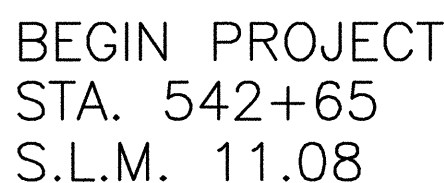


HAMILTON COUNTY

UNDER AUTHORITY OF SECTION 4511.21,
DIVISION (1) OF THE REVISED CODE OF OHIO,
THE REVISED PRIMA FACIE SPEED LIMITS AS
INDICATED HEREIN ARE DETERMINED TO BE
REASONABLE AND SAFE, AND ARE HEREBY
ESTABLISHED FOR THE DURATION OF THIS
PROJECT. THE PRIMA FACIE SPEED LIMIT OR
LIMITS HEREBY ESTABLISHED SHALL BECOME
EFFECTIVE WHEN APPROPRIATE SIGNS GIVING
NOTICE THEREOF ARE ERECTED.



CURRENT A.D.T. (2000)	=	132100
DESIGN A.D.T. (2020)	=	172000
D.H.V. (2020)	=	7167
DIRECTIONAL DISTRIBUTION	=	50%
TRUCKS (24 HOUR B & C)	=	6%
DESIGN SPEED	=	70 M.P.H.
LEGAL SPEED	=	65 M.P.H.
DESIGN FUNCTIONAL CLASSIFICATION	=	URBAN INTERSTATE

NONE

DM-4.4	4-29-99	TEMPORARY EROSION CONTROL
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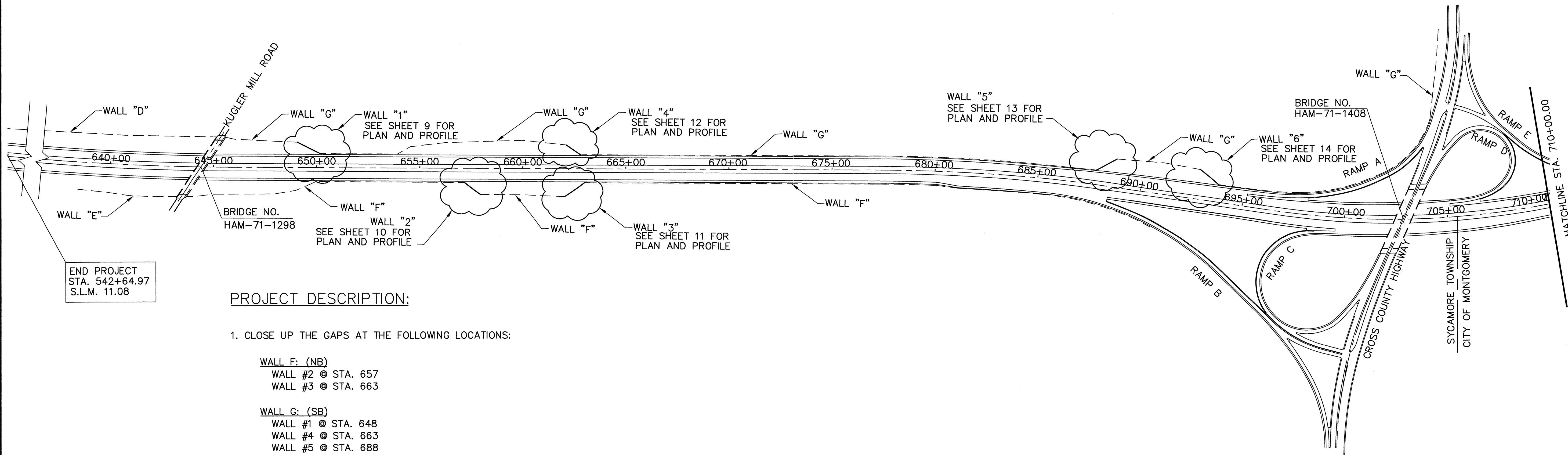
A circular professional engineer seal for the State of Ohio. The outer ring contains the text "STATE OF OHIO" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The center of the seal contains the following text: "MOLAPO", "RAYMOND M.", "KGABO", "E-59364", and "REGISTERED".

DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

HAM-71-11.08

$$\frac{1}{37}$$

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END PROJECT
STA. 542+64.97
S.L.M. 11.08

PROJECT DESCRIPTION:

1. CLOSE UP THE GAPS AT THE FOLLOWING LOCATIONS:

WALL F: (NB)
WALL #2 @ STA. 657
WALL #3 @ STA. 663

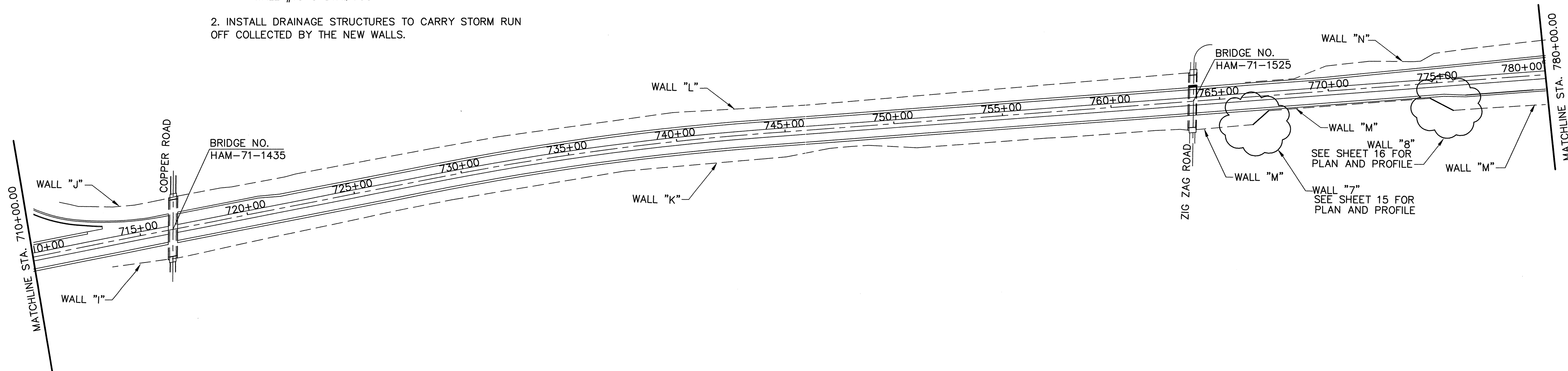
WALL G: (SB)
WALL #1 @ STA. 648
WALL #4 @ STA. 663
WALL #5 @ STA. 688
WALL #6 @ STA. 694

WALL M: (NB)
WALL #7 @ STA. 767
WALL #8 @ STA. 775

WALL O: (NB)
WALL #9 @ STA. 796
WALL #11 @ STA. 824

WALL P: (SB)
WALL #10 @ STA. 798

2. INSTALL DRAINAGE STRUCTURES TO CARRY STORM RUN
OFF COLLECTED BY THE NEW WALLS.



0

50

100

SCALE IN FEET

CALCULATED

RY

CHECKED

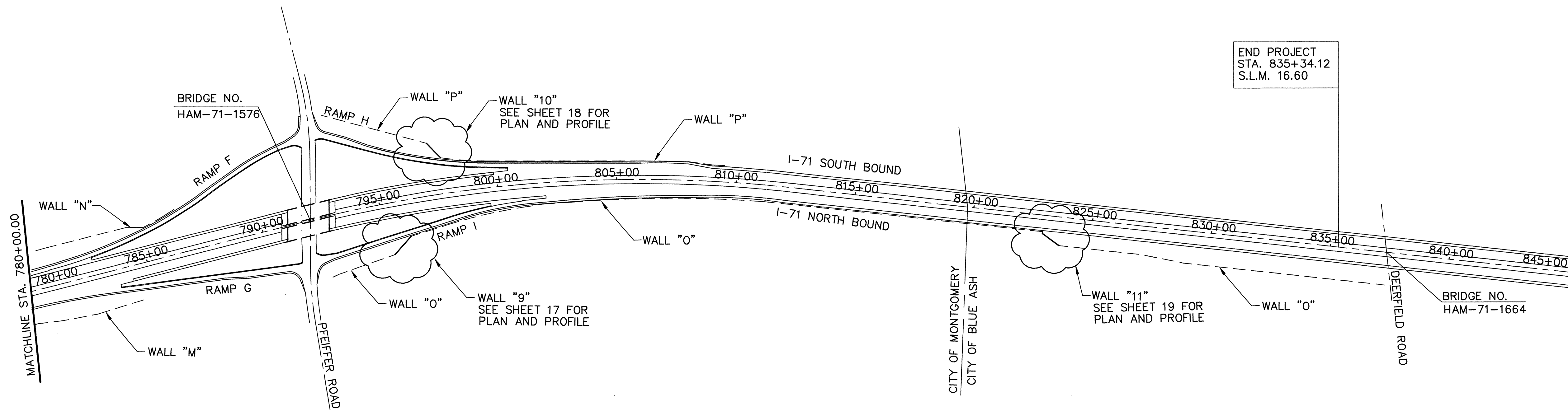
MRMK

SCHEMATIC PLAN

STA. 635+00 TO STA. 780+00

HAM-71-11.44

2/37



PROJECT DESCRIPTION:

1. CLOSE UP THE GAPS AT THE FOLLOWING LOCATIONS:

WALL F: (NB)
WALL #2 @ STA. 657
WALL #3 @ STA. 663

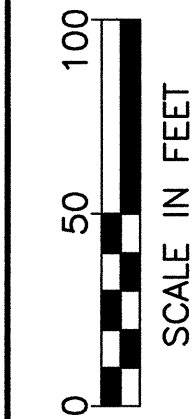
WALL G: (SB)
WALL #1 @ STA. 648
WALL #4 @ STA. 663
WALL #5 @ STA. 688
WALL #6 @ STA. 694

WALL M: (NB)
WALL #7 @ STA. 767
WALL #8 @ STA. 775

WALL O: (NB)
WALL #9 @ STA. 796
WALL #11 @ STA. 824

WALL P: (SB)
WALL #10 @ STA. 798

2. INSTALL DRAINAGE STRUCTURES TO CARRY STORM RUN
OFF COLLECTED BY THE NEW WALLS.



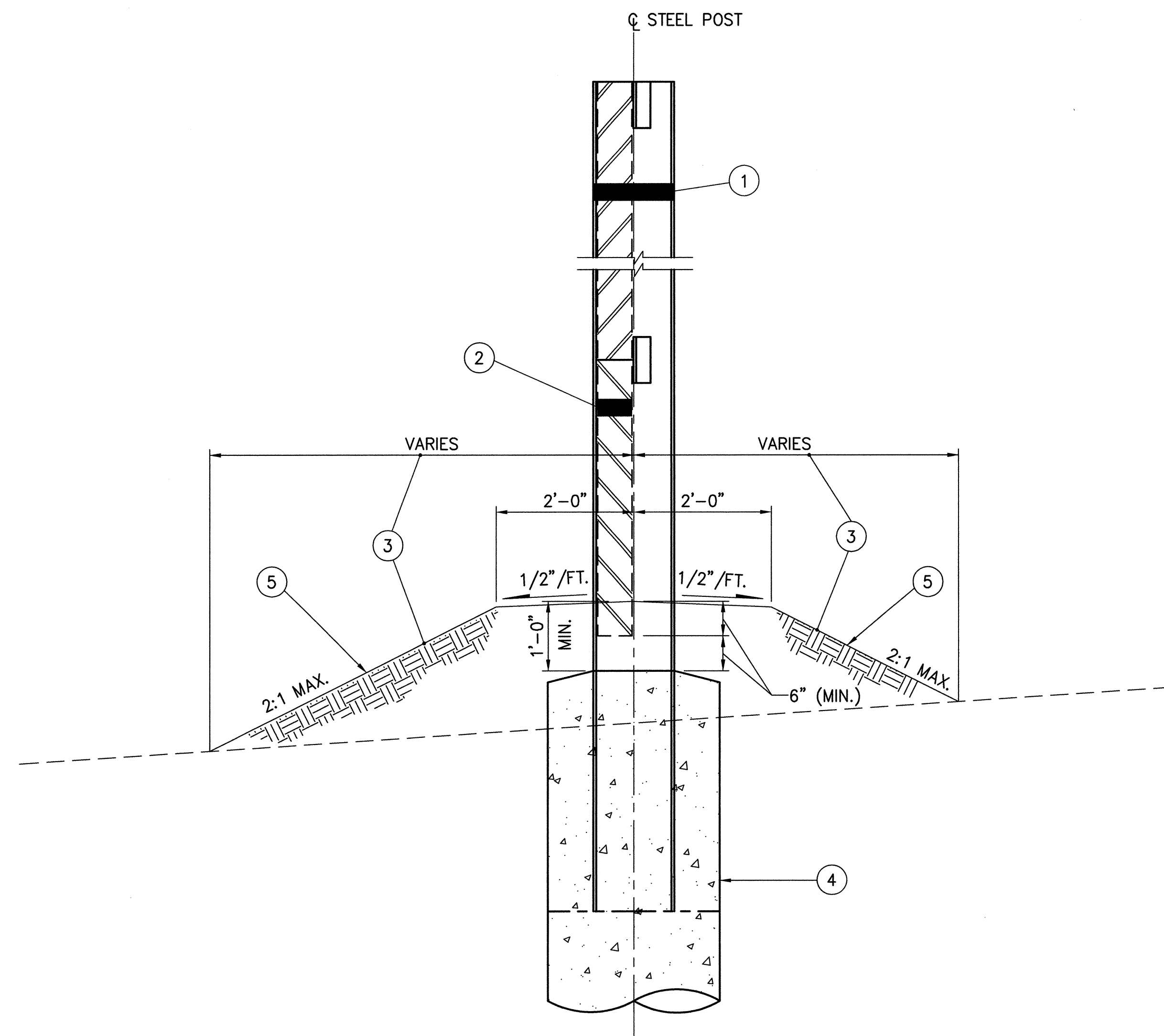
CALCULATED	RY	CHECKED	MRMK
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SCHEMATIC PLAN
STA. 780+00 TO STA. 845+00

HAM-71-1144

3
37

NORMAL SECTION



- ① ITEM 513 STRUCTURAL STEEL
- ② ITEM SPECIAL NOISE BARRIER, 10FT. AND UNDER
ITEM SPECIAL NOISE BARRIER, OVER 10FT. TO 14FT. HEIGHT
ITEM SPECIAL NOISE BARRIER, OVER 14FT. TO 20FT. HEIGHT
- ③ ITEM 659 SEEDING AND MULCHING
- ④ ITEM 524 – DRILLED SHAFTS
- ⑤ ITEM 203 – EMBANKMENT

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GENERAL NOTES

NOISE BARRIER

- | | |
|----------------|---------------------------|
| I. DESCRIPTION | III. CONSTRUCTION METHODS |
| II. POSTS | IV. BASIS OR PAYMENT |

ITEM SPECIAL--NOISE BARRIER

I. DESCRIPTION

THIS WORK SHALL CONSIST OF FURNISHING AND INSTALLING NOISE BARRIERS INCLUDING ALL MATERIAL, LABOR AND EQUIPMENT REQUIRED IN ACCORDANCE WITH THESE PROVISIONS AND APPLICABLE STANDARDS AND IN CONFORMITY WITH THE DIMENSIONS, LINES AND GRADES SHOWN ON THE PLANS.

THE BARRIER AND THE ASSOCIATED WORK SHALL CONFORM TO SECTIONS 499 AND 501 AT THE CMS AS APPROPRIATE.

II. POSTS

A. STEEL POSTS

STEEL POSTS SHALL BE ASTM A-588 AND MANUFACTURED IN ACCORDANCE WITH ITEM 513 OF THE CMS UNLESS OTHERWISE SPECIFIED.

THE PORTION OF ANY POSTS IN CONTACT WITH SOIL AND AN ADDITIONAL 6 INCHES ABOVE AND BELOW THE SOIL CONTACT LINE ON THE POST SHALL BE COATED WITH COAL TAR EPOXY POINT. THE PAINT SHALL CONFORM TO STRUCTURAL STEEL PAINTING COUNCIL (SSPC) PAINT SPECIFICATION 16; BE BLACK IN COLOR; BE APPLIED AS PER THE PAINT MANUFACTURER'S RECOMMENDATIONS, AND HAVE A MINIMUM DRY FILM THICKNESS OF 16 MILLS. ALL SURFACES THAT RECEIVE PAINT ON THE STEEL POSTS, WHETHER COAL TAR EPOXY OR PAINT TO MATCH THE NOISE PANEL'S COLOR, SHALL BE BLAST CLEANED TO CONFORM TO SSPC - SP10, NEAR WHITE METAL.

B. DRILLED SHAFTS

REINFORCING STEEL SHALL BE ASTM A615, GRADE 60.

C. CONCRETE FOR DRILLED SHAFTS

CONCRETE FOR ALL DRILLED SHAFTS SHALL BE CLASS S CONCRETE AND SHALL BE IN ACCORDANCE WITH ITEM 511 EXCEPT AS MODIFIED AND SUPPLEMENTED HEREIN. THE REQUIRED SLUMP IS 7 INCHES PLUS OR MINUS 1/2 INCH. THE MAXIMUM WATER TO CEMENT RATIO SHALL BE 0.50 FOR CONCRETE PLACED UNDER WATER. THE REQUIREMENTS OF ADDING 10 PERCENT MORE CEMENT TO THE CONCRETE MIX SHALL BE WAIVED. THE TOP 10 FEET OF CONCRETE IN THE DRILLED SHAFTS ARE REQUIRED TO BE VIBRATED. ONLY A MINIMAL VIBRATORY EFFORT IS NECESSARY. SPECIAL CARE SHALL BE TAKEN NOT TO OVER-VIBRATE THE DRILLED SHAFT CONCRETE.

NOTE: IF THE CASING IS REMOVED USING A VIBRATORY HAMMER, NO OTHER VIBRATORY EFFORT IS NEEDED. THE CONCRETE FOR THE DRILLED SHAFT SHALL BE PLACED AS PER 511 EXCEPT AS MODIFIED BY THE PLANS. THE CONCRETE PLACEMENT OPERATION SHALL BE CONTINUOUS FROM THE START TO FINISH. THE CONCRETE FOR THE DRILLED SHAFT SHALL BE PLACED PROMPTLY AFTER THE FINAL INSPECTION OF THE SHAFT. IF PRACTICAL, THE CONCRETE SHALL BE PLACED IN A CLEAN DRY EXCAVATION. CARE SHALL BE TAKEN TO ENSURE THAT CONCRETE IS NOT BEING PLACED IN MOVING WATER. THE CONCRETE CAN BE PLACED IN A DRY DRILLED SHAFT EXCAVATION BY THE FREE FALL METHOD PROVIDED THE CONCRETE FALLS TO ITS FINAL POSITION THROUGH AIR WITHOUT STRIKING THE SIDES OF THE HOLE, THE REINFORCING STEEL CAGE OR ANY OTHER OBSTRUCTION. THE FREE FALL METHOD ALLOWS THE CONCRETE TO BE DROPPED FROM THE TOP THROUGH A CENTERING CHUTE TO THE CONCRETE'S FINAL POSITION.

IF THE ENGINEER DETERMINES THAT DEWATERING IS NOT PRACTICAL, THE CONTRACTOR MAY BE GIVEN PERMISSION TO PLACE THE CONCRETE UNDERWATER. THE DRILLED SHAFT EXCAVATION SHALL BE FILLED WITH WATER TO SUCH A DEPTH THAT ALL WATER MOTION HAS CEASED. THE CONCRETE SHALL THEN BE PLACED BY MEANS OF A CONCRETE PUMP. THE CONCRETE PUMP PIPE SHALL HAVE A DIAMETER THAT IS NOT LESS THAN 4 INCHES. THE CONCRETE PUMP EQUIPMENT SHALL BE SO ARRANGED THAT NO VIBRATIONS RESULT WHICH MIGHT DAMAGE FRESH CONCRETE. PIPES CARRYING CONCRETE FROM THE PUMP TO THE SHAFT SHOULD BE ARRANGED WITH A MINIMUM NUMBER OF BENDS. THE PIPE USED TO CONVEY THE CONCRETE TO THE BOTTOM OF THE DRILLED SHAFT EXCAVATION SHALL BE ANCHORED TO THE STEEL CASING TO PREVENT THE PIPE FROM UNDULATING DURING THE INITIAL PLACEMENT OF THE CONCRETE.

THE PUMPING EQUIPMENT SHALL BE SUITABLE IN KIND AND ADEQUATE IN CAPACITY FOR THE WORK REQUIRED. THE USE OF ALUMINUM PIPE AS A CONVEYANCE FOR THE CONCRETE WILL NOT BE PERMITTED. AN ADEQUATE QUANTITY OF GROUT, MORTAR, OR CONCRETE WITH COARSE AGGREGATE OMITTED SHALL BE PUMPED THROUGH THE EQUIPMENT AHEAD OF THE SPECIFICATION CONCRETE TO PROVIDE LUBRICATION TO THE PUMPING SYSTEM. THE CONCRETE USED FOR LUBRICATION SHALL NOT BE PLACED IN THE SHAFT. THE LUBRICATION PROCESS WILL NOT BE REPEATED AS LONG AS THE PUMPING OPERATIONS ARE CONTINUOUS. THE OPERATION OF THE PUMP SHALL BE SUCH THAT A CONTINUOUS STREAM OF CONCRETE WITHOUT AIR POCKETS IS PRODUCED. IN ORDER TO PREVENT THE CONTAMINATION OF THE CONCRETE PLACED INITIALLY AT THE BOTTOM OF THE SHAFT, THE OUTLET END OF THE PUMPING PIPE SHALL BE SEALED WITH A DIAPHRAGM OR PLUG THAT IS FLUSHED OUT WHEN THE HYDROSTATIC PRESSURE FROM THE COLUMN OF CONCRETE EXCEEDS THAT OF THE WATER IN THE SHAFT. THE INITIAL RATE OF CONCRETE PLACEMENT MUST BE CAREFULLY CONTROLLED SO AS NOT TO LIFT OR DISPLACE THE CAGE OF REINFORCING STEEL. THE CONVEYING SYSTEM SHALL BE WATERTIGHT AND THE OUTLET END SHALL ALWAYS REMAIN WELL BELOW THE TOP OF THE FRESHLY PLACED CONCRETE. THE PREFERRED CONCRETE PLACEMENT PROCEDURE IS TO MAINTAIN THE OUTLET END OF THE PUMPING SYSTEM AT APPROXIMATELY 10 FEET BELOW THE TOP OF THE FRESH CONCRETE. WHEN THE CONCRETE REACHES THE TOP OF THE DRILLED SHAFT COLUMN, ALL LAITANCE SHALL BE REMOVED.

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				CALCULATED	MRMK	CHECKED	RY
				NOISE BARRIER GENERAL NOTES			
				HAM-71-1144			
				6 37			
CONCRETE	SUPPLIERS	DRAWINGS AND NOTES	VARIABLES	COLOR	TEXTURE	PATTERN	
						BRICK	STYLE
	SOUNDCORE 4043 MAPLE ROAD, SUITE 106 AMHERST, NY 14226 TELEPHONE: (716) 833-7651	SOUNDCORE - STANDARD HOLLOWCORE PRECAST NOISE BARRIERS DRAWING NO. DET-1 (02/12/97)					

III. CONSTRUCTION METHODS

A. NOISE BARRIERS SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS. JOINTS AND CONNECTIONS SHALL BE SECURED IN SUCH A MANNER AS TO BE STRUCTURALLY SOUND WITH NO VISIBLE OPENINGS FOR SOUND TRANSMISSION. NOISE PANEL ATTACHMENTS TO POSTS AND INSTALLATION METHODS SHALL BE STRUCTURALLY SOUND, GIVE ADEQUATE SUPPORT TO THE NOISE PANELS, AND BE SECURED TO THE POST OR ADEQUATELY BLOCKED BETWEEN THE POST'S FLANGES TO ELIMINATE MOVEMENT AT THE SUPPORT AND ELIMINATE ANY POSSIBLE VIBRATION.

THE TOP OF INSTALLED NOISE BARRIERS SHALL MATCH THE TOP OF WALL DESIGN ELEVATIONS, WITH NO VARIATION BETWEEN POSTS, UNLESS THE DESIGN PLANS REQUIRE AN ELEVATION CHANGE.

B. MARRED, CHIPPED, SCRATCHED, SPALLED, OR ANY OTHER DAMAGE DEEMED DETRIMENTAL TO THE SALVAGED PANELS BY THE ENGINEER SHALL BE REPLACED, AS APPROVED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

ANY NOISE BARRIER PANELS DAMAGED BY THE CONSTRCTOR SHALL BE REPLACED IN KIND. THE COLOR OF THE REPLACEMENT SHALL BE SEALED WITH EPOXY-URETHENE CONCRETE SEALER TO MATCH THE COLOR OF THE DAMAGED PANEL. ALL COSTS ASSOCIATED WITH THIS WORK IS INCLUDED IN THE LUMP SUM ITEM FOR THIS WORK.

C. TRENCH BACKFILL SHALL BE WITH CLASS S CONCRETE MODIFIED AS PER I.I.G, ABOVE. THE METHOD OR PLACEMENT SHALL NOT ALLOW VOIDS OR EXCESSIVE SEGREGATION AND SHALL BE PERFORMED TO THE SATISFACTION OF THE ENGINEER.

D. ALL EXCESS EXCAVATION SHALL BE DISPOSED OF IN A MANNER SATISFACTORY TO THE ENGINEER.

E. AFTER ERECTION OF THE NOISE BARRIER, THE DISTURBED AREA SHALL BE LEFT IN A FINISHED CONDITION AT THE DIRECTION OF THE ENGINEER AND A GROWTH OF GRASS ESTABLISHED, AT THE CONTRACTOR'S EXPENSE. IN ACCORDANCE WITH CMS ITEM 659.

F. THE SALVAGED POSTS SHALL BE CUT OFF AT THE GROUND ELEVATION. LEAVE THE EXISTING DEEP FOUNDATIONS IN PLACE.

G. ARTIMIS

IF DURING THE PROCESS OF CONSTRUCTION AND/OR WALL SECTION REMOVAL, THE ARTIMIS EQUIPMENT GETS DAMAGED, IT SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE. ALSO, SERVICE SHALL NOT BE DISRUPTED FOR LONGER THAN 3 DAYS AT A TIME.

H. TOLERANCES

1. POSTS (MEASURED AT TOP)
A. VERTICAL ALIGNMENT SHALL BE WITHIN 0.05 INCH/FT. OF HEIGHT.

B. POSTS SHALL BE SET WITHIN +/- 1/2 INCH OF THEIR SPECIFIED LOCATION.

2. NOISE BARRIERS
A. VERTICAL ALIGNMENT SHALL BE WITHIN 0.05 INCH/FT. OF HEIGHT.

I. FOR NOISE BARRIERS THAT ARE BUILT ON TOP OF EARTH BERMS, THE BERMS SHALL BE CONSTRUCTED OF EARTHWORK FILL MATERIAL IN ACCORDANCE WITH ITEM 203 OF THE CMS.

J. THE CONTRACTOR SHALL MINIMIZE THE DISTURBANCE TO VEGETATION DURING THE DEMOLITION AND CONSTRUCTION OF FENCE AND NOISE BARRIER.

IV. BASIS OF PAYMENT

NOISE BARRIERS, COMPLETED AND IN PLACE, AS DESCRIBED IN METHOD OF MEASUREMENT, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT. THIS PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR AND EQUIPMENT NECESSARY TO CONSTRUCT THE NOISE BARRIER. ALL EXCAVATION, BACKFILL WITH SUITABLE MATERIAL AND ANY ADJUSTMENT IN EARTHWORK QUANTITIES REQUIRED DUE TO THE CONTRACTOR'S SELECTED NOISE PANEL, SEALING CONCRETE WITH EPOXY AND URETHANE, AGGREGATE DRAINS, COMPACTION, DISPOSAL OF SURPLUS OR UNSUITABLE MATERIALS, SEEDING, FERTILIZING AND MULCHING OF DISTURBED AREAS SHALL ALSO BE INCLUDED FOR PAYMENT.

ITEM	DESCRIPTION	UNIT
REFLECTIVE TYPE		
SPECIAL	NOISE BARRIER (REFLECTIVE) 10 FT. HT. AND UNDER	ST.FT.
SPECIAL	NOISE BARRIER (REFLECTIVE), OVER 10 TO 14 FT. HT.	SQ.FT.
SPECIAL	NOISE BARRIER (REFLECTIVE), OVER 14 TO 20 FT. HT.	SQ.FT.
ABSORPTIVE TYPE		
SPECIAL	NOISE BARRIER (ABSORPTIVE), 10 FT. HT. AND UNDER.	SQ.FT.
SPECIAL	NOISE BARRIER (ABSORPTIVE), OVER 10 TO 14 FT. HT.	SQ.FT.
SPECIAL	NOISE BARRIER (ABSORPTIVE), OVER 14 TO 20 FT. HT.	SQ.FT.

ABBREVIATIONS

AITC AMERICAN INSTITUTE OF TIMBER CONSTRUCTION

ASTM AMERICAN SOCIETY FOR TESTING AND MATERIALS

AWPA AMERICAN WOOD PRESERVERS' ASSOCIATION

BIA BRICK INSTITUTE OF AMERICA

CCA CROMATED COPPER ARSENATE

CMS CONSTRUCTION AND MATERIALS SPECIFICATIONS OF ODOT

ILI INDIANA LIMESTONE INSTITUTE

LPG VOLATILE PETROLEUM SOLVENT (LIQUID PROPANE GAS)

SSPC STRUCTURAL STEEL PAINTING COUNCIL

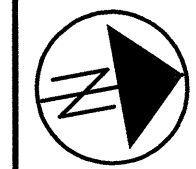
VPS VOLUNTARY PRODUCT STANDARD

NOISEWALL BASELINE GEOMETRY

WALL #	STATION	NORTHING	EASTING	BEARING (FROM BACK TO AHEAD)	DISTANCE & DIRECTION FROM REF. PT TO B POINT														
1	3+56.49	446420.5168	1438364.0953	N 13°12'18" E	REF. PT. 19 TO STA. 3+56.49 = 61.48', N64°00'59"W RERERENCE POINT FOR WALL 648sb <table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th></tr><tr><td>T-19</td><td>446393.5830</td><td>1438419.3580</td><td>801.50</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	T-19	446393.5830	1438419.3580	801.50						
	PT.#	NORTHING	EASTING	ELEV.															
	T-19	446393.5830	1438419.3580	801.50															
	4+04.34	446467.1019	1438375.0261	N 36°44'47" E															
	5+27.45	446565.7475	1438448.6783	N 10°20'20" E															
5+99.40	446636.5349	1438461.5923																	
2	13+84.66	447159.9358	1438696.3366	N 10°20'51" E	REF. PT. 21 TO STA. 13+84.66 = 180.34', S09°43'13"W REF. PT. 22 TO STA. 16+00.72 = 23.26', S53°28'45"E RERERENCE POINTS FOR WALL 657nb <table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th><th>BEARING</th></tr><tr><td>T-21</td><td>447337.6870</td><td>1438726.7850</td><td>806.41</td><td rowspan="2">N63°49'25"E</td></tr><tr><td>T-22</td><td>447358.1970</td><td>1438768.5100</td><td>807.79</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	BEARING	T-21	447337.6870	1438726.7850	806.41	N63°49'25"E	T-22	447358.1970	1438768.5100	807.79
	PT.#	NORTHING	EASTING	ELEV.		BEARING													
	T-21	447337.6870	1438726.7850	806.41		N63°49'25"E													
	T-22	447358.1970	1438768.5100	807.79															
	14+56.60	447230.7014	1438709.2574	N 46°17'09" E															
15+52.85	447297.2181	1438778.8289	N 10°04'42" E																
16+00.72	447344.3519	1438787.2064																	
3	18+70.06	447626.7698	1438843.7179	N 12°25'18" E	REF. PT. 23 TO STA. 18+70.06 = 25.62', N76°58'15"E REF. PT. 24 TO STA. 18+70.06 = 91.30', N54°11'14"E RERERENCE POINTS FOR WALL 663nb <table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th><th>BEARING</th></tr><tr><td>T-23</td><td>447620.9940</td><td>1438818.7580</td><td>805.70</td><td rowspan="2">N45°50'51"E</td></tr><tr><td>T-24</td><td>447573.3460</td><td>1438769.6790</td><td>804.70</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	BEARING	T-23	447620.9940	1438818.7580	805.70	N45°50'51"E	T-24	447573.3460	1438769.6790	804.70
	PT.#	NORTHING	EASTING	ELEV.		BEARING													
	T-23	447620.9940	1438818.7580	805.70		N45°50'51"E													
	T-24	447573.3460	1438769.6790	804.70															
	19+41.93	447696.9527	1438859.1765	N 23°23'43" W															
20+57.86	447803.3539	1438813.1432	N 10°12'18" E																
21+05.85	447850.5846	1438821.6455																	
4	16+84.82	447631.2528	1438585.3877	N 15°51'11" E	REF. PT. 17 TO STA. 16+84.82 = 91.23', S49°50'40"W REF. PT. 18 TO STA. 16+84.82 = 59.43', N39°44'55"W RERERENCE POINTS FOR WALL 663sb <table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th><th>BEARING</th></tr><tr><td>T-17</td><td>447690.0810</td><td>1438655.1110</td><td>803.61</td><td rowspan="2">N16°52'58"E</td></tr><tr><td>T-18</td><td>447585.5588</td><td>1438623.3891</td><td>803.33</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	BEARING	T-17	447690.0810	1438655.1110	803.61	N16°52'58"E	T-18	447585.5588	1438623.3891	803.33
	PT.#	NORTHING	EASTING	ELEV.		BEARING													
	T-17	447690.0810	1438655.1110	803.61		N16°52'58"E													
	T-18	447585.5588	1438623.3891	803.33															
	18+04.75	447746.6199	1438618.1484	N 42°26'20" E															
18+88.12	447808.1465	1438674.4068	N 10°17'20" E																
19+84.19	447902.6770	1438691.5672																	
5	42+89.88	450213.8468	1439170.9773	N 15°47'58" E	REF. PT. 16 TO STA. 42+89.88 = 183.99', S13°28'48"W RERERENCE POINT FOR WALL 688sb <table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th></tr><tr><td>T-16</td><td>450392.7690</td><td>1439213.8670</td><td>798.77</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	T-16	450392.7690	1439213.8670	798.77						
	PT.#	NORTHING	EASTING	ELEV.															
	T-16	450392.7690	1439213.8670	798.77															
	43+37.87	450260.0268	1439184.0445	N 15°24'14" W															
	44+49.17	450367.3239	1439154.4823	N 11°01'00" E															
44+73.21	450390.9203	1439159.0761	N 14°43'14" E																
45+21.11	450437.2514	1439171.2485																	
6	48+03.75	450644.9284	1439230.6096	N 20°47'43" E	REF. PT. 14 TO STA. 48+03.75 = 133.66', S44°10'37"W REF. PT. 15 TO STA. 48+03.75 = 83.49', N38°14'45"W RERERENCE POINTS FOR WALL 694sb <table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th><th>BEARING</th></tr><tr><td>T-14</td><td>450740.7870</td><td>1439323.7530</td><td>801.19</td><td rowspan="2">N14°24'19"E</td></tr><tr><td>T-15</td><td>450579.3620</td><td>1439282.2900</td><td>800.40</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	BEARING	T-14	450740.7870	1439323.7530	801.19	N14°24'19"E	T-15	450579.3620	1439282.2900	800.40
	PT.#	NORTHING	EASTING	ELEV.		BEARING													
	T-14	450740.7870	1439323.7530	801.19		N14°24'19"E													
	T-15	450579.3620	1439282.2900	800.40															
	49+23.75	450757.1120	1439273.2133	N 48°44'29" E															
50+36.34	450831.3568	1439357.8472	N 17°19'12" E																
50+84.35	450877.1920	1439372.1408																	

WALL #	STATION	NORTHING	EASTING	BEARING (FROM BACK TO AHEAD)	DISTANCE & DIRECTION FROM REF. PT TO B POINT														
7	1+77.17	457917.0008	1440107.3970	N 07°21'01" E	REF. PT. 25 TO STA. 1+77.17 = 75.56', S55°31'49"E RERERENCE POINT FOR WALL 767nb<table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th></tr><tr><td>T-25</td><td>457959.7680</td><td>1440045.1000</td><td>811.71</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	T-25	457959.7680	1440045.1000	811.71						
	PT.#	NORTHING	EASTING	ELEV.															
	T-25	457959.7680	1440045.1000	811.71															
	2+01.09	457940.7242	1440110.4572	N 01°28'09" W															
	2+25.26	457964.8884	1440109.8374	N 00°54'04" W															
	2+49.23	457988.8568	1440109.4604	N 01°16'02" W															
	2+72.96	458012.5815	1440108.9356	N 30°47'24" W															
	3+68.57	458094.7159	1440059.9929	N 05°46'06" E															
3+92.46	458118.4777	1440062.3932																	
8	10+83.65	458810.8588	1440132.2417	N 05°55'02" E	REF. PT. 27 TO STA. 10+83.65 = 162.54', S17°59'06"W RERERENCE POINT FOR WALL 775nb<table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th></tr><tr><td>T-27</td><td>458965.4560</td><td>1440182.4290</td><td>808.85</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	T-27	458965.4560	1440182.4290	808.85						
	PT.#	NORTHING	EASTING	ELEV.															
	T-27	458965.4560	1440182.4290	808.85															
	11+07.59	458834.6750	1440134.7100	N 37°28'02" E															
12+27.69	458929.9925	1440207.7632	N 06°30'43" E																
12+99.63	459001.4676	1440215.9219																	
9	2+15.82	460724.4079	1440492.7570	N 01°36'20" E	REF. PT. 30 TO STA. 2+15.82 = 105.23', S21°19'31"E RERERENCE POINT FOR WALL 796nb<table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th></tr><tr><td>T-30</td><td>460822.4304</td><td>1440454.4898</td><td>788.45</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	T-30	460822.4304	1440454.4898	788.45						
	PT.#	NORTHING	EASTING	ELEV.															
	T-30	460822.4304	1440454.4898	788.45															
	3+47.83	460856.3635	1440496.4557	N 27°11'04" W															
4+48.45	460945.8670	1440450.4878	N 02°28'19" E																
5+44.21	461041.5415	1440454.6183																	
10	4+00.18	461070.2105	1440079.3353	N 35°22'48" E	REF. PT. 33 TO STA. 4+00.19 = 169.12', S84°39'15"W REF. PT. 34 TO STA. 4+00.19 = 56.93', N33°07'03"W RERERENCE POINTS FOR WALL 798sb<table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th><th>BEARING</th></tr><tr><td>T-33</td><td>461085.9670</td><td>1440247.7240</td><td>803.50</td><td rowspan="2">N65°11'59"E</td></tr><tr><td>T-34</td><td>461022.5310</td><td>1440110.4380</td><td>796.21</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	BEARING	T-33	461085.9670	1440247.7240	803.50	N65°11'59"E	T-34	461022.5310	1440110.4380	796.21
	PT.#	NORTHING	EASTING	ELEV.		BEARING													
	T-33	461085.9670	1440247.7240	803.50		N65°11'59"E													
	T-34	461022.5310	1440110.4380	796.21															
	4+24.11	461089.7211	1440093.1906	N 35°13'19" E															
	4+48.16	461109.3712	1440107.0635	N 34°07'38" E															
4+72.04	461129.1366	1440120.4593	N 59°37'53" E																
5+53.80	461170.4713	1440191.0014	N 25°02'00" E																
6+01.75	461213.9183	1440211.2919																	
11	30+35.15	463367.5666	1441306.8330	N 26°09'53" E	REF. PT. 50 TO STA. 30+35.15 = 68.02', S85°04'05"W REF. PT. 31 TO STA. 32+73.49 = 53.69', S49°29'35"E RERERENCE POINTS FOR WALL 824nb<table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th><th>BEARING</th></tr><tr><td>T-31</td><td>463576.1660</td><td>1441407.5570</td><td>824.77</td><td rowspan="2">N65°11'59"E</td></tr><tr><td>T-50</td><td>463373.4148</td><td>1441374.6057</td><td>821.76</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	BEARING	T-31	463576.1660	1441407.5570	824.77	N65°11'59"E	T-50	463373.4148	1441374.6057	821.76
	PT.#	NORTHING	EASTING	ELEV.		BEARING													
	T-31	463576.1660	1441407.5570	824.77		N65°11'59"E													
	T-50	463373.4148	1441374.6057	821.76															
	31+07.15	463432.1868	1441338.5809	S 63°46'37" E															
	31+16.48	463428.0626	1441346.9540	N 55°10'24" E															
32+01.46	463476.5946	1441416.7135	N 26°04'35" E																
32+73.49	463541.2918	1441448.3753																	

NOTE: ALL REFERENCE POINTS ARE IRON PINS.
SEE PLAN SHEETS FOR LOCATIONS.

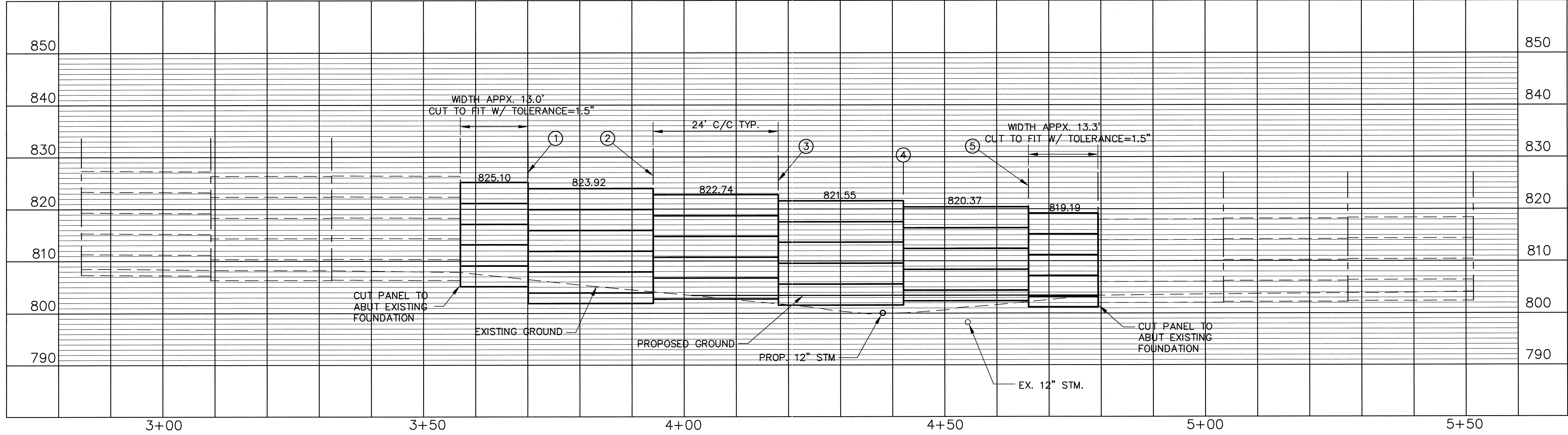
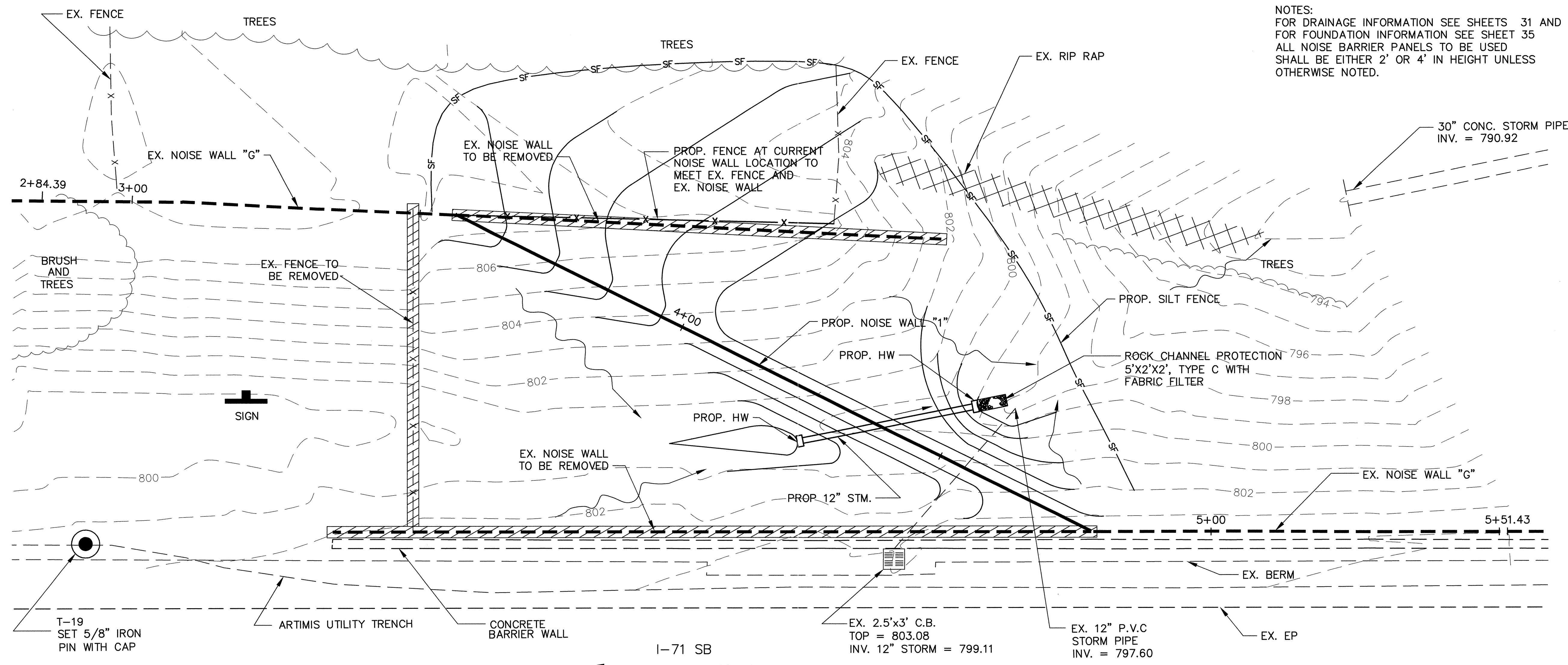


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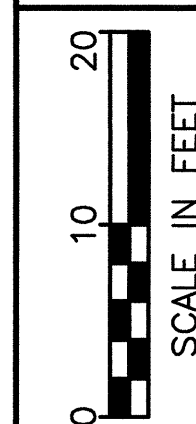
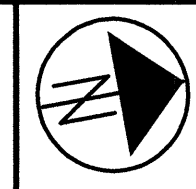
PLAN AND PROFILE SHEET
PROPOSED NOISE WALL "I"

HAM-71-1108

NOTES:
FOR DRAINAGE INFORMATION SEE SHEETS 31 AND 32
FOR FOUNDATION INFORMATION SEE SHEET 35
ALL NOISE BARRIER PANELS TO BE USED
SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
OTHERWISE NOTED.



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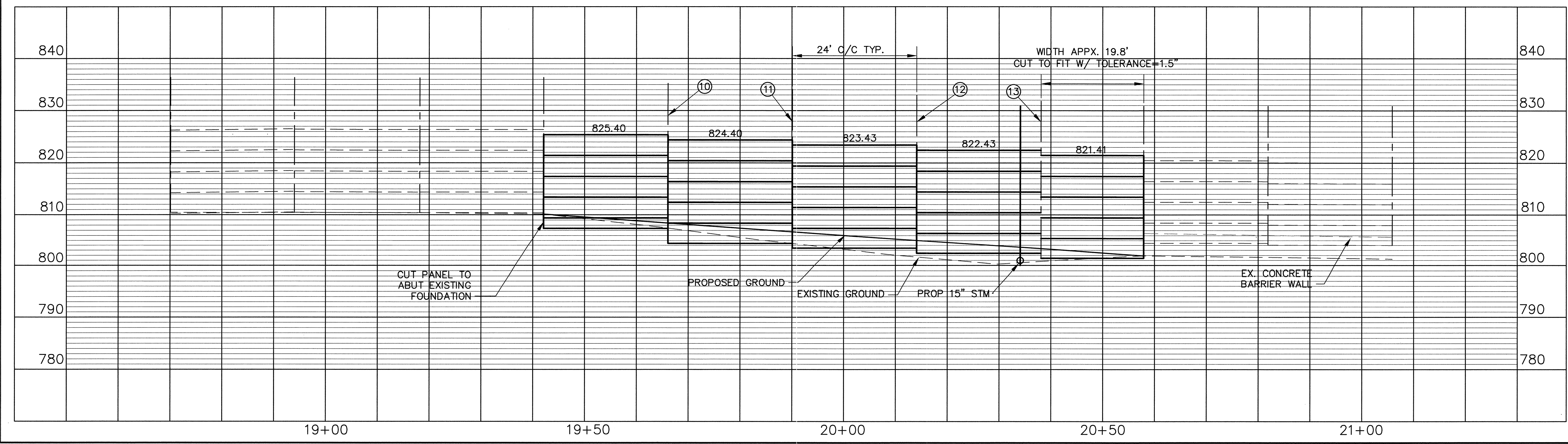
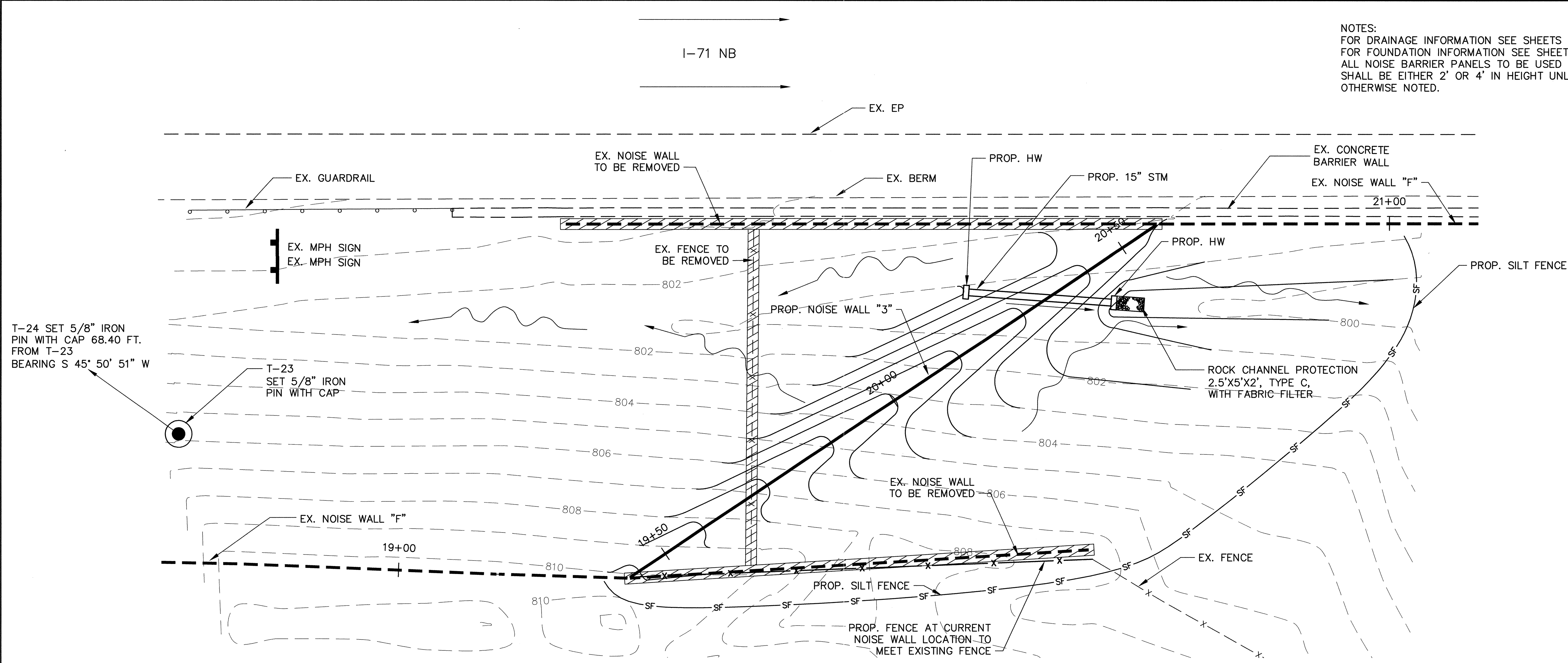


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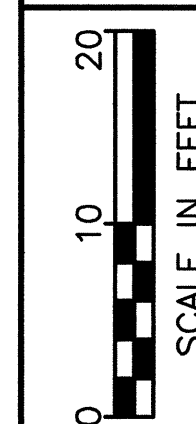
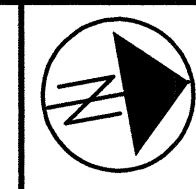
PLAN AND PROFILE SHEET
PROPOSED NOISE WALL "3"

HAM-71-1108

NOTES:
FOR DRAINAGE INFORMATION SEE SHEETS 31 AND 32
FOR FOUNDATION INFORMATION SEE SHEET 35
ALL NOISE BARRIER PANELS TO BE USED
SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
OTHERWISE NOTED.



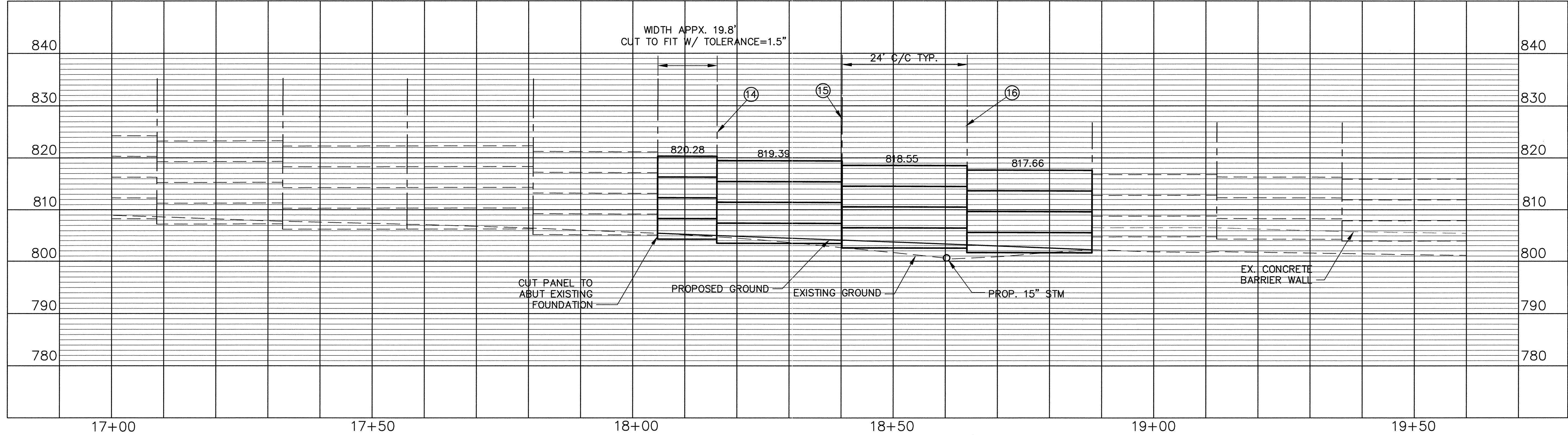
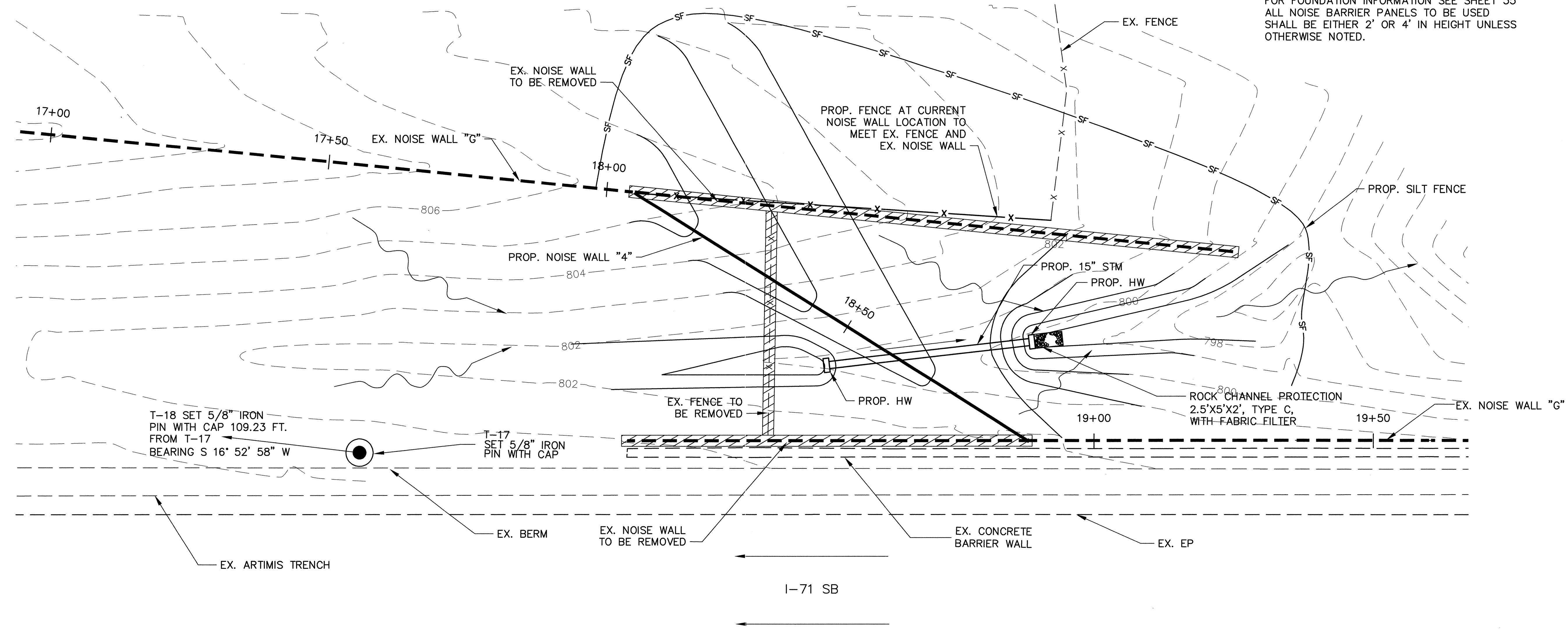
NOTES:
FOR DRAINAGE INFORMATION SEE SHEETS 31 AND 32
FOR FOUNDATION INFORMATION SEE SHEET 35
ALL NOISE BARRIER PANELS TO BE USED
SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
OTHERWISE NOTED.



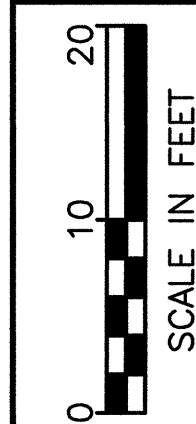
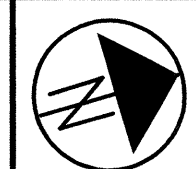
CALCULATED
C.J.L.
CHECKED
MRMK

PLAN AND PROFILE SHEET
PROPOSED NOISE WALL "4"

HAM-71-1108



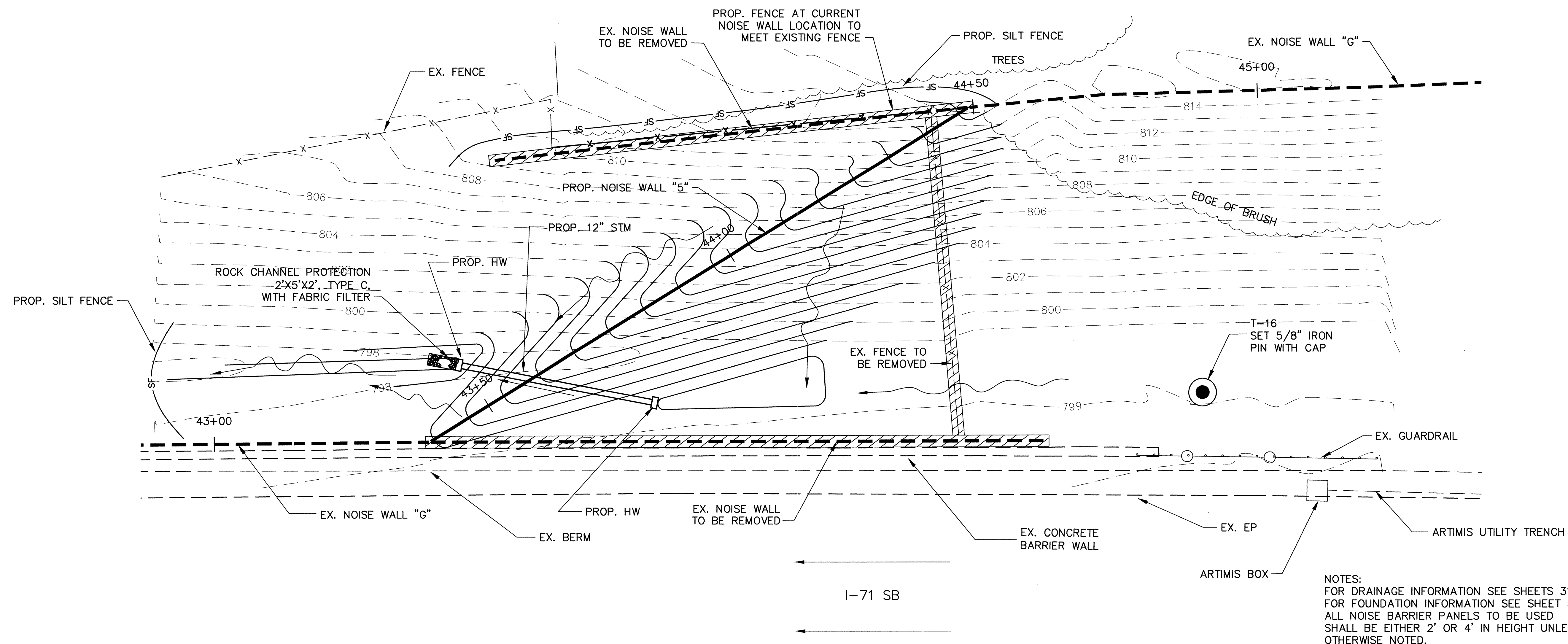
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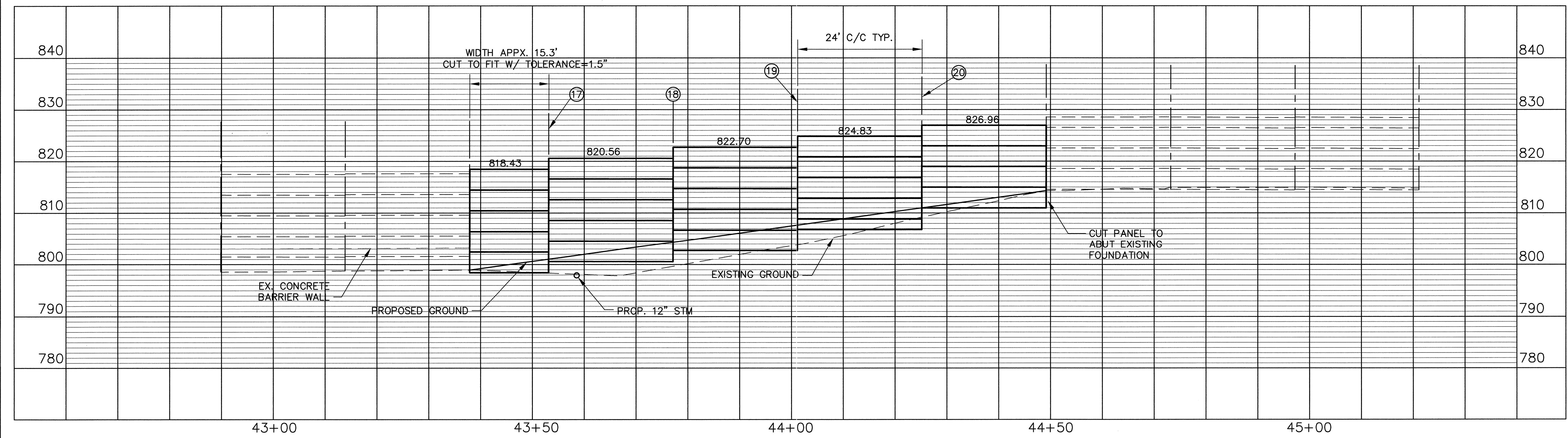
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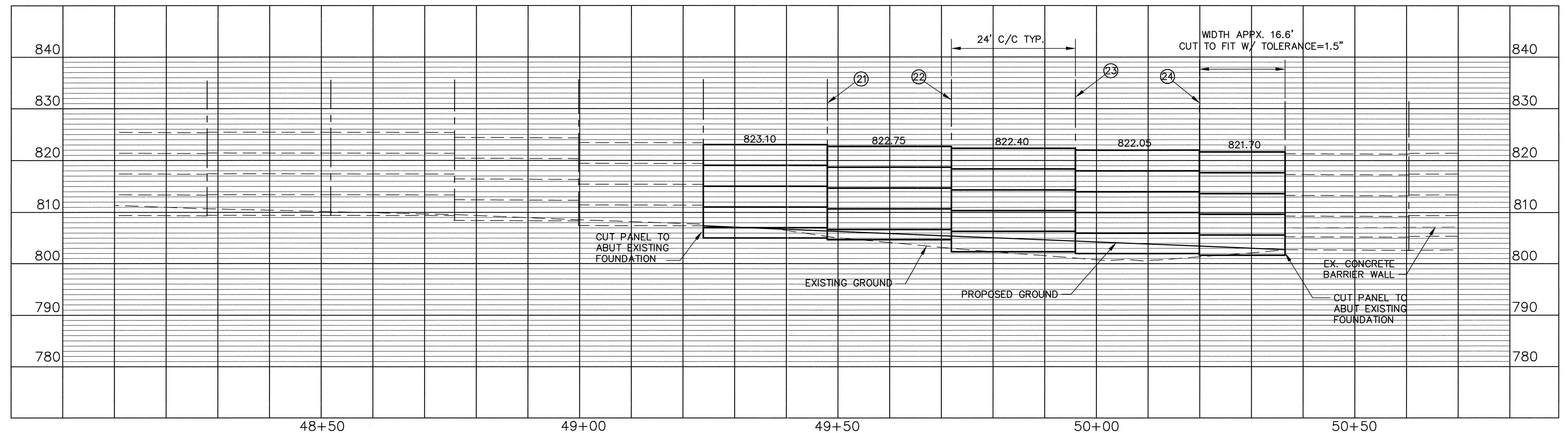
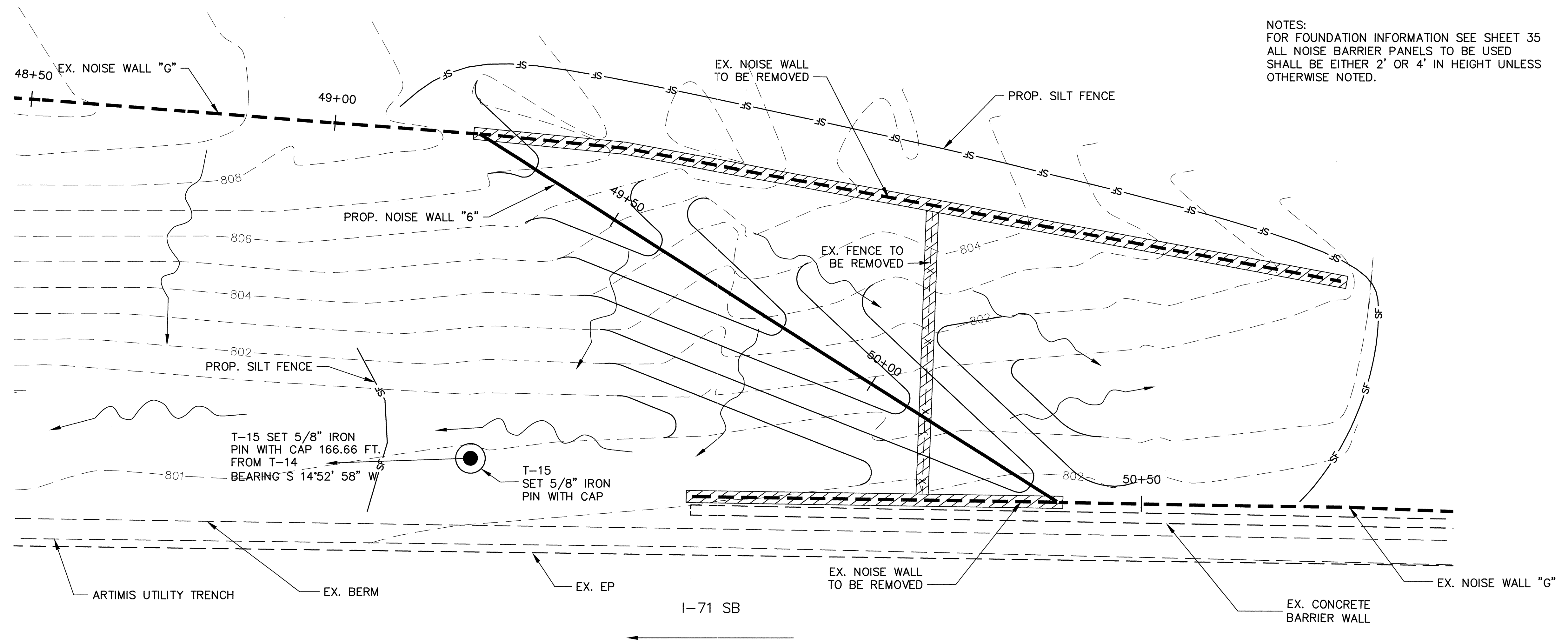
PLAN AND PROFILE SHEET
PROPOSED NOISE WALL "5"

HAM-71-1108



NOTES:
FOR DRAINAGE INFORMATION SEE SHEETS 31 AND 32
FOR FOUNDATION INFORMATION SEE SHEET 35
ALL NOISE BARRIER PANELS TO BE USED
SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
OTHERWISE NOTED.



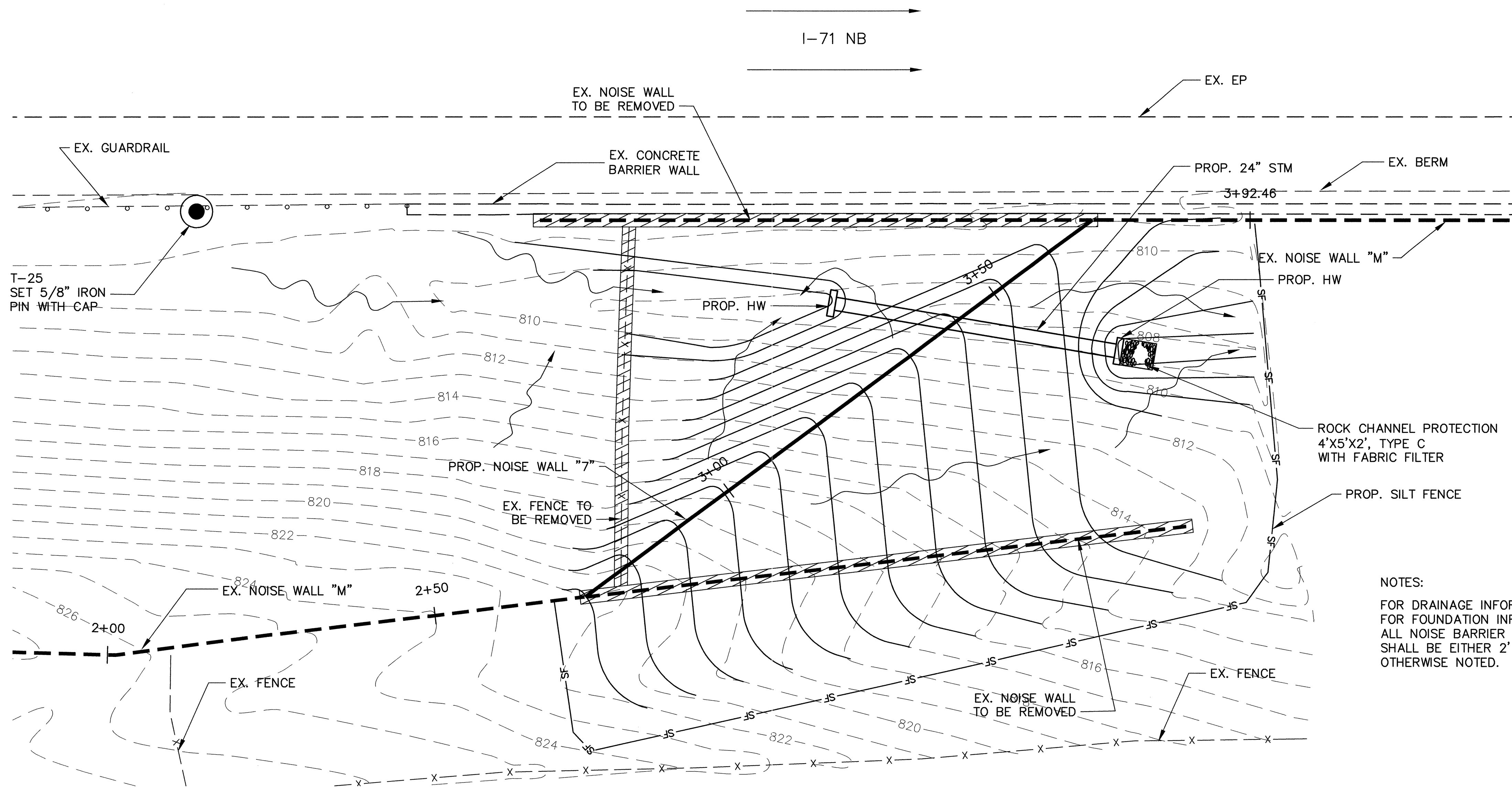


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	MRMK

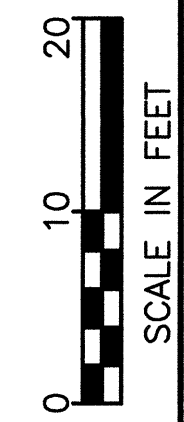
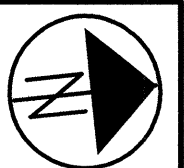
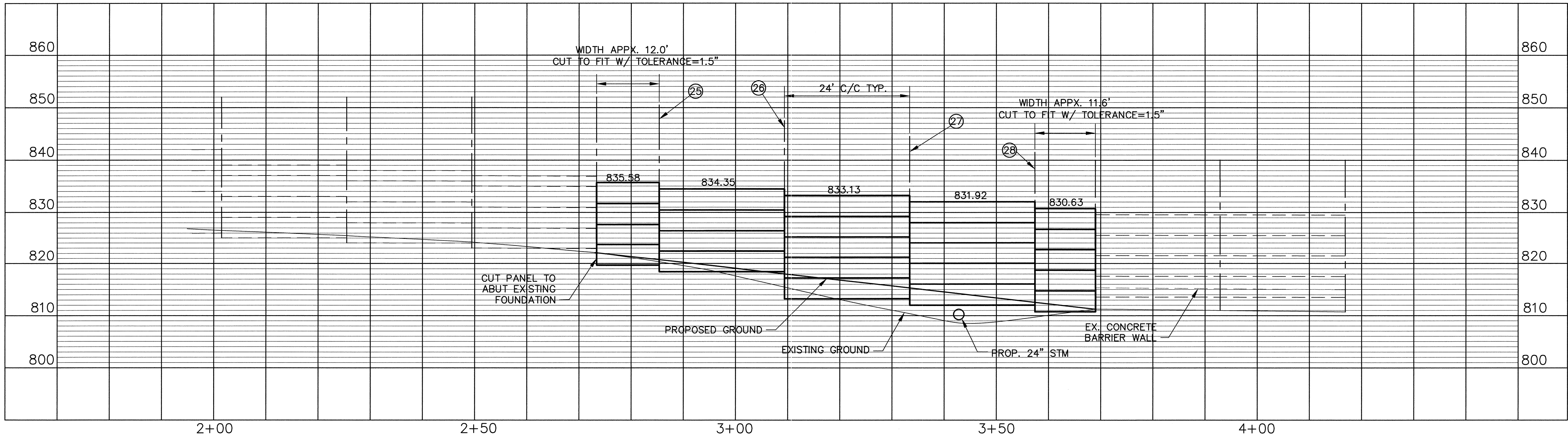
PLAN AND PROFILE SHEET PROPOSED NOISE WALL "6"

11.00

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NOTES:
FOR DRAINAGE INFORMATION SEE SHEETS 31 AND 32
FOR FOUNDATION INFORMATION SEE SHEET 35
ALL NOISE BARRIER PANELS TO BE USED
SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
OTHERWISE NOTED.

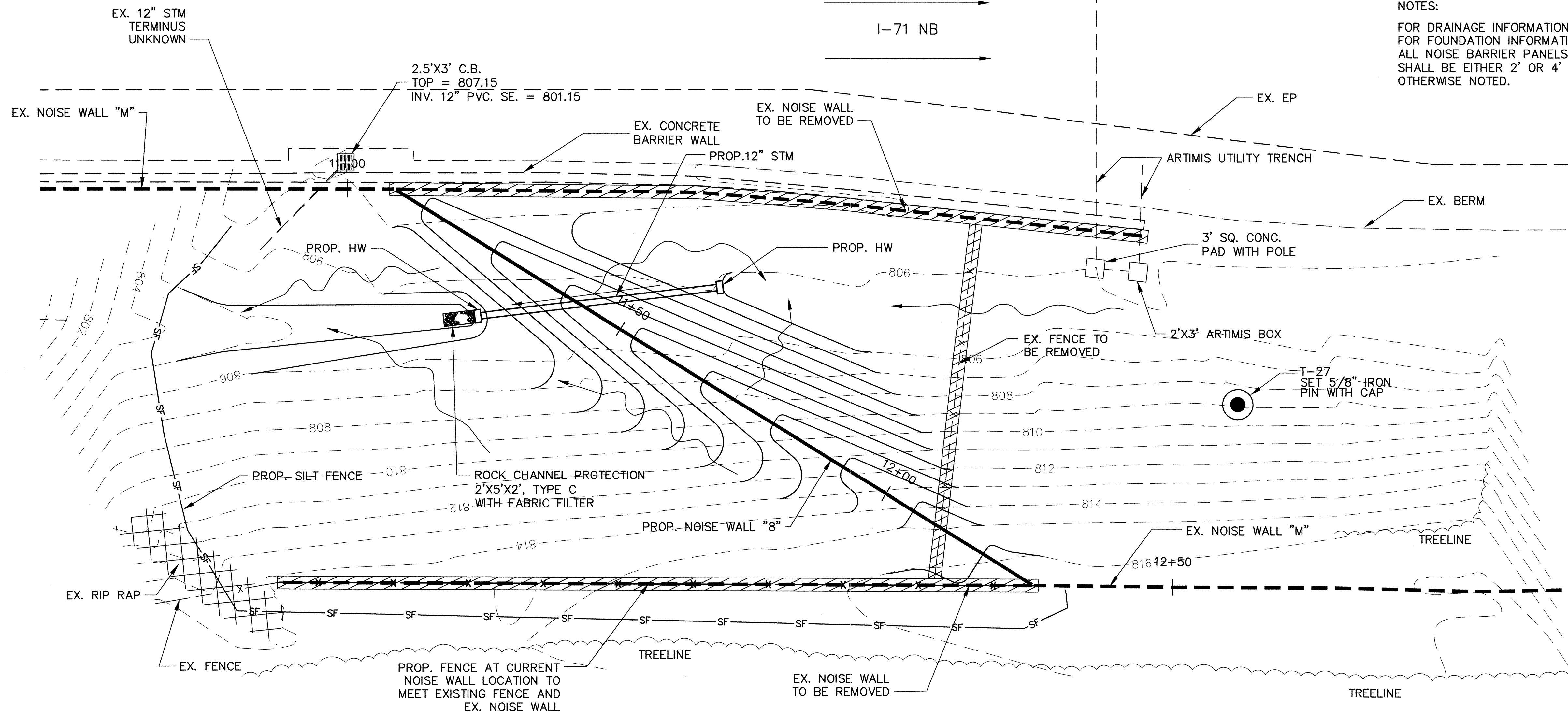


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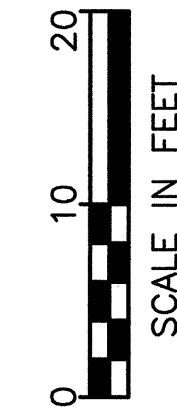
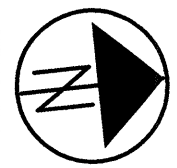
PLAN AND PROFILE SHEET
PROPOSED NOISE WALL "7"

HAM-71-1108

15
37

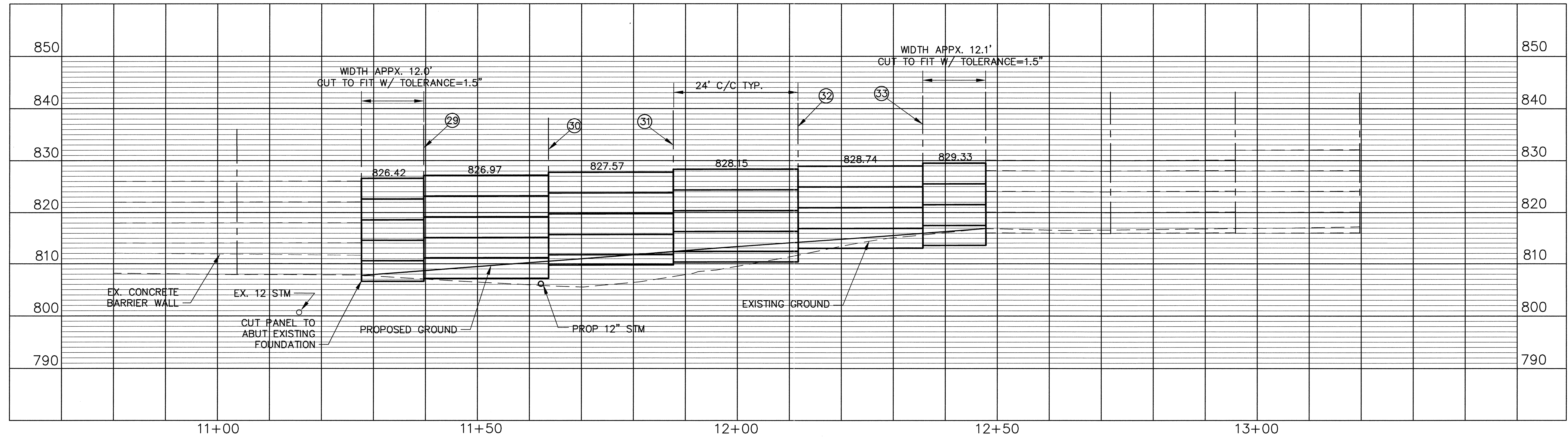


NOTES:
 FOR DRAINAGE INFORMATION SEE SHEETS 31 AND 32
 FOR FOUNDATION INFORMATION SEE SHEET 35
 ALL NOISE BARRIER PANELS TO BE USED
 SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
 OTHERWISE NOTED.



CALCULATED
 C.J.L.
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 MRMK

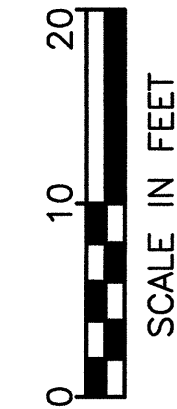
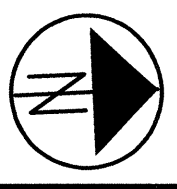
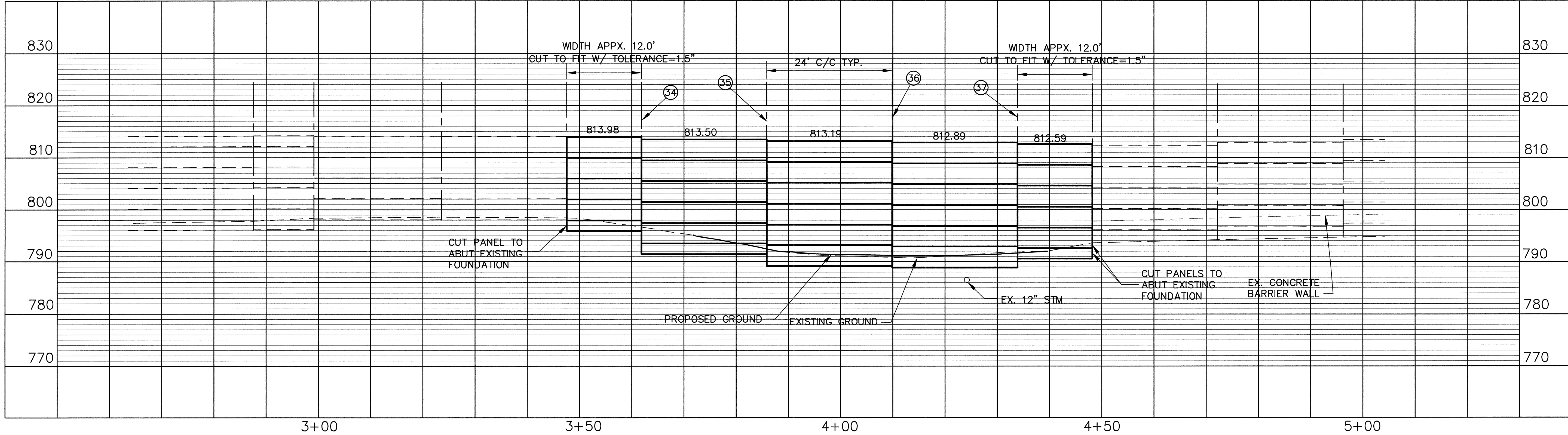
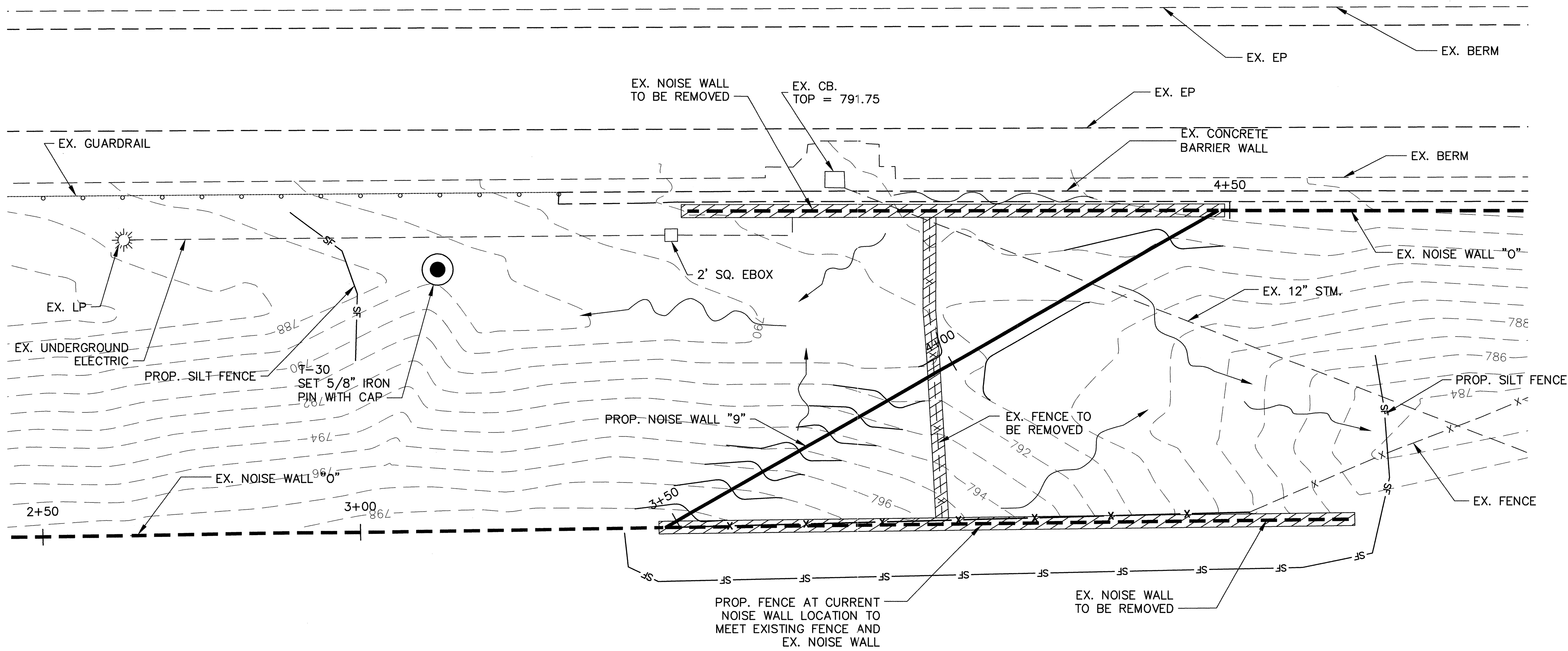
PLAN AND PROFILE SHEET
 PROPOSED NOISE WALL "8"



HAM-71-1108

RAMP 1

NOTES:
FOR FOUNDATION INFORMATION SEE SHEET 35
ALL NOISE BARRIER PANELS TO BE USED
SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
OTHERWISE NOTED.

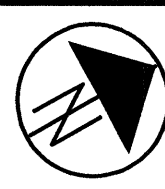


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PLAN AND PROFILE SHEET
PROPOSED NOISE WALL "9"

HAM-71-1108

17
37

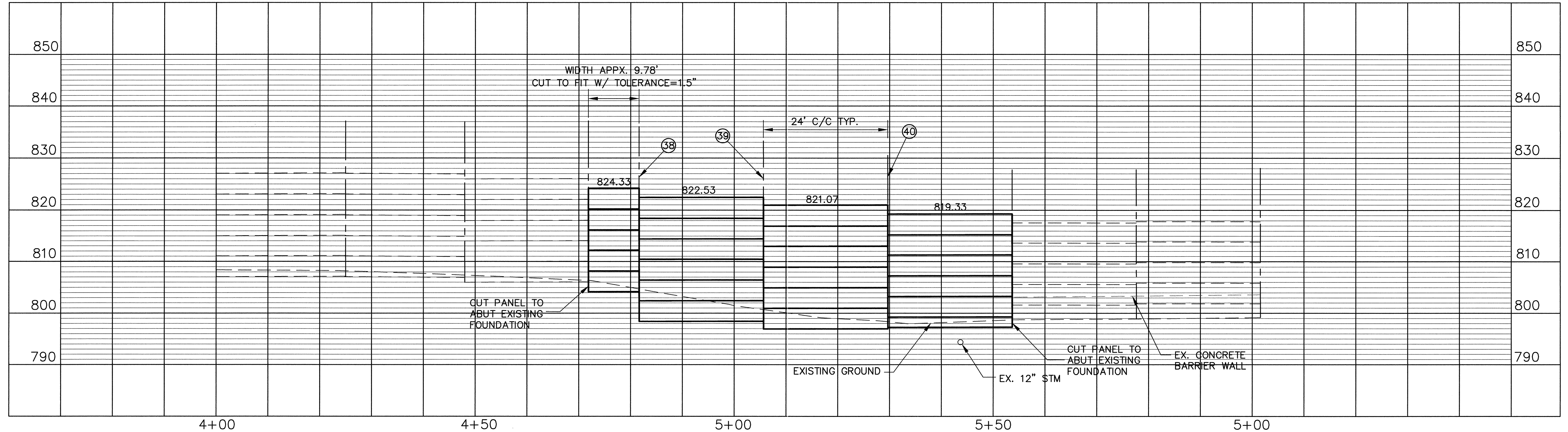
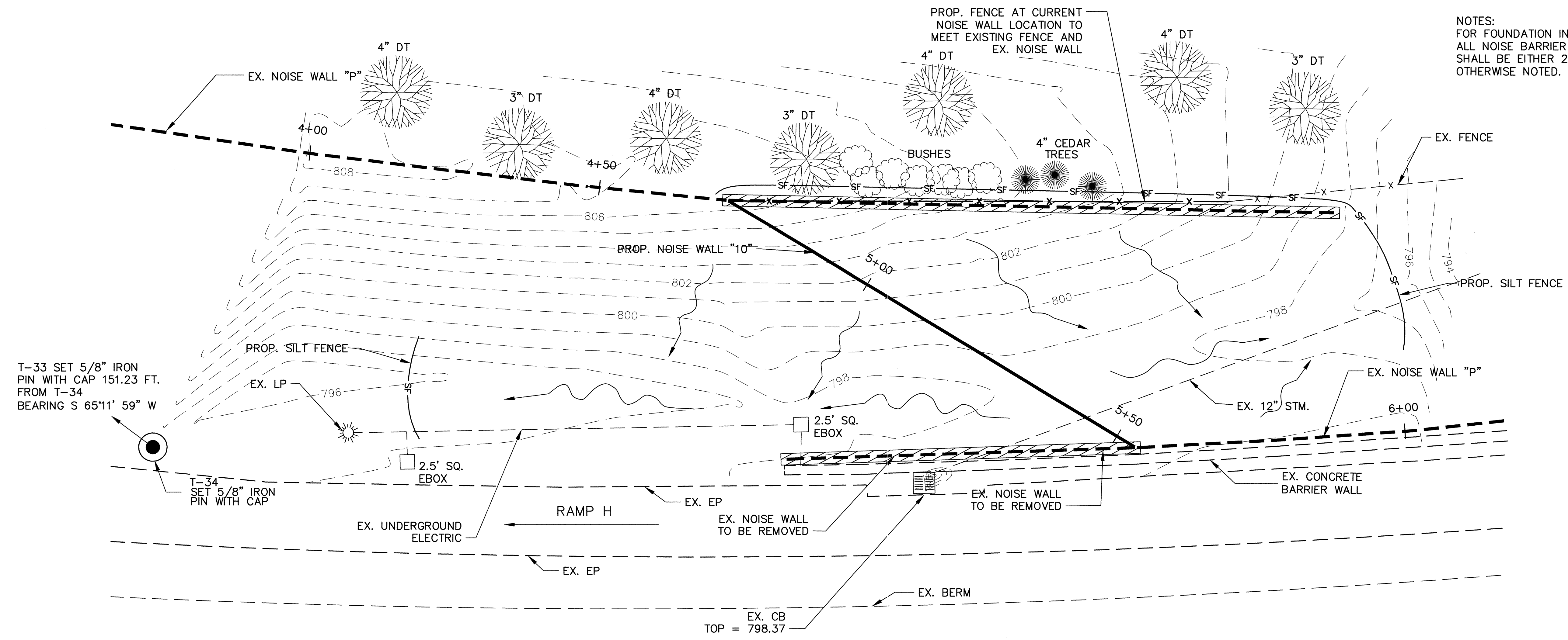


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PLAN AND PROFILE SHEET
PROPOSED NOISE WALL "10"

HAM-71-11.08

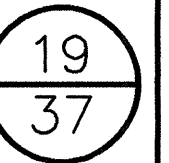
NOTES:
FOR FOUNDATION INFORMATION SEE SHEET 35
ALL NOISE BARRIER PANELS TO BE USED
SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
OTHERWISE NOTED.

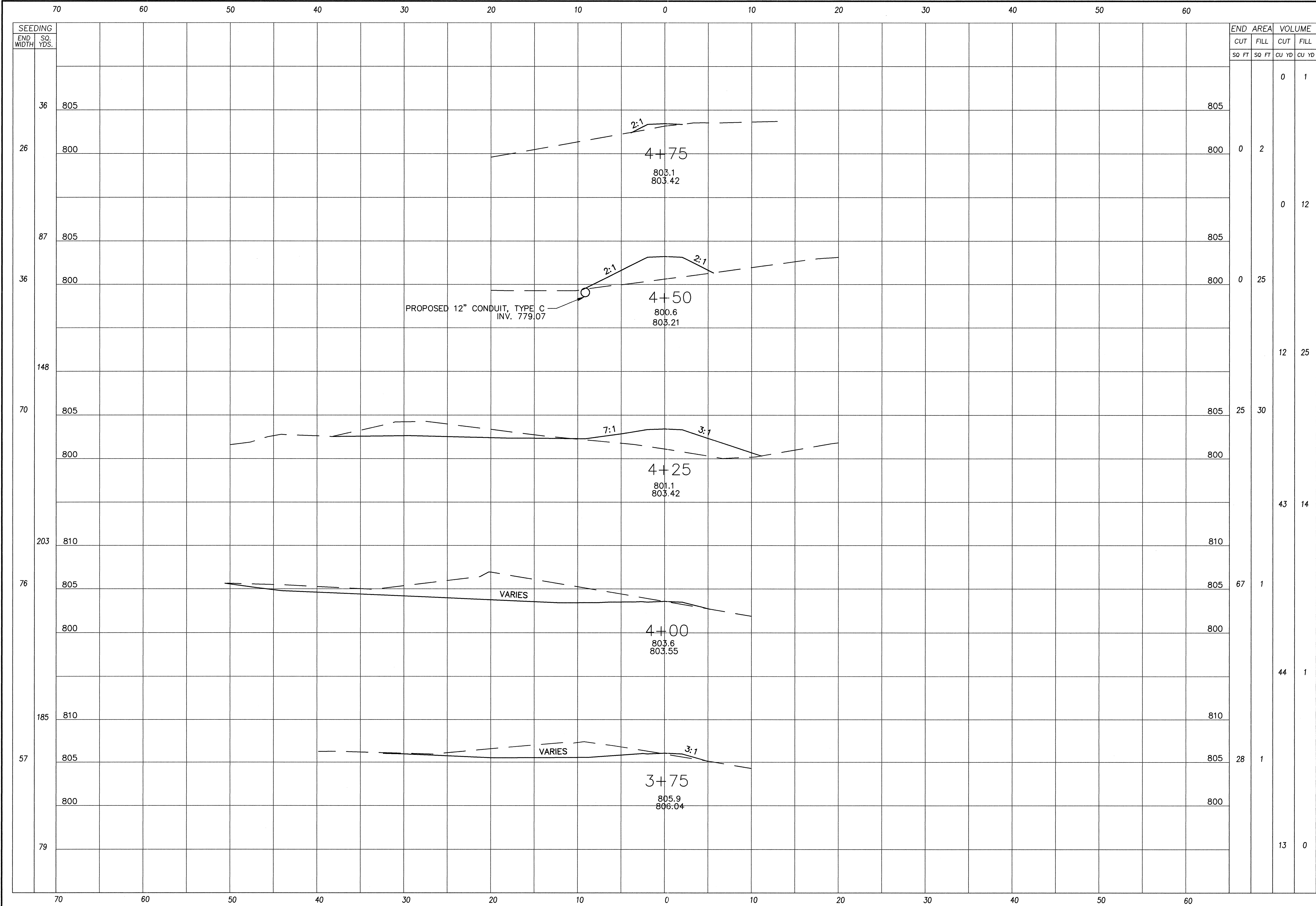


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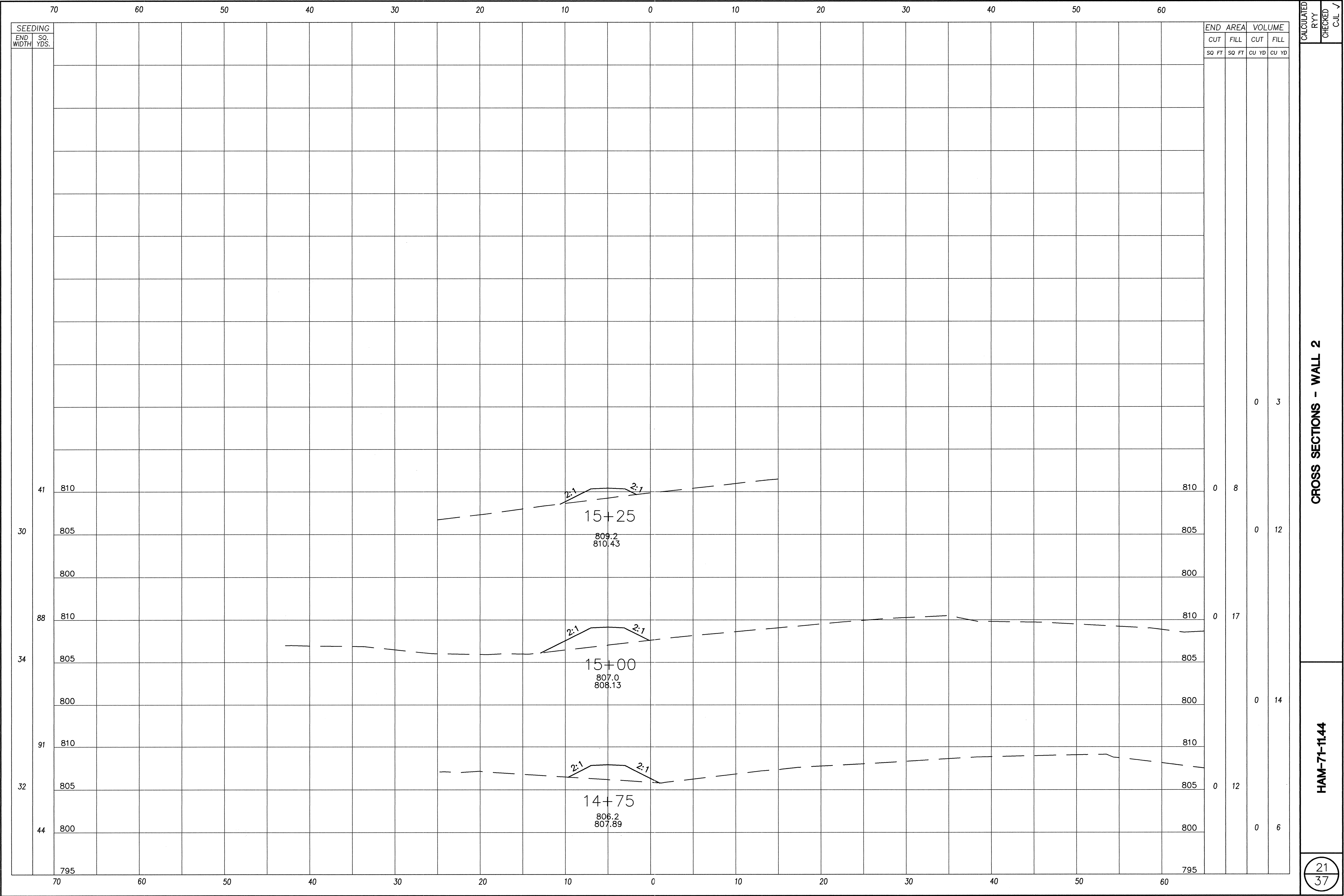


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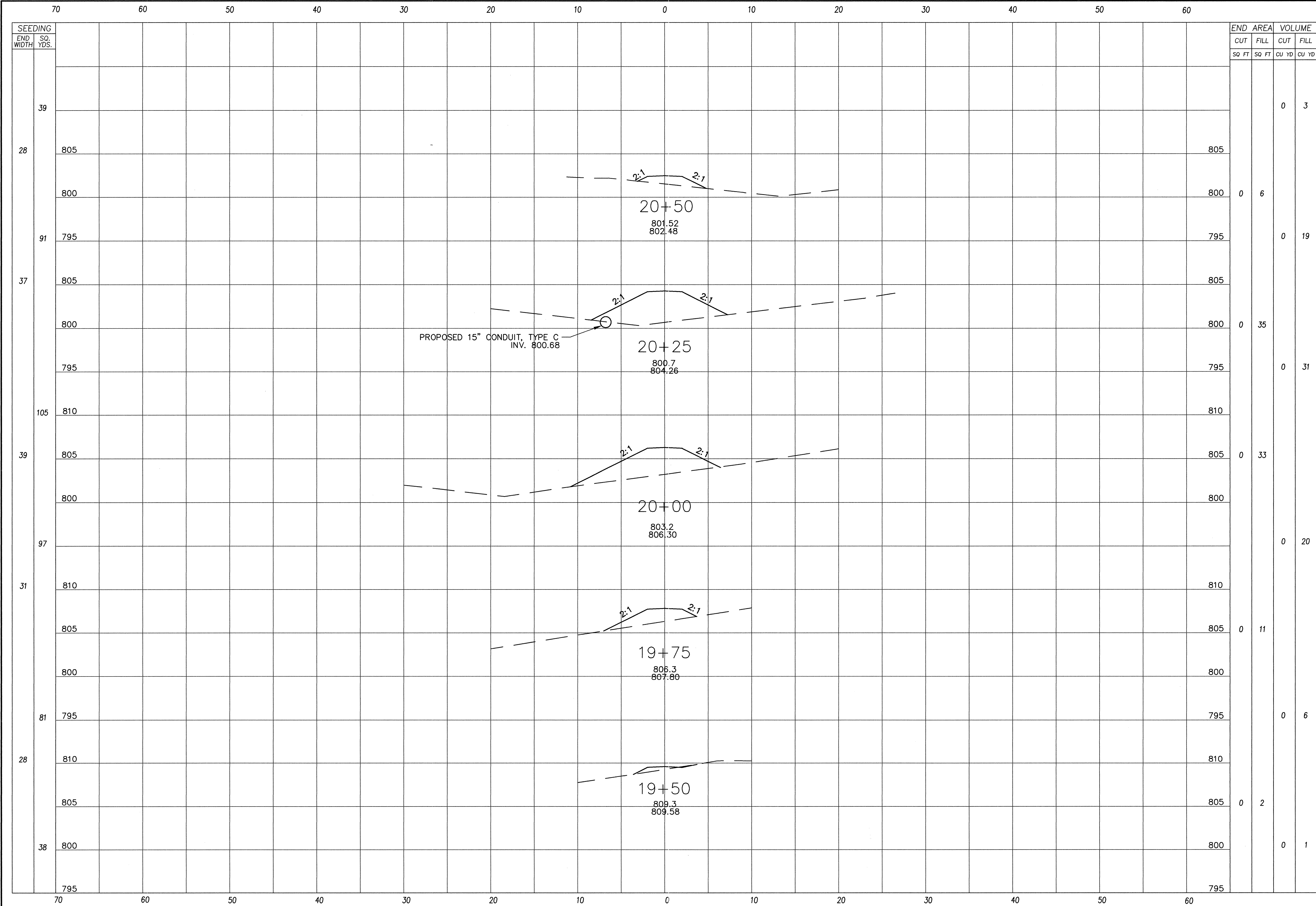




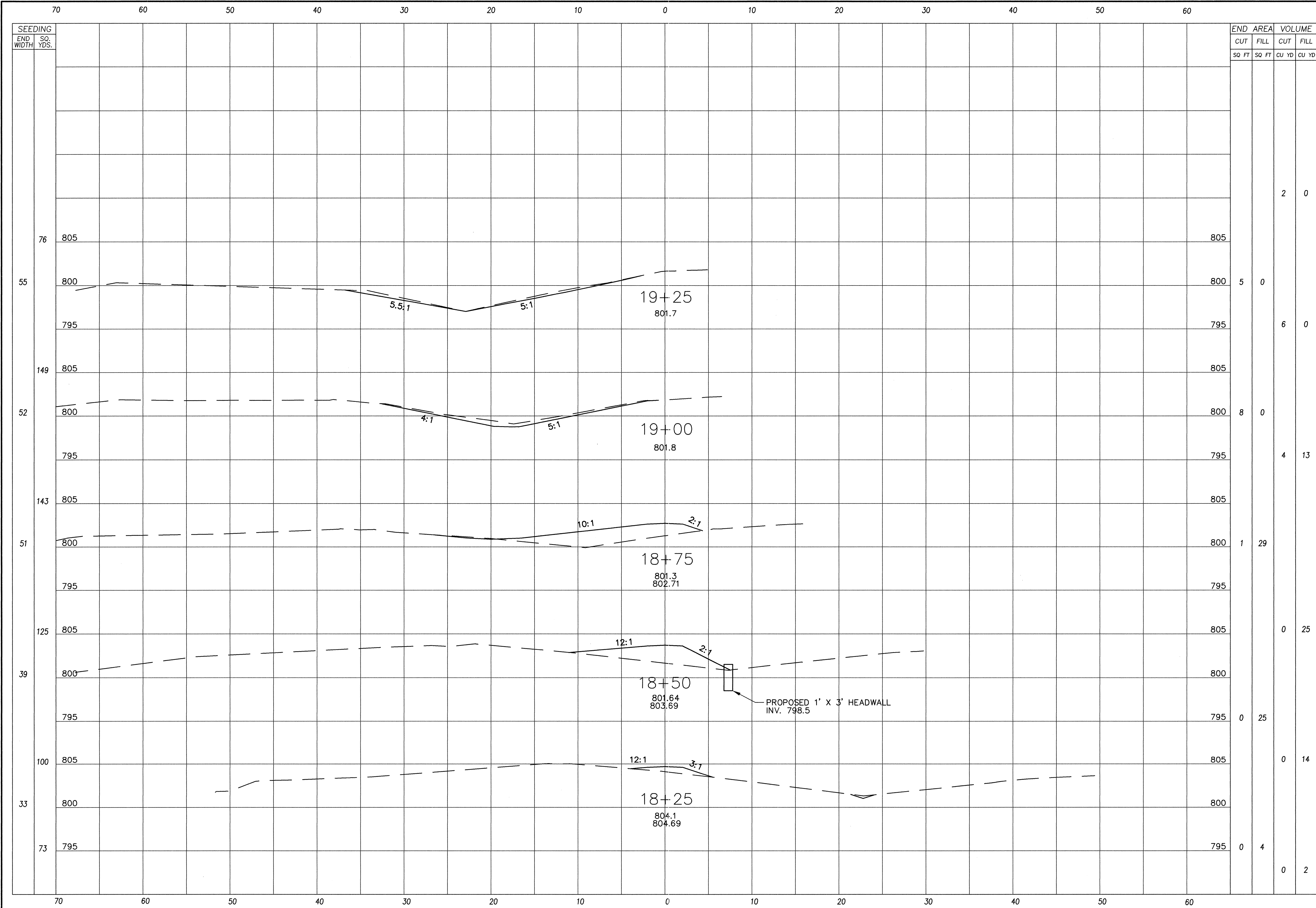
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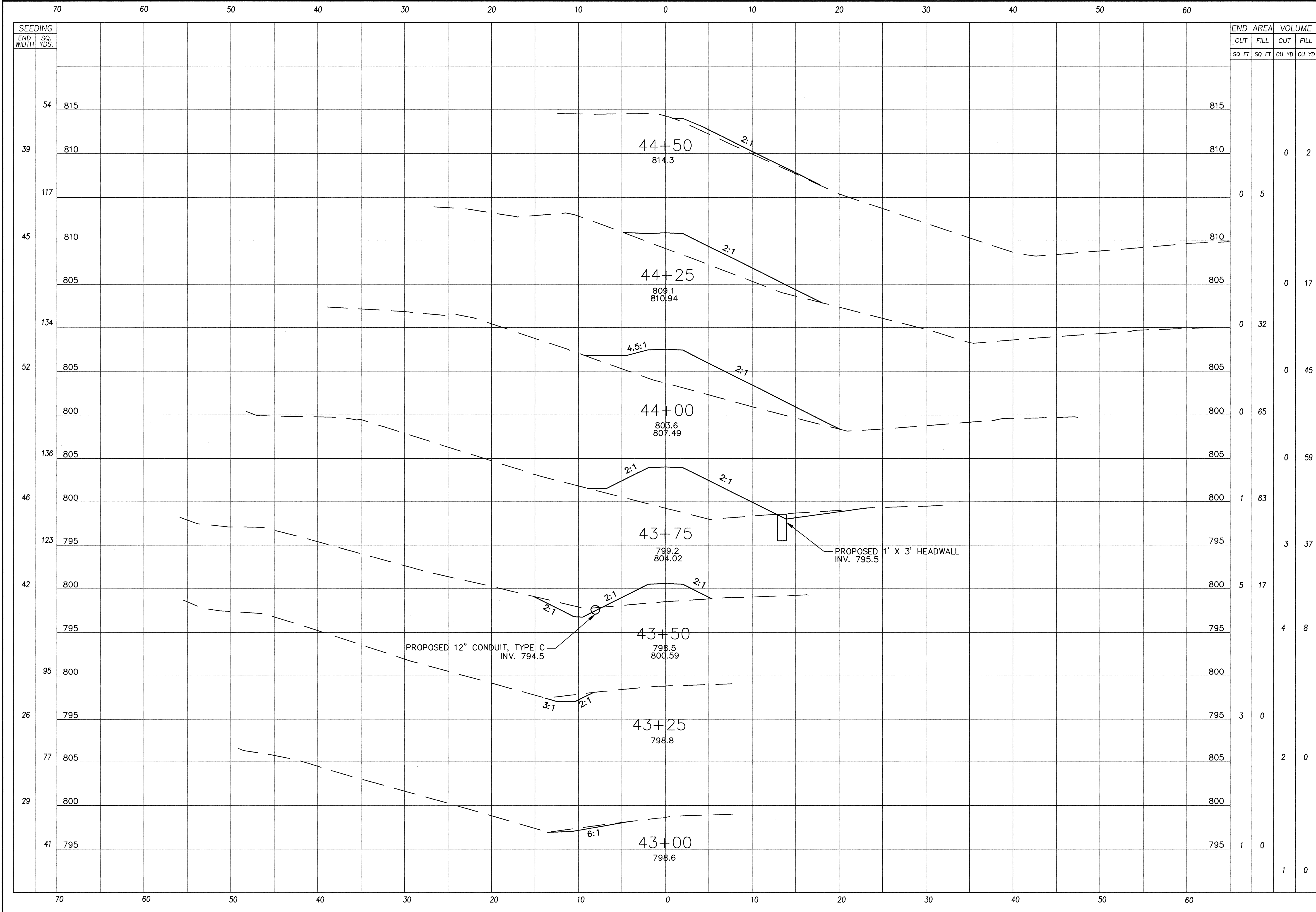


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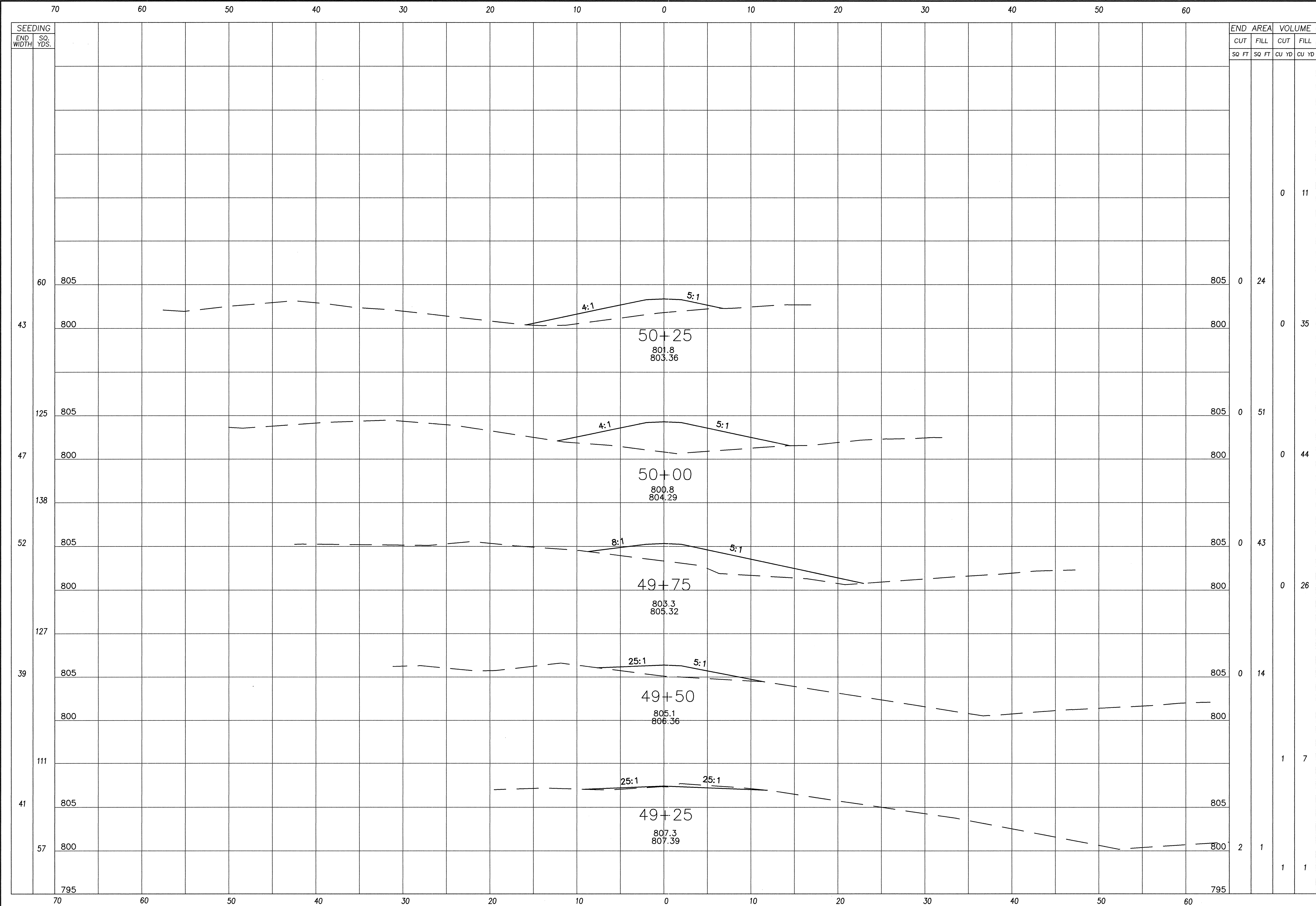


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		HAM-71-1144			
		22 37			

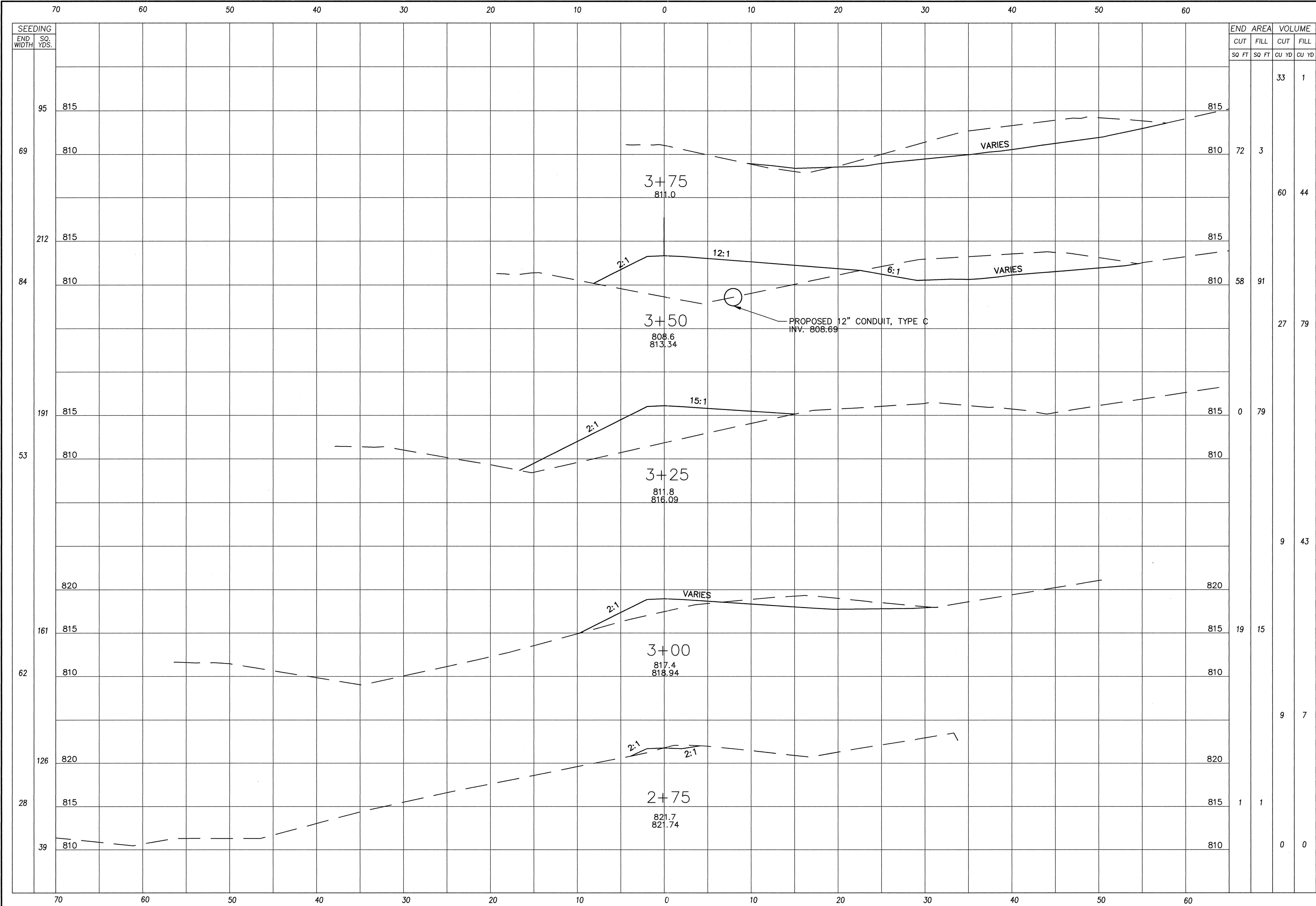




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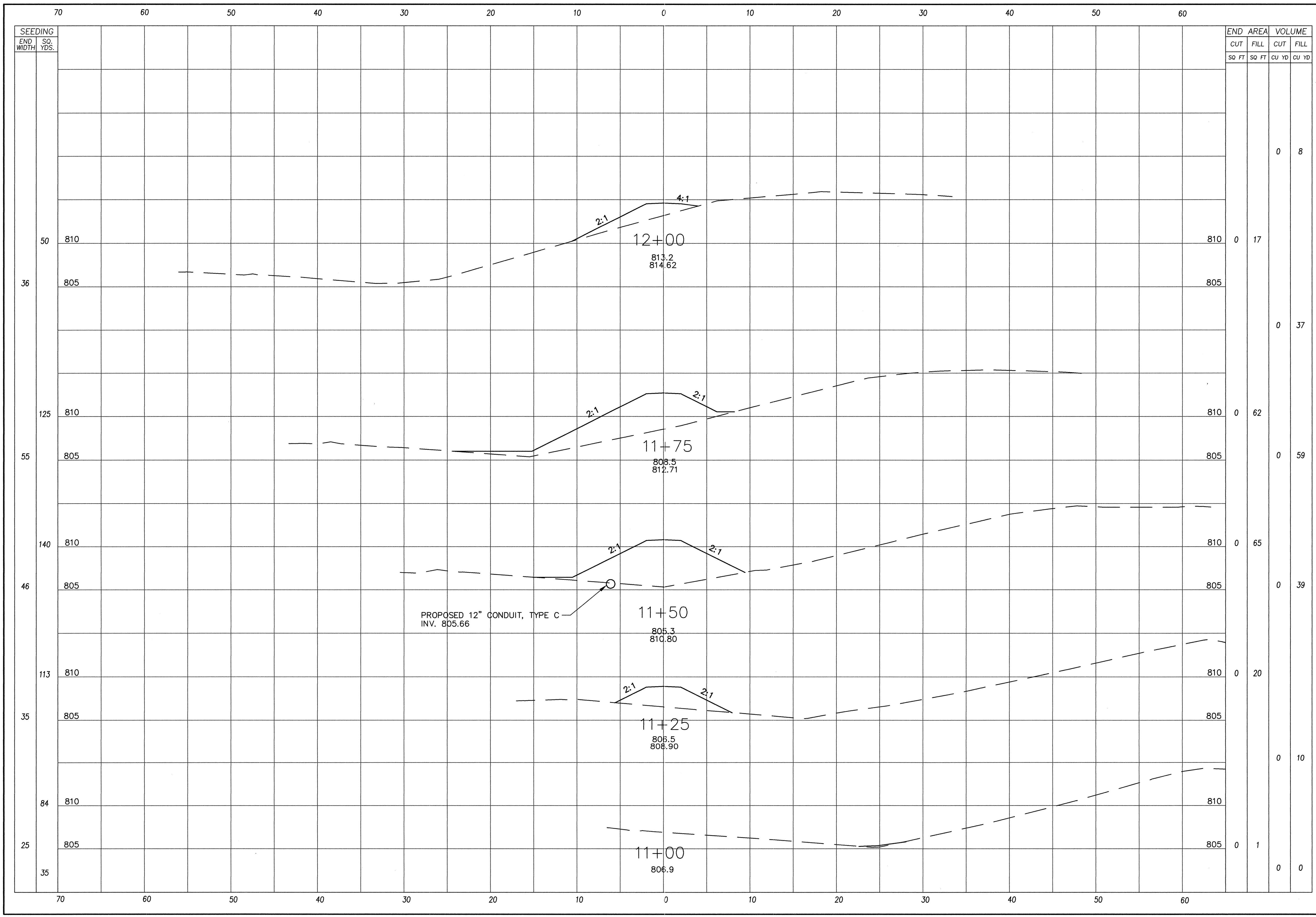


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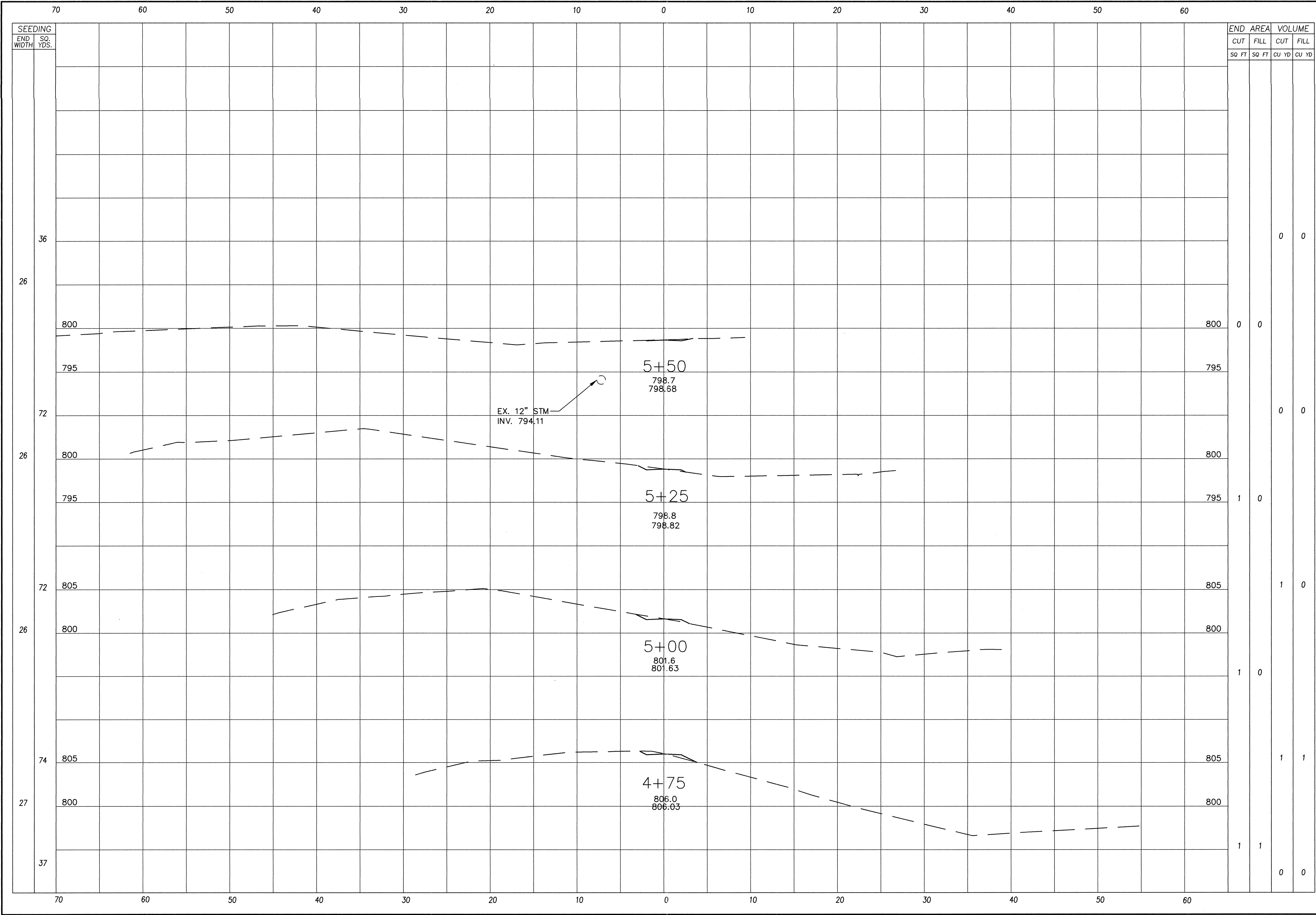
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CROSS SECTIONS - WALL 7				
HAM-71-11.44				
26 37				

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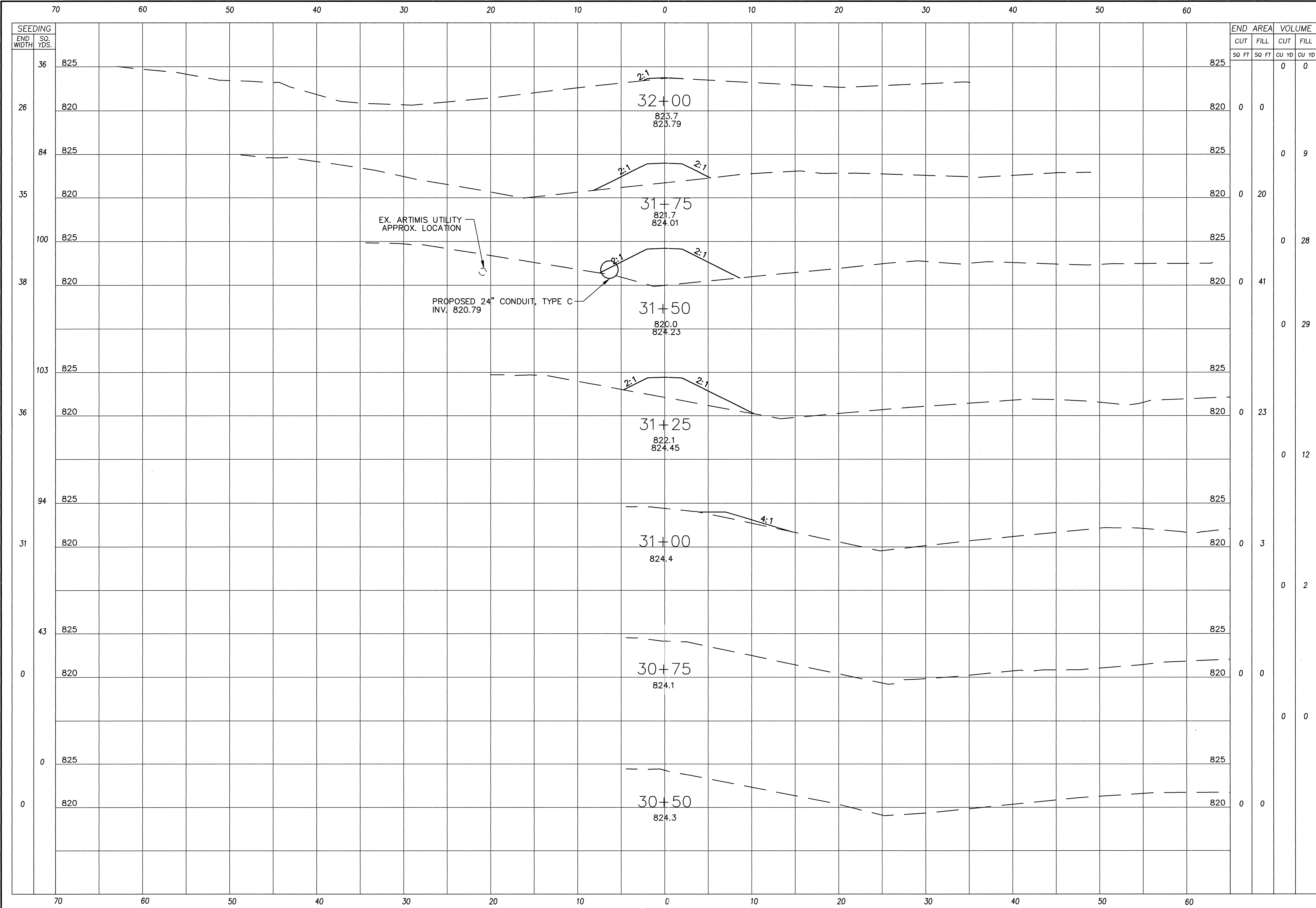


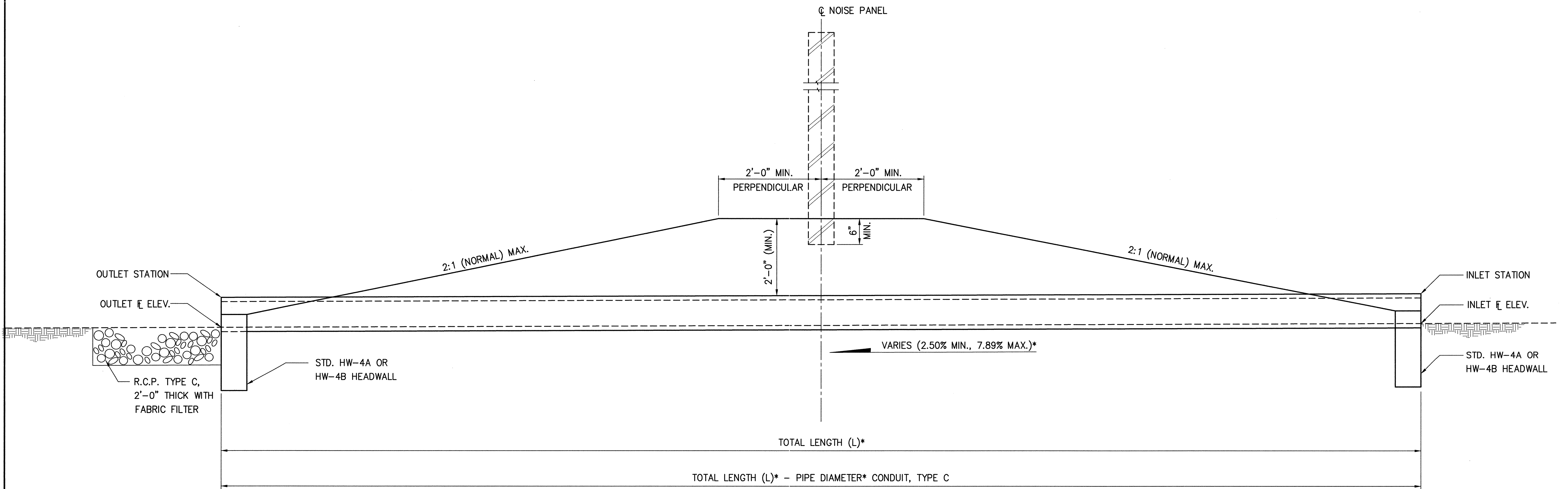
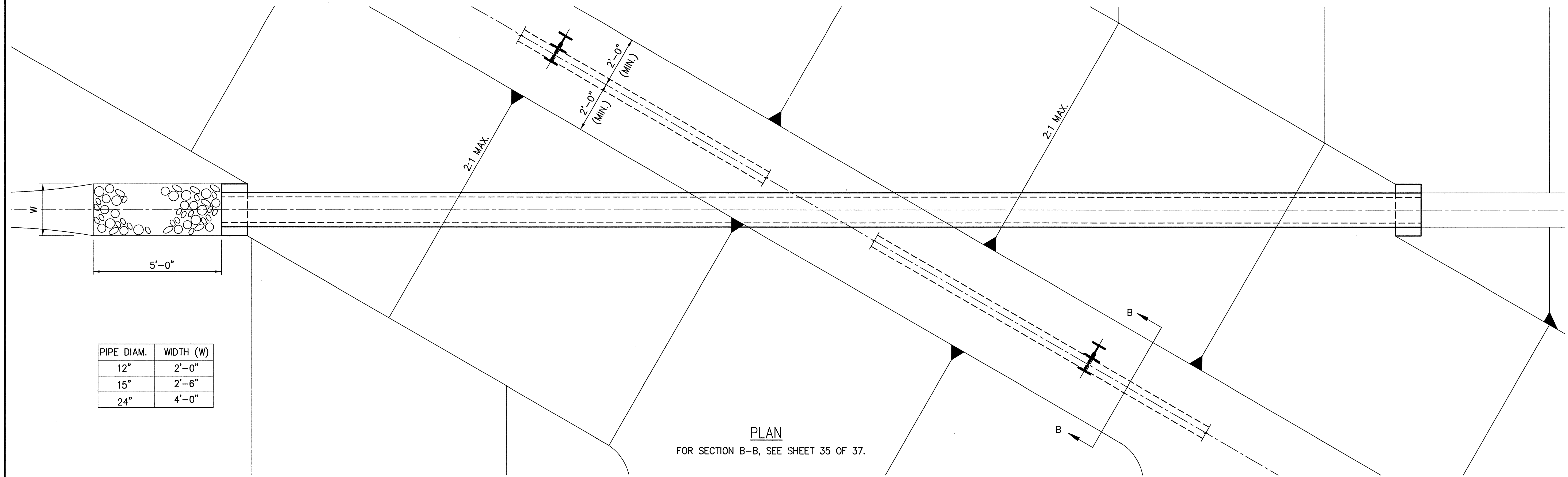
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CROSS SECTIONS - WALL 8				
HAM-71-11.44				
27/37				

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PROFILE ALONG ϕ PIPE

* SEE TABLE ON SHEET 32 OF 37.

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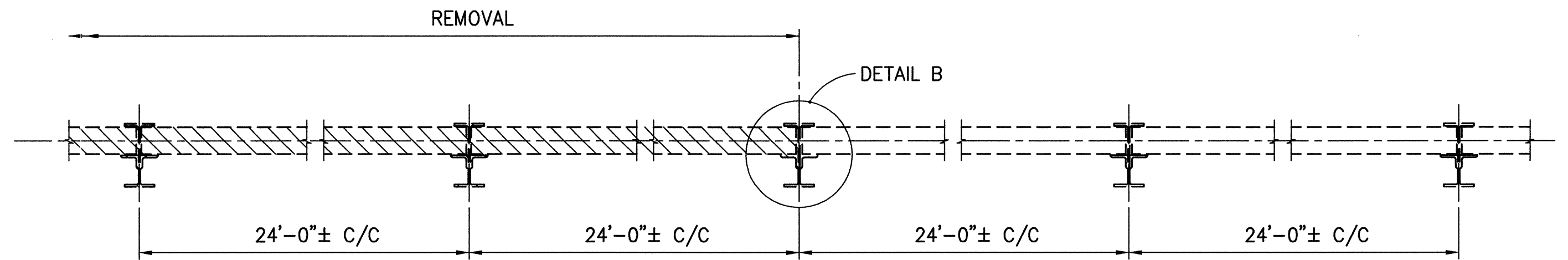
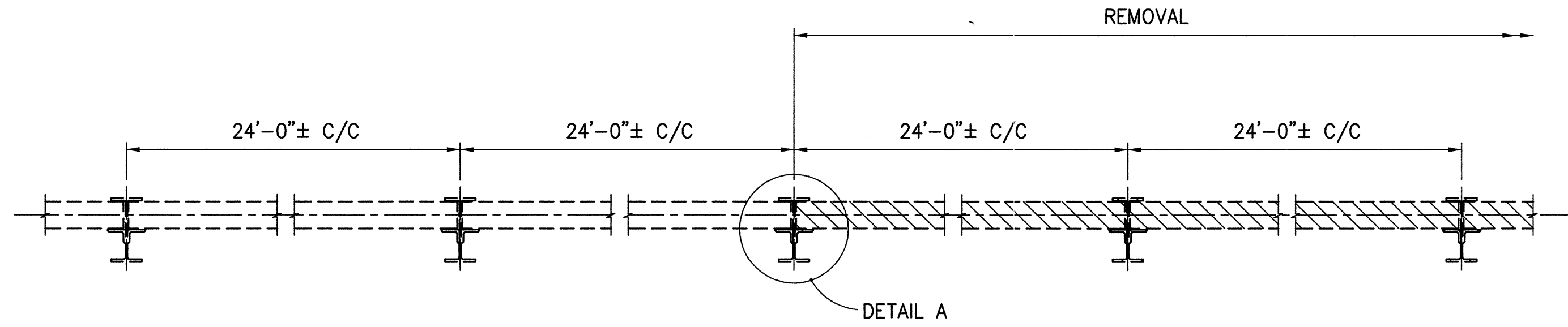
PIPE LOCATION	PIPE DIAMETER (INCH)	TOTAL LENGTH (FEET)	5 YEAR DISCHARGE	10 YEAR DISCHARGE	5 YEAR VELOCITY	10 YEAR VELOCITY	MINIMUM SLOPE (%)	INLET ℙ ELEV.	INLET STATION	OFFSET	OUTLET ℙ ELEV.	OUTLET STATION	OFFSET
WALL No. 1	12"	32.00	0.800 CFS	0.850 CFS	1.02 FPS	7.99 FPS	3.13	800.00	4+26.60	8.75 RT.	799.00	4+51.89	10.64 LT.
WALL No. 3	15"	28.00	2.981 CFS	3.168 CFS	2.43 FPS	8.88 FPS	2.86	800.80	20+21.53	9.45 LT.	800.00	20+43.65	7.71 RT.
WALL No. 4	15"	38.00	2.964 CFS	3.150 CFS	2.42 FPS	14.74 FPS	7.89	801.00	18+50.12	8.11 RT.	798.00	18+79.79	15.62 LT.
WALL No. 5	12"	36.00	1.674 CFS	1.779 CFS	2.13 FPS	7.53 FPS	2.78	798.00	43+75.44	15.30 RT.	797.00	43+48.95	9.08 LT.
WALL No. 7	24"	45.00	9.874 CFS	10.177 CFS	3.14 FPS	15.14 FPS	4.44	810.00	3+29.08	13.76 LT.	808.00	3+60.35	18.60 RT.
WALL No. 8	12"	40.00	0.707 CFS	0.751 CFS	0.90 FPS	7.14 FPS	2.50	806.00	11+60.45	14.39 LT.	805.00	11+29.17	10.56 RT.
WALL No. 11	24"	30.00	6.146 CFS	6.531 CFS	1.96 FPS	13.11 FPS	3.33	821.00	31+55.47	8.47 LT.	820.00	31+32.42	10.73 RT.

TABLE (HYDRAULIC INFORMATION)

NOTES

1. ALL STORM SEWERS PIPES SHALL CONFORM TO AASHTO SPECIFICATIONS.
2. TRENCHES SHALL BE COMPACTED AS PER ITEM 603, UNLESS OTHERWISE NOTED ON THE PLANS.
ANY SETTLEMENT WHICH OCCURS DURING THE GUARANTEE PERIOD, SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE STATE.
3. THE CONTRACTOR IS REQUIRED TO INSPECT THE PROJECT SITE AND FULLY INFORM HIMSELF CONCERNING ALL CONDITIONS AFFECTING THE SCOPE OF THE WORK. FAILURE TO DO SO SHALL NOT RELIEVE HIM FROM ANY RESPONSIBILITY IN THE PERFORMANCE OF THE CONTRACT.
4. ALL TREES (OR SHRUBS) WHETHER SHOWN OR NOT SHOWN ON THE PLANS ARE TO BE PRESERVED, UNLESS APPROVAL IS GIVEN IN WRITING BY THE PROJECT ENGINEER. PAYMENT WILL BE MADE UNDER ITEM 201, CLEARING AND GRUBBING.
5. INVESTIGATION, LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ADDITIONALLY, THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING UTILITY RELOCATIONS WITH THE OWNER OF THE UTILITY.

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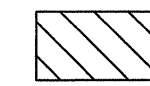


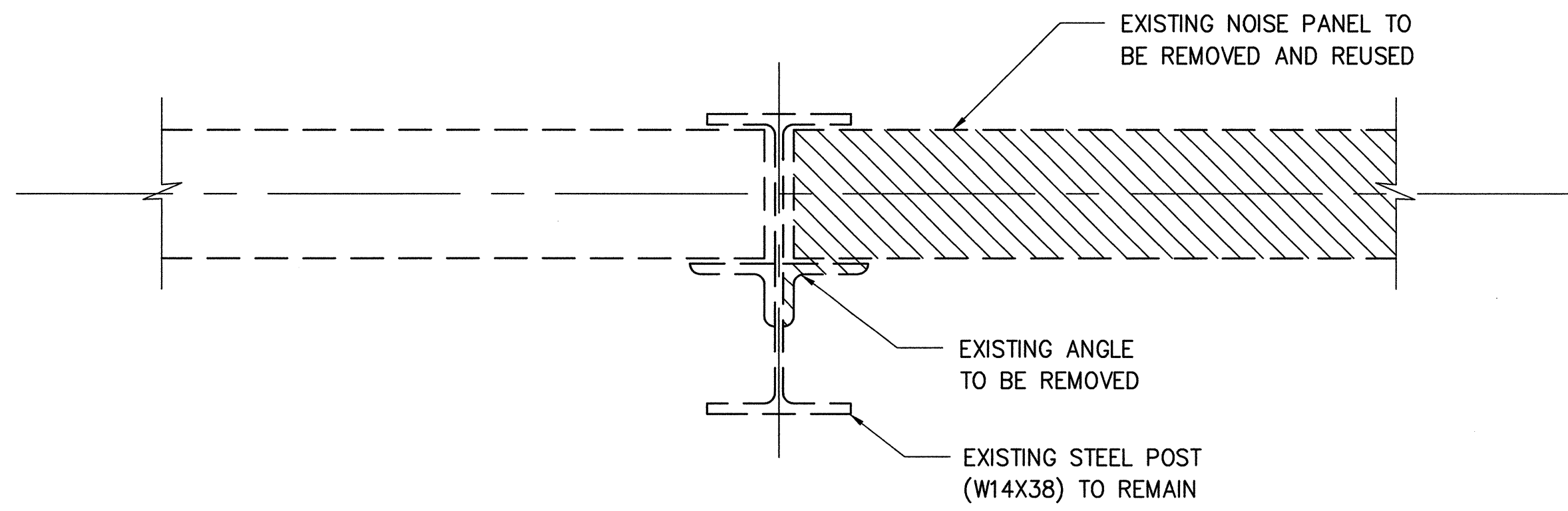
PLAN

NOTES

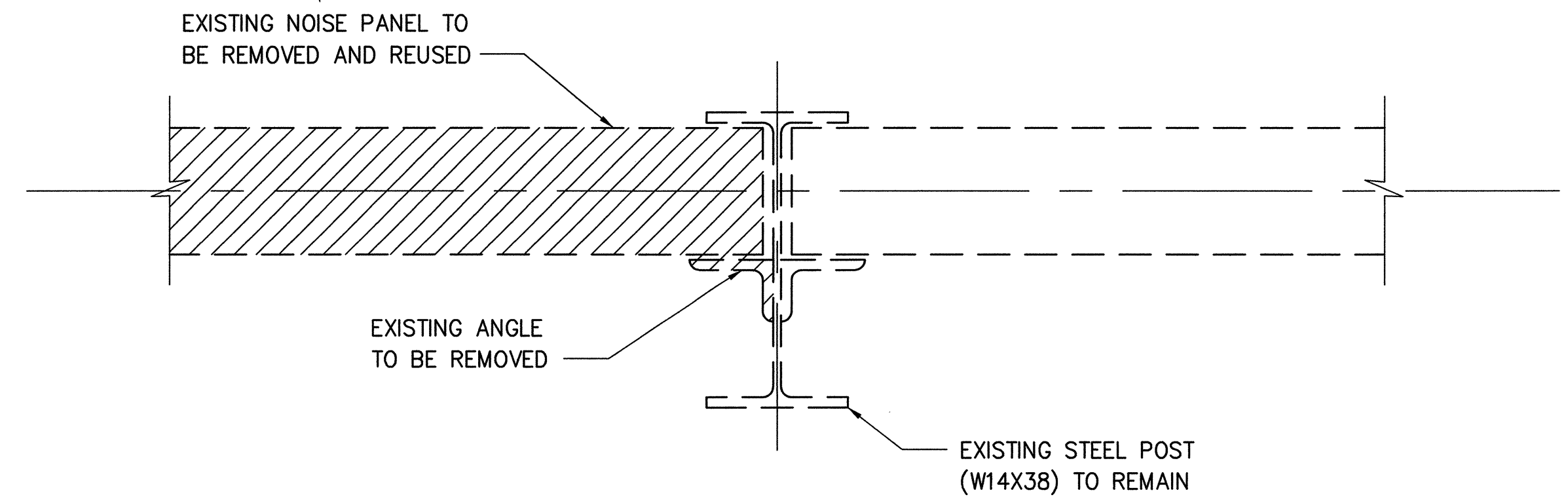
THE EXISTING ANGLES SHOULD BE REMOVED AND THE SURFACE OF THE EXISTING STEEL POSTS (W14X38) SHALL BE GROUND SMOOTH TO PROVIDE FOR THE PLACEMENT OF NEW ANGLES AS SHOWN ON THE DETAILS ON SHEET 34 OF 37.

LEGEND

 INDICATES AREA TO BE REMOVED

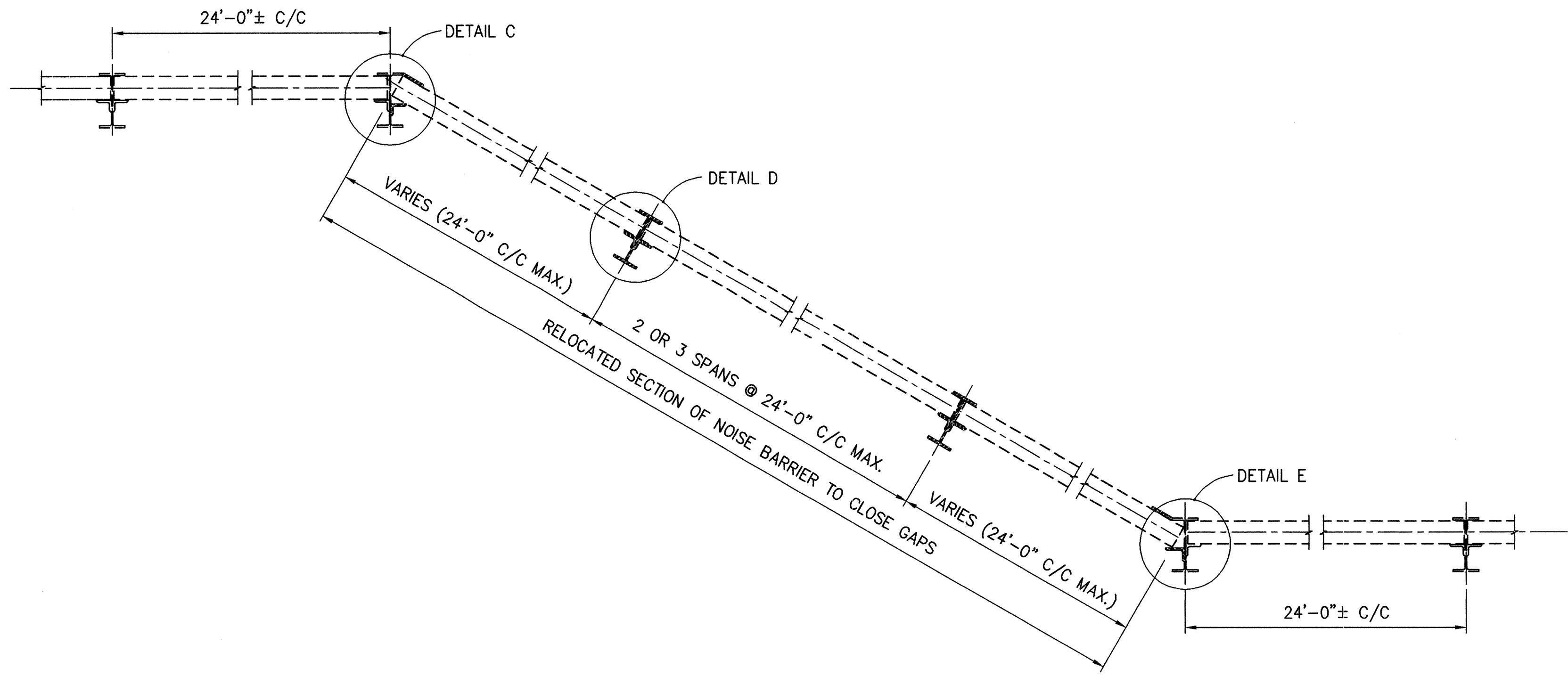


DETAIL A



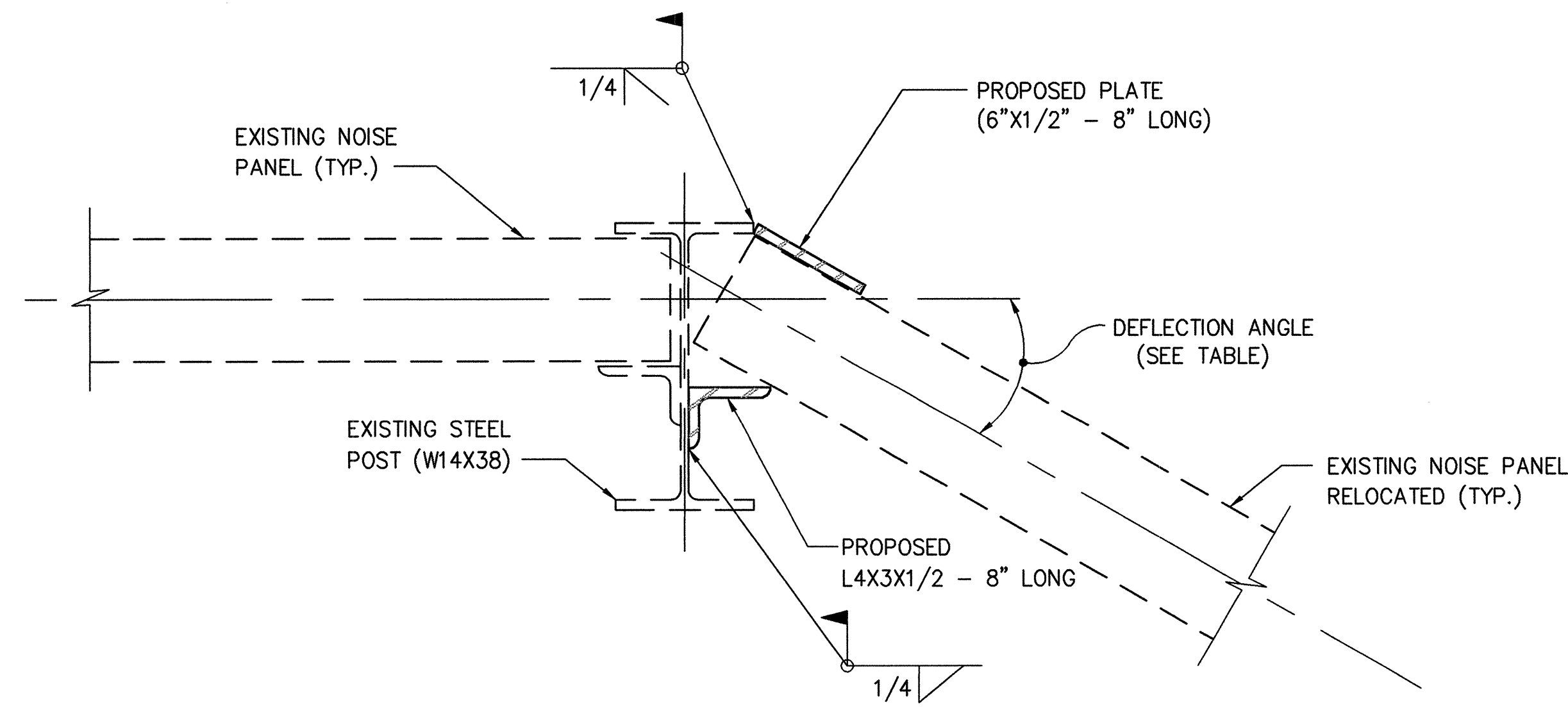
DETAIL B

C:\Documents and Settings\craig\l\Desktop\00015Det1.dwg Mon Oct 30 19:08:56 2000

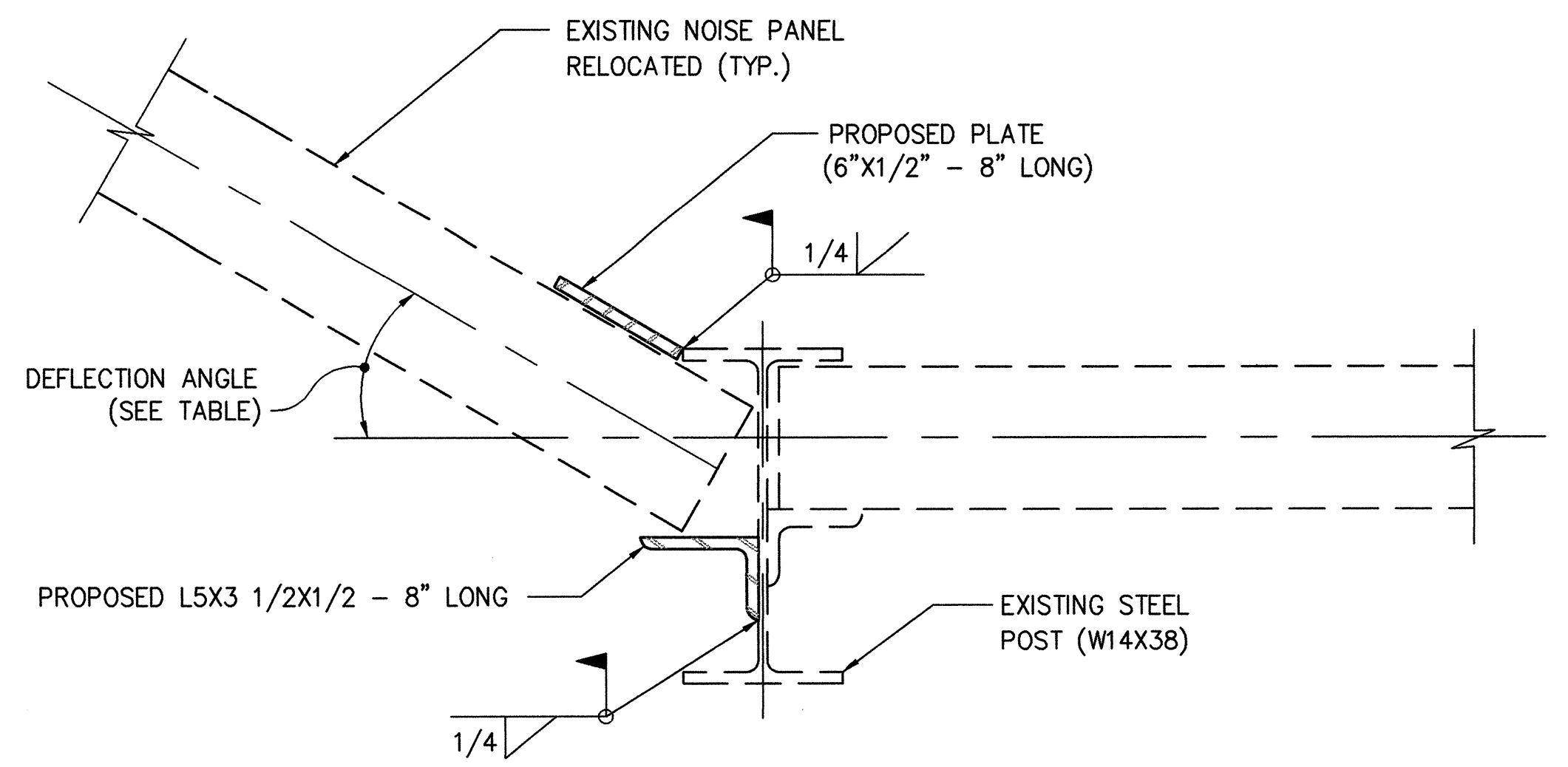


PLAN

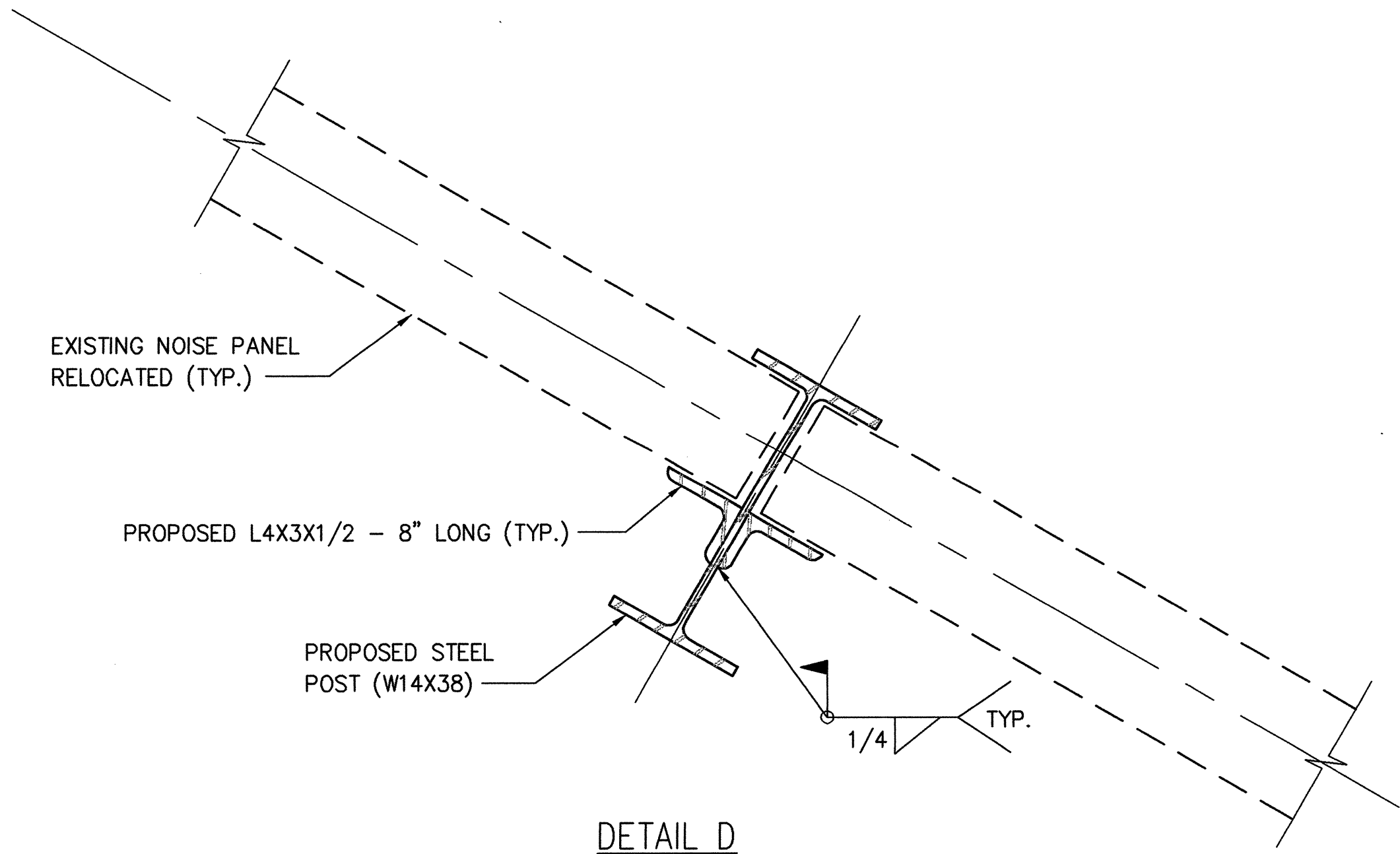
DEFLECTION ANGLE TABLE			
WALL NO.	LOCATION	WEST WALL ANGLE	EAST WALL ANGLE
1	NW G, STA. 648+00 SB	23°45'40"	26°37'18"
2	NW F, STA. 657+00 NB	36°12'35"	36°22'60"
3	NW F, STA. 663+00 NB	33°48'53"	35°38'26"
4	NW G, STA. 663+00 SB	26°42'23"	32°25'56"
5	NW G, STA. 688+00 SB	26°26'22"	31°17'27"
6	NW G, STA. 694+00 SB	27°57'28"	31°15'30"
7	NW M, STA. 767+00 NB	36°42'16"	29°36'27"
8	NW M, STA. 775+00 NB	31°35'51"	30°04'13"
9	NW O, STA. 796+00 NB	29°52'41"	28°46'41"
10	NW P, STA. 798+00 SB	25°32'28"	34°22'47"
11	NW O, STA. 824+00 NB	28°56'54"	29°15'15"



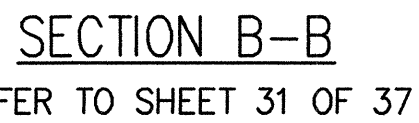
DETAIL C



DETAIL E



DETAIL D



REFER TO SHEET 31 OF 37

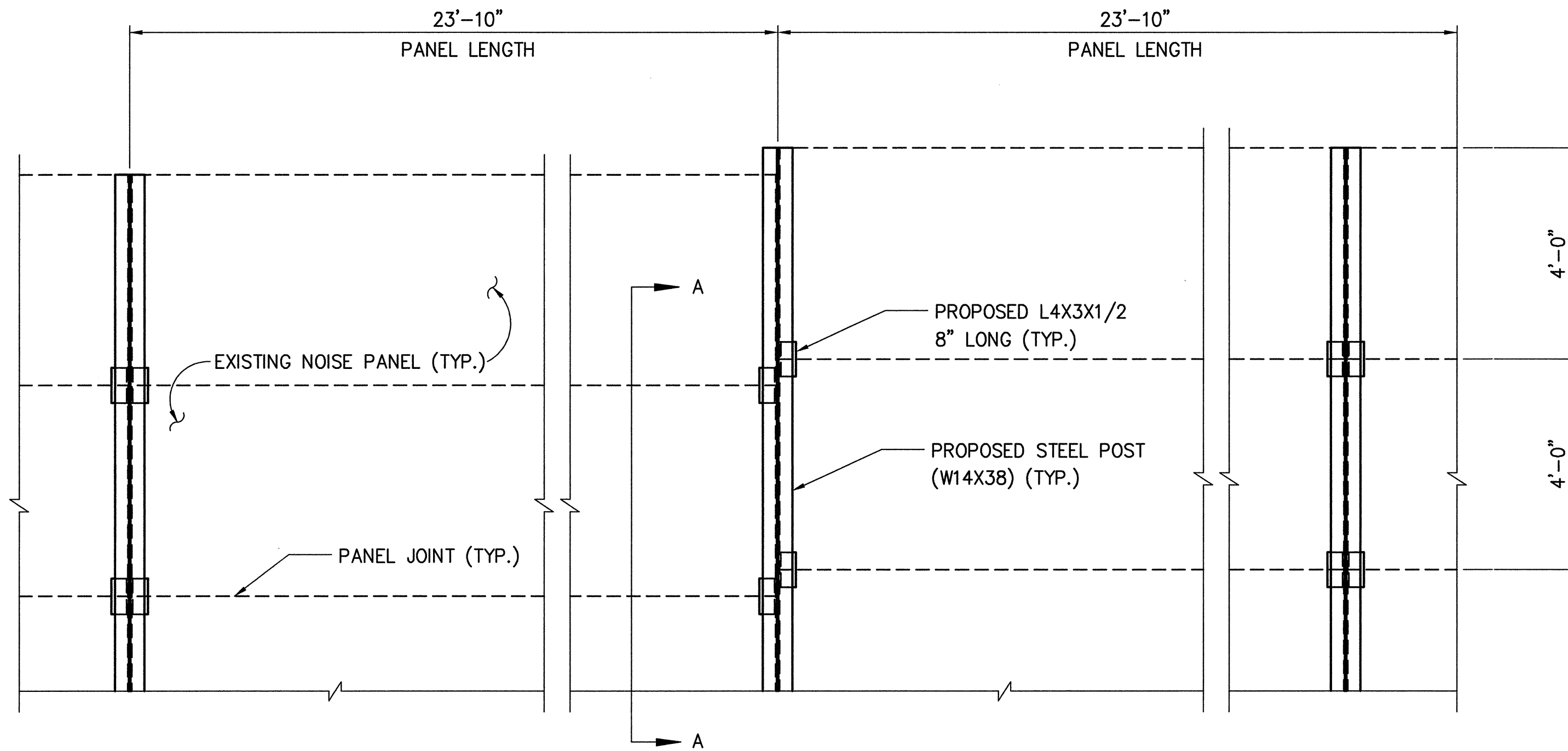
3. REFERRING TO THE BORINGS DRILLED FOR THIS PROJECT, HARD BEDROCK IS DEFINED AS BEDROCK ON WHICH AUGER REFUSAL WAS MET, AND ROCK CORING WAS PERFORMED. SOFT BEDROCK IS DEFINED AS BEDROCK WHICH WAS AUGERED, HOWEVER, SPLIT-SPOON REFUSAL, DEFINED AS RECORDING IN EXCESS OF 50 BLOWS WITH LESS THAN 6" OF PENETRATION, WAS ACHIEVED.



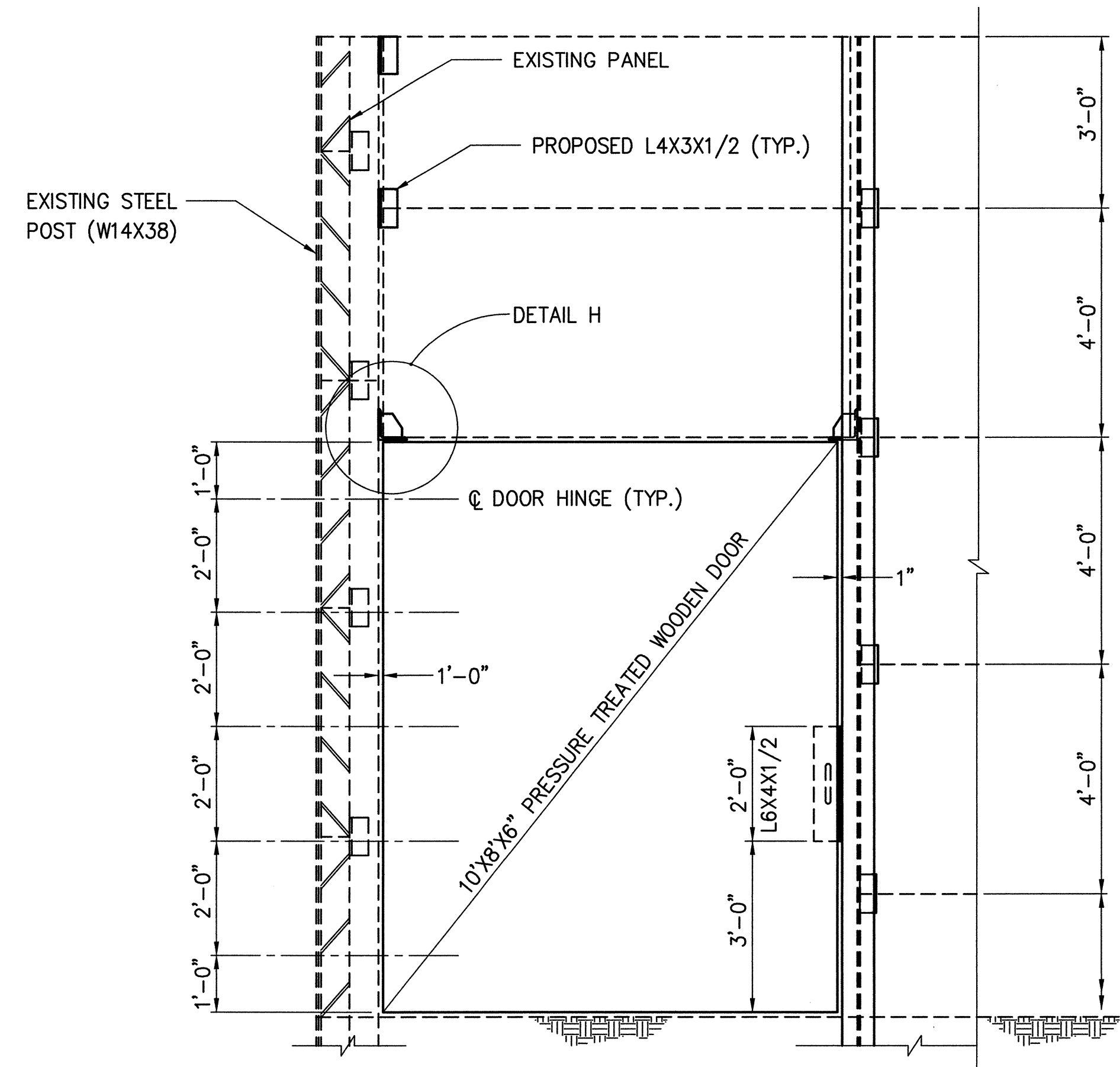
WALL NO. 11	(41)	820.98	13'-0"
	(42)	820.98	13'-0"
	(43)	819.71	13'-0"
	(44)	819.71	13'-0"



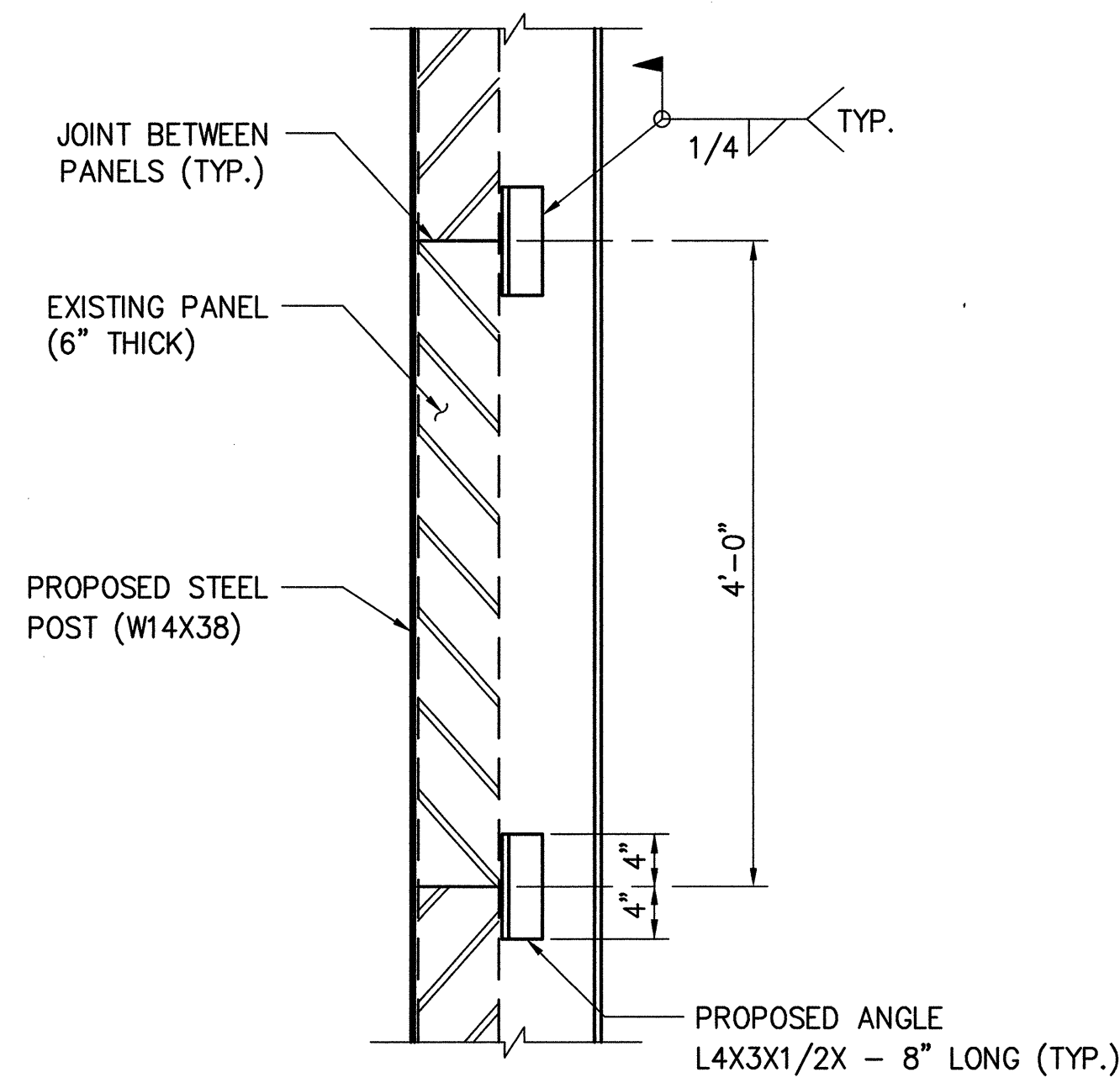
6: D:\06\LEPT14B-00145\Noise Barriers\StructDetails\B001B5Elev.dwg Fri Oct 27 17:34:33 2000



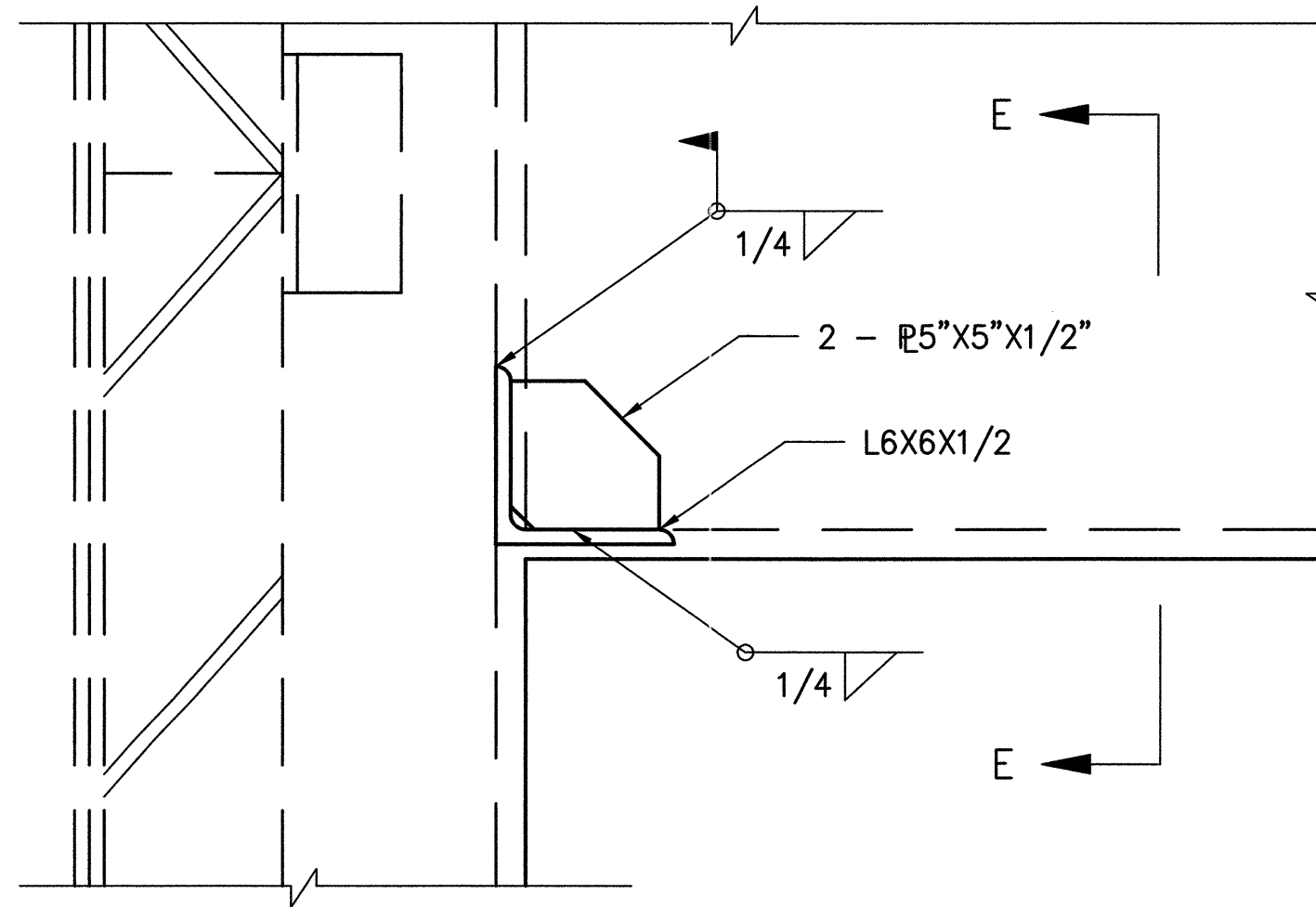
TYPICAL NOISE BARRIER ELEVATION



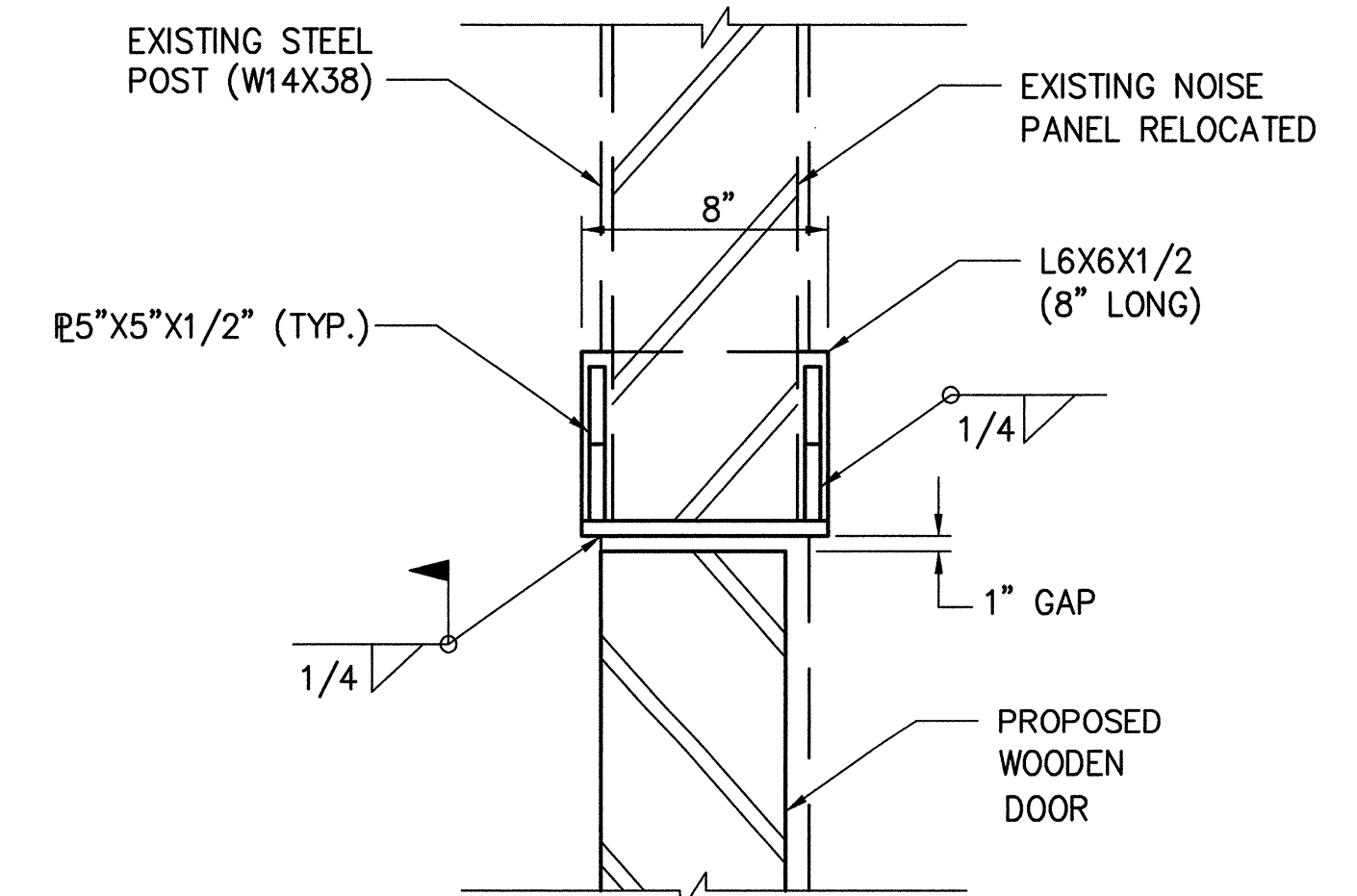
DOOR ELEVATION
(LOOKING NORTH)



SECTION A-A

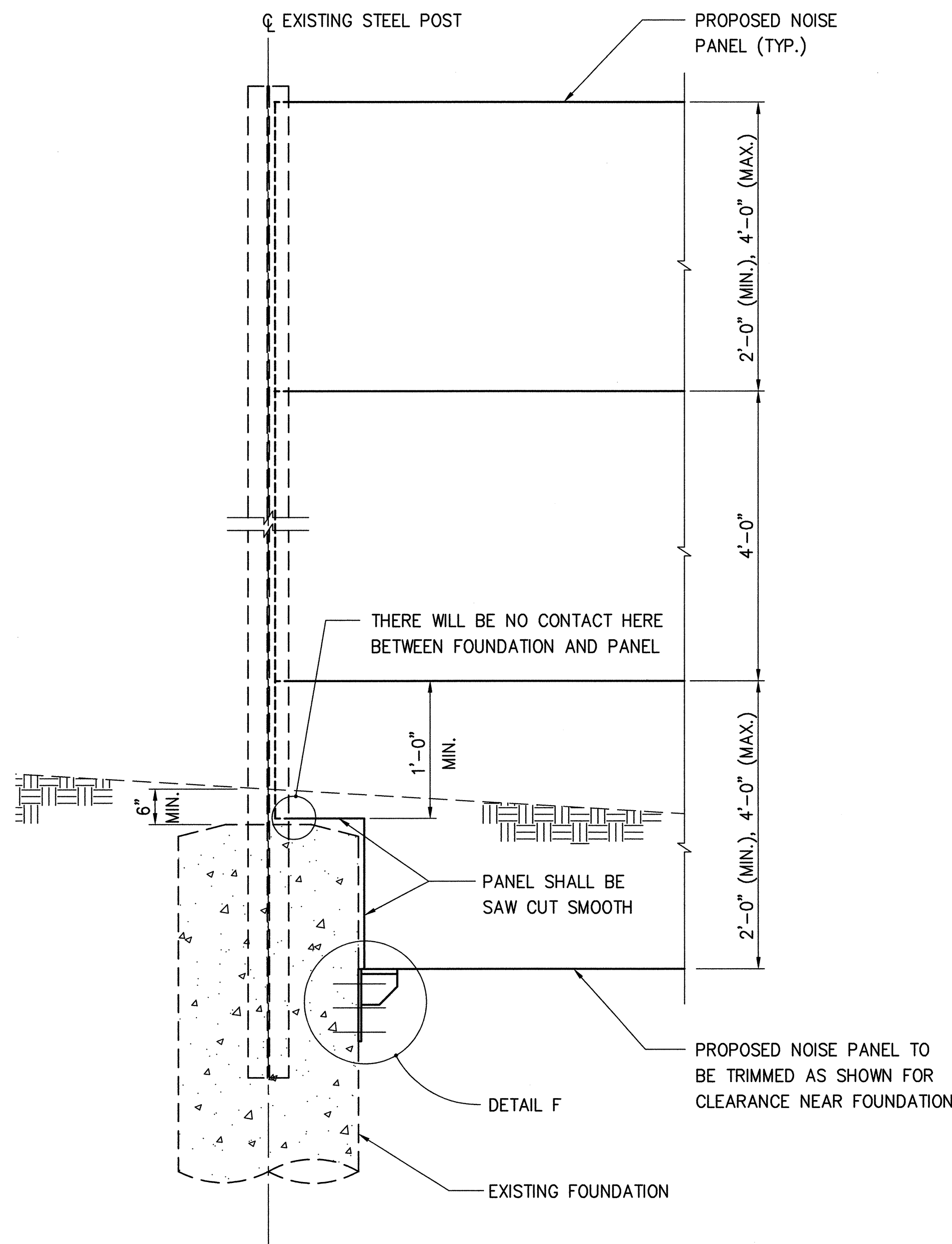


DETAIL H



SECTION E-E

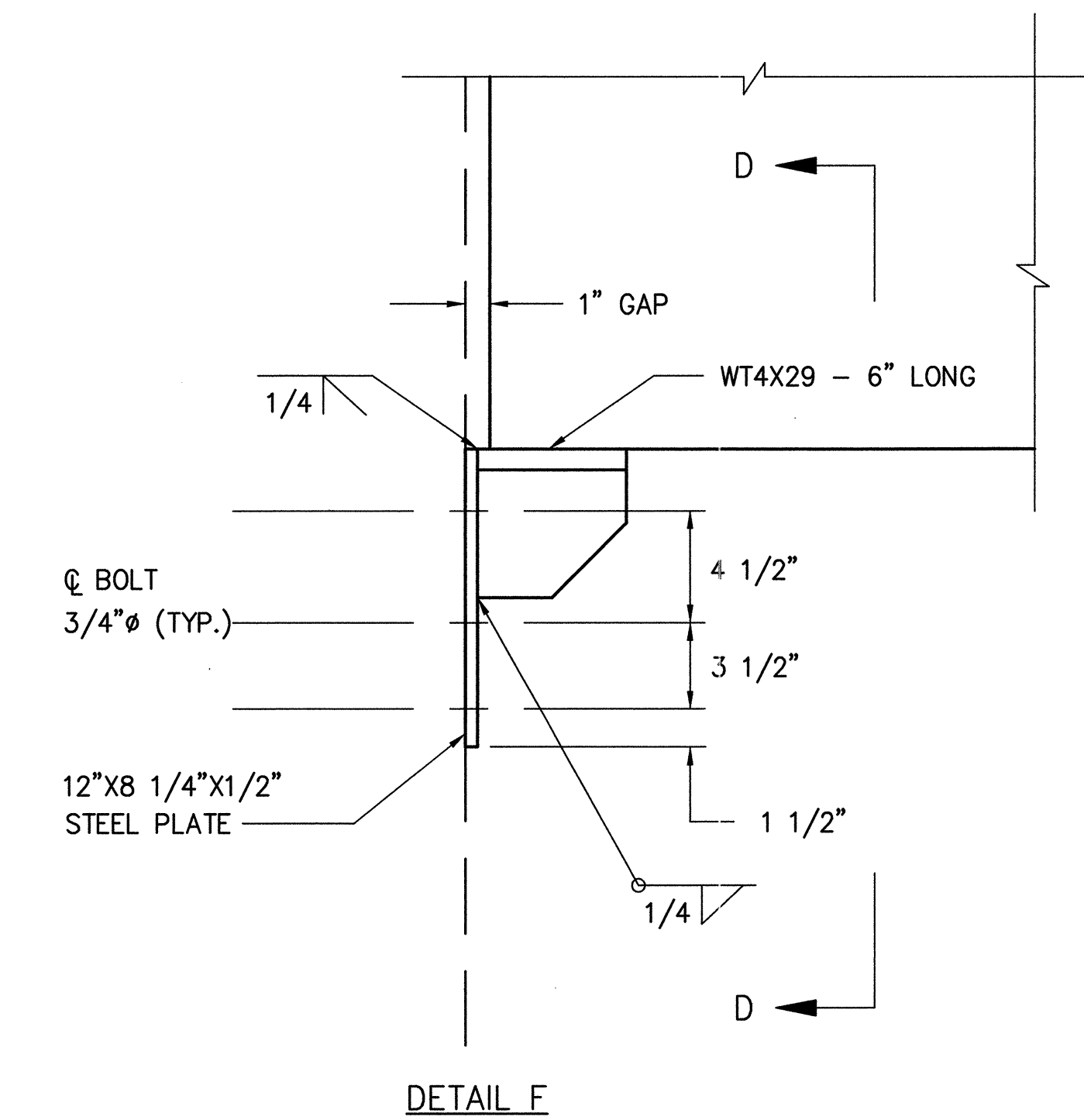
G:\DWG\DEPT\48-00\45\Noise Barriers\StructDetails\B005Det2.dwg Fri Oct 27 17:35:16 2000



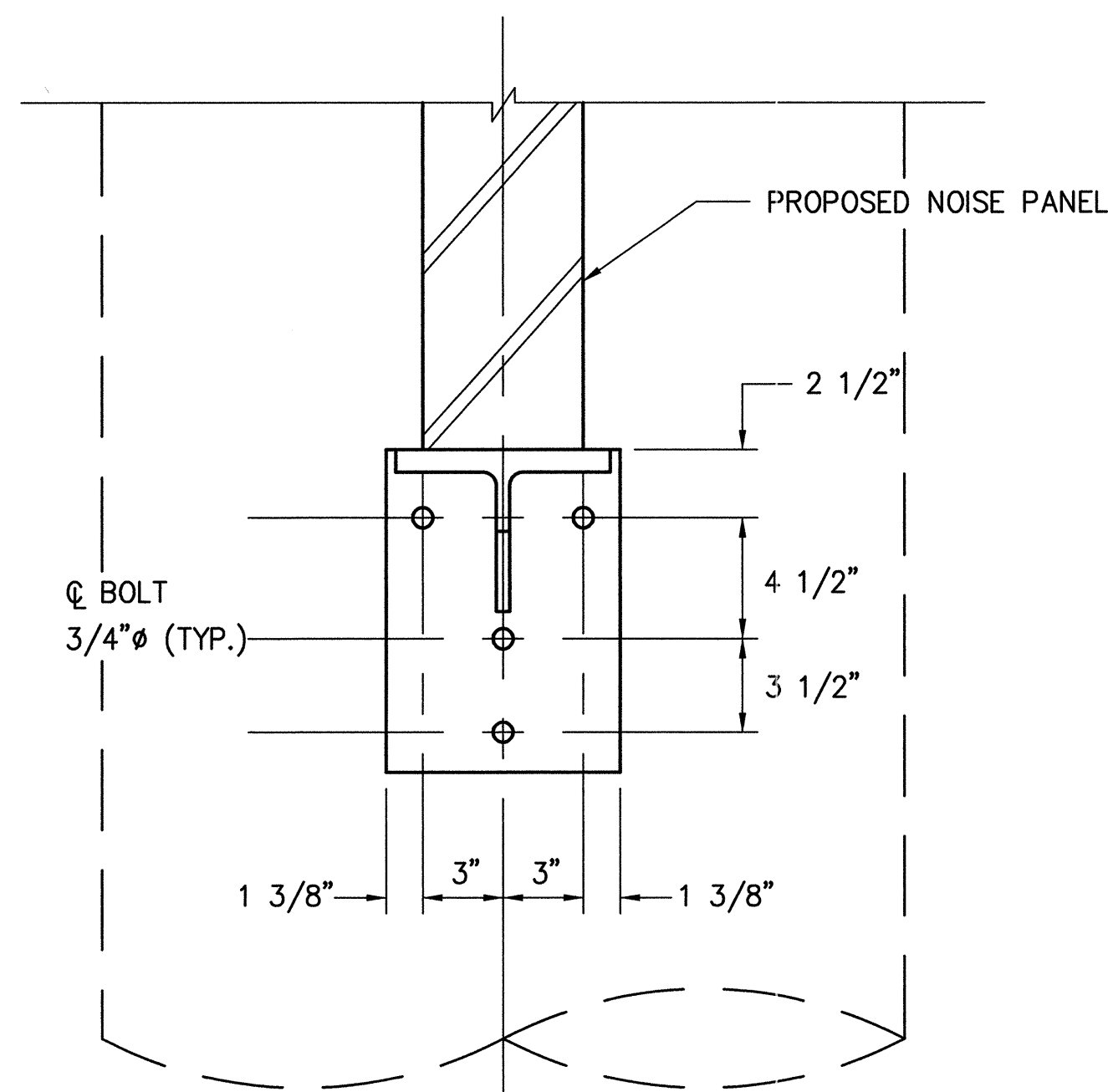
NOISE BARRIER SUPPORT DETAIL

NOTES

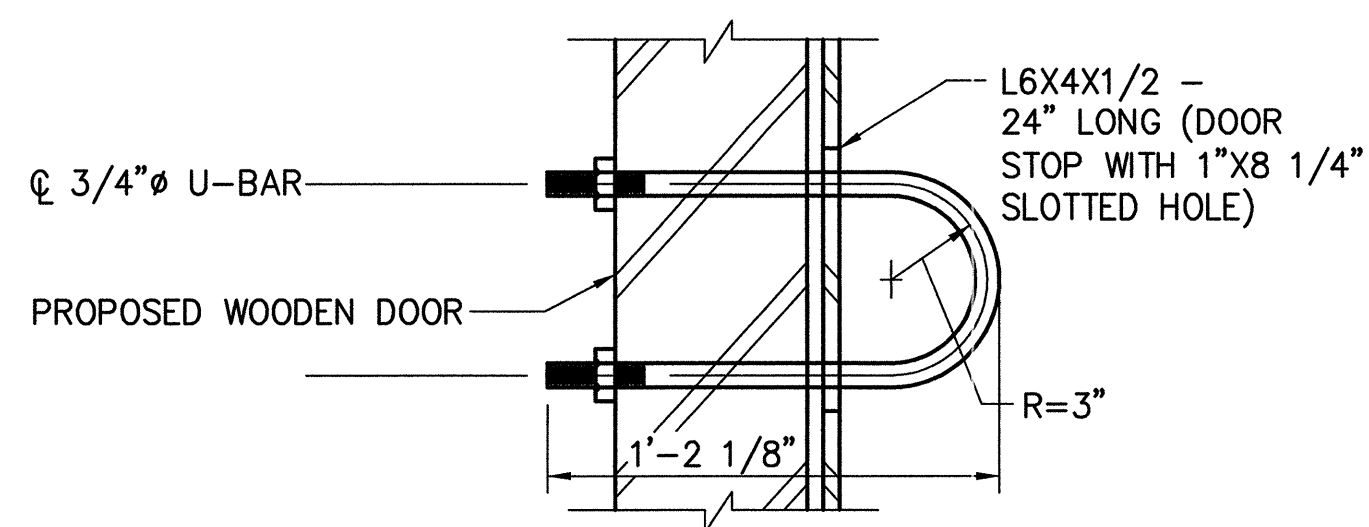
1. ALL ANCHOR BOLTS, U-BAR, NUTS, PLAIN WASHERS AND LOCKWASHERS SHALL BE GALVANIZED AND CONFORM TO THE PHYSICAL PROPERTIES OF ASTM A572 EXCEPT THAT THE MINIMUM ELONGATION SHALL BE 10%. THE CHEMICAL PROPERTIES ARE WAIVED.
2. THE GAP BETWEEN THE FACE OF THE EXISTING FOUNDATION AND THE BACK OF THE STEEL PLATE SHALL BE FILLED WITH GROUT.
3. THE NOISE PANEL SUPPORT SHOULD CARRY THE WEIGHT OF THE PANEL AND ANY CONTACT BETWEEN THE TOP OF THE EXISTING FOUNDATION AND THE BOTTOM OF THE TRIMMED PANEL SHOULD BE AVOIDED.



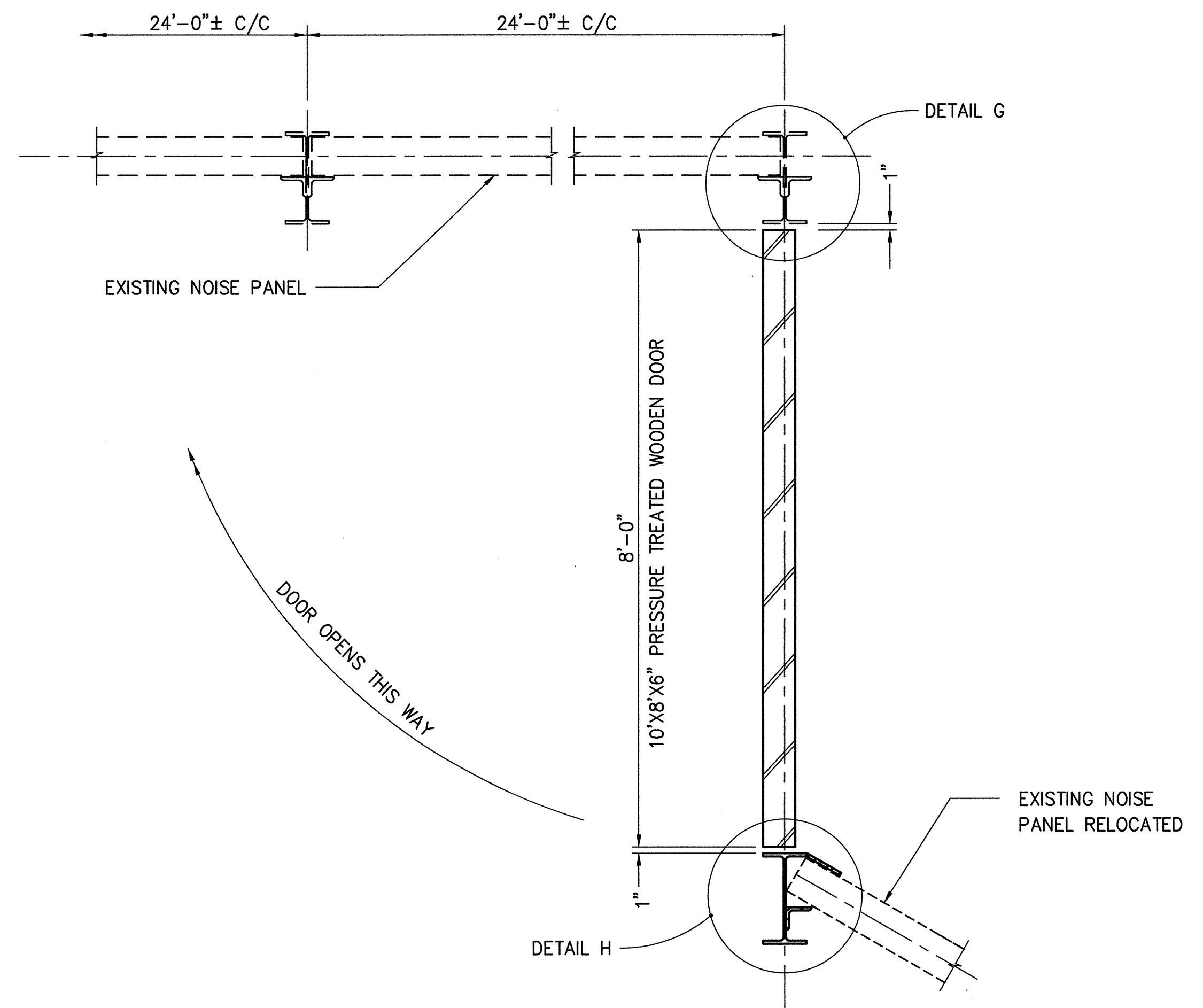
DETAIL F



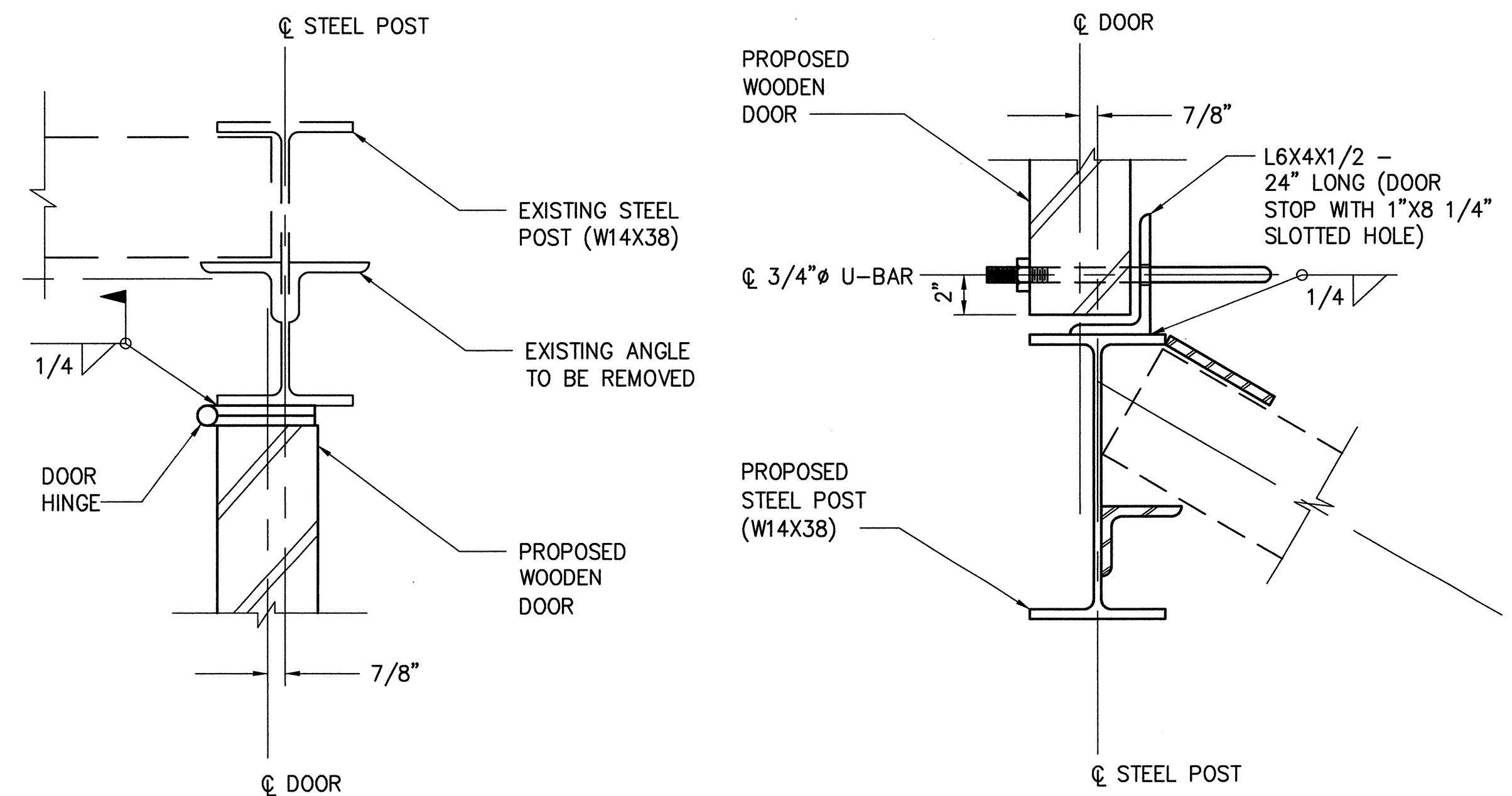
SECTION D-D



BOLT DETAIL



PLAN
(FOR DOOR ELEVATION, SEE SHEET 36 OF 37)



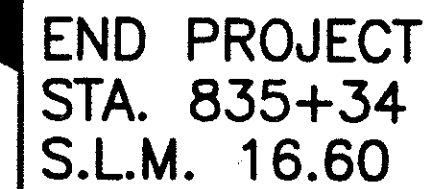
DETAIL G

DETAIL H
(FOR MORE INFORMATION, SEE SHEET 34 OF 37)

STATE OF OHIO

HAM-71-11.08

HAMILTON COUNTY



BEGIN PROJECT
STA. 542+65
S.L.M. 11.08

SCALE: 1:30000

[illegible]

PORTION TO BE IMPROVED
STATE HIGHWAYS
OTHER HIGHWAYS

CURRENT A.D.T. (2000)	= 132100
DESIGN A.D.T. (2020)	= 172000
D.H.V. (2020)	= 7167
DIRECTIONAL DISTRIBUTION	= 50%
TRUCKS (24 HOUR B & C)	= 6%
DESIGN SPEED	= 70 M.P.H.
LEGAL SPEED	= 65 M.P.H.
DESIGN FUNCTIONAL CLASSIFICATION	= URBAN INTERSTATE

SHEET DATE

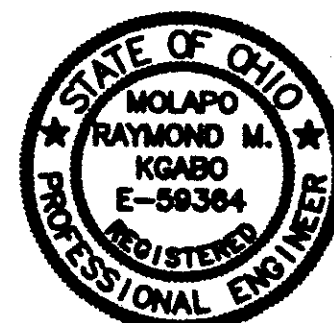
SUBMITTAL	DATE
60% COMPLETE PLAN	10-13-00
FINAL PLANS	10-27-00

**2 WORK DAYS
BEFORE YOU DIG**

CALL 800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE

**NON MEMBERS
MUST BE CALLED DIRECTLY**

RESOURCE INTERNATIONAL INC.
281 ENTERPRISE DRIVE
WESTERVILLE, OHIO 43081
(614) 885-1959

[illegible]

SUPPLEMENTAL SPECIFICATIONS

UNDER AUTHORITY OF SECTION 4511.21,
DIVISION (1) OF THE REVISED CODE OF OHIO,
THE REVISED PRIMA FACIE SPEED LIMITS AS
INDICATED HEREIN ARE DETERMINED TO BE
REASONABLE AND SAFE, AND ARE HEREBY
ESTABLISHED FOR THE DURATION OF THIS
PROJECT. THE PRIMA FACIE SPEED LIMIT OR
LIMITS HEREBY ESTABLISHED SHALL BECOME
EFFECTIVE WHEN APPROPRIATE SIGNS GIVING
NOTICE THEREOF ARE ERECTED.

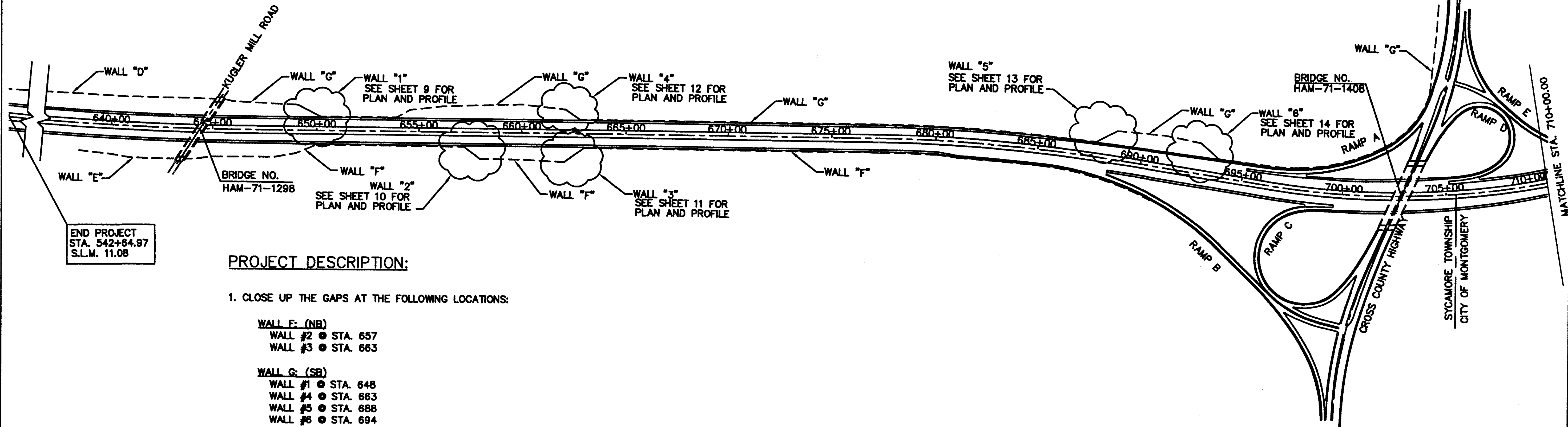
APPROVED _____
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

RAILROAD INVOLVEMENT
NONE

HAM-71-11.08

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END PROJECT
STA. 542+64.97
S.L.M. 11.08

PROJECT DESCRIPTION:

1. CLOSE UP THE GAPS AT THE FOLLOWING LOCATIONS:

WALL F: (NB)
WALL #2 @ STA. 657
WALL #3 @ STA. 663

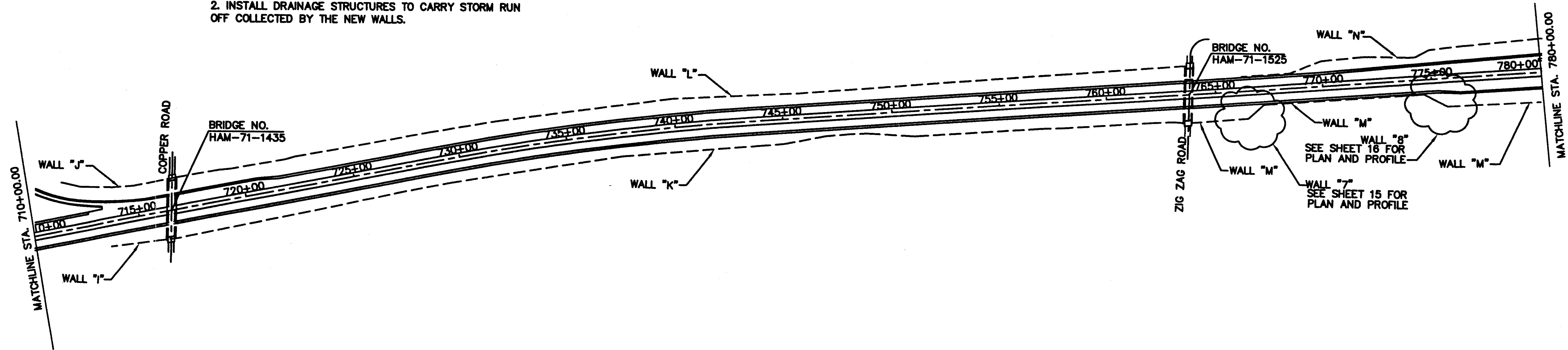
WALL G: (SB)
WALL #1 @ STA. 648
WALL #4 @ STA. 663
WALL #5 @ STA. 688
WALL #6 @ STA. 694

WALL M: (NB)
WALL #7 @ STA. 767
WALL #8 @ STA. 775

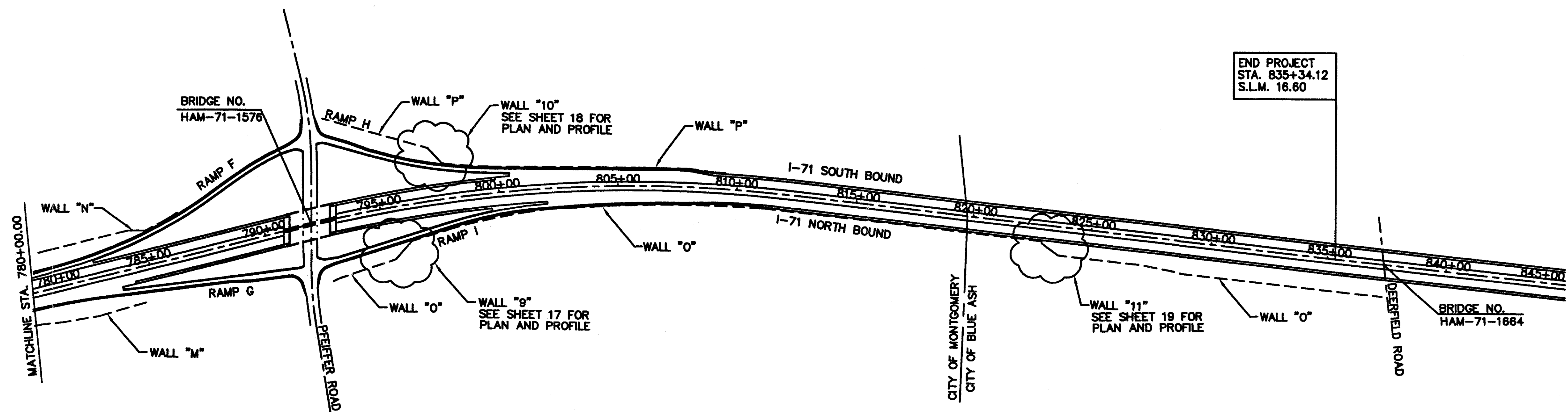
WALL O: (NB)
WALL #9 @ STA. 796
WALL #11 @ STA. 824

WALL P: (SB)
WALL #10 @ STA. 798

2. INSTALL DRAINAGE STRUCTURES TO CARRY STORM RUN OFF COLLECTED BY THE NEW WALLS.



CALCULATED	RY	CHECKED	MRWK
SCHEMATIC PLAN STA. 635+00 TO STA. 780+00			
HAM-71-11.08			
2/37			
170 205			



PROJECT DESCRIPTION:

1. CLOSE UP THE GAPS AT THE FOLLOWING LOCATIONS:

WALL F: (NB)
 WALL #2 @ STA. 657
 WALL #3 @ STA. 663

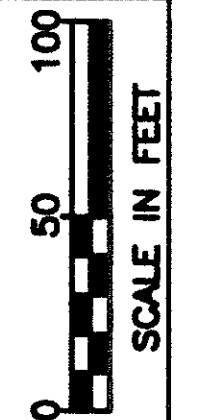
WALL G: (SB)
 WALL #1 @ STA. 648
 WALL #4 @ STA. 663
 WALL #5 @ STA. 688
 WALL #6 @ STA. 694

WALL M: (NB)
 WALL #7 @ STA. 767
 WALL #8 @ STA. 775

WALL O: (NB)
 WALL #9 @ STA. 796
 WALL #11 @ STA. 824

WALL P: (SB)
 WALL #10 @ STA. 798

2. INSTALL DRAINAGE STRUCTURES TO CARRY STORM RUN OFF COLLECTED BY THE NEW WALLS.



CALCULATED	RY	CHECKED	MRWK
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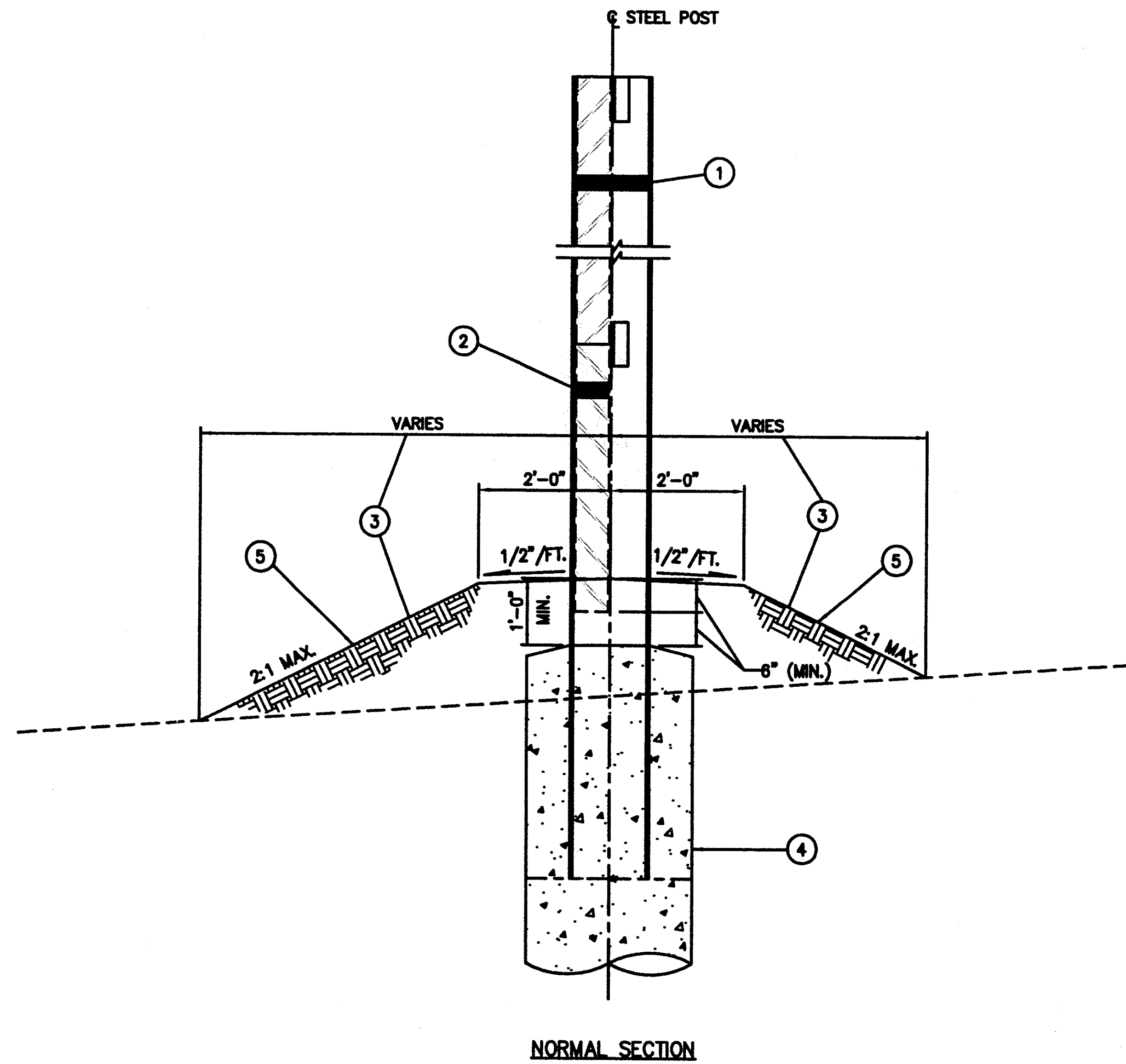
SCHEMATIC PLAN
 STA. 780+00 TO STA. 845+00

HAM-71-11.08

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 205

TYPICAL SECTION



- ITEM LEGEND
- ① ITEM 513 STRUCTURAL STEEL
 - ② ITEM SPECIAL NOISE BARRIER, 10FT. AND UNDER
ITEM SPECIAL NOISE BARRIER, OVER 10FT. TO 14FT. HEIGHT
ITEM SPECIAL NOISE BARRIER, OVER 14FT. TO 20FT. HEIGHT
 - ③ ITEM 659 SEEDING AND MULCHING
 - ④ ITEM 524 - DRILLED SHAFTS
 - ⑤ ITEM 203 - EMBANKMENT

CALCULATED	MRMK	CHECKED	RYT
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NOISE BARRIER TYPICAL SECTION

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GENERAL NOTES

NOISE BARRIER

- | | |
|----------------|---------------------------|
| I. DESCRIPTION | III. CONSTRUCTION METHODS |
| II. POSTS | IV. BASIS OR PAYMENT |

ITEM SPECIAL-NOISE BARRIER

I. DESCRIPTION

THIS WORK SHALL CONSIST OF FURNISHING AND INSTALLING NOISE BARRIERS INCLUDING ALL MATERIAL, LABOR AND EQUIPMENT REQUIRED IN ACCORDANCE WITH THESE PROVISIONS AND APPLICABLE STANDARDS AND IN CONFORMITY WITH THE DIMENSIONS, LINES AND GRADES SHOWN ON THE PLANS.

THE BARRIER AND THE ASSOCIATED WORK SHALL CONFORM TO SECTIONS 499 AND 501 AT THE CMS AS APPROPRIATE.

II. POSTS

A. STEEL POSTS

STEEL POSTS SHALL BE ASTM A-588 AND MANUFACTURED IN ACCORDANCE WITH ITEM 513 OF THE CMS UNLESS OTHERWISE SPECIFIED.

THE PORTION OF ANY POSTS IN CONTACT WITH SOIL AND AN ADDITIONAL 6 INCHES ABOVE AND BELOW THE SOIL CONTACT LINE ON THE POST SHALL BE COATED WITH COAL TAR EPOXY POINT. THE PAINT SHALL CONFORM TO STRUCTURAL STEEL PAINTING COUNCIL (SSPC) PAINT SPECIFICATION 16; BE BLACK IN COLOR; BE APPLIED AS PER THE PAINT MANUFACTURER'S RECOMMENDATIONS, AND HAVE A MINIMUM DRY FILM THICKNESS OF 16 MILLS. ALL SURFACES THAT RECEIVE PAINT ON THE STEEL POSTS, WHETHER COAL TAR EPOXY OR PAINT TO MATCH THE NOISE PANEL'S COLOR, SHALL BE BLAST CLEANED TO CONFORM TO SSPC - SP10, NEAR WHITE METAL.

B. DRILLED SHAFTS

REINFORCING STEEL SHALL BE ASTM A615, GRADE 60.

C. CONCRETE FOR DRILLED SHAFTS

CONCRETE FOR ALL DRILLED SHAFTS SHALL BE CLASS S CONCRETE AND SHALL BE IN ACCORDANCE WITH ITEM 511 EXCEPT AS MODIFIED AND SUPPLEMENTED HEREIN. THE REQUIRED SLUMP IS 7 INCHES PLUS OR MINUS 1/2 INCH. THE MAXIMUM WATER TO CEMENT RATIO SHALL BE 0.50 FOR CONCRETE PLACED UNDER WATER. THE REQUIREMENTS OF ADDING 10 PERCENT MORE CEMENT TO THE CONCRETE MIX SHALL BE WAIVED. THE TOP 10 FEET OF CONCRETE IN THE DRILLED SHAFTS ARE REQUIRED TO BE VIBRATED. ONLY A MINIMAL VIBRATORY EFFORT IS NECESSARY. SPECIAL CARE SHALL BE TAKEN NOT TO OVER-VIBRATE THE DRILLED SHAFT CONCRETE.

NOTE: IF THE CASING IS REMOVED USING A VIBRATORY HAMMER, NO OTHER VIBRATORY EFFORT IS NEEDED. THE CONCRETE FOR THE DRILLED SHAFT SHALL BE PLACED AS PER 511 EXCEPT AS MODIFIED BY THE PLANS. THE CONCRETE PLACEMENT OPERATION SHALL BE CONTINUOUS FROM THE START TO FINISH. THE CONCRETE FOR THE DRILLED SHAFT SHALL BE PLACED PROMPTLY AFTER THE FINAL INSPECTION OF THE SHAFT. IF PRACTICAL, THE CONCRETE SHALL BE PLACED IN A CLEAN DRY EXCAVATION. CARE SHALL BE TAKEN TO ENSURE THAT CONCRETE IS NOT BEING PLACED IN MOVING WATER. THE CONCRETE CAN BE PLACED IN A DRY DRILLED SHAFT EXCAVATION BY THE FREE FALL METHOD PROVIDED THE CONCRETE FALLS TO ITS FINAL POSITION THROUGH AIR WITHOUT STRIKING THE SIDES OF THE HOLE, THE REINFORCING STEEL CAGE OR ANY OTHER OBSTRUCTION. THE FREE FALL METHOD ALLOWS THE CONCRETE TO BE DROPPED FROM THE TOP THROUGH A CENTERING CHUTE TO THE CONCRETE'S FINAL POSITION.

IF THE ENGINEER DETERMINES THAT DEWATERING IS NOT PRACTICAL, THE CONTRACTOR MAY BE GIVEN PERMISSION TO PLACE THE CONCRETE UNDERWATER. THE DRILLED SHAFT EXCAVATION SHALL BE FILLED WITH WATER TO SUCH A DEPTH THAT ALL WATER MOTION HAS CEASED. THE CONCRETE SHALL THEN BE PLACED BY MEANS OF A CONCRETE PUMP. THE CONCRETE PUMP PIPE SHALL HAVE A DIAMETER THAT IS NOT LESS THAN 4 INCHES. THE CONCRETE PUMP EQUIPMENT SHALL BE SO ARRANGED THAT NO VIBRATIONS RESULT WHICH MIGHT DAMAGE FRESH CONCRETE. PIPES CARRYING CONCRETE FROM THE PUMP TO THE SHAFT SHOULD BE ARRANGED WITH A MINIMUM NUMBER OF BENDS. THE PIPE USED TO CONVEY THE CONCRETE TO THE BOTTOM OF THE DRILLED SHAFT EXCAVATION SHALL BE ANCHORED TO THE STEEL CASING TO PREVENT THE PIPE FROM UNDULATING DURING THE INITIAL PLACEMENT OF THE CONCRETE.

THE PUMPING EQUIPMENT SHALL BE SUITABLE IN KIND AND ADEQUATE IN CAPACITY FOR THE WORK REQUIRED. THE USE OF ALUMINUM PIPE AS A CONVEYANCE FOR THE CONCRETE WILL NOT BE PERMITTED. AN ADEQUATE QUANTITY OF GROUT, MORTAR, OR CONCRETE WITH COARSE AGGREGATE OMITTED SHALL BE PUMPED THROUGH THE EQUIPMENT AHEAD OF THE SPECIFICATION CONCRETE TO PROVIDE LUBRICATION TO THE PUMPING SYSTEM. THE CONCRETE USED FOR LUBRICATION SHALL NOT BE PLACED IN THE SHAFT. THE LUBRICATION PROCESS WILL NOT BE REPEATED AS LONG AS THE PUMPING OPERATIONS ARE CONTINUOUS. THE OPERATION OF THE PUMP SHALL BE SUCH THAT A CONTINUOUS STREAM OF CONCRETE WITHOUT AIR POCKETS IS PRODUCED. IN ORDER TO PREVENT THE CONTAMINATION OF THE CONCRETE PLACED INITIALLY AT THE BOTTOM OF THE SHAFT, THE OUTLET END OF THE PUMPING PIPE SHALL BE SEALED WITH A DIAPHRAGM OR PLUG THAT IS FLUSHED OUT WHEN THE HYDROSTATIC PRESSURE FROM THE COLUMN OF CONCRETE EXCEEDS THAT OF THE WATER IN THE SHAFT. THE INITIAL RATE OF CONCRETE PLACEMENT MUST BE CAREFULLY CONTROLLED SO AS NOT TO LIFT OR DISPLACE THE CAGE OF REINFORCING STEEL. THE CONVEYING SYSTEM SHALL BE WATERTIGHT AND THE OUTLET END SHALL ALWAYS REMAIN WELL BELOW THE TOP OF THE FRESHLY PLACED CONCRETE. THE PREFERRED CONCRETE PLACEMENT PROCEDURE IS TO MAINTAIN THE OUTLET END OF THE PUMPING SYSTEM AT APPROXIMATELY 10 FEET BELOW THE TOP OF THE FRESH CONCRETE. WHEN THE CONCRETE REACHES THE TOP OF THE DRILLED SHAFT COLUMN, ALL LAITANCE SHALL BE REMOVED.

CALCULATED	INFORM	CHECKED	RY
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NOISE BARRIER GENERAL NOTES

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III. CONSTRUCTION METHODS A. NOISE BARRIERS SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS. JOINTS AND CONNECTIONS SHALL BE SECURED IN SUCH A MANNER AS TO BE STRUCTURALLY SOUND WITH NO VISIBLE OPENINGS FOR SOUND TRANSMISSION. NOISE PANEL ATTACHMENTS TO POSTS AND INSTALLATION METHODS SHALL BE STRUCTURALLY SOUND, GIVE ADEQUATE SUPPORT TO THE NOISE PANELS, AND BE SECURED TO THE POST OR ADEQUATELY BLOCKED BETWEEN THE POST'S FLANGES TO ELIMINATE MOVEMENT AT THE SUPPORT AND ELIMINATE ANY POSSIBLE VIBRATION. THE TOP OF INSTALLED NOISE BARRIERS SHALL MATCH THE TOP OF WALL DESIGN ELEVATIONS, WITH NO VARIATION BETWEEN POSTS, UNLESS THE DESIGN PLANS REQUIRE AN ELEVATION CHANGE. B. MARRED, CHIPPED, SCRATCHED, SPALLED, OR ANY OTHER DAMAGE DEEMED DETRIMENTAL TO THE SALVAGED PANELS BY THE ENGINEER SHALL BE REPLACED, AS APPROVED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE. ANY NOISE BARRIER PANELS DAMAGED BY THE CONSTRCTOR SHALL BE REPLACED IN KIND. THE COLOR OF THE REPLACEMENT SHALL BE SEALED WITH EPOXY-URETHENE CONCRETE SEALER TO MATCH THE COLOR OF THE DAMAGED PANEL. ALL COSTS ASSOCIATED WITH THIS WORK IS INCLUDED IN THE LUMP SUM ITEM FOR THIS WORK. C. TRENCH BACKFILL SHALL BE WITH CLASS S CONCRETE MODIFIED AS PER II.G, ABOVE. THE METHOD OR PLACEMENT SHALL NOT ALLOW VOIDS OR EXCESSIVE SEGREGATION AND SHALL BE PERFORMED TO THE SATISFACTION OF THE ENGINEER. D. ALL EXCESS EXCAVATION SHALL BE DISPOSED OF IN A MANNER SATISFACTORY TO THE ENGINEER. E. AFTER ERECTION OF THE NOISE BARRIER, THE DISTURBED AREA SHALL BE LEFT IN A FINISHED CONDITION AT THE DIRECTION OF THE ENGINEER AND A GROWTH OF GRASS ESTABLISHED, AT THE CONTRACTOR'S EXPENSE. IN ACCORDANCE WITH CMS ITEM 659. F. THE SALVAGED POSTS SHALL BE CUT OFF AT THE GROUND ELEVATION. LEAVE THE EXISTING DEEP FOUNDATIONS IN PLACE. G. ARTIMIS IF DURING THE PROCESS OF CONSTRUCTION AND/OR WALL SECTION REMOVAL, THE ARTIMIS EQUIPMENT GETS DAMAGED, IT SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE. ALSO, SERVICE SHALL NOT BE DISRUPTED FOR LONGER THAN 3 DAYS AT A TIME. H. TOLERANCES 1. <u>POSTS (MEASURED AT TOP)</u> A. VERTICAL ALIGNMENT SHALL BE WITHIN 0.05 INCH/FT. OF HEIGHT. B. POSTS SHALL BE SET WITHIN +/- 1/2 INCH OF THEIR SPECIFIED LOCATION. 2. <u>NOISE BARRIERS</u> A. VERTICAL ALIGNMENT SHALL BE WITHIN 0.05 INCH/FT. OF HEIGHT. I. FOR NOISE BARRIERS THAT ARE BUILT ON TOP OF EARTH BERMS, THE BERMS SHALL BE CONSTRUCTED OF EARTHWORK FILL MATERIAL IN ACCORDANCE WITH ITEM 203 OF THE CMS. J. THE CONTRACTOR SHALL MINIMIZE THE DISTURBANCE TO VEGETATION DURING THE DEMOLITION AND CONSTRUCTION OF FENCE AND NOISE BARRIER. IV. BASIS OF PAYMENT NOISE BARRIERS, COMPLETED AND IN PLACE, AS DESCRIBED IN METHOD OF MEASUREMENT, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT. THIS PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR AND EQUIPMENT NECESSARY TO CONSTRUCT THE NOISE BARRIER. ALL EXCAVATION, BACKFILL WITH SUITABLE MATERIAL AND ANY ADJUSTMENT IN EARTHWORK QUANTITIES REQUIRED DUE TO THE CONTRACTOR'S SELECTED NOISE PANEL, SEALING CONCRETE WITH EPOXY AND URETHANE, AGGREGATE DRAINS, COMPACTION, DISPOSAL OF SURPLUS OR UNSUITABLE MATERIALS, SEEDING, FERTILIZING AND MULCHING OF DISTURBED AREAS SHALL ALSO BE INCLUDED FOR PAYMENT. <table><thead><tr><th>ITEM</th><th>DESCRIPTION</th><th>UNIT</th></tr></thead><tbody><tr><td colspan="3">REFLECTIVE TYPE</td></tr><tr><td>SPECIAL</td><td>NOISE BARRIER (REFLECTIVE) 10 FT. HT. AND UNDER</td><td>ST.FT.</td></tr><tr><td>SPECIAL</td><td>NOISE BARRIER (REFLECTIVE), OVER 10 TO 14 FT. HT.</td><td>SQ.FT.</td></tr><tr><td>SPECIAL</td><td>NOISE BARRIER (REFLECTIVE), OVER 14 TO 20 FT. HT.</td><td>SQ.FT.</td></tr><tr><td colspan="3">ABSORPTIVE TYPE</td></tr><tr><td>SPECIAL</td><td>NOISE BARRIER (ABSORPTIVE), 10 FT. 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HT.</td><td>SQ.FT.</td></tr><tr><td colspan="3">ABBREVIATIONS</td></tr><tr><td>ATC</td><td colspan="2">AMERICAN INSTITUTE OF TIMBER CONSTRUCTION</td></tr><tr><td>ASTM</td><td colspan="2">AMERICAN SOCIETY FOR TESTING AND MATERIALS</td></tr><tr><td>AWPA</td><td colspan="2">AMERICAN WOOD PRESERVERS' ASSOCIATION</td></tr><tr><td>BIA</td><td colspan="2">BRICK INSTITUTE OF AMERICA</td></tr><tr><td>CCA</td><td colspan="2">CROMATED COPPER ARSENATE</td></tr><tr><td>CMS</td><td colspan="2">CONSTRUCTION AND MATERIALS SPECIFICATIONS OF ODOT</td></tr><tr><td>ILI</td><td colspan="2">INDIANA LIMESTONE INSTITUTE</td></tr><tr><td>LPG</td><td colspan="2">VOLATILE PETROLEUM SOLVENT (LIQUID PROPANE GAS)</td></tr><tr><td>SSPC</td><td colspan="2">STRUCTURAL STEEL PAINTING COUNCIL</td></tr><tr><td>VPS</td><td colspan="2">VOLUNTARY PRODUCT STANDARD</td></tr></tbody></table> APPROVED REFLECTIVE BARRIER SUPPLIERS <table><thead><tr><th colspan="2">SUPPLIERS</th><th>DRAWINGS AND NOTES</th><th>VARIABLES</th><th>COLOR TEXTURE PATTERN BRICK STYLE</th></tr></thead><tbody><tr><td>CONCRETE</td><td>SOUNDCORE 4043 MAPLE ROAD, SUITE 106 AMHERST, NY 14226 TELEPHONE: (716) 833-7851</td><td>SOUNDCORE - STANDARD HOLLOWCORE PRECAST NOISE BARRIERS DRAWING NO. DET-1 (02/12/97)</td><td></td><td></td></tr></tbody></table>				ITEM	DESCRIPTION	UNIT	REFLECTIVE TYPE			SPECIAL	NOISE BARRIER (REFLECTIVE) 10 FT. HT. AND UNDER	ST.FT.	SPECIAL	NOISE BARRIER (REFLECTIVE), OVER 10 TO 14 FT. HT.	SQ.FT.	SPECIAL	NOISE BARRIER (REFLECTIVE), OVER 14 TO 20 FT. HT.	SQ.FT.	ABSORPTIVE TYPE			SPECIAL	NOISE BARRIER (ABSORPTIVE), 10 FT. HT. AND UNDER.	SQ.FT.	SPECIAL	NOISE BARRIER (ABSORPTIVE), OVER 10 TO 14 FT. HT.	SQ.FT.	SPECIAL	NOISE BARRIER (ABSORPTIVE), OVER 14 TO 20 FT. HT.	SQ.FT.	ABBREVIATIONS			ATC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION		ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS		AWPA	AMERICAN WOOD PRESERVERS' ASSOCIATION		BIA	BRICK INSTITUTE OF AMERICA		CCA	CROMATED COPPER ARSENATE		CMS	CONSTRUCTION AND MATERIALS SPECIFICATIONS OF ODOT		ILI	INDIANA LIMESTONE INSTITUTE		LPG	VOLATILE PETROLEUM SOLVENT (LIQUID PROPANE GAS)		SSPC	STRUCTURAL STEEL PAINTING COUNCIL		VPS	VOLUNTARY PRODUCT STANDARD		SUPPLIERS		DRAWINGS AND NOTES	VARIABLES	COLOR TEXTURE PATTERN BRICK STYLE	CONCRETE	SOUNDCORE 4043 MAPLE ROAD, SUITE 106 AMHERST, NY 14226 TELEPHONE: (716) 833-7851	SOUNDCORE - STANDARD HOLLOWCORE PRECAST NOISE BARRIERS DRAWING NO. DET-1 (02/12/97)			NOISE BARRIER GENERAL NOTES			HAM-71-11.08	
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NOISEWALL BASELINE GEOMETRY

WALL #	STATION	NORTHING	EASTING	BEARING (FROM BACK TO AHEAD)	DISTANCE & DIRECTION FROM REF. PT TO B POINT														
1	3+56.49	446420.5168	1438364.0953	N 13°12'18" E	REF. PT. 19 TO STA. 3+56.49 = 61.48', N64°00'59"W RERERENCE POINT FOR WALL 648ab <table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th></tr><tr><td>T-19</td><td>446393.5830</td><td>1438419.3580</td><td>801.50</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	T-19	446393.5830	1438419.3580	801.50						
	PT.#	NORTHING	EASTING	ELEV.															
	T-19	446393.5830	1438419.3580	801.50															
	4+04.34	446467.1019	1438375.0261	N 36°44'47" E															
	5+27.45	446565.7475	1438448.6783	N 10°20'20" E															
5+99.40	446636.5349	1438461.5923																	
2	13+84.66	447159.9358	1438696.3366	N 10°20'51" E	REF. PT. 21 TO STA. 13+84.66 = 180.34', S09°43'13"W REF. PT. 22 TO STA. 16+00.72 = 23.26', S53°28'45"E RERERENCE POINTS FOR WALL 657nb <table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th><th>BEARING</th></tr><tr><td>T-21</td><td>447337.6870</td><td>1438726.7850</td><td>806.41</td><td rowspan="2">N63°49'25"E</td></tr><tr><td>T-22</td><td>447358.1970</td><td>1438768.5100</td><td>807.79</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	BEARING	T-21	447337.6870	1438726.7850	806.41	N63°49'25"E	T-22	447358.1970	1438768.5100	807.79
	PT.#	NORTHING	EASTING	ELEV.		BEARING													
	T-21	447337.6870	1438726.7850	806.41		N63°49'25"E													
	T-22	447358.1970	1438768.5100	807.79															
	14+56.60	447230.7014	1438709.2574	N 46°17'09" E															
15+52.85	447297.2181	1438778.8289	N 10°04'42" E																
16+00.72	447344.3519	1438787.2064																	
3	18+70.06	447626.7698	1438843.7179	N 12°25'18" E	REF. PT. 23 TO STA. 18+70.06 = 25.62', N76°58'15"E REF. PT. 24 TO STA. 18+70.06 = 91.30', N54°11'14"E RERERENCE POINTS FOR WALL 663nb <table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th><th>BEARING</th></tr><tr><td>T-23</td><td>447620.9940</td><td>1438818.7580</td><td>805.70</td><td rowspan="2">N45°50'51"E</td></tr><tr><td>T-24</td><td>447573.3460</td><td>1438769.6790</td><td>804.70</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	BEARING	T-23	447620.9940	1438818.7580	805.70	N45°50'51"E	T-24	447573.3460	1438769.6790	804.70
	PT.#	NORTHING	EASTING	ELEV.		BEARING													
	T-23	447620.9940	1438818.7580	805.70		N45°50'51"E													
	T-24	447573.3460	1438769.6790	804.70															
	19+41.93	447696.9527	1438859.1765	N 23°23'43" W															
20+57.86	447803.3539	1438813.1432	N 10°12'18" E																
21+05.85	447850.5846	1438821.6455																	
4	16+84.82	447631.2528	1438585.3877	N 15°51'11" E	REF. PT. 17 TO STA. 16+84.82 = 91.23', S49°50'40"W REF. PT. 18 TO STA. 16+84.82 = 59.43', N39°44'55"W RERERENCE POINTS FOR WALL 663ab <table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th><th>BEARING</th></tr><tr><td>T-17</td><td>447690.0810</td><td>1438655.1110</td><td>803.61</td><td rowspan="2">N16°52'58"E</td></tr><tr><td>T-18</td><td>447585.5588</td><td>1438623.3891</td><td>803.33</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	BEARING	T-17	447690.0810	1438655.1110	803.61	N16°52'58"E	T-18	447585.5588	1438623.3891	803.33
	PT.#	NORTHING	EASTING	ELEV.		BEARING													
	T-17	447690.0810	1438655.1110	803.61		N16°52'58"E													
	T-18	447585.5588	1438623.3891	803.33															
	18+04.75	447746.6199	1438618.1484	N 42°26'20" E															
18+88.12	447808.1465	1438674.4068	N 10°17'20" E																
19+84.19	447902.6770	1438691.5672																	
5	42+89.88	450213.8468	1439170.9773	N 15°47'58" E	REF. PT. 16 TO STA. 42+89.88 = 183.99', S13°28'48"W RERERENCE POINT FOR WALL 688ab <table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th></tr><tr><td>T-16</td><td>450392.7690</td><td>1439213.8670</td><td>798.77</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	T-16	450392.7690	1439213.8670	798.77						
	PT.#	NORTHING	EASTING	ELEV.															
	T-16	450392.7690	1439213.8670	798.77															
	43+37.87	450260.0268	1439184.0445	N 15°24'14" W															
	44+49.17	450367.3239	1439154.4823	N 11°01'00" E															
44+73.21	450390.9203	1439159.0761	N 14°43'14" E																
45+21.11	450437.2514	1439171.2485																	
6	48+03.75	450644.9284	1439230.6096	N 20°47'43" E	REF. PT. 14 TO STA. 48+03.75 = 133.66', S44°10'37"W REF. PT. 15 TO STA. 48+03.75 = 83.49', N38°14'45"W RERERENCE POINTS FOR WALL 694ab <table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th><th>BEARING</th></tr><tr><td>T-14</td><td>450740.7870</td><td>1439323.7530</td><td>801.19</td><td rowspan="2">N14°24'19"E</td></tr><tr><td>T-15</td><td>450579.3620</td><td>1439282.2900</td><td>800.40</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	BEARING	T-14	450740.7870	1439323.7530	801.19	N14°24'19"E	T-15	450579.3620	1439282.2900	800.40
	PT.#	NORTHING	EASTING	ELEV.		BEARING													
	T-14	450740.7870	1439323.7530	801.19		N14°24'19"E													
	T-15	450579.3620	1439282.2900	800.40															
	49+23.75	450757.1120	1439273.2133	N 48°44'29" E															
50+36.34	450831.3568	1439357.8472	N 17°19'12" E																
50+84.35	450877.1920	1439372.1408																	

WALL #	STATION	NORTHING	EASTING	BEARING (FROM BACK TO AHEAD)	DISTANCE & DIRECTION FROM REF. PT TO B POINT														
7	1+77.17	457917.0008	1440107.3970	N 07°21'01" E	REF. PT. 25 TO STA. 1+77.17 = 75.56', S55°31'49"E REFERENCE POINT FOR WALL 767nb <table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th></tr><tr><td>T-25</td><td>457959.7680</td><td>1440045.1000</td><td>811.71</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	T-25	457959.7680	1440045.1000	811.71						
	PT.#	NORTHING	EASTING	ELEV.															
	T-25	457959.7680	1440045.1000	811.71															
	2+01.09	457940.7242	1440110.4572	N 01°28'09" W															
	2+25.26	457964.8884	1440109.8374	N 00°54'04" W															
	2+49.23	457988.8568	1440109.4604	N 01°16'02" W															
	2+72.96	458012.5815	1440108.9356	N 30°47'24" W															
3+68.57	458094.7159	1440059.9929	N 05°46'06" E																
3+92.46	458118.4777	1440062.3932																	
8	10+83.65	458810.8588	1440132.2417	N 05°55'02" E	REF. PT. 27 TO STA. 10+83.65 = 162.54', S17°59'06"W REFERENCE POINT FOR WALL 775nb <table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th></tr><tr><td>T-27</td><td>458965.4560</td><td>1440182.4290</td><td>808.85</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	T-27	458965.4560	1440182.4290	808.85						
	PT.#	NORTHING	EASTING	ELEV.															
	T-27	458965.4560	1440182.4290	808.85															
	11+07.59	458834.6750	1440134.7100	N 37°28'02" E															
12+27.69	458929.9925	1440207.7632	N 06°30'43" E																
12+99.63	459001.4676	1440215.9219																	
9	2+15.82	460724.4079	1440492.7570	N 01°36'20" E	REF. PT. 30 TO STA. 2+15.82 = 105.23', S21°19'31"E REFERENCE POINT FOR WALL 796nb <table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th></tr><tr><td>T-30</td><td>460822.4304</td><td>1440454.4898</td><td>788.45</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	T-30	460822.4304	1440454.4898	788.45						
	PT.#	NORTHING	EASTING	ELEV.															
	T-30	460822.4304	1440454.4898	788.45															
	3+47.83	460856.3635	1440496.4557	N 27°11'04" W															
4+48.45	460945.8670	1440450.4878	N 02°28'19" E																
5+44.21	461041.5415	1440454.6183																	
10	4+00.18	461070.2105	1440079.3353	N 35°22'48" E	REF. PT. 33 TO STA. 4+00.19 = 169.12', S84°39'15"W REF. PT. 34 TO STA. 4+00.19 = 56.93', N33°07'03"W REFERENCE POINTS FOR WALL 798ab <table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th><th>BEARING</th></tr><tr><td>T-33</td><td>461085.9670</td><td>1440247.7240</td><td>803.50</td><td rowspan="2">N65°11'59"E</td></tr><tr><td>T-34</td><td>461022.5310</td><td>1440110.4380</td><td>796.21</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	BEARING	T-33	461085.9670	1440247.7240	803.50	N65°11'59"E	T-34	461022.5310	1440110.4380	796.21
	PT.#	NORTHING	EASTING	ELEV.		BEARING													
	T-33	461085.9670	1440247.7240	803.50		N65°11'59"E													
	T-34	461022.5310	1440110.4380	796.21															
	4+24.11	461089.7211	1440093.1906	N 35°13'19" E															
	4+48.16	461109.3712	1440107.0635	N 34°07'38" E															
	4+72.04	461129.1366	1440120.4593	N 59°37'53" E															
5+53.80	461170.4713	1440191.0014	N 25°02'00" E																
6+01.75	461213.9183	1440211.2919																	
11	30+35.15	463367.5666	1441306.8330	N 26°09'53" E	REF. PT. 50 TO STA. 30+35.15 = 68.02', S85°04'05"W REF. PT. 31 TO STA. 32+73.49 = 53.69', S49°29'35"E REFERENCE POINTS FOR WALL 824nb <table><tr><th>PT.#</th><th>NORTHING</th><th>EASTING</th><th>ELEV.</th><th>BEARING</th></tr><tr><td>T-31</td><td>463576.1660</td><td>1441407.5570</td><td>824.77</td><td rowspan="2">N65°11'59"E</td></tr><tr><td>T-50</td><td>463373.4148</td><td>1441374.6057</td><td>821.76</td></tr></table>	PT.#	NORTHING	EASTING	ELEV.	BEARING	T-31	463576.1660	1441407.5570	824.77	N65°11'59"E	T-50	463373.4148	1441374.6057	821.76
	PT.#	NORTHING	EASTING	ELEV.		BEARING													
	T-31	463576.1660	1441407.5570	824.77		N65°11'59"E													
	T-50	463373.4148	1441374.6057	821.76															
	31+07.15	463432.1868	1441338.5809	S 63°46'37" E															
	31+16.48	463428.0826	1441346.9540	N 55°10'24" E															
32+01.46	463476.5946	1441416.7135	N 26°04'35" E																
32+73.49	463541.2918	1441448.3753																	

NOTE: ALL REFERENCE POINTS ARE IRON PINS.
SEE PLAN SHEETS FOR LOCATIONS.

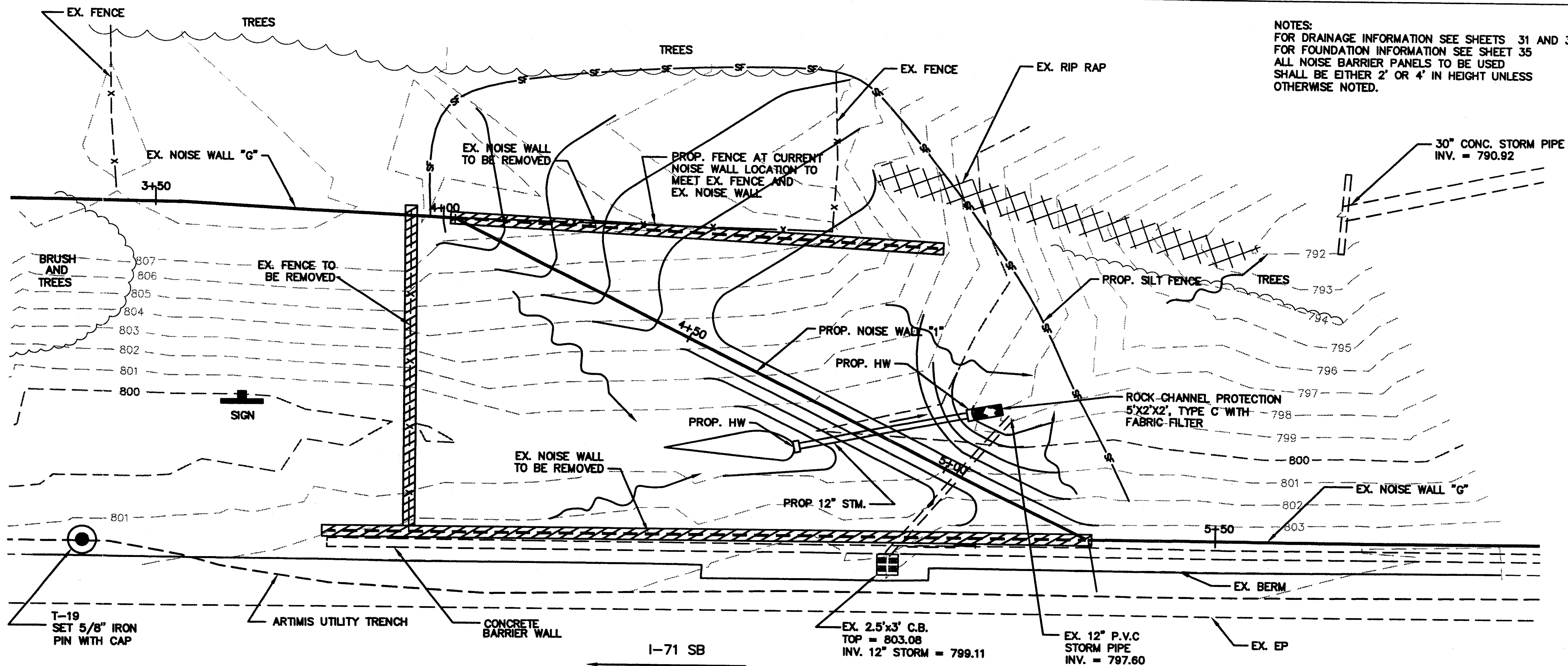
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NOISEWALL BASELINE GEOMETRY

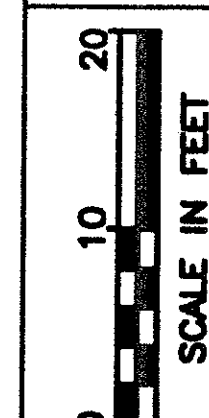
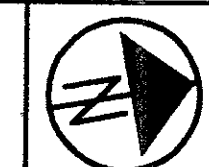
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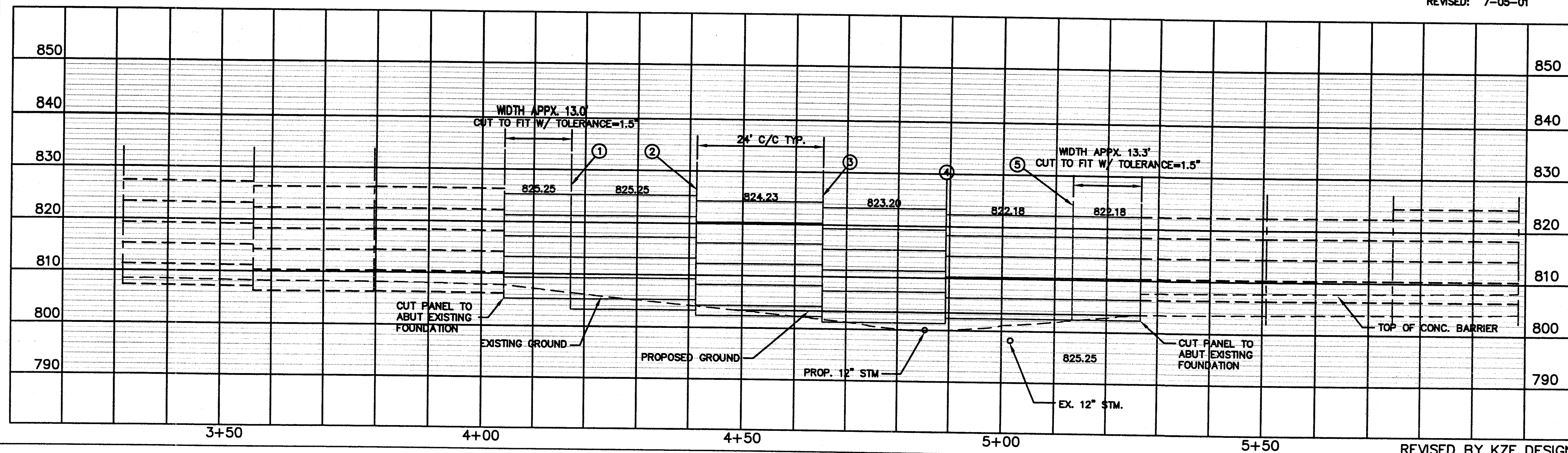
NOTES:
 FOR DRAINAGE INFORMATION SEE SHEETS 31 AND 32
 FOR FOUNDATION INFORMATION SEE SHEET 35
 ALL NOISE BARRIER PANELS TO BE USED
 SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
 OTHERWISE NOTED.



CALCULATED
 C.J.L.
 CHECKED
 M.R.M.K.

PLAN AND PROFILE SHEET
 PROPOSED NOISE WALL "1"

REVISED: 7-05-01

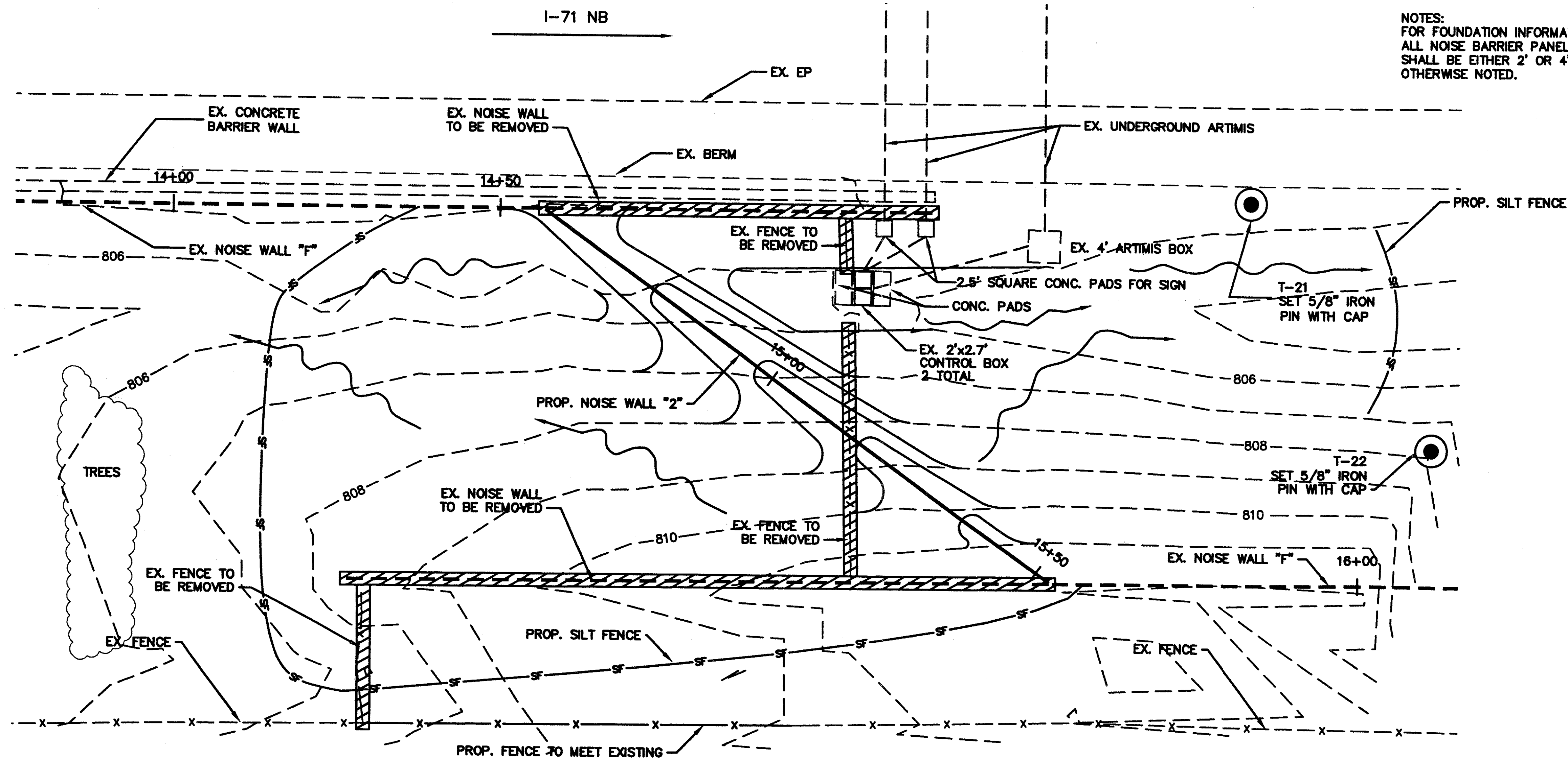


HAM-71-11.08

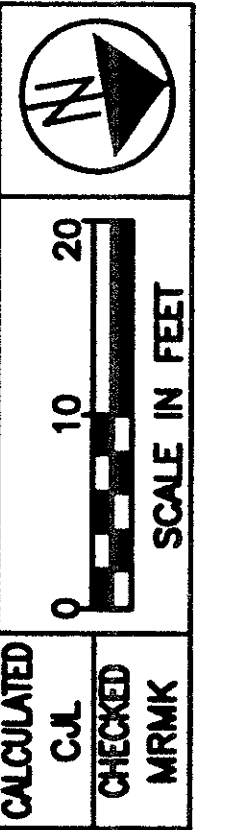
9/37

177
 205

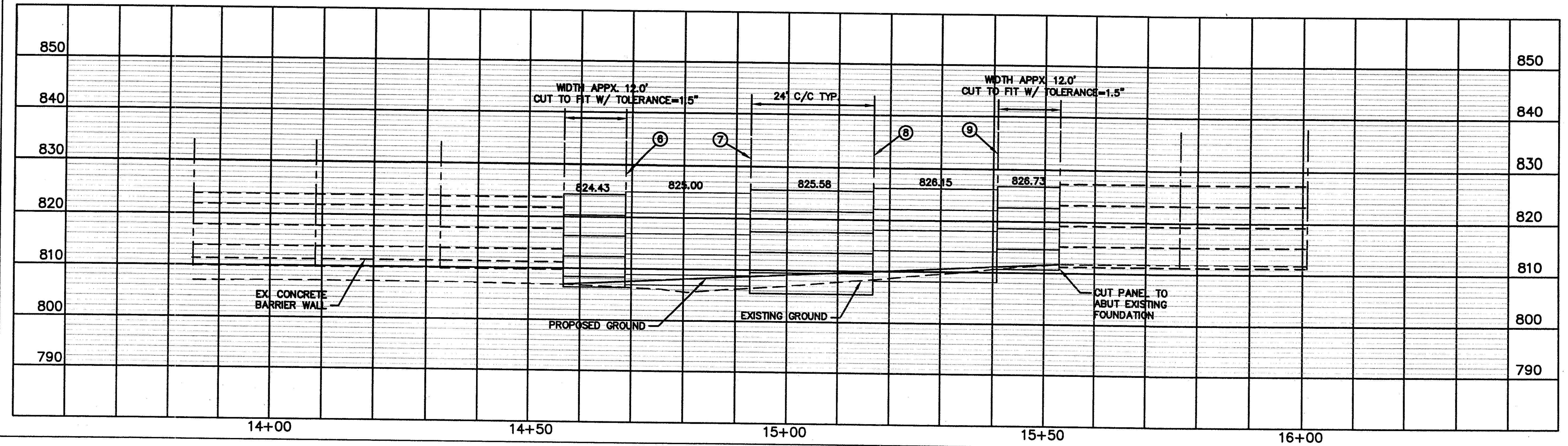
REVISED BY KZF DESIGN



NOTES:
FOR FOUNDATION INFORMATION SEE SHEET 35
ALL NOISE BARRIER PANELS TO BE USED
SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
OTHERWISE NOTED.



PLAN AND PROFILE SHEET
PROPOSED NOISE WALL "2"



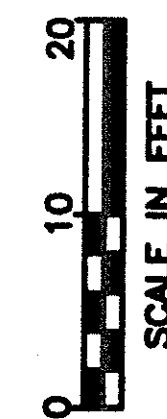
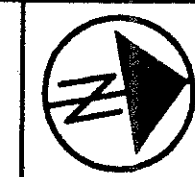
HAM-71-11.08

10/37

178
205

I-71 NB

NOTES:
FOR DRAINAGE INFORMATION SEE SHEETS 31 AND 32
FOR FOUNDATION INFORMATION SEE SHEET 35
ALL NOISE BARRIER PANELS TO BE USED
SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
OTHERWISE NOTED.



CALCULATED
C.A.
CHECKED
M.R.M.K.

PLAN AND PROFILE SHEET
PROPOSED NOISE WALL "3"

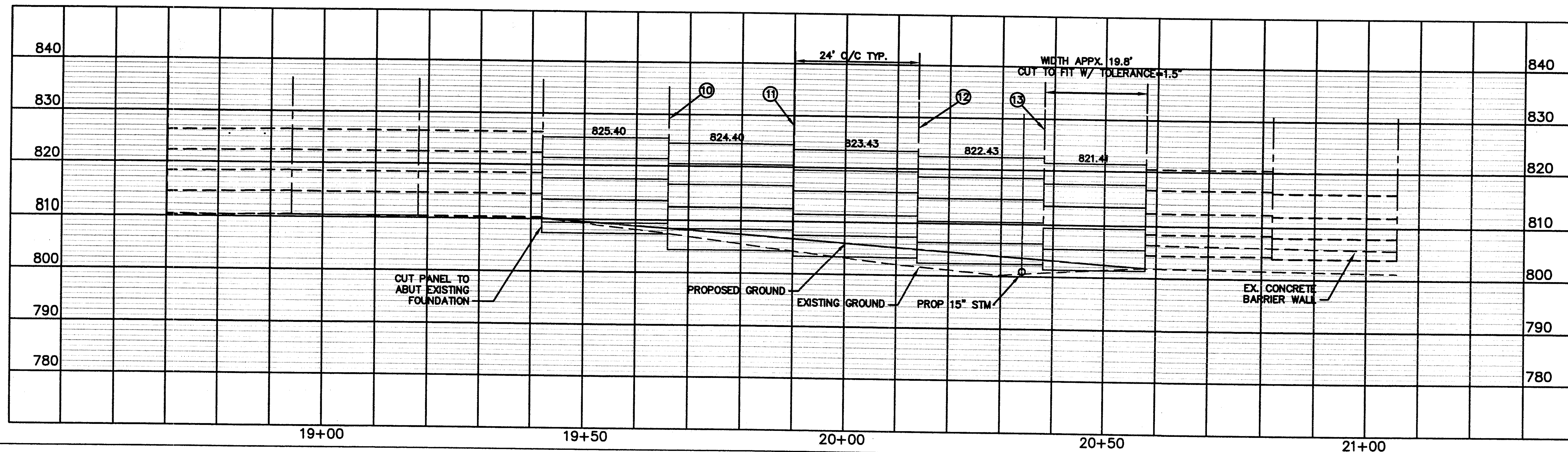
HAM-71-11.08

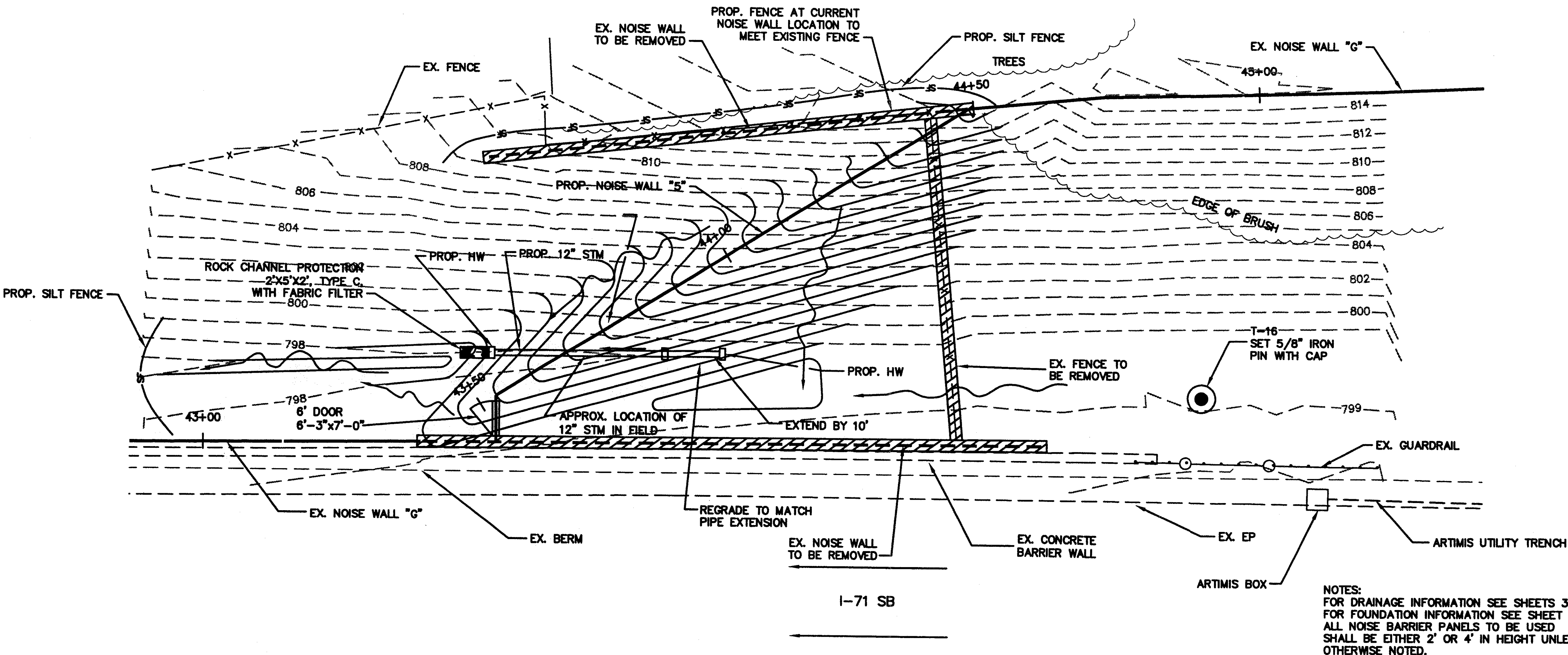
11/37

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205

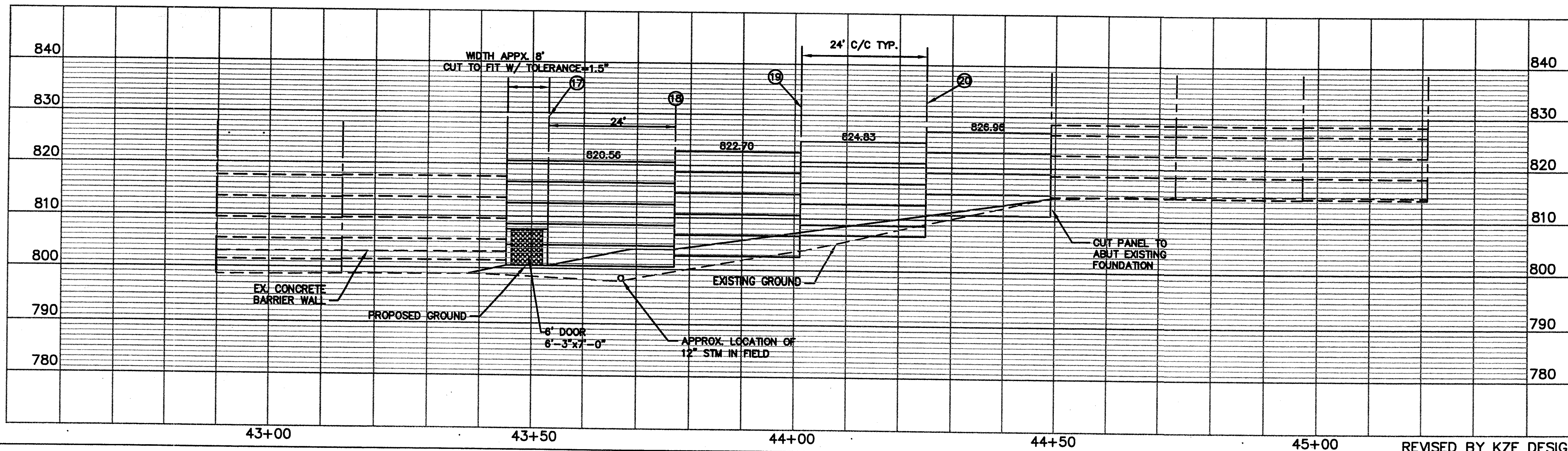
T-24 SET 5/8" IRON
PIN WITH CAP 68.40 FT.
FROM T-23
BEARING S 45° 50' 51" W

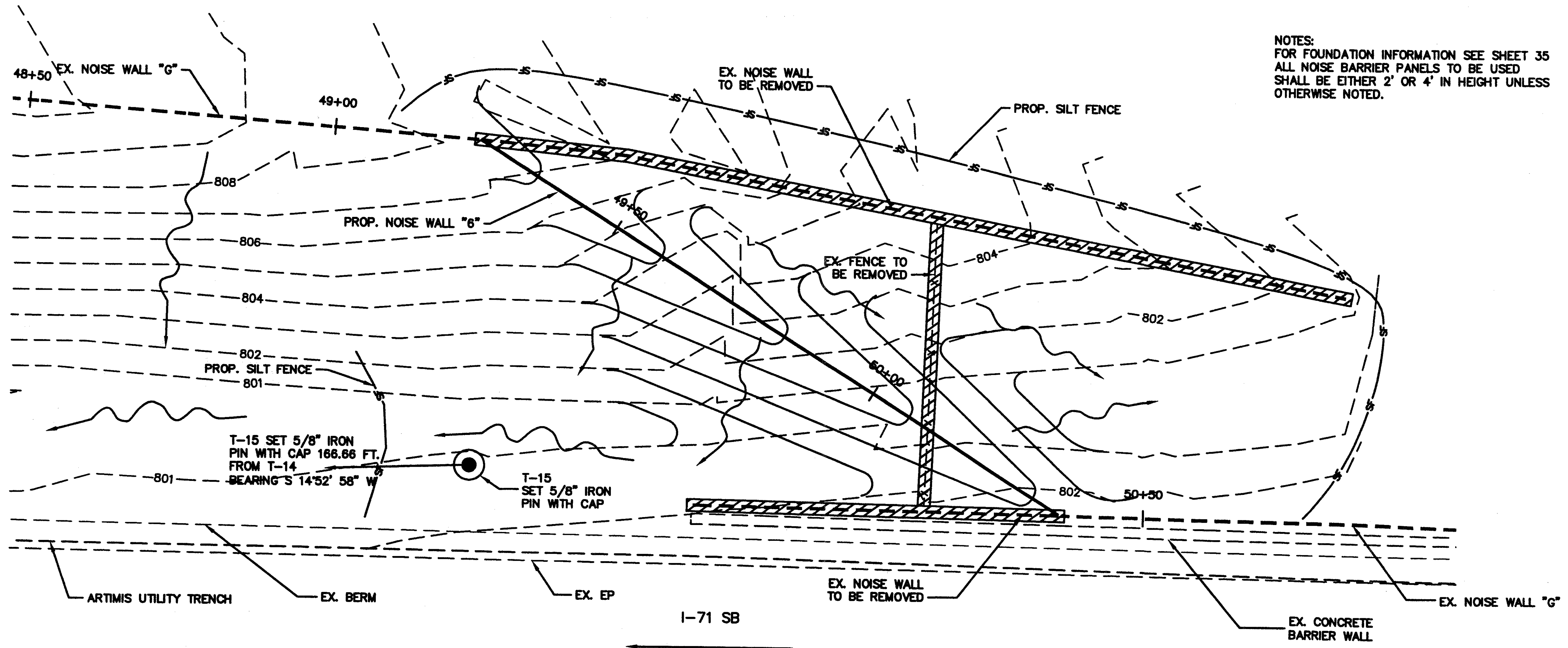
T-23
SET 5/8" IRON
PIN WITH CAP



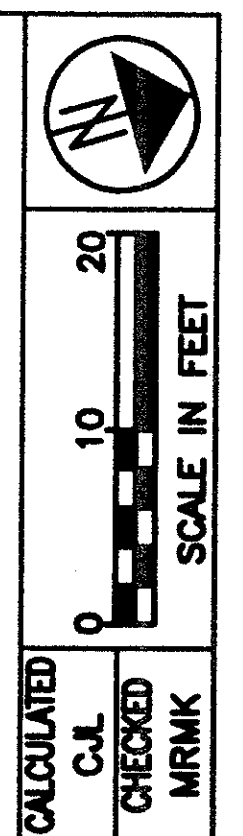


NOTES:
 FOR DRAINAGE INFORMATION SEE SHEETS 31 AND 32
 FOR FOUNDATION INFORMATION SEE SHEET 35
 ALL NOISE BARRIER PANELS TO BE USED
 SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
 OTHERWISE NOTED.

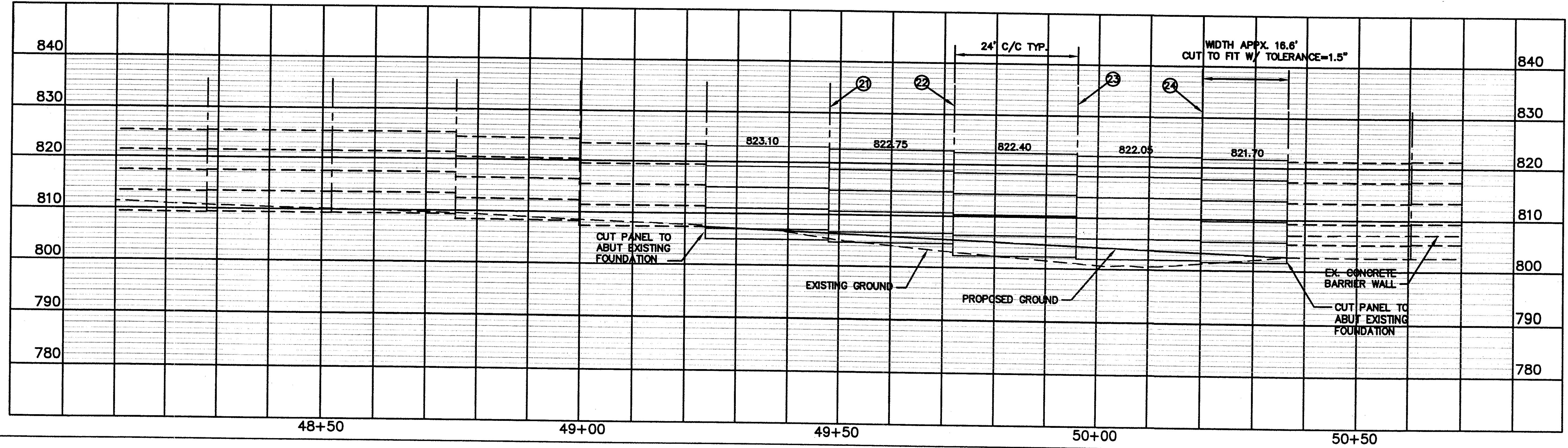




NOTES:
 FOR FOUNDATION INFORMATION SEE SHEET 35
 ALL NOISE BARRIER PANELS TO BE USED
 SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
 OTHERWISE NOTED.



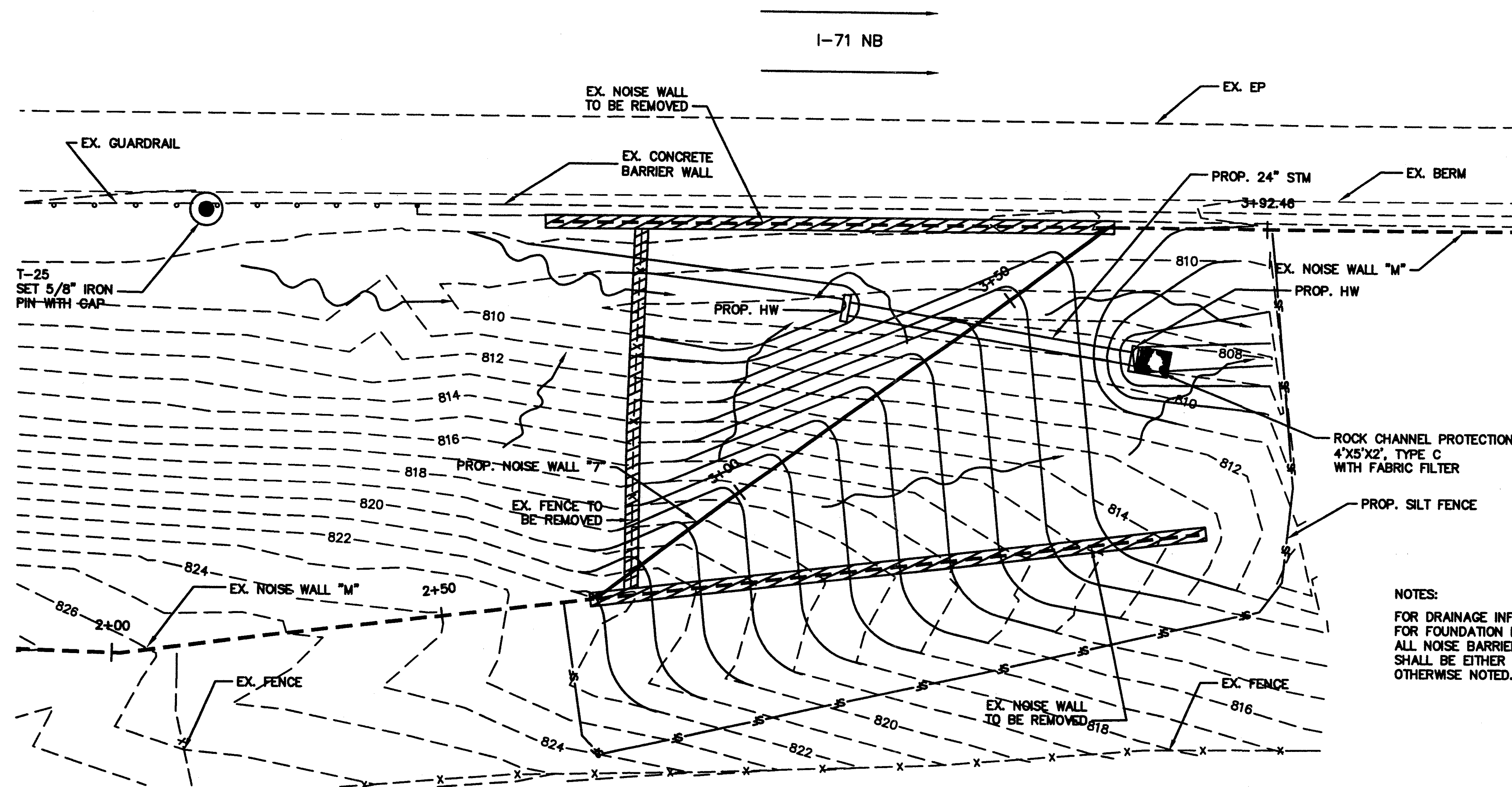
PLAN AND PROFILE SHEET,
 PROPOSED NOISE WALL #6



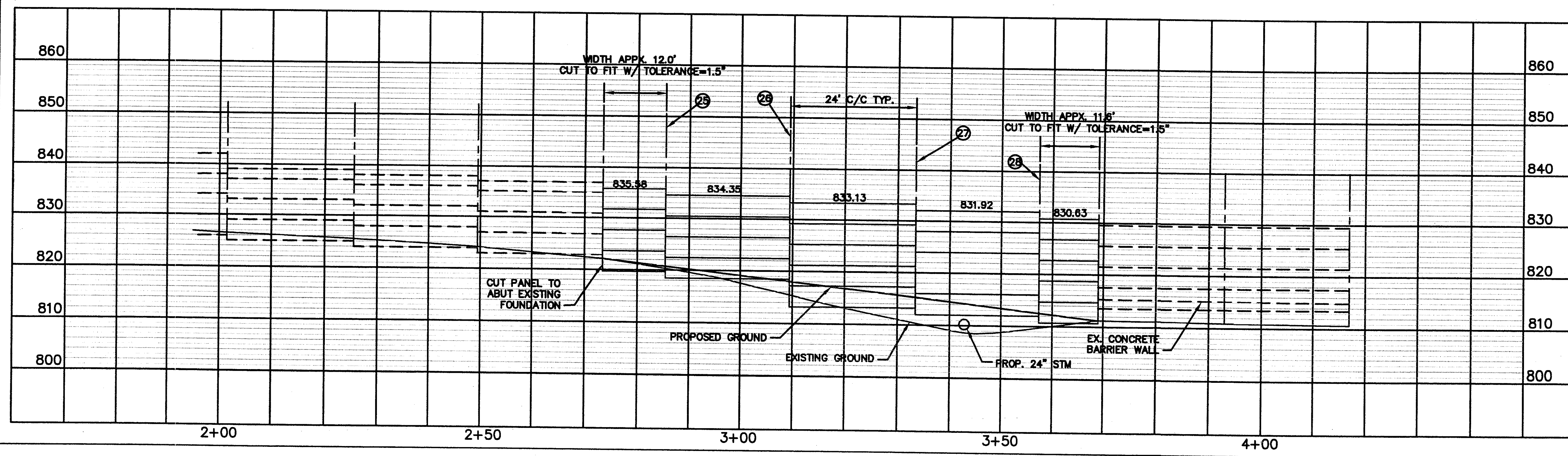
HAM-71-11.08

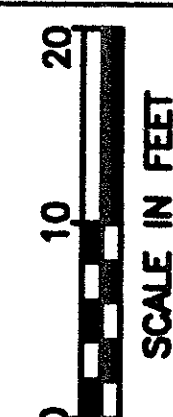
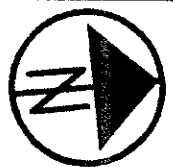
14/37

182
205



NOTES:
 FOR DRAINAGE INFORMATION SEE SHEETS 31 AND 32
 FOR FOUNDATION INFORMATION SEE SHEET 35
 ALL NOISE BARRIER PANELS TO BE USED
 SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
 OTHERWISE NOTED.





CALCULATED
C.L.
CHECKED
MRWK

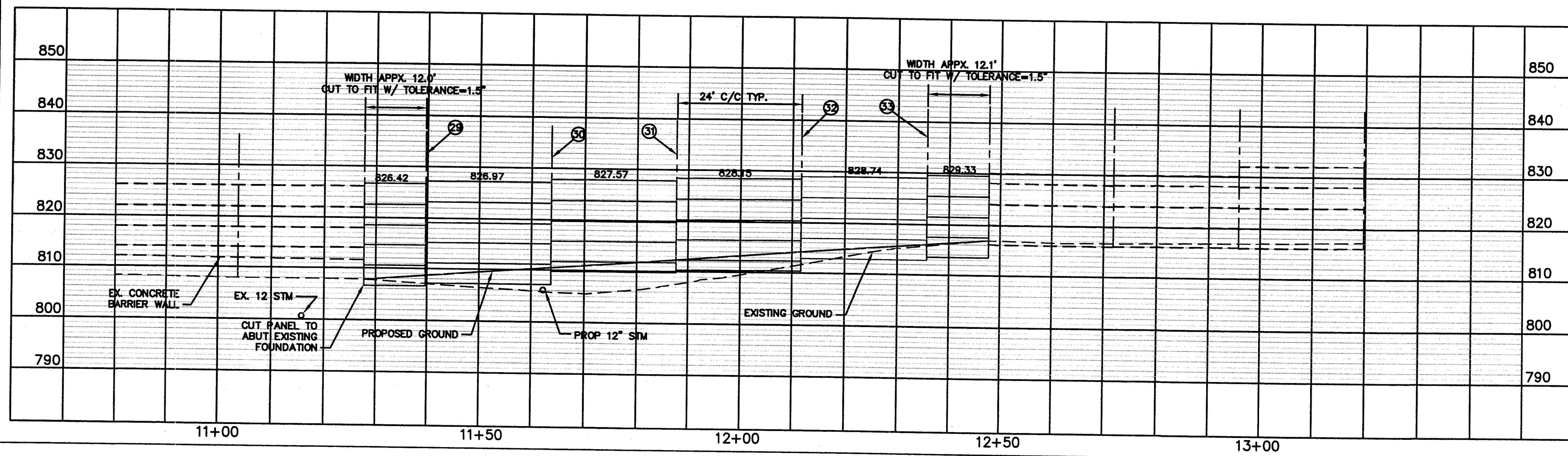
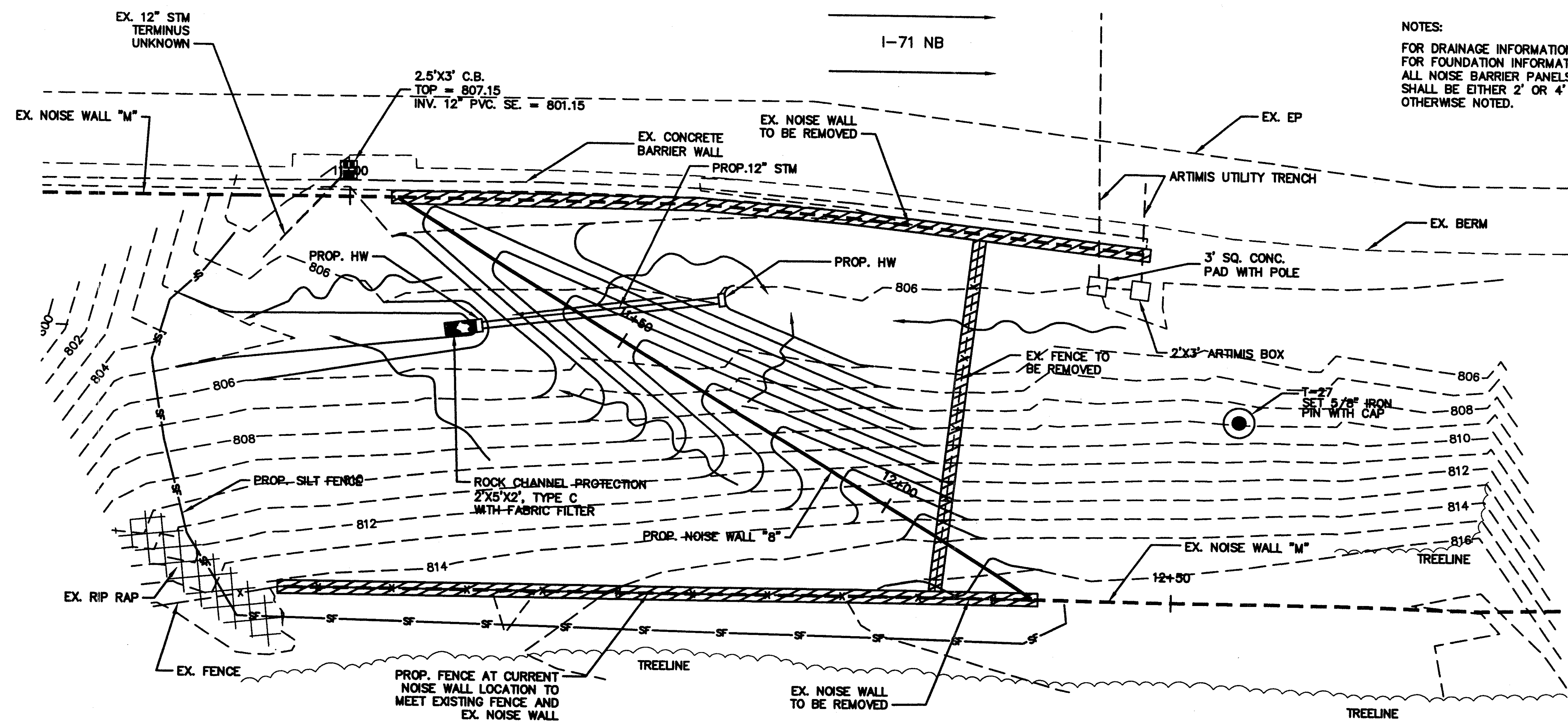
PLAN AND PROFILE SHEET
PROPOSED NOISE WALL "8"

HAM-71-11.08

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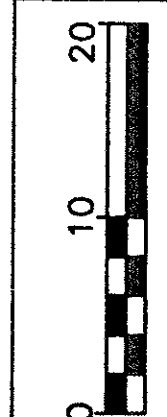
184
205

NOTES:
FOR DRAINAGE INFORMATION SEE SHEETS 31 AND 32
FOR FOUNDATION INFORMATION SEE SHEET 35
ALL NOISE BARRIER PANELS TO BE USED
SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
OTHERWISE NOTED.



RAMP 1

NOTES:
FOR FOUNDATION INFORMATION SEE SHEET 35
ALL NOISE BARRIER PANELS TO BE USED
SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
OTHERWISE NOTED.



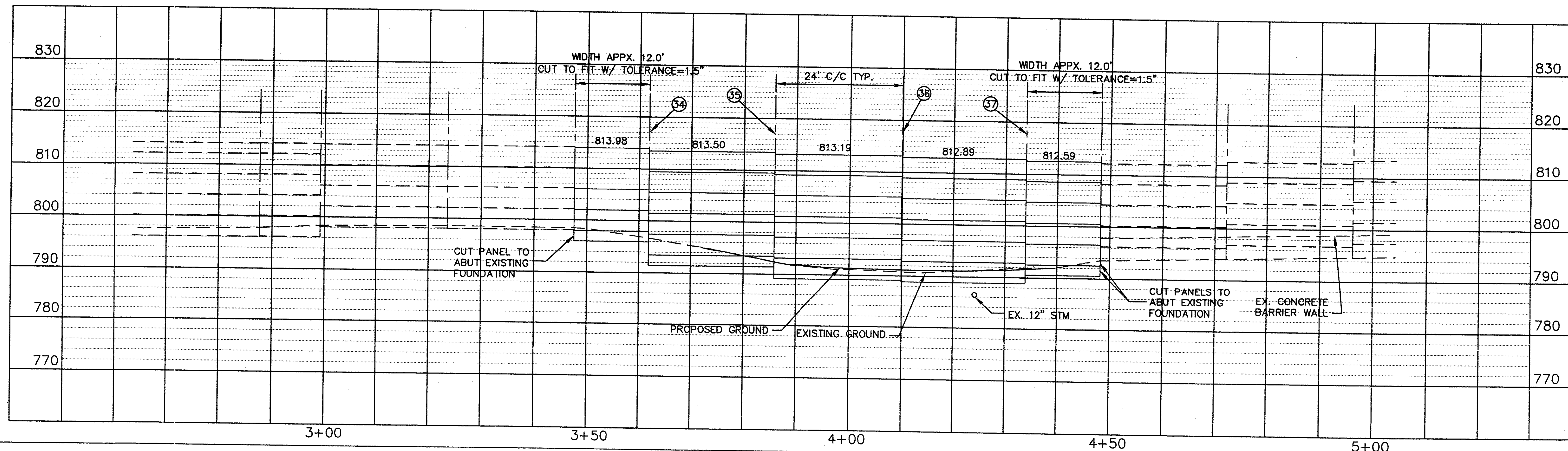
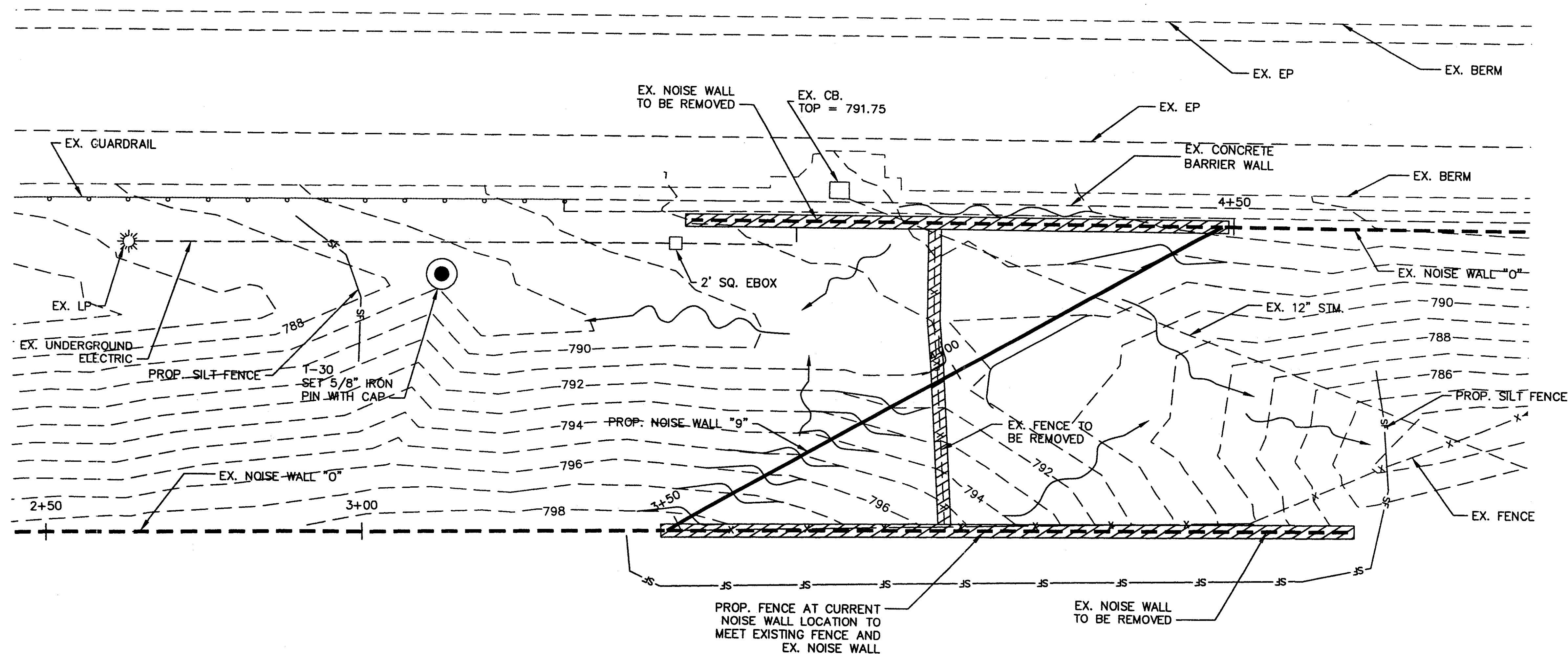
CALCULATED
CUL
CHECKED
MRWK

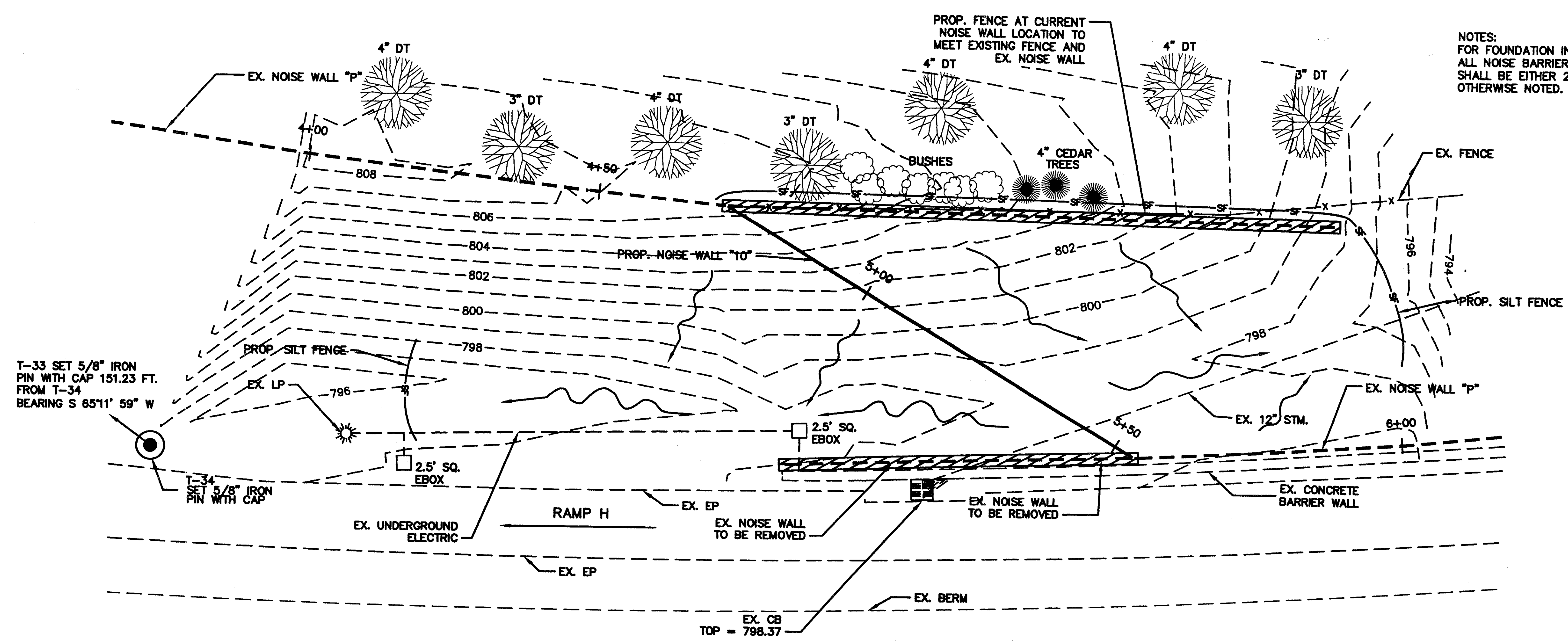
PLAN AND PROFILE SHEET,
PROPOSED NOISE WALL "9"

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205





NOTES:
 FOR FOUNDATION INFORMATION SEE SHEET 35
 ALL NOISE BARRIER PANELS TO BE USED
 SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
 OTHERWISE NOTED.

CALCULATED

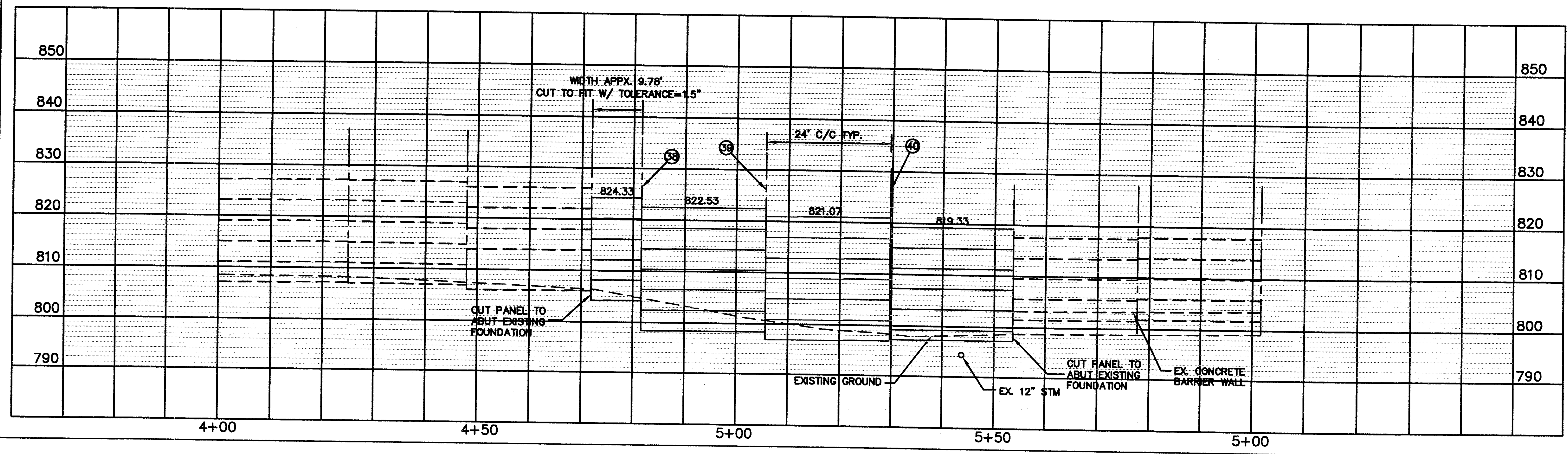
C.J.L.

CHECKED

M.R.M.K.

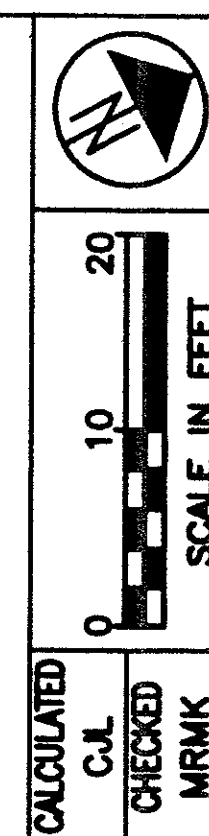
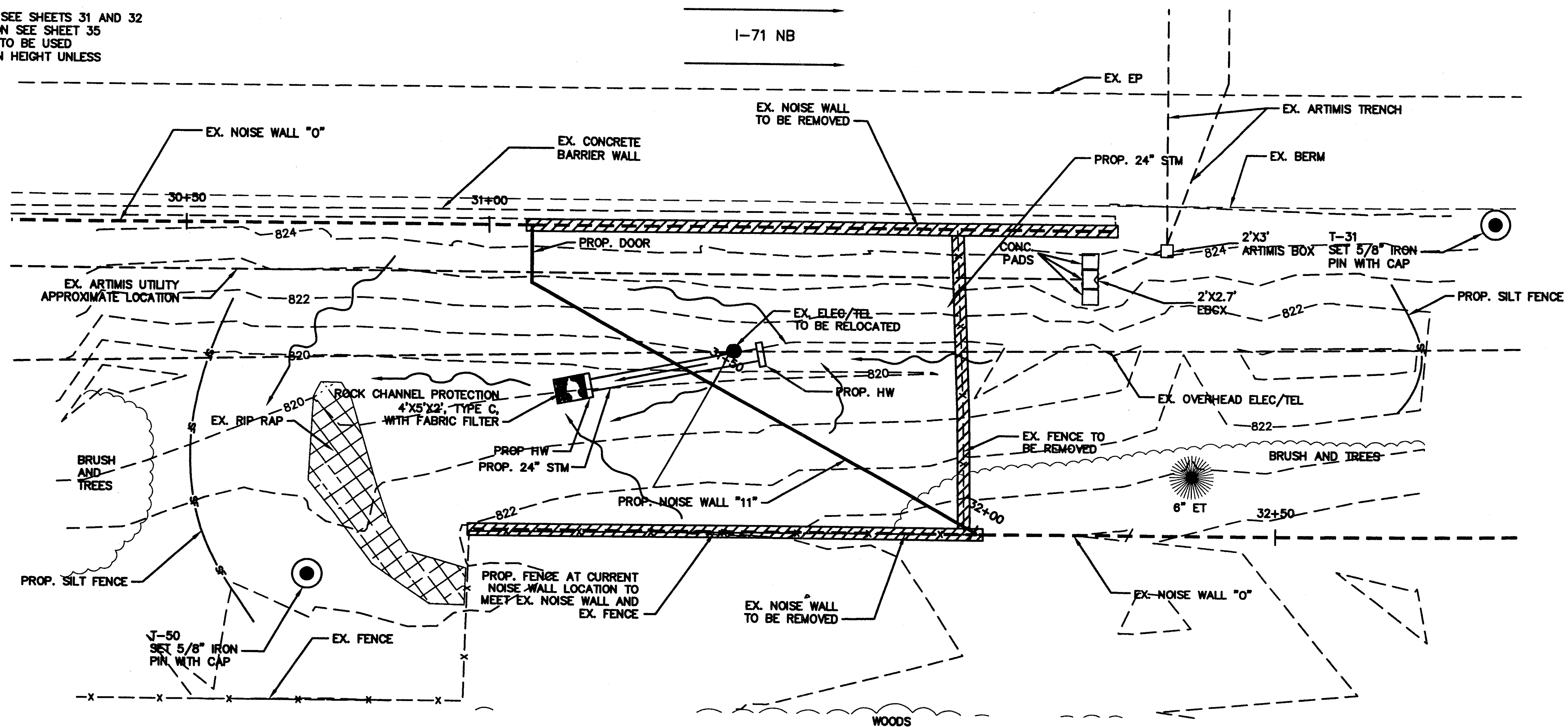
SCALE IN FEET

PLAN AND PROFILE SHEET
PROPOSED NOISE WALL "10"

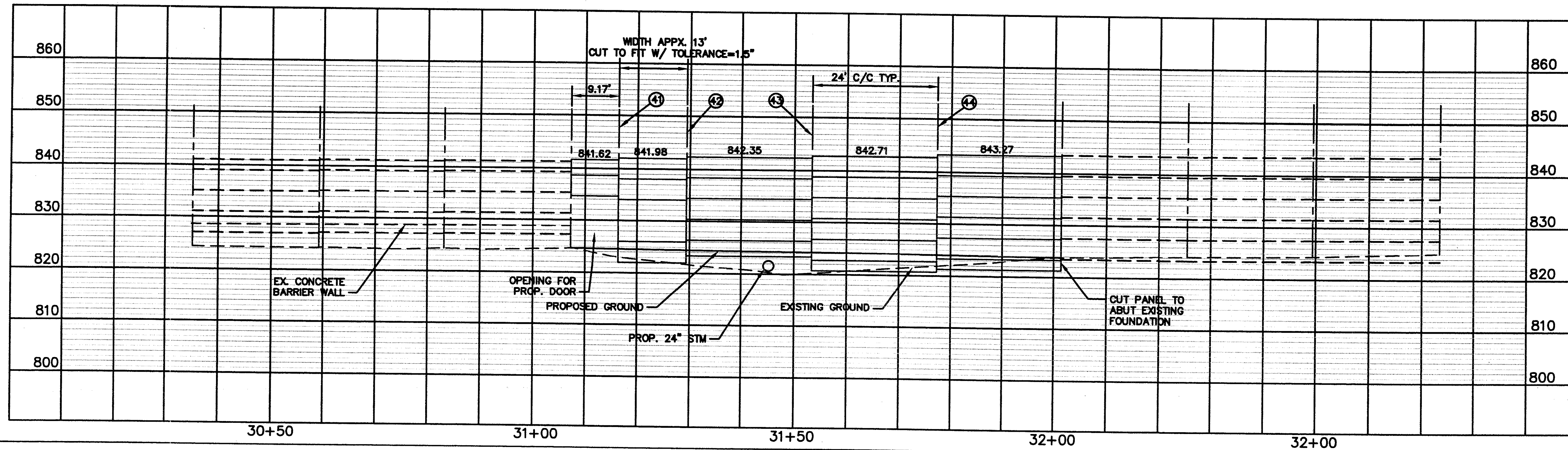


NOTES:
 FOR DRAINAGE INFORMATION SEE SHEETS 31 AND 32
 FOR FOUNDATION INFORMATION SEE SHEET 35
 ALL NOISE BARRIER PANELS TO BE USED
 SHALL BE EITHER 2' OR 4' IN HEIGHT UNLESS
 OTHERWISE NOTED.

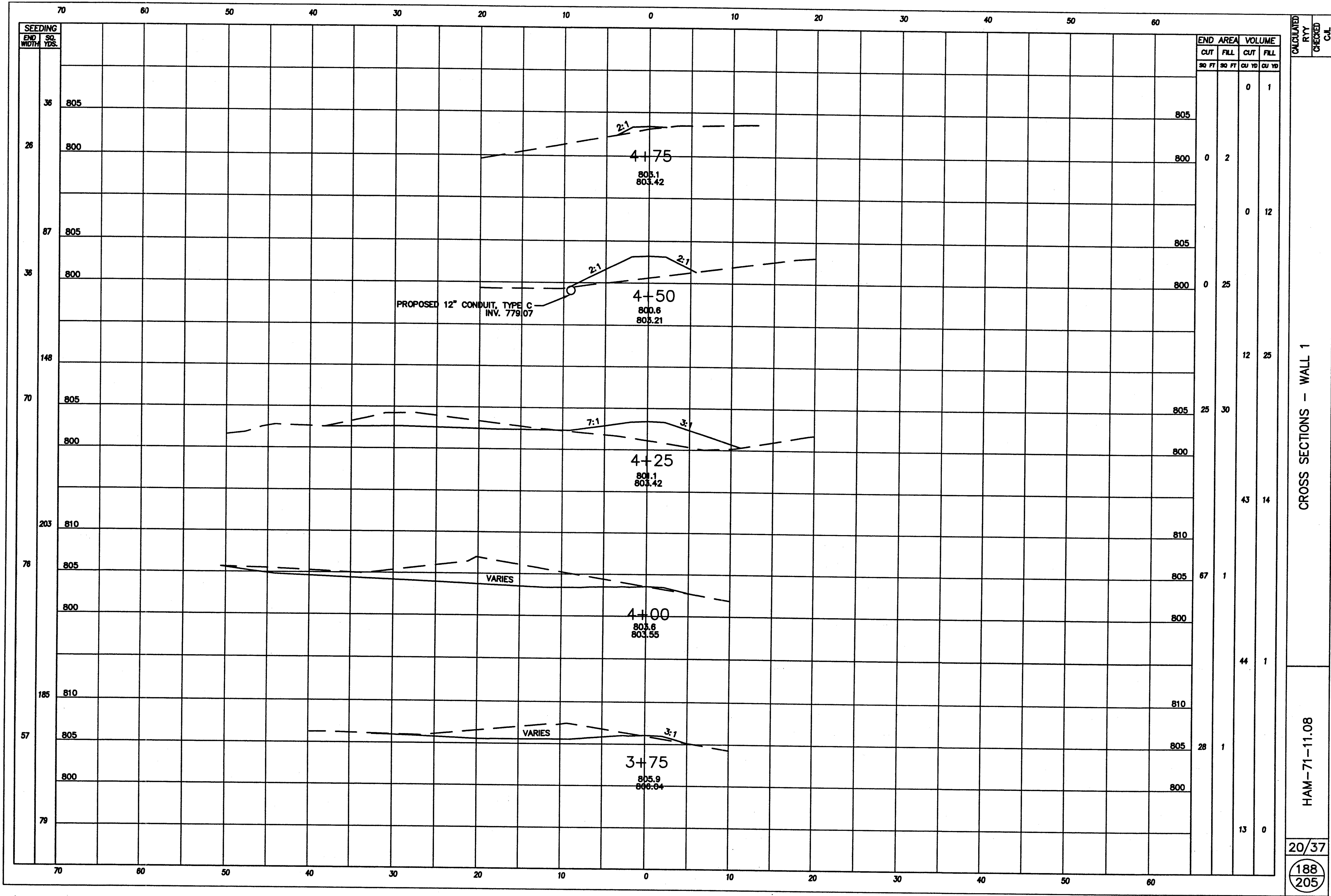
I-71 NB



PLAN AND PROFILE SHEET
 PROPOSED NOISE WALL "11"

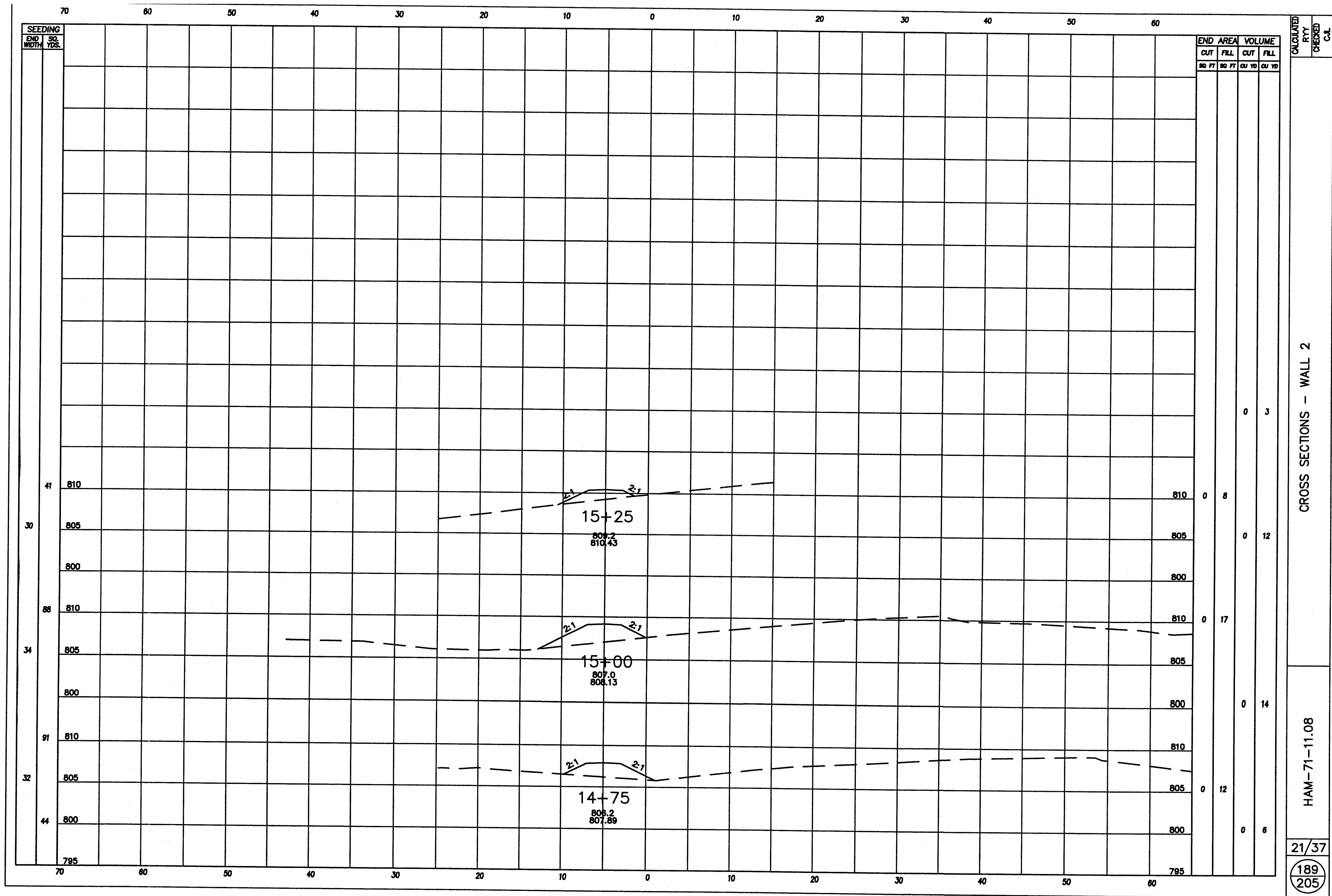


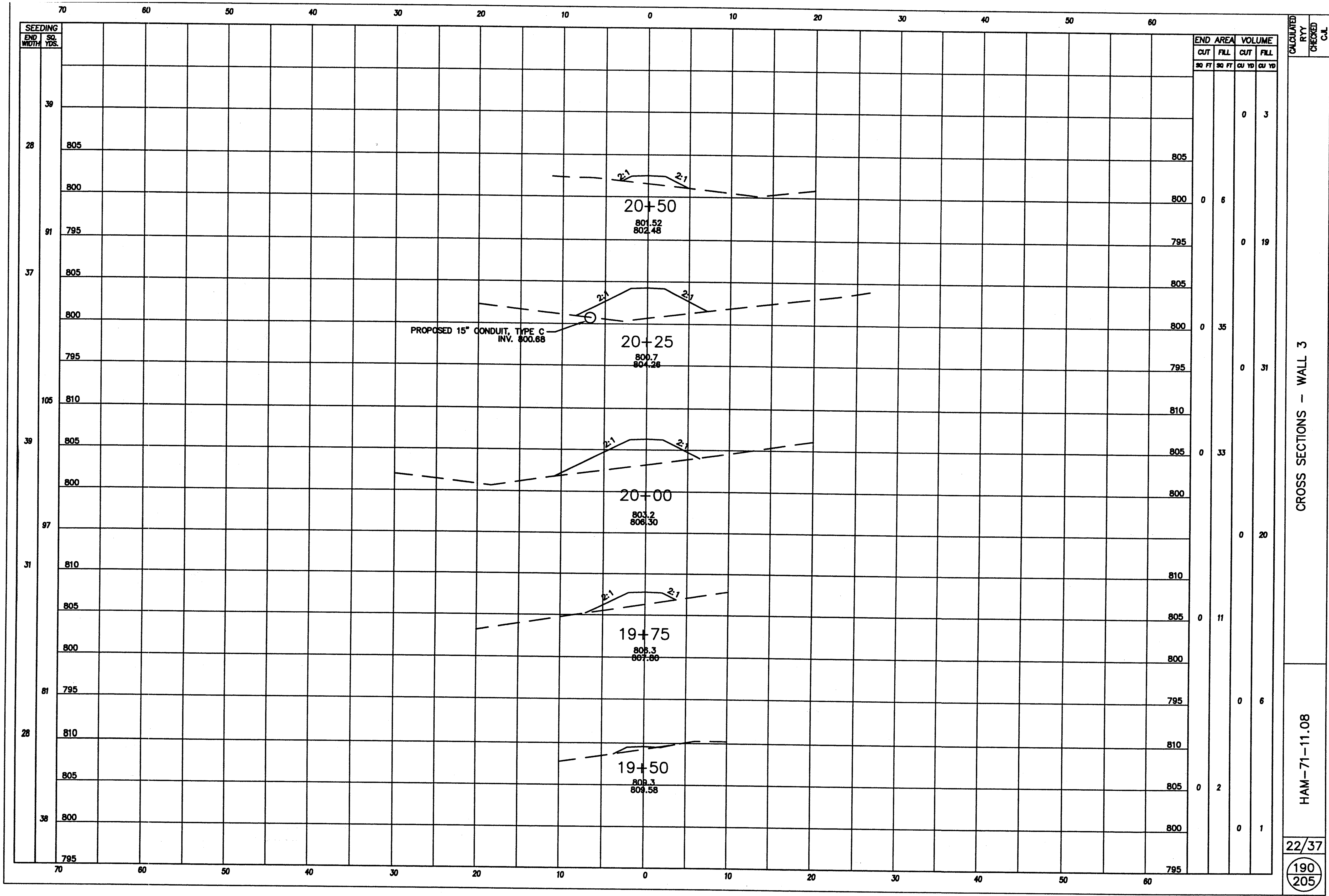
HAM-71-11.08

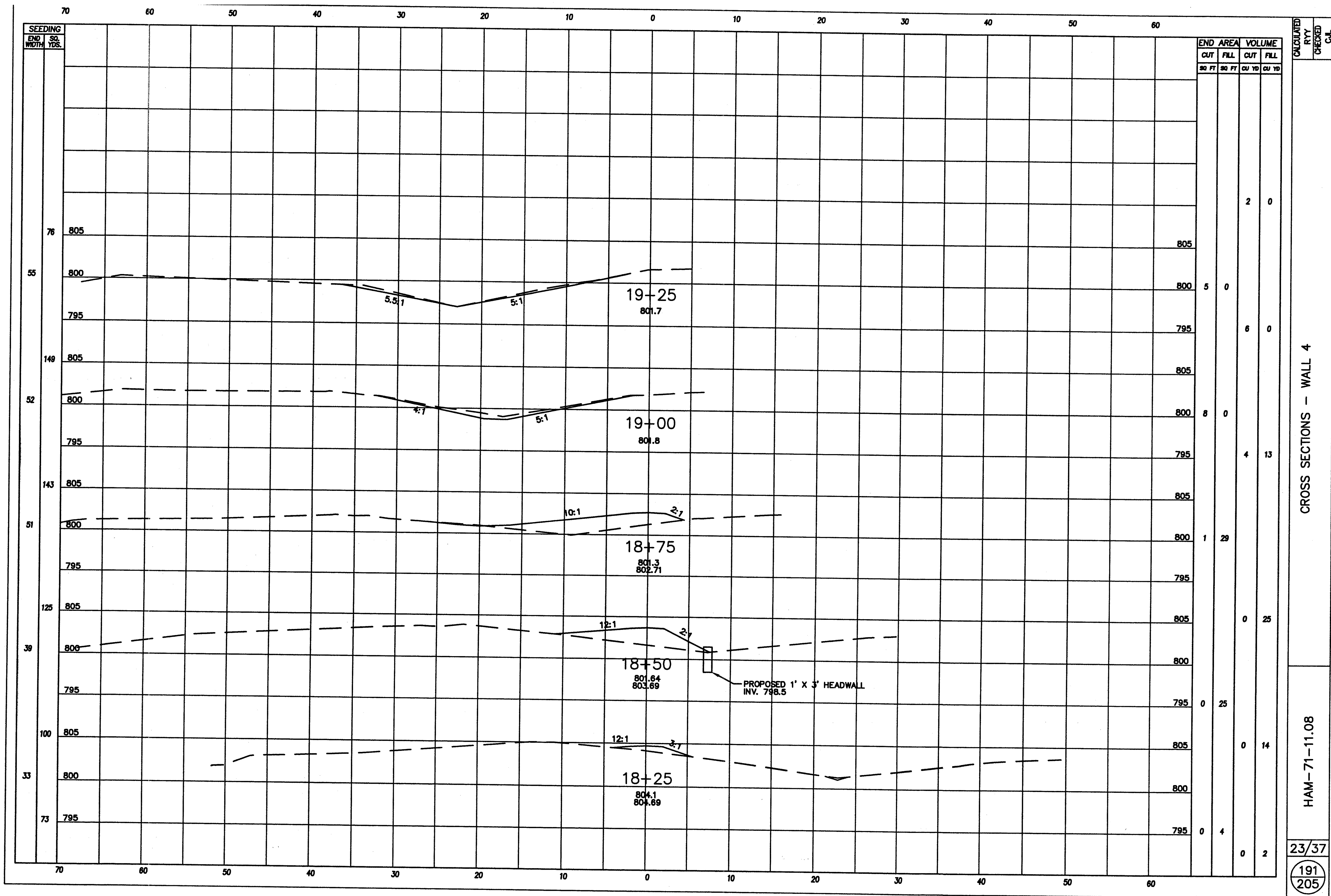


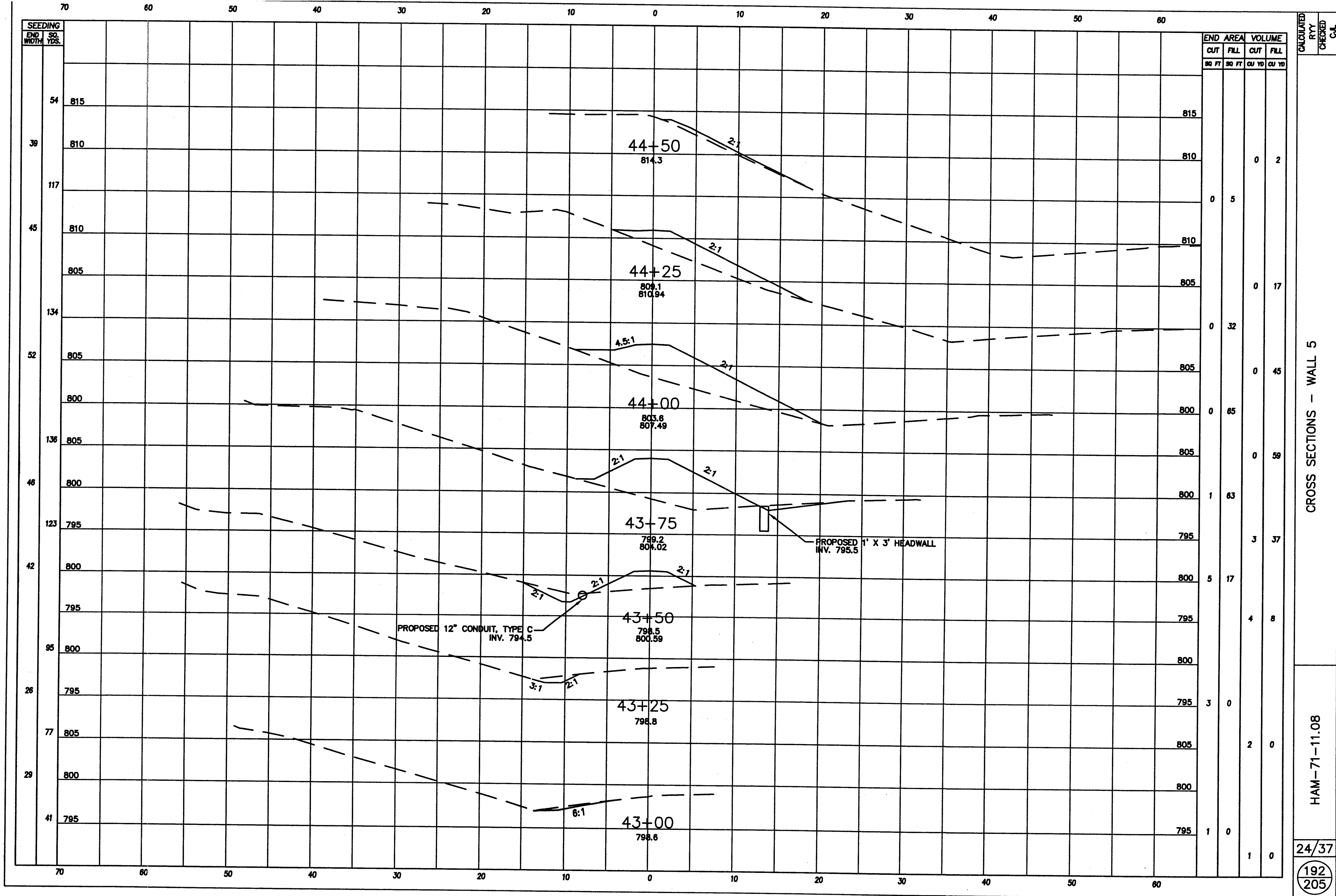
CROSS SECTIONS - WALL 1

HAM-71-11.08







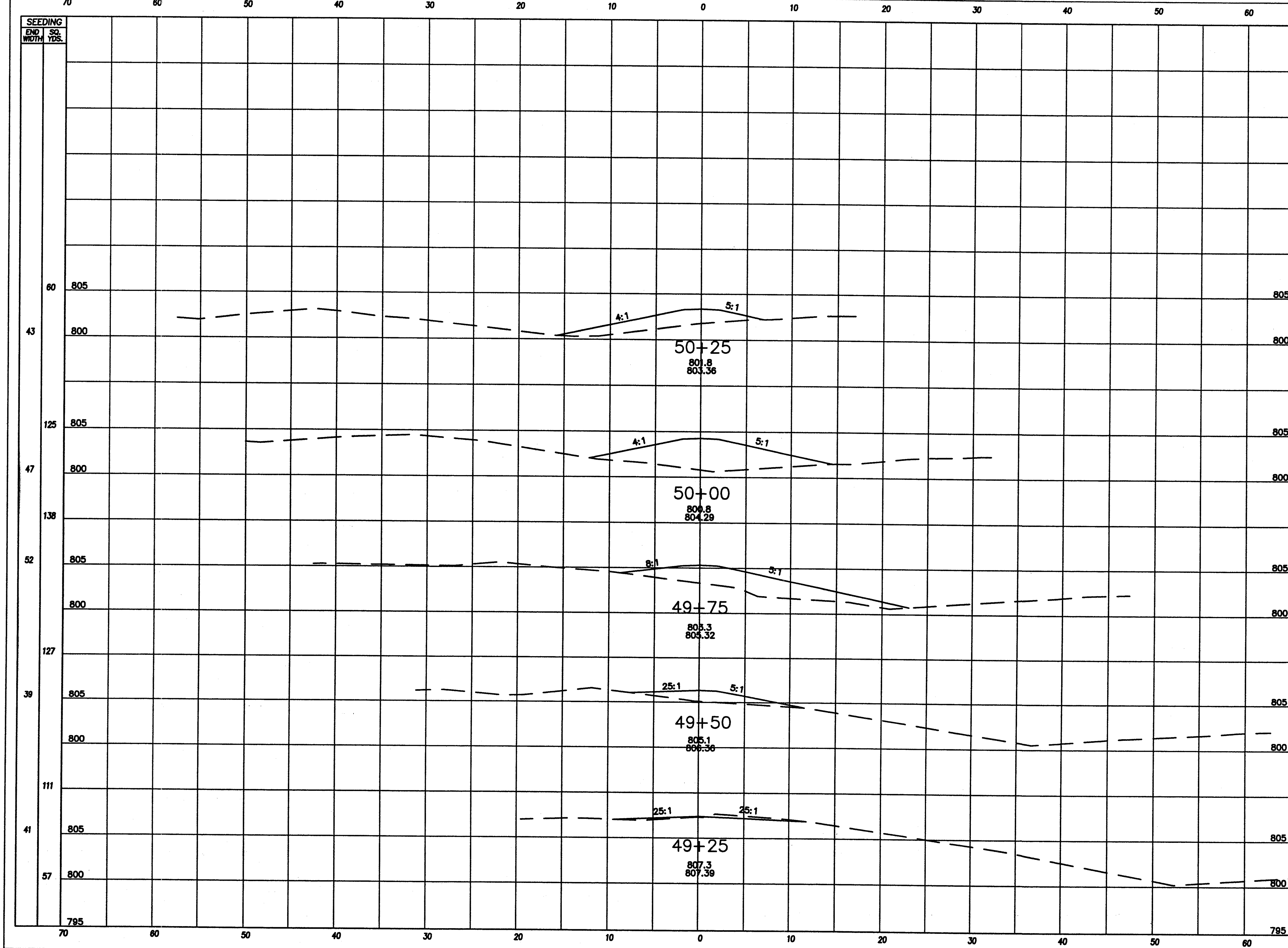


CROSS SECTIONS - WALL 5

HAM-71-11.08

24/37

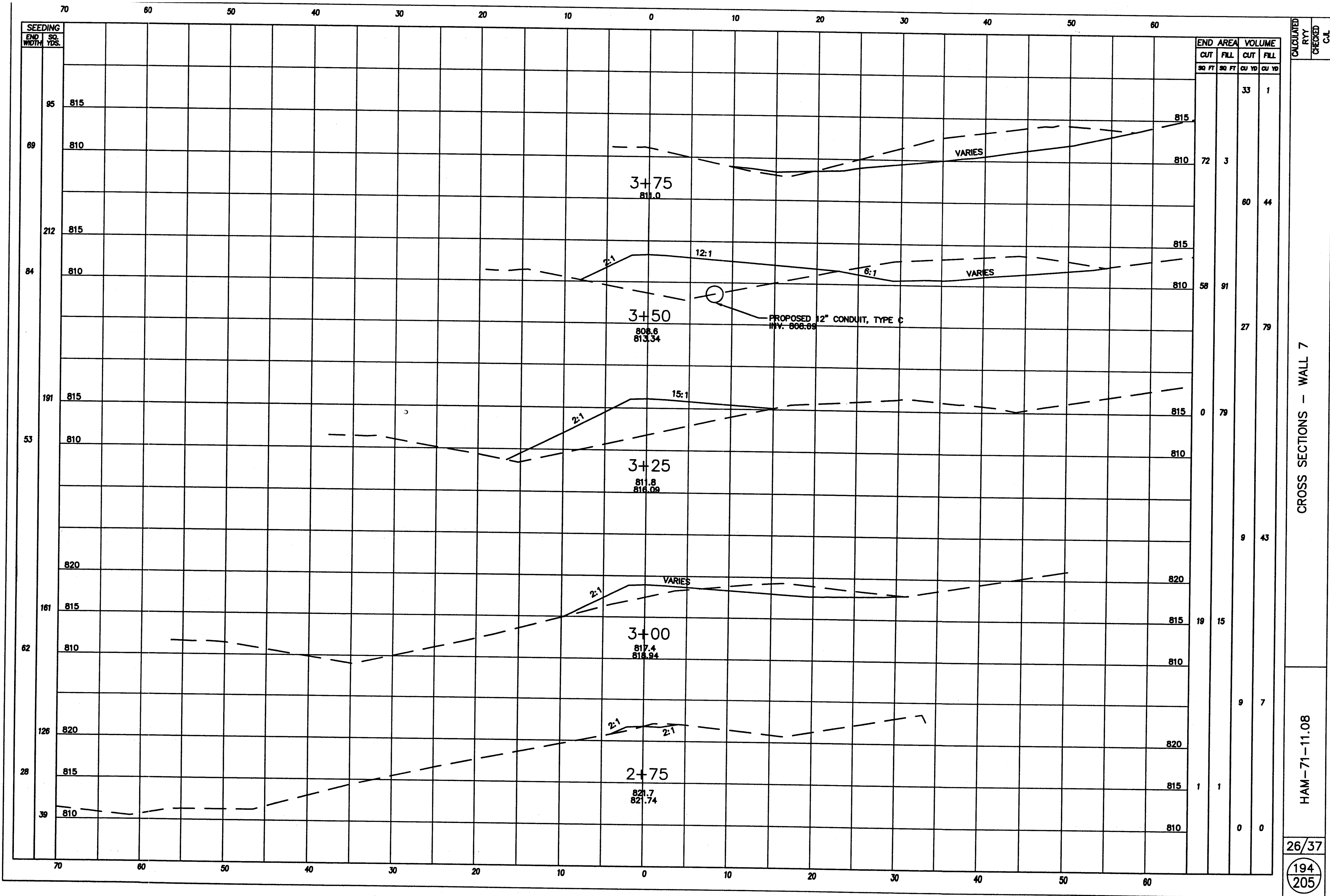
192
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END AREA		VOLUME	
CUT	FILL	CUT	FILL
sq ft	sq ft	cu yd	cu yd
0	0	0	11
0	24	0	35
0	51	0	44
0	43	0	28
0	14	1	7
2	1	1	1

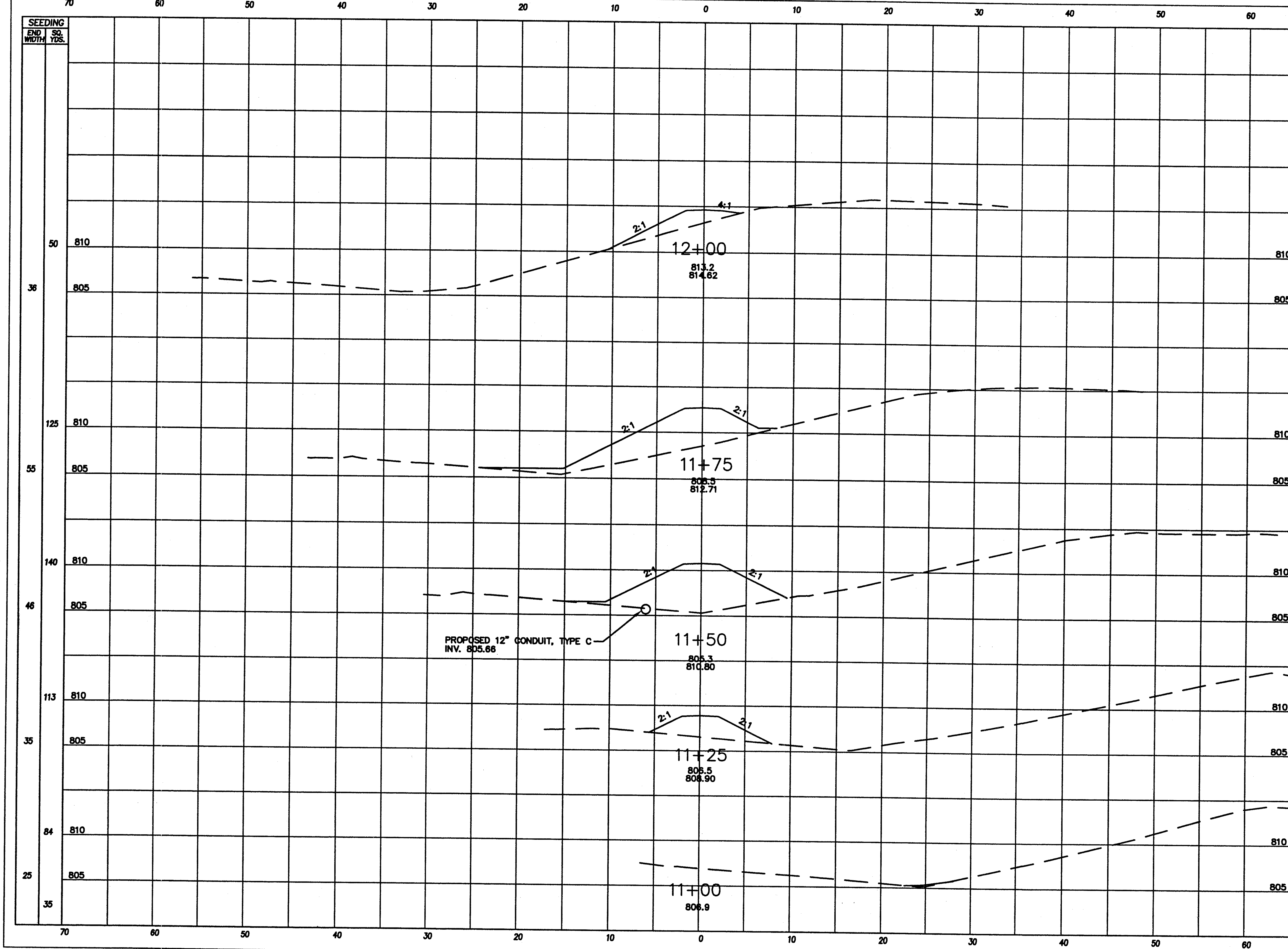
CROSS SECTIONS - WALL 6

HAM-71-11.08



CROSS SECTIONS - WALL 7

HAM-71-11.08

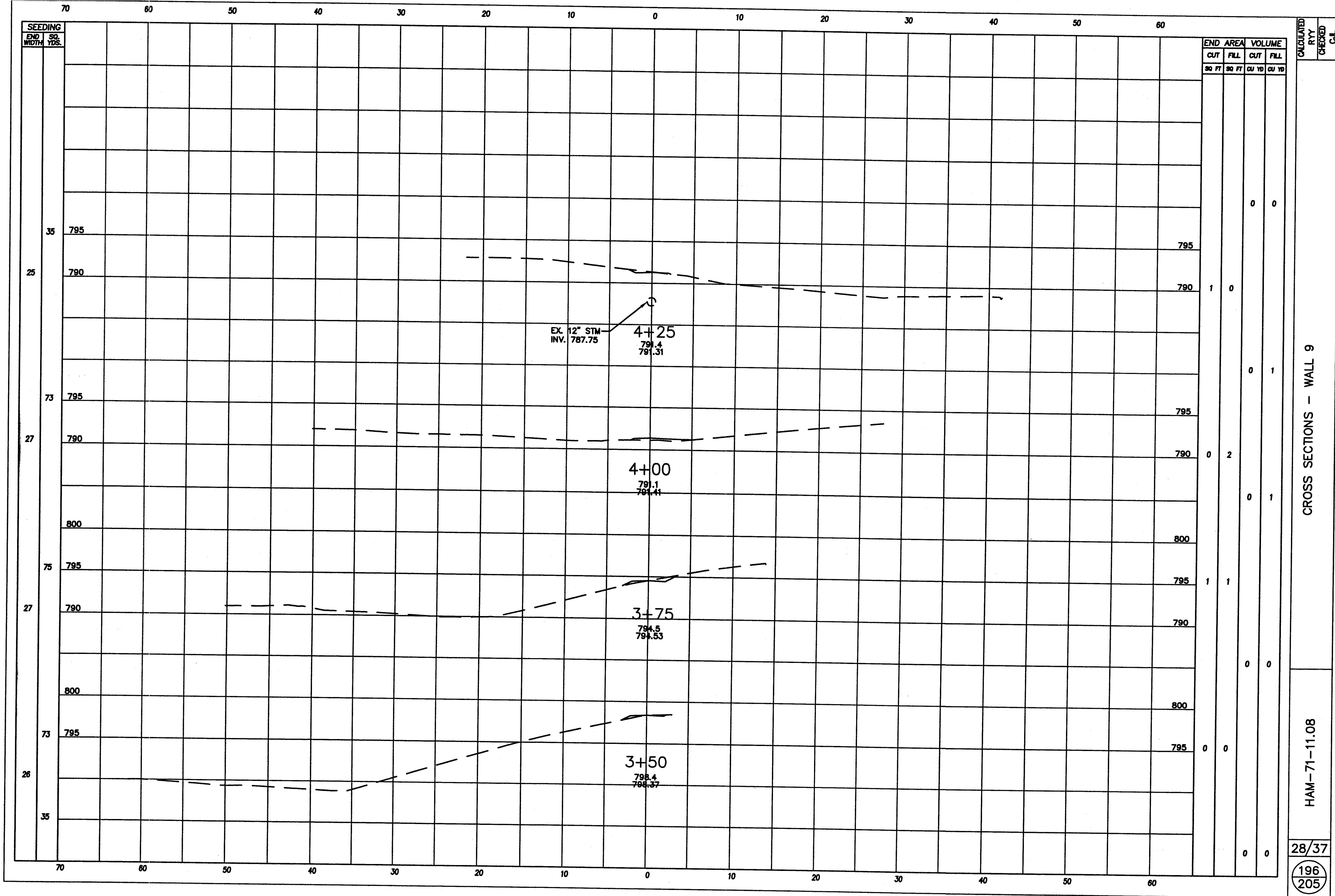


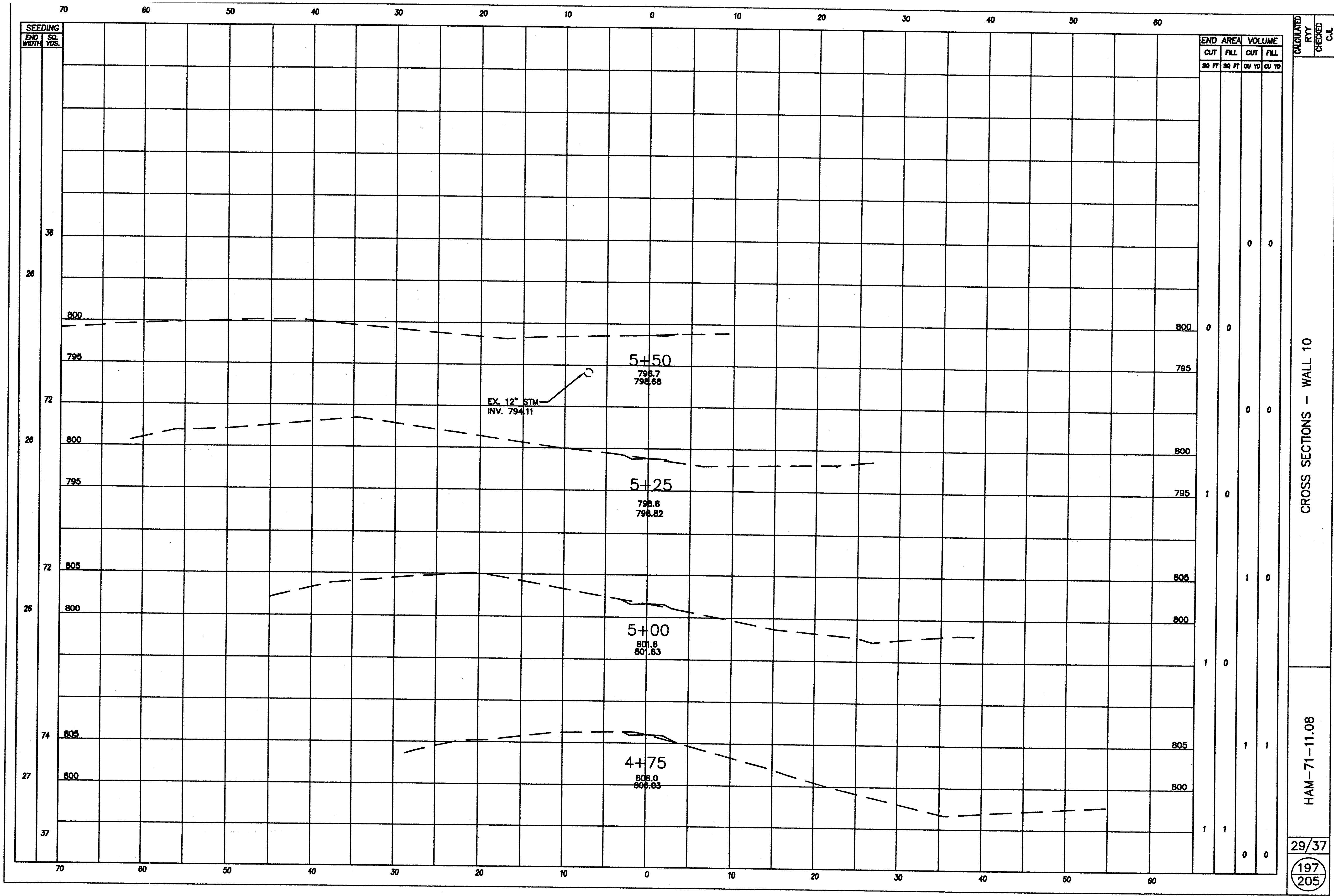
CROSS SECTIONS - WALL 8

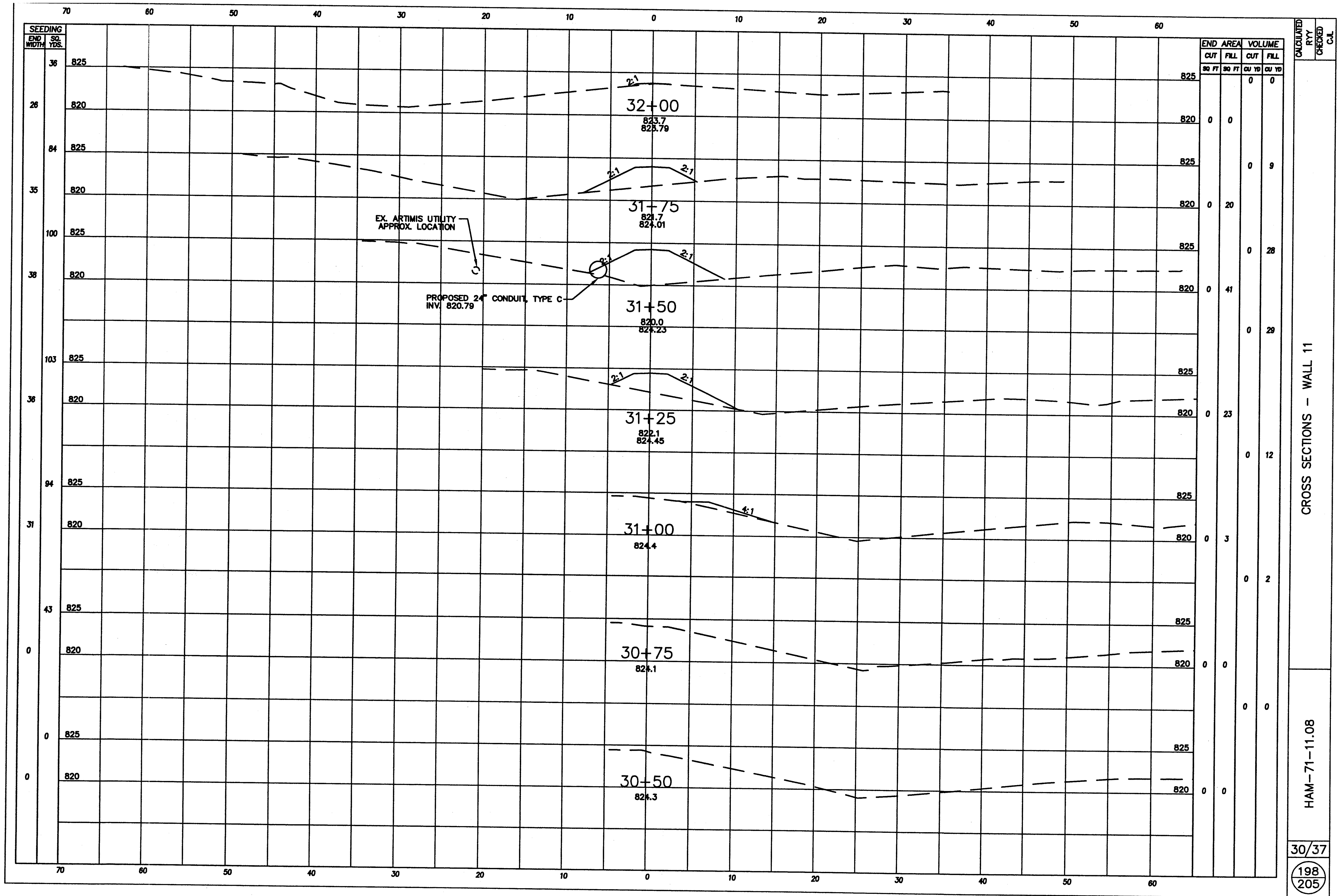
HAM-71-11.08

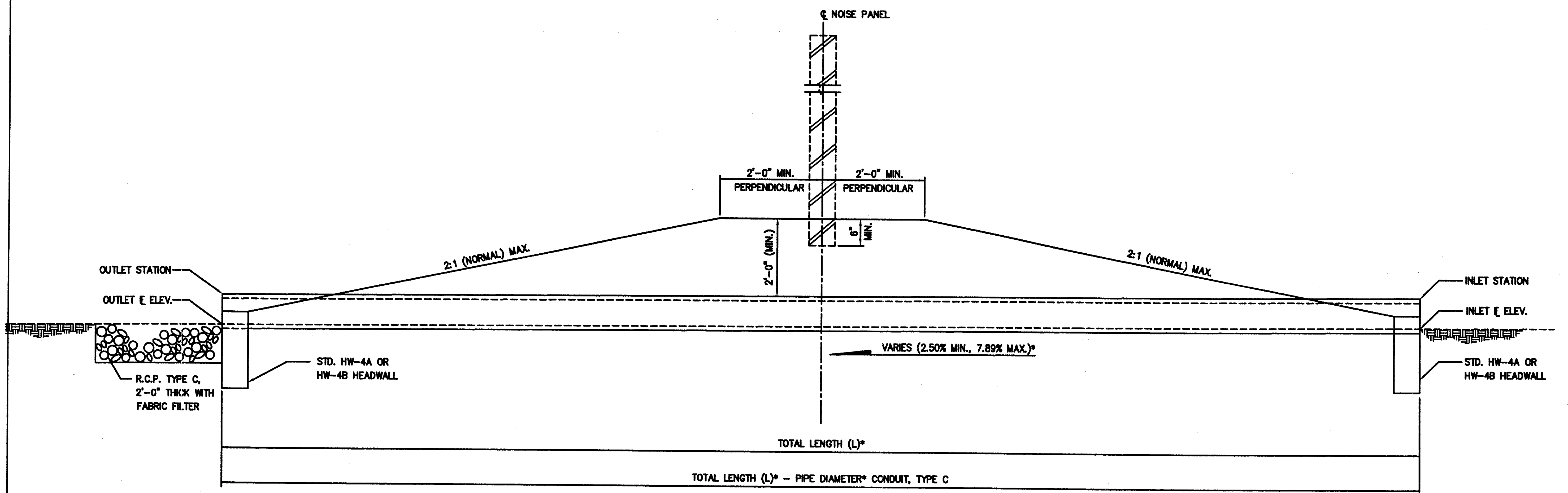
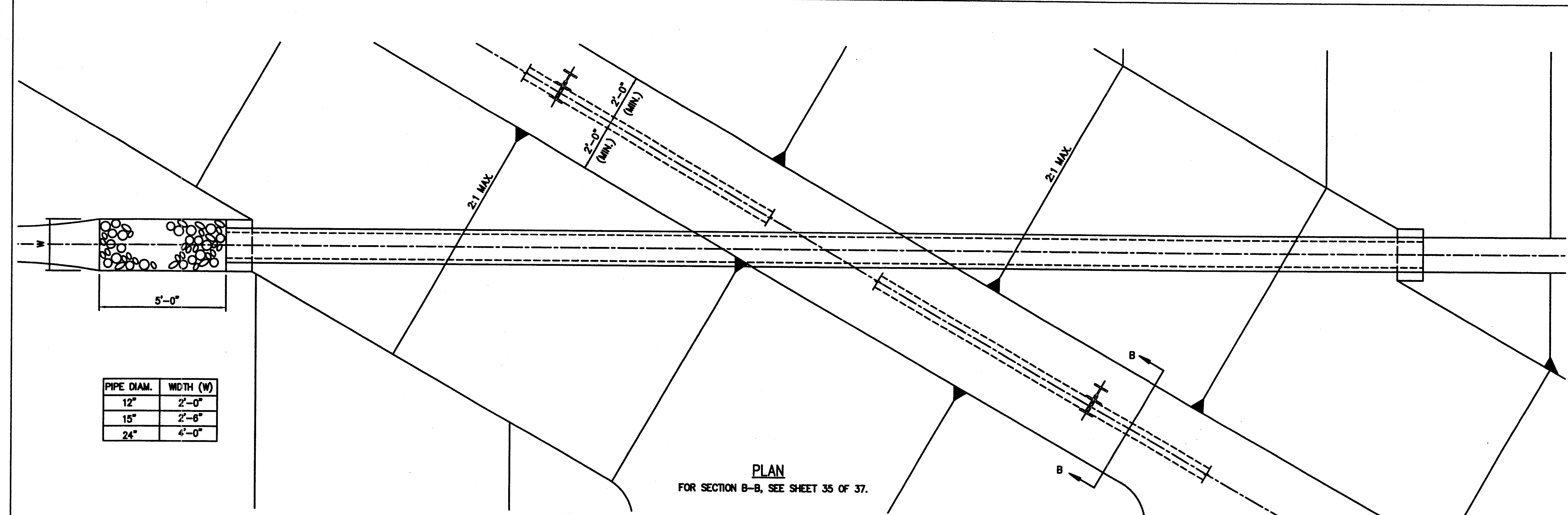
27/37

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PROFILE ALONG C₁ PIPE

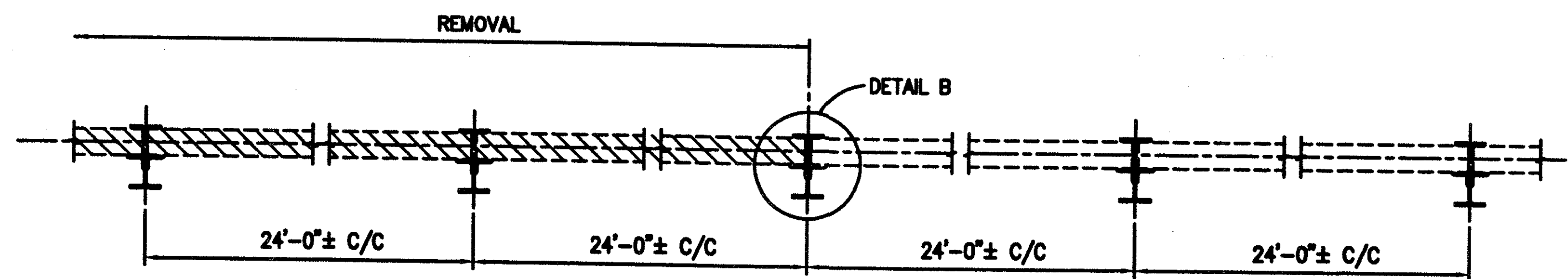
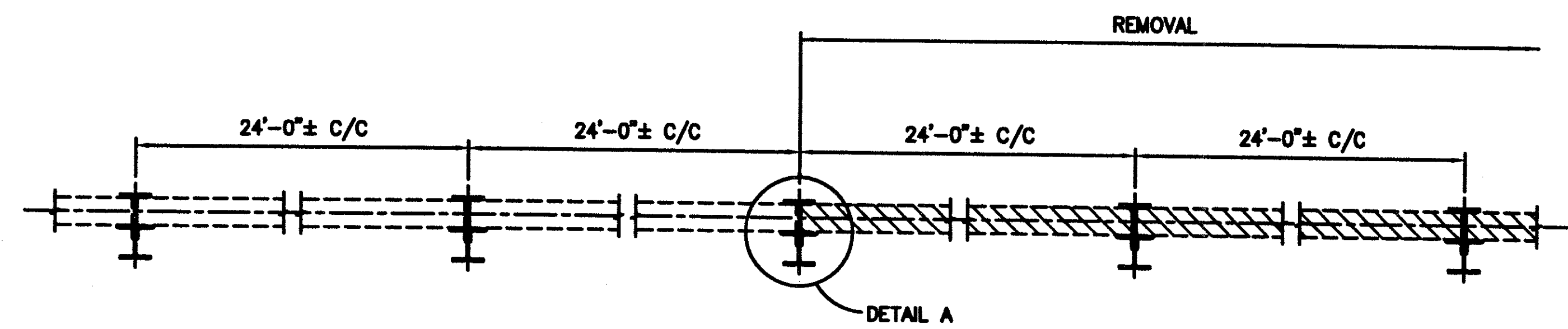
* SEE TABLE ON SHEET 32 OF 37.

PIPE LOCATION	PIPE DIAMETER (INCH)	TOTAL LENGTH (FEET)	5 YEAR DISCHARGE	10 YEAR DISCHARGE	5 YEAR VELOCITY	10 YEAR VELOCITY	MINIMUM SLOPE (%)	INLET E ELEV.	INLET STATION	OFFSET	OUTLET E ELEV.	OUTLET STATION	OFFSET
WALL No. 1	12"	32.00	0.800 CFS	0.850 CFS	1.02 FPS	7.99 FPS	3.13	800.00	4+26.60	8.75 RT.	799.00	4+51.89	10.64 LT.
WALL No. 3	15"	28.00	2.981 CFS	3.168 CFS	2.43 FPS	8.88 FPS	2.86	800.80	20+21.53	9.45 LT.	800.00	20+43.65	7.71 RT.
WALL No. 4	15"	38.00	2.964 CFS	3.150 CFS	2.42 FPS	14.74 FPS	7.89	801.00	18+50.12	8.11 RT.	798.00	18+79.79	15.82 LT.
WALL No. 5	12"	36.00	1.674 CFS	1.779 CFS	2.13 FPS	7.53 FPS	2.78	798.00	43+75.44	15.30 RT.	797.00	43+48.95	9.08 LT.
WALL No. 7	24"	45.00	9.874 CFS	10.177 CFS	3.14 FPS	15.14 FPS	4.44	810.00	3+29.08	13.76 LT.	808.00	3+60.35	18.60 RT.
WALL No. 8	12"	40.00	0.707 CFS	0.751 CFS	0.90 FPS	7.14 FPS	2.50	806.00	11+60.45	14.39 LT.	805.00	11+29.17	10.56 RT.
WALL No. 11	24"	30.00	6.146 CFS	6.531 CFS	1.96 FPS	13.11 FPS	3.33	821.00	31+55.47	8.47 LT.	820.00	31+32.42	10.73 RT.

TABLE (HYDRAULIC INFORMATION)

NOTES

1. ALL STORM SEWERS PIPES SHALL CONFORM TO AASHTO SPECIFICATIONS.
2. TRENCHES SHALL BE COMPACTED AS PER ITEM 603, UNLESS OTHERWISE NOTED ON THE PLANS. ANY SETTLEMENT WHICH OCCURS DURING THE GUARANTEE PERIOD, SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE STATE.
3. THE CONTRACTOR IS REQUIRED TO INSPECT THE PROJECT SITE AND FULLY INFORM HIMSELF CONCERNING ALL CONDITIONS AFFECTING THE SCOPE OF THE WORK. FAILURE TO DO SO SHALL NOT RELIEVE HIM FROM ANY RESPONSIBILITY IN THE PERFORMANCE OF THE CONTRACT.
4. ALL TREES (OR SHRUBS) WHETHER SHOWN OR NOT SHOWN ON THE PLANS ARE TO BE PRESERVED, UNLESS APPROVAL IS GIVEN IN WRITING BY THE PROJECT ENGINEER. PAYMENT WILL BE MADE UNDER ITEM 201, CLEARING AND GRUBBING.
5. INVESTIGATION, LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ADDITIONALLY, THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING UTILITY RELOCATIONS WITH THE OWNER OF THE UTILITY.



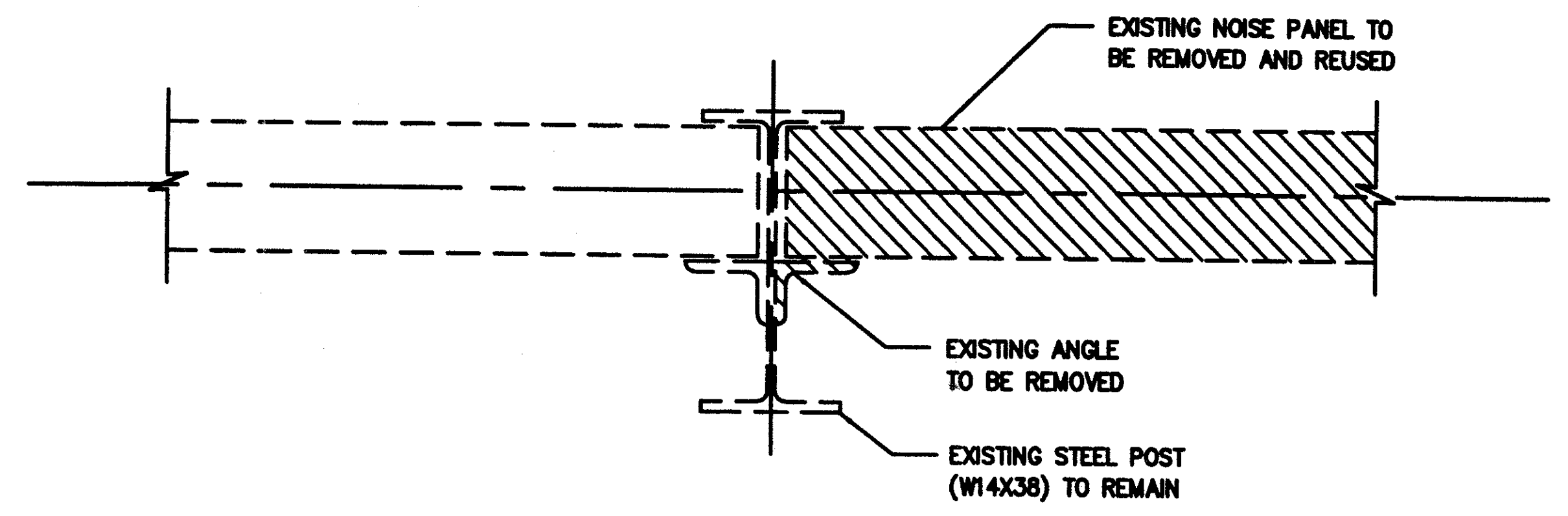
PLAN

NOTES

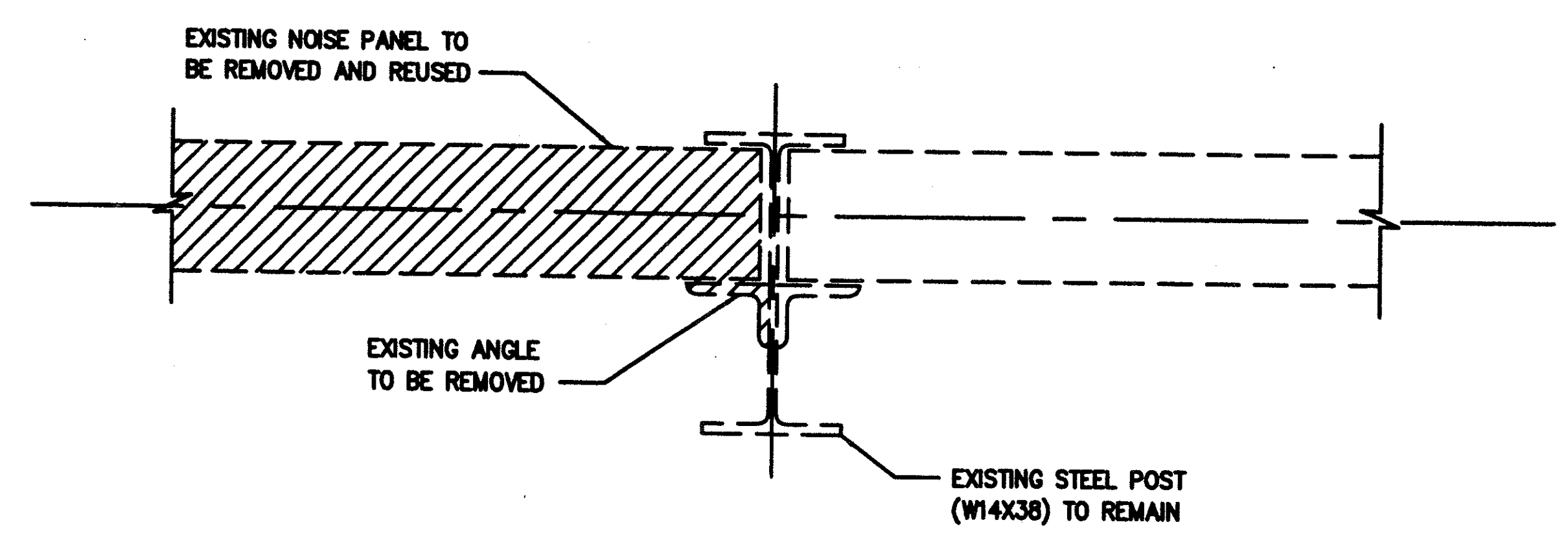
THE EXISTING ANGLES SHOULD BE REMOVED AND THE SURFACE OF THE EXISTING STEEL POSTS (W14X38) SHALL BE GROUND SMOOTH TO PROVIDE FOR THE PLACEMENT OF NEW ANGLES AS SHOWN ON THE DETAILS ON SHEET 34 OF 37.

LEGEND

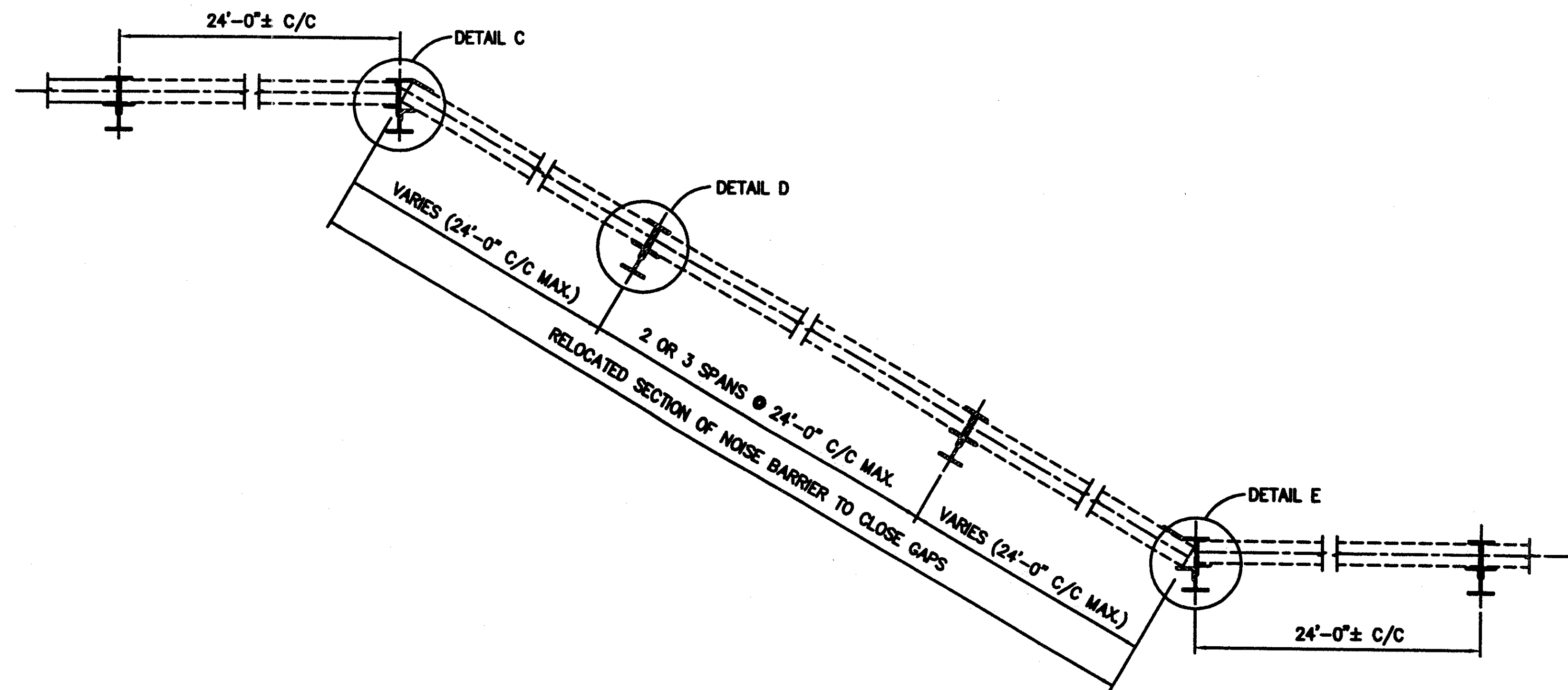
INDICATES AREA TO BE REMOVED



DETAIL A

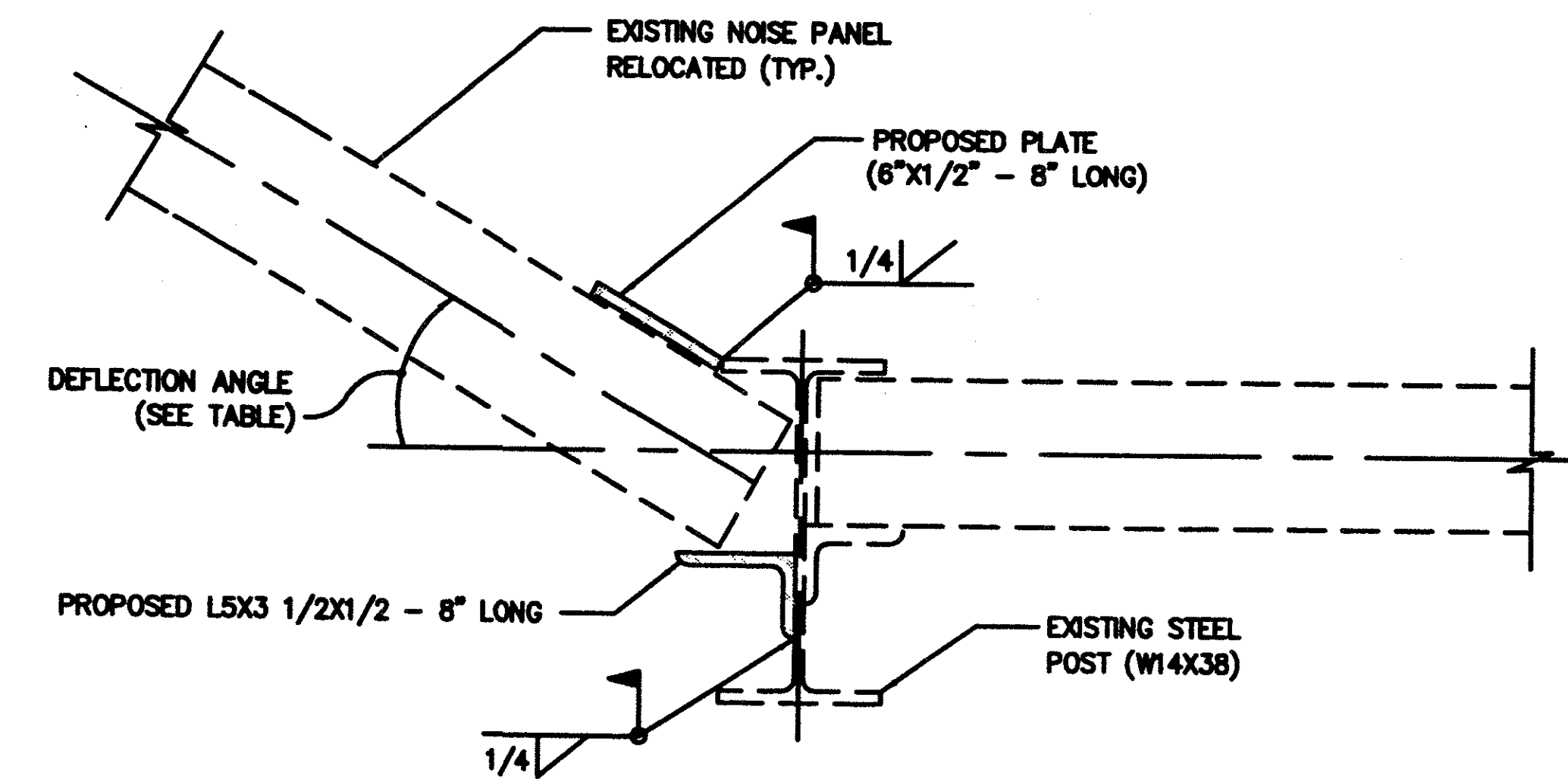


DETAIL B

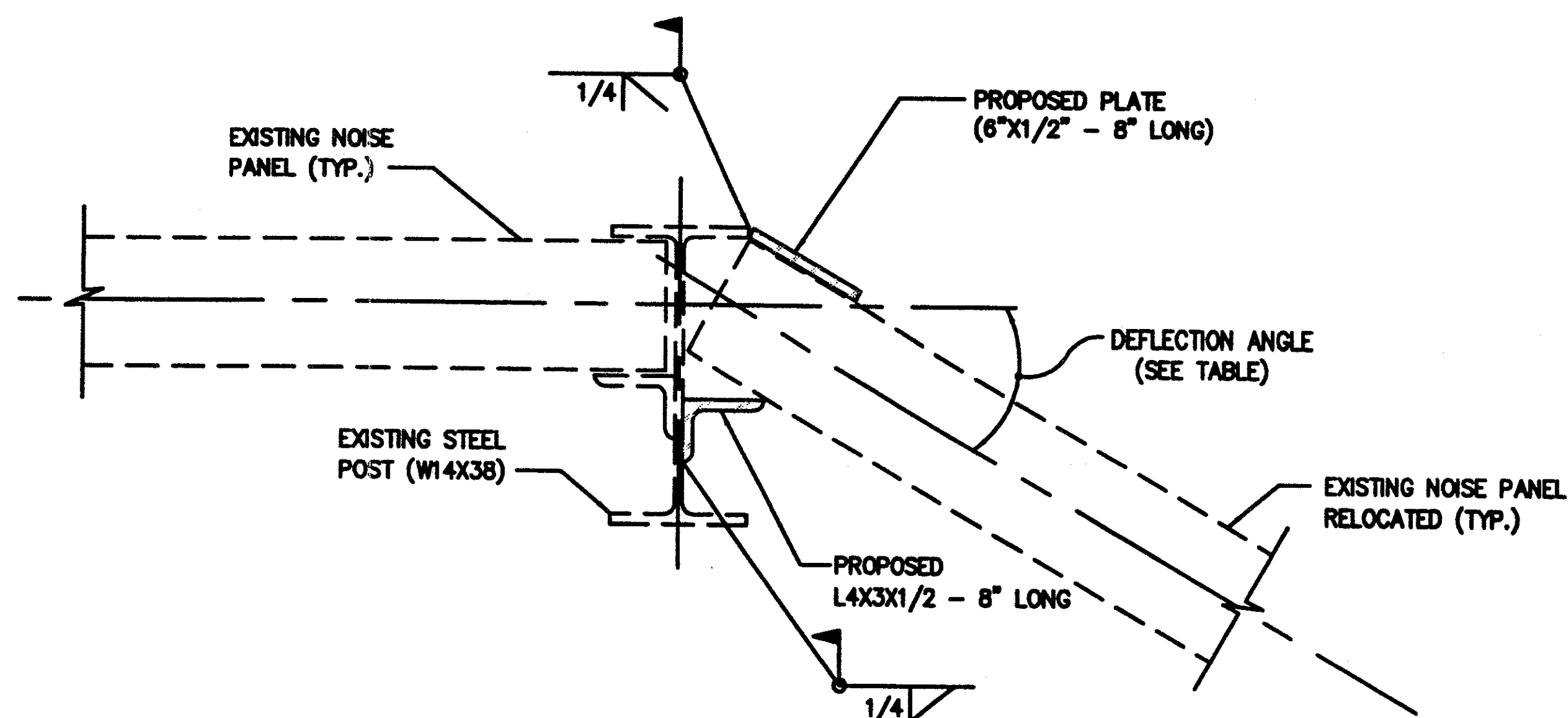


PLAN

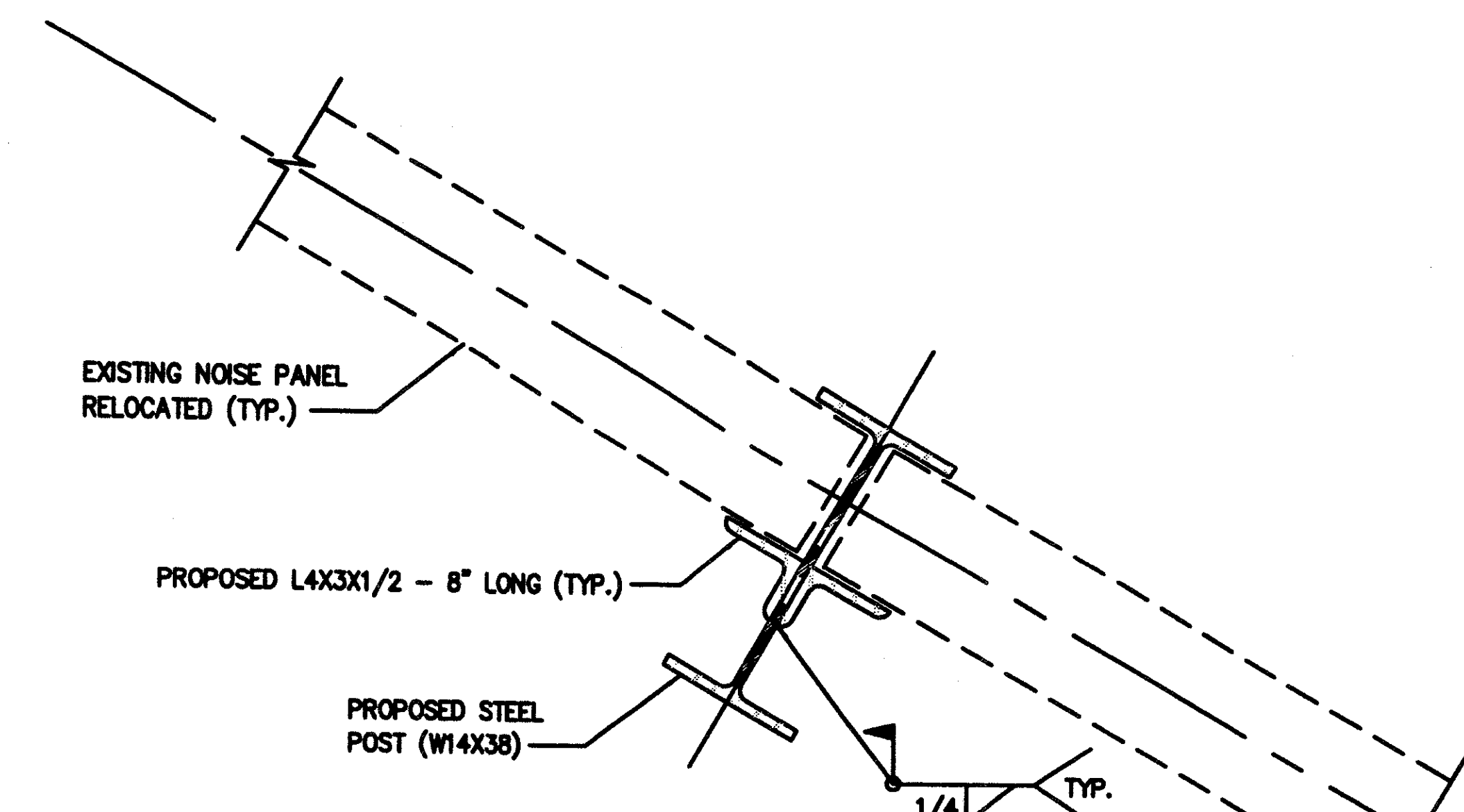
DEFLECTION ANGLE TABLE			
WALL NO.	LOCATION	WEST WALL ANGLE	EAST WALL ANGLE
1	NW G, STA. 648+00 SB	23°45'40"	28°37'18"
2	NW F, STA. 657+00 NB	36°12'35"	36°22'60"
3	NW F, STA. 663+00 NB	33°48'53"	35°38'26"
4	NW G, STA. 663+00 SB	28°42'23"	32°25'56"
5	NW G, STA. 688+00 SB	28°28'22"	31°17'27"
6	NW G, STA. 694+00 SB	27°57'28"	31°15'30"
7	NW M, STA. 767+00 NB	36°42'16"	29°36'27"
8	NW M, STA. 775+00 NB	31°35'51"	30°04'13"
9	NW O, STA. 796+00 NB	29°52'41"	28°46'41"
10	NW P, STA. 798+00 SB	25°32'28"	34°22'47"
11	NW O, STA. 824+00 NB	28°56'54"	29°15'15"



DETAIL E



DETAIL C



DETAIL D

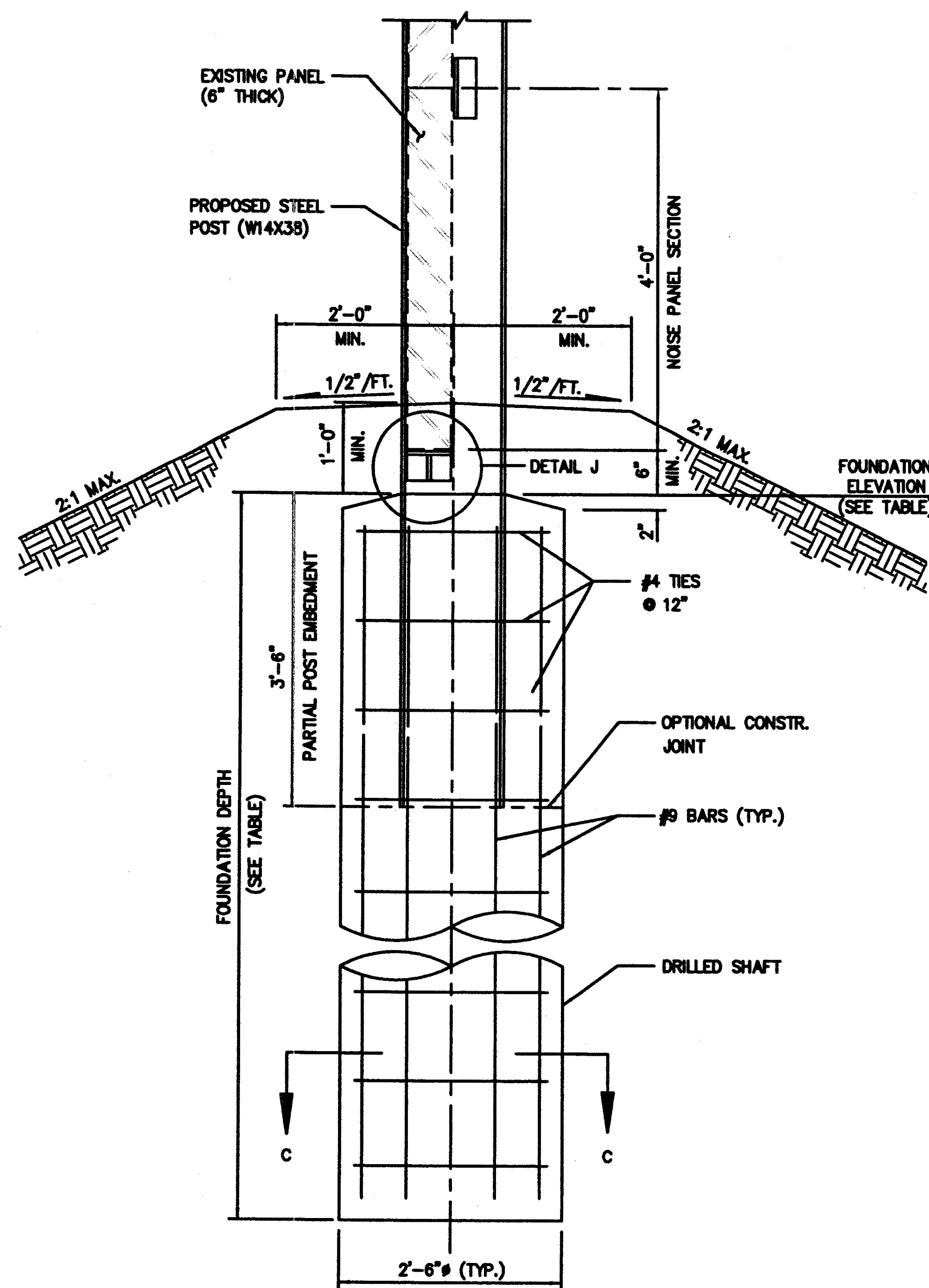
CALCULATED
MRMK
CHECKED
RYV

NOISE BARRIER DETAILS

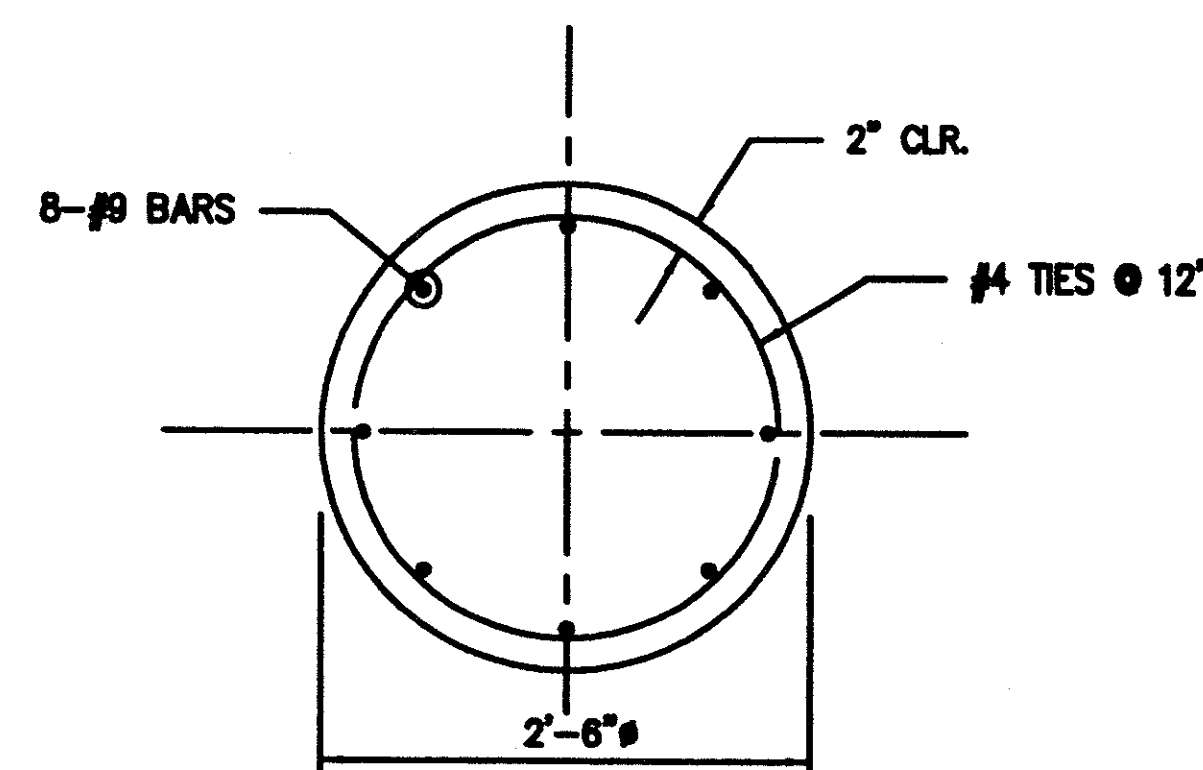
HAM-71-11.08

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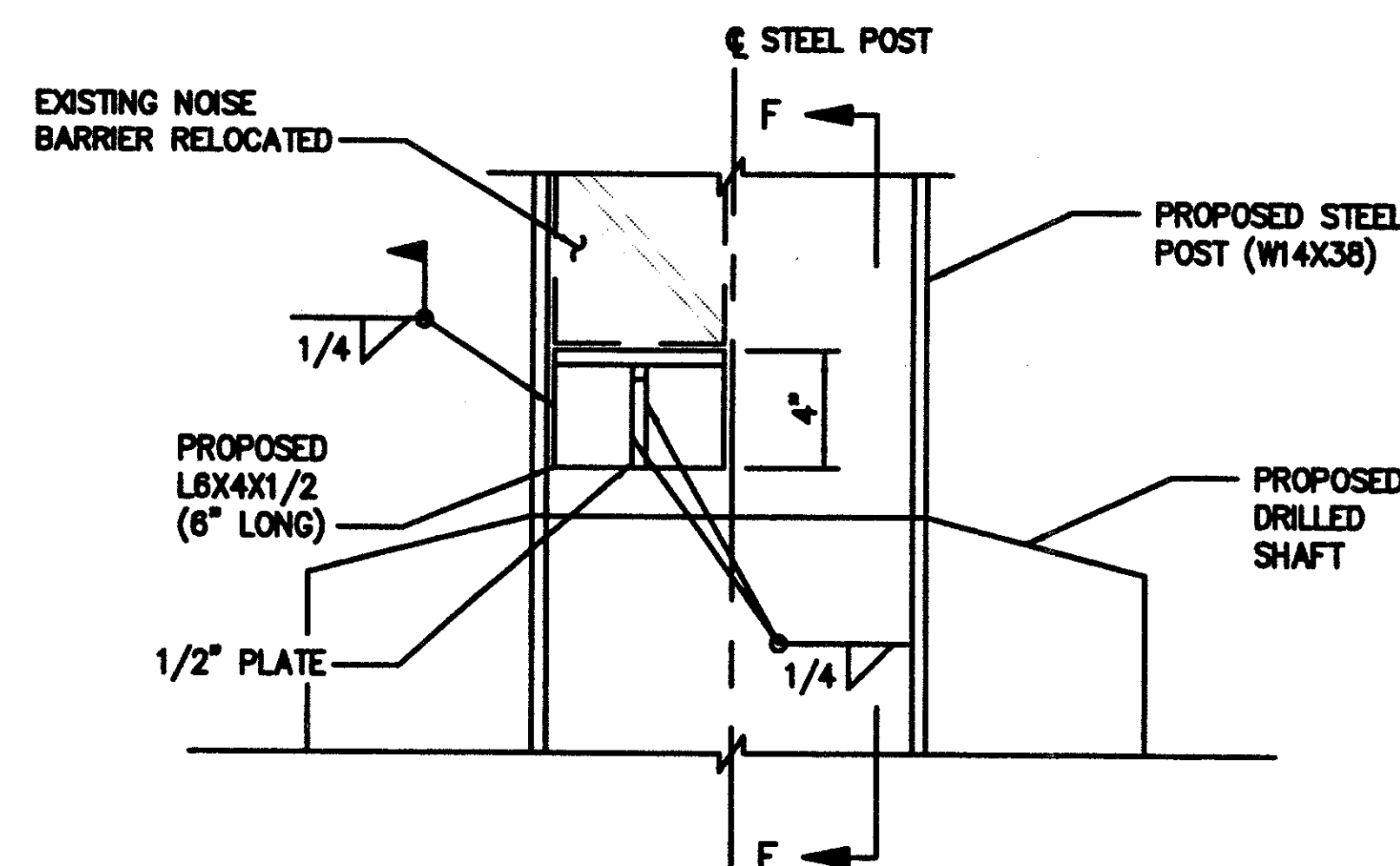
202
205



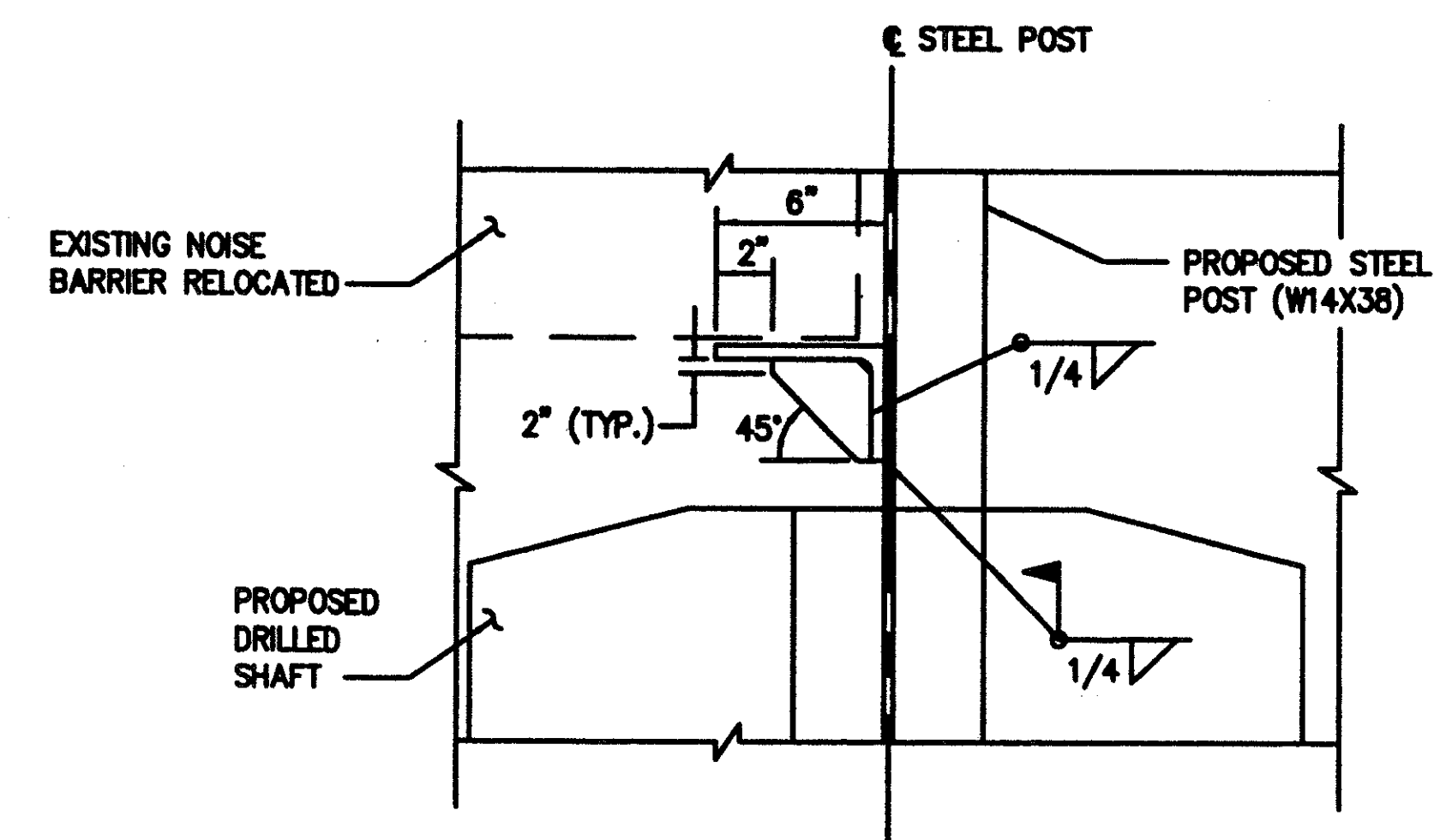
SECTION B-B
REFER TO SHEET 31 OF 37



SECTION C-C



DETAIL J



SECTION F-F

FOUNDATION TABLE							
LOCATION	POST NO.	TOP OF FOUNDATION		LOCATION	POST NO.	TOP OF FOUNDATION	
		ELEVATION	FOUND. DEPTH			ELEVATION	FOUND. DEPTH
		(FEET)	(FEET)			(FEET)	(FEET)
WALL NO. 1	①	800.92	14'-0"	WALL NO. 6	⑳	803.75	9'-0"
	②	800.92	14'-0"		㉑	801.40	9'-0"
	③	800.55	14'-0"		㉒	801.05	9'-0"
	④	800.55	14'-0"		㉓	800.70	9'-0"
	⑤	800.19	14'-0"	WALL NO. 7	㉔	817.35	12'-6"
WALL NO. 2	⑥	805.43	9'-0"		㉕	812.13	12'-6"
	⑦	804.58	9'-0"		㉖	810.92	12'-6"
	⑧	804.58	9'-0"		㉗	809.63	12'-6"
	⑨	807.15	9'-0"	WALL NO. 8	㉘	805.42	14'-0"
WALL NO. 3	⑩	803.40	13'-0"		㉙	805.97	14'-0"
	⑪	802.43	13'-0"		㉚	808.57	14'-0"
	⑫	801.43	13'-0"		㉛	809.15	14'-0"
	⑬	800.41	13'-0"		㉜	811.74	14'-0"
WALL NO. 4	⑭	802.39	9'-0"	WALL NO. 9	㉝	790.50	14'-0"
	⑮	801.55	9'-0"		㉞	788.19	14'-0"
	⑯	800.66	9'-0"		㉟	787.89	14'-0"
	⑰	797.43	9'-0"		㊱	787.89	14'-0"
WALL NO. 5	⑱	799.58	9'-0"	WALL NO. 10	㊲	797.53	15'-0"
	㉀	801.70	9'-0"		㊳	796.07	15'-0"
	㉁	805.83	9'-0"		㊴	796.07	15'-0"
					㊵	796.07	15'-0"
				WALL NO. 11	㊶	820.98	13'-0"
					㊷	820.98	13'-0"
					㊸	819.71	13'-0"
					㊹	819.71	13'-0"

NOTES

1. THE SUPPORT BRACKET SHOWN ON DETAIL "J" SHOULD BE USED TO SUPPORT ALL THE PROPOSED NOISE BARRIER PANELS.
2. IF WITHIN THE REQUIRED LENGTH OF THE FOUNDATION, BEDROCK IS ENCOUNTERED, THE DRILLED SHAFT FOUNDATION MAY BE TERMINATED AFTER 3 FEET OF PENETRATION INTO HARD BEDROCK OR 6 FEET OF PENETRATION INTO SOFT BEDROCK.
3. REFERRING TO THE BORINGS DRILLED FOR THIS PROJECT, HARD BEDROCK IS DEFINED AS BEDROCK ON WHICH AUGER REFUSAL WAS MET, AND ROCK CORING WAS PERFORMED. SOFT BEDROCK IS DEFINED AS BEDROCK WHICH WAS AUGERED, HOWEVER, SPLIT-SPOON REFUSAL, DEFINED AS RECORDING IN EXCESS OF 50 BLOWS WITH LESS THAN 6" OF PENETRATION, WAS ACHIEVED.

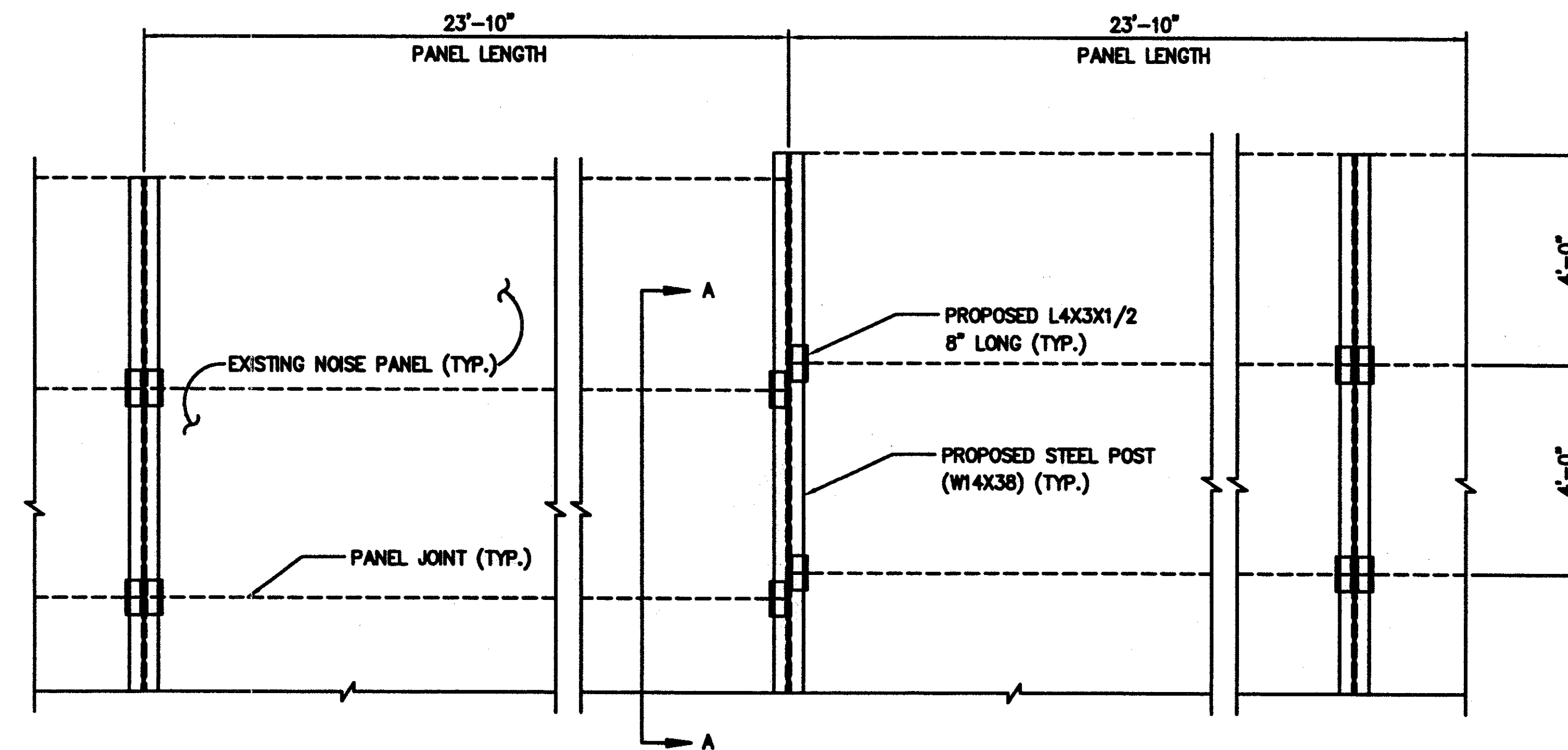
CALCULATED
MRMK
CHECKED
RYT

NOISE BARRIER FOOTING & DETAILS

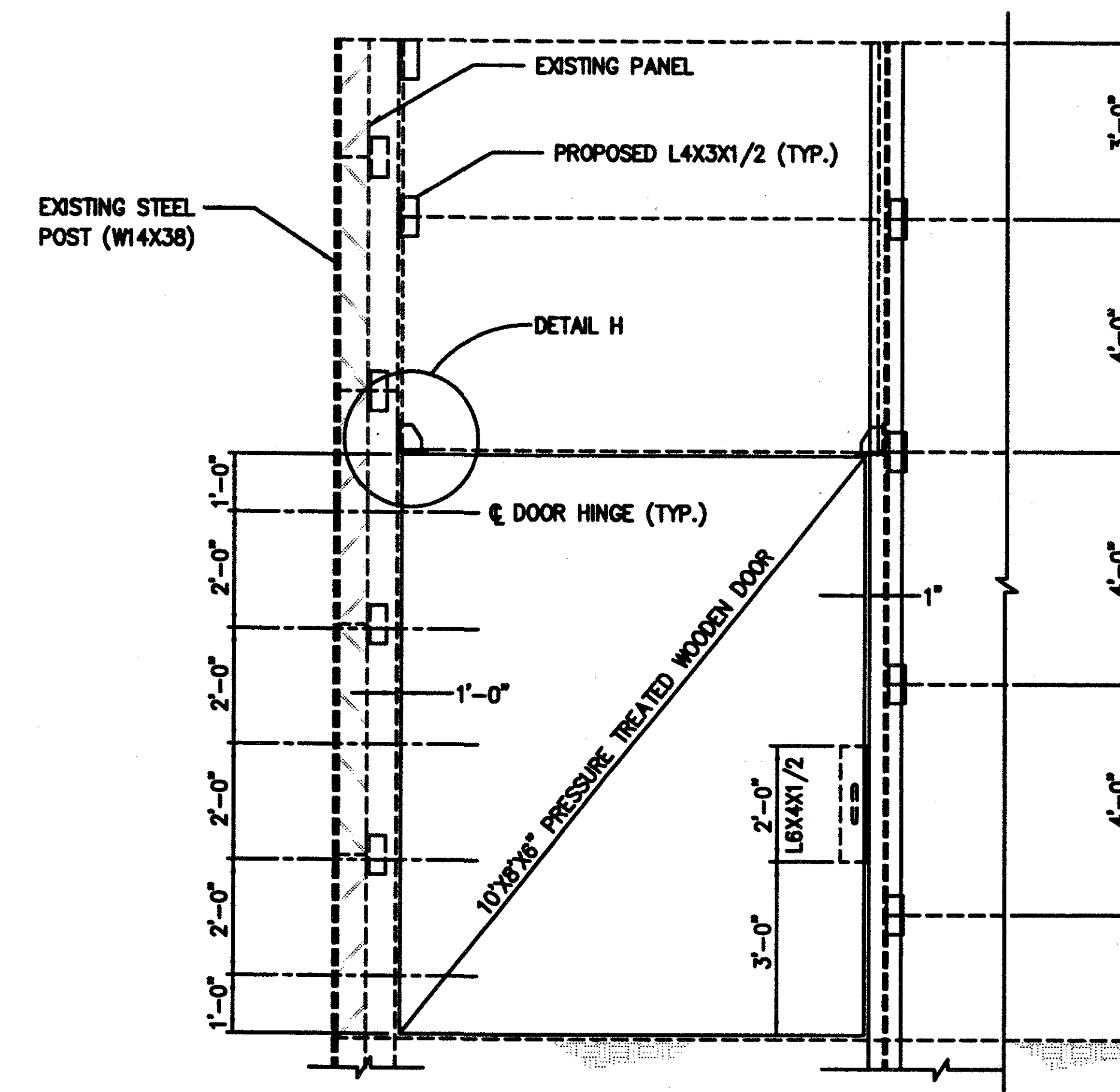
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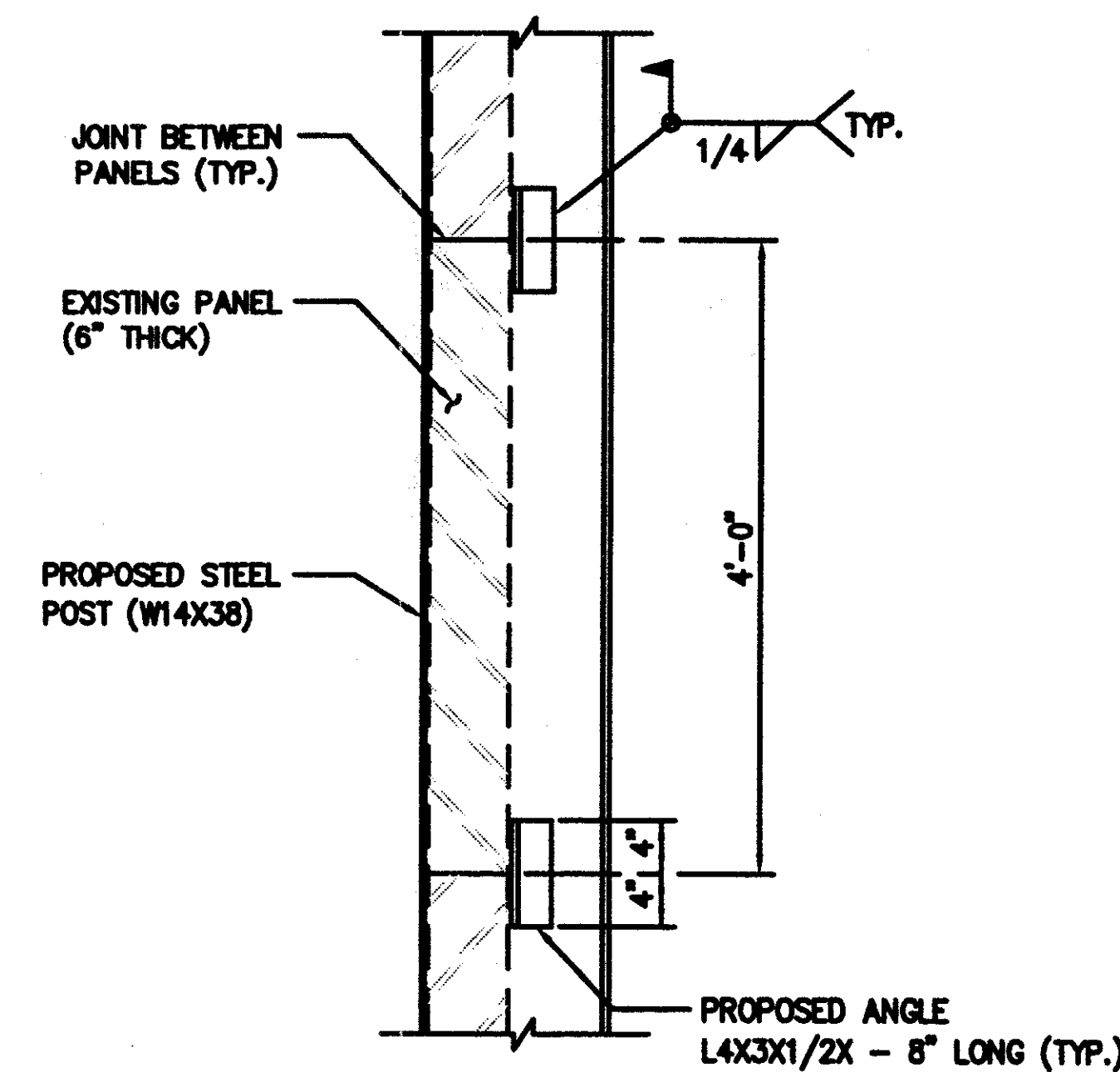
203
205



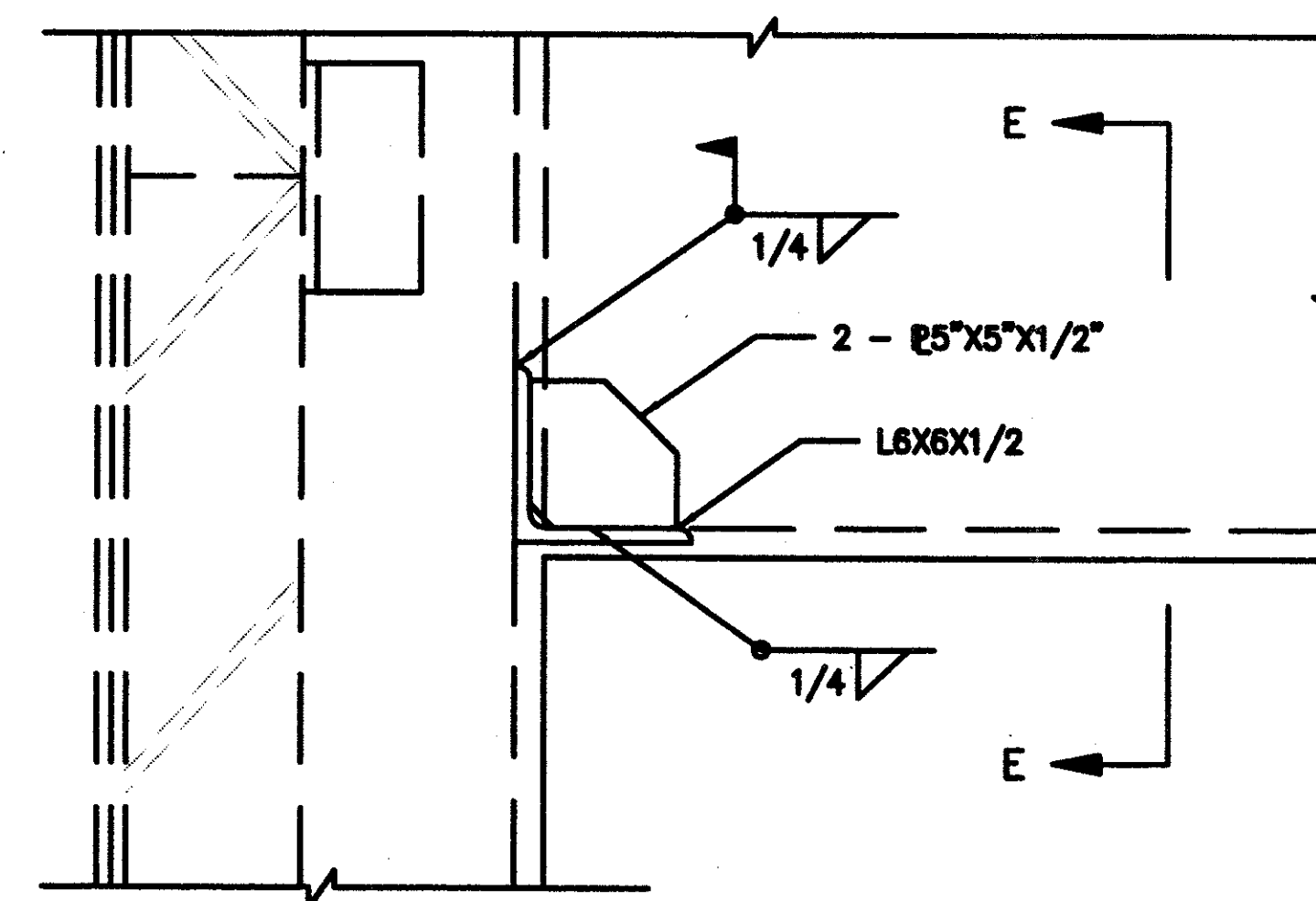
TYPICAL NOISE BARRIER ELEVATION



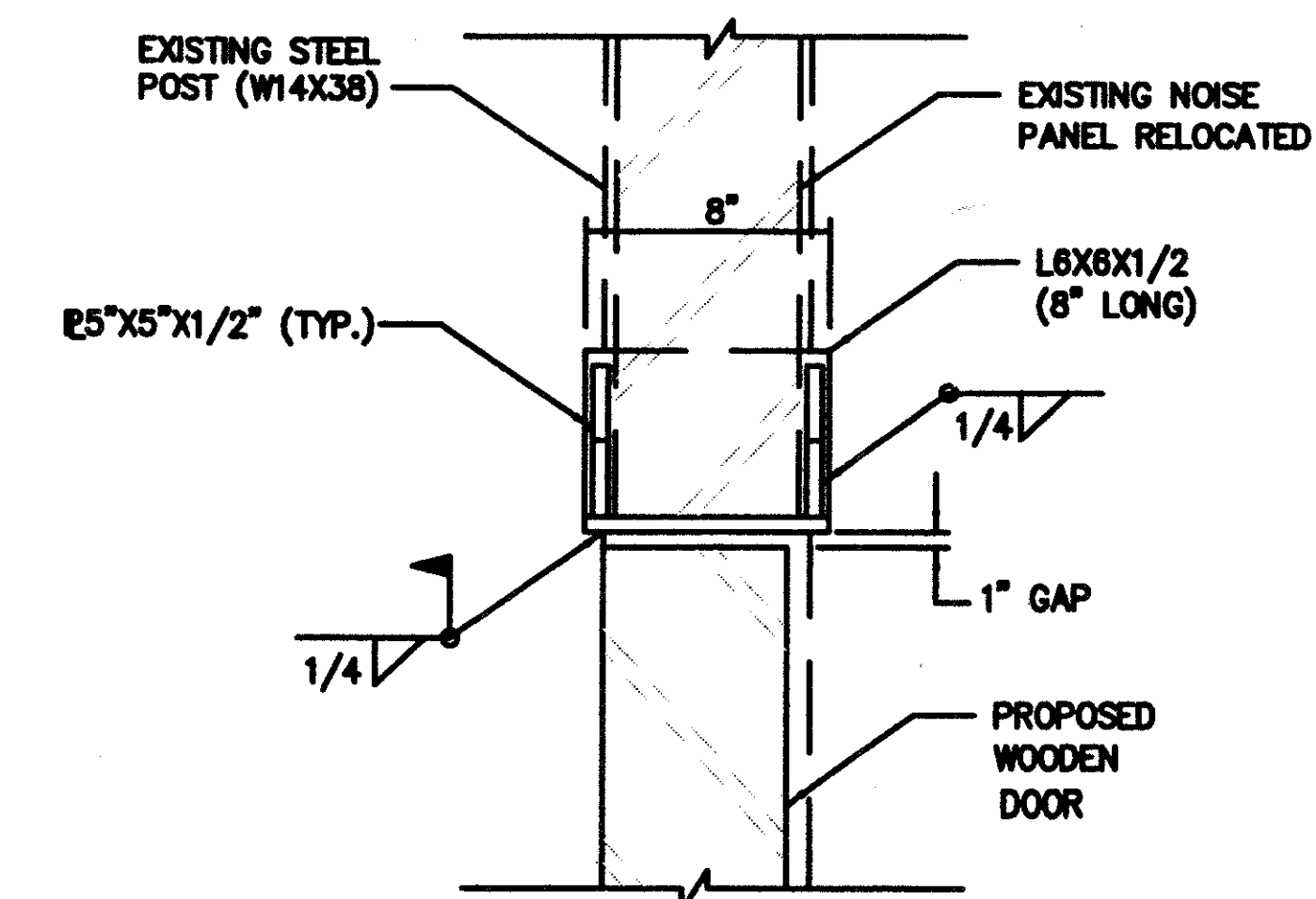
DOOR ELEVATION
(LOOKING NORTH)



SECTION A-A



DETAIL H



SECTION E-E

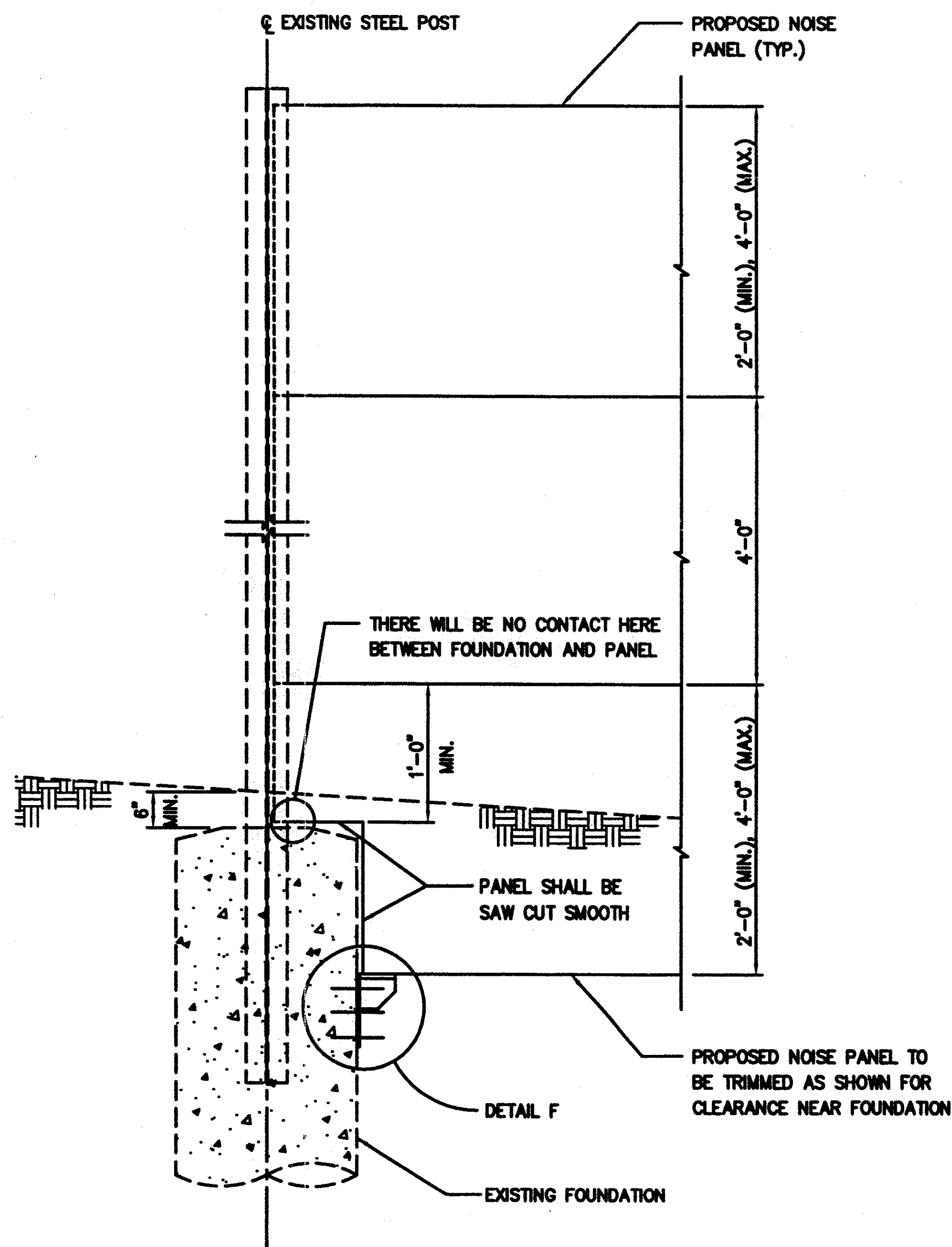
CALCULATED
MIRAK
CHECKED
RYT

NOISE BARRIER ELEVATION & DETAILS

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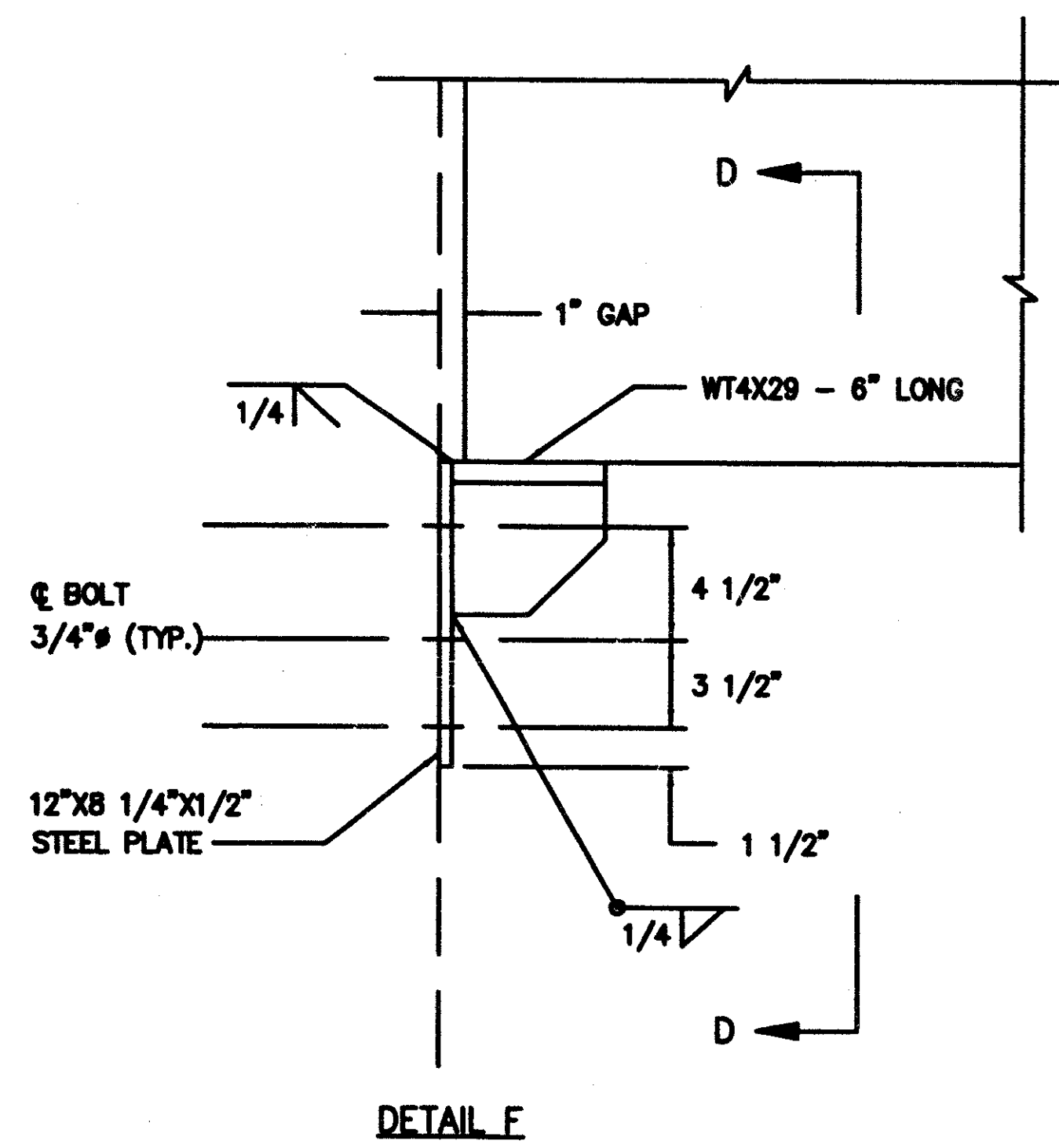
204
205



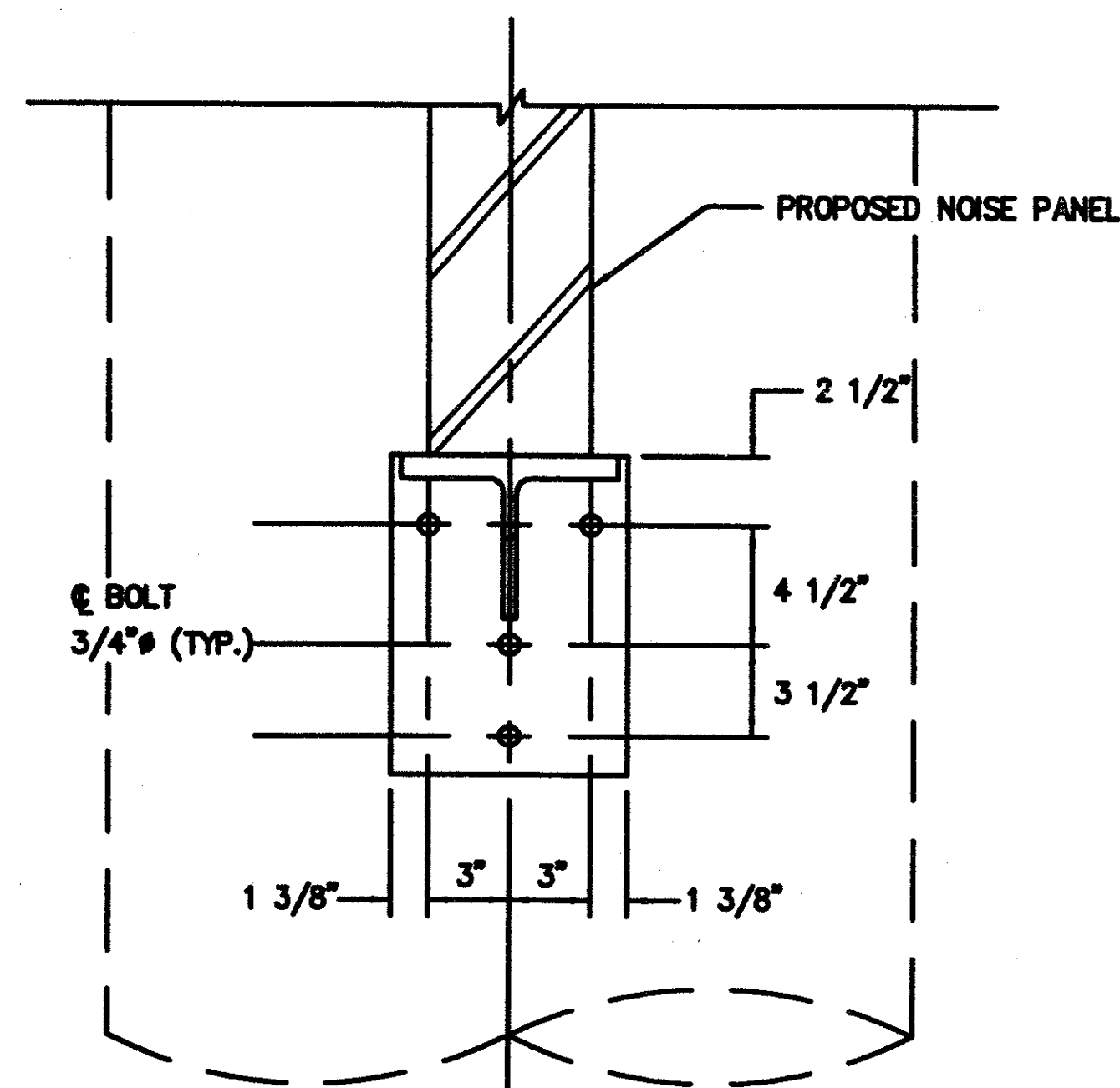
NOISE BARRIER SUPPORT DETAIL

NOTES

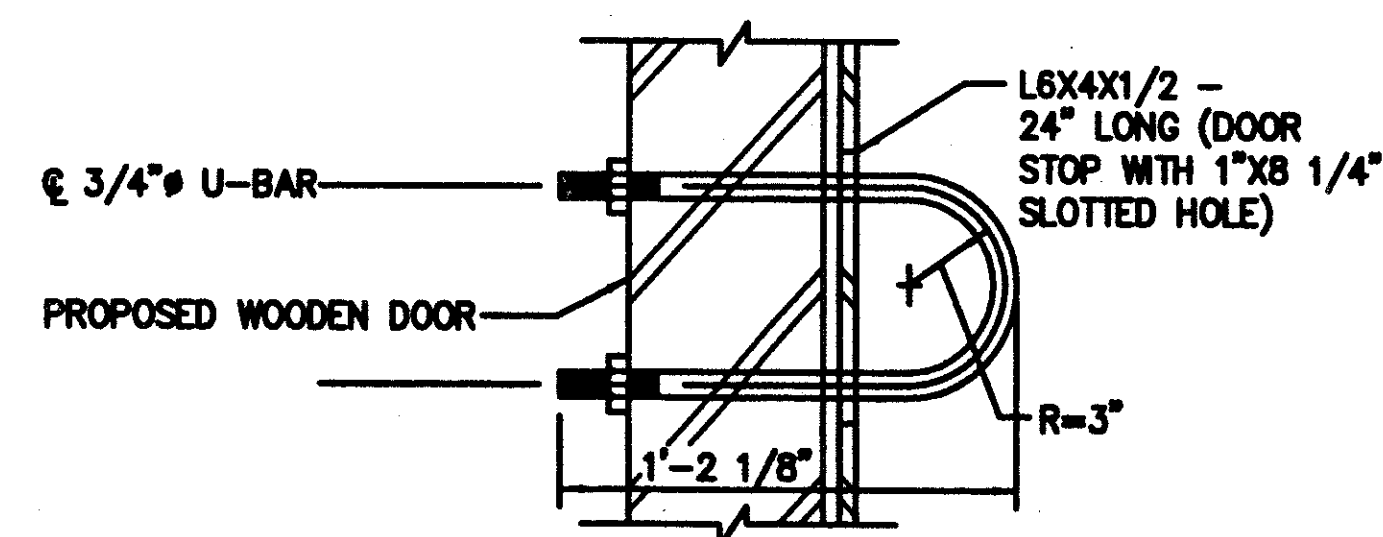
1. ALL ANCHOR BOLTS, U-BAR, NUTS, PLAIN WASHERS AND LOCKWASHERS SHALL BE GALVANIZED AND CONFORM TO THE PHYSICAL PROPERTIES OF ASTM A572 EXCEPT THAT THE MINIMUM ELONGATION SHALL BE 10%. THE CHEMICAL PROPERTIES ARE WAIVED.
2. THE GAP BETWEEN THE FACE OF THE EXISTING FOUNDATION AND THE BACK OF THE STEEL PLATE SHALL BE FILLED WITH GROUT.
3. THE NOISE PANEL SUPPORT SHOULD CARRY THE WEIGHT OF THE PANEL AND ANY CONTACT BETWEEN THE TOP OF THE EXISTING FOUNDATION AND THE BOTTOM OF THE TRIMMED PANEL SHOULD BE AVOIDED.



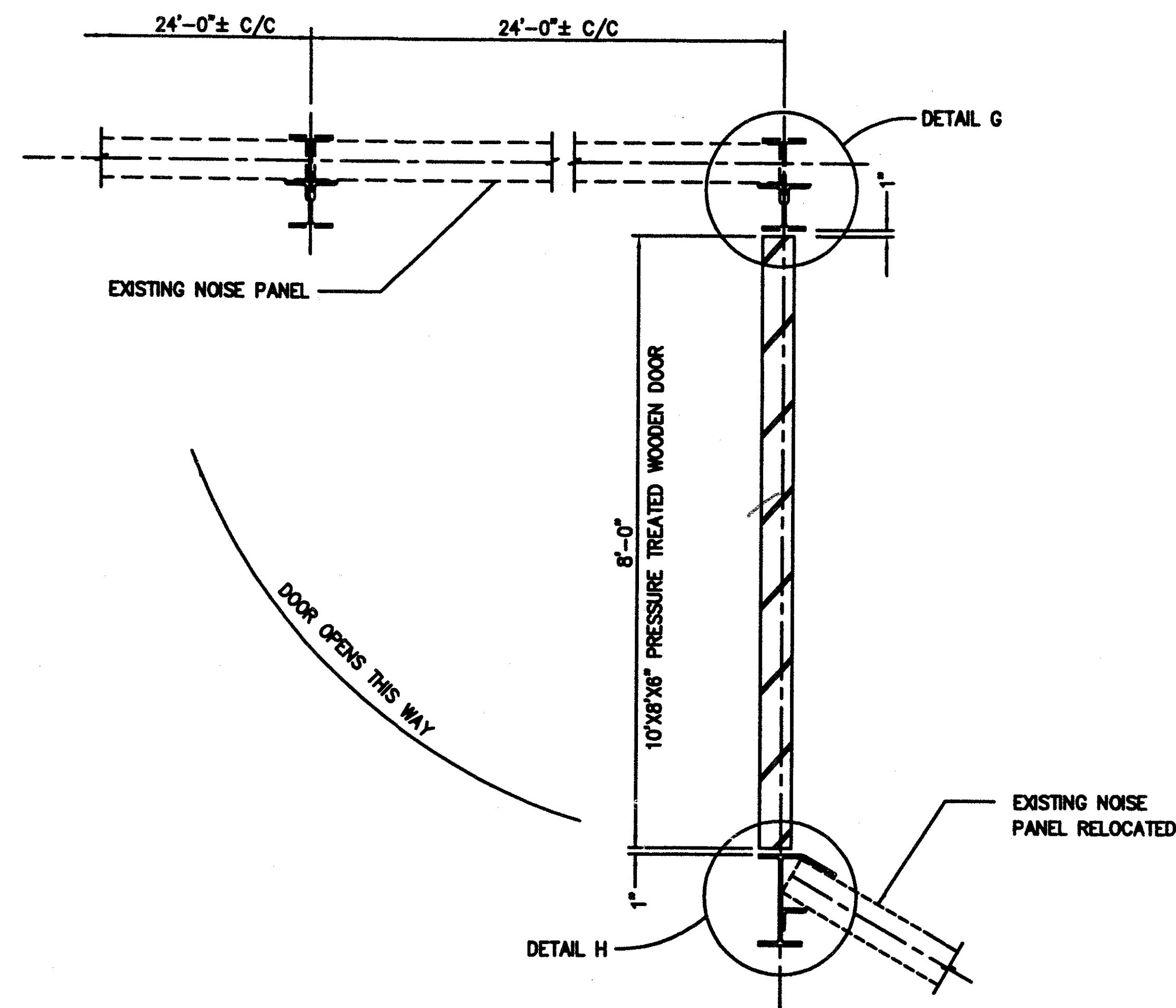
DETAIL F



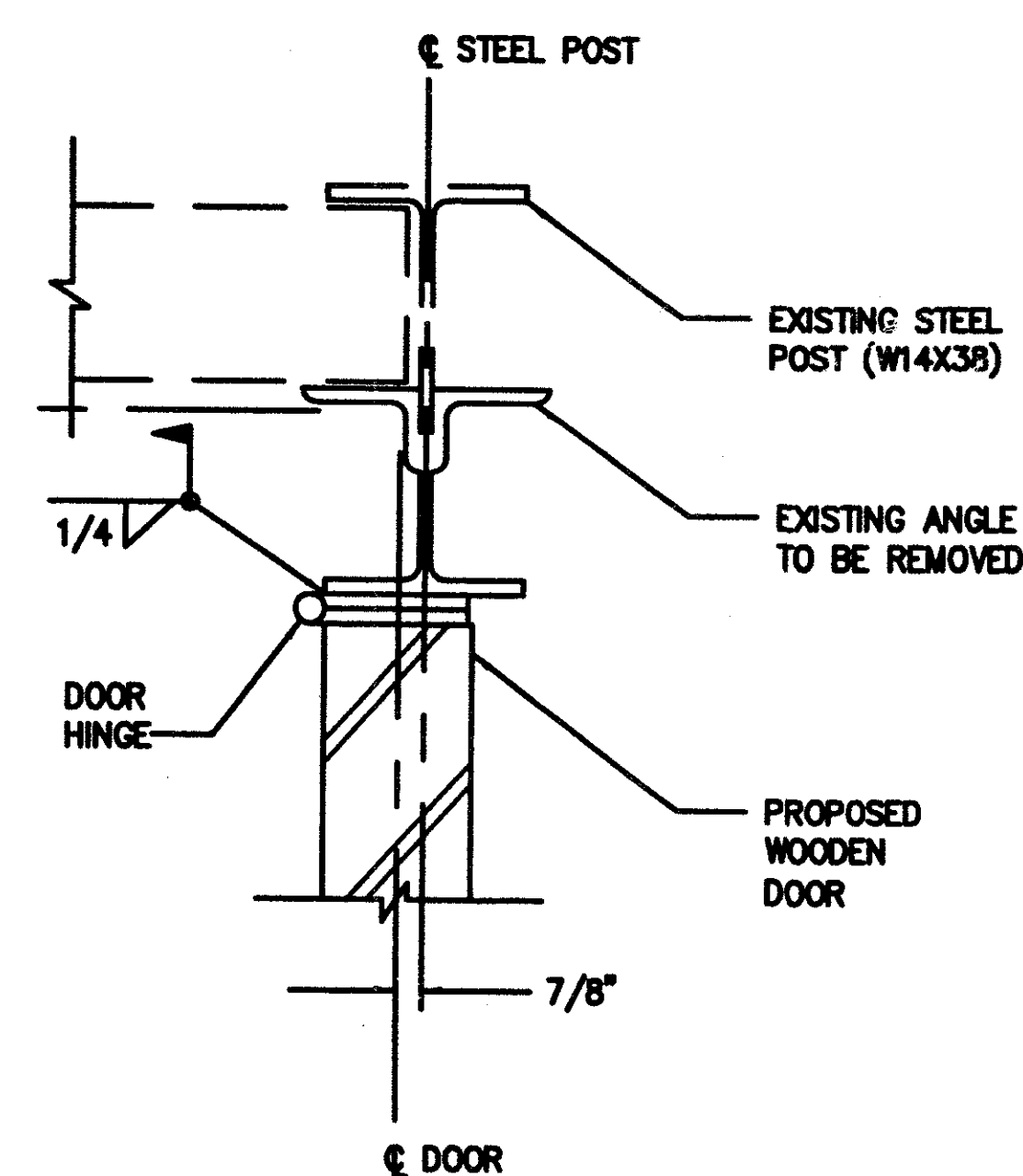
SECTION D-D



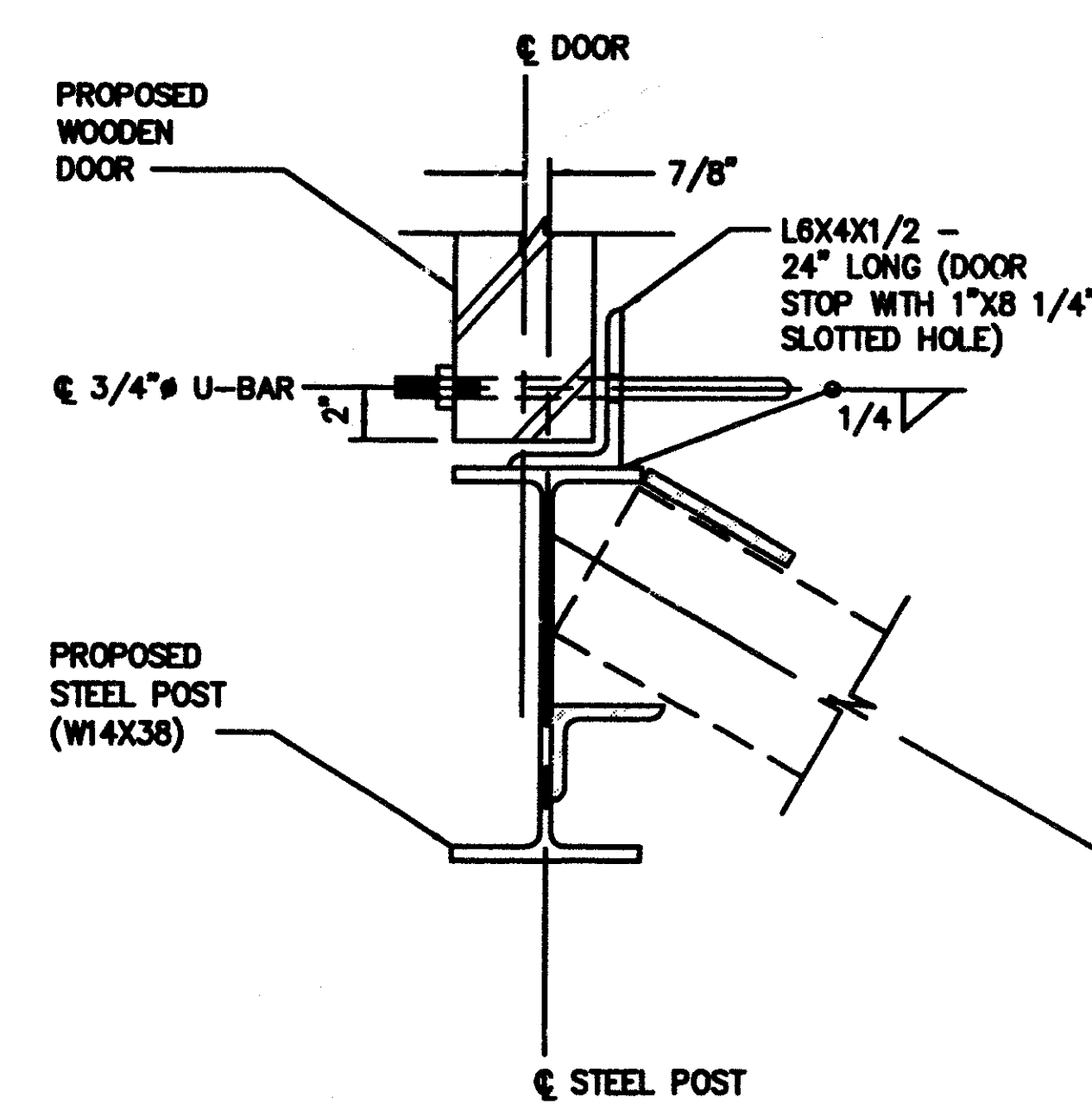
BOLT DETAIL



PLAN
(FOR DOOR ELEVATION, SEE SHEET 36 OF 37)



DETAIL G



DETAIL H
(FOR MORE INFORMATION, SEE SHEET 34 OF 37)

NOISE BARRIER DETAILS

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