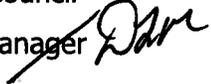


To: Members of Dublin City Council
From: Dana L. McDaniel, City Manager 
Date: March 19, 2015
Initiated By: Paul A. Hammersmith, P.E., Director of Engineering/City Engineer
Jean-Ellen M. Willis, P.E., Engineering Manager - Transportation
Re: Resolution No. 31-15 - Authorizing the City Manager to enter into a Letter of Agreement with Ohio Power Company for the Design and Construction of an AEP Overhead to Underground Relocation Project, in conjunction with the I-270/US 33 Interchange Upgrade, Phase 1 Project.

Summary

The City of Dublin's adopted 2015-2019 Capital Improvements Program includes the I-270 AEP Overhead to Underground Crossing project, which is identified as Project # ET 1525. Staff has worked closely with Ohio Power Company, an Ohio Corporation ("AEP Ohio") on design and construction drawings to bury two overhead electric power line locations that cross I-270 in the vicinity of the IGS Energy building, located at 6100 Emerald Parkway, and near the southern terminus of Shamrock Court. These two existing AEP power line locations tie into the AEP substation located in the southwest corner of the Emerald Parkway and Shier Rings Road intersection. See Figure 1 below to show location of project.

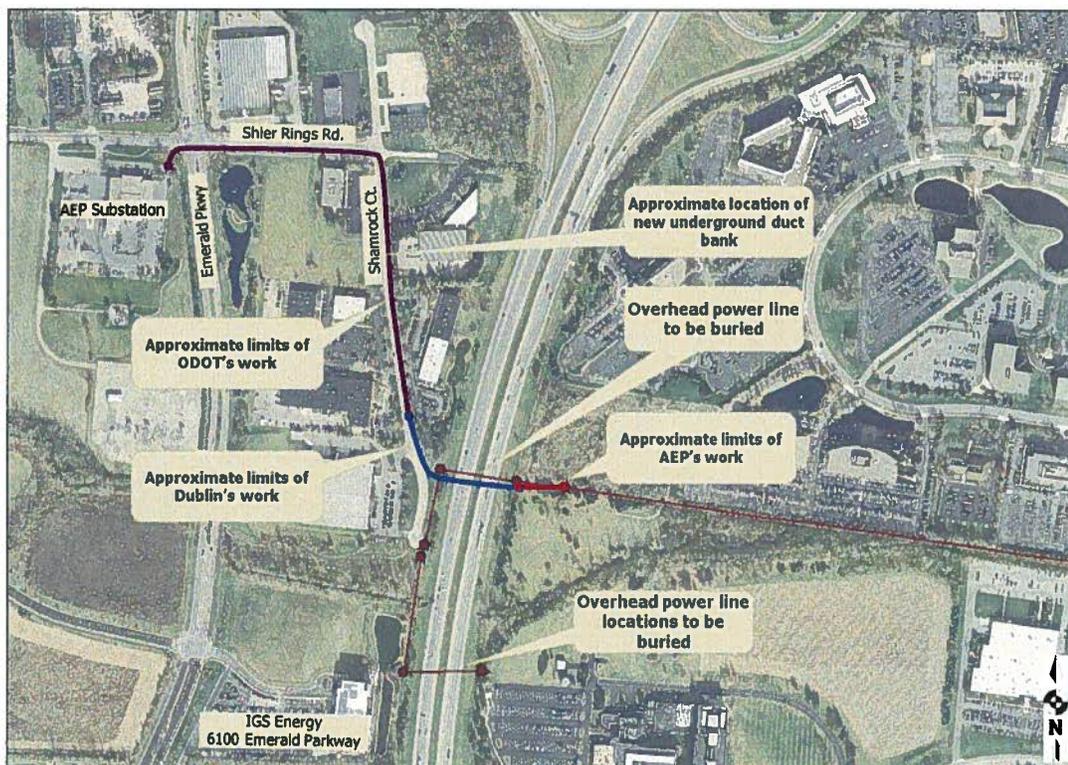


Figure 1: AEP Overhead to Underground Burial Project Location

Dublin has agreed to reimburse AEP Ohio for the portion of the cost of the project that buries the two overhead power line locations under I-270. While there is additional work that is being performed, the financial responsibility of the remaining work is of either the Ohio Department of Transportation (ODOT) or AEP Ohio. We will know actual expenses/costs of the project later this year and will receive invoices from AEP Ohio once the work is complete. The costs broken out by each agency for the overall project is included in the Table below.

Table 1: Financial Responsibility by Agency

Agency	Amount
ODOT	\$1,250,000
City of Dublin	\$1,170,000
AEP Ohio	\$100,000
Total	\$2,530,000

Recommendation

Staff recommends approval of Resolution No. 31-15, Authorizing the City Manager to enter into a Letter of Agreement with Ohio Power Company for the Design and Construction of an AEP Overhead to Underground Relocation Project, in conjunction with the I-270/US 33 Interchange Upgrade, Phase 1 Project.

RECORD OF RESOLUTIONS

Dayton Legal Blank, Inc., Form No. 30045

Resolution No. 31-15 Passed _____, 20____

A RESOLUTION AUTHORIZING THE CITY MANAGER TO ENTER INTO A LETTER OF AGREEMENT WITH OHIO POWER COMPANY FOR THE DESIGN AND CONSTRUCTION OF AN AEP OVERHEAD TO UNDERGROUND RELOCATION PROJECT, IN CONJUNCTION WITH THE I-270/US33 INTERCHANGE UPGRADE PHASE 1 PROJECT.

WHEREAS, the City of Dublin's adopted 2015-2019 Capital Improvements Program includes the I-270 AEP Overhead to Underground Crossing project; and

WHEREAS, the City of Dublin has worked closely with AEP Ohio on design and construction drawings to bury two overhead power line locations that cross I-270 in the vicinity of the IGS Energy building and near the southern terminus of Shamrock Court; and

WHEREAS, Dublin has agreed to reimburse AEP Ohio to bury two overhead power line locations that cross I-270 in conjunction with the I-270/US33 Interchange Upgrade, Phase 1 project; and

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Dublin, _____ of its elected members concurring, that:

Section 1. The City Manager is hereby authorized to enter into a Letter of Agreement with AEP Ohio for the reimbursement of the portion of the cost of the total project to relocate the two overhead power line locations under I-270, which is located within the City of Dublin, in substantially the same form as attached, with changes not inconsistent with the Resolution and not substantially adverse to the City and which shall be approved by the City Manager and Director of Finance. The approval of changes thereto by those officials, and their character as not being substantially adverse to the City, shall be evidenced conclusively by their execution thereof.

Section 2. The City Manager, the Clerk of Council, the Director of Law, the Director of Finance, or other appropriate officers of the City are hereby authorized to prepare and sign all agreements and instruments and to take any other actions as may be appropriate to implement this Resolution. The City Manager and the Director of Finance are also authorized, for and in the name of the City, to execute any amendments to the Letter of Agreement, which amendments are not inconsistent with the Resolution and not substantially adverse to this City.

Section 3. This Resolution shall take effect upon adoption in accordance with Section 4.04(a) of the Revised Charter.

Passed this _____ day of _____, 2015.

Mayor - Presiding Officer

ATTEST:

Clerk of Council

Letter of Agreement

This Letter of Agreement is entered into as of March ____, 2015 (the "Effective Date"), between Ohio Power Company, an Ohio corporation ("AEP Ohio") and the City of Dublin, Ohio, a political subdivision of the State of Ohio (the "City").

Background Information

- A. The City has worked with AEP Ohio to determine the scope of work and construction drawings to bury two overhead power line locations over I-270, one crossing I-270 near the IGS Energy building, and the second crossing I-270 near the southern terminus of Shamrock Court, approximately 800-feet north of the IGS crossing location ("The Project").
- B. The City has requested, and AEP Ohio has agreed, to bury these two overhead power line locations under I-270 (the "Dublin Work") to be consistent with current City policy to bury all utility lines as becomes practical in the course of larger construction projects.
- C. The I-270/US 33 Interchange Improvement Project, Phase 1, FRA-270-17.28 PID 88310, identified a utility conflict with the interchange design and requires the power lines to be relocated as a result of the improvement project.
- D. AEP Ohio has estimated the cost of the Project to be \$2,530,000, of which the City has agreed to pay \$1,170,000 (the "AEP Work Cost").
- E. The City acknowledges that it is responsible for the portion of the Project that buries the two overhead power line locations under I-270, identified herein as the Dublin Work. The City is not responsible for any costs associated with adding additional circuits, burying or relocating the power line beyond the proposed I-270 crossing location, or relocations or installation of any infrastructure associated with burying or relocating the power line beyond the proposed I-270 location.
- F. The parties hereto desire to set forth the terms upon which the City will reimburse AEP Ohio for the AEP Work Cost.

Statement of Work

The parties hereto acknowledge the accuracy of the above background information and agree as follows:

1. The Project. AEP Ohio shall proceed with the Project, including the Dublin Work, pursuant to the plans and specifications attached hereto as Exhibit A. AEP Ohio shall pay the Contractors all expenses associated with the Dublin Work and shall present to the City all invoices and proof of payment of such invoices that are associated with the Dublin Work. The City shall reimburse AEP Ohio for all payments made by AEP Ohio that are associated with the Dublin Work within thirty (30) days of receipt of such invoices.

2. Supervision of Contractors. AEP Ohio shall supervise the Contractors pursuant to the Project contracts with such Contractors. AEP Ohio shall regularly inspect the progress of the Dublin Work and shall immediately notify the City if AEP Ohio determines that the design specifications for the Dublin Work are not being met.

3. Title to the AEP Work Facilities. Upon completion of the Project and the City's reimbursement to AEP Ohio for the Dublin Work, AEP Ohio shall remain the owner of the AEP Work facilities. It will be AEP Ohio's responsibility to ensure that any and all Contractors release any and all liens associated with the Dublin Work. Once the City has made final payment, the City will seek a lien waiver from AEP Ohio releasing the City from further financial obligation. AEP shall issue the lien waiver within thirty (30) days of the City's request for such waiver.

4. Cost Overruns. The City shall not be responsible for any expenses relating to the Dublin Work that exceeds \$1,170,000, unless the City approves such cost increase in writing, executed by the parties hereto and makes reference to this Letter of Agreement.

5. Jurisdiction. This Letter of Agreement shall be governed by the laws of Ohio. Any disputes arising herein shall be adjudicated at the Court of Common Pleas of Franklin County, Ohio.

This Letter of Agreement is accepted by the parties hereto and executed as of the date set forth above.

OHIO POWER COMPANY

By: _____

CITY OF DUBLIN, OHIO

By: _____

Exhibit A

AEP Overhead to Underground Relocation Project

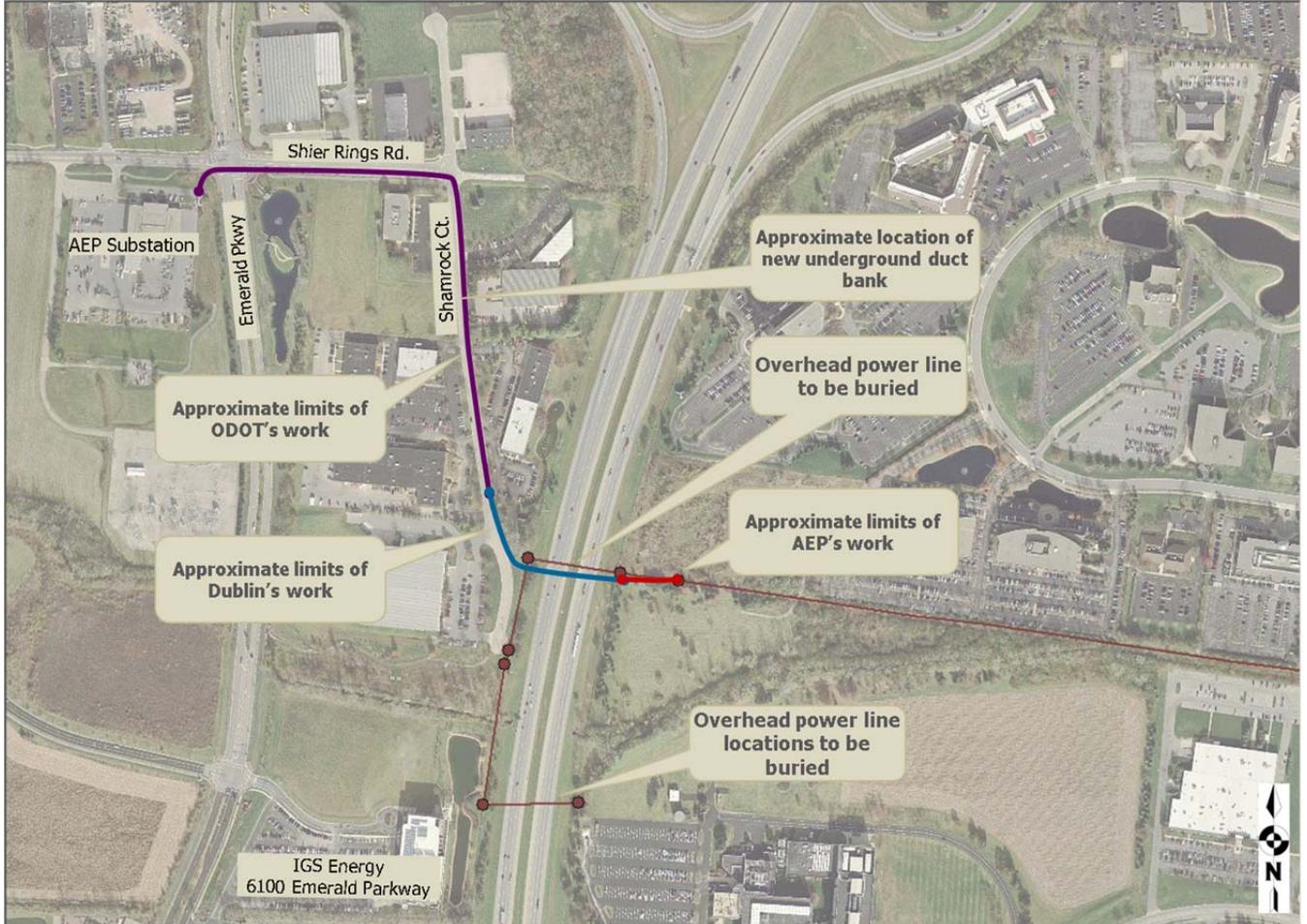
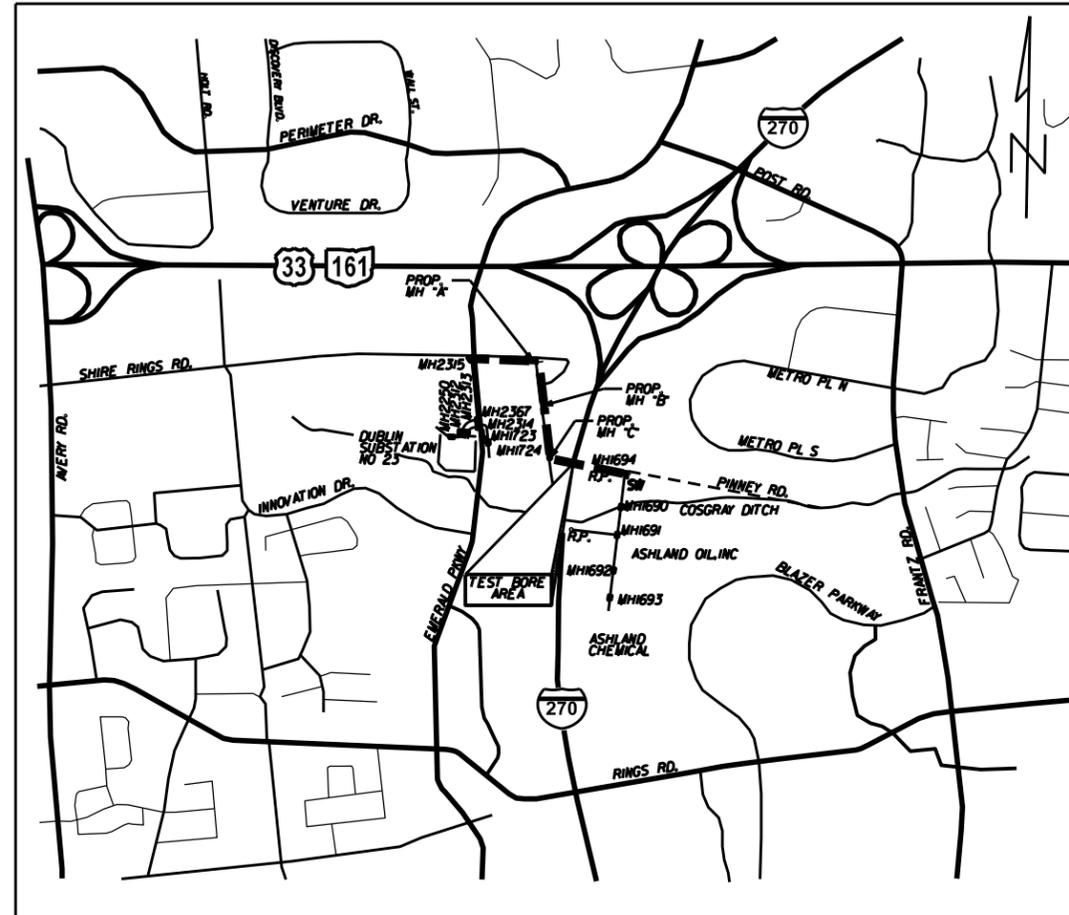


Figure 1: Project Location Map

EXHIBIT B

DUBLIN, OHIO I-270 RELOCATION PROJECT SHIER-RINGS RD. & SHAMROCK CT. JULY 2014

BENCH MARK-2
CONC. MONUMENT
C/L I-270 NEAR
STA 661+60.56
N: 763171.3990
E: 790320.9890
ELEV: 901.959



LOCATION MAP
N.T.S

GENERAL NOTES (APPLICABLE TO TEST BORINGS OR CONSTRUCTION):

1. ANY UNRECORDED ACTIVE CONNECTION TO SANITARY SEWERS, FOOTER DRAINS OR YARD DRAINS DISTURBED DURING CONSTRUCTION SHALL BE REPAIRED IN ACCORDANCE WITH CITY SPECIFICATIONS.
2. ALL SIGNS, FENCES, SHRUBS, DRAINAGE FACILITIES, INDIVIDUAL WATER AND WASTEWATER SYSTEMS OR OTHER FACILITIES DISTURBED BY THIS WORK SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.
3. THE LOCATION, SIZE & DEPTH OF EXISTING OR PROPOSED UTILITIES, PIPES & OTHER UNDERGROUND APPURTENANCES REPRESENTS THE BEST INFORMATION AVAILABLE, BUT THE CORRECTNESS & COMPLETENESS THEREOF CANNOT BE ASSURED. THE LOCATIONS OF ALL SUCH UNDERGROUND FACILITIES SHALL BE FIELD VERIFIED PRIOR TO STARTING CONSTRUCTION.
4. I-270 CROSSING BASED UPON ODOT DRAWING FRA-270-IT-20 (STAGE 4) REC'D 8-18-2014.
5. FIELD LOCATE ALL WATER, GAS, SEWER, ELECTRIC AND SEWER SERVICES PRIOR TO EXCAVATING.
6. THIS PROJECT IS LOCATED COMPLETELY WITHIN THE CITY OF DUBLIN, OHIO.
7. EXISTING GROUND ELEVATIONS AT TEST BORE LOCATIONS PER CENTRAL SURVEY DATA RECEIVED 10-2014.
8. PLAN & PROFILE REVISED PER OCTOBER, 2014 PRELIMINARY SURVEY BY CENTRAL SURVEY.

FOR THE DIVISION OF WATER

EXPOSE ALL WATER LINES AT ALL CROSSINGS TO VERIFY DEPTH & LOCATION PRIOR TO EXCAVATION.

THE CUSTOMER IS RESPONSIBLE FOR LOCATION ALL CUSTOMER-OWNED SERVICE LINES. THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL & VERTICAL LOCATION OF ANY CITY OR CUSTOMER-OWNED MAIN OR SERVICE LINE THAT MAY BE AFFECTED BY THE PROPOSED CONSTRUCTION ACTIVITIES. FIELD VERIFICATION SHALL TAKE PLACE PRIOR TO ANY ACTIVITY THAT MAY JEOPARDIZE THE INTEGRITY OF THE FACILITY & AT A LOCATION NEAREST THE POINT OF ANY CONFLICT.

ANY REPAIR TO CITY OR CUSTOMER-OWNED WATER LINES IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL CONTACT THE CITY OF COLUMBUS, DIVISION OF WATER AT (614) 645-7788 PRIOR TO ANY REPAIRS ON CITY-OWNED WATER FACILITIES. REPAIRS TO CITY WATER LINES MUST BE MADE ONLY BY A CITY OF COLUMBUS LICENSED WATER CONTRACTOR.

THE CONTRACTOR SHALL MAINTAIN 3' MIN. HORIZONTAL & 1' MIN. VERTICAL CLEARANCE FROM THE OUTSIDE DIAMETER OF ALL WATER LINES & 8' MIN. CLEARANCE FROM ANY 'TEE' CONNECTION, BENDS & ENDS OF THE WATER LINES AS MEASURED FROM THE OUTSIDE DIAMETER OF THE WATER LINE TO THE NEAREST EDGE OF THE FACILITY BEING PLACED.

INDEX OF SHEETS

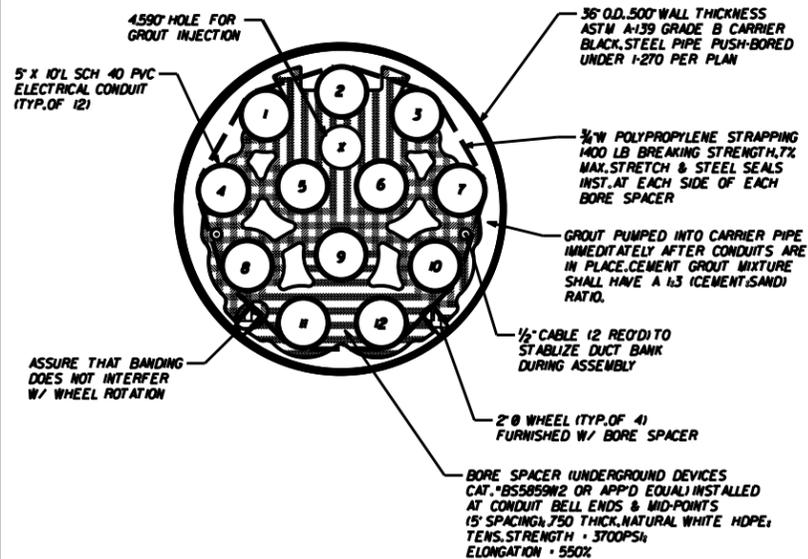
LOCATION MAP & NOTES	_____	SHEET 0
MISC. DETAILS	_____	SHEET A
BORE DETAILS	_____	SHEET B
PLAN & PROFILE	_____	SHEETS 1 THRU 6
M.O.T. NOTES & PLANS	_____	SHEETS 7 THRU 13



DUBLIN, OHIO
I-270 RELOCATION
Duct & Manhole
Installation
JULY 2014
TITLE SHEET

D			CMM	12/1/14	ADDED M.O.T. SHEETS 7-13	ISSUED & DATED	DATE
C			CMM	10/20/14	REVISED PER SURVEY	ISSUED & DATED	DATE
B			CMM	10/14/14	ISSUED FOR TB #2 & 4 ONLY SEE SHT. 5	ISSUED & DATED	DATE
A			CMM	5/22/14	PRELIMINARY ISSUE	ISSUED & DATED	DATE
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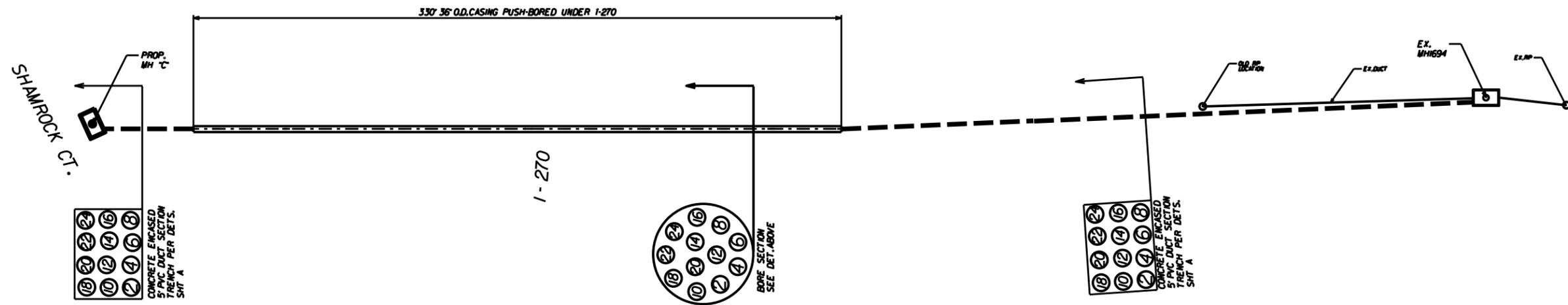




BORE SECTION
N.T.S.

NOTES:

1. CASING PIPE SHALL BE INSTALLED IN A MANNER THAT IS STRAIGHT & TRUE. MAINTAIN ALIGNMENT & DEPTH AS SHOWN ON THE PLANS.
2. CASING PIPE SECTIONS SHALL BE FULL-RING WELDED TO PRECEDING SECTIONS BY CERTIFIED WELDERS. WELDS SHALL BE IN ACCORDANCE WITH ANSI/MWVA C206.
3. THE CASING I.D. MUST BE SMOOTH & FREE FROM RIDGES. PROJECTIONS OR SEAMS THAT MIGHT INTERFERE WITH ROTATION OF THE WHEELS ON THE BORE SPACERS.
4. USE ONE BORE SPACER FOR EVERY 5' OF DUCT BANK. ASSURE THAT BANDING DOES NOT IMPEDE WHEEL ROTATION.
5. BORE SPACERS MUST BE INSTALLED PERPENDICULAR TO THE CONDUITS TO MINIMIZE TENDENCY TO ROTATE. USE STABILIZATION CABLES TO AVOID ROTATION.
6. BORE SPACERS MUST BE HELD IN PLACE RELATIVE TO THE CONDUIT. AS THE GROUT IS PUMPED INTO PLACE, THE COMPARTMENTS FORMED BETWEEN THE SPACERS ARE SEQUENTIALLY FILLED, PLACING A TEMPORARY THRUST LOAD ON EACH BORE SPACER.
7. AFTER CONDUIT/SPACER ASSEMBLY HAS BEEN PULLED INTO POSITION WITHIN THE CASING, BUT PRIOR TO PUMPING THE GROUT INTO THE VOIDS, VERIFY THE THE ASSEMBLY HAS NOT ROTATED, AND THAT ALL CONDUITS ARE INTACT.
8. THE DUCT BANK MUST BE HELD IN POSITION AT BOTH ENDS DURING THE GROUTING OPERATION, THIS IS TO ACCOMMODATE POSSIBLE UNEVEN THRUST LOADS GENERATED DURING THE GROUTING OPERATION.
9. CAREFULLY MONITOR GROUT PRESSURE TO AVOID COLLAPSE OF THE CONDUITS DUE TO HYDRAULIC PRESSURE OF THE GROUT.
10. ACTUAL QUANTITY OF GROUT USED & PRESSURE ARE TO BE RECORDED.



BORE PLAN
N.T.S.

NOTE:

OTHER TRANSITIONS ARE POSSIBLE. POSITIONS OF DUCTS ENTERING & EXITING THE CASING MUST BE AS SHOWN ABOVE, & MUST MATCH AT EACH END.

SEE SHT. 5 FOR PLAN & PROFILE

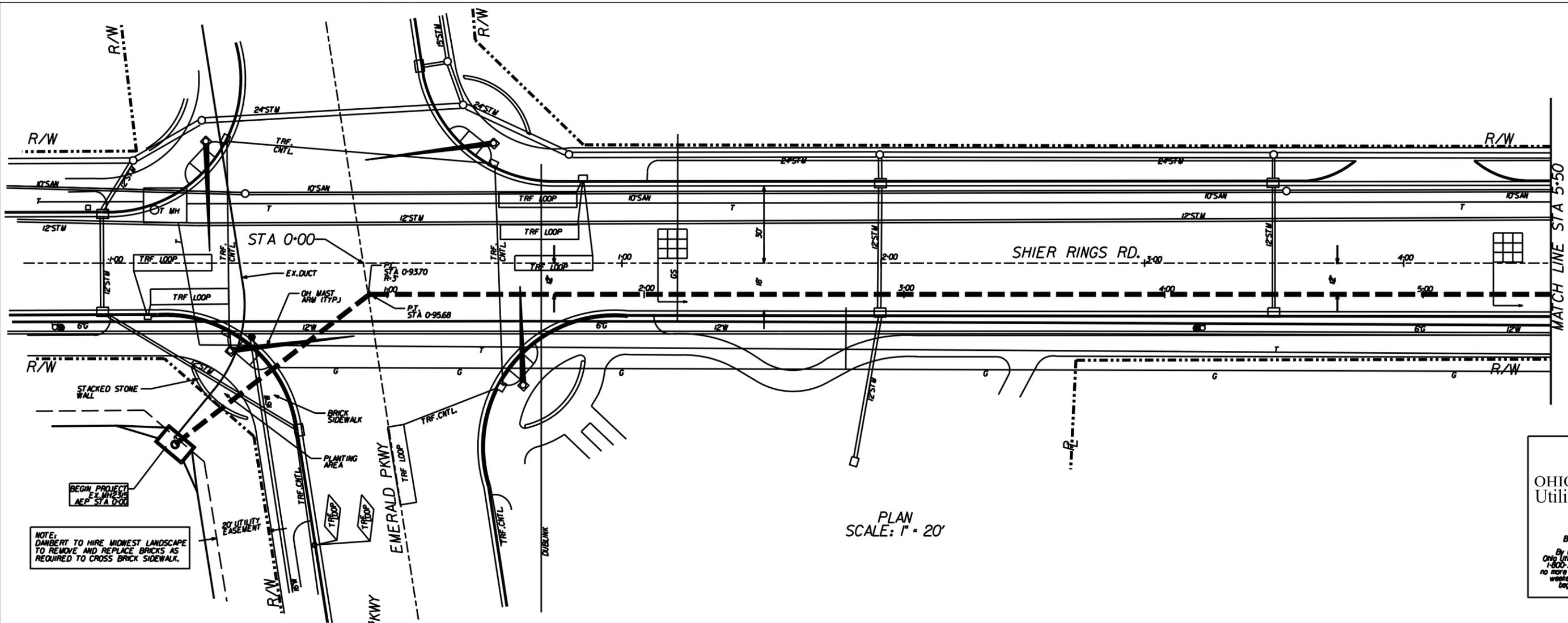
OHIO Utilities Protection SERVICE
Call Before You Dig
BEFORE YOU EXCAVATE!!
WARNING
By law, everyone must contact the Ohio Utilities Protection Service 8-1-1, or 1-800-352-2764, at least 48 hours, but no more than 10 working days (excluding weekends and legal holidays) before beginning any digging project.

DUBLIN, OHIO
I-270 RELOCATION
Duct & Manhole Installation
JULY 2014

BORE DETAILS
DANBERT

ISSUED & APPROVED BY
DATE
10/6/2014

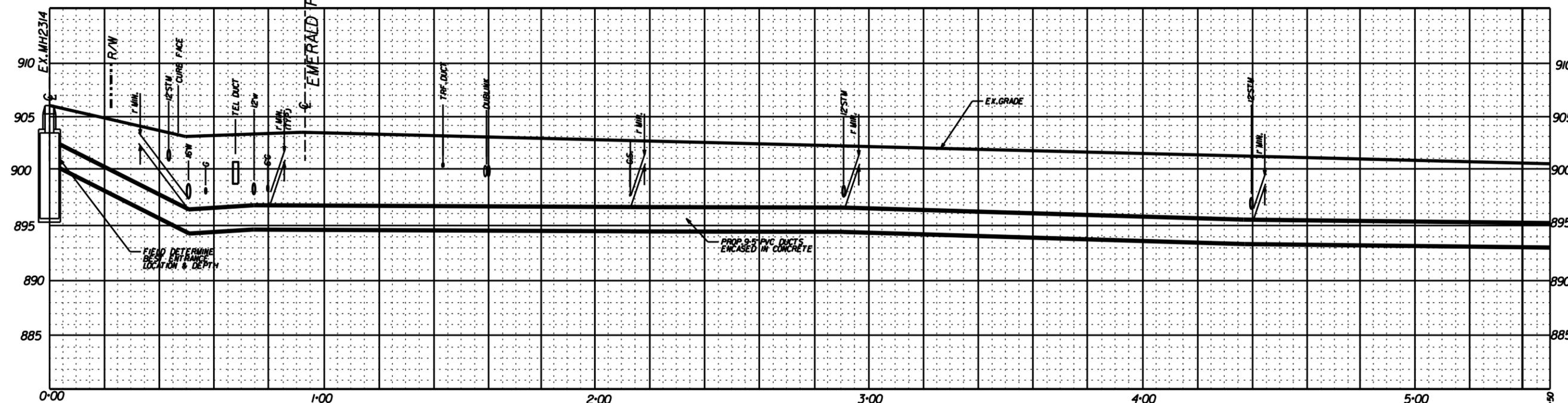
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NOTE: DANBERT TO HIRE MIDWEST LANDSCAPE TO REMOVE AND REPLACE BRICKS AS REQUIRED TO CROSS BRICK SIDEWALK.

PLAN SCALE: 1" = 20'

OHIO Utilities Protection SERVICE
 Call Before You Dig
BEFORE YOU EXCAVATE!
 WARNING
 By law, everyone must contact the Ohio Utilities Protection Service 8-1-1, or 1-800-368-2764, at least 48 hours, but no more than 10 working days (excluding weekends and legal holidays) before beginning any digging project.

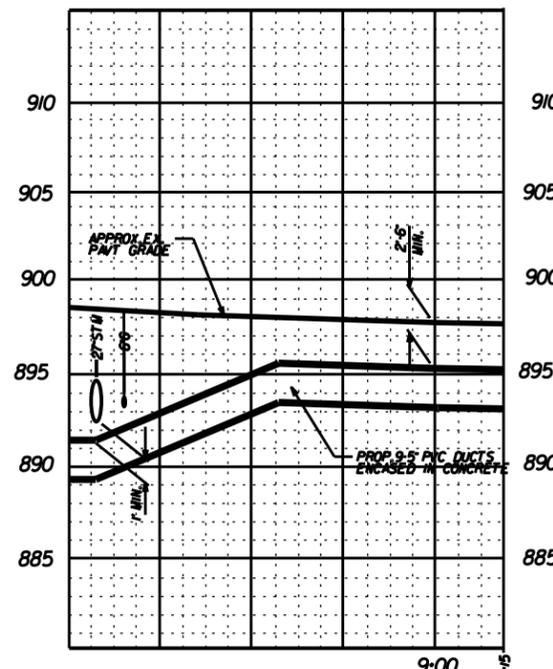
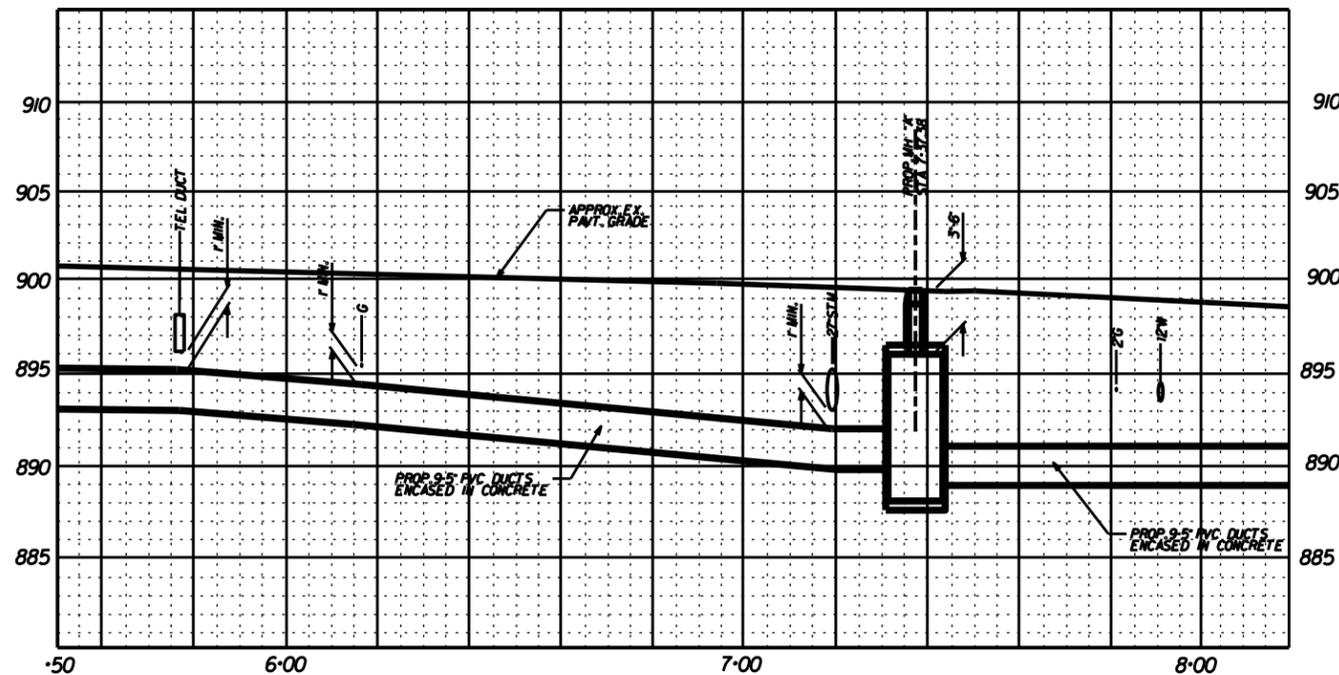
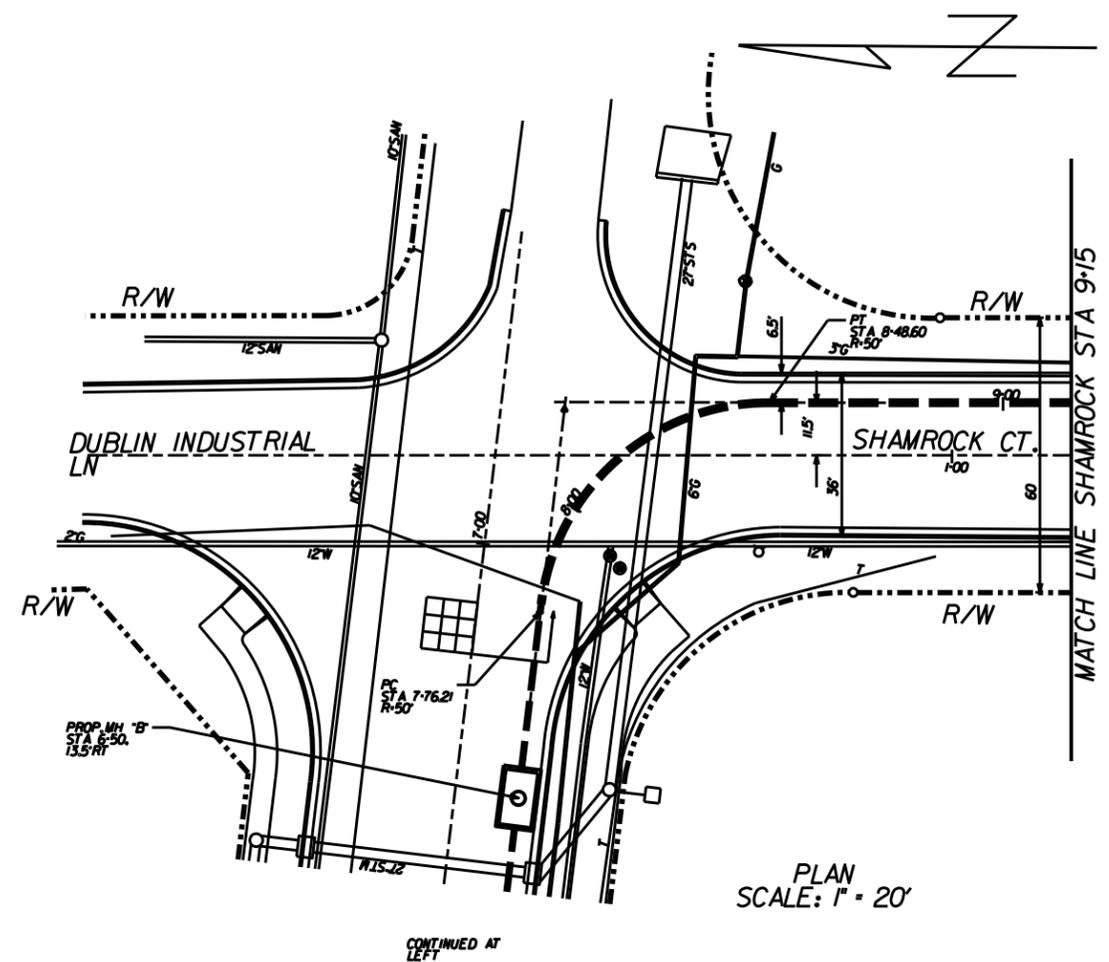
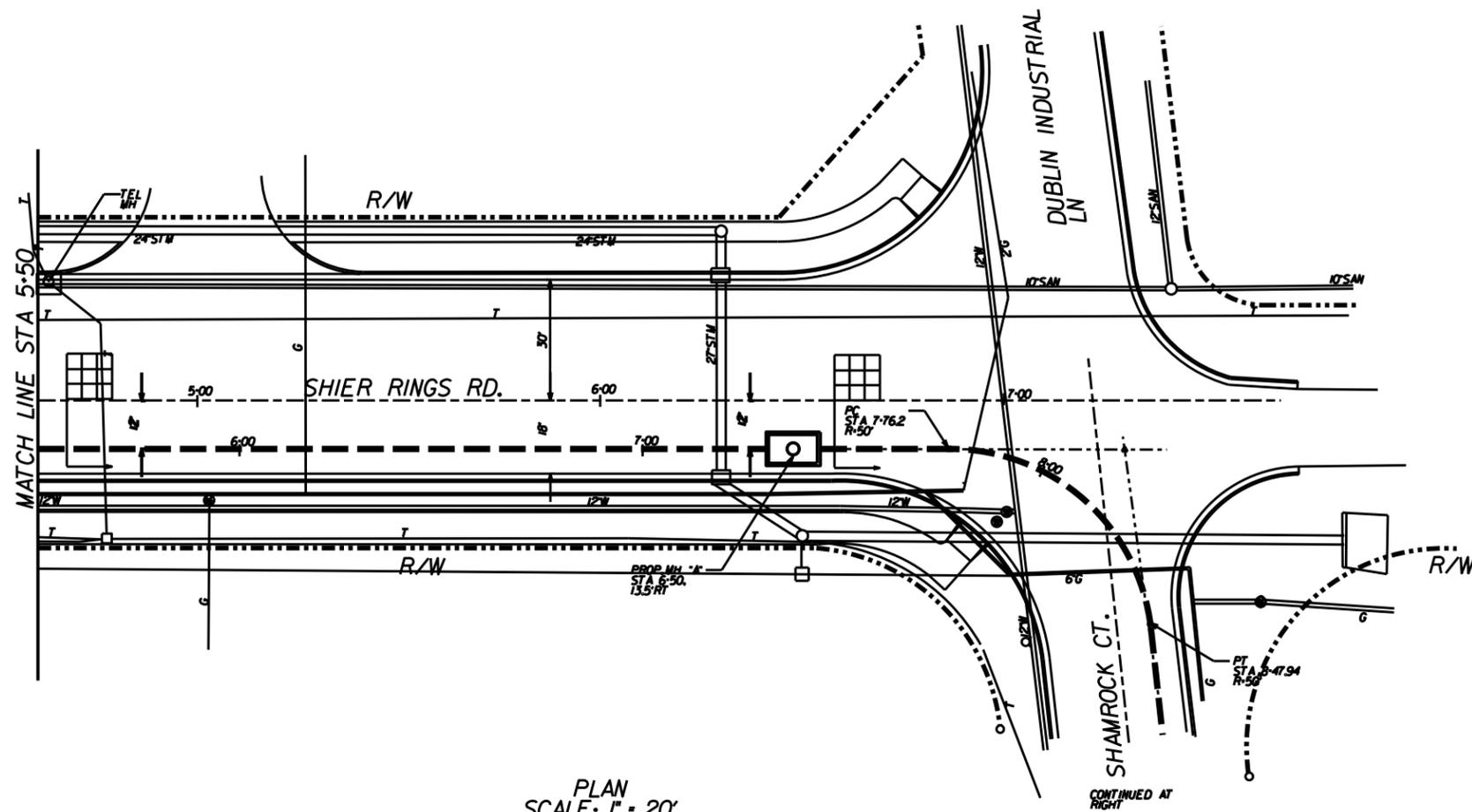


SHIER-RINGS PROFILE SCALE: 1" = 20' HORIZ. 1" = 5' VERT.

DUBLIN, OHIO
 I-270 RELOCATION
 Duct & Manhole Installation
 JULY 2014
 P & P
DANBERT

REV.	BY	DATE	APP'D	DATE	DESCRIPTION
D			CMM	12/11/14	ADDED M.D.T. SHEETS 7-13

ISSUED & APPROVED	DATE
CMM	9/22/2014
SCALE	AS SHOWN
DATE	9/22/2014
REVISION	1 X D



OHIO
Utilities Protection
SERVICE

Call Before You Dig
WARNING
BEFORE YOU EXCAVATE!!
By law, everyone must contact the Ohio Utilities Protection Service 8-1-1, or 1-800-362-2764, at least 48 hours, but no more than 10 working days (excluding weekends and legal holidays) before beginning any digging project.

DUBLIN, OHIO
I-270 RELOCATION
Duct & Manhole
Installation
JULY 2014

P & P

DANBERT

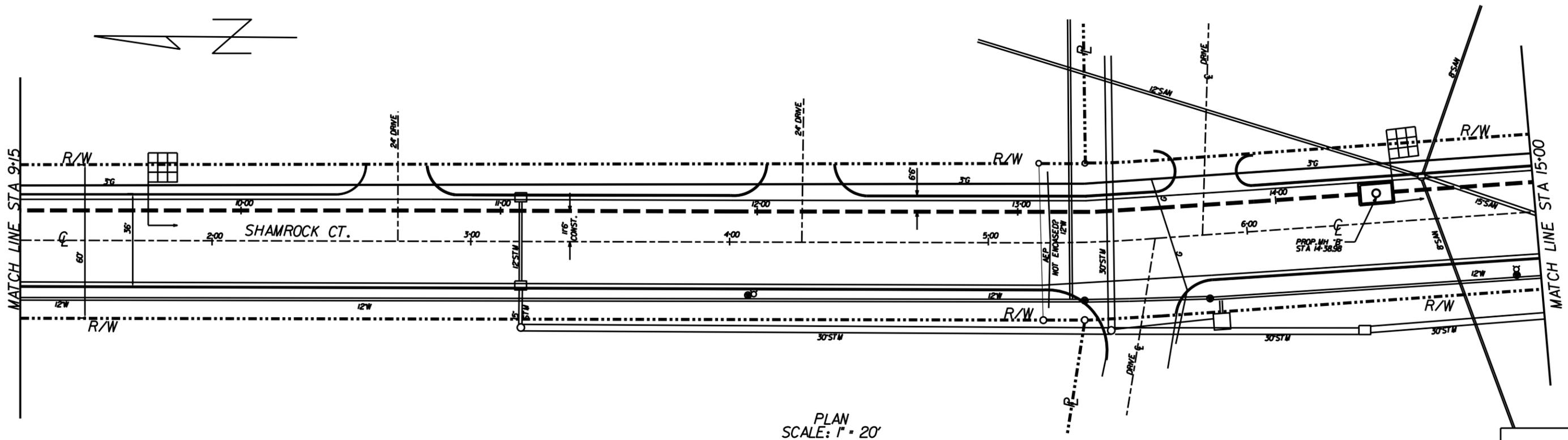
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APPROVED BY: CMW DATE: 5/22/2014

SCALE: NTS REVISIONS:

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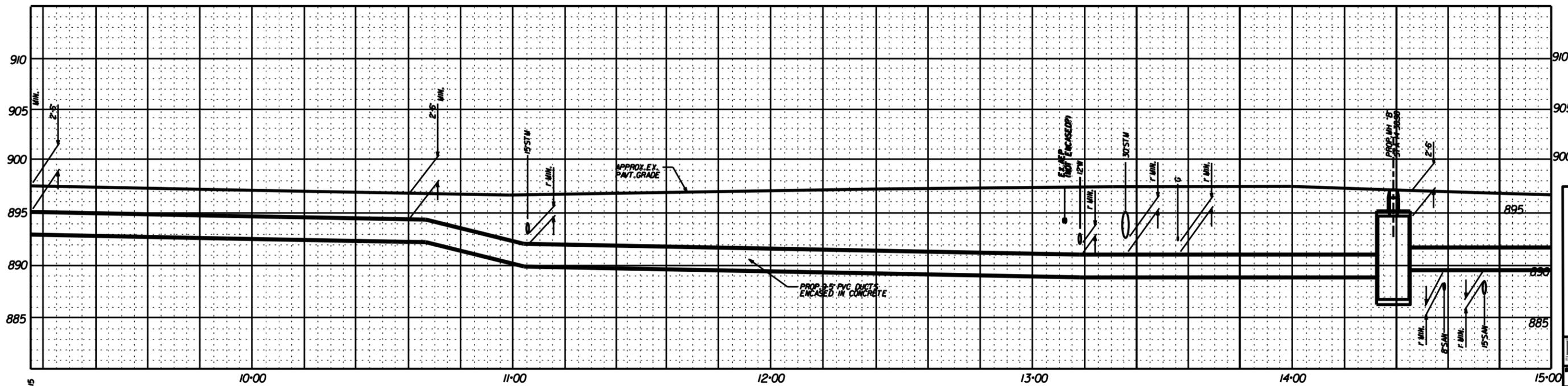


PLAN
SCALE: 1" = 20'

OHIO
Utilities Protection
SERVICE

Call Before You Dig
BEFORE YOU EXCAVATE!!
WARNING

By law, everyone must contact the Ohio Utilities Protection Service 8-1-1, or 1-800-352-2754, at least 48 hours, but no more than 10 working days (excluding weekends and legal holidays) before beginning any digging project.



SHAMROCK PROFILE
SCALE: 1" = 20' HORIZ.
1" = 5' VERT.

DUBLIN, OHIO
I-270 RELOCATION
Duct & Manhole
Installation
JULY 2014

P & P
DANBERT

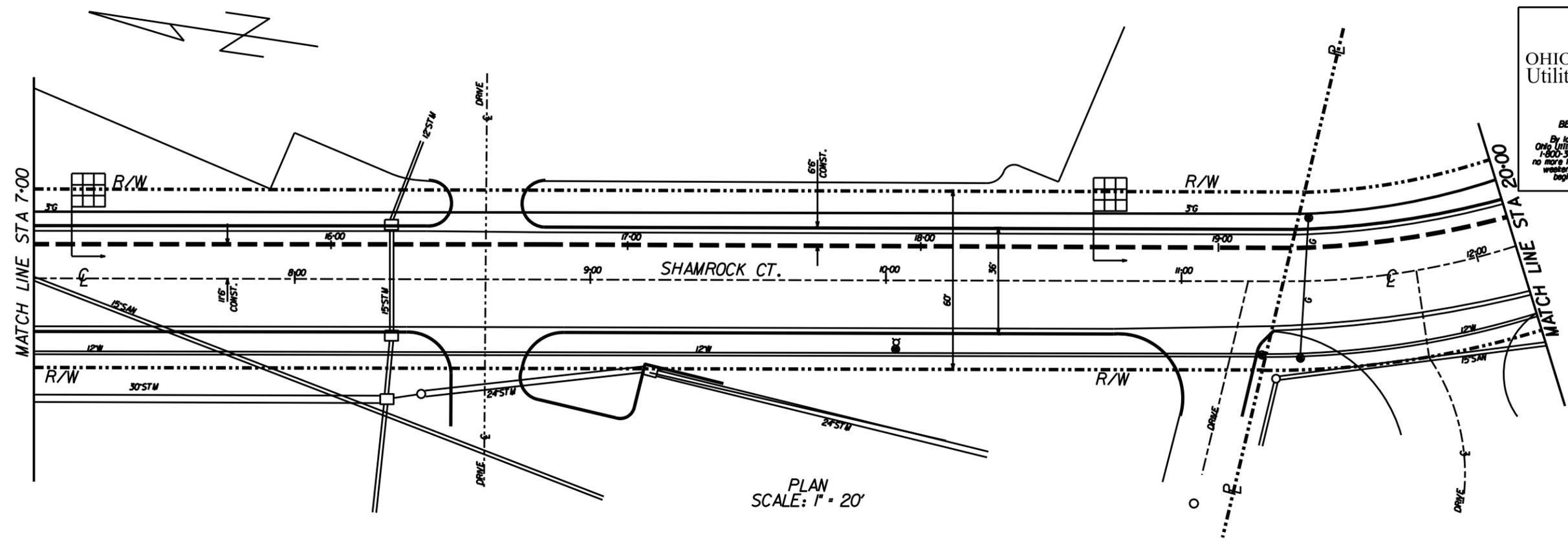
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PROJECT NO. 14-38-98
DATE 5/22/2014

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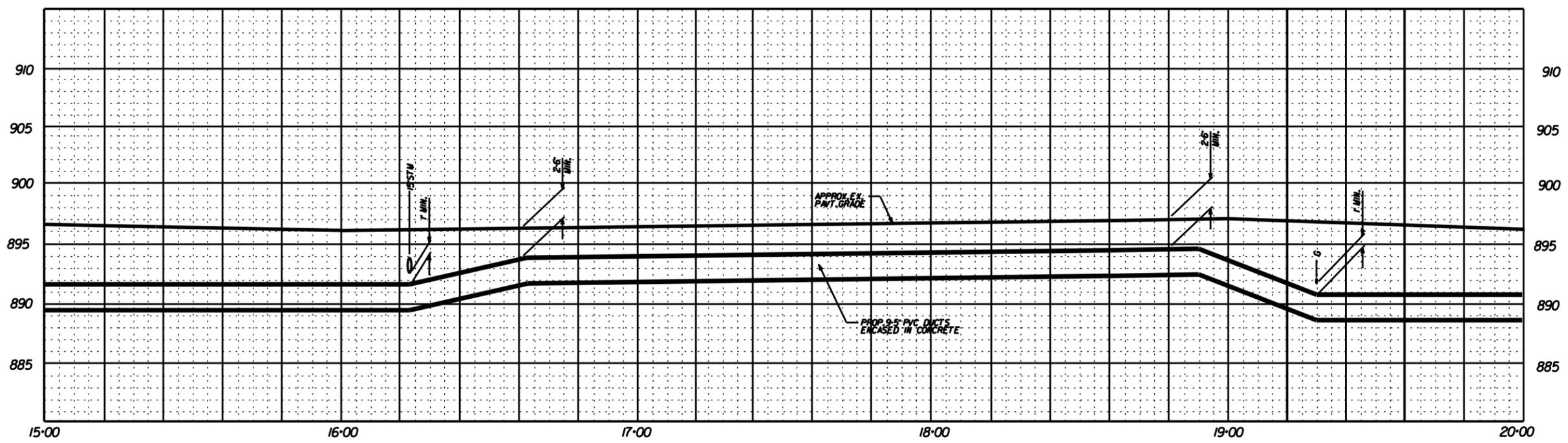
OHIO
Utilities Protection
SERVICE

Call Before You Dig
BEFORE YOU EXCAVATE!!

WARNING
By law, everyone must contact the Ohio Utilities Protection Service 8-1-1, or 1-800-362-2764, at least 48 hours, but no more than 10 working days (excluding weekends and legal holidays) before beginning any digging project.



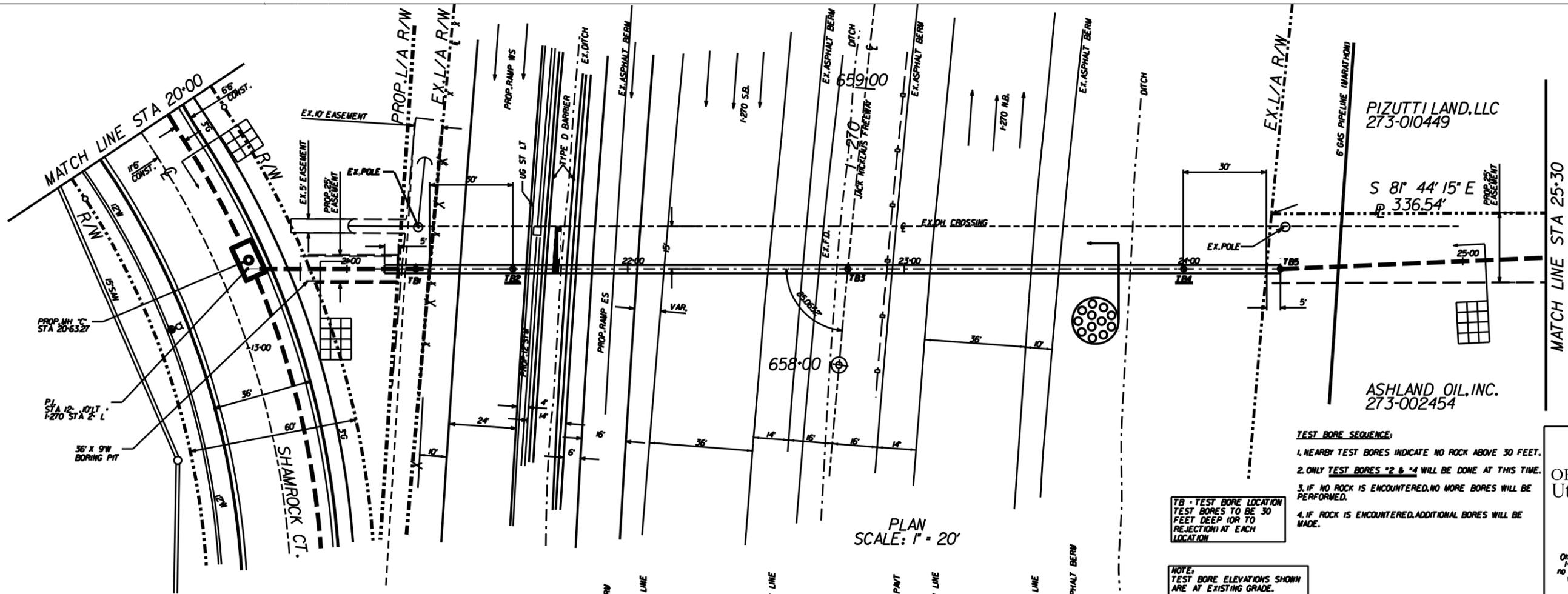
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SCALE: 1" = 20'



SHAMROCK PROFILE
SCALE: 1" = 20' HORIZ.
1" = 5' VERT.

DUBLIN, OHIO
I-270 RELOCATION
Duct & Manhole
Installation
JULY 2014
P & P
DANBERT

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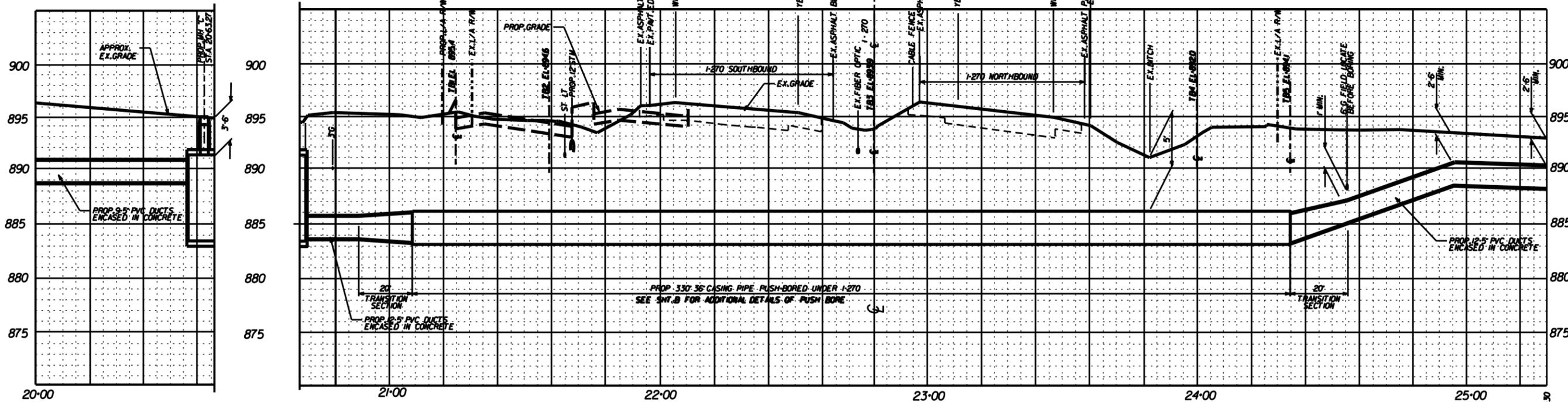
PLAN
SCALE: 1" = 20'

- TEST BORE SEQUENCE:**
1. NEARBY TEST BORES INDICATE NO ROCK ABOVE 30 FEET.
 2. ONLY TEST BORES *2 & *4 WILL BE DONE AT THIS TIME.
 3. IF NO ROCK IS ENCOUNTERED, NO MORE BORES WILL BE PERFORMED.
 4. IF ROCK IS ENCOUNTERED, ADDITIONAL BORES WILL BE MADE.

TB - TEST BORE LOCATION
TEST BORES TO BE 30 FEET DEEP (OR TO REJECTION) AT EACH LOCATION

NOTE:
TEST BORE ELEVATIONS SHOWN ARE AT EXISTING GRADE.

OHIO Utilities Protection SERVICE
Call Before You Dig
BEFORE YOU EXCAVATE!!
WARNING
By law, everyone must contact the Ohio Utilities Protection Service 8-1-1, or 1-800-362-2764, at least 48 hours, but no more than 10 working days (excluding weekends and legal holidays) before beginning any digging project.

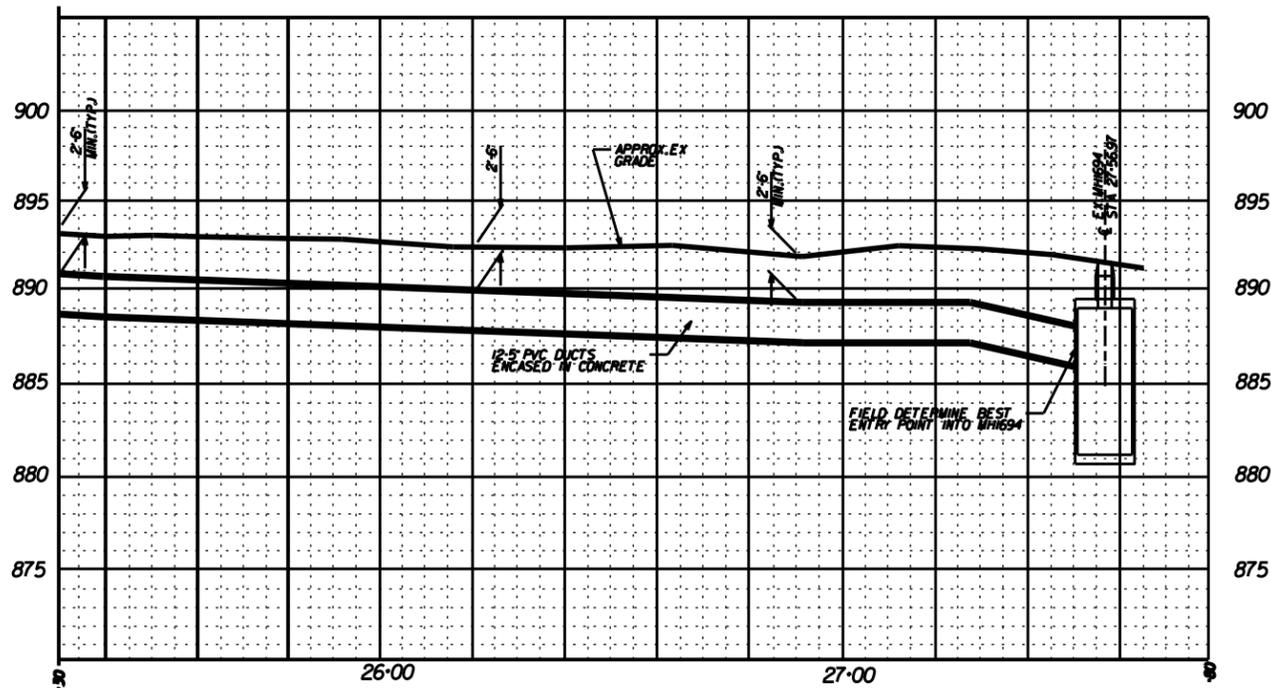
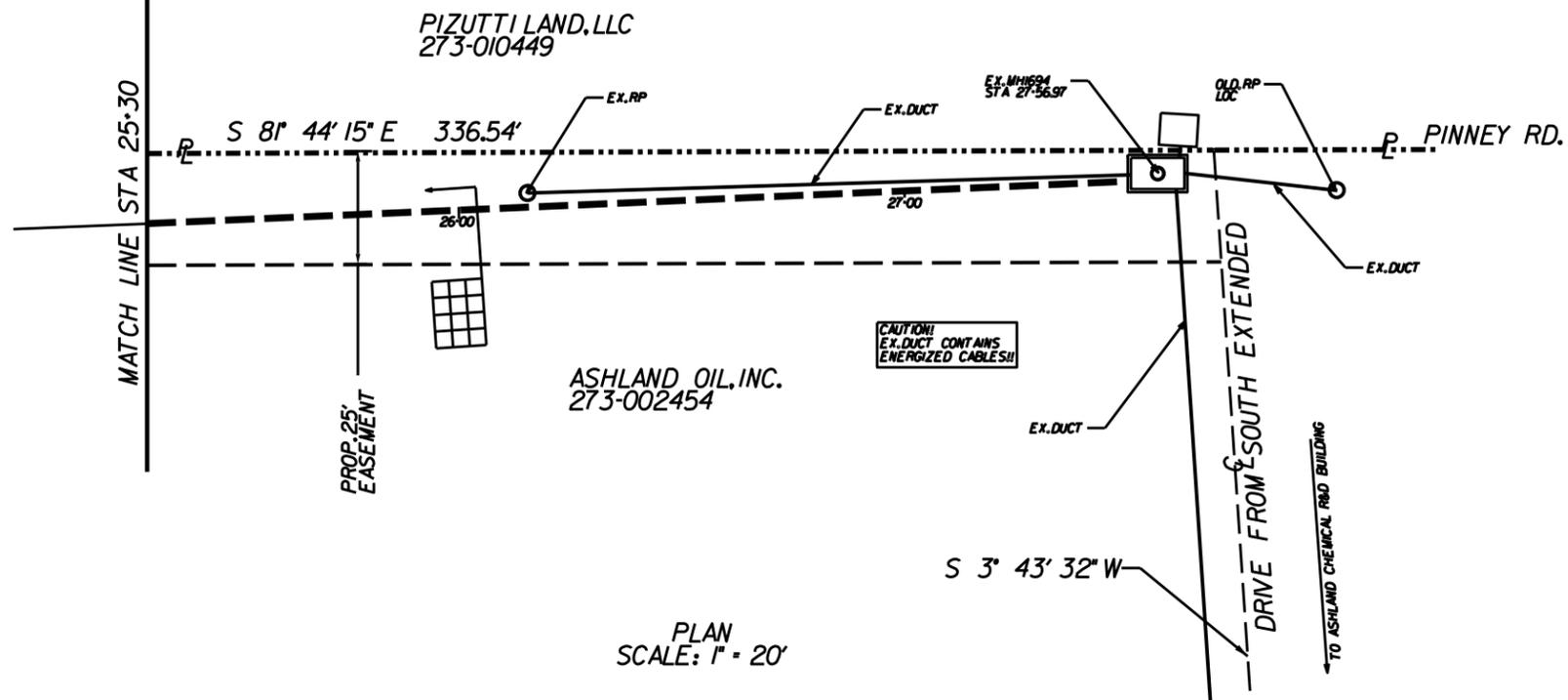


PROFILE
SCALE: 1" = 20' HOR.
1" = 5' VERT

DUBLIN, OHIO
1-270 RELOCATION
Duct & Manhole
Installation
JULY 2014

P & P
DANBERT

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C		CMW	10/20/14	REVISED PER SURVEY	ISSUED & APPROVED	DATE
B		CMW	10/14/14	ISSUED FOR TB *2 & *4 ONLY SEE SHT. 5	NOTED	DATE
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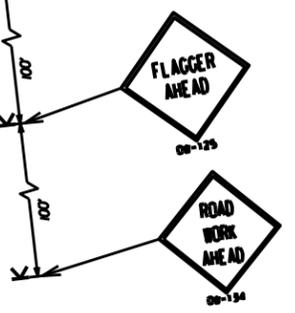
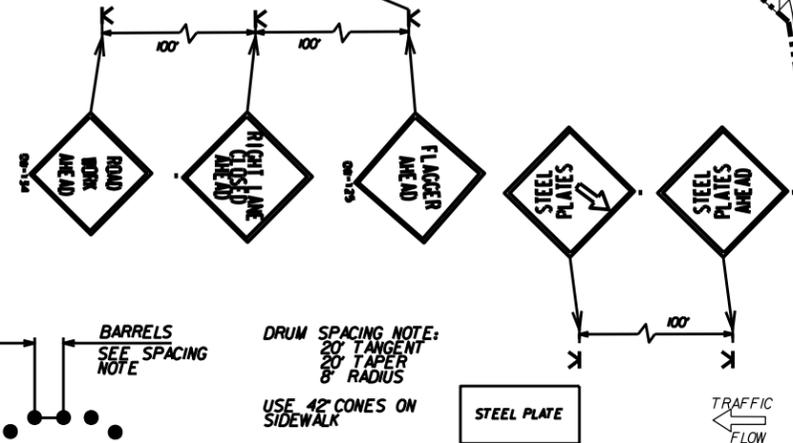
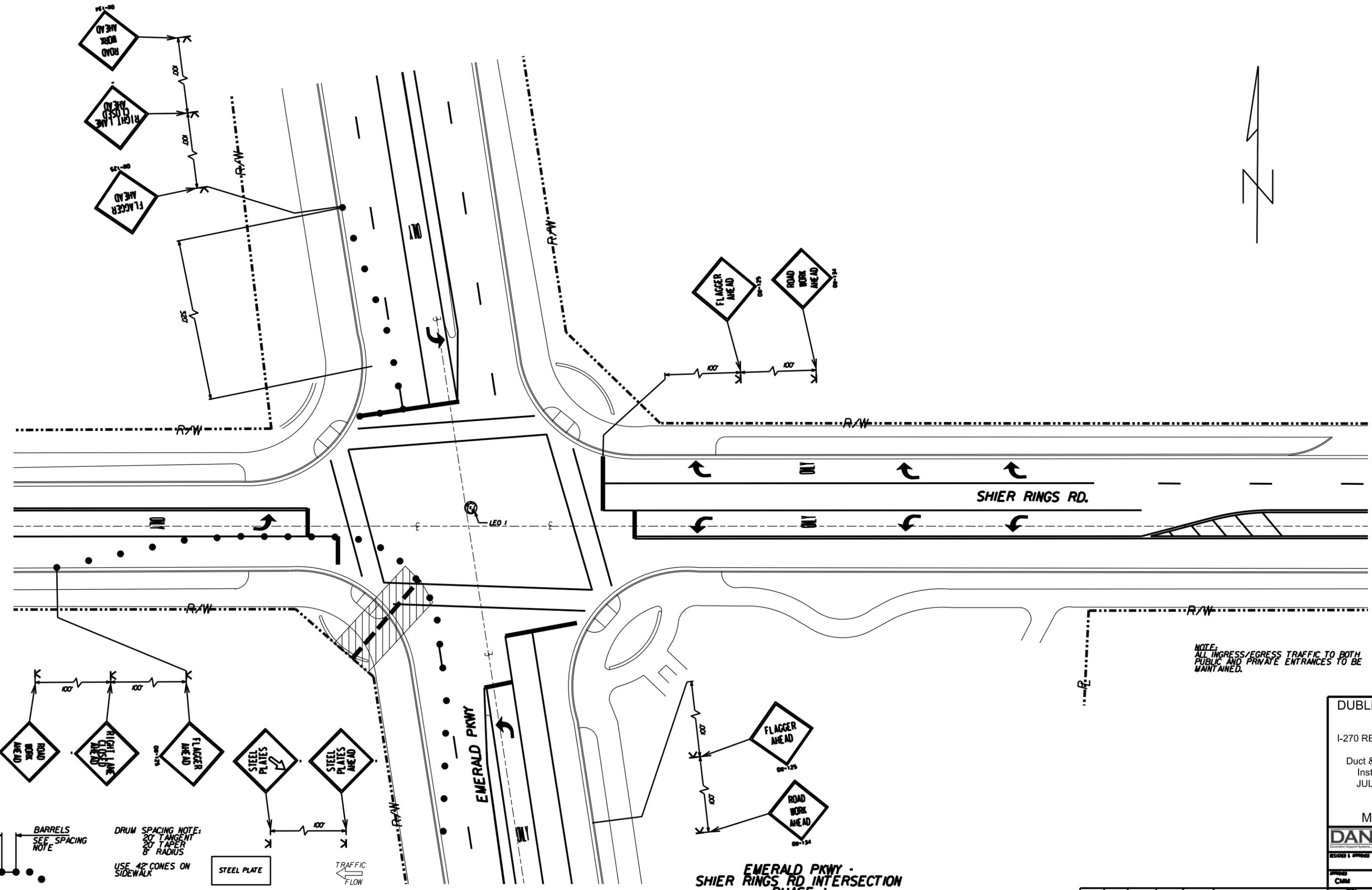


OHIO Utilities Protection SERVICE
 Call Before You Dig
BEFORE YOU EXCAVATE!!
 WARNING
 By law, everyone must contact the Ohio Utilities Protection Service 8-1-1 or 1-800-362-2164, at least 48 hours, but no more than 10 working days (excluding weekends and legal holidays) before beginning any digging project.

DUBLIN, OHIO
 I-270 RELOCATION
 Duct & Manhole Installation
 JULY 2014

P & P
DANBERT
Engineering & Surveying
 DESIGNED & DRAWN BY: **CMW** DATE: **5/22/2014**

REV.	BY	DATE	APP'D	DATE	DESCRIPTION	ISSUED TO	SHEET NO.	TOTAL SHEETS
D			CMW	12/11/14	ADDED M.D.T. SHEETS 7-13	ISSUED		
C			CMW	10/20/14	REVISED PER SURVEY	SCALE: N.T.S.		
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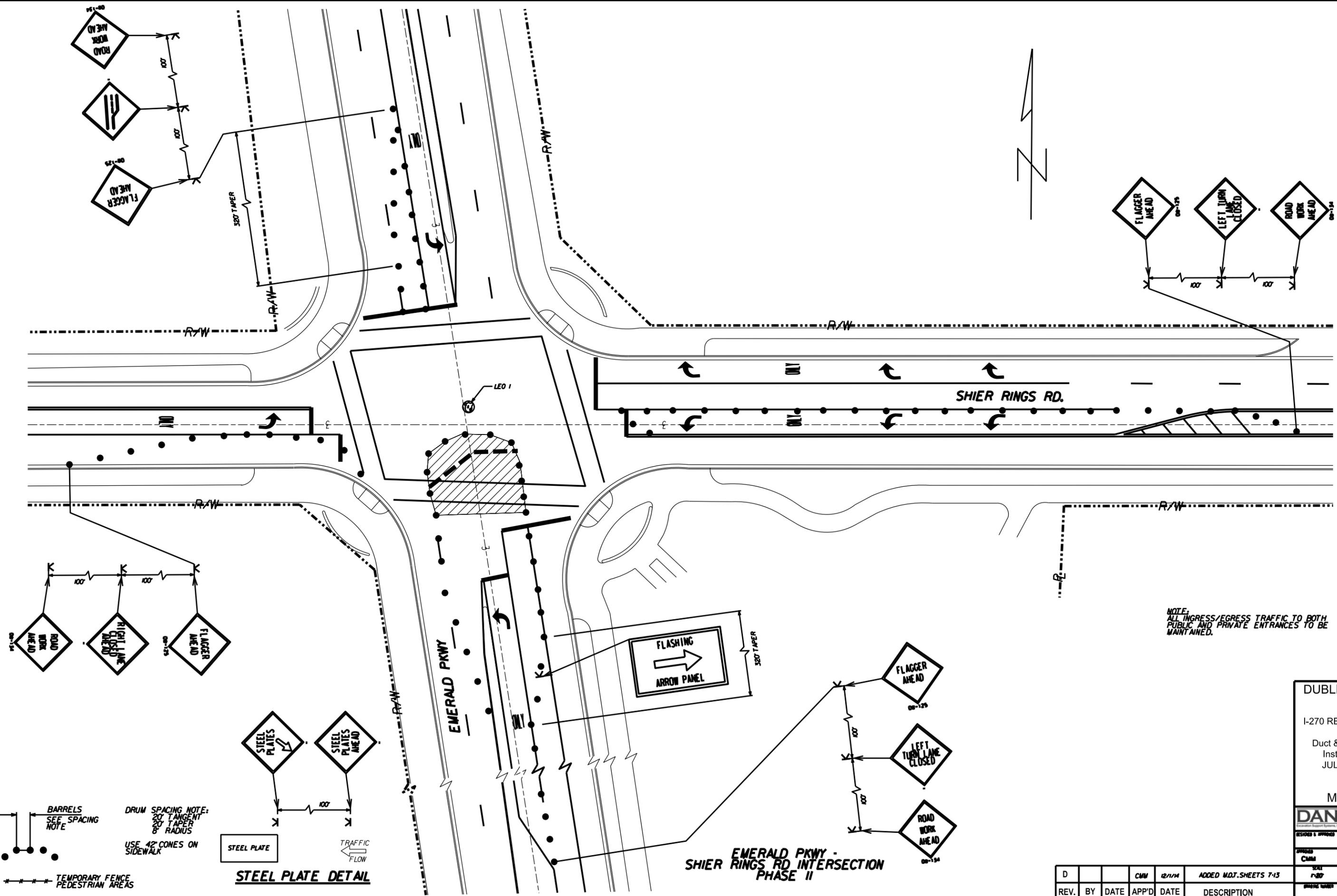
DUBLIN, OHIO
I-270 RELOCATION
Duct & Manhole Installation
JULY 2014
M.O.T.

DANBERT
DESIGNED & APPROVED DATE

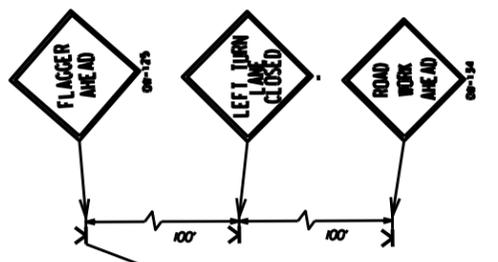
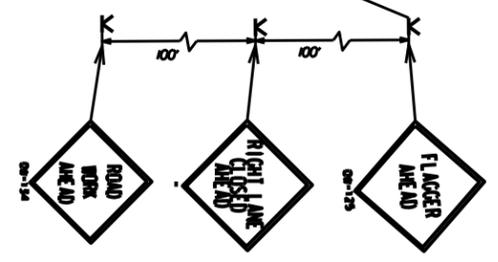
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CMM 5/22/2014

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SHEET NO. 7 OF 13
DATE: 5/22/2014

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NOTE:
ALL INGRESS/EGRESS TRAFFIC TO BOTH
PUBLIC AND PRIVATE ENTRANCES TO BE
MAINTAINED.



BARRELS
SEE SPACING
NOTE

DRUM SPACING NOTE:
20' TANGENT
20' TAPER
8' RADIUS

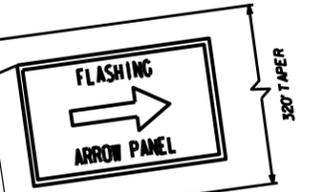
USE 42" CONES ON
SIDEWALK



STEEL PLATE DETAIL

TRAFFIC
FLOW

*** TEMPORARY FENCE
PEDESTRIAN AREAS



**EMERALD PKWY -
SHIER RINGS RD INTERSECTION
PHASE II**

DUBLIN, OHIO

I-270 RELOCATION

Duct & Manhole
Installation
JULY 2014

M.O.T.

DANBERT

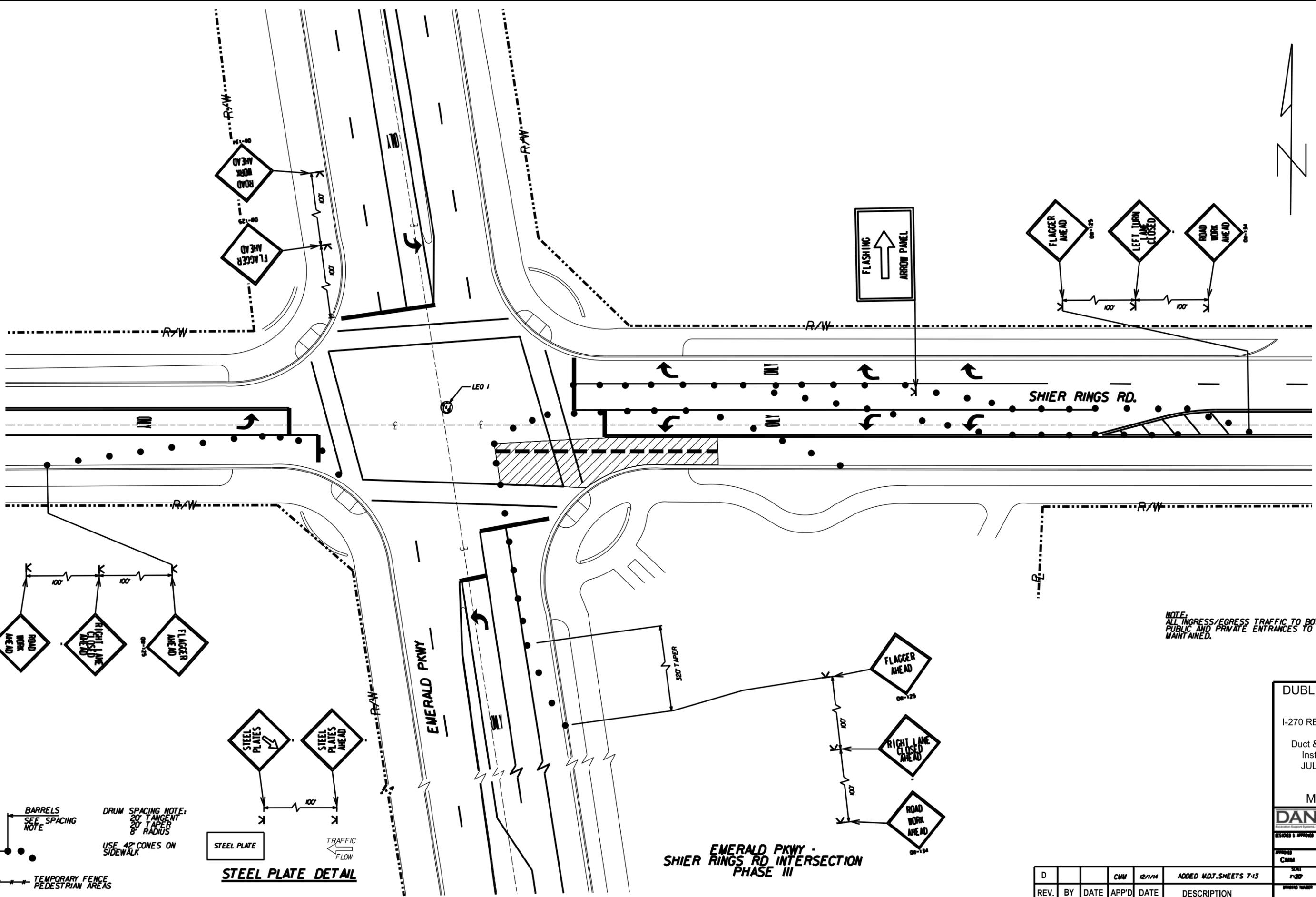
DESIGNED & DRAWN DATE

DESIGNED
CMM 5/22/2014

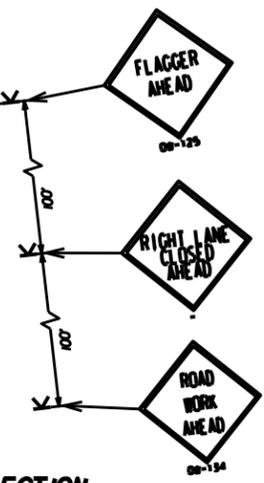
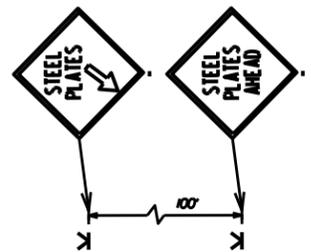
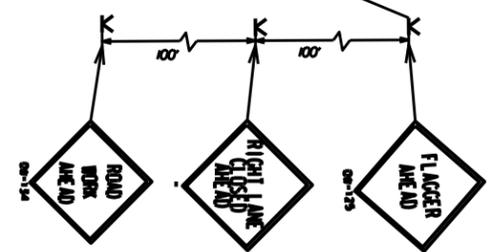
SCALE 1"=30'

DATE 8 X D

D	BY	DATE	APP'D	DATE	DESCRIPTION



NOTE:
ALL INGRESS/EGRESS TRAFFIC TO BOTH
PUBLIC AND PRIVATE ENTRANCES TO BE
MAINTAINED.



BARRELS
SEE SPACING
NOTE

DRUM SPACING NOTE:
20' TANGENT
20' TAPER
8' RADIUS
USE 42" CONES ON
SIDEWALK

STEEL PLATE

STEEL PLATE DETAIL

*** TEMPORARY FENCE
PEDESTRIAN AREAS

**EMERALD PKWY -
SHIER RINGS RD INTERSECTION
PHASE III**

DUBLIN, OHIO

I-270 RELOCATION

Duct & Manhole
Installation
JULY 2014

M.O.T.

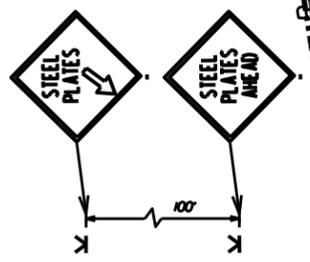
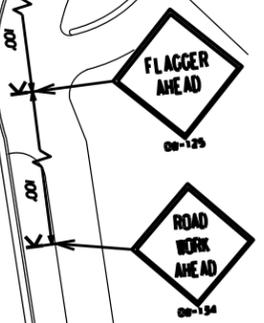
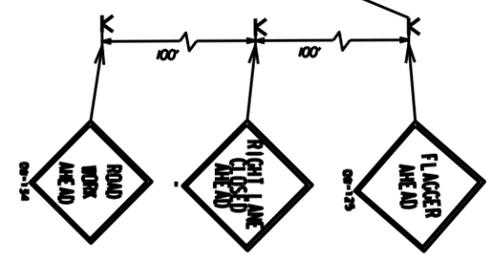
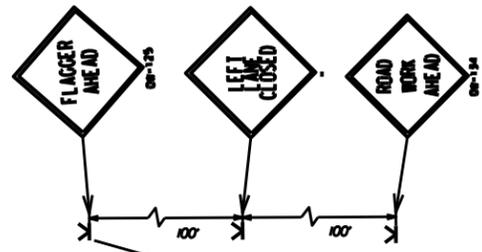
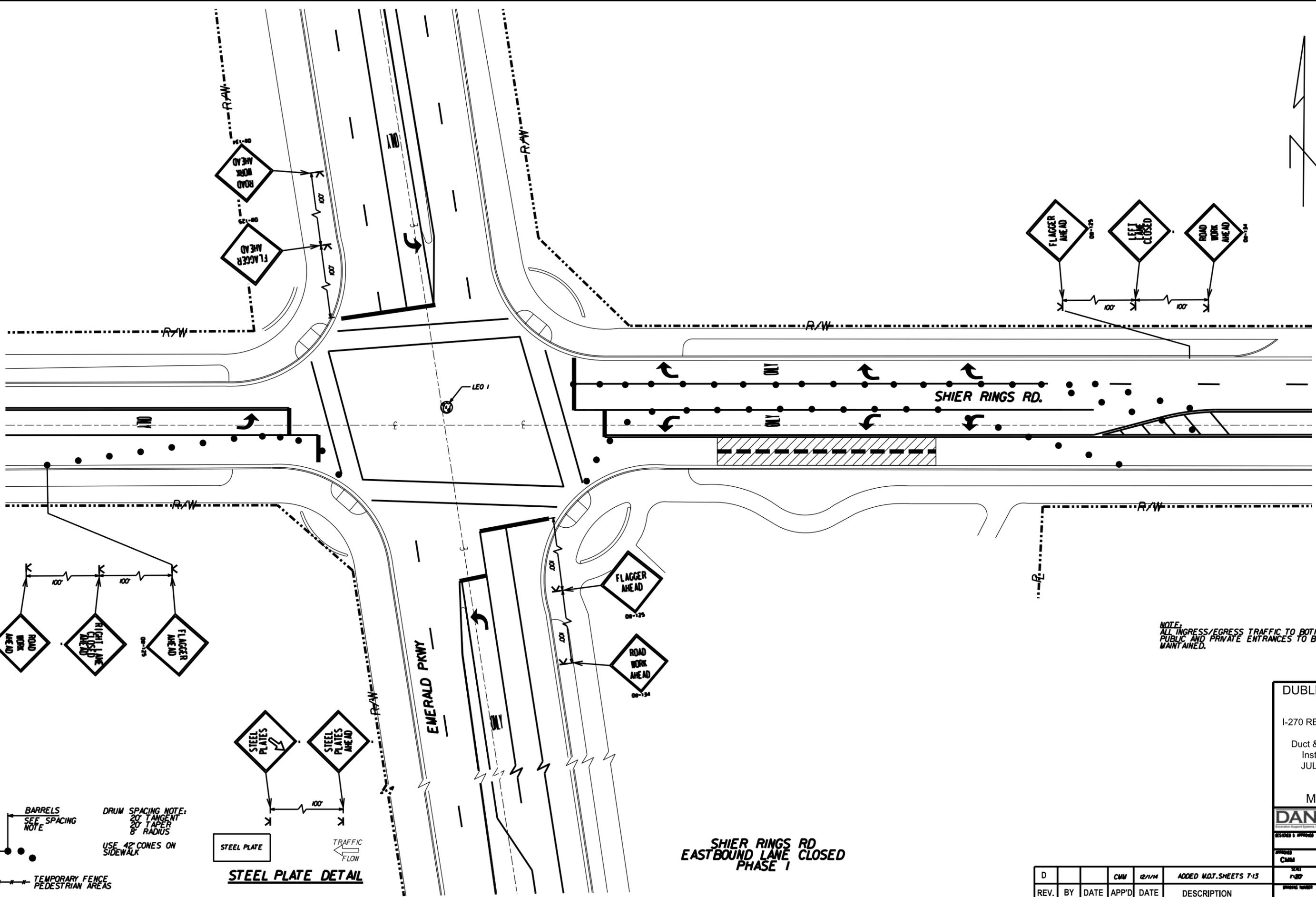
DANBERT

DESIGNED & DRAWN: CMW DATE: 5/22/2014

REV.	BY	DATE	APP'D	DATE	DESCRIPTION
D			CMW	12/1/14	ADDED M.O.T. SHEETS 7-13

SCALE: 1"=30'

9 X D



NOTE:
ALL INGRESS/EGRESS TRAFFIC TO BOTH
PUBLIC AND PRIVATE ENTRANCES TO BE
MAINTAINED.

BARRELS
SEE SPACING
NOTE

DRUM SPACING NOTE:
20' TANGENT
20' TAPER
8' RADIUS

USE 42" CONES ON
SIDEWALK



STEEL PLATE DETAIL

*** TEMPORARY FENCE
PEDESTRIAN AREAS

**SHIER RINGS RD
EASTBOUND LANE CLOSED
PHASE 1**

DUBLIN, OHIO

I-270 RELOCATION

Duct & Manhole
Installation
JULY 2014

M.O.T.

DANBERT

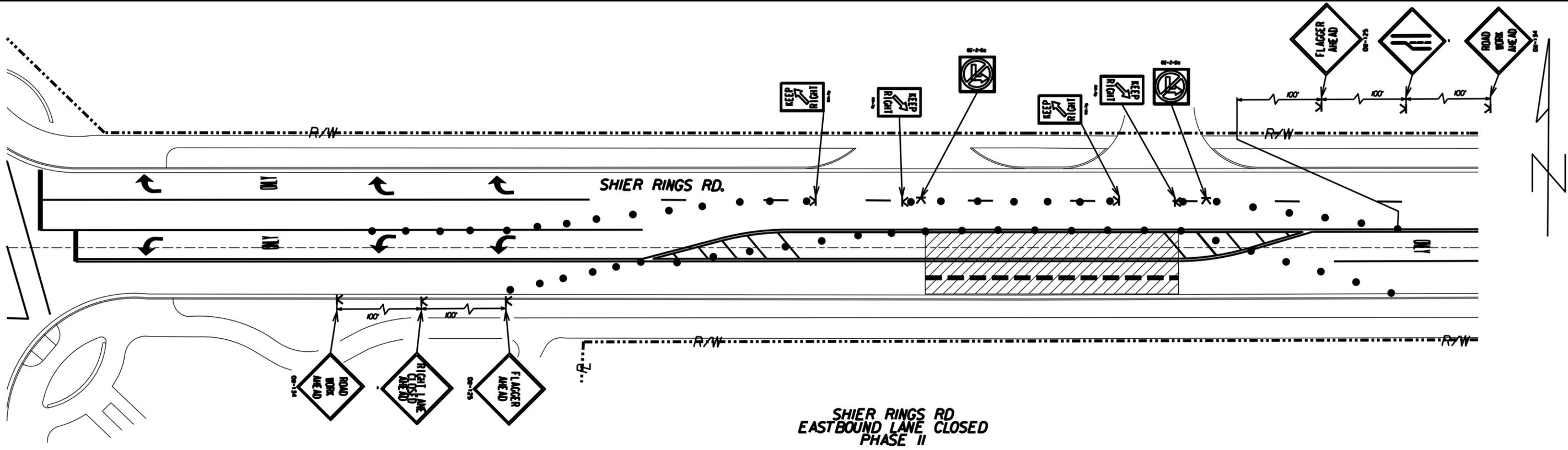
DESIGNED & DRAWN DATE

APP'D CMM 5/22/2014

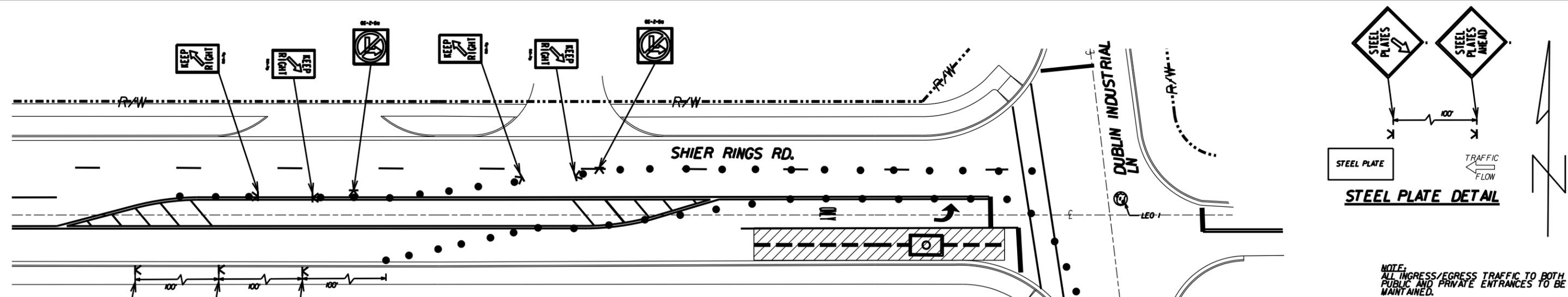
SCALE 1"=30'

DATE 10 X D

D	REV.	BY	DATE	APP'D	DATE	DESCRIPTION
				CMM	12/1/14	ADDED M.O.T. SHEETS 7-13



SHIER RINGS RD
EASTBOUND LANE CLOSED
PHASE II



SHIER RINGS RD
EASTBOUND LANE CLOSED
PHASE III

BARRELS
SEE SPACING
NOTE

DRUM SPACING NOTE:
20' TANGENT
20' TAPER
8' RADIUS

USE 42" CONES ON
SIDEWALK

TEMPORARY FENCE
PEDESTRIAN AREAS

NOTE:
ALL INGRESS/EGRESS TRAFFIC TO BOTH
PUBLIC AND PRIVATE ENTRANCES TO BE
MAINTAINED.

DUBLIN, OHIO

I-270 RELOCATION

Duct & Manhole
Installation
JULY 2014

M.O.T.

DANBERT

DESIGNED & APPROVED: *[Signature]* DATE: 5/22/2014

APP'D: *[Signature]* DATE: 5/22/2014

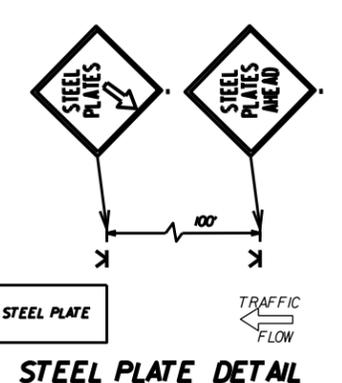
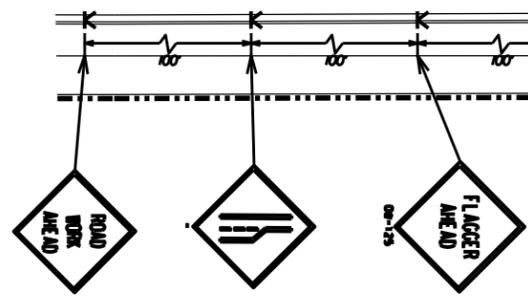
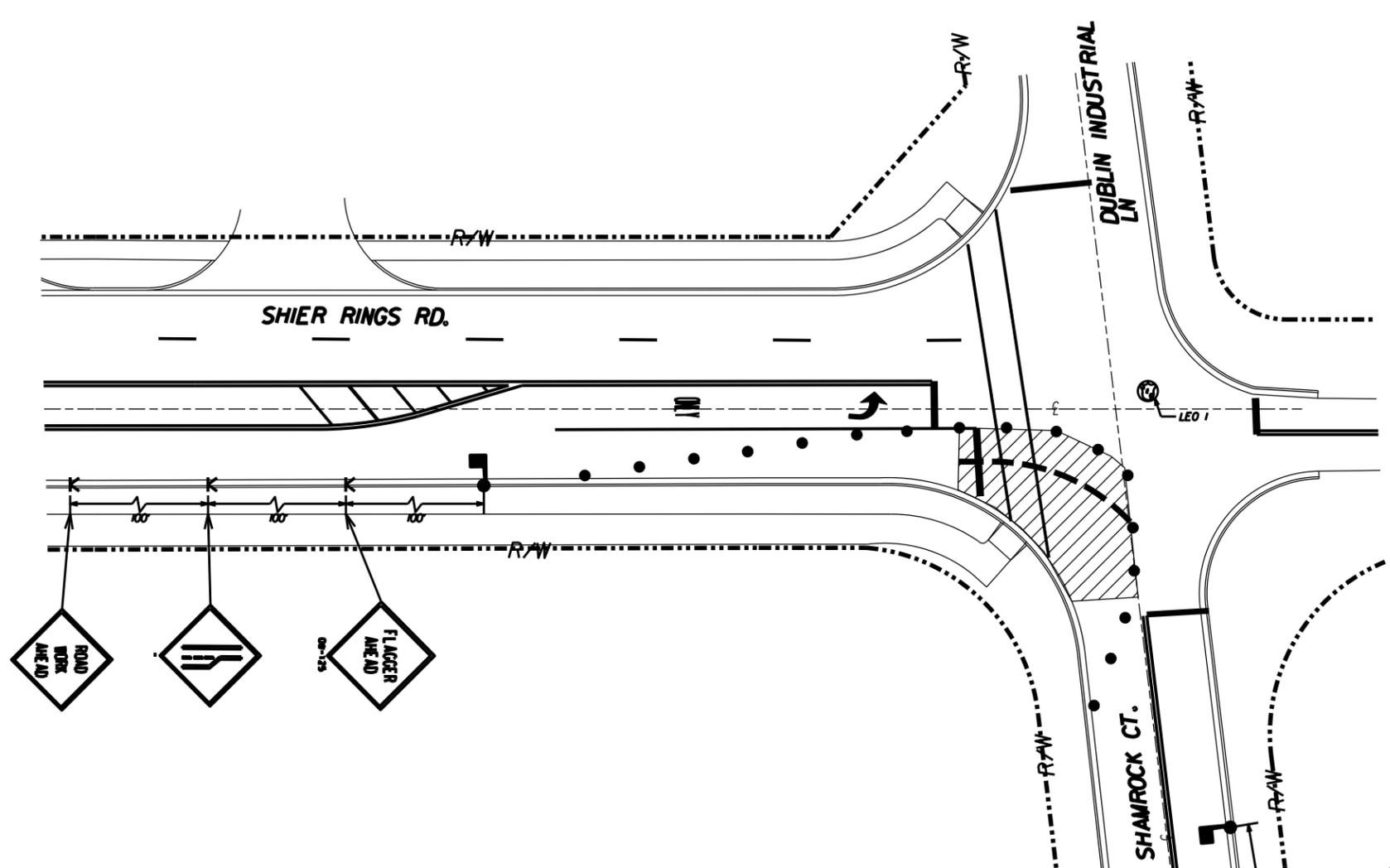
SCALE: 1"=30'

DATE: 5/22/2014

REVISIONS:

NO.	DATE	DESCRIPTION
11	X	D

D	REV.	BY	DATE	APP'D	DATE	DESCRIPTION
				CMW	12/1/14	ADDED M.O.T. SHEETS 7-13



NOTE:
ALL INGRESS/EGRESS TRAFFIC TO BOTH
PUBLIC AND PRIVATE ENTRANCES TO BE
MAINTAINED.

**SHIER RINGS RD - SHAMROCK CT
INTERSECTION WORK
PHASE I**

DUBLIN, OHIO
I-270 RELOCATION
Duct & Manhole
Installation
JULY 2014
M.O.T.
DANBERT
DESIGNED & DRAWN: CMW
DATE: 5/22/2014

BARRELS
SEE SPACING
NOTE

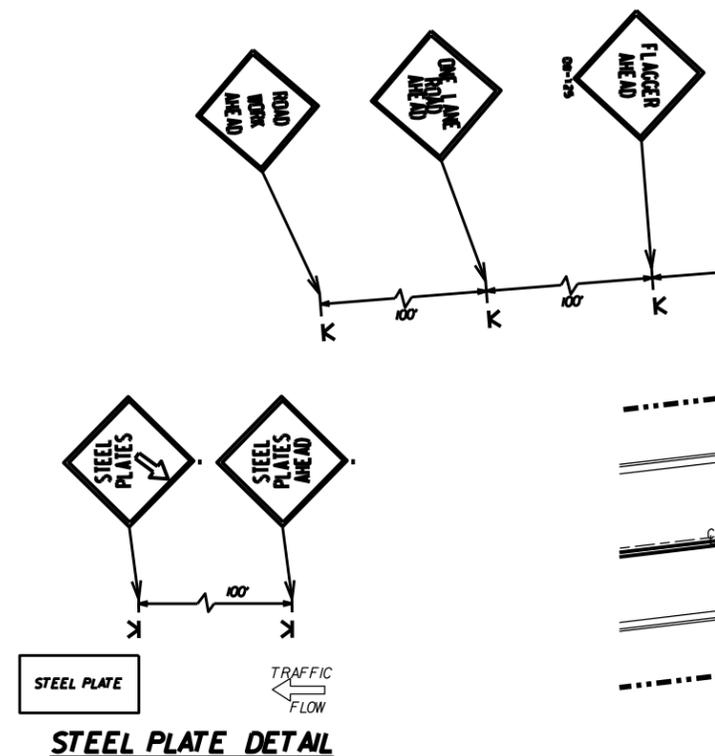
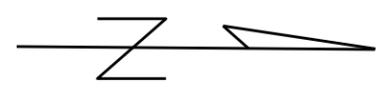
DRUM SPACING NOTE:
20' TANGENT
20' TAPER
8' RADIUS

USE 42" CONES ON
SIDEWALK

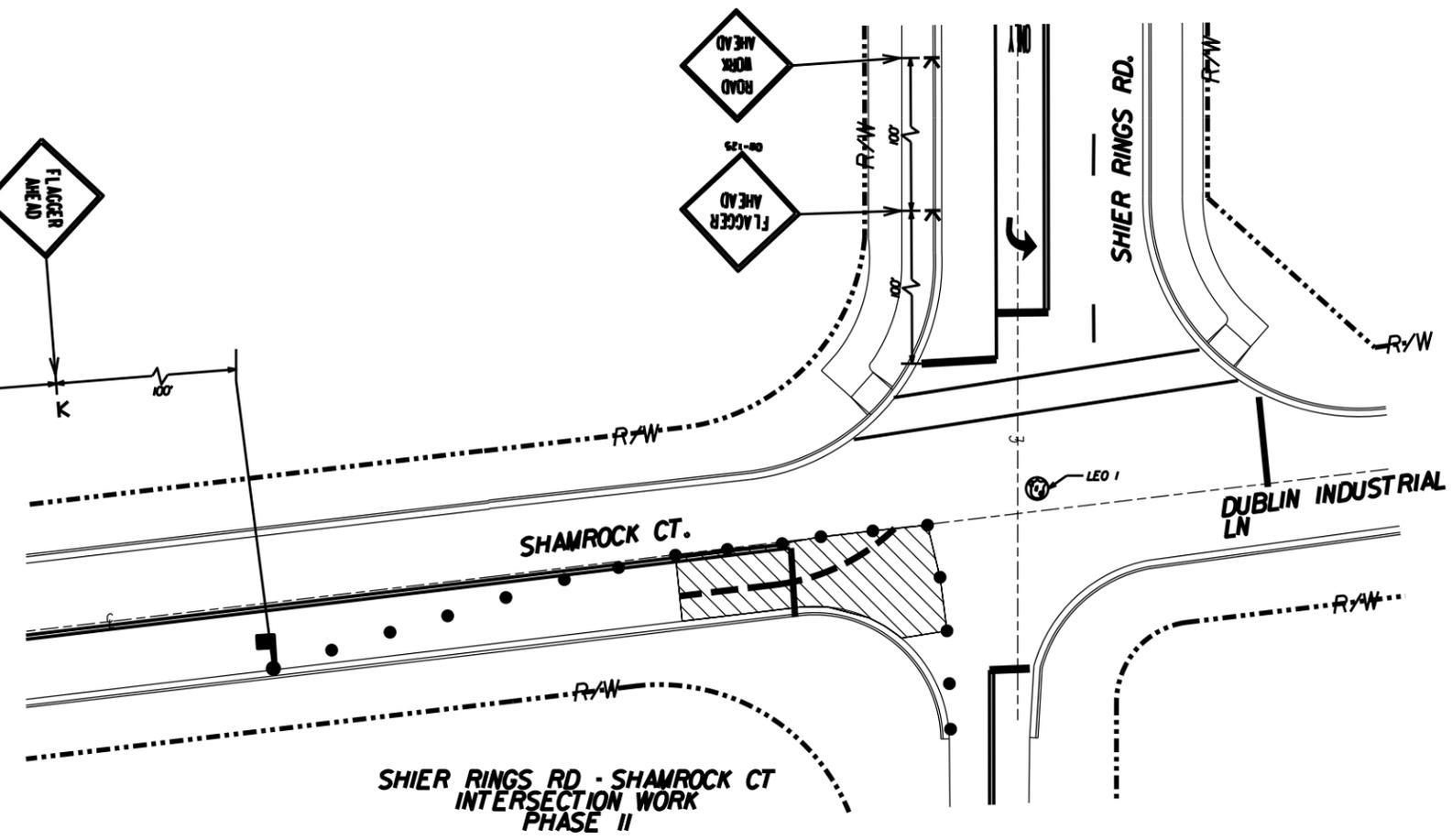
*** TEMPORARY FENCE
PEDESTRIAN AREAS

REV.	BY	DATE	APP'D	DATE	DESCRIPTION
D			CMW	12/1/14	ADDED M.O.T. SHEETS 7-13

SCALE	1"=30'
SHEET TOTAL	12
SHEET NUMBER	X
DATE	D

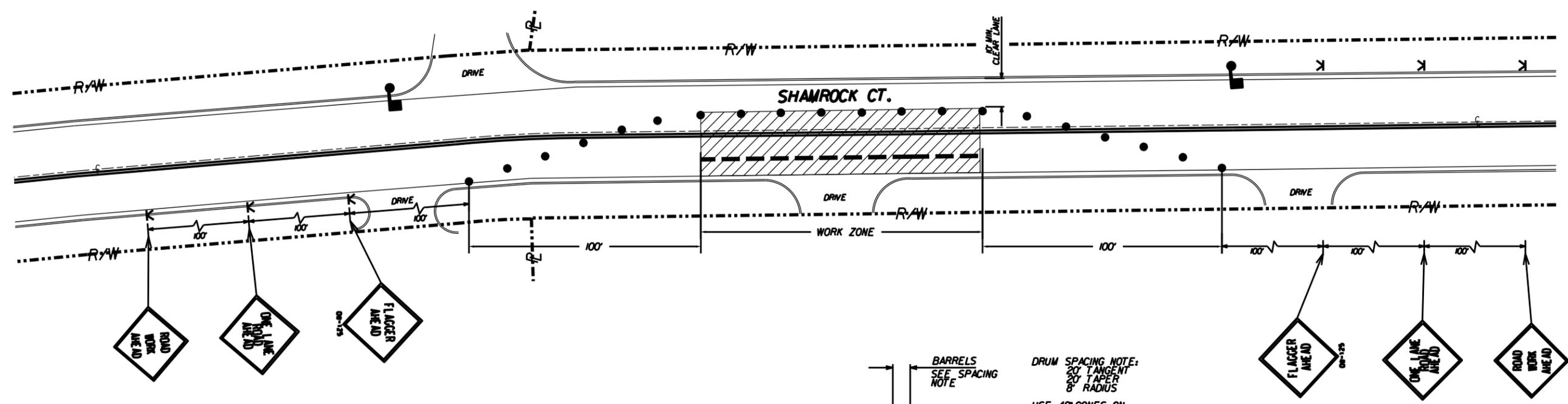
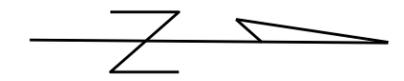


STEEL PLATE DETAIL



SHIER RINGS RD - SHAMROCK CT INTERSECTION WORK PHASE II

NOTE:
ALL INGRESS/EGRESS TRAFFIC TO BOTH PUBLIC AND PRIVATE ENTRANCES TO BE MAINTAINED.



TYPICAL ONE-LANE TWO-WAY CLOSURE USING FLAGGERS

BARRELS
SEE SPACING
NOTE

DRUM SPACING NOTE:
20' TANGENT
20' TAPER
8' RADIUS

USE 42' CONES ON
SIDEWALK

TEMPORARY FENCE
PEDESTRIAN AREAS



DUBLIN, OHIO
I-270 RELOCATION
Duct & Manhole
Installation
JULY 2014
M.O.T.
DANBERT

D		CMW	12/1/14	ADDED M.O.T. SHEETS 7-13	SCALE 1"=30'	REVISIONS 13 X D
REV.	BY	DATE	APP'D	DATE	DESCRIPTION	