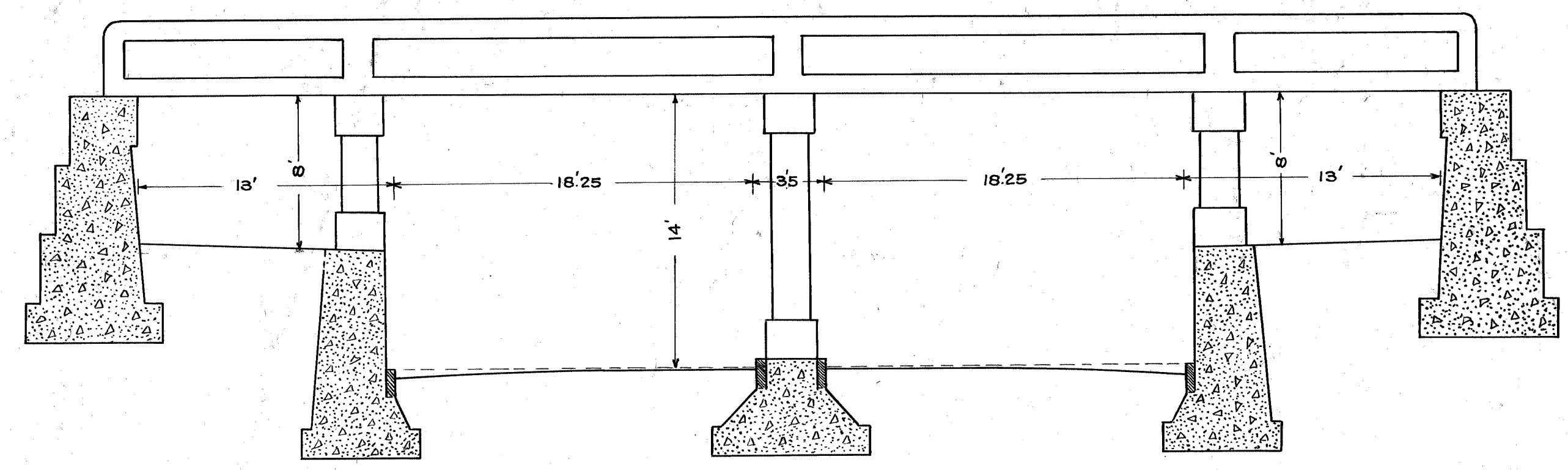


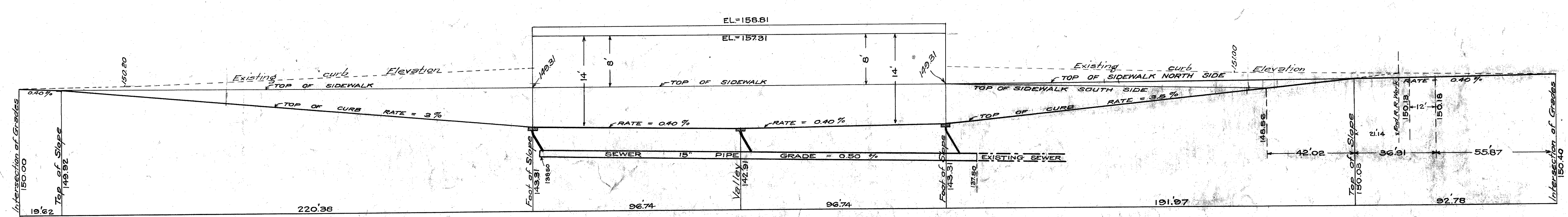
PLAN

Approved 1915
A. H. Conner
 CITY ENGINEER
M. W. H.
 CHIEF ENGINEER, M.C.R.R.

PLAN OF
 PROPOSED SUBWAY
 IN
HOLDEN AVE
 UNDER
 G. T., LAKE SHORE & MICH. CENT'L R.R.'S.



CROSS SECTION
 SCALE, ONE INCH = 6'



LONGITUDINAL SECTION
 ON NORTH AND SOUTH CURB LINES

HOLDEN AVE.

CITY ENGINEER'S OFFICE
 CITY SEPARATION & BRIDGES
 Case A Drawn 4-1-16

HOR. ONE INCH = 30'
 SCALE, VER. " " = 10'

9p 9-20-42

PROCEDURE

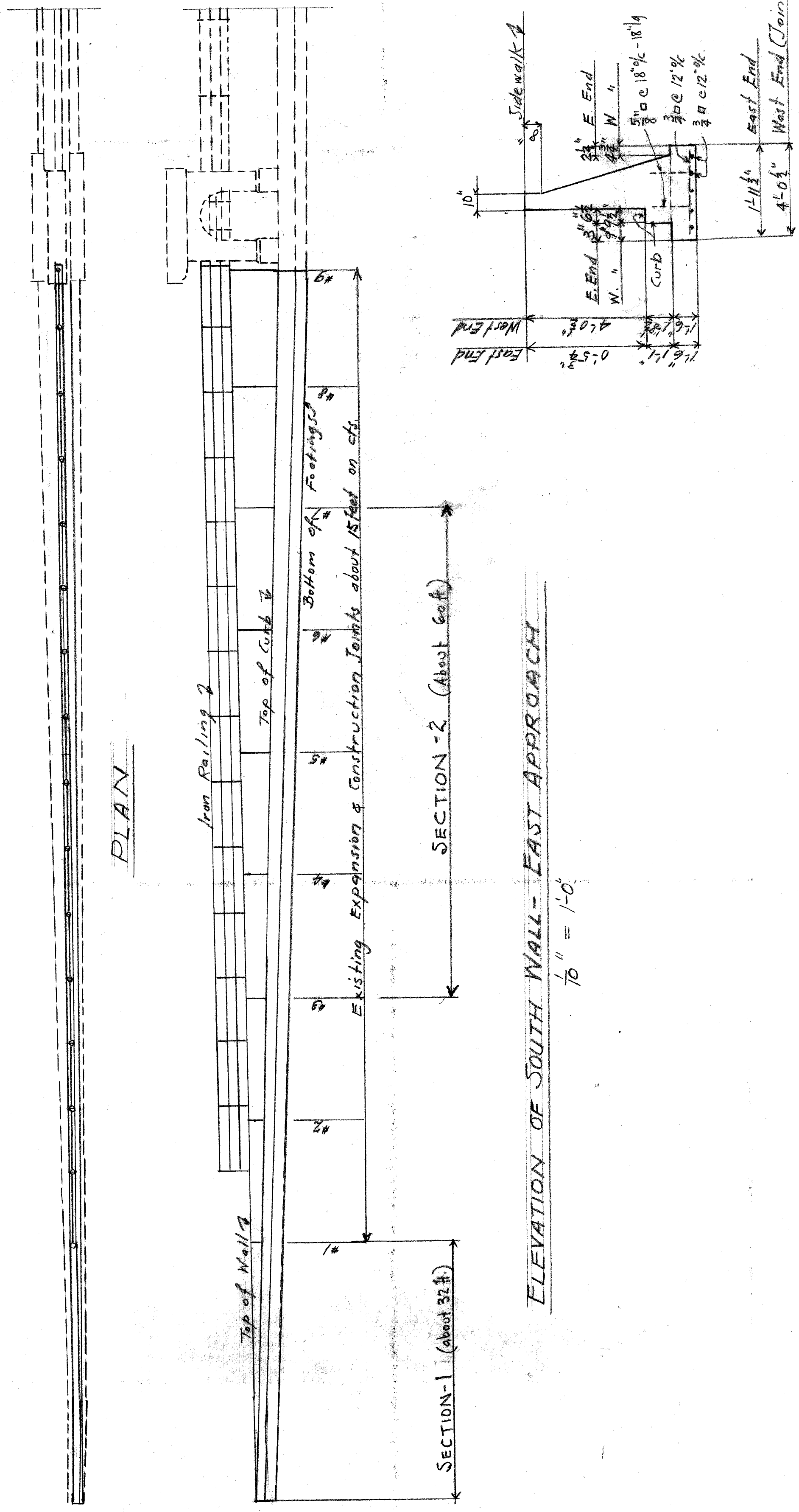
It is the intention of these plans to provide for the repair of the southerly wall, along the east approach, in the two areas marked Section 1 and Section 2.

SECTION 1

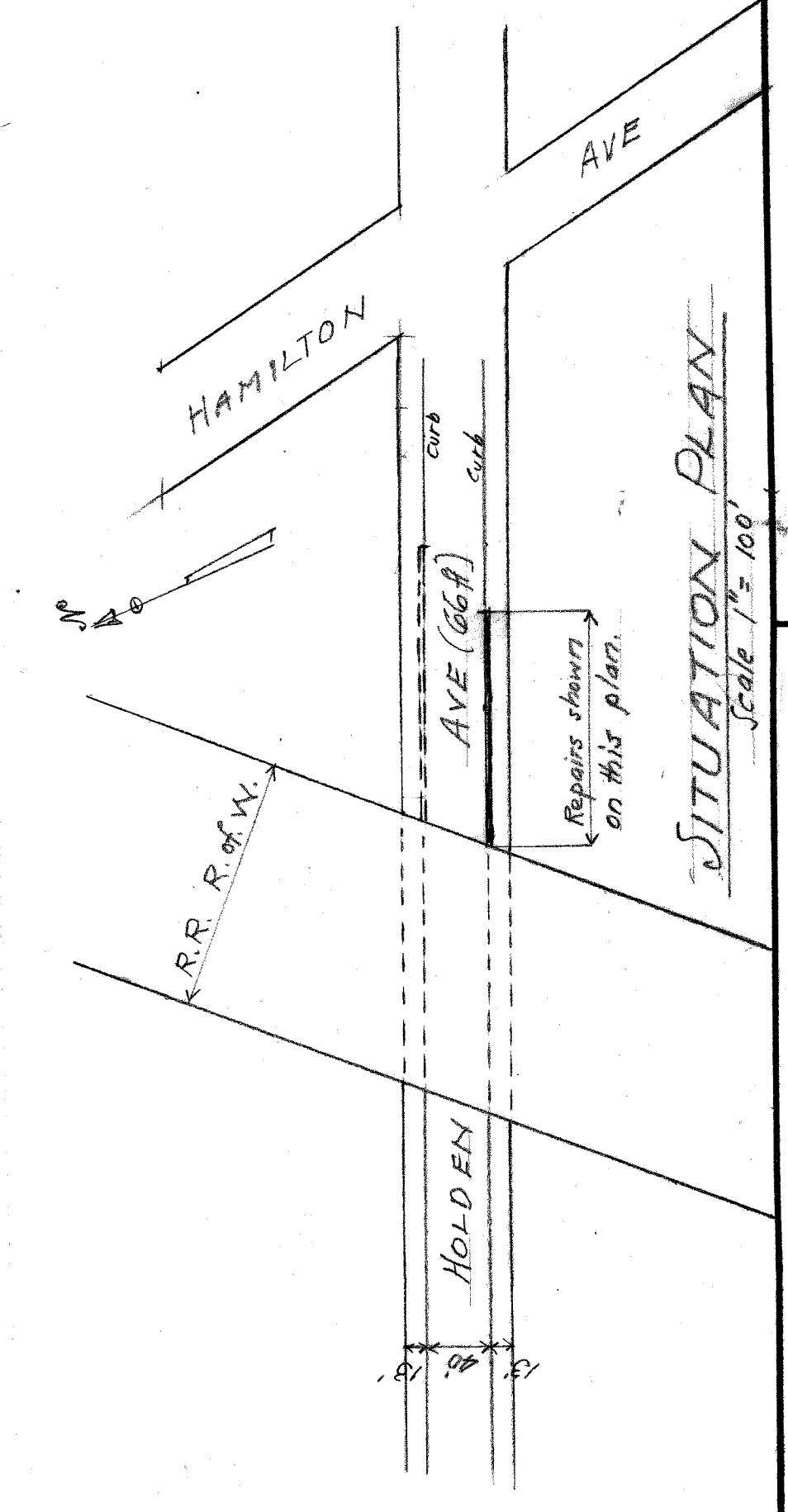
Remove as much of the spalled concrete as is necessary to rebuild this section. These repairs will be governed by local conditions as to the best method to make the new concrete adhere to the old.

SECTION 2

Remove all of the wall which shows fissures down to a point where the original solid section is found. Into the top of the remaining original section drill holes for anchors about 12" φ and 9" deep, in front and rear of wall and about 18" on cts. Before starting pouring of new wall section pour 3/4 φ or 3/0 anchor bars 24" g into prepared holes. The section of the new wall shall be either the same as the section of the original wall, as shown on this plan, or the wall shall be rebuilt as directed by the City Engineer. This decision will be made after the removal of the existing wall.



ORIGINAL SECTION OF WALL



REPAIRS TO APPROACH WALL
HOLDEN AVE GRADE SEPARATION
WEST OF HAMILTON

CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEER'S OFFICE
BUREAU OF STRUCTURES.

SHEET 1 OF 1 SHEETS
CONTRACT
DRWG NO C-246

| NO | DESCRIPTION | DATE |
|----|-------------|------|
| | | |
| | | |
| | | |
| | | |
| | | |
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| | | |

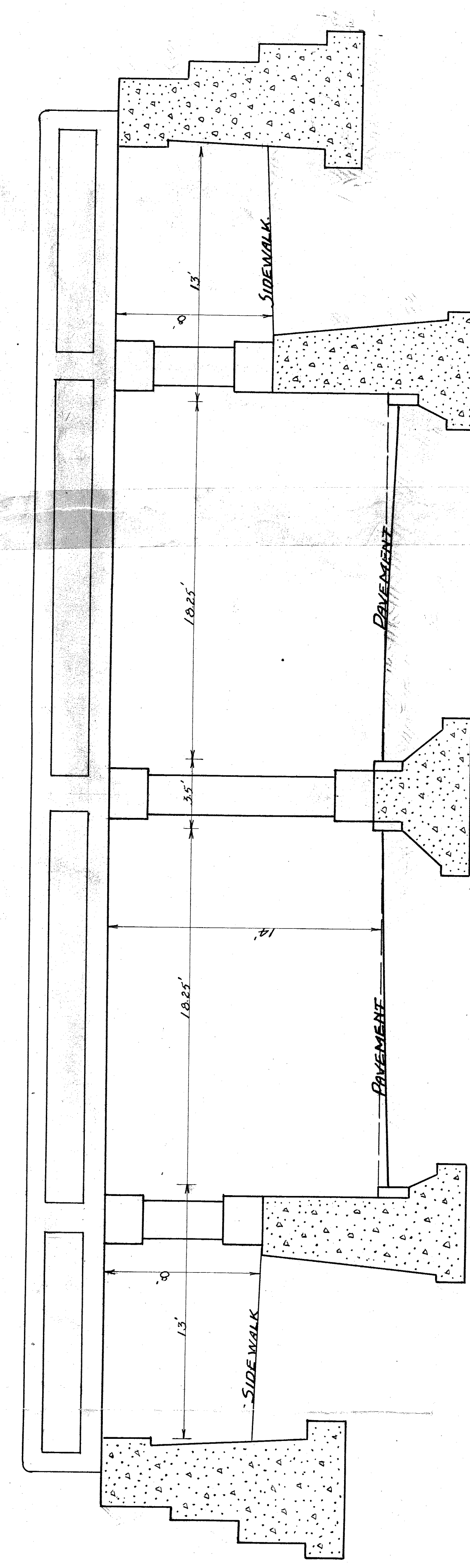
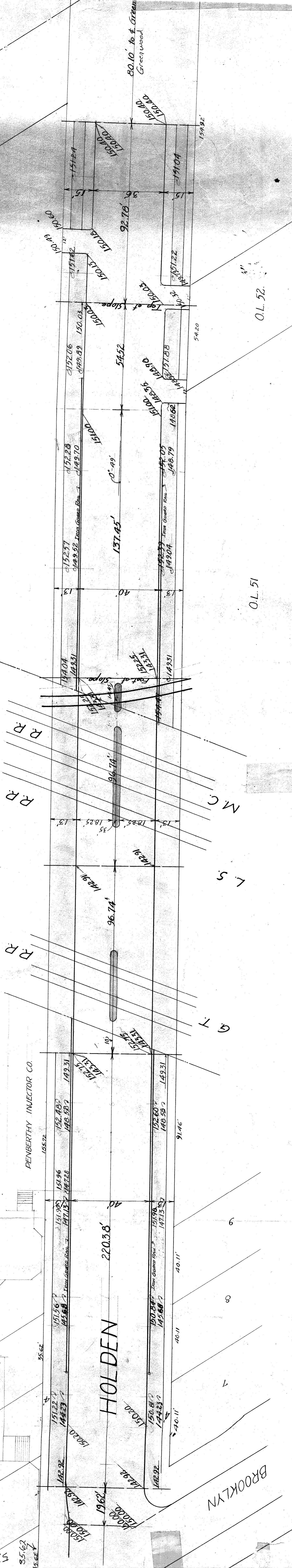
| | |
|-------------|--------------|
| DESIGNED BY | R. Schulhof |
| DRAWN BY | R.S. 9/16/42 |
| TRACED BY | |
| CHECKED BY | R.S. |

| | |
|-----------|----------------------|
| APPROVED: | <i>J.L. Bateman</i> |
| ENGINEER: | <i>W.J. Greene</i> |
| CHECKED: | <i>G.P. Thompson</i> |

September 17, 1942

Scales as shown

File X06-2



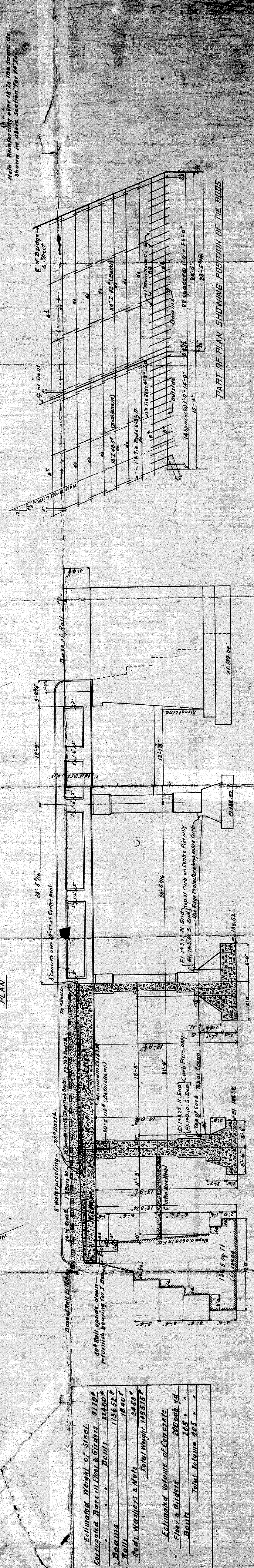
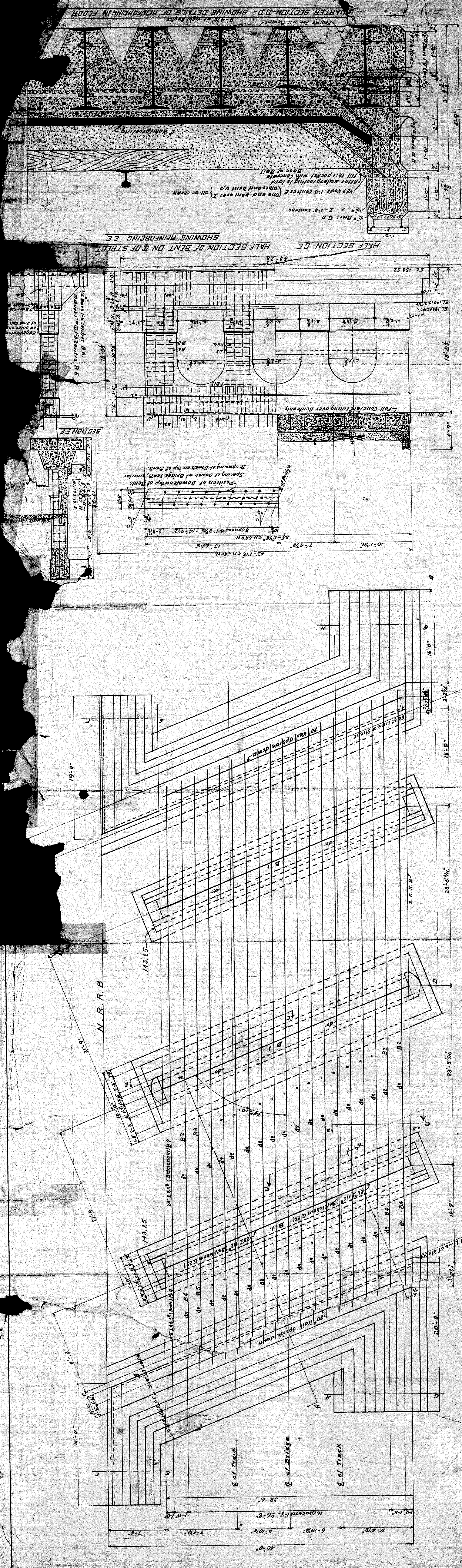
CROSSSECTION OF HOLDEN AT FOOT OF SLOPE.
SCALE 1" = 4'

RED FIGURES SHOW OLD SIDEWALK AND CURB ELEVATIONS
BLACK FIGURES SHOW DIMENSIONS AND NEW SIDEWALK AND CURB ELEVATIONS.

O.L. 51

O.L. 52

HOLDEN AVE



HALF SECTION AA

STRIPPERS FOR 3-24 IN. 45 (BETHLEHEM)

| MEMBERS | QUANTITY | WEIGHT |
|--------------|-----------------------|------------------------|
| M 1 | 15870 ft. in. | 39,276.00 lbs. |
| M 2 | 44100 ft. in. | 57,740.00 lbs. |
| M 3 | 25200 ft. in. | 31,500.00 lbs. |
| M 4 | 14700 ft. in. | 17,010.00 lbs. |
| TOTAL | 103860 ft. in. | 145,526.00 lbs. |

| MEMBERS | QUANTITY | WEIGHT |
|--------------|-----------------------|-----------------------|
| M 5 | 62000 ft. in. | 14,480.00 lbs. |
| M 6 | 16400 ft. in. | 3,770.00 lbs. |
| M 7 | 11300 ft. in. | 2,590.00 lbs. |
| M 8 | 24000 ft. in. | 5,520.00 lbs. |
| TOTAL | 113700 ft. in. | 26,360.00 lbs. |

HALF SECTION BB

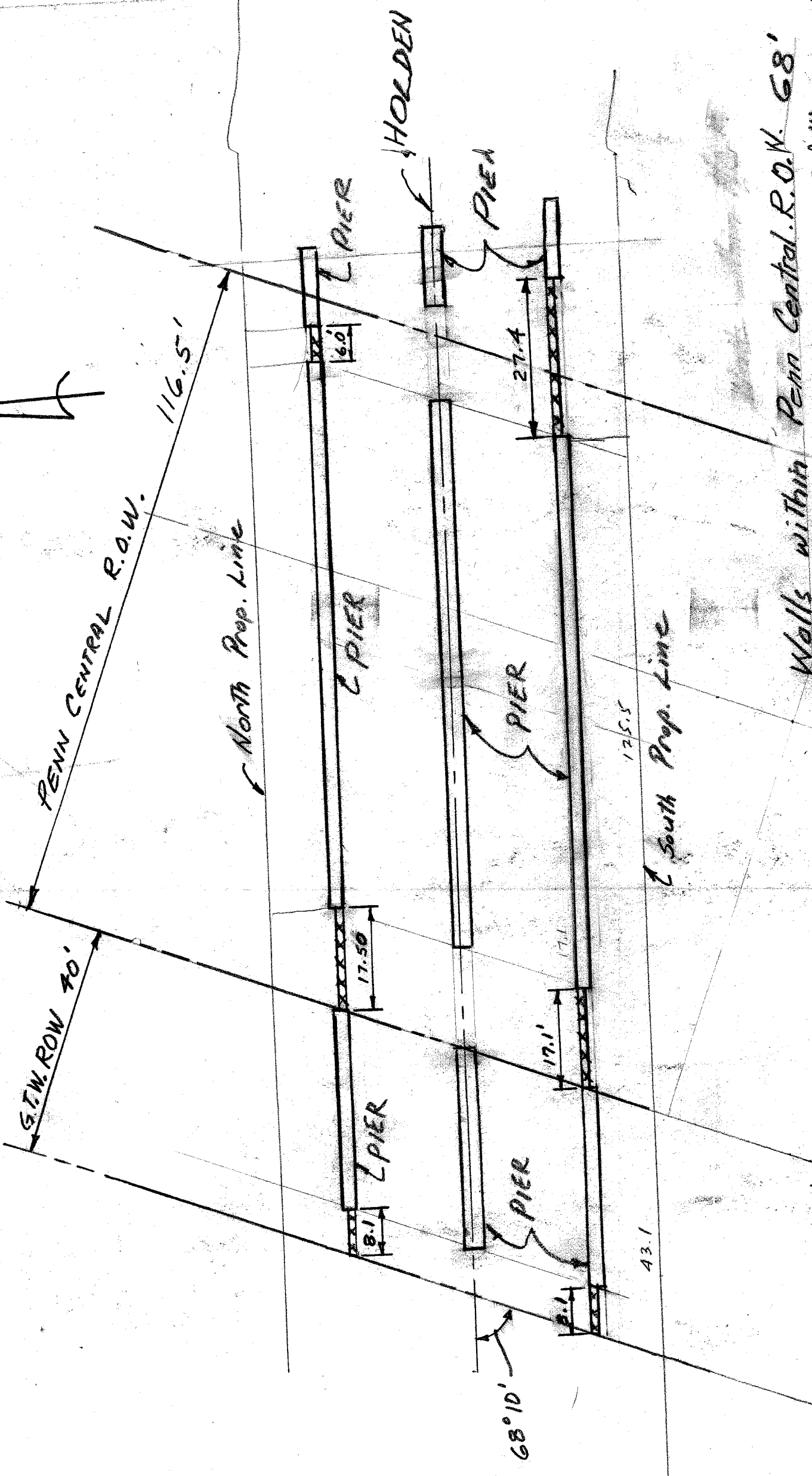
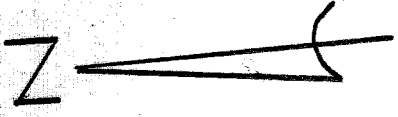
STEEL BARS IN FLOOR

| MARK | NO. | SIZE | LENGTH | WEIGHT |
|------|-----|------|--------|--------|
| 1 | 1 | 3/4" | 10'-0" | 10.00 |
| 2 | 2 | 3/4" | 10'-0" | 10.00 |
| 3 | 3 | 3/4" | 10'-0" | 10.00 |
| 4 | 4 | 3/4" | 10'-0" | 10.00 |
| 5 | 5 | 3/4" | 10'-0" | 10.00 |
| 6 | 6 | 3/4" | 10'-0" | 10.00 |
| 7 | 7 | 3/4" | 10'-0" | 10.00 |
| 8 | 8 | 3/4" | 10'-0" | 10.00 |
| 9 | 9 | 3/4" | 10'-0" | 10.00 |
| 10 | 10 | 3/4" | 10'-0" | 10.00 |
| 11 | 11 | 3/4" | 10'-0" | 10.00 |
| 12 | 12 | 3/4" | 10'-0" | 10.00 |
| 13 | 13 | 3/4" | 10'-0" | 10.00 |
| 14 | 14 | 3/4" | 10'-0" | 10.00 |
| 15 | 15 | 3/4" | 10'-0" | 10.00 |
| 16 | 16 | 3/4" | 10'-0" | 10.00 |
| 17 | 17 | 3/4" | 10'-0" | 10.00 |
| 18 | 18 | 3/4" | 10'-0" | 10.00 |
| 19 | 19 | 3/4" | 10'-0" | 10.00 |
| 20 | 20 | 3/4" | 10'-0" | 10.00 |
| 21 | 21 | 3/4" | 10'-0" | 10.00 |
| 22 | 22 | 3/4" | 10'-0" | 10.00 |
| 23 | 23 | 3/4" | 10'-0" | 10.00 |
| 24 | 24 | 3/4" | 10'-0" | 10.00 |
| 25 | 25 | 3/4" | 10'-0" | 10.00 |
| 26 | 26 | 3/4" | 10'-0" | 10.00 |
| 27 | 27 | 3/4" | 10'-0" | 10.00 |
| 28 | 28 | 3/4" | 10'-0" | 10.00 |
| 29 | 29 | 3/4" | 10'-0" | 10.00 |
| 30 | 30 | 3/4" | 10'-0" | 10.00 |

Estimated Weight of Steel 81104
 Corroded Bars in Floor & Girders 224004
 Bars 152422
 Total Weight 195537
 Total Weight 195537
 Estimated Volume of Concrete 290.649 cu. ft.
 Floor & Girders 268.000 cu. ft.
 Beams 22.649 cu. ft.
 Total Volume 581.308 cu. ft.

Examined: *H. H. Street* Structural Engineer
 Approved: *J. H. H. Street* Chief Engineer
 Date: *May 27, 1915*

Grand Trunk Railway System
 Detroit Division, 29th District
 Bridge No. *1101* over *Holden Avenue*
 West Detroit - Grade Separation
 Designed by *J. W. M.*
 Scale: *1/4" = 1'-0"*
 Office of Chief Engineer, Michigan State Road Commission
 Sheet No. *101*



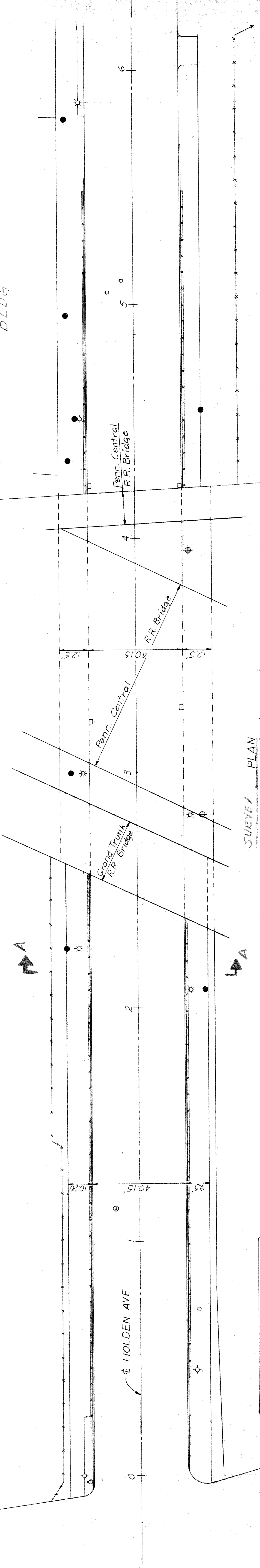
Walls within Penn Central R.O.W. 68'
 Walls within Grand Trunk R.S.W. 16.2'

G.T.W. 16.2' Wall
 43.1'

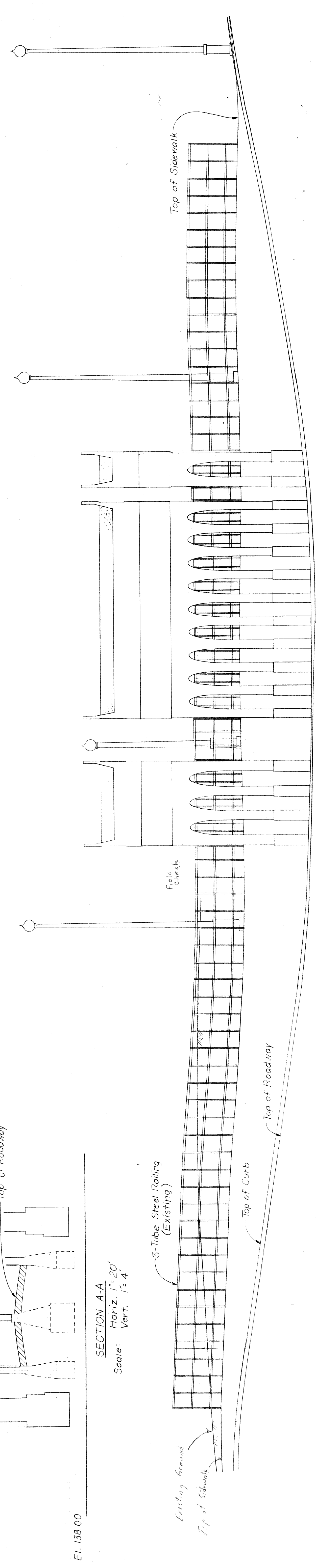
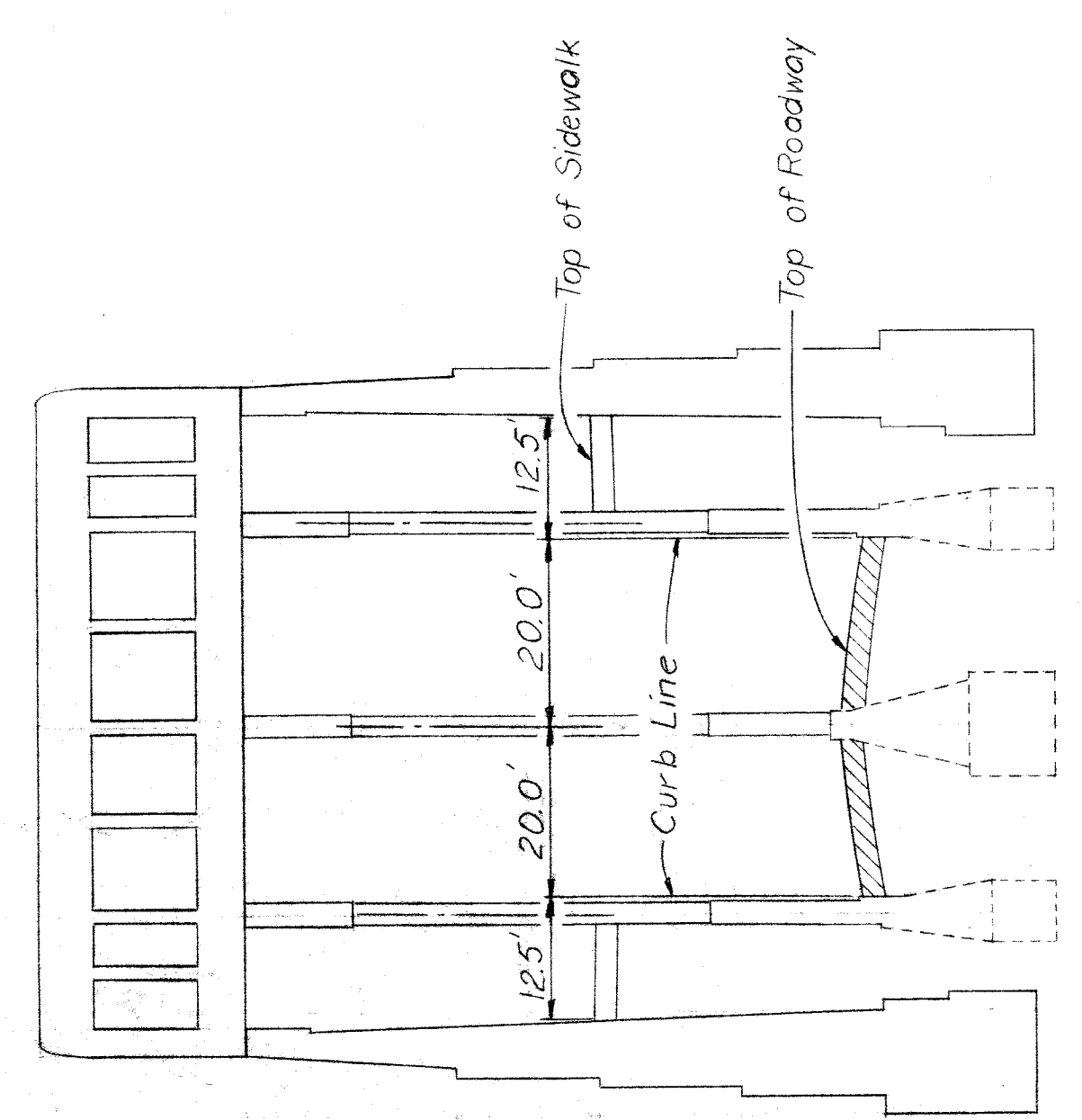
HOLDEN AVE
 Wall within R.E. R.O.W.

XU6-6

BLDG

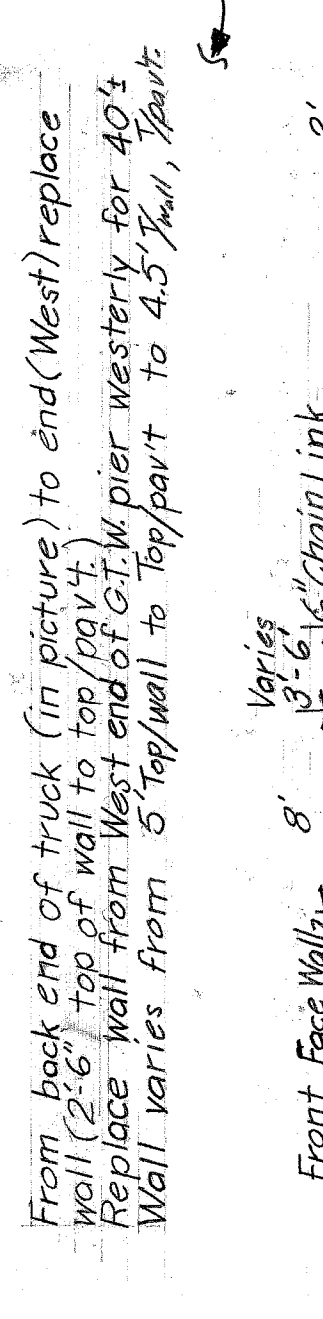


- LEGEND**
- Catch Basin
 - Water Gate
 - ◻ Water Shut-Off
 - P.L.C. Manhole
 - Fire Hydrant
 - ◇ D.E. Pole
 - ◇ P.L.C. Pole
 - ◇ P.L.C. Light Pole
 - Fence



| | | | | | | | |
|--|--|--------------|--|-----------|--|---|--|
| SHEET OF SHEETS | | CONTRACT NO. | | DRWG NO. | | DATE | |
| DESIGNED BY | | DRAWN BY | | TRACED BY | | CHECKED BY | |
| APPROVED: | | | | | | CITY ENGINEER | |
| CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE | | | | FOR | | | |
| DESCRIPTION | | REV. NO. | | DATE | | REVISIONS LOCATED BY COORDINATES ON SHEET | |
| | | | | | | | |

1 2 3 4 5 6 7 8 9 10 11



From back end of truck (in picture) to end (West) replace wall (2'-6" top wall to top of curb).
 Replace wall from West end of Grand Trunk R.R. pier westerly for 40'.
 Wall varies from 6' top wall to top part to 4.5' wall, South.

George L. Johnson Co.
 and new blacktop parking

Who will maintain this slope - new growing weed and brush

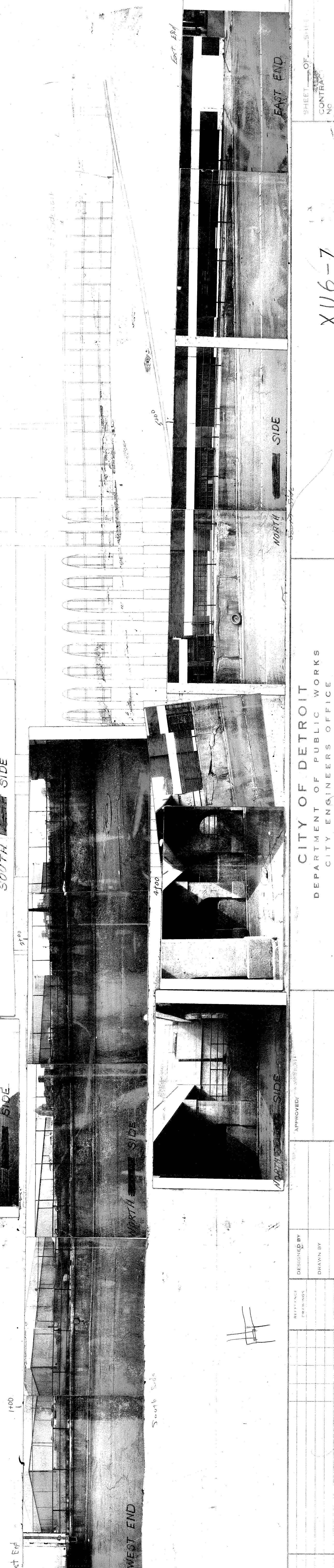
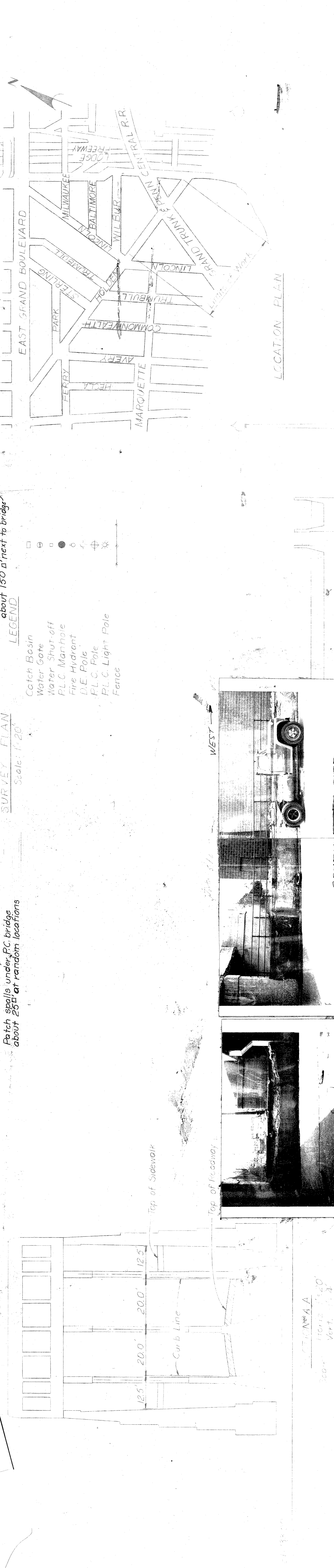
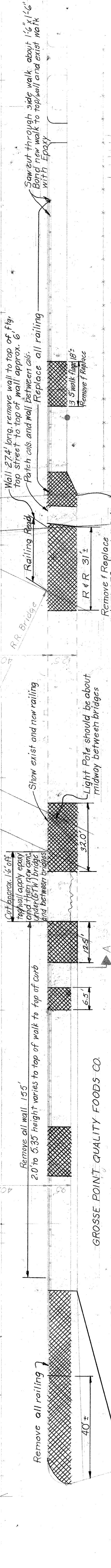
Recommend building new 6' walk from driveway to bridge

Catch Basins about 1 or more ft. from curb lines. Don't appear to interfere with wall repair work

Save railing between columns of P.C. Bridges - Clean and paint.

Remove & Replace Walk

Old drive way to Bldg. Entrance (blocked up)



CITY OF DETROIT
 DEPARTMENT OF PUBLIC WORKS
 CITY ENGINEERS OFFICE

DESIGNED BY
 DRAWN BY
 TRACED BY
 CHECKED BY

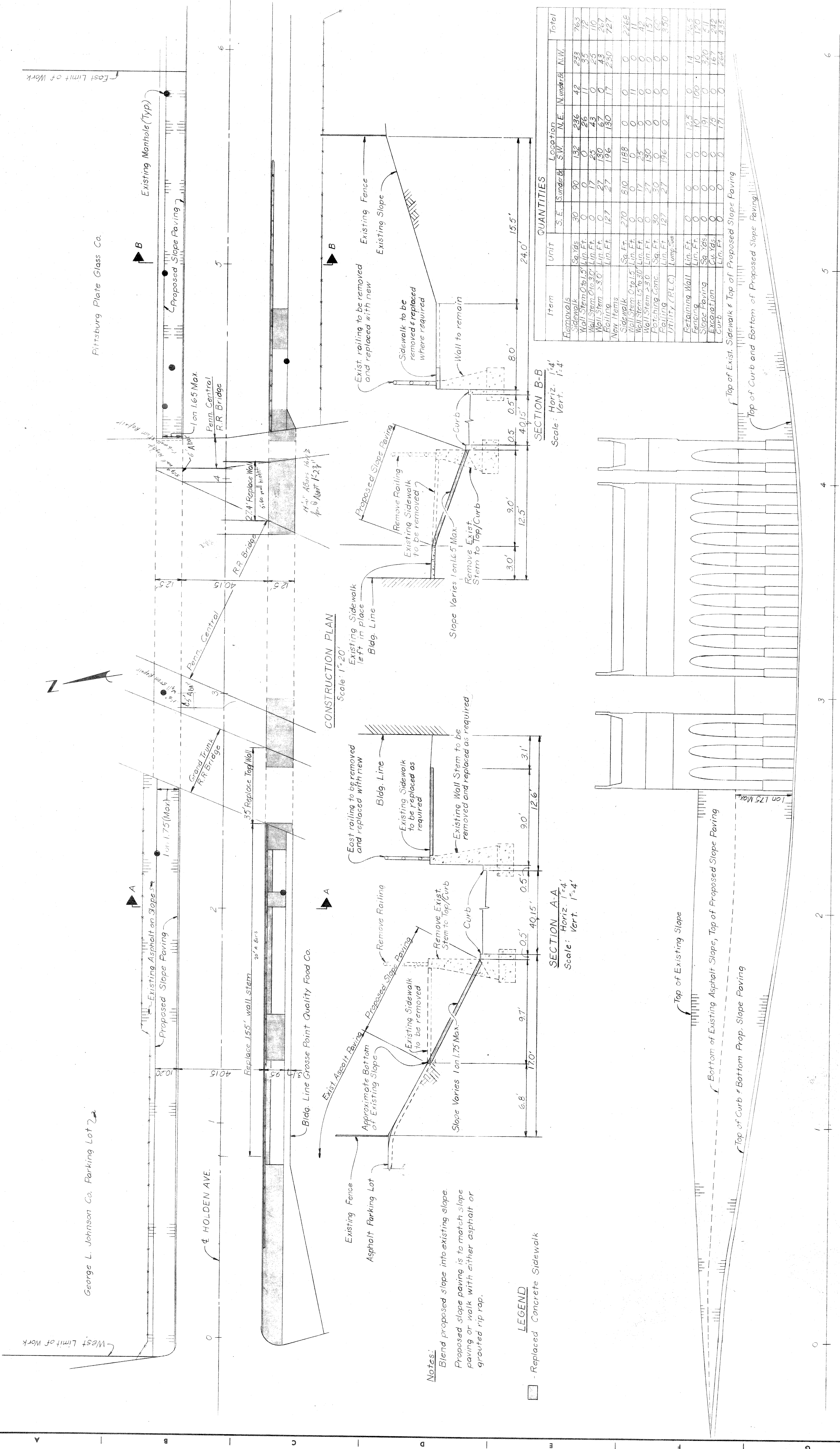
APPROVED: [Signature]

SHEET OF [Number] SHEETS

CONTRACT [Number]

XU6-7

As Rep on plans (conc) and no work 1.3.38

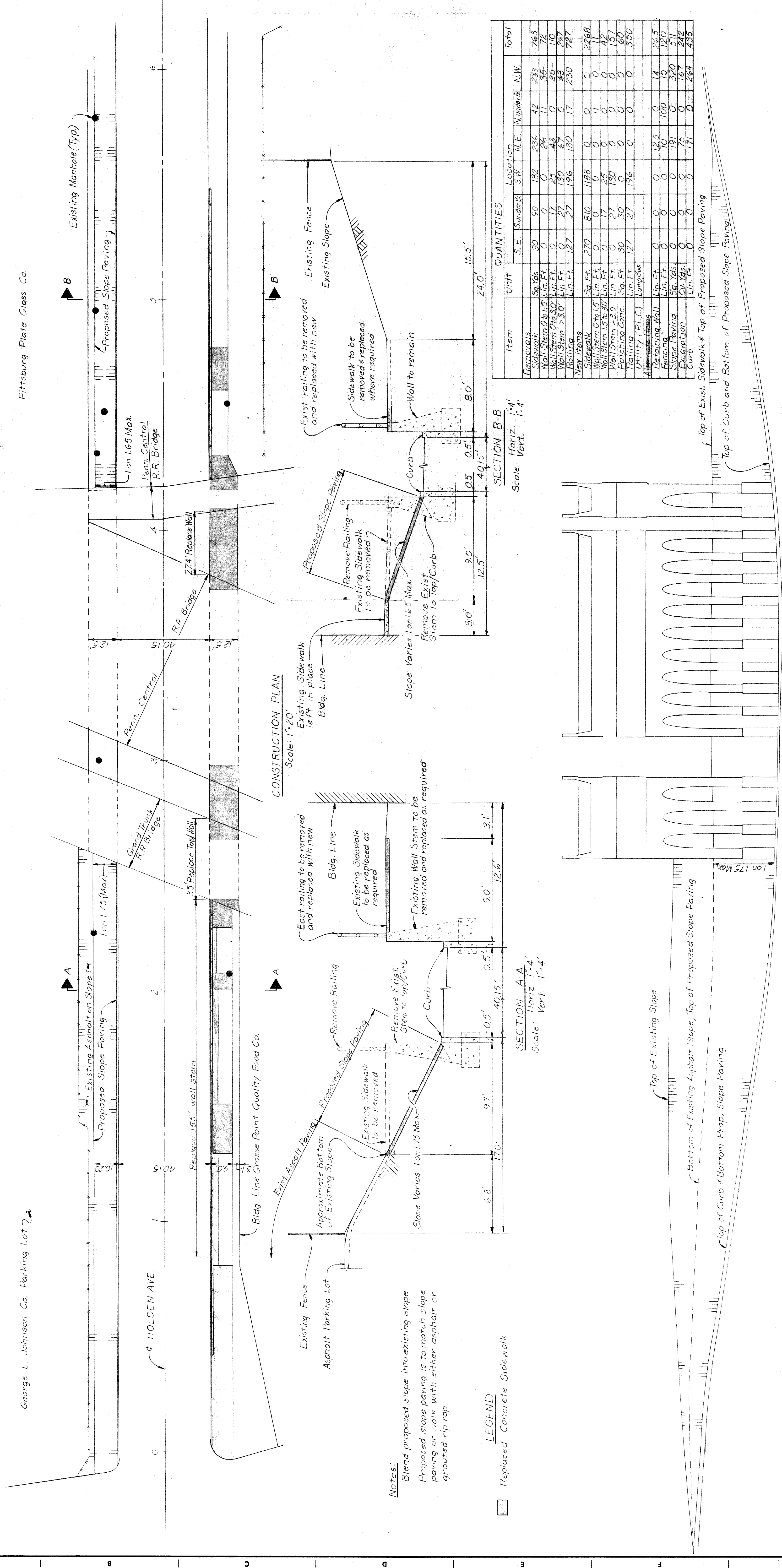


| Item | Unit | Location | | | | Total |
|-----------------------|----------|----------|-------|-------|-------|-------|
| | | S. E. | S. W. | N. E. | N. W. | |
| Removals | | | | | | |
| Sidewalks | Sq. Yds | 30 | 132 | 236 | 42 | 763 |
| Wall Stem 0 to 1.5' | Lin. Ft. | 0 | 0 | 26 | 11 | 79 |
| Wall Stem 1.5 to 3.0' | Lin. Ft. | 0 | 17 | 25 | 0 | 110 |
| Wall Stem > 3.0' | Lin. Ft. | 0 | 27 | 130 | 0 | 327 |
| Railing | Lin. Ft. | 127 | 196 | 130 | 17 | 727 |
| New Items | | | | | | |
| Sidewalk | Sq. Ft. | 270 | 510 | 1158 | 0 | 2265 |
| Wall Stem 0 to 1.5' | Lin. Ft. | 0 | 0 | 0 | 11 | 11 |
| Wall Stem 1.5 to 3.0' | Lin. Ft. | 0 | 17 | 25 | 0 | 49 |
| Wall Stem > 3.0' | Lin. Ft. | 0 | 27 | 130 | 0 | 157 |
| Patching Conc. | Sq. Ft. | 30 | 30 | 0 | 0 | 60 |
| UTILITY (P.L.C.) | Lin. Ft. | 127 | 27 | 196 | 0 | 350 |
| Retaining Wall | Lin. Ft. | 0 | 0 | 125 | 0 | 125 |
| Fencing | Lin. Ft. | 0 | 0 | 10 | 10 | 20 |
| Slope Paving | Sq. Yds | 0 | 0 | 191 | 0 | 320 |
| Excavation | Cu. Yds | 0 | 0 | 79 | 0 | 169 |
| Curb | Lin. Ft. | 0 | 0 | 171 | 0 | 264 |

Notes:
 Blend proposed slope into existing slope.
 Proposed slope paving is to match slope paving or walk with either asphalt or grouted rip rap.

LEGEND
 [Symbol] - Replaced Concrete Sidewalk

| | | | | | | | | | |
|--|--|---|--|---|---|---|--|---|--|
| DESIGNED BY W. A. L. | | DRAWN BY L. G. | | TRACED BY | | CHECKED BY | | APPROVED: | |
| REVISIONS LOCATED BY COORDINATES ON SHEET | | REVISIONS LOCATED BY COORDINATES ON SHEET | | REVISIONS LOCATED BY COORDINATES ON SHEET | | REVISIONS LOCATED BY COORDINATES ON SHEET | | REVISIONS LOCATED BY COORDINATES ON SHEET | |
| DESCRIPTION | | DESCRIPTION | | DESCRIPTION | | DESCRIPTION | | DESCRIPTION | |
| CITY ENGINEER | | CITY ENGINEER | | CITY ENGINEER | | CITY ENGINEER | | CITY ENGINEER | |
| CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE | | | | | HOLDEN AVE. UNDER BRIDGE XU-6 PENN CENTRAL & GRAND TRUNK WESTERN RR. | | | | |
| WALL SIDEWALK & RAILING REPAIR | | | | | REPAIR PLAN | | | | |
| XU6-8 | | | | | XU6-8 | | | | |
| SHEET OF SHEETS | | | | | CONTRACT NO. | | | | |
| DRAWING NO. | | | | | DATE | | | | |



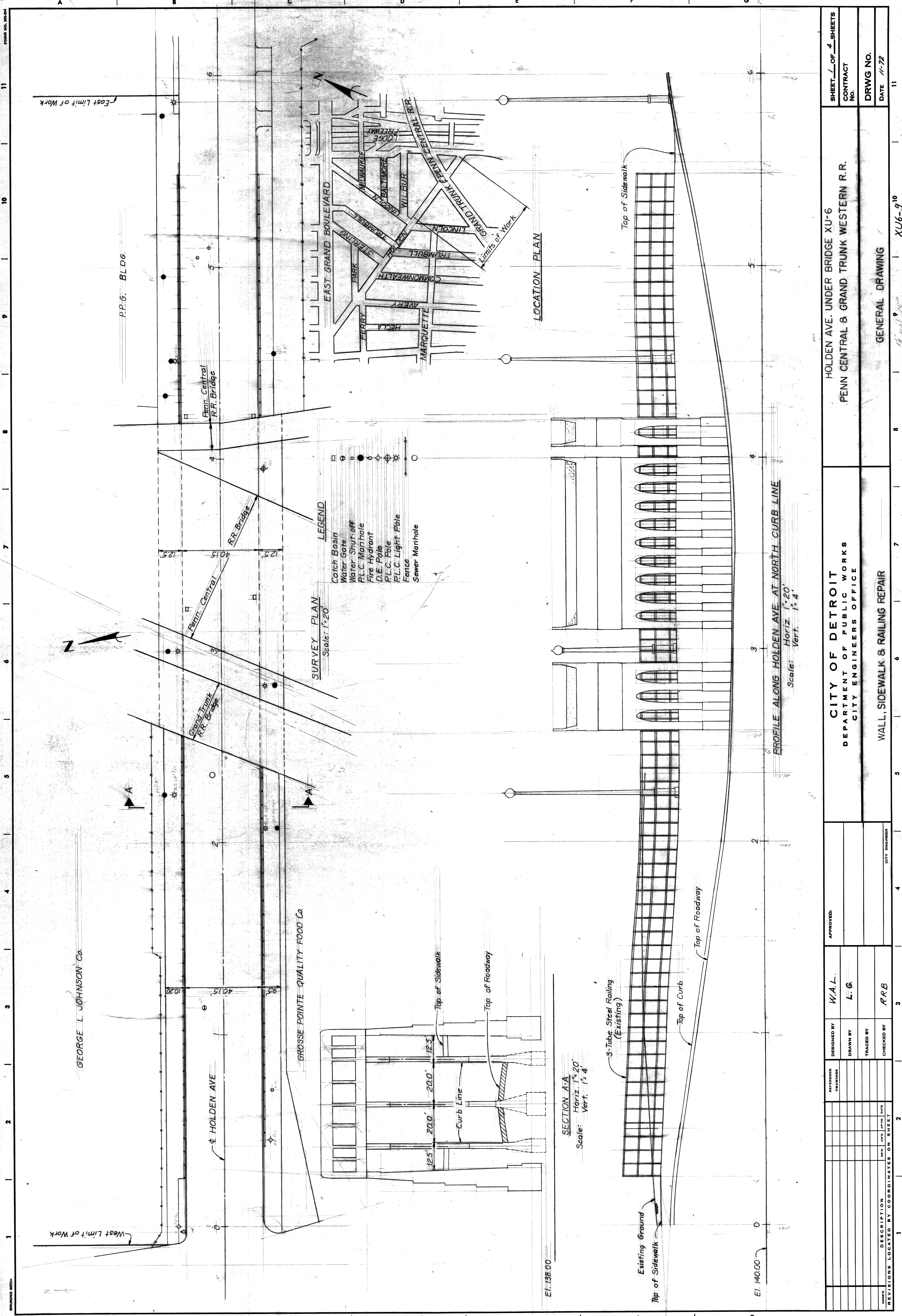
George L. Johnson Co. Parking Lot 2

Pittsburg Plate Glass Co.

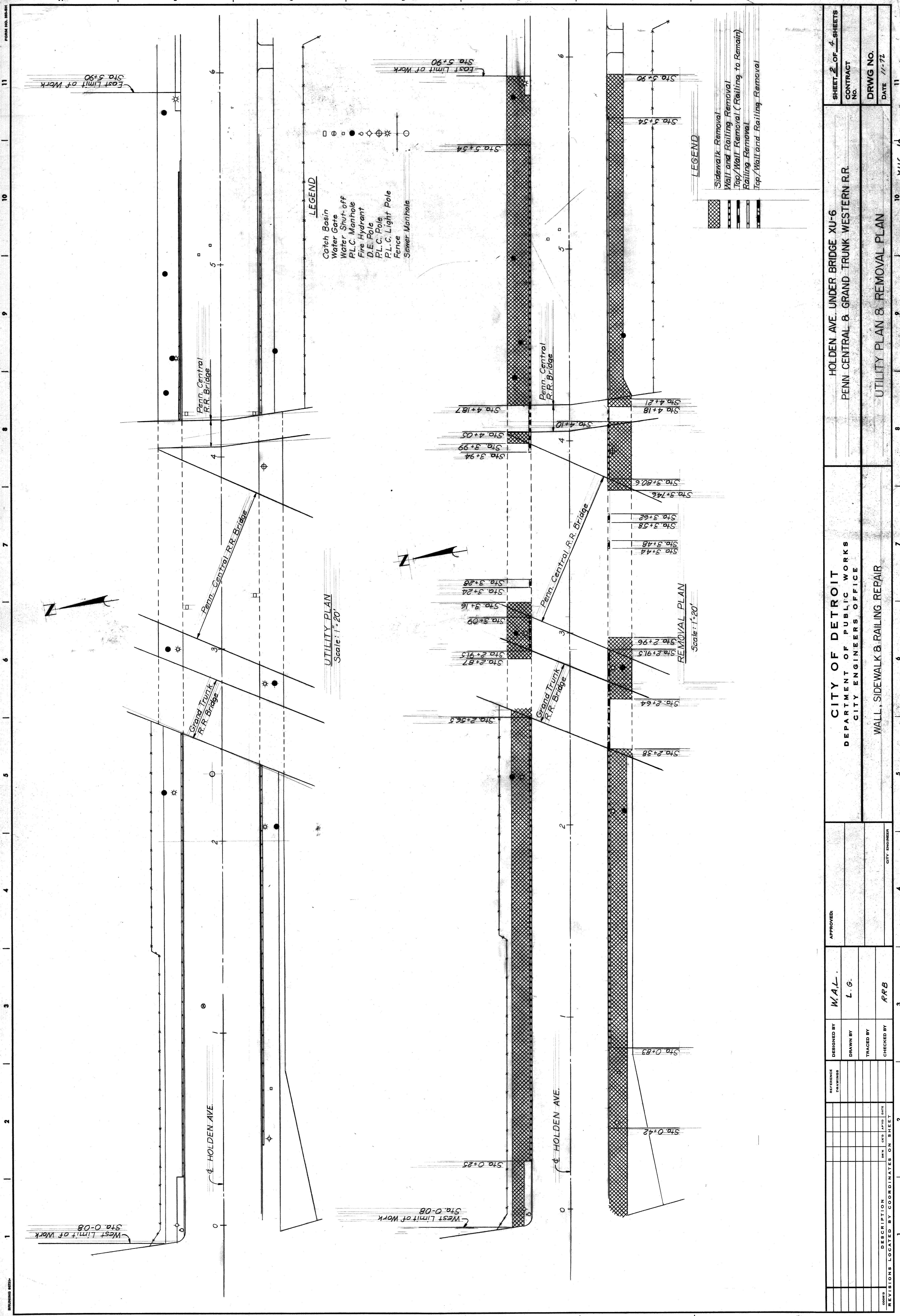
Notes:
 Blend proposed slope into existing slope
 Proposed slope paving is to match slope paving or walk with either asphalt or grouted rip rap.

LEGEND
 [Symbol] Replaced Concrete Sidewalk

| | | | | | | |
|---|----------|-----------|------------------------------------|-----------|---|---|
| DESIGNED BY WAL | DRAWN BY | TRACED BY | CHECKED BY | APPROVED: | CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE FOR: WALL, SIDEWALK & RAILING REPAIR | SHEET <u> </u> OF <u> </u> SHEETS CONTRACT NO. DRWG NO. XU6-8(a) DATE |
| HOLDEN AVE. UNDER BRIDGE XU-6 PENN CENTRAL & GRAND TRUNK WESTERN RR. | | | REPAIR CONSTRUCTION PLAN | | | |



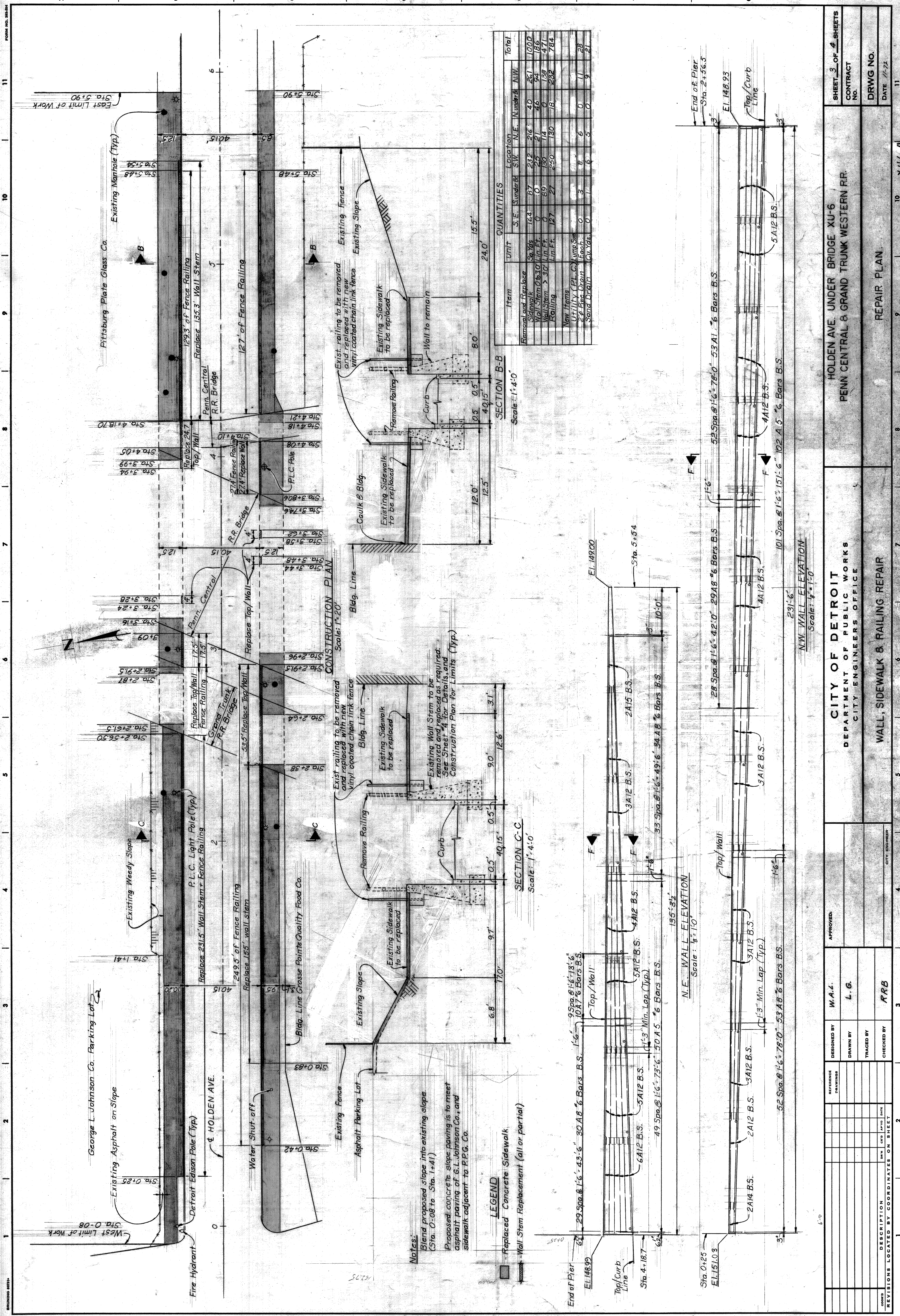
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|---|--|---------------|--|---|--|-------------------|--|
| SHEET 1 OF 4 SHEETS | | CONTRACT NO. | | DRWG NO. | | DATE 11-72 | |
| HOLDEN AVE. UNDER BRIDGE XU-6 | | | | PENN CENTRAL & GRAND TRUNK WESTERN R.R. | | | |
| CITY OF DETROIT | | | | DEPARTMENT OF PUBLIC WORKS | | | |
| CITY ENGINEERS OFFICE | | | | GENERAL DRAWING | | | |
| DESIGNED BY W.A.L. | | DRAWN BY L.G. | | TRACED BY | | CHECKED BY R.R.B. | |
| APPROVED | | CITY ENGINEER | | | | | |
| REVISIONS LOCATED BY COORDINATES ON SHEET | | DATE | | BY | | | |
| 11 | | 10 | | 9 | | 8 | |
| 11 | | 10 | | 9 | | 8 | |
| 11 | | 10 | | 9 | | 8 | |
| 11 | | 10 | | 9 | | 8 | |



BRUNING 8021-1

| | | | |
|---|---------------------|---|-------------------|
| SHEET 2 OF 4 SHEETS CONTRACT NO. _____ DRWG NO. _____ DATE 11-72 | | HOLDEN AVE. UNDER BRIDGE XU-6 PENN. CENTRAL & GRAND TRUNK WESTERN R.R. | |
| CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE | | UTILITY PLAN & REMOVAL PLAN | |
| DESIGNED BY W.A.L. | DRAWN BY L.G. | TRACED BY RRB | CHECKED BY RRB |
| APPROVED | CITY ENGINEER | 3 | 4 |
| REVISIONS LOCATED BY COORDINATES ON SHEET | DESCRIPTION DATE | 2 | 2 |

XU6-10



QUANTITIES

| Item | Unit | S.E. Number | Location S.W. | N.E. | Number | N.W. | Total |
|------------------------------|----------|-------------|---------------|------|--------|------|-------|
| Removal and Replace Sidewalk | Sq. Yds. | 164 | 232 | 216 | 40 | 261 | 1000 |
| Wall Stem 0 to 30" Lin. Ft. | Lin. Ft. | 0 | 0 | 21 | 46 | 94 | 186 |
| Wall Stem > 30" Lin. Ft. | Lin. Ft. | 0 | 89 | 14 | 0 | 139 | 471 |
| Railing | Lin. Ft. | 127 | 27 | 250 | 180 | 252 | 784 |
| New Items | | | | | | | |
| Utility (P.F.C.) Lump Sum | | 0 | 3 | 8 | 0 | 11 | 28 |
| 2" Pipe Drain Each | | 0 | 1 | 6 | 0 | 7 | 9 |
| Sand Drain | Co. Yds. | 0 | 1 | 6 | 0 | 7 | 21 |

SECTION B-B
Scale: 1"=4'-0"

SECTION C-C
Scale: 1"=4'-0"

N.E. WALL ELEVATION
Scale: 1/8"=1'-0"

N.W. WALL ELEVATION
Scale: 1/8"=1'-0"

LEGEND

- Replaced Concrete Sidewalk
- Wall Stem Replacement (all or partial)

Notes:

- Blend proposed slope into existing slope (Sta. 0+08 to Sta. 1+41)
- Proposed concrete slope paving is to meet asphalt paving of G.L. Johnson Co., and sidewalk adjacent to P.P.G. Co.

| | | | |
|-------------|--------|----------|--|
| DESIGNED BY | W.A.L. | APPROVED | |
| DRAWN BY | L.G. | | |
| TRACED BY | | | |
| CHECKED BY | ARB | | |

REVISIONS LOCATED BY COORDINATES ON SHEET

DESCRIPTION

DATE

DATE

CITY ENGINEER

CITY ENGINEERS OFFICE

DEPARTMENT OF PUBLIC WORKS

CITY OF DETROIT

WALL, SIDEWALK & RAILING REPAIR

PENN CENTRAL & GRAND TRUNK WESTERN RR.

HOLDEN AVE. UNDER BRIDGE XU-6

REPAIR PLAN

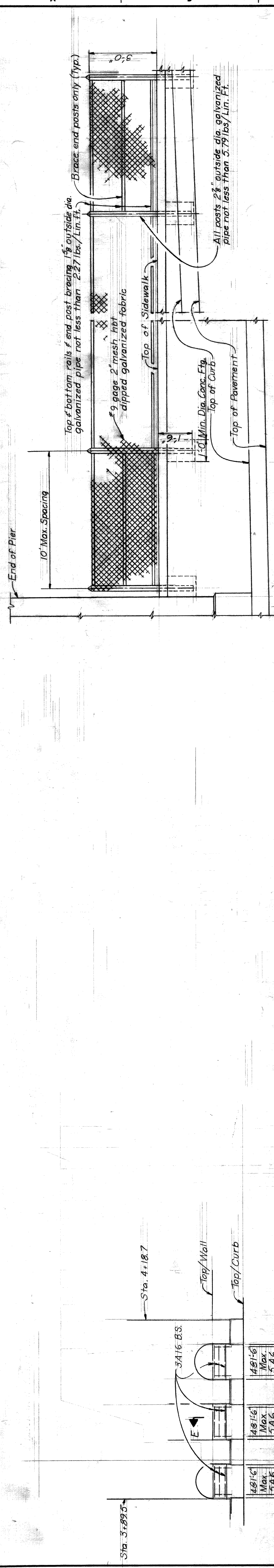
SHEET 3 OF 4 SHEETS

CONTRACT NO.

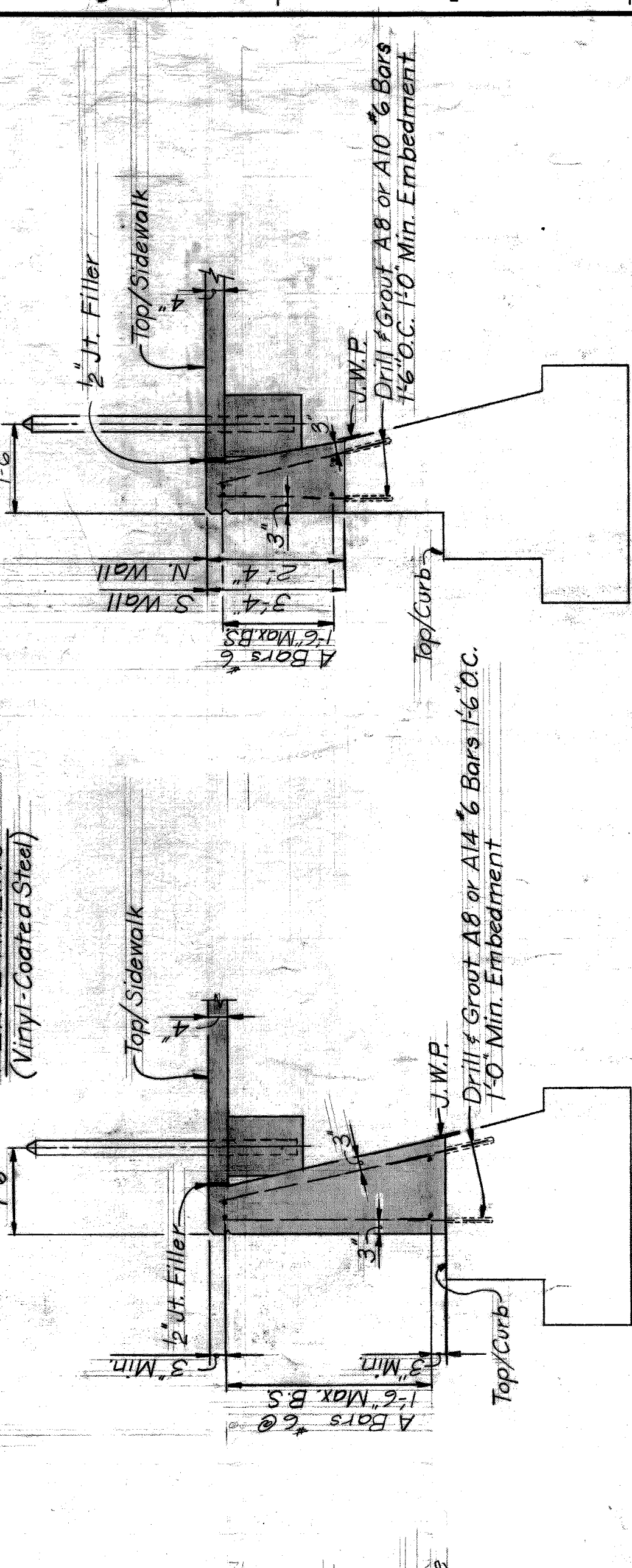
DRWG NO.

DATE 11-72

11 XU6-11



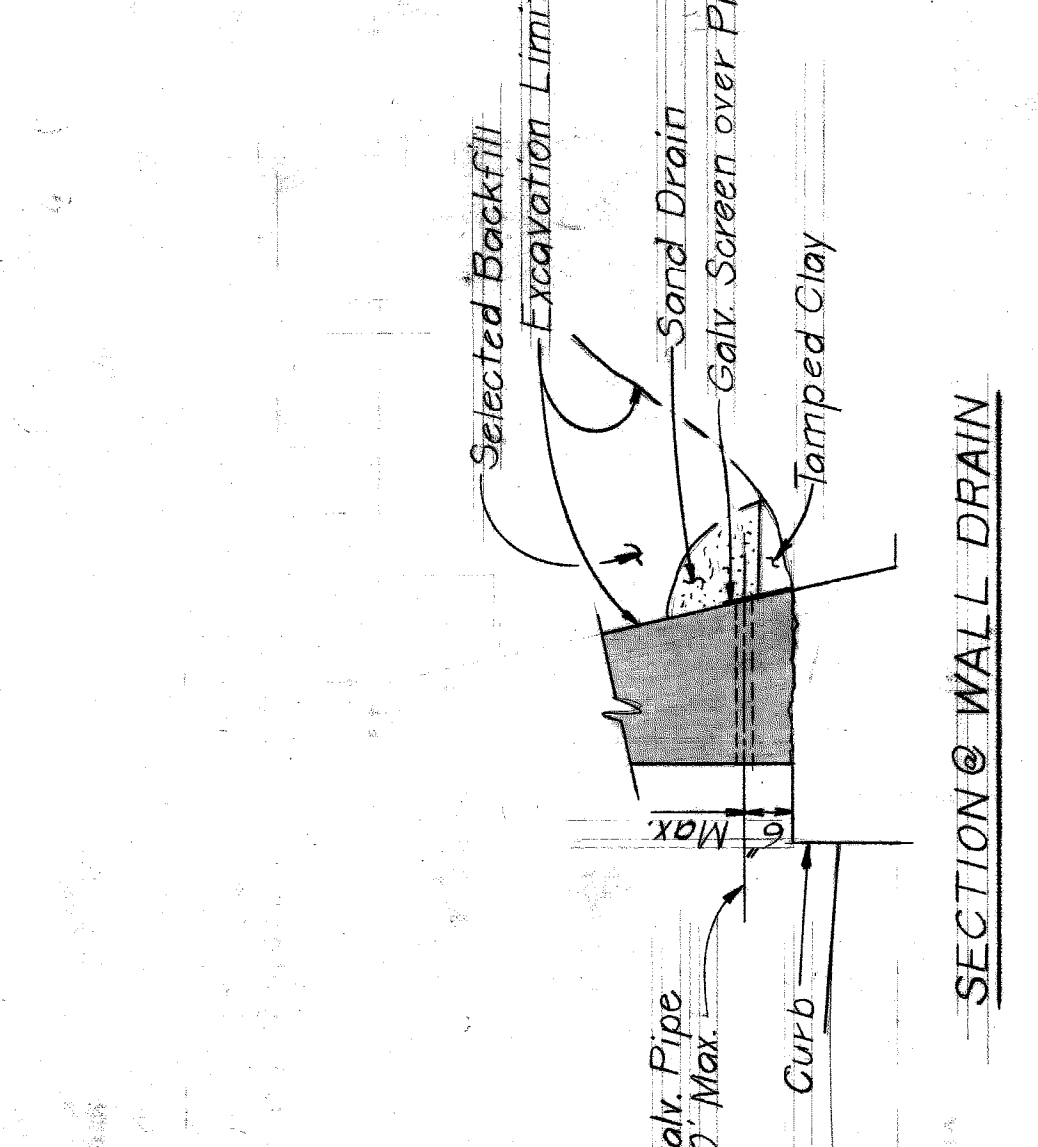
NOTES:
 Fittings & fastenings shall be malleable, wrought iron or pressed steel and galvanized. Wire used in fastening the fabric shall be not less than #9 gage. The bands of wire shall be not less than 12" apart on the posts and not more than 15" apart on the top rail.
 All fencing materials shall be coated with a plasticized polyvinyl chloride, except that portion of the posts to be imbedded in concrete.
 The fencing material shall be either:
 (a) Anchor Vinyl Coated Steel Chain Link Fence with a color coating black, supplied by the Anchor Fence Division, Anchor Post Products, Inc.
 (b) Color Band with a color coating black, supplied by the Color Guard Corp. Raritan, N.J.
 (c) or approved equal to the above.



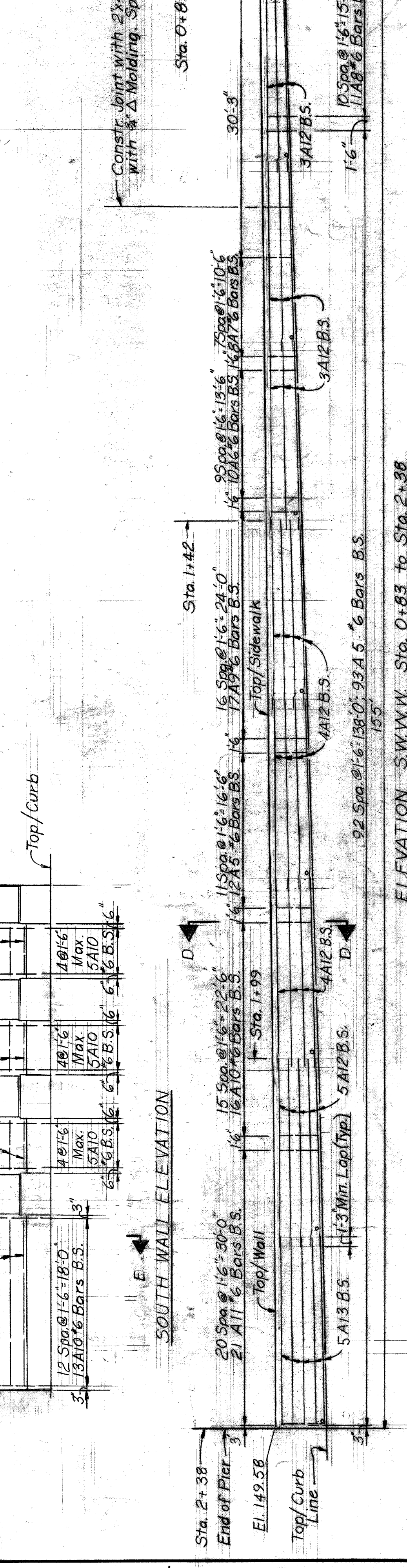
SECTION D-D
SECTION E-E

STEEL REINFORCEMENT DETAILS

| No. | Length | Size | Quan. | Weight |
|--------------|--------|------|-------|--------------|
| 1 | 3'-9" | #6 | 106 | 597 |
| 2 | 18'-0" | #6 | 6 | 162 |
| 3 | 17'-0" | #6 | 16 | 409 |
| 4 | 19'-9" | #6 | 16 | 475 |
| 5 | 4'-0" | #6 | 564 | 3389 |
| 6 | 2'-9" | #6 | 74 | 306 |
| 7 | 2'-3" | #6 | 36 | 122 |
| 8 | 3'-6" | #6 | 314 | 1651 |
| 9 | 3'-3" | #6 | 34 | 153 |
| 10 | 4'-3" | #6 | 88 | 562 |
| 11 | 4'-9" | #6 | 92 | 656 |
| 12 | 20'-0" | #6 | 190 | 5707 |
| 13 | 2'-0" | #6 | 10 | 315 |
| 14 | 6'-6" | #6 | 4 | 39 |
| 15 | 11'-9" | #6 | 4 | 71 |
| 16 | 5'-3" | #6 | 36 | 284 |
| Total | | | | 14489 |



SECTION @ WALL DRAIN



CITY OF DETROIT
 DEPARTMENT OF PUBLIC WORKS
 CITY ENGINEERS' OFFICE

FOR
WALL, SIDEWALK & RAILING REPAIR

HOLDEN AVE. UNDER BRIDGE XU-6
 PENN CENTRAL & GRAND TRUNK WESTERN RR.

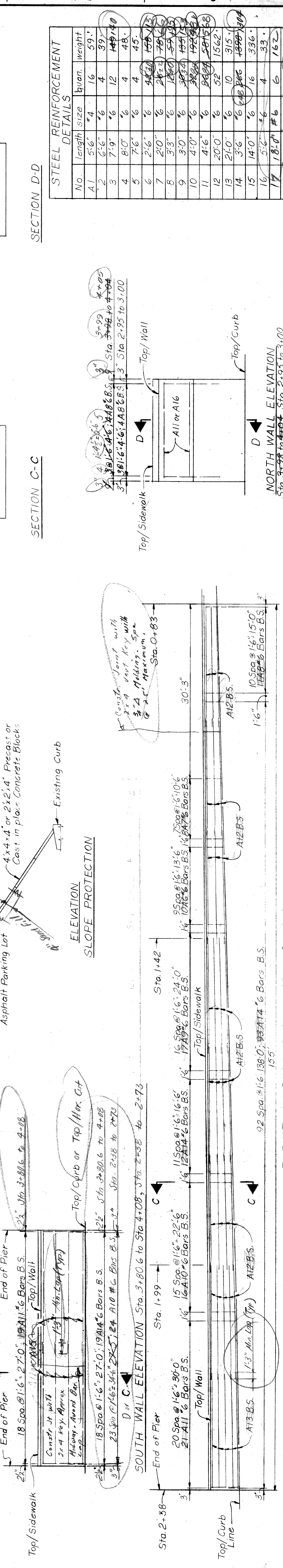
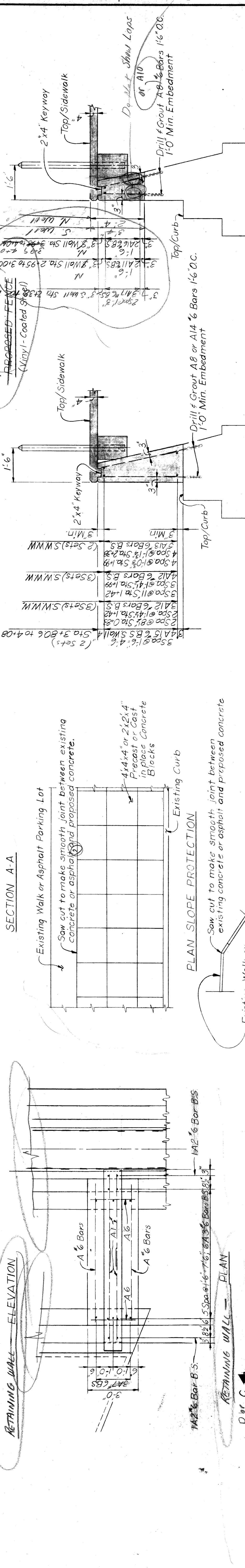
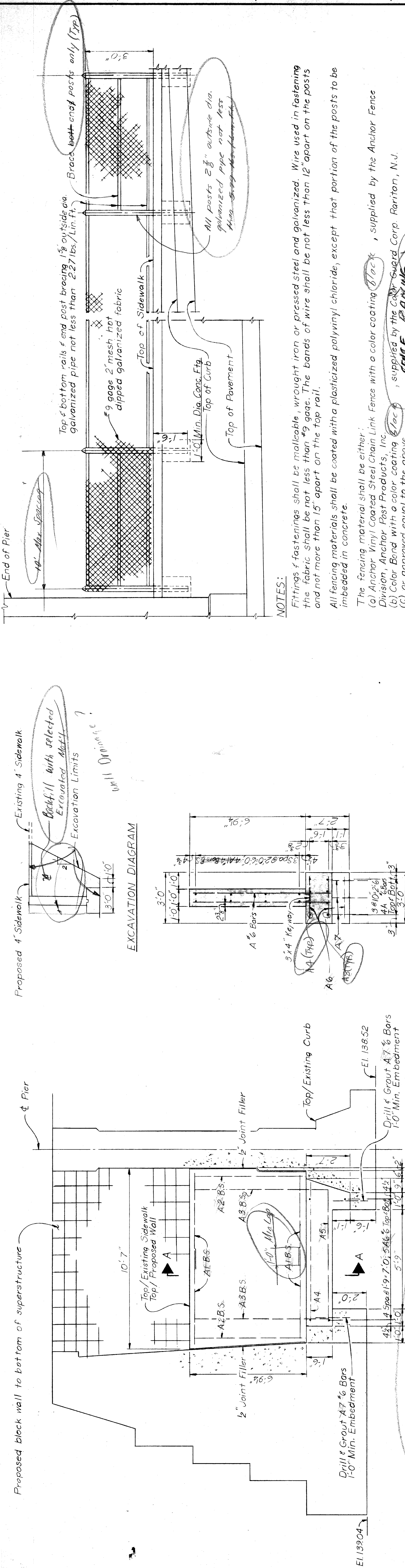
DESIGNED BY: **WAL**
 DRAWN BY: **L.G.**
 TRACED BY:
 CHECKED BY: **RRB**

APPROVED:

REVISIONS LOCATED BY COORDINATES ON SHEET

CONTRACT No.
 DRWG No.
 DATE 11-72

11 10 9 8 7 6 5 4 3 2 1



CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEERS OFFICE

HOLDEN AVE. UNDER BRIDGE XU-6
PENN CENTRAL & GRAND TRUNK WESTERN R.R.

WALL, SIDEWALK & RAILING REPAIR

FOR

DESIGNED BY
DRAWN BY
TRACED BY
CHECKED BY

REVISIONS LOCATED BY COORDINATES ON SHEET

APPROVED

SHEET 2 OF 2 SHEETS
CONTRACT NO.
DRWG NO.
DATE