

ADDENDUM NO. 2

WEST DUSTON ROAD AREA SEWER, WATER, AND ROADWAY IMPROVEMENTS Salem, New Hampshire January 23, 2020

The following changes and information are hereby incorporated into the Construction Drawings and Contract and Specifications Manual.

DRAWINGS

1. Drawing G1 (SHEET LAYOUT)
 - **Change** the sheet label from “GP7” to “P6” for the sheet labels on West Duston Road.
2. Drawing G2 (SEWER CONSTRUCTION NOTES)
 - **Change** the minimum cover in Note 2 from “6.5” to “6.0”.
3. Drawing G2 (WATER CONSTRUCTION NOTES)
 - **Revise** Note 8, sentence 4 to read, “**SERVICE LINES SHALL BE PRESSURE TESTED.**”
4. Drawing G2 (KEY NOTES)
 - **Revise** the last sentence of Keynote 4 to read, “**INSTALL 16”x8” SS TAPPING SLEEVE (PAY AS ITEM 611.71168).**”
5. Drawing G4 (QUANTITY SUMMARY – WATER & SEWER SERVICE CONNECTION)
 - **Replace** the QUANTITY SUMMARY – WATER & SEWER SERVICE CONNECTION table with **Attachment “A”**.
6. Drawing RD1 (TYPICAL ROADWAY REPAIR DETAILS, 1/RD2)
 - **Revise** the following note on the FULL-WIDTH PAVEMENT RECLAMATION, REMOVE & REPLACE section to read:
 - “Hot Bituminous Pavement Machine Method, NHDOT 403 Latest Edition 4” Nominal (2.5” Binder, 1.5” Wearing, **following one freeze/thaw season.**)”
7. Drawing GP1, **Switch** the location of the **LPS** and **water main** in accordance with Drawing P1, Addendum No. 2.
8. Drawing P1 (LAKESIDE STREET PLAN & PROFILE, ATTACHED)
 - **Change** the LPS pipe diameter from “1.5” to “2” from SMH #1 to SMH #2.
 - **Switch** the location and alignment of the **LPS** and **water main** on Lakeview Street.
 - **Replace** DWG P1 with Addendum No. 2, **DWG P1, Attachment “B”**.
9. Drawing GP3, **Switch** the location of the **LPS** and **water main** in accordance with Drawing P3, Addendum No. 2.
10. Drawing P3 (LAKEVIEW STREET PLAN & PROFILE, ATTACHED)
 - **Switch** the location and alignment of the **LPS** and **water main** along Lakeview Street.
 - **Replace** DWG P3 with Addendum No. 2, **DWG P3, Attachment “B”**. (Note, the location of the LPS and water main is switched to provide 18” vertical separation at LPS/water crossings.)
11. Drawing GP4, **Switch** the location of the **LPS** and **water main** in accordance with Drawing P4, Addendum No. 2.
12. Drawing P4 (WEST DUSTON ROAD PLAN & PROFILE, ATTACHED)
 - **Replace** DWG P4 with Addendum No. 2, **DWG P4, Attachment “B”**. (Note, the location and invert of SMH #6 is revised.)
 - **Change** the length of the 3” LPS between SMH #6 and SMH #7 from “900” to “889”.

13. Drawing P5 (WEST DUSTON ROAD PLAN & PROFILE, ATTACHED)
 - **Replace** DWG P5 with Addendum No. 2, **DWG P5, Attachment "B"**. (Note, the LPS profile is revised to maintain 18" vertical separation.)
 - **Change** the LPS invert elevation at STA 41+20 to maintain 18" vertical separation between the LPS and water main.
 - **Change** the length of the 3" LPS between SMH #6 and SMH #7 from "900" to "889".
14. Drawing D1 (STANDARD SEWER MANHOLE, DETAIL 1/D1)
 - Note 1 – **Change** NHDES reference in specifications to **ENV-WQ 704**.
 - Note 2 – **Replace** Note 2 with the following: **"2. Leakage Test: All pressure sewers and forcemains shall be tested in accordance with Contract and Specifications Manual, Special Provision 612, Section 3.9. All manholes shall be tested in accordance with Section 3.9.10."**
 - Note 11 – **Change** NHDES reference in specifications to **ENV-WQ 704**.
 - **Replace** SECTION B-B with **Attachment "C", Section B-B**.
15. Drawing D2 (STANDARD SEWER TRENCH SECTION, DETAIL 5/D2)
 - **Revise** notes 15 to 17 with **Attachment "D", Notes 15 to 17**.
16. Drawing D2 (GRAVITY – SEWER SERVICE, DETAIL 6/D2)
 - **Replace** plan view of the service to main connection with **Attachment "E"**.
17. Drawing D2 (LPS – SEWER SERVICE KIT, DETAIL 7/D2)
 - **Delete** the references to "Note 4" and "Note 5".
18. Drawing D2 (LOW PRESSURE FORCEMAIN – THRUST BLOCK, DETAIL 8/D2)
 - **Delete** the note that reads, "SEE NOTE 5, FOR LPS TRENCH DETAIL".
19. Drawing D2 (LOW PRESSURE SEWER TERMINUS MANHOLE CONNECTION, DETAIL 9/D2)
 - **Delete** slope **S = 0.025** and length **18"** dimension and leaders.
20. Drawing D2 (3-WAY FLUSHING MANHOLE, DETAIL 10/D2)
 - **Replace** pipe support note, "CINDER BLOCK (TYP)" with the following:
 - **"CONCRETE PIPE SUPPORT W/SS PIPE ANCHOR STRAP (TYP)"**
21. Drawing D1 and D2 (All Details)
 - **Replace** all occurrences of detail notes that state, "LINK SEAL WITH MORTAR" with the following two notes:
 - **"KOR-N-SEAL PIPE TO MANHOLE BOOT CONNECTOR (OR APPROVED EQUAL)"**
 - **"SEAL W/ NON-SHRINK MORTAR"**

CONTRACT AND SPECIFICATIONS

1. CONTRACTORS BID SCHEDULE
 - **Replace** the Contractors Bid Schedule with **Attachment "F"**.
2. SUPPLEMENTAL SPECIFICATION
 - **Replace** AMENDMENT TO SECTION 209 – GRANULAR BACKFILL with **Attachment "G"**.
3. SPECIAL PROVISION
 - **SECTION 612 – SANITARY SEWER INSTALLATION**
 - **Delete** paragraph 2.3.2.4.1
 - **Replace** in paragraph 2.3.7 "NHDES ENV-Wq 704.10" with **"NHDES ENV-Wq 704"**.

- **Replace** in paragraph 3.1.10 “NHDES ENV-Wq 704.12” with “**NHDES ENV-Wq 704.19**”.
- **Add** a sentence to the end of paragraph 3.9.7 that reads: “**All gravity sewers shall be lamp tested in accordance with NHDES ENV-Wq 704.06(c).**”

OTHER

1. PRE-BID MEETING NOTES

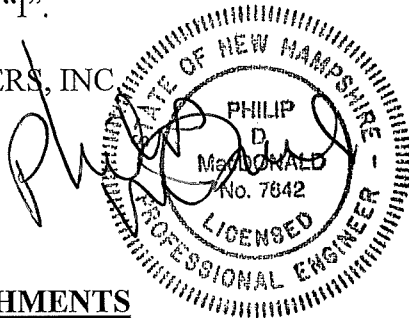
- Pre-Bid Meeting Notes (Attachment “H”) and additional information provided on Attachment “H” is included within the documents by this addendum.

2. LIST OF ATTENDEES

- See Attachment “I”.

UNDERWOOD ENGINEERS, INC

Philip D. MacDonald, P.E.



SUMMARY OF ATTACHMENTS

- A. Quantity Summary – Water & Sewer Service Connection table
- B. Revised Drawings P1, P3, P4, P5
- C. Standard Sewer Manhole, Detail 1/D1, Section B-B
- D. Standard Sewer Trench Section, Detail 5/D2, Notes 15 to 17
- E. Gravity Sewer Service, Detail 6/D2, Connection Wye Plan view
- F. Contractors Bid Schedule
- G. Amendment to Section 209 – Granular Backfill
- H. Pre-bid Meeting Notes
- I. Pre-bed Meeting Attendees List

Addendum No. 2
Attachment "A"

1/10/2020

QUANTITY SUMMARIES - WATER & SEWER SERVICE CONNECTION

Item No./Item		611.5011	611.5101	611.5201	1.0125A	1.0125B	612.35006	1000	
Location		1" Copper	1" Corp. Stop	1" Curb Stop	1-1/4" LPS Lateral	1-1/4" LPS Service Kit	6" PVC Sewer Lateral	Interior Plumbing	
Dw		LF	Ea.	Ea.	LF	EA	LF	Allowance	Remarks
	# Street								
P1	1 Lakeside St.	35	1	1	30	1			
	2 Lakeside St.	20	1	1	9	1			
	3 Lakeside St.	12	1	1	25	1			
	5 Lakeside St.	22	1	1	28	1			
	6 Lakeside St.	29	1	1	24	1			LPS Connect on P3
	7 Lakeside St.	10	1	1	25	1			
	9 Lakeside St.	6	1	1	19	1			
	11 Lakeside St.	10	1	1	22	1			
	13 Lakeside St.	12	1	1	23	1			
	15 Lakeside St.	13	1	1	24	1			
	17 Lakeside St.	12	1	1	24	1			
	19 Lakeside St.	13	1	1	25	1			
P2	4 Community St.	15	1	1	26	1			
	6 Community St.	15	1	1	27	1			
	8 Community St.	16	1	1	27	1			
P3	3 Lakeview St.	12	1	1	26	1			
	4 Lakeview St.	24	1	1	13	1			
	5 Lakeview St.	13	1	1	25	1			
	6 Lakeview St.	23	1	1	11	1			
	11 Lakeview St.	12	1	1	25	1			
	17 Lakeview St.	9	1	1	22	1			
P4	22 W Duston Rd.	10	1	1	21	1			
	25 W Duston Rd.	25	1	1	14	1			
	26 W Duston Rd.	10	1	1	22	1			
	30 W Duston Rd.	12	1	1	22	1			
	31 W Duston Rd.	24	1	1	14	1			LPS connecton P3
	36 W Duston Rd.	12	1	1	22	1			
	38 W Duston Rd.	12	1	1	22	1			Vacant Lot
	40 W Duston Rd.	25	1	1	40	1			
	44 W Duston Rd.	8	1	1	18	1			
	46 W Duston Rd.	105	1	1	14	1			
P5	15 W Duston Rd.	26	1	1	15	1			Vacant Lot
	16 W Duston Rd.	10	1	1	21	1			
	21 W Duston Rd.	20	1	1	14	1			
P6	2 W Duston Rd.								Sewer & Water from N. Policy
	3 W Duston Rd.								Sewer & Water from N. Policy
	4 W Duston Rd.	24	1	1			26		
	5 W Duston Rd.	18	1	1			14		
	8 W Duston Rd.	22	1	1			30		
	11 W Duston Rd.	19	1	1			10		
	12 W Duston Rd.	18	1	1			30		
P7	9 W Duston Rd.	21	1	1			12		
	5 McGrath St.						10		Water from N. Policy Road
	6 McGrath St.	278	1	1			28		
	Sub total:	1032	41	41	739	34	160		
	Rounding:	68	1	1	11	1	10		
	Total:	1100	42	42	750	35	170		



DWG NO	P1
SHEET	14 OF 30
LAKESIDE STREET PLAN & PROFILE	
WEST DUSTON ROAD AREA	
SEWER, WATER & ROADWAY IMPROVEMENTS	
TOWN OF SALEM, NH	



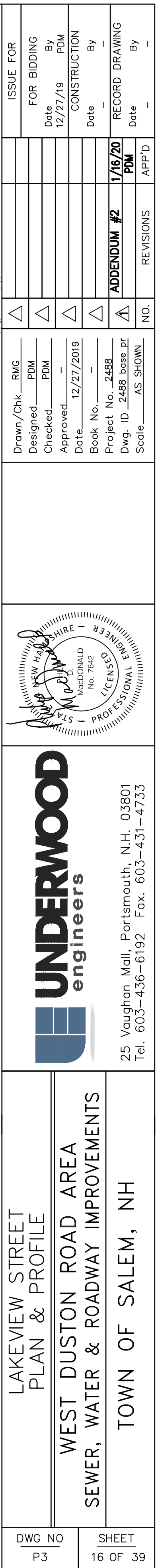
25 Vaughan Mall, Portsmouth, N.H. 03801
Tel. 603-436-6192 Fax. 603-431-4733

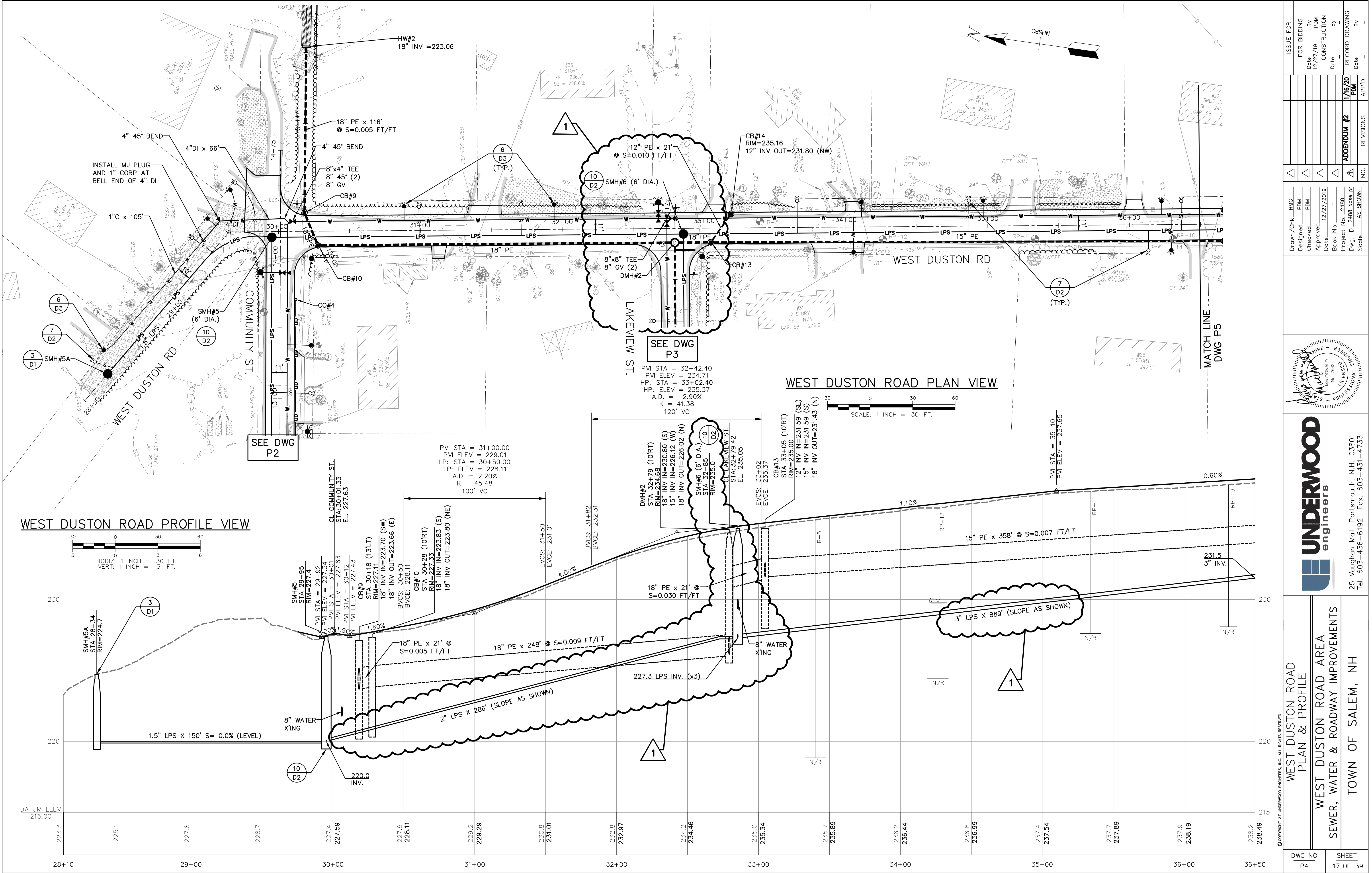


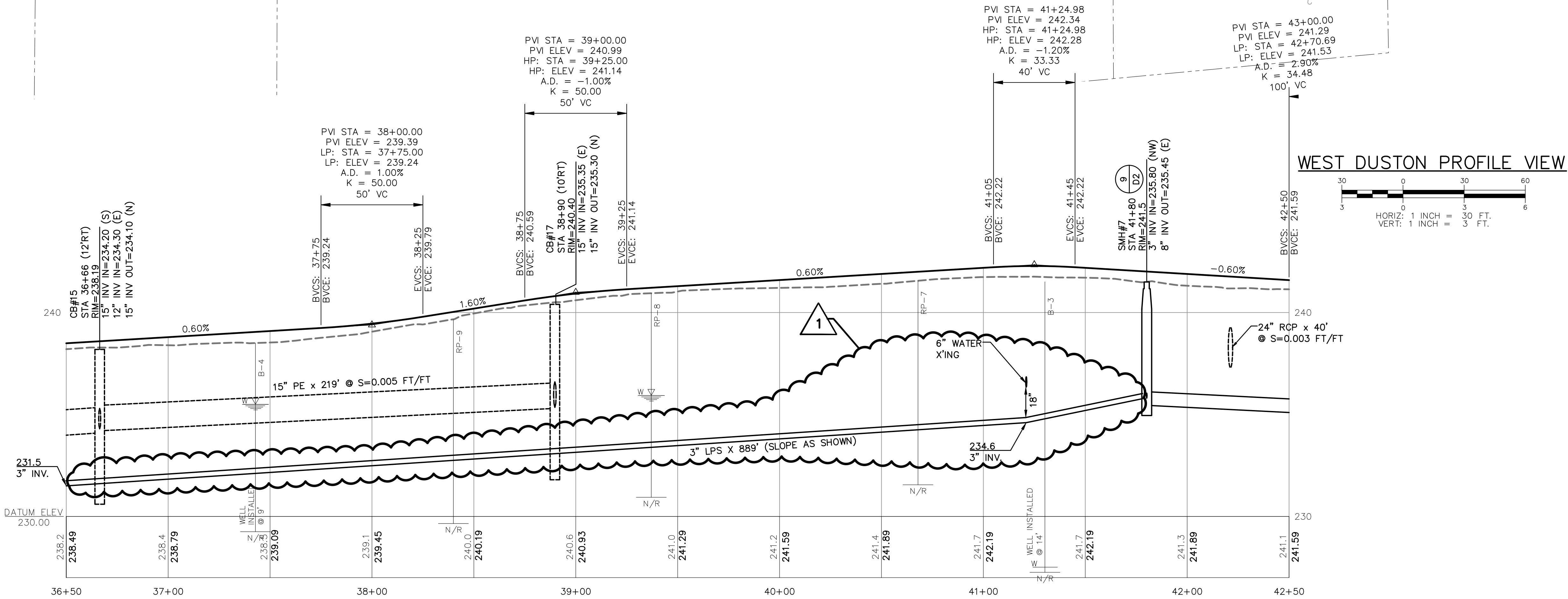
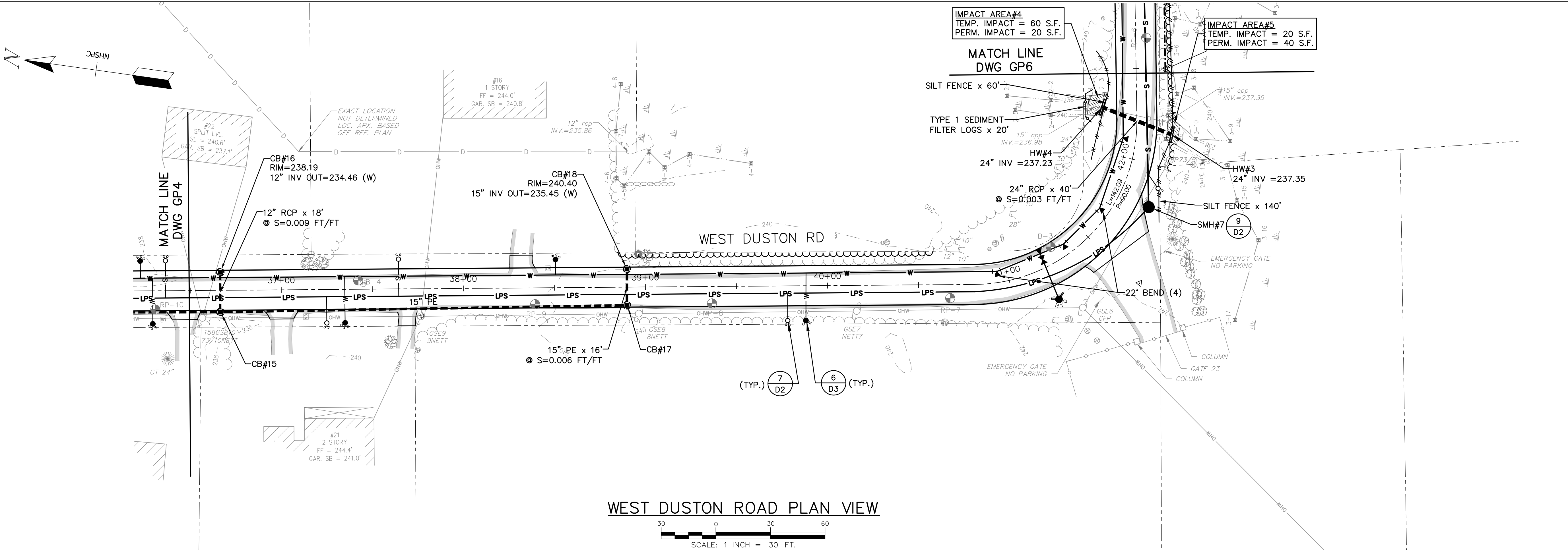
Drawn/Chk.	RMG	△
Designed	PDM	△
Checked	PDM	△
Approved		△
Date:	12/27/2019	
Book No.	—	
Project No.	2488	
Dwg. ID	2488 base pr	
Scale	AS SHOWN	

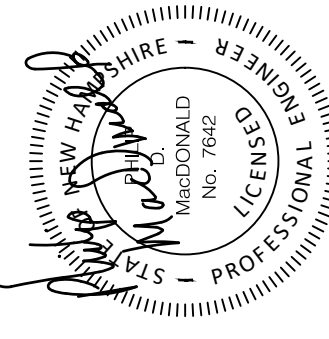
ADDENDUM #2		1/16/20
RECORD DRAWING	By	FM
Revisions	No.	APPD

FOR BIDDING	DATE	BY
12/27/19	FM	
CONSTRUCTION	DATE	BY
ISSUE FOR	DATE	BY







ISSUE FOR	
FOR BIDDING	By
Date	12/27/19
By	PDM
CONSTRUCTION	By
Date	1/16/20
RECORD DRAWING	By
Date	PDM
REVISIONS	APP'D
NO.	
Drawn/Chk. RMG	
Designed PDM	
Checked PDM	
Approved	
Date	12/27/2019
Book No.	
Project No.	2488
Dwg. ID	2488 Base Br
Scale	AS SHOWN
	
	
25 Vaughan Mall, Portsmouth, N.H. 03801 Tel. 603-436-6192 Fax. 603-431-4733	
WEST DUSTON ROAD PLAN & PROFILE	
WEST DUSTON ROAD AREA SEWER, WATER & ROADWAY IMPROVEMENTS	
TOWN OF SALEM, NH	
DWG NO P5	SHEET 18 OF 39

Addendum No. 2

Attachment "C"

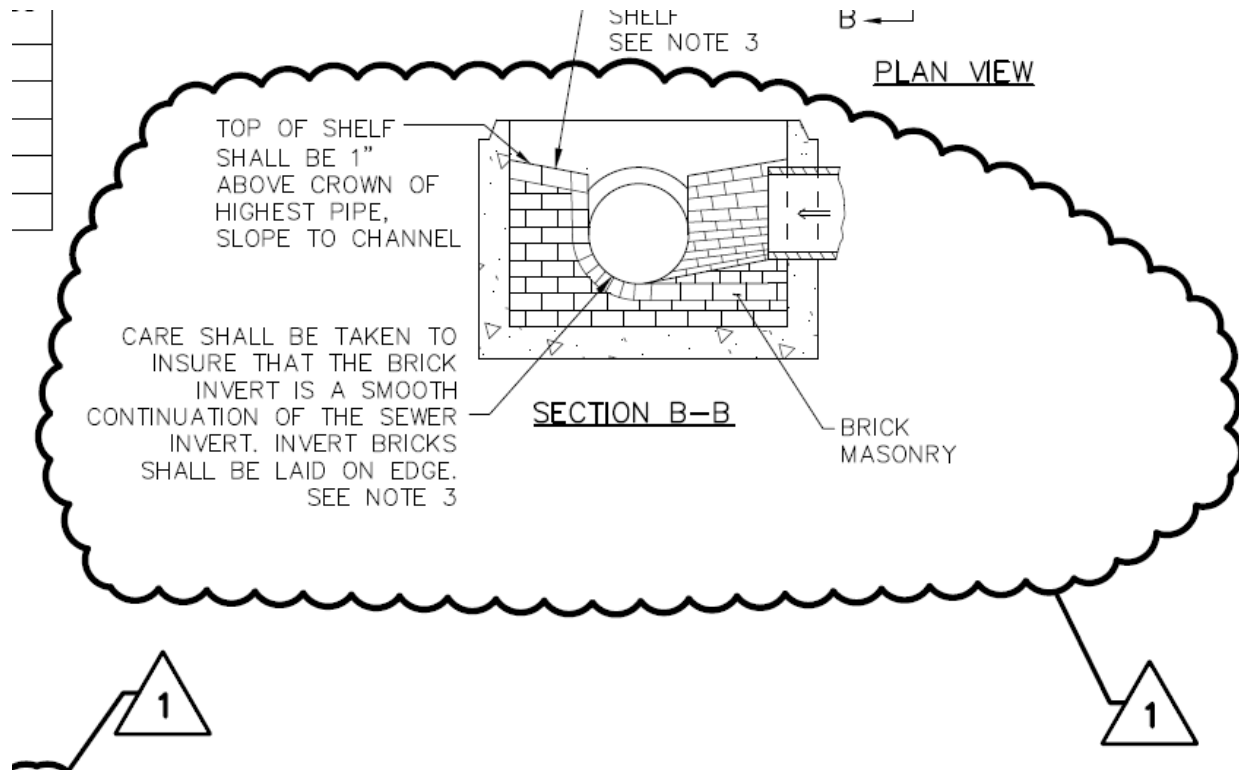


Figure 1: From DWG D1 – SEWER DETAILS, STANDARD SEWER MANHOLE, DETAIL 1/D1

Addendum No. 2

Attachment "D"

14. IF TRENCH BOTTOM IS DISTURBED THEN CONTRACTOR SHALL COMPACT AS APPROPRIATE.

15. WATER LINE SEPARATION: THERE SHALL BE TEN FEET HORIZONTAL SEPARATION BETWEEN SEWER LINE AND WATER MAIN AND 18 INCHES VERTICAL SEPARATION AT CROSSINGS (WATER OVER SEWER). CONSTRUCT SEWER LATERALS BELOW WATER MAIN AND MAINTAIN 18 INCHES OF VERTICAL SEPARATION.

16. CONCRETE ENCASEMENT: IF SPECIFIED, REFERENCE TOWN OF SALEM CONCRETE ENCASEMENT DETAIL FOR PROPER CONCRETE ENCASEMENT.

17. *SHORING AND STABILIZING OF TRENCH SIDEWALLS DURING EXCAVATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY TRENCH EXCAVATION BEYOND THE LIMITS OF PAY EXCAVATION INDICATED INCLUDING ROCK OR ROCK STRUCTURE EXCAVATION*



STANDARD SEWER TRENCH SECTION

NOT TO SCALE



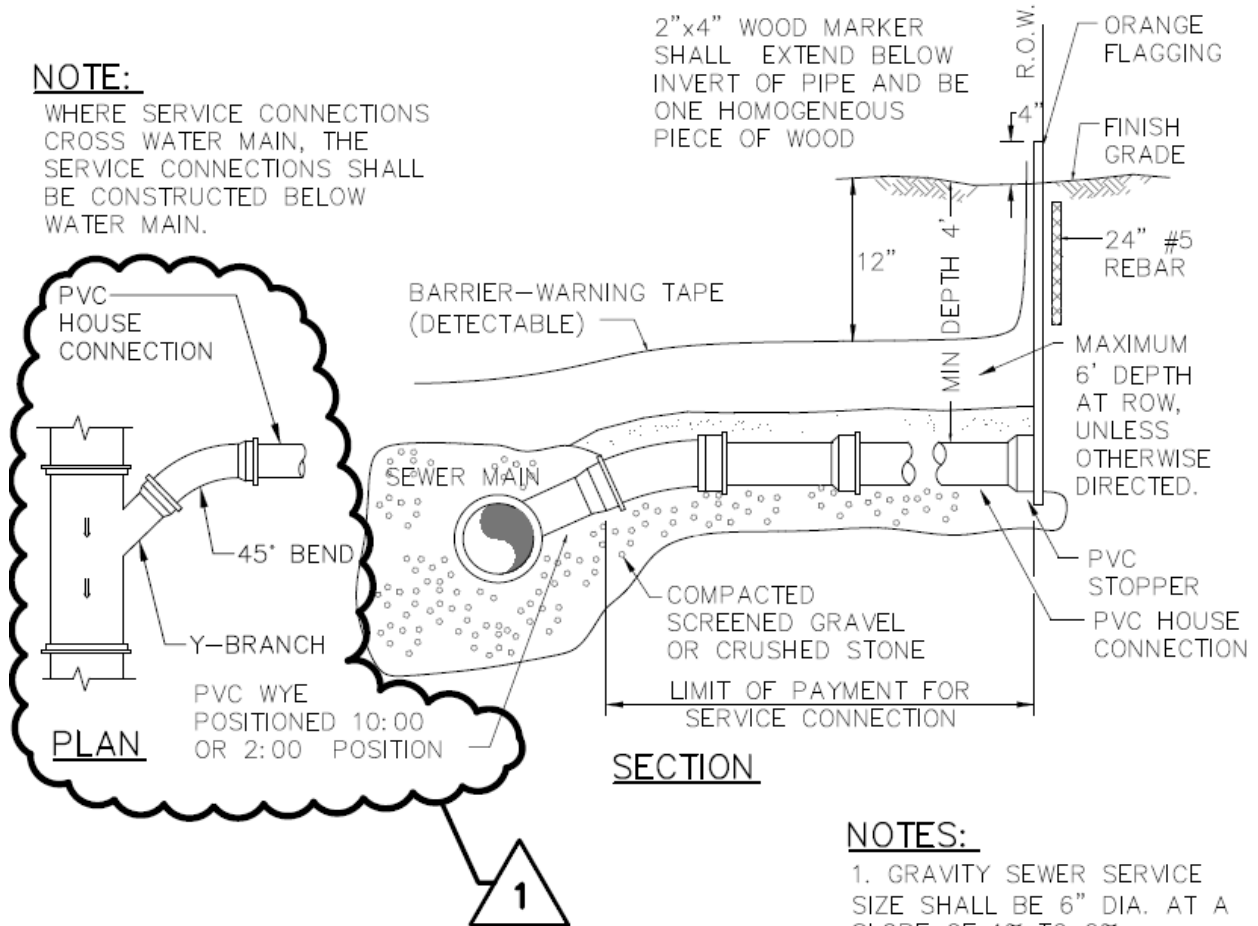
Figure 2: From DWG D2 – STANDARD SEWER TRENCH SECTION, NOTES

Addendum No. 2

Attachment "E"

NOTE:

WHERE SERVICE CONNECTIONS CROSS WATER MAIN, THE SERVICE CONNECTIONS SHALL BE CONSTRUCTED BELOW WATER MAIN.



NOTES:

1. GRAVITY SEWER SERVICE SIZE SHALL BE 6" DIA. AT A SLOPE OF 1% TO 2% UNLESS SHOWN OTHERWISE.

6 **GRAVITY – SEWER SERVICE**
D2 NOT TO SCALE

Figure 3: From DWG D2 – GRAVITY – SEWER SERVICE plan view of sewer service to sewer main connection.

Contractors Bid Schedule - West Duston Road Area Improvements							
Item No.	Est. Quant.	Units	Item Description (and Unit Price written in words)		Unit Price		Amount
SCHEDULE 1 - ROADWAY IMPROVEMENTS							
201.02	0.25	Ac.	Grubbing (F): _____ Dollars and _____ Cents per	Ac.		Ac.	
201.1	0.07	Ac.	Clearing and Grubbing (F): _____ Dollars and _____ Cents per	Ac.		Ac.	
201.21	12	Ea.	Removing small trees: _____ Dollars and _____ Cents per	Ea.		Ea.	
201.22	5	Ea.	Removing large trees: _____ Dollars and _____ Cents per	Ea.		Ea.	
201.321	1	LS	Tree Pruning and Trimming: _____ Dollars and _____ Cents per	LS		LS	
201.4	2	Ea.	Removing Stumps: _____ Dollars and _____ Cents per	Ea.		Ea.	
201.8822	500	SY	Invasive Species Control - Type 2: _____ Dollars and _____ Cents per	SY		SY	
202.41	220	LF	Removal of Existing Pipe (0 to 24"): _____ Dollars and _____ Cents per	LF		LF	
202.5	2	Ea.	Removal of Catch Basins, Drop Inlets & Manholes: _____ Dollars and _____ Cents per	Ea.		Ea.	
203.1	2,060	CY	Common Excavation (F): _____ Dollars and _____ Cents per	CY		CY	

Contractors Bid Schedule - West Duston Road Area Improvements

Item No.	Est. Quant.	Units	Item Description (and Unit Price written in words)		Unit Price		Amount
203.4	200	CY	Muck/Unsuitable Material Excavation: ____ Dollars and ____ Cents per	CY		CY	
203.6	100	CY	Embankment-in-Place (F): ____ Dollars and ____ Cents per	CY		CY	
206.2	100	CY**	Rock Structure Excavation - Drainage: ____ Dollars and ____ Cents per	CY**		CY**	
572.1	200	LF	Re-Construct Stone Wall (Single Stone Wide): ____ Dollars and ____ Cents per	LF		LF	
585.3	10	CY	Stone Fill, Class C: ____ Dollars and ____ Cents per	CY		CY	
593.32	200	SY	Geotextile, Stabilization (Drainage Diches or Embankments): ____ Dollars and ____ Cents per	SY		SY	
603.00324	40	LF	24" Rein. Conc. Pipe, 3000D: ____ Dollars and ____ Cents per	LF		LF	
603.82212	1020	LF	12" PE Pipe (Type S): ____ Dollars and ____ Cents per	LF		LF	
603.82215	1080	LF	15" PE Pipe (Type S): ____ Dollars and ____ Cents per	LF		LF	
603.82218	410	LF	18" PE Pipe (Type S): ____ Dollars and ____ Cents per	LF		LF	

Contractors Bid Schedule - West Duston Road Area Improvements

Item No.	Est. Quant.	Units	Item Description (and Unit Price written in words)		Unit Price		Amount
604.0007	20	Ea.	Polyethylene Liners: ____ Dollars and ____ Cents per	Ea.		Ea.	
604.12	16	Unit	Catch Basin, Type B, 4 ft. Dia.: ____ Dollars and ____ Cents per	Unit		Unit	
604.122	2	Unit	Catch Basin, Type B, 2 ft. Square.: ____ Dollars and ____ Cents per	Unit		Unit	
604.32	5	Unit	Drainage Manholes: ____ Dollars and ____ Cents per	Unit		Unit	
604.8	7	Unit	4' Dia. Leaching Basin: ____ Dollars and ____ Cents per	Unit		Unit	
605.82251	900	LF	24" Aggregate Underdrain, Type 2 w/6 Perf. PE Pipe: ____ Dollars and ____ Cents per	LF		LF	
605.82442	140	LF	36" Aggregate Underdrain, Type 2 w/12 Perf. PE Pipe (Smooth Int.): ____ Dollars and	LF		LF	
607.98	50	LF	Reset Miscellaneous Fences: ____ Dollars and ____ Cents per	LF		LF	
609.811	660	LF	Bituminous Curb (Modified Cape Cod Curb): ____ Dollars and ____ Cents per	LF		LF	
615.03	50.0	Sq. Ft.	Traffic Sign, Type C: ____ Dollars and ____ Cents per	Sq. Ft.		Sq. Ft.	

Contractors Bid Schedule - West Duston Road Area Improvements							
Item No.	Est. Quant.	Units	Item Description (and Unit Price written in words)		Unit Price		Amount
615.06	15.0	Sq. Ft.	Traffic Sign, Type CC: ____ Dollars and ____ Cents per	Sq. Ft.		Sq. Ft.	
621.31	10	Ea.	Single Delineator with Post: ____ Dollars and ____ Cents per	Ea.		Ea.	
622.55	5	Ea.	Remove and Reset Monuments: ____ Dollars and ____ Cents per	Ea.		Ea.	
632.0104	500	LF	Retroreflective PaintMarking, 4 in line(N.Policy): ____ Dollars and ____ Cents per	LF		LF	
632.3118	100	LF	Retroreflective Thermo. Pave. Marking, 18 in (stop bars): ____ Dollars and ____ Cents per	LF		LF	
645.441	100	LF	Sediment Filter Logs: ____ Dollars and ____ Cents per	LF		LF	
645.531	700	LF	Silt fence: ____ Dollars and ____ Cents per	LF		LF	
645.533	20	Ea.	Inlet Filter Basket: ____ Dollars and ____ Cents per	Ea.		Ea.	
645.85	60	SY	Subsurface Gravel Wetland: ____ Dollars and ____ Cents per	SY		SY	
645.9	1	Ea.	Silt Boom in Canobie Lake: ____ Dollars and ____ Cents per	Ea.		Ea.	

Contractors Bid Schedule - West Duston Road Area Improvements							
Item No.	Est. Quant.	Units	Item Description (and Unit Price written in words)		Unit Price		Amount
670.0661	35	Ea.	Remove & Re-set Single or Double Mailbox Assemblies: _____ Dollars and _____ Cents per	Ea.		Ea.	
900.1	7	Unit	Rein. Conc. PC-1 Headwall (12" to 18" dia. pipe): _____ Dollars and _____ Cents per	Unit		Unit	
900.2	2	Unit	Rein. Conc. Headwall (24" to 30" dia. pipe): _____ Dollars and _____ Cents per	Unit		Unit	
				Sub-Total Schedule 1			\$
SCHEDULE 2 - WATER IMPROVEMENTS							
206.2	200	CY**	Rock Structure Excavation - Water: _____ Dollars and _____ Cents per	CY**		CY**	
611.05204	370	LF	4" Cement Lined Ductile Iron Water Pipe, CL 52: _____ Dollars and _____ Cents per	LF		LF	
611.05208	3420	LF	8" Cement Lined Ductile Iron Water Pipe, CL 52: _____ Dollars and _____ Cents per	LF		LF	
611.05212	10	LF	12" Cement Lined Ductile Iron Water Pipe, CL 52: _____ Dollars and _____ Cents per	LF		LF	
611.5011	1100	LF	1" Copper Water Pipe: _____ Dollars and _____ Cents per	LF		LF	

Contractors Bid Schedule - West Duston Road Area Improvements							
Item No.	Est. Quant.	Units	Item Description (and Unit Price written in words)		Unit Price		Amount
611.5101	42	EA	1" Corporation Stop: ____ Dollars and ____ Cents per	EA		EA	
611.5201	42	EA	1" Curb Stop w/Box: ____ Dollars and ____ Cents per	EA		EA	
611.70004	6	EA	4" Ductile Iron Fittings: ____ Dollars and ____ Cents per	EA		EA	
611.70008	20	EA	8" Ductile Iron Fittings: ____ Dollars and ____ Cents per	EA		EA	
611.71168	1	EA	16"x8" SS Tapping Sleeve: ____ Dollars and ____ Cents per	EA		EA	
611.71008	8	EA	8" Gate Valve: ____ Dollars and ____ Cents per	EA		EA	
611.81	7	EA	Hydrant Assemblies: ____ Dollars and ____ Cents per	EA		EA	
611.815	1	EA	Remove & Salvage Hydrant: ____ Dollars and ____ Cents per	EA		EA	
611.93	70	LF	Removal of Water Pipe (outside trench limits): ____ Dollars and ____ Cents per	LF		LF	
					Sub-Total Schedule 2		\$

Contractors Bid Schedule - West Duston Road Area Improvements							
Item No.	Est. Quant.	Units	Item Description (and Unit Price written in words)		Unit Price		Amount
SCHEDULE 3 - SEWER IMPROVEMENTS							
206.2	250	CY**	Rock Structure Excavation - Sewer: _____ Dollars and _____ Cents per	CY**		CY**	
209.3	200	CY**	Granular Backfill (Sand)(F): _____ Dollars and _____ Cents per	CY**		CY**	
604.314	4	EA.	4' Dia. Sewer Manhole: _____ Dollars and _____ Cents per	EA.		EA.	
604.3141	3	EA.	4' Dia. Terminal Flushing Manhole: _____ Dollars and _____ Cents per	EA.		EA.	
604.3152	1	EA.	5' Dia. Terminal Air/Vacuum Relief Manhole: _____ Dollars and _____ Cents per	EA.		EA.	
604.3161	3	EA.	6' Diameter Flushing Manhole - 3 way: _____ Dollars and _____ Cents per	EA.		EA.	
612.332	1	EA	4' Diameter SMH Drop Connection: _____ Dollars and _____ Cents per	EA		EA	
612.35006	170	LF	6" PVC Sewer Pipe - SDR 35: _____ Dollars and _____ Cents per	LF		LF	
612.35008	1000	LF	8" PVC Sewer Pipe - SDR 35: _____ Dollars and _____ Cents per	LF		LF	
612.35012	750	LF	1.25" dia. LPS Service Pipe - HDPE DR11: _____ Dollars and _____ Cents per	LF		LF	

Contractors Bid Schedule - West Duston Road Area Improvements							
Item No.	Est. Quant.	Units	Item Description (and Unit Price written in words)		Unit Price		Amount
612.35015	670	LF	1.5" LPS Main - HDPE DR11: _____ Dollars and _____ Cents per	LF		LF	
612.35020	1440	LF	2" LPS Main - HDPE DR11: _____ Dollars and _____ Cents per	LF		LF	
612.35030	900	LF	3" LPS Main - HDPE DR11: _____ Dollars and _____ Cents per	LF		LF	
612.36012	35	EA	1-1/4" LPS SERVICE KIT (tee, ball valve, curb stop & check valve): _____ Dollars and _____ Cents per	EA		EA	
703.67	100	CY**	Additional Crushed Stone, #67 Stone (where ordered): _____ Dollars and _____ Cents per	CY**		CY**	
			Sub-Total Schedule 3				\$
SCHEDULE 4 - COMMON ITEMS							
206.19	50	CY	Common Structure Excavation - Exploratory: _____ Dollars and _____ Cents per	CY		CY	
214	1	Unit	Fine Grading: _____ Dollars and _____ Cents per	Unit		Unit	
304.2	975	CY	Gravel (F): _____ Dollars and _____ Cents per	CY		CY	
304.3	490	CY	Crushed Gravel (F): _____ Dollars and _____ Cents per	CY		CY	

Contractors Bid Schedule - West Duston Road Area Improvements							
Item No.	Est. Quant.	Units	Item Description (and Unit Price written in words)		Unit Price		Amount
304.32	30	CY	Crushed Gravel (for Shoulder Leveling): _____ Dollars and _____ Cents per	CY		CY	
304.4	200	CY	Crushed Stone, Fine Gradation: _____ Dollars and _____ Cents per	CY		CY	
306.208	7917	SY	Reclaimed Stabilized Base, Rem. & Reh., 8" Depth (F): _____ Dollars and _____ Cents per	SY		SY	
306.36	754	Ton	Stone for Reclaimed Stabilized Base: _____ Dollars and _____ Cents per	Ton		Ton	
403.11A	1450	Ton	Hot Bit. Pavement - Machine Method (Binder): _____ Dollars and _____ Cents per	Ton		Ton	
403.11B	900	Ton	Hot Bit. Pavement - Machine Method (Wearing Course): _____ Dollars and _____ Cents per	Ton		Ton	
403.12	180	Ton	Hot Bit. Pavement - Hand Method: _____ Dollars and _____ Cents per	Ton		Ton	
417	300	SY	Cold Planing Bituminous Surfaces: _____ Dollars and _____ Cents per	SY		SY	
593.211	500	SY**	Geotextile, Class 1 - Nonwoven (Where Directed): _____ Dollars and _____ Cents per	SY**		SY**	
618.6	1	Allow	Uniformed Officers (Allowance): Two-hundred Thousand Dollars and Zero Cents per	Allow		Allow	

Contractors Bid Schedule - West Duston Road Area Improvements							
Item No.	Est. Quant.	Units	Item Description (and Unit Price written in words)		Unit Price		Amount
619.1	1	Unit	Maintenance of Traffic: ____ Dollars and ____ Cents per	Unit		Unit	
619.254	4	Month	Portable Changeable Message Sign: ____ Dollars and ____ Cents per	Month		Month	
628.2	400	LF	Sawed Bit. Pavement: ____ Dollars and ____ Cents per	LF		LF	
645.7	1	Unit	Storm Water Pollution Prevention Plan: ____ Dollars and ____ Cents per	Unit		Unit	
645.72	30	Visit	Monitoring SWPPP and Erosion and Sediment Controls: ____ Dollars and ____ Cents per	Visit		Visit	
646.512	2040	SY	Turf Establishment W/Mulch, Tack and Loam (F): ____ Dollars and ____ Cents per	SY		SY	
692	1	Unit	Mobilization: ____ Dollars and ____ Cents per	Unit		Unit	
912	1	LS	R&R Landscaping: ____ Dollars and ____ Cents per	LS		LS	
1010.2	1	Allow	Asphalt Cement Adjustment (Allowance): Twenty Thousand Dollars and Zero Cents per	Allow		Allow	
					Sub-Total Schedule 4		\$
					TOTAL BASE BID (Add Schedules 1 to 4)		\$

Contractors Bid Schedule - West Duston Road Area Improvements

Item No.	Est. Quant.	Units	Item Description (and Unit Price written in words)		Unit Price		Amount
Add/Deduct Alternatives							
611.05208	-785	LF	Deduct 8" Cement Lined Ductile Iron Water Pipe, CL 52: _____ Dollars and _____ Cents per	LF		LF	
611.05212	1650	LF	Add 12" Cement Lined Ductile Iron Water Pipe, CL 52: _____ Dollars and _____ Cents per	LF		LF	
611.70016	2	EA	Add 16" Ductile Iron Fittings: _____ Dollars and _____ Cents per	EA		EA	
611.71012	3	EA	Add 12" Gate Valve: _____ Dollars and _____ Cents per	EA		EA	
611.71016	1	EA	Add 16" Gate Valve: _____ Dollars and _____ Cents per	EA		EA	
Name of Contractor: _____ Date: _____							
Notes to Bidders:							
1. Contract award is dependent on Town appropriation of funds (March 2020).							
2. ** Means Indeterminate Quantity.							
3. 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 Town.							
4. Unit prices in words shall govern over unit prices in numbers in determination of bid.							
5. The apparent low bid will be based on the Total Base Bid (Add Schedules 1 to 4) amount entered on page A-3.13.							

Addendum No. 2
Attachment "G"

SUPPLEMENTAL SPECIFICATION

AMENDMENT TO SECTION 209 – GRANULAR BACKFILL

Replace Section 209.4.3 with the following:

- 4.3** Granular backfill for trenches will not be measured, but will be considered as a final pay quantity for management of saturated soils. The item quantity will not be revised.
- 4.3.1** Dewatering and pre-draining soils in advance or during excavation is subsidiary to pipe installation.

Add Section 209.5.4 with the following:

- 5.4** Granular backfill for trenches will be paid for at this contract price complete and in place, based on a percentage of work completed, as determined by the Engineer.
- 5.4.1** Payment shall constitute full compensation for management of soils, particularly saturated soils that are considered unsuitable for backfill including:
- Transport and stockpile of wet soils to permit drying for re-use as backfill.
 - Additional fill materials generated off site for placement and compaction in accordance with the project specifications.
 - Provide proper de-watering of saturated soils without impacts to adjacent properties, drainage, and downstream wetlands.

PRE-BID MEETING NOTES

West Duston Road Area
Sewer, Water and Roadway Improvements
33 Geremonty Drive, Salem, NH

January 16, 2020 at 1:00 P.M.

1. Introductions

- James Danis, P.E., Capital Projects Engineer, Town of Salem
- Roy E. Sorenson, Director Municipal Services, Town of Salem
- Lyndsay R. Butler, P.E., Project Engineer, Town of Salem
- Philip D. MacDonald, P.E., Underwood Engineers, Inc., pmac@underwoodengineers.com Tel. 603.436.6192
- Timothy A. Puls, P.E. Underwood Engineers, Inc., tpuls@underwoodengineers.com Tel. 603.436.6192
- Shannon Larocque, P.E., NHDES Wastewater Engineering Bureau, Shannon.larocque@des.nh.gov Tel. 603.271.2903

Attendees

See Attendee Sign-in sheet attached to these meeting notes, Attachment "I".

2. Bidding Requirements

- Pre-Bid Meeting: This is a non-mandatory pre-bid meeting.
- Bid Security for 5% of bid price
- Acknowledgement of Addendums; Submit with Bid
- Qualification of Contractors: Submit with Bid

3. Project Area

- West Duston Road Area including Lakeside Street, Community Street, Lakeview Street, McGrath Street, and West Duston Road.

4. Bids

The apparent low bid will be based on the Total Base Bid without alternates.

The bid alternate is an option to replace the 8" DI water main along West Duston Road from North Policy to a proposed booster station site (location TBD) with two (2) 12" DI water mains, one high pressure (HP) main and one low pressure (LP) main.

5. Schedule

Completion time for the project will be as follows:

- Work is expected to begin in April 2020, construction layout may precede prior to notice to proceed with authorization from the Owner.
- All work is to be substantially complete within 180 days of the notice to proceed, which is anticipated for mid-October 2020.
- Final Completion will be within 210 days of the notice to proceed, which is anticipated for mid-November 2020.
- Final paving, 1.5" wearing course, may be completed after one freeze/thaw season with prior authorization from the Owner.

6. Project Overview

The project generally includes the following items:

- Sewer Improvements – low pressure sewer mains (~3,000 LF) and gravity sewer main (~1,200 LF) and sewer service lines for properties.
- Water Improvements – water main (~3,800 LF) and appurtenances, hydrants, valves, and water service lines up for properties.
- Drainage Improvements – subsurface (underdrains), ditching and drainage conveyance (structures and piping), and stormwater treatment systems at drainage outfalls.
- Road Re-Construction, including road reclamation or full depth reconstruction as prescribed on Contract Documents. See Questions section below for additional clarification on road reclamation.
- Complete property restorations, public and private.
- Other work where specified on drawings or included within the Contract Documents

7. Construction Traffic Management

The Contractor will be required to maintain the roadway in a safe passable condition. There is no through traffic and traffic is generally light but the Contractor will need to maintain access to residential properties and driveways. Refer to Section 01850 for general requirements. One-way alternating traffic is anticipated on West Duston Road to Lakeview, and on McGrath, during work hours. However, traffic in either direction may not be impeded for more than 5 minutes without the Town's prior approval. Temporary road closures may be approved providing that alternate routes remain open and are in clear passable condition.

8. Work Hours

The contract time for completion is based on work hours from 7am to 3:30pm, Monday through Fridays. Work beyond these hours is not permitted without Town approval. Tie-in of new water and sewer on North Policy Road may require adjustments to the normal schedule. Coordination with the Town is required to avoid disruptions to traffic and existing water and sewer services.

9. Temporary Facilities & Environmental Controls

Contractor is required to provide and monitor erosion and siltation controls, to prevent degradation to wetlands, drainage ditches and adjoining properties. Temporary controls and general housekeeping during construction include but may not be limited to:

- Preparation and implementation of SWPPP (unit items provided)
- Dust Control needs to be continuous; Contractor is to monitor and control dust
- Continuous maintenance and cleanup work areas
- Safe passage of traveling public
- General housekeeping

Note: Canobie Lake is the Town's drinking water supply, therefore, erosion and dust control measures, construction site runoff, and general site conditions will be monitored closely and upkeep will be enforced.

10. NHDES Inspection

The project may be funded in part by a State Aid Grant (SAG). NHDES representatives shall be granted rights to observe all portions of the work. It is anticipated that NHDES representatives will conduct site visits to ensure compliance with SAG requirements. SAG requirements do not include Davis Bacon wage rates, American Iron & Steel, nor Disadvantaged Business Enterprise.

The following documents will be reviewed by NHDES:

- Pay Request Forms
- Change Orders

11. Community Information

The Contractor is required to provide the following information on a weekly basis:

- A brief narrative of upcoming work areas and schedule (2-week projection)
- Address or provide status updates relating to property owners' complaints.
- Provide a 24-hour contact person for emergencies.
- The Contractor's project superintendent and project manager may be requested to attend a pre-construction, public informational meeting if one occurs.

The Contractor shall not have any direct interaction with the general public and/or area residents, all project coordination will be the responsibility of the Town. All complaints and/or claims shall be forwarded to the Town, James Danis, and will be handled by Town staff.

12. Staging Areas

The Contractor is responsible for obtaining adequate staging areas for the project. Staging areas have not yet been identified. Contractor is required to find staging area for project materials.

13. Wetlands Permit

A wetland permit will be secured for drainage improvements and stormwater management work in the following project areas:

- Impact Area #1 – Lakeside Street Outlet, see DWG P1
- Impact Area #2 – Community Street Outlet, see DWG P2
- Impact Area #3 – West Duston Road Outlet, see DWG P2
- Impact Area #4 – West Duston Road Culvert (north), see DWG P5
- Impact Area #5 – West Duston Road Culvert (south), see DWG P5
- Impact Area #6 – West Duston Road / North Policy Culvert Inlet, see DWG P6
- Impact Area #7 – West Duston Road / North Policy Culvert Outlet, see DWG P6

The wetland permit approval is pending. A copy of the permit and permit conditions will be provided in advance of construction.

14. Addendum

- Addendum No. 1 was issued on January 2, 2020.
- Addendum No. 2 including Pre-Bid Meeting notes and questions from bidders will be issued 5 or 6 days prior to bidding. Addendum No. 2 will also include minor modifications to pipe alignment on Lakeview, some minor modifications to construction details and specifications. Also, Addendum No. 2 will include an increase in 2" LPS, which is offset by a decrease in 1.5" LPS (approximately 500 feet).

Comments and questions will need to be forwarded via email to Timothy A. Puls, at Underwood Engineers, Inc., tpuls@underwoodengineers.com before January 21, 2020, to be addressed by Addendum.

Addendum will be issued at least five (5) days prior to the bid date and is expected to include the following:

15. **Questions** *(Note that responses in italics address questions asked at Pre-Bid Meeting that were addressed after the pre-bid meeting.)*

Q1: Will reclaim be before or after pipe installation?

R1: It is understood that the bid documents do not specify when reclamation and remove & re-handle operations are to occur, before or after the pipe installation. It is not the intent of the bid set to dictate means and methods of construction. It shall be the Contractor's option whether to complete reclamation operations, before or after pipe installation, or to box out the road following pipe installation and provide suitable replacement for the specified reclaimed base and stone admixture. The Contractor shall prevent contamination or degradation of the reclaim through the course of work for acceptance. Reclaimed stabilized base shall meet the gradation of NHDOT Item 306. It is expected the Contractor will provide a plan for proper management of material for review. Upon completion of reclamation and satisfactory blending of reclaim stone, a sieve will be completed to develop a baseline. Reclaim quality shall not degrade below the established baseline.

Q2: Would it be better to box out roadway and use gravel as opposed to reclaimed base?

R2: The Contractor shall submit the means and methods used to manage reclaim material or replace with acceptable material. The Contractor may box out road and use either reclaimed product or substitute crushed stone fine gradation that meets NHDOT 304.4, provided that an 8" depth and uniform cross section of material across the entire road section is achieved and no additional cost is incurred.

Q3: Can additional clarification be provided regarding contact with area residents and communications with field representatives?

R3: A full-time project representative will be provided. All questions and complaints shall be directed to the Town's project representative.

Q4: There is a note on the plans that calls for testing and disinfection of water service lines. What is expected of the Contractor for testing and disinfection of water service lines?

R4: The Contractor will not be required to disinfect each water service line, but each line will be required to be pressure tested. The note on DWG G2, WATER CONSTRUCTION NOTES No. 8, sentence 4 is revised in Addendum No. 2 to read, "Service lines shall be pressure tested."

Q5: Can a bid item be provided for replacement of saturated materials that may be unsuitable for backfill?

R5: Yes, bid item 209.3, with a quantity allowance of 200 CY, is added to Schedule 3 of the Bid Schedule of Addendum No. 2. In addition, the Supplemental Specification, Amendment to Section 209 – Granular Backfill is revised in Addendum No. 2.

Item 209.3 is included as a supplement to trench backfill operation where no dry material is available on-site. Surplus material, suitable for backfill, should be generated during trenching activities at the beginning of the project. Dry suitable material shall be stockpiled for reuse in lower sections of the project where saturated materials are encountered. It is further understood that any saturated materials removed from the trench will be stock piled and allowed to dry for reuse in trenching activities. "Unsuitable" material as defined by the contract documents shall be replaced in accordance with the contract documents.

The Contractor is advised to be diligent with proper trench dewater activities at lower sections of the project where ground water is encountered. The contractor shall provide a trenching plan for review which identifies methods of construction. Test pitting prior to the start of trenching at depth as means of determining necessary dewater activities will be authorized.

Q6: Do the As-Built measurements need to be completed by a licensed surveyor?

R6: Final measurements and As-Built survey may be done by the Contractor. However, property monuments that were disturbed during construction need to be replaced by a licensed surveyor.

Q7: What is the Engineer's estimate?

R7: \$2.2M

Q8: Are there any existing gas mains in the project area?

R8: No

Q9: When is the anticipated contract award and notice to proceed?

R9: Contract Award is anticipated for March 2020. Notice to Proceed is anticipated by mid-April 2020.

Q10: Can the wearing course be completed following freeze/thaw cycle (i.e. the following season)?

R10: Yes. However, it is the Town's goal to complete the project in 2020

16. Additional questions following meeting (not part of meeting) as follows:

Q1: Will the Contractor be allowed to have an office trailer on-site?

R1: Yes. However, the Contractor must ensure the trailer is either in the ROW or have a written agreement with property owner if outside the ROW.



Addendum No. 2 - Attachment "I"

SIGN IN LOG

Town of Salem, NH 2020 Road Improvement Program Pre Bid Meeting
West Duston Area - Sewer, Water and Roadway Improvements
January 16, 2020

Name	Company	Address	Phone	Email
Tim Puls	Underwood Engineers	25 Vaughan Hall, Portsmouth, NH	(603) 438-6197	tpuls@underwoodengineers.com
STEW McCORMACK	DE FELICE CORPORATION	28 SILVA LN. DEXTER, MA	978-377-5044	smccormack@defelicecorp.com
MARK NICKLIN	WEAVER BROTHERS	1629 RT 3A BOW	603-444-5945	mnicklin@wbcc.biz
SPIN DONOVAN	AS Coleman	9 NH RTE 113 Conway 03818	447-5936	sdonovan@ajcalen.com
George Hester	Busby Construction	71 Route 111 Atkinson NH	898-4800	ghester@busbyconstruction.com
Brian Good	Busby Construction	71 Route 111 Atkinson NH 03811	(603) 898-4800	bgood@busbyconstruction.com
Steve Cassarino	American Excavating	5 MADOLE RD, DEXTER NH	603-235-1082	STEVE@AMERICANEXCAVATING.COM
Ryan Lannan	American Excavating	5 "	603-548-1489	Ryan@AmericanExcavating.com
Dave Whitney	Albunese Brothers Inc	25 Loan Hill Road	457-3350 978-874-5540	dwhitney@albunesebrothers.com
Maura Sarnaglia	JP Cardillo & Son	1 MELVIN ST., Wakefield MA	781-245-8095	mavrac@jpcardillo.com
Shannon Larague	NHDES	29 Hazen Drive, Concord NH	603-271-2903	shannon.larague@nhdes.com