

ADDENDUM NO. 1
JUNE 14, 2013
LINCOLN AREA SEWER SEPARATION – CONTRACT #3C
PORTSMOUTH, NEW HAMPSHIRE

The following changes and information are hereby incorporated into the Contract Documents (Project Manual and Drawings).

PROJECT MANUAL

1. Pre-Bid Meeting

Meeting Notes (**Attachment A**) and the information provided within are included in the Contract Documents by this Addendum No. 1.

2. Bid Schedule

The Bid Schedule is revised to reflect common excavation of the road base and 12” depth gravel installation. Reclamation of the road base in place (min. 6” depth) is included for the Contractor’s maintenance of the roadway during construction. Road box/common excavation shall occur after all utilities are installed and tested, for the incremental work areas (1,500 road lengths specified). Any surplus reclaimed material, meeting the specifications, will become the property of the Contractor and may be incorporated into the project providing it meets the material specifications for the intended use. Material for roadway shall meet the requirements of 02229-5, paragraph 3.d, and NHDOT Section 304, paragraph 3.1.3.1. Material use as granular backfill under sidewalks may also be permitted provided that it meets these same requirements of NHDOT Section 304, paragraph 3.1.3.1. The pavement reclamation depth should not exceed twice the pavement depth, if the Contractor intends to incorporate the material into the project.

The following modifications are **incorporated** into the Bid Schedule:

a. Page A-3.14, Item 4.3:

Delete Item 4.3 and Replace with the following Item 4.3A:

BID ITEM	TOTAL EST. QTY	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS		UNIT PRICE	EXTENDED TOTAL
4.3A	16,300	SY	Full width pavement reclamation, In Place (6-inch min. depth) _____ Dollars and _____ Cents per	SY		

b. Page A-3.14, Item 4.4A:

Revise the total estimated quantity for Item 4.4A as follows:

4.4A	3,000 8,700	CY	Common excavation (Roadway): _____ Dollars and _____ Cents per	CY		
------	------------------------	----	---	----	--	--

c. Page A-3.15, Item 4.5.1A:

Revise the total estimated quantity for Item 4.5.1A as follows:

4.5.1A	600 <u>6,100</u>	CY (*)	Furnish and install crushed gravel (Roadway):	CY (*)		
			_____ Dollars and			
			_____ Cents per			

d. Page A-3.21, Item 6.15:

Revise the total estimated quantity for Item 6.15 as follows:

6.15	20,000 <u>10,000</u>	Lbs. (*)	Calcium chloride for dust control:	Lbs. (*)		
			_____ Dollars and			
			_____ Cents per			

e. Page A-3.21, Item 6.19:

Delete Item 6.19 Temporary roadway stabilization gravels entirely (Item 4.3A is provided for temporary stabilization). Maintenance of the roadway is subsidiary.

f. Page A-3.22, Notes to Bidders:

Revise Note 2 as follows:

The lowest bid and basis of award will be based on Engineers Estimate of Quantities and Contractor's Total Bid. ~~for the Total Base Bid plus Additive Alternate #1.~~ However, the Owner may elect to complete only the Total Base Bid work and not complete sidewalk work.

Delete Note 5 entirely.

g. Pages A-3.4 to A-3.22:

Remove these pages (the Bid Schedule) and Replace them with Attachment B (revised Bid Schedule pages A-3.4 to A-3.22) which reflects the above changes. The Contractor shall submit their bid on the revised Bid Schedule (Attachment B) provided. Bids not received on Attachment B will not be accepted.

3. Prosecution of Work

a. Page POW-5, Paragraph 8:

Add the following after the last sentence in the paragraph titled "Gas Lines to be replaced":

"New gas mains are being installed by Unitil, and are not shown on the drawings. New gas mains will be installed at the following locations:

Union Street (Lincoln Ave. to Middle St., DWG NO's P-3 and P-4): New plastic gas main will be constructed between the proposed sewer and water mains, approximately 10 feet off the face of the existing curb on the western side of the street (Sta. 179+70 to Sta. 188+90).

Union Street (Lincoln Ave. to South St., DWG NO's P-5 and P-6): New plastic gas main will be installed along the curb on the west side of the roadway from Sta. 192+00 to Sta.

193+80 and between the proposed water and the sewer mains from Sta. 193+80 to Sta. 200+00 +/-, approximately 4 feet from the proposed water main location as shown on DWG No's P-5 and P-6.

Wibird Street (Middle St. to Lincoln Ave., DWG NO's P-7 and P-8): New plastic gas main will be installed along the centerline of the proposed roadway, Sta. 204+30 to Sta. 211+20.

Hawthorne Street (Wibird St. to Union St., DWG NO P-12): New plastic gas main will be installed approximately 2 to 3 feet south of the proposed water main, as shown on the drawings.

It should be noted that the proposed alignments described above are based on locations provided by the gas company. The Contractor is encouraged to review these locations on the ground and coordinate with Unitil if more information is desired in preparation of their Bid. The Contractor shall anticipate excavation, backfill, and protection of the new gas mains and service laterals while preparing their bid. Excavation, backfill and protection of all gas mains and service laterals are subsidiary to the Contractor's work and will not be measured for payment.

SCHEDULE

The gas company began their work on June 12, 2013 and locations may be reviewed on the ground, contact Phil Johnson (603.235.0252) at Unitil if additional information is needed. Gas line work will proceed westerly to Union Street, Hawthorne Street, Wibird Street and Chauncey Street. Gas main and service replacements are expected to take six to eight weeks and be completed by July 26, 2013. Week to week scheduling for proposed gas installations can be coordinated with Unitil, by the Contractor.

4. Section 01025 - Measurement and Payment

a. Page 01025-4, Paragraph 1.8.A.14:

Delete paragraph 1.8.A.14 and replace with the following:

14. Temporary roadway stabilization materials (crushed gravel or reclaimed asphalt product).

b. Page 01025-23, Item 3.6 – Remove Existing Hydrant Assembly:

Delete paragraph A.2 and **Replace** with the following:

2. The removal of existing Hydrants within 5 feet of hydrants being replaced are subsidiary to Item 3.5 and will not be measured for payment under this item.

c. Page 01025-47

Delete Item 6.19 Temporary Gravels for Roadway Stabilization entirely.

DRAWINGS

5. DWG NO. G-7, Roadway Quantity Schedules:
Delete DWG. NO G-7 entirely and **Replace** Roadway Quantity Schedules with **Attachment D**
6. DWG NO. X-1, Typical Road Section:
Delete DWG. NO X-1 entirely and **Replace** with **Attachment E**
7. DWG NO. P-5 and P-12 (Profile section of the Utilities Plan) SMH #209:
Delete reference to 5' diameter, shown at Sta. 194+04 and Sta. 405+11 of the profile. *SMH #209 will be a 4' diameter structure.*
8. DWG NO. D-1, Standard Sewer Details:
Add Chimney detail (alternate), **Attachment C**

CONTRACTOR REQUESTS FOR ADDITIONAL INFORMATION (RFI) AND ENGINEERS RESPONSE (ER)

9. RFI: SMH #209 on Sheet P-5 and P-12 is labeled as a 5' Dia. on the profile. The SMH schedule has it listed as a 4' Dia. Please clarify diameter.

ER: SMH #209 is to be a 4' diameter structure.

10. RFI: Please confirm the rounding quantity for the 6'' SDR service on private property is intended to be 235 lf for a total of 400 lf. Sheet G-6, service lateral schedule.

ER: The rounding quantity for Item 1.1.06B is 235 LF for a total of 400 LF as show on the service lateral schedule (Sheet G-6).

11. RFI: Please clarify detail 7/D1 for the sewer chimneys. The detail shows a ductile iron tee on the sewer main and ductile iron fittings and pipe up to the service pipe. The measurement and payment section 01025-7 states payment to include 6'' PVC pipe, sonnet tube and concrete encasement, that would assume PVC fittings being used. Are we to use DI or PVC? Would you clarify what services need the chimneys? It will make a big difference if it is on a 30'' pipe or an 8'' pipe.

ER: Item 1.1.06C (Sewer Service Chimneys) may be either DI as shown on DWG D1 or PVC as shown on **Attachment C** of this addendum, Contractors choice. Chimney locations will be dependent upon the required depth to make gravity connections at the property line, which will vary. The Contractor shall anticipate that sewer services will be constructed below the water main and drains at crossings, in preparation unless otherwise directed.

12. RFI: Please clarify the following:

The following sheets have notes to save existing sidewalks however there are drain, sewer or water lines that cross them. Will the contractor be responsible to replace at their own cost or

will these areas be changed to pay items?; P-8: Water and Sewer for #168, Sewer for #194, P-11: Drain and Sewer for #31, Drain for #25, P-13: Water and Drain for #76.

ER: The Contractor will be paid under Item 5.1.4 – 4” Concrete Sidewalk for the repair of sidewalk panels removed for sewer, water or drain installations.

13. RFI: Please clarify how payment is to be made for the removal of the top of the 48” RCP pipe and the placement of solid bedding as noted on sheet P-1 (profile at station 10+50).

Could the pipe be completely removed and paid under pipe removal, and replaced with pipe spoil excavation? It will be dug through numerous times for the three utility services.

ER: Payment for the removal of the top of the 48” RCP will be paid under Item 4.4B – Excavation and disposal of reinforced or unreinforced concrete.

The pipe spoils may be used for pipe bedding providing it is graded with other material and there are no voids.

14. Measurement and Payment for Manholes and Catch Basins include “Construction Fabric”. Please confirm that if fabric is required it will be paid under fabric items, 1.8A or 1.8B.

ER: Construction fabric (where directed) will be paid for under Items 1.8A and 1.8B.

15. Who is responsible to determine if a material is considered “contaminated”? Is there a specific area we should anticipate contaminated soils based on the 500 LF? Typically, by the time the test results come back, several hundred feet of pipe could have been installed.

ER: POW-7, 17 states that the Owner will maintain the right to determine the exact limits of the contaminated soil/groundwater.

16. Will the Engineer or Owner be providing the required testing of excess fill?

ER: Required testing is included and/or subsidiary to Item 1.15.

17. If soil is determined contaminated and needs to be trucked off site, specifications section 13100 states that the Engineer and Owner reserve the right to field screen the surplus materials prior to shipment. How will that be paid?

ER: Field screening will be paid by the Owner.

18. For Item 1.15D, is there a “type of disposal site/landfill” we should assume for disposal?

Measurement and payment states to provide disposal estimates though the bid form asks for a unit price. Should this be an allowance?

ER: Item 1.15D includes estimates from three (3) disposal sites.

No, a per Ton price is requested.

19. Does payment for obtaining temporary groundwater discharge permits or any services from environmental professionals to prepare documents relating to this get covered under the allowance for contaminated groundwater, Item 1.15E, or should we consider this incidental?


ER: Payment for groundwater discharge permits associated with the discharge of contaminated groundwater will be included for payment under Item 1.15E.

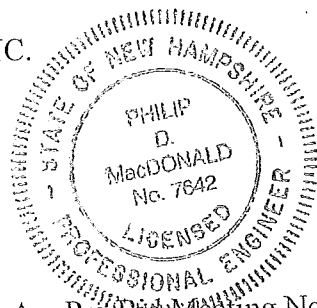
20. Please confirm that payment for temporary water is only for one side of the street.

ER: The basis of payment for temporary water is provided in Section 01025-24, Item 3.7, and includes temporary water to both sides of the roadway.

21. Is Item 1.17, Post Construction Video of Sewer for sewer mains only, or does it include sewer services?

ER: Post Construction Video of Sewers, Item 17, where directed, includes mains and services.

UNDERWOOD ENGINEERS, INC.

Philip MacDonald, P.E.
Project Manager



Dated June 14, 2013

Attachments:

- Attachment A – Pre-Bid Meeting Notes
- Attachment B – Revised Bid Schedule, Pages A-3.4 to A-3.22
- Attachment C – PVC Sewer Service Chimney Detail
- Attachment D – Road Quantity Schedules
- Attachment E – Typical Road Section

ATTACHMENT A

ADDENDUM NO. 1

LINCOLN AREA SEWER SEPARATION – CONTRACT #3C
CITY OF PORTSMOUTH, NH

PRE-BID MEETING NOTES

Portsmouth Department of Public Works
680 Peverly Hill Road
June 4, 2013 (10:00 a.m.)

<u>Attendees</u>	<u>Representing</u>	<u>Phone</u>	<u>Email</u>
Phil MacDonald	Underwood Engineers	603-436-6192	pmac@underwoodengineers.com
Jeff Clifton	Underwood Engineers	603-436-6192	jclifton@underwoodengineers.com
Rick Dolce	City of Portsmouth	603-766-1413	rsdolce@pw.cityofportsmouth.com
Sean O'Leary	RJ Grondin & Sons	207-400-6517	estimators@grondinconstruction.com
Mark Rainey	Severino Trucking Co., Inc.	603-483-2133	mrainey@severinotrucking.com
Keven Niland	Baker Corp.	603-851-2487	kniland@bakercorp.com
Maura Lane	Albanese Bros, Inc.	978-454-8850	mlane@albanesebros.com
Pietro Ciano	Albanese D&S, Inc.	978-937-0909	pciano@albaneseds.com
Jimmy Locke	NE Earth Mechanics	603-435-7989	jimmyl@neearth.com
Jason DeWildt	SUR Construction, Inc.	603-332-4554	jdewildt@surconstruction.com

1. Introductions

Phil MacDonald introduced the project team.

2. Project Area

Phil MacDonald gave a brief overview of the project area and the previous associated projects in the area.

3. Pre-Qualification of Contractors

The following are pre-qualified and were invited to attend this pre-bid meeting:

- Albanese Brothers, Inc. (Dracut, MA)
- Albanese D&S, Inc. (Dracut, MA)
- Northeast Earth Mechanics (Pittsfield, NH)
- Park Construction (Fitzwilliam, NH)
- R.D. Edmunds & Sons, Inc. (Franklin, NH)
- R.J. Grondin & Sons (Gorham, ME)
- Sargent Corp. (Stillwater, ME)
- Severino Trucking Co., Inc. (Candia, NH)
- S.U.R. Construction, Inc. (Rochester, NH)

4. Mandatory Pre-Bid Meeting

Attendance at this meeting is mandatory. Bids from Contractors not in attendance will not be opened.

5. Project Overview

The project includes but is not limited to the following items:

- Sanitary sewer installations
- Storm sewer installations, including storm sewer service laterals
- Water system replacement (temporary water is specified, includes tie-ins to the curb stop, either existing or new)
- Interior sewer service re-plumbing work (Allowance Item 1.16) and sewer service installation on private property (Item 1.1.06B). See DWG G-10
- Roadway reconstruction:
 - a. Richards Avenue = Full depth reconstruction (removal of brick pavers and gravel installation)
 - b. All other streets = Full width reclamation, 10” depth, remove and rehandle
- Curbing and sidewalk repairs and/or re-construction
- Modifications to existing sewers and storm drains (connections and tie-ins).
- Combined sewer by-pass piping or pumping operations to maintain existing flows (Item 1.0).
- Traffic control and maintenance of traffic, includes two message boards. See Items 6.5A & 6.5B. The TCP will need to be submitted in advance for the City’s approval
- Preparation and maintenance of a Storm Water Pollution Prevent Plan (SWPPP) (Items 6.8 A & 6.8B).
- Prosecution of the work as outlined in the Project Manual

Other items of note for bidders:

- Contaminated Soils vs. Urban Fill (refer to POW for a discussion on management of suspect soils, if encountered.)
- A Health and Safety Plan will need to be submitted before earthwork can begin (Refer to Section 13710 of the project Manual)
- COP Blasting Permit Requirements (see Appendix E)
- Vibration monitoring in addition to blasting.
- Protection of existing facilities to remain will be the responsibility of the Contractor. Negligence and/or protection of utilities, public and/or private property will not be tolerated.
- Protect trees not listed for removal in Tree Removal Plan, includes penalties for damage to trees designated to remain, reference POW-11, Para. 31. The Tree Removal plan is included in Appendix I.
- Location of all existing sewer services by video inspection.
- The allowable length of unpaved road is 1,500 linear feet

6. Available Information

The following information has been included in the Appendix of the project manual:

- Gas Line Record Information (Appendix A). Note new lines are being installed
- Geotechnical Report and boring logs (Appendix B)
- Available sewer service tie sheets (Appendix C)
- Phase 1A Archaeological Sensitivity Report (Appendix D)
- City of Portsmouth Blasting Ordinance (Appendix E)
- Tree Removal Plan (Appendix I)

The following additional information is also available on request:

- Sewer videos and TV inspection logs.
- House to House basement surveys
- Homeowner Questionnaires
- Sewer manhole data sheets

7. Bids

Bids will be received by the City of Portsmouth Purchasing Department until 12:00 p.m., June 21, 2013.

8. Schedule

Completion time for the project will be calculated as calendar days from the date specified in the “Notice to Proceed” as follows:

300 Calendar days for Sewer and Drain Work Substantial Completion (excluding the 90 day winter shutdown periods).

330 Calendar days for Total Project Substantial Completion (excluding the 90 day winter shutdown periods).

360 Calendar days for Completion of all work except Final Pavement Overlay, (excluding the 90 day winter shutdown periods).

Winter shutdown period will begin December 15 and extend to March 15. Work during winter shutdown period is subject to the City’s approval.

9. Funding Requirements

- Funded through local funds and SAG Grant (NHDES).
- Davis-Bacon Wage Rates do not apply
- ARRA By American Requirements do not apply
- MBE/WBE Requirements do not apply
- Note Special Conditions modified NHDES State Standard Conditions (pages SC-2.2 through SC-2.7 of the Project Manual).
 - Insurance – City limits are higher
 - Bonding – City forms

Other

- NHDES will monitor construction of the eligible portions of the project.
- NHDES inspectors shall be granted access to the work areas at all times
- NHDES SAG sign requirement (see Section 01580 of the Project Manual)

10. Prosecution of Work (Division 1 - Section POW)

- Project Specific requirements are included in Section POW of the project manual for the Contractor’s reference.

11. Traffic Control (Section 01570)

- The work area is a densely populated residential neighborhood
- Provide detailed traffic control plan for approval prior to the start of work. A work plan of the area road network is provided for the Contractor's benefit in Section 01570 of the project manual. The Contractor should anticipate the following conditions pertaining to the maintenance of traffic.
 - Closures to through traffic will be conditionally allowed
 - Road closures will require approved detour routes and sign packages.
 - Access to residential properties and businesses must be provided at all times:
 - During working hours, local traffic shall be accommodated as well as emergency vehicles, school busses, and trash removal vehicles
 - Suitable detours must be provided
 - During non-working hours roads shall be open for two way traffic at all times.
 - All excavations shall be backfilled daily and it will not be acceptable to plate excavations overnight.
 - Pedestrian traffic
 - The Lincoln Avenue Area is in close proximity to Schools and is also used by residents and elderly citizens. Safe pedestrian travel will need to be maintained throughout the project
- Item 6.5B includes two (2) portable message boards (provided by the Contractor).

12. Work Hours

- The contract time for completion is based on work hours from 7 am to 5 pm. Work prior to 7 am or after 5pm will require approval by the City.
- Any request for permission to work beyond the normal hours stated above must be submitted to the City a minimum of two (2) weeks in advance.

13. Community Information (Section 01201)

The Contractor is required to provide the following:

- Prepare a brief written narrative of upcoming work areas and schedules (2 week projection)
 - This information can be shown on the work area map and will be posted on the City's website
- Maintain a complaint tracking system (Sample complaint form is provided, section 01201)
- Provide a 24-hour contact person for emergencies
- Attend public informational meetings upon request (two anticipated)

14. Geotechnical Report

- Geotechnical Report and boring logs are included in Appendix B. Contractor should note construction considerations included in the geotechnical report

15. Archaeological and Historic Sensitivity

- While no archeological sensitive areas are identified, the Contractor should be alert for historical artifacts.

16. Maintenance of Active Sewer Lines (Item #1.0)

- High flows can be anticipated within the combined sewer both during and following rain events. Contractor will need to consider weather when sequencing construction operations. Maintenance of existing combined sewer flows will be the Contractor's responsibility.

17. Utilities

Gas

- Gas lines are owned by Unitil.
- Unitil will replace their existing cast iron mains within the project area. The Contractor shall review locations with and coordinate scheduling with the gas company.
- The gas company has received a copy of the City's plans for water, sewer and drain installations. Coordination with Unitil will be required to complete vertical relocations and protect any existing gas main which may interfere with proposed work.

Other

- Conflicts or excavation beneath unknown utilities not identified on the plans or in the contract documents may exist. The Contractor is to assume that each property has one water, one sewer, and one gas service each. Items 6D and 6E are provided to facilitate payment for additional service crossings (more than one of each utility for each property) or for main line utility crossings that are not shown on the drawings, Item 6D or for repairs to utilities (Item #6E) not shown on the drawings and not marked in the field (DIGSAFE). Excavation, backfill and protection of new gas mains and services to be installed by the gas company will not be considered for payment under Items 6D and 6E.

18. Staging Area and Office Trailer

- The Contractor must establish an appropriate staging area.
 - No staging area has been identified
- The Contractor may make arrangements with property owners for additional staging areas.

19. Re-Routing of Interior Plumbing

- Backyard/cross country sewers are being abandoned and filled.
- Some houses will require interior plumbing modifications (Item 1.16)
 - Coordinate work with City's Contracted General Plumber.
 - Work with plumber to determine best location for new foundation penetration.
- Construct new sewer service on private property in the location determined in the field by the homeowner and the Engineer (Item 1.1.06B).
- Restoration of driveway (Item #4.2) and all landscape and hardscape (Item 4.2, 5.1.6, or 5.2 as required) areas impacted to existing conditions.
- See Sewer Service Relocation Work Plan (DWG G-10).

20. Tree Removal

- The Contractor will coordinate tree removal with the City's sub-contractor (Urban Tree Service, Rochester, New Hampshire); payment for tree removal is included in Items 6.12A and 6.12B.
- Only trees marked on the drawings and the Tree Removal Plan (Appendix I) shall be removed.

- Other trees may not be removed without prior authorization from the City, the City's Tree Committee, and the Engineer.
- Trimming shall be completed by the City of Portsmouth after a site walk and participation by the Contractor.
- Trees are typically trimmed providing a height clearance of approximately 14'.

21. Tree Protection

- Contractor will endeavor to prevent damage to all trees to remain.
- All damages sustained by trees will be subject to penalties assessed as described in Paragraph #30 of the Prosecution of Work.

22. Pre Bid Meeting Notes

A copy of the Pre-Bid meeting notes will be included by addendum.

23. Quality of Life

The project is located in a densely populated residential neighborhood with many young families, children and a considerable volume of pedestrian traffic. Offensive language will not be tolerated. The Contractor will be required to carry out the work in a professional and orderly manner, and to keep the work area neat as possible. Construction impacts will need to be mitigated to the extent possible.

24. Questions

Q: What is the estimated Contract value?

A: The Engineers Estimate is between \$4 and \$5 Million.

Q: How comfortable are the engineers with the ledge probes?

A: The ledge probes represent the best available information and Underwood indicated that they are comfortable with the reported data and ledge quantities provided.

Q: Is there any sewer flow data available?

A: In general, the flows are highest on Wibird Street. The Contractor should anticipate that the pipe will flow full following significant storm events. Standard flows can be anticipated for the other streets within the project area.

Q: Do the trenches need to be backfilled each night or will plating and backfilling be allowed?

A: The streets need to be returned to two-way traffic each night. Exposed plates will not be permitted.

Q: What is the intention of the temporary gravel item?

A: Temporary gravel was intended for roadway maintenance where the reclaimed asphalt is removed to prevent contamination.

Q: If reclaim product is unacceptable, will 3 to 4 inches of temporary gravel be allowed for use under the temporary gravel item?

A: Yes, providing that is requested by the Engineer. UE will review the expectations of the reclaim and temporary gravel items and provide further clarification to the Contractors in Addendum No.1.

Q: Will Underwood Engineers be on-site to watch the gas company install their pipes in the ground to make sure they are in the correct location?

A: No, UE will not oversee the gas company construction. However, the gas company has received copies of the City's plans for sewer, water and drain installations.

Q: When will the Contract be Awarded?

A: It is anticipated that the Contract will be awarded between mid-July and August 1, 2013.

ATTACHMENT B - ADDENDUM NO. 1
A-3.4
LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
1.0	1	LS	Maintenance of Combined Sanitary and Storm Sewer Flows during construction, including all temporary pumping and piping systems necessary to by-pass live sewers around the work area : _____ Dollars and _____ Cents per	LS	
1.1.06A	4,100	LF	Furnish and install 6" PVC SDR 35 sewer service connection all depths within City Right of Way, including earth excavation, fittings, backfill, dewatering, curbing and property restoration: _____ Dollars and _____ Cents per	LF	
1.1.06B	400	LF	Furnish and install 6" PVC SDR 35 sewer service connection all depths on Private Property, including earth excavation, fittings, backfill, dewatering, curbing/retaining wall and property restoration (hardscaping, landscaping, flower beds etc.): _____ Dollars and _____ Cents per	LF	
1.1.06D	40	EA(*)	Furnish and install cast iron covers for sewer service cleanouts when cleanouts are located in paved areas : _____ Dollars and _____ Cents per	EA(*)	
1.1.1.08	4,500	LF	Furnish and install 8" PVC SDR 35 sewer pipe all depths, including removal or plugging of existing sewer line, earth excavation, fittings, backfill, and dewatering: _____ Dollars and _____ Cents per	LF	
1.1.1.10	1,000	LF	Furnish and install 10" PVC SDR 35 sewer pipe all depths, including earth excavation, fittings, backfill, and dewatering: _____ Dollars and _____ Cents per	LF	

ATTACHMENT B - ADDENDUM NO. 1
A-3.5
LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
1.1.12	20	LF	Furnish and install 12" PVC SDR 35 sewer pipe all depths, including earth excavation, fittings, backfill, and dewatering: _____ Dollars and _____ Cents per	LF	
1.1.18	40	LF	Furnish and install 18" PVC SDR 35 sewer pipe all depths, including earth excavation, fittings, backfill, and dewatering: _____ Dollars and _____ Cents per	LF	
1.1.30	600	LF	Furnish and install 30" PVC SDR 35 sewer pipe all depths, including earth excavation, fittings, backfill, and dewatering: _____ Dollars and _____ Cents per	LF	
1.5.4	260	VF	Furnish and install standard 4' diameter sewer manholes including excavation and backfill: _____ Dollars and _____ Cents per	VF	
1.5.5	60	VF	Furnish and install standard 5' diameter sewer manholes including excavation and backfill: _____ Dollars and _____ Cents per	VF	
1.5A	40	EA(*)	Additional Adjustment of SMH Covers (where directed): _____ Dollars and _____ Cents per	EA(*)	

ATTACHMENT B - ADDENDUM NO. 1
A-3.6

LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
1.6	10	VF	Furnish and install inside drop structure for sewer manholes: _____ Dollars and _____ Cents per	VF	
1.8A	1,000	LF (*)	Furnish and install geotextile fabric around sewer bedding stone and pipe (in trench) where directed in accordance with the standard details: _____ Dollars and _____ Cents per	LF (*)	
1.8B	500	LF (*)	Furnish and install Geogrid Trench Stabilization where directed in accordance with the standard details: _____ Dollars and _____ Cents per	LF (*)	
1.9A	10	EA (*)	Field core sewer manholes and foundation penetrations for sewer service relocations (4" - 15" diameter pipe) including pipe connection system: _____ Dollars and _____ Cents per	EA (*)	
1.9B	2	EA (*)	Field core sewer manholes (larger than 18" diameter pipe) including pipe connection system: _____ Dollars and _____ Cents per	EA (*)	
1.9C	10	EA (*)	Field core foundation penetration (6" to 8") through stone or granite foundations for sewer service relocations including pipe connection system: _____ Dollars and _____ Cents per	EA (*)	

ATTACHMENT B - ADDENDUM NO. 1
A-3.7
LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
1.10	5	EA (*)	Remove sewer manholes including backfill, disposal of concrete, and salvage of frames and covers to City: _____ Dollars and _____ Cents per	EA (*)	
1.11	200	CY (*)	Furnish and install flowable fill where directed: _____ Dollars and _____ Cents per	CY (*)	
1.12	500	LF (*)	Well-Point Dewatering System (where directed) (MIN \$15/LF): _____ Dollars and _____ Cents per	LF (*)	
1.13	1,000	SF (*)	Sheeting (MIN \$10/SF): _____ Dollars (MINIMUM TEN DOLLARS/SF) and _____ Cents per	SF (*)	
1.15A	1	LS	Develop Health and Safety Plan _____ Dollars and _____ Cents per	LS	
1.15B	500*	LF	Contaminated Soils Management (MIN \$5/LF): _____ Dollars (MIN \$5/LF) and _____ Cents per	LF	

ATTACHMENT B - ADDENDUM NO. 1
A-3.8
LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
1.15C	800*	Ton	Load & haul contaminated soils (MIN \$5/Ton): _____ Dollars (MINIMUM FIVE DOLLARS/Ton) and _____ Cents per		
1.15D	800*	Ton	Disposal of contaminated soils (MIN \$30/Ton): _____ Dollars (MINIMUM THIRTY DOLLARS/Ton) and _____ Cents per		
1.15E	1	Allow	Treatment & disposal of contaminated groundwater: TEN THOUSAND Dollars and ZERO Cents per (ALLOWANCE)	\$10,000.00	\$10,000.00
1.16	1	Allow	Rework interior plumbing: TWENTY THOUSAND Dollars and ZERO Cents per (ALLOWANCE)	\$20,000.00	\$20,000.00
1.17	6,135	LF	Post Construction Video of Sewers where directed (Section 01382): _____ Dollars and _____ Cents per		
1.18	160	EA	Locate existing sewer service by Video Inspection, transmitter and locator (Section 01382): _____ Dollars and _____ Cents per		
2.1.06	3,300	LF (*)	Furnish and install 6" CPDT drain service connection all depths, including earth excavation, fittings, backfill, dewatering, curbing and property restoration: _____ Dollars and _____ Cents per		

ATTACHMENT B - ADDENDUM NO. 1
A-3.9

LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
2.1.12	4,800	LF	Furnish and install 12" CPE, all depths, including earth excavation, fittings, backfill, and dewatering: _____ Dollars and _____ Cents per	LF	
2.1.15	1,000	LF	Furnish and install 15" CPE, all depths, including earth excavation, fittings, backfill, and dewatering: _____ Dollars and _____ Cents per	LF	
2.1.18	30	LF	Furnish and install 18" CPE, all depths, including earth excavation, fittings, backfill, and dewatering: _____ Dollars and _____ Cents per	LF	
2.1.24	170	LF	Furnish and install 24" CPE, all depths, including earth excavation, fittings, backfill, and dewatering: _____ Dollars and _____ Cents per	LF	
2.5.4	57	VF	Furnish and install 4' diameter drain manhole including excavation and backfill: _____ Dollars and _____ Cents per	VF	
2.5.5	36	VF	Furnish and install 5' diameter drain manhole including excavation and backfill: _____ Dollars and _____ Cents per	VF	

ATTACHMENT B - ADDENDUM NO. 1
A-3.10
LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
2.5A	15	EA(*)	Additional Adjustment of DMH Covers (where directed): _____ Dollars and _____ Cents per	EA(*)	
2.6.4	430	VF	Furnish and install standard 4' diameter catch basin including excavation and backfill: _____ Dollars and _____ Cents per	VF	
2.6.5	27	VF	Furnish and install standard 5' diameter catch basin including excavation and backfill: _____ Dollars and _____ Cents per	VF	
2.6A	55	EA	Furnish and install catch basin hood (12" through 18" diameter outlet pipes or as directed): _____ Dollars and _____ Cents per	EA	
2.8	1,000	LF (*)	Furnish and install geotextile wrap around drain bedding stone and pipe (in trench) where directed : _____ Dollars and _____ Cents per	LF (*)	
2.9A	5	EA (*)	Field core drain manholes or catch basins, 4" - 15" dia. pipe: _____ Dollars and _____ Cents per	EA (*)	

ATTACHMENT B - ADDENDUM NO. 1
A-3.11
LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
2.9B	2	EA (*)	Field core drain manholes or catch basins, 18" and larger diameter pipe: _____ Dollars and _____ Cents per	EA (*)	
2.10	10	EA (*)	Remove drain manholes or catch basins including fill materials and disposal of cone section and salvage of frames and cover or grate to DPW: _____ Dollars and _____ Cents per	EA (*)	
3.1.06	100	LF (*)	Furnish and install, 6" diameter ductile iron water main including earth excavation, fittings not paid for under another item, backfill, insulation, dewatering and testing: _____ Dollars and _____ Cents per	LF (*)	
3.1.08	4,900	LF	Furnish and install, 8" diameter ductile iron water main including earth excavation, fittings not paid for under another item, backfill, insulation, dewatering and testing: _____ Dollars and _____ Cents per	LF	
3.1.12	1,750	LF	Furnish and install, 12" diameter ductile iron water main including earth excavation, fittings not paid for under another item, backfill, insulation, dewatering and testing: _____ Dollars and _____ Cents per	LF	
3.2A	4,050	LF	Furnish and install, 3/4" copper water service pipe including earth excavation, backfill, insulation, dewatering and testing: _____ Dollars and _____ Cents per	LF	

ATTACHMENT B - ADDENDUM NO. 1
A-3.12

LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
3.2B	200	LF (*)	Furnish and install, 1" copper water service pipe including earth excavation, backfill, insulation, dewatering and testing: _____ Dollars and _____ Cents per	LF (*)	
3.3A	160	EA	Furnish and install, ¾" water service connections, including earth excavation, backfill, insulation, dewatering and testing: _____ Dollars and _____ Cents per	EA	
3.3B	5	EA(*)	Furnish and install, 1" water service connections, including earth excavation, backfill, insulation, dewatering and testing: _____ Dollars and _____ Cents per	EA(*)	
3.4.08	18	EA	Furnish and install, 8" gate valve assembly including earth excavation, fittings not paid for under another item, backfill, insulation, dewatering and testing: _____ Dollars and _____ Cents per	EA	
3.4.08A	2	EA	Furnish and install, 8" tapping valve assembly including earth excavation, tapping sleeve, fittings not paid for under another item, backfill, insulation, dewatering and testing: _____ Dollars and _____ Cents per	EA	
3.4.12	8	EA	Furnish and install, 12" gate valve assembly including earth excavation, fittings not paid for under another item, backfill, insulation, dewatering and testing: _____ Dollars and _____ Cents per	EA	

ATTACHMENT B - ADDENDUM NO. 1
A-3.13
LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
3.4.12A	1	EA	Furnish and install, 12" tapping valve assembly including earth excavation, tapping sleeve, fittings not paid for under another item, backfill, insulation, dewatering and testing: _____ Dollars and _____ Cents per	EA	
3.4A	21	EA (*)	Additional Adjustment of gate valve boxes and shutoffs (to final pavement elevation): _____ Dollars and _____ Cents per	EA (*)	
3.5	7	EA	Furnish and install, hydrant assembly including anchoring tee, gate valve, pipe extension, backfill, insulation, dewatering and testing: _____ Dollars and _____ Cents per	EA	
3.6	2	EA (*)	Removal of existing hydrant assembly including excavation, backfill, capping existing branch piping for abandonment: _____ Dollars and _____ Cents per	EA (*)	
3.7	5,800	LF(*)	Temporary Water System (potable): _____ Dollars and _____ Cents per	LF(*)	
4.1A	2,700	TON	Furnish and install bituminous pavement - Machine Method (Binder Course): _____ Dollars and _____ Cents per	TON	

ATTACHMENT B - ADDENDUM NO. 1
A-3.14
LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
4.1B	1,600	TON	Furnish and install bituminous pavement - Machine Method (Wearing Course): _____ Dollars and _____ Cents per	TON	
4.2	700	TON	Hot bituminous pavement, hand worked: _____ Dollars and _____ Cents per	TON	
4.3A	16,300	SY	Full width pavement reclamation, In Place (6-inch depth) : _____ Dollars and _____ Cents per	SY	
4.4A	8,700	CY	Common excavation (Roadway): _____ Dollars and _____ Cents per	CY	
4.4B	200	CY (*)	Excavation and disposal of reinforced or unreinforced concrete (misc. concrete panels, curbing and brick paver masonry): _____ Dollars and _____ Cents per	CY (*)	
4.5.1A	6,100	CY (*)	Furnish and install crushed gravel (Roadway): _____ Dollars and _____ Cents per	CY (*)	

ATTACHMENT B - ADDENDUM NO. 1
A-3.15
LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
4.5.1B	500	CY(*)	Furnish and install crushed gravel (Drives): _____ Dollars and _____ Cents per	CY(*)	
4.5.2	100	CY	Furnish and install bank-run gravel (where shown or as directed): _____ Dollars and _____ Cents per	CY	
4.6	5,000	SY(*)	Furnish and install construction geotextile fabric (where directed): _____ Dollars and _____ Cents per	SY(*)	
4.7	200	SY(*)	Cold planing existing pavement: _____ Dollars and _____ Cents per	SY(*)	
4.8	1	Allow	Fuel Adjustment and Asphalt Escalation: <u>TWENTY THOUSAND</u> Dollars and <u>ZERO</u> Cents per (ALLOWANCE)	Allow	\$20,000.00
4.9	1,000	LF(*)	Mechanical (saw) cutting: _____ Dollars and _____ Cents per	LF(*)	

ATTACHMENT B - ADDENDUM NO. 1
A-3.16

LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
4.10	500	Ton(*)	Furnish and install temporary pavement repairs where shown as directed _____ Dollars and _____ Cents per		
5.1.4	5,000	SY	Furnish and install 4" concrete sidewalk (fiber reinforced) : _____ Dollars and _____ Cents per		
5.1.6	200	SY	6" concrete sidewalk curb ramps and driveways: _____ Dollars and _____ Cents per		
5.2	160	SY (*)	Replace brick sidewalk (as directed): _____ Dollars and _____ Cents per		
5.3.1	6,450	LF	Furnish and install vertical straight granite curb (5" x 18"): _____ Dollars and _____ Cents per		
5.3.2	100	LF (*)	Furnish and install vertical straight granite curb (6" x 24"): _____ Dollars and _____ Cents per		

ATTACHMENT B - ADDENDUM NO. 1
A-3.17
LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
5.3.3	730	LF	Furnish and install vertical radius granite curb: _____ Dollars and _____ Cents per	LF	
5.4	2,930	LF	Reset vertical straight granite curb: _____ Dollars and _____ Cents per	LF	
5.5	180	SF	ADA compliant detectable warning panels: _____ Dollars and _____ Cents per	SF	
6A	1	LS	Mobilization (not to exceed 10% of total base bid) : _____ Dollars and _____ Cents per	LS	
6B	1	Allow	Vibration Monitoring: <u>TEN THOUSAND</u> Dollars and <u>ZERO</u> Cents per (ALLOWANCE)	Allow	\$10,000.00
6C	1	Allow	Archeological monitoring and delays: <u>FIVE THOUSAND</u> Dollars and <u>ZERO</u> Cents per (ALLOWANCE)	Allow	\$5,000.00
6D	20	EA (*)	Unknown utility crossing: _____ Dollars and _____ Cents per	EA (*)	

ATTACHMENT B - ADDENDUM NO. 1
A-3.18
LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
6E	20	EA (*)	Repair of unknown or mismarked utility: _____ Dollars and _____ Cents per	EA (*)	
6.1	1,820	CY (*)	Ledge removal including disposal (MIN \$80/CY, MAX \$140/CY): _____ Dollars and _____ Cents per	CY (*)	
6.2A	500	CY (*)	Additional excavation below grade (where ordered by Engineer) : _____ Dollars and _____ Cents per	CY (*)	
6.2B	500	CY (*)	Excavation and disposal of unsuitable materials, where ordered by Engineer (includes peat, muck, stumps and misc. wood debris): _____ Dollars and _____ Cents per	CY (*)	
6.3	200	CY (*)	Furnish and install additional screened gravel (crushed stone) (where ordered by Engineer): _____ Dollars and _____ Cents per	CY (*)	
6.4	50	EA (*)	Exploratory test pit excavation (as shown and where directed by Engineer): _____ Dollars and _____ Cents per	EA (*)	

ATTACHMENT B - ADDENDUM NO. 1
A-3.19
LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
6.5A	1	UNIT	Prepare a Traffic Control Plan: _____ Dollars and _____ Cents per	UNIT	
6.5B	1	UNIT	Maintenance of Traffic in accordance with the Traffic Control Plan (MIN. \$70,000.00): _____ Dollars (MINIMUM SEVENTY THOUSAND DOLLARS/LS UNIT) and _____ Cents per	UNIT	\$70,000.00
6.6	1	Allow	Uniformed officer (Allowance): <u>THIRTY THOUSAND</u> Dollars and <u>ZERO</u> Cents per (ALLOWANCE)	Allow	\$30,000.00
6.7	6,000	HRS (*)	Uniformed flagger for traffic control: _____ Dollars and _____ Cents per	HRS (*)	
6.8A	1	UNIT	Develop an erosion control and stormwater pollution prevention plan (SWPPP) for approval and obtain NPDES Construction permit: _____ Dollars and _____ Cents per	UNIT	
6.8B	1	UNIT	Implement and maintain approved erosion control plan and SWPPP: _____ Dollars and _____ Cents per	UNIT	

ATTACHMENT B - ADDENDUM NO. 1
A-3.20
LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
6.9	100	LF (*)	Remove and dispose of Asbestos Cement pipe, all diameters including earth excavation, backfill, disposal, and dewatering: _____ Dollars and _____ Cents per _____	LF (*)	
6.10	1	Allow	Allowance for geotechnical testing: <u>TEN THOUSAND</u> Dollars and <u>ZERO</u> Cents per (ALLOWANCE)	Allow	\$10,000.00
6.11	1	Allow	Replace deciduous trees (as requested by the Owner): <u>FIVE THOUSAND</u> Dollars and <u>ZERO</u> Cents per (ALLOWANCE)	Allow	\$5,000.00
6.12A	5	EA (*)	Remove large trees (24" dia. or larger) where directed: <u>ONE THOUSAND, FIVE HUNDRED</u> Dollars and <u>ZERO</u> Cents per (ALLOWANCE)	EA (*)	\$1,500.00
6.12B	15	EA (*)	Remove small trees (less than 24" dia.) where directed: <u>FOUR HUNDRED</u> Dollars and <u>ZERO</u> Cents per (ALLOWANCE)	EA (*)	\$6,000.00
6.13A	10	EA (*)	Remove large stumps (24" dia. or larger at the cut face) where directed: _____ Dollars and _____ Cents per _____	EA (*)	
6.13B	20	EA (*)	Remove small stumps (smaller than 24" dia. at the cut face) where directed: _____ Dollars and _____ Cents per _____	EA (*)	

ATTACHMENT B - ADDENDUM NO. 1
A-3.21
LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
CITY OF PORTSMOUTH, NH

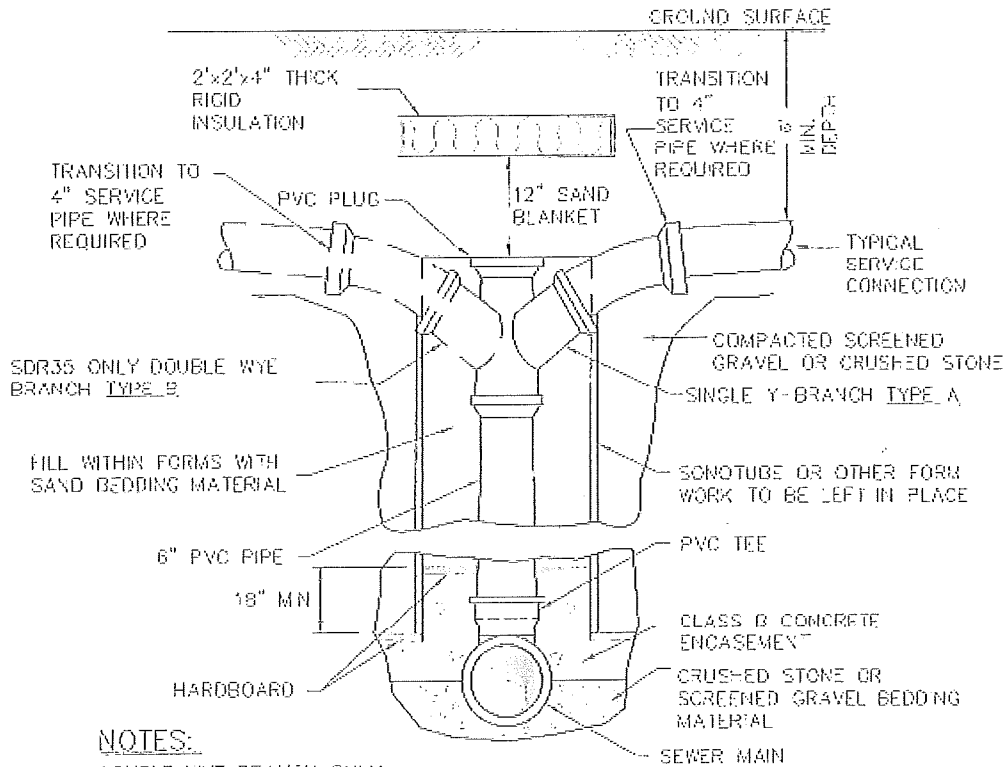
BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
6.14.0224	500	LF (*)	Furnish and install 2" thick x 24" wide rigid polystyrene insulation: _____ Dollars and _____ Cents per	LF (*)	
6.15	10,000	lbs (*)	Calcium chloride for dust control: _____ Dollars and _____ Cents per	lbs (*)	
6.16	9,000	SY	Turf Establishment including preparation and fine grading of sub grade, foam placement and grading, seeding & mulch (hydraulic): _____ Dollars and _____ Cents per	SY	
6.17	500	LF (*)	Remove and relocate existing fences: _____ Dollars and _____ Cents per	LF (*)	
6.19	1,500	CY	Temporary roadway stabilization gravels (as directed) (MIN \$10/CY): _____ Dollars and _____ Cents per	CY	
6.15.03	90	SF	Traffic sign, Type C: _____ Dollars and _____ Cents per	SF	

ATTACHMENT B - ADDENDUM NO. 1
 A-3.22
 LINCOLN AREA SEWER SEPARATION-CONTRACT 3C
 CITY OF PORTSMOUTH, NH

BID ITEM	EST. QNT.	UNITS	BID ITEM DESCRIPTION AND UNIT PRICE IN WORDS	UNIT PRICE	EXTENDED TOTAL
615.06	22	SF	Traffic sign, Type CC: _____ Dollars and _____ Cents per	SF	
632.0104	20,000	LF	Retroreflective paint marking, 4" line: _____ Dollars and _____ Cents per	LF	
632.3118	2,000	LF	Retroreflective Thermoplastic paint marking, 18" line: _____ Dollars and _____ Cents per	LF	
TOTAL BID					

Notes to Bidders:


1. The Contractor must be prequalified. Bids from unqualified Contractors will not be accepted.
2. The lowest bid and basis of award will be based on Engineers Estimate of Quantities and Contractor's Total Bid.
3. (*) means indeterminate quantity
4. The owner reserves the right to waive any informalities or minor defects or reject any and all bids and to take any other action that is in the best interest of the Owner.



NOTES:

DOUBLE WYE BRANCH ONLY
TO BE USED WHERE
APPROVED BY ENGINEER

7 CHIMNEY
D-1 NOT TO SCALE

DATE 6/14/13	 UNDERWOOD engineers	ATTACHMENT C APPENDIX No. 1 LINCOLN AREA SEWER SEPARATION- CONTRACT 30 CITY OF PORTSMOUTH, NH	FIG. C
PROJECT 1642	25 Vaughan Mall, Portsmouth, N.H. 03801 Tel. 603-436-6192 Fax. 603-431-4733		

ROADWAY EXCAVATION DEPTH

Full Depth Reconstruction:
 Binder Course = 2.50 in 0.21 ft
 Wearing Course = 1.50 in 0.13 ft
 Crushed = 12.00 in 1.00 ft
 Bank Run = 0.00 in 0.00 ft

Total Road Box Depth: 1.33 ft

Notes:

1) Common Excavation pay limit is based on length's and widths provided.

Station	Length (ft)	Paved Width (ft)	Existing Centerline Grade (ft)	Centerline Grade (ft)	Depth of Excavation at Centerline (ft)	ITEM # 4.4A: Common Excavation ¹ (CY)	ITEM #4.5.2: Bank Run Gravel (CY)	ITEM #4.5.1A: Crushed Gravel ² (CY)	ITEM #4.3A: Pavement reclamation, In Place (6- inch depth) (SY)	ITEM #4.1A: Hot Bituminous Pavement (2.5" Binder) (TON)	ITEM #4.1B: Hot Bituminous Pavement (1.5" Wearing) (TON)
RICHARDS AVENUE											
10200	50	22.0	11.80	11.44	1.69	68	0	44	0	17	10
10250	50	22.0	12.00	11.69	1.64	66	0	44	0	17	10
10300	50	22.0	12.20	11.94	1.59	67	0	44	0	17	10
10350	50	22.0	12.60	12.24	1.69	67	0	44	0	17	10
10400	50	22.0	13.10	12.83	1.60	63	0	44	0	17	10
10450	50	22.0	13.60	13.43	1.50	61	0	44	0	17	10
10500	50	22.0	14.20	14.03	1.50	63	0	44	0	17	10
10550	50	22.0	14.90	14.63	1.60	65	0	44	0	17	10
10600	50	22.0	15.50	15.23	1.60	65	0	44	0	17	10
10650	50	22.0	16.10	15.83	1.60	65	0	44	0	17	10
10700	50	22.0	16.70	16.43	1.60	65	0	44	0	17	10
10750	50	22.0	17.30	17.03	1.60	61	0	44	0	17	10
10800	50	22.0	17.70	17.63	1.40	59	0	44	0	17	10
10850	50	22.0	18.40	18.23	1.50	62	0	44	0	17	10
10900	50	22.0	19.50	19.30	1.53	56	0	44	0	17	10
10950	50	22.0	21.20	21.30	1.23	47	0	44	0	17	10
11000	50	22.0	24.00	24.24	1.09	47	0	44	0	17	10
11050	50	22.0	28.00	28.10	1.23	47	0	44	0	17	10
TOTAL:	850					1051	0	756	0	295	177

ATTACHMENT D - ADDENDUM NO. 1

Page 2 of 5

LINCOLN AREA SEWER SEPARATION - CONTRACT 3C
CITY OF PORTSMOUTH, NH

Station	Length		Paved Width	Existing Centerline Grade	Centerline Grade	Depth of Excavation at Centerline	ITEM # 4.4.A: Common Excavation 1 (CY)	ITEM #4.5.2: Bank Run Gravel (CY)	ITEM #4.5.1A: Crushed Gravel 2 (CY)	ITEM #4.3A: Pavement reclamation, In Place (6-inch depth) (SY)	ITEM #4.1A: Hot Bituminous Pavement (2.5" Binder) (TON)	ITEM #4.1B: Hot Bituminous Pavement (1.5" Wearing) (TON)
	(ft)	(ft)										
UNION ST. (North of Lincoln)												
18050			29.0	20.50	20.49	1.34						
18100	50		28.0	21.30	21.29	1.34	71	0	53	158	22	13
18150	50		28.0	22.10	22.09	1.34	70	0	52	156	22	13
18200	50		28.0	23.00	22.89	1.44	72	0	52	156	22	13
18250	50		28.0	23.50	23.34	1.49	76	0	52	156	22	13
18300	50		31.5	23.60	23.79	1.34	78	0	55	165	23	14
18350	50		28.0	24.40	24.24	1.49	78	0	55	165	23	14
18400	50		28.0	24.60	24.54	1.39	75	0	52	156	22	13
18450	50		28.0	25.00	24.84	1.49	75	0	52	156	22	13
18500	50		28.0	25.60	25.44	1.49	77	0	52	156	22	13
18550	50		28.0	26.20	26.04	1.49	77	0	52	156	22	13
18600	50		28.0	26.50	26.29	1.54	79	0	52	156	22	13
18650	50		28.0	26.60	26.54	1.39	76	0	52	156	22	13
18700	50		28.0	26.90	26.78	1.45	74	0	52	156	22	13
18750	50		28.0	26.30	26.19	1.44	75	0	52	156	22	13
18800	50		28.0	24.40	24.29	1.44	75	0	52	156	22	13
18850	50		29.0	22.40	22.23	1.50	78	0	53	158	22	13
18900	50		30.0	21.50	21.17	1.66	86	0	55	164	23	14
UNION ST. (SOUTH)												
19280			29.5	21.60	21.59	1.34						
19300	20		29.0	22.30	22.14	1.49	31	0	22	65	9	6
19350	50		28.5	24.40	24.16	1.57	82	0	53	160	23	14
19400	50		28.0	27.10	27.10	1.33	76	0	52	157	22	13
19450	50		28.0	30.60	30.50	1.43	72	0	52	156	22	13
19500	50		28.0	33.90	33.83	1.40	74	0	52	156	22	13
19550	50		28.0	36.60	36.60	1.33	71	0	52	156	22	13
19600	50		28.0	39.10	39.00	1.43	72	0	52	156	22	13
19650	50		28.0	41.50	41.40	1.43	74	0	52	156	22	13
19700	50		28.0	44.60	44.33	1.60	79	0	52	156	22	13
19750	50		28.0	48.30	48.30	1.33	76	0	52	156	22	13
19800	50		28.0	52.70	52.74	1.29	68	0	52	156	22	13
19850	50		28.0	56.40	56.25	1.48	72	0	52	156	22	13
19900	50		28.0	58.40	58.62	1.11	67	0	52	156	22	13
19950	50		28.0	60.40	60.72	1.01	55	0	52	156	22	13
20000	50		38.0	62.80	62.82	1.31	71	0	61	183	26	16
TOTAL:							2332	0	1651	4954	702	421

Station	Length (ft)	Paved Width (ft)	Existing Centerline Grade (ft)	Centerline Grade (ft)	Depth of Excavation at Centerline (ft)	ITEM # 4.4A: Common Excavation ¹ (CY)	ITEM #4.5.2: Bank Run Gravel (CY)	ITEM #4.5.1A: Crushed Gravel ² (CY)	ITEM #4.3A: Pavement reclamation, In Place (6- inch depth) (SY)	ITEM #4.1A: Hot Bituminous Pavement (2.5" Binder) (TON)	ITEM #4.1B: Hot Bituminous Pavement (1.5" Wearing) (TON)
WIBIRD STREET (NORTH)											
20450			28.70	28.28	1.75						
20500	50	30.0	28.80	28.73	1.40	88	0	56	167	24	14
20550	50	34.5	28.40	28.44	1.29	81	0	60	179	25	15
20600	50	30.0	27.40	27.18	1.55	85	0	60	179	25	15
20650	50	30.5	26.00	25.68	1.65	90	0	56	168	24	14
20700	50	30.5	24.60	24.56	1.37	85	0	56	169	24	14
20750	50	30.5	24.60	24.05	1.88	92	0	56	169	24	14
20800	50	31.0	23.80	23.60	1.53	97	0	57	171	24	15
20850	50	31.0	23.40	23.15	1.58	89	0	57	172	24	15
20900	50	31.0	23.30	22.85	1.78	97	0	57	172	24	15
20950	50	31.0	23.20	23.09	1.44	93	0	57	172	24	15
21000	50	31.0	23.00	22.95	1.38	81	0	57	172	24	15
21050	50	31.5	22.70	22.55	1.48	83	0	58	174	25	15
21100	50	32.0	22.20	22.15	1.38	84	0	59	176	25	15
WIBIRD STREET (SOUTH)											
21300				22.30	1.63						
21350	50	32	22.8	22.71	1.42	91	0	59	178	25	15
21400	50	32	23.8	23.80	1.33	82	0	59	178	25	15
21450	50	32	25.1	25.00	1.43	82	0	59	178	25	15
21500	50	32	26.6	26.72	1.21	78	0	59	178	25	15
21550	50	32	29.3	29.50	1.13	70	0	59	178	25	15
21600	50	32.0	32.50	32.56	1.27	71	0	59	178	25	15
21650	50	32.0	34.40	34.33	1.40	79	0	59	178	25	15
21700	50	32.0	35.20	35.12	1.41	83	0	59	178	25	15
21750	50	32.0	35.80	35.87	1.26	79	0	59	178	25	15
21800	50	40.5	36.60	36.62	1.31	86	0	67	201	29	17
21850	50	32.0	37.30	37.37	1.26	86	0	67	201	29	17
21900	50	32.0	38.10	38.12	1.31	76	0	59	178	25	15
21950	50	32.0	38.70	38.87	1.16	73	0	59	178	25	15
22000	50	32.0	39.50	39.62	1.21	70	0	59	178	25	15
22050	50	50.0	40.40	40.40	1.33	97	0	76	228	32	19
22100	50	32.0	41.70	41.75	1.28	99	0	76	228	32	19
22150	50	32.0	43.80	43.84	1.29	76	0	59	178	25	15
22200	50	32.0	46.50	46.67	1.16	73	0	59	178	25	15
22250	50	32.0	50.20	50.20	1.33	74	0	59	178	25	15
22300	50	32.0	53.90	53.90	1.33	79	0	59	178	25	15
22350	50	32.0	57.10	57.60	0.83	64	0	59	178	25	15
TOTAL:	1,700					2,816	0	2,041	6,122	868	521

ATTACHMENT D - ADDENDUM NO. 1
 Page 4 of 5
 LINCOLN AREA SEWER SEPARATION - CONTRACT 3C
 CITY OF PORTSMOUTH, NH

Station	Length (ft)	Paved Width (ft)	Existing Centerline Grade (ft)	Centerline Grade (ft)	Depth of Excavation at Centerline (ft)	ITEM # 4.4.A: Common Excavation ¹ (CY)	ITEM #4.5.2: Bank Run Gravel (CY)	ITEM #4.5.1.A: Crushed Gravel ² (CY)	ITEM #4.3.A: Pavement reclamation, In Place (6- inch depth) (SY)	ITEM #4.1.A: Hot Bituminous Pavement (2.5" Binder) (TON)	ITEM #4.1.B: Hot Bituminous Pavement (1.5" Wearing) (TON)
CHAUNCEY STREET											
31850	50	24.5	24.90	24.80	1.43						
31900	50	25.0	25.60	25.60	1.33	63	0	46	138	19	12
31950	50	24.0	26.40	26.40	1.33	60	0	45	136	19	12
32000	50	25.0	27.20	27.20	1.33	60	0	45	136	19	12
32050	50	25.0	27.90	27.88	1.35	62	0	46	139	20	12
32100	50	22.0	28.50	28.38	1.45	61	0	44	131	19	11
TOTAL:	250					308		226	679	96	58
HAWTHORNE STREET											
40550	50	22.0	27.80	27.77	1.36						
40600	50	22.0	29.70	29.97	1.06	49	0	41	122	17	10
40650	50	28.0	32.20	32.17	1.36	56	0	46	139	20	12
40700	50	28.0	33.70	34.00	1.03	62	0	52	156	22	13
40750	50	22.5	34.80	34.30	1.83	67	0	47	140	20	12
40800	50	28.0	34.10	34.02	1.41	76	0	47	140	20	12
40850	50	22.5	32.50	32.19	1.64	71	0	47	140	20	12
TOTAL:	300					382		279	838	119	71
PARK STREET (NORTH)											
22650	50	24.0	31.00	30.83	1.50						
22700	50	24.0	28.40	28.13	1.60	69	0	44	133	19	11
22750	50	24.0	26.50	26.05	1.78	75	0	44	133	19	11
22800	50	24.0	25.50	25.10	1.73	78	0	44	133	19	11
22850	50	24.0	25.30	24.80	1.83	79	0	44	133	19	11
22900	50	24.0	24.90	24.50	1.73	79	0	44	133	19	11
22950	50	24.0	24.60	24.25	1.68	76	0	44	133	19	11
23000	50	24.0	23.80	23.70	1.43	69	0	44	133	19	11
23050	50	24.0	23.10	22.95	1.48	65	0	44	133	19	11
23100	50	26.0	22.30	22.20	1.43	68	0	46	139	20	12
23150	50	28.0	21.50	21.45	1.38	70	0	50	150	21	13
PARK STREET (SOUTH)											
23250	50	28.0	21.10	21.00	1.43						
23300	50	28.0	21.40	21.30	1.43	74	0	52	156	22	13
23350	50	28.0	21.80	21.60	1.53	77	0	52	156	22	13
23400	50	28.0	22.30	22.11	1.52	79	0	52	156	22	13
23450	50	46.0	23.30	23.05	1.58	106	0	69	206	29	17
23500	50	28.0	24.30	24.20	1.43	103	0	69	206	29	17
23550	50	28.0	25.70	25.47	1.56	78	0	52	156	22	13
23600	50	28.0	28.00	27.61	1.72	85	0	52	156	22	13
23650	50	28.0	30.80	30.72	1.41	81	0	52	156	22	13
23700	50	28.0	34.60	34.65	1.28	70	0	52	156	22	13
23750	50	28.0	37.20	37.15	1.38	69	0	52	156	22	13

ATTACHMENT D - ADDENDUM NO. 1

Page 5 of 5

LINCOLN AREA SEWER SEPARATION - CONTRACT 3C
CITY OF PORTSMOUTH, NH

Station	Length (ft)	Paved Width (ft)	Existing Centerline Grade (ft)	Centerline Grade (ft)	Depth of Excavation at Centerline (ft)	ITEM # 4.4A: Common Excavation 1 (CY)	ITEM #4.5.2: Bank Run Gravel (CY)	ITEM #4.5.1A: Crushed Gravel 2 (CY)	ITEM #4.3A: Pavement reclamation, in Place (6- inch depth) (SY)	ITEM #4.1A: Hot Bituminous Pavement (2.5" Binder) (TON)	ITEM #4.1B: Hot Bituminous Pavement (1.5" Wearing) (TON)
23800	50	28.0	37.60	37.35	1.58	77	0	52	156	22	13
23850	50	28.0	36.10	36.08	1.35	76	0	52	156	22	13
TOTAL:	1,100					1,705		1,107	3,322	471	283

SUMMARY OF QUANTITIES

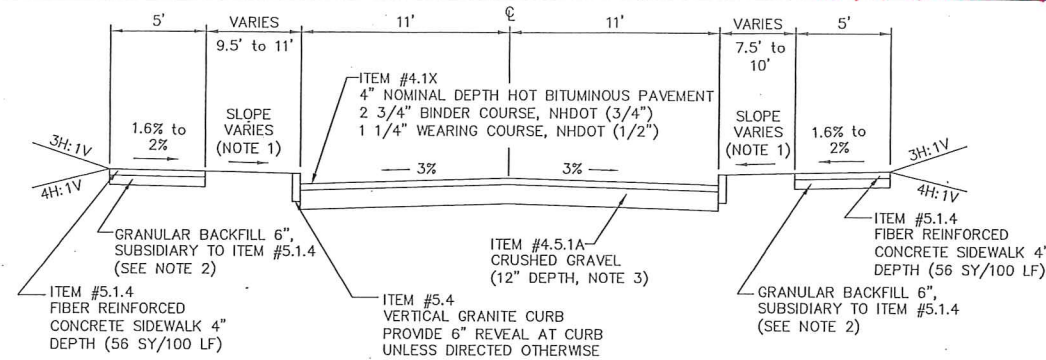
ITEM # 4.4A: Common Excavation (CY)	ITEM #4.5.2: Bank Run Gravel (CY)	ITEM #4.5.1A: Crushed Gravel (CY)	ITEM #4.3A: Reclaimed Base, in Place (6" Depth) (SY)	ITEM #4.1A: Hot Bituminous Pavement (Binder) (TON)	ITEM #4.1B: Hot Bituminous Pavement (Wearing) (TON)
8593	0	6061	15915	2550	1530
107	100	39	385	150	70
8,700	100	6,100	16,300	2,700	1,600

SUB-TOTAL:

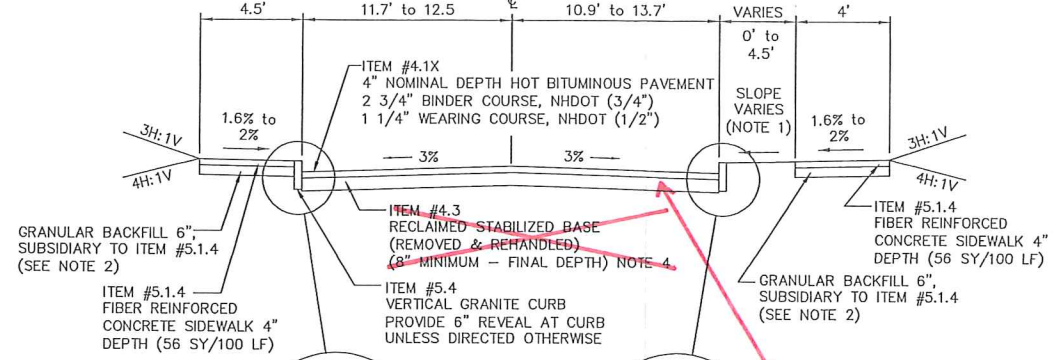
Rounding:

EXTENDED TOTAL (Rounded):

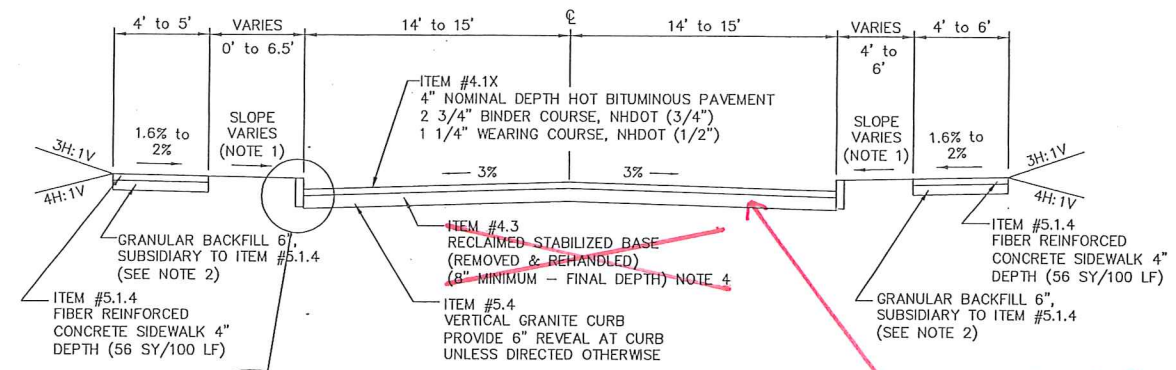
ATTACHMENT E - ADDENDUM No.1



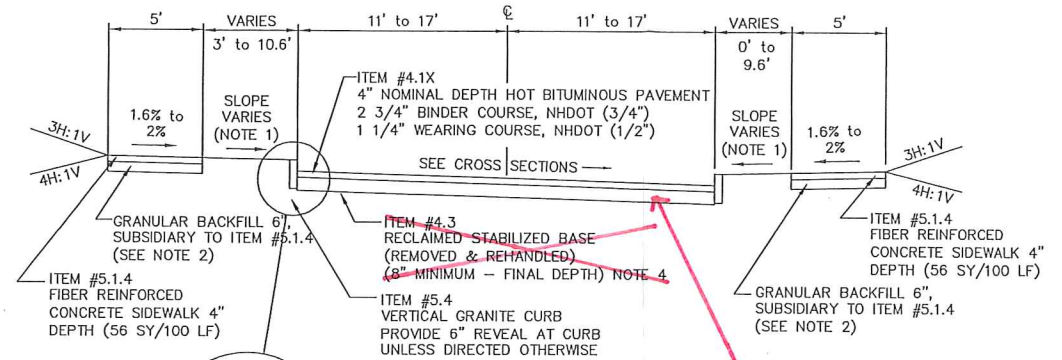
RICHARDS AVENUE - TYPICAL SECTION



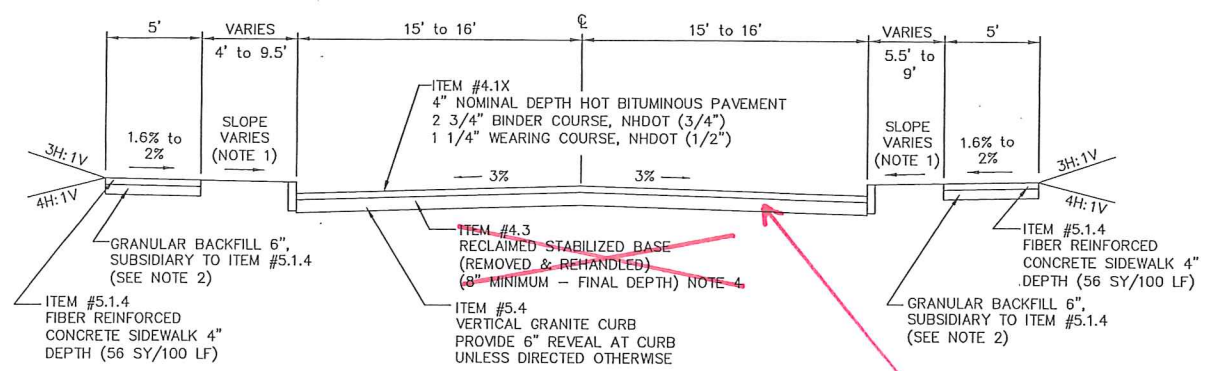
CHAUNCEY STREET - TYPICAL SECTION



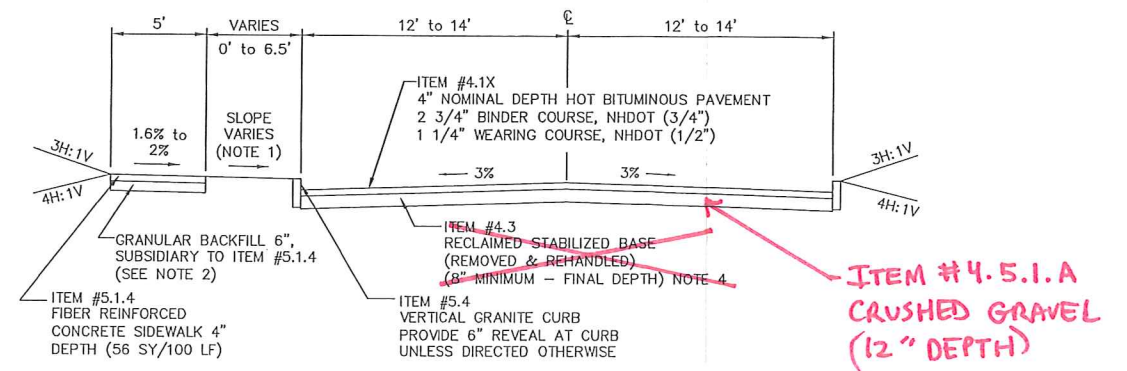
UNION STREET - TYPICAL SECTION



HAWTHORNE STREET - TYPICAL SECTION



WIBIRD STREET - TYPICAL SECTION



PARK STREET - TYPICAL SECTION

NOTES:

- SLOPE VARIES, 2% (MIN.) TO 25% (MAX.). SEE CROSS SECTIONS FOR GRADES.
- THE GRANULAR BACKFILL MATERIAL MAY CONSIST OF EXISTING GRAVEL OR CRUSHED ASPHALT PRODUCT GRAVEL, MEETING GRADATION OF NHDOT ITEM 209.4, OR RECLAIMED ASPHALT PRODUCT.
- GRAVEL PAY LIMITS ON MILLER AVENUE WILL EXPAND 1' BEYOND FACE OF CURB AT EACH SIDE.
- ~~PAY LIMITS FOR THE RECLAIMED STABILIZED BASE TO BE REMOVED AND RE-HANDLED WILL BE THE ACTUAL WIDTH OF PAVEMENT RECLAIMED REMOVED & RE-HANDLED TO A DEPTH OF 10". A MINIMUM OF 8" SHALL BE BLADED BACK ON THE ROAD SURFACE PRIOR TO PAVING.~~
- ~~EXCAVATION LIMITS EXTEND 1' BEYOND FACE OF CURB FOR MILLER AVENUE ONLY. REFER TO DWG G-7 FOR PAY LIMITS/QUANTITY SCHEDULE.~~
- THE PAVEMENT CROWN AND CROSS SLOPES VARY REFER TO CROSS SECTIONS FOR GRADING.

ITEM #4.5.1.A
CRUSHED GRAVEL
(12" DEPTH)

ITEM #4.5.1.A
CRUSHED GRAVEL
(12" DEPTH)

ITEM #4.5.1.A
CRUSHED GRAVEL
(12" DEPTH)

ITEM #4.5.1.A
CRUSHED GRAVEL
(12" DEPTH)

ITEM #4.5.1.A
CRUSHED GRAVEL
(12" DEPTH)

ISSUE FOR	APPROVAL	DATE	BY
CONSTRUCTION	DATE	BY	
RECORD DRAWING	DATE	BY	
NO.	REVISIONS	NO.	APPD

Drawn/Chk.	RMG	D.R.	PM
Designed	J.S.	PM	PM
Checked	J.S.	PM	PM
Approved	J.S.	PM	PM
Date	MAY 2013		
Book No.	1512		
Project No.	1512		
Dwg. ID	1512-TPKSEC-3B		
Scale	AS SHOWN		

UNDERWOOD engineers

25 Vaughan Mall, Portsmouth, N.H. 03801
Tel. 603-436-6192 Fax. 603-431-4733

TYPICAL ROAD SECTION

LINCOLN AREA SEWER SEPARATION (CONTRACT #3C)

CITY OF PORTSMOUTH

PORTSMOUTH, NEW HAMPSHIRE

DWG NO X-1 SHEET 43 OF 66

