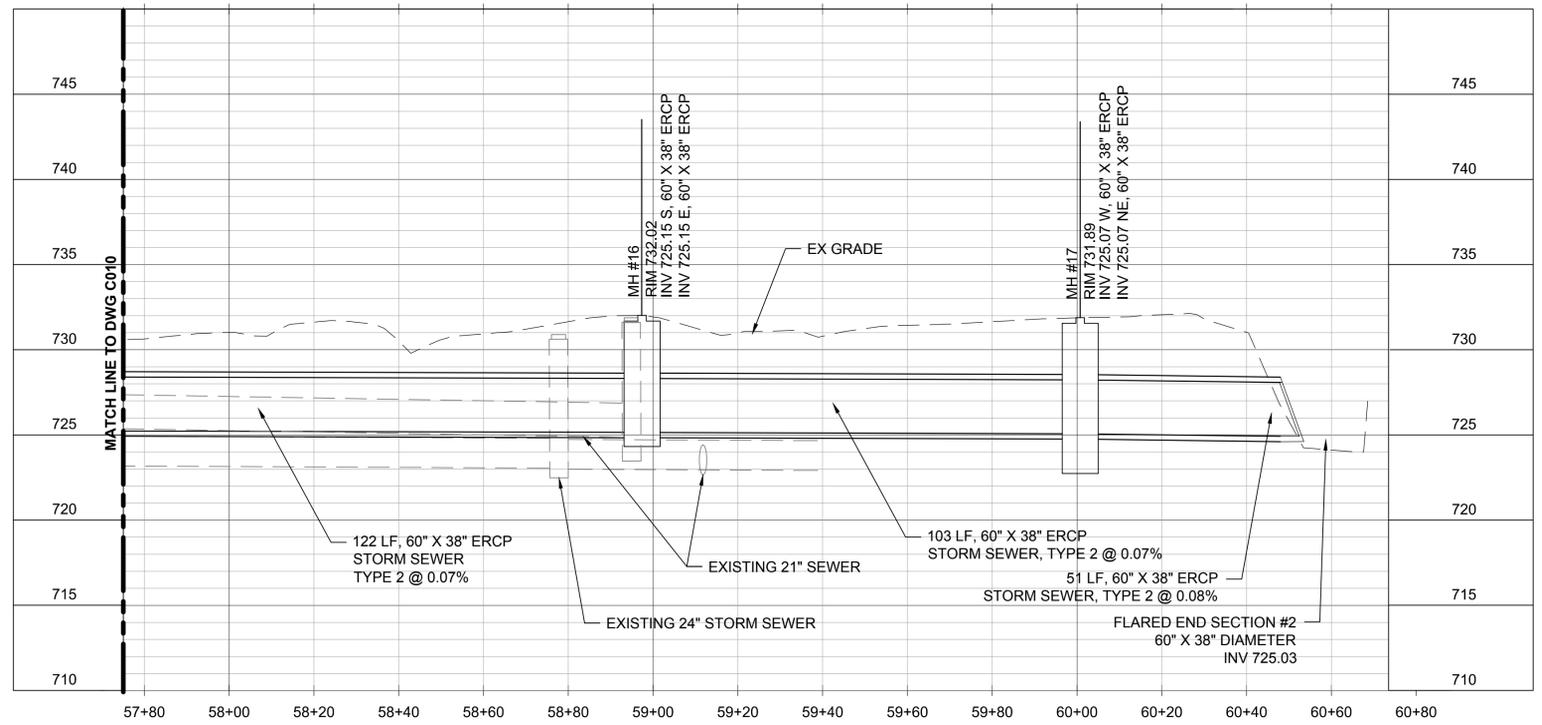
NORTHWEST SEWER AND OUTFALL
PLAN AND PROFILE
STA. 45+00 TO 50+00

project	78333	contract	-
drawing	C008	rev.	1
sheet	11	of	29 sheets
file 78333C008.DWG			

no.	date	by	ckd	description
0	09/03/15	TRD	JMD	ISSUED FOR BID
1	09/21/15	TRD	JMD	ADDENDUM NO. 1



- NOTE:**
1. TOPSOIL STOCKPILE SHALL BE LOCATED ON WEST WASTEWATER TREATMENT PLANT PROPERTY AND ADJACENT TO TRENCH EXCAVATION WITHIN THE EASEMENT LIMITS. TOPSOIL STOCKPILE SHALL NOT BE LOCATED ON CN RAILROAD PROPERTY. SILT FENCE BARRIER SHALL BE INSTALLED AROUND THE STOCKPILE AND MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
 2. CONTRACTOR SHALL CLEAN, DREDGE, AND REMOVE DEBRIS FROM THE DRAINAGE DITCH FROM COUNTY ROAD 3100 N TO NORTH PROPERTY LINE. DITCH SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE TO THE NORTH. CONTRACTOR SHALL LEGALLY DISPOSE OF ALL DREDGE WASTE AND DEBRIS.
 3. CONTRACTOR SHALL CLOSE OFF EAST INVERT INSIDE EXISTING SANITARY MANHOLE WITH BRICK AND MORTAR.



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date	SEPTMBER 2015	detailed	T. DUNSEITH
designed	J. DARLINGTON	checked	R. PATCHETT



NORTHWEST SEWER AND OUTFALL
PLAN AND PROFILE
STA. 57+75 TO 63+00

project	78333	contract	-
drawing	C011	rev.	1
sheet	14	of	29 sheets
file	78333C011.DWG		