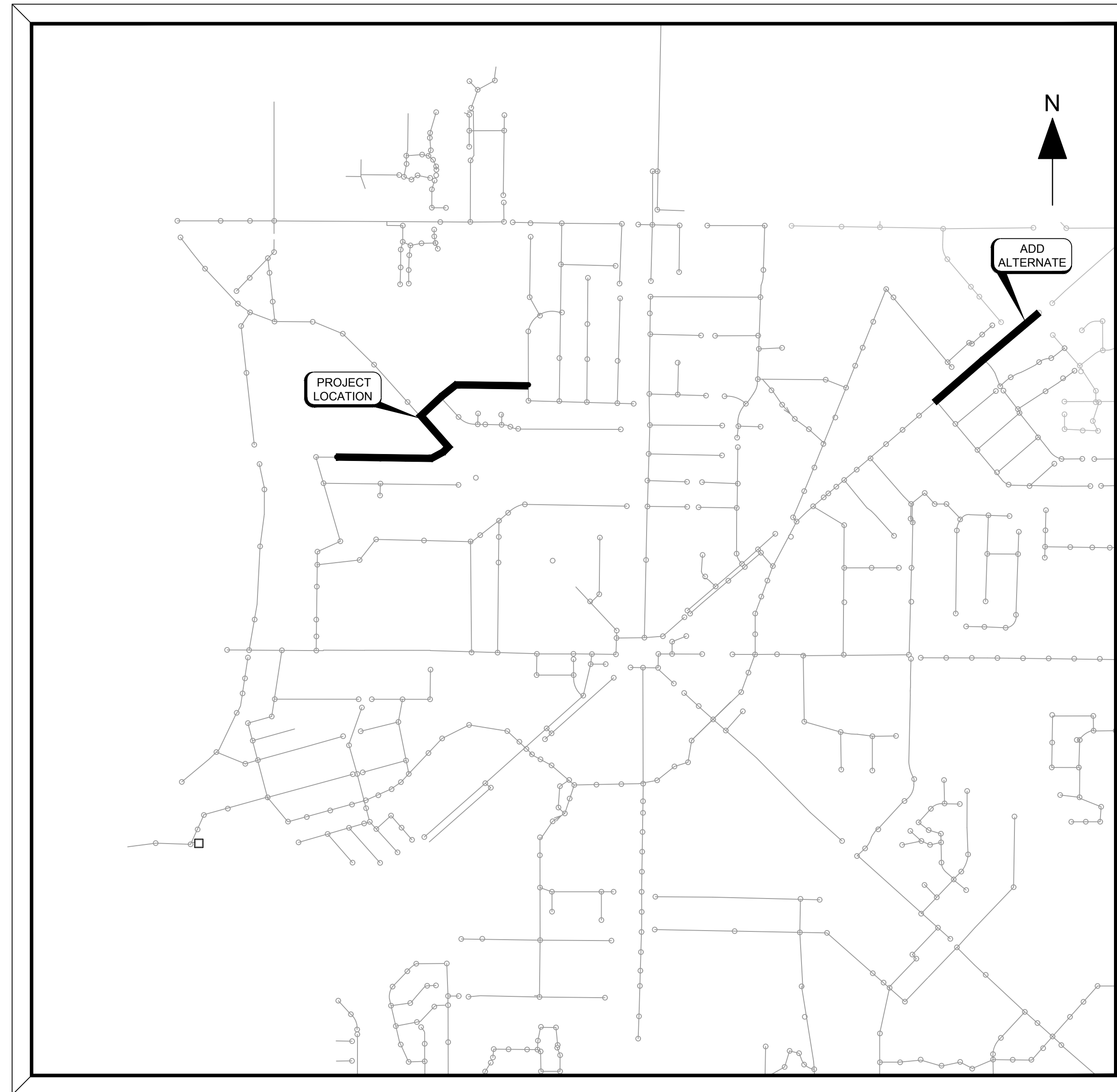


# CITY OF TALLMADGE, OHIO

## EVERGREEN DRIVE / MARK DRIVE SANITARY SEWER REHABILITATION

*JUNE 2018*



VICINITY MAP

0 600' 1200' 2400'

SHEET LIST	
SHEET NO	DESCRIPTION
1	TITLE SHEET
2	GENERAL NOTES
3	MISCELLANEOUS DETAILS
4	SEWER REHABILITATION SCHEDULE
5	MARK DRIVE MH NOS. 310-313
6	MARK DR, NORTHEAST AVE. MH NOS 314-316, 319
7	NORTHEAST AVE, EVERGREEN DR MH NOS. 320 & 322-323
8	EVERGREEN DRIVE MH NOS. 324-326
9	ADD ALTERNATE - NORTHEAST AVE. MH NOS. 1-8

APPROVAL

*David H. Kline* 6/19/2018  
DAVID KLINE - MAYOR DATE

*Michael T. Rorar* 6/19/2018  
MICHAEL RORAR, DIRECTOR OF PUBLIC SERVICE DATE

*Barrell Stineman* 6/22/2018  
BARRELL STINEMAN, UTILITIES SUPERINTENDENT DATE



*Jeffrey A. Marnicio* E-71748 6-14-18  
BURGESS & NIPLÉ, INC. P.E. No. DATE



CALL 1-800-362-2764 (TOLL FREE) OR 8-1-1

**BURGESS & NIPLÉ**  
50 SOUTH MAIN STREET, SUITE 600  
AKRON, OHIO 44308

CITY OF TALLMADGE, OHIO  
EVERGREEN DRIVE / MARK DRIVE  
SANITARY SEWER REHABILITATION

NO.	DESCRIPTION	DATE

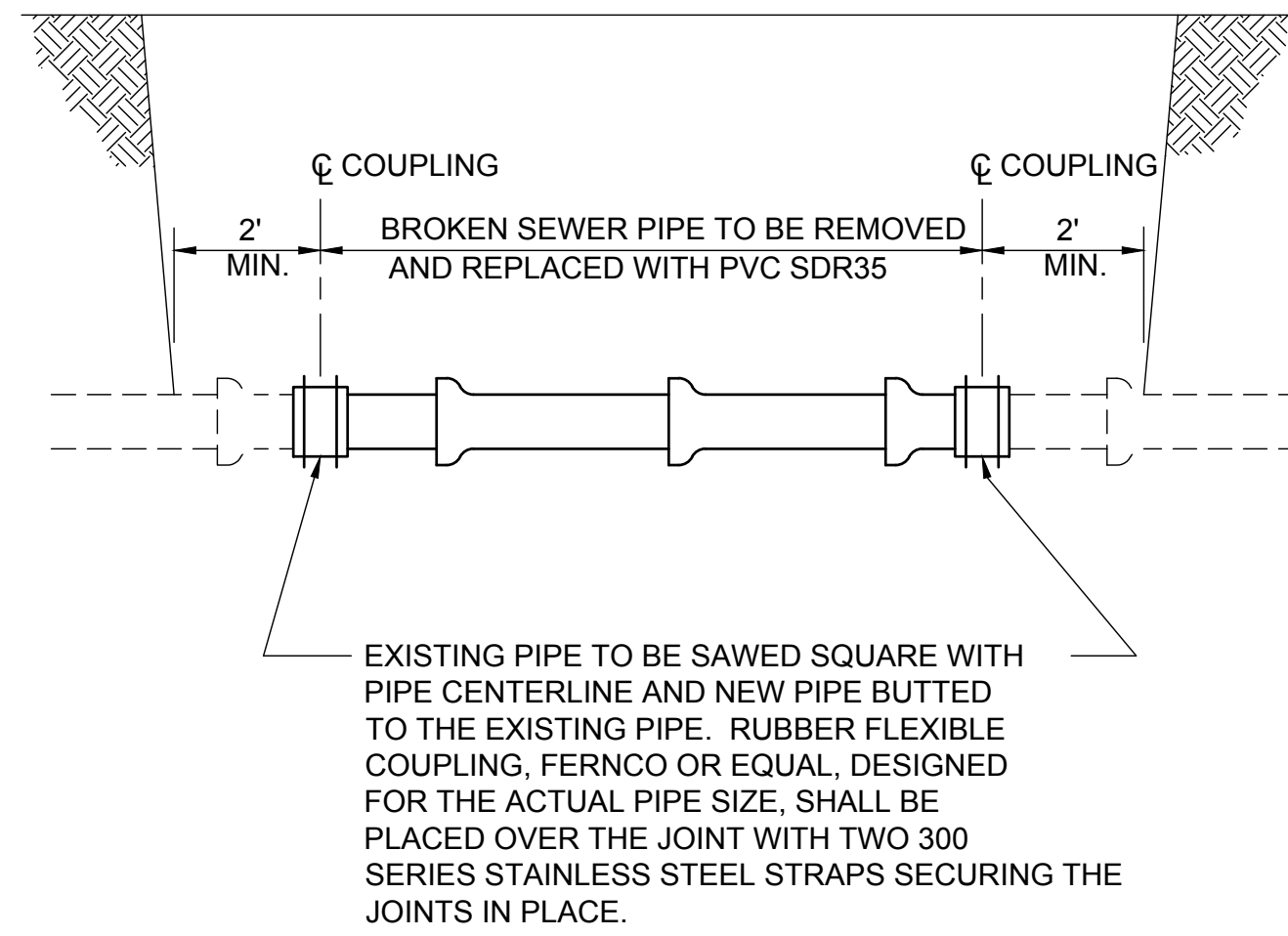
JOB NO: PR52444  
DATE: JUNE 2018  
DESIGNED BY: JAM  
DRAWN BY: PLB  
CHECKED BY: JAM  
APPROVED BY: JAM  
SCALE: AS NOTED

TITLE SHEET

1

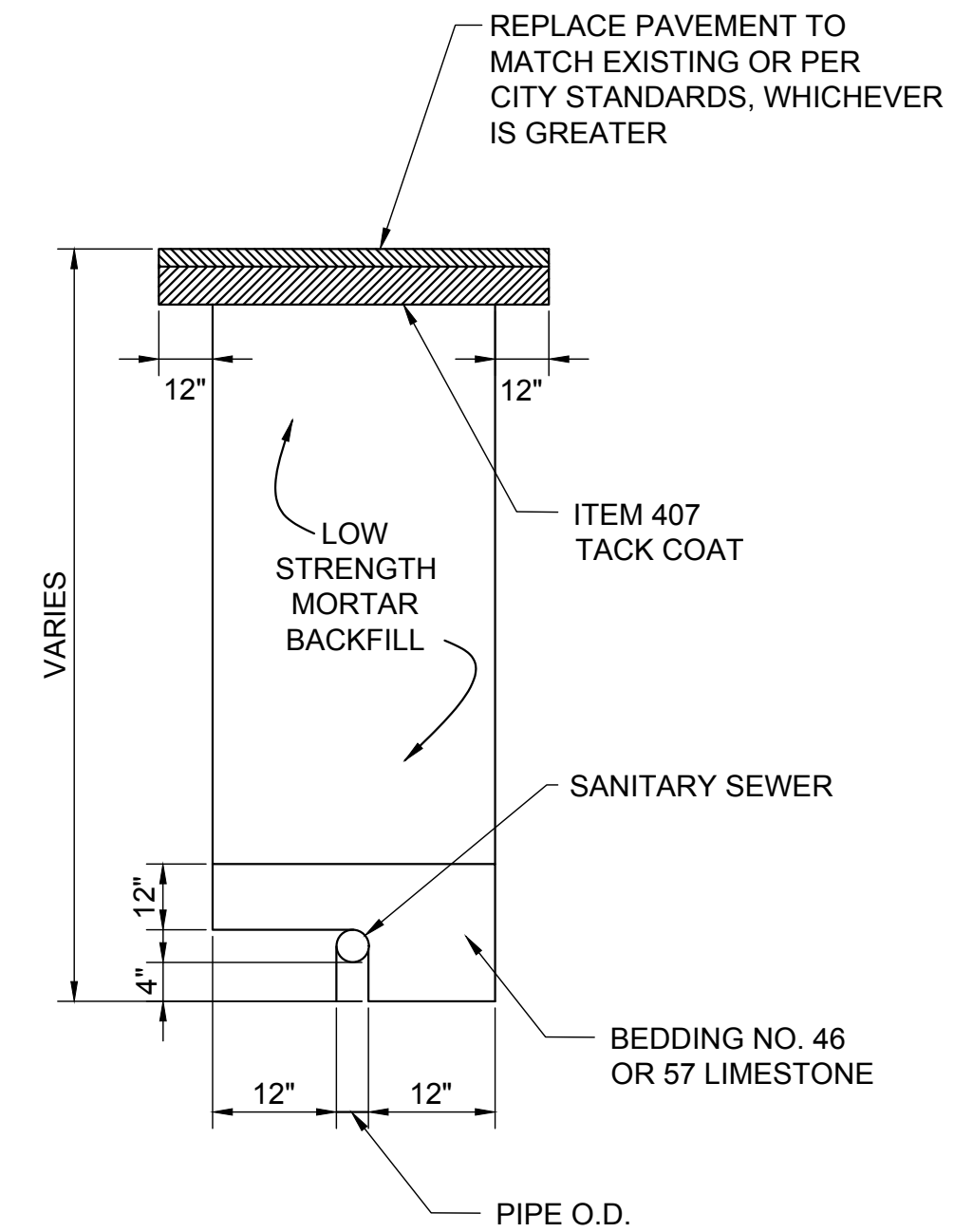
SHEET: 1 OF 9





**SEWER PIPE REPLACEMENT DETAIL**  
NOT TO SCALE

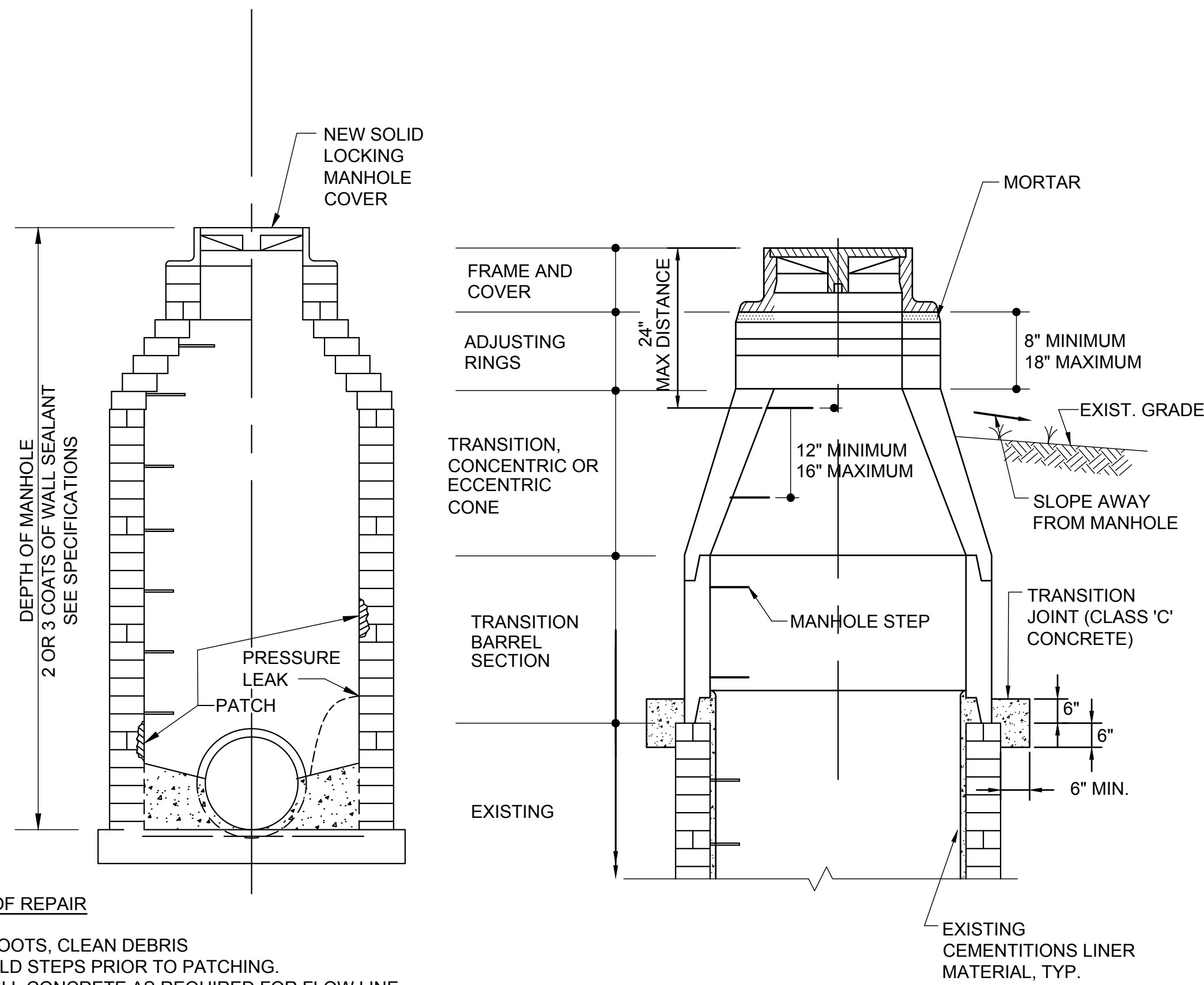
LOW STRENGTH MORTAR BACKFILL MATERIALS:  
CEMENT: 100 LBS  
FLY ASH: 250 LBS  
SAND: 350-2700 LBS  
WATER: 500 LBS



**LOW STRENGTH MORTAR BACKFILL**  
SCALE: NONE

**NOTES:**

1. ASPHALT MUST BE COMPACTED IN PLACE.
2. TEMPORARY PAVEMENT: LOW STRENGTH MORTAR BACKFILL TO GRADE.
3. IF MORTAR IS USED FOR TOP 3-1/4" BECAUSE ASPHALT IS UNAVAILABLE (I.E. WINTER MONTHS), TOP 3-1/4" OF MORTAR TO BE REMOVED AND REPLACED WITH ASPHALT WHEN IT BECOMES AVAILABLE.
4. LOW STRENGTH MORTAR BACKFILL WILL BE USED UNDER ALL PAVEMENT EXCAVATIONS/REPLACEMENTS.
5. PLEASE SEE SPECIFICATION SECTION 31 23 23.14.



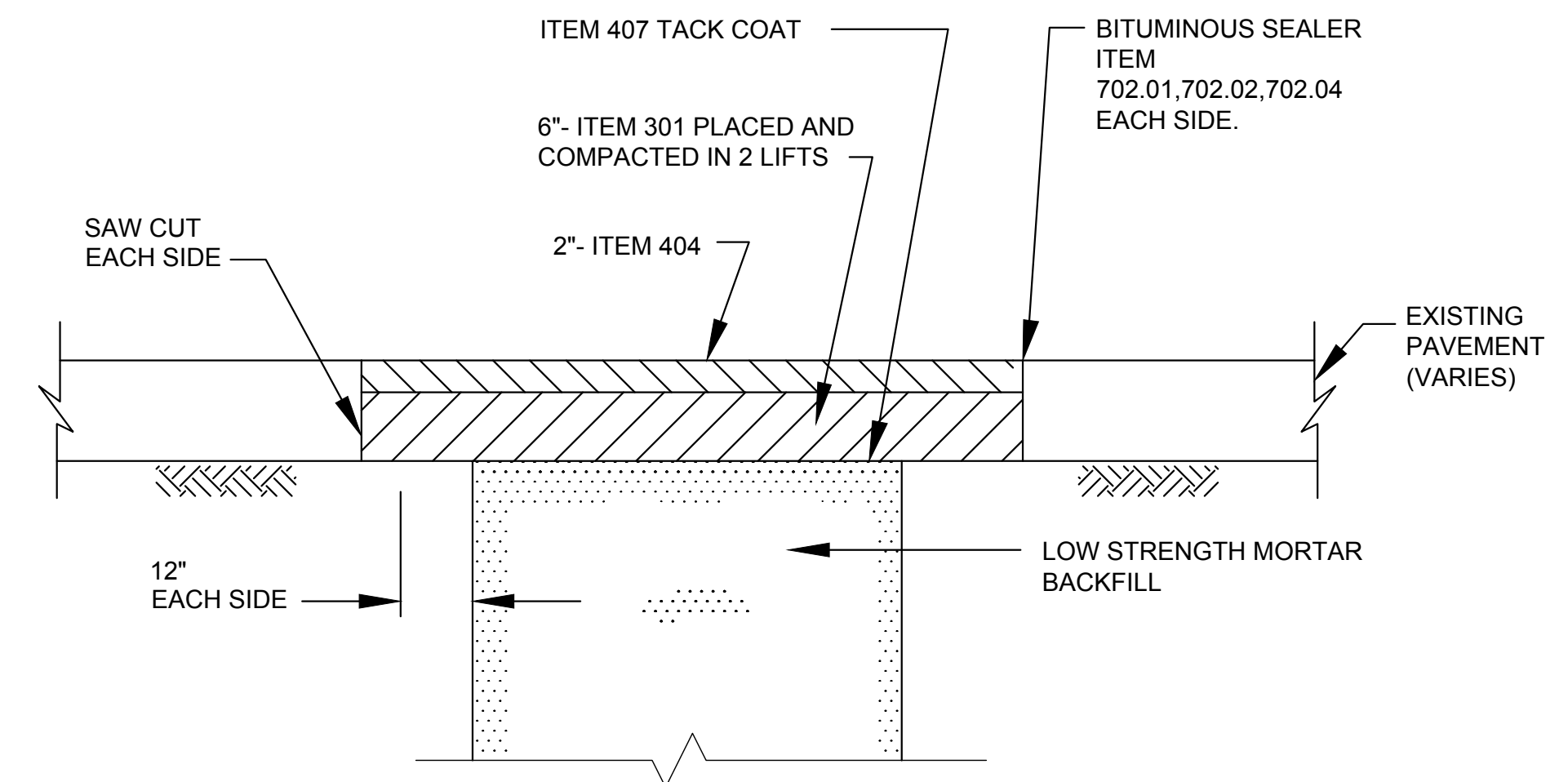
**MANHOLE RAISING DETAIL**  
NOT TO SCALE

**SEQUENCE OF REPAIR**

1. REMOVE ROOTS, CLEAN DEBRIS
2. REMOVE OLD STEPS PRIOR TO PATCHING.
3. REMOVE FILL CONCRETE AS REQUIRED FOR FLOW LINE MODIFICATION.
4. SEAL PRESSURE LEAKS- IPANEX- R. OR STRONGPLUG
5. PATCH DAMAGED AREAS
6. INSTALL NEW CONCRETE IN BOTTOM.
7. APPLY WALL SEALANT
8. INSTALL NEW STEPS, REPAIR BENCH AND/OR INVERT.
9. INSERT CHIMNEY SEAL, REPLACE MANHOLE COVER

NOTE:  
ALL REPAIR/RECONSTRUCTION ITEMS LISTED ABOVE ARE AS DIRECTED BY THE OWNER/ENGINEER FOR A GIVEN MANHOLE REPAIR. WORK SHALL BE PAID OUT OF THE MANHOLE REPAIR ALLOWANCE ITEM.

**MANHOLE REPAIR DETAIL**  
NOT TO SCALE



**ASPHALT REPLACEMENT (OVER TRENCH)**  
NOT TO SCALE

**NOTES:**

1. LOW STRENGTH MORTAR BACKFILL WILL BE USED UNDER ALL PAVEMENT EXCAVATIONS/REPLACEMENTS.
2. PLEASE SEE SPECIFICATION SECTION 31 23 23.14.

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CITY OF TALLMADGE, OHIO  
EVERGREEN DRIVE / MARK DRIVE  
SANITARY SEWER REHABILITATION

NO.	DESCRIPTION	DATE

JOB NO:	PR52444
DATE:	JUNE 2018
DESIGNED BY:	JAM
DRAWN BY:	PLB
CHECKED BY:	JAM
APPROVED BY:	JAM
SCALE:	NONE

MISCELLANEOUS DETAILS

MANHOLE SCHEDULE (BASE PROJECT)

SHEET NO.	ROADWAY	MH NO.	INVERT ELEVATION	APPROX DEPTH (FT)	MANHOLE CONSTRUCTION	CHIMNEY CONSTRUCTION	INVERT BENCH	EXISTING STEPS	REPAIR
5	MARK DRIVE	310	1138.98	10	BRICK	BRICK	FULL	YES	REHABILITATE
5	MARK DRIVE	311	1143.44	10	BRICK	BRICK	FULL	YES	REHABILITATE
5	MARK DRIVE	312	1060.24	10	BRICK	BRICK	FULL	YES	NO WORK - PREVIOUSLY REHABILITATED
5	MARK DRIVE	313	1065.99	10	BRICK	BRICK	FULL	YES	REHABILITATE
6	MARK DRIVE	314	1069.89	10	BRICK	BRICK	FULL	YES	REHABILITATE
6	MARK DRIVE	315	1076.41	10	BRICK	BRICK	FULL	YES	REHABILITATE
6	MARK DRIVE	316	1081.75	12	BRICK	BRICK	FULL	YES	REHABILITATE
6	NORTHWEST AVENUE	319	1082.54	12	BRICK	BRICK	FULL	YES	REHABILITATE
7	NORTHWEST AVENUE	320	1083.29	12	BRICK	BRICK	FULL	YES	REHABILITATE
7	EVERGREEN DRIVE	322	1084.24	12	BRICK	BRICK	FULL	YES	REHABILITATE
7	EVERGREEN DRIVE	323	1084.31	12	BRICK	BRICK	FULL	YES	REHABILITATE
8	EVERGREEN DRIVE	324	1092.07	12	BRICK	BRICK	FULL	YES	REHABILITATE
8	EVERGREEN DRIVE	325	1104.07	12	BRICK	BRICK	FULL	YES	REHABILITATE
8	EVERGREEN DRIVE	326	1118.56	12	BRICK	BRICK	FULL	YES	REHABILITATE

- NOTES:
- MANHOLE SCHEDULE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. INFORMATION IS PROVIDED BASED ON EXISTING DRAWINGS AND SEWER VIDEO. CONTRACTOR SHALL VERIFY ALL MANHOLE INFORMATION AS REQUIRED.
  - EXISTING MANHOLE STEPS SHALL REMAIN IN PLACE.

NORTHEAST AVE. MANHOLE SCHEDULE (ALTERNATE PROJECT)

SHEET NO.	ROADWAY	MH NO.	INVERT ELEVATION	APPROX. DEPTH (FT.)	MANHOLE CONSTRUCTION	CHIMNEY CONSTRUCTION	INVERT BENCH	EXISTING STEPS	REPAIR
9	NORTHEAST AVE.	1	N/A	7	BRICK	BRICK	FULL	UNKNOWN	REHABILITATE
9	NORTHEAST AVE.	2	N/A	9.3	BRICK	BRICK	FULL	UNKNOWN	REHABILITATE
9	NORTHEAST AVE.	3	N/A	10	BRICK	BRICK	FULL	UNKNOWN	REHABILITATE
9	NORTHEAST AVE.	4	N/A	9.6	BRICK	BRICK	FULL	UNKNOWN	REHABILITATE
9	NORTHEAST AVE. AT WILSON AVE.	5	N/A	10	BRICK	BRICK	FULL	UNKNOWN	REHABILITATE
9	NORTHEAST AVE.	6	N/A	11.8	BRICK	BRICK	FULL	UNKNOWN	REHABILITATE
9	NORTHEAST AVE.	7	N/A	8.3	BRICK	BRICK	FULL	UNKNOWN	REHABILITATE
9	NORTHEAST AVE. AT BARNES DR.	8	N/A	9.8	BRICK	BRICK	FULL	UNKNOWN	REHABILITATE

- NOTES:
- MANHOLE SCHEDULE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. INFORMATION IS PROVIDED BASED ON EXISTING DRAWINGS AND SEWER VIDEO. CONTRACTOR SHALL VERIFY ALL MANHOLE INFORMATION AS REQUIRED.
  - EXISTING MANHOLE STEPS SHALL REMAIN IN PLACE.

SANITARY SEWER REHABILITATION SCHEDULE (BASE PROJECT)

SHEET NO.	ROADWAY	UPSTREAM MH NO.	DOWNSTREAM MH NO.	SIZE (INCHES)	APPROX. LENGTH (LF)	MATERIAL	LATERALS (EA)	POINT REPAIR	MIN. LINER THICKNESS	NOTES
5	MARK DRIVE	311	310	8	306	VCP	5		4.5	
5	MARK DRIVE	312	311	8	350	VCP	6		4.5	
5	MARK DRIVE	313	312	8	356	VCP	7		4.5	
5-6	MARK DRIVE	314	313	8	388	VCP	6		4.5	
6	MARK DRIVE	315	314	8	173	VCP	1		4.5	
6	MARK DRIVE	316	315	8	140	VCP	1		4.5	
6	NORTHWEST AVENUE	316	319	10	321	VCP	3	X	4.5	BROKEN PIPE 108-FT UPSTREAM FROM MH #319
6-7	NORTHWEST AVENUE	319	320	10	308	VCP	4		4.5	
7	EVERGREEN DRIVE	322	320	10	399	VCP	3		4.5	
7	EVERGREEN DRIVE	323	322	10	283	VCP	4	X	4.5	CAMERA UNDER WATER 205-FT DOWNSTREAM FROM MH #323
7-8	EVERGREEN DRIVE	324	323	8	355	VCP	6		4.5	
8	EVERGREEN DRIVE	325	324	8	360	VCP	7		4.5	
8	EVERGREEN DRIVE	326	325	8	355	VCP	2		4.5	

- NOTES:
- ALL PIPE IS ASSUMED TO BE VITRIFIED CLAY, BASED UPON EXISTING DRAWINGS AND SEWER VIDEO.
  - INFORMATION FOR MARK DR., NORTHWEST AVE., AND EVERGREEN DR. ARE FROM CCTV RECORDS FROM 2014.
- ① LENGTH FROM CENTER OF MANHOLE TO CENTER OF MANHOLE IS OBTAINED FROM PREVIOUS SEWER VIDEOS AND DRAWINGS. PAYMENT WILL BE MADE AT THESE LENGTHS UNLESS VIDEO TAPES SHOW A DIFFERENCE OF GREATER THAN 2%. SEE SCOPE OF BIDS IN SPECIFICATIONS.
- ② NUMBER OF LATERALS IS BASED UPON THE NUMBER OF HOMES BELIEVED TO BE TIED INTO THAT SECTION OF SEWER. ACTUAL NUMBER OF LATERALS WILL BE BASED UPON THE POST-LINED VIDEO OF THE SANITARY SEWER. CONTRACTOR WILL BE PAID FOR ACTUAL NUMBER OF LATERALS PER THE UNIT PRICE BID.

NORTHEAST AVE. SANITARY SEWER REHABILITATION SCHEDULE (ALTERNATE PROJECT)

SHEET NO.	ROADWAY	UPSTREAM MH NO.	DOWNSTREAM MH NO.	SIZE (INCHES)	APPROX. LENGTH (LF)	MATERIAL	LATERALS (EA)	POINT REPAIR	MIN. LINER THICKNESS	NOTES
9	NORTHEAST AVE.	1	2	10	300	VCP	4	X	4.5	INTRUDING LATERAL AT US MH 1, DROPPED PIPE 4' FROM DOWNSTREAM MH 2.
9	NORTHEAST AVE.	2	3	10	312	VCP	4		4.5	INTRUDING LATERAL AT EACH END, UNABLE TO COMPLETE CCTV.
9	NORTHEAST AVE.	3	4	10	300	VCP	3		4.5	
9	NORTHEAST AVE.	4	5	10	295	VCP	4		4.5	HEAVY ROOTS
9	NORTHEAST AVE.	5	6	12	326	VCP	6	X	6.0	BROKEN PIPE AT 280' FROM MH 5.
9	NORTHEAST AVE.	6	7	12	300	VCP	3		6.0	
9	NORTHEAST AVE.	7	8	12	303	VCP	5		6.0	

- NOTES:
- ALL PIPE IS ASSUMED TO BE VITRIFIED CLAY, BASED UPON EXISTING DRAWINGS AND SEWER VIDEO.
  - INFORMATION FOR NORTHEAST AVE. ARE FROM CCTV RECORDS FROM 2018.
- ① LENGTH FROM CENTER OF MANHOLE TO CENTER OF MANHOLE IS OBTAINED FROM PREVIOUS SEWER VIDEOS AND DRAWINGS. PAYMENT WILL BE MADE AT THESE LENGTHS UNLESS VIDEO TAPES SHOW A DIFFERENCE OF GREATER THAN 2%. SEE SCOPE OF BIDS IN SPECIFICATIONS.
- ② NUMBER OF LATERALS IS BASED UPON THE NUMBER OF HOMES BELIEVED TO BE TIED INTO THAT SECTION OF SEWER. ACTUAL NUMBER OF LATERALS WILL BE BASED UPON THE POST-LINED VIDEO OF THE SANITARY SEWER. CONTRACTOR WILL BE PAID FOR ACTUAL NUMBER OF LATERALS PER THE UNIT PRICE BID.

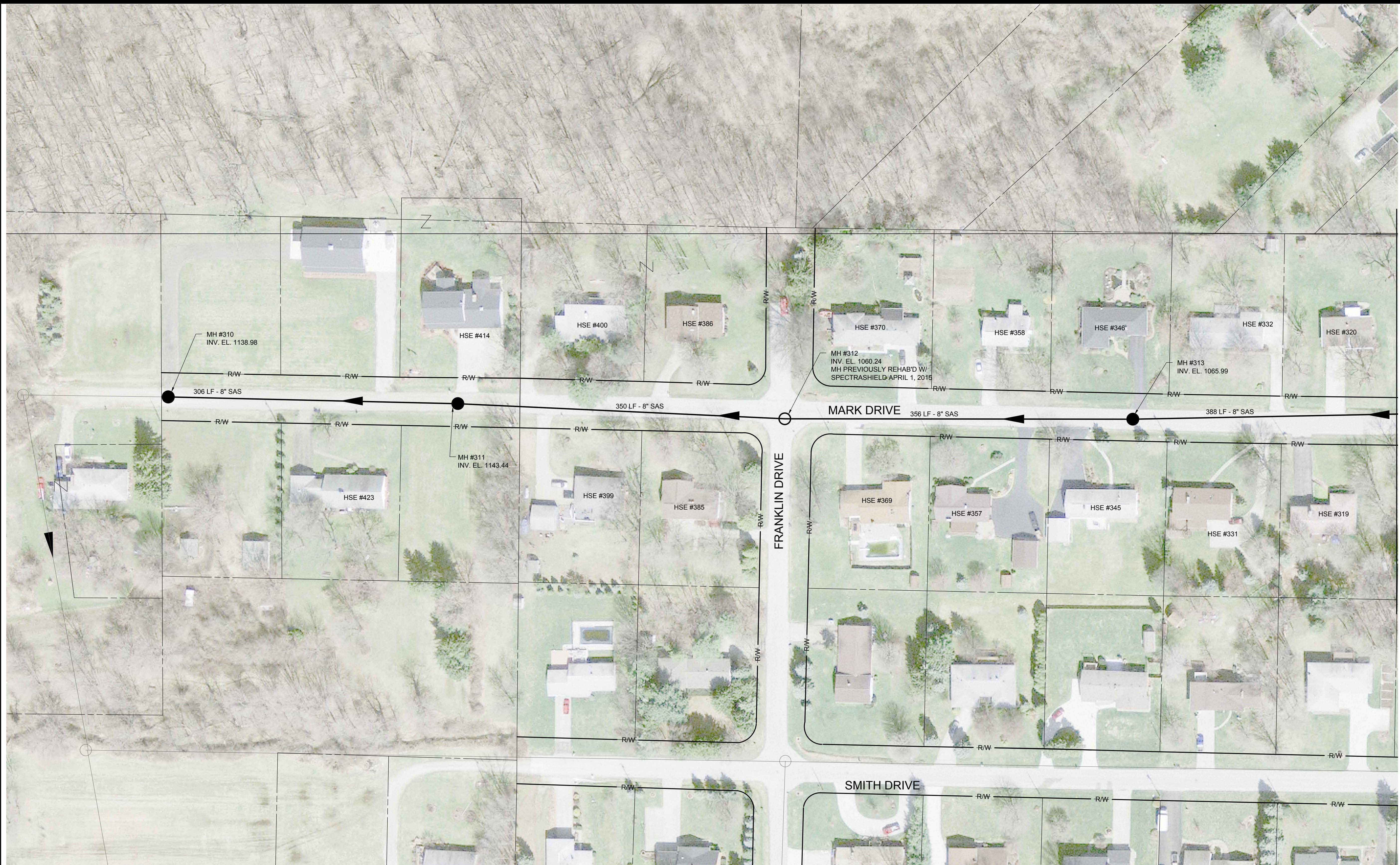
**BURGESS & NIPLÉ**  
50 SOUTH MAIN STREET, SUITE 600  
AKRON, OHIO 44308

CITY OF TALLMADGE, OHIO  
EVERGREEN DRIVE / MARK DRIVE  
SANITARY SEWER REHABILITATION

NO.	DESCRIPTION	DATE

JOB NO: PR52444  
DATE: JUNE 2018  
DESIGNED BY: JAM  
DRAWN BY: PLB  
CHECKED BY: JAM  
APPROVED BY: JAM  
SCALE: NONE

SEWER REHABILITATION SCHEDULE



MATCHLINE - SEE SHEET 6 FOR CONTINUATION

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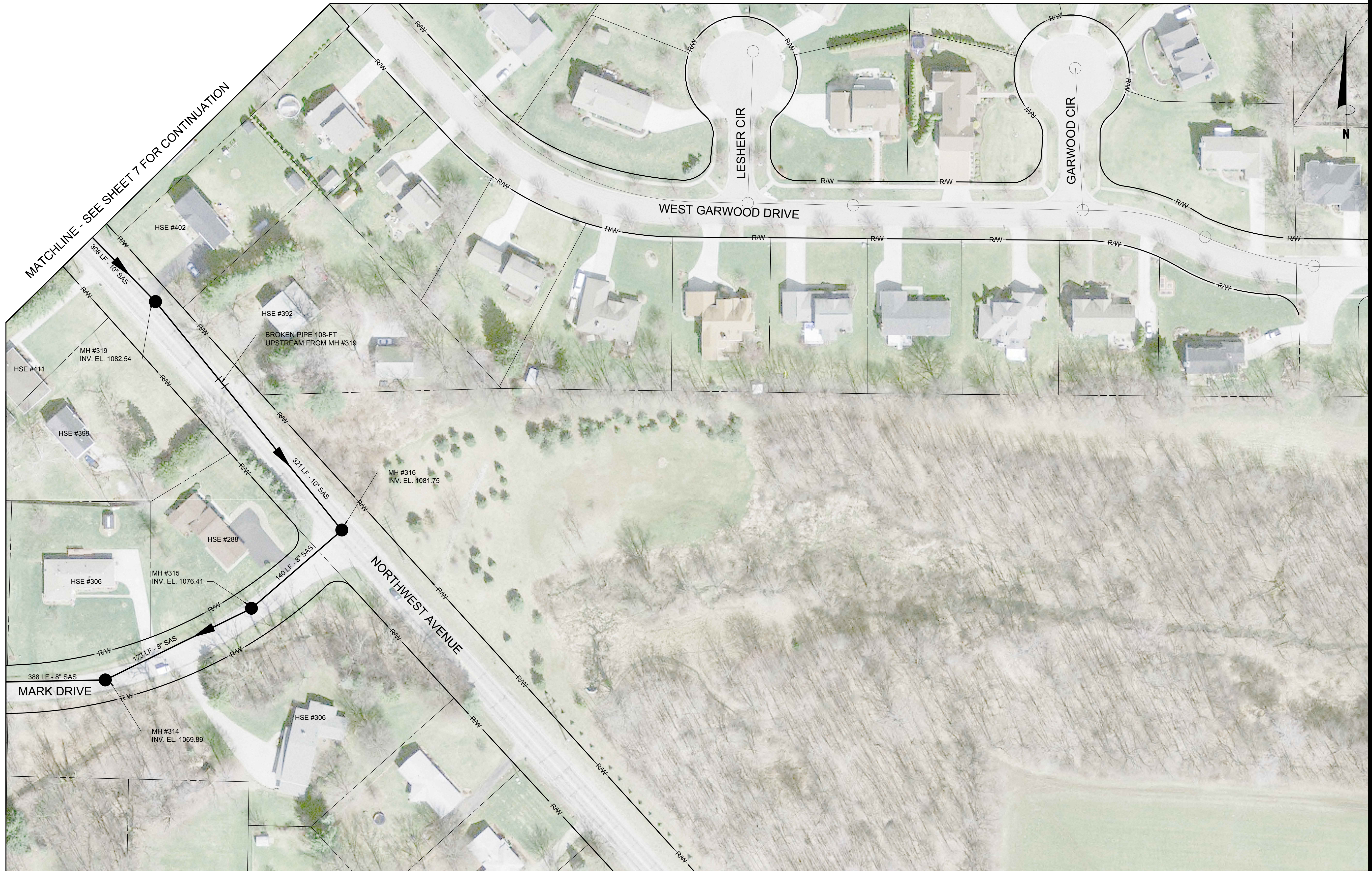
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 CHECKED BY: JAM  
 APPROVED BY: JAM  
 SCALE: 1" = 50'

MARK DRIVE  
 MH NOS.  
 310-313

**5**  
 SHEET: 5 OF 9

MATCHLINE - SEE SHEET 5 FOR CONTINUATION

MATCHLINE - SEE SHEET 7 FOR CONTINUATION



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 APPROVED BY: JAM  
 SCALE: 1" = 50'

MARK DRIVE  
 NORTHWEST AVE  
 EVERGREEN DRIVE  
 MH NOS.  
 314-316 & 319



MATCHLINE - SEE SHEET 8 FOR CONTINUATION

MATCHLINE - SEE SHEET 6 FOR CONTINUATION



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 SANITARY SEWER REHABILITATION

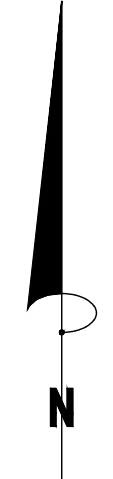
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 APPROVED BY: JAM  
 SCALE: 1" = 50'

EVERGREEN DRIVE  
 MH NOS.  
 320 & 322-323

7  
 SHEET: 7 OF 9

MATCHLINE - SEE SHEET 7 FOR CONTINUATION



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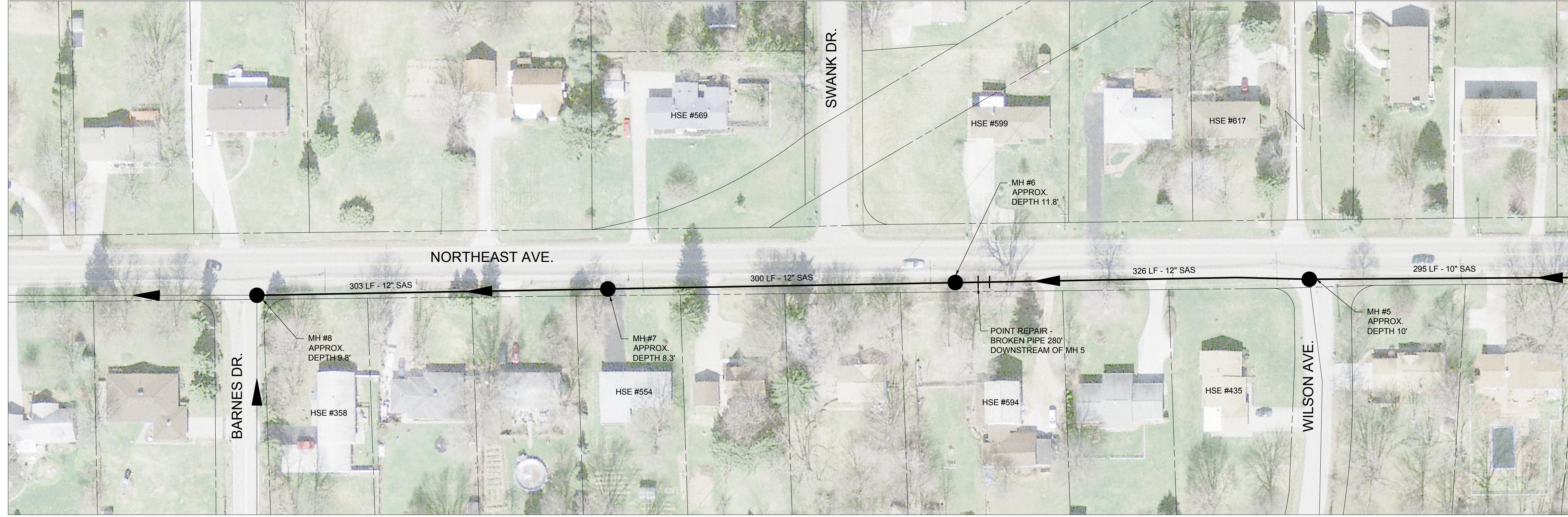
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 CHECKED BY: JAM  
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 SCALE: 1" = 50'

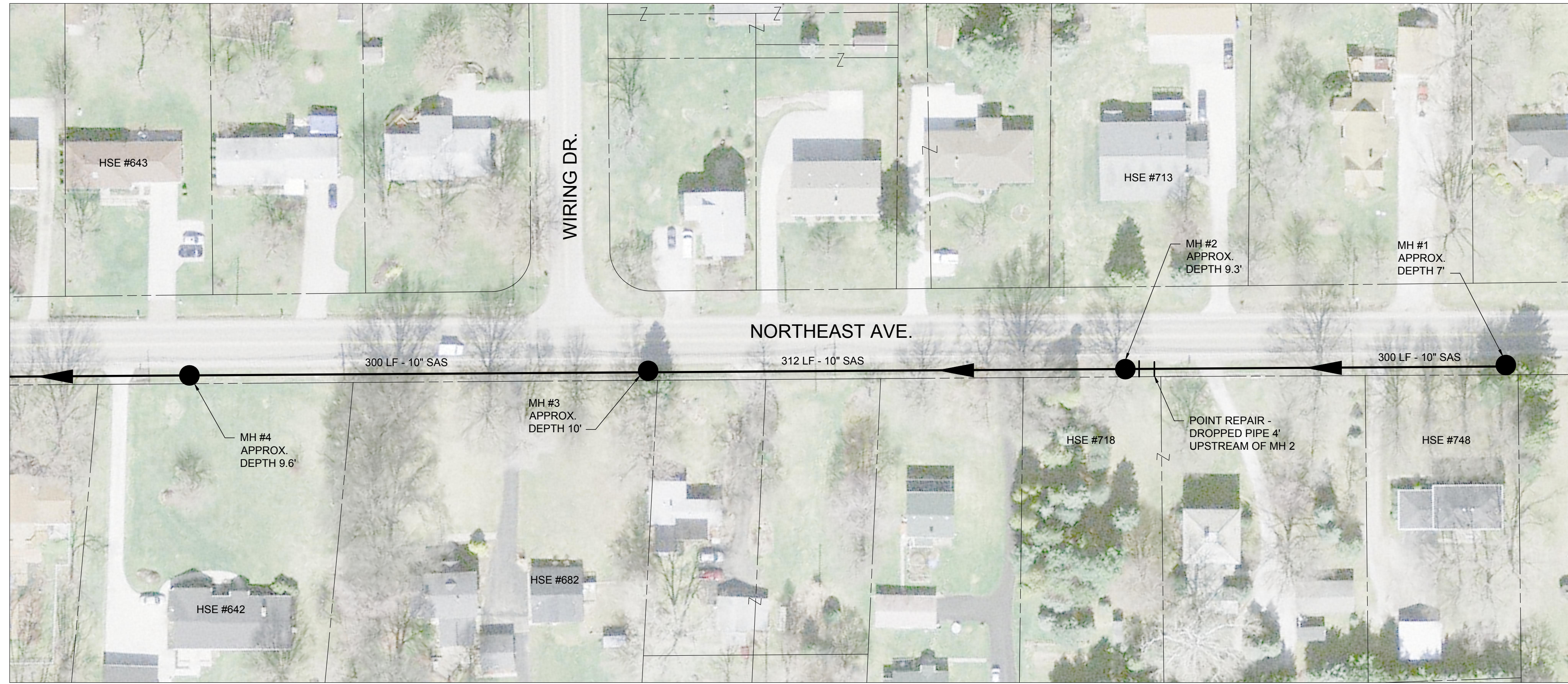
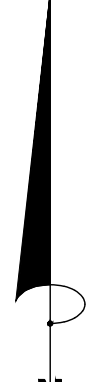
EVERGREEN DRIVE  
 MH NOS.  
 324-326

8  
 SHEET: 8 OF 9





MATCHLINE - SEE BELOW FOR CONTINUATION



MATCHLINE - SEE ABOVE FOR CONTINUATION



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 EVERGREEN DRIVE / MARK DRIVE  
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 DRAWN BY: RRH  
 CHECKED BY: JAM  
 APPROVED BY: JAM  
 SCALE: NONE

ADD ALTERNATE  
 NORTHEAST AVE.  
 MH NOS. 1-8