0+05 Begin 24" R.C.P. Encase 10' with reinf. conc.

CANAL

MOSLEY

LINE 1

117.05 top of load

113.86 f/o

15.8'

conc.

top of 116.68

114.50 6" PVC

115.50 f/o

f/o 114.17

replace surface with 4" asph. conc.

Sta 21+57 Construct brick manhole.

0+66 Construct brick manhole.

Compact backfill 0+05 to 0+25
Begin sand fill @ 0+55
Flush all backfill 0+25 to end project.

N

Scale: 1" = 20'

Sta. 4+81 Construct brick manhole.

Sta. 5+37 Construct brick manhole.

Sta. 6+29 Construct brick manhole. End Line #1

Note: Contractor is to repair or replace any sanitary sewer connections damaged or removed by construction of storm sewers. The top of backfill between 0+67 & asph. path is to be rock or gravel.

TC 122.20 f/o and 119.00

183'-15"

f/o 122.00

f/o out 118.00 TC 122.00

LINE 2

21ST ST.

Bid price of manholes removed is to include plugging pipes, removing castings & filling manhole with sand. Plugging of leads @ inlets is to be included in bid price of inlets removed.

remove inlets & plug pipes

B.M. 123.35 '+' cut on N. Cor. Conc. wing, N.W. Cor. Canal Bridge on Mosley, S. of 21st St.

B.M. 122.06 'X' cut on N. end conc. ret. wall S. side Bldg., N.S. 21st St., 127' E. of Alley

0+66 Const. brick MH

Sta 21+57 Const. brick MH

Sta 5+37 Const. brick MH

Sta 6+29 Const. brick MH End Line #1

LINE 1

24" R.C.P. @ +0.70%

24" R.C.P. @ +7.10%

rip-rap

10' perm. conc. easement

18" R.C.P. @ +0.60%

f/c in f/o out 112.05

f/o in f/o out 112.28

f/o out 113.80 f/c in 115.26

f/o out 115.54

f/o out 115.80 f/c in 116.44

f/o in f/o out 117.69

f/o out 118.20

top m.h. 122.30

top m.h. 121.90

top m.h. 121.80

f/c in f/o out 118.44

f/o out 118.20

0+00

1+00

2+00

3+00

4+00

5+00

6+00

120

110

100

DRAINAGE - 21ST ST.
BROADWAY TO WASHINGTON
CITY OF WICHITA, KANSAS
B.E. SMITH - CITY ENGINEER
SEPT., 1964 PROJ. C14-53

1/3

Scale: 1"=20'

MOSLEY

Sta. 2+68 Construct brick manhole. End Line 1-A.

Line 1-A

T.C. 123.51
f/o out 119.70
f/i in 119.50

12" S.W.S.

21ST ST.

f/i in 119.50

f/o out 120.00

T.C. 123.38

Sta. 0+00 Line 1-A =
Sta. 4+91.5 Line 1

M.O.P. R.R.

Construct 2'x5' inlet & connect existing 6" pipe. remove existing inlets & manhole & plug pipes.

Scale: 1"=20'

BROADWAY

M.H.

remove existing inlet & lead & construct 2'x5' inlet & 15" lead

S.W.S.

M.H.

21ST ST.

21ST ST.

15" V.C.P.

M.H.

18" S.W.S. M.H. 30" S.W.S.

remove inlet & plug pipes

remove inlet

30"-15" R.C.P.

construct 2 2'x5' inlets & 15" leads as shown

TOPEKA

Grade pave plan

T.C. 122.60

f/o out 119.50

remove inlet

50'-15" R.C.P.

21ST ST.

50' S.W.S.

30" S.W.S.

f/o in 119.00

f/o in 119.30

16'-15" R.C.P.

f/o out 118.50

T.C. 122.71

Adjust existing grate inlet

remove grate & plug lead

3032 pave plan

M.H.

compact backfill

Sta. 2+68 End Line 1-A

Top rail 124.10

18" R.C.P. @ +0.66%

18" R.C.P. @ +0.66%

120

110

LINE 1-A

f/o in 117.40

Sta. 0+00 Line 1-A

118.06

117.72

f/o out 117.17

1400

2400

18" C.M.P. (10 ga) laid in place

Road concrete backfill

18" R.C.P.

Alternate method of R.R. crossing To be bid as lin. ft. of tunnel. R.C.P. will be bid separate.

Rail

compact backfill to cut density or greater.

#5 ⊓ bars @ 2' ctrs.

#5 longitudinal bars

trench width.

Open trench through track area. The Contractor it to make arrangements with the R.R. Co. on timing & method of track area crossing. All charges by the R.R. for flagmen, etc. will be paid by the Contractor. To be bid as lin. ft. of R.C. existing pipe bid separate.

Railroad Crossing Details
no scale

DRAINAGE
21ST ST.
C14-53
SHEET 2 OF 3

Sta. 0+00 Begin 24" R.C.P. @ outside face of wing-wall.

11.85 spring plan T.C. 122.25

flo. out 118.00

remove inlet & plug pipe

33.9'-15" R.C.P.

21ST ST.

flo in 118.50

24" R.C.P.

3'-15"

Double 2'x2' grate inlet gutter flo 122.62

remove existing inlet & plug pipes

Sta. 1+16 Construct brick manhole 18" to & 21st

remove existing inlet & construct 2'x5' inlet on existing pipes.

T.C. 122.54

flo. out 119.50

95.4'-15" R.C.P.

flo in 119.00

remove inlet

Sta. 3+24 Construct brick manhole

WICHITA TERMINAL R.R.

Hotel

NOTE: Open trench railroad crossing. Mechanically compact backfill thru crossing. Contractor is to make arrangements with R.R. for track removal replacement, etc. All charges by the R.R. to flagmen, etc. will be paid by the Contractor. (See note on R.R. crossing detail).

remove existing inlet & construct 2'x5' inlet

flo. out 119.50

59.6'-15" R.C.P.

flo in 119.90

24" R.C.P.

Line 2.7

remove dead M.H.

T.C. 122.15

Sta. 5+52 Construct brick manhole

remove existing inlet & plug pipes

T.C. 121.54

flo out 118.50

61'-15" R.C.P.

flo in 119.00

54'-18"

flo in 118.00

flo out 118.00

7'-15"

T.C. 121.13

Sta. 6+71 Construct brick manhole End 24" R.C.P.

remove grate inlet plug opening to catch basin

B.M. 122.63 'b' cut on N.S. conc. base to Coca Cola Sign, S. Side 21st @ 0+59

Repair pavt. around manholes with 6" thick concrete. No pay items. It may be necessary to alter alignment & elevation of the storm sewer during construction.

B.M. 124.03 N.W. Cor. Conc. base Stelly Sign, S. Side 21st St. @ 5+39.

Begin Line 2

H.M. 1+10

top m.h. 121.82

flo out 113.70

flo in 114.32

flo out 114.82

H.M. 2+10

top m.h. 122.22

flo in 114.88

flo out 115.38

H.M. 3+10

flo in 115.88

flo out 116.38

H.M. 4+10

top m.h. 121.70

flo in 116.94

flo out 117.44

H.M. 5+10

top m.h. 121.35

flo in 117.60

flo out 118.10

H.M. 6+10

flo in 118.10

flushed sand fill

compacted backfill

24" R.C.P. @ +0.62%

24" R.C.P. @ +0.50%

24" R.C.P. @ +0.50%

24" R.C.P. @ +0.50%

LINE 2

DRAINAGE - 21ST ST.
BROADWAY TO WASHINGTON
PROJ. C14-53 SHEET 3 OF 3

10 14 4 (4)

B.M. 1247.1 Brass Rod in Conc. Post N. end Traffic Island. 22.0 E. & 41.5 N. Trimble & Broadway & 21st. Street.

NOTE: All 6 Sack Conc. & Ramp Type Drives will be paid as Cu. Yds. Concrete.

B.M. 1245.55 + N.E. Cor. of conc landing to steps on N side building # 421

N

Scale: 1" = 20'

0+00 0+50 1+00 1+50 2+00 2+50 3+00 3+50 4+00 4+50 5+00 5+50 6+00

20' V.C. P.V.I. El. 3.36 N.E. 0+46 — P.V.C. 0+36 — P.V.T. 0+56 — -1.136% — 30' Transition 00 to Full Cb.

20' V.C. P.V.I. El. 4.86 0+90 — P.V.C. 0+80 — -3.800% — 30' Transition 00 to Full Cb.

20' V.C. P.V.I. El. 4.60 (Cb) 1+10 — P.V.T. 1+20 — -0.550%

No V.C. req. P.V.I. El. 3.83 2+50 — -0.280%

21 ST. — STREET

Street Car Track Area (Remove Brick Only)

BROADWAY — TOPEKA

+2.283% — -1.341% — -3.800% — -0.750% — -0.500% — -0.325%

0+16 — 0+75 — 1+75 P.V.T. — 3+00.05

0+36 P.V.C. — 0+56 P.V.T. — P.V.I. El. 3.45 N.E. 20' V.C.

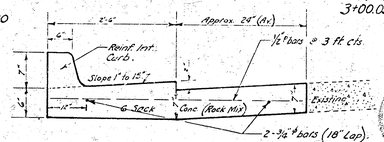
0+80 P.V.I. El. 4.86 20' V.C. — 1+00 P.V.C. — +80 P.V.C.

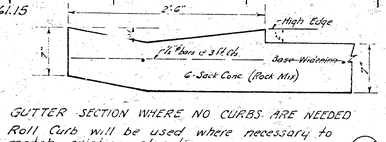
1+20 P.V.T. — 1+50 P.V.I. El. 4.30 50' V.C.

20' Alley (vacated) +1.30 ft.

+61.15

CURB & GUTTER & BASE WIDENING DETAIL





GUTTER SECTION WHERE NO CURBS ARE NEEDED
Roll Curb will be used where necessary to match existing elevations.

16

21st STREET

FROM E.L. BROADWAY to W.L. WASHINGTON
Comb. Curb & Gutter. 2" Asph. Conc. Improve & Reimprove
B.E. SMITH CITY ENGINEER
CITY OF WICHITA, KANSAS
Date: SEPT. 1954

Project No. C14-53

B.M. 122.63 'a' Cut on conc base on N. side Metal Pole to Coca Cola Sign (N.E.) Sta. 11+63

No V. Curve P.V.I. El. 2.60 6+50

Begin Bridge 10+10

End Br. 10+42.5

25' V.C. P.V.I. El. 2.23 11+75

6+00 6+50 7+00 7+50 8+00 8+50 9+00 9+50 10+00 10+50 11+00 11+50 12+00

P.V.C. +62.5 P.V.T. +87.5

-0.280% +0.300% -1.066% +0.160%

21st STREET

-0.325% +0.298% -1.236% H.E. +0.450% +0.160%

6+66 P.V.I. El. 2.51 No. V. Curve

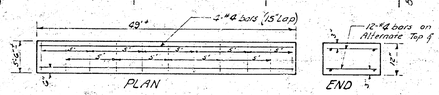
10+05 Beg. Bridge

10+44 End Br.

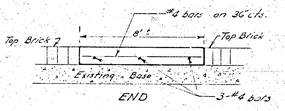
11+50 P.V.C. 11+70 P.V.T.

11+60 P.V.I. El. 1.58 H.E. 20' V.C.

12+00 P.V.I. El. 1.76 H.E. 30' V.C.

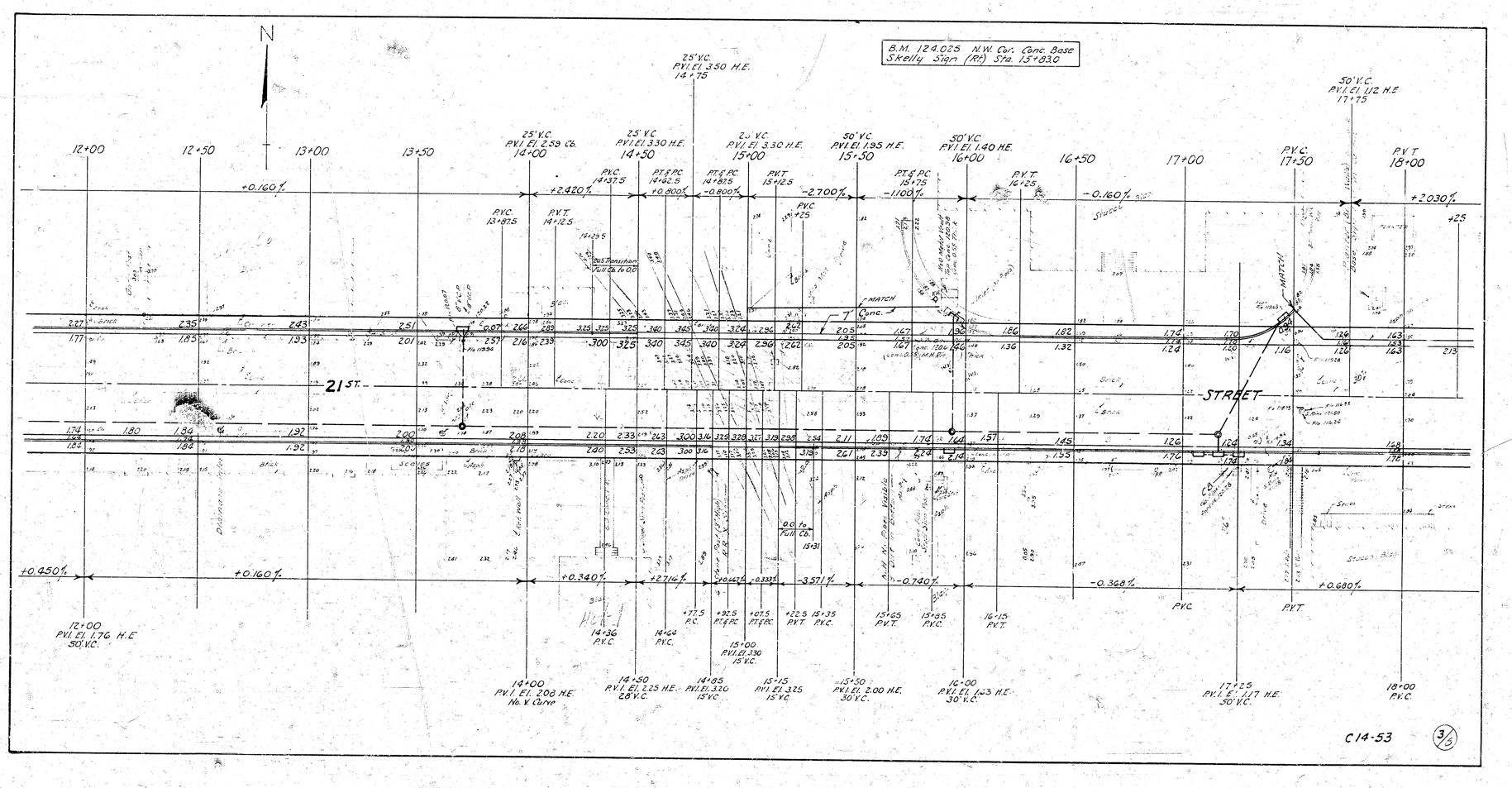


REINF. STEEL PATTERN FOR 12" CONCRETE BETWEEN RAIL ROAD TRACKS.
No Scale



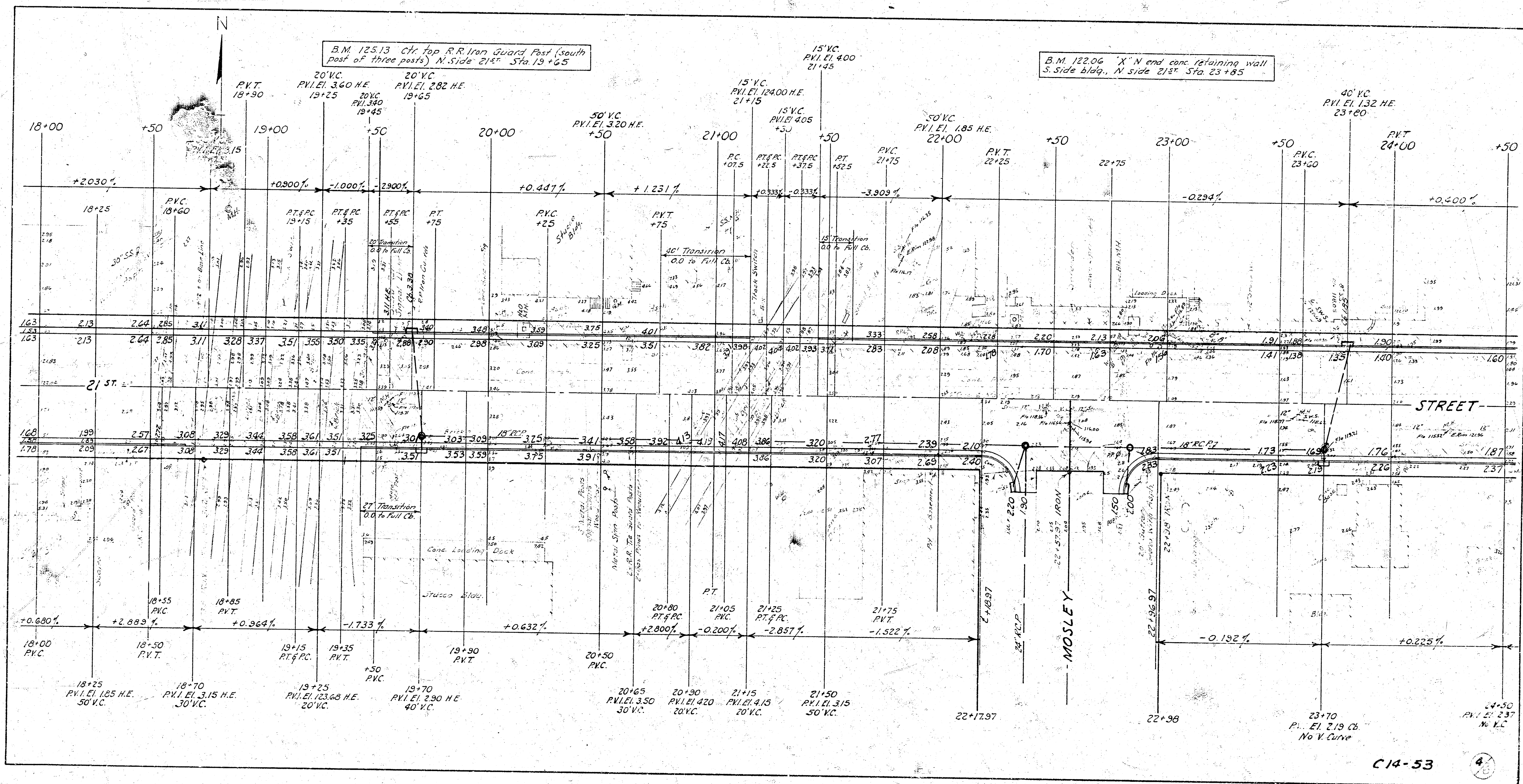
STEEL PATTERN - STREET CAR TRACK AREAS.
No Scale

C14-53 (2/6)

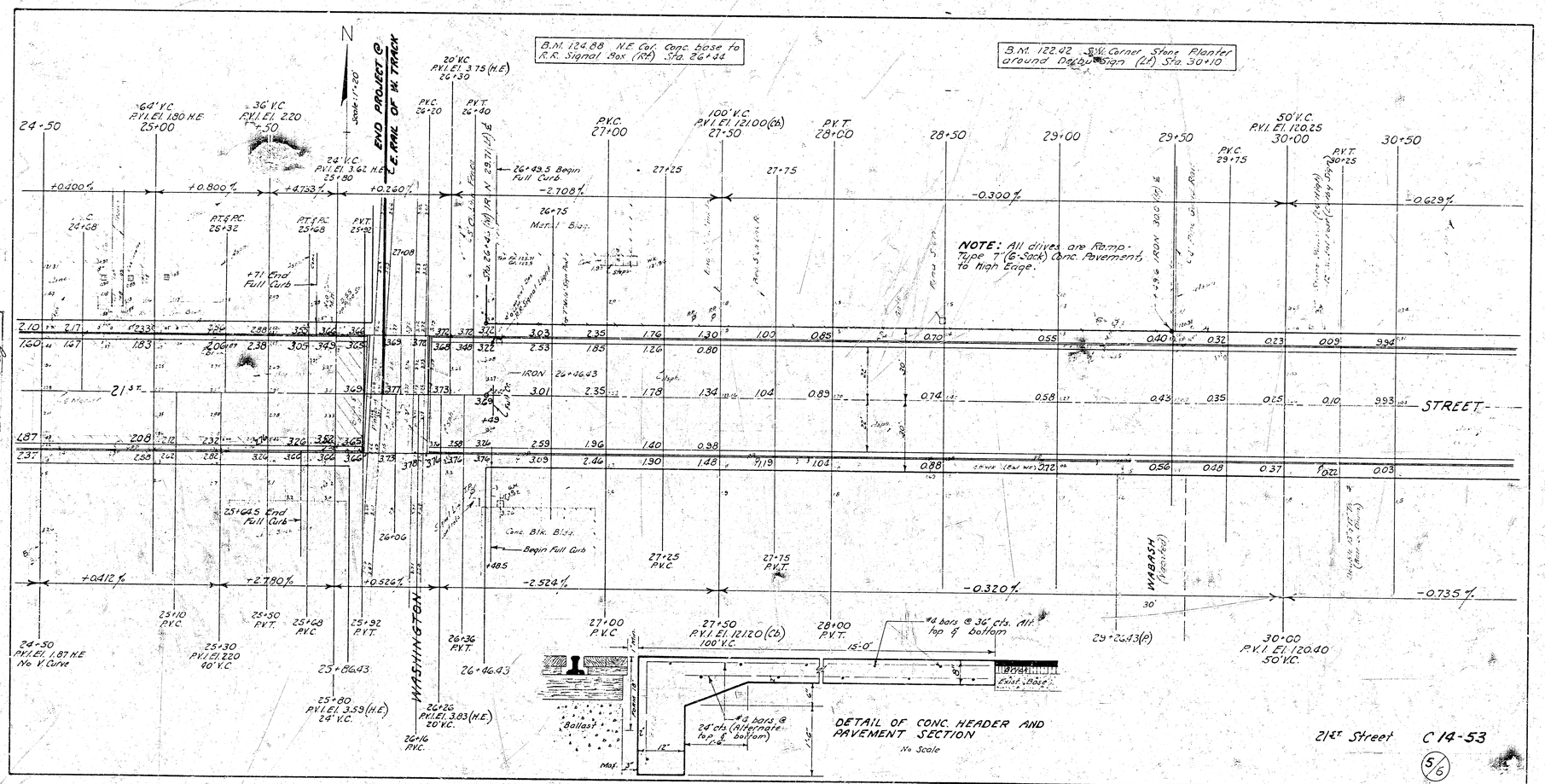

N
B.M. 124.025 N.W. Cor. Conc. Base
S Kelly Sign (Rt.) Sta. 15+83.0
25' V.C.
P.V.I. El. 3.50 H.E.
14+75
50' V.C.
P.V.I. El. 1.12 H.E.
17+75
12+00
12+50
13+00
13+50
14+00
14+50
15+00
15+50
16+00
16+50
17+00
17+50
18+00
25' V.C.
P.V.I. El. 2.59 Cb.
25' V.C.
P.V.I. El. 3.30 H.E.
2-V.C.
P.V.I. El. 3.30 H.E.
50' V.C.
P.V.I. El. 1.95 H.E.
50' V.C.
P.V.I. El. 1.40 H.E.
P.V.C. 14+37.5
P.T.&P.C. 14+62.5
P.T.&P.C. 14+87.5
P.V.T. 15+12.5
P.T.&P.C. 15+75
P.V.T. 16+25
P.V.C. 17+50
P.V.T. 18+00
P.V.C. 13+87.5
P.V.T. 14+12.5
P.V.C. +25
+25
+0.160%
+2.420%
+0.800%
-0.800%
-2.700%
-1.100%
-0.160%
+2.030%
-0.450%
+0.160%
+0.340%
+2.716%
+0.467%
-0.333%
-3.571%
-0.740%
-0.368%
+0.680%
MATCH
Conc.
21 ST.
STREET
Brick
Concrete
Dwelling
Garage
Shed
Store
Office
Drive
Steps
Curb
Gas Transition Full Co. to 0.0
0.0 to Full Co. 15+31
Conc. Base Curb
Conc. Curb
Cast Iron Water Main
Cast Iron Sewer
Vitrified Sewer
Gas Main
Elec. Light Pole
Elec. Power Pole
Fire Alarm Box
Fire Hydrant
Water Valve
Manhole
Catch Basin
Gas Valve
Gas Meter
Telephone Pole
Guy Wire
Flood Light
Mail Box
Sign
Tree
Hedge
Fence
Wall
Retaining Wall
Steps
Curb
Gutter
Pavement
Sidewalk
Edge of Pavement
Edge of Sidewalk
Property Line
Building Line
Easement
Right of Way
Center Line
Railroad
Bridge
Culvert
Pipe
Inlet
Outlet
Ditch
Swale
Slope
Embankment
Excavation
Fill
Cut
Grade
Elevation
Station
Offset
Radius
Tangent
Curve
Chord
Bearing
Distance
Angle
Deflection
Intersection
Point of Curvature
Point of Tangency
Point of Intersection
Point of Beginning
Point of Ending
Point of Reference
Point of Control
Point of Tangency
Point of Curvature
Point of Intersection
Point of Beginning
Point of Ending
Point of Reference
Point of Control
12+00
P.V.I. El. 1.76 H.E.
50 V.C.
14+00
P.V.I. El. 2.00 H.E.
No. V. Curve
14+50
P.V.I. El. 2.25 H.E.
28 V.C.
14+85
P.V.I. El. 3.20
15 V.C.
15+15
P.V.I. El. 3.25
15 V.C.
15+50
P.V.I. El. 2.00 H.E.
30 V.C.
16+00
P.V.I. El. 1.43 H.E.
30 V.C.
17+25
P.V.I. E. 1.17 H.E.
30 V.C.
18+00
P.V.C.
14+36
P.V.C.
14+64
P.V.C.
+77.5
P.C.
+92.5
P.T.&P.C.
+07.5
P.T.&P.C.
15+00
P.V.I. El. 1.30
15 V.C.
+22.5
P.V.T.
15+35
P.V.C.
15+65
P.V.T.
15+95
P.V.C.
16+15
P.V.T.
P.V.C.
P.V.T.

C14-53

3/3



N
B.M. 125.13 Ctr. top R.R. Iron Guard Post (south post of three posts) N. Side 21ST. Sta. 19+65
B.M. 122.06 "X" N end conc. retaining wall S. Side bldg., N. side 21ST. Sta. 23+85
18+00
+50
19+00
+50
20+00
+50
21+00
+50
22+00
+50
23+00
+50
24+00
+50
P.V.T. 18+90
20'V.C. P.V.I. El. 3.60 H.E. 19+25
20'V.C. P.V.I. 3.40 19+45
20'V.C. P.V.I. El. 2.82 H.E. 19+65
50' V.C. P.V.I. El. 3.20 H.E.
15'V.C. P.V.I. El. 124.00 H.E. 21+15
15'V.C. P.V.I. El. 4.05 +30
15'V.C. P.V.I. El. 4.00 21+45
50'V.C. P.V.I. El. 1.85 H.E.
40'V.C. P.V.I. El. 1.32 H.E. 23+60
P.V.T. 24+00
+2.030%
+0.900%
-1.000%
-2.900%
+0.447%
+1.231%
+0.333%
-0.333%
-3.909%
-0.294%
+0.400%
18+25
P.V.C. 18+60
P.T.&P.C. 19+15
P.T.&P.C. +35
P.T.&P.C. +55
P.T. +75
P.V.C. +25
Stucco Bldg.
P.V.T. +75
P.C. +07.5
P.T.&P.C. +22.5
P.T.&P.C. +37.5
P.T. +52.5
P.V.C. 21+75
P.V.T. 22+25
22+75
P.V.C. 23+60
20' Transition 0.0 to Full Cb.
40' Transition 0.0 to Full Cb.
15' Transition 0.0 to Full Cb.
27' Transition 0.0 to Full Cb.
Track Switch
Loading Dock
21 ST.
STREET
18" R.C.P.
Conc. Loading Dock
Stucco Bldg.
Metal Sign Posts
MOSLEY
IRON
24" R.C.P.
22+18.97
22+57.97
22+96.97
22+98
Bldg.
+0.680%
+2.889%
+0.964%
-1.733%
+0.632%
+2.800%
-0.200%
-2.857%
-1.522%
-0.192%
+0.225%
18+00 P.V.C.
18+55 P.V.C.
18+50 P.V.T.
18+85 P.V.T.
19+15 P.T.&P.C.
19+35 P.V.T.
+50 P.V.C.
19+90 P.V.T.
20+50 P.V.C.
20+80 P.T.&P.C.
21+05 P.V.C.
21+25 P.T.&P.C.
21+75 P.V.T.
18+25 P.V.I. El. 1.85 H.E. 50'V.C.
18+70 P.V.I. El. 3.15 H.E. 30'V.C.
19+25 P.V.I. El. 123.68 H.E. 20'V.C.
19+70 P.V.I. El. 2.90 H.E. 40'V.C.
20+65 P.V.I. El. 3.50 30'V.C.
20+90 P.V.I. El. 4.20 20'V.C.
21+15 P.V.I. El. 4.15 20'V.C.
21+50 P.V.I. El. 3.15 50'V.C.
22+17.97
23+70 P.V.I. El. 2.19 Cb. No V. Curve
24+50 P.V.I. El. 2.37 No V.C.
C14-53
4/8


N
Scale 1"=20'
END PROJECT @
C.E. RAIL OF W. TRACK
B.M. 124.88 N.E. Cor. Conc. base to R.R. Signal Box (RA) Sta. 26+44
B.M. 122.02 S.W. Corner Stone Planter around Depot Sign (LA) Sta. 30+10
64' V.C. P.V.I. El. 1.80 H.E. 25+00
36' V.C. P.V.I. El. 2.20 27+50
24' V.C. P.V.I. El. 3.62 H.E. 25+80
20' V.C. P.V.I. El. 3.75 (H.E.) 26+30
P.V.C. 26+20
P.V.T. 26+40
P.V.C. 27+00
100' V.C. P.V.I. El. 12.100 (Cb) 27+50
P.V.T. 28+00
50' V.C. P.V.I. El. 12.0.25 30+00
P.V.C. 29+75
P.V.T. 30+25
24+50
+0.400%
+0.800%
+4.752%
+0.260%
-2.708%
-0.300%
-0.629%
26+49.5 Begin Full Curb.
26+75 Mon'l Bldg.
NOTE: All drives are Ramp-Type 7" (6-Sack) Conc. Pavement, to high Edge.
P.C. 25+68
P.T. & P.C. 25+32
P.T. & P.C. 25+68
P.V.T. 25+92
+71 End Full Curb
27+08
IRON 26+46.43
21st
STREET
25+42.5 End Full Curb
26+06
Conc. Blk. Bldg.
Begin Full Curb
+485
+0.412%
+2.780%
+0.526%
-2.524%
-0.320%
-0.735%
27+25 P.V.C.
27+75 P.V.T.
WASHINGTON
WABASH (Varies 60'-80')
24+50 P.V.I. El. 1.87 H.E. No V. Curve
25+10 P.V.C.
25+30 P.V.I. El. 2.20 40' V.C.
25+50 P.V.T.
25+68 P.V.C.
25+80 P.V.I. El. 3.59 (H.E.) 24' V.C.
25+92 P.V.T.
25+86.43
26+16 P.V.C.
26+26 P.V.I. El. 3.83 (H.E.) 20' V.C.
26+36 P.V.T.
26+46.43
27+00 P.V.C.
27+50 P.V.I. El. 121.20 (Cb) 100' V.C.
28+00 P.V.T.
29+26.43 (P.)
30+00 P.V.I. El. 120.40 50' V.C.
#4 bars @ 36" c/s. Alt. top & bottom
15'-0"
Existing Base
#4 bars @ top & bottom
24" c/s (Alternate
Ballast
Max. 3"
DETAIL OF CONC. HEADER AND PAVEMENT SECTION
No Scale
21st Street C 14-53
5/6