MINNESOTA DEPARTMENT OF TRANSPORTATION

THE COUNTY OF OLMSTED

CONSTRUCTION PLAN FOR CAMPUS ROADWAY IMPROVEMENTS PHASE II

LOCATED ON ..... BETWEEN ..... AND ..... (GEOGRAPHIC DESCRIPTION)

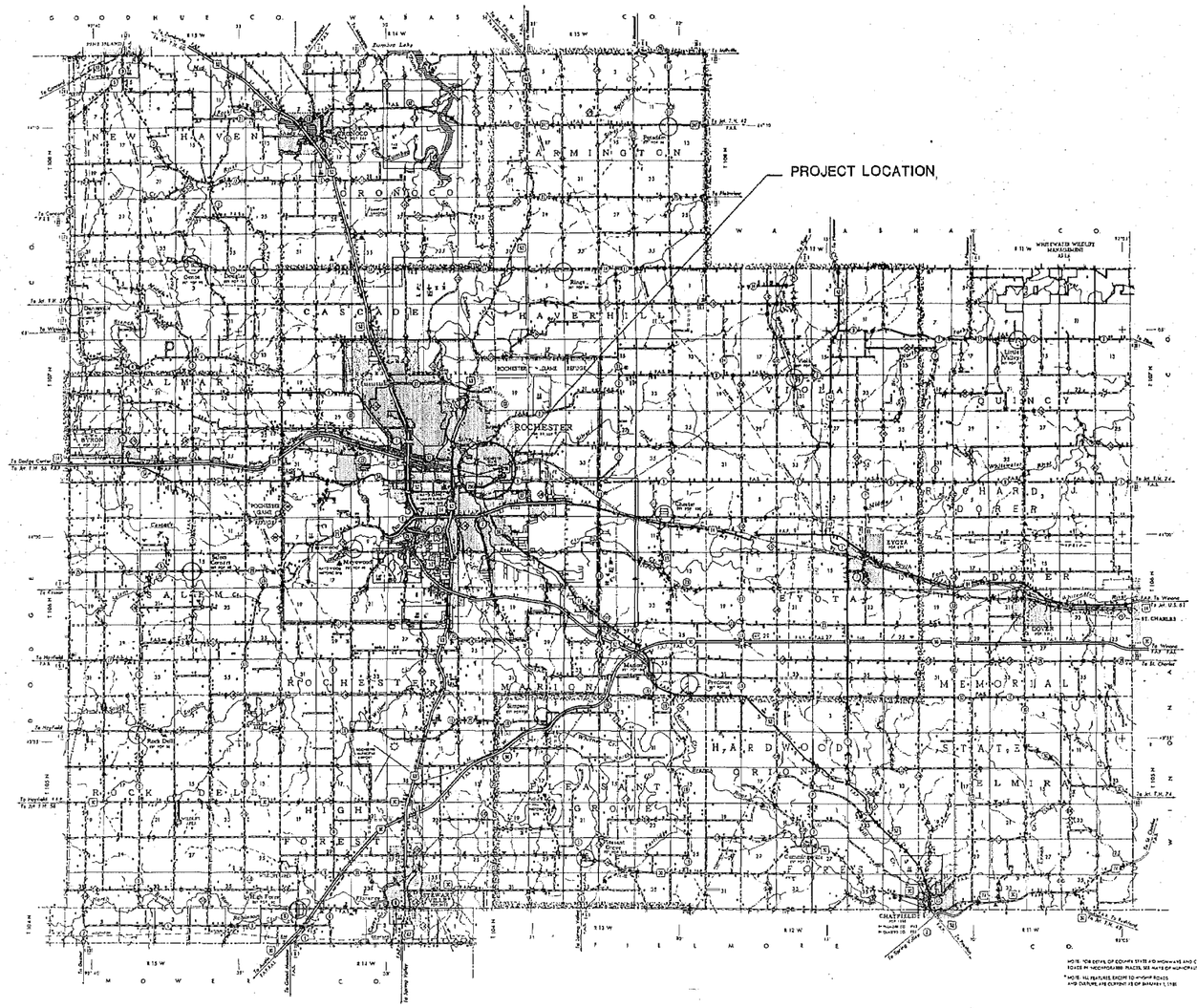
FROM ..... TO ..... (LEGAL DESCRIPTION)

STATE PROJ. NO. .....

GROSS LENGTH ..... FEET ..... MILES
BRIDGES-LENGTH ..... FEET ..... MILES
EXCEPTIONS-LENGTH ..... FEET ..... MILES
NET LENGTH ..... FEET ..... MILES

STATE PROJ. NO. .....

GROSS LENGTH ..... FEET ..... MILES
BRIDGES-LENGTH ..... FEET ..... MILES
EXCEPTIONS-LENGTH ..... FEET ..... MILES
NET LENGTH ..... FEET ..... MILES



PLANS SYMBOLS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
RIGHT-OF-WAY LINE
PRESENT RIGHT OF WAY LINE
CONTROL OF ACCESS LINE
PROPERTY LINE (Except Land Lines)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT OF WAY LINE
RIVER OR CREEK
DRY RUN
DRAINAGE DITCH
DRAIN TILE
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE
RAILROAD SNOW FENCE
STONE WALL OR FENCE
HEDGE
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
MEANDER CORNER
SPRINGS
MARSH
TIMBER
ORCHARD
BRUSH
NURSERY
CATCH BASIN, EXISTING
FIRE HYDRANT
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame)
F-FRAME C-CONCRETE
S-STONE T-TILE
B-BRICK ST-STUCCO
IRON PIPE OR ROD
MONUMENT (STONE, CONCRETE, OR METAL)
WOODEN HUB
GRAVEL PIT
SAND PIT
BORROW PIT
ROCK QUARRY
SLOPE EASEMENT

UTILITIES SYMBOLS

POWER POLE LINE
TELEPHONE OR TELEGRAPH POLE LINE
JOINT TELEPHONE AND POWER ON POWER POLES
ON TELEPHONE POLES
ANCHOR
STEEL TOWER
STREET LIGHT
PEDESTAL (TELEPHONE CABLE TERMINAL)
GAS MAIN
WATER MAIN
CONDUIT
TELEPHONE CABLE IN CONDUIT
ELECTRIC CABLE IN CONDUIT
TELEPHONE MANHOLE
ELECTRIC MANHOLE
BURIED TELEPHONE CABLE
BURIED ELECTRIC CABLE
AERIAL TELEPHONE CABLE
SEWER, (SANITARY OR STORM)
SEWER MANHOLE
NEW CATCH BASIN
NEW MANHOLE
NEW STORM SEWER
NEW CONCRETE CURB
NEW PAVEMENT
GUTTER ELEV. OR GROUND ELEV. FOR CASTING G.E.
INVERT ELEVATION I.E.
TREE
PINE TREE

SCALES

PLAN 50'
PROFILE H - 50' V - 5'
INDEX MAP 2 MI.
GENERAL LAYOUT

ALBINSON MYLS SHEET
STATE AID TITLE SHEET

MINN. PROJ. NO. .....
COUNTY PROJ. NO. C 85-6

SPECIFICATIONS REFERENCE

The 1983 Edition of the Minnesota Department of Transportation "Standard Specifications For Highway Construction" Shall Govern.

INDEX

SHEET NO.	TITLE
1	TITLE PAGE
2	ESTIMATED QUANTITIES, STANDARD PLATES, & TYPICAL SECTIONS
3	PARKING LOT DETAILS, JOINT LOCATION DETAIL
4	PARKING LOT STORM SEWER BUILDING #6 DRIVEWAY
5	SILVER CREEK ROAD
6	SILVER CREEK ROAD
7	EAST SERVICE DRIVE
8	CAMPUS DRIVE
9 - 10	SILVER CREEK ROAD CROSS SECTIONS
11	EAST SERVICE DRIVE & CAMPUS DRIVE CROSS SECTIONS

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am duly Registered Professional Engineer under the laws of the State of Minnesota

Robert E. Toddie, P.E
Kirkham, Michael & Associates, Inc.

Date 4/15/85 Reg. No. 6937

DESIGN DESIGNATION

R .....
ADT (Current Year) = ...
ADT (Future Year) = ...
DHV (Design Hr. Vol.) = ...
D (Directional Distr.) = ... %
T (Heavy Commercial) = ... %
SOIL FACTOR .....

ΣN18(20) .....
Design Speed ..... MPH
Based on ..... Sight Distance
Height of eye ..... Height of object .....
Design Speed not achieved at:
STA. ..... TO STA. ..... MPH.....
STA. ..... TO STA. ..... MPH.....
STA. ..... TO STA. ..... MPH.....

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE 4/16/85 REG. NO. 10397 ENGR. Michael J Sheehan

COUNTY ASSISTANT COUNTY ENGINEER

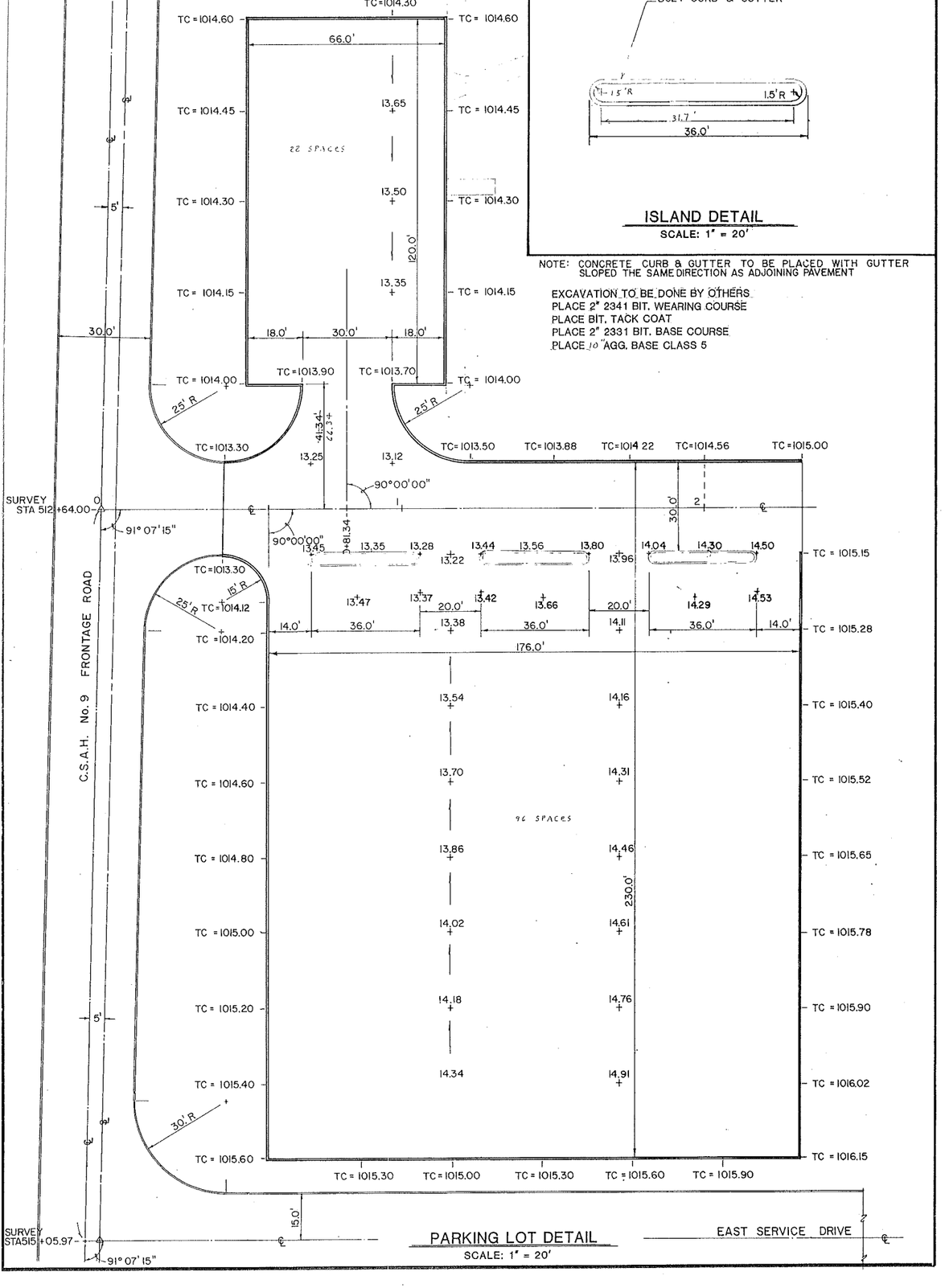
Recommended for Approval ..... 19.....

Recommended for Approval ..... 19.....

Approved ..... 19.....

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
DIVISION ADMINISTRATOR DATE

SHEET NO. 1



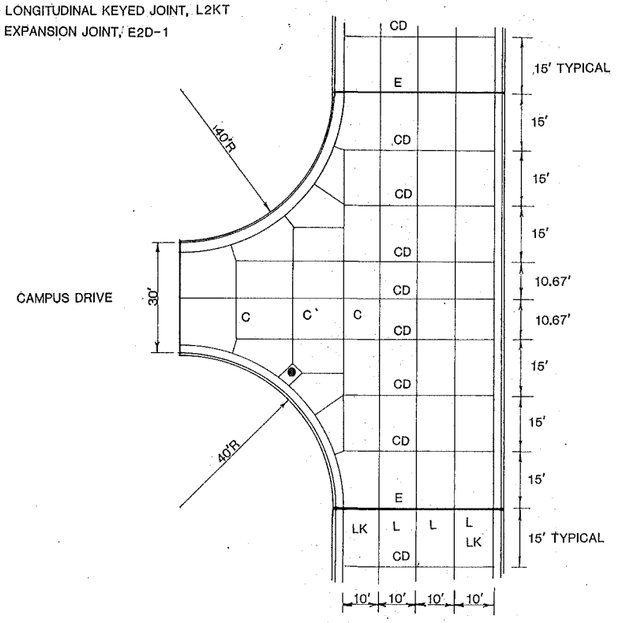
PARKING LOT DETAIL
SCALE: 1" = 20'

ISLAND DETAIL
SCALE: 1" = 20'

NOTE: CONCRETE CURB & GUTTER TO BE PLACED WITH GUTTER SLOPED THE SAME DIRECTION AS ADJOINING PAVEMENT

EXCAVATION TO BE DONE BY OTHERS
PLACE 2" 2341 BIT. WEARING COURSE
PLACE BIT. TACK COAT
PLACE 2" 2331 BIT. BASE COURSE
PLACE 10" AGG. BASE CLASS 5

C = CONTRACTION JOINT, C1-1
CD = DOWELED CONTRACTION JOINT, C5D-1
L = LONGITUDINAL JOINT, L1T OR L2KT
LK = LONGITUDINAL KEYED JOINT, L2KT
E = EXPANSION JOINT, E2D-1



SILVER CREEK ROAD

JOINT LOCATION DETAIL
SCALE: 1" = 20'

KIRKHAM, MICHAEL AND ASSOCIATES
ARCHITECTS ENGINEERS PLANNERS

revisions

CAMPUS ROADWAY IMPROVEMENTS PHASE II
OLMSTED COUNTY MINNESOTA

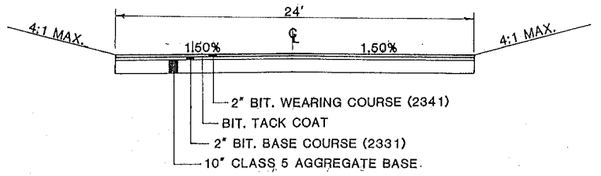
PARKING LOT DETAILS
JOINT LOCATION DETAIL

date APR. 1985
drawn K.W.H.
checked R.E.T.
job no. 8840635

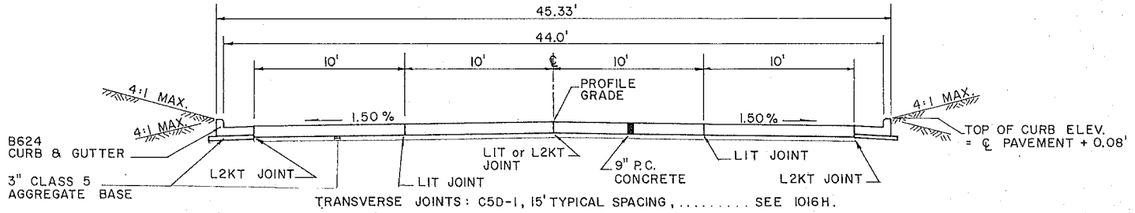
SHEET 3

ESTIMATED QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES		
2021.501	MOBILIZATION	LUMP SUM	LS		
2101.502	CLEARING	TREE	3		
2101.507	GRUBBING	TREE	3		
2104.501	REMOVE CULVERT PIPE	LF	70		
2105.501	COMMON EXCAVATION	CY	8200 P		
2123.501	COMMON LABORERS	HOUR	40		
2123.510	10 CY TRUCK	HOUR	40		
2123.514	4 CY FRONT END LOADER	HOUR	40		
2211.501	AGGREGATE BASE, CLASS 5	TON	6900		
2301.501	CONCRETE PAVEMENT, 9"	SY	9230		
2301.511	STRUCTURAL CONCRETE	CY	2350		
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	74		
2331.514	BASE COURSE MIXTURE	TON	1400		
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	78		
2341.508	WEARING COURSE MIXTURE	TON	1300		
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	590		
2501.515	42" R.C. PIPE APRON	EACH	1		
2501.525	13-1/2" X 22" SPAN R.C. PIPE ARCH APRONS, 3110F	EACH	2		
2501.565	13-1/2" X 22" SPAN R.C. PIPE ARCH CULVERT, 3014J, CL IIIA	LF	60		
2503.511	12" RC PIPE SEWER CLASS IV	LF	564		
2503.511	15" RC PIPE SEWER CLASS IV	LF	6		
2503.511	18" R.C. PIPE SEWER, CL III	LF	478		
2503.511	24" RC PIPE SEWER CLASS III	LF	483		
2503.511	27"R.C. PIPE SEWER CL III	LF	412		
2503.511	36" R.C. PIPE SEWER, CL III	LF	287		
2503.511	42" R.C. PIPE SEWER, CL III	LF	1222		
2506.508	CONSTRUCT MANHOLE, DESIGN TYPE 2	EACH	6		
2506.508	CONSTRUCT MANHOLE DESIGN TYPE 4-A2	EACH	4		
2506.509	CONSTRUCT CATCH BASIN, DESIGN TYPE 1-B	EACH	15		
2506.509	CONSTRUCT CATCH BASIN, DESIGN TYPE 3	EACH	3		
2506.522	ADJUST FRAME AND RING CASTINGS	EACH	2		
2511.501	RANDOM RIPRAP, CLASS II	CY	11		
2531.501	CONCRETE CURB AND GUTTER DESIGN B624	LF	8222		
2571.541	TRANSPLANT TREES	TREE	1		
2575.501	ROADSIDE SEEDING, MIXTURE 5	ACRE	2		
2575.505	SODDING	SY	2550		
	RELOCATE HYDRANT	EACH	2		
	STEEL CASING PIPE	LF	90		



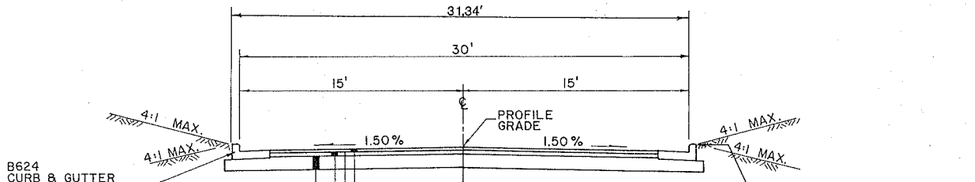
BUILDING #6 DRIVEWAY



TRANSVERSE JOINTS: C5D-1, 15' TYPICAL SPACING, ... SEE 1016H.

SEE STANDARD PLATES 1016H, 1070J, 1100N, 1103I, 1120R, 1140R, 1141C, 1150N, 1210E.

SILVER CREEK ROAD



EAST SERVICE DRIVE
CAMPUS DRIVE

STANDARD PLATES

CITY OF ROCHESTER

PLATE NO.	DESCRIPTION
SDP1-01	CATCH BASIN TYPE 1-B
SDP1-03	CATCH BASIN TYPE 3
SDP1-05	CURB AND GUTTER REINFORCING AT CATCH BASINS
SDP1-07	FRAME, GRATE, AND CURB BOX CASTING FOR CATCH BASINS
SDP2-03	CURB AND GUTTER BASE PREPARATION
SDP4-01	MANHOLE COVER AND CASTINGS RING
SDP4-02	MANHOLE ADJUSTING RINGS
SDP4-13	MANHOLE TYPE 4-A2
SDP4-09	MANHOLE TYPE 2
SDP7-04	TRENCH WIDTHS
SDP8-01	WATERMAIN THRUST BLOCKS
SDP8-02	TYPICAL SECTIONS LOWER OR RAISE WATERMAIN AND REBUILD WATERSERVICE
SDP8-03	WATERMAIN TIE RODS

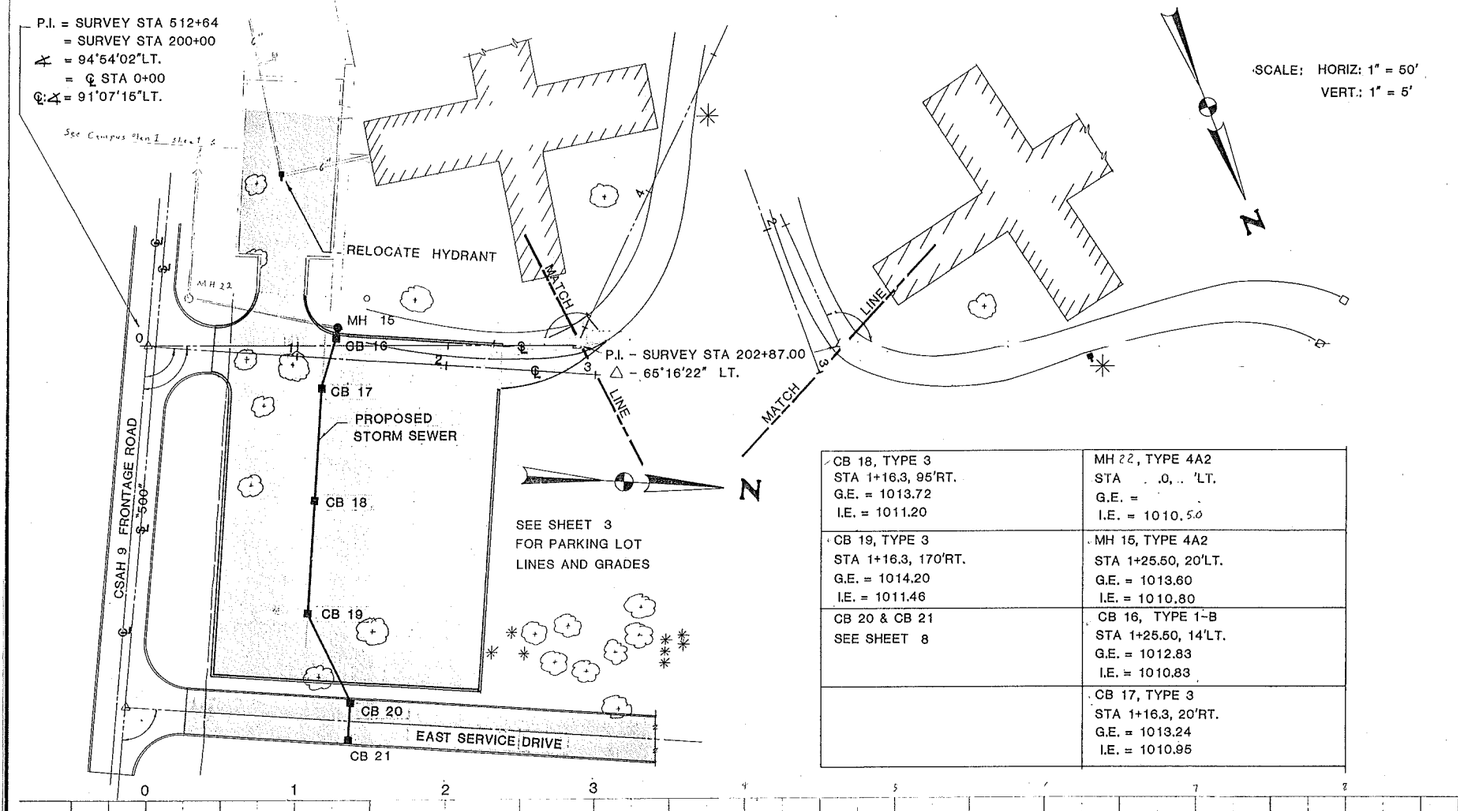
STANDARD PLATES

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT.

PLATE NO.	DESCRIPTION
0004A	SPECIFICATION REFERENCE TO STANDARD PLATES
1016H	CONCRETE PAVEMENT NON-REINFORCED
1100N	EXPANSION JOINTS
1103I	TYPICAL DOWEL BAR ASSEMBLY
1120R	CONTRACTION JOINTS
1140R	LONGITUDINAL JOINTS
1141C	PAVEMENT KEYWAY FOR KEYED JOINT CONSTRUCTION
1150N	CONSTRUCTION OF HEADER JOINTS
3000I	REINFORCED CONCRETE PIPE
3006D	GASKET JOINT FOR R.C. PIPE
3014J	REINFORCED CONCRETE PIPE ARCH DETAIL
3100F	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
3110F	CONCRETE APRON FOR REINFORCED CONCRETE PIPE-ARCH
3133A	RIP RAP AT R.C.P. OUTLETS
7100F	CONCRETE CURB AND GUTTER
8000H	STANDARD BARRICADES
9102C	SODDING AT PIPE CULVERT ENDS

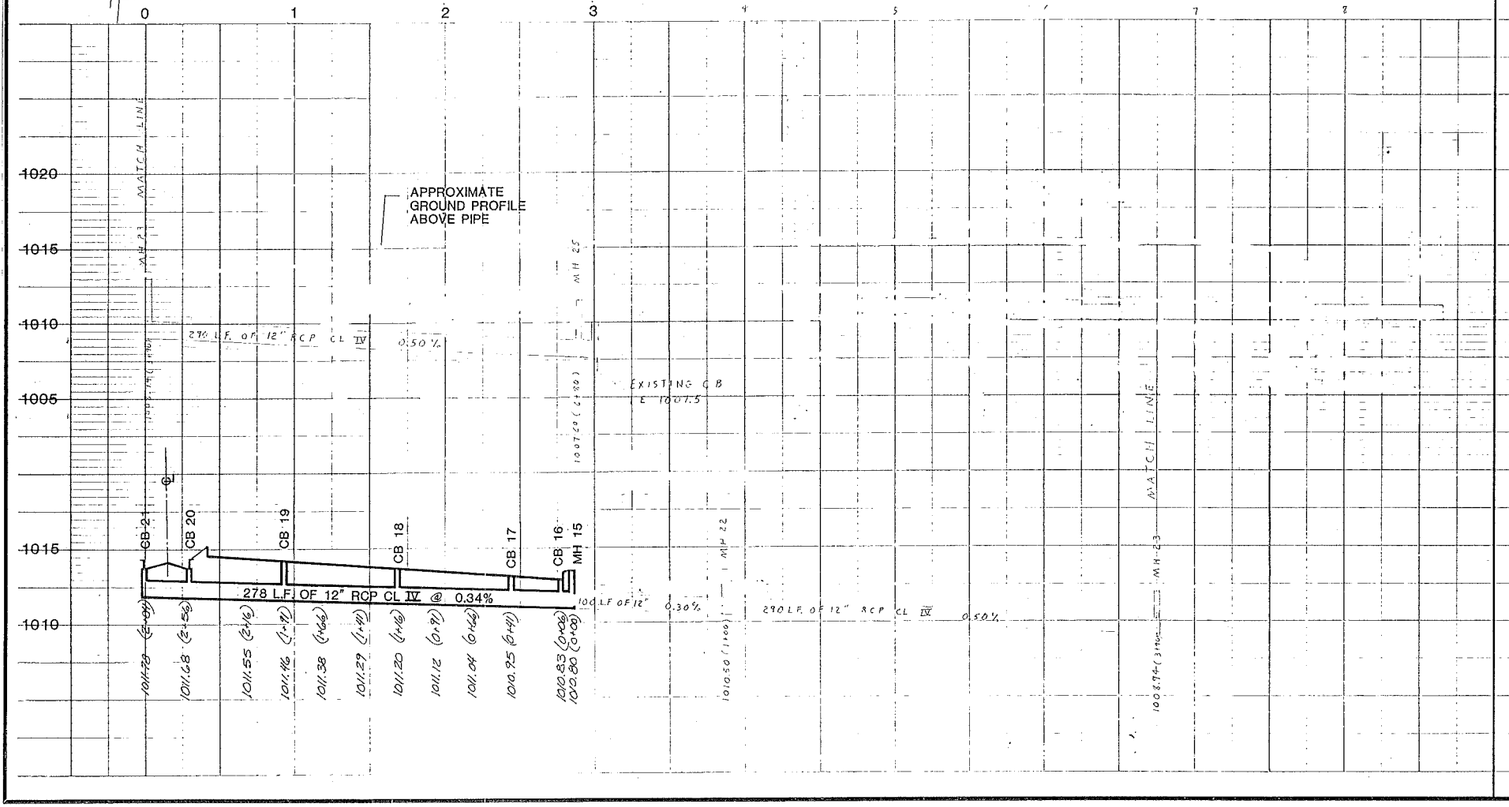
KIRKHAM, ARCHITECTS ENGINEERS
revisions
CAMPUS ROADWAY IMPROVEMENTS PHASE II
ESTIMATED QUANTITIES, STANDARD PLATES
date APR. 1985
SHEET

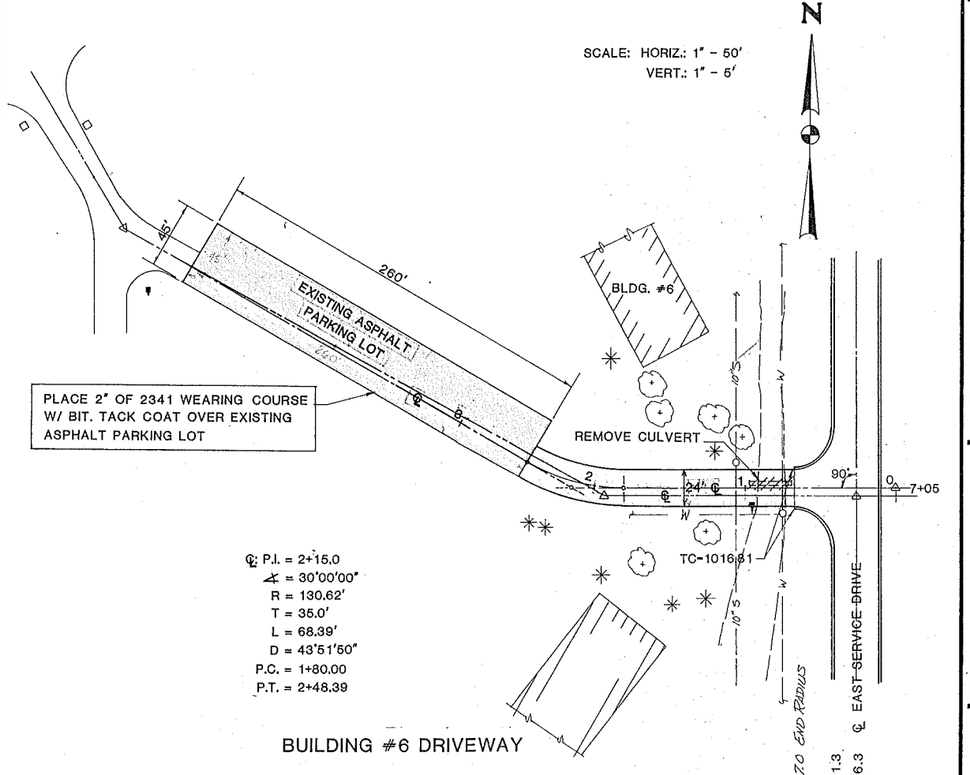
P.I. = SURVEY STA 512+64
= SURVEY STA 200+00
∠ = 94°54'02" LT.
= ℄ STA 0+00
℄ ∠ = 91°07'15" LT.

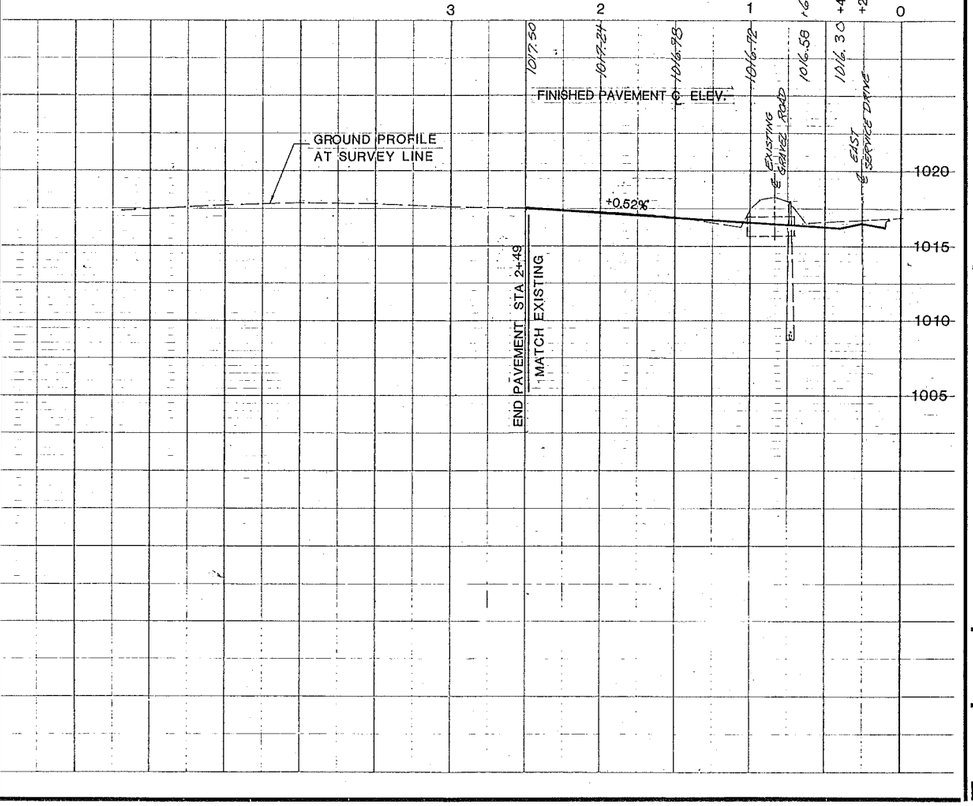


SCALE: HORIZ: 1" = 50'
VERT.: 1" = 5'

CB 18, TYPE 3 STA 1+16.3, 95'RT. G.E. = 1013.72 I.E. = 1011.20	MH 22, TYPE 4A2 STA . .0. . 'LT. G.E. = I.E. = 1010.50
CB 19, TYPE 3 STA 1+16.3, 170'RT. G.E. = 1014.20 I.E. = 1011.46	MH 15, TYPE 4A2 STA 1+25.50, 20'LT. G.E. = 1013.60 I.E. = 1010.80
CB 20 & CB 21 SEE SHEET 8	CB 16, TYPE 1-B STA 1+25.50, 14'LT. G.E. = 1012.83 I.E. = 1010.83
	CB 17, TYPE 3 STA 1+16.3, 20'RT. G.E. = 1013.24 I.E. = 1010.95







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CAMPUS ROADWAY IMPROVEMENTS PHASE II
OLMSTED COUNTY MINNESOTA

PARKING LOT STORM SEWER
BUILDING #6 DRIVEWAY

date APR. 1985
designed K.W.H.
checked R.E.T.
project B8340635

SHEET 4

T.109N. R.19W. 1 36 6 31 – SURVEY STA. 200+00

MH 9, TYPE 4A2
STA. 7+50, 33' LT.
G.E. = 1017.00
I.E. = 1012.40
E.IE IN=1012.50
CB 9-2, TYPE 1-B
STA. = 7+50, 21' LT.
G.E. = 1016.16
I.E. = 1012.74
CB 9-1, TYPE 1-B
STA. = 7+50, 21' RT.
G.E. = 1016.16
I.E. = 1013.16

MH 8, TYPE 2
STA 10+13, 33'LT.
GE=1017.50±
IE=1011.50±

MH 7, TYPE 2
STA 13+00 33' LT.
G.E. = 1017.70
IE=1010.64
EJE IN =1011.22
CB 7-2, TYPE 1-B
STA. 13+00 21' LT.
G.E. = 1016.91
I.E. = 1011.66
CB 7-1, TYPE 1-B
STA. 13+00 21' RT.
G.E. = 10.16.91
I.E. = 1012.50

ASPHALT APRON, W/40' RAD.
STA 0+32 TO STA 0+72
2" OF 2341 WEARING COURSE
6" OF 2331 BASE COURSE
6" OF CLASS 5 AGG. BASE

PLACE SOD AT CULVERT ENDS
SEE STANDARD PLATE 9102-C

REMOVE EXISTING 18" CMP CULVERT
PLACE 60 LF OF 13 1/2" X 22" RCP
ARCH CULVERT CL IIA AT 0.42%
WITH TWO CONCRETE APRONS
ALIGN SAME AS EXISTING CULVERT

40' R
I.E. = 1013.35
I.E. = 1013.70
40' R
40' R
40' R
P.I. = SURVEY STA. 600+00
= SURVEY STA. P.O.T. 225+46.15
STA. 0+00 = SURVEY STA. 600+00, 10' LT.
6 31 1 4 = LT. 90°18'41"

CAMPUS DRIVE
MH 11
20'
30'
MH 9
MH 8
MH 7
PROPOSED STORM SEWER
CB 9-2
CB 9-1
CB 7-1
33'
44'
SEE SHEET 6
MATCH LINE
N
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'

SILVER CREEK ROAD

FINISHED PAVEMENT ℄ ELEVATIONS
FINISHED ℄ PROFILE
EXISTING PROFILE AT SURVEY LINE
+0.32%
-0.40%
+0.50%
-0.50%
+0.50%
263 LF OF 24" RCP CL III @ 0.64
287 LF OF 36" RCP CL III @ 0.30%
SEE SHEET 6
42 LF OF 12" RCP CL IV @ 1.00%
11 LF OF 12" RCP CL IV @ 2.18%
42 LF OF 12" RCP CL IV @ 2.00%
11 LF OF 12" RCP CL IV @ 4.00%
BEGIN PAVEMENT STA. 0+32
MATCH EXISTING EDGE OF HIGHWAY
BEGIN CONC. PAVEMENT STA. 0+72
BEG. RAD.
℄ CAMPUS DRIVE
END RAD.
MH 9
MH 8
MH 7
CB 9-1
CB 9-2
CB 7-1
CB 7-2
1020
1015
1010
1005

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CAMPUS ROADWAY IMPROVEMENTS PHASE II
OLMSTED COUNTY MINNESOTA

SILVER CREEK ROAD

SHEET 5

SP 2-1985
APP. designed K.W.H.
drawn R.E.T.
proj. no. B840635

MH 6, TYPE 2
STA 19+50, 33'LT.
G.E. = 1018.40
I.E. = 1008.69
E/E IN = 1011.94
CB 6-2, TYPE 1-B
STA. 19+50, 21'LT.
G.E. = 1017.61
I.E. IN = 1012.66, I.E. OUT = 1012.60
CB 6-1, TYPE 1-B
STA 19+50, 21'RT.
G.E. = 1017.61
I.E. OUT = 1013.50

MH 5, TYPE 2
STA 22+50, 33' LT.
G.E. = 1013.20
I.E. = 1007.79

N

SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'

EXISTING CAMPUS ENTRANCE

MATCH LINE SEE SHEET 5

PROPOSED STORM SEWER

MH 6

CB 6-2

CB 6-1

MH 5

173' 30"

50' 50'

GNW

90 LF OF 42" STEEL CASING AUGERED OR JACKED IN PLACE

42" RC APRON
STA. 26+20.17, 9.16' RT.
I.E. = 1006.68

PLACE RIPRAP
SEE STANDARD DETAIL
PLATE 3133A

EXISTING GRAVEL ROAD

BRIDGE

SILVER CREEK

CONSTRUCT CURB
DROP 30" WIDE
PLACE 40 TON
AGG. BASE CLASS 5

SURVEY STA 622+64.90
TAYLOR'S PROPERTY CORNER

B.M. SPK. IN PP = 1021.84

DNR DRIVEWAY

SILVER CREEK ROAD

15 16 17 18 19 20 21 22 23

1019.54 1019.75 1019.00 1018.25 1018.50 1019.25 1019.00 1018.75 1018.50 1018.37 1018.25 1017.75 1017.50 1016.87 1016.33

FINISHED PAVEMENT ℄ ELEVATIONS

EXISTING PROFILE AT SURVEY LINE

FINISHED ℄ PROFILE

P.V.I. = STA 19+50
P.V.I. ELEV = 1018.25
V.C. = 50'

1020 1015 1010 1005 1000

650 LF OF 42" RCP CL III AT 0.30%

300 LF OF 42" RCP CL III AT 0.30%

MH 6

STA. 21+00
END CONC. PAVEMENT

MH 5

EXISTING PROFILE AT SURVEY LINE

272 LF OF 42" RCP CL III AT 0.30%

CONSTRUCT CONCRETE COLLAR
6" THICK X 24" WIDE AROUND PIPE JOINT

90 LF OF 42" STEEL CASING AT 0.30%
AUGERED OR JACKED IN PLACE

CB 6-1 CB 6-2 MH 6

42 LF OF 12" RCP CL IV AT 2.00%

11 LF OF 12" RCP CL IV @ 6.00%

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ARCHITECTS ENGINEERS PLANNERS

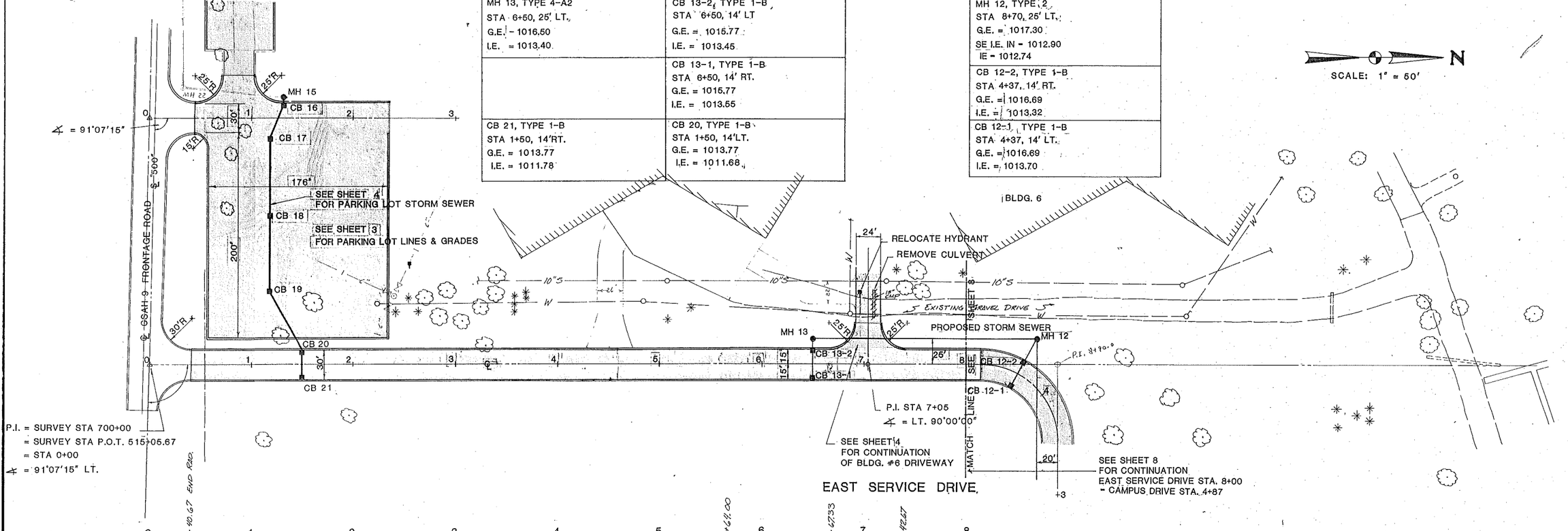
revisions

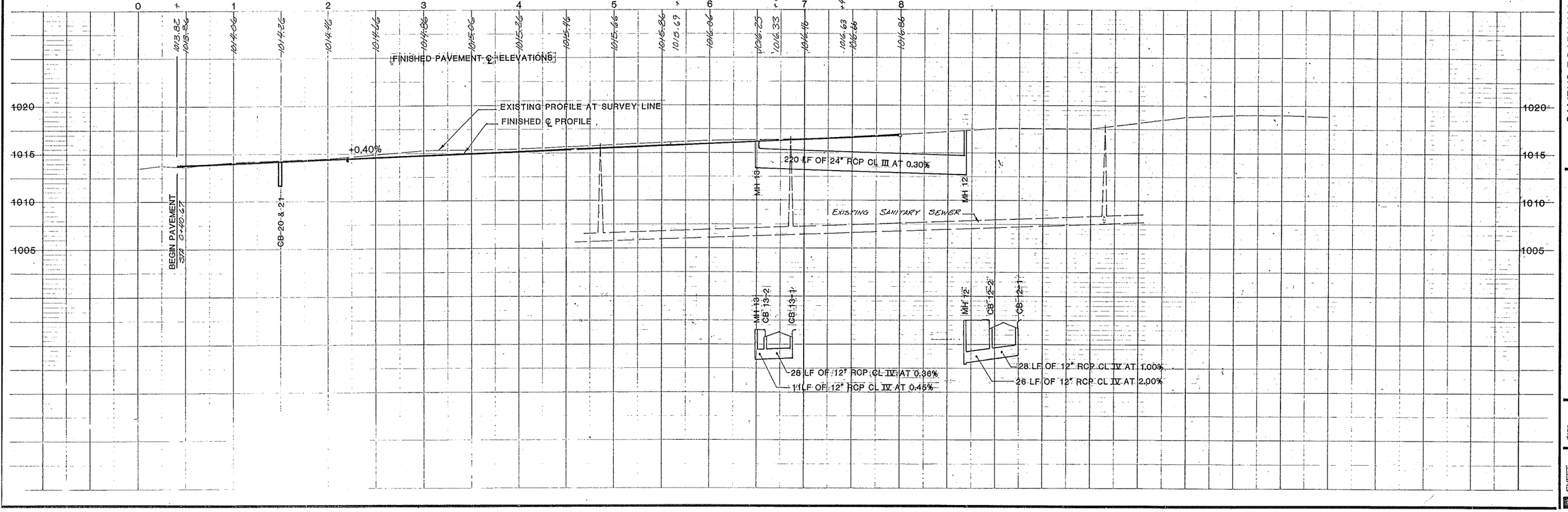
CAMPUS ROADWAY IMPROVEMENTS PHASE III
OLMSTED COUNTY MINNESOTA

SILVER CREEK ROAD

date 1985
designed K.W.H.
drawn R.E.T.
kmm no. B840535

SHEET 6





KIRKHAM, MICHAEL AND ASSOCIATES
ARCHITECTS ENGINEERS PLANNERS

revisions

CAMPUS ROADWAY IMPROVEMENTS PHASE II
OLMSTED COUNTY MINNESOTA

EAST SERVICE DRIVE

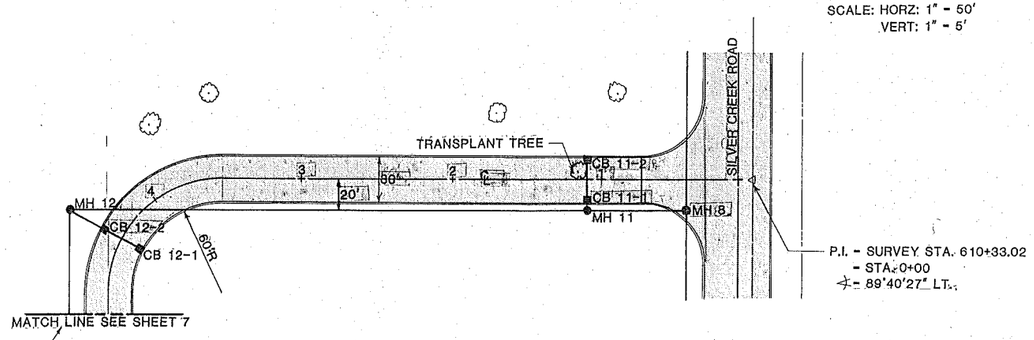
date APR. 1985
designed K.W.H.
drawn R.E.T.
km's no. B840635

SHEET 7

MH 11, TYPE 2 STA. 1+90, 20' LT. G.E. = 1017.30 I.E. = 1011.70
CB 11-2, TYPE 1-B STA. 1+90, 14' RT. G.E. = 1016.57 I.E. = 1013.00
CB 11-1, TYPE 1-B STA. 1+90, 14' LT. G.E. = 1016.57 I.E. = 1012.72

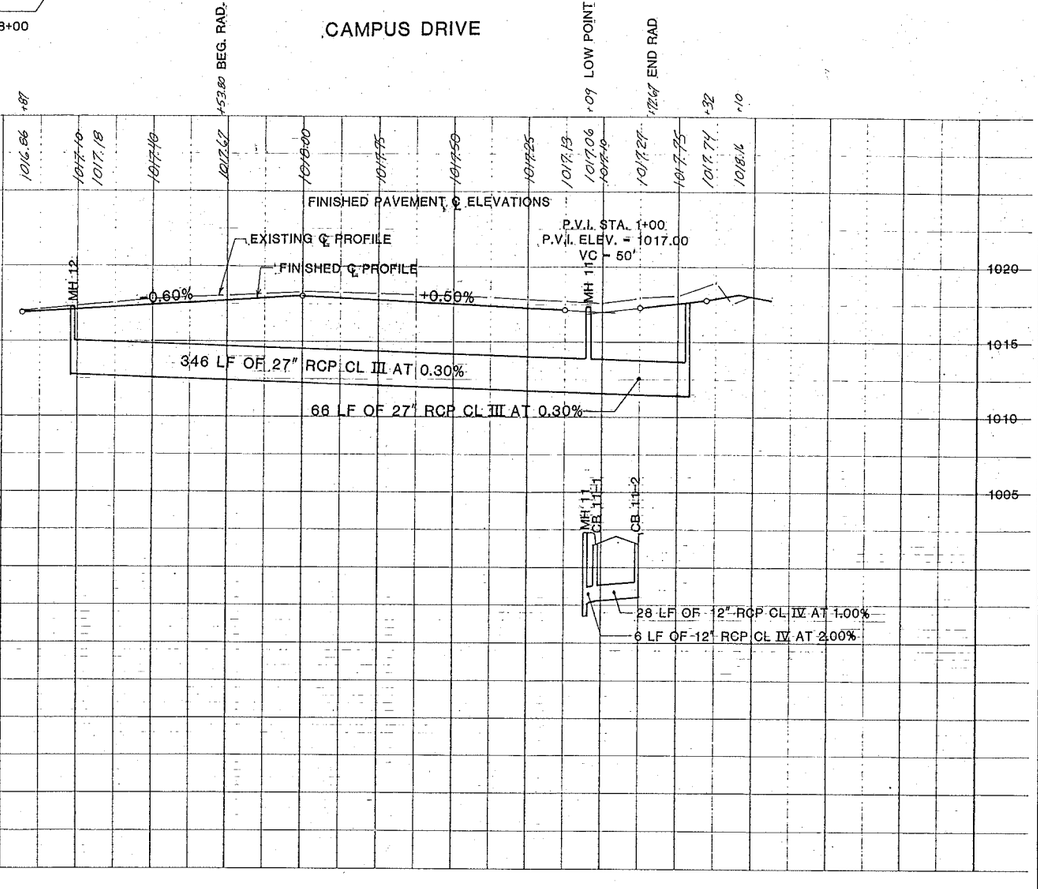
N

SCALE: HORZ: 1" = 50'
VERT: 1" = 5'



CAMPUS DRIVE STA. 4+87
= EAST SERVICE DRIVE STA. 8+00

CAMPUS DRIVE



KIRKHAM, MICHAEL AND ASSOCIATES
ARCHITECTS ENGINEERS PLANNERS

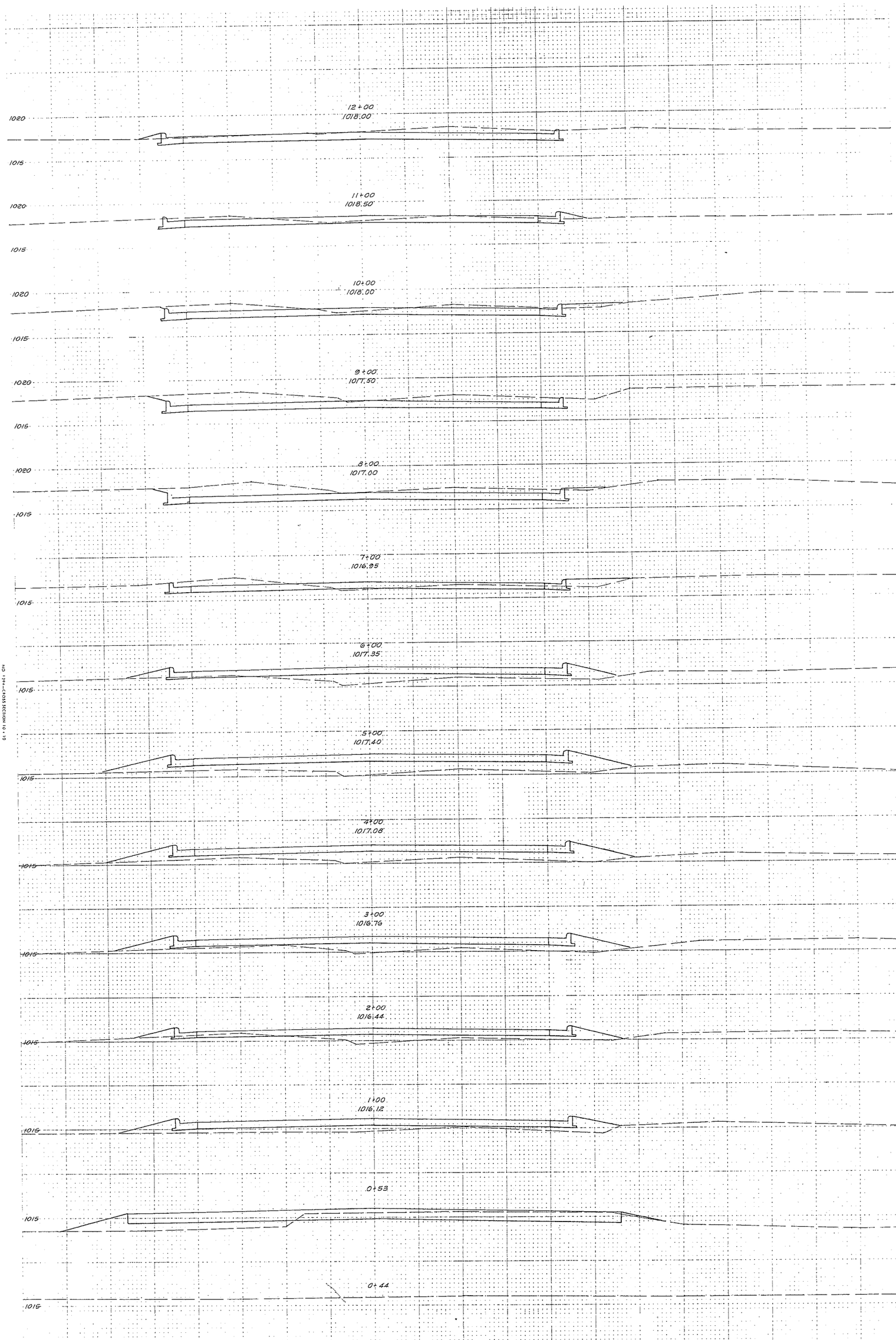
revisions 4-9-85

CAMPUS ROADWAY IMPROVEMENTS PHASE II
OLMSTED COUNTY MINNESOTA

CAMPUS DRIVE

date APR. 1985
designed K.W.H.
drafted R.E.T.
kma no. 8840635

SHEET 8



10 X 10 PER INCH CROSS SECTION 10 X 10
"CLEARPRINT PAPER CO."
MADE IN U.S.A.

SHEET 9	SILVER CREEK ROAD CROSS SECTIONS	CAMPUS ROADWAY IMPROVEMENTS PHASE II

SILVER CREEK ROAD
CROSS SECTIONS

CAMPUS ROADWAY
IMPROVEMENTS PHASE II

OLMSTED COUNTY
MINNESOTA

SHEET
10

23+00
1020

22+00
1015

21+00
1016.33
1020

20+00
1017.91
1015

19+00
1018.50
1020

18+00
1019.00
1015

17+00
1018.50
1020

16+00
1019.00
1020

15+67
1018.83
1015

15+53
1015

15+20
1018.50
1020

14+00
1018.
1020

13+00
1017.50
1015

0
10
20
30
40
50

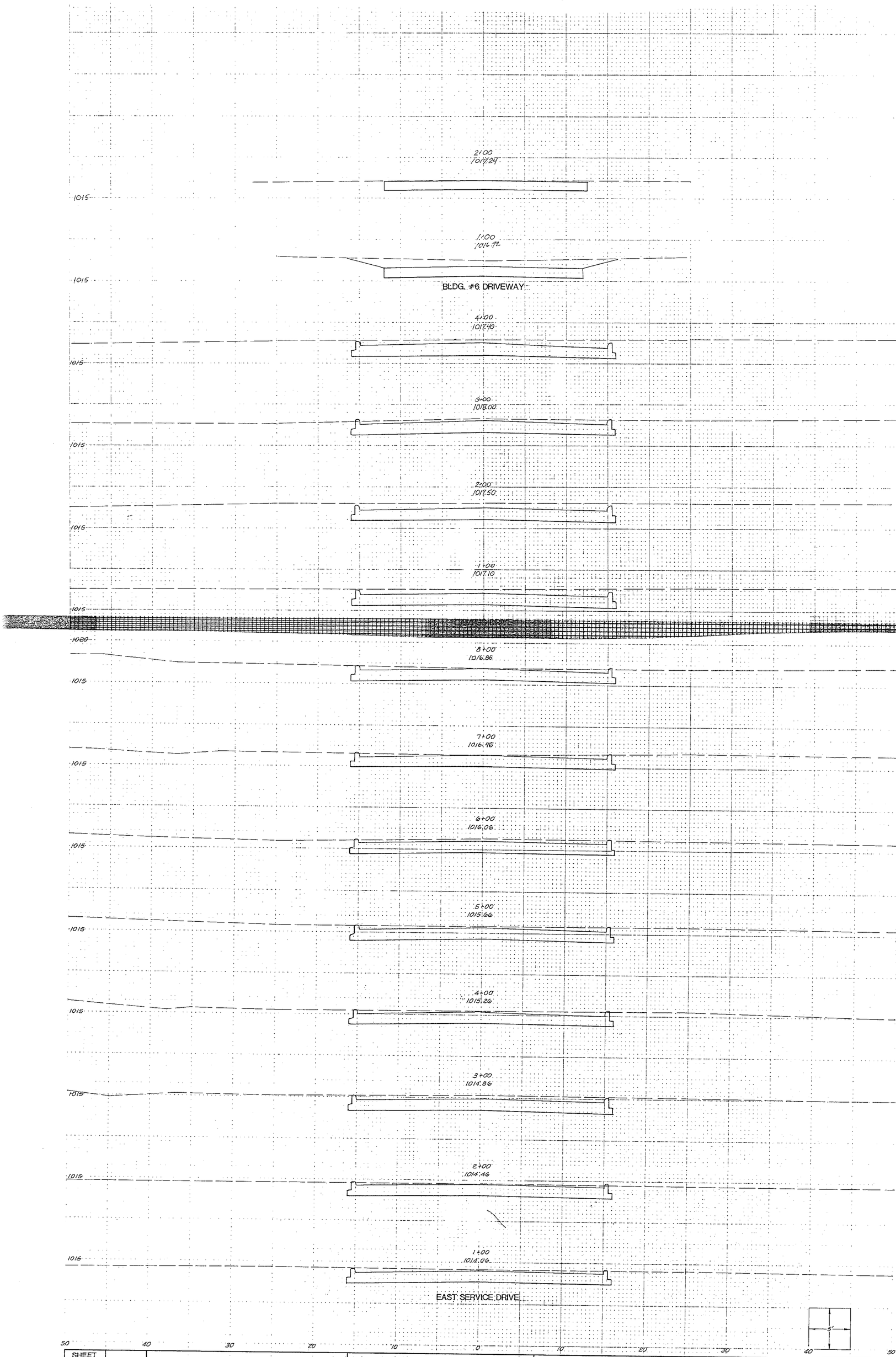
0 20 30 40 50

16% GRADE

DRIVEWAY

S = 5'

"CLEARPRINT PAPER CO."
MADE IN U.S.A.
NO. 1324 - CROSS SECTION 10 x 10



SHEET					
11		EAST SERVICE DRIVE CAMPUS DRIVE CROSS SECTIONS	CAMPUS ROADWAY IMPROVEMENTS PHASE II OLMSTED COUNTY MINNESOTA		

MINNESOTA DEPARTMENT OF TRANSPORTATION

THE COUNTY OF OLMSTED

CONSTRUCTION PLAN FOR CAMPUS ROADWAY IMPROVEMENTS PHASE II

LOCATED ON ..... BETWEEN ..... AND ..... (GEOGRAPHIC DESCRIPTION)

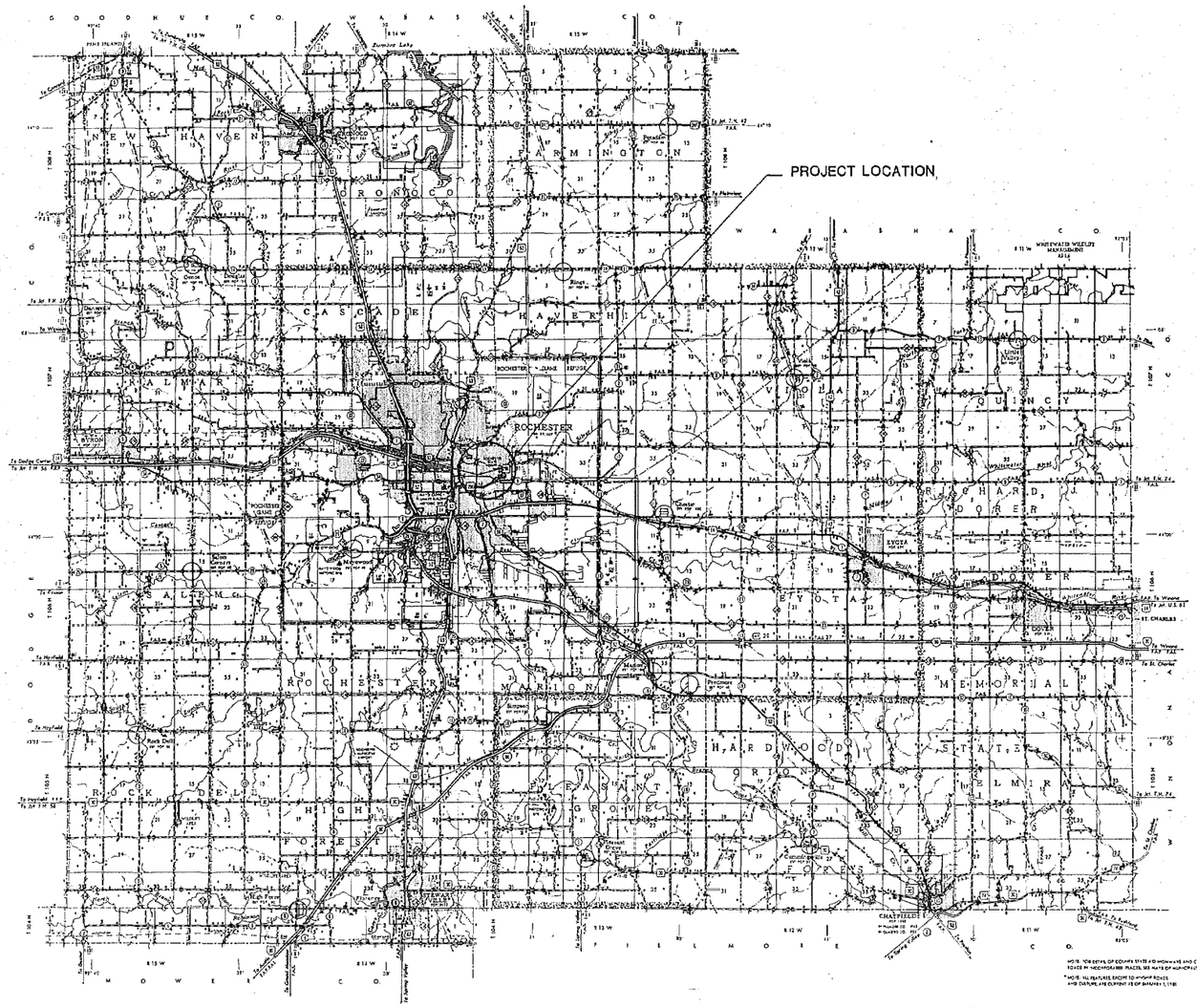
FROM ..... TO ..... (LEGAL DESCRIPTION)

STATE PROJ. NO. .....

GROSS LENGTH ..... FEET ..... MILES
BRIDGES-LENGTH ..... FEET ..... MILES
EXCEPTIONS-LENGTH ..... FEET ..... MILES
NET LENGTH ..... FEET ..... MILES

STATE PROJ. NO. .....

GROSS LENGTH ..... FEET ..... MILES
BRIDGES-LENGTH ..... FEET ..... MILES
EXCEPTIONS-LENGTH ..... FEET ..... MILES
NET LENGTH ..... FEET ..... MILES



PLANS SYMBOLS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
RIGHT-OF-WAY LINE
PRESENT RIGHT OF WAY LINE
CONTROL OF ACCESS LINE
PROPERTY LINE (Except Land Lines)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT OF WAY LINE
RIVER OR CREEK
DRY RUN
DRAINAGE DITCH
DRAIN TILE
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE
RAILROAD SNOW FENCE
STONE WALL OR FENCE
HEDGE
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
MEANDER CORNER
SPRINGS
MARSH
TIMBER
ORCHARD
BRUSH
NURSERY
CATCH BASIN, EXISTING
FIRE HYDRANT
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame)
F-FRAME C-CONCRETE
S-STONE T-TILE
B-BRICK ST-STUCCO
IRON PIPE OR ROD
MONUMENT (STONE, CONCRETE, OR METAL)
WOODEN HUB
GRAVEL PIT
SAND PIT
BORROW PIT
ROCK QUARRY
SLOPE EASEMENT

UTILITIES SYMBOLS

POWER POLE LINE
TELEPHONE OR TELEGRAPH POLE LINE
JOINT TELEPHONE AND POWER ON POWER POLES
ON TELEPHONE POLES
ANCHOR
STEEL TOWER
STREET LIGHT
PEDESTAL (TELEPHONE CABLE TERMINAL)
GAS MAIN
WATER MAIN
CONDUIT
TELEPHONE CABLE IN CONDUIT
ELECTRIC CABLE IN CONDUIT
TELEPHONE MANHOLE
ELECTRIC MANHOLE
BURIED TELEPHONE CABLE
BURIED ELECTRIC CABLE
AERIAL TELEPHONE CABLE
SEWER, (SANITARY OR STORM)
SEWER MANHOLE
NEW CATCH BASIN
NEW MANHOLE
NEW STORM SEWER
NEW CONCRETE CURB
NEW PAVEMENT
GUTTER ELEV. OR GROUND ELEV. FOR CASTING G.E.
INVERT ELEVATION I.E.
TREE
PINE TREE

SCALES

PLAN 50'
PROFILE H - 50' V - 5'
INDEX MAP 2 MI.
GENERAL LAYOUT

ALBINSON MYLS SHEET
STATE AID TITLE SHEET

MINN. PROJ. NO. .....
COUNTY PROJ. NO. C 85-6

SPECIFICATIONS REFERENCE

The 1983 Edition of the Minnesota Department of Transportation "Standard Specifications For Highway Construction" Shall Govern.

INDEX

SHEET NO.	TITLE
1	TITLE PAGE
2	ESTIMATED QUANTITIES, STANDARD PLATES, & TYPICAL SECTIONS
3	PARKING LOT DETAILS, JOINT LOCATION DETAIL
4	PARKING LOT STORM SEWER BUILDING #6 DRIVEWAY
5	SILVER CREEK ROAD
6	SILVER CREEK ROAD
7	EAST SERVICE DRIVE
8	CAMPUS DRIVE
9 - 10	SILVER CREEK ROAD CROSS SECTIONS
11	EAST SERVICE DRIVE & CAMPUS DRIVE CROSS SECTIONS

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am duly Registered Professional Engineer under the laws of the State of Minnesota

Robert E. Toddie, P.E
Kirkham, Michael & Associates, Inc.

Date 4/15/85 Reg. No. 6937

DESIGN DESIGNATION

R .....
ADT (Current Year) = ...
ADT (Future Year) = ...
DHV (Design Hr. Vol.) = ...
D (Directional Distr.) = ... %
T (Heavy Commercial) = ... %
SOIL FACTOR .....

ΣN18(20) .....
Design Speed ..... MPH
Based on ..... Sight Distance
Height of eye ..... Height of object .....
Design Speed not achieved at:
STA. ..... TO STA. ..... MPH.....
STA. ..... TO STA. ..... MPH.....
STA. ..... TO STA. ..... MPH.....

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE 4/16/85 REG. NO. 10397 ENGR. Michael J Sheehan

COUNTY ASSISTANT COUNTY ENGINEER

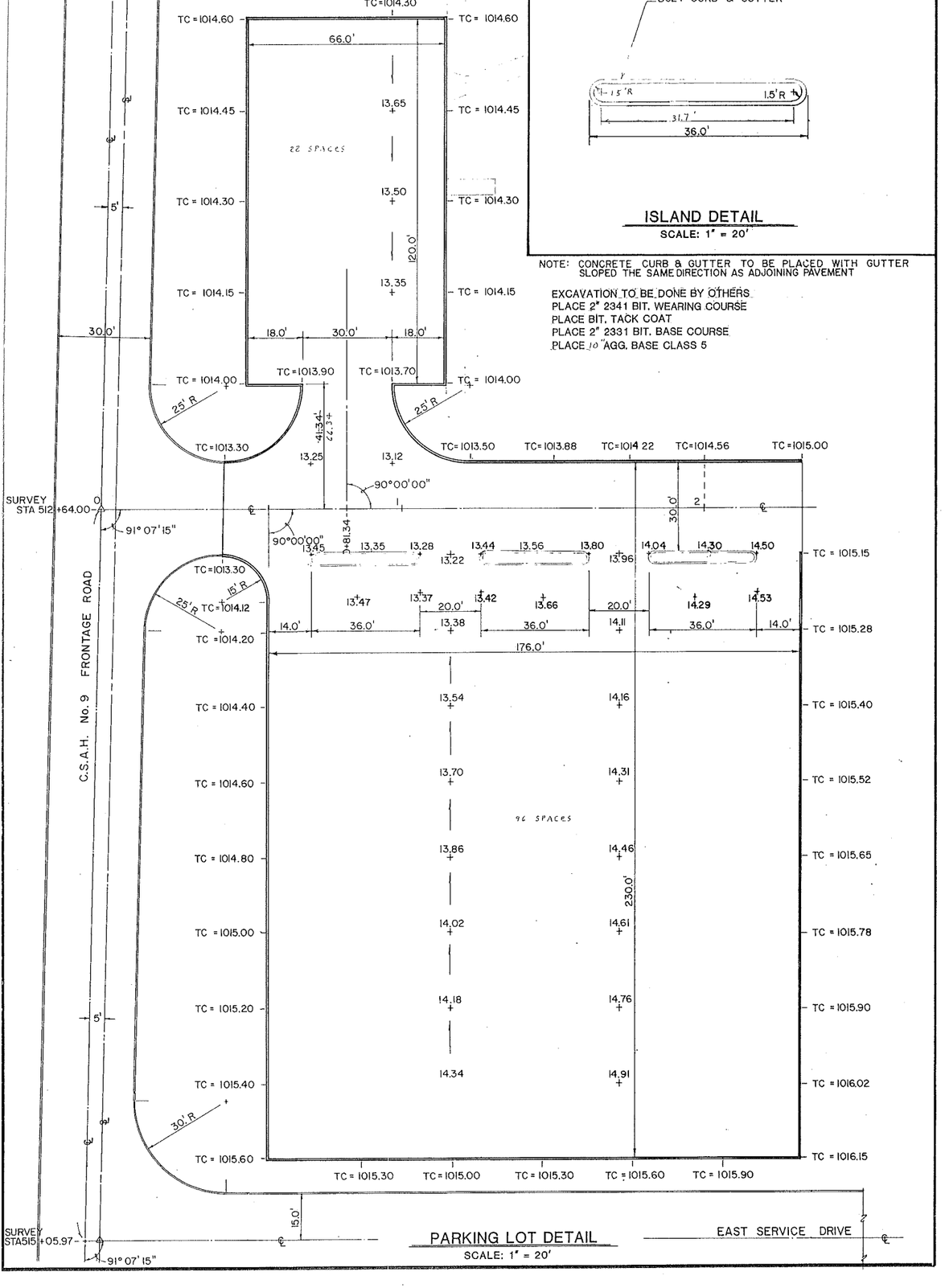
Recommended for Approval ..... 19.....

Recommended for Approval ..... 19.....

Approved ..... 19.....

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
DIVISION ADMINISTRATOR DATE

SHEET NO. 1



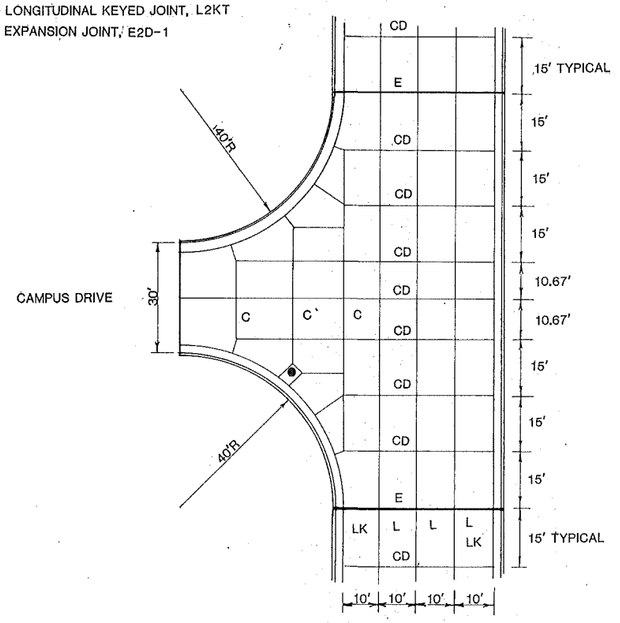
PARKING LOT DETAIL
SCALE: 1" = 20'

ISLAND DETAIL
SCALE: 1" = 20'

NOTE: CONCRETE CURB & GUTTER TO BE PLACED WITH GUTTER SLOPED THE SAME DIRECTION AS ADJOINING PAVEMENT

EXCAVATION TO BE DONE BY OTHERS
PLACE 2" 2341 BIT. WEARING COURSE
PLACE BIT. TACK COAT
PLACE 2" 2331 BIT. BASE COURSE
PLACE 10" AGG. BASE CLASS 5

C = CONTRACTION JOINT, C1-1
CD = DOWELED CONTRACTION JOINT, C5D-1
L = LONGITUDINAL JOINT, L1T OR L2KT
LK = LONGITUDINAL KEYED JOINT, L2KT
E = EXPANSION JOINT, E2D-1



SILVER CREEK ROAD

JOINT LOCATION DETAIL
SCALE: 1" = 20'

KIRKHAM, MICHAEL AND ASSOCIATES
ARCHITECTS ENGINEERS PLANNERS

revisions

CAMPUS ROADWAY IMPROVEMENTS PHASE II
OLMSTED COUNTY MINNESOTA

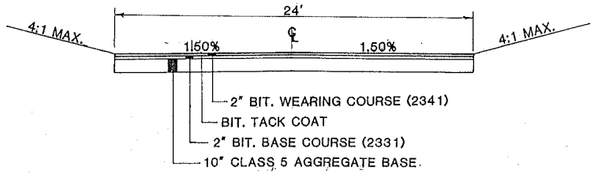
PARKING LOT DETAILS
JOINT LOCATION DETAIL

date APR. 1985
drawn K.W.H.
checked R.E.T.
job no. 8840635

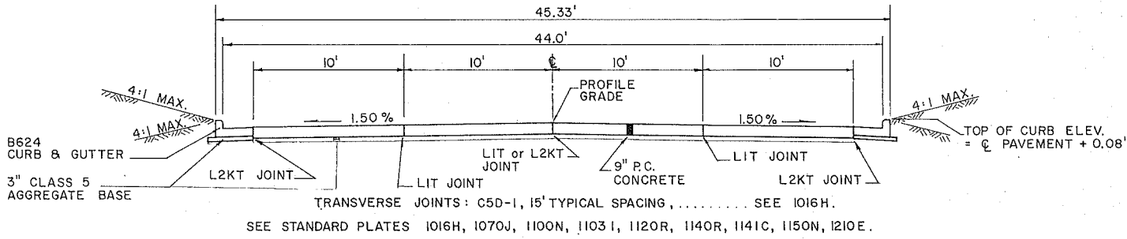
SHEET 3

ESTIMATED QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES		
2021.501	MOBILIZATION	LUMP SUM	LS		
2101.502	CLEARING	TREE	3		
2101.507	GRUBBING	TREE	3		
2104.501	REMOVE CULVERT PIPE	LF	70		
2105.501	COMMON EXCAVATION	CY	8600 P		
2123.501	COMMON LABORERS	HOUR	40		
2123.510	10 CY TRUCK	HOUR	40		
2123.514	4 CY FRONT END LOADER	HOUR	40		
2211.501	AGGREGATE BASE, CLASS 5	TON	6900		
2301.501	CONCRETE PAVEMENT, 9"	SY	9230		
2301.511	STRUCTURAL CONCRETE	CY	2350		
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	74		
2331.514	BASE COURSE MIXTURE	TON	1400		
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	78		
2341.508	WEARING COURSE MIXTURE	TON	1300		
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	590		
2501.515	42" R.C. PIPE APRON	EACH	1		
2501.525	13-1/2" X 22" SPAN R.C. PIPE ARCH APRONS, 3110F	EACH	2		
2501.565	13-1/2" X 22" SPAN R.C. PIPE ARCH CULVERT, 3014J, CL IIA	LF	60		
2503.511	12" RC PIPE SEWER CLASS IV	LF	564		
2503.511	15" RC PIPE SEWER CLASS IV	LF	6		
2503.511	18" R.C. PIPE SEWER, CL III	LF	478		
2503.511	24" RC PIPE SEWER CLASS III	LF	483		
2503.511	27"R.C. PIPE SEWER CL III	LF	412		
2503.511	36" R.C. PIPE SEWER, CL III	LF	287		
2503.511	42" R.C. PIPE SEWER, CL III	LF	1222		
2506.508	CONSTRUCT MANHOLE, DESIGN TYPE 2	EACH	6		
2506.508	CONSTRUCT MANHOLE DESIGN TYPE 4-A2	EACH	4		
2506.509	CONSTRUCT CATCH BASIN, DESIGN TYPE 1-B	EACH	15		
2506.509	CONSTRUCT CATCH BASIN, DESIGN TYPE 3	EACH	3		
2506.522	ADJUST FRAME AND RING CASTINGS	EACH	2		
2511.501	RANDOM RIPRAP, CLASS II	CY	11		
2531.501	CONCRETE CURB AND GUTTER DESIGN B624	LF	8222		
2571.541	TRANSPLANT TREES	TREE	1		
2575.501	ROADSIDE SEEDING, MIXTURE 5	ACRE	2		
2575.505	SODDING	SY	2550		
	RELOCATE HYDRANT	EACH	2		
	STEEL CASING PIPE	LF	90		



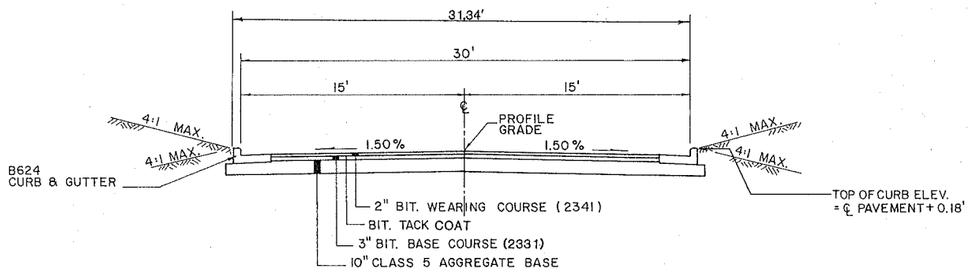
BUILDING #6 DRIVEWAY



TRANSVERSE JOINTS: C5D-1, 15' TYPICAL SPACING, ... SEE 1016H.

SEE STANDARD PLATES 1016H, 1070J, 1100N, 1103I, 1120R, 1140R, 1141C, 1150N, 1210E.

SILVER CREEK ROAD



EAST SERVICE DRIVE
CAMPUS DRIVE

STANDARD PLATES

CITY OF ROCHESTER

PLATE NO.	DESCRIPTION
SDP1-01	CATCH BASIN TYPE 1-B
SDP1-03	CATCH BASIN TYPE 3
SDP1-05	CURB AND GUTTER REINFORCING AT CATCH BASINS
SDP1-07	FRAME, GRATE, AND CURB BOX CASTING FOR CATCH BASINS
SDP2-03	CURB AND GUTTER BASE PREPARATION
SDP4-01	MANHOLE COVER AND CASTINGS RING
SDP4-02	MANHOLE ADJUSTING RINGS
SDP4-13	MANHOLE TYPE 4-A2
SDP4-09	MANHOLE TYPE 2
SDP7-04	TRENCH WIDTHS
SDP8-01	WATERMAIN THRUST BLOCKS
SDP8-02	TYPICAL SECTIONS LOWER OR RAISE WATERMAIN AND REBUILD WATERSERVICE
SDP8-03	WATERMAIN TIE RODS

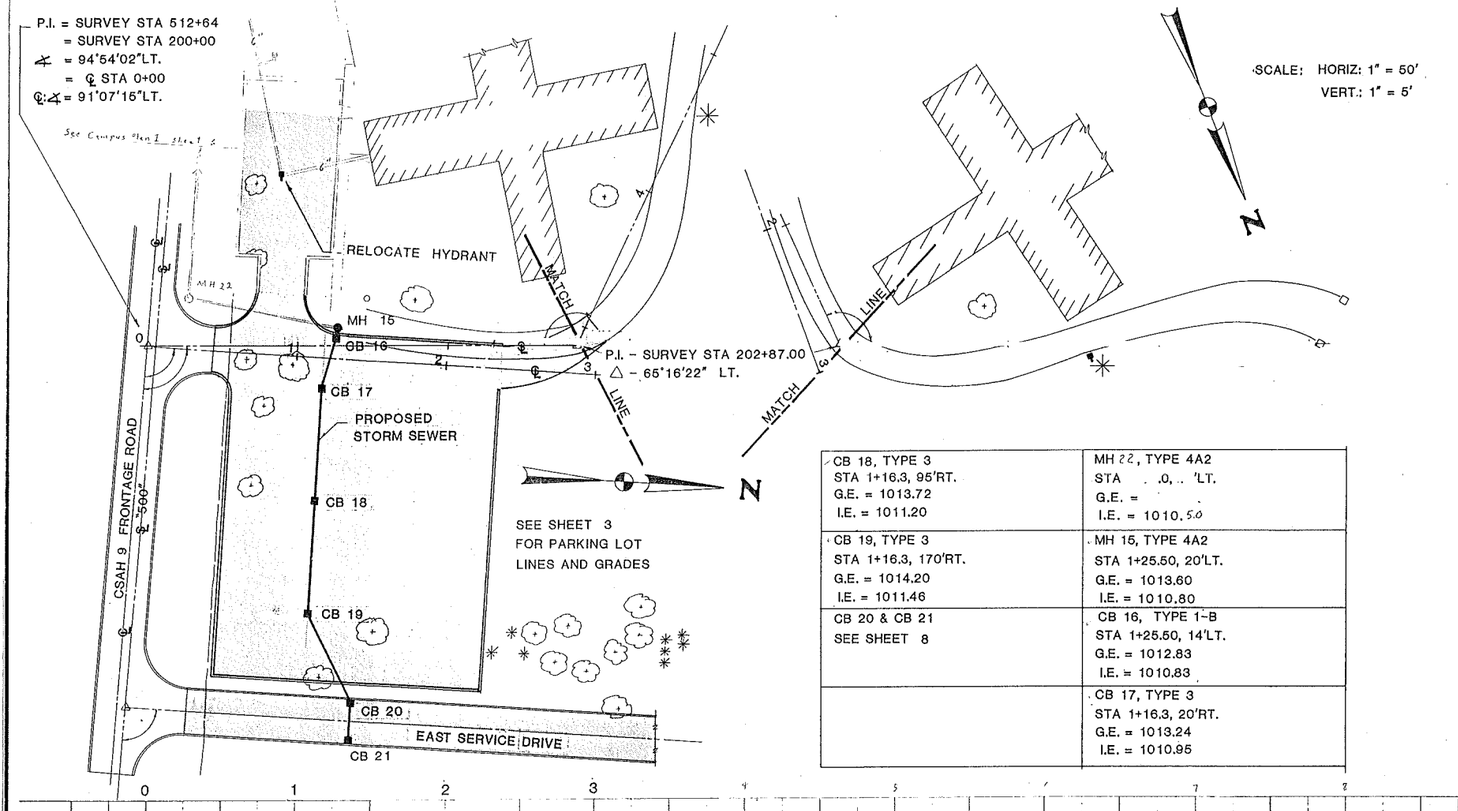
STANDARD PLATES

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT.

PLATE NO.	DESCRIPTION
0004A	SPECIFICATION REFERENCE TO STANDARD PLATES
1016H	CONCRETE PAVEMENT NON-REINFORCED
1100N	EXPANSION JOINTS
1103I	TYPICAL DOWEL BAR ASSEMBLY
1120R	CONTRACTION JOINTS
1140R	LONGITUDINAL JOINTS
1141C	PAVEMENT KEYWAY FOR KEYED JOINT CONSTRUCTION
1150N	CONSTRUCTION OF HEADER JOINTS
3000I	REINFORCED CONCRETE PIPE
3006D	GASKET JOINT FOR R.C. PIPE
3014J	REINFORCED CONCRETE PIPE ARCH DETAIL
3100F	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
3110F	CONCRETE APRON FOR REINFORCED CONCRETE PIPE-ARCH
3133A	RIP RAP AT R.C.P. OUTLETS
7100F	CONCRETE CURB AND GUTTER
8000H	STANDARD BARRICADES
9102C	SODDING AT PIPE CULVERT ENDS

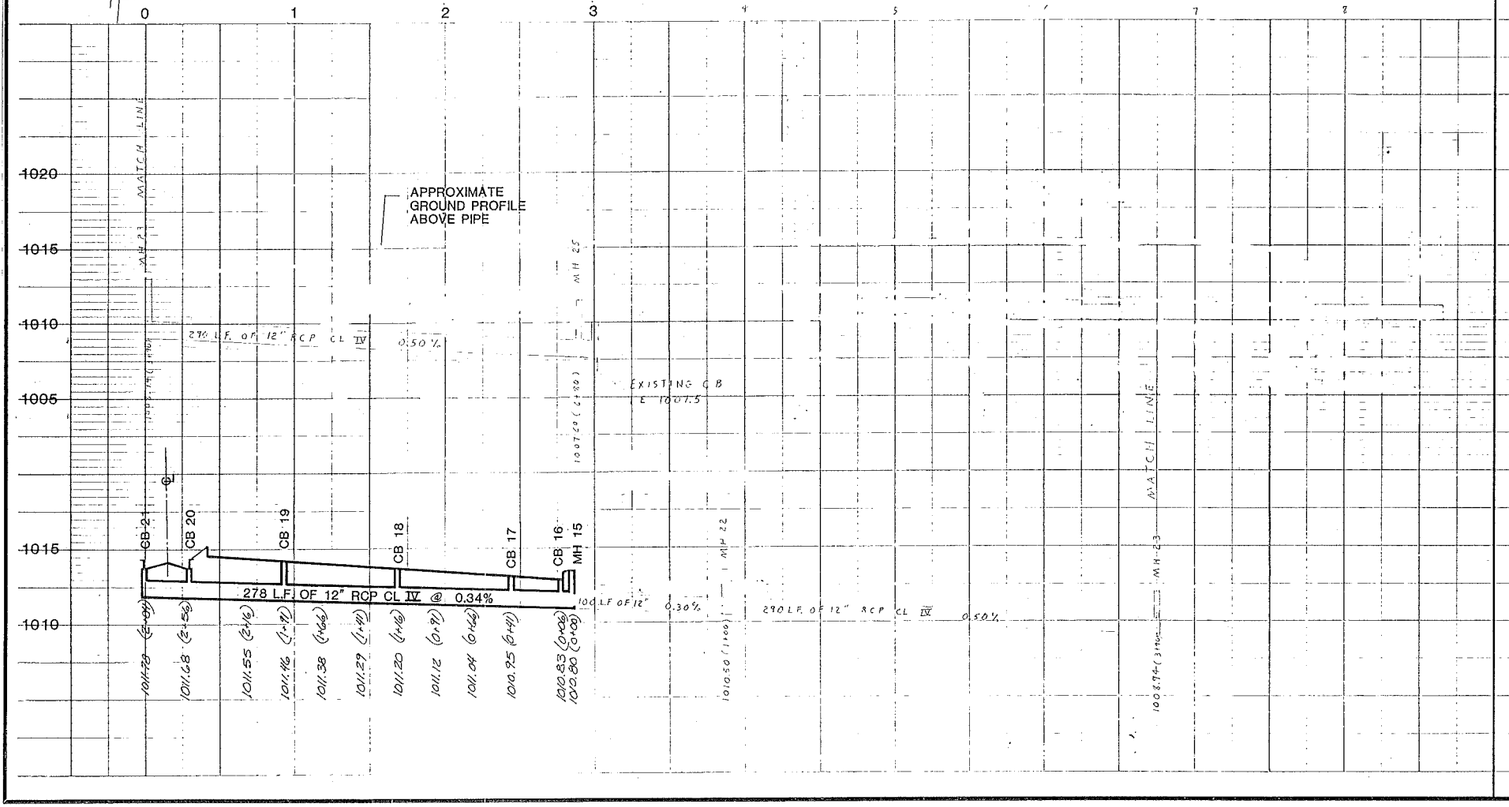
ARCHITECTS ENGINEERS
KIRKHAM,
revisions
CAMPUS ROADWAY IMPROVEMENTS, PHASE II
ESTIMATED QUANTITIES, STANDARD PLATES
date APR. 1985 designed
SHEET

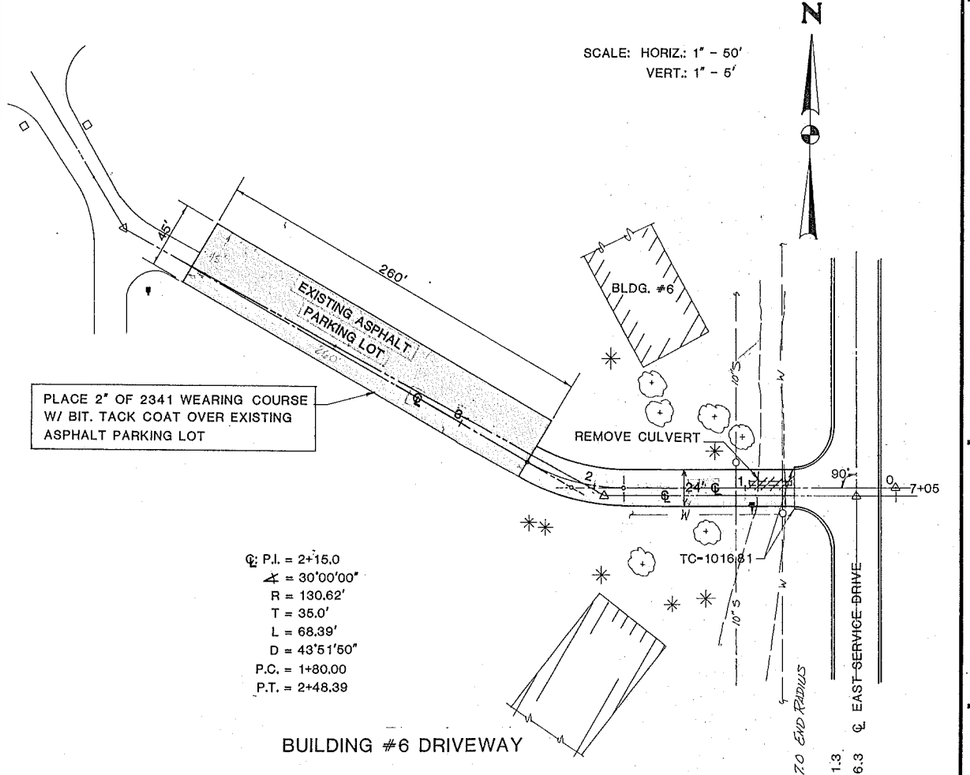
P.I. = SURVEY STA 512+64
= SURVEY STA 200+00
∠ = 94°54'02" LT.
= ℄ STA 0+00
℄ ∠ = 91°07'15" LT.

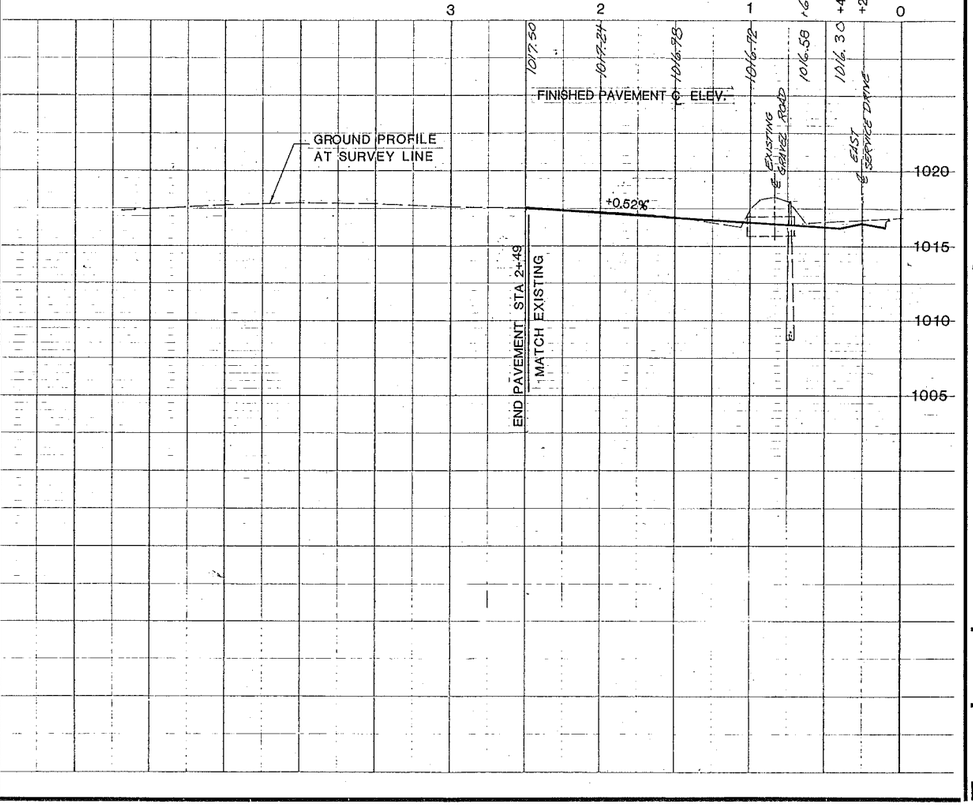


SCALE: HORIZ: 1" = 50'
VERT.: 1" = 5'

CB 18, TYPE 3 STA 1+16.3, 95'RT. G.E. = 1013.72 I.E. = 1011.20	MH 22, TYPE 4A2 STA . .0. . 'LT. G.E. = I.E. = 1010.50
CB 19, TYPE 3 STA 1+16.3, 170'RT. G.E. = 1014.20 I.E. = 1011.46	MH 15, TYPE 4A2 STA 1+25.50, 20'LT. G.E. = 1013.60 I.E. = 1010.80
CB 20 & CB 21 SEE SHEET 8	CB 16, TYPE 1-B STA 1+25.50, 14'LT. G.E. = 1012.83 I.E. = 1010.83
	CB 17, TYPE 3 STA 1+16.3, 20'RT. G.E. = 1013.24 I.E. = 1010.95







KIRKHAM, MICHAEL AND ASSOCIATES
ARCHITECTS ENGINEERS PLANNERS

revisions

CAMPUS ROADWAY IMPROVEMENTS PHASE II
OLMSTED COUNTY MINNESOTA

PARKING LOT STORM SEWER
BUILDING #6 DRIVEWAY

date APR. 1985
designed K.W.H.
checked R.E.T.
project B8340635

SHEET 4

R.14W T.106N R.13W 1 36 6 31

- SURVEY STA. 200+00

MH 9, TYPE 4A2
STA. 7+50, 33' LT.
G.E. - 1017.00
I.E.- 1012.40
E.IE IN-1012.50
CB 9-2, TYPE 1-B
STA. - 7+50, 21' LT.
G.E. - 1016.16
I.E. - 1012.74
CB 9-1, TYPE 1-B
STA. - 7+50, 21' RT.
G.E. - 1016.16
I.E. - 1013.16

MH 8, TYPE 2
STA 10+13, 33'LT.
GE-1017.50±
IE-1011.50

MH 7, TYPE 2
STA 13+00 33' LT.
G.E. -1017.70
IE-1010.64
E.IE IN -1011.22
CB 7-2, TYPE 1-B
STA. 13+00 21' LT.
G.E. - 1016.91
I.E. - 1011.66
CB 7-1, TYPE 1-B
STA. 13+00 21' RT.
G.E. - 1016.91
I.E. - 1012.50

ASPHALT APRON, W/40' RAD.
STA 0+32 TO STA 0+72
2" OF 2341 WEARING COURSE
6" OF 2331 BASE COURSE
6" OF CLASS 5 AGG. BASE

PLACE SOD AT CULVERT ENDS
SEE STANDARD PLATE 9102-C

REMOVE EXISTING 18" CMP CULVERT
PLACE 60 LF OF 13 1/2" X 22" RCP
ARCH CULVERT CL IIA AT 0.42%
WITH TWO CONCRETE APRONS
ALIGN SAME AS EXISTING CULVERT

40' R

I.E. - 1013.35

I.E. - 1013.70

P.I. - SURVEY STA. 600+00
- SURVEY STA. P.O.T. 225+46.15
STA. 0+00 - SURVEY STA. 600+00, 10' LT.
- LT. 90°18'41"

MH 9 — CB 9-2 — CB 9-1 — MH 8 — MH 7 — CB 7-1 — CB 7-2

CAMPUS DRIVE

PROPOSED STORM SEWER

SEE SHEET 6

MATCH LINE

SILVER CREEK ROAD

SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'

FINISHED PAVEMENT ℄ ELEVATIONS

1016.05 1016.00 1015.82 1016.12 1016.28 1016.44 1016.60 1016.76 1016.92 1017.08 1017.24 1017.40 1017.56 1017.35 1017.15 1016.95 1016.75 1017.00 1017.25 1017.50 1017.75 1017.88 1018.00 1018.16 1018.25 1018.41 1018.50 1018.25 1018.00 1017.75 1017.50 1017.75 1018.00 1018.25 1018.50

FINISHED ℄ PROFILE

EXISTING PROFILE AT SURVEY LINE

+0.32% -0.40% +0.50% -0.50% +0.50%

263 LF OF 24" RCP CL III @ 0.64

287 LF OF 36" RCP CL III @ 0.30%

SEE SHEET 6

BEGIN PAVEMENT STA 0+32
MATCH EXISTING EDGE OF HIGHWAY
BEGIN CONC. PAVEMENT STA 0+72

42 LF OF 12" RCP CL IV @ 1.00%
11 LF OF 12" RCP CL IV @ 2.18%

42 LF OF 12" RCP CL IV @ 2.00%
11 LF OF 12" RCP CL IV @ 4.00%

KIRKHAM, MICHAEL AND ASSOCIATES
ARCHITECTS ENGINEERS PLANNERS

revisions

CAMPUS ROADWAY IMPROVEMENTS PHASE II
OLMSTED COUNTY MINNESOTA

SILVER CREEK ROAD

SHEET 5

SRP
APP. 1985
designed K.W.H.
checked R.E.T.
kma no. B8406.35

MH 6, TYPE 2
STA 19+50, 33'LT.
G.E. = 1018.40
I.E. = 1008.69
E/E IN = 1011.94
CB 6-2, TYPE 1-B
STA. 19+50, 21'LT.
G.E. = 1017.61
I.E. IN = 1012.66, I.E. OUT = 1012.60
CB 6-1, TYPE 1-B
STA 19+50, 21'RT.
G.E. = 1017.61
I.E. OUT = 1013.50

MH 5, TYPE 2
STA 22+50, 33' LT.
G.E. = 1013.20
I.E. = 1007.79

N

SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'

EXISTING CAMPUS ENTRANCE

MATCH LINE SEE SHEET 5

PROPOSED STORM SEWER

MH 6

CB 6-2

CB 6-1

MH 5

173' 30"

50' 50'

GNW

90 LF OF 42" STEEL CASING AUGERED OR JACKED IN PLACE

42" RC APRON
STA. 26+20.17, 9.16' RT.
I.E. = 1006.68

PLACE RIPRAP
SEE STANDARD DETAIL
PLATE 3133A

EXISTING GRAVEL ROAD

BRIDGE

SILVER CREEK

CONSTRUCT CURB
DROP 30" WIDE
PLACE 40 TON
AGG. BASE CLASS 5

SURVEY STA 622+64.90
TAYLOR'S PROPERTY CORNER

B.M. SPK. IN PP = 1021.84

DNR DRIVEWAY

SILVER CREEK ROAD

15 16 17 18 19 20 21 22 23

1019.54 1019.75 1019.00 1018.25 1018.50 1019.25 1019.00 1018.75 1018.50 1018.37 1018.25 1017.75 1017.50 1016.87 1016.33

FINISHED PAVEMENT ℄ ELEVATIONS

EXISTING PROFILE AT SURVEY LINE

FINISHED ℄ PROFILE

P.V.I. = STA 19+50
P.V.I. ELEV = 1018.25
V.C. = 50'

1020 1015 1010 1005 1000

650 LF OF 42" RCP CL III AT 0.30%

300 LF OF 42" RCP CL III AT 0.30%

MH 6

STA. 21+00
END CONC. PAVEMENT

MH 5

EXISTING PROFILE AT SURVEY LINE

272 LF OF 42" RCP CL III AT 0.30%

CONSTRUCT CONCRETE COLLAR
6" THICK X 24" WIDE AROUND PIPE JOINT

90 LF OF 42" STEEL CASING AT 0.30%
AUGERED OR JACKED IN PLACE

CB 6-1 CB 6-2 MH 6

42 LF OF 12" RCP CL IV AT 2.00%

11 LF OF 12" RCP CL IV @ 6.00%

KIRKHAM, MICHAEL AND ASSOCIATES
ARCHITECTS ENGINEERS PLANNERS

revisions

CAMPUS ROADWAY IMPROVEMENTS PHASE III
OLMSTED COUNTY MINNESOTA

SILVER CREEK ROAD

date 1985
designed K.W.H.
drawn R.E.T.
kmm no. B840535

SHEET 6

MH 13, TYPE 4-A2 STA 6+50, 25' LT. G.E. = 1016.50 I.E. = 1013.40	CB 13-2, TYPE 1-B STA 6+50, 14' LT G.E. = 1015.77 I.E. = 1013.45
	CB 13-1, TYPE 1-B STA 6+50, 14' RT. G.E. = 1015.77 I.E. = 1013.55
CB 21, TYPE 1-B STA 1+50, 14'RT. G.E. = 1013.77 I.E. = 1011.78	CB 20, TYPE 1-B STA 1+50, 14'LT. G.E. = 1013.77 I.E. = 1011.68

MH 12, TYPE 2 STA 8+70, 25' LT. G.E. = 1017.30 SE I.E. IN = 1012.90 IE = 1012.74
CB 12-2, TYPE 1-B STA 4+37, 14' RT. G.E. = 1016.69 I.E. = 1013.32
CB 12-1, TYPE 1-B STA 4+37, 14' LT. G.E. = 1016.69 I.E. = 1013.70

SCALE: 1" = 50'

P.I. = SURVEY STA 700+00
= SURVEY STA P.O.T. 515+05.67
= STA 0+00
∠ = 91°07'15" LT.

∠ = 91°07'15"

MH 15
CB 16
CB 17
CB 18
CB 19
CB 20
CB 21
MH 13
CB 13-2
CB 13-1
MH 12
CB 12-2
CB 12-1

176'
200'
30'
25'R
15'R
30'R

SEE SHEET 4 FOR PARKING LOT STORM SEWER

SEE SHEET 3 FOR PARKING LOT LINES & GRADES

6 - SSAH 9 - FRONTAGE ROAD - S 500'

BLDG. 6

RELOCATE HYDRANT
REMOVE CULVERT
15" CMP
EXISTING GRAVEL DRIVE
PROPOSED STORM SEWER
10"S
W

P.I. STA 7+05
∠ = LT. 90°00'00"

SEE SHEET 4 FOR CONTINUATION OF BLDG. #6 DRIVEWAY

SEE SHEET 8 FOR CONTINUATION EAST SERVICE DRIVE STA. 8+00 = CAMPUS DRIVE STA. 4+87

MATCH LINE

EAST SERVICE DRIVE

FINISHED PAVEMENT ℄ ELEVATIONS

EXISTING PROFILE AT SURVEY LINE
FINISHED ℄ PROFILE

+0.40%

BEGIN PAVEMENT STA 0+40.67

220 LF OF 24" RCP CL III AT 0.30%

EXISTING SANITARY SEWER

28 LF OF 12" RCP CL IV AT 0.36%
11 LF OF 12" RCP CL IV AT 0.45%
28 LF OF 12" RCP CL IV AT 1.00%
26 LF OF 12" RCP CL IV AT 2.00%

0 1 2 3 4 5 6 7 8

1020 1015 1010 1005

KIRKHAM, MICHAEL AND ASSOCIATES
ARCHITECTS ENGINEERS PLANNERS

revisions

CAMPUS ROADWAY IMPROVEMENTS PHASE II
OLMSTED COUNTY MINNESOTA

EAST SERVICE DRIVE

dsgn APR.1985
drawn
K.W.H.
checked
R.E.T.
project no.
8840635

SHEET 7

MH 11, TYPE 2 STA. 1+90, 20' LT. G.E. = 1017.30 I.E. = 1011.70
CB 11-2, TYPE 1-B STA. 1+90, 14' RT. G.E. = 1016.57 I.E. = 1013.00
CB 11-1, TYPE 1-B STA. 1+90, 14' LT. G.E. = 1016.57 I.E. = 1012.72

N

SCALE: HORZ: 1" = 50'
VERT: 1" = 5'

KIRKHAM, MICHAEL AND ASSOCIATES
ARCHITECTS ENGINEERS PLANNERS

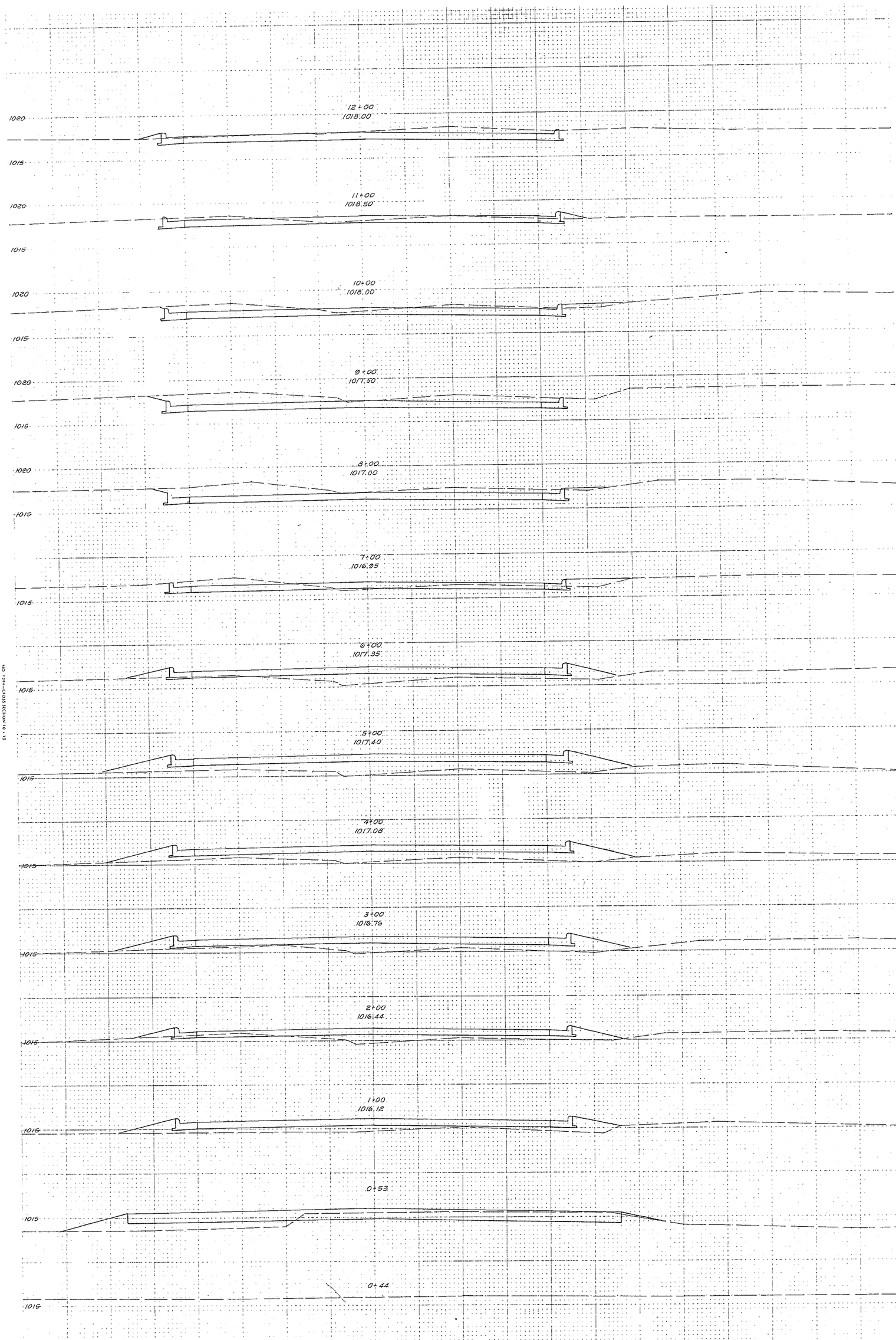
revisions 4-9-85

CAMPUS ROADWAY IMPROVEMENTS PHASE II
OLMSTED COUNTY MINNESOTA

CAMPUS DRIVE

date April 1985
designed K.W.H.
checked R.E.T.
K.M.A. No. B840635

SHEET 8



10 X 10 PER INCH CROSS SECTION 10 X 10
"CLEARPRINT PAPER CO."
MADE IN U.S.A.

SHEET 9	SILVER CREEK ROAD CROSS SECTIONS	CAMPUS ROADWAY IMPROVEMENTS PHASE II

SILVER CREEK ROAD
CROSS SECTIONS

CAMPUS ROADWAY
IMPROVEMENTS PHASE II

OLMSTED COUNTY
MINNESOTA

SHEET
10

23+00
1020

22+00
1015

21+00
1016.33
1020

20+00
1017.91
1015

19+00
1018.50
1020

18+00
1019.00
1015

17+00
1018.50
1020

16+00
1019.00
1020

15+67
1018.83
1015

15+53
1015

15+20
1018.50
1020

14+00
1018.
1020

13+00
1017.50
1015

0
10
20
30
40
50

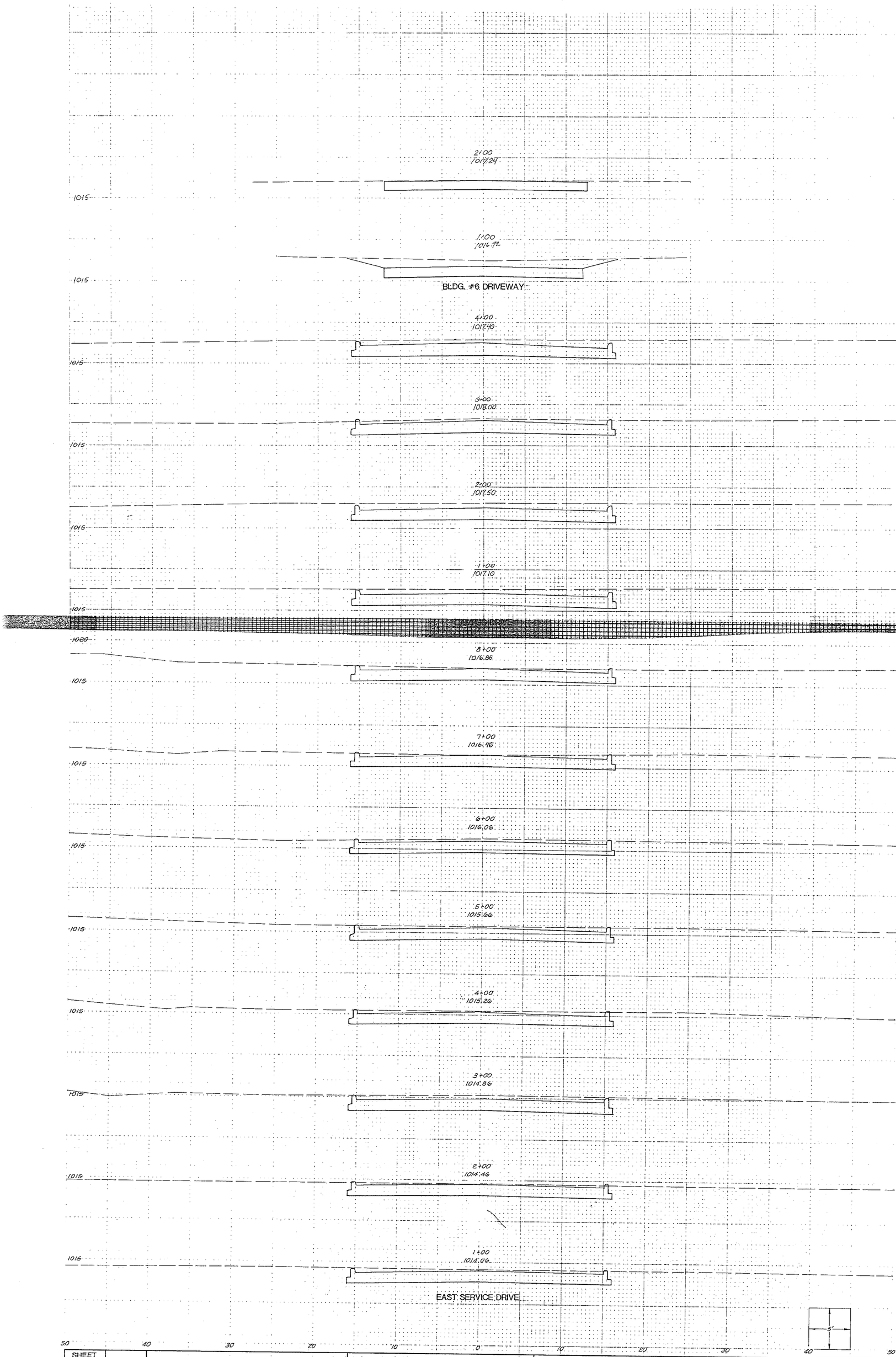
0 20 30 40 50

16% GRADE

DRIVEWAY

S = 5'

"CLEARPRINT PAPER CO."
MADE IN U.S.A.
NO. 1324 - CROSS SECTION 10 x 10



SHEET					
11		EAST SERVICE DRIVE CAMPUS DRIVE CROSS SECTIONS	CAMPUS ROADWAY IMPROVEMENTS PHASE II OLMSTED COUNTY MINNESOTA		