SANITARY SEWER PLANS

RELOCATION & RECONSTRUCTION OF A PORTION OF OLIVER & WOODLAWN SEWER MAINS

CITY OF BEL AIRE
SEDGWICK COUNTY, KANSAS

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.

2. A PORTION OF EXCESS EXCAVATED MATERIAL SHALL BE MOUNDED AROUND MANHOLES WHICH EXTEND MORE THAN ONE (1) FOOT ABOVE THE EXISTING GROUND. SUCH MOUNDS SHALL BE CONSTRUCTED WITH A SIX (6) FOOT DIAMETER FLAT TOP WITH 4 TO 1 SIDE SLOPES DOWN TO THE ORIGINAL GROUND. THE ELEVATION OF THE FLAT TOP OF THE MOUND SHALL BE 0.4 FOOT BELOW THE TOP OF THE MANHOLE.

3. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF TWENTY-FOUR (24) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

   KANSAS ONE-CALL 1-800-344-7233

   THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF EMERGENCY:

CITY OF BEL AIRE	744-2451
ARKLA GAS COMPANY	942-8350 or 263-8161
BELL TELEPHONE	1-316-571-2115
CABLEVISION	262-0661
GAS SERVICE COMPANY	263-7511
KANSAS GAS & ELECTRIC	264-1141
CITY OF WICHITA WATER DEPARTMENT	268-4908
CITY OF WICHITA SEWER DEPARTMENT	268-4071

4. EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.

5. ALL STUBS AND PLUGGED PIPES SHALL BE LOCATED WITH GREEN PLASTIC TAPE IN THE SAME MANNER AS RISERS.

6. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED.

7. PRIOR TO LAYING SEWER LINES USING EXISTING STUBS IN EXISTING MANHOLES, THE CONTRACTOR SHALL EXPOSE AND VERIFY THE ELEVATION, GRADE AND ALIGNMENT OF EXISTING STUBS AND NOTIFY THE ENGINEER OF ANY DEVIATION FROM THE PLAN. WHERE CONNECTING TO AN EXISTING MANHOLE THAT DOES NOT HAVE AN EXISTING STUB ON THE STUB IS UNUSABLE DUE TO ELEVATION GRADE OR ALIGNMENT, THE CONTRACTOR SHALL RESHAPE THE EXISTING MANHOLE INVERT TO PROVIDE SMOOTH FLOW. THE COST OF RESHAPING EXISTING MANHOLE INVERTS IS INCIDENTAL TO THE PROJECT.

8. TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.

9. MANHOLES TO BE REMOVED SHALL HAVE PIPES PLUGGED WITH A 8" MASONRY PLUG. THE TOP FOUR FEET OF THE MANHOLE IS TO BE REMOVED. THE MANHOLE IS TO BE FILLED WITH SAND AND FLUSHED TO WITHIN 4' OF GRADE. THE TOP 4' OF THE HOLES SHALL BE FILLED WITH DIRT COMPACTED TO 90% STANDARD DENSITY. MANHOLE CASTINGS ARE TO BE SALVAGED, CLEANED AND DELIVERED TO THE CITY OF BEL AIRE'S MAINTENANCE FACILITY AT NORTH WOODLAWN. THE BID OF MANHOLES REMOVED SHALL INCLUDE ALL OF THE ABOVE TASKS.

10. CONSTRUCTION OF LINES 1 AND 2 SHALL BE COORDINATED WITH THE RELOCATION OF UTILITIES AND THE CONSTRUCTION OF THE WORK BY THE GRADING CONTRACTOR ON K-96. IT IS ANTICIPATED THAT LINE 2 CAN PROCEED AS SOON AS THE CONTRACT IS SIGNED. WORK ON LINE 1 WILL FOLLOW THE RELOCATION OF THE EXISTING 24" WATER LINE. EASEMENTS FOR LINE 3 ARE BEING NEGOTIATED. WORK ON LINE 3 WILL BE SCHEDULED WHEN RIGHT-OF-WAY IS AVAILABLE.

11. ALL FENCES REMOVED SHALL BE REPLACED.

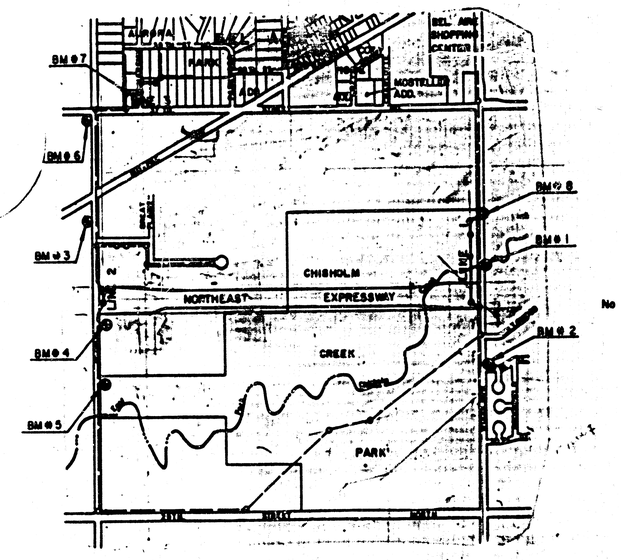
12. GRASS SHALL BE RE-SEEDED FROM 3+70.2 TO 6+39.3 ON LINE 3.

13. EXISTING 18" SANITARY SEWER ON WOODLAWN SHALL BE SAND FILLED FROM STATION 0+00 TO STATION 6+40 (RIGHT). THE 250 L.F OF EXISTING SANITARY SEWER IS TO BE REMOVED BY THE BRIDGE CONTRACTOR FROM 6+40 (RIGHT) TO 9+32.7.

14. STANDARD MANHOLES SHALL BE CITY OF WICHITA TYPE "P" OR "C".

15. THE COST OF PUMPING OR OTHERWISE HANDLING OF SEWAGE FLOWS SHALL BE INCLUDED IN THE BID OF SITE PREPARATION AND RESTORATION.

16. THE COST OF RESTORATION OF THE GRAVEL ROADWAY ON HARDING TO ITS ORIGINAL CONDITION SHALL BE CONSIDERED INCLUDED IN THE COST OF THE BID OF SITE PREPARATION AND RESTORATION.



BENCH MARKS

B.M.#1 City of Wichita Std. disk in SE. cor. of bridge over Woodlawn & 24' Left of Sta. 48 + 85.3
ELEV. = 1361.94'

B.M.#2 "□" cut on NE. cor. of curb inlet at NE. cor. of 32nd St. & Woodlawn 60.8' left of Sta. 7+96
ELEV. = 1367.18'

B.M.#3 "□" cut on CL of N. headwall culvert 28.7' Right of STA. 37+66.5 Oliver
ELEV. = 1365.00'

B.M.#4 City of Wichita B.M. Disk 30.2' Left of Sta. 52+60.8 Oliver
ELEV. = 1360.206'

B.M.#5 "□" cut NE. cor. of water meter vault at NE. cor. of Oliver & entrance to Chisholm Creek Park 40.4' Left of Sta. 61+80.4
ELEV. = 1340.935'

B.M.#6 CL of Wichita B.M. disk E. end of headwall to RCB 34' N. & 22.5' S. of CL - CL 37th St. N. & Oliver
ELEV. = 1372.03'

B.M.#7 "□" cut on SE. cor. of driveway to house at 3815 N. Harding
ELEV. = 1372.96'

B.M.#8 "□" cut on S. edge of san. sewer manhole 18.8' Right of STA 39 + 71.3
ELEV. = 1366.13'

Booked 12-90 DOL M-129 M-145 6297

INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-3	PLAN & PROFILE LINE 1
4	PLAN & PROFILE LINE 2
5-6	PLAN & PROFILE LINE 3

APPROVED AS NOTED
By CITY ENGINEER OF WICHITA

Sanitary Sewers VRH 12/11/89
Storm Sewers
Driveway Approaches
Water Mains
Paving

NOTE TO CONTRACTOR

INSPECTION AND TESTING FOR THIS PROJECT IS TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERING FIRM UNDER CONTRACT WITH THE OWNER/DEVELOPER. SAID INSPECTION TO BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD CONSTRUCTION ENGINEERING PRACTICES AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. NO WORK SHALL BE PERFORMED IN DEDICATED EASEMENTS OR THE PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION NOR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

DEAN S. SELLERS LICENSED NO. 3683 KANSAS PROFESSIONAL ENGINEER

AS BUILT : JUNE 1990
C.O.W. PROJECT NO. 234 PPS (607861)

MK EC

BEL AIRE, KANSAS
SANITARY SEWER
RELOCATION & RECONSTRUCTION
OF A PORTION OF
OLIVER & WOODLAWN
SEWER MAINS

Design DSS
Drawn by D. M
Checked by
Date Nov. 1989
Job no.

MID-KANSAS ENGINEERING CONSULTANTS PA
3500 NORTH ROCK ROAD
BUILDING #800
WICHITA, KANSAS 67226
636-5566

Sheet 1 of 6

FILMED FROM THE BEST AVAILABLE COPY

CITY OF BEL AIRE KANSAS
RELOCATION & RECONSTRUCTION OF
A PORTION OF THE OLIVER & WOODLAWN SEWER MAINS

N

Scale: 1" = 20' Horiz.
1" = 5' Vert.

NORTHEAST EXPRESSWAY — RIGHT-OF-WAY

MH 1-2 — PROP. 15" SWS — 132°45'50" A.B.

MH 1-3

MH 1-1

EXISTING 24" WATER LINE

INSTALL 18" MASONRY PLUG

REMOVE MANHOLE

WOODLAWN

N.W. Cor., S.W. 1/4 Sec. 31, T.26 R.22E.

INSTALL 18" MASONRY PLUG

NORTHEAST EXPRESSWAY — RIGHT-OF-WAY

PLAN LINE 1

PROFILE LINE 1

Sta. 0+00, Line 1"
Remove Existing Manhole
Exist. MH Top = 1357.67
Const. New Std. Manhole
Set Top @ 1353.28 A.B.

Exist. 24" Water Top = 1351.00

Sta. 0+14.4 Line 1
Const. Std. Manhole
MH Top = 1353.43 A.B.

Proposed Storm Water Sewer

Proposed Grade

Existing Ground

Sta. 4+74.87 A.B.
Sta. 4+88.87 Line 1
Const. Std. Manhole
MH Top 1355.40

40 L.F. 8" Reinforced Concrete Encasement

814 L.F. - 18" Pipe @ 0.114%
TG. G! A.B.

398.0 - L.F. - 18" Pipe @ 0.114%
-398.2G A.D.

E Out = 1344.82 (Exist. 18" San. Sewer - S)
E In = 1344.93
1344.70 A.B.

E Out = 1344.87 A.B.
E In = 1344.97
1344.98 A.B.
1344.93

E Out = 1345.36
E In = 1345.36

1345.05
1345.16
1345.27
1345.39

1365 1360 1355 1350 1345 1340 1335 1330

0 1 2 3 4 5 6

2/6

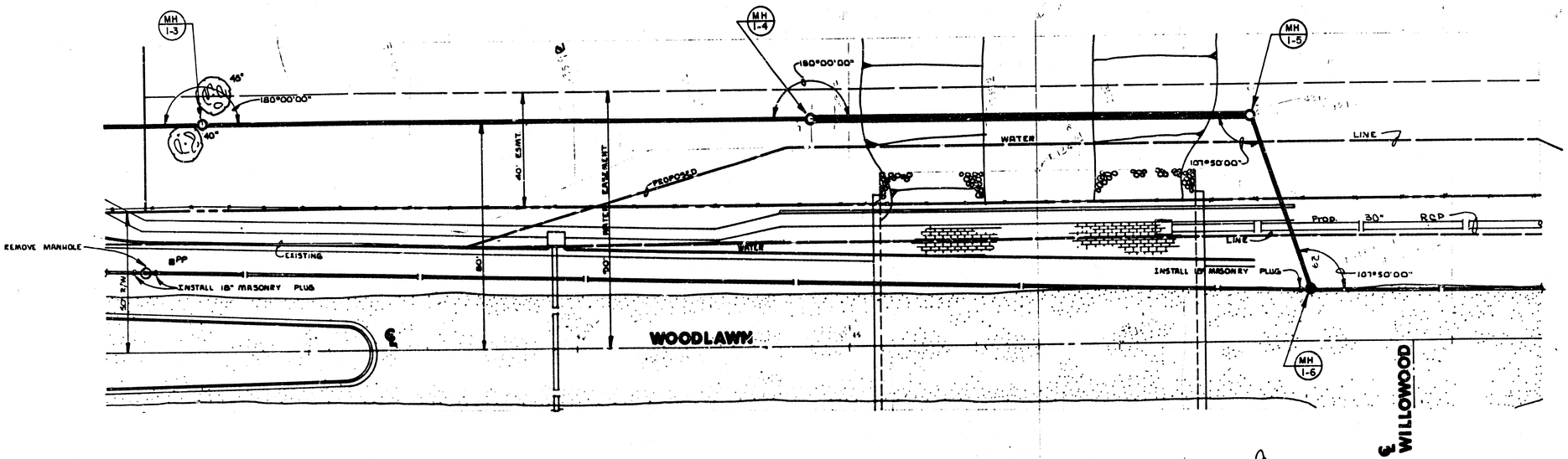
M.K.E. 2/12

FILMED FROM THE BEST AVAILABLE COPY

CITY OF BEL AIRE KANSAS
RELOCATION & RECONSTRUCTION OF
A PORTION OF THE OLIVER & WOODLAWN SEWER MAINS

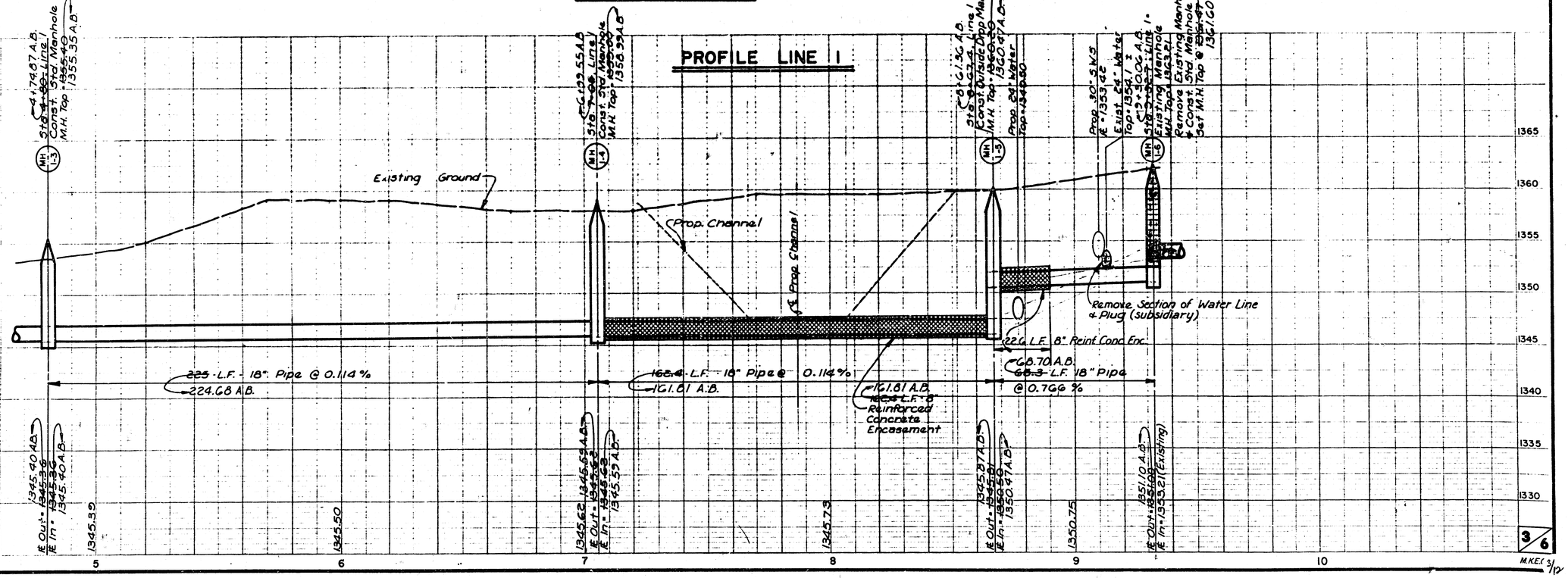
N

Scale: 1" = 20' Horiz.
1" = 5' Vert.



PLAN LINE 1

PROFILE LINE 1



3/6

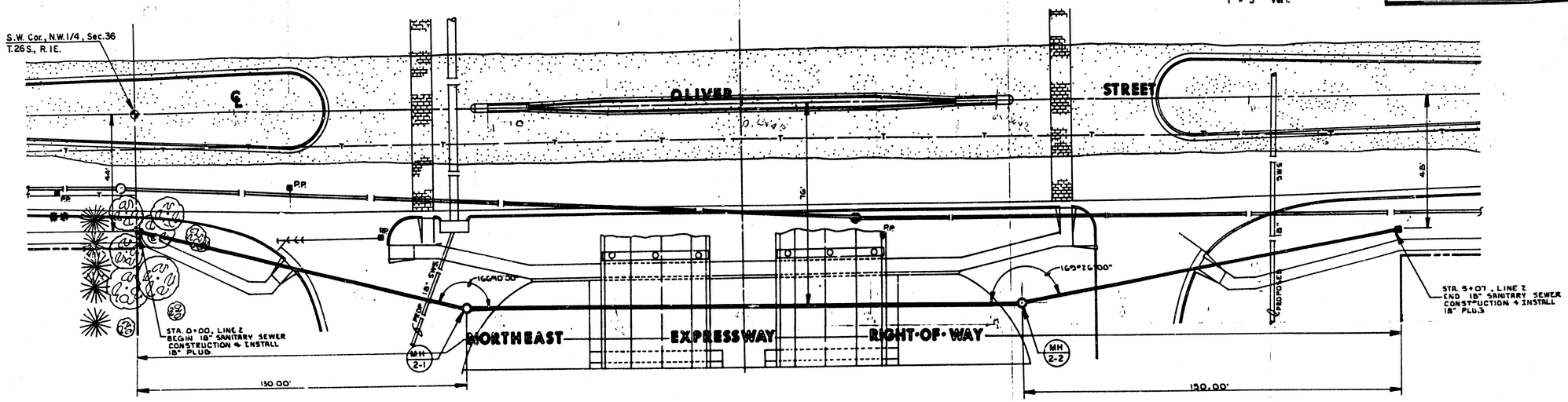
MKE 3/12

FILMED FROM THE BEST AVAILABLE COPY

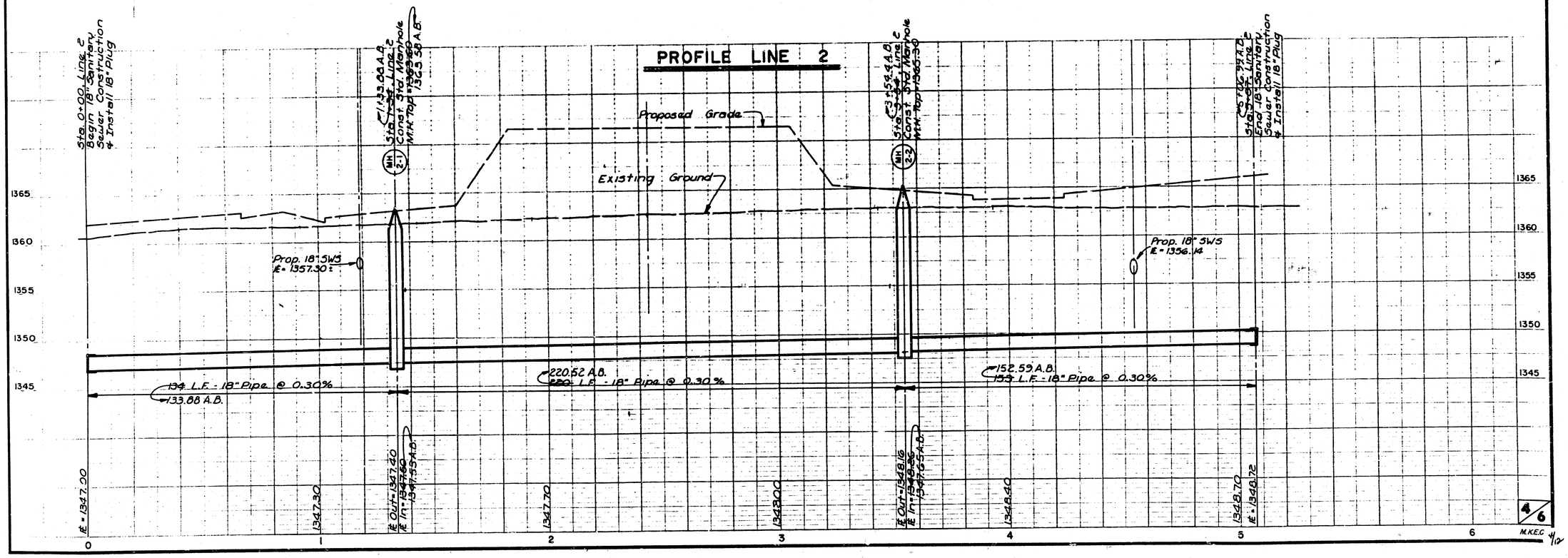
CITY OF BEL AIRE KANSAS
RELOCATION & RECONSTRUCTION OF A PORTION OF THE OLIVER & WOODLAWN SEWER MAINS

N

Scale: 1" = 20' Horiz.
1" = 5' Vert.

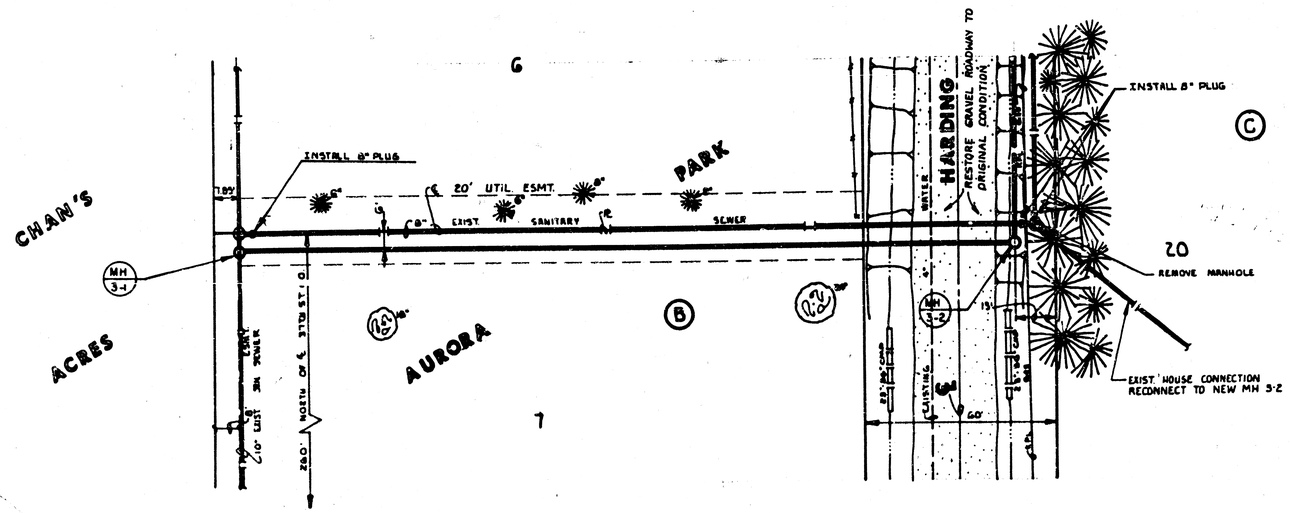


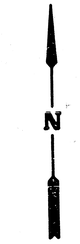
PLAN LINE 2



FILMED FROM THE BEST AVAILABLE COPY

CITY OF BEL AIRE KANSAS
RELOCATION & RECONSTRUCTION OF
A PORTION OF THE OLIVER & WOODLAWN SEWER MAINS

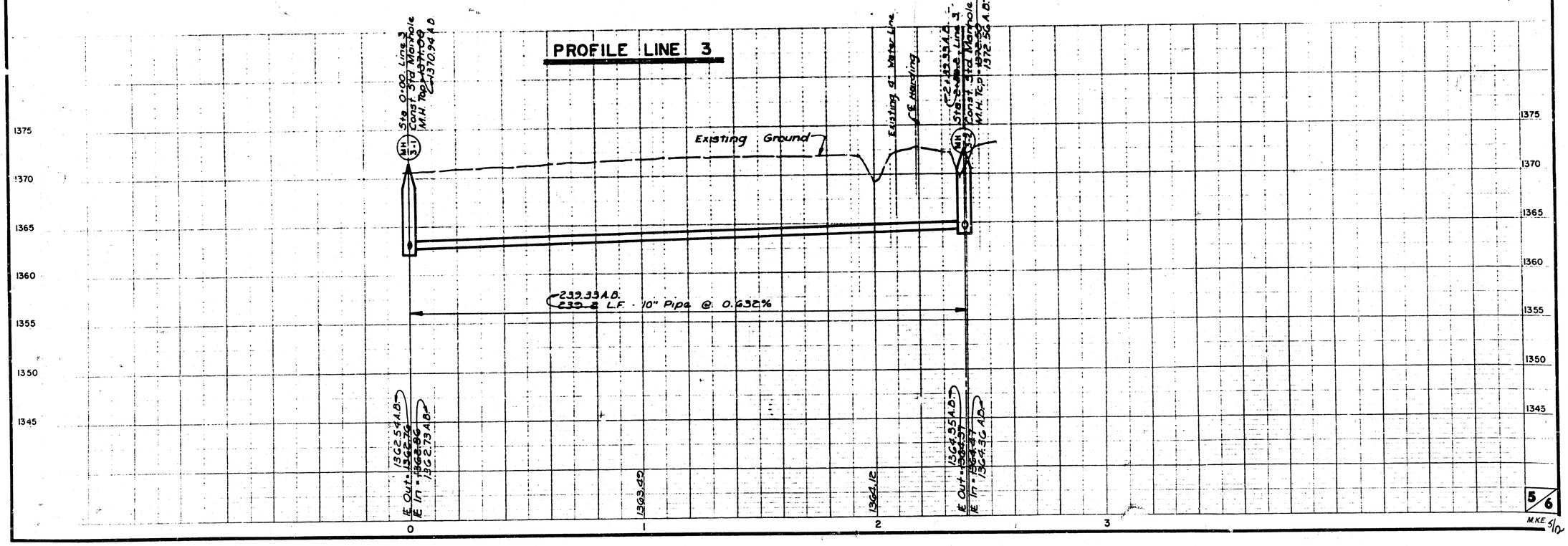




Scale: 1" = 20' Horiz.
1" = 5' Vert.

PLAN LINE 3

PROFILE LINE 3

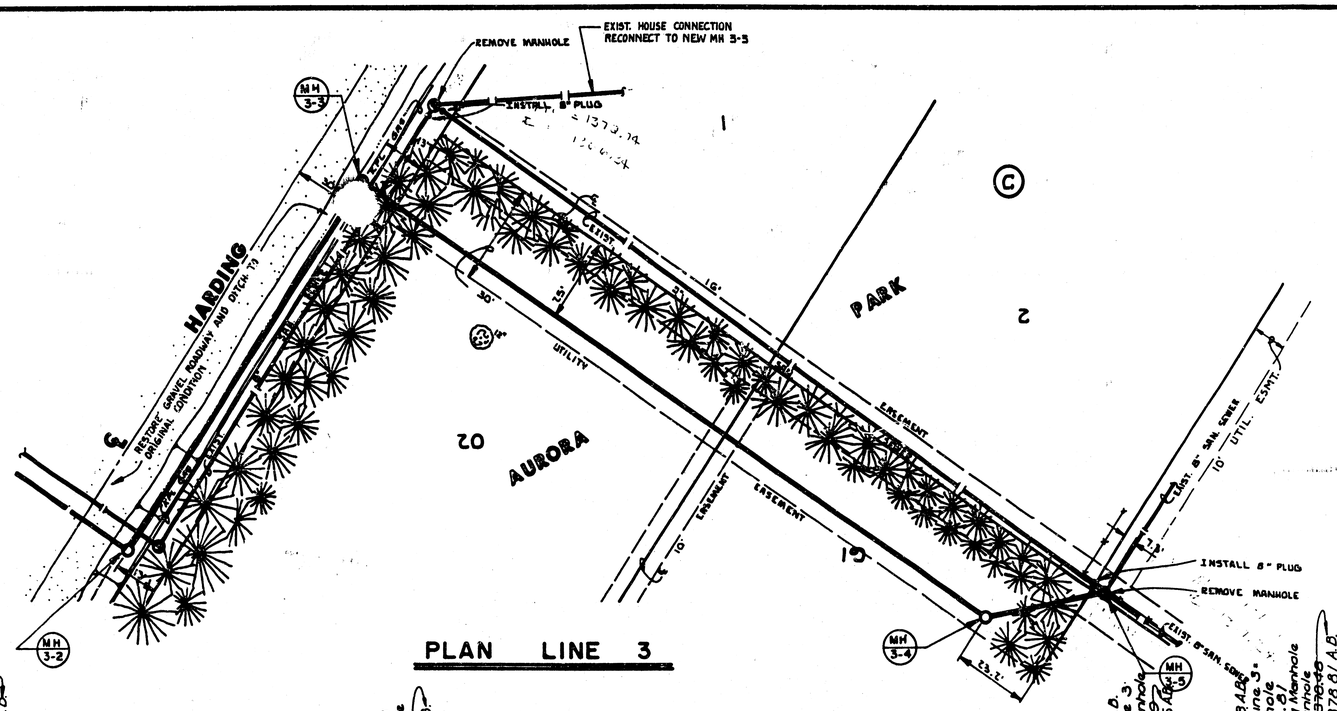


5/6

M.K.E. 5/12

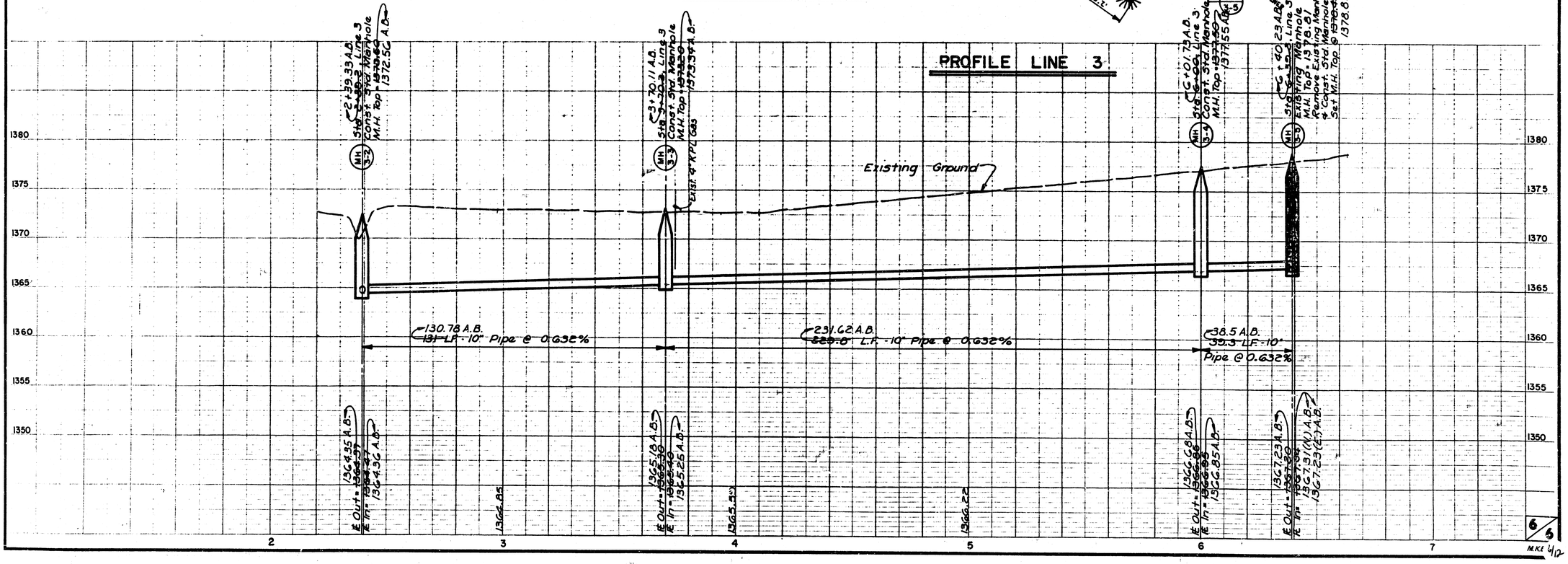
FILMED FROM THE BEST AVAILABLE COPY

CITY OF BEL AIRE KANSAS
RELOCATION & RECONSTRUCTION OF
A PORTION OF THE OLIVER & WOODLAWN SEWER MAINS



PLAN LINE 3

PROFILE LINE 3



6/5

M.K.L. 4/12

FILMED FROM THE BEST AVAILABLE COPY

SANITARY SEWER PLANS

RELOCATION & RECONSTRUCTION OF A PORTION OF OLIVER & WOODLAWN SEWER MAINS

CITY OF BEL AIRE
SEDGWICK COUNTY, KANSAS

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.

2. A PORTION OF EXCESS EXCAVATED MATERIAL SHALL BE MOUNDED AROUND MANHOLES WHICH EXTEND MORE THAN ONE (1) FOOT ABOVE THE EXISTING GROUND. SUCH MOUNDS SHALL BE CONSTRUCTED WITH A SIX (6) FOOT DIAMETER FLAT TOP WITH 4 TO 1 SIDE SLOPES DOWN TO THE ORIGINAL GROUND. THE ELEVATION OF THE FLAT TOP OF THE MOUND SHALL BE 0.4 FOOT BELOW THE TOP OF THE MANHOLE.

3. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF TWENTY-FOUR (24) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

   KANSAS ONE-CALL 1-800-344-7233

   THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF EMERGENCY:

CITY OF BEL AIRE	744-2451
ARKLA GAS COMPANY	942-8350 or 263-8161
BELL TELEPHONE	1-316-571-2115
CABLEVISION	262-0661
GAS SERVICE COMPANY	263-7511
KANSAS GAS & ELECTRIC	264-1141
CITY OF WICHITA WATER DEPARTMENT	268-4908
CITY OF WICHITA SEWER DEPARTMENT	268-4071

4. EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.

5. ALL STUBS AND PLUGGED PIPES SHALL BE LOCATED WITH GREEN PLASTIC TAPE IN THE SAME MANNER AS RISERS.

6. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED.

7. PRIOR TO LAYING SEWER LINES USING EXISTING STUBS IN EXISTING MANHOLES, THE CONTRACTOR SHALL EXPOSE AND VERIFY THE ELEVATION, GRADE AND ALIGNMENT OF EXISTING STUBS AND NOTIFY THE ENGINEER OF ANY DEVIATION FROM THE PLAN. WHERE CONNECTING TO AN EXISTING MANHOLE THAT DOES NOT HAVE AN EXISTING STUB OR THE STUB IS UNUSABLE DUE TO ELEVATION GRADE OR ALIGNMENT, THE CONTRACTOR SHALL RESHAPE THE EXISTING MANHOLE INVERT TO PROVIDE SMOOTH FLOW. THE COST OF RESHAPING EXISTING MANHOLE INVERTS IS INCIDENTAL TO THE PROJECT.

8. TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.

9. MANHOLES TO BE REMOVED SHALL HAVE PIPES PLUGGED WITH A 8" MASONRY PLUG. THE TOP FOUR FEET OF THE MANHOLE IS TO BE REMOVED. THE MANHOLE IS TO BE FILLED WITH SAND AND FLUSHED TO WITHIN 4' OF GRADE. THE TOP 4' OF THE HOLES SHALL BE FILLED WITH DIRT COMPACTED TO 90% STANDARD DENSITY. MANHOLE CASTINGS ARE TO BE SALVAGED, CLEANED AND DELIVERED TO THE CITY OF BEL AIRE'S MAINTENANCE FACILITY AT NORTH WOODLAWN. THE BID OF MANHOLES REMOVED SHALL INCLUDE ALL OF THE ABOVE TASKS.

10. CONSTRUCTION OF LINES 1 AND 2 SHALL BE COORDINATED WITH THE RELOCATION OF UTILITIES AND THE CONSTRUCTION OF THE WORK BY THE GRADING CONTRACTOR ON K-96. IT IS ANTICIPATED THAT LINE 2 CAN PROCEED AS SOON AS THE CONTRACT IS SIGNED. WORK ON LINE 1 WILL FOLLOW THE RELOCATION OF THE EXISTING 24" WATER LINE. EASEMENTS FOR LINE 3 ARE BEING NEGOTIATED. WORK ON LINE 3 WILL BE SCHEDULED WHEN RIGHT-OF-WAY IS AVAILABLE.

11. ALL FENCES REMOVED SHALL BE REPLACED.

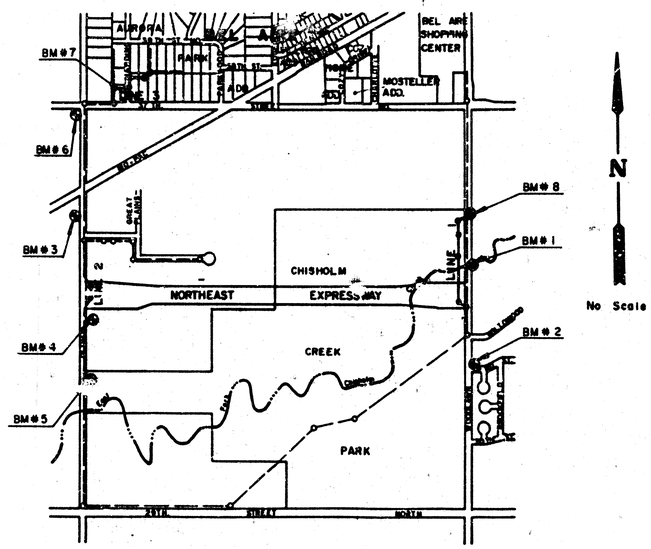
12. GRASS SHALL BE RE-SEEDED FROM 3+70.2 TO 6+39.3 ON LINE 3.

13. EXISTING 18" SANITARY SEWER ON WOODLAWN SHALL BE SAND FILLED FROM STATION 0+00 TO STATION 6+40 (RIGHT). THE 250 L.F OF EXISTING SANITARY SEWER IS TO BE REMOVED BY THE BRIDGE CONTRACTOR FROM 6+40 (RIGHT) TO 9+32.7.

14. STANDARD MANHOLES SHALL BE CITY OF WICHITA TYPE "P" OR "C".

15. THE COST OF PUMPING OR OTHERWISE HANDLING OF SEWAGE FLOWS SHALL BE INCLUDED IN THE BID OF SITE PREPARATION AND RESTORATION.

16. THE COST OF RESTORATION OF THE GRAVEL ROADWAY ON HARDING TO ITS ORIGINAL CONDITION SHALL BE CONSIDERED INCLUDED IN THE COST OF THE BID OF SITE PREPARATION AND RESTORATION.



BENCH MARKS

B.M.#1 City of Wichita Std. disk in SE. cor. of bridge over Woodlawn & 24' Left of Sta. 48 + 85.3
ELEV. = 1361.94'

B.M.#2 " □ " cut on NE. cor. of curb inlet at NE. cor. of 32nd St. & Woodlawn 60.8' left of Sta. 71+56
ELEV. = 1357.15'

B.M.#3 " □ " cut on CL of W. headwall culvert 28.7' Right of STA. 37+86.5 Oliver
ELEV. = 1365.00'

B.M.#4 City of Wichita B.M. Disk 30.2' Left of Sta. 52+68.8 Oliver
ELEV. = 1389.205'

B.M.#5 " □ " cut on NE. cor. of water meter vault at NE. cor. of Oliver & entrance to Chisholm Creek Park 40.4' Left of Sta. 61+39.4
ELEV. = 1340.935'

B.M.#6 City of Wichita B.M. disk E. end of headwall to RCB 34' W. & 22.5' S. of CL - CL 37th St. N. & Oliver
ELEV. = 1372.03'

B.M.#7 " □ " cut on SE. cor. of driveway to house at 3815 N. Harding
ELEV. = 1372.95'

B.M.#8 " □ " cut on S. edge of san. sewer manhole 18.8' Right of STA 39 + 71.3
ELEV. = 1366.13'

INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-3	PLAN & PROFILE LINE 1
4	PLAN & PROFILE LINE 2
5-6	PLAN & PROFILE LINE 3

APPROVED AS NOTED
By CITY ENGINEER OF WICHITA

Sanitary Sewers VRH 12/21/89
Storm Sewers
Driveway Approaches
Water Mains
Paving

NOTE TO CONTRACTOR

INSPECTION AND TESTING FOR THIS PROJECT IS TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERING FIRM UNDER CONTRACT WITH THE OWNER/DEVELOPER. SAID INSPECTION TO BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD CONSTRUCTION ENGINEERING PRACTICES AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. NO WORK SHALL BE PERFORMED IN DEDICATED EASEMENTS OR THE PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION NOR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

Active project 790

C.O.W. PROJECT NO. 234 PPS (607861)

BEL AIRE, KANSAS
SANITARY SEWER
RELOCATION & RECONSTRUCTION OF A PORTION OF OLIVER & WOODLAWN SEWER MAINS

Design DSS
Drawn by DLM
Checked by
Date Nov. 1989
Job no.

MID-KANSAS ENGINEERING CONSULTANTS PA
3500 NORTH ROCK ROAD
BUILDING #800
WICHITA, KANSAS 67226
636-5566

Sheet 1 of 6

FILMED FROM THE BEST AVAILABLE COPY

CITY OF BEL AIRE KANSAS
RELOCATION & RECONSTRUCTION OF
A PORTION OF THE OLIVER & WOODLAWN SEWER MAINS

N

Scale: 1"= 20' Horiz.
1"= 5' Vert.

NORTHEAST EXPRESSWAY

RIGHT · OF · WAY

MH 1-1

MH 1-2

MH 1-3

N.W. Cor., S.W.1/4 Sec. 31, T.26 R.2E.

Hedge Row

EXISTING

PROP. 15" SWS

136°07'25"

136°31'25"

43°32'35"

24"

WATER LINE

EXIST.

INSTALL 18" MASONRY PLUG

REMOVE MANHOLE

WOODLAWN

40' WIDTH

30'

80'

PLAN LINE 1

PROFILE LINE 1

Sta. 0+00, Line 1 - Remove Existing Manhole Exist. M.H. Top = 1357.67 Const. New Std. Manhole Set Top @ 1359.28

Exist. 24" Water Top = 1351.00

Sta. 0+81.4 Line 1 Const. Std. Manhole M.H. Top = 1355.55 from P.E.C.

Proposed Storm Water Sewer

Sta. 4+80.0 Line 1 Const. Std. Manhole M.H. Top = 1355.40

Proposed Grade

Existing Ground

40 L.F. 8" Reinforced Concrete Encasement

81.4 L.F. - 18" Pipe @ 0.114%

398.6 - L.F. - 18" Pipe @ 0.114%

(Exist. 18" San. Sewer-S)

E Out = 1344.82
E In = 1344.82

E Out = 1344.91
E In = 1344.91

E Out = 1345.36
E In = 1345.36

1344.93

1345.05

1345.16

1345.27

1345.38

1365 1360 1355 1350 1345 1340 1335 1330

0 1 2 3 4 5

2/6

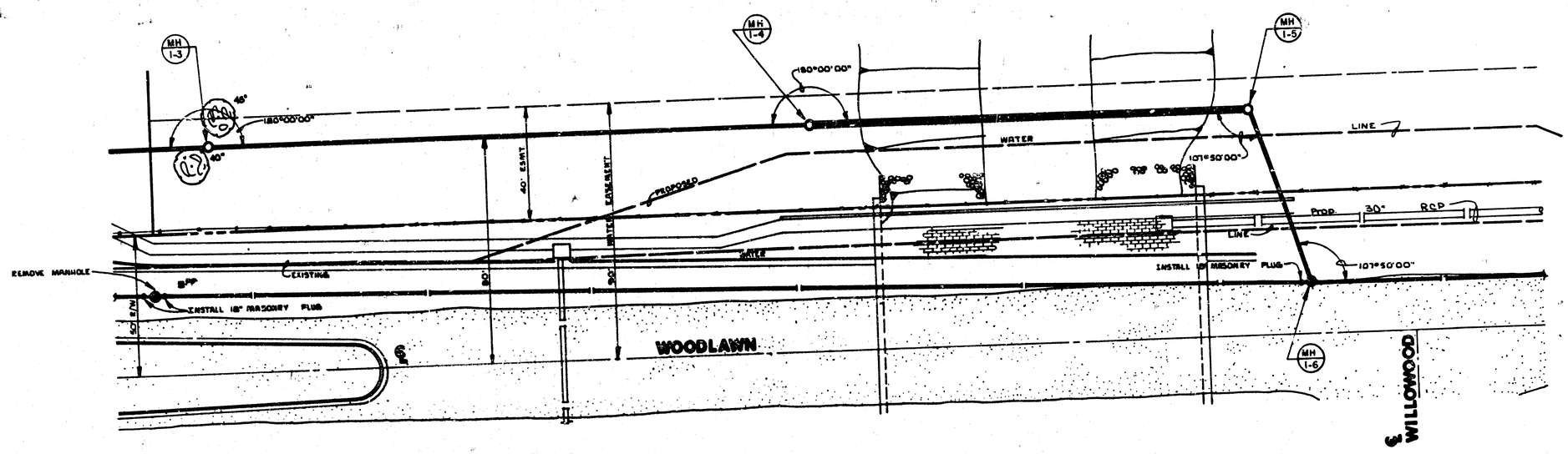
MKE 9/12

FILMED FROM THE BEST AVAILABLE COPY

CITY OF BEL AIRE KANSAS
RELOCATION & RECONSTRUCTION OF
A PORTION OF THE OLIVER & WOODLAWN SEWER MAINS

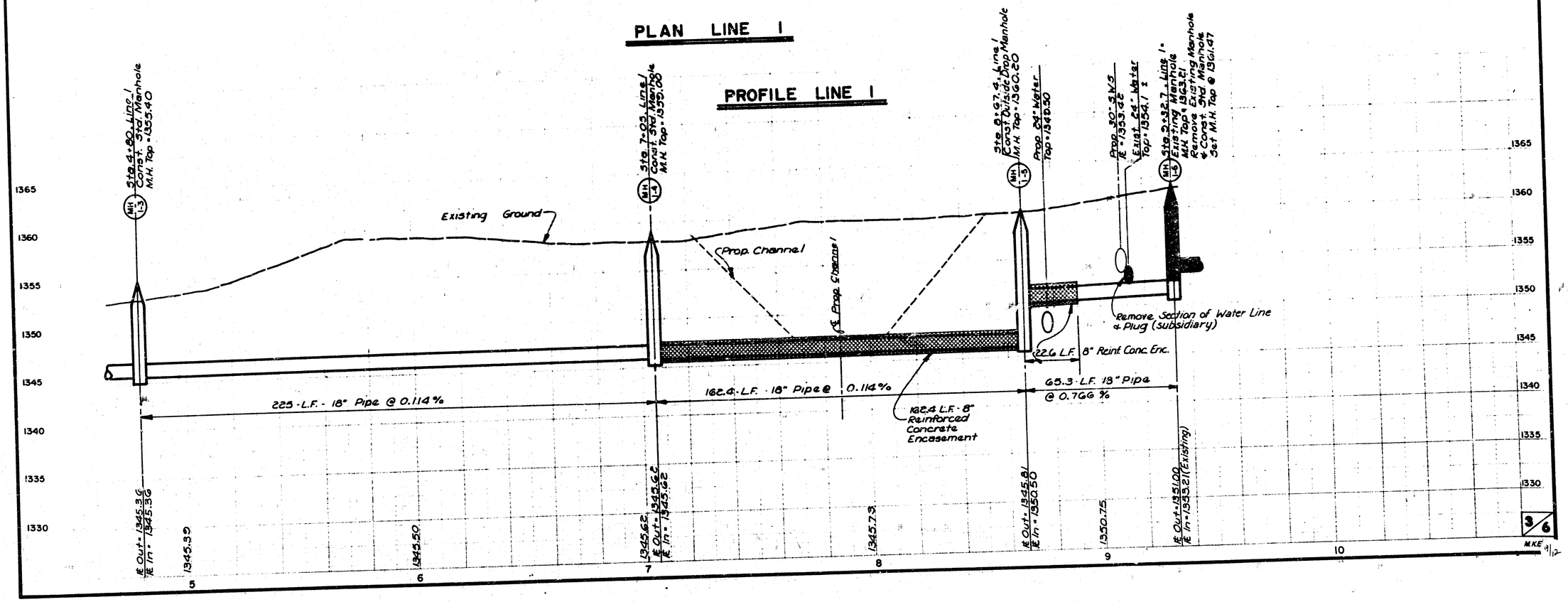
N

Scale: 1" = 20' Horiz.
1" = 5' Vert.



PLAN LINE 1

PROFILE LINE 1

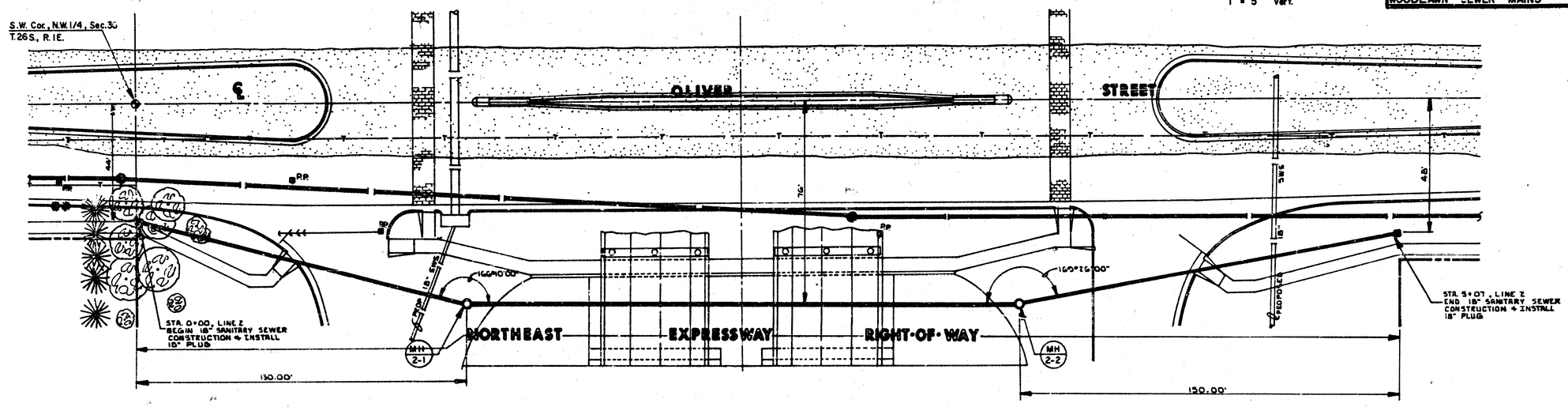


FILMED FROM THE BEST AVAILABLE COPY

CITY OF BEL AIRE KANSAS
RELOCATION & RECONSTRUCTION OF A PORTION OF THE OLIVER & WOODLAWN SEWER MAINS

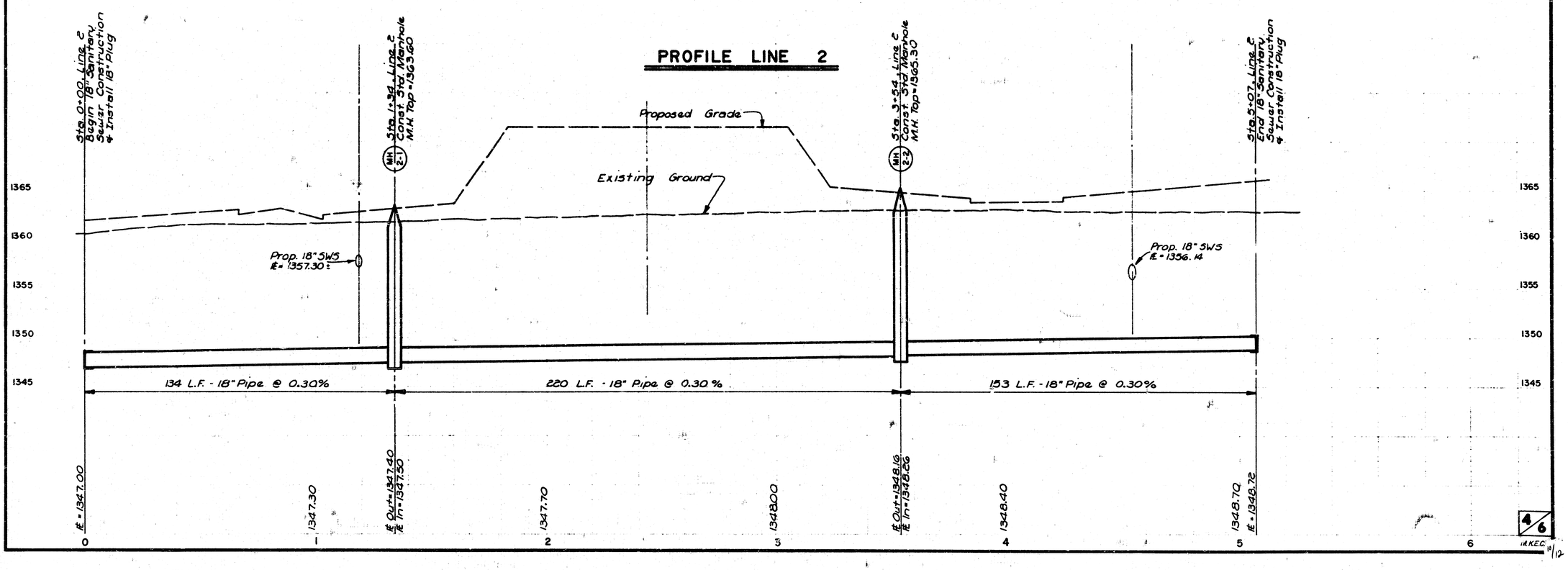
N

Scale: 1" = 20' Horiz.
1" = 5' Vert.



PLAN LINE 2

PROFILE LINE 2

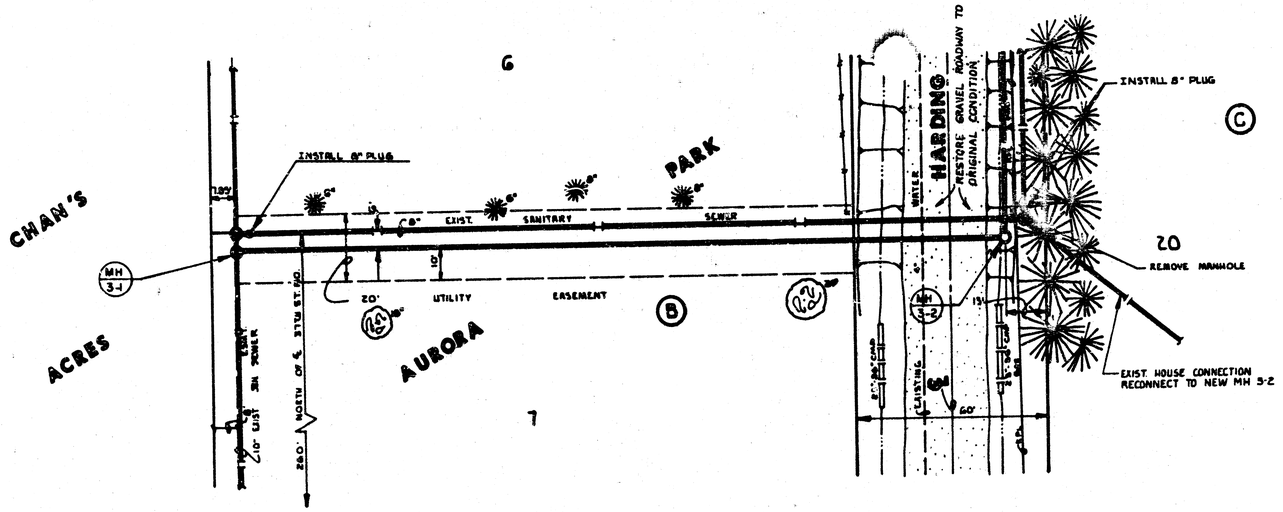


4/6

IKEG 4/17

FILMED FROM THE BEST AVAILABLE COPY

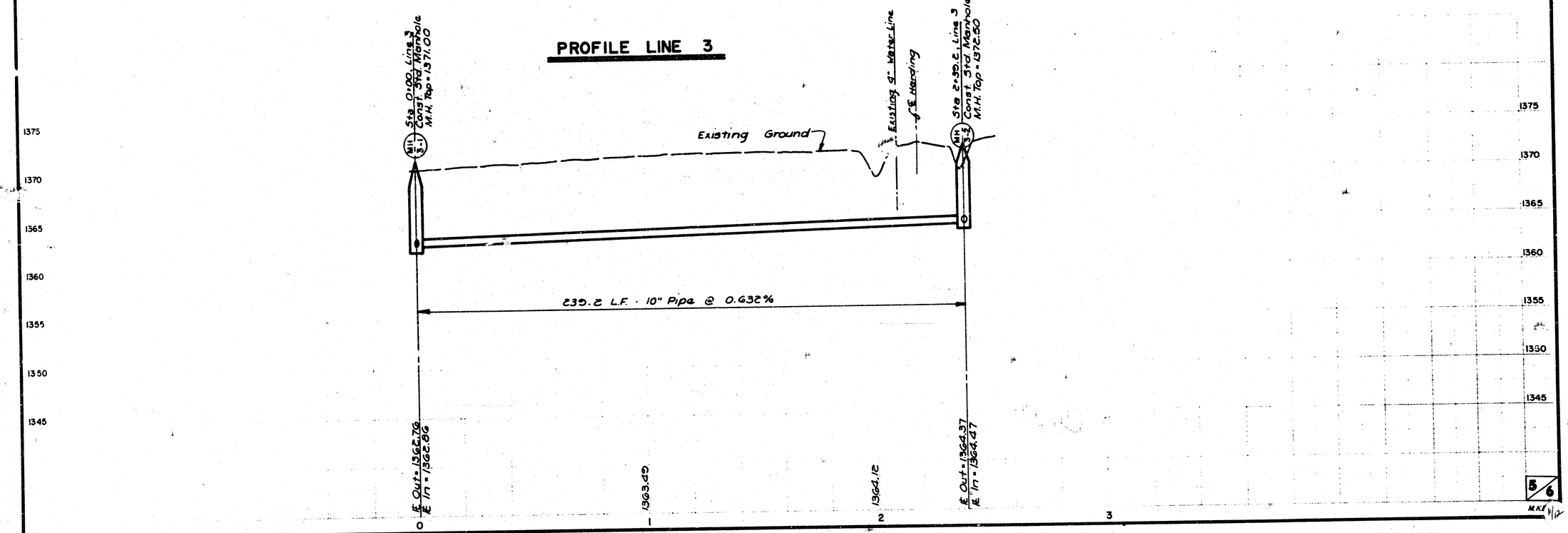
CITY OF BEL AIRE KANSAS
RELOCATION & RECONSTRUCTION OF
A PORTION OF THE OLIVER & WOODLAWN SEWER MAINS



Scale: 1" = 20' Horiz.
1" = 5' Vert.

PLAN LINE 3

PROFILE LINE 3

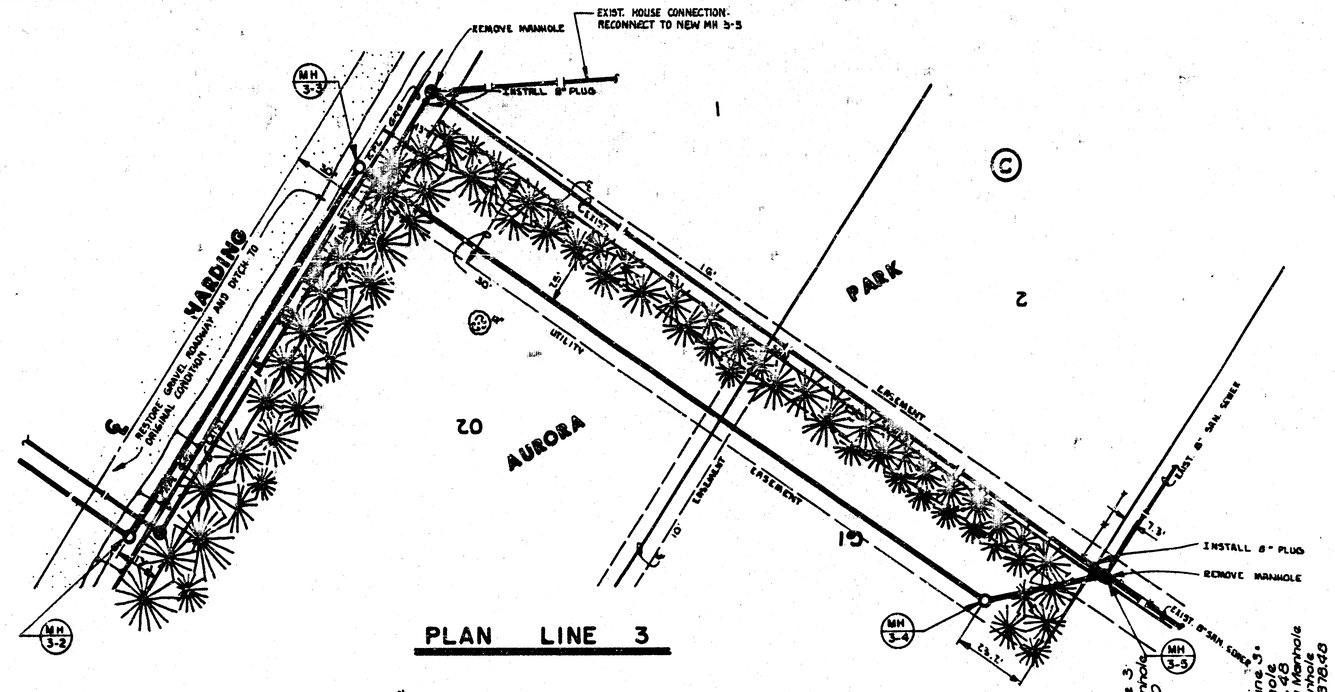


5/6

MKE 1/12

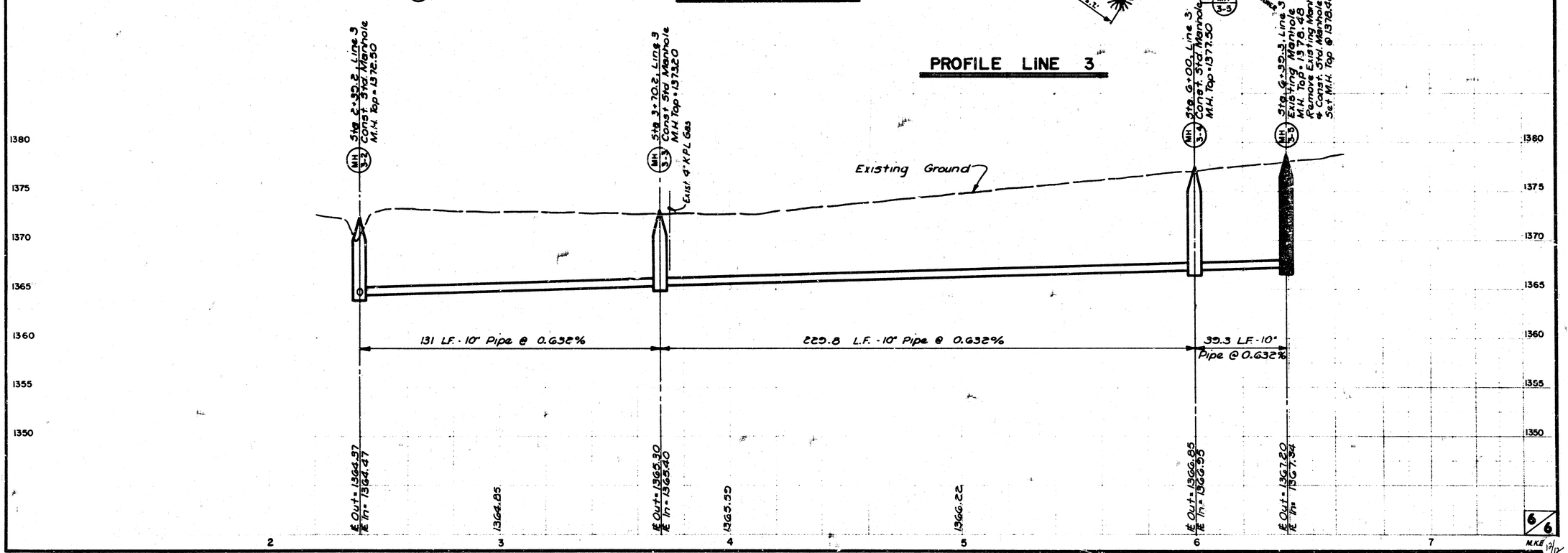
FILMED FROM THE BEST AVAILABLE COPY

CITY OF BEL AIRE KANSAS
RELOCATION & RECONSTRUCTION OF A PORTION OF THE OLIVER & WOODLAWN SEWER MAINS



PLAN LINE 3

PROFILE LINE 3



6/6

M.K.E. 12/17

FILMED FROM THE BEST AVAILABLE COPY