

To: Tom Watkins <TWatkins@CityofNewburyport.com>
Cc: Jon-Eric White <JEWhite@CityofNewburyport.com>; Wayne Amaral <WAmaral@CityofNewburyport.com>; Byron J. Lane [Council] <BLane@CityofNewburyport.com>; Sean Reardon <SReardon@CityofNewburyport.com>; Andrew Levine <ALevine@CityofNewburyport.com>; Richard Jones <RJones@CityofNewburyport.com>; Kimberly Turner <KTurner@CityofNewburyport.com>; Ethan Manning <EManning@CityofNewburyport.com>; James J. McCauley [Council] <JMcCauley@CityofNewburyport.com>; Ed Cameron [Council] <ECameron@CityofNewburyport.com>
Subject: Re: Phillips Drive

Tom and All,

I want to thank all of you for the information you have provided. It helped me better understand this project and the current state.

I consider this project to be overbudget by approximately a \$1m dollars (+23%) and I want to explain how I come to this:

1. The contingency that was built in what chiseled down and, ultimately, completely written down. In the end, the accepted bid basically equaled the appropriation.

Compare \$4.39m low bid (bids attached) with total funding of \$4.39m (funding order attached). Keep in mind that the funding appropriation was increased from \$3.8m to the \$4.39 while it was in Committee. At 95% design, there was a 10% contingency carried in the spreadsheet (attached) so the bond didn't actually cover the 95% design estimation. That's what I mean by the idea that the contingency was consumed to allow the bid to be awarded. **The amount here is \$400k based on the attached 95% design estimate.**

2. The circumstances around the paving are sketchy at best. I can tell you that as a Councillor we spent months debating the cost of granite curbing versus asphalt loaf so the idea that the funding didn't include finish paving is, respectfully, absurd. Phillips Drive and associated streets (Ryan, Drew, Sullivan) appear in the 5-year plan (relevant page attached). And, that cost shows not just the roadway but also the sidewalks, as well. I guess we can toy with numbers but that means it's either coming out of Chapter 90 or it's coming out of the brand-new roadway bond that we just passed. **The amount here was \$630k based on 2022 estimate but now has been reduced to \$275k based on 2023 estimate in the attached roadway plan - not sure which figure will be the reality but I will use the average - \$452k.**

3. In the meeting that was recently held, I understand that an overage of \$200k was discussed with funding sources TBD. I assume that these arise from change orders or unexpected expenses that can't be covered by a contingency because there isn't one (see #1 above). I also understand that this project is only about 57% spent at this point and operationally the project is closer to 50% completed, based on the presentation provided to residents (attached). As such, this amount may (will?) change. **The amount here is (at least) \$200k based on the stated figure at the public meeting.**

If you total the amounts, you will arrive at my \$1m figure (averaging the 22/23 cost estimates for paving). The overage is relative to the budgeted amount not how much additional appropriation that you may need to come to the City Council for - it's a comparison of the overall budget with the actual spend needed to complete. The roadway funding may actually come from the roadway bond that we recently passed. The \$200k (or whatever it ends up being) may end up being "found" in other lines that don't require appropriation and the roadway will probably either be taken from Ch. 90 or bond. In any case, they will absolutely come from other projects or things that needed (and need) to be done.

Respectfully,
Sharif

//CC W6 Councillor, Chair Public Works and Safety, City Clerk, City Council President

CITY OF NEWBURYPORT



IN CITY COUNCIL

May 24, 2021

ORDERED:

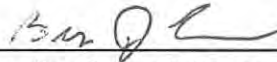
THAT, subject to the conditions shown below, a grand total of \$4,389,000 from various sources is appropriated to the Phillips Drive Neighborhood Roadway, Drainage, and Water line Improvements Project. The funding sources are shown as follows:

THAT, at the recommendation of the American Rescue Plan Ad Hoc Committee, \$1,000,000 is further appropriated to pay Costs of the Phillips Drive Neighborhood Drainage Improvements and Roadway Reconstruction related thereto from the City's allocation of the Coronavirus State and Local Fiscal Recovery Funds.

THAT, \$1,575,000 is appropriated to pay costs of the Phillips Drive Neighborhood Roadway and Drainage Improvements Project including the payment of all costs incidental and related thereto, and that to meet this appropriation, the Treasurer with the approval of the Mayor, is authorized to borrow said amount under and pursuant to M.G.L. c. 44, §7(1), or pursuant to any other enabling authority, and to issue bonds or notes of the City therefor; and that the Mayor and the Treasurer are authorized to take any other action necessary or convenient to carry out this vote. Any premium received upon the sale of any bonds or notes approved by this order, less any such premium applied to the payment of the costs of issuance of such bonds or notes, may be applied to the payment of costs approved by this vote in accordance with M.G.L. c. 44, §20, thereby reducing the amount authorized to be borrowed to pay such costs by a like amount. While all notes and bonds issued under this loan order shall be general obligations of the City, it is the intent that the debt service on such notes and bonds be paid from General Fund revenues.

THAT, \$1,814,000 is appropriated to pay costs of the Phillips Drive Neighborhood Water Line Project including the payment of all costs incidental and related thereto, and that to meet this appropriation, the Treasurer with the approval of the Mayor, is authorized to borrow said amount under and pursuant to M.G.L. c. 44, §7(1), or pursuant to any other enabling authority, and to issue bonds or notes of the City therefor; and that the Mayor and the Treasurer are authorized to take any other action necessary or convenient to carry out this vote. Any premium received upon the sale of any bonds or notes approved by this order, less any such premium applied to the payment of the costs of issuance of such bonds or notes, may be applied to the payment of costs approved by this vote in accordance with M.G.L. c. 44, §20, thereby reducing the amount authorized to be borrowed to pay such costs by a like amount. The appropriation referenced in this paragraph shall not be considered valid until such time as

the City Engineer provides to the City Council via the City Clerk (A) a final report including, at minimum, , an analysis of the pipe condition and (B) a final plan meeting the City Engineer's approval defining the final planned scope of the Water Line project with a detailed cost estimate along with information about all alternatives considered. While all notes and bonds issued under this loan order shall be general obligations of the City, it is the intent that the debt service on such notes and bonds be paid from Water Enterprise Fund revenues.



Councillor Byron J. Lane



Councillor Charles F. Tontar

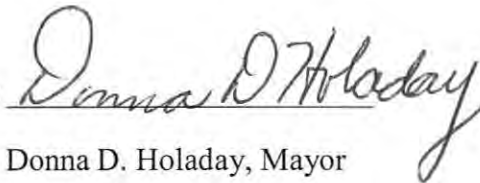
In City Council May 24, 2021:

Motion to refer to Budget & Finance by Councillor Tontar, seconded by Councillor Zeid. Roll call vote. 11 yes. Motion passes.

In City Council August 30, 2021:

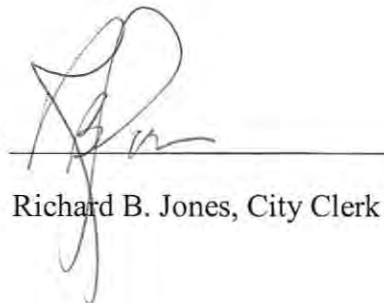
Motion to approve by Councillor Zeid, seconded by Councillor Lane. Motion to amend as presented by Councillor Zeid, seconded by Councillor McCauley. Motion to delete the last sentence beginning with the words "The appropriation..." ending with the word "...considered" by Councillor Tontar, seconded by Councillor Lane. A friendly amendment to the standing motion to amend as presented to strike "from the General Fund" and to strike "from" and to insert "with the intent to use" after the words "and related thereto" was accepted by Councillors Zeid and Lane. Friendly amendment by Councillor Khan to strike only the words of the last sentence between "a series...locations" and "determined...inspection" accepted by Councillors Tontar and Lane. Roll call on the Motion to Delete. 11 yes. Motion passes. Roll call on the Motion to Amend. 11 yes. Motion passes. Roll call on the Motion to Approve. 11 Yes. Motion passes.

Approve:



Donna D. Holaday, Mayor

Attest:



Richard B. Jones, City Clerk

Date:

10/4/2021

**GC E-Bid : List of bids received 04/28/22 01:00 PM Roadway, Drainage & Water
Main Improvements 849161**

Company	Total Base Bid Amount (Whole Dollar) ▾	Alternate No. 1	Bid Package	Action	Comments
J. Tropeano Inc, 1780 Osgood Street,North Andover, MA 01845	\$4,396,140.00	\$315,000.00	View File	Approve Reject	
N.Granese & Sons Inc, 59 Jefferson Ave,Salem, MA 01970	\$4,417,200.00	\$462,000.00	View File	Approve Reject	
Revoli Construction, 90 Earls Way,Franklin, MA 02038	\$4,733,295.00	\$420,000.00	View File	Approve Reject	
Newport Construction Corp., 145 Temple Street,Nashua, NH 03060	\$4,819,585.00	\$346,500.00	View File	Approve Reject	
Joseph P. Cardillo & Son Inc., 1 Melvin Street Extension 1D,Wakefield, MA 01880	\$4,964,757.00	\$288,750.00	View File	Approve Reject	
RJV Construction Corp, 5 Lincoln St,Canton, MA 02021	\$6,220,078.00	\$525,000.00	View File	Approve Reject	

Close Save

PHILIPS DRIVE NEIGHBORHOOD ROADWAY AND DRAINAGE IMPROVEMENTS
 NEWBURYPORT, MASSACHUSETTS
 ENGINEER'S ESTIMATE
 95% DESIGN
 AUGUST 11, 2021
 PREPARED BY BSC GROUP
 BSC PROJECT NO. 89923.00

Item No	Description	Unit of Measure	Unit Price	Total Quantity	Total	Drainage	Roadway/Sidewalk	Waterline
101.	CLEARING AND GRUBBING	A	\$30,000.00	0.25	\$7,500.00	\$7,500.00		
120.	EARTH EXCAVATION	CY	\$30.00	100.00	\$3,000.00	\$3,000.00		
121.	CLASS A ROCK EXCAVATION	CY	\$150.00	100.00	\$7,500.00		\$7,500.00	
129.	SIDEWALK REMOVAL	SY	\$30.00	1875.00	\$56,250.00		\$56,250.00	
142.	CLASS B TRENCH EXCAVATION	CY	\$40.00	1366.00	\$54,640.00	\$27,320.00		\$27,320.00
144.	CLASS B ROCK EXCAVATION	CY	\$150.00	100.00	\$15,000.00			\$15,000.00
145.	DRAINAGE STRUCTURE ABANDONED	EA	\$500.00	15.00	\$7,500.00	\$7,500.00		
146.	DRAINAGE STRUCTURE REMOVED	EA	\$700.00	13.00	\$9,100.00	\$9,100.00		
153.	CONTROLLED DENSITY FILL - TYPE 1E	CY	\$150.00	169.99	\$25,498.17	\$25,498.17		
170.	FINE GRADING AND COMPACTING	SY	\$4.20	2000.00	\$8,400.00		\$8,400.00	
181.	DISPOSAL OF UNREGULATED SOIL	CY	\$76.00	100.00	\$176.00	\$176.00		
201.	CATCH BASIN	EA	\$4,500.00	35.00	\$157,500.00	\$157,500.00		
202.	MANHOLE	EA	\$5,000.00	32.00	\$160,000.00	\$160,000.00		
206.	DROP INLET, TYPE A	EA	\$4,500.00	9.00	\$40,500.00	\$40,500.00		
206.5	WATER QUALITY UNIT	EA	\$15,000.00	2.00	\$30,000.00	\$30,000.00		
220.7	SANITARY STRUCTURES ADJUSTED	EA	\$500.00	24.00	\$12,000.00		\$12,000.00	
252.118	18 INCH CORRUGATED PLASTIC PIPE FLARED END	EA	\$1,350.00	1.00	\$1,350.00	\$1,350.00		
252.12	12 INCH CORRUGATED PLASTIC (POLYETHYLENE) PIPE	FT	\$100.00	745.00	\$74,500.00	\$74,500.00		
252.130	30 INCH CORRUGATED PLASTIC PIPE FLARED END	EA	\$1,500.00	1.00	\$1,500.00	\$1,500.00		
252.15	15 INCH CORRUGATED PLASTIC (POLYETHYLENE) PIPE	FT	\$95.00	2405.00	\$228,475.00	\$228,475.00		
252.18	18 INCH CORRUGATED PLASTIC (POLYETHYLENE) PIPE	FT	\$107.50	505.00	\$54,287.50	\$54,287.50		
252.24	24 INCH CORRUGATED PLASTIC (POLYETHYLENE) PIPE	FT	\$140.00	460.00	\$64,400.00	\$64,400.00		
252.30	30 INCH CORRUGATED PLASTIC (POLYETHYLENE) PIPE	FT	\$180.00	110.00	\$19,800.00	\$19,800.00		
252.36	36 INCH CORRUGATED PLASTIC (POLYETHYLENE) PIPE	FT	\$200.00	410.00	\$82,000.00	\$82,000.00		
269.06	6 INCH SLOT-PERFORATED CORRUGATED PLASTIC PIPE (STUB)	EA	\$500.00	40.00	\$20,000.00	\$20,000.00		
269.10	10 INCH SLOT-PERFORATED CORRUGATED PLASTIC PIPE (SUBDRAIN)	FT	\$110.00	2885.00	\$317,350.00	\$317,350.00		
302.08	8 INCH DUCTILE IRON WATER PIPE (ROBBER CASKET)	FT	\$150.00	7075.00	\$1,061,250.00			\$1,061,250.00
309.	DUCTILE IRON FITTINGS FOR WATER PIPE	LB	\$7.50	3500.00	\$26,250.00			\$26,250.00
347.075	3/4 INCH COPPER TUBING TYPE K	FT	\$95.00	2025.00	\$192,375.00			\$192,375.00
350.08	8 INCH GATE VALVE AND GATE BOX	EA	\$2,500.00	23.00	\$57,500.00			\$57,500.00
350.09	6 INCH GATE VALVE AND GATE BOX	EA	\$2,000.00	8.00	\$16,000.00			\$16,000.00
363.075	3/4 INCH CORPORATION COCK	EA	\$475.00	76.00	\$36,100.00			\$36,100.00
376.	HYDRANT	EA	\$5,500.00	8.00	\$44,000.00			\$44,000.00
384.	CURB STOP	EA	\$650.00	76.00	\$49,400.00		\$90,000.00	\$49,400.00
402.	DENSE GRADED CRUSHED STONE FOR SUB-BASE (SIDEWALKS AND ROADWAY BLENDING)	CY	\$72.00	1250.00	\$90,000.00			
403.	RECLAIMED PAVEMENT FOR BASE COURSE AND/OR SUB-BASE	SY	\$3.750	16050.00	\$60,187.50		\$60,187.50	
443.	WATER FOR ROADWAY DUST CONTROL	MGL	\$75.00	100.00	\$7,500.00		\$7,500.00	
450.41	SUPERPAVE BASE COURSE - 25.0 (SBC - 25.0)	TON	\$100.00	1800.10	\$180,010.00		\$180,010.00	
470.	HOT MIX ASPHALT BERM	TON	\$275.00	150.14	\$41,287.40		\$41,287.40	
472.	TEMPORARY ASPHALT PATCHING (2 INCH APPLICATION)	TON	\$200.00	576.30	\$115,260.00	\$115,260.00		
482.3	SAWCUTTING ASPHALT PAVEMENT	FT	\$2.88	22600.00	\$65,088.00	\$32,544.00		\$32,544.00
697.1	SILT SACK	EA	\$180.00	44.00	\$7,920.00		\$7,920.00	
697.	SEDIMENTATION FENCE	LF	\$10.00	3000.00	\$30,000.00		\$30,000.00	
701.2	CEMENT CONCRETE WHEELCHAIR RAMP	SY	\$100.00	53.33	\$5,333.33		\$5,333.33	
702.	HOT MIX ASPHALT SIDEWALK	TON	\$225.00	314.93	\$70,858.13		\$70,858.13	
703.	HOT MIX ASPHALT DRIVEWAY	TON	\$225.00	77.11	\$17,350.20		\$17,350.20	
748.	MOBILIZATION	LS	\$100,000.00	1.00	\$100,000.00	\$32,330.00	\$33,330.00	\$33,330.00
751.	LOAM BORROW	CY	\$58.00	1000.00	\$58,000.00		\$58,000.00	
756.	NPDES STORMWATER POLLUTION PREVENTION PLAN	LS	\$5,000.00	1.00	\$5,000.00	\$5,000.00		
765.	SEEDING	SY	\$2.00	6500.00	\$13,000.00		\$13,000.00	
832.	WARNING - REGULATORY AND ROUTE MARKER - ALUMINUM PANEL (TYPE A)	EA	\$150.00	8.00	\$1,200.00		\$1,200.00	
847.1	SIGN SUPPORT (NOT GUIDE) AND ROUTE MARKER WITH 1 BREAKAWAY POST ASSEMBLY - STEEL	EA	\$250.00	8.00	\$2,000.00		\$2,000.00	
850.01	POLICE DETAIL	HRS	\$60.00	2400.00	\$144,000.00	\$57,600.00	\$28,800.00	\$57,600.00
859.	REFLECTORIZED DRUM	DAY	\$100.00	280.00	\$28,000.00		\$28,000.00	
860.1	CROSS WALK WHITE LINE (PAINTED)	EA	\$5.00	250.00	\$1,250.00		\$1,250.00	
860.112	12-INCH REFLECTORIZED WHITE LINE (PAINTED)	FT	\$4.00	1400.00	\$5,600.00		\$5,600.00	
SUBTOTAL =					\$3,989,946.23	\$1,574,490.67	\$765,776.56	\$1,648,669.00
CONTINGENCY (10%) =					\$398,994.62 ###	\$157,449.07	\$76,577.66	\$164,866.90
TOTAL (Rounded to nearest 1,000) =					\$4,389,000.00	\$1,732,000.00	\$843,000.00	\$1,814,000.00

**2024 City of Newburyport - DPS
Five Year Roadway and Sidewalk Plan**

Ward 6 FY 24 (2023 Construction Season)

Street Name	From Street	To Street	Road Repair Calendar Year	General Condition	Proposed Repair Method	Length (Ft)	Length (Miles)	Road Surface Rating (RSR)	Sidewalk Repair Calendar Year	Sidewalk Material Proposed	2022 Estimated Cost	Revised 2023 Estimated Cost
DENNETT DRIVE	EVERETTE DRIVE	FINNEGAN WY	2023 - COMPLETED	Poor	Mill & Overlay	953.53	0.18	47	n/a	n/a	\$ 54,342.16	
PETERS ROAD	MARQUAND RD	HAWTHORNE RD	2023 - COMPLETED	Poor	Mill & Overlay	497.63	0.09	55	NA	NA	\$ 30,070.29	\$ -
HOYTS LN	STOREY AVE	CURZON'S MILL RD	2023 - COMPLETED	Poor	Mill & Overlay	497.63	0.09	61	NA	NA	\$ 30,070.29	\$ -
LONGFELLOW DRIVE	TURKEY HILL RD	28 LONGFELLOW DRIVE	2023 - COMPLETED	Poor	Mill & Overlay	1077.33	0.20	58	NA	NA	\$ 92,000.00	\$ -
CURZON'S MILL RD	HOYTS LN	DEAD END	2023 - COMPLETED	Very Poor	Reclamation	3071.61	0.58	33	NA	NA	\$ 262,111.04	\$ -
TOTAL											\$ 414,251.62	\$ -

\$53,000 est actual cost
\$125,000 est actual cost
\$66,000 est actual cost
\$221,000 est actual cost

Ward 6 FY 25 (2024 Construction Season)

Street Name	From Street	To Street	Road Repair Calendar Year	General Condition	Proposed Repair Method	Length (Ft)	Length (Miles)	Road Surface Rating (RSR)	Sidewalk Repair Calendar Year	Sidewalk Material Proposed	2022 Estimated Cost	Revised 2023 Estimated Cost
NOBLE STREET	COOMBS CIR	STOREY AVE	2024	Very Poor	Reclamation	1358.77	0.26	20	n/a	n/a	\$ 164,212.35	\$ 312,800.00
SPRING LN	FERRY RD	DEAD END	2024	Very Poor	Reclamation	1783.71	0.34	8	n/a	n/a	\$ 114,157.28	\$ 141,125.00
PHILIPS DRIVE	STOREY AVE	STOREY AVE	2024	Very Poor	Reclamation	3134.45	0.59	34	2024	Asphalt	\$ 398,230.51	\$ 145,000.00
DREW STREET	HOYTS LN	PHILIPS DR	2024	Poor	Mill & Overlay	1411.34	0.27	53	2024	Asphalt	\$ 63,301.90	\$ 63,700.00
RYAN ROAD	PHILIPS DR	PHILIPS DR	2024	Very Poor	Reclamation	444.05	0.08	36	2024	Asphalt	\$ 62,608.72	\$ 25,300.00
SULLIVAN DRIVE	PHILIPS DR	PHILIPS DR	2024	Very Poor	Reclamation	889.34	0.17	36	2024	Asphalt	\$ 107,480.06	\$ 41,500.00
											\$ -	\$ -
TOTAL											\$ 909,990.84	\$ 729,425.00

Ward 6 FY 26 (2025 Construction Season)

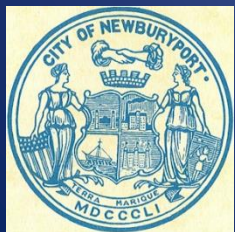
Street Name	From Street	To Street	Road Repair Calendar Year	General Condition	Proposed Repair Method	Length (Ft)	Length (Miles)	Road Surface Rating (RSR)	Sidewalk Repair Calendar Year	Sidewalk Material Proposed	2022 Estimated Cost	Revised 2023 Estimated Cost
BRIGGS AVENUE	FERRY RD	CUL DE SAC	2025	Poor	Mill & Overlay	852.42	0.07	54	n/a	n/a	\$ 50,419.17	\$ 60,550.00
EVERETTE DRIVE	TURKEY HILL RD	CUL DE SAC	2025	Very Poor	Reclamation	1119.31	0.21	32	n/a	n/a	\$ 135,272.43	\$ 113,675.00
TOTAL											\$ 185,691.60	\$ 174,225.00

Ward 6 FY 27 (2026 Construction Season)

Street Name	From Street	To Street	Road Repair Calendar Year	General Condition	Proposed Repair Method	Length (Ft)	Length (Miles)	Road Surface Rating (RSR)	Sidewalk Repair Calendar Year	Sidewalk Material Proposed	2022 Estimated Cost	Revised 2023 Estimated Cost
MOSELEY AVENUE	250'W of ROTARY	50'W OF ROOSEVELT PL	2026	Poor	Reclamation	1500.00	0.29	52	2026	Asphalt	\$ 112,029.92	\$ 409,650.00
											\$ -	\$ -
											\$ -	\$ -
TOTAL											\$ 112,029.92	\$ 409,650.00

Phillips Drive Neighborhood Roadway, Drainage & Watermain Improvements Project

CONSTRUCTION STATUS PUBLIC MEETING JANUARY 17, 2024



Department of Public Services
Engineering Division
16C Perry Way
Newburyport, MA 01950

AGENDA

- INTROS
- WORK COMPLETED TO-DATE
- CONSTRUCTION CHALLENGES
- REMAINING WORK & SCHEDULE
- SUBDRAIN CONNECTIONS
- Q&A

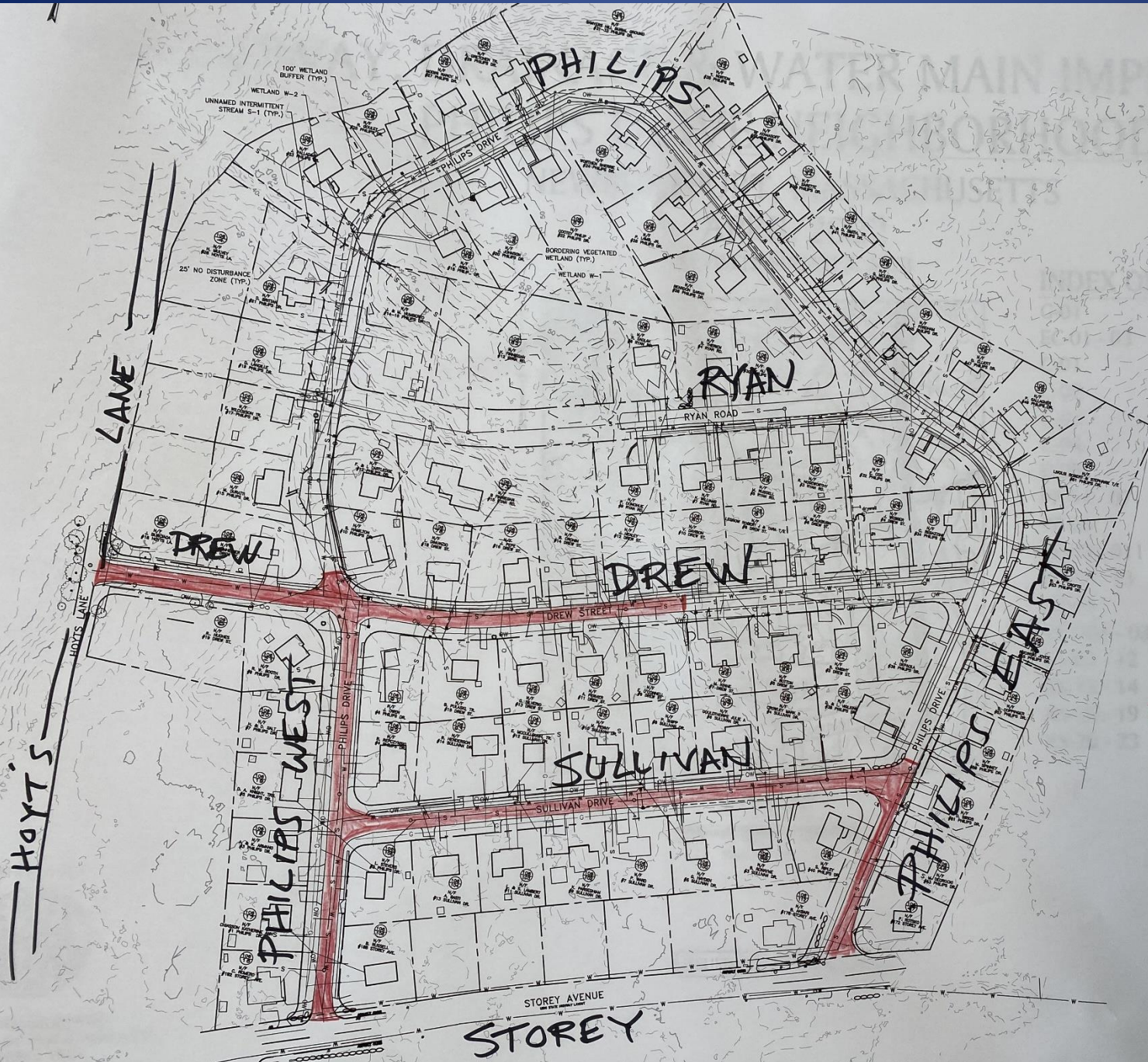
INTROS

City Proj. Mgr.:	Jon-Eric White, City Engineer
City Ass't. PM:	Diane Gagnon, City Ass't Engineer
Design Eng.:	David Biancavilla, BSC Group, Inc.
Resident Eng.:	Emily Machlin, BETA Group, Inc.
Contractor Super:	Brett Stevenson, J Tropeano, Inc.
Other contacts:	www.cityofnewburyport.com \Departments\Engineering Division\Engineering Projects and Presentations\Philips Drive...Project

WORK COMPLETED

(Up to Dec. 2, 2023)

- Contract Sum (Bid Amount): \$4,396,139.81
 - Completed: \$2,488,080.28 (57%)
- Drainage Pipe - Total: 7,930 linear feet
 - Completed: 2,967 linear feet (37%)
- Drainage Structures - Total: 82
 - Completed: 48 (59%)
- Water main - Total: 6,240 linear feet
 - Completed: 3,816 linear feet (61%)
- Water Services – Total: 84 each
 - Completed: 39 each (46%)
- Asphalt - Total: 3,650 tons
 - Completed: 1,778 tons (49%)

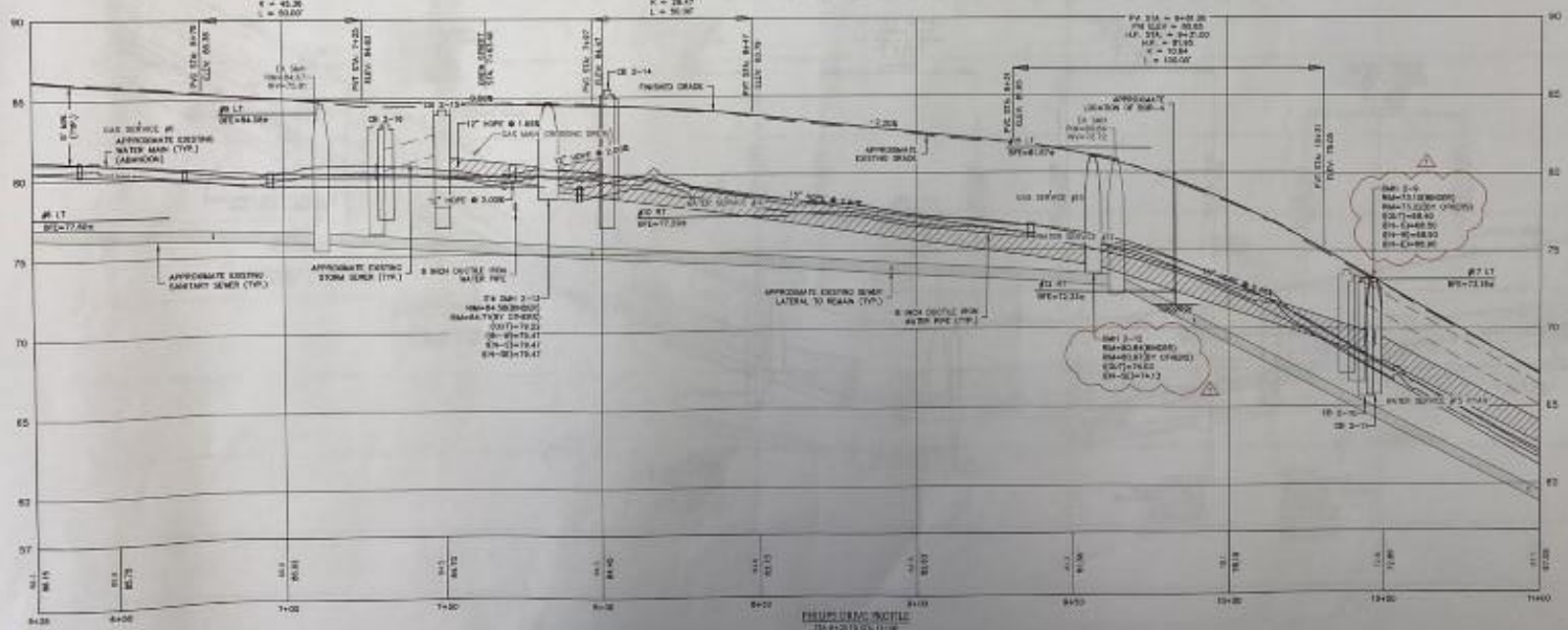


RED = PAVED - BINDER ONLY
 UTILITIES COMPLETE



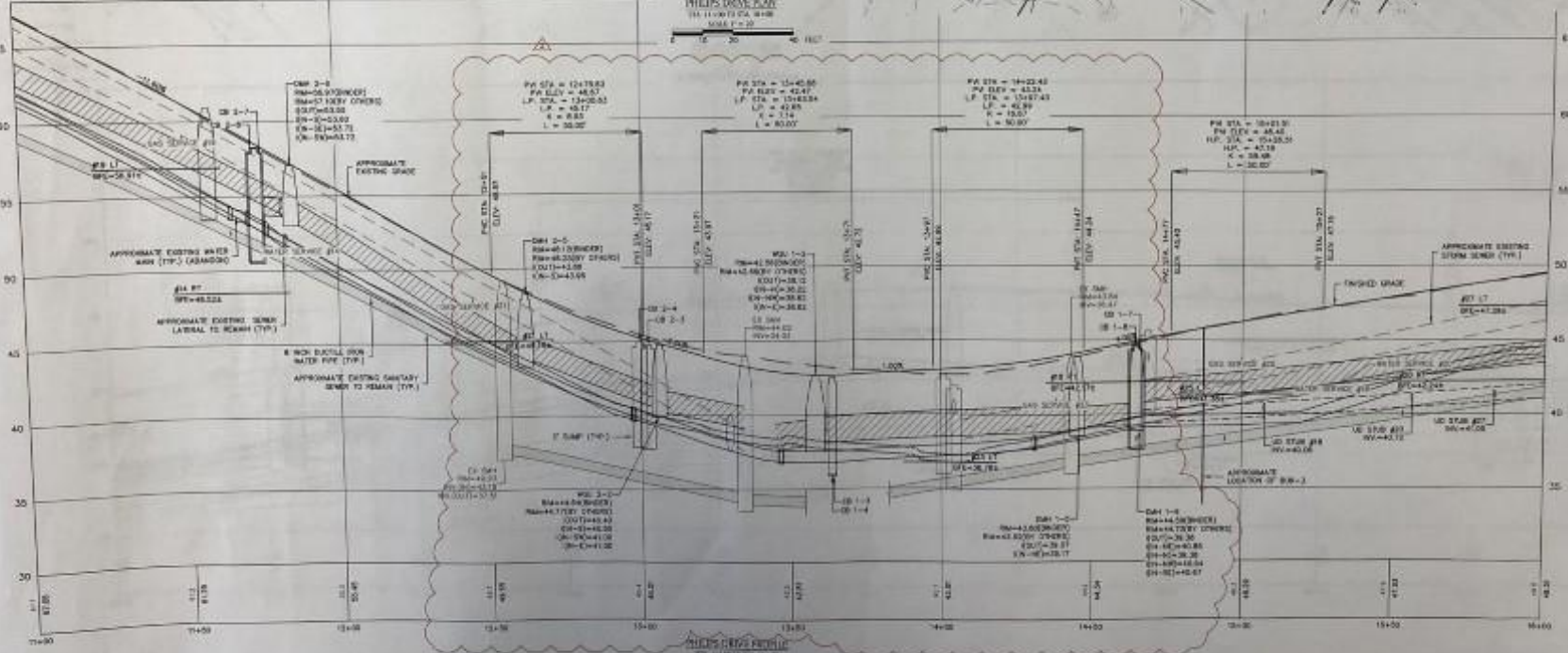
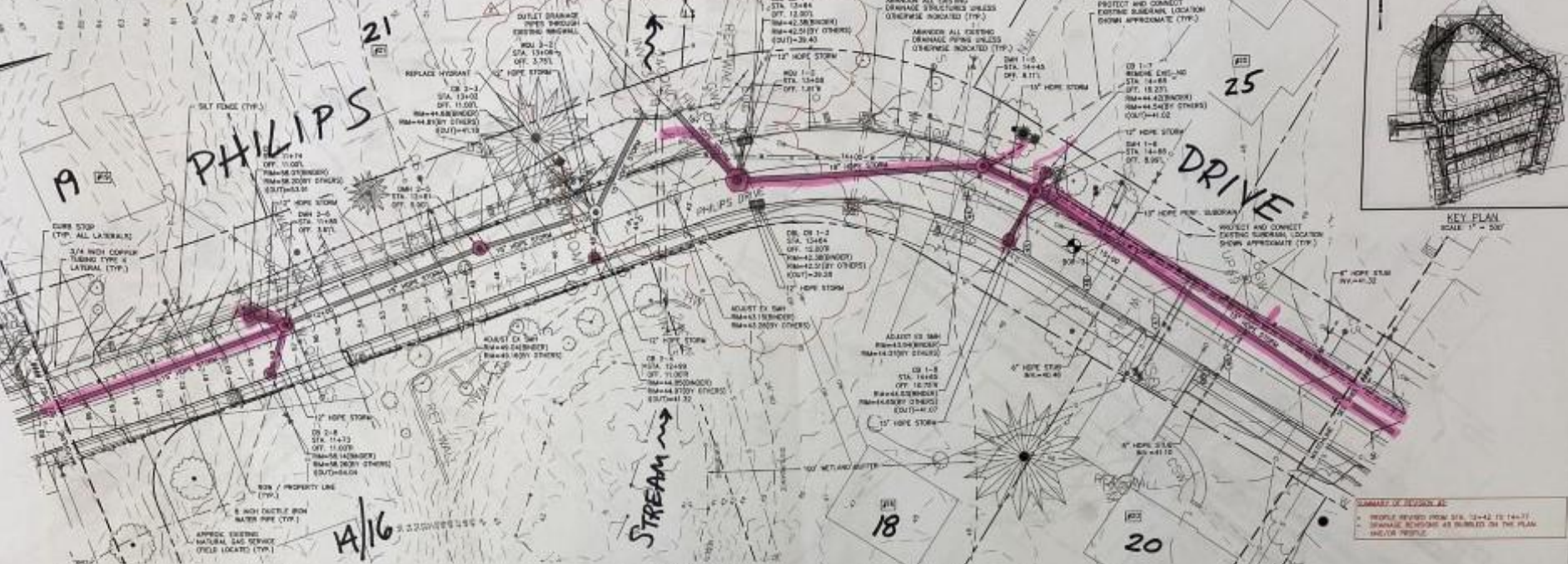
- SUMMARY OF DESIGN:**
- SHOWN UTILITIES AS SUBMITTED BY THE PLAN AND/OR PEOPLE.
 - UPDATED LOCATIONS OF EXISTING AND PROPOSED WATER MAIN AND SANITARY SEWERS.
 - SHOWN LOCATIONS OF EXISTING NATURAL GAS MAIN AND SERVICE.
 - SHOWN EXISTING SANITARY SEWER MAINS.
 - ALIGNED, SIZED AND SPACED SHOWN ON THE PROFILE WHERE COLLISION IS INDICATED.

PHILIPS DRIVE PLAN
 1/4" = 10' (1/8" = 20')

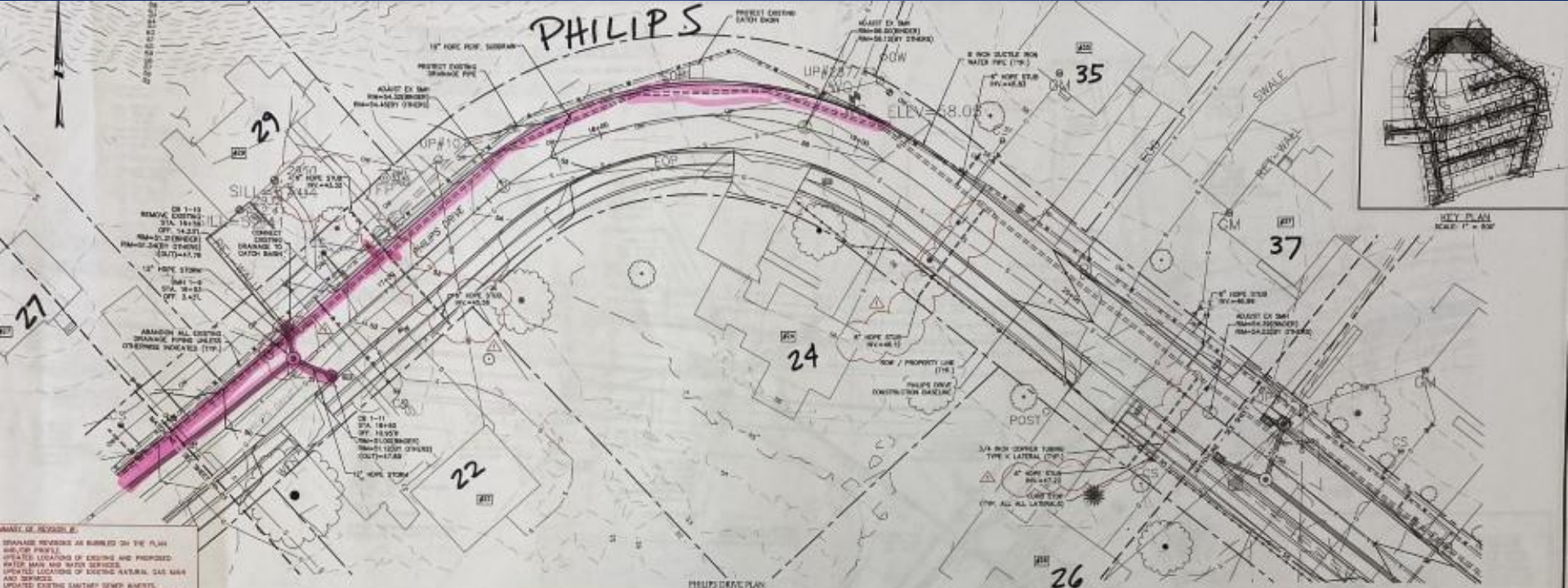


PHILIPS DRIVE PROFILE
 1/4" = 10' (1/8" = 20')

ISSUED FOR CONSTRUCTION



ISSUED FOR CONSTRUCTION



LIST OF REVISIONS

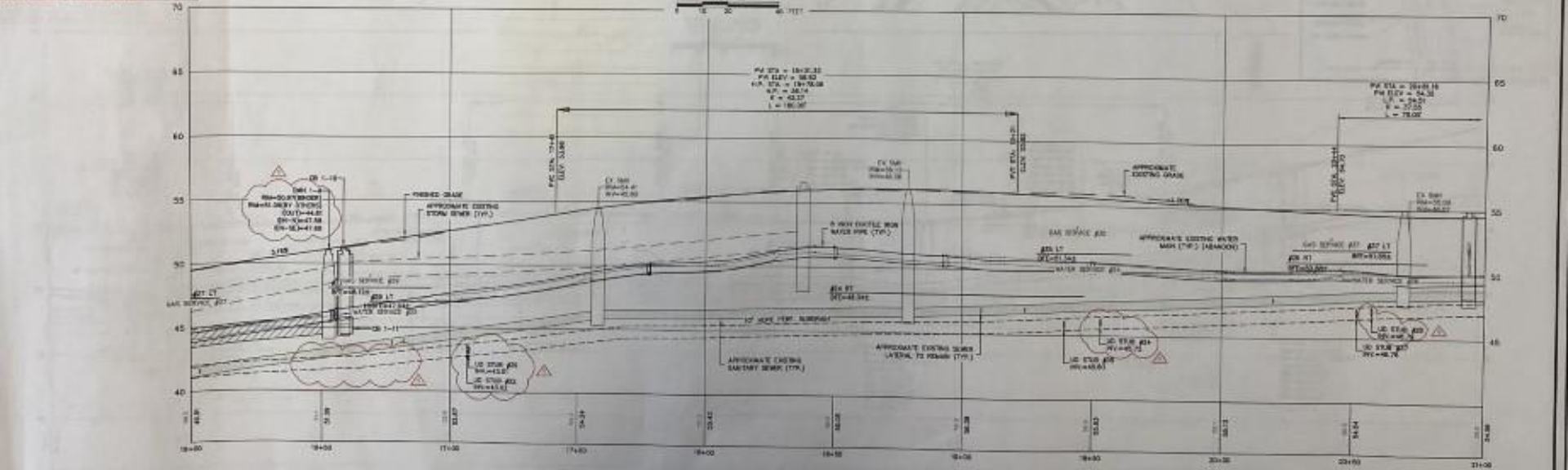
SEWERAGE REVISIONS AS SHOWN ON THE PLAN AND/OR PROFILE.

UPDATED LOCATIONS OF EXISTING AND PROPOSED WATER MAIN AND WATER SERVICES.

UPDATED LOCATIONS OF EXISTING NATURAL GAS MAIN AND SERVICES.

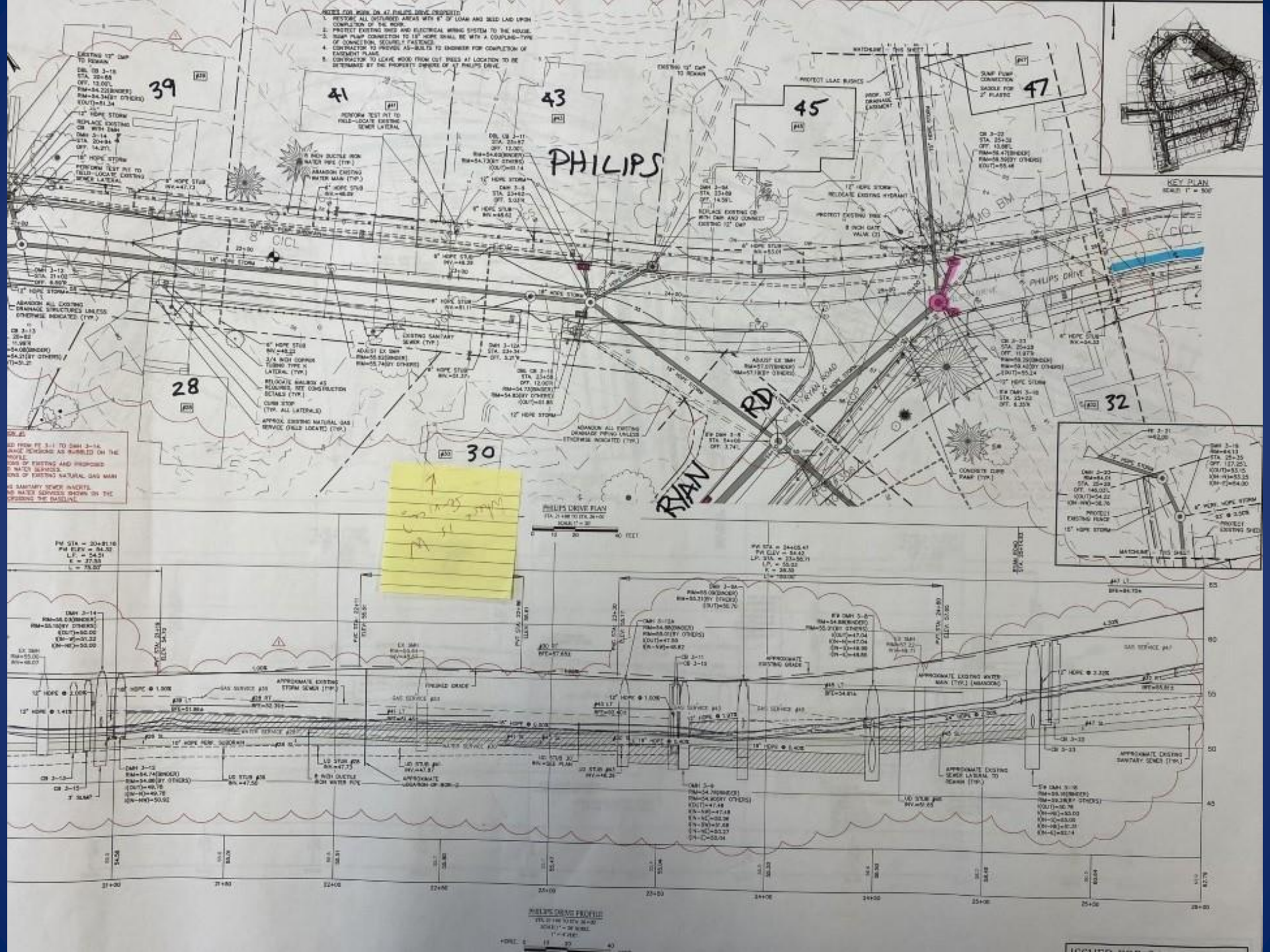
UPDATED EXISTING SANITARY SEWER MAINS, NATURAL GAS AND WATER SERVICE MAINS ON THE PROPERTY BEING DEDICATED TO THE PUBLIC.

PHILIPS DRIVE PLAN
SCALE: 1" = 30'



PHILIPS DRIVE PROFILE
SCALE: 1" = 30'

ISSUED FOR CONSTRUCTION



1. REMOVE ALL OCCUPIED AREAS WITH 4" OF LEARN AND BELL LAD UPON COMPLETION OF THE WORK.
2. PROTECT EXISTING WIRE AND ELECTRICAL WIRING SYSTEM TO THE HOUSE.
3. SEWER PUMP CONNECTION TO 12" HOPE SHALL BE WITH A COMPAUND-TYPE OF CONNECTION, SECURELY FASTENED.
4. CONTRACTOR TO PROVIDE AS-BUILT TO ENGINEER FOR COMPLETION OF EXISTENT PLAN.
5. CONTRACTOR TO LEAVE WOOD FROM CUT BRUSH AT LOCATION TO BE DETERMINED BY THE PROPERTY OWNER OF 47 PHILIPS DRIVE.

PHILIPS



Handwritten notes on a yellow sticky note:
 1. 12" HOPE STUB
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 99. 12" HOPE STUB
 100. 12" HOPE STUB

PHILIPS DRIVE PLAN
 STA. 1+00 TO STA. 2+00
 SCALE 1" = 30'

PHILIPS DRIVE PROFILE
 STA. 1+00 TO STA. 2+00
 SCALE 1" = 30' VERT.
 1" = 40' HORIZ.

PHILIPS DRIVE PROFILE
 STA. 1+00 TO STA. 2+00
 SCALE 1" = 30' VERT.
 1" = 40' HORIZ.



REMARKS TO BE KEPT:

- DRAINAGE DEVICES TO BE BUILT ON THE PLAN AND ON PROFILE.
- CONCRETE (ON TOP OF EXISTING AND PROPOSED WATER MAIN AND WATER SERVICE).
- OPERATE (ON TOP OF EXISTING NATURAL GAS MAIN AND SERVICE).
- OPERATE EXISTING SANITARY SEWER DEVICES.
- NATURAL GAS AND WATER SERVICES SHALL BE THE PROPERTY OWNER'S RESPONSIBILITY.

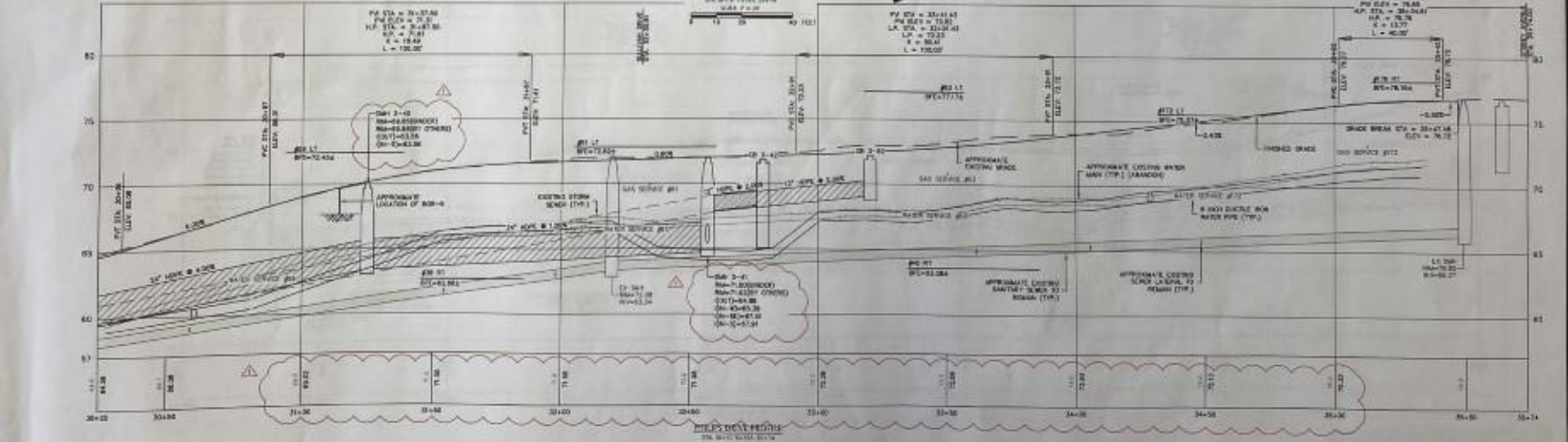
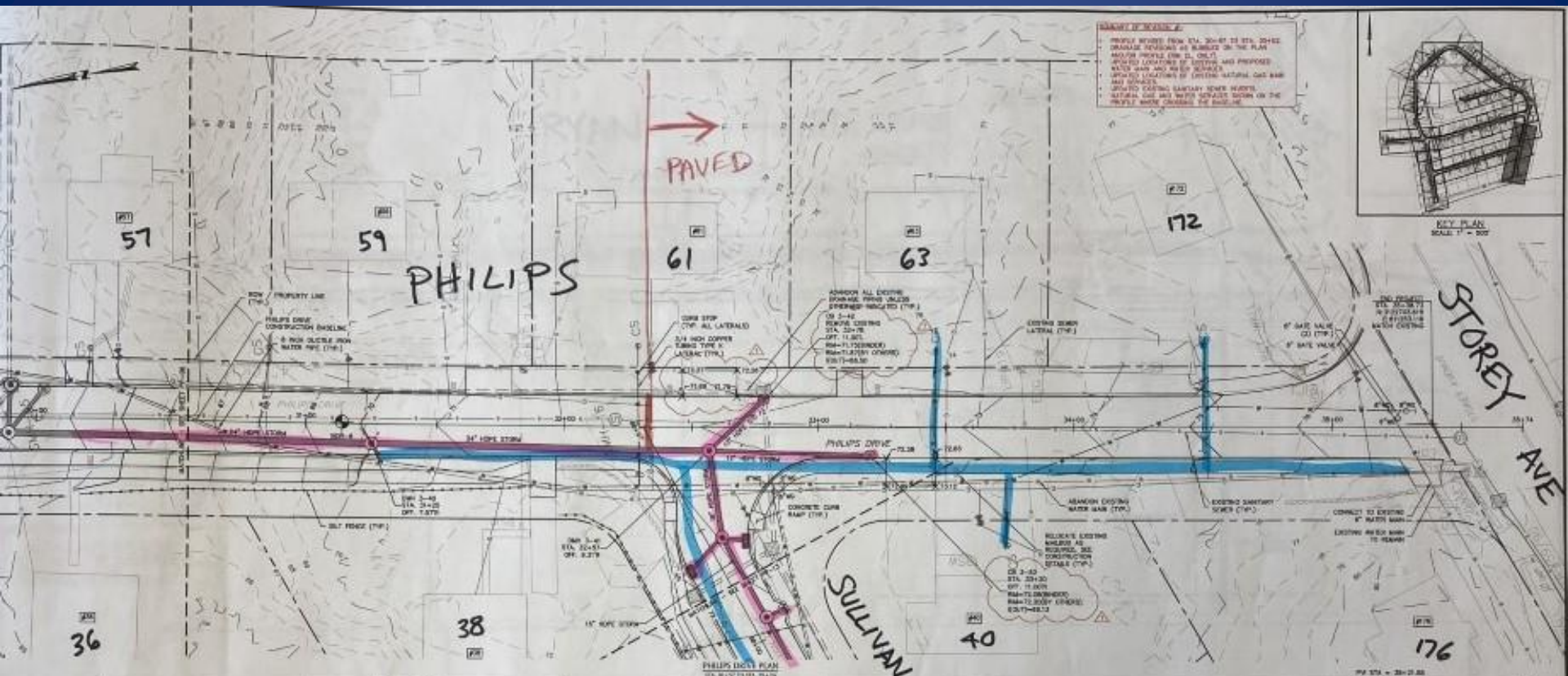


PHILIPS DRAINAGE PROFILE (PROFILE)
SCALE: 1" = 20' VERT.

VERT. 0 10 20 40 60 80 100

ISSUED FOR CONSTRUCTION

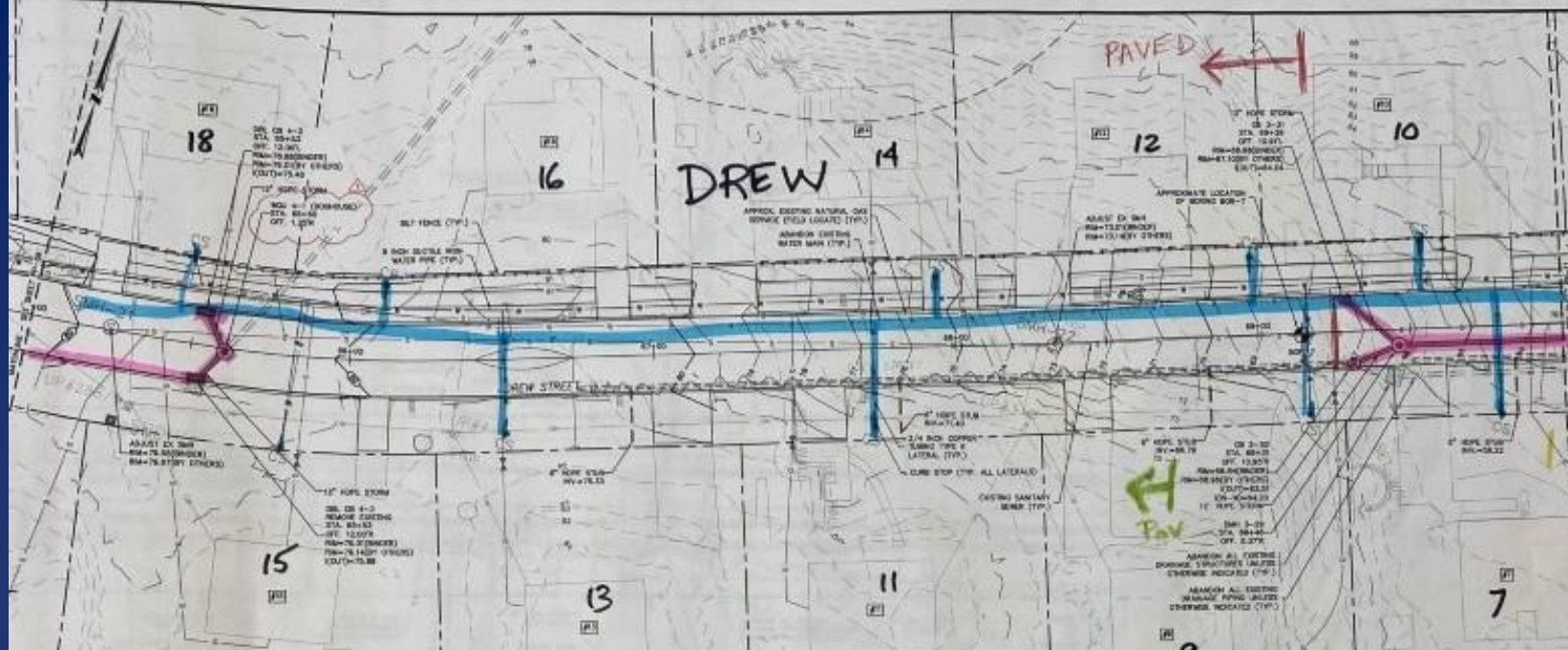
NOTES TO BE ADDED:
 1. PROPERTY LINES FROM STA. 20+00 TO STA. 25+00
 2. DRAINAGE DIVISION AS SHOWN ON THE PLAN
 3. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF PHOENIX STANDARD SPECIFICATIONS FOR CONSTRUCTION OF STREETS AND SANITARIAN SEWER SYSTEMS
 4. APPROVED LOCATIONS OF EXISTING UTILITIES AND PROPOSED WATER MAIN AND SANITARIAN SEWER LINES
 5. APPROVED LOCATIONS OF EXISTING NATURAL GAS MAIN AND SERVICE LINES
 6. APPROVED EXISTING SANITARIAN SEWER MAINS, NATURAL GAS MAINS AND WATER SERVICE LINES ON THE PROPERTY BEING CONSIDERED FOR THIS WORK



ISSUED FOR CONSTRUCTION

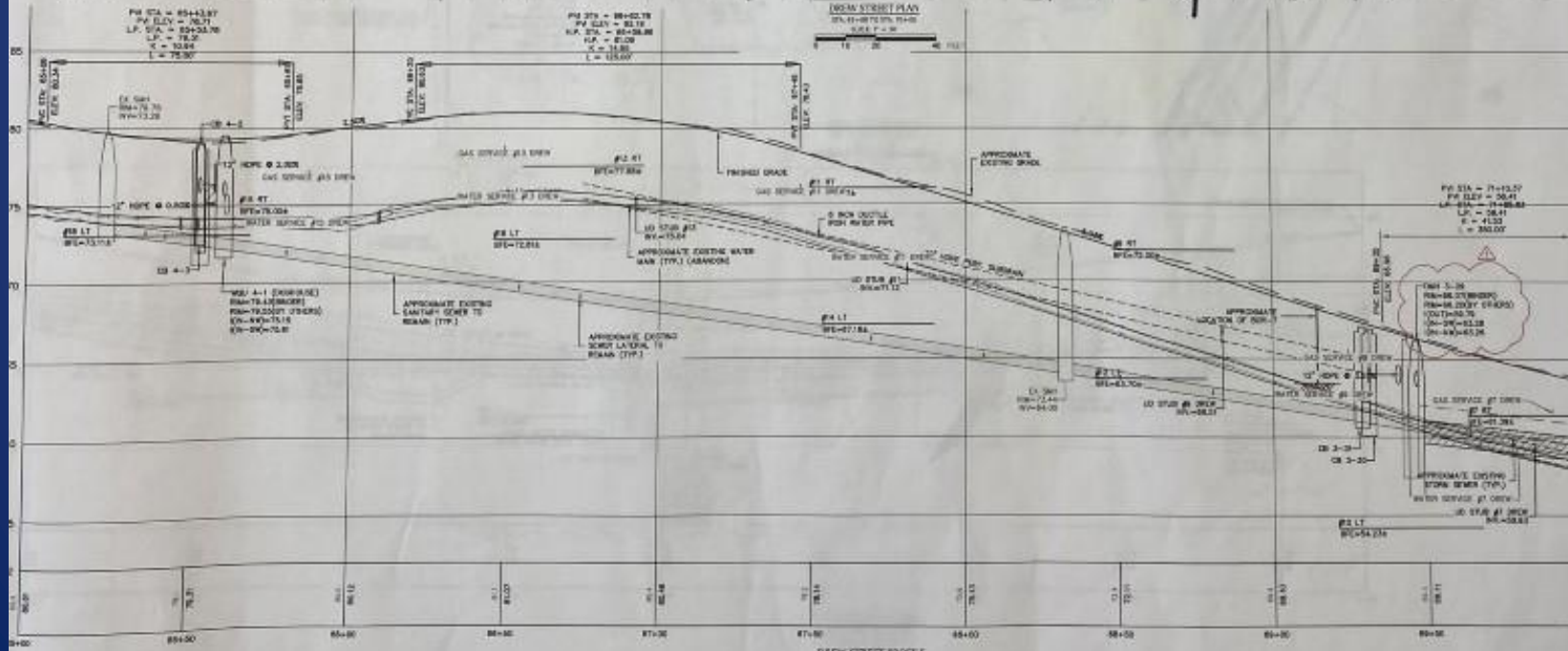


KEY PLAN
SCALE: 1" = 200'



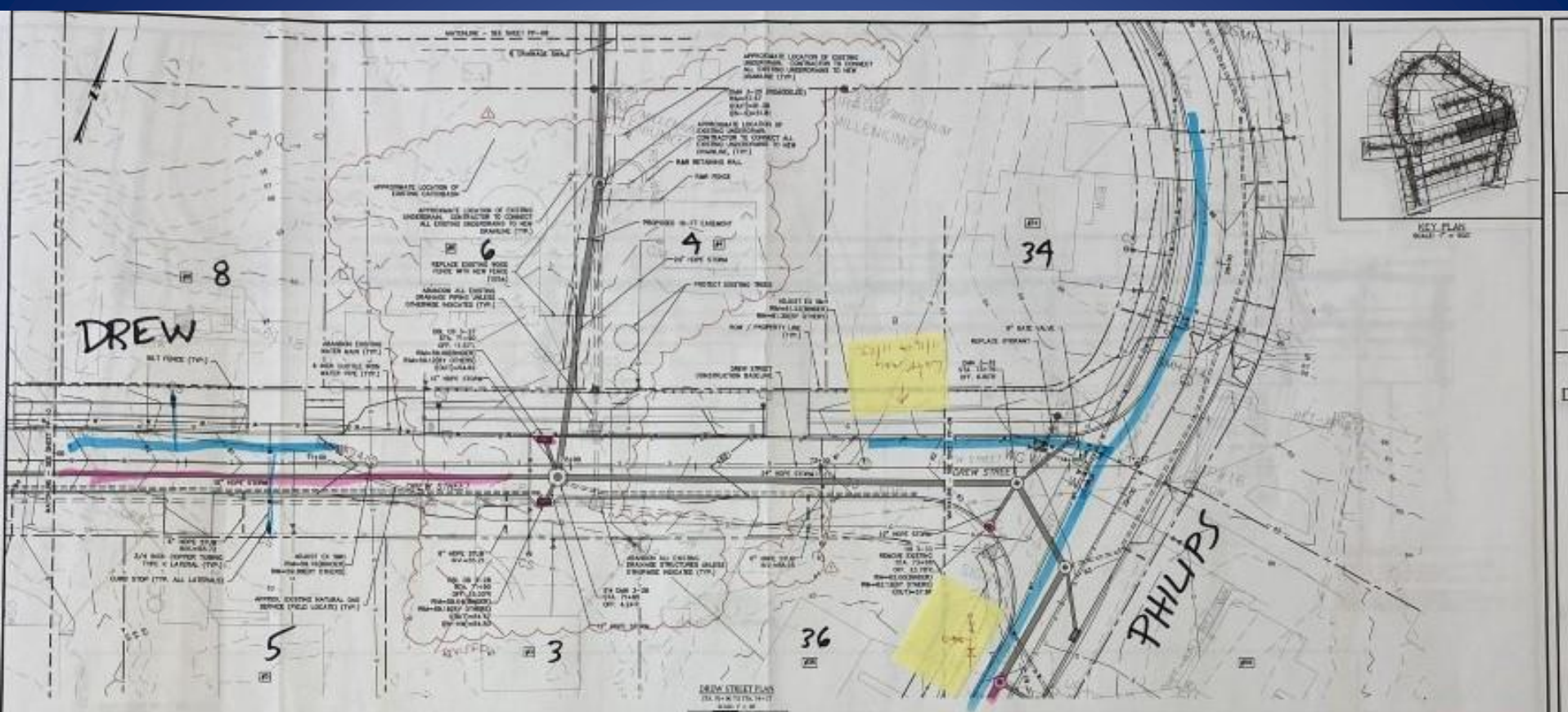
- SUMMARY OF NOTES:**
- 1. CHANGES REQUESTED AS SUBMITTED BY THE PLAN REVIEWER SHALL BE SHOWN BY THE PLAN REVIEWER'S SYMBOLS.
 - 2. APPROVED LOCATIONS OF EXISTING AND PROPOSED WATER MAINS AND WATER SERVICES.
 - 3. APPROVED LOCATIONS OF EXISTING NATURAL GAS MAINS AND SERVICES.
 - 4. APPROVED EXISTING SANITARY SEWER MAINS AND SERVICES.
 - 5. APPROVED EXISTING SANITARY SEWER MAINS AND SERVICES.
 - 6. APPROVED EXISTING SANITARY SEWER MAINS AND SERVICES.
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 - 17. APPROVED EXISTING SANITARY SEWER MAINS AND SERVICES.
 - 18. APPROVED EXISTING SANITARY SEWER MAINS AND SERVICES.

DREW STREET PLAN
SCALE: 1" = 30'



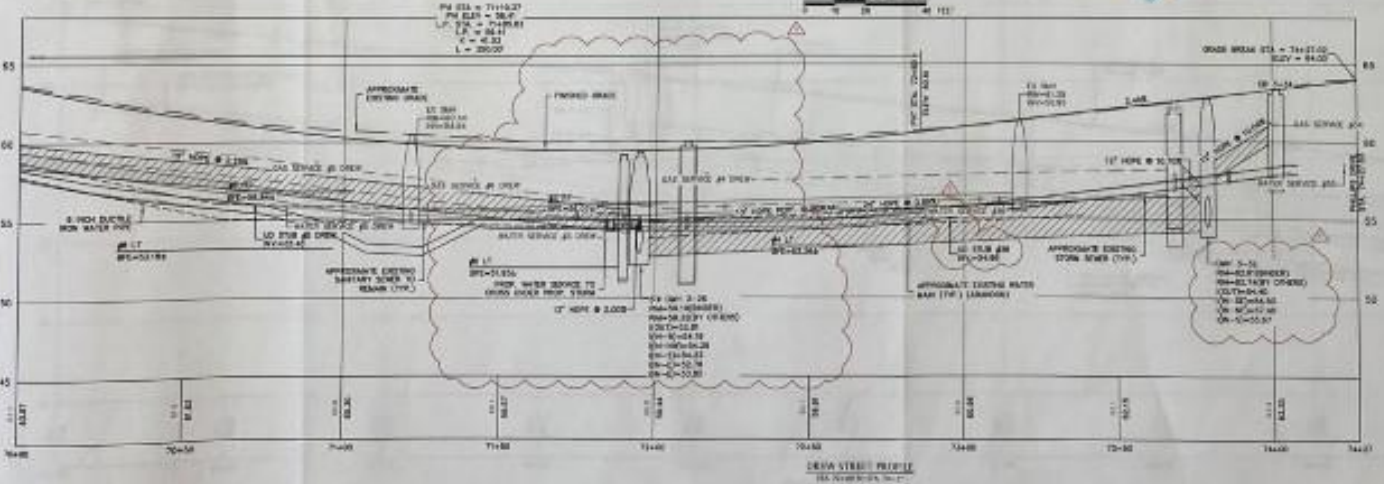
DREW STREET PROFILE
SCALE: 1" = 30'

ISSUED FOR CONSTRUCTION



SUMMARY OF REVISIONS:

- REPLACE SEWER AS SHOWN ON THE PLAN AND/OR PROFILE.
- UPDATE LOCATIONS OF EXISTING AND PROPOSED 12" AND 18" GAS MAINS, SERVICES, AND BRANCHES.
- UPDATE EXISTING SANITARY SEWER SYSTEMS, GAS MAINS AND WATER SERVICES TO BE ON THE PROJECT WHERE ORIGINAL TO BE MAINTAINED.



HORIZ. 1" = 20' VERT. 1" = 10'

ISSUED FOR CONSTRUCTION

Construction Challenges

- Delay in ordering water main pipe due to supply chain issues.
- Rain, rain, and more rain.
- Abnormally high groundwater.
- Existing soils – clays, ledge/rock
- Inaccurate records on existing service connections – water, sewer, and gas.





Dec 19, 2022 1:32:14 PM
Philips Drive
Newburyport, Essex County 01950
Philips Drive Utility Improvements



Jan 4, 2023 12:16:38 PM

Philips Drive

Newburyport, Essex County 01950

CB 1-8



Mar 7, 2023 7:18:39 AM

Philips Drive

Newburyport, Essex County 01950



Mar 7, 2023 8:24:31 AM
Philips Drive
Newburyport, Essex County 01950
Temporary French Drain for Groundwater



Mar 23, 2023 10:48:46 AM

Philips Drive

Newburyport, Essex County 01950

CB 2-11

WORK REMAINING

- Drainage Pipe: 4,963 linear feet (63%)
- Drainage Structures: 34 (41%)
- Water main: 2,424 linear feet (39%)
- Water Services: 45 each (54%)
- Asphalt: 1,872 tons (51%)

WORK REMAINING

Continue installing:

- Drainage structures and piping
- Water main and services:
 - ✓ Water shutdowns will need to take place.
 - ✓ We will provide advanced warning of shutdowns in order to make the necessary connections to your homes and to do the Work.
 - ✓ *Emergency shutdowns may occur but unfortunately these will not have any advanced warnings.*

Green = Drainage
Blue = Water
Orange = Utils complete



WORK REMAINING

Final Phases (after utilities):

- Roadway Binder (asphalt base beneath top course)
- Settling
- Roadway Top Course, berm, sidewalks, and driveways

Approximate Schedule*:

- | | |
|-------------------------------------|-----------------------|
| • Utilities complete | June 2024 |
| • Roadway Binder | July/Aug 2024 |
| • Settling | July 2024-Spring 2025 |
| • Top course, berm, SW's, driveways | Summer 2025 |

* *Weather and construction conditions dependent*

FOUNDATION DRAIN CONNECTIONS

1. The Project was designed to allow high flood prone residents to connect their exterior foundation drains to the City's newly-installed drainage system.
2. The Project includes subdrains in the streets for the majority of the neighborhood. This will lower the groundwater in that area.
3. The City is providing stubs from the subdrain piping in the street for homes that are known to have experienced high groundwater conditions and persistent basement flooding.

FOUNDATION DRAIN CONNECTIONS

What's NOT Allowed

1. Rainwater and groundwater is NOT allowed to be connected to the City's Sanitary Sewer (sewage) System. This includes sump pumps.

City of Newburyport, Code of Ordinances

Sec. 14-57. - Discharge of surface runoff, groundwater prohibited.

No person shall make connection of roof downspouts, exterior foundation drains, areaway drains, or other sources of surface runoff or groundwater to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer.

(Ord. of 7-10-89, Art. III, § 8)

Difference Between Stormwater & Sanitary Sewers

Sanitary Sewer System:

A piping system that transports sewage, typically from homes and buildings, to a sewage treatment facility or other type of treatment system before discharging into the environment. Sewage is what we call the waste stream from sinks, showers, toilets, floor drains.

Also known as:

Sewage System, sewerage system, sanitary drainage system, building drain

Storm Sewer System:

A system that collects stormwater runoff (i.e. rainwater) and transports it in piping or other conveyance system to local water bodies. In some instances the runoff is treated prior to discharge.

Also known as:

Storm drainage, **drainage system**, stormwater management system, or just drain



Credit: City of Barberton, OH

FOUNDATION DRAIN CONNECTIONS

What's NOT Allowed

2. Piping connections from basements to the City's subdrain is NOT ALLOWED, per State Plumbing Code, without a liquid-seal trap.

Excerpt from: 248 CMR 10.00: UNIFORM STATE PLUMBING CODE, latest edition

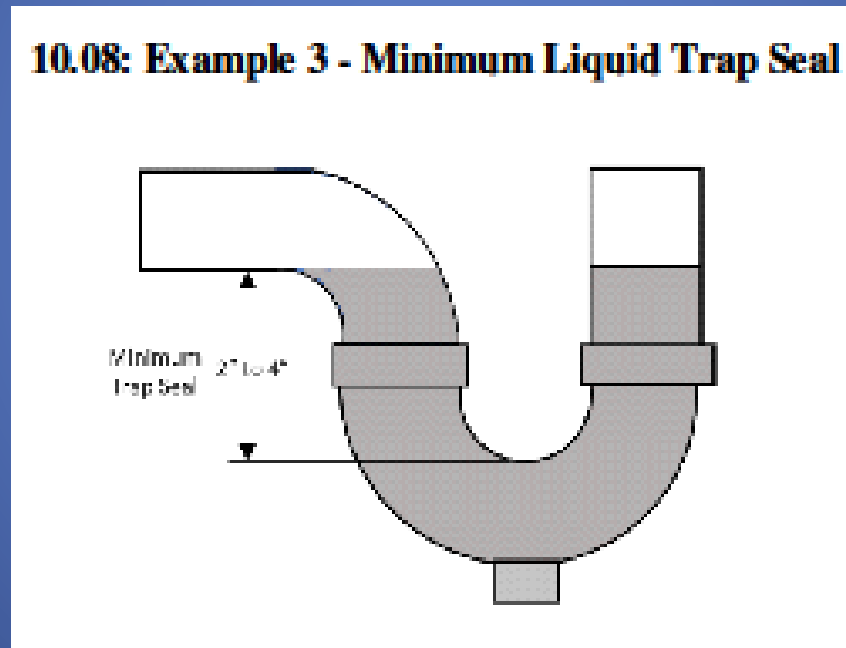
Section 10.02: Basic Principles

(9) Principle 9: Need for Traps in the Plumbing Drainage System. Every fixture directly connected to the drainage system must be equipped with a liquid-seal trap. The drainage and associated vent system must be designed to provide adequate circulation of air in and throughout all piping. Trap seals shall be protected from the dangers of siphonage, leakage, aspiration, momentum, oscillation, back pressure, evaporation, and capillary action under conditions of normal ordinary use.

FOUNDATION DRAIN CONNECTIONS

What's NOT Allowed

Example of a Liquid Trap Seal:



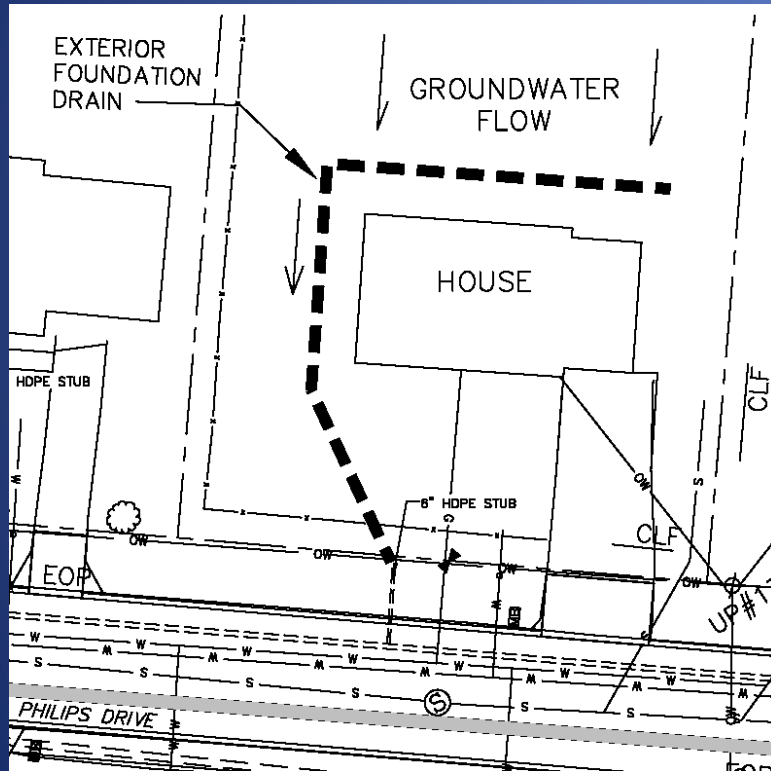
Reference: MA State Plumbing Code

FOUNDATION DRAIN CONNECTIONS

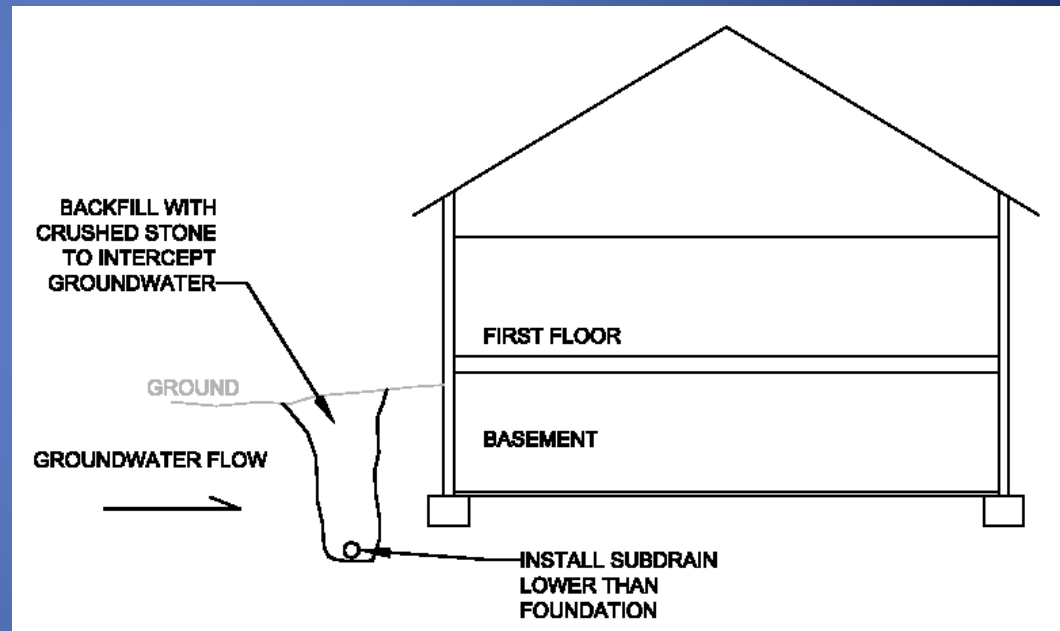
NEXT STEPS:

- We will provide you with the subdrain stub location and depth in front of your house. (Not all homes need one.)
- Homeowners are responsible for making the connections, if they so choose. The Project's contractor will NOT perform these tie ins.
- We will likely hold a separate meeting with homeowners wanting to make the connection so we can discuss further and to answer any questions specific to your home.
- Contact DPS prior to making the connection. A permit with DPS is not required but we must be notified 48- hours in advance so we can schedule someone to observe the work. If any work is needed inside your home, then a permit may be required. Contact the Building Department.
- **For those of you with persistent basement flooding and your sump pump is constantly running, we recommend installing a foundation drain and making the connection.**

TYPICAL EXTERIOR FOUNDATION DRAIN LAYOUT AND SECTION VIEWS



LAYOUT VIEW



SECTION VIEW

Q&A