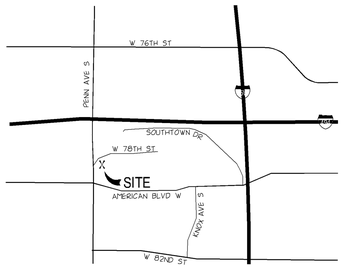
AREA LOCATION MAP

BLOOMINGTON, MN



PL201700224

McDONALD'S USA, LLC.

BLOOMINGTON, MN

NORTH
NO SCALE

ABBREVIATIONS

D	Angle	L.F.	Lineal Feet
&	And	L.P.	Low Point / Liquid Petroleum
@	At	LB.	Pound
100 YR.	100 Year Flood Elevation	LGU	Local Government Unit
A.B.	Anchor Bolt	LONG.	Longitudinal
A.D.	Area Drain	LT.	Light / Lighting
A/C	Air Conditioning Unit	MAINT.	Maintenance
ADD.	Addendum	MAS.	Masonry
ADDL.	Additional	MATL.	Material
ADJ.	Adjacent / Adjust	MAX.	Maximum
AHU	Air Handling Unit	MECH	Mechanical
ALT.	Alternate	MED.	Medium
ALUM.	Aluminum	MFR.	Manufacturer
ANOD.	Anodized	MH	Manhole
APPROX.	Approximate	MIN.	Minimum / Minute
ARCH	Architect / Architectural	MISC.	Miscellaneous
AUTO.	Automatic	MNDOT	Minnesota Department Of Transportation
AVG.	Average	MOD.	Module / Modular
B.C.	Back of Curb	MUL.	Mullion
B/W	Bottom of Wall	N.	North
BFE	Basement Floor Elevation	N.I.C.	Not In Contract
BIT	Bituminous (Asphaltic)	NO. OR #	Number
BLDG	Building	NOM	Nominal
BSMT.	Basement	NTS	Not to Scale
C.F.	Cubic Feet	NWE	Normal Water Elevation
C.F.S.	Cubic Feet Per Second	NWL	Normal Water Level
C.G.	Corner Guard	O.C.	On Center
C.J.	Control Joint	O.D.	Outside Dimension
C.L.	Centerline	O.E.	Overhead Electric
C.M.U.	Concrete Masonry Unit	OH	Overhead
C.O.	Cleanout	OHWL	Ordinary High Water Level
C.O.E.	U.S. Army Corps Of Engineers	OPNG.	Opening
C.Y.	Cubic Yards	ORIG.	Original
CB	Catch Basin	P.C.	Point of Curvature
CBMH	Catch Basin Manhole	P.I.	Point of Intersection
CEM.	Cement	PIV	Post Indicator Valve
CIP	Cast Iron Pipe	P.L. OR P/L	Property Line
CMP	Corrugated Metal Pipe	P.O.B.	Point of Beginning
CONC.	Concrete (Portland)	P.S.F.	Pounds Per Square Foot
CONN.	Connection	P.S.I.	Pounds Per Square Inch
CONST.	Construction	P.T.	Point of Tangency
CONT.	Continuous	P.V.C.	Point of Vertical Curvature
CONTR.	Contractor	P.V.I.	Point of Vertical Intersection
COP.	Copper	P.V.T.	Point of Vertical Tangency
CU.	Cubic	PE	Polyethylene
D.S.	Down Spout	PED.	Pedestal / Pedestrian
DEG.	Degree	PERF.	Perforated
DEMO.	Demolition / Demolish	PREP.	Preparation
DEPT.	Department	PROJ.	Project
DET.	Detail	PROP.	Proposed
DIA.	Diameter	PVC.	Poly-Vinyl-Chloride (Piping)
DIAG.	Diagonal	PVMT.	Pavement
DIM.	Dimension	QTR.	Quarter
DIP	Ductile Iron Pipe	QTY.	Quantity
DN	Down	R.	Radius
DWG.	Drawing	RAD.	Radius
E.	East	R.D.	Roof Drain
E.J.	Expansion Joint	RE.	Remove Existing
E.O.	Emergency Overflow	R.O.	Rough Opening
E.O.S.	Emergency Overflow Swale	R.P.	Radius Point
E.W.	Each Way	RCP	Reinforced Concrete Pipe
EA.	Each	R.S.	Rough Slab
EL.	Elevation	RSD	Roof Storm Drain
ELEC.	Elecrrical	RE	Rim Elevation (Casting)
ELEV.	Elevation	RE.	Regarding
EMER.	Emergency	REINF.	Reinforced
ENGR.	Engineer	REQ'D	Required
ENTR.	Entrance	REV.	Revision / Revised
EQ.	Equal	RGU	Regulatory Government Unit
EQUIP.	Equipment	ROW OR R/W	Right of Way
EQUIV.	Equivalent	S.	South
EXIST.	Existing	S.F.	Square Feet
EXP.	Expansion	SAN.	Sanitary Sewer
F & I	Furnish and Install	SECT.	Section
F.B.O.	Furnished by Others	SE	Side Exit
F.C.	Face of Curb	SEWO	Side Exit Walk Out
F.D.	Floor Dran	SHT.	Sheet
F.D.C.	Fire Department Connection	SIM.	Similar
F.V.	Field Verify	SLNT.	Sealant
FB	Full Basement	SPEC.	Specification
FBWO	Full Basement Walk Out	SQ.	Square
FBLO	Full Basement Look Out	SSD	Subsurface dran
FDN.	Foundation	STMH	Storm Sewer Manhole
FES	Flared End Section	STD.	Standard
FFE	Finished Floor Elevation	STRUCT.	Structural
FLR.	Floor	SYM.	Symmetrical
FT. OR (')	Foot	T	Thickness
FUT.	Future	T/R	Top of Rim
G.B.	Grade Break	T/W	Top of Wall
G.C.	General Contractor	TEMP.	Temporary
GAL.	Gallon	THK.	Thck / Thickness
GALV.	Galvanized	T.J.	Tooled Joint
GFE	Garage Floor Elevation	TNH	Top Nut Hydrant
GL.	Glass	TYP.	Typical
GR.	Grade	U.N.O.	Unless Noted Otherwise
H.	Height	V.B.	Vapor Barrier
H.P.	High Point	V.C.	Vertical Curve
HDPEP	High Density Polyethylene Pipe	V.I.F.	Verify In Field
HGT.	Height	VER	Verify
HORIZ.	Horizontal	VERT.	Vertical
HVAC	Heating, Ventilation, Air Conditioning	VEST.	Vestibule
HYD	Hydrant	W	Width
I.D.	Inside Dimension	W.P.T.	Working Point
IE or I.E.	Invert Elevation	W.W.F.	Welded Wire Fabric
IN. OR (")	Inches	W/	With
INFO.	Information	W/O	Without
INL.	Inlet Elevation	WO	Walk Out
INSUL.	Insulation	WETL.	Wetland
INV.	Invert Elevation	WP	Waterproof
JT.	Joint	WT.	Weight
		YD.	Yard
		YR.	Year

SYMBOLS

EXISTING	DESCRIPTION	NEW	DESCRIPTION
120	MAJOR CONTOUR	120	MAJOR CONTOUR
123	MINOR CONTOUR	123	MINOR CONTOUR
x 234.5	SPOT ELEVATION	x 123.45	SPOT ELEVATION
	BUILDING		BUILDING
	CANOPY / OVERHANG		CANOPY/OVERHANG
	CONCRETE		UNDERGROUND STRUCTURE
	BITUMINOUS		CONCRETE
	LANDSCAPING		CONCRETE CURB
	GRAVEL	BIT. EDGE HEIGHT, TYPE	EDGE OF PAVEMENT
	PAVING BLOCK		FENCING
	PAVING BLOCK		GUARD RAIL
12"STS	STORM SEWER LINE		CONCRETE RETAINING WALL
8"SAN	SANITARY SEWER LINE		MODULAR RETAINING WALL
6"WTR	WATER MAIN		FIELDSTONE RETAINING WALL
OE	OVERHEAD ELECTRIC		EXIT LOCATION
UT	UNDERGROUND TELEPHONE		LIGHT STANDARD
UE	UNDERGROUND ELECTRIC	Ø	POWER POLE
G	GAS LINE	1.00%	SLOPE DIRECTION
	CONCRETE CURB		CATCH BASIN
	FENCING		MANHOLE
			BOLLARD
	RETAINING WALL	STS FES RIPRAP	STORM SEWER
	SET 1/2" X 14" IRON PIPE	SAN	SANITARY SEWER-WASTE
	IRON MONUMENT FOUND	FM	FORCE MAIN
	SURVEY DISK (BENCHMARK)	RD	ROOF DRAIN SYSTEM
	POWERPOLE	GATE VALVE WTR HYD	WATERMAIN
	GUY WIRE	FIRE	FIRE LINE (IF SEPARATE)
	GUARD POST	BLDG.	FIRE DEPT. CONNECTION
GM	GAS METER	C.O.	SOIL SUBDRAIN
T	TRANSFORMER	GAS	GAS LINE-UNDERGROUND
	WATER SHUT-OFF VALVE	ELEC	ELECTRIC-UNDERGROUND
	TRAFFIC SIGN	TELE	TELEPHONE-UNDERGROUND
LT	FLAG POLE	CATV	UNDERGROUND CABLE/TV
	LIGHT POLE	LSS	LAWN SPRINKLER SLEEVE
	TREES		
	TREE LINE		
	MANHOLE		
	CATCH BASIN		
	FIRE HYDRANT		
	WATER VALVE		
	FLARED END SECTION		
FIB	MAILBOX		
1	NOTE NUMBER		
(M)	MEASURED DISTANCE		
(P)	DISTANCE PER RECORDED PLAT		
B-X	SOIL BORING		

EROSION CONTROL SYMBOLS

SYMBOL	DESCRIPTION
	SEDIMENT CONTROL FENCE
	INLET PROTECTION

DRAWING SYMBOLS

SYMBOL	DESCRIPTION
3	NOTE REFERENCE
12	PARKING STALL COUNT
C7.3 1	LARGE SHEET DETAIL
C21	COORDINATE POINT
2	REVISION - ADDENDUM, BULLETIN, ETC.
	REVISED AREA (THIS ISSUE)
x	EXIT LOCATION: A = ACCESSIBLE E = EGRESS S = SERVICE

LEGAL DESCRIPTION

PART OF LOT 1, BLOCK 1, SOUTHTOWN SHOPPING CENTER 3RD ADDITION, HENNEPIN COUNTY, MINNESOTA

BENCHMARK

SITE BENCHMARK:
TOP NUT OF FIRE HYDRANT
LOCATION: HYDRANT IS LOCATED 70.6 FT EAST OF THE SE CORNER OF THE MCDONALDS BUILDING.

ELEVATION = 836.69 FEET

CIVIL SHEET INDEX & REVISION MATRIX

SHEETS ISSUED BY ISSUE / REVISION DATE

SHEET NO.	DESCRIPTION	07.14.17	10.11.17
C0.1	CIVIL TITLE SHEET	X	X
C1.1	EXISTING CONDITIONS & DEMOLITION	X	X
C2.1	SITE PLAN	X	X
C2.2	DRIVE-THRU LAYOUT	X	X
C2.3	DRIVE-THRU DETAILS	X	X
C2.4	DRIVE-THRU DETAILS	X	X
C2.5	DRIVE-THRU DETAILS	X	X
C2.6	STRIPING	X	X
C3.1	GRADING, DRAINAGE, PAVING, & EROSION CONTROL		X
C7.1	CIVIL CONSTRUCTION DETAILS		X

OWNER

McDONALD'S USA, LLC.
1650 WEST 82ND STREET #900
BLOOMINGTON, MN 55431-9888
TEL (952) 884-4355
FAX (952) 885-4755
CONTACT: VICKY STADTHER

PROJECT CONTACTS

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LANDFORM
105 SOUTH FIFTH AVENUE, SUITE 513
MINNEAPOLIS, MN 55401
TEL 612-252-9070
FAX 612-252-9077
CONTACT: SEAN MURPHY

SURVEYOR
LANDFORM
105 SOUTH FIFTH AVENUE, SUITE 513
MINNEAPOLIS, MN 55401
TEL 612-252-9070
FAX 612-252-9077
CONTACT: ERIC LINDGREN

ARCHITECT
REPRISE
12400 PORTLAND AVE S, SUITE 100
BURNSVILLE, MN 55337
TEL 952-252-4042
FAX 952-252-4043
CONTACT: KRISTI DONAHUE

SITE/UTILITY CONTACTS

CITY PLANNER
CITY OF BLOOMINGTON
1800 WEST OLD SHAKOPEE ROAD
BLOOMINGTON, MN 55431

NICK M. JOHNSON

NMJohnson@BloomingtonMN.gov
TEL: 952-563-8925
FAX:

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Web: landform.net

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REVISION HISTORY

REV	DATE	
	07-14-17	CITY SUBMITTAL
	10-11-17	CITY SUBMITTAL

CERTIFICATION

McDONALD'S USA, LLC.

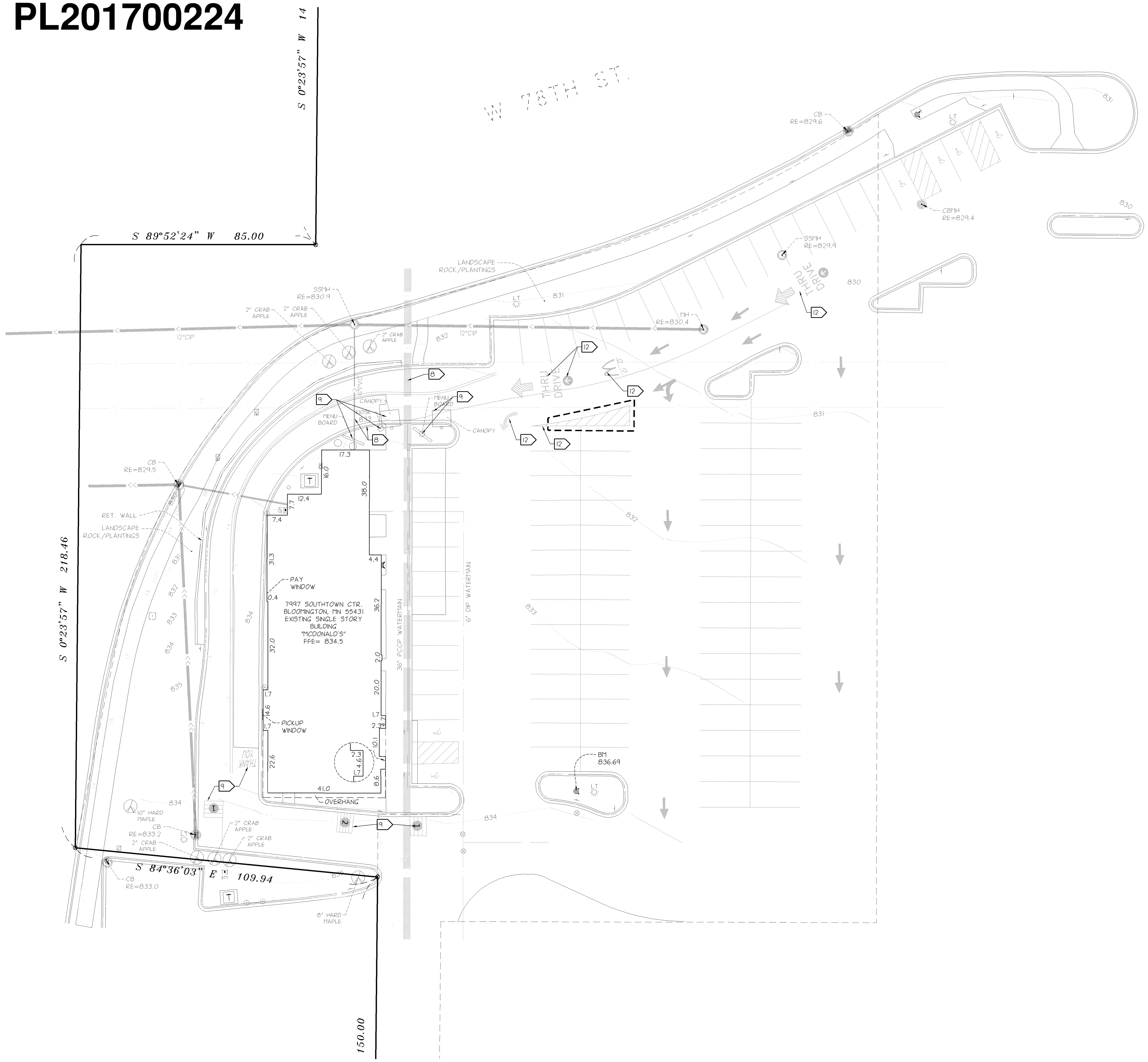
OFFICE ADDRESS
#650 W. 82ND STREET #900 BLOOMINGTON, MINNESOTA 55431-9888 (952)-884-4355

CITY	STATE	DRAWN BY	DATE
BLOOMINGTON	MN	TDD	PROTO ISSUED
STREET ADDRESS	COUNTY	REVIEWED BY	DATE REVIEWED
7997 SOUTHTOWN CENTER	HENNEPIN	CNC	07-10-17
SHEET NAME			DATE ISSUED
CIVIL & LANDSCAPE TITLE SHEET			10-11-17
NATIONAL NUMBER	STATE NUMBER		
19751	022-0316		

SHEET NO. C0.1

FILE NAME: C001MCD206.DWG
PROJECT NO. MCD12208

PL201700224



EXISTING CONDITIONS

1. BACKGROUND INFORMATION SHOWN IS FROM SURVEY BY LANDFORM PROFESSIONAL SERVICES, LLC, MINNEAPOLIS, MN, ON JANUARY 19, 2017, EXPRESSLY FOR THIS PROJECT; BLOOMINGTON, MN RECORD DRAWINGS; AND UTILITY SERVICE PROVIDERS. LANDFORM OFFERS NO WARRANTY, EXPRESSED OR WRITTEN, FOR INFORMATION PROVIDED BY OTHERS. EXISTING PROJECT CONDITIONS SHALL BE VERIFIED PRIOR TO BEGINNING CONSTRUCTION. ERRORS, INCONSISTENCIES, OR OMISSIONS DISCOVERED SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.

DEMOLITION AND CLEARING NOTES

2. OBTAIN PERMITS FOR DEMOLITION, CLEARING, AND DISPOSAL PRIOR TO BEGINNING.
3. CONTACT UTILITY SERVICE PROVIDERS FOR FIELD LOCATION OF SERVICES 72 HOURS PRIOR TO BEGINNING DEMOLITION AND CLEARING.
4. DIMENSIONS SHOWN FOR REMOVAL ARE APPROXIMATE. COORDINATE WITH NEW CONSTRUCTION TO ENSURE APPROPRIATE REMOVAL OF EXISTING FACILITIES.
5. SAWCUT EXISTING PAVEMENT. REMOVE CONCRETE WALKS AND CURBING TO THE NEAREST EXISTING JOINT BEYOND CONSTRUCTION LIMITS.
6. COMPLETE DEMOLITION WITH MINIMAL DISRUPTION OF TRAFFIC. COORDINATE LANE CLOSURES WITH THE REGULATORY AUTHORITY AND PROVIDE ADVANCE NOTIFICATION TO AFFECTED EMERGENCY RESPONSE PROVIDERS.
7. PROVIDE BARRICADES, LIGHTS, SIGNS, TRAFFIC CONTROL, AND OTHER MEASURES NECESSARY FOR PROTECTION AND SAFETY OF THE PUBLIC AND MAINTAIN THROUGHOUT CONSTRUCTION. THE CITY REQUIRES TRAFFIC CONTROL MEASURES TO BE IN PLACE DURING UTILITY INSTALLATION, EXISTING BUILDING DEMOLITION, DRIVEWAY INSTALLATION, SIDEWALK INSTALLATION AND FINAL RESTORATION WITHIN THE RIGHT-OF-WAY.
8. PROTECT STRUCTURES, UTILITIES, TREES, PLANT MATERIAL, SOD, AND ADJACENT PROPERTY FROM DAMAGE DURING CONSTRUCTION UNLESS NOTED FOR REMOVAL. DAMAGE SHALL BE REPAIRED TO EQUAL OR BETTER CONDITION AT NO ADDITIONAL COST.
9. REMOVE EXISTING SITE FEATURES INCLUDING, BUT NOT LIMITED TO, UNDERGROUND UTILITIES, PAVING, CURBING, WALKWAYS, FENCING, RETAINING WALLS, SCREEN WALLS, APRONS, LIGHTING, RELATED FOUNDATIONS, SIGNAGE, BOLLARDS, LANDSCAPING, AND STAIRWAYS WITHIN THE CONSTRUCTION LIMITS UNLESS NOTED OTHERWISE.
10. COORDINATE REMOVAL, RELOCATION, TERMINATION, AND RE-USE OF EXISTING PRIVATE UTILITY SERVICES AND APPURTENANCES WITH THE UTILITY COMPANIES. RESTORE ELECTRIC HANDHOLES, PULLBOXES, POWERPOLES, GUYLINES, AND STRUCTURES DISTURBED BY CONSTRUCTION IN ACCORDANCE WITH UTILITY OWNER REQUIREMENTS.
11. HAUL DEMOLITION DEBRIS OFF-SITE TO A FACILITY APPROVED BY REGULATORY AUTHORITIES FOR THE HANDLING OF DEMOLITION DEBRIS.
12. REMOVE PAVEMENT MARKINGS.

DEMOLITION LEGEND

- TREE/SHRUB REMOVAL
- CURB REMOVAL
- PAVEMENT SAWCUT
- CONSTRUCTION LIMITS
- TREE PROTECTION
- XXXXXXXXXXXXXXX UTILITY LINE REMOVAL

NORTH

0 20 40

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Suite 513
Minneapolis, MN 55401

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Fax: 612-252-9077
Web: landform.net

REV	DATE	REVISION HISTORY
	07-14-17	CITY SUBMITTAL
	10-11-17	CITY SUBMITTAL

CERTIFICATION

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.

Christopher N. Call

License Number 46224

Date 10/11/2017

McDONALD'S USA, LLC.

THESE DRAWINGS AND SPECIFICATIONS ARE THE CONFIDENTIAL AND PROPRIETARY PROPERTY OF McDONALD'S CORPORATION AND SHALL NOT BE COPIED OR REPRODUCED WITHOUT WRITTEN AUTHORIZATION. THE CONTRACT DOCUMENTS WERE PREPARED FOR USE ON THIS SPECIFIC SITE IN CONJUNCTION WITH ITS ISSUE DATE AND ARE NOT SUITABLE FOR USE ON A DIFFERENT SITE OR AT A LATER TIME. USE OF THESE DRAWINGS FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THE CONTRACT DOCUMENTS FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED.

OFFICE ADDRESS
1650 W. 82ND STREET #900 BLOOMINGTON, MINNESOTA 55431-9888 (952)-884-4355

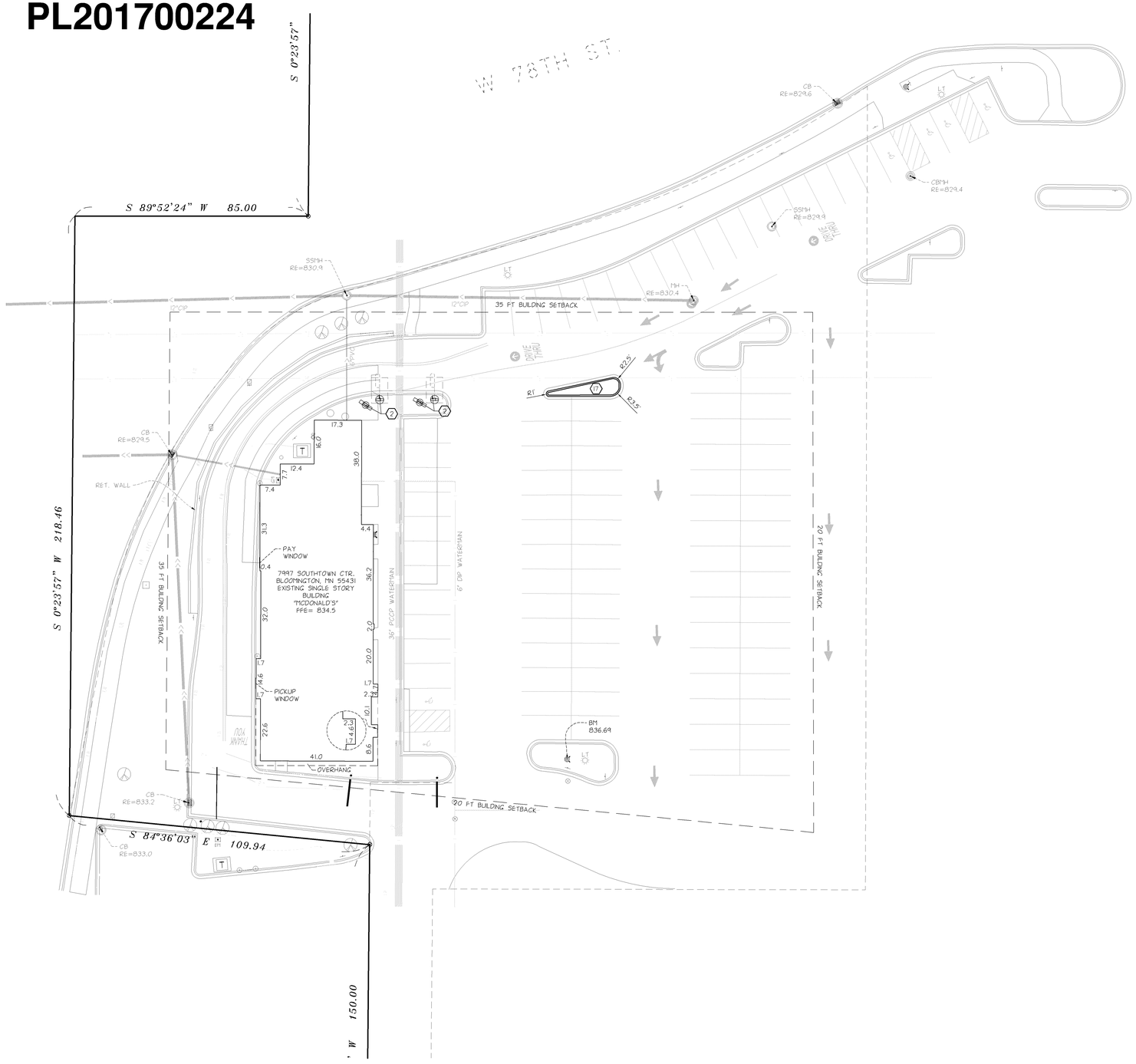
DRAWN BY: TDD
PROTO. ISSUED:
REVIEWED BY: CNC
DATE REVIEWED: 07-10-17
DATE ISSUED: 10-11-17

CITY: BLOOMINGTON
STATE: MN
STREET ADDRESS: 7997 SOUTHTOWN CENTER
COUNTY: HENNEPIN
SHEET NAME: EXISTING CONDITIONS & DEMOLITION
NATIONAL NUMBER: 15751
STATE NUMBER: 022-0316

SHEET NO. C1.1

FILE NAME: C101MCD208.DWG
PROJECT NO. MCD12208

PL201700224



Add bike rack or identify existing bike racks to ensure they meeting bike parking requirements.

SITE CONSTRUCTION NOTES

1. McDONALD'S PYLON SIGN. – NOT USED.
2. DRIVE-THRU SIGNAGE. SEE SHEET C2.2.
6. CONCRETE DRIVE APRONS AND SLABS. REFER TO SHEET C3.1 FOR SPECIFICATIONS. – NOT USED.
7. CONCRETE SIDEWALK. MEET AND MATCH EXISTING SIDEWALK. REFER TO SHEET C3.1. – NOT USED.
8. CONCRETE PATIO. MEET AND MATCH SIDEWALK. – NOT USED
9. BITUMINOUS PAVEMENT. REFER TO SHEET C3.1 FOR SPECIFICATIONS. – NOT USED.
10. PARKING LOT LIGHT. REFER TO SHEET C2.4 FOR DETAILS. – NOT USED.
11. 6' X 42" RAILING. REFER TO ARCHITECTURAL. – NOT USED.
12. PLANTING AREA. REFER TO SHEET L2.1 FOR DETAILS. – NOT USED.
13. TRASH ENCLOSURE. REFER TO ARCHITECTURAL. – NOT USED.
14. STACKING DISTANCE IS 95'
15. CONNECTION TO PUBLIC SIDEWALK. – NOT USED.
16. BIKE RACK. REFER TO SHEET L2.1 FOR DETAILS. – NOT USED.
17. ROCK MULCH TO MATCH ADJACENT ISLANDS.

SITE PLAN NOTES

1. OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WITHIN, OR USE OF, PUBLIC RIGHT-OF-WAY.
2. THE DIGITAL FILE, WHICH CAN BE OBTAINED FROM THE ENGINEER, SHALL BE USED FOR STAKING. DISCREPANCIES BETWEEN THE DRAWINGS AND THE DIGITAL FILE SHALL BE REPORTED TO THE ENGINEER. THE BUILDING FOOTPRINT, AS SHOWN ON THESE DRAWINGS, AND THE DIGITAL FILE, SHALL BE COMPARED TO THE STRUCTURAL DRAWINGS PRIOR TO STAKING.
3. DIMENSIONS SHOWN ARE TO FACE OF CURB AND EXTERIOR FACE OF BUILDING UNLESS NOTED OTHERWISE.

GREEN SPACE

NORTH

0 20 40

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REV	DATE	REVISION HISTORY
	07-14-17	CITY SUBMITTAL
	10-11-17	CITY SUBMITTAL

CERTIFICATION

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.

Christopher N. Call

License Number 46224

Date 10/11/2017

McDONALD'S USA, LLC.

OFFICE ADDRESS
1650 W. 82ND STREET #900 BLOOMINGTON, MINNESOTA 55431-0888 (952)-884-4355

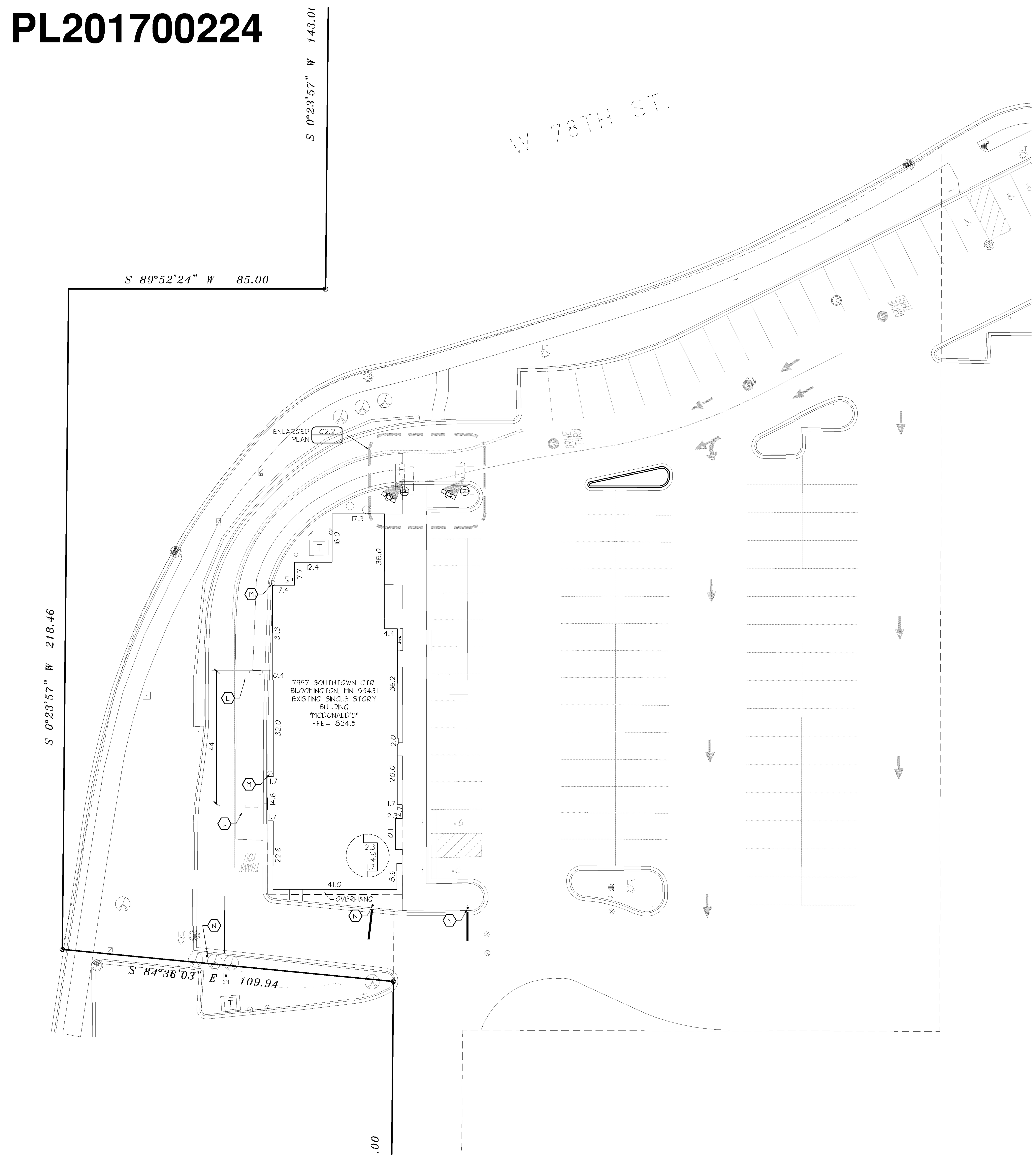
CITY	BLOOMINGTON	STATE	MN
STREET ADDRESS	7997 SOUTHTOWN CENTER	COUNTY	HENNEPIN
SHEET NAME	SITE PLAN		
NATIONAL NUMBER	18751	STATE NUMBER	022-0316

DRAWN BY	TDD
PROTO ISSUED	
REVIEWED BY	CNC
DATE REVIEWED	07-10-17
DATE ISSUED	10-11-17

SHEET NO. C2.1

FILE NAME: C201MCD208.DWG
PROJECT NO. MCD12208

PL201700224



DRIVE-THRU CONSTRUCTION NOTES

- (A) NEW CONCRETE CURB AND GUTTER. – NOT USED.
- (B) INSTALL NEW OUTDOOR MENU BOARD. SEE SHEET C2.3 FOR FOUNDATION DETAIL, SHEET C2.5 FOR SCHEMATIC DETAIL AND SEE MANUFACTURER FOR INSTALLATION INSTRUCTIONS.
- (C) PRIMARY LANE CANOPY. LOCATE 95' FROM C.L. OF CANOPY TO C.L. OF CASH WINDOW MEASURED ALONG C.L. OF TRAVEL PATH. SEE SHEET C2.3 FOR FOUNDATION DETAIL, SHEET C2.5 FOR SCHEMATIC DETAIL AND MANUFACTURER FOR INSTALLATION INSTRUCTIONS. SIGN CONTRACTOR TO PROVIDE SIGN CLEARANCE SIGNAGE ON STRUCTURE.
- (D) THE MIDPOINT OF THE SECONDARY COD FACE IS LOCATED 20'–0" (+ 2'; 20'–22') BACK FROM THE CENTER OF THE PRIMARY COD AS MEASURED ALONG THE FACE OF THE CURB OF THE DRIVE–THRU LANE. SIGN CONTRACTOR TO PROVIDE SIGN CLEARANCE SIGNAGE ON STRUCTURE.
- (E) INSTALL PRIMARY LANE DETECTOR LOOP. FLIP LOOP FORWARD.
- (F) INSTALL SECONDARY LANE DETECTOR LOOP 2'–0" FORWARD OF C.L. OF COD. FLIP LOOP FORWARD. – NOT USED.
- (G) SINGLE ARM GATEWAY SIGN. CENTER OF THE FOOTING OF THE GATEWAY SIGN SHALL BE 18" FROM THE BACK OF CURB. SEE SHEET C2.3 FOR FOUNDATION DETAIL, SHEET C2.5 FOR SCHEMATIC DETAIL AND MANUFACTURER FOR INSTALLATION INSTRUCTIONS. – NOT USED.
- (H) LANDSCAPED AREA. – NOT USED.
- (I) ANY LANE ANY TIME SIGN. ATTACH SIGN TO GATEWAY 6' FROM BOTTOM OF POST. SEE SHEET C2.5 FOR SCHEMATIC DETAIL AND MANUFACTURER FOR INSTALLATION INSTRUCTIONS. – NOT USED.
- (J) PRIMARY PRE–BROWSE BOARD. PRE–BROWSE BOARD MUST BE 18"–24" FROM FACE OF CURB. THE DISTANCE BETWEEN THE PRIMARY CANOPY AND PRE–BROWSE BOARD IS TO BE 15' AS MEASURED ALONG THE CENTER LINE OF THE LANE. THIS IS MEASURED FROM THE CENTER OF THE PRE–BROWSE BOARD FOUNDATION TO THE CENTER OF THE COD FOUNDATION. SEE SHEET C2.3 FOR FOUNDATION DETAIL, C2.5 FOR SCHEMATIC DETAIL, AND MANUFACTURER FOR INSTALLATION INSTRUCTIONS. – NOT USED.
- (K) SECONDARY PRE–BROWSE BOARD. PRE–BROWSE BOARD MUST BE MIN. 12" FROM FACE OF CURB. THE DISTANCE BETWEEN THE SECONDARY CANOPY AND PRE–BROWSE BOARD IS TO BE 15' AS MEASURED ALONG FACE OF THE CURB, THIS IS MEASURED FROM THE POINT PERPENDICULAR TO THE CENTER OF THE PRE–BROWSE BOARD FOUNDATION TO THE POINT PERPENDICULAR TO THE CENTER OF THE CANOPY FOUNDATION. – NOT USED.
- (L) INSTALL DETECTOR LOOPS AT CASH AND PRESENT WINDOWS.
- (M) EXISTING BOLLARD AT THE CORNER OF THE BUILDING ON THE DRIVE THRU SIDE.
- (N) INSTALL PULL FORWARD SIGN & BOLLARD. SEE DETAIL C2.5/2.

GENERAL NOTES

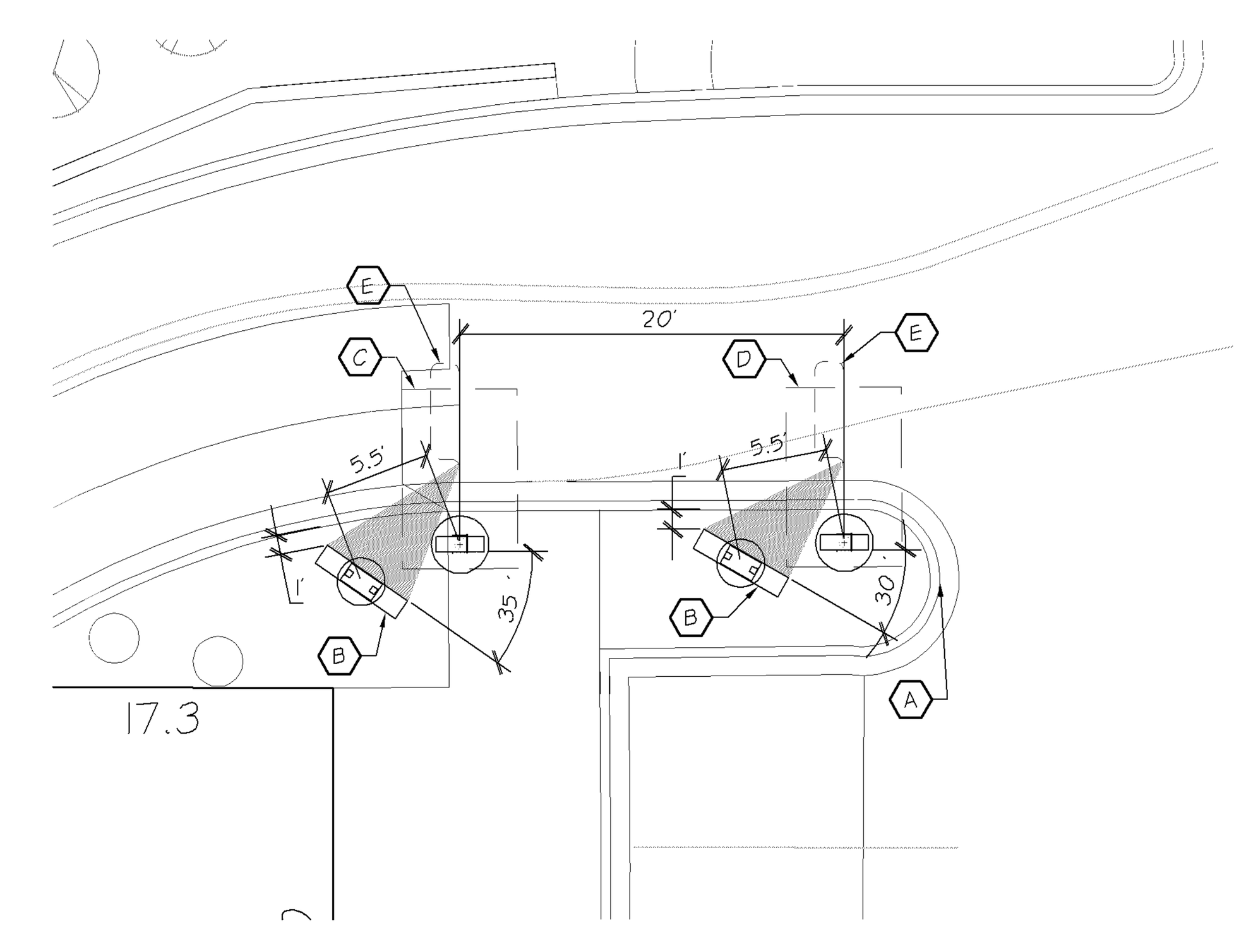
1. SIGNAGE & DRIVE–THRU ELEMENTS:
   COD, DRIVE–THRU PYLON/CLEARANCE POLE, BOLLARD SIGN, AND FREESTANDING MERCHANDIZER SHALL BE CONSISTENT WITH THE 2013 STANDARD BUILDING DESIGN DRIVE–THRU ELEMENTS. OTHER DESIGNS MAY NOT BE USED.
2. GENERAL CONTRACTOR SHALL COORDINATE WITH CIVIL PLANS, McDONALD'S PROJECT MANAGER, AND SIGNAGE SUPPLIER TO DETERMINE THE EXACT LOCATION, ORIENTATION, MOUNTING HEIGHTS, AND NUMBER OF SIGNS AND OTHER DRIVE–THRU ELEMENTS TO BE INSTALLED AT THIS SITE. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES.
3. CONTACT McDONALD'S PROJECT MANAGER FOR SIGNAGE & DRIVE–THRU ELEMENT FOOTING AND WIRING REQUIREMENTS. SIGNAGE MANUFACTURER TO PROVIDE FOOTING ANCHORS & TEMPLATES TO G.C. PRIOR TO FOUNDATION POURING.
4. SEE SHEET C2.5 AND ELECTRICAL SHEETS FOR DRIVE–THRU WIRING INFORMATION.
5. GENERAL CONTRACTOR TO COORDINATE THE RESPONSIBILITES OF THE ELECTRICAL CONTRACTOR AND THE SIGN SUPPLIER.
6. GENERAL CONTRACTOR TO INSTALL PRE–FORMED, PRE–WIRED VEHICLE DETECTOR LOOP.
7. GENERAL CONTRACTOR SHALL VERIFY CONDUIT SIZES REQUIRED BY VEHICLE LOOP DETECTOR SUPPLIER.

DRIVE-THRU LAYOUT NOTES

1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS NOTED OTHERWISE ON PLAN.
2. FIELD VERIFY AND CONFIRM EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCING CONSTRUCTION. NOTIFY MCDONALD'S PROJECT MANAGER OF ANY DISCREPANCIES PRIOR TO COMMENCING CONSTRUCTION.
3. SEE SHEET C2.1 FOR ALL OTHER CONSTRUCTION SITE DIMENSIONS.
4. SEE SHEET C2.6 FOR STRIPING.

LEGEND

:VISION TRIANGLE



1 ENLARGED PLAN

10 SCALE

NORTH

0 20 40

811 Know what's Below. Call before you dig.

LANDFORM From Site to Finish
105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401
Tel: 612-252-9070
Fax: 612-252-9077
Web: landform.net

REV	DATE	REVISION HISTORY
	07-14-17	CITY SUBMITTAL
	10-11-17	CITY SUBMITTAL

CERTIFICATION

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.

Christopher N. Call

License Number 46224

Date 10/11/2017

McDONALD'S USA, LLC.

OFFICE ADDRESS 1650 W. 82ND STREET #900 BLOOMINGTON, MINNESOTA 55431-9888 (952)-884-4355

DRAWN BY TDP | PROTO. ISSUED | REVIEWED BY CNC | DATE REVIEWED 07-10-17 | DATE ISSUED 10-11-17

CITY BLOOMINGTON | STATE MN | STREET ADDRESS 7997 SOUTHTOWN CENTER | COUNTY HENNEPIN | SHEET NAME DRIVE-THRU LAYOUT | NATIONAL NUMBER 18751 | STATE NUMBER 022-0316

SHEET NO. C2.2

FILE NAME: C202MCD208.DWG

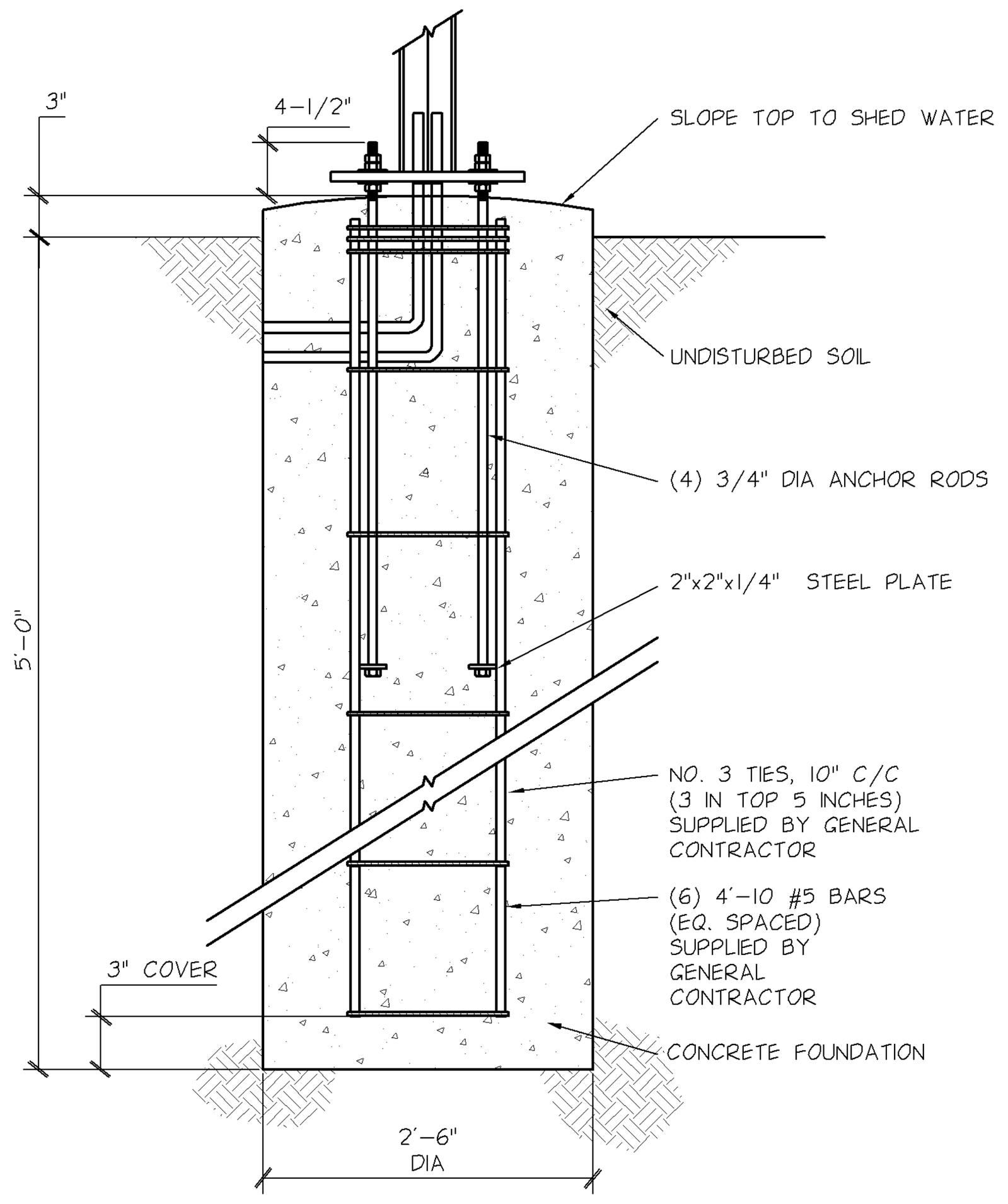
PROJECT NO. MCD12208

PL201700224

3 — ODMB AND PRE-BROWSE FOUNDATION - 90 MPH

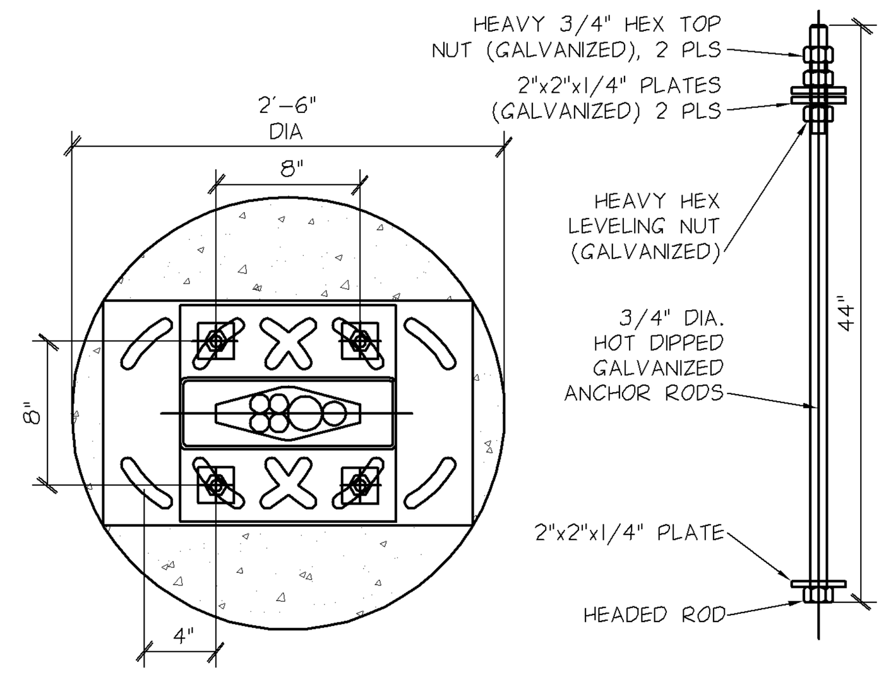
NO SCALE

FOUNDATION NOTES:
- PIER DEPTHS REQUIRED ARE MINIMUMS. ALL PIERS TO EXTEND TO FROST DEPTH AS DETERMINED BY LOCAL JURISDICTION.
- TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT ACCUMULATE.
- MINIMUM ALLOWABLE LATERAL SOIL BEARING PRESSURE 100 PSF/FT OF DEPTH (x2)
- ALL REINFORCING STEEL BY GENERAL CONTRACTOR



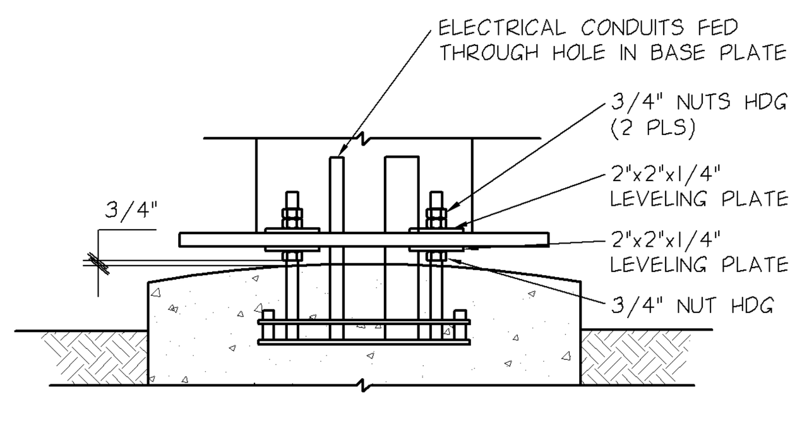
FOUNDATION – NTS

NOTES:
- TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT ACCUMULATE.
- ANCHOR RODS, NUTS, AND WASHERS SHALL BE SHIPPED AS AN ASSEMBLY FROM THE SIGN/LIGHTING MANUFACTURER



ANCHOR BOLT PATTERN – NTS

NOTES:
- TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT ACCUMULATE.
- ANCHOR RODS, NUTS, AND WASHERS SHALL BE SHIPPED AS AN ASSEMBLY FROM THE SIGN/LIGHTING MANUFACTURER
- DO NOT CUT ANCHOR BOLTS AFTER INSTALLATION OF POLE



CONNECTION DETAILS – NTS

GENERAL NOTES

- THE FOLLOWING CODES WERE USED IN DESIGN:
  - IBC 2012
  - ASCE 7-10
  - ACI 318-14
  - AISC 14th EDITION
  - AWS D1.1
- WIND SPEED 90 MPH (ULTIMATE WIND SPEED)
  - EXPOSURE C
- DESIGN LOADS DERIVED FROM THESE CODES AND FORCES

	SINGLE	DOUBLE
-AXIAL	- 325#	-590#
-SHEAR	- 104#	-184#
-MOMENT	- 402#'	-764#'

- ALL FOOTING EXCAVATIONS ARE TO BE CLEAR OF WATER AND FOREIGN MATTER BEFORE PLACING CONCRETE.
- MINIMUM ALLOWABLE LATERAL SOIL BEARING PRESSURE OF 100PSF/FT (x2).
- SITE SOIL CONDITIONS TO BE CONFIRMED BY GEOTECHNICAL ENGINEER. IF ASSUMED SOIL CONDITIONS ARE NOT PRESENT, FOUNDATION SHALL BE DESIGNED BY A LICENSED STRUCTURAL ENGINEER TAKING INTO ACCOUNT ACTUAL SITE SOIL CONDITIONS.
- TOP 6" OF SOIL NEGLECTED IN EMBEDMENT DEPTH CALCULATIONS (EMBEDMENT DEPTHS SHOWN ARE FROM GRADE).
- ELECTRICAL CONTRACTOR TO PROVIDE INFORMATION ON CONDUIT AND ELECTRICAL REQUIREMENTS.

CONCRETE:

- ALL FOOTINGS SHALL BEAR ON FIRM UNDISTURBED RESIDUAL SOIL AND/OR ENGINEERED EARTH FILL COMPACTED TO 98% OF ITS MAXIMUM DRY DENSITY AS PER ASTM D 698-70 (STANDARD PROCTOR) UNLESS NOTED OTHERWISE.
- ALL PIERS TO EXTEND TO FROST DEPTH AS DETERMINED BY LOCAL JURISDICTION.
- TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT ACCUMULATE.
- MINIMUM CONCRETE STRENGTH (f'c=3,000 PSI) SHALL CONFORM WITH MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATIONS SECTION 2.13-A.
- USE OF ADMIXTURES SHALL CONFORM TO MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATION SECTION 2.6.
- AIR ENTRAINMENT SHALL CONFORM WITH MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATION SECTIONS 2.6-A & 2.13-A.
- WATER CONTENT RATIO SHALL CONFORM TO MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATIONS SECTION 2.13-A.
- FOUNDATION CONCRETE TO BE TESTED PER MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATIONS SECTION 3.14.
- PROVIDE A MINIMUM 3" OF CONCRETE COVER OVER ALL EMBEDDED STEEL.
- REINFORCEMENT PLACEMENT SHALL CONFORM TO MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATIONS SECTIONS 3.2 & 3.5. PERFORMED BY GENERAL CONTRACTOR.
- ANCHOR RODS TO BE SET IN ACCORDANCE WITH AISC CODE OF STANDARD PRACTICE
- DO NOT PLACE POLES ON CONCRETE UNTIL CONCRETE HAS CURED PER MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATION, SECTION 3.11-E.

STEEL:

- STEEL PIPE SECTION: ASTM A53 OR A252 TYPE E GRADE B (F_y=35ksi)
- HSS ROUND SECTION: ASTM A500 GRADE B (F_y=42ksi)
- HSS SQUARE/RECTANGULAR SECTIONS: ASTM A500 GRADE B (F_y=46ksi)
- HEADED ANCHOR RODS ASTM F1554 GR 55, AN ACCEPTABLE ALTERNATIVE IS ASTM F1554 GR 55, S1 WHEN THE EMBEDDED END OF THE ROD IS THREADED AND THE NUT TACK WELDED PRIOR TO GALVANIZATION.
- STEEL ANGLES, CHANNELS, STRUCTURAL SHAPES AND PLATES: ASTM A36
- REINFORCEMENT: ASTM A615 GRADE 60 – BY GENERAL CONTRACTOR
- NUTS: ASTM A563A, HEAVY HEX
- WASHERS: ASTM F844 A36
- USE ASTM A153 CLASS C HOT DIPPED GALVANIZED BOLTS AND FASTENERS
- ANCHOR RODS, NUTS, AND WASHERS SHALL BE SHIPPED AS AN ASSEMBLY FROM THE SIGN/LIGHTING MANUFACTURER.
- NO FIELD HEATING TO BEND STEEL SHALL BE ALLOWED WITHOUT ENGINEER'S APPROVAL.
- DO NOT CUT ANCHOR RODS AFTER INSTALLATION OF POLE.
- AFTER INSTALLATION, ALL EXPOSED STEEL SHALL BE PAINTED WITH AN ENAMEL PAINT TO INHIBIT CORROSION.
- ANY FIELD WELDING SHALL FIRST BE VERIFIED BY ENGINEER AND PERFORMED IN ACCORDANCE WITH AWS D1.1.
- REFER TO SIGN MANUFACTURER DRAWINGS AND INSTRUCTIONS FOR ADDITIONAL INFORMATION.

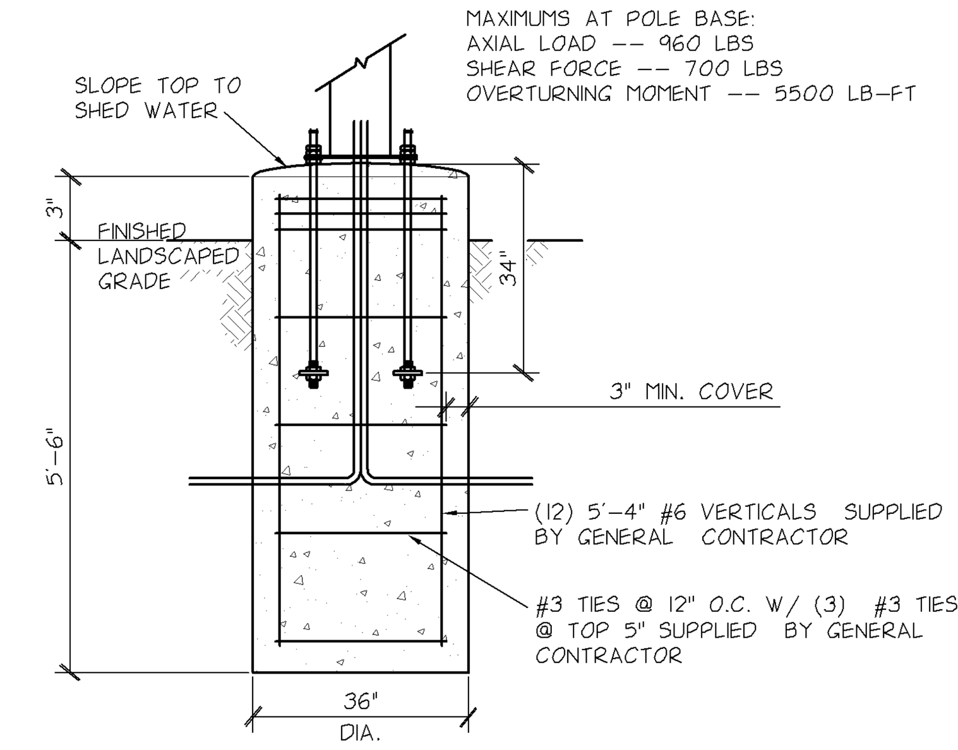
- CONTRACTOR (INSTALLER) IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION IN REGARDS TO JOBSITE SAFETY.
- DETAILS AND STRUCTURAL MEMBERS NOT SHOWN DESIGNED BY OTHERS.
- ANY MODIFICATIONS ARE TO BE VERIFIED BY AN ENGINEER.

1 — DOUBLE GATEWAY FOUNDATION - 100 MPH

NO SCALE

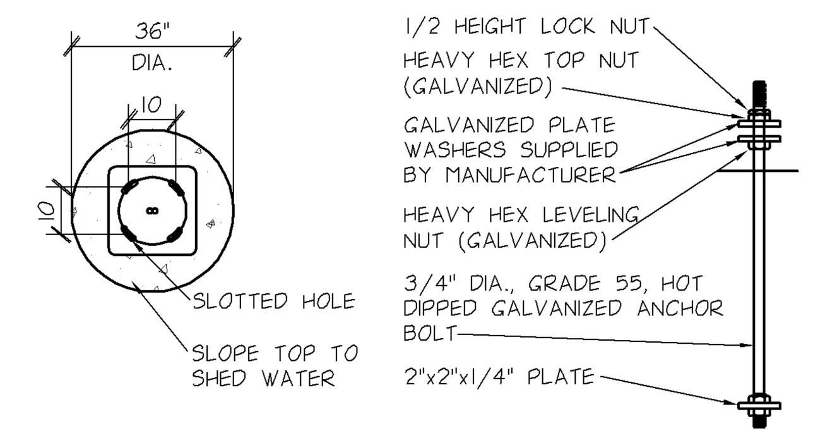
NOTE:

- DESIGN CODES
  IBC 2009
  ASCE 7-05
  ACI 318-08
  AISC 13TH EDITION
  AWS D1.1
  WIND SPEED -- 100 MPH, 3 SEC GUST
  - EXPOSURE C
- DESIGN LOADS DERIVED FROM THESE CODES AND FORCES
  AXIAL LOAD -- 960 LBS
  SHEAR FORCE -- 700 LBS
  OVERTURNING MOMENT -- 5500 LB-FT
- USE 3000 PSI CONCRETE COMPRESSIVE STRENGTH (f'c)
- PIER DEPTHS REQUIRED ARE MINIMUMS. ALL PIERS TO EXTEND TO FROST DEPTH AS DETERMINED BY LOCAL JURISDICTION.
- TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT ACCUMULATE.
- ELECTRICAL CONTRACTOR TO PROVIDE INFORMATION ON CONDUIT AND ELECTRICAL REQUIREMENTS.
- MINIMUM ALLOWABLE LATERAL SOIL BEARING PRESSURE 100 PSF/FT OF DEPTH x2.
- TOP 6" OF SOIL NEGLECTED IN EMBEDMENT DEPTH CALCULATIONS (EMBEDMENT DEPTHS SHOWN ARE FROM GRADE)
- 3" MIN. CONCRETE COVER FOR REINFORCEMENT
- ALL REINFORCING STEEL BY GENERAL CONTRACTOR



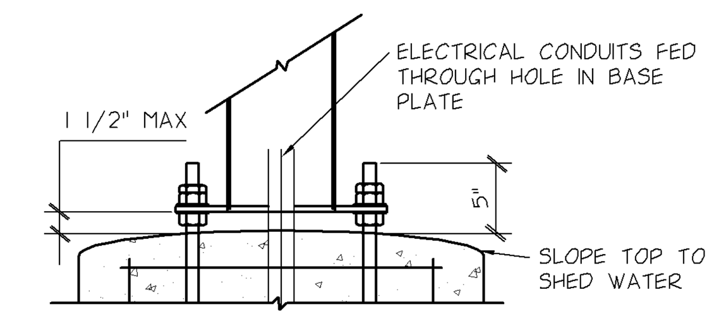
FOUNDATION – NTS

NOTES:
- TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT ACCUMULATE.
- HOT DIPPED GALVANIZED BOLTS
- F1554 GRADE 36 ANCHOR BOLTS
- ANCHOR BOLTS TO BE SET IN ACCORDANCE WITH AISC CODE OF STANDARD PRACTICE
- ANCHOR RODS, NUTS, AND WASHERS SHALL BE SHIPPED AS AN ASSEMBLY FROM THE SIGN/LIGHTING MANUFACTURER
- DO NOT CUT ANCHOR BOLTS AFTER INSTALLATION OF POLE



ANCHOR BOLT PATTERN – NTS

NOTES:
- TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT ACCUMULATE.
- ANCHOR RODS, NUTS, AND WASHERS SHALL BE SHIPPED AS AN ASSEMBLY FROM THE SIGN/LIGHTING MANUFACTURER
- DO NOT CUT ANCHOR BOLTS AFTER INSTALLATION OF POLE



CONNECTION DETAILS – NTS

GENERAL NOTES

- THE FOLLOWING CODES WERE USED IN DESIGN:
  - IBC 2009
  - ASCE 7-05
  - ACI 318-08
  - AISC 13th EDITION
  - AWS D1.1
  - WIND SPEED 100 MPH, 3 SEC GUST
  - EXPOSURE C
  - DESIGN LOADS DERIVED FROM THESE CODES AND FORCES
  - AXIAL – 960 LBS
  - SHEAR – 700 LBS
  - MOMENT – 5500 LB-FT
- ALL FOOTING EXCAVATIONS ARE TO BE CLEAR OF WATER AND FOREIGN MATTER BEFORE PLACING CONCRETE.
- MINIMUM ALLOWABLE LATERAL SOIL BEARING PRESSURE OF 100PSF/FT (x2)
- SITE SOIL CONDITIONS TO BE CONFIRMED BY GEOTECHNICAL ENGINEER. IF ASSUMED SOIL CONDITIONS ARE NOT PRESENT, FOUNDATION SHALL BE DESIGNED BY A LICENSED STRUCTURAL ENGINEER TAKING INTO ACCOUNT ACTUAL SITE SOIL CONDITIONS.
- TOP 6" OF SOIL NEGLECTED IN EMBEDMENT DEPTH CALCULATIONS (EMBEDMENT DEPTHS SHOWN ARE FROM GRADE)
- ELECTRICAL CONTRACTOR TO PROVIDE INFORMATION ON CONDUIT AND ELECTRICAL REQUIREMENTS.

CONCRETE:

- ALL FOOTINGS SHALL BEAR ON FIRM UNDISTURBED RESIDUAL SOIL AND/OR ENGINEERED EARTH FILL COMPACTED TO 98% OF ITS MAXIMUM DRY DENSITY AS PER ASTM D 698-70 (STANDARD PROCTOR) UNLESS NOTED OTHERWISE.
- ALL PIERS TO EXTEND TO FROST DEPTH AS DETERMINED BY LOCAL JURISDICTION.
- TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT ACCUMULATE.
- MINIMUM CONCRETE STRENGTH (f'c) SHOULD CONFORM WITH MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATIONS SECTION 2.13-A.
- USE OF ADMIXTURES SHALL CONFORM TO MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATION SECTION 2.6.
- AIR ENTRAINMENT SHALL CONFORM WITH MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATION SECTIONS 2.6-A & 2.13-A.
- WATER CONTENT RATIO SHALL CONFORM TO MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATIONS SECTION 2.13-A.
- FOUNDATION CONCRETE TO BE TESTED PER MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATIONS SECTION 3.14.
- PROVIDE A MINIMUM 3" OF CONCRETE COVER OVER ALL EMBEDDED STEEL.
- REINFORCEMENT PLACEMENT SHALL CONFORM TO MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATIONS SECTIONS 3.2 & 3.5 PERFORMED BY GENERAL CONTRACTOR.
- ANCHOR BOLTS TO BE SET IN ACCORDANCE WITH AISC CODE OF STANDARD PRACTICE.
- DO NOT PLACE POLES ON CONCRETE UNTIL CONCRETE HAS CURED PER MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATION, SECTION 3.11-E.

STEEL:

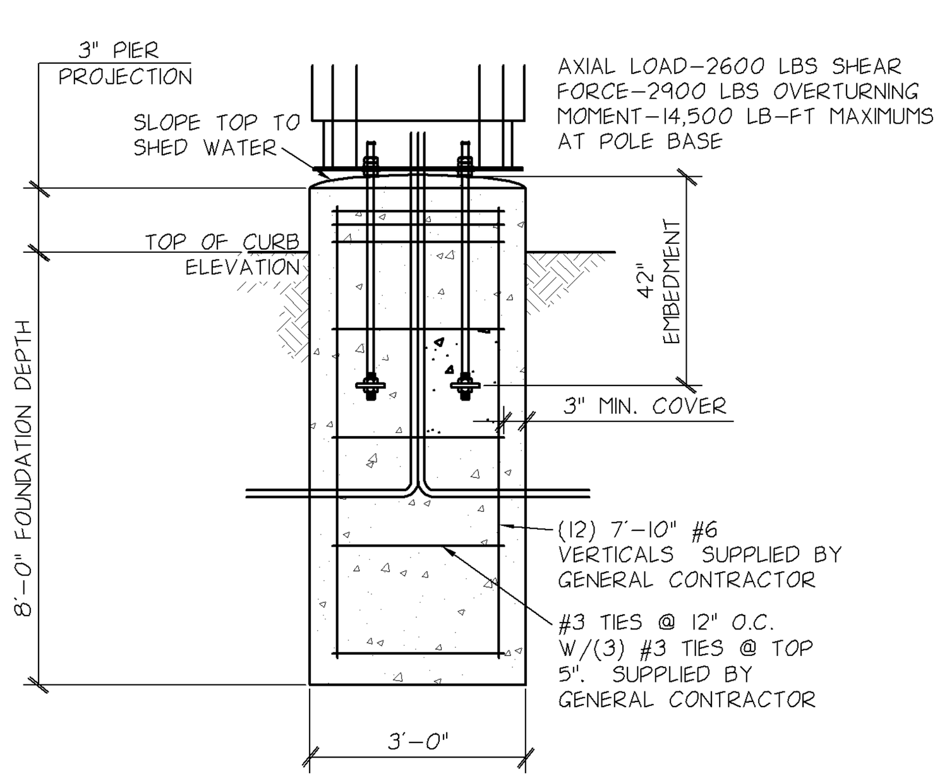
- STEEL PIPE SECTION: ASTM A53 OR A252 TYPE E GRADE B (F_y = 35ksi)
- HSS ROUND SECTION: ASTM A500 GRADE B (F_y = 42ksi)
- HSS SQUARE/RECTANGULAR SECTIONS: ASTM A500 GRADE B (F_y = 46ksi)
- CONNECTION BOLTS A325
- STEEL ANGLES, CHANNELS, STRUCTURAL SHAPES AND PLATES: ASTM A36
- REINFORCEMENT: GRADE 60 – BY GENERAL CONTRACTOR
- NUTS: A563DH OR A194-2H
- WASHERS: A36
- USE HOT DIPPED GALVANIZED BOLTS AND FASTENERS.
- ANCHOR RODS, NUTS, AND WASHERS SHALL BE SHIPPED AS AN ASSEMBLY FROM THE SIGN/LIGHTING MANUFACTURER.
- NO FIELD HEATING TO BEND STEEL SHALL BE ALLOWED WITHOUT ENGINEER'S APPROVAL.
- DO NOT CUT ANCHOR BOLTS AFTER INSTALLATION OF POLE.
- AFTER INSTALLATION, ALL EXPOSED STEEL SHALL BE PAINTED WITH AN ENAMEL PAINT TO INHIBIT CORROSION.
- ANY FIELD WELDING SHALL FIRST BE VERIFIED BY ENGINEER AND PERFORMED IN ACCORDANCE WITH AWS D1.1.

- REFER TO SIGN MANUFACTURER DRAWINGS AND INSTRUCTIONS FOR ADDITIONAL INFORMATION.
- CONTRACTOR (INSTALLER) IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION IN REGARDS TO JOBSITE SAFETY.
- DETAILS AND STRUCTURAL MEMBERS NOT SHOWN DESIGNED BY OTHERS.
- ANY MODIFICATIONS ARE TO BE VERIFIED BY AN ENGINEER.

2 — ORDER HERE CANOPY - 100 MPH

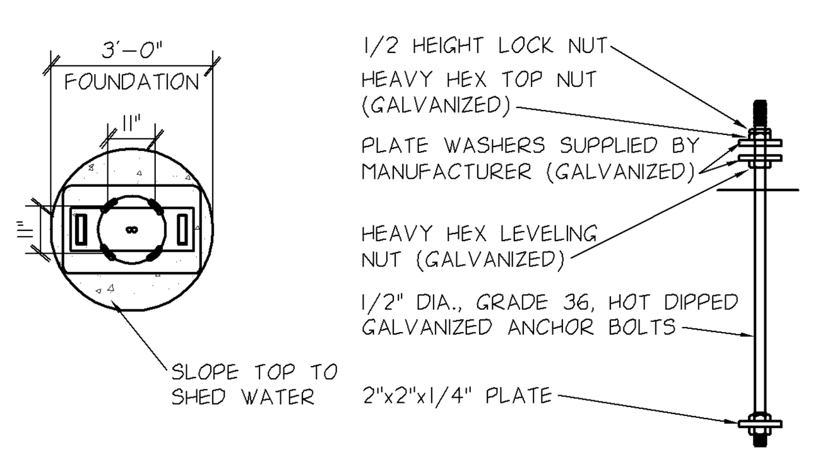
NO SCALE

NOTE:
- DESIGN CODES
  IBC 2009
  ASCE 7-05
  ACI 318-08
  AISC 13th EDITION
  AWS D1.1
- WIND SPEED-100 MPH (MPH 3-SEC GUST)
  - EXPOSURE C
- DESIGN LOADS DERIVED FROM THESE CODES AND FORCES (#, #')
  - AXIAL-2600 LBS
  - SHEAR-2900 LBS
  - OVERTURNING MOMENT-14,500 LB-FT
- USE CONCRETE WITH A 3000PSI MINIMUM COMPRESSIVE STRENGTH (f'c).
- PIER DEPTHS REQUIRED ARE MINIMUMS. ALL PIERS TO EXTEND TO FROST DEPTH AS DETERMINED BY LOCAL JURISDICTION.
- TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT ACCUMULATE.
- ELECTRICAL CONTRACTOR TO PROVIDE INFORMATION ON CONDUIT AND ELECTRICAL REQUIREMENTS.
- MINIMUM ALLOWABLE LATERAL SOIL BEARING PRESSURE 100 PSF/FT OF DEPTH (x2).
- TOP 6" OF SOIL NEGLECTED IN EMBEDMENT DEPTH CALCULATIONS (EMBEDMENT DEPTHS SHOWN ARE FROM GRADE).
- PROVIDE A MINIMUM OF 3" CONCRETE COVER FOR ALL EMBEDDED STEEL.
- FOUNDATION IS DESIGNED FOR SINGLE OR DOUBLE POLE COLUMNS.
- ALL REINFORCING STEEL BY GENERAL CONTRACTOR.



FOUNDATION – NTS

NOTES:
- TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT ACCUMULATE.
- USE F1554 GRADE 36 BOLTS MINIMUM.
- USE HOT DIPPED GALVANIZED BOLTS.
- ANCHOR BOLTS TO BE SET IN ACCORDANCE WITH AISC CODE OF STANDARD PRACTICE.
- ANCHOR RODS, NUTS, AND WASHERS SHALL BE SHIPPED AS AN ASSEMBLY FROM THE SIGN/LIGHTING MANUFACTURER.
- DO NOT CUT ANCHOR BOLTS AFTER INSTALLATION OF POLE.



ANCHOR BOLT PATTERN – NTS

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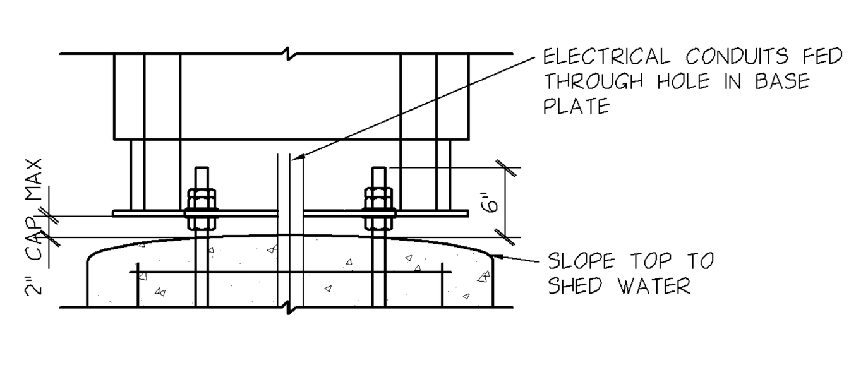

CONNECTION DETAILS – NTS

GENERAL NOTES

- THE FOLLOWING CODES WERE USED IN DESIGN:
  - IBC 2009
  - ASCE 7-05
  - ACI 318-08
  - AISC 13th EDITION
  - AWS D1.1
  - WIND SPEED 100 MPH, 3 SEC GUST
  - EXPOSURE C
  - DESIGN LOADS DERIVED FROM THESE CODES AND FORCES
  - AXIAL – 2600 LBS
  - SHEAR – 2900 LBS
  - MOMENT – 14,500 LB-FT
- ALL FOOTING EXCAVATIONS ARE TO BE CLEAR OF WATER AND FOREIGN MATTER BEFORE PLACING CONCRETE.
- MINIMUM ALLOWABLE LATERAL SOIL BEARING PRESSURE OF 100PSF/FT (x2).
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CONCRETE:

- ALL FOOTINGS SHALL BEAR ON FIRM UNDISTURBED RESIDUAL SOIL AND/OR ENGINEERED EARTH FILL COMPACTED TO 98% OF ITS MAXIMUM DRY DENSITY AS PER ASTM D 698-70 (STANDARD PROCTOR) UNLESS NOTED OTHERWISE.
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- MINIMUM CONCRETE STRENGTH (f'c) SHOULD CONFORM WITH MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATIONS SECTION 2.13-A.
- USE OF ADMIXTURES SHALL CONFORM TO MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATION SECTION 2.6.
- AIR ENTRAINMENT SHALL CONFORM WITH MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATION SECTIONS 2.6-A & 2.13-A.
- WATER CONTENT RATIO SHALL CONFORM TO MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATIONS SECTION 2.13-A.
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STEEL:

- STEEL PIPE SECTION: ASTM A53 OR A252 TYPE E GRADE B (F_y = 35ksi)
- HSS ROUND SECTION: ASTM A500 GRADE B (F_y = 42ksi)
- HSS SQUARE/RECTANGULAR SECTIONS: ASTM A500 GRADE B (F_y = 46ksi)
- CONNECTION BOLTS A325
- STEEL ANGLES, CHANNELS, STRUCTURAL SHAPES AND PLATES: ASTM A36
- REINFORCEMENT: GRADE 60 – BY GENERAL CONTRACTOR
- NUTS: A563DH OR A194-2H
- WASHERS: A36
- USE HOT DIPPED GALVANIZED BOLTS AND FASTENERS
- ANCHOR RODS, NUTS, AND WASHERS SHALL BE SHIPPED AS AN ASSEMBLY FROM THE SIGN/LIGHTING MANUFACTURER
- NO FIELD HEATING TO BEND STEEL SHALL BE ALLOWED WITHOUT ENGINEER'S APPROVAL.
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- ANY FIELD WELDING SHALL FIRST BE VERIFIED BY ENGINEER AND PERFORMED IN ACCORDANCE WITH AWS D1.1.

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- DETAILS AND STRUCTURAL MEMBERS NOT SHOWN DESIGNED BY OTHERS.
- ANY MODIFICATIONS ARE TO BE VERIFIED BY AN ENGINEER.

REVISION HISTORY

REV	DATE	
	07-14-17	CITY SUBMITTAL
	10-11-17	CITY SUBMITTAL

CERTIFICATION

McDONALD'S USA, LLC.

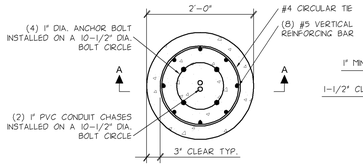
OFFICE ADDRESS: 1650 W. 82ND STREET #900 BLOOMINGTON, MINNESOTA 55431-9888 (952)-884-4355

CITY: BLOOMINGTON	STATE: MN	DRAWN BY: TDD	PROTO. ISSUED:
STREET ADDRESS: 7997 SOUTHTOWN CENTER	COUNTY: HENNEPIN	REVIEWED BY: CNC	DATE REVIEWED: 07-10-17
SHEET NAME: DRIVE-THRU DETAILS			
NATIONAL NUMBER: 18751	STATE NUMBER: 022-0316	DATE ISSUED: 10-11-17	

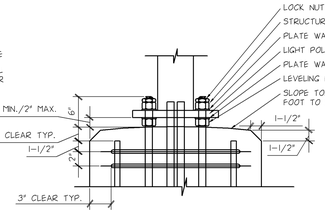
SHEET NO. C2.3

FILE NAME: C203MCD208.DWG
PROJECT NO. MCD12208

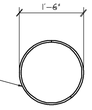
PL201700224



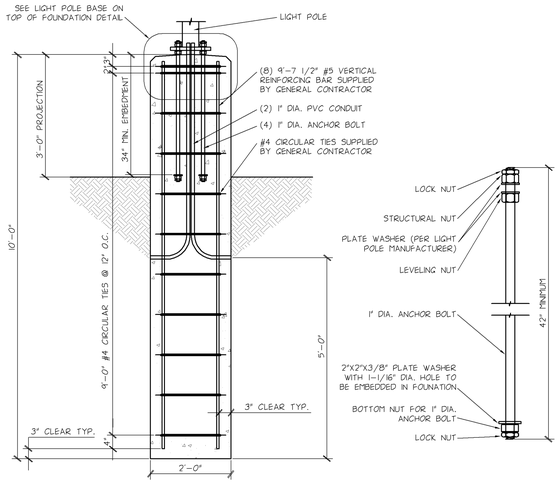
POLE BASE – PLAN VIEW – NTS



POLE BASE AT FOUNDATION – NTS



CIRCULAR TIE DETAIL – NTS



VIEW AA – NTS

ANCHOR BOLT – NTS

DESIGN CRITERIA:

AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARES AND TRAFFIC SIGNALS, FIFTH EDITION, 2009.

FOUNDATION DESIGN PARAMETERS:

1. MAXIMUM LIGHT POLE BASE REACTIONS: BASE MOMENT = 16,845 lbs-ft BASE SHEAR = 978 lbs
2. MAXIMUM WIND SPEED (3 SECOND GUST) = 120MPH
3. MINIMUM REQUIRED SOIL PARAMETERS: COHESIVE SOILS:
   - SHEAR STRENGTH = 750 lbs/ft²
   - 6' MAXIMUM DEPTH OF DISTURBED SOIL OR TOP SOIL

   COHESIONLESS SOILS:
   - ANGLE OF INTERNAL FRICTION = 27 DEGREES
   - WATER TABLE SHALL BE LOCATED BELOW THE BOTTOM OF THE FOUNDATION
   - 6" MAXIMUM DEPTH OF DISTURBED SOIL OR TOP SOIL
4. THE SOILS REPORT SHALL BE REVIEWED BY THE ENGINEER OF RECORD TO CONFIRM THAT THE MINIMUM SOIL PARAMETERS ARE MET OR EXCEEDED BEFORE THIS DESIGN IS USED. IF THE MINIMUM SOIL PARAMETERS ARE NOT MET, THIS DESIGN SHALL NOT BE USED.
5. THE ENGINEER OF RECORD SHALL REVIEW THE MAXIMUM BASE REACTIONS AND DESIGN WIND SPEED FOR THE LIGHT POLE TO BE INSTALLED TO DETERMINE IF THE FOUNDATION'S MAXIMUM DESIGN LOADS HAVE NOT BEEN EXCEEDED. THIS FOUNDATION DESIGN SHALL NOT BE USED IF THE MAXIMUM DESIGN LOADS OR WIND SPEED HAVE BEEN EXCEEDED.
6. THIS FOUNDATION DESIGN SHALL NOT BE USED IN LOCATIONS WHICH ARE CLOSER THAN 8Ft FROM A RETAINING WALL.
7. THIS FOUNDATION DESIGN SHALL NOT BE USED AT LOCATIONS WHERE THE GROUND SLOPE EXCEEDS 4 INCHES PER FOOT.

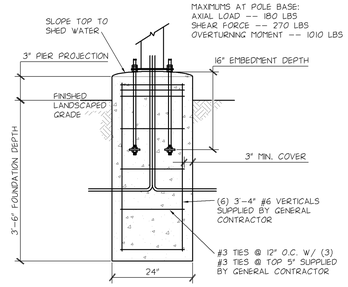
GENERAL NOTES:

1. CONCRETE COMPRESSIVE STRENGTH (f'c) SHALL BE A MINIMUM OF 3000psi
2. ANCHOR BOLTS SHALL BE ASTM F1554 GRADE 55, HOT DIP GALVANIZED PER ASTM F2329
3. REINFORCING STEEL SHALL BE ASTM A615 GRADE 60, SUPPLIED BY GENERAL CONTRACTOR
4. NUTS SHALL BE HEAVY HEX ASTM A563 GRADE DH, HOT DIP GALVANIZED PER ASTM A153
5. PLATE SHALL BE ASTM A572 GRADE 50, HOT DIP GALVANIZED PER ASTM A153
6. LOCK NUT SHALL BE HOT DIP GALVANIZED PER ASTM A153

3 TYPICAL LIGHT POLE FOUNDATION DETAILS

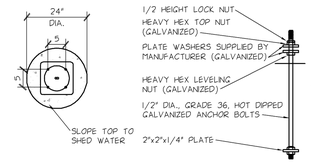
NO SCALE

NOTE:
-DESIGN CODES
IBC 2009
ASCE 7-05
ACI 318-08
AISC 13th EDITION
AWS D1.1
-WIND SPEED (100 MPH 3-SEC GUST)
-EXPOSURE C
-DESIGN LOADS DERIVED FROM THESE CODES AND FORCES
-AXIAL – 130#
-SHEAR – 215#
-MOMENT – 600#
-USE CONCRETE WITH A 3000PSI MINIMUM COMPRESSIVE STRENGTH (f'c).
-PIER DEPTHS REQUIRED ARE MINIMUMS. ALL PIERS TO EXTEND TO FROST DEPTH AS DETERMINED BY LOCAL JURISDICTION.
-TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT ACCUMULATE.
-ELECTRICAL CONTRACTOR TO PROVIDE INFORMATION ON CONDUIT AND ELECTRICAL REQUIREMENTS.
-MINIMUM ALLOWABLE LATERAL SOIL BEARING PRESSURE 100 PSF/FT OF DEPTH (x2).
-TOP 6" OF SOIL NEGLECTED IN EMBEDMENT DEPTH CALCULATIONS (EMBEDMENT DEPTHS SHOWN ARE FROM GRADE).
-PROVIDE A MINIMUM OF 3" CONCRETE COVER FOR ALL EMBEDDED STEEL.
-ALL REINFORCING STEEL BY GENERAL CONTRACTOR.



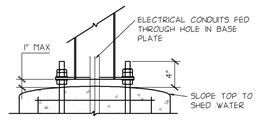
FOUNDATION – NTS

NOTES:
-TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT ACCUMULATE.
-USE F1554 GRADE 36 BOLTS MINIMUM.
-USE HOT DIPPED GALVANIZED BOLTS.
-ANCHOR BOLTS TO BE SET IN ACCORDANCE WITH AISC CODE OF STANDARD PRACTICE.
-ANCHOR RODS, NUTS, AND WASHERS SHALL BE SHIPPED AS AN ASSEMBLY FROM THE SIGN/LIGHTING MANUFACTURER.
-DO NOT CUT ANCHOR BOLTS AFTER INSTALLATION OF POLE.



ANCHOR BOLT PATTERN – NTS

NOTES:
-TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT ACCUMULATE.
-ANCHOR RODS, NUTS, AND WASHERS SHALL BE SHIPPED AS AN ASSEMBLY FROM THE SIGN/LIGHTING MANUFACTURER.
-DO NOT CUT ANCHOR BOLTS AFTER INSTALLATION OF POLE.
-INSTALL DIRECTIONAL SIGN FOOTING 3' FROM THE BACK OF CURB TO THE CENTER OF FOOTING UNLESS NOTED OTHERWISE ON PLAN.



CONNECTION DETAILS – NTS

GENERAL NOTES

-THE FOLLOWING CODES WERE USED IN DESIGN
-IBC 2009
-ASCE 7-05
-ACI 318-08
-AISC 13th EDITION
-AWS D1.1
-WIND SPEED (100 MPH 3-SEC GUST)
-EXPOSURE C
-DESIGN LOADS DERIVED FROM THESE CODES AND FORCES
-AXIAL – 150#
-SHEAR – 270#
-MOMENT – 1010#

-ALL FOOTING EXCAVATIONS ARE TO BE CLEAR OF WATER AND FOREIGN MATTER BEFORE PLACING CONCRETE.
-MINIMUM ALLOWABLE LATERAL SOIL BEARING PRESSURE OF 100PSF/FT (x2)
-SITE SOIL CONDITIONS TO BE CONFIRMED BY GEOTECHNICAL ENGINEER. IF ASSUMED SOIL CONDITIONS ARE NOT PRESENT, FOUNDATION SHALL BE DESIGNED BY A LICENSED STRUCTURAL ENGINEER TAKING INTO ACCOUNT ACTUAL SITE SOIL CONDITIONS.
-TOP 6" OF SOIL NEGLECTED IN EMBEDMENT DEPTH CALCULATIONS (EMBEDMENT DEPTHS SHOWN ARE FROM GRADE).

-ELECTRICAL CONTRACTOR TO PROVIDE INFORMATION ON CONDUIT AND ELECTRICAL REQUIREMENTS.

CONCRETE:

-ALL FOOTINGS SHALL BEAR ON FIRM UNDISTURBED RESIDUAL SOIL AND/OR ENGINEERED EARTH FILL COMPACTED TO 98% OF ITS MAXIMUM DRY DENSITY AS PER ASTM D 698-70 (STANDARD PROCTOR) UNLESS NOTED OTHERWISE.
-ALL PIERS TO EXTEND TO FROST DEPTH AS DETERMINED BY LOCAL JURISDICTION.
-TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT ACCUMULATE.
-MINIMUM CONCRETE STRENGTH (f'c) SHOULD CONFORM WITH MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATIONS SECTION 2.13-A.
-USE OF ADMIXTURES SHALL CONFORM TO MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATION SECTION 2.6.
-AIR ENTRAINMENT SHALL CONFORM WITH MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATION SECTIONS 2.6-A & 2.13-A.
-WATER CONTENT RATIO SHALL CONFORM TO MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATIONS SECTION 2.13-A.
-FOUNDATION CONCRETE TO BE TESTED PER MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATIONS SECTION 3.14.
-PROVIDE A MINIMUM 3" OF CONCRETE COVER OVER ALL EMBEDDED STEEL.
-REINFORCEMENT PLACEMENT SHALL CONFORM TO MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATIONS SECTIONS 3.2 & 3.5. PERFORMED BY GENERAL CONTRACTOR.
-ANCHOR BOLTS TO BE SET IN ACCORDANCE WITH AISC CODE OF STANDARD PRACTICE.
-DO NOT PLACE POLES ON CONCRETE UNTIL CONCRETE HAS CURED PER MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATION, SECTION 3.11-E.

STEEL:

-STEEL PIPE SECTION: ASTM A53 OR A252 TYPE II GRADE B (F_y = 35ksi)
-HSS ROUND SECTION: ASTM A500 GRADE B (F_y = 42ksi)
-HSS SQUARE/RECTANGULAR SECTIONS: ASTM A500 GRADE B (F_y = 46ksi)
-CONNECTION BOLTS A325
-STEEL ANGLES, CHANNELS, STRUCTURAL SHAPES AND PLATES: ASTM A36
-REINFORCEMENT: GRADE 60 – BY GENERAL CONTRACTOR
-NUTS: A563DH OR A194-2H
-WASHERS: ASTM F-436
-USE HOT DIPPED GALVANIZED BOLTS AND FASTENERS.
-ANCHOR RODS, NUTS, AND WASHERS SHALL BE SHIPPED AS AN ASSEMBLY FROM THE SIGN/LIGHTING MANUFACTURER.
-NO FIELD HEATING TO BEND STEEL SHALL BE ALLOWED WITHOUT ENGINEER'S APPROVAL.
-DO NOT CUT ANCHOR BOLTS AFTER INSTALLATION OF POLE.
-AFTER INSTALLATION, ALL EXPOSED STEEL SHALL BE PAINTED WITH AN ENAMEL PAINT TO INHIBIT CORROSION.
-ANY FIELD WELDING SHALL FIRST BE VERIFIED BY ENGINEER AND PERFORMED IN ACCORDANCE WITH AWS D1.1.

-REFER TO SIGN MANUFACTURER DRAWINGS AND INSTRUCTIONS FOR ADDITIONAL INFORMATION.
-CONTRACTOR (INSTALLER) IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION IN REGARDS TO JOBSITE SAFETY.
-DETAILS AND STRUCTURAL MEMBERS NOT SHOWN DESIGNED BY OTHERS.
-ANY MODIFICATIONS ARE TO BE VERIFIED BY AN ENGINEER.

1 TYPICAL DIRECTIONAL SIGN WITH ARCH FOUNDATION & CONNECTION DETAILS - 100 MPH RATING

NO SCALE

NOTE:
-DESIGN CODES
IBC 2009
ASCE 7-05
ACI 318-08
AISC 13th EDITION
AWS D1.1
-WIND SPEED (100 MPH 3-SEC GUST)
-EXPOSURE C
-DESIGN LOADS DERIVED FROM THESE CODES AND FORCES
-AXIAL – 130#
-SHEAR – 215#
-MOMENT – 600#
-USE CONCRETE WITH A 3000PSI MINIMUM COMPRESSIVE STRENGTH (f'c).
-PIER DEPTHS REQUIRED ARE MINIMUMS. ALL PIERS TO EXTEND TO FROST DEPTH AS DETERMINED BY LOCAL JURISDICTION.
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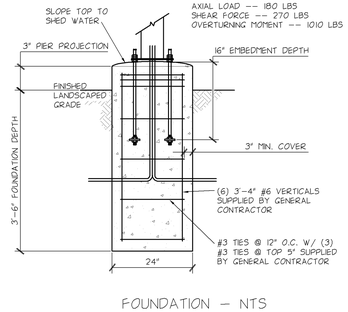
-PROVIDE A MINIMUM OF 3" CONCRETE COVER FOR ALL EMBEDDED STEEL.
-ALL REINFORCING STEEL BY GENERAL CONTRACTOR.



FOUNDATION – NTS

NOTES:
-TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT ACCUMULATE.
-USE F1554 GRADE 36 BOLTS MINIMUM.
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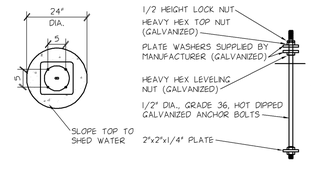

ANCHOR BOLT PATTERN – NTS

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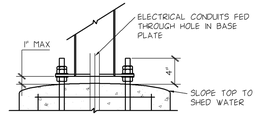

CONNECTION DETAILS – NTS

GENERAL NOTES

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-IBC 2009
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-AWS D1.1
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-EXPOSURE C
-DESIGN LOADS DERIVED FROM THESE CODES AND FORCES
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-MOMENT – 600#

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-HSS SQUARE/RECTANGULAR SECTIONS: ASTM A500 GRADE B (F_y = 46ksi)
-CONNECTION BOLTS A325
-STEEL ANGLES, CHANNELS, STRUCTURAL SHAPES AND PLATES: ASTM A36
-REINFORCEMENT: GRADE 60 – BY GENERAL CONTRACTOR.
-NUTS: A563DH OR A194-2H
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-ANY MODIFICATIONS ARE TO BE VERIFIED BY AN ENGINEER.

2 TYPICAL DIRECTIONAL SIGN WITHOUT ARCH FOUNDATION & CONNECTION DETAILS - 100 MPH RATING

NO SCALE

REVISION HISTORY

REV	DATE	
	07-14-17	CITY SUBMITTAL
	10-11-17	CITY SUBMITTAL

CERTIFICATION

McDONALD'S USA, LLC.
OFFICE ADDRESS
1650 W. 82ND STREET #900 BLOOMINGTON, MINNESOTA 55431-0888 (952)-884-4355

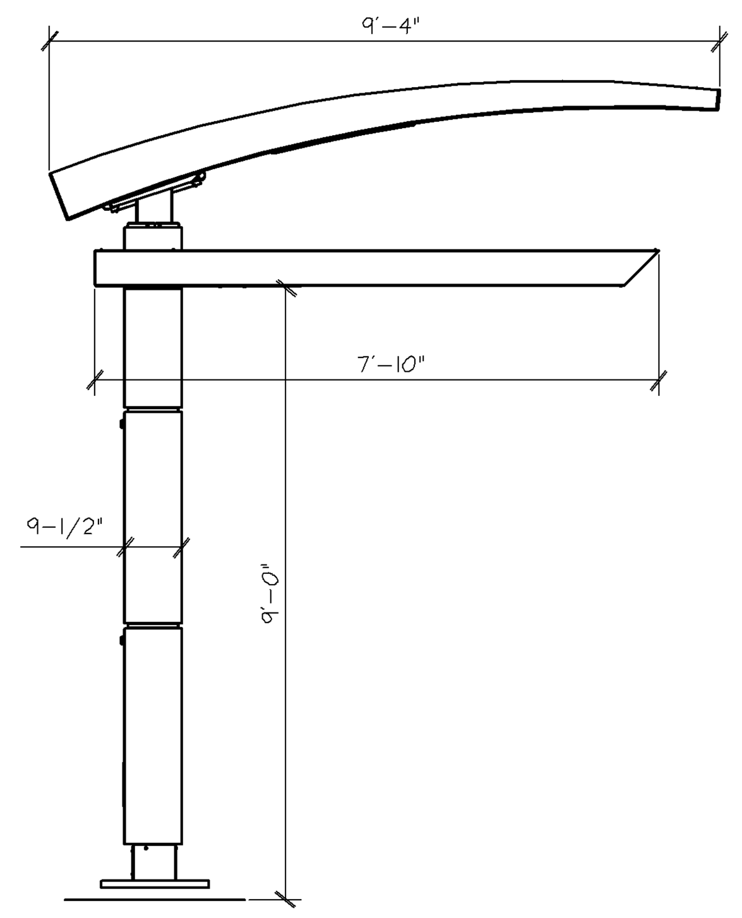
CITY	BLOOMINGTON	STATE	MN
STREET ADDRESS	7997 SOUTHTOWN CENTER	COUNTY	HENNEPIN
SHEET NAME	DRIVE-THRU DETAILS	STATE NUMBER	022-0316
NATIONAL NUMBER	19751		

DRAWN BY	TDD
PROTO ISSUED	
REVIEWED BY	CNC
DATE REVIEWED	07-10-17
DATE ISSUED	10-11-17

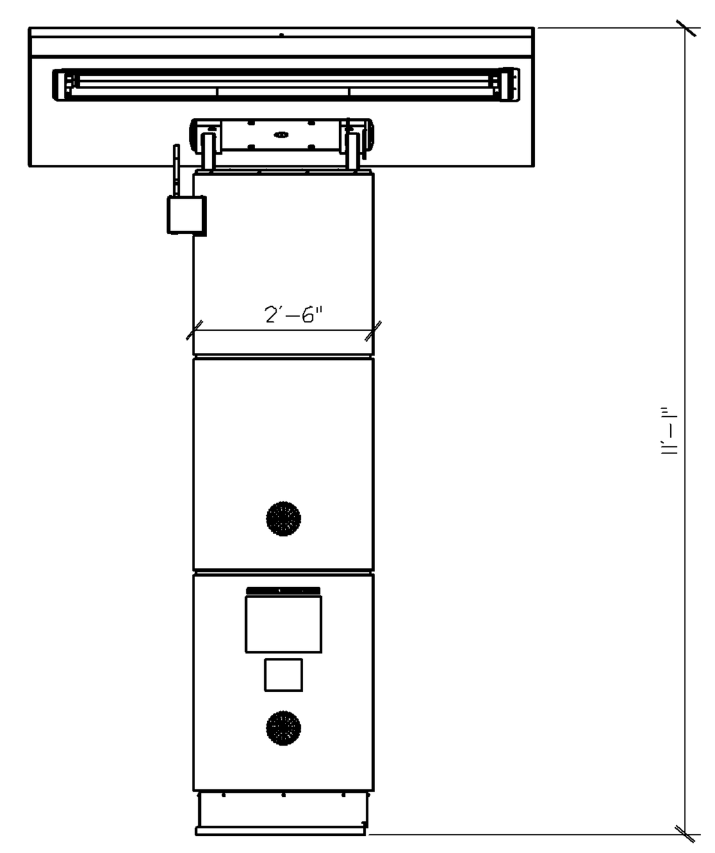
SHEET NO. C2.4

FILE NAME: C204MCD208.DWG
PROJECT NO. MCD12208

PL201700224



DETAIL ELEVATION – NTS



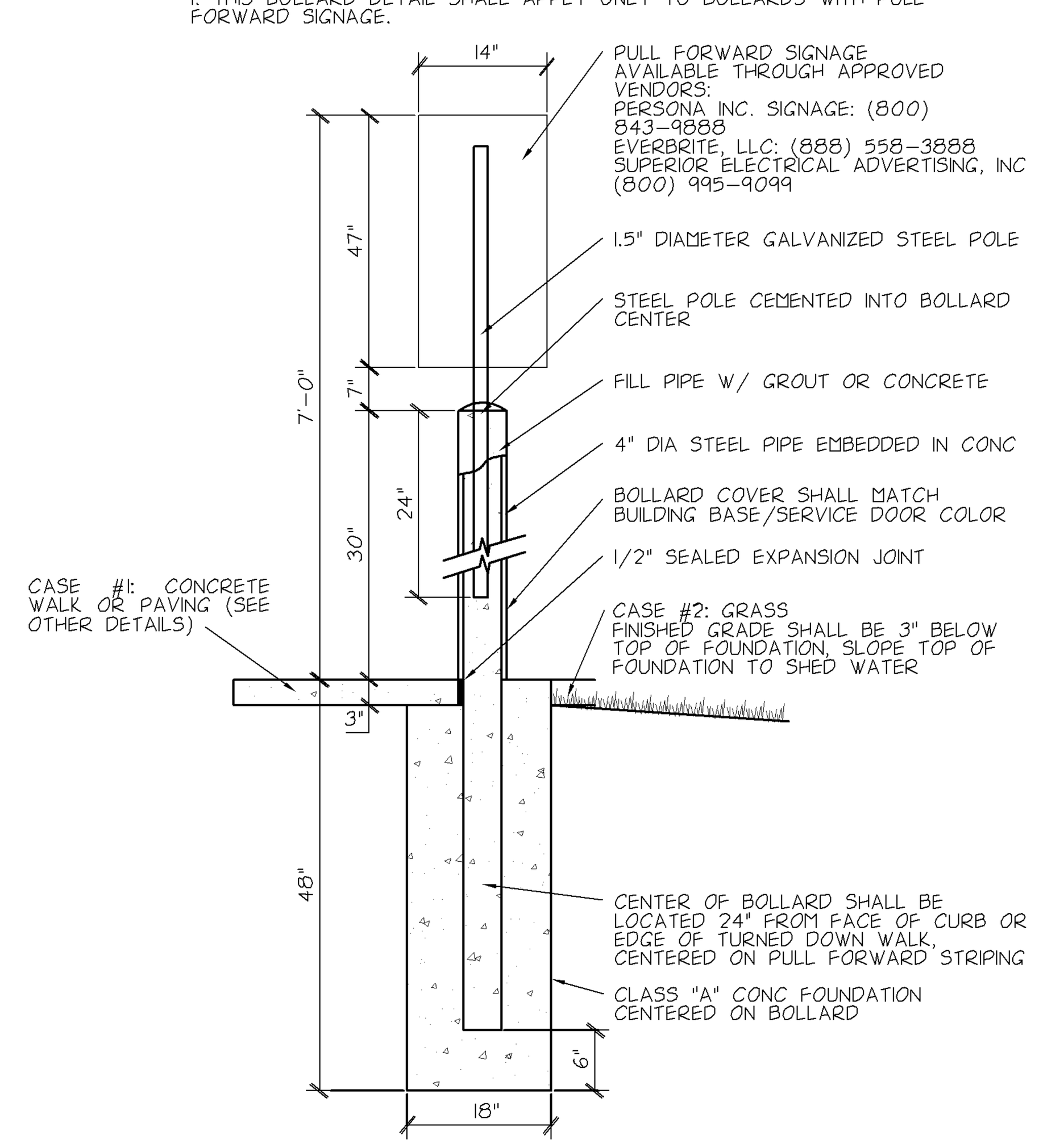
DETAIL PLAN – NTS

NOTE: THIS DRAWING IS SHOWN FOR SCHEMATIC PURPOSES ONLY. SEE MANUFACTURER FOR INSTALLATION INSTRUCTIONS

1 CANOPY SCHEMATIC DETAIL

NO SCALE

NOTES:
1. THIS BOLLARD DETAIL SHALL APPLY ONLY TO BOLLARDS WITH PULL FORWARD SIGNAGE.



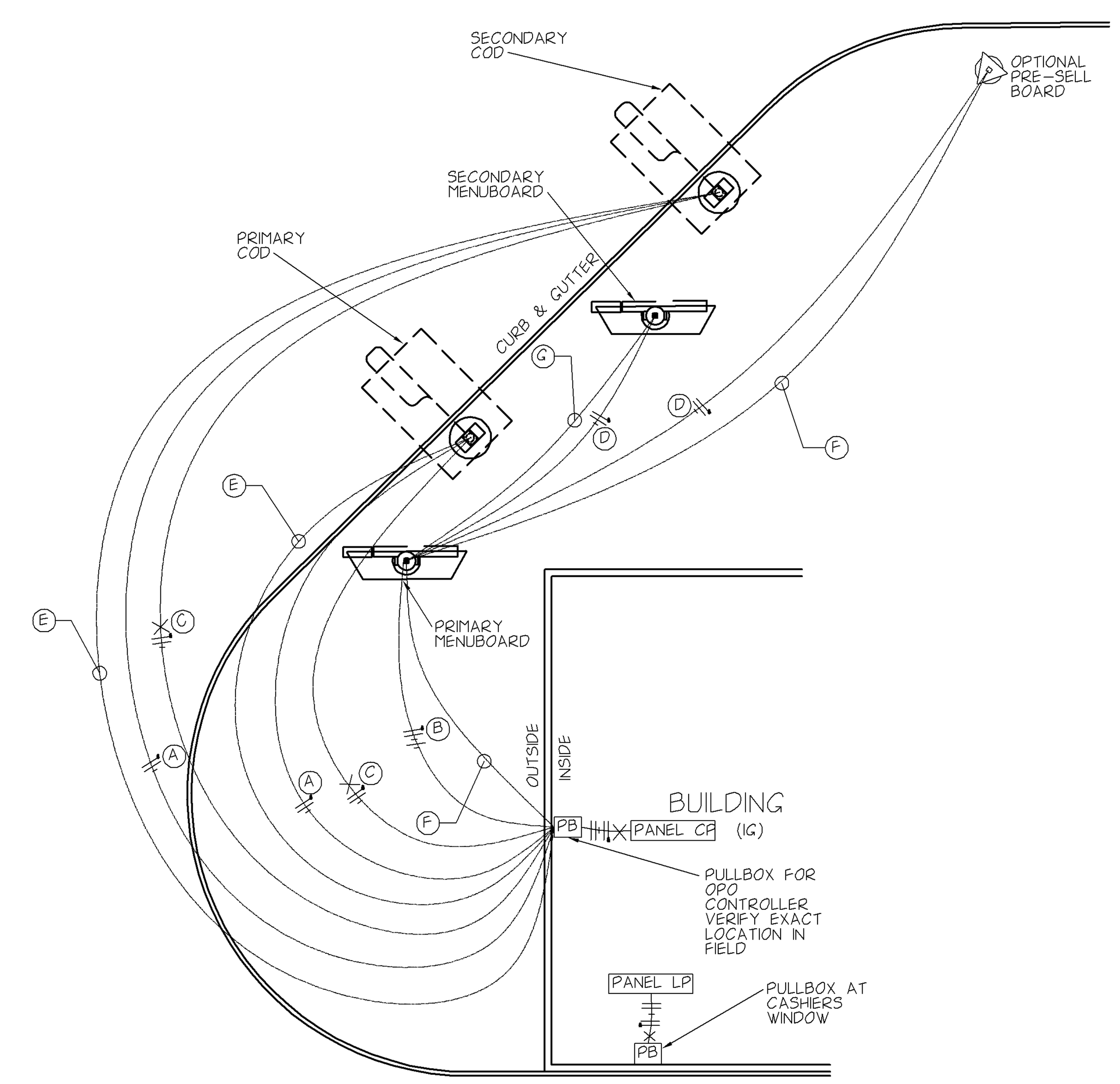
2 PULL FORWARD SIGN & BOLLARD DETAIL

NO SCALE

KEY NOTES:

- (A) 2#12 & 1#12 GND., 3/4" CONDUIT TO LP-1 FOR COD CANOPY LIGHTING
- (B) 4#12 & 1#12 GND., 3/4" CONDUIT TO LP-1 FOR PRIMARY OPO MENUBOARD LIGHTING AND PLC.
- (C) 2#12 & 1#12 GND & 1#12 ISOLATED GND., 3/4" CONDUIT TO CP FOR ISOLATED GROUND POWER TO COD'S. EACH COD SHALL BE ON ITS OWN DEDICATED CIRCUIT.
- (D) 2#12 & 1#12 GND, 3/4" CONDUIT TO LP-1 FOR SECONDARY OPO MENUBOARD AND PRESELL BOARD LIGHTING.
- (E) (2) 1-1/2" CONDUIT ONE FOR COD CABLING ONE FOR LOOP DETECTOR
- (F) 1" CONDUIT
- (G) 1-1/2" CONDUIT

GENERAL NOTES:
1. VERIFY EXACT CIRCUITS AND QUANTITIES OF CIRCUITS WITH PANEL SCHEDULES ON DRAWING E4.2 AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. PER MANUFACTURER'S INSTALLATION INSTRUCTIONS SEPERATE DEDICATED NEUTRALS ARE REQUIRED TO MENUBOARD AND PRESELL BOARD FOR EACH CIRCUIT (PLC AND LIGHTING).



SKETCH CREATED FROM ELECTRICAL OPO UPDATE (E-OPO) DATED SEPT. 2012

3 DRIVE-THRU WIRING DETAIL

NO SCALE

Know what's **Below.** **Call** before you dig.

LANDFORM From Site to Finish

105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401
Tel: 612-252-9070
Fax: 612-252-9077
Web: landform.net

REV	DATE	REVISION HISTORY
	07-14-17	CITY SUBMITTAL
	10-11-17	CITY SUBMITTAL

CERTIFICATION

McDONALD'S USA, LLC.

OFFICE ADDRESS: 1650 W. 82ND STREET #900 BLOOMINGTON, MINNESOTA 55431-9888 (952)-884-4355

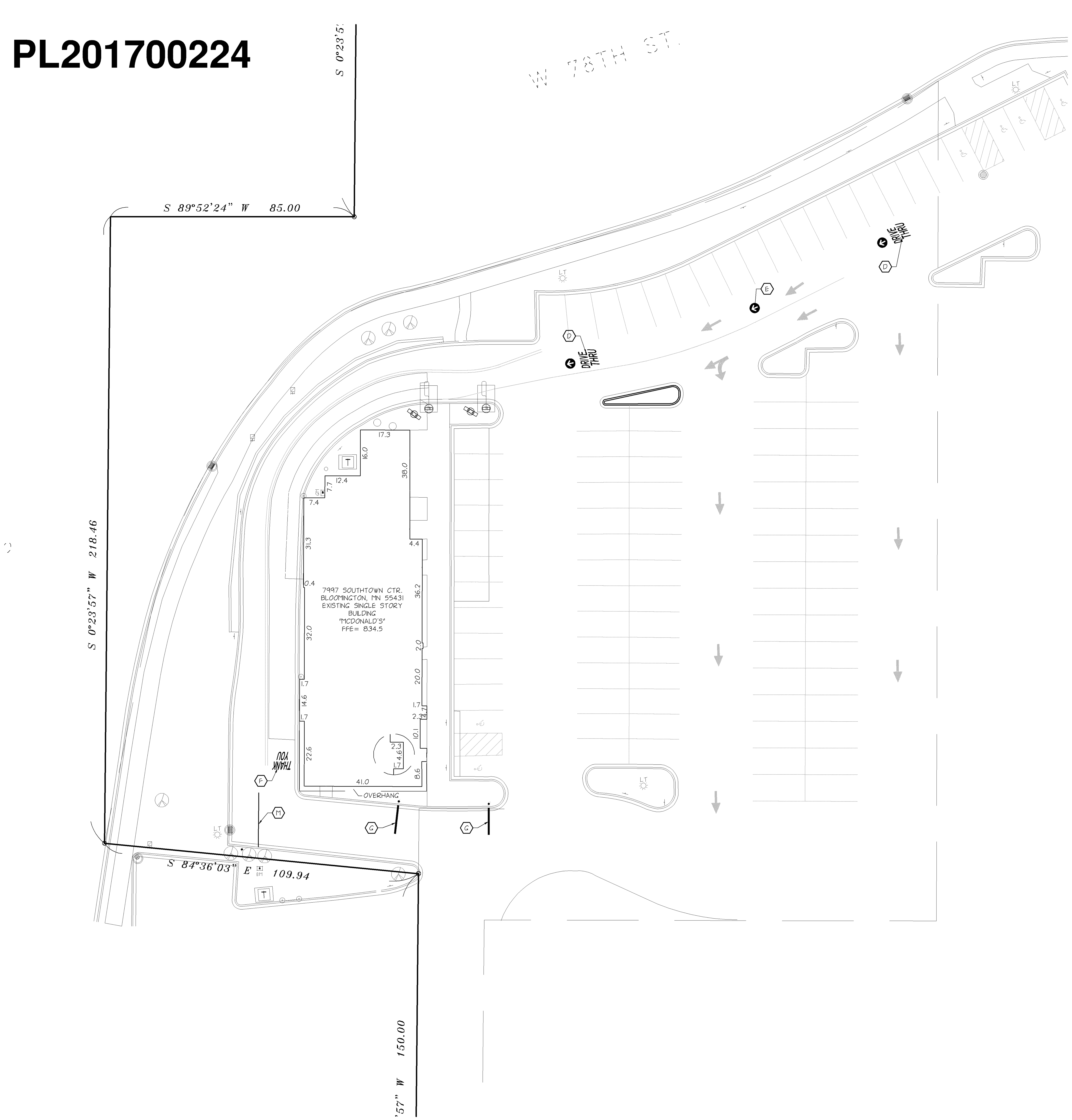
DRAWN BY: TDD
PROTO. ISSUED:
REVIEWED BY: CNC
DATE REVIEWED: 07-10-17
DATE ISSUED: 10-11-17

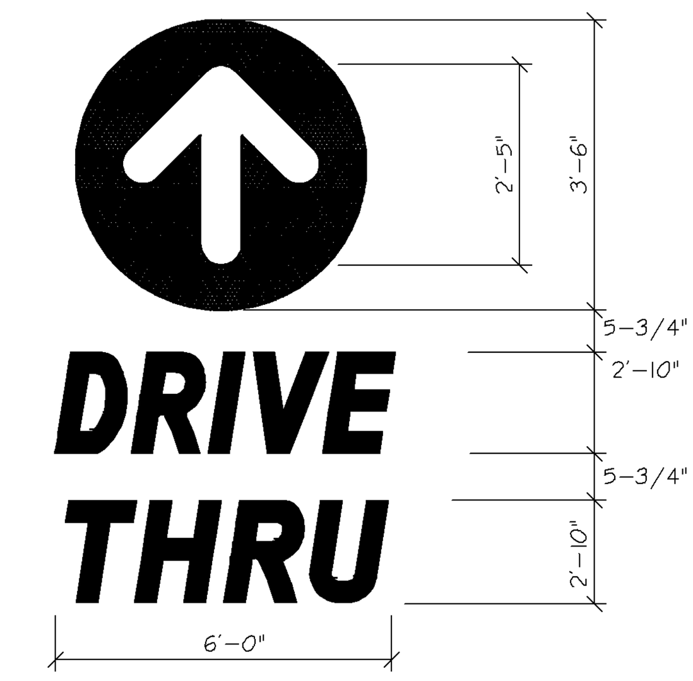
CITY: BLOOMINGTON
STATE: MN
STREET ADDRESS: 7997 SOUTHTOWN CENTER
COUNTY: HENNEPIN
SHEET NAME: DRIVE-THRU DETAILS
NATIONAL NUMBER: 18751
STATE NUMBER: 022-0316

SHEET NO. C2.5

FILE NAME: C205MCD208.DWG
PROJECT NO. MCD12208

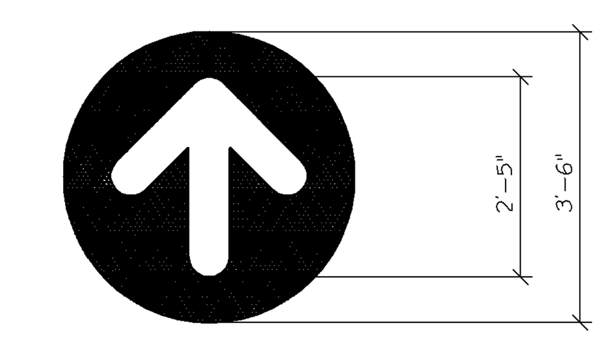
PL201700224





NOTE: ALL TEXT AND ARROW SHALL BE PAINTED YELLOW (PMS 123)

1 PAINTED 'DRIVE THRU' WITH ARROW
NO SCALE

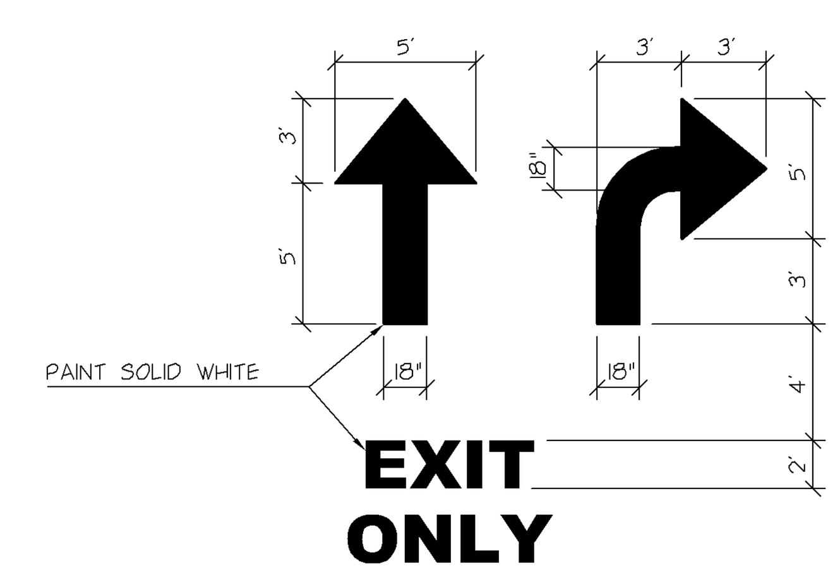


NOTE: ARROW SHALL BE PAINTED YELLOW (PMS 123)

2 PAINTED ARROW
NO SCALE

NOTE: ALL TEXT SHALL BE PAINTED YELLOW (PMS 123)

3 PAINTED 'THANK YOU'
NO SCALE



NOTE : ARROWS AND WORDS CAN BE ARRANGED IN OTHER COMBINATIONS THAN THOSE ILLUSTRATED HERE TO ACHIEVE DESIRED RESULT.

4 TYPICAL PAVEMENT MARKING
NO SCALE

NOTE: TEXT SHALL BE PAINTED WHITE

5 PAINTED 'NO PARKING'
NO SCALE

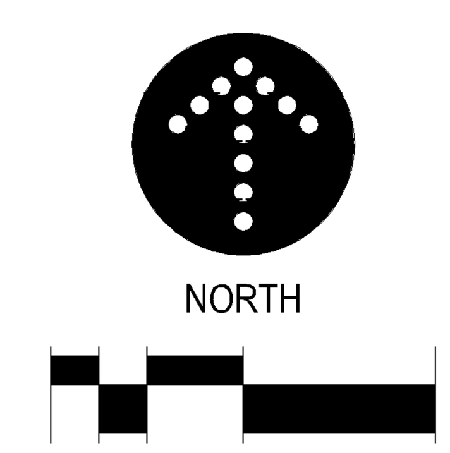
STRIPING NOTES

- (A) 6" WIDE PAINTED STRIPE. PMS 123, YELLOW. – NOT USED.
- (B) 1'–0" WIDE PAINTED DIRECTIONAL ARROW. PMS 123 YELLOW. SEE GENERAL NOTE 4. – NOT USED.
- (C) 6" WIDE PAINTED MERGE POINT. PMS 123 YELLOW. SEE GENERAL NOTE 4. – NOT USED.
- (D) PAINTED DRIVE THRU GRAPHIC. SEE DETAIL 1. SEE GENERAL NOTE 4.
- (E) PAINTED DRIVE THRU GRAPHIC. SEE DETAIL 2. SEE GENERAL NOTE 4.
- (F) PAINTED DRIVE THRU GRAPHIC. SEE DETAIL 3. SEE GENERAL NOTE 4.
- (G) 8" WIDE, 10' LONG PAINTED PULL FORWARD STRIPE. PMS 123 YELLOW.
- (H) PAINTED SITE CIRCULATION ARROW. SEE DETAIL 4. SEE GENERAL NOTE 4. – NOT USED.
- (I) 4" WIDE CUSTOMER PARKING STRIPING. WHITE. – NOT USED.
- (J) STRIPED AREA TO BE PAINTED WITH 4" LINES AT 18" O.C., AT 45 DEGREES TO PATH OF TRAVEL, WHITE. – NOT USED.
- (L) 2' x 4' PAINTED CROSSWALK STRIPING AT 4' O.C. WHITE – NOT USED.
- (M) 4" WIDE RESERVED DRIVE–THRU PARKING STALL STRIPING. PMS 123 YELLOW.
- (N) PAINTED GRAPHIC. SEE DETAIL 5. SEE GENERAL NOTE 4. – NOT USED.

GENERAL NOTES

1. FIELD VERIFY AND CONFIRM EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCING CONSTRUCTION. NOTIFY MCDONALD'S PROJECT MANAGER OF ANY DISCREPANCIES PRIOR TO COMMENCING CONSTRUCTION.
2. SEE SHEET C2.1 FOR ALL RADIUS DIMENSIONS.
3. SEE SHEET C2.2 FOR DRIVE–THRU CONSTRUCTION.
4. ALL PAVEMENT STENCILS MUST BE PURCHASED FROM THE FOLLOWING AUTHORIZED PROVIDER.

   PAVEMENT STENCIL COMPANY
   P.O. BOX 18034
   ROANOKE, VA. 24014
   PH 800–250–5547 FAX 540–427–1326
   PAVEMENTSTENCIL.NET



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105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401
Tel: 612-252-9070
Fax: 612-252-9077
Web: landform.net

REV	DATE	REVISION HISTORY
	07–14–17	CITY SUBMITTAL
	10–11–17	CITY SUBMITTAL

CERTIFICATION

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.

Christopher N. Call

License Number 46224

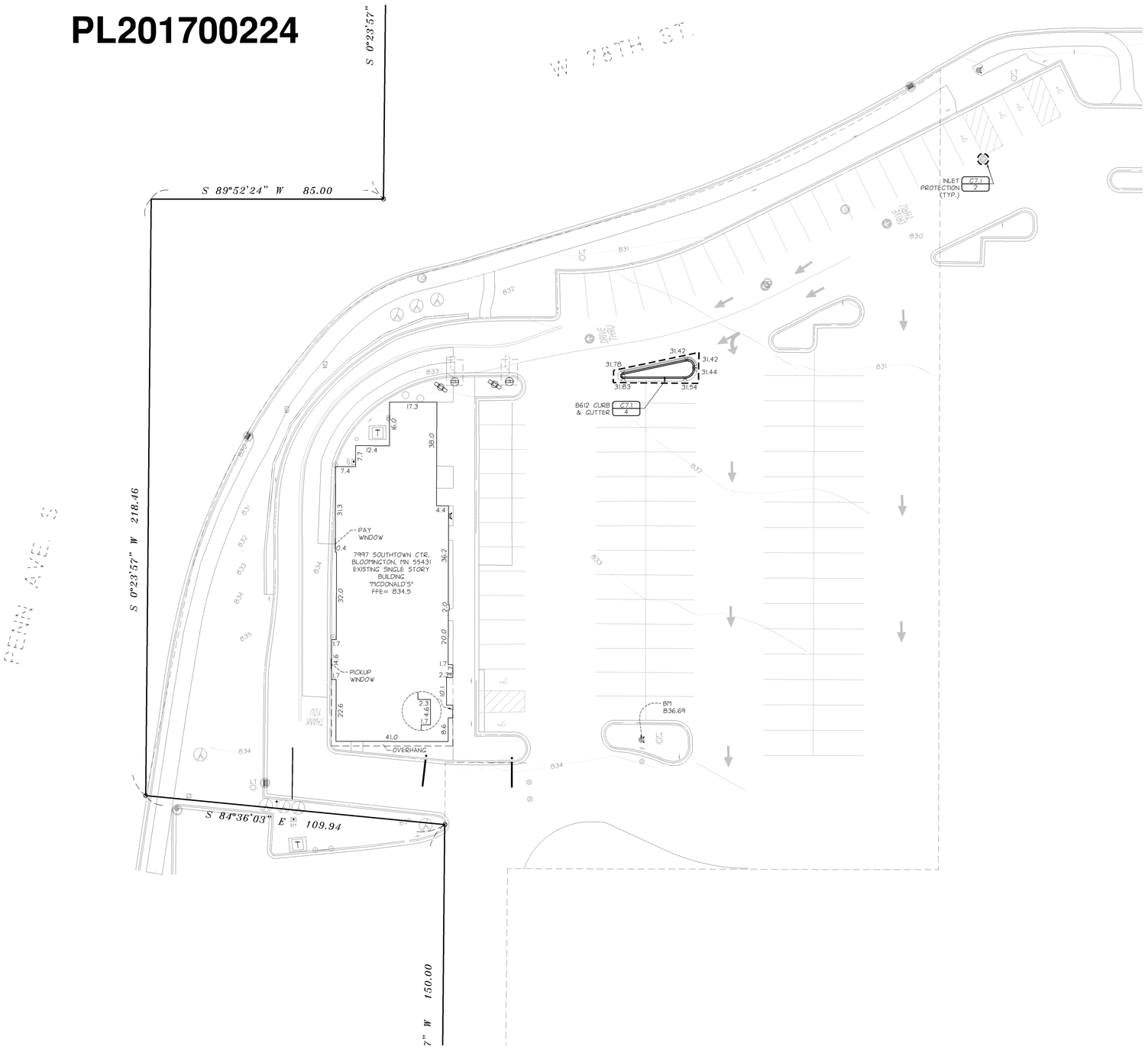
Date 10/11/2017

McDONALD'S USA, LLC.

OFFICE ADDRESS
1650 W. 82ND STREET #900 BLOOMINGTON, MINNESOTA 55431–9888 (952)–884–4355

DRAWN BY	TDD
PROTO. ISSUED	
REVIEWED BY	CNC
DATE REVIEWED	07-10-17
DATE ISSUED	10-11-17
CITY	BLOOMINGTON
STATE	MN
STREET ADDRESS	7997 SOUTHTOWN CENTER
COUNTY	HENNEPIN
SHEET NAME	STRIPING
NATIONAL NUMBER	15751
STATE NUMBER	022-0316
SHEET NO.	C2.6
FILE NAME:	C206MCD208.DWG
PROJECT NO.	MCD12208

PL201700224



EROSION PREVENTION AND SEDIMENT CONTROL NOTES

1. PERIMETER SEDIMENT CONTROLS SHALL BE INSTALLED AND INSPECTED PRIOR TO BEGINNING WORK. MAINTAIN FOR DURATION OF CONSTRUCTION. REMOVE CONTROLS AFTER AREAS CONTRIBUTING RUN OFF ARE PERMANENTLY STABILIZED AND DISPOSE OF OFF SITE.
2. LIMIT SOIL DISTURBANCE TO THE GRADING LIMITS SHOWN. SCHEDULE OPERATIONS TO MINIMIZE LENGTH OF EXPOSURE OF DISTURBED AREAS.
3. MANAGEMENT PRACTICES SHOWN ARE THE MINIMUM REQUIREMENT. INSTALL AND MAINTAIN ADDITIONAL CONTROLS AS WORK PROCEEDS TO PREVENT EROSION AND CONTROL SEDIMENT CARRIED BY WIND OR WATER.
4. ALL EXPOSED SOIL AREAS MUST BE STABILIZED WITHIN 72 HOURS OF COMPLETION OF WORK IN EACH AREA.
5. SEED, SOD, MULCH AND FERTILIZER SHALL MEET THE FOLLOWING SPECIFICATIONS, AS MODIFIED.

ITEM	SPECIFICATION NUMBER
SOD	MNDOT 3878
SEED	MNDOT 3876
	MN TYPE 22-111 @ 30.5 LB/AC - TEMPORARY EROSION CONTROL
	MN TYPE 25-151 @ 120 LB/AC - PERMANENT TURF
MULCH	MNDOT 3882
	(MNDOT TYPE 1 @ 2 TON/AC, DISC ANCHORED)
FERTILIZER	MNDOT 3881
GENERAL PLACEMENT	MNDOT 2575

6. ALL DISTURBED LANDSCAPE AREAS SHALL BE RESTORED WITH ROCK MULCH. COORDINATE WITH MCDONALD'S AREA CONSTRUCTION MANAGER.
7. SCRAPE ADJACENT STREETS CLEAN DAILY AND SWEEP CLEAN WEEKLY.

GRADING NOTES

8. CONTACT UTILITY SERVICE PROVIDERS FOR FIELD LOCATION OF SERVICES 72 HOURS PRIOR TO BEGINNING GRADING.
9. REMOVE TOPSOIL FROM GRADING AREAS AND STOCKPILE SUFFICIENT QUANTITY FOR REUSE. MATERIALS MAY BE MINED FROM LANDSCAPE AREAS FOR USE ON SITE AND REPLACED WITH EXCESS ORGANIC MATERIAL WITH PRIOR OWNER APPROVAL.
10. REMOVE SURFACE AND GROUND WATER FROM EXCAVATIONS. PROVIDE INITIAL LIFTS OF STABLE FOUNDATION MATERIAL IF EXPOSED SOILS ARE WET AND UNSTABLE.
11. REFER TO STRUCTURAL SPECIFICATIONS FOR EARTHWORK REQUIREMENTS FOR BUILDING PADS.
12. AN INDEPENDENT TESTING FIRM SHALL VERIFY THE REMOVAL OF ORGANIC AND UNSUITABLE SOILS, SOIL CORRECTION, AND COMPACTION AND PROVIDE PERIODIC REPORTS TO THE OWNER.
13. PLACE AND COMPACT FILL USING LIFT THICKNESSES MATCHED TO SOIL TYPE AND COMPACTION EQUIPMENT TO OBTAIN SPECIFIED COMPACTION THROUGHOUT THE LIFT.
14. COMPACT MATERIAL IN PAVED AREAS TO 95% OF MAXIMUM DRY DENSITY, STANDARD PROCTOR (ASTM D698) EXCEPT THE TOP 3 FEET WHICH SHALL BE COMPACTED TO 100%. COMPACT TO 98% DENSITY WHERE FILL DEPTH EXCEEDS 10 FEET.
15. COORDINATE WITH ARCHITECTURAL FOR BUILDING STOOP LOCATIONS. SLOPES SHOWN ON ADJACENT WALKS AND PAVEMENT SHOULD CONTINUE OVER STOOPS.

PAVING NOTES

16. SPOT ELEVATIONS AT CURBLINES INDICATE FLOWLINES UNLESS NOTED OTHERWISE. SEE SHEET C4.1 FOR RIM ELEVATIONS OF CATCH BASINS.
17. GRADES BETWEEN PROPOSED SPOT ELEVATIONS SHALL BE CONTINUOUS AND NONVARIABLE. SPOT ELEVATIONS SHALL GOVERN OVER CONTOUR LINES.

LEGEND

SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
	:INLET PROTECTION	1 EACH
	:TIP OUT CURB	
	:PAVEMENT SAWCUT	

NORTH

0 20 40

Know what's Below. Call before you dig.

LANDFORM
From Site to Finish
105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401
Tel: 612-252-9070
Fax: 612-252-9077
Web: landform.net

REV	DATE	REVISION HISTORY
	07-14-17	CITY SUBMITTAL
	10-11-17	CITY SUBMITTAL

CERTIFICATION

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.

Christopher N. Call

License Number 46224

Date 10/11/2017

McDONALD'S USA, LLC.
OFFICE ADDRESS:
1650 W. 82ND STREET #900 BLOOMINGTON, MINNESOTA 55431-9888 (952)-884-4355

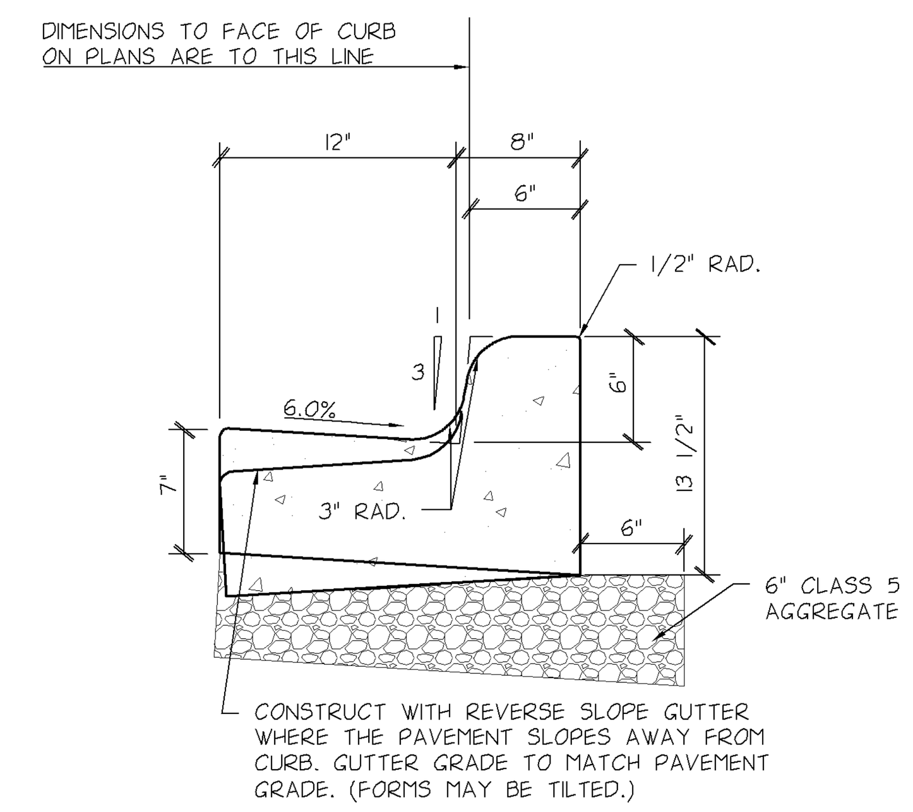
CITY	BLOOMINGTON	STATE	MN
STREET ADDRESS	7997 SOUTHTOWN CENTER	COUNTY	HENNEPIN
SHEET NAME	GRADING, DRAINAGE, PAVING, & EROSION CONTROL		
NATIONAL NUMBER	18751	STATE NUMBER	022-0316

DRAWN BY	TDD
PROJECT ISSUED	
REVIEWED BY	CNC
DATE REVIEWED	07-10-17
DATE ISSUED	10-11-17

SHEET NO. C3.1

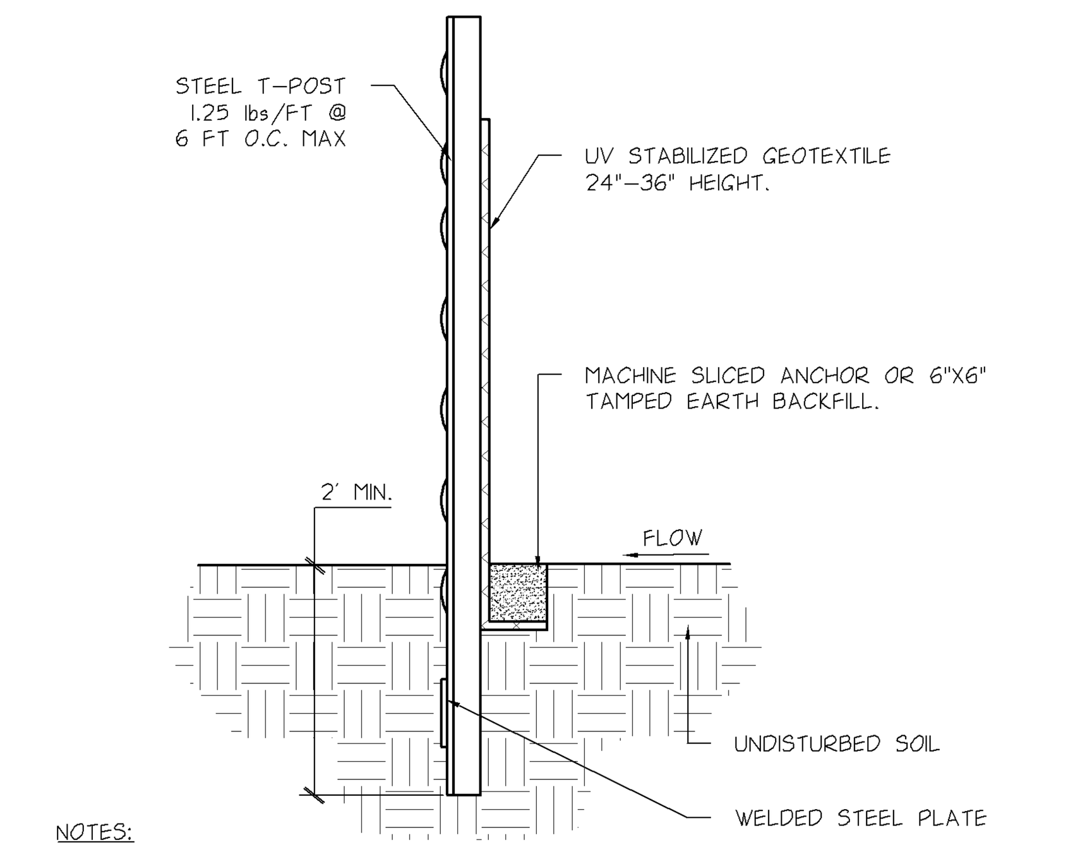
FILE NAME: C301MCD208.DWG
PROJECT NO. MCD12208

PL201700224



4 **B612 CONCRETE CURB AND GUTTER**

NO SCALE

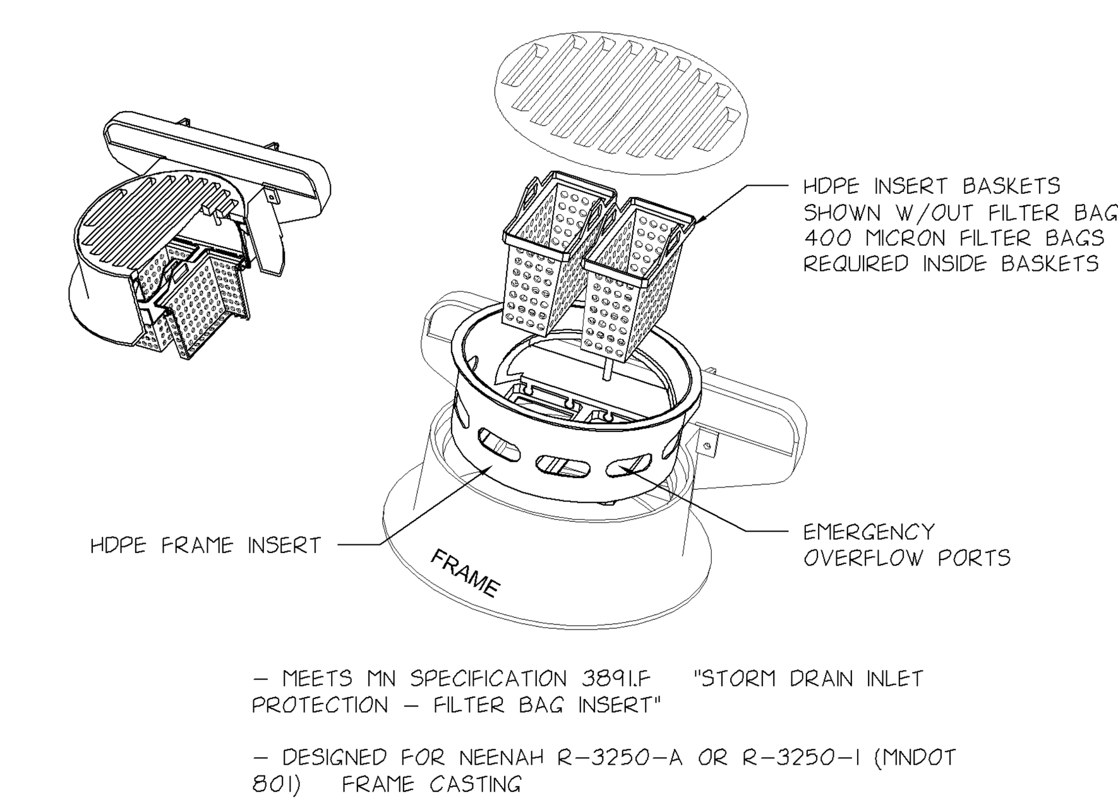


NOTES:

1. DIG A 6" TRENCH ALONG THE INTENDED FENCE LINE OR USE MACHINE SLICED ANCHOR.
2. INSTALL ON CONTOUR AT CONSTANT ELEVATION.
3. DRIVE ALL POSTS INTO THE GROUND AT THE BACK SIDE OF THE TRENCH.
4. LAYOUT WIRE MESH AND SILT FENCE ON THE UPHILL SIDE ALONG THE FENCE LINE, AND BACK FILL.

1 **SILT FENCE**

NO SCALE



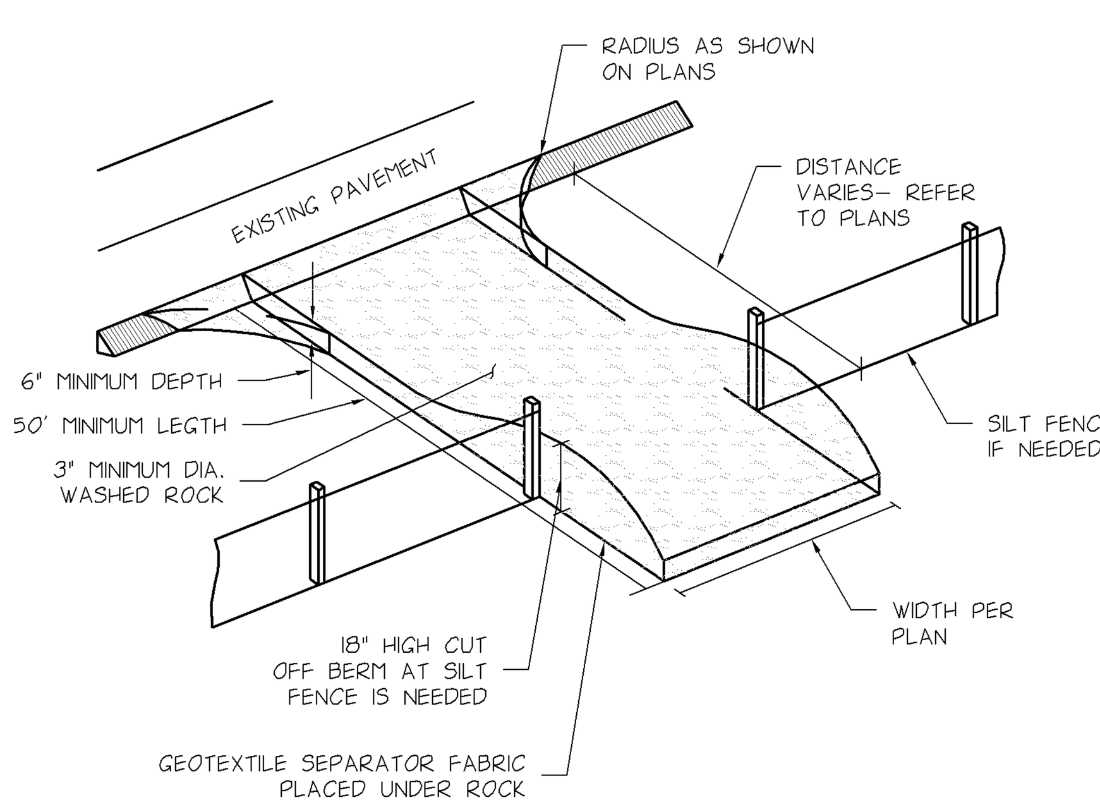
- MEETS MN SPECIFICATION 3891LF "STORM DRAIN INLET PROTECTION - FILTER BAG INSERT"
- DESIGNED FOR NEENAH R-3250-A OR R-3250-1 (MNDOT 801) FRAME CASTING

INFRASAFE - 27" DEBRIS COLLECTION DEVICE
AS MANUFACTURED BY ROYAL ENVIRONMENTAL SYSTEMS

ALTERNATIVE ALLOWED AS APPROVED BY PERMITTING AUTHORITIES

2 **INLET PROTECTION**

NO SCALE



3 **VEHICLE TRACKING PAD**

NO SCALE

REV	DATE	REVISION HISTORY
	07-14-17	CITY SUBMITTAL
	10-11-17	CITY SUBMITTAL

CERTIFICATION

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.

Christopher N. Call

License Number 46224

Date 10/11/2017

McDONALD'S USA, LLC.

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DRAWN BY: TDD
PROTO ISSUED
REVIEWED BY: CNC
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CITY: BLOOMINGTON
STATE: MN
STREET ADDRESS: 7997 SOUTHTOWN CENTER
COUNTY: HENNEPIN
SHEET NAME: CIVIL CONSTRUCTION DETAILS
NATIONAL NUMBER: 18781
STATE NUMBER: 022-0316

SHEET NO. **C7.1**

FILE NAME: C701MCD208.DWG
PROJECT NO. MCD12208