

SECTION AT STA. 544+32
SCALE 1/4" = 1'

EST. BOOK P.P.
DESIGNED BY Klemmeyer
TRACED BY "
CHECKED BY "

18

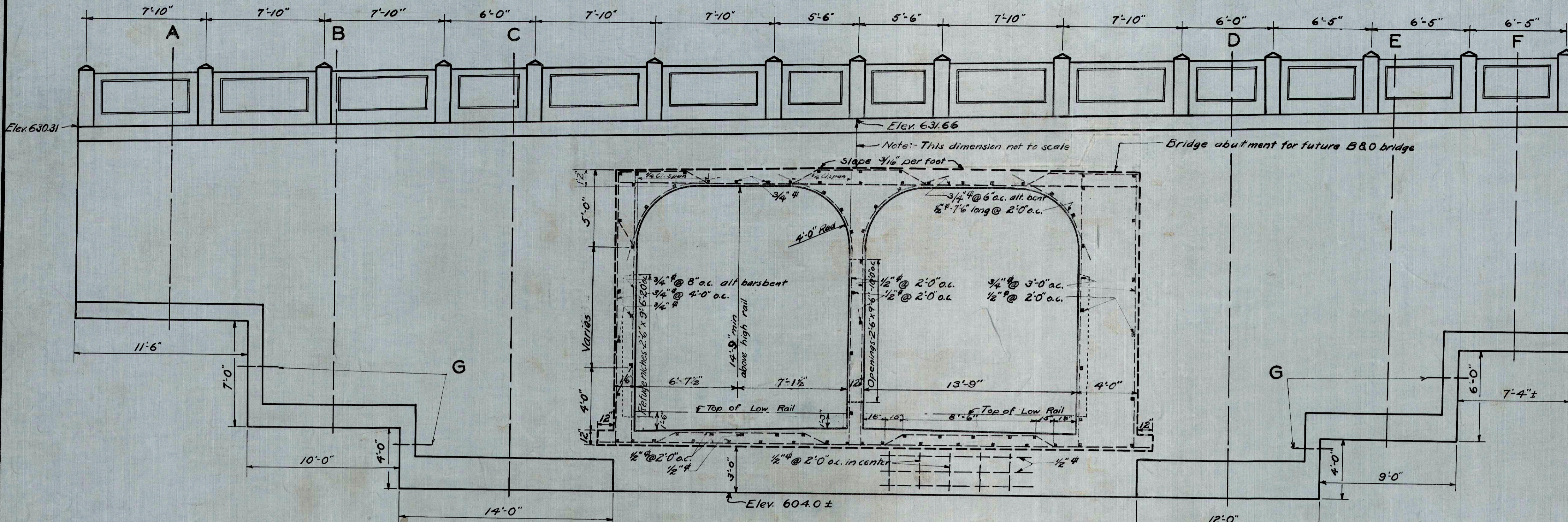
BOARD OF
RAPID TRANSIT COMMISSIONERS
CINCINNATI, OHIO

SECTION NO 9
STA. 537-50 TO MADISON RD.

SCALE - 1" = 40'-0"
CORRECTED BY
APPROVED
APPROVED

DATE May 2, 1924
PRIN. ASST. ENGR.
CHIEF ENGINEER
FOR THE COMMISSION
PRESIDENT

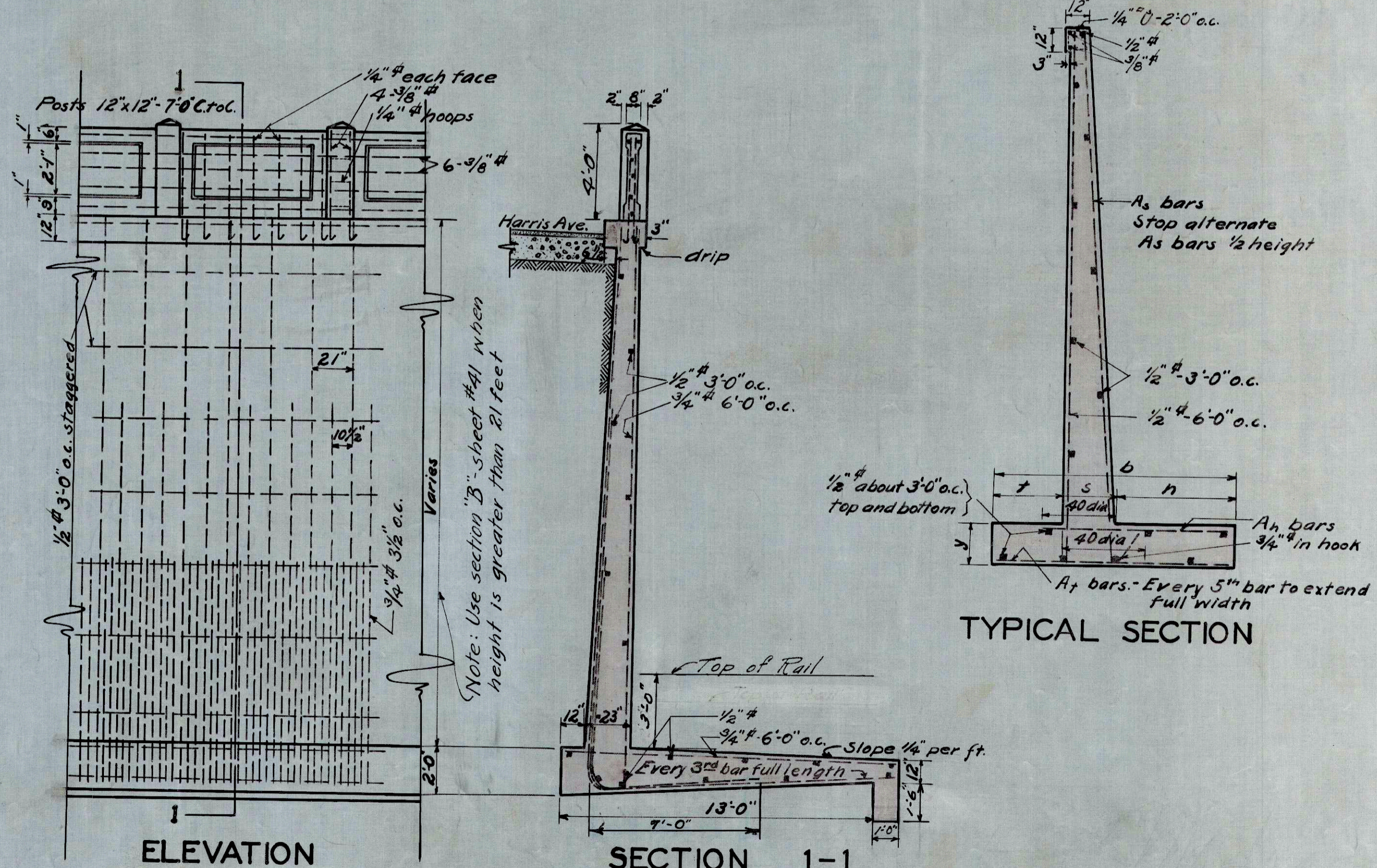
29-25-35



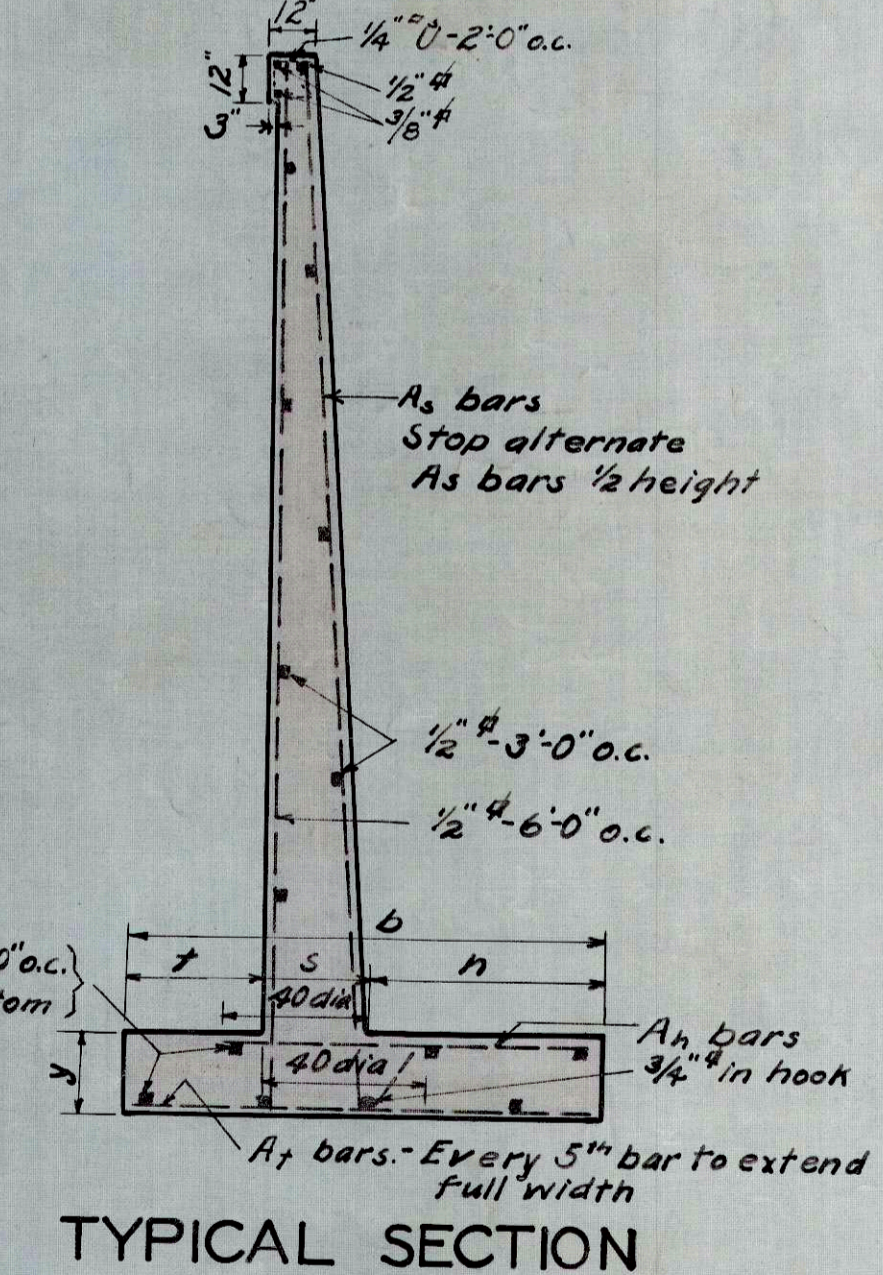
WALL SCHEDULE

Section	h	s	n	y	A ₁	A ₂	A ₃	Elev.
A	6'-6"	2'-0"	14 1/2"	3'-3"	13"	5/8" @ 12"	3/8" @ 8"	615.00
B	9'-0"	2'-8"	1'-0"	4'-6"	18"	3/4" @ 12"	3/8" @ 5"	608.00
C	12'-0"	3'-7"	2'-5"	6'-0"	25"	3/4" @ 12"	3/8" @ 4"	604.00
D	13'-0"	3'-8"	2'-10"	6'-6"	30"	3/4" @ 10"	3/8" @ 3"	604.00
E	10'-0"	2'-11"	2'-1"	5'-0"	21"	3/4" @ 8"	3/8" @ 6"	608.00
F	7'-6"	2'-3 1/2"	1'-5 1/2"	3'-9"	15"	3/4" @ 8"	3/8" @ 5"	614.00
G	12" thick - width varies.							

WEST ELEVATION-WALL ALONG MONTGOMERY AVE.



ELEVATION SECTION 1-1
WALL ALONG HARRIS AVE.
FROM STA. 526+55 ± TO STA. 537+50



TYPICAL SECTION

DETAILS-MONTGOMERY AVE. SUBWAY
HARRIS AVE. WALL

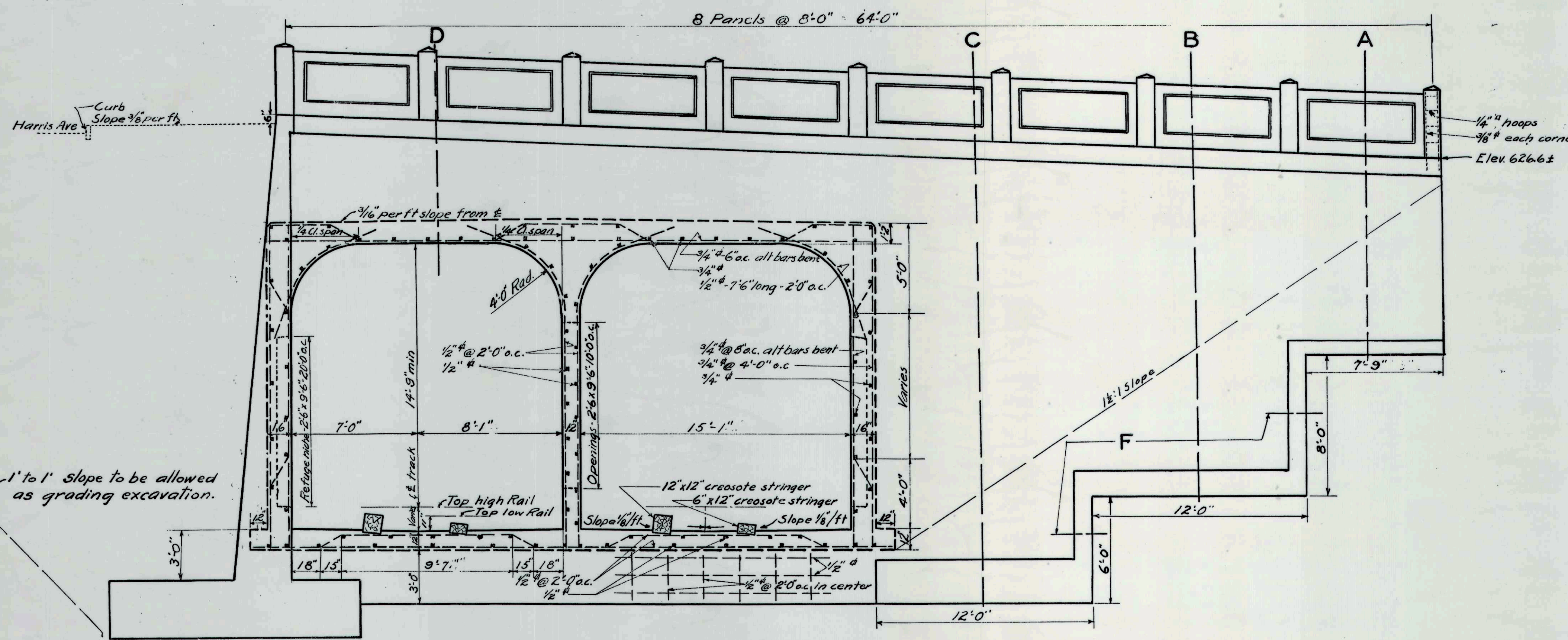
Revised Sept 22, 1925

BOARD OF
RAPID TRANSIT COMMISSIONERS
CINCINNATI, OHIO.
SECTION NO 8

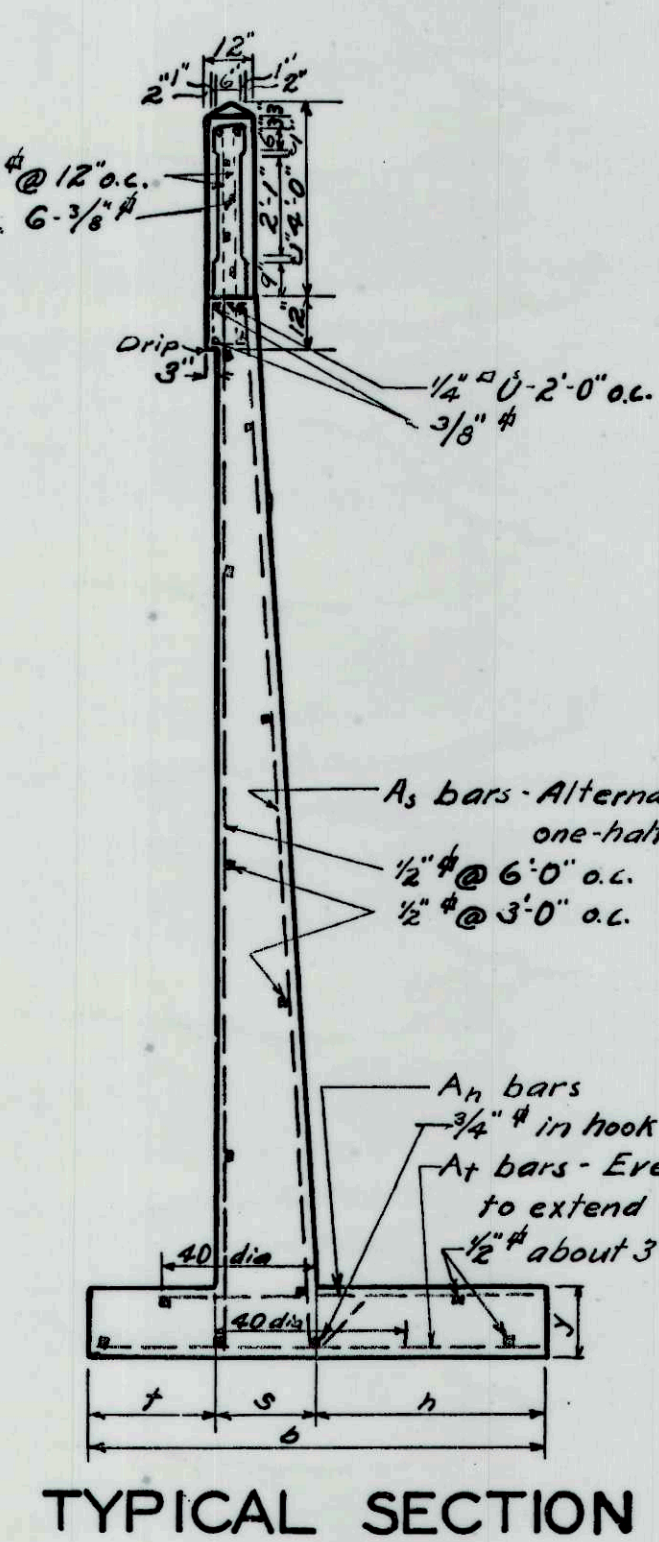


SCALE - 1/4" = 1'-0" DATE May 2, 1924.
CORRECTED BY [Signature] PRIN. ASS'T. ENG'R.
APPROVED BY [Signature] CHIEF ENGINEER
APPROVED BY [Signature] FOR THE COMMISSION PRESIDENT

EST. BOOK... P.P.
DESIGNED BY J.R.B.
TRACED BY J.E.H.
CHECKED BY J.R.B.



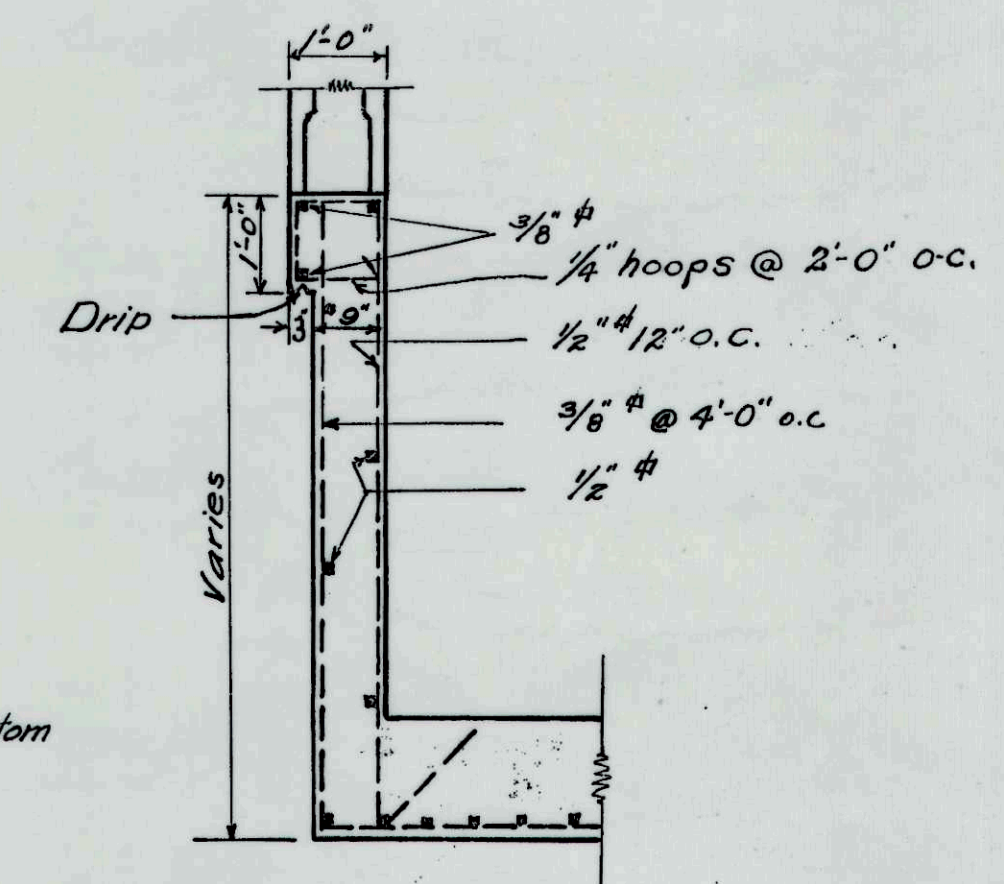
SECTION - E
WALL ALONG HARRIS AVE.
ELEVATION - WEST END HARRIS AVE. SUBWAY



TYPICAL SECTION

WALL SCHEDULE

Section	b	f	s	h	y	Steel	Elev. Footing
A	5'-0"	1'-8"	10"	2'-6"	10"	1/2" @ 12" o.c. 3/8" @ 7' o.c. 3/8" @ 3' o.c.	613.42
B	9'-0"	2'-8"	1'-10"	4'-6"	18"	3/4" @ 5' o.c. 1/2" @ 7' o.c. 3/8" @ 3' o.c.	607.42
C	13'-0"	3'-8"	2'-10"	6'-6"	30"	1/2" @ 12" o.c. 3/8" @ 7' o.c. 3/8" @ 3' o.c.	601.42
D	Parapet wall - See detail						
E	14'-0"	3'-10"	3'-2"	7'-0"	33"	1/2" @ 4' o.c. 3/8" @ 5' o.c. 3/8" @ 3' o.c.	599.40
F	12" thick - width varies						



SECTION PARAPET WALL
SCALE 1/2" = 1'-0"

DETAILS - HARRIS AVE. SUBWAY
HARRIS AVE. WALL

EST. BOOK 9 P.P. _____
DESIGNED BY J.E.H. _____
TRACED BY " _____
CHECKED BY J.R.B. _____

43

BOARD OF
RAPID TRANSIT COMMISSIONERS
CINCINNATI, OHIO
SECTION NO 9
SCALE - 1/4" = 1'-0" DATE May 2, 1924
CORRECT *W. R. ...* PRIN. ASS'T. ENG'R.
APPROVED *J. E. ...* CHIEF ENGINEER
APPROVED *W. C. ...* FOR THE COMMISSION
PRESIDENT

29-25-36

CITY OF CINCINNATI
DEPARTMENT OF TRANSPORTATION
AND ENGINEERING

HARRIS AVENUE SUBWAY FILLING (PHASE II) & NORWOOD TUNNEL SEWER REPLACEMENT

INDEX OF SHEETS:

- Title Sheet.....1
- Plan and Profile.....2
- Proposed Sewer Plans.....3,4
- Existing Plans.....5-9

PROJECT LOCATION



LOCATION MAP

1997 SPECIFICATIONS:

The standard specifications of The State of Ohio, Department of Transportation, the current edition of the City of Cincinnati Supplement, and the Special Provisions listed in the bid document shall govern this improvement.

NOTES:

The location of the underground utilities shown on the plans have been obtained by diligent field checks and searches of available records. The City does not guarantee the accuracy of the locations and accepts no responsibility for expense resulting from errors in the location. Contractor(s) shall verify by field inspection utility locations prior to start of work.

CAUTION UNDERGROUND UTILITIES
2 WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764
OHIO UTILITY PROTECTION SERVICE
CALL NON-SERVICE FACILITY
OWNERS DIRECT

PLANS PREPARED BY:
CITY OF CINCINNATI
DEPARTMENT OF TRANSPORTATION
AND ENGINEERING
STRUCTURAL AND GEOTECHNICAL
DESIGN SECTION



Recommended: *Frankly Conn* 10.18.02
Principal Structural Engineer

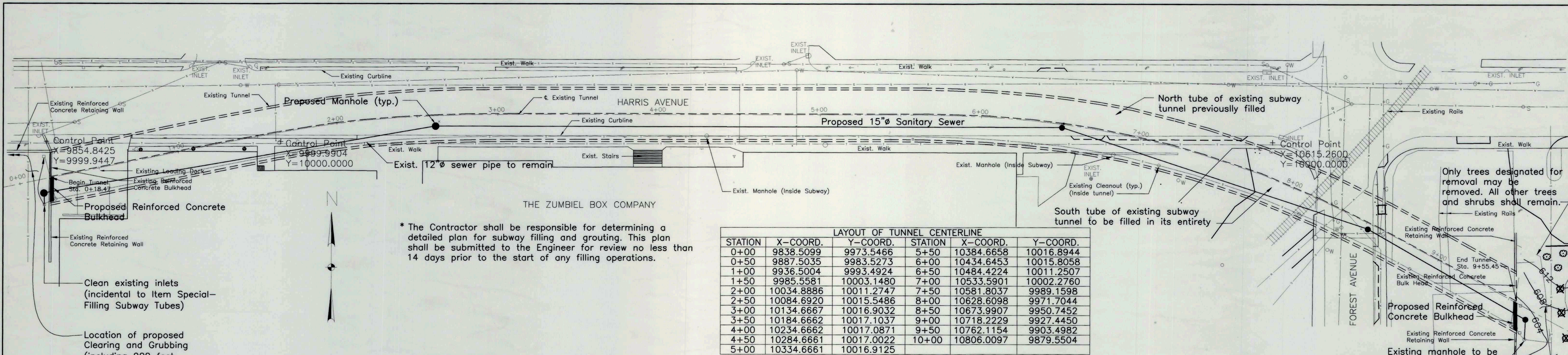
Recommended: *Jo Gls* 10/24/02
Principal Construction Engineer

Recommended: *Edward H. Kistner* 10/24/02
Sewers Chief Engineer

Approved: *Prem K. Garg* 10/31/02
City Engineer DATE:

Approved: *Stephen M. ...* 10/25/02
Sewers Director DATE:

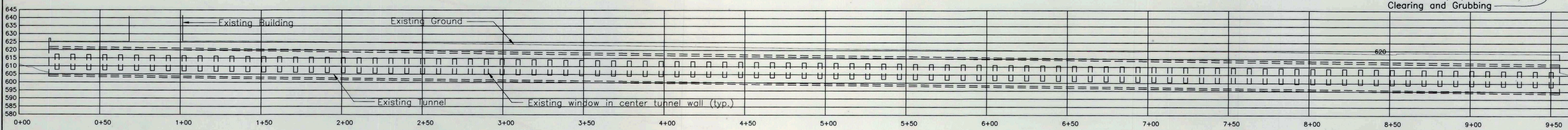
Approved: *Edwin Enabreit* 10/31/02
Director of Transportation and Engineering DATE:



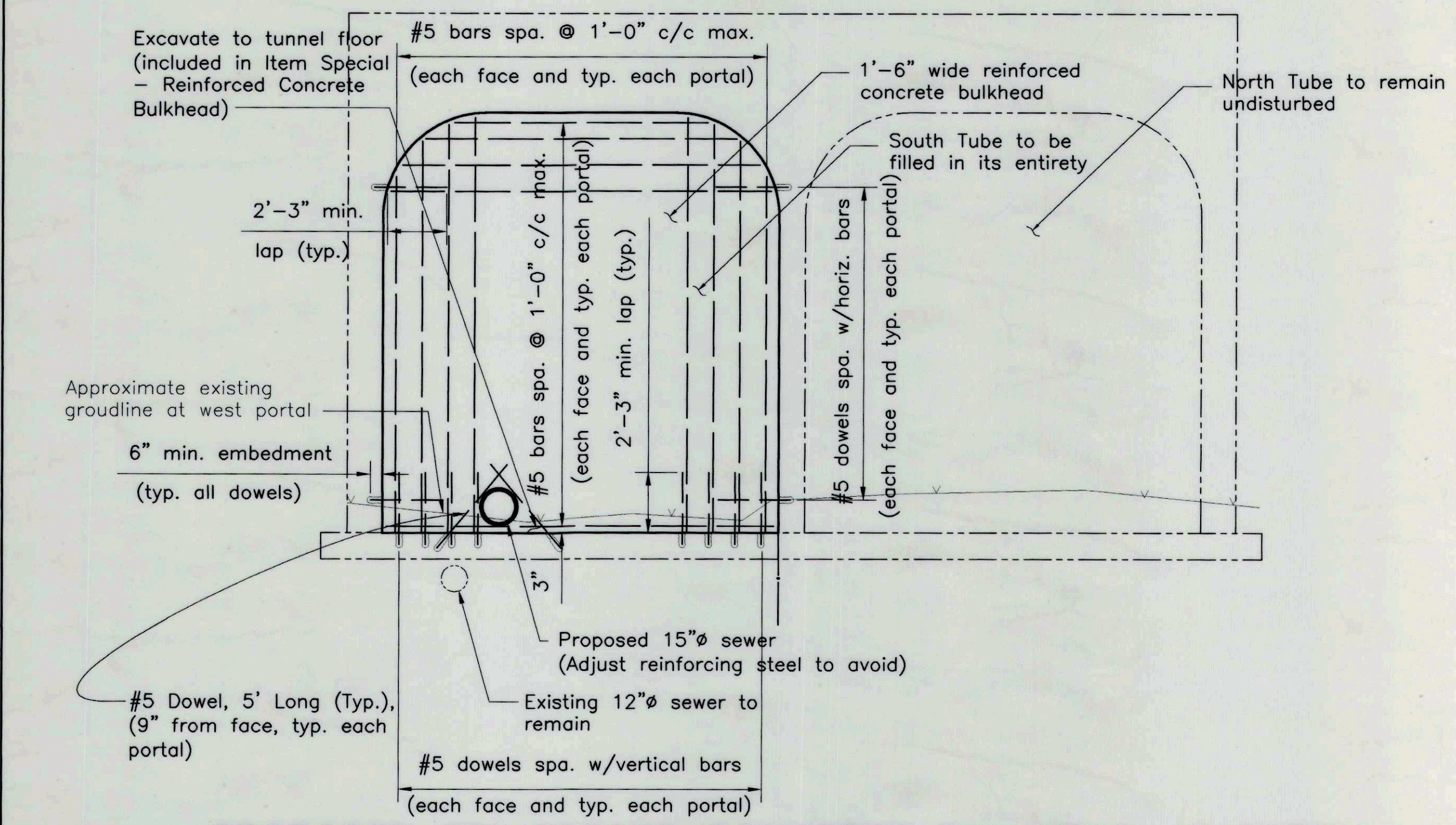
LAYOUT OF TUNNEL CENTERLINE

STATION	X-COORD.	Y-COORD.	STATION	X-COORD.	Y-COORD.
0+00	9838.5099	9973.5466	5+50	10384.6658	10016.8944
0+50	9887.5035	9983.5273	6+00	10434.6453	10015.8058
1+00	9936.5004	9993.4924	6+50	10484.4224	10011.2507
1+50	9985.5581	10003.1480	7+00	10533.5901	10002.2760
2+00	10034.8886	10011.2747	7+50	10581.8037	9989.1598
2+50	10084.6920	10015.5486	8+00	10628.6098	9971.7044
3+00	10134.6667	10016.9032	8+50	10673.9907	9950.7452
3+50	10184.6662	10017.1037	9+00	10718.2229	9927.4450
4+00	10234.6662	10017.0871	9+50	10762.1154	9903.4982
4+50	10284.6661	10017.0022	10+00	10806.0097	9879.5504
5+00	10334.6661	10016.9125			

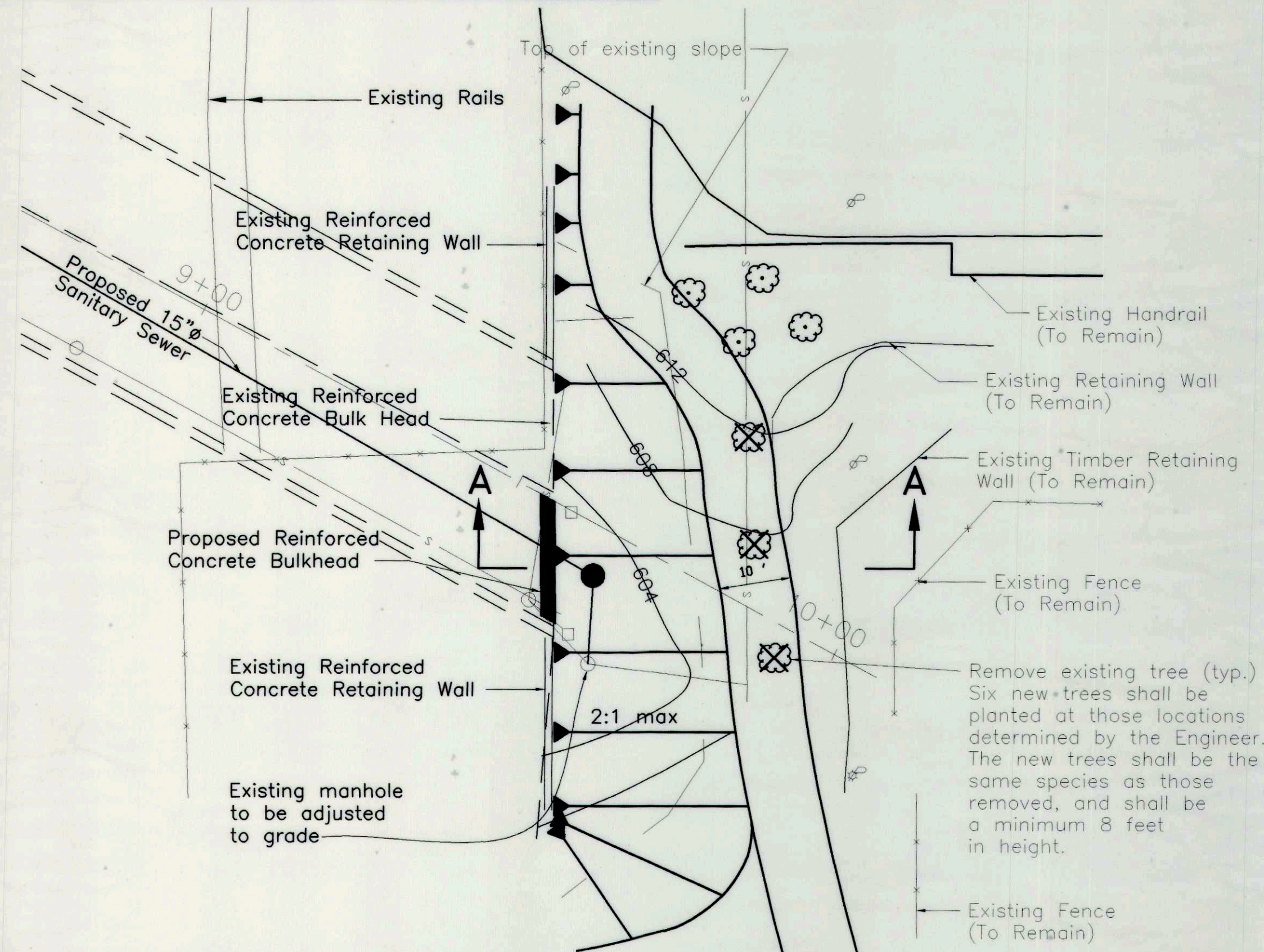
PLAN



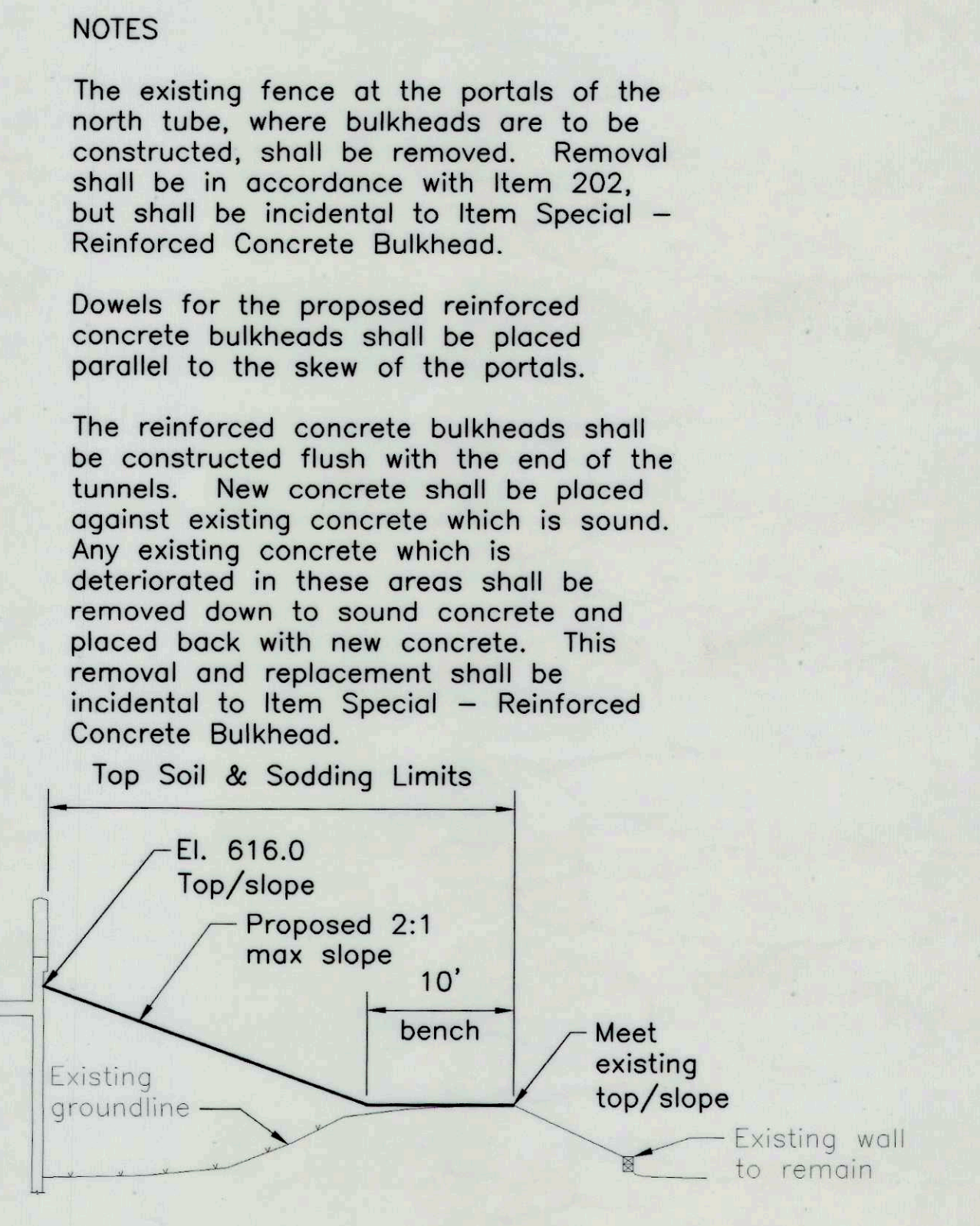
PROFILE ALONG CENTERLINE OF TUNNEL



PROPOSED REINFORCED CONCRETE BULKHEAD AT PORTAL
(Existing fence at portals not shown)



GRADING PLAN AT EAST END



SECTION A-A

NOTES

The existing fence at the portals of the north tube, where bulkheads are to be constructed, shall be removed. Removal shall be in accordance with Item 202, but shall be incidental to Item Special - Reinforced Concrete Bulkhead.

Dowels for the proposed reinforced concrete bulkheads shall be placed parallel to the skew of the portals.

The reinforced concrete bulkheads shall be constructed flush with the end of the tunnels. New concrete shall be placed against existing concrete which is sound. Any existing concrete which is deteriorated in these areas shall be removed down to sound concrete and placed back with new concrete. This removal and replacement shall be incidental to Item Special - Reinforced Concrete Bulkhead.

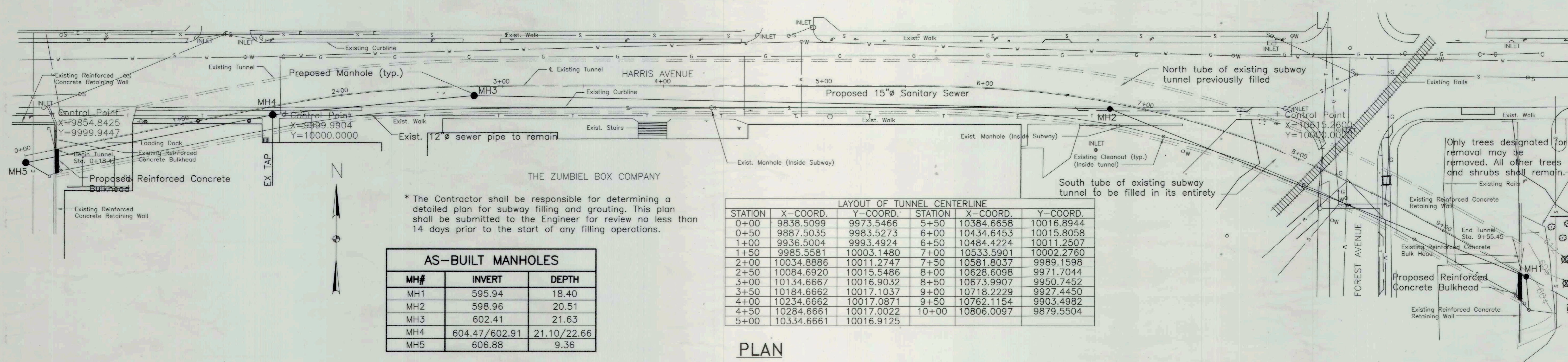
Top Soil & Sodding Limits

El. 616.0 Top/slope
Proposed 2:1 max slope
10' bench
Meet existing top/slope
Existing wall to remain

Remove existing tree (typ.)
Six new trees shall be planted at those locations determined by the Engineer. The new trees shall be the same species as those removed, and shall be a minimum 8 feet in height.

DESIGN AGENCY: DEPT. OF TRANSPORT. AND ENGINEERING
 DATE: CHN 10/2002
 STRUCTURE FILE NUMBER: Ph.II Plan.dwg
 DRAWN: WJS
 CHECKED: RJS
 DESIGNED: WJS
 REVISIONS: RJS
PLAN AND PROFILE
 HARRIS AVENUE SUBWAY FILLING (Phase II)
 DEPARTMENT OF TRANSPORTATION AND ENGINEERING
HARRIS AVE.
 2 / 2
 2 / 9

29-25-28

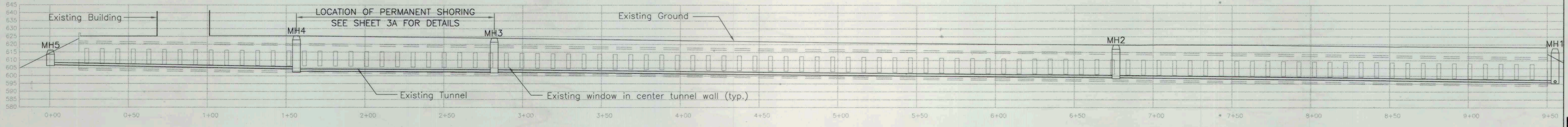


* The Contractor shall be responsible for determining a detailed plan for subway filling and grouting. This plan shall be submitted to the Engineer for review no less than 14 days prior to the start of any filling operations.

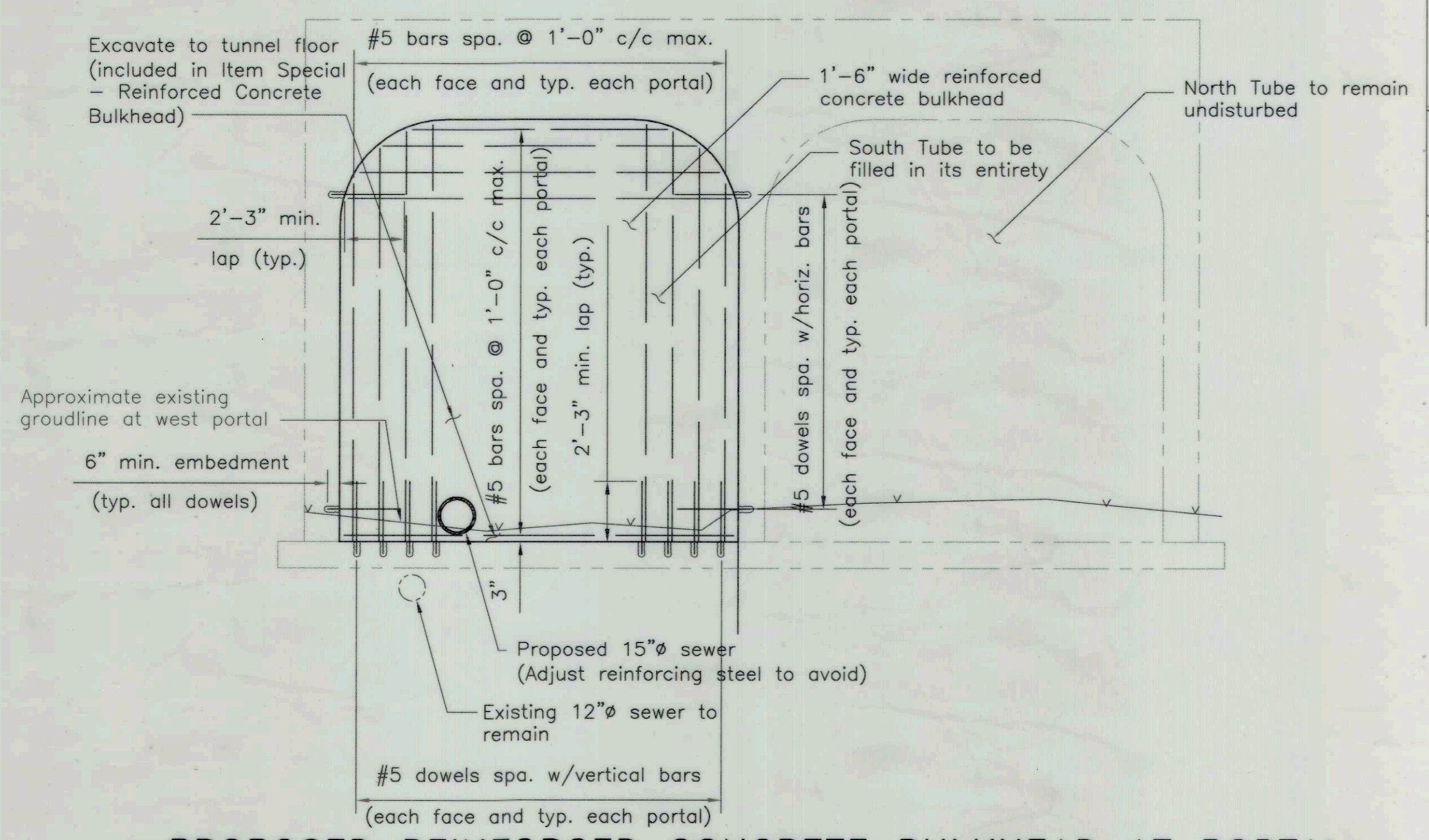
AS-BUILT MANHOLES		
MH#	INVERT	DEPTH
MH1	595.94	18.40
MH2	598.96	20.51
MH3	602.41	21.63
MH4	604.47/602.91	21.10/22.66
MH5	606.88	9.36

LAYOUT OF TUNNEL CENTERLINE					
STATION	X-COORD.	Y-COORD.	STATION	X-COORD.	Y-COORD.
0+00	9838.5099	9973.5466	5+50	10384.6658	10016.8944
0+50	9887.5035	9983.5273	6+00	10434.6453	10015.8058
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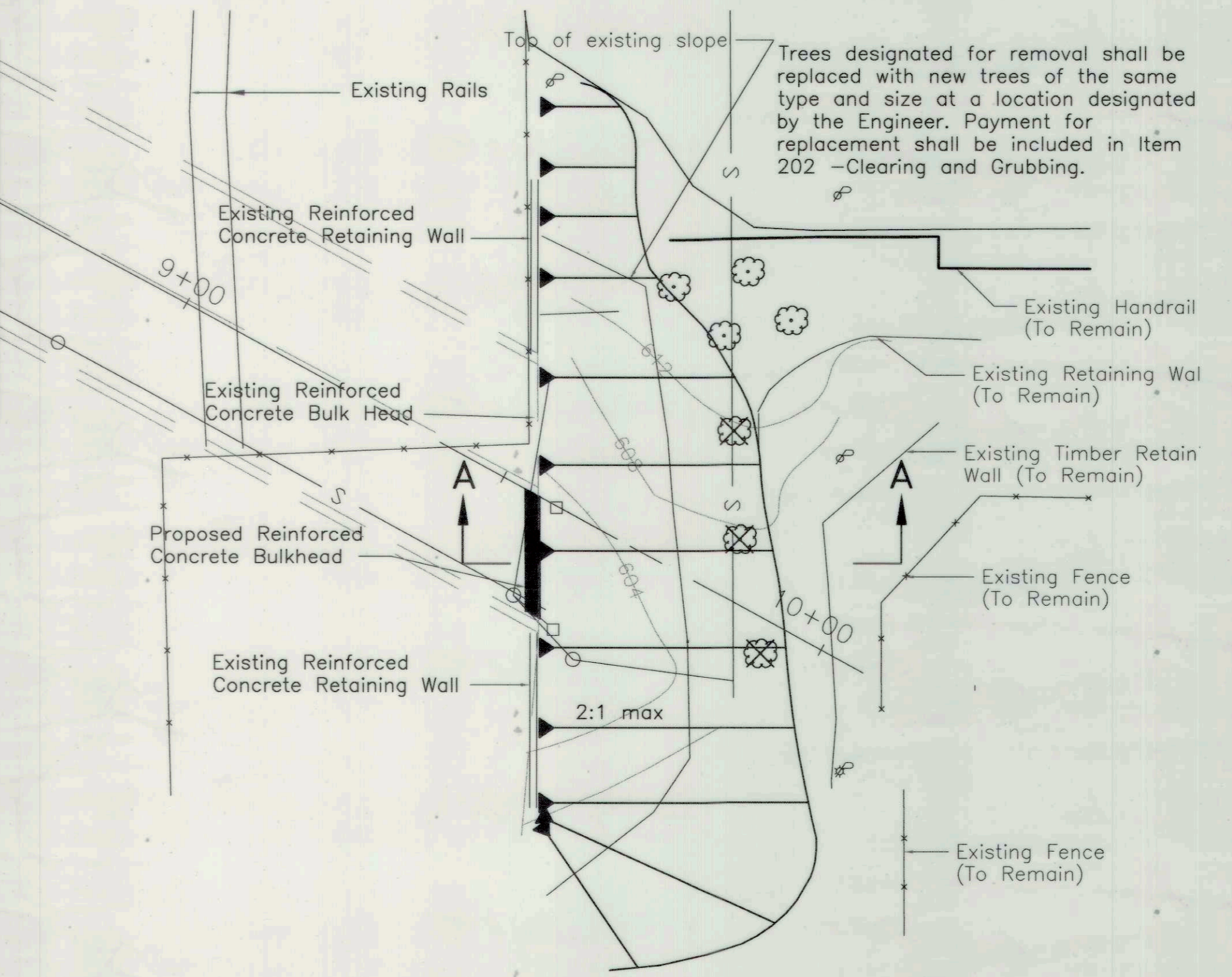
PLAN



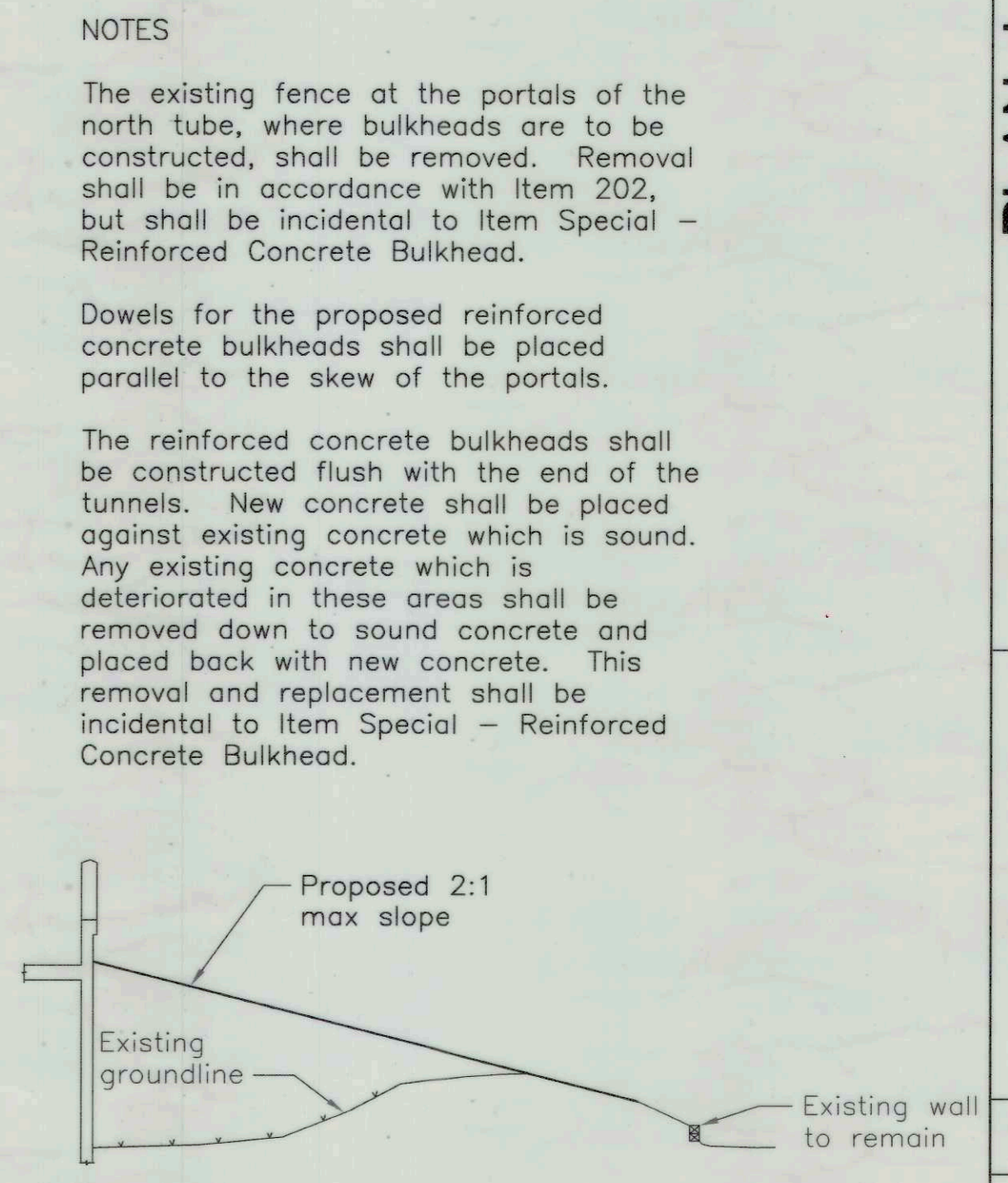
PROFILE ALONG CENTERLINE OF TUNNEL



PROPOSED REINFORCED CONCRETE BULKHEAD AT PORTAL
(Existing fence at portals not shown)



GRADING PLAN AT EAST END

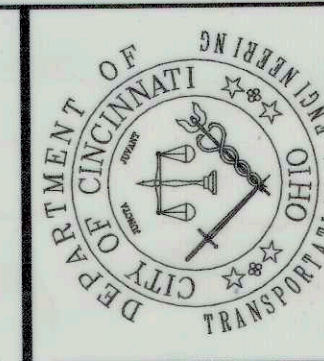


SECTION A-A

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DESIGN AGENCY: DEPT. OF TRANSPORTATION AND ENGINEERING
 DATE: _____
 DRAWN: WJS
 CHECKED: WJS
 DESIGNED: WJS
 STRUCTURE FILE NUMBER: _____
 HARRIS AVE. SUBWAY FILLING (Phase II)
 DEPARTMENT OF TRANSPORTATION AND ENGINEERING
 HARRIS AVE.
 2 / 2
 2

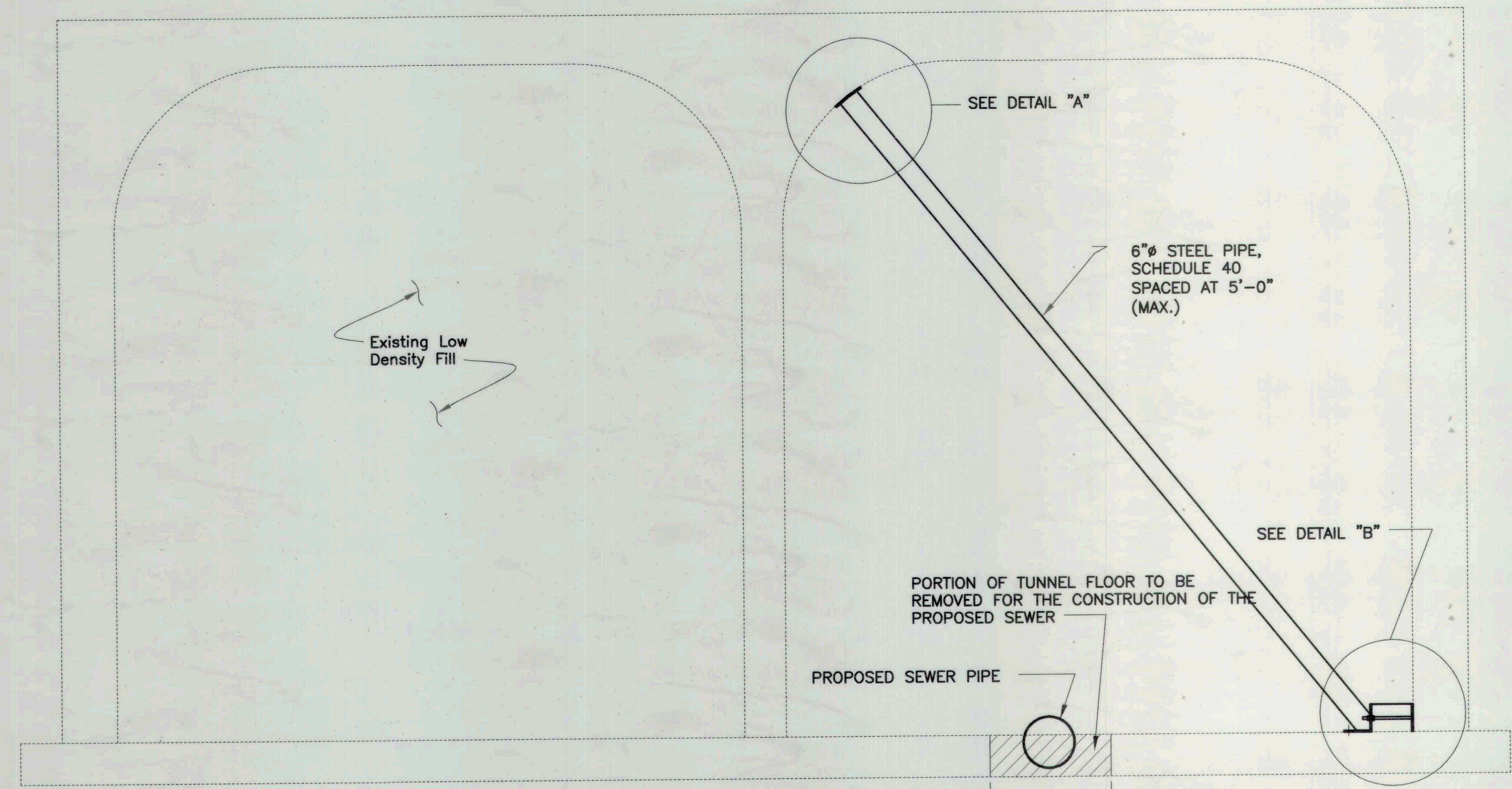
29-25-29



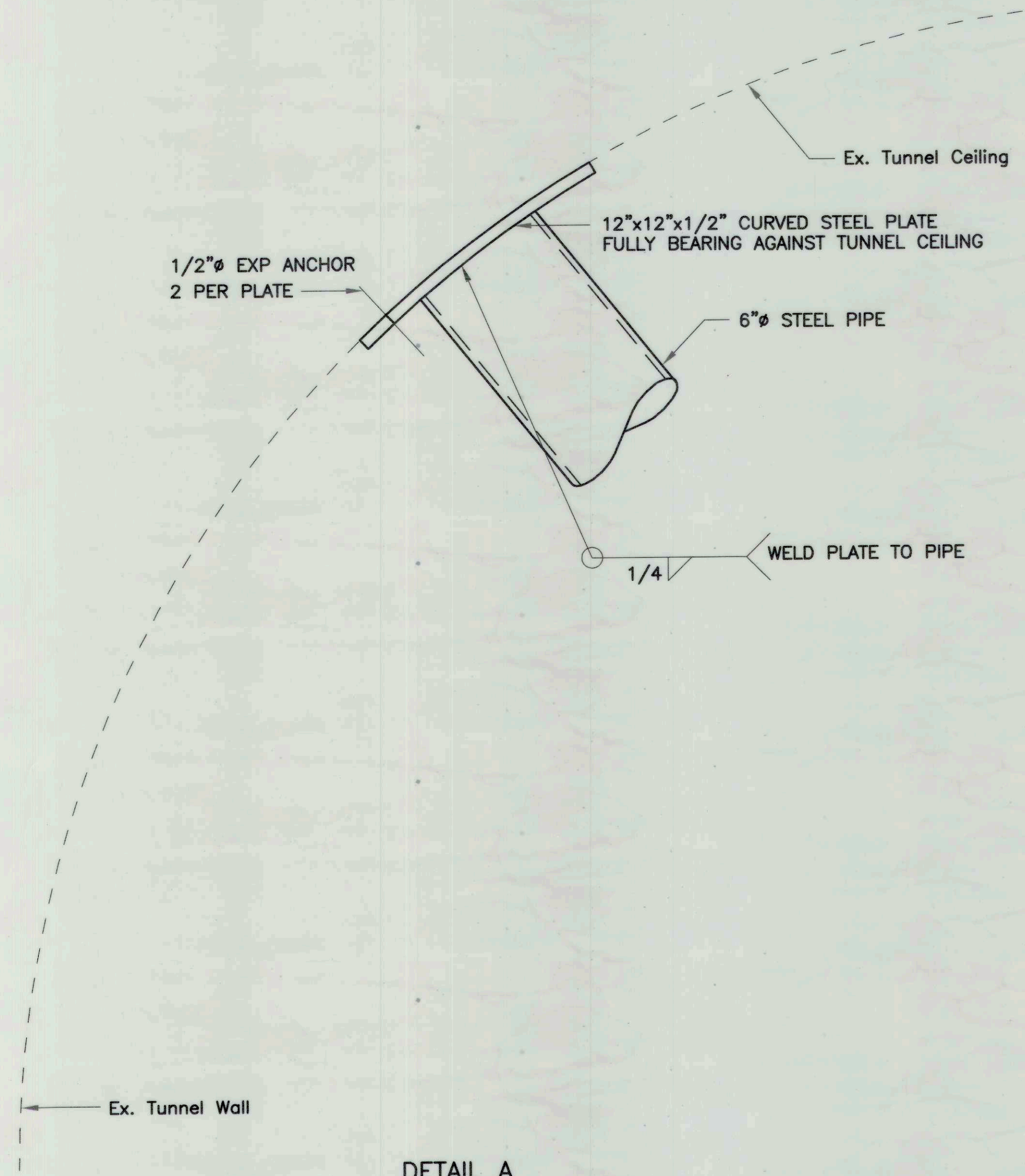
CONTRACT DRAWING
 PRINTS NOT BEARING THIS STAMP WERE MADE FOR BIDS AND ARE TO BE CONSIDERED OBSOLETE FOR CONTRACT PURPOSES.

Department of Transportation and Engineering
 City of Cincinnati
 City Hall, Street Cincinnati, Ohio 45202

HARRIS AVENUE SUBWAY FILLING AND SEWER REPLACEMENT SHORING PLAN



HARRIS SUBWAY TUNNEL ELEVATION



DETAIL A

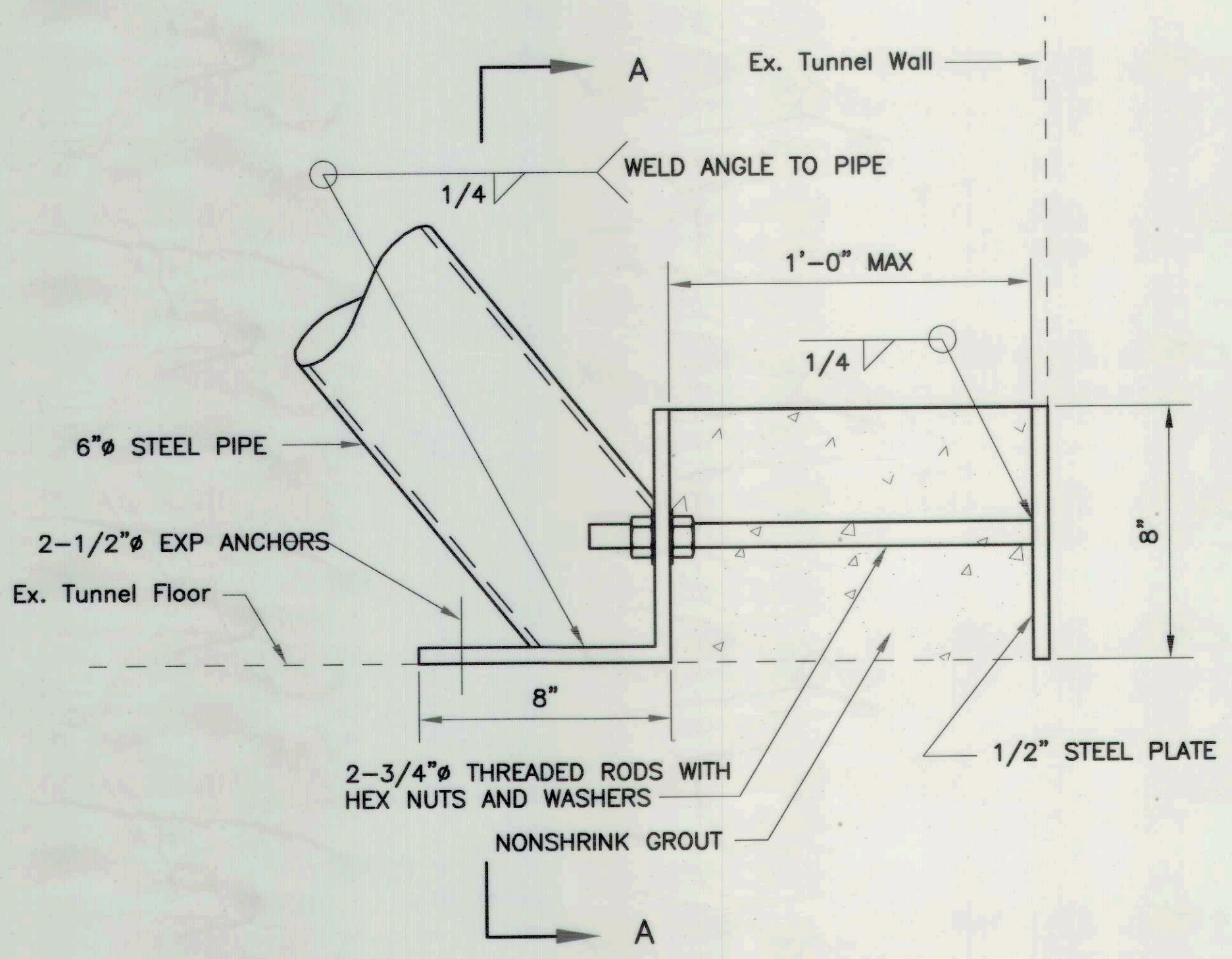
NOTES

- INSTALLATION SEQUENCE:**
1. PLACE SHORE DIAGONALLY AT LOCATION OF GREATEST DISTANCE BETWEEN UPPER LEFT AND BOTTOM RIGHT "CORNER" OF TUNNEL.
 2. TORQUE NUTS UNTIL SHORE IS TIGHT AND PLATES ARE IN FULL BEARING AGAINST TUNNEL WALL AND CEILING
 3. DRILL AND SET EXPANSION ANCHORS
 4. GROUT BETWEEN VERTICAL PLATE AND ANGLE

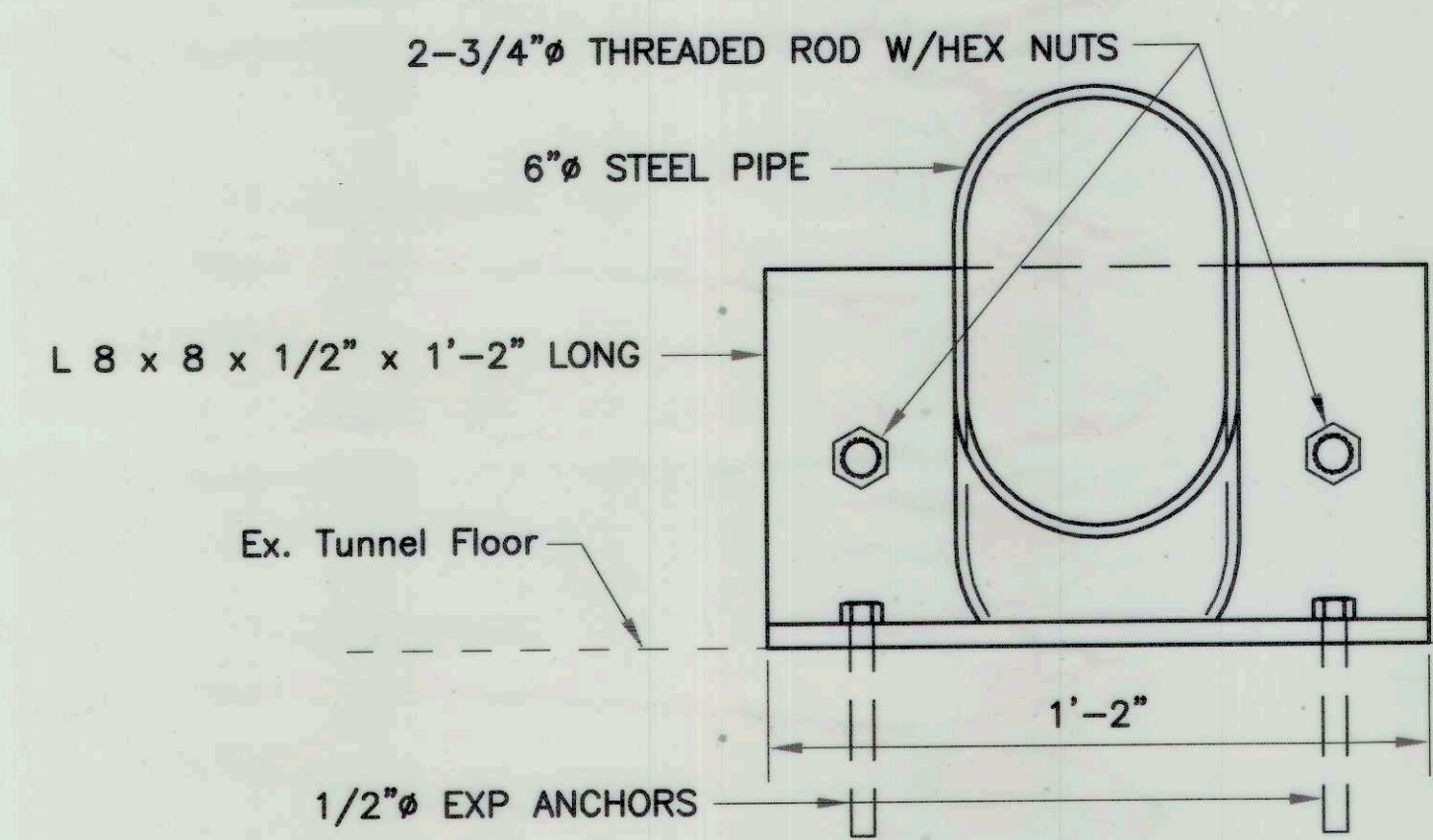
- MATERIALS:**
- STEEL PIPE: ASTM A53, GRADE B
 - STEEL ANGLES AND PLATES: ASTM A36
 - EXPANSION ANCHORS: SUBMIT FOR APPROVAL
 - NONSHRINK GROUT: SUBMIT FOR APPROVAL

SUPPORTS ARE TO BE PLACED ALONG THE ENTIRE LENGTH WHERE THE EXISTING TUNNEL FLOOR IS TO BE REMOVED, IN WHOLE OR IN PART, TO INSTALL THE NEW SEWER PIPE. THE SUPPORTS SHALL BE IN PLACE PRIOR TO ANY REMOVAL OF THE TUNNEL FLOOR.

THE SUPPORTS SHALL BE LEFT PERMANENTLY IN PLACE.



DETAIL B



SECTION A-A

29-25-30

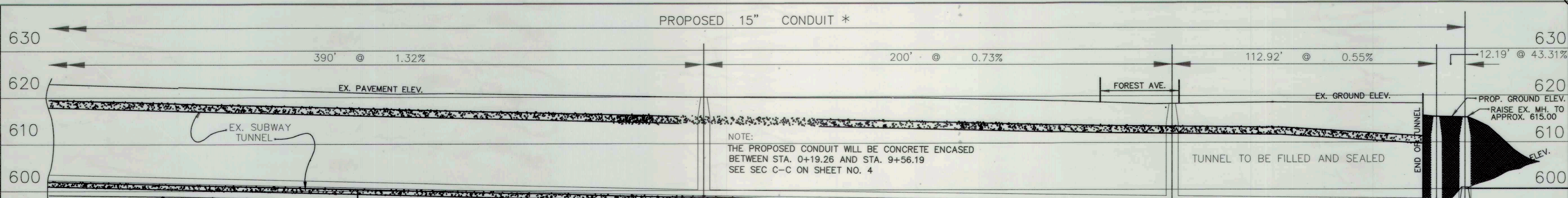
Date	Revisions No.
1/22/2004	
1/22/2004	
1/23/2004	

Drawn by: WJS
 Designed by: WJS
 Checked by: RJS
 Reviewed by:

Consultant

Structure File Number

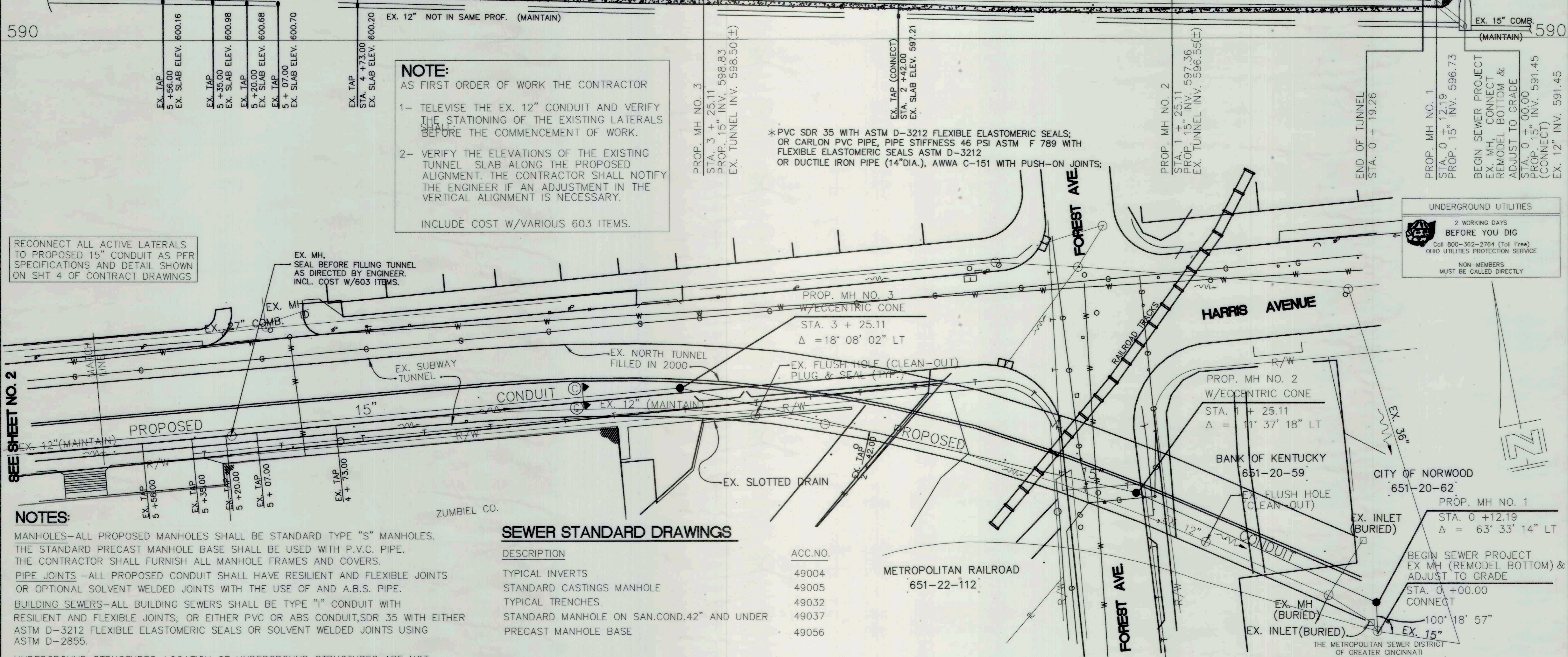
ACC No. 27248



NOTE:
THE PROPOSED CONDUIT WILL BE CONCRETE ENCASED BETWEEN STA. 0+19.26 AND STA. 9+56.19 SEE SEC C-C ON SHEET NO. 4

NOTE:
AS FIRST ORDER OF WORK THE CONTRACTOR SHALL:
1- TELEVIEW THE EX. 12" CONDUIT AND VERIFY THE STATIONING OF THE EXISTING LATERALS BEFORE THE COMMENCEMENT OF WORK.
2- VERIFY THE ELEVATIONS OF THE EXISTING TUNNEL SLAB ALONG THE PROPOSED ALIGNMENT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF AN ADJUSTMENT IN THE VERTICAL ALIGNMENT IS NECESSARY.
INCLUDE COST W/VARIOUS 603 ITEMS.

RECONNECT ALL ACTIVE LATERALS TO PROPOSED 15" CONDUIT AS PER SPECIFICATIONS AND DETAIL SHOWN ON SHT 4 OF CONTRACT DRAWINGS



UNDERGROUND UTILITIES
2 WORKING DAYS
BEFORE YOU DIG
Call 800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

NOTES:
MANHOLES—ALL PROPOSED MANHOLES SHALL BE STANDARD TYPE "S" MANHOLES. THE STANDARD PRECAST MANHOLE BASE SHALL BE USED WITH P.V.C. PIPE. THE CONTRACTOR SHALL FURNISH ALL MANHOLE FRAMES AND COVERS.
PIPE JOINTS—ALL PROPOSED CONDUIT SHALL HAVE RESILIENT AND FLEXIBLE JOINTS OR OPTIONAL SOLVENT WELDED JOINTS WITH THE USE OF AND A.B.S. PIPE.
BUILDING SEWERS—ALL BUILDING SEWERS SHALL BE TYPE "I" CONDUIT WITH RESILIENT AND FLEXIBLE JOINTS; OR EITHER PVC OR ABS CONDUIT, SDR 35 WITH EITHER ASTM D-3212 FLEXIBLE ELASTOMERIC SEALS OR SOLVENT WELDED JOINTS USING ASTM D-2855.
UNDERGROUND STRUCTURES—LOCATION OF UNDERGROUND STRUCTURES ARE NOT GUARANTEED.
ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
THE CONTRACTOR SHALL MAINTAIN CONTINUOUS FLOW OF SEWAGE DURING CONSTRUCTION.
THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ALL DAMAGED UTILITIES AND STORM SEWERS.
THE CONTRACTOR SHALL VERIFY EXISTING INVERT ELEVATIONS IN THE TUNNEL PRIOR TO INSTALLATION OF THE PROPOSED CONDUITS AND MANHOLES.

SEWER STANDARD DRAWINGS

DESCRIPTION	ACC.NO.
TYPICAL INVERTS	49004
STANDARD CASTINGS MANHOLE	49005
TYPICAL TRENCHES	49032
STANDARD MANHOLE ON SAN.COND.42" AND UNDER	49037
PRECAST MANHOLE BASE	49056

BENCH MARKS
PBM NO. 2512. HARRIS AVE. & POPLAR ST. MARK IS 21.1' N OF THE CENTER LINE OF HARRIS AVE., 68' E OF THE EAST CURB OF POPLAR ST AND 15' SOUTH OF THE SE CORNER OF HN 4828.

CONTRACT DRAWING
PRINTS NOT BEARING THIS STAMP WERE MADE PRIOR TO ADVERTISING FOR BIDS AND ARE TO BE CONSIDERED OBSOLETE FOR CONTRACT PURPOSES

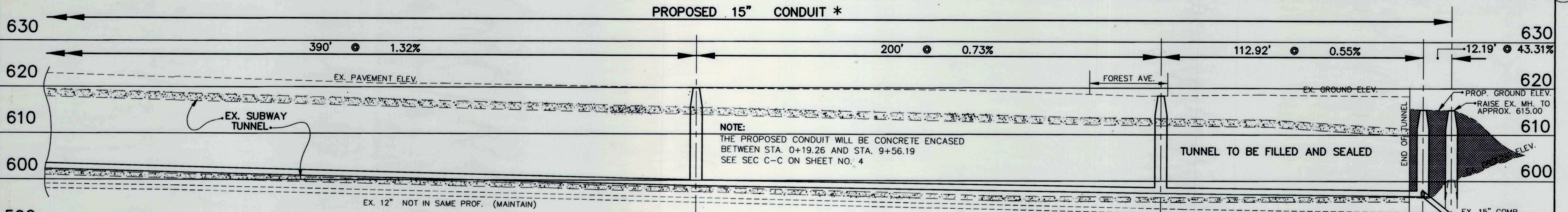


**PROPOSED SANITARY SEWER NO. 5367
NORWOOD TUNNEL SEWER REPLACEMENT**

SCALE: HORIZ. 1"=20'
VERT. 1"=10'
DATE: _____
SUBMITTED: _____ SEWERS CHIEF ENGINEER
APPROVED: _____ DIRECTOR OF SEWERS

DESIGNED BY: EQ	REVISIONS	
	BY:	DATE:
DRAWN BY: EQ		
S.F.N. NO:		

29-25-31



STATION	REMARKS
0+00	EX. FH No 1
0+50.01 -	○ ○ ○
0+83.01	EX. FH No 2
1+50.1	○ ○ ○
2+16.4	○ ○ ○
2+33.9	○ ○ ○
2+53.4	EX. FH No 3
2+67.9	○ ○ ○
2+83.00	EX. MH No 4
3+59.32	○ ○ ○ ○ ○
3+78.42	○ ○ ○ ○ ○
4+15.12	○ ○ ○ ○ ○
4+22.22	○ ○ ○ ○ ○
4+32.42 -	○ ○ ○ ○ ○
4+48.42	○ ○ ○ ○ ○
4+64.32 -	○ ○ ○ ○ ○
4+78.62	○ ○ ○ ○ ○
4+93.02	○ ○ ○ ○ ○
5+07.12	EX. FH No 5

LEGEND
 ○ DYE TESTED, POSITIVE
 ○ ○ POSSIBLE BULKHEADED
 ○ ○ ○ TAP BULKHEADED

NOTE:
 AS FIRST ORDER OF WORK THE CONTRACTOR SHALL:
 1- TELEVIEW THE EX. 12" CONDUIT AND VERIFY THE STATIONING OF THE EXISTING LATERALS BEFORE THE COMMENCEMENT OF WORK.
 2- VERIFY THE ELEVATIONS OF THE EXISTING TUNNEL SLAB ALONG THE PROPOSED ALIGNMENT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF AN ADJUSTMENT IN THE VERTICAL ALIGNMENT IS NECESSARY.
 INCLUDE COST W/VARIOUS 603 ITEMS.

PROP. MH NO. 3
 STA. 3 + 25.11
 PROP. 15" INV. 598.83
 EX. TUNNEL INV. 598.50 (±)

*PVC SDR 35 WITH ASTM D-3212 FLEXIBLE ELASTOMERIC SEALS;
 OR CARLON PVC PIPE, PIPE STIFFNESS 46 PSI ASTM F 789 WITH FLEXIBLE ELASTOMERIC SEALS ASTM D-3212
 OR DUCTILE IRON PIPE (14" DIA.), AWWA C-151 WITH PUSH-ON JOINTS;

PROP. MH NO. 2
 STA. 1 + 25.11
 PROP. 15" INV. 597.36
 EX. TUNNEL INV. 596.55 (±)

END OF TUNNEL
 STA. 0 + 19.26

PROP. MH NO. 1
 STA. 0 + 12.19
 PROP. 15" INV. 596.73

BEGIN SEWER PROJECT
 EX. MH. CONNECT
 REMODEL BOTTOM &
 ADJUST TO GRADE
 STA. 0 + 00.00
 PROP. 15" INV. 591.45
 EX. 12" INV. 591.45

RECONNECT ALL ACTIVE LATERALS TO PROPOSED 15" CONDUIT AS PER SPECIFICATIONS AND DETAIL SHOWN ON SHT 4 OF CONTRACT DRAWINGS

EX. MH. SEAL BEFORE FILLING TUNNEL AS DIRECTED BY ENGINEER. INCL. COST W/603 ITEMS.

SEE SHEET NO. 2

NOTES:
 MANHOLES-ALL PROPOSED MANHOLES SHALL BE STANDARD TYPE "S" MANHOLES. THE STANDARD PRECAST MANHOLE BASE SHALL BE USED WITH P.V.C. PIPE. THE CONTRACTOR SHALL FURNISH ALL MANHOLE FRAMES AND COVERS.
 PIPE JOINTS-ALL PROPOSED CONDUIT SHALL HAVE RESILIENT AND FLEXIBLE JOINTS OR OPTIONAL SOLVENT WELDED JOINTS WITH THE USE OF AND A.B.S. PIPE.
 BUILDING SEWERS-ALL BUILDING SEWERS SHALL BE TYPE "1" CONDUIT WITH RESILIENT AND FLEXIBLE JOINTS; OR EITHER PVC OR ABS CONDUIT, SDR 35 WITH EITHER ASTM D-3212 FLEXIBLE ELASTOMERIC SEALS OR SOLVENT WELDED JOINTS USING ASTM D-2855.
 UNDERGROUND STRUCTURES-LOCATION OF UNDERGROUND STRUCTURES ARE NOT GUARANTEED.
 ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
 THE CONTRACTOR SHALL MAINTAIN CONTINUOUS FLOW OF SEWAGE DURING CONSTRUCTION.
 THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ALL DAMAGED UTILITIES AND STORM SEWERS.
 THE CONTRACTOR SHALL VERIFY EXISTING INVERT ELEVATIONS IN THE TUNNEL PRIOR TO INSTALLATION OF THE PROPOSED CONDUITS AND MANHOLES.

SEWER STANDARD DRAWINGS

DESCRIPTION	ACC.NO.
TYPICAL INVERTS	49004
STANDARD CASTINGS MANHOLE	49005
TYPICAL TRENCHES	49032
STANDARD MANHOLE ON SAN.COND. 42" AND UNDER	49037
PRECAST MANHOLE BASE	49056

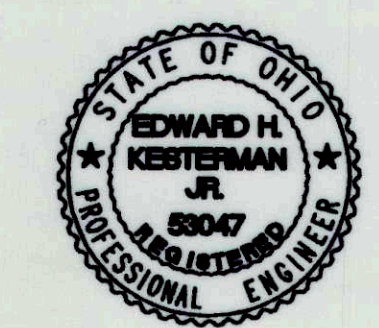
BENCH MARKS

PBM NO. 2512. HARRIS AVE. & POPLAR ST. MARK IS 21.1' N OF THE CENTER LINE OF HARRIS AVE., 68' E OF THE EAST CURB OF POPLAR ST AND 15' SOUTH OF THE SE CORNER OF HN 4828.

REVISIONS	
DESIGNED BY: E.Q.	DATE:
BY:	
DATE:	
BY: E.Q.	
DATE:	
S.F.N. NO:	

ACAD DRAWING NAME: NORWTUN2C

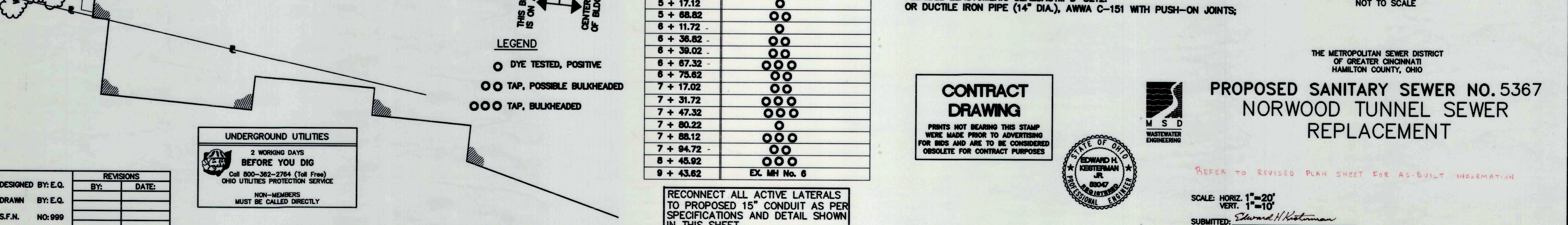
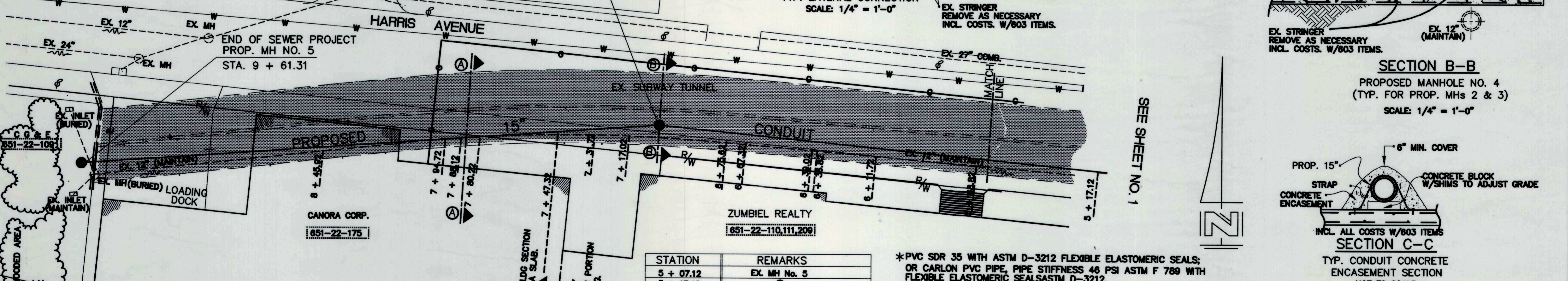
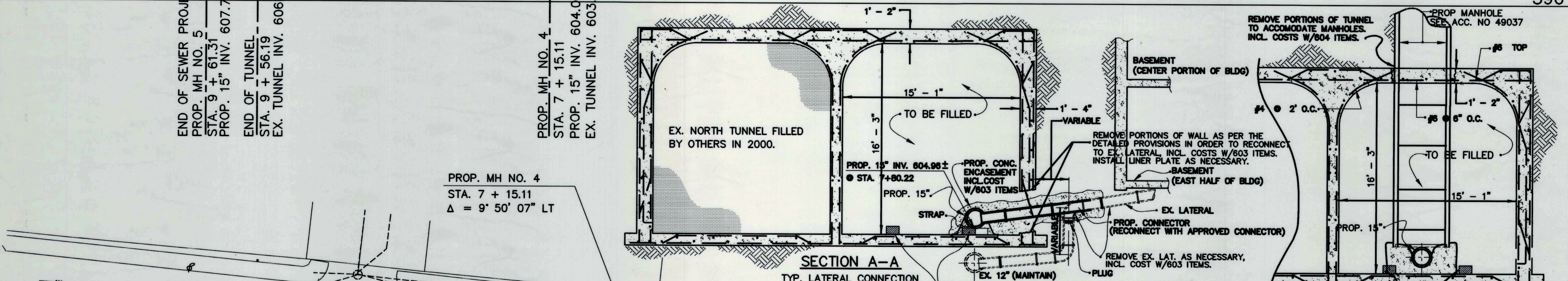
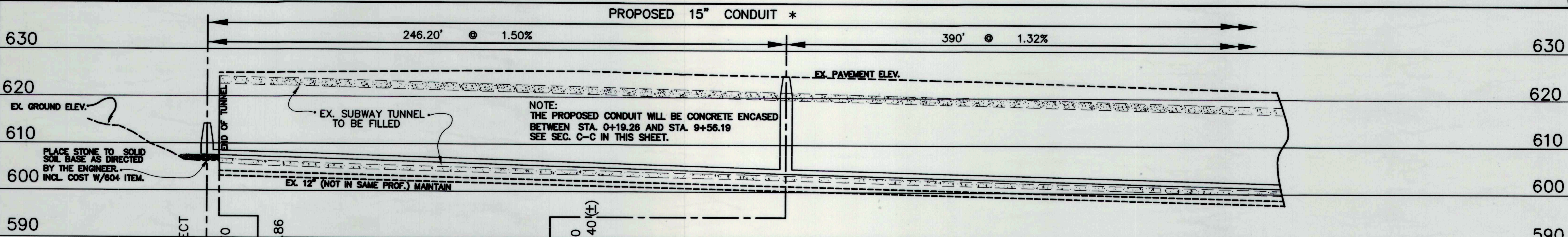
CONTRACT DRAWING
 PRINTS NOT BEARING THIS STAMP WERE MADE PRIOR TO ADVERTISING FOR BIDS AND ARE TO BE CONSIDERED OBSOLETE FOR CONTRACT PURPOSES



PROPOSED SANITARY SEWER NO. 5367 NORWOOD TUNNEL SEWER REPLACEMENT

REFER TO REVISED PLAN SHEET FOR AS-BUILT INFORMATION
 SCALE: HORIZ. 1"=20'
 VERT. 1"=10'
 SUBMITTED: Edward H. Kesterman
 SEWERS CHIEF ENGINEER
 DATE: 10/24/02

29-25-32



STATION	REMARKS
5 + 07.12	EX. MH No. 5
5 + 17.12	○
5 + 68.82	○○
6 + 11.72	○○
6 + 36.82	○○
6 + 39.02	○○
6 + 67.32	○○○
6 + 75.62	○○○
7 + 17.02	○○
7 + 31.72	○○○
7 + 47.32	○○○
7 + 80.22	○
7 + 88.12	○○○
7 + 94.72	○○
8 + 45.92	○○
9 + 43.62	EX. MH No. 6

RECONNECT ALL ACTIVE LATERALS TO PROPOSED 15" CONDUIT AS PER SPECIFICATIONS AND DETAIL SHOWN IN THIS SHEET.

CONTRACT DRAWING
PRINTS NOT BEARING THIS STAMP WERE MADE PRIOR TO ADVERTISING FOR BIDS AND ARE TO BE CONSIDERED OBSOLETE FOR CONTRACT PURPOSES



**PROPOSED SANITARY SEWER NO. 5367
NORWOOD TUNNEL SEWER
REPLACEMENT**

SCALE: HORIZ. 1"=20'
VERT. 1"=10'
SUBMITTED: Edward H. Kesterman
SEWERS CHIEF ENGINEER

UNDERGROUND UTILITIES
2 WORKING DAYS BEFORE YOU DIG
Call 800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE

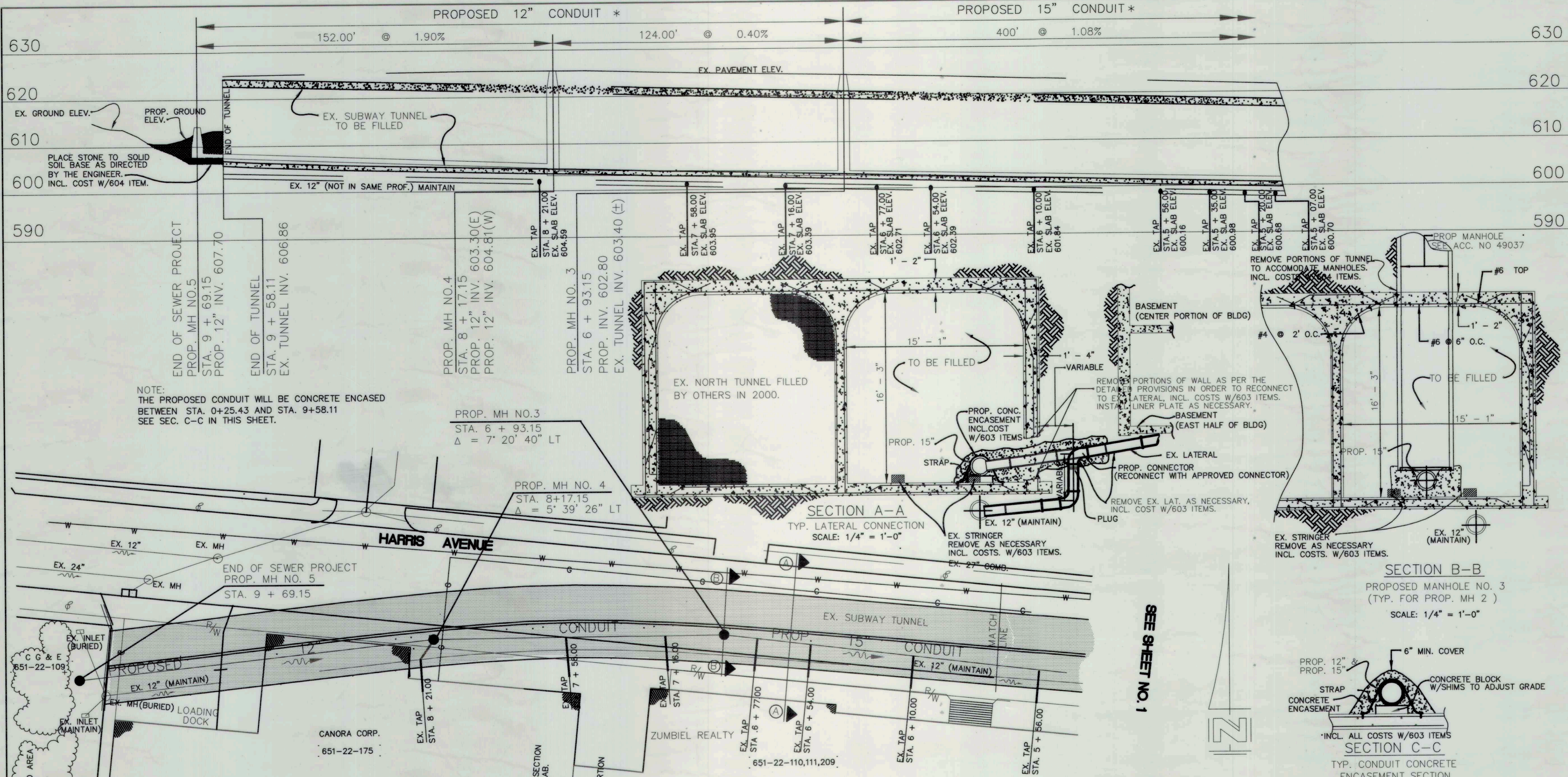
NON-MEMBERS MUST BE CALLED DIRECTLY

DESIGNED BY:	DATE:
E.Q.	

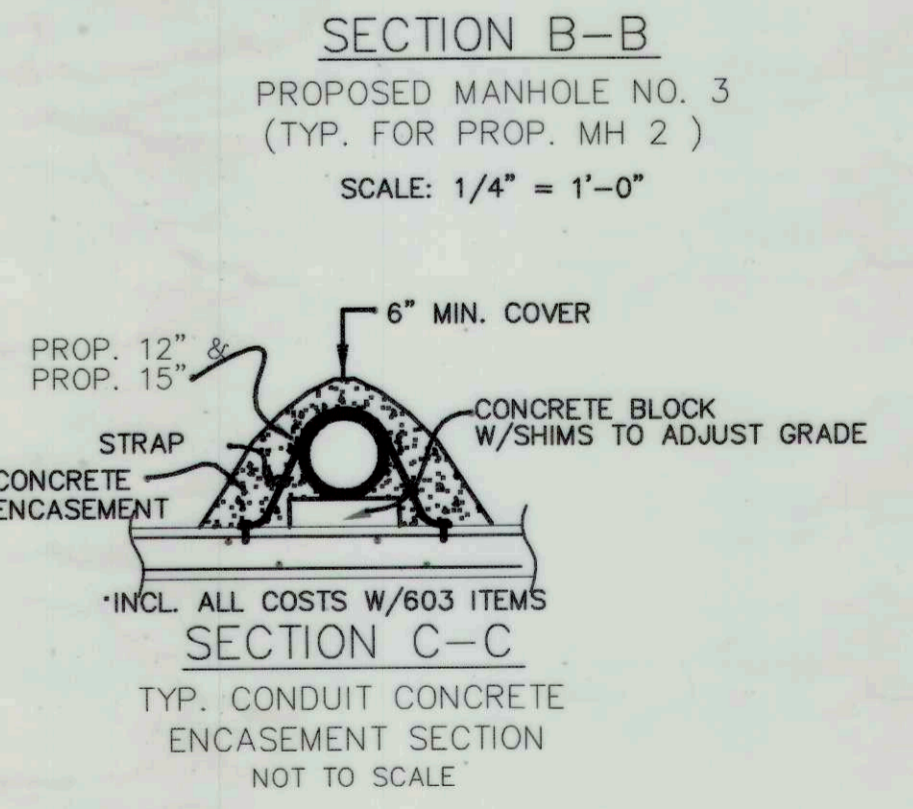
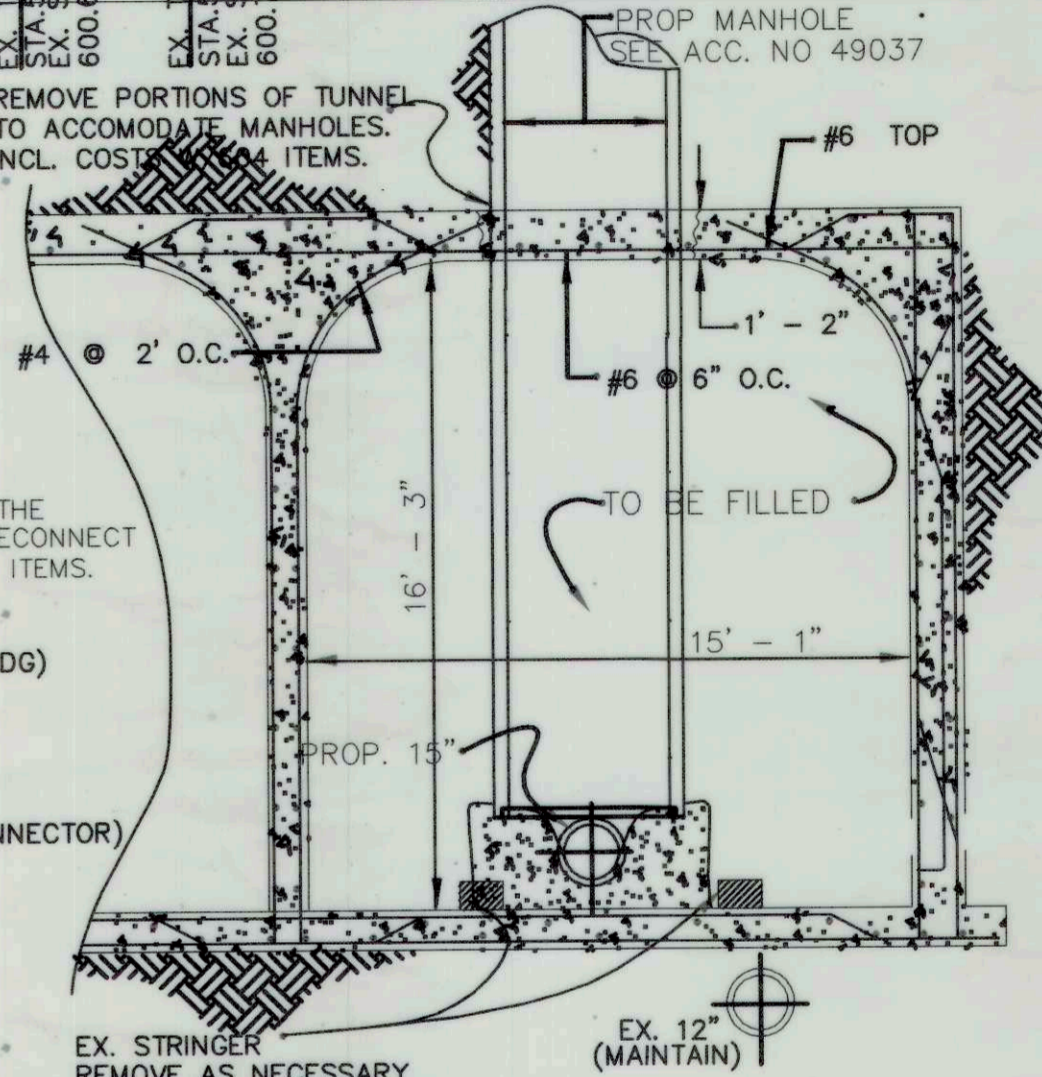
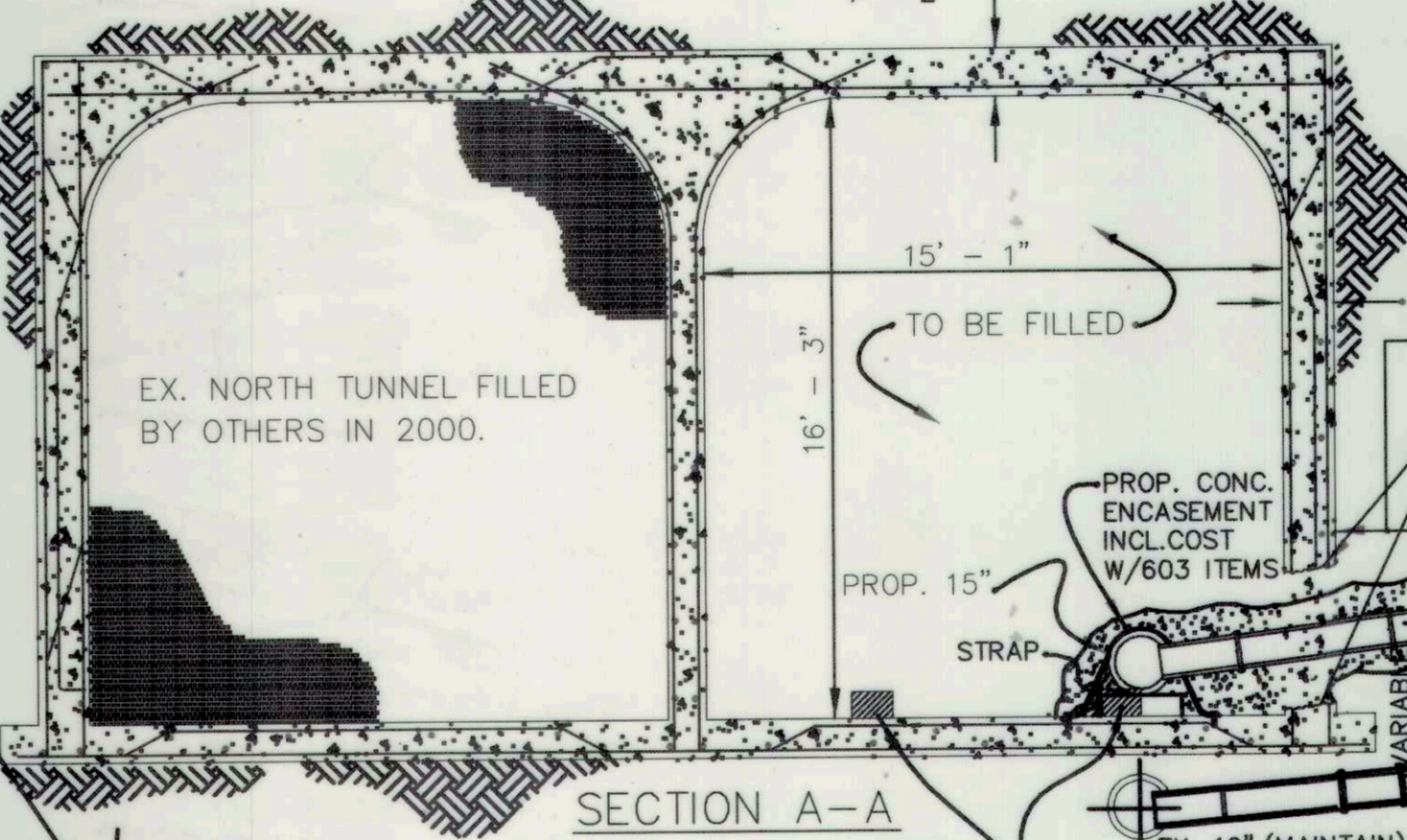
REVISIONS	DATE:
BY:	

S.F.N. NO: 999

29-25-33



NOTE:
THE PROPOSED CONDUIT WILL BE CONCRETE ENCASED BETWEEN STA. 0+25.43 AND STA. 9+58.11 SEE SEC. C-C IN THIS SHEET.



OLD PLAN STATION	INTERCEPTION ELEV. OF EX. TAP
2 + 42.00	599.00' ±
4 + 73.00	601.70'
5 + 07.00	602.20'
5 + 20.00	602.18'
5 + 35.00	602.48'
5 + 56.00	601.66'
6 + 10.00	603.34'
6 + 54.00	603.89'
6 + 77.00	605.00' ±
7 + 16.00	604.89'
7 + 58.00	605.45'
8 + 21.00	603.42'

*PVC SDR 35 WITH ASTM D-3212 FLEXIBLE ELASTOMERIC SEALS;
OR CARLON PVC PIPE, PIPE STIFFNESS 46 PSI ASTM F 789 WITH FLEXIBLE ELASTOMERIC SEALS ASTM D-3212.
OR DUCTILE IRON PIPE (14" DIA.), AWWA C-151 WITH PUSH-ON JOINTS;

CONTRACT DRAWING
PRINTS NOT BEARING THIS STAMP WERE MADE PRIOR TO ADVERTISING FOR BIDS AND ARE TO BE CONSIDERED OBSOLETE FOR CONTRACT PURPOSES



THE METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI
HAMILTON COUNTY, OHIO

**PROPOSED SANITARY SEWER NO. 5367
NORWOOD TUNNEL SEWER REPLACEMENT**

SCALE: HORIZ. 1"=20'
VERT. 1"=10'

SUBMITTED: _____
SEWERS CHIEF ENGINEER

DESIGNED BY: E.O.	REVISIONS
BY:	DATE:

UNDERGROUND UTILITIES
2 WORKING DAYS BEFORE YOU DIG
Call 800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS MUST BE CALLED DIRECTLY

RECONNECT ALL ACTIVE LATERALS TO PROP. 12" & 15" CONDUIT AS PER SPECIFICATIONS AND DETAIL SHOWN IN THIS SHEET.

FOR EASEMENT DRAWING SEE ACC. NO. NONE