



# WE ARE BUILDING A BETTER HARVEY

*Integrity . Unity . Pride*

Christopher J. Clark, Mayor  
CITY OF HARVEY

## Addendum 1

Bid Number: 2024-04-12

For

## 154<sup>th</sup> STREET RECONSTRUCTION PROJECT

Date of Bid Advertisement: April 3, 2024

Bid Due Date: April 19, 2024

Bid Due Time: 10:00am Central Time

Revised Bid Due Date: April 26, 2024

Revised Bid Due Time: 10:00am Central Time

City of Harvey

15320 Broadway Avenue

Harvey, IL 60426

Phone: 708-210-5300

Email: [procurement@cityofharveyil.gov](mailto:procurement@cityofharveyil.gov)

# 154<sup>TH</sup> STREET RECONSTRUCTION PROJECT

## Addendum 1

Summary of Addendum 1:

1. Response to Contractor Questions enclosed.
2. Enclosed is the updated demolition plan sheets and updated storm plan and profile sheets.
3. Updated Bid Form with the addition of:
  - a. Tree Root Pruning and Treatment
  - b. Temporary Patching
  - c. The signs broken down to type and pay item of each.
  - d. ASTM C-923 Rubber Boot
  - e. Concrete Washout
  - f. Temporary Construction Entrance
  - g. Sod
4. Update to the Bid Form with changes in quantities to:
  - a. Removing existing light poles and traffic signal bases
  - b. Combined Sewer Removal
  - c. Manholes Type A, 4' Diameter
  - d. Manholes Type A, 6' Diameter
  - e. Storm Sewers, Class A, Type 1, 12", 18", 24" and 36"
5. Attached is the geotechnical report and pavement cores report.
6. Bid Due Date has been revised to Friday, April 26, 2024.



# WE ARE BUILDING A BETTER HARVEY

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## Response to Contractor Questions

Bid Number: 2024-04-12

For

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# 154<sup>TH</sup> STREET RECONSTRUCTION PROJECT

## Response to Contractor Questions

**1. When is the completion date?**

*Constructed in 2024.*

**2. Please give more information on the sizes of the plantings?**

*The sizes are on sheet L1.5. They are either a number 1 container pot or a 4-cell tray.*

**3. Can you give more detail on the electric pole removal? Foundation removal? Conduit / wire removal?**

*Sawcut remaining electrical pole base to be flush with the sidewalk. The wiring has already been removed. Do not need to remove the foundations.*

**4. How is landscape restoration being paid for? What will be required to be replaced (Seed? Sod?). To what extent will the restoration be done in the parkways?**

- a. If landscaping is disturbed during construction then it will need to be replaced.*
- b. Replace with sod.*
- c. Quantities of sod have been added to the bid form.*

**5. Who is doing the layout for the project?**

*City of Harvey will coordinate construction staking.*

**6. Are CAD Files available?**

*CAD files will be given to the awarded contractor if requested.*

**7. What is meant by Washed CA-6?**

*This line item description has been revised to 12" aggregate base course IDOT CA-6.*

**8. Intersections will need to be closed at some point during construction. How many can be closed at the same time?**

*No more than 2 consecutive intersections can be closed at a time.*

**9. How will CCDD Testing Be handled? Has any testing been done?**

*No testing has been done. The contractor is responsible for CCDD testing.*

**10. How will Undercuts in the base (if necessary) be handled?**

*Undercuts in the base are not anticipated at this time. If undercuts are necessary, that may be addressed with a change order. Included in this response is the geotechnical report and pavement cores.*

**11. The binder will be placed in phases and the surface course will be placed at the end in one mobilization?**

*Yes that is anticipated.*

**12. Can we get a cross section of the proposed curb with required reinforcement?**

*The curb with reinforcement is required adjacent to concrete pavement per detail on sheet C-70.*

**13. Who is the "By Others" that are removing the Storm Structures? What extent will this be completed?**

- a. There are no longer removed storm structures by others.*
- b. The demolition plans and proposed storm plans have been revised as part of the addendum.*

**14. Do you have any cores of the existing conditions?**

*The geotechnical report and pavement cores are issued in this addendum.*

**15. What storm structures are to be cleaned?**

*All storm structures within the project limits.*

**16. Does any storm sewer pipe need to be cleaned?**

*No.*

**17. Is the quantity given for the sign panels, correct?**

*The quantity for sign panels has been revised to Each.*

**18. Is Inlet Protection and Silt Fence the only Erosion Control required?**

*Concrete Washout Area has been added to the bid form. Temporary Construction Entrance has been added to the bid form.*

**19. What will be required for Soil Compaction and Testing? Will monitoring be required? Possible pay items?**

*Subgrade to be compacted to 95% proctor under proposed pavement or as approved by the Construction Engineer. This is not the responsibility of the contractor.*

**20. Pay item for structure / water valve adjustments?**

*Added pay item to the bid form.*

**21. Are there any foundations or other buried obstacles that are in the excavation area?**

*Some of the existing road has brick below it. But no other foundations or buried obstacles are known.*

**22. How will contaminated soil be handled if encountered?**

*Contaminated soil must be disposed of according to State and Federal requirements.*

**23. What is required for temporary access? How will it be paid for?**

*Temporary construction entrance has been added as a pay item. Preferred location for temporary construction entrance will be determined at the pre-construction meeting.*

**24. How will tree root pruning and treatment be paid for?**

*A pay item has been added for this.*

**25. How will temporary patching be paid for?**

*A pay item has been added for this.*

**26. Any sidewalk or detectable warnings on the project?**

*No. Any damage to existing sidewalks is to be replaced at the cost of the contractor.*

**27. Is the engineered soil in the bid form for the bumpouts the same as the soil media mix on plan sheet C-77?**

*Yes this is the same. The bid form has been updated to say Soil Media Mix.*

**28. Is there seeding in the rain gardens?**

*No there is no seeding in the rain gardens. Just the plants, rocks and mulch.*

Item no.	Description	Unit	Unit Price	Quantity	Total
<b>GENERAL</b>					
1	MOBILIZATION	L SUM		1	
2	TRAFFIC MAINTENANCE	L SUM		1	
General Subtotal:					
<b>DEMOLITION</b>					
3	CURB & GUTTER REMOVAL	LF		6503	
4	SAWCUT PAVEMENT	LF		1810	
5	CONCRETE REMOVAL	SQ YD		191	
6	SOIL REMOVAL	CU YD		1049	
7	FULL-DEPTH PAVEMENT REMOVAL	SQ YD		23124	
8	REMOVING MANHOLES/CATCH BASINS	EACH		26	
9	REMOVE EXISTING LIGHT POLES AND TRAFFIC SIGNAL BASES	EACH		8	
10	COMBINED SEWER REMOVAL	LF		204	
11	TREE ROOT PRUNING AND TREATMENT	EACH		12	
12	TEMPORARY PATCHING	L SUM		1	
Demolition Subtotal:					
<b>NEW CONSTRUCTION</b>					
<i>Roadway</i>					
13	HOT-MIX ASPHALT SURFACE COURSE, 1.5", N50	TON		1844	
14	HOT-MIX ASPHALT BINDER COURSE, 2.5" N50	TON		3073	
15	12" AGGREGATE BASE COURSE, IDOT CA-6	TON		11064	
16	BITUMINOUS MATERIALS (TACK COAT)	GAL		3319	

17	BITUMINOUS MATERIALS (PRIME COAT)	GAL		8852	
18	B-6.12 CURB & GUTTER (INCL. DEPRESSED)	LF		7656	
19	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD		152	
20	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT		360	
21	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	LF		9340	
22	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	LF		2562	
23	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	LF		475	
24	METAL POST - TYPE A	FOOT		588	
25	SOD	SY		1555	
26	STOP SIGN	EACH		21	
27	SPEED LIMIT	EACH		4	
28	BIKE SIGN	EACH		44	
29	ONE WAY	EACH		14	
30	DO NOT ENTER	EACH		7	
<b>Roadway Subtotal:</b>					
<i>Drainage</i>					
31	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 12 FRAME AND GRATE	EACH		43	
32	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH		22	
33	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH		6	
34	DROP MANHOLE	EACH		4	
35	EXISTING STRUCTURE ADJUSTMENT	EACH		20	
36	ASTM C-923 RUBBER BOOT	EACH		20	
37	STORM SEWER, 8" PVC PIPE	LF		35	
38	STORM SEWERS, CLASS A, TYPE 1, 12"	LF		160	



39	STORM SEWERS, CLASS A, TYPE 1, 18"	LF		912	
40	STORM SEWERS, CLASS A, TYPE 1, 24"	LF		1560	
41	STORM SEWERS, CLASS A, TYPE 1, 36"	LF		160	
<b>Drainage Subtotal:</b>					
<i>Bumpouts</i>					
42	EARTH EXCAVATION AND HAULOFF	CU YD		1785	
43	SOIL MEDIA MIX	CU YD		460	
44	PIPE UNDERDRAINS 4" (SPECIAL)	LF		765	
45	UNDERDRAIN CAPS	EACH		20	
46	UNDERDRAIN CLEANOUT	EACH		10	
47	WOVEN GEOTECHNICAL FABRIC	SQ YD		2350	
48	AGGREGATE BASE COURSE - CA-7	TON		1360	
49	RIPRAP	CU YD		26	
50	River Rock	CU YD		38	
51	Granite Boulders	SF		738	
52	Butterfly Weed	EACH		228	
53	Purple Poppy Mallow	EACH		84	
54	Side-oats Grama	EACH		268	
55	White Tinged Sedge	EACH		367	
56	Common Wood Sedge	EACH		334	
57	Cool as Ice Fescue	EACH		309	
58	Prarie Smoke	EACH		237	
59	Variegated Lilyturf	EACH		396	
60	Prairie Petunia	EACH		167	

61	Aromatic Aster	EACH		64	
<b>Bumpouts Subtotal:</b>					
<i>Erosion Control</i>					
62	INLET PROTECTION	EACH		92	
63	CONCRETE WASHOUT	EACH		1	
64	TEMPORARY CONSTRUCTION ENTRANCE	EACH		1	
65	SILT FENCE	LF		4105	
<b>Erosion Control Subtotal:</b>					
<b>Grand Total:</b>					



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March 20, 2023  
File No. 27076

Mr. Jeffery Ekegren  
The Antero Group, LLVC  
1631 W. Walnut Street, 2nd Floor  
Chicago, IL 60612

Re: Geotechnical Investigation  
154<sup>th</sup> Street  
Harvey, Illinois

Dear Mr. Ekegren:

We are submitting our report for the subsurface investigation completed along 154<sup>th</sup> Street between Ashland Avenue and Lexington Avenue in the City of Harvey, Illinois.

The investigation was requested to determine current subsurface soil and water conditions at select boring locations. The findings of the field investigation and the results of laboratory testing are intended to assist in the planning, design, and construction of the proposed green infrastructure.

#### SCOPE OF THE INVESTIGATION

The field investigation included obtaining 8 borings at the locations requested and as indicated on the enclosed location sketches. The boring locations were established using field taping methods and accuracy.

We auger drilled the 8 borings to depths of 7.5 feet below existing surface elevations. Soil samples were obtained using a split barrel sampler advanced utilizing an automatic SPT hammer. Soil profiles were determined in the field and soil samples returned to our laboratory for additional testing including determination of moisture content. Cohesive soils obtained by split barrel sampling were tested further to determine dry unit weight and unconfined compressive strength.

The results of all field determinations and laboratory testing are included in summary with this report.

#### RESULTS OF THE INVESTIGATION

Enclosed are boring logs indicating the soil conditions encountered at each location. Site surface conditions include pavement materials, vegetation, topsoil and fill soil conditions. The topsoil is classified as dark brown to black silt/clay mixtures with traces of roots usually present.

Fill soil conditions were encountered at each of the borings with the exception of B-5. Composition of the fill includes the presence of silt/clay/sand, topsoil, and silt/clay mixtures extending to depths of 1.0 feet to 3.0 feet at these boring locations. The limits of fill placement

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SOIL BORINGS • SITE INVESTIGATIONS • PAVEMENT INVESTIGATIONS • GEOTECHNICAL ENGINEERING  
TESTING OF • SOIL • ASPHALT • CONCRETE • MORTAR • STEEL

were not determined within the scope of this investigation. Larger debris may also be present within the fill but was not encountered during the investigation.

Underlying natural soil conditions consist primarily of cohesive soils. These are classified as tough to very hard clay/silt mixtures with lesser portions of sand and gravel. A thin seam of non-cohesive soils was also encountered as indicated at boring B-8. These include loose silt/clay mixtures in a very damp condition. Cobbles and boulders may be present within the site soils at any elevation, although none were encountered while drilling.

### SUBSURFACE WATER

The boring logs indicate subsurface water was not encountered in the bore holes at the time of the drilling operations and during the period of these readings. It is expected that fluctuations from the water levels recorded will occur over a period of time due to variations in rainfall, temperature, subsurface soil conditions, soil permeability and other factors not evident at the time of the water level measurements.

### SOIL INFILTRATION RATES

We understand the proposed new green infrastructure improvements may include some infiltration planned at an approximate depth of 4.0 feet below existing grades. Grain-size analysis testing was performed on selected samples of natural soils encountered at each of the borings to determine USDA soil classifications and estimated infiltration rates. The grain size analysis determinations and estimated infiltration rates are shown in the below table:

Boring	Depth	USDA Soil Classification	Estimated Infiltration Rate
B-1	3.5' to 5.0'	Silt Loam	0.13 inches per hour
B-2	3.5' to 5.0'	Silty Clay Loam	0.19 inches per hour
B-3	3.5' to 5.0'	Silty Clay	0.07 inches per hour
B-4	3.5' to 5.0'	Clay Loam	0.03 inches per hour
B-5	3.5' to 5.0'	Silty Clay	0.07 inches per hour
B-6	3.5' to 5.0'	Silty Clay Loam	0.19 inches per hour
B-7	3.5' to 5.0'	Silty Clay	0.07 inches per hour
B-8	3.5' to 5.0'	Silty Clay	0.07 inches per hour

Estimated design infiltration rates were taken from  
Table 3-1 of City of Chicago Stormwater Ordinance Manual.

### CONCLUSION

The information within this report is intended to provide initial information concerning subsurface soil and water conditions on the site. Variations in subsurface conditions are expected to be present between boring locations due to naturally changing and filled soil conditions.

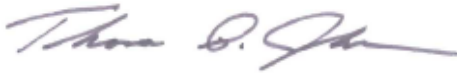
Our understanding of the proposed improvements is based on limited information available to us at the writing of this report. The findings of the investigation and the recommendations

presented are not considered applicable to significant changes in the scope of the improvements or applicable to alternate site uses. We recommend that proposed landscape plans be reviewed by our office to determine if additional considerations are necessary to address anticipated subsurface conditions.

If you have any questions concerning the findings or recommendations presented in this report, please let me know.

Very truly yours,

SOIL AND MATERIAL CONSULTANTS, INC.



Thomas P. Johnson, P.E.  
President



David Rak, E.I.T.  
Project Engineer

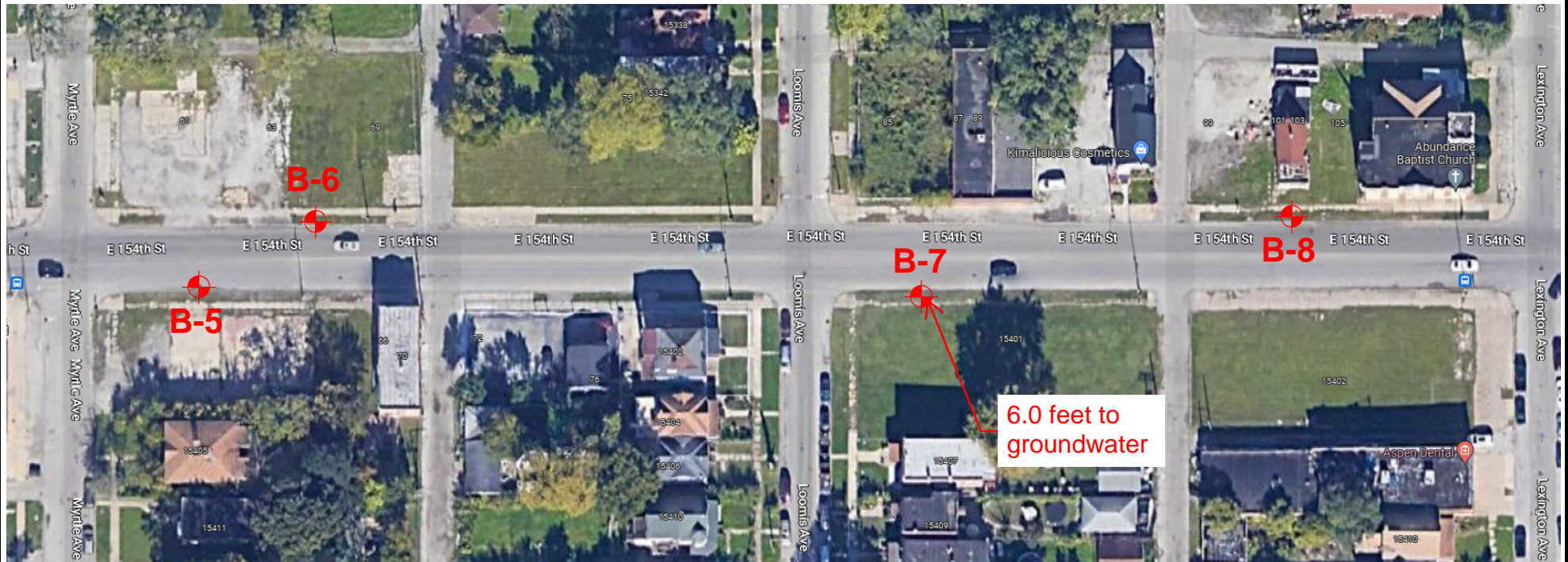
TPJ:ek  
Enc.

cc: Ms. Liz Chipp, P.E. – The Anterio Group, LLC

All other borings more than 7.5 feet to groundwater



<b>SMC</b>		SOIL AND MATERIAL CONSULTANTS, INC.	<b>LOCATION SKETCH</b>
Client:	THE ANTERO GROUP		
Project:	154 <sup>TH</sup> STREET		
Location:	HARVEY, ILLINOIS		
File No.	27076	Date:	3-15-23
		Scale:	NONE



<b>SMC</b>	SOIL AND MATERIAL CONSULTANTS, INC.	<b>LOCATION SKETCH</b>
	Client:	THE ANTERO GROUP
Project:	154 <sup>TH</sup> STREET	
Location:	HARVEY, ILLINOIS	
File No.	27076	Date: 3-15-23
		Scale: NONE



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# SOIL BORING LOG 1

Logged By: CS Page: 1 of 1

Client: The Antero Group

File No. 27076 Date Drilled: 3/15/23

Reference: 154th Street  
Harvey, IL

**Comments:**

depth, ft.	Equipment: <input checked="" type="checkbox"/> D - 25 <input type="checkbox"/> D - 50 <input type="checkbox"/> Hand Auger <input type="checkbox"/> Other
	<b>CLASSIFICATION</b>
	Elevation Existing Surface
1	Black silt, some clay & sand, trace gravel damp - Fill
2	Brown-gray clay, some silt, trace sand & gravel, damp, tough to very hard
3	
4	
5	
6	
7	
8	End of Boring
9	
10	

standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	○ unconfined compressive strength, tons/sq. ft. ● penetrometer reading, tons/sq. ft. 1.0 2.0 3.0 4.0 × standard penetration "N", blows/ft. △ moisture content, % 10 20 30 40			
×	△	γ	○	10	20	30	40
	18.2				△		
4	24.7	99.5	1.7	×	●	○	△
6	21.9	105.0	3.2	×		△	○ ●
23	13.6	122.7	10.0+		△	×	○ ● 10:04

Water encountered at dry feet during drilling operations (W.D.)  
 Water recorded at dry feet on completion of drilling operations (A.D.)  
 Water recorded at feet hours after completion of drilling operations (A.D.)





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# SOIL BORING LOG 2

Logged By: CS Page: 1 of 1

Client: The Antero Group

File No. 27076 Date Drilled: 3/15/23

Reference: 154th Street  
Harvey, IL

**Comments:**

depth, ft.	Equipment: <input checked="" type="checkbox"/> D - 25 <input type="checkbox"/> D - 50 <input type="checkbox"/> Hand Auger <input type="checkbox"/> Other
	<b>CLASSIFICATION</b>
	Elevation Existing Surface
1	Black silt, some clay, trace sand & roots, damp (topsoil) - Fill
2	Brown-gray to brown clay, some silt, trace sand & gravel, damp, very tough to hard
5	End of Boring

standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	○ unconfined compressive strength, tons/sq. ft. ● penetrometer reading, tons/sq. ft. 1.0 2.0 3.0 4.0 × standard penetration "N", blows/ft. △ moisture content, % 10 20 30 40			
×	△	γ	○	10	20	30	40
	23.9					△	
6	23.0	101.0	2.1	×		△ ●	
9	17.6	115.8	4.5	×		△	○ 4.5
18	13.6					△ ×	● 4.5*

Water encountered at dry feet during drilling operations (W.D.)  
 Water recorded at dry feet on completion of drilling operations (A.D.)  
 Water recorded at feet hours after completion of drilling operations (A.D.)



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**SOIL BORING LOG** 3

Logged By: CS Page: 1 of 1

Client: The Antero Group

File No. 27076 Date Drilled: 3/15/23

Reference: 154th Street  
Harvey, IL

Comments:

depth, ft.	Equipment: <input checked="" type="checkbox"/> D - 25 <input type="checkbox"/> D - 50 <input type="checkbox"/> Hand Auger <input type="checkbox"/> Other
	CLASSIFICATION
	Elevation Existing Surface
1	Black silt, some clay, trace sand & roots, very damp (topsoil) - Fill
2	Brown-gray to brown clay, some silt, trace sand & gravel, damp, very tough
4	Brown-gray to brown clay, some silt, trace sand & gravel, damp, tough to hard
7	Gray clay, some silt, trace sand & gravel, damp, very hard
8	End of Boring

standard penetration	moisture content	dry unit weight lbs./cu. ft.	unconfined compressive strength	○ unconfined compressive strength, tons/sq. ft. ● penetrometer reading, tons/sq. ft. 1.0 2.0 3.0 4.0 × standard penetration "N", blows/ft. △ moisture content, % 10 20 30 40			
×	△	γ	○	10	20	30	40
	27.4					△	
7	22.0	104.4	2.8	×		△ ○	
	29.6	94.7	1.1		●		△
6	19.7	108.7	4.2	×		△ ●	○
17	11.9	124.8	9.6		△	×	○

Water encountered at dry feet during drilling operations (W.D.)  
 Water recorded at dry feet on completion of drilling operations (A.D.)  
 Water recorded at feet hours after completion of drilling operations (A.D.)



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**SOIL BORING LOG** \_\_\_\_\_ 4 \_\_\_\_\_

Logged By: CS Page: 1 of 1

Client: The Antero Group

File No. 27076 Date Drilled: 3/15/23

Reference: 154th Street  
Harvey, IL

**Comments:**

depth, ft.	Equipment: <input checked="" type="checkbox"/> D - 25 <input type="checkbox"/> D - 50 <input type="checkbox"/> Hand Auger <input type="checkbox"/> Other
	<b>CLASSIFICATION</b>
	Elevation Existing Surface

depth, ft.	CLASSIFICATION	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	○ unconfined compressive strength, tons/sq. ft. ● penetrometer reading, tons/sq. ft. 1.0 2.0 3.0 4.0 X standard penetration "N", blows/ft. Δ moisture content, % 10 20 30 40				
1	Black-dark brown silt, some clay, trace sand & gravel, damp - Fill		26.9							
2	Brown-gray to brown clay, some silt, trace sand & gravel, damp, tough to very tough									
3		6	24.7	98.1	1.9	X	●	Δ		
4										
5		7	24.2	102.4	3.0	X	●	Δ	○	
6										
7										
8	End of Boring	13	21.6	106.0	2.8	X		Δ	○	●
9										
10										

Water encountered at dry feet during drilling operations (W.D.)  
 Water recorded at dry feet on completion of drilling operations (A.D.)  
 Water recorded at feet hours after completion of drilling operations (A.D.)



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**SOIL BORING LOG** 5

Logged By: CS Page: 1 of 1

Client: The Antero Group

File No. 27076 Date Drilled: 3/15/23

Reference: 154th Street  
Harvey, IL

Comments:

depth, ft.	Equipment: <input checked="" type="checkbox"/> D - 25 <input type="checkbox"/> D - 50 <input type="checkbox"/> Hand Auger <input type="checkbox"/> Other
	<b>CLASSIFICATION</b>
	Elevation Existing Surface
1	Bituminous concrete - 3.0" Brick/cobblestone - 3.0" Crushed gravel & cinders - 8.0"
2	Brown-gray to brown clay, some silt, trace sand & gravel, damp, hard
3	
4	Brown-gray to brown clay, some silt, trace sand & gravel, damp, tough to very tough
5	
6	
7	
8	End of Boring
9	
10	

standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	○ unconfined compressive strength, tons/sq. ft. ● penetrometer reading, tons/sq. ft. 1.0 2.0 3.0 4.0 × standard penetration "N", blows/ft. △ moisture content, % 10 20 30 40			
×	△	γ	○	10	20	30	40
8	18.3	113.9	4.8	×	△		● 4.8 ○
5	23.1	104.0	1.5	×	○	△	
12	16.6	108.1	2.9	×	△	○	

Water encountered at dry feet during drilling operations (W.D.)  
 Water recorded at dry feet on completion of drilling operations (A.D.)  
 Water recorded at feet hours after completion of drilling operations (A.D.)



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# SOIL BORING LOG 6

Logged By: CS Page: 1 of 1

Client: The Antero Group

File No. 27076 Date Drilled: 3/15/23

Reference: 154th Street  
Harvey, IL

**Comments:**

depth, ft.	Equipment: <input checked="" type="checkbox"/> D - 25 <input type="checkbox"/> D - 50 <input type="checkbox"/> Hand Auger <input type="checkbox"/> Other
	<b>CLASSIFICATION</b>
	Elevation Existing Surface
1	Black silt, some clay, trace sand, roots & gravel, damp (topsoil) - Fill
2	Dark brown-black-brown clay, some silt, trace sand & gravel, damp, tough - Fill
3	Brown-gray to brown clay, some silt, trace sand & gravel, damp, very tough to hard
4	
5	
6	
7	
8	End of Borint
9	
10	

standard penetration	moisture content	dry unit weight lbs./cu. ft.	unconfined compressive strength				
X	Δ	γ	O	1.0	2.0	3.0	4.0
				○ unconfined compressive strength, tons/sq. ft. ● penetrometer reading, tons/sq. ft. X standard penetration "N", blows/ft. Δ moisture content, %			
				10	20	30	40
	27.6					Δ	
6	25.6	97.3	1.7	X	○	Δ	●
12	23.9	103.1	2.3	X	●	Δ	
23	11.9	127.4	7.1		Δ	X	○ <sup>7.1</sup>

Water encountered at dry feet during drilling operations (W.D.)  
 Water recorded at dry feet on completion of drilling operations (A.D.)  
 Water recorded at feet hours after completion of drilling operations (A.D.)



8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

**SOIL BORING LOG** 7

Logged By: CS Page: 1 of 1

Client: The Antero Group

File No. 27076 Date Drilled: 3/15/23

Reference: 154th Street  
Harvey, IL

Comments:

Equipment:  D - 25  D - 50  Hand Auger  Other

**CLASSIFICATION**

Elevation Existing Surface

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	unconfined compressive strength, tons/sq. ft.			
					1.0	2.0	3.0	4.0
					standard penetration "N", blows/ft.			
					moisture content, %			
					10	20	30	40
1-2								
3-4	7	26.5			X		△	
5-6	6	24.2	101.9	2.1	X		●	
7-8	19	11.1	124.7	9.2		△	X	○
8-10								9.2

Water encountered at dry feet during drilling operations (W.D.)  
 Water recorded at dry feet on completion of drilling operations (A.D.)  
 Water recorded at feet hours after completion of drilling operations (A.D.)



8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

**SOIL BORING LOG** \_\_\_\_\_ 8 \_\_\_\_\_

Logged By: CS Page: 1 of 1

Client: The Antero Group

File No. 27076 Date Drilled: 3/15/23

Reference: 154th Street  
Harvey, IL

**Comments:**

depth, ft.	Equipment: <input checked="" type="checkbox"/> D - 25 <input type="checkbox"/> D - 50 <input type="checkbox"/> Hand Auger <input type="checkbox"/> Other
	<b>CLASSIFICATION</b>
	Elevation Existing Surface
1	Black silt, some clay, trace sand, gravel & cinders, damp - Fill
2	Brown-gray to brown clay, some silt, trace sand & gravel, damp, tough to very tough
3	
4	
5	
6	Brown-gray silt, some clay, trace sand & gravel, very damp, loose
7	Brown-gray clay, some silt, trace sand & gravel, damp, hard
8	End of Boring
9	
10	

standard penetration	moisture content	dry unit weight lbs./cu. ft.	unconfined compressive strength	<input type="checkbox"/> unconfined compressive strength, tons/sq. ft. <input checked="" type="checkbox"/> penetrometer reading, tons/sq. ft. 1.0 2.0 3.0 4.0 <input checked="" type="checkbox"/> standard penetration "N", blows/ft. <input checked="" type="checkbox"/> moisture content, % 10 20 30 40			
X	Δ	γ	O				
	26.0					Δ	
5	26.0	94.7	1.6	X	●	Δ	
8	23.4	103.0	2.6	X		Δ	○
14	12.5	126.3	7.2		X	Δ	1.7 ○

Water encountered at dry feet during drilling operations (W.D.)  
 Water recorded at dry feet on completion of drilling operations (A.D.)  
 Water recorded at feet hours after completion of drilling operations (A.D.)

# GENERAL NOTES

## SAMPLE CLASSIFICATION

Soil sample classification is based on the Unified Soil Classification System, the Standard Practice for Description and Identification Soils (Visual-Manual Procedure), ASTM D-2488, the Standard Test Method for Classification of Soils for Engineering Purposes, ASTM D-2487 (when applicable), and the modifiers noted below.

### CONSISTENCY OF COHESIVE SOILS

Term	Qu-tons.sq.ft.	N (unreliable)
Very soft	0.00 – 0.25	0 – 2
Soft	0.26 – 0.49	3 – 4
Stiff	0.50 – 0.99	5 – 8
Tough	1.00 – 1.99	9 – 15
Very Tough	2.00 – 3.99	16 – 30
Hard	4.00 – 7.99	30 +
Very Hard	8.00 +	

### RELATIVE DENSITY OF GRANULAR SOILS

Term	N – blows/foot
Very Loose	0 – 4
Loose	5 – 9
Medium Dense	10 – 29
Dense	30 – 49
Very Dense	50 +

### IDENTIFICATION AND TERMINOLOGY

Term	Size Range
Boulder	over 8 in.
Cobble	3 in. to 8 in.
Gravel - coarse	1 in. to 3 in.
- medium	3/8 in. to 1 in.
- fine	#4 sieve to 3/8 in.
Sand - coarse	#10 sieve to #4 sieve
- medium	#40 sieve to #10 sieve
- fine	#200 sieve to #40 sieve
Silt	0.002 mm to #200 sieve
Clay	smaller than 0.002mm

### Modifying Term                      Percent by Weight

Trace	1 – 10
Little	11 – 20
Some	21 – 35
And	36 – 50

### Moisture Content

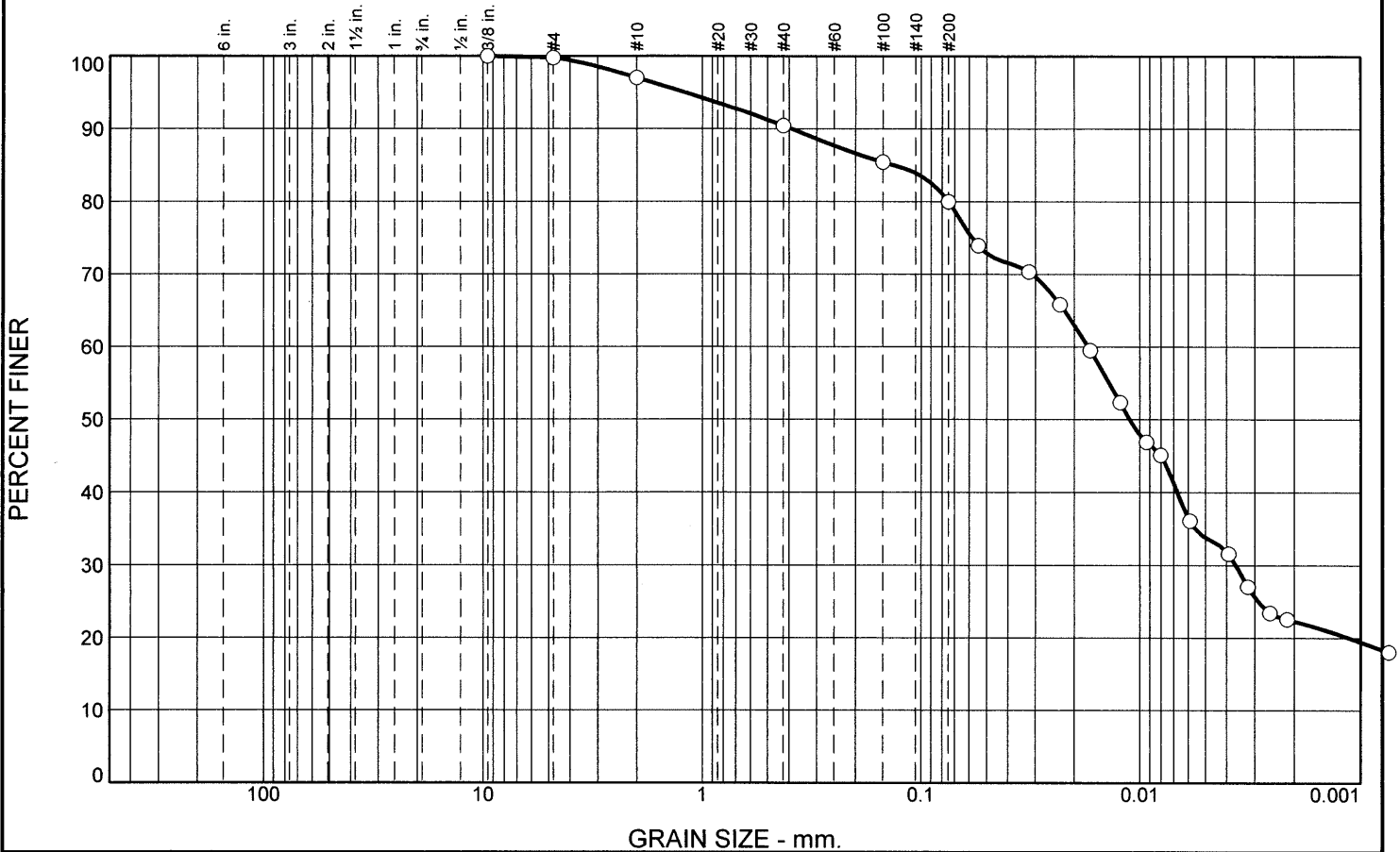
Dry  
 Damp  
 Very Damp  
 Saturated

### DRILLING, SAMPLING & SOIL PROPERTY SYMBOLS

CF	- Continuous Flight Auger
HS	- Hollow Stem Auger
HA	- Hand Auger
RD	- Rotary Drilling
AX	- Rock Core, 1-3/16 in. diameter
BX	- Rock Core, 1-5/8 in. diameter
NX	- Rock Core, 2-1/8 in. diameter
S	- Sample Number
T	- Type of Sample
J	- Jar
AS	- Auger Sample
SS	- Split Spoon (2 in. O.D. with 1-3/8 in. I.D.)
ST	- Shelby Tube (2 in. O.D. w/ith 1-7/8 in. I. D.)
R	- Recovery Length, in.
B	- Blows/6 in. interval, Standard Penetration Test (SPT)
N	- Blows/foot to drive 2 in. O.D. split-spoon sampler with 140 lb. hammer falling 30 in., (STP)
Pen.	- Pocket Penetrometer readings, tons/sq.ft.
W	- Water Content, % dry weight
Uw	- Dry Unit Weight of soil, lbs./cu.ft.
Qu	- Unconfined Compressive Strength, tons/sq.ft.
Str	- % Strain at Qu.
WL	- Water Level
WD	- While Drilling
AD	- After Drilling
DCI	- Dry Cave-in.
WCI	- Wet Cave-in.
LL	- Liquid Limit, %
PL	- Plastic Limit, %
PI	- Plasticity Index (LL-PL)
LI	- Liquidity Index [(W-PL)/PI]



# Particle Size Distribution Report



% Stones	% +3"	% Gravel			% Sand					% Silt		% Clay
		Coarse	Medium	Fine	V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Fine	
0.0	0.0	0.0	0.2	2.8	2.8	3.0	3.5	4.2	10.6	9.9	40.7	22.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	99.8		
#10	97.0		
#40	90.4		
#100	85.4		
#200	80.0		

**Material Description**

Silt Loam

**Atterberg Limits**

PL=                      LL=                      PI=

**Coefficients**

D<sub>90</sub>= 0.3926              D<sub>85</sub>= 0.1339              D<sub>60</sub>= 0.0173

D<sub>50</sub>= 0.0111              D<sub>30</sub>= 0.0036              D<sub>15</sub>=

D<sub>10</sub>=                      C<sub>u</sub>=                      C<sub>c</sub>=

**Classification**

USCS=                      AASHTO=

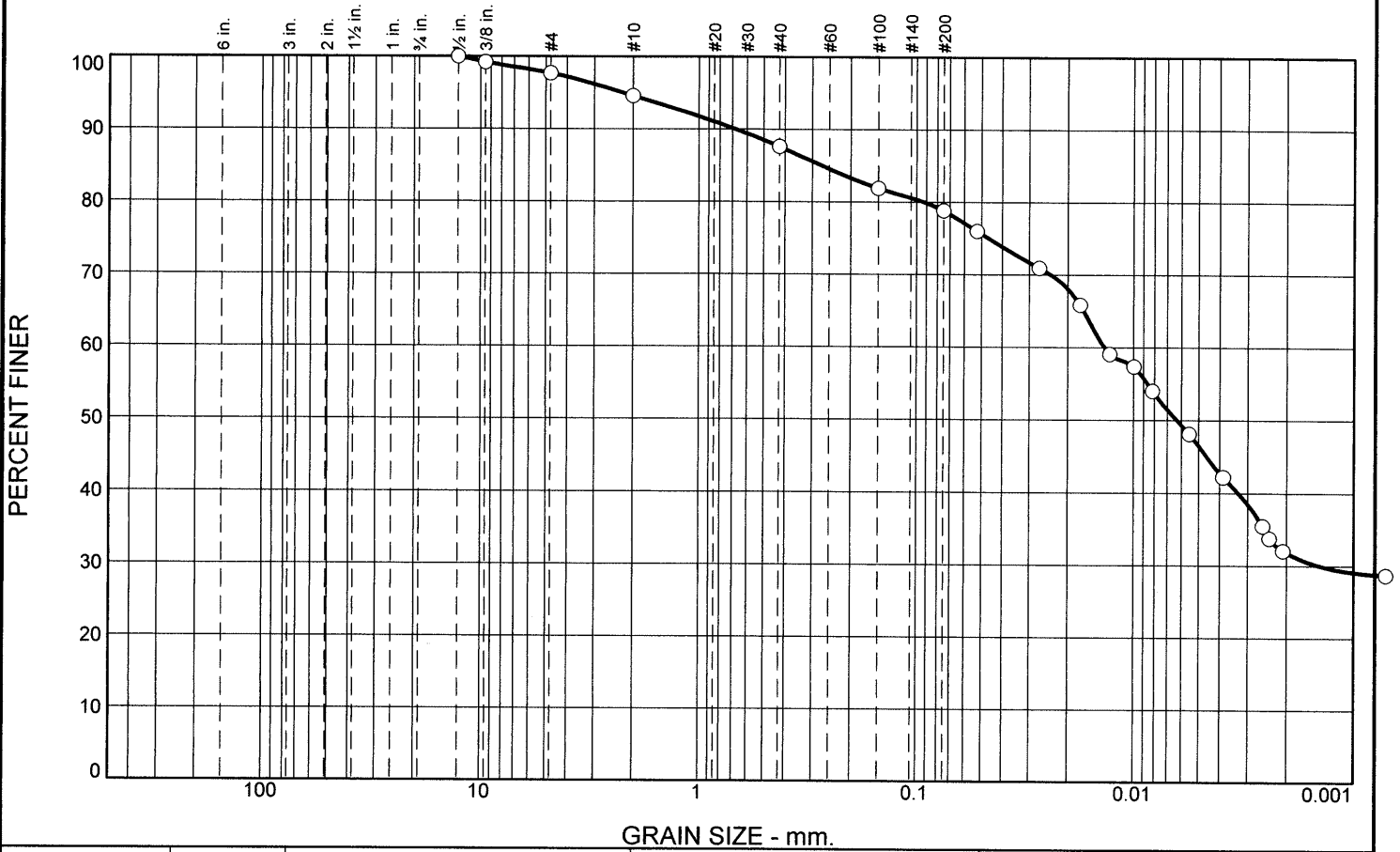
  

**Remarks**

\* (no specification provided)

**Location:** B-1                      **Sample Number:** 3                      **Depth:** 3.5' - 5.0'                      **Date:**

# Particle Size Distribution Report



GRAIN SIZE - mm.

% Stones	% +3"	% Gravel			% Sand					% Silt		% Clay
		Coarse	Medium	Fine	V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Fine	
0.0	0.0	0.0	2.3	3.1	2.9	3.2	4.0	4.2	4.7	7.5	36.3	31.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2	100.0		
3/8	99.2		
#4	97.7		
#10	94.6		
#40	87.6		
#100	81.9		
#200	78.8		

\* (no specification provided)

**Material Description**

Silty Clay Loam

**Atterberg Limits**

PL=                      LL=                      PI=

**Coefficients**

D<sub>90</sub>= 0.6788      D<sub>85</sub>= 0.2716                      D<sub>60</sub>= 0.0136  
D<sub>50</sub>= 0.0063      D<sub>30</sub>= 0.0014                      D<sub>15</sub>=  
D<sub>10</sub>=                      C<sub>u</sub>=                                      C<sub>c</sub>=

**Classification**

USCS=                      AASHTO=

**Remarks**

**Location:** B-2                      **Depth:** 3.5' - 5.0'

**Sample Number:** 3

**Date:**



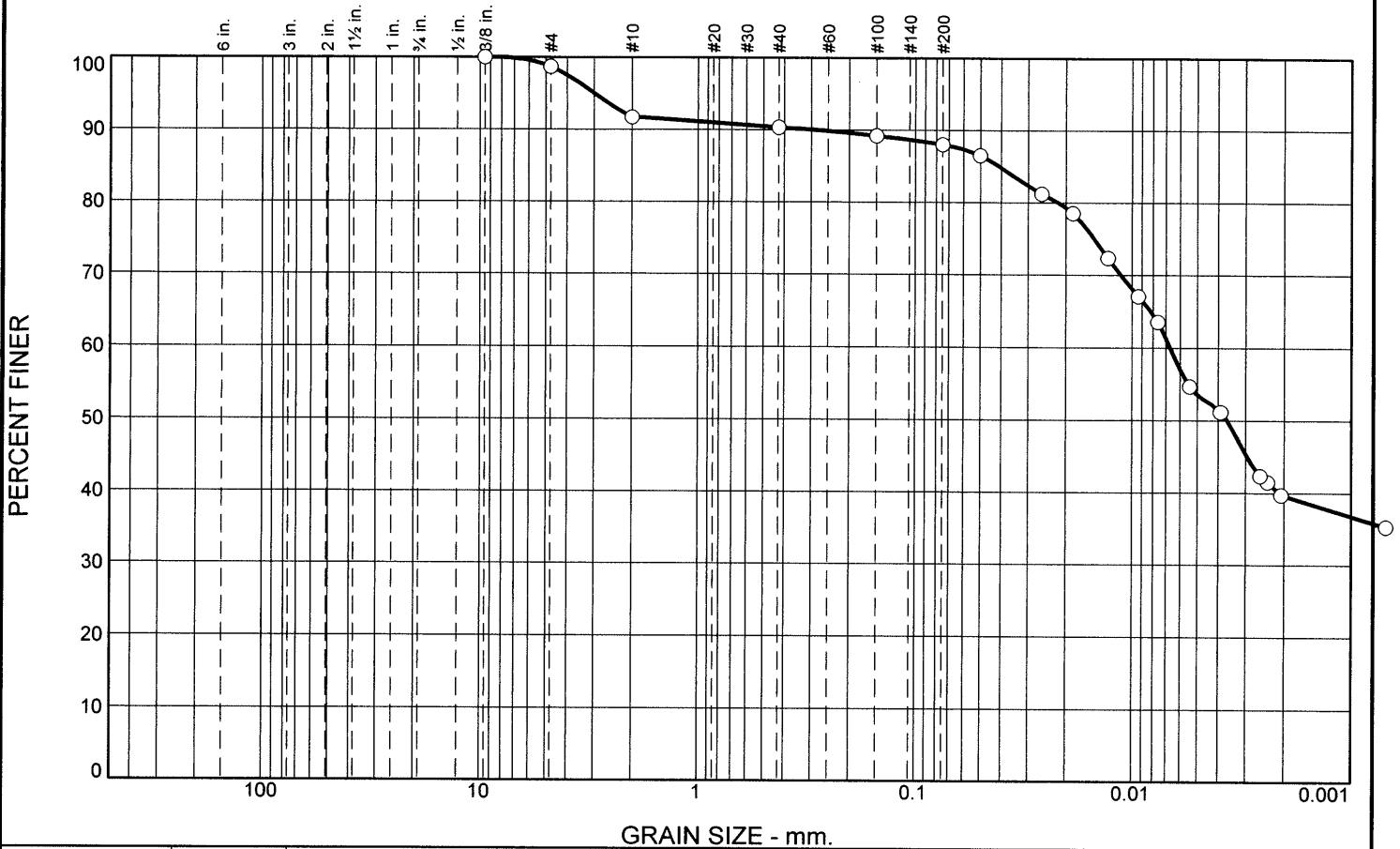
**Client:** The Antero Group

**Project:** 154th Street  
Harvey, IL

**Project No:** 27076

**Figure**

# Particle Size Distribution Report



% Stones	% +3"	% Gravel			% Sand						% Silt		% Clay
		Coarse	Medium	Fine	V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Fine		
0.0	0.0	0.0	1.3	7.0	0.6	0.6	0.7	1.2	2.1	7.2	39.7	39.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	98.7		
#10	91.7		
#40	90.3		
#100	89.2		
#200	88.0		

**Material Description**

Silty Clay

PL=                      **Atterberg Limits**                      PI=

LL=                      **Coefficients**                      D<sub>60</sub>= 0.0067

D<sub>90</sub>= 0.2917                      D<sub>85</sub>= 0.0409                      D<sub>15</sub>=

D<sub>50</sub>= 0.0037                      D<sub>30</sub>=                      C<sub>c</sub>=

D<sub>10</sub>=                      C<sub>u</sub>=

USCS=                      **Classification**                      AASHTO=

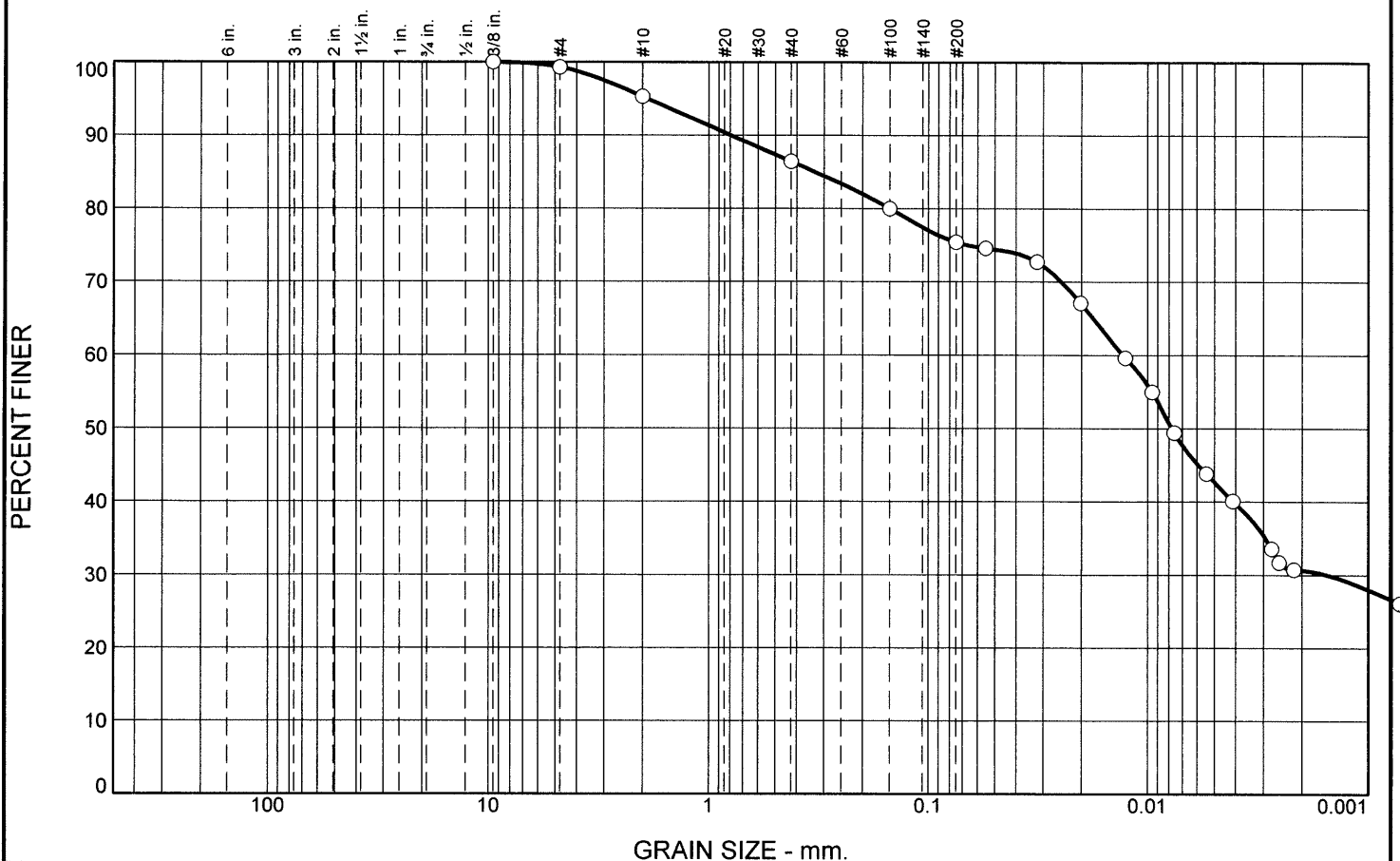
**Remarks**

\* (no specification provided)

Location: B-3                      Sample Number: 3                      Depth: 3.5' - 5.0'                      Date:

<b>SOIL AND MATERIAL CONSULTANTS, INC.</b>	<b>Client:</b> The Antero Group <b>Project:</b> 154th Street Harvey, IL <b>Project No:</b> 27076	<b>Figure</b>
--------------------------------------------	-----------------------------------------------------------------------------------------------------------	---------------

# Particle Size Distribution Report



GRAIN SIZE - mm.

% Stones	% +3"	% Gravel			% Sand					% Silt		% Clay
		Coarse	Medium	Fine	V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Fine	
0.0	0.0	0.0	0.7	4.0	4.0	4.0	3.9	6.4	2.6	7.4	36.3	30.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	99.3		
#10	95.3		
#40	86.4		
#100	80.0		
#200	75.4		

\* (no specification provided)

**Material Description**

Clay Loam

**Atterberg Limits**

PL=                      LL=                      PI=

**Coefficients**

D<sub>90</sub>= 0.7969      D<sub>85</sub>= 0.3317      D<sub>60</sub>= 0.0129  
D<sub>50</sub>= 0.0078      D<sub>30</sub>= 0.0015      D<sub>15</sub>=  
D<sub>10</sub>=                      C<sub>u</sub>=                      C<sub>c</sub>=

**Classification**

USCS=                      AASHTO=

**Remarks**

**Location:** B-4

**Sample Number:** 3

**Depth:** 3.5' - 5.0'

**Date:**



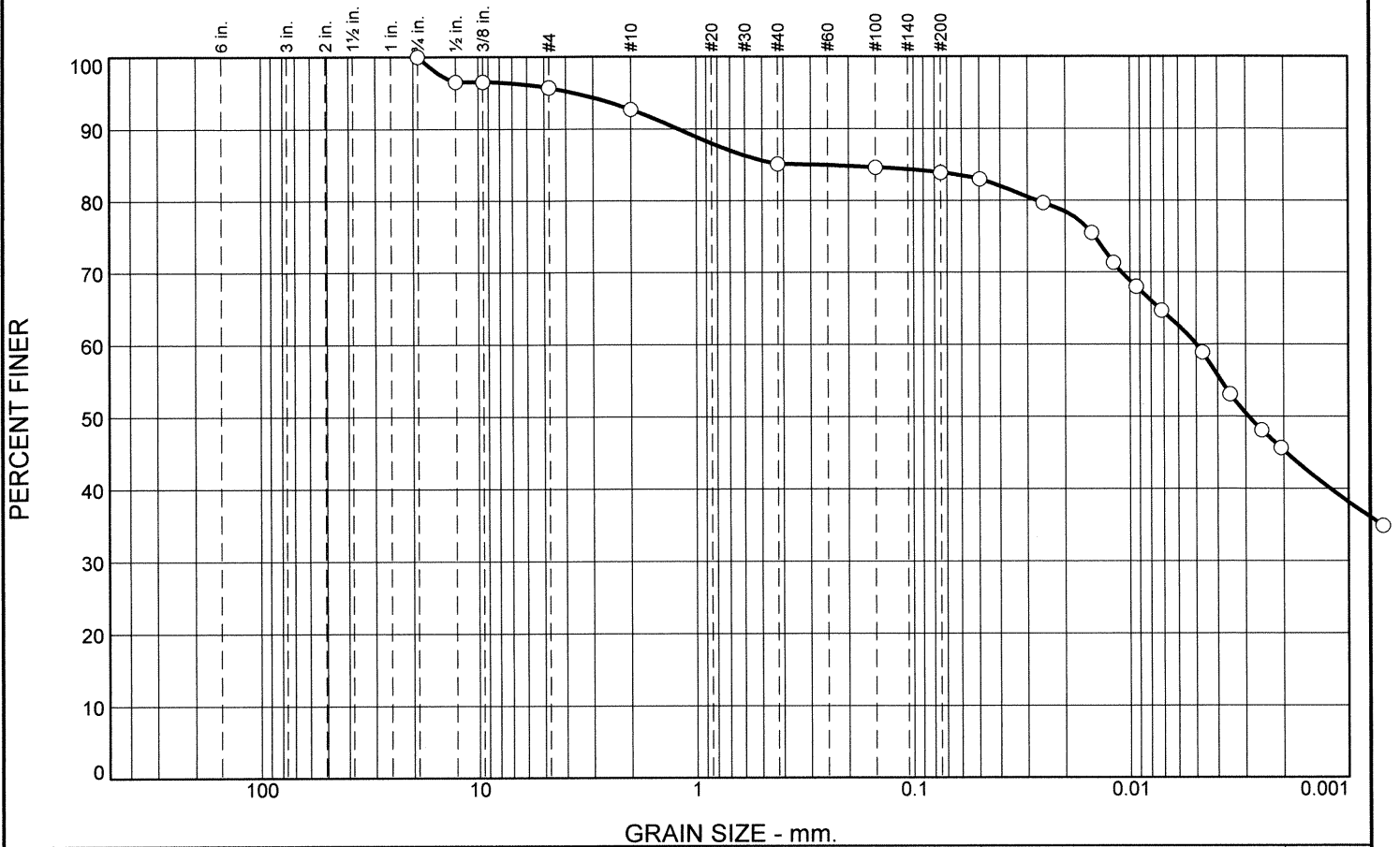
**Client:** The Antero Group

**Project:** 154th Street  
Harvey, IL

**Project No:** 27076

**Figure**

# Particle Size Distribution Report



% Stones	% +3"	% Gravel			% Sand					% Silt		% Clay
		Coarse	Medium	Fine	V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Fine	
0.0	0.0	0.0	4.3	3.0	3.8	3.3	0.7	0.6	1.3	4.6	33.1	45.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4	100.0		
1/2	96.5		
3/8	96.5		
#4	95.7		
#10	92.7		
#40	85.1		
#100	84.6		
#200	83.9		

\* (no specification provided)

**Material Description**  
Silty Clay

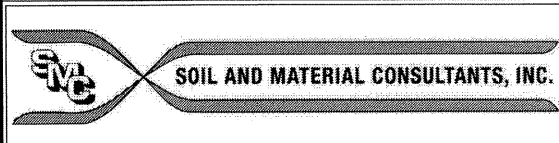
**Atterberg Limits**  
PL=                    LL=                    PI=

**Coefficients**  
D<sub>90</sub>= 1.2123      D<sub>85</sub>= 0.2949      D<sub>60</sub>= 0.0050  
D<sub>50</sub>= 0.0029      D<sub>30</sub>=                    D<sub>15</sub>=                     
D<sub>10</sub>=                    C<sub>u</sub>=                    C<sub>c</sub>=

**Classification**  
USCS=                    AASHTO=

**Remarks**

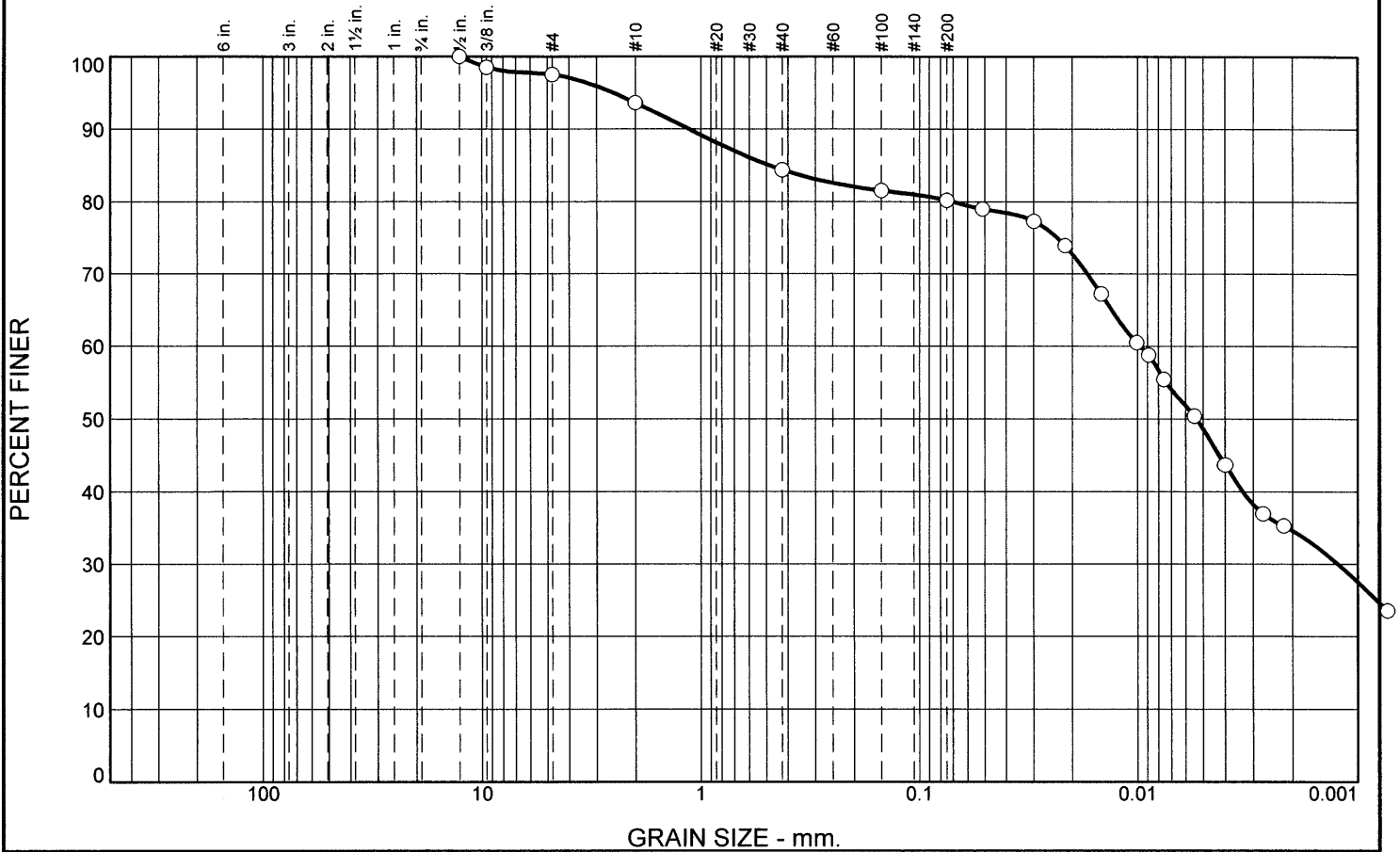
**Location:** B-5      **Sample Number:** 2      **Depth:** 3.5' - 5.0'      **Date:**



**Client:** The Antero Group  
**Project:** 154th Street  
Harvey, IL  
**Project No:** 27076

**Figure**

# Particle Size Distribution Report



% Stones	% +3"	% Gravel			% Sand					% Silt		% Clay
		Coarse	Medium	Fine	V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Fine	
0.0	0.0	0.0	2.5	3.9	4.4	4.0	2.6	1.7	2.0	6.1	38.2	34.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2	100.0		
3/8	98.5		
#4	97.5		
#10	93.6		
#40	84.4		
#100	81.5		
#200	80.2		

**Material Description**

Silty Clay Loam

**Atterberg Limits**

PL=                      LL=                      PI=

**Coefficients**

D<sub>90</sub>= 1.1398              D<sub>85</sub>= 0.4842              D<sub>60</sub>= 0.0097

D<sub>50</sub>= 0.0053              D<sub>30</sub>= 0.0012              D<sub>15</sub>=

D<sub>10</sub>=                      C<sub>u</sub>=                      C<sub>c</sub>=

**Classification**

USCS=                      AASHTO=

**Remarks**

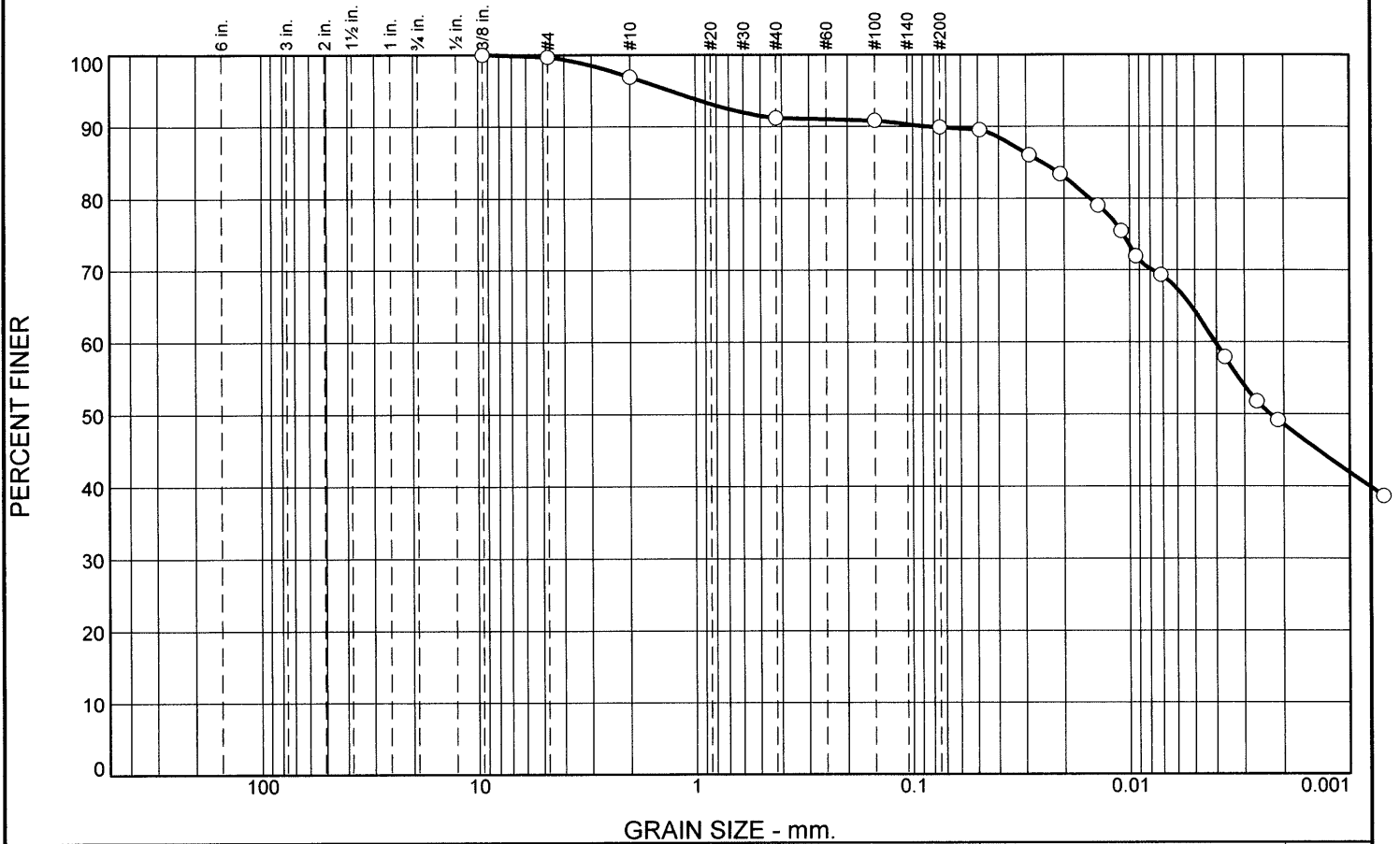
\* (no specification provided)

**Location:** B-6                      **Depth:** 3.5' - 5.0'                      **Date:**

**Sample Number:** 3

<b>SOIL AND MATERIAL CONSULTANTS, INC.</b>	<p><b>Client:</b> The Antero Group</p> <p><b>Project:</b> 154th Street Harvey, IL</p> <p><b>Project No:</b> 27076</p>	<p><b>Figure</b></p>
--------------------------------------------	---------------------------------------------------------------------------------------------------------------------------	----------------------

# Particle Size Distribution Report



% Stones	% +3"	% Gravel			% Sand					% Silt		% Clay
		Coarse	Medium	Fine	V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Fine	
0.0	0.0	0.0	0.3	2.8	3.1	2.3	0.5	0.8	0.6	6.6	34.5	48.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	99.7		
#10	96.9		
#40	91.2		
#100	90.8		
#200	89.9		

**Material Description**

Silty Clay

**Atterberg Limits**  
 PL=                      LL=                      PI=

**Coefficients**  
 D<sub>90</sub>= 0.0866      D<sub>85</sub>= 0.0252                      D<sub>60</sub>= 0.0040  
 D<sub>50</sub>= 0.0023      D<sub>30</sub>=                                      D<sub>15</sub>=  
 D<sub>10</sub>=                      C<sub>u</sub>=                                      C<sub>c</sub>=

**Classification**  
 USCS=                      AASHTO=

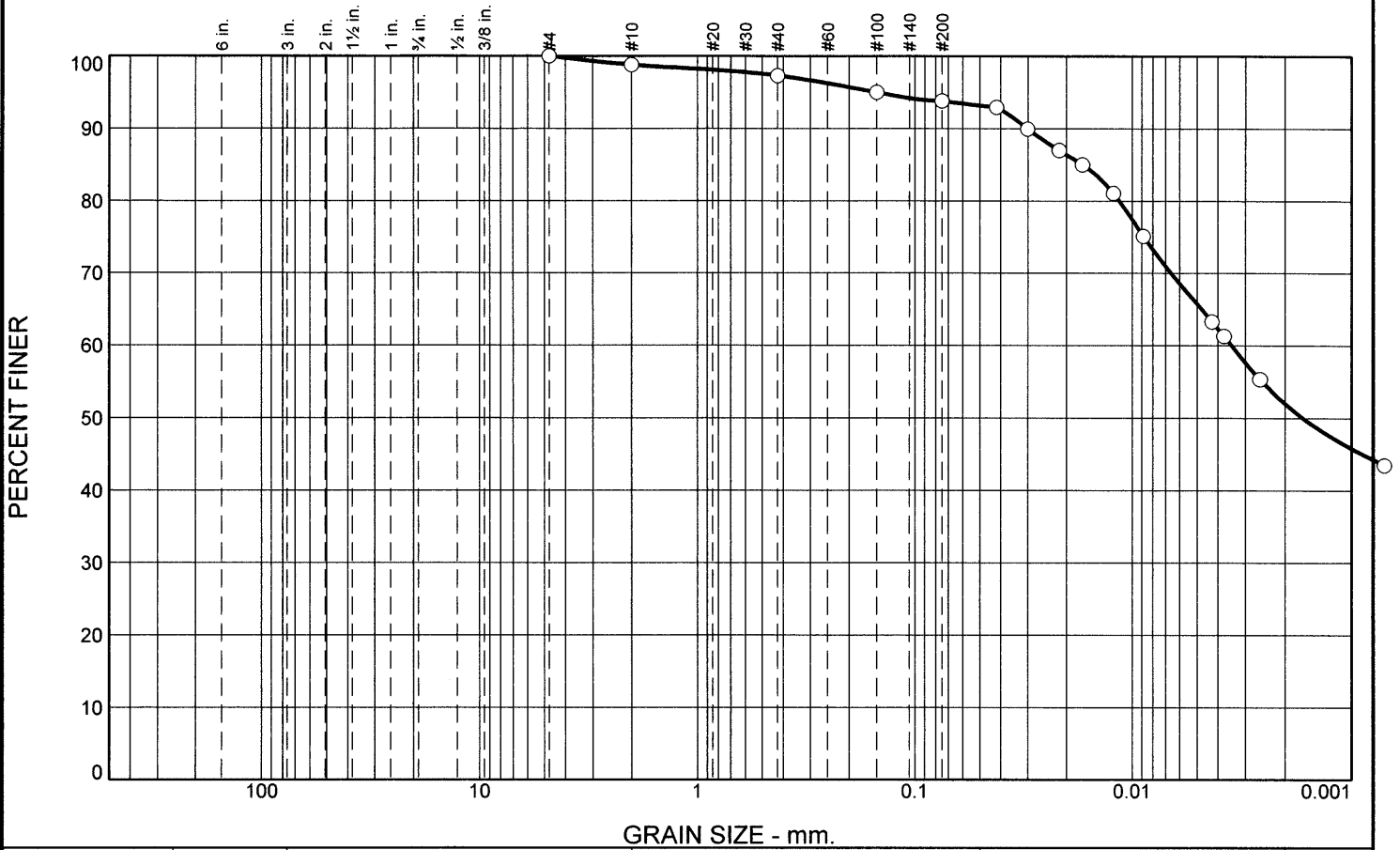
**Remarks**

\* (no specification provided)

**Location:** B-7                      **Depth:** 3.5' - 5.0'                      **Date:**

**Sample Number:** 2

# Particle Size Distribution Report



% Stones	% +3"	% Gravel			% Sand					% Silt		% Clay
		Coarse	Medium	Fine	V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Fine	
0.0	0.0	0.0	0.0	1.2	0.6	0.7	1.3	2.1	0.9	6.8	34.4	52.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	98.8		
#40	97.3		
#100	95.0		
#200	93.8		

**Material Description**

Silty Clay

**Atterberg Limits**

PL=                      LL=                      PI=

**Coefficients**

D<sub>90</sub>= 0.0302      D<sub>85</sub>= 0.0169      D<sub>60</sub>= 0.0035  
 D<sub>50</sub>= 0.0017      D<sub>30</sub>=                      D<sub>15</sub>=  
 D<sub>10</sub>=                      C<sub>u</sub>=                      C<sub>c</sub>=

**Classification**

USCS=                      AASHTO=

**Remarks**

\* (no specification provided)

**Location:** B-8      **Sample Number:** 2      **Depth:** 3.5' - 5.0'      **Date:**

	<b>Client:</b> The Antero Group <b>Project:</b> 154th Street Harvey, IL <b>Project No:</b> 27076	<b>Figure</b>
	(Additional information or notes)	





**SOIL AND MATERIAL CONSULTANTS, INC.**

Office: 847-870-0544  
 Fax: 847-870-0661  
 us@soilandmaterialconsultants.com  
 www.soilandmaterialconsultants.com

June 23, 2021  
 File No. 25896

Ms. Annie Makuch  
 The Antero Group, LLC  
 1212 N. Ashland Avenue  
 Chicago, IL 60622

Re: Pavement Investigation  
 154<sup>th</sup> Street from  
 Wood Street to Park Avenue  
 Harvey, Illinois

Dear Ms. Makuch:

We are submitting the results of our pavement investigation completed along 154<sup>th</sup> Street from Wood Street to Park Avenue in the City of Harvey, Illinois. The investigation was requested to determine existing pavement sections.

The field investigation included obtaining 12 pavement cores at the requested locations. The pavement materials were returned to our laboratory for identification and thickness verification. The results are included in the summary with this submittal.

Enclosed are core logs indicating the pavement conditions encountered at each location. The summary table below indicates pavement materials and thicknesses encountered at each location. Please refer to the individual core logs and pictures for more detailed information.

<u>Core</u>	<u>Total HMA (in.)</u>	<u>Paver Brick (in.)</u>	<u>Portland Cement Concrete(in.)</u>	<u>Granular Base (in.)</u>	<u>Total Pavement (in.)</u>
1	3.75	---	<b>12.25</b>	3.75	19.75
2	<b>3.0</b>	3.75	---	13.0	19.75
3	<b>5.0</b>	---	---	12.0	17.0
4	3.5	3.75	---	11.25	18.5
5	3.75	3.75	---	11.75	19.25
6	<b>3.5</b>	3.5	---	5.0	12.0
7	2.75	3.75	---	8.75	15.25
8	9.5	---	---	9.0	18.5
9	<b>5.5</b>	3.75	---	11.75	21.0
10	5.0	3.75	---	<b>10.25</b>	19.0
11	<b>6.25*</b>	3.75	---	13.0+	23.0+
12	<b>3.5</b>	3.75	---	14.25	21.5

Note: Failures noted in the pavement materials have the thicknesses shown in **bold**. Granular base contaminated with clay have the thicknesses shown in **bold**. The presence of bituminous treated aggregate is indicated by (\*).

8 W. COLLEGE DR. ● SUITE C ● ARLINGTON HEIGHTS, IL 60004

SOIL BORINGS ● SITE INVESTIGATIONS ● PAVEMENT INVESTIGATIONS ● GEOTECHNICAL ENGINEERING  
 TESTING OF ● SOIL ● ASPHALT ● CONCRETE ● MORTAR ● STEEL

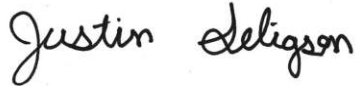
File No. 25896  
Re: 154<sup>th</sup> Street from Wood Street to Park Avenue  
Harvey, Illinois

Page 2

If you should have any questions concerning the enclosed information, please feel free to contact our office at anytime.

Very truly yours,

SOIL AND MATERIAL CONSULTANTS, INC.

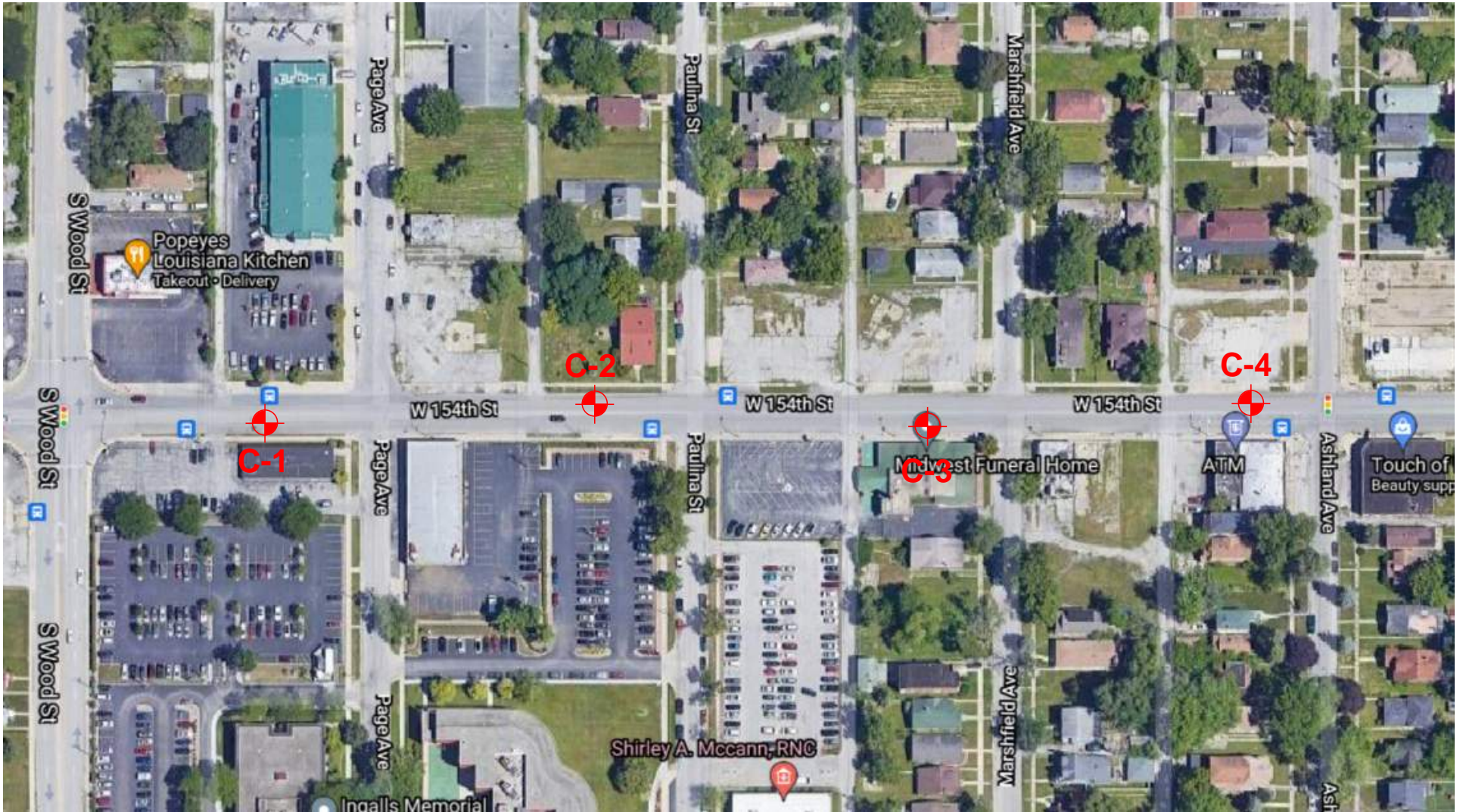


Justin Seligson, E.I.T.  
Project Engineer



Thomas P. Johnson, P.E.  
President

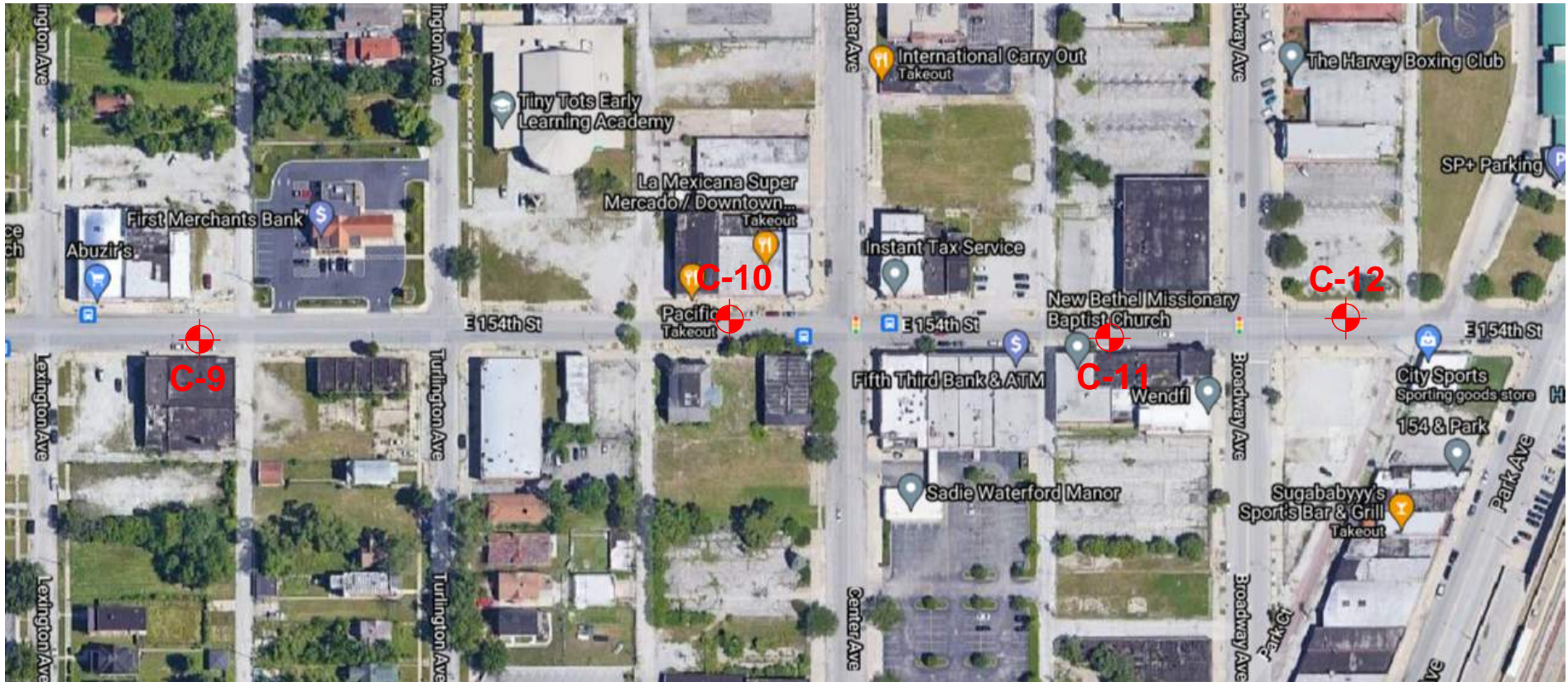
JMS:TPJ  
Enc.



<b>SMC</b>		SOIL AND MATERIAL CONSULTANTS, INC.	<b>LOCATION SKETCH</b>
Client:	THE ANTERO GROUP, LLC		
Project:	154 <sup>TH</sup> ST. - WOOD ST. to PARK AVE.		
Location:	HARVEY, ILLINOIS		
File No. 25896	Date: 6-10-21	Scale: NONE	



<b>SMC</b>		SOIL AND MATERIAL CONSULTANTS, INC.	<b>LOCATION SKETCH</b>
Client:	THE ANTERO GROUP, LLC		
Project:	154 <sup>TH</sup> ST. - WOOD ST. to PARK AVE.		
Location:	HARVEY, ILLINOIS		
File No.	25896	Date:	6-10-21
		Scale:	NONE



<b>SMC</b>		SOIL AND MATERIAL CONSULTANTS, INC.	<b>LOCATION SKETCH</b>
Client:	THE ANTERO GROUP, LLC		
Project:	154 <sup>TH</sup> ST. - WOOD ST. to PARK AVE.		
Location:	HARVEY, ILLINOIS		
File No.	25896	Date:	6-10-21
		Scale:	NONE



CORE LOG

Client: The Antero Group, LLC Reference: 154th St. from Wood St. to Park Ave. Harvey, IL

Core No: 1 Work Done By: CS & DB

Location of Core: 154th St., 150' E. of Wood St., 13' S. of CL

Comments:

(Depth, In.)	Type of Material	Recovery
0 --		
1 --	2-1/4" Bituminous concrete - surface	Full
2 --		
3 --	0-1/2" Bituminous concrete - surface	Full
4 --	1-0" Bituminous concrete - surface	Full
5 --		
6 --		
7 --		
8 --		
9 --	12-1/4" Concrete (failed)	Partial
10 --		
11 --		
12 --		
13 --		
14 --		
15 --		
16 --		
17 --		
18 --	3-3/4" Crushed & uncrushed gravel with fines	Partial
19 --		
20 --	Total 19-3/4"	
	E.O.C.	



CORE LOG

Client: The Antero Group, LLC Reference 154th St. from Wood St. to Park Ave. Harvey, IL

Core No: 2 Work Done By: CS & DB

Location of Core: 41, 154th St., 11' N. of CL

Comments:

(Depth, In.)	Type of Material	Recovery
0 --		
1 --	1-0" Bituminous concrete - surface	Full
2 --	1-0" Bituminous concrete - surface	Full
3 --	1-0" Bituminous concrete - surface (failed)	Partial
4 --		
5 --	3-3/4" Paver brick	Partial
6 --		
7 --		
8 --		
9 --		
10 --		
11 --		
12 --		
13 --	13-0" Crushed limestone	Partial
14 --		
15 --		
16 --		
17 --		
18 --		
19 --		
20 --	Total 19-3/4"	
	E.O.C.	



CORE LOG

Client: The Antero Group, LLC Reference: 154th St. from Wood St. to Park Ave. Harvey, IL

Core No: 3 Work Done By: CS & DB

Location of Core: 154th St., 65' W. of Marshfield St., 14' S. of CL

Comments:

(Depth, In.)	Type of Material	Recovery
0 --		
1 --	1-1/4" Bituminous concrete - surface	Full
2 --	1-1/4" Bituminous concrete - surface	Full
3 --	0-3/4" Bituminous concrete - surface	Full
4 --	1-3/4" Bituminous concrete - binder (failed)	Partial
5 --		
6 --		
7 --		
8 --		
9 --		
10 --		
11 --	12-0" Large crushed limestone	
12 --		
13 --		
14 --		
15 --		
16 --		
17 --	Total 17-0"	
18 --	E.O.C.	
19 --		
20 --		





CORE LOG

Client: The Antero Group, LLC Reference: 154th St. from Wood St. to Park Ave. Harvey, IL

Core No: 4 Work Done By: CS & DB

Location of Core: 6, 154th St., 14' N. of CL

Comments:

(Depth, In.)	Type of Material	Recovery
0 --		
1 --	2-1/2" Bituminous concrete - surface	Full
2 --		
3 --	1-0" Bituminous concrete - surface	Full
4 --		
5 --	3-3/4" Paver brick	Partial
6 --		
7 --		
8 --		
9 --		
10 --		
11 --		
12 --		
13 --	11-1/4" Crushed limestone with fines, some uncrushed gravel	Partial
14 --		
15 --		
16 --		
17 --		
18 --	Total 18-1/2"	
19 --	E.O.C.	
20 --		



**SOIL AND MATERIAL CONSULTANTS, INC.**

Date: 6/21/21

File No.: 25896

8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

**CORE LOG**

Client: The Antero Group, LLC Reference: 154th St. from Wood St. to Park Ave. Harvey, IL

Core No: 5 Work Done By: GS & DB

Location of Core: 154th St., 150' E. of Ashland Ave., 15' S. of CL

Comments: \_\_\_\_\_

(Depth, In.)	Type of Material	Recovery
0 --	1-0" Bituminous concrete - surface	Full
1 --	1-0" Bituminous concrete - surface	Full
2 --	0-1/2" Bituminous concrete - surface	Full
3 --	1-1/4" Bituminous concrete - surface	Full
4 --		
5 --	3-3/4" Paver brick	Partial
6 --		
7 --		
8 --		
9 --		
10 --		
11 --		
12 --		
13 --	11-3/4" Crushed limestone	Partial
14 --		
15 --		
16 --		
17 --		
18 --		
19 --	Total 19-1/4"	
20 --	E.O.C.	



Date: 6/21/21

File No.: 25896

8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

**CORE LOG**

Client: The Antero Group, LLC Reference: 154th St. from Wood St. to Park Ave. Harvey, IL

Core No: 6 Work Done By: CS & DB

Location of Core: 41, 154th St., 12' N. of CL

Comments: \_\_\_\_\_

(Depth, In.)	Type of Material	Recovery
0 --		
1 --	1-0" Bituminous concrete - surface	Full
2 --	1-1/2" Bituminous concrete - surface	Full
3 --	0-1/2" Bituminous concrete - surface	Full
4 --	0-1/2" Bituminous concrete - surface (failed)	Partial
5 --		
6 --		
7 --		
8 --		
9 --		
10 --	3-1/2" Paver brick	Partial
11 --		
12 --	5-0" Crushed limestone	Partial
13 --		
14 --		
15 --		
16 --		
17 --		
18 --		
19 --		
20 --		
	E.O.C.	
	Total 12-0"	



CORE LOG

Client: The Antero Group, LLC

Reference: 154th St. from Wood St. to Park Ave. Harvey, IL

Core No: 7 Work Done By: CS & DB

Location of Core: 154th St., 175 W. of Loomis Ave., 14' S. of CL

Comments:

(Depth, In.)	Type of Material	Recovery
0 --		
1 --	1-0" Bituminous concrete - surface	Full
2 --	1-0" Bituminous concrete - surface	Full
3 --	0-3/4" Bituminous concrete - surface	Full
4 --		
5 --	3-3/4" Paver brick	Partial
6 --		
7 --		
8 --		
9 --		
10 --		
11 --		
12 --	8-3/4" Crushed limestone with fines, some large, some crushed gravel	Partial
13 --		
14 --		
15 --	Total 15-1/4"	
16 --	E.O.C.	
17 --		
18 --		
19 --		
20 --		



CORE LOG

Client: The Antero Group, LLC Reference: 154th St. from Wood St. to Park Ave. Harvey, IL

Core No: 8 Work Done By: CS & DB

Location of Core: 103, 154th St., 13' N. of CL

Comments:

(Depth, In.)	Type of Material	Recovery
0 --		
1 --	2-0" Bituminous concrete - surface	Full
2 --		
3 --	2-1/2" Bituminous concrete - binder	Full
4 --		
5 --		
6 --		
7 --	5-0" Bituminous concrete - binder	Full
8 --		
9 --		
10 --		
11 --		
12 --		
13 --		
14 --	9-0" Crushed limestone with fines, some large, some crushed gravel	Partial
15 --		
16 --		
17 --		
18 --	Total 18-1/2"	
19 --	E.O.C.	
20 --		



CORE LOG

Client: The Antero Group, LLC Reference: 154th St. from Wood St. to Park Ave. Harvey, IL

Core No: 9 Work Done By: CS & DB

Location of Core: 124, 154th St., 10' S. of CL

Comments:

(Depth, In.)	Type of Material	Recovery
0 --		
1 --	1-1/2" Bituminous concrete - surface	Full
2 --		
3 --	2-3/4" Bituminous concrete - surface	Full
4 --		
5 --	0-1/2" Bituminous concrete - surface	Full
6 --	0-3/4" Bituminous concrete - surface (failed)	Partial
7 --		
8 --	3-3/4" Paver brick	Partial
9 --		
10 --		
11 --		
12 --		
13 --		
14 --		
15 --	11-3/4" Crushed limestone with fines, some crushed & uncrushed gravel	Partial
16 --		
17 --		
18 --		
19 --		
20 --		
21 --	Total 21-0"	
	E.O.C.	



CORE LOG

Client: The Antero Group, LLC Reference: 154th St. from Wood St. to Park Ave. Harvey, IL

Core No: 10 Work Done By: CS & DB

Location of Core: 157, 154th St., 12' N. of CL

Comments:

(Depth, In.)	Type of Material	Recovery
0 --	1-0" Bituminous concrete - surface	Full
1 --		
2 --	1-3/4" Bituminous concrete - surface	Full
3 --	0-1/4" Bituminous concrete - surface	Full
4 --	0-1/2" Bituminous concrete - surface	Full
5 --	1-1/2" Bituminous concrete - binder	Full
6 --		
7 --	3-3/4" Paver brick	Partial
8 --		
9 --		
10 --	3-1/4" Soil contaminated with gravel	
11 --		
12 --		
13 --		
14 --		
15 --	7-0" Crushed limestone with fines, some crushed & uncrushed gravel	Partial
16 --		
17 --		
18 --		
19 --	Total 19-0"	
20 --	E.O.C.	



**SOIL AND MATERIAL CONSULTANTS, INC.**

Date: 6/21/21  
 File No.: 25896

8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

**CORE LOG**

Client: The Antero Group, LLC Reference: 154th St. from Wood St. to Park Ave. Harvey, IL  
 Core No: 11 Work Done By: CS & DB  
 Location of Core: 190, 154th St., 13' S. of CL

Comments: \_\_\_\_\_

(Depth, In.)	Type of Material	Recovery
0 --		
1 --	1-1/4" Bituminous concrete - surface	Full
2 --		
3 --	2-1/4" Bituminous concrete - surface	Full
4 --		
5 --	0-1/2" Bituminous concrete - surface	Full
6 --	1-1/4" Bituminous concrete - surface	Full
7 --		
8 --	1-0" Bituminous treated aggregate (failed)	Partial
9 --		
10 --		
11 --		
12 --		
13 --		
14 --		
15 --		
16 --	3-3/4" Paver brick	Partial
17 --		
18 --		
19 --		
20 --		
21 --		
22 --		
23 --	13-0"+ Crushed limestone with fines, some crushed & uncrushed gravel	Partial
	Total 23-0"+	
	E.O.C.	





CORE LOG

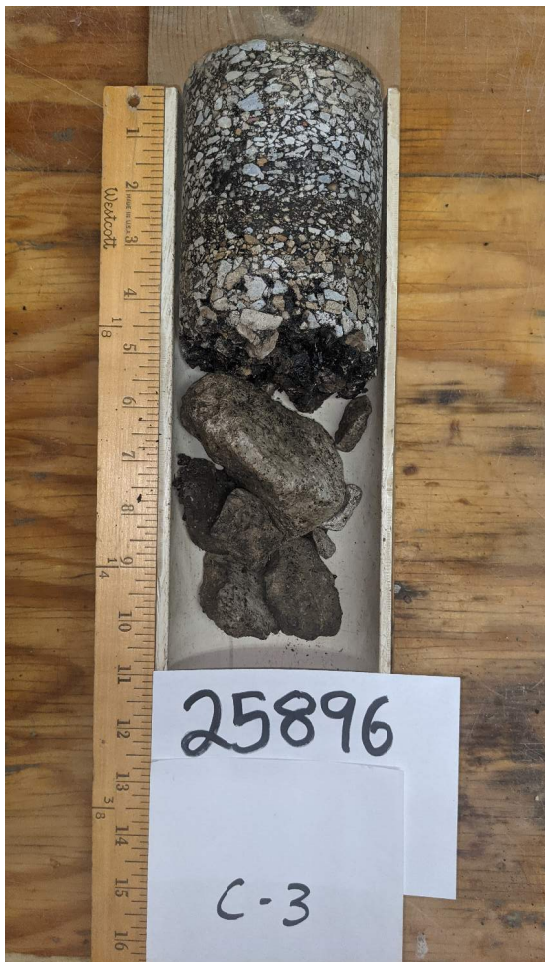
Client: The Antero Group, LLC Reference 154th St. from Wood St. to Park Ave. Harvey, IL

Core No: 12 Work Done By: CS & DB

Location of Core: 154th St., 120' E. of Broadway Ave., 12' N. of CL

Comments:

(Depth, In.)	Type of Material	Recovery
0 --		
1 --		
2 --	2-1/4" Bituminous concrete - surface	Full
3 --	0-1/2" Bituminous concrete - surface	Full
	0-1/4" Bituminous concrete - surface	Full
	0-1/2" Bituminous concrete - surface (failed)	Partial
4 --		
5 --	3-3/4" Paver brick	Partial
6 --		
7 --		
8 --		
9 --		
10 --		
11 --		
12 --		
13 --	14-1/4" Crushed limestone with fines, some large, some crushed & uncrushed gravel	Partial
14 --		
15 --		
16 --		
17 --		
18 --		
19 --		
20 --		
21.5	E.O.C. 21-1/2"	







**CONTACT INFORMATION**

**OWNER**  
CITY OF HARVEY  
MAYOR CHRISTOPHER J. CLARK  
15320 BROADWAY AVE  
HARVEY, IL 60426  
PHONE: 708-210-5300

**PUBLIC WORKS DEPARTMENT**  
110 W 159TH ST.  
HARVEY, IL 60426  
PHONE: 708-210-5403

**HARVEY WATER DEPARTMENT**  
15320 BROADWAY AVE  
HARVEY, IL 60426  
PHONE: 708-210-5300

**HARVEY FIRE DEPARTMENT**  
15600 CENTER AVE  
HARVEY, IL 60426  
PHONE: 911  
PHONE: 708-331-7720

**HAEGER ENGINEERING**  
PROJECT SURVEYOR  
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100 E STATE PARKWAY  
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PHONE: 847-230-3167

**COMED**  
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4401 W 135TH ST.  
CRESTWOOD, IL 60418  
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**CITY ENGINEER**  
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ENEAGU@ANTEROGROUP.COM

**CIVIL ENGINEER**  
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1631 WEST WALNUT STREET  
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JEKEGREN@ANTEROGROUP.COM

**NICOR GAS**  
GAS UTILITY  
1844 FERRY ROAD  
NAPERVILLE, IL 60563  
PHONE: 888-642-6748

**MWRD**  
DAN WALSH  
100 E. ERIE ST.  
CHICAGO, IL 60611  
PHONE: 312-751-3214

**BASIS OF BEARINGS**

HORIZONTAL COORDINATES:  
NAD83(2011) ILLINOIS EAST ZONE 1201 STATE PLANE COORDINATES

VERTICAL DATUM:  
NAVD88 (GEOID 12A)

**TOPOGRAPHY INFORMATION**

SURVEY COMPLETED BY HAEGER ENGINEERING ON NOVEMBER 11, 2022

**BENCHMARKS**

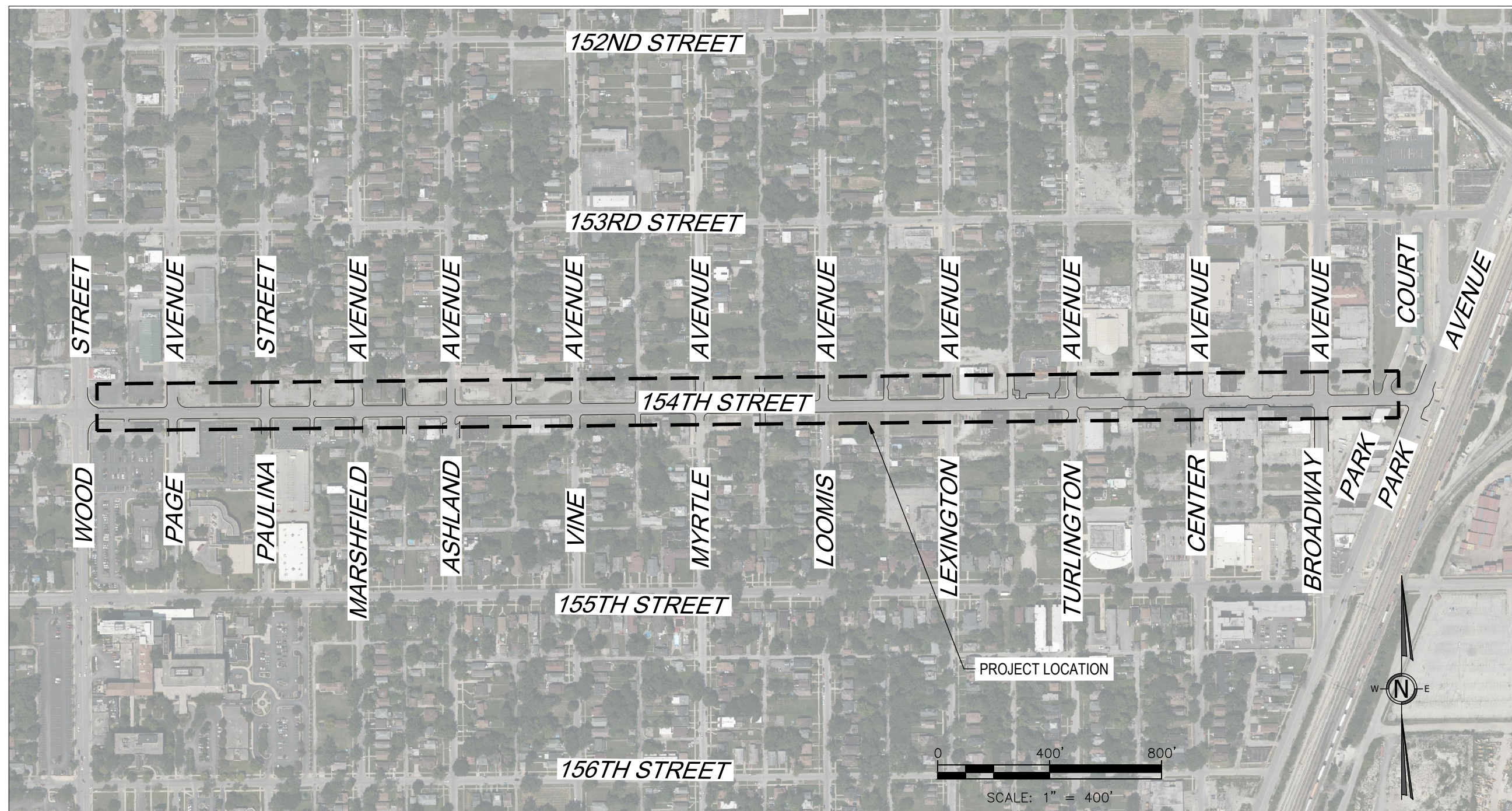
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CP # 1112 CROSS NOTCH N: 1801136.3529 E: 1168477.3016 ELEV.: 605.39	CP # 602 CROSS NOTCH N: 1801145.5288 E: 1168871.3103 ELEV.: 604.60	CP # 9004 BM BOLT ON HYDRANT N: 1801205.4962 E: 1169468.4908 ELEV.: 606.49	CP # 4176 BM BOLT ON HYDRANT N: 1801221.0087 E: 1170894.8760 ELEV.: 604.78	CP # 7146 BM BOLT ON HYDRANT N: 1801257.0916 E: 1171694.5646 ELEV.: 603.77	CP # 5257 BM BOLT ON HYDRANT N: 1801240.4452 E: 1172574.3615 ELEV.: 603.58
CP # 1110 CROSS NOTCH N: 1801143.8009 E: 1168654.7717 ELEV.: 604.87	CP # 1553 CROSS NOTCH N: 1801197.6983 E: 1168980.6104 ELEV.: 604.45	CP # 3339 CROSS NOTCH N: 1801152.8347 E: 1169651.5698 ELEV.: 603.67	CP # 607 CROSS NOTCH N: 1801166.9697 E: 1170894.1004 ELEV.: 602.63	CP # 7145 CROSS NOTCH N: 1801228.5519 E: 1172684.6975 ELEV.: 602.72	CP # 611 CROSS NOTCH N: 1801187.4481 E: 1172684.6975 ELEV.: 602.40
CP # 1109 CROSS NOTCH N: 1801191.7707 E: 1168707.6406 ELEV.: 604.43	CP # 9005 BM BOLT ON HYDRANT N: 1801206.0062 E: 1169138.4514 ELEV.: 605.42	CP # 605 CROSS NOTCH N: 1801156.9063 E: 1169995.2346 ELEV.: 603.30	CP # 4406 BM BOLT ON HYDRANT N: 1801225.6406 E: 1171251.7858 ELEV.: 604.28	CP # 5740 BM BOLT ON HYDRANT N: 1801238.0162 E: 1172132.1264 ELEV.: 604.73	CP # 5456 CROSS NOTCH N: 1801179.3366 E: 1172904.4687 ELEV.: 602.41

# 154TH STREET RECONSTRUCTION PROJECT

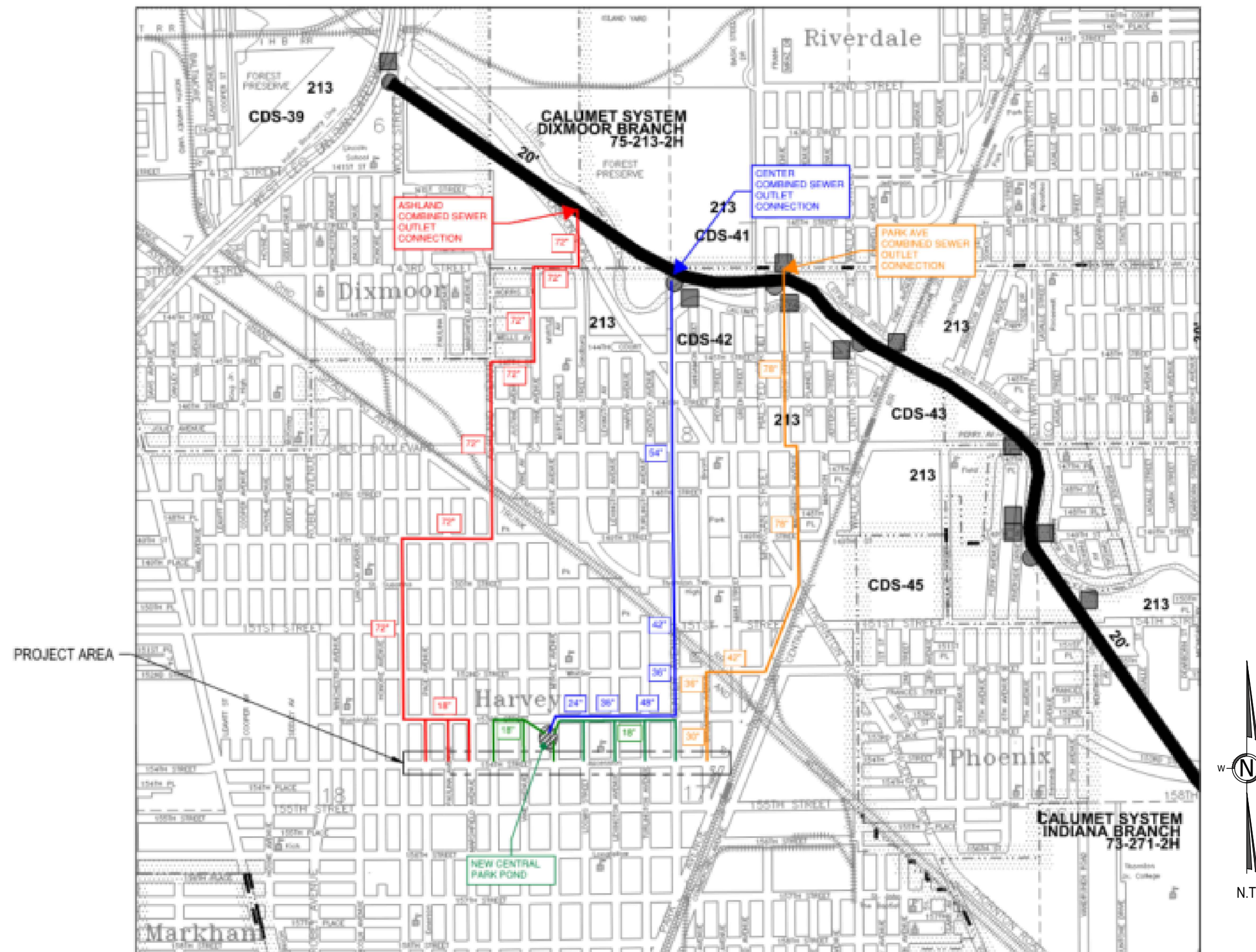
## CITY OF HARVEY, COOK COUNTY, ILLINOIS

154TH STREET SECTIONS 17 & 18, TOWNSHIP 36 NORTH, RANGE 14, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS

**LOCATION MAP**



**OVERALL ROUTING MAP**

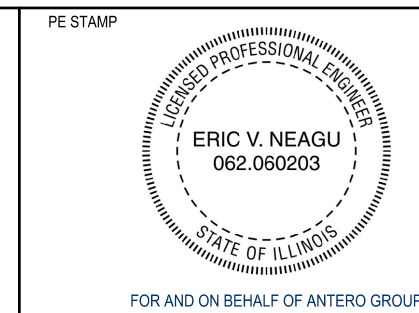


File Location: Users\j\j\onefive - anterogroup\Projects\City of harvey\cap2207\_154th st reconstruction\DWG\Sheets\Coh+2207-COV\RDwg Plot Date: 4/15/2024 12:25 PM Last Saved By: ROBLUCH-HOLZ

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C-02	GENERAL NOTES
C-03	OVERALL PLAN
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C-06	EXISTING CONDITIONS STA 41+70 TO 53+55
C-07	EXISTING CONDITIONS STA 53+55 TO 65+40
C-08	EXISTING CONDITIONS STA 65+40 TO 77+00
C-09	DEMOLITION PLAN STA 29+50 TO 41+70
C-10	DEMOLITION PLAN STA 41+70 TO 53+55
C-11	DEMOLITION PLAN STA 53+55 TO 65+40
C-12	DEMOLITION PLAN STA 65+40 TO 77+00
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C-15	GEOMETRY PLAN STA 41+70 TO 47+70
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C-17	GEOMETRY PLAN STA 53+55 TO 59+55
C-18	GEOMETRY PLAN STA 59+55 TO 65+40
C-19	GEOMETRY PLAN STA 65+40 TO 71+15
C-20	GEOMETRY PLAN STA 71+15 TO 77+00
C-21	PLAN AND PROFILE STA 29+50 TO 35+70
C-22	PLAN AND PROFILE STA 35+70 TO 41+70
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C-29	STORM PLAN AND PROFILE STA 29+50 TO 35+70
C-30	STORM PLAN AND PROFILE STA 35+70 TO 41+70
C-31	STORM PLAN AND PROFILE STA 41+70 TO 47+70
C-32	STORM PLAN AND PROFILE STA 47+70 TO 53+55
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C-60	TRAFFIC CONTROL PLAN PHASE 1
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C-62	TRAFFIC CONTROL PLAN PHASE 1
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C-78	CONSTRUCTION DETAILS 09
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C-80	EROSION CONTROL PLAN STA 41+70 TO 53+55
C-81	EROSION CONTROL PLAN STA 53+55 TO 65+40
C-82	EROSION CONTROL PLAN STA 65+40 TO 77+00

No.	DATE	REVISION DESCRIPTION
1	04/15/24	ISSUED ADDENDUM 1

PREPARED FOR  
**CITY OF HARVEY,**  
15320 BROADWAY AVENUE  
HARVEY, IL 60426



**154TH STREET RECONSTRUCTION PROJECT**

**COVER SHEET**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER	CoH-2207
DATE	3/29/2024
SHEET	C-01

**A. REFERENCED SPECIFICATIONS**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:
  - STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
  - STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION;
  - CITY OF HARVEY MUNICIPAL CODE;
  - THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL;
  - IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

**B. NOTIFICATIONS**

- THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055 OR SEND EMAIL NOTIFICATION WITH PROJECT NAME, LOCATION AND PERMIT NUMBER TO [WNOJOBSTART@MWRD.ORG](mailto:WNOJOBSTART@MWRD.ORG)).
- THE CITY OF HARVEY ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

**C. GENERAL NOTES**

- ALL ELEVATIONS SHOWN ON PLANS REFERENCE NSRS 2011 FT.
- MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.
- THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.
- THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.
- THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.
- ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.
- THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.
- ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.
- RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.

**SANITARY SEWER:**

- THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.
- A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.
- DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY OR MWRD.
- ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).
- ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.
- ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
- ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
VITRIFIED CLAY PIPE	ASTM C-700	ASTM C-425
REINFORCED CONCRETE SEWER PIPE	ASTM C-76	ASTM C-443
CAST IRON SOIL PIPE	ASTM A-74	ASTM C-564
DUCTILE IRON PIPE	ANSI A21.51	ANSI A21.11
POLYVINYL CHLORIDE (PVC) PIPE 6-INCH TO 15-INCH DIAMETER SDR 26 18-INCH TO 27-INCH DIAMETER F/DY=46	ASTM D-3034 ASTM F-679	ASTM D-3212 ASTM D-3212
HIGH DENSITY POLYETHYLENE (HDPE)	ASTM D-3350 ASTM D-3035	ASTM D-3261, F-2620 (HEAT FUSION) ASTM D-3212, F-477 (GASKETED)
WATER MAIN QUALITY PVC 4-INCH TO 36-INCH 4-INCH TO 12-INCH 14-INCH TO 48-INCH	ASTM D-2241 AWWA C900 AWWA C905	ASTM D-3139 ASTM D-3139 ASTM D-3139

THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE.

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
POLYPROPYLENE (PP) PIPE		
12-INCH TO 24-INCH DOUBLE WALL	ASTM F-2736	D-3212, F-477
30-INCH TO 60-INCH TRIPLE WALL	ASTM F-2764	D3212, F-477

**(SANITARY SEWER CONT.)**

- ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE 1/4" TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO 1/4 THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.
- NON-SHEAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS.
- ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICKHOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID.
- WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:
  - A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUBWYE SADDLE OR HUB-TEE SADDLE.
  - REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION.
  - WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.
- WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMANS SHALL BE MAINTAINED UNLESS THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.
- ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.
- ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE.
- ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRECAST "RUBBER BOOTS" THAT CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRECAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS.
- ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG.
- EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES ASSOCIATED WITH VOLUME CONTROL FACILITIES, DRAIN TILES/FIELD TILES/UNDERDRAINS/PERFORATED PIPES ARE NOT ALLOWED TO BE CONNECTED TO OR TRIBUTARY TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS IN COMBINED SEWER AREAS. CONSTRUCTION OF NEW FACILITIES OF THIS TYPE IS PROHIBITED, AND ALL EXISTING DRAIN TILES AND PERFORATED PIPES ENCOUNTERED WITHIN THE PROJECT AREA SHALL BE PLUGGED OR REMOVED, AND SHALL NOT BE CONNECTED TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS.
- A BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

**DEMOLITION AND CLEARING NOTES**

- ALL EROSION CONTROL MEASURES MUST BE IN PLACE PRIOR TO LAND DISTURBANCE.
- DISPOSAL OF MATERIALS SHALL BE IN STRICT ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL RULES AND REGULATIONS.
- THE CONTRACTOR SHALL INSURE NO PART OF THE SITE SHOULD BE EXPOSED OVERNIGHT.
- THE CONTRACTOR SHALL REMOVE ALL PRE-EXISTING ON-SITE IMPROVEMENTS TO VIRGIN SOIL, UNLESS OTHERWISE NOTED AND WASTE OFF-SITE. THIS INCLUDES BUT IS NOT LIMITED TO BUILDINGS, FOUNDATIONS, FOOTINGS, CURBS ASPHALT, CONCRETE, EXISTING UTILITY LINES, DEBRIS, TREES/SHRUBS AND ALL OTHER ITEMS AND UTILITIES TO BE ABANDONED AS NOTED ON THE DEMOLITION PLAN.
- CONTRACTOR SHALL FIELD VERIFY BENCHMARKS AND PROTECT PROPERTY CORNERS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE, IDENTIFY AND REMOVE OR ARRANGE FOR THE REMOVAL OF ANY EXISTING UTILITIES AS INDICATED, INCLUDING BUT NOT LIMITED TO GAS, ELECTRIC, PHONE, CABLE, ETC. (UNLESS OTHERWISE NOTED TO REMAIN OR BY OTHERS) THE CONTRACTOR SHALL COORDINATE WITH ALL LOCAL UTILITY COMPANIES PRIOR TO THE REMOVAL OF THE FACILITIES.
- DO NOT DISTURB ANY CONIFEROUS OR DECIDUOUS TREES OR BRUSH, EXCEPT THOSE DESIGNATED FOR REMOVAL. DO NOT DISTURB THE AREA BELOW THE DRIP LINE EXCEPT AS SHOWN ON THE DRAWINGS OR DESIGNATED BY THE ENGINEER. FENCE ALL TREES AND SHRUBS ADJACENT TO WORK OR ACCESS AREAS.

**GRADING NOTES**

- BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE, LOCATION AND SIZE OF ALL UTILITIES & UNDERGROUND STRUCTURES AND REPORT DISCREPANCIES TO THE ANTERO GROUP, LLC PRIOR TO THE COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL INSURE SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- THE CONTRACTOR SHALL INSURE ALL ELEVATIONS ARE TO FINISHED GRADE.
- ALL SITE WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS PREPARED BY THE ANTERO GROUP, LLC, LOCAL MUNICIPAL REQUIREMENTS, APPLICABLE SECTIONS OF IDOT STANDARD SPECIFICATIONS AND STANDARDS, LATEST EDITION AND ALL OTHER PERTINENT FEDERAL AND STATE LAWS.
- THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS AND POLICIES GOVERNING SAFETY AND HEALTH, INCLUDING THE FEDERAL CONSTRUCTION SAFETY ACT (PUBLIC LAW 91-54), FEDERAL REGISTER, CHAPTER XVII, PART 1926 OF TITLE 29 REGULATIONS, OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION AND SUBSEQUENT PUBLICATIONS UPDATING THESE REGULATIONS.
- THE CONTRACTOR SHALL, IN EXCAVATED AREAS, PRUNE AND TREAT ANY ROOTS ENCOUNTERED. DO NOT DAMAGE LIMBS. WHERE AGREED BY THE ENGINEER, PRUNE LIMBS THAT OBSTRUCT WORK.
- DO NOT DISTURB AREAS OUTSIDE OF NEW CONTOURS SHOWN ON THE DRAWINGS, EXCEPT FOR STAGING AREAS, STOCKPILES, AND TEMPORARY CONSTRUCTION ACCESS POINTS AS APPROVED BY THE ENGINEER.

**UTILITY NOTES**

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATIONS AND PROTECTION OF ALL EXISTING UTILITIES SHOWN, ALL EXISTING UTILITIES NOT SHOWN, AND ALL PROPOSED UTILITIES ON THESE PLANS.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS TO COMPLETE THE PROPOSED WORK, AND SHALL COMPLY WITH ALL LOCAL STATE AND FEDERAL REGULATIONS.
- IT IS THE CONTRACTORS RESPONSIBILITY TO MAINTAIN ANY TEMPORARY ROADWAY PATCHES THAT MAY OCCUR IN ORDER TO REOPEN A ROADWAY OR PARKING LOT WHILE CONSTRUCTION ACTIVITY PROGRESSES, UNTIL SUCH TIME A PERMANENT PATCH CAN BE INSTALLED.
- THE CONTRACTOR SHALL PERFORM THE WORK ACCORDING TO ALL CITY, COUNTY, STATE, AND FEDERAL SAFETY AND HEALTH REGULATIONS. IN PARTICULAR THE "TRENCHING" AND "OPEN EXCAVATION" OPERATIONS SHALL COMPLY WITH ALL CURRENT O.S.H.A. REGULATORY REQUIREMENTS.

**EXISTING LEGEND**

	CONTROL POINT		BOLLARD		SIDEWALK
	CATCH BASIN		OVERHEAD ELECTRIC		CURB AND GUTTER
	STORM INLET		ROADWAY CENTERLINE		EXISTING SPOT ELEVATION
	MANHOLE		RIGHT OF WAY		TELEPHONE POLE
	TREE		CONTOURS		MONITORING WELL
	VALVE BOX		BUILDING		SIGN
	STREET LIGHT		WATER MAIN		GAS VALVE
	TRAFFIC LIGHT		FENCE		PAVEMENT CORE
	UTILITY POLE		EXISTING COMBINED SEWER		HAND HOLE
	HYDRANT		SIDEWALK		

**ABBREVIATIONS**

LF	LINEAR FEET	FL	FLOW LINE	OFF	OFFSET
SYS	SQUARE YARDS	FF	FINISHED FLOOR	HMA	HOT MIX ASPHALT
BC G	BOTTOM OF CURB / GUTTER	FG	FINISHED GRADE	PCC	PORTLAND CEMENT CONCRETE
C	CURB	HOR.	HORIZONTAL	PVC	POLYVINYL CHLORIDE
CB	CATCH BASIN	INV.	INVERT	P	PAVEMENT
CSS	COMBINED SANITARY SEWER	GR.	GRATE	RCP	REINFORCED CONCRETE PIPE
CL	CENTERLINE	G	GUTTER	ROW	RIGHTS-OF-WAY
CONC.	CONCRETE	LT	LEFT	RT	RIGHT
CP	CONTROL POINT	MAX.	MAXIMUM	STA	STATION
CYS	CUBIC YARDS	M.E.	MATCH EXISTING	STM.	STORM
E	EASTING	MIN.	MINIMUM	TF	TOP OF FOUNDATION
EG	EXISTING GRADE	MH	MANHOLE	TYP.	TYPICAL
ELEV. OR EL	ELEVATION	N	NORTHING	VERT	VERTICAL
EX.	EXISTING	N.T.S.	NOT TO SCALE	VCP	VITRIFIED CLAY PIPE
EOP	EDGE OF PAVEMENT				

**PROPOSED LEGEND**

	B-6.12 CURB & GUTTER		OBSERVATION WELL
	DEPRESSED CURB		PERFORATED UNDERDRAIN PIPE
	BARRIER CURB		DOGHOUSE MANHOLE
	ASPHALT PAVEMENT		STORM SEWER
	CONCRETE PAVEMENT		CATCH BASIN
	RIGHT OF WAY LINE		SLOPE ARROW
	STORM SEWER MANHOLE		CLEANOUT
	RAIN GARDEN		PROPOSED SIGN
	PROPOSED SPOT ELEVATION		DEPRESSED CURB
	PERFORATED UNDERDRAIN PIPE		DETECTABLE WARNING
			PROPOSED CONTOUR

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PREPARED FOR

**CITY OF HARVEY,**  
**15320 BROADWAY AVENUE**  
**HARVEY, IL 60426**

Antero Group

PE STAMP

FOR AND ON BEHALF OF ANTERO GROUP

154TH STREET RECONSTRUCTION PROJECT

**GENERAL NOTES**

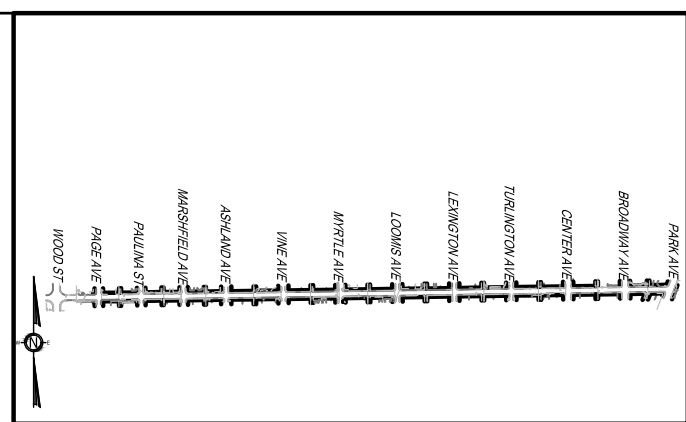
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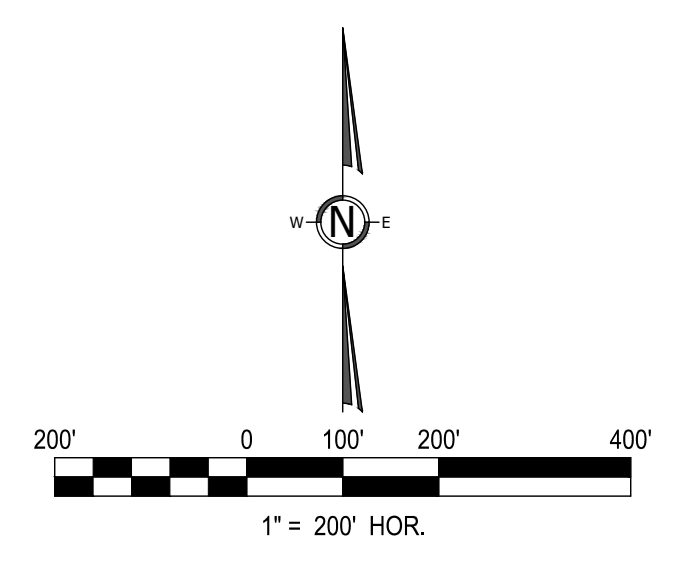
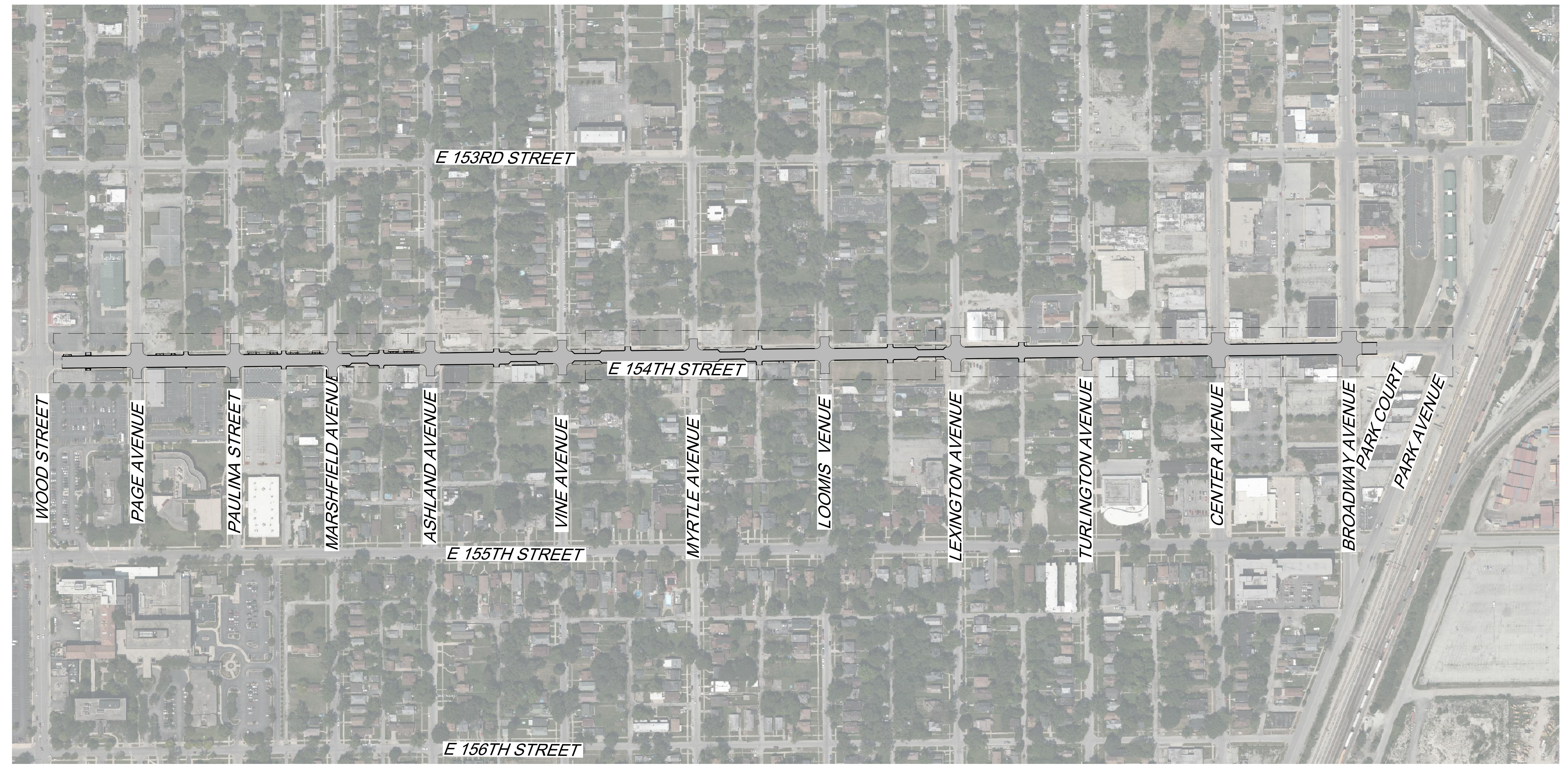
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SHEET  
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LOCATION MAP



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 HARVEY, IL 60426

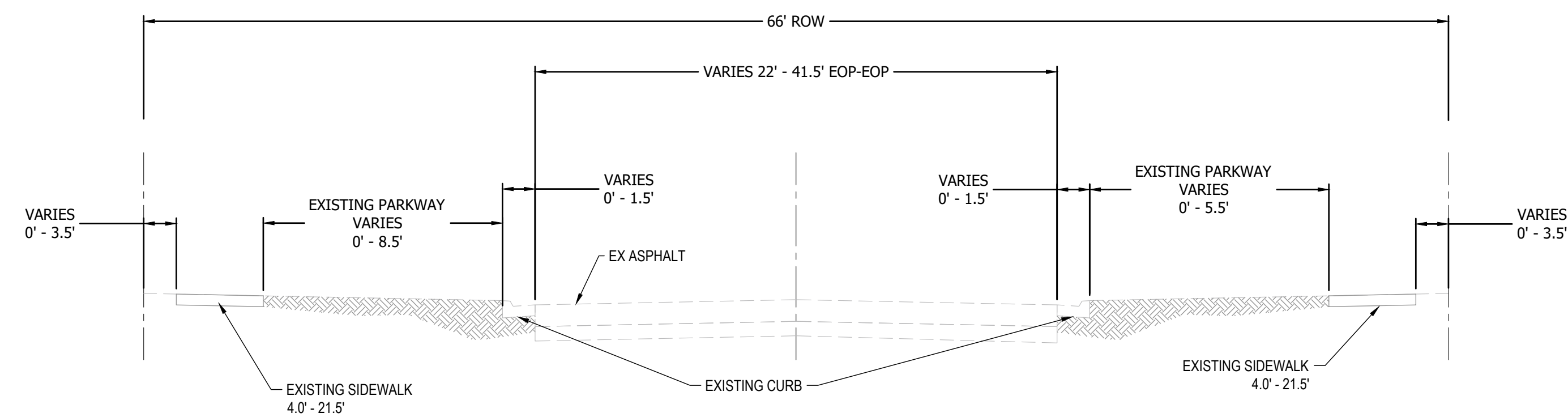


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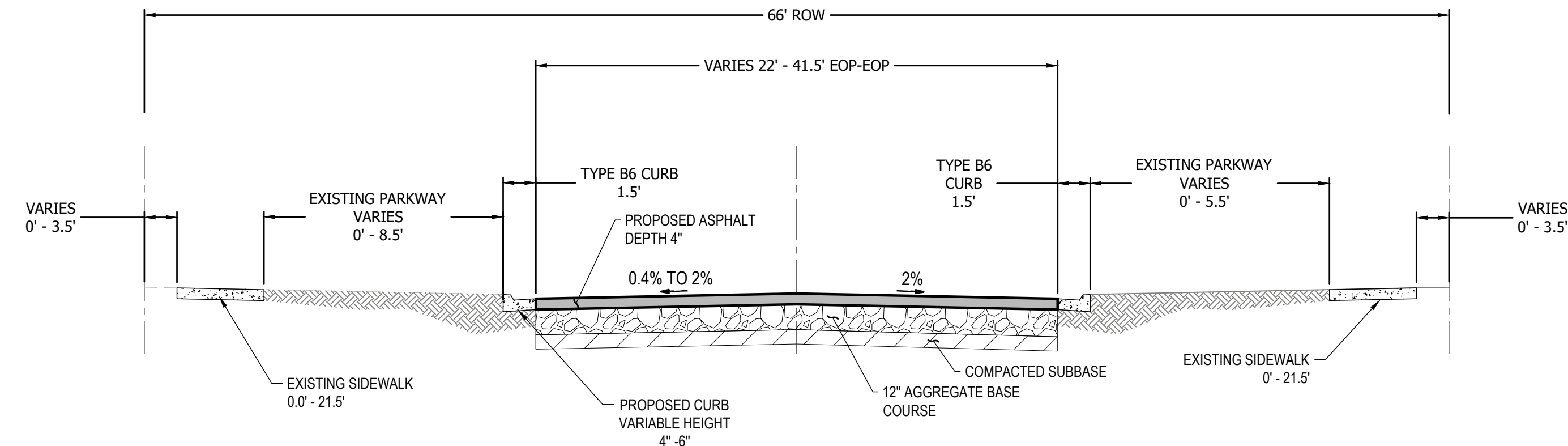
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**OVERALL PLAN**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

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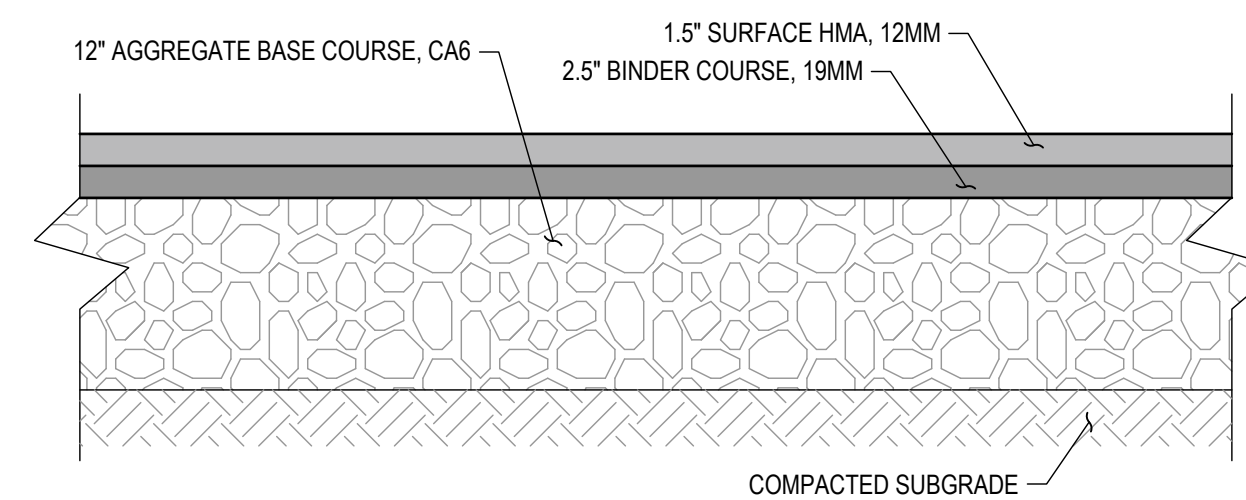
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**EXISTING 154TH STREET SECTION**  
 STA: 29+96.50 TO 76+53  
 N.T.S.



**PROPOSED 154TH STREET SECTION**  
 STA: 29+96.50 TO 76+53  
 N.T.S.



**ASPHALT PAVEMENT SECTION**



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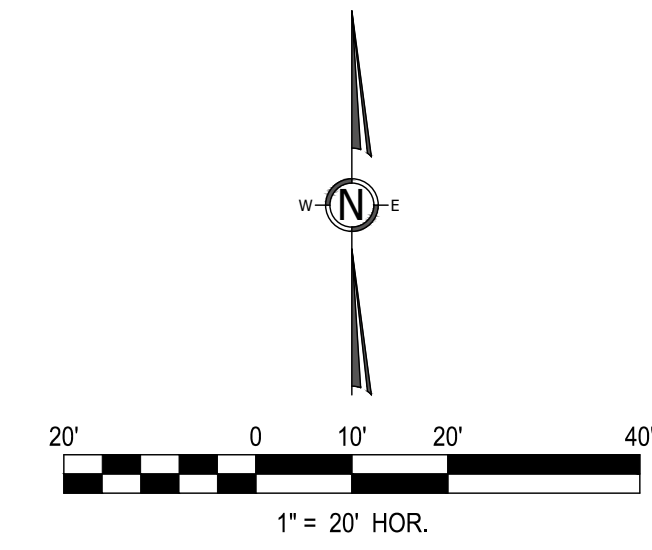
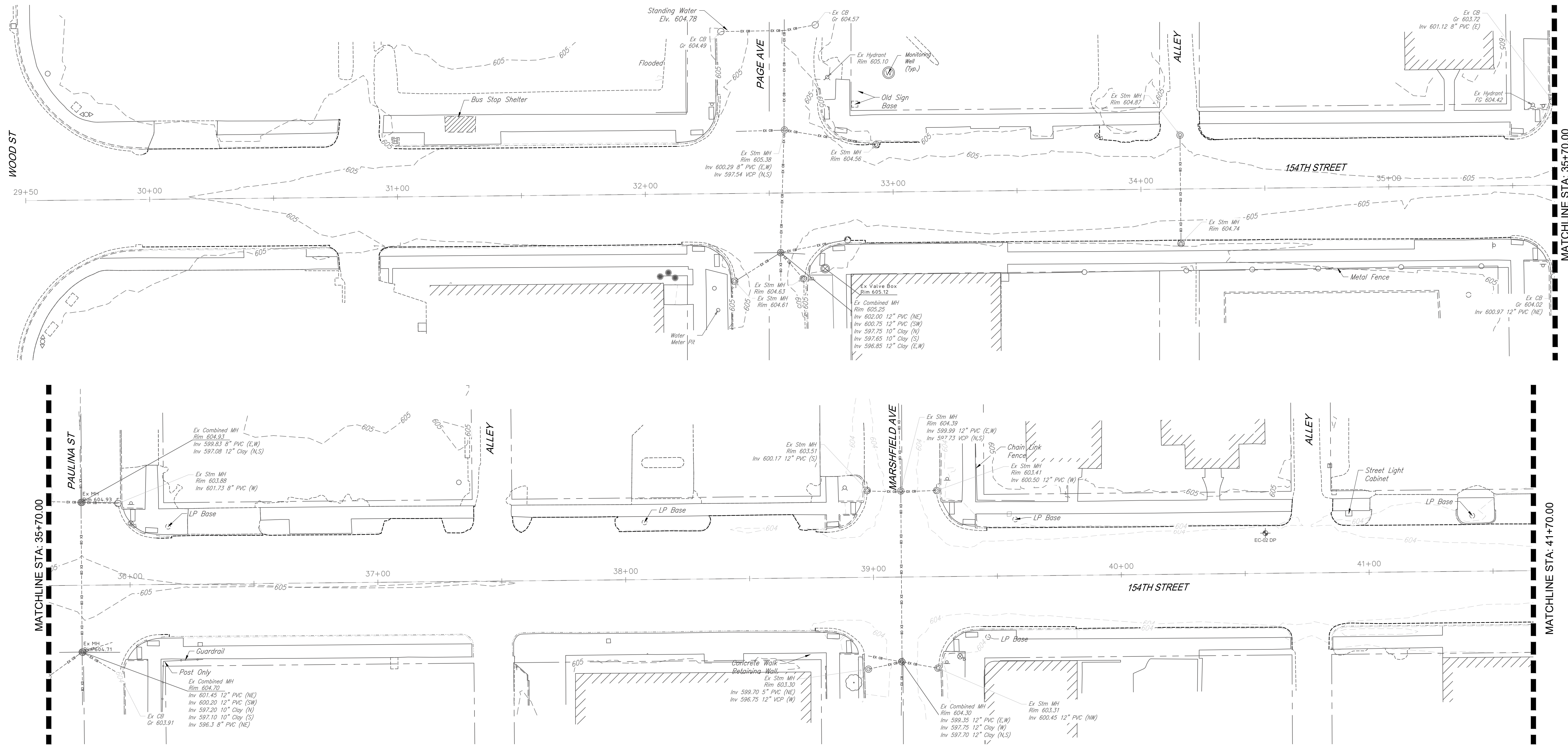
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**TYPICAL SECTIONS**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

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 SHEET: C-04



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 HARVEY, IL 60426

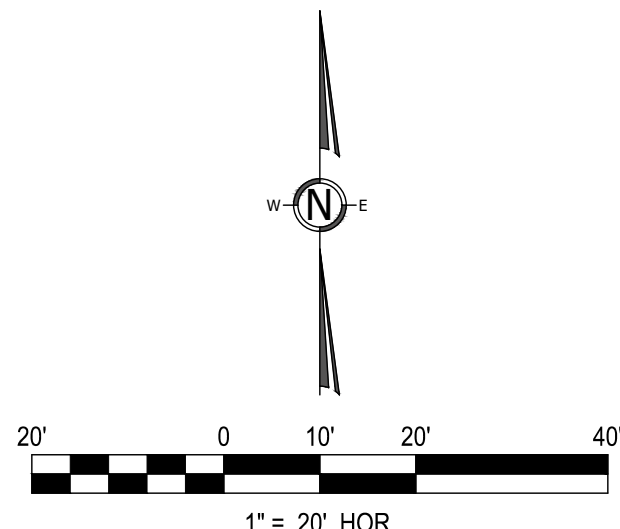
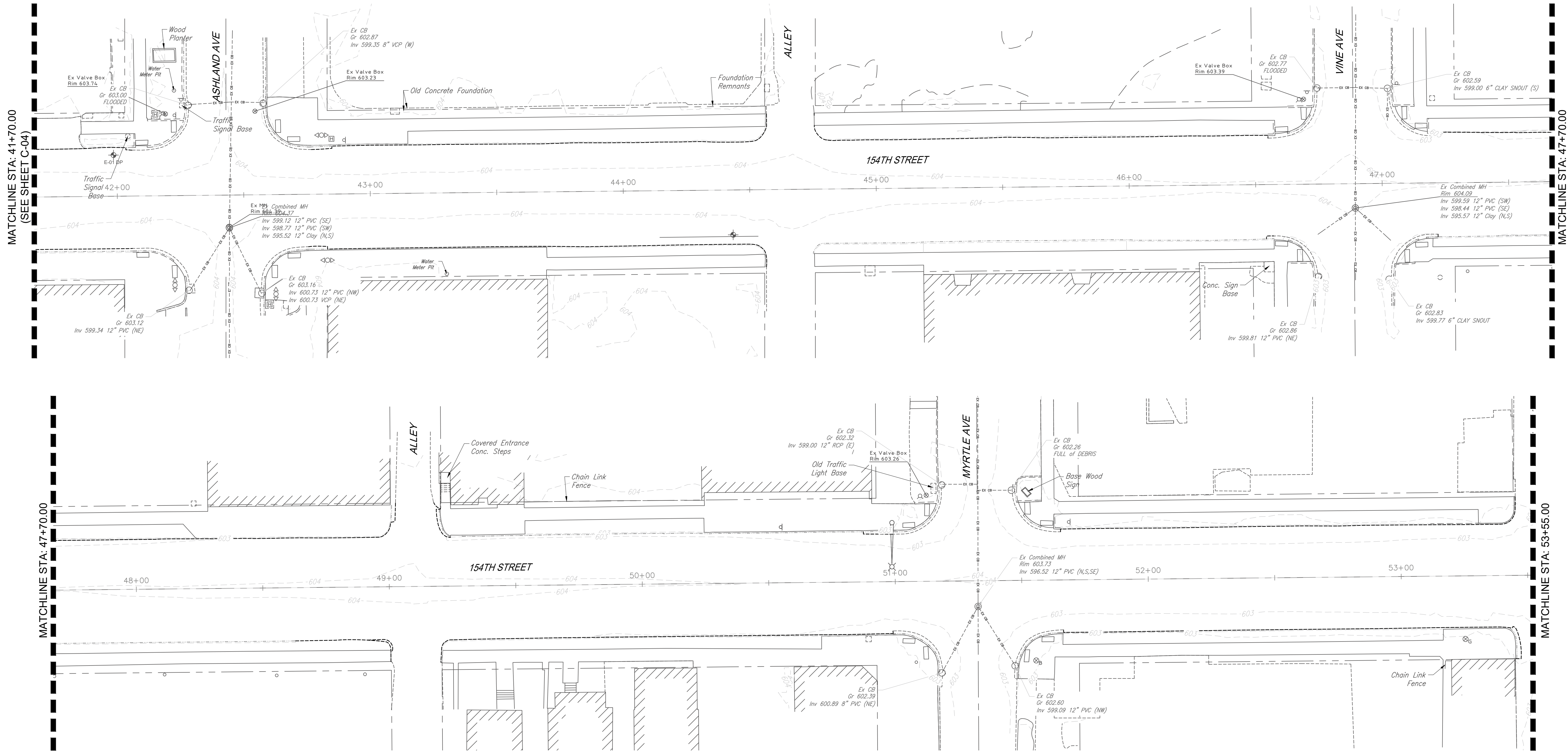


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**154TH STREET RECONSTRUCTION PROJECT**  
**EXISTING CONDITIONS**  
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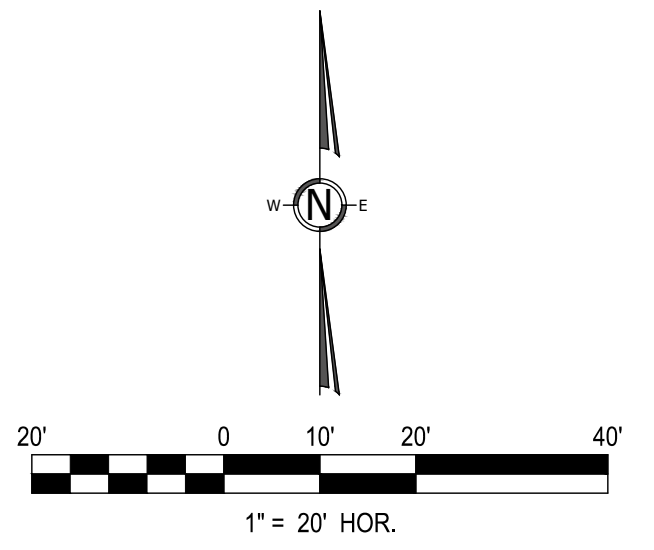
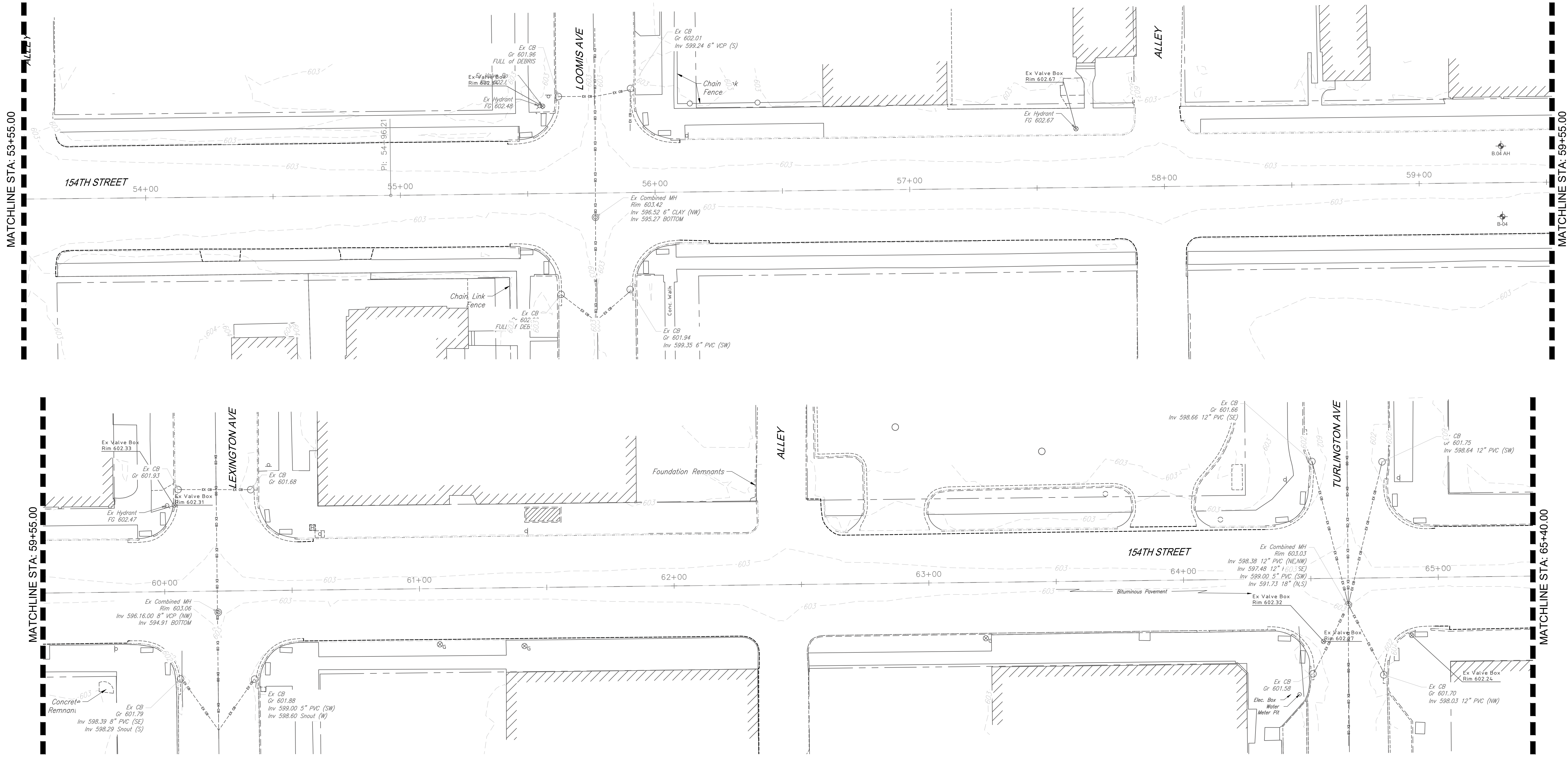


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**154TH STREET RECONSTRUCTION PROJECT**  
**EXISTING CONDITIONS**  
 STA 41+70 TO 53+55  
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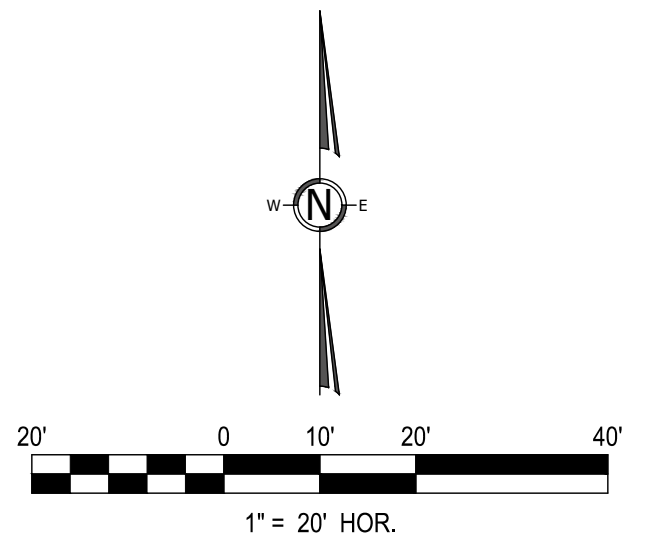
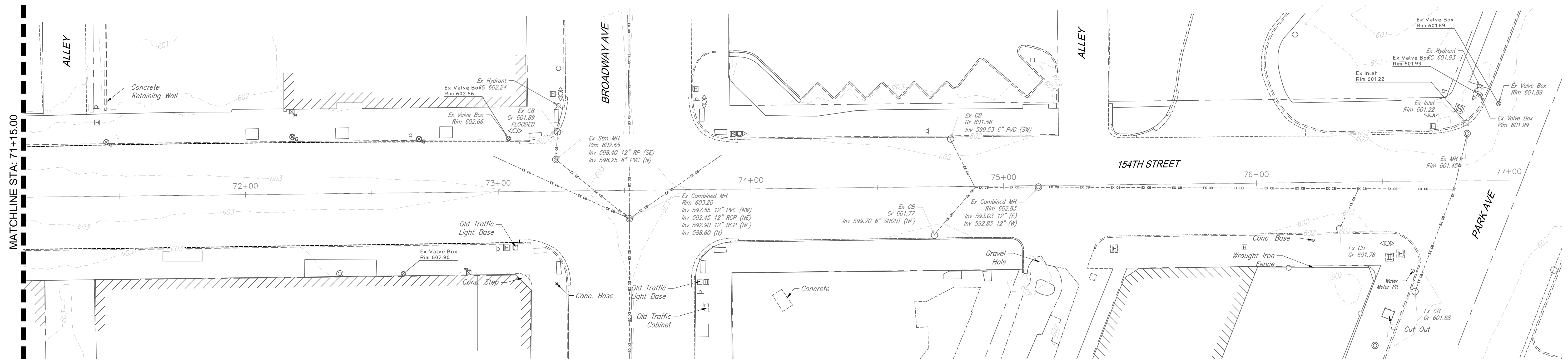
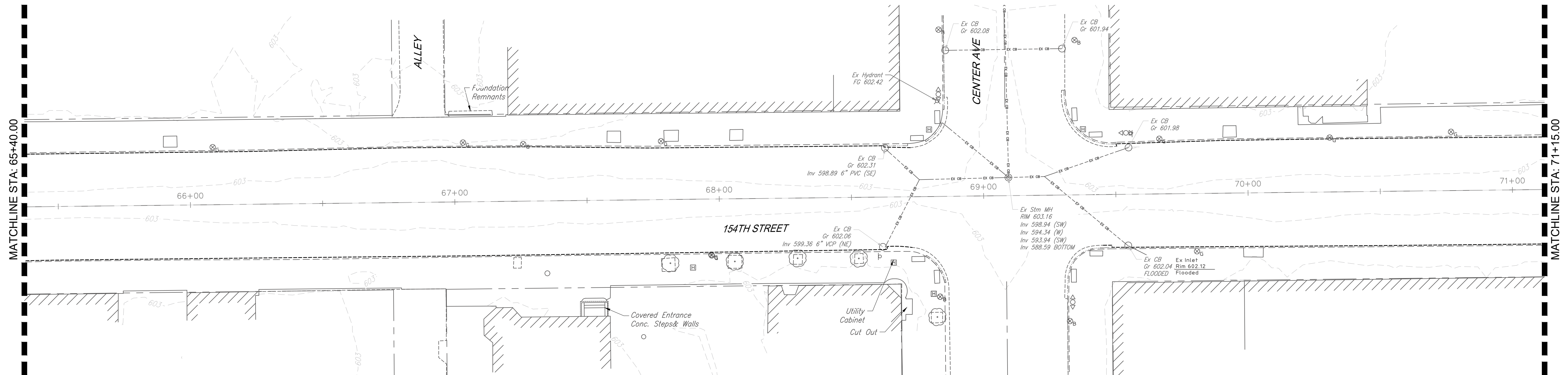


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**154TH STREET RECONSTRUCTION PROJECT**  
**EXISTING CONDITIONS**  
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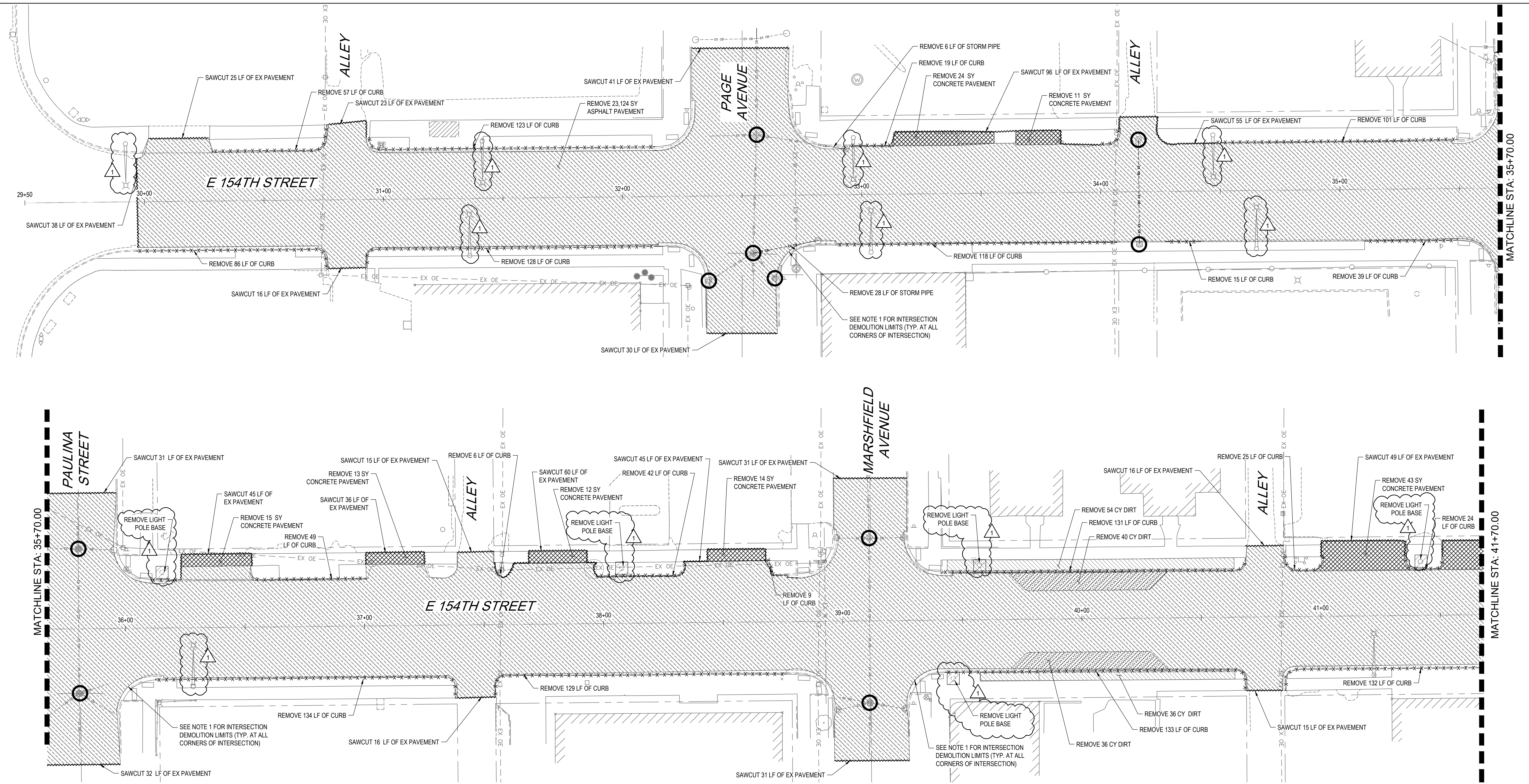


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**154TH STREET RECONSTRUCTION PROJECT**  
**EXISTING CONDITIONS**  
 STA 65+40 TO 77+00  
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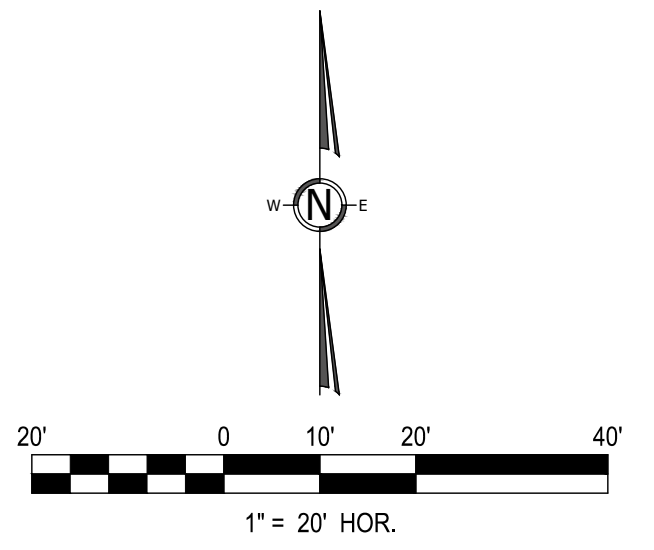


**LEGEND**

- x-x-x-x- REMOVE CURB & GUTTER
- ~ ~ ~ SAWCUT PAVEMENT
- [Hatched Box] FULL DEPTH PAVEMENT REMOVAL
- [Dotted Box] FULL DEPTH PAVEMENT REMOVAL AND OVEREXCAVATION 6 FT. DEPTH
- [Cross-hatched Box] REMOVE CONCRETE
- [Diagonal Hatched Box] OVEREXCAVATION 6 FT. DEPTH
- X REMOVE CATCH BASIN / MANHOLE
- O REMOVE AND REPLACE TOP 3" OF CATCH BASIN / MANHOLE AND ADJUST RIM ELEVATION TO FINISHED GRADE
- - - - - RIGHT OF WAY LINE
- EX OE --- REMOVE EXISTING COMBINED SEWER
- [Hatched Box] REMOVE EXISTING LIGHTS POLES AND REPAVE SIDEWALK

**NOTES:**

1. AT ALL INTERSECTIONS, ALL EXISTING CURB, GUTTER, AND SIDEWALK IS TO REMAIN IN-PLACE. ANY DAMAGE TO THE EXISTING CURB, GUTTER, AND SIDEWALKS IS TO BE REPLACED BY THE CONTRACTOR IN-KIND.



No.	DATE	REVISION DESCRIPTION
1	4/15/24	ISSUED ADDENDUM 1

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

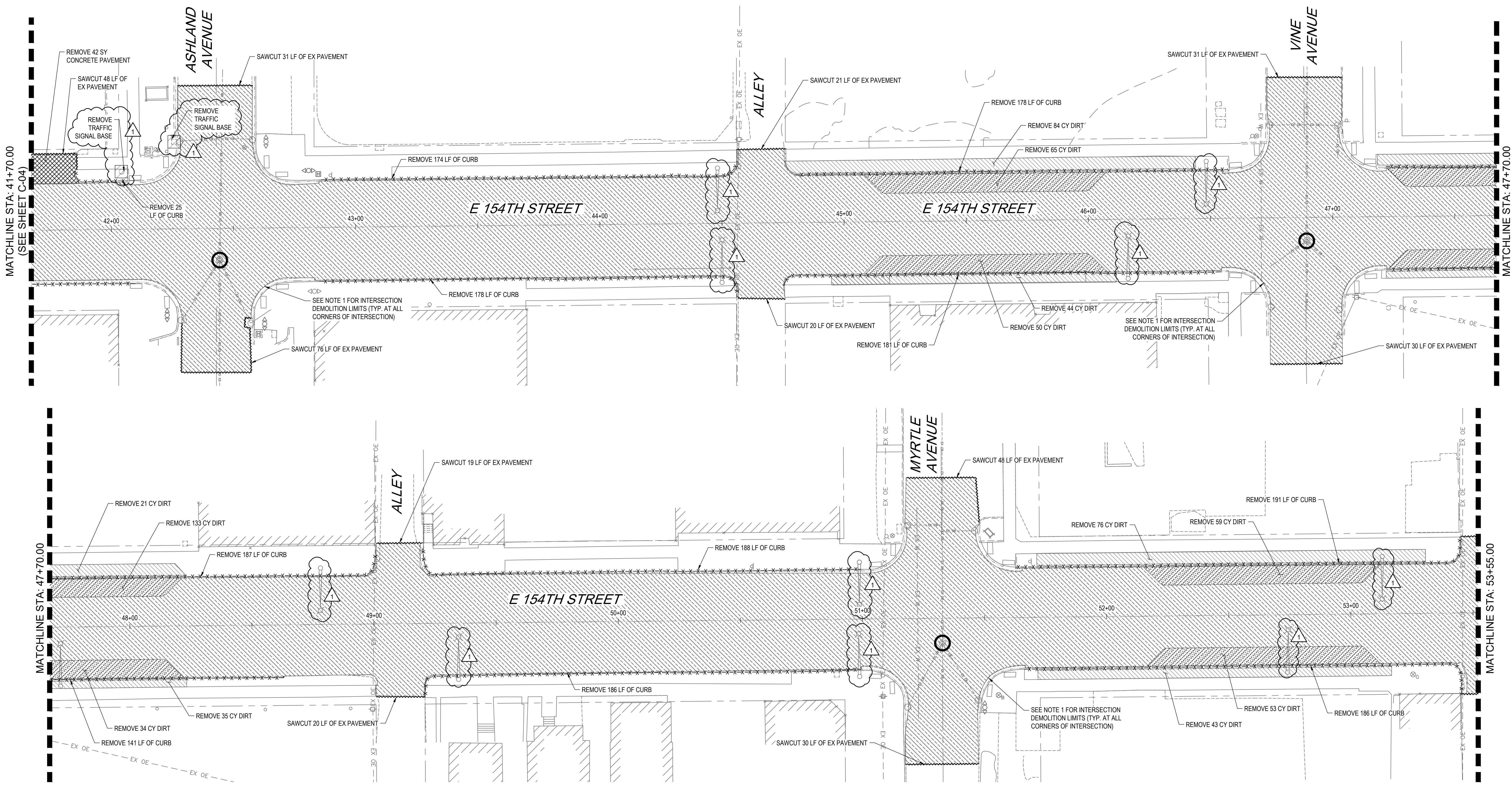


PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**DEMOLITION PLAN STA 29+50 TO 41+70**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER	CoH-2207
DATE	3/29/2024
SHEET	C-09

File Location: C:\Users\jaye\OneDrive - anterogroup.com\Documents - anterogroup.com\Documents - anterogroup.com\Projects\154th St Reconstruction\DWG\Sheets\CoH-2207-DEMOC.dwg Plot Date: 4/15/2024 12:26 PM Last Saved By: JDYE

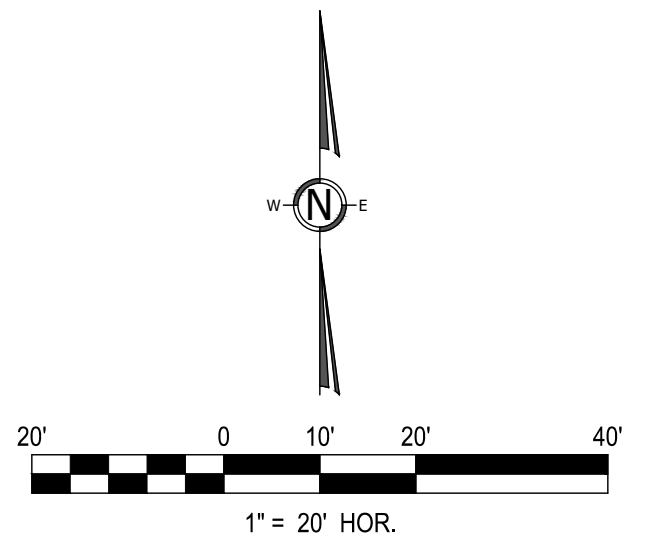


**LEGEND**

- |                            |                                                            |                          |                                                                                               |
|----------------------------|------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------|
| -x-x-x-x-                  | REMOVE CURB & GUTTER                                       | X                        | REMOVE CATCH BASIN / MANHOLE                                                                  |
| ~~~~~                      | SAWCUT PAVEMENT                                            | O                        | REMOVE AND REPLACE TOP 3" OF CATCH BASIN / MANHOLE AND ADJUST RIM ELEVATION TO FINISHED GRADE |
| [Cross-hatch pattern]      | FULL DEPTH PAVEMENT REMOVAL                                | - - - - -                | RIGHT OF WAY LINE                                                                             |
| [Dotted pattern]           | FULL DEPTH PAVEMENT REMOVAL AND OVEREXCAVATION 6 FT. DEPTH | =====                    | REMOVE EXISTING COMBINED SEWER                                                                |
| [Diagonal hatch pattern]   | REMOVE CONCRETE                                            | [Diagonal hatch pattern] | REMOVE EXISTING LIGHTS POLES AND REPAVE SIDEWALK                                              |
| [Horizontal hatch pattern] | OVEREXCAVATION 6 FT. DEPTH                                 |                          |                                                                                               |

**NOTES:**

1. AT ALL INTERSECTIONS, ALL EXISTING CURB, GUTTER, AND SIDEWALK IS TO REMAIN IN-PLACE. ANY DAMAGE TO THE EXISTING CURB, GUTTER, AND SIDEWALKS IS TO BE REPLACED BY THE CONTRACTOR IN-KIND.



No.	DATE	REVISION DESCRIPTION
1	4/15/24	ISSUED ADDENDUM 1

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

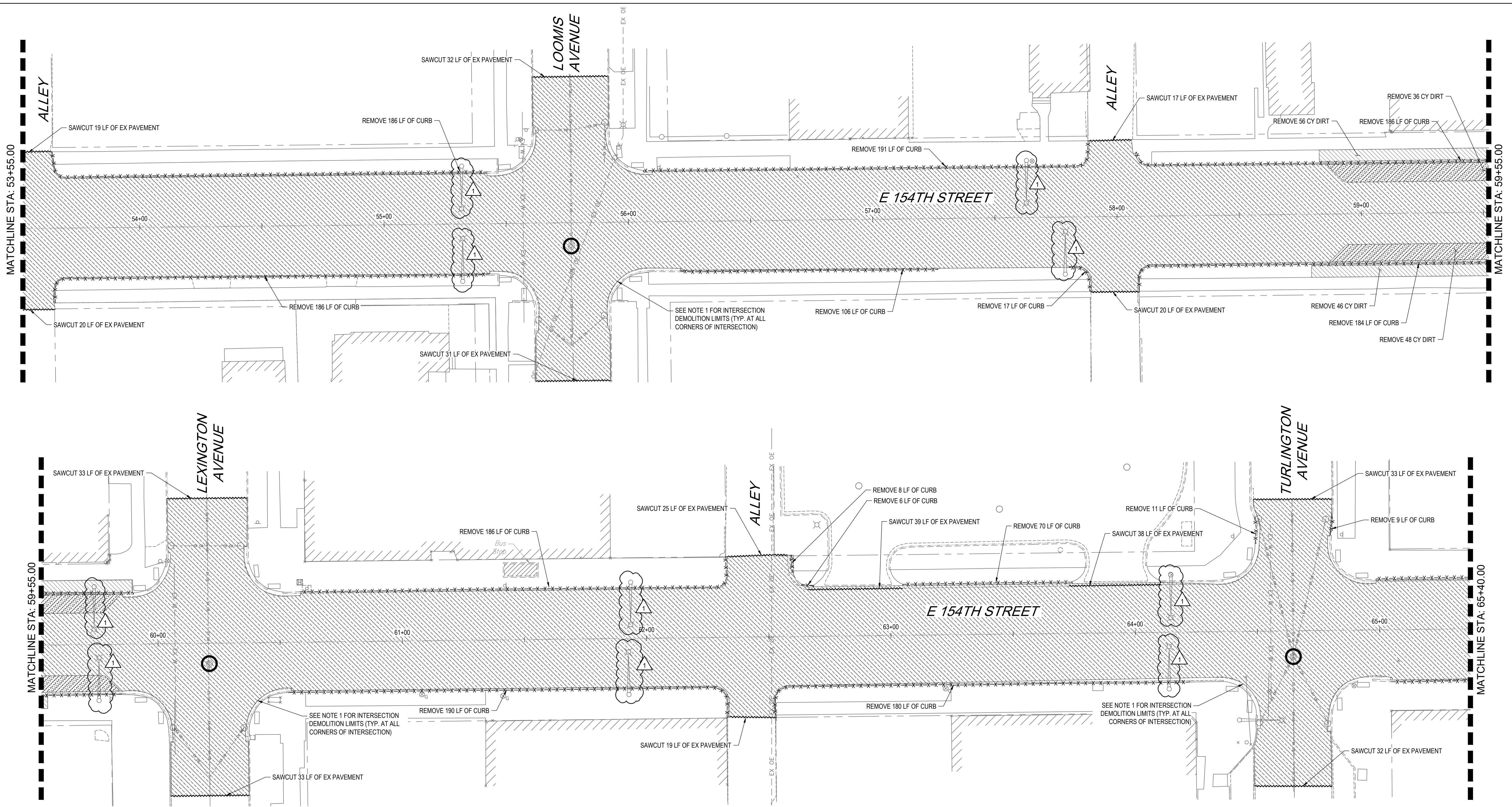


PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**DEMOLITION PLAN STA 41+70 TO 53+55**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-10**

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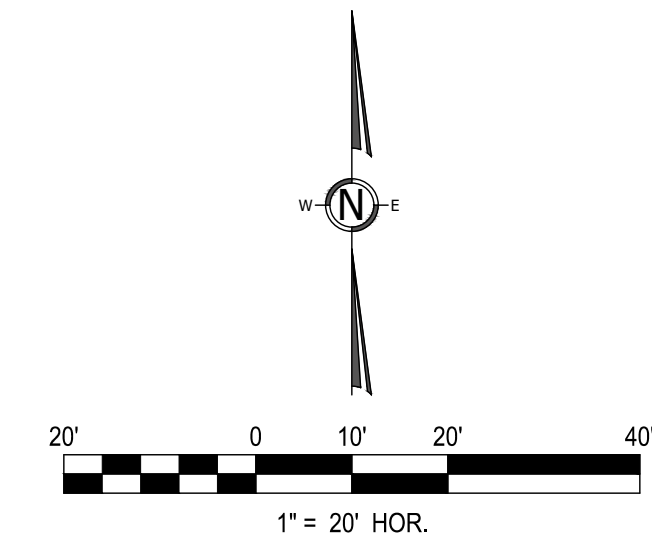


**LEGEND**

	REMOVE CURB & GUTTER		REMOVE CATCH BASIN / MANHOLE
	SAWCUT PAVEMENT		REMOVE AND REPLACE TOP 3' OF CATCH BASIN / MANHOLE AND ADJUST RIM ELEVATION TO FINISHED GRADE
	FULL DEPTH PAVEMENT REMOVAL		RIGHT OF WAY LINE
	FULL DEPTH PAVEMENT REMOVAL AND OVEREXCAVATION 6FT. DEPTH		REMOVE EXISTING COMBINED SEWER
	REMOVE CONCRETE		REMOVE EXISTING LIGHTS POLES AND REPAVE SIDEWALK
	OVEREXCAVATION 6 FT. DEPTH		

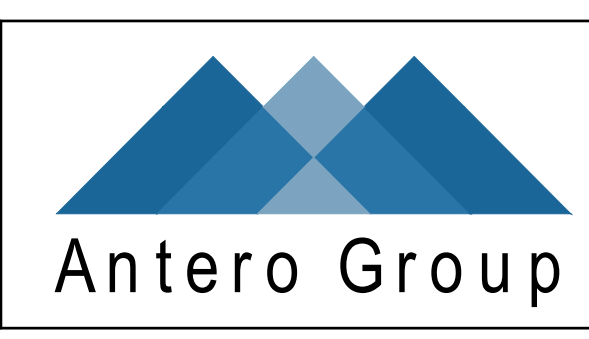
**NOTES:**

- AT ALL INTERSECTIONS, ALL EXISTING CURB, GUTTER, AND SIDEWALK IS TO REMAIN IN-PLACE. ANY DAMAGE TO THE EXISTING CURB, GUTTER, AND SIDEWALKS IS TO BE REPLACED BY THE CONTRACTOR IN-KIND.



No.	DATE	REVISION DESCRIPTION
1	4/15/24	ISSUED ADDENDUM 1

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

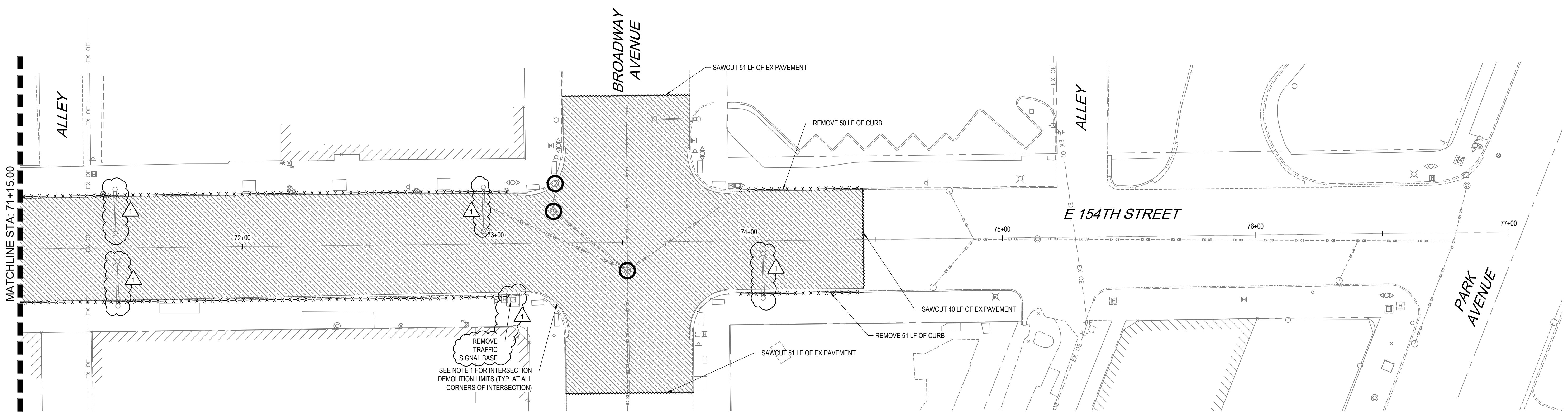
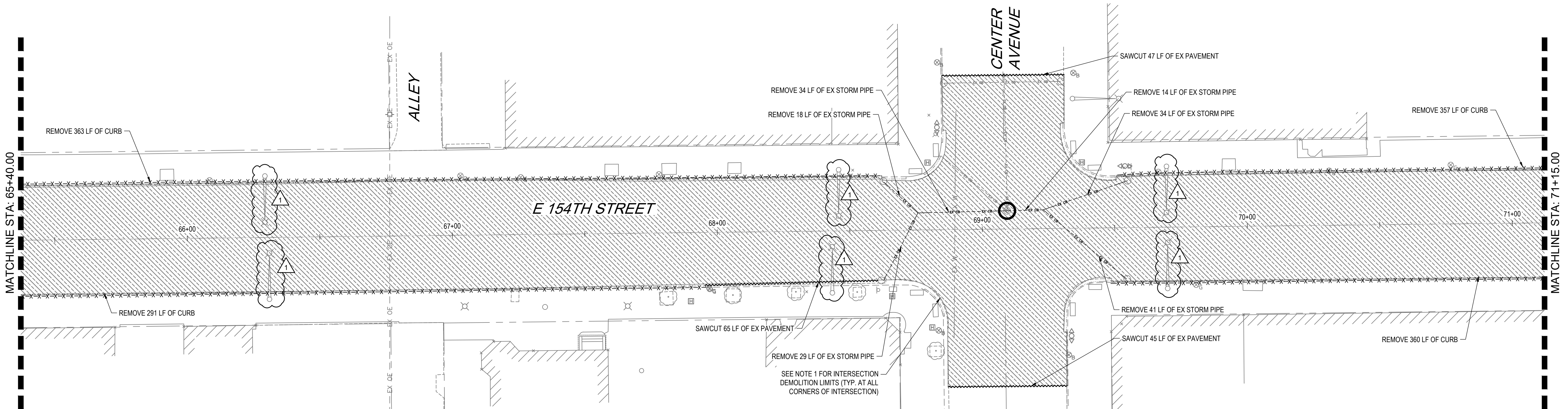


PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**DEMOLITION PLAN STA 53+55 TO 65+40**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-11**

File Location: C:\Users\jvonefive - antero group\p\Projects\City of harvey\154th st reconstruction\DWG\Sheets\CoH-2207-DEM.dwg Plot Date: 4/15/2024 12:26 PM Last Saved By: JDYE

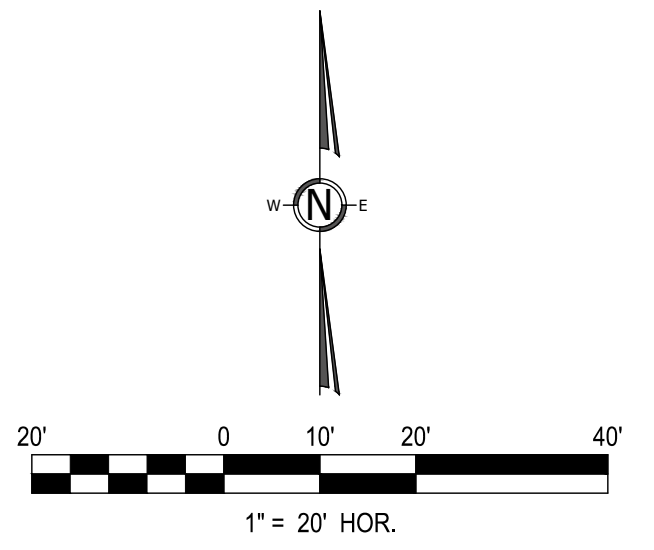


**LEGEND**

- |           |                                                           |           |                                                                                               |
|-----------|-----------------------------------------------------------|-----------|-----------------------------------------------------------------------------------------------|
| -x-x-x-x- | REMOVE CURB & GUTTER                                      | X         | REMOVE CATCH BASIN / MANHOLE                                                                  |
| ~~~~~     | SAWCUT PAVEMENT                                           | O         | REMOVE AND REPLACE TOP 3' OF CATCH BASIN / MANHOLE AND ADJUST RIM ELEVATION TO FINISHED GRADE |
| ▨         | FULL DEPTH PAVEMENT REMOVAL                               | - - - - - | RIGHT OF WAY LINE                                                                             |
| ▩         | FULL DEPTH PAVEMENT REMOVAL AND OVEREXCAVATION 6FT. DEPTH | — — — — — | REMOVE EXISTING COMBINED SEWER                                                                |
| ▧         | REMOVE CONCRETE                                           | ▨         | REMOVE EXISTING LIGHTS POLES AND REPAVE SIDEWALK                                              |
| ▩         | OVEREXCAVATION 6 FT. DEPTH                                |           |                                                                                               |

**NOTES:**

1. AT ALL INTERSECTIONS, ALL EXISTING CURB, GUTTER, AND SIDEWALK IS TO REMAIN IN-PLACE. ANY DAMAGE TO THE EXISTING CURB, GUTTER, AND SIDEWALKS IS TO BE REPLACED BY THE CONTRACTOR IN-KIND.



No.	DATE	REVISION DESCRIPTION
1	4/15/24	ISSUED ADDENDUM 1

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



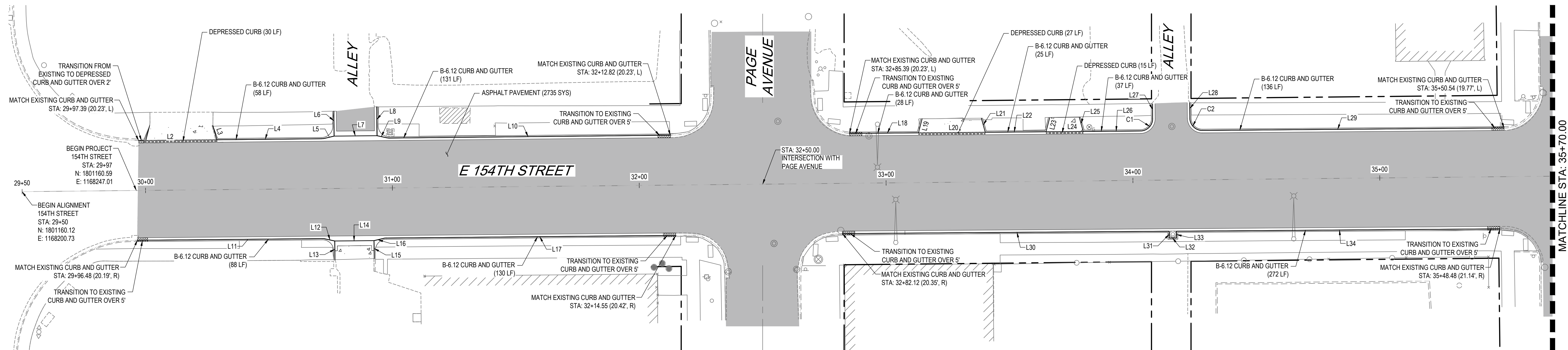
PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**DEMOLITION PLAN STA 65+40 TO 77+00**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-12**



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**NOTES:**

1. ALL LINES AND CURVES DENOTE LOCATION OF THE FLOW LINE UNLESS OTHERWISE NOTED.
2. REFERENCE DETAILS FOR CURB TYPE B-6.12 AND CURB CUTS.

**LEGEND**

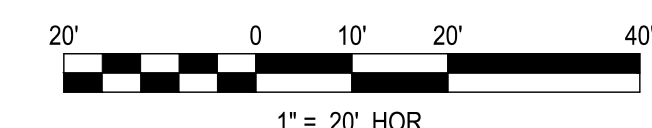
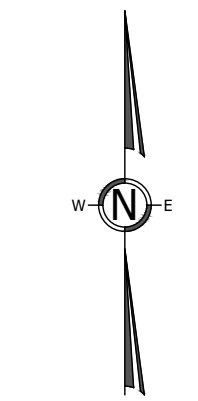
- B-6.12 CURB & GUTTER
- DEPRESSED CURB
- BARRIER CURB
- CURB & GUTTER TRANSITION
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- RIGHT OF WAY LINE

**LINE TABLE**

LINE #	BEARING	DISTANCE
L2	N89°25'16"E	29.74
L3	S15°34'44"E	5.94
L4	N89°25'16"E	42.52
L5	N76°44'27"E	4.00
L6	N00°34'44"W	10.11
L7	N89°25'16"E	17.39
L8	N00°34'44"W	11.69
L9	N77°53'55"W	4.00
L10	S89°25'12"W	113.83
L11	N89°28'54"E	74.96
L12	S77°49'35"E	4.00
L13	S00°34'30"E	7.57
L14	N89°28'54"E	15.92
L15	N00°34'29"W	7.30
L16	N76°48'46"E	4.00
L17	N89°28'54"E	117.19
L18	N89°31'14"E	27.94
L19	S14°31'14"W	5.91
L20	N89°31'14"E	79.14
L21	S15°28'46"E	5.91
L22	N89°31'14"E	24.15
L23	S14°31'14"W	5.91
L24	N89°31'14"E	16.00
L25	S15°28'46"E	5.91
L26	N89°31'14"E	22.70
L27	N00°28'46"W	5.90
L28	S00°28'46"E	6.24
L29	N89°31'14"E	122.22
L30	N89°35'25"E	132.33
L31	S00°24'35"E	2.73
L32	N89°35'25"E	3.00
L33	N00°24'35"W	2.73
L34	N89°35'25"E	131.03

**CURVE TABLE**

CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	7.85	5.00	90°00'00"	N44°31'14"E	7.07
C2	7.85	5.00	90°00'00"	S45°28'46"E	7.07



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

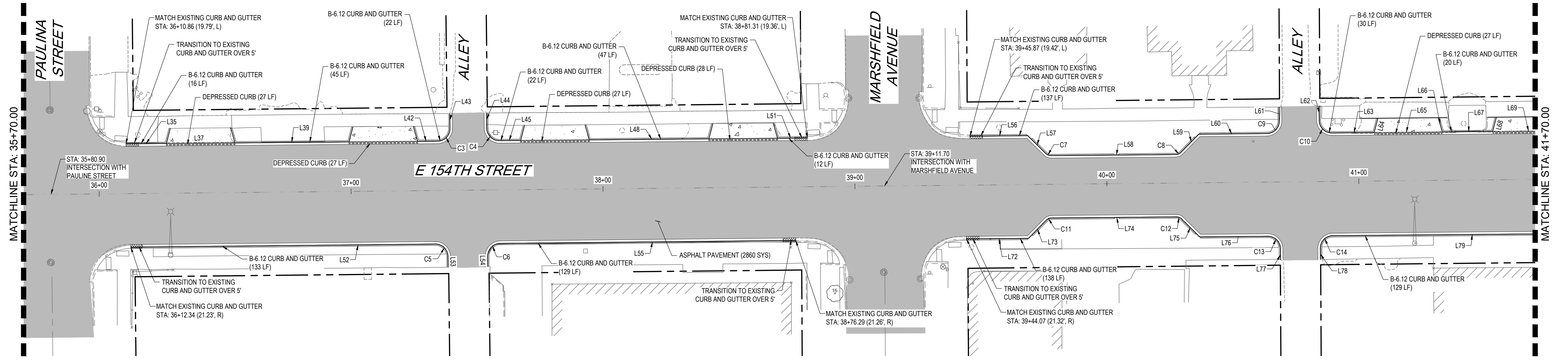


PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**GEOMETRY PLAN STA 29+50 TO 35+70**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-13**

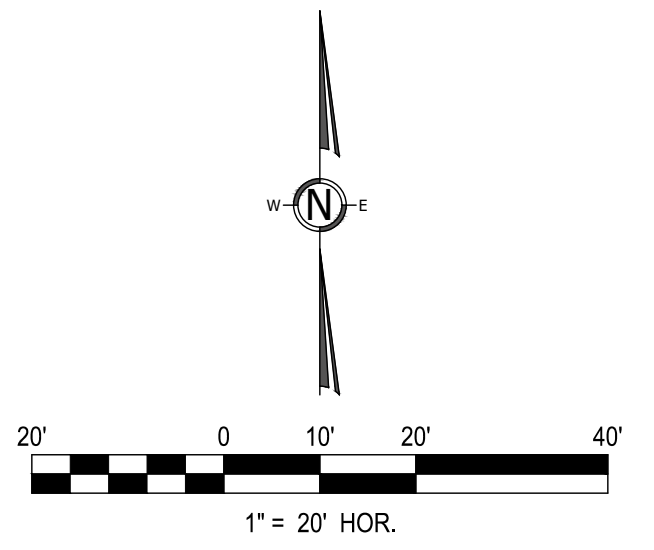
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- NOTES:**
1. ALL LINES AND CURVES DENOTE LOCATION OF THE FLOW LINE UNLESS OTHERWISE NOTED.
  2. REFERENCE DETAILS FOR CURB TYPE B-6.12 AND CURB CUTS.

CURVE TABLE					
CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C3	7.85	5.00	90°00'00"	N44°30'42"E	7.07
C4	7.85	5.00	90°00'00"	S45°29'18"E	7.07
C5	7.85	5.00	90°00'00"	S45°34'20"E	7.07
C6	7.85	5.00	90°00'00"	N44°25'40"E	7.07
C7	2.36	3.00	45°00'00"	S68°00'56"E	2.30
C8	2.36	3.00	45°00'00"	N66°59'04"E	2.30
C9	7.85	5.00	89°58'50"	N44°29'38"E	7.07
C10	7.86	5.00	90°01'10"	N45°30'21"W	7.07
C11	2.36	3.00	45°00'00"	N67°00'14"E	2.30
C12	2.36	3.00	45°00'00"	S67°59'46"E	2.30
C13	7.85	5.00	90°00'00"	S45°29'46"E	7.07
C14	7.85	5.00	90°00'00"	N44°30'14"E	7.07

- LEGEND**
- B-6.12 CURB & GUTTER
  - DEPRESSED CURB
  - BARRIER CURB
  - CURB & GUTTER TRANSITION
  - ASPHALT PAVEMENT
  - CONCRETE PAVEMENT
  - RIGHT OF WAY LINE



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**GEOMETRY PLAN STA 35+70 TO 41+70**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

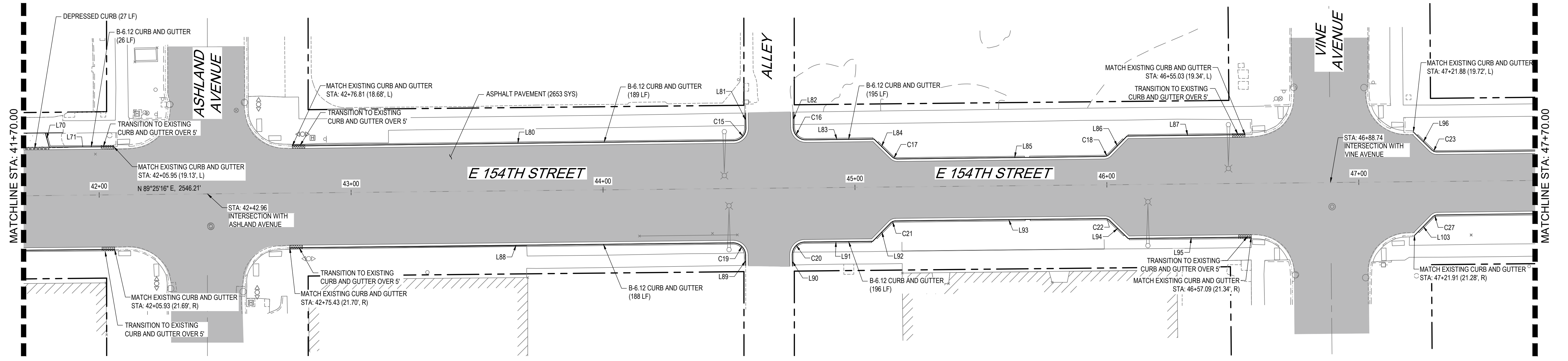
JOB NUMBER  
CoH-2207

DATE  
3/29/2024

SHEET  
**C-14**



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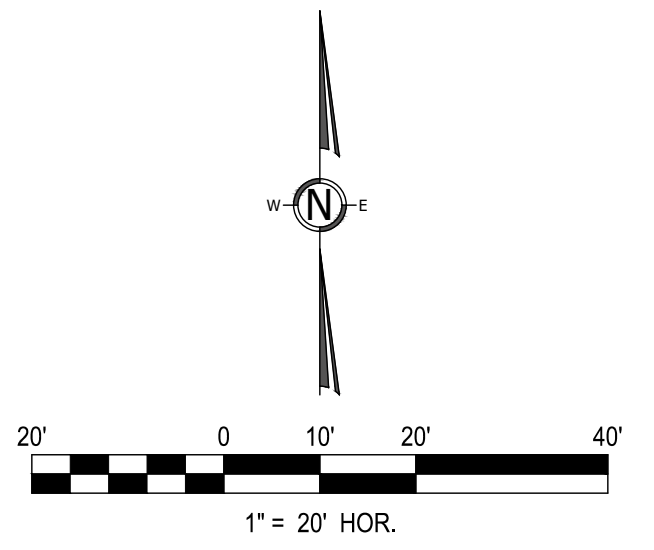
- NOTES:**
1. ALL LINES AND CURVES DENOTE LOCATION OF THE FLOW LINE UNLESS OTHERWISE NOTED.
  2. REFERENCE DETAILS FOR CURB TYPE B-6.12 AND CURB CUTS.

LINE TABLE		
LINE #	BEARING	DISTANCE
L70	S15°30'56"E	5.86
L71	S89°29'04"W	25.58
L80	N89°19'15"E	175.13
L81	N00°40'45"W	5.93
L82	S00°40'45"E	6.06
L83	N89°19'15"E	27.00
L84	S45°40'45"E	10.07
L85	N89°19'15"E	50.40
L86	N44°19'15"E	10.07
L87	N89°19'15"E	46.84
L88	N89°22'02"E	175.88
L89	S00°37'58"E	4.02
L90	N00°37'58"W	4.47
L91	N89°22'02"E	27.00
L92	N44°22'02"E	10.07
L93	N89°22'02"E	51.36
L94	S45°37'58"E	10.07
L95	N89°22'02"E	48.87
L96	S45°35'01"E	10.07
L103	N44°18'02"E	10.07

CURVE TABLE					
CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C15	7.85	5.00	90°00'00"	N44°19'15"E	7.07
C16	7.85	5.00	90°00'00"	S45°40'45"E	7.07
C17	2.36	3.00	45°00'00"	S68°10'45"E	2.30
C18	2.36	3.00	45°00'00"	N66°49'15"E	2.30
C19	7.85	5.00	90°00'00"	S45°37'58"E	7.07
C20	7.85	5.00	90°00'00"	N44°22'02"E	7.07
C21	2.36	3.00	45°00'00"	N66°52'02"E	2.30
C22	2.36	3.00	45°00'00"	S68°07'58"E	2.30
C23	2.36	3.00	45°00'00"	S68°05'01"E	2.30
C27	2.36	3.00	45°00'00"	N66°48'02"E	2.30

**LEGEND**

- B-6.12 CURB & GUTTER
- DEPRESSED CURB
- BARRIER CURB
- CURB & GUTTER TRANSITION
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- RIGHT OF WAY LINE



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**GEOMETRY PLAN STA 41+70 TO 47+70**

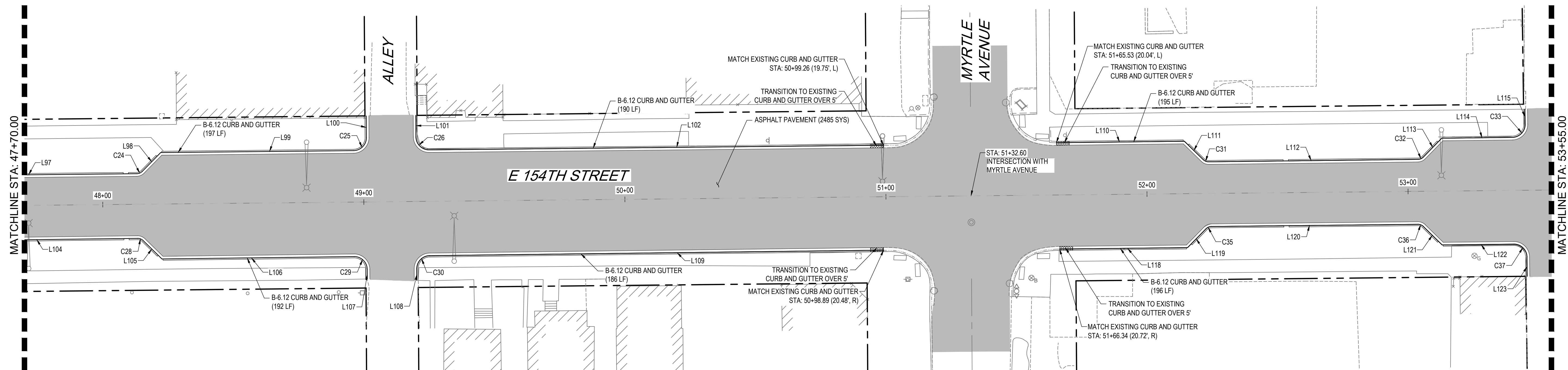
CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
CoH-2207

DATE  
3/29/2024

SHEET  
**C-15**

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**NOTES:**

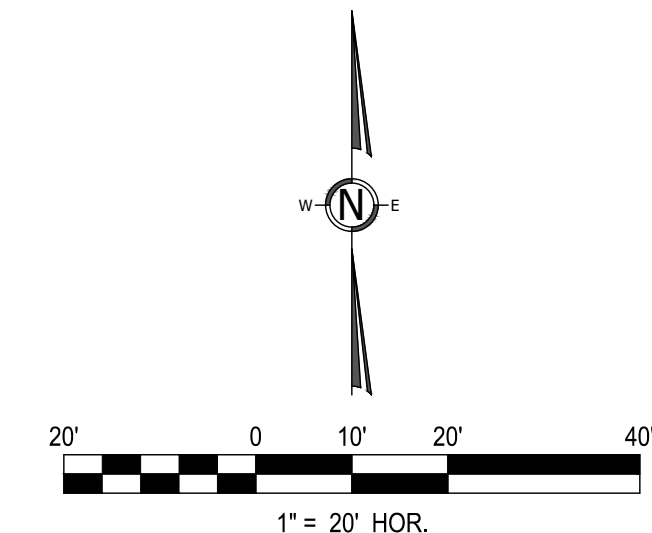
1. ALL LINES AND CURVES DENOTE LOCATION OF THE FLOW LINE UNLESS OTHERWISE NOTED.
2. REFERENCE DETAILS FOR CURB TYPE B-6.12 AND CURB CUTS.

LINE TABLE		
LINE #	BEARING	DISTANCE
L97	N89°24'59"E	82.00
L98	N44°24'59"E	10.07
L99	N89°24'59"E	73.86
L100	N00°21'55"W	8.29
L101	S00°21'55"E	8.25
L102	N89°24'59"E	174.03
L104	N89°18'02"E	82.00
L106	N89°18'02"E	73.58
L107	S00°21'55"E	3.61
L108	N00°21'55"W	4.46
L109	N89°18'02"E	173.86
L110	N89°19'39"E	49.00
L111	S45°40'21"E	10.07
L112	N89°19'39"E	49.60
L113	N44°19'39"E	10.07
L114	N89°19'39"E	27.00
L115	N00°47'02"W	5.75
L118	N89°23'16"E	49.00
L119	N44°23'16"E	10.07
L120	N89°23'16"E	49.32
L121	S45°36'44"E	10.07
L122	N89°23'16"E	27.41
L123	S00°47'02"E	7.39

CURVE TABLE					
CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C24	2.36	3.00	45°00'00"	N66°54'59"E	2.30
C25	7.83	5.00	89°46'54"	N44°31'32"E	7.06
C26	7.87	5.00	90°13'06"	S45°28'28"E	7.08
C28	2.36	3.00	45°00'00"	S68°11'58"E	2.30
C29	7.88	5.00	90°2'03"	S45°31'56"E	7.09
C30	7.82	5.00	89°39'57"	N44°28'04"E	7.05
C31	2.36	3.00	45°00'00"	S68°10'21"E	2.30
C32	2.36	3.00	45°00'00"	N66°49'39"E	2.30
C33	7.86	5.00	90°06'41"	N44°16'19"E	7.08
C35	2.36	3.00	45°00'00"	N66°53'16"E	2.30
C36	2.36	3.00	45°00'00"	S68°06'44"E	2.30
C37	7.84	5.00	89°49'42"	S45°41'53"E	7.06

**LEGEND**

- B-6.12 CURB & GUTTER
- DEPRESSED CURB
- BARRIER CURB
- CURB & GUTTER TRANSITION
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- RIGHT OF WAY LINE



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



FOR AND ON BEHALF OF ANTERO GROUP

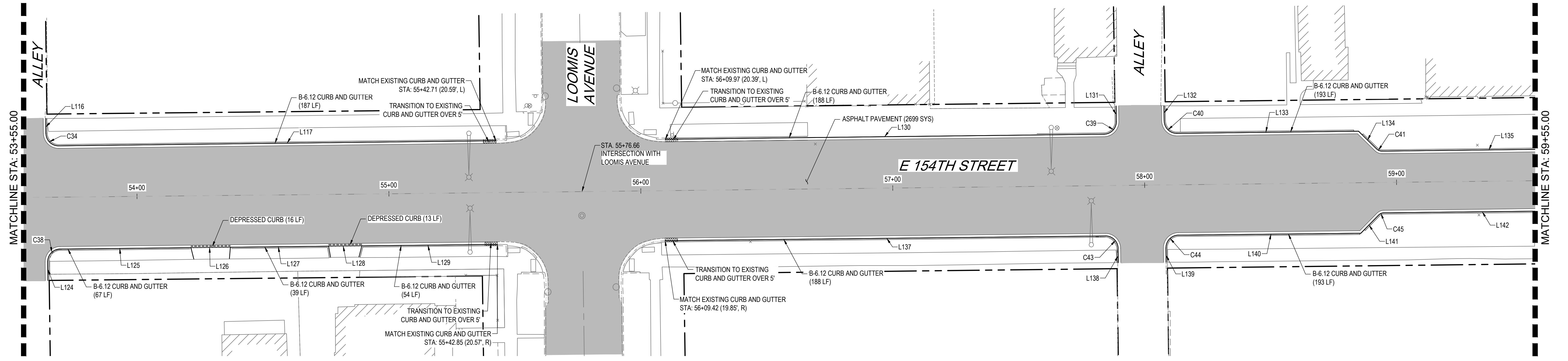
**154TH STREET RECONSTRUCTION PROJECT**  
**GEOMETRY PLAN STA 47+70 TO 53+55**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET

**C-16**

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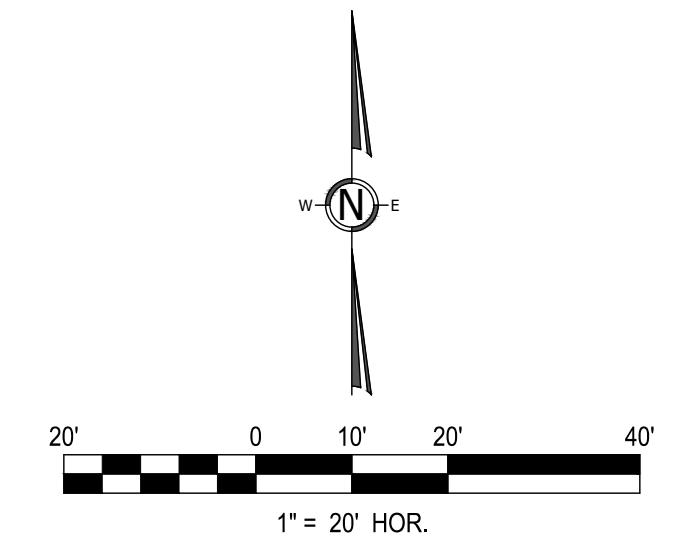
- NOTES:**
1. ALL LINES AND CURVES DENOTE LOCATION OF THE FLOW LINE UNLESS OTHERWISE NOTED.
  2. REFERENCE DETAILS FOR CURB TYPE B-6.12 AND CURB CUTS.

LINE TABLE		
LINE #	BEARING	DISTANCE
L116	S00°47'02"E	5.92
L117	N89°19'39"E	173.57
L124	N00°47'02"W	7.38
L125	N89°23'16"E	51.93
L127	N89°23'16"E	38.99
L128	N89°23'16"E	173.59
L129	N89°23'16"E	53.84
L130	N89°20'13"E	117.58
L131	N00°47'02"W	6.12
L132	S00°47'02"E	6.00
L133	N89°20'13"E	72.09
L134	S45°39'47"E	10.07
L135	N89°20'13"E	82.12
L137	N89°23'12"E	174.75
L138	S00°47'02"E	5.64
L139	N00°47'02"W	5.67
L140	N89°23'12"E	72.44
L141	N44°23'12"E	10.07
L142	N89°23'12"E	81.98

CURVE TABLE					
CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C34	7.84	5.00	89°53'19"	S45°43'41"E	7.06
C38	7.87	5.00	90°10'18"	N44°18'07"E	7.08
C39	7.86	5.00	90°07'15"	N44°16'38"E	7.08
C40	7.84	5.00	89°52'45"	S45°43'24"E	7.06
C41	2.36	3.00	45°00'00"	S68°09'47"E	2.30
C43	7.84	5.00	89°49'46"	S45°41'55"E	7.06
C44	7.87	5.00	90°10'14"	N44°18'05"E	7.08
C45	2.36	3.00	45°00'00"	N66°53'12"E	2.30

**LEGEND**

- B-6.12 CURB & GUTTER
- DEPRESSED CURB
- BARRIER CURB
- CURB & GUTTER TRANSITION
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- RIGHT OF WAY LINE



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**GEOMETRY PLAN STA 53+55 TO 59+55**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

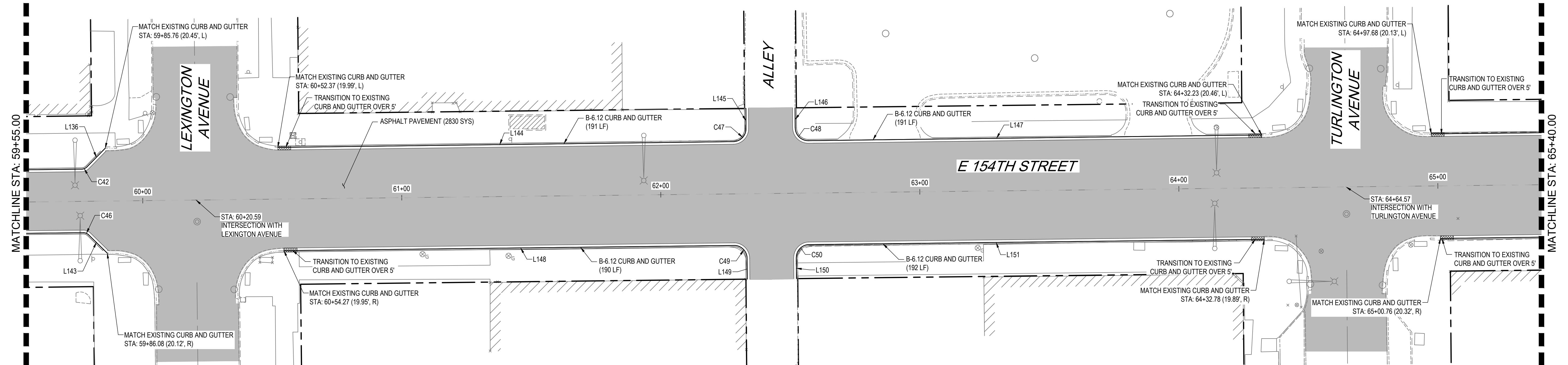
JOB NUMBER  
CoH-2207

DATE  
3/29/2024

SHEET  
**C-17**



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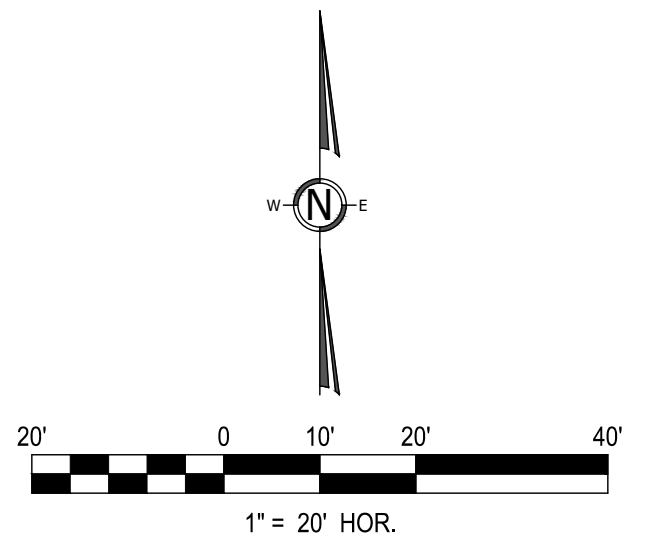


- NOTES:**
1. ALL LINES AND CURVES DENOTE LOCATION OF THE FLOW LINE UNLESS OTHERWISE NOTED.
  2. REFERENCE DETAILS FOR CURB TYPE B-6.12 AND CURB CUTS.

LINE TABLE		
LINE #	BEARING	DISTANCE
L136	N44°20'13"E	10.07
L143	S45°36'48"E	10.07
L144	N89°16'27"E	175.84
L145	N00°28'03"W	7.81
L146	S00°28'03"E	7.74
L147	N89°16'27"E	175.03
L148	N89°20'14"E	173.76
L149	S00°28'03"E	8.06
L150	N00°28'03"W	8.10
L151	N89°20'14"E	175.75

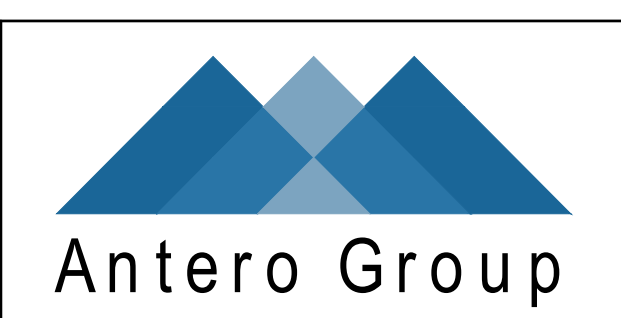
CURVE TABLE					
CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C42	2.36	3.00	45°00'00"	N66°50'13"E	2.30
C46	2.36	3.00	45°00'00"	S68°06'48"E	2.30
C47	7.83	5.00	89°44'30"	N44°24'12"E	7.06
C48	7.88	5.00	90°15'30"	S45°35'48"E	7.09
C49	7.87	5.00	90°11'43"	S45°33'54"E	7.08
C50	7.84	5.00	89°48'17"	N44°26'08"E	7.06

- LEGEND**
- B-6.12 CURB & GUTTER
  - DEPRESSED CURB
  - BARRIER CURB
  - CURB & GUTTER TRANSITION
  - ASPHALT PAVEMENT
  - CONCRETE PAVEMENT
  - RIGHT OF WAY LINE



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



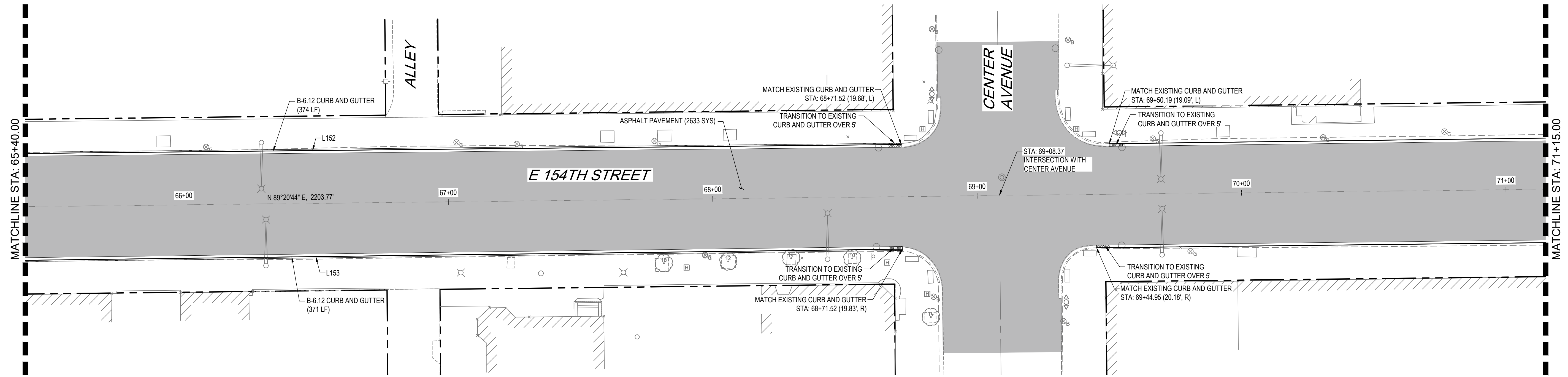
FOR AND ON BEHALF OF ANTERO GROUP

154TH STREET RECONSTRUCTION PROJECT  
 GEOMETRY PLAN STA 59+55 TO 65+40  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-18**



File Location: C:\Users\jaye\onedrive - anterogroup.com\documents - anterogroup.com\projects\city of harvey\csh2207\_154th st reconstruction\DWG\Sheets\csh2207-GEOM.dwg Plot Date: 4/15/2024 12:27 PM Last Saved By: 13037



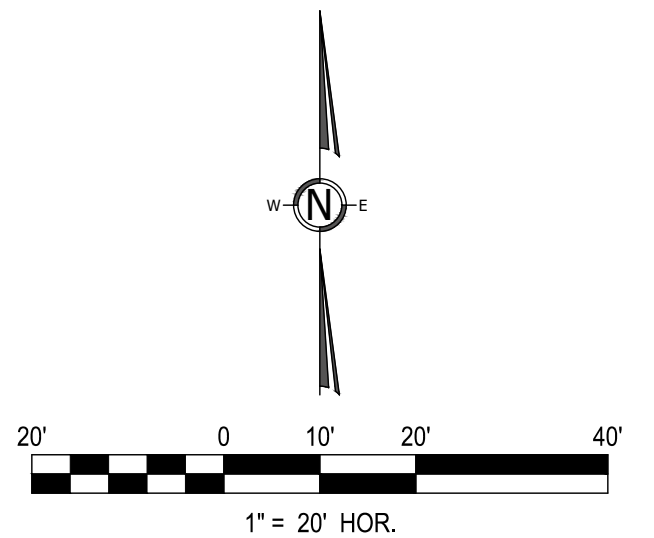
**NOTES:**

1. ALL LINES AND CURVES DENOTE LOCATION OF THE FLOW LINE UNLESS OTHERWISE NOTED.
2. REFERENCE DETAILS FOR CURB TYPE B-6.12 AND CURB CUTS.

LINE TABLE		
LINE #	BEARING	DISTANCE
L152	N89°24'54"E	373.84
L153	N89°16'15"E	370.76

**LEGEND**

- B-6.12 CURB & GUTTER
- DEPRESSED CURB
- BARRIER CURB
- CURB & GUTTER TRANSITION
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- RIGHT OF WAY LINE



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



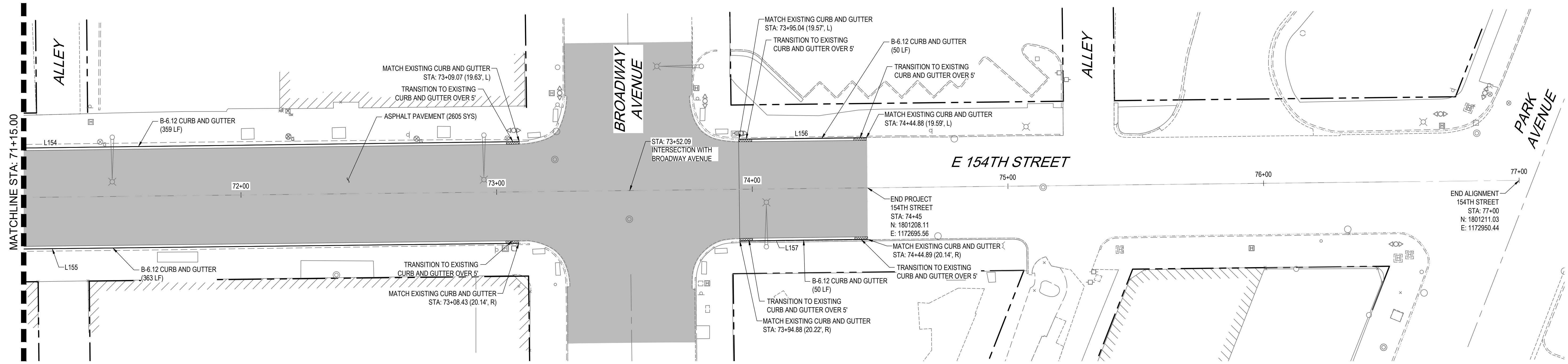
PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**GEOMETRY PLAN STA 65+40 TO 71+15**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-19**

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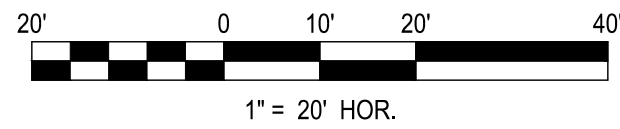
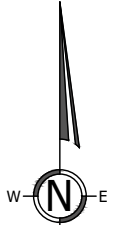


- NOTES:**
1. ALL LINES AND CURVES DENOTE LOCATION OF THE FLOW LINE UNLESS OTHERWISE NOTED.
  2. REFERENCE DETAILS FOR CURB TYPE B-6.12 AND CURB CUTS.

LINE TABLE		
LINE #	BEARING	DISTANCE
L154	N89°15'32"E	358.87
L155	N89°20'22"E	363.48
L156	N89°19'38"E	49.84
L157	N89°15'18"E	50.01

**LEGEND**

- B-6.12 CURB & GUTTER
- DEPRESSED CURB
- BARRIER CURB
- CURB & GUTTER TRANSITION
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- RIGHT OF WAY LINE



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

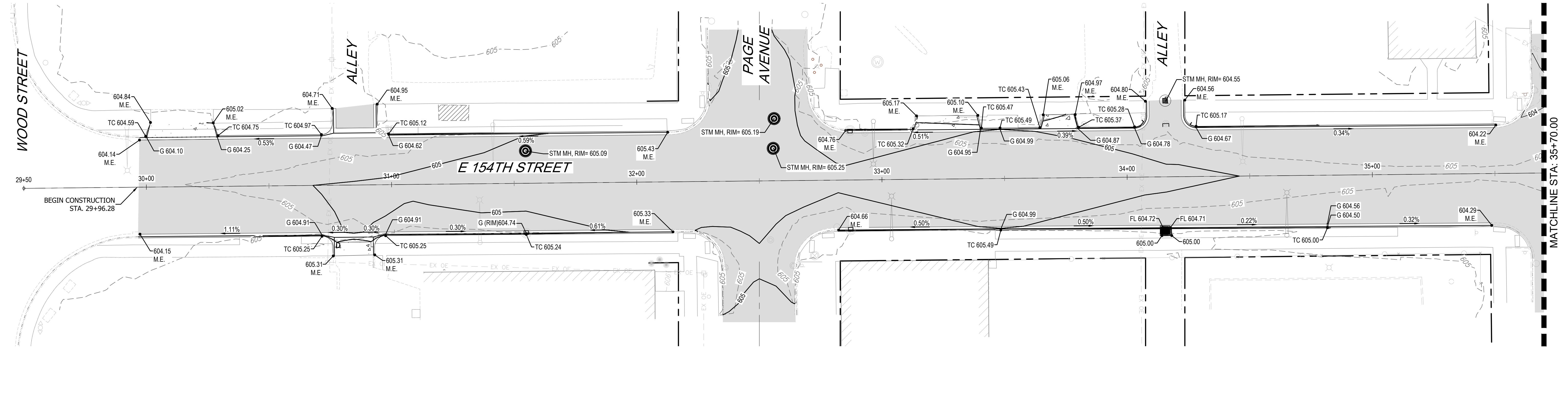
**154TH STREET RECONSTRUCTION PROJECT**  
**GEOMETRY PLAN STA 71+15 TO 77+00**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-20**

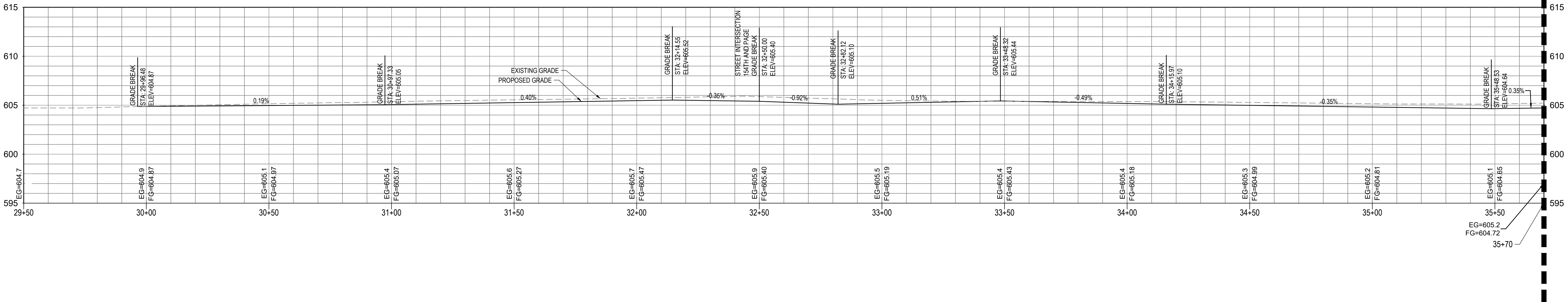




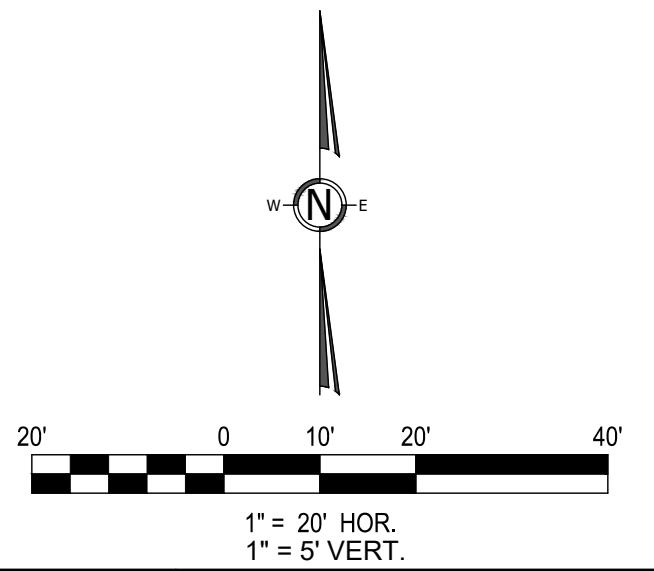
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154TH STREET



- NOTES:**
1. ANY DAMAGE TO EXISTING SIDEWALK, CURBS, AND PAVEMENT AT CONNECTION POINTS SHALL BE REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE.
  2. PAVEMENT PATCHING WILL BE REQUIRED IN ALL AREAS OF CURB AND GUTTER REPLACEMENT.
  3. ALL STORM STRUCTURES ARE TO BE CLEANED OUT AFTER CONSTRUCTION.
  4. REFER TO INTERSECTION DETAILS FOR SPOT GRADES AT INTERSECTIONS.



No.	DATE	REVISION DESCRIPTION
1	4/12/24	ADDENDUM 1 RESPONDING TO CONTRATOR QUESTIONS

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

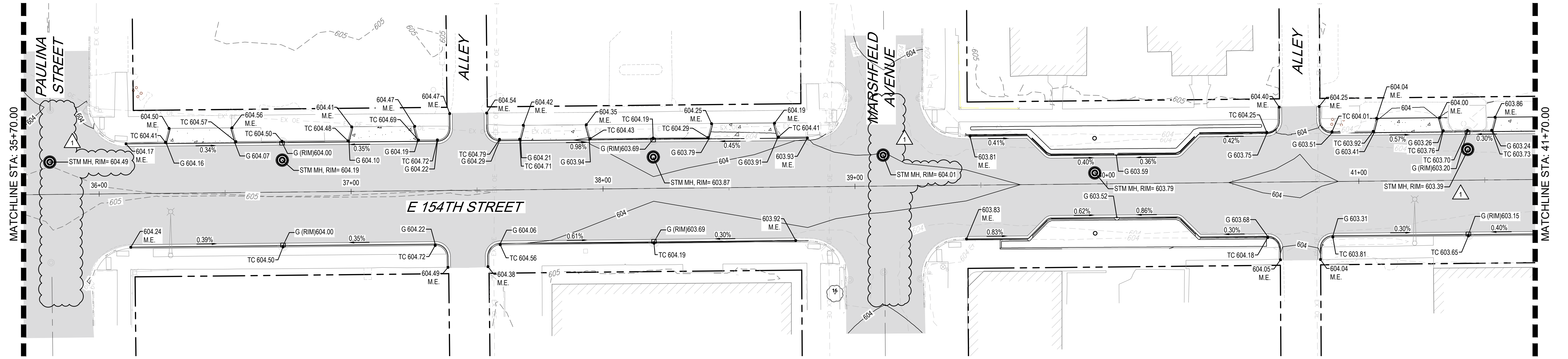


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 FOR AND ON BEHALF OF ANTERO GROUP

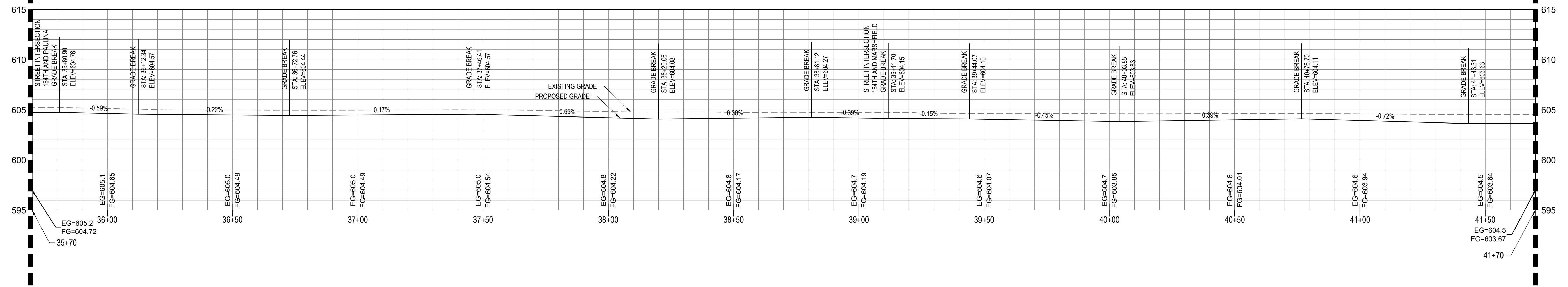
**154TH STREET RECONSTRUCTION PROJECT**  
 PLAN AND PROFILE STA 29+50 TO 35+70  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-21**

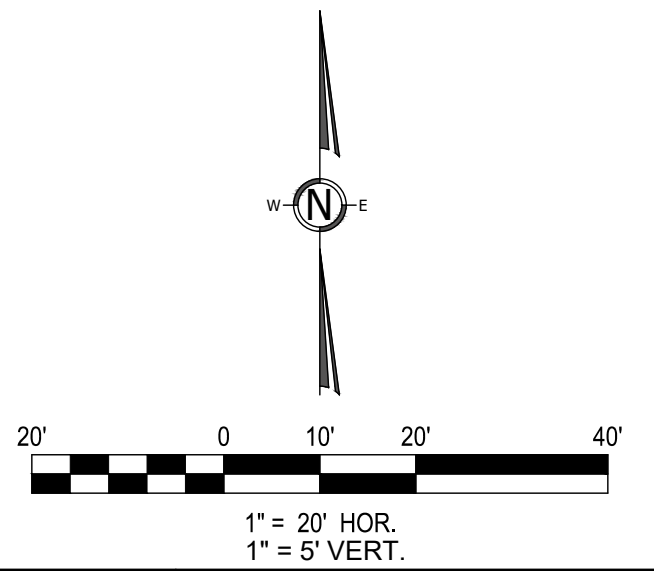
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154TH STREET



- NOTES:**
1. ANY DAMAGE TO EXISTING SIDEWALK, CURBS, AND PAVEMENT AT CONNECTION POINTS SHALL BE REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE.
  2. PAVEMENT PATCHING WILL BE REQUIRED IN ALL AREAS OF CURB AND GUTTER REPLACEMENT.
  3. ALL STORM STRUCTURES ARE TO BE CLEANED OUT AFTER CONSTRUCTION.
  4. REFER TO INTERSECTION DETAILS FOR SPOT GRADES AT INTERSECTIONS.



No.	DATE	REVISION DESCRIPTION
1	4/15/24	ISSUED ADDENDUM 1

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

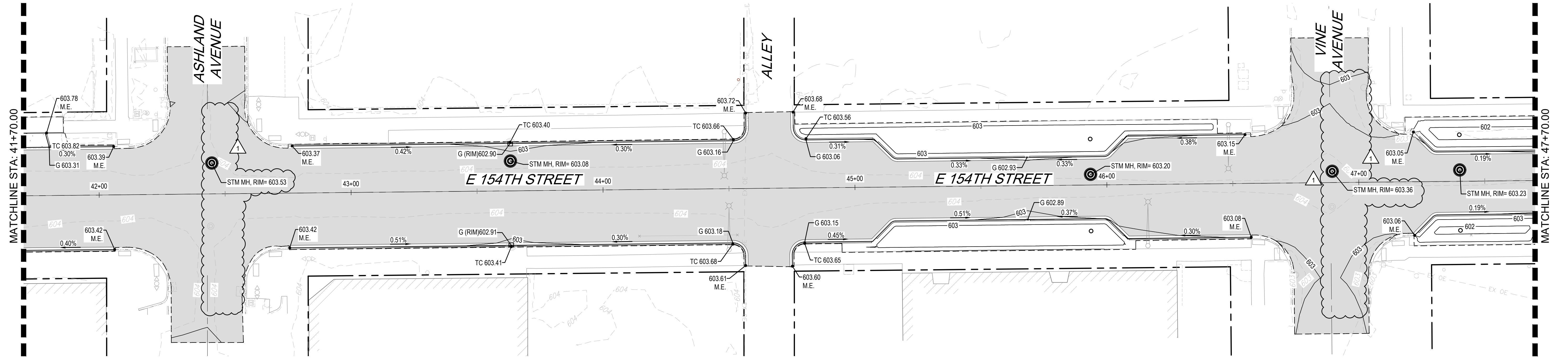


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 FOR AND ON BEHALF OF ANTERO GROUP

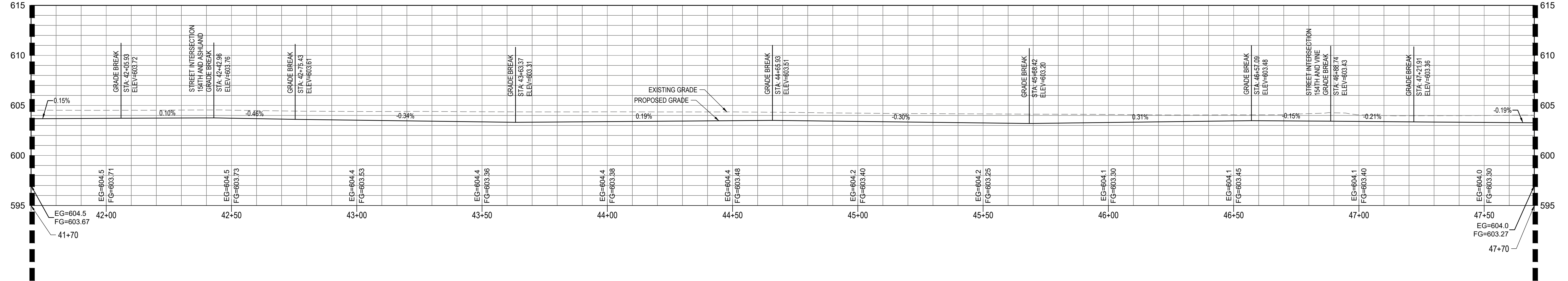
**154TH STREET RECONSTRUCTION PROJECT**  
 PLAN AND PROFILE STA 35+70 TO 41+70  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-22**

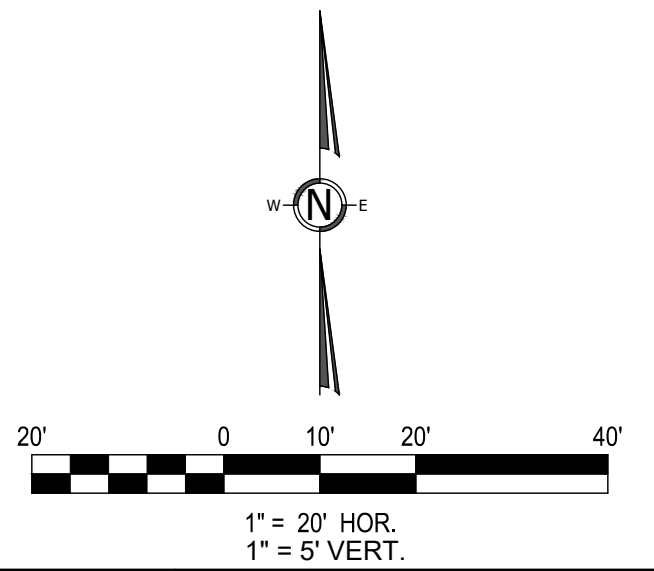
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154TH STREET



- NOTES:**
1. ANY DAMAGE TO EXISTING SIDEWALK, CURBS, AND PAVEMENT AT CONNECTION POINTS SHALL BE REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE.
  2. PAVEMENT PATCHING WILL BE REQUIRED IN ALL AREAS OF CURB AND GUTTER REPLACEMENT.
  3. ALL STORM STRUCTURES ARE TO BE CLEANED OUT AFTER CONSTRUCTION.
  4. REFER TO INTERSECTION DETAILS FOR SPOT GRADES AT INTERSECTIONS.



No.	DATE	REVISION DESCRIPTION
1	4/15/24	ISSUED ADDENDUM 1

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

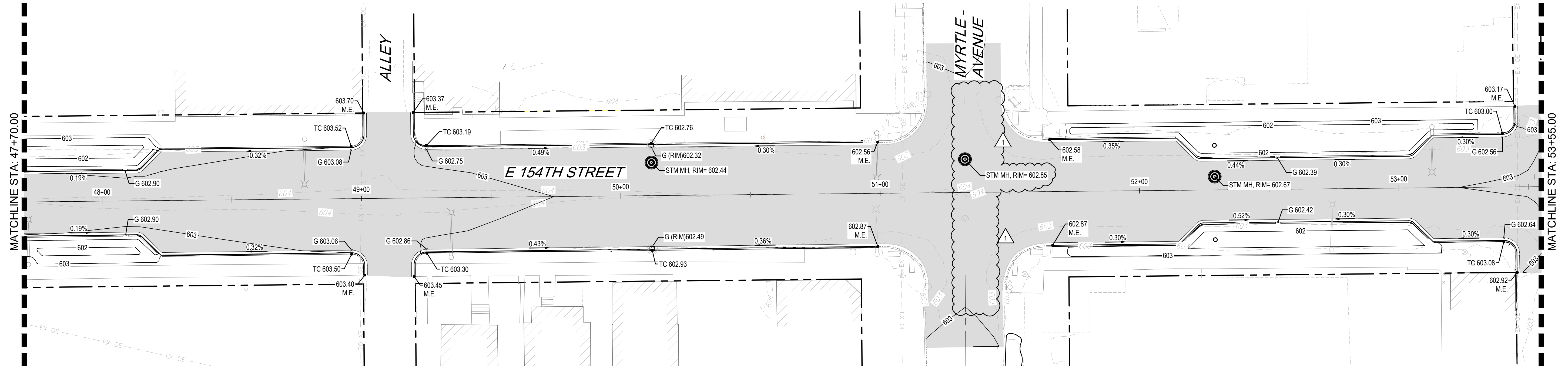


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 FOR AND ON BEHALF OF ANTERO GROUP

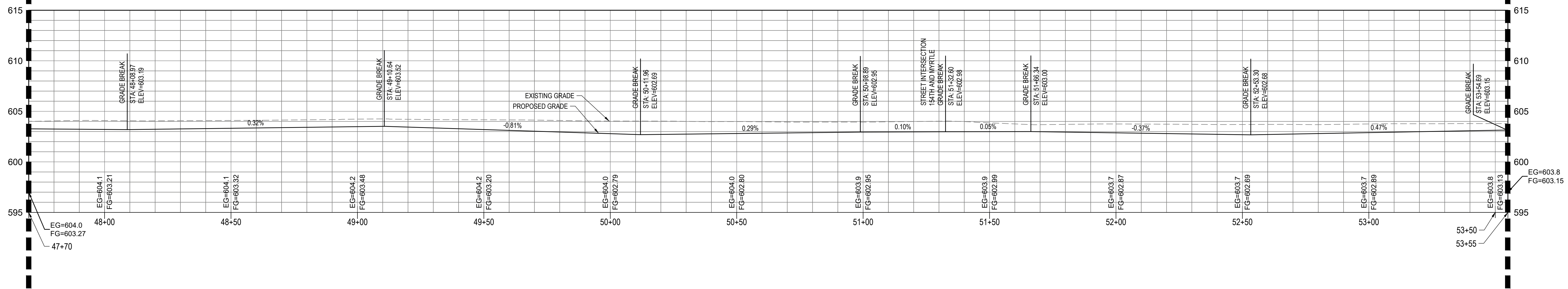
**154TH STREET RECONSTRUCTION PROJECT**  
 PLAN AND PROFILE STA 41+70 TO 47+70  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-23**

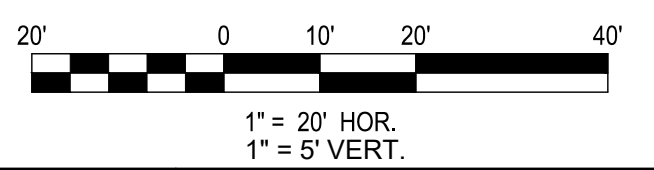
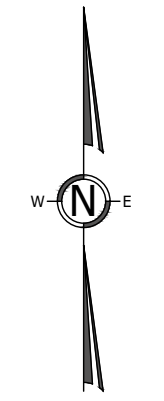
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154TH STREET



- NOTES:**
1. ANY DAMAGE TO EXISTING SIDEWALK, CURBS, AND PAVEMENT AT CONNECTION POINTS SHALL BE REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE.
  2. PAVEMENT PATCHING WILL BE REQUIRED IN ALL AREAS OF CURB AND GUTTER REPLACEMENT.
  3. ALL STORM STRUCTURES ARE TO BE CLEANED OUT AFTER CONSTRUCTION.
  4. REFER TO INTERSECTION DETAILS FOR SPOT GRADES AT INTERSECTIONS.



No.	DATE	REVISION DESCRIPTION
1	4/15/24	ISSUED ADDENDUM 1

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



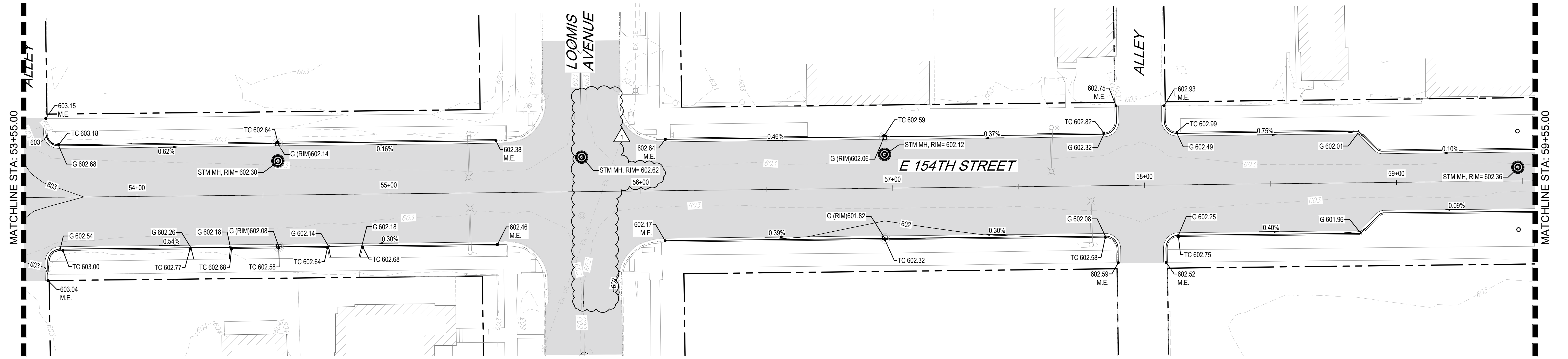
PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
 PLAN AND PROFILE STA 47+70 TO 53+55

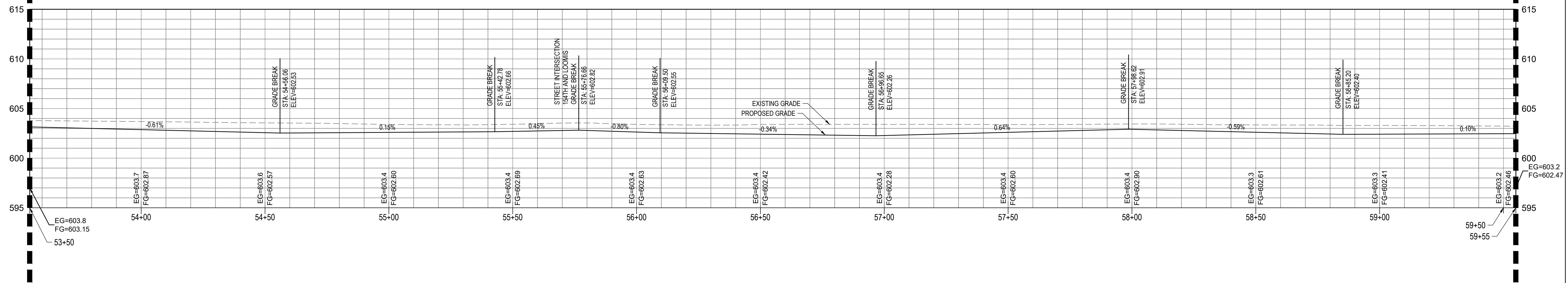
CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
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 SHEET  
**C-24**

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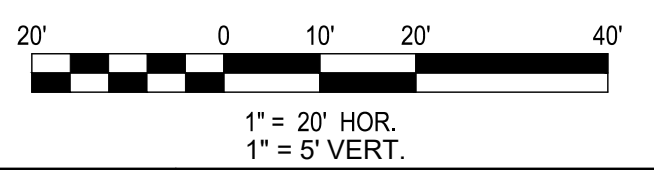
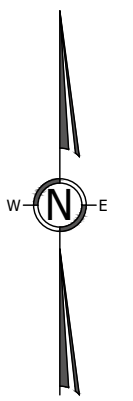


154TH STREET



**NOTES:**

1. ANY DAMAGE TO EXISTING SIDEWALK, CURBS, AND PAVEMENT AT CONNECTION POINTS SHALL BE REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE.
2. PAVEMENT PATCHING WILL BE REQUIRED IN ALL AREAS OF CURB AND GUTTER REPLACEMENT.
3. ALL STORM STRUCTURES ARE TO BE CLEANED OUT AFTER CONSTRUCTION.
4. REFER TO INTERSECTION DETAILS FOR SPOT GRADES AT INTERSECTIONS.



No.	DATE	REVISION DESCRIPTION
1	4/15/24	ISSUED ADDENDUM 1

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



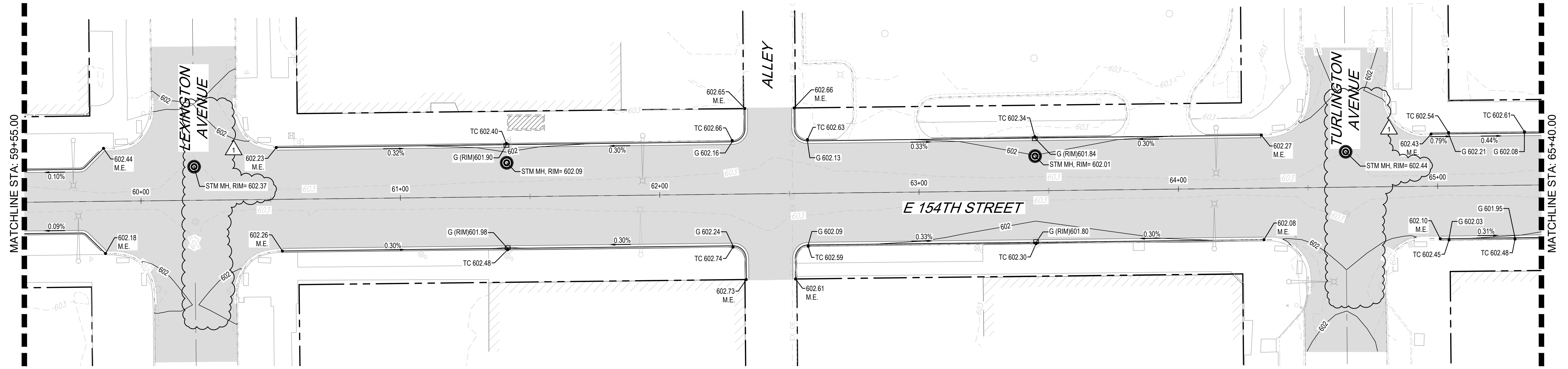
PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
 PLAN AND PROFILE STA 53+55 TO 59+55  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

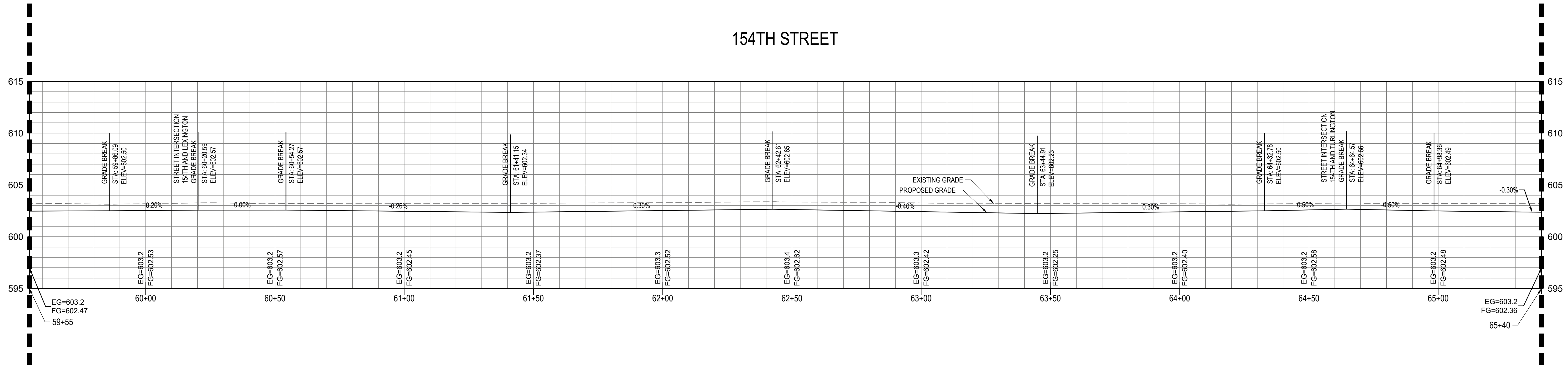
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**C-25**



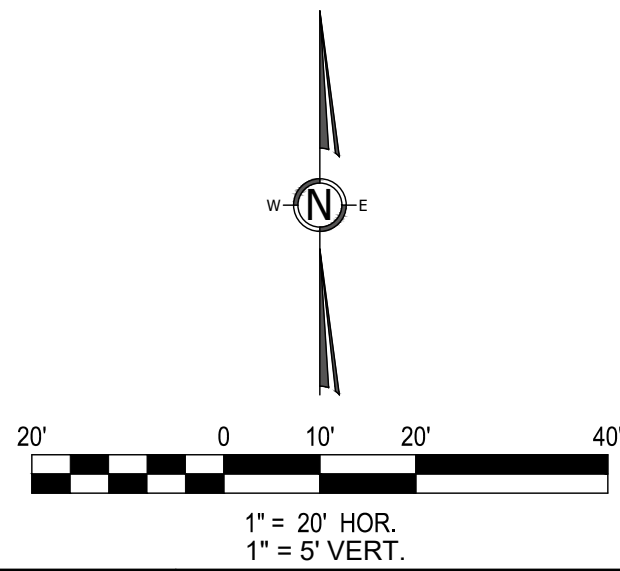
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154TH STREET



- NOTES:**
1. ANY DAMAGE TO EXISTING SIDEWALK, CURBS, AND PAVEMENT AT CONNECTION POINTS SHALL BE REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE.
  2. PAVEMENT PATCHING WILL BE REQUIRED IN ALL AREAS OF CURB AND GUTTER REPLACEMENT.
  3. ALL STORM STRUCTURES ARE TO BE CLEANED OUT AFTER CONSTRUCTION.
  4. REFER TO INTERSECTION DETAILS FOR SPOT GRADES AT INTERSECTIONS.



No.	DATE	REVISION DESCRIPTION
1	4/15/24	ISSUED ADDENDUM 1

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

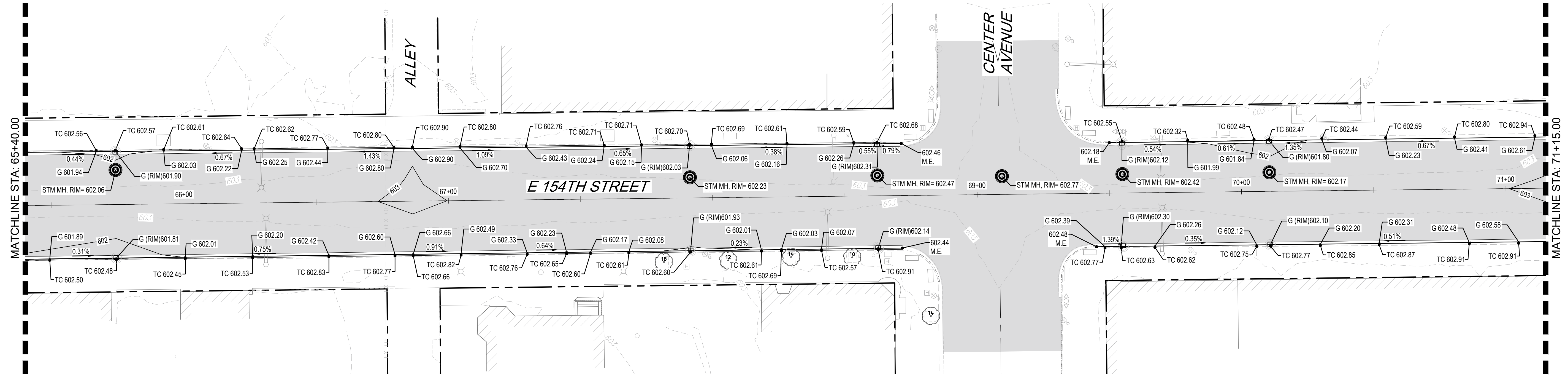


PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

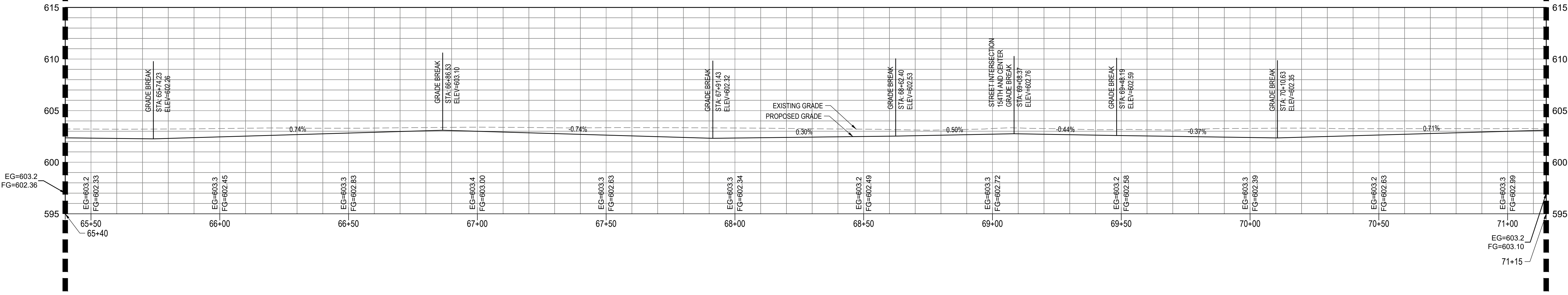
**154TH STREET RECONSTRUCTION PROJECT**  
 PLAN AND PROFILE STA 59+55 TO 65+40  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-26**

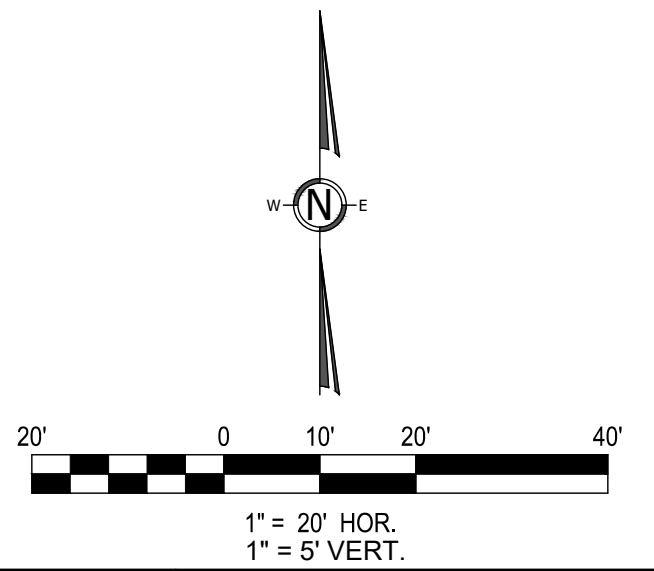
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154TH STREET



- NOTES:**
1. ANY DAMAGE TO EXISTING SIDEWALK, CURBS, AND PAVEMENT AT CONNECTION POINTS SHALL BE REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE.
  2. PAVEMENT PATCHING WILL BE REQUIRED IN ALL AREAS OF CURB AND GUTTER REPLACEMENT.
  3. ALL STORM STRUCTURES ARE TO BE CLEANED OUT AFTER CONSTRUCTION.
  4. REFER TO INTERSECTION DETAILS FOR SPOT GRADES AT INTERSECTIONS.



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

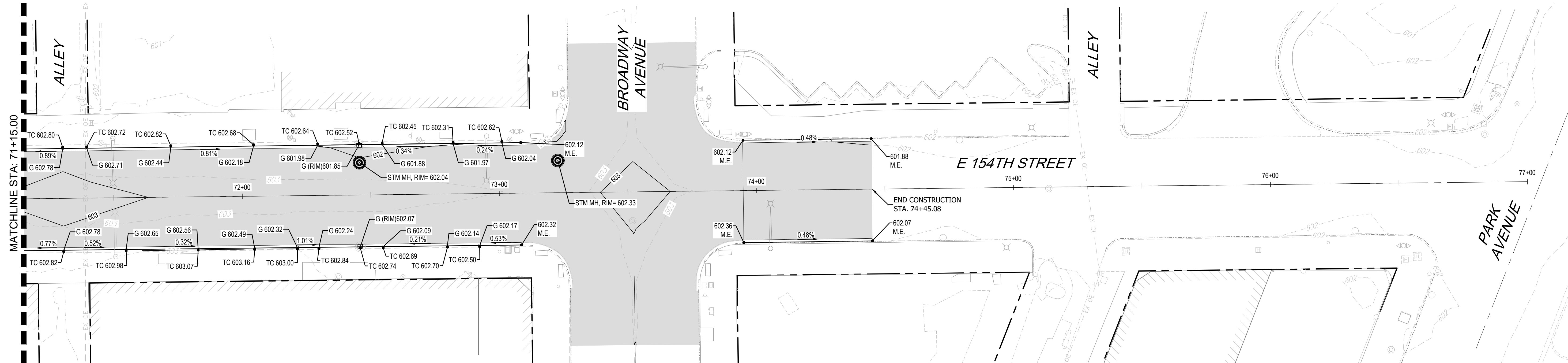


PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

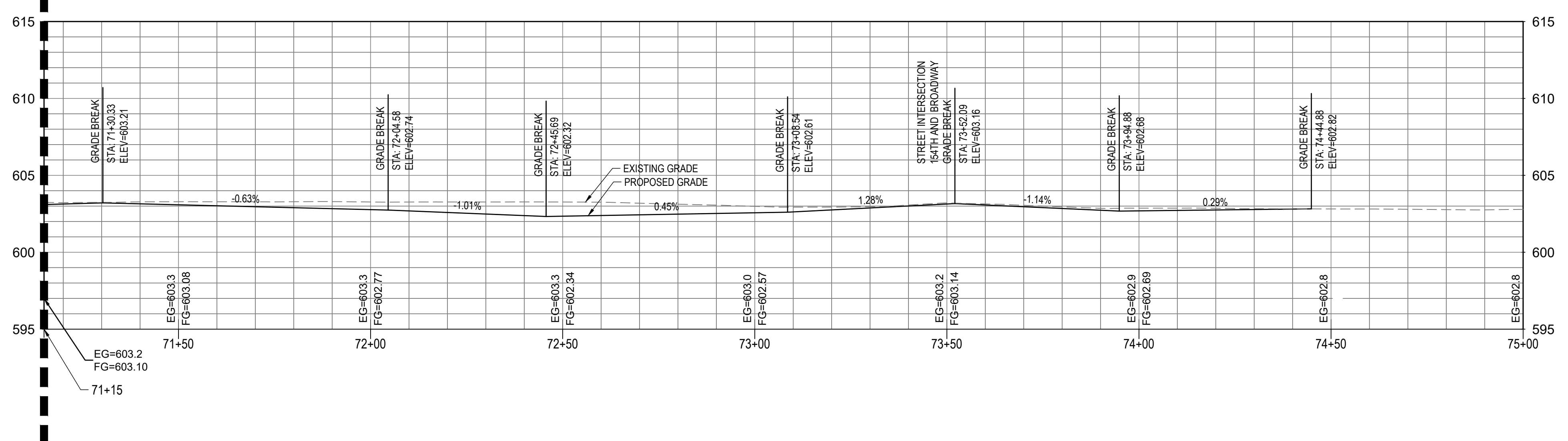
**154TH STREET RECONSTRUCTION PROJECT**  
 PLAN AND PROFILE STA 65+40 TO 71+15  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-27**

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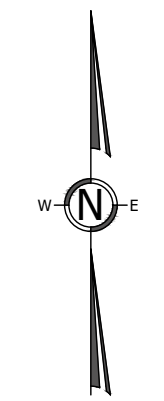


154TH STREET



NOTES:

1. ANY DAMAGE TO EXISTING SIDEWALK, CURBS, AND PAVEMENT AT CONNECTION POINTS SHALL BE REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE.
2. PAVEMENT PATCHING WILL BE REQUIRED IN ALL AREAS OF CURB AND GUTTER REPLACEMENT.
3. ALL STORM STRUCTURES ARE TO BE CLEANED OUT AFTER CONSTRUCTION.
4. REFER TO INTERSECTION DETAILS FOR SPOT GRADES AT INTERSECTIONS.



1" = 20' HOR.  
1" = 5' VERT.



No.	DATE	REVISION DESCRIPTION
1	4/15/24	ISSUED ADDENDUM 1

PREPARED FOR  
CITY OF HARVEY,  
15320 BROADWAY AVENUE  
HARVEY, IL 60426



PE STAMP  
  
FOR AND ON BEHALF OF ANTERO GROUP

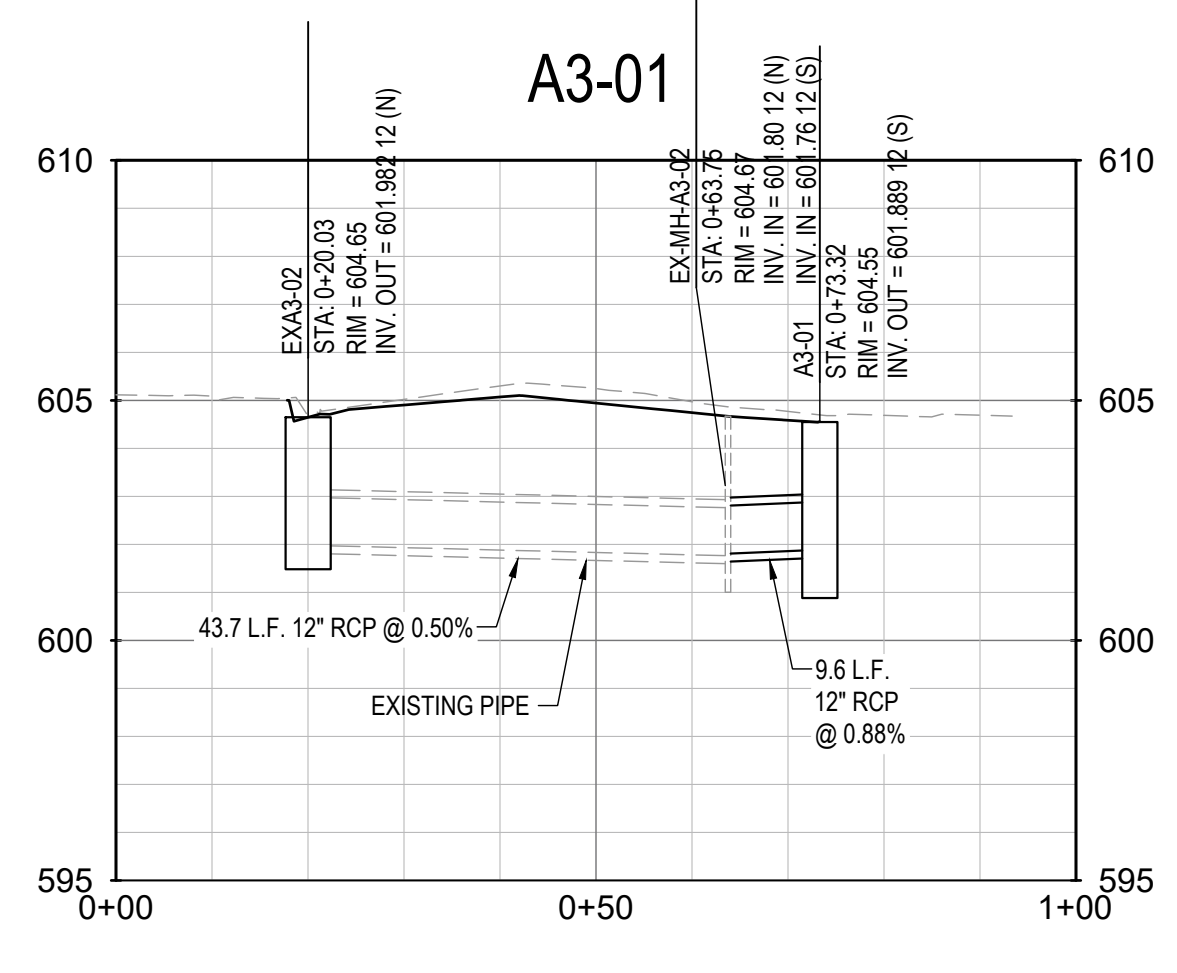
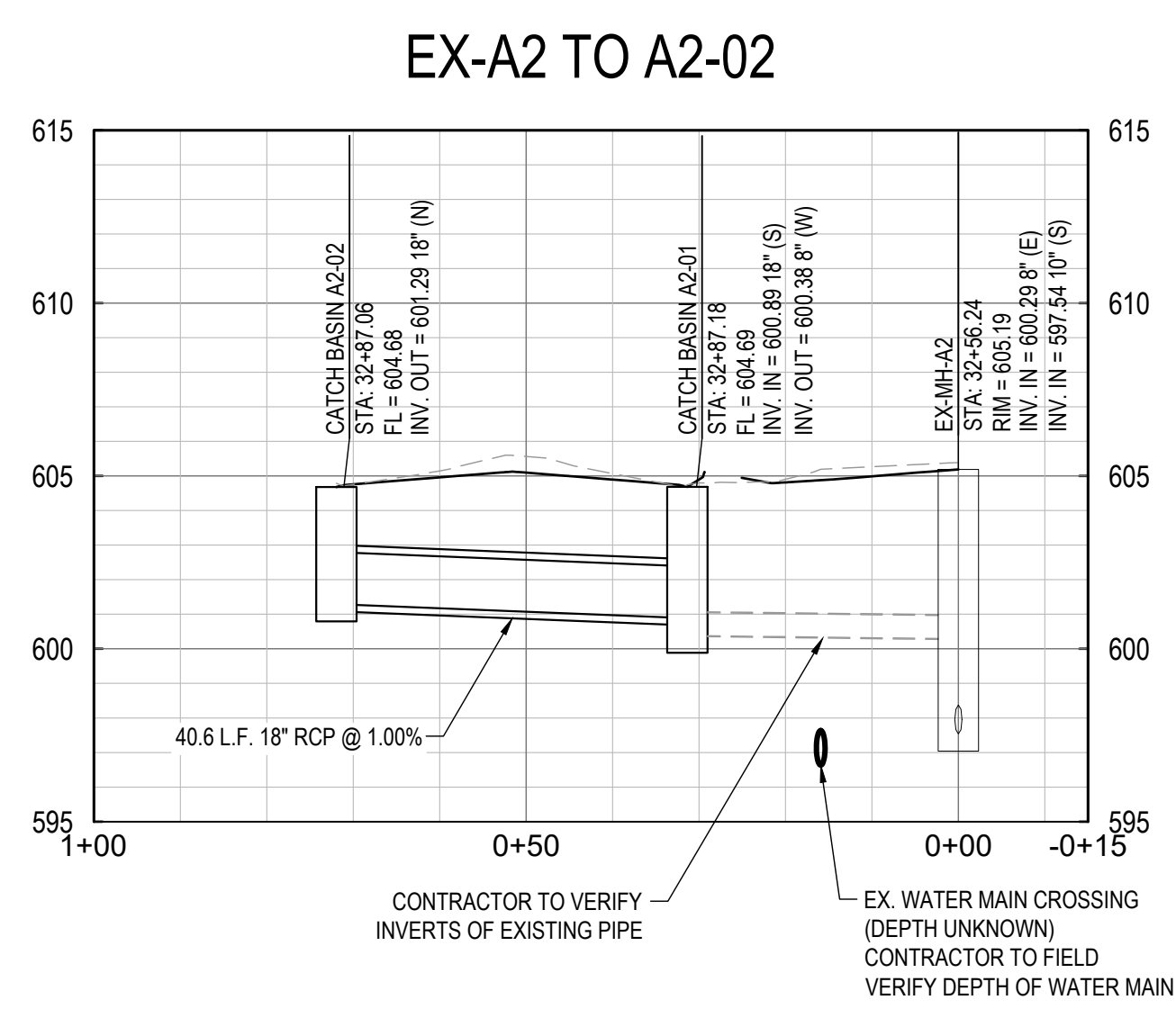
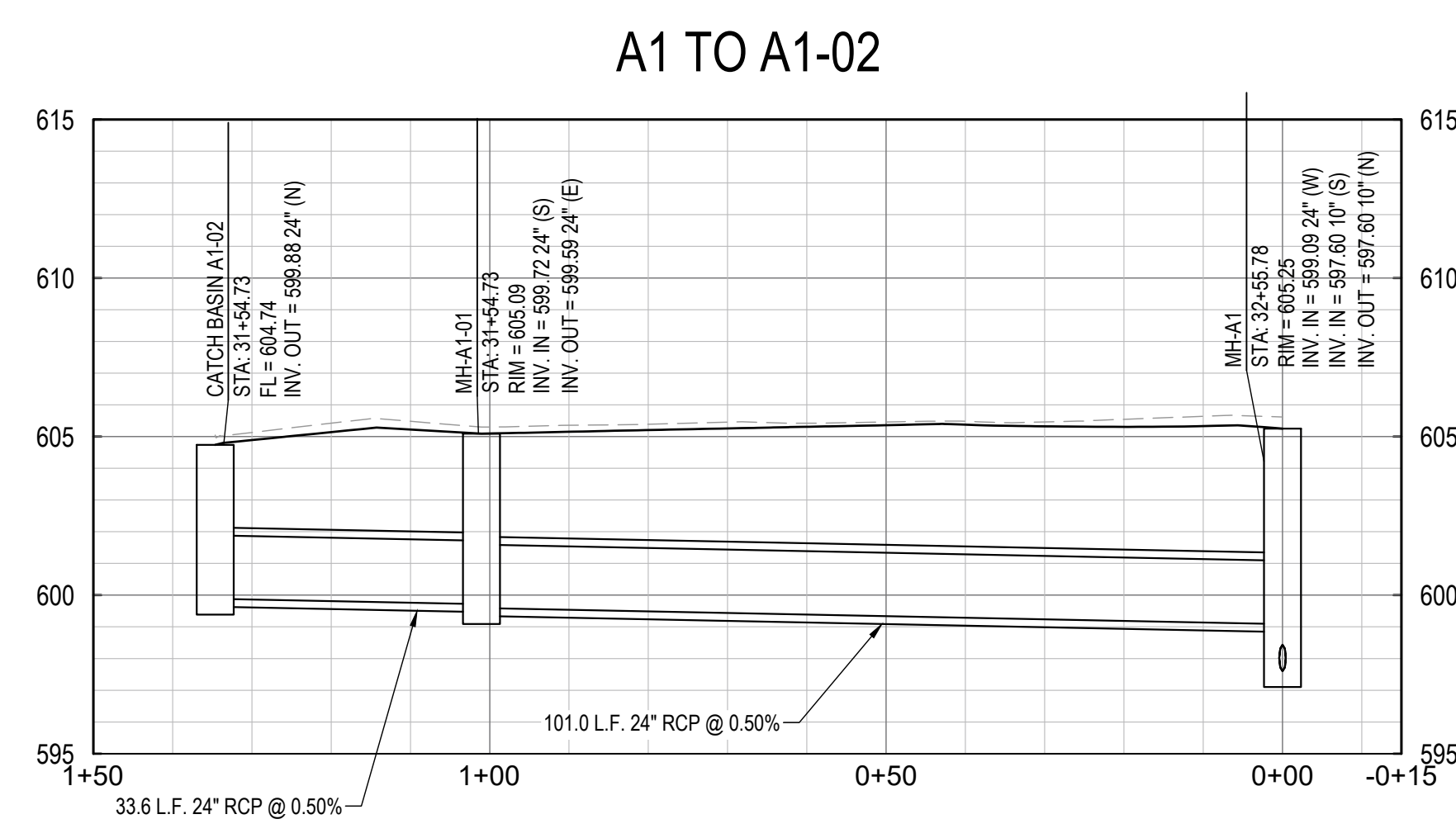
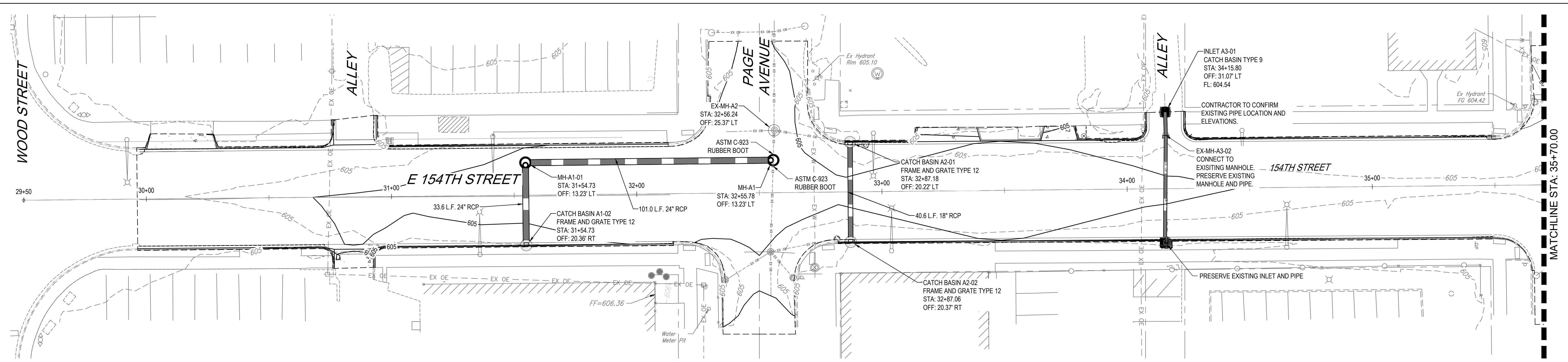
154TH STREET RECONSTRUCTION PROJECT  
PLAN AND PROFILE STA 71+15 TO 77+00

CITY OF HARVEY, COOK COUNTY, ILLINOIS

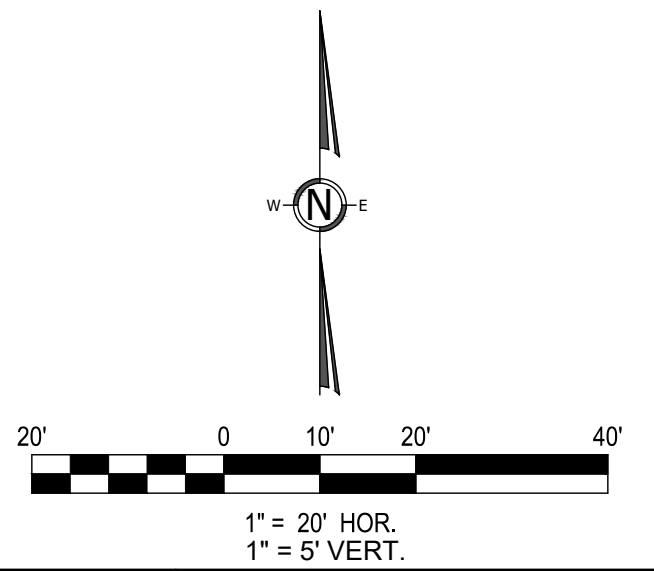
JOB NUMBER  
CoH-2207  
DATE  
3/29/2024  
SHEET  
C-28



File Location: C:\Users\jaye\onedrive - antero group\documents - antero group\Projects\154th st reconstruction\DWG\Sheets\CoH-2207-STRM\Plt.dwg Plot Date: 4/15/2024 12:29 PM Last Saved By: ROBBUCHHOLZ



- NOTES:**
- FOR FRAME AND GRATE TYPE 12 DETAILS SEE SHEET C-79.
  - FOR FRAME AND GRATE TYPE 9 DETAILS SEE SHEET C-79.
  - ALL MANHOLES ARE 4' IN DIAMETER UNLESS OTHERWISE INDICATED. SEE SHEET C-80 FOR PRECAST MANHOLE TYPE A 4' DIAMETER DETAILS.
  - SEE SHEET C-78 FOR PRECAST MANHOLE TYPE A 6' DIAMETER DETAILS.



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

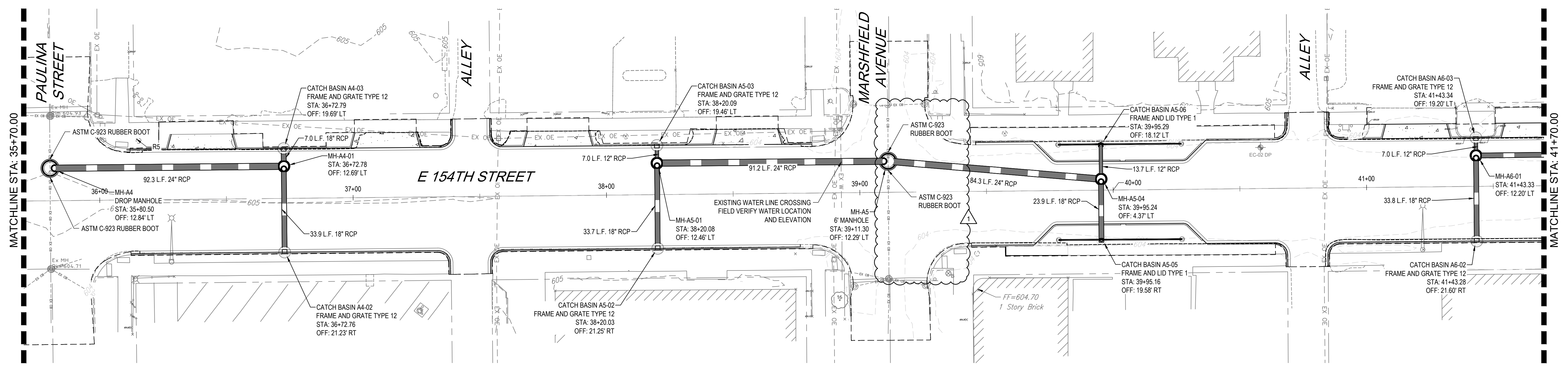


PE STAMP  
  
 FOR AND ON BEHALF OF ANTERO GROUP

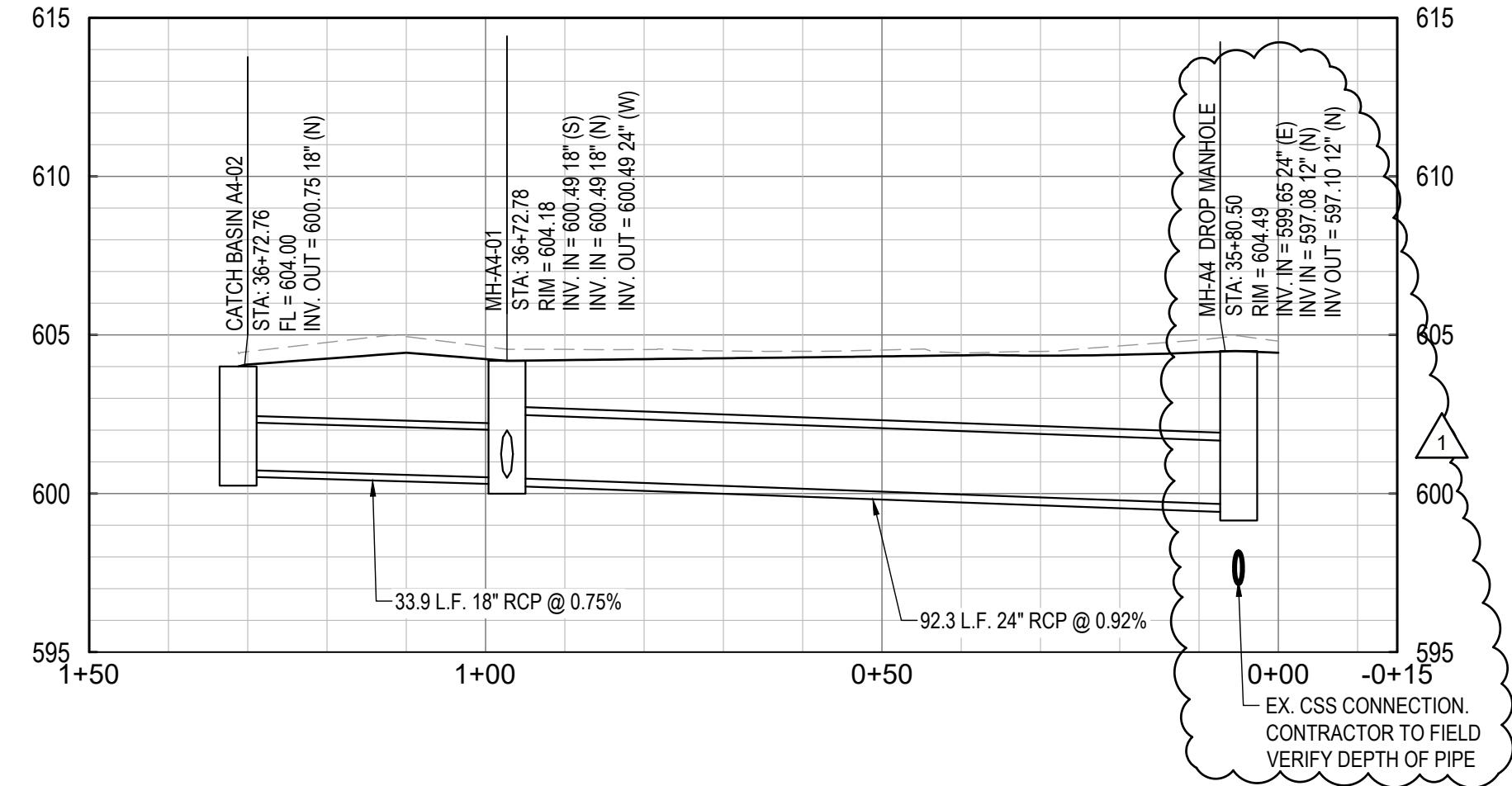
**154TH STREET RECONSTRUCTION PROJECT**  
**STORM PLAN AND PROFILE STA 29+50 TO 35+70**  
  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
CoH-2207  
 DATE  
3/29/2024  
 SHEET  
**C-29**

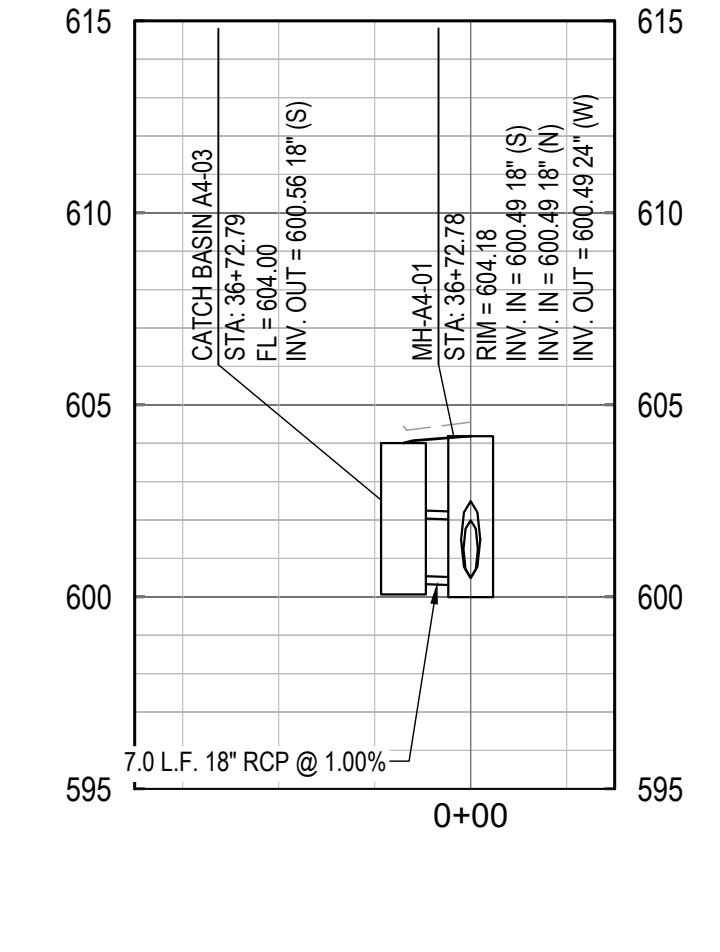
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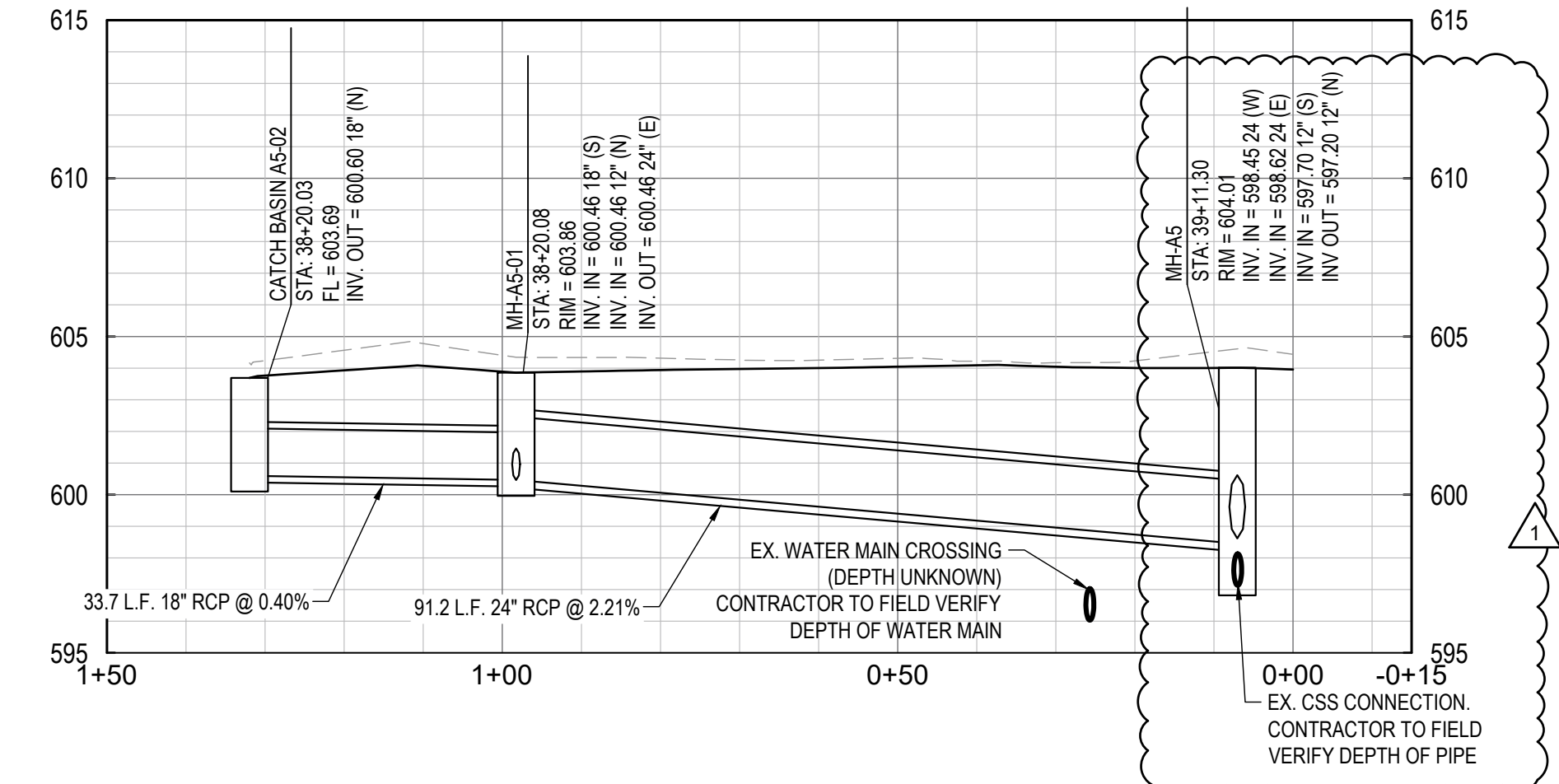
A4 TO A4-02



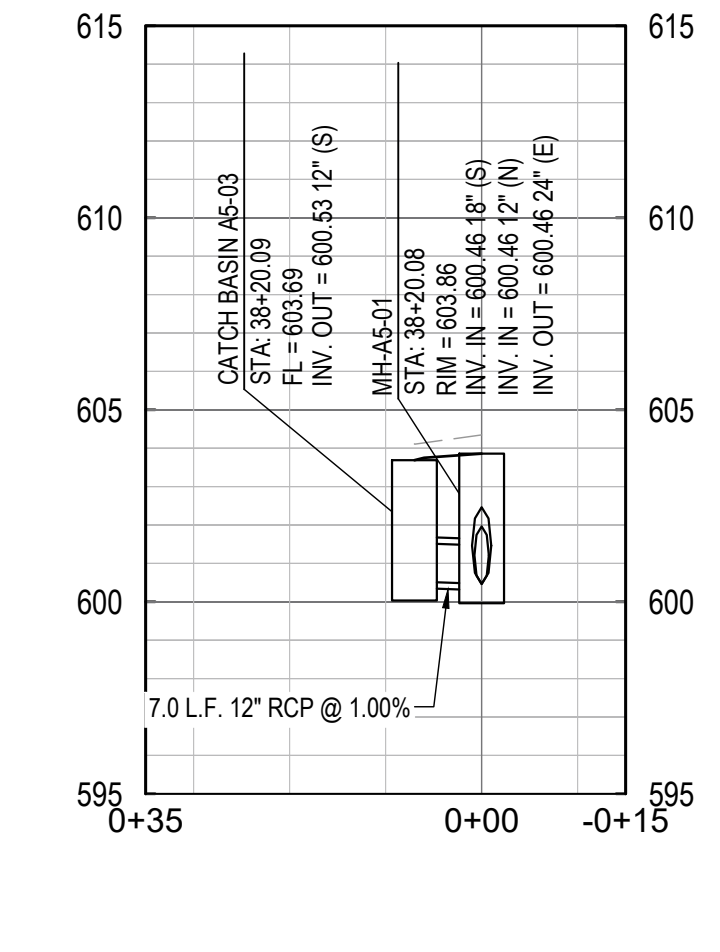
A4-02 TO A4-03



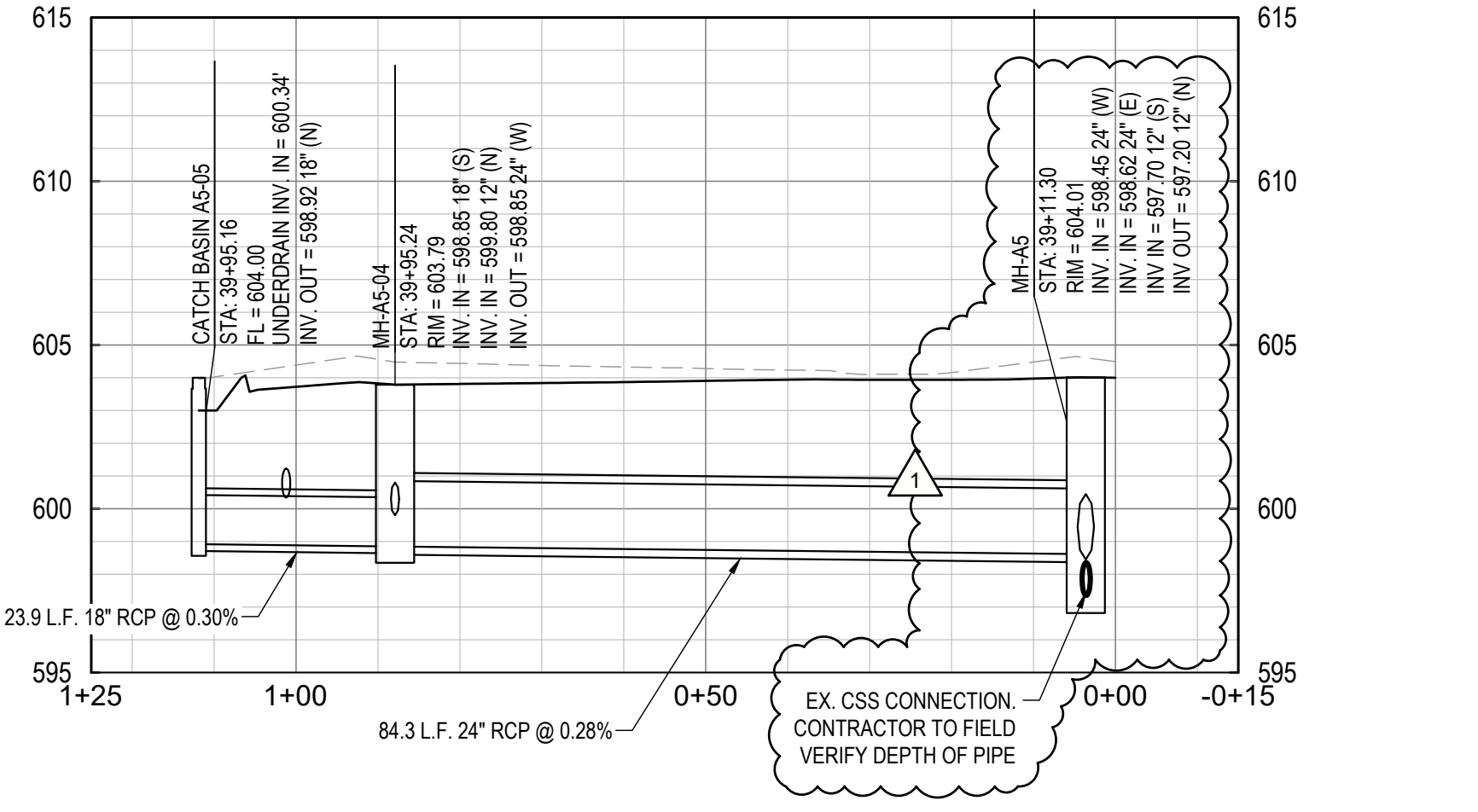
A5 TO A5-02



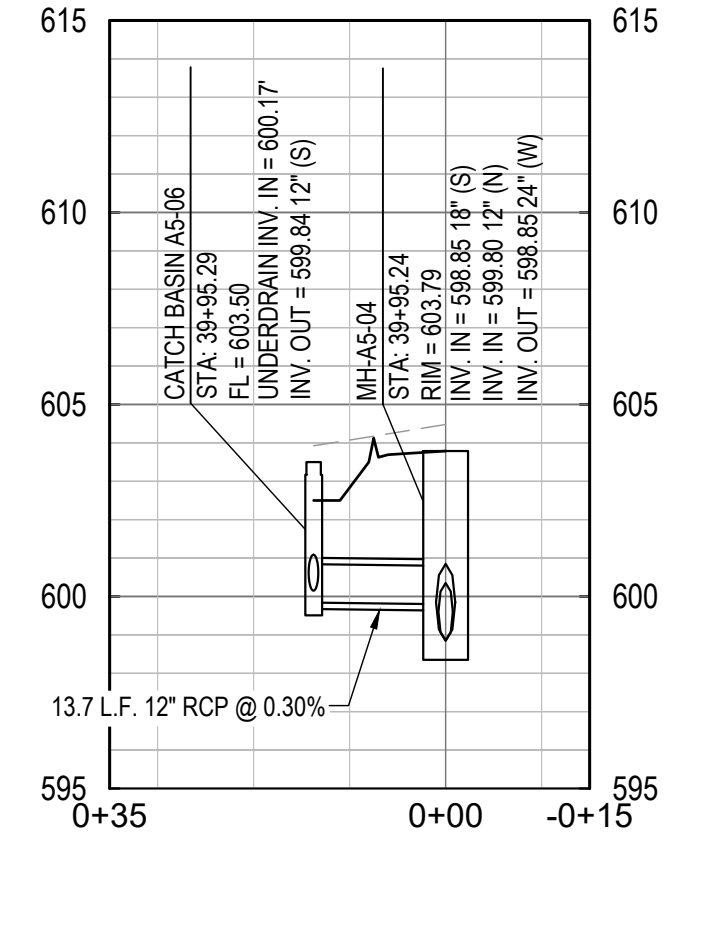
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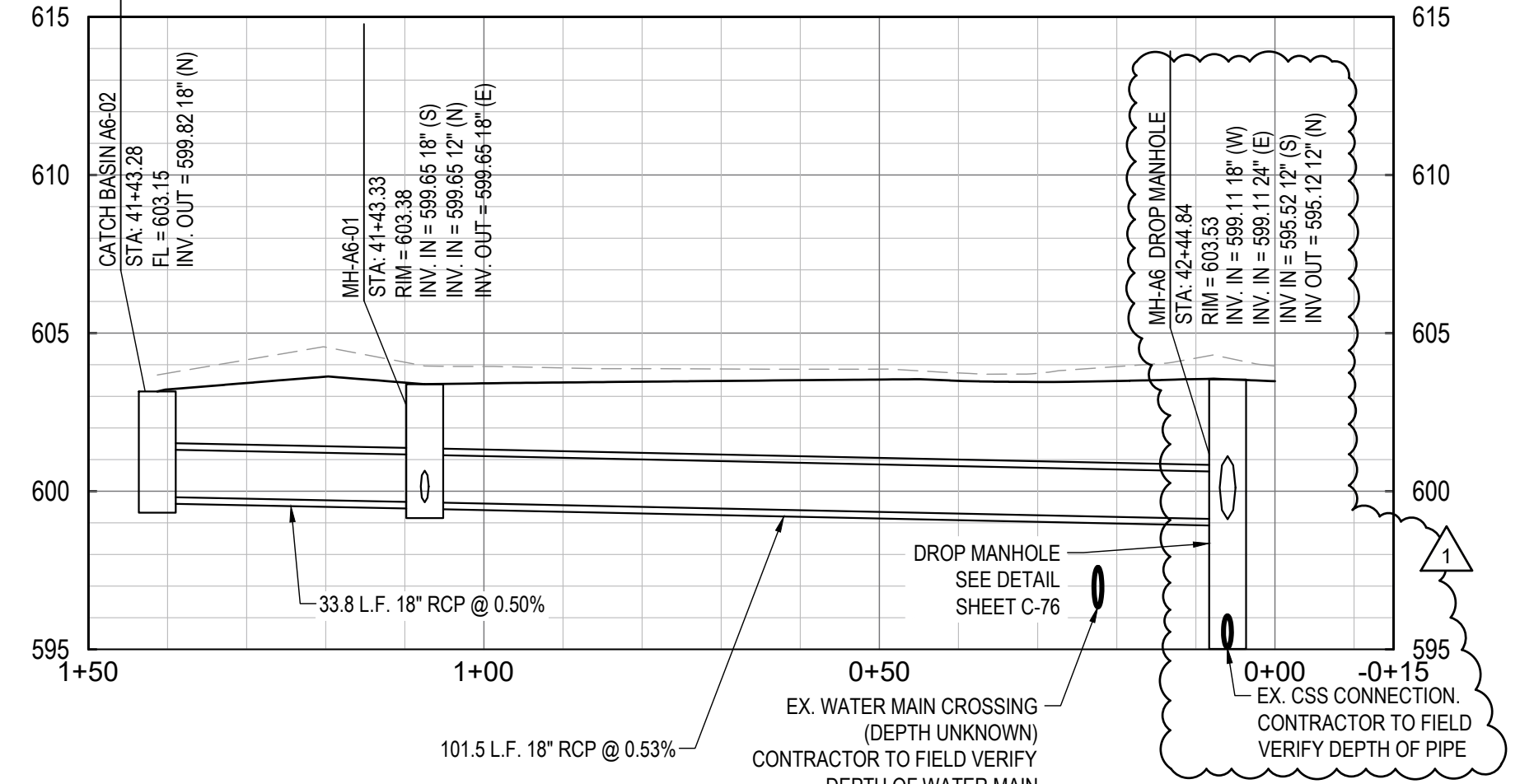
A5 TO A5-05



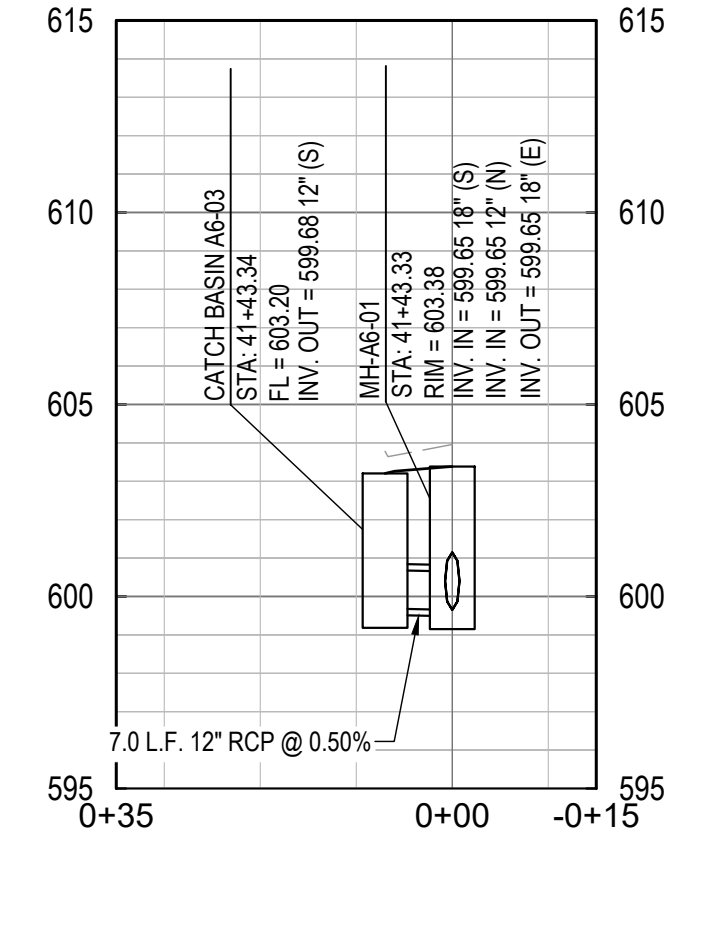
A5-04 TO A5-06



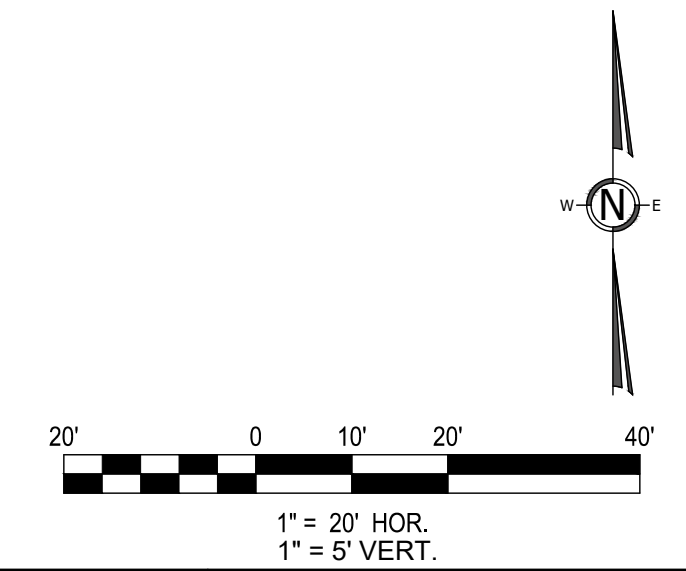
A6 TO A6-02



A6-01 TO A6-03



- NOTES:
- FOR FRAME AND GRATE TYPE 12 DETAILS SEE SHEET C-79.
  - FOR FRAME AND GRATE TYPE 9 DETAILS SEE SHEET C-79.
  - ALL MANHOLES ARE 4' IN DIAMETER UNLESS OTHERWISE INDICATED. SEE SHEET C-80 FOR PRECAST MANHOLE TYPE A 4' DIAMETER DETAILS.
  - SEE SHEET C-78 FOR PRECAST MANHOLE TYPE A 6' DIAMETER DETAILS.



No.	DATE	REVISION DESCRIPTION
1	4/15/24	ISSUED ADDENDUM 1

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

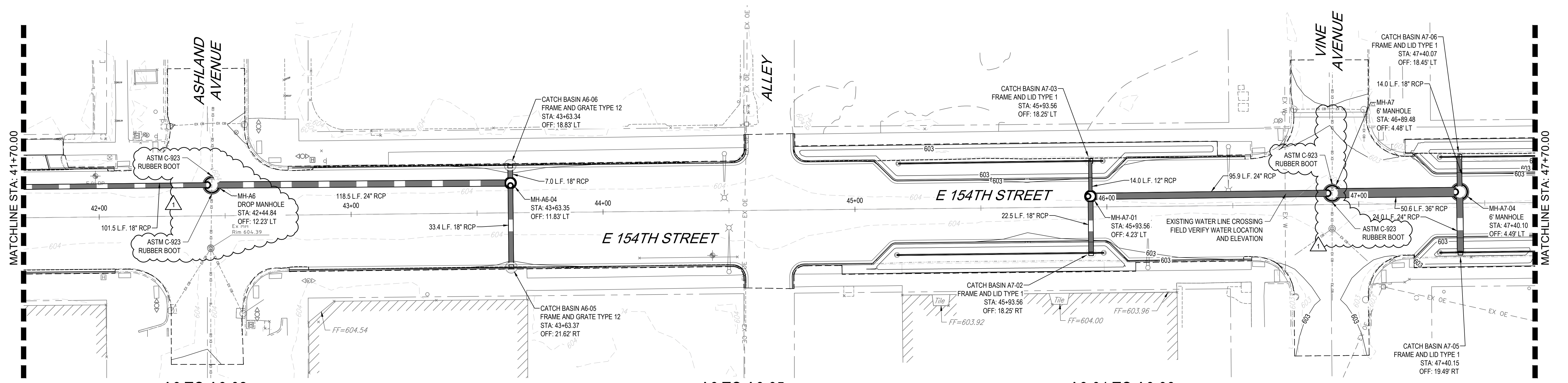


PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**STORM PLAN AND PROFILE STA 35+70 TO 41+70**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-30**

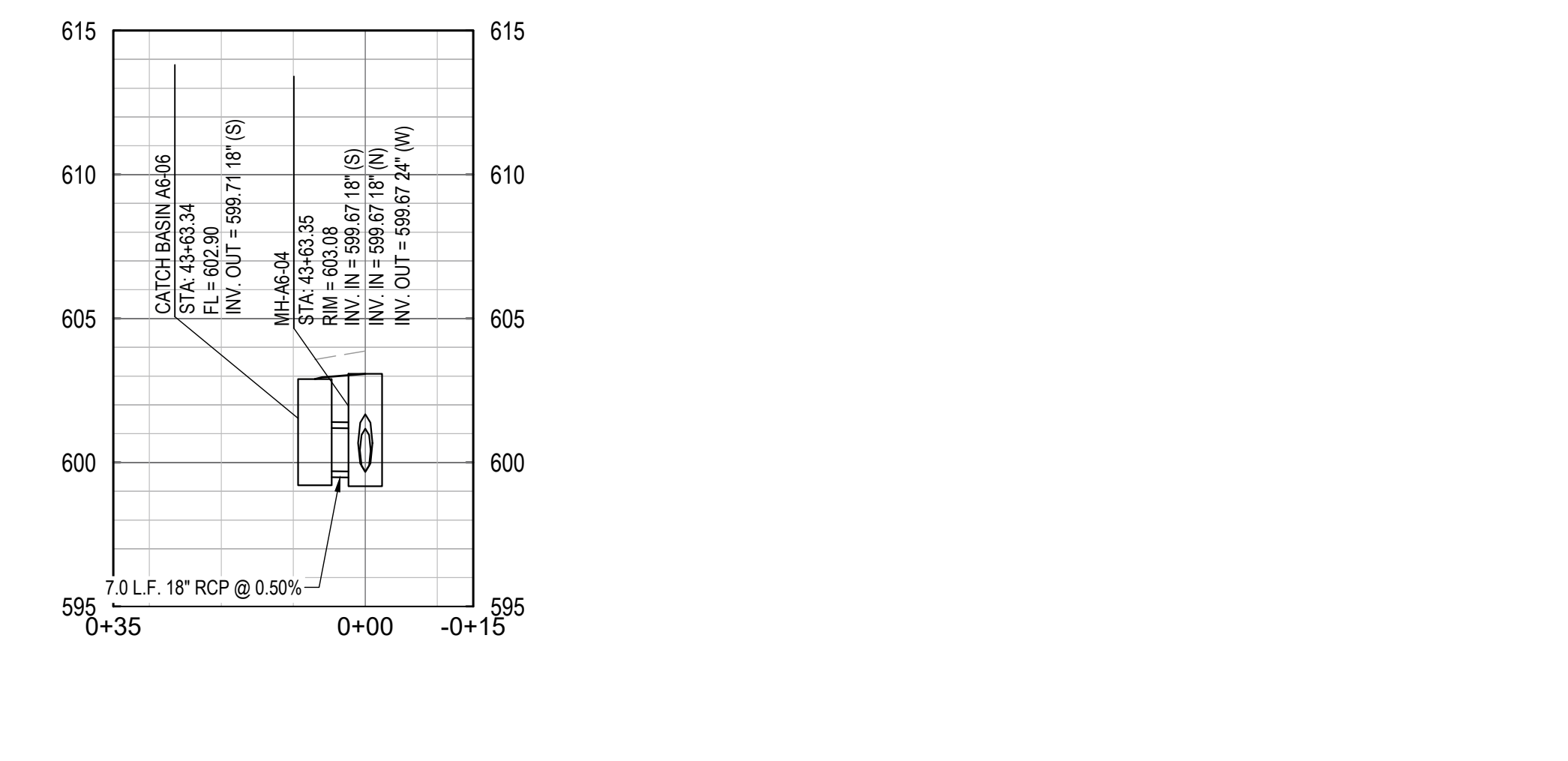
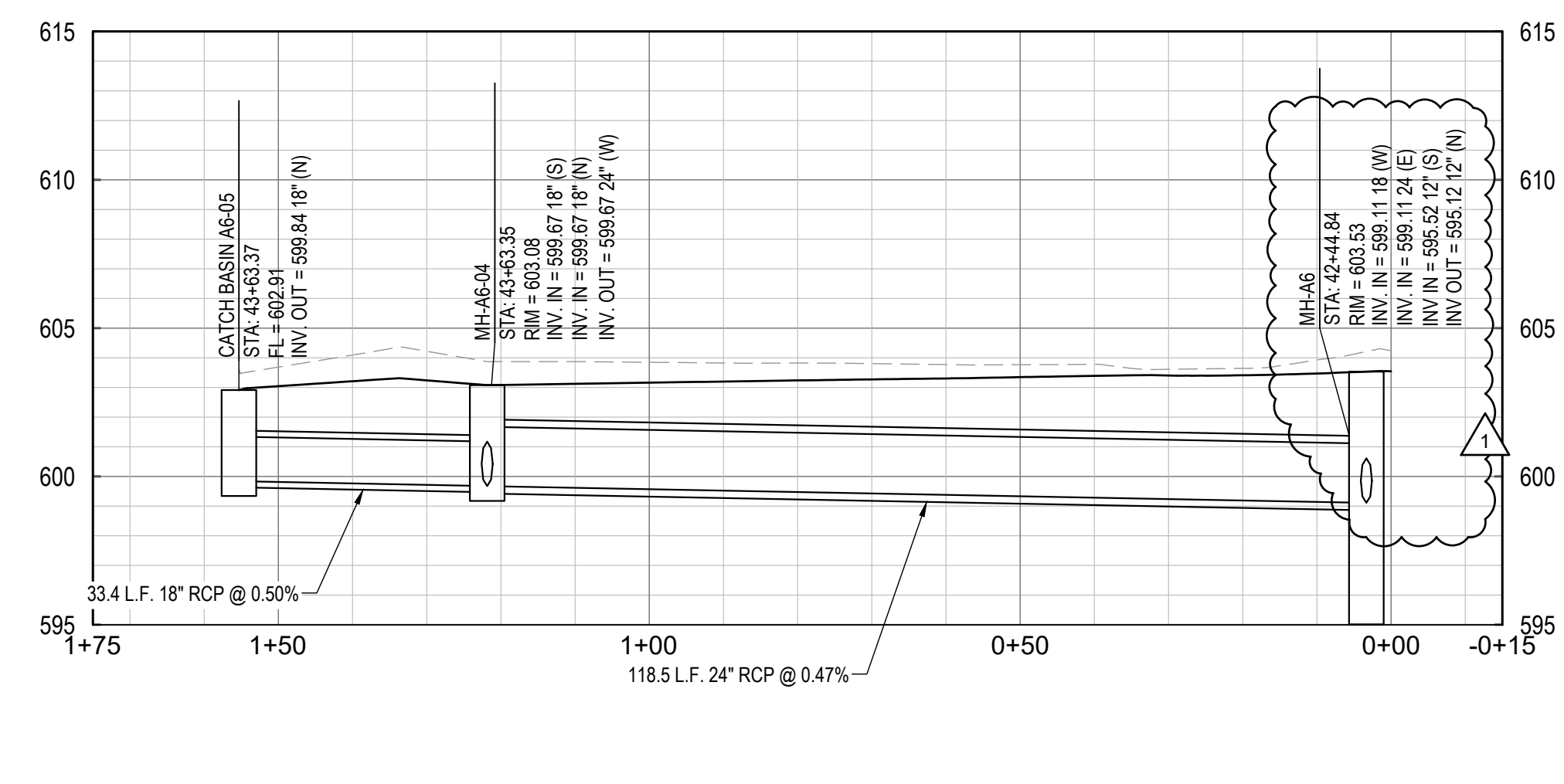
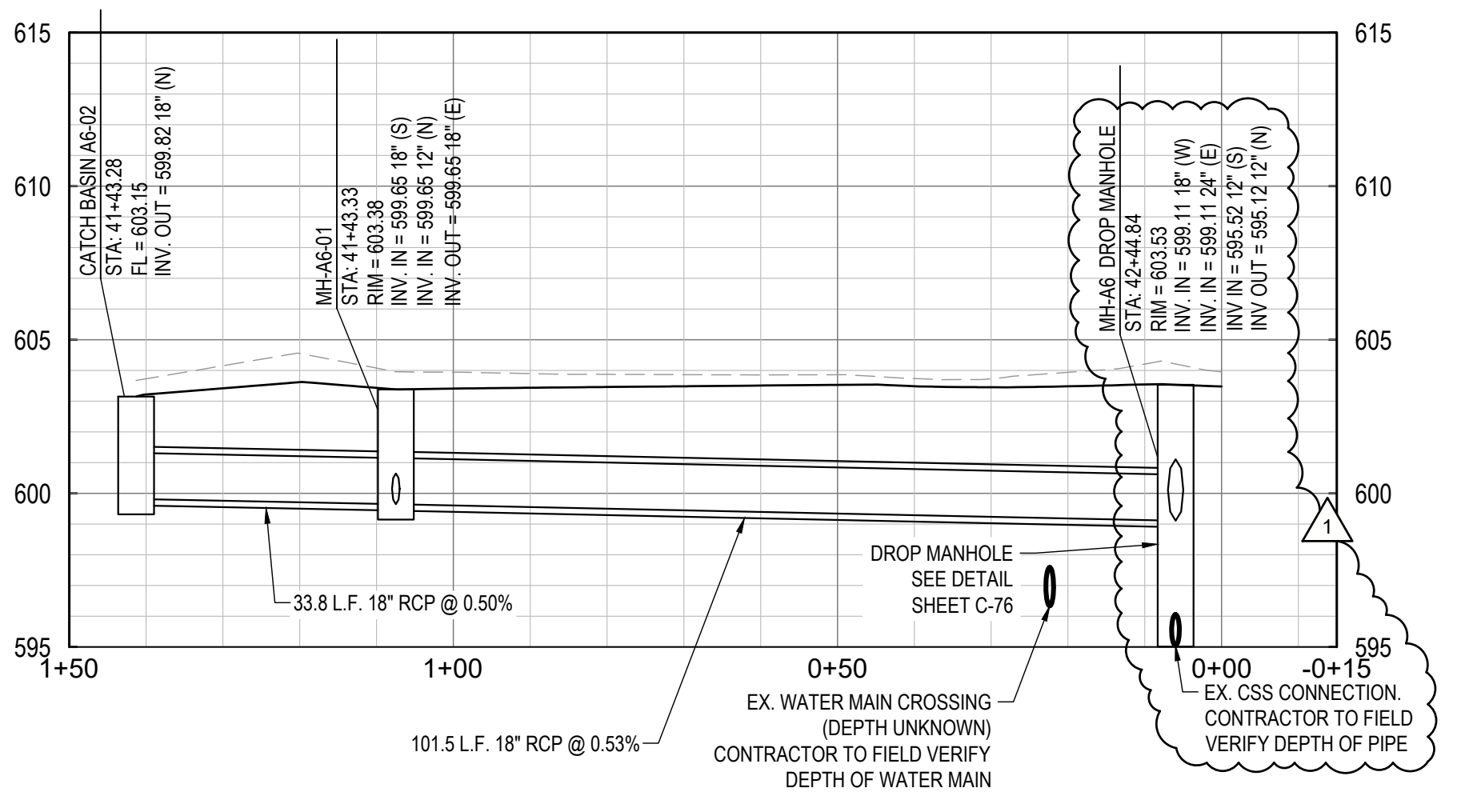
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A6 TO A6-02

A6 TO A6-05

A6-04 TO A6-06

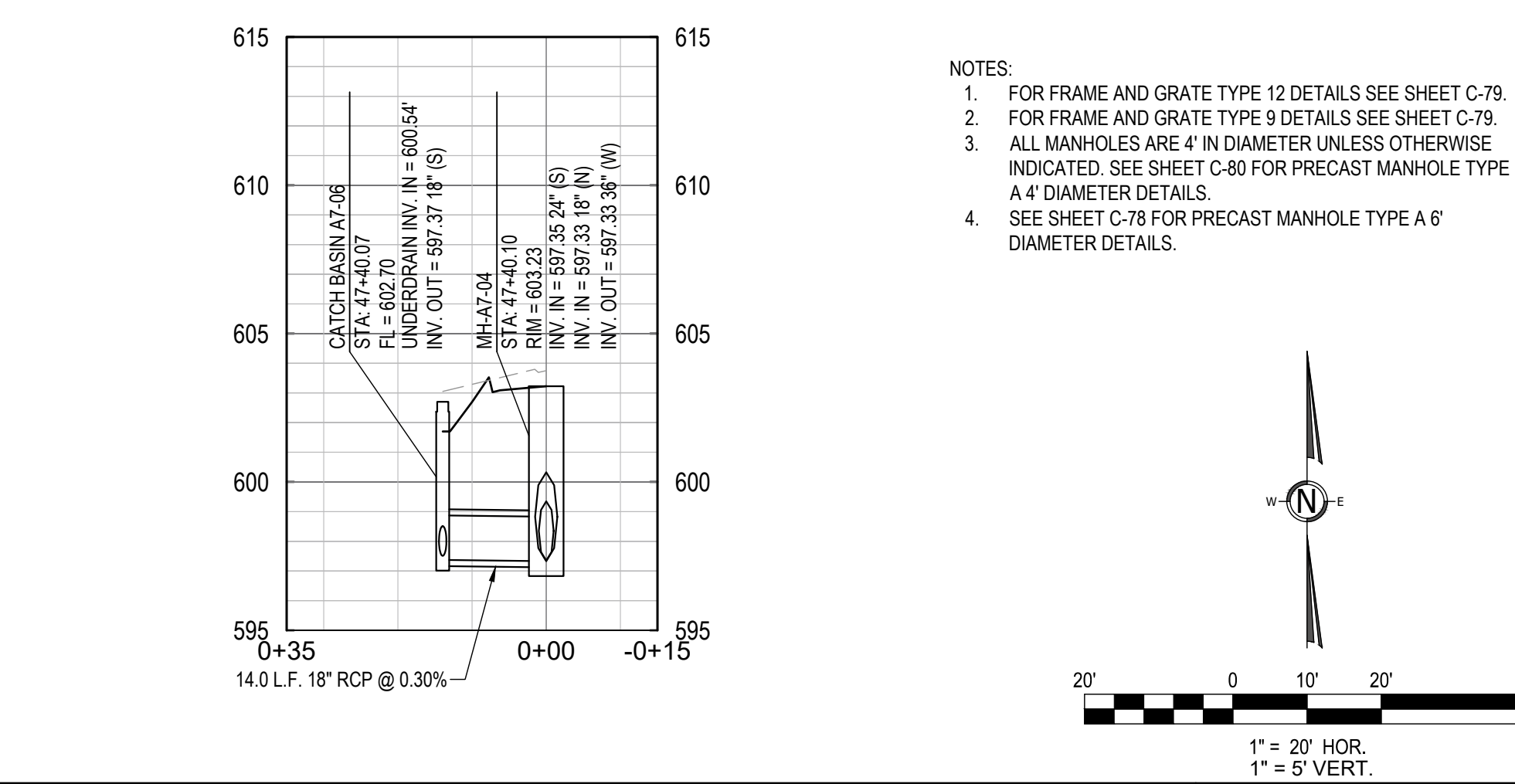
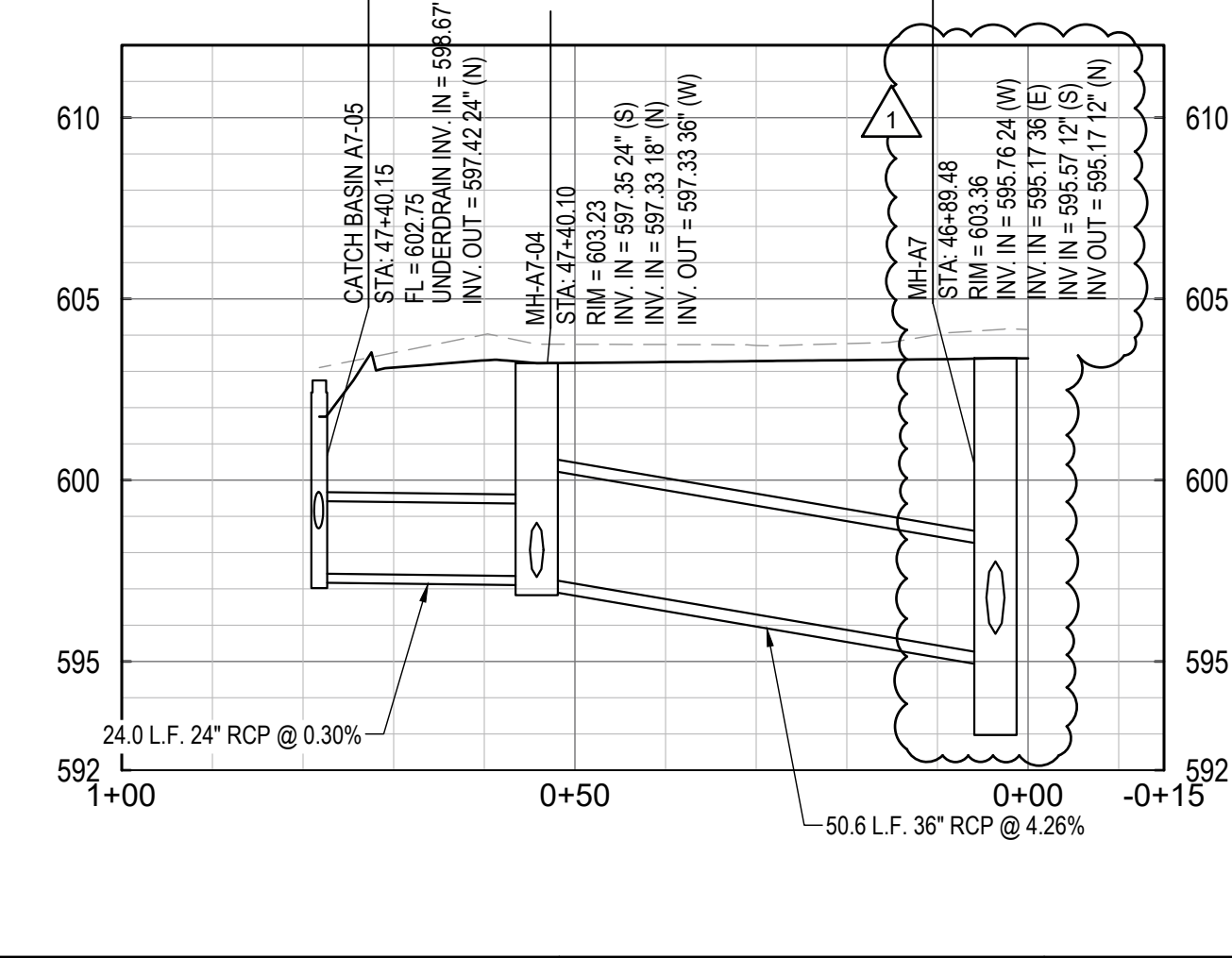
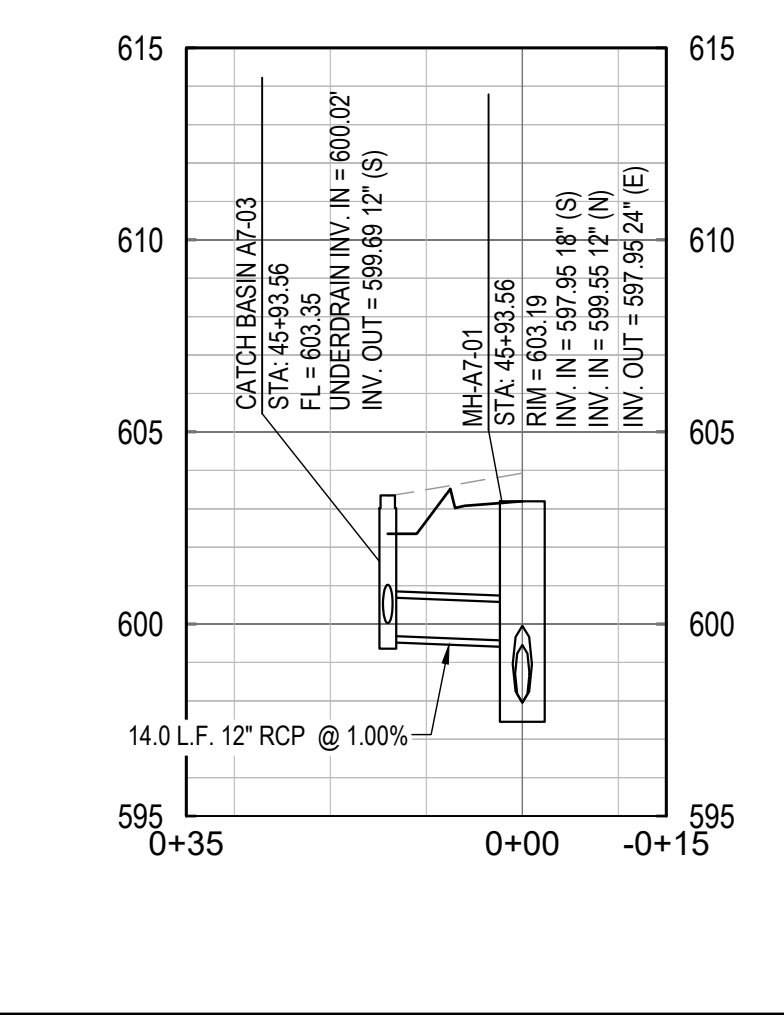
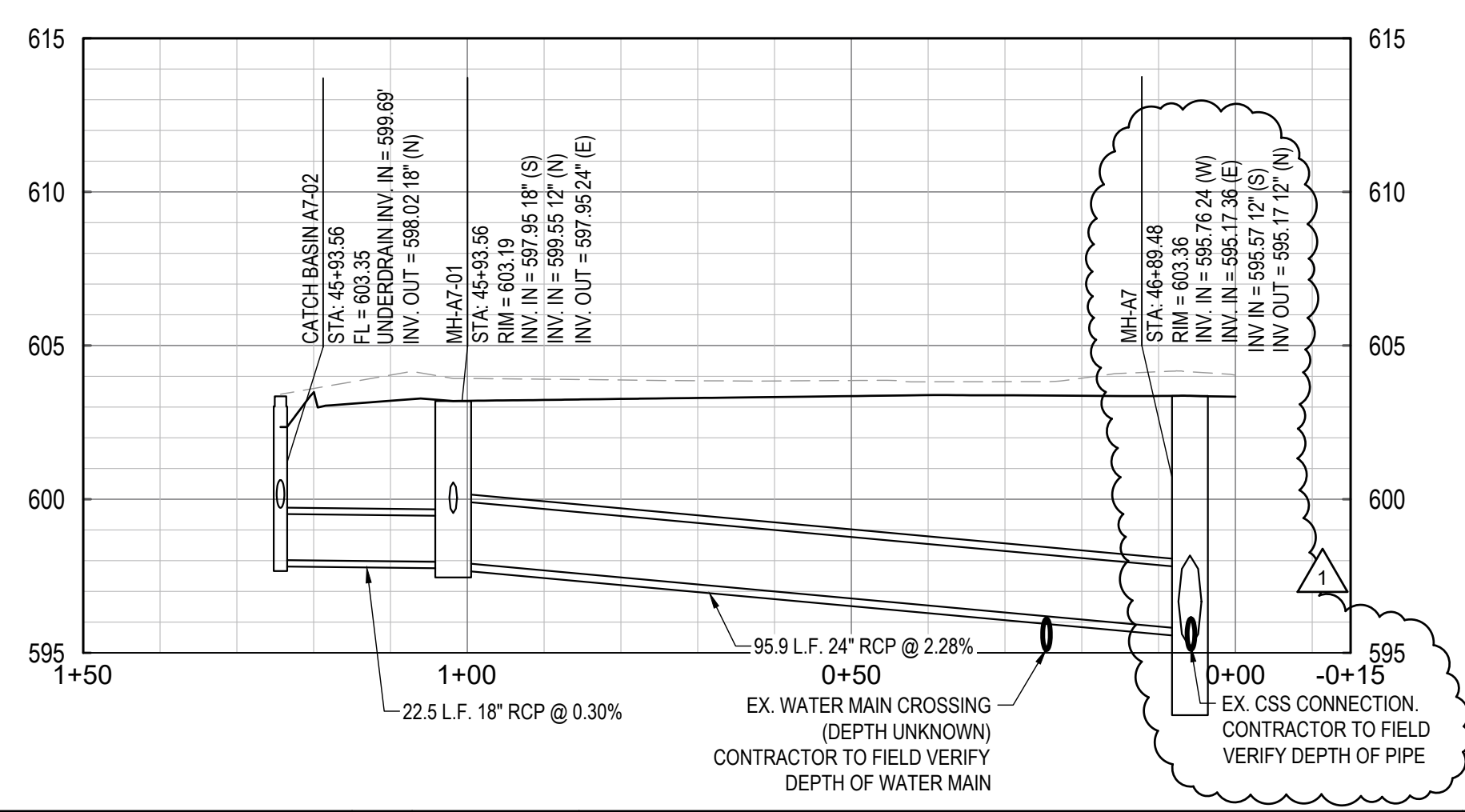


A7 TO A7-01

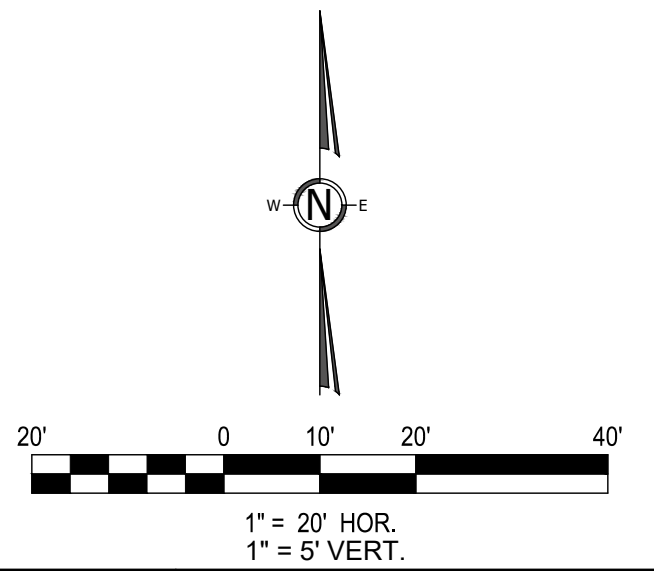
A7-01 TO A7-03

A7 TO A7-05

A7-04 TO A7-06



- NOTES:
1. FOR FRAME AND GRATE TYPE 12 DETAILS SEE SHEET C-79.
  2. FOR FRAME AND GRATE TYPE 9 DETAILS SEE SHEET C-79.
  3. ALL MANHOLES ARE 4' IN DIAMETER UNLESS OTHERWISE INDICATED. SEE SHEET C-80 FOR PRECAST MANHOLE TYPE A 4' DIAMETER DETAILS.
  4. SEE SHEET C-78 FOR PRECAST MANHOLE TYPE A 6' DIAMETER DETAILS.



No.	DATE	REVISION DESCRIPTION
1	4/15/24	ISSUED ADDENDUM 1

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

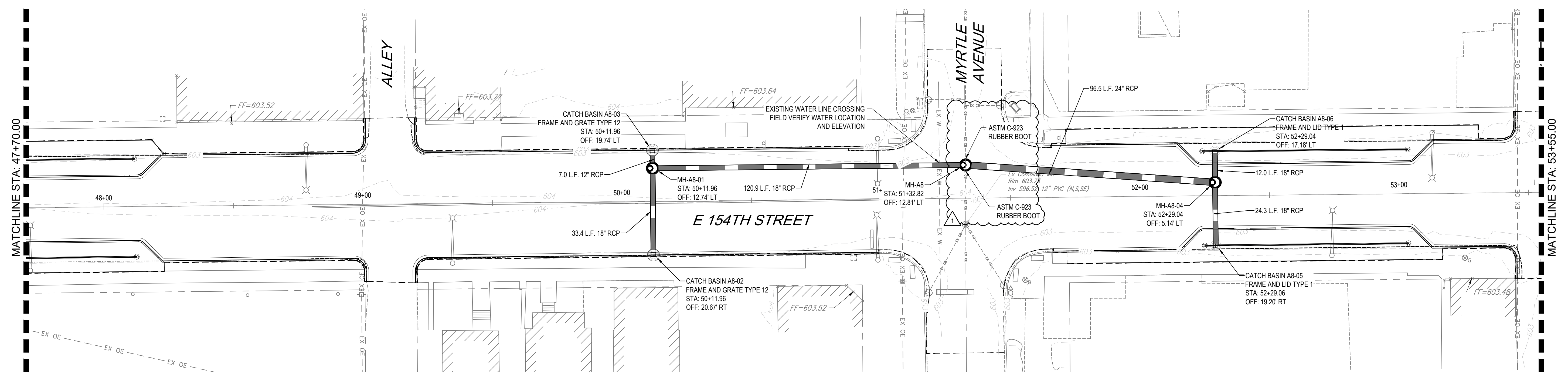


PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**STORM PLAN AND PROFILE STA 41+70 TO 47+70**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-31**

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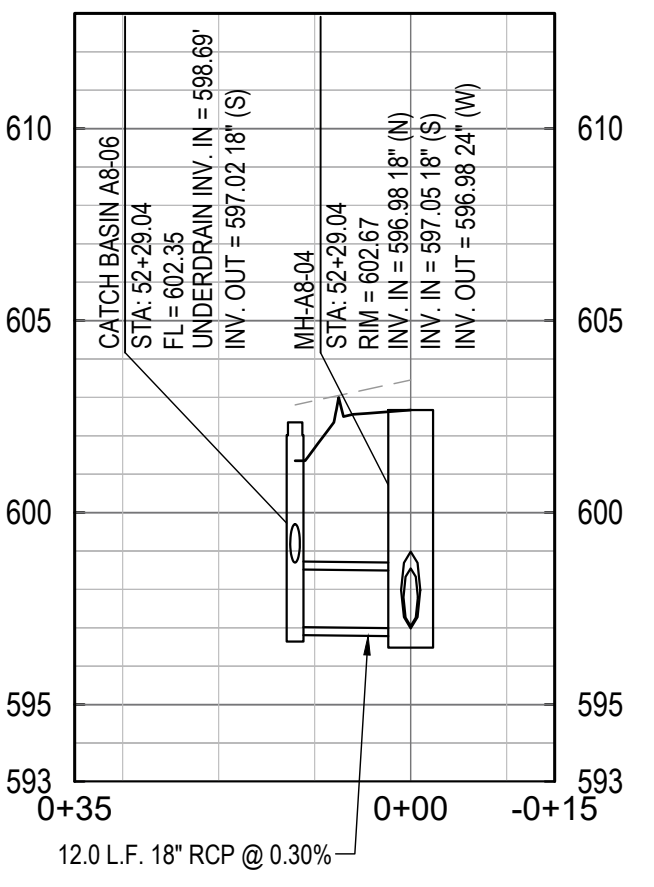
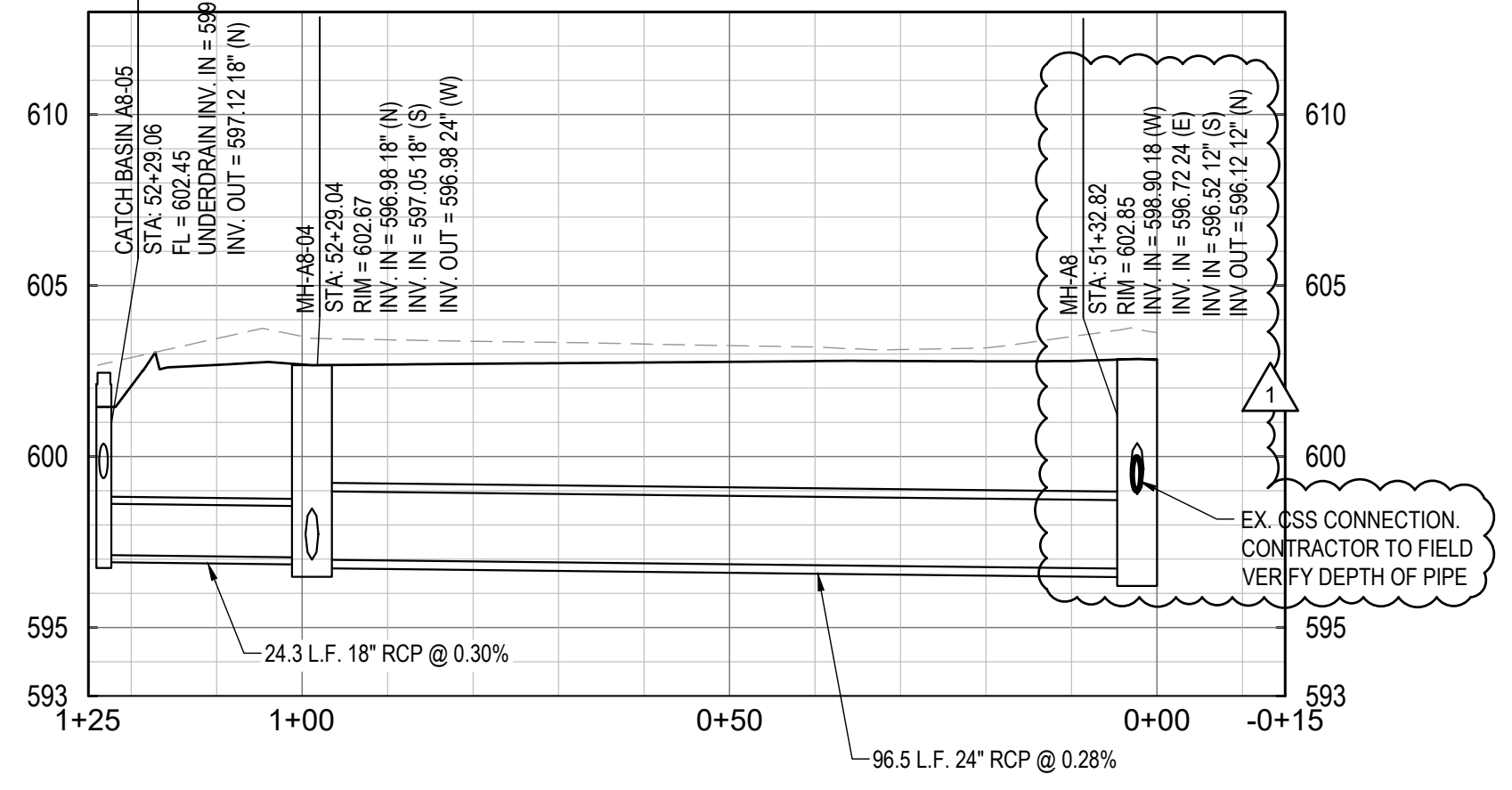
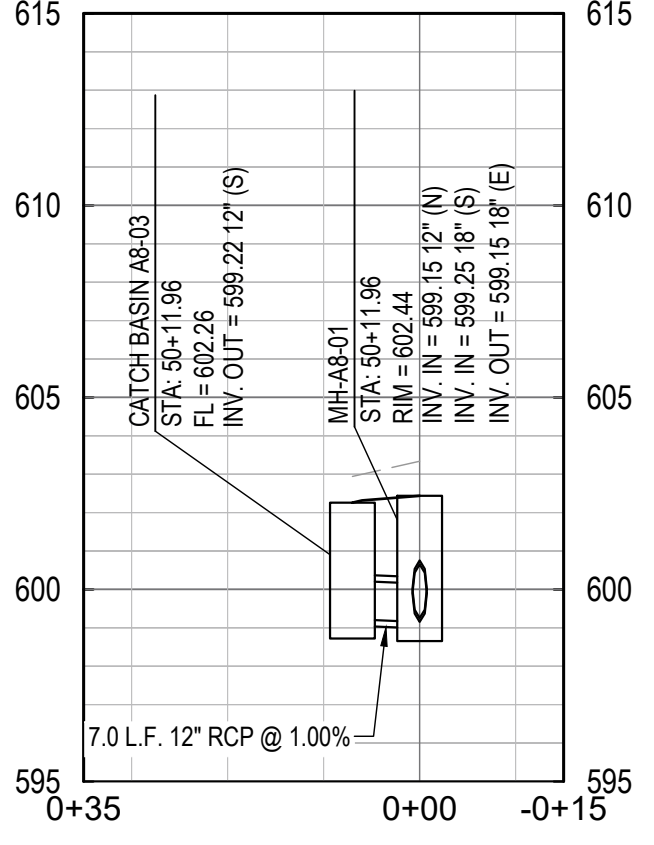
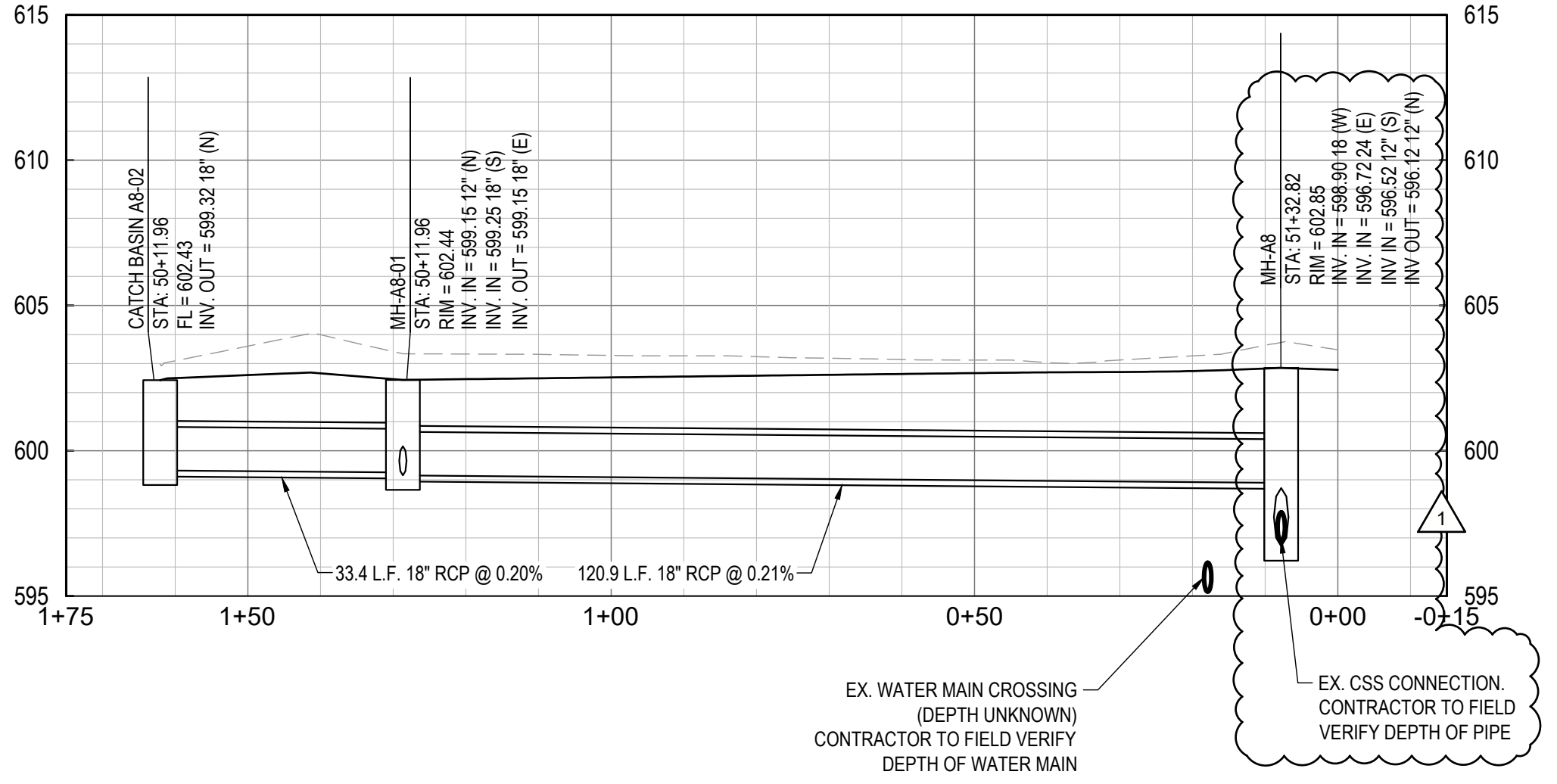


A8 TO A8-01

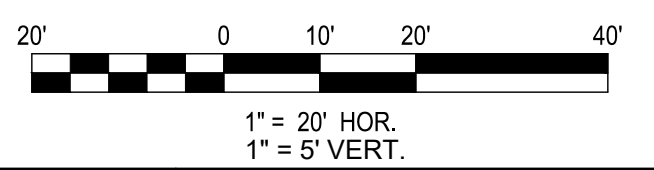
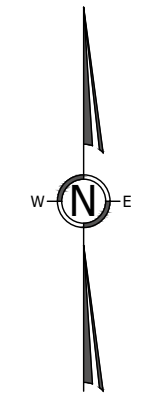
A8-01 TO A8-03

A8 TO A8-05

A8-04 TO A8-06



- NOTES:
- FOR FRAME AND GRATE TYPE 12 DETAILS SEE SHEET C-79.
  - FOR FRAME AND GRATE TYPE 9 DETAILS SEE SHEET C-79.
  - ALL MANHOLES ARE 4' IN DIAMETER UNLESS OTHERWISE INDICATED. SEE SHEET C-80 FOR PRECAST MANHOLE TYPE A 4' DIAMETER DETAILS.
  - SEE SHEET C-78 FOR PRECAST MANHOLE TYPE A 6' DIAMETER DETAILS.



No.	DATE	REVISION DESCRIPTION
1	4/15/24	ISSUED ADDENDUM 1

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



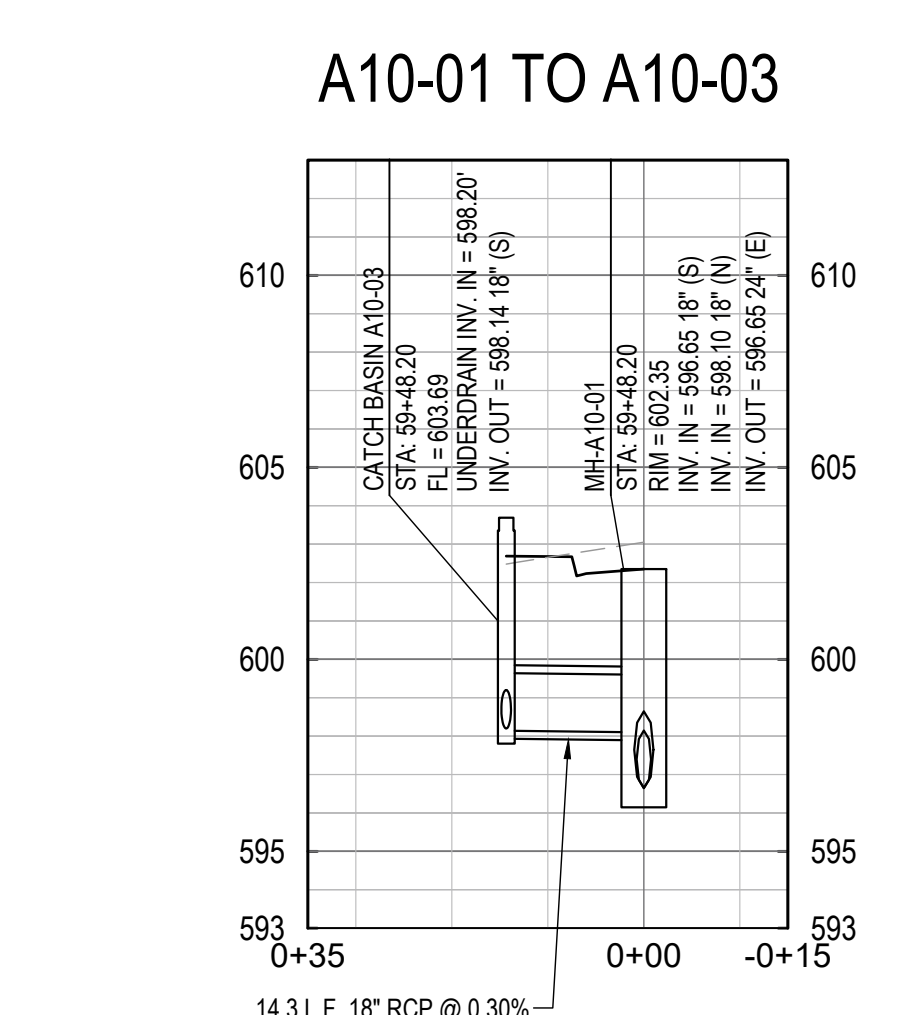
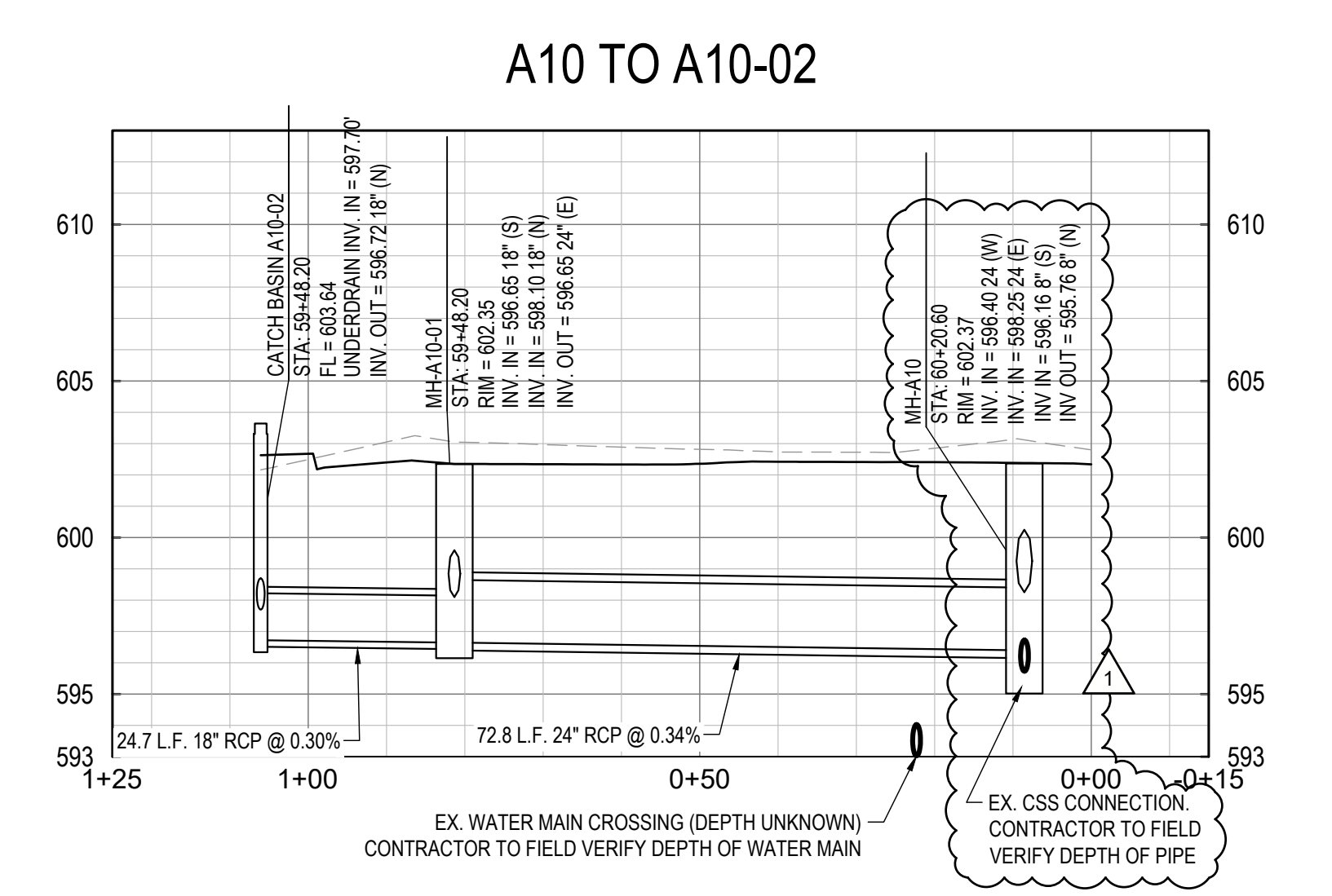
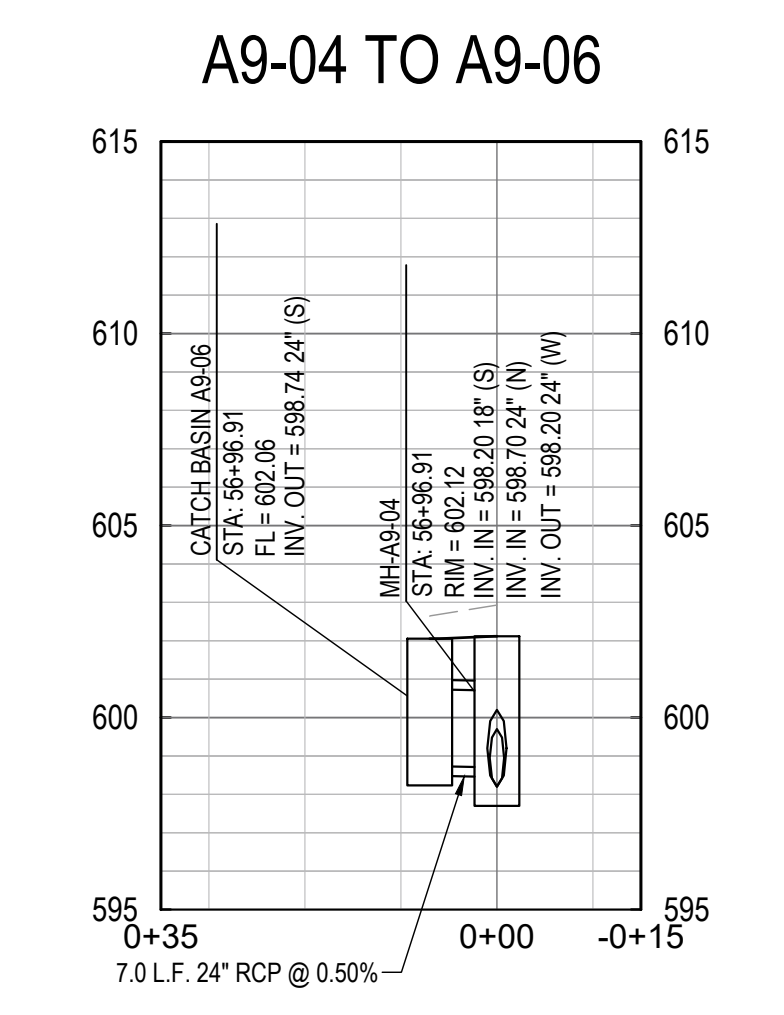
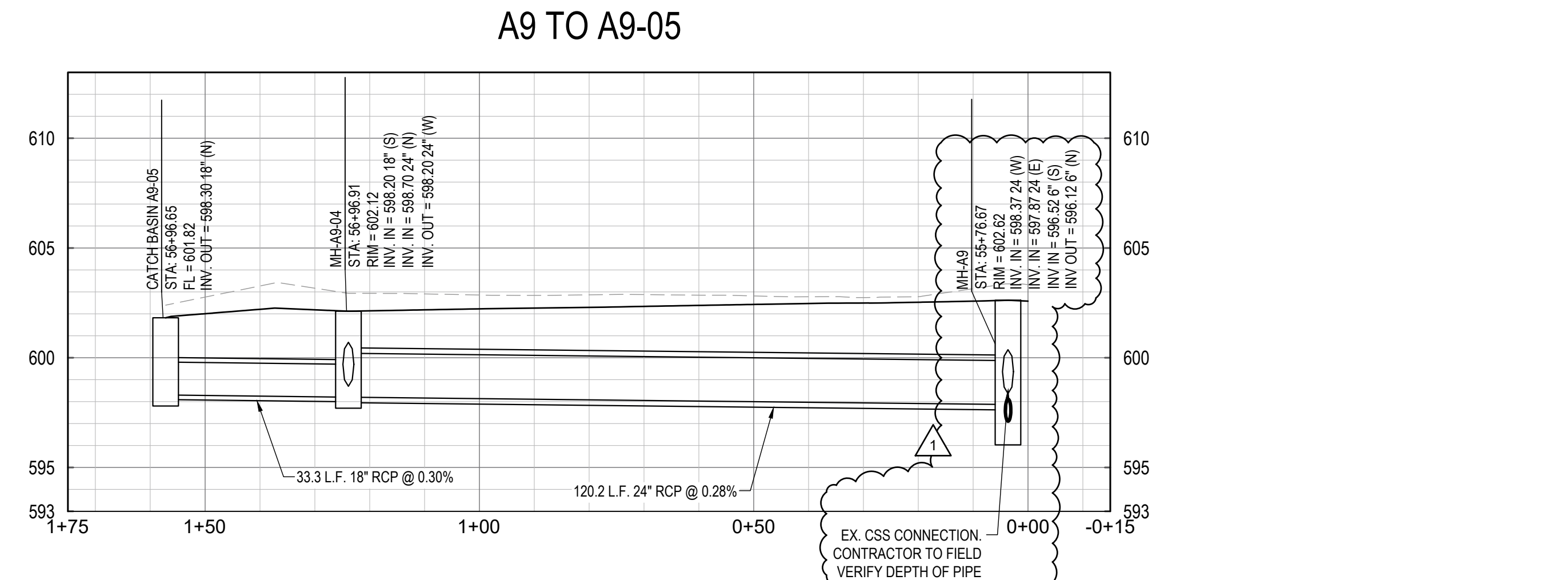
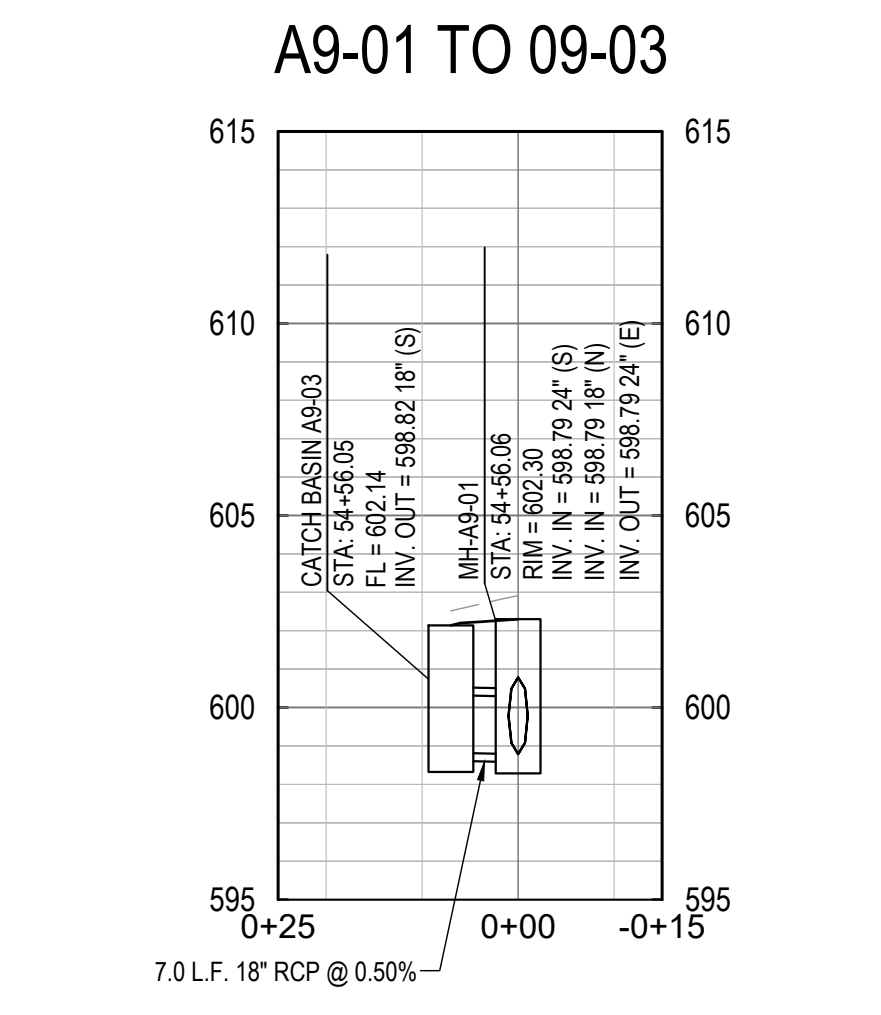
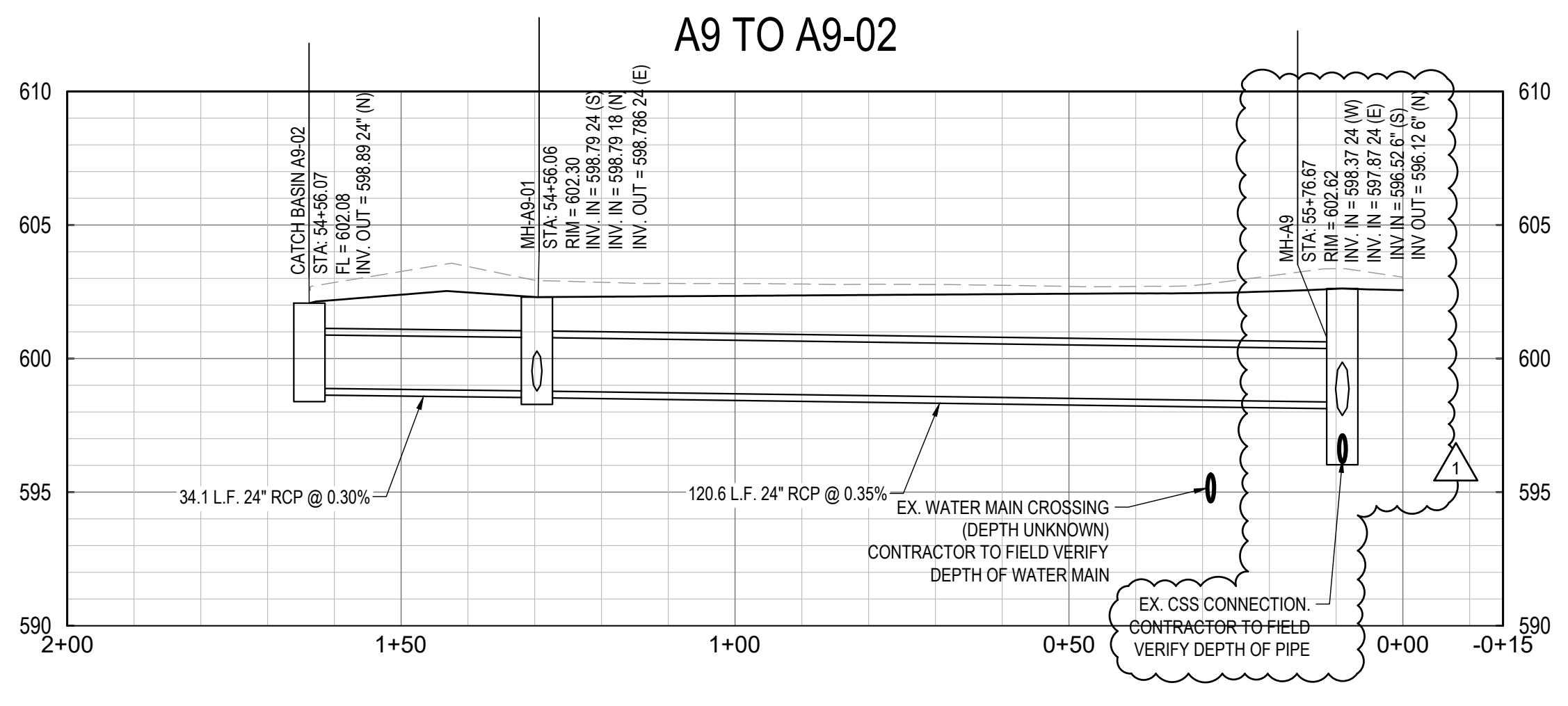
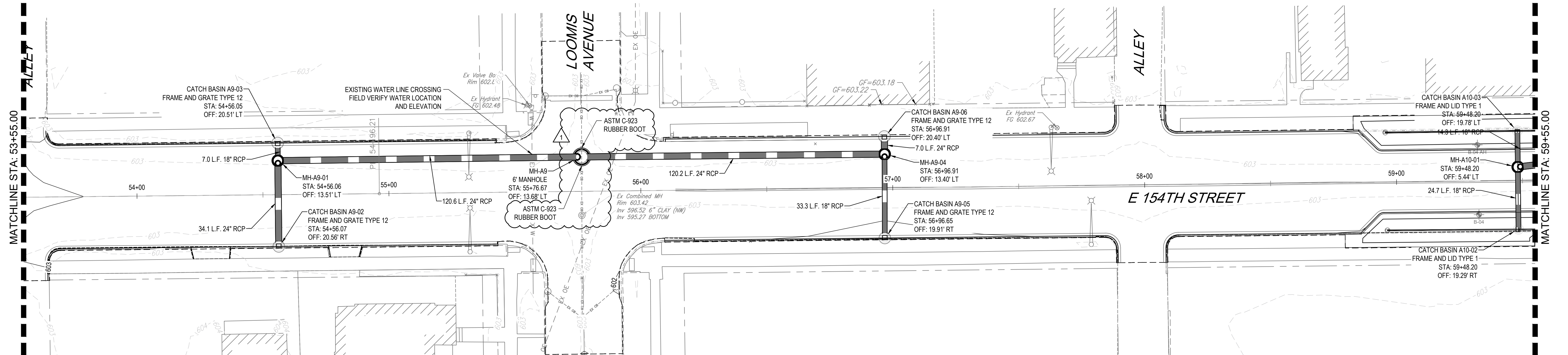
PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**STORM PLAN AND PROFILE STA 47+70 TO 53+55**

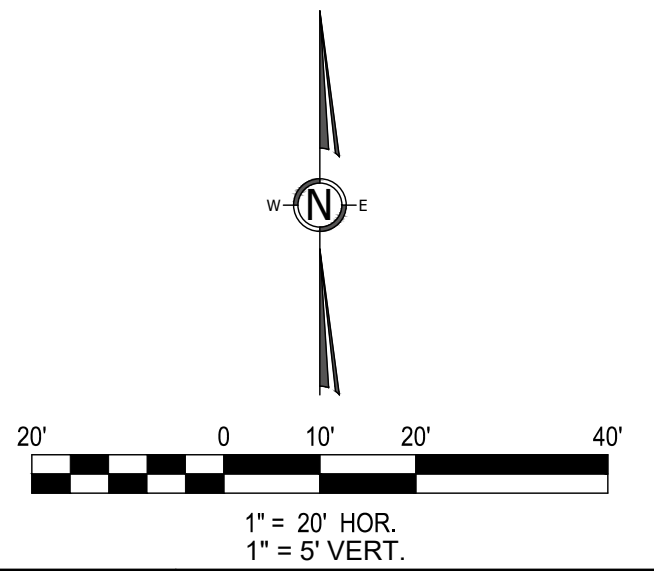
CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-32**

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- NOTES:
- FOR FRAME AND GRATE TYPE 12 DETAILS SEE SHEET C-79
  - FOR FRAME AND GRATE TYPE 9 DETAILS SEE SHEET C-79
  - ALL MANHOLES ARE 4' IN DIAMETER UNLESS OTHERWISE INDICATED. SEE SHEET C-80 FOR PRECAST MANHOLE TYPE A 4' DIAMETER DETAILS.
  - SEE SHEET C-78 FOR PRECAST MANHOLE TYPE A 6' DIAMETER DETAILS.



No.	DATE	REVISION DESCRIPTION
1	4/15/24	ISSUED ADDENDUM 1

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



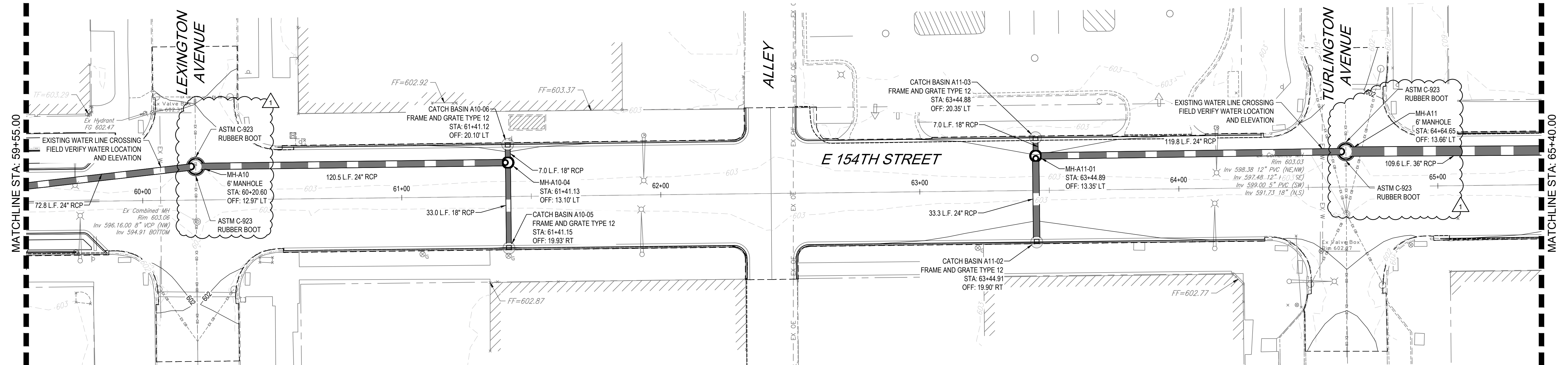
PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**STORM PLAN AND PROFILE STA 53+55 TO 59+55**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-33**

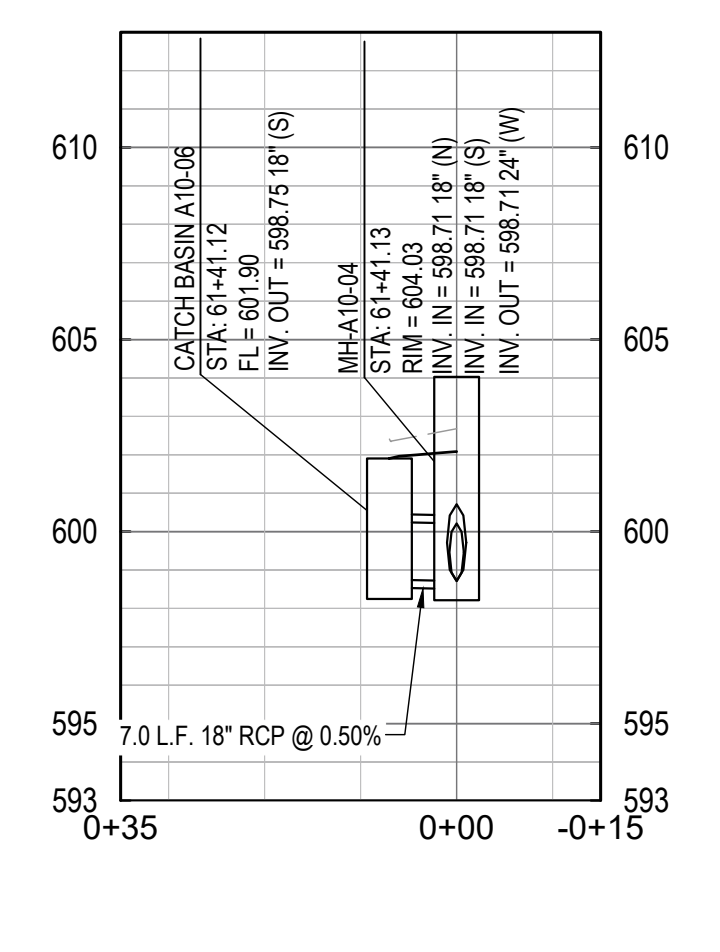
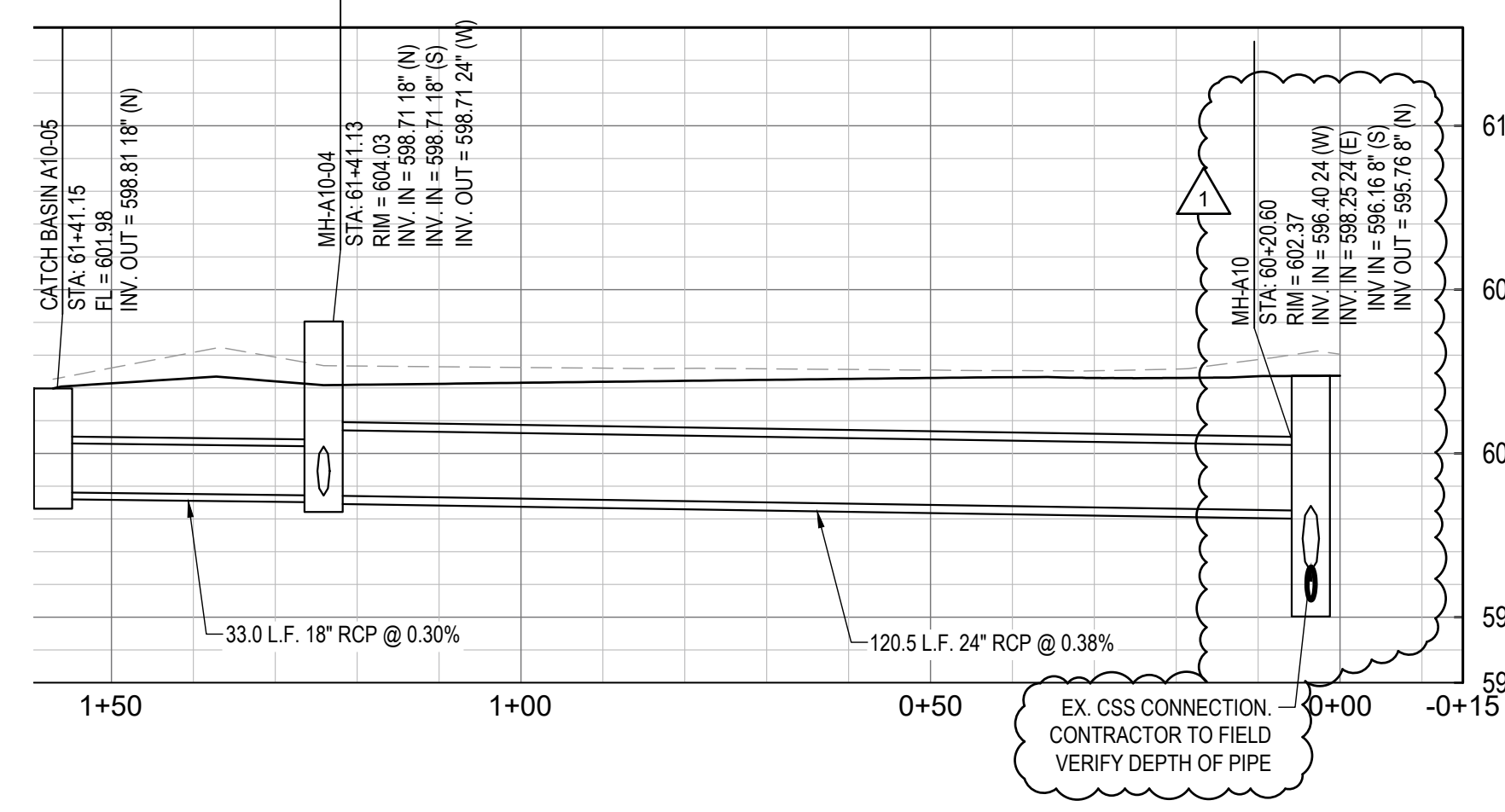
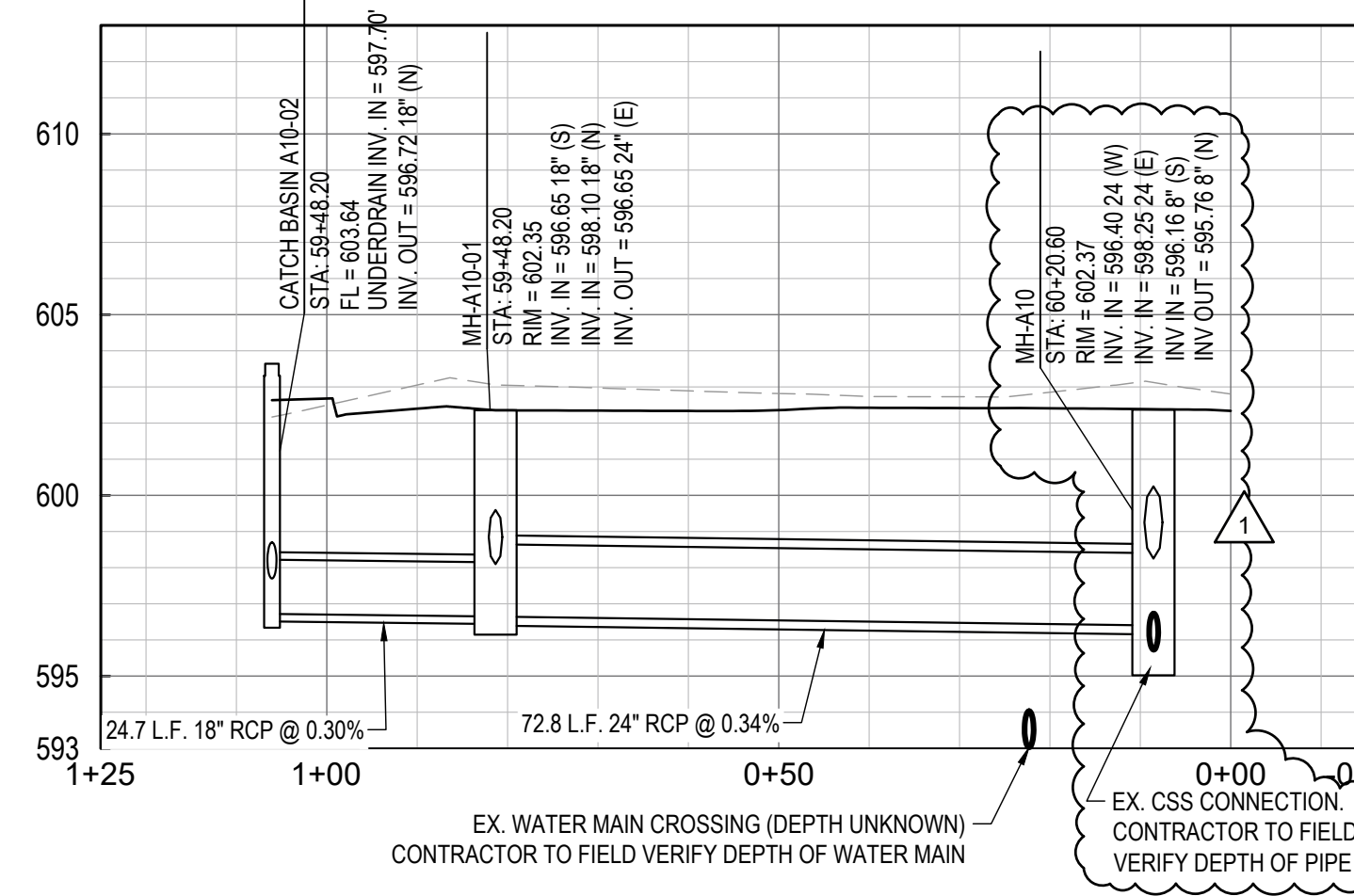
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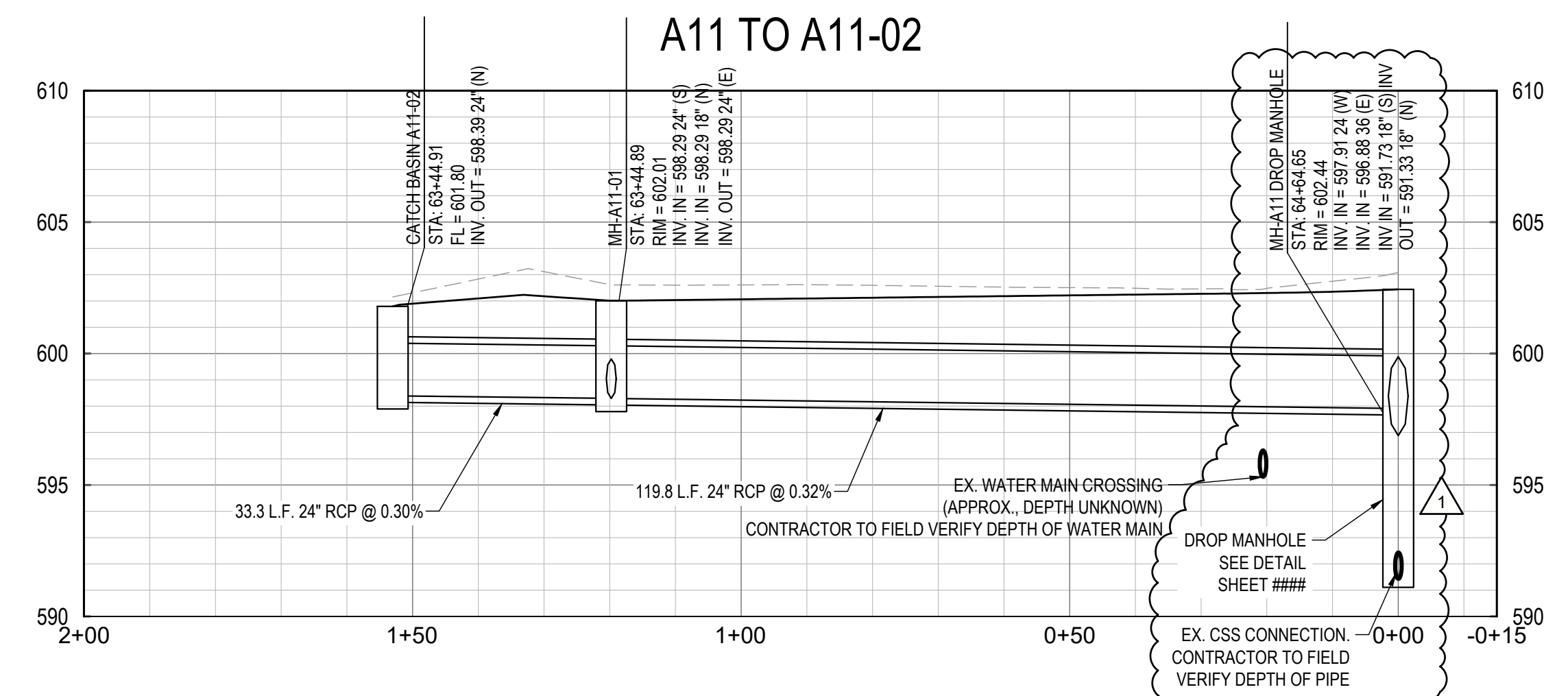
A10 TO A10-02

A10 TO A10-05

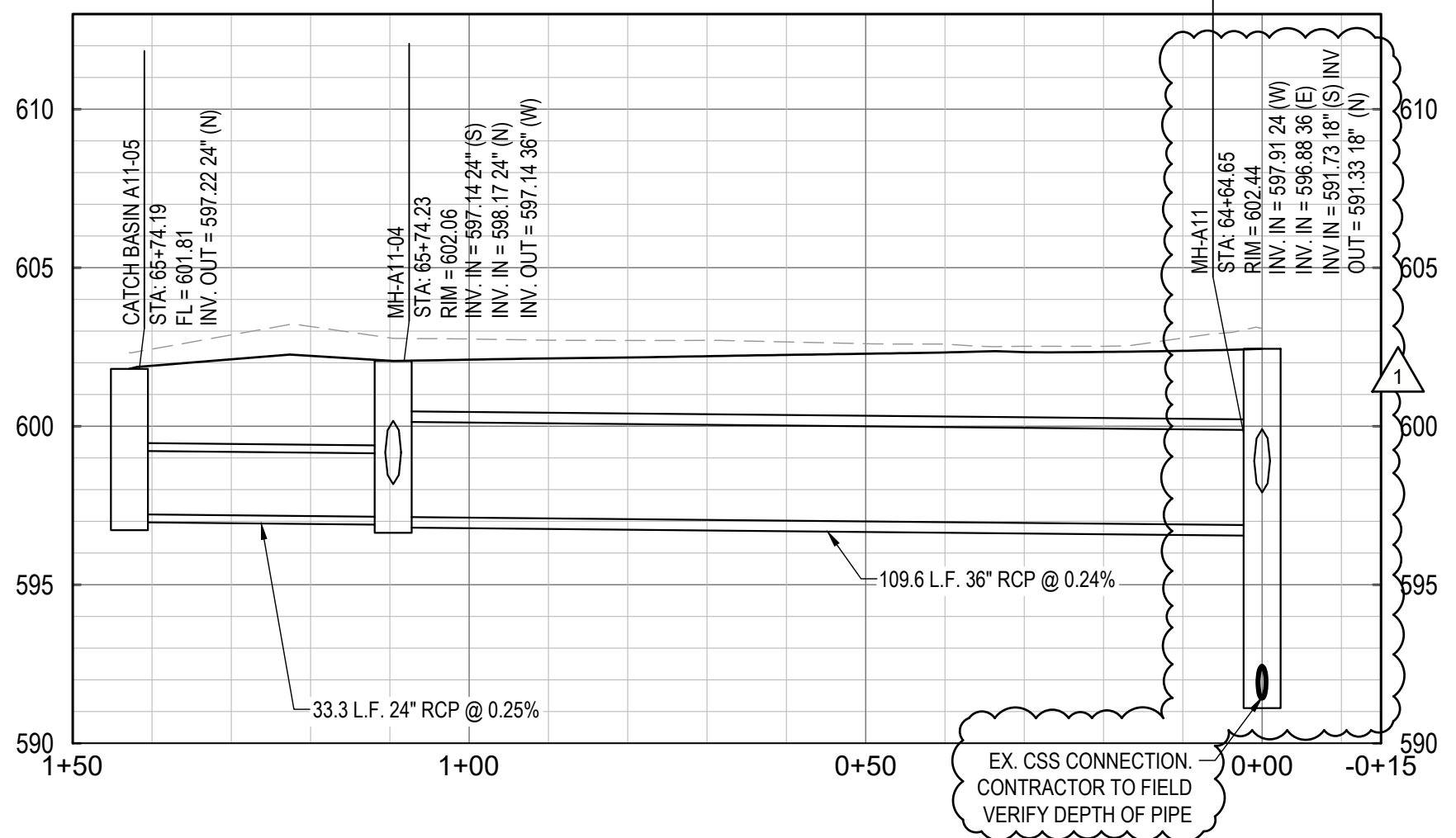
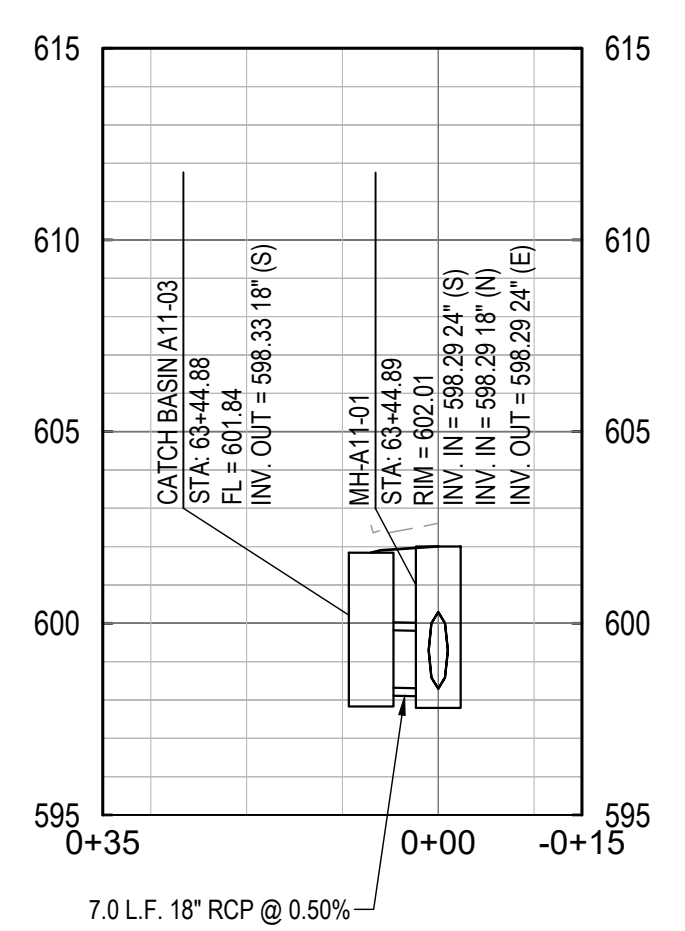
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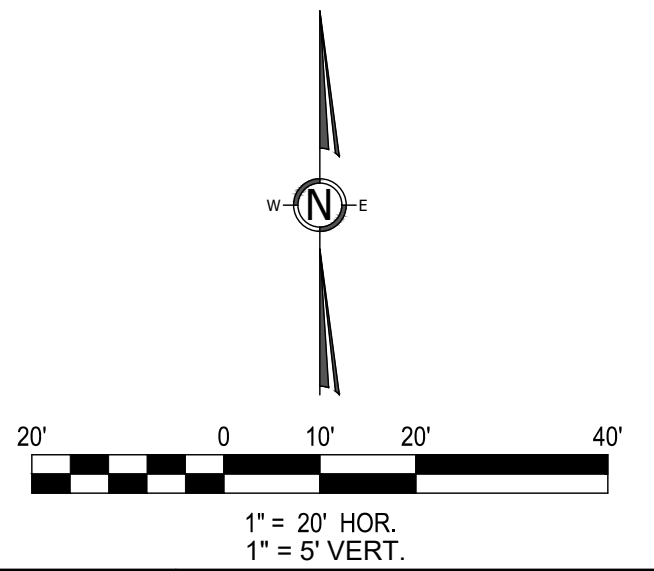
A11 TO A11-05



A11-01 TO A11-03



- NOTES:
- FOR FRAME AND GRATE TYPE 12 DETAILS SEE SHEET C-79.
  - FOR FRAME AND GRATE TYPE 9 DETAILS SEE SHEET C-79.
  - ALL MANHOLES ARE 4' IN DIAMETER UNLESS OTHERWISE INDICATED. SEE SHEET C-80 FOR PRECAST MANHOLE TYPE A 4' DIAMETER DETAILS.
  - SEE SHEET C-78 FOR PRECAST MANHOLE TYPE A 6' DIAMETER DETAILS.



No.	DATE	REVISION DESCRIPTION
1	4/15/24	ISSUED ADDENDUM 1

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



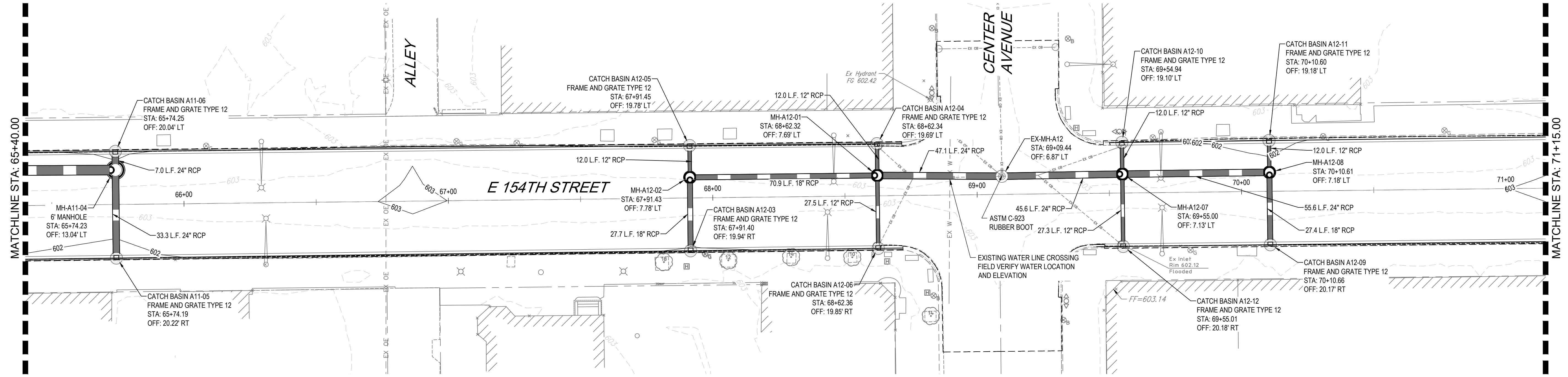
PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**STORM PLAN AND PROFILE STA 59+55 TO 65+40**

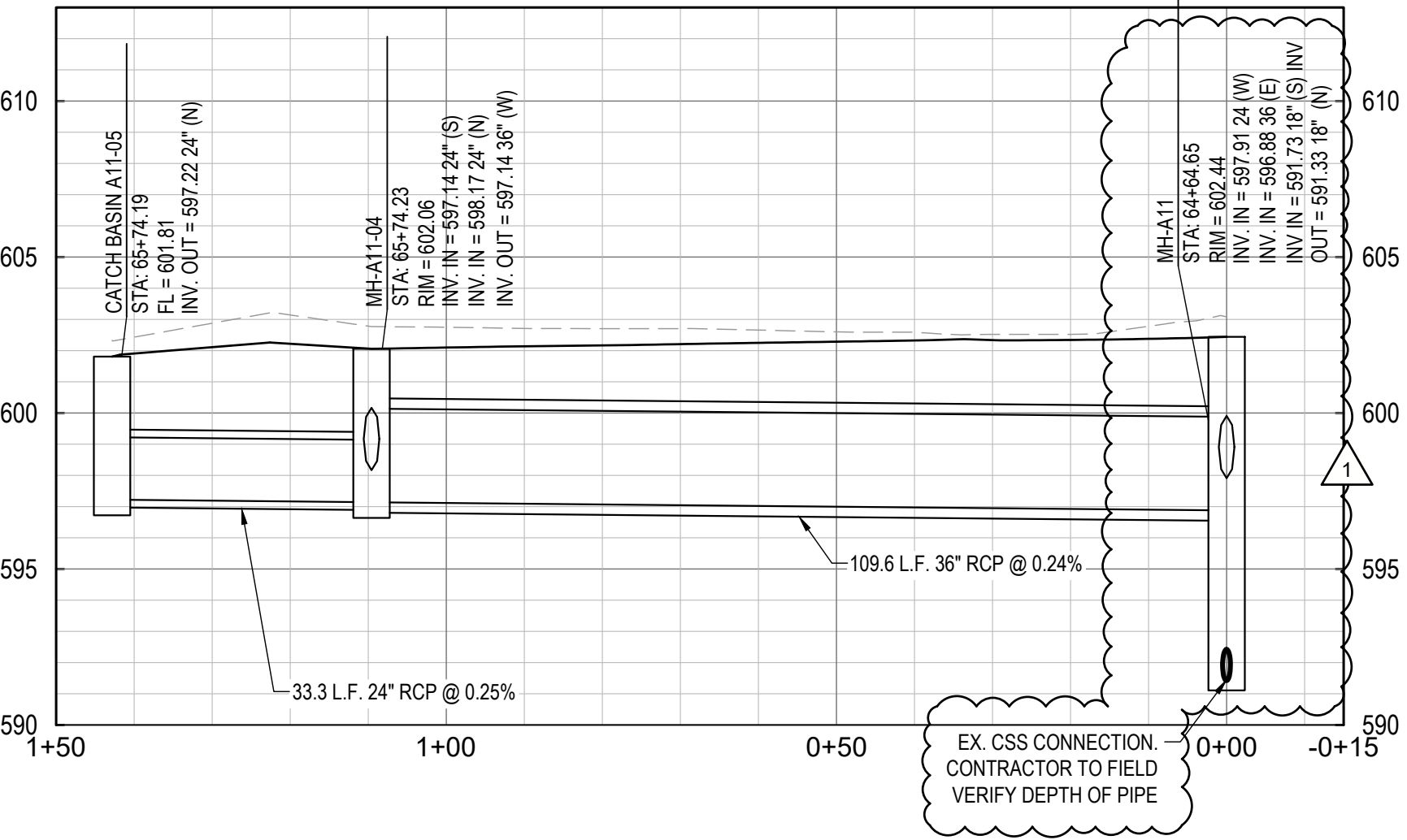
CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-34**

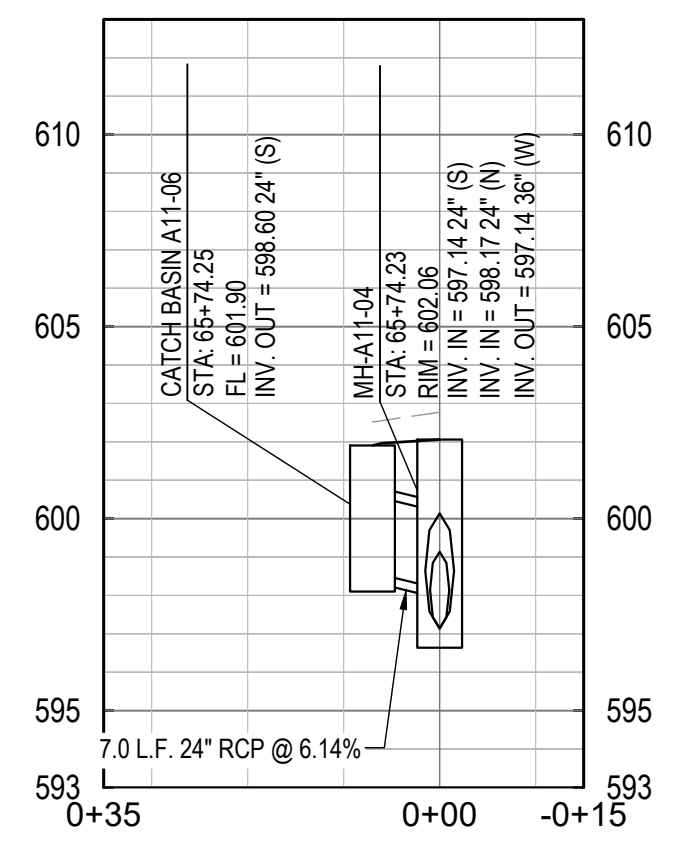
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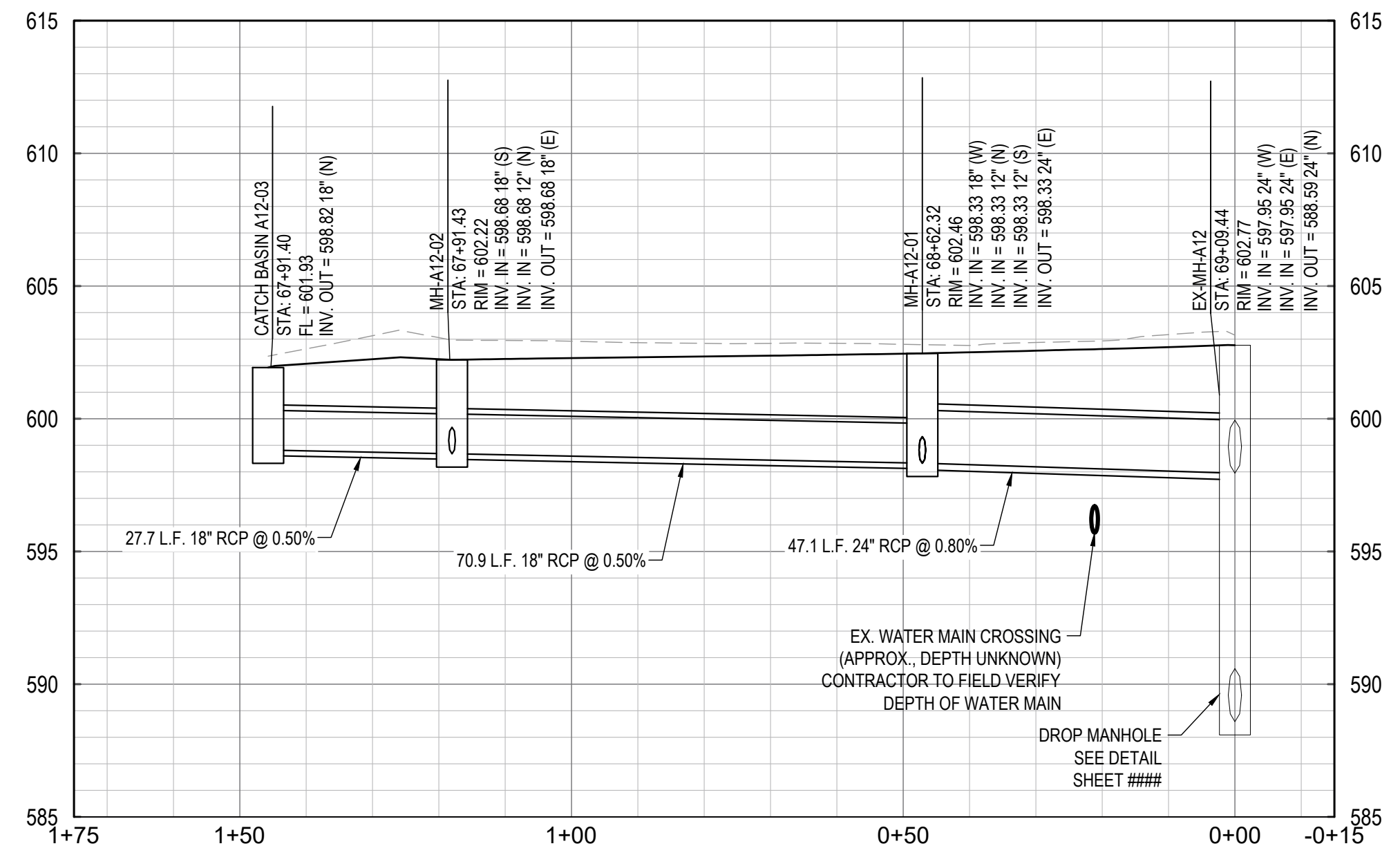
A11 TO A11-05



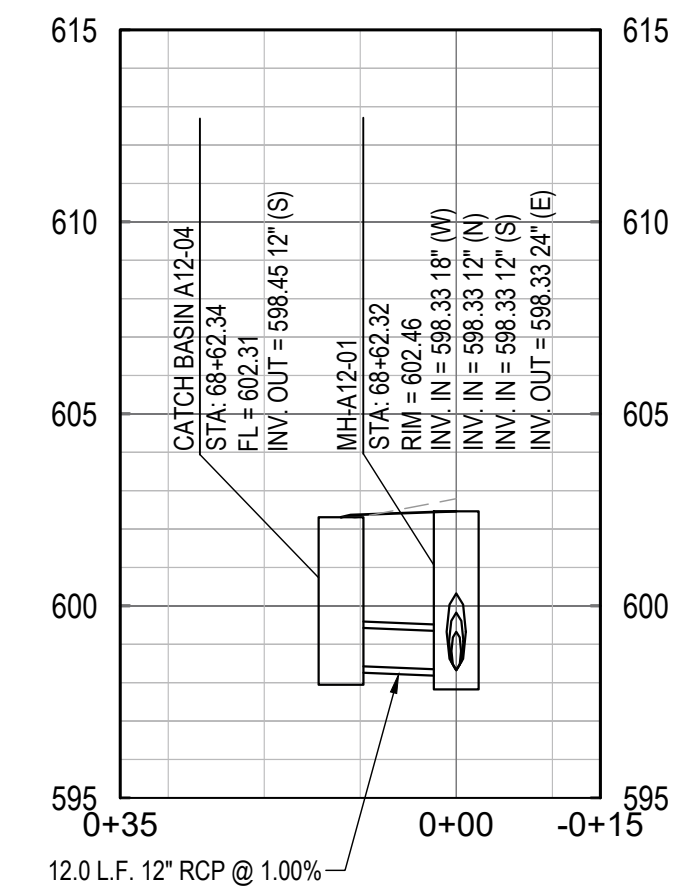
A11-04 TO A11-06



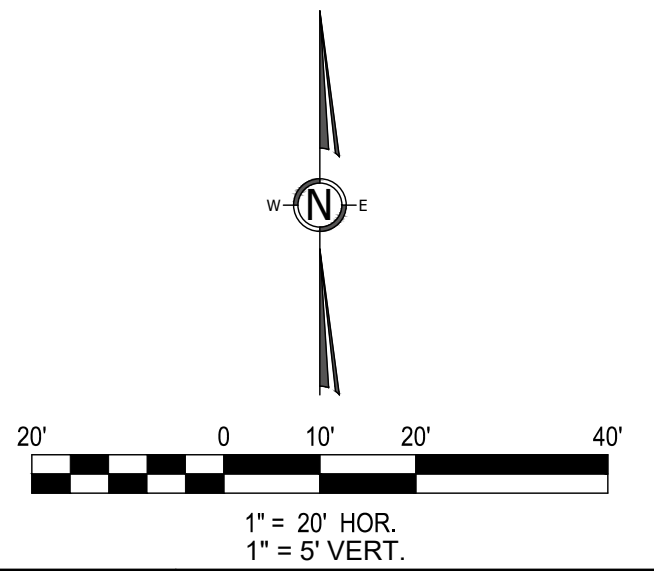
EX-A12 TO A12-03



A12-01 TO A12-04



- NOTES:**
- FOR FRAME AND GRATE TYPE 12 DETAILS SEE SHEET C-79.
  - FOR FRAME AND GRATE TYPE 9 DETAILS SEE SHEET C-79.
  - ALL MANHOLES ARE 4' IN DIAMETER UNLESS OTHERWISE INDICATED. SEE SHEET C-80 FOR PRECAST MANHOLE TYPE A 4' DIAMETER DETAILS.
  - SEE SHEET C-78 FOR PRECAST MANHOLE TYPE A 6' DIAMETER DETAILS.



No.	DATE	REVISION DESCRIPTION
1	4/15/24	ISSUED ADDENDUM 1

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



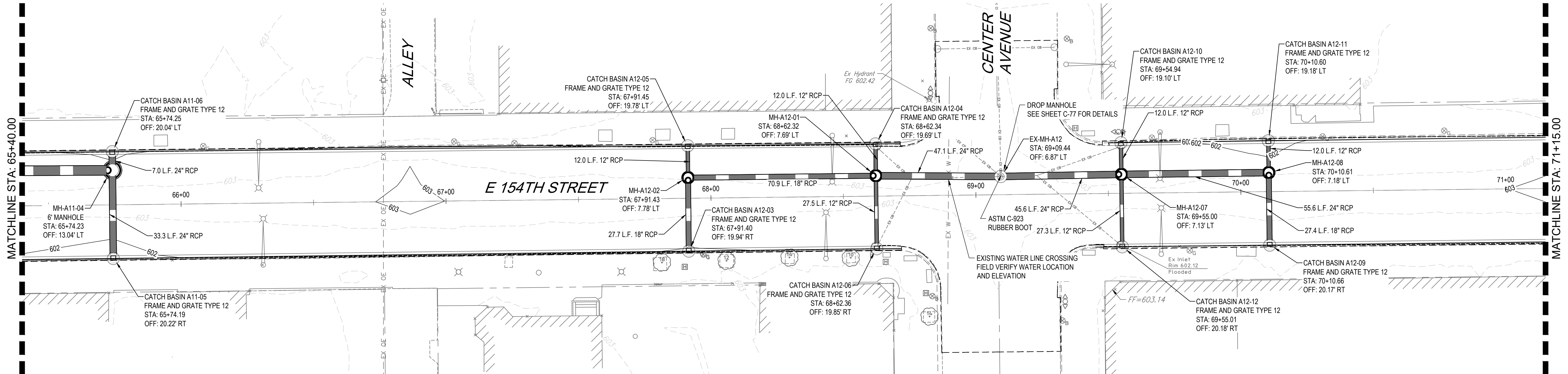
PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**STORM PLAN AND PROFILE STA 65+40 TO 71+15**

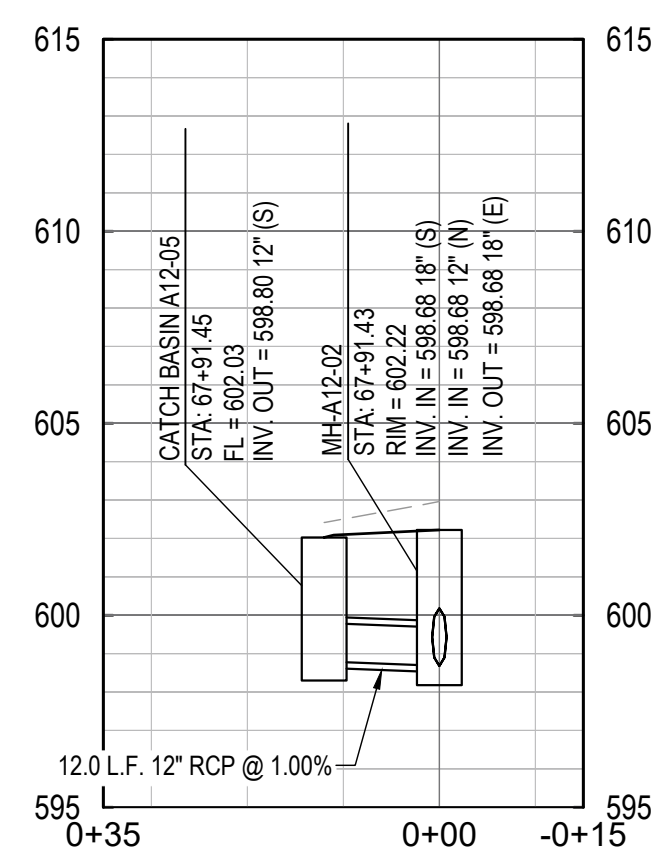
CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-35**

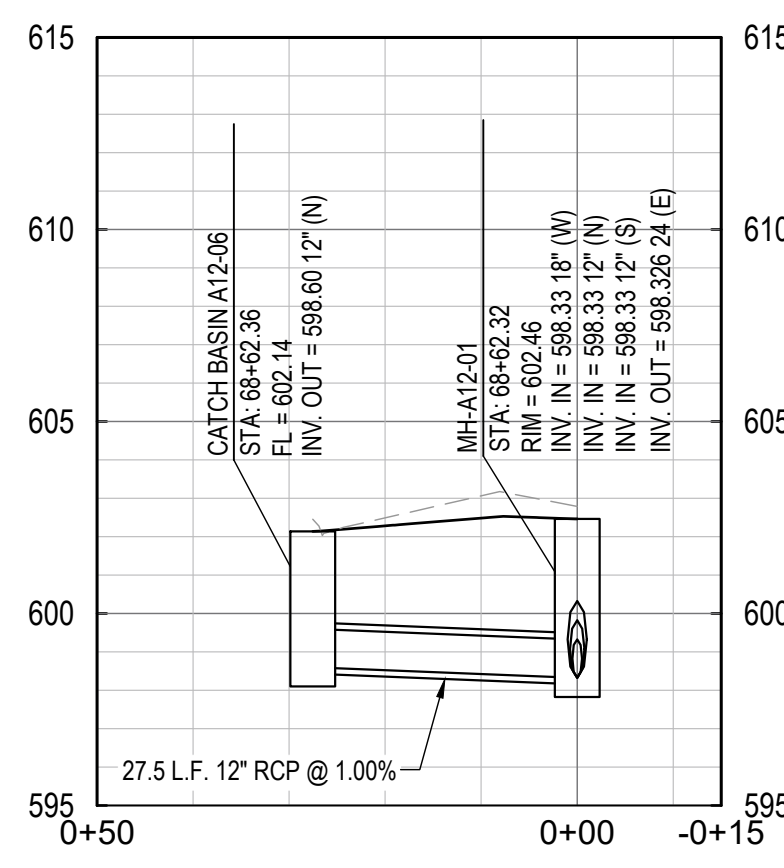
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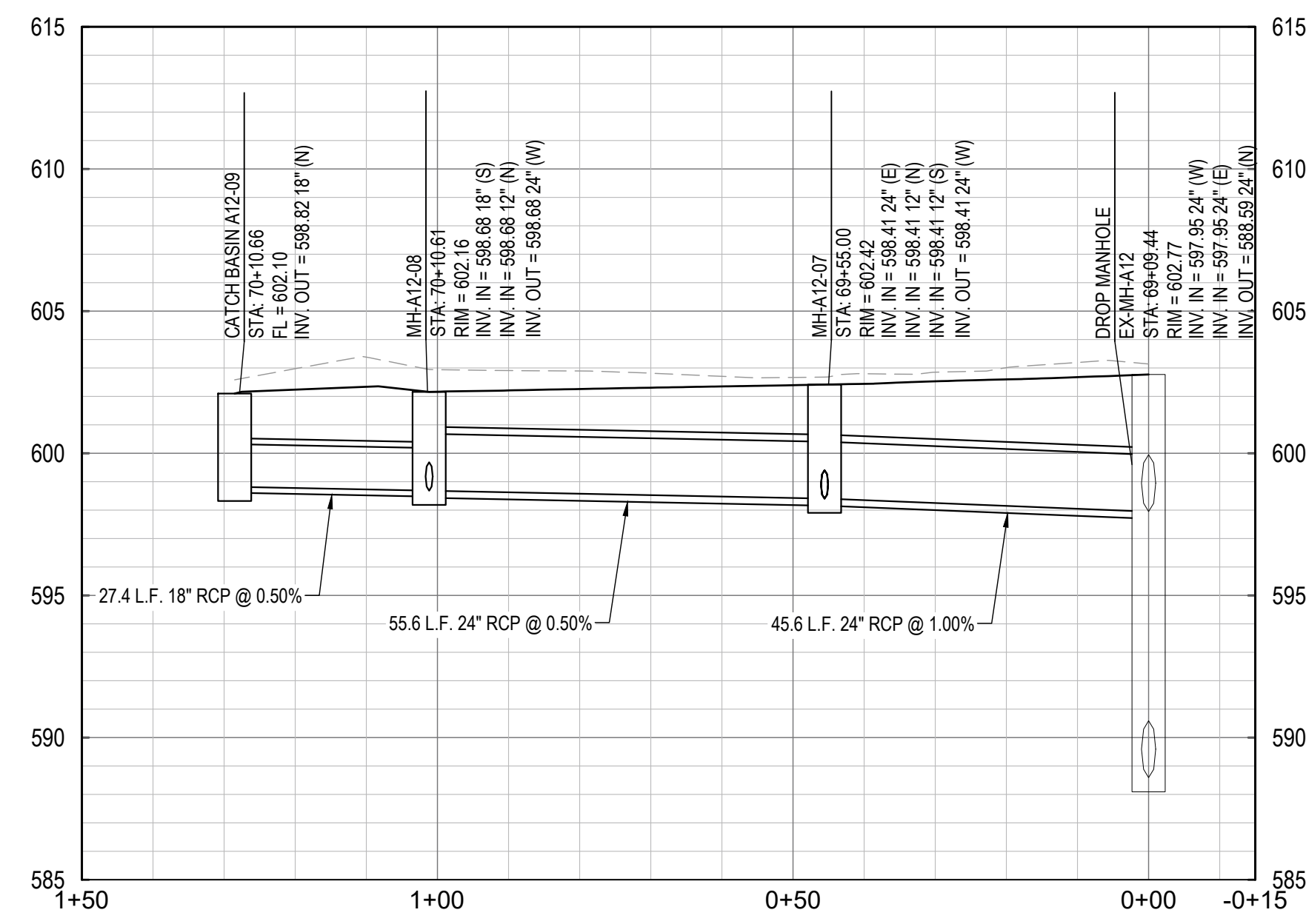
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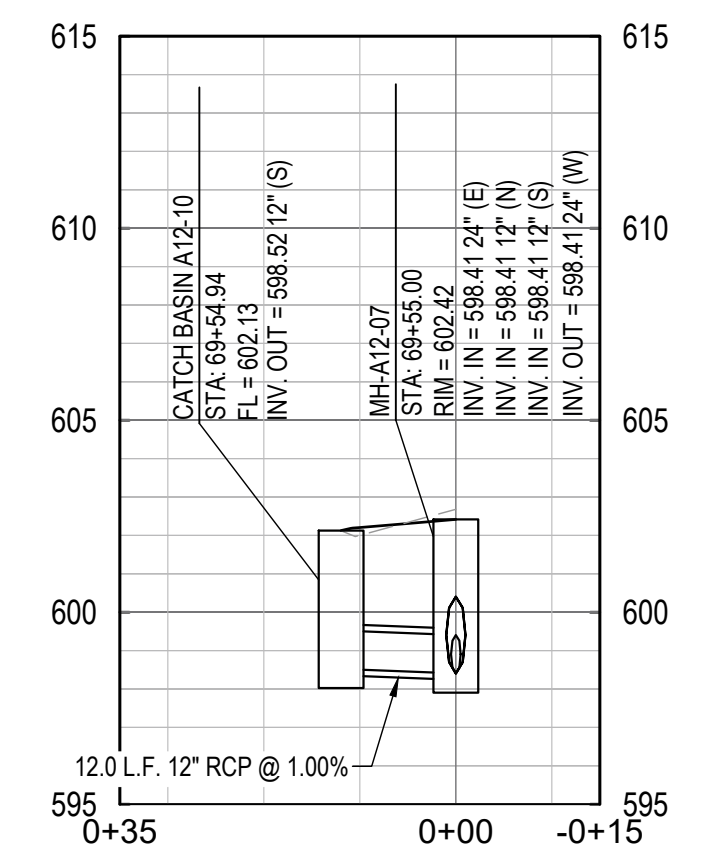
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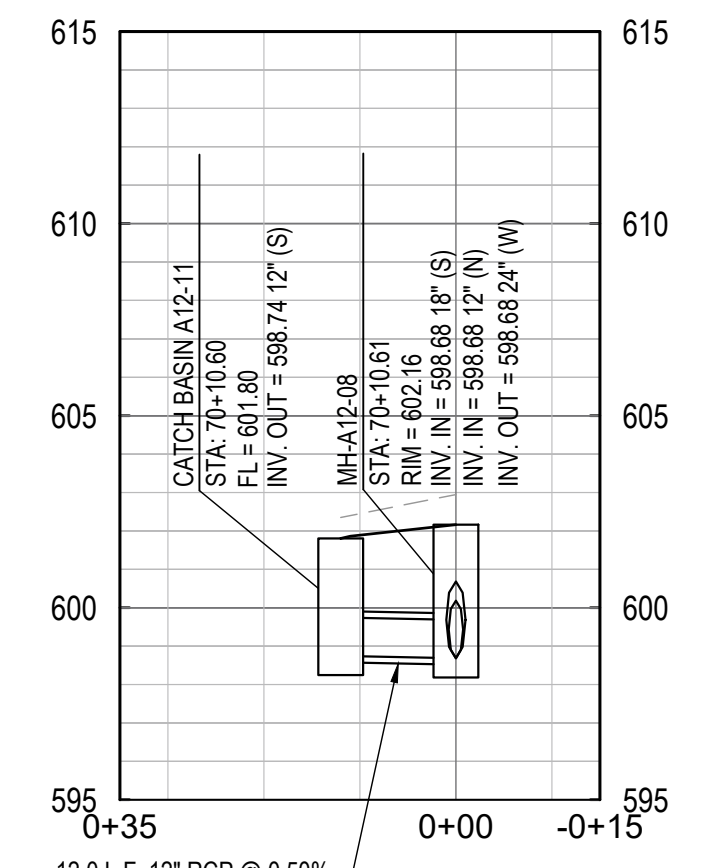
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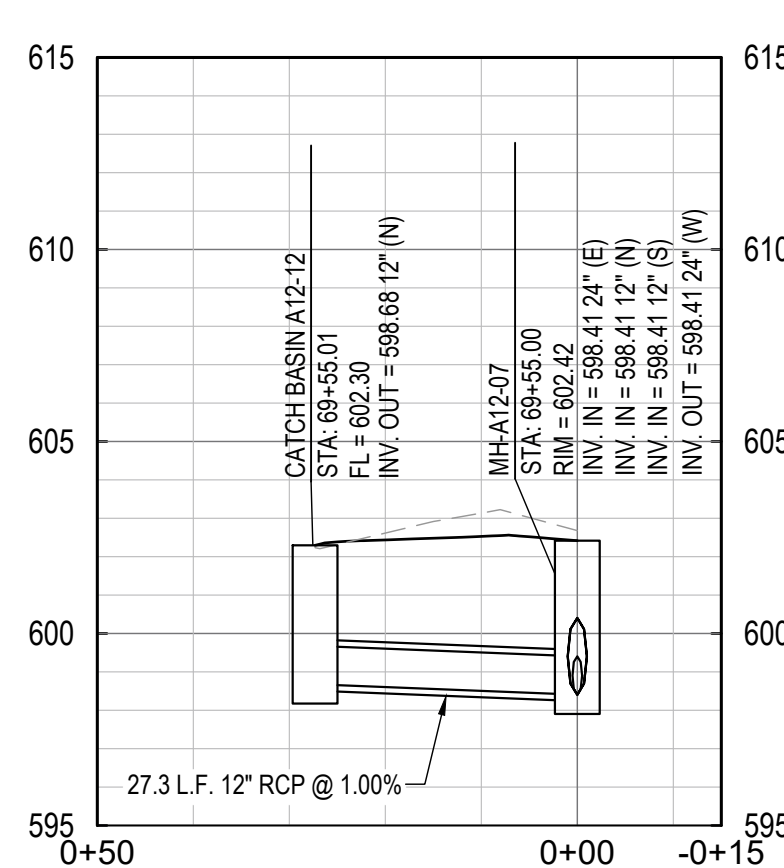
**A12-07 TO A12-10**



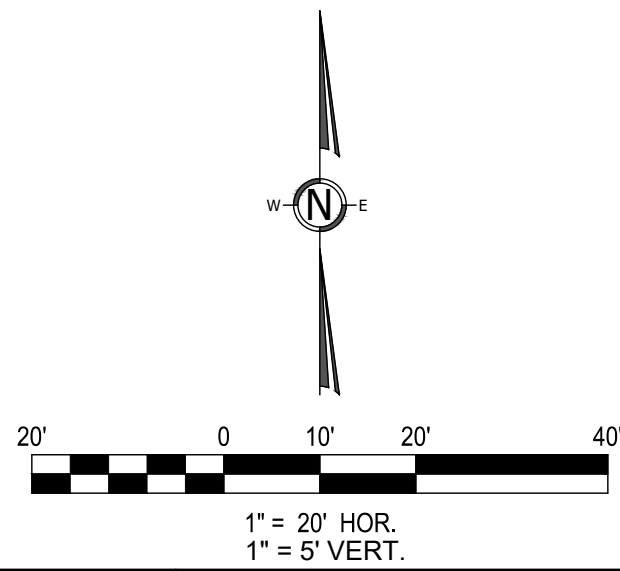
**A12-08 TO A12-11**



**A12-07 TO A12-12**



- NOTES:
- FOR FRAME AND GRATE TYPE 12 DETAILS SEE SHEET C-79.
  - FOR FRAME AND GRATE TYPE 9 DETAILS SEE SHEET C-79.
  - ALL MANHOLES ARE 4' IN DIAMETER UNLESS OTHERWISE INDICATED. SEE SHEET C-80 FOR PRECAST MANHOLE TYPE A 4' DIAMETER DETAILS.
  - SEE SHEET C-78 FOR PRECAST MANHOLE TYPE A 6' DIAMETER DETAILS.



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



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 FOR AND ON BEHALF OF ANTERO GROUP

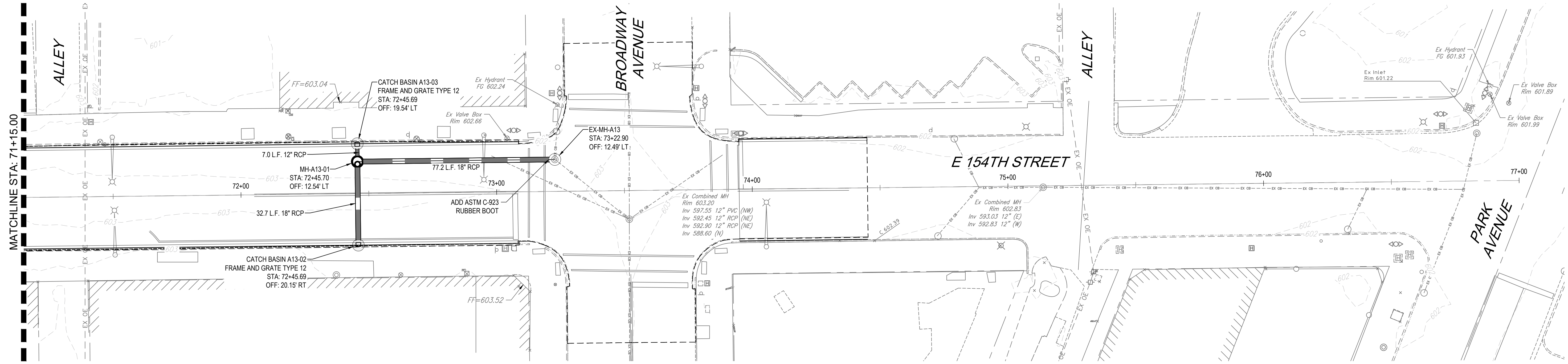
**154TH STREET RECONSTRUCTION PROJECT**  
**STORM PLAN AND PROFILE STA 65+40 TO 71+15 (2)**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

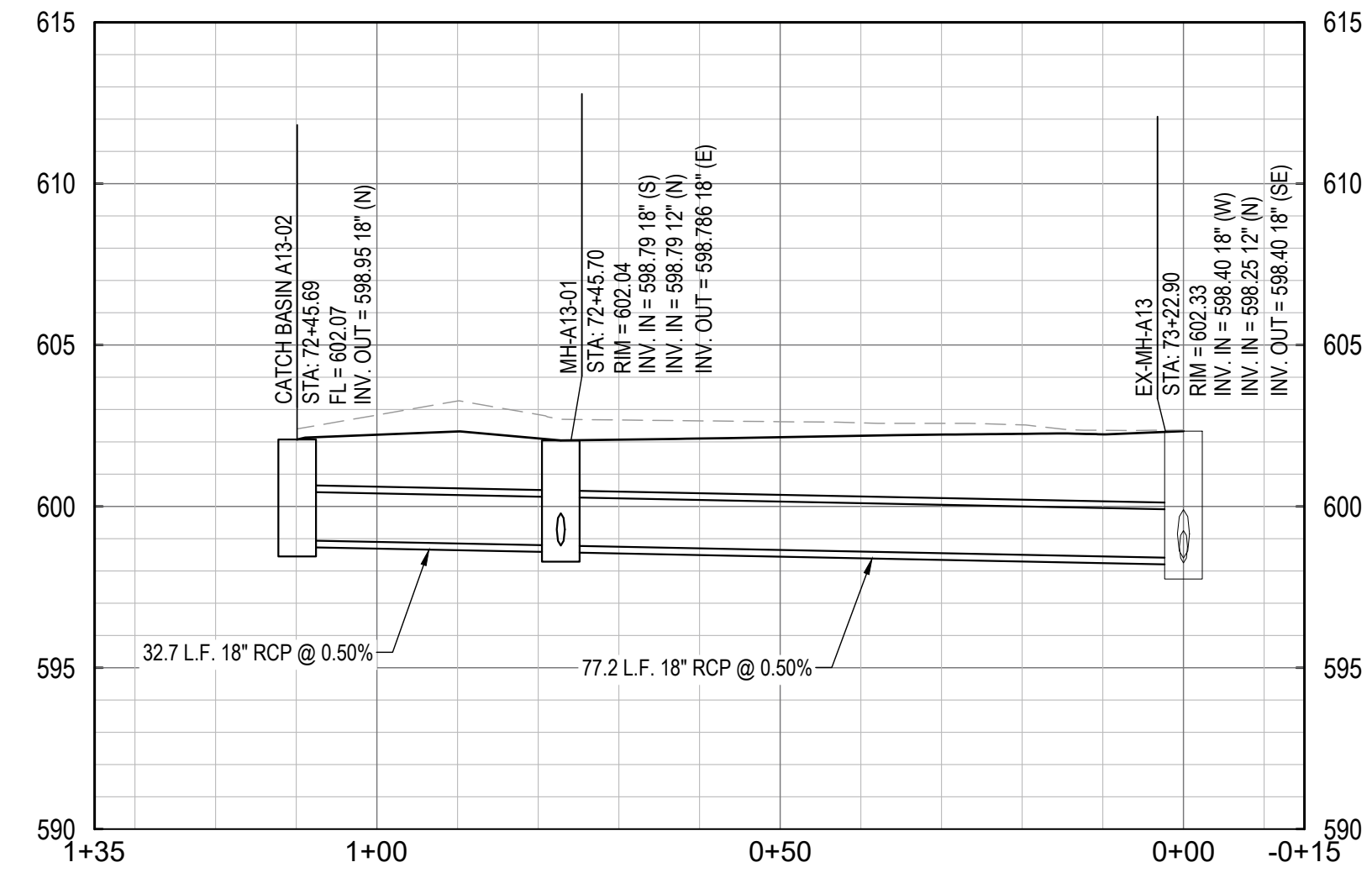
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 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-36**



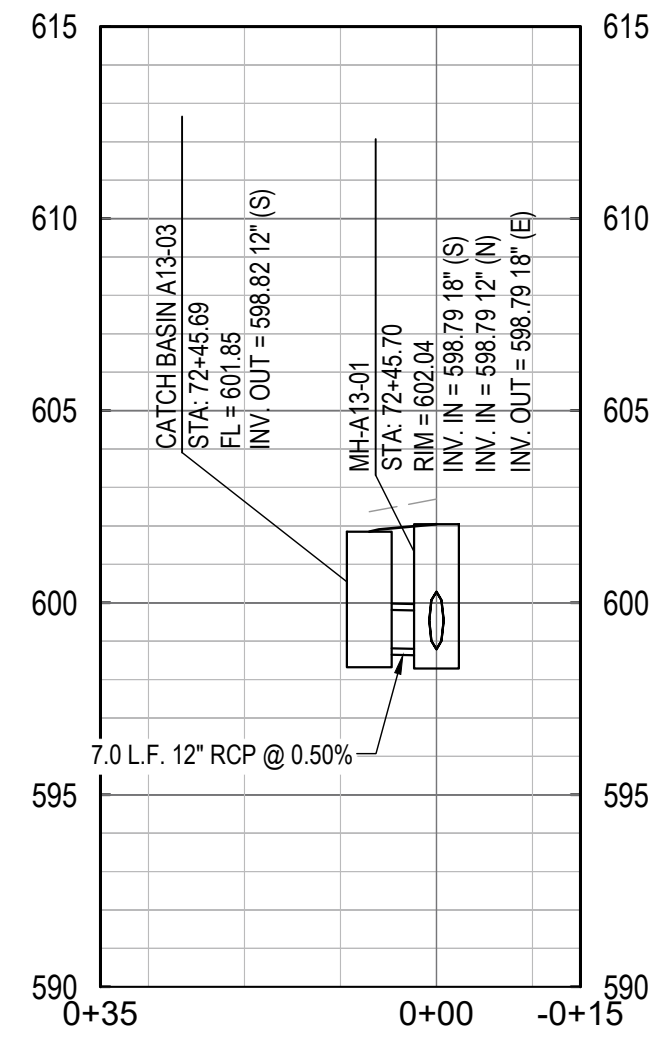
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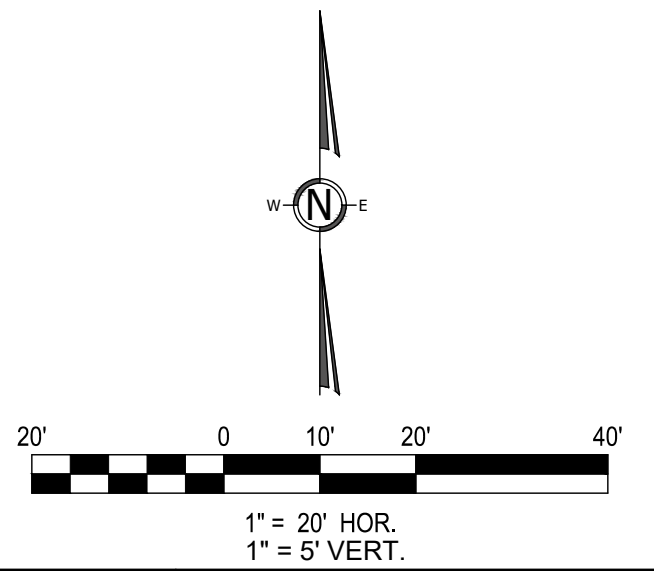
EX-13 TO 13-02



A13-01 TO A13-03



- NOTES:
- FOR FRAME AND GRATE TYPE 12 DETAILS SEE SHEET C-79.
  - FOR FRAME AND GRATE TYPE 9 DETAILS SEE SHEET C-79.
  - ALL MANHOLES ARE 4' IN DIAMETER UNLESS OTHERWISE INDICATED. SEE SHEET C-80 FOR PRECAST MANHOLE TYPE A 4' DIAMETER DETAILS.
  - SEE SHEET C-78 FOR PRECAST MANHOLE TYPE A 6' DIAMETER DETAILS.



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



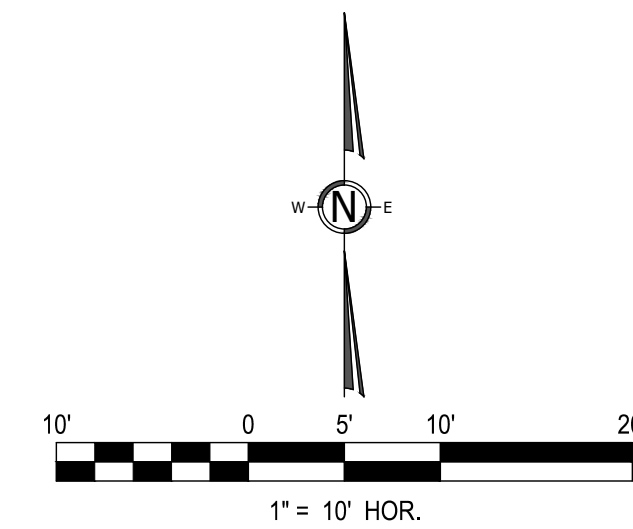
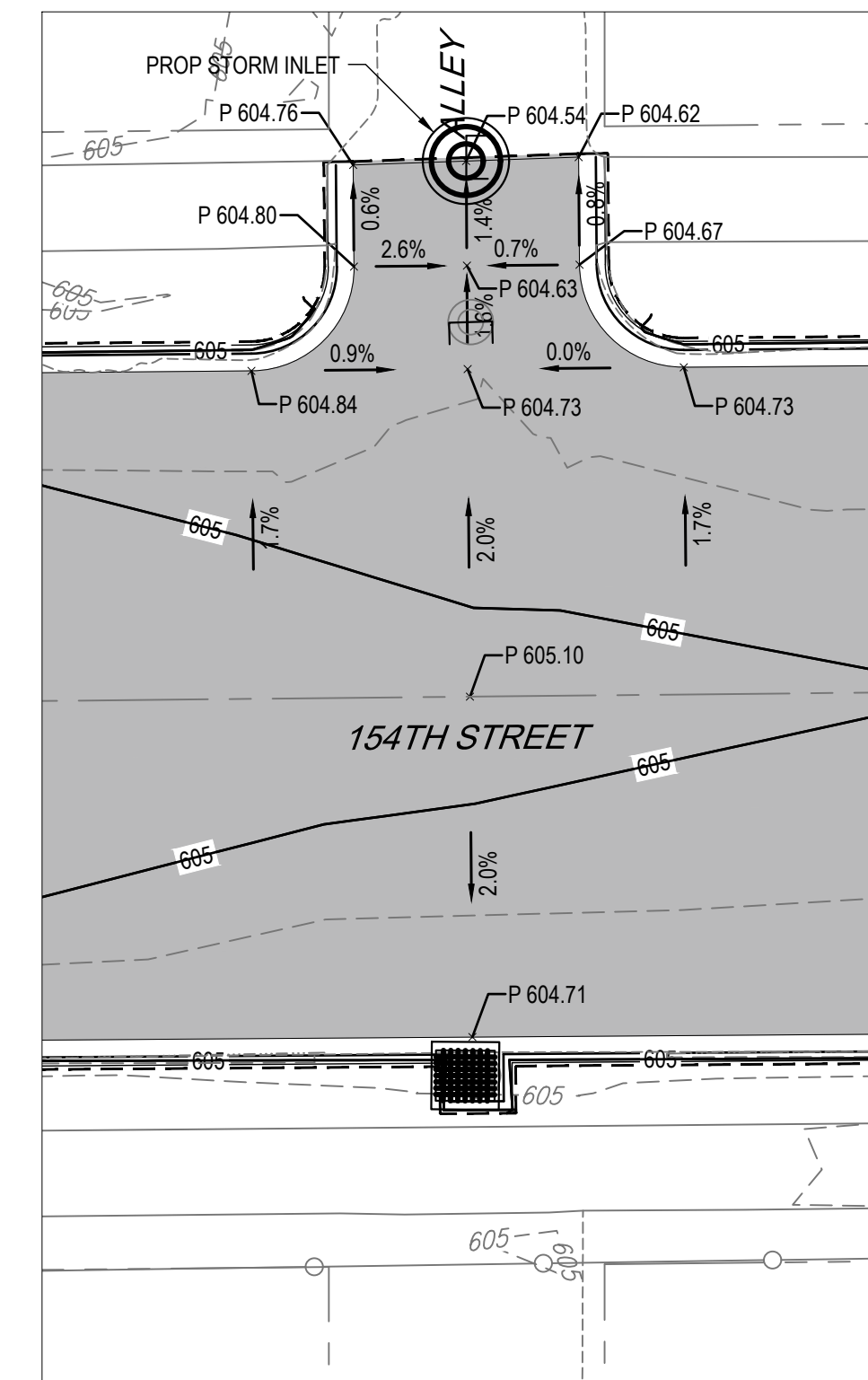
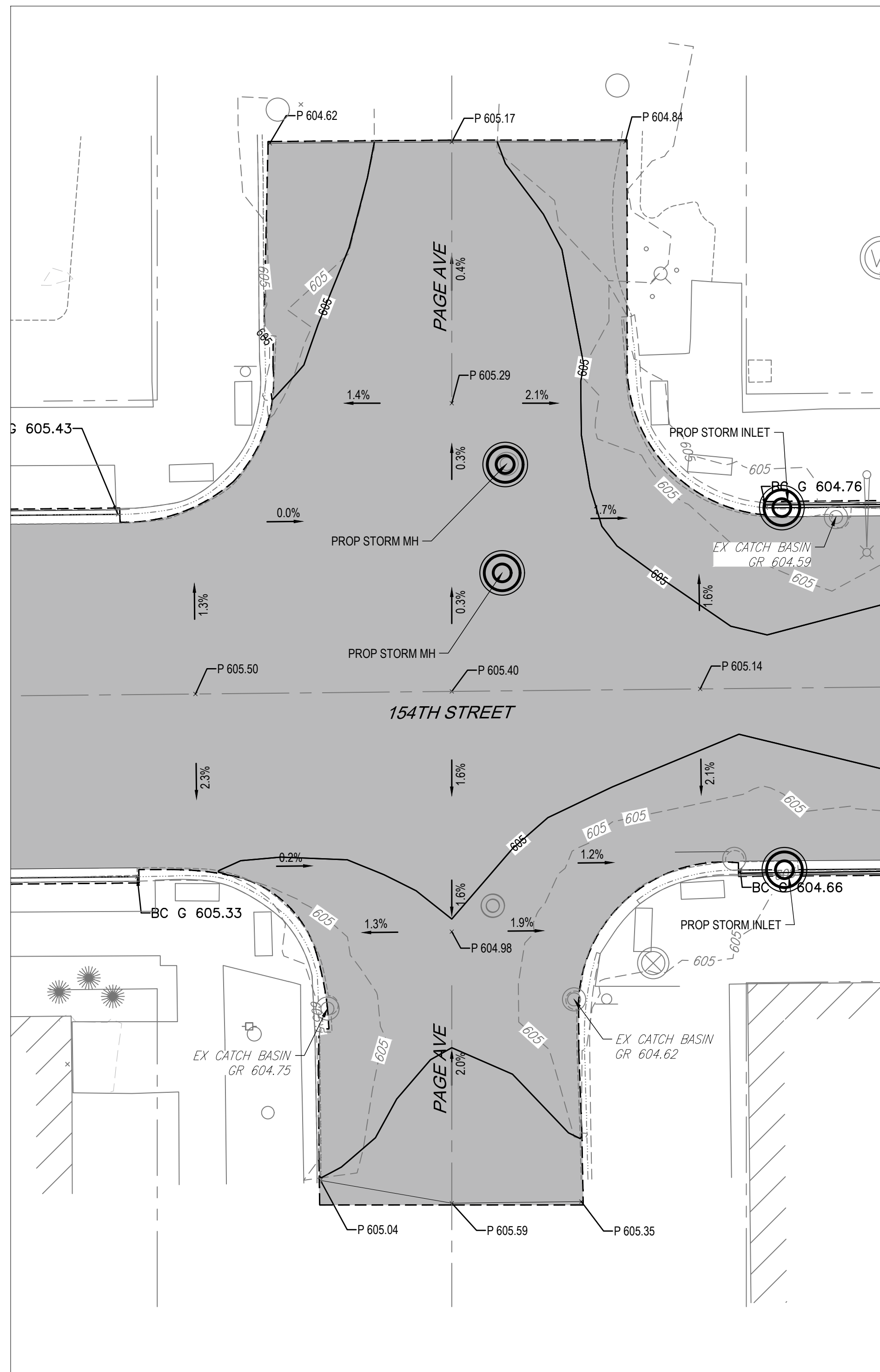
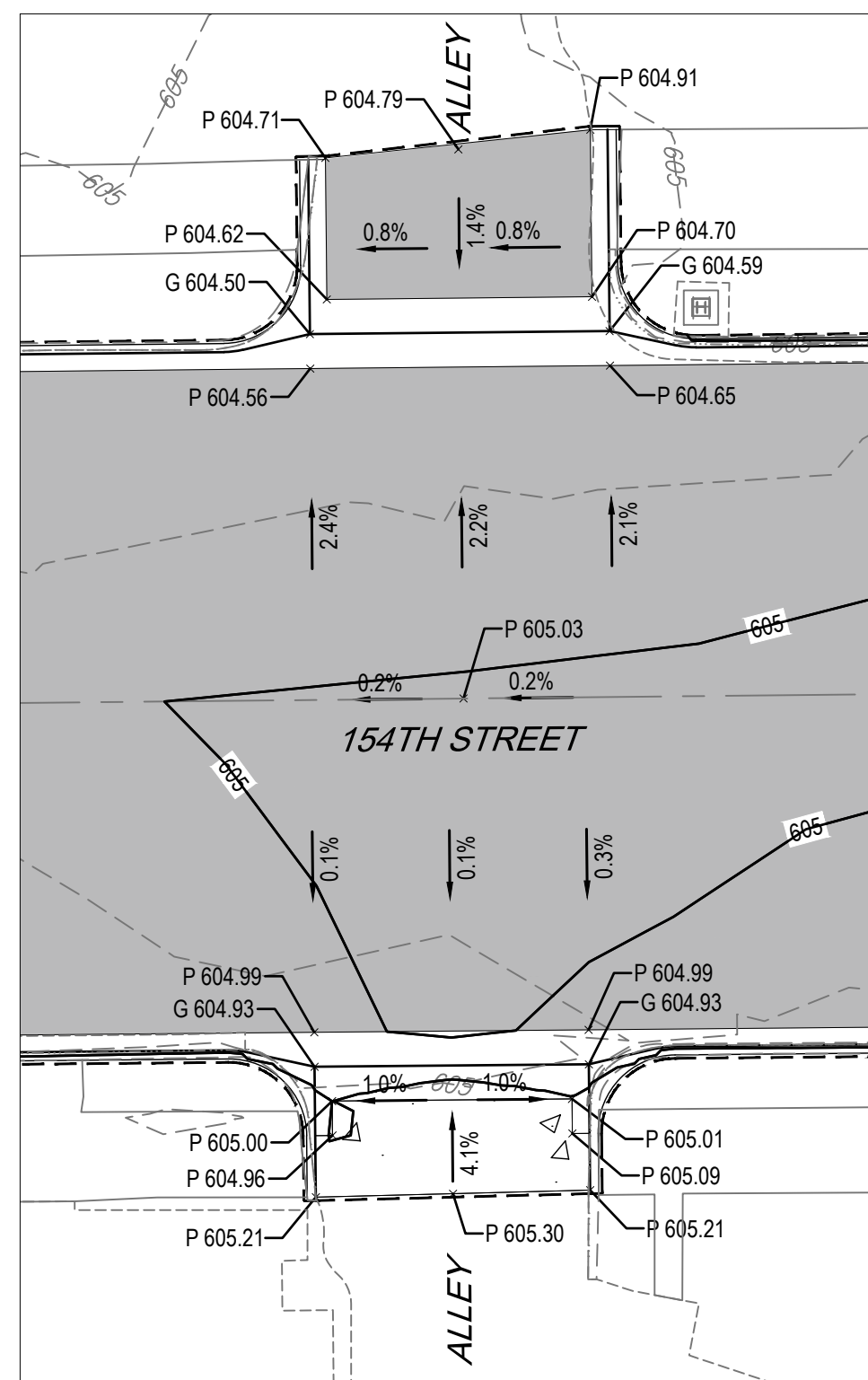
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 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**STORM PLAN AND PROFILE STA 71+15 TO 77+00**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-37**

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No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



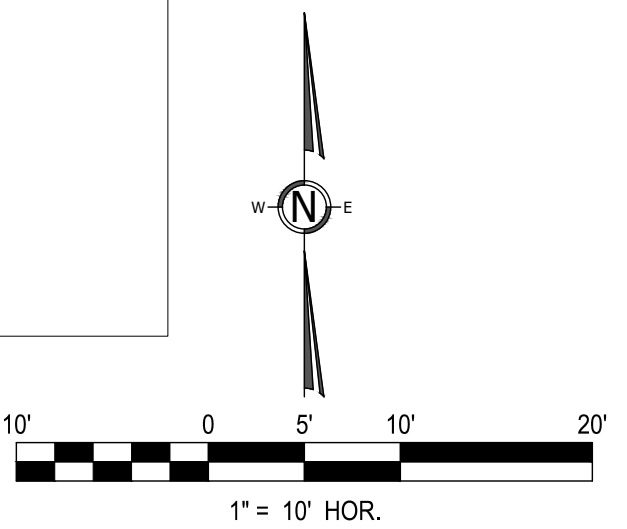
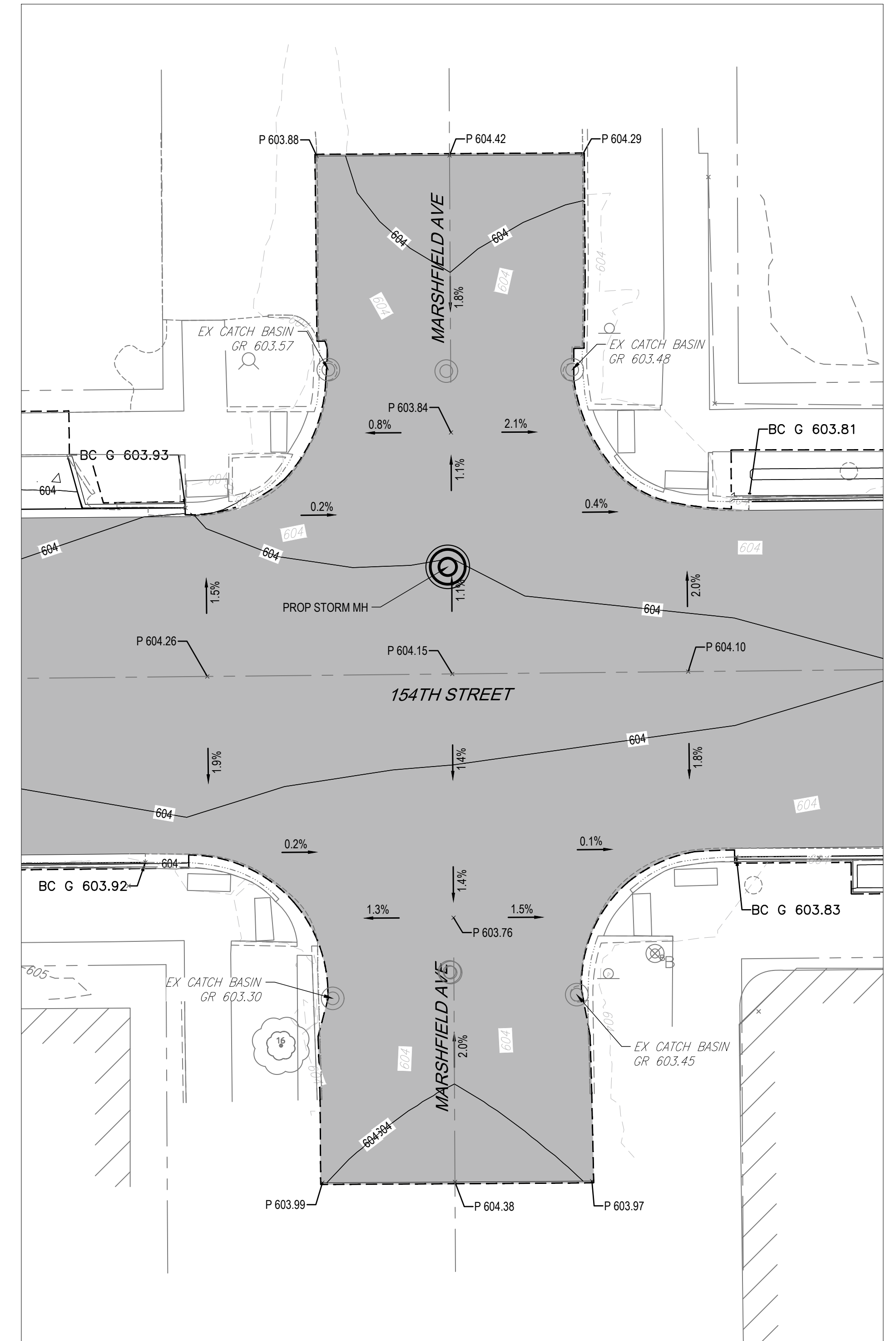
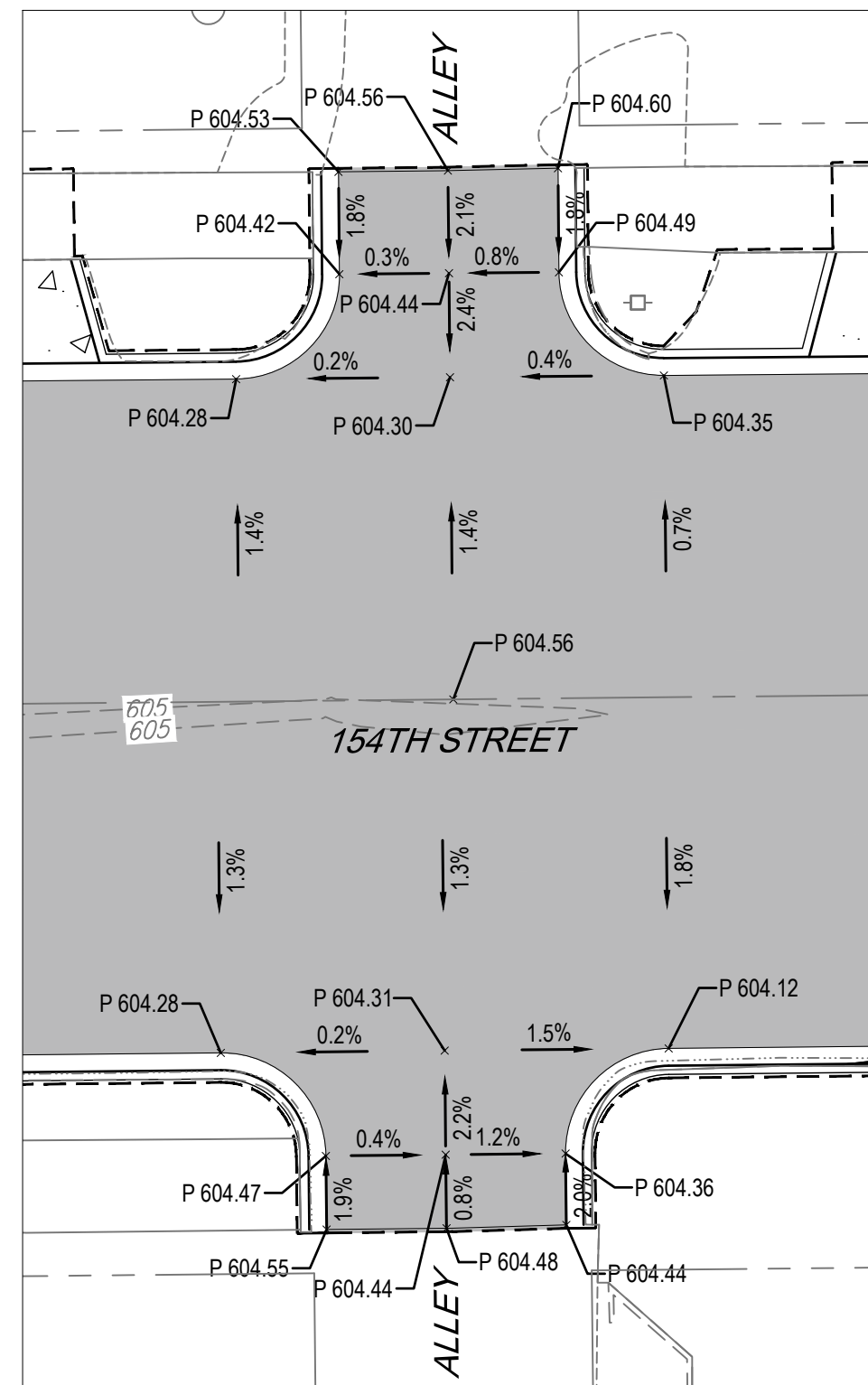
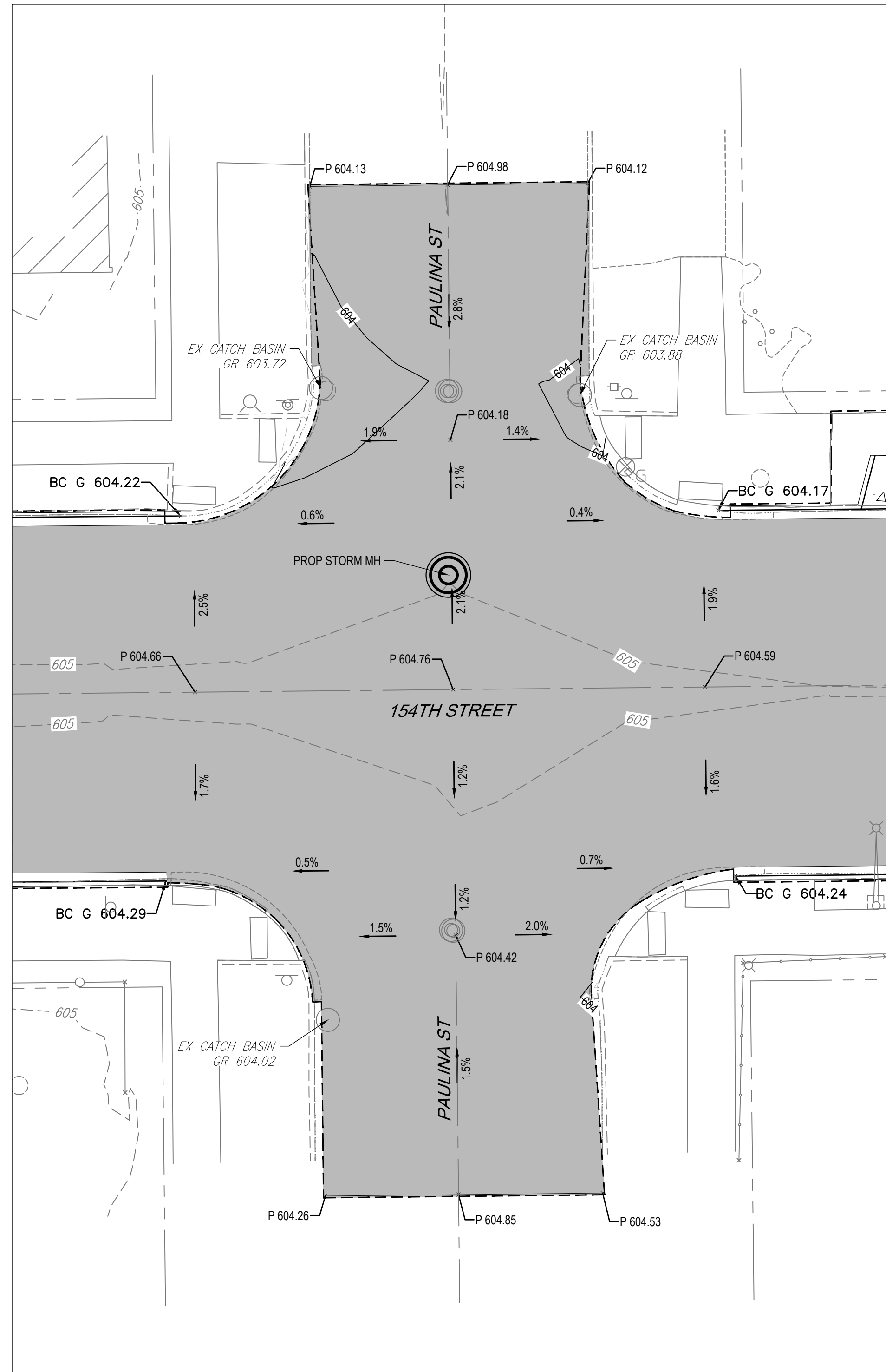
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**154TH STREET RECONSTRUCTION PROJECT**  
**INTERSECTION GRADING DETAIL 01**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-38**

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No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



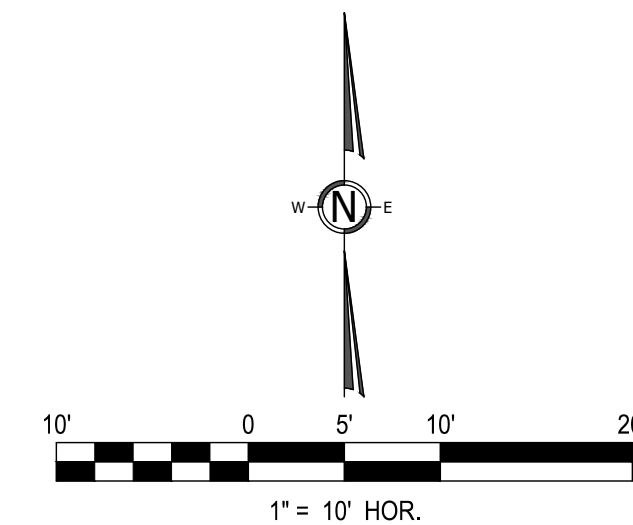
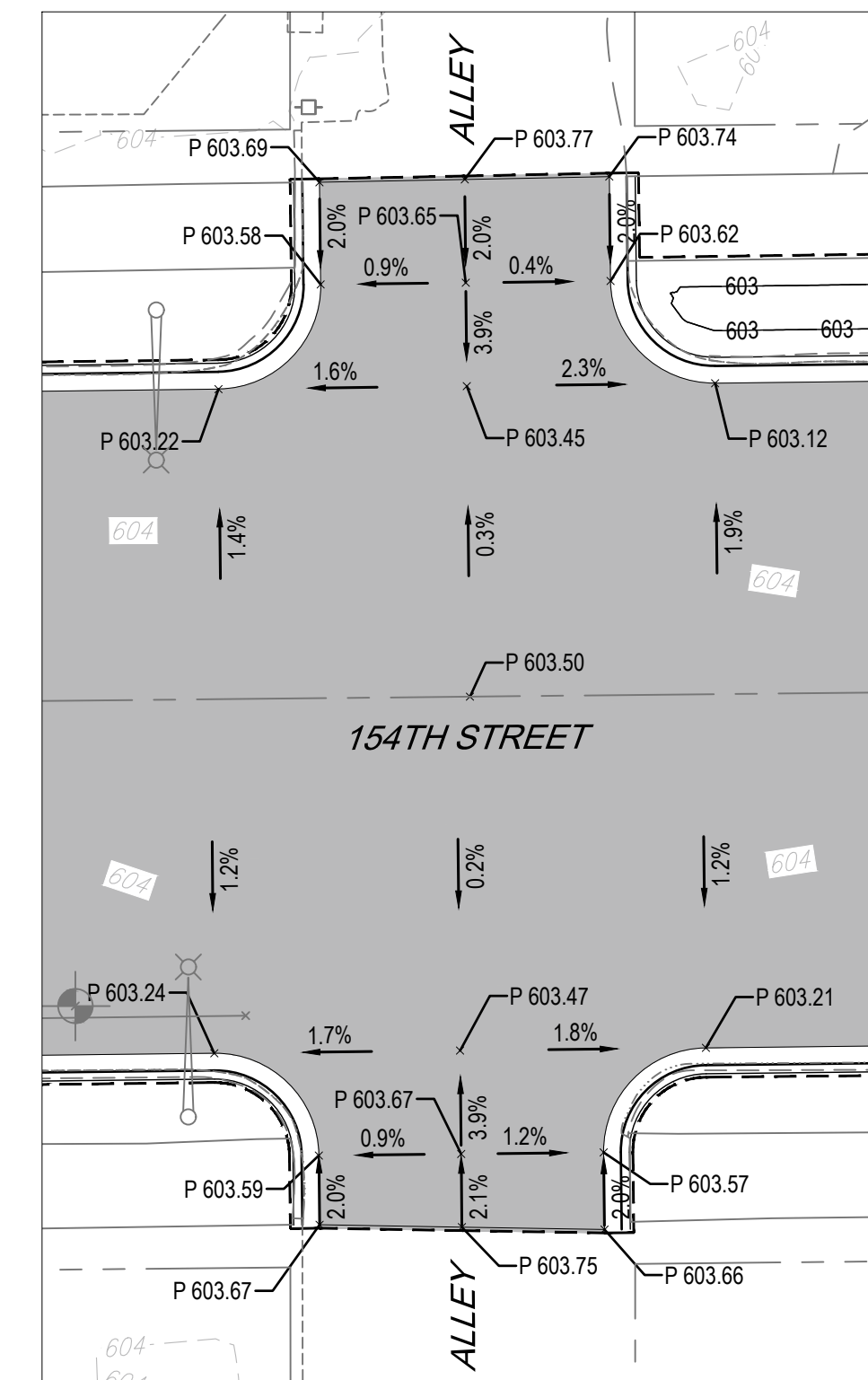
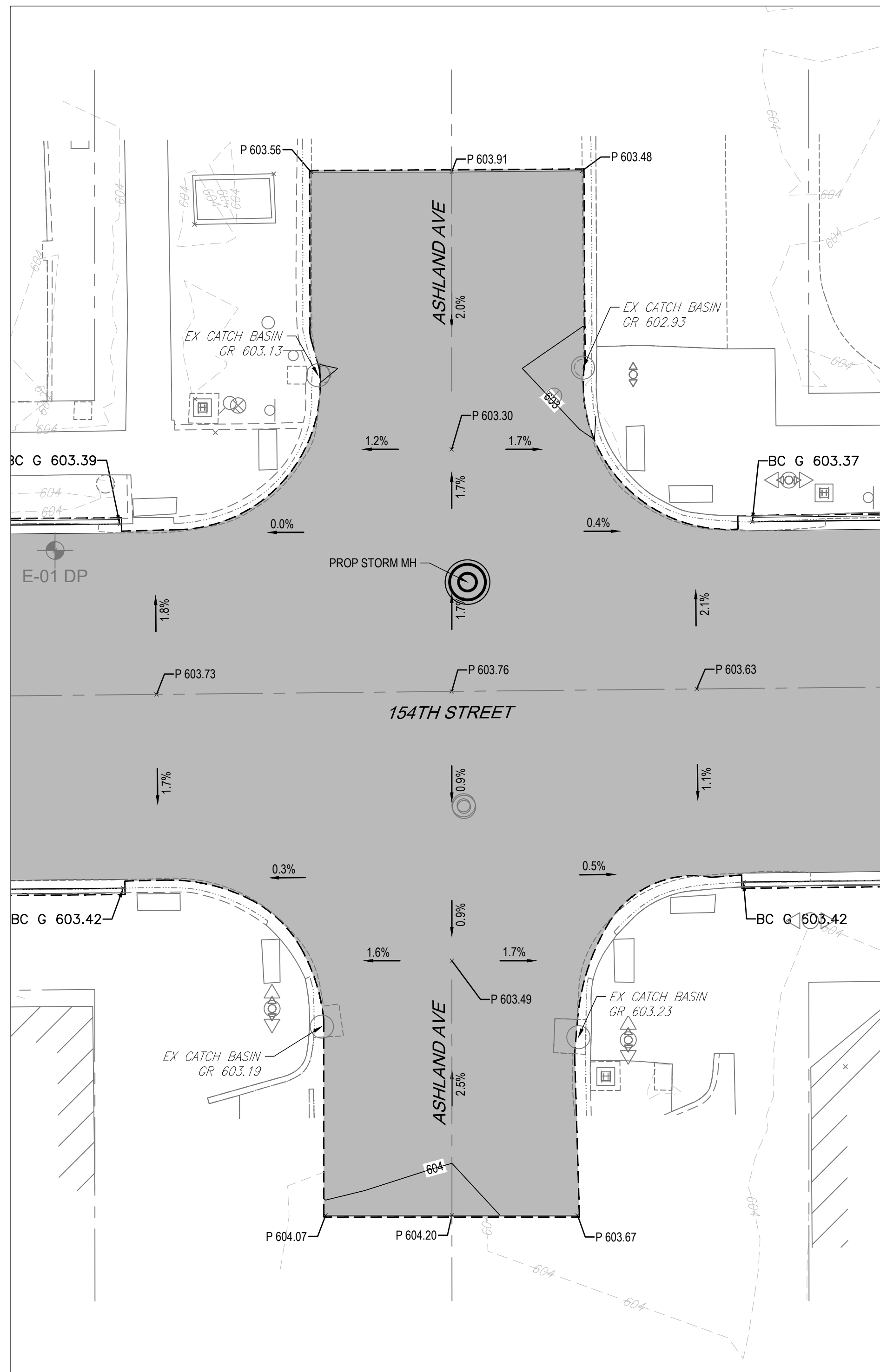
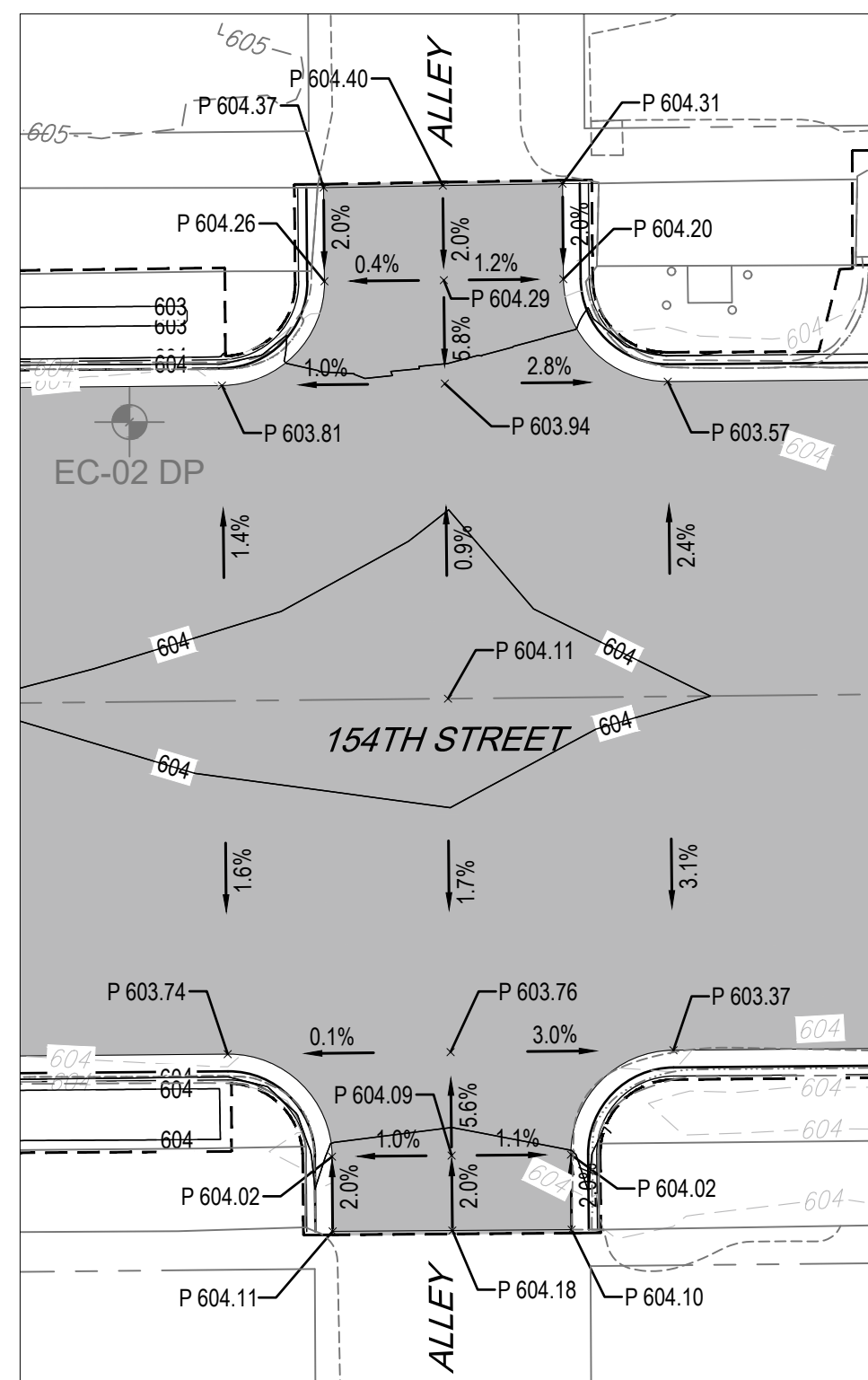
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 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**INTERSECTION GRADING DETAIL 02**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-39**

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No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



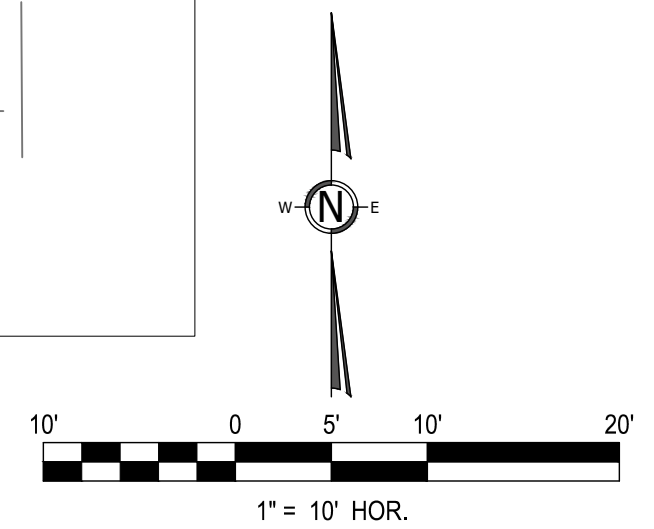
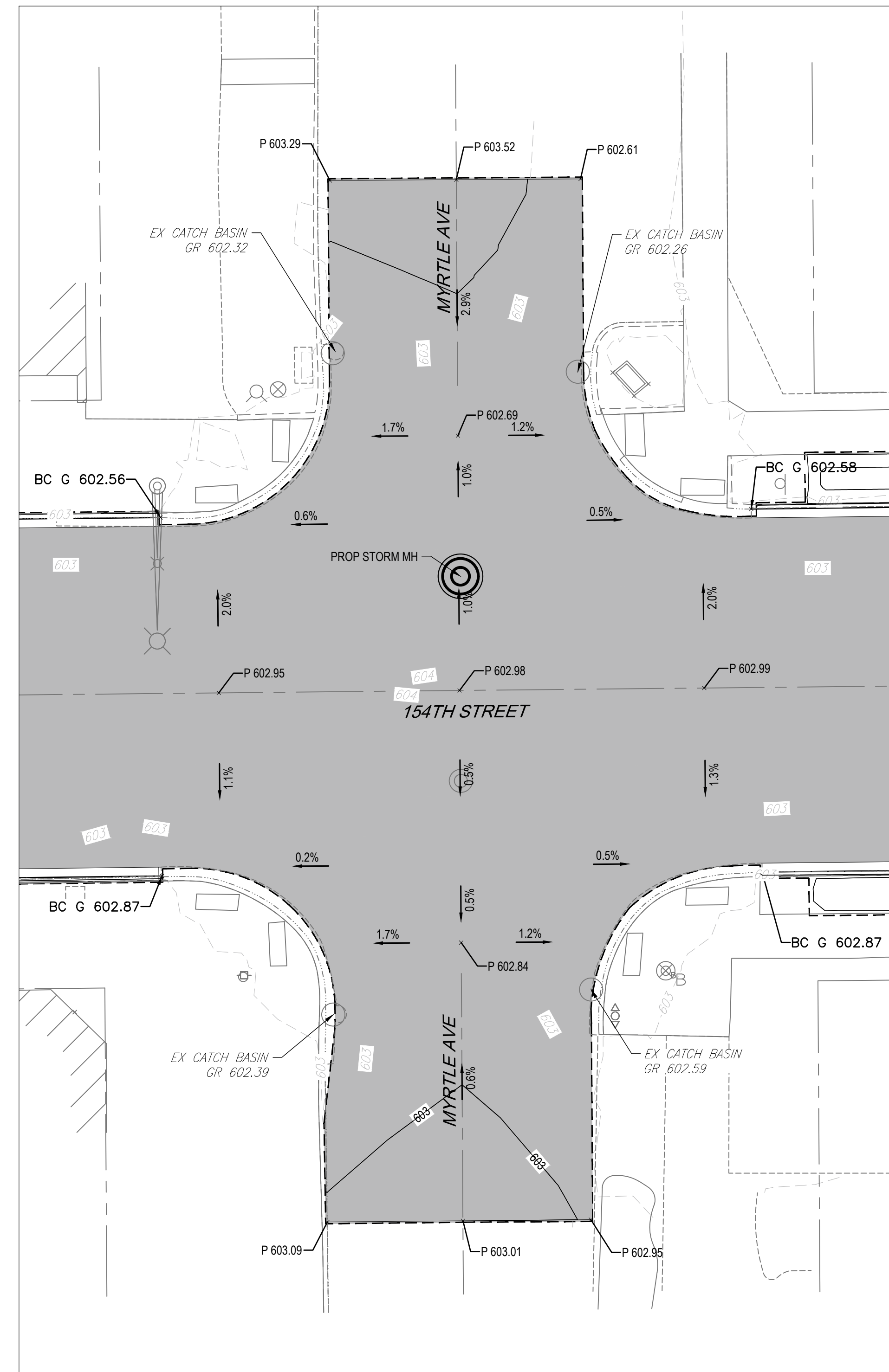
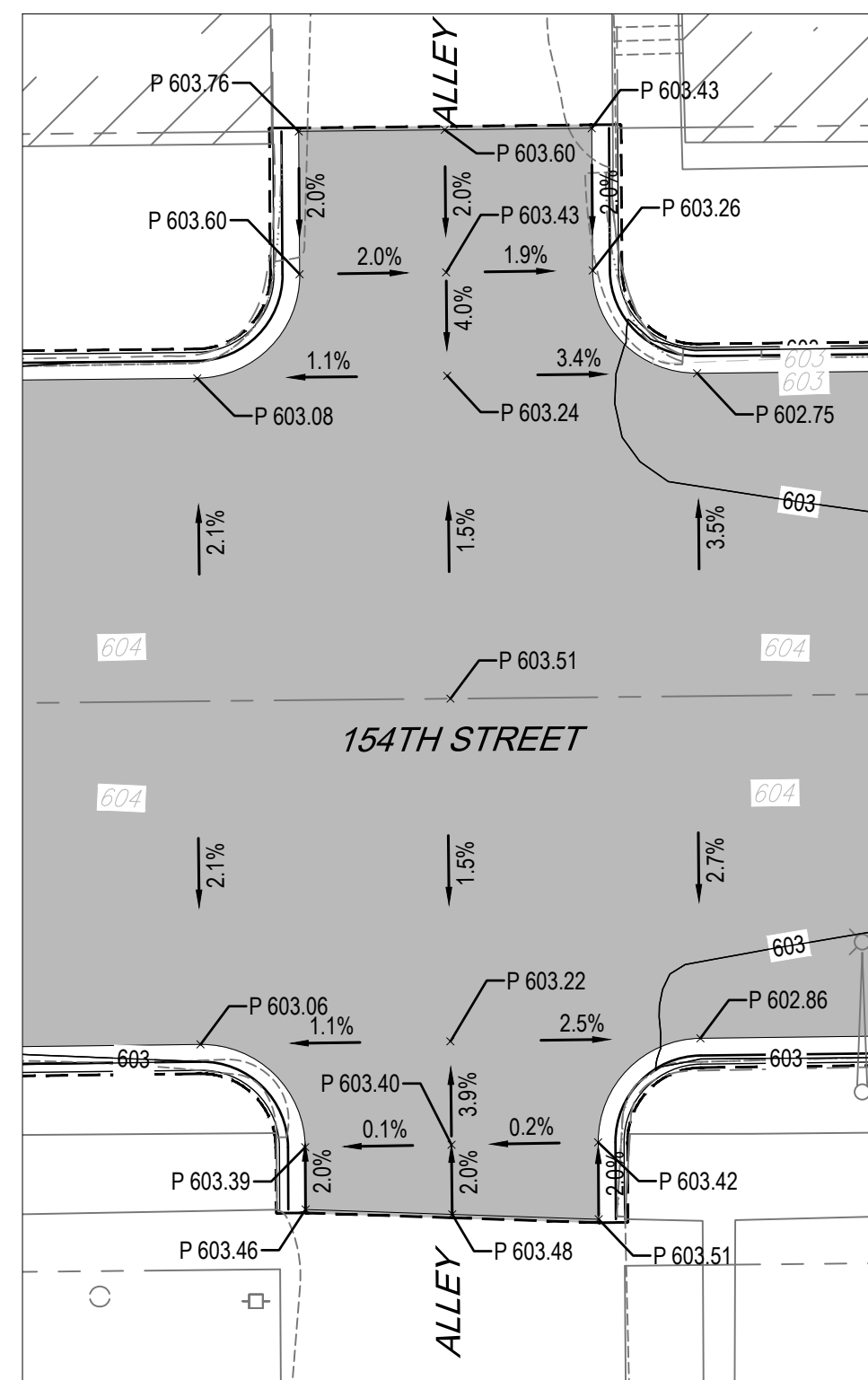
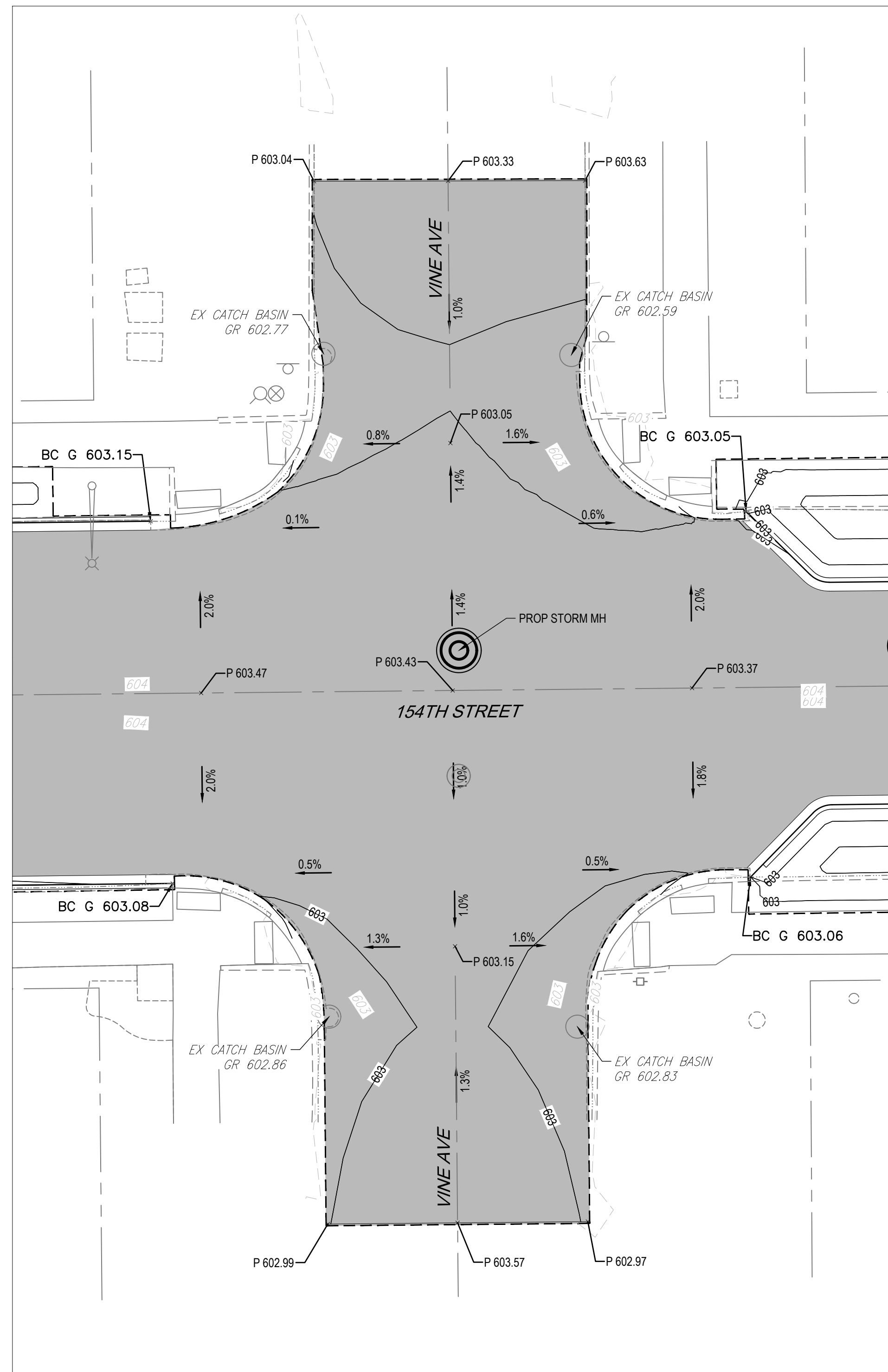
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**154TH STREET RECONSTRUCTION PROJECT**  
**INTERSECTION GRADING DETAIL 03**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
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 SHEET  
**C-40**

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No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



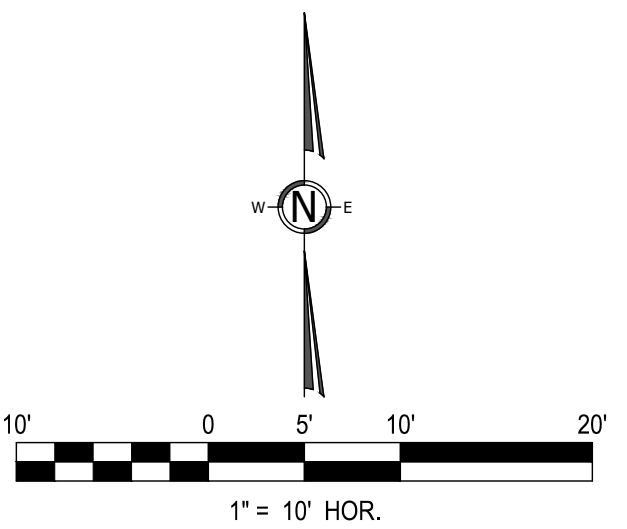
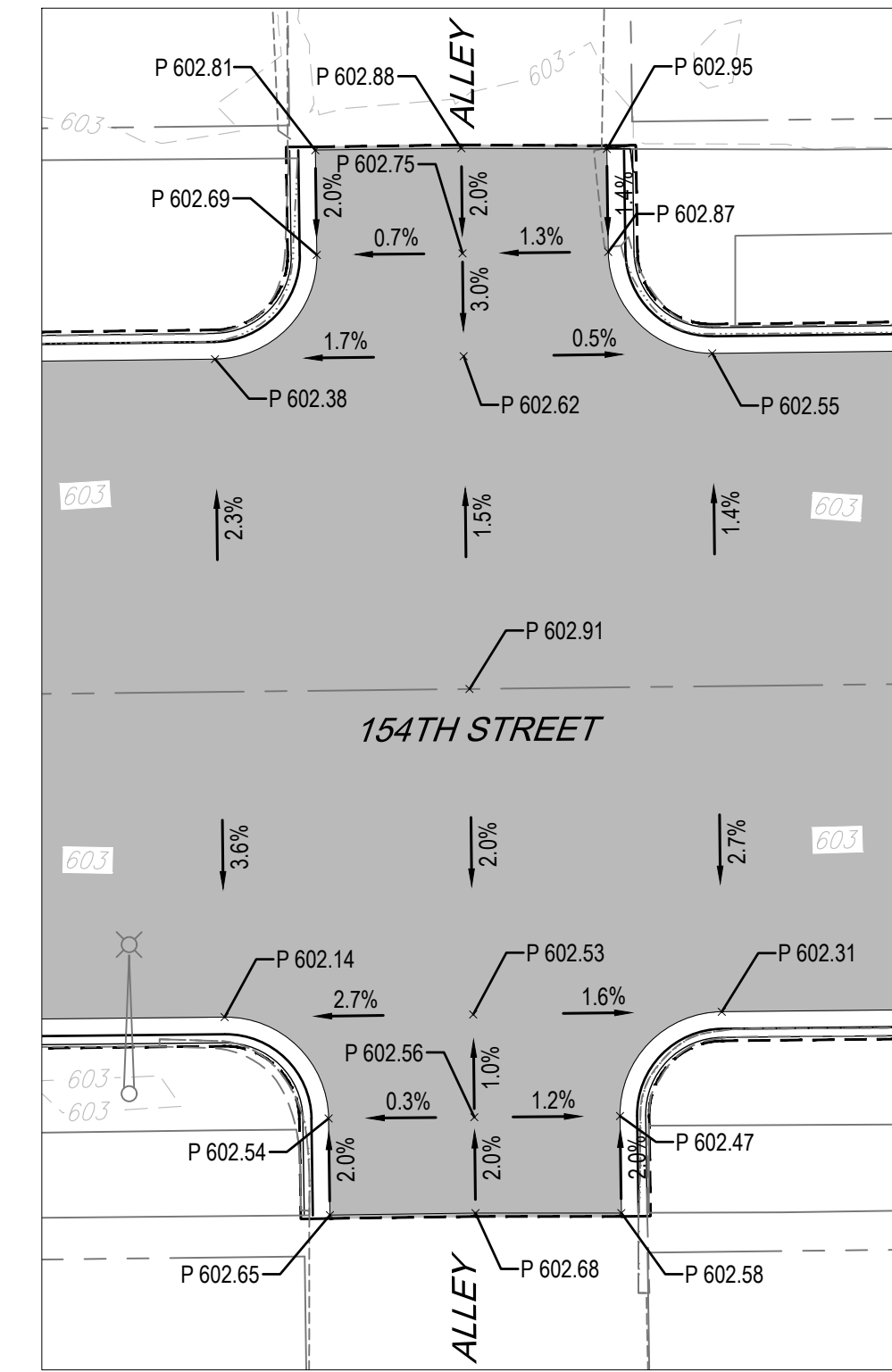
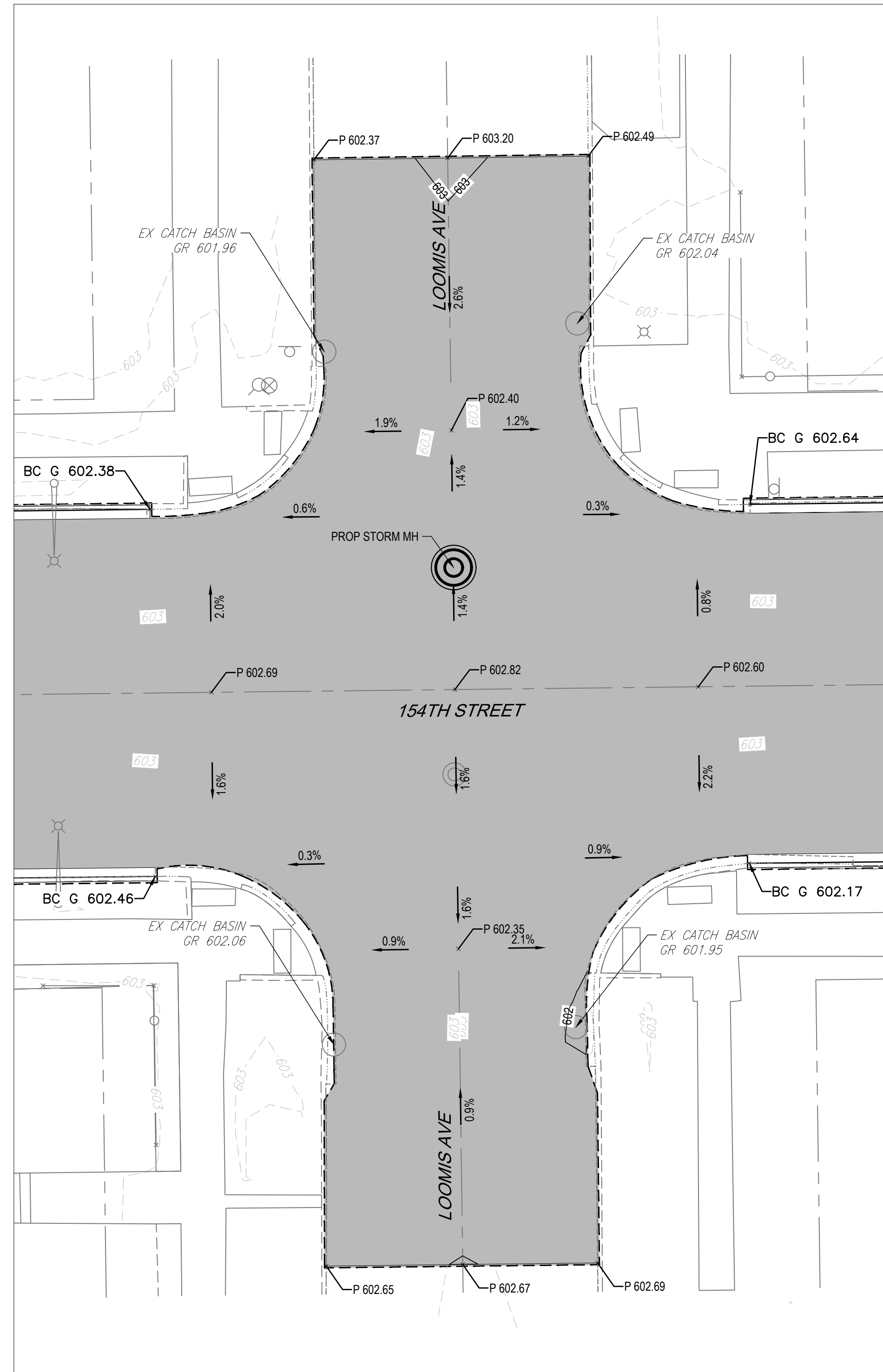
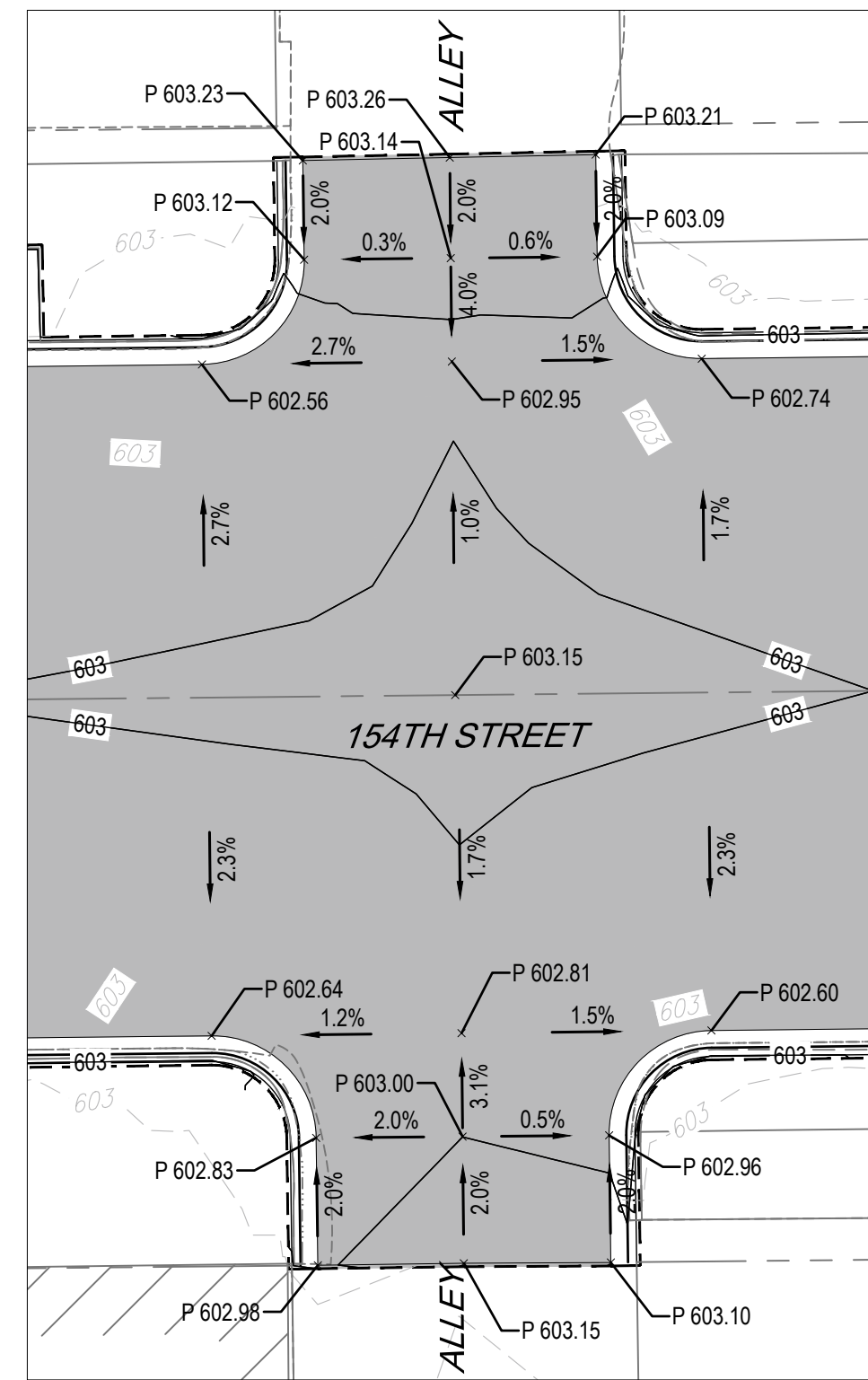
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 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**INTERSECTION GRADING DETAIL 04**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
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 SHEET  
**C-41**

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No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
 CITY OF HARVEY,  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



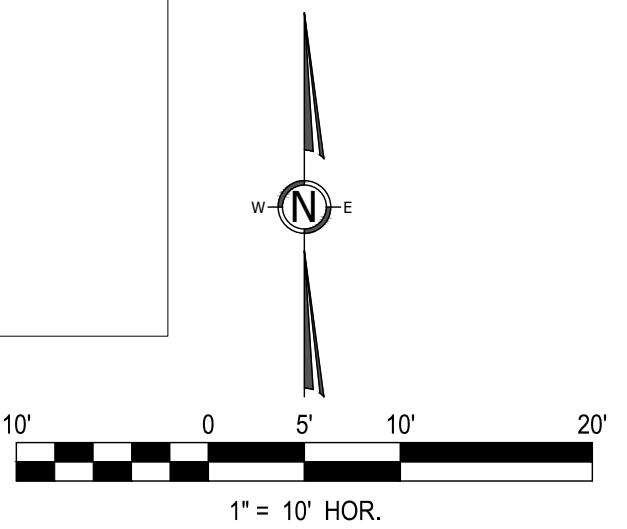
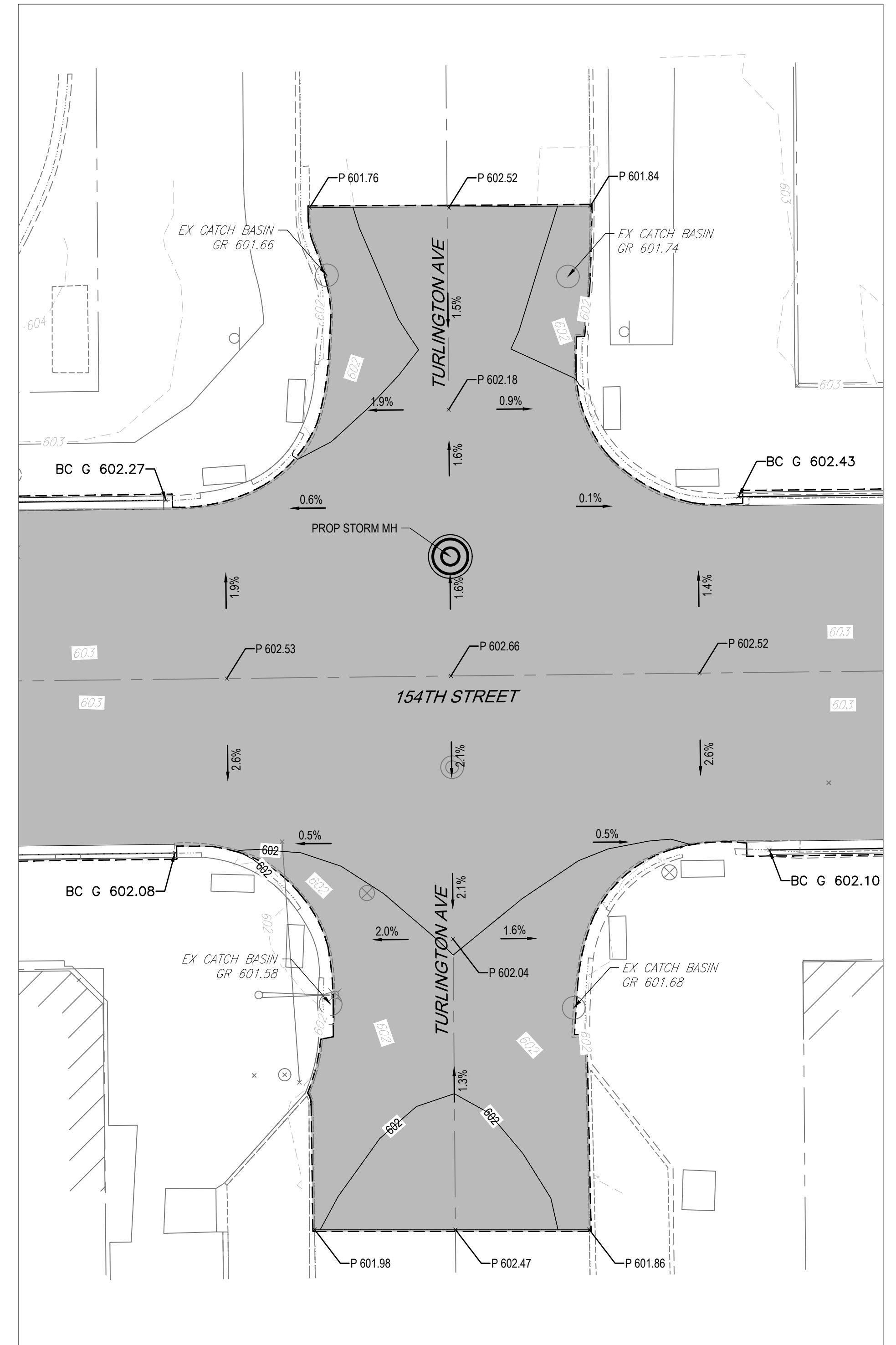
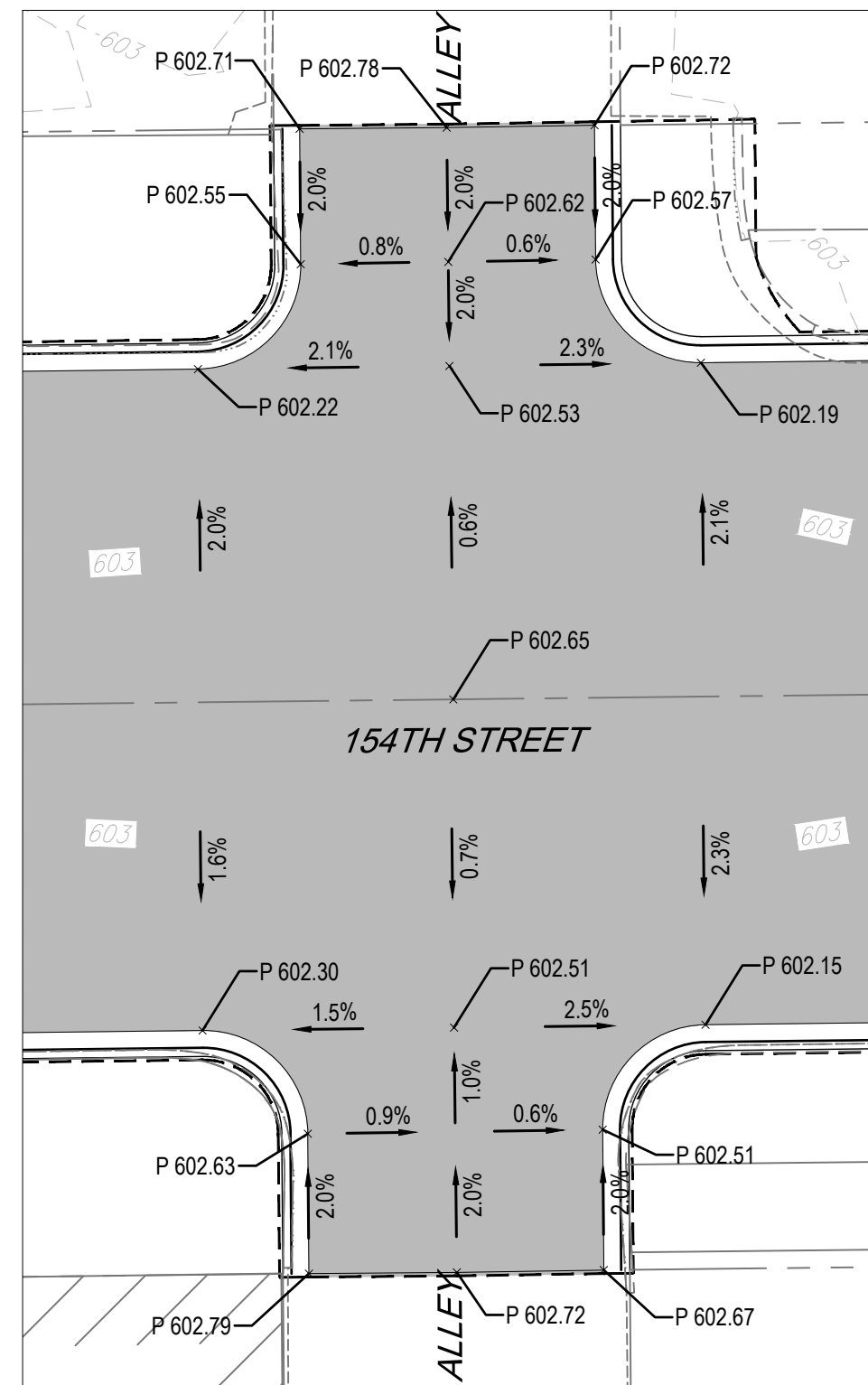
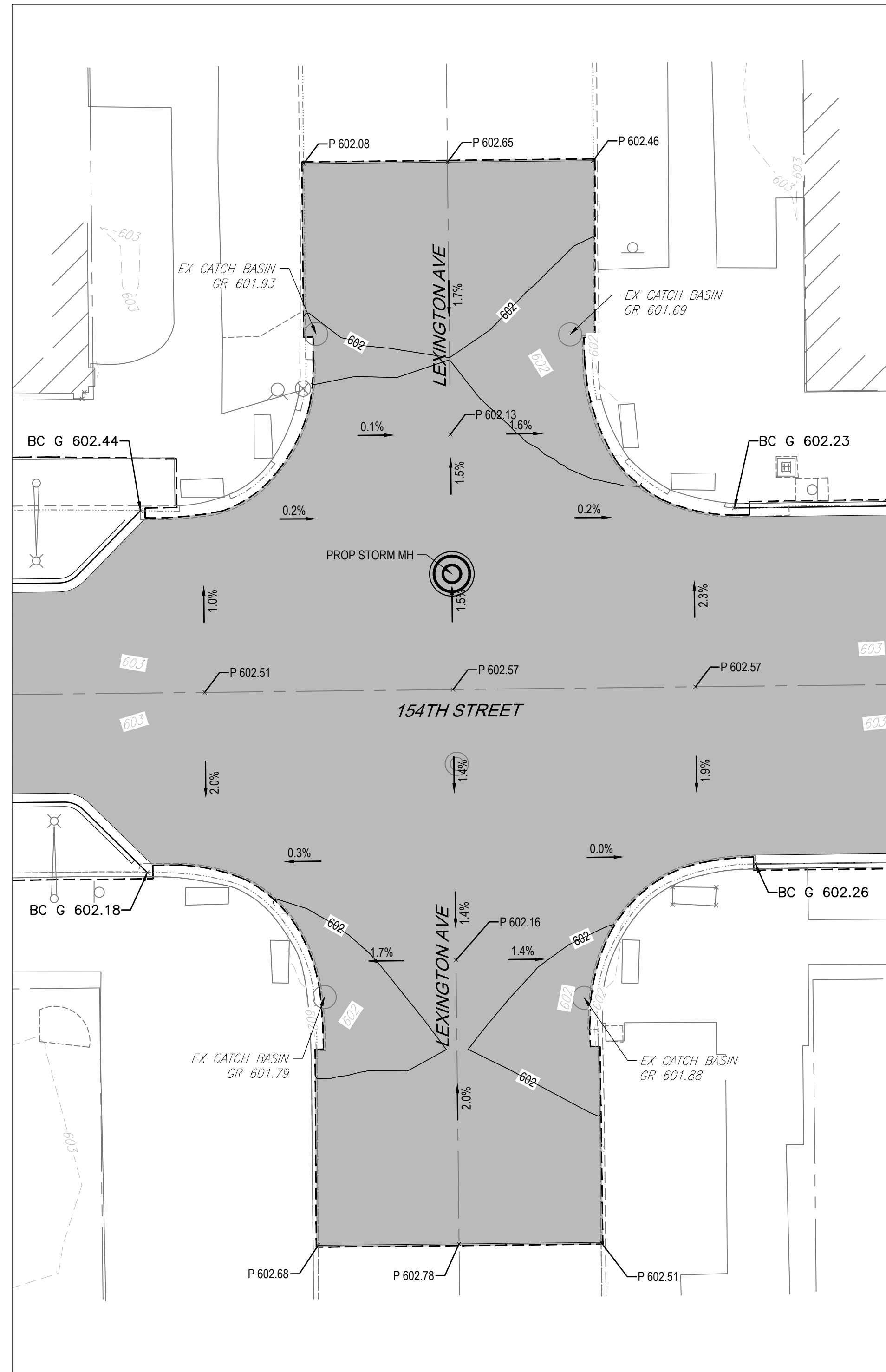
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 FOR AND ON BEHALF OF ANTERO GROUP

154TH STREET RECONSTRUCTION PROJECT  
 INTERSECTION GRADING DETAIL 05

CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
 C-42

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No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



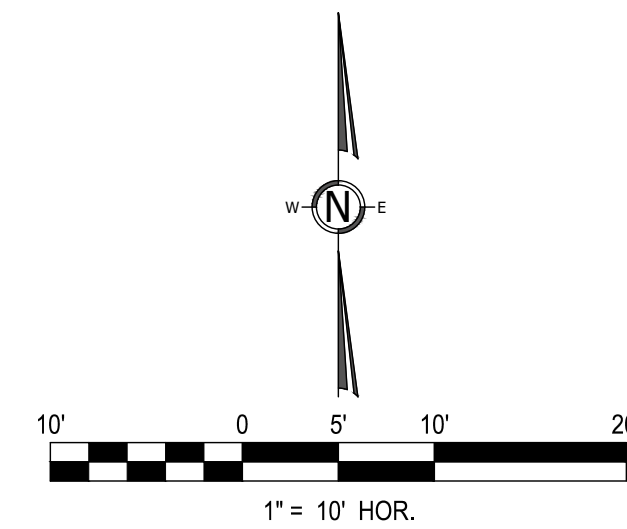
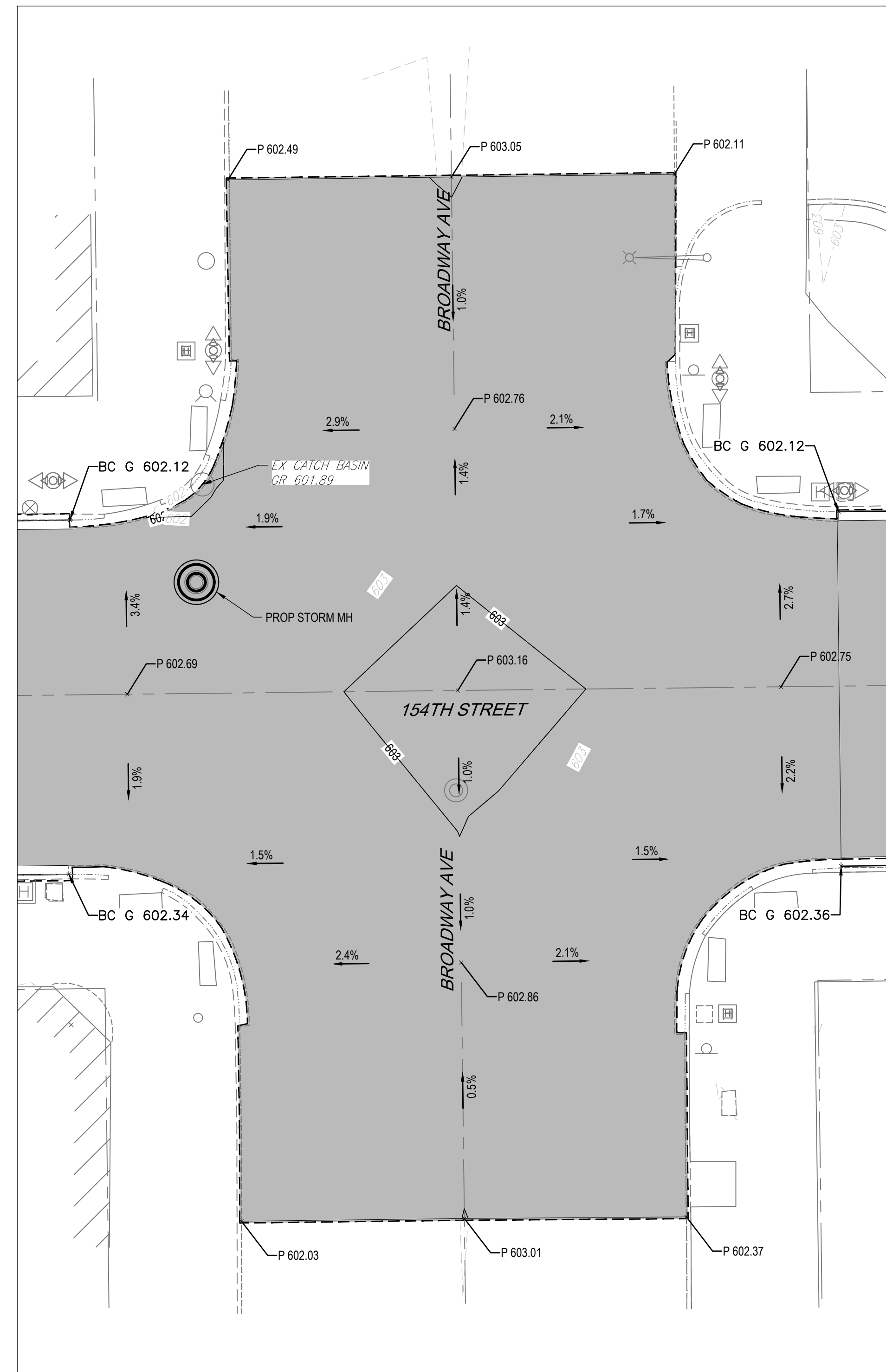
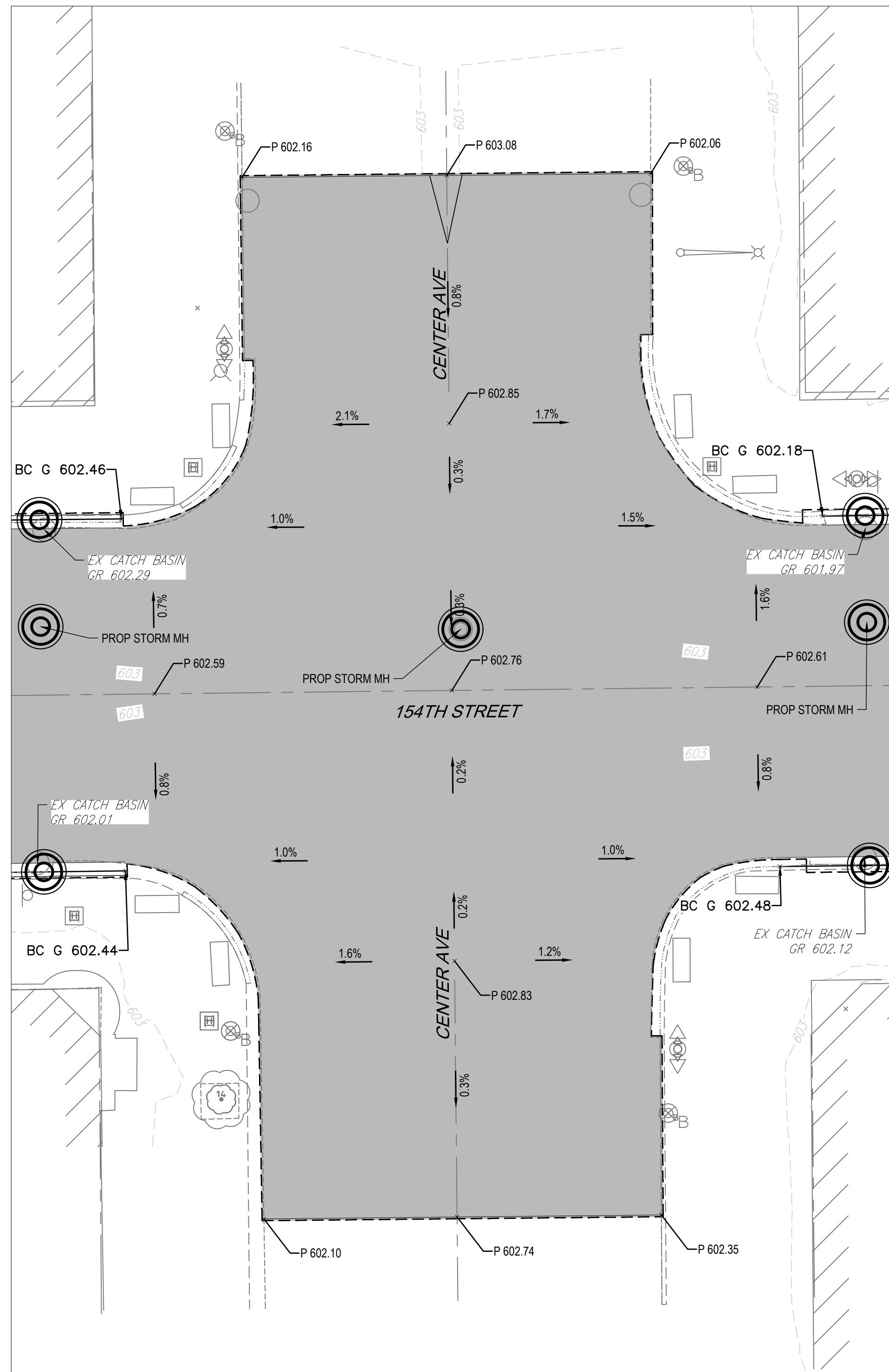
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 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**INTERSECTION GRADING DETAIL 06**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-43**

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No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



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 FOR AND ON BEHALF OF ANTERO GROUP

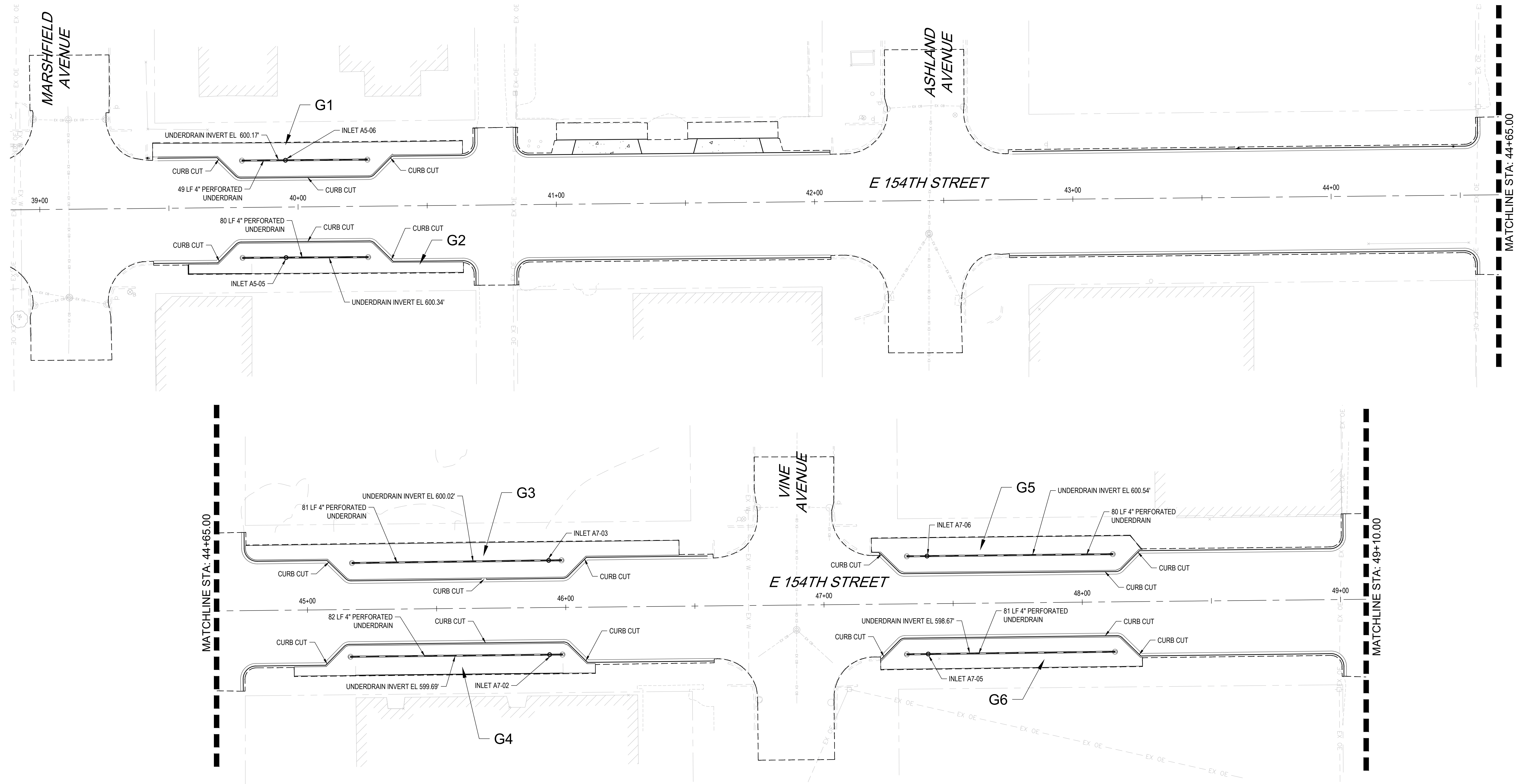
**154TH STREET RECONSTRUCTION PROJECT**  
**INTERSECTION GRADING DETAIL 07**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
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 DATE  
 3/29/2024  
 SHEET  
**C-44**



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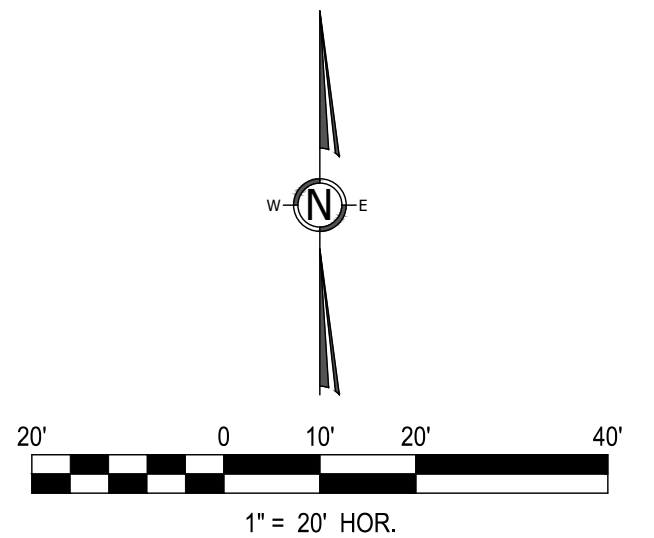


**RAINGARDENS MAINTENANCE AND MONITORING:**

1. NEED FOR PLANTING, RESEEDING, OR SODDING. SUPPLEMENT ALTERNATIVE NATIVE VEGETATION IF A SIGNIFICANT PORTION HAS NOT ESTABLISHED (50% OF THE SURFACE AREA AFTER SECOND GROWING SEASON). RESEED WITH ALTERNATIVE NATIVE GRASS SPECIES IF ORIGINAL GRASS COVER HAS NOT SUCCESSFULLY ESTABLISHED.
2. EVIDENCE OF GRAZING, MOTORBIKES, OR OTHER VEHICLES, REPAIR.
3. CHECK FOR INVASIVE VEGETATION, REMOVE WHEN POSSIBLE.
4. REGULAR MOWING TO CONTROL VEGETATION; IT IS RECOMMENDED THAT NATIVE VEGETATION REMAIN UNCUT.
5. DEAD OR DAMAGED NON-NATIVE GRASSY AREAS - REPAIR WITH SEEDING WITH FERTILIZATION OR SEEDING WITH MULCH.
6. COMPENSATORY STORAGE AREA SHALL BE RESEEDING WITH APPROPRIATE VEGETATION ACCORDING TO THE APPROVED PLANTING PLAN.

**NOTES:**

1. ANY DAMAGE TO EXISTING SIDEWALK AT CONNECTION POINTS SHALL BE REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE.
2. ANY DAMAGE TO THE CURB LINE ON 154TH STREET OUTSIDE DESIGNATED AREAS IN THESE PLANS SHALL BE REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE.
3. PAVEMENT PATCHING WILL BE REQUIRED IN ALL AREAS OF CURB AND GUTTER REPLACEMENT.
4. ALL STORM STRUCTURES ARE TO BE CLEANED OUT AFTER CONSTRUCTION.
5. ALL UNDERDRAIN STRUCTURES ARE TO BE INSTALLED AT 0.0% SLOPE.



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

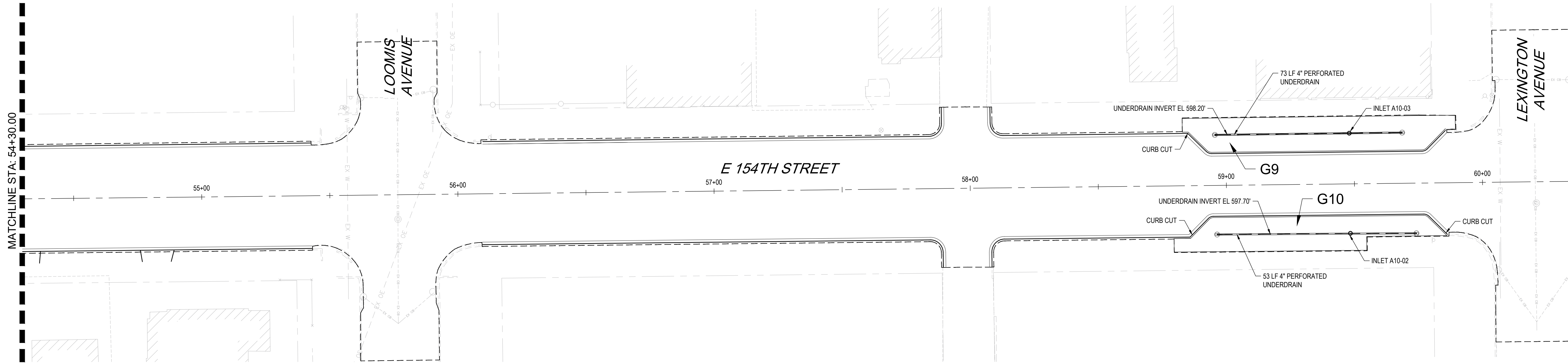
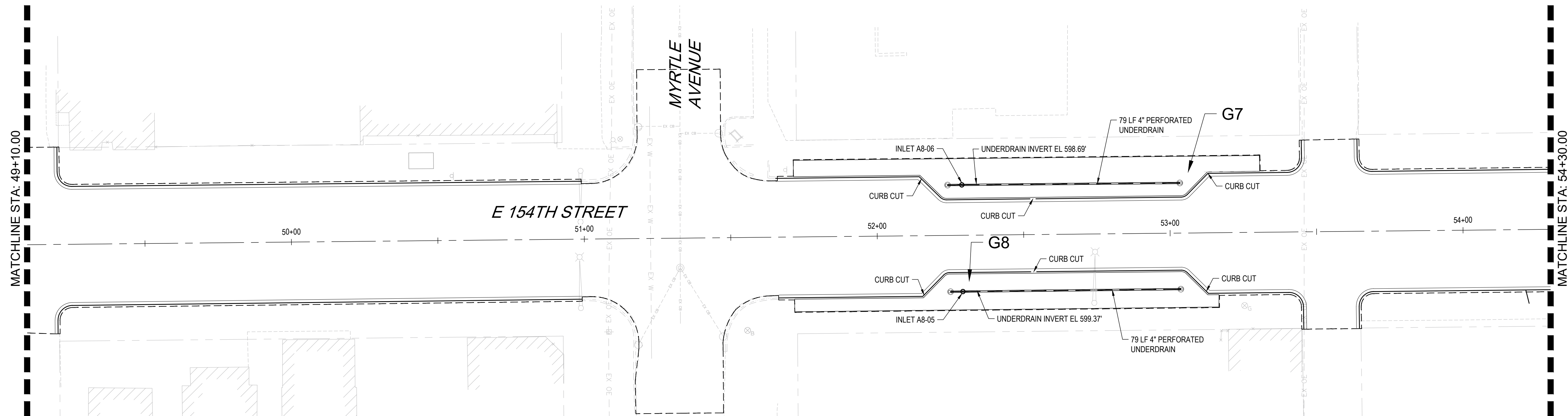


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**154TH STREET RECONSTRUCTION PROJECT**  
**PROPOSED RAIN GARDENS 01**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-45**

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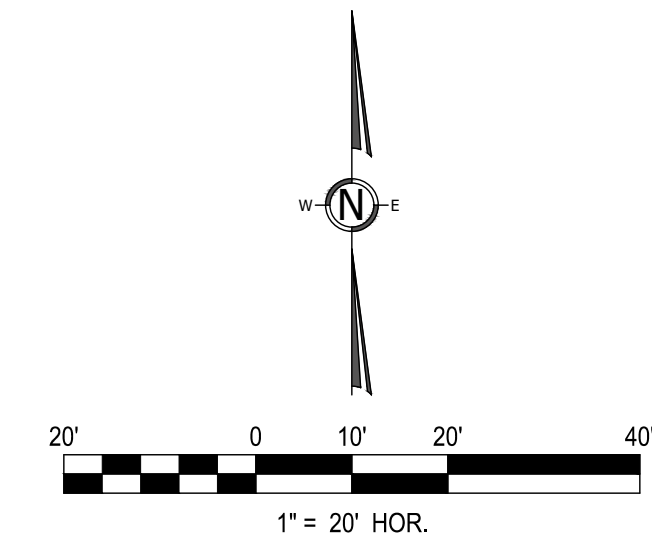


**RAIN GARDENS MAINTENANCE AND MONITORING:**

1. NEED FOR PLANTING, RESEEDING, OR SODDING. SUPPLEMENT ALTERNATIVE NATIVE VEGETATION IF A SIGNIFICANT PORTION HAS NOT ESTABLISHED (50% OF THE SURFACE AREA AFTER SECOND GROWING SEASON). RESEED WITH ALTERNATIVE NATIVE GRASS SPECIES IF ORIGINAL GRASS COVER HAS NOT SUCCESSFULLY ESTABLISHED.
2. EVIDENCE OF GRAZING, MOTORBIKES, OR OTHER VEHICLES. REPAIR.
3. CHECK FOR INVASIVE VEGETATION. REMOVE WHEN POSSIBLE.
4. REGULAR MOWING TO CONTROL VEGETATION; IT IS RECOMMENDED THAT NATIVE VEGETATION REMAIN UNCUT.
5. DEAD OR DAMAGED NON-NATIVE GRASSY AREAS - REPAIR WITH SEEDING WITH FERTILIZATION OR SEEDING WITH MULCH.
6. COMPENSATORY STORAGE AREA SHALL BE RESEEDED WITH APPROPRIATE VEGETATION ACCORDING TO THE APPROVED PLANTING PLAN.

**NOTES:**

1. ANY DAMAGE TO EXISTING SIDEWALK AT CONNECTION POINTS SHALL BE REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE.
2. ANY DAMAGE TO THE CURB LINE ON 154TH STREET OUTSIDE DESIGNATED AREAS IN THESE PLANS SHALL BE REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE.
3. PAVEMENT PATCHING WILL BE REQUIRED IN ALL AREAS OF CURB AND GUTTER REPLACEMENT.
4. ALL STORM STRUCTURES ARE TO BE CLEANED OUT AFTER CONSTRUCTION.
5. ALL UNDERDRAIN STRUCTURES ARE TO BE INSTALLED AT 0.0% SLOPE.



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

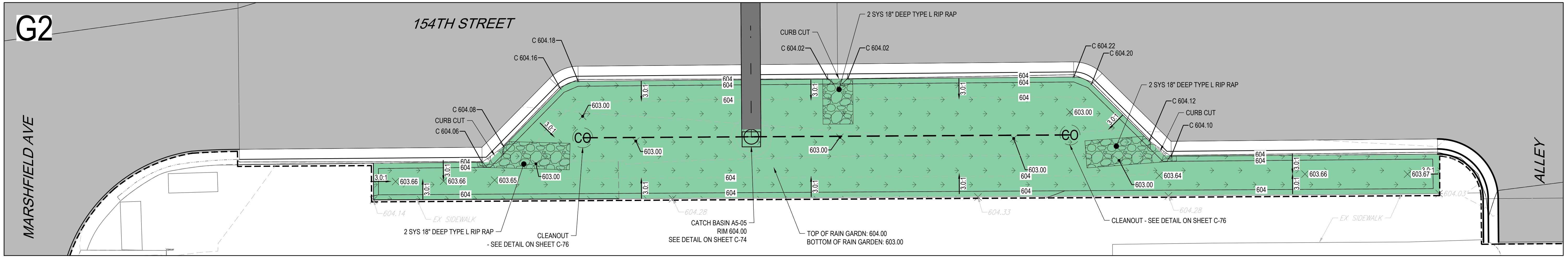
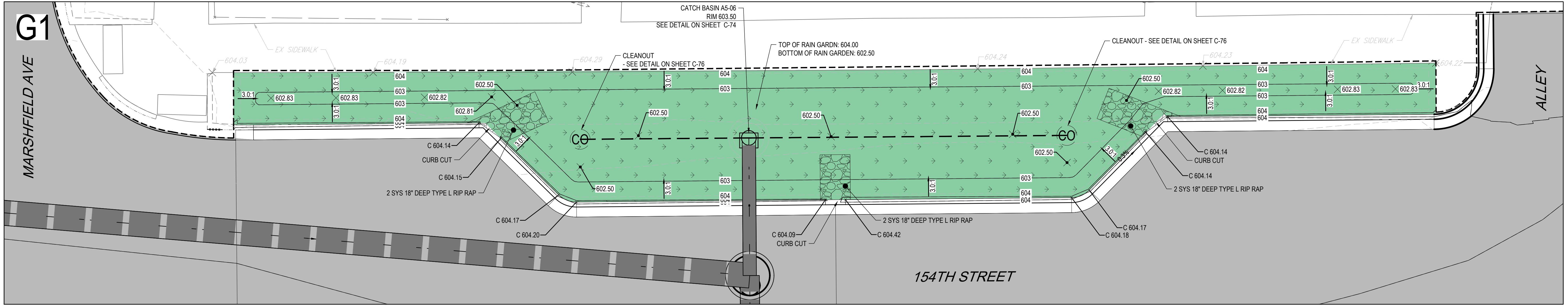


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**154TH STREET RECONSTRUCTION PROJECT**  
**PROPOSED RAIN GARDENS 02**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

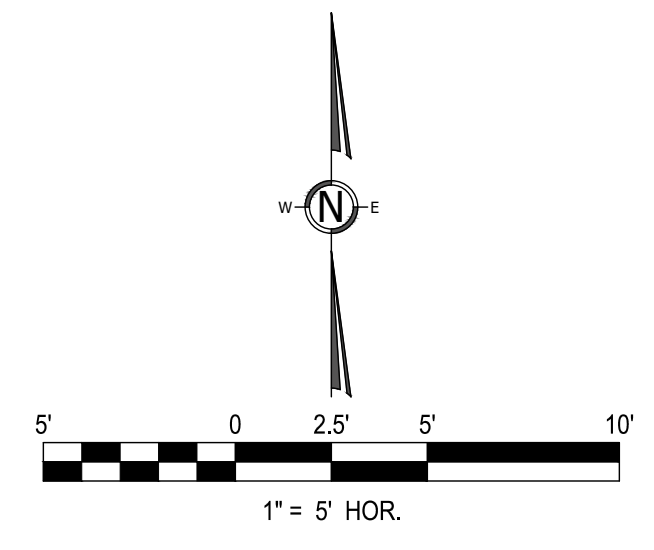
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 DATE  
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 SHEET  
**C-46**

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**LEGEND**

- XXX --- EXISTING CONTOURS
- XXX --- PROPOSED CONTOURS
- CATCH BASIN
- OBSERVATION WELL
- CO CLEANOUT
- PROPOSED PAVEMENT
- PROPOSED RAIN GARDEN
- PROPOSED RIP RAP
- PROPOSED CURB AND GUTTER
- - - CONSTRUCTION LIMITS



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
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 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



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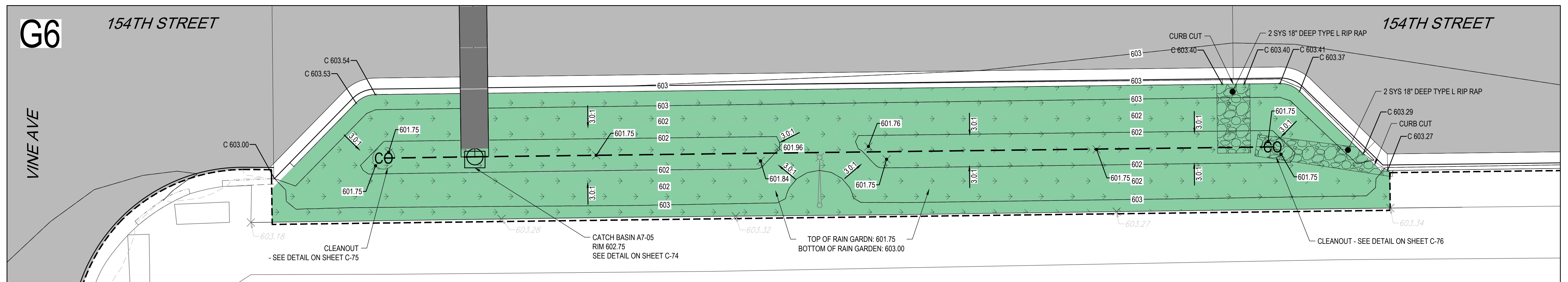
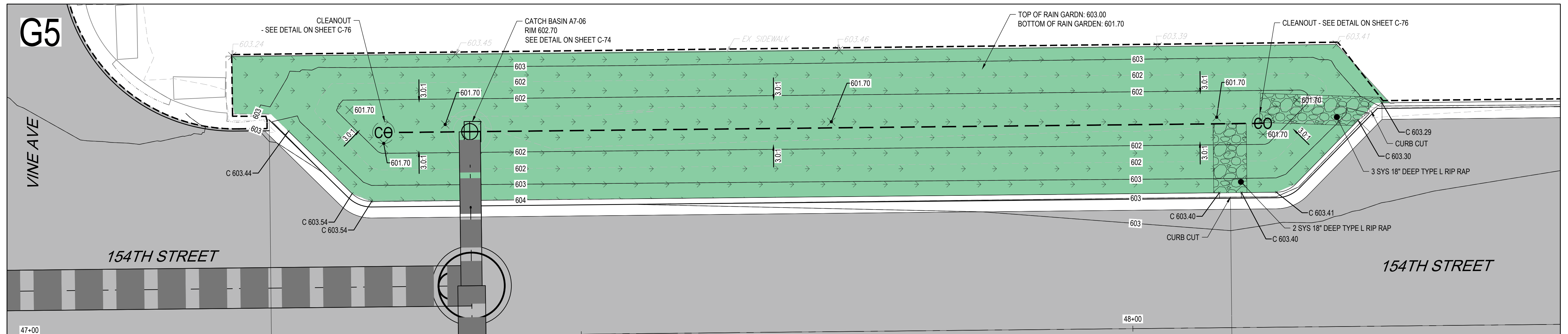
**154TH STREET RECONSTRUCTION PROJECT**  
**BUMPOUT AND RAIN GARDEN DETAILS G1 & G2**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
CoH-2207  
 DATE  
3/29/2024  
 SHEET  
**C-47**

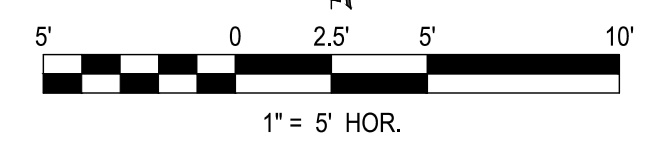


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**LEGEND**

- XXXX --- EXISTING CONTOURS
- XXXX --- PROPOSED CONTOURS
- CATCH BASIN
- OBSERVATION WELL
- CLEANOUT
- PROPOSED PAVEMENT
- PROPOSED RAIN GARDEN
- PROPOSED RIP RAP
- PROPOSED CURB AND GUTTER
- CONSTRUCTION LIMITS



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

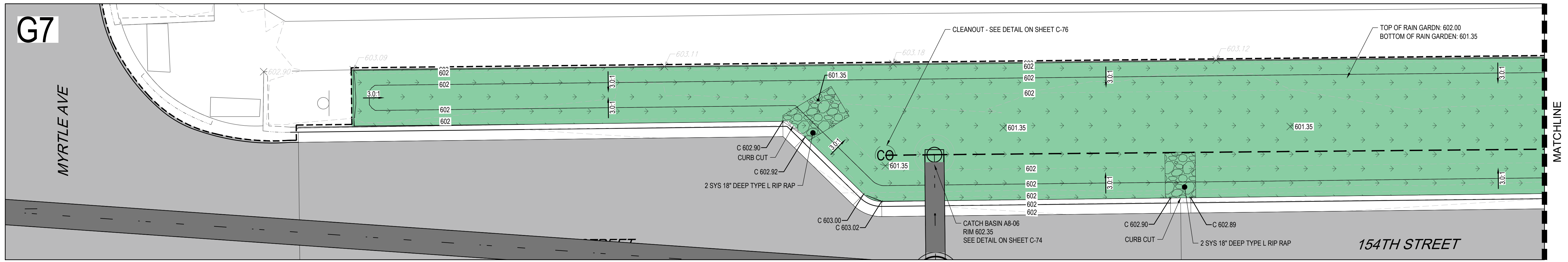


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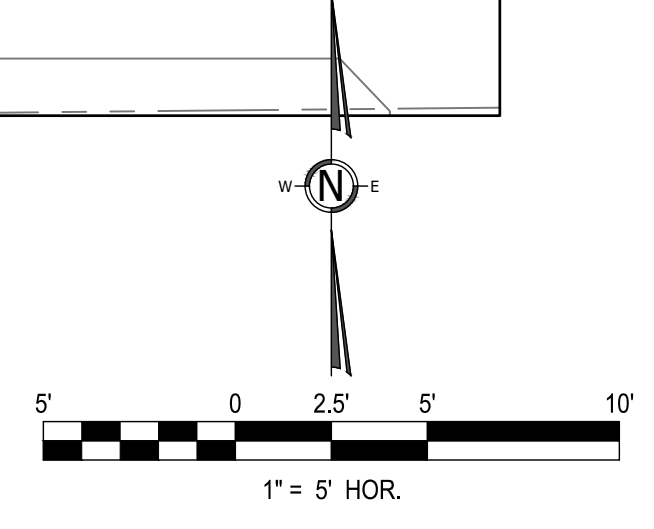
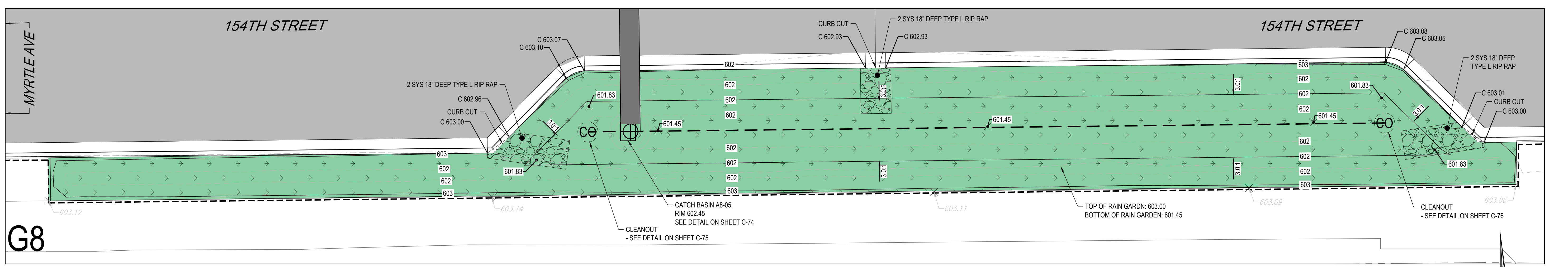
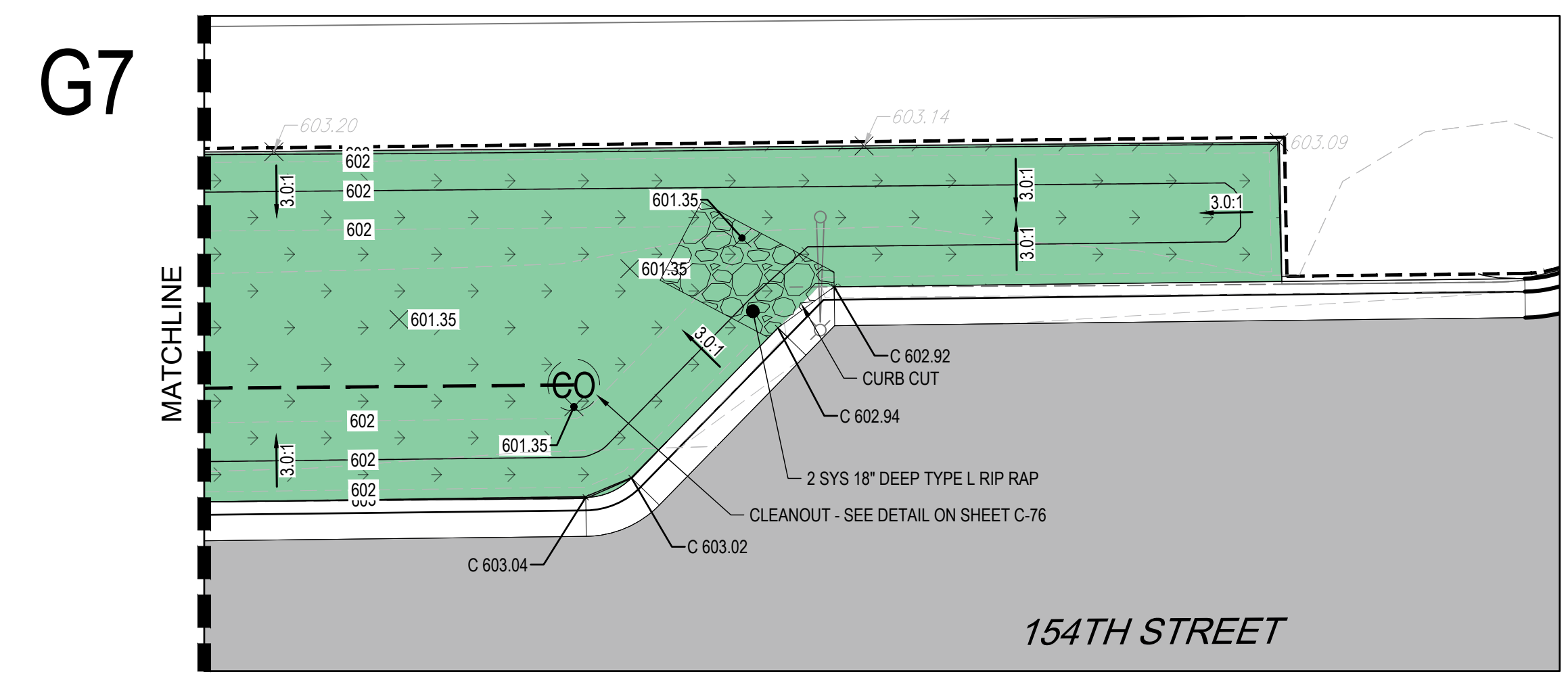
**154TH STREET RECONSTRUCTION PROJECT**  
**BUMPOUT AND RAIN GARDEN DETAILS G5 & G6**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-49**

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- LEGEND**
- XXX --- EXISTING CONTOURS
  - XXX --- PROPOSED CONTOURS
  - CATCH BASIN
  - OBSERVATION WELL
  - CLEANOUT
  - PROPOSED PAVEMENT
  - PROPOSED RAIN GARDEN
  - PROPOSED RIP RAP
  - PROPOSED CURB AND GUTTER
  - - - - CONSTRUCTION LIMITS



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

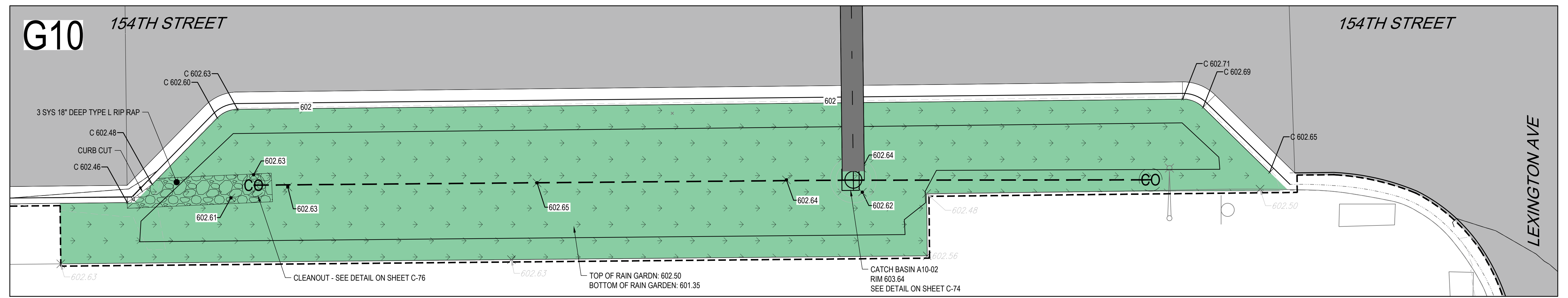
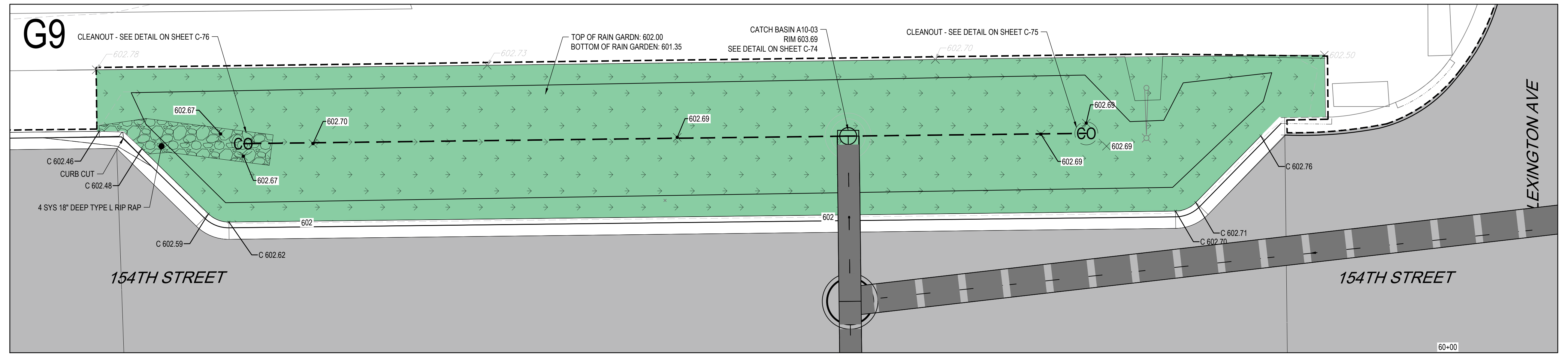


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**154TH STREET RECONSTRUCTION PROJECT**  
**BUMPOUT AND RAIN GARDEN DETAILS G7 & G8**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

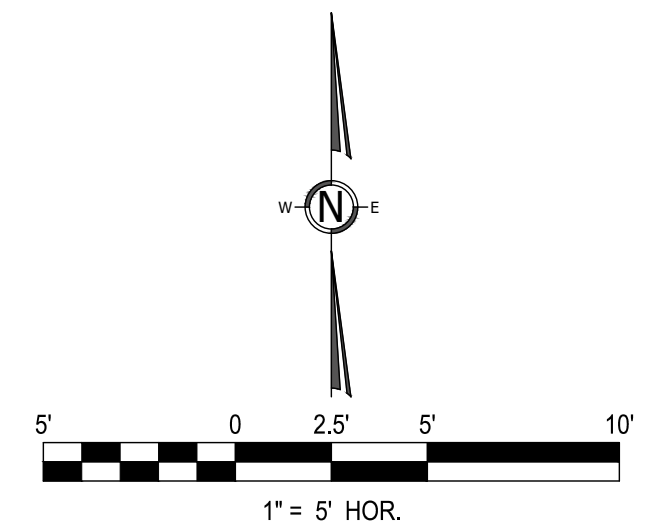
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 DATE: 3/29/2024  
 SHEET: **C-50**

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**LEGEND**

- XXX --- EXISTING CONTOURS
- XXX --- PROPOSED CONTOURS
- CATCH BASIN
- OBSERVATION WELL
- CLEANOUT
- PROPOSED PAVEMENT
- PROPOSED RAIN GARDEN
- PROPOSED RIP RAP
- PROPOSED CURB AND GUTTER
- - - - - CONSTRUCTION LIMITS



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



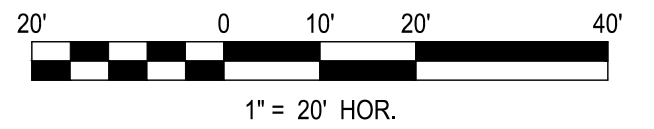
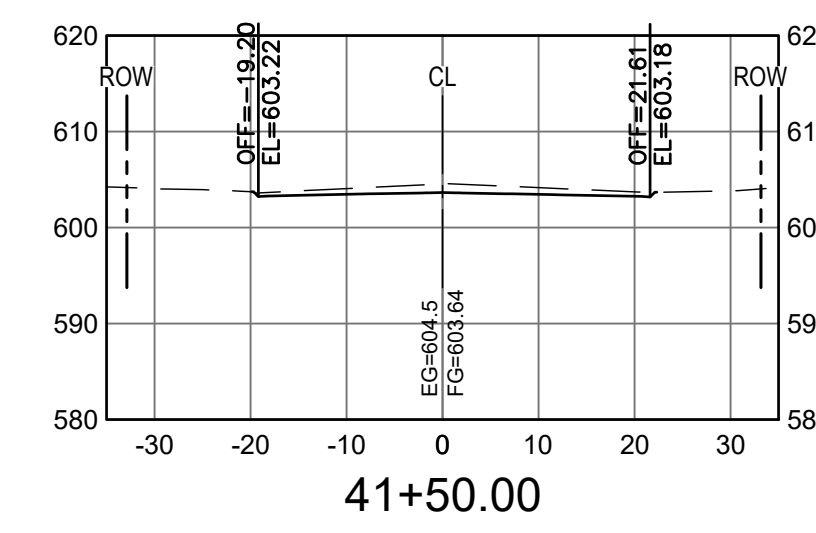
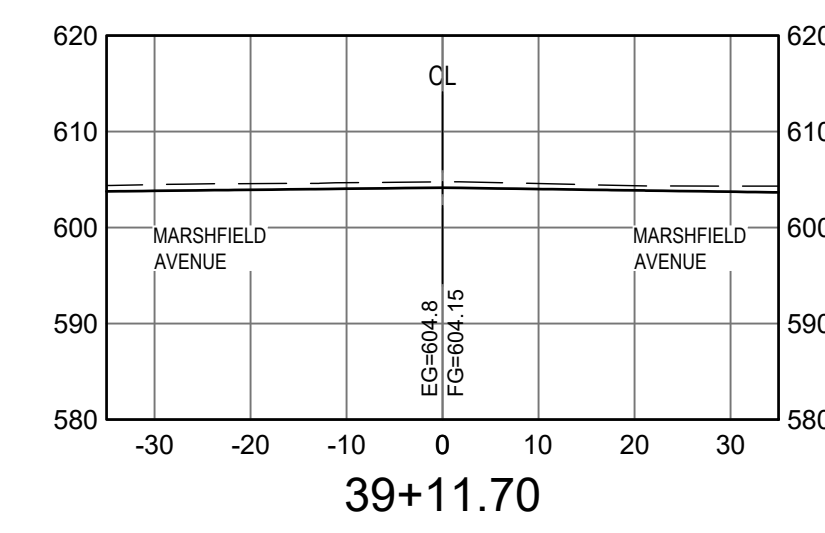
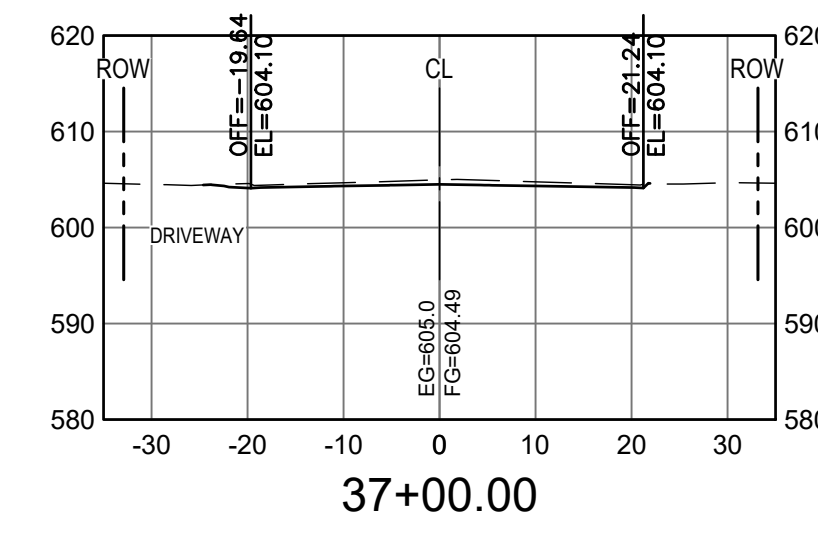
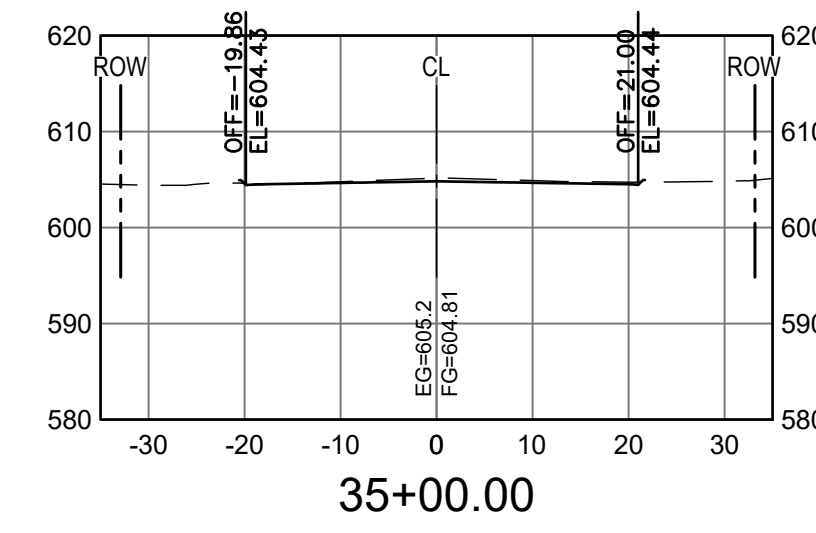
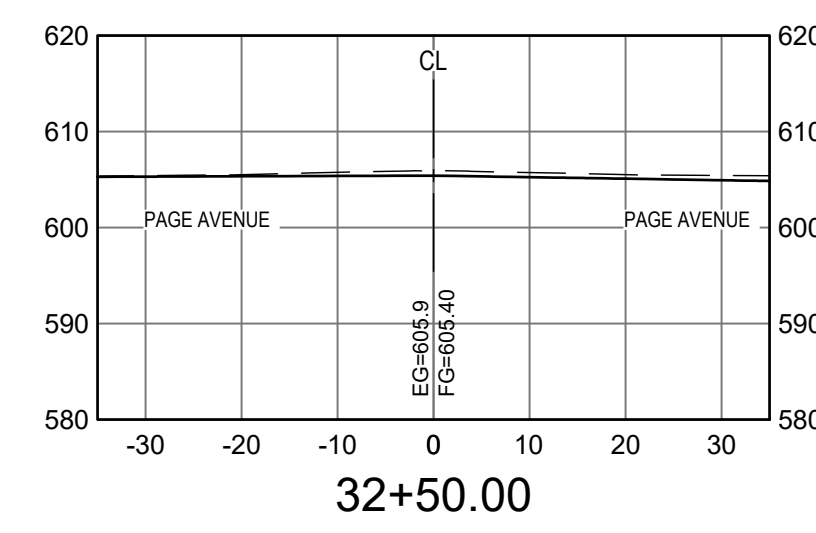
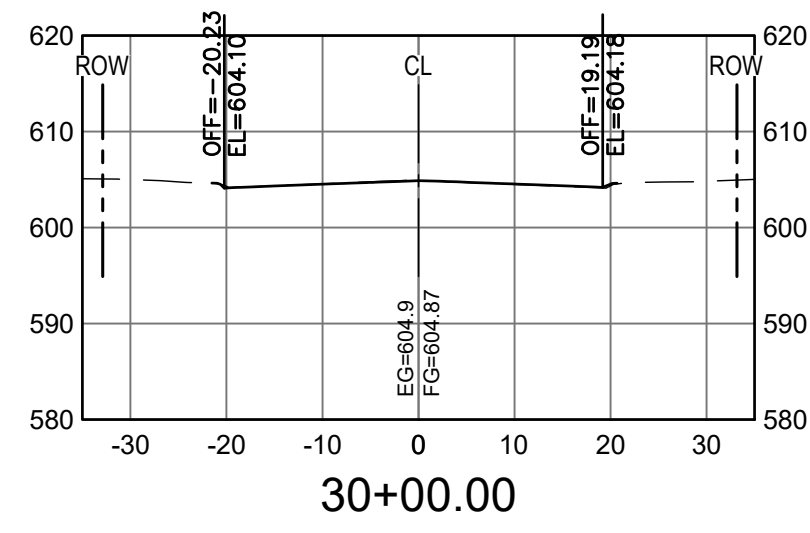
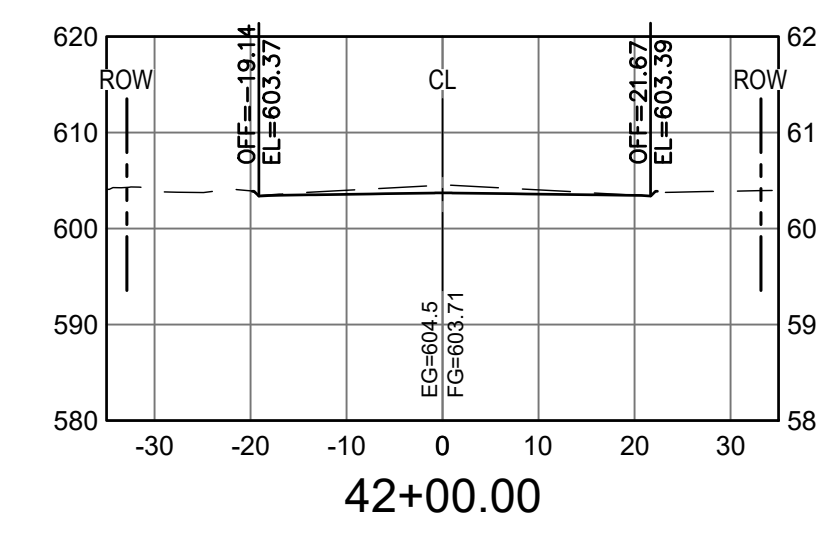
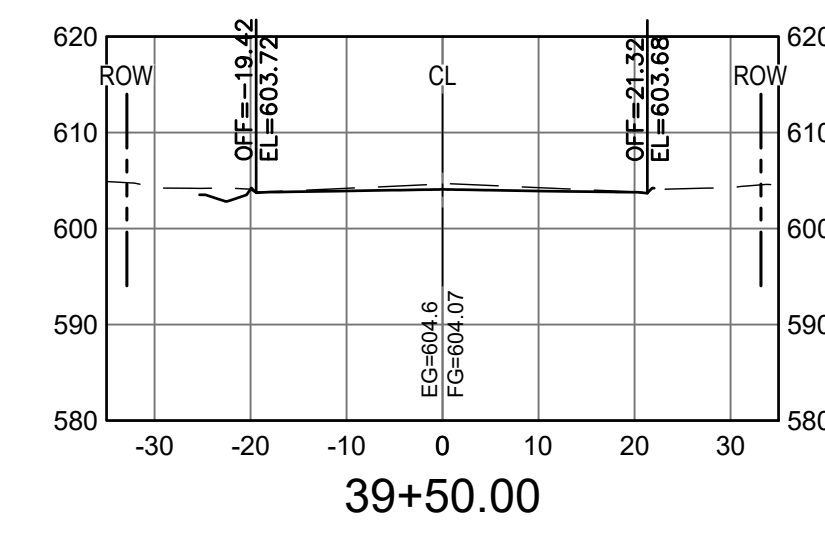
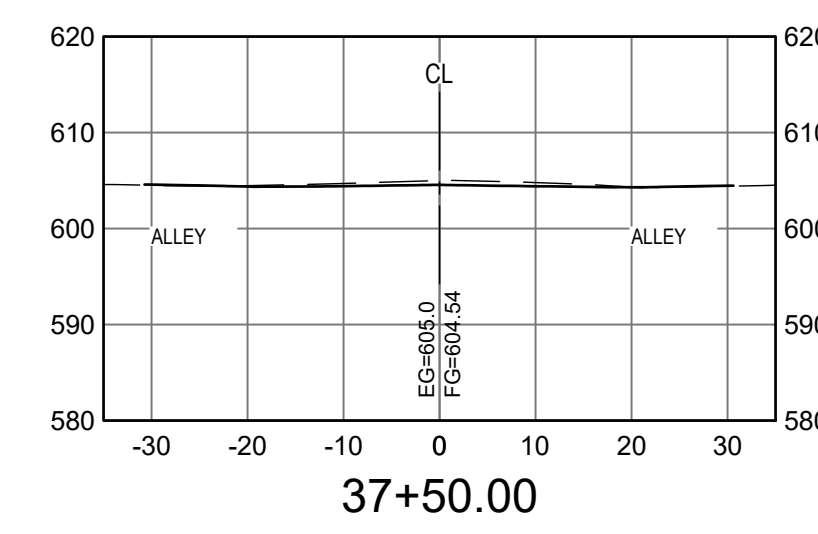
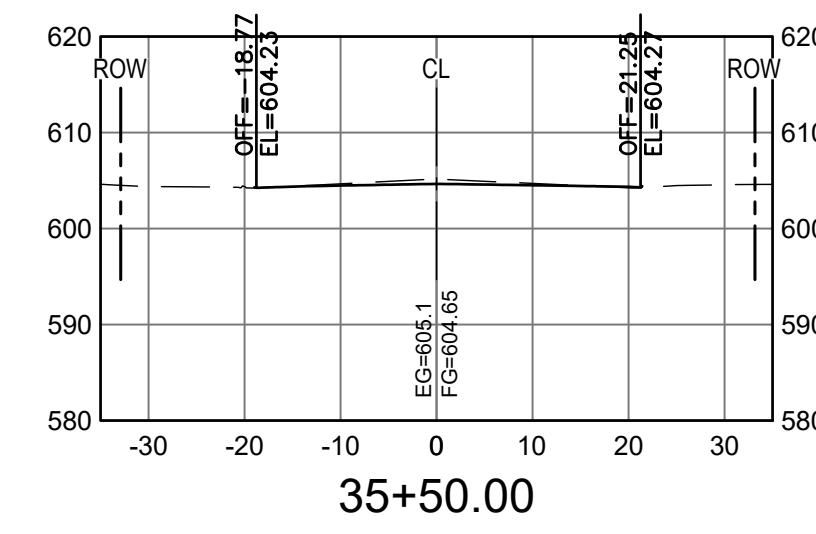
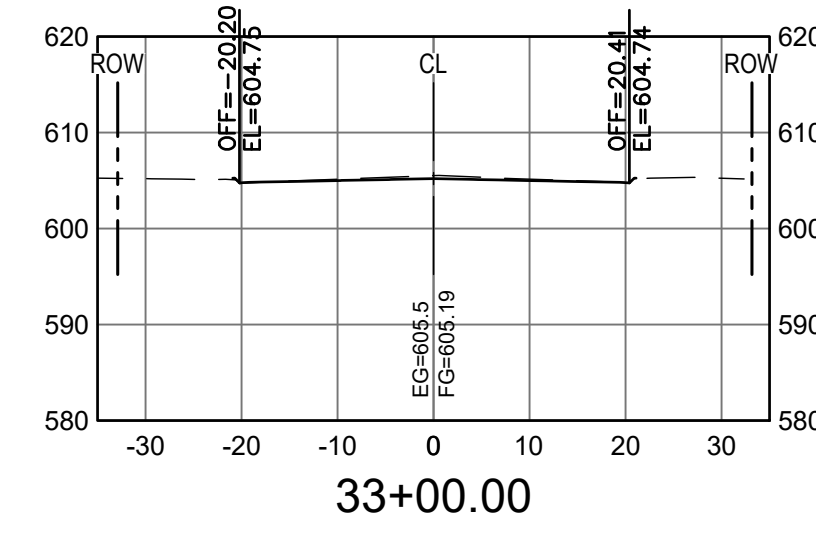
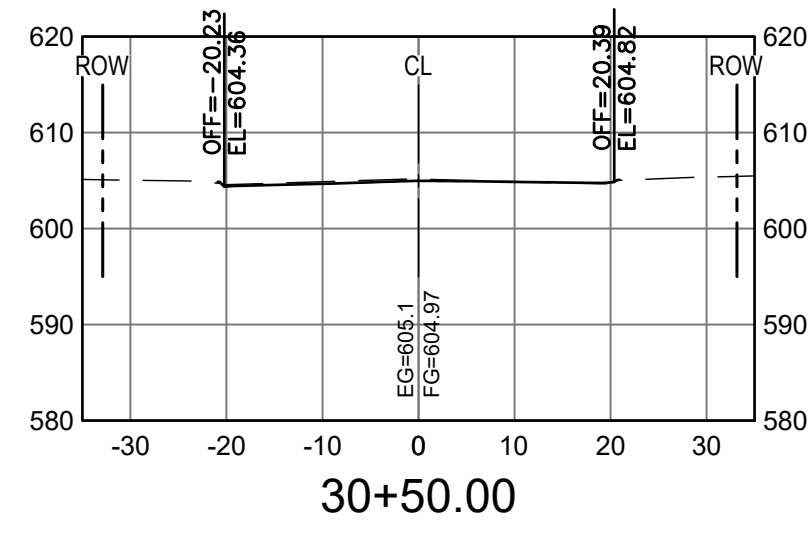
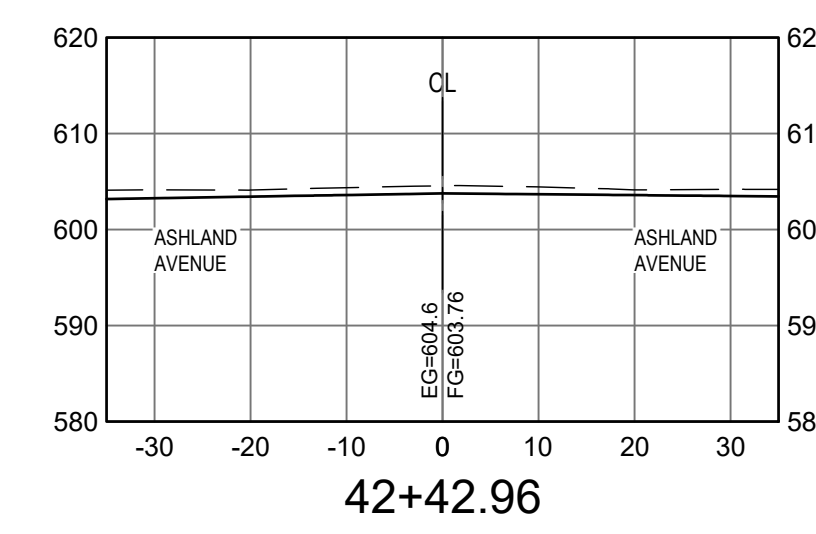
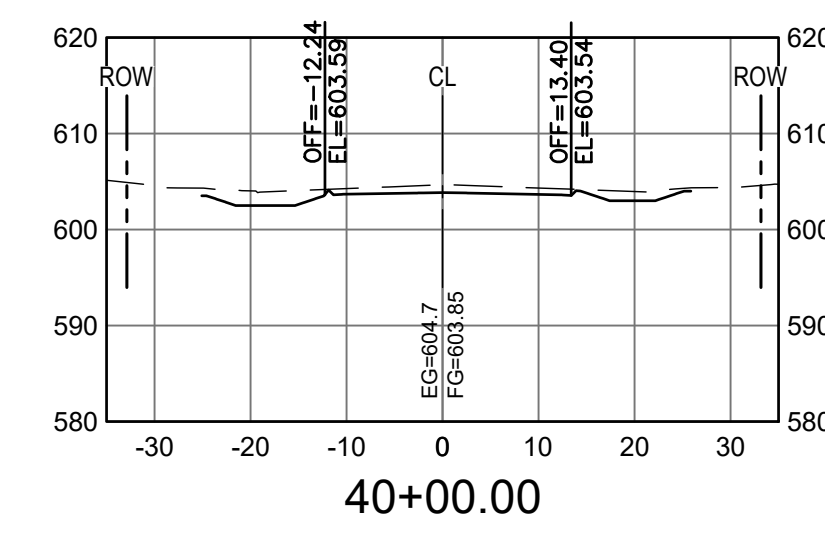
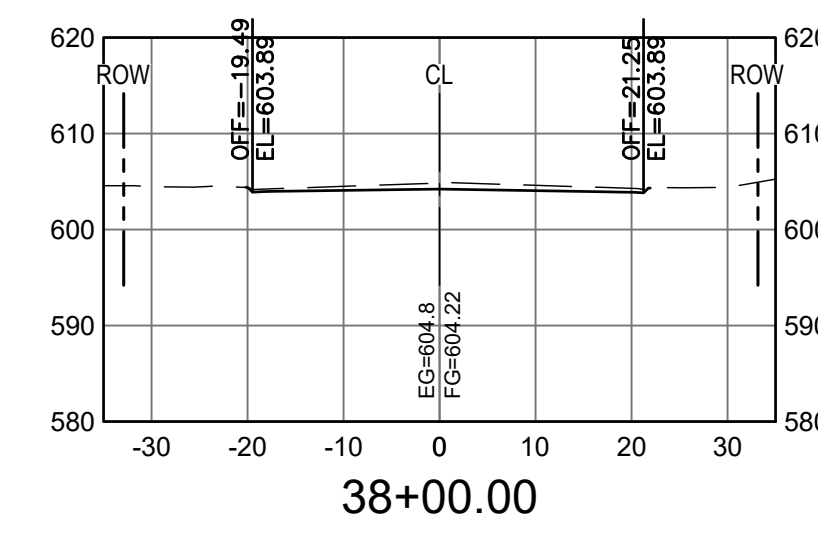
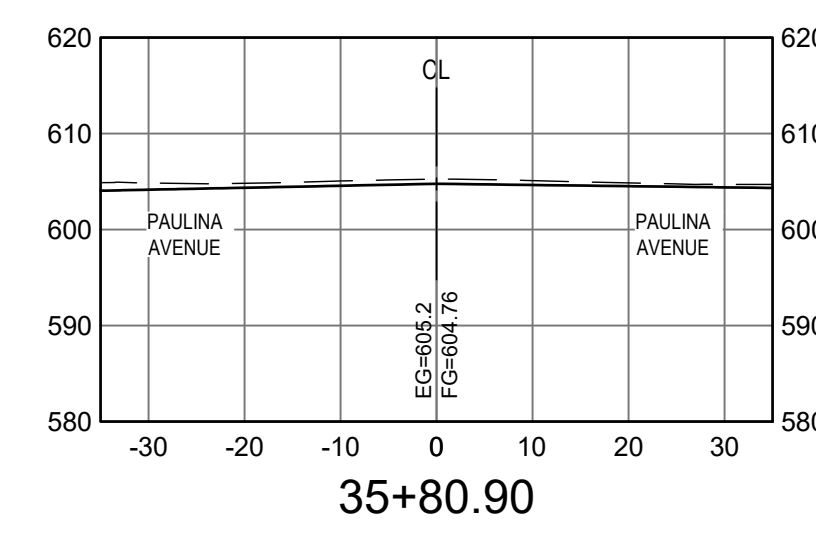
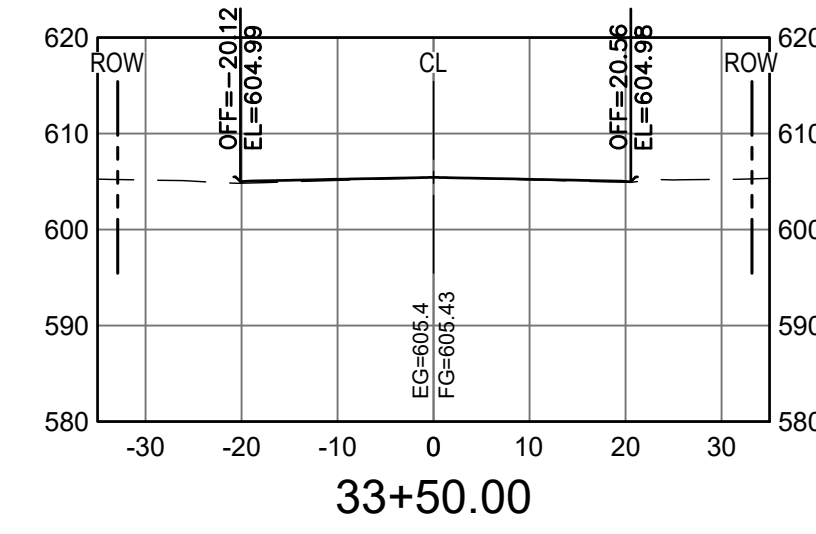
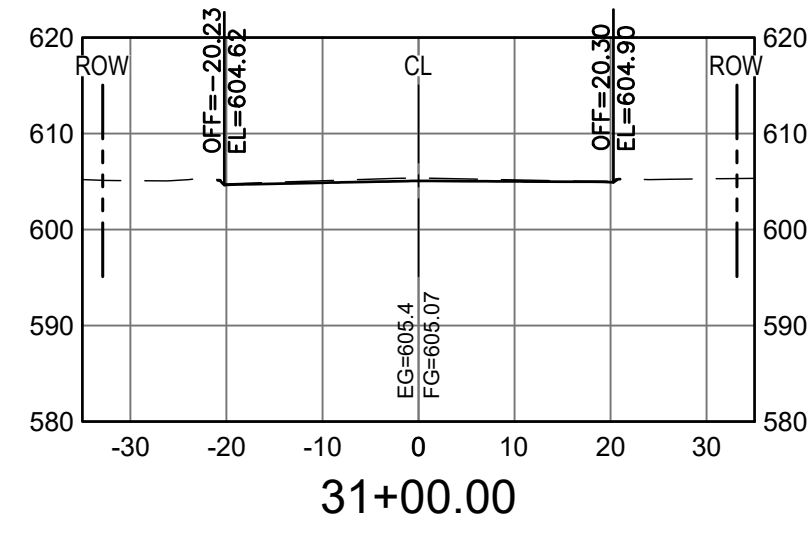
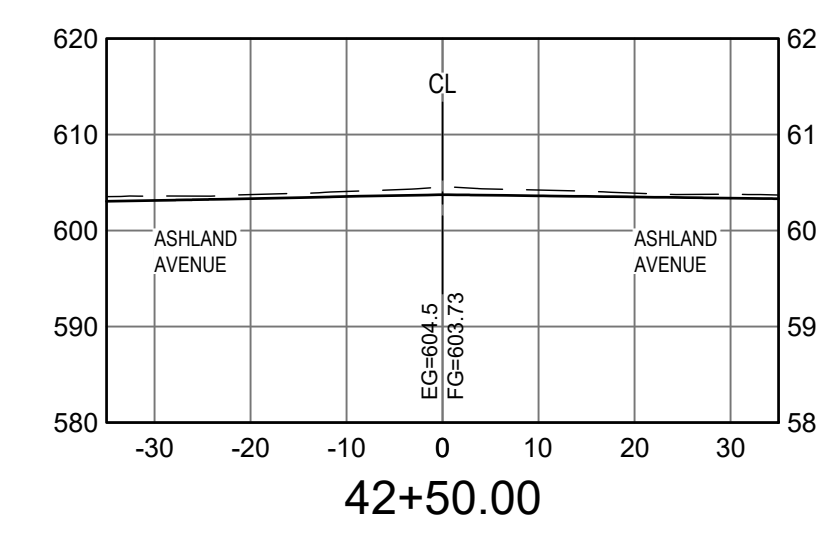
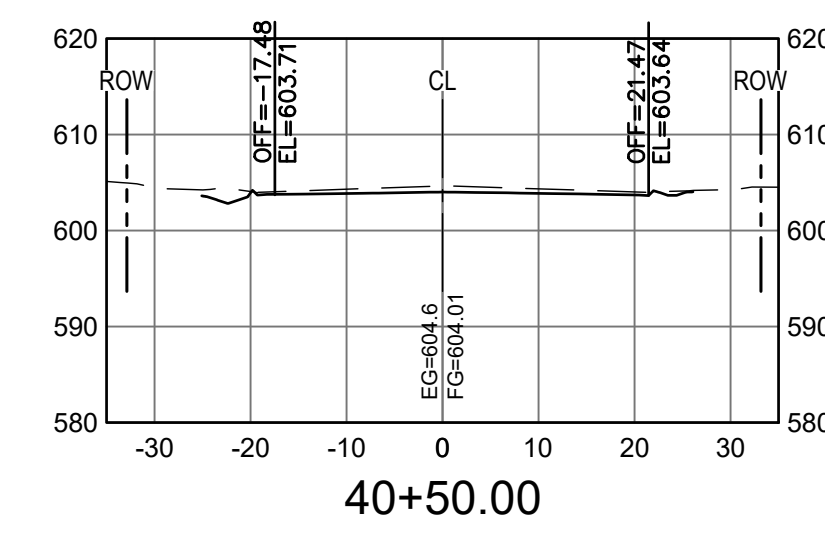
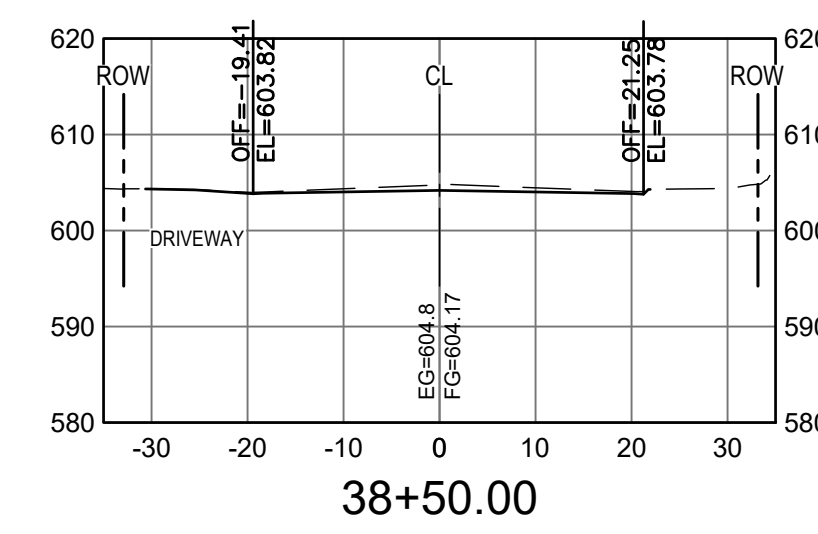
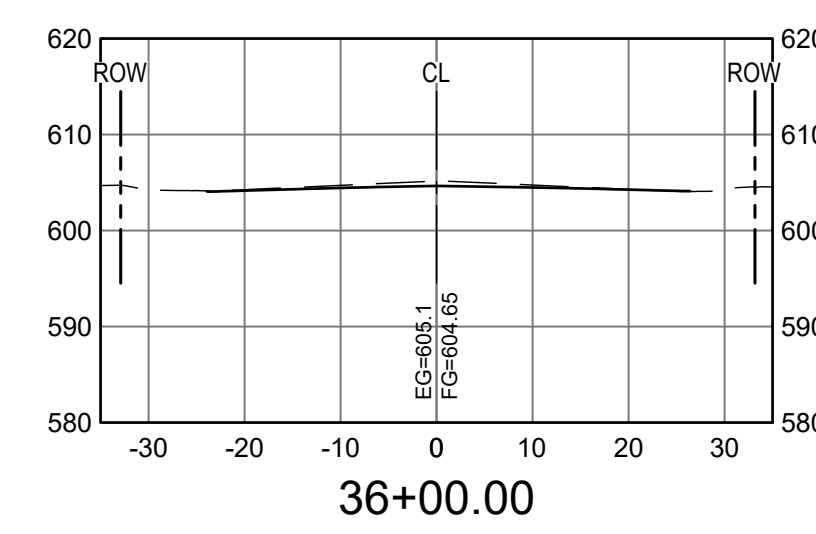
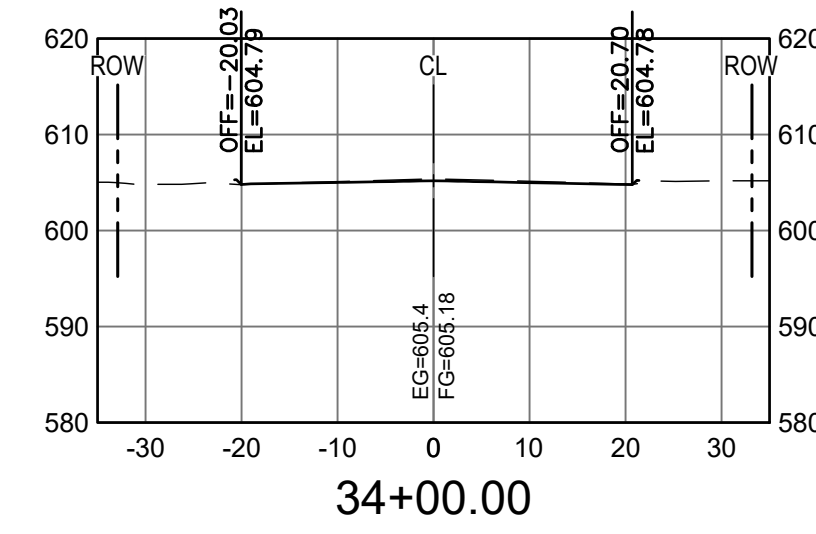
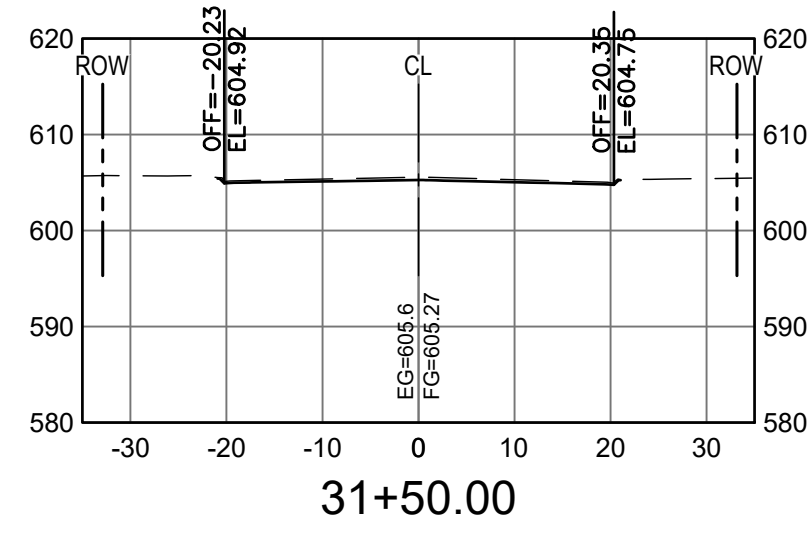
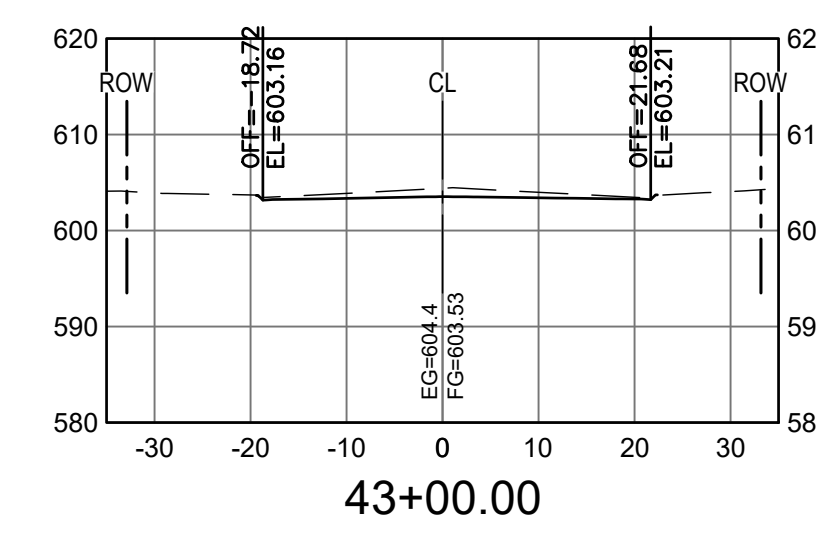
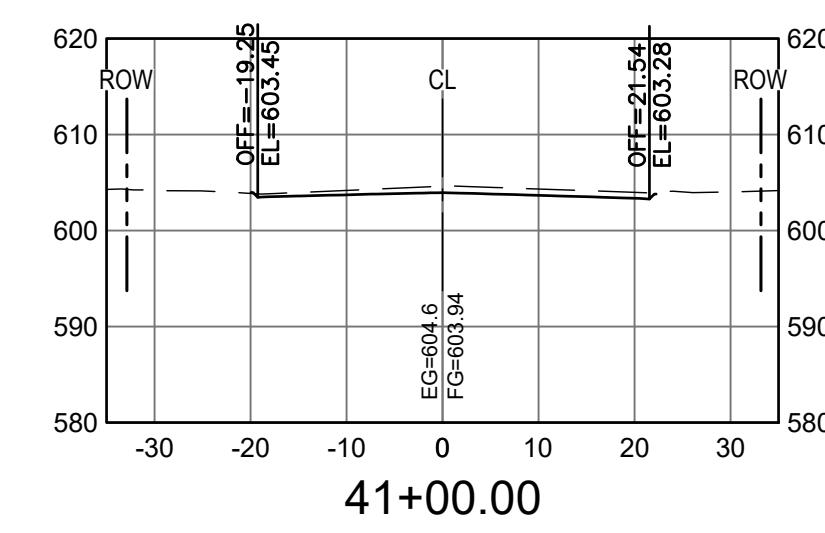
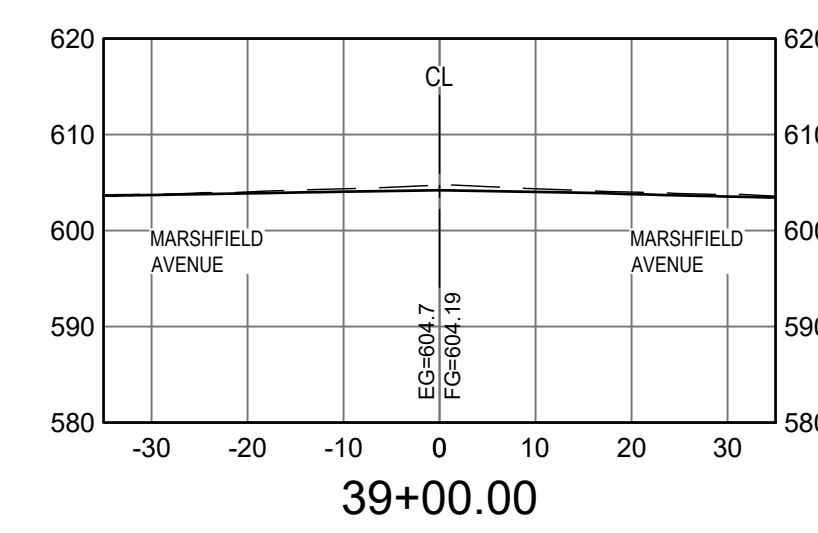
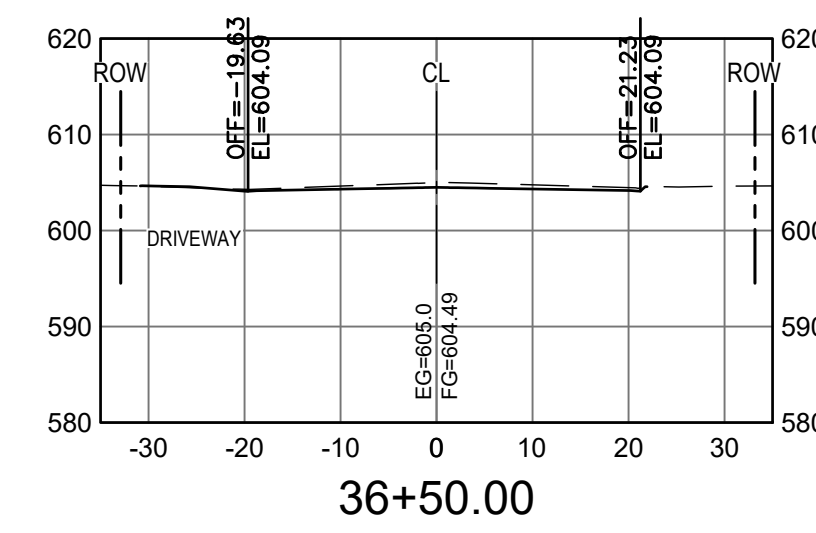
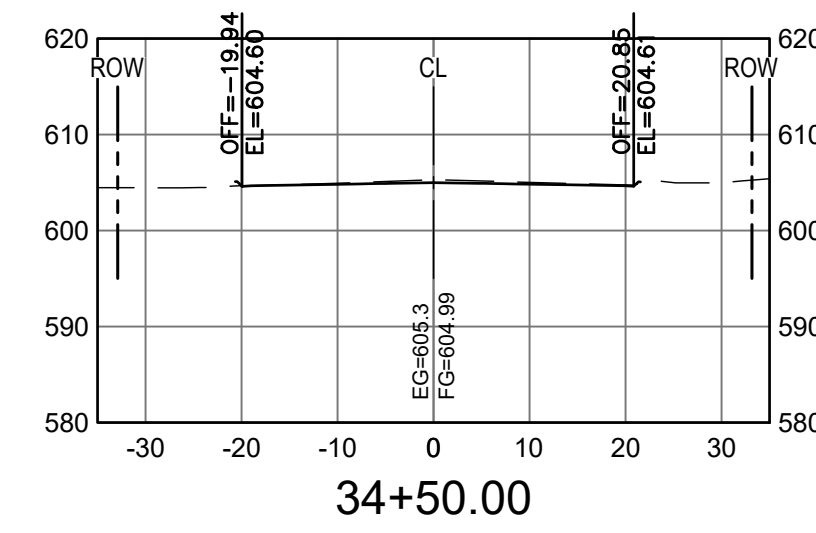
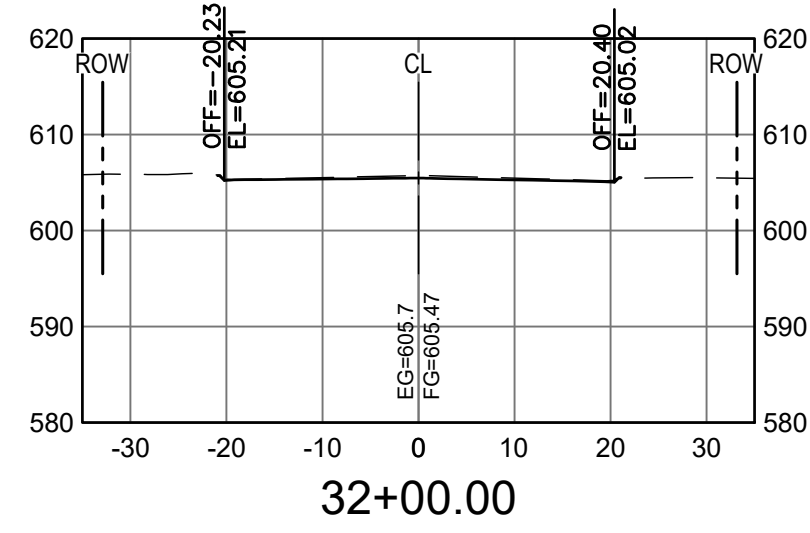
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**154TH STREET RECONSTRUCTION PROJECT**  
**BUMPOUT AND RAIN GARDEN DETAILS G9 & G10**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER	CoH-2207
DATE	3/29/2024
SHEET	<b>C-51</b>

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No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



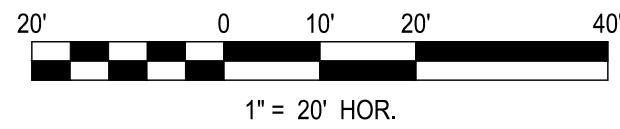
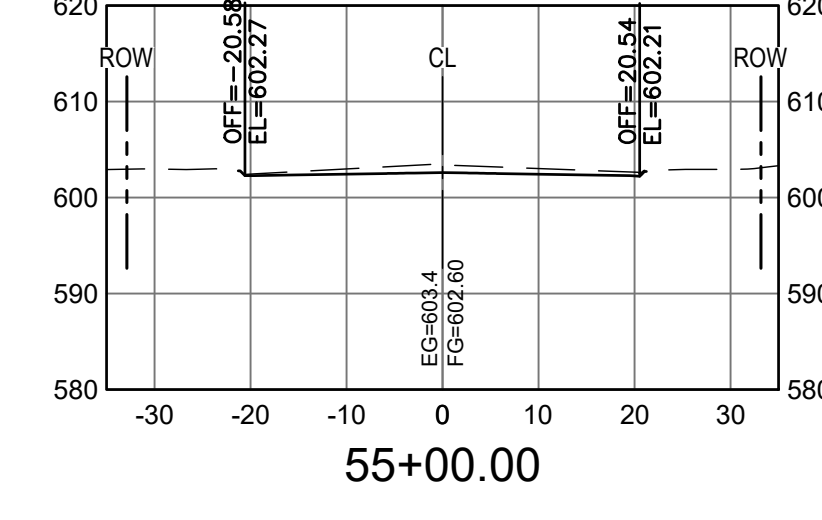
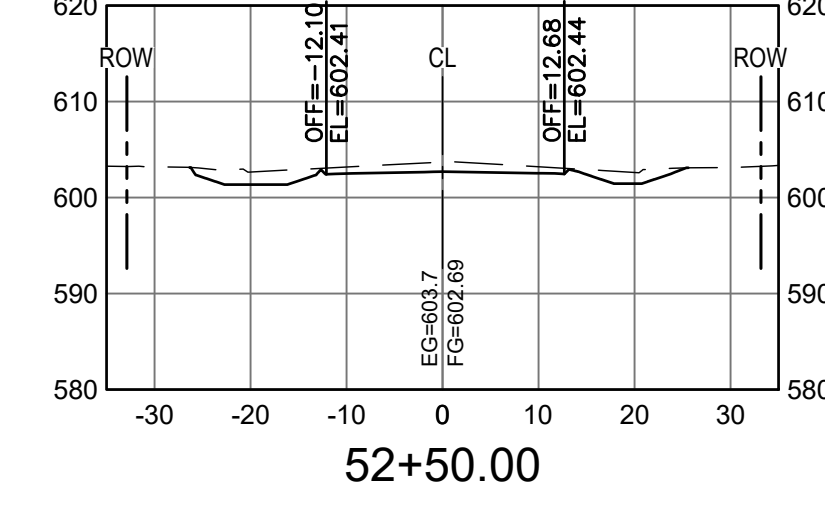
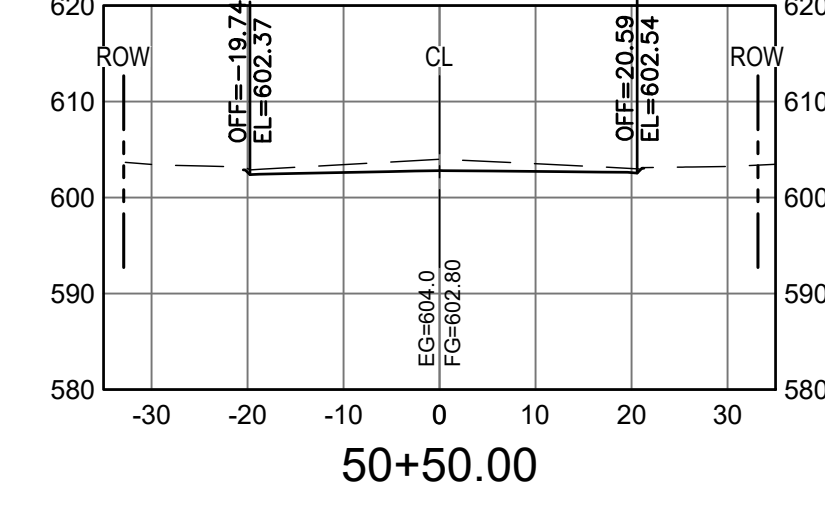
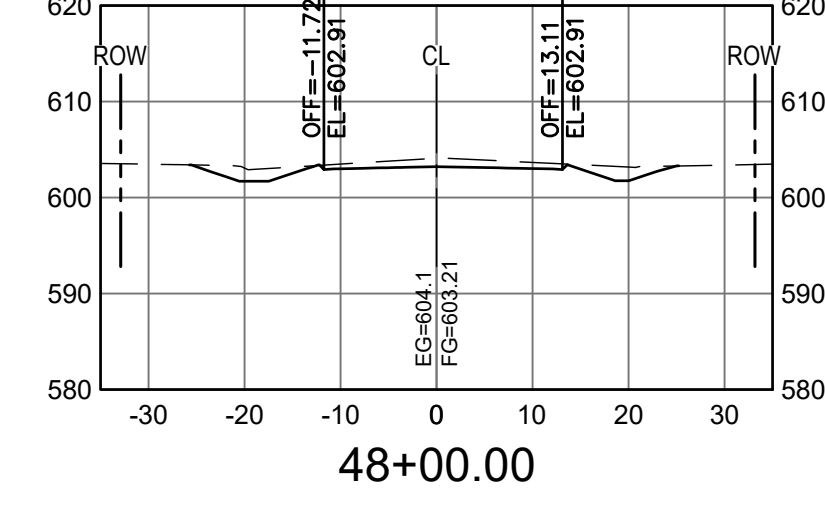
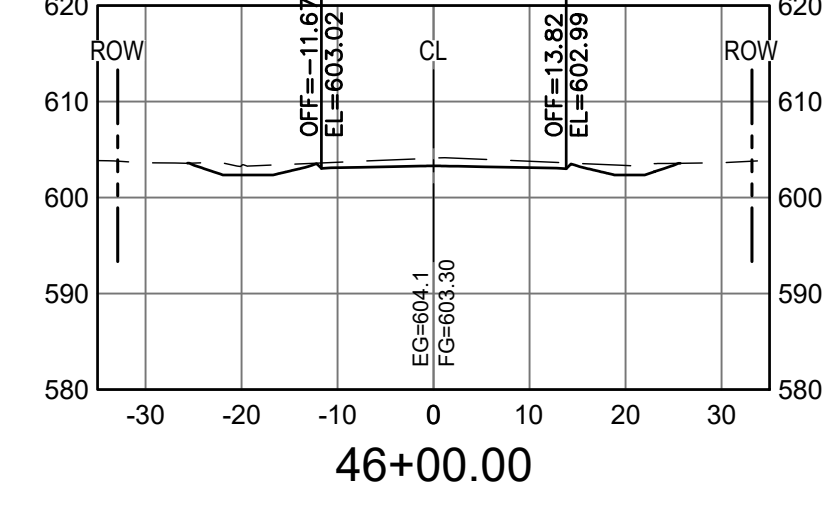
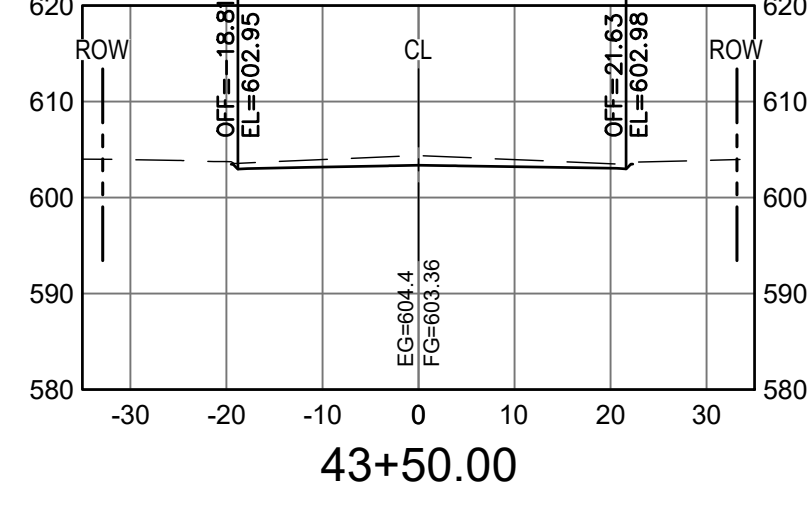
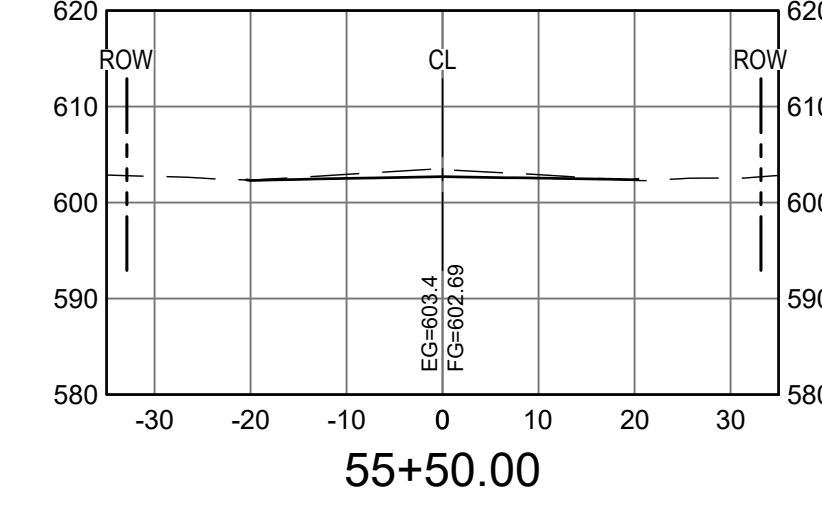
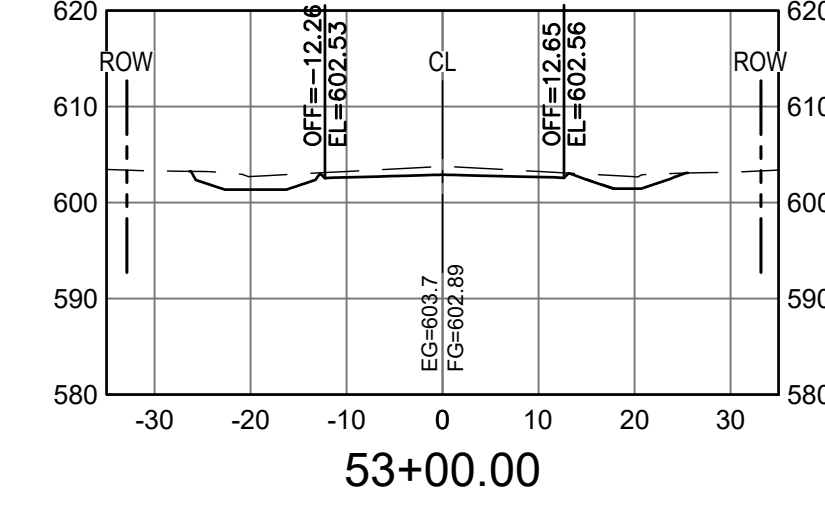
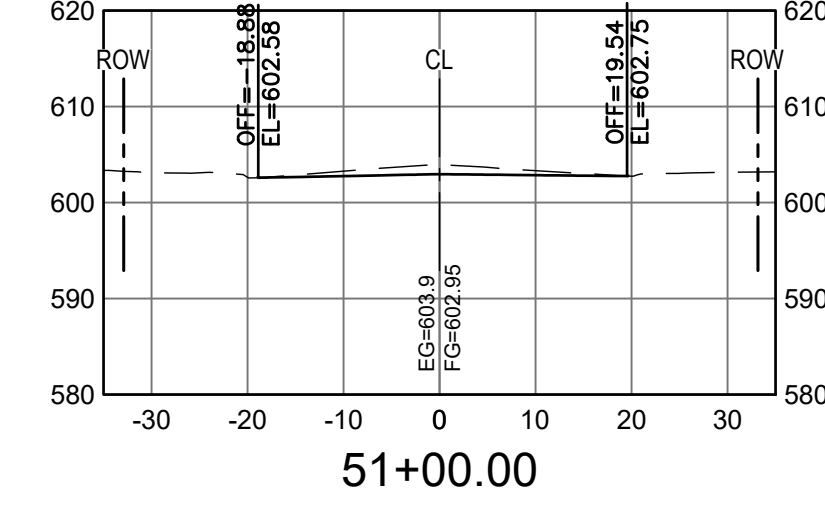
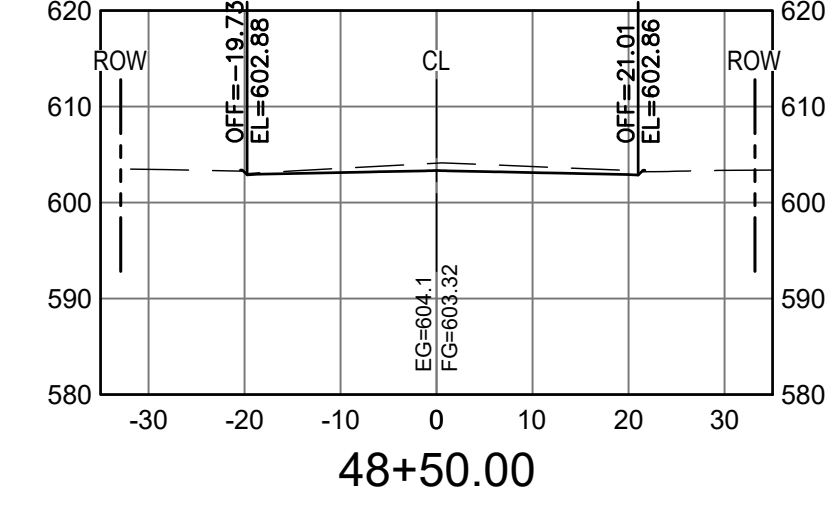
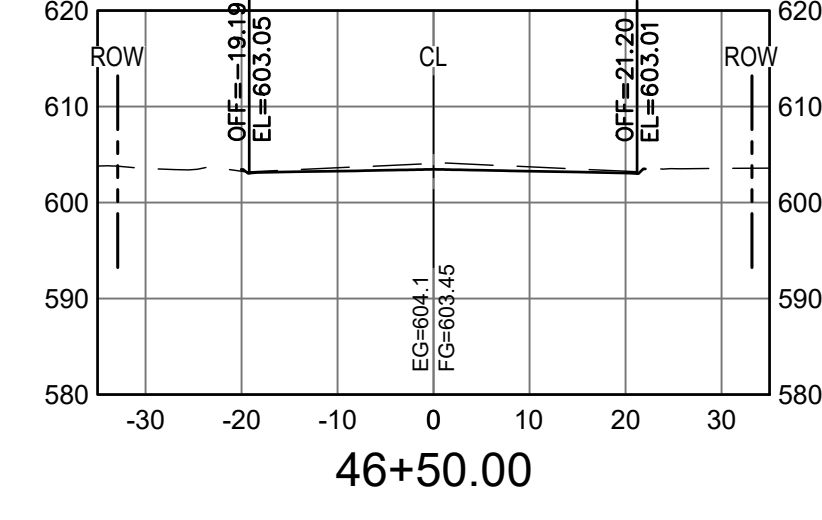
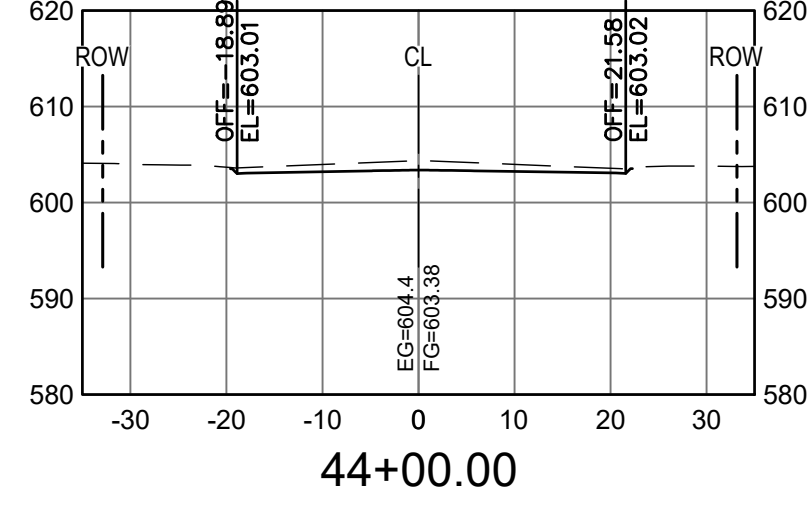
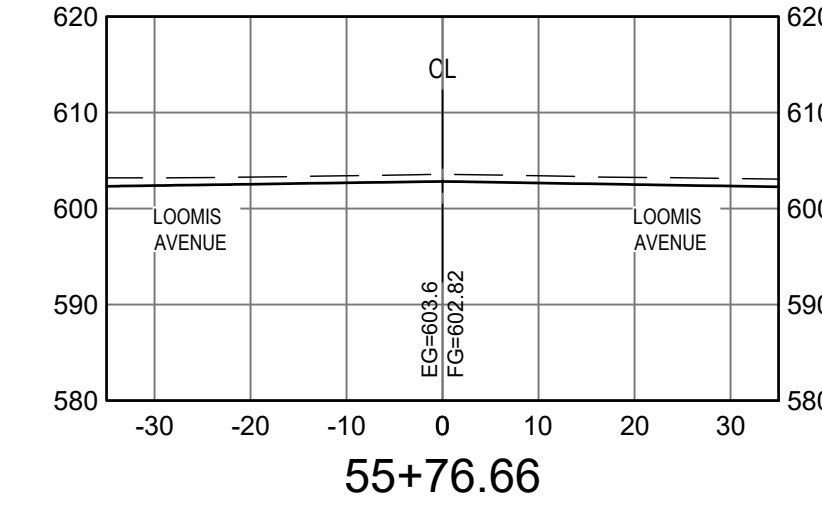
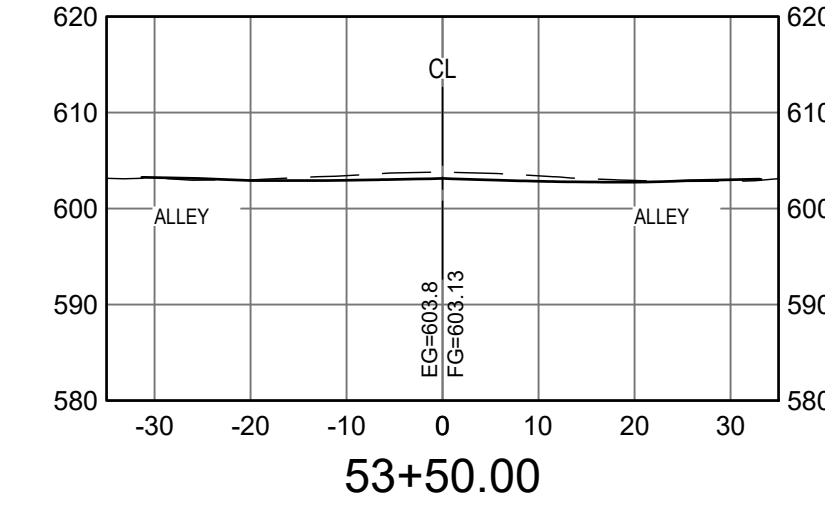
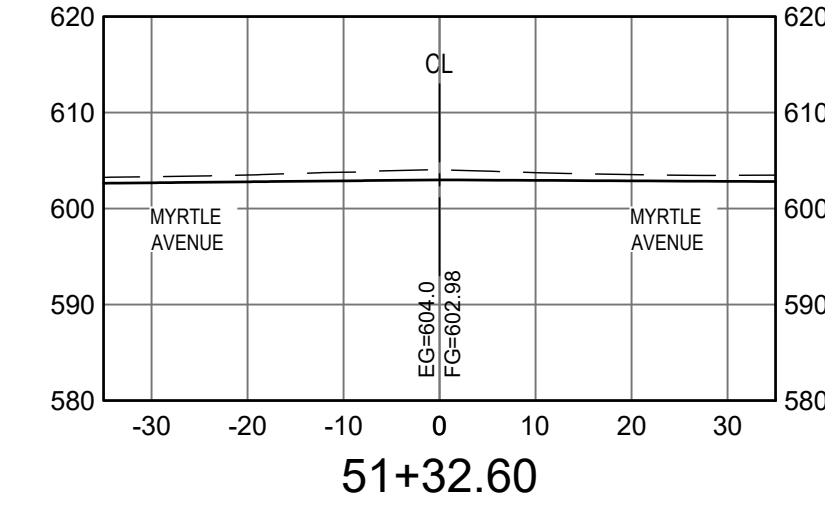
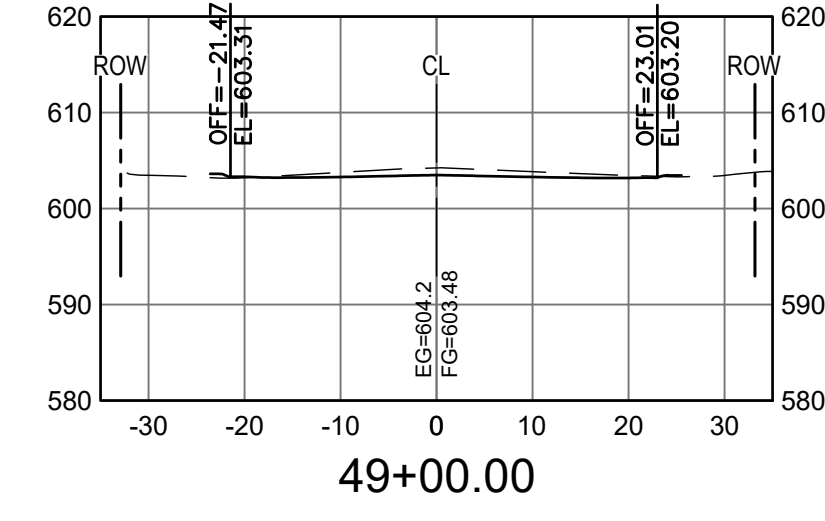
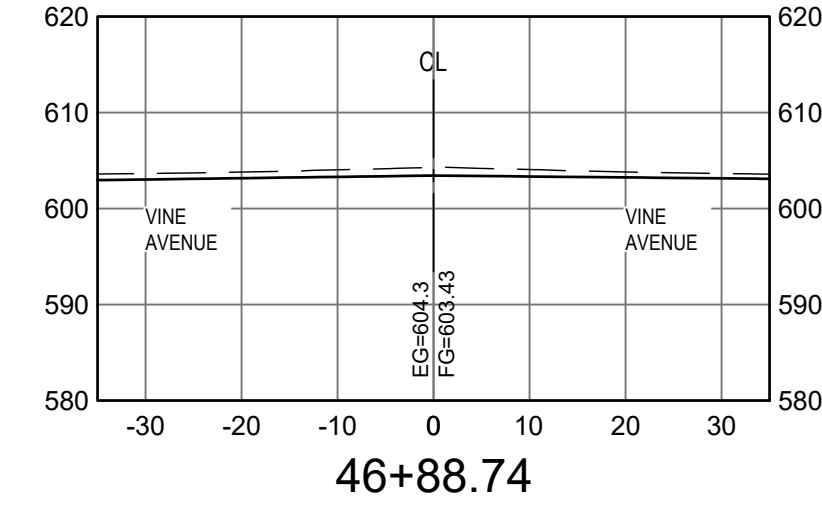
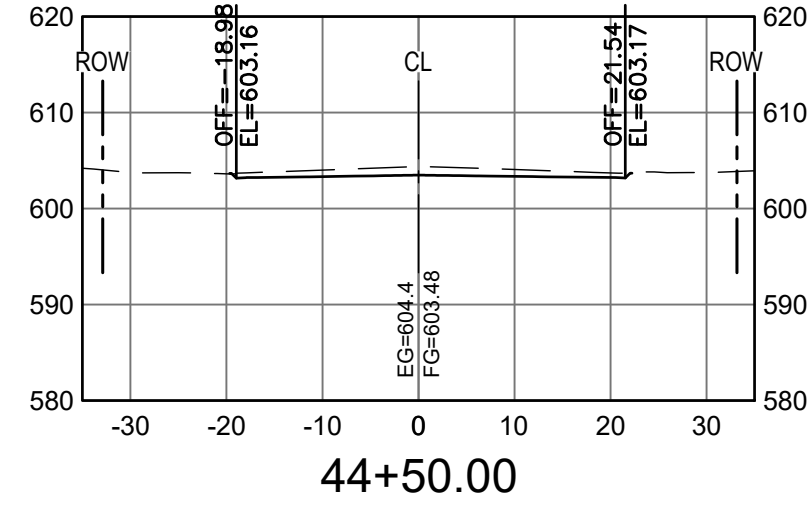
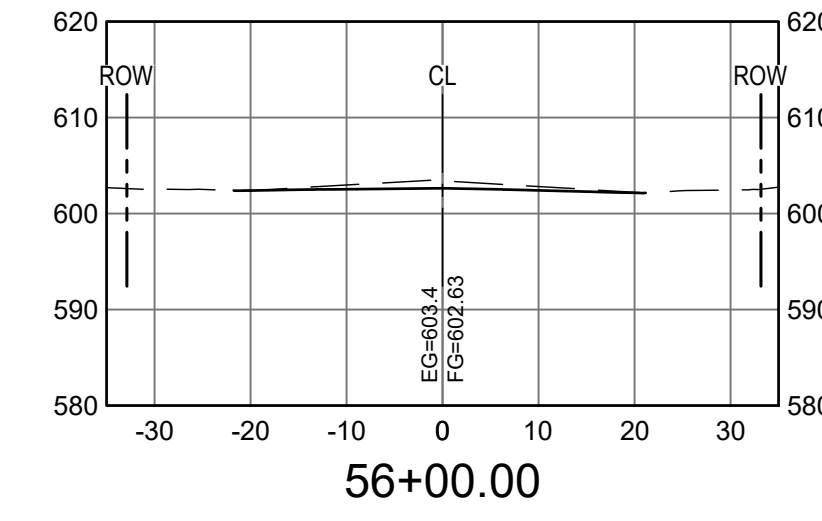
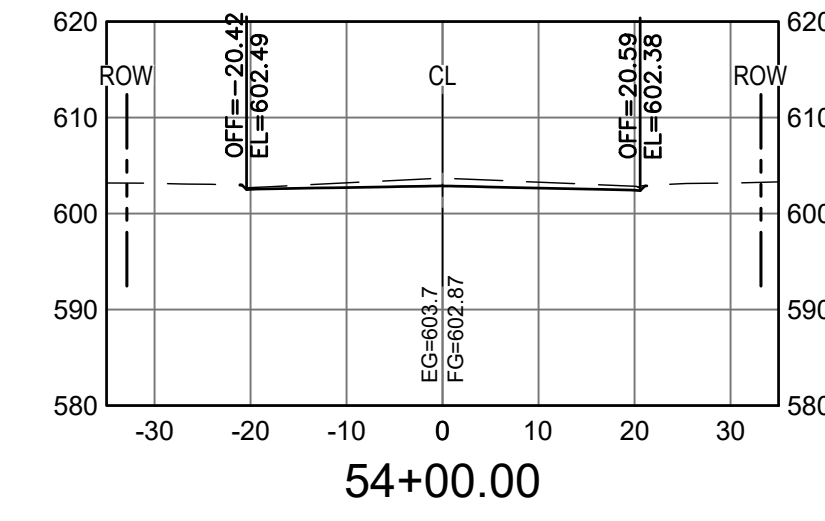
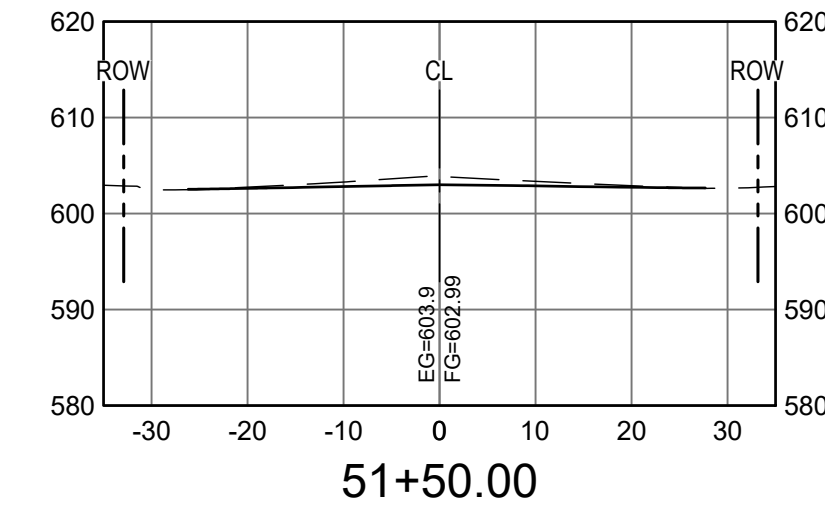
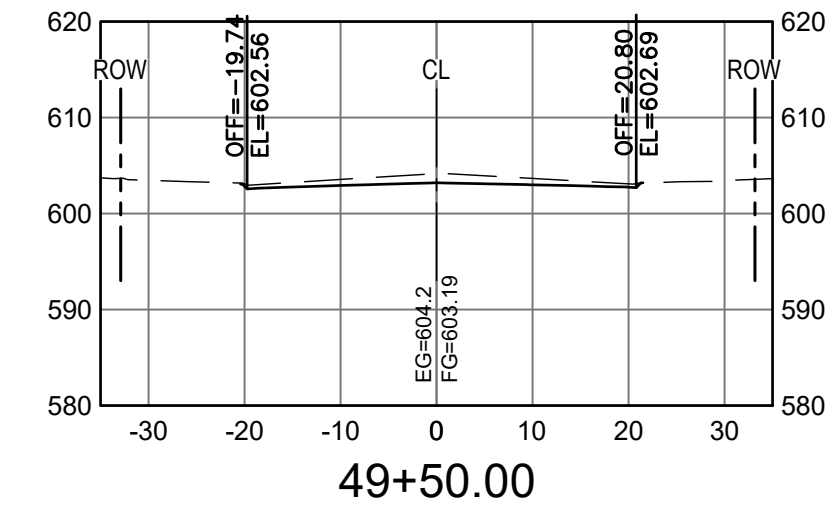
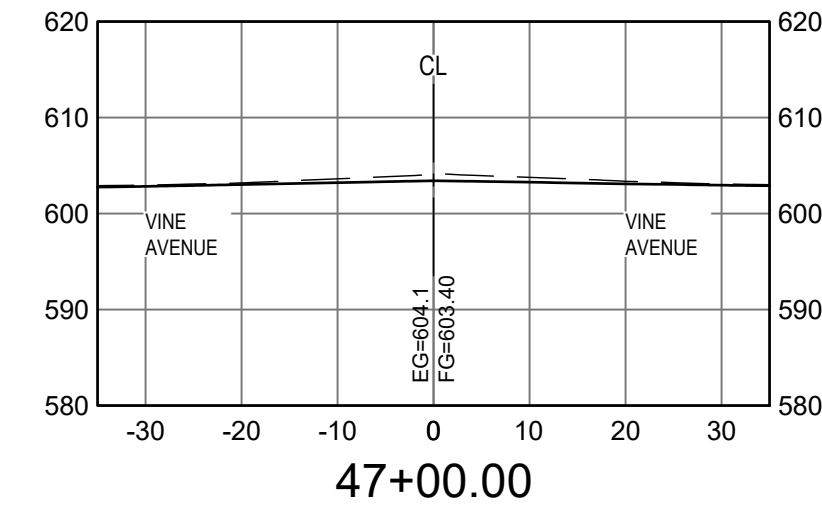
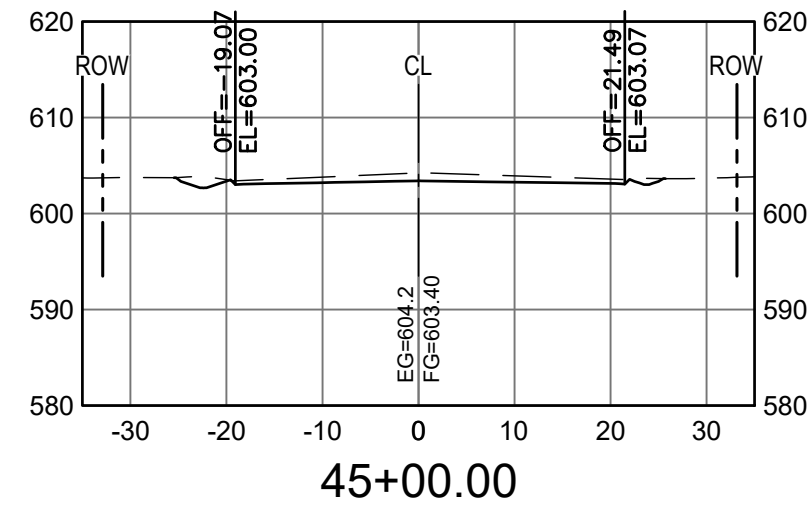
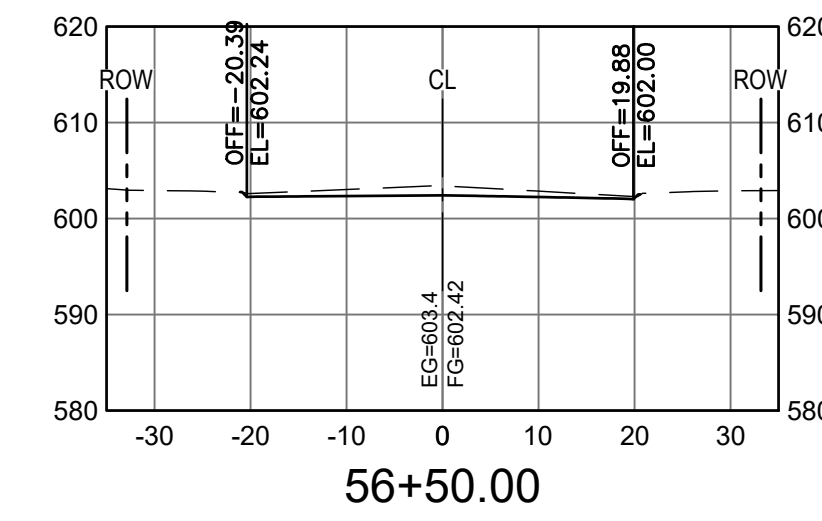
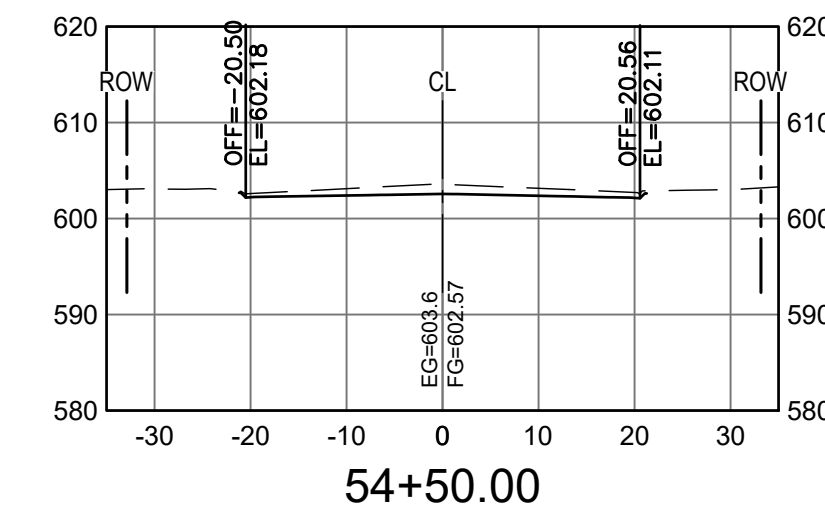
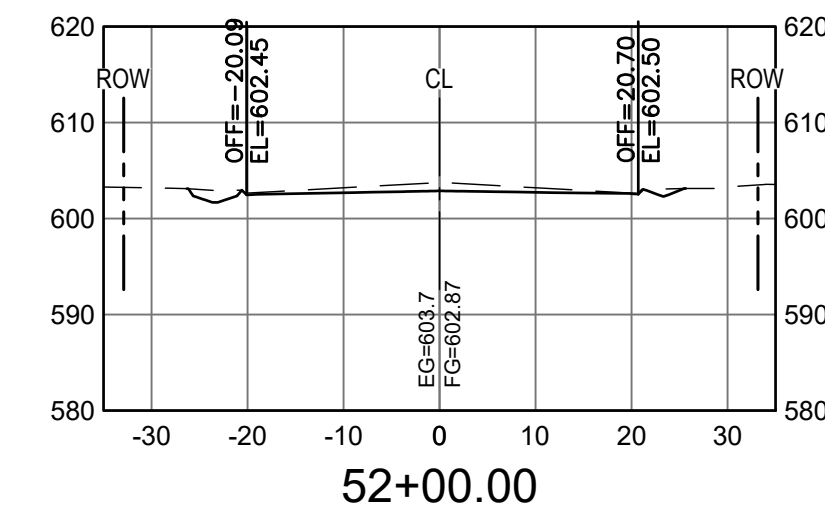
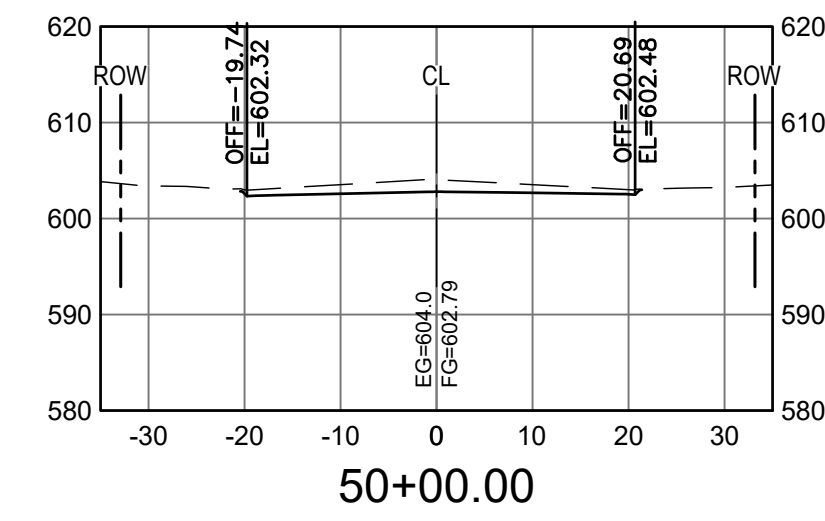
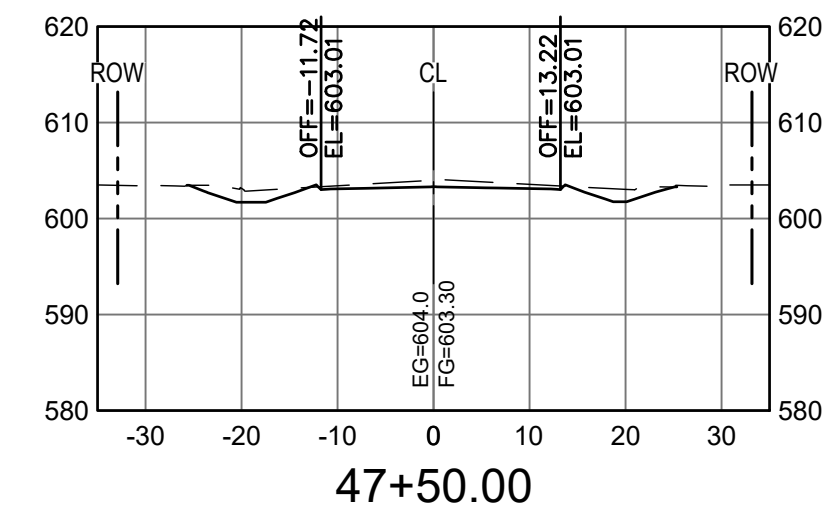
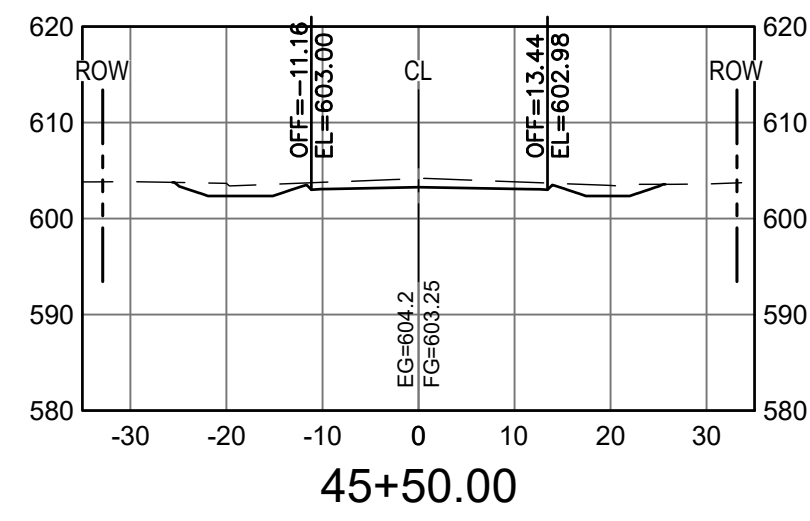
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**154TH STREET RECONSTRUCTION PROJECT**  
**CROSS SECTION 01**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-52**



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No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

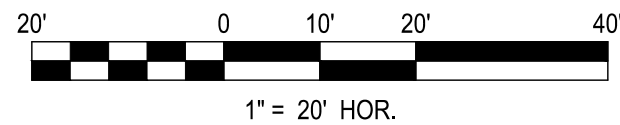
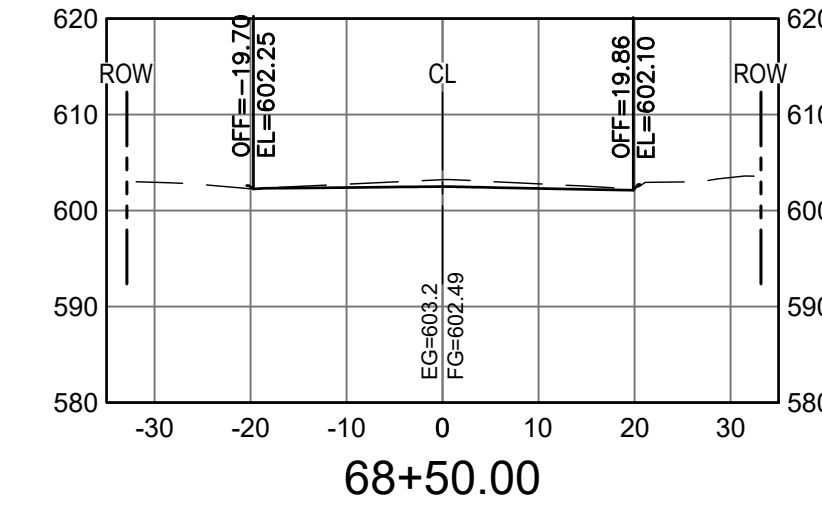
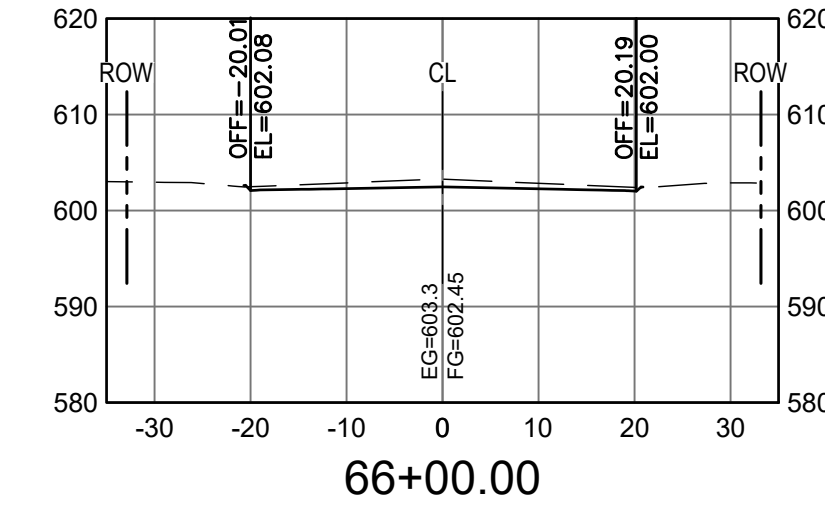
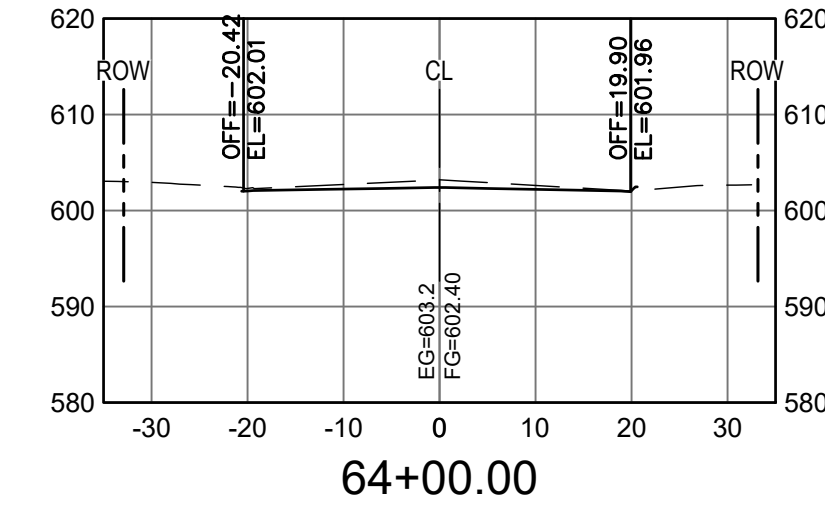
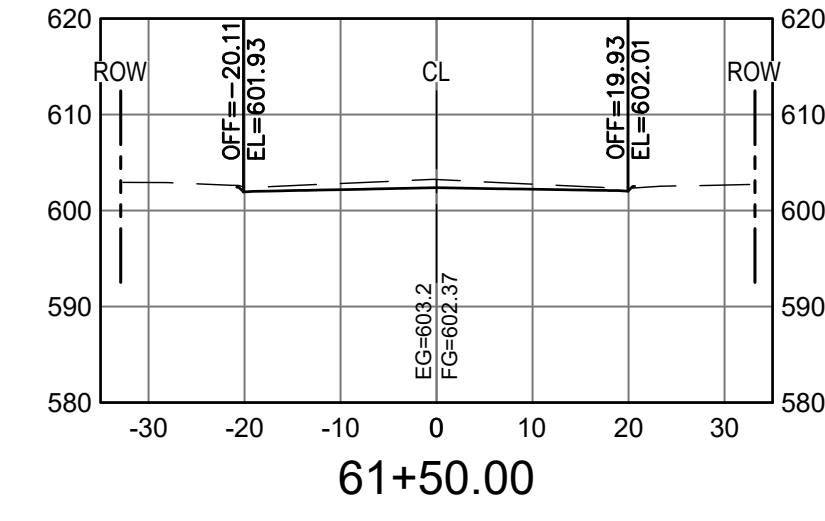
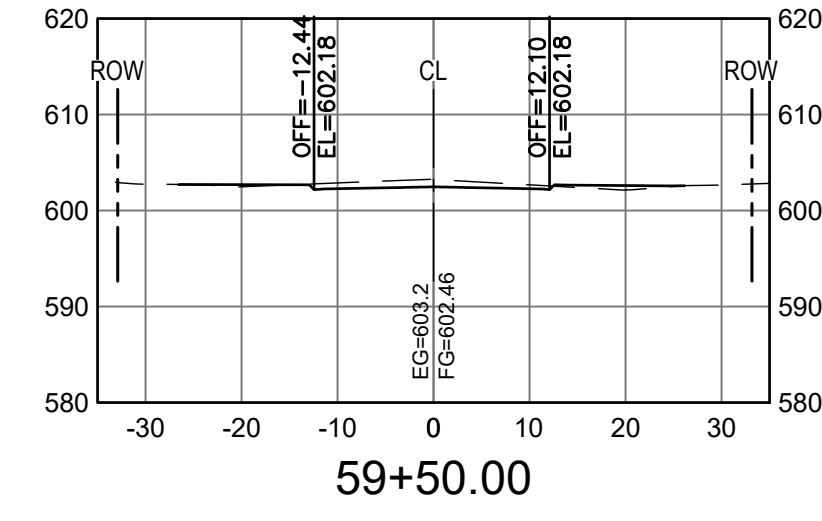
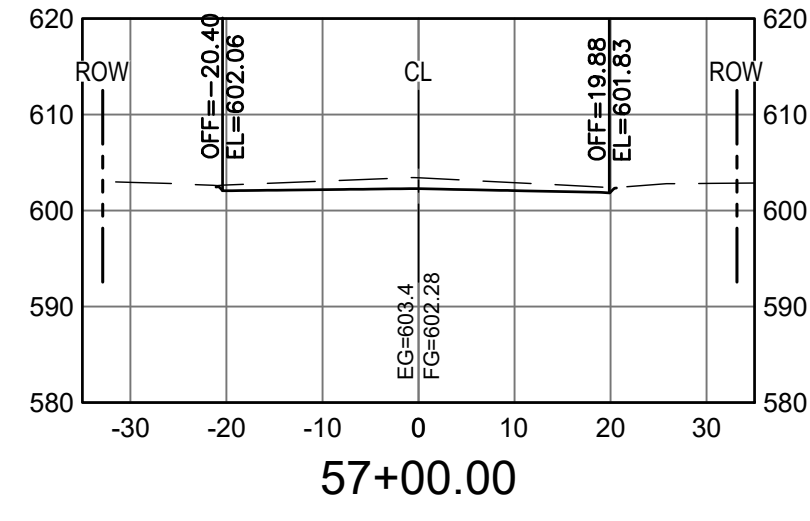
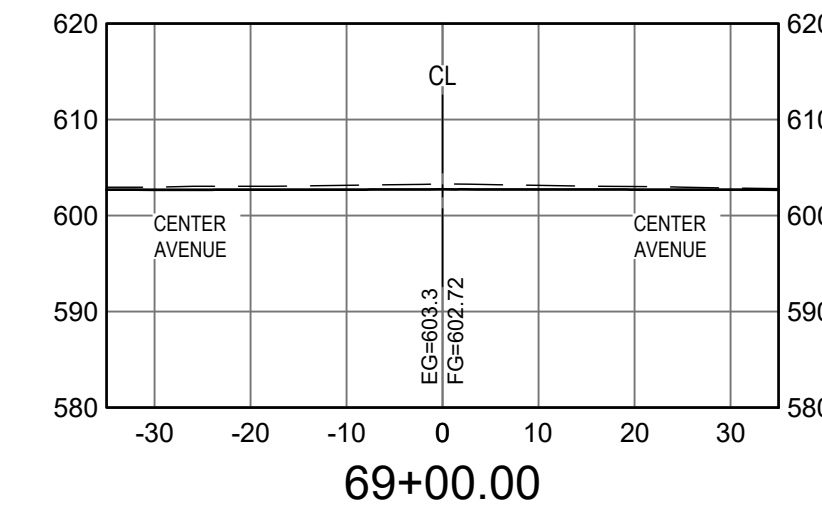
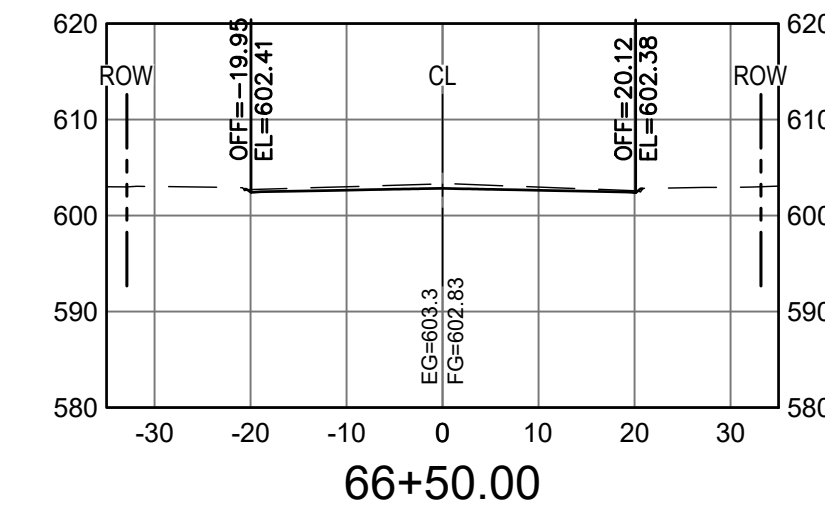
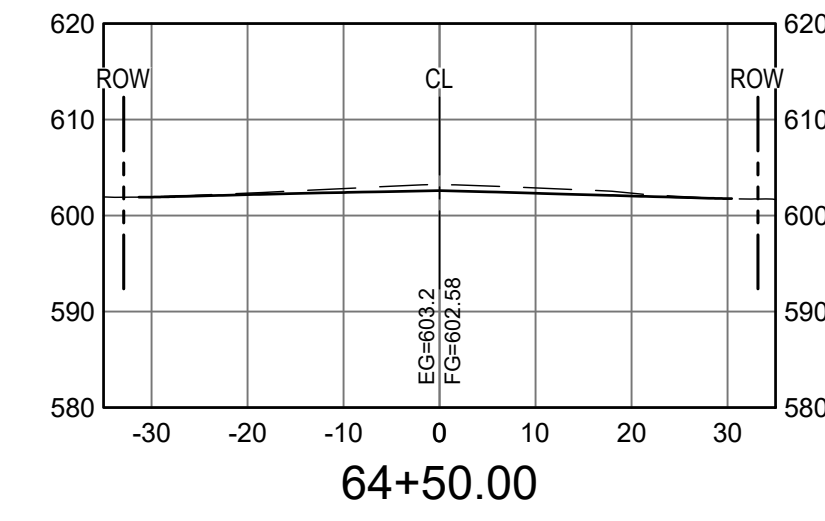
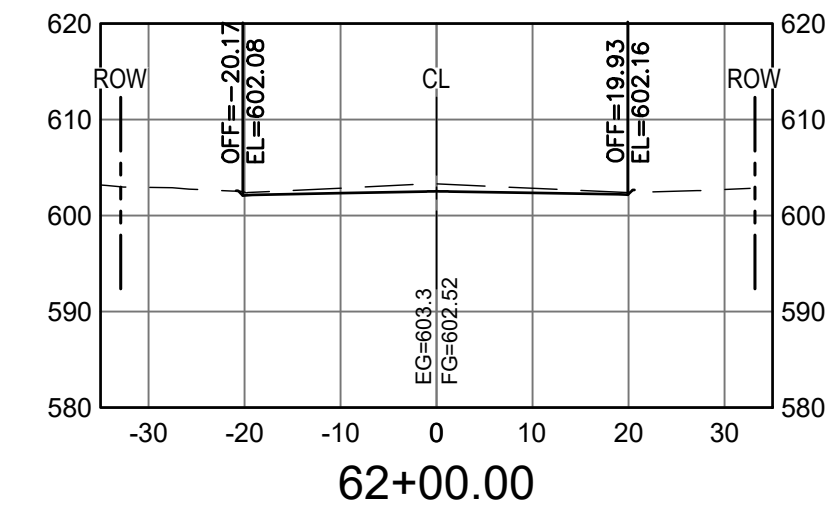
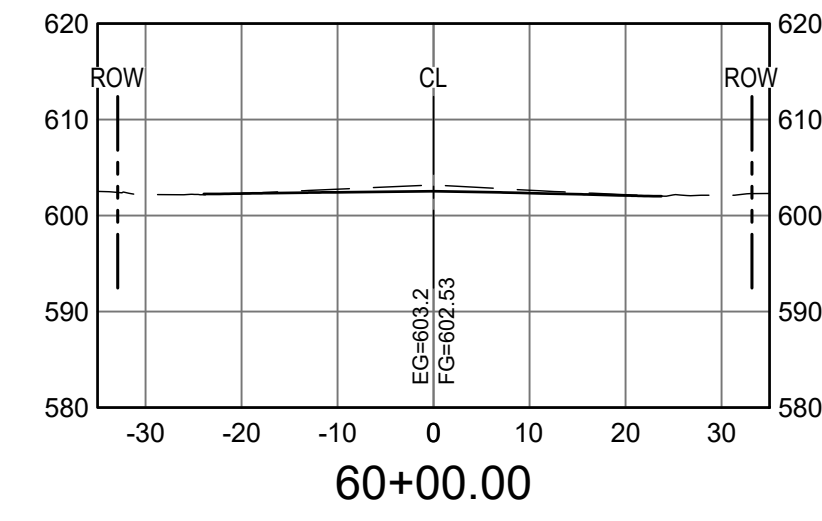
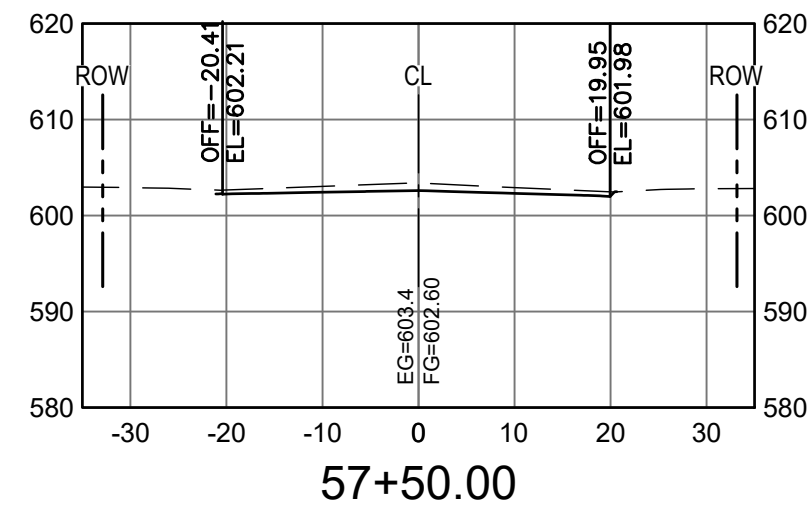
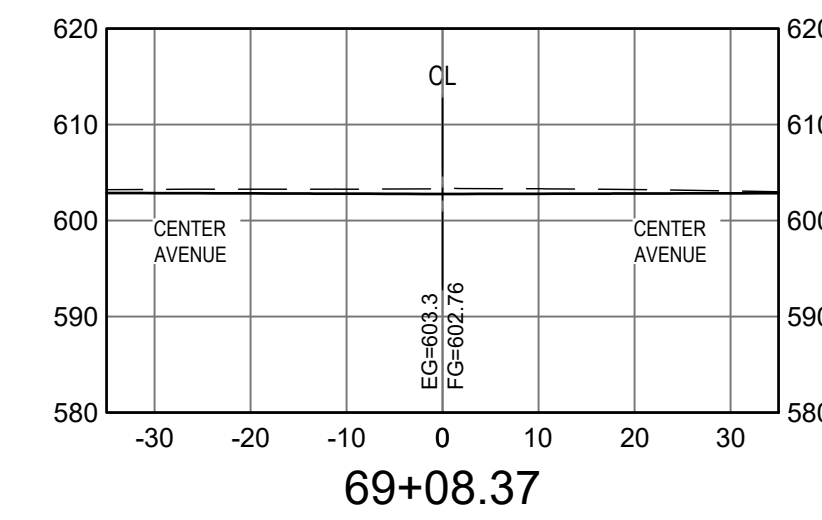
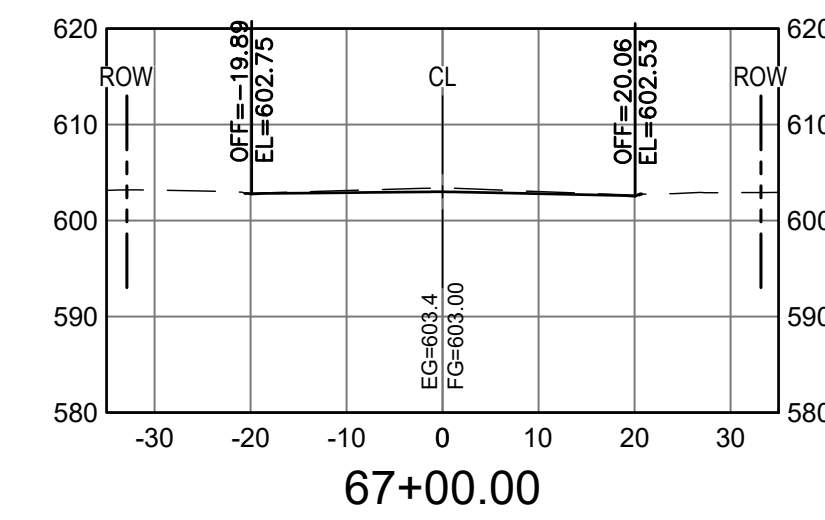
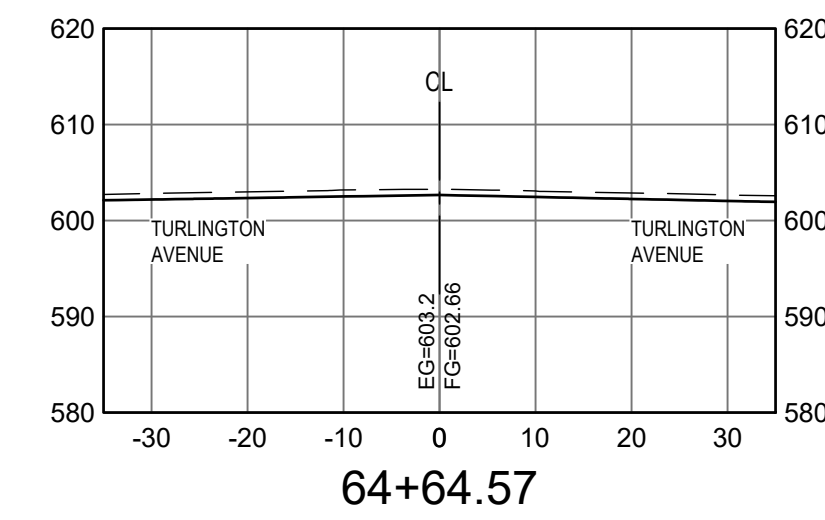
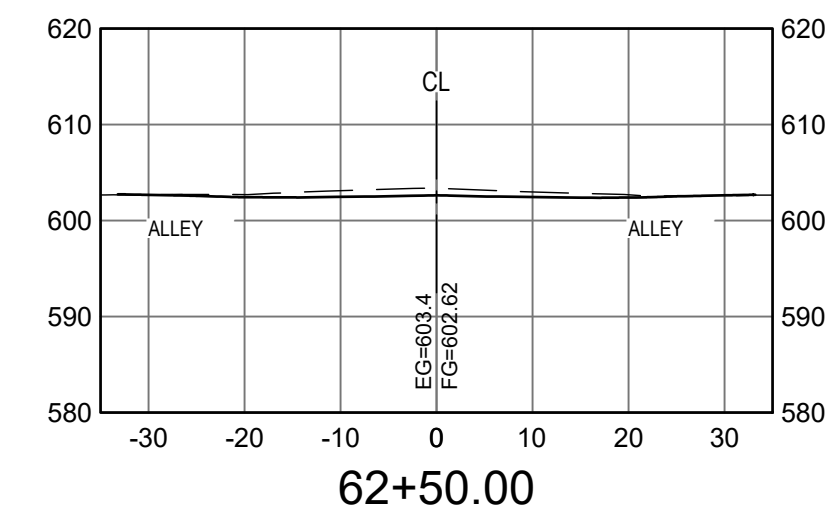
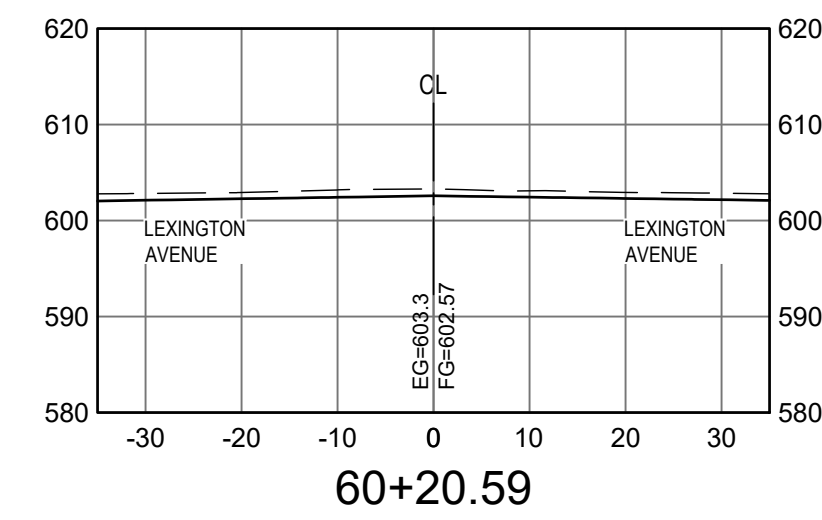
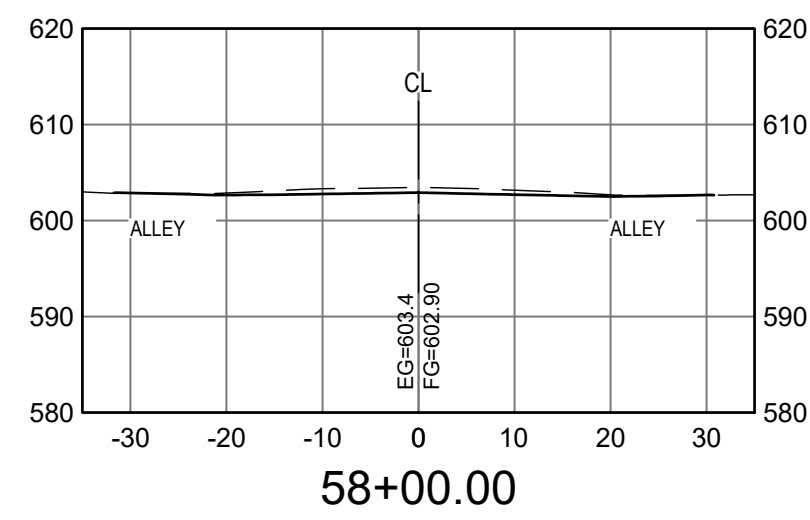
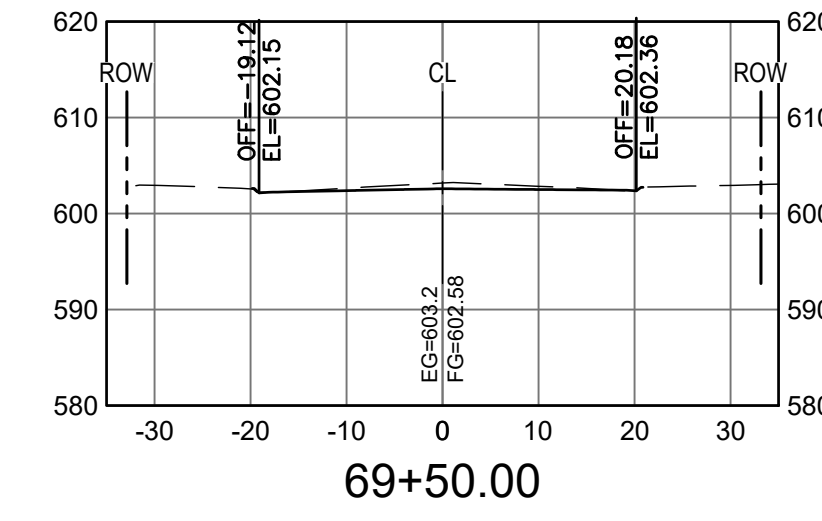
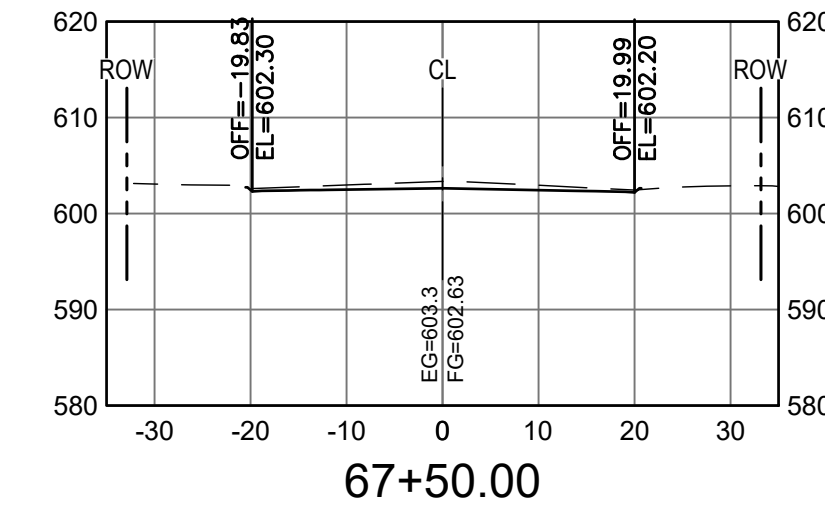
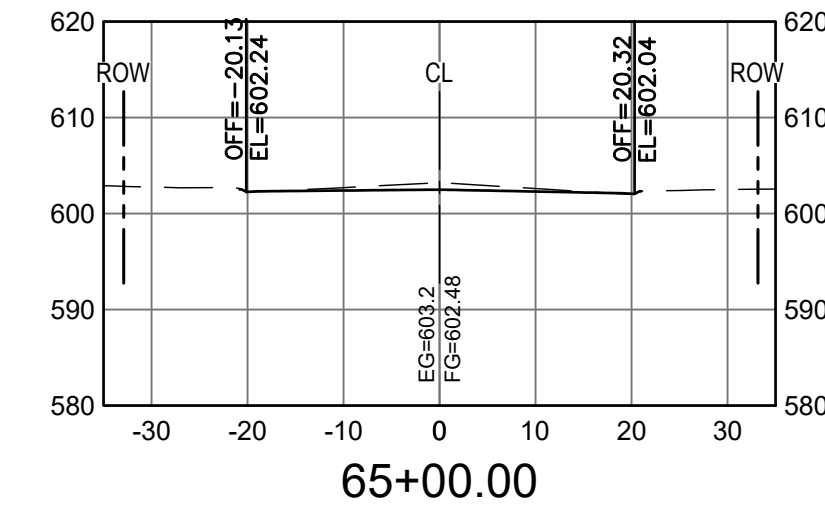
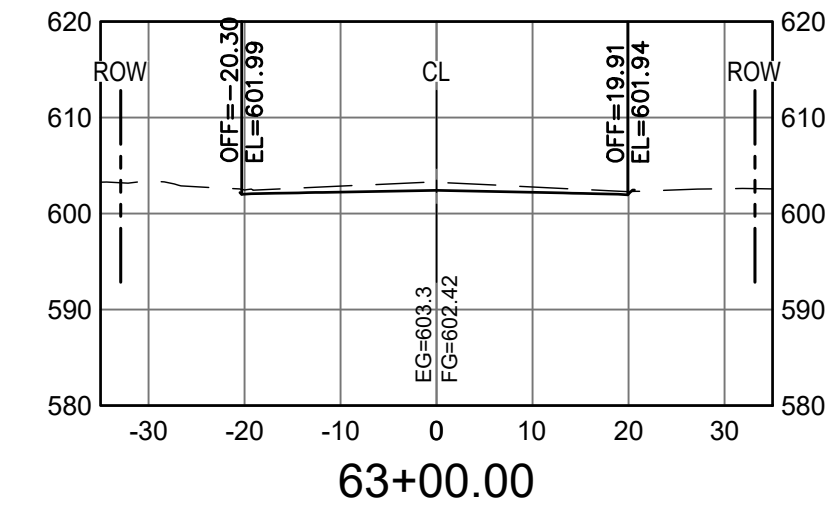
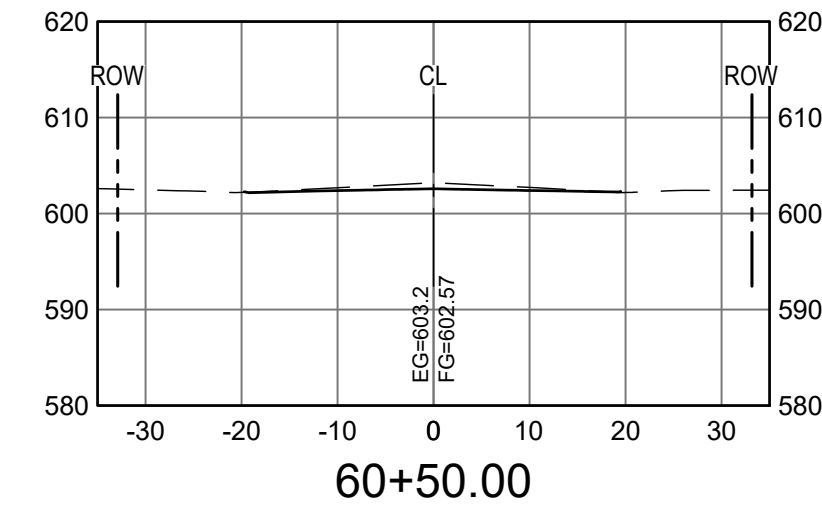
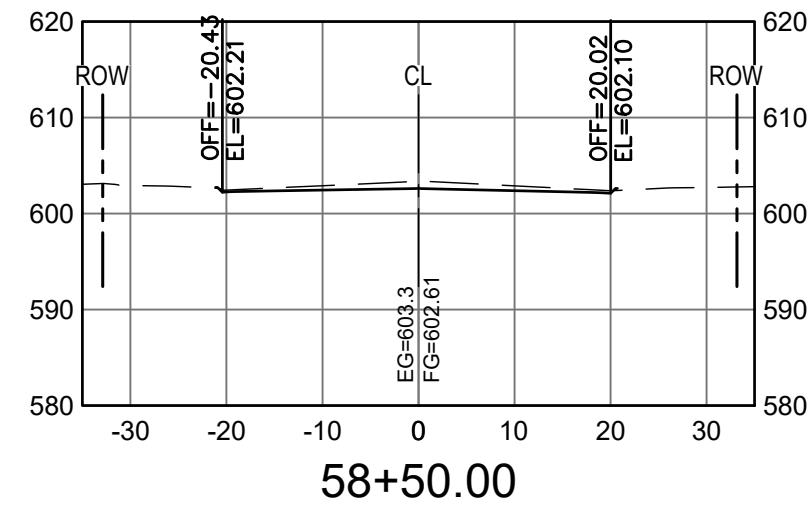
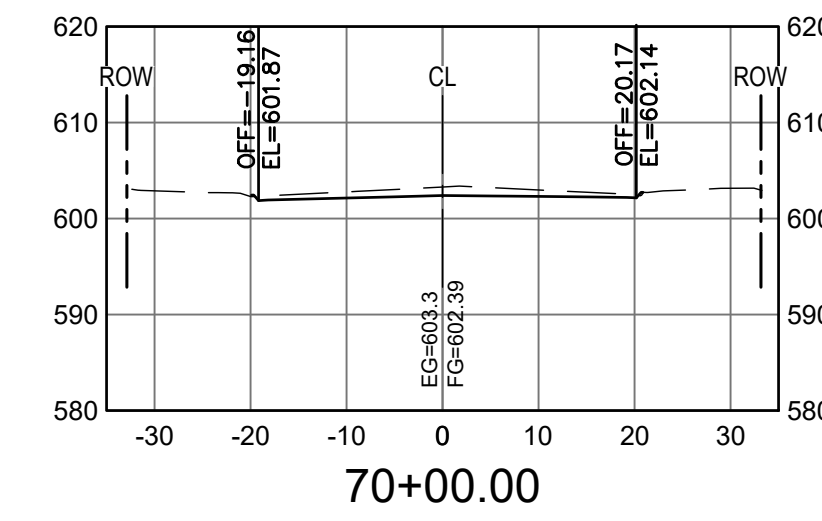
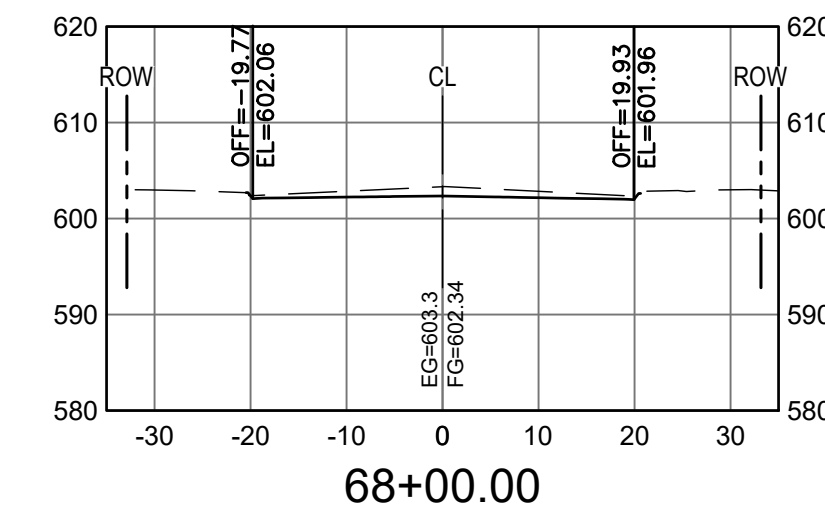
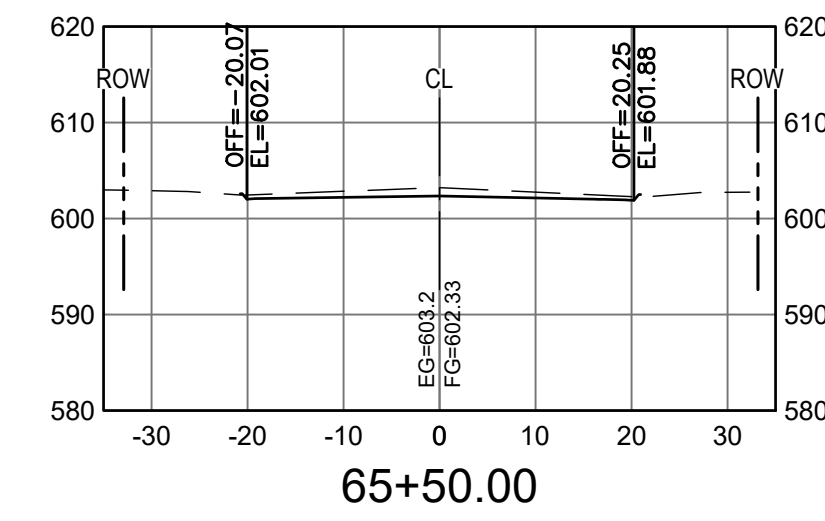
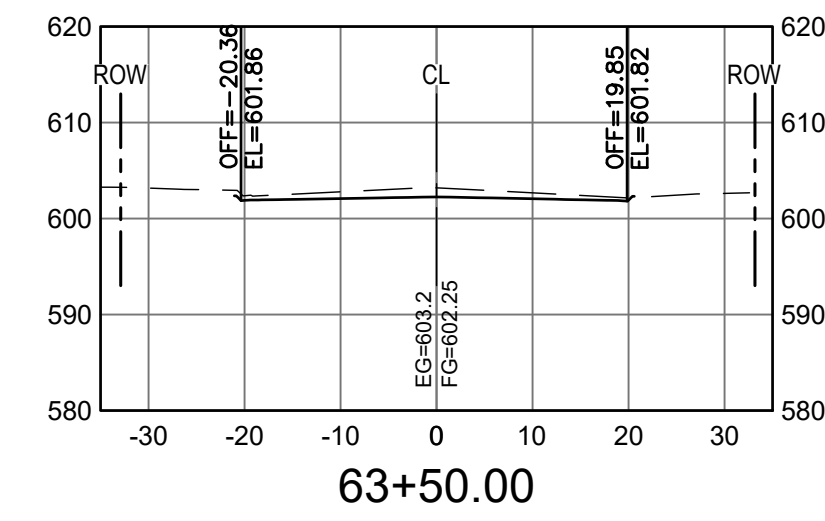
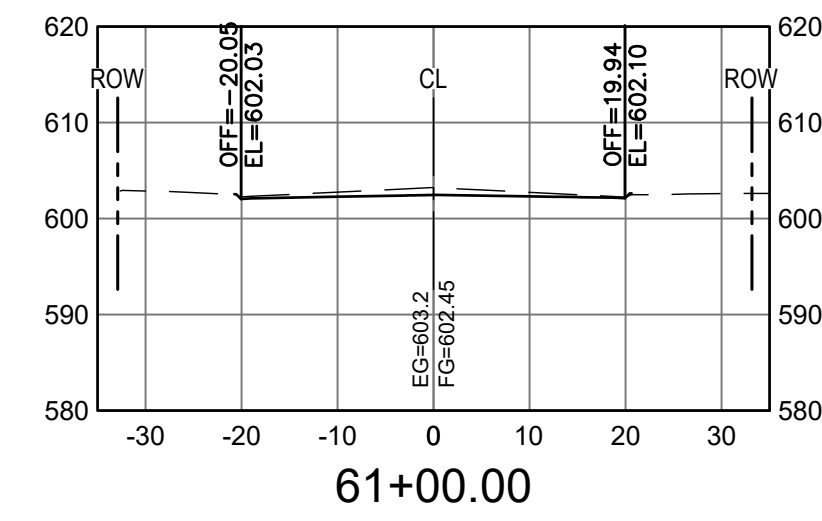
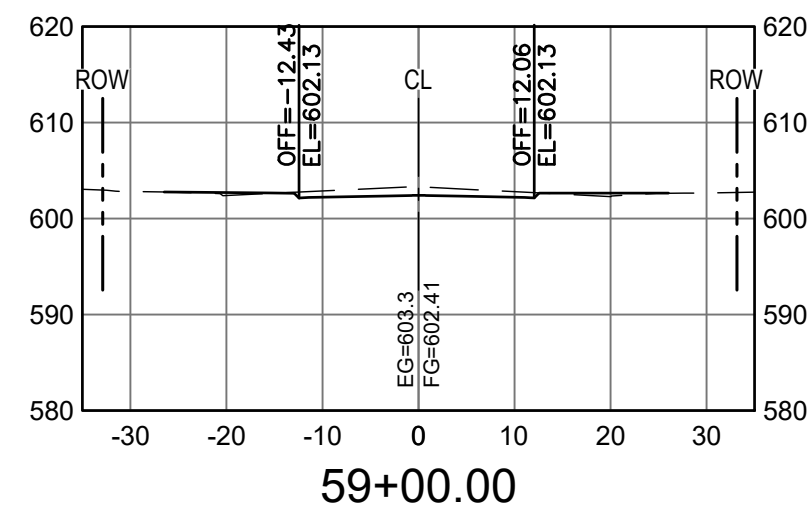


PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**CROSS SECTION 02**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-53**

File Location: C:\Users\jdyone\OneDrive - anterogroup.com\Documents - anterogroup.com\Documents - anterogroup.com\Projects\154th St Reconstruction\DWG\Sheets\CoH-2207-CROSS SECTIONS.dwg Plt Date: 4/15/2024 12:36 PM Last Saved By: 13037



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

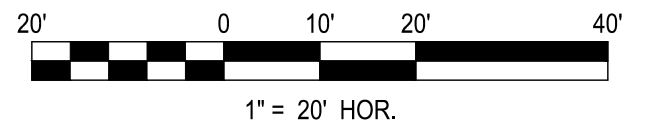
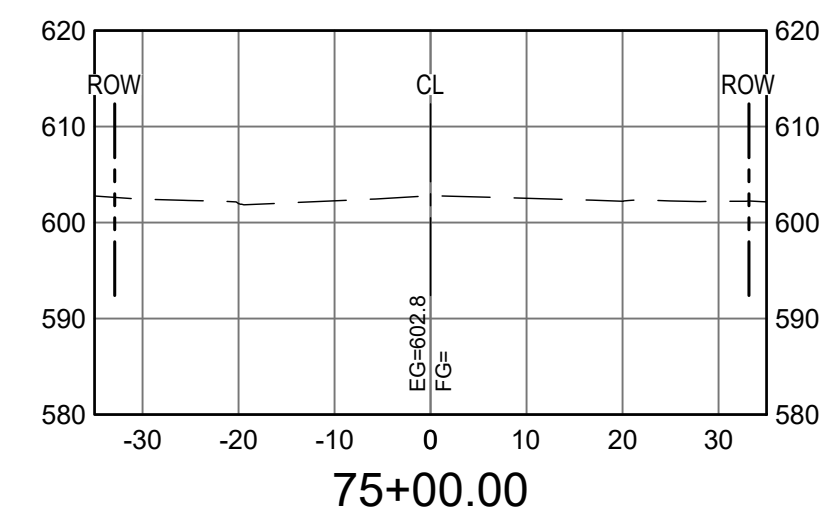
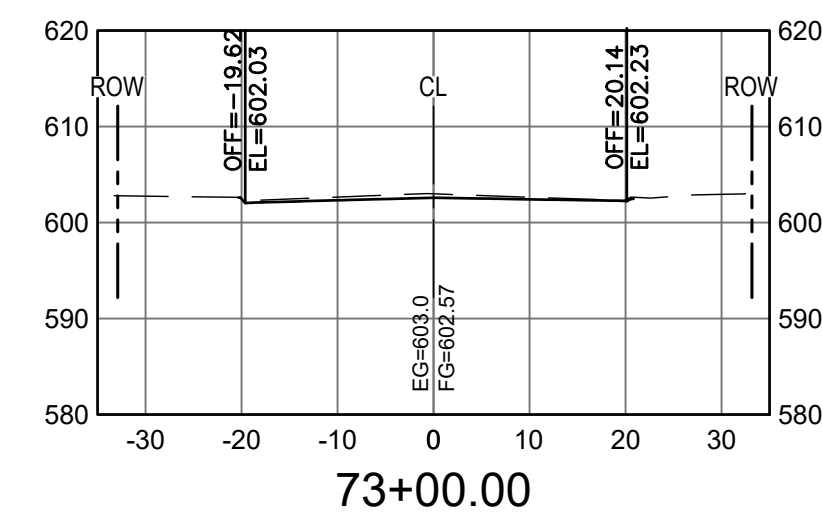
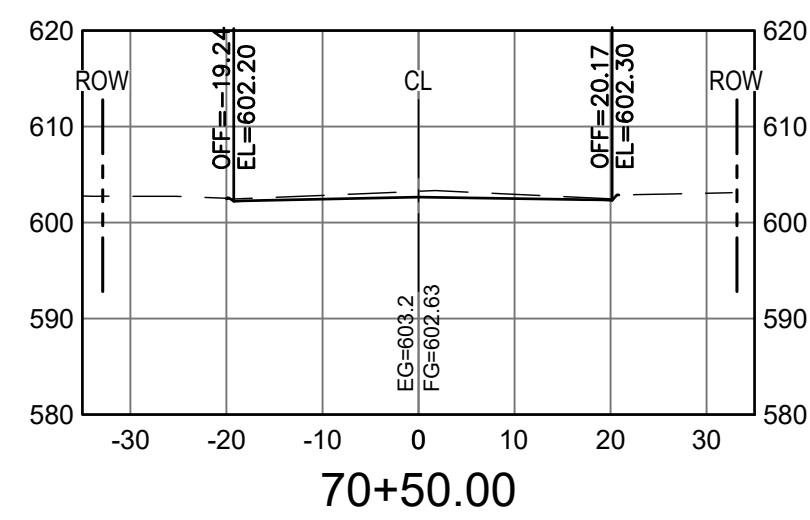
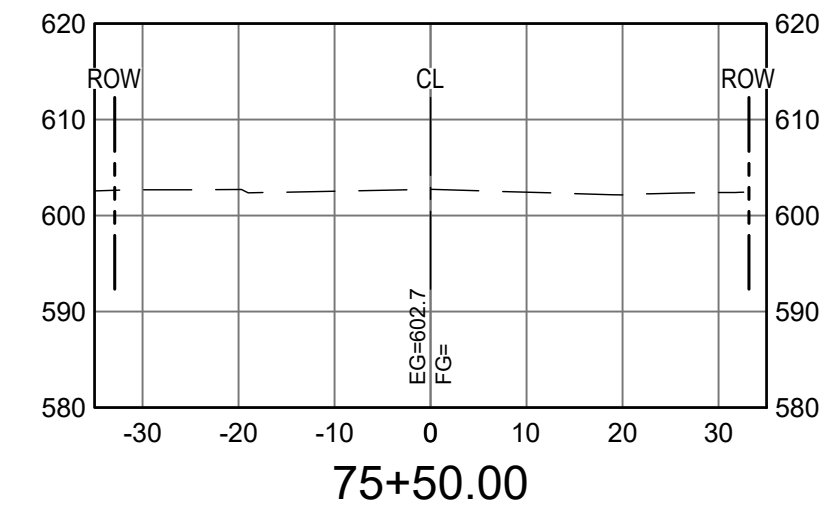
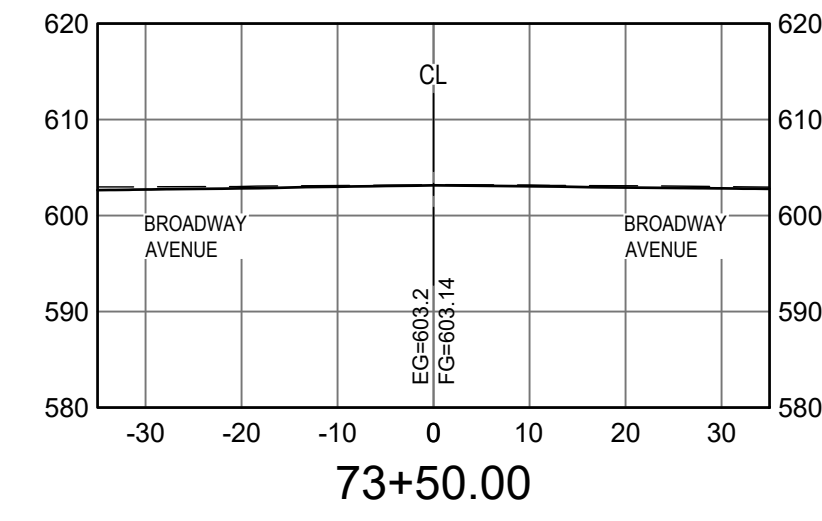
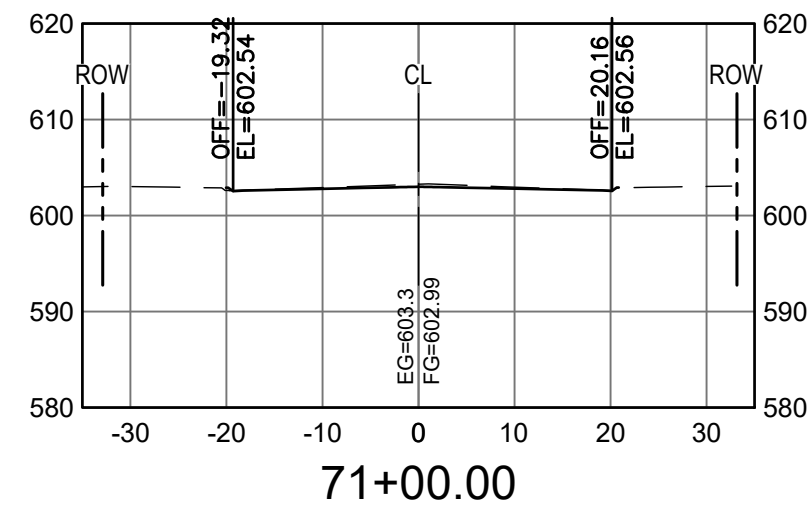
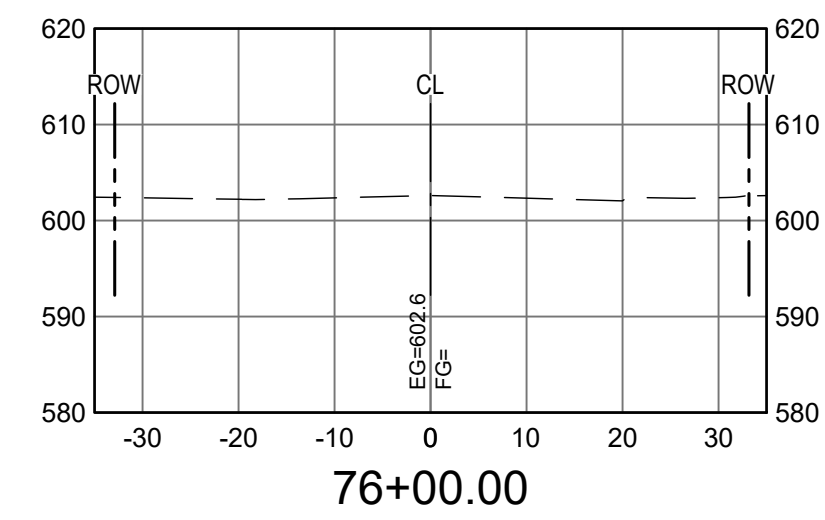
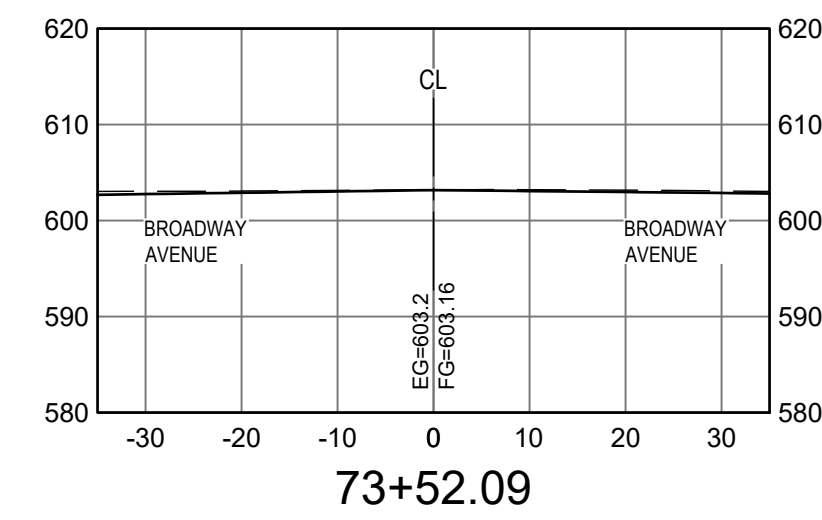
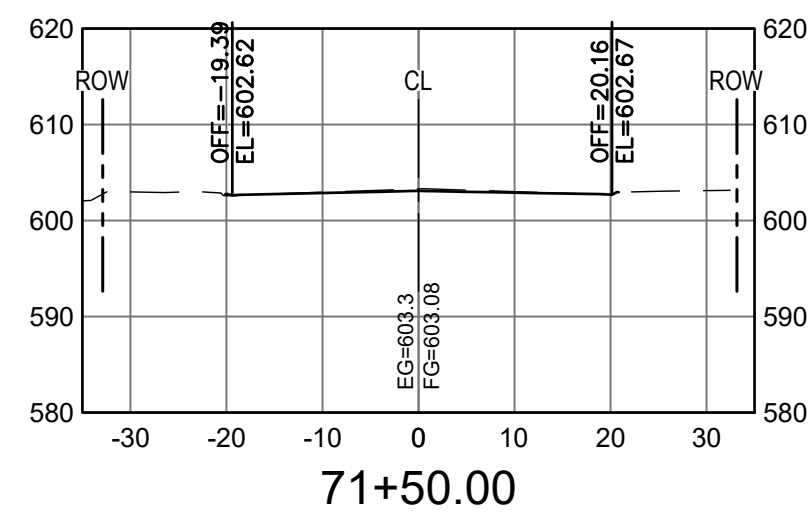
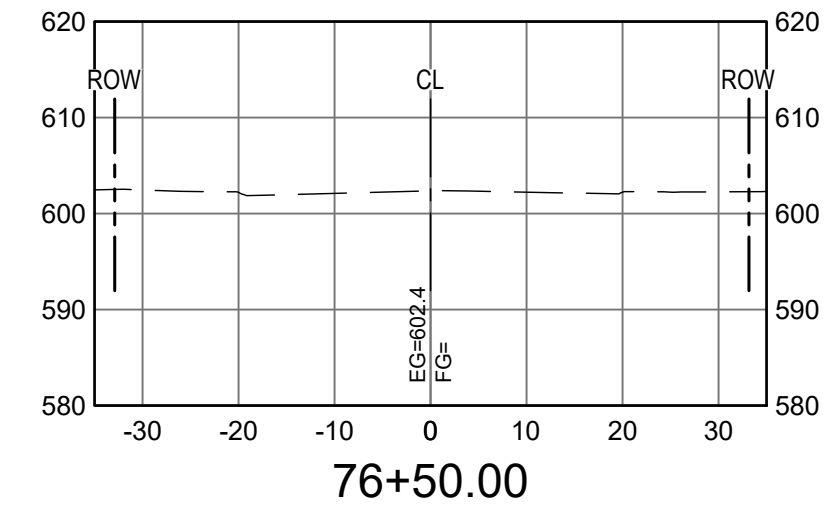
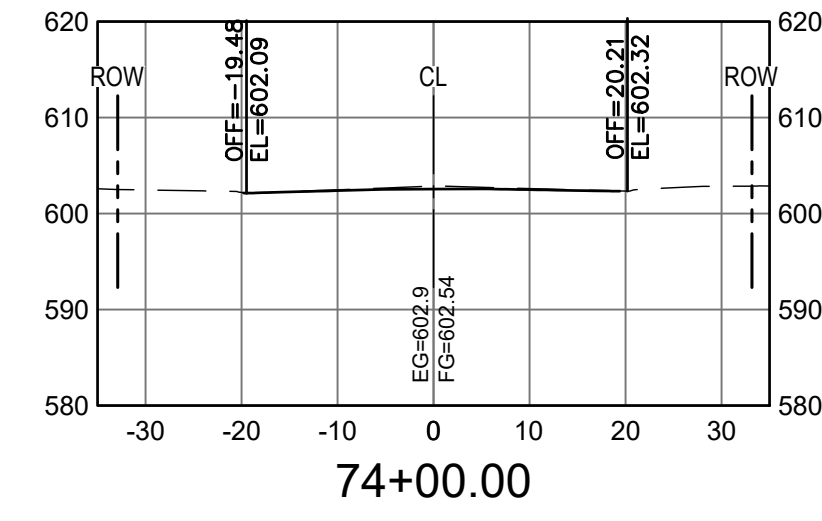
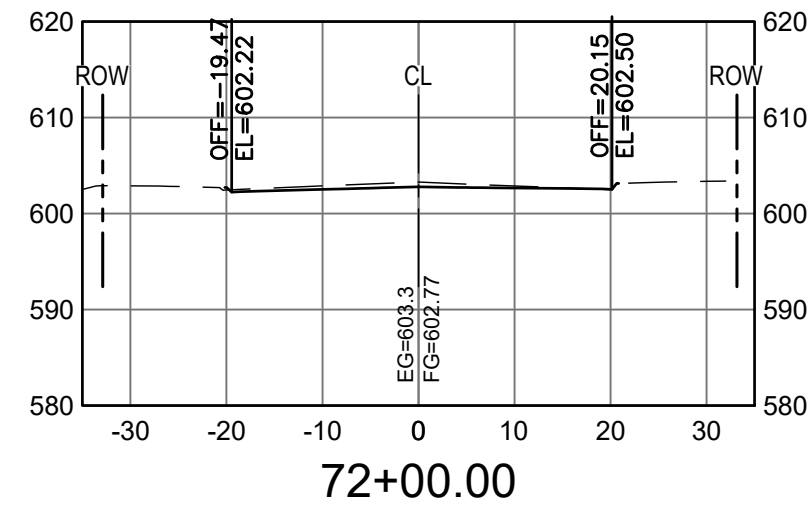
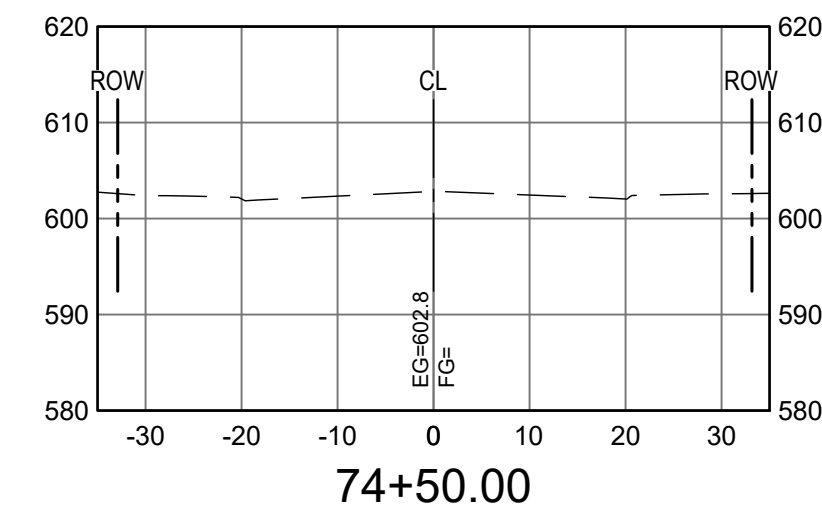
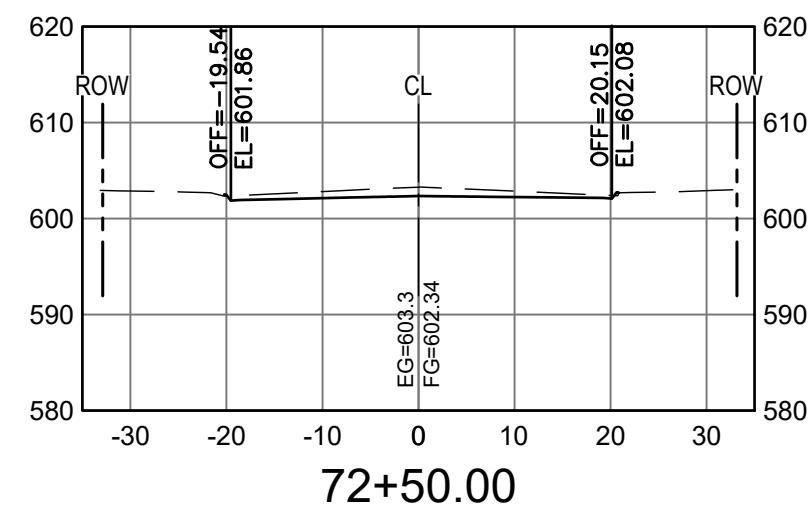


PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**CROSS SECTION 03**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-54**

File Location: C:\Users\jaye\onedrive - antero group\documents - antero group\Projects\154th st reconstruction\DWG\Sheets\CoH-2207-CROSS SECTIONS.dwg Pk1 Date: 4/15/2024 12:36 PM Last Saved By: 13037



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



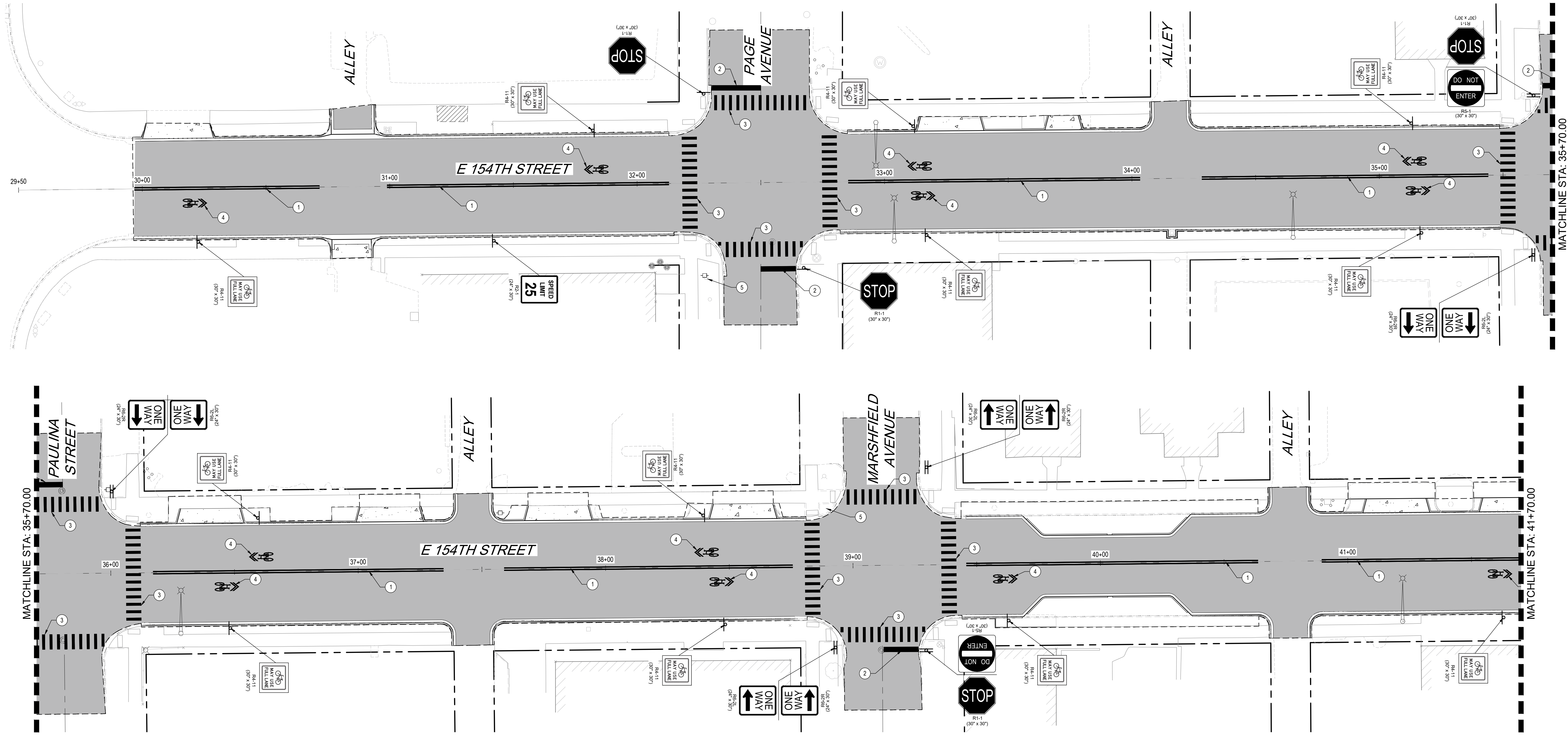
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 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**CROSS SECTION 04**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

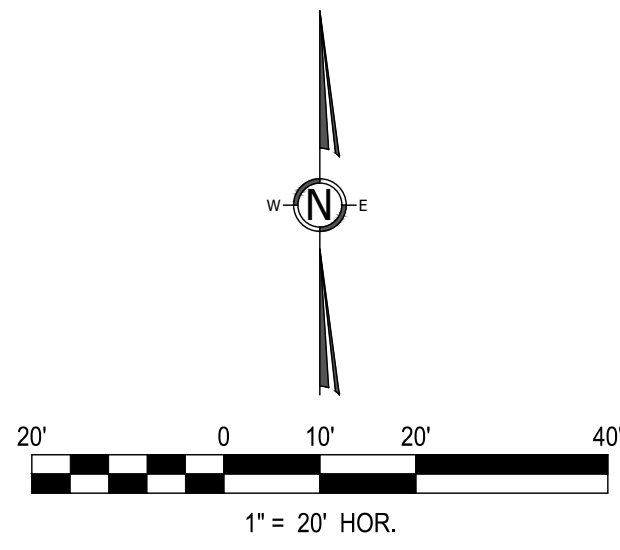
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 DATE  
 3/29/2024  
 SHEET  
**C-55**

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**LEGEND**

- ① CENTERLINE MARKING  
4" YELLOW, DOUBLE SOLID
- ② STOP BAR MARKING  
24" WHITE, SOLID
- ③ CROSSWALK MARKING  
12" WHITE, SOLID, 24" SPACING
- ④ WHITE SHARED LANE SYMBOL  
MARKING
- ⑤ REPLACE STREET NAME  
SIGNS



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

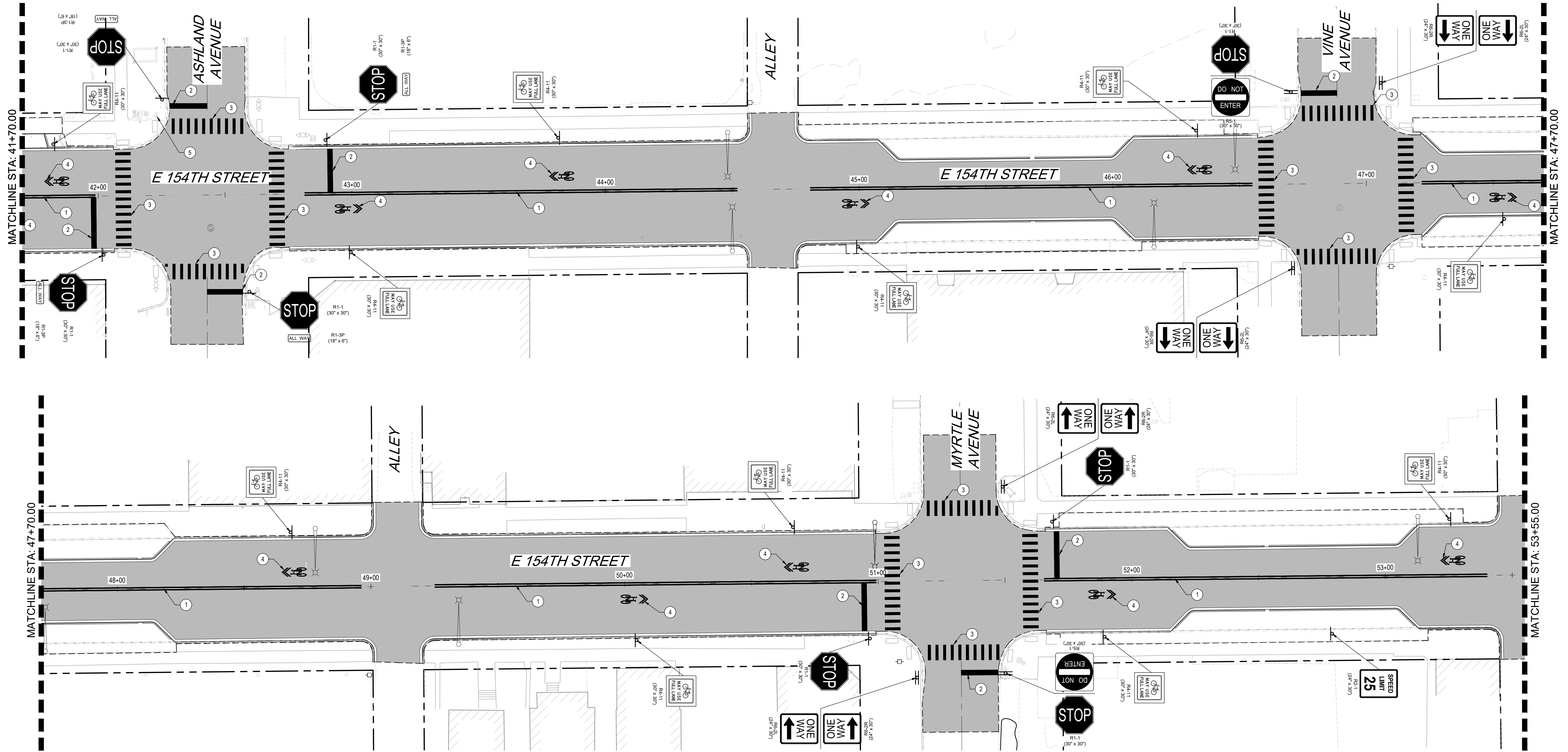


PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**SIGNAGE AND MARKING PLAN STA 29+50 TO 41+70**

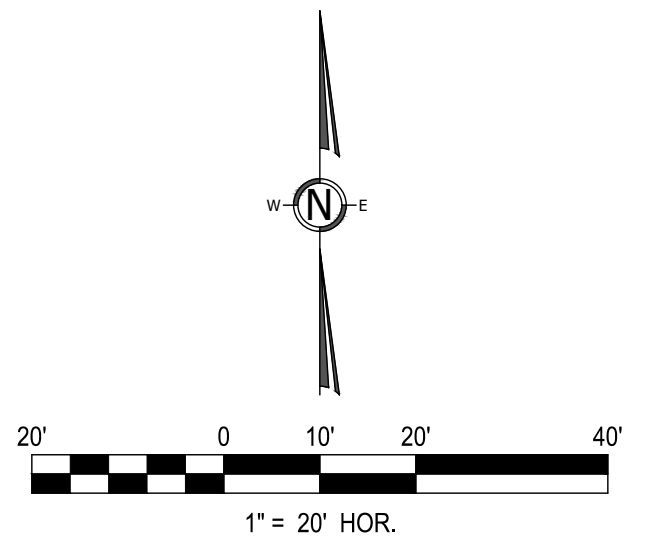
CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-56**



**LEGEND**

- ① CENTERLINE MARKING  
4" YELLOW, DOUBLE SOLID
- ② STOP BAR MARKING  
24" WHITE, SOLID
- ③ CROSSWALK MARKING  
12" WHITE, SOLID, 24" SPACING
- ④ WHITE SHARED LANE SYMBOL  
MARKING
- ⑤ REPLACE STREET NAME  
SIGNS



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

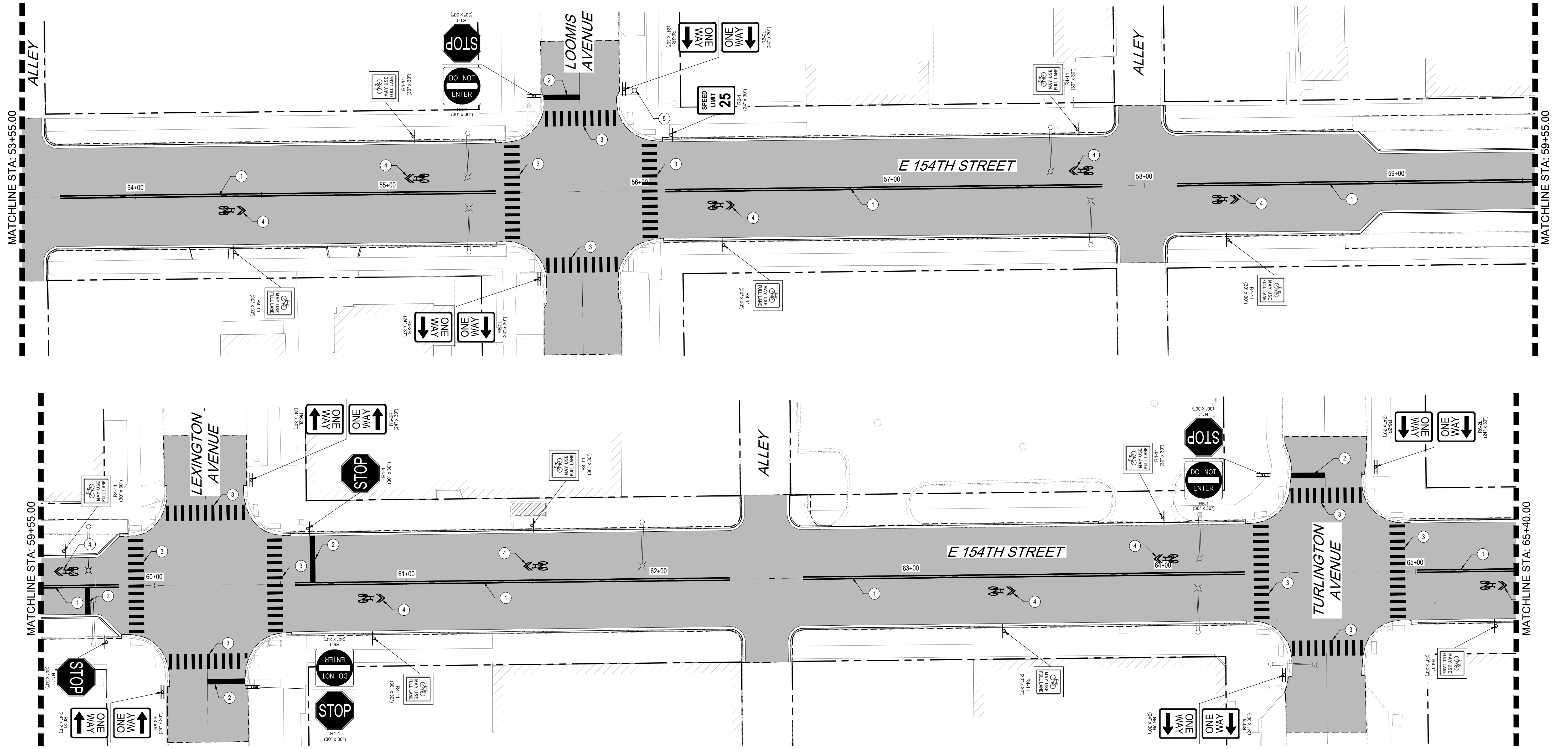


PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**SIGNAGE AND MARKING PLAN STA 41+70 TO 53+55**

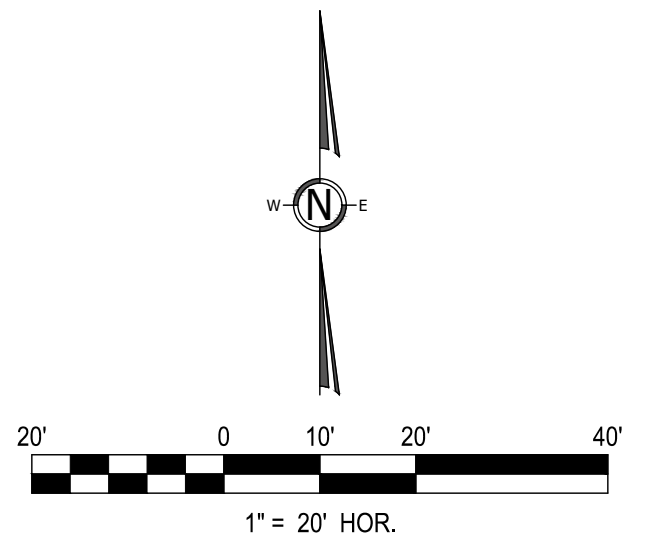
CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-57**



**LEGEND**

- ① CENTERLINE MARKING  
4" YELLOW, DOUBLE SOLID
- ② STOP BAR MARKING  
24" WHITE, SOLID
- ③ CROSSWALK MARKING  
12" WHITE, SOLID, 24" SPACING
- ④ WHITE SHARED LANE SYMBOL  
MARKING
- ⑤ REPLACE STREET NAME  
SIGNS



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



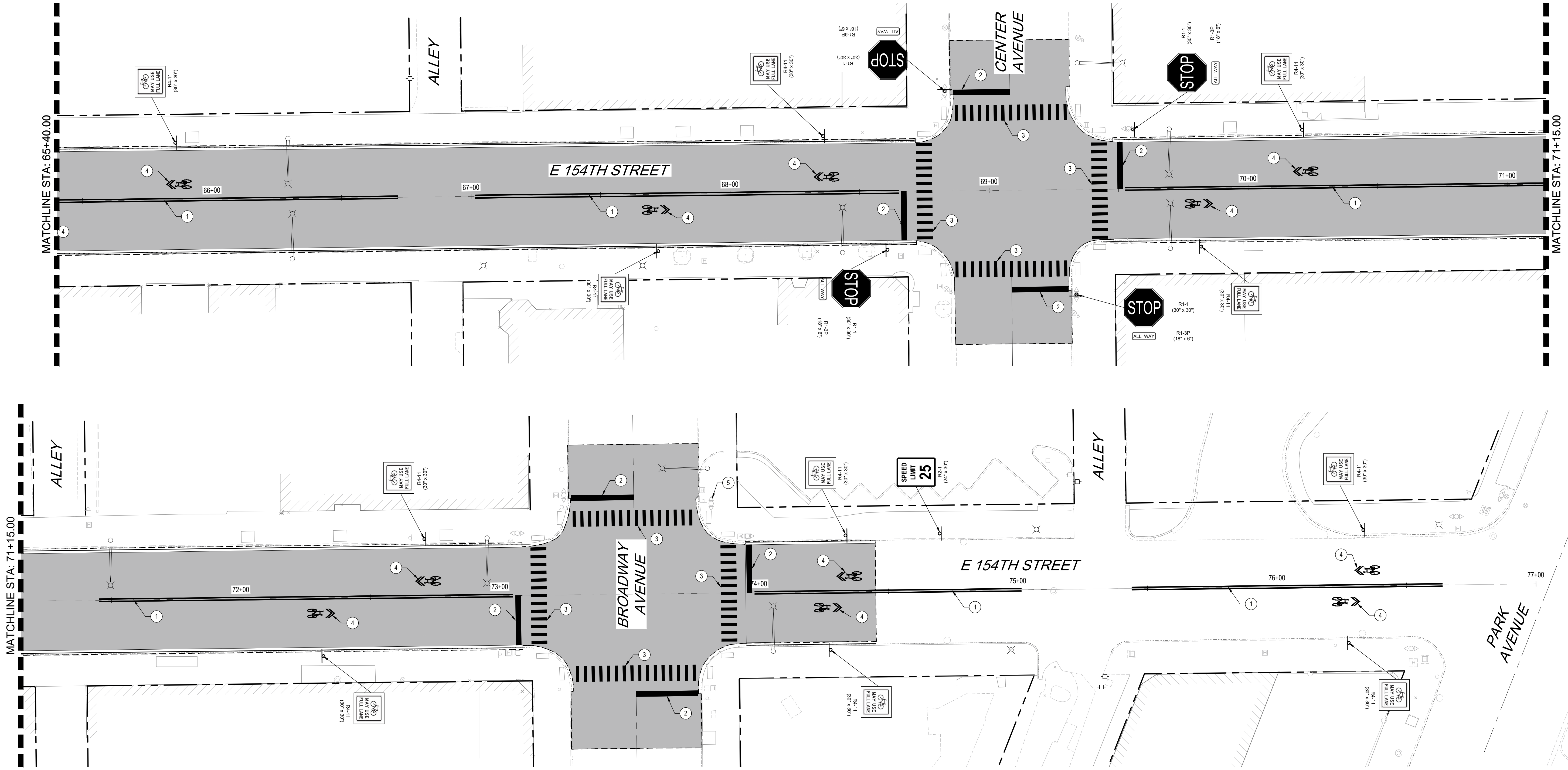
PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**SIGNAGE AND MARKING PLAN STA 53+55 TO 65+40**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

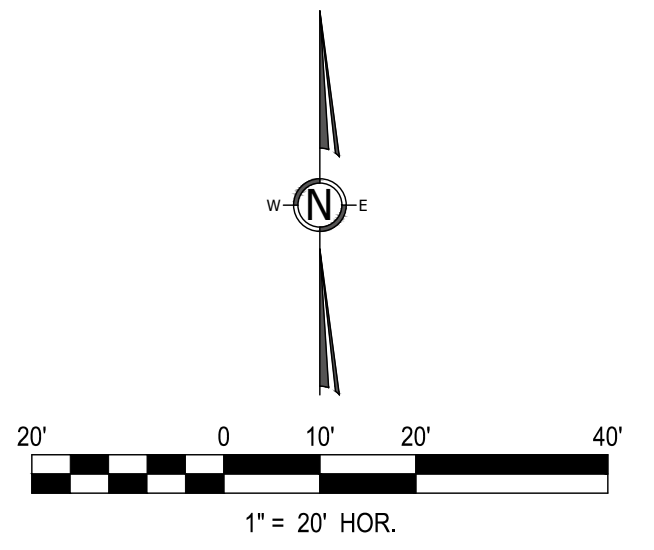
JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-58**

File Location: C:\Users\jaye\onedrive - antero group\documents - antero group\Projects\city of harvey\csh2207\_154th st reconstruction\DWG\Sheets\Csh+2207-Sgn and Stripe.dwg Plot Date: 4/15/2024 12:37 PM Last Saved By: LIZCHIPPE



**LEGEND**

- ① CENTERLINE MARKING  
4" YELLOW, DOUBLE SOLID
- ② STOP BAR MARKING  
24" WHITE, SOLID
- ③ CROSSWALK MARKING  
12" WHITE, SOLID, 24" SPACING
- ④ WHITE SHARED LANE SYMBOL  
MARKING
- ⑤ REPLACE STREET NAME  
SIGNS



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

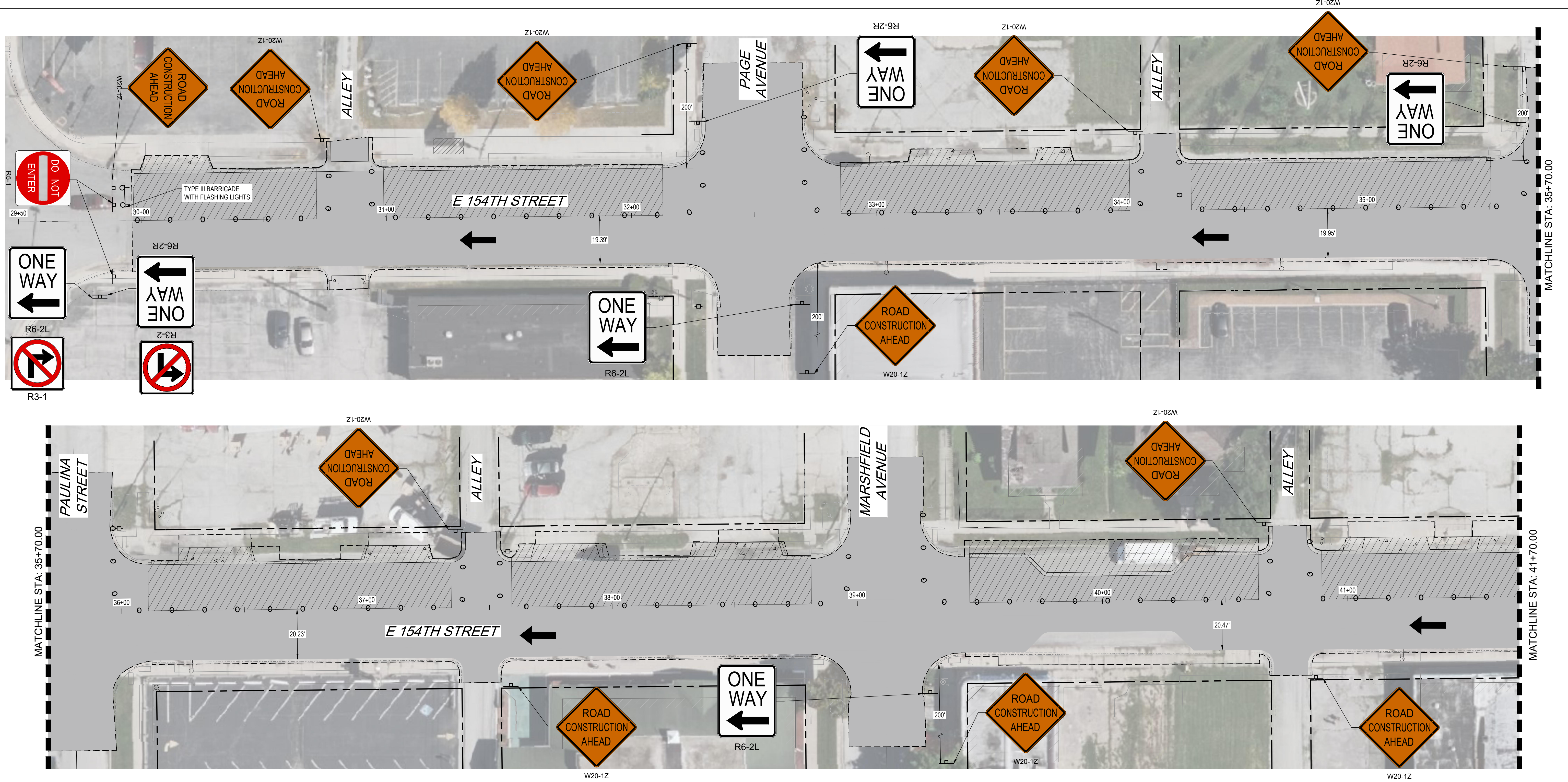


PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**SIGNAGE AND MARKING PLAN STA 65+40 TO 77+00**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-59**

File Location: C:\Users\jaye\OneDrive - antero group\Documents - antero group\Projects\City of Harvey\154th St Reconstruction\DWG\Sheets\CoH-2207-PHS1.dwg Plot Date: 4/15/2024 12:37 PM Last Saved By: JEKEG

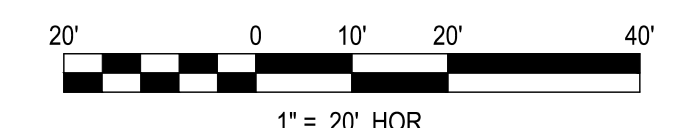
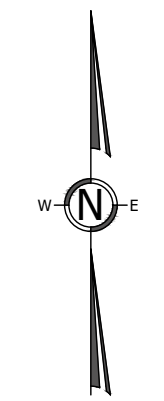


**LEGEND**

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- DRUM
- TRAFFIC FLOW

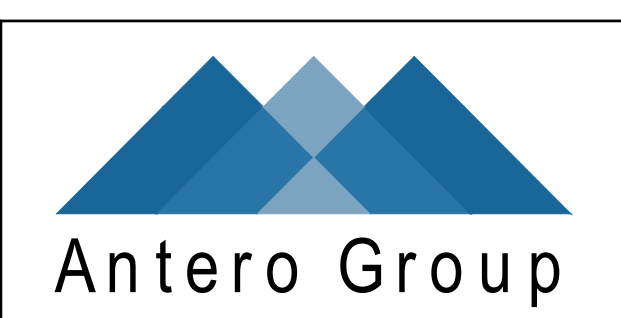
**NOTES:**

1. PHASE ONE CONSTRUCTION SHALL CONSIST OF DEMOLITION, CURBING, PAVING, UTILITY RELOCATION, AND STORM STRUCTURE AND PIPE INSTALLATION ON THE NORTH SIDE OF THE CENTERLINE OF 154TH STREET.
2. NO PARKING PERMITTED ON 154TH STREET DURING CONSTRUCTION.
3. DRUMS ARE TO BE USED TO SEPARATE TRAFFIC FROM WORK AREA.
4. SEE ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL DETAILS SHEET.
5. EACH INTERSECTION TO BE CLOSED FOR THE LEAST PRACTICABLE AMOUNT OF TIME. SEE TYPICAL INTERSECTION CLOSURE DETAIL.
6. SIDEWALKS ON SIDE OF ROAD UNDER CONSTRUCTION TO BE CLOSED. SEE TYPICAL SIDEWALK CLOSURE DETAIL.
7. SEE DETOUR SIGNAGE DETAIL.
8. CONTRACTOR RESPONSIBLE FOR MAINTAINING ACCESS TO ALL RESIDENCES AND BUSINESSES.
9. CONTRACTOR TO COORDINATE WITH PACE SUBURBAN BUS ON LANE CLOSURE AND BUS STOP CLOSURE.



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

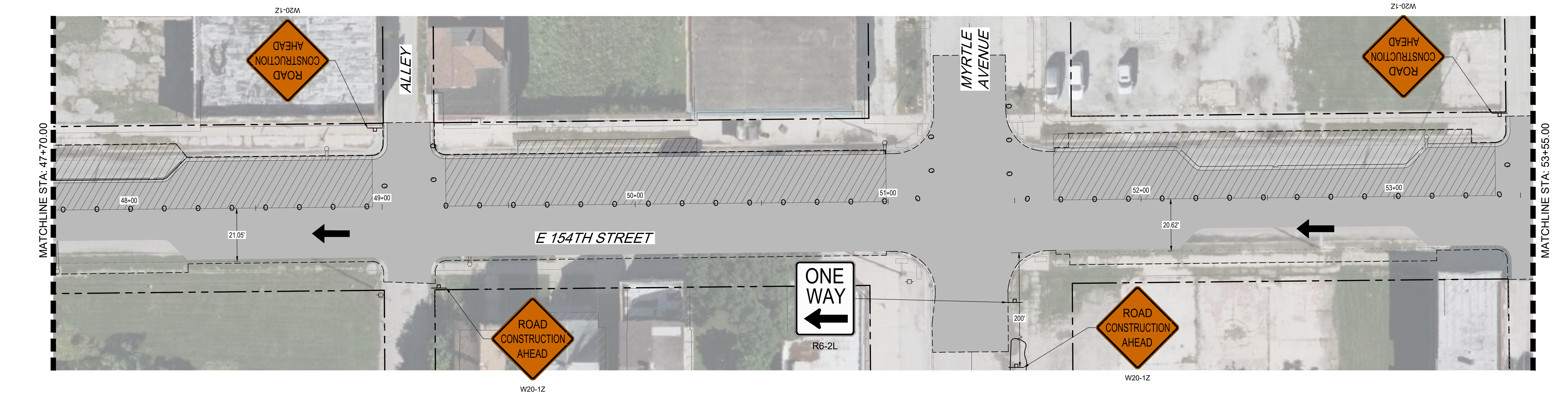
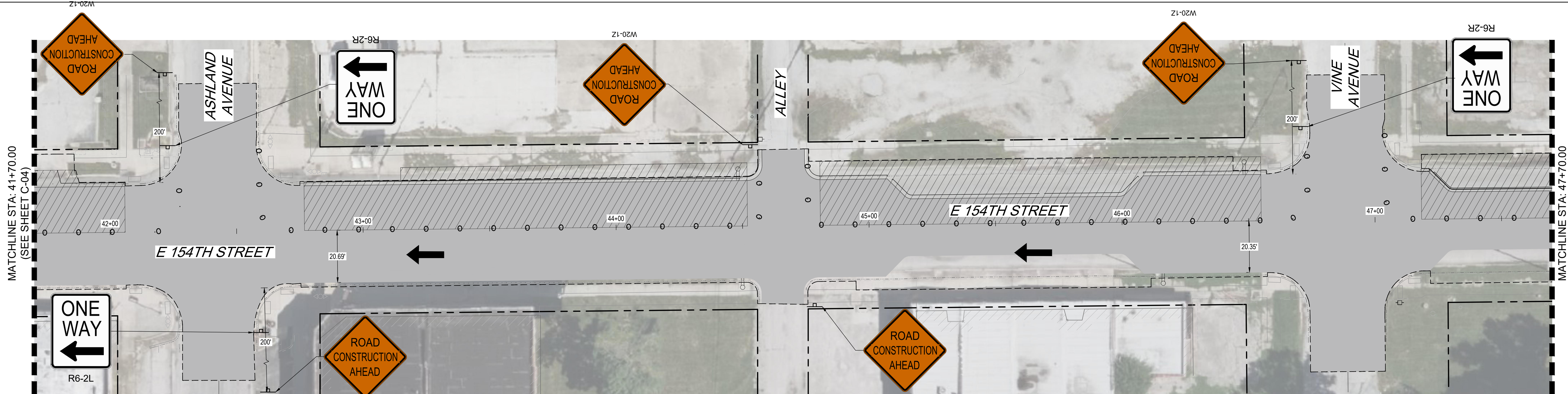
**154TH STREET RECONSTRUCTION PROJECT**  
**TRAFFIC CONTROL PLAN PHASE 1**  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-60**





File Location: C:\Users\jaye\onedrive - antero group\Documents - antero group\Projects\City of Harvey\154th St Reconstruction\DWG\Sheets\CoH-2207-PHS1.dwg Plot Date: 4/15/2024 12:37 PM Last Saved By: JEKEG

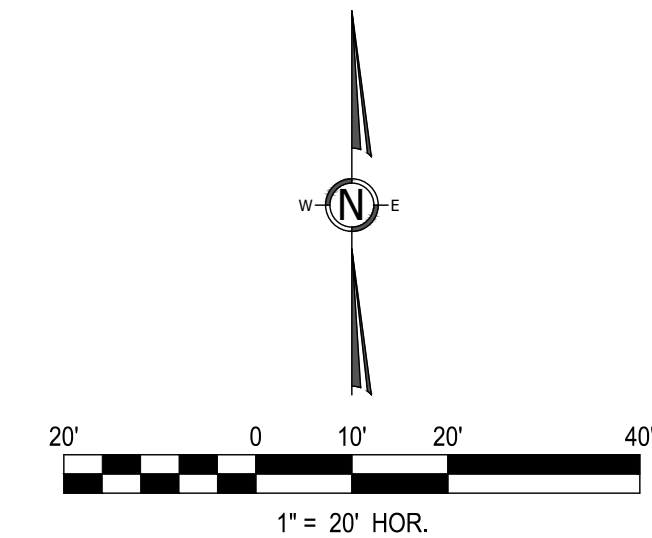


**LEGEND**

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- DRUM
- TRAFFIC FLOW

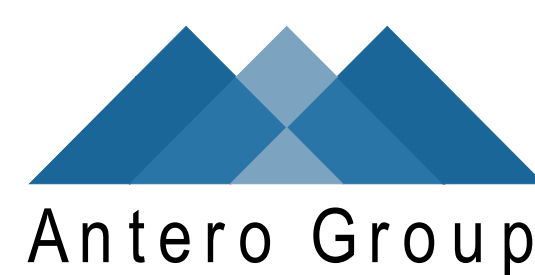
**NOTES:**

1. PHASE ONE CONSTRUCTION SHALL CONSIST OF DEMOLITION, CURBING, PAVING, UTILITY RELOCATION, AND STORM STRUCTURE AND PIPE INSTALLATION ON THE NORTH SIDE OF THE CENTERLINE OF 154TH STREET.
2. NO PARKING PERMITTED ON 154TH STREET DURING CONSTRUCTION.
3. DRUMS ARE TO BE USED TO SEPARATE TRAFFIC FROM WORK AREA.
4. SEE ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL DETAILS SHEET.
5. EACH INTERSECTION TO BE CLOSED FOR THE LEAST PRACTICABLE AMOUNT OF TIME. SEE TYPICAL INTERSECTION CLOSURE DETAIL.
6. SIDEWALKS ON SIDE OF ROAD UNDER CONSTRUCTION TO BE CLOSED. SEE TYPICAL SIDEWALK CLOSURE DETAIL.
7. SEE DETOUR SIGNAGE DETAIL.
8. CONTRACTOR RESPONSIBLE FOR MAINTAINING ACCESS TO ALL RESIDENCES AND BUSINESSES.
9. CONTRACTOR TO COORDINATE WITH PACE SUBURBAN BUS ON LANE CLOSURE AND BUS STOP CLOSURE.



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



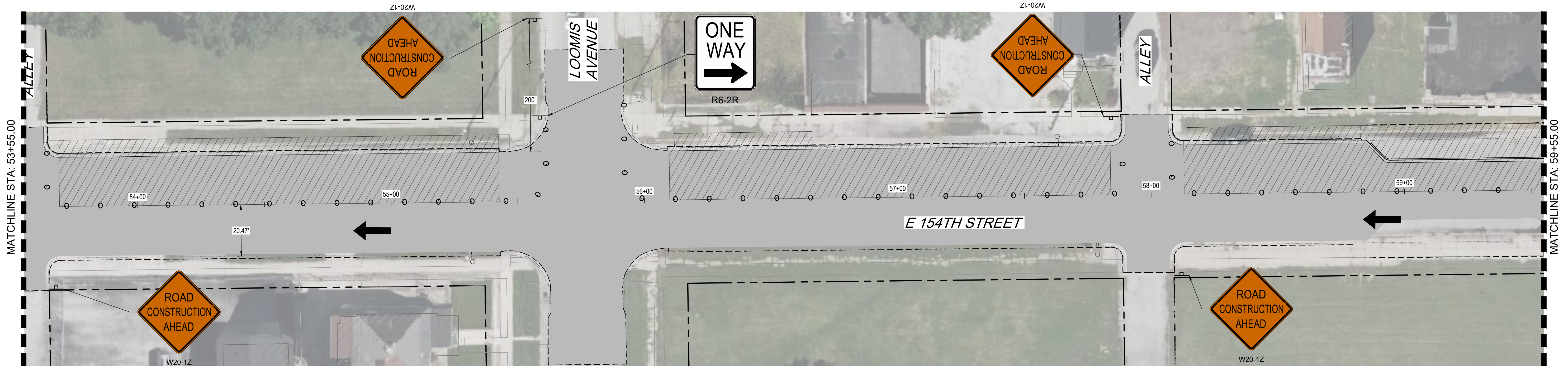
PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**TRAFFIC CONTROL PLAN PHASE 1**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-61**

File Location: C:\Users\jaye\OneDrive - antero group\Documents - antero group\Projects\City of Harvey\154th st reconstruction\DWG\Sheets\CoH-2207-PHS1.dwg Plot Date: 4/15/2024 12:37 PM Last Saved By: JEKGG

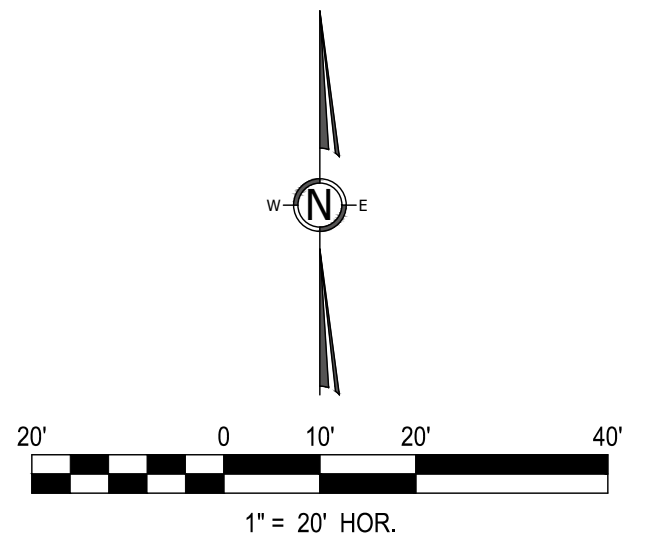


**LEGEND**

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- DRUM
- TRAFFIC FLOW

**NOTES:**

1. PHASE ONE CONSTRUCTION SHALL CONSIST OF DEMOLITION, CURBING, PAVING, UTILITY RELOCATION, AND STORM STRUCTURE AND PIPE INSTALLATION ON THE NORTH SIDE OF THE CENTERLINE OF 154TH STREET.
2. NO PARKING PERMITTED ON 154TH STREET DURING CONSTRUCTION.
3. DRUMS ARE TO BE USED TO SEPARATE TRAFFIC FROM WORK AREA.
4. SEE ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL DETAILS SHEET.
5. EACH INTERSECTION TO BE CLOSED FOR THE LEAST PRACTICABLE AMOUNT OF TIME. SEE TYPICAL INTERSECTION CLOSURE DETAIL.
6. SIDEWALKS ON SIDE OF ROAD UNDER CONSTRUCTION TO BE CLOSED. SEE TYPICAL SIDEWALK CLOSURE DETAIL.
7. SEE DETOUR SIGNAGE DETAIL.
8. CONTRACTOR RESPONSIBLE FOR MAINTAINING ACCESS TO ALL RESIDENCES AND BUSINESSES.
9. CONTRACTOR TO COORDINATE WITH PACE SUBURBAN BUS ON LANE CLOSURE AND BUS STOP CLOSURE.



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



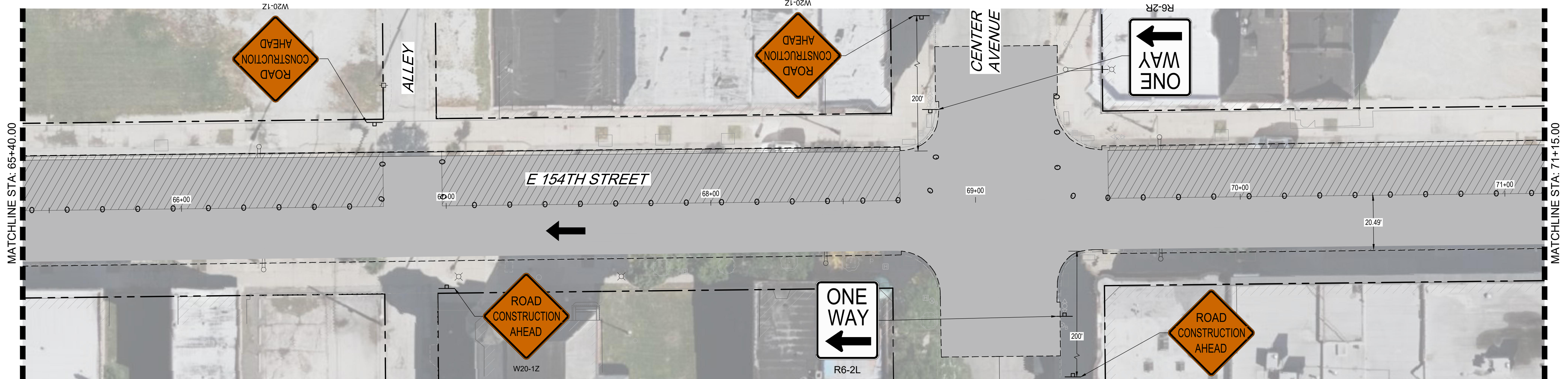
PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**TRAFFIC CONTROL PLAN PHASE 1**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-62**

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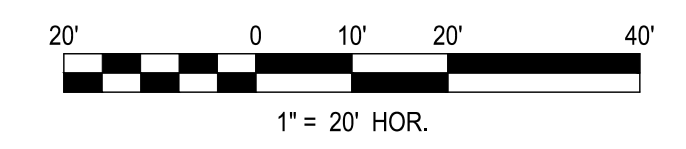
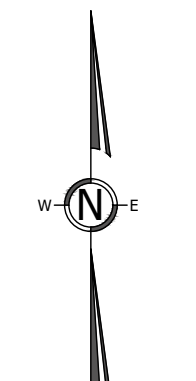


**LEGEND**

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- DRUM
- TRAFFIC FLOW

**NOTES:**

1. PHASE ONE CONSTRUCTION SHALL CONSIST OF DEMOLITION, CURBING, PAVING, UTILITY RELOCATION, AND STORM STRUCTURE AND PIPE INSTALLATION ON THE NORTH SIDE OF THE CENTERLINE OF 154TH STREET.
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No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

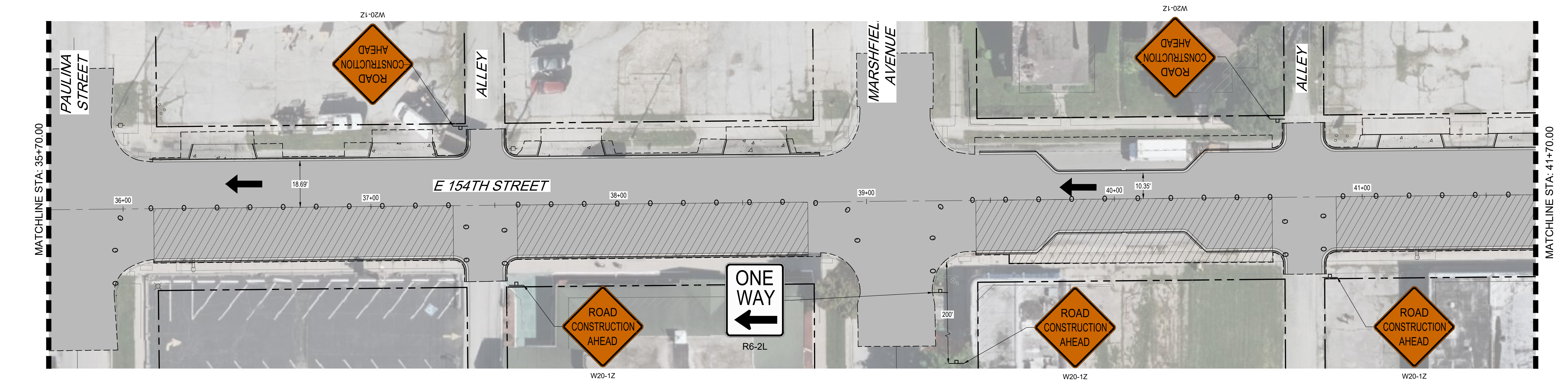
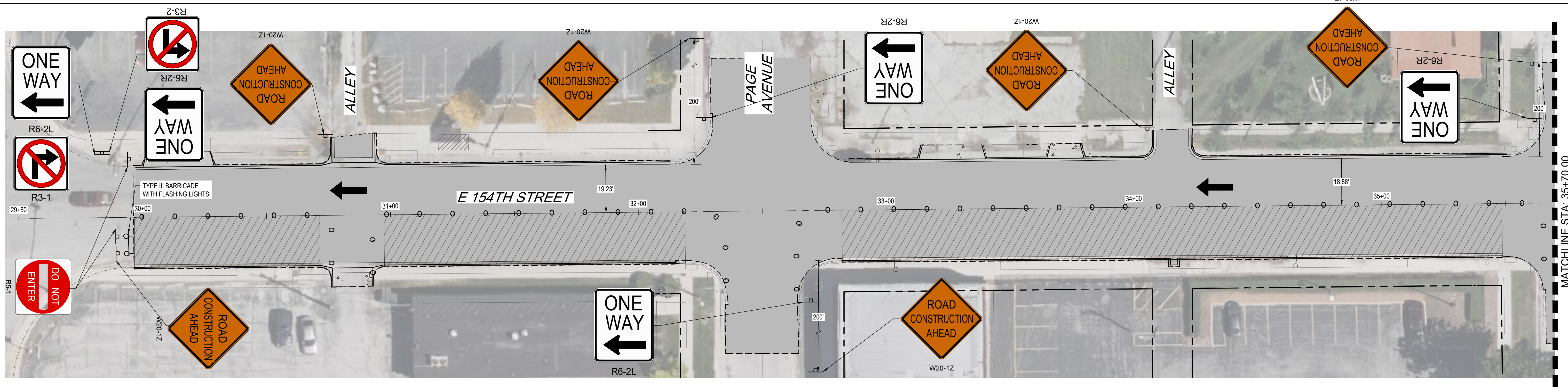


PE STAMP  
  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**TRAFFIC CONTROL PLAN PHASE 1**  
  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER	CoH-2207
DATE	3/29/2024
SHEET	C-63

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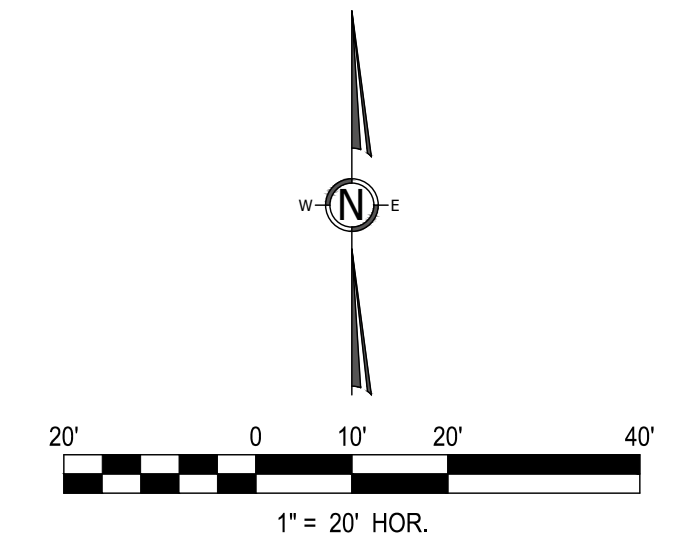


**LEGEND**

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- DRUM
- TRAFFIC FLOW

**NOTES:**

1. PHASE TWO CONSTRUCTION SHALL CONSIST OF DEMOLITION, CURBING, PAVING, UTILITY RELOCATION, AND STORM STRUCTURE AND PIPE INSTALLATION ON THE SOUTH SIDE OF THE CENTERLINE OF 154TH STREET.
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	No.	DATE	REVISION DESCRIPTION
Know what's below. Call before you dig.			

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

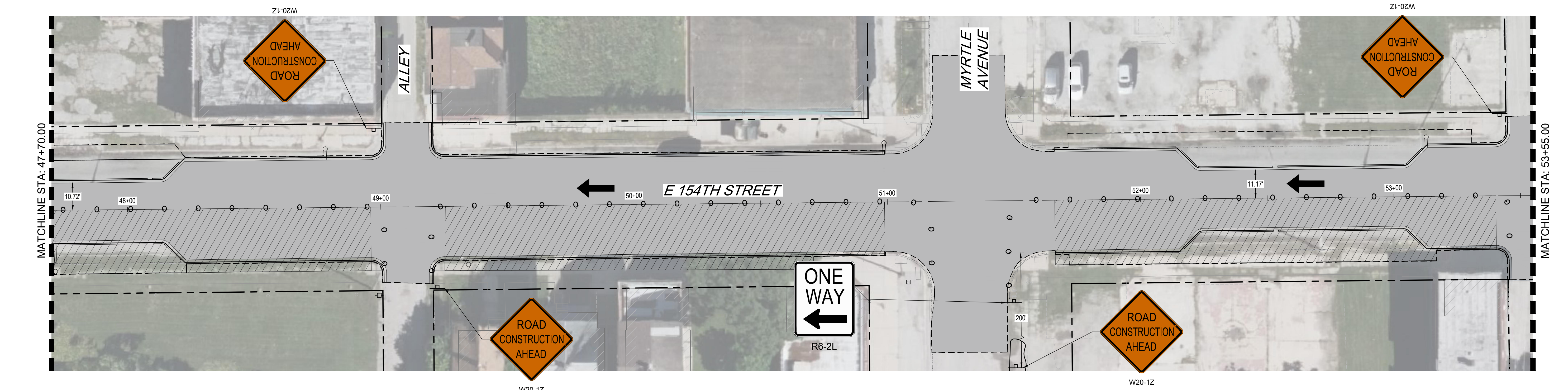
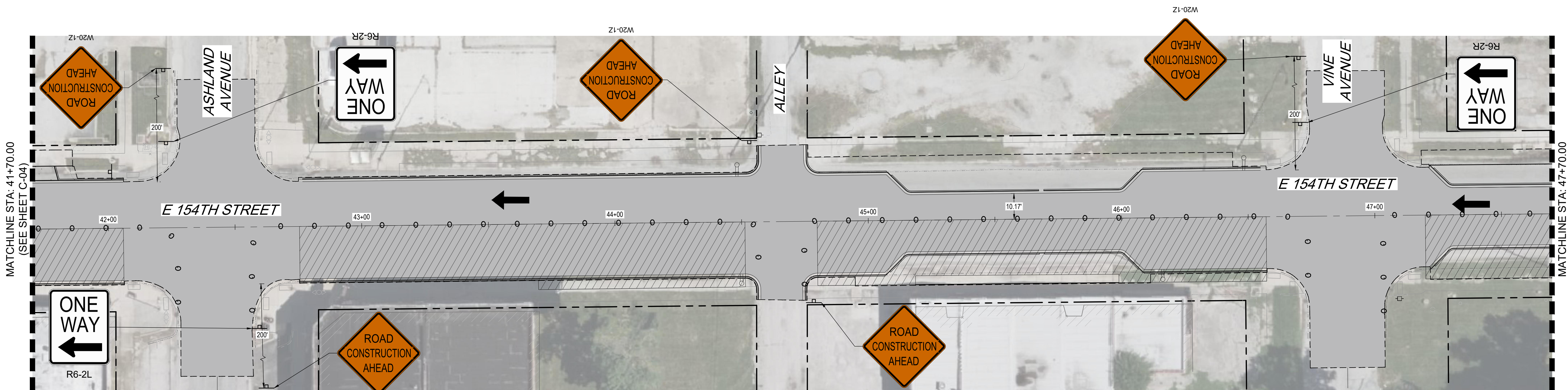


PE STAMP  
  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**TRAFFIC CONTROL PLAN PHASE 2**  
  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
CoH-2207  
 DATE  
3/29/2024  
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**C-64**

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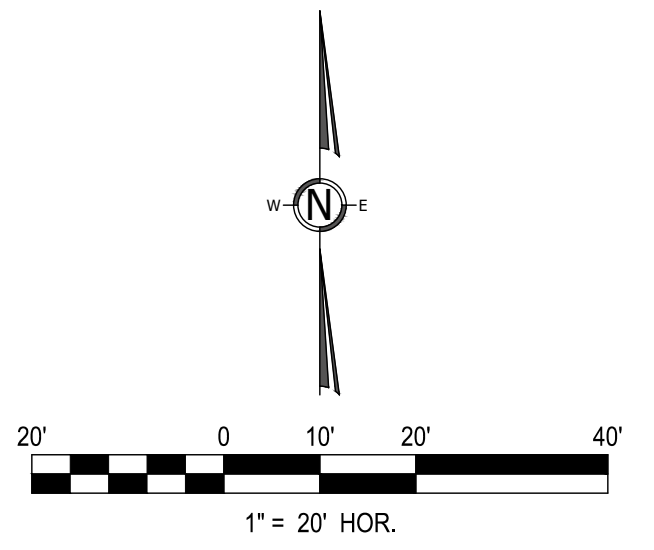


**LEGEND**

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- DRUM
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**NOTES:**

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 HARVEY, IL 60426

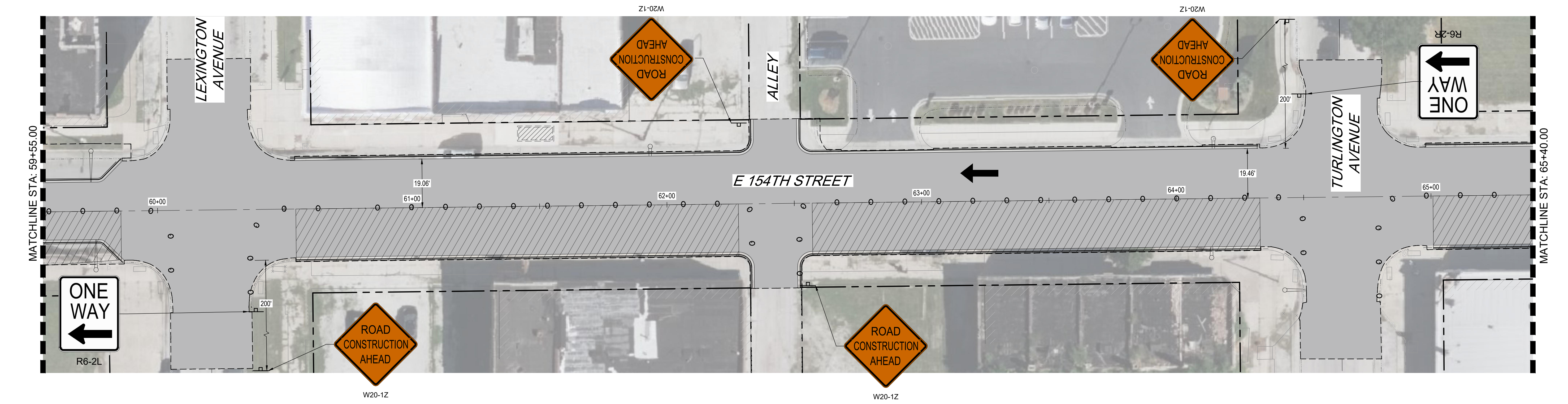
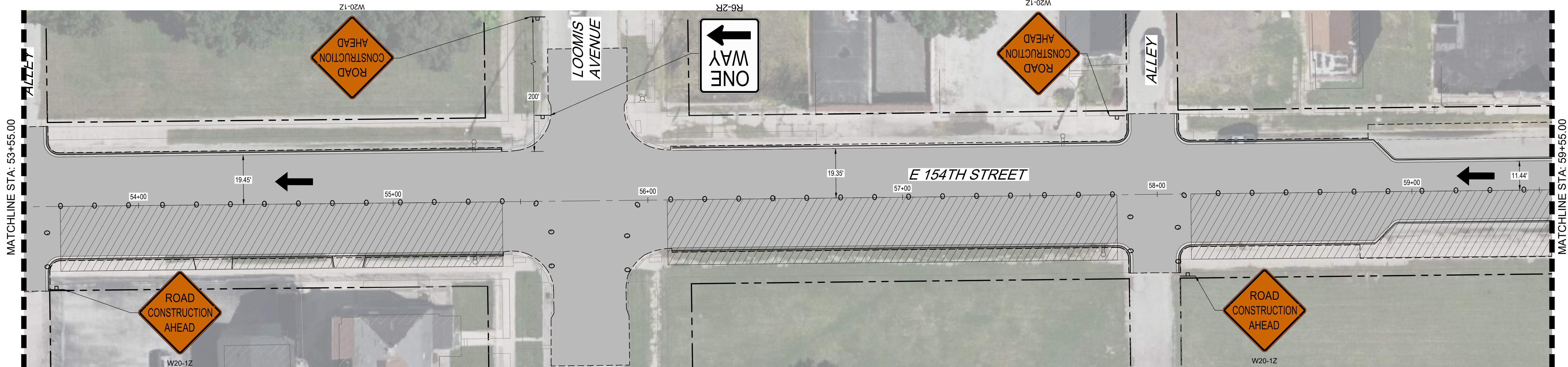


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FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**TRAFFIC CONTROL PLAN PHASE 2**  
  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

<small>JOB NUMBER</small> CoH-2207	<small>JOB NUMBER</small> C-65
<small>DATE</small> 3/29/2024	
<small>SHEET</small>	

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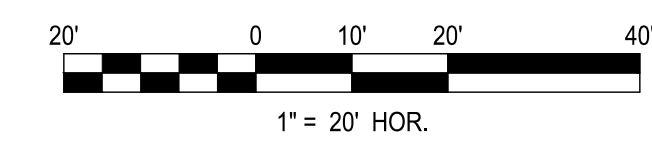
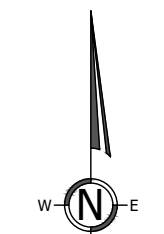


**LEGEND**

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- DRUM
- TRAFFIC FLOW

**NOTES:**

1. PHASE TWO CONSTRUCTION SHALL CONSIST OF DEMOLITION, CURBING, PAVING, UTILITY RELOCATION, AND STORM STRUCTURE AND PIPE INSTALLATION ON THE SOUTH SIDE OF THE CENTERLINE OF 154TH STREET.
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PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

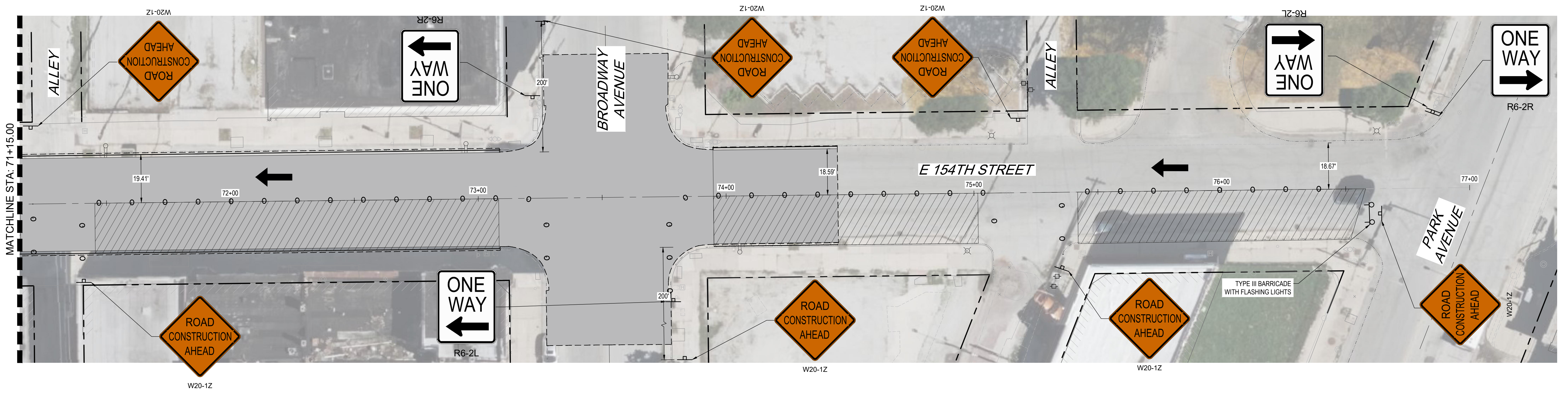
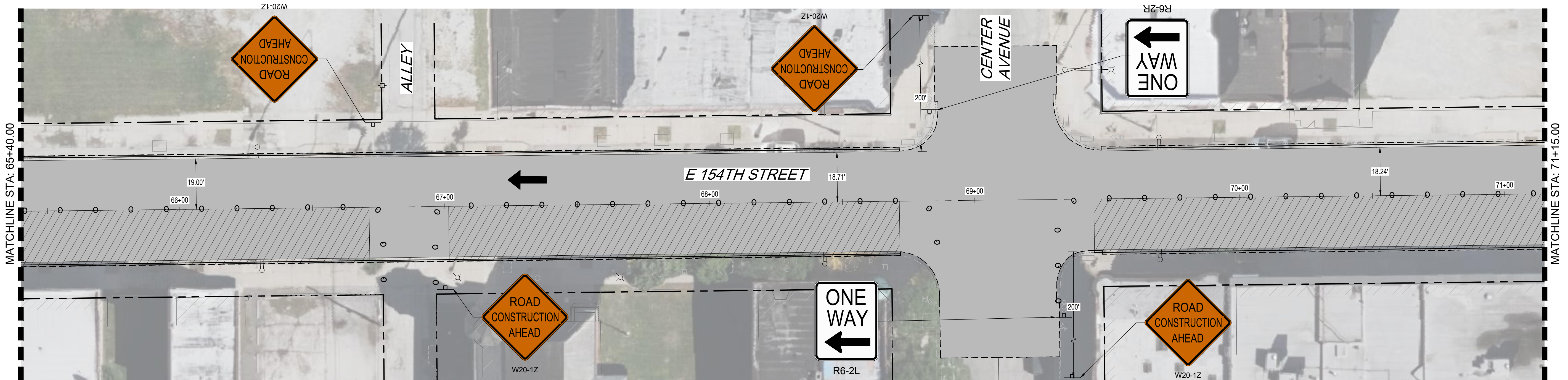


PE STAMP  
  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**TRAFFIC CONTROL PLAN PHASE 2**  
  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
CoH-2207  
 DATE  
3/29/2024  
 SHEET  
**C-66**

File Location: C:\Users\jvelazquez\OneDrive - anterogroup.com\Documents - anterogroup.com\Documents - anterogroup.com\Projects\154th St Reconstruction\DWG\Sheets\CoH+2207-PHS2.dwg Plot Date: 4/15/2024 12:38 PM Last Saved By: 13037

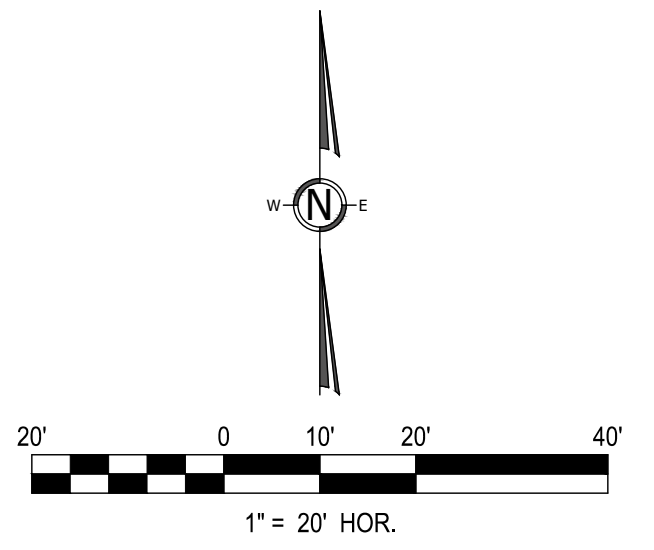


**LEGEND**

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- DRUM
- TRAFFIC FLOW

**NOTES:**

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No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



PE STAMP  
  
FOR AND ON BEHALF OF ANTERO GROUP

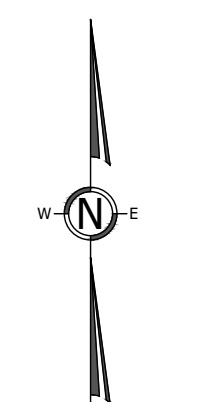
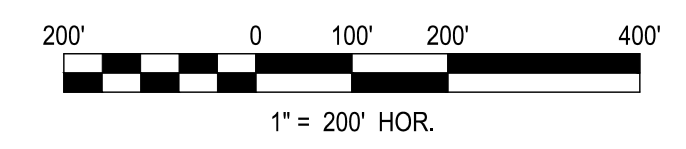
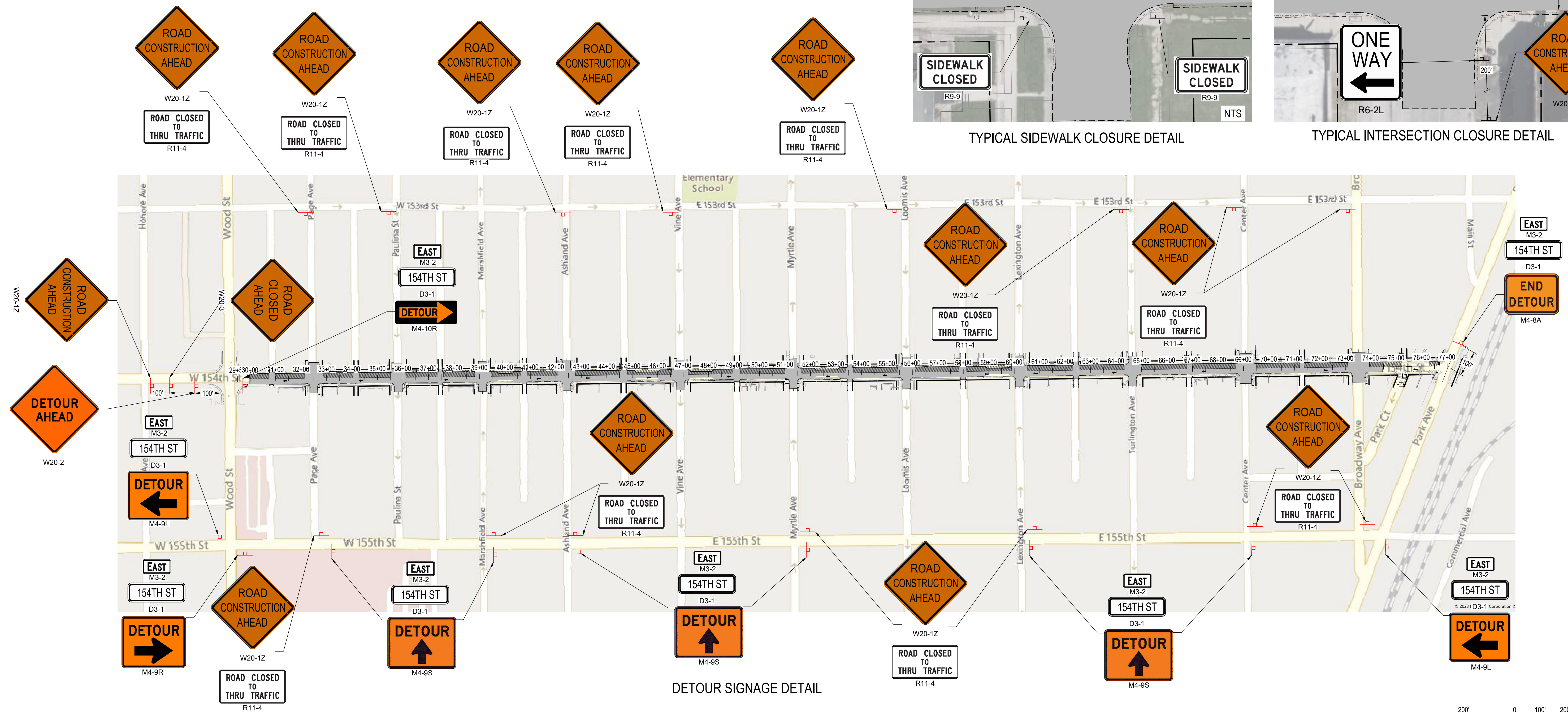
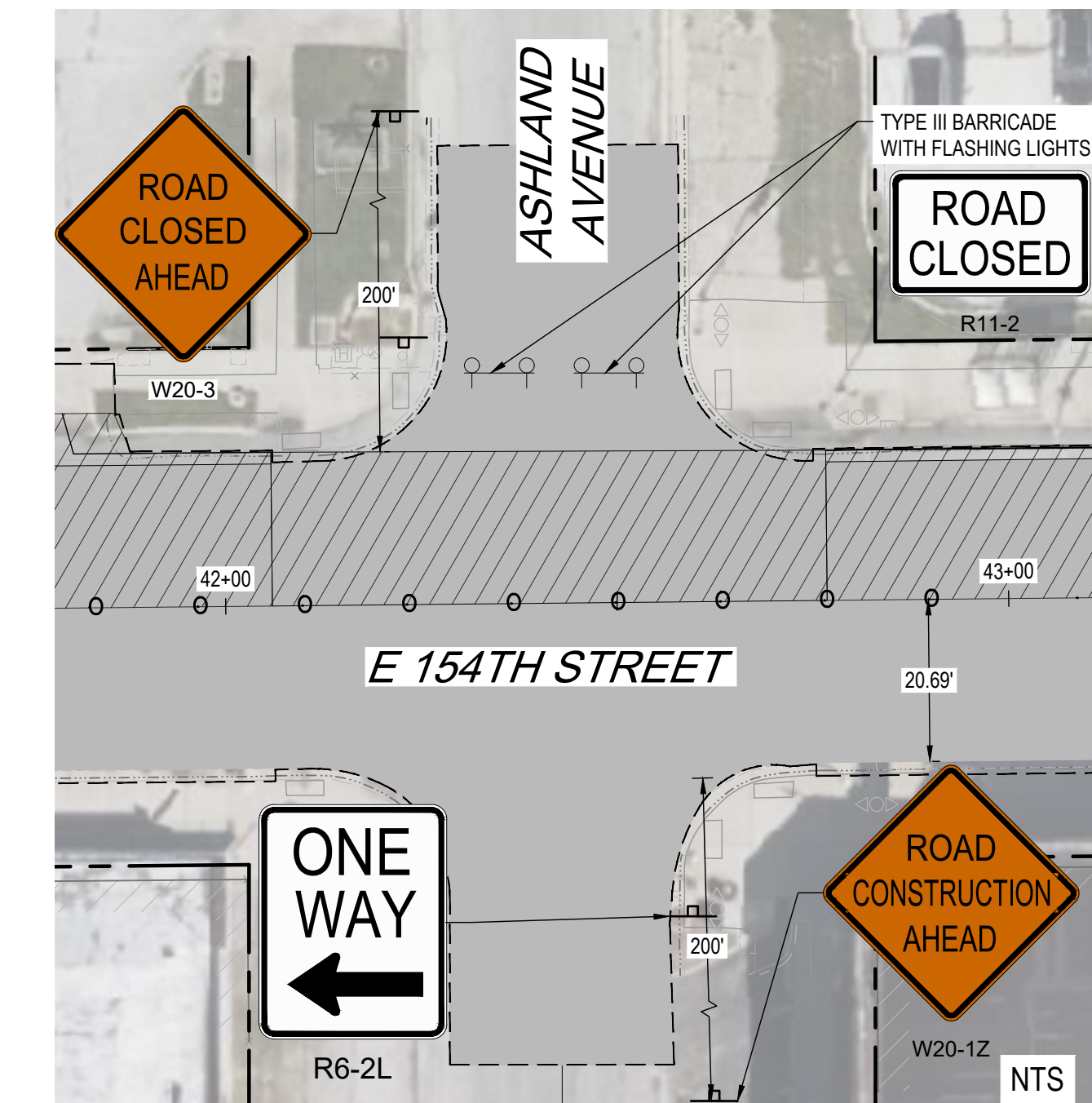
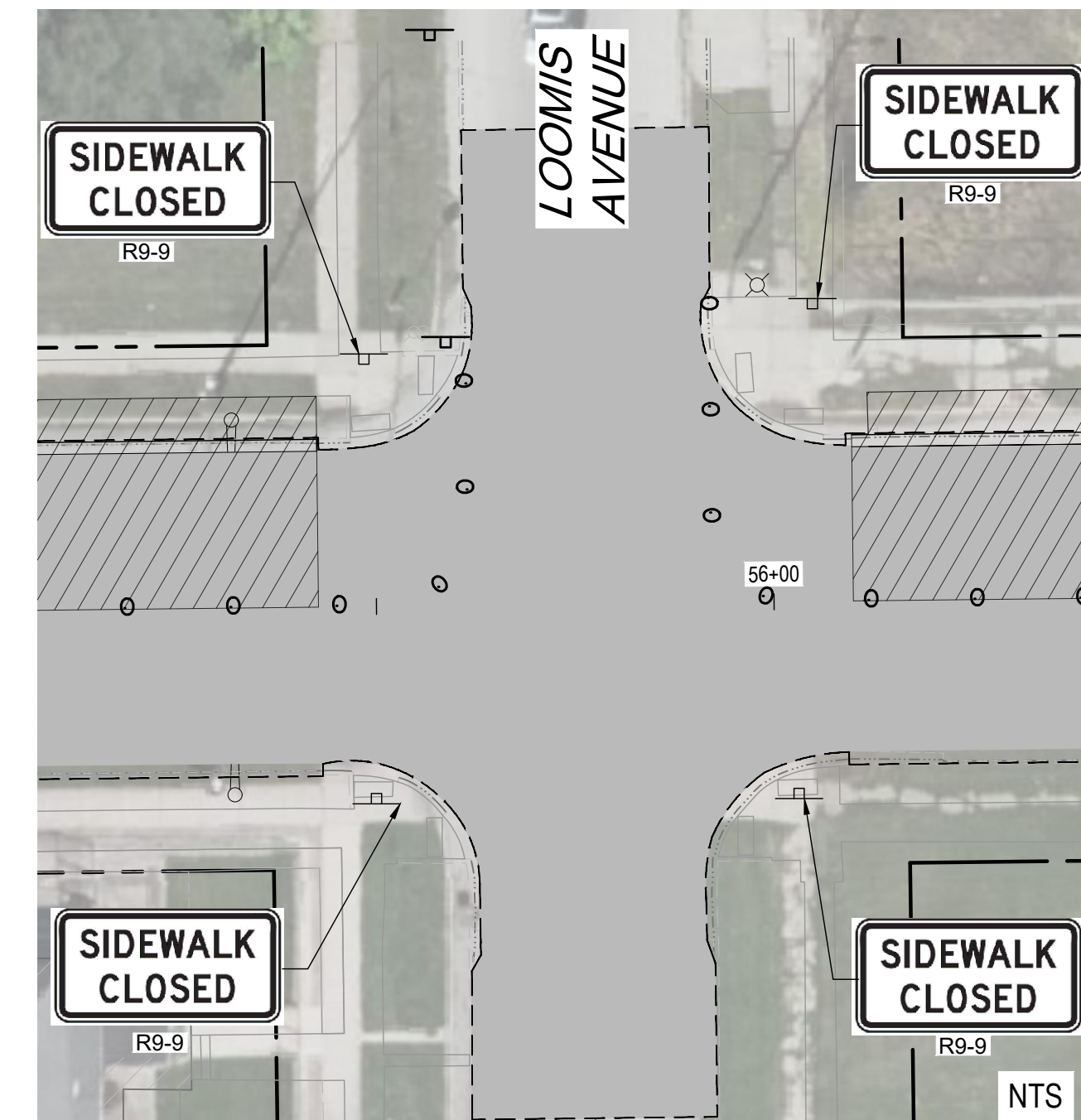
**154TH STREET RECONSTRUCTION PROJECT**  
**TRAFFIC CONTROL PLAN PHASE 2**  
  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
DATE  
 3/29/2024  
SHEET  
**C-67**

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**LEGEND**

- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- DRUM
- TRAFFIC FLOW



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



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 FOR AND ON BEHALF OF ANTERO GROUP

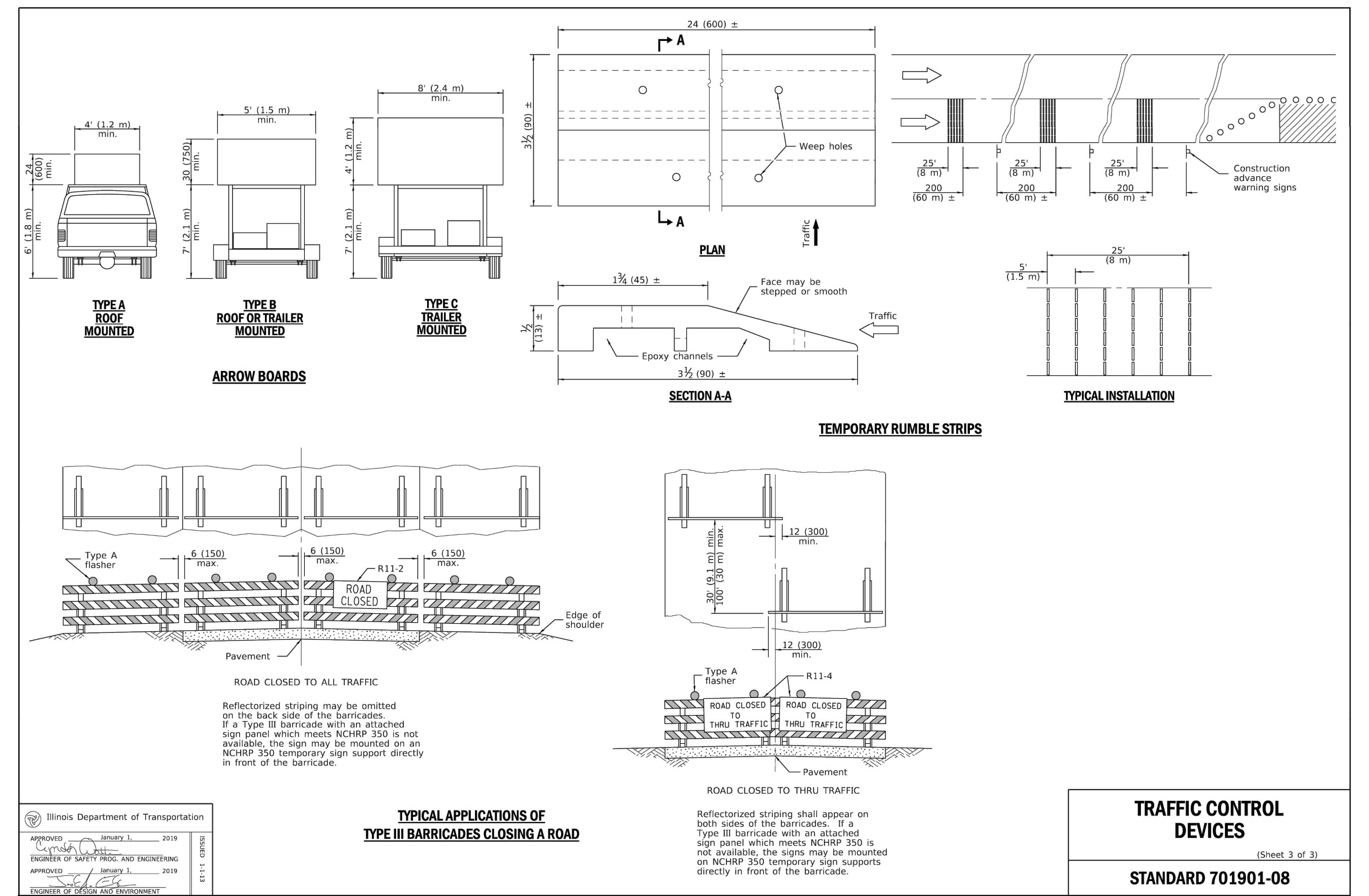
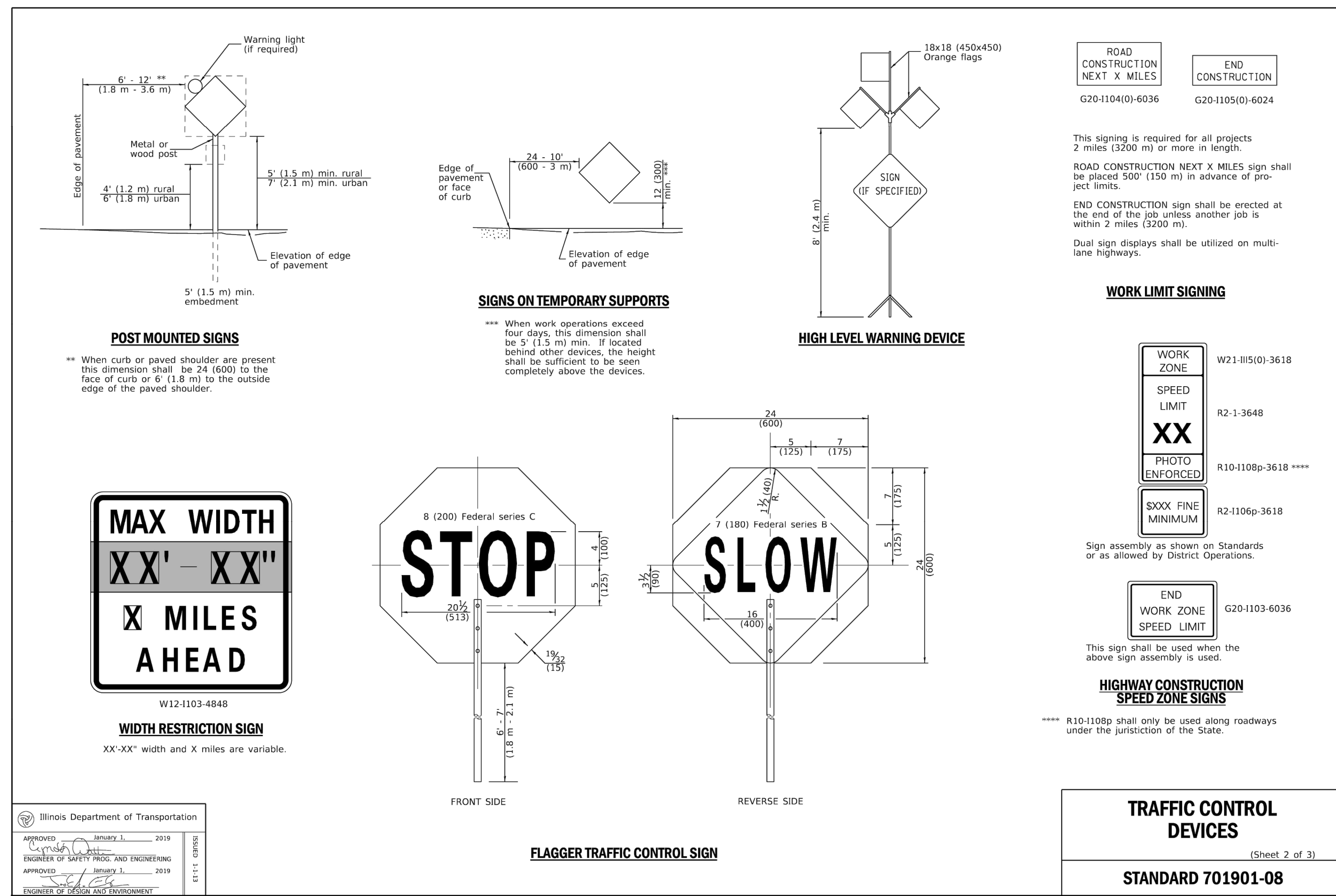
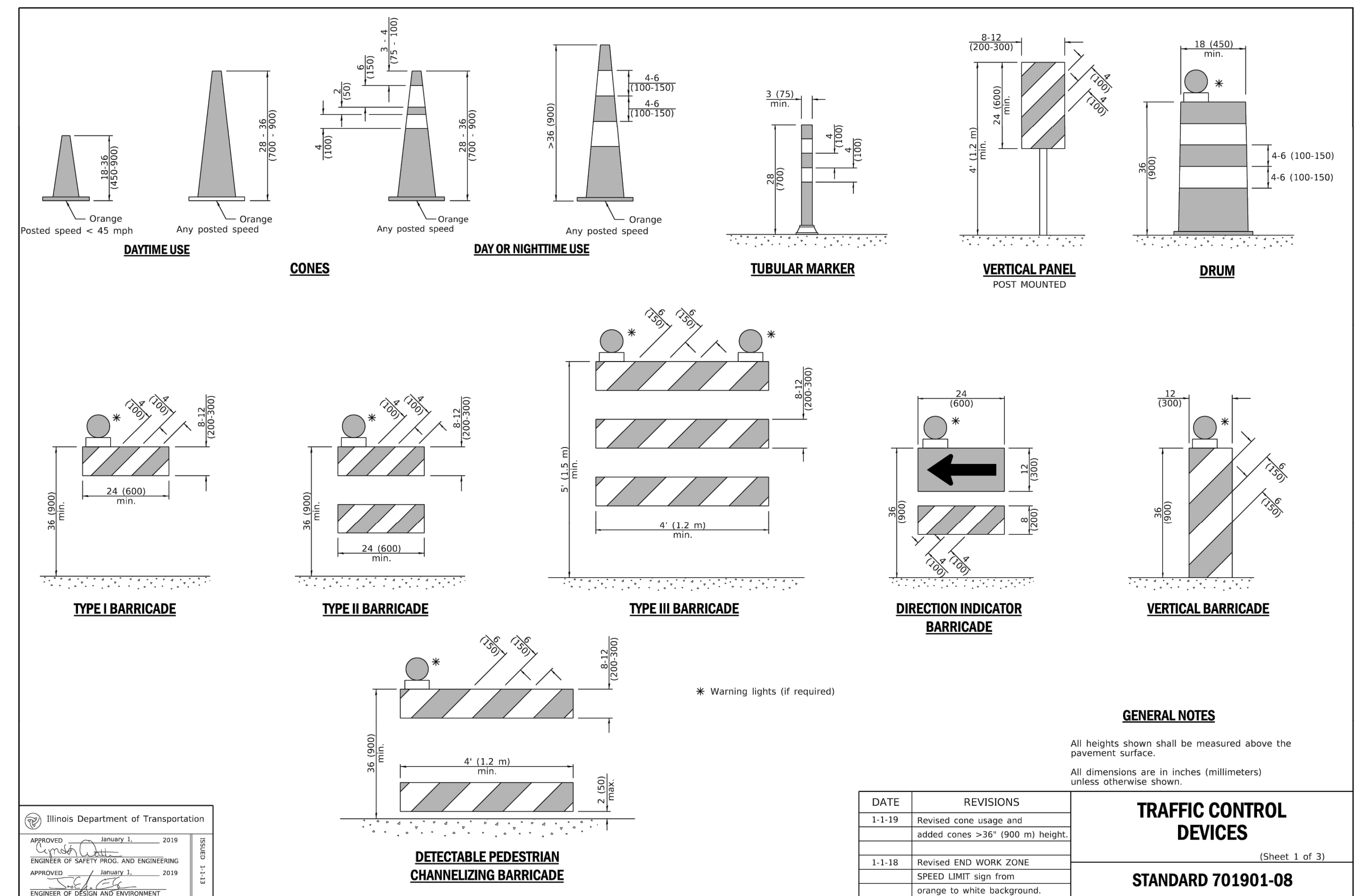
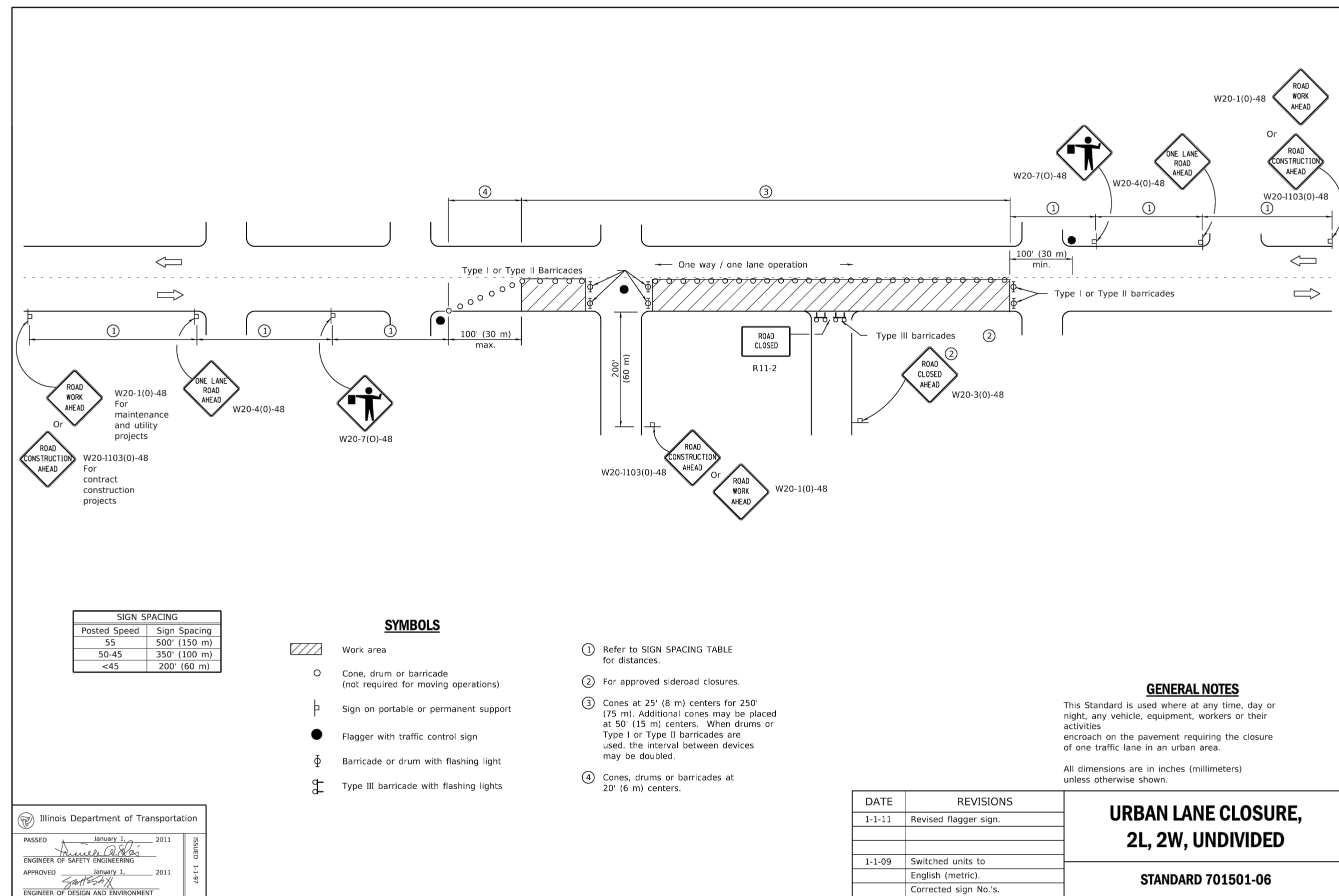
**154TH STREET RECONSTRUCTION PROJECT**  
**TRAFFIC CONTROL PLAN DETAILS 01**

CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
**C-68**



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No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
15320 BROADWAY AVENUE  
HARVEY, IL 60426

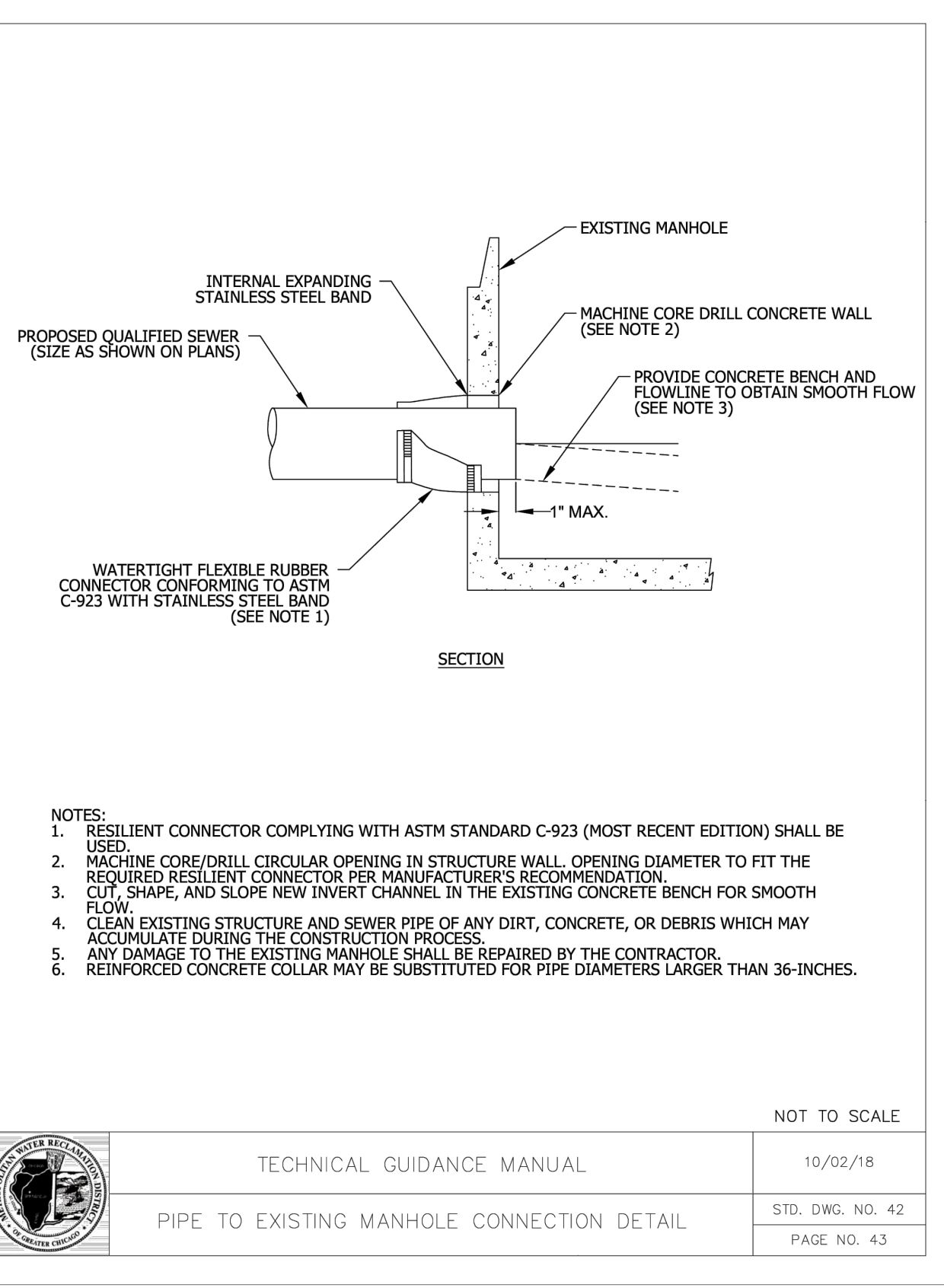
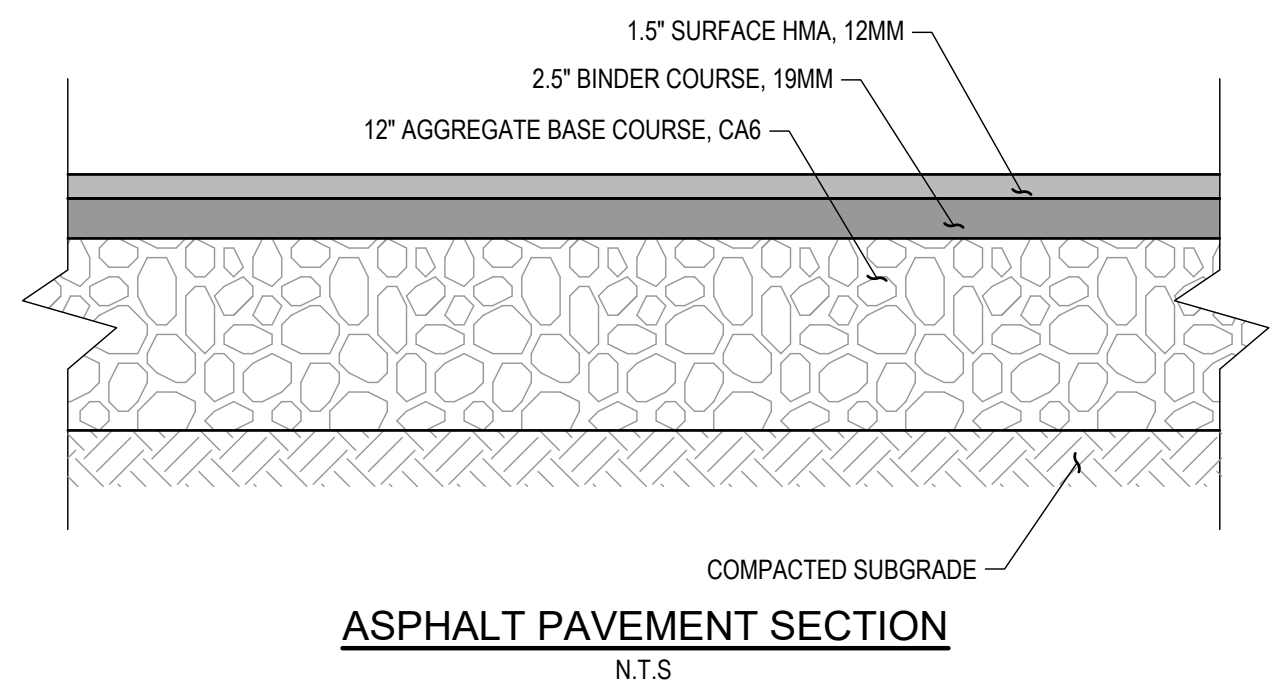
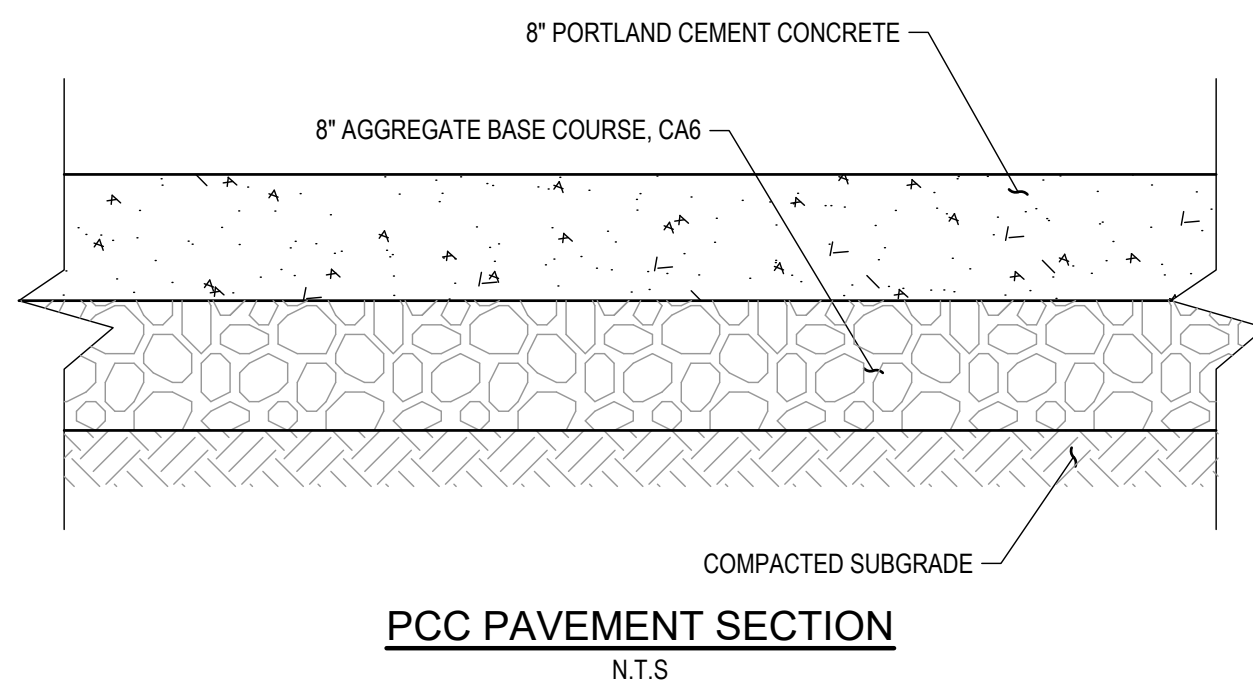


PE STAMP  
FOR AND ON BEHALF OF ANTERO GROUP

154TH STREET RECONSTRUCTION PROJECT  
TRAFFIC CONTROL PLAN DETAILS 02  
CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER: CoH-2207  
DATE: 3/29/2024  
SHEET: C-69

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- NOTES:**
- RESILIENT CONNECTOR COMPLYING WITH ASTM STANDARD C-923 (MOST RECENT EDITION) SHALL BE USED.
  - MACHINE CORE/DRILL CIRCULAR OPENING IN STRUCTURE WALL, OPENING DIAMETER TO FIT THE REQUIRED RESILIENT CONNECTOR PER MANUFACTURER'S RECOMMENDATION.
  - CUT, SHAPE, AND SLOPE NEW INVERT CHANNEL IN THE EXISTING CONCRETE BENCH FOR SMOOTH FLOW.
  - CLEAN EXISTING STRUCTURE AND SEWER PIPE OF ANY DIRT, CONCRETE, OR DEBRIS WHICH MAY ACCUMULATE DURING THE CONSTRUCTION PROCESS.
  - ANY DAMAGE TO THE EXISTING MANHOLE SHALL BE REPAIRED BY THE CONTRACTOR.
  - REINFORCED CONCRETE COLLAR MAY BE SUBSTITUTED FOR PIPE DIAMETERS LARGER THAN 36-INCHES.

TECHNICAL GUIDANCE MANUAL  
 PIPE TO EXISTING MANHOLE CONNECTION DETAIL  
 NOT TO SCALE  
 10/02/18  
 STD. DWG. NO. 42  
 PAGE NO. 43

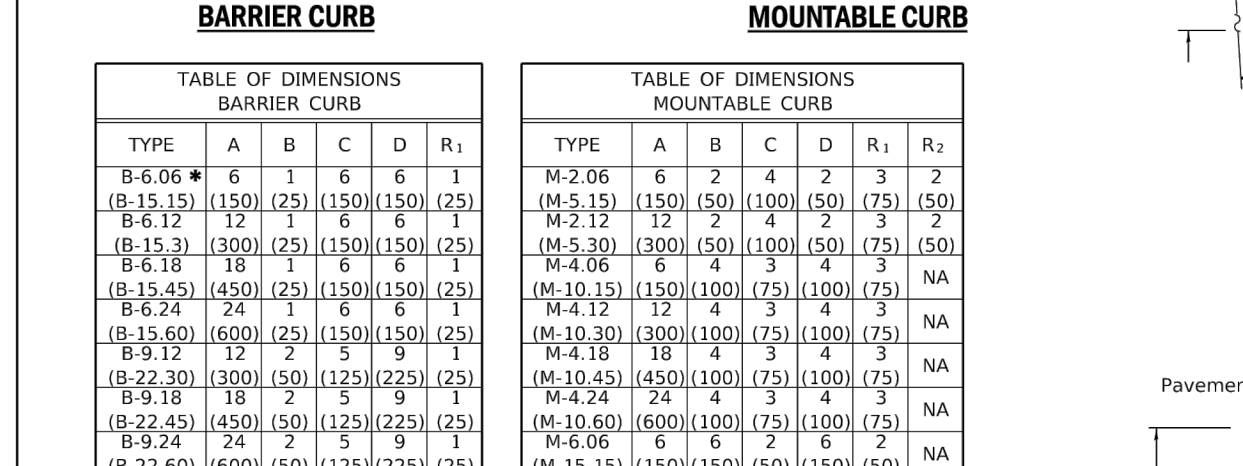
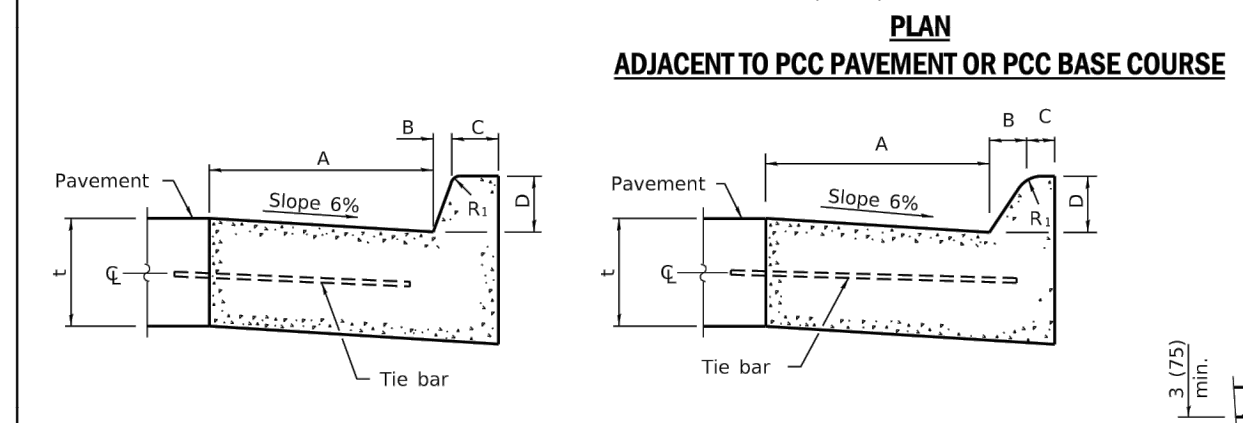
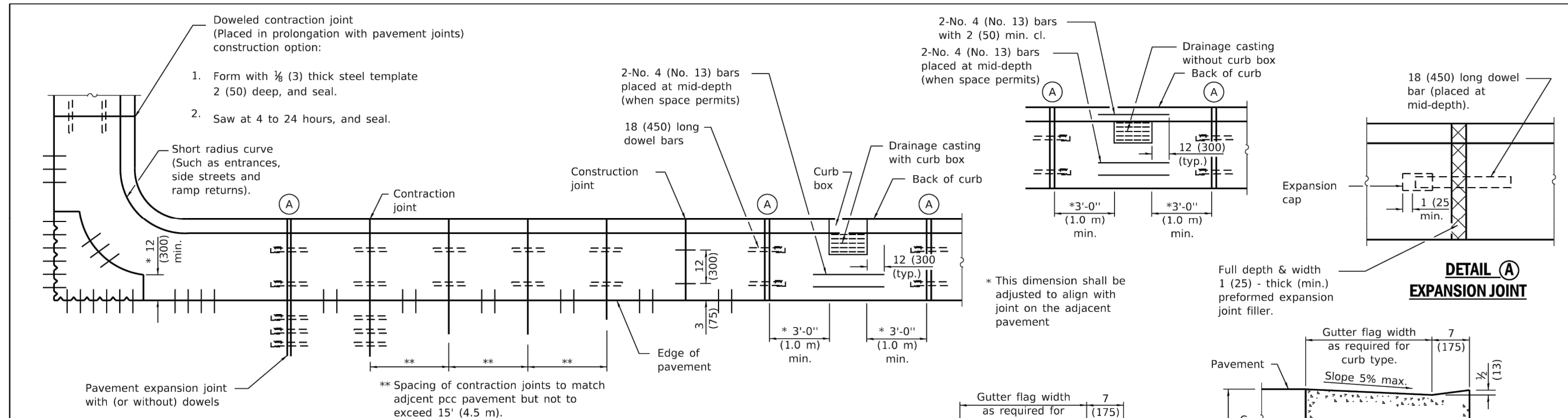
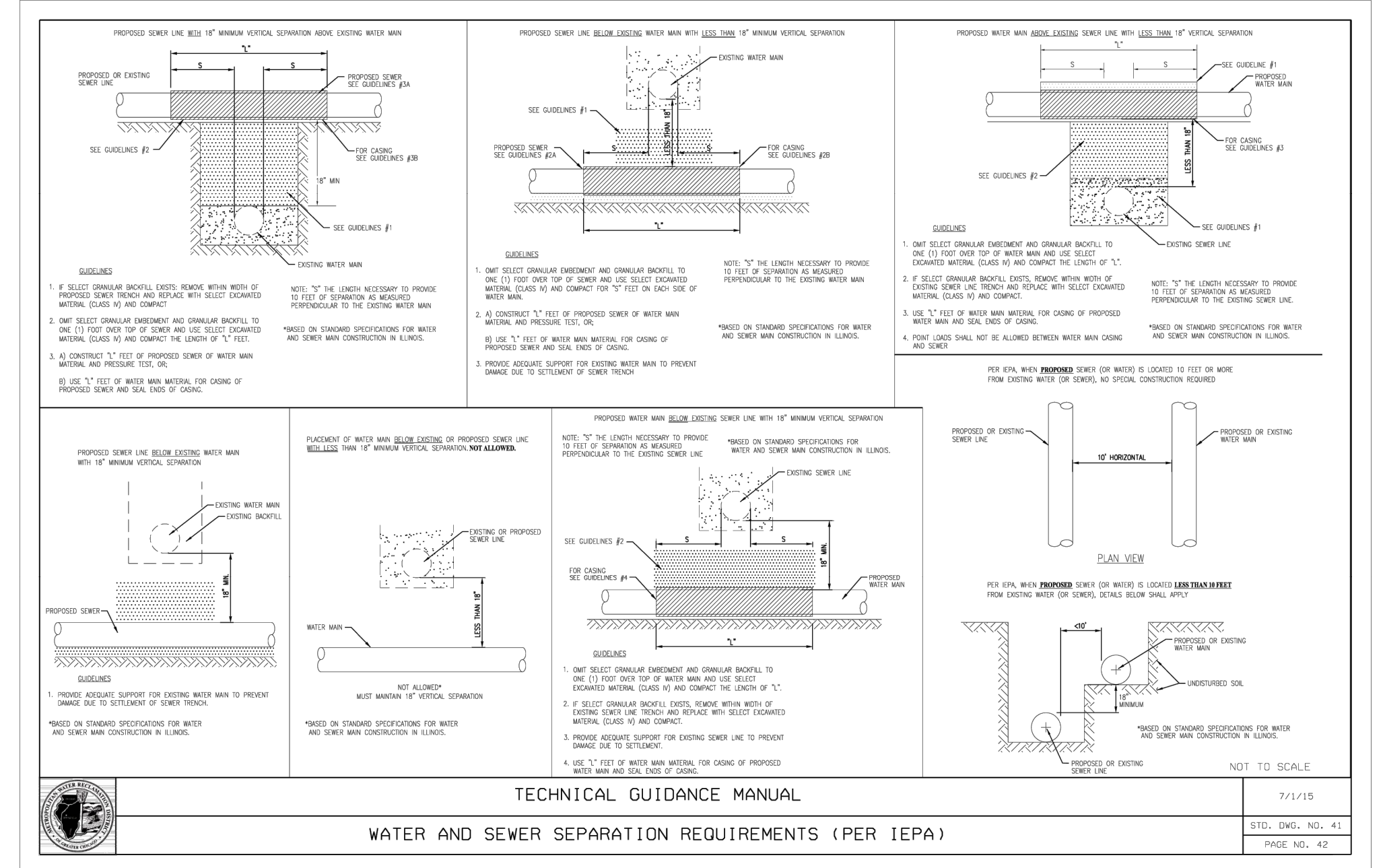


TABLE OF DIMENSIONS BARRIER CURB					
TYPE	A	B	C	D	R1
B-6.06	6	1	6	6	1
(B-15.15)	(150)	(25)	(150)	(150)	(25)
B-6.12	12	2	6	6	1
(B-15.30)	(300)	(25)	(150)	(150)	(25)
B-6.18	18	1	6	6	1
(B-15.45)	(450)	(25)	(150)	(150)	(25)
B-6.24	24	1	6	6	1
(B-15.60)	(600)	(25)	(150)	(150)	(25)
B-9.12	12	2	5	9	1
(B-22.30)	(300)	(50)	(125)	(225)	(25)
B-9.18	18	2	5	9	1
(B-22.45)	(450)	(50)	(125)	(225)	(25)
B-9.24	24	2	5	9	1
(B-22.60)	(600)	(50)	(125)	(225)	(25)

\* For corner islands only.

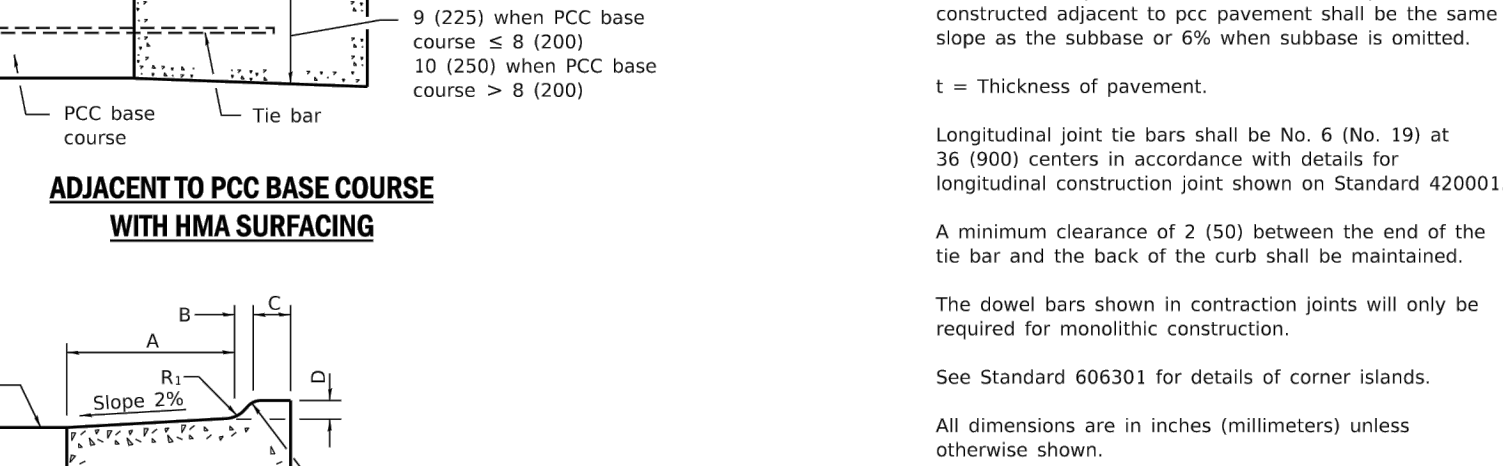
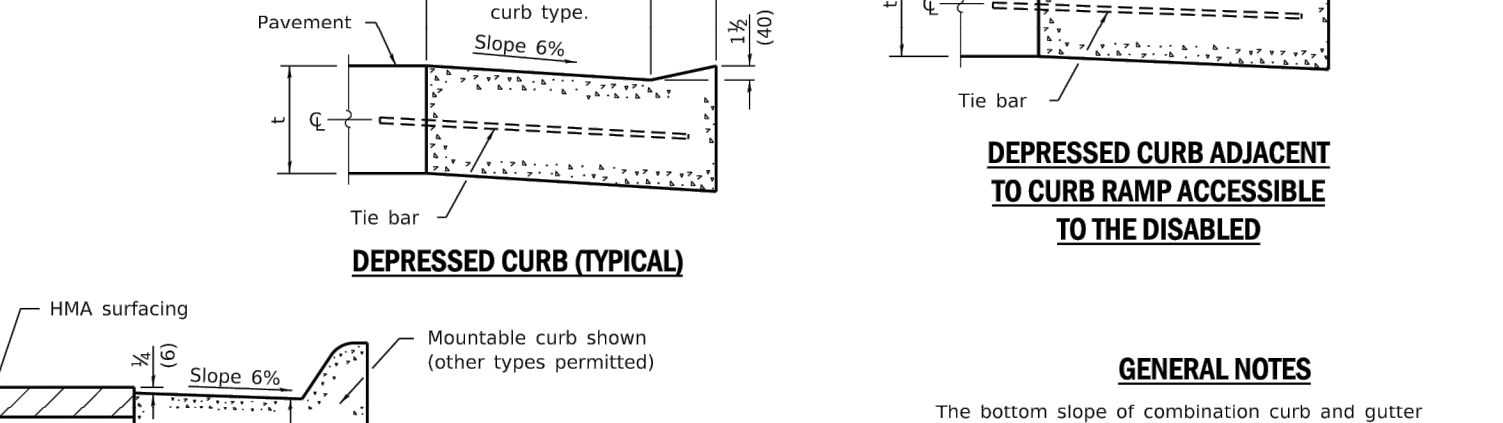
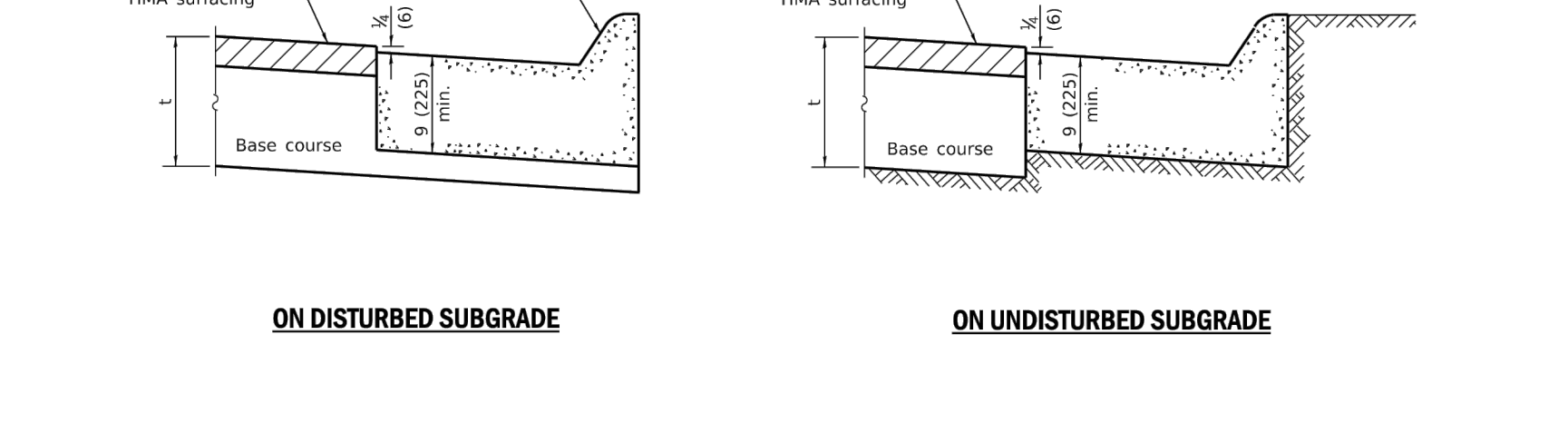
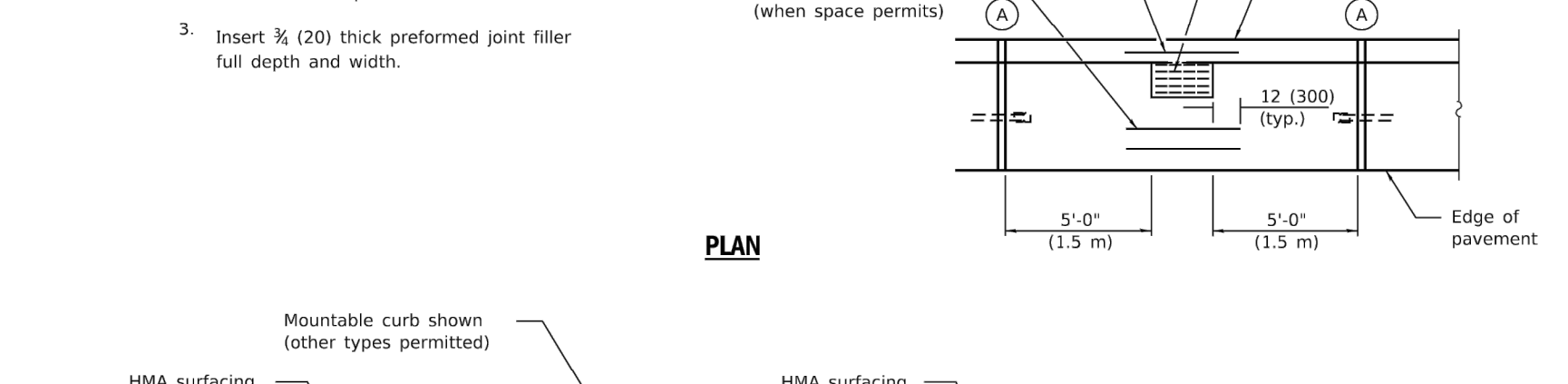
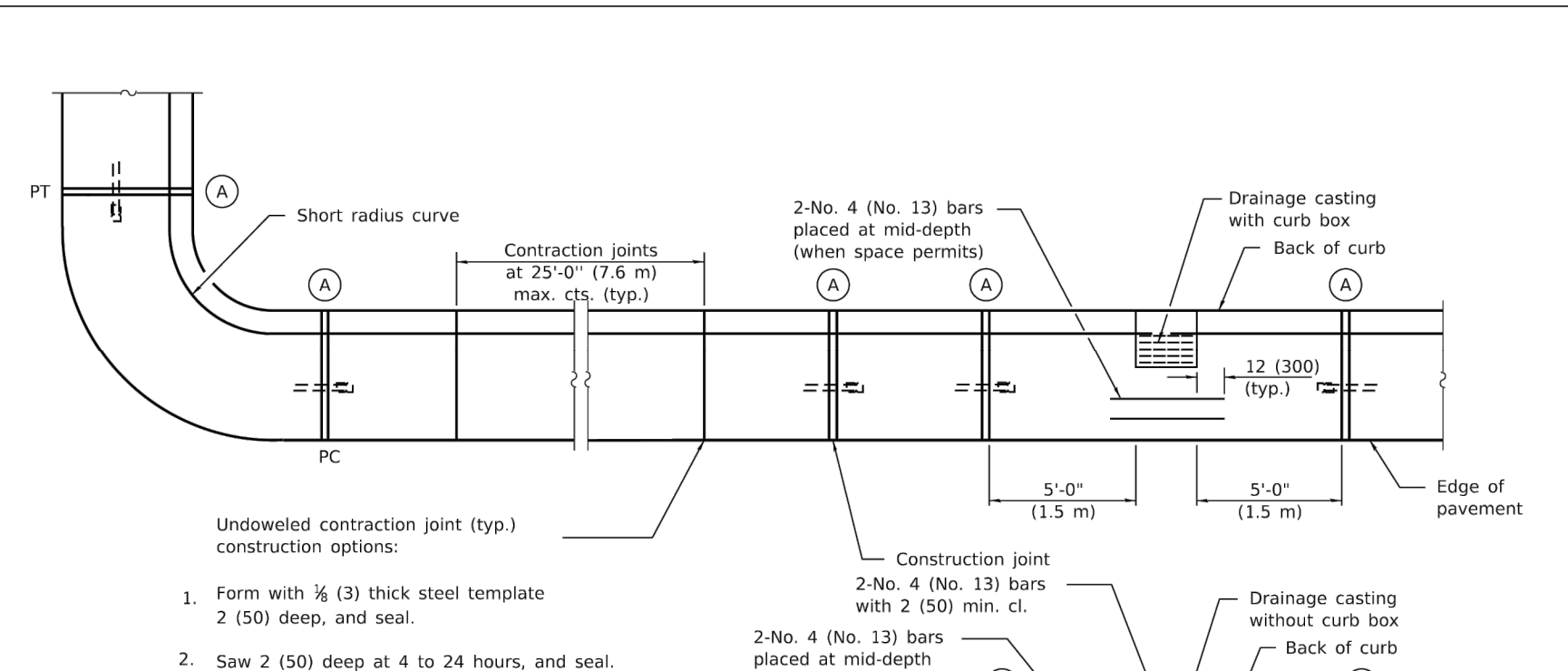
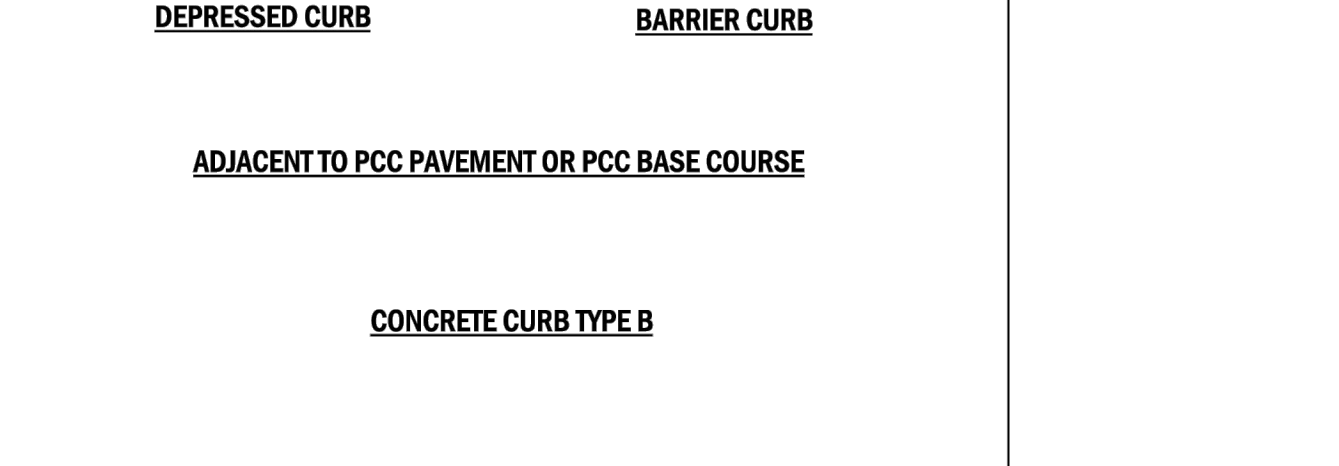
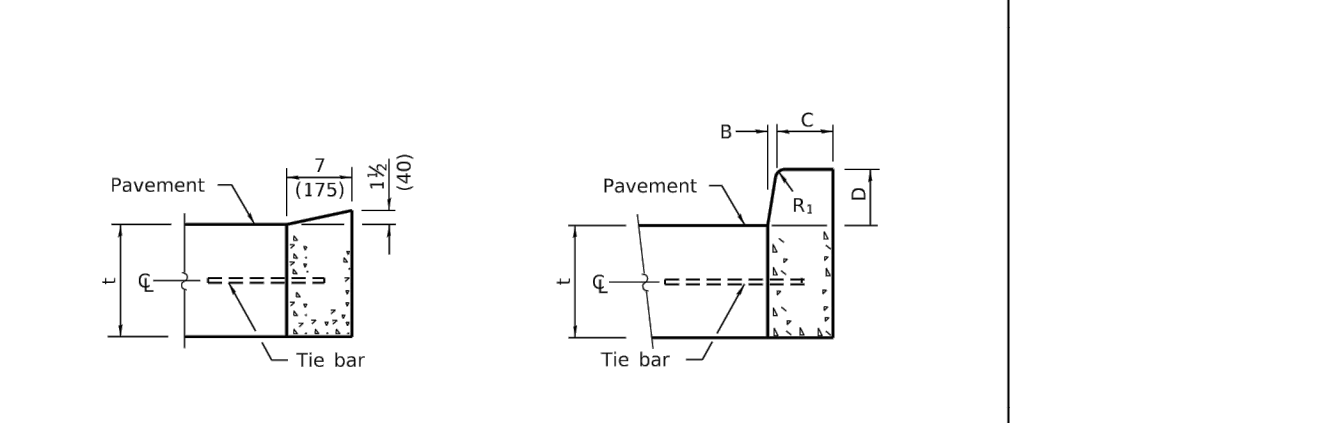
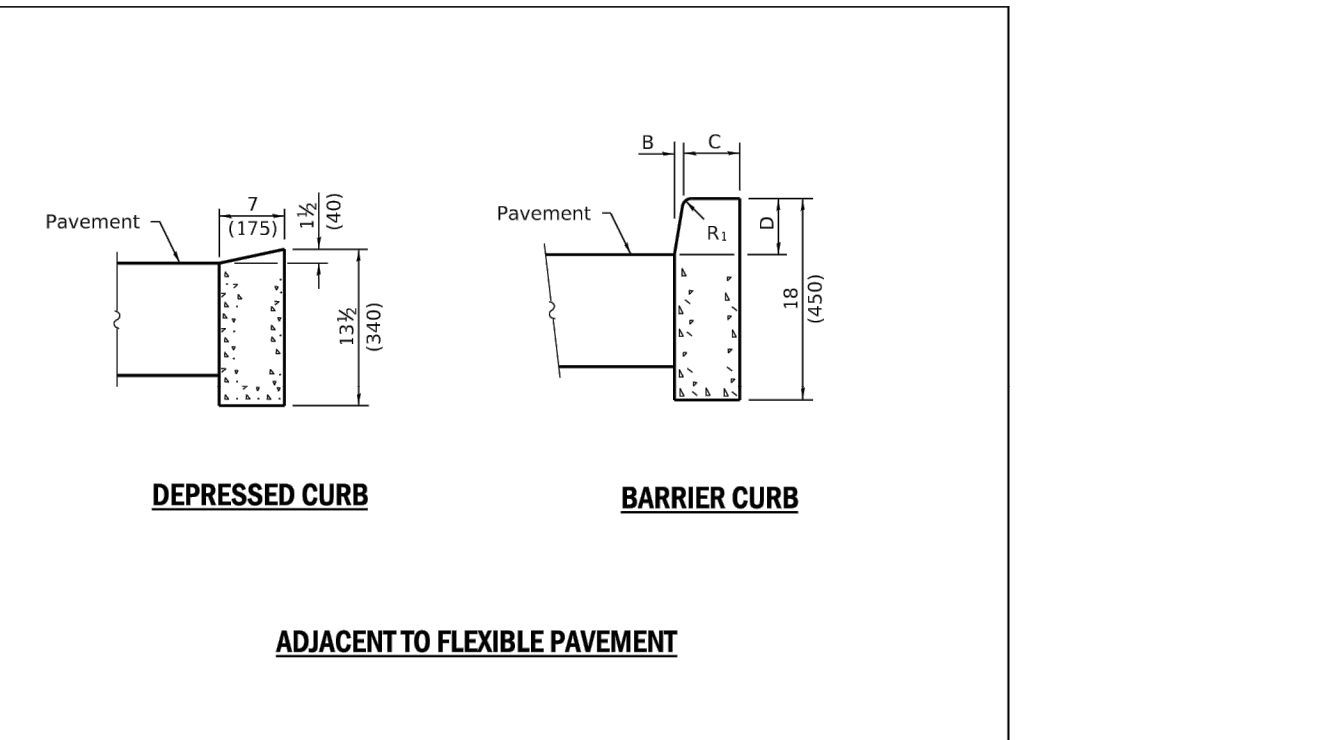


TABLE OF DIMENSIONS MOUNTABLE CURB									
TYPE	A	B	C	D	R1	R2			
M-2.06	6	2	4	2	3	2			
(M-5.15)	(150)	(50)	(100)	(50)	(75)	(50)			
M-2.12	12	2	4	2	3	2			
(M-5.30)	(300)	(50)	(100)	(50)	(75)	(50)			
M-4.06	6	4	3	4	3	NA			
(M-10.15)	(150)	(100)	(75)	(100)	(75)	NA			
M-4.12	12	4	3	4	3	NA			
(M-10.30)	(300)	(100)	(75)	(100)	(75)	NA			
M-4.18	18	4	3	4	3	NA			
(M-10.45)	(450)	(100)	(75)	(100)	(75)	NA			
M-4.24	24	4	3	4	3	NA			
(M-10.60)	(600)	(100)	(75)	(100)	(75)	NA			
M-6.06	6	6	2	6	2	NA			
(M-15.15)	(150)	(150)	(50)	(150)	(50)	NA			
M-6.12	12	6	2	6	2	NA			
(M-15.30)	(300)	(150)	(50)	(150)	(50)	NA			
M-6.18	18	6	2	6	2	NA			
(M-15.45)	(450)	(150)	(50)	(150)	(50)	NA			
M-6.24	24	6	2	6	2	NA			
(M-15.60)	(600)	(150)	(50)	(150)	(50)	NA			



DATE	REVISIONS
1-1-22	Revised contraction joint spacing adjacent to pcc pavement.
1-1-18	Revised General Note for tie bar spacing to 36 (900) cts.

**CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER**  
 (Sheet 1 of 2)  
 STANDARD 606001-08



DATE	REVISIONS
1-1-22	Revised contraction joint spacing adjacent to pcc pavement.
1-1-18	Revised General Note for tie bar spacing to 36 (900) cts.

**CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER**  
 (Sheet 2 of 2)  
 STANDARD 606001-08



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

154TH STREET RECONSTRUCTION PROJECT  
 CONSTRUCTION DETAILS 01  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER: CoH-2207  
 DATE: 3/29/2024  
 SHEET: C-70

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SOP-DASH	YELLOW	10' (3.0 m) C/C WITH 30' (9.1 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C/C
NO PASSING ZONE LINES FOR BOTH DIRECTIONS	4 (100)	SOLID	YELLOW	18 (450) C/C FROM SHOULDER CENTERLINE TO 11 (280) C/C FROM SHOULDER CENTERLINE BETWEEN
LANE LINES	4 (100)	SOP-DASH	WHITE	10' (3.0 m) LINE WITH 30' (9.1 m) SPACE
LANE LINES ON FREEWAYS	2 (125)	SOP-DASH	WHITE	10' (3.0 m) LINE WITH 30' (9.1 m) SPACE
DOTTED LINES (EXTENSION OF CENTRAL LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SOP-DASH	SAME AS LINE BEING EXTENDED	2 (500) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW/LEFT WHITE/RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	4 (150) LINE FULL SIZE LETTERS & SYMBOLS 18" (450) MIN.	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SOP-DASH AND SOLID IN PAIR	YELLOW	10' (3.0 m) LINE WITH 30' (9.1 m) SPACE FOR EACH DIRECTION
CROSSWALK LINES (PEDESTRIAN)	2 @ 4 (150)	SOLID	WHITE	NOT LESS THAN 6' (1.8 m) APART
CROSSWALK LINES (BIKE & EQUESTRIAN)	12 (300) @ 45°	SOLID	WHITE	SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 1 (1.2 m) IN ADVANCE OF AND 2 (500) FROM STOPPING PLACE AT STOPPED STOPPING PLACE. CHANGE TO CROSSWALK CENTERLINE, WHEN APPLICABLE.
PAINTED MEDIANS	2 @ 4 (150) WITH 12 (300) DIAGONALS @ 45°	SOLID	YELLOW	11 (280) C/C FOR THE DOUBLE LINE. SEE TYPICAL PAINTED MEDIAN MARKING.
GONE MARKING AND CHANNELING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 12' (3.6 m) C/C LESS THAN 30 MPH (50 km/h) 30' (9.1 m) C/C 30 MPH TO 40 MPH (50 km/h) 40' (12.2 m) C/C 40 MPH TO 45 MPH (70 km/h) 50' (15.2 m) C/C 45 MPH TO 55 MPH (90 km/h) 60' (18.3 m) C/C 55 MPH TO 60 MPH (90 km/h)
RAILROAD CROSSING	24 (600) TRANSVERSE LINES 18" (450) MIN. SPACING	SOLID	WHITE	SEE STATE STANDARD 780001-05-4.5.5. SPACING: 18" (450) MIN. SPACING 7' (2.1 m) MIN. SPACING 7' (2.1 m) MIN. SPACING 7' (2.1 m) MIN. SPACING
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS 2' - 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	10' (3.0 m) C/C LESS THAN 30 MPH (50 km/h) 10' (3.0 m) C/C 30 MPH TO 40 MPH (50 km/h) 10' (3.0 m) C/C 40 MPH TO 45 MPH (70 km/h) 10' (3.0 m) C/C 45 MPH TO 55 MPH (90 km/h)
U TURN ARROW	SEE DETAIL	SOLID	WHITE	36.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	36.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001-05.

All dimensions are in inches (millimeters) unless otherwise shown.

**WORD AND ARROW LAYOUT**

20' (6.1 m): urban  
50' (15.2 m): rural (between arrow and word or between words)

**WRONG WAY ARROW**

16'-6" (5.0 m) x 30" (750 mm)

**INTERNATIONAL SYMBOL OF ACCESSIBILITY**

36" (914 mm) x 3'-5" (1.06 m)

**BIKE SYMBOL**

3'-4" (1.0 m) x 6'-0" (1.8 m)

**SHARED LANE SYMBOL**

3'-4" (1.0 m) x 6'-0" (1.8 m)

**BIKE SYMBOL**

3'-4" (1.0 m) x 6'-0" (1.8 m)

**TYPICAL PAVEMENT MARKINGS**

(Sheet 3 of 3)

**STANDARD 780001-05**

**STEP 1**

Place end-post (stake) of first silt fence adjacent to end-post (stake) of second silt fence with fabric positioned as shown.

**STEP 2**

Rotate posts (stakes) together 180° clockwise and drive both posts (stakes) 18" (450) into ground.

**ATTACHING TWO SILT FILTER FENCES**

(Not applicable for J-hooks)

**SILT FILTER J-HOOK PLACEMENT**

Place posts (stakes) adjacently and bind at top with wire.

**AGGREGATE DITCH CHECK**

When the ditch check is within the clear zone and the road is open to traffic, the traffic approach slope of the aggregate shall be 1:4 (V:H).

**TRENCH METHOD**

Excavate, backfill and compact trench to secure fabric.

**SEDIMENT BASIN**

The performance of the basin will improve if put into a series.

The long dimension should be parallel with the direction of the flow. Accumulated silt shall be removed anytime the basins become 75% filled.

**TEMPORARY DITCHES FOR CUT & FILL SECTIONS**

Final embankment limits, Temporary toe ditch, Final ditch.

**GENERAL NOTES**

The installation details and dimensions shown for perimeter erosion barriers shall also apply for inlet and pipe protection.

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-13	Corrected notation for flowline (E) on SEDIMENT BASIN ELEVATION.
1-1-12	Omitted hay/straw perimeter barrier. Added SILT METHOD to SECTION A-A.

**TEMPORARY EROSION CONTROL SYSTEMS**

(Sheet 1 of 2)

**STANDARD 280001-07**

**TEMPORARY EROSION CONTROL SYSTEMS**

(Sheet 2 of 2)

**STANDARD 280001-07**



No.	DATE	REVISION DESCRIPTION

PREPARED FOR

**CITY OF HARVEY,**  
15320 BROADWAY AVENUE  
HARVEY, IL 60426



FOR AND ON BEHALF OF ANTERO GROUP

154TH STREET RECONSTRUCTION PROJECT

CONSTRUCTION DETAILS 02

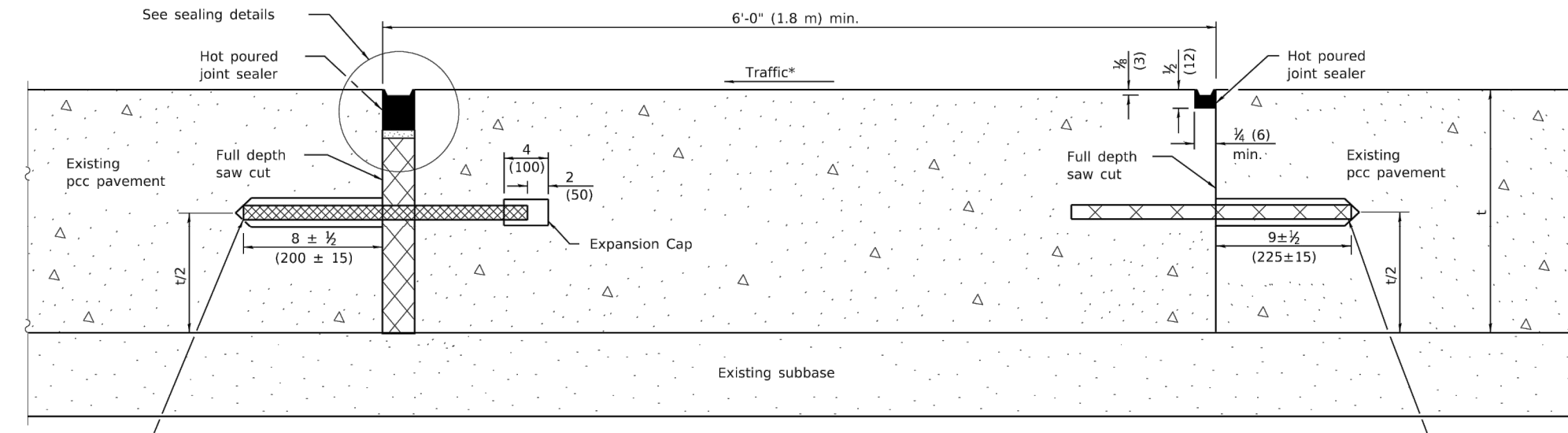
CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER: CoH-2207

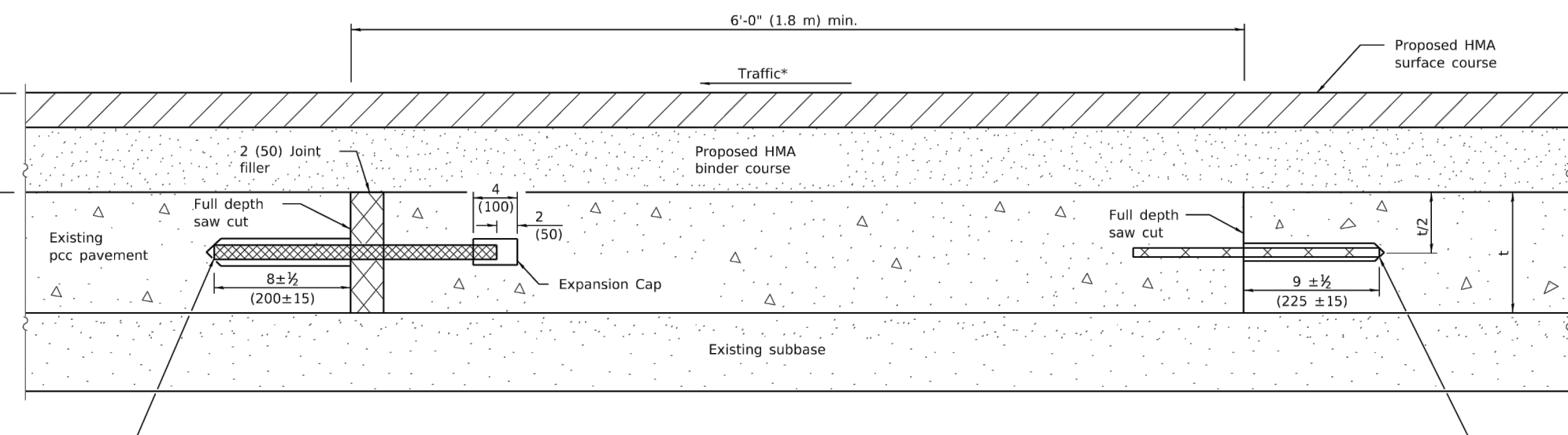
DATE: 3/29/2024

SHEET: C-71

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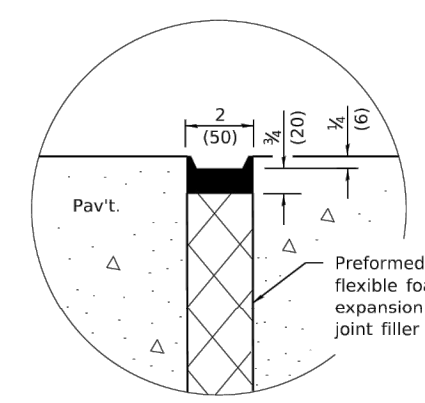


**METHOD I**  
(Without Resurfacing)

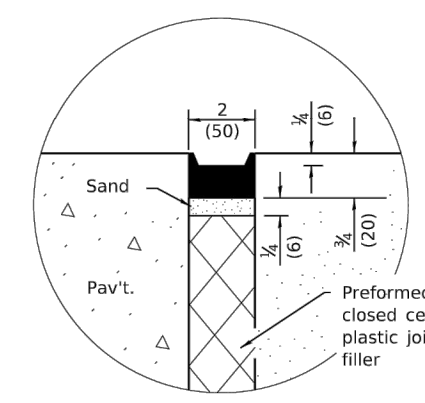


**METHOD II**  
(With Resurfacing)

**TRANSVERSE EXPANSION JOINTS**



**SEALING DETAIL**



**SEALING DETAIL**

**NOTE**

When re-establishing a transverse expansion joint on a two-lane, two-way road, reverse the orientation of the dowel bars with respect to traffic for one of the patches such that the joint will be continuous across both lanes.

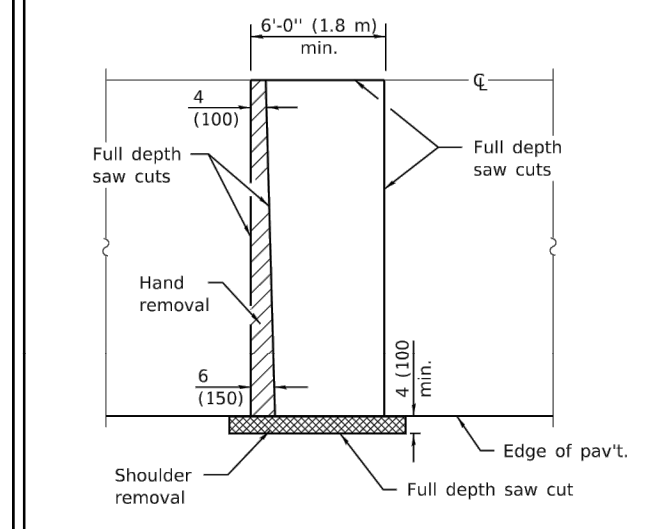
**CLASS B PATCHES**

(Sheet 2 of 2)

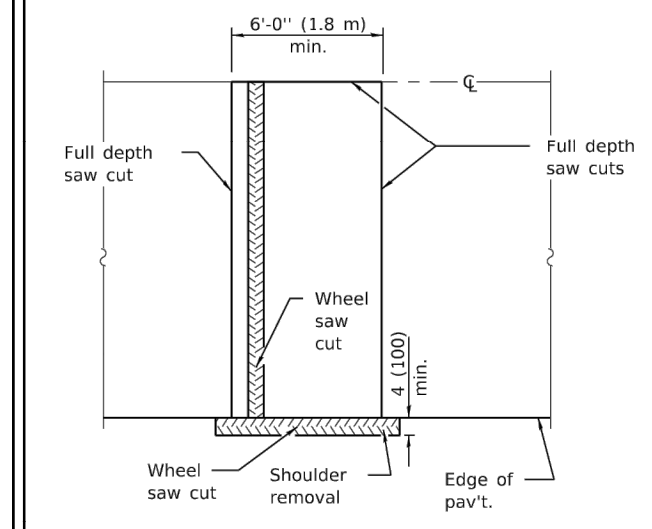
**STANDARD 442101-09**

Illinois Department of Transportation  
 PASSED January 3, 2019  
 ENGINEER OF POLICY AND PROCEDURES  
 APPROVED January 3, 2019  
 ENGINEER OF DESIGN AND ENVIRONMENT

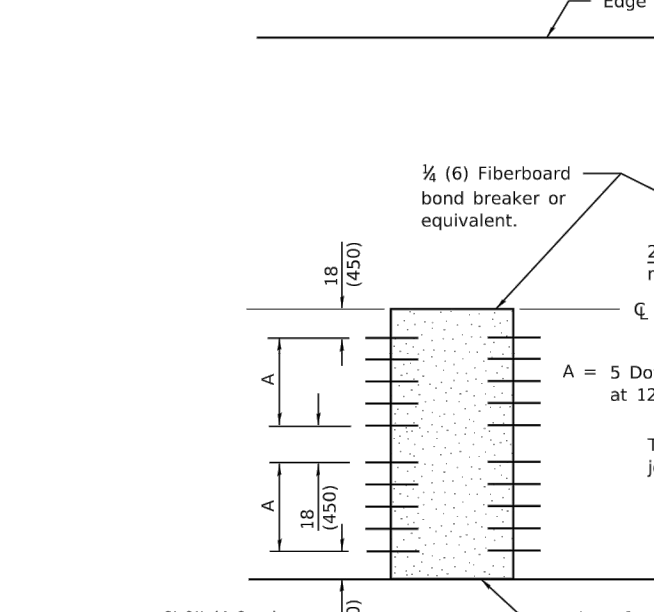
Illinois Department of Transportation  
 PASSED January 3, 2019  
 ENGINEER OF POLICY AND PROCEDURES  
 APPROVED January 3, 2019  
 ENGINEER OF DESIGN AND ENVIRONMENT



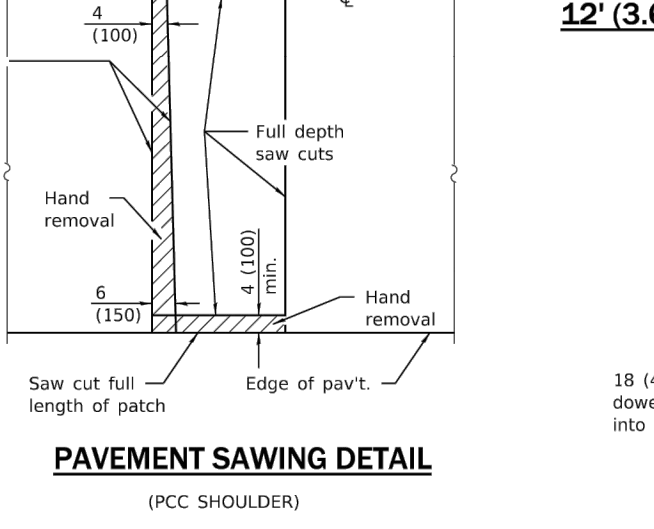
**PAVEMENT SAWING DETAIL**  
(HMA SHOULDER)



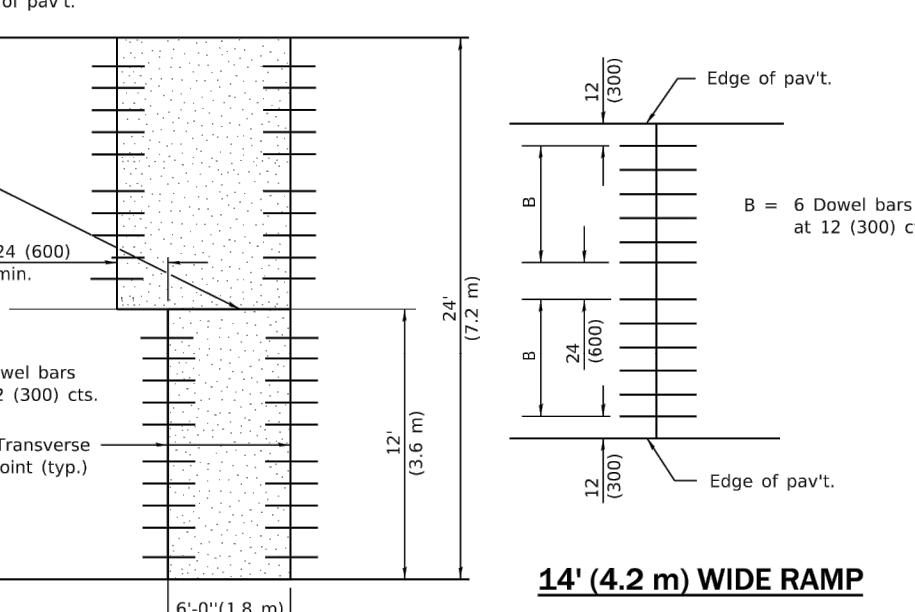
**ALTERNATE SAWING DETAIL**  
(HMA SHOULDER)



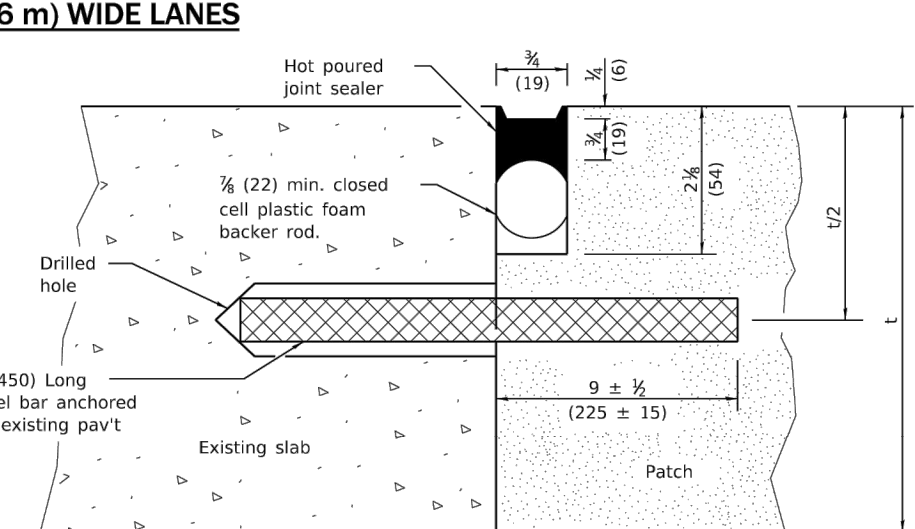
**PAVEMENT SAWING DETAIL**  
(PCC SHOULDER)



**ALTERNATE SAWING DETAIL**  
(PCC SHOULDER)

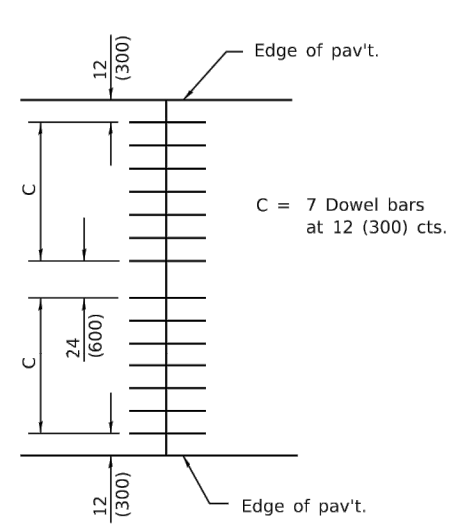


**12' (3.6 m) WIDE LANES**

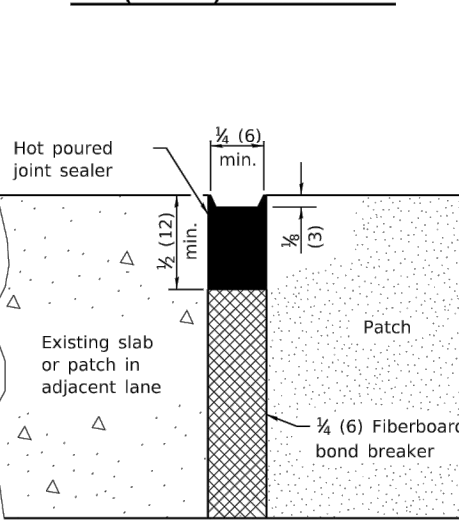


**TRANSVERSE JOINT**

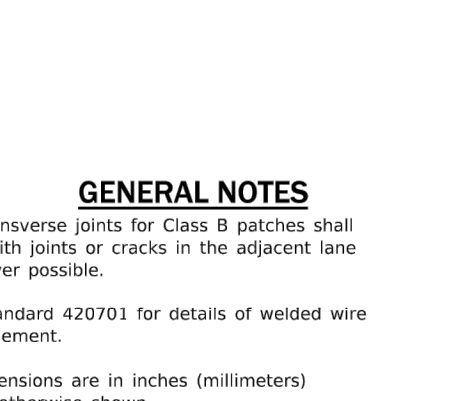
PAVEMENT THICKNESS	DOWEL BAR DIAMETER	HOLE DIAMETER
10 (250) or greater	1 1/2 (38)	1 3/4 (41)
8 (200) thru 9.99 (249)	1 1/4 (32)	1 3/8 (35)
Less than 8 (200)	1 (25)	1 1/8 (29)



**14' (4.2 m) WIDE RAMP**



**16' (4.8 m) WIDE RAMP**



**CENTERLINE JOINT**

**GENERAL NOTES**

The transverse joints for Class B patches shall align with joints or cracks in the adjacent lane whenever possible.  
 See Standard 420701 for details of welded wire reinforcement.  
 All dimensions are in inches (millimeters) unless otherwise shown.

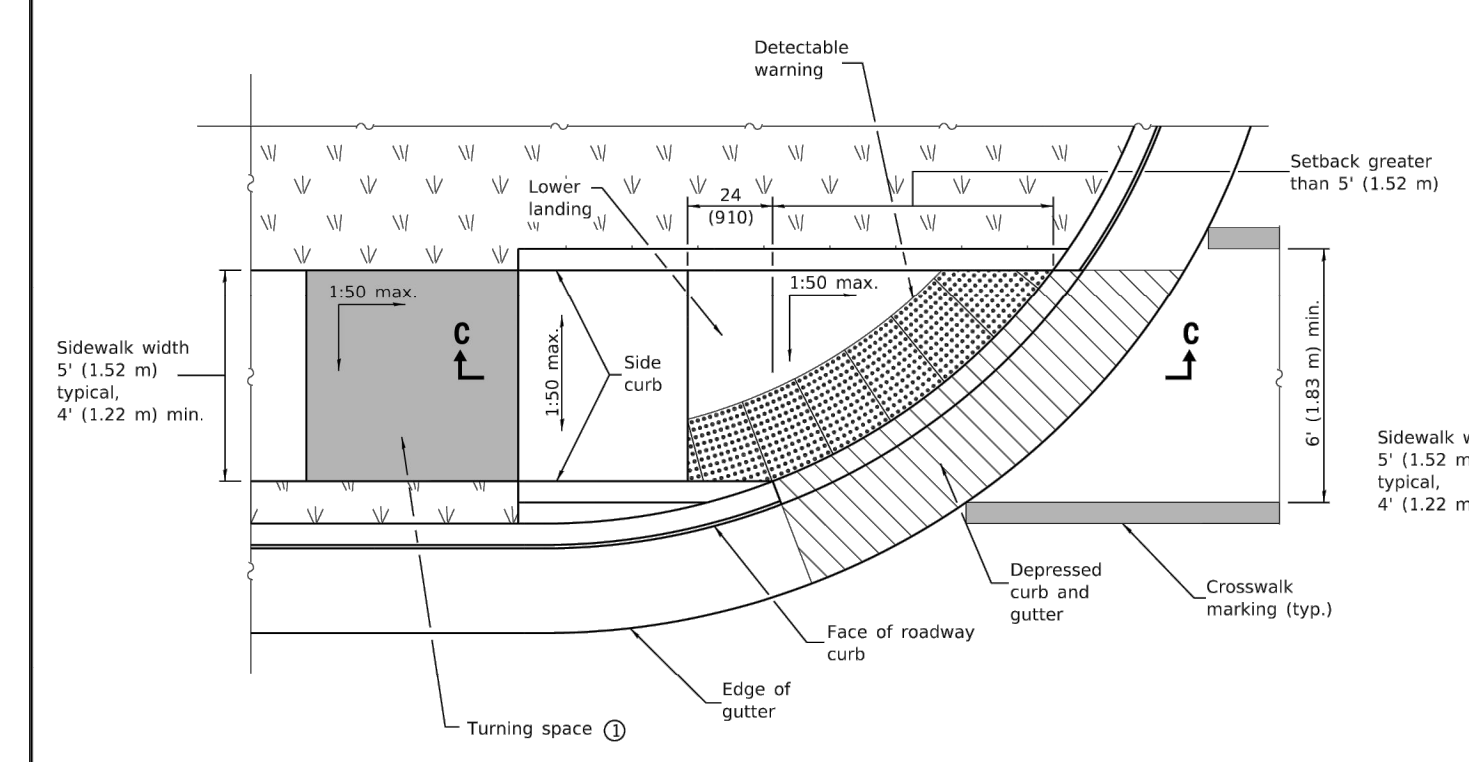
**CLASS B PATCHES**

(Sheet 1 of 2)

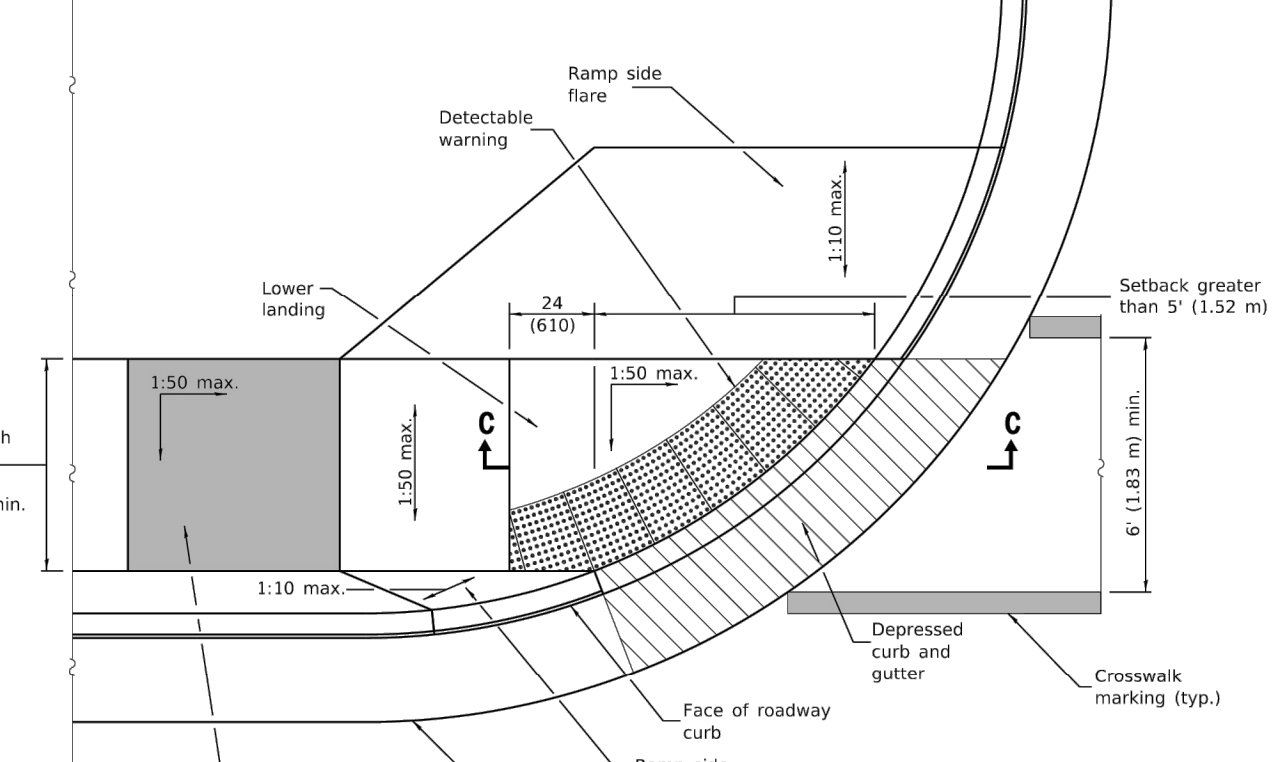
**STANDARD 442101-09**

Illinois Department of Transportation  
 PASSED January 3, 2019  
 ENGINEER OF POLICY AND PROCEDURES  
 APPROVED January 3, 2019  
 ENGINEER OF DESIGN AND ENVIRONMENT

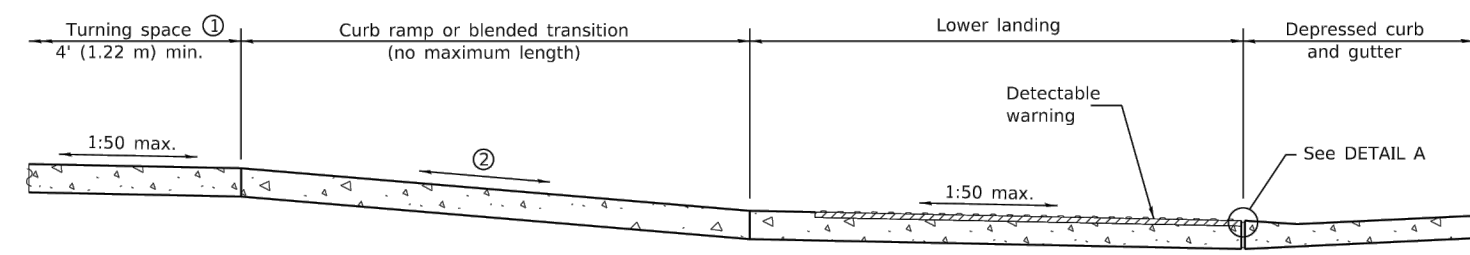
DATE	REVISIONS
1-1-19	Revised reference to Standard 420701 in General Notes.
1-1-18	Revised DOWEL BAR TABLE.



**RAMP IN LANDSCAPED AREA**  
**SETBACK > 5'**



**RAMP IN PAVED AREA**  
**SETBACK > 5'**



**SECTION C-C**

- This turning space not required for blended transitions.
- The running slope of a curb ramp shall be 1:20 min. and 1:12 max. The running slope of a blended transition shall be 1:20 max.

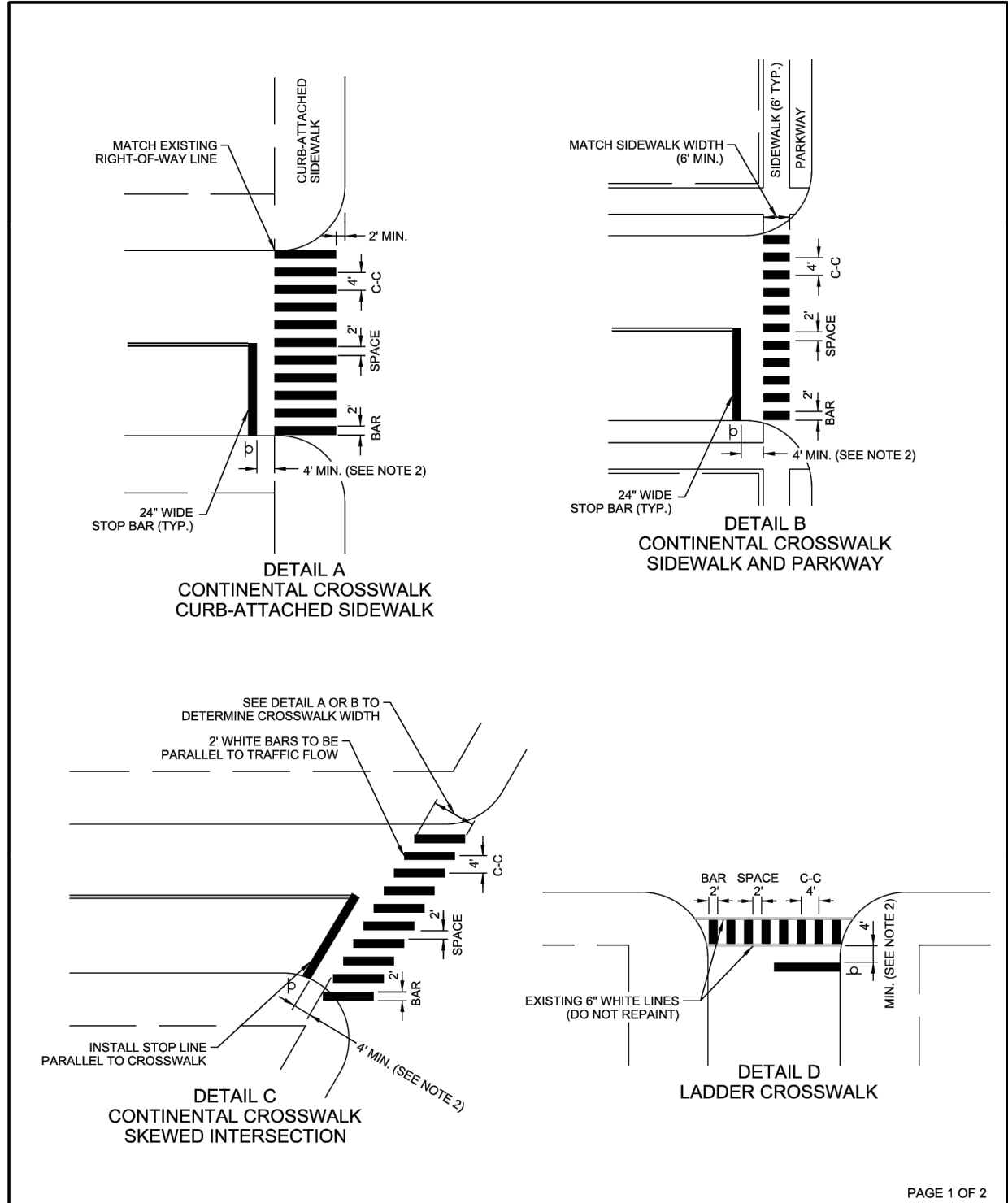
**GENERAL NOTES**

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).  
 Where the turning space is constrained on a side opposite a ramp, the minimum length of the turning space in the direction of the ramp-run shall be 5' (1.52 m).  
 Where 1:50 maximum slope is shown, 1:64 is preferred.  
 Detectable warnings are shown in their ideal locations but the following placement tolerances are allowed.  
**Side Border** - Detectable warnings should extend the full width of the walking surface (excluding flared sides) but a border along each side up to 2 in. (50 mm) in width is allowed.  
**Curb Set-Back** - Detectable warnings located at the back of curb should closely align with the curb but a gap up to 6 in. (150 mm) behind the curb is allowed.  
 See Standard 606001 for details of depressed curb adjacent to curb ramp.  
 All dimensions are in inches (millimeters) unless otherwise shown.

**PERPENDICULAR CURB RAMPS FOR SIDEWALKS**

(Sheet 2 of 2)

**STANDARD 442001-11**



PAGE 1 OF 2

DATE	REVISION	CITY OF CHICAGO	
1/1/2014	REVISION 1	DATE	SHEET
		06/25/12	A-7-1A
		DRAWN BY	CDOT



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

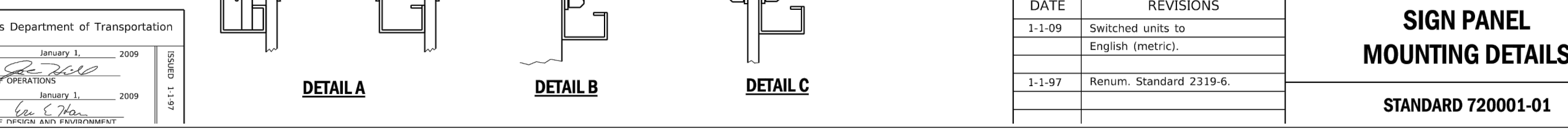
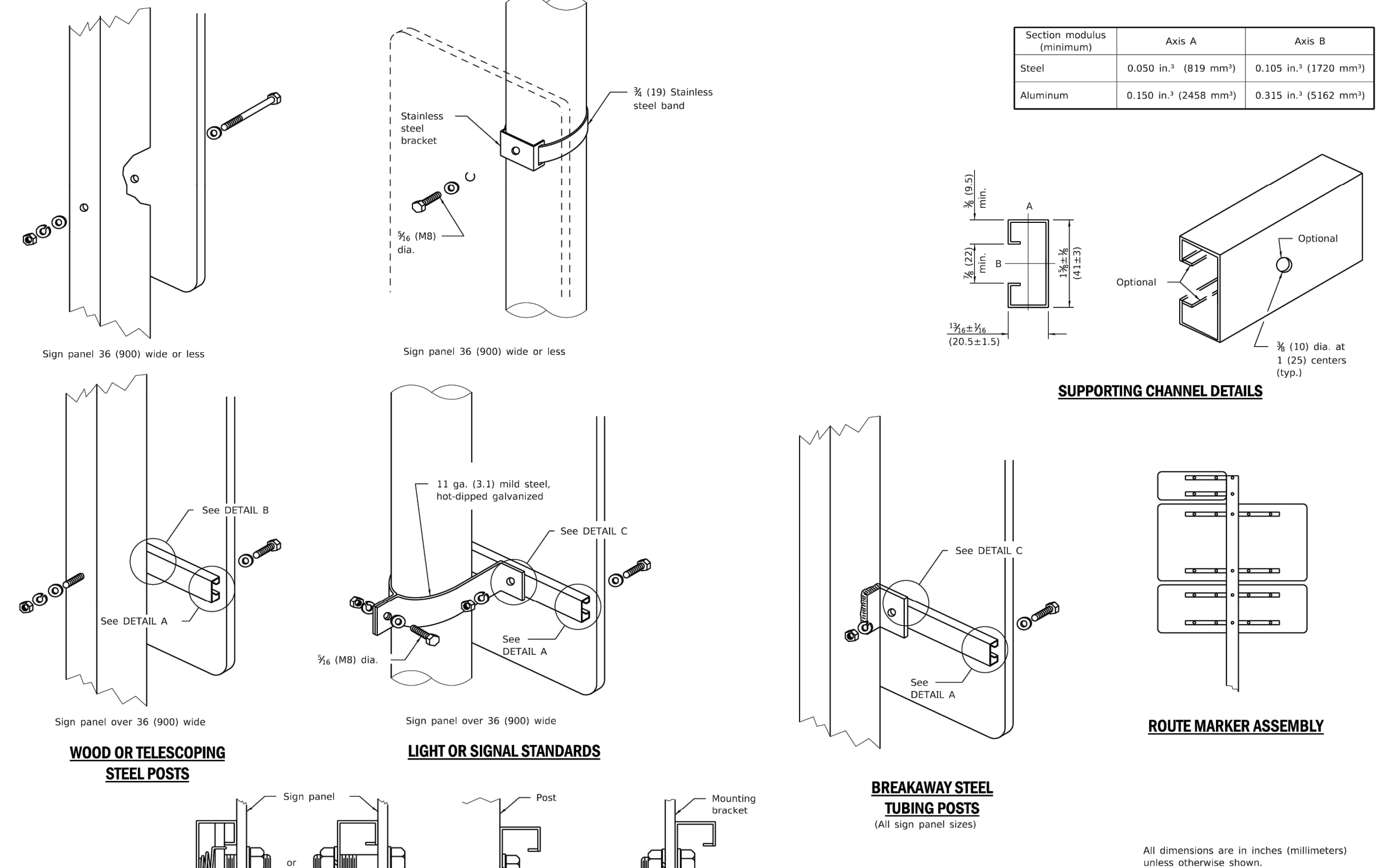


PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

154TH STREET RECONSTRUCTION PROJECT  
 CONSTRUCTION DETAILS 03  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER	CoH-2207
DATE	3/29/2024
SHEET	C-72

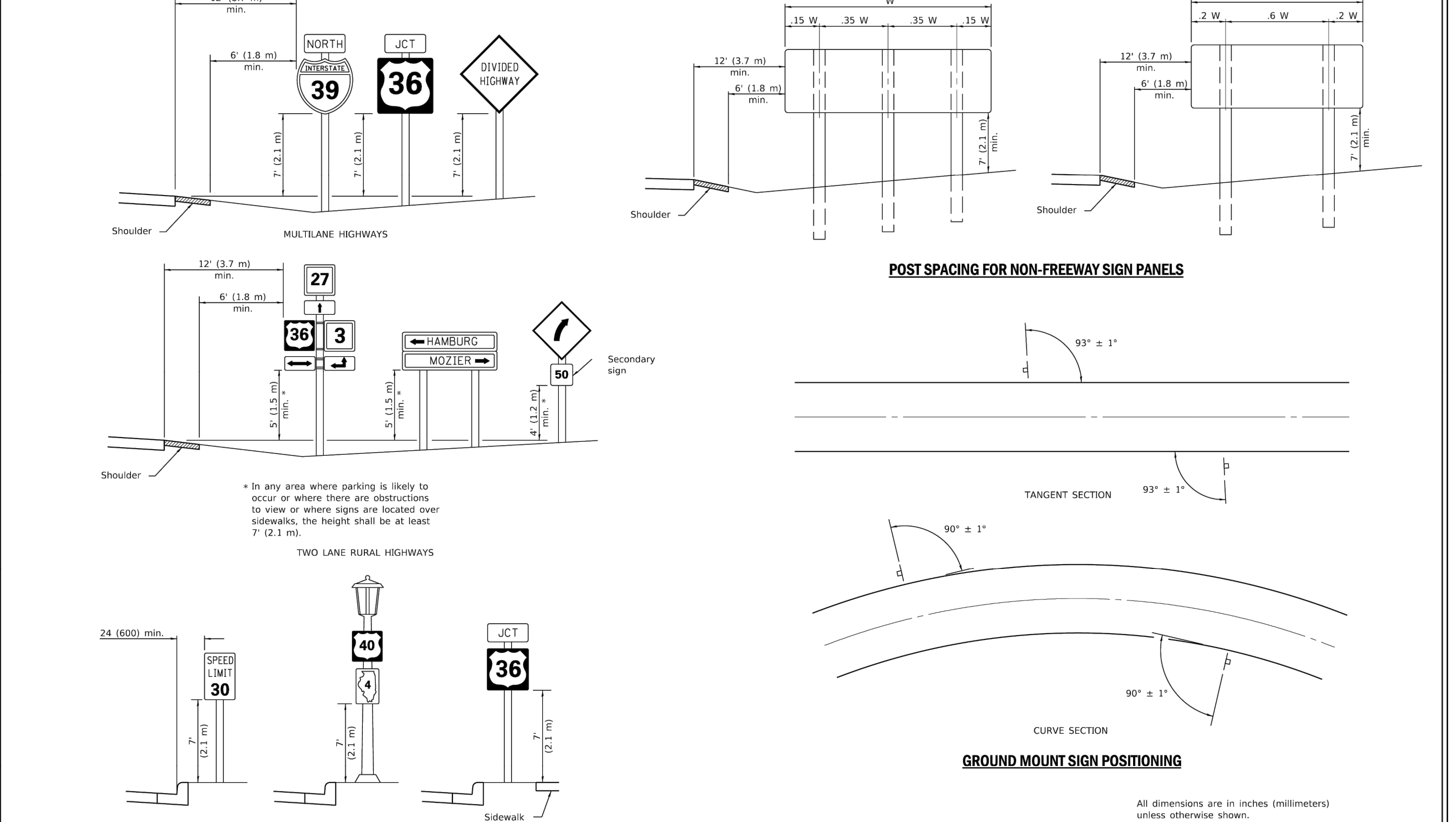
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DATE	REVISIONS
1-1-09	Switched units to English (metric).
1-1-97	Renum. Standard 2319-6.

**SIGN PANEL MOUNTING DETAILS**

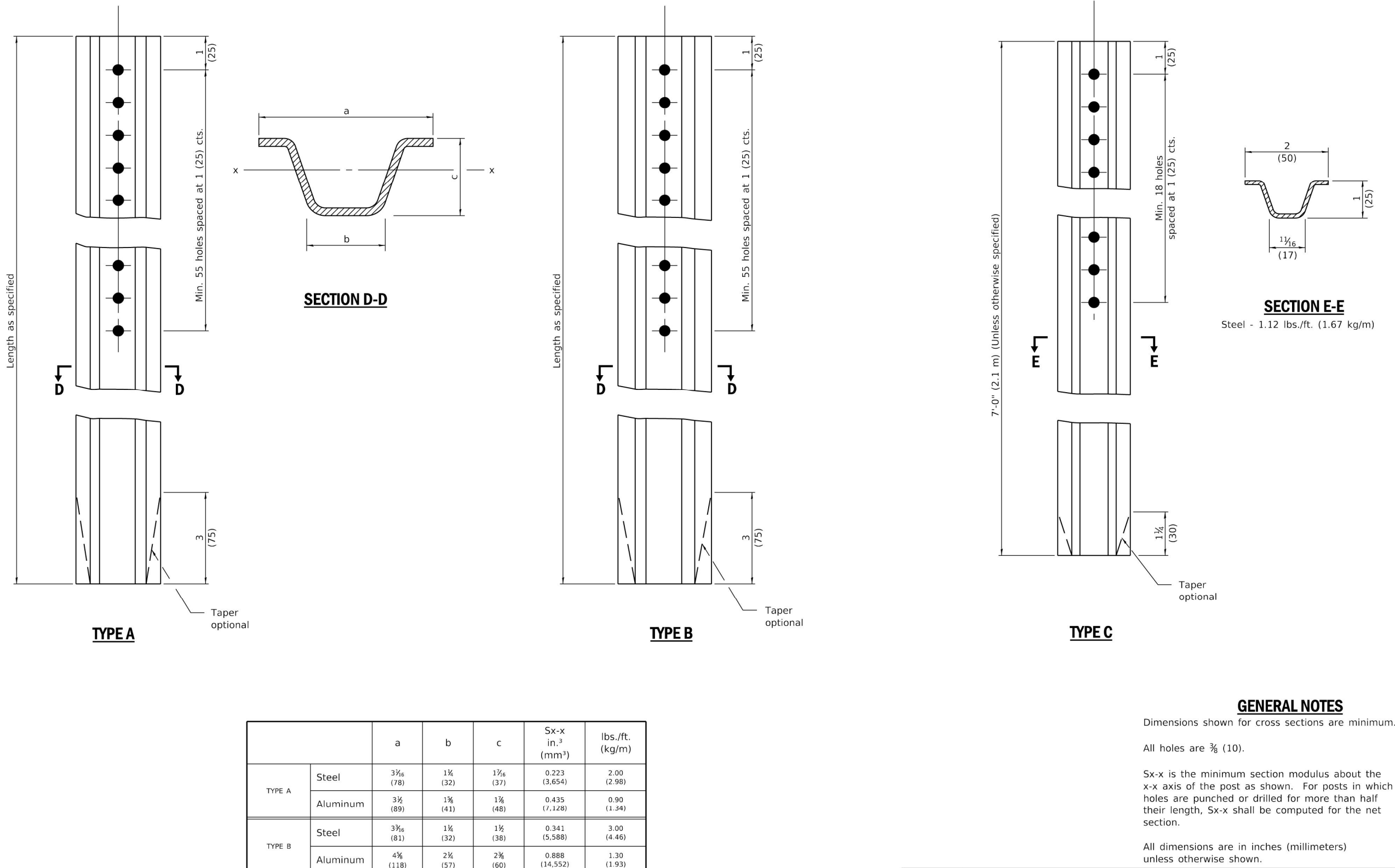
**STANDARD 720001-01**



DATE	REVISIONS
1-1-14	Added shoulders and slopes. Changed sign distances from roadway and shoulder.
1-1-12	Rev. sign elev. for multilane hwy's. Revised sign elev. and dist. to curb for rural loc.

**SIGN PANEL ERECTION DETAILS**

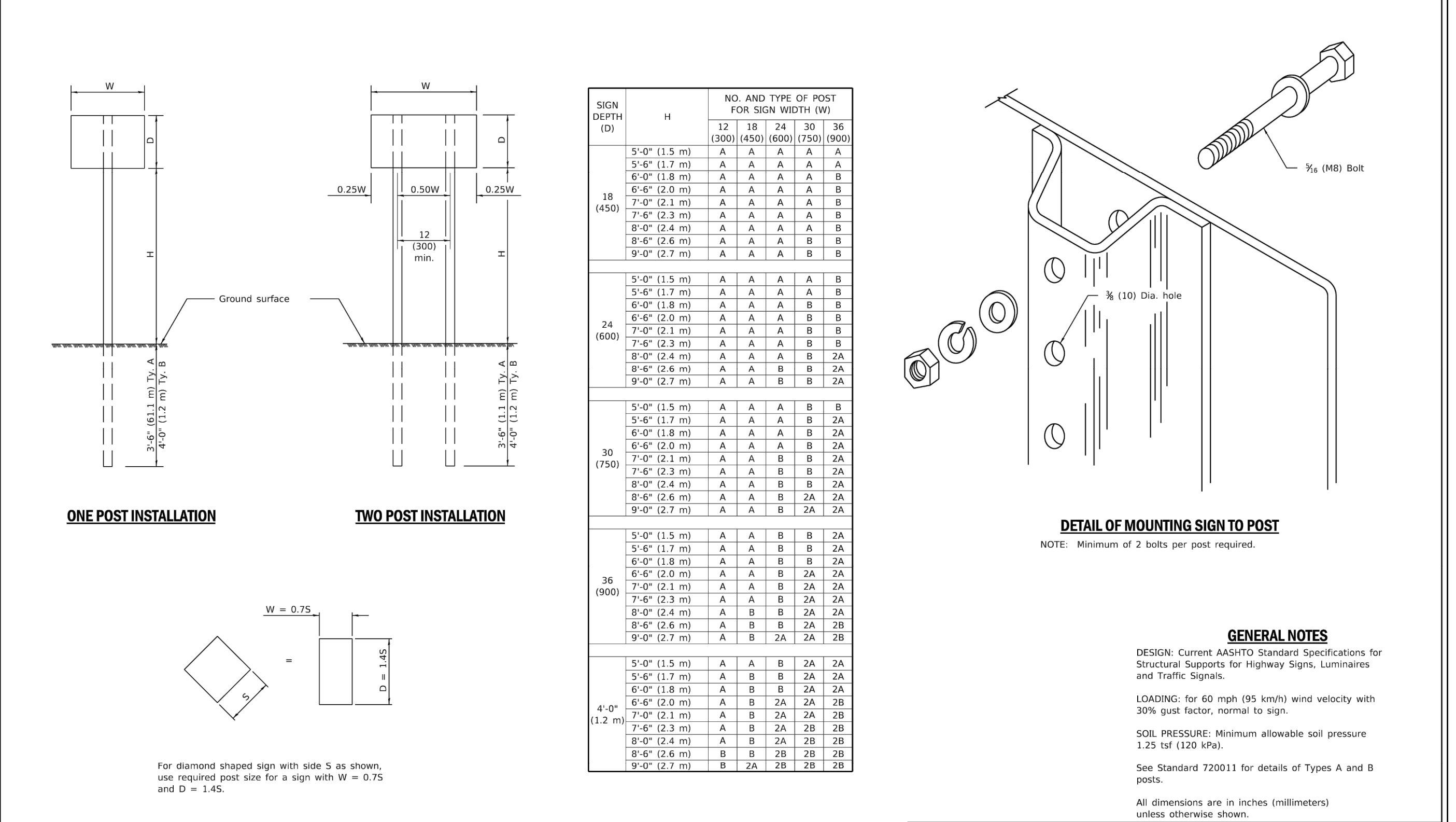
**STANDARD 720006-04**



DATE	REVISIONS
1-1-09	Switched units to English (metric).
1-1-97	Renum. Standard 2350-4.

**METAL POSTS FOR SIGNS, MARKERS & DELINEATORS**

**STANDARD 720011-01**



DATE	REVISIONS
1-1-09	Switched units to English (metric).
1-1-97	Renum. Standard 2362-2.

**APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)**

**STANDARD 729001-01**



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

154TH STREET RECONSTRUCTION PROJECT  
 CONSTRUCTION DETAILS 04  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
 CoH-2207  
 DATE  
 3/29/2024  
 SHEET  
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**SECTION PARALLEL TO PIPE**  
(Without conical top riser)

**SECTION PERPENDICULAR TO PIPE**  
(With conical top riser)

**BASE SLAB JOINT CONFIGURATIONS**

**GEOMETRIC LIMITS FOR PIPE PENETRATION HOLES**

**FLAT SLAB TOP JOINT CONFIGURATIONS**  
(Shown at access hole)

**SHEAR KEY GEOMETRY**  
(Reinforcement not shown for clarity)

**GENERAL NOTES**

Pipe holes shall be formed to facilitate proper placement of hole reinforcement.

The manufacturer shall ensure that all precast manhole sections are additionally reinforced where required to resist damage from handling, shipping and installation stresses.

Lifting holes shall be located in the sections as per the manufacturer's recommendations.

See Standard 602701 for details of manhole steps.

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS
1-1-21	Revised Note 1, Note 2 and lifting hole general note.
3-1-19	Moved wall reinforcement from inside face to middle.

**PRECAST MANHOLE TYPE A**  
**6' (1.83 m) DIAMETER**  
(Sheet 1 of 3)

**STANDARD 602406-11**

**FLAT SLAB TOP REINFORCEMENT**

Location	Riser Height (RH)	WWR (each direction)		Rebar (each direction except as noted)		Bar Size
		A <sub>s</sub> (min.)	Spacing (max.)	A <sub>s</sub> (min.)	Spacing (max.)	
Top Mat	All	0.11 sq. in./ft. (233 sq. mm/m)	18 (450)	0.11 sq. in./ft. (233 sq. mm/m)	18 (450)	#3 or #4 (#10) (#13)
Bottom Mat	RH ≤ 10 ft. (3.05 m)	** 0.62 sq. in./ft. (1312 sq. mm/m)	6 (150)	See plan view for rebar orientation and spacing and this table for bar size		#5 (#16)
	RH > 10 ft. (3.05 m)	** 0.88 sq. in./ft. (1963 sq. mm/m)	6 (150)			#6 (#19)

\*\* Only one layer of WWR permitted to avoid congestion.

**WALL REINFORCEMENT**

Location	Orientation	WWR or Rebar	
		A <sub>s</sub> (min.)	Spacing (max.)
4 ft. (1.22 m) Ø Riser	Circumferential	0.12 sq. in./ft. (254 sq. mm/m)	6 (150)
	Vertical	0.045 sq. in./ft. (95 sq. mm/m)	8 (200)
6 ft. (1.83 m) Ø Barrel	Circumferential	0.18 sq. in./ft. (381 sq. mm/m)	6 (150)
	Vertical	0.045 sq. in./ft. (95 sq. mm/m)	8 (200)

**BASE SLAB REINFORCEMENT**

Location	Riser Height (RH)/ Total Height (TH)	WWR or Rebar (each direction)	
		A <sub>s</sub> (min.)	Spacing (max.)
Top Mat	RH ≤ 10 ft. (3.05 m) & TH ≤ 20 ft. (6.10 m)	0.28 sq. in./ft. (593 sq. mm/m)	6 (150)
	RH > 10 ft. (3.05 m) or TH > 20 ft. (6.10 m)	0.40 sq. in./ft. (847 sq. mm/m)	6 (150)
Bottom Mat	All	0.11 sq. in./ft. (233 sq. mm/m)	18 (450)

**JOINT SPLICE**

**CONNECTION ANGLE**

**TIE PLATE**

**PRECAST MANHOLE TYPE A**  
**6' (1.83 m) DIAMETER**  
(Sheet 3 of 3)

**STANDARD 602406-11**

**PLAN - FLAT SLAB TOP**  
(Showing layout of bottom reinforcement bars and c bars)

**PLAN - FLAT SLAB TOP**  
(Showing layout of welded wire reinforcement and c bars)

**PRECAST MANHOLE TYPE A**  
**6' (1.83 m) DIAMETER**  
(Sheet 2 of 3)

**STANDARD 602406-11**

**ELEVATION (Standard Outlet)**

**ELEVATION (Half Trap)**

**ALTERNATE BOTTOM SLAB**

**ALTERNATE MATERIALS FOR WALLS**

	D	C*	T
Precast Reinforced Concrete Section	4'-0" (1.2 m)	30 (750)	4 (100)
Cast-in-place Concrete	4'-0" (1.2 m)	30 (750)	6 (150)

\* For precast reinforced concrete sections, dimension "C" may vary from the dimension given to plus 6 (150).

**GENERAL NOTES**

Bottom slabs shall be reinforced with a minimum of 0.20 sq. in./ft. (420 sq. mm/m) in both directions with a maximum spacing of 12 (300).

Bottom slabs may be connected to the riser as determined by the fabricator; however, only a single row of reinforcement around the perimeter may be utilized.

See Standard 602601 for optional precast reinforced concrete flat slab top.

See Standard 602701 for details of steps.

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-11	Added "Outside" to half trap note. Detail rem. in slabs.
1-1-09	Revised general notes.
	Switched units to English (metric).

**CATCH BASIN TYPE A**  
**STANDARD 602001-02**



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
15320 BROADWAY AVENUE  
HARVEY, IL 60426



PE STAMP  
FOR AND ON BEHALF OF ANTERO GROUP

154TH STREET RECONSTRUCTION PROJECT  
CONSTRUCTION DETAILS 05  
CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
CoH-2207  
DATE  
3/29/2024  
SHEET  
**C-74**

File Location: C:\Users\jaye\OneDrive - anterogroup.com\Documents - anterogroup.com\Documents - anterogroup.com\Projects\154th St Reconstruction\DWG\Sheets\CoH+2207-STRM-DET.dwg Date: 4/15/2024 12:38 PM Last Saved By: LICZHIPPE

**SECTION A-A**  
CAST FRAME

**SECTION B-B**  
CAST FRAME

**SECTION C-C**  
CAST GRATE

**SECTION D-D**  
CAST GRATE

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-15	Revised dimensions of frame and grate.
1-1-09	Switched units to English (metric).

**FRAME AND GRATE TYPE 12**  
STANDARD 604061-03

Illinois Department of Transportation  
PASSED: January 1, 2015  
ENGINEER OF POLICY AND PROCEDURES  
APPROVED: January 1, 2015  
ENGINEER OF DESIGN AND ENVIRONMENT

**SECTION A-A**  
CAST FRAME

**SECTION B-B**  
CAST FRAME

**SECTION C-C**  
CAST GRATE

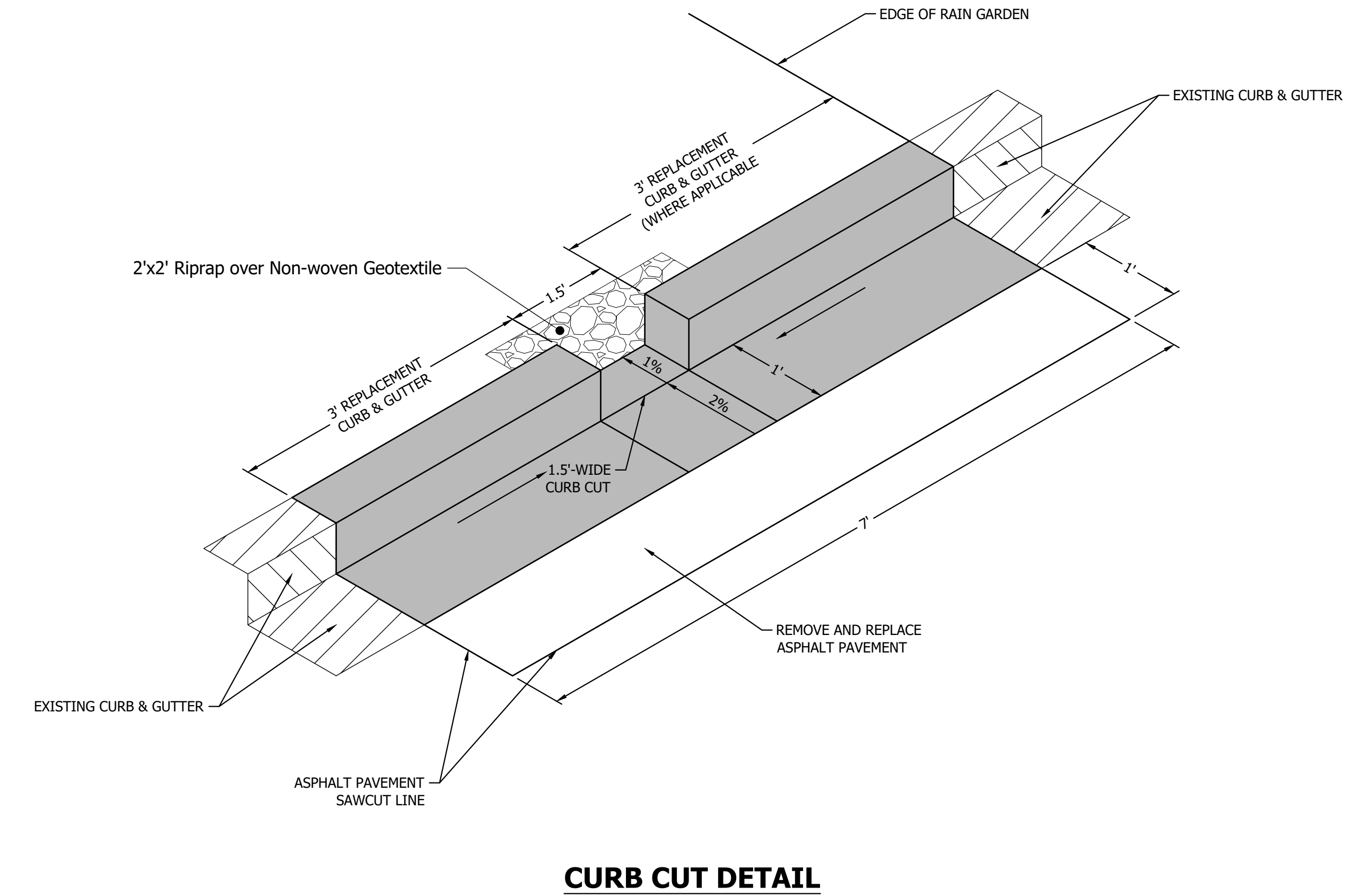
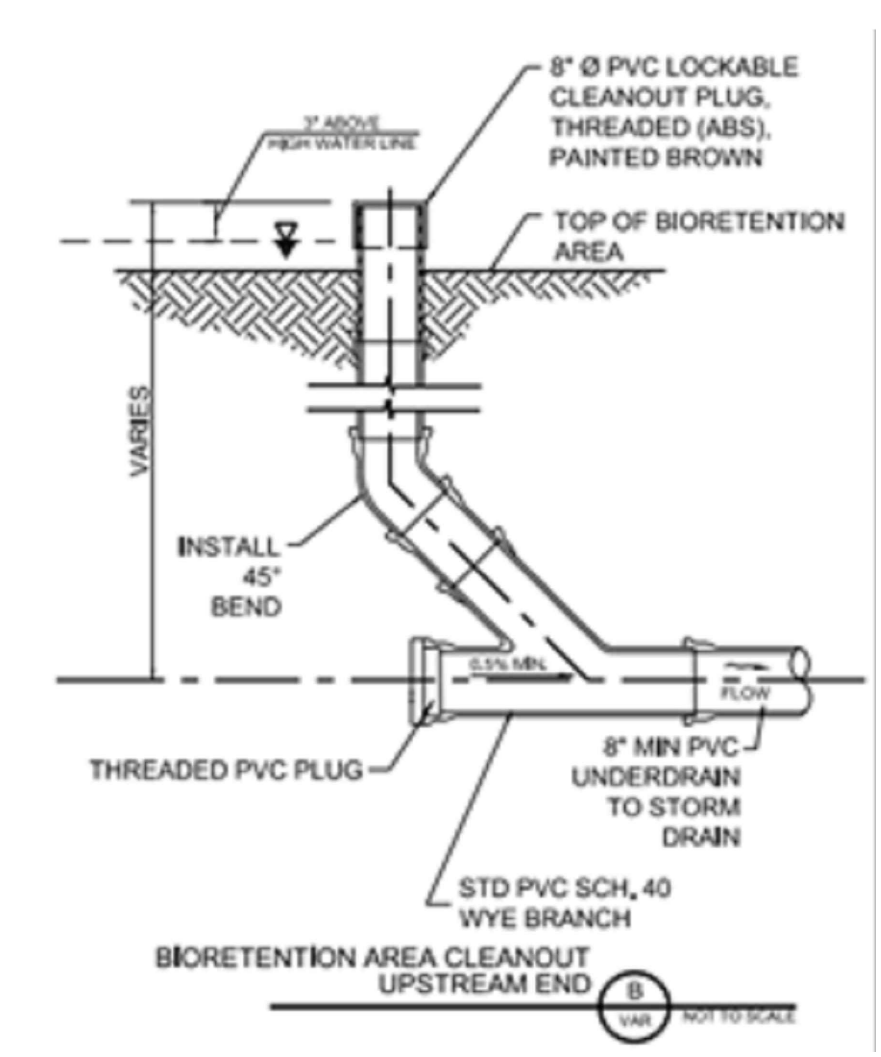
**SECTION D-D**  
CAST GRATE

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-15	Revised dimensions of frame.
1-1-09	Switched units to English (metric).

**FRAME AND GRATE TYPE 9**  
STANDARD 604041-03

Illinois Department of Transportation  
PASSED: January 1, 2015  
ENGINEER OF POLICY AND PROCEDURES  
APPROVED: January 1, 2015  
ENGINEER OF DESIGN AND ENVIRONMENT



**CURB CUT DETAIL**



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
15320 BROADWAY AVENUE  
HARVEY, IL 60426



PE STAMP  
FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
CONSTRUCTION DETAILS 06  
CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER: CoH-2207  
DATE: 3/29/2024  
SHEET: C-75

File Location: C:\Users\Alye\OneDrive - anterogroup.com\Documents - anterogroup.com\Documents - anterogroup.com\Projects\City of harvey\cap2207\_154th st reconstruction\DWG\Sheets\CoH+2207-STRM-DET.dwg Plot Date: 4/15/2024 12:39 PM Last Saved By: LICZHIPPE

**SECTION PARALLEL TO PIPE**  
(Without conical top riser)

**SECTION PERPENDICULAR TO PIPE**  
(With conical top riser)

**BASE SLAB JOINT CONFIGURATIONS**

**GEOMETRIC LIMITS FOR PIPE PENETRATION HOLES**

**GENERAL NOTES**

**FLAT SLAB TOP JOINT CONFIGURATIONS**  
(Shown at access hole)

**PRECAST MANHOLE TYPE A**  
**4' (1.22 m) DIAMETER**  
STANDARD 602401-06  
(Sheet 1 of 2)

Illinois Department of Transportation  
PASSED: [Signature] March 1, 2019  
ENGINEER OF POLICY AND PROCEDURES  
APPROVED: [Signature] March 1, 2019  
ENGINEER OF DESIGN AND ENVIRONMENT

**FLAT SLAB TOP REINFORCEMENT**

**WALL REINFORCEMENT**

**BASE SLAB REINFORCEMENT**

**JOINT SPLICE**

**CONNECTION ANGLE**

**TIE PLATE**

**PRECAST MANHOLE TYPE A**  
**4' (1.22 m) DIAMETER**  
STANDARD 602401-06  
(Sheet 2 of 2)

Illinois Department of Transportation  
PASSED: [Signature] March 1, 2019  
ENGINEER OF POLICY AND PROCEDURES  
APPROVED: [Signature] March 1, 2019  
ENGINEER OF DESIGN AND ENVIRONMENT

**CAST FRAME**

**SECTION C-C**

**SECTION F-F**

**SECTION B-B**

**CAST OPEN LID**

**SECTION E-E**

**ADA COMPLIANT CAST OPEN LID**

**SECTION D-D**

**CAST CLOSED LID**  
Gray Iron Lid

**FRAME AND LIDS TYPE 1**  
STANDARD 604001-05

Illinois Department of Transportation  
PASSED: [Signature] February 1, 2020  
ENGINEER OF POLICY AND PROCEDURES  
APPROVED: [Signature] February 1, 2020  
ENGINEER OF DESIGN AND ENVIRONMENT

**TYPICAL DROP MANHOLE CONNECTION**

**DIAMETER (INCHES)**

D1	D2
6	8
8	8
10	8
12	8
15	10
18	12
21	15
24	18

**NOTES:**

- REQUIRED FOR 2FT. OR GREATER DROP TO SANITARY OR COMBINED SEWER.
- MINIMUM WALL THICKNESS IS 6" FOR CAST IN PLACE CONCRETE STRUCTURES AND 1/2" MANHOLE DIAMETER FOR PRECAST CONCRETE STRUCTURES.
- CONCRETE FOR ENCASEMENT SHALL BE 4,000 PSI @ 28 DAYS.
- FORCEMAIN FLOW NOT ALLOWED AS INCOMING SEWER, SEE FORCEMAIN DISCHARGE DETAIL.

TECHNICAL GUIDANCE MANUAL  
7/1/15  
STD. Dwg. NO. 33  
PAGE NO. 34



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
15320 BROADWAY AVENUE  
HARVEY, IL 60426

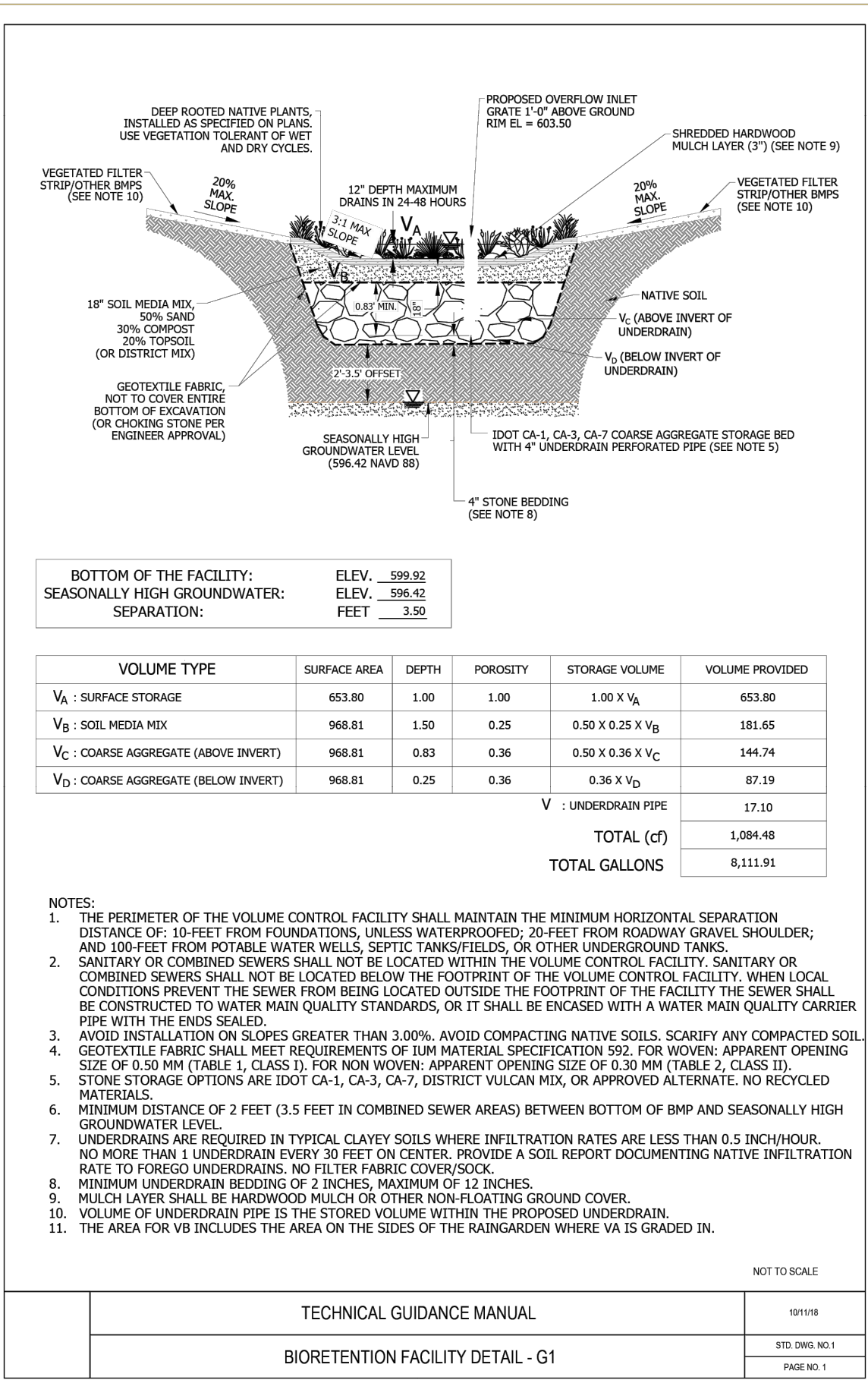


PE STAMP  
FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
CONSTRUCTION DETAILS 07  
CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
CoH-2207  
DATE  
3/29/2024  
SHEET  
C-76





**BOTTOM OF THE FACILITY:**  
SEASONALLY HIGH GROUNDWATER SEPARATION: ELEV. 599.92, FEET 3.50

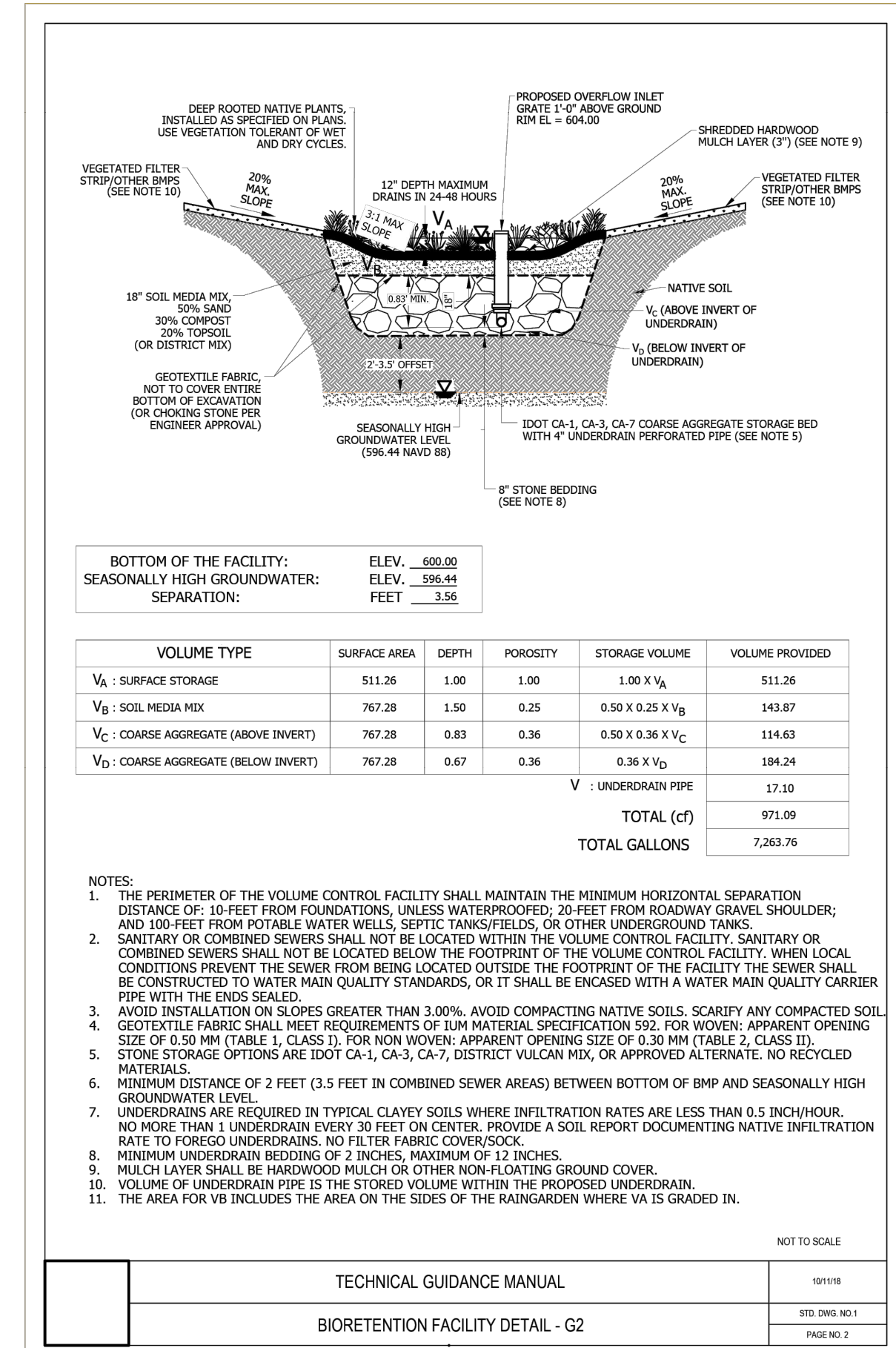
VOLUME TYPE	SURFACE AREA	DEPTH	POROSITY	STORAGE VOLUME	VOLUME PROVIDED
V <sub>A</sub> : SURFACE STORAGE	653.80	1.00	1.00	1.00 X V <sub>A</sub>	653.80
V <sub>B</sub> : SOIL MEDIA MIX	968.81	1.50	0.25	0.50 X 0.25 X V <sub>B</sub>	181.65
V <sub>C</sub> : COARSE AGGREGATE (ABOVE INVERT)	968.81	0.83	0.36	0.50 X 0.36 X V <sub>C</sub>	147.74
V <sub>D</sub> : COARSE AGGREGATE (BELOW INVERT)	968.81	0.25	0.36	0.36 X V <sub>D</sub>	87.19
V : UNDERDRAIN PIPE					17.10
TOTAL (cf)					1,084.48
TOTAL GALLONS					8,111.91

**NOTES:**  
1. THE PERIMETER OF THE VOLUME CONTROL FACILITY SHALL MAINTAIN THE MINIMUM HORIZONTAL SEPARATION DISTANCE OF: 10- FEET FROM FOUNDATIONS, UNLESS WATERPROOFED; 20- FEET FROM ROADWAY GRAVEL SHOULDER; AND 100- FEET FROM POTABLE WATER WELLS, SEPTIC TANKS/FIELDS, OR OTHER UNDERGROUND TANKS.  
2. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED WITHIN THE VOLUME CONTROL FACILITY. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED BELOW THE FOOTPRINT OF THE VOLUME CONTROL FACILITY. WHEN LOCAL CONDITIONS PREVENT THE SEWER FROM BEING LOCATED OUTSIDE THE FOOTPRINT OF THE FACILITY THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN QUALITY STANDARDS, OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.  
3. AVOID INSTALLATION ON SLOPES GREATER THAN 3.00%. AVOID COMPACTING NATIVE SOILS. SCARIFY ANY COMPACTED SOIL.  
4. GEOTEXTILE FABRIC SHALL MEET REQUIREMENTS OF LHM MATERIAL SPECIFICATION 592. FOR WOVEN: APPARENT OPENING SIZE OF 0.50 MM (TABLE 1, CLASS 1). FOR NON WOVEN: APPARENT OPENING SIZE OF 0.30 MM (TABLE 2, CLASS II).  
5. STONE STORAGE OPTIONS ARE IDOT CA-1, CA-3, CA-7, DISTRICT VULCAN MIX, OR APPROVED ALTERNATE. NO RECYCLED MATERIALS.  
6. MINIMUM DISTANCE OF 2 FEET (3.5 FEET IN COMBINED SEWER AREAS) BETWEEN BOTTOM OF BMP AND SEASONALLY HIGH GROUNDWATER LEVEL.  
7. UNDERDRAINS ARE REQUIRED IN TYPICAL CLAYEY SOILS WHERE INFILTRATION RATES ARE LESS THAN 0.5 INCH/HOUR. NO MORE THAN 1 UNDERDRAIN EVERY 30 FEET ON CENTER. PROVIDE A SOIL REPORT DOCUMENTING NATIVE INFILTRATION RATE TO FOREGO UNDERDRAINS. NO FILTER FABRIC COVER/SOCK.  
8. MINIMUM UNDERDRAIN BEDDING OF 2 INCHES, MAXIMUM OF 12 INCHES.  
9. MULCH LAYER SHALL BE HARDWOOD MULCH OR OTHER NON-FLOATING GROUND COVER.  
10. VOLUME OF UNDERDRAIN PIPE IS THE STORED VOLUME WITHIN THE PROPOSED UNDERDRAIN.  
11. THE AREA FOR VB INCLUDES THE AREA ON THE SIDES OF THE RAINGARDEN WHERE VA IS GRADED IN.

NOT TO SCALE

TECHNICAL GUIDANCE MANUAL 101116

BIORETENTION FACILITY DETAIL - G1



**BOTTOM OF THE FACILITY:**  
SEASONALLY HIGH GROUNDWATER SEPARATION: ELEV. 600.00, FEET 3.56

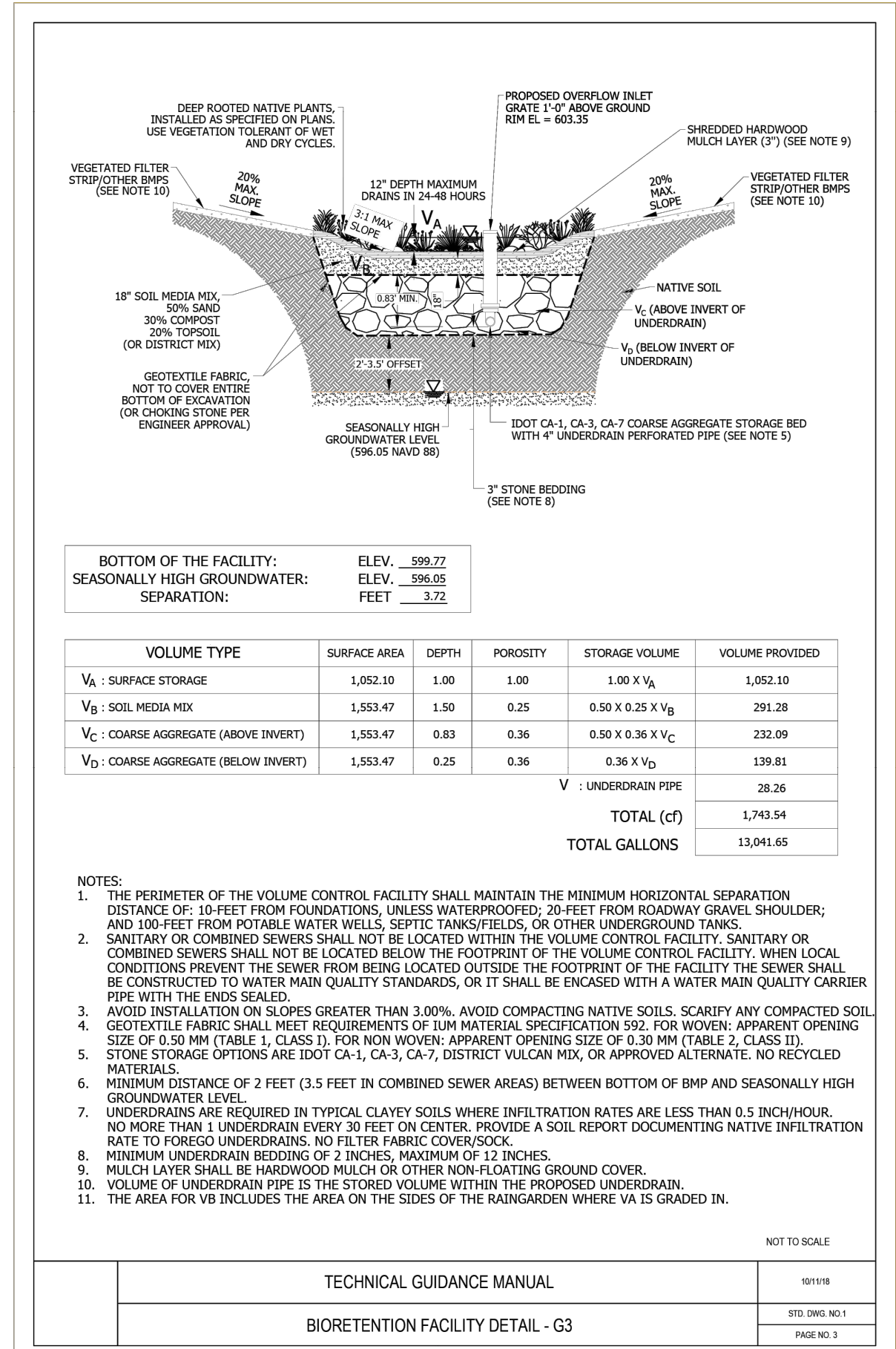
VOLUME TYPE	SURFACE AREA	DEPTH	POROSITY	STORAGE VOLUME	VOLUME PROVIDED
V <sub>A</sub> : SURFACE STORAGE	511.26	1.00	1.00	1.00 X V <sub>A</sub>	511.26
V <sub>B</sub> : SOIL MEDIA MIX	767.28	1.50	0.25	0.50 X 0.25 X V <sub>B</sub>	143.87
V <sub>C</sub> : COARSE AGGREGATE (ABOVE INVERT)	767.28	0.83	0.36	0.50 X 0.36 X V <sub>C</sub>	114.63
V <sub>D</sub> : COARSE AGGREGATE (BELOW INVERT)	767.28	0.25	0.36	0.36 X V <sub>D</sub>	104.24
V : UNDERDRAIN PIPE					17.10
TOTAL (cf)					971.09
TOTAL GALLONS					7,263.76

**NOTES:**  
1. THE PERIMETER OF THE VOLUME CONTROL FACILITY SHALL MAINTAIN THE MINIMUM HORIZONTAL SEPARATION DISTANCE OF: 10- FEET FROM FOUNDATIONS, UNLESS WATERPROOFED; 20- FEET FROM ROADWAY GRAVEL SHOULDER; AND 100- FEET FROM POTABLE WATER WELLS, SEPTIC TANKS/FIELDS, OR OTHER UNDERGROUND TANKS.  
2. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED WITHIN THE VOLUME CONTROL FACILITY. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED BELOW THE FOOTPRINT OF THE VOLUME CONTROL FACILITY. WHEN LOCAL CONDITIONS PREVENT THE SEWER FROM BEING LOCATED OUTSIDE THE FOOTPRINT OF THE FACILITY THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN QUALITY STANDARDS, OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.  
3. AVOID INSTALLATION ON SLOPES GREATER THAN 3.00%. AVOID COMPACTING NATIVE SOILS. SCARIFY ANY COMPACTED SOIL.  
4. GEOTEXTILE FABRIC SHALL MEET REQUIREMENTS OF LHM MATERIAL SPECIFICATION 592. FOR WOVEN: APPARENT OPENING SIZE OF 0.50 MM (TABLE 1, CLASS 1). FOR NON WOVEN: APPARENT OPENING SIZE OF 0.30 MM (TABLE 2, CLASS II).  
5. STONE STORAGE OPTIONS ARE IDOT CA-1, CA-3, CA-7, DISTRICT VULCAN MIX, OR APPROVED ALTERNATE. NO RECYCLED MATERIALS.  
6. MINIMUM DISTANCE OF 2 FEET (3.5 FEET IN COMBINED SEWER AREAS) BETWEEN BOTTOM OF BMP AND SEASONALLY HIGH GROUNDWATER LEVEL.  
7. UNDERDRAINS ARE REQUIRED IN TYPICAL CLAYEY SOILS WHERE INFILTRATION RATES ARE LESS THAN 0.5 INCH/HOUR. NO MORE THAN 1 UNDERDRAIN EVERY 30 FEET ON CENTER. PROVIDE A SOIL REPORT DOCUMENTING NATIVE INFILTRATION RATE TO FOREGO UNDERDRAINS. NO FILTER FABRIC COVER/SOCK.  
8. MINIMUM UNDERDRAIN BEDDING OF 2 INCHES, MAXIMUM OF 12 INCHES.  
9. MULCH LAYER SHALL BE HARDWOOD MULCH OR OTHER NON-FLOATING GROUND COVER.  
10. VOLUME OF UNDERDRAIN PIPE IS THE STORED VOLUME WITHIN THE PROPOSED UNDERDRAIN.  
11. THE AREA FOR VB INCLUDES THE AREA ON THE SIDES OF THE RAINGARDEN WHERE VA IS GRADED IN.

NOT TO SCALE

TECHNICAL GUIDANCE MANUAL 101116

BIORETENTION FACILITY DETAIL - G2



**BOTTOM OF THE FACILITY:**  
SEASONALLY HIGH GROUNDWATER SEPARATION: ELEV. 599.77, FEET 3.72

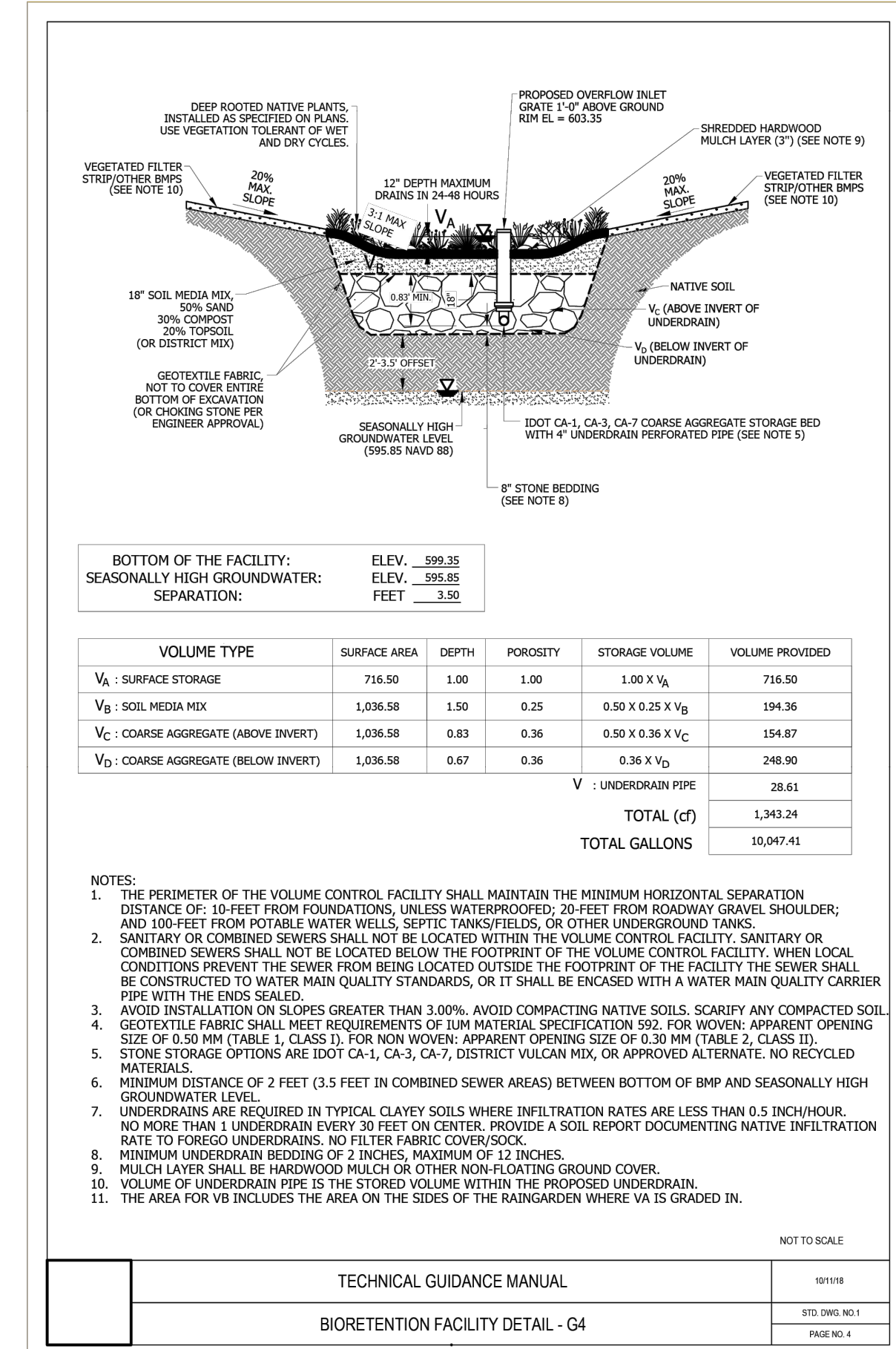
VOLUME TYPE	SURFACE AREA	DEPTH	POROSITY	STORAGE VOLUME	VOLUME PROVIDED
V <sub>A</sub> : SURFACE STORAGE	1,052.10	1.00	1.00	1.00 X V <sub>A</sub>	1,052.10
V <sub>B</sub> : SOIL MEDIA MIX	1,553.47	1.50	0.25	0.50 X 0.25 X V <sub>B</sub>	291.28
V <sub>C</sub> : COARSE AGGREGATE (ABOVE INVERT)	1,553.47	0.83	0.36	0.50 X 0.36 X V <sub>C</sub>	232.09
V <sub>D</sub> : COARSE AGGREGATE (BELOW INVERT)	1,553.47	0.25	0.36	0.36 X V <sub>D</sub>	139.81
V : UNDERDRAIN PIPE					28.26
TOTAL (cf)					1,743.54
TOTAL GALLONS					13,041.65

**NOTES:**  
1. THE PERIMETER OF THE VOLUME CONTROL FACILITY SHALL MAINTAIN THE MINIMUM HORIZONTAL SEPARATION DISTANCE OF: 10- FEET FROM FOUNDATIONS, UNLESS WATERPROOFED; 20- FEET FROM ROADWAY GRAVEL SHOULDER; AND 100- FEET FROM POTABLE WATER WELLS, SEPTIC TANKS/FIELDS, OR OTHER UNDERGROUND TANKS.  
2. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED WITHIN THE VOLUME CONTROL FACILITY. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED BELOW THE FOOTPRINT OF THE VOLUME CONTROL FACILITY. WHEN LOCAL CONDITIONS PREVENT THE SEWER FROM BEING LOCATED OUTSIDE THE FOOTPRINT OF THE FACILITY THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN QUALITY STANDARDS, OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.  
3. AVOID INSTALLATION ON SLOPES GREATER THAN 3.00%. AVOID COMPACTING NATIVE SOILS. SCARIFY ANY COMPACTED SOIL.  
4. GEOTEXTILE FABRIC SHALL MEET REQUIREMENTS OF LHM MATERIAL SPECIFICATION 592. FOR WOVEN: APPARENT OPENING SIZE OF 0.50 MM (TABLE 1, CLASS 1). FOR NON WOVEN: APPARENT OPENING SIZE OF 0.30 MM (TABLE 2, CLASS II).  
5. STONE STORAGE OPTIONS ARE IDOT CA-1, CA-3, CA-7, DISTRICT VULCAN MIX, OR APPROVED ALTERNATE. NO RECYCLED MATERIALS.  
6. MINIMUM DISTANCE OF 2 FEET (3.5 FEET IN COMBINED SEWER AREAS) BETWEEN BOTTOM OF BMP AND SEASONALLY HIGH GROUNDWATER LEVEL.  
7. UNDERDRAINS ARE REQUIRED IN TYPICAL CLAYEY SOILS WHERE INFILTRATION RATES ARE LESS THAN 0.5 INCH/HOUR. NO MORE THAN 1 UNDERDRAIN EVERY 30 FEET ON CENTER. PROVIDE A SOIL REPORT DOCUMENTING NATIVE INFILTRATION RATE TO FOREGO UNDERDRAINS. NO FILTER FABRIC COVER/SOCK.  
8. MINIMUM UNDERDRAIN BEDDING OF 2 INCHES, MAXIMUM OF 12 INCHES.  
9. MULCH LAYER SHALL BE HARDWOOD MULCH OR OTHER NON-FLOATING GROUND COVER.  
10. VOLUME OF UNDERDRAIN PIPE IS THE STORED VOLUME WITHIN THE PROPOSED UNDERDRAIN.  
11. THE AREA FOR VB INCLUDES THE AREA ON THE SIDES OF THE RAINGARDEN WHERE VA IS GRADED IN.

NOT TO SCALE

TECHNICAL GUIDANCE MANUAL 101116

BIORETENTION FACILITY DETAIL - G3



**BOTTOM OF THE FACILITY:**  
SEASONALLY HIGH GROUNDWATER SEPARATION: ELEV. 599.35, FEET 3.50

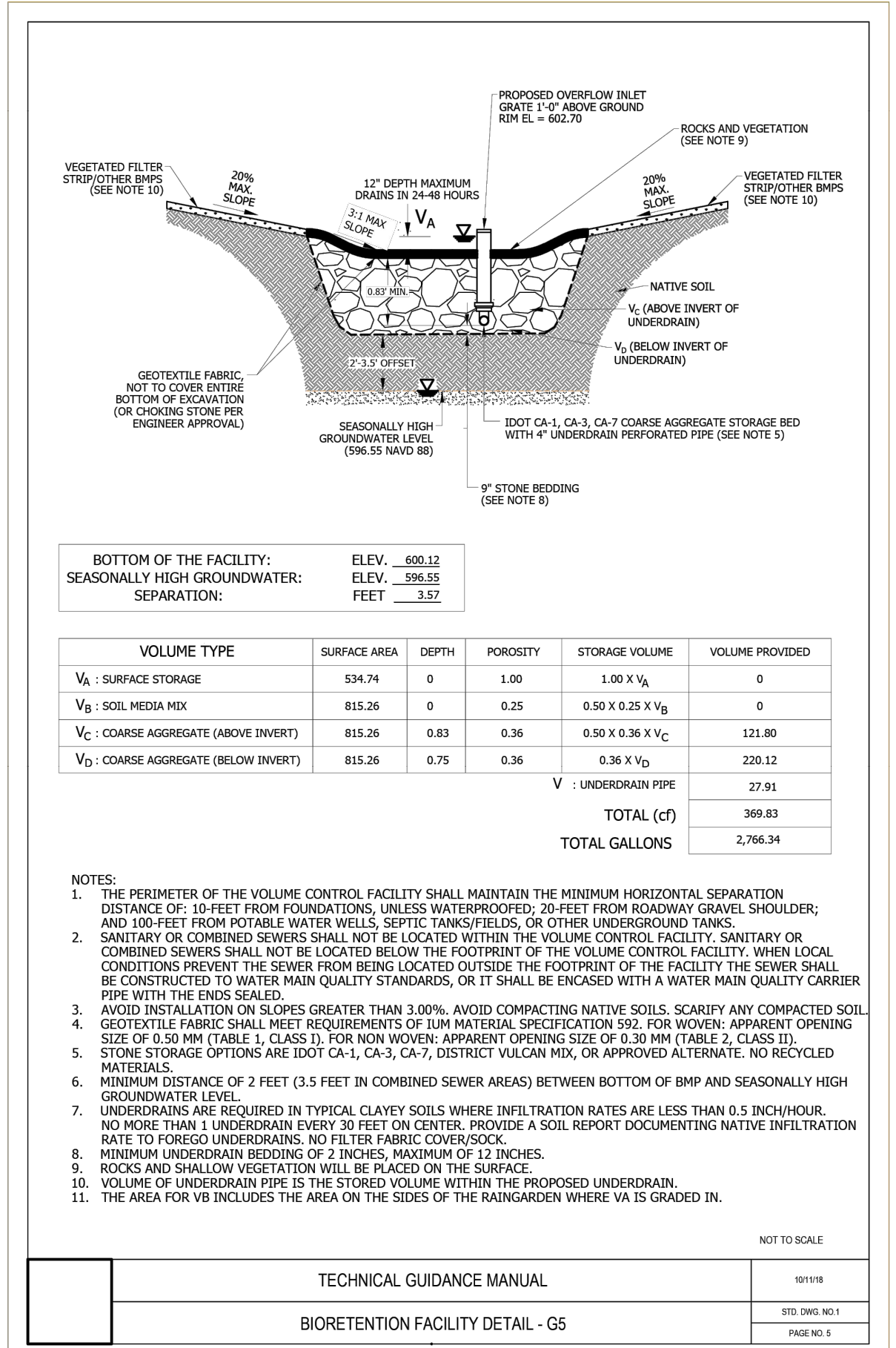
VOLUME TYPE	SURFACE AREA	DEPTH	POROSITY	STORAGE VOLUME	VOLUME PROVIDED
V <sub>A</sub> : SURFACE STORAGE	716.50	1.00	1.00	1.00 X V <sub>A</sub>	716.50
V <sub>B</sub> : SOIL MEDIA MIX	1,036.58	1.50	0.25	0.50 X 0.25 X V <sub>B</sub>	194.36
V <sub>C</sub> : COARSE AGGREGATE (ABOVE INVERT)	1,036.58	0.83	0.36	0.50 X 0.36 X V <sub>C</sub>	154.87
V <sub>D</sub> : COARSE AGGREGATE (BELOW INVERT)	1,036.58	0.25	0.36	0.36 X V <sub>D</sub>	246.90
V : UNDERDRAIN PIPE					28.61
TOTAL (cf)					1,343.24
TOTAL GALLONS					10,047.41

**NOTES:**  
1. THE PERIMETER OF THE VOLUME CONTROL FACILITY SHALL MAINTAIN THE MINIMUM HORIZONTAL SEPARATION DISTANCE OF: 10- FEET FROM FOUNDATIONS, UNLESS WATERPROOFED; 20- FEET FROM ROADWAY GRAVEL SHOULDER; AND 100- FEET FROM POTABLE WATER WELLS, SEPTIC TANKS/FIELDS, OR OTHER UNDERGROUND TANKS.  
2. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED WITHIN THE VOLUME CONTROL FACILITY. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED BELOW THE FOOTPRINT OF THE VOLUME CONTROL FACILITY. WHEN LOCAL CONDITIONS PREVENT THE SEWER FROM BEING LOCATED OUTSIDE THE FOOTPRINT OF THE FACILITY THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN QUALITY STANDARDS, OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.  
3. AVOID INSTALLATION ON SLOPES GREATER THAN 3.00%. AVOID COMPACTING NATIVE SOILS. SCARIFY ANY COMPACTED SOIL.  
4. GEOTEXTILE FABRIC SHALL MEET REQUIREMENTS OF LHM MATERIAL SPECIFICATION 592. FOR WOVEN: APPARENT OPENING SIZE OF 0.50 MM (TABLE 1, CLASS 1). FOR NON WOVEN: APPARENT OPENING SIZE OF 0.30 MM (TABLE 2, CLASS II).  
5. STONE STORAGE OPTIONS ARE IDOT CA-1, CA-3, CA-7, DISTRICT VULCAN MIX, OR APPROVED ALTERNATE. NO RECYCLED MATERIALS.  
6. MINIMUM DISTANCE OF 2 FEET (3.5 FEET IN COMBINED SEWER AREAS) BETWEEN BOTTOM OF BMP AND SEASONALLY HIGH GROUNDWATER LEVEL.  
7. UNDERDRAINS ARE REQUIRED IN TYPICAL CLAYEY SOILS WHERE INFILTRATION RATES ARE LESS THAN 0.5 INCH/HOUR. NO MORE THAN 1 UNDERDRAIN EVERY 30 FEET ON CENTER. PROVIDE A SOIL REPORT DOCUMENTING NATIVE INFILTRATION RATE TO FOREGO UNDERDRAINS. NO FILTER FABRIC COVER/SOCK.  
8. MINIMUM UNDERDRAIN BEDDING OF 2 INCHES, MAXIMUM OF 12 INCHES.  
9. MULCH LAYER SHALL BE HARDWOOD MULCH OR OTHER NON-FLOATING GROUND COVER.  
10. VOLUME OF UNDERDRAIN PIPE IS THE STORED VOLUME WITHIN THE PROPOSED UNDERDRAIN.  
11. THE AREA FOR VB INCLUDES THE AREA ON THE SIDES OF THE RAINGARDEN WHERE VA IS GRADED IN.

NOT TO SCALE

TECHNICAL GUIDANCE MANUAL 101116

BIORETENTION FACILITY DETAIL - G4



**BOTTOM OF THE FACILITY:**  
SEASONALLY HIGH GROUNDWATER SEPARATION: ELEV. 600.12, FEET 3.57

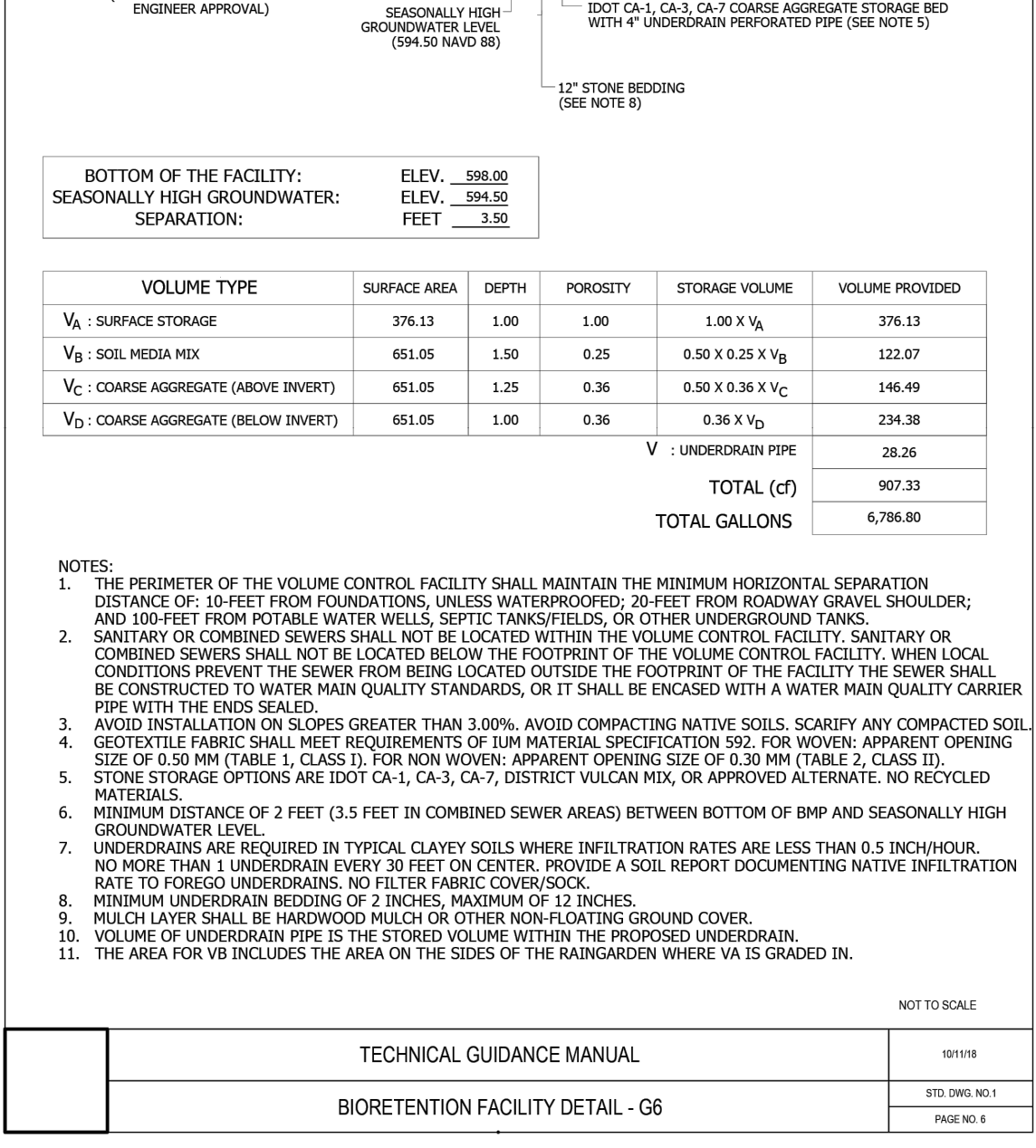
VOLUME TYPE	SURFACE AREA	DEPTH	POROSITY	STORAGE VOLUME	VOLUME PROVIDED
V <sub>A</sub> : SURFACE STORAGE	534.74	0	1.00	1.00 X V <sub>A</sub>	0
V <sub>B</sub> : SOIL MEDIA MIX	815.26	0	0.25	0.50 X 0.25 X V <sub>B</sub>	0
V <sub>C</sub> : COARSE AGGREGATE (ABOVE INVERT)	815.26	0.83	0.36	0.50 X 0.36 X V <sub>C</sub>	121.80
V <sub>D</sub> : COARSE AGGREGATE (BELOW INVERT)	815.26	0.75	0.36	0.36 X V <sub>D</sub>	220.12
V : UNDERDRAIN PIPE					27.91
TOTAL (cf)					369.83
TOTAL GALLONS					2,766.34

**NOTES:**  
1. THE PERIMETER OF THE VOLUME CONTROL FACILITY SHALL MAINTAIN THE MINIMUM HORIZONTAL SEPARATION DISTANCE OF: 10- FEET FROM FOUNDATIONS, UNLESS WATERPROOFED; 20- FEET FROM ROADWAY GRAVEL SHOULDER; AND 100- FEET FROM POTABLE WATER WELLS, SEPTIC TANKS/FIELDS, OR OTHER UNDERGROUND TANKS.  
2. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED WITHIN THE VOLUME CONTROL FACILITY. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED BELOW THE FOOTPRINT OF THE VOLUME CONTROL FACILITY. WHEN LOCAL CONDITIONS PREVENT THE SEWER FROM BEING LOCATED OUTSIDE THE FOOTPRINT OF THE FACILITY THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN QUALITY STANDARDS, OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.  
3. AVOID INSTALLATION ON SLOPES GREATER THAN 3.00%. AVOID COMPACTING NATIVE SOILS. SCARIFY ANY COMPACTED SOIL.  
4. GEOTEXTILE FABRIC SHALL MEET REQUIREMENTS OF LHM MATERIAL SPECIFICATION 592. FOR WOVEN: APPARENT OPENING SIZE OF 0.50 MM (TABLE 1, CLASS 1). FOR NON WOVEN: APPARENT OPENING SIZE OF 0.30 MM (TABLE 2, CLASS II).  
5. STONE STORAGE OPTIONS ARE IDOT CA-1, CA-3, CA-7, DISTRICT VULCAN MIX, OR APPROVED ALTERNATE. NO RECYCLED MATERIALS.  
6. MINIMUM DISTANCE OF 2 FEET (3.5 FEET IN COMBINED SEWER AREAS) BETWEEN BOTTOM OF BMP AND SEASONALLY HIGH GROUNDWATER LEVEL.  
7. UNDERDRAINS ARE REQUIRED IN TYPICAL CLAYEY SOILS WHERE INFILTRATION RATES ARE LESS THAN 0.5 INCH/HOUR. NO MORE THAN 1 UNDERDRAIN EVERY 30 FEET ON CENTER. PROVIDE A SOIL REPORT DOCUMENTING NATIVE INFILTRATION RATE TO FOREGO UNDERDRAINS. NO FILTER FABRIC COVER/SOCK.  
8. MINIMUM UNDERDRAIN BEDDING OF 2 INCHES, MAXIMUM OF 12 INCHES.  
9. MULCH LAYER SHALL BE HARDWOOD MULCH OR OTHER NON-FLOATING GROUND COVER.  
10. VOLUME OF UNDERDRAIN PIPE IS THE STORED VOLUME WITHIN THE PROPOSED UNDERDRAIN.  
11. THE AREA FOR VB INCLUDES THE AREA ON THE SIDES OF THE RAINGARDEN WHERE VA IS GRADED IN.

NOT TO SCALE

TECHNICAL GUIDANCE MANUAL 101116

BIORETENTION FACILITY DETAIL - G5



**BOTTOM OF THE FACILITY:**  
SEASONALLY HIGH GROUNDWATER SEPARATION: ELEV. 598.00, FEET 3.50

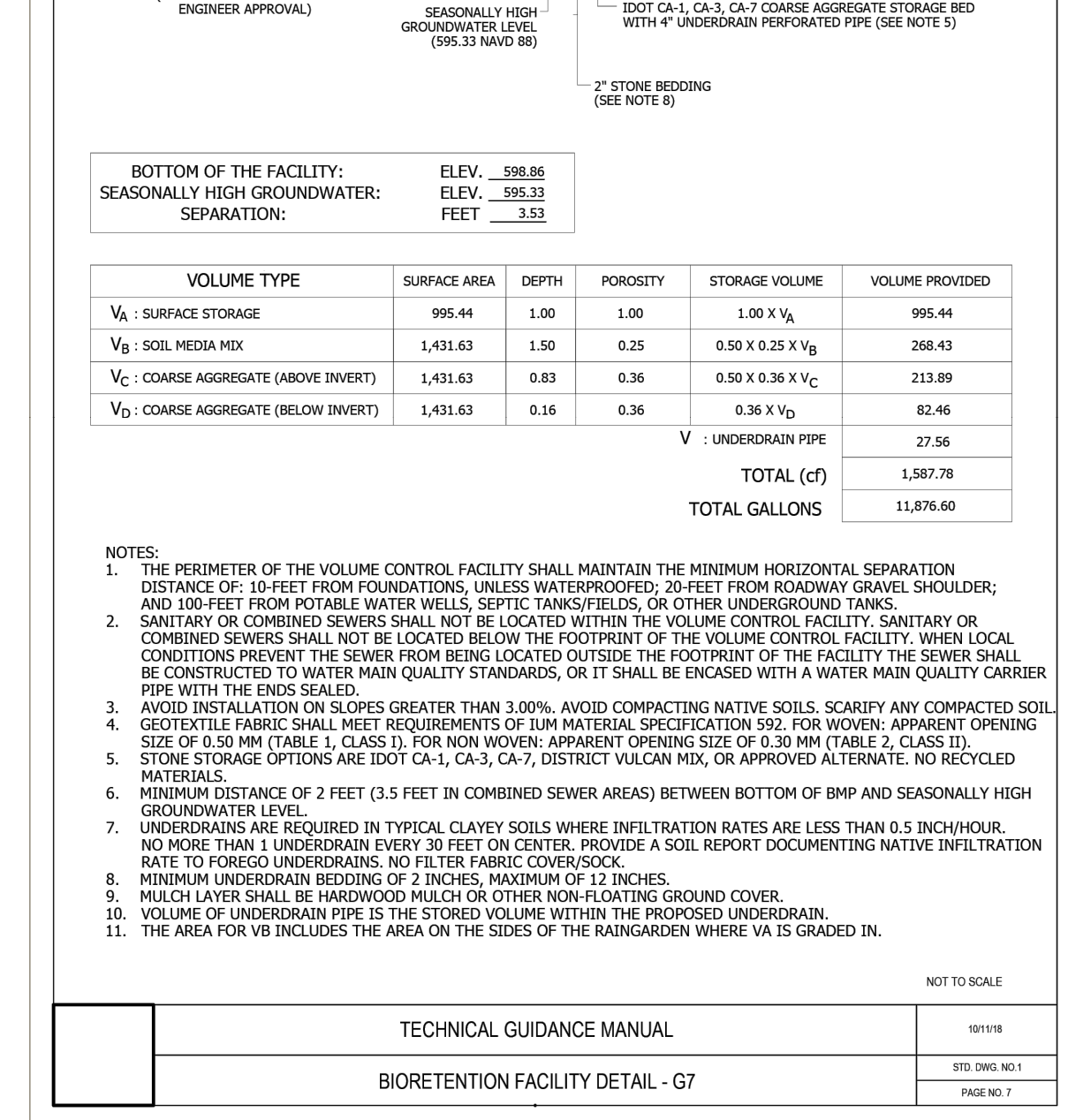
VOLUME TYPE	SURFACE AREA	DEPTH	POROSITY	STORAGE VOLUME	VOLUME PROVIDED
V <sub>A</sub> : SURFACE STORAGE	376.13	1.00	1.00	1.00 X V <sub>A</sub>	376.13
V <sub>B</sub> : SOIL MEDIA MIX	651.05	1.50	0.25	0.50 X 0.25 X V <sub>B</sub>	122.07
V <sub>C</sub> : COARSE AGGREGATE (ABOVE INVERT)	651.05	1.25	0.36	0.50 X 0.36 X V <sub>C</sub>	146.49
V <sub>D</sub> : COARSE AGGREGATE (BELOW INVERT)	651.05	1.00	0.36	0.36 X V <sub>D</sub>	234.38
V : UNDERDRAIN PIPE					28.26
TOTAL (cf)					907.33
TOTAL GALLONS					6,786.80

**NOTES:**  
1. THE PERIMETER OF THE VOLUME CONTROL FACILITY SHALL MAINTAIN THE MINIMUM HORIZONTAL SEPARATION DISTANCE OF: 10- FEET FROM FOUNDATIONS, UNLESS WATERPROOFED; 20- FEET FROM ROADWAY GRAVEL SHOULDER; AND 100- FEET FROM POTABLE WATER WELLS, SEPTIC TANKS/FIELDS, OR OTHER UNDERGROUND TANKS.  
2. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED WITHIN THE VOLUME CONTROL FACILITY. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED BELOW THE FOOTPRINT OF THE VOLUME CONTROL FACILITY. WHEN LOCAL CONDITIONS PREVENT THE SEWER FROM BEING LOCATED OUTSIDE THE FOOTPRINT OF THE FACILITY THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN QUALITY STANDARDS, OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.  
3. AVOID INSTALLATION ON SLOPES GREATER THAN 3.00%. AVOID COMPACTING NATIVE SOILS. SCARIFY ANY COMPACTED SOIL.  
4. GEOTEXTILE FABRIC SHALL MEET REQUIREMENTS OF LHM MATERIAL SPECIFICATION 592. FOR WOVEN: APPARENT OPENING SIZE OF 0.50 MM (TABLE 1, CLASS 1). FOR NON WOVEN: APPARENT OPENING SIZE OF 0.30 MM (TABLE 2, CLASS II).  
5. STONE STORAGE OPTIONS ARE IDOT CA-1, CA-3, CA-7, DISTRICT VULCAN MIX, OR APPROVED ALTERNATE. NO RECYCLED MATERIALS.  
6. MINIMUM DISTANCE OF 2 FEET (3.5 FEET IN COMBINED SEWER AREAS) BETWEEN BOTTOM OF BMP AND SEASONALLY HIGH GROUNDWATER LEVEL.  
7. UNDERDRAINS ARE REQUIRED IN TYPICAL CLAYEY SOILS WHERE INFILTRATION RATES ARE LESS THAN 0.5 INCH/HOUR. NO MORE THAN 1 UNDERDRAIN EVERY 30 FEET ON CENTER. PROVIDE A SOIL REPORT DOCUMENTING NATIVE INFILTRATION RATE TO FOREGO UNDERDRAINS. NO FILTER FABRIC COVER/SOCK.  
8. MINIMUM UNDERDRAIN BEDDING OF 2 INCHES, MAXIMUM OF 12 INCHES.  
9. MULCH LAYER SHALL BE HARDWOOD MULCH OR OTHER NON-FLOATING GROUND COVER.  
10. VOLUME OF UNDERDRAIN PIPE IS THE STORED VOLUME WITHIN THE PROPOSED UNDERDRAIN.  
11. THE AREA FOR VB INCLUDES THE AREA ON THE SIDES OF THE RAINGARDEN WHERE VA IS GRADED IN.

NOT TO SCALE

TECHNICAL GUIDANCE MANUAL 101116

BIORETENTION FACILITY DETAIL - G6



**BOTTOM OF THE FACILITY:**  
SEASONALLY HIGH GROUNDWATER SEPARATION: ELEV. 598.86, FEET 3.53

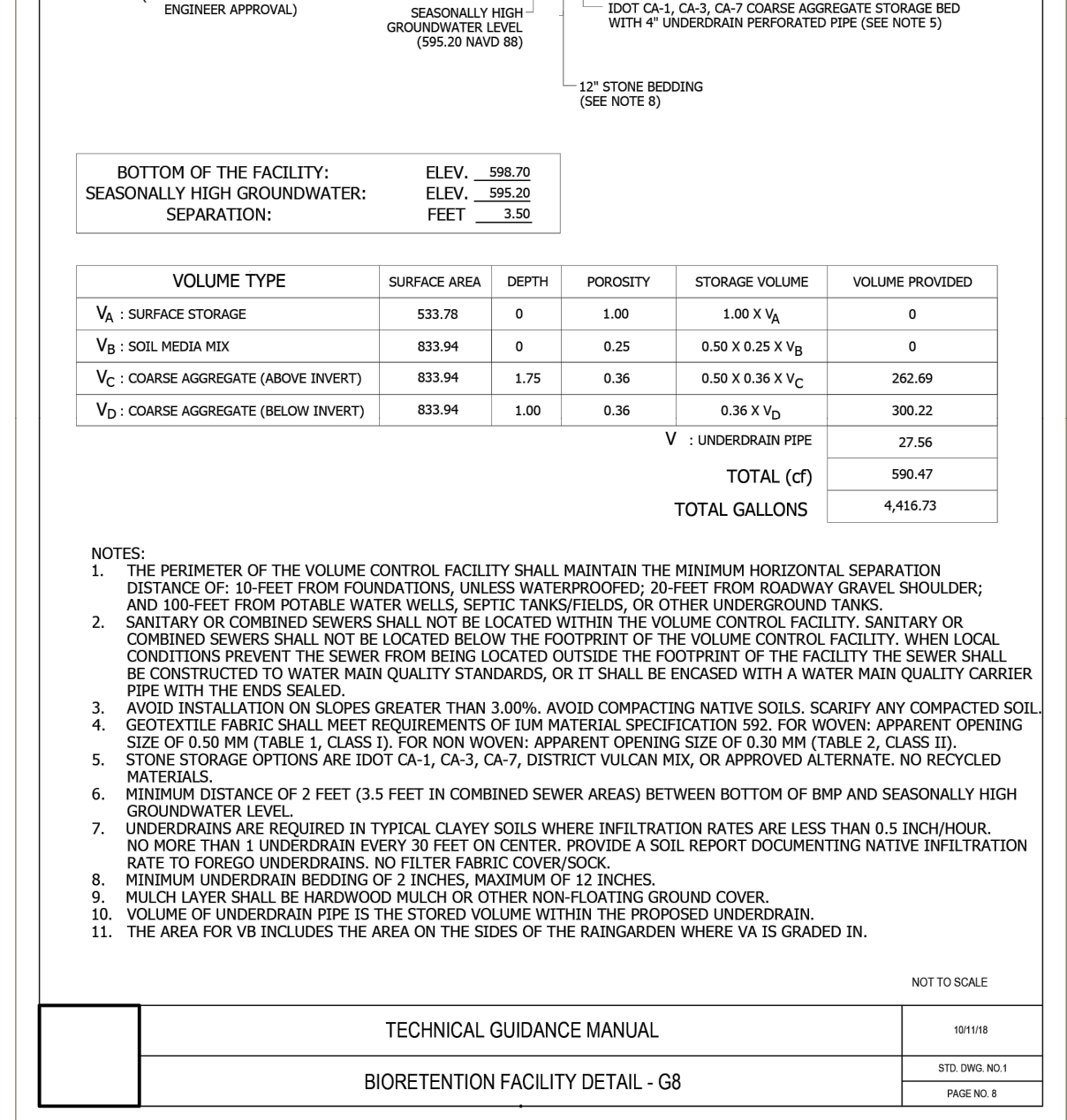
VOLUME TYPE	SURFACE AREA	DEPTH	POROSITY	STORAGE VOLUME	VOLUME PROVIDED
V <sub>A</sub> : SURFACE STORAGE	995.44	1.00	1.00	1.00 X V <sub>A</sub>	995.44
V <sub>B</sub> : SOIL MEDIA MIX	1,431.63	1.50	0.25	0.50 X 0.25 X V <sub>B</sub>	268.43
V <sub>C</sub> : COARSE AGGREGATE (ABOVE INVERT)	1,431.63	0.83	0.36	0.50 X 0.36 X V <sub>C</sub>	213.89
V <sub>D</sub> : COARSE AGGREGATE (BELOW INVERT)	1,431.63	0.16	0.36	0.36 X V <sub>D</sub>	82.46
V : UNDERDRAIN PIPE					27.56
TOTAL (cf)					1,587.78
TOTAL GALLONS					11,876.60

**NOTES:**  
1. THE PERIMETER OF THE VOLUME CONTROL FACILITY SHALL MAINTAIN THE MINIMUM HORIZONTAL SEPARATION DISTANCE OF: 10- FEET FROM FOUNDATIONS, UNLESS WATERPROOFED; 20- FEET FROM ROADWAY GRAVEL SHOULDER; AND 100- FEET FROM POTABLE WATER WELLS, SEPTIC TANKS/FIELDS, OR OTHER UNDERGROUND TANKS.  
2. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED WITHIN THE VOLUME CONTROL FACILITY. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED BELOW THE FOOTPRINT OF THE VOLUME CONTROL FACILITY. WHEN LOCAL CONDITIONS PREVENT THE SEWER FROM BEING LOCATED OUTSIDE THE FOOTPRINT OF THE FACILITY THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN QUALITY STANDARDS, OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.  
3. AVOID INSTALLATION ON SLOPES GREATER THAN 3.00%. AVOID COMPACTING NATIVE SOILS. SCARIFY ANY COMPACTED SOIL.  
4. GEOTEXTILE FABRIC SHALL MEET REQUIREMENTS OF LHM MATERIAL SPECIFICATION 592. FOR WOVEN: APPARENT OPENING SIZE OF 0.50 MM (TABLE 1, CLASS 1). FOR NON WOVEN: APPARENT OPENING SIZE OF 0.30 MM (TABLE 2, CLASS II).  
5. STONE STORAGE OPTIONS ARE IDOT CA-1, CA-3, CA-7, DISTRICT VULCAN MIX, OR APPROVED ALTERNATE. NO RECYCLED MATERIALS.  
6. MINIMUM DISTANCE OF 2 FEET (3.5 FEET IN COMBINED SEWER AREAS) BETWEEN BOTTOM OF BMP AND SEASONALLY HIGH GROUNDWATER LEVEL.  
7. UNDERDRAINS ARE REQUIRED IN TYPICAL CLAYEY SOILS WHERE INFILTRATION RATES ARE LESS THAN 0.5 INCH/HOUR. NO MORE THAN 1 UNDERDRAIN EVERY 30 FEET ON CENTER. PROVIDE A SOIL REPORT DOCUMENTING NATIVE INFILTRATION RATE TO FOREGO UNDERDRAINS. NO FILTER FABRIC COVER/SOCK.  
8. MINIMUM UNDERDRAIN BEDDING OF 2 INCHES, MAXIMUM OF 12 INCHES.  
9. MULCH LAYER SHALL BE HARDWOOD MULCH OR OTHER NON-FLOATING GROUND COVER.  
10. VOLUME OF UNDERDRAIN PIPE IS THE STORED VOLUME WITHIN THE PROPOSED UNDERDRAIN.  
11. THE AREA FOR VB INCLUDES THE AREA ON THE SIDES OF THE RAINGARDEN WHERE VA IS GRADED IN.

NOT TO SCALE

TECHNICAL GUIDANCE MANUAL 101116

BIORETENTION FACILITY DETAIL - G7



File Location: C:\Users\jaye\OneDrive - antero group\Documents - antero group\Projects\city of harvey\csh2207\_154th st reconstruction\DWG\Sheets\CoH-2207-STRM-DET.dwg Plot Date: 4/15/2024 12:39 PM Last Saved By: LICHPHPE

**SECTION A-A**  
CAST FRAME

**SECTION B-B**

**SECTION C-C**  
CAST GRATE

**SECTION D-D**

**SECTION C-C**  
① = 6 1/2 (159) max. (typ.)  
② = 1/2 (19) min. (typ.)

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-15	Revised dimensions of frame.
1-1-09	Switched units to English (metric).

**FRAME AND GRATE TYPE 9**

STANDARD 604041-03

**CAST FRAME**

**SECTION C-C**

**SECTION F-F**

**SECTION D-D**  
CAST CLOSED LID  
Gray Iron Lid

**SECTION B-B**  
CAST OPEN LID

**SECTION E-E**  
ADA COMPLIANT CAST OPEN LID

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-20	Revised dimension in Section B-B of cast open lid.
1-1-15	Revised dimensioning of frame. Added ADA compliant open lid.
1-1-09	Switched units to English (metric).

**FRAME AND LIDS TYPE 1**

STANDARD 604001-05



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426

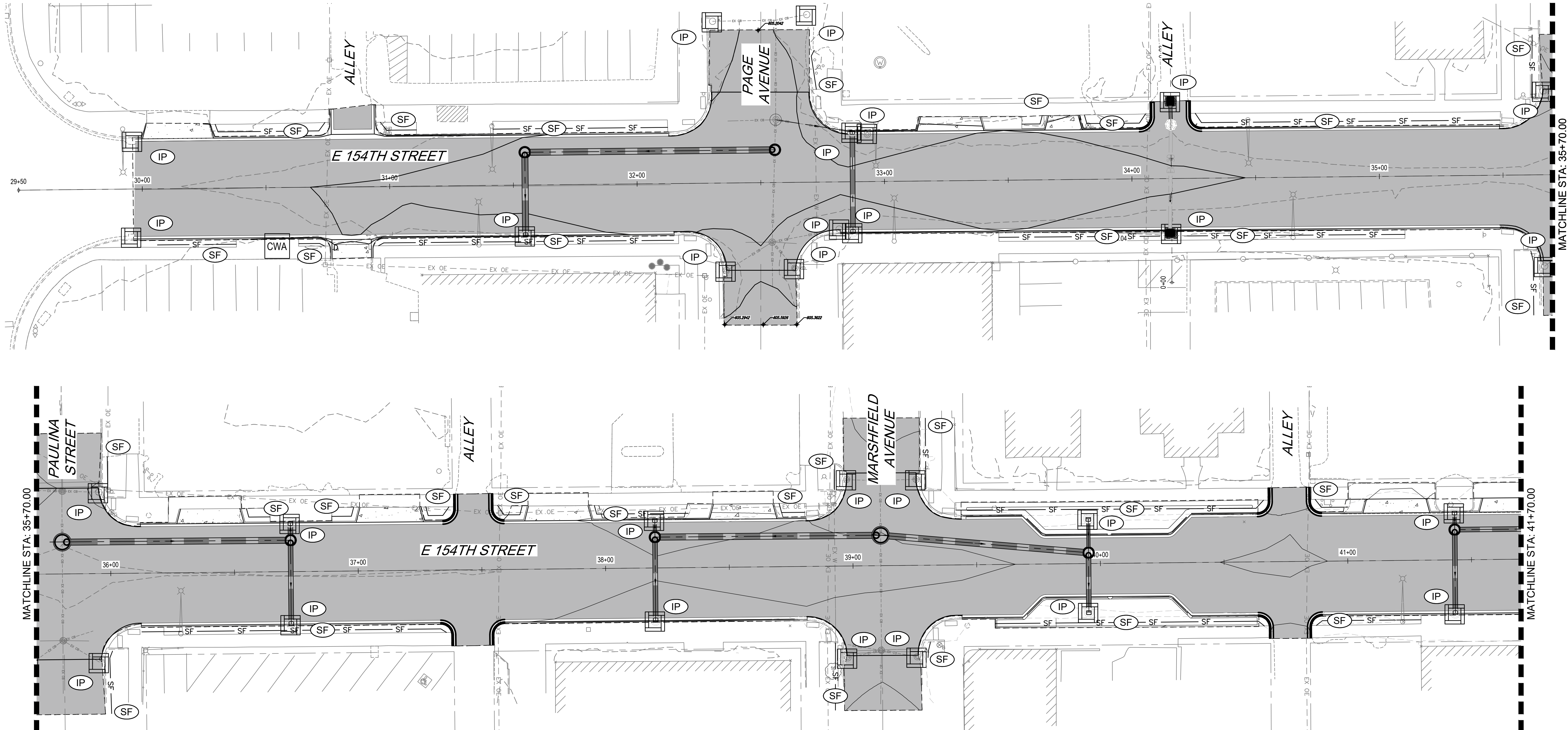


PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
 CONSTRUCTION DETAILS 09  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
CoH-2207  
 DATE  
3/29/2024  
 SHEET  
**C-78**

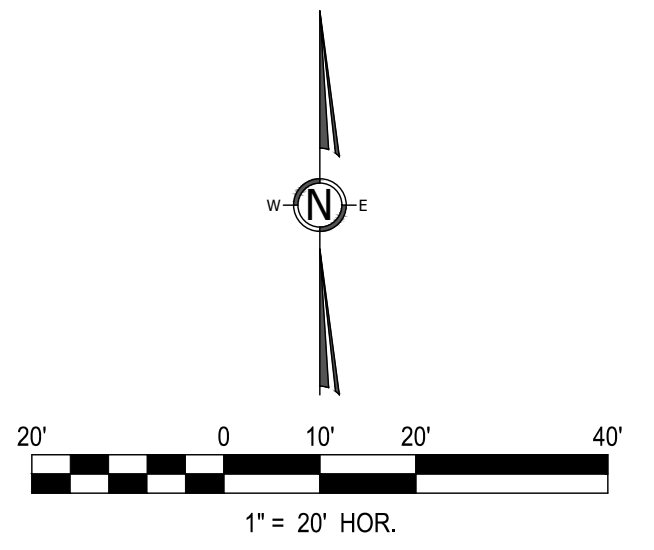
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**LEGEND**

		INLET PROTECTION
		SILT FENCE
		CONCRETE WASH AREA

- NOTES:**
- CONTRACTOR TO COORDINATE STOCKPILE LOCATION WITH CITY ENGINEER.
  - ALL NEWLY CUT OR FILLED AREA, LACKING ADEQUATE VEGETATION, SHALL BE SEEDED, MULCHED, FERTILIZED, AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
  - AREAS OF EXISTING TREES, GRASSES, SHRUBS, FORBS, AND OTHER WOODY VEGETATION SHALL REMAIN UNDISTURBED DURING ANY STAGE OF CONSTRUCTION. ALL PARKWAYS OR VEGETATION DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITY MUST BE RESTORED TO THEIR ORIGINAL CONDITION OR REPLACED AT CONTRACTOR'S EXPENSE.



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**EROSION CONTROL PLAN STA 29+50 TO 41+70**

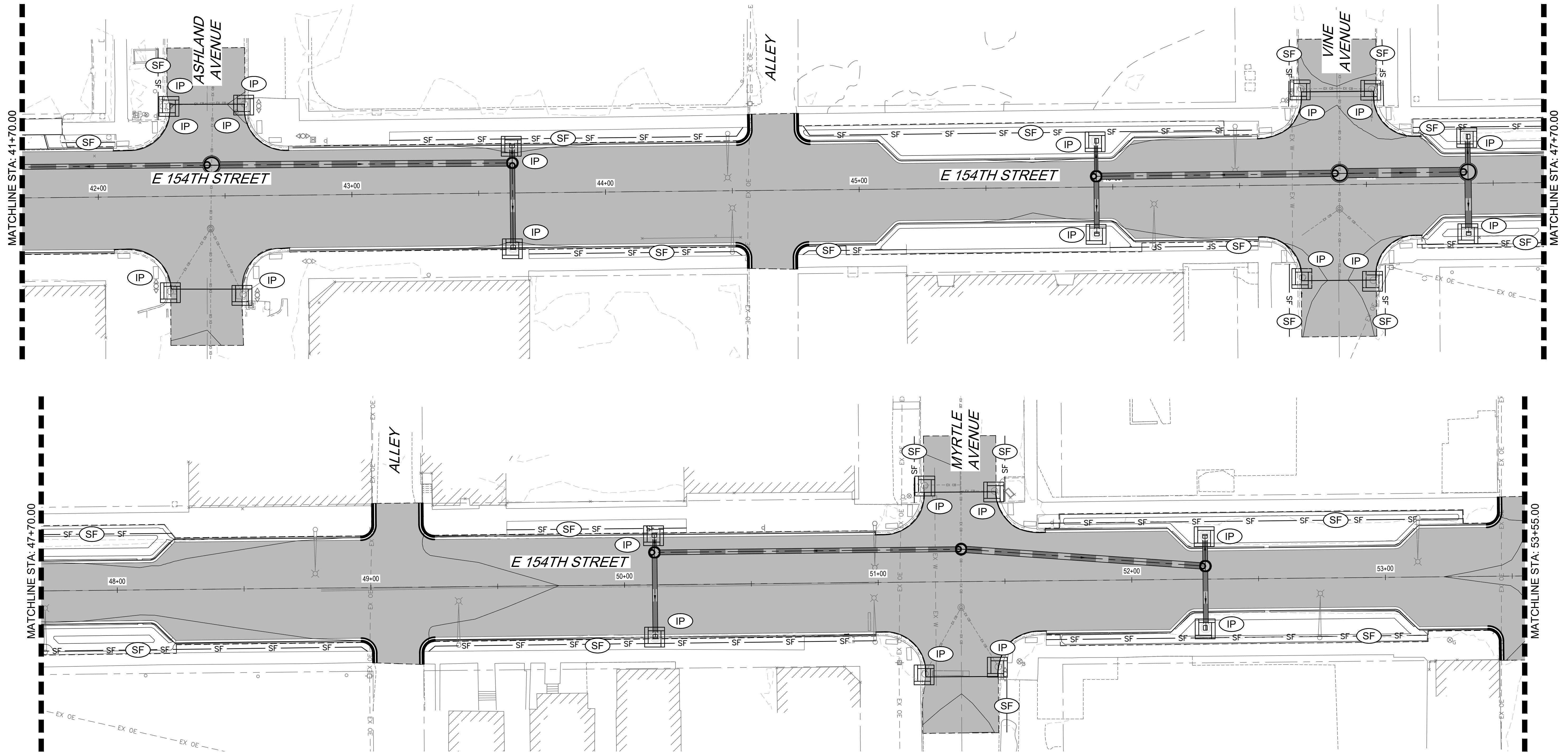
CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
CoH-2207

DATE  
3/29/2024

SHEET  
**C-79**

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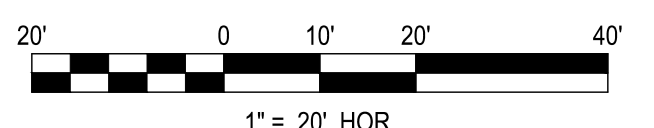
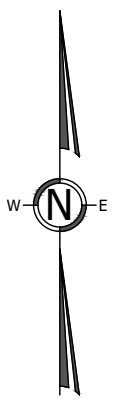


**LEGEND**

- IP         INLET PROTECTION
- SF    — SF —    SILT FENCE
- CWA    CONCRETE WASH AREA

**NOTES:**

1. CONTRACTOR TO COORDINATE STOCKPILE LOCATION WITH CITY ENGINEER.
2. ALL NEWLY CUT OR FILLED AREA, LACKING ADEQUATE VEGETATION, SHALL BE SEEDED, MULCHED, FERTILIZED, AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. AREAS OF EXISTING TREES, GRASSES, SHRUBS, FORBS, AND OTHER WOODY VEGETATION SHALL REMAIN UNDISTURBED DURING ANY STAGE OF CONSTRUCTION. ALL PARKWAYS OR VEGETATION DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITY MUST BE RESTORED TO THEIR ORIGINAL CONDITION OR REPLACED AT CONTRACTOR'S EXPENSE.



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



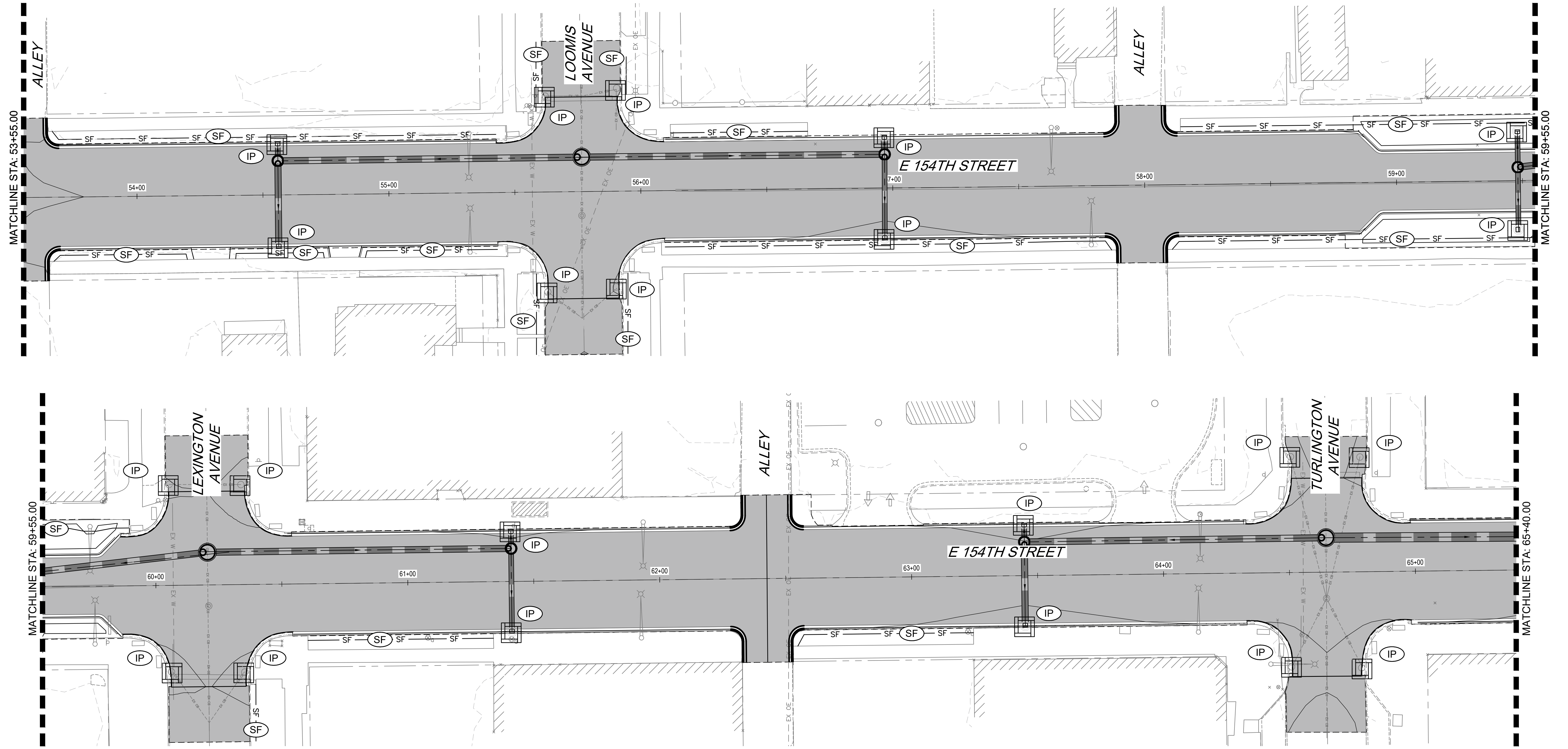
PE STAMP  
  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**EROSION CONTROL PLAN STA 41+70 TO 53+55**




CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
CoH-2207  
 DATE  
3/29/2024  
 SHEET  
**C-80**

File Location: C:\Users\jdyone\OneDrive - anterogroup.com\Documents - anterogroup.com\Documents - anterogroup.com\Projects\154th St Reconstruction\DWG\Sheets\CoH-2207-ECP.dwg Plot Date: 4/15/2024 12:39 PM Last Saved By: jdyone

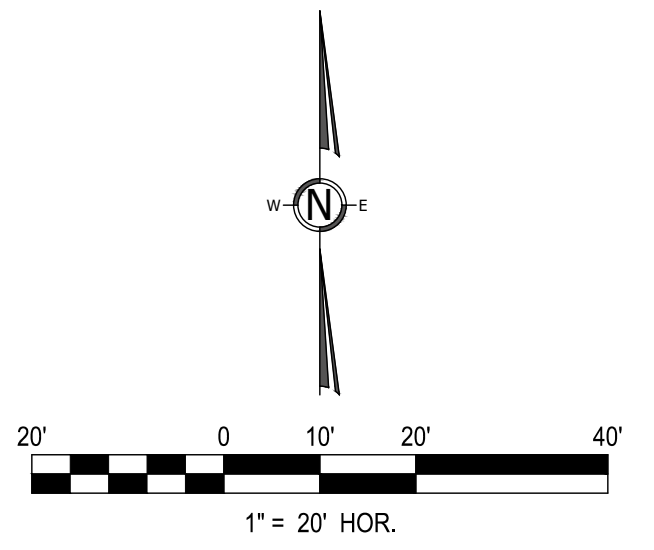


**LEGEND**

-  INLET PROTECTION
-  SILT FENCE
-  CONCRETE WASH AREA

**NOTES:**

1. CONTRACTOR TO COORDINATE STOCKPILE LOCATION WITH CITY ENGINEER.
2. ALL NEWLY CUT OR FILLED AREA, LACKING ADEQUATE VEGETATION, SHALL BE SEEDED, MULCHED, FERTILIZED, AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. AREAS OF EXISTING TREES, GRASSES, SHRUBS, FORBS, AND OTHER WOODY VEGETATION SHALL REMAIN UNDISTURBED DURING ANY STAGE OF CONSTRUCTION. ALL PARKWAYS OR VEGETATION DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITY MUST BE RESTORED TO THEIR ORIGINAL CONDITION OR REPLACED AT CONTRACTOR'S EXPENSE.



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



PE STAMP  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**EROSION CONTROL PLAN STA 53+55 TO 65+40**

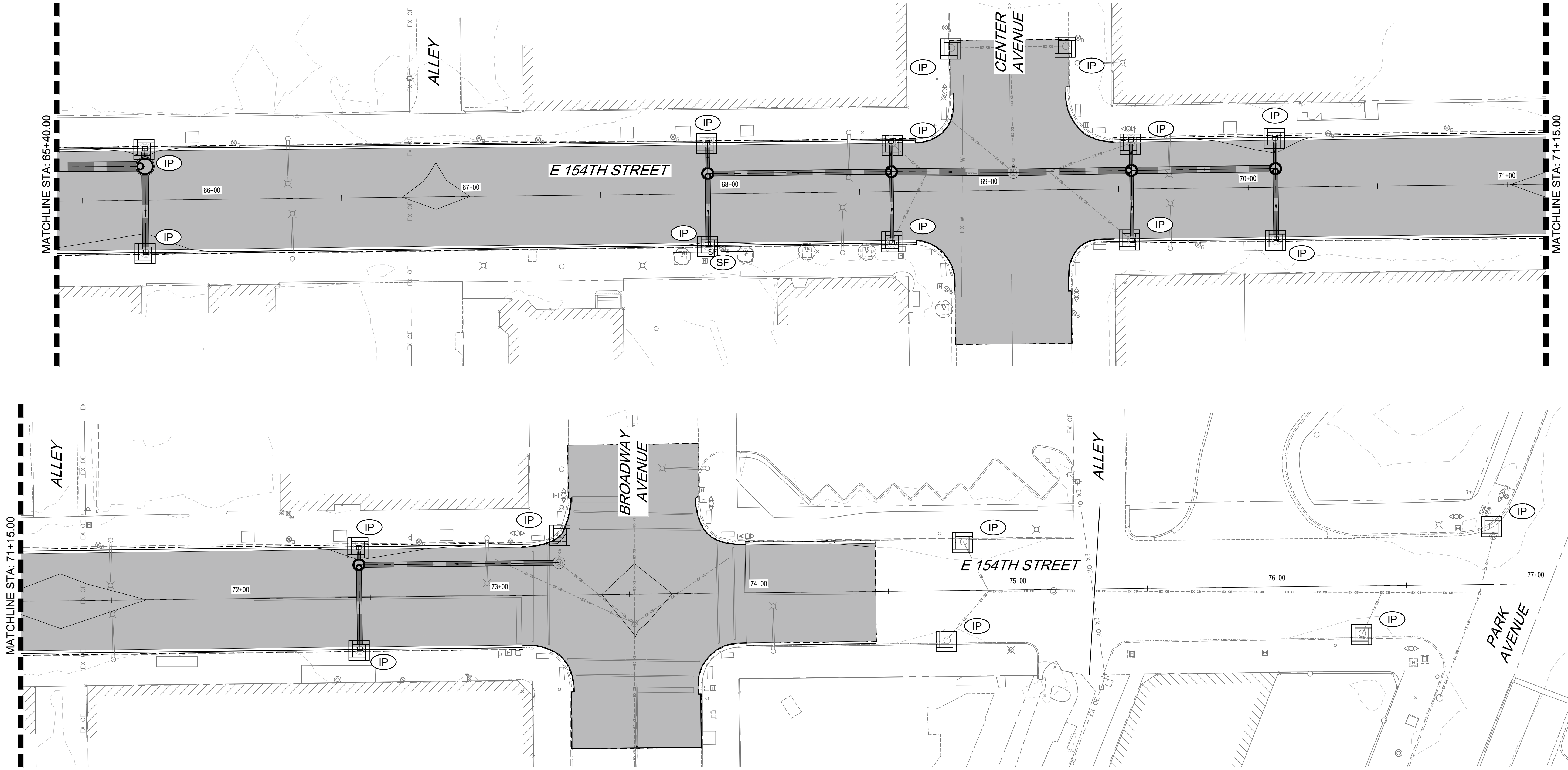
CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
CoH-2207

DATE  
3/29/2024

SHEET  
**C-81**

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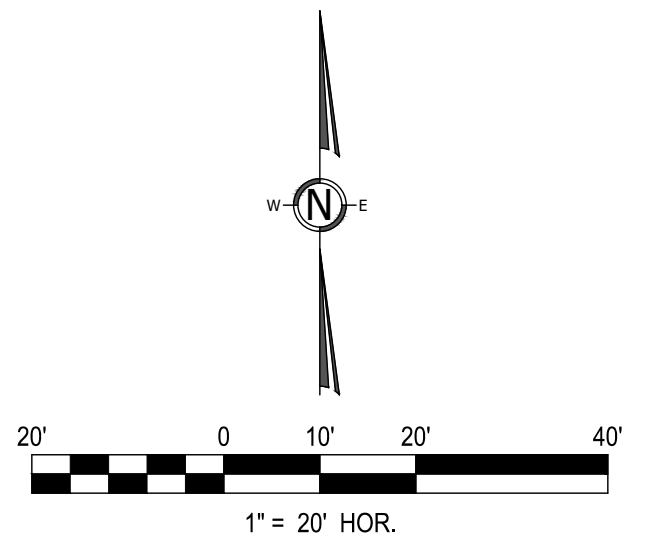


**LEGEND**

- IP          INLET PROTECTION
- SF     — SF —     SILT FENCE
- CWA     CONCRETE WASH AREA

**NOTES:**

1. CONTRACTOR TO COORDINATE STOCKPILE LOCATION WITH CITY ENGINEER.
2. ALL NEWLY CUT OR FILLED AREA, LACKING ADEQUATE VEGETATION, SHALL BE SEEDED, MULCHED, FERTILIZED, AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. AREAS OF EXISTING TREES, GRASSES, SHRUBS, FORBS, AND OTHER WOODY VEGETATION SHALL REMAIN UNDISTURBED DURING ANY STAGE OF CONSTRUCTION. ALL PARKWAYS OR VEGETATION DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITY MUST BE RESTORED TO THEIR ORIGINAL CONDITION OR REPLACED AT CONTRACTOR'S EXPENSE.



No.	DATE	REVISION DESCRIPTION

PREPARED FOR  
**CITY OF HARVEY,**  
 15320 BROADWAY AVENUE  
 HARVEY, IL 60426



PE STAMP  
  
 FOR AND ON BEHALF OF ANTERO GROUP

**154TH STREET RECONSTRUCTION PROJECT**  
**EROSION CONTROL PLAN STA 65+40 TO 77+00**  
  
 CITY OF HARVEY, COOK COUNTY, ILLINOIS

JOB NUMBER  
CoH-2207  
 DATE  
3/29/2024  
 SHEET  
**C-82**