FED. PROJ. NO. ____________

MINNESOTA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN FOR GRADING, AGGREGATE BASE, CONCRETE CURB & GUTTER, BITUMINOUS SURFACING, STORM SEWER, SANITARY SEWER, WATER MAIN, BITUMINOUS TRAIL, CONCRETE SIDEWALK, AND TRAFFIC SIGNAL

LOCATED ON TH 35W OFF-RAMP AT CSAH 17

LOCATED ON LEXINGTON AVE. (CSAH 17) FROM TH 35W OFF-RAMP TO 100 FT SOUTH OF BALL ROAD

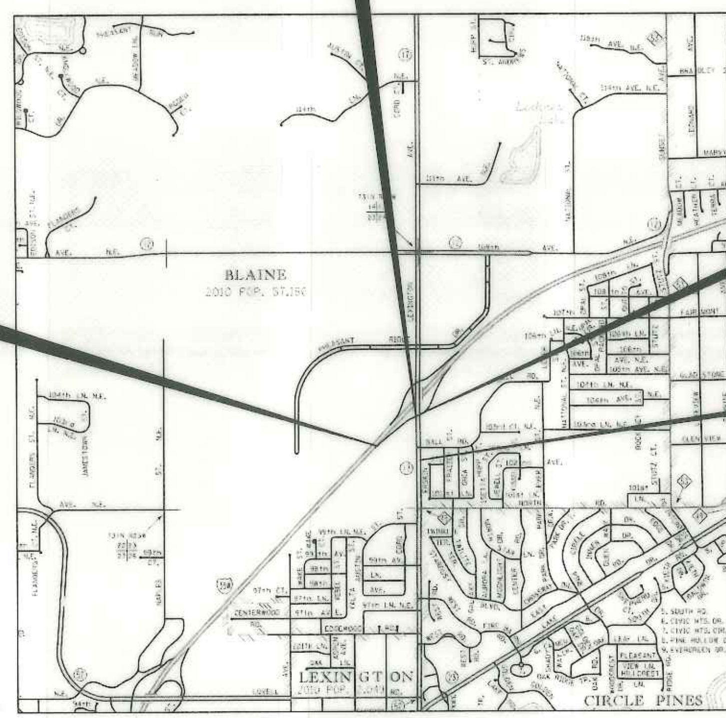
STATE PROJ. NO. 0280-75			STATE AID PROJ. NO. 106-020-033		
GROSS LENGTH	946.32 FEET	0.179 MILES	GROSS LENGTH	1034.88 FEET	0.196 MILES
BRIDGES-LENGTH	- FEET	- MILES	BRIDGES-LENGTH	FEET	MILES
EXCEPTIONS-LENGTH	- FEET	MILES	EXCEPTIONS-LENGTH	- FEET	MILES
NET LENGTH	946.32 FEET	0.179 MILES	NET LENGTH	1034.88 FEET	0.196 MILES
REF. POINT	33+00.359	TO REF. POINT 33+00.514	REF. POINT		TO REF. POINT

END S.P. 0280-75
STA. 9+46.32
TH-35W EXIT RAMP

END S.A.P. 106-020-033
STA. 11+34.88
CSAH 17

BEGIN S.P. 0280-75
STA. 0+00.00
TH-35W EXIT RAMP

BEGIN S.A.P. 106-020-033
STA.1+00.00
CSAH 17



N

AGREEMENT

AGREEMENT NO. 1000033
BLAINE
S.P. 0280-75 (TH 35W=63)
METRO DISTRICT

GOVERNING SPECIFICATIONS

THE 2014 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND THE 2014 EDITION OF THE "MATERIAL LAB SUPPLEMENTAL SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

TRAFFIC CONTROL

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MNMUTCD, INCLUDING "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS." DATED JANUARY 2014.

INDEX

THIS PLAN CONTAINS 78 SHEETS

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: GEORGE D. ABERNATHY LICENSE # 43505

DATE: 03/12/2015 SIGNATURE: [signature]

DESIGN SQUAD:

APPROVED [signature] 3/17 2015
DISTRICT STATE AID ENGINEER: REVIEWED FOR COMPLIANCE WITH STATE AID RULES/POLICY

APPROVED for [signature] 03/16/2015
CITY OF BLAINE ENGINEER

APPROVED [signature] 3/17/2015
ANOKA COUNTY ENGINEER

RECOMMENDED FOR APPROVAL [signature] 3/19 2015
DISTRICT TRANSPORTATION ENGINEER

RECOMMENDED FOR APPROVAL [signature] 3-17 2015
DISTRICT MATERIALS ENGINEER

RECOMMENDED FOR APPROVAL [signature] 3-17 2015
DISTRICT WATER RESOURCES/HYDRAULICS ENGINEER

RECOMMENDED FOR APPROVAL [signature] 3/18 2015
DISTRICT TRAFFIC ENGINEER

RECOMMENDED FOR APPROVAL [signature] 4/14 2015
STATE PRE-LETTING ENGINEER

OFFICE OF LAND MANAGEMENT APPROVAL [signature] 4/14 2015
DIRECTOR, LAND MANAGEMENT

APPROVED 4/14 2015 for Nancy Daubenberger
STATE DESIGN ENGINEER

I HEREBY CERTIFY THAT THE FINAL FIELD REVISIONS, IF ANY, WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: LICENSE #

DATE: SIGNATURE:

SCALES

PLAN	0 — 50 FT.	
PROFILE	0 — 50 FT. HORIZ.	0 — 10 FT. VERT.
INDEX MAP	0 — 2000 FT.	
GENERAL LAYOUT	0 — 80 FT.	
CROSS SECTIONS	0 — 20 FT. HORIZ.	0 — 10 FT. VERT.

DESIGN DESIGNATION FOR S.P. # 0280-75

DESIGN ESALS =
ADT (CURRENT YEAR) 2008 =
ADT (FUTURE YEAR) 2013 =
DHV (DESIGN HR. VOL.) 2015 = 530
D (DIRECTIONAL DISTR.) = %
T (HEAVY COMMERCIAL) = %

DESIGN SPEED 70 MPH

DESIGN DESIGNATION FOR S.A.P. # 106-020-033

DESIGN ESALS =
ADT (CURRENT YEAR) 2015 = 17,300
ADT (FUTURE YEAR) 2035 = 26,700
DHV (DESIGN HR. VOL.) 2015 = 1,340
D (DIRECTIONAL DISTR.) = %
T (HEAVY COMMERCIAL) = %

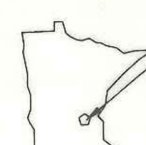
DESIGN SPEED 45 MPH

FOR PLANS AND UTILITIES SYMBOLS SEE TECHNICAL MANUAL

STATE PROJ. NO. CHARGE IDENTIFIER

THE SUBSURFACE UTILITY INFORMATION SHOWN ON THESE PLANS IS A UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF ASCE/CI 38-02, TITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA." THE CONTRACTOR AND/OR SUBCONTRACTORS SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, BY CONTACTING THE NOTIFICATION CENTER (GOPHER STATE ONE FOR MINNESOTA). THE CONTRACTOR AND/OR SUBCONTRACTOR AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES, WHICH MIGHT BE OCCASIONED BY HIS OR HER FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES (UNDERGROUND AND OVERHEAD).

IF THE CONTRACTOR ENCOUNTERS ANY DRAIN TILE WITHIN THE SITE, HE OR SHE SHALL NOTIFY THE ENGINEER WITH THE LOCATION, SIZE, INVERT AND IF THE TILE LINE IS ACTIVE. NO ACTIVE DRAIN TILE SHALL BE BACKFILLED WITHOUT APPROVAL FROM THE PROJECT ENGINEER.



PROJECT LOCATION
COUNTY : ANOKA
DISTRICT : METRO

STATE PROJ. NO. 0280-75 (TH 35W= 063)

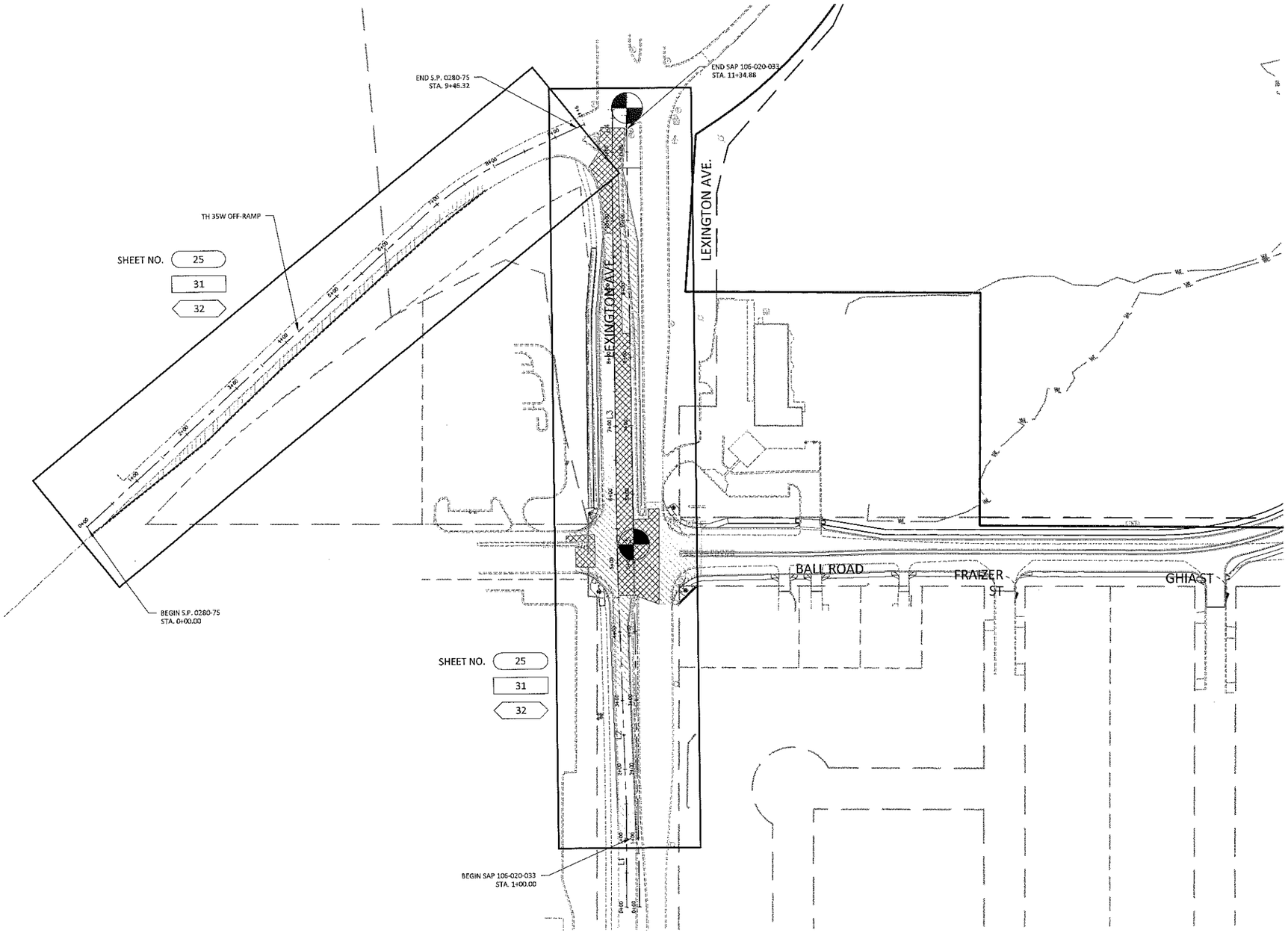
No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
C	01/12/15	JEB	COUNTY COMMENTS - DATED 11/21/14
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75
STATE AID PROJECT NO. 106-020-033

TITLE SHEET



LEGEND

- INPLACE PAVEMENT
- NEW CONSTRUCTION UNDER THIS CONTRACT
- MILL AND/OR OVERLAY
- XXX TOPOGRAPHY PLAN SHEET NUMBER
- XXX CONSTRUCTION PLAN SHEET NUMBER
- XXX DRAINAGE PLAN SHEET NUMBER
- INPLACE SIGNAL SYSTEM
- PROPOSED SIGNAL SYSTEM

N

SCALE 0 80 FT.

No.	Date	By	Revision
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abrahathy

Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

GENERAL LAYOUT

2
78

STATEMENT OF ESTIMATED QUANTITIES

NOTES	TAB	SHEET NO	ITEM NO	ITEM DESCRIPTION	UNITS	TOTAL ESTIMATED QUANTITY
	-	-	2021.501	MOBILIZATION	LUMP SUM	1
1	-	-	2101.511	CLEARING AND GRUBBING	LUMP SUM	1
	C	20	2102.502	PAVEMENT MARKING REMOVAL	LIN FT	832
	C	20	2104.501	REMOVE CURB AND GUTTER	LIN FT	1972
	C	20	2104.501	REMOVE MANHOLES OR CATCH BASINS	LIN FT	12.5
	C	20	2104.501	REMOVE SEWER PIPE (STORM)	LIN FT	550
	C	20	2104.505	REMOVE CONCRETE PAVEMENT	SQ YD	937.5
	C	20	2104.505	REMOVE BITUMINOUS PAVEMENT	SQ YD	4168
	C	20	2104.509	REMOVE SIGN	EACH	5
	-	28	2104.511	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LIN FT	26
	-	28	2104.513	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	2330
2	C	20	2104.521	SALVAGE CHAIN LINK FENCE	LIN FT	405
5	C	20	2104.523	SALVAGE LIGHTING UNIT	EACH	1
	F	40	2104.523	SALVAGE SIGN TYPE C	EACH	9
	F	40	2104.523	SALVAGE SIGN TYPE D	EACH	1
	-	-	2105.501	COMMON EXCAVATION (P)	CU YD	600
	-	-	2105.522	SELECT GRANULAR BORROW (LV)	CU YD	2352
	-	-	2105.523	COMMON BORROW (LV)	CU YD	1440
	-	-	2211.503	AGGREGATE BASE (CV), CLASS 5 (P)	CU YD	1178
	BB	20	2232.501	MILL BITUMINOUS SURFACE (1.5")	SQ YD	2420
7	-	-	2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	1312
	A	20	2360.501	TYPE SP 9.5 WEARING COURSE MIXTURE (4,C)	TON	1196
	A	20	2360.502	TYPE SP 12.5 NON WEARING COURSE MIXTURE (4,B)	TON	815
	D	33	2501.515	12" RC PIPE APRON	EACH	3
	-	-	2501.602	SKIMMER	EACH	1
	D	33	2503.541	12" RC PIPE SEWER DES 3006	LIN FT	524
	D	33	2503.541	21" RC PIPE SEWER DES 3006	LIN FT	286
	D	33	2503.602	CONNECT INTO EXISTING DRAINAGE STRUCTURE	EACH	4
	-	26	2504.602	ADJUST VALVE BOX - WATER	EACH	1
	D	33	2506.501	CONSTRUCT DRAINAGE STRUCTURE DESIGN F	LIN FT	32.9
	D	33	2506.501	CONSTRUCT DRAINAGE STRUCTURE DESIGN N	LIN FT	7.6
	D	33	2506.516	CASTING ASSEMBLY	EACH	11
	D	33	2506.522	ADJUST FRAME AND RING CASTING	EACH	2
	D	33	2506.601	CONTROL STRUCTURE	LUMP SUM	1
	CC	20	2511.501	RANDOM RIPRAP, CLASS III	CU YD	8.8
	CC	20	2511.515	GEOTEXTILE FILTER TYPE IV	SQ YD	16
	B	20	2521.501	4" CONCRETE WALK	SQ FT	4192
	B	20	2521.501	6" CONCRETE WALK	SQ FT	480
	A	20	2521.511	2.5" BITUMINOUS WALK	SQ FT	3130
	AA	20	2531.501	CONCRETE CURB AND GUTTER, DESIGN B618	LIN FT	1501
	CC	20	2531.618	TRUNCATED DOMES	SQ FT	92
	H	44	2533.507	PORTABLE PRECAST CONC BARRIER DES 8337	LIN FT	950
5	C	20	2545.511	INSTALL LIGHTING UNIT	EACH	1
	H	44	2554.615	IMPACT ATTENUATOR	ASSEMBLY	1
	H	44	2563.601	TRAFFIC CONTROL	LUMP SUM	1
2	C	20	2557.603	INSTALL CHAIN LINK FENCE	LIN FT	405
	-	-	2563.602	PORTABLE PRECAST CONC BARRIER DELINEATOR	EACH	31
	F	40	2564.531	SIGN PANELS, TYPE C	SQ FT	100
	F	40	2564.537	INSTALL SIGN TYPE C	EACH	9
	F	40	2564.537	INSTALL SIGN TYPE D	EACH	1
	-	-	2565.511	TRAFFIC CONTROL SIGNAL SYSTEM	SIG SYS	1
	-	-	2565.616	TEMPORARY SIGNAL SYSTEM	SYSTEM	1
	-	-	2573.515	FILTER BERM TYPE 3	CU YD	15
	-	-	2573.530	STORM DRAIN INLET PROTECTION	EACH	18
	-	-	2573.533	SEDIMENT CONTROL LOG TYPE COMPOST	LIN FT	1660
6	-	-	2575.555	TURF ESTABLISHMENT	LUMP SUM	1

STATEMENT OF ESTIMATED QUANTITIES

	H	44	2581.501	REMOVABLE PREFORMED PAVEMENT MARKING TAPE	LIN FT	2843
	H	44	2581.602	REMOVABLE PREFORMED PAVEMENT MARKING TAPE	EACH	12
	G	41	2582.501	PAVEMENT MESSAGE (LEFT ARROW) - POLY PREF	EACH	3
	G	41	2582.501	PAVEMENT MESSAGE (RIGHT ARROW) - POLY PREF	EACH	2
	G	41	2582.501	PAVEMENT MESSAGE THRU) - POLY PREF	EACH	3
	G	41	2582.501	PAVEMENT MESSAGE (LEFT ARROW) - POLY PREF - GR IN	EACH	3
	G	41	2582.501	PAVEMENT MESSAGE (RIGHT ARROW) - POLY PREF - GR IN	EACH	3
	G	41	2582.501	PAVEMENT MESSAGE (LEFT/THRU ARROW) - POLY PREF - GR IN	EACH	3
	G	41	2582.502	4" SOLID LINE WHITE - EPOXY	LIN FT	1848
	G	41	2582.502	4" BROKEN LINE WHITE - EPOXY	LIN FT	1104
	G	41	2582.502	4" SOLID LINE YELLOW - EPOXY	LIN FT	816
	G	41	2582.502	4" SOLID LINE WHITE - EPOXY - GR IN	LIN FT	2417
	G	41	2582.502	4" SOLID LINE YELLOW - EPOXY - GR IN	LIN FT	868
	G	41	2582.503	CROSSWALK MARKING WHITE - POLY PREF	SQ FT	1115

TABULATION INDEX

TAB	SHEET NO.	TABULATION
A	20	BITUMINOUS
B	20	CONCRETE WALK
C	20	MISCELLANEOUS SALVAGE AND REMOVAL
D	33	DRAINAGE QUANTITIES
F	40	SIGNING PLAN QUANTITIES
G	41	STRIPING PLAN QUANTITIES
H	44	TRAFFIC CONTROL
AA	20	B618 CONCRETE CURB AND GUTTER
BB	20	MILL BITUMINOUS PAVEMENT
CC	20	MISCELLANEOUS CONSTRUCTION ITEMS

NOTES:

1. CLEAR AND GRUB TREES AND BRUSH WITHIN RIGHT-OF-WAY AS DIRECTED BY ENGINEER.
2. CHAINLINK FENCE TO BE SALVAGED AND INSTALLED AS SHOWN IN THE PLANS TO ALLOW FOR CONSTRUCTION OF EXIT RAMP IMPROVEMENTS.
3. NOTE DELETED.
4. NOTE DELETED.
5. EXISTING LIGHTING UNIT TO BE SALVAGED AND INSTALLED AS SHOWN IN THE PLANS TO ALLOW FOR CONSTRUCTION OF EXIT RAMP IMPROVEMENTS.
6. LUMP SUM COMPOSED OF SEED, SOD, FERTILIZER, EROSION CONTROL BLANKET, AND SEEDING.
7. DILUTED EMULSION WITH APPLICATION RATE OF 0.1 GAL/SY FOR NEW ASPHALT AND 0.13 GAL/SY FOR MILLED ASPHALT PER MNDOT SPEC 2357 AND TABLE 2357-2.

No.	Date	By	Revision
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.
Signature
Name George D. Abrahamson
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

ESTIMATED QUANTITIES

THE FOLLOWING STANDARD PLATES,
APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION,
SHALL APPLY ON THIS PROJECT.

MN/DOT STANDARD PLATES	
PLATE NO.	DESCRIPTION
3000L	REINFORCED CONCRETE PIPE (5 SHEETS)
3006G	GASKET JOINT FOR R.C. PIPE (2 SHEETS)
3100G	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
3133D	RIPRAP AT RCP OUTLETS
3145G	CONCRETE PIPE TIES
4003B	30' PRECAST CATCH BASIN (DESIGN N)
4005M	MANHOLE OR CATCH BASIN (DESIGN F)
4006L	MANHOLE OR CATCH BASIN PRECAST (DESIGN G AND H)
4101D	RING CASTING FOR MANHOLE OR CATCH BASIN
4108F	ADJUSTING RINGS FOR CATCH BASINS AND MANHOLES
4110F	COVER CASTING FOR MANHOLE - CASTING NO. 715 AND 716
4125D	CATCH BASIN FRAME CASTING - CASTING NO. 806
4152C	CATCH BASIN GRATE CASTING - CASTING NO. 814A
4160D	CURB BOX CASTING FOR CATCH BASIN - CASTING NO. 823A AND 833A
4180J	MANHOLE OR CATCH BASIN STEP
7038A	DETECTABLE WARNING SURFACE TRUNCATED DOMES
7100H	CONCRETE CURB & GUTTER (DESIGN B AND V)
7107I	ENTRANCE NOSE (URBAN DESIGN)
7111J	STANDARD BARRICADES
7113A	CONCRETE APPROACH NOSE DETAIL
8000I	STANDARD BARRICADES
8337C	TEMPORARY PORTABLE PRECAST CONCRETE BARRIER (3 SHEETS)
9322K	CHAIN LINK FENCE (2 SHEETS)

No.	Date	By	Revision
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

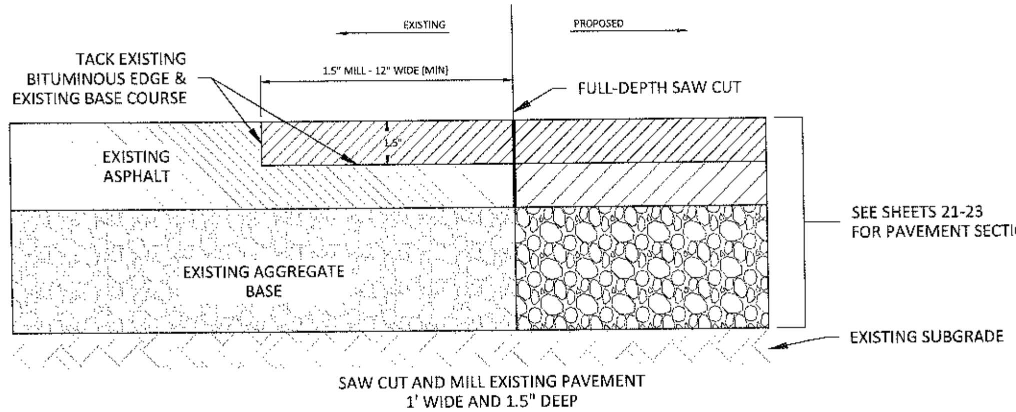
Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.
Signature
Name George D. Aluthathy
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

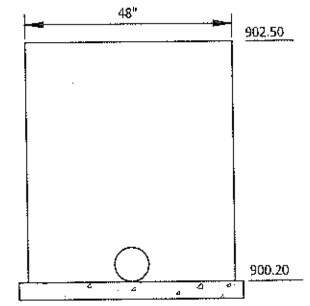
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

STANDARD PLATES

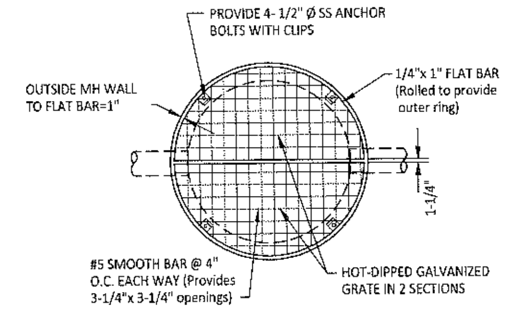


PAVEMENT JOINT DETAIL

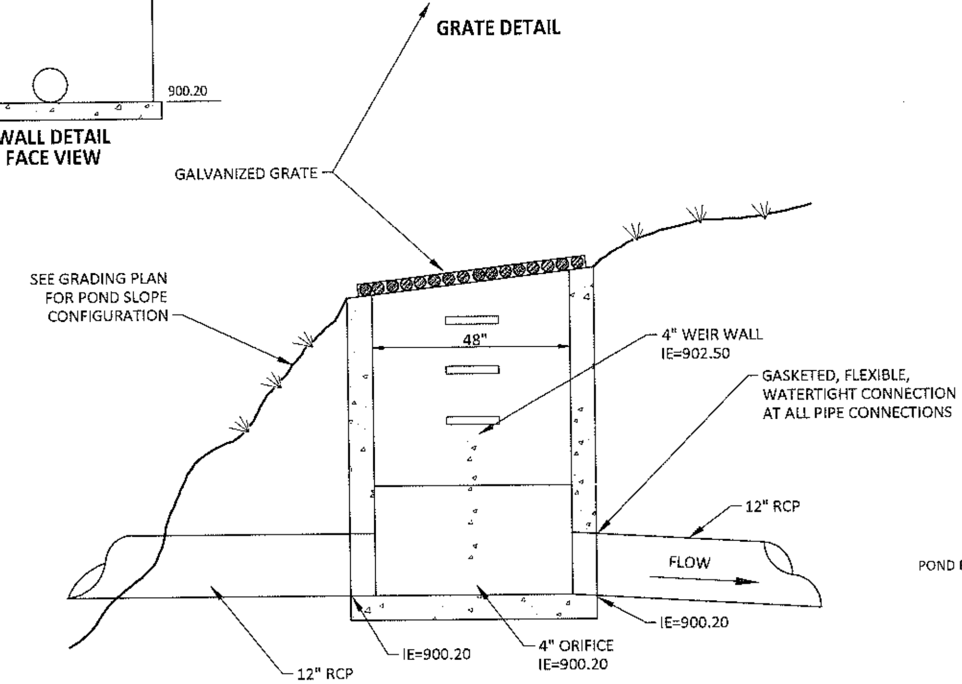
N.T.S. REV. 10/12 (1)



WALL DETAIL
FACE VIEW

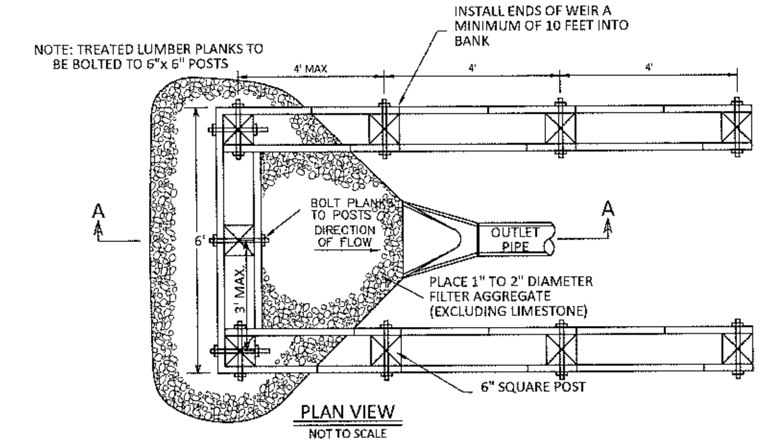


GRATE DETAIL

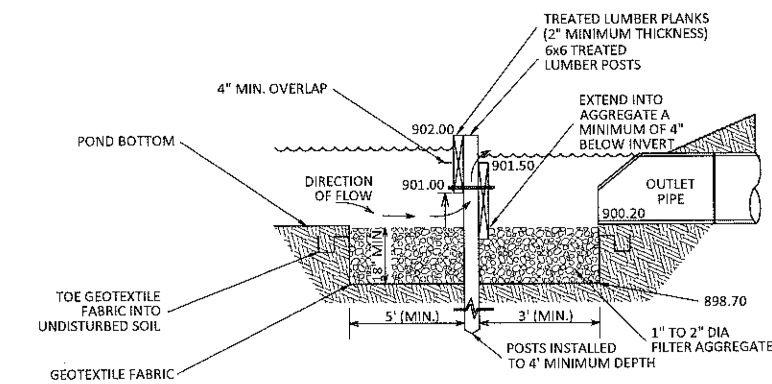


OUTLET CONTROL STRUCTURE

(4) N.T.S.



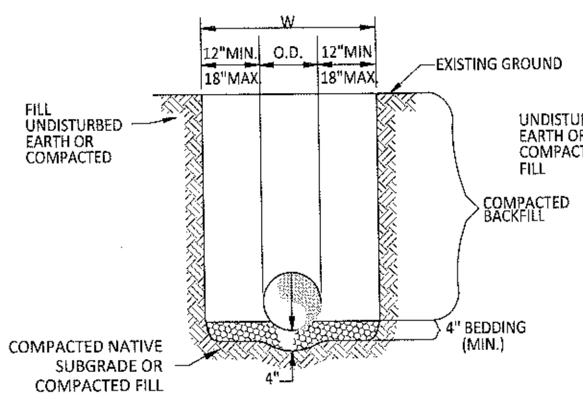
PLAN VIEW
NOT TO SCALE



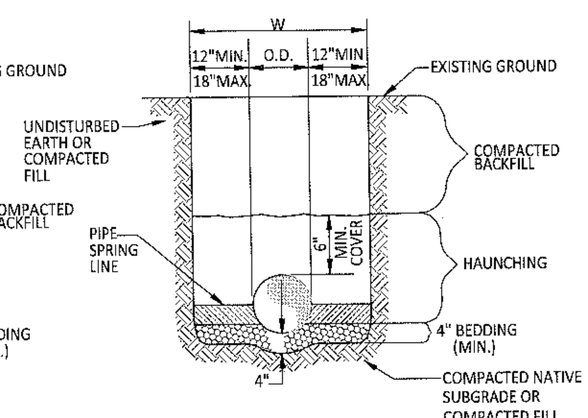
SECTION A-A

WOOD SKIMMER STRUCTURE

N.T.S. (5)



REINFORCED CONCRETE PIPE (RCP)
N.T.S.



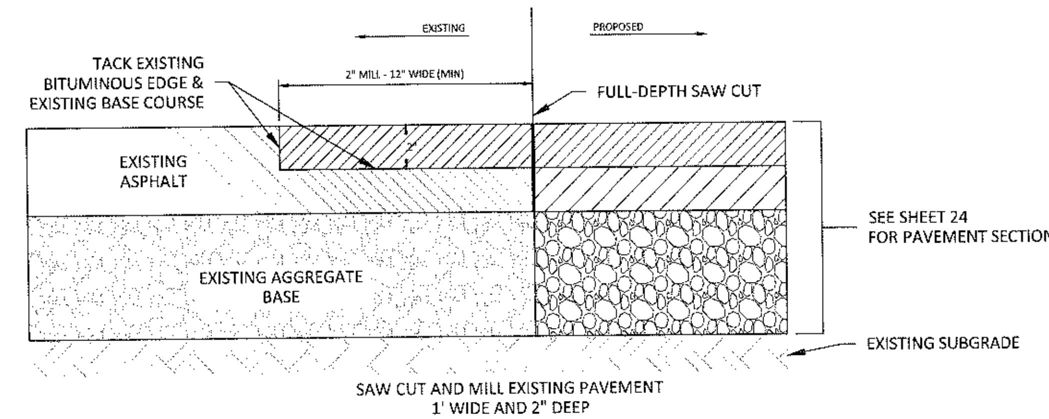
ALL OTHER PIPES
N.T.S.

GENERAL NOTES:

1. ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321, LATEST EDITION ON THE PROJECT SPECIFICATION SECTION 2300.
2. BEDDING SHALL BE CLASS I-A (ASTM D 2321) WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I-B (ASTM D2321) COMPACTED TO 85% STANDARD PROCTOR OR MNDOT STANDARD SPECIFICATION 3149.2(g).
3. HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I-A (ASTM D2321) OR CLASS I-B (ASTM D2321) OR CLASS II COMPACTED TO 85% STANDARD PROCTOR OR MNDOT STANDARD SPECIFICATION 3149.2(j).
4. COMPACTED BACKFILL SHALL CONSIST OF SUITABLE MATERIALS AS DEFINED IN SPECIFICATION SECTION 2300 AND SHALL MEET THE COMPACTION REQUIREMENTS OUTLINED IN THAT SECTION.
5. COMPACTED BACKFILL NOT UNDER PAVED AREAS MAY BE CLASS IV-A COMPACTED TO 95% STANDARD PROCTOR.
6. ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698. MATERIALS SHALL BE COMPACTED WITHIN MOISTURE CONTENT LIMITS LISTED IN THE SPECIFICATION.
7. FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
8. ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES. (SEE SPECIFICATIONS)

TYPICAL STORM SEWER TRENCH AND BEDDING DETAIL

N.T.S. REV. 12/20/04 (2)



PAVEMENT JOINT DETAIL

N.T.S. REV. 10/12 (3)

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

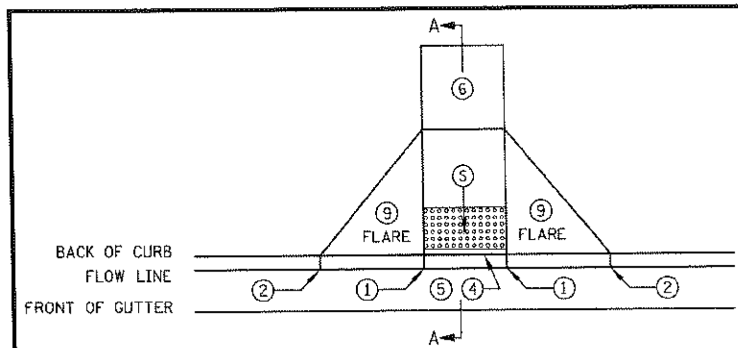
Signature
Name George D. Ab…athy
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

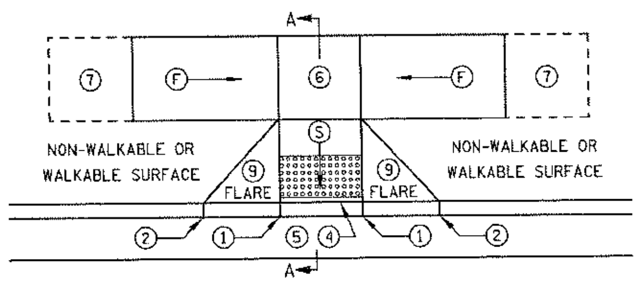
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CONSTRUCTION DETAILS NOTES & STANDARD PLATES

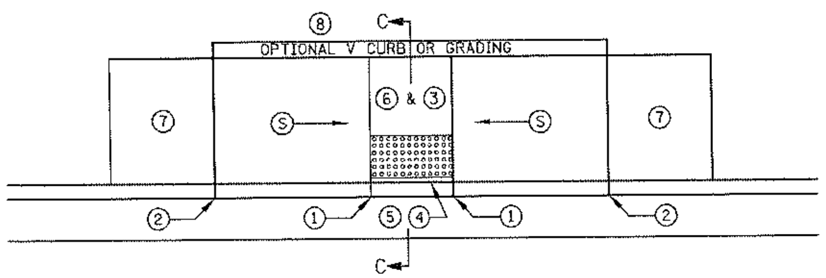
Apr 09, 2015 - 12:45pm - User:577 L:\WAL-MART\WAL18568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-05-DETAILS.dwg



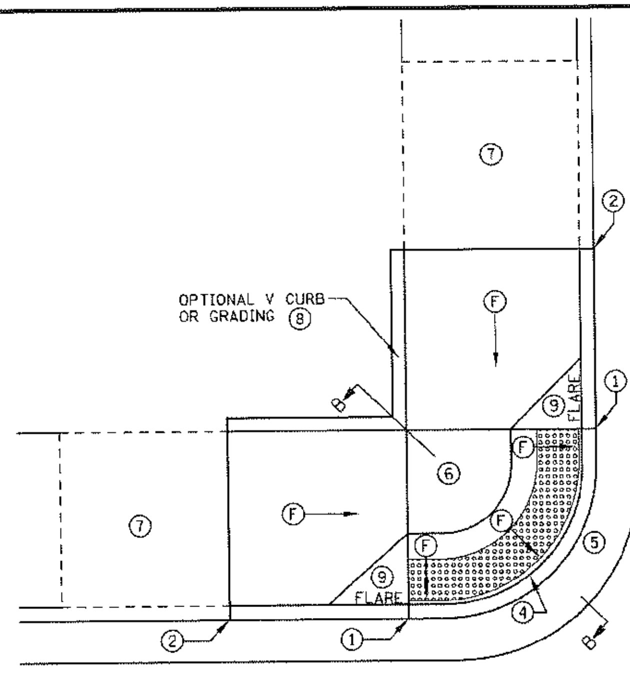
PERPENDICULAR



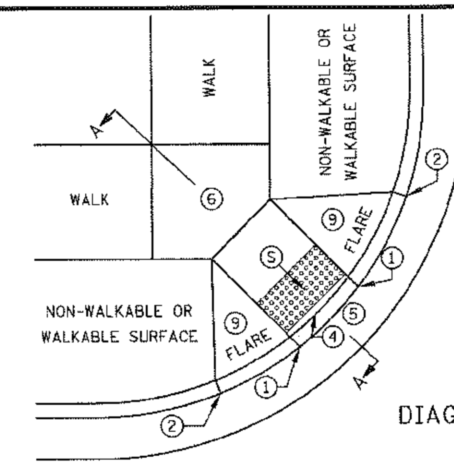
TIERED PERPENDICULAR



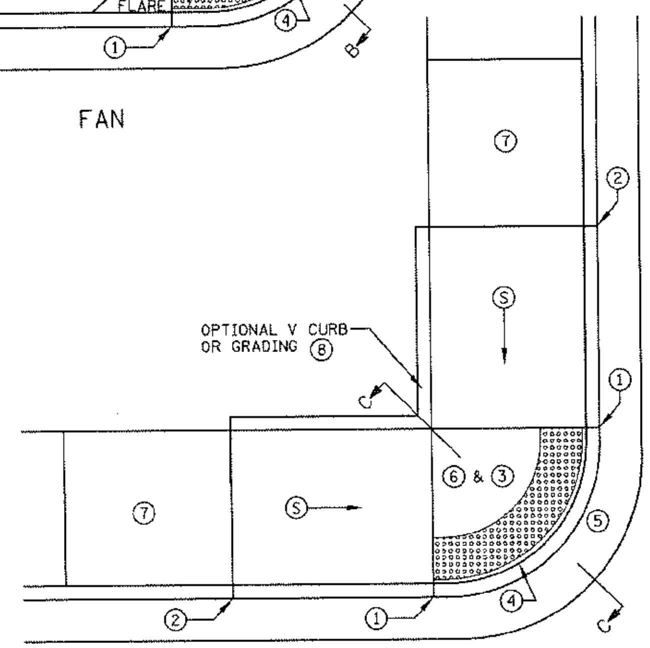
PARALLEL



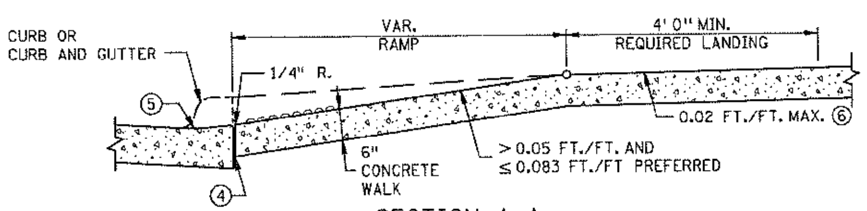
FAN



DIAGONAL ⑩

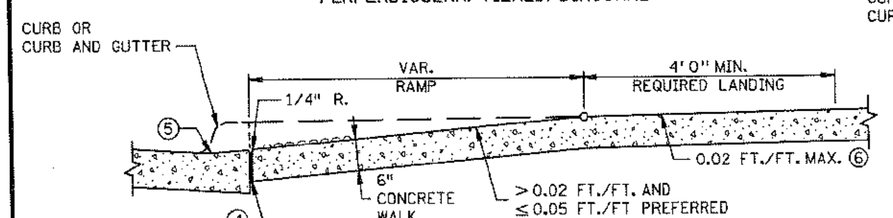


DEPRESSED CORNER



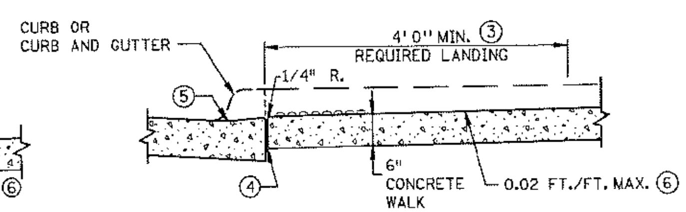
SECTION A-A

PERPENDICULAR/TIERED/DIAGONAL



SECTION B-B

FAN



SECTION C-C

PARALLEL/DEPRESSED CORNER

NOTES:

LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE CHANGES DIRECTION, AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.0%, AND IF THE APPROACHING WALK IS INVERSE GRADE.

INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB, WITH 6' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE.

SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30" OF VERTICAL RISE WHEN THE LONGITUDINAL SLOPE IS GREATER THAN 5.0%.

CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS.

ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL.

TO ENSURE RAMPS AND LANDINGS ARE PROPERLY CONCTRUCTED, LANDINGS MAY BE CAST SEPARATELY. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 5 WHEN LANDINGS ARE CAST SEPARATELY.

ALL SLOPES ARE ABSOLUTE, RATHER THAN RELATIVE TO SIDEWALK/ROADWAY GRADES.

TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

4' MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS. DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MINIMUM OF 24" IN THE PATH OF TRAVEL. SHARED USE PATHS SHALL HAVE DETECTABLE WARNING ACROSS THE ENTIRE WIDTH OF PATH WHEN THE PATH CROSSES A ROAD.

SEE STANDARD PLATE 7038 AND SHEET 4 OF 5 FOR ADDITIONAL DETAILS ON DETECTABLE WARNING.

① 0" CURB HEIGHT.

② FULL CURB HEIGHT.

③ DETECTABLE WARNINGS MAY BE PART OF 4' X 4' LANDING AREA IF IT IS NOT FEASIBLE TO CONSTRUCT THE LANDING OUTSIDE OF THE DETECTABLE WARNING AREA.

④ 1/2" PREFORMED JOINT FILLER MATERIAL AASHTO M 213. JOINT FILLER SHALL BE PLACED FLUSH WITH THE BACK OF CURB AND ADJACENT SIDEWALK. JOINT SHALL BE FREE OF DEBRIS. RECTANGULAR DETECTABLE WARNINGS SHALL BE SETBACK 3" FROM THE BACK OF CURB. RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3" MINIMUM TO 6" MAXIMUM FROM THE BACK OF CURB.

⑤ SEE PEDESTRIAN ACCESS ROUTE CURB AND GUTTER DETAIL FOR INFORMATION ON CONSTRUCTING CURB AND GUTTER AT CURB OPENINGS. SEE SHEET NO. 3 OF 5.

⑥ 4' BY 4' MIN. LANDING WITH MAX. 2.0% SLOPE IN ALL DIRECTIONS.

⑦ IF LONGITUDINAL SLOPE IS GREATER THAN 5.0%, 4' X 4' MIN. LANDING WITH MAX 2.0% SLOPE IN ALL DIRECTIONS REQUIRED.

⑧ V CURB, IF USED, SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS. SEE SHEET 5 OF 5.

⑨ SEE SHEET 4 OF 5, TYPICAL SIDE TREATMENT OPTIONS, FOR DETAILS ON FLARES AND RETURNED CURBS.

⑩ DIAGONAL RAMPS SHOULD ONLY BE USED AFTER ALL OTHER CURB RAMP TYPES HAVE BEEN EVALUATED AND DEEMED IMPRACTICAL.

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

Ⓢ INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%

Ⓕ INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%

REVISION:
APPROVED: 8-6-2014
OPERATIONS ENGINEER

MINNESOTA DEPARTMENT OF TRANSPORTATION

STATE DESIGN ENGINEER

REVISED:

APPROVED: 8-6-2014

PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 1 OF 5

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

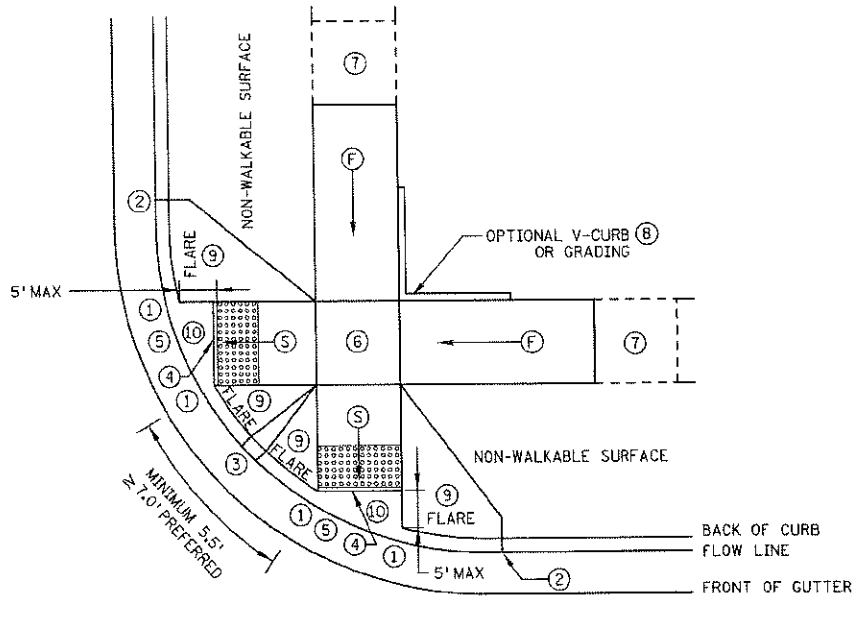
I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature
Name George D. Abernathy
Date 04/09/2015 License No. 43505

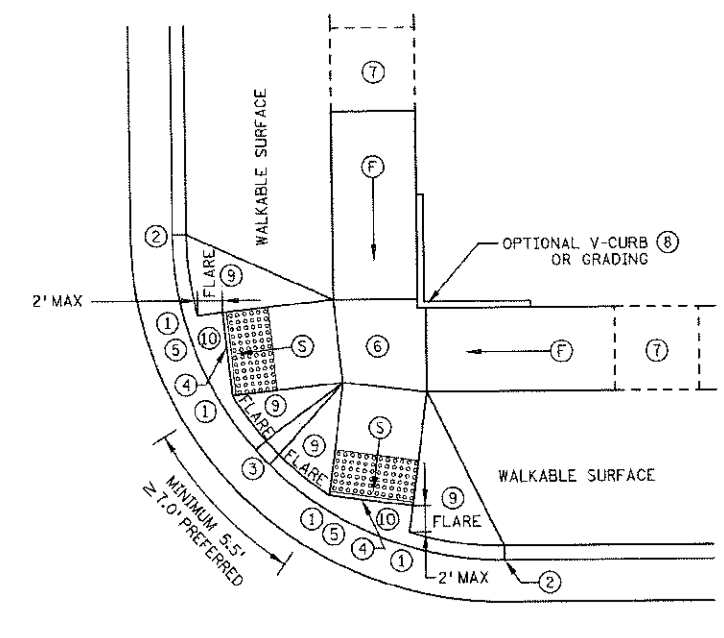
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CONSTRUCTION DETAILS
NOTES & STANDARD PLATES



ADJACENT TO NON-WALKABLE SURFACE



ADJACENT TO WALKABLE SURFACE

COMBINED DIRECTIONAL ⑮

NOTES:

LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE CHANGES DIRECTION, AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.0%, AND IF THE APPROACHING WALK IS INVERSE GRADE.

INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB, WITH 6' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE.

SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30" OF VERTICAL RISE WHEN THE LONGITUDINAL SLOPE IS GREATER THAN 5.0%.

CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS.

ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL.

TO ENSURE RAMPS AND LANDINGS ARE PROPERLY CONCTRUCTED, LANDINGS MAY BE CAST SEPARATELY. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 5 WHEN LANDINGS ARE CAST SEPARATELY.

ALL SLOPES ARE ABSOLUTE, RATHER THAN RELATIVE TO SIDEWALK/ROADWAY GRADES.

TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

4' MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS. DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MINIMUM OF 24" IN THE PATH OF TRAVEL. SHARED USE PATHS SHALL HAVE DETECTABLE WARNING ACROSS THE ENTIRE WIDTH OF PATH WHEN THE PATH CROSSES A ROAD.

SEE STANDARD PLATE 7038 AND SHEET 4 OF 5 FOR ADDITIONAL DETAILS ON DETECTABLE WARNING.

① 0" CURB HEIGHT.

② FULL CURB HEIGHT.

③ 3" MINIMUM CURB HEIGHT, 4" PREFERRED.

④ 1/2" PREFORMED JOINT FILLER MATERIAL AASHTO M 213. JOINT FILLER SHALL BE PLACED FLUSH WITH THE BACK OF CURB AND ADJACENT SIDEWALK. JOINT SHALL BE FREE OF DEBRIS. RECTANGULAR DETECTABLE WARNINGS SHALL BE SETBACK 3" FROM THE BACK OF CURB. RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3" MIN. TO 6" MAX. FROM THE BACK OF CURB.

⑤ SEE PEDESTRIAN ACCESS ROUTE CURB AND GUTTER DETAIL FOR INFORMATION ON CONSTRUCTING CURB AND GUTTER AT CURB OPENINGS. SEE SHEET NO. 3 OF 5.

⑥ 4' BY 4' MIN. LANDING WITH MAX. 2.0% SLOPE IN ALL DIRECTIONS.

⑦ IF LONGITUDINAL SLOPE IS GREATER THAN 5.0%, 4' X 4' MIN. LANDING WITH MAX 2.0% SLOPE IN ALL DIRECTIONS REQUIRED.

⑧ V CURB, IF USED, SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS.

⑨ SEE SHEET 4 OF 5, TYPICAL SIDE TREATMENT OPTIONS, FOR DETAILS ON FLARES AND RETURNED CURBS.

⑩ MAX. 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK AND DRAIN TO FLOW LINE. SHALL BE CONSTRUCTED INTEGRAL WITH CURB AND GUTTER.

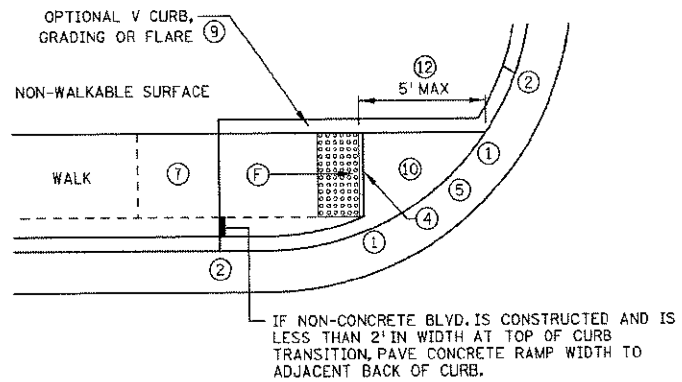
⑪ TO BE USED FOR ALL DIRECTIONAL RAMPS.

⑫ PLACE DOMES AT THE BACK OF CURB WHEN ALLOWABLE SETBACK CRITERIA IS EXCEEDED.

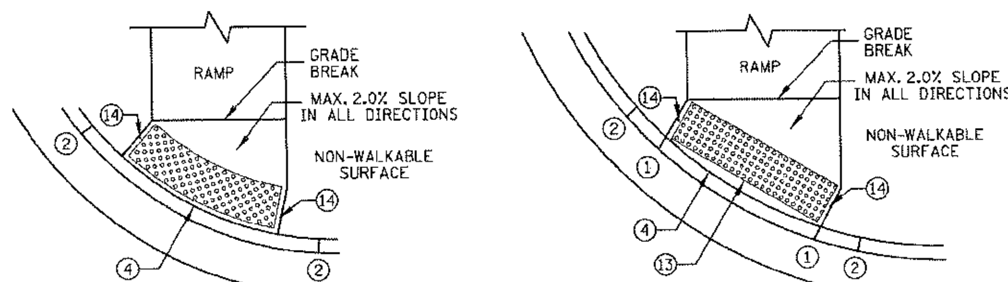
⑬ RECTANGULAR DETECTABLE WARNINGS MAY BE SETBACK 9" FROM THE BACK OF CURB WITH CORNERS SET 3" FROM BACK OF CURB. IF 9" SETBACK IS EXCEEDED USE RADIAL DETECTABLE WARNINGS.

⑭ WHEN NO CONCRETE FLARES ARE PROPOSED, THE CONCRETE WALK SHALL BE FORMED AND CONSTRUCTED PERPENDICULAR TO THE BACK OF CURB. MAINTAIN 3" BETWEEN EDGE OF DOMES AND EDGE OF CONCRETE.

⑮ FRONT EDGE OF DETECTABLE WARNING SHALL BE SET BACK 2' MAXIMUM WHEN ADJACENT TO WALKABLE SURFACE, AND 5' MAXIMUM WHEN ADJACENT TO NON-WALKABLE SURFACE WITH ONE CORNER SET 3" FROM BACK OF CURB. WHETHER A SURFACE IS WALKABLE OR NOT SHALL BE DETERMINED BY THE ENGINEER



ONE-WAY DIRECTIONAL



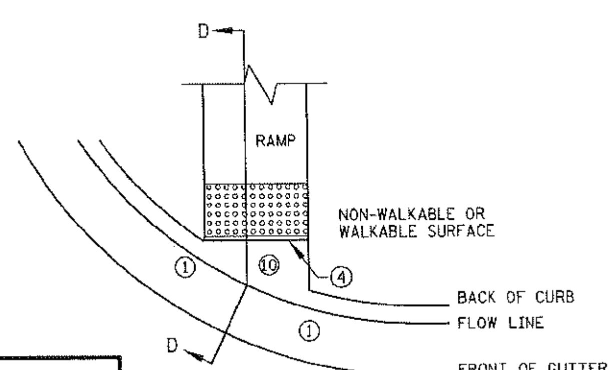
DETECTABLE WARNING PLACEMENT WHEN SETBACK CRITERIA IS EXCEEDED

LEGEND

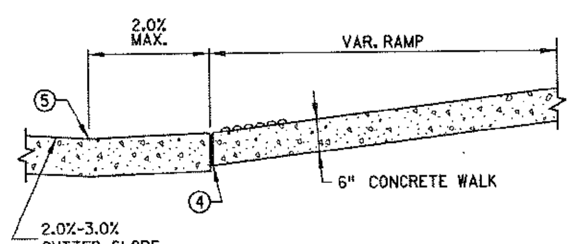
THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

Ⓢ INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%

Ⓕ INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%



CURB FOR DIRECTIONAL RAMPS ⑪



SECTION D-D

REVISION:
APPROVED: 8-6-2014
OPERATIONS ENGINEER

REVISED:
APPROVED: 8-6-2014
STATE DESIGN ENGINEER

PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 2 OF 5

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

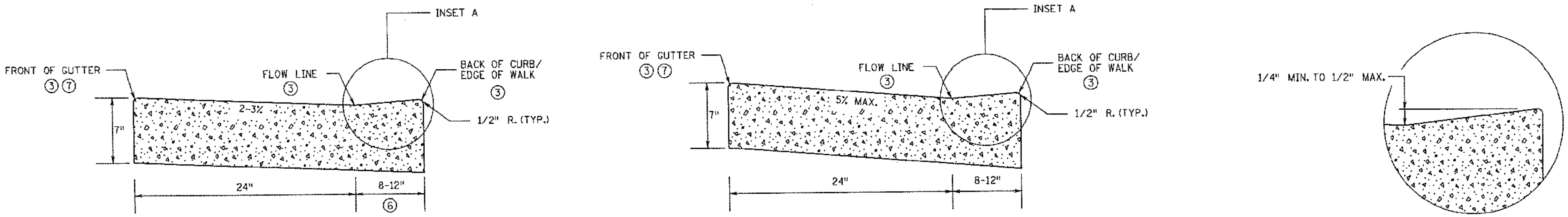
Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.
Signature
Name George D. Abernathy
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CONSTRUCTION DETAILS NOTES & STANDARD PLATES

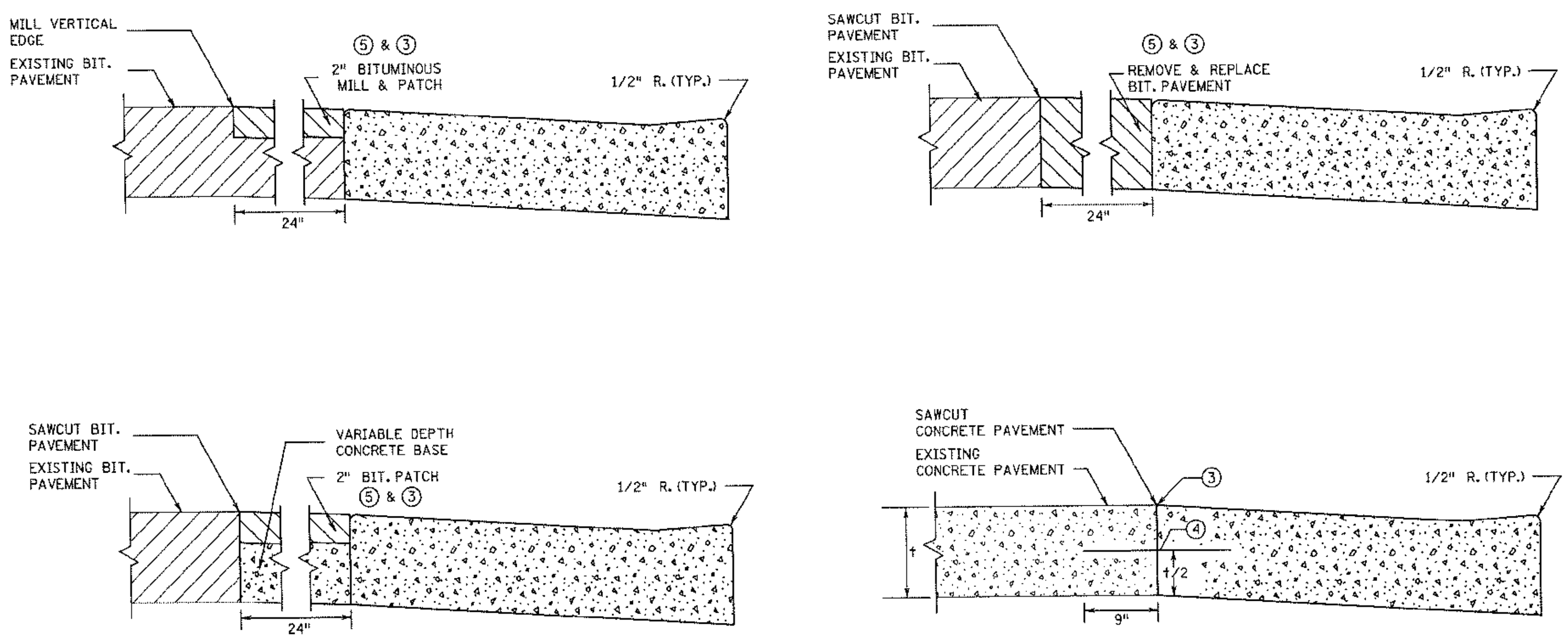


NON PERPENDICULAR ①

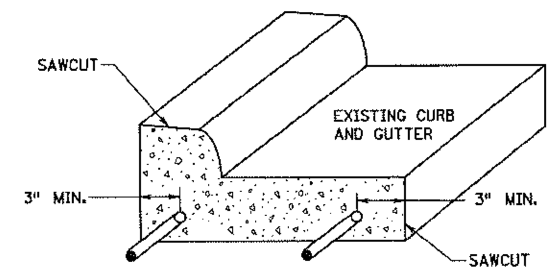
PERPENDICULAR ②

INSET A

PEDESTRIAN ACCESS ROUTE
CURB & GUTTER DETAIL



PAVEMENT TREATMENT OPTIONS
IN FRONT OF CURB & GUTTER
FOR USE ON CURB RAMP RETROFITS



CURB AND GUTTER REINFORCEMENT ⑧
FOR USE ON CURB RAMP RETROFITS

NOTES:

POSITIVE FLOW LINE DRAINAGE SHALL BE MAINTAINED THROUGH THE PEDESTRIAN ACCESS ROUTE (PAR) AT A 2% MAXIMUM.

NO PONDING SHALL BE PRESENT IN THE PAR.

ANY VERTICAL LIP THAT OCCURS AT THE FLOW LINE SHALL NOT BE GREATER THAN 1/4 INCH.

① FOR USE AT CURB CUTS WHERE THE PEDESTRIAN'S PATH OF TRAVEL IS ASSUMED NON PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE: FANS, DEPRESSED CORNERS, & ONE WAY AND COMBINED DIRECTIONALS.

② FOR USE AT CURB CUTS WHERE THE PEDESTRIAN'S PATH OF TRAVEL IS ASSUMED PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE: PERPENDICULAR, TIERED PERPENDICULAR, PARALLEL, AND DIAGONAL RAMPS.

③ THERE SHALL BE NO VERTICAL DISCONTINUITIES GREATER THAN 1/4".

④ DRILL AND GROUT NO. 4 EPOXY-COATED 18" LONG TIE BARS AT 30" CENTER TO CENTER INTO EXISTING CONCRETE PAVEMENT.

⑤ ELEVATION CHANGE TAKES PLACE FROM THE EXISTING TO NEW FRONT OF GUTTER. PATCH IS USED TO MATCH THE NEW GUTTER FACE INTO THE EXISTING ROADWAY.

⑥ VARIABLE WIDTH FOR DIRECTIONAL CURB APPLICATIONS.

⑦ TOP FRONT OF GUTTER SHALL BE CONSTRUCTED FLUSH WITH PROPOSED ADJACENT PAVEMENT ELEVATION. PAR GUTTER SHALL NOT BE OVERLAID.

⑧ WHERE PLAN SPECIFIES, DRILL AND GROUT 2 - NO. 4 X 12" LONG REINFORCEMENT BARS (EPOXY COATED).

REVISION:

APPROVED: 8-6-2014

OPERATIONS ENGINEER

MINNESOTA DEPARTMENT OF TRANSPORTATION

REVISED:

APPROVED:
8-6-2014

STATE DESIGN ENGINEER

PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 3 OF 5

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

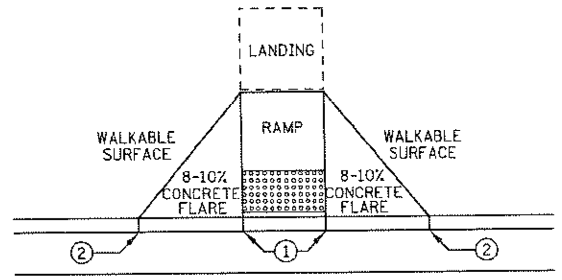
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

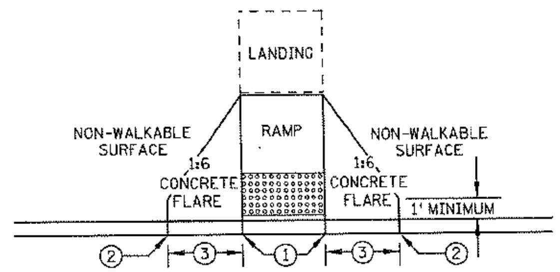
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CONSTRUCTION DETAILS
NOTES & STANDARD PLATES

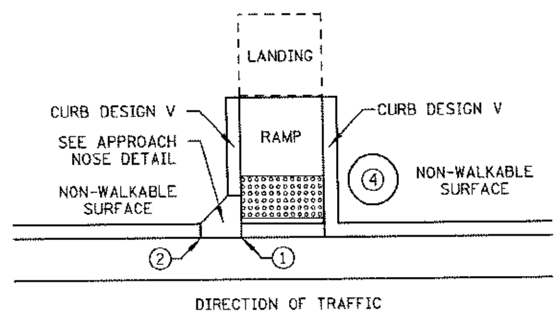
Apr 09, 2015 - 12:45pm - User:377 L:\WAL-MART\WAL18568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568 05-DETAILS.dwg



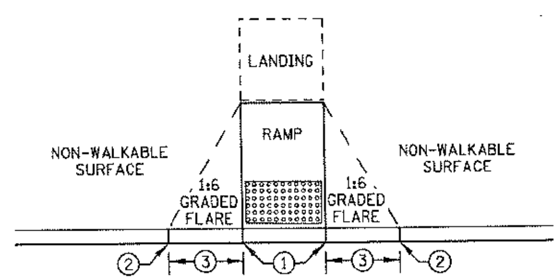
PAVED FLARES
ADJACENT TO WALKABLE SURFACE



PAVED FLARES
ADJACENT TO NON-WALKABLE SURFACE

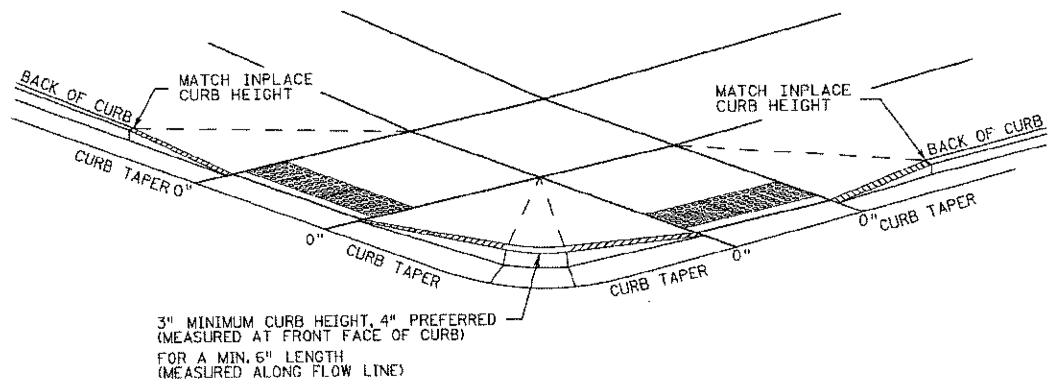


RETURNED CURB

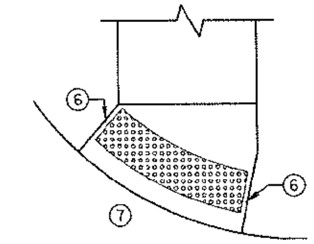


GRADED FLARES

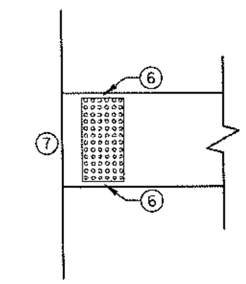
TYPICAL SIDE TREATMENT OPTIONS ⑤



DETECTABLE EDGE WITH
CURB AND GUTTER ⑧

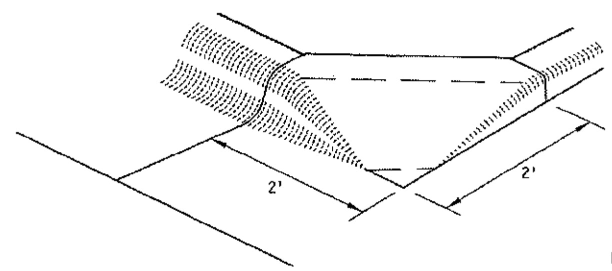


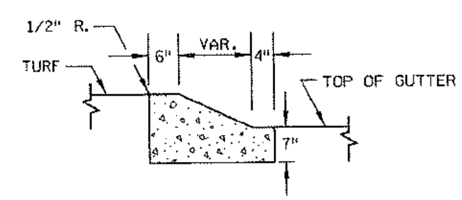
RADIAL DETECTABLE WARNING



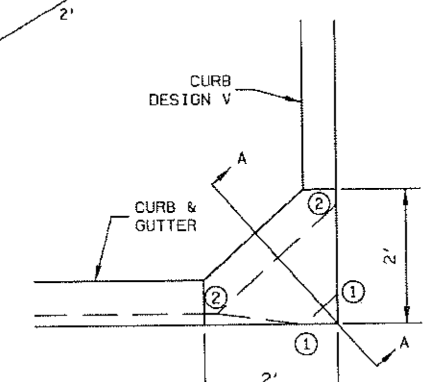
RECTANGULAR DETECTABLE WARNING

DETECTABLE EDGE WITHOUT CURB AND GUTTER





SECTION A-A



APPROACH NOSE DETAIL
FOR DOWNSTREAM SIDE OF TRAFFIC

NOTES:

SEE STANDARD PLATE 7038 AND THIS SHEET FOR ADDITIONAL DETAILS ON DETECTABLE WARNING.

WHETHER A SURFACE IS WALKABLE OR NOT SHALL BE DETERMINED BY THE ENGINEER.

CONCRETE FLARE LENGTHS ADJACENT TO NON-WALKABLE SURFACES SHOULD BE LESS THAN 8' LONG MEASURED ALONG THE RAMPS FROM THE BACK OF CURB.

① 0" CURB HEIGHT.
② FULL CURB HEIGHT.
③ 2' - 3' FLARE.
④ IMMOVABLE OBJECT OR OBSTRUCTION.
⑤ SIDE TREATMENTS ARE APPLICABLE TO ALL RAMP TYPES AND SHOULD BE IMPLEMENTED AS NEEDED ON ALL RAMPS AS FIELD CONDITIONS DICTATE. THE ENGINEER SHALL DETERMINE THE RAMP SIDE TREATMENTS BASED ON MAINTENANCE OF BOTH ROADWAY AND SIDEWALK, ADJACENT PROPERTY CONSIDERATIONS, AND MITIGATING CONSTRUCTION IMPACTS.
⑥ WHEN NO CONCRETE FLARES ARE PROPOSED, THE CONCRETE WALK SHALL BE FORMED AND CONSTRUCTED PERPENDICULAR TO THE EDGE OF ROADWAY. MAINTAIN 3" BETWEEN EDGE OF DOMES AND EDGE OF CONCRETE.
⑦ IF NO CURB AND GUTTER IS PLACED IN RURAL SECTIONS, DETECTABLE WARNINGS SHALL BE PLACED 1' FROM THE EDGE OF ROADWAY TO PROVIDE VISUAL CONTRAST.
⑧ ALL CONSTRUCTED CURBS MUST HAVE A CONTINUOUS DETECTABLE EDGE FOR THE VISUALLY IMPAIRED. THIS DETECTABLE EDGE REQUIRES DETECTABLE WARNINGS WHEREVER THERE IS ZERO-INCH HIGH CURB. CURB TAPERS ARE CONSIDERED A DETECTABLE EDGE WHEN THE TAPER STARTS WITHIN 3" OF THE EDGE OF THE DETECTABLE WARNINGS AND UNIFORMLY RISES TO A 3-INCH MINIMUM CURB HEIGHT. ANY CURB NOT PART OF A CURB TAPER AND LESS THAN 3 INCHES IN HEIGHT IS NOT CONSIDERED A DETECTABLE EDGE AND THEREFORE IS NOT COMPLIANT WITH ACCESSIBILITY STANDARDS.

REVISION:
APPROVED: 8-6-2014
OPERATIONS ENGINEER

MINNESOTA DEPARTMENT OF TRANSPORTATION
STATE DESIGN ENGINEER
REVISED:
APPROVED: 8-6-2014

PEDESTRIAN CURB RAMP DETAILS
STANDARD PLAN 5-297.250 | 4 OF 5

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

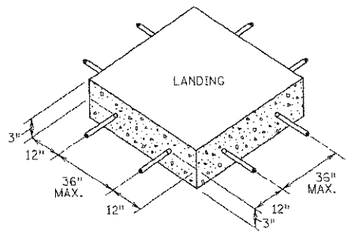
Signature
Name George D. Abernathy
Date 04/09/2015 License No. 43505

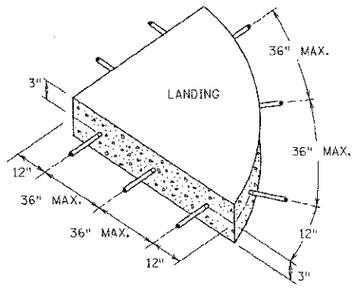
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

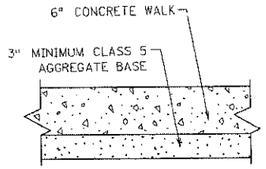
CONSTRUCTION DETAILS
NOTES & STANDARD PLATES

Apr 09, 2015 - 12:45pm - User:S77 L:\WAL-MART\WAL18568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-05-DETAILS.dwg

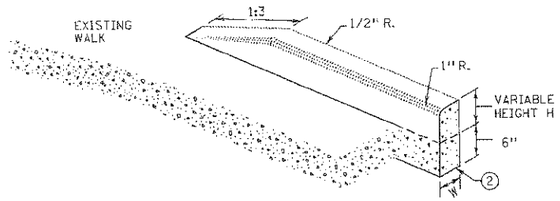




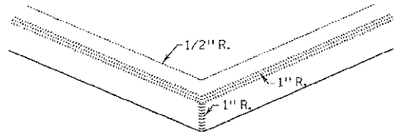
SIDEWALK REINFORCEMENT ⑥ ⑦



TYPICAL SIDEWALK SECTION WITHIN INTERSECTION CORNER

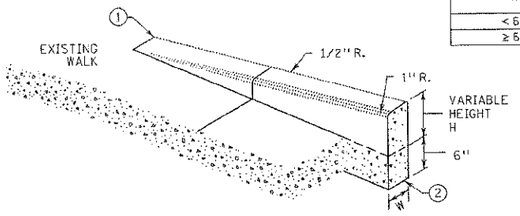


V CURB ADJACENT TO LANDSCAPE
CURB WITHIN SIDEWALK LIMITS

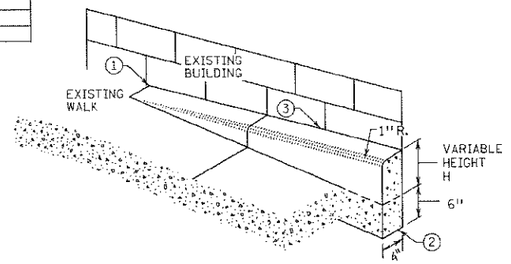


V CURB INTERSECTION

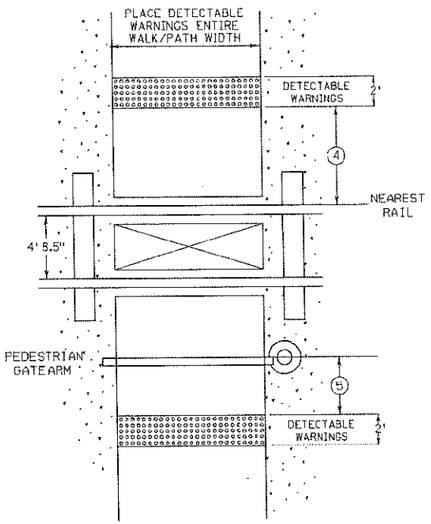
CONCRETE CURB DESIGN V	
CURB HEIGHT H	CURB WIDTH W
< 6"	4"
≥ 6"	6"



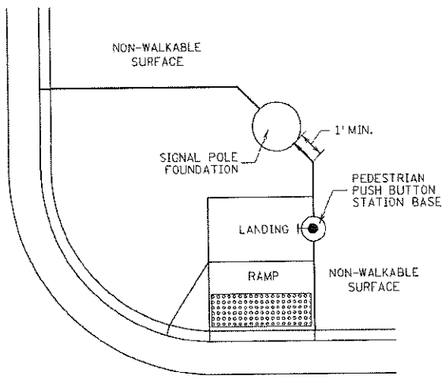
V CURB ADJACENT TO LANDSCAPE
CURB OUTSIDE SIDEWALK LIMITS



V CURB ADJACENT TO BUILDING OR BARRIER



RAILROAD CROSSING
PLAN VIEW



CONCRETE WALK EDGES ADJACENT
TO CONCRETE STRUCTURES

NOTES:

ALL V CURB CONTRACTION JOINTS SHALL MATCH CONCRETE WALK JOINTS.

WHERE RIGHT-OF-WAY ALLOWS, USE OF V CURB SHOULD BE MINIMIZED. GRADING ADJACENT TURF OR SLOPING ADJACENT PAVEMENT IS PREFERRED.

V CURB SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS.

V CURB NEXT TO BUILDING SHALL BE A 4" WIDTH AND SHALL MATCH PREVIOUS TOP OF SIDEWALK ELEVATIONS.

① END TAPERS AT TRANSITION SECTION SHALL MATCH INPLACE SIDEWALK GRADES.

② ALL V CURB SHALL MATCH BOTTOM OF ADJACENT WALK.

③ EDGE BETWEEN NEW V CURB AND INPLACE STRUCTURE SHALL BE SEALED AND BOND BREAKER SHALL BE USED BETWEEN EXISTING STRUCTURE AND PLACED V-CURB.

④ NEAREST EDGE OF DETECTABLE WARNING SURFACES SHALL BE PLACED 12' MINIMUM TO 15' MAXIMUM FROM THE NEAREST RAIL. FOR SKEWED RAILWAYS IN NO INSTANCE SHALL THE DETECTABLE WARNING BE CLOSER THAN 12' MEASURED PERPENDICULAR TO THE NEAREST RAIL.

⑤ WHEN PEDESTRIAN GATES ARE PROVIDED, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE SIDE OF THE GATES OPPOSITE THE RAIL. 2' FROM THE APPROACHING SIDE OF THE GATE ARM.

⑥ WHEN PLAN SPECIFIES, DRILL AND GROUT NO. 4 12" LONG REINFORCEMENT BARS AT 36" MAX. CENTER TO CENTER (EPOXY COATED).

⑦ TO ENSURE RAMPS AND LANDINGS ARE PROPERLY CONSTRUCTED, LANDINGS MAY BE CAST SEPARATELY. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON THIS SHEET WHEN LANDINGS ARE CAST SEPARATELY.

REVISION:

APPROVED: 2-9-2015
OPERATIONS ENGINEER

REVISED:

APPROVED: 2-9-2015
STATE DESIGN ENGINEER

PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 5 OF 5

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.
Signature
Name George D. Alphathy
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CONSTRUCTION DETAILS NOTES & STANDARD PLATES

10 / 78

Apr 09, 2015 - 12:46pm - User:577 L:\WAL-MART\WAL1854.85\Rail Road improvement\dwg\Civil\final\Lexington-Ramp\12560-05-DETAILS.dwg

CONSTRUCTION REQUIREMENTS

I. OPEN CUTTING OF BITUMINOUS OR CONCRETE SURFACED ROADS WILL BE ALLOWED ONLY AT THE DISCRETION OF THE COUNTY ENGINEER.
II. NEITHER SUPPLIES NOR EXCAVATED MATERIALS SHALL BE PLACED ON THE BITUMINOUS OR CONCRETE SURFACE AT ANY TIME.
III. NO TRENCHES WILL BE ALLOWED TO REMAIN OPEN OVERNIGHT.
IV. MATERIALS REMOVED FROM THE TRENCH SHALL BE USED AS BACKFILL INSOFAR AS THEY ARE SUITABLE. ALL BACKFILL MATERIAL SHALL CONFORM TO MNDOT SPECIFICATIONS FOR COMPACTION. THE USE OF HEAVY EQUIPMENT ON TOP OF TRENCH, SLAPPING WITH BACKHOE BUCKET AND/OR BACKCASTING TO ACHIEVE COMPACTION IS PROHIBITED. ANY ADDITIONAL MATERIAL REQUIRED TO BACK FILL THE ORIGINAL GRADE SHALL BE FURNISHED BY THE APPLICANT AT NO EXPENSE TO ACHD. ALL THE BASE AND SURFACE COURSES DAMAGED DURING CONSTRUCTION OPERATIONS SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN BEFORE OPERATIONS BEGAN. THE APPLICANT SHALL BE RESPONSIBLE FOR AND RESTORE ANY SETTLEMENT.
V. ALL CULVERTS, DITCHES, SHOULDERS AND BACKSLOPES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION UNLESS OTHERWISE DIRECTED BY THE ACHD. SHOULDERS WHICH HAVE BEEN PREVIOUSLY CONSTRUCTED OR RECONSTRUCTED WITH SPECIAL MATERIALS SHALL BE REPLACED IN KIND. RESTORATION OF SIGNS, GUARDRAILS, GUARDPOSTS, ETC. ARE THE SOLE RESPONSIBILITY OF THE APPLICANT AND SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
VI. ALL ROADWAY MAINTENANCE REQUIRED WITHIN THE LIMITS OF THE UTILITY PROJECT THAT IS RELATED TO THE APPLICANT'S ACTIVITIES SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT FOR 1 YEAR AFTER COMPLETION OF THE PROJECT. UPON COMPLETION OF THE RESTORATION WORK, THE APPLICANT SHALL REQUEST A FINAL INSPECTION BY THE ACHD. THE ACHD'S APPROVED COMPLETION DATE SHALL BE THE STARTING DATE OF THE APPLICANT'S 1-YEAR RESPONSIBILITY.

BITUMINOUS RESTORATION

I. THE LOCATIONS AND DIMENSIONS OF ALL OPENINGS TO BE MADE IN THE BITUMINOUS SURFACE SHALL BE APPROVED BY THE ACHD AND CITY OF BLAINE PRIOR TO ANY CUTTING OR ANY SURFACE OPENING OPERATIONS.
II. ALL OPENINGS IN BITUMINOUS SURFACES SHALL BE CUT IN A STRAIGHT LINE WITH SIDES SMOOTH AND VERTICAL. NO RAGGED EDGES WILL BE PERMITTED. CUTTING SHALL BE DONE WITH A CONCRETE SAW.
III. ALL NECESSARY DUST CONTROL OPERATIONS SHALL BE CARRIED OUT BY THE APPLICANT AT NO EXPENSE TO ANOKA COUNTY AND CITY OF BLAINE.
IV. THE MINIMUM REQUIREMENT FOR SUBGRADE REPLACEMENT SHALL BE THE UPPER 12 INCHES OF MATERIAL AND SHALL MEET MNDOT SPECIFICATIONS FOR CLASS 5 PLACED IN 6-INCH LAYERS COMPACTED TO 100 PERCENT OF OPTIMUM DENSITY.
V. ALL MANHOLE CASTINGS, GATE VALVES AND OTHER UTILITY STRUCTURES SHALL BE SET ONE-QUARTER INCH BELOW THE TOP OF THE FINISHED SURFACE.
VI. BITUMINOUS TACK COAT MATERIALS AND APPLICATION THEREOF SHALL CONFORM TO MNDOT SPECIFICATION 2357.
VII. ALL BITUMINOUS SURFACING SHALL BE REPLACED AS SOON AS PRACTICAL AFTER THE BASE CONSTRUCTION. ALL BITUMINOUS SURFACING SHALL BE MACHINE LAID. ANY EXCEPTIONS MUST BE APPROVED BY THE ACHD. BITUMINOUS SURFACING SHALL BE REPLACED TO ORIGINAL PAVEMENT DEPTH OR TO A MINIMUM OF SIX (6) INCHES OF BITUMINOUS MIXTURE (2360), WHICHEVER IS GREATER. BITUMINOUS MIXTURES MUST BE PLACED IN LIFTS NOT EXCEEDING THREE (3) INCHES IN THICKNESS FOR BASE AND BINDER COURSES AND NOT EXCEEDING TWO (2) INCHES FOR THE WEAR COURSE.
VIII. ALL SURFACE RESTORATION REGARDLESS OF SIZE SHALL CONFORM TO EXISTING GRADES.
IX. ANY UNNECESSARY OR NEGLIGENT DAMAGE TO BITUMINOUS SURFACE IN CONJUNCTION WITH THE INSTALLATION AND/OR REPAIR OF A UTILITY SHALL BE CUT OUT AND REPLACED IN KIND AS DIRECTED BY ACHD.

CONCRETE RESTORATION

I. CURB AND GUTTER, SIDEWALKS AND DRIVEWAYS SHALL BE RESTORED IN ACCORDANCE WITH MNDOT SPECIFICATIONS 2531 AND 2521.

UTILITY LINES

I. THERE SHALL BE ONLY A SINGLE POLE LINE ON THE COUNTY RIGHT-OF-WAY ON EITHER SIDE OF THE CENTERLINE THEREOF.
II. EXACT LOCATIONS OF LONGITUDINAL INSTALLATIONS ON COUNTY HIGHWAYS SHALL BE LOCATED AS DIRECTED BY ACHD.

SECTION CORNER MONUMENTS

I. UTILITY LOCATIONS SHALL NOT INTERFERE WITH THE LOCATION OF ANY SECTION, QUARTER, WITNESS OR R.O.W. MONUMENTS. FOR ASSISTANCE IN LOCATIONS, CONTACT THE ANOKA COUNTY SURVEYOR'S OFFICE.
II. THE APPLICANT SHALL BE RESPONSIBLE FOR REPLACEMENT OF ANY EXISTING PROPERTY IRONS DISTURBED DURING CONSTRUCTION.
III. THE APPLICANT SHALL NOTIFY THE ANOKA COUNTY SURVEYOR'S OFFICE 3 WORKING DAYS IN ADVANCE OF ANY ANTICIPATED DISTURBANCE OF ANY SECTION, QUARTER, WITNESS OR R.O.W. MONUMENTS.
IV. ANY MONUMENT DISTURBED DURING THE COURSE OF CONSTRUCTION SHALL BE RESET BY THE ANOKA COUNTY SURVEYOR'S OFFICE AT THE EXPENSE OF THE APPLICANT.

GENERAL NOTES

1. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME. WHERE A CONFLICT EXISTS BETWEEN LOCAL JURISDICTIONAL STANDARD SPECIFICATIONS AND MNDOT SPECIFICATIONS, THE MORE STRINGENT SPECIFICATION SHALL APPLY.
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATIONS AND/OR ELEVATIONS OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE SUBSURFACE UTILITY INFORMATION SHOWN ON THESE PLANS IS A UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA." THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL TO THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE LOCATIONS OF SMALL UTILITIES SHALL BE OBTAINED BY THE CONTRACTOR, BY CALLING MINNESOTA GOPHER STATE ONE-CALL AT (800) 252-1166 OR (651) 454-0002.
3. THE DESIGN SHOWN IS BASED UPON THE ENGINEER'S UNDERSTANDING OF THE EXISTING CONDITIONS. THE EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED UPON ALTA AND TOPOGRAPHIC SURVEY PREPARED BY MFRA DATED 09-13-2011. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS OWN EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
4. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
5. SAFETY NOTICE TO CONTRACTORS: IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE DUTY OF THE ENGINEER OR THE OWNER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, OR NEAR THE CONSTRUCTION SITE.
6. THE GENERAL CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT.
7. CONTRACTOR SHALL END ALL UTILITY CONNECTIONS 5' FROM BUILDING OR AT THE LOCATIONS DESIGNATED ON THE ARCHITECTURAL PLANS. OTHERS SHALL MAKE ALL CONNECTIONS FROM BUILDING TO SITE UTILITIES.
8. DURING UTILITY CONSTRUCTION, THE CONTRACTOR SHALL ANTICIPATE ENCOUNTERING PERCHED OR TRAPPED GROUND WATER CONDITIONS. WHEN THESE CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL DEWATER THE SOILS AND STABILIZE EXCAVATION BOTTOMS WITH AGGREGATE TO FACILITATE PLACEMENT AND BACKFILLING OF THE UTILITIES.
9. UTILITIES THAT ARE TO BE ABANDONED AND REMOVED (SANITARY, STORM, WATER AND TELEPHONE) SHALL REMAIN OPERATIONAL UNTIL NEW LINES ARE CONSTRUCTED TO AVOID LOSS OF SERVICE TO OTHER PROPERTIES.
10. ALL UTILITY CONNECTIONS ARE TO BE SCHEDULED AND COORDINATED WITH THE CITY AND/OR APPROPRIATE UTILITY AUTHORITY. CONTRACTOR SHALL NOTIFY UTILITY AUTHORITY INSPECTOR 72 HOURS BEFORE CONNECTING.
11. DRAWINGS DO NOT PURPORT TO SHOW ALL EXISTING UTILITIES.
12. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
13. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
14. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
15. LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
16. RESTORE SURFACES (CURB, BITUMINOUS, ETC.) IN KIND WHERE PROPOSED UTILITIES ARE TIED INTO EXISTING UTILITIES.
17. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH OF 3000 P.S.I.
18. JET AND VAC STORM SEWER AND SANITARY SEWER FROM CONNECTION POINTS TO EXISTING PUBLIC SYSTEMS DOWNSTREAM TO THE NEXT MANHOLE.

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.
Signature
Name George D. Abernathy
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

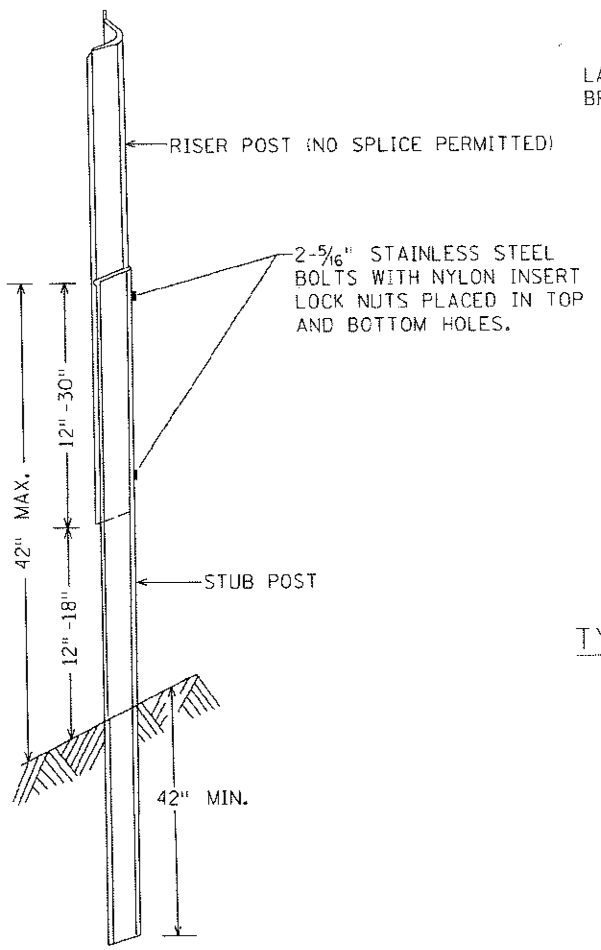
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CONSTRUCTION DETAILS
NOTES & STANDARD PLATES

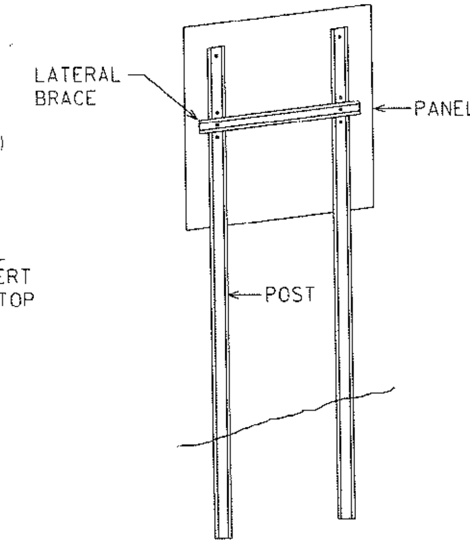
Apr 09, 2015 - 12:46pm - User:577 L:\WAL-MART\WAL16568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\16568-05-DETAILS.dwg

PLOTTED/REVISED: 4/25/2014

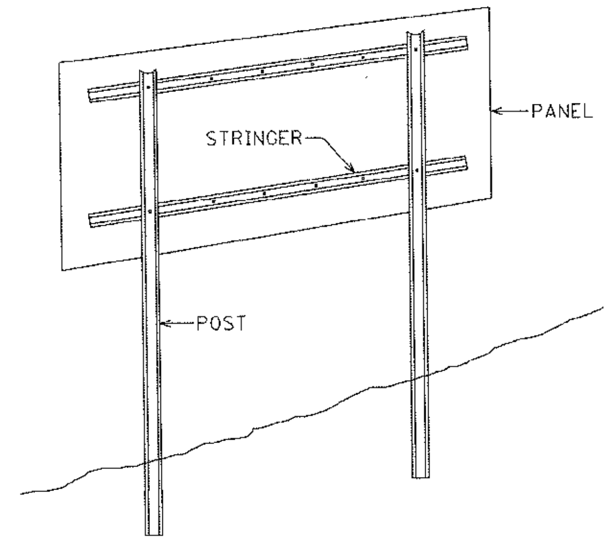
TYPE C & D POST



U POST BREAKAWAY SPLICE



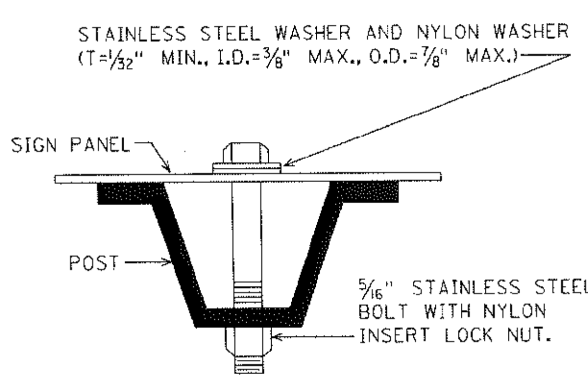
TYPICAL TYPE C INSTALLATION



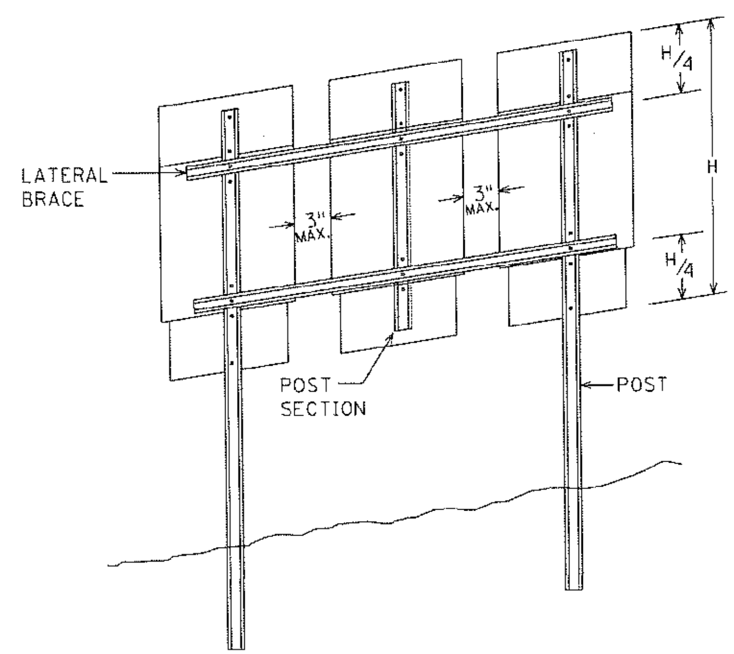
TYPICAL TYPE D INSTALLATION

NOTES:

1. USE 3 LB/FT STUB POSTS. SHALL CONFORM TO MNDOT 3401.
2. USE 2.5 LB/FT RISER POSTS, STRINGERS, KNEE BRACES AND LATERAL BRACES. ALL SHALL CONFORM TO MNDOT 3401.
3. SEE SIGN DATA SHEETS FOR NUMBER OF POSTS, KNEE BRACES, POST LENGTHS AND SPACINGS, AS DETERMINED FROM TEM CHARTS 6.3 AND 6.4.
4. IF MORE THAN TWO POSTS ARE NEEDED, THE MINIMUM SPACING SHALL BE 45" BETWEEN POSTS.
5. TYPE D SIGN PANELS SHALL BE BOLTED TO STRINGERS AT 24" MAXIMUM INTERVALS IN ACCORDANCE WITH THE TYPE D STRINGER AND PANEL-JOINT DETAIL (SEE STANDARD SIGNS MANUAL).
6. MOUNTING (PUNCH CODE) FOR TYPE C SIGN PANELS SHALL BE AS INDICATED IN THE STANDARD SIGNS MANUAL UNLESS OTHERWISE SPECIFIED.
7. ALL RISER (VERTICAL) U POSTS SHALL BE SPLICED. DRIVEN STUB POSTS SHALL BE AT LEAST 7' LONG.
8. USE STAINLESS STEEL 5/16" BOLTS, WASHERS AND NYLON INSERT LOCK NUTS AS SHOWN FOR ALL GROUND MOUNTED AND OVERHEAD MOUNTED SIGNS.
9. STAINLESS STEEL WASHER WITH SAME DIMENSIONS SHALL BE PROVIDED BETWEEN ALL NYLON WASHERS AND BOLT HEADS.
10. BRACING STUBS SHALL BE NO MORE THAN 4" ABOVE GROUND AND EMBEDDED AT LEAST 42".
11. A-FRAME BRACKET SHALL BE STEEL CONFORMING TO MNDOT 3306 AND GALVANIZED IN ACCORDANCE WITH MNDOT 3394.
12. COLLARS SHALL BE USED TO SHIM OVERLAYS AND LEGEND COMPONENTS AWAY FROM PANEL WHERE INTERFERENCE WITH BOLT HEADS IS ENCOUNTERED. MNDOT 3352.2A6.
13. 2 POST TYPE C SIGNS SHALL BE REINFORCED WITH AT LEAST ONE LATERAL BRACE. INSTALLATIONS WHERE THE TOTAL PANEL HEIGHT IS 60" OR MORE SHALL HAVE TWO LATERAL BRACES LOCATED APPROXIMATELY AT THE QUARTER POINTS.
14. WHERE 2 SINGLE POST TYPE C SIGNS ARE INSTALLED SIDE BY SIDE, THEY SHALL BE REINFORCED LATERALLY BY AT LEAST 2 BRACES, BOLTED AT EACH POST AND LOCATED APPROXIMATELY AT THE QUARTER POINTS.
15. WHERE 3 OR MORE TYPE C SIGNS ARE INSTALLED SIDE BY SIDE, THEY SHALL BE REINFORCED LATERALLY BY AT LEAST 2 BRACES, BOLTED AT EACH POST AND POST SECTION AND LOCATED APPROXIMATELY AT THE QUARTER POINTS AS SHOWN IN MODIFIED TYPE C INSTALLATION.



U POST MOUNTING TYPE C SIGNS



MODIFIED TYPE C INSTALLATION

TYPE C & D SIGN STRUCTURAL DETAILS

Sheet 1 of 3

REVISED: 3-7-2014

DISTRICT #: METRO
IPLOT NAME: C&D-SIGN-Groundmounted
PATH & FILENAME: IP_PWP:d14412\C&D-SIGN-Groundmounted.dgn

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

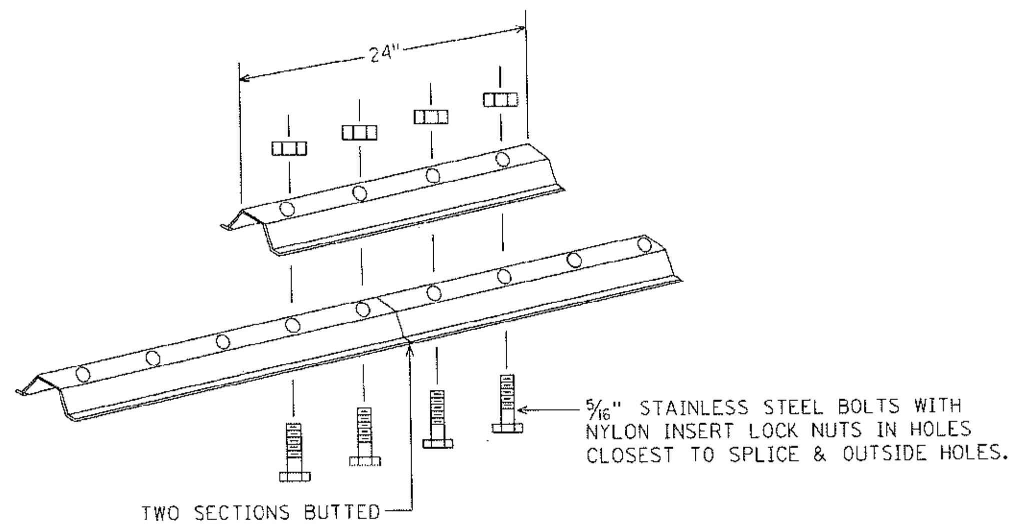
Signature
Name George D. Abernathy
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

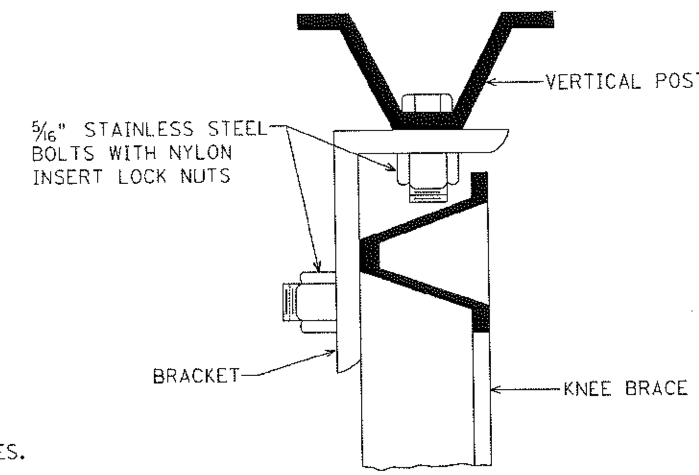
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CONSTRUCTION DETAILS NOTES & STANDARD PLATES

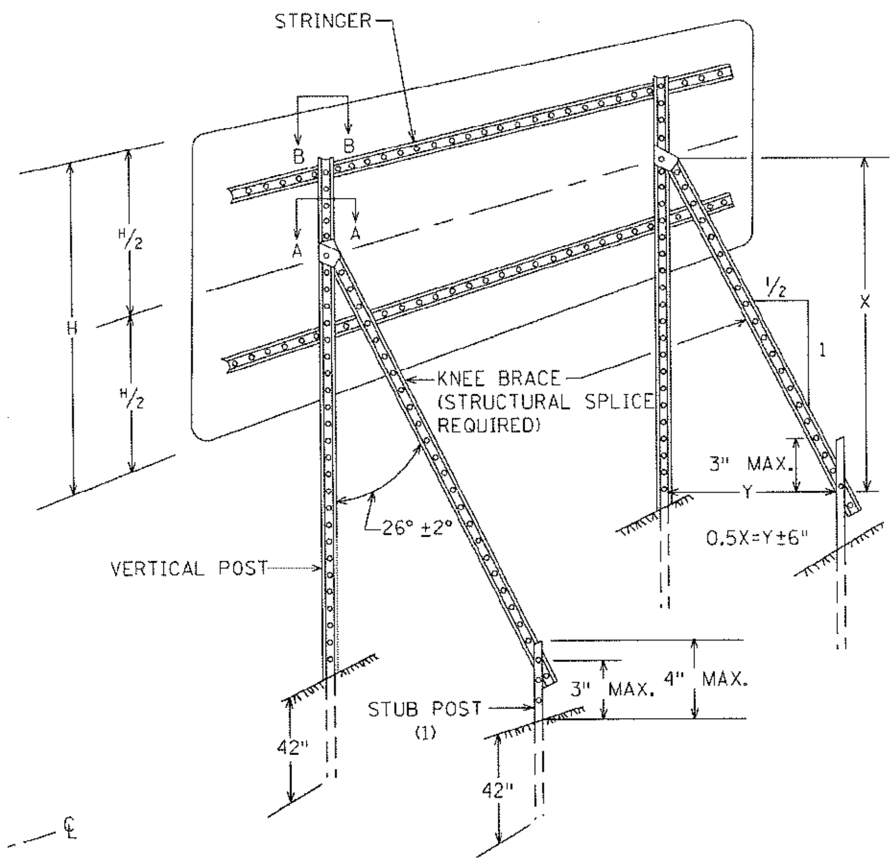
PLOTTED/REVISED: 4/25/2014
DISTRICT #: METRO
IPLOT NAME: C&D-SIGN-Groundmounted
PATH & FILENAME: IP_PWP:d\44121\C&D-SIGN-Groundmounted.dgn



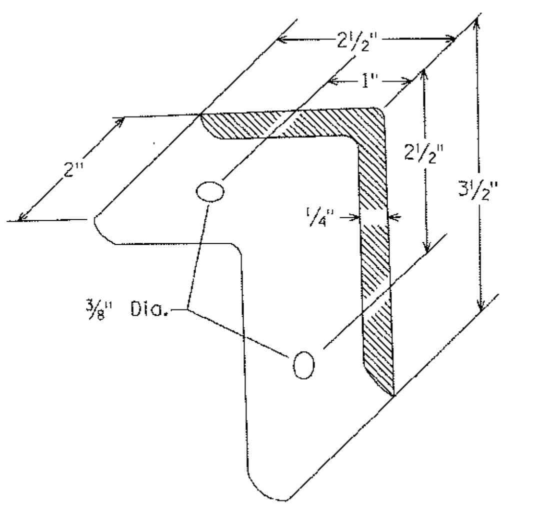
LATERAL BRACE OR STRINGER SPLICE DETAIL (EXPLODED VIEW)



SECTION A-A

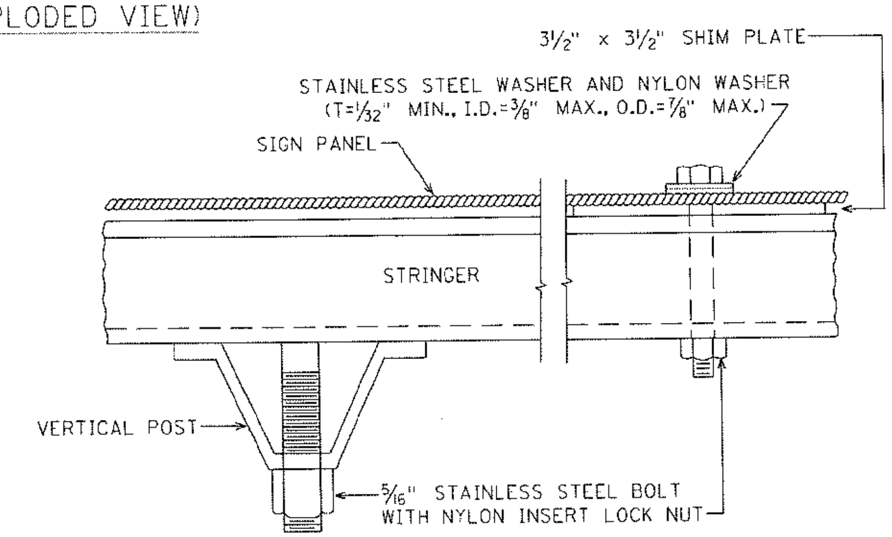


TYPICAL "A-FRAME" INSTALLATION TYPE "D" SIGNS

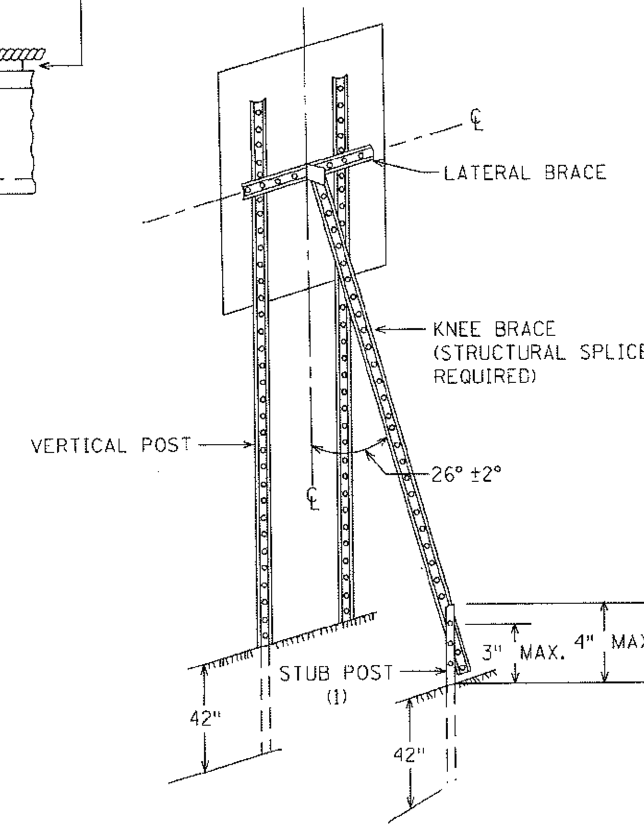


A-FRAME BRACKET

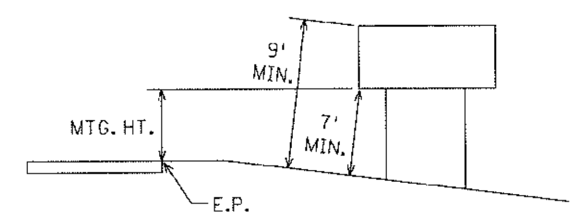
(STEEL MNDOT 3306 GALVANIZED PER MNDOT 3394)



SECTION B-B

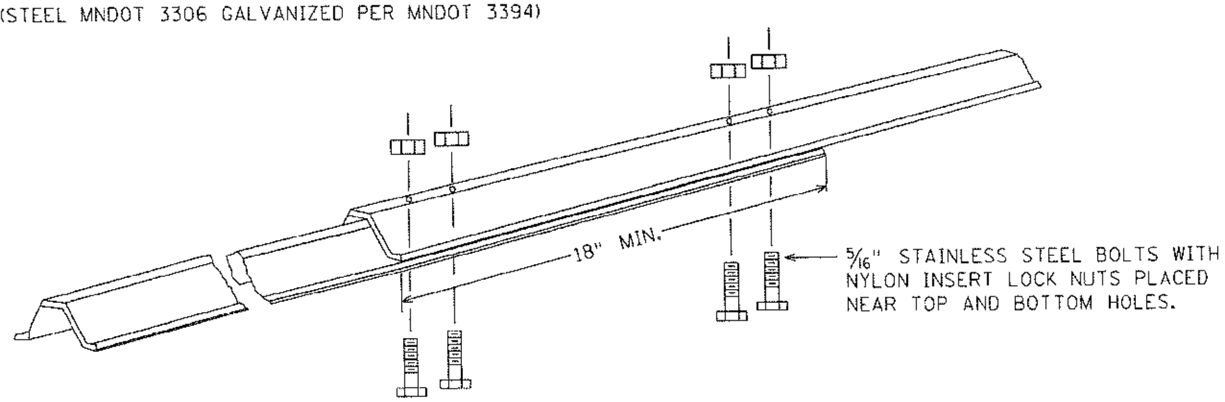


TYPICAL "A-FRAME" INSTALLATION TYPE "C" SIGNS



TYPICAL MOUNTING

(1) OFFSET STUB POST 1' TOWARD ROADWAY RELATIVE TO VERTICAL POST. ATTACH STUB POST AND KNEE BRACE BACK TO BACK.



STRUCTURAL SPLICE

(USE WHEN IT IS NECESSARY TO FABRICATE THE CORRECT LENGTH OF POST FROM TWO PIECES)

TYPE C & D SIGN STRUCTURAL DETAILS

Sheet 2 of 3

REVISED: 12-4-2013

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

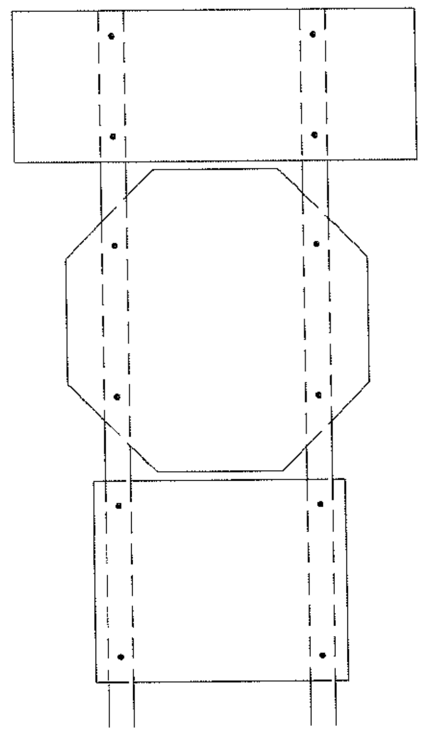
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

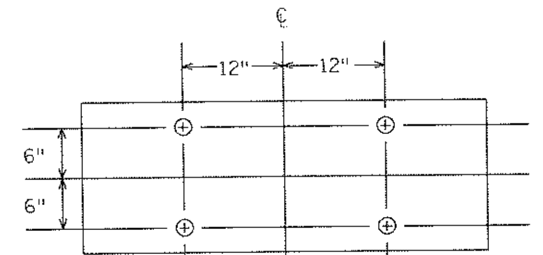
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CONSTRUCTION DETAILS NOTES & STANDARD PLATES

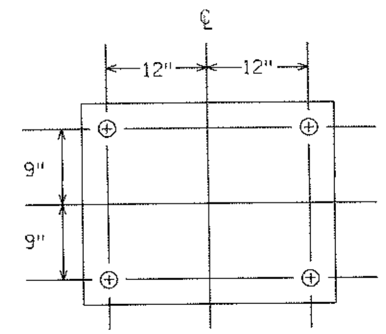
Apr 09, 2015 - 12:46pm - User:577 L:\WAL-MART\WAL18568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\16568-05-DETAILS.dwg



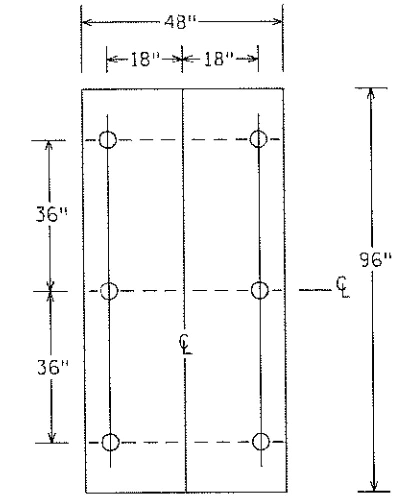
R6-1, R1-1 & (R6-3 OR R6-3a)
MOUNTING



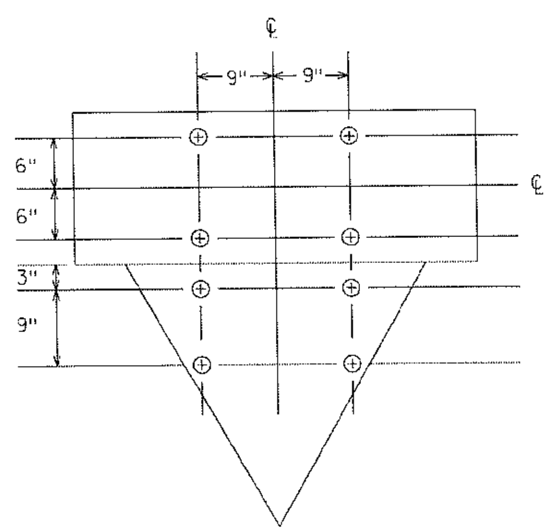
PUNCHING FOR R6-1(54"x18")



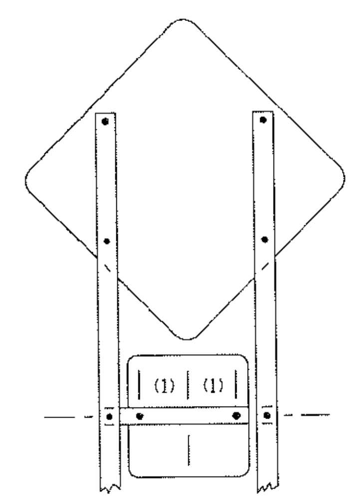
PUNCHING FOR R6-3 OR R6-3a(30"x24")



PUNCHING FOR R2-4b
SPEED LIMIT

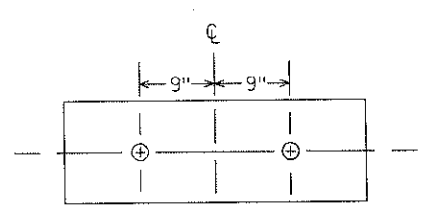


PUNCHING FOR R6-1(54"x18")
& R1-2(36"x36"x36")



WARNING SIGN [30"x30 OR 48"X48"] AND
WARNING PLAQUE [18"x18" OR 30"x30"]
PUNCHING AND MOUNTING

(1) 6" FOR WARNING PLAQUE (18"x18")
12" FOR WARNING PLAQUE (30"x30")



PUNCHING FOR R6-1(36"x12")

TYPE C & D SIGN

STRUCTURAL DETAILS

Sheet 3 of 3

PLOTTED/REVISED: 4/25/2014

DISTRICT #: METRO
IPLOT NAME: C&D-SIGN-Groundmounted2
PATH & FILENAME: IP_FWP:d14412I\C&D-SIGN-Groundmounted.dgn

REVISED: 10-2-2013

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

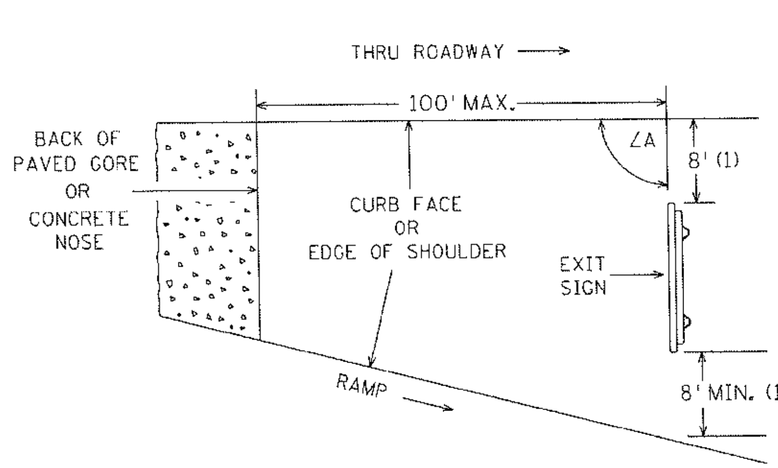
CONSTRUCTION DETAILS
NOTES & STANDARD PLATES

Apr 09, 2015 - 12:46pm - User:577 L:\WAL-MART\WAL15568\01 Sall Road Improvements\dwg\Civil\Final\Lexington-Ramp\15568-05-DETAILS.dwg

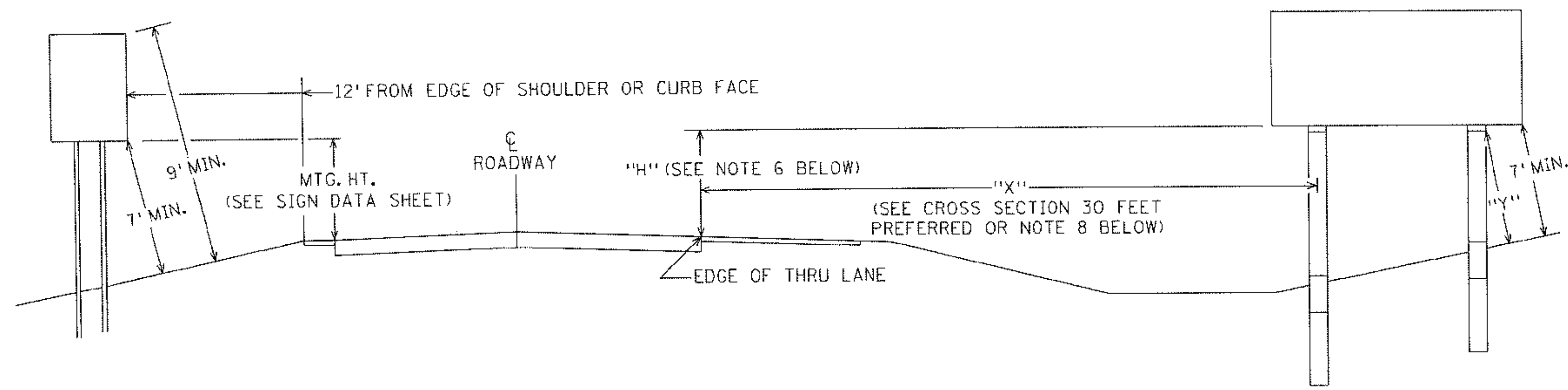
PLOTTED/REVISED: 4/25/2014

DISTRICT #: METRO
IPLOT NAME: PLACEMENT_STD*
PATH & FILENAME: IP_PWP:d4412\PLACEMENT_STD*.dgn

GORE PLACEMENT



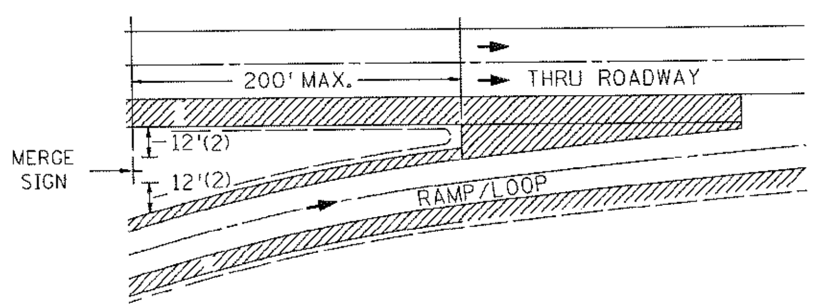
ROADSIDE PLACEMENT



ROUTE MARKER, REGULATORY & WARNING SIGNS - TYPE C

GUIDE SIGNS - TYPE D

GUIDE SIGN - TYPE A



SPECIFIC NOTES:

(1) EXIT SIGNS

IF THESE OFFSETS CANNOT BE ATTAINED WITHIN 100 FEET OF THE PAVED GORE, A 4 FOOT OFFSET IS ACCEPTABLE. IF THE 4 FOOT OFFSETS CANNOT BE ATTAINED WITHIN 100 FEET OF THE PAVED GORE, CONTACT THE PROJECT ENGINEER WHO WILL CONSULT WITH THE STATE SIGNING ENGINEER.

(2) MERGE SIGNS

IF THESE OFFSETS CANNOT BE ATTAINED WITHIN 200 FEET OF THE PAVED GORE, A 4 FOOT OFFSET IS ACCEPTABLE. IF THE 4 FOOT OFFSETS CANNOT BE ATTAINED WITHIN 200 FEET OF THE PAVED GORE, CONTACT THE PROJECT ENGINEER WHO WILL CONSULT WITH THE STATE SIGNING ENGINEER.

NOTES:

1. ALL ROUTE MARKERS, WARNING & REGULATORY SIGNS SHALL BE AT LEAST 7' ABOVE EDGE OF THRU LANE.
2. SIGN FACES SHALL BE VERTICAL.
3. OVERHEAD SIGNS SHALL BE POSITIONED AT RIGHT ANGLES TO THE THRU ROADWAY UNLESS OTHERWISE NOTED.
4. TO AVOID SPECULAR GLARE, ∠A SHALL BE APPROXIMATELY 93° FOR SIGNS LOCATED LESS THAN 30' FROM THE EDGE OF THRU LANE AND APPROXIMATELY 92° FOR SIGNS LOCATED 30' OR MORE FROM EDGE OF THRU LANE. THIS APPLIES TO SIGNS TYPE A, C, & D AND INCLUDES SIGNS IN THE GORE.
5. "Y" IS THE PERPENDICULAR DISTANCE FROM THE GROUND LINE TO THE FRICTION FUSE ON THE POST. THIS DISTANCE SHALL BE AT LEAST 7'.
6. WHERE "X" IS LESS THAN 30', "H" SHALL BE 7' ±6". WHERE "X" IS 30' OR GREATER, MINIMUM AND PREFERRED "H" IS 5'.
7. LATERAL CLEARANCES GIVEN APPLY TO RIGHT AND OR LEFT SIDE INSTALLATION.
8. WHEN A TYPE A SIGN IS INSTALLED DIRECTLY BEHIND TRAFFIC BARRIER, THE LEFT EDGE OF THE SIGN PANEL SHALL BE LOCATED A MINIMUM OF 8 FEET BEHIND THE FACE OF THE TRAFFIC BARRIER.

SIGN PLACEMENT

REVISED: 3-7-14

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

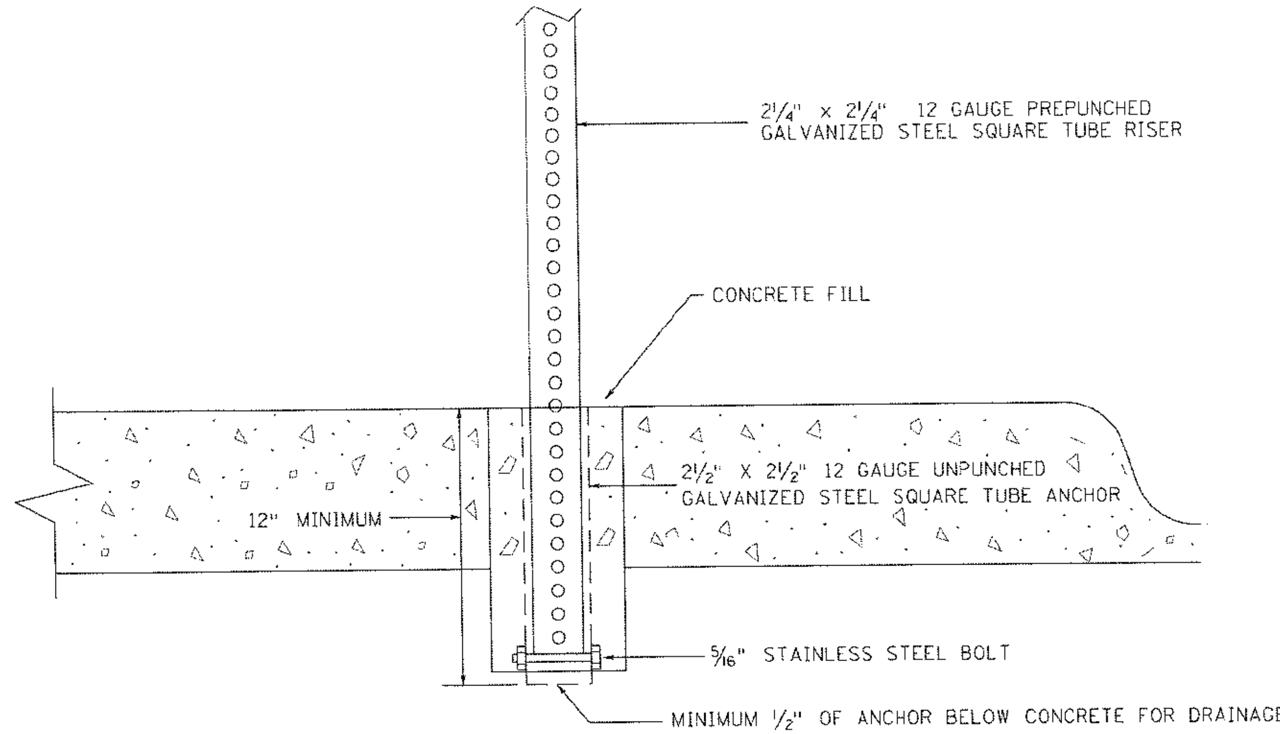
Signature
Name George D. Abernathy
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CONSTRUCTION DETAILS
NOTES & STANDARD PLATES

Apr 09, 2015 - 12:46pm - User:577 L:\WAL-MART\WAL16568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-05-DETAILS.dwg



NOTES:

1. DRILL AN 8" DIAMETER HOLE THE FULL DEPTH OF THE ANCHOR.
2. DRILL 3/8" HOLES ON OPPOSITE SIDES OF THE UNPUNCHED GALVANIZED STEEL SQUARE TUBE ANCHOR APPROX. 1" FROM THE BOTTOM OF THE ANCHOR. INSERT A 5/16" STAINLESS STEEL BOLT THROUGH THE HOLES AND SECURE WITH A STAINLESS STEEL LOCK NUT WITH NYLON INSERT. THE PREPUNCHED GALVANIZED STEEL SQUARE TUBE RISER (TO BE INSERTED INSIDE THE UNPUNCHED GALVANIZED SQUARE TUBE ANCHOR) WILL REST ON BOLT.
3. INSERT THE ANCHOR IN THE HOLE.
4. AFTER INSTALLATION OF THE UNPUNCHED GALVANIZED STEEL SQUARE TUBE ANCHOR, FILL THE HOLE WITH A CONCRETE MIX APPROVED BY THE ENGINEER AND LEVEL OFF THE TOP OF CONCRETE.

TYPE C SIGNS, DELINEATORS & MARKERS IN CONCRETE

REVISED: 10-2-2013

PLOTTED/REVISED: 11/27/2013

DISTRICT #: METRO
IPLOT NAME: C-SIGN-MOUNTINGS2
PATH & FILENAME: IP_PWP:d1441210\C-SIGN-MOUNTINGS.dgn

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

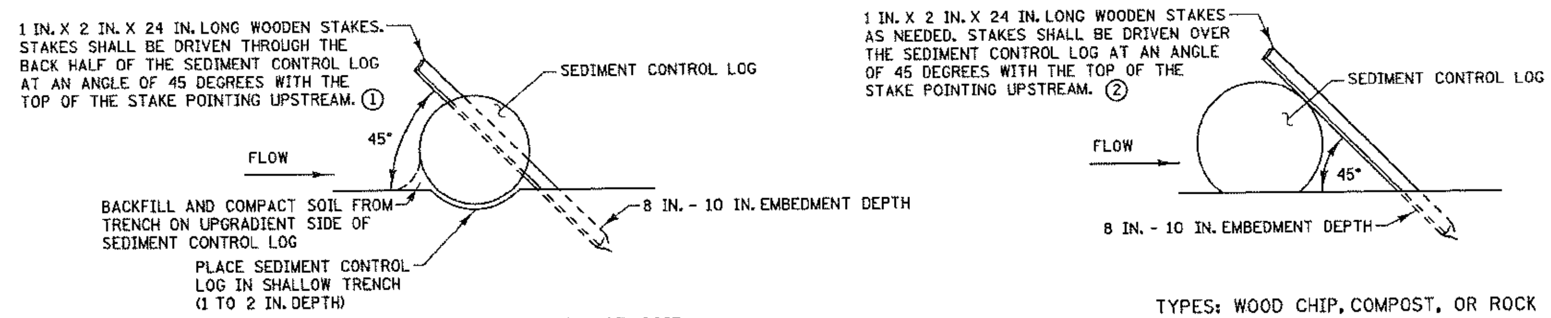
Name George D. Abernathy

Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

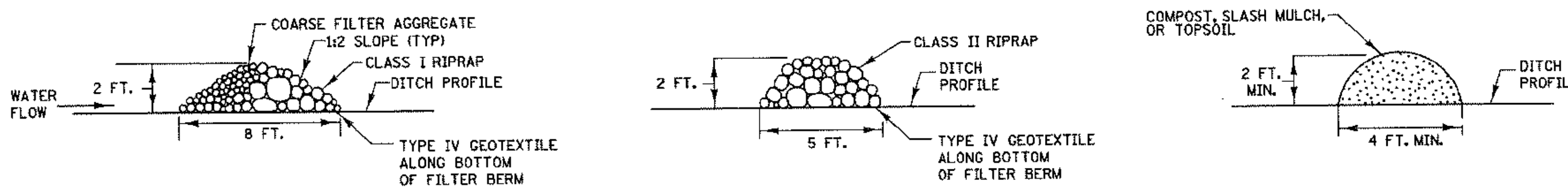
CONSTRUCTION DETAILS NOTES & STANDARD PLATES



TYPES: STRAW, WOOD FIBER, OR COIR

TYPES: WOOD CHIP, COMPOST, OR ROCK

SEDIMENT CONTROL LOGS

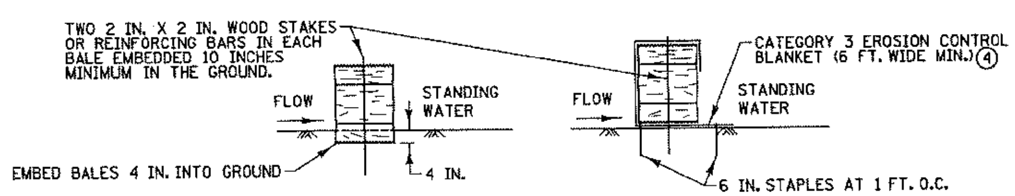


TYPE 3 (ROCK WEEPER)

TYPE 5 (ROCK)

TYPE 1 (COMPOST), TYPE 2 (SLASH MULCH), OR TYPE 4 (TOPSOIL)

FILTER BERMS



EMBEDMENT METHOD

BLANKET METHOD (ALTERNATE)

BALE BARRIERS ③

NOTES:

SEE SPECS. 2573, 3149, 3874, 3882, 3886, & 3897.

① SPACE BETWEEN STAKES SHALL BE A MAXIMUM OF 1 FOOT FOR DITCH CHECKS OR 2 FEET FOR OTHER APPLICATIONS.

② PLACE STAKES AS NEEDED TO PREVENT MOVEMENT OF SEDIMENT CONTROL LOGS PLACED ON SLOPES OR AS NEEDED DUE TO OTHER FACTORS. STAKES SHALL BE INCIDENTAL.

③ TO BE USED FOR CRITICAL PERIMETER CONTROL AREAS WHERE STANDING WATER OCCURS (6 INCH MAX. DEPTH). BALES SHALL CONSIST OF TYPE 1 MULCH OF APPROXIMATELY 14 IN. X 18 IN. X 36 IN. LONG. BALES SHALL BE PLACED ON EDGE AND BUTTED TIGHT TO ADJACENT BALES.

④ INSTEAD OF TRENCHING, PLACE BALE ON THE BLANKET AND WRAP BLANKET AROUND THE BALE. PLACE STAKE THROUGH BALE AND BLANKET.

REVISION:

APPROVED: 8-6-2014

CHIEF ENVIRONMENTAL OFFICER

MINNESOTA DEPARTMENT OF TRANSPORTATION

REVISED:

APPROVED: 8-6-2014

STATE DESIGN ENGINEER

TEMPORARY SEDIMENT CONTROL

FILTER BERMS, SEDIMENT CONTROL LOGS, AND BALE BARRIERS

STANDARD PLAN 5-297.405 | 2 OF 7

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

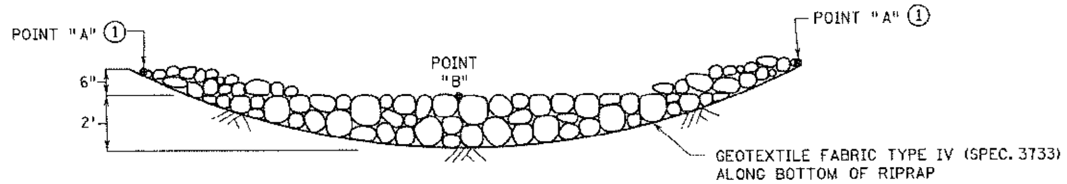
CITY OF BLAINE

TH 35W OFF-RAMP/LEXINGTON AVE

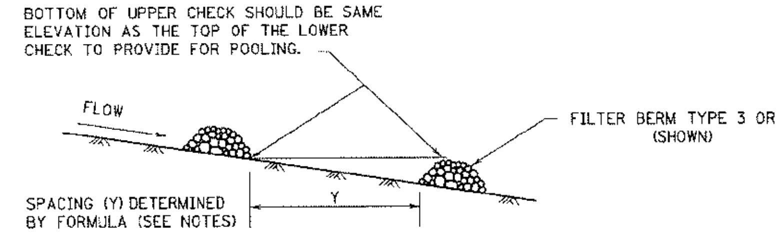
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CONSTRUCTION DETAILS NOTES & STANDARD PLATES

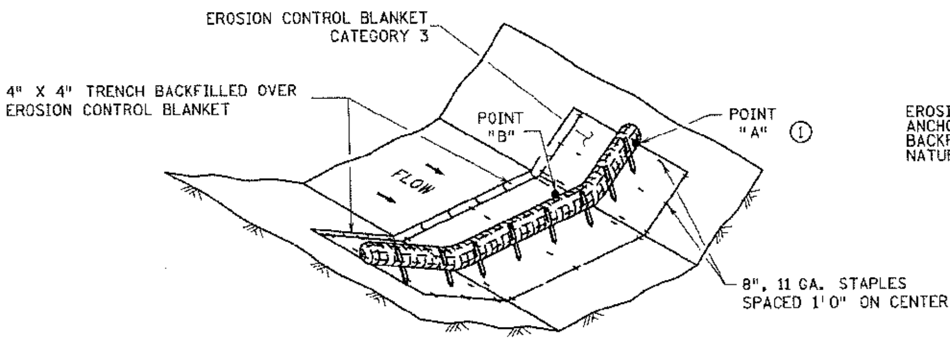
Apr 09, 2015 - 12:46pm - User:577 L:\WAL-MART\WAL18568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-05-DETAILS.dwg

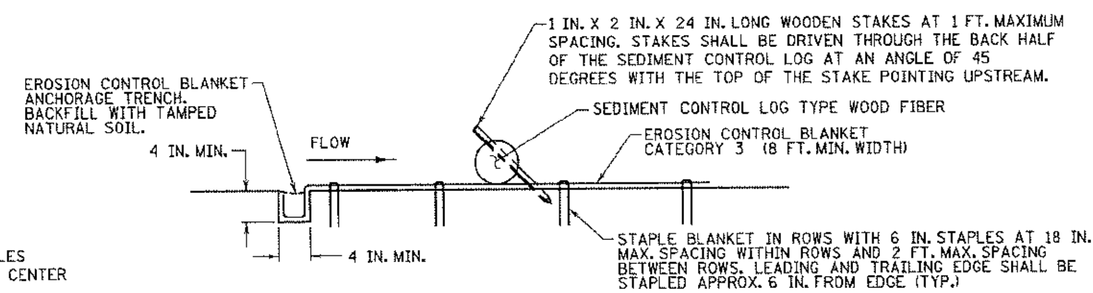


ROCK DITCH CHECKS
FILTER BERMS TYPE 3 (ROCK WEEPER) OR FILTER TYPE 5 (ROCK) ②③
(FOR USE ON ROUGH GRADED AREAS)

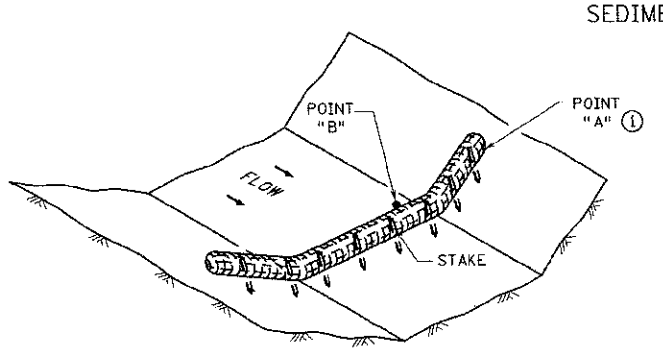


DITCH CHECK SPACING
(FOR ALL FILTER BERM TYPES)





SEDIMENT CONTROL LOG TYPE BLANKET SYSTEM ④



SEDIMENT CONTROL LOG TYPE WOOD FIBER, OR TYPE COMPOST ⑤
(FOR USE ON ROUGH GRADED AREAS)

NOTES:

SEE SPECS. 2573, 3601, 3733, 3885, 3886 & 3889.

FOR DITCH CHECKS, PLACE SEDIMENT CONTROL LOG PERPENDICULAR TO FLOW AND IN A CRESCENT SHAPE WITH THE ENDS FACING UPSTREAM.

APPROXIMATE SPACING BETWEEN EACH DITCH CHECK SHOULD BE DETERMINED FROM THE FOLLOWING SPACING FORMULA:

$$\text{APPROXIMATE SPACING OF DITCH CHECKS (FT.)} = Y = \frac{\text{DITCH CHECK HEIGHT (FT)}}{\text{\% CHANNEL SLOPE}} \times 100$$

① POINT "A" MUST BE A MINIMUM OF 6 INCHES HIGHER THAN POINT "B" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.

② PERMANENT ROCK DITCH CHECKS PLACED WITHIN THE CLEAR ZONE ARE TO BE 18" OR LESS IN HEIGHT. A 1:6 APPROACH AND DEPARTURE SLOPE SHALL BE PROVIDED.

③ DITCH GRADE 3% - 5%, MAX. FLOW VELOCITY 12 FT./SEC..

④ DITCH GRADE 1.5% - 3%, MAX. FLOW VELOCITY 4.5 FT./SEC..

⑤ DITCH GRADE 1.5% - 3%, MAX. FLOW VELOCITY 1.5 FT./SEC..

REVISION:
APPROVED: 8-6-2014
CHIEF ENVIRONMENTAL OFFICER

MINNESOTA DEPARTMENT OF TRANSPORTATION
STATE DESIGN ENGINEER
REVISED:
APPROVED: 8-6-2014

TEMPORARY SEDIMENT CONTROL
DITCH CHECK

STANDARD PLAN 5-297.405 | 3 OF 7

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

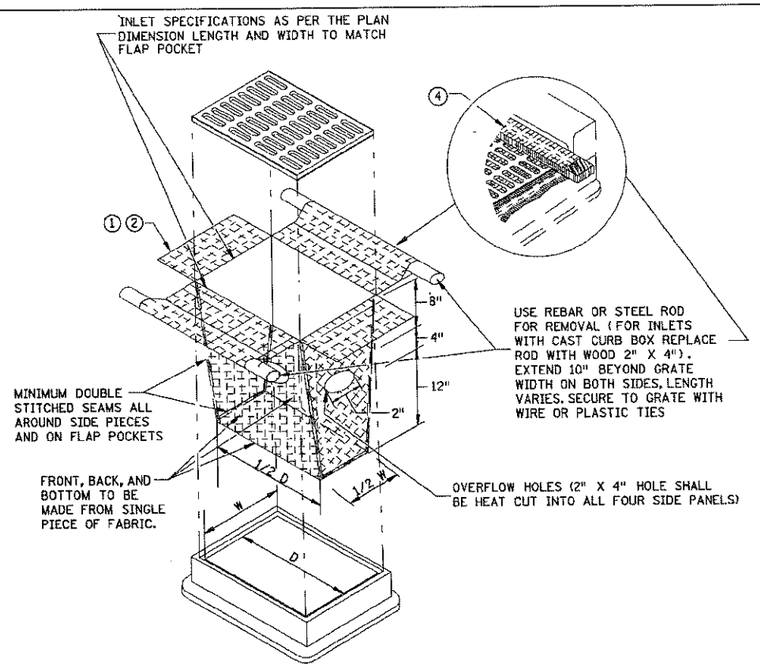
Signature
Name George D. Abernathy
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

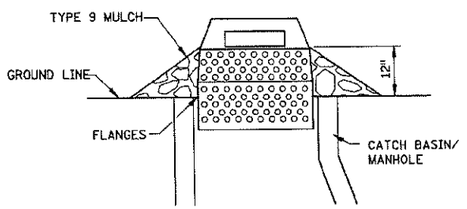
CONSTRUCTION DETAILS
NOTES & STANDARD PLATES

Apr 09, 2015 - 12:46pm - User:577 L:\WAL-MART\WAL18568\01Rail Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-05-DETAILS.dwg



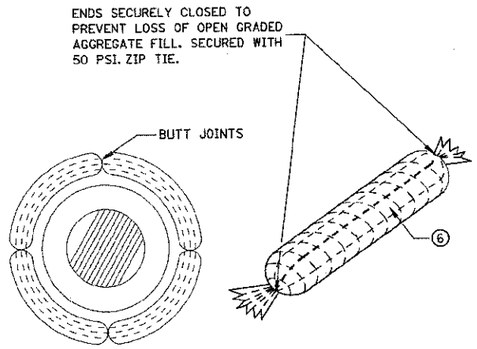
FILTER BAG INSERT ③

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX)

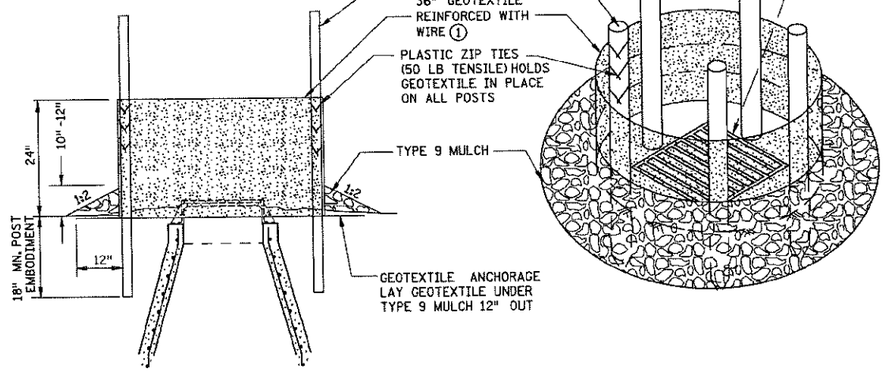


SEDIMENT CONTROL INLET HAT

NOTE:
THE SEDIMENT CONTROL BARRIER SHALL BE A METAL OR PLASTIC/POLYETHYLENE RISER SIZED TO FIT INSIDE THE CATCH BASIN/MANHOLE; HAVE PERFORATIONS TO ALLOW FOR WATER INFILTRATION; HAVE AN OVERFLOW OPENING, FLANGES AND A LID/COVER.

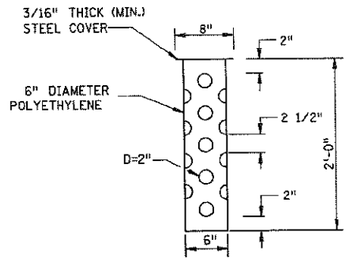


ROCK LOG/COMPOST LOG

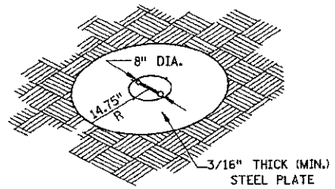


SILT FENCE RING AND ROCK FILTER BERM

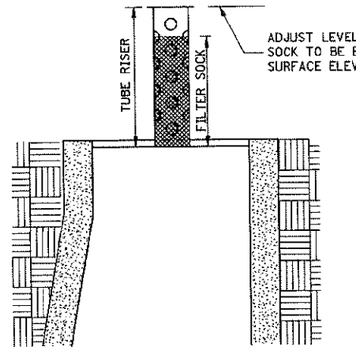
USE WHERE INLET DRAINS IN AN AREA WITH SLOPES AT 1:3 or LESS



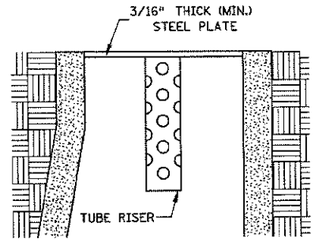
TUBE RISER



PERSPECTIVE VIEW



SECTION
(UP POSITION)



SECTION
(DOWN POSITION)

POP-UP HEAD

NOTES:
SEE SPECS. 2573, 3137, & 3886.

DEVICES MUST BE ADJUSTED ACCORDINGLY AS TO NOT CAUSE FLOODING ON ROADWAY THAT WOULD IMPEED TRAFFIC FLOW.

① ALL GEOTEXTILE USED FOR INLET PROTECTION SHALL BE MONOFILAMENT IN BOTH DIRECTIONS, MEETING SPEC. 3886.

② FINISHED SIZE, INCLUDING POCKETS WHERE REQUIRED SHALL EXTEND A MINIMUM OF 10 INCHES AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

③ INSTALLATION NOTES:
DO NOT PLACE FILTER BAG INSERT IN INLETS SHALLOWER THAN 30 INCHES, MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE. THE PLACED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE OF 3 INCHES BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES. WHERE NECESSARY THE CONTRACTOR SHALL CLINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3 INCH SIDE CLEARANCE.

④ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2 INCH X 4 INCH OR USE A ROCK SOCK OR SAND BAGS IN PLACE OF THE FLAP POCKETS.

⑤ SOCK HEIGHT MUST NOT BE SO HIGH AS TO SLOW DOWN WATER FILTRATION TO CAUSE FLOODING OF THE ROADWAY.

⑥ GEOTEXTILE SOCK BETWEEN 4-10 FEET LONG AND 4-6 INCH DIAMETER. SEAM TO BE JOINED BY TWO ROWS OF STITCHING WITH A PLASTIC MESH BACKING OR PROVIDE A HEAT BONDED SEAM (OR APPROVED EQUIVALENT). FILL ROCK LOG WITH OPEN GRADED AGGREGATE CONSISTING OF SOUND DURABLE PARTICLES OF COARSE AGGREGATE CONFORMING TO SPEC. 3137 TABLE 3137-1; CA-3 GRADATION.

REVISION:

APPROVED: 8-6-2014

CHIEF ENVIRONMENTAL OFFICER

REVISED:

APPROVED: 8-6-2014

STATE DESIGN ENGINEER

TEMPORARY SEDIMENT CONTROL
STORM DRAIN INLET PROTECTION

STANDARD PLAN 5-297.405 | 4 OF 7

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abramathy

Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CONSTRUCTION DETAILS NOTES & STANDARD PLATES

19/78

A — BITUMINOUS

STATION TO STATION	LOCATION	2360 TYPE SP 9.5 WEARING COURSE MIXTURE (SPWEA440C)			2360 TYPE SP 12.5 NON WEARING COURSE MIXTURE (SPNWB430B)		
		TOTAL AREA	MIX	DEPTH	TOTAL AREA	MIX	DEPTH
		SQ YD	TON	INCH	SQ YD	TON	INCH
LEXINGTON AVENUE DESIGN ALIGNMENT							
1+00 TO 4+50	CL TO 24' LT	1000	181.5	3	1000	181.5	3
4+40 TO 4+50 **	43' LT TO 51' LT **	9	1.36125	2.5			
4+50 TO 5+70	36' RT TO VAR. LT	977	88.66275	1.5			
4+50 TO 5+70	36' RT TO 52' RT	225	40.8375	3	225	40.8375	3
4+50 TO 5+70	27' LT TO 60' LT	433	78.5895	3	433	78.5895	3
5+70 TO 8+60	CL TO 25' LT	739	67.06425	1.5			
5+70 TO 8+60	CL TO 12' RT	440	79.86	3	440	79.86	3
5+70 TO 8+60	25' LT TO 48' LT	777	141.0255	3	777	141.0255	3
5+70 TO 8+60 **	56' LT TO 64' LT **	257	38.87125	2.5			
8+60 TO 9+70	12' LT TO 24' LT	151	13.70325	1.5			
8+60 TO 9+70	12' RT TO 12' LT	265	48.0975	3	265	48.0975	3
8+60 TO 9+70	24' LT TO VAR. LT	216	39.204	3	216	39.204	3
8+60 TO 9+60 **	53' LT TO 61' LT **	84	12.705	2.5			
9+70 TO 9+90	12' LT TO VAR. LT	56	5.082	1.5			
9+70 TO 9+90	VAR. RT TO 12' LT	60	10.89	3	60	10.89	3
9+90 TO 10+40	VAR. RT TO 12' LT	91	16.5165	3	91	16.5165	3
9+90 TO 10+40	12' LT TO VAR. LT	117	10.61775	1.5			
10+40 TO 10+76.55	VAR. LT TO 12' LT	43	7.8045	3	43	7.8045	3
10+40 TO 10+76.55	12' LT TO VAR. LT	126	11.4345	1.5			
10+76.55 TO 11+40	7' LT OT VAR. LT	279	25.31925	1.5			
TH-35W EXIT RAMP							
0+1.30 TO 2+03.41	13.27' RT TO VAR. RT	167	40.414	4	167	20.207	2
2+03.41 TO 7+71.01	13' RT TO 27' RT	813	196.746	4	813	98.373	2
BALL ROAD							
33+40 TO 33+87	VAR. LT TO VAR. RT	434	39.3855	1.5	434	52.514	2
TOTAL		7759	1196		4964	815	

** QUANTITIES ARE FOR ITEM 2521 BITUMINOUS WALK

B — CONCRETE WALK

ALIGNMENT	STATION TO STATION	LOCATION	4" SQ FT	6" SQ FT
LEXINGTON AVE DESIGN ALIGNMENT	1+10 TO 4+50	1.5' LT TO VAR. LT	1179	
	5+83 to 9+70	14' RT TO 17' RT	1368	
	9+70 TO 10+40	VAR. RT TO 17' RT	783	
	10+40 TO 10+77	VAR. LT TO 17' RT	828	
	4+53	CL	17	
	5+70	15' RT	17	
	4+60	65' RT		40
	4+60	50' LT		60
	4+65	50' LT		40
	5+70	50' RT		250
	5+70	50' LT		90
	TOTAL		4192	480

C — MISCELLANEOUS SALVAGE AND REMOVAL

STATION TO STATION	LOCATION	ITEM INPLACE	SALVAGE & INSTALL		REMOVE								REMARKS
			LIGHTING UNIT	CHAIN LINK FENCE	BITUMINOUS PAVEMENT	PAVEMENT MARKING	CONCRETE PAVEMENT	CURB AND GUTTER	SEWER PIPE (STORM)	MANHOLES AND CATCH BASINS	SIGN		
			EACH	LIN FT	SQ YD	LIN FT	SQ YD	LIN FT	LIN FT	LIN FT	EACH		
TH-35W EXIT RAMP													
2+10	30' RT	LIGHT	1										
2+03 TO 6+10	50' -80' RT	CHAIN LINK FENCE		405									
4+40	30' RT	SIGN TYPE R3-3									1		
6+20	30' RT	FOOD AND GAS LEGEND SIGN									1		
7+05	35' RT	SIGN TYPE R3-8G									1		
7+10	35' RT	SIGN TYPE R5-1A									1		
8+00	40' RT	SIGN TYPE R3-7R									1		
0+00.30 TO 7+71.01	13.26' -24.78' RT	BIT. PAVT.			232								FULL DEPTH
0+00.30 TO 7+71.01	13.26' -24.78' RT	STRIPING				832							
LEXINGTON AVENUE DESIGN ALIGNMENT													
1+00 TO 4+50	3' LT TO 34' LT	BIT. PAVT.			1000								
4+50 TO 5+70	36' TO 52' RT	BIT. PAVT.			645								
4+50 TO 5+70	25' TO 60' LT	BIT. PAVT.			406								
5+70 TO 8+60	CL TO 12' RT	BIT. PAVT.			360								
5+70 TO 8+60	24' LT TO 48' LT	BIT. PAVT.			660								
8+60 TO 9+70	12' RT TO VAR. LT	BIT. PAVT.			380								
9+70 TO 9+90	VAR. RT TO 12' LT	BIT. PAVT.			60								
9+90 TO 10+40	VAR. RT TO 12' LT	BIT. PAVT.			91								
10+40 TO 10+76.55	VAR. LT -12' LT	BIT. PAVT.			40								
4+50 TO 4+82	33' LT TO 52' LT	CONCRETE PAVEMENT					44						
4+66 TO 4+75	56' RT TO 75' RT	CONCRETE PAVEMENT					20						
5+41 TO 5+65	70' RT TO 45' RT	CONCRETE PAVEMENT					25.5						
5+60 TO 5+90	45' LT TO VAR. LT	CONCRETE PAVEMENT					34						
5+68 TO 9+50	VAR. RT TO 18' RT	CONCRETE PAVEMENT					452						
9+50 TO 10+77	VAR. LT TO 18' RT	CONCRETE PAVEMENT					362						
1+10.83 TO 4+86.34	30.21' LT TO VAR. LT	B618 C&G						408					
1+02.47 TO 4+53.32	2.68' LT TO CL	B618 C&G						351					
4+39.83 TO 4+92.46	55' RT TO 99' RT	B618 C&G						79					
5+12	67' RT TO 100' RT	B618 C&G						33					
5+15	67' RT TO 100' RT	B618 C&G						33					
5+40 TO 5+86	98.5' RT TO 44' RT	B618 C&G						84					
5+75 TO 10+77	17' RT TO 6.85' LT	B618 C&G						519					
5+47 TO 9+82	91' LT TO 37' LT	B618 C&G						465					
5+90 TO 9+60	50' LT TO 58' LT	BIT TRAIL			294								
3+00 TO 4+50	30' LT	SEWER PIPE (STORM)							150				
4+50 TO 6+00	30' LT TO 40' LT	SEWER PIPE (STORM)							140				
6+00 TO 8+75	44' LT TO 30' LT	SEWER PIPE (STORM)							260				
3+00	30' LT	MANHOLES OR CATCH BASINS								4			
4+50	30' LT	MANHOLES OR CATCH BASINS								4			
5+90	50' LT	MANHOLES OR CATCH BASINS								4.5			
TOTAL			1	405	4168	832	937.5	1972	550	12.5	5		

AA — B618 CONCRETE CURB AND GUTTER

STATION TO STATION	LOCATION	LIN FT
1+11.61 TO 4+37.38	30.18' LT TO 37.02' LT	326
4+37.38 TO 4+86.25	37.02' LT TO 86.17' LT	77
4+32.01 TO 4+81.03	55.41' RT TO 97.78' RT	68
5+47.30 TO 5+87.13	90.90' LT TO 50.49' LT	63
5+50.44 TO 6+00.86	93.72' RT TO 44.33' RT	78
5+83.16 TO 9+69.83	12.50' RT TO 14.10' RT	385
5+87.13 TO 8+65.09	50.49' LT TO 49.33' LT	278
8+65.09 TO 9+81.85	49.33' LT TO 46.82' LT	117
9+69.83 TO 10+76.55	14.10' RT TO 6.79' LT	109
TOTAL		1501

* STATION AND LOCATION BASED ON LEXINGTON AVE DESIGN ALIGNMENT

BB — MILL BITUMINOUS PAVEMENT 1.5"

STATION TO STATION	LOCATION	SQ YD
4+50 to 5+74	40' RT TO 24' LT	863
4+50 TO 5+74	60' LT TO VAR. LT	144
5+74 TO 8+40	CL TO 24' LT	663
8+40 TO 9+80	12' LT TO 24' LT	224
9+80 TO 10+76	12' LT TO VAR. LT	285
10+76 TO 11+35	VAR. LT	241
TOTAL		2420

*STATION AND LOCATION BASED ON LEXINGTON AVENUE DESIGN ALIGNMENT

CC — MISCELLANEOUS CONSTRUCTION ITEMS

STATION	LOCATION	ITEM	QTY	UNIT
LEXINGTON AVE DESIGN ALIGNMENT				
3+75	90' RT	RIPRAP CLASS III	4.4	CU YD
4+50	100' RT	RIPRAP CLASS III	4.4	CU YD
3+75	90' RT	GEOTEXTILE FABRIC TYPE IV	8	SQ YD
4+50	100' RT	GEOTEXTILE FABRIC TYPE IV	8	SQ YD
4+70	70' RT	TRUNCATED DOMES	10	SQ FT
4+70	50' LT	TRUNCATED DOMES	24	SQ FT
4+75	55' LT	TRUNCATED DOMES	10	SQ FT
5+80	60' RT	TRUNCATED DOMES	24	SQ FT
5+80	55' LT	TRUNCATED DOMES	24	SQ FT

No.	Date	By	Revision
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abrahamthy

Date 04/09/2015 License No. 43505

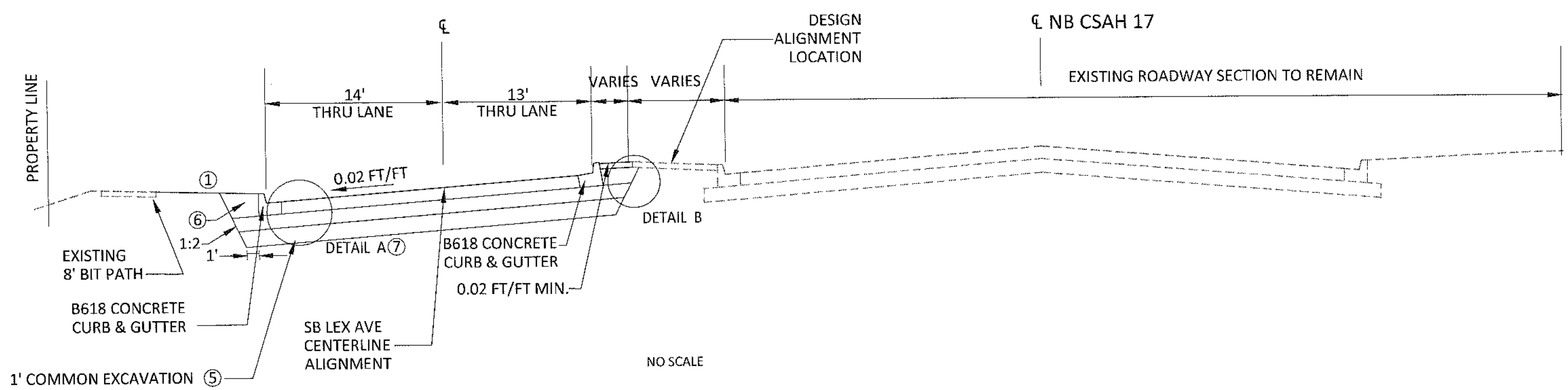
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

TABULATIONS

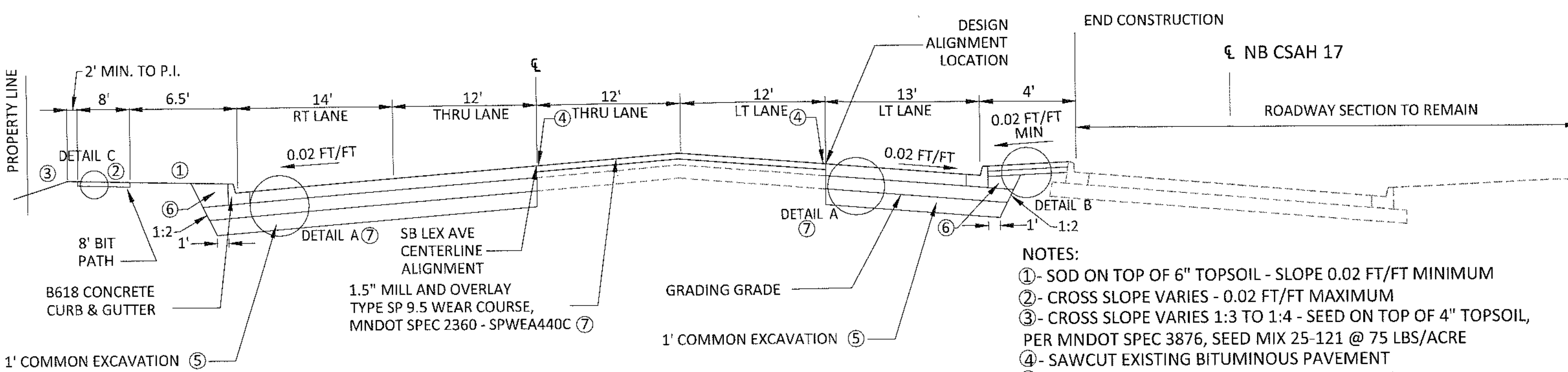
20 / 78

LEXINGTON AVE
STA. 1+00 TO STA. 4+50
TYPICAL STREET SECTION
WITH B618 CURB



NO SCALE

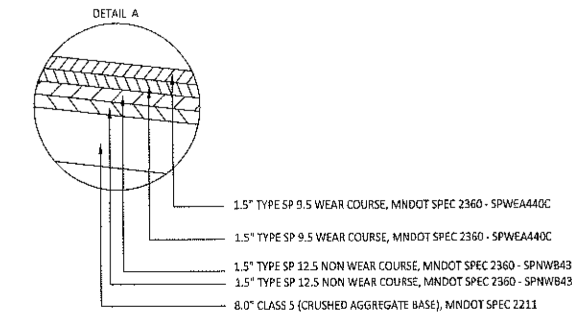
LEXINGTON AVE
STA. 5+70 TO STA. 8+60
TYPICAL STREET SECTION
WITH B618 CURB



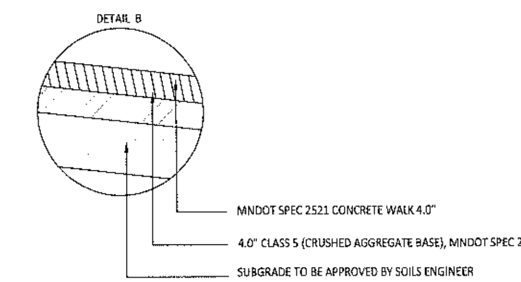
NOTES:

①- SOD ON TOP OF 6" TOPSOIL - SLOPE 0.02 FT/FT MINIMUM
②- CROSS SLOPE VARIES - 0.02 FT/FT MAXIMUM
③- CROSS SLOPE VARIES 1:3 TO 1:4 - SEED ON TOP OF 4" TOPSOIL, PER MNDOT SPEC 3876, SEED MIX 25-121 @ 75 LBS/ACRE
④- SAWCUT EXISTING BITUMINOUS PAVEMENT
⑤- BACKFILL WITH SELECT GRANULAR MATERIAL
⑥- BACKFILL WITH SELECT GRADING MATERIAL
⑦- CONSTRUCTION SEAMS ON WEAR COURSE BITUMINOUS PAVEMENT SHALL MATCH THE LANE STRIPING LOCATION.

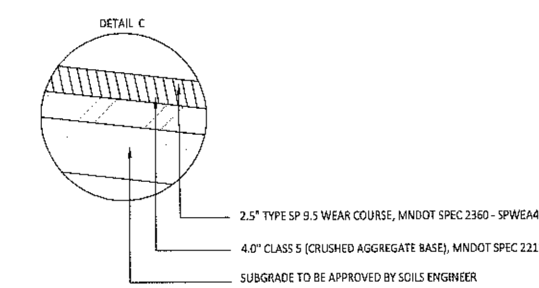
NO SCALE



DETAIL A N.T.S. REV. 2/14 (1)



DETAIL B N.T.S. REV. 2/14 (2)



DETAIL C N.T.S. REV. 2/14 (3)

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
C	01/12/15	JEB	COUNTY COMMENTS - DATED 11/21/14
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

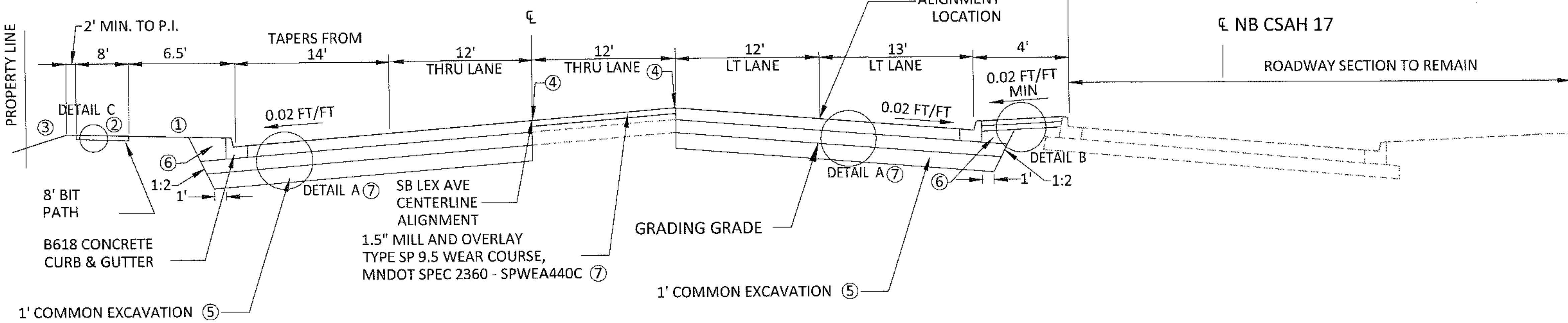
Signature [signature]
Name George D. Abernathy
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

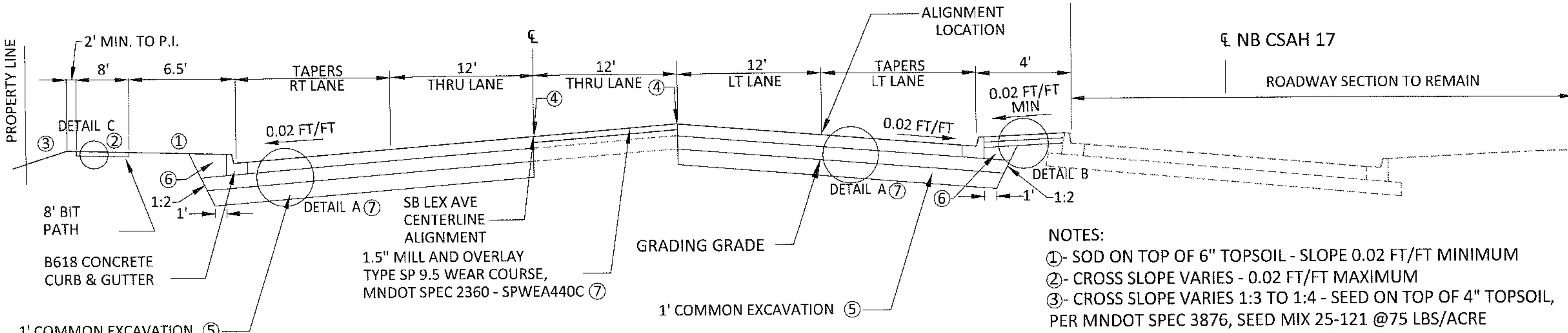
LEXINGTON AVENUE TYPICAL SECTIONS

LEXINGTON AVE
STA. 8+60 TO STA. 9+70
TYPICAL STREET SECTION
WITH B618 CURB

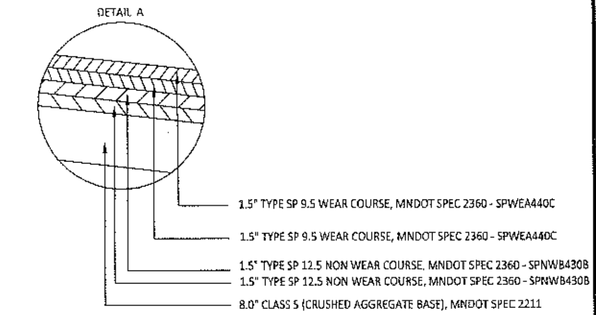


NO SCALE

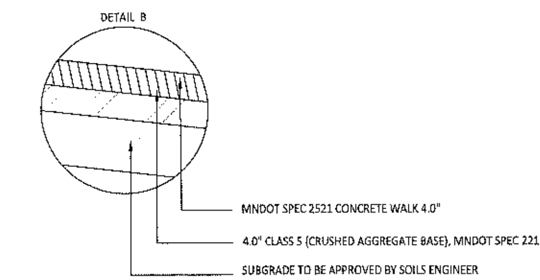
LEXINGTON AVE
STA. 9+70 TO STA. 9+90
TYPICAL STREET SECTION
WITH B618 CURB



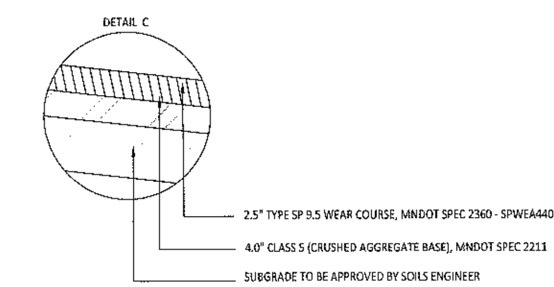
NO SCALE



DETAIL A (1) N.T.S. REV. 2/14



DETAIL B (2) N.T.S. REV. 2/14



DETAIL C (3) N.T.S. REV. 2/14

NOTES:

①- SOD ON TOP OF 6" TOPSOIL - SLOPE 0.02 FT/FT MINIMUM
②- CROSS SLOPE VARIES - 0.02 FT/FT MAXIMUM
③- CROSS SLOPE VARIES 1:3 TO 1:4 - SEED ON TOP OF 4" TOPSOIL, PER MNDOT SPEC 3876, SEED MIX 25-121 @75 LBS/ACRE
④- SAWCUT EXISTING BITUMINOUS PAVEMENT
⑤- BACKFILL WITH SELECT GRANULAR MATERIAL
⑥- BACKFILL WITH SELECT GRADING MATERIAL
⑦- CONSTRUCTION SEAMS ON WEAR COURSE BITUMINOUS PAVEMENT SHALL MATCH THE LANE STRIPING LOCATION.

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
C	01/12/15	JEB	COUNTY COMMENTS - DATED 11/21/14
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.
Signature
Name George D. Abernathy
Date 04/09/2015 License No. 43505

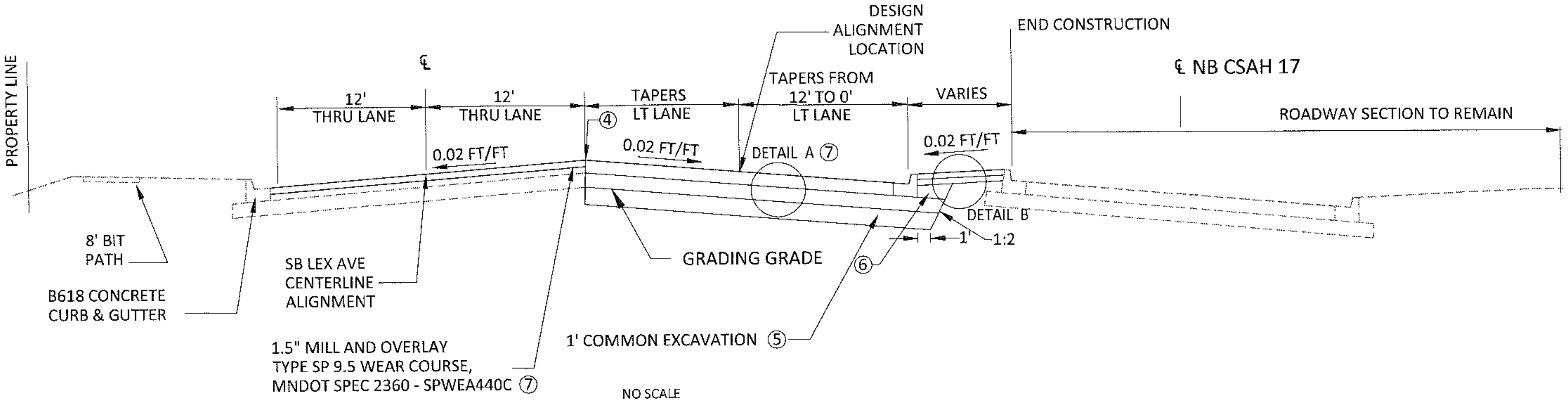
Sambatek www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

LEXINGTON AVENUE TYPICAL SECTIONS

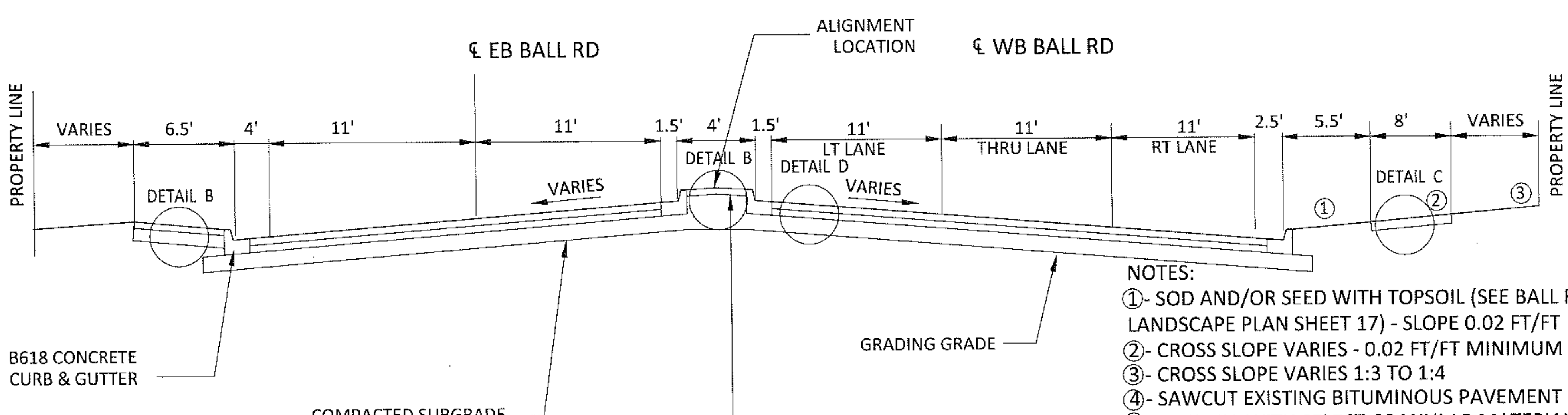
Apr 13, 2015 - 2:21am - User:577 L:\WAL-MART\WAL18598\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18598-10-TYP SECT.dwg

LEXINGTON AVE
STA. 9+90 TO STA. 10+76.55
TYPICAL STREET SECTION
WITH B618 CURB



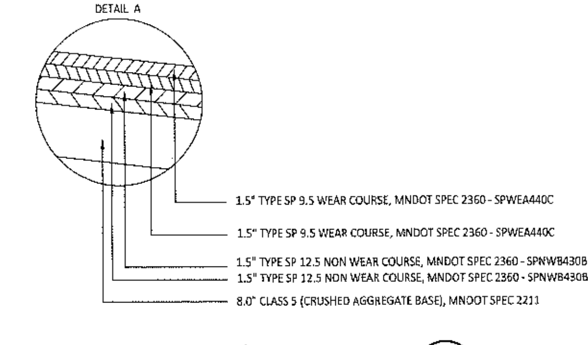
NO SCALE

BALL RD
STA. 31+88 TO STA. 33+87
TYPICAL STREET SECTION
WITH B618 CURB

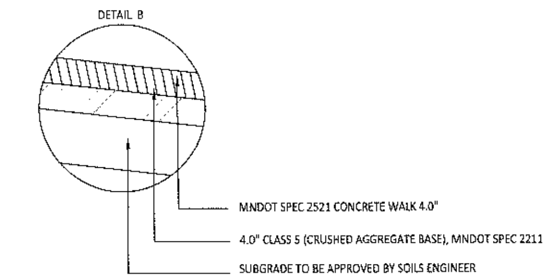


NO SCALE

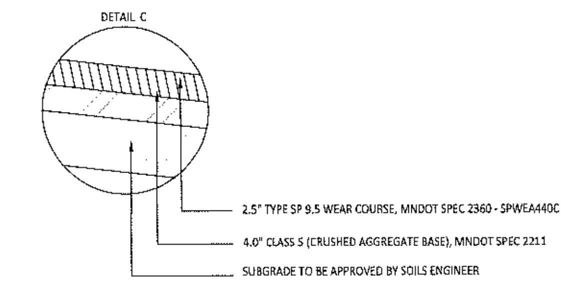
NOTES:
①- SOD AND/OR SEED WITH TOPSOIL (SEE BALL ROAD LANDSCAPE PLAN SHEET 17) - SLOPE 0.02 FT/FT MINIMUM
②- CROSS SLOPE VARIES - 0.02 FT/FT MINIMUM
③- CROSS SLOPE VARIES 1:3 TO 1:4
④- SAWCUT EXISTING BITUMINOUS PAVEMENT
⑤- BACKFILL WITH SELECT GRANULAR MATERIAL
⑥- BACKFILL WITH SELECT GRADING MATERIAL
⑦- CONSTRUCTION SEAMS ON WEAR COURSE BITUMINOUS PAVEMENT SHALL MATCH THE LANE STRIPING LOCATION.



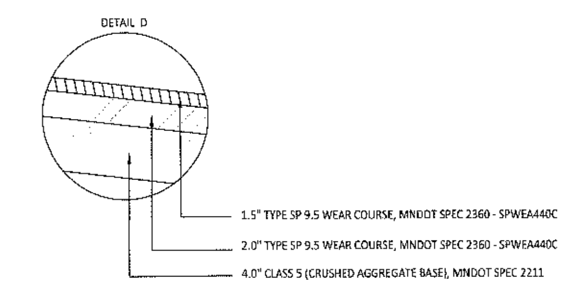
DETAIL A N.T.S. REV. 2/14 (1)



DETAIL B N.T.S. REV. 2/14 (2)



DETAIL C N.T.S. REV. 2/14 (3)



DETAIL D N.T.S. REV. 2/15 (4)

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
C	01/12/15	JEB	COUNTY COMMENTS - DATED 11/21/14
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature
Name George D. Abernathy
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

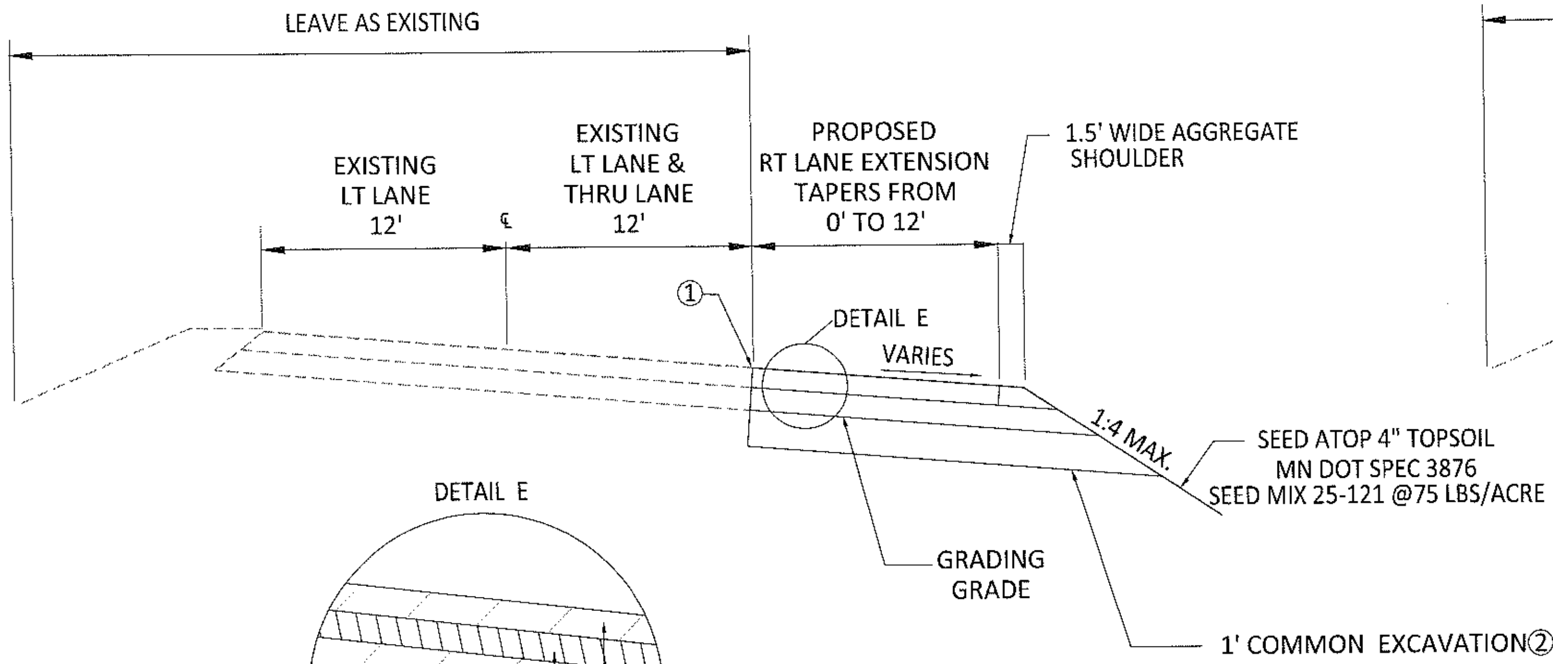
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

LEXINGTON AVENUE & BALL ROAD TYPICAL SECTIONS

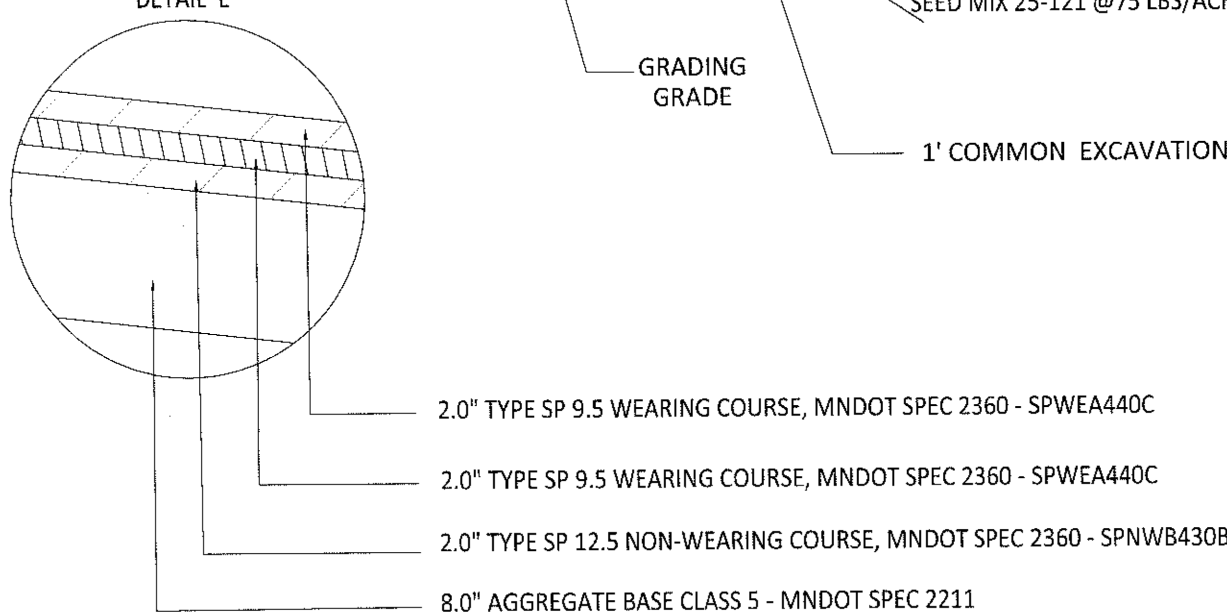
Apr 13, 2015 - 1:45pm - User:577 L:\WAL-MART\WAL18568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18562-10-TYP SECT.dwg

TH 35W EXIT RAMP TYPICAL SECTION

STA. 0+01 TO STA. 2+03

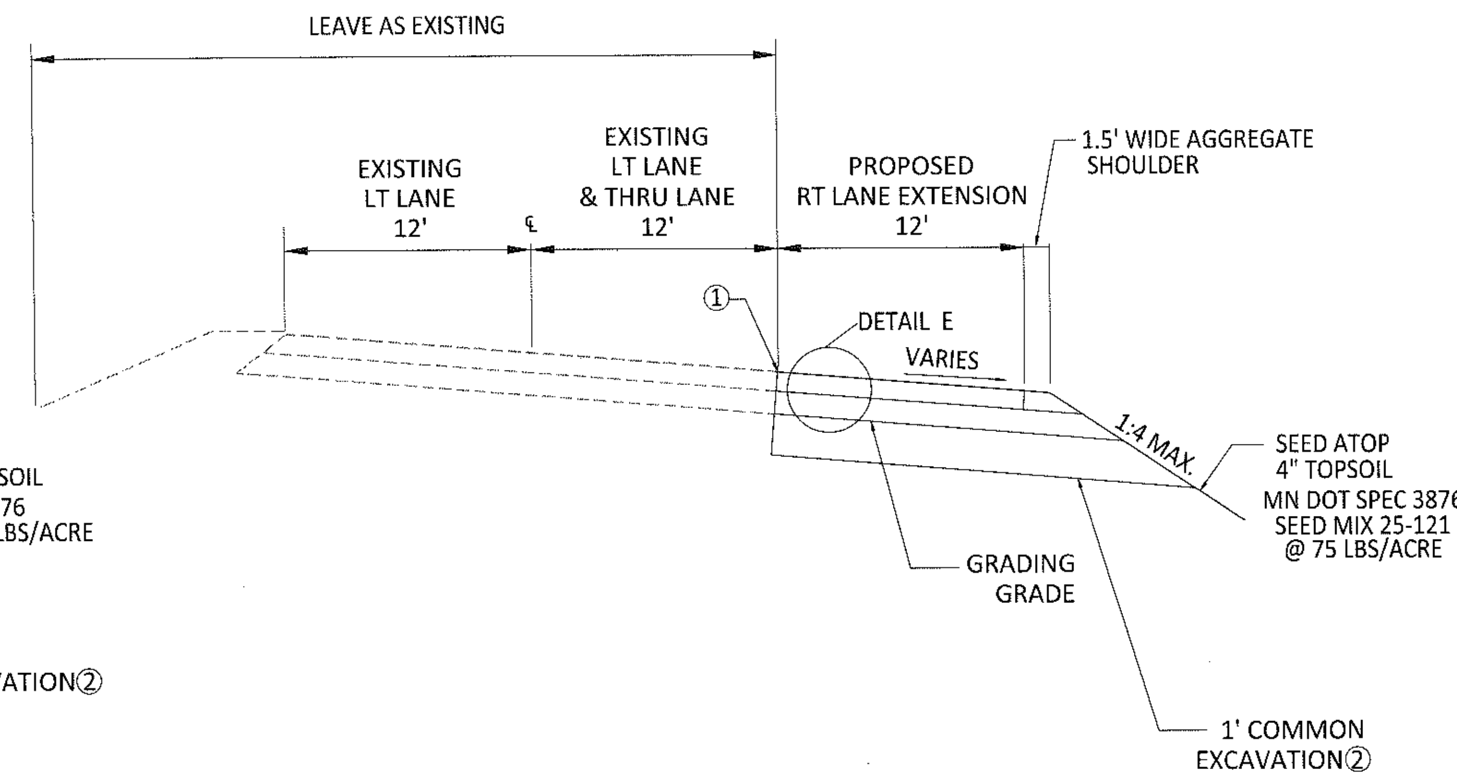


DETAIL E



TH 35W EXIT RAMP TYPICAL SECTION

STA. 2+03 TO STA. 7+71



NOTES:
①- SAWCUT EXISTING BITUMINOUS PAVEMENT
②- BACKFILL WITH SELECT GRANULAR MATERIAL

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

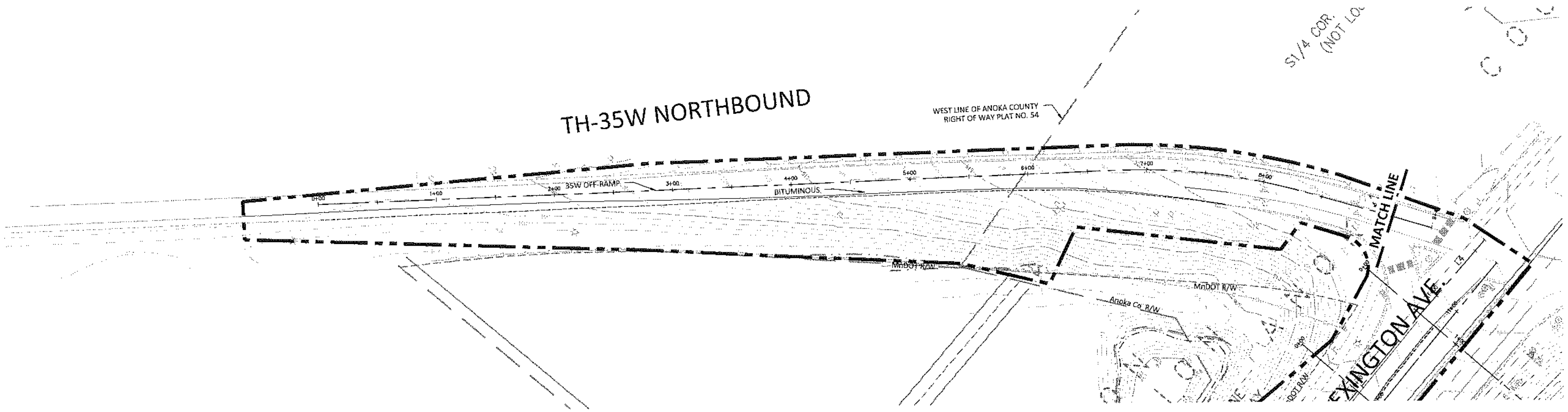
Date 04/09/2015 License No. 43505

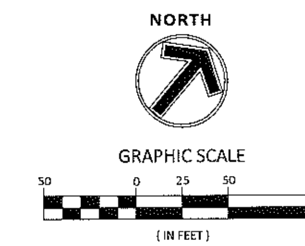
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

TH 35W EXIT RAMP TYPICAL SECTIONS

Apr 13, 2015 - 1:45pm - User:577 L:\WAL-MART\WAL18568\01Ball Road improvements\dwg\Civil\Final\Lexington-Ramp\18568-10-TYP SECT.dwg



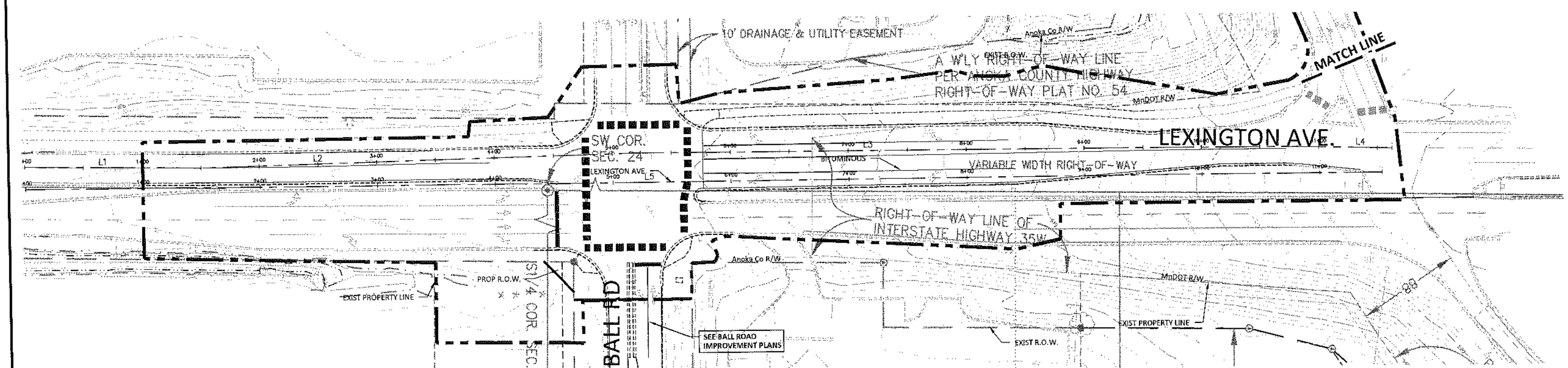


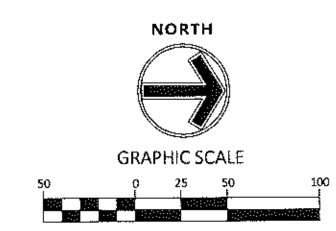
NOTE:

THE RIGHT OF WAY AND EASEMENTS SHOWN ON THE TOPOGRAPHY SHEETS GIVE A GRAPHICAL LOCATION WITH RESPECT TO THE GEOMETRIC DESIGN AND MAP DATA. THE EXACT RIGHT OF WAY, EASEMENTS, AND BOUNDARY CORNERS ARE LOCATED BY REFERENCE TO THE RIGHT OF WAY PLATS AND ARE IDENTIFIED ON THE RIGHT OF WAY MAP, WHICH SHALL BE USED FOR STAKING PURPOSES.

NOTE:

FOR INPLACE UTILITIES AND DRAINAGE SEE INPLACE UTILITIES PLAN SHEETS.





No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE

TH 35W OFF-RAMP/LEXINGTON AVE

STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

INPLACE TOPOGRAPHY

Apr 09, 2015 - 12:45pm - User:577 L:\WAL-MART\WAL18568\01Ball Road Improvements\dwg\C3D\Final\Lexington-Ramp\18568-14-INP TOPO.dwg

GENERAL NOTES:

- ALL UTILITY WORK SHOWN ON THESE SHEETS SHALL BE DONE BY OTHERS UNLESS NOTED.
- ALL POWERLINES ARE DISTRIBUTION UNLESS NOTED OTHERWISE.
- THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA".

(1) - WATER VALVE BOX ADJUSTMENT TO BE DONE BY CONTRACTOR.

UTILITIES

THE FOLLOWING LIST SHOWS THE UTILITY COMPANIES INVOLVED ON THIS PROJECT.

CENTERPOINT ENERGY MINNESOTA GAS

CENTURYLINK

XCEL ENERGY

CITY OF BLAINE

UTILITY

CB = CATCH BASIN
P = POLE
SAN = SANITARY SEWER
WAT = WATERMAIN
RCP = REINFORCED CONCRETE PIPE
GL = GAS LINE
TPH = TELEPHONE - UNDERGROUND
VAULT = UNDERGROUND VAULT
VB = VALVE BOX

OWNERSHIP

CITY = CITY OF BLAINE
CPE = CENTERPOINT ENERGY MINNESOTA GAS
XCEL = XCEL ENERGY
CENTURY = CENTURYLINK

PUBLIC UTILITIES - POWER

STATION TO STATION	ROADWAY NAME	OFFSET TO OFFSET FT	ITEM INPLACE		LEAVE AS IS	REMARKS			NOTES
						ADJUST	RELOCATE	OWNER	
0+90	CSAH 17 DESIGN ALIGNMENT	49' RT		POLE OHP	X			XCEL	
3+20	CSAH 17 DESIGN ALIGNMENT	59' RT		POLE OHP	X			XCEL	
4+40	CSAH 17 DESIGN ALIGNMENT	59' RT		POLE OHP			X	XCEL	
5+60	CSAH 17 DESIGN ALIGNMENT	90' RT		POLE OHP	X			XCEL	
5+65	CSAH 17 DESIGN ALIGNMENT	66' RT		POLE OHP	X			XCEL	
5+65 TO 8+10	CSAH 17 DESIGN ALIGNMENT	66' RT TO 104' RT		OHP	X			XCEL	
8+10	CSAH 17 DESIGN ALIGNMENT	104' RT		POLE OHP	X			XCEL	
11+20	CSAH 17 DESIGN ALIGNMENT	140' RT		POLE OHP	X			CENTURY	
4+15	CSAH 17 DESIGN ALIGNMENT	44'RT	TPH	VAULT	X			CENTURY	
5+39	CSAH 17 DESIGN ALIGNMENT	41'	TPH	VAULT	X			CENTURY	
8+48	CSAH 17 DESIGN ALIGNMENT	61' RT	TPH	VAULT	X			CENTURY	
11+15	CSAH 17 DESIGN ALIGNMENT	72' RT	TPH	VAULT	X			CENTURY	

PUBLIC UTILITIES - GAS

STATION TO STATION	ROADWAY NAME	OFFSET TO OFFSET FT	ITEM INPLACE		LEAVE AS IS	REMARKS			NOTES
						ADJUST	RELOCATE	OWNER	
4+91	CSAH 17 DESIGN ALIGNMENT	38' LT TO 95' RT		GL	X			CPE	
4+91 TO 11+65	CSAH 17 DESIGN ALIGNMENT	38' LT TO 38' LT		GL	X			CPE	
5+45	CSAH 17 DESIGN ALIGNMENT	90' RT TO 95' RT		GL	X			CPE	
5+45 TO 5+57	CSAH 17 DESIGN ALIGNMENT	90' RT		GL	X			CPE	

PUBLIC UTILITIES - SANITARY SEWER

STATION TO STATION	ROADWAY NAME	OFFSET TO OFFSET FT	ITEM INPLACE		LEAVE AS IS	REMARKS			NOTES
						ADJUST	RELOCATE	OWNER	
5+49	CSAH 17 DESIGN ALIGNMENT	22' LT TO 97' RT		SAN	X			CITY	

PUBLIC UTILITIES - WATERMAIN

STATION TO STATION	ROADWAY NAME	OFFSET TO OFFSET FT	ITEM INPLACE		LEAVE AS IS	REMARKS			NOTES
						ADJUST	RELOCATE	OWNER	
3+30 TO 4+75	CSAH 17 DESIGN ALIGNMENT	38' RT		WAT	X			CITY	
4+65	CSAH 17 DESIGN ALIGNMENT	40' RT		VB	X	X		CITY	(1)
4+75	CSAH 17 DESIGN ALIGNMENT	38' RT TO 97' RT		WAT	X			CITY	

PUBLIC UTILITIES - STORM SEWER

STATION TO STATION	ROADWAY NAME	OFFSET TO OFFSET FT	ITEM INPLACE		LEAVE AS IS	REMARKS			NOTES
						ADJUST	RELOCATE	OWNER	
1+00 TO 3+00	CSAH 17 DESIGN ALIGNMENT	30' LT	RCP	CB	X			CITY	
1+40	CSAH 17 DESIGN ALIGNMENT	2' LT TO 55' LT	RCP	CB	X			CITY	
1+40 TO 1+55	CSAH 17 DESIGN ALIGNMENT	2' LT TO 2' RT	RCP	CB	X			CITY	
1+55 TO 2+08	CSAH 17 DESIGN ALIGNMENT	2' RT TO 50' RT	RCP	CB	X			CITY	
2+95 TO 3+00	CSAH 17 DESIGN ALIGNMENT	52' RT TO 30' LT	RCP	CB	X			CITY	
5+83	CSAH 17 DESIGN ALIGNMENT	6' RT TO 19' RT	RCP	CB	X			CITY	
5+83	CSAH 17 DESIGN ALIGNMENT	6' RT TO 43' LT	RCP	CB	X			CITY	
8+65	CSAH 17 DESIGN ALIGNMENT	19' RT TO 54' RT	RCP	CB	X			CITY	
8+65	CSAH 17 DESIGN ALIGNMENT	19' RT TO 2' RT	RCP	CB	X			CITY	
8+65	CSAH 17 DESIGN ALIGNMENT	2' RT TO 33' LT	RCP		X			CITY	

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature
Name George D. Abernathy
Date 04/09/2015 License No. 43505

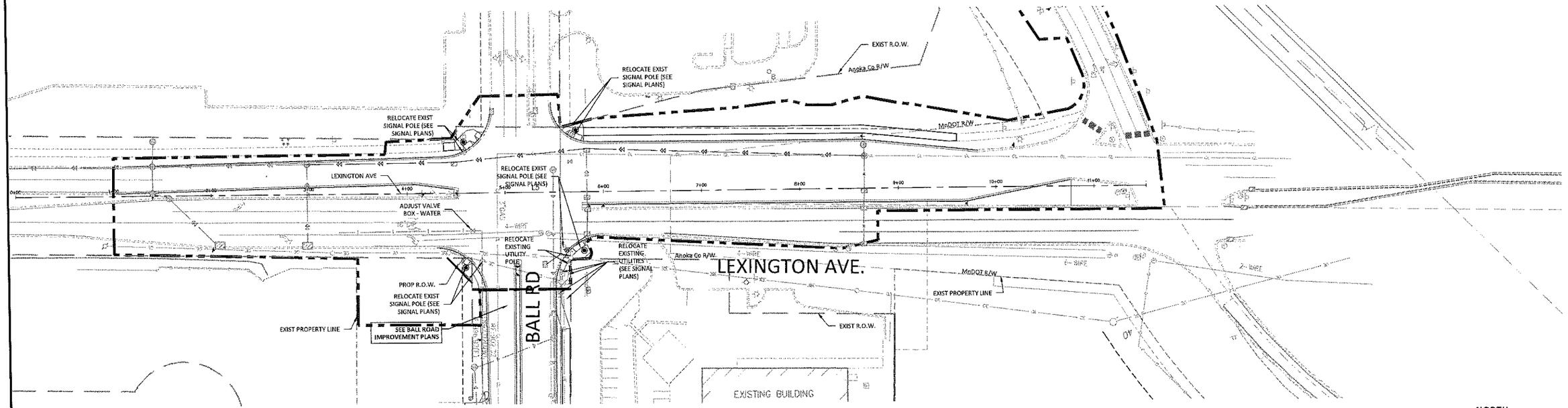
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

INPLACE UTILITY TABULATION

LEGEND

	PROPOSED	EXISTING
LIMITS OF CONSTRUCTION		
CURB & GUTTER		
STORM SEWER		
SANITARY SEWER		
FORCEMAIN (SAN.)		
WATERMAIN		
DRAINTILE		
EASEMENT		
GAS LINE	GL	GL
ELECTRIC	UE	UE
TELEPHONE	UT	UT
OVERHEAD WIRE	OE	OE
FIBER OPTIC LINE	FO	FO
UNDERGROUND CONDUIT	UGC	



NORTH

GRAPHIC SCALE

50 0 25 50 100

(IN FEET)

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MnDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

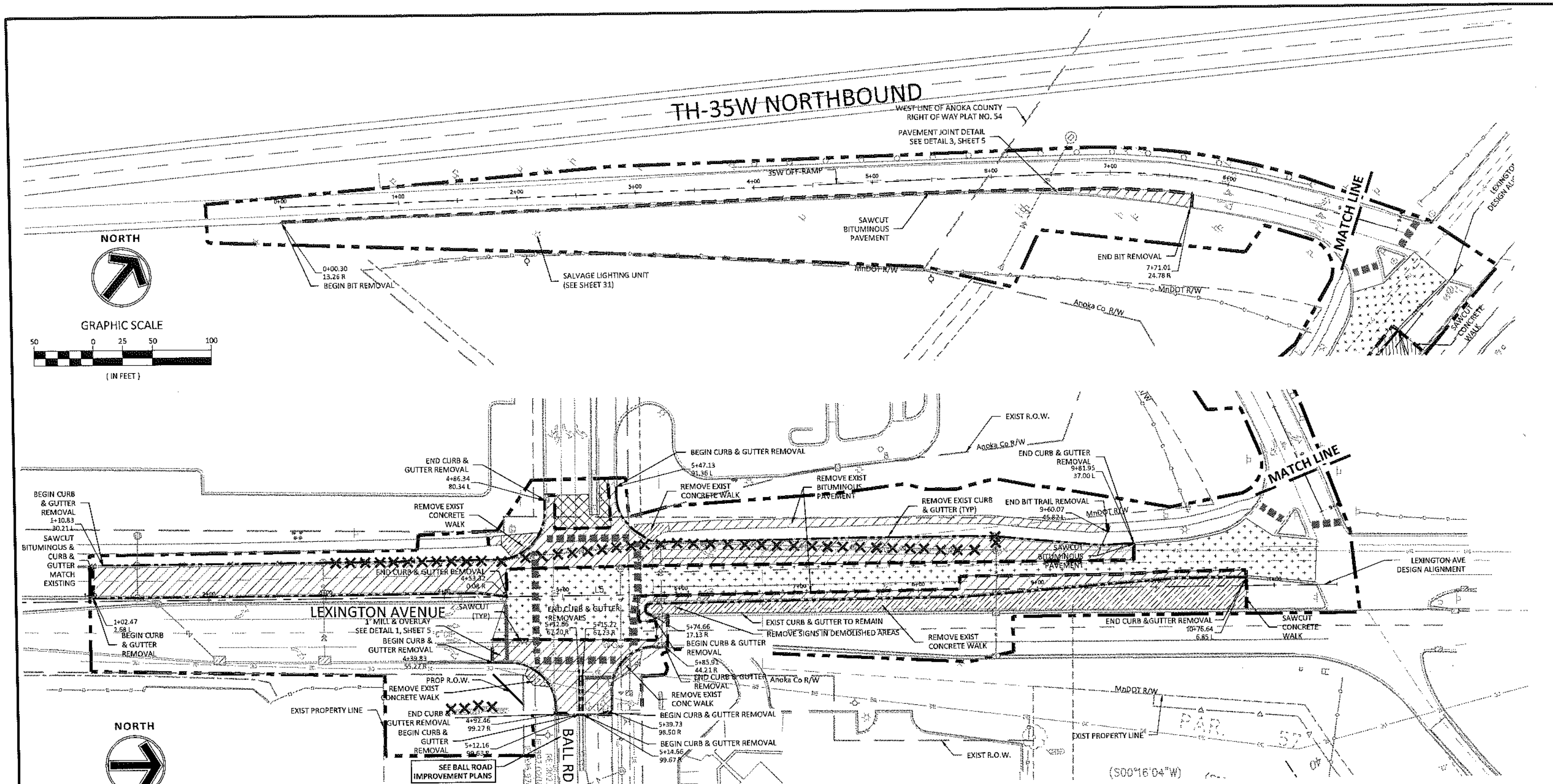
CITY OF BLAINE

TH 35W OFF-RAMP/LEXINGTON AVE

STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

INPLACE UTILITY PLAN SHEET

27 / 78



LEGEND

- REMOVE EXISTING UTILITY LINE
- REMOVE EXIST CONCRETE CURB
- SAW CUT EXIST PAVEMENT
- LIMITS OF CONSTRUCTION
- REMOVE EXISTING BITUMINOUS PAVEMENT (FULL DEPTH)
- REMOVE EXISTING CONCRETE PAVEMENT
- MILL EXISTING BITUMINOUS PAVEMENT 1 1/2" DEPTH
- REMOVE EXISTING STRIPING
- REMOVE EXISTING ✕

REMOVAL NOTES

1. REMOVAL NOTES ARE FOR CLARIFICATION ONLY AND ARE SHOWN FOR THE CONTRACTOR'S BENEFIT. THESE NOTES ARE NOT INTENDED TO BE COMPREHENSIVE. THE CONTRACTOR SHALL REMOVE OR RELOCATE ALL EXISTING ON-SITE IMPROVEMENTS NECESSARY TO ACCOMMODATE THE PROPOSED CONSTRUCTION.
2. THE DESIGN SHOWN IS BASED ON THE ENGINEER'S UNDERSTANDING OF THE EXISTING CONDITIONS. THE EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED UPON ALTA AND TOPOGRAPHIC PREPARED BY MFRA DATED 09-13-2011. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS OWN EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
3. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSING IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES AND IN ACCORDANCE WITH APPLICABLE CODES, OF ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.
4. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
5. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE DISCONNECTION OF UTILITY SERVICES TO THE EXISTING BUILDINGS PRIOR TO DEMOLITION OF THE BUILDINGS.
7. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE SUBSURFACE UTILITY INFORMATION SHOWN ON THESE PLANS IS A UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA." THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES AT LEAST 48 HOURS BEFORE ANY EXCAVATION FOR ON-SITE LOCATIONS OF EXISTING UTILITIES. THE LOCATIONS OF SMALL UTILITIES SHALL BE OBTAINED BY THE CONTRACTOR BY CALLING MINNESOTA GOPHER STATE ONE CALL AT 800-252-1166 OR 651-454-0002.
8. ALL EXISTING SEWERS, PIPING, AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK. UTILITIES DETERMINED TO BE ABANDONED SHALL BE REMOVED IF UNDER THE BUILDING INCLUDING 10' BEYOND FOUNDATIONS.
9. ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN THE ANY ROAD RIGHT OF WAY DURING CONSTRUCTION.
10. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC., TO THE BEST PRACTICES AND APPROVED BY GOVERNING AUTHORITY .
11. CONTINUOUS ACCESS SHALL BE MAINTAINED FOR THE SURROUNDING PROPERTIES AT ALL TIMES DURING DEMOLITION OF THE EXISTING FACILITIES.
12. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.
13. CONTRACTOR MAY LIMIT SAW-CUT & PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR AND TRAFFIC CONTROL SHALL BE INSTALLED FOR REMOVALS WITHIN PUBLIC RIGHT-OF-WAY.
14. CONTRACTOR TO PROTECT EXISTING FEATURES WHICH ARE TO REMAIN. DAMAGE TO ANY EXISTING CONDITIONS TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
15. EXISTING ON-SITE UTILITIES (INCLUDING MANHOLES) THAT ARE NOT TO REMAIN IN SERVICE SHALL BE REMOVED. ABANDONED PIPES LOCATED OUTSIDE PROPOSED BUILDING PAD LIMITS WITH AN EXCESS OF 3' COVER MAY BE DECOMMISSIONED AND ABANDONED IN PLACE, PROVIDED THAT THESE ABANDONED UTILITIES ARE GROUTED AND CAPPED. ALL EXISTING WATER SERVICES ARE TO BE ABANDONED AT THE GATE VALVE. SANITARY SERVICE SHALL BE ABANDONED AT THE LOT LINE. ALL STREET RESTORATION SHALL BE COMPLETED IN COMPLIANCE WITH LOCAL STANDARDS.
16. THE CONTRACTOR IS RESPONSIBLE FOR THE ABATEMENT OF ASBESTOS-CONTAINING MATERIALS; DETERIORATED LEAD-BASED PAINT; PCB, CFC AND MERCURY-CONTAINING COMPONENTS; OTHER HAZARDOUS MATERIALS; AND REGULATED WASTE.
17. CONTRACTOR MAY HAVE TO FIELD ADJUST THE EXTENT OF REMOVALS BASED ON ACTUAL FIELD CONDITIONS. ADDITIONAL REMOVALS ARE TO BE AT NO ADDITIONAL COST TO OWNER.
18. CONTRACTOR SHALL COORDINATE ALL LANE CLOSURES AND TRAFFIC CONTROL ON LEXINGTON AVENUE WITH THE ANOKA COUNTY HIGHWAY DEPARTMENT.

CONSTRUCTION CONTINGENCY PLAN

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH OSHA, EPA, MPCA & LOCAL REQUIREMENTS FOR HANDLING AND DISPOSAL OF HAZARDOUS MATERIAL. CONTRACTOR SHALL PREPARE A HASP AND STORE IN JOB TRAILER ON SITE.

IF CONTRACTOR ENCOUNTERS SUSPECTED CONTAMINATED SOILS, ASBESTOS CONTAINING MATERIALS (ACMS), UNDERGROUND STORAGE TANKS (USTS), CONTAINERS OF LIQUIDS OR OTHER WASTES, AND OTHER WASTE MATERIALS NOT PREVIOUSLY OBSERVED, CONTRACTOR SHALL CEASE WORKING IN THE AREA OF SUSPECTED CONTAMINATION AND CONTACT WALMART'S CONSTRUCTION TESTING LABORATORY (CTL). CTL SHALL PERFORM TESTS TO DETERMINE IF CONTAMINATION IS PRESENT. CONTRACTOR SHALL ASSIST CTL IN OBTAINING SAMPLES AT NO ADDITIONAL COST TO WALMART.

CONTRACTOR AND ALL SUBCONTRACTORS SHALL OBTAIN AND REVIEW THE CONSTRUCTION CONTINGENCY PLAN (CCP) PREPARED BY BRAUN INTERTEC, DATED JULY 15, 2014.

1. CONTAMINATED SOILS : IF CONTAMINATION IS PRESENT IN SOILS, CONTRACTOR SHALL SEGREGATE AND STOCKPILE THE CONTAMINATED SOILS. CONTRACTOR SHALL PLACE CONTAMINATED SOIL STOCKPILES ON POLYETHYLENE SHEETING AND SECURELY COVER THE STOCKPILES WITH POLYETHYLENE SHEETING AT THE END OF EACH WORKDAY. CONTRACTOR SHALL SURROUND CONTAMINATED SOIL STOCKPILES WITH A BERM TO PREVENT STORMWATER RUNOFF/RUN-ON. CONTRACTOR SHALL DISPOSE OF CONTAMINATED SOILS OFF-SITE AT A LANDFILL LICENSED TO RECEIVE SUCH WASTE/CONTAMINANTS. CONTAMINATED SOILS SHALL BE PROPERLY MANIFESTED AND TRANSPORTED BY LICENSED TRANSPORTERS. DISPOSAL SHALL COMPLY WITH LOCAL, STATE AND FEDERAL REGULATIONS. LOAD TICKETS SHALL BE PROVIDED TO CTL FOR EACH LOAD OF MATERIAL REMOVED FROM THE SITE.
2. PETROLEUM CONTAMINATED SOILS : IF SUSPECTED PETROLEUM CONTAMINATED SOILS ARE ENCOUNTERED, CONTRACTOR SHALL STOP WORK IN THE AREA OF THE PETROLEUM CONTAMINATED SOILS AND CONTACT CTL TO PERFORM TESTING. CONTRACTOR SHALL DISPOSE OF PETROLEUM CONTAMINATED SOILS IN ACCORDANCE WITH CTL DIRECTION AND IN COMPLIANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
3. ASBESTOS CONTAINING MATERIALS (ACMS) : IF SUSPECTED ACMS ARE ENCOUNTERED, CONTRACTOR SHALL STOP WORK IN THE AREA OF THE ACMS AND CONTACT CTL TO PERFORM TESTING. CONTRACTOR SHALL DISPOSE OF ACMS IN ACCORDANCE WITH CTL DIRECTION AND IN COMPLIANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
4. UNDERGROUND STORAGE TANKS OR DRUMS (USTS) : IF USTS ARE ENCOUNTERED, CONTRACTOR SHALL STOP WORK IN THE AREA OF THE USTS AND CONTACT CTL TO PERFORM TESTING. CONTRACTOR SHALL DISPOSE OF USTS IN ACCORDANCE WITH CTL DIRECTION AND IN COMPLIANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
5. CONTAINERS OF LIQUIDS OR OTHER WASTES : IF CONTAINERS OF LIQUIDS OR OTHER WASTES ARE ENCOUNTERED, CONTRACTOR SHALL STOP WORK IN THE AREA WHERE THE CONTAINERS WERE ENCOUNTERED AND CONTACT THE CTL TO PERFORM TESTING. IF CONTAINERS ARE LEAKING, CONTRACTOR SHALL PLACE ABSORBENT PADS TO CONTAIN THE LEAKS. CONTRACTOR SHALL DISPOSE OF CONTAINERS AND WASTES IN ACCORDANCE WITH CTL DIRECTION AND IN COMPLIANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
6. OTHER WASTE MATERIALS : IF WASTE MATERIALS SUBSTANTIALLY DIFFERENT FROM THOSE DESCRIBED IN THIS SECTION ARE ENCOUNTERED, CONTRACTOR SHALL STOP WORK IN THE AREA OF WASTE MATERIAL AND CONTACT THE CTL TO PERFORM TESTING. CONTRACTOR SHALL DISPOSE OF WASTE MATERIALS IN ACCORDANCE WITH CTL DIRECTION AND IN COMPLIANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
7. WELLS/SEPTIC SYSTEM: IF CONTRACTOR ENCOUNTERS WELL/SEPTIC SYSTEMS, ALL WORK IN THE AREA WHERE THE WELL/SEPTIC SYSTEM WAS ENCOUNTERED SHALL CEASE. CONTRACTOR SHALL CONTACT CEC AND CTL TO DETERMINE NEXT STEPS.

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

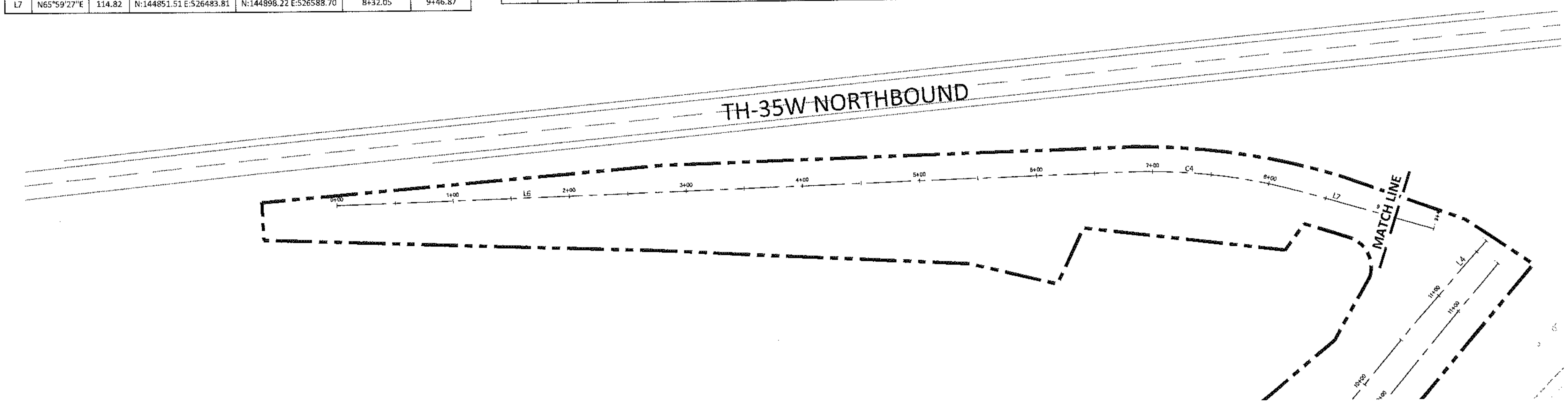
REMOVAL PLAN

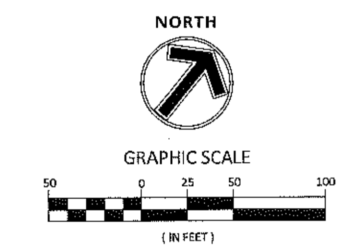
TH-35W OFF RAMP **ALIGNMENT LINE TABLE**						
LINE	DIRECTION	LENGTH	BEGIN COORDINATES	END COORDINATES	BEGIN STATION	END STATION
L6	N48°07'30"E	676.14	N:144315.74 E:525850.04	N:144767.07 E:526353.50	0+00.00	6+76.14
L7	N65°59'27"E	114.82	N:144851.51 E:526483.81	N:144898.22 E:526588.70	8+32.05	9+46.87

TH-35W OFF RAMP **ALIGNMENT CURVE TABLE**									
CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH	PC COORDINATES	PT COORDINATES	PI	PI COORDINATES
C4	155.91	500.00	17°51'57"	N57°03'29"E	155.28	N:144767.07 E:526353.50	N:144851.51 E:526483.81	7+54.74	N:144819.5285 E:526412.0210

LEGEND

LIMITS OF CONSTRUCTION



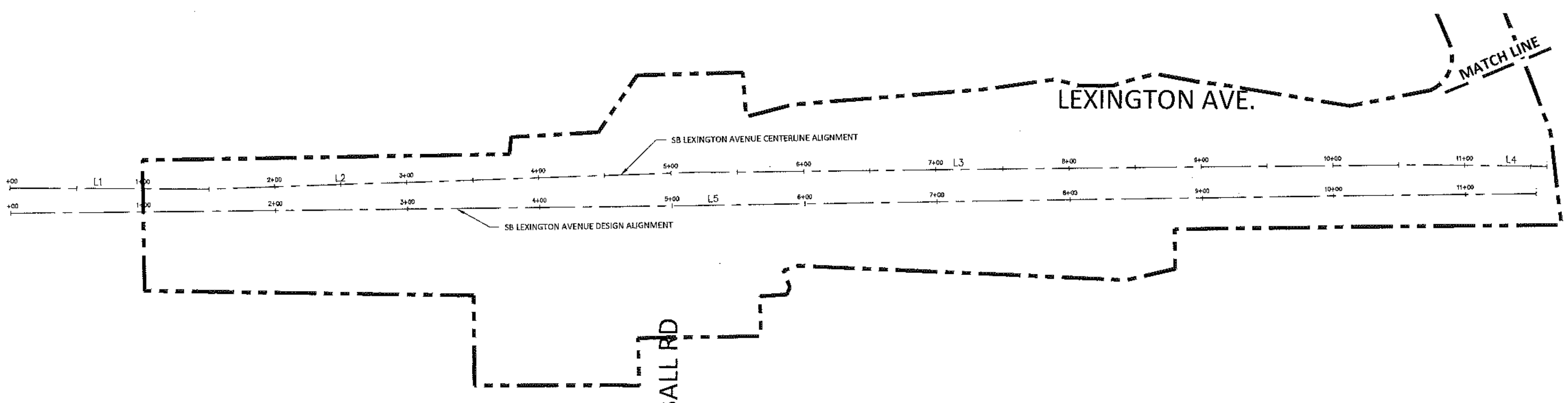


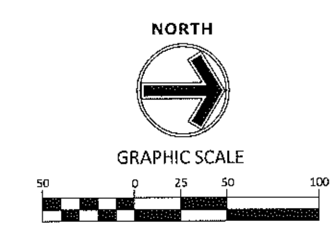
SB LEXINGTON AVENUE CENTERLINE **ALIGNMENT LINE TABLE**						
LINE	DIRECTION	LENGTH	BEGIN COORDINATES	END COORDINATES	BEGIN STATION	END STATION
L1	N0°33'14"E	139.69	N:143756.52 E:526635.77	N:143896.20 E:526637.12	0+00.00	1+39.69
L2	N1°29'50"W	344.68	N:143919.82 E:526636.93	N:144264.39 E:526627.92	1+63.31	5+07.99
L3	N0°01'21"E	536.28	N:144281.89 E:526627.69	N:144818.17 E:526627.90	5+25.50	10+61.78
L4	N1°17'43"E	86.08	N:144832.83 E:526628.07	N:144918.89 E:526630.02	10+76.44	11+62.52

SB LEXINGTON AVENUE DESIGN **ALIGNMENT LINE TABLE**						
LINE	DIRECTION	LENGTH	BEGIN COORDINATES	END COORDINATES	BEGIN STATION	END STATION
L5	N0°12'54"W	1153.40	N:143756.89 E:526654.41	N:144910.28 E:526650.08	0+00.00	11+53.40

HORIZONTAL CONTROL

THE HORIZONTAL CONTROL FOR THIS PLAN IS NAD83 (1996 ADJUSTMENT) ANOKA COUNTY COORDINATES. FOR INFORMATION ON HORIZONTAL CONTROL POINTS CONTACT MN/DOT'S OFFICE OF LAND MANAGEMENT OR THE METRO DISTRICT SURVEYS OFFICE.





No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

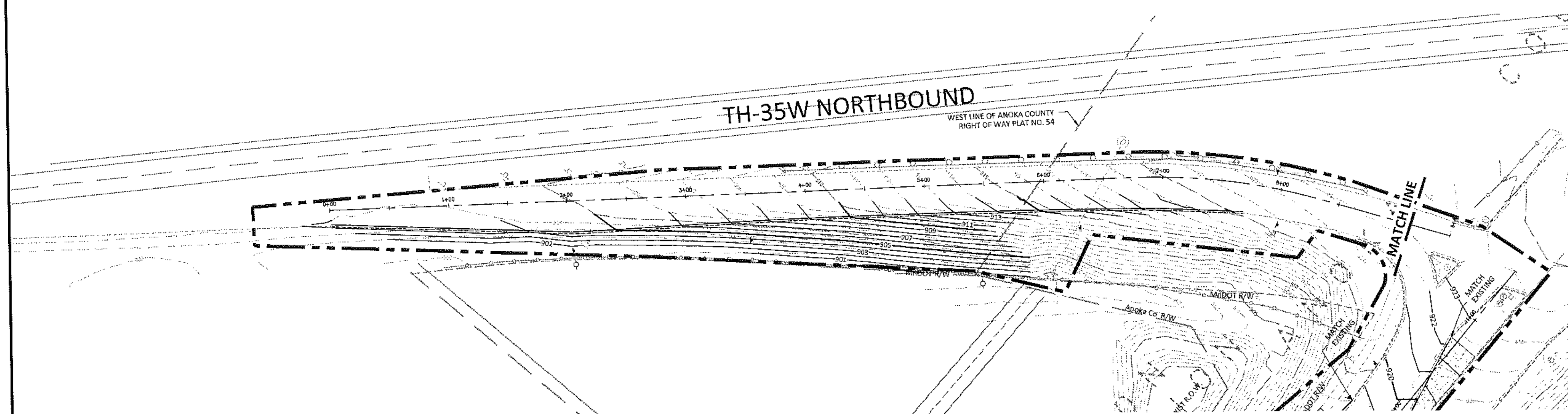
Name George D. Abernathy

Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

ALIGNMENT PLAN



LEGEND

	PROPOSED	EXISTING
CURB & GUTTER		
STORM SEWER		
DRAINTILE		
EASEMENT		
SPOT ELEVATION	962.5 X	962.5 X
CONTOUR	902	902
RIP RAP		

GRADING NOTES

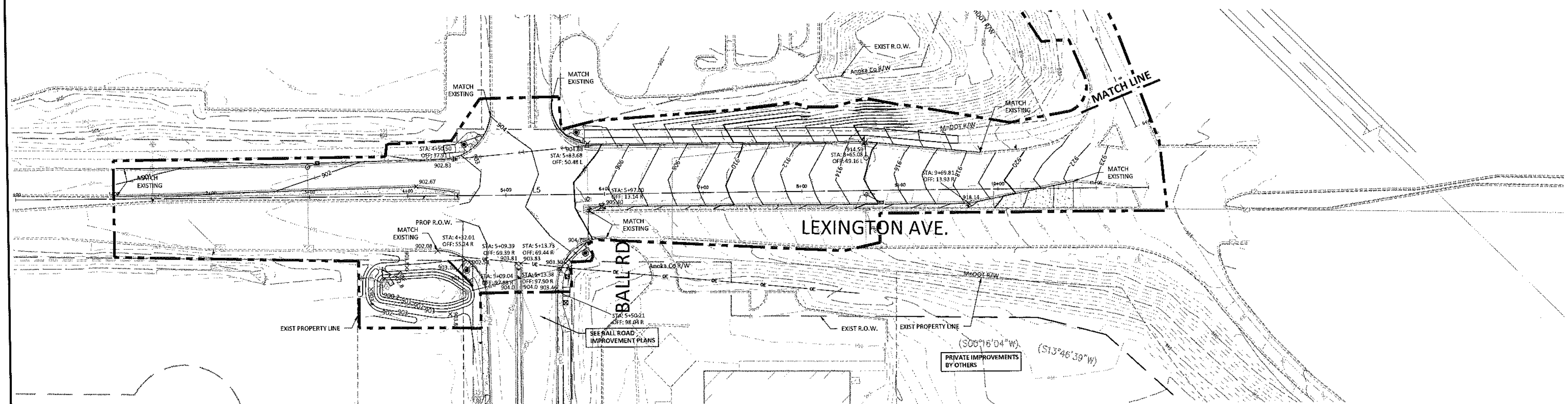
1. PROPOSED CONTOURS ARE TO FINISHED SURFACE GRADE. EXISTING AND PROPOSED CONTOURS ARE SHOWN AT 1 FOOT INTERVALS. ALL FINISHED CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED AND CONSTRUCTED PER IBC AND THE LOCAL JURISDICTION CODE.
2. SPOT ELEVATIONS SHOWN INDICATE FINISHED PAVEMENT ELEVATION UNLESS OTHERWISE NOTED. ELEVATIONS SHOWN AT CURB AND GUTTER ARE GUTTER GRADES UNLESS NOTED OTHERWISE.

NORTH

GRAPHIC SCALE

50 0 25 50 100

(IN FEET)



NORTH

GRAPHIC SCALE

50 0 25 50 100

(IN FEET)

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
C	01/12/15	JEB	COUNTY COMMENTS - DATED 11/21/14
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

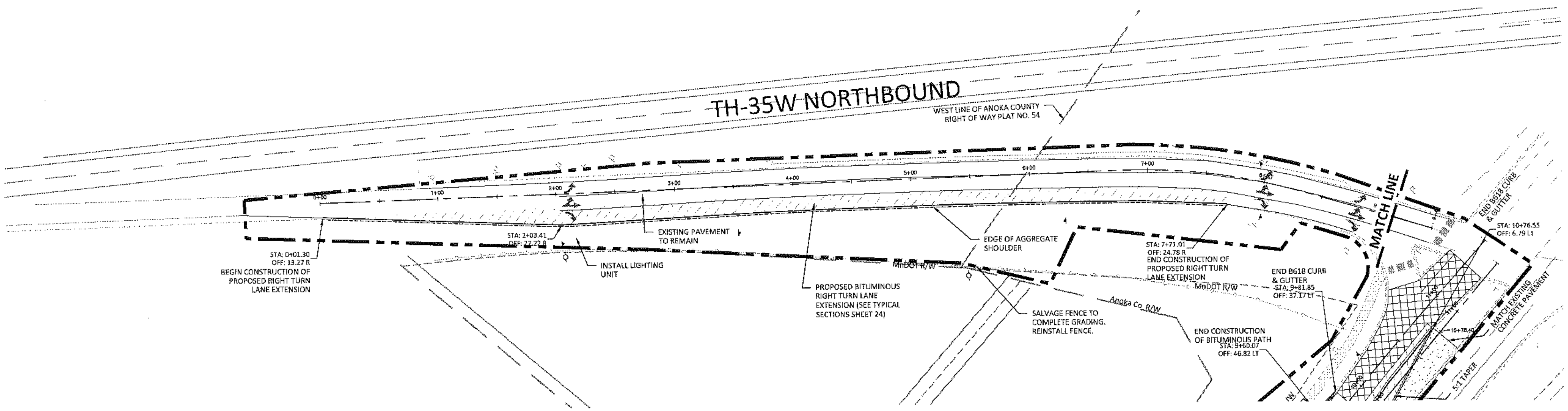
CITY OF BLAINE

TH 35W OFF-RAMP/LEXINGTON AVE

STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

FINISHED CONTOUR PLAN

Apr 09, 2015 - 12:55pm - User:577 L:\WAL-MART\WAL18568\01Ball Road Improvements\dwg\Civil\Final\Lexington Ramp\18568-20-CONT.dwg



LEGEND

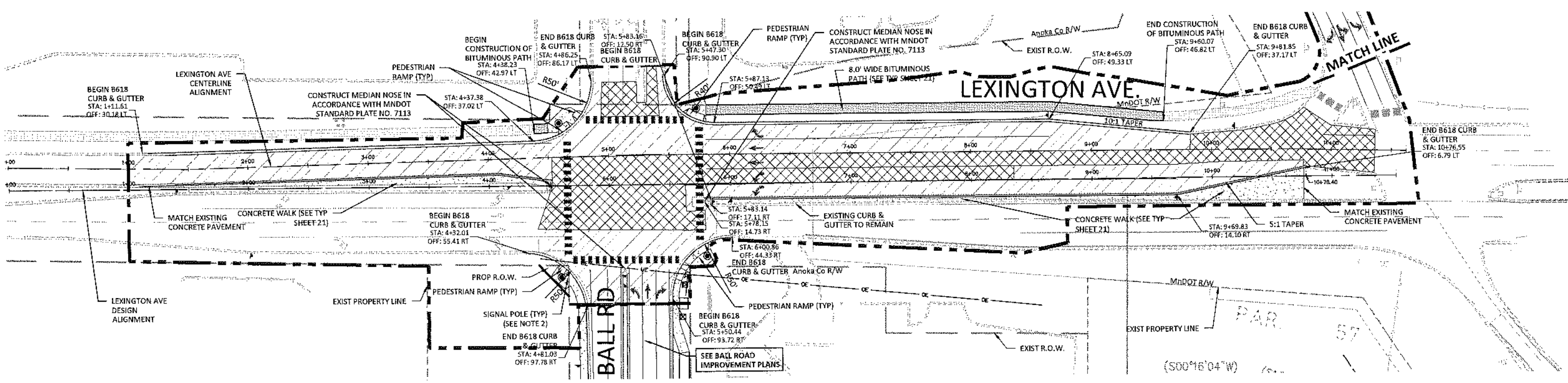
	PROPOSED	EXISTING
BITUMINOUS PAVING (SEE TYP SHEETS 21-24)		
CONCRETE WALK (SEE TYP SHEETS 21-23)		
MILL & OVERLAY 1 1/2" DEPTH		
BITUMINOUS PATH (SEE TYP SHEETS 21-23)		
LIMITS OF CONSTRUCTION		

NORTH

GRAPHIC SCALE

50 0 25 50 100

(IN FEET)



NOTES

1. ALL RADII, STATION, AND OFFSET MEASUREMENTS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
2. REFER TO TRAFFIC SIGNAL PLANS FOR INSTALLATION OF PROPOSED SIGNAL POLES AND RELATED APPURTENANCES.
3. SEE SHEET 21 FOR PAVEMENT SECTION FOR PROPOSED LEXINGTON AVENUE TURN LANE IMPROVEMENTS.
4. THE RIGHT OF WAY AND EASEMENTS SHOWN ON THE CONSTRUCTION SHEETS GIVE A GRAPHICAL LOCATION WITH RESPECT TO THE GEOMETRIC DESIGN AND MAP DATA. THE EXACT RIGHT OF WAY, EASEMENTS, AND BOUNDARY CORNERS ARE LOCATED BY REFERENCE TO THE RIGHT OF WAY PLATS AND ARE IDENTIFIED ON THE RIGHT OF WAY MAP, WHICH SHALL BE USED FOR STAKING PURPOSES.
5. ALL STATION AND OFFSET LABELS ARE REFERRING TO THE LEXINGTON AVENUE DESIGN ALIGNMENT

NORTH

GRAPHIC SCALE

50 0 25 50 100

(IN FEET)

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

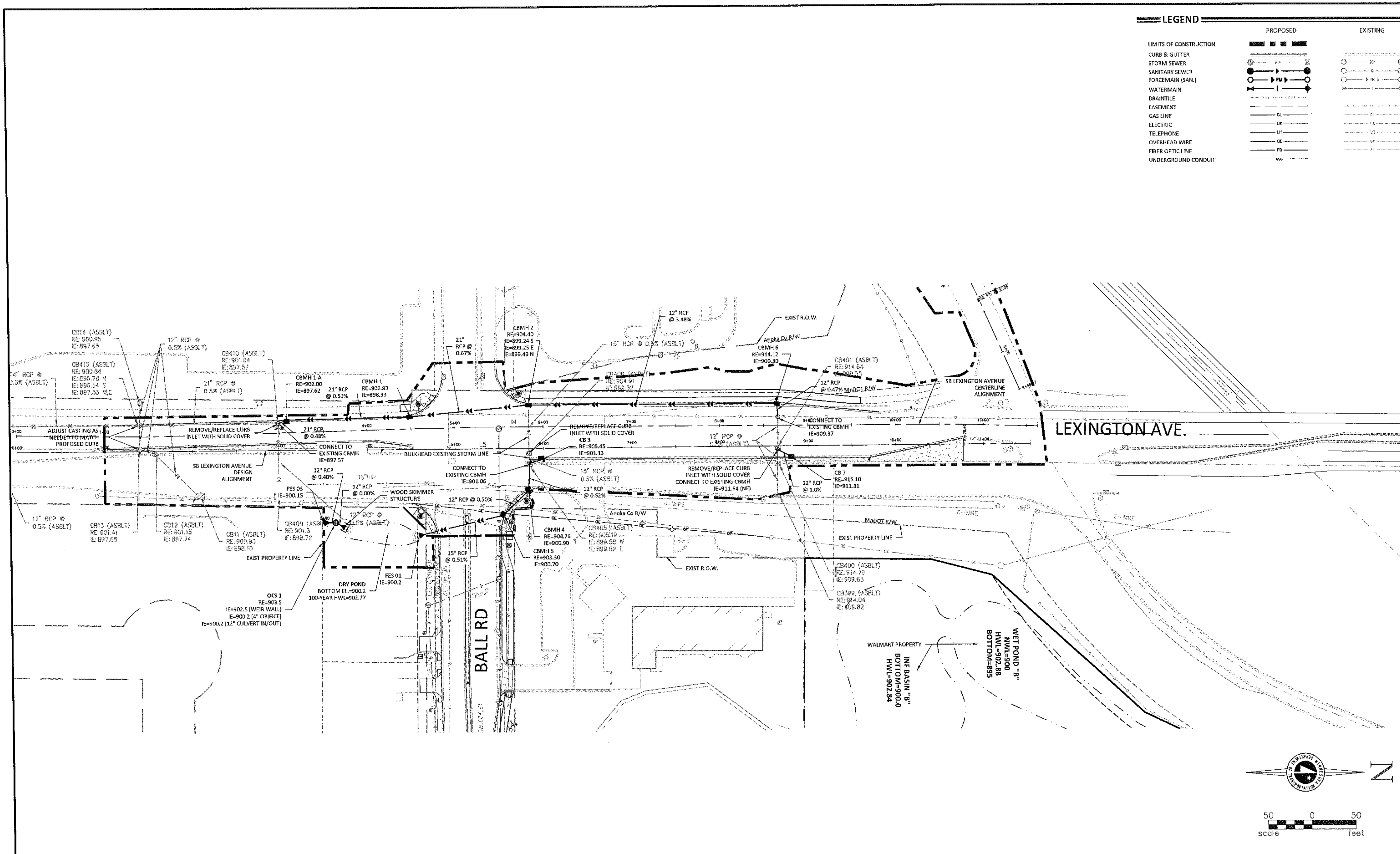
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CONSTRUCTION PLAN

Apr 09, 2015 - 12:56pm - User:577 L:\WAL-MART\WAL18568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-21-CONST.dwg



No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

DRAINAGE PLAN

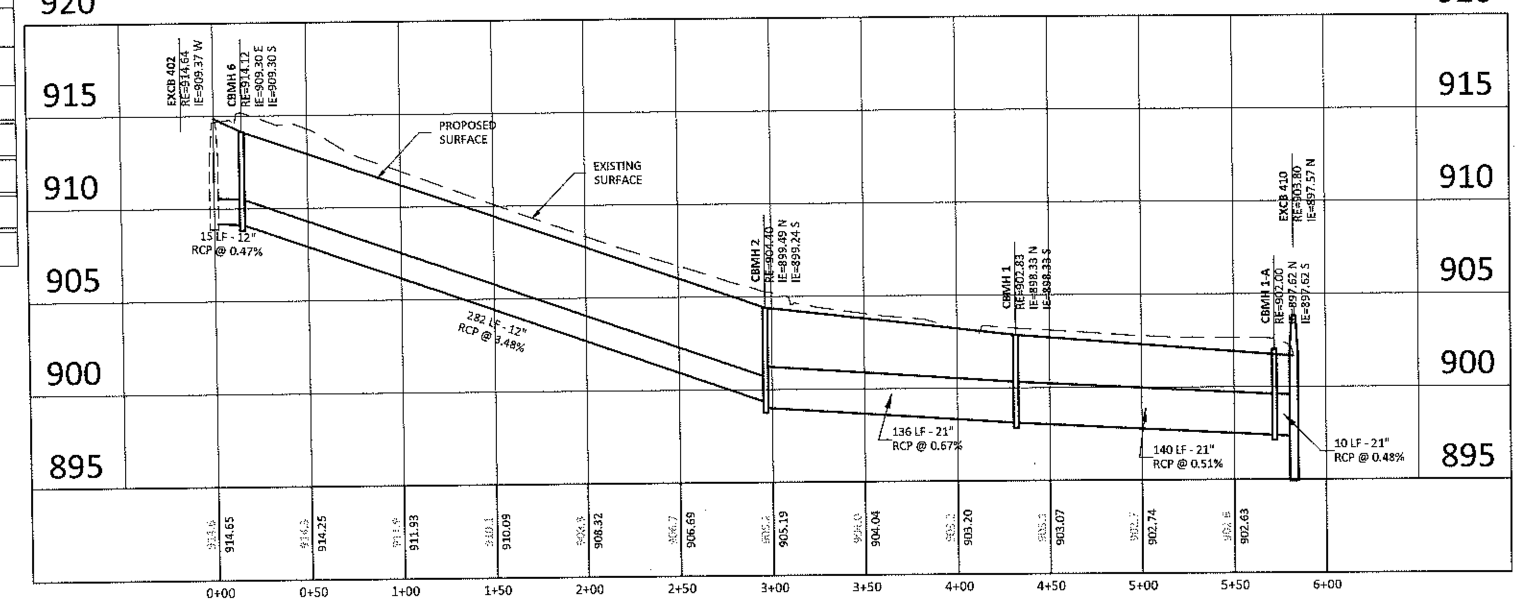
Apr 09, 2015 - 12:57pm - User:577 L:\WAL-MART\WAL18568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-72-DRAIN.dwg

DRAINAGE TABULATION																	
STRUCTURE NO.		STRUCTURE LOCATION			DRAINAGE STRUCTURES						12" RC PIPE SEWER	15" RC PIPE SEWER	21" RC PIPE SEWER	APRON			
FLOWS FROM	FLOWS TO	ALIGN.	STATION	OFFSET	TYPE	CASTING ASSEMBLY TYPE	STEPS REQUIRED	TOP OF CASTING ELEV	OUTLET ELEV	INLET ELEV	LIN FT	LIN FT	LIN FT	EACH	APRON TYPE	REMARKS
401	6	LEX AVE DESIGN	8+60	5' RT	EXISTING	A-7D										
6	2	LEX AVE DESIGN	8+60	50' LT	CBMH, TYPE F	B-11	N	914.12	909.3	899.49	280					
2	1	LEX AVE DESIGN	5+90	50' LT	CBMH, TYPE F	B-11	Y	904.4	899.24	898.33			135			
1	1-A	LEX AVE DESIGN	4+50	36' LT	CBMH, TYPE F	B-11	N	902.83	898.33	897.62			140			
1-A	410	LEX AVE DESIGN	3+08	34' LT	CBMH, TYPE F	B-11	N	902	897.62	897.57			10			
410	415	LEX AVE DESIGN	3+00	31' LT	EXISTING	A-7D										
7	401	LEX AVE DESIGN	8+70	13' RT	CB, TYPE N	B-11	N	915.1	911.81	909.55	18					
406	2	LEX AVE DESIGN	5+90	5' RT	EXISTING	A-7D										
3	405	LEX AVE DESIGN	6+00	10' RT	CB, TYPE N	B-11	N	905.45	901.13	901.06	15					
405	4	LEX AVE DESIGN	5+90	16' RT	EXISTING	EXISTING	N/A	905.19	901.06	900.9	31					
4	5	LEX AVE DESIGN	5+83	48' RT	CBMH, TYPE F	B-11	N	904.76	900.9	900.7	40					
5	FES 01	LEX AVE DESIGN	5+50	70' RT	CBMH, TYPE F	B-11	N	903.3	900.7	900.2	100					
FES 01		LEX AVE DESIGN	4+55	100' RT	FES				900.2					1	RC APRON	
FES 02	OCS 1	LEX AVE DESIGN	3+70	90' RT	FES				9002	900.2	12			1	RC APRON	
OCS 1	FES 03	LEX AVE DESIGN	3+60	85' RT	CONTROL STRUCTURE			903.5	900.2	900.15	12					
FES 03		LEX AVE DESIGN	3+50	85' RT	FES				900.15					1	RC APRON	

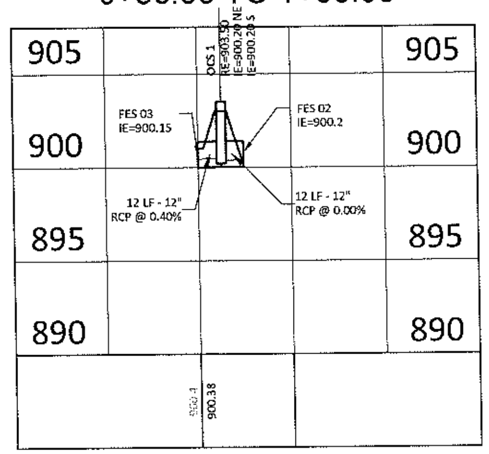
CASTING ASSEMBLY KEY AND SUMMARY			
ASSEMBLY	ASSEMBLY REQ.	CASTING NUMBER	STANDARD PLATE
B-11	8	FRAME CASTING NO. 806/CURB BOX 4160	4125
		GRATE CASTING NO. 814A	4152
A-7D	3	FRAME CASTING NO. 700-7	4101
		GRATE CASTING NO. 715	4110

STORM SEWER SUMMARY		D
ITEM	UNIT	TOTALS
12" RC PIPE SEWER	LIN FT	524
21" RC PIPE SEWER	LIN FT	286
12" RC PIPE APRON	EACH	3
CONSTRUCT DRAINAGE STRUCTURE, F	LIN FT	32.93
CONSTRUCT DRAINAGE STRUCTURE, N	LIN FT	7.61
CONNECT TO EXIST DRAINAGE STRUCTURE	EACH	4
CASTING ASSEMBLY	EACH	11
ADJUST FRAME AND RING CASTING	EACH	2

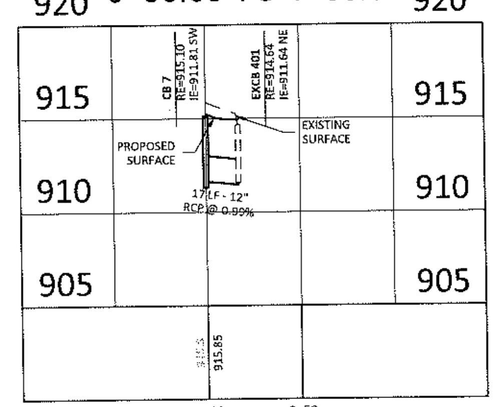
CBMH6-CB410
-0+50.00 TO 6+50.00



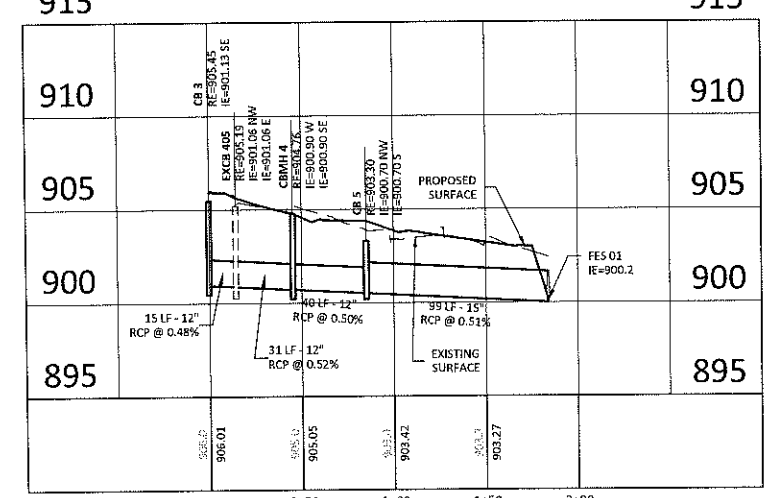
FES02-FES03
-0+50.00 TO 1+00.00



CB 7
-0+50.00 TO 1+00.00



CB3
-0+50.00 TO 2+50.00



No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

DRAINAGE PROFILES AND TABULATIONS

PLOTTED/REVISED: 03-NOV-2014 11:36

DISTRICT: METRO
PLOT NAME: WRENOTES_SWPPP_2013
PATH & FILENAME: Projects/DM_ROS/Non_Project/Hydraulics/Templates/SWPPP/WRENOTES_SWPPP_2013.dgn

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE

PROJECT DESCRIPTION/LOCATION

SP 0280-75 IS LOCATED ON TH 35W OFF-RAMP FROM THW 35W EXIT 33 TO CSAH 17 IN THE CITY OF BLAINE IN ANOKA COUNTY.

THE PLANNED SCOPE OF THE PROJECT INCLUDES:
GRADING, AGGREGATE BASE, CONCRETE CURB & GUTTER,
BITUMINOUS SURFACING, STORM SEWER, SANITARY SEWER,
WATER MAIN, BITUMINOUS TRAIL, CONCRETE SIDEWALK,
AND TRAFFIC SIGNAL

SPECIAL AND IMPAIRED WATERS

THERE ARE NO SPECIAL OR IMPAIRED WATERS LOCATED WITHIN ONE MILE OF THE PROJECT LIMITS THAT RECEIVE RUNOFF FROM THE PROJECT SITE.

AREAS OF ENVIRONMENTAL SENSITIVITY (AES) AND INFESTED WATERS

IN ADDITION TO THE LIST OF SPECIAL AND IMPAIRED WATERS THE CONTRACTOR SHALL BE AWARE THAT THERE ARE WETLANDS AND EXISTING STORMWATER FACILITIES WITHIN AND NEAR THE PROJECT BOUNDARY.

SOIL TYPES

SOIL TYPES TYPICALLY FOUND ON THIS PROJECT ARE ISANTI FINE SANDY LOAM, SODERVILLE FINE SAND, AND MARKEY MUCK.

LONG TERM MAINTENANCE AND OPERATION

MNDOT HAS ENTERED INTO A COOPERATIVE AGREEMENT WITH BLAINE/ANOKA COUNTY THAT IDENTIFIES THE AGENCY THAT IS RESPONSIBLE FOR ONGOING MAINTENANCE. SEE AGREEMENT NUMBER 1000033, ON FILE WITH MNDOT, FOR MORE INFORMATION.

PROJECT PERSONNEL AND TRAINING

THIS SWPPP WAS PREPARED BY PERSONNEL THAT ARE CERTIFIED IN THE DESIGN OF CONSTRUCTION SWPPPS. COPIES OF THE CERTIFICATIONS ARE ON FILE WITH MNDOT AND ARE AVAILABLE UPON REQUEST.

PROVIDE A CERTIFIED EROSION CONTROL SUPERVISOR IN GOOD STANDING WHO IS KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES. THE EROSION CONTROL SUPERVISOR WILL WORK WITH THE PROJECT ENGINEER TO OVERSEE THE IMPLEMENTATION OF THE SWPPP AND THE INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS BEFORE, DURING AND AFTER CONSTRUCTION UNTIL THE NOTICE OF TERMINATION (NOT) HAS BEEN FILED WITH THE MPCA. PROVIDE PROOF OF CERTIFICATION AT THE PRECONSTRUCTION MEETING. WORK WILL NOT BE ALLOWED TO COMMENCE UNTIL PROOF OF CERTIFICATION HAS BEEN PROVIDED TO THE PROJECT ENGINEER.

CHAIN OF RESPONSIBILITY

THE CONTRACTOR IS RESPONSIBLE TO COMPLY WITH ALL ASPECTS OF THE NPDES CONSTRUCTION PERMIT AT ALL TIMES UNTIL THE NOTICE OF TERMINATION (NOT) HAS BEEN FILED WITH THE MPCA. THE CONTRACTOR WILL DEVELOP A CHAIN OF COMMAND WITH ALL OPERATORS ON THE SITE TO ENSURE THAT THE SWPPP WILL BE IMPLEMENTED AND STAY IN EFFECT UNTIL THE CONSTRUCTION PROJECT IS COMPLETE, THE ENTIRE SITE HAS UNDERGONE FINAL STABILIZATION, AND A NOTICE OF TERMINATION (NOT) HAS BEEN SUBMITTED TO THE MPCA.

PROJECT CONTACTS

THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP AND INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS BEFORE, DURING AND AFTER CONSTRUCTION UNTIL THE NOTICE OF TERMINATION HAS BEEN FILED. MNDOT METRO DISTRICT WATER RESOURCES STAFF ARE ALSO AVAILABLE FOR TECHNICAL ASSISTANCE.

ORGANIZATION	CONTACT NAME	PHONE
MNDOT METRO WATER RESOURCES (WRE) DESIGN	BRUCE IRISH	651-234-7534
MNDOT METRO CONSTRUCTION RESIDENT ENGINEER	MICHAEL BEER	651-366-5104
METRO DISTRICT MAINTENANCE CONTACT	BEVERLY FARRAHER	651-234-7901
MNDOT METRO DESIGN	MARK LINDBERG	651-234-7722
MNDOT METRO WRE (EROSION CONTROL/MS4)	CAROLYN ADAMSON	651-775-0921
MINNESOTA POLLUTION CONTROL AGENCY (MPCA)	DAN SULLIVAN	651-757-2768
MINNESOTA DEPARTMENT OF NATURAL RESOURCES	PETER LEETE	651-366-3634
WATERSHED DISTRICT	NICK TOMCZIK	763-398-3079
ARMY CORPS OF ENGINEERS	ANDY BEAUDET	763-398-3079
COUNTY AGRICULTURE INSPECTOR	TIM SEVICIK	763-767-2896

MPCA DUTY OFFICER 24 HOUR EMERGENCY NOTIFICATION:
651-649-5451 OR 800-422-0798

LOCATION OF SWPPP REQUIREMENTS

THE REQUIRED SWPPP ELEMENTS MAY BE LOCATED IN MANY PLACES WITHIN THE PLAN SET AS WELL AS IN THE SPECIAL PROVISIONS, MNDOT SPEC BOOK (2014 EDITION), OR ON FILE WITH MNDOT. THE NOTES AND TABLE BELOW ARE INTENDED TO BE A QUICK REFERENCE FOR THE CONTRACTOR AND PROJECT ENGINEER TO USE IN THE FIELD. THERE MAY BE ADDITIONAL REQUIRED SWPPP ELEMENTS INCLUDED ON THE PROJECT THAT ARE NOT LISTED ON THIS SHEET.

LOCATION OF SWPPP REQUIREMENTS IN PROJECT PLAN

DESCRIPTION	LOCATION
TEMPORARY EROSION CONTROL MEASURES	SHEETS NO. 37-38
PERMANENT EROSION CONTROL MEASURES	SHEETS NO. 37-38
DIRECTION OF FLOW	SHEETS NO. 37-38
FINAL STABILIZATION	SHEETS NO. 37-38
SOILS AND CONSTRUCTION NOTES	SHEETS NO. 37-38
DRAINAGE STRUCTURES	SHEETS NO. 32
DRAINAGE TABULATION	SHEETS NO. 33
STORM SEWER PROFILE SHEETS	SHEETS NO. 33
STORM SEWER TABULATION	SHEETS NO. 33
EROSION AND SEDIMENT CONTROL DETAILS	SHEETS NO. 17-19
EROSION CONTROL TABULATION	SHEETS NO. N/A
TURF ESTABLISHMENT TABULATION	SHEETS NO. N/A
SITE MAP	SHEETS NO. 36
STORMWATER TREATMENT CONSTRUCTION STAGING	SHEETS NO. N/A
STORMWATER CALCULATIONS AND MAPS	PROJECTWISE
WATER RESOURCES NOTES	SHEET NO. 36

STORMWATER CALCULATIONS AND ADDITIONAL HYDRAULIC DESIGN INFORMATION IS STORED IN THE PROJECT'S HYDRAULICS FOLDER IN PROJECTWISE OR ON S:\PROJECTWISE. WATER RESOURCES WILL MAKE THIS INFORMATION AVAILABLE UPON REQUEST.

SITE INSPECTION AND MAINTENANCE

INSPECT THE ENTIRE CONSTRUCTION SITE A MINIMUM OF ONCE EVERY SEVEN DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. INSPECT ALL TEMPORARY AND PERMANENT WATER QUALITY MANAGEMENT, EROSION PREVENTION AND SEDIMENT CONTROL BMPS UNTIL THE SITE HAS UNDERGONE FINAL STABILIZATION AND THE NOT HAS BEEN SUBMITTED. INSPECT SURFACE WATER INCLUDING DRAINAGE DITCHES FOR SIGNS OF EROSION AND SEDIMENT DEPOSITION. INSPECT CONSTRUCTION SITE VEHICLE EXIT LOCATIONS FOR EVIDENCE OF TRACKING ONTO PAVED SURFACES. INSPECT SURROUNDING PROPERTIES FOR EVIDENCE OF OFF SITE SEDIMENT ACCUMULATION. INSPECT INFILTRATION AREAS FOR SIGNS OF SEDIMENT DEPOSITION AND COMPACTION (TO ENSURE THAT EQUIPMENT IS NOT BEING DRIVEN ACROSS THE AREA).

RECORD ALL INSPECTIONS AND MAINTENANCE ACTIVITIES IN WRITING WITHIN 24 HOURS. SUBMIT INSPECTION REPORTS IN A FORMAT THAT IS ACCEPTABLE TO THE PROJECT ENGINEER. INCLUDE THE FOLLOWING IN THE RECORDS OF EACH INSPECTION AND MAINTENANCE ACTIVITY:

A. DATE AND TIME OF INSPECTIONS
B. NAME OF PERSONS CONDUCTING INSPECTIONS
C. FINDINGS OF INSPECTIONS, INCLUDING RECOMMENDATIONS FOR CORRECTIVE ACTIONS
D. CORRECTIVE ACTIONS TAKEN, INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES
E. DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCH IN 24 HOURS
F. DOCUMENTS AND CHANGES MADE TO THE SWPPP

REPLACE, REPAIR OR SUPPLEMENT ALL NONFUNCTIONAL BMPS BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY UNLESS LISTED DIFFERENTLY BELOW:

A. REPAIR, REPLACE, OR SUPPLEMENT PERIMETER CONTROL DEVICES WHEN IT BECOMES NONFUNCTIONAL OR SEDIMENT REACHES 1/2 THE HEIGHT OF THE DEVICE. COMPLETE REPAIRS BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
B. REPAIR OR REPLACE INLET PROTECTION DEVICES WHEN THEY BECOME NONFUNCTIONAL OR SEDIMENT REACHES 1/2 THE HEIGHT AND/OR DEPTH OF THE DEVICE.
C. DRAIN AND REMOVE SEDIMENT FROM TEMPORARY AND PERMANENT SEDIMENT BASINS ONCE THE SEDIMENT HAS REACHED 1/2 THE STORAGE VOLUME. COMPLETE WORK WITHIN 72 HOURS OF DISCOVERY.
D. REMOVE ALL DELTAS AND SEDIMENT DEPOSITED IN SURFACE WATERS INCLUDING DRAINAGE WAYS, CATCH BASINS, AND OTHER DRAINAGE SYSTEMS. RESTABILIZE ANY AREAS THAT ARE DISTURBED BY SEDIMENT REMOVAL OPERATIONS. SEDIMENT REMOVAL AND STABILIZATION MUST BE COMPLETED WITHIN 7 DAYS OF DISCOVERY. PREPARE AND SUBMIT A SITE MANAGEMENT PLAN FOR WORKING IN SURFACE WATERS. CONTACT ALL APPROPRIATE AUTHORITIES PRIOR TO WORKING IN SURFACE WATERS.
E. REMOVE TRACKED SEDIMENT FROM PAVED SURFACES BOTH ON AND OFF SITE WITHIN 24 HOURS OF DISCOVERY. STREET SWEEPING MAY HAVE TO OCCUR MORE OFTEN TO MINIMIZE OFF SITE IMPACTS. LIGHTLY WET THE PAVEMENT PRIOR TO SWEEPING.
F. MAINTAIN ALL BMPS UNTIL WORK HAS BEEN COMPLETED, SITE HAS GONE UNDER FINAL STABILIZATION, AND THE NOTICE OF TERMINATION (NOT) HAS BEEN SUBMITTED TO THE MPCA. ONLY USE IF THERE IS AN NPDES PERMIT

ENVIRONMENTAL REVIEW

THERE ARE STORMWATER MITIGATION MEASURES REQUIRED AS A RESULT OF AN ENVIRONMENTAL, ARCHEOLOGICAL OR AGENCY REVIEW. ALL MITIGATION MEASURES HAVE BEEN ADDRESSED IN THIS PLAN SET OR THE SPECIAL PROVISIONS.

THIS PROJECT IS NOT LOCATED IN A WELL HEAD PROTECTION AREA.

THIS PROJECT IS LOCATED IN A DRINKING WATER SUPPLY MANAGEMENT AREA (DWSMA). THE DWSMA VULNERABILITY IS CLASSIFIED AS LOW

LAND FEATURE CHANGES

TOTAL DISTURBED AREA	4.72 ACRES
TOTAL EXISTING IMPERVIOUS SURFACE AREA	2.99 ACRES
TOTAL PROPOSED IMPERVIOUS SURFACE AREA	3.27 ACRES
TOTAL PROPOSED NET CHANGE IN IMPERVIOUS SURFACE AREA	0.28 ACRES

SHEET 1 OF 3

STORM WATER POLLUTION PREVENTION PLAN NARRATIVE

No.	Date	By	Revision
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.
Signature
Name George D. Alexathy
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

SWPPP NARRATIVE

34
78

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE (CONTINUED)

STABILIZATION TIME FRAMES

AREA	TIME FRAME	NOTES
LAST 200 LINEAL FEET OF DRAINAGE DITCH OR SWALE	WITHIN 24 HOURS OF CONNECTION TO SURFACE WATER OR PROPERTY EDGE	1, 2, 3
REMAINING PORTIONS OF DRAINAGE DITCH OR SWALE	14 DAYS	1, 3
PIPE AND CULVERT OUTLETS	24 HOURS	
EXPOSED SOILS AND STOCKPILES	14 DAYS	1

1. INITIATE STABILIZATION IMMEDIATELY WHEN CONSTRUCTION HAS TEMPORARILY OR PERMANENTLY CEASED ON ANY PORTION OF THE SITE. COMPLETE STABILIZATION WITHIN THE TIME FRAME LISTED. IN MANY INSTANCES THIS WILL REQUIRE STABILIZATION TO OCCUR MORE THAN ONCE DURING THE COURSE OF THE PROJECT. TEMPORARY SOIL STOCKPILES WITHOUT SIGNIFICANT CLAY OR SILT AND STOCKPILED AND CONSTRUCTED ROAD BASE ARE EXEMPT FROM THE STABILIZATION REQUIREMENT.

2. STABILIZE WETTED PERIMETER OF DITCH (I.E. WHERE THE DITCH GETS WET).

3. APPLICATION OF MULCH, HYDROMULCH, TACKIFIER AND POLYACRYLAMIDE ARE NOT ACCEPTABLE STABILIZATION METHODS IN THESE AREAS.

4. STABILIZE ALL AREAS OF THE SITE PRIOR TO THE ONSET OF WINTER. ANY WORK STILL BEING PERFORMED WILL BE SNOW MULCHED, SEEDED, AND BLANKETED WITHIN THE TIME FRAMES IN THE NPDES PERMIT.

5. TOPSOIL BERMS MUST BE STABILIZED IN ORDER TO BE CONSIDERED PERIMETER CONTROL BMPS. USE RAPID STABILIZATION METHOD 2, 3, OR 4 AS DIRECTED BY THE ENGINEER. THE SEED MIX USED IN THE RAPID STABILIZATION MAY BE SUBSTITUTED AS FOLLOWS:
   A. SINGLE YEAR CONSTRUCTION BETWEEN MAY 1 – AUGUST 1, SEED WITH SEED MIXTURE 21-111
   B. SINGLE YEAR CONSTRUCTION BETWEEN AUGUST 1 AND OCTOBER 31, SEED WITH SEED MIXTURE 21-112
   C. MULTI YEAR CONSTRUCTION 22-111

6. KEEP DITCHES AND EXPOSED SOILS IN AN EVEN ROUGH GRADED CONDITION IN ORDER TO BE ABLE TO APPLY EROSION CONTROL MULCHES, HYDROMULCHES AND BLANKETS.

GENERAL SWPPP NOTES FOR CONSTRUCTION ACTIVITY

1. AMEND THE SWPPP AND DOCUMENT ANY AND ALL CHANGES TO THE SWPPP AND ASSOCIATED PLAN SHEETS IN A TIMELY MANNER. STORE THE SWPPP AND ALL AMENDMENTS ON SITE AT ALL TIMES.

2. PREPARE AND SUBMIT A SITE MANAGEMENT PLAN FOR THE ENGINEER'S ACCEPTANCE FOR CONCRETE MANAGEMENT, CONCRETE SLURRY APPLICATION AREAS, WORK IN AND NEAR AREAS OF ENVIRONMENTAL SENSITIVITY, AREAS IDENTIFIED IN THE PLANS AS "SITE MANAGEMENT PLAN AREA", ANY WORK THAT WILL REQUIRE DEWATERING, AND AS REQUESTED BY THE ENGINEER. SUBMIT ALL SITE MANAGEMENT PLANS TO THE ENGINEER IN WRITING. ALLOW A MINIMUM OF 7 DAYS FOR MNDOT TO REVIEW AND ACCEPT SITE MANAGEMENT PLAN SUBMITTALS. WORK WILL NOT BE ALLOWED TO COMMENCE IF A SITE MANAGEMENT PLAN IS REQUIRED UNTIL ACCEPTANCE HAS BEEN GRANTED BY THE ENGINEER. THERE WILL BE NO EXTRA TIME ADDED TO THE CONTRACT DUE TO THE UNTIMELY SUBMITTAL.

3. IT IS THE DESIGNER'S INTENT THAT THE CONTRACTOR BUILD PONDS AND INSTALL EROSION CONTROL BMPS BEFORE PUTTING THEM INTO ACTIVE SERVICE TO THE MAXIMUM EXTENT PRACTICABLE.

4. BURNING OF ANY MATERIAL IS NOT ALLOWED WITHIN PROJECT BOUNDARY.

5. DO NOT DISTURB AREAS OUTSIDE OF THE CONSTRUCTION LIMITS. DELINEATE AREAS NOT TO BE DISTURBED PRIOR TO STARTING GROUND DISTURBING ACTIVITIES. IF IT BECOMES NECESSARY TO DISTURB AREAS OUTSIDE OF THE CONSTRUCTION LIMITS OBTAIN WRITTEN PERMISSION FROM THE PROJECT ENGINEER PRIOR TO PROCEEDING. PRESERVE ALL NATURAL BUFFERS SHOWN ON THE PLANS.

6. ROUTE STORMWATER AROUND UNSTABILIZED AREAS OF THE SITE WHENEVER FEASIBLE. PROVIDE EROSION CONTROL AND VELOCITY DISSIPATION DEVICES AS NEEDED TO KEEP CHANNELS FROM ERODING AND TO PREVENT NUISANCE CONDITIONS AT THE OUTLET.

7. DIRECT DISCHARGES FROM BMPS TO VEGETATED AREAS WHENEVER FEASIBLE. PROVIDE VELOCITY DISSIPATION DEVICES AS NEEDED TO PREVENT EROSION.

8. THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS SHALL BE PLACED AS NECESSARY TO MINIMIZE EROSION FROM DISTURBED SURFACES AND TO CAPTURE SEDIMENT ON SITE. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF ANY REMOVAL WORK AND/OR GROUND DISTURBING ACTIVITIES COMMENCE.

9. ESTABLISH SEDIMENT CONTROL DEVICES ON ALL DOWN GRADIENT PERIMETERS AND UPGRADIENT OF ANY BUFFER ZONES BEFORE ANY UP GRADIENT LAND DISTURBING ACTIVITIES BEGIN. MAINTAIN SEDIMENT CONTROL DEVICES UNTIL CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.

10. LOCATE PERIMETER CONTROL ON THE CONTOUR TO CAPTURE OVERLAND, LOW- VELOCITY SHEET FLOWS DOWN GRADIENT OF ALL EXPOSED SOILS AND PRIOR TO DISCHARGING TO SURFACE WATERS. PLACE J-HOOKS AT A MAXIMUM OF 100 FOOT INTERVALS.

11. PROVIDE PERIMETER CONTROL AROUND ALL STOCKPILES. PLACE BMP A MINIMUM 5 FEET FROM THE TOE OF SLOPE WHERE FEASIBLE. DO NOT PLACE STOCKPILES IN NATURAL BUFFER AREAS, SURFACE WATERS OR STORMWATER CONVEYANCES.

12. FLOATING SILT CURTAIN IS ALLOWED AS PERIMETER CONTROL FOR IN WATER WORK ONLY. INSTALL THE FLOATING SILT CURTAIN AS CLOSE TO SHORE AS POSSIBLE. PLACE PERIMETER CONTROL BMP ON LAND IMMEDIATELY AFTER THE IN WATER WORK IS COMPLETED.

13. DITCH CHECKS WILL BE PLACED AS INDICATED ON THE PLANS DURING ALL PHASES OF CONSTRUCTION.

14. PROTECT STORM SEWER INLETS AT ALL TIMES WITH THE APPROPRIATE INLET PROTECTION FOR EACH SPECIFIC PHASE OF CONSTRUCTION. PROVIDE INLET PROTECTION DEVICES WITH EMERGENCY OVERFLOW CAPABILITIES. SILT FENCE PLACED IN THE INLET GRATE IS NOT AN ACCEPTABLE INLET PROTECTION BMP FOR GRADING OPERATIONS. SILT FENCE PLACED IN THE GRATE IS ONLY ALLOWED FOR SHORT INTERVALS DURING MILLING OR PAVING OPERATIONS. INLET PROTECTION DEVICES MAY NEED TO BE PLACED MULTIPLE TIMES IN THE SAME LOCATION OVER THE LIFE OF THE CONTRACT. INLET PROTECTION DEVICES WILL BE PAID FOR ONCE PER INLET REGARDLESS OF THE NUMBER OF TIMES THE BMP IS PLACED. KEEP ALL STORM SEWER INLET PROTECTION DEVICES IN GOOD FUNCTIONAL CONDITION AT ALL TIMES. REPLACE INLET PROTECTION DEVICE WITH A SUITABLE ALTERNATIVE IF THE PROJECT ENGINEER DEEMS AN INLET PROTECTION DEVICE TO BE NONFUNCTIONAL, IN POOR CONDITION, INEFFECTIVE, OR NOT APPROPRIATE FOR THE CURRENT CONSTRUCTION ACTIVITIES. THERE WILL BE NO COST TO MNDOT FOR REPLACEMENT OF INLET PROTECTION DEVICES.

15. PLACE CONSTRUCTION EXITS, AS NECESSARY, TO PREVENT TRACKING OF SEDIMENT ONTO PAVED SURFACES BOTH ON AND OFF THE PROJECT SITE. PROVIDE CONSTRUCTION EXITS OF SUFFICIENT SIZE TO PREVENT TRACK OUT. MAINTAIN CONSTRUCTION EXITS WHEN EVIDENCE OF TRACKING IS DISCOVERED. REGULAR STREET SWEEPING IS NOT AN ACCEPTABLE ALTERNATIVE TO PROPER CONSTRUCTION EXIT INSTALLATION AND MAINTENANCE.

16. DISCHARGE TURBID OR SEDIMENT LADEN WATER TO TEMPORARY SEDIMENT BASINS WHENEVER FEASIBLE. IN THE EVENT THAT IT IS NOT FEASIBLE TO DISCHARGE THE SEDIMENT LADEN WATER TO A TEMPORARY SEDIMENT BASIN, THE WATER MUST BE TREATED SO THAT IT DOES NOT CAUSE A NUISANCE CONDITION IN THE RECEIVING WATERS OR TO DOWNSTREAM LANDOWNERS. CLEAN OUT ALL PERMANENT STORMWATER BASINS REGARDLESS OF WHETHER USED AS TEMPORARY SEDIMENT BASINS OR TEMPORARY SEDIMENT TRAPS TO THE DESIGN CAPACITY AFTER ALL UPGRADIENT LAND DISTURBING ACTIVITY IS COMPLETED.

17. PROVIDE SCOUR PROTECTION AT ANY OUTFALL OF DEWATERING ACTIVITIES.

18. PROVIDE STABILIZATION IN ANY TRENCHES CUT FOR DEWATERING OR SITE DRAINING PURPOSES.

POLLUTION PREVENTION

1. PROVIDE A SPILL KIT AT EACH WORK LOCATION ON THE SITE.

2. STORE ALL BUILDING MATERIALS THAT HAVE THE POTENTIAL TO LEACH POLLUTANTS, PESTICIDES, HERBICIDES, INSECTICIDES, FERTILIZERS, TREATMENT CHEMICALS, AND LANDSCAPE MATERIALS UNDER COVER AND WITH SECONDARY CONTAINMENT.

3. PROVIDE A SECURE STORAGE AREA WITH RESTRICTED ACCESS FOR ALL HAZARDOUS MATERIALS AND TOXIC WASTE. RETURN ALL HAZARDOUS MATERIALS AND TOXIC WASTE TO THE DESIGNATED STORAGE AREA AT THE END OF THE BUSINESS DAY UNLESS INFEASIBLE. STORE ALL HAZARDOUS MATERIALS AND TOXIC WASTE (INCLUDING BUT NOT LIMITED TO OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT, PETROLEUM BASED PRODUCTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS, AND ACIDS) IN SEALED CONTAINERS WITH SECONDARY CONTAINMENT. CLEAN UP SPILLS IMMEDIATELY.

4. STORE, COLLECT AND DISPOSE OF ALL SOLID WASTE.

5. POSITION ALL PORTABLE TOILETS SO THAT THEY ARE SECURE AND CANNOT BE TIPPED OR KNOCKED OVER. PROPERLY DISPOSE OF ALL SANITARY WASTE.

6. FUEL AND MAINTAIN VEHICLES IN A DESIGNATED CONTAINED AREA WHENEVER FEASIBLE. USE DRIP PANS OR ABSORBENT MATERIALS TO PREVENT SPILLS OR LEAKED CHEMICALS FROM DISCHARGING TO SURFACE WATER OR STORMWATER CONVEYANCES. PROVIDE A SPILL KIT AT EACH LOCATION THAT VEHICLES AND EQUIPMENT ARE FUELED OR MAINTAINED AT.

7. LIMIT VEHICLE AND EQUIPMENT WASHING TO A DEFINED AREA OF THE SITE. CONTAIN RUNOFF FROM THE WASHING AREA TO A TEMPORARY SEDIMENT BASIN OR OTHER EFFECTIVE CONTROL. PROPERLY DISPOSE OF ALL WASTE GENERATED BY VEHICLE AND EQUIPMENT WASHING. ENGINE DEGREASING IS NOT ALLOWED ON THE SITE.

8. PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS. LIQUID AND SOLID WASHOUT WASTES MUST NOT CONTACT THE GROUND. DESIGN THE CONTAINMENT SO THAT IT DOES NOT RESULT IN RUNOFF FROM THE WASHOUT OPERATIONS OR CONTAINMENT AREA.

9. CREATE AND FOLLOW A WRITTEN DISPOSAL PLAN FOR ALL WASTE MATERIALS. INCLUDE IN THE PLAN HOW THE MATERIAL WILL BE DISPOSED OF AND THE LOCATION OF THE DISPOSAL SITE. SUBMIT PLAN TO THE ENGINEER.

10. USE METHODS AND OPERATIONAL PROCEDURES THAT PREVENT DISCHARGE OR PLACEMENT OF BITUMINOUS GRINDINGS, CUTTINGS, MILLINGS, AND OTHER BITUMINOUS WASTES FROM AREAS OF EXISTING OR FUTURE VEGETATED SOILS AND FROM ALL WATER CONVEYANCE SYSTEMS, INCLUDING INLETS, DITCHES AND CURB FLOW LINES.

11. USE METHODS AND OPERATIONAL PROCEDURES THAT PREVENT CONCRETE DUST, PARTICLES, CONCRETE WASH OUT, AND OTHER CONCRETE WASTES FROM LEAVING MNDOT RIGHT OF WAY, DEPOSITING IN EXISTING OR FUTURE VEGETATED AREAS, AND FROM ENTERING STORMWATER CONVEYANCE SYSTEMS, INCLUDING INLETS, DITCHES AND CURB FLOW LINES. USE METHODS AND OPERATIONAL PROCEDURES THAT PREVENT SAW CUT SLURRY AND PLANING WASTE FROM LEAVING MNBOT RIGHT OF WAY AND FROM ENTERING STORMWATER CONVEYANCE SYSTEMS INCLUDING DITCHES AND CULVERTS.

STORM WATER POLLUTION PREVENTION PLAN NARRATIVE

No.	Date	By	Revision
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.
Signature
Name George D. Abrahamy
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

SWPPP NARRATIVE

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE (CONTINUED)

WATER RESOURCES NOTES

THESE NOTES ALONG WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE ARE INTENDED TO GIVE INFORMATION ON CRITICAL DRAINAGE FEATURES, NATURAL RESOURCES AND CONTRACTOR OPERATIONS THAT MAY IMPACT DRAINAGE AND NATURAL RESOURCES.

1. THE SIZE AND ELEVATION OF CULVERTS, STORM SEWER PIPES, CATCH BASINS, PONDS, INFILTRATION/FILTRATION BASINS, PERMEABLE DITCH BLOCKS AND OVERFLOW DEVICES HAVE BEEN SPECIFICALLY DESIGNED TO CONFORM TO MNDOT DESIGN STANDARDS, MINNESOTA POLLUTION CONTROL AGENCY (MPCA) AND WATERSHED DISTRICT PERMIT REQUIREMENTS. THE DESIGN COMPUTATIONS ARE ON FILE WITH MNDOT METRO WATER RESOURCES. CHANGING THESE ITEMS OR THE DIRECTION OF FLOW FROM WHAT IS SHOWN ON THE PLANS MAY CAUSE PROBLEMS OFF THE PROJECT AND COULD MEAN THE PROJECT IS OUT OF COMPLIANCE WITH APPROVED DRAINAGE PERMITS. ANY CHANGES TO THE SIZE, ELEVATION OR DIRECTION OF FLOW OF THE DRAINAGE SYSTEM MUST BE APPROVED BY THE METRO WATER RESOURCES DESIGNER.

2. SUBSOIL ALL DISTURBED GREEN SPACES EXCEPT AS LISTED IN 2574.3A.2.

3. PERFORM POST INSTALLATION MANDREL TESTING OF ALL PLASTIC PIPE.

4. ANY SUBSURFACE DRAINAGE TILES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED, REPLACED OR REROUTED, AND CONNECTED TO THE EXISTING TILE OR DRAINAGE SYSTEM TO ENSURE THAT EXISTING UPLAND DRAINAGE IS PERPETUATED. THIS SHOULD BE DONE TO THE APPROVAL AND SATISFACTION OF THE ENGINEER.

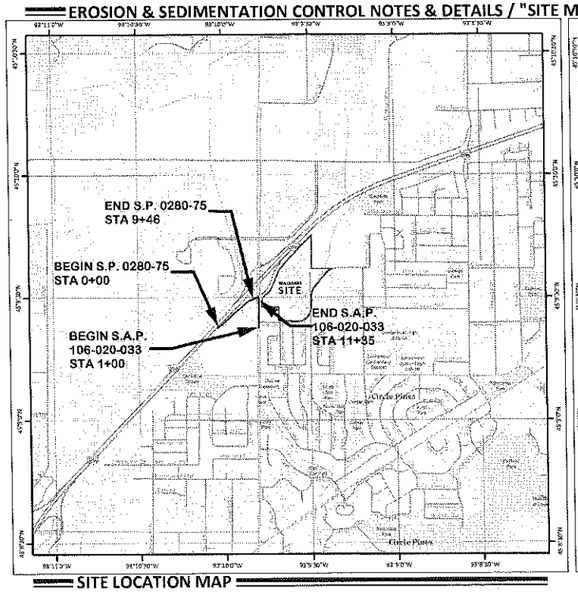
5. THE FOLLOWING WATER RELATED PERMITS APPLY TO THIS PROJECT:

AGENCY	TYPE OF PERMIT
MINNESOTA POLLUTION CONTROL AGENCY (MPCA)	NPDES CONSTRUCTION PERMIT
WATERSHED DISTRICT	CONSTRUCTION/WETLAND
DEPARTMENT OF NATURAL RESOURCES (DNR)	N/A
ARMY CORPS OF ENGINEERS	WETLAND PERMIT

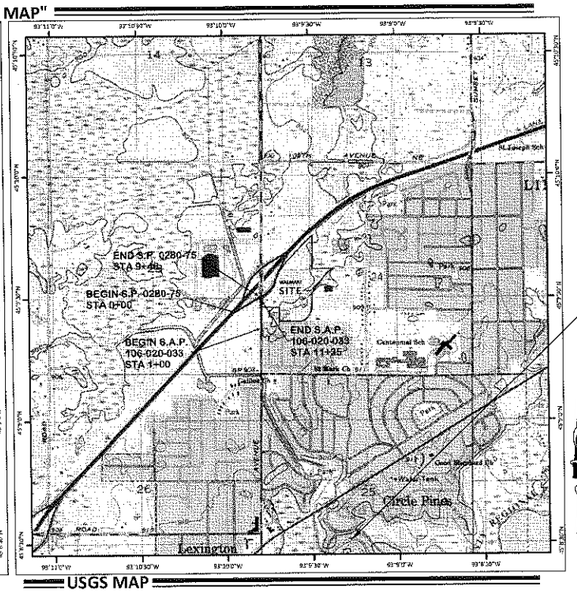
REVIEW ALL PERMITS FOR ANY SPECIAL CONDITIONS THAT WILL EFFECT CONSTRUCTION OF THE PROJECT.

TEMPORARY DEWATERING ACTIVITIES MAY BE REQUIRED FOR ROADWAY CONSTRUCTION AND UTILITY WORK. THEREFORE IT IS POSSIBLE THAT A PERMIT FOR THE TEMPORARY APPROPRIATION OF WATERS OF THE STATE, NON-IRRIGATION FROM MNDNR WILL BE REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THIS PERMIT PRIOR TO COMMENCING DEWATERING ACTIVITIES. ALL TEMPORARY DEWATERING SHALL BE DISCHARGED TO AN APPROVED LOCATION FOR TREATMENT PRIOR TO DISCHARGE TO THE RECEIVING WATER. SUBMIT A SITE MANAGEMENT PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCING WORK.

EROSION & SEDIMENTATION CONTROL NOTES & DETAILS / "SITE MAP"



SITE LOCATION MAP
NOT TO SCALE



USGS MAP
NOT TO SCALE

SHEET 3 OF 3

WATER RESOURCES NOTES AND STORM WATER POLLUTION PLAN NARRATIVE

No.	Date	By	Revision
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

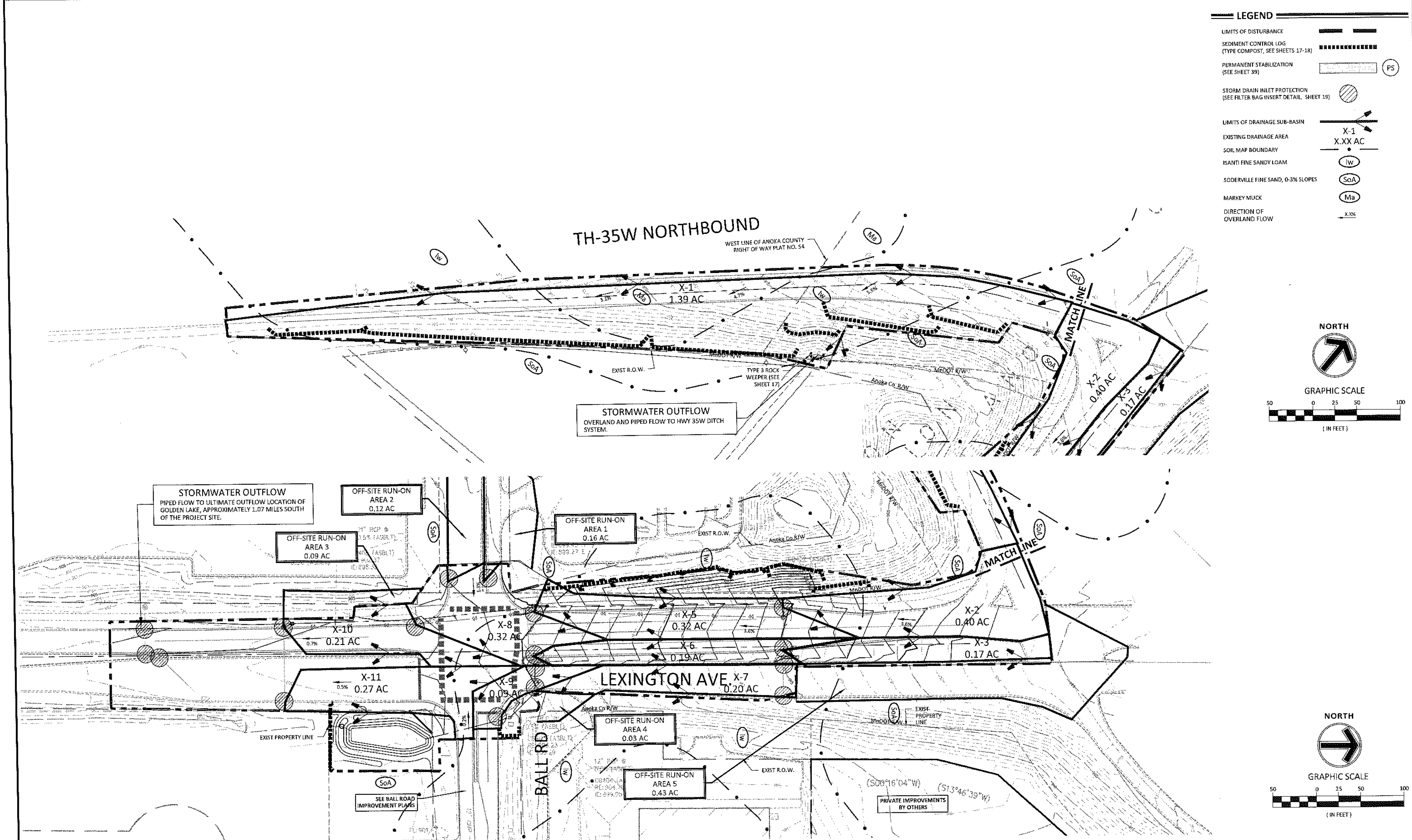
Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.
Signature
Name George D. Abernathy
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

SWPPP NARRATIVE



No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
C	01/12/15	JEB	COUNTY COMMENTS - DATED 11/21/14
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

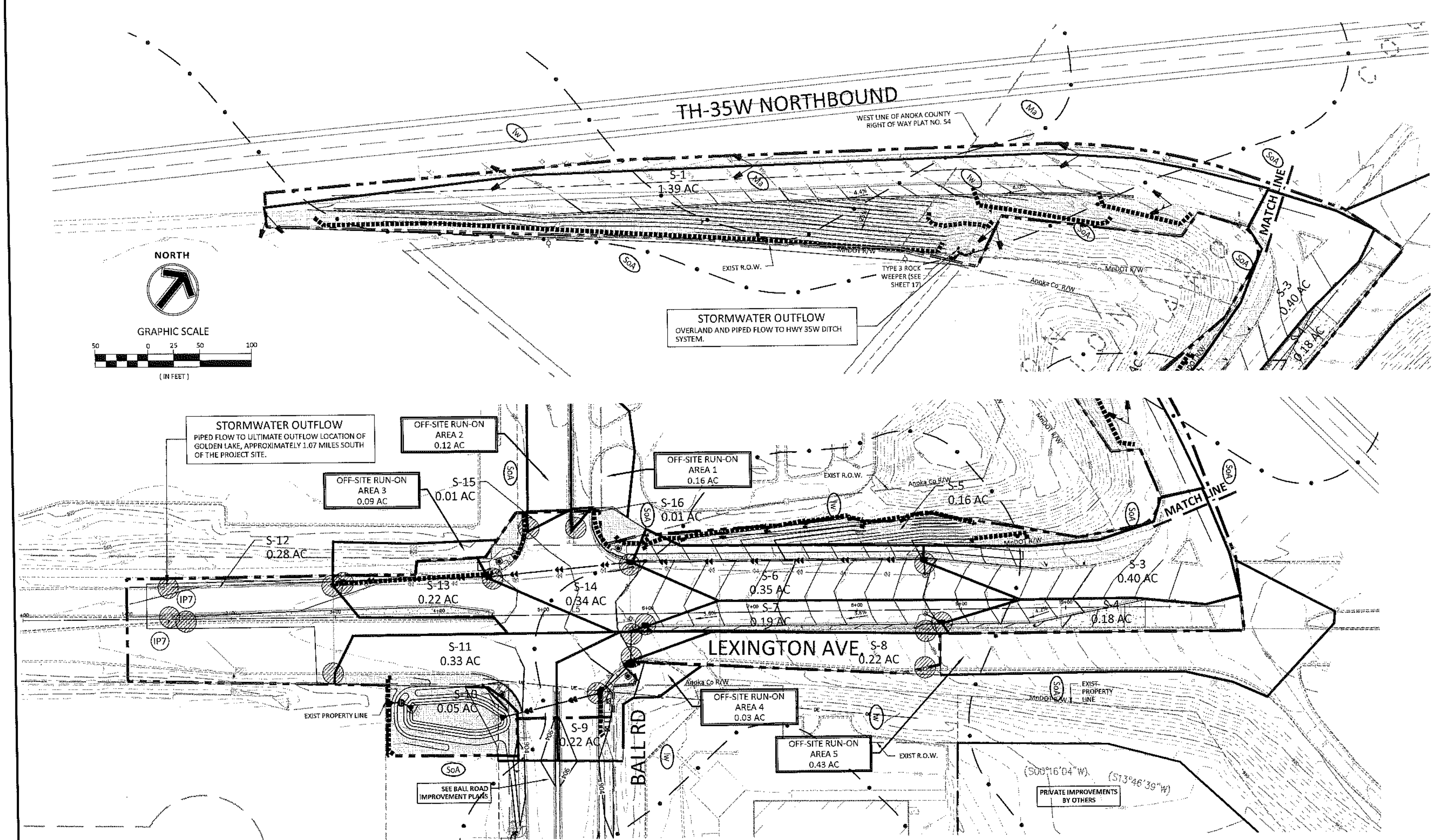
Signature
Name George D. Abernathy
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

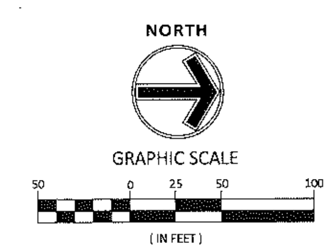
PHASE 1B EROSION & SEDIMENTATION CONTROL PLAN

Apr 09, 2015 - 1:01pm - User:577 L:\WAL-MART\WAL18568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-24-EROS.dwg



LEGEND

- LIMITS OF DISTURBANCE
- SEDIMENT CONTROL LOG (TYPE COMPOST, SEE SHEETS 17-18)
- PERMANENT STABILIZATION (SEE SHEET 39) (PS)
- STORM DRAIN INLET PROTECTION (SEE FILTER BAG INSERT DETAIL, SHEET 19)
- LIMITS OF DRAINAGE SUB-BASIN
- EXISTING DRAINAGE AREA — S-1 X.XX AC
- SOIL MAP BOUNDARY
- ISANTI FINE SANDY LOAM (Iw)
- SODERVILLE FINE SAND, 0-3% SLOPES (SoA)
- MARKEY MUCK (Ma)
- DIRECTION OF OVERLAND FLOW — X.X%



No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
C	01/12/15	JEB	COUNTY COMMENTS - DATED 11/21/14
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

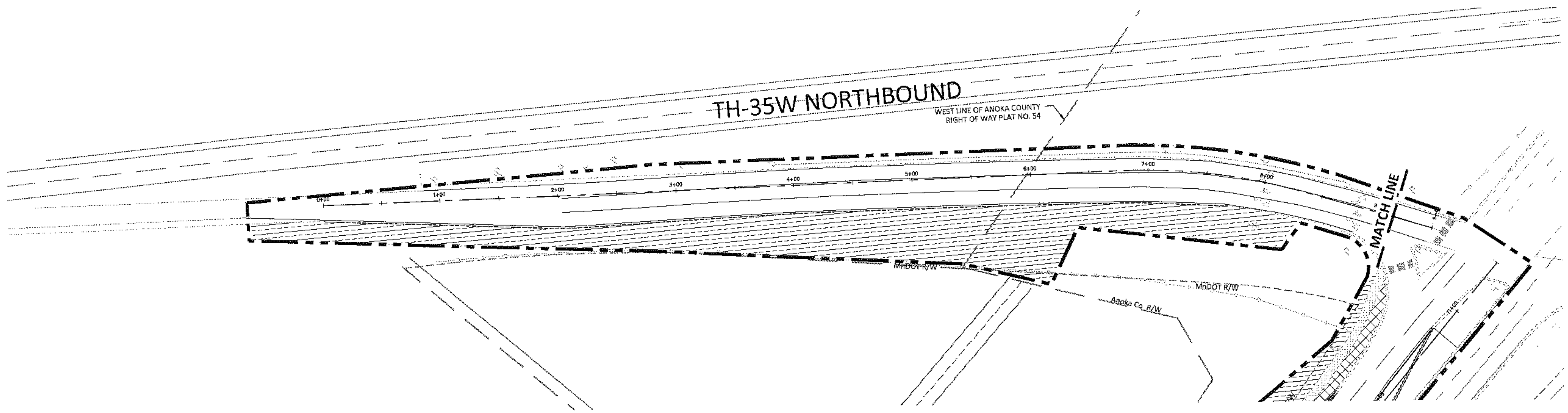
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

PHASE II EROSION & SEDIMENTATION CONTROL PLAN

Apr 09, 2015 - 1:02pm - User:577 L:\WAL-MART\WA\16568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\16568-24-EROS.dwg

LEGEND

	PROPOSED	EXISTING
SEED MIXTURE 25-121 @ 75LBS/ACRE FERTILIZER TYPE 3, 22-5-10 @ 350 LBS/ACRE EROSION CONTROL BLANKETS - CAT 3B		
SODDING TYPE SALT TOLERANT FERTILIZER TYPE 3, 22-5-10, 80% W.I.N. 0% CL		
BITUMINOUS PATH (SEE TYP SHEETS 21-23)		
LIMITS OF CONSTRUCTION		

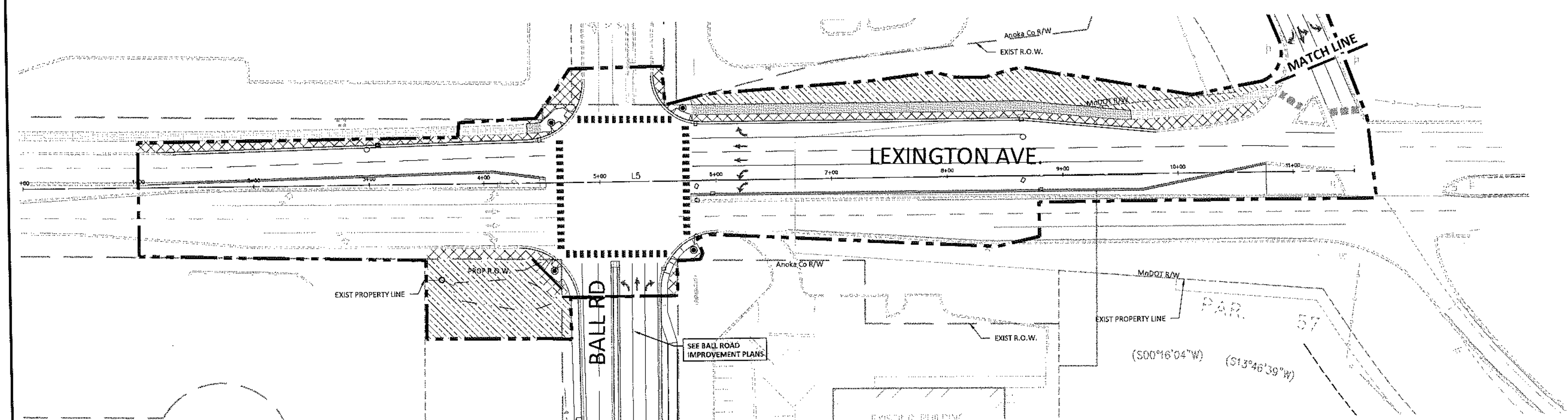


NORTH

GRAPHIC SCALE

50 0 25 50 100

(IN FEET)



NORTH

GRAPHIC SCALE

50 0 25 50 100

(IN FEET)

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

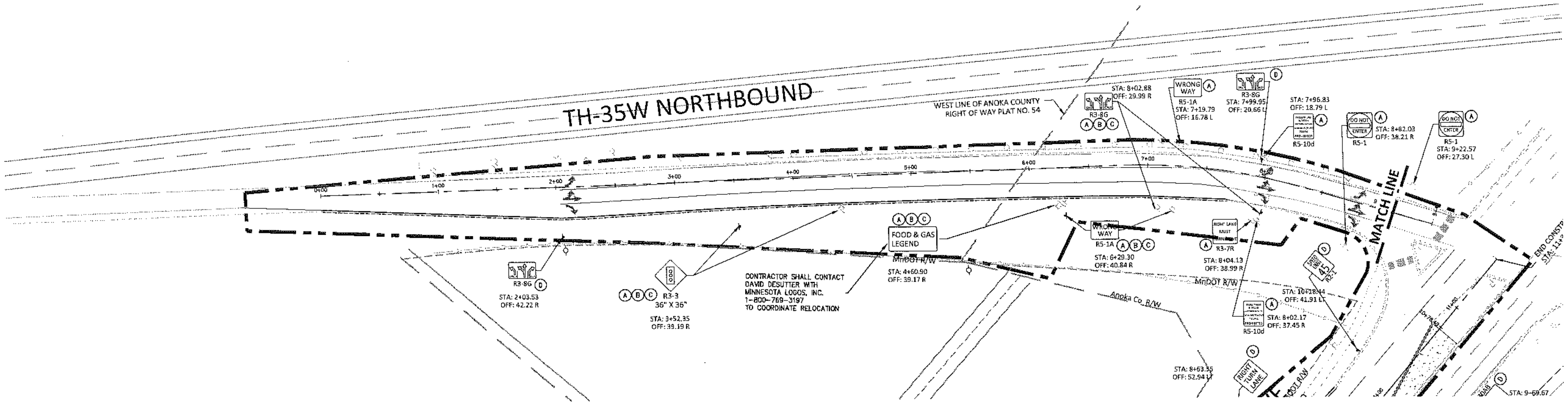
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

TURF ESTABLISHMENT PLAN

Apr 09, 2015 - 1:03pm - User:577 L:\WAL-MART\WAL18568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-36-TURF.dwg

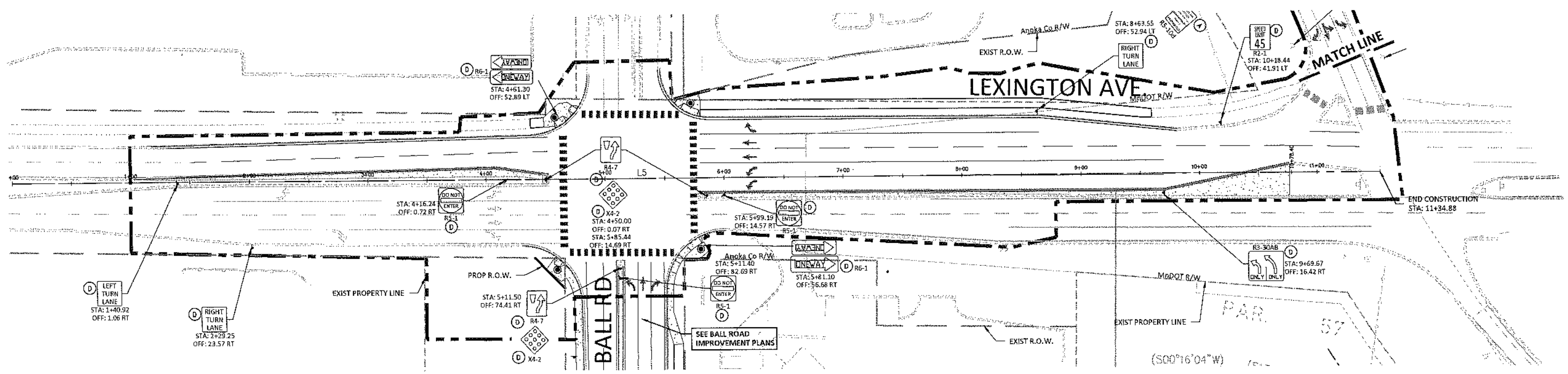


SIGNING PLAN QUANTITIES		F
ITEM	UNIT	QUANTITIES
SALVAGE SIGN TYPE C	EACH	9
SALVAGE SIGN TYPE D	EACH	1
SIGN PANELS TYPE C	SQ FT	100
INSTALL SIGN TYPE C	EACH	9
INSTALL SIGN TYPE D	EACH	1

LEGEND

- (A) TRAFFIC SIGN INPLACE.
- (B) TRAFFIC SIGN SALVAGE.
- (C) TRAFFIC SIGN INSTALL.
- (D) TRAFFIC SIGN FURNISH & INSTALL.

LIMITS OF CONSTRUCTION



No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

FINAL SIGNING PLAN AND QUANTITIES

Apr 09, 2015 - 1:04pm User:577 L:\WAL-MART\WAL18568\03Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-26-SIGN.dwg

NOTES AND GUIDELINES

GENERAL INFORMATION:

THE ENGINEER'S INVOLVEMENT IN THE APPLICATION OF THE MATERIAL SHALL BE LIMITED TO FIELD CONSULTATION AND INSPECTION. THE CONTRACTOR WILL PLACE NECESSARY "SPOTTING" AT APPROPRIATE POINTS TO PROVIDE HORIZONTAL CONTROL FOR STRIPING AND TO DETERMINE NECESSARY STARTING AND CUTOFF POINTS. LONGITUDINAL JOINTS, PAVEMENT EDGES AND EXISTING MARKINGS MAY SERVE AS HORIZONTAL CONTROL WHEN SO DIRECTED.

EDGE LINES AND LANE LINES ARE TO BE BROKEN ONLY AT INTERSECTIONS WITH PUBLIC ROADS AND AT PRIVATE ENTRANCES IF THEY ARE CONTROLLED BY A YIELD SIGN, STOP SIGN OR TRAFFIC SIGNAL. THE BREAK POINT IS TO BE AT THE START OF THE RADIUS FOR THE INTERSECTION OR AT MARKED STOP LINES OR CROSSWALKS.

A TOLERANCE OF 1/4 INCH UNDER OR 1/4 INCH OVER THE SPECIFIED WIDTH WILL BE ALLOWED FOR STRIPING PROVIDED THE VARIATION IS GRADUAL AND DOES NOT DETRACT FROM THE GENERAL APPEARANCE. BROKEN LINE SEGMENTS MAY VARY UP TO ONE-HALF FOOT FROM THE SPECIFIED LENGTHS PROVIDED THE OVER AND UNDER VARIATIONS ARE REASONABLY COMPENSATORY. ALIGNMENT DEVIATIONS FROM THE CONTROL GUIDE SHALL NOT EXCEED 1 INCH. MATERIAL SHALL NOT BE APPLIED OVER LONGITUDINAL JOINTS. ESTABLISHMENT OF APPLICATION TOLERANCES SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLY AS CLOSELY AS PRACTICABLE WITH THE PLANNED DIMENSIONS.

EPOXY:

THE ROAD SURFACE SHALL BE CLEANED AT THE DIRECTION OF THE ENGINEER JUST PRIOR TO APPLICATION. PAVEMENT CLEANSING SHALL CONSIST OF AT LEAST BRUSHING WITH A ROTARY BROOM (NON-METALLIC) OR AS RECOMMENDED BY THE MATERIAL MANUFACTURER AND ACCEPTABLE TO THE ENGINEER. NEW PORTLAND CEMENT CONCRETE SURFACES SHALL BE SANDBLAST CLEANED TO REMOVE AND SURFACE TREATMENTS AND/OR LAITANCE. ON LOW SPEED (SPEED LIMIT 35 OR LESS) URBAN PORTLAND CEMENT CONCRETE ROADWAYS, SANDBLAST CLEANING SHALL BE USED FOR ALL EPOXY PAVEMENT MARKINGS.

THE EPOXY MARKING APPLICATION SHALL IMMEDIATELY FOLLOW THE PAVEMENT CLEANING. GLASS BEADS SHALL BE APPLIED IMMEDIATELY AFTER APPLICATION OF THE EPOXY RESIN LINE TO PROVIDE AN IMMEDIATE NO-TRACK SYSTEM.

FOR 15 MIL APPLICATIONS, GLASS BEADS SHALL BE APPLIED AT A RATE OF AT LEAST 25 LB/GAL. THE "NO-TRACKING" CONDITION SHALL BE DETERMINED ON AN APPLICATION OF SPECIFIED THICKNESS TO THE PAVEMENT AND COVERED WITH GLASS BEADS AT THE RATE OF AT LEAST 25 LB/GAL.

OPERATIONS SHALL BE CONDUCTED ONLY WHEN THE ROAD PAVEMENT SURFACE TEMPERATURES ARE 50 DEGREES °F OR GREATER.

PERMENENT PAVEMENT MARKINGS SHALL NOT BE PLACED OVER TEMPORARY TAPE MARKINGS.

POLY PREFORM INLAY APPLICATION:

MAT TEMPERATURE SHALL BE CHECKED USING A THERMOMETER TO MAKE SURE THE INLAY IS BEING DONE IN THE PROPER TEMPERATURE RANGE. THE TEMPERATURE SHOULD MEASURE BETWEEN 150° F (ASPHALT FIRM ENOUGH TO WALK ON) AND 120° F. APPLICATION BELOW 120° F MAY NOT GET A PROPER INLAY. INLAYS ARE NOT RECOMMENDED AFTER SEPTEMBER 15TH AS THE ASPHALT COOLS TOO FAST AT THIS TIME OF THE YEAR.

NO PRIMERS ARE USED FOR INLAY APPLICATION. DO NOT INSTALL LANE LINES ON AN ASPHALT SEAM. ROLLING OF ALL THE MARKINGS SHOULD BE LENGTHWISE IN THE DIRECTION THEY WERE LAID. FOR CROSSWALKS AND STOP BARS, INITIAL TAMPING WITH THE TAMPING CART IS RECOMMENDED USING ONLY 100 LBS. OF WEIGHT.

USE COMPACTION ROLLER TO EMBED (INLAY) MARKINGS INTO PAVEMENT SURFACE. USE MINIMUM SPEED AND WATER ON ROLLER. DO NOT USE VIBRATOR. IF MARKING BUCKLES OR DISTORTS SEVERELY IN FRONT OF ROLLER, MAT TEMPERATURE OR ROLLER SPEED MAY BE TOO HIGH.

POLY PREFORM GROOVED APPLICATION:

CONCRETE PAVEMENT SURFACES AND BITUMINOUS PAVEMENT SURFACES WHERE PAVEMENT MARKINGS CANNOT BE INLAID IN THE HOT MAT, SHALL BE GROOVED FOR THE INSTALLATION OF DURABLE REFLECTORIZED PAVEMENT MARKINGS. SEE SPECIAL PROVISIONS.

PAINT:

AT THE TIME OF APPLYING THE MARKING MATERIAL, THE APPLICATION AREA SHALL BE FREE OF CONTAMINATION. THE CONTRACTOR SHALL CLEAN THE ROADWAY SURFACE PRIOR TO THE LINE APPLICATION IN A MANNER AND TO THE EXTENT REQUIRED BY THE ENGINEER.

GLASS BEADS SHALL BE APPLIED IMMEDIATELY AFTER APPLICATION OF THE PAINT LINE.

EXCEPT WHEN USED AS A TEMPORARY MARKING, PAVEMENT MARKINGS SHALL ONLY BE APPLIED IN SEASONABLE WEATHER WHEN AIR TEMPERATURE IS 50° F OR HIGHER AND SHALL NOT BE APPLIED WHEN THE WIND OR OTHER CONDITIONS CAUSE A FILM OF DUST TO BE DEPOSITED ON THE PAVEMENT SURFACE AFTER CLEANING AND BEFORE THE MARKING MATERIAL CAN BE APPLIED.

THE FILLING OF TANKS, POURING OF MATERIALS OR CLEANING OF EQUIPMENT SHALL NOT BE PERFORMED ON UNPROTECTED PAVEMENT SURFACES UNLESS ADEQUATE PROVISIONS ARE MADE TO PREVENT SPILLAGE OF MATERIAL.

PERMANENT PAVEMENT MARKING PLAN INDEX

LEGEND

(1) PAVEMENT MARKING ARROWS - PREFORMED THERMOPLASTIC.

(2) PAVEMENT MARKING ARROWS - POLY PREFORM GROUND IN

(3) PAVEMENT MARKING CROSSWALK - PREFORMED THERMOPLASTIC.

(4) GROUND IN

LIMITS OF CONSTRUCTION

TEMPORARY STRIPING KEY/PAVEMENT MARKING

TRIANGLE - PAINT

PENTAGON - REMOVABLE PREFORMED PLASTIC MARKING

CIRCLE - EPOXY

1ST DIGIT WIDTH	2ND DIGIT PATTERN	3RD DIGIT COLOR
4" OR 8"	S - SOLID	W - WHITE
	B - BROKEN	Y - YELLOW
	D - DASH/DOUBLE	B - BLACK

EXAMPLE: (4SW) = 4" SOLID LINE WHITE - EPOXY

FINAL STRIPING SHEET NO. 1

PAVEMENT MARKING		G
ITEM	UNIT	TOTAL
PAVT MSSG (LT ARROW) POLY PREF-GR IN	EACH	3
PAVT MSSG (RT ARROW) POLY PREF-GR IN	EACH	3
PAVT MSSG (LT-THRU ARROW) POLY PREF-GR IN	EACH	3
PAVT MSSG (LT ARROW) POLY PREF (1)	EACH	3
PAVT MSSG (RT ARROW) POLY PREF (1)	EACH	2
PAVT MSSG (THRU ARROW) POLY PREF (1)	EACH	3
4" SOLID LINE WHITE-EPOXY - GR IN	LIN FT	2417
4" SOLID LINE YELLOW-EPOXY - GR IN	LIN FT	868
4" SOLID LINE WHITE-EPOXY	LIN FT	1848
4" SOLID LINE YELLOW-EPOXY	LIN FT	816
4" BROKEN LINE WHITE-EPOXY	LIN FT	1104
CROSSWALK MARKING WHITE-POLY PREF (1)	SQ FT	1115

NOTES:

(1) PREFORMED THERMOPLASTIC

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

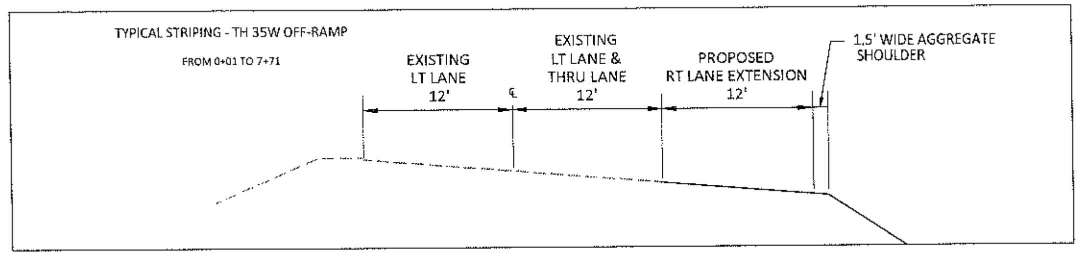
CITY OF BLAINE

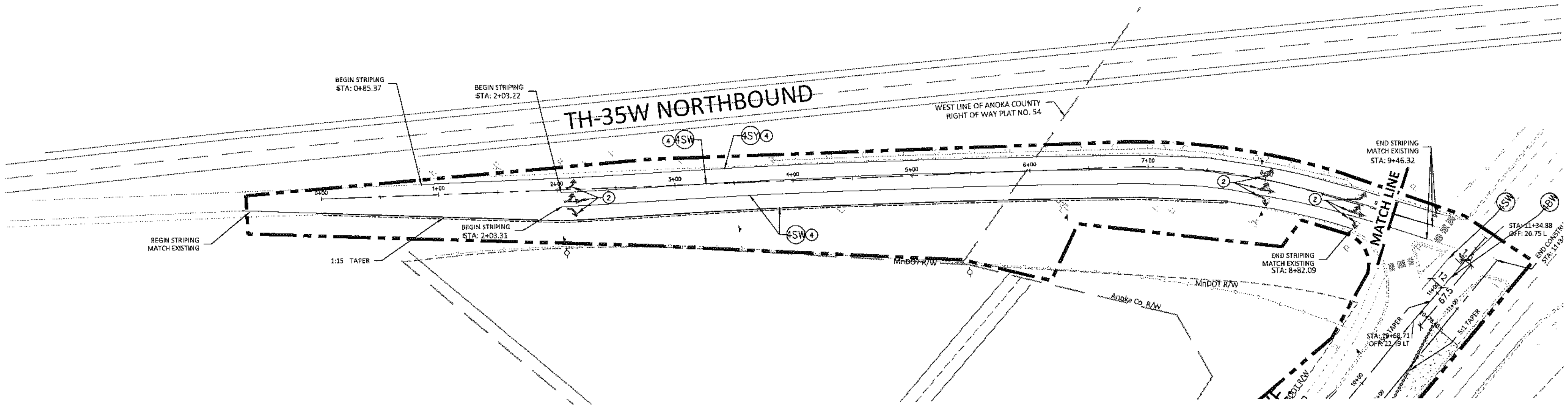
TH 35W OFF-RAMP/LEXINGTON AVE

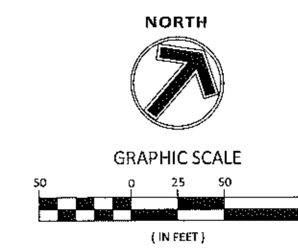
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

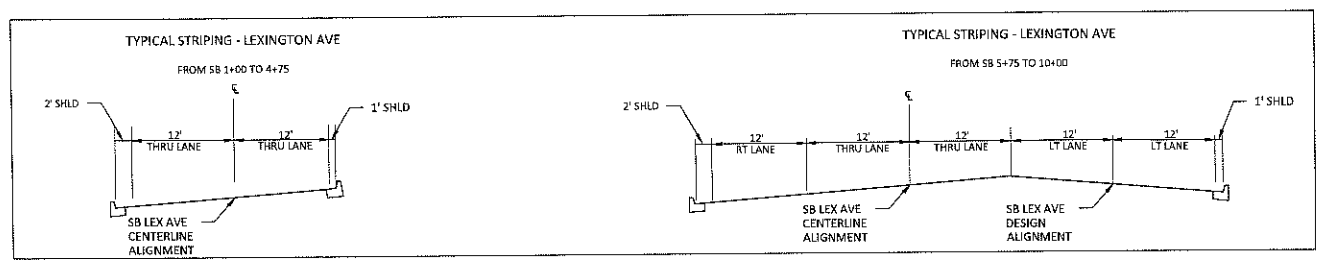
FINAL STRIPING TITLE SHEET

Apr 09, 2015 - 1:04pm - User:577 L:\WAL-MART\WA18568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-27-STRIPE.dwg

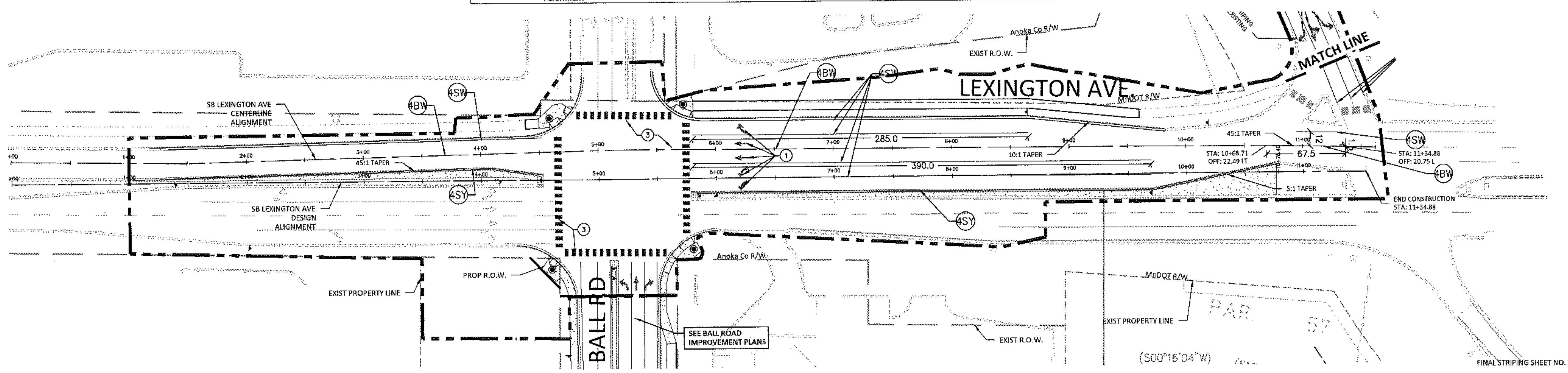


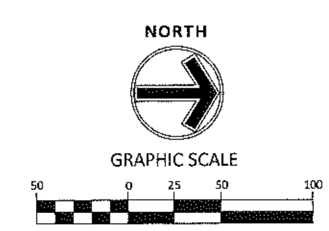






NOTES:
1. SEE SHEET 41 FOR LEGEND
2. ALL STATION AND OFFSET LABELS ARE REFERRING TO THE SB LEXINGTON AVENUE DESIGN ALIGNMENT





No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

FINAL STRIPING PLAN

Apr 09, 2015 - 1:05pm - User:577 L:\WAL-MART\WAL18568\05Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-27-STRIPE.dwg

NOTES AND GUIDELINES

GENERAL INFORMATION

1. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN THE DEVICES IN THIS TRAFFIC CONTROL PLAN UNLESS OTHERWISE NOTED.
2. FIELD CONDITIONS MAY REQUIRE MODIFICATIONS OF THIS LAYOUT AS DEEMED NECESSARY BY THE ENGINEER.
3. ALL DISTANCES ARE APPROXIMATE.
4. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ANY WORK AREAS NEAR TRAFFIC IN ACCORDANCE WITH THE MNMUTCD.
5. AN ANNUAL FALL REVIEW OF ALL TRAFFIC CONTROLS WILL BE MADE TO PREPARE FOR WINTER MAINTENANCE OF THE PROJECT. THIS MAY INCLUDE ADJUSTMENTS OR EXCHANGE OF ONE TRAFFIC CONTROL DEVICE FOR ANOTHER. READJUSTMENTS MAY AGAIN BE REQUIRED IN THE SPRING.
6. IF THE CONTRACTOR DECIDES TO PERFORM THE CONSTRUCTION WORK IN A SEQUENCE OTHER THAN SHOWN IN THIS TRAFFIC CONTROL PLAN THE CONTRACTOR SHALL PROVIDE COMPLETE REVISED TRAFFIC CONTROL PLANS TO BE APPROVED BY THE ENGINEER.

PAVEMENT MARKING

1. OBLITERATE ANY CONFLICTING PAVEMENT MARKINGS AS DIRECTED BY THE ENGINEER.
2. PAINT, POLYMER LANE TAPE AND/OR TRPM'S ARE ACCEPTABLE TEMPORARY STRIPING ALTERNATIVES ACCORDING TO ACTUAL CONDITIONS ENCOUNTERED AS DIRECTED BY THE ENGINEER. GENERALLY, ONLY PAINT WILL BE USED BEFORE MAY 1ST OR WHEN THE OTHER MANUFACTURERS' SPECIFICATIONS CAN NOT BE MET.
3. TRPM'S (TEMPORARY RAISED PAVEMENT MARKERS) SHOULD BE USED TO SUPPLEMENT THE LONG TERM (MORE THAN 3 DAYS) EDGELINES ON ALL TRANSITION AREAS WHEN THE CONDITIONS ARE WITHIN THE MANUFACTURERS' SPECIFICATIONS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND INSTALLATION OF TEMPORARY AND FINAL STRIPING. MN/DOT TRAFFIC PERSONNEL WILL ASSIST IN THE SPOTTING OF TRANSITION AREAS, GORES AND TAPERS.

SIGNING

1. ALL TRAFFIC CONTROL DEVICES, INCLUDING OVERHEAD SIGNS ON ROADS OPEN TO TRAFFIC THAT ARE NOT CONSISTENT WITH TRAFFIC OPERATION SHALL BE COVERED, REMOVED OR REVISED AS DIRECTED BY THE ENGINEER.
2. WHEN SIGNS ARE INSTALLED, THEY SHALL BE MOUNTED ON POSTS DRIVEN INTO THE GROUND AT THE PROPER HEIGHT AND LATERAL OFFSET AS DETAILED IN THE MNMUTCD. IF THIS IS NOT POSSIBLE THEY WILL BE MOUNTED ON PORTABLE SUPPORTS AS APPROVED BY THE ENGINEER. WHEN THE SIGNS ARE REMOVED THE SIGN POSTS SHALL ALSO BE REMOVED AS SOON AS POSSIBLE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY EXTRA SIGNING NEEDED TO FACILITATE TRAFFIC SWITCHES OR FOR TRANSITIONING TRAFFIC FROM ONE STAGE TO ANOTHER.
4. ALL ORANGE WARNING AND ORANGE GUIDE SIGNS SHALL BE FABRICATED WITH SIGN SHEETING MATERIAL AS LISTED ON THE MN/DOT APPROVED PRODUCT LIST FOR "SHEETING FOR RIGID TEMPORARY WORK ZONE SIGNS".
   BARRICADES SHALL BE FABRICATED WITH SIGN SHEETING MATERIAL AS LISTED ON THE MN/DOT APPROVED PRODUCT LIST FOR BARRICADE SHEETING. NOTE THAT ASTM TYPE VII SHEETING IS NOT ALLOWED ON BARRICADES AFTER JANUARY 1, 2010.
5. LONGITUDINAL DROPOFFS SHALL BE SIGNED AS SHOWN IN THE "TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS" FIELD MANUAL UNLESS OTHERWISE SPECIFIED IN THESE PLANS.
6. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE FINAL SIGNS TO ASSURE THAT THE FINAL SIGNS ARE INSTALLED AS NEEDED, OR PROVIDE TEMPORARY SIGNING AT THEIR EXPENSE UNTIL THE FINAL SIGNING IS INSTALLED.

BARRIER & DELINEATION

1. TOP MOUNTED BARRIER DELINEATORS WILL HAVE A MINIMUM OF 24 SQ. IN. OF REFLECTIVE SURFACE AREA AND BE PLACED AT 30' SPACES ON TOP OF THE BARRIER WHEN THE BARRIER IS WITHIN 10' OF TRAFFIC UNLESS OTHERWISE NOTED OR AS DIRECTED BY THE ENGINEER. IF THE TRAFFIC ENGINEER REQUIRES SIDE MOUNTED BARRIER DELINEATORS, THEY WILL HAVE A MINIMUM OF 12 SQ. IN. OF REFLECTIVE SURFACE AREA AND BE PLACED AT 30' SPACES. IF A SMALLER APPROVED BARRIER DELINEATOR IS USED IT SHALL BE AT ONE HALF THE SPACING AND ONE HALF THE BID PRICE.

CONSTRUCTION INFORMATION SIGNING

1. THE CONTRACTOR SHALL USE CONSTRUCTION INFORMATION SIGNING AS SHOWN IN THE PLAN AND WHICH ARE TO BE AS FOLLOWS:

   G20-X1 CLOSURE NOTICE SIGNS PAIRED WITH G20-X3 WORK ENDS SIGNS TO DISPLAY THE CORRECT START DATE AND AN ESTIMATED FINISH DATE AS APPROVED BY THE PROJECT ENGINEER.

   G20-X2 WORK ZONE ADVANCE NOTICE SIGNS WITH THE CORRECT STARTING DATE DISPLAYED BEFORE WORK BEGINS. ONCE WORK BEGINS, THE START DATE LEGEND SHALL BE COVERED BY THE SUGGESTED PLAQUE CONTAINED IN THIS PLAN. IF NO ALTERNATE MESSAGE IS SUGGESTED OR IF DIRECTED BY THE PROJECT ENGINEER, THE CORRECT ESTIMATED FINISH DATE, MONTH, OR SEASON SHALL BE DISPLAYED.

   CONSTRUCTION INFORMATION SIGNING NOT VISIBLE TO THE MOTORING PUBLIC ONCE WORK BEGINS WILL BE MOVED BY THE CONTRACTOR TO A SITE IN ADVANCE OF THE WORK ZONE OR CLOSURE AS DIRECTED BY THE PLAN OR PROJECT ENGINEER.

DETOURS

1. DETAILED DETOUR LAYOUTS SHALL BE SUBMITTED TO THE TRAFFIC ENGINEER FOR APPROVAL.
2. NO DETOURS SHALL BE PERMITTED WITHOUT PRIOR APPROVAL OF THE ANOKA COUNTY TRAFFIC ENGINEER.
3. ONE WEEK'S NOTICE MUST BE GIVEN PRIOR TO THE INSTALLATION OF ANY DETOUR.
4. IT SHALL BE THE RESPONSIBILITY OF THE APPLICANT TO NOTIFY ANOKA COUNTY CENTRAL COMMUNICATIONS, LOCAL GOVERNMENT BODIES, AND ANY AFFECTED BUS COMPANIES 48 HOURS PRIOR TO ANY ROAD CLOSURES/DETOURS.
5. IMMEDIATELY UPON COMPLETION OF WORK AND/OR DETOURS, ALL POSTS, BARRICADES, AND SIGNS SHALL BE REMOVED FROM THE RIGHT OF WAY.
6. TRAFFIC CONTROL DEVICES
7. ALL TRAFFIC CONTROL DEVICES, BARRICADES, FLASHERS, ETC. SHALL BE FURNISHED BY THE APPLICANT AND SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS-FIELD MANUAL DATED JANUARY 2011 OF THE SAME MANUAL.

TRAFFIC CONTROL DEVICES & SYMBOLS LEGEND

SYMBOL	DESCRIPTION
	AREA CLOSED TO TRAFFIC / WORK AREA
	TRAFFIC CONTROL SIGN
	TYPE III BARRICADE =
	DRUM-LIKE CHANNELIZER =
	TYPE A FLASHING WARNING LIGHT
	FLASHING ARROW BOARD TYPE C = (4' X 8' UNLESS OTHERWISE NOTED).
	SOLID LINE PAVEMENT MARKING WITH TEMPORARY RAISED PAVEMENT MARKERS AT 10' SPACES
	IMPACT ATTENUATOR
	PAVEMENT_MESSAGE_(LEFT_ARROW)_EPOXY_____
	PORTABLE CONCRETE BARRIERS WITH DELINEATORS AT 30' SPACES

TEMPORARY STRIPING KEY/PAVEMENT MARKING

TRIANGLE - PAINT

PENTAGON - REMOVABLE PREFORMED PLASTIC MARKING

1ST DIGIT WIDTH	2ND DIGIT PATTERN	3RD DIGIT COLOR
4" OR 8"	S - SOLID	W - WHITE
	B - BROKEN	Y - YELLOW
	D - DASH/DOUBLE	B - BLACK

EXAMPLE: (4SW) = 4" SOLID LINE WHITE - EPOXY

INDEX

TRAFFIC CONTROL SHEET NO. 1

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

TRAFFIC CONTROL TITLE SHEET

Apr 09, 2015 - 1:05pm - User:577 L:\WAL-MART\WAL18568\01Bas Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-29-STAGE.dwg

PAY ITEM TABULATION SHEET				H
ITEM	UNIT	STAGE ONE	STAGE TWO	TOTAL
TRAFFIC CONTROL	LUMP SUM	0.5	0.5	1
PORTABLE CONCRETE BARRIER	LIN FT	-	950	950
(1) IMPACT ATTENUATOR	ASSEMBLY	-	1	1
4" REMOVABLE PREFORM PAVEMENT MARKING TAPE	LIN FT	973	1870	2843
PAVEMENT MESSAGE (LEFT ARROW)-REMOVABLE POLY PREFORMED	EACH	2	-	2
PAVEMENT MESSAGE (RIGHT ARROW)-REMOVABLE POLY PREFORMED	EACH	2	2	4
PAVEMENT MESSAGE (THRU ARROW)-REMOVABLE POLY PREFORMED	EACH	2	4	6

NOTES:
(1) TL3 ASSEMBLY, TEMPORARY.

TRAFFIC CONTROL SHEET NO. 2

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.
Signature
Name George D. Abernathy
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

PAY ITEM TABULATION SHEET

Apr 15, 2015 - 1:47pm - User.577 C:\WAL-MART\WAL18568\01B2k Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-29-STAGE.dwg

TRAFFIC CONTROL TABULATION SHEET

"W" SERIES

SIGN	SIGN NO.	COLOR	SIZE
ROAD WORK AHEAD	W20-1	BLACK ON ORANGE	48" X 48"
TURN LANE CLOSED	W20-X18	BLACK ON ORANGE	48" X 48"
NO SHOULDER	W8-23	BLACK ON ORANGE	48" X 48"
RIGHT LANE CLOSED	W21-X5	BLACK ON ORANGE	48" X 48"
	W16-5mp	BLACK ON ORANGE	36" X 24"
MERGE	W20-X3	BLACK ON ORANGE	48" X 48"
	W4-2	BLACK ON YELLOW	48" X 48"

"R" SERIES

SIGN	SIGN NO.	COLOR	SIZE
	R3-1	RED AND BLACK ON WHITE	48" X 48"
	R3-2	RED AND BLACK ON WHITE	48" X 48"
ROAD CLOSED	R11-2	BLACK ON WHITE	48" X 30"
TRAIL CLOSED	R9-9A	BLACK ON WHITE	24" X 18"

"G" SERIES

SIGN	SIGN NO.	COLOR	SIZE
END ROAD WORK	G20-2A	BLACK ON ORANGE	48" X 24"

DEVICES

ITEM	SIGN NO.	COLOR	SIZE
	TYPE 3	BLACK ON ORANGE	48" X 48"
	DLC	BLACK ON ORANGE	48" X 48"
	TYPE A	ORANGE	48" X 48"

TRAFFIC CONTROL SHEET NO. 3

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

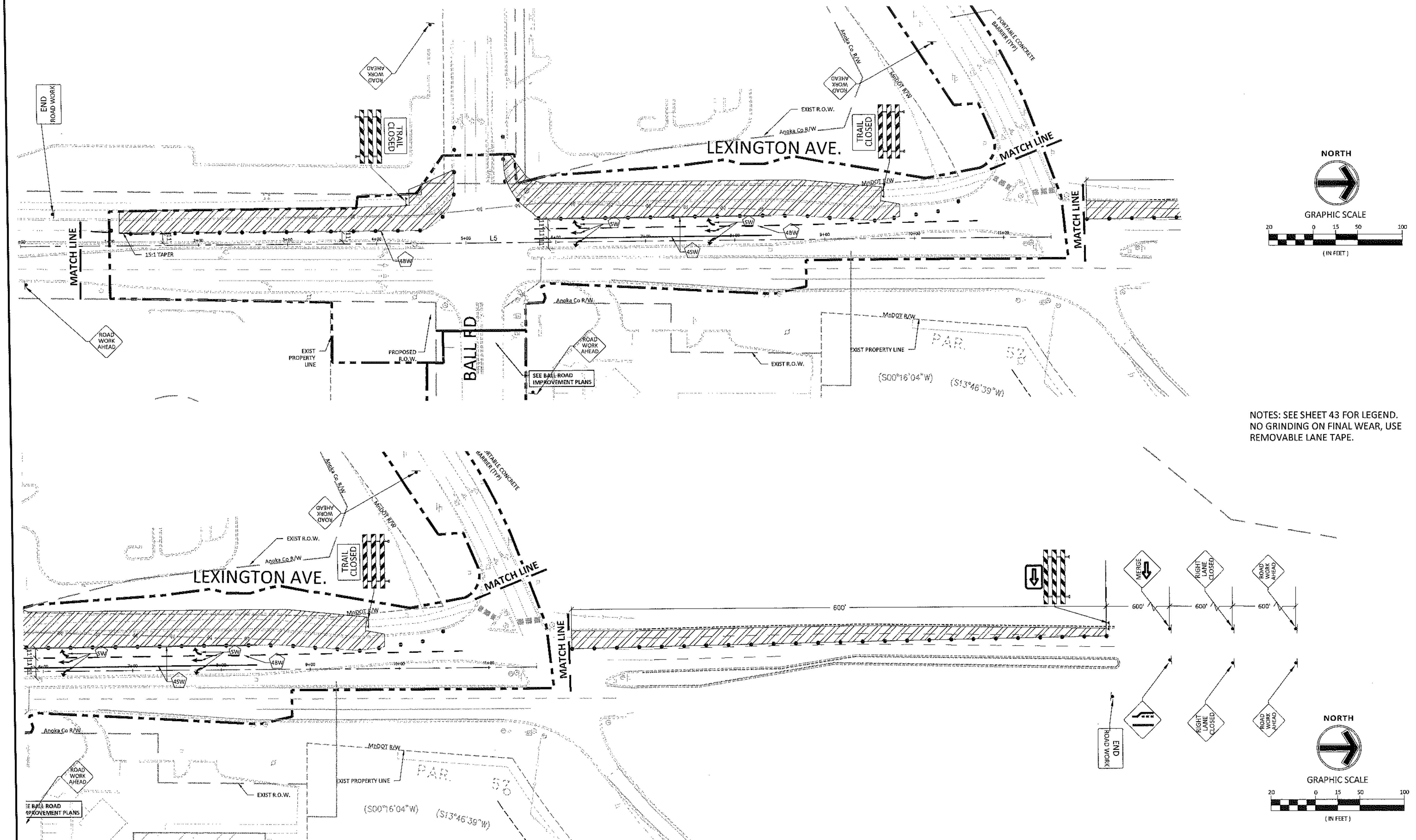
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

TRAFFIC CONTROL TABULATION SHEET

Apr 09, 2015 - 1:05pm - User:577 L:\WAL-MART\WAL18568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-29-STAGE.dwg



NOTES: SEE SHEET 43 FOR LEGEND.
NO GRINDING ON FINAL WEAR, USE REMOVABLE LANE TAPE.

TRAFFIC CONTROL SHEET NO. 4

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

Name George D. Abernathy

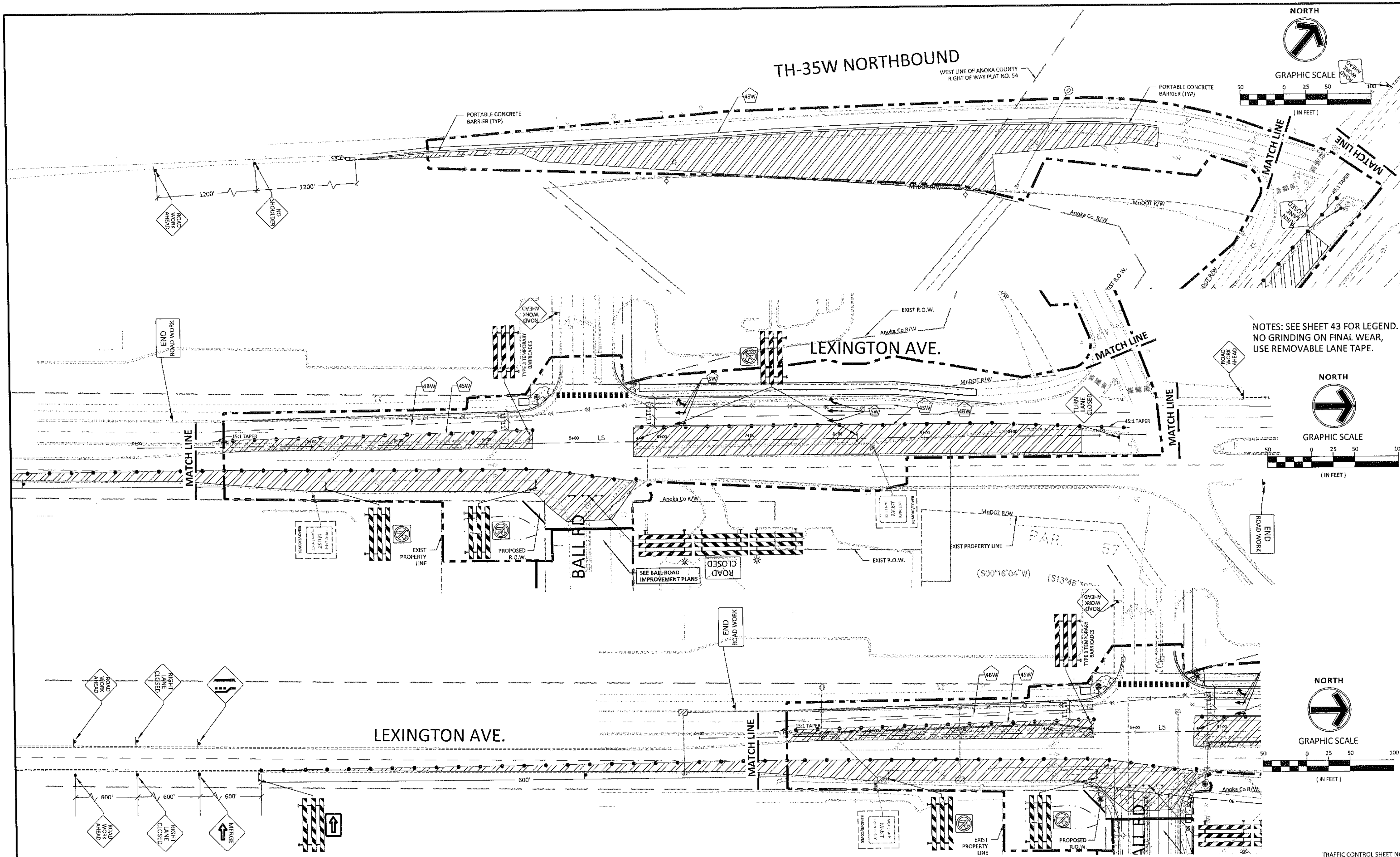
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

PHASE 1 TRAFFIC CONTROL & CONSTRUCTION STAGING PLAN

Apr 09, 2015 - 1:06pm - User:S77 L:\WAL-MART\WAL18569\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18569-29-STAGE.dwg



No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional ENGINEER under the laws of the State of Minnesota.

Signature

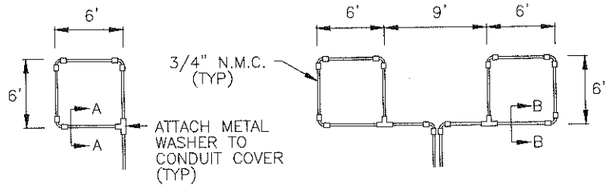
Name George D. Abernathy

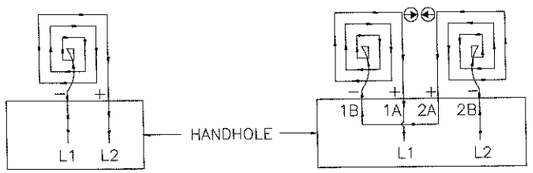
Date 04/09/2015 License No. 43505

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

PHASE 2 TRAFFIC CONTROL & CONSTRUCTION STAGING PLAN





LOOP CONNECTIONS SHALL BE LABELED AND SPLICED IN THE HANDHOLE AS FOLLOWS:

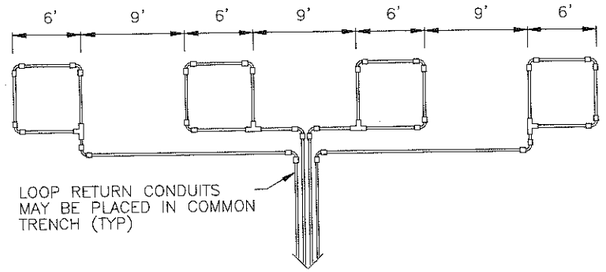
L1 TO 1A
1B TO 2A
2B TO L2

LOOP DETECTOR DETAIL 'A'

(LOOP PHASING FOR SINGLE CONNECTION)

LOOP DETECTOR DETAIL 'B'

(LOOP PHASING FOR SERIES CONNECTION)



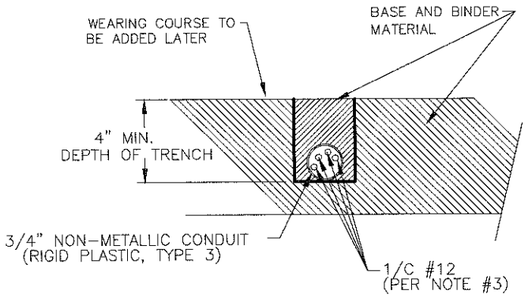
LOOP CONNECTIONS SHALL BE LABELED AND SPLICED IN THE HANDHOLE AS FOLLOWS:

L1 TO 1A
1B TO 2A
2B TO 3A
3B TO 4A
4B TO L2

SPLICE CONTROL CABLE TO L1 & L2 IN HANDHOLE. ALL CONDUCTORS SHALL BE TAGGED IN HANDHOLE (1A, 1B, ECT)

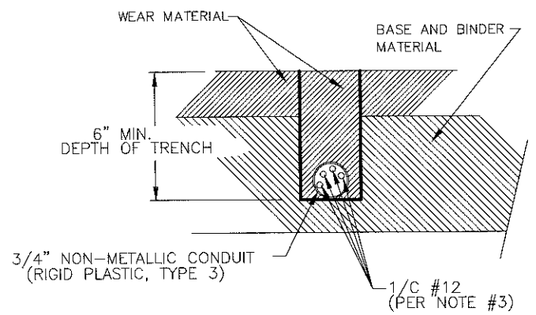
LOOP DETECTOR DETAIL 'C'

(LOOP PHASING FOR SERIES CONNECTION)



SECTION A–A

DETAIL FOR LOOP INSTALLATION IN NEW ROADWAY



SECTION B–B

DETAIL FOR LOOP INSTALLATION IN EXISTING ROADWAY

LOOP DETECTOR WIRING

1) ALL CORNERS SHALL BE 90° CONDUIT BENDS.
2) CONNECT WIRES IN HANDHOLES USING SPLICE KIT METHOD DESCRIBED IN THE SPECIAL PROVISIONS.
3) LOOP DETECTOR WIRES SHALL BE #12 AWG CROSSED LINKED POLYETHYLENE (XLP). SEE SPECIAL PROVISIONS.
4) LOOP LEAD IN WIRES SHALL BE TWISTED A MIN. OF (5) TURNS PER FOOT THROUGH THE CONDUIT TO THE HANDHOLE.
5) NMC DESIGNATES NON-METALLIC CONDUIT (SPEC. 3803)
6) LOOPS 6' x 6' THRU 6' x 14' SHALL HAVE (4) TURNS.
7) LOOPS 6' x 15' AND LARGER SHALL HAVE (2) TURNS.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Name: Edward F. Terhaar, PE
Date: April 9, 2015 Lic. No. 24441

DRAWN: EFT
DESIGNED: EFT
CHECKED: EFT

BY	DATE	REVISIONS
EFT	6/27/14	REVISED PER ADDENDUM
EFT	2/9/15	REVISED PER COMMENTS
EFT	2/24/15	REVISED PER COMMENTS
EFT	4/7/15	RESPONSE TO MNDOT COMMENTS

Wenck
© Wenck Associates, Inc. Consulting Engineers

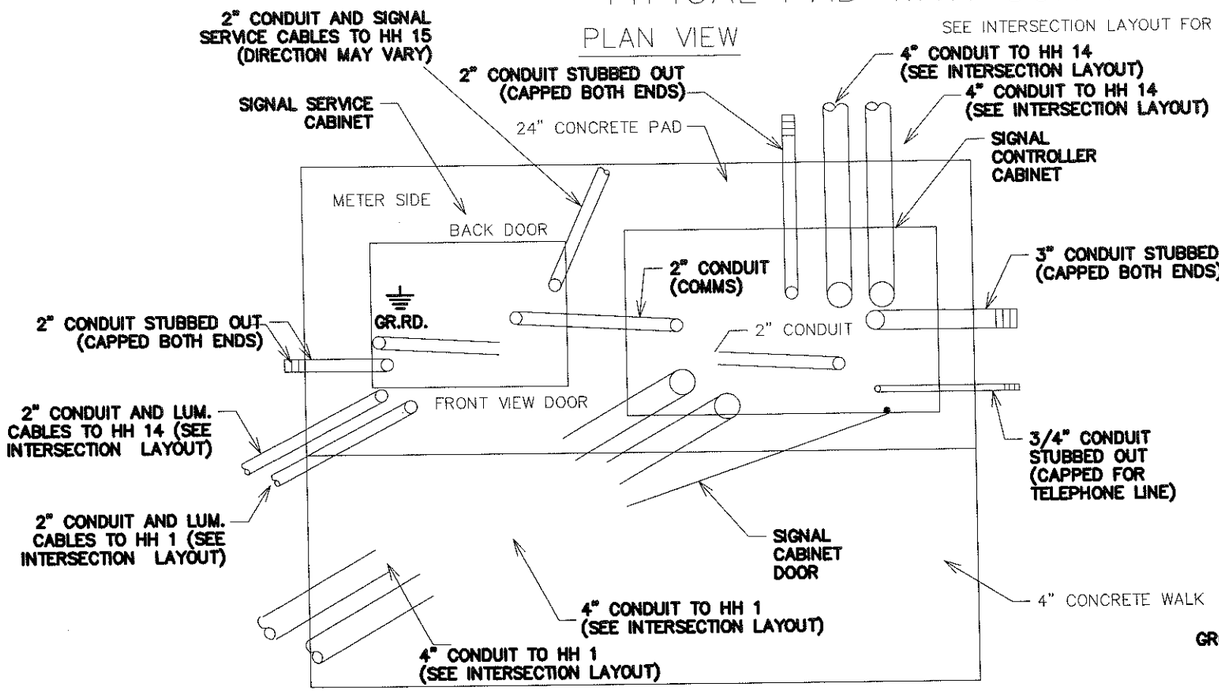
LOOP DETECTOR DETAILS
CSAH 17 (LEXINGTON AVE) AT BALL RD
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CITY OF BLAINE
ANOKA COUNTY, MINNESOTA

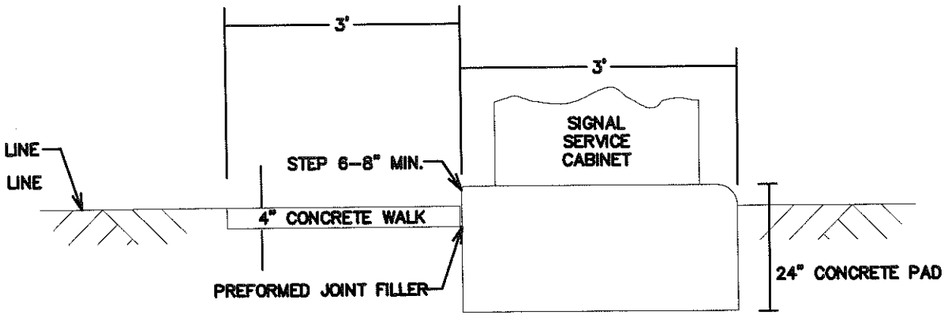
TYPICAL PAD WITH CONTROLLER CABINET AND SERVICE CABINET

SEE INTERSECTION LAYOUT FOR CABLE INFORMATION (NOT TO SCALE)

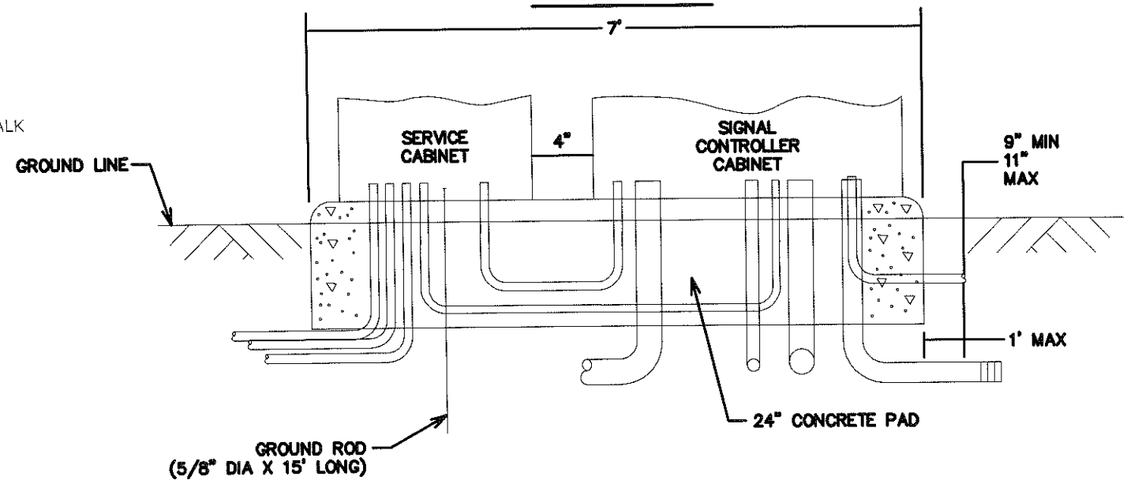
PLAN VIEW



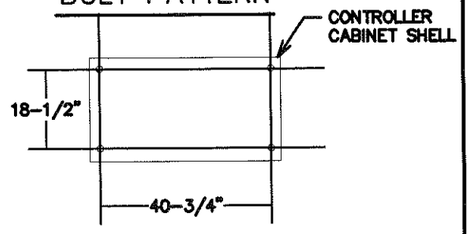
SIDE VIEW



FRONT VIEW



CONTROLLER CABINET TYPE "P" & "R" BOLT PATTERN



DIMENSION SHOWN ARE CENTER ROD TO CENTER ROD

NOTES:

1. THE ANCHOR RODS, NUTS, AND WASHERS FOR THE COUNTY FURNISHED CONTROLLER AND CABINET SHALL BE FURNISHED BY THE COUNTY AND INSTALLED BY THE CONTRACTOR.
2. THE UPPER PART OF THE NEW EQUIPMENT PAD WALK SHALL BE BEVELED OR CHAMFERED IN A NEAT MANNER AS DIRECTED BY THE ENGINEER.
3. THE TOP OF THE CONDUITS SHALL BE CAPPED AFTER INSTALLATION (UNTIL CABLES ARE PULLED IN).
4. CONDUIT SHALL PROJECT A MINIMUM OF 2" ABOVE THE CONCRETE AND SHALL BE LOCATED INSIDE THE CABINET WHERE DIRECTED BY THE ENGINEER, BUT SHALL NOT INTERFERE WITH THE CABINET FUNCTIONS (SUPPORTING MEMBERS, ETC.).
5. CONCRETE MIX 3A32 OR EQUAL SHALL BE USED FOR THE EQUIPMENT PAD AND SIDEWALK.
6. CONDUITS WITH BOTH ENDS TERMINATING WITHIN THE PAD SHALL NOT BE PLACED BELOW THE CONCRETE.
7. THE EXACT LOCATION OF CONDUITS WITHIN THE PAD SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
8. CORRECT PLACEMENT OF CONDUIT TO THE LEFT OF THE CABINET DIVIDER IS CRITICAL.
9. ANCHOR RODS SHALL PROJECT A MINIMUM OF 3" ABOVE THE CONCRETE BUT SHALL NOT INTERFERE WITH THE CABINET FUNCTIONS (SUPPORTING MEMBERS, ETC.).
10. CABINETS TO BE CENTERED (LEFT & RIGHT) ON THE PAD.
11. BRUSH ON ANTI-SEIZE LUBRICANT MUST BE APPLIED TO ALL ANCHOR ROD THREADS PROTRUDING ABOVE THE CONCRETE PAD BEFORE THE CABINET IS SET.
12. CONTRACTOR SHALL PROVIDE MINIMUM 4" CLEARANCE BETWEEN CONTROLLER AND SERVICE CABINET ON THE EQUIPMENT PAD FOUNDATION AS SHOWN.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Name: Edward F. Terhaar, PE
Date: April 9, 2015 Lic. No. 24441

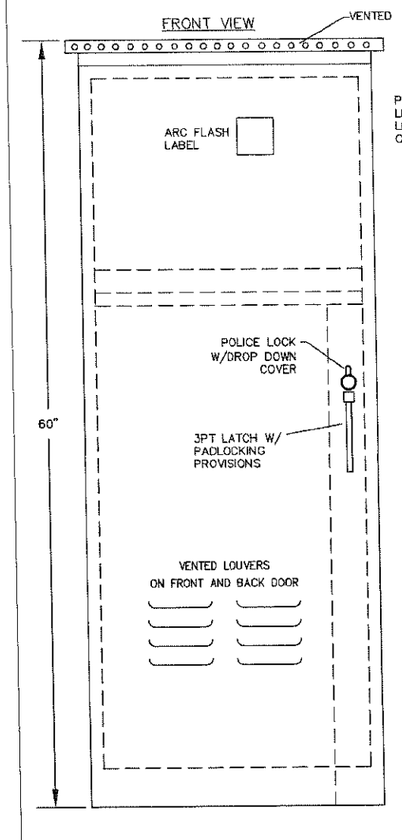
DRAWN: EFT
DESIGNED: EFT
CHECKED: EFT

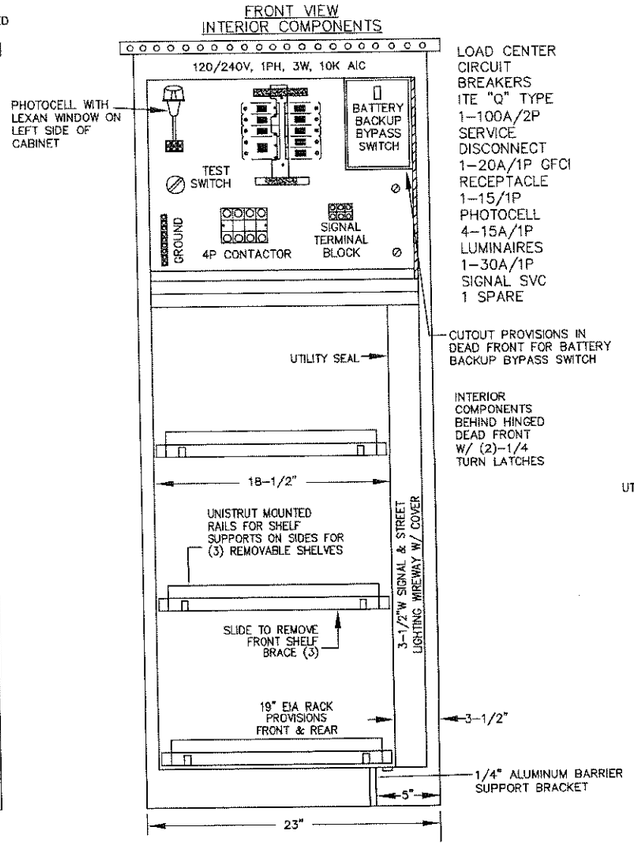
BY	DATE	REVISIONS
EFT	6/27/14	REVISED PER ADDENDUM
EFT	2/9/15	REVISED PER COMMENTS
EFT	2/24/15	REVISED PER COMMENTS
EFT	4/7/15	RESPONSE TO MNDOT COMMENTS

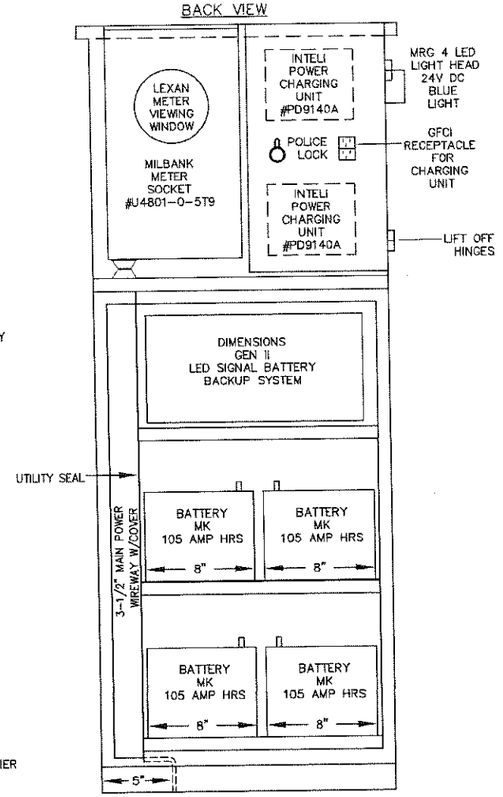
Wenck
Consulting Engineers

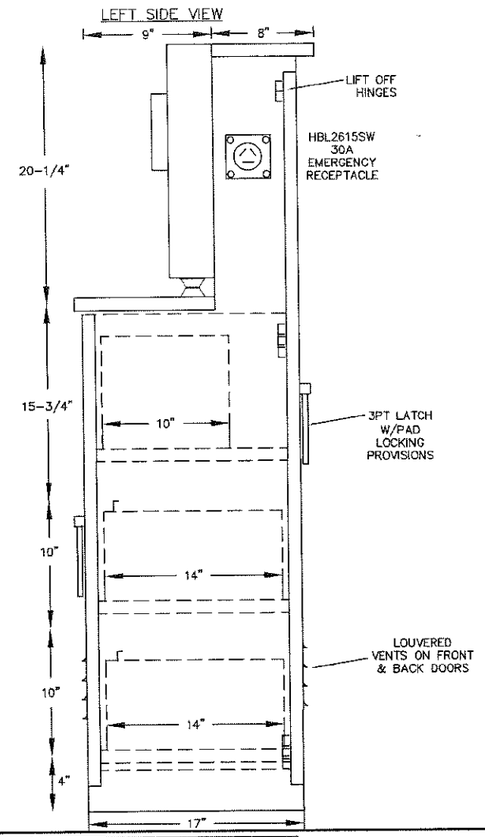
EQUIPMENT PAD FOUNDATION
CSAH 17 (LEXINGTON AVE) AT BALL RD
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 105-020-033

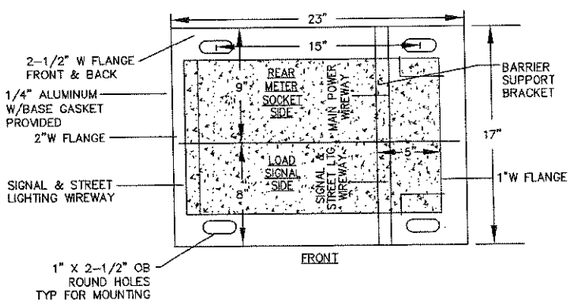
CITY OF BLAINE
ANOKA COUNTY, MINNESOTA





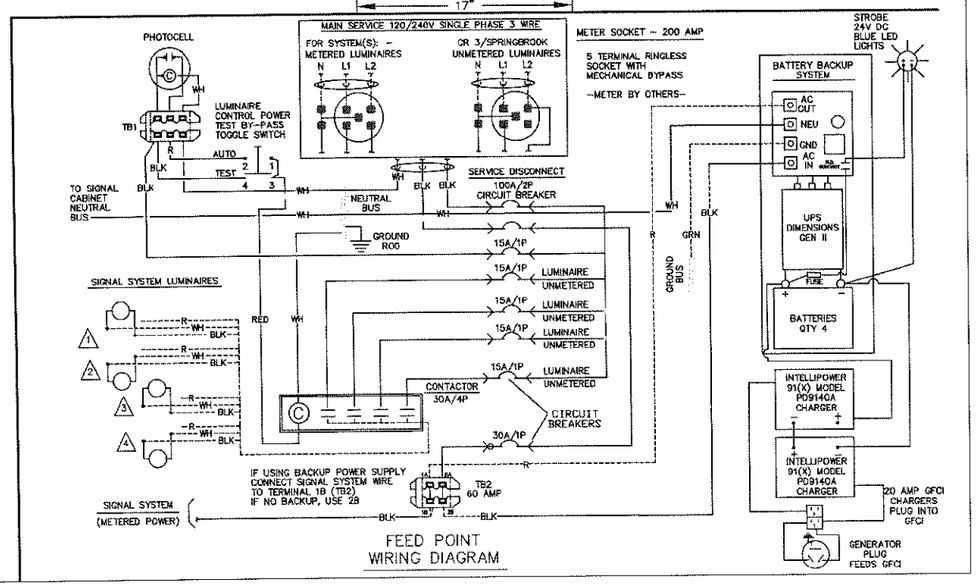






CABINET CONSTRUCTION

-NEMA 3R
-1/8" ALUMINUM 5052-H32
-ANODIZED 30 MINUTE CLEAR
-NEOPRENE GASKETED DOORS
-NON-CORRODING HARDWARE
-ETL LISTED IN ACCORDANCE W/UL508A



FEED POINT WIRING DIAGRAM

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Name: Edward F. Terhaar, PE
Date: April 9, 2015 Lic. No. 24441

DRAWN: EFT
DESIGNED: EFT
CHECKED: EFT

BY	DATE	REVISIONS
EFT	6/27/14	REVISED PER ADDENDUM
EFT	2/9/15	REVISED PER COMMENTS
EFT	2/24/15	REVISED PER COMMENTS
EFT	4/7/15	RESPONSE TO MNDOT COMMENTS

Wenck
© Wenck Associates, Inc.
Consulting Engineers

SERVICE CABINET DETAILS
CSAH 17 (LEXINGTON AVE) AT BALL RD
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CITY OF BLAINE
ANOKA COUNTY, MINNESOTA

LOOP DETECTOR CHART			DISTANCE FROM STOP LINE
DESIGNATION	SIZE	FUNCTION	
D1-1	2-6'X 6'	(1)	15',45'
D1-2	2-6'X 6'	(1)	0',30'
D2-1,D2-2	1-6'X 6'	(1)	300'
D3-1	2-6'X 6'	(1)	20',50'
D3-2	2-6'X 6'	(1)	5',35'
D4-1	1-6'X 6'	(3/8)	150'
D4-2	1-6'X 10'	(7)	-3',5'
	1-6'X 6'		
D5-1	2-6'X 6'	(1)	5',35'
D5-2	2-6'X 6'	(1)	5',35'
D5-3	2-6'X 6'	(1)	20',50'
D5-4	2-6'X 6'	(1)	20',50'
D6-1,D6-2	1-6'X 6'	(1)	300'
D7-1	2-6'X 6'	(1)	20',50'
D7-2	2-6'X 6'	(1)	20',50'
D7-3	2-6'X 6'	(1)	5',35'
D7-4	2-6'X 6'	(1)	5',35'
D8-1	1-6'X 6'	(3/8)	150'
D8-2	2-6'X 6'	(7)	5',20'
D8-3	2-6'X 6'	(7)	5',20'

FUNCTIONS:
(1) - CALL AND EXTEND
(3) - EXTEND ONLY
(7) - IMMEDIATE EXTEND, DELAY CALL
(8) - DELAY CALL DENSITY ONLY

NOTES:
1) THIS PROJECT CONSISTS OF (1) FURNISHING AND INSTALLING POLES AND MAST ARMS 1, 2, 3, & 4 AND (2) FURNISHING AND INSTALLING MATERIALS AS SHOWN.
2) ALL EXISTING EQUIPMENT ON POLES AND MAST ARMS 1-4 SHALL BE SALVAGED AND REINSTALLED.
3) VEHICLE HEAD 5-1 SHALL BE FURNISHED AND INSTALLED ON MAST ARM 3.
4) ALL EXISTING SIGNAL WIRE SHALL BE REMOVED AND REPLACED.
5) THE EXACT LOCATION OF HANDHOLES, FOUNDATIONS, AND LOOP DETECTORS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
6) SEE SPECIAL PROVISIONS FOR COUNTY FURNISHED MATERIALS.
7) NEW HANDHOLES SHALL BE PVC HANDHOLES WITH METAL FRAMES AND COVERS.
8) A 3/4" HALF COUPLING, 3/4" PIPE NIPPLE, AND CONDUIT OUTLET BODY SHALL BE FURNISHED AND INSTALLED 6' FROM THE END OF ALL MAST ARMS (FOR EVP).
9) THE CONTRACTOR SHALL CONTACT THE POWER COMPANY TO COORDINATE CONNECTION.
10) EACH PEDESTRIAN INDICATION SHALL BE ONE SECTION FILLED COUNTDOWN TIMER 'HAND/WALKING PERSON' INDICATION.
11) EACH SIGNAL FACE SHALL HAVE A BACKGROUND SHIELD.
12) CONTRACTOR SHALL MAINTAIN TRAFFIC SIGNAL OPERATION AT THE INTERSECTION AT ALL TIMES UNLESS DIRECTED BY THE ENGINEER.
13) CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL EXISITNG LOOPS PRIOR TO INSTALLING NEW LOOPS.
14) ALL PEDESTRIAN PUSH BUTTONS SHALL BE SOLID STATE. SEE SPECIAL PROVISIONS ADDITIONAL DETAILS.
15) SIGNAL POLE FOUNDATIONS SHALL FOLLOW MNDOT STANDARD PLATE 8126K.
16) CONTRACTOR SHALL COORDINATE TEMPORARY SIGNAL CONTROL WITH ENGINEER. SEE TEMPORARY SIGNAL PLAN SHEETS FOR MORE DETAIL.
17) ALL POLE MOUNT HARDWARE ON NEW POLES SHALL MATCH EXISTING HARDWARE.
18) FROM CABINET TO FIRST I-35W SIGNAL CABINET (NORTH) AND BALL RD. (SOUTH), EXISTING MULTI-MODE FIBER INTERCONNECT CABLE SHALL BE REPLACED WITH 6 COUNT SINGLE-MODE FIBER.
19) LUMINAIRES ON POLES 1 AND 3 SHALL BE REPLACED WITH LED LUMINAIRES.

(3)
REMOVE: EXISTING POLE, MAST ARM, AND FOUNDATION
F&I: PA100 POLE AND FOUNDATION
F&I: : TYPE PA100-A-55-D40-9 (DAVIT AT 350°)
SALVAGE & REINSTALL:
ALL EXISTING EQUIPMENT ON POLE & MAST ARM
3-ONE WAY SIGNALS (OVERHEAD)
(0', 24' AND 36' FROM END OF MAST ARM)
F&I: 1-ONE WAY SIGNAL (OVERHEAD)
(12' FROM END OF MAST ARM)
SALVAGE & REINSTALL:
ONE WAY EVP DETECTOR AND LIGHT
(6' FROM END OF MAST ARM), 3/4" HUB
R6-1 SIGNS ON POLE
F&I: TYPE 10B AT 90°
F&I: TYPE 10B AT 180°
F&I: LUMINAIRE-LED W/PEC & CHECK SWITCH
F&I: 2-PEDESTRIAN PUSH BUTTONS & SIGNS
F&I: 2-PEDESTRIAN COUNTDOWN TIMERS
3" RSC INTO HH 7
2-12/C #14
4-3/C #14
1-3/C #14 (LUM)
1-3/C #20
1-5/C #14 (SPARE)

(4)
REMOVE: EXISTING POLE, MAST ARM, AND FOUNDATION
F&I: PA100 POLE AND FOUNDATION
F&I: TYPE PA100-A-50
SALVAGE & REINSTALL:
ALL EXISTING EQUIPMENT ON POLE & MAST ARM
2-ONE WAY SIGNALS (OVERHEAD)
(0' AND 17' FROM END OF MAST ARM)
ONE WAY EVP DETECTOR AND LIGHT
(6' FROM END OF MAST ARM), 3/4" HUB
R6-1 SIGNS ON POLE
F&I: TYPE 10B AT 90°
F&I: TYPE 10B AT 180°
F&I: 2-PEDESTRIAN PUSH BUTTONS & SIGNS
F&I: 2-PEDESTRIAN COUNTDOWN TIMERS
3" RSC INTO HH 11
1-12/C #14
4-3/C #14
1-3/C #20
1-5/C#14
1-5C #14 (SPARE)

(2)
REMOVE: EXISTING POLE, MAST ARM, AND FOUNDATION
F&I: PA100 POLE AND FOUNDATION
F&I: : TYPE PA100-A-50
SALVAGE & REINSTALL:
EXISTING EQUIPMENT ON POLE & MAST ARM
2-ONE WAY SIGNALS (OVERHEAD)
(0' AND 20' FROM END OF MAST ARM)
ONE WAY EVP DETECTOR AND LIGHT
(6' FROM END OF MAST ARM), 3/4" HUB
R6-1 SIGNS ON POLE
F&I: TYPE 10B AT 90°
F&I: TYPE 10B AT 180°
F&I: 2-PEDESTRIAN PUSH BUTTONS & SIGNS
F&I: 2-PEDESTRIAN COUNTDOWN TIMERS
3" RSC INTO HH 3A
2-12/C #14
4-3/C #14
1-3/C #20
1-5/C #14
(SPARE)

(1)
REMOVE: EXISTING POLE, MAST ARM, AND FOUNDATION
F&I: PA100 POLE AND FOUNDATION
F&I: : TYPE PA100-A-45-D40-9 (DAVIT AT 350°)
SALVAGE & REINSTALL:
ALL EXISTING EQUIPMENT ON POLE & MAST ARM
3-ONE WAY SIGNALS (OVERHEAD)
(0', 12' AND 24' FROM END OF MAST ARM)
ONE WAY EVP DETECTOR AND LIGHT
(6' FROM END OF MAST ARM), 3/4" HUB
R6-1 SIGNS ON POLE
F&I: TYPE 10B AT 90°
F&I: TYPE 10B AT 180°
F&I: LUMINAIRE-LED W/PEC & CHECK SWITCH
F&I: 2-PEDESTRIAN PUSH BUTTONS & SIGNS
F&I: 2-PEDESTRIAN COUNTDOWN TIMERS
3" RSC INTO HH 14
2-12/C #14
4-3/C #14
1-3/C #14 (LUM)
1-3/C #20
1-5/C #14 (SPARE)

(A) INSTALL CONTROLLER AND CABINET (FURNISHED BY COUNTY)
EQUIPMENT PAD
BATTERY BACKUP SIGNAL SERVICE CAB.
CONTROLLER CABINET TO HH 1

4" RSC	4" RSC
2-12/C #14	2-12/C #14
4-3/C #14	4-3/C #14
7-2/C #14	7-2/C #14
1-3/C #20	1-3/C #20
1-FIBER CABLE	2-5/C #14 (SPARE)

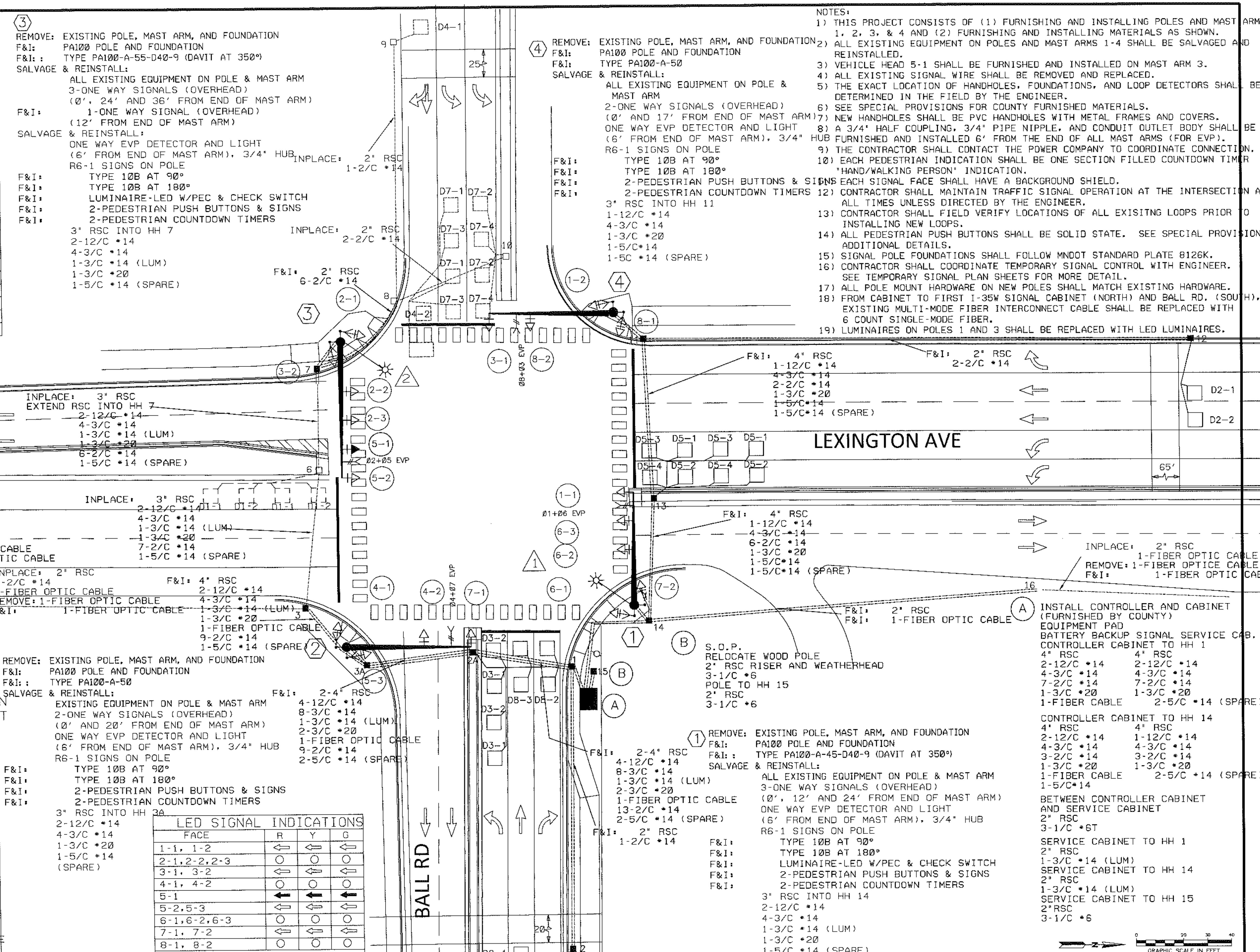
CONTROLLER CABINET TO HH 14

4" RSC	4" RSC
2-12/C #14	1-12/C #14
4-3/C #14	4-3/C #14
3-2/C #14	3-2/C #14
1-3/C #20	1-3/C #20
1-FIBER CABLE	2-5/C #14 (SPARE)
1-5/C#14	

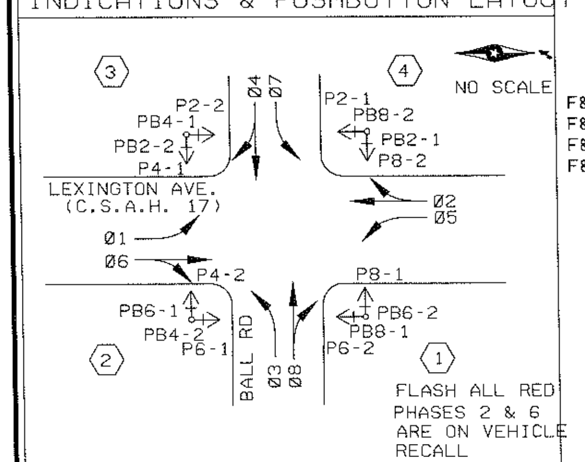
BETWEEN CONTROLLER CABINET AND SERVICE CABINET
2" RSC
3-1/C #6T

SERVICE CABINET TO HH 1
2" RSC
1-3/C #14 (LUM)
SERVICE CABINET TO HH 14
2" RSC
1-3/C #14 (LUM)
SERVICE CABINET TO HH 15
2" RSC
3-1/C #6

(B) S.O.P.
RELOCATE WOOD POLE
2" RSC RISER AND WEATHERHEAD
3-1/C #6
POLE TO HH 15
2" RSC
3-1/C #6



CONTROLLER PHASING, PEDESTRIAN INDICATIONS & PUSHBUTTON LAYOUT



LED SIGNAL INDICATIONS			
FACE	R	Y	G
1-1, 1-2	⇦	⇦	⇦
2-1,2-2,2-3	O	O	O
3-1, 3-2	⇦	⇦	⇦
4-1, 4-2	O	O	O
5-1	←	←	←
5-2,5-3	⇦	⇦	⇦
6-1,6-2,6-3	O	O	O
7-1, 7-2	⇦	⇦	⇦
8-1, 8-2	O	O	O

-ALL VEHICLE SIGNAL INDICATIONS SHALL BE 12"

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Name: Edward F. Terhaar, PE
Date: April 9, 2015 Lic. No. 24441

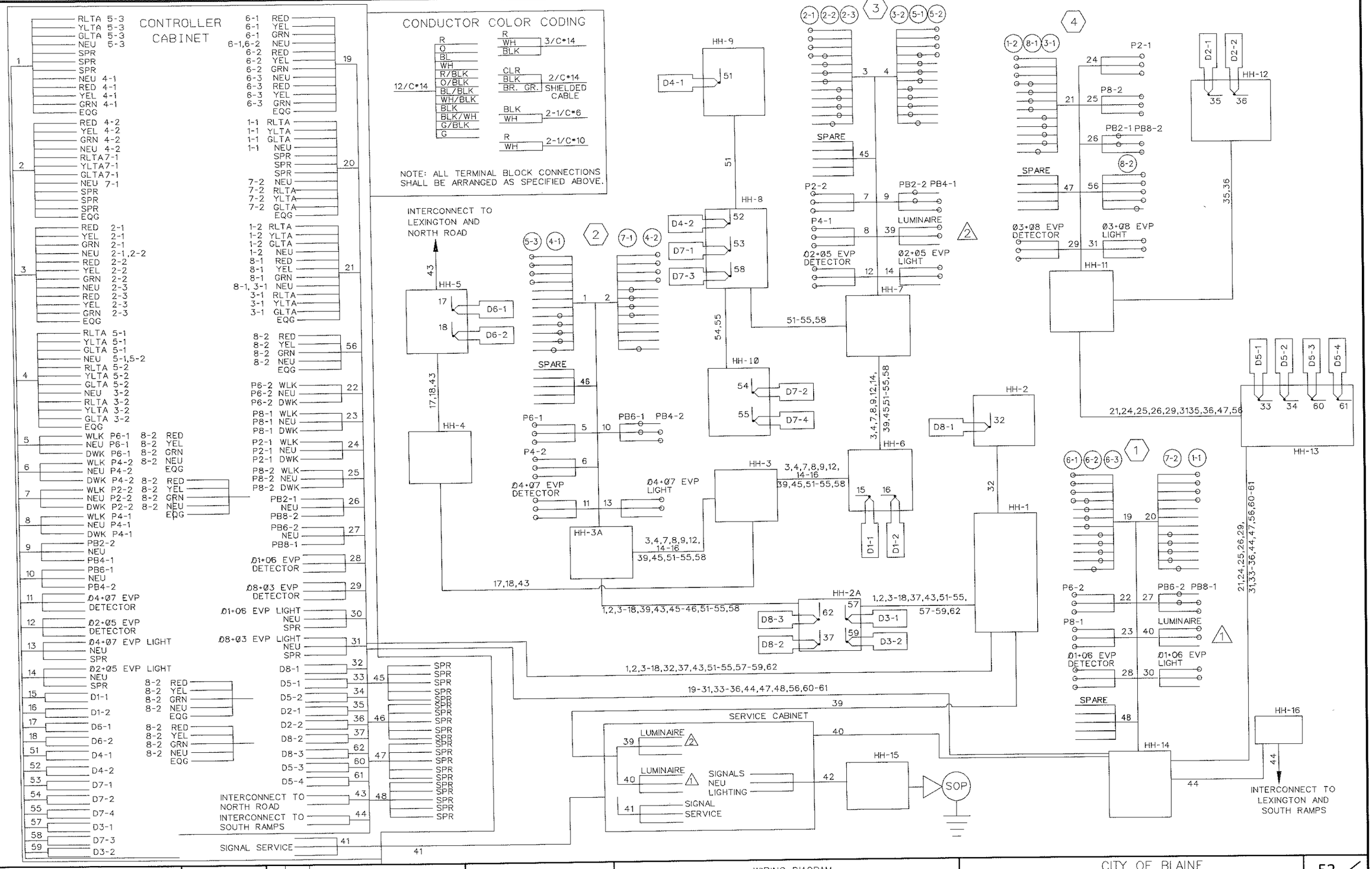
DRAWN: EFT
DESIGNED: EFT
CHECKED: EFT

BY	DATE	REVISIONS
EFT	2/9/15	REVISED PER COMMENTS
EFT	2/24/15	REVISED PER COMMENTS
EFT	3/11/15	REVISED PER COMMENTS
EFT	4/7/15	RESPONSE TO MNDOT COMMENTS

Wenck
© Wenck Associates, Inc. Consulting Engineers

TRAFFIC SIGNAL SYSTEM
INTERSECTION LAYOUT
CSAH 17 (LEXINGTON AVE) AT BALL RD
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CITY OF BLAINE
ANOKA COUNTY, MINNESOTA



I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. Name: Edward F. Terhaar, PE Date: April 9, 2015 Lic. No. 24441	DRAWN: EFT DESIGNED:EFT CHECKED: EFT	BY / DATE / REVISIONS EFT 6/27/14 REVISED PER ADDENDUM EFT 2/9/15 REVISED PER COMMENTS EFT 2/24/15 REVISED PER COMMENTS EFT 4/7/15 RESPONSE TO MNDOT COMMENTS
Wenck © Wenck Associates, Inc. Consulting Engineers	WIRING DIAGRAM CSAH 17 (LEXINGTON AVE) AT BALL RD STATE PROJECT NO. 0280-75 (TH 35W) STATE AID PROJECT NO. 106-020-033	CITY OF BLAINE ANOKA COUNTY, MINNESOTA
		52 / 78

LOOP DETECTOR CHART			DISTANCE FROM STOP LINE
DESIGNATION	SIZE	FUNCTION	
D1-1	2-6'X 6'	(1)	15',45'
D1-2	2-6'X 6'	(1)	0',30'
D2-1,D2-2	1-6'X 6'	(1)	300'
D3-1	2-6'X 6'	(1)	20',50'
D3-2	2-6'X 6'	(1)	5',35'
D4-1	1-6'X 6'	(3/8)	150'
D4-2	1-6'X 10'	(7)	-9',0'
	1-6'X 6'		
D5-1	2-6'X 6'	(1)	15',45'
D5-2	2-6'X 6'	(1)	0',30'
D6-1,D6-2	1-6'X 6'	(1)	300'
D7-1	1-6'X 6'	(1)	30'
D7-1	1-6'X 6'	(1)	55'
D7-2	2-6'X 6'	(1)	25',55'
D7-3	1-6'X 6'	(1)	15'
D7-3	1-6'X 6'	(1)	45'
D7-4	2-6'X 6'	(1)	10',40'
D8-1	1-6'X 6'	(3/8)	150'
D8-2	2-6'X 6'	(7)	5',20'

FUNCTIONS:
(1) - CALL AND EXTEND
(3) - EXTEND ONLY
(7) - IMMEDIATE EXTEND, DELAY CALL
(8) - DELAY CALL DENSITY ONLY

LED SIGNAL INDICATIONS			
FACE	R	Y	G
1-1, 1-2	⇦	⇦	⇦
2-1,2-2,2-3	○	○	○
3-1, 3-2	⇦	⇦	⇦
4-1	○	○	○
4-2	○	○	○
5-1,5-2	⇦	⇦	⇦
6-1,6-2,6-3	○	○	○
7-1, 7-2	⇦	⇦	⇦
8-1	○	○	○
8-2	○	○	○

-ALL VEHICLE SIGNAL INDICATIONS SHALL BE 12"

3 INPLACE-LEAVE INPLACE
TYPE PA100-A40-D40-9 (DAVIT AT 350°)
PA100 POLE FOUNDATION
3 - ONE WAY SIGNALS (OVERHEAD)
(0', 12' AND 24' FROM END OF MAST ARM)
ONE WAY EVP DETECTOR AND LIGHT
(6' FROM END OF MAST ARM), 3/4" HUB
TYPE 10B AT 0°
TYPE 10B AT 180°
LUMINAIRE - 250 WATT H.P.S. W/PEC & CHECK SWITCH
2 - PEDESTRIAN PUSH BUTTONS & SIGNS
3" RSC INTO HH 7B
2-12/C #12
4-3/C #12
1-3/C #12 (LUM)
1-3/C #20

2 INPLACE-LEAVE INPLACE
TYPE PA100-A35
PA100 POLE FOUNDATION
1 - ONE WAY SIGNAL (OVERHEAD)
(0' FROM END OF MAST ARM)
ONE WAY EVP DETECTOR AND LIGHT
(6' FROM END OF MAST ARM), 3/4" HUB
1 - ONE WAY SIGNAL (OVERHEAD)
(15' FROM END OF MAST ARM)
TYPE 10B AT 0°
TYPE 10B AT 180°
2 - PEDESTRIAN PUSH BUTTONS & SIGNS
3" RSC INTO HH 3B
2-12/C #12
4-3/C #12

4 INPLACE-LEAVE INPLACE
TYPE PA100-A45
PA100 POLE FOUNDATION
1 - ONE WAY SIGNAL (OVERHEAD)
(0' FROM END OF MAST ARM)
1 - ONE WAY SIGNAL (OVERHEAD)
(13' FROM END OF MAST ARM)
ONE WAY EVP DETECTOR AND LIGHT
(6' FROM END OF MAST ARM), 3/4" HUB
TYPE 10B AT 90°
TYPE 10B AT 270°
2 - PEDESTRIAN PUSH BUTTONS & SIGNS
3" RSC INTO HH 8B
1-12/C #12
4-3/C #12
1-3/C #20
1-5/C#12

NOTES:
1) THIS PROJECT CONSISTS OF FURNISHING AND INSTALLING VEHICLE HEADS, LOOP DETECTORS, AND CABLE AS SHOWN AND MAKE ALL NECESSARY CONNECTIONS TO THE SATISFACTION OF THE ENGINEER.
2) FOUR EXISTING R-Y-G VEHICLE HEADS SHALL BE REPLACED WITH FOUR NEW RLTA-YLTA-GLTA VEHICLE HEADS AT LOCATIONS 3-1, 3-2, 7-1, AND 7-2. TWO EXISTING R-Y-G VEHCILES HEADS SHALL BE REINSTALLED AT LOCATIONS 4-2 AND 8-2.
3) ALL NEW VEHICLE SIGNAL INDICATIONS SHALL HAVE RED LED, YELLOW INCANDESCENT, AND GREEN INCANDESCENT INDICATIONS.
4) ALL SIGNAL COMPONENTS ARE INPLACE UNLESS NOTED OTHERWISE.
5) EACH SIGNAL FACE SHALL HAVE A BACKGROUND SHIELD.
6) SEE SPECIAL PROVISIONS FOR CONTRACTORS RESPONSIBILITY FOR LOCATION OF UTILITIES.
7) CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF EXISITNG LOOPS D4-2, D7-1, D7-2, D7-3, AND D7-4 PRIOR TO INSTALLING NEW LOOPS.

EXISTING INTERSECTION— FOR INFORMATION ONLY

INPLACE: 2" RSC 1-2/C #14
INPLACE: 2" RSC 2-2/C #14
INPLACE: 2" RSC 5-2/C #14 1-2/C #14
INPLACE: 2" RSC 2-2/C #14
INPLACE: 3" RSC 1-12/C #12 4-3/C #12 2-2/C #14 1-3/C #20 1-5/C#12
INPLACE: 3" RSC 2-12/C #12 4-3/C #12 1-3/C #12 (LUM) 1-3/C #20 5-2/C #14 1-2/C #14
INPLACE: 2" RSC 2-2/C #14 1-6PR #19
INPLACE: 3" RSC 2-12/C #12 4-3/C #12 1-3/C #12 (LUM) 2-2/C #14 1-3/C #20 5-2/C #14 1-2/C #14
INPLACE: 4" RSC 4-12/C #12 8-3/C #12 1-3/C #12 (LUM) 4-2/C #14 2-3/C #20 1-6PR #19 5-2/C #14 1-2/C #14
INPLACE: 3" RSC 1-12/C #12 4-3/C #12 4-2/C #14 1-3/C #20 1-6PR #19 1-5/C#12
INPLACE: 2" RSC 1-6PR #19
2" RSC 1-2/C #14

S.O.P.
INPLACE-LEAVE INPLACE
NSP WOOD POLE (INP.)
2" RSC RISER AND WEATHERHEAD
3-1/C #6
POLE TO HH 15B
2" RSC
3-1/C #6

1 INPLACE-LEAVE INPLACE
TYPE PA100-A40-D40-9 (DAVIT AT 350°)
PA100 POLE FOUNDATION
3 - ONE WAY SIGNALS (OVERHEAD)
(0', 10' AND 21' FROM END OF MAST ARM)
ONEWAY EVP DETECTOR AND LIGHT
(6' FROM END OF MAST ARM), 3/4" HUB
TYPE 10B AT 90°
TYPE 10B AT 270°
LUMINAIRE - 250 WATT H.P.S. W/PEC & CHECK SWITCH
2 - PEDESTRIAN PUSH BUTTONS & SIGNS
3" RSC INTO HH 13B
2-12/C #12
4-3/C #12
1-3/C #12 (LUM)
1-3/C #20

B INPLACE-LEAVE INPLACE
SERVICE CABINET FOUNDATION
SERVICE CABINET TO HH 14B
2" RSC
3-1/C #6
SERVICE CABINET TO HH 1B
2" RSC
2-3/C #12
SERVICE CABINET TO HH 15B
2" RSC
3-1/C #6

A INPLACE-LEAVE INPLACE
EQUIPMENT PAD
CONTROLLER AND CABINET
CONTROLLER CABINET TO HH 1B
4" RSC
4-12/C #12
8-3/C #12
6-2/C #14
2-3/C #20
1-6PR #19
5-2/C #14
3-2/C#14
CONTROLLER CABINET TO HH 13B
4" RSC
3-12/C #12
8-3/C #12
4-2/C #14
2-3/C #20
1-6PR #19
1-5/C#12
CONTROLLER CABINET TO HH 14B
4" RSC
1/C #6
STUB OUT AND CAP
2-3" RSC TO WEST

C.S.A.H. 17 (LEXINGTON AVE.)
(45 M.P.H.)
BALL RD. (30 M.P.H.)
LEXINGTON AVE. (C.S.A.H. 17)
BALL ROAD
Ø4 EVP
Ø2-Ø5 EVP
Ø1-Ø6 EVP
Ø8 EVP
50'
60'
25'

CONTROLLER PHASING, PEDESTRIAN INDICATIONS & PUSHBUTTON LAYOUT
NO SCALE
FLASH ALL RED PHASES 2 & 6 ARE ON VEHICLE RECALL
GRAPHIC SCALE IN FEET

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Name: Edward F. Terhaar, PE
Date: April 9, 2015 Lic. No. 24441

DRAWN: EFT
DESIGNED:EFT
CHECKED: EFT

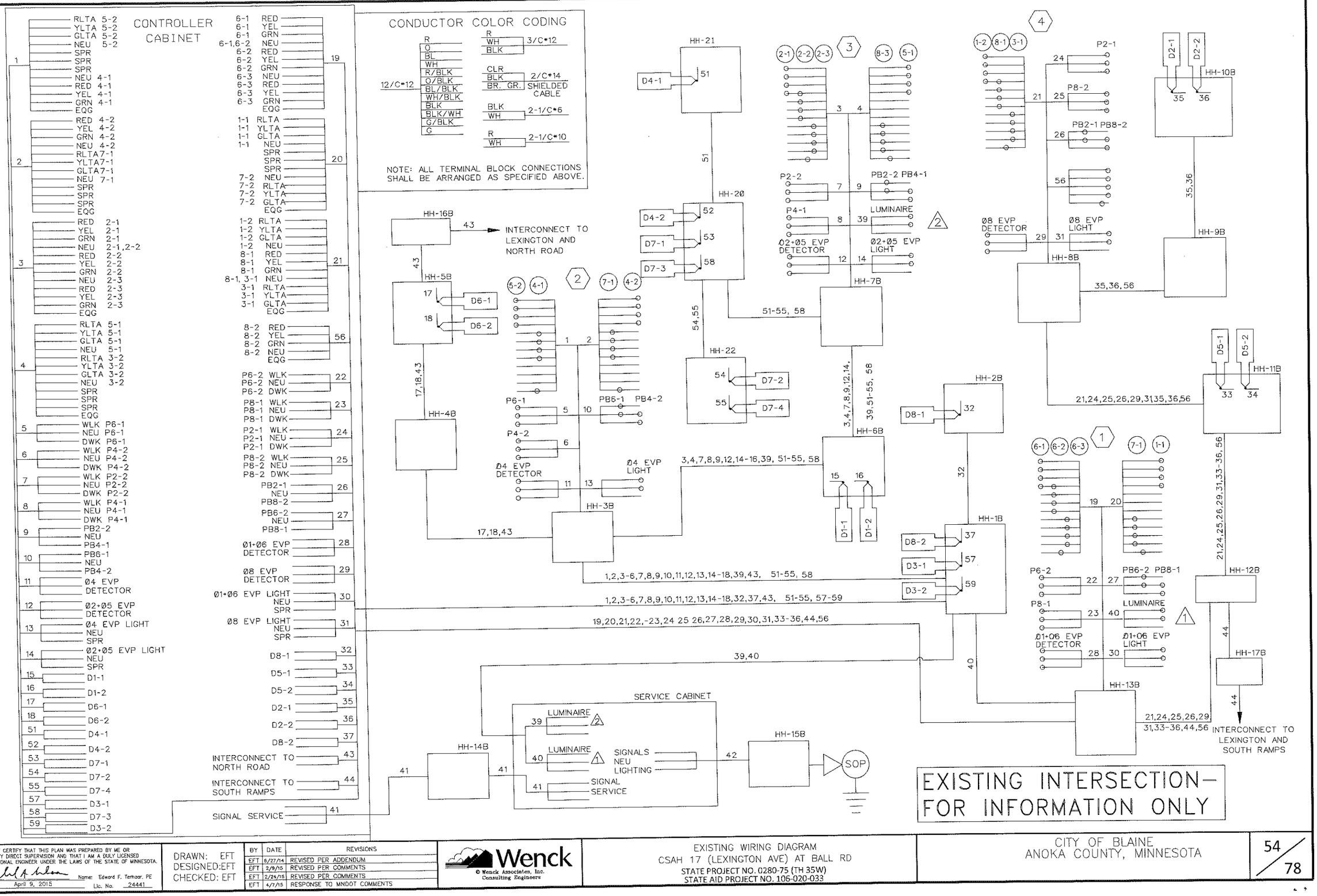
BY	DATE	REVISIONS
EFT	6/27/14	REVISED PER ADDENDUM
EFT	2/9/15	REVISED PER COMMENTS
EFT	2/24/15	REVISED PER COMMENTS
EFT	4/7/15	RESPONSE TO MNDOT COMMENTS

Wenck
© Wenck Associates, Inc.
Consulting Engineers

EXISTING TRAFFIC SIGNAL SYSTEM
INTERSECTION LAYOUT
CSAH 17 (LEXINGTON AVE) AT BALL RD
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CITY OF BLAINE
ANOKA COUNTY, MINNESOTA

53/78



I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Name: Edward F. Terhaar, PE
Date: April 9, 2015 Lic. No. 24441

DRAWN: EFT
DESIGNED: EFT
CHECKED: EFT

BY	DATE	REVISIONS
EFT	6/27/14	REVISED PER ADDENDUM
EFT	2/9/15	REVISED PER COMMENTS
EFT	2/24/15	REVISED PER COMMENTS
EFT	4/7/15	RESPONSE TO MNDOT COMMENTS

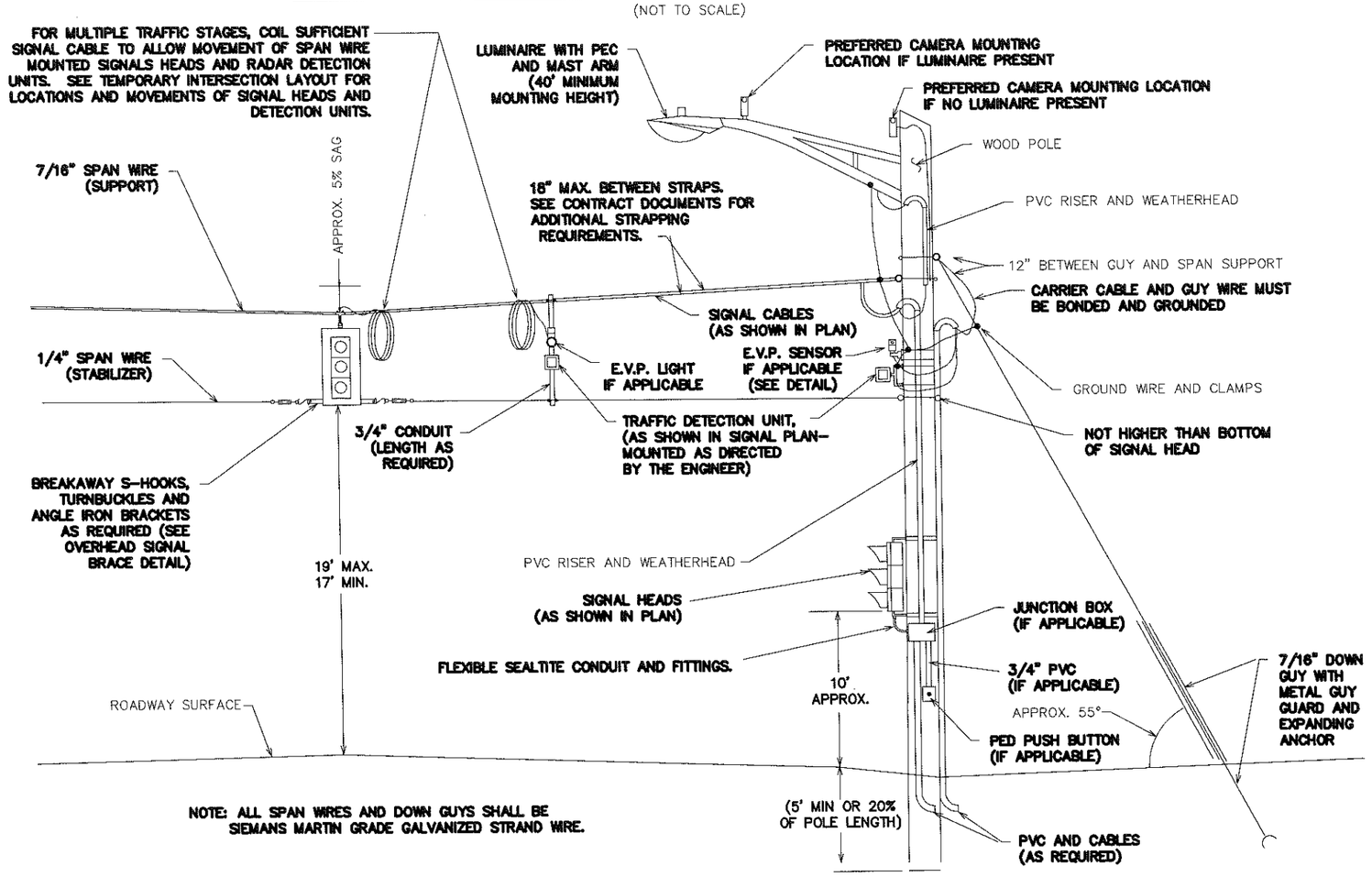
Wenck
© Wenck Associates, Inc.
Consulting Engineers

EXISTING WIRING DIAGRAM
CSAH 17 (LEXINGTON AVE) AT BALL RD
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CITY OF BLAINE
ANOKA COUNTY, MINNESOTA

TYPICAL WOOD POLE AND SPAN WIRE MOUNTED TRAFFIC SIGNALS

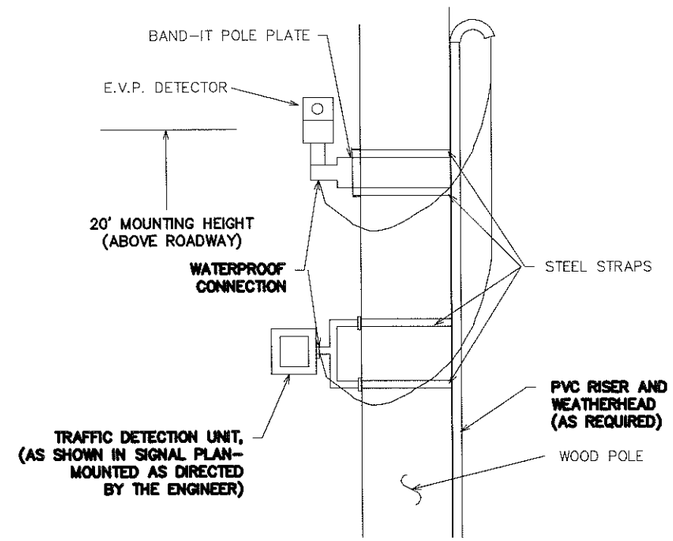
(NOT TO SCALE)



NOTE: ALL SPAN WIRES AND DOWN GUYS SHALL BE SIEMANS MARTIN GRADE GALVANIZED STRAND WIRE.

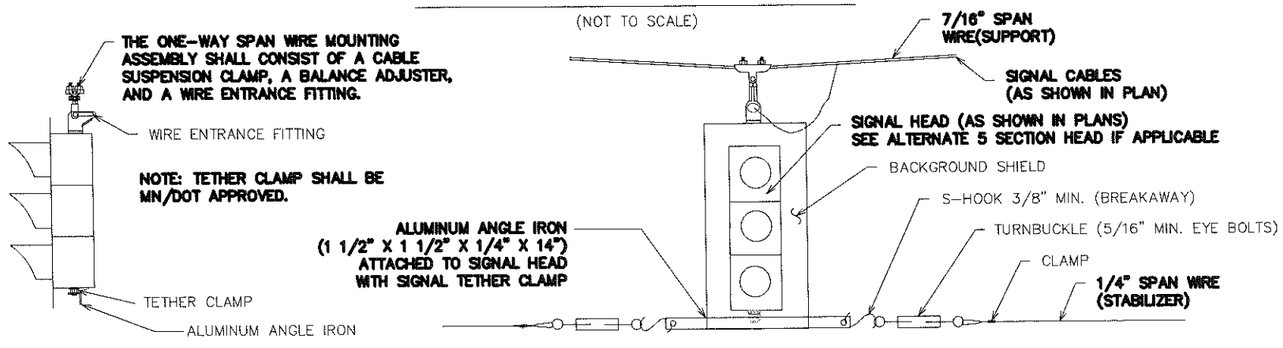
E.V.P. OR TRAFFIC DETECTOR WOOD POLE MOUNT

(NOT TO SCALE)



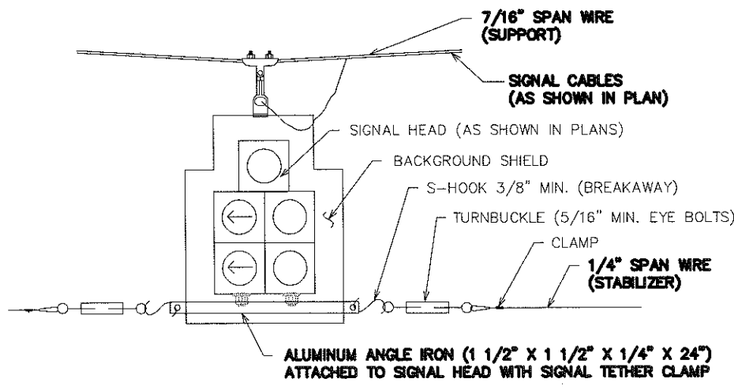
OVERHEAD SIGNAL BRACE DETAIL

(NOT TO SCALE)



5 SECTION HEAD OVERHEAD SIGNAL BRACE DETAIL

(NOT TO SCALE)



I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Name: Edward F. Terhaar, PE
Date: April 9, 2015 Lic. No. 24441

DRAWN: EFT
DESIGNED: EFT
CHECKED: EFT

BY	DATE	REVISIONS
EFT	4/7/15	RESPONSE TO MNDOT COMMENTS

Wenck
© Wenck Associates, Inc.
Consulting Engineers

TEMPORARY SIGNAL SYSTEM
WOOD POLE AND SPAN WIRE DETAILS
CSAH 17 (LEXINGTON AVE) AT BALL RD
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CITY OF BLAINE
ANOKA COUNTY, MINNESOTA

NOTES:
1) LOCATION OF WOOD POLES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
2) HANDHOLES SHALL BE INSTALLED AS SHOWN FOR THE TEMPORARY SIGNAL SYSTEM.
3) EACH SIGNAL FACE SHALL HAVE A BACKGROUND SHIELD.
4) SEE DETAILS FOR WOOD POLE AND SPAN WIRE MOUNTING DETAILS.
5) ALL VEHICLE SIGNAL INDICATIONS SHALL BE LED AND SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR AS SHOWN BELOW.
6) ALL TRAFFIC SIGNAL MATERIALS AND ELECTRICAL EQUIPMENT TO BE FURNISHED AND INSTALLED BY CONTRACTOR FOR THE TEMPORARY SIGNAL SYSTEM SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION AT THE INTERSECTION. SEE SPECIAL PROVISIONS.
7) MOVEMENT/RELOCATION OF HEADS, EVP DETECTORS AND INDICATOR LIGHTS, AND VIDEO DETECTOR CAMERAS SHALL BE INCLUDED IN THE PAY ITEM FOR "TEMPORARY SIGNAL SYSTEM".
8) SEE SPECIAL PROVISIONS REGARDING VIDEO DETECTION SYSTEM TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR, AND FOR ALL VIDEO DETECTION SYSTEM COMPONENTS TO BE TURNED OVER TO THE COUNTY (FOR THE COUNTY TO OWN) AFTER TEMPORARY SIGNAL SYSTEM IS REMOVED AND REVISED SIGNAL SYSTEM IS MADE OPERATIONAL. (INCLUDED AS SEPARATE PAY ITEM WITHIN "TEMPORARY SIGNAL SYSTEM").
9) (F&I) = ITEMS TO BE FURNISHED & INSTALLED BY CONTRACTOR.
10) CONTRACTOR SHALL BAG (AND MAKE IN-OPERATIONAL) ALL VEHICLE SIGNAL HEADS NOT IN USE DURING CONSTRUCTION.
11) CONTRACTOR SHALL MAINTAIN A SIGNAL SYSTEM IN OPERATION AT THE INTERSECTION AT ALL TIMES, UNLESS OTHERWISE APPROVED BY THE ENGINEER FOR THE SIGNAL SYSTEM TO BE TURNED OFF DURING NON-PEAK PERIODS (FOR SWITCHOVERS FROM EXISTING SIGNAL SYSTEM TO TEMPORARY SIGNAL SYSTEM, AND FROM TEMPORARY SIGNAL SYSTEM TO REVISED PERMANENT SIGNAL SYSTEM).
12) CONTRACTOR SHALL PROTECT AND MAINTAIN ALL ITEMS OF THE EXISTING PERMANENT SIGNAL SYSTEM THAT WILL BE REUSED AS PART OF THE TEMPORARY AND REVISED SIGNAL SYSTEMS, AND SHALL REPLACE ITEMS DAMAGED DURING CONSTRUCTION WITH NEW ITEMS (AT NO EXPENSE TO THE COUNTY).
13) CONTRACTOR SHALL FURNISH AND INSTALL FOUR EMERGENCY VEHICLE PREEMPTION (EVP) DETECTORS AND EVP CONFIRMATION LIGHTS WHERE SHOWN, ALONG WITH ALL WOOD POLE AND SPAN WIRE MOUNTING HARDWARE, ALL AS PART OF PAY ITEM FOR "TEMPORARY SIGNAL SYSTEM". NEW EVP DETECTORS SHALL BE COMPATIBLE WITH "OPTICOM" EVP SYSTEM ALREADY INPLACE.

(7) F&I
50' WOOD POLE-CLASS 2
2-DOWN GUYS, GUY GUARDS, AND SCREW ANCHORS
15' MAST ARM AND LUMINAIRE (LED) WITH PEC
1-TYPE 10A AT 90°
1-TYPE 10A AT 180°
1-VIDEO CAMERA-LUMINAIRE EXT. MOUNTED (V2/5)
METAL JUNCTION BOX WITH TERMINAL BLOCKS
2" PVC RISER AND WEATHERHEAD ABOVE JUNCTION BOX WITH:
2-4/C #14
2" PVC RISER AND WEATHERHEAD ABOVE SPAN WIRE WITH:
1-3/C #14 (VIDEO)
1-3/C #14 (LUM)

(8) F&I
50' WOOD POLE-CLASS 2
2-DOWN GUYS, GUY GUARDS, AND SCREW ANCHORS
1-TYPE 10A AT 90°
1-TYPE 10A AT 180°
1-VIDEO CAMERA-WOOD POLE MOUNTED (V3/8)
METAL JUNCTION BOX WITH TERMINAL BLOCKS
2" PVC RISER AND WEATHERHEAD ABOVE JUNCTION BOX WITH:
2-4/C #14
2" PVD RISER AND WEATHERHEAD ABOVE SPAN WIRE WITH:
1-3/C #14 (VIDEO)

GRAPHIC SCALE IN FEET 0 20 30 40

CAMERA NO.	INTERSECTION APPROACH FACING	CAMERA LOCATION	CAMERA MOUNTED AT	MOUNTING HEIGHT
V2/5	SB CSAH 17	WP 7	ON LUM. EXT.	40'
V3/8	WB BALL RD	WP 8	ON WOOD POLE	40'
V4/7	EB BALL RD	WP 6	ON WOOD POLE	40'
V1/6	NB CSAH 17	WP 5	ON LUM. EXT.	40'

NOTE: THIS PLAN IS INTENDED TO SHOW WOOD POLE LOCATION AND EQUIPMENT TO BE USED FOR THE TEMPORARY SIGNAL SYSTEM INSTALLATION. SPECIFIC ROADWAY ELEMENTS MAY OR MAY NOT BE INPLACE AT THE TIME OF OPERATION. THE LOCATION OF OVERHEAD SIGNALS AND DETECTORS FOR EACH STAGE OR PHASE WILL NEED TO BE ADJUSTED ACCORDIN

WOOD POLE 7 TO SIGNAL HEAD 2-1
7/16" SPAN WIRE-F&I
1/4" SPAN WIRE-F&1
2-4/C #14-F&I
1-3/C #14 (LUM)-F&I
1-3/C #14 (VIDEO)-F&I

WOOD POLE 8 TO SIGNAL HEAD 3-1
7/16" SPAN WIRE-F&I
1/4" SPAN WIRE-F&1
2-4/C #14-F&I
1-3/C #14 (EVP)-F&I
1-3/C #20 (EVP)-F&I

WOOD POLE 8 TO SIGNAL HEAD 1-1
7/16" SPAN WIRE-F&I
1/4" SPAN WIRE-F&1
4-4/C #14-F&I
1-3/C #14 (EVP)-F&I
1-3/C #20 (EVP)-F&I
1-3/C #14 (VIDEO)-F&I

LEXINGTON AVE

WOOD POLE 5 TO SIGNAL HEAD 1-1
7/16" SPAN WIRE-F&I
1/4" SPAN WIRE-F&1
7-4/C #14-F&I
2-3/C #14 (EVP)-F&I
2-3/C #20 (EVP)-F&I
1-3/C #14 (VIDEO)-F&I

WOOD POLE 6 TO SIGNAL HEAD 2-2
7/16" SPAN WIRE-F&I
1/4" SPAN WIRE-F&1
4-4/C #14-F&I
1-3/C #14 (EVP)-F&I
1-3/C #14 (LUM)-F&I
1-3/C #20 (EVP)-F&I
1-3/C #14 (VIDEO)-F&I

(6) F&I
50' WOOD POLE-CLASS 2
2-DOWN GUYS, GUY GUARDS, AND SCREW ANCHORS
1-TYPE 10A AT 90°
1-TYPE 10A AT 180°
1-VIDEO CAMERA-WOOD POLE MOUNTED (V4/7)
METAL JUNCTION BOX WITH TERMINAL BLOCKS
2" PVC RISER AND WEATHERHEAD ABOVE JUNCTION BOX WITH:
2-4/C #14
2" PVC RISER AND WEATHERHEAD ABOVE SPAN WIRE WITH:
1-3/C #14 (VIDEO)

WOOD POLE 6 TO SIGNAL HEAD 2-2
7/16" SPAN WIRE-F&I
1/4" SPAN WIRE-F&1
6-4/C #14-F&I
1-3/C #14 (EVP)-F&I
1-3/C #14 (LUM)-F&I
1-3/C #20 (EVP)-F&I
1-3/C #14 (VIDEO)-F&I

WOOD POLE 5 TO SIGNAL HEAD 4-2
7/16" SPAN WIRE-F&I
1/4" SPAN WIRE-F&1
8-4/C #14-F&I
2-3/C #14 (EVP)-F&I
2-3/C #20 (EVP)-F&I
2-3/C #14 (VIDEO)-F&I
1-3/C #14 (LUM)-F&I

(5) F&I
50' WOOD POLE-CLASS 2
2-DOWN GUYS, GUY GUARDS, AND SCREW ANCHORS
15' MAST ARM AND LUMINAIRE (LED) WITH PEC
1-TYPE 10A AT 90°
1-TYPE 10A AT 180°
1-VIDEO CAMERA-LUMINAIRE EXT. MOUNTED (V1/6)
EXTEND INTO HH1
4" PVC RISER AND WEATHERHEAD
15-4/C #14-F&I
4-3/C #14 (EVP)-F&I
4-3/C #20 (EVP)-F&I
4-3/C #14 (VIDEO)-F&I
2-3/C #14 (LUM)-F&I

(A) INPLACE CONTROLLER AND CABINET EQUIPMENT PAD
CONTROLLER CABINET TO HH 1
4" PVC-F&I
15-4/C #14-F&I
4-3/C #14 (EVP)-F&I
4-2/C #20 (EVP)-F&I
4-3/C #14 (VIDEO)-F&I

BETWEEN CONTROLLER CABINET AND SERVICE CABINET
2" PVC
3-1/C #6

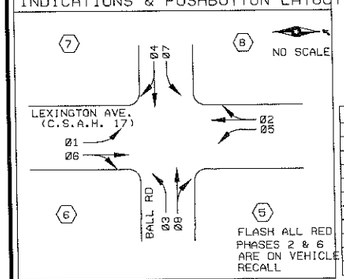
SERVICE CABINET TO HH 1
2" PVC
2-3/C #14 (LUM)

SERVICE CABINET TO HH 15
2" PVC
3-1/C #6

(B) S.O.P.
INPLACE WOOD POLE
2" PVC RISER AND WEATHERHEAD
3-1/C #6
POLE TO HH 15
2" PVC
3-1/C #6

BALL RD

CONTROLLER PHASING, PEDESTRIAN INDICATIONS & PUSHBUTTON LAYOUT



LED SIGNAL INDICATIONS

FACE	R	Y	G
1-1, 1-2	⇦	⇦	⇦
2-1, 2-2	○	○	○
3-1, 3-2	⇦	⇦	⇦
4-1, 4-2	○	○	○
5-1, 5-2	⇦	⇦	⇦
6-1,6-2,6-3	○	○	○
7-1, 7-2	⇦	⇦	⇦
8-1, 8-2	○	○	○

-ALL VEHICLE SIGNAL INDICATIONS SHALL BE 12"

PHASE 1

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Name: Edward F. Terhoor, PE
Date: April 9, 2015 Lic. No. 24441

DRAWN: EFT
DESIGNED: EFT
CHECKED: EFT

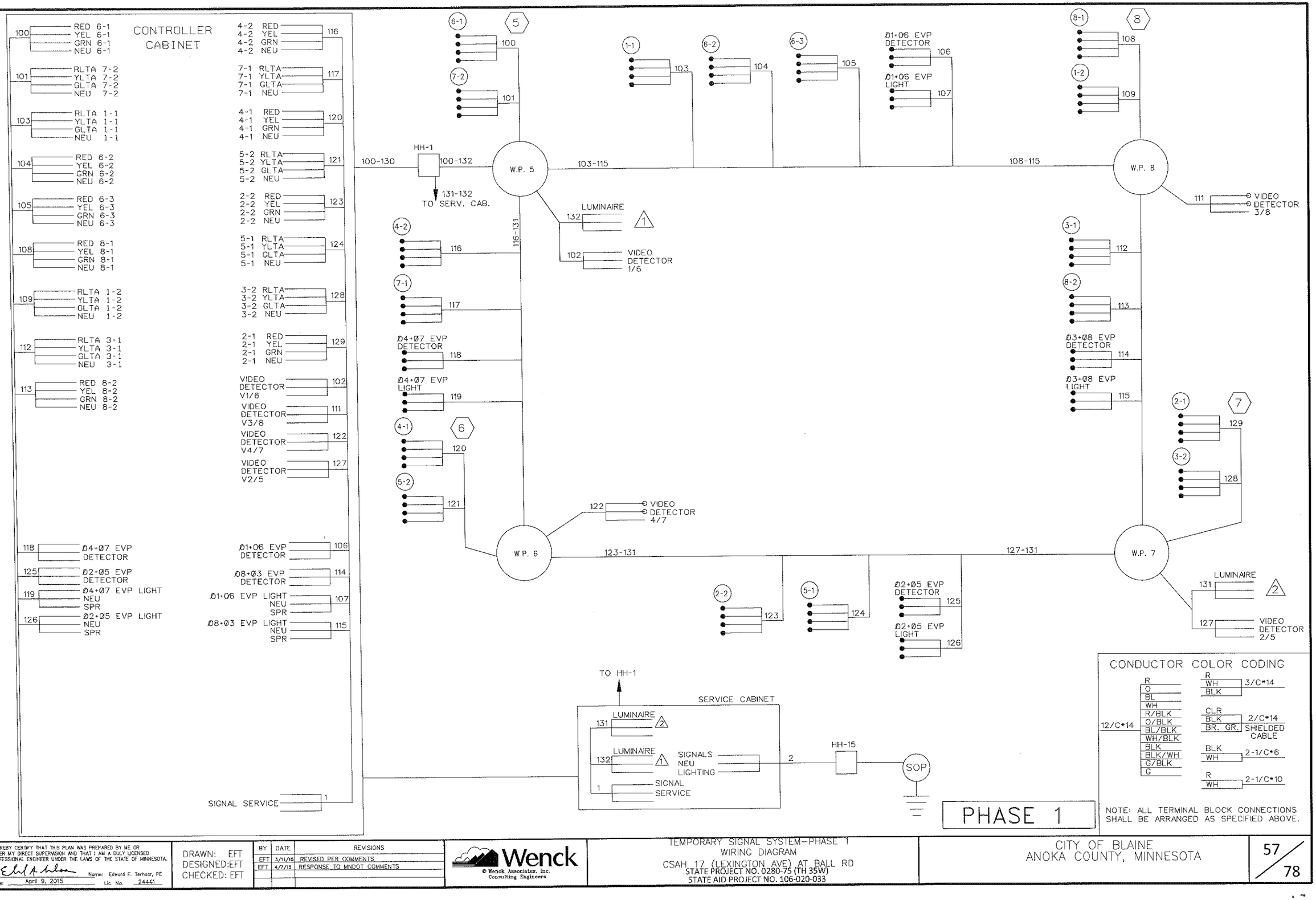
BY	DATE	REVISIONS
EFT	3/11/15	REVISED PER COMMENTS
EFT	4/7/15	RESPONSE TO MNDOT COMMENTS

Wenck
© Wenck Associates, Inc.
Consulting Engineers

TEMPORARY SIGNAL SYSTEM-PHASE 1
INTERSECTION LAYOUT
CSAH 17 (LEXINGTON AVE) AT BALL RD
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CITY OF BLAINE
ANOKA COUNTY, MINNESOTA

56/78



I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Name: Edward F. Terhaar, PE
Date: April 9, 2015 Lic. No. 24441

DRAWN: EFT
DESIGNED: EFT
CHECKED: EFT

BY	DATE	REVISIONS
EFT	3/11/15	REVISED PER COMMENTS
EFT	4/7/15	RESPONSE TO MNDOT COMMENTS

Wenck
© Wenck Associates, Inc.
Consulting Engineers

TEMPORARY SIGNAL SYSTEM–PHASE 1
WIRING DIAGRAM
CSAH 17 (LEXINGTON AVE) AT BALL RD
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CITY OF BLAINE
ANOKA COUNTY, MINNESOTA

NOTES:
1) LOCATION OF WOOD POLES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
2) HANDHOLES SHALL BE INSTALLED AS SHOWN FOR THE TEMPORARY SIGNAL SYSTEM.
3) EACH SIGNAL FACE SHALL HAVE A BACKGROUND SHIELD.
4) SEE DETAILS FOR WOOD POLE AND SPAN WIRE MOUNTING DETAILS.
5) ALL VEHICLE SIGNAL INDICATIONS SHALL BE LED AND SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR AS SHOWN BELOW.
6) ALL TRAFFIC SIGNAL MATERIALS AND ELECTRICAL EQUIPMENT TO BE FURNISHED AND INSTALLED BY CONTRACTOR FOR THE TEMPORARY SIGNAL SYSTEM SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION AT THE INTERSECTION. SEE SPECIAL PROVISIONS.
7) MOVEMENT/RELOCATION OF HEADS, EVP DETECTORS AND INDICATOR LIGHTS, AND VIDEO DETECTOR CAMERAS SHALL BE INCLUDED IN THE PAY ITEM FOR "TEMPORARY SIGNAL SYSTEM".
8) SEE SPECIAL PROVISIONS REGARDING VIDEO DETECTION SYSTEM TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR, AND FOR ALL VIDEO DETECTION SYSTEM COMPONENTS TO BE TURNED OVER TO THE COUNTY (FOR THE COUNTY TO OWN) AFTER TEMPORARY SIGNAL SYSTEM IS REMOVED AND REVISED SIGNAL SYSTEM IS MADE OPERATIONAL. (INCLUDED AS SEPARATE PAY ITEM WITHIN "TEMPORARY SIGNAL SYSTEM").
9) (F&I) - ITEMS TO BE FURNISHED & INSTALLED BY CONTRACTOR.
10) CONTRACTOR SHALL BAG (AND MAKE IN-OPERATIONAL) ALL VEHICLE SIGNAL HEADS NOT IN USE DURING CONSTRUCTION.
11) CONTRACTOR SHALL MAINTAIN A SIGNAL SYSTEM IN OPERATION AT THE INTERSECTION AT ALL TIMES, UNLESS OTHERWISE APPROVED BY THE ENGINEER FOR THE SIGNAL SYSTEM TO BE TURNED OFF DURING NON-PEAK PERIODS (FOR SWITCHOVERS FROM EXISTING SIGNAL SYSTEM TO TEMPORARY SIGNAL SYSTEM, AND FROM TEMPORARY SIGNAL SYSTEM TO REVISED PERMANENT SIGNAL SYSTEM).
12) CONTRACTOR SHALL PROTECT AND MAINTAIN ALL ITEMS OF THE EXISTING PERMANENT SIGNAL SYSTEM THAT WILL BE REUSED AS PART OF THE TEMPORARY AND REVISED SIGNAL SYSTEMS, AND SHALL REPLACE ITEMS DAMAGED DURING CONSTRUCTION WITH NEW ITEMS (AT NO EXPENSE TO THE COUNTY).
13) CONTRACTOR SHALL FURNISH AND INSTALL FOUR EMERGENCY VEHICLE PREEMPTION (EVP) DETECTORS AND EVP CONFIRMATION LIGHTS WHERE SHOWN, ALONG WITH ALL WOOD POLE AND SPAN WIRE MOUNTING HARDWARE, ALL AS PART OF PAY ITEM FOR "TEMPORARY SIGNAL SYSTEM". NEW EVP DETECTORS SHALL BE COMPATIBLE WITH "OPTICOM" EVP SYSTEM ALREADY INPLACE.

(7) F&I — 50' WOOD POLE-CLASS 2
2-DOWN GUYS, GUY GUARDS, AND SCREW ANCHORS
15' MAST ARM AND LUMINAIRE (LED) WITH PEC
1-TYPE 10A AT 90°
1-TYPE 10A AT 180°
1-VIDEO CAMERA-LUMINAIRE EXT. MOUNTED (V2/5)
1-PEDESTRIAN PUSH BUTTON, SIGN (R10-3E), AND RISERS
METAL JUNCTION BOX WITH TERMINAL BLOCKS
2" PVC RISER AND WEATHERHEAD ABOVE JUNCTION BOX WITH:
2-4/C #14
1-2/C #14
2" PVC RISER AND WEATHERHEAD ABOVE SPAN WIRE WITH:
1-3/C #14 (VIDEO)
1-3/C #14 (LUM)

(8) F&I — 50' WOOD POLE-CLASS 2
2-DOWN GUYS, GUY GUARDS, AND SCREW ANCHORS
1-TYPE 10A AT 90°
1-TYPE 10A AT 180°
1-PEDESTRIAN PUSH BUTTON, SIGN (R10-3E), AND RISERS
METAL JUNCTION BOX WITH TERMINAL BLOCKS
2" PVC RISER AND WEATHERHEAD ABOVE JUNCTION BOX WITH:
2-4/C #14
1-2/C #14

GRAPHIC SCALE IN FEET (0, 20, 30, 40)

CAMERA NO.	INTERSECTION APPROACH FACING	CAMERA LOCATION	CAMERA MOUNTED AT	MOUNTING HEIGHT
V2/5	SB CSAH 17	WP 7	ON LUM. EXT.	40'
V4/7	EB BALL RD	WP 6	ON WOOD POLE	40'
V1/6	NB CSAH 17	WP 5	ON LUM. EXT.	40'

NOTE: THIS PLAN IS INTENDED TO SHOW WOOD POLE LOCATION AND EQUIPMENT TO BE USED FOR THE TEMPORARY SIGNAL SYSTEM INSTALLATION. SPECIFIC ROADWAY ELEMENTS MAY OR MAY NOT BE INPLACE AT THE TIME OF OPERATION. THE LOCATION OF OVERHEAD SIGNALS AND DETECTORS FOR EACH STAGE OR PHASE WILL NEED TO BE ADJUSTED ACCORDINGLY.

WOOD POLE 8 TO WOOD POLE 7
7/16" SPAN WIRE-F&I
1/4" SPAN WIRE-F&1

WOOD POLE 8 TO SIGNAL HEAD 1-1
7/16" SPAN WIRE-F&I
1/4" SPAN WIRE-F&1
4-4/C #14-F&I
1-2/C #14-F&I
1-3/C #14 (EVP)-F&I
1-3/C #20 (EVP)-F&I

WOOD POLE 7 TO SIGNAL HEAD 2-2
7/16" SPAN WIRE-F&I
1/4" SPAN WIRE-F&1
2-4/C #14-F&I
1-2/C #14-F&I
1-3/C #14 (LUM)-F&I
1-3/C #14 (VIDEO)-F&I

WOOD POLE 6 TO SIGNAL HEAD 2-2
7/16" SPAN WIRE-F&I
1/4" SPAN WIRE-F&1
4-4/C #14-F&I
1-2/C #14-F&I
1-3/C #14 (EVP)-F&I
1-3/C #14 (LUM)-F&I
1-3/C #20 (EVP)-F&I
1-3/C #14 (VIDEO)-F&I

WOOD POLE 5 TO SIGNAL HEAD 1-1
7/16" SPAN WIRE-F&I
1/4" SPAN WIRE-F&1
7-4/C #14-F&I
1-2/C #14-F&I
2-3/C #14 (EVP)-F&I
2-3/C #20 (EVP)-F&I

WOOD POLE 5 TO SIGNAL HEAD 4-2
7/16" SPAN WIRE-F&I
1/4" SPAN WIRE-F&1
8-4/C #14-F&I
1-2/C #14-F&I
2-3/C #14 (EVP)-F&I
2-3/C #20 (EVP)-F&I
2-3/C #14 (VIDEO)-F&I
1-3/C #14 (LUM)-F&I

WOOD POLE 6 TO SIGNAL HEAD 2-2
7/16" SPAN WIRE-F&I
1/4" SPAN WIRE-F&1
6-4/C #14-F&I
1-2/C #14-F&I
1-3/C #14 (EVP)-F&I
1-3/C #14 (LUM)-F&I
1-3/C #20 (EVP)-F&I
1-3/C #14 (VIDEO)-F&I

(6) F&I — 50' WOOD POLE-CLASS 2
2-DOWN GUYS, GUY GUARDS, AND SCREW ANCHORS
1-TYPE 10A AT 90°
1-TYPE 10A AT 180°
1-VIDEO CAMERA-WOOD POLE MOUNTED (V4/7)
METAL JUNCTION BOX WITH TERMINAL BLOCKS
2" PVC RISER AND WEATHERHEAD ABOVE JUNCTION BOX WITH:
2-4/C #14
1-2/C #14
2" PVC RISER AND WEATHERHEAD ABOVE SPAN WIRE WITH:
1-3/C #14 (VIDEO)

(5) F&I — 50' WOOD POLE-CLASS 2
2-DOWN GUYS, GUY GUARDS, AND SCREW ANCHORS
15' MAST ARM AND LUMINAIRE (LED) WITH PEC
1-TYPE 10A AT 90°
1-TYPE 10A AT 180°
1-VIDEO CAMERA-LUMINAIRE EXT. MOUNTED (V1/6)
EXTEND INTO HH1
4" PVC RISER AND WEATHERHEAD
15-4/C #14-F&I
2-2/C #14-F&I
4-3/C #14 (EVP)-F&I
4-3/C #20 (EVP)-F&I
3-3/C #14 (VIDEO)-F&I
2-3/C #14 (LUM)-F&I

(A) INPLACE CONTROLLER AND CABINET EQUIPMENT PAD
CONTROLLER CABINET TO HH 1
4" PVC-F&I
15-4/C #14-F&I
4-3/C #14 (EVP)-F&I
2-2/C #14-F&I
4-2/C #20 (EVP)-F&I
3-3/C #14 (VIDEO)-F&I

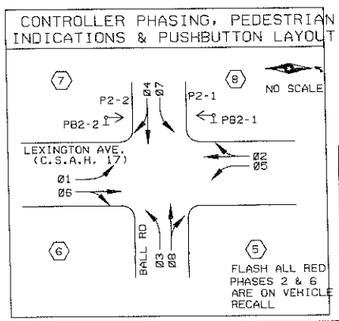
BETWEEN CONTROLLER CABINET AND SERVICE CABINET
2" PVC
3-1/C #6

SERVICE CABINET TO HH 1
2" PVC
2-3/C #14 (LUM)

SERVICE CABINET TO HH 15
2" PVC
3-1/C #6

(B) S.O.P.
INPLACE WOOD POLE
2" PVC RISER AND WEATHERHEAD
3-1/C #6
POLE TO HH 15
2" PVC
3-1/C #6

CONTROLLER PHASING, PEDESTRIAN INDICATIONS & PUSHBUTTON LAYOUT



LED SIGNAL INDICATIONS

FACE	R	Y	G
1-1, 1-2	⇦	⇦	⇦
2-1, 2-2, 2-3	○	○	○
4-1, 4-2	○	○	○
6-1, 6-2	○	○	○
7-1, 7-2	⇦	⇦	⇦

*ALL VEHICLE SIGNAL INDICATIONS SHALL BE 12"

PHASE 2

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Name: Edward F. Terhaar, PE
Date: April 9, 2015 Lic. No. 24441

DRAWN: EFT
DESIGNED: EFT
CHECKED: EFT

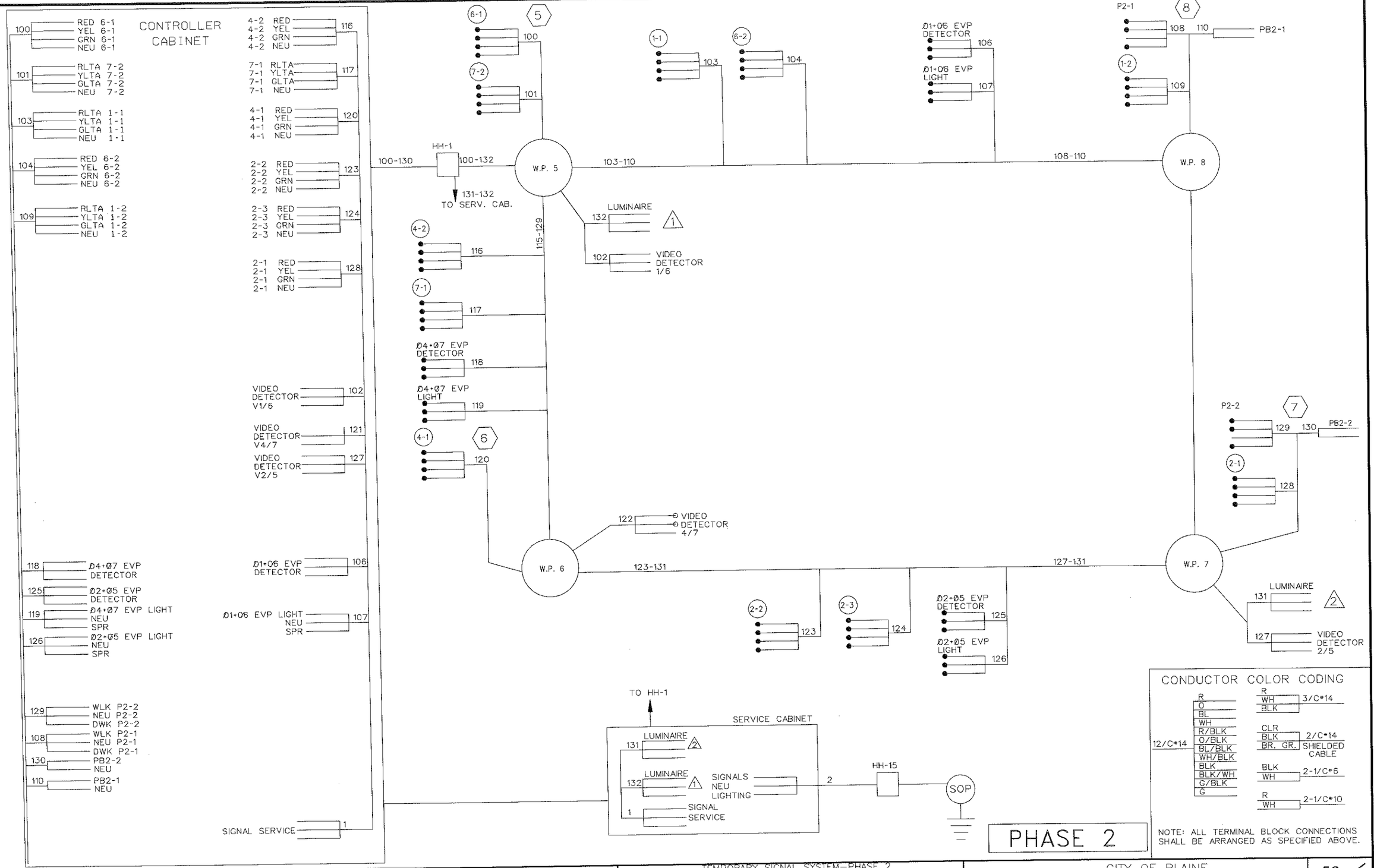
BY	DATE	REVISIONS
EFT	3/31/15	REVISED PER COMMENTS
EFT	4/7/15	RESPONSE TO MNDOT COMMENTS

Wenck
© Wenck Associates, Inc.
Consulting Engineers

TEMPORARY SIGNAL SYSTEM-PHASE 2
INTERSECTION LAYOUT
CSAH 17 (LEXINGTON AVE) AT BALL RD
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CITY OF BLAINE
ANOKA COUNTY, MINNESOTA

58/78



I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Name: Edward F. Terhaar, PE
Date: April 9, 2015 Lic. No. 24441

DRAWN: EFT
DESIGNED: EFT
CHECKED: EFT

BY	DATE	REVISIONS
EFT	3/11/15	REVISED PER COMMENTS
EFT	4/7/15	RESPONSE TO MNDOT COMMENTS

Wenck
© Wenck Associates, Inc.
Consulting Engineers

TEMPORARY SIGNAL SYSTEM–PHASE 2
WIRING DIAGRAM
CSAH 17 (LEXINGTON AVE) AT BALL RD
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CITY OF BLAINE
ANOKA COUNTY, MINNESOTA

59
78

7145

LOOP DETECTOR CHART			DISTANCE FROM STOP LINE
DESIGNATION	SIZE	FUNCTION	
D2-1	1-1.7m × 1.7m	(1)	92m
D2-2	1-1.7m × 1.7m	(1)	92m
D4-1	1-1.7m × 1.7m	(3)	35m
D4-2	1-1.7m × 1.7m	(3)	35m
D4-3	2-1.7m × 1.7m	(1)	0m,4.6m
D4-4	2-1.7m × 1.7m	(1)	0m,4.6m
D5-1	2-1.7m × 1.7m	(1)	6.1m,15.2m
D5-2	2-1.7m × 1.7m	(1)	1.5m,10.7m
D6-1	1-1.7m × 1.7m	(1)	92m
D6-2	1-1.7m × 1.7m	(1)	92m

FUNCTIONS:

(1) - CALL AND EXTEND
(3) - EXTEND ONLY
(7) - IMMEDIATE EXTEND, DELAY CALL

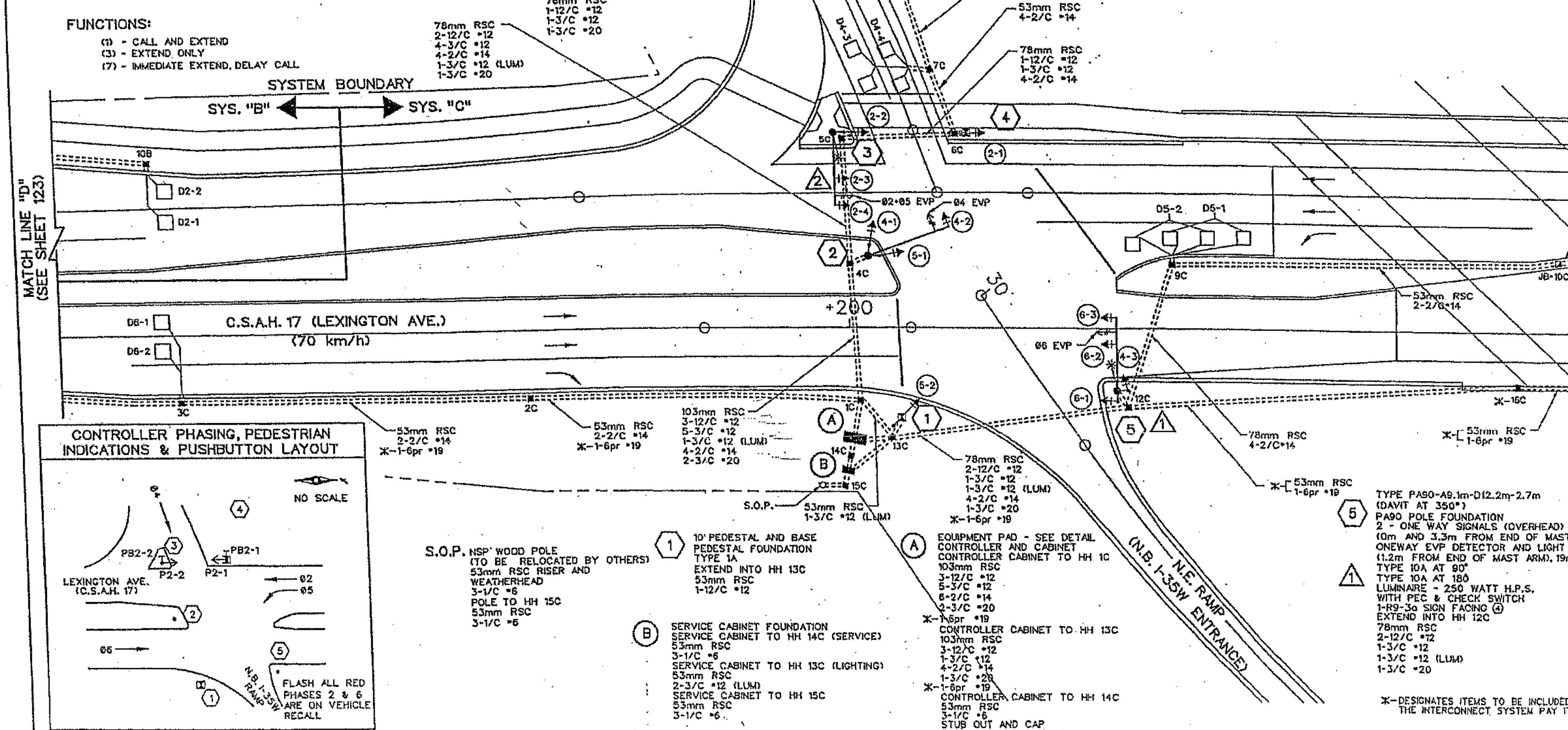
(3) TYPE PA90-A9.1m-D12.2m-2.7m (DAVIT AT 350°) PA90 POLE FOUNDATION 2 - ONE WAY SIGNALS (OVERHEAD) (0m AND 3.3m FROM END OF MAST ARM) ONEWAY EVP DETECTOR AND LIGHT (1.2m FROM END OF MAST ARM), 19mm HUB TYPE 10B AT 270°
(△2) LUMINAIRE - 250 WATT H.P.S. WITH PEC & CHECK SWITCH 1 - PEDESTRIAN PUSH BUTTON & SIGN EXTEND INTO HH 5C 78mm RSC 1-12/C #12 3-3/C #12 1-3/C #12 (LUM) 1-3/C #20

(2) TYPE PA90-A10.7m PA90 POLE FOUNDATION 1 - ONE WAY SIGNALS (OVERHEAD) (0m FROM END OF MAST ARM) ONEWAY EVP DETECTOR AND LIGHT (1.8m FROM END OF MAST ARM), 19mm HUB TYPE 10A AT 0° TYPE 10A AT 270° 1-R9-3a SIGN FACING (3) EXTEND INTO HH 4C 78mm RSC 1-12/C #12 1-3/C #12 1-3/C #20

(4) 10' PEDESTAL AND BASE PEDESTAL FOUNDATION TYPE 1B 1 - PEDESTRIAN PUSH BUTTON & SIGN EXTEND INTO HH 6C 53mm RSC 1-12/C #12 1-3/C #12

NOTES:

1) SEE SPECIAL PROVISIONS FOR COUNTY FURNISHED EQUIPMENT.
2) EACH SIGNAL FACE SHALL HAVE A BACKGROUND SHIELD.
3) SEE SHEET 119 AND SPECIAL PROVISIONS FOR SERVICE CABINET DETAILS.
4) TYPE D SIGNS SHALL BE FURNISHED AND INSTALLED ON MAST ARM POLES 1,2,3 AND 4. SEE SPECIAL PROVISIONS.
5) SEE SPECIAL PROVISIONS FOR HANDHOLE TYPE.
6) SEE SPECIAL PROVISIONS FOR CONTRACTORS RESPONSIBILITY FOR LOCATION OF UTILITIES.
7) ALL PEDESTRIAN INDICATIONS SHALL BE MAN/HAND (SEE SPECIAL PROVISIONS).
8) ALL SIGNAL FACES SHALL BE 300mm - 3 SECTION R-Y-G, EXCEPT (5-1) (5-2) WHICH SHALL BE 300mm - 3 SECTION RLTA, YLTA AND GLTA.
9) ALL VEHICLE SIGNAL INDICATIONS AND PEDESTRIAN INDICATIONS SHALL USE GLASS LENSES, EXCEPT RED INDICATIONS WHICH SHALL USE LED TECHNOLOGY.
10) CONDUIT AND JUNCTION BOXES ON BRIDGE TO BE INCLUDED IN BRIDGE PAY ITEMS.



(1) 10' PEDESTAL AND BASE PEDESTAL FOUNDATION TYPE 1A EXTEND INTO HH 13C 53mm RSC 1-12/C #12

(A) EQUIPMENT PAD - SEE DETAIL CONTROLLER AND CABINET CONTROLLER CABINET TO HH 1C 103mm RSC 3-12/C #12 5-3/C #12 6-2/C #14 2-3/C #20 ✱-1-6pr #19 CONTROLLER CABINET TO HH 13C 103mm RSC 3-12/C #12 1-3/C #12 4-2/C #14 1-3/C #20 ✱-1-6pr #19 CONTROLLER CABINET TO HH 14C 53mm RSC 3-1/C #6 STUB OUT AND CAP 2-78mm RSC TO WEST

(B) SERVICE CABINET FOUNDATION SERVICE CABINET TO HH 14C (SERVICE) 53mm RSC 3-1/C #6 SERVICE CABINET TO HH 13C (LIGHTING) 53mm RSC 2-3/C #12 (LUM) SERVICE CABINET TO HH 15C 53mm RSC 3-1/C #6.

S.O.P. NSP WOOD POLE (TO BE RELOCATED BY OTHERS) 53mm RSC RISER AND WEATHERHEAD 3-1/C #6 POLE TO HH 15C 53mm RSC 3-1/C #6

(5) TYPE PA90-A9.1m-D12.2m-2.7m (DAVIT AT 350°) PA90 POLE FOUNDATION 2 - ONE WAY SIGNALS (OVERHEAD) (0m AND 3.3m FROM END OF MAST A[RM]) ONEWAY EVP DETECTOR AND LIGHT (1.2m FROM END OF MAST ARM), 19mm TYPE 10A AT 90° TYPE 10A AT 180
(△1) LUMINAIRE - 250 WATT H.P.S. WITH PEC & CHECK SWITCH 1-R9-3a SIGN FACING (4) EXTEND INTO HH 12C 78mm RSC 2-12/C #12 1-3/C #12 1-3/C #12 (LUM) 1-3/C #20

✱-DESIGNATES ITEMS TO BE INCLUDED IN THE INTERCONNECT SYSTEM PAY ITEM

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota. George M. Stuempfig

STATE AID PROJECT NO. SAP 02-617-11 | STATE PROJECT NO.
DRAWN BY R.W.SMITH 9-95 | DESIGNED BY G.STUEMPFIG 9-95 | CHECKED BY C.LEIGHT 9-95 | COMM. NO.

SRF CONSULTING GROUP, INC.

ANOKA COUNTY
INTERSECTION LAYOUT
C.S.A.H. 17 RECONSTRUCTION

EXISTING INTERSECTION— FOR INFORMATION ONLY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Name: Edward F. Terhaar, PE
Date: April 9, 2015 Lic. No. 24441

DRAWN: EFT
DESIGNED: EFT
CHECKED: EFT

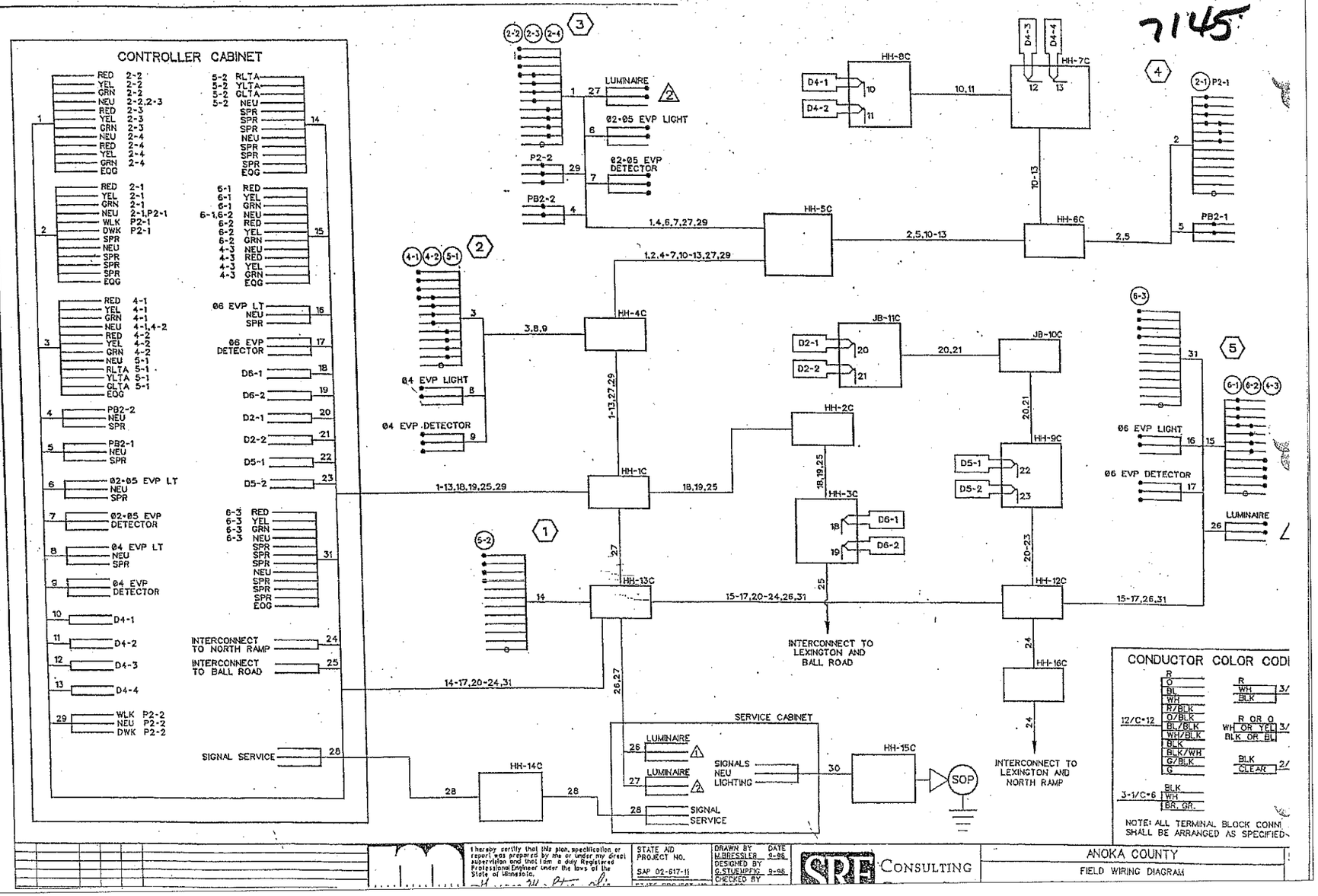
BY	DATE	REVISIONS
EFT	4/7/15	RESPONSE TO MNDOT COMMENTS

Wenck
© Wenck Associates, Inc. Consulting Engineers

EXISTING INTERSECTION LAYOUT
CSAH 17 (LEXINGTON AVE) AT I-35W SOUTH RAMP
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CITY OF BLAINE
ANOKA COUNTY, MINNESOTA

7145



EXISTING INTERSECTION–
FOR INFORMATION ONLY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Name: Edward F. Terhaar, PE
Date: April 9, 2015 Lic. No. 24441

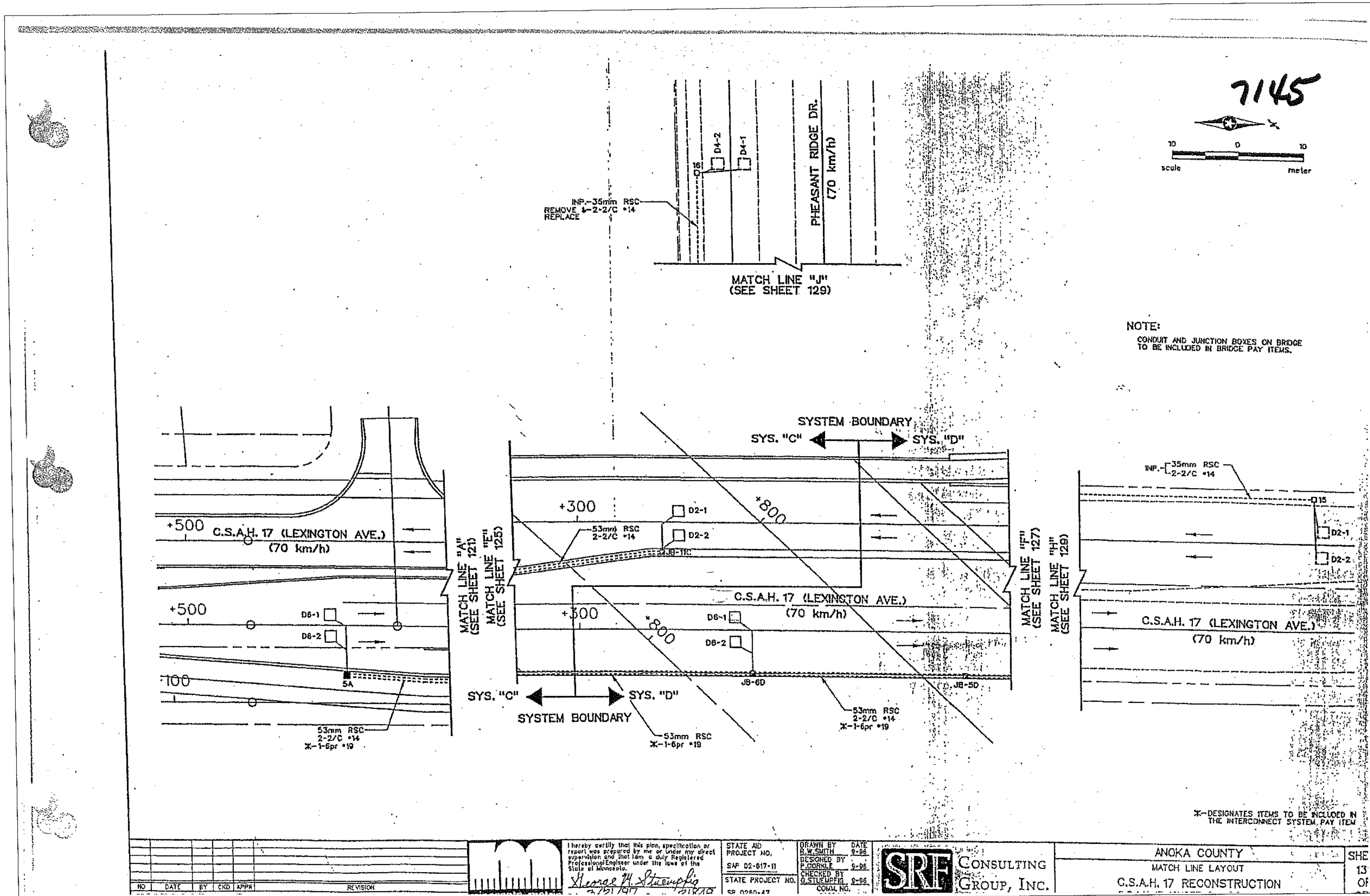
DRAWN: EFT
DESIGNED: EFT
CHECKED: EFT

BY	DATE	REVISIONS
EFT	4/7/15	RESPONSE TO MNDOT COMMENTS

Wenck
© Wenck Associates, Inc.
Consulting Engineers

EXISTING WIRING DIAGRAM
CSAH 17 (LEXINGTON AVE) AT I-35W SOUTH RAMP
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CITY OF BLAINE
ANOKA COUNTY, MINNESOTA



EXISTING INTERSECTION–
FOR INFORMATION ONLY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. Name: Edward F. Terhaar, PE Date: April 9, 2015 Lic. No. 24441	DRAWN: EFT DESIGNED: EFT CHECKED: EFT	BY / DATE / REVISIONS EFT / 4/7/15 / RESPONSE TO MNDOT COMMENTS	Wenck © Wenck Associates, Inc. Consulting Engineers	EXISTING LAYOUT BETWEEN CSAH 17 (LEXINGTON AVE) AND I-35W SOUTH RAMP STATE PROJECT NO. 0280-75 (TH 35W) STATE AID PROJECT NO. 106-020-033	CITY OF BLAINE ANOKA COUNTY, MINNESOTA

7149

LOOP DETECTOR CHART			DISTANCE FROM STOP LINE
DESIGNATION	SIZE	FUNCTION	
D1-1	2 - 6' x 6'	(1)	2', 32'
D1-2	2 - 6' x 6'	(1)	-13', 17'
D2-1	1 - 6' x 6'	(1)	300'
D2-2	1 - 6' x 6'	(1)	300'
D4-1	**1 - 6' x 6'**	**(3)**	**120'**
D4-2	**2 - 6' x 6'**	**(1)**	**0', 9'**
D4-3	**1 - 6' x 6'**	**(7)**	**7'**
D4-4	**1 - 6' x 10'**	**(7)**	**-2'**
D5-1	2 - 6' x 6'	(1)	4.5', 34'
D5-2	2 - 6' x 6'	(1)	-11', 19'
D6-1	1 - 6' x 6'	(1)	300'
D6-2	1 - 6' x 6'	(1)	300'
D8-1	1 - 6' x 6'	(3)	180'
D8-2	3 - 6' x 6'	(7)	-18', -3', 12'
D8-3	1 - 6' x 6'	(7)	-25'

FUNCTIONS:

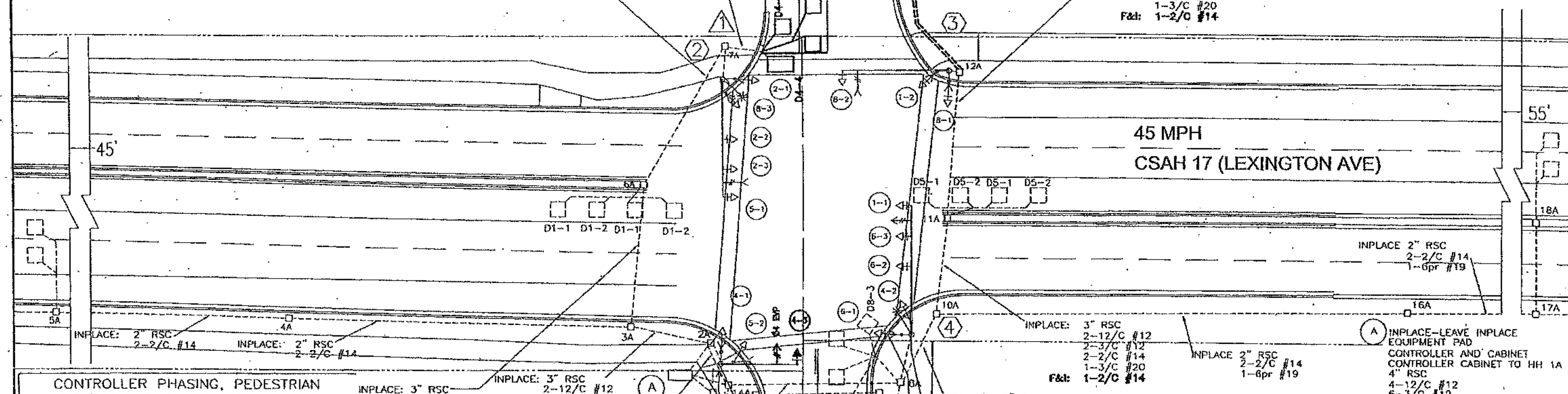
(1) - CALL AND EXTEND
(3) - EXTEND ONLY
(7) - IMMEDIATE EXTEND, DELAY CALL

(2) INPLACE-LEAVE INPLACE
TYPE PA100-A50-D40-9 (DAVIT AT 350')
PA100 POLE FOUNDATION
3 - ONE WAY SIGNALS (OVERHEAD)
(0', 11' AND 23' FROM END OF MAST ARM)
(1) ONEWAY EVP DETECTOR AND LIGHT
(6' FROM END OF MAST ARM), 3/4" HUB
TYPE 10B AT 0°
TYPE 10B AT 270°
LUMINAIRE - 250 WATT H.P.S. W/PEC & CHECK SWITCH
2 - PEDESTRIAN PUSH BUTTON & SIGN
3" RSC INTO HH 7A
2-12/C #12
4-3/C #12
1-3/C #12 (LUM)
1-3/C #20

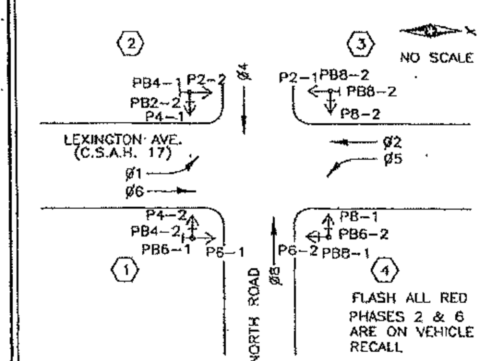
NOTES:

1. THIS PROJECT SHALL CONSIST OF INSTALLING A 30' MAST ARM ON EXISTING POLE 1. F&I VEHICLE HEAD 4-3, F&I LOOPS D4-1, D4-2, D4-3, AND D4-4, AND F&I EVP EQUIPMENT ON POLE 1. THE REMAINDER OF THE SIGNAL SYSTEM SHALL NOT BE MODIFIED.
2. VEHICLE HEAD 4-3 SHALL BE A 12" 3-SECTION R-Y-G WITH LED INDICATIONS.
3. SEE SPECIAL PROVISIONS FOR COUNTY FURNISHED EQUIPMENT.
4. EACH SIGNAL FACE SHALL HAVE A BACKGROUND SHIELD.
5. A 3/4" HALF COUPLING, 3/4" PIPE NIPPLE AND CONDUIT OUTLET BODY FOR EMERGENCY VEHICLE PREEMPTION EQUIPMENT SHALL BE MOUNTED 6' FROM THE END OF NEW MASTARM 1. A 3/C #20 SHALL BE WIRED DIRECT TO THE CONDUIT OUTLET BODY AND 2-1/C #14 SHALL BE WIRED FROM THE TERMINAL BLOCK IN THE SIGNAL BASE TO THE CONDUIT OUTLET BODY.
6. THE EXACT LOCATION OF HANDHOLES AND LOOP DETECTORS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
7. SEE SPECIAL PROVISIONS FOR HANDHOLE TYPE.
8. SEE SPECIAL PROVISIONS FOR CONTRACTOR RESPONSIBILITY FOR LOCATION OF UTILITIES.
9. NEW VEHICLE HEAD 4-3 SHALL HAVE RED LED AND INCANDESCENT YELLOW AND GREEN INDICATIONS.

(3) INPLACE-LEAVE INPLACE
TYPE PA90-A30
PA100 POLE FOUNDATION
1 - ONE WAY SIGNALS (OVERHEAD)
(0' FROM END OF MAST ARM)
ONEWAY EVP DETECTOR AND LIGHT
(6' FROM END OF MAST ARM), 3/4" HUB
TYPE 10B AT 0°
TYPE 10B AT 270°
2 - PEDESTRIAN PUSH BUTTON & SIGN
3" RSC INTO HH 12A
2-12/C #12
2-3/C #12
1-3/C #20



CONTROLLER PHASING, PEDESTRIAN INDICATIONS & PUSHBUTTON LAYOUT



(1) INPLACE-LEAVE INPLACE
TYPE PA90-A0
(0' PERPENDICULAR TO NORTH RD.)
PA90 POLE FOUNDATION
F&I: 30' MAST ARM
F&I: 1-ONE WAY SIGNAL (OVERHEAD)
(0' FROM END OF MAST ARM)
F&I: ONE WAY EVP DETECTOR AND LIGHT
(6' FROM END OF MAST ARM), 3/4" HUB
TYPE 10B AT 0'
TYPE 10B AT 270'
2 - PEDESTRIAN PUSH BUTTONS & SIGNS
3" RSC INTO HH 2A
2-12/C #12
2-3/C #12
1-3/C #20
1-NYLON ROPE

INPLACE: 2" RSC
1-3/C #12 (LUM)

INPLACE: 4" RSC
4-12/C #12
6-3/C #12
1-3/C #12 (LUM)
6-2/C #14
2-3/C #20
1-6pr #19
F&I: 1-2/C #14

INPLACE: 3" RSC
3-1/C #4

INPLACE 1½" RSC
1-2/C #14

S.O.P. NSP WOOD POLE (INP.)
2" RISER AND WEATHERHEAD
3-1/C #6
POLE TO HH 15A
2" RSC
3-1/C #6

(4) INPLACE-LEAVE INPLACE
TYPE PA100-A45-D40-9 (DAVIT AT 350')
PA100 POLE FOUNDATION
3 - ONE WAY SIGNALS (OVERHEAD)
(0', 12' AND 24' FROM END OF MAST ARM)
(2) ONEWAY EVP DETECTOR AND LIGHT
(6' FROM END OF MAST ARM), 3/4" HUB
TYPE 10B AT 0°
TYPE 10B AT 270°
LUMINAIRE - 250 WATT H.P.S. W/PEC & CHECK SWITCH
2 - PEDESTRIAN PUSH BUTTONS & SIGNS
3" RSC INTO HH 8A
2-12/C #12
4-3/C #12
1-3/C #12 (LUM)
1-3/C #20

(A) INPLACE-LEAVE INPLACE
EQUIPMENT PAD
CONTROLLER AND CABINET
CONTROLLER CABINET TO HH 1A
4" RSC
4-12/C #12
6-3/C #12
6-2/C #14
2-3/C #20
1-pr #19
F&I: 1-2/C #14
CONTROLLER CABINET TO HH 2A
4" RSC
4-12/C #12
6-3/C #12
5-2/C #14
2-3/C #20
1-NYLON ROPE
F&I: 3-2/C #14
CONTROLLER CABINET TO HH 13A
2" RSC
3-1/C #6
STUB 2-3" RSC AND CAP

(B) INPLACE-LEAVE INPLACE
SERVICE CABINET WITH FOUNDATION
SERVICE CABINET TO HH 14A (SERVICE)
2" RSC
3-1/C #6
SERVICE CABINET TO HH 1A (LIGHTING)
2" RSC
2-3/C #12 (LUM)
SERVICE CABINET TO HH 13A (SERVICE)
2" RSC
3-1/C #6

MILLS FLEET FARM
MILLS PROPERTIES, INC.
BLAINE, MINNESOTA
CSAH 17/NORTH ROAD INTERSECTION LAYOUT
SHEET 3 of 10

EXISTING INTERSECTION- FOR INFORMATION ONLY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Name: Edward F. Terhaar, PE
Date: April 9, 2015 Lic. No. 24441

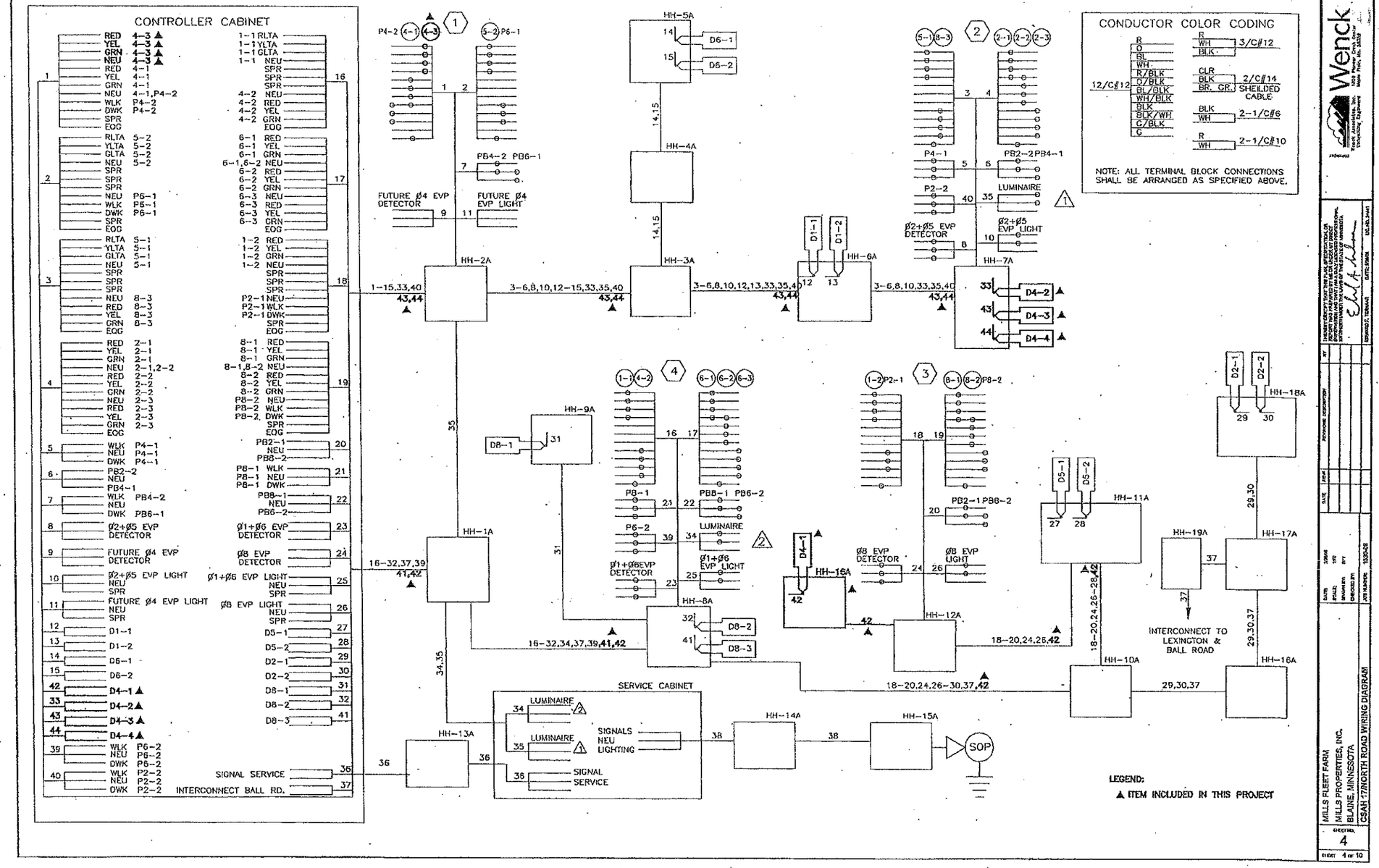
DRAWN: EFT
DESIGNED: EFT
CHECKED: EFT

BY	DATE	REVISIONS
EFT	4/7/15	RESPONSE TO MNDOT COMMENTS

Wenck
© Wenck Associates, Inc. Consulting Engineers

EXISTING INTERSECTION LAYOUT
CSAH 17 (LEXINGTON AVE) AT BALL ROAD
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CITY OF BLAINE
ANOKA COUNTY, MINNESOTA



EXISTING INTERSECTION–
FOR INFORMATION ONLY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Name: Edward F. Terhaar, PE
Date: April 9, 2015 Lic. No. 24441

DRAWN: EFT
DESIGNED: EFT
CHECKED: EFT

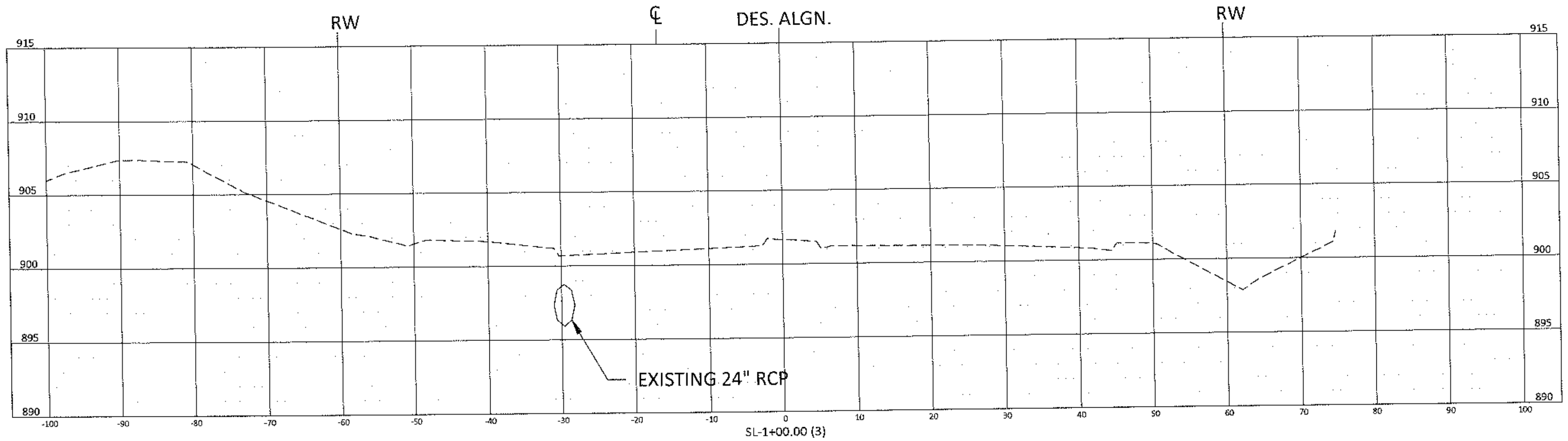
BY	DATE	REVISIONS
EFT	4/7/15	RESPONSE TO MNDOT COMMENTS

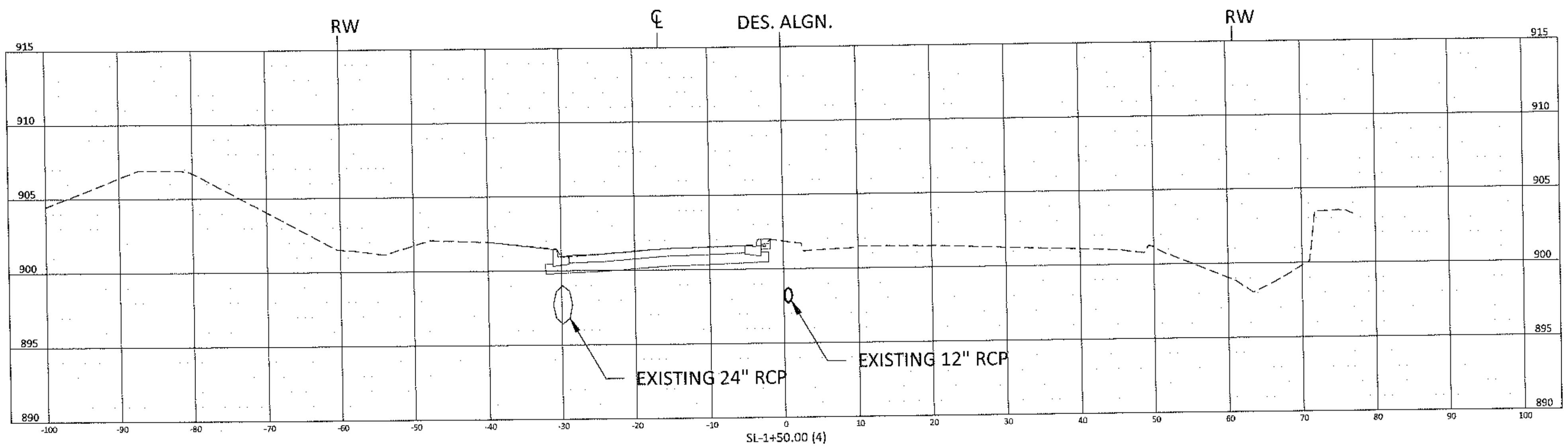
Wenck
© Wenck Associates, Inc.
Consulting Engineers

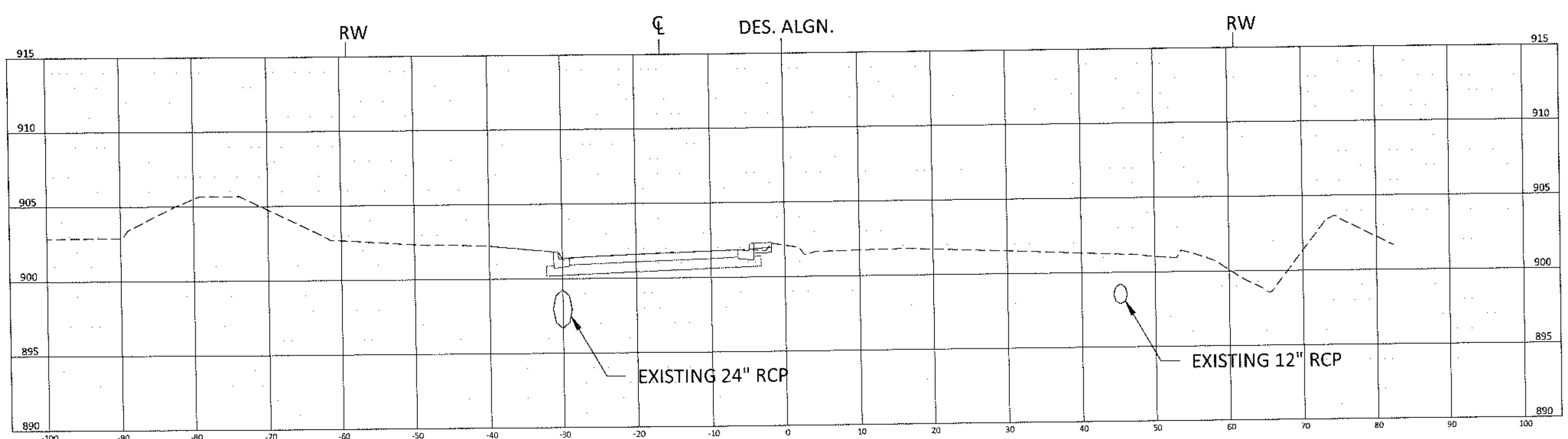
EXISTING WIRING DIAGRAM
CSAH 17 (LEXINGTON AVE) AT BALL ROAD
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

CITY OF BLAINE
ANOKA COUNTY, MINNESOTA

LEXINGTON AVE







GENERAL CROSS SECTION NOTES:

- DITCH GRADES AND TOP OF DITCH BLOCK ELEVATIONS ARE TO TOP OF TOPSOIL (TTS).
- UTILITY ELEVATIONS AND LOCATIONS ARE APPROXIMATE.
- SOME UTILITIES MAY HAVE BEEN REMOVED OR ABANDONED. SOME NEW UTILITIES MAY HAVE BEEN RECENTLY CONSTRUCTED AND MAY NOT BE SHOWN.
- FOR ADDITIONAL SLOPE OR DITCH DETAILS, SEE TYPICAL SECTIONS.

LEXINGTON AVE STA. 1+00 TO 2+00

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA
VERT SCALE: 1"=10'
HORIZ SCALE: 1"=20'

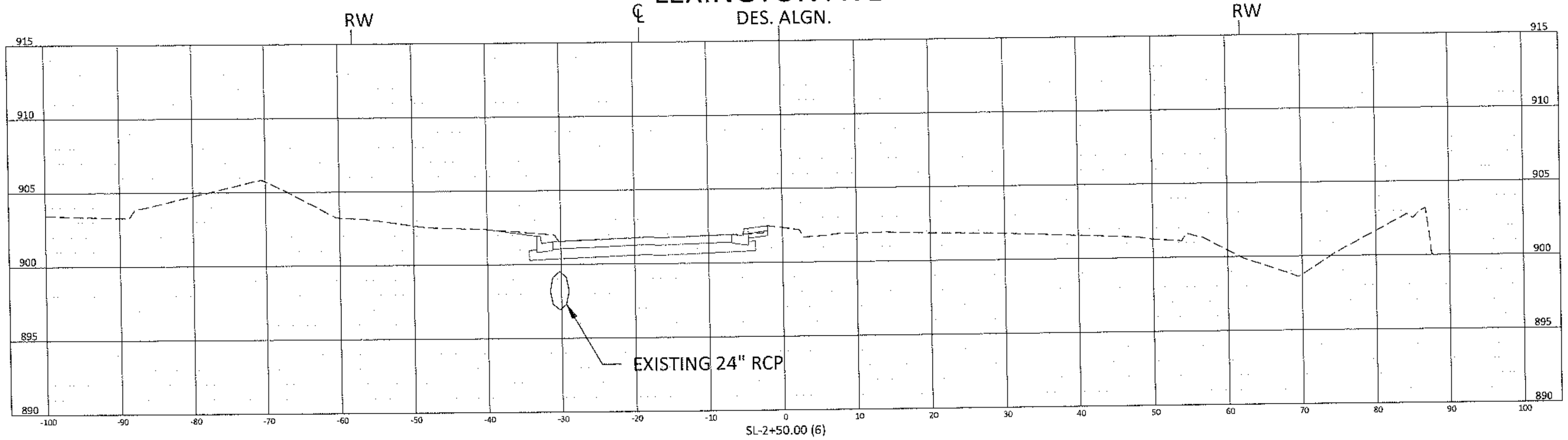
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

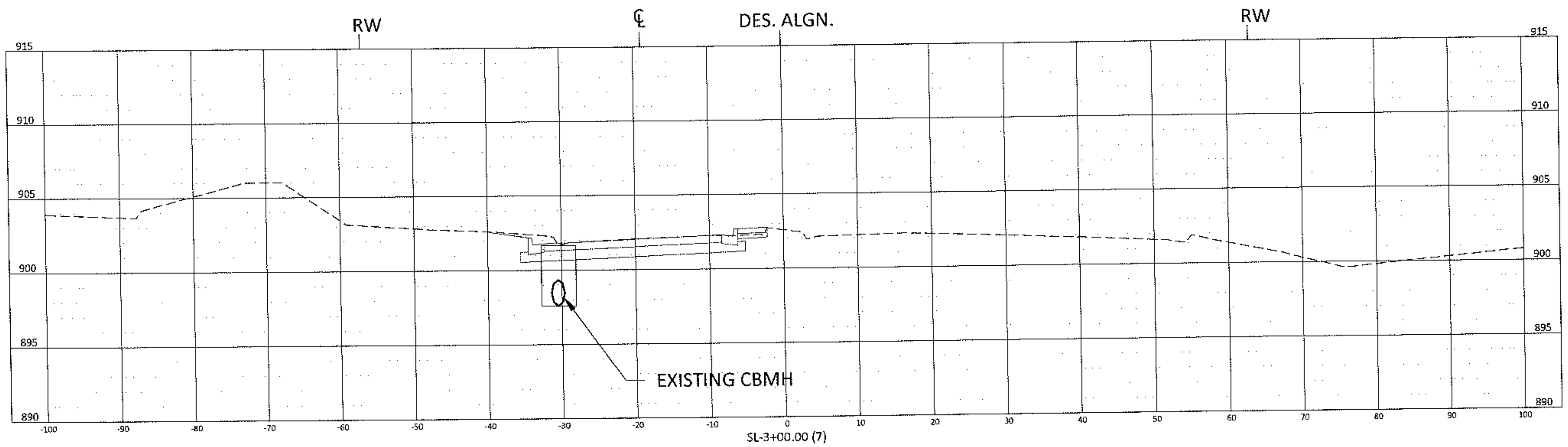
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

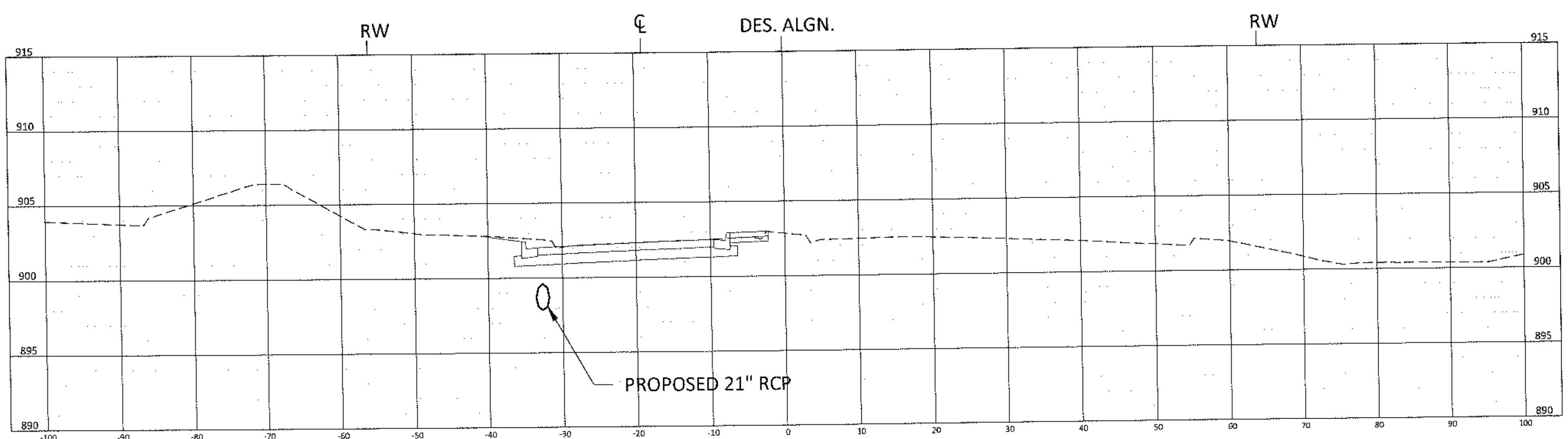
LEXINGTON AVENUE CROSS SECTIONS

Apr 09, 2015 - 1:08pm - User:577 L:\WAL-MART\WA128568\01Bell Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-35-XSEC.dwg

LEXINGTON AVE







LEXINGTON AVE. STA. 2+50 TO 3+50

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA
VERT SCALE: 1"=10'
HORIZ SCALE: 1"=20'

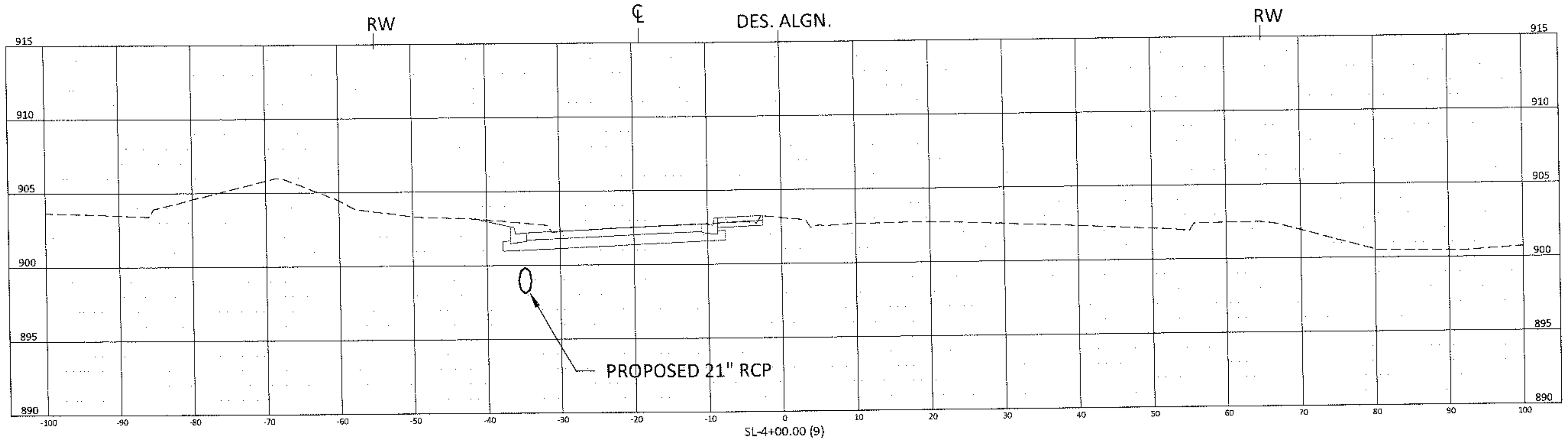
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

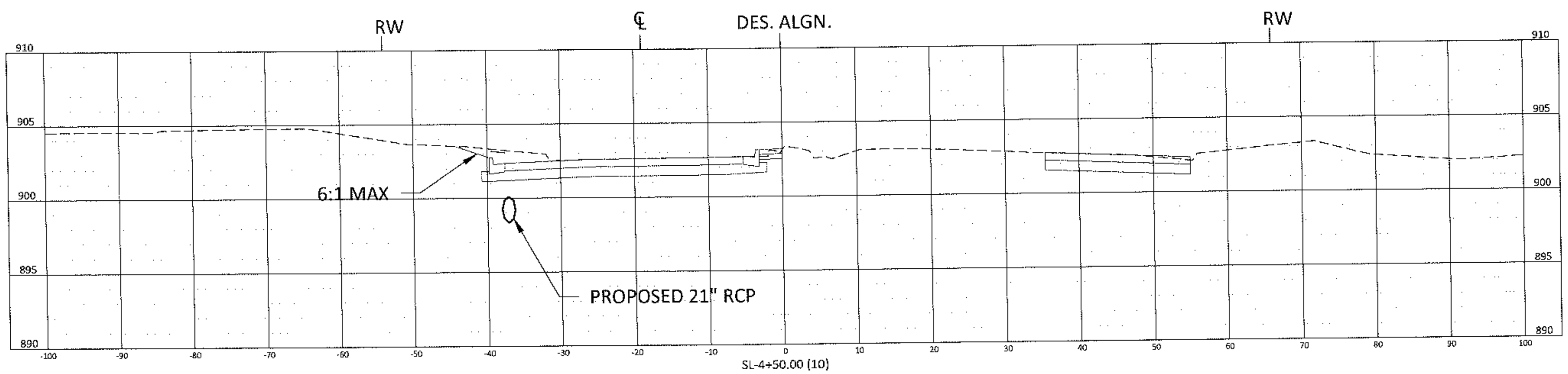
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

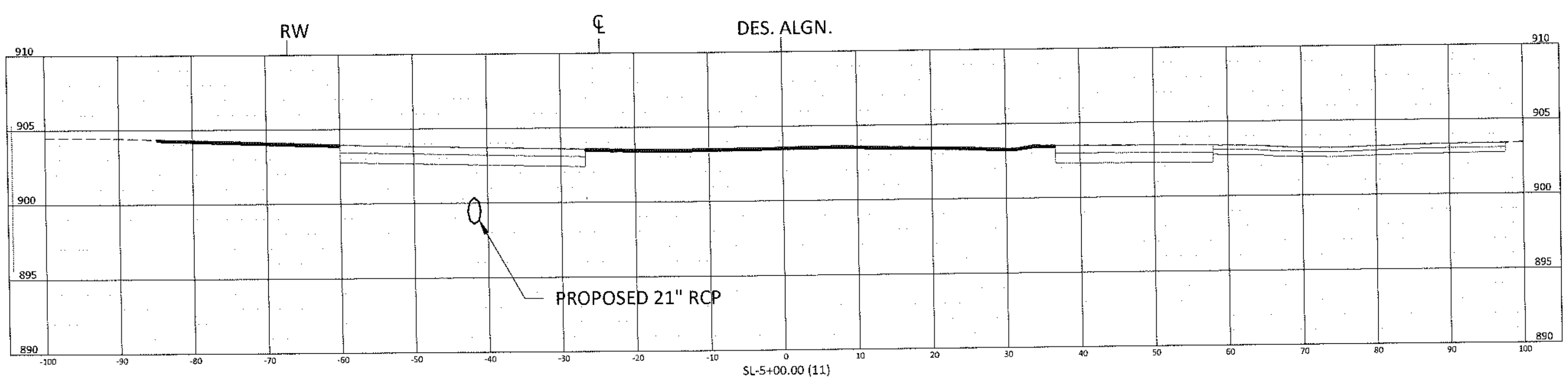
LEXINGTON AVENUE CROSS SECTIONS

Apr 09, 2015 - 1:08pm - User:577 L:\WAL-MART\WAL18568\05Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-35-XSEC.dwg

LEXINGTON AVE.







LEXINGTON AVE. STA. 4+00 TO 5+00

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA
VERT SCALE: 1"=10'
HORIZ SCALE: 1"=20'

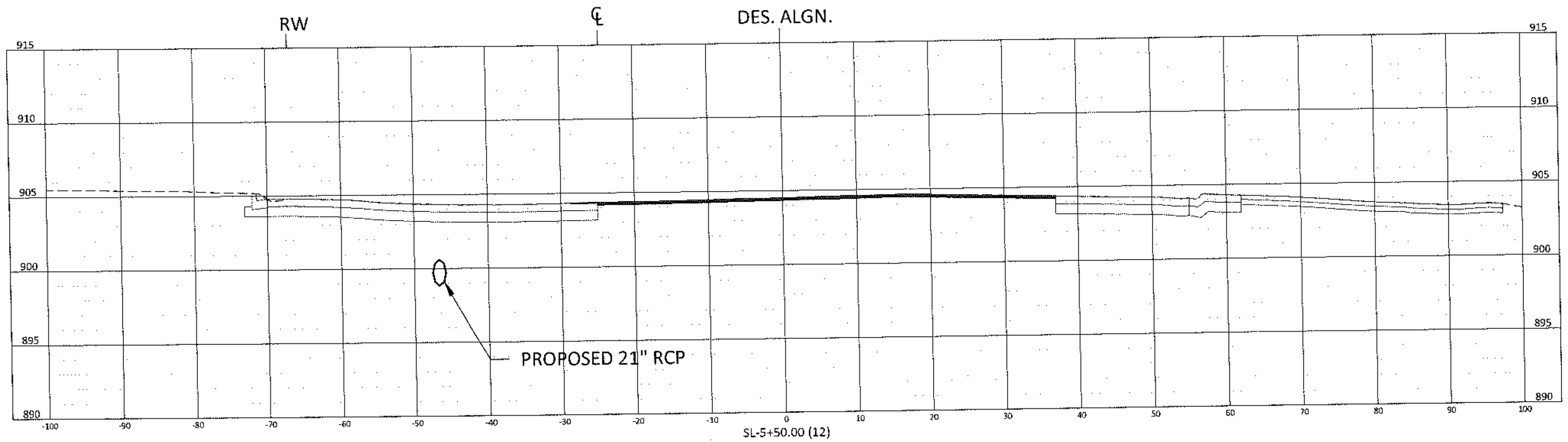
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

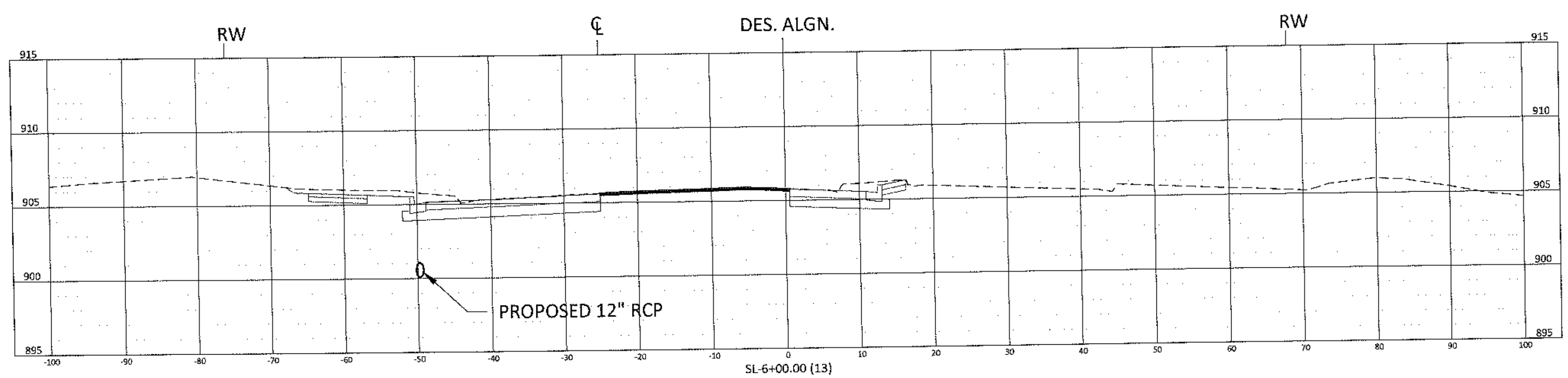
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

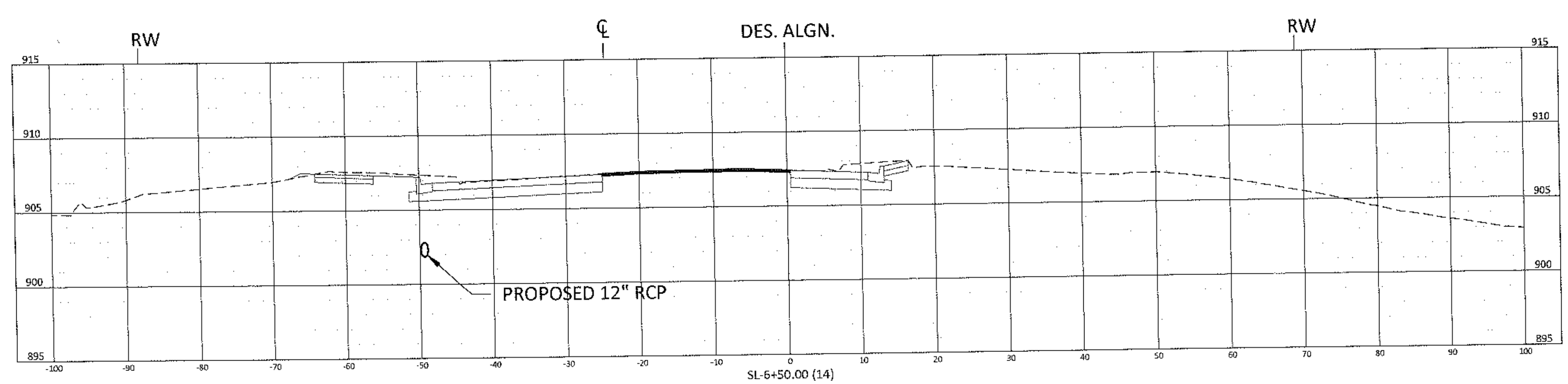
LEXINGTON AVENUE CROSS SECTIONS

Apr 09, 2015 - 1:08pm - User:577 L:\WAL-MART\WAL18568\010 Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-35-XSEC.dwg

LEXINGTON AVE.







LEXINGTON AVE. STA. 5+50 TO 6+50

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

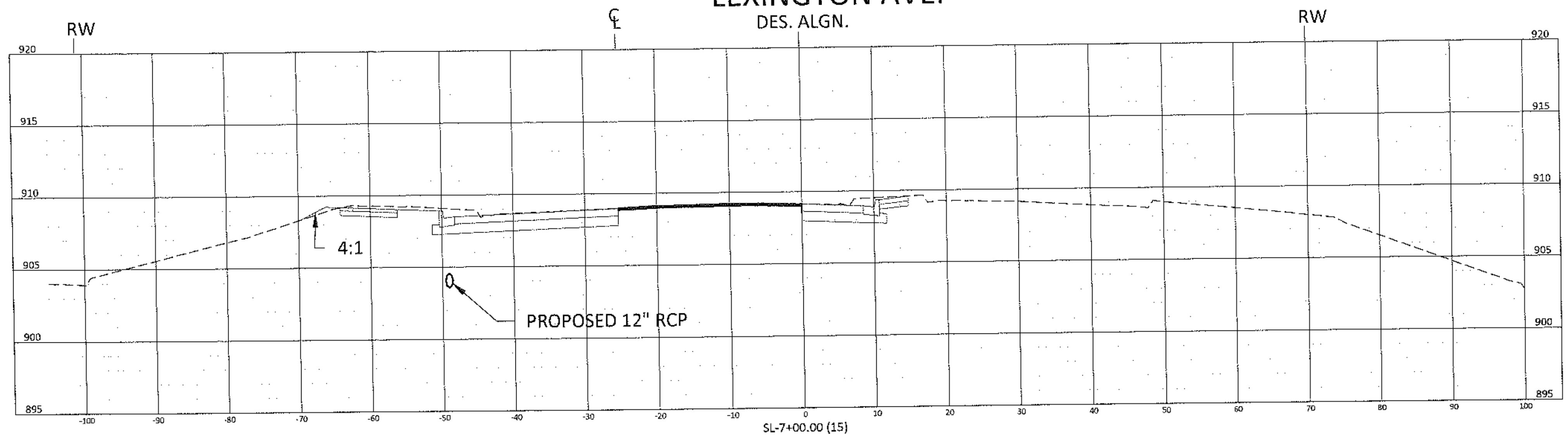
Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA
VERT SCALE: 1"=10'
HORIZ SCALE: 1"=20'

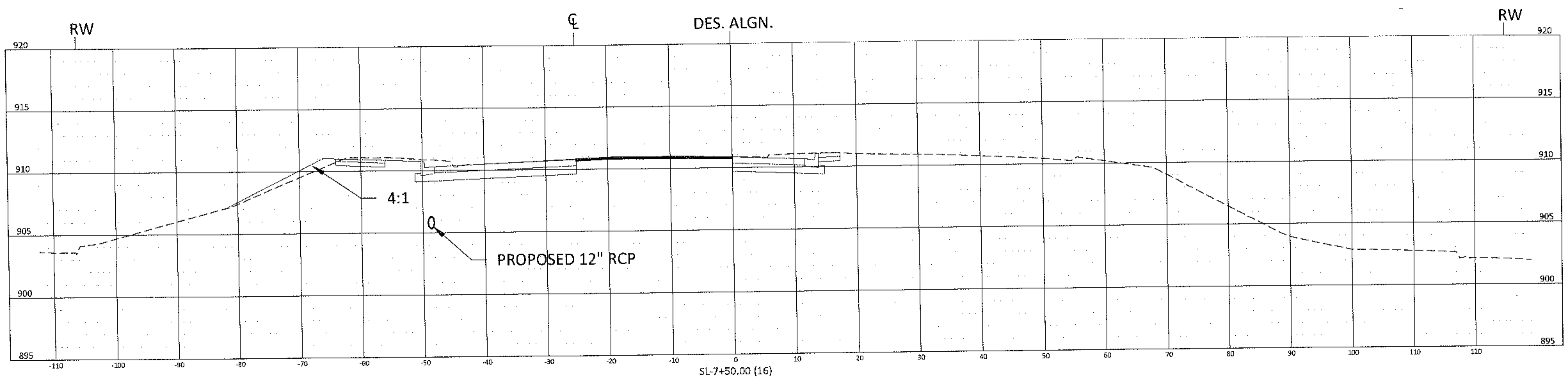
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

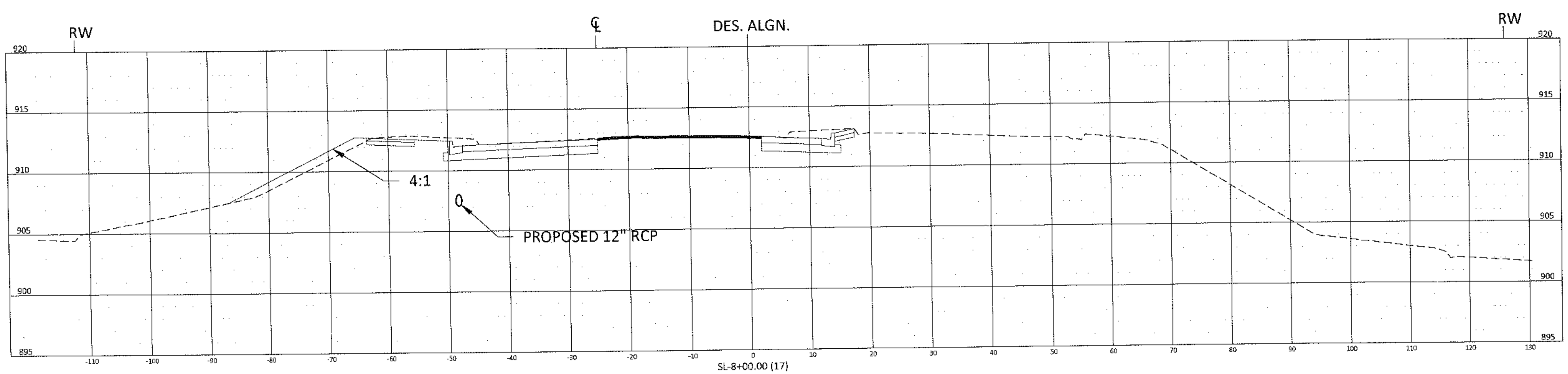
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

LEXINGTON AVENUE CROSS SECTIONS

LEXINGTON AVE.







LEXINGTON AVE. STA. 7+00 TO 8+00

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
C	01/12/15	JEB	COUNTY COMMENTS - DATED 11/21/14
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA
VERT SCALE: 1"=10'
HORIZ SCALE: 1"=20'

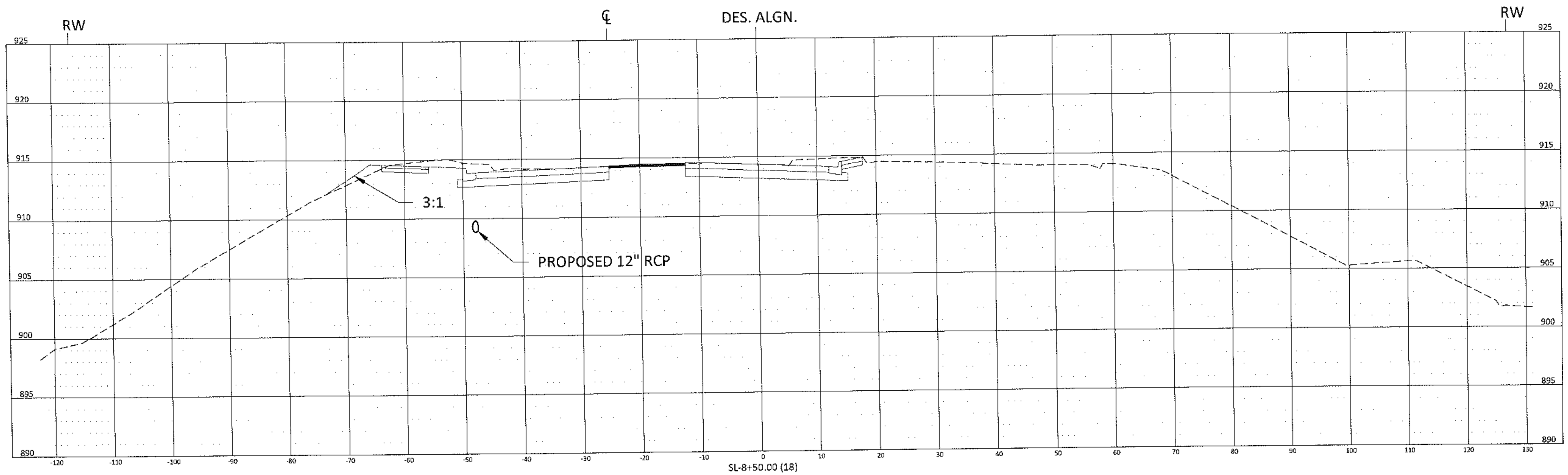
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

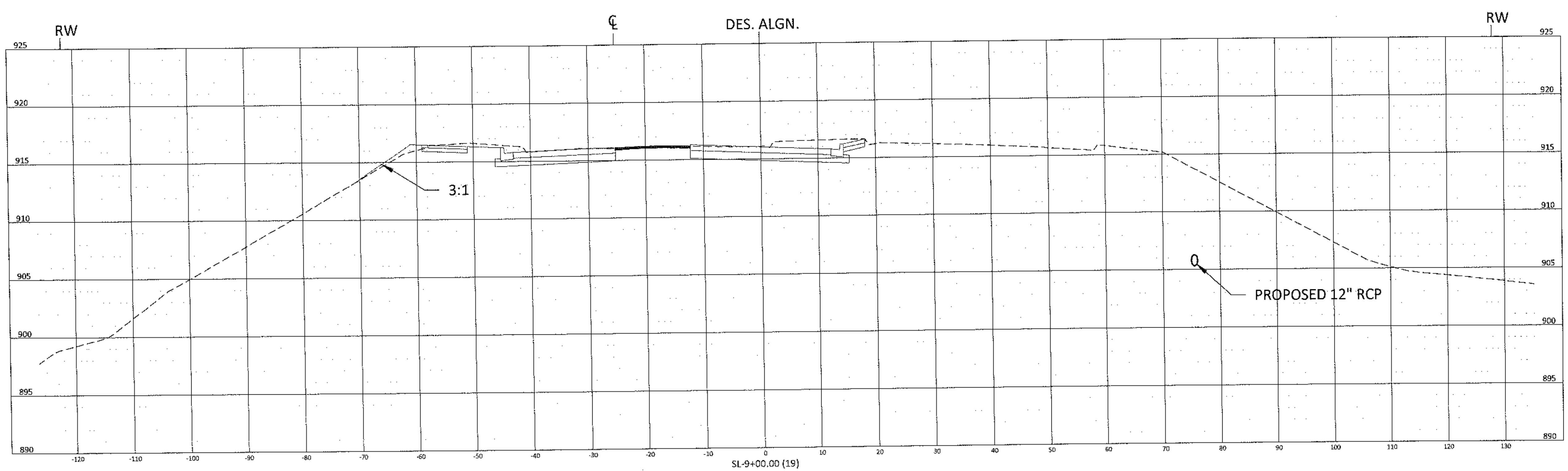
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

LEXINGTON AVENUE CROSS SECTIONS

Apr 09, 2015 - 1:06pm - User:577 L:\WAL-MART\WAL18568\03Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-35-XSEC.dwg

LEXINGTON AVE.





LEXINGTON AVE. STA. 8+50 TO 9+00

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
C	01/12/15	JEB	COUNTY COMMENTS - DATED 11/21/14
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA
VERT SCALE: 1"=10'
HORIZ SCALE: 1"=20'

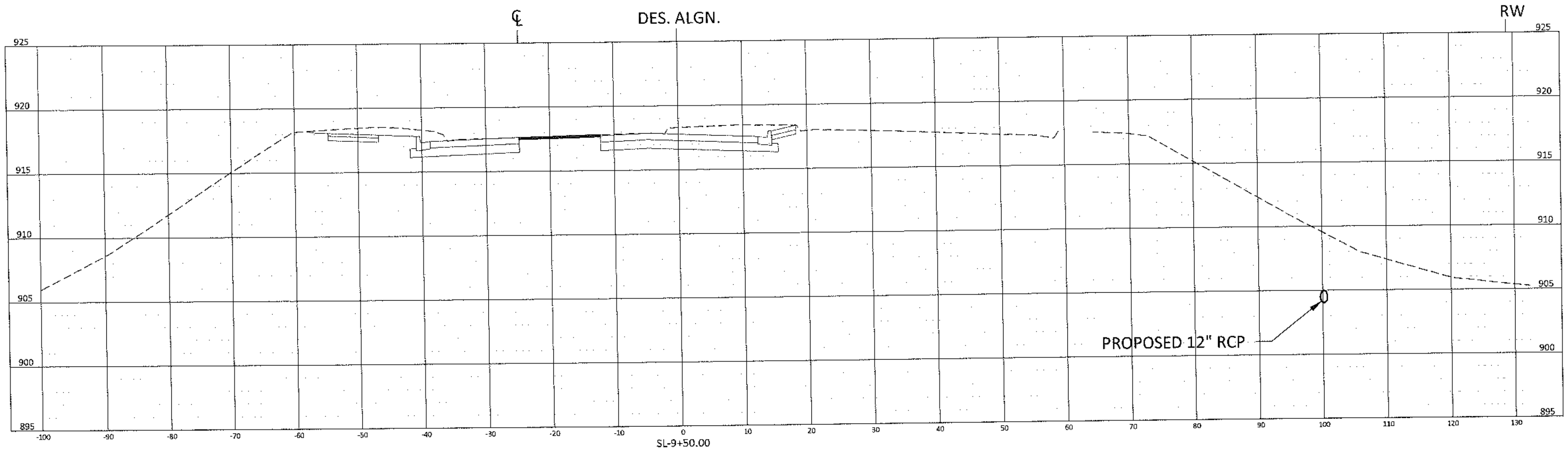
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

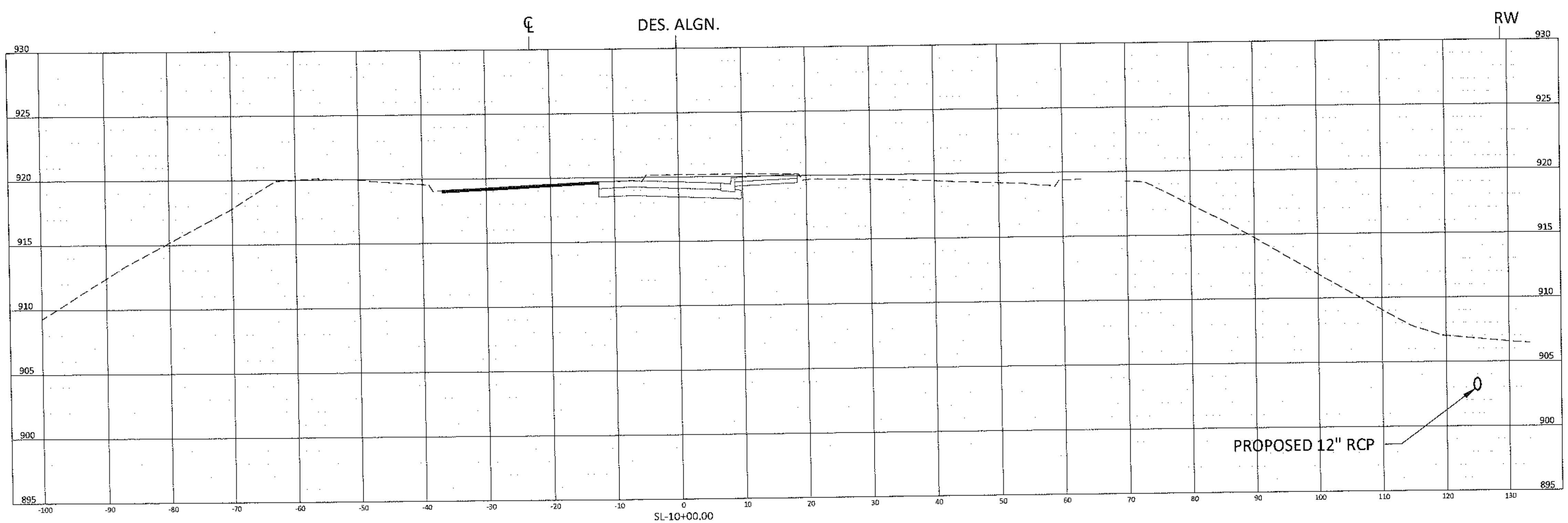
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

LEXINGTON AVENUE CROSS SECTIONS

Apr 09, 2015 - 1:08pm - User:577 L:\WAL-MART\WAL18568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-35-XSEC.dwg

LEXINGTON AVE.





LEXINGTON AVE. STA. 9+50 TO 10+00

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA
VERT SCALE: 1"=10'
HORIZ SCALE: 1"=20'

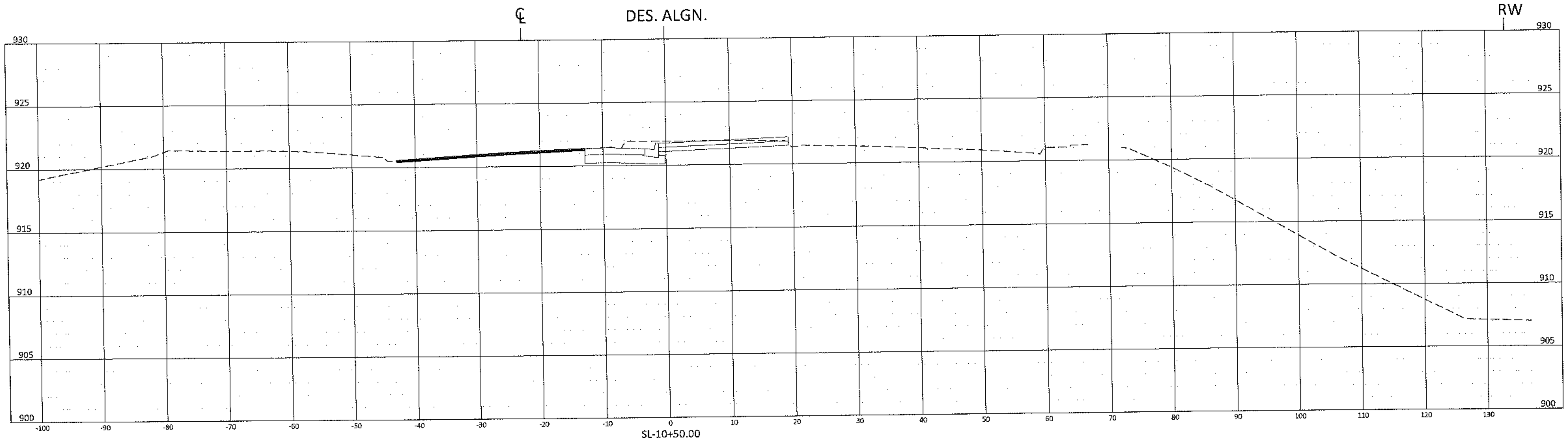
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

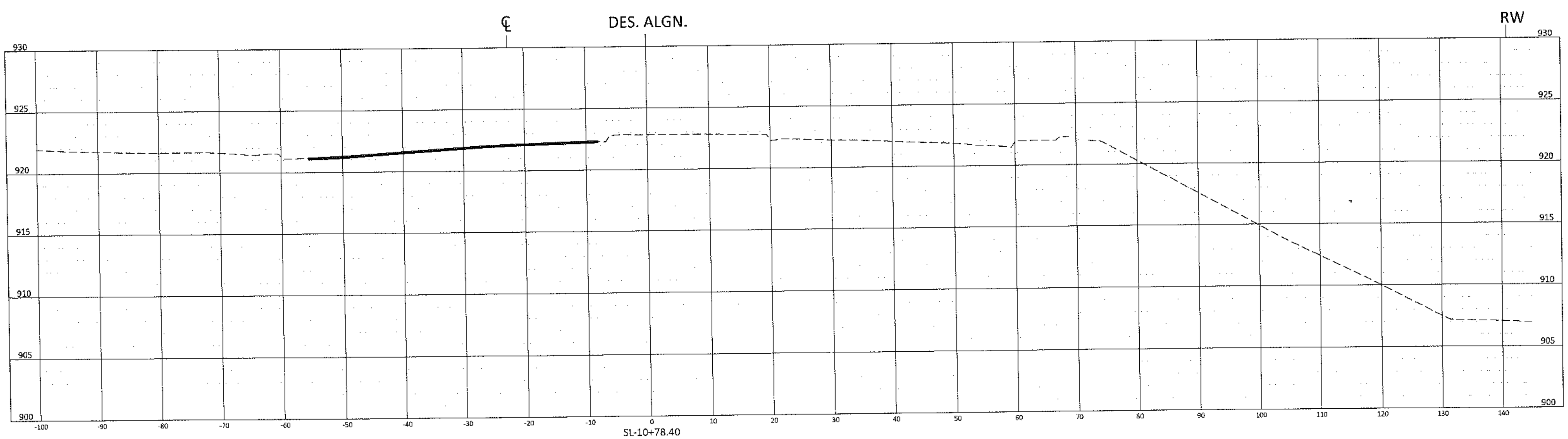
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

LEXINGTON AVENUE CROSS SECTIONS

Apr 09, 2015 - 1:08pm - User:577 L:\WAL-MART\WAL18566\019a Road Improvements\dwg\Civil\Final\Lexington Ramp\18566-35-XSEC.dwg

LEXINGTON AVE.





LEXINGTON AVE. STA. 10+50 TO 10+78.40

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA
VERT SCALE: 1"=10'
HORIZ SCALE: 1"=20'

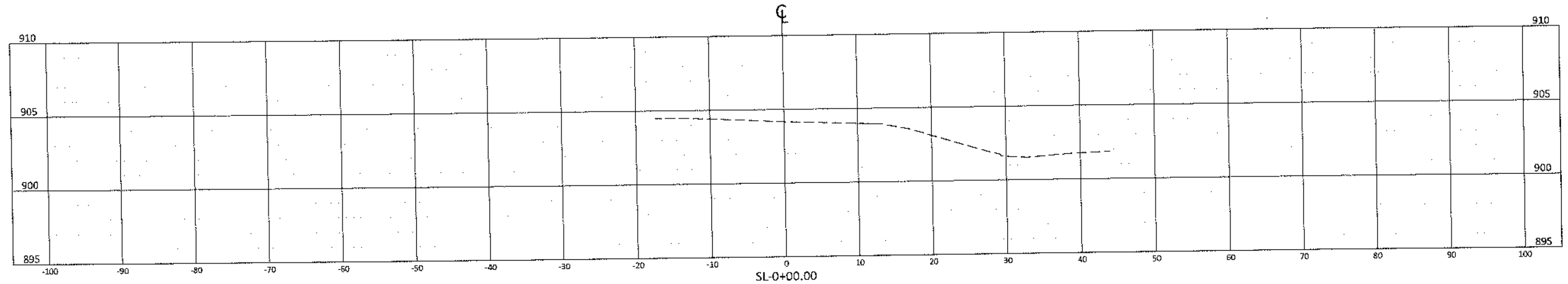
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

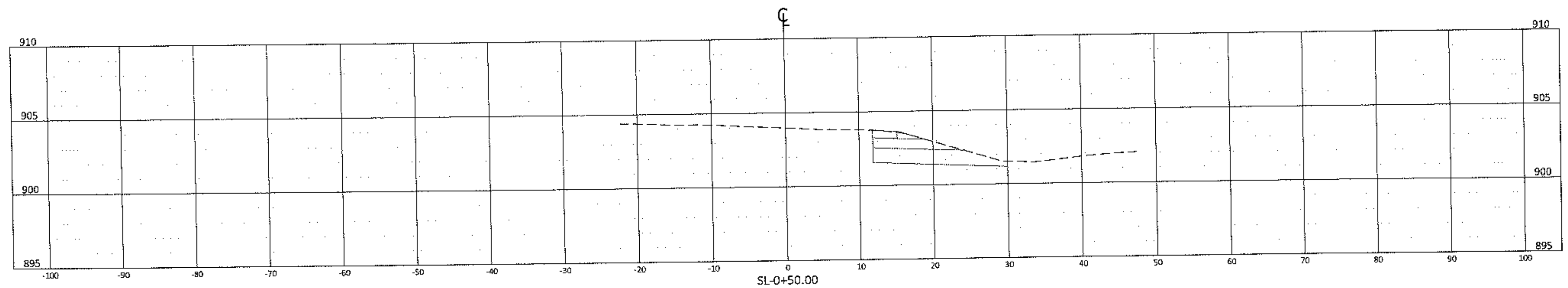
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

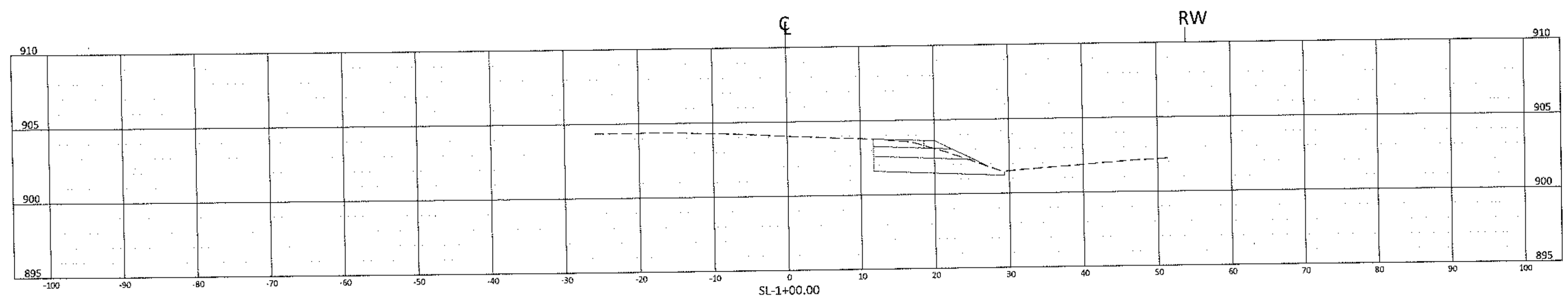
LEXINGTON AVENUE CROSS SECTIONS

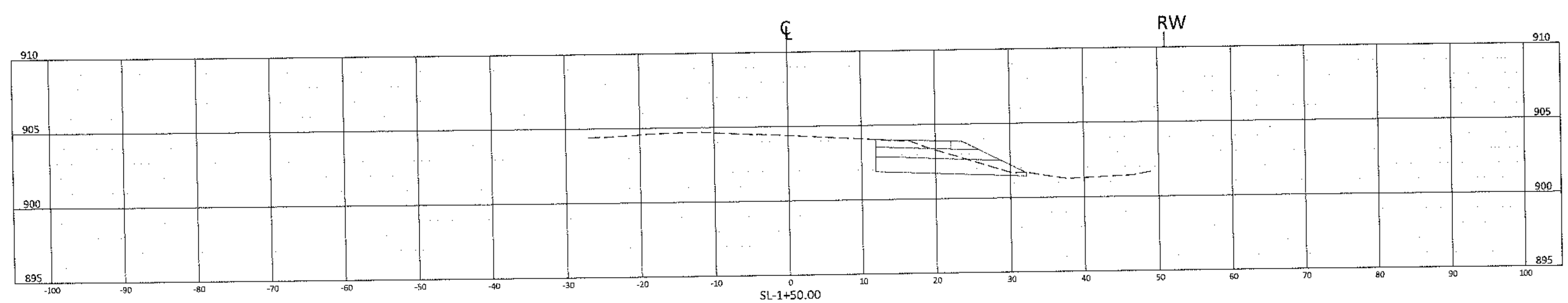
Apr 09, 2015 - 1:08pm - User:577 L:\WAL-MART\WAL18568\01829 Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-35-XSEC.dwg

TH 35W OFF-RAMP









TH 35W OFF-RAMP STA. 0+00 TO 1+50

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA
VERT SCALE: 1"=10'
HORIZ SCALE: 1"=20'

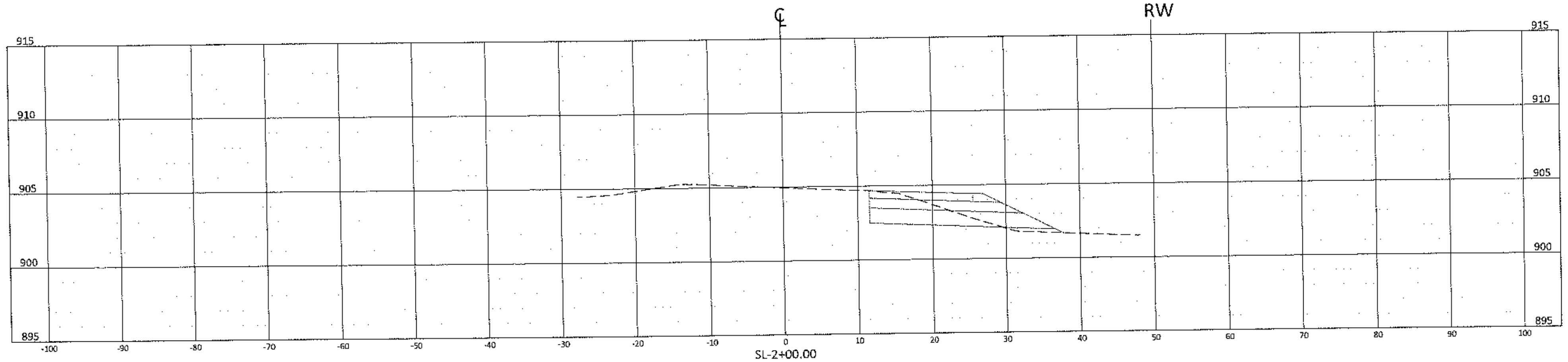
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

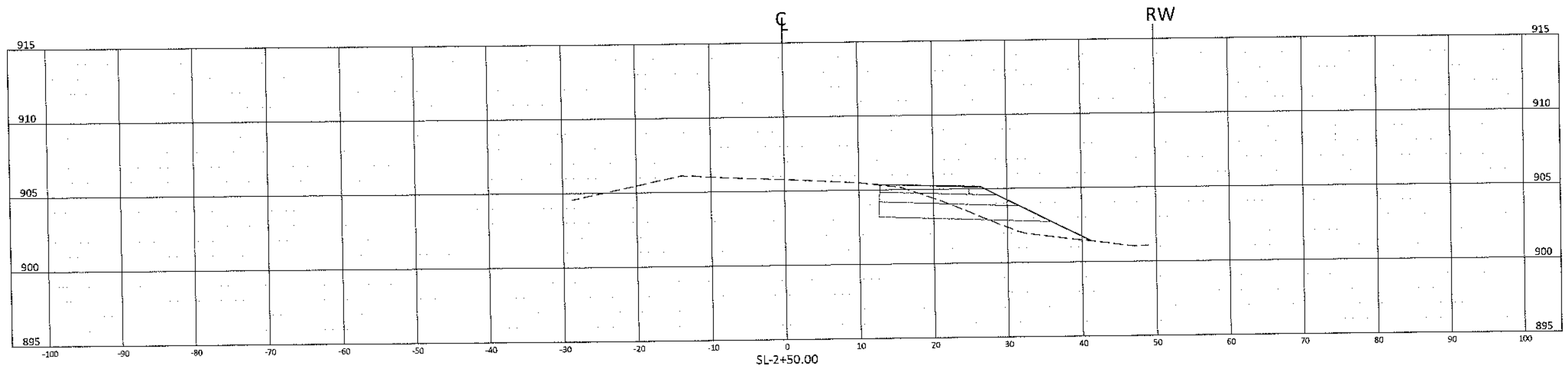
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

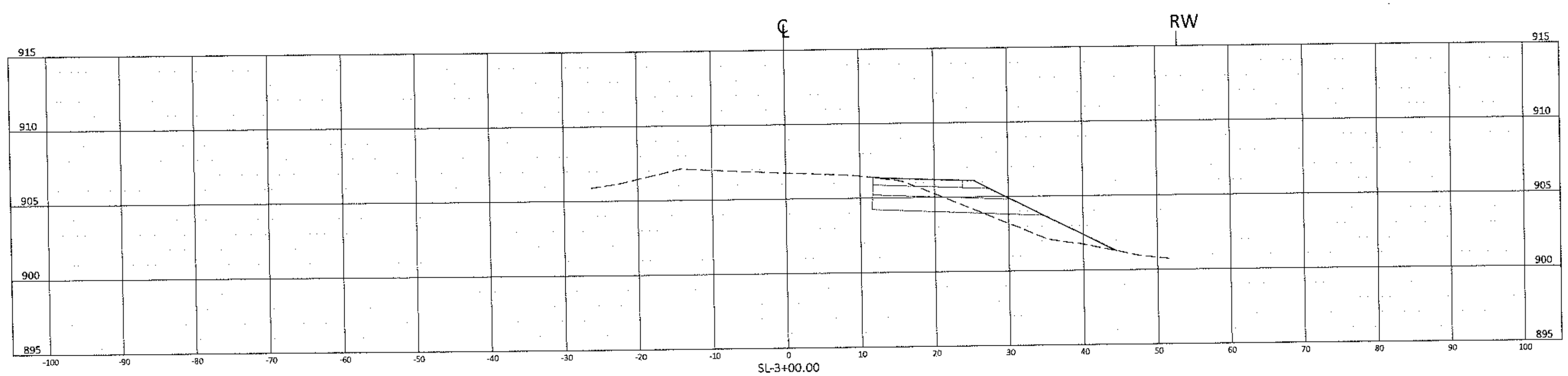
TH 35W EXIT RAMP CROSS SECTIONS

Apr 09, 2015 - 1:08pm - User:577 C:\WAC-MAR1\WAL18568\01Bell Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-35-XSEC.dwg

TH 35W OFF-RAMP







TH 35W OFF-RAMP STA. 2+00 TO 3+00

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA
VERT SCALE: 1"=10'
HORIZ SCALE: 1"=20'

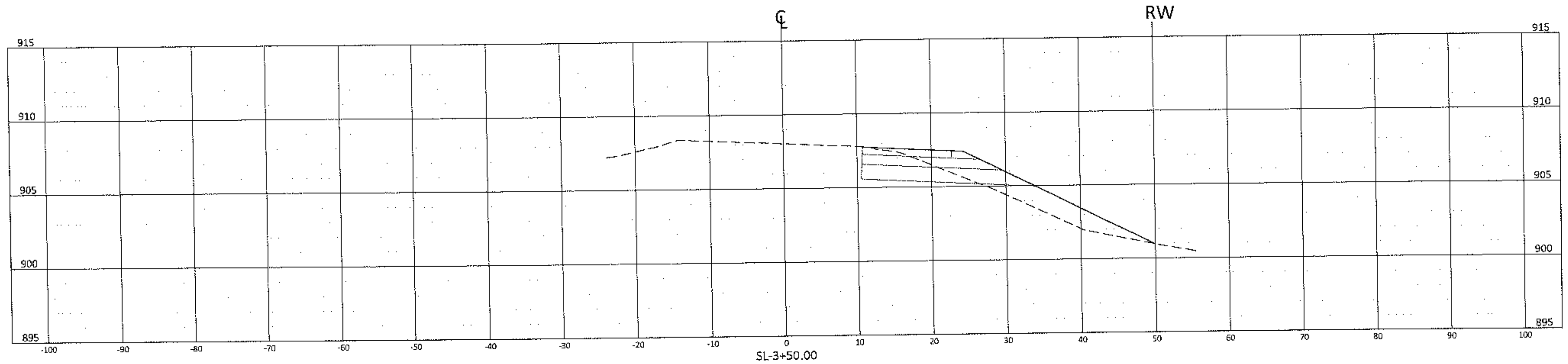
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

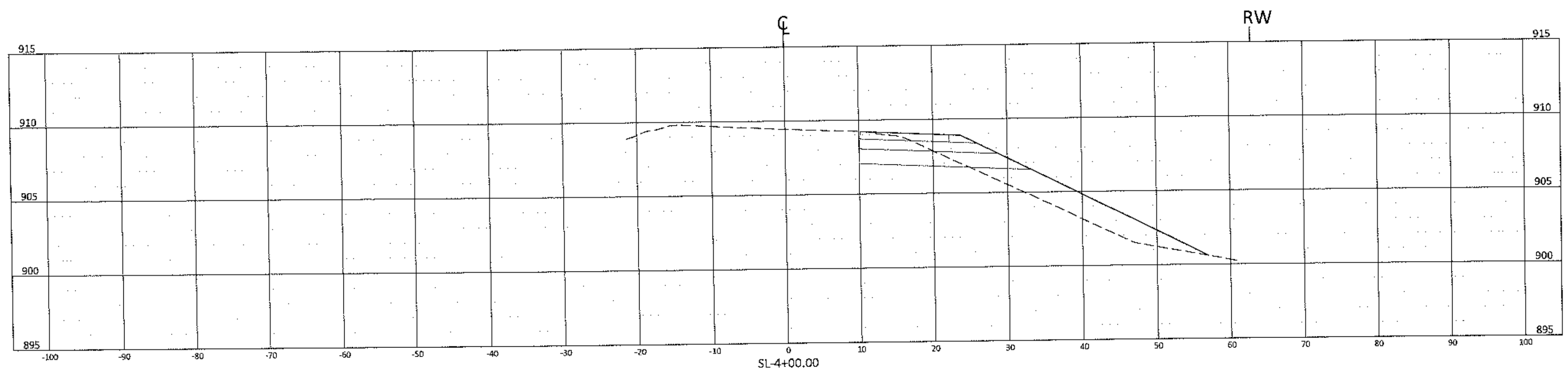
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

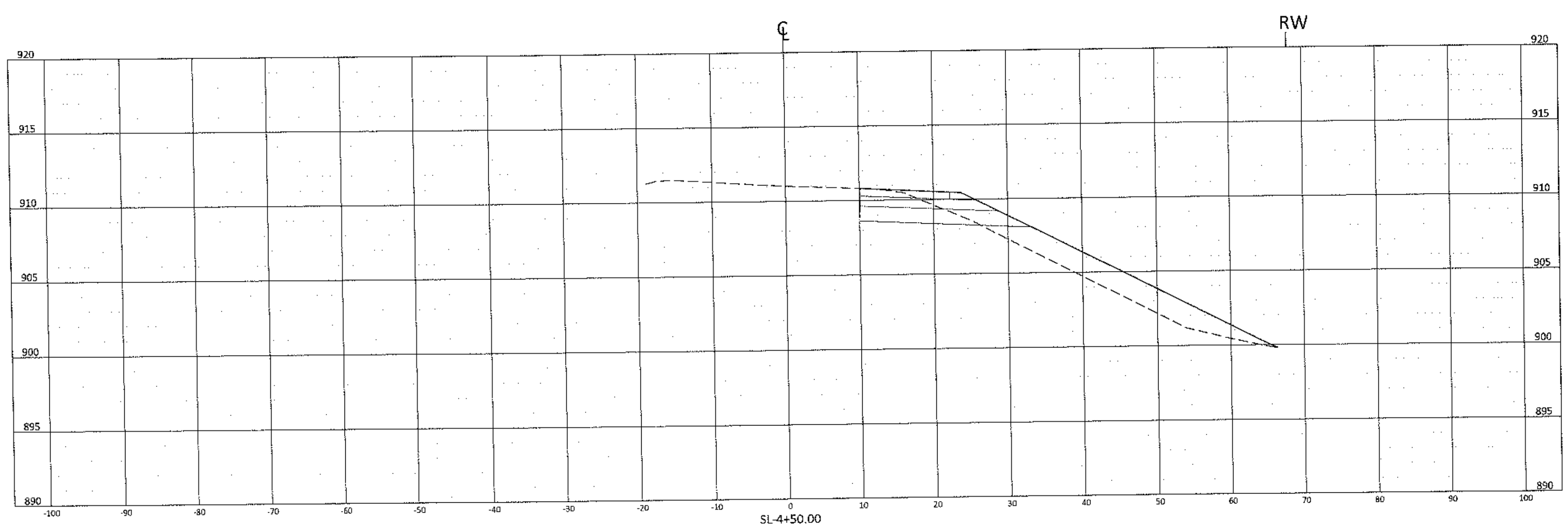
TH 35W EXIT RAMP CROSS SECTIONS

Apr 09, 2015 - 1:08pm - User:577 L:\WAL-MART\WAL18568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-35-XSEC.dwg

TH 35W OFF-RAMP







TH 35W OFF-RAMP STA. 3+50 TO 4+50

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA
VERT SCALE: 1"=10'
HORIZ SCALE: 1"=20'

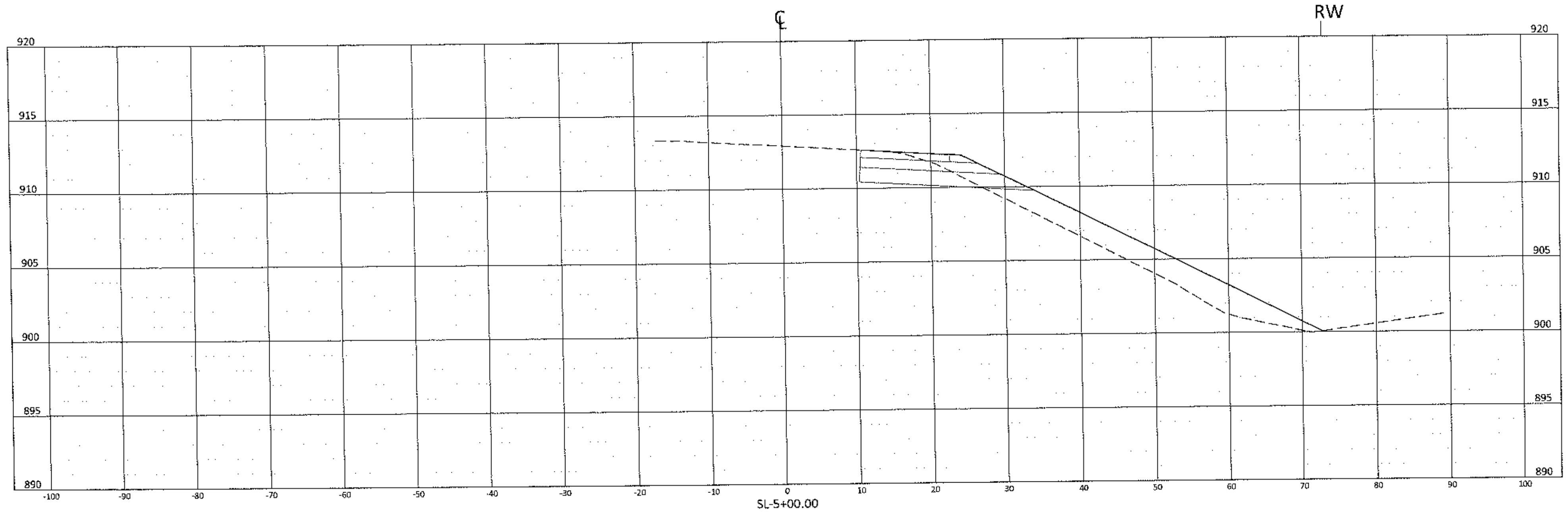
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

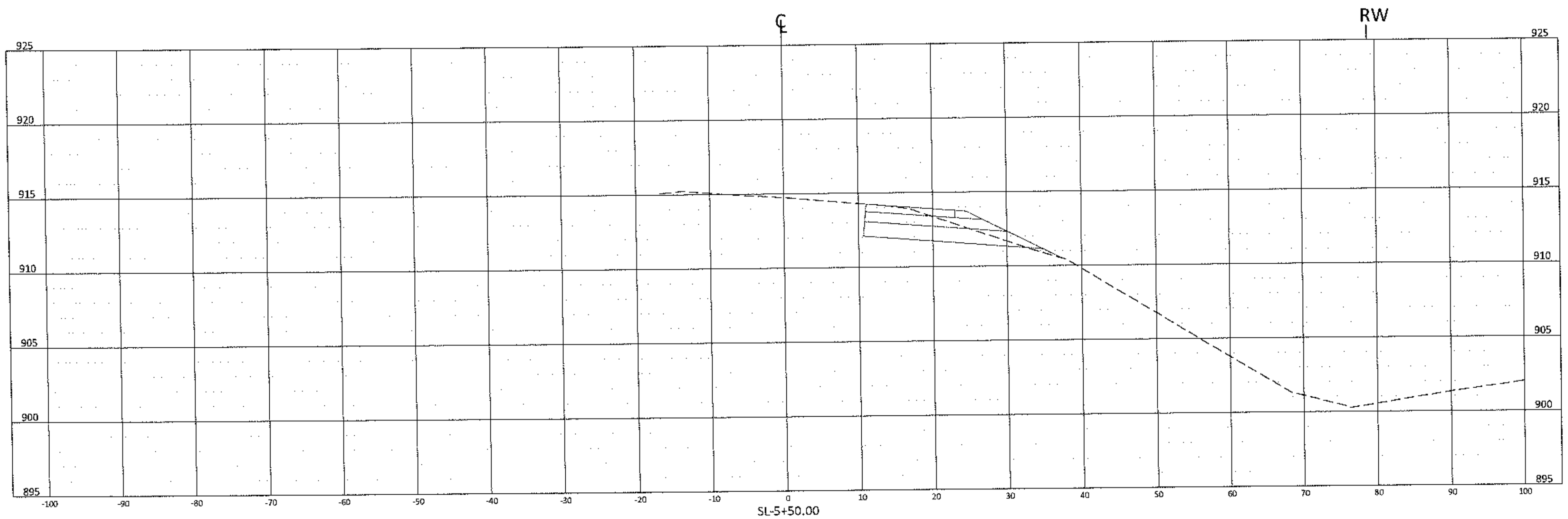
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

TH 35W EXIT RAMP CROSS SECTIONS

Apr 09, 2015 - 1:09pm - User:577 L:\WAL-MART\WAL18568\01 Bell Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-35-XSEC.dwg

TH 35W OFF-RAMP





TH 35W OFF-RAMP STA. 5+00 TO 5+50

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA
VERT SCALE: 1"=10'
HORIZ SCALE: 1"=20'

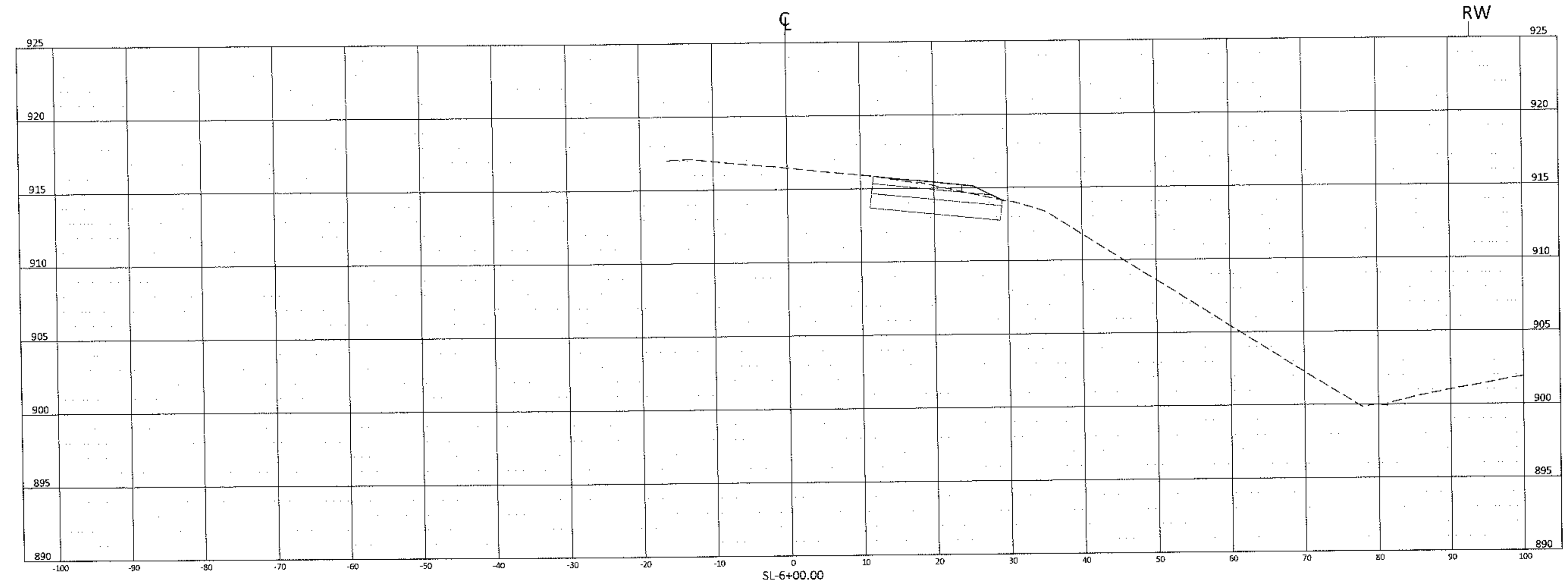
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

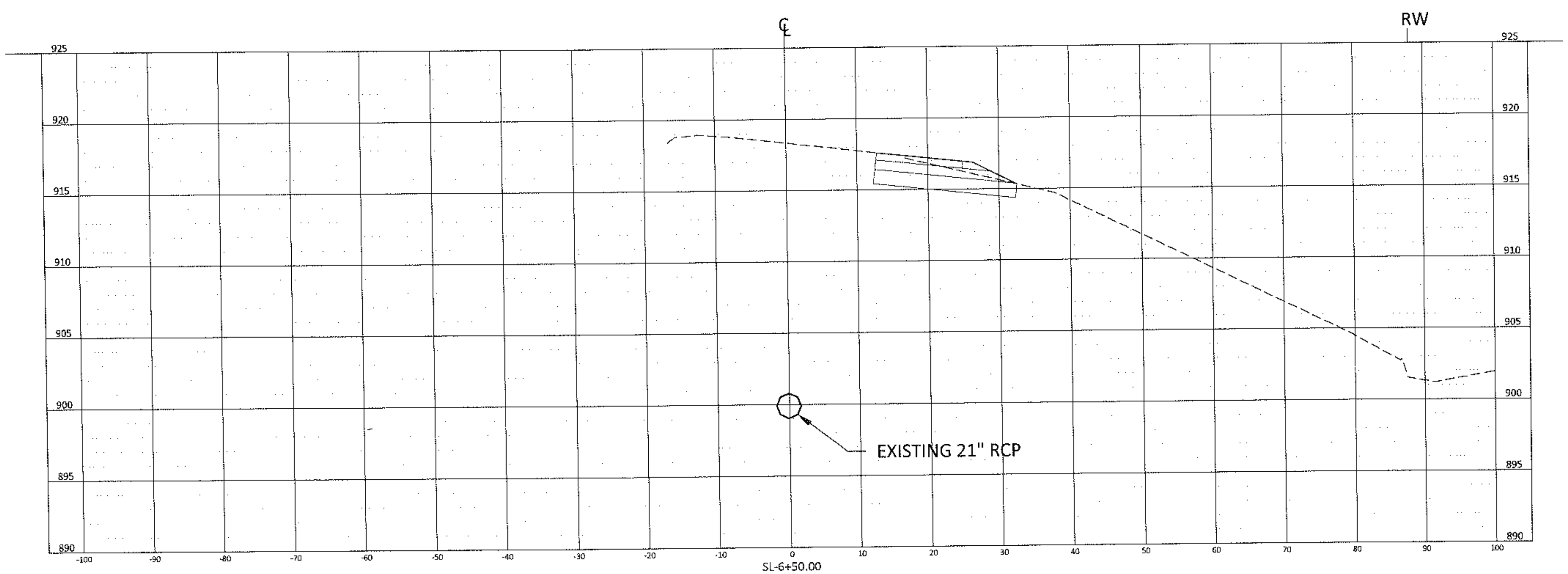
CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

TH 35W EXIT RAMP CROSS SECTIONS

Apr 09, 2015 - 1:09pm - User:577 L:\WAL-MART\WAL18568\01 Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-35-XSEC.dwg

TH 35W OFF-RAMP





TH 35W OFF-RAMP STA. 6+00 TO 6+50

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA
VERT SCALE: 1"=10'
HORIZ SCALE: 1"=20'

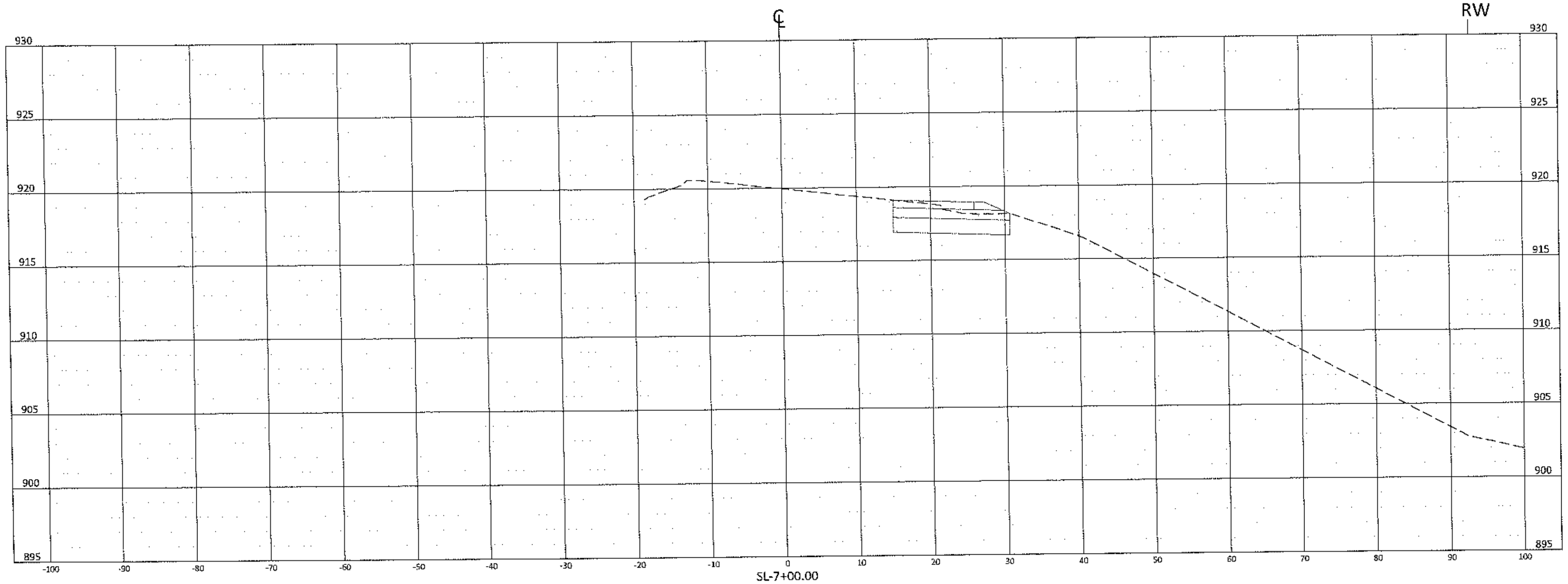
Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

TH 35W EXIT RAMP CROSS SECTIONS

Apr 09, 2015 - 1:09pm - User:577 L:\WAL-MART\WAL18668\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-35-XSEC.dwg

TH 35W OFF-RAMP



TH 35W OFF-RAMP STA. 7+50

No.	Date	By	Revision
A	07/14/14	JMT	Addendum #5
B	01/09/15	JEB	RESPONSE TO MNDOT COMMENTS - 90% PLAN REVIEW
D	02/05/15	JEB	RESPONSE TO MNDOT COMMENTS - 100% PLAN REVIEW
E	02/25/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 02/13/15
F	03/12/15	JEB	RESPONSE TO ACHD COMMENTS - DATED 03/09/15
G	04/07/15	JEB	RESPONSE TO MNDOT COMMENTS - FINAL PLAN REVIEW

Designed: GDA
Drawn: JMT/JEB
Checked: BDB
Approved: GDA
VERT SCALE: 1"=10'
HORIZ SCALE: 1"=20'

Sambatek
www.sambatek.com
Engineering | Surveying | Planning | Environmental

CITY OF BLAINE
TH 35W OFF-RAMP/LEXINGTON AVE
STATE PROJECT NO. 0280-75 (TH 35W)
STATE AID PROJECT NO. 106-020-033

TH 35W EXIT RAMP
CROSS SECTIONS

Apr 09, 2015 - 1:09pm - User:577 L:\WAL-MART\WAL18568\01Ball Road Improvements\dwg\Civil\Final\Lexington-Ramp\18568-35-XSEC.dwg