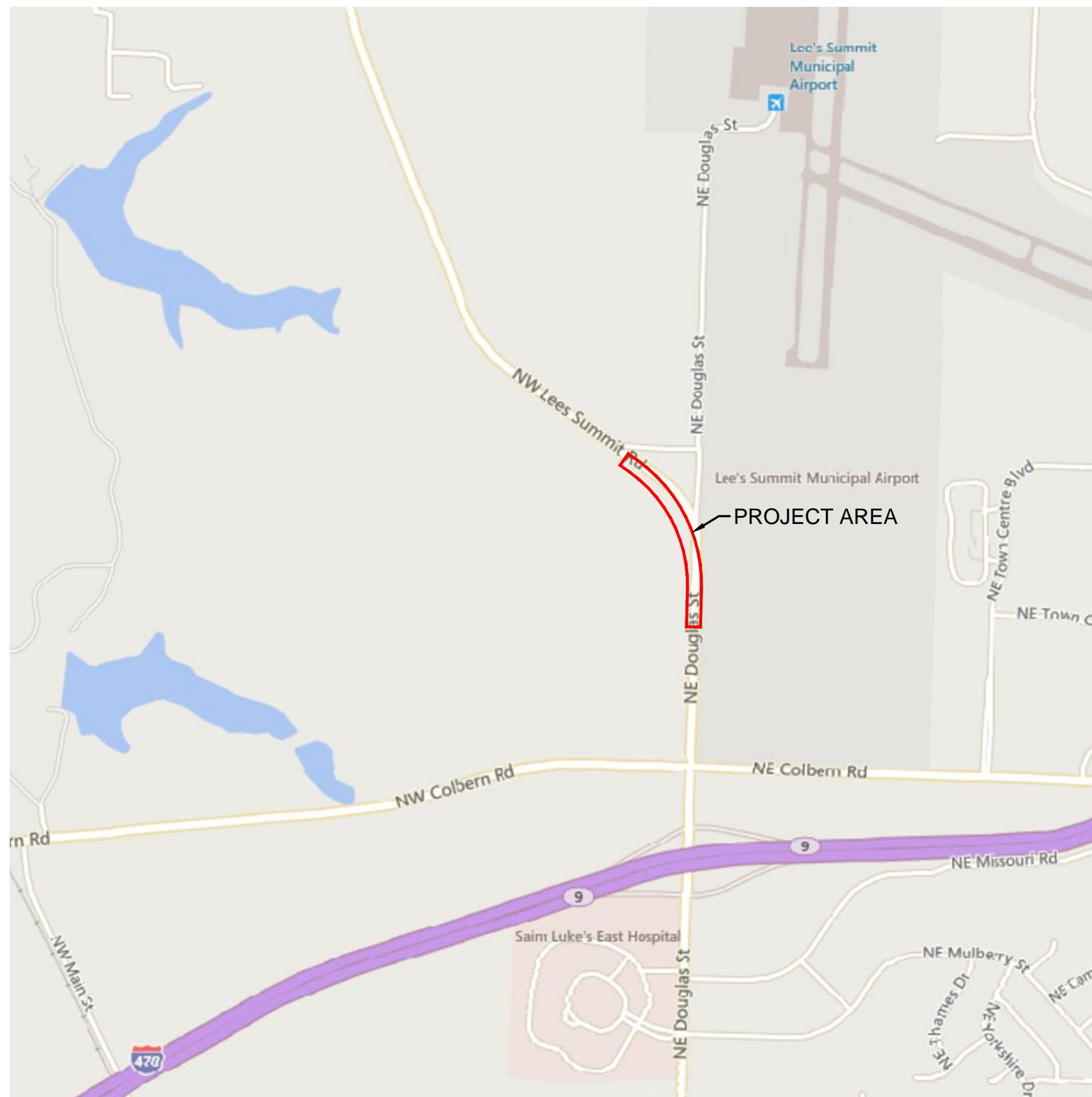




SECTION 30, TOWNSHIP 48N, RANGE 31W
IN LEE'S SUMMIT, JACKSON COUNTY, MO

PROJECT TEAM & UTILITY CONTACT LIST	
<u>OWNER</u> UNITY SCHOOL OF CHRISTIANITY 1901 NW BLUE PARKWAY UNITY VILLAGE, MO 64065 CONTACT: GUY SWANSON PHONE: 816.607.0602 EMAIL: SWANSONSG@UNITYONLINE.ORG	<u>UTILITY SERVICE NUMBERS</u> NAME: LEE'S SUMMIT PUBLIC WORKS PHONE: 816-969-1800 NAME: LEE'S SUMMIT WATER & SERVICES DEPARTMENT PHONE: 816-969-1940 NAME: SPIRE (MGE) PHONE: 314-342-0500
<u>DEVELOPER</u> CENTRAL STATES CONSTRUCTION 4215 PHILLIPS FARM RD. SUITE 109 COLUMBIA, MO 65201 CONTACT: BRIAN MAENNER PHONE: 573-449-9902 EMAIL: BPFMAENNER@CENTRALSTATECONST.COM	NAME: AT&T PHONE: 800-286-8313 NAME: EVERGY PHONE: 816-471-5275 NAME: SPECTRUM (TWC) PHONE: 877-772-2253
<u>ENGINEER</u> OLLSSON 1301 BURLINGTON, SUITE 100 NORTH KANSAS CITY, MO 64116 CONTACT: NICHOLAS HEISER PHONE: 816.361.1177 EMAIL: NHEISER@OLLSSON.COM	NAME: GOOGLE FIBER PHONE: 877-454-6959
<u>SURVEYOR</u> OLLSSON 1301 BURLINGTON, SUITE 100 NORTH KANSAS CITY, MO 64116 CONTACT: JASON ROUDEBUSH PHONE: 816.361.1177 EMAIL: JROUDEBUSH@OLLSSON.COM	



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☐ NOT FOR CONSTRUCTION

☒ REVIEWED FOR CONSTRUCTION



AS PROVIDED BY STEWART TITLE GUARANTY COMPANY:
TRACT OF LAND IN THE NORTHEAST QUARTER OF SECTION 30 TOWNSHIP 48 NORTH, RANGE 31 WEST OF THE 5TH PRINCIPAL MERIDIAN IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI BEING BOUNDED AND DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID NORTHEAST QUARTER SECTION; THENCE SOUTH 01 DEGREES 37 MINUTES 50 SECONDS WEST, ON THE WEST LINE, SAID QUARTER SECTION, 853.75 FEET TO A POINT ON THE SOUTHEAST LOT LINE OF LOT 1, LEE'S SUMMIT ROAD, DUMP STATION, A SUBDIVISION RECORDED IN BOOK 1 51 AT PAGE 90 IN THE JACKSON COUNTY RECORDER OF DEEDS OFFICE; THENCE NORTH 50 DEGREES 41 MINUTES 15 SECONDS EAST, ON SAID SOUTHEAST LOT LINE, 59.22 FEET, TO THE POINT OF BEGINNING OF THE TRACT OF LAND TO BE HEREIN DESCRIBED; THENCE CONTINUING NORTH 50 DEGREES 41 MINUTES 15 SECONDS EAST ALONG SAID LINE, 116.89 FEET; THENCE NORTH 44 DEGREES 49 MINUTES 51 SECONDS EAST, 792.38 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF NW LEE'S SUMMIT ROAD AS ESTABLISHED BY DOCUMENT NUMBER 201500017982 IN THE JACKSON COUNTY RECORDER OF DEEDS OFFICE; THENCE ON SAID WESTERLY RIGHT-OF-WAY LINE, SOUTH 54 DEGREES 34 MINUTES 12 SECONDS EAST, 95.69 FEET; THENCE SOUTHEASTERLY ALONG A CURVE TO THE RIGHT BEING TANGENT TO THE LAST DESCRIBED COURSE WITH A RADIUS OF 1,142.00 FEET, A CENTRAL ANGLE OF 56 DEGREES 01 MINUTES 43 SECONDS AND AN ARC DISTANCE OF 1,116.74 FEET; THENCE SOUTH 01 DEGREES 27 MINUTES 31 SECONDS WEST, 322.27 FEET; THENCE LEAVING SAID RIGHT-OF-WAY LINE, NORTH 88 DEGREES 32 MINUTES 29 SECONDS WEST, 375.74 FEET; THENCE NORTH 01 DEGREES 27 MINUTES 27 SECONDS EAST, 62.94 FEET; THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, 195.68 FEET; THENCE NORTH 45 DEGREES 00 MINUTES 00 SECONDS WEST, 889.18 FEET TO THE POINT OF BEGINNING, SUBJECT TO THAT PART, IF ANY, IN STREETS, ROADWAYS, HIGHWAYS OR OTHER PUBLIC RIGHT-OF-WAYS.

BMK 1
LOCATED NEAR SE CORNER OF COLBERN RD. & DOUGLAS ST. INTERSECTION.
N: 1012195.53
E: 282382.89
EL: 982.46

BMK 2
LOCATED ON LIGHTPOLE BASE AT NE CORNER OF LEE'S SUMMIT RD. & DOUGLAS ST INTERSECTION.
N: 1014699.72
E: 2823025.86
EL: 932.31

BMK 5
N: 1014159.31
E: 2822030.75
EL: 908.88

[illegible]

File: F:\2019\0001-0500\019-0012-B\40-Design\AutoCAD\Final Plans\GNCV\Public Street Improvements\VC_GEN01_B190012.dwg ~ Plot Date: 2019.10.01 03:03 PM ~ Layout: GENERAL NOTES ~ Last Saved By: mdiebolt ~

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE PLANS IN THEIR POSSESSION ARE THE MOST CURRENT VERSION ISSUED, ARE FULLY COORDINATED WITH ALL SUBCONTRACTORS, AND PRESENT ON SITE AT ALL TIMES. CURRENT PLANS PREPARED BY OLSSON MAY BE OBTAINED AT THE DIRECTION OF OLSSON'S CLIENT. DIRECT REQUESTS TO OLSSON MAY REQUIRE ADDITIONAL AUTHORIZATIONS, AGREEMENTS, AND/OR FEES. PLEASE CONTACT THE ENGINEER FOR INFORMATION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEVIATIONS FROM THESE PLANS UNLESS WRITTEN APPROVAL FROM ENGINEER, OWNER, AND DEVELOPER.
3. ALL WORK AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
4. ALL ESTIMATES OF QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING QUANTITIES AND ITEMS OF WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLETE THE WORK SHOWN IN THE PLANS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, PAYING ALL FEES, AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE WORK.
7. THE CONTRACTOR SHALL NOT ENGAGE IN ACTIVITIES THAT MAY ENCROACH ON WATERS OF THE U.S., INCLUDING WETLANDS, UNTIL ANY NECESSARY PERMITS MAY BE OBTAINED. THE CONTRACTOR SHALL REVIEW AND COMPLY WITH ALL CONDITIONS DESCRIBED IN THE PERMIT.
8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, THE SAFETY OF ALL PERSONS INCLUDING VISITORS AND THE GENERAL PUBLIC, AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY THROUGHOUT THE PROJECT AND NOT BE LIMITED BY WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES.
9. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH ALL UTILITY COMPANIES AND OBTAIN ANY RELEVANT INFORMATION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
10. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL BOUNDARY CORNERS AND SECTION CORNERS. ANY BOUNDARY CORNER AND/OR SECTION CORNER DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE RESET BY A LAND SURVEYOR LICENSED IN THE STATE OF MISSOURI, AT THE CONTRACTOR'S EXPENSE.
11. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ADJACENT PROPERTIES AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE DURING CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR REPAIRING ANY DAMAGE RESULTING FROM CONSTRUCTION ACTIVITIES.
12. PRIOR TO MOVING OFF THE JOB THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER TO PERFORM A FINAL WALK-THROUGH OF THE CONSTRUCTION SITE.

REFERENCES

1. ARCHITECTURAL AND STRUCTURAL ELEMENTS SHOWN IN THESE PLANS ARE FOR REFERENCE ONLY. CONTRACTORS AND SURVEYORS SHALL REFERENCE THEIR RESPECTIVE PLANS FOR DESIGN INFORMATION.
2. THE CONTRACTOR SHALL ADHERE TO THE SITE PREPARATION AND STRUCTURAL FILL RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AS PROVIDED BY THE GEOTECHNICAL ENGINEER INCLUDING ALL CURRENT ADDENDUMS. THE STANDARDS AND SPECIFICATIONS OF LEE'S SUMMIT, MISSOURI SHALL ALSO APPLY AND TAKE PRECEDENCE WHEN STRICTER THAN THE GEOTECHNICAL REPORT OR WHEN NO GEOTECHNICAL REPORT IS GIVEN.
3. UNLESS EXPLICITLY DESCRIBED OTHERWISE WITHIN THESE PLANS THE FOLLOWING SHALL APPLY:

A. ALL CONSTRUCTION, INCLUDING THOSE LISTED BELOW, SHALL CONFORM TO THE LATEST CODES AND ORDINANCES OF LEE'S SUMMIT, MISSOURI.

B. ALL CONSTRUCTION IN MODOT RIGHT-OF-WAY SHALL CONFORM TO THE LATEST SPECIFICATIONS ADOPTED BY U.S. DEPARTMENT OF TRANSPORTATION AND MODOT.

C. ALL TRAFFIC CONTROL SIGNAGE SHALL CONFORM WITH THE CURRENT EDITION OF THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

D. ALL UTILITY EXTENSIONS AND CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE UTILITY COMPANIES..

E. ALL EXTERIOR PAVEMENT (PCC, ASPHALT, ETC.) SHALL BE IN CONFORMANCE WITH THE SPECIFICATIONS OF LEE'S SUMMIT, MISSOURI AND THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.
4. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE DELIVERY MANAGER AND COORDINATING ANY MAILBOXES THAT MAY BE DISTURBED. FAILURE TO DO SO MAY SUBJECT THE CONTRACTOR TO PROSECUTION BY THE FEDERAL GOVERNMENT.

EXISTING CONDITIONS

1. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS OF THE PROJECT AREA.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING THEIR OWN INVESTIGATIONS AND MAKING THEIR OWN ASSUMPTIONS REGARDING SITE SURFACE AND SUBSURFACE CONDITIONS. THIS INCLUDES THE LOCATION AND CONSISTENCY OF ANY EXISTING ROCK LAYERS UNDERLYING THE PROJECT SITE. CONTACT THE ENGINEER REGARDING ANY DISCREPANCIES THAT MAY AFFECT THE ABILITY TO CONSTRUCT FROM THESE PLANS AS DESIGNED.
3. EXISTING CONDITIONS WERE DETERMINED THROUGH A VARIETY OF METHODS THAT MAY INCLUDE SURVEY, AERIAL IMAGERY, AVAILABLE RECORDS, GIS DATA, ETC. SUBSURFACE CONDITIONS ARE APPROXIMATE AND MAY NOT INCLUDE ALL UTILITIES AND OTHER SITE IMPROVEMENTS PRESENT ON SITE. THE CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS WHEN CONFLICTS AND DISCREPANCIES ARE FOUND.

CONSTRUCTION

1. THE CONTRACTOR SHALL INSTALL TRAFFIC CONTROL WHILE WORKING IN THE PUBLIC RIGHT-OF-WAY AS SHOWN IN THESE PLANS. IF PLANS ARE NOT PROVIDED, CONTRACTOR SHALL COORDINATE AND PROVIDE CONTROLS TO THE SATISFACTION OF THE RIGHT-OF-WAY OWNER.
2. THE CONTRACTOR SHALL PROTECT ALL TREES OVER 3" CALIPER FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE ON THESE PLANS.
3. IN ADDITION TO THE CONDITIONS OF THE GEOTECHNICAL REPORT AND AS A MINIMUM THE CONTRACTOR SHALL PERFORM THE GRADING AS FOLLOWS:

A. THE CONSTRUCTION AREA SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL AND ORGANIC MATTER FROM ALL AREAS TO BE OCCUPIED BY BUILDING AND PAVING. STRIPPING EXISTING TOPSOIL AND ORGANIC MATTER SHALL BE TO A MINIMUM DEPTH OF 6 INCHES. TOPSOIL FOR REPLACEMENT ON SLOPES MAY BE STOCKPILED ON SITE IN AREAS DESIGNATED BY THE OWNER. CONTRACTOR SHALL REMOVE EXCESS STRIPPINGS AND EXCESS EXCAVATION WITHIN 30 DAYS OF COMPLETION OF GRADING OPERATIONS.

B. AREAS TO RECEIVE FILL AND AREAS CUT TO SUBGRADE LEVEL SHALL BE SCARIFIED AND THE TOP 8-INCH DEPTH COMPACTED TO 95% STANDARD PROCTOR DENSITY. THE SUBGRADE SHALL BE PROOF ROLLED WITH A MODERATELY HEAVY LOADED DUMP TRUCK OR SIMILAR APPROVED CONSTRUCTION EQUIPMENT TO DETECT UNSUITABLE SOIL CONDITIONS. ANY UNSUITABLE AREAS SHALL BE UNDERCUT AND REPLACED WITH SUITABLE MATERIAL BEFORE ANY FILL MATERIAL CAN BE APPLIED.

C. FILL SHALL BE PLACED IN MAXIMUM OF 8 INCH LIFTS.

D. TOPSOIL SHALL BE PLACED TO A MINIMUM DEPTH OF 6 INCHES OVER ALL AREAS DISTURBED BY THE WORK. LARGE STONES, STICKS AND LUMPS SHALL BE REMOVED OR BROKEN UP, AND THE TOPSOIL SHALL BE LEVELED AND RAKED. ALL DISTURBED AREAS SHALL BE LANDSCAPED PER LANDSCAPE PLANS OR SHALL BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED.

E. CONTRACTOR SHALL PROVIDE COMPACTION TEST RESULTS AS REQUIRED.
4. THE CONTRACTOR SHALL DISPOSE ALL WASTE MATERIAL RESULTING FROM THE PROJECT OFF-SITE AND IN STRICT CONFORMANCE WITH ALL LOCAL CODES AND ORDINANCES.
5. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS ARE TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED. NOT ALL ADJUSTMENTS ARE INDICATED IN THE PLANS.
6. THE CONTRACTOR SHALL STREET SWEEP OR OTHERWISE CLEAN ALL ACCESS ROUTES TO THE SITE AT CONCLUSION OF THE PROJECT.

SHOP DRAWINGS

1. THE CONTRACTOR SHALL SUBMIT SHOP DRAWING A MINIMUM OF 7 DAYS PRIOR TO THE REQUESTED DATE OF APPROVAL. ENGINEER SHALL REVIEW SHOP DRAWINGS OR SAMPLES CONFORMANCE WITH THE DESIGN FOR THIS PROJECT AS DESCRIBED IN THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS. THE ENGINEER'S REVIEW SHALL NOT EXTEND TO MEANS OR METHODS OF CONSTRUCTION . CONTRACTOR SHALL BE RESPONSIBLE FOR ANY VARIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS UNLESS CONTRACTOR HAS NOTIFIED ENGINEER OF EACH SUCH VARIATION AT THE TIME OF SUBMISSION, AND OBTAINED ENGINEER'S WRITTEN APPROVAL OF EACH SUCH VARIATION. PRIOR TO SUBMITTING EACH SHOP DRAWING OR SAMPLE, CONTRACTOR SHALL HAVE REVIEWED AND VERIFIED:

A. ALL FIELD MEASUREMENTS, QUANTITIES, DIMENSIONS, SPECIFIED PERFORMANCE CRITERIA, INSTALLATION REQUIREMENTS, MATERIALS, CATALOG NUMBERS AND SIMILAR INFORMATION WITH RESPECT THERETO;

B. ALL MATERIALS WITH RESPECT TO INTENDED USE, FABRICATION, SHIPPING, HANDLING, STORAGE, ASSEMBLY AND INSTALLATION PERTAINING TO THE PERFORMANCE OF THE WORK;

C. ALL INFORMATION RELATIVE TO MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION AND SAFETY PRECAUTIONS AND PROGRAMS INCIDENT THERETO;

D. CONTRACTOR SHALL ALSO HAVE REVIEWED AND COORDINATED EACH SHOP DRAWING OR SAMPLE WITH OTHER SHOP DRAWINGS AND SAMPLES, AND WITH THE REQUIREMENTS OF THE WORK AND THE CONTRACT DOCUMENTS.

E. ALL SUBMITTED SHOP DRAWINGS SHALL BEAR A STAMP OR SPECIFIC WRITTEN INDICATION AND SIGNATURE THAT CONTRACTOR HAS FULLY COMPLETED THE ABOVE TASKS.

2. SHOP DRAWINGS AS DESCRIBED ABOVE ARE REQUIRED FOR, BUT NOT LIMITED TO, THE FOLLOWING:

A. ALL STORM SEWER STRUCTURES TO BE INSTALLED WITH THIS PROJECT.

B. ALL SANITARY SEWER STRUCTURES TO BE INSTALLED WITH THIS PROJECT.

C. ALL SITE FENCING AND RAILING INCLUDING ANY GATES.

D. ALL LANDSCAPE AND RETAINING WALLS.

E. ANY ITEMS IN THESE PLANS THAT ALLOW FOR AN 'APPROVED EQUAL' ALTERNATIVE.

ESTIMATE OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	AS-BUILT
GRADING				
1	EXCAVATION	C.Y.	853	
2	EMBANKMENT	C.Y.	4803	
3	SUBGRADE STABILIZATION (9" FLYASH TREATMENT)	S.Y.	1544	
PAVEMENT				
4	7.5" ASPHALT	S.Y.	159	
5	4" MODOT TYPE 5 AGGREGATE BASE	S.Y.	431	
6	6" MODOT TYPE 5 AGGREGATE BASE	S.Y.	1113	
PAVEMENT MARKING AND SIGNAGE				
7	4" SOLID WHITE STRIPING	L.F.	3330	
8	4" SOLID YELLOW STRIPING	L.F.	2826	
9	4" DOTTED WHITE/YELLOW STRIPING	L.F.	322	
10	TURN ARROWS	EA.	15	
11	STREET SIGNS	EA.	2	
CURBS, SIDEWALKS & DRIVES				
12	CURB & GUTTER (TYPE CG-1)	L.F.	3353	
13	CONCRETE SIDEWALK (5' WIDE)	L.F.	1441	
14	CONCRETE DRIVE APPROACH (8" UNREINFORCED)	S.F.	3876	
15	CURB RAMPS	EA.	4	
STORM SEWER				
16	15" HDPE	L.F.	78.5	
17	18" HDPE	L.F.	62.0	
18	15" END SECTION	EA.	1	
19	18" END SECTION	EA.	1	
20	STD. 4'x4' FIELD INLET	EA.	1	
21	RIPRAP	S.Y.	26.3	

SUMMARY OF QUANTITIES AS INDICATED ABOVE AND ANY QUANTITIES AS SHOWN WITHIN THE PLANS HAVE BEEN PROVIDED FOR PERMITTING PURPOSES ONLY AND ARE NOT INTENDED FOR USE IN PREPARATION OF CONTRACT DOCUMENTS. QUANTITIES INTENDED FOR, BUT NOT LIMITED TO, THE PREPARATION OF PROPOSALS AND BID DOCUMENTS SHALL BE INDEPENDENTLY EVALUATED BY THE ESTIMATING PARTY BASED UPON THE CONTENTS OF THESE PLANS.

LEGEND	
GENERAL	
ACU	AIR CONDITIONING UNIT
AST	ARROW STRAIGHT
ATL	ARROW TURN LEFT
ATR	ARROW TURN RIGHT
BLB	BILLBOARD
BOV	BLOW OFF VALVE
BSH	BUSH
COL	COLUMN
CTR	CONIFEROUS TREE
DRN	DRAIN GRATE
DTR	DECIDUOUS TREE
FLP	FLAG POLE
GDP	GUARD POST
GPL	GUY POLE
GTP	GREASE TRAP
GUY	GUY WIRE
HCP	ACCESSABLE PARKING MARKER
LST	LIFT STATION
MLB	MAILBOX
MP	MILE POST MARKER
MWL	MONITORING WELL
PIV	POST INDICATOR VALVE
PPT	PROPANE TANK
RAT	RADIO TOWER
SAD	SATELLITE
SCV	SPRINKLER CONTROL VALVE
SGN	SIGN
SLB	STREET LIGHT BOX
SLC	STREET LIGHT CABINET
SPB	SPRINKLER BOX
SPH	SPRINKLER HEAD
STP	STUMP
SVL	SEWER VALVE
TCB	TRAFFIC CONTROL BOX
TSA	TRAFFIC SIGNAL WITH MAST ARM
TSC	TRAFFIC SIGNAL CABINET
TSMH	TRAFFIC SIGNAL MANHOLE
TSP	TRAFFIC SIGNAL POLE
	EXISTING TREELINE
	PROPOSED TREELINE
	EXISTING SIDEWALK
	PROPOSED SIDEWALK
	FUTURE SIDEWALK
	EXISTING BUILDINGS
	PROPOSED BUILDINGS
	FUTURE BUILDINGS
	EXISTING EDGE OF PAVEMENT
	PROPOSED EDGE OF PAVEMENT
	FUTURE EDGE OF PAVEMENT
	EXISTING ROADWAY CENTER LINE
	PROPOSED ROADWAY CENTER LINE
	FUTURE ROADWAY CENTER LINE
	EXISTING CURB & GUTTER
	PROPOSED CURB & GUTTER
	FUTURE CURB & GUTTER
	RADIUS
	ARC DISTANCE
	DELTA / CENTRAL ANGLE
EASEMENTS & SETBACKS	
	A.E. ACCESS EASEMENT
	B.M.P. BEST MANAGEMENT PRACTICE EASEMENT
	B.L. BUILDING SETBACK
	C.T.V.E. CABLE TV EASEMNT
	C.E. CONSERVATION EASEMENT
	C.G.E. CONSTRUCTION GRADING EASEMENT
	F.P.E. FLOOD PLAIN EASEMENT
	F.O.E. FIBER OPTIC EASEMENT
	F.P.S.E. FIRE PROTECTION SYSTEM EASEMENT
	F.L.E. FUEL LINE EASEMENT
	L.S.E. LANDSCAPE EASEMENT
	G.E. NATURAL GAS EASEMENT
	T.E. TELEPHONE EASEMENT
	E.E. POWER/ELECTRIC EASEMENT
	P.S. PARKING SETBACK
	S.B. STREAM BUFFER
	S.D.E. SURFACE DRAINAGE EASEMENT
	SIGHT DIST. ESMT.
	S.E. SANITARY SEWER EASEMENT
	S.L.E. STEAM LINE EASEMENT
	D.E. STORM DRAINAGE EASEMENT
	S.W.M.E. STORM WATER MANAGEMENT EASEMENT
	T.C.D.S.E. TEMPORARY CUL-DE-SAC EASEMENT
	TEMP. ESMT. TEMPORARY EASEMENT
	TRAIL ESMT. TRAIL\PATH EASEMENT
	U.E. UTILITY EASEMENT
	W.E. WATER EASEMENT
	F.Y.S. FRONT YARD SETBACK
	R.Y.S. REAR YARD SETBACK
	S.Y.S. SIDE YARD SETBACK
CONTOURS	
	EXISTING INDEX CONTOURS
	EXISTING INTERMEDIATE CONTOURS
	PROPOSED INDEX CONTOURS
	PROPOSED INTERMEDIATE CONTOURS
SURVEY MARKERS	
BMK	BENCHMARK
CPT	CONTROL POINT
FND	FOUND MONUMENT
ROW	ROW MARKER
SCR	SECTION CORNER
SET	SET MONUMENT
BOUNDARIES	
	SECTION LINE
	EXISTING PROPERTY BOUNDARY
	PROPOSED PROPERTY BOUNDARY
	EXISTING LOT LINE
	PROPOSED LOT LINE
	EXISTING RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
UTILITIES	
CAB	CABLE BOX
CAV	CABLE VAULT
TVP	TELEVISION PEDESTAL
TVR	TELEVISION RISER
	EXISTING CABLE TV, OVERHEAD
	EXISTING CABLE TV, UNDERGROUND
	PROPOSED CABLE TV, OVERHEAD
	PROPOSED CABLE TV, UNDERGROUND
	FIBER OPTIC BOX
	FIBER OPTIC MANHOLE
	FIBER OPTIC PEDESTAL
	FIBER OPTIC VAULT
	EXISTING FIBER OPTIC, OVERHEAD
	EXISTING FIBER OPTIC, UNDERGROUND
	PROPOSED FIBER OPTIC, OVERHEAD
	PROPOSED FIBER OPTIC, UNDERGROUND
	FIRE DEPT. CONNECTION
	EXISTING FIRE PROTECTION SYSTEM LINE
	PROPOSED FIRE PROTECTION SYSTEM LINE
	EXISTING FUEL LINE
	PROPOSED FUEL LINE
	GAS RISER
	GAS MANHOLE
	GAS MARKER
	GAS METER
	GAS REGULATOR
	GAS VALVE
	EXISTING NATURAL GAS LINE
	PROPOSED NATURAL GAS LINE
TEC	TELEPHONE CABINET
TEP	TELEPHONE PEDESTAL
TER	TELEPHONE RISER
TEV	TELEPHONE VAULT
TMH	TELEPHONE MANHOLE
	EXISTING TELEPHONE LINE, OVERHEAD
	EXISTING TELEPHONE LINE, UNDERGROUND
	PROPOSED TELEPHONE LINE, OVERHEAD
	PROPOSED TELEPHONE LINE, UNDERGROUND
	GROUND LIGHT
	LIGHT POLE
	POWER POLE
	ELECTRIC TRANSFORMER
	ELECTRIC BOX
	ELECTRIC CABINET
	ELECTRIC RISER
	ELECTRIC MANHOLE
	ELECTRIC METER
	ELECTRIC SECTIONALIZER
	ELECTRIC VAULT
	YARD LIGHT
	EXISTING POWER/ELECTRIC LINE, OVERHEAD
	EXISTING POWER/ELECTRIC LINE, UNDERGROUND
	SEWER CLEANOUT
	SANITARY MANHOLE
	EXISTING SANITARY SEWER
	PROPOSED SANITARY SEWER
	FUTURE SANITARY SEWER
	EXISTING STEAM LINE
	PROPOSED STEAM LINE
	STORM SEWER MANHOLE
	FLARED END SECTION
	ROOF DRAIN
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
	FIRE HYDRANT
	WATER MANHOLE
	WATER MARKER
	WATER METER
	WATER VALVE
	EXISTING WATER LINE
	PROPOSED WATER LINE

OLSSON - CIVIL ENGINEERING
NO. CERTIFICATE OF AUTHORITY #001582
NORTH KANSAS CITY, MO 64116
TEL 816.381.1177
www.olsson.com

STATE OF MISSOURI
NICHOLAS D. HEISER, P.E.
NUMBER 07/22/2020
PE-2019000555
PROFESSIONAL ENGINEER

NICHOLAS D. HEISER, P.E.
MO# 2015000555

BY

REVISIONS DESCRIPTION

DATE

NO. REV.

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2020.07.22

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2020

GENERAL NOTES
PUBLIC STREET IMPROVEMENT PLANS

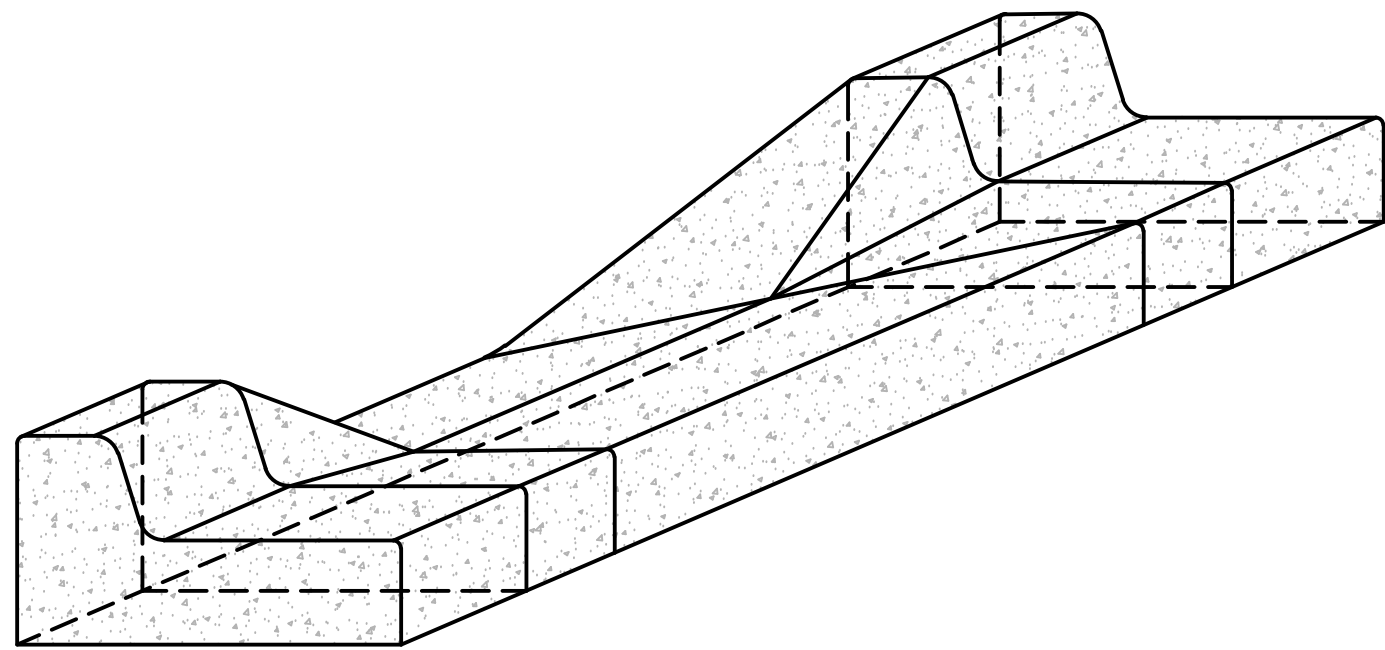
NW LEE'S SUMMIT ROAD &
NE DOUGLAS STREET

LEE'S SUMMIT, MO

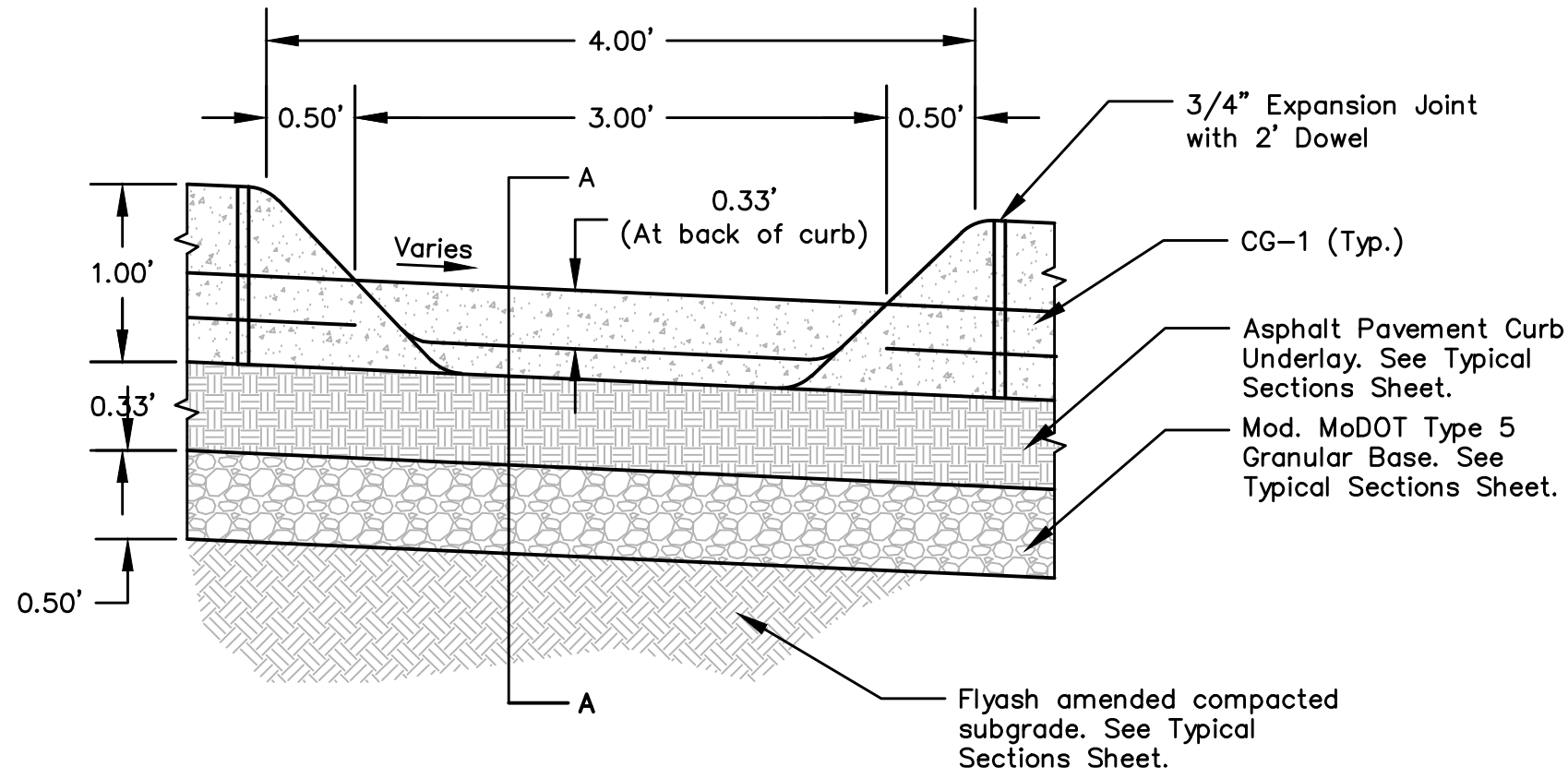
drawn by: M.J.D.
checked by: N.D.H.
designed by: M.J.D.
QA/QC by: N.D.H.
project no.: 019-0012-B
date: 2020.06.32

SHEET
C2

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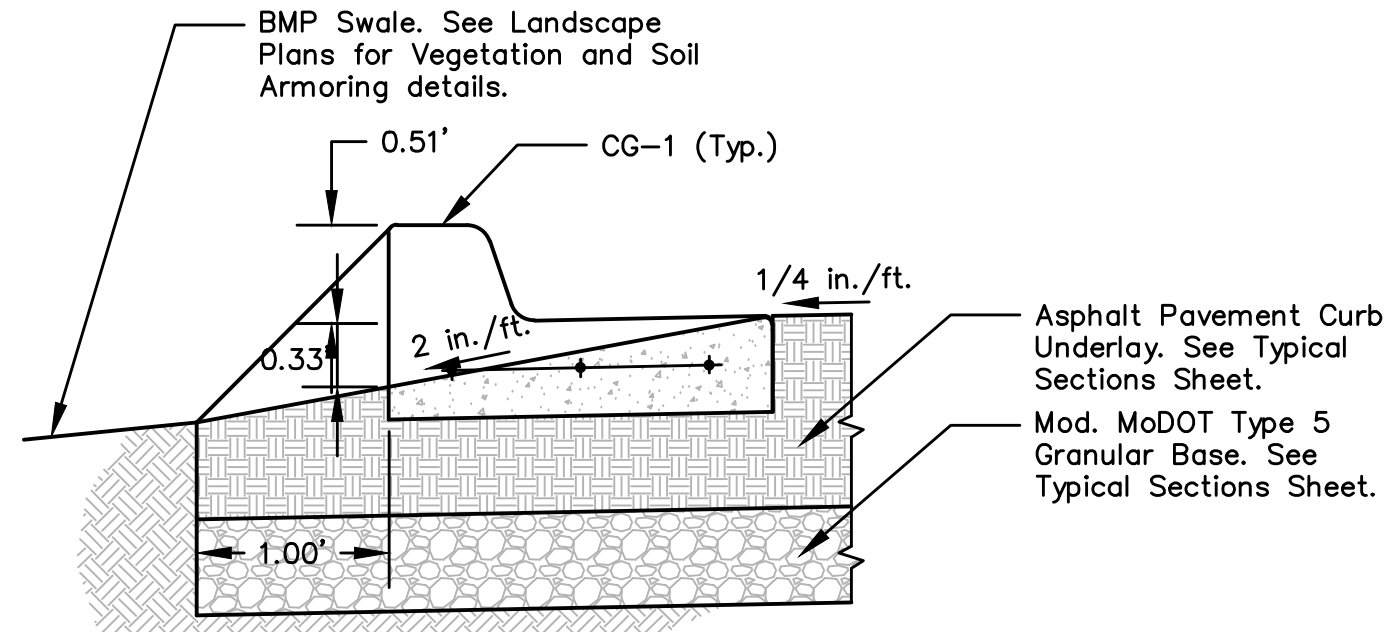


Isometric View

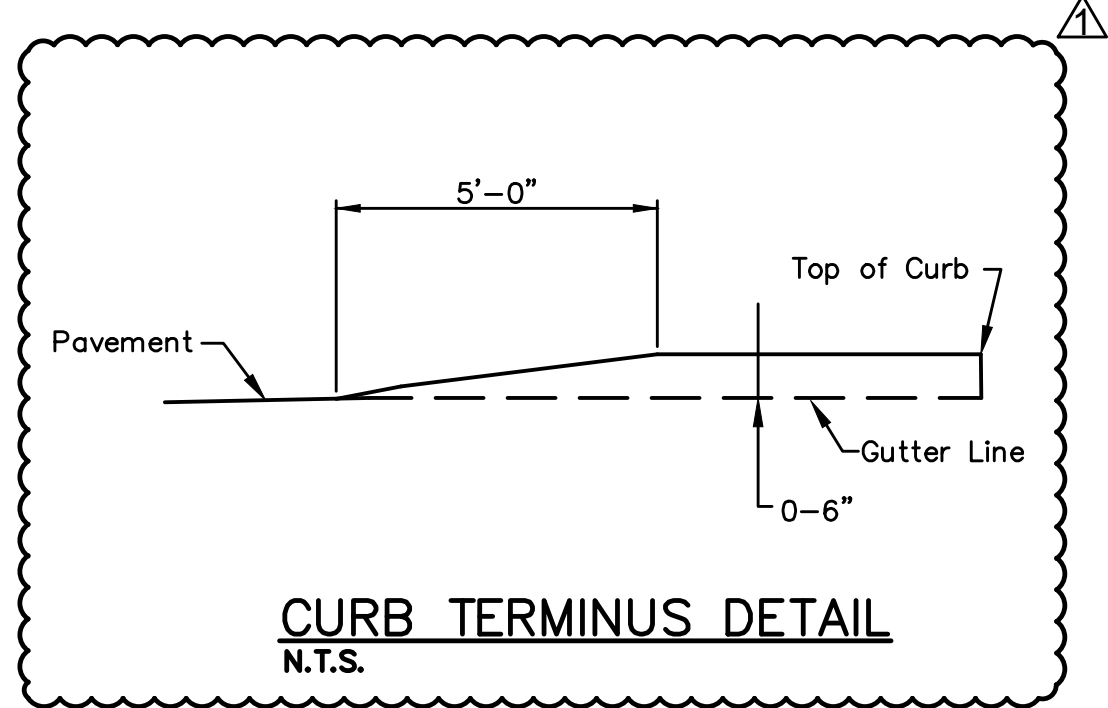


- CURB CUT NOTES:**
- 3/4" EXPANSION JOINTS WITH 2' EPOXY-COATED DOWELS SHALL BE PLACED AT EITHER SIDE OF CURB CUT. THESE DOWELS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
 - FIX DOWELS WITH BAR CHAIRS OR EQUAL.
 - CONCRETE SHALL CONFORM TO KCMMB 4K UNLESS OTHERWISE SPECIFIED IN PLANS AND PROJECT MANUAL. SEE SECTION 2300 OF STANDARD SPECIFICATIONS AND DESIGN CRITERIA.

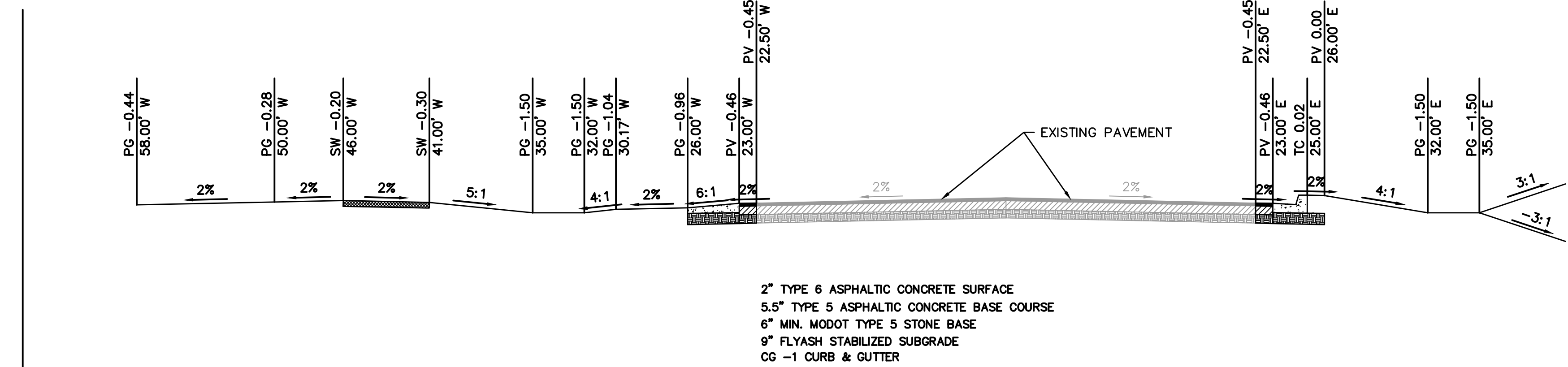
CURB CUT DETAIL
N.T.S.



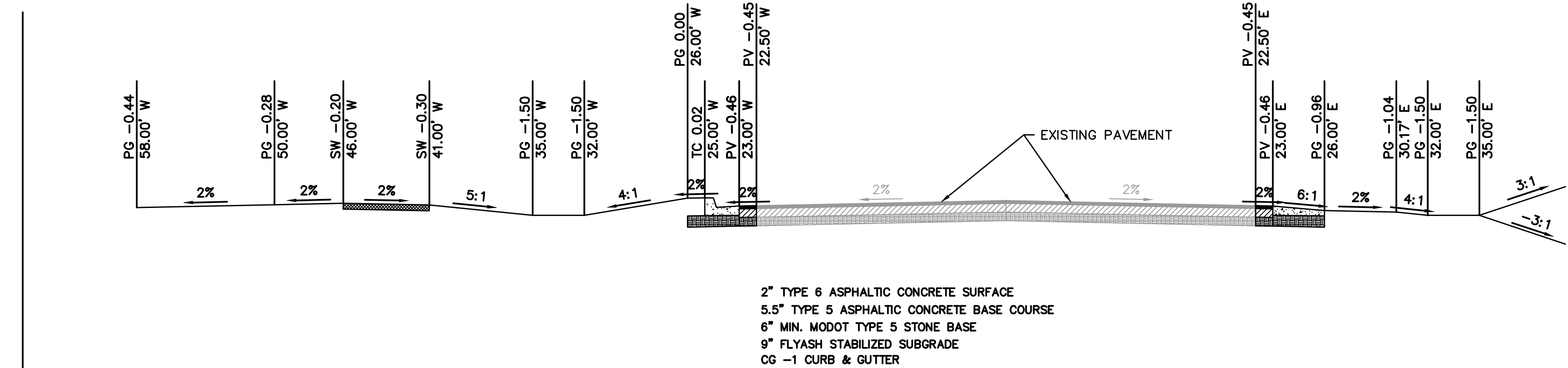
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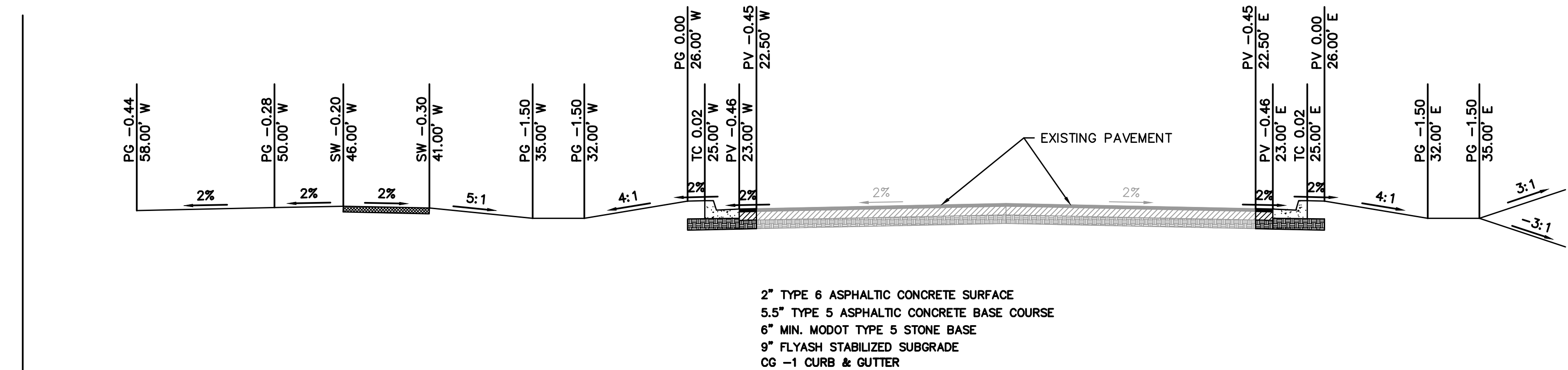
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N.T.S.



SCALE: N.T.S.
NW LEE'S SUMMIT RD AND NE DOUGLAS ST
WITH CURB CUTS ON WEST SIDE



SCALE: N.T.S.
NW LEE'S SUMMIT RD AND NE DOUGLAS ST
WITH CURB CUTS ON EAST SIDE



SCALE: N.T.S.
NW LEE'S SUMMIT RD AND NE DOUGLAS ST
WITHOUT CURB CUTS

TYPICAL SECTIONS
PUBLIC STREET IMPROVEMENT PLANS

NW LEE'S SUMMIT ROAD &
NE DOUGLAS STREET

LEE'S SUMMIT, MO

2020

drawn by: M.J.D.
checked by: N.D.H.
designed by: M.J.D.
QA/QC by: N.D.H.
project no.: 019-0012-B
date: 2020.06.12

SHEET
C3



NICHOLAS D. HEISER, P.E.
MO# 2015000555

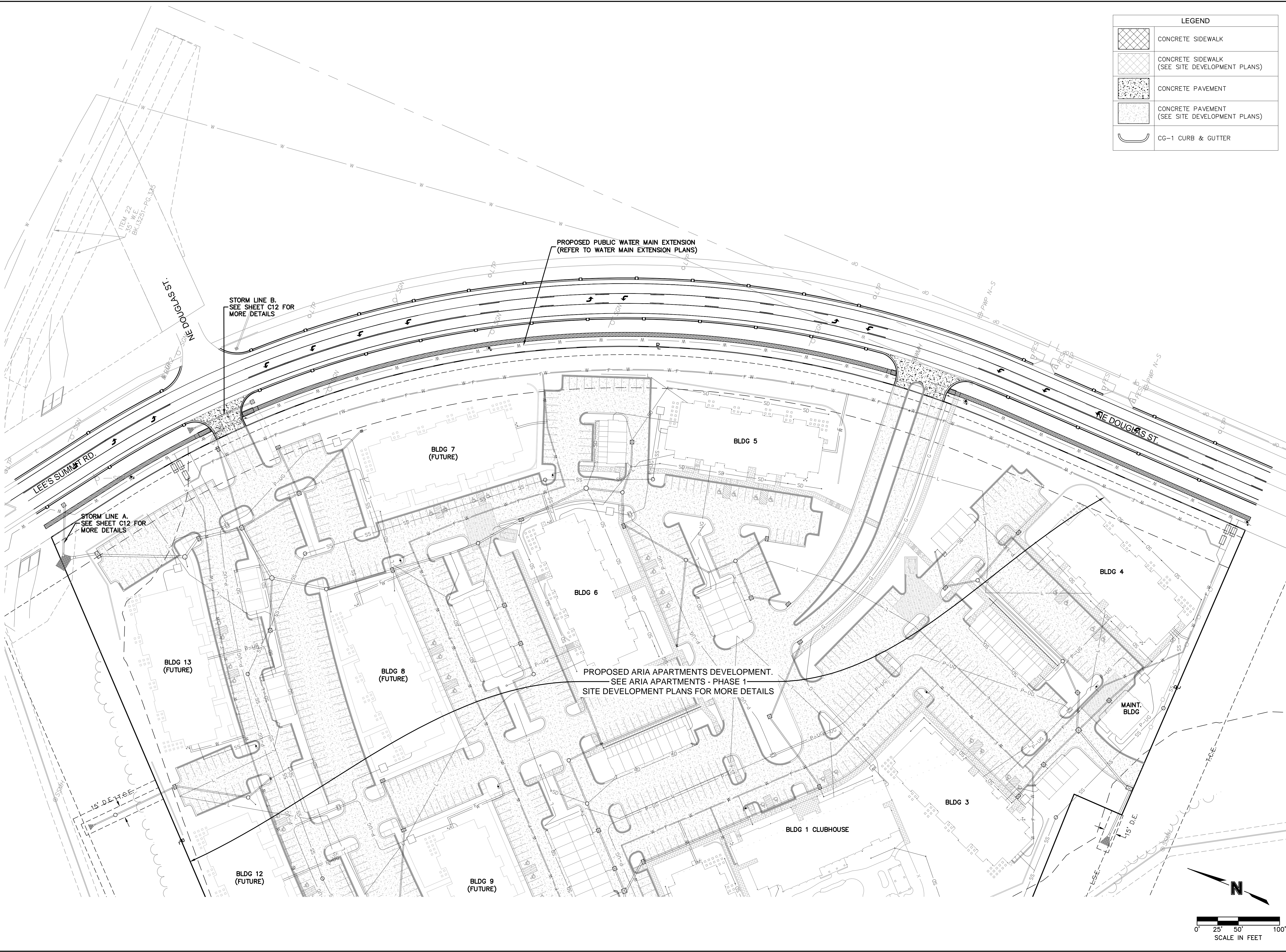
NO. REV.	DATE	REVISIONS DESCRIPTION
1	2020.07.22	CURB TERMINUS DETAIL ADDED

REVISIONS

olsson

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NORTH KANSAS CITY, MO 64116
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File: F:\2019\0001-0500\019-0012-B\40-Design\AutoCAD\Final Plans\Sheets\GNCV\Public Street Improvements\C_GEN02_B190012.dwg ~ Layout: GENERAL LAYOUT ~ Last Saved By: mdebolt ~ Plot Date: 2019.10.01 03:03 PM



LEGEND	
	CONCRETE SIDEWALK
	CONCRETE SIDEWALK (SEE SITE DEVELOPMENT PLANS)
	CONCRETE PAVEMENT
	CONCRETE PAVEMENT (SEE SITE DEVELOPMENT PLANS)
	CG-1 CURB & GUTTER

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STATE OF MISSOURI
NICHOLAS D. HEISER
07/22/2020
NUMBER
PE-2019000553
PROFESSIONAL ENGINEER

NICHOLAS D. HEISER, P.E.
MO# 2015000555

BY

REVISIONS DESCRIPTION

NO. REV.

DATE

REVISED PER CITY COMMENTS

2020

GENERAL LAYOUT
PUBLIC STREET IMPROVEMENT PLANS

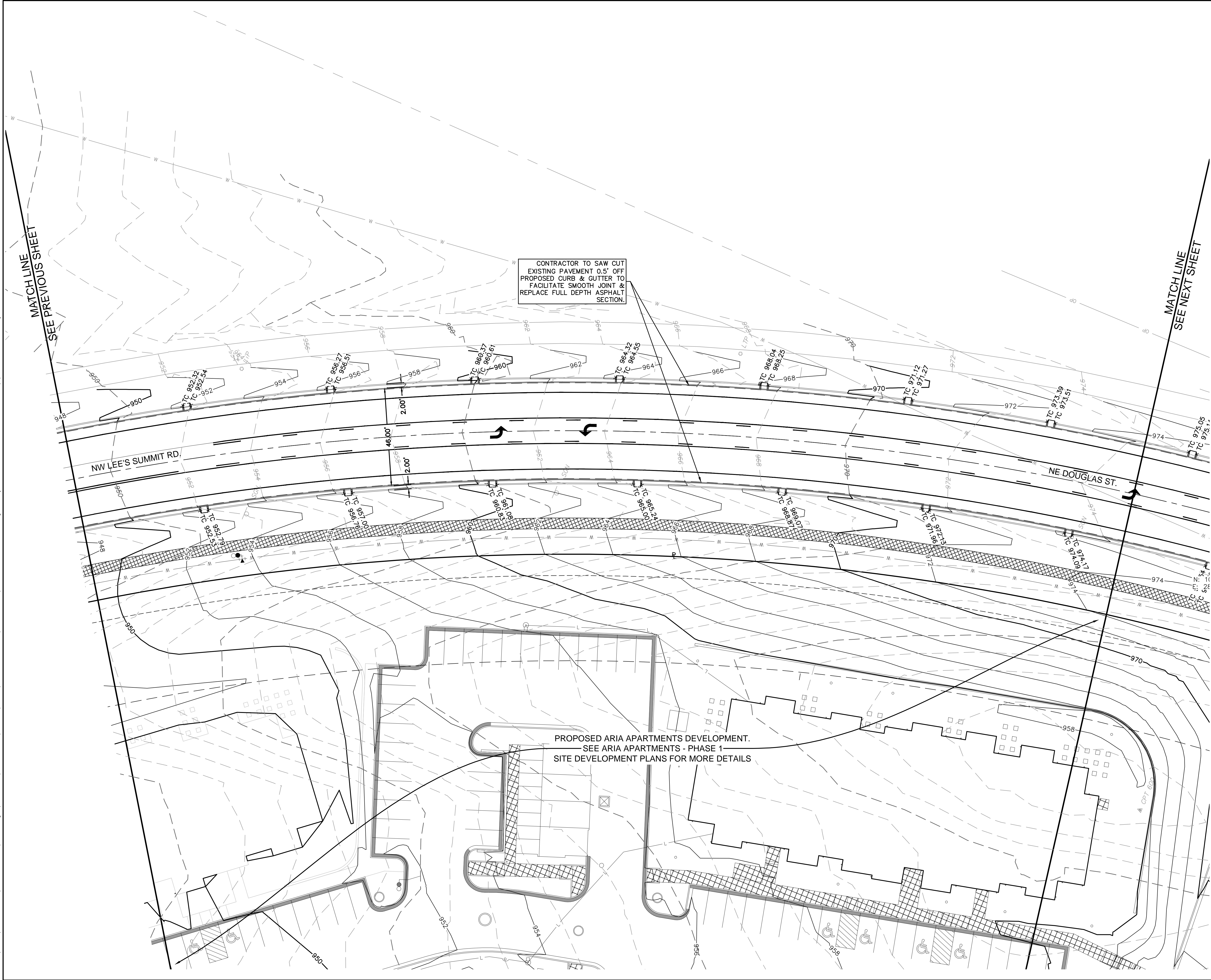
NW LEE'S SUMMIT ROAD &
NE DOUGLAS STREET

LEE'S SUMMIT, MO

drawn by: M.J.D.
checked by: N.D.H.
designed by: M.J.D.
QA/QC by: N.D.H.
project no.: 019-0012-B
date: 2020.06.12

SHEET
C4

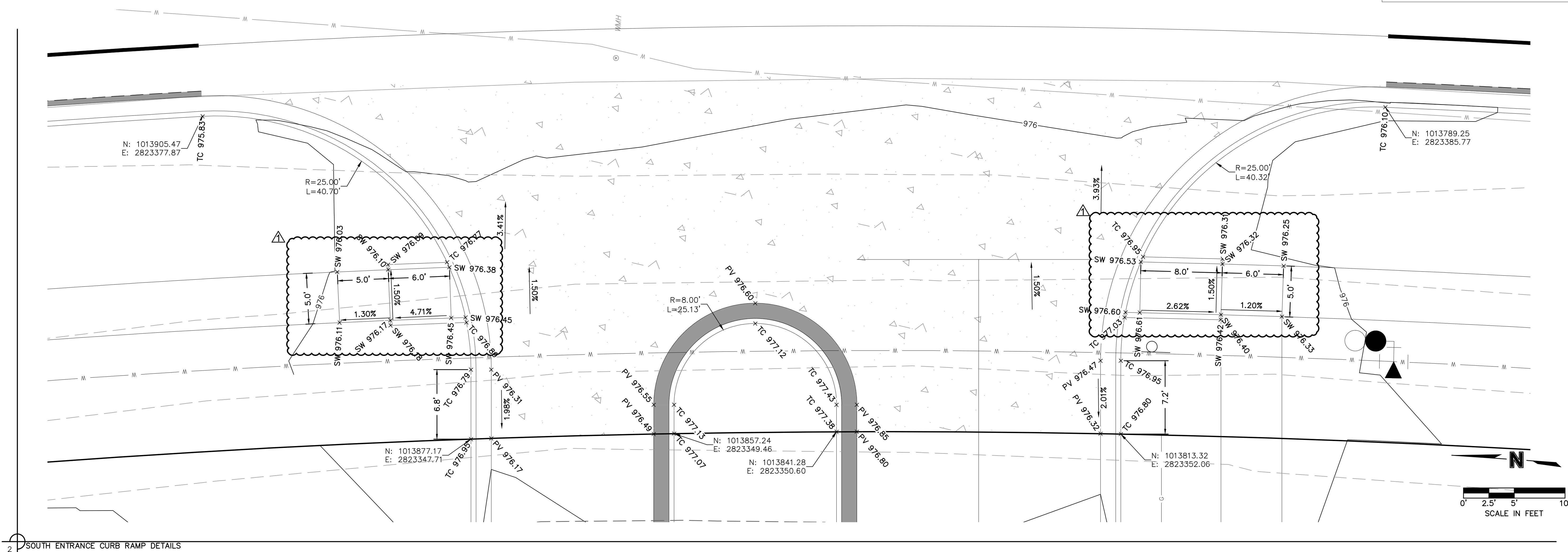
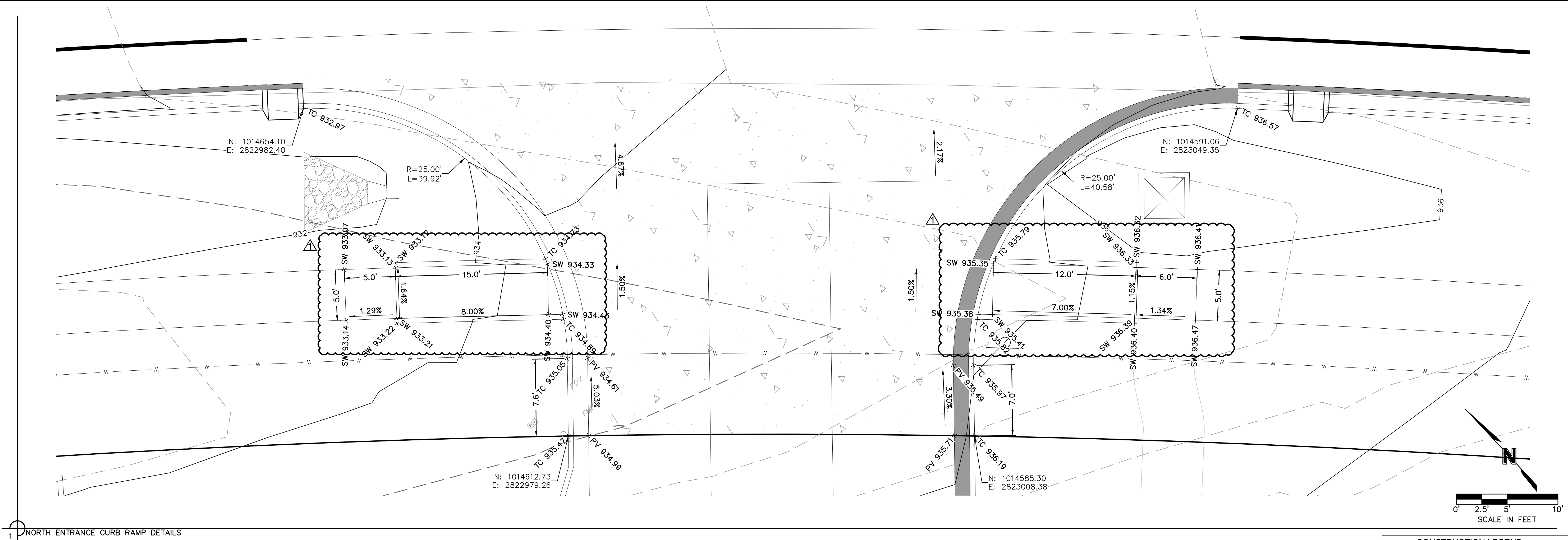
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SITE AND GRADING PLAN PUBLIC STREET IMPROVEMENT PLANS		NO. REV.		DATE	REVISIONS DESCRIPTION	BY
NW LEE'S SUMMIT ROAD & NE DOUGLAS STREET		1	2020.07.22	REVISED PER CITY COMMENTS		
LEE'S SUMMIT, MO		2020		REVISIONS		
drawn by: M.J.D. checked by: N.D.H. designed by: M.J.D. QA/QC by: N.D.H. project no.: 019-0012-B date: 2020.06.12						
SHEET C6						

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TEL 816.361.1177
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NICHOLAS D. HEISER, P.E.
MO# 2015000555



CONSTRUCTION LEGEND	
	CG-1 CURB & GUTTER (See Detail Sheet)
	CG-1 DRY CURB & GUTTER (See Detail Sheet)

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STATE OF MISSOURI
NICHOLAS D. HEISER
NUMBER
07/22/2020
PE-2019000555
PROFESSIONAL ENGINEER

NICHOLAS D. HEISER, P.E.
MO# 2015000555

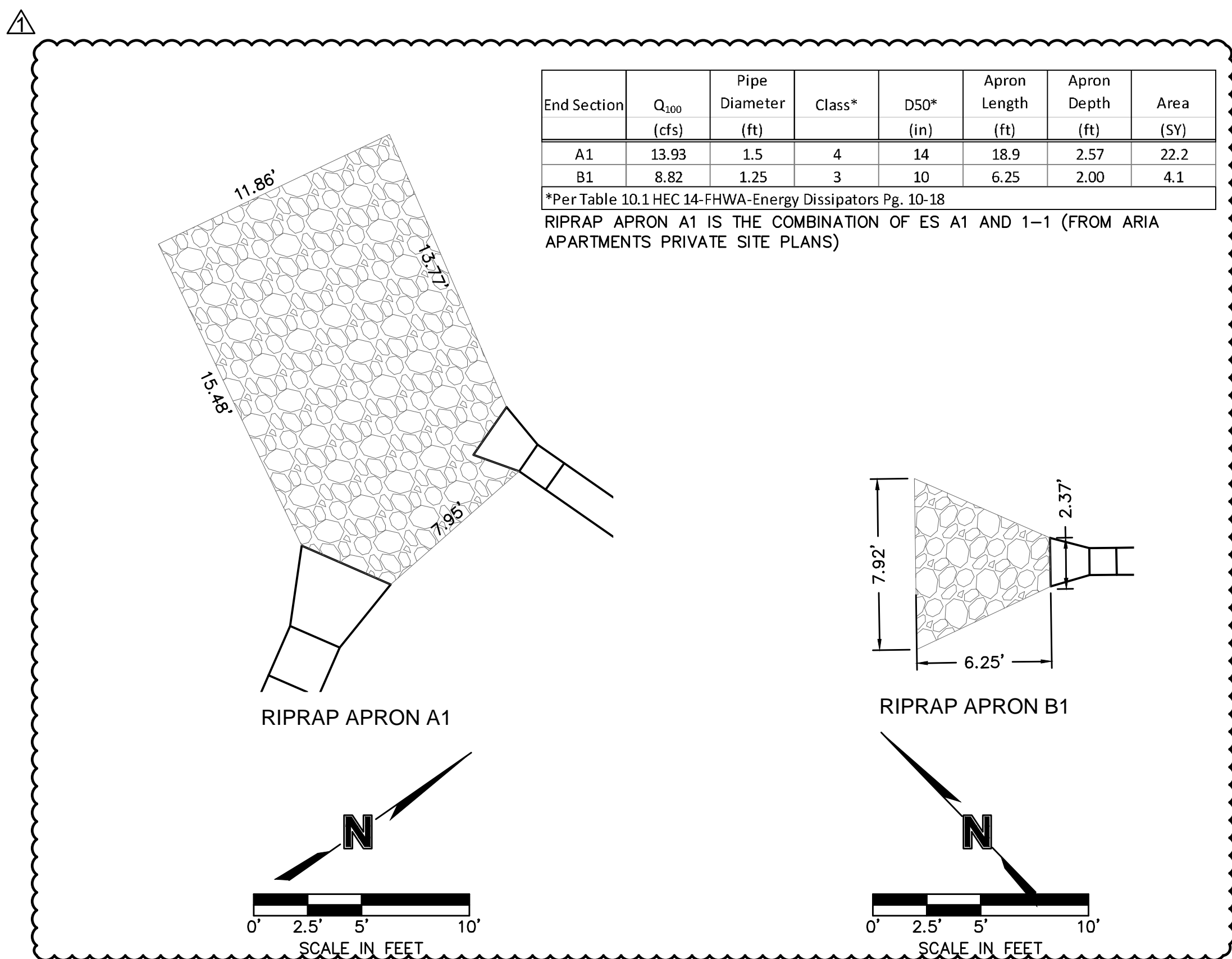
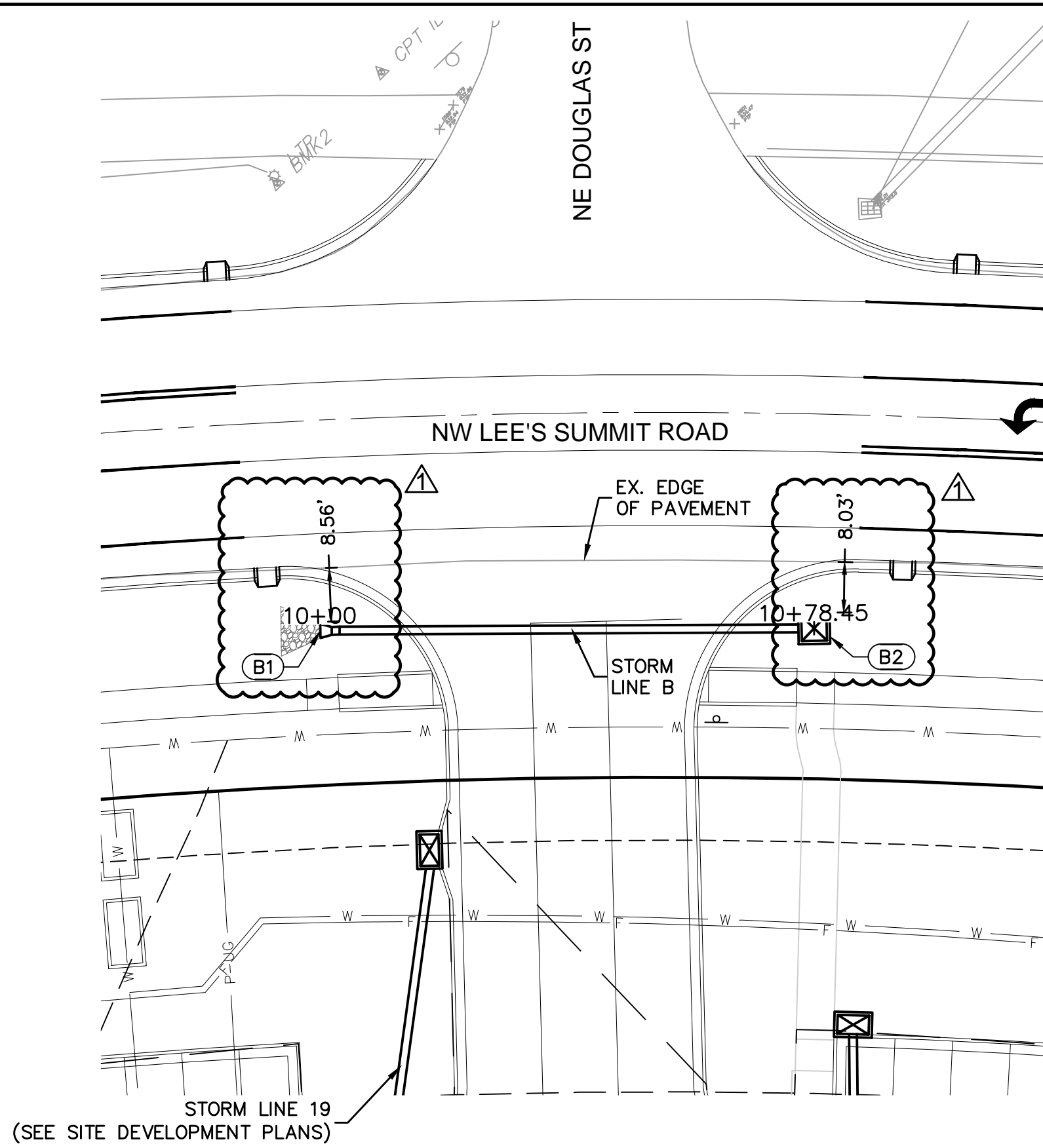
BY		REVISIONS DESCRIPTION	
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SPOT ELEVATION DETAILS PUBLIC STREET IMPROVEMENT PLANS		2020	
NW LEE'S SUMMIT ROAD & NE DOUGLAS STREET		LEE'S SUMMIT, MO	

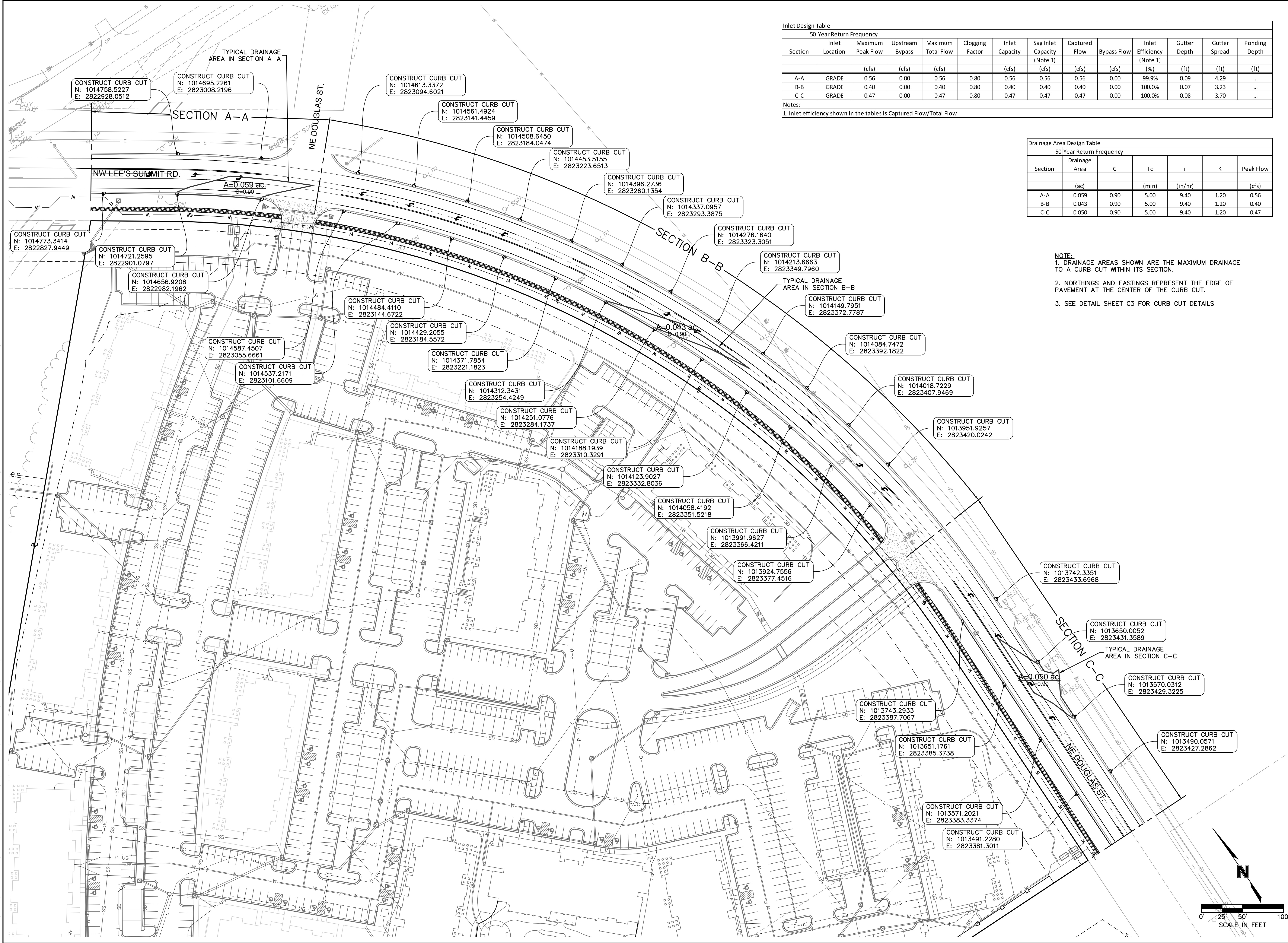
drawn by: M.J.D.
checked by: N.D.H.
designed by: M.J.D.
QA/QC by: N.D.H.
project no.: 019-0012-B
date: 2020.06.12

SHEET
C8

Section	Drainage Area	C	Tc	i	K	Peak Flow
	(ac.)		(min)	(in/hr)		(cfs)
D-D	0.82	0.42	5.00	10.32	1.25	4.43
E-E	1.64	0.44	5.00	10.32	1.25	9.26
F-I	0.41	0.69	5.00	10.32	1.25	3.67



File: F:\2019\0001-0500\019-0012-B\40-Design\AutoCAD\Final Plans\Sheets\GNCA\Public Street Improvements\CCP01_B190012.dwg ~ Layout: CURB CUT PLAN ~ Last Saved By: mdebot ~ Plot Date: 2019.10.01 03:03 PM



Inlet Design Table													
50 Year Return Frequency													
Section	Inlet Location	Maximum Peak Flow	Upstream Bypass	Maximum Total Flow	Clogging Factor	Inlet Capacity	Sag Inlet Capacity (Note 1)	Captured Flow	Bypass Flow	Inlet Efficiency (Note 1)	Gutter Depth	Gutter Spread	Ponding Depth
		(cfs)	(cfs)	(cfs)		(cfs)	(cfs)	(cfs)	(cfs)	(%)	(ft)	(ft)	(ft)
A-A	GRADE	0.56	0.00	0.56	0.80	0.56	0.56	0.56	0.00	99.9%	0.09	4.29	...
B-B	GRADE	0.40	0.00	0.40	0.80	0.40	0.40	0.40	0.00	100.0%	0.07	3.23	...
C-C	GRADE	0.47	0.00	0.47	0.80	0.47	0.47	0.47	0.00	100.0%	0.08	3.70	...
Notes:													
1. Inlet efficiency shown in the tables is Captured Flow/Total Flow													

Notes:
1. Inlet efficiency shown in the tables is Captured Flow/Total Flow

Drainage Area Design Table						
50 Year Return Frequency						
Section	Drainage Area	C	Tc	i	K	Peak Flow
	(ac)		(min)	(in/hr)		(cfs)
A-A	0.059	0.90	5.00	9.40	1.20	0.56
B-B	0.043	0.90	5.00	9.40	1.20	0.40
C-C	0.050	0.90	5.00	9.40	1.20	0.47

- NOTE:
1. DRAINAGE AREAS SHOWN ARE THE MAXIMUM DRAINAGE TO A CURB CUT WITHIN ITS SECTION.
2. NORTHINGS AND EASTINGS REPRESENT THE EDGE OF PAVEMENT AT THE CENTER OF THE CURB CUT.
3. SEE DETAIL SHEET C3 FOR CURB CUT DETAILS

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NO. CERTIFICATE OF AUTHORITY #001582
NORTH KANSAS CITY, MO 64116
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STATE OF MISSOURI
NICHOLAS D. HEISER
07/22/2020
NUMBER
PE-2019000555
PROFESSIONAL ENGINEER

NICHOLAS D. HEISER, P.E.
MO# 2015000555

NO.	REV.	DATE	REVISIONS DESCRIPTION
1		2020.07.22	REVISED PER CITY COMMENTS

CURB CUT PLAN
PUBLIC STREET IMPROVEMENT PLANS

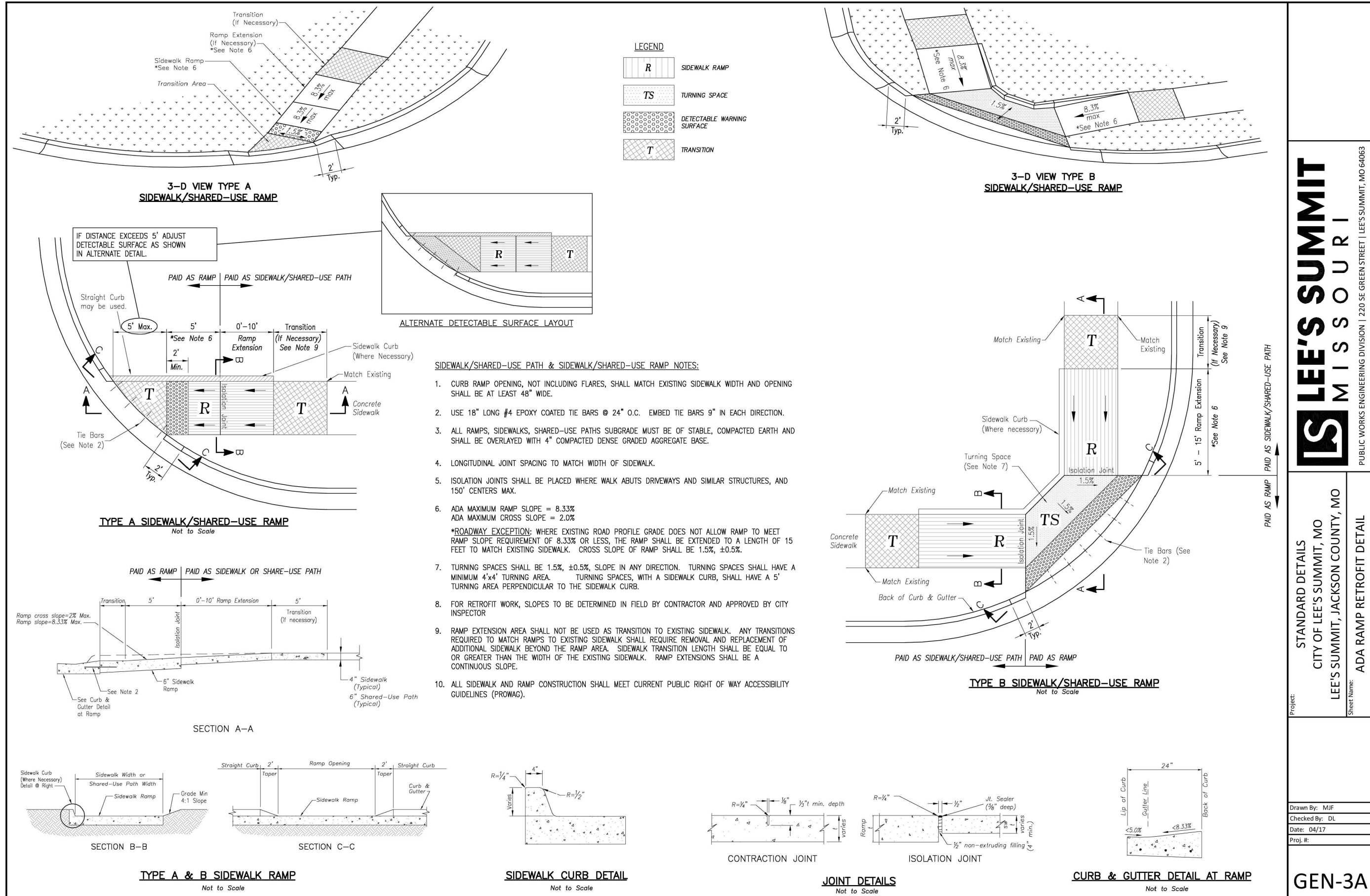
NW LEE'S SUMMIT ROAD &
NE DOUGLAS STREET

LEE'S SUMMIT, MO

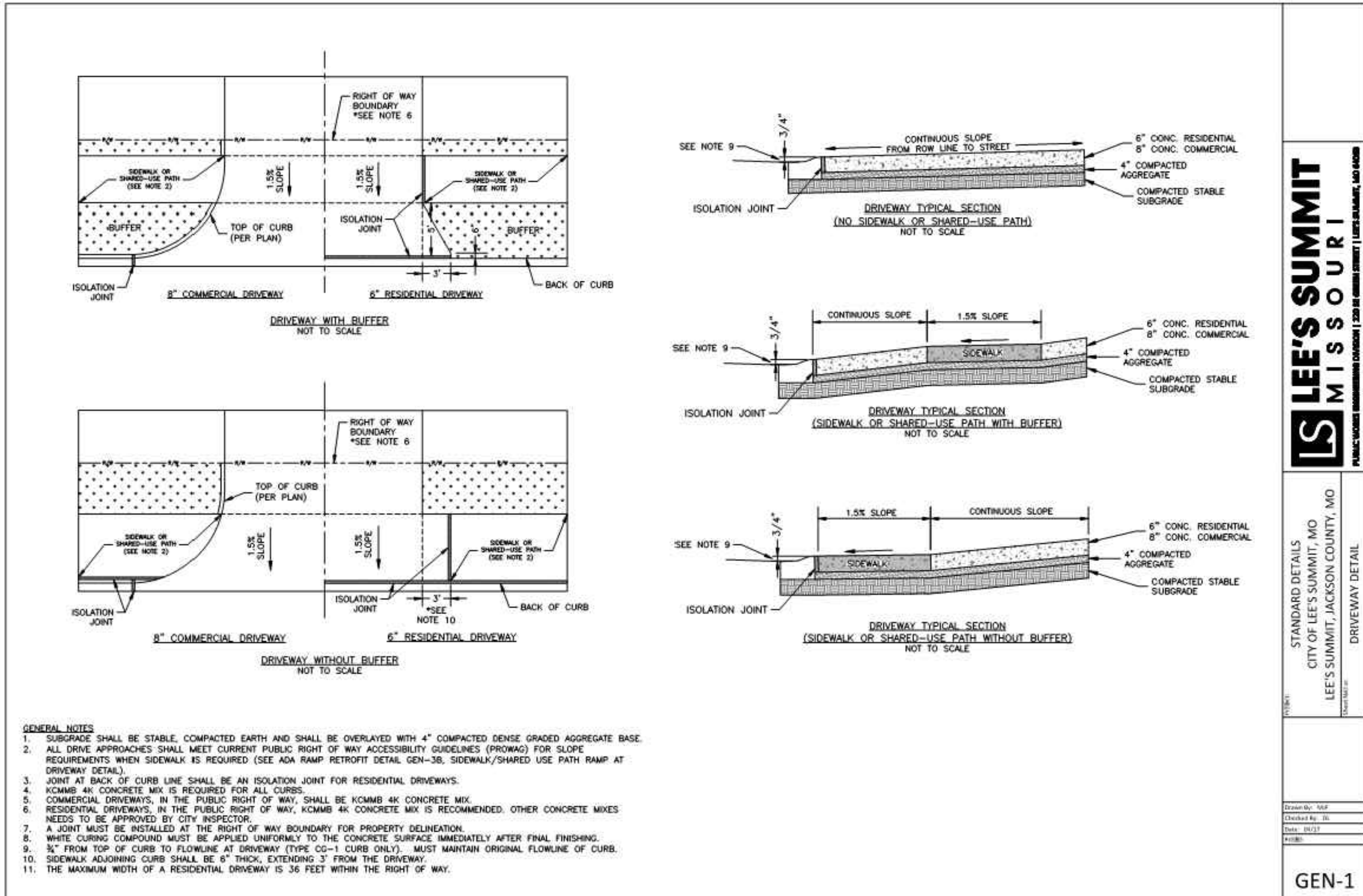
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checked by: N.D.H.
designed by: M.J.D.
QA/QC by: N.D.H.
project no.: 019-0012-B
date: 2020.06.12

SHEET
C13

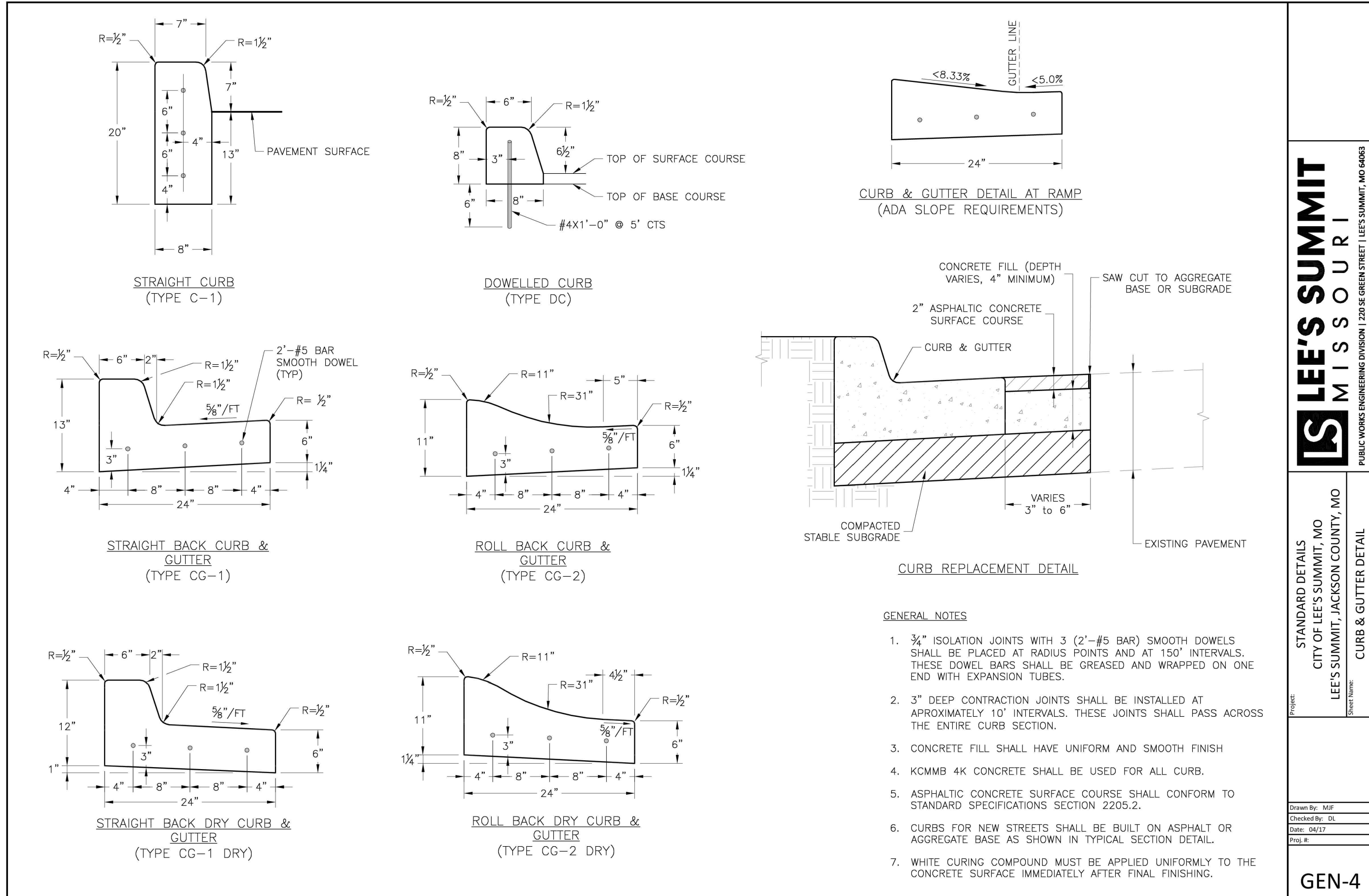
2020
REVISIONS



STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64083
ADA RAMP RETROFIT DETAIL
GEN-3A



STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64083
DRIVEWAY DETAIL
GEN-1



STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64083
CURB & GUTTER DETAIL
GEN-4

DETAIL SHEET
PUBLIC STREET IMPROVEMENT PLANS

NW LEE'S SUMMIT ROAD &
NE DOUGLAS STREET

LEE'S SUMMIT, MO

REVISIONS DESCRIPTION

BY

NICHOLAS D. HEISER, P.E.
MO# 2015000555

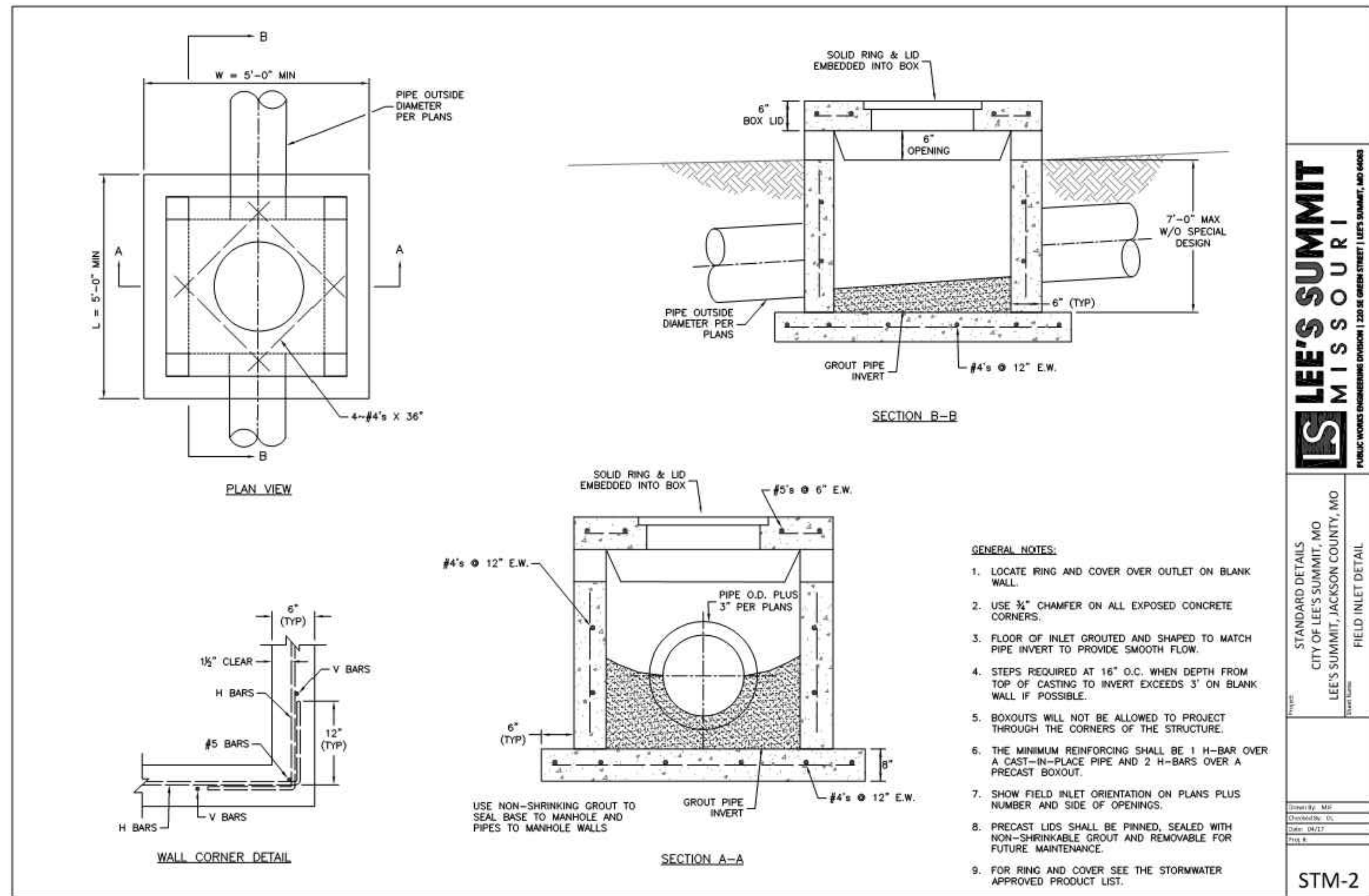
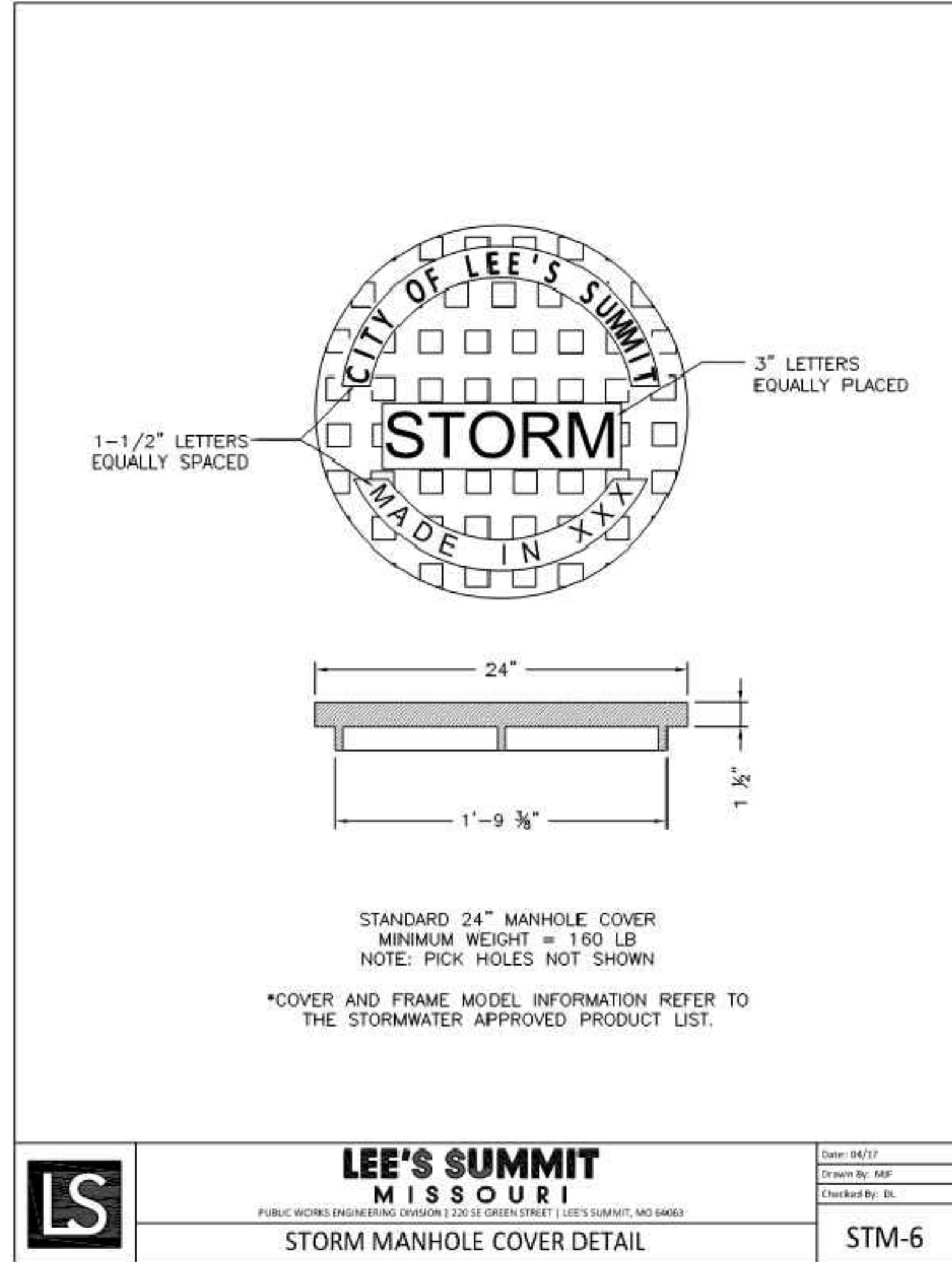
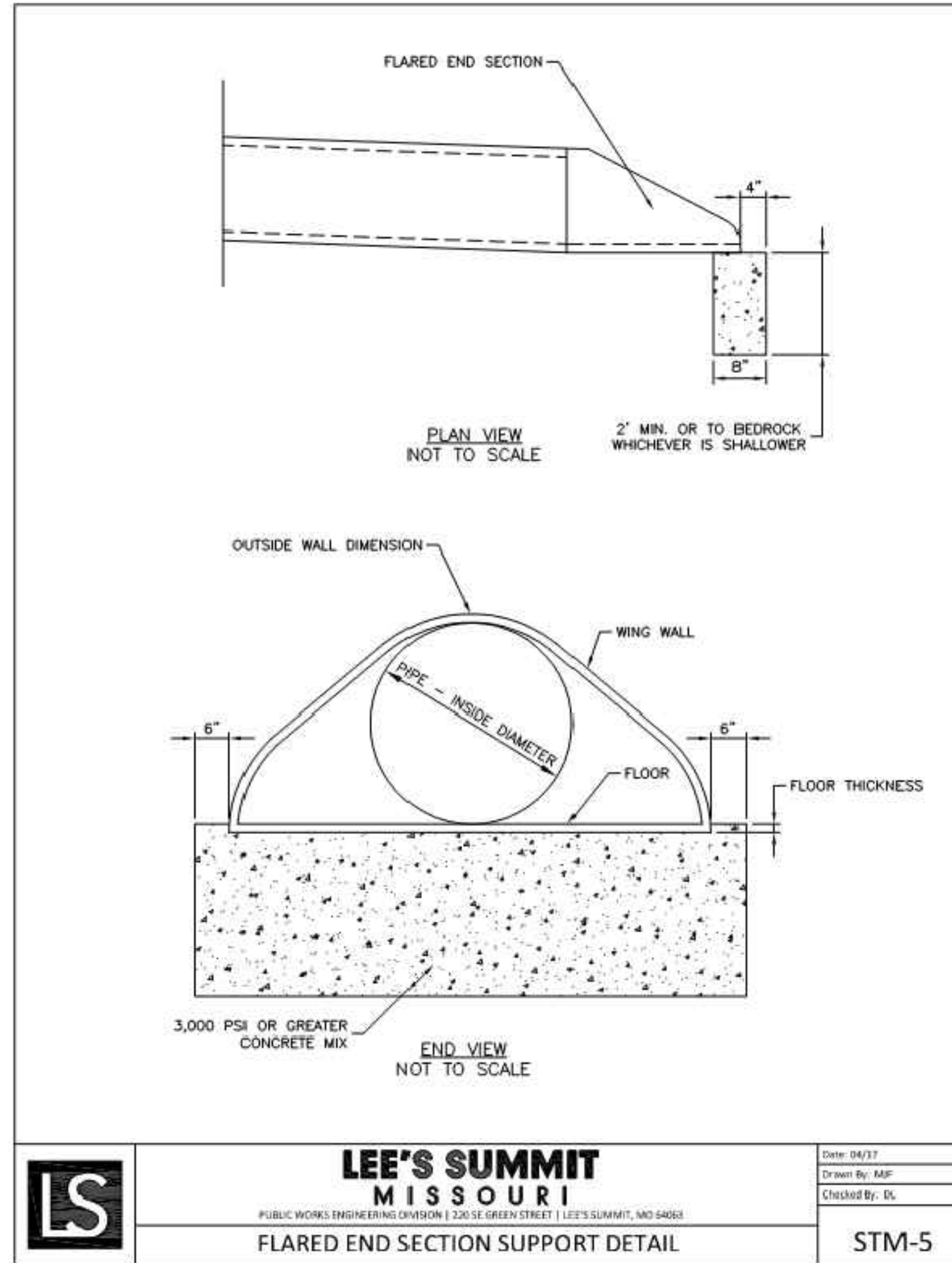
STATE OF MISSOURI
NICHOLAS D. HEISER
07/22/2020
NUMBER
PE-2015000555
PROFESSIONAL ENGINEER

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SHEET
C14

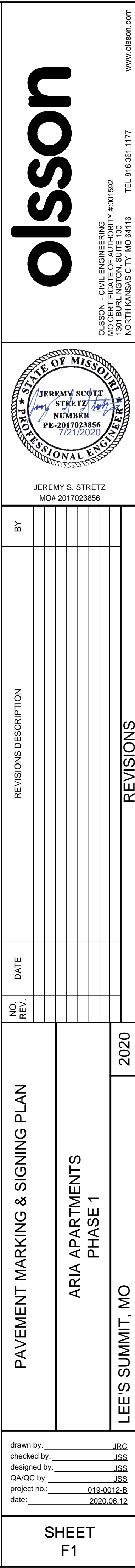
drawn by: M.J.D.
checked by: N.D.H.
designed by: M.J.D.
QA/QC by: N.D.H.
project no.: 019-0012-B
date: 2020.06.12



GENERAL NOTE:

1. ALL LONGITUDINAL MARKINGS (E.G. LANE LINES) SHALL BE HIGH-BUILD PAINT, AND ALL SYMBOLS, DIAGONALS, STOP LINES SHALL BE PRE-FORMED THERMOPLASTIC MATERIAL TO ACCORDING TO CITY OF LEE'S SUMMIT STANDARDS AND SPECIFICATIONS.

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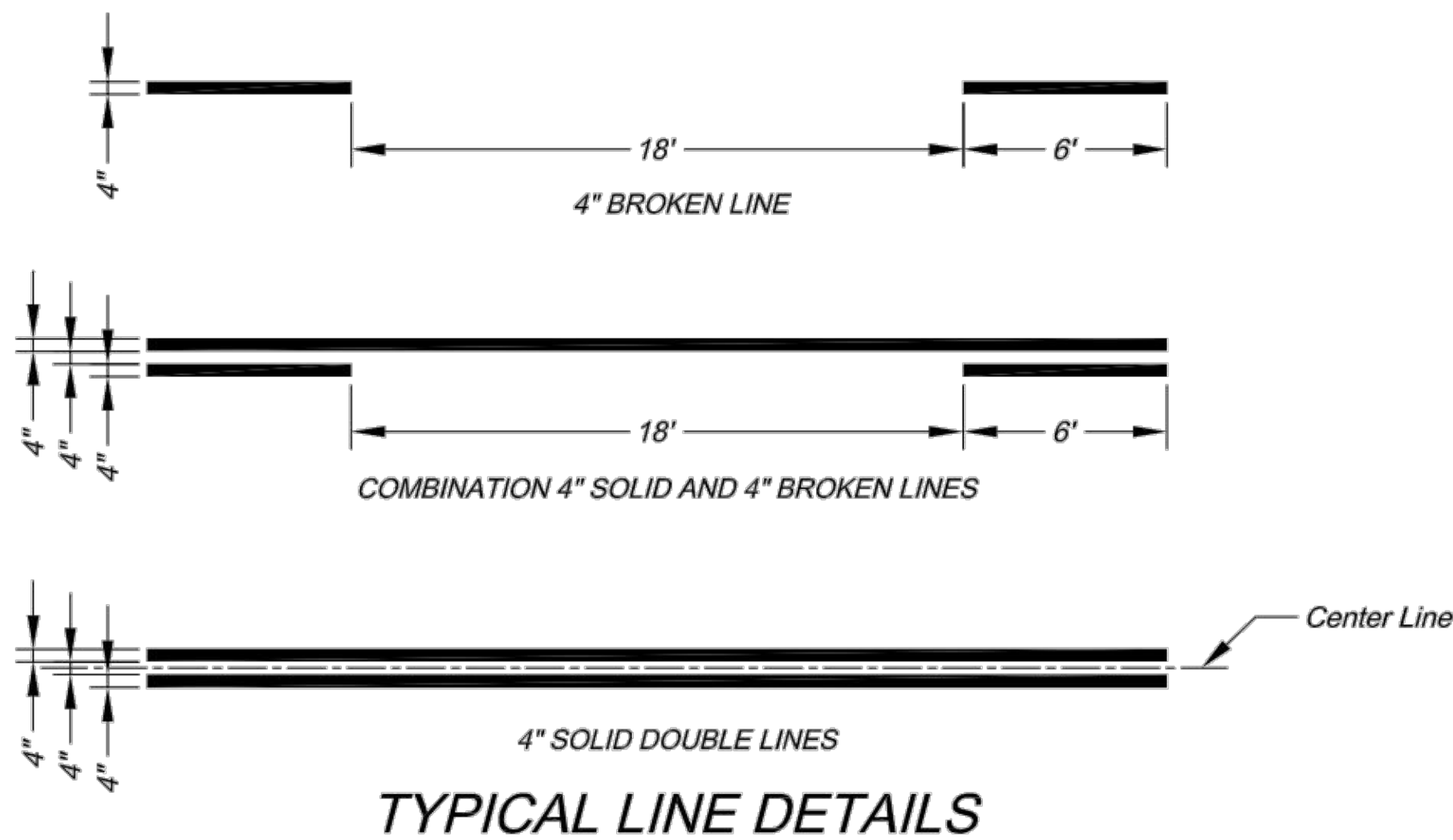
PERMANENT SIGNING SUMMARY						
STATION	STREET REFERENCE	OFFSET FROM C/L	MUTCD DESIGNATION	SIGN SIZE	AREA (SF) MEP SIGNS	POST TYPE
4+09.12	E LEES SUMMIT ROAD	48.7' RIGHT	R1-1	30"x30"	5.18	SQUARE
			D3-1 (Lee's Summit Rd)	9"x48"	6.00	SHARED
			D3-1 (NE Douglas St)	9"x48"	6.00	SHARED
13+18.74	E LEES SUMMIT ROAD	49.3' RIGHT	R1-1	30"x30"	5.18	SQUARE
			D3-1 (NE Douglas St)	9"x48"	6.00	SHARED
TOTALS			28.36			2

PAVEMENT MARKING SUMMARY							
STATION TO STATION		LOCATION	HIGH-BUILD PAINT 4" SOLID WHITE LANE LINES (LF)	HIGH-BUILD PAINT 4" SOLID YELLOW LANE LINE (LF)	HIGH-BUILD PAINT 4" BROKEN YELLOW LANE LINES (LF)	PRE-FORMED THERMOPLASTIC WHITE TURN ARROWS (EA)	
						RT	LT
1+07	3+33	E LEES SUMMIT ROAD	565	435			3
4+32	7+08	E LEES SUMMIT ROAD	770	550			4
7+08	9+25	E LEES SUMMIT ROAD	432	417	104		2
9+25	12+23	E LEES SUMMIT ROAD	595	595	149		2
13+42	16+18	E LEES SUMMIT ROAD	772	553			4
16+18	17+16	E LEES SUMMIT ROAD	196	276	69		
TOTALS			3330	2826	322	0	15

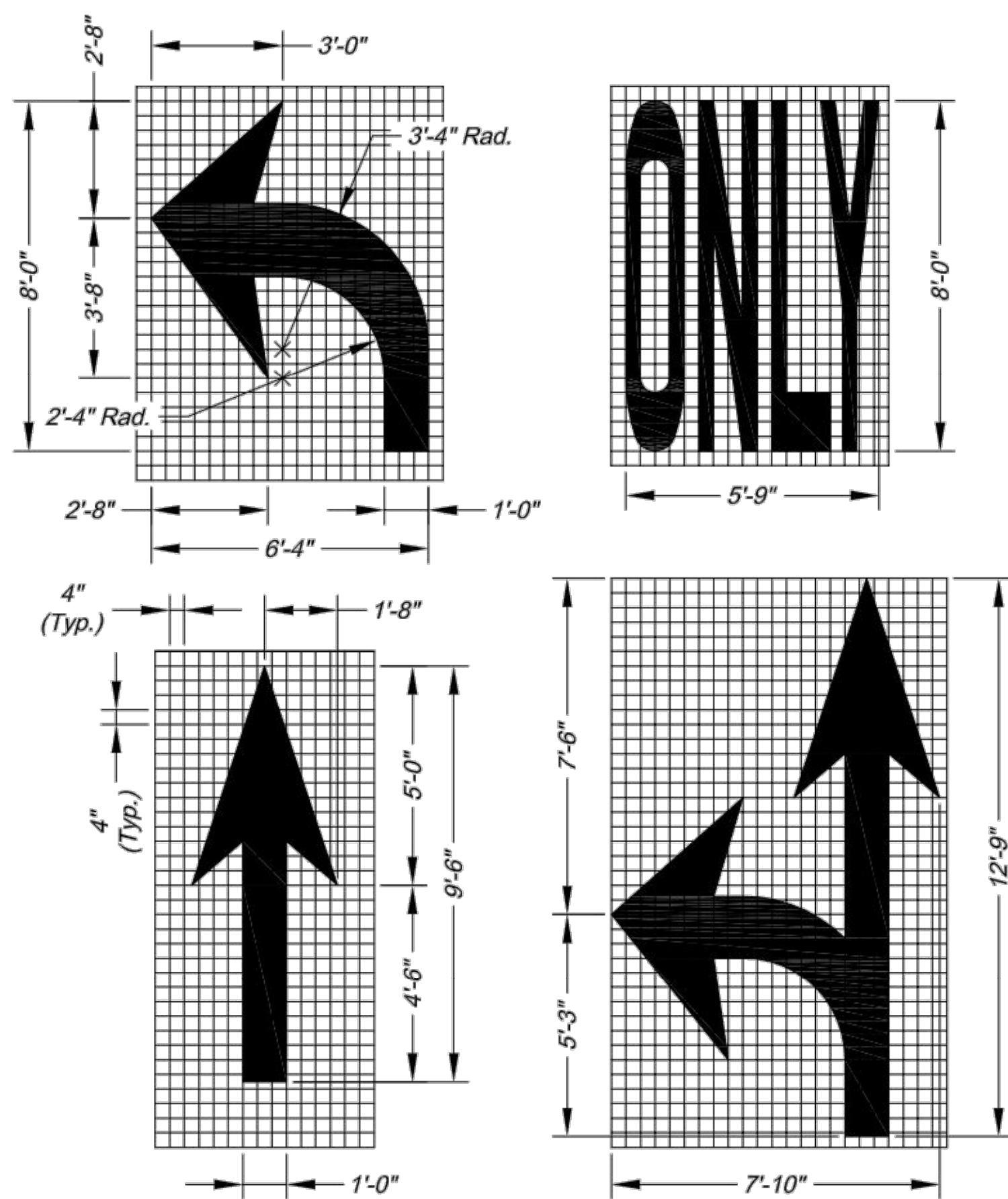
GENERAL NOTE:

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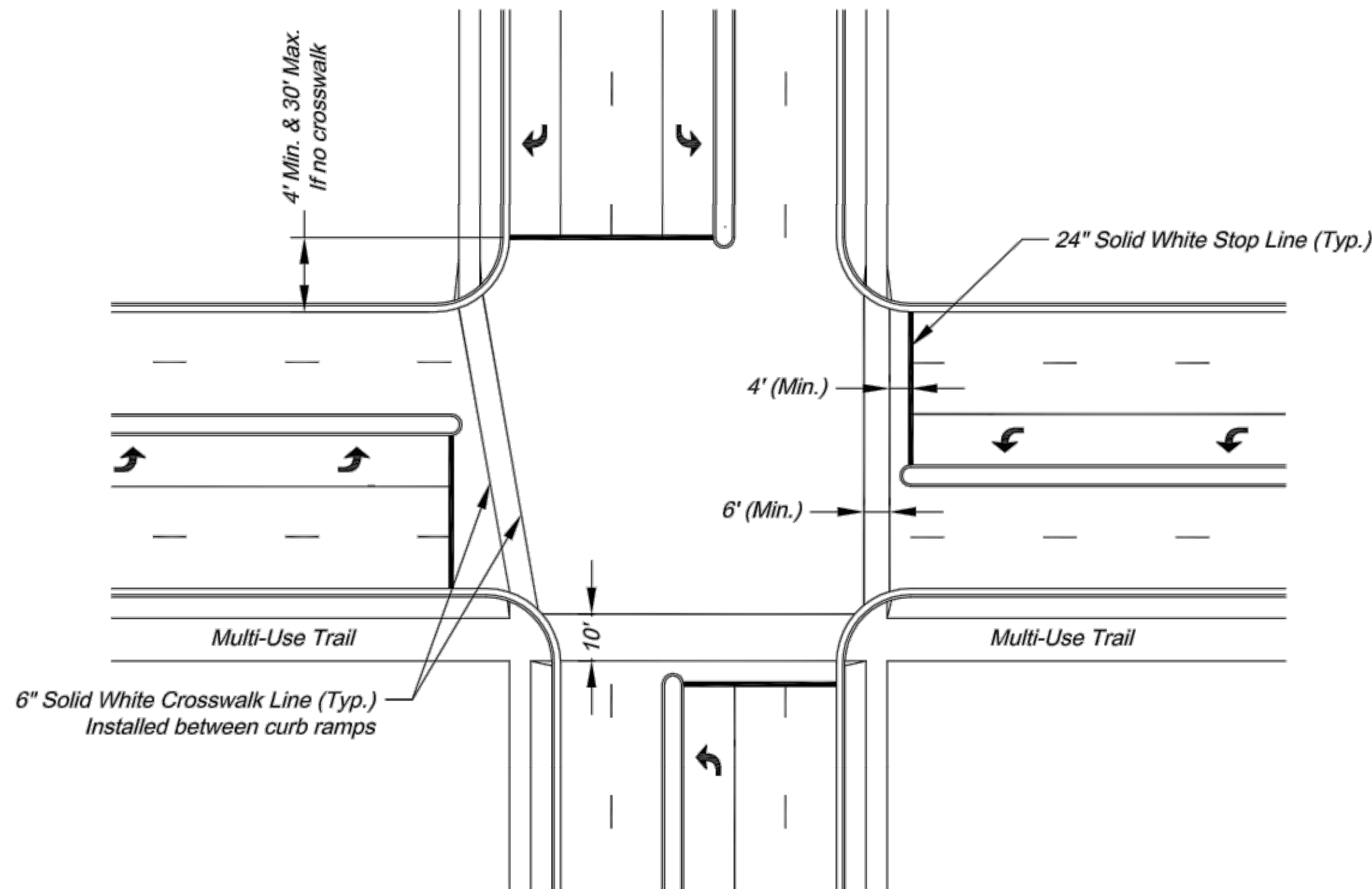
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PAVEMENT MARKING & SIGNING QUANTITIES		NO. DATE	
ARIA APARTMENTS PHASE 1			
LEE'S SUMMITT, MO		REVISIONS	



- NOTES:
1. All edge line, center line, and lane line pavement markings shall be 4" wide unless otherwise noted.
 2. Edge lines shall be continuous solid white or yellow lines. Right side edge lines shall be solid white. Median or left side edge lines on divided roadways are to be solid yellow. Edge lines and center lines shall be continuous across driveways.

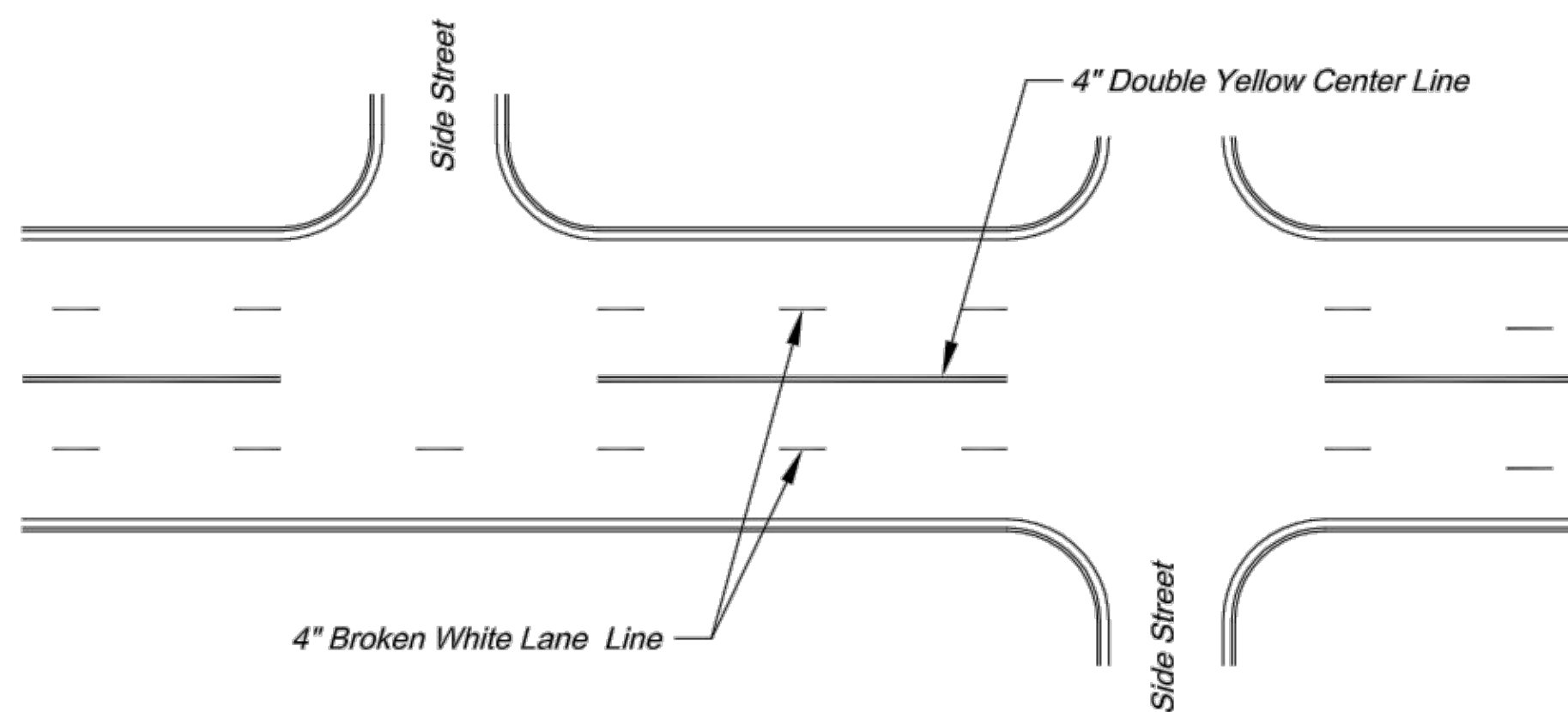


- NOTES:
1. All arrow and symbol markings shall be white, and shall be centered in their respective traffic lanes.
 2. Right-turn and combination right-turn/straight arrows are reverse of arrows shown.



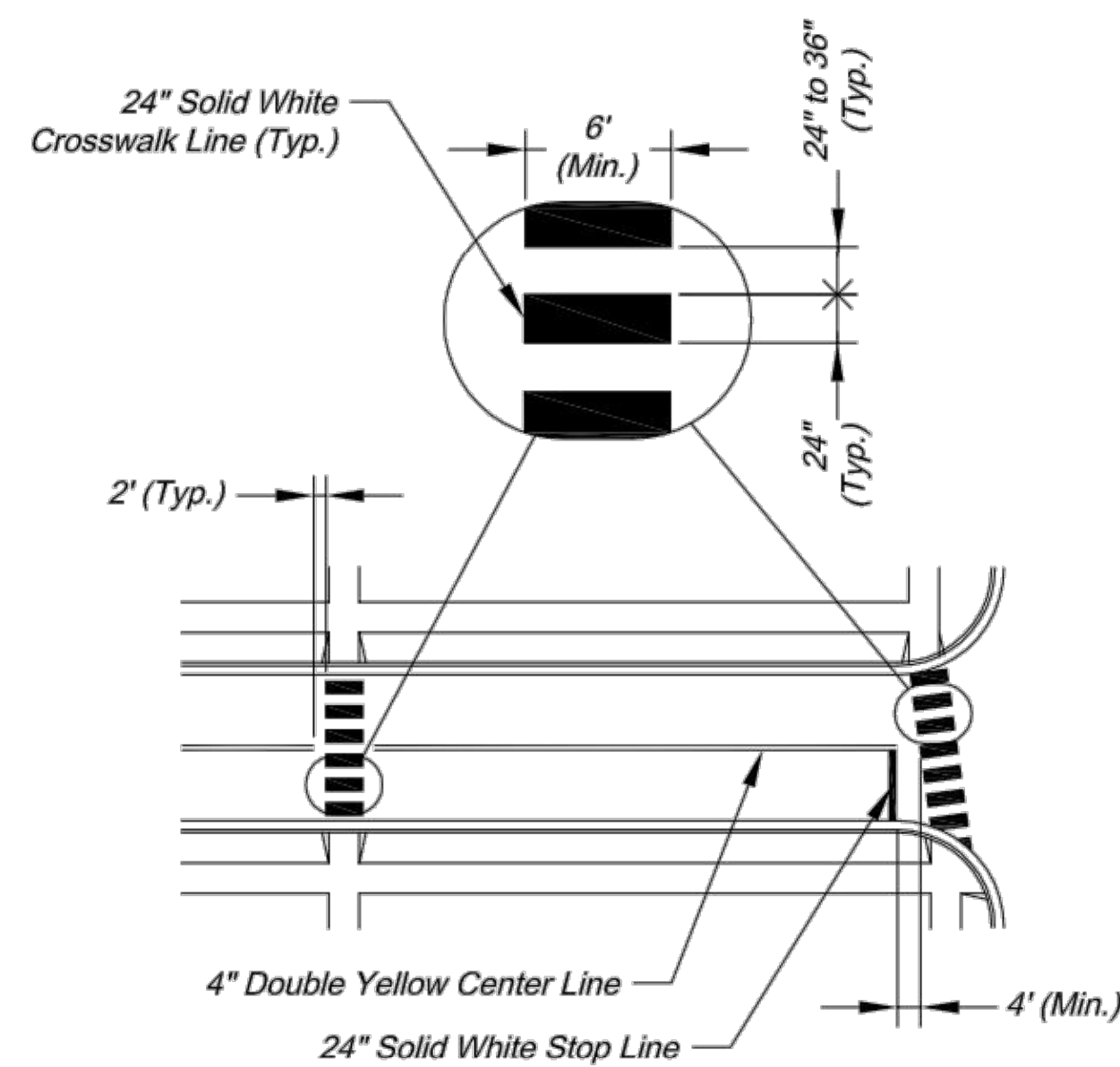
TYPICAL INTERSECTION MARKINGS

- NOTES:
1. Transverse crosswalk lines shall be installed such that the distance between lines is at least 6 or 10 feet.
 2. Stop lines are required at signalized intersections, on multi-lane stop controlled approaches, or in front of crosswalks at controlled intersections.

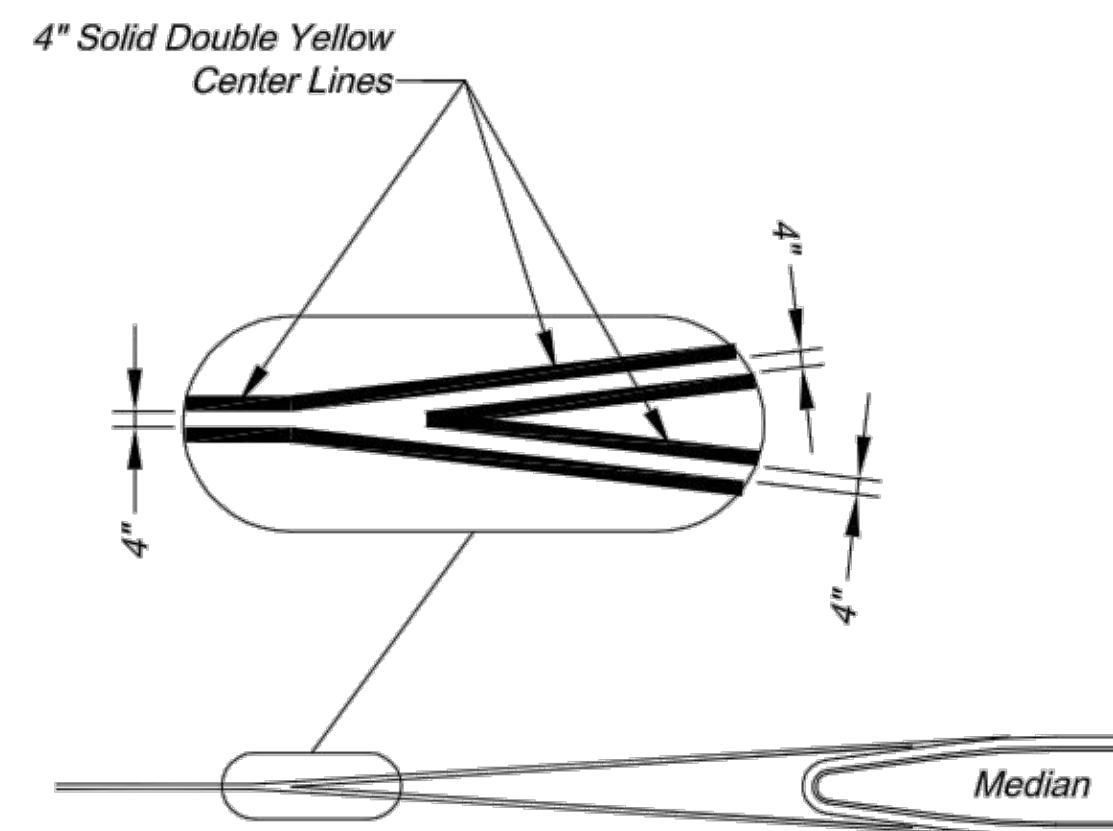


TYPICAL MARKINGS FOR FOUR-LANE UNDIVIDED ROADWAY

- PAVEMENT MARKING GENERAL NOTES:
1. All pavement markings shall be in accordance with the latest edition of the *Manual on Uniform Traffic Control Devices (MUTCD)*.
 2. All words and symbols shall conform to the latest edition of *Standard Alphabets for Highway Signs and Pavement Markings* printed by the U.S. Department of Transportation, Federal Highway Administration.
 3. Pavement markings, either temporary or permanent are required at all times if the roadway is open to traffic.
 4. All pavement markings that conflict with the desired markings shall be completely removed. Removals shall not leave the road surface scarred with an image that misleads traffic. Any excess damage or scarring of pavement shall be repaired at the Contractor's expense.
 5. The proposed permanent markings shall be laid out by the Contractor in advance of the marking installation. Markings shall not be applied until the layout has been approved by the City Traffic Engineer.
 6. Center lines shall be marked on all undivided arterial streets, and any other undivided street with more than two lanes and/or a speed limit of 30 mph or more.
 7. Edge lines shall be marked on all non-curbed streets.

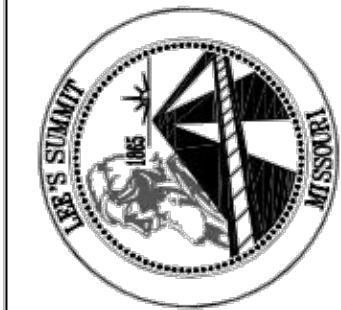


TYPICAL MIDBLOCK OR SCHOOL CROSS WALK



TYPICAL MEDIAN NOSE CENTER LINE DETAIL

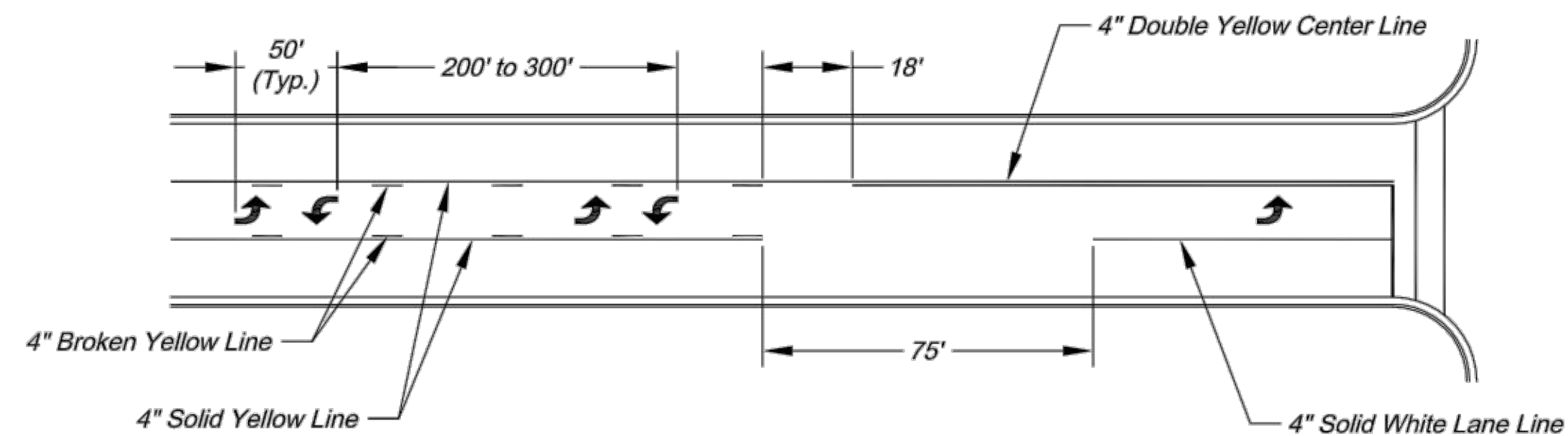
CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE: (816) 969-1800 FAX: (816) 969-1809



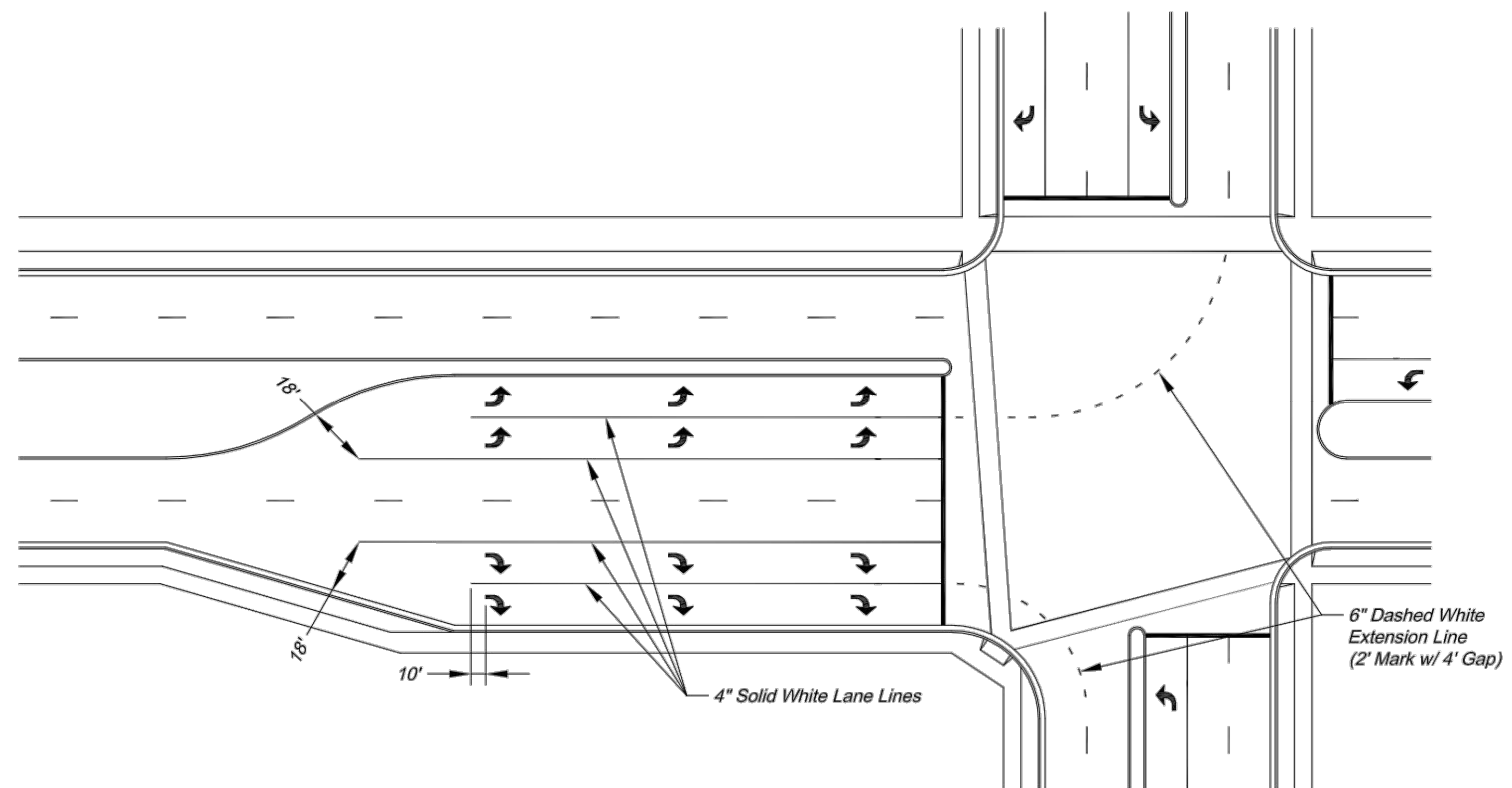
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ROADWAY MARKING DETAILS
Sheet Name: STANDARD DRAWING PM-1

Drawn By: AS
Checked By: JW
Date: 09/09/2009
Project#

SHEET
F4

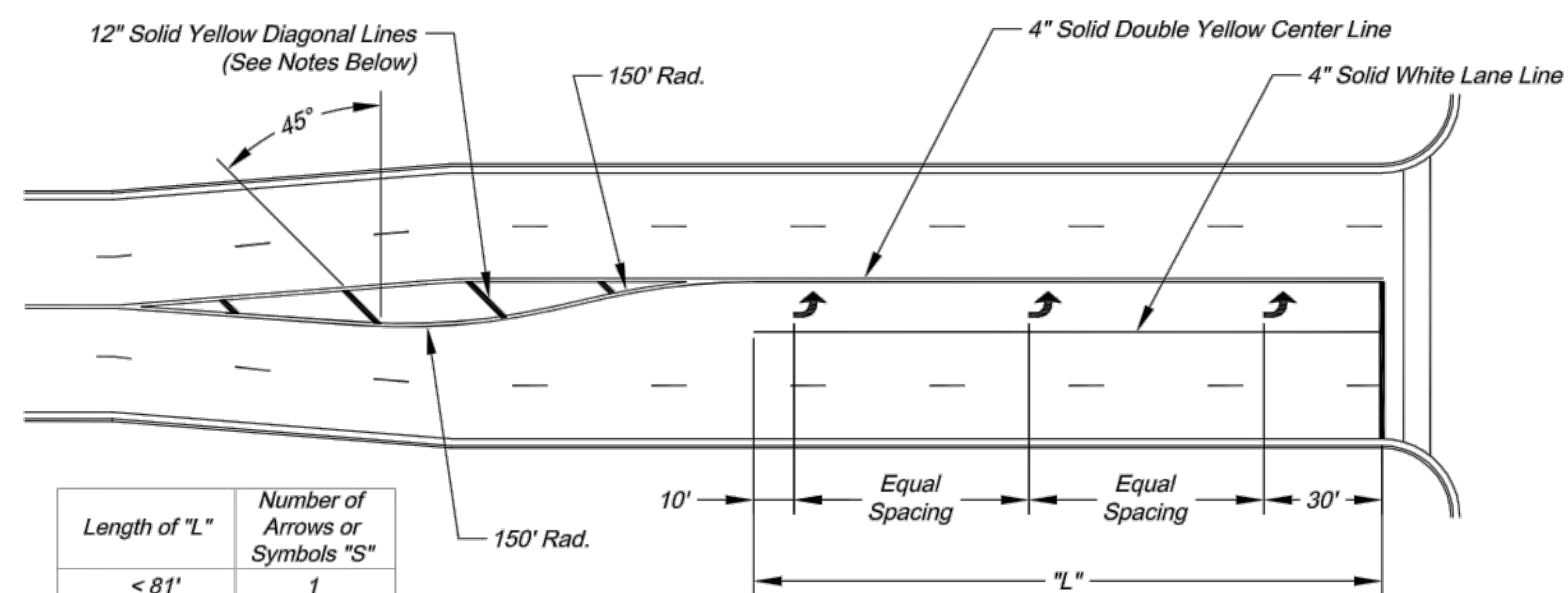


TYPICAL MARKINGS FOR TWO-WAY LEFT-TURN LANE



TYPICAL DUAL TURN LANE MARKINGS

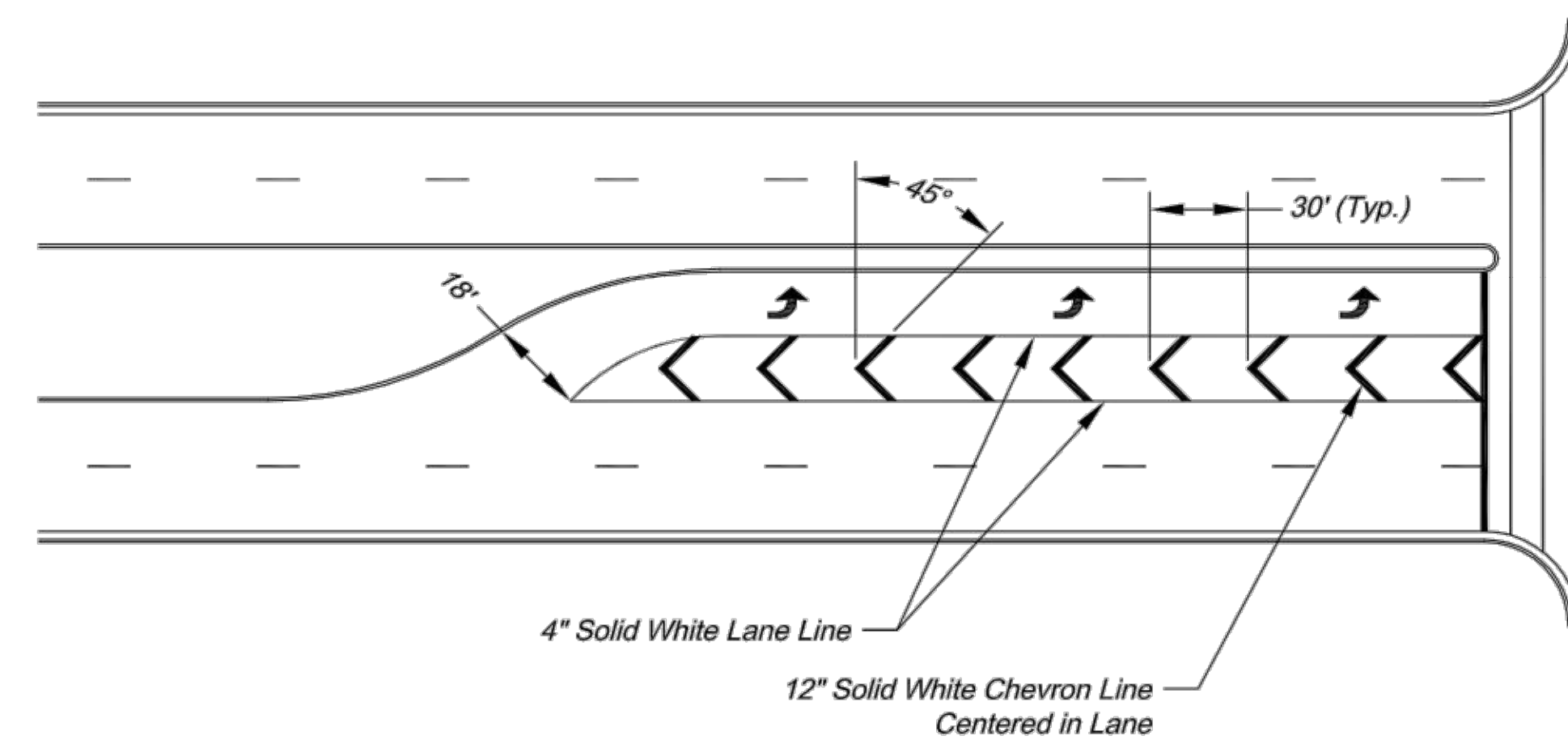
NOTE:
1. Dashed extension lines shall not extend through crosswalks.



Length of "L"	Number of Arrows or Symbols "S"
< 81'	1
81' - 120'	2
121' - 200'	3
201' - 280'	4
281' - 360'	5
361' - 440'	6

TYPICAL TURN LANE MARKINGS

- NOTES:
1. Diagonal lines are required between centerlines if the width of the area between the center lines is greater than 12' and/or the length of the area between center lines is greater than 250'.
 2. Diagonal lines should be spaced at 5' increments, equal to the posted speed limit.
 3. Equal Spacing is calculated as $(L - 40) / (S - 1)$.
 4. When a through lane of traffic terminates as a mandatory turn lane, Arrow and "ONLY" symbols should be marked in the turn lane, in alternating order. The first and last symbols should be Arrows.



TYPICAL STRIPED OUT TURN LANE MARKINGS

CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE: (816) 969-1800 FAX: (816) 969-1809



INTERSECTION MARKING DETAILS

STANDARD DRAWING PM-2

Project:

Sheet Name:

Drawn By: AS

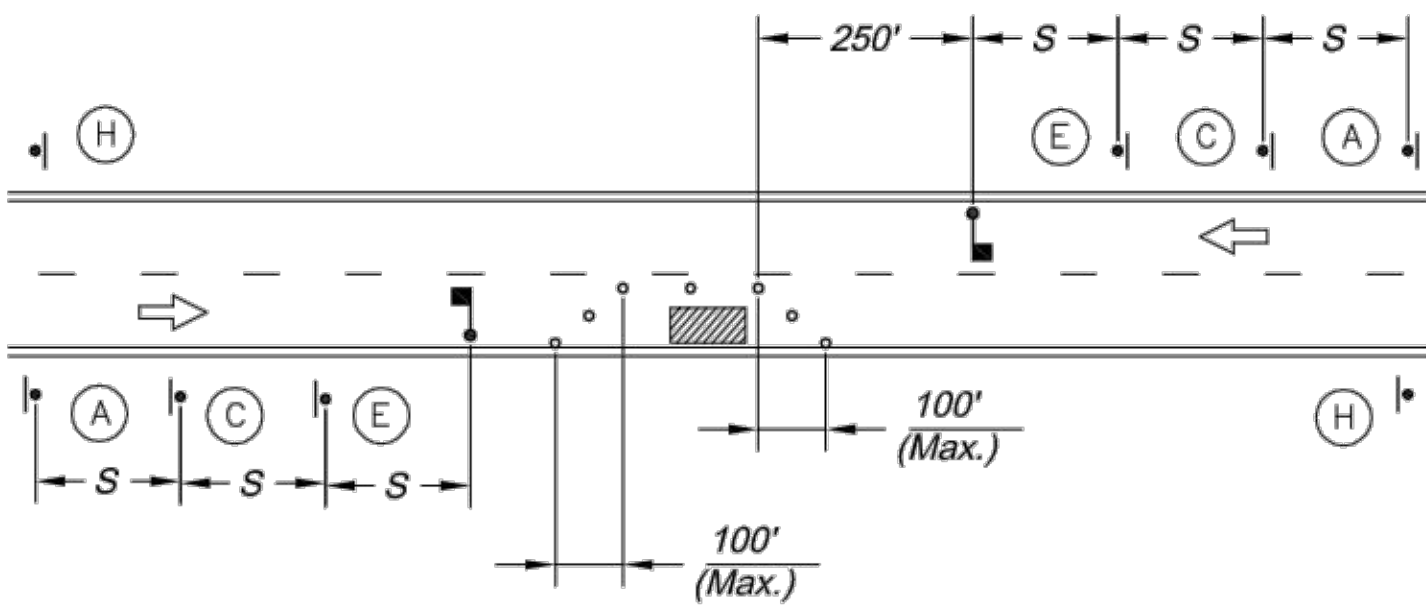
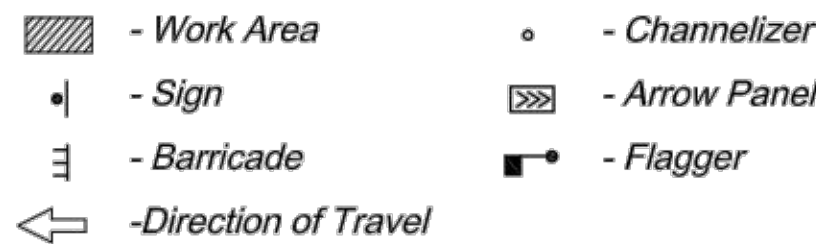
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Date: 09/09/2009

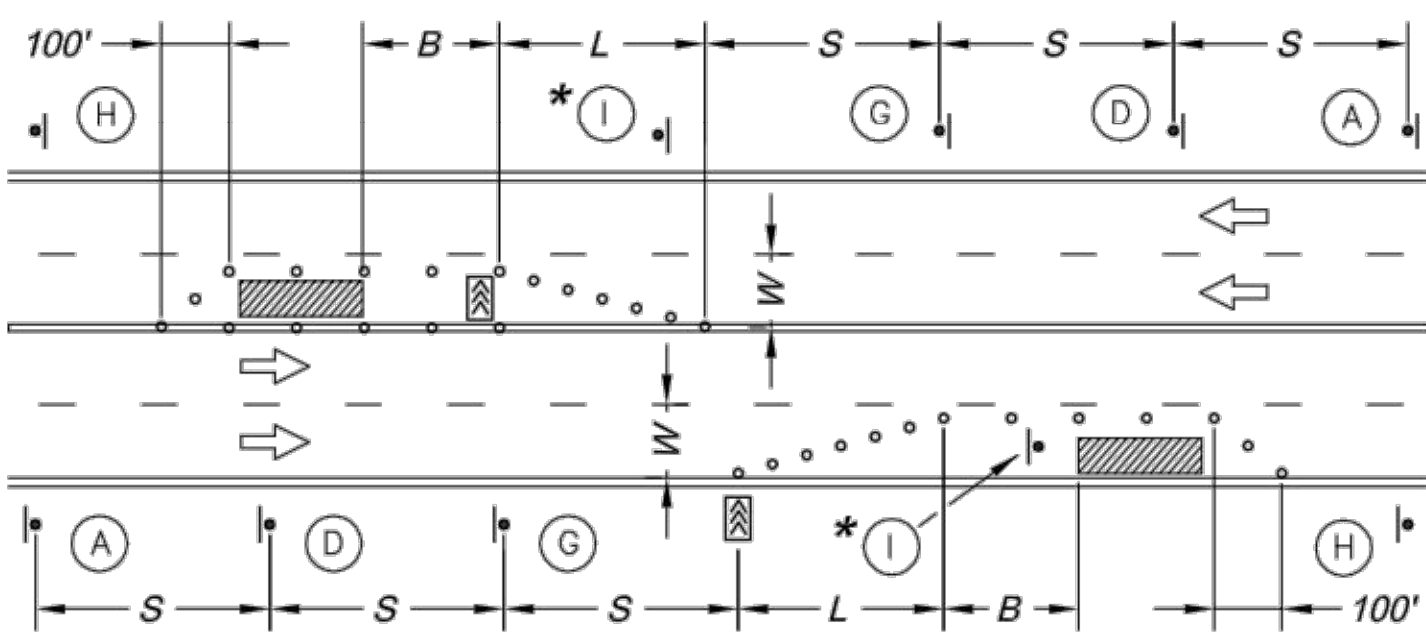
Project#

SHEET
F5

SYMBOL LEGEND

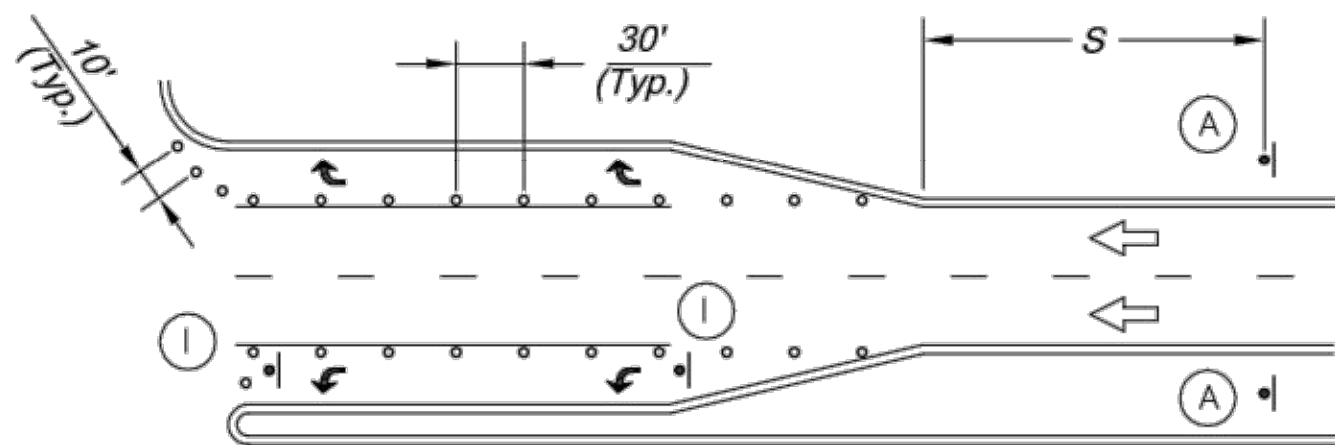


LANE CLOSURE - TWO LANE STREET



LANE CLOSURE - FOUR LANE STREET

* Install Signs Every 200 Feet Throughout the Closed Lane or As Needed



TURN LANE CLOSURE

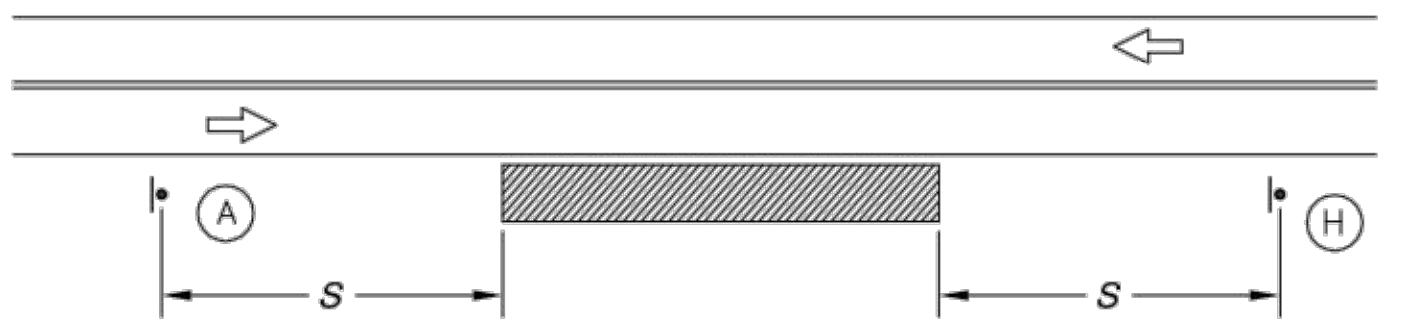
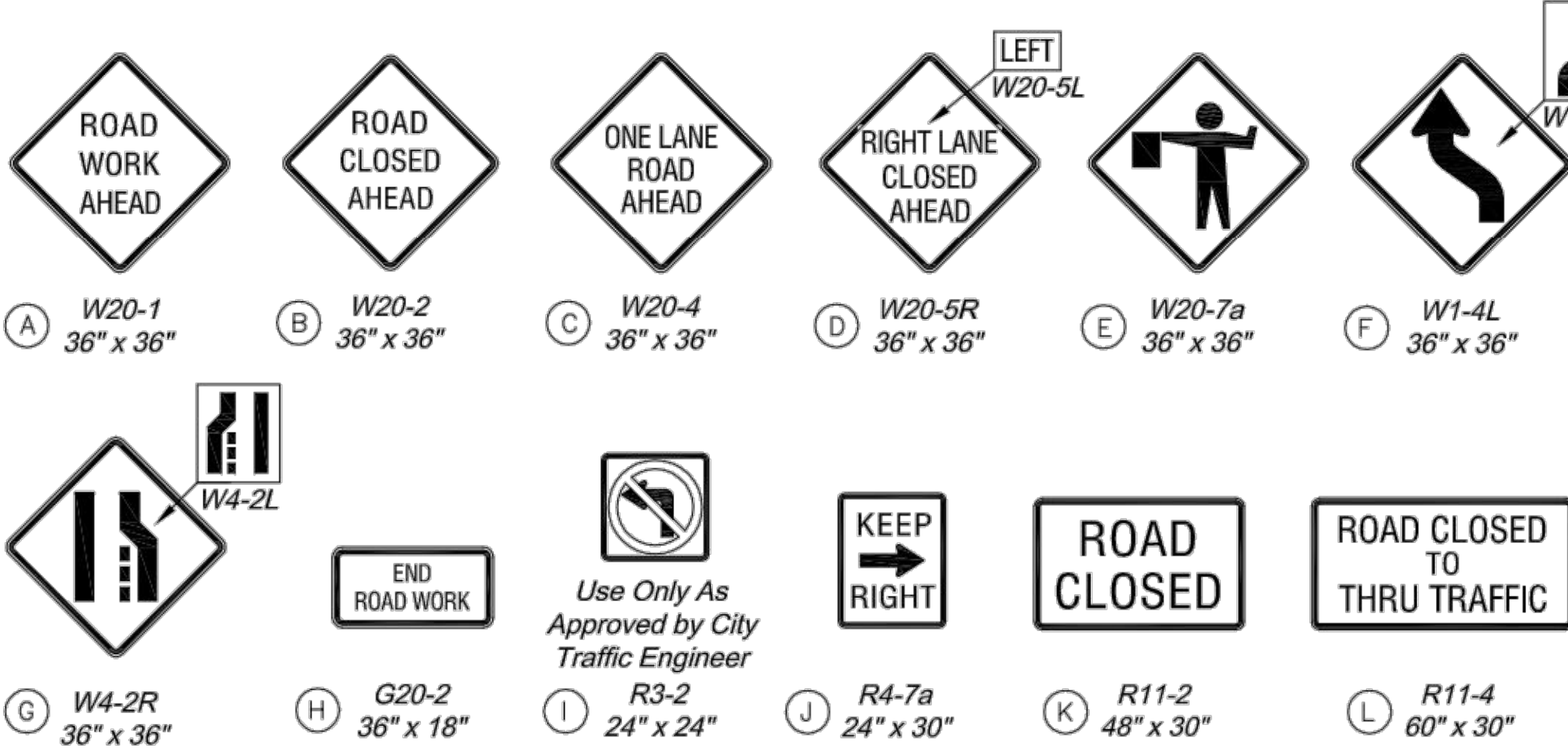
Sign Spacing "S"	
Speed Limit (mph)	Spacing (Feet)
25	100
30 - 35	250
≥ 40	350

Taper Dimensions (Feet)				
Speed Limit (mph)	Minimum Taper Length "L", per Lane Width "W"			Minimum Number of Channelizers
	10	11	12	
25	105	115	125	6
30	150	165	180	7
35	205	225	245	8
40	270	295	320	9
45	450	495	540	13

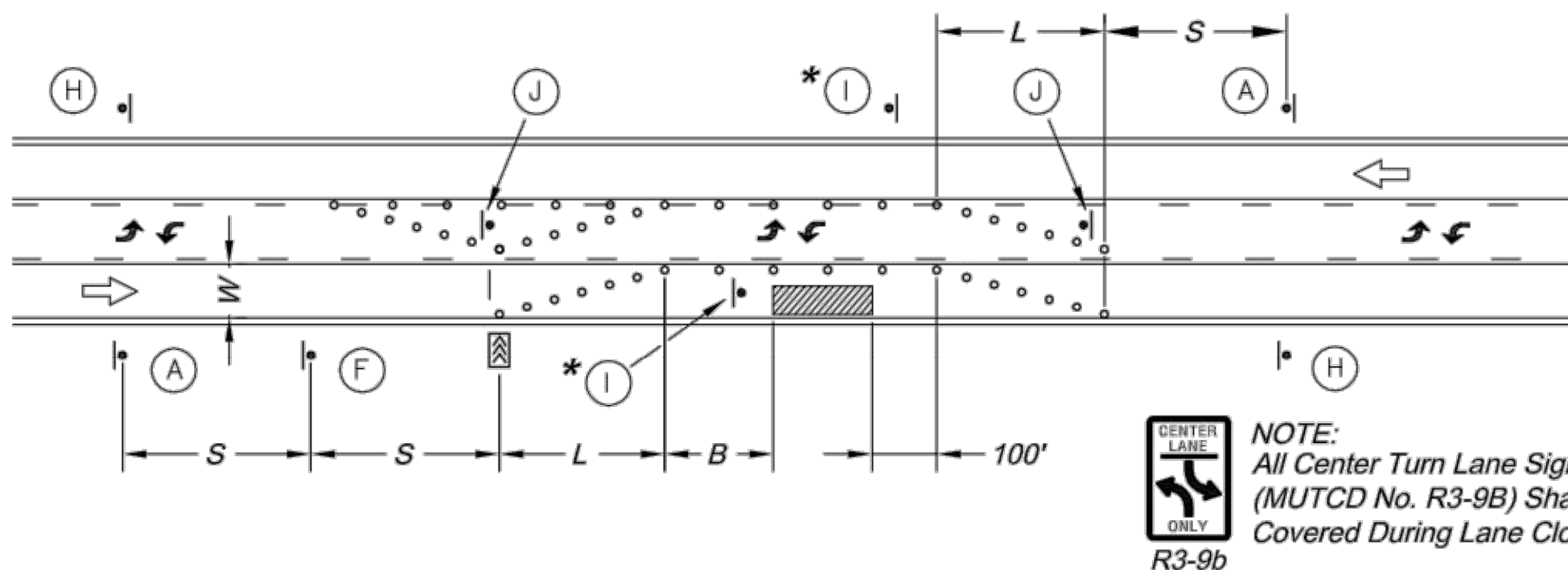
Guidelines for Length of Longitudinal Buffer Space "B"	
Speed Limit (mph)	Length (Feet)
25	35
30	55
35	85
40	120
45	170

Maximum Channelizer Spacing		
Speed Limit (mph)	Within Taper (Feet)	Outside Taper (Feet)
25	25	50
30	30	60
35	35	70
40	40	80
45	45	90

SIGN LEGEND

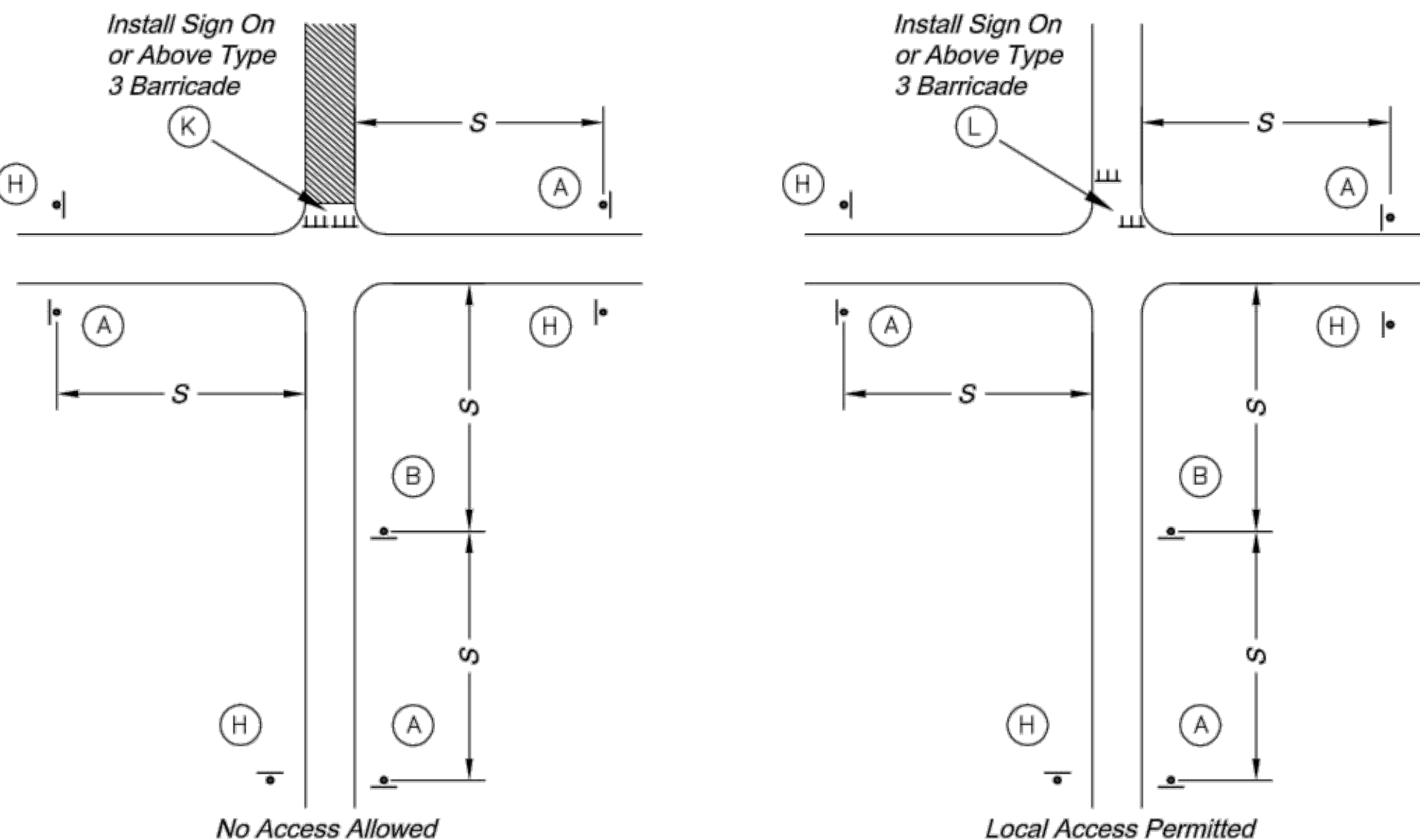


TYPICAL SIGNING FOR WORK ADJACENT TO THE STREET



LANE CLOSURE - THREE LANE STREET

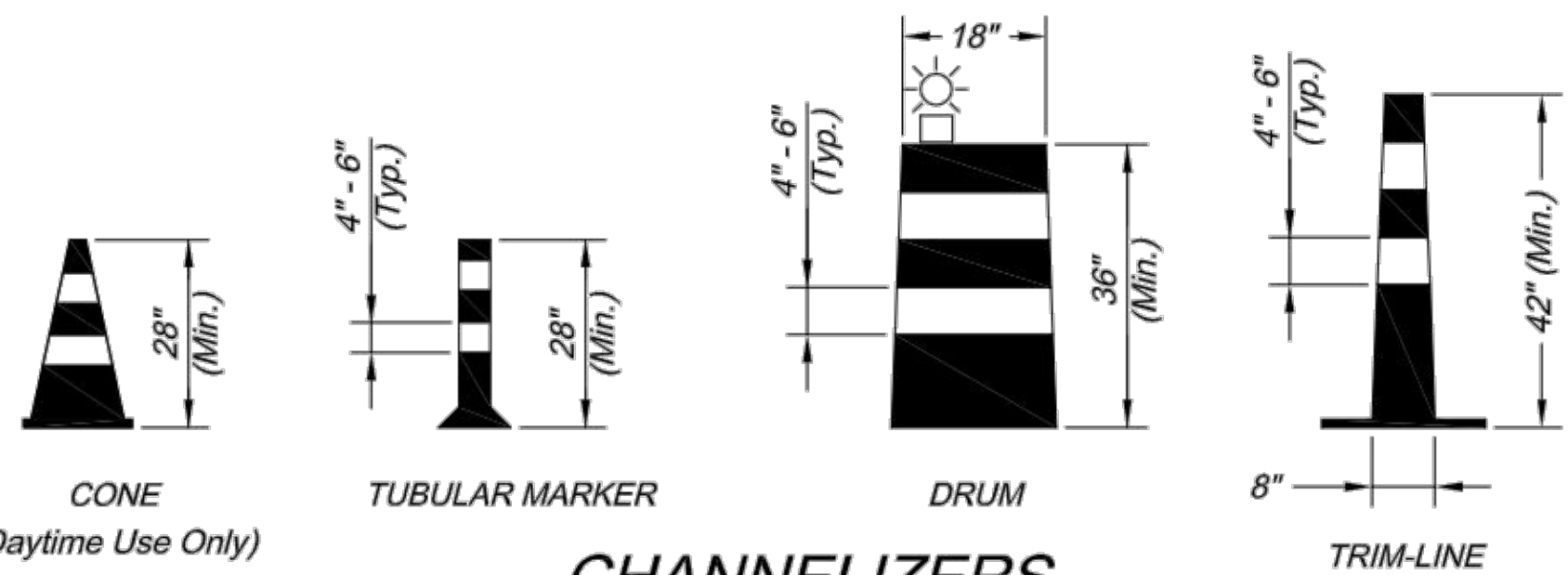
* Install Signs Every 200 Feet Throughout the Closed Lane or As Needed



TYPICAL STREET CLOSURE

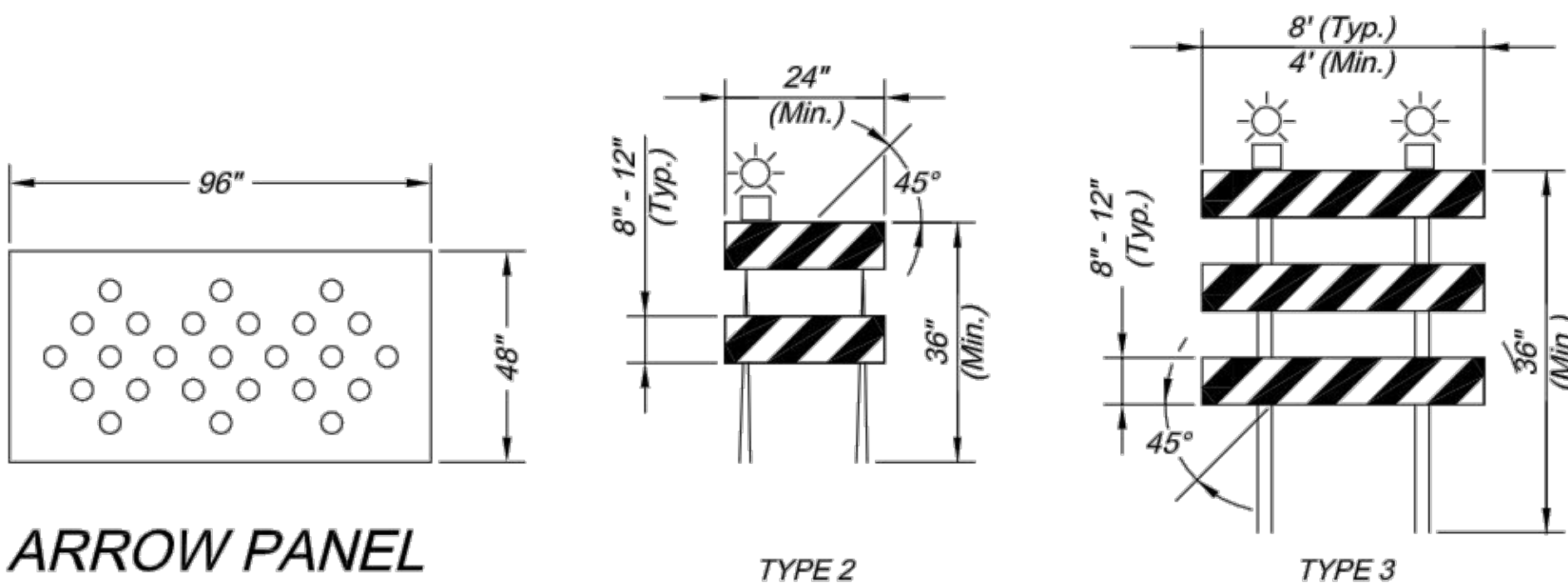
GENERAL NOTES:

1. All signs, barricades, channelizers, markings and other traffic control devices shall conform to the latest edition of the *Manual on Uniform Traffic Control Devices (MUTCD)*.
2. All traffic control devices shall be standard in size, shape, color, and message, in good condition, and retro-reflectORIZED. All signs shall be securely mounted with height and lateral location as described in the MUTCD.
3. Warning lights shall be used on barricades in place at night and on warning signs which alert drivers about a change in alignment, traffic control, lane closure, or road closure.
4. Flaggers shall be used where indicated on the plans, where construction vehicles interact with normal traffic, or where construction activities impose a restriction on traffic, as directed by the City Traffic Engineer. Where flaggers are used, advance signing shall be erected as shown in the details or as specified in the MUTCD. Flaggers shall meet the requirements in the MUTCD in regard to character, training, attire, and behavior.
5. Trim-lines are the City's preferred channelizing device. Cones may not be used at nighttime.
6. Traffic control devices not in use or not applicable shall be either covered or removed from the work area.
7. The Contractor shall use barricades, street plates, or fencing as needed to effectively shield pedestrian and vehicular traffic from exposed objects, excavations, and construction activities.
8. Access shall be maintained to all driveways and side streets unless noted otherwise on the plans.
9. No street shall be closed without the approval of the City Traffic Engineer. The Contractor shall notify the City Traffic Engineer at least 7 days in advance of any street closure. If a detour route around the closure is to be provided, all detour signing shall be as shown on a plan approved by the City Traffic Engineer.
10. Construction vehicles parked along streets shall be located within the work area (traffic control) or where otherwise normally permitted. Construction materials, including traffic control and vehicles shall not restrict sight distance for vehicles exiting at streets or drives.
11. Construction materials shall be kept off of sidewalks, consolidated in one location within City right-of-way, and removed daily unless otherwise approved by the Inspector. Dirt, mud, and other construction debris on streets and sidewalks shall be removed immediately.
12. The Contractor shall not perform any work that will restrict vehicular traffic in any way between the hours of 7:00 a.m. and 9:00 a.m. or 4:00 p.m. and 6:00 p.m. Monday through Friday unless otherwise indicated in the specifications.
13. All travel lanes should be at least 11 feet wide unless otherwise authorized by the City Traffic Engineer. A "Narrow Lanes" sign shall be installed in advance of a lane width reduction to less than 11 feet.
14. All edge drop-offs of more than 2 inches and less than 4 inches should be protected by a wedge or barrier and all edge drop-offs greater than 4 inches shall have edge protection (see Traffic Control Specifications for edge treatment requirements).
15. The "Workers" symbolic sign (MUTCD No. W21-1a) may be used instead of the "Road Work Ahead" sign for work with a duration of 12 hours or less. The "End Road Work" sign is not required to be installed after the "Workers" sign.
16. No traffic signal shall be altered or modified in any way without a plan approved by the City Traffic Engineer.
17. The Contractor shall be responsible for maintaining all traffic control devices on an around-the-clock basis, whether or not work is actively being pursued and any deficiencies noted shall be corrected immediately.
18. The traffic control requirements shown on these plans are minimum requirements only and do not attempt to address in depth the variety of situations that may occur once construction has started. In no way do the requirements shown on these plans relieve the Contractor of his responsibility for selecting the proper traffic control devices and implementation procedures that will assure the safety of drivers, pedestrians, and workers at all times.
19. Should the contractor fail to enforce the traffic control plan or fail to clean, replace or otherwise maintain the traffic control devices when directed to do so by the City Traffic Engineer or representative, the City may take one or more of the following actions:
 - A) Employ another agency to correct deficiencies in traffic control devices and deduct the cost from the Contractor's pay estimate,
 - B) Stop the work until deficiencies are corrected,
 - C) Suspend all pay estimates until deficiencies are corrected, or
 - D) Place the Contractor in default.



CHANNELIZERS

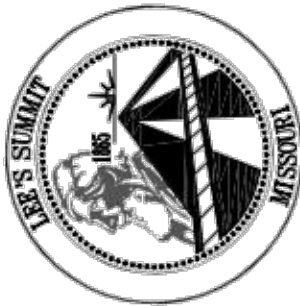
NOTE: White Bands On Barricades and Channelizers Shall Be Made From High Intensity Sheeting Material.



ARROW PANEL

BARRICADES

CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE: (816) 969-1800 FAX: (816) 969-1809



TRAFFIC CONTROL DETAILS

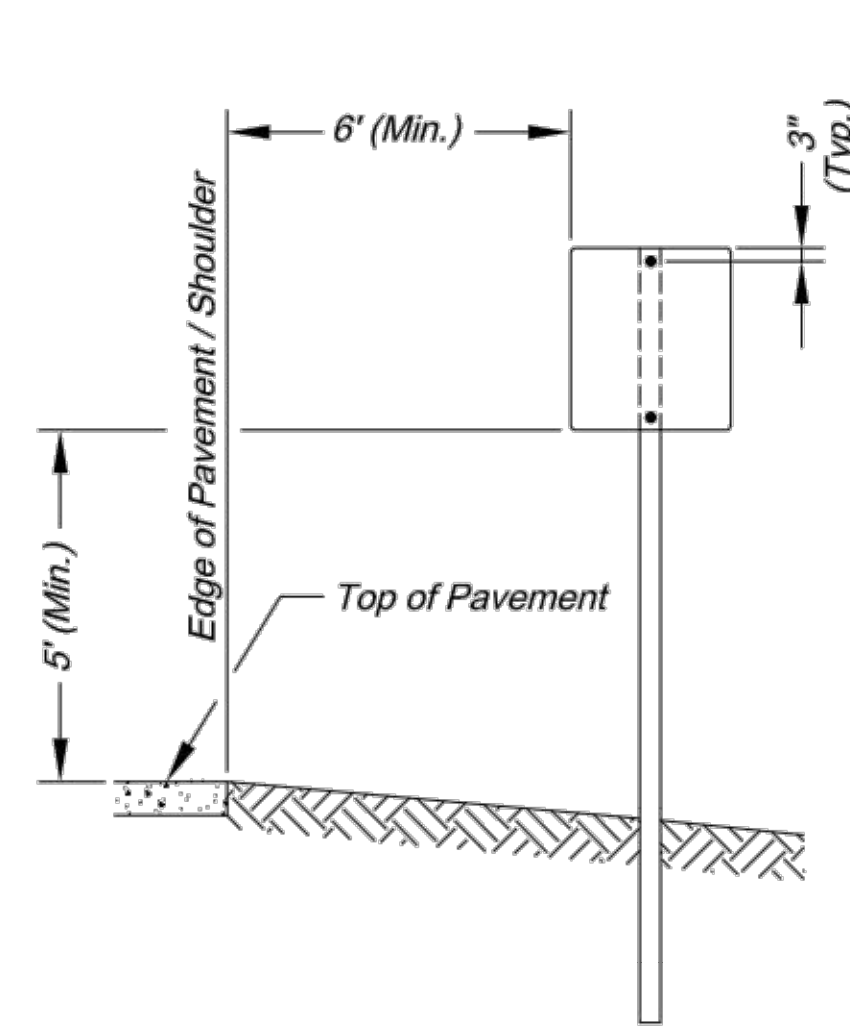
STANDARD DRAWING TC-1

Project:

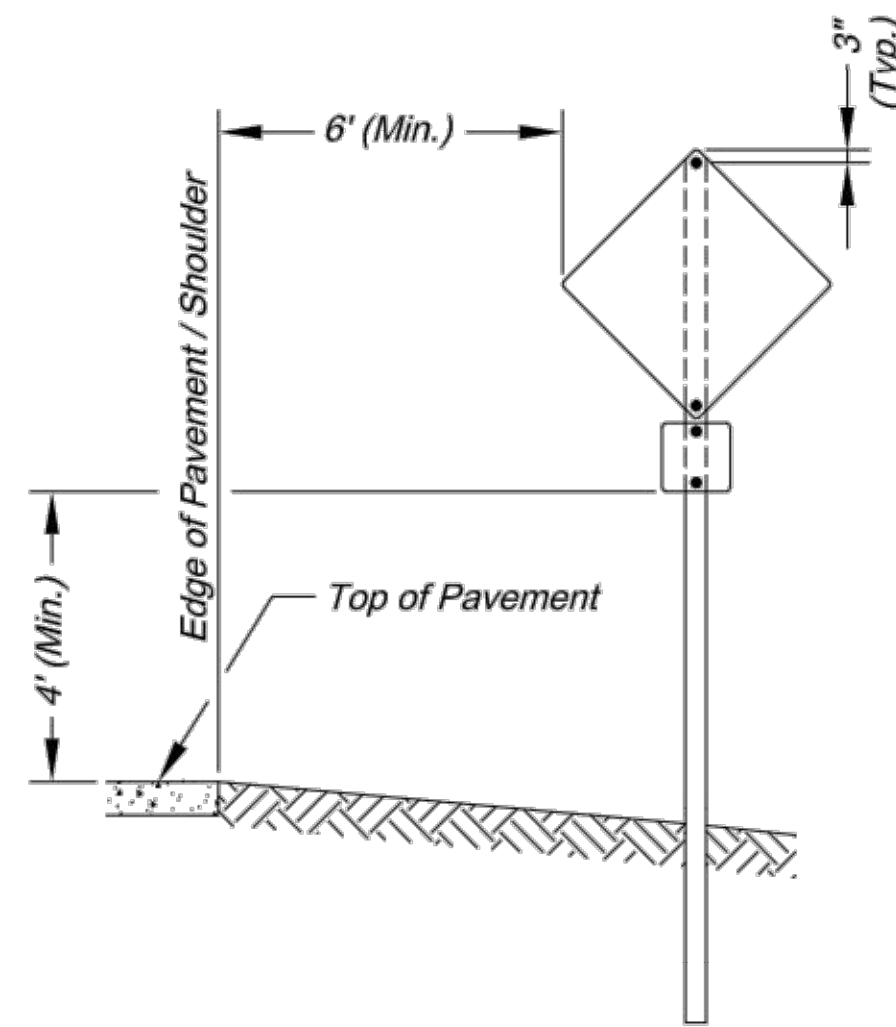
Sheet Name:

Drawn By: JJW
Checked By: MP
Date: 12-10-2008
Project No.: X

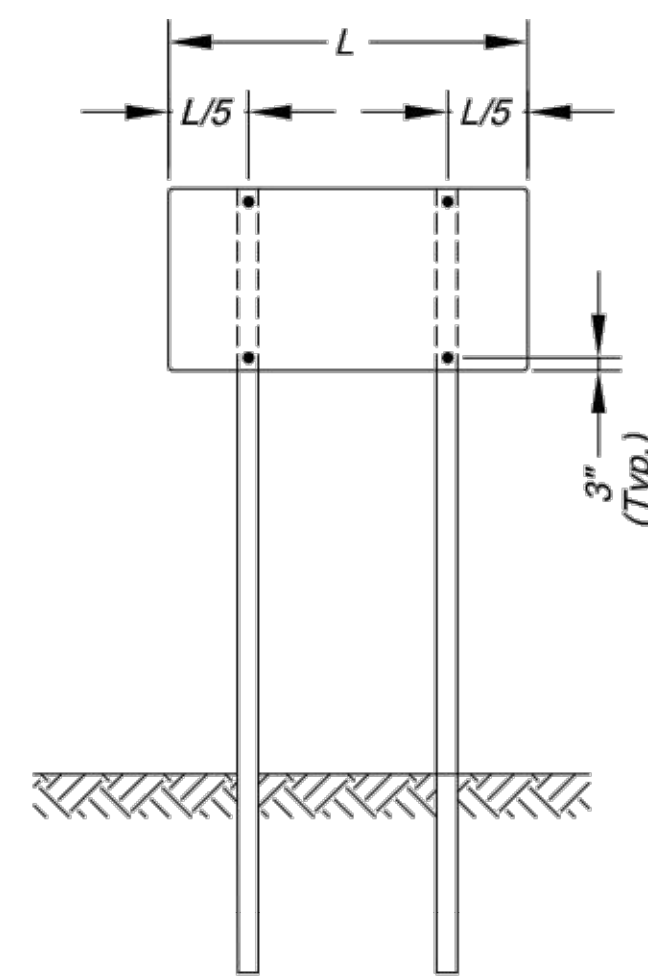
SHEET
F6



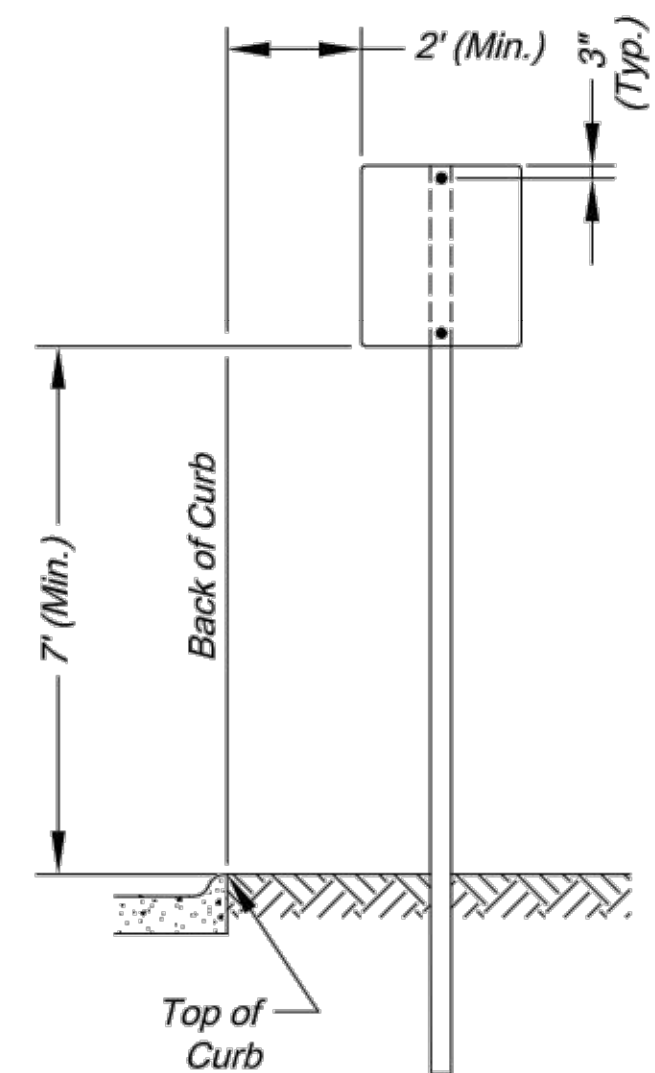
SIGN INSTALLATION FOR
NON-CURBED STREET



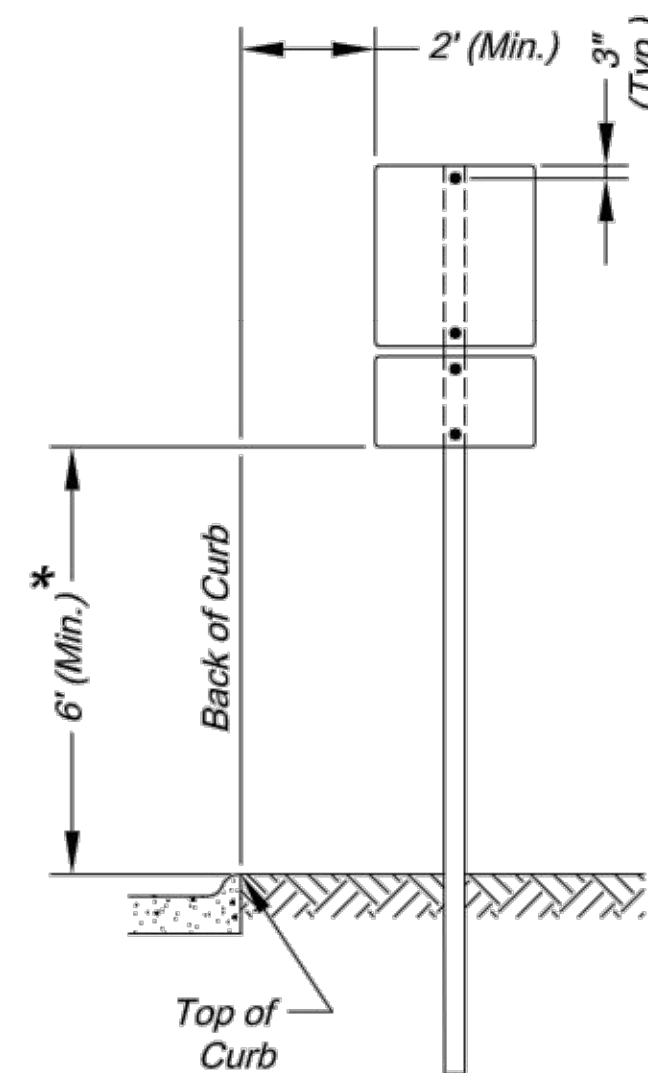
SIGN INSTALLATION WITH
AUXILARY SIGN FOR
NON-CURBED STREET



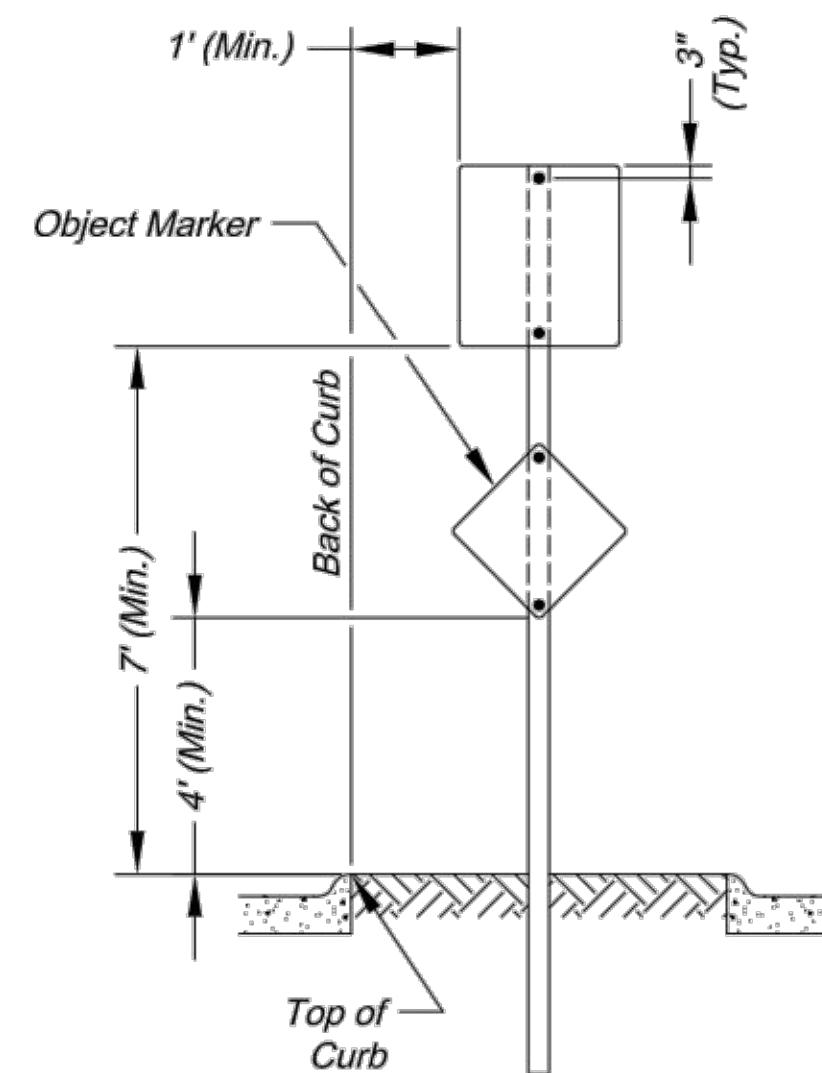
SIGN INSTALLATION WITH
TWO SIGN POSTS



SIGN INSTALLATION FOR
CURBED STREET



SIGN INSTALLATION WITH
AUXILARY SIGN FOR
CURBED STREET



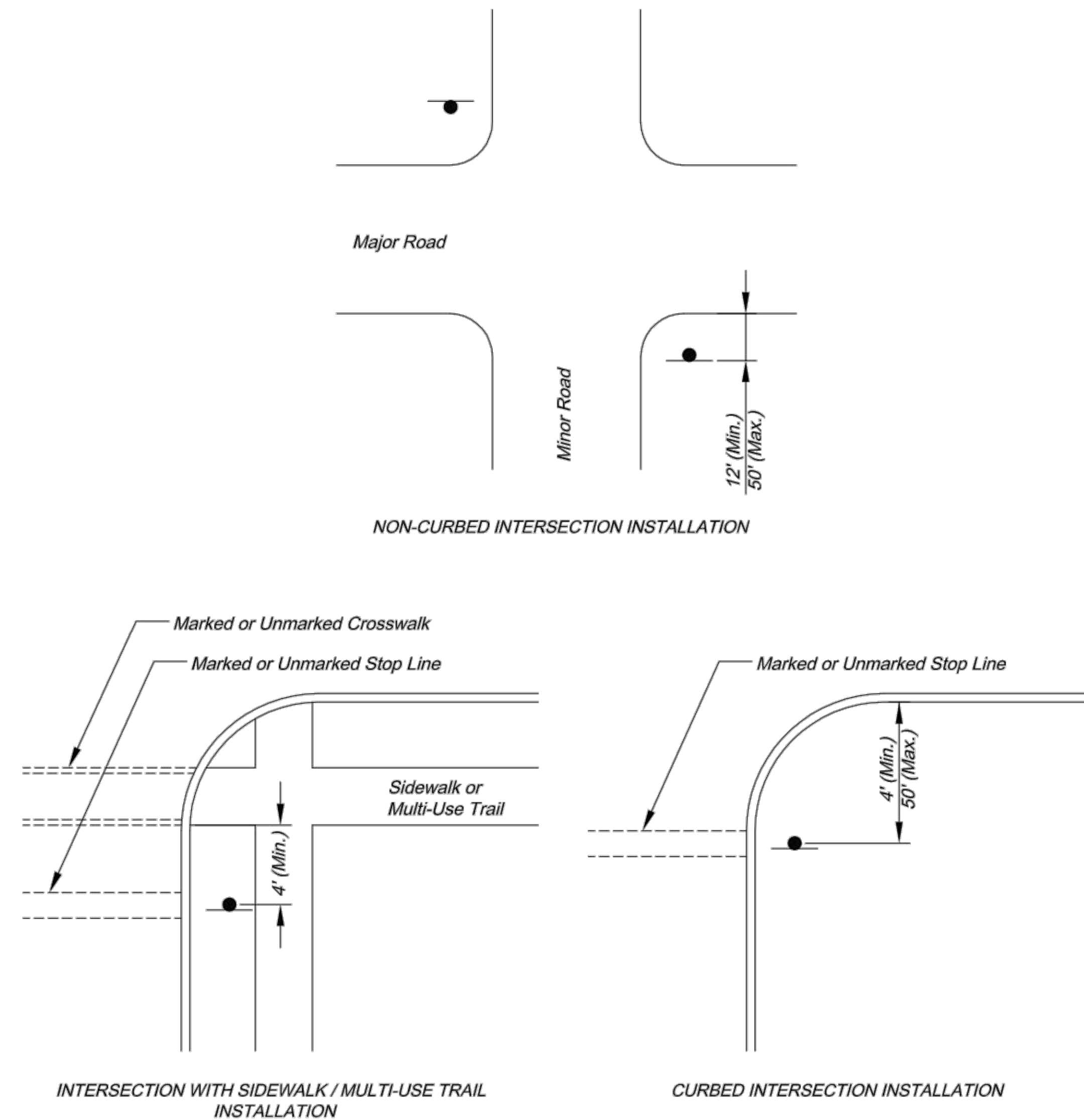
SIGN INSTALLATION FOR
RAISED MEDIANS

SIGN MOUNTING DETAILS

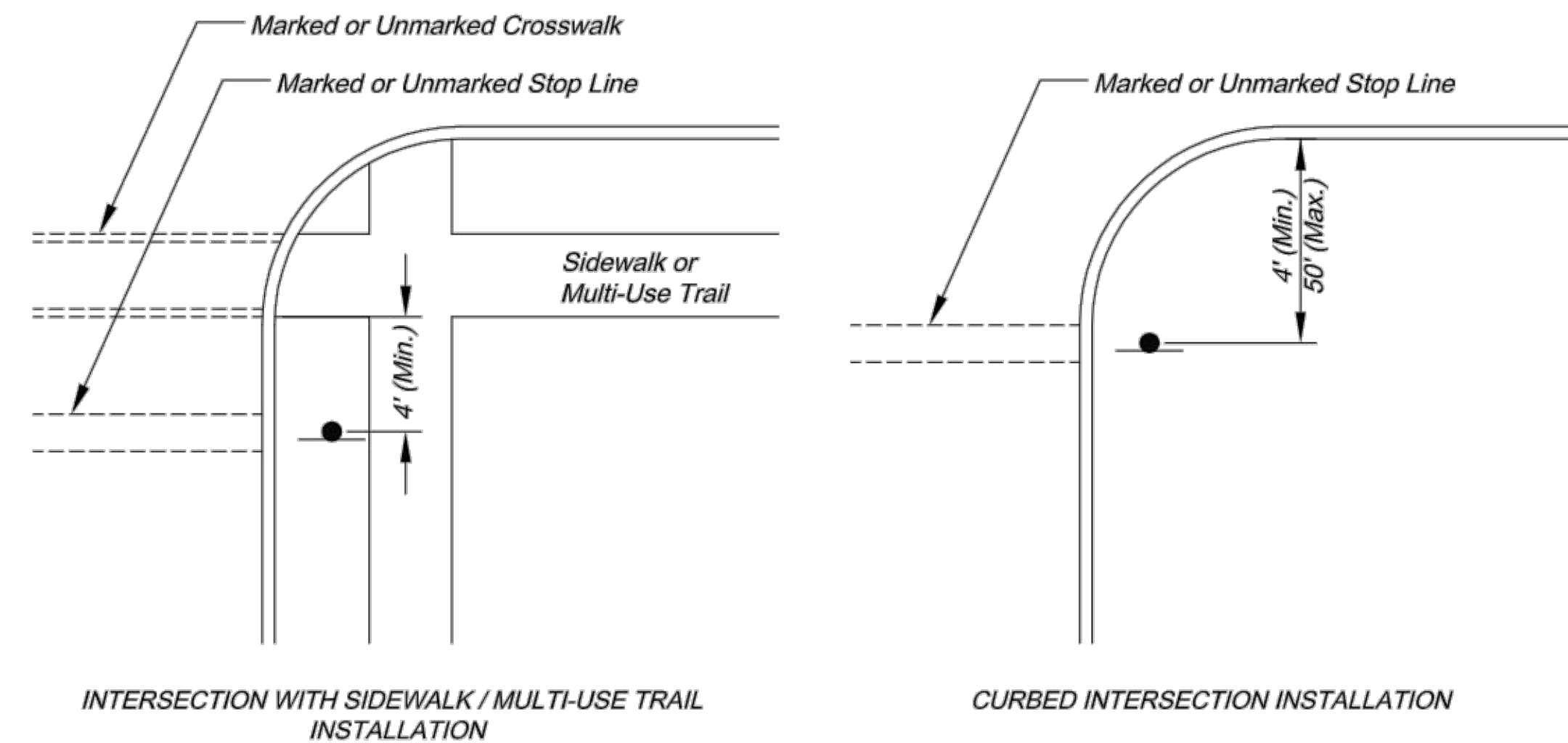
* The height to the bottom of a sign when it is located in a pedestrian walkway or extends into a walkway shall be a minimum of 80 inches above the walkway.

NOTE:

- Generally, the sign mounting height should not be more than 1' greater than the minimum mounting height.

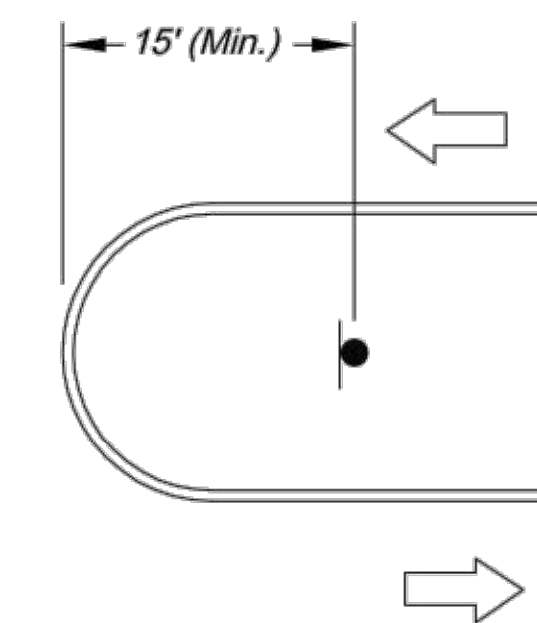


NON-CURBED INTERSECTION INSTALLATION



CURBED INTERSECTION INSTALLATION

CONTROL SIGN LOCATION



TYPICAL MEDIAN SIGN LOCATION

MEDIAN SIGN LOCATION

NOTES:

- A 4" P.V.C. sleeve shall be installed in new concrete medians at each location where a sign is to be installed.
- For existing concrete medians, a 4" hole shall be cored into the concrete.



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Project:
SIGN MOUNTING DETAILS

Sheet Name:
STANDARD DRAWING SN-1

Drawn By: AS
Checked By: JW
Date: 08/26/2009
Project#

1 OF 3

F7



5/16" Stainless Steel Hex Head Bolt With 5/16" Flat Washer

5/16" Flat Plastic Washer

Stainless Steel Bracket

3/4" x 0.030" Stainless Steel Strap Material

STRAP AND BRACKET INSTALLATION

3/4" Stainless Steel Strap Seal

Bend Down

ENDS OF STRAP CLAMPED IN SEAL

STRAP TYPE SIGN SUPPORT DETAILS

The image contains three technical drawings of sign post mounting hardware:

- SECTION A-A:** A side view of a sign post mounting. It shows a sign post with a sign attached. The mounting hardware includes a 2 1/2" x 5/16" Stainless Steel Hex Head Bolt, a 5/16" Flat Washer, a 5/16" Flat Plastic Washer, a 5/16" Flat Washer, a 5/16" Hex Head Jam Nut, and a Sign Post.
- CORNER BOLT:** A detail view of a corner bolt. It shows a 1 5/16" long bolt with a 1 11/16" long threaded section.
- SECTION B-B:** A side view of a sign post mounting using an anchor sleeve. It shows a sign post with a sign attached. The mounting hardware includes an Anchor Sleeve, a Post Anchor, a 5/16" Flat Washer, a 5/16" Stainless Steel Corner Bolt, a 5/16" Flat Washer, a 5/16" Hex Head Jam Nut, and a Sign Post.

SQUARE STEEL POST DETAILS

F8

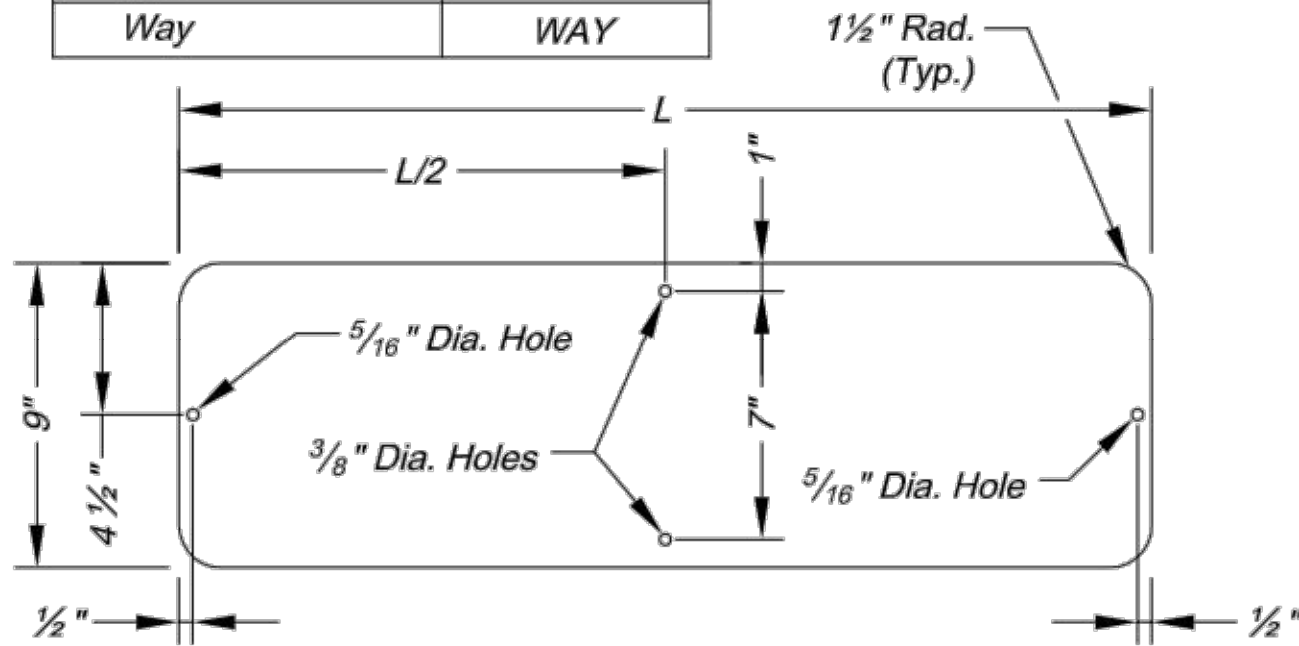
STANDARD ABBREVIATION LISTS

Named Streets	
Avenue	AVE
Boulevard	BLVD
Circle	CIR
Creek	CR
Court	CT
Crossing	XING
Drive	DR
Highway	HWY
Lane	LN
Parkway	PKWY
Place	PL
Road	RD
Street	ST
Terrace	TER
Trail	TRL
Way	WAY

Numbered Streets	
First	ST
Second	ND
Third	RD
Fourth to Tenth	TH

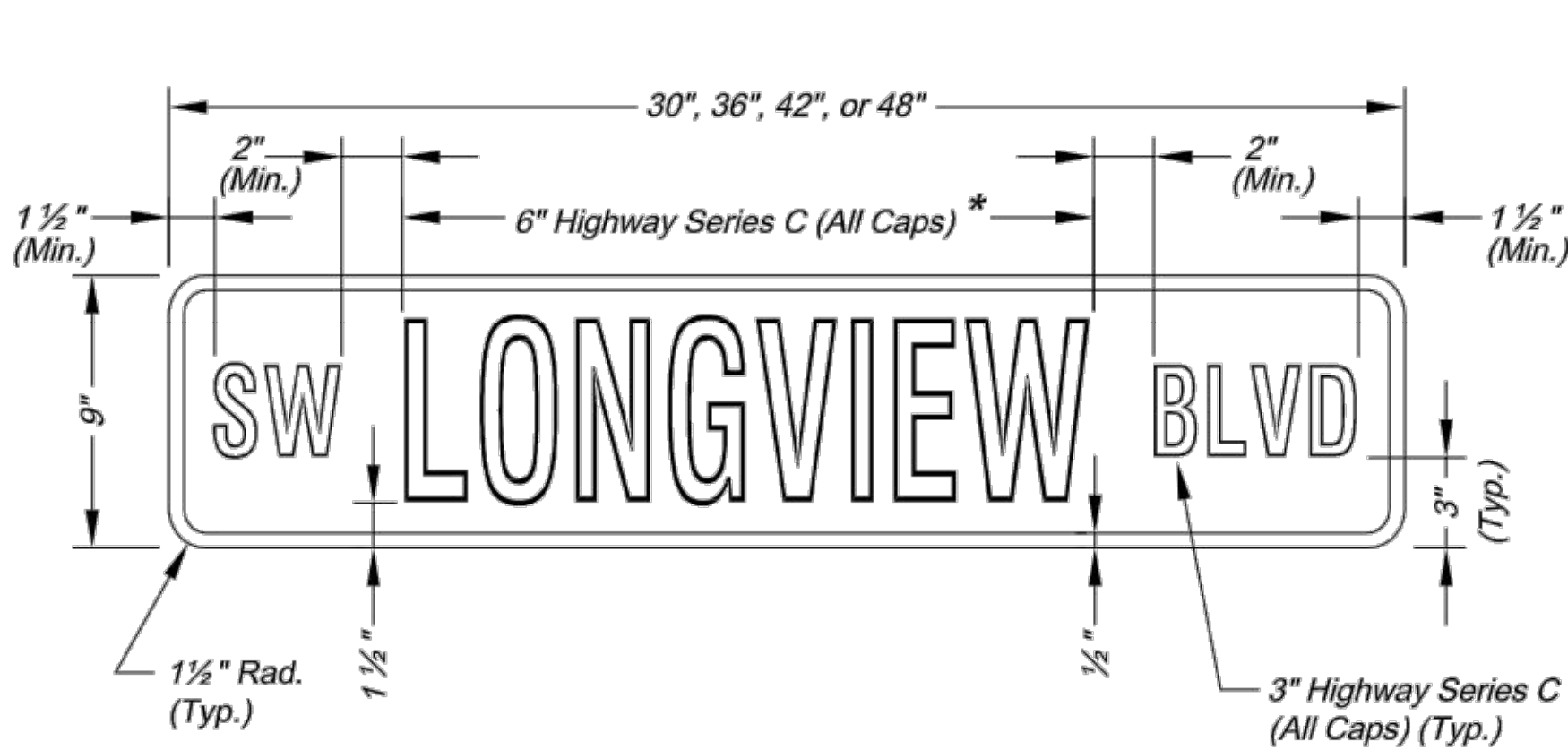
STREET NAME SIGN QUANTITIES

Sign Designation	Sign Size	Sign Area (Sq. Ft.)	Number	Quantity (Sq. Ft.)
D3-1 (SP-1) E LEES SUMMIT RD	9" x 48"	3.00	2	6.00
D3-1 (SP-2) NE DOUGLAS ST	9" x 48"	3.00	4	12.00



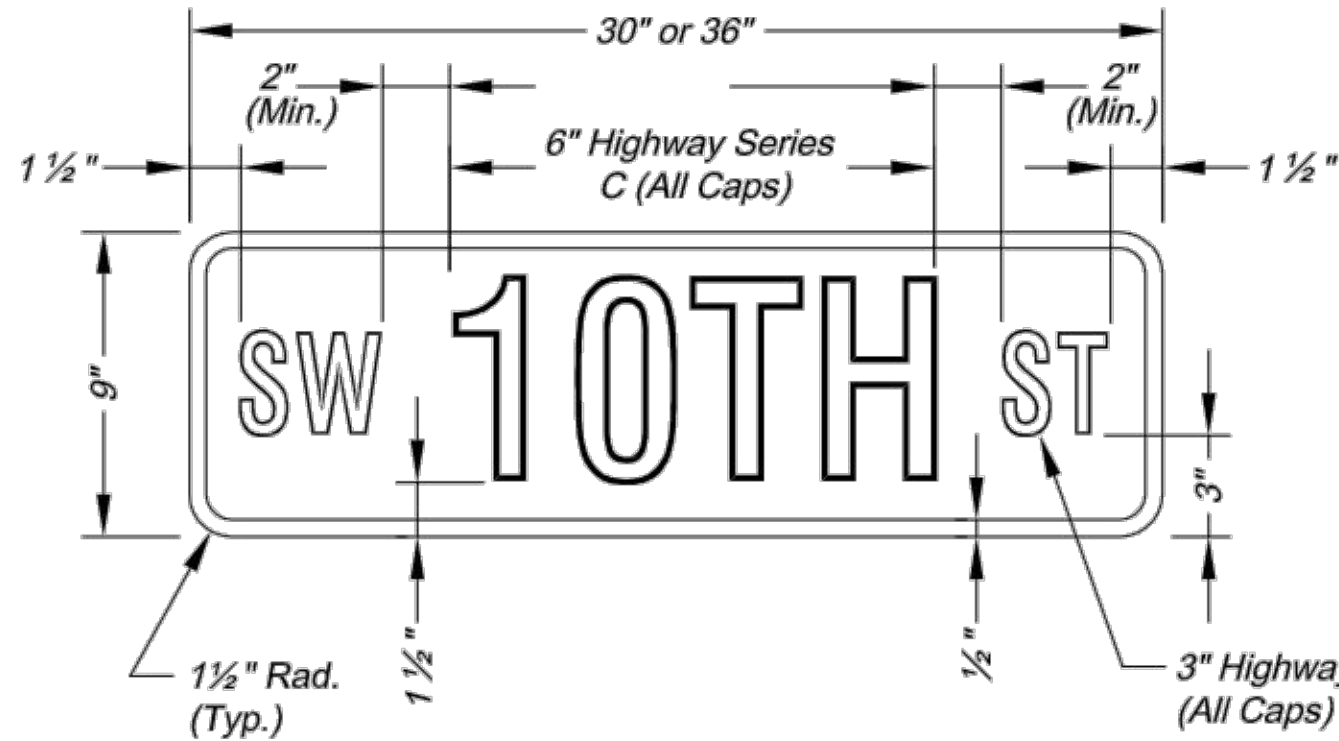
STREET NAME SIGN BLANK DETAILS

For Mounting on Square Steel Posts

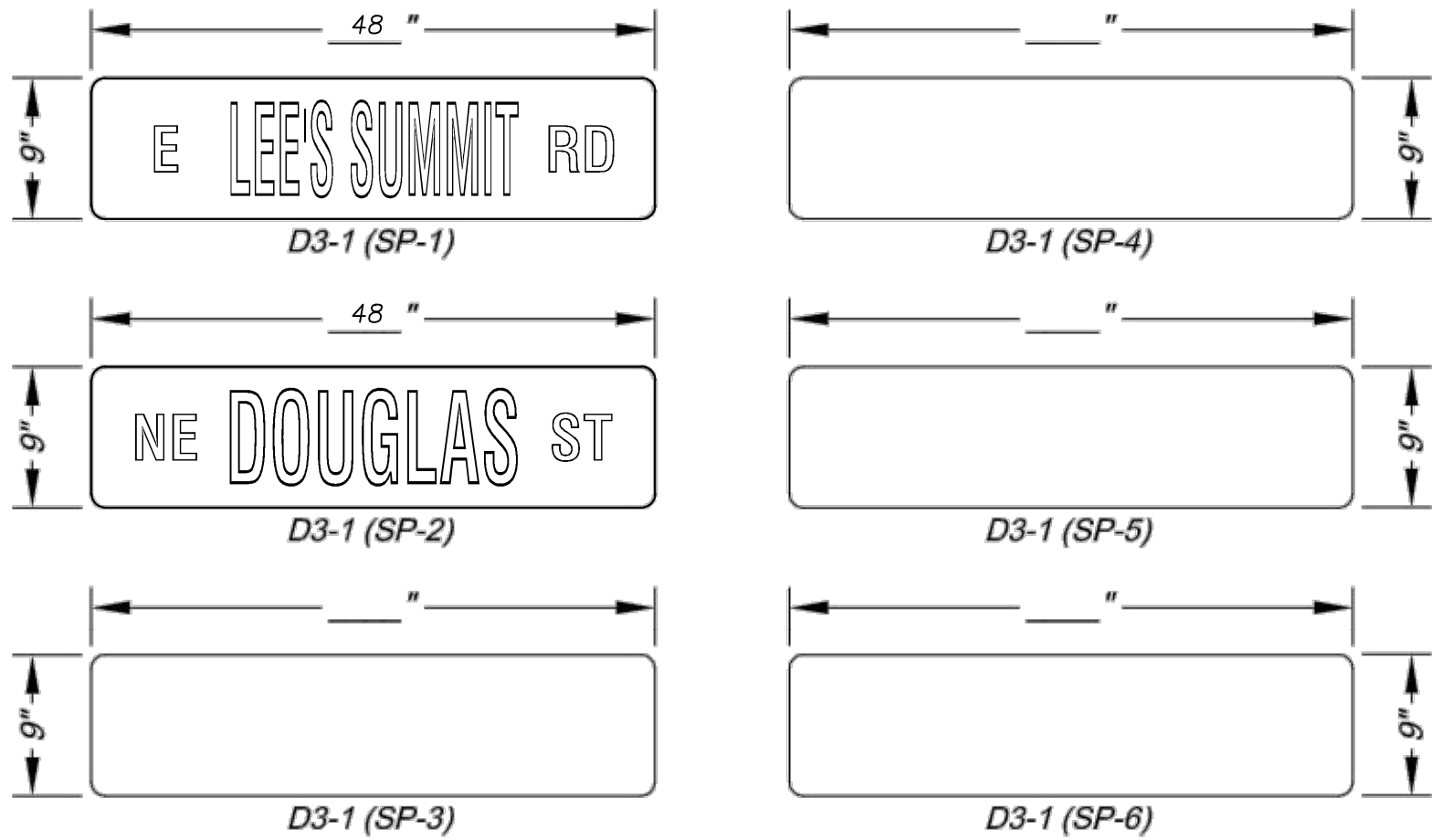


NAMED STREET NAME SIGN DETAIL

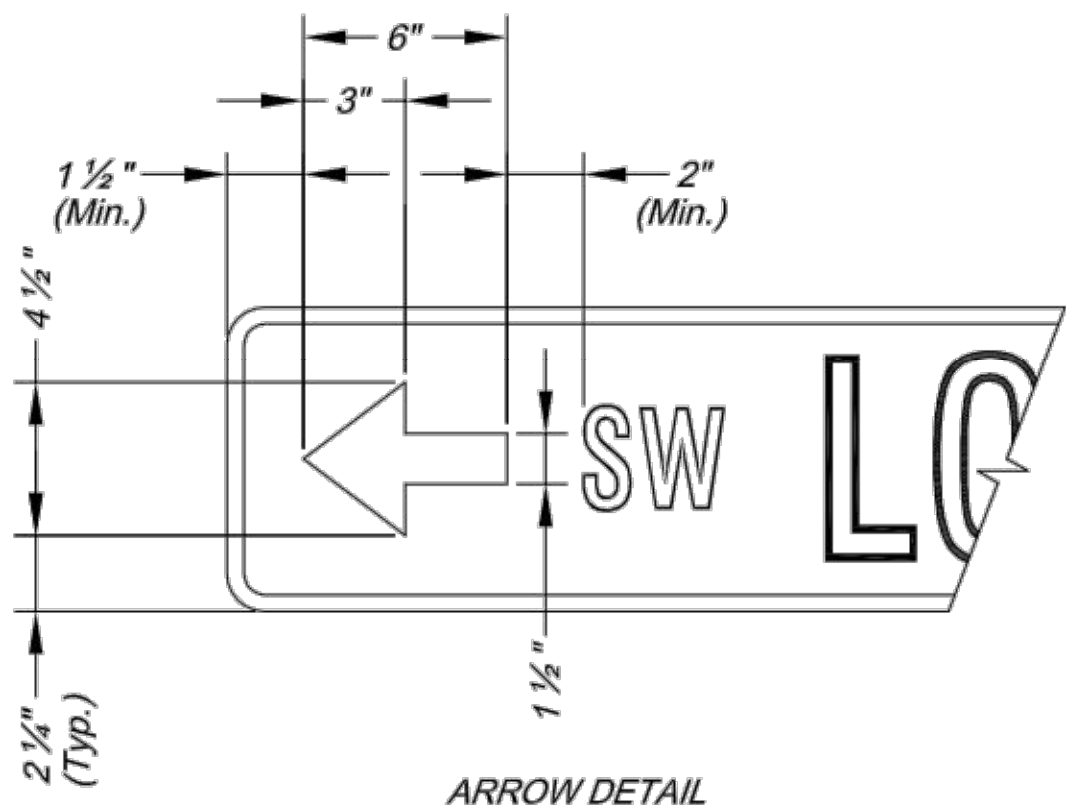
* Use Highway Series B (All Caps) in lieu of series C if necessary to fit text on a 36" sign blank.



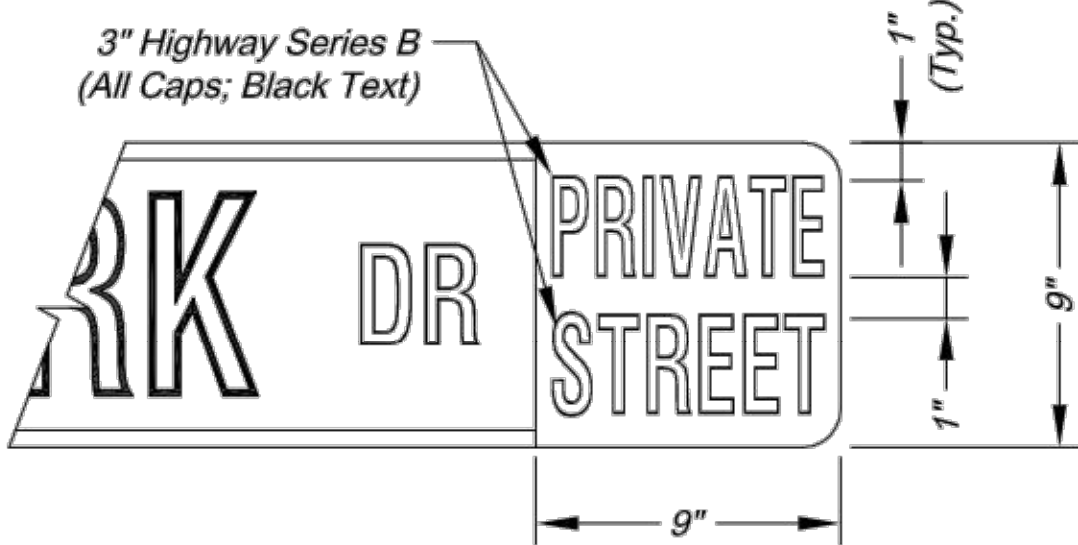
NUMBERED STREET NAME SIGN DETAIL



PROJECT SIGN DETAILS



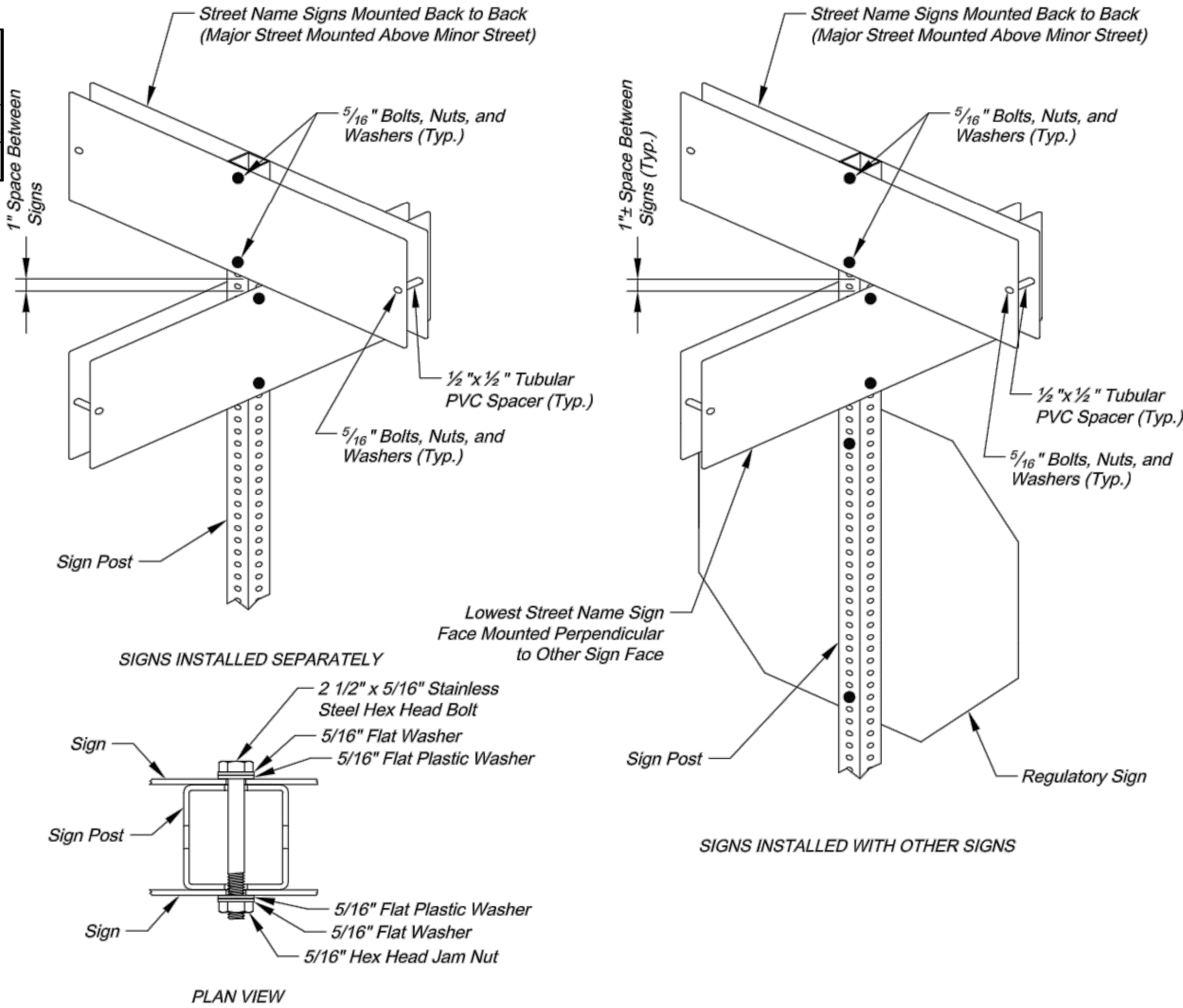
ARROW DETAIL



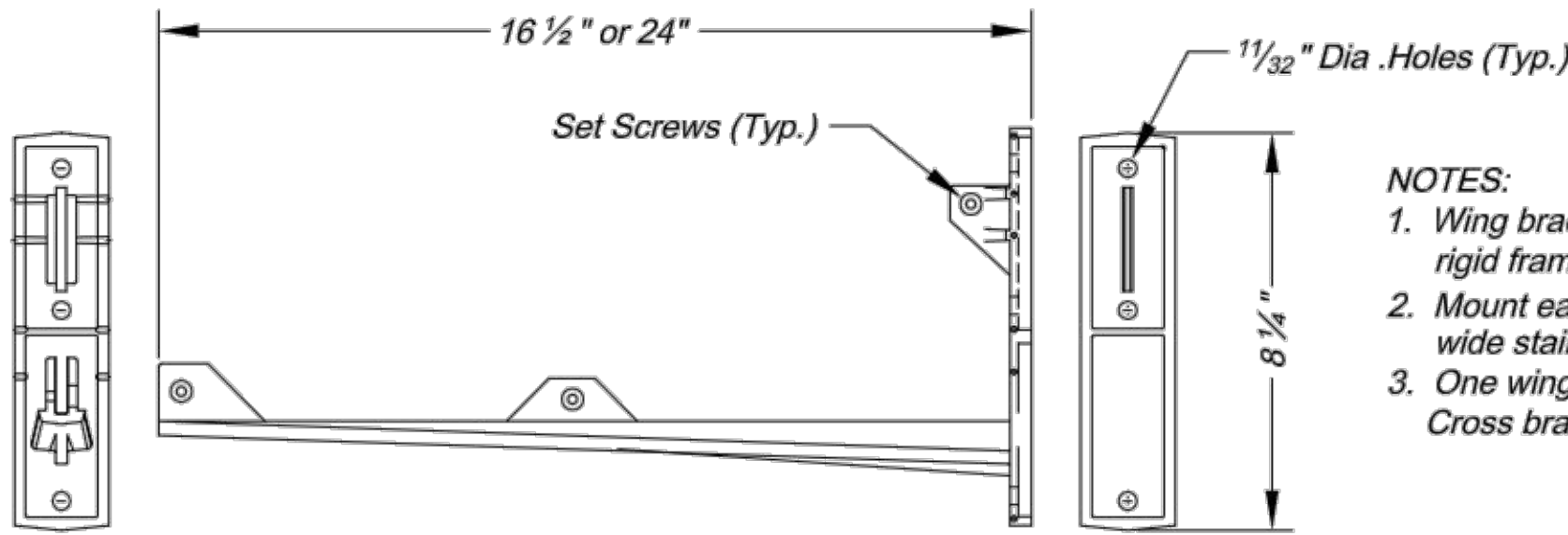
PRIVATE STREET TAG DETAIL

- NOTES:
- For all street name signs, the legend shall be white and the background shall be green.
 - Arrows shall be added to street name signs where the name of a street changes at an intersection. Street name signs with arrows are to be installed on each side of the intersection to indicate the change in names. Arrows shall be white.
 - The "PRIVATE STREET" tag should be added to the end of street name signs to indicate where a street that is outside the right-of-way intersects a public street. The background for the "PRIVATE STREET" tag shall be yellow.

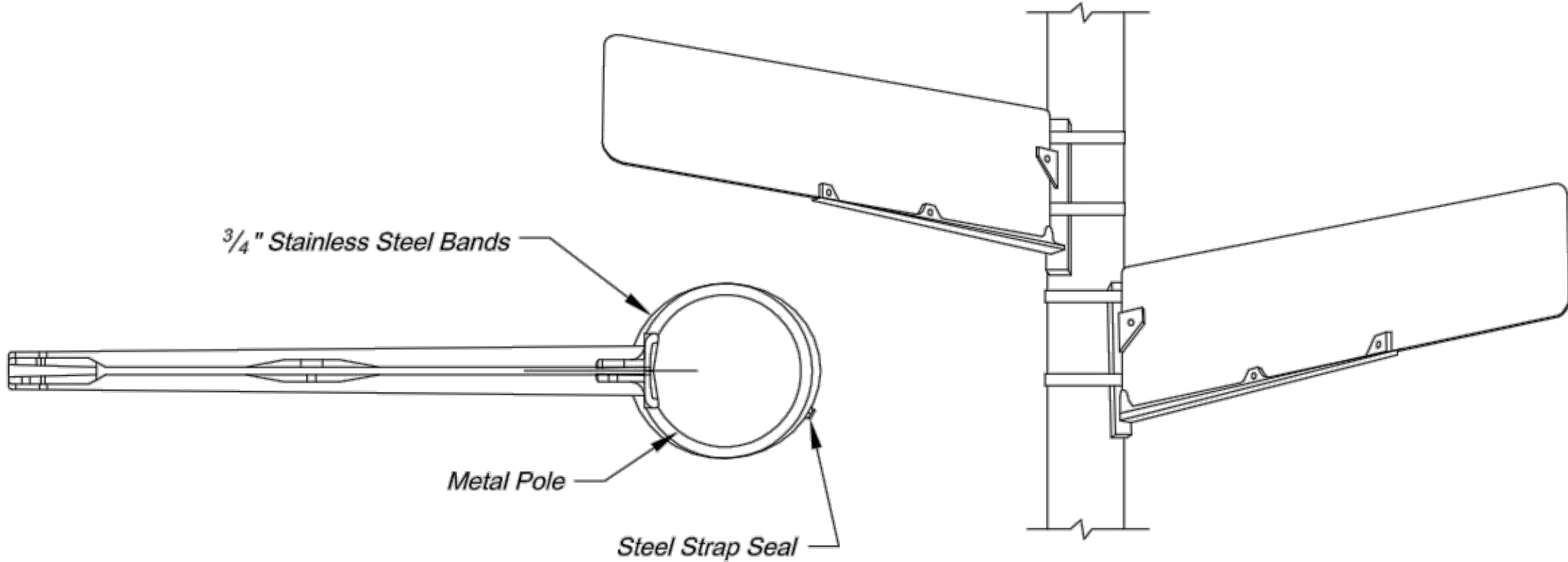
STREET NAME SIGN FACE DETAILS



SQUARE STEEL POST MOUNTING DETAILS



- NOTES:
- Wing bracket shall be an L-shaped cantilever of T-beam rigid frame 380-3 aluminum alloy construction.
 - Mount each wing bracket to metal pole using two 3/4" wide stainless steel straps.
 - One wing bracket shall be installed per each sign. Cross brackets are not allowed.



WING BRACKET MOUNTING DETAILS



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Project: STREET NAME SIGN DETAILS
Sheet Name: STANDARD DRAWING SN-3

Drawn By: AS
Checked By: JW
Date: 08/26/2009
Project#

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