WATERFORD NORTH THIRD

STORM WATER DRAIN NO 67

PROJECT NO.

468·76·245·81433 ·000·000·001

CITY OF WICHITA, KANSAS
MIKE LINDEBAK, CITY ENGINEER
MARCH, 1985

GENERAL NOTES

1. CONTRACTOR SHALL AVOID UNCOVERING EXISTING WATER LINES UNLESS ABSOLUTELY NECESSARY. UNCOVERING SHALL BE DONE ONLY IN THE PRESENCE OF A WATER DEPARTMENT ENGINEER.
2. 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 OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAWS.
3. CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF CONSTRUCTION SCHEDULING.
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. EXCAVATION SHALL REMAIN ON SITE. CONTRACTOR SHALL NOTIFY THE OWNER 24 HOURS PRIOR TO CONSTRUCTION TO OBTAIN THE LOCATION TO PLACE EXCESS MATERIAL. SPREADING OF THE EXCESS MATERIAL SHALL BE SUBSIDIARY TO THIS PROJECT.

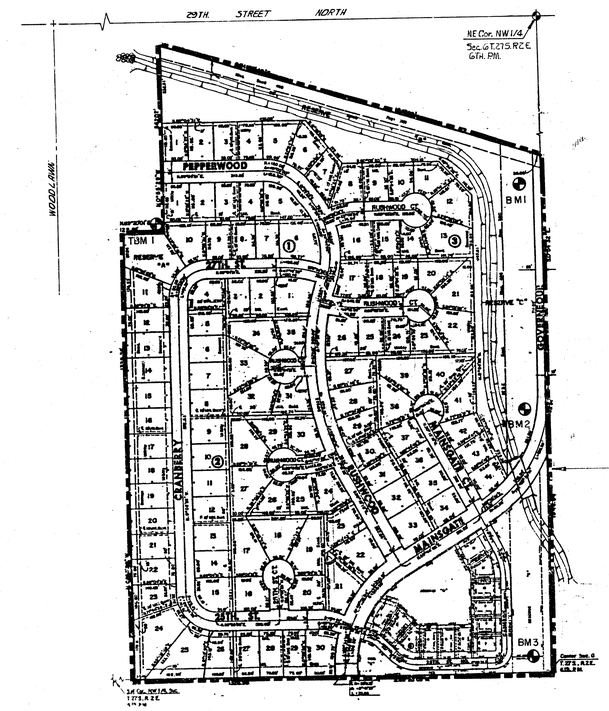
BENCH MARKS

B.M. #1 Railroad spike west face of west pole first H-pole south of 29th. Elev. = 187.88

B.M. #2 Railroad spike west face of west pole second H-pole south of 29th. Elev. = 191.85

B.M. #3 Railroad spike west face of west pole third H-pole south of 29th. Elev. = 195.71

TBM #1 South rim of existing manhole 1-0. Elev. = 177.36



Scale: 1"= 200'

INDEX TO DRAWINGS

SHEET NO.	DISCRIPTION
1	TITLE SHEET
2-7	CHANNEL PLAN & PROFILE
8	WASH CHECK DETAILS
9	CONC. RIP-RAP DETAILS
10-14	CROSS SECTIONS
15-16	FINAL PLAT

KENNETH H. BENGTSON LICENSED 7238 KANSAS PROFESSIONAL ENGINEER

MKEC

WATERFORD NORTH THIRD ADDITION STORM WATER DRAIN

Design F.F.
Drawn by F.F.
Checked by KHB
Date 1985
Job no

MID-KANSAS ENGINEERING CONSULTANTS PA
3500 NORTH ROCK ROAD
BUILDING #800
WICHITA, KANSAS 67226 682-6561

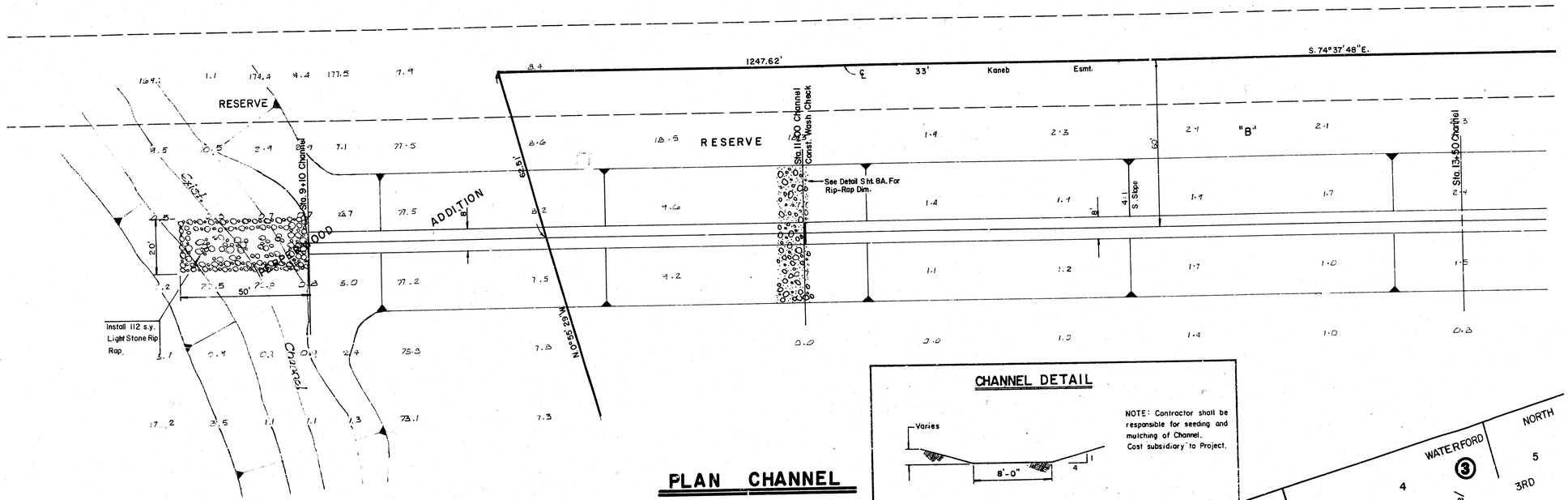
Sheet 1 of 16

17 pages

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WATERFORD NORTH THIRD ADDITION
STORM WATER DRAIN NO. 67
PROJ. NO. 468-76-245-81433-000-000-001

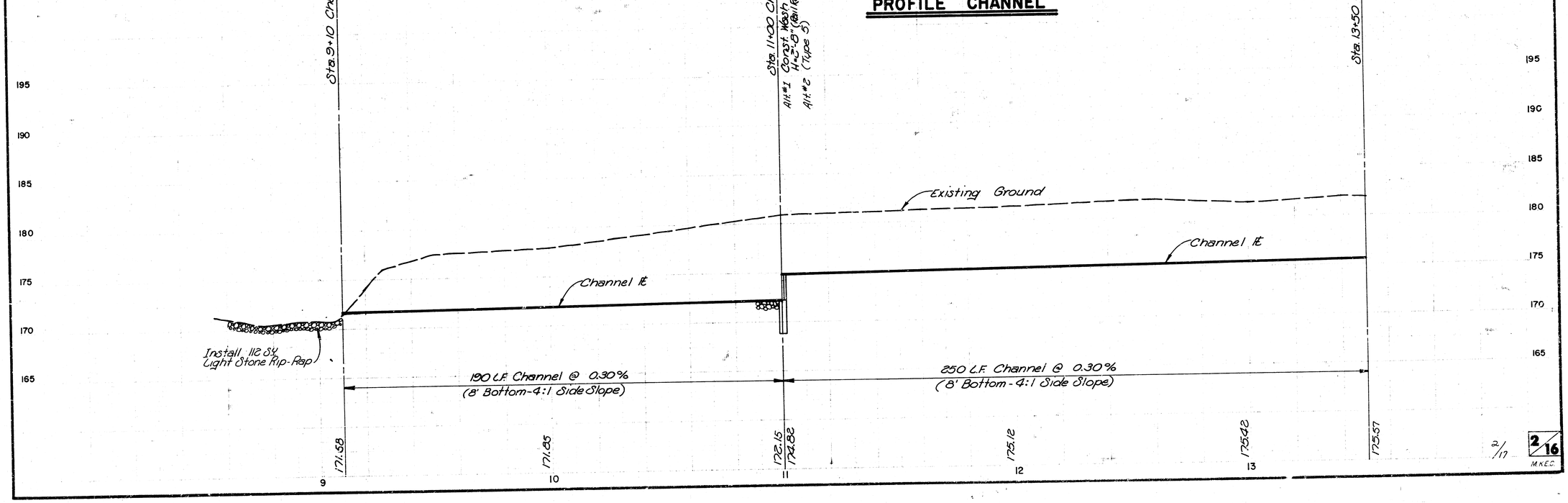
PLAN CHANNEL



CHANNEL DETAIL

NOTE: Contractor shall be responsible for seeding and mulching of Channel. Cost subsidiary to Project.

PROFILE CHANNEL



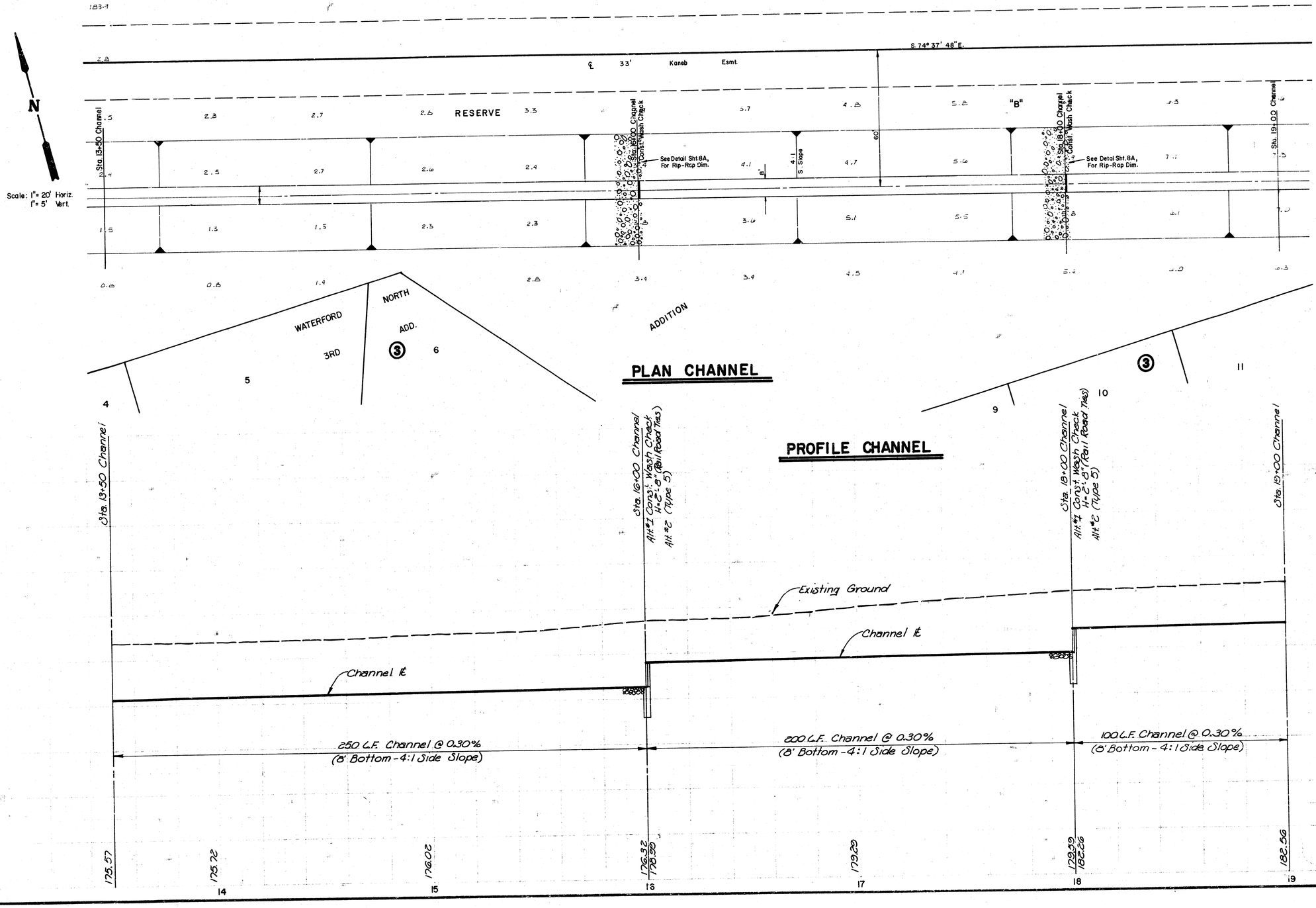
2/17

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MKEC

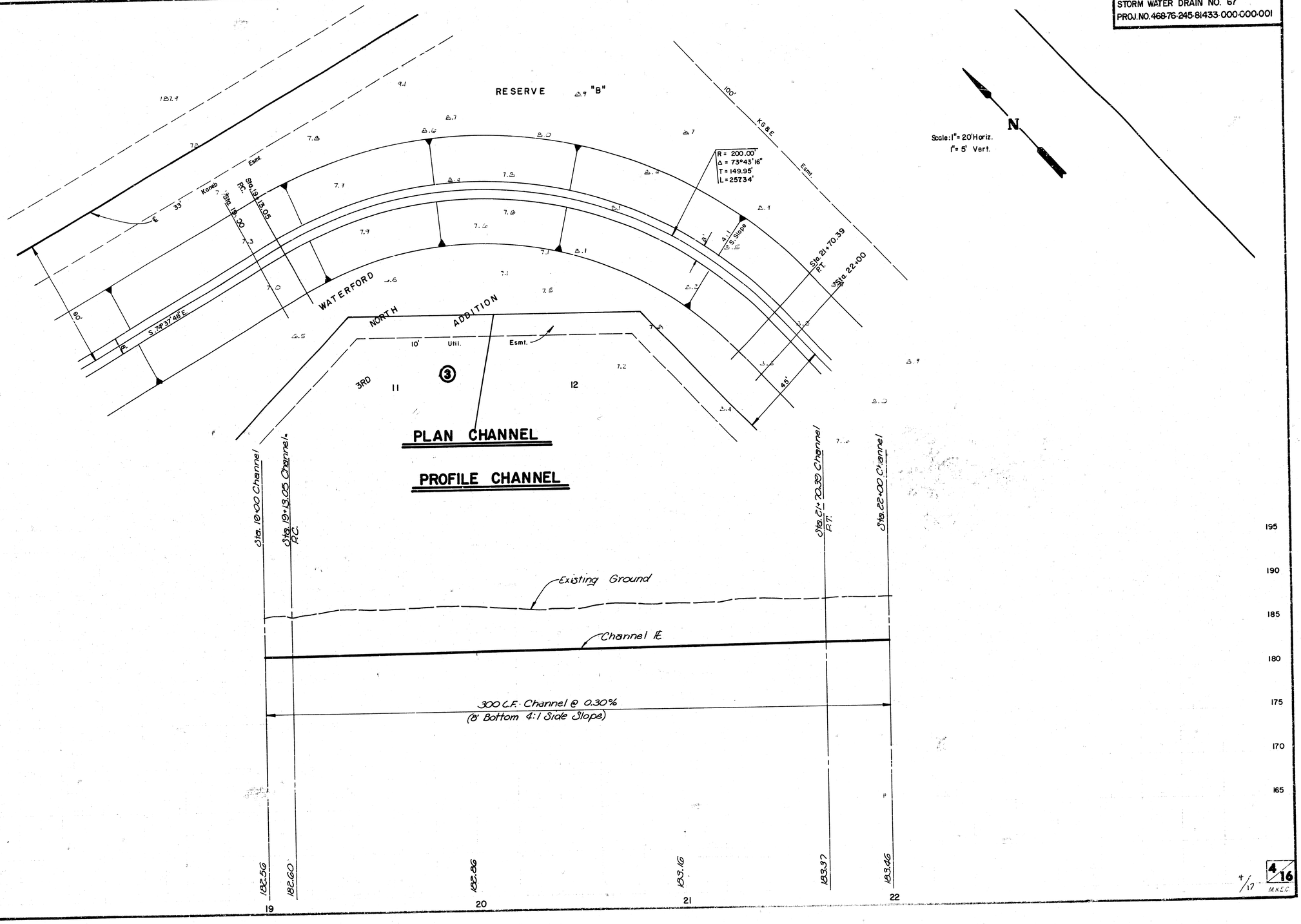
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WATERFORD NORTH THIRD ADDITION
STORM WATER DRAIN NO. 67
PROJ. NO. 468-76-245-814 33-000-000-001



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WATERFORD NORTH THIRD ADDITION
STORM WATER DRAIN NO. 67
PROJ. NO. 468-76-245-81433-000-000-001



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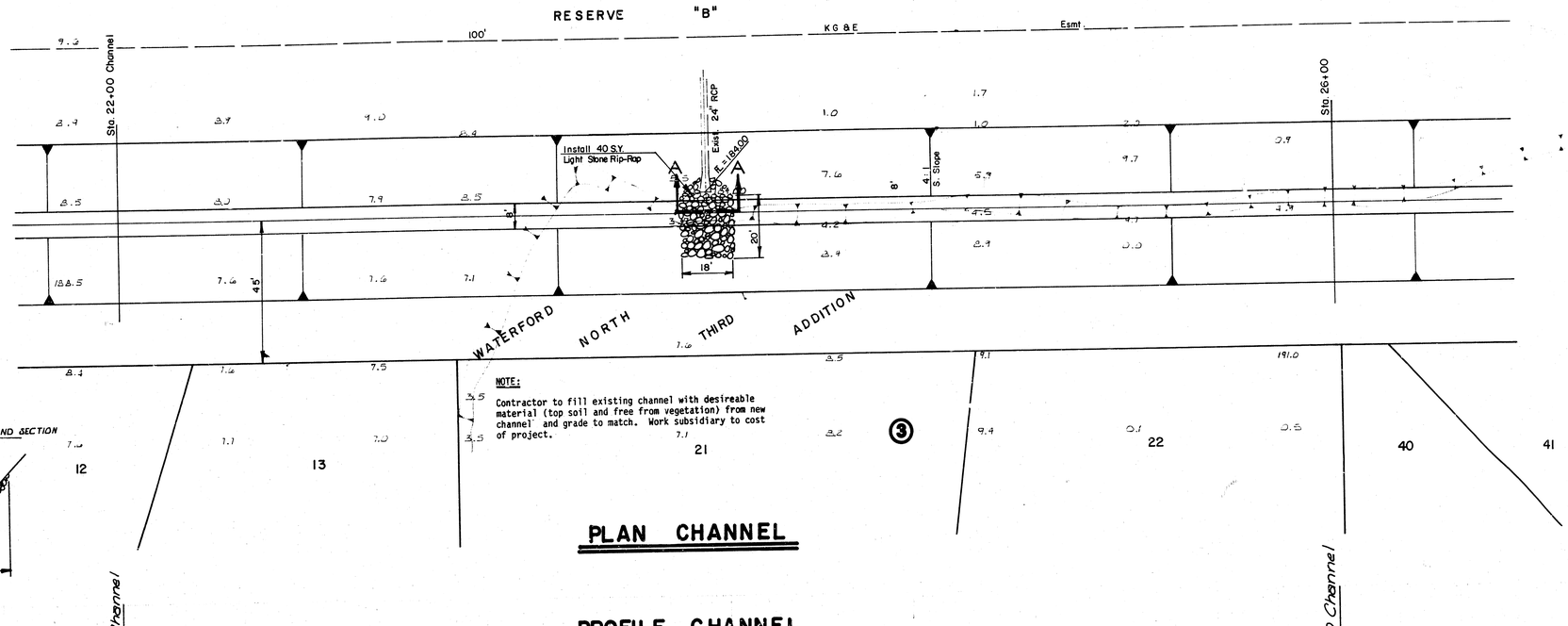
4/16

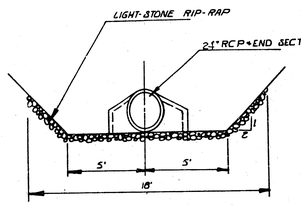
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WATERFORD NORTH THIRD ADDITION
STORM WATER DRAIN NO. 67
PROJ. NO. 468-76-245814 33-000-000-001

N

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

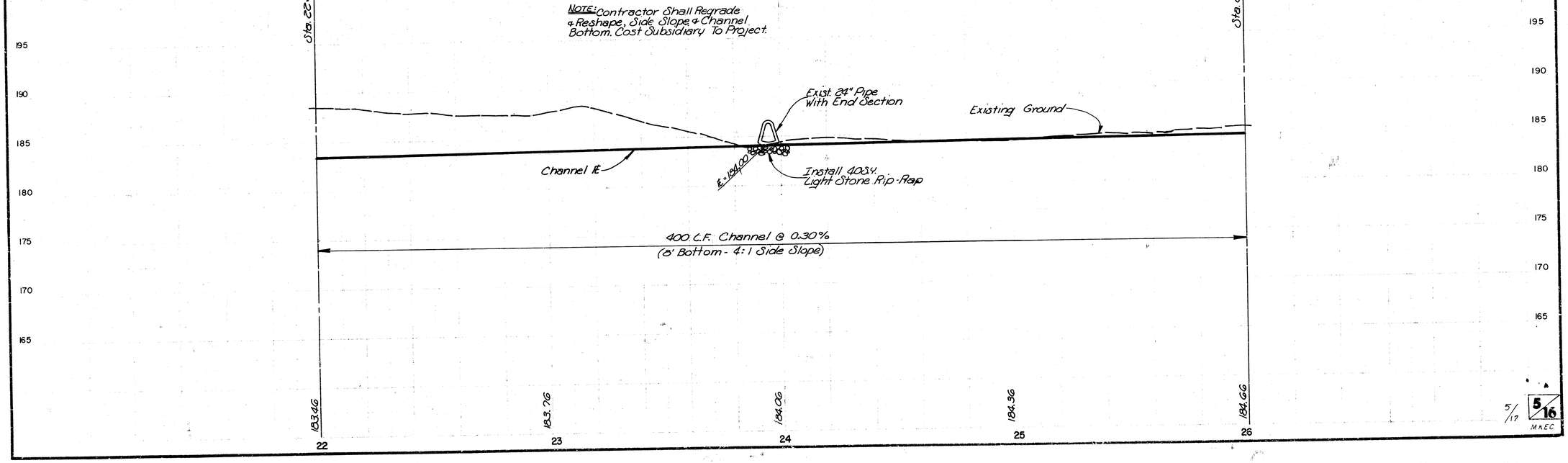




SECTION A-A

PLAN CHANNEL

PROFILE CHANNEL



5/17 5/16 MKEC

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WATERFORD NORTH THIRD ADDITION
STORM WATER DRAIN NO. 67
PROJ. NO. 468-76-245-81433-000-000-001

N

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

NOTE:

Contractor to fill existing channel with desireable material (top soil and free from vegetation) from new channel and grade to match. Work subsidiary to cost of project.

LIGHT-STONE RIP-RAP
30" RCP + END SECTION
5'
5'
18'
SECTION A-A

Sta 26+00 Channel
Sta 26+20.98 Channel P.C.
100'
KG & E Easement
RESERVE
"B"
Sta 28+19.74 Channel
N 19° 53' 22" W
Install 40 SY Light Stone Rip-Rap
R = 600'
Δ = 18°58'50"
T = 100.30'
L = 198.76'
18'
45'
Easement
Utility
Install Conc. Rip. Rap Bags
Sta 30+00 Channel
Steel Sta. 9+50
3-48" RCP
E.F.
R/W
36'
70'
Prop. 12" W. Line
MAINSGATE
10'
8" Sanitary Sewer
30'
22
40
41
42
43
44
PLAN CHANNEL

PROFILE CHANNEL

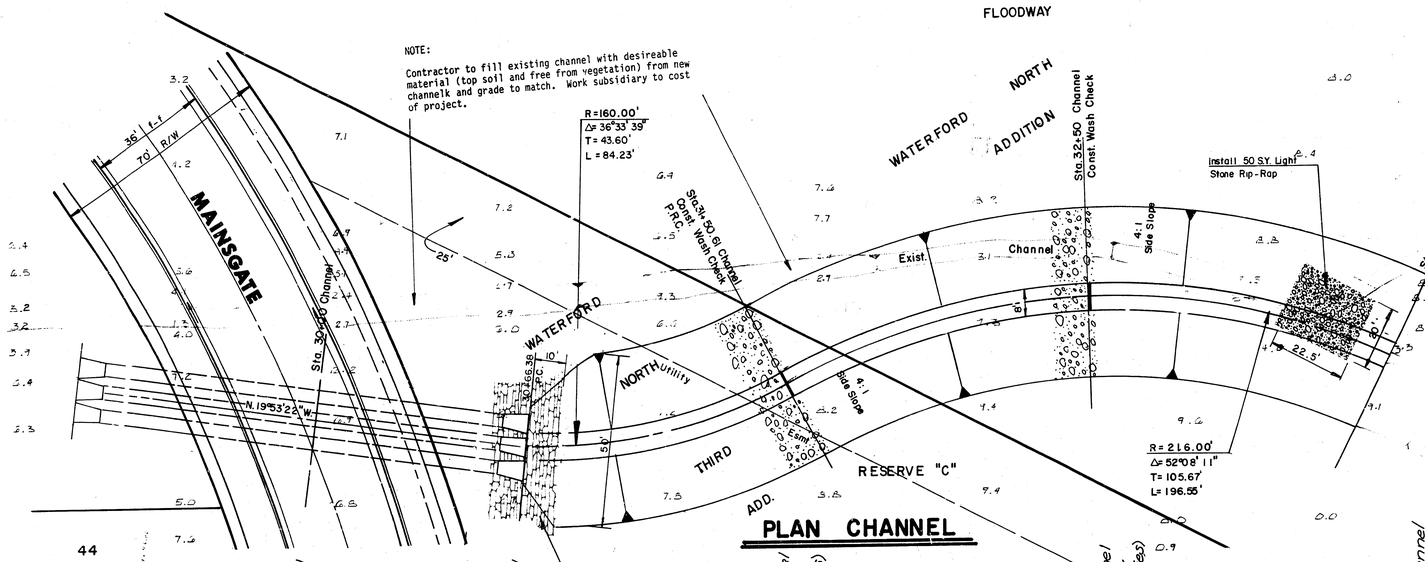
NOTE: Contractor Shall Regrade & Reshape, Side Slope & Channel Bottom. Cost Subsidiary To Project.

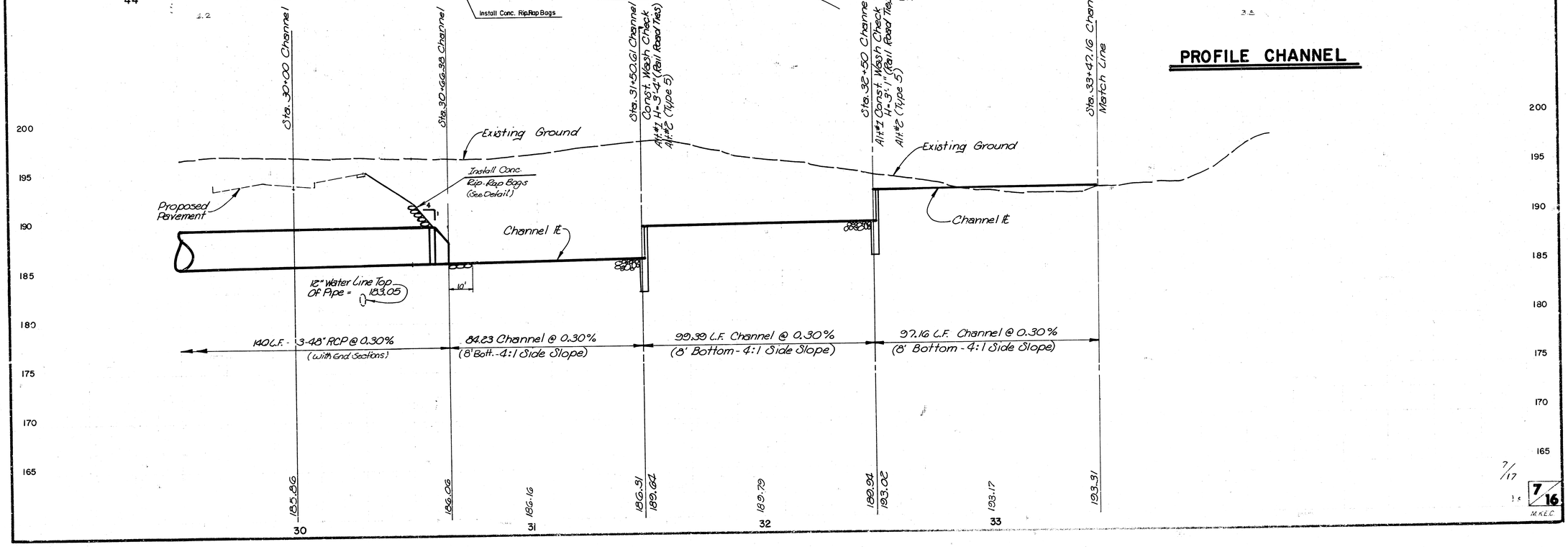
Sta. 26+00 Channel
Sta. 26+20.98 Channel P.C.
Sta. 28+19.74 Channel P.T.
Sta. 29+26.38 Channel
Sta. 30+00 Channel
Existing 30" Pipe
Existing Ground
Proposed Pavement
Install Conc. Rip-Rap Bags (See Detail)
Channel IE
Install 40 SY Light Stone Rip-Rap
219.74 L.F. Channel @ 0.30% (8' Bottom 4:1 Side Slope)
106.64 L.F. Channel @ 0.30% (8' Bottom 4:1 Side Slope)
140 L.F. 3-48" R.C.P. @ 0.30% (With End Sections)
195
190
185
180
175
170
165
184.66
184.72
184.96
185.26
185.32
185.56
185.64
185.86
26
27
28
29
30

6/17
6/16
M.S.E.

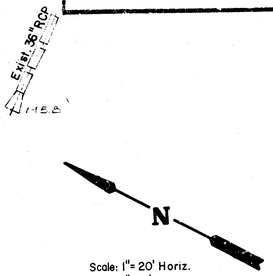
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WATERFORD NORTH THIRD ADDITION
STORM WATER DRAIN NO. 67
PROJ. NO. 468-76-245-81433-000-000-0C1





PROFILE CHANNEL



NOTE:
Contractor Shall Regrade Existing Channel From 36" RCP To Proposed Channel & Make Sure To Drain. Cost Of Regrading & Seeding Subsidiary To Project. (4' Bottom, 4:1 Side Slopes)

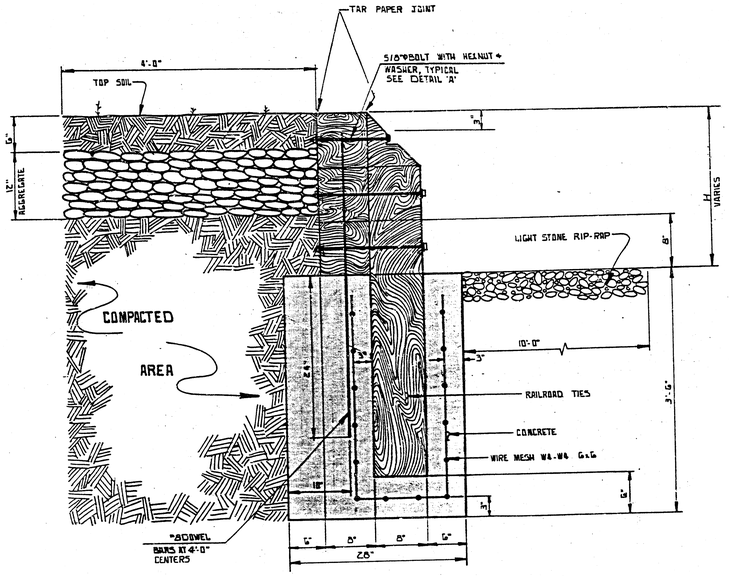
44

7/17

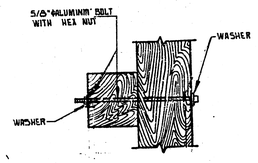
7/16

M.K.E.C.

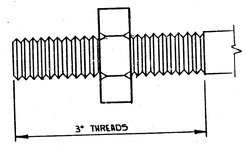
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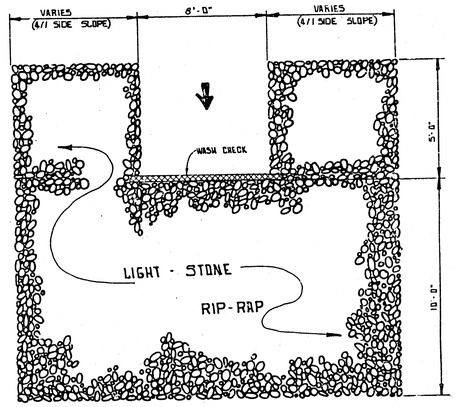
SIDE VIEW
NO SCALE



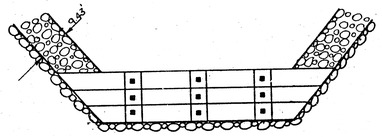
DETAIL 'A'
NO SCALE



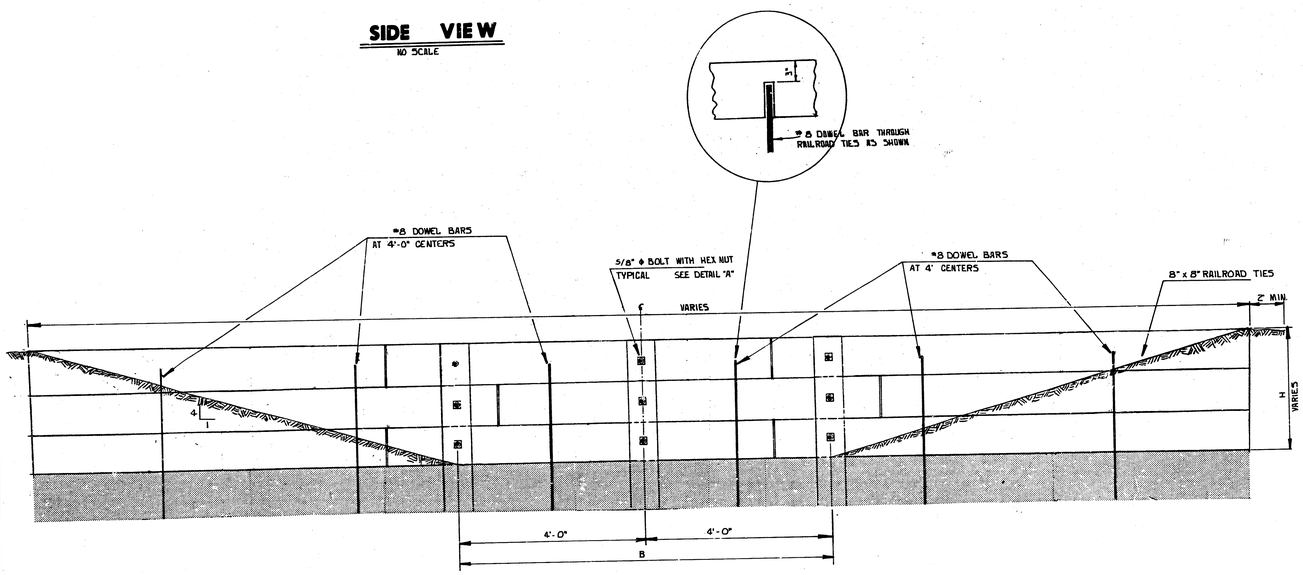
ALUMINUM BOLT DETAIL
NO SCALE



RIP-RAP DETAIL
NO SCALE



FRONT VIEW RIP-RAP



FRONT VIEW
NO SCALE

GENERAL NOTES:

1. Contractor shall use new railroad ties.
2. Contractor shall re-treat railroad ties around bolts and bars.
3. ~~All wash checks, earthwork, materials and labor shall~~ be included in "lump sum" bid. Earthwork of channel shall be paid separately.

WASH CHECK DETAILS

Design:	
Drawn by	
Checked by	
Date	
Job no.	

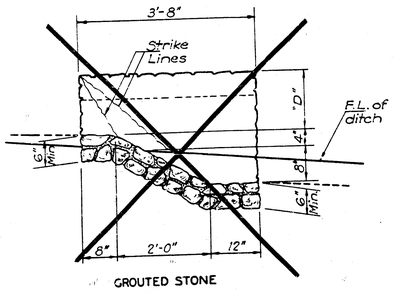
MID-KANSAS ENGINEERING CONSULTANTS PA
3500 NORTH ROCK ROAD
BUILDING #800
WICHITA, KANSAS 67226
682-6561

8/17

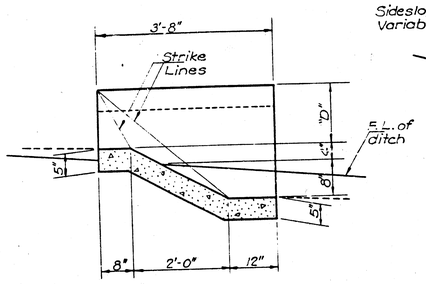
Sheet 8A of 16

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PUB. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	KANSAS		19		

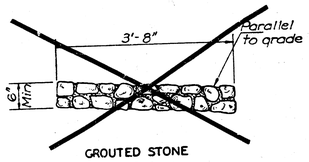


GROUTED STONE
TYPE I

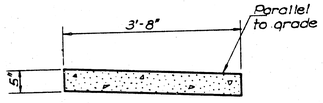


CONCRETE
TYPE 5

SECTION A-A
Without Toe Wall.



GROUTED STONE
TYPE I

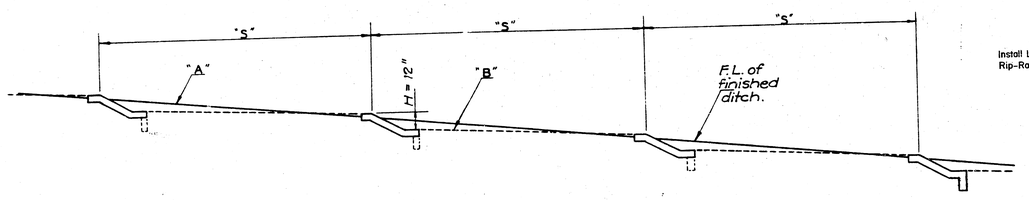


CONCRETE
TYPE 5

SECTION B-B
Same section at each end of unit.
Without Toe Wall.

Note: Use Class 'A' concrete thruout for Type 5 & 5-T Wash Checks.

Note: The stone in all stone wash checks shall be laid in a 3" mortar bed and the spaces between stones shall be filled with mortar.



SPACING DIAGRAM
Same for each type.

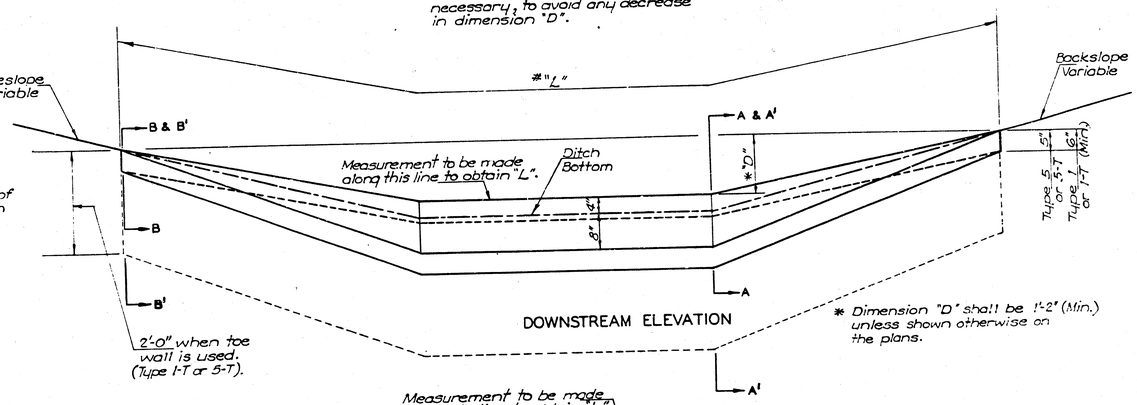
S = Spacing of units in feet (10' min.).
A = Per cent grade of ditch.
B = Per cent at which washing is expected to stop. This will vary with the type of soil, etc.
H = Height of drop at each unit.

$$S = \frac{100\,H}{(A-B)}\ ,(10'\ \text{min.})$$

FORMULA

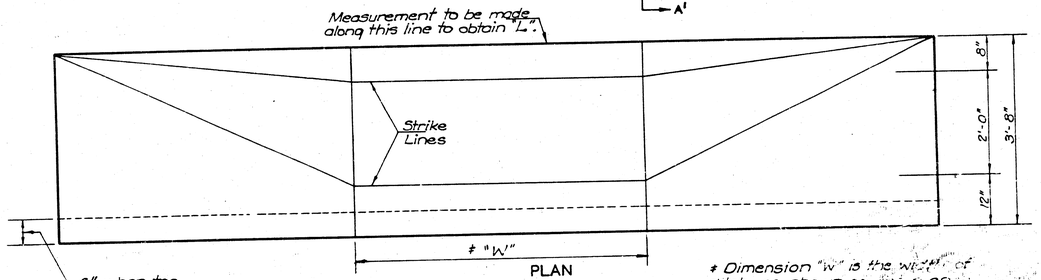
TABLE OF SPACING Same for each type			
(A-B)	Spacing	(A-B)	Spacing
1	100'	6	17'
1.5	67'	6.5	15.5'
2	50'	7	14'
2.5	40'	7.5	13'
3	33'	8	12.5'
3.5	29'	8.5	12'
4	25'	9	11'
4.5	22'	9.5	10.5'
5	20'	10	10'
5.5	18'		

\# Dimension "L" may be varied if necessary, to avoid any decrease in dimension "D".



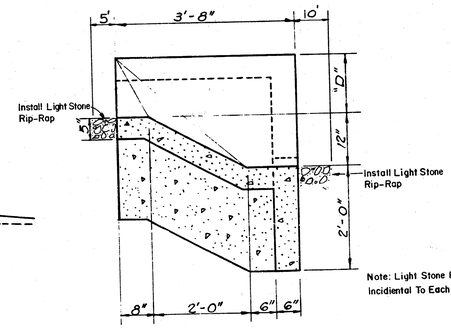
DOWNSTREAM ELEVATION

* Dimension "D" shall be 1'-2" (Min.) unless shown otherwise on the plans.



PLAN

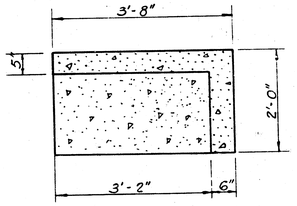
\# Dimension "W" is the width of ditch as shown on the plans.



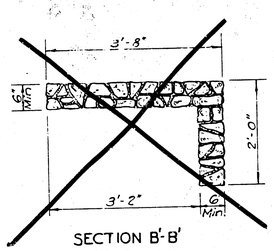
SECTION A'-A'
With Toe Wall
TYPE 5-T

Note: Light Stone Rip-Rap IS Incidental To Each Wash Check

Note: Type 1-T or 5-T wash checks shall be used on the lowest unit in each row. Additional locations where these units are to be constructed shall be designated by the Engineer.



SECTION B'-B'
With Toe Wall
TYPE 5-T



SECTION B'-B'
With Toe Wall
TYPE 1-T

Note: Unless otherwise noted, either of these types may be used.

NO	DATE	REVISIONS	BY	APP'D
11				

STATE HIGHWAY COMMISSION OF KANSAS

WASH CHECKS
TYPE I & TYPE 5

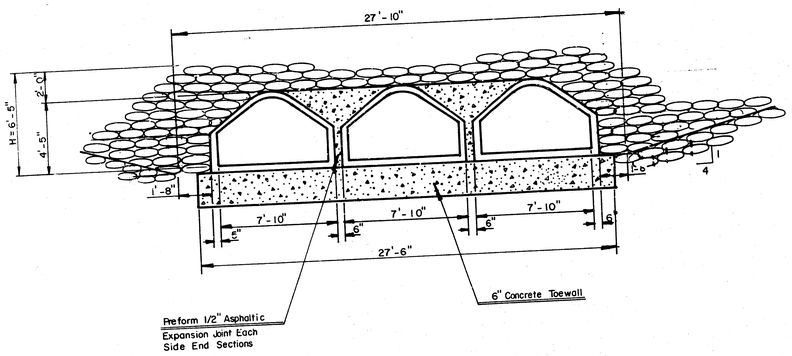
STD. NO. 506

SHEET NO. OF	SCALE No Scale	Appd. [illegible]	Check 2-51
DESIGNED WAB	DETAILED WAB	QUANTITIES	TRACED WAB
DESIGN CK EAR	DETAIL CK	QUAN. CK	TRACE CK.

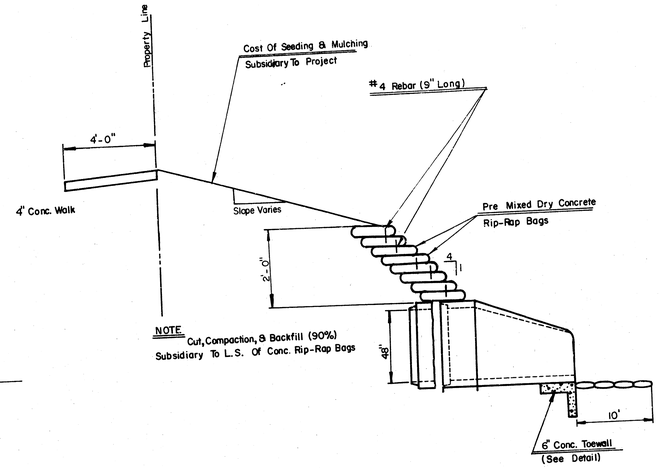
9/17

8B
16

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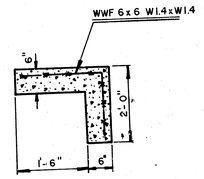


FRONT VIEW

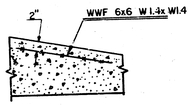


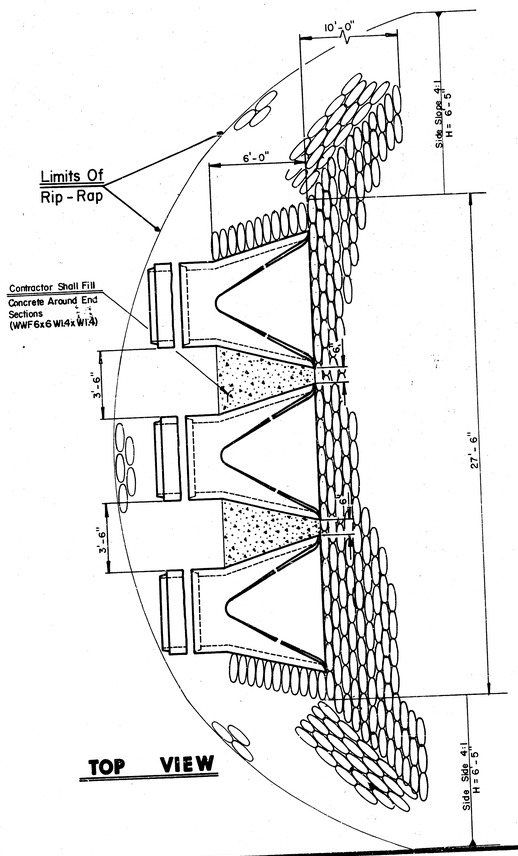
SIDE VIEW

All type work, material, and labor on this sheet are subsidiary to Lump Sum of Concrete Rip-Rap Bags.



TOEWALL DETAIL





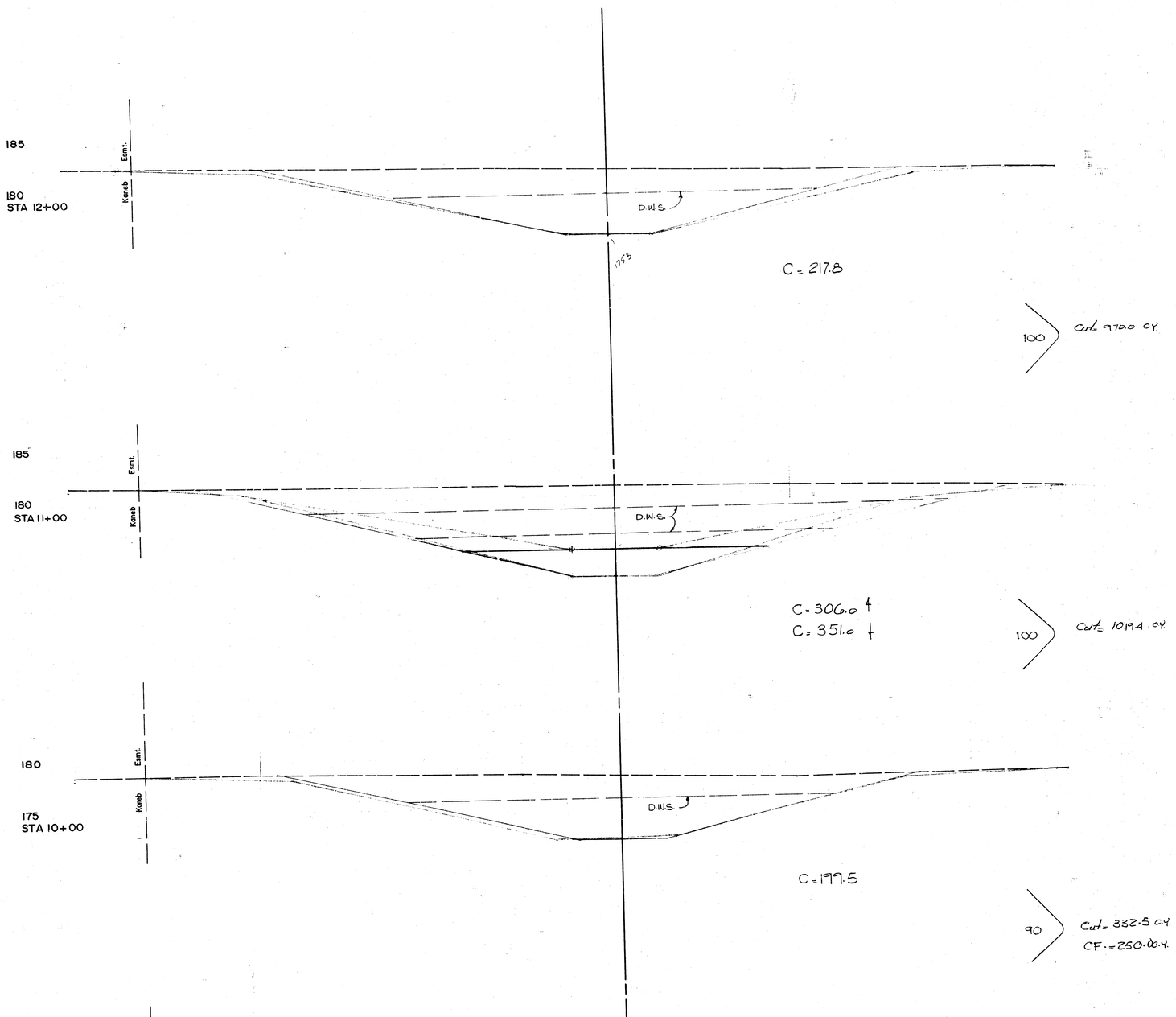
TOP VIEW

MK EC	**DRY CONCRETE RIP-RAP BAG DETAILS**
Design:	
Drawn by:	
Checked by:	
Date:	
Job no:	
Sheet:	9 of 16

MID-KANSAS ENGINEERING CONSULTANTS PA
3500 N. Rock Road
Building No. 800
WICHITA, KANSAS 67206
682-6561

10/17

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TOTAL CUT = 1813.1.8 CY.
TOTAL C.F. = 1663.2 CY.

WATERFORD NORTH 3rd ADDITION
STORM WATER DRAIN NO. 67
PROJ.NO.468762458133.000-000-001

11/17

19/16

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185
Esmt.
Kaneb
180
STA. 17+00
D.W.S.
C. = 165.0
100
Cut = 6867 C.Y.

185
Esmt.
Kaneb
180
STA. 16+00
D.W.S.
C. = 205.8
C. = 263.6
100
Cut = 885.3 C.Y.

185
Kaneb
Esmt.
180
STA. 15+00
D.W.S.
C. = 214.5
100
Cut = 769.4 C.Y.
Lot 6
W. Ford N. 3rd.

185
Esmt.
Kaneb
180
STA. 14+00
D.W.S.
C. = 201.0
100
Cut = 742.6 C.Y.

185
Esmt.
Kaneb
180
STA. 13+00
D.W.S.
C. = 200.0
Cut = 773.7 C.Y.
100

WATERFORD NORTH 3rd ADDITION
STORM WATER DRAIN NO. 67
PROJ NO. 468762458143300000000 001

50 45 40 35 30 25 20 15 10 5 ℄ 5 10 15 20 25 30 35 40 45 50

11/16

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WATERFORD NORTH 3rd ADDITION
STORM WATER DRAIN NO. 67
PROJ.NO.4687624581433000-000-001

50 45 40 35 30 25 20 15 10 5 ℄ 5 10 15 20 25 30 35 40 45 50

12/16
13/17

Sta 18+00
185
190

C.=123.4
C.=137.8'

STA 19+13.05
185
190
Lot 11
W. Ford N. 3rd.
D.W.S.
Kerb
Esmt.

C.=129.6
C.=641.60'
18G.95
STA 20+50
185
190
D.W.S.

C.=150.2
120.37
C.=623.80'
STA 21+70.39
185
190
Lot 12
W. Ford N. 3rd.
D.W.S.

KG & E

C.=146.3
29.61
C.=162.60'
STA 22+00
185
190
Lot 12
D.W.S.

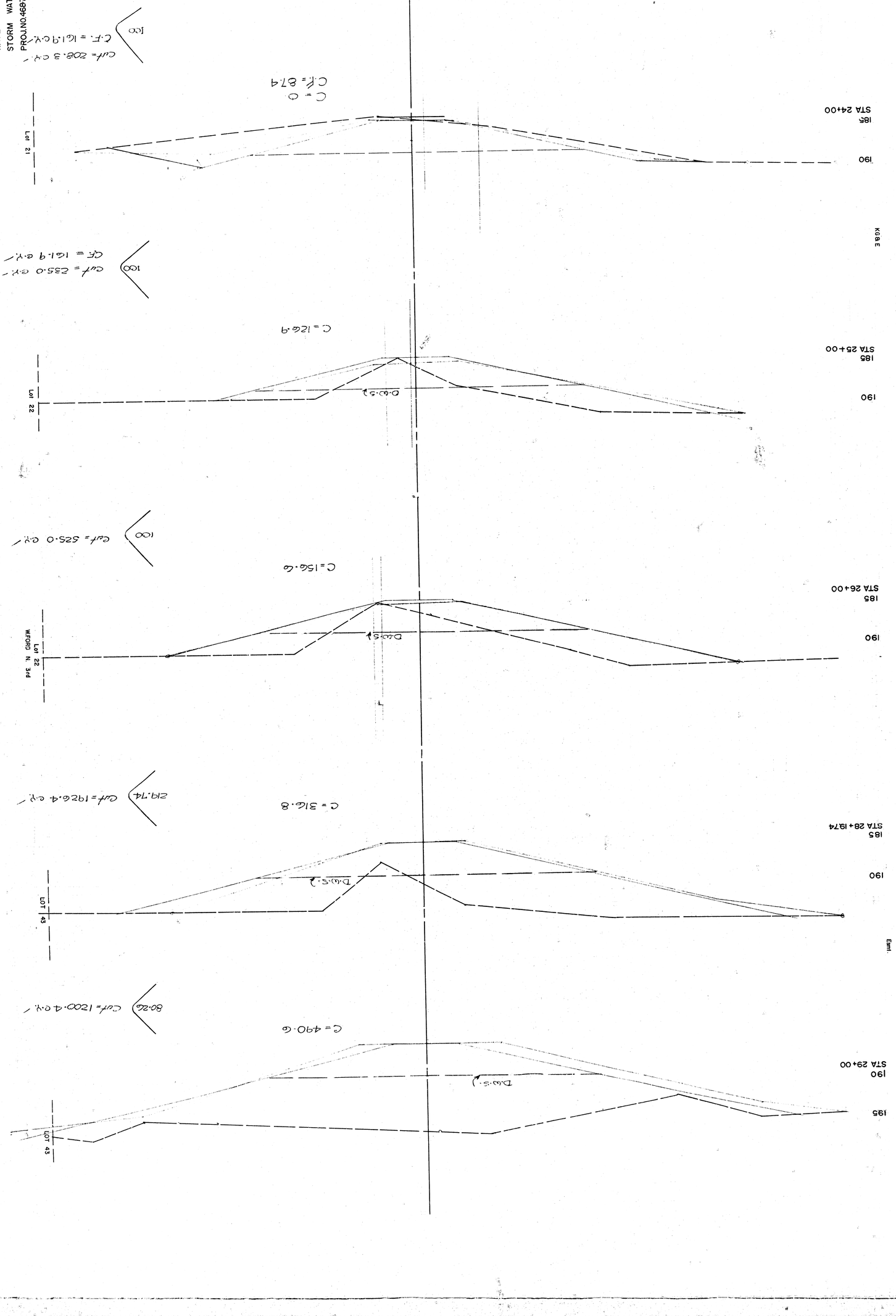
Esmt.

C.=112.5
100
C.=479.30'
STA 23+00
185
190
Lot 13
D.W.S.

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WATERFORD NORTH 3rd ADDITION
STORM WATER DRAIN NO. 67
PROJ.NO.468762451-8143300000001

50 45 40 35 30 25 20 15 10 5 ℄ 5 10 15 20 25 30 35 40 45 50



200

STA. 33+47.16

190

C.=89.9

97.16 CUT=512.6 c.y.

200

STA. 32+50

190

D.W.S.

C.=195.01
C.=293.41

99.39 CUT=1366.2 c.y.

195

190

STA 31+50.61

D.W.S.

C.=448.91
C.=570.01

84.23 CUT=1290.4 c.y.

195

STA. 30+66.38

190

C.=257.3
C.F.=219.3

140 CUT=1286.4 c.y.
C.F.=1089.4

200

STA. 29+26.38

190

Conc.

36"ø

4'-4" W. Pool W.S.El.

C.=238.9
C.F.=200.9

26.38 CUT=356.9 c.y.

WATERFORD NORTH 3rd ADDITION
SANITARY SEWER DRAIN NO. 67
PROJ.NO.468762458433.000000.001

50 45 40 35 30 25 20 15 10 5 ℄ 5 10 15 20 25 30 35 40 45 50

15/17

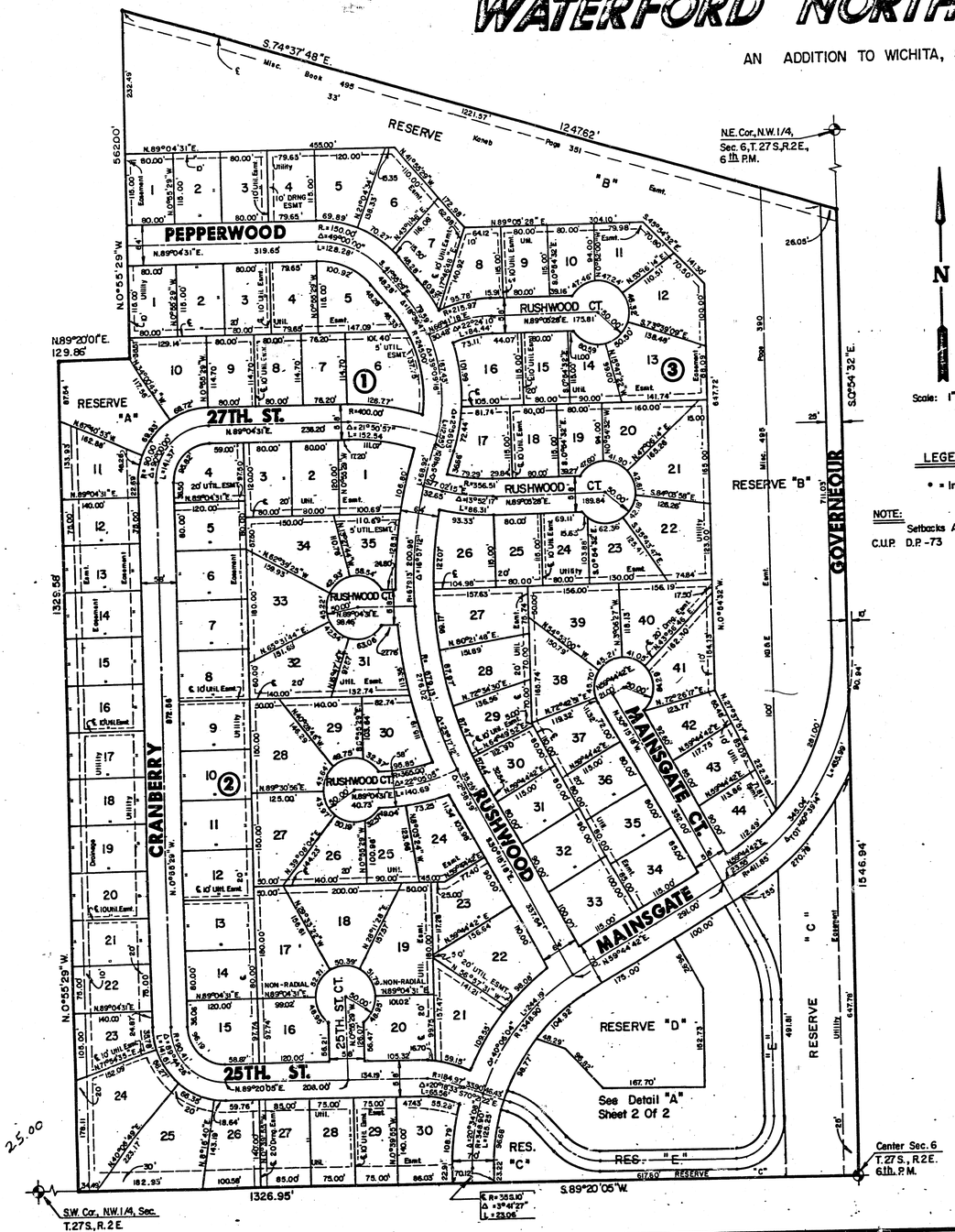
14/16

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FINAL PLAT OF

WATERFORD NORTH THIRD ADDITION

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



I, Michael D. Harding, a Civil Engineer in Kansas, do hereby certify that I have been in responsible charge of surveying and platting of "WATERFORD NORTH THIRD ADDITION", an addition to Wichita, Sedgwick County, Kansas, into Lots, Blocks, Streets and Reserves, the same being accurately set forth in the accompanying plot and described herein:

A replat of "Pepperwood Second Addition", an addition to Wichita, Sedgwick County, Kansas, located within the northwest quarter of Section 6, Township 27 south, Range 2 east of the 6th P.M.

All lots, easements, building setbacks and streets within the above described property are being located and replatted by virtue of K.S.A. 12-512 (b). I hereby certify that the details of this plat are correct to the best of my knowledge and belief this ____ day of January, 1985.

Michael D. Harding
Michael D. Harding
Mid-Kansas Engineering Consultants, P.A.
3500 N.Rock Road, Bldg. 800
Wichita, KS 67226

MICHAEL D. HARDING LICENSED 9399 KANSAS PROFESSIONAL ENGINEER

Know all men by these presents that we the undersigned property owners of the land as above set forth in the Civil Engineers Certificate, have caused the same to be surveyed and platted into lots, blocks, streets and reserves, the same to be known as "WATERFORD NORTH THIRD ADDITION" an addition to Wichita, Sedgwick County, Kansas. The streets are hereby dedicated to and for the use of the public. Easements for construction and maintenance of public utilities and drainage are hereby granted. Reserves are platted for the use of landscaping, utilities, drainage, recreation and open space. Reserve "E" is being platted for construction and maintenance of public utilities, drainage, and a private street. The reserves shall be owned and maintained by the Homeowners' Association. The maintenance easements are granted for access by the adjoining property owner for maintenance of their structures and for a 2.0 foot roof overhang. Building setbacks shall be as shown on the Comotara Residential Community Unit Plan (DP-73) on file at the Wichita-Sedgwick County Planning Department office, 10th floor, 455 N. Main, Wichita, Kansas.

Landmark Communities, Inc.

By: Robert R. Fox
Robert R. Fox
President
Landmark Communities, Inc.

STATE OF KANSAS SS:
COUNTY OF SEDGWICK

Be it remembered that on this 23rd day of January, 1985, before me, a Notary Public in and for said State and County, came the Landmark Communities Inc. by Robert R. Fox, President, to me personally known to be the same person who executed the foregoing instrument of writing and duly acknowledged the execution of the same, on behalf of the Corporation. In testimony whereof I have hereunto set my hand and affixed my notarial seal the day and year above written.

Carolyn R. Duer, Notary Public
Carolyn R. Duer

My Appointment Expires: My Appointment Expires May 20, 1985

We the Fourth National Bank & Trust, Wichita, Kansas, mortgagees on the above described property do hereby consent to the plat of "Waterford North Third Addition".

The Fourth National Bank & Trust

By: _____
J.D. Newman

STATE OF KANSAS SS:
COUNTY OF SEDGWICK

Be it remembered on this ____ day of _____, 1985, before me, a Notary Public in and for said State and County, came the Fourth National Bank & Trust, Wichita, Kansas, by J.D. Newman, to me personally known to be the same person who executed the foregoing instrument of writing and duly acknowledged the execution of the same. In testimony whereof, I have hereunto set my hand and affixed my notarial seal the day and year above written.

_____, Notary Public

My Appointment Expires: _____

LONNETA L. DECKER, STATE NOTARY PUBLIC, Sedgwick County, Kansas, My Appt.Exp. ____

This plat of "WATERFORD NORTH THIRD ADDITION" has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this 29th day of NOVEMBER, 1984.

Wichita-Sedgwick County Metropolitan Area Planning Commission

James C. Wilson, Chairman

Robert A. Lakin, Secretary

This plat approved and all dedications shown hereon, if any, accepted by the City Commission of the City of Wichita, Kansas, this 5th day of Feb, 1985.

Robert G. Knight, Mayor

Donald C. Gisick, City Clerk

This plat approved and all dedications shown hereon, if any, accepted by the Board of County Commissioners of Sedgwick County, Kansas, this 13th day of February, 1985.

Donald E. Gregg, Chairman

Bernard A. Hentzen, Commissioner

Tom Scott, Commissioner

Attest: Don Wright, County Clerk

Entered on transfer record this 13th day of February, 1985.

Don Wright, County Clerk

STATE OF KANSAS SS:
COUNTY OF SEDGWICK

This is to certify that this instrument was filed for record in the Register of Deeds Office at 4:00 PM 13th day of February, 1985.

Pat Ketsler, Register of Deeds

Ed Resa, Deputy

732105

15/16

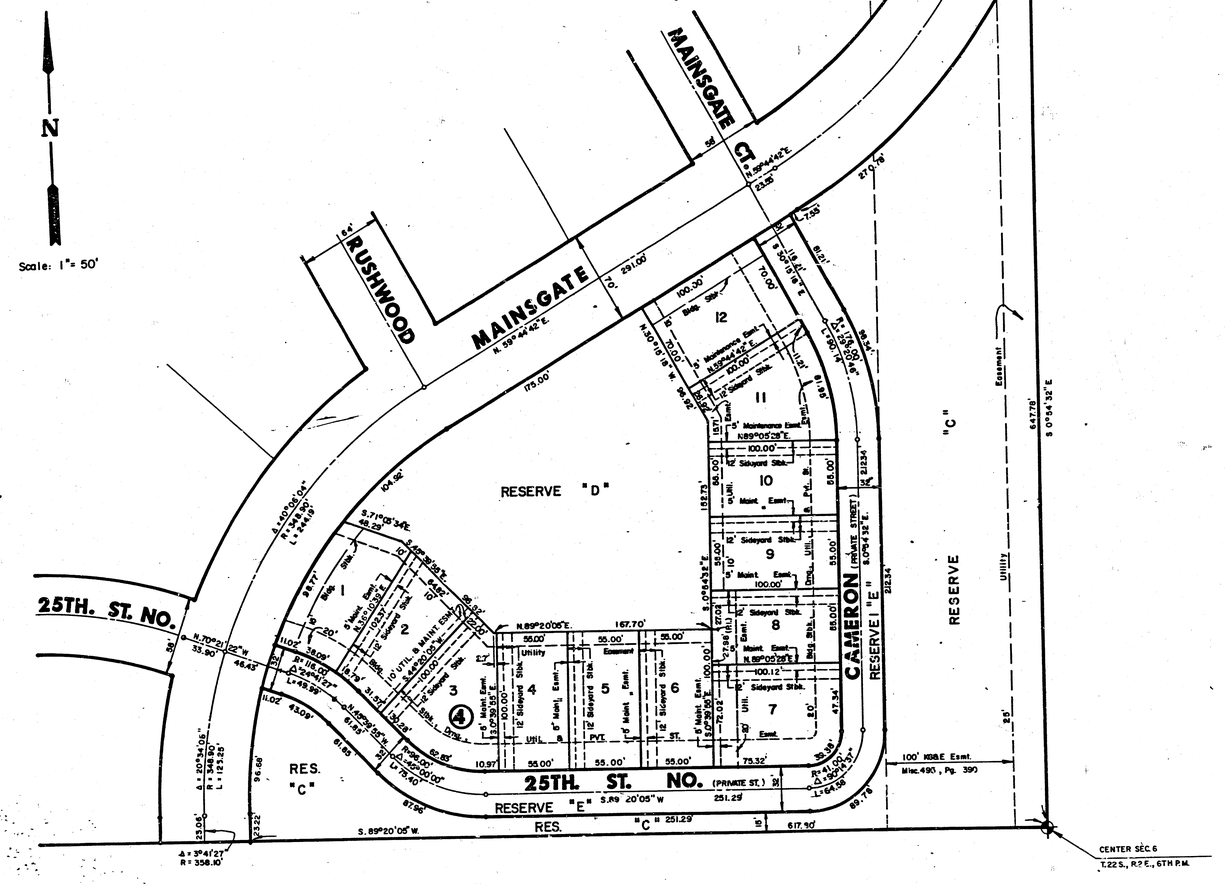
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MF-1 7-26B

FINAL PLAT OF

WATERFORD NORTH THIRD ADDITION

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



MF-1 7-26B

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