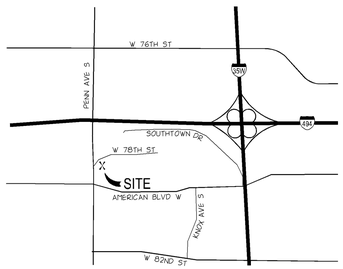
McDONALD'S USA, LLC.

BLOOMINGTON, MN

AREA LOCATION MAP

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 / Denolish	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.	Renove 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.	Electrical	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 Drain	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 drain
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.	Thick / 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	EDGE OF PAVEMENT
	PAVING BLOCK	HEIGHT, TYPE	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	100%	SLOPE DIRECTION
	CONCRETE CURB		CATCH BASIN
			MANHOLE
HEIGHT, TYPE	FENCING		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	FDC / BLDG.	FRE DEPT. CONNECTION
G1	GAS METER	C.O. / X"SSD	SOIL SUBDRAIN
T	TRANSFORMER	GAS	GAS LINE-UNDERGROUND
	WATER SHUT-OFF VALVE	ELEC	ELECTRIC-UNDERGROUND
	TRAFFIC SIGN	TELE	TELEPHONE-UNDERGROUND
	FLAG POLE	CATV	UNDERGROUND CABLE/TV
LT	LIGHT POLE	LSS	LAWN SPRINKLER SLEEVE
	TREES		
	TREE LINE		
	MANHOLE		
	CATCH BASIN		
	FIRE HYDRANT		
	WATER VALVE		
	FLARED END SECTION		
FES	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, MINESOTA.

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	08.23.17
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

CIVIL ENGINEER
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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REVISION HISTORY

REV	DATE	
	07-14-17	CITY SUBMITTAL
	08-23-17	CITY SUBMITTAL

CERTIFICATION

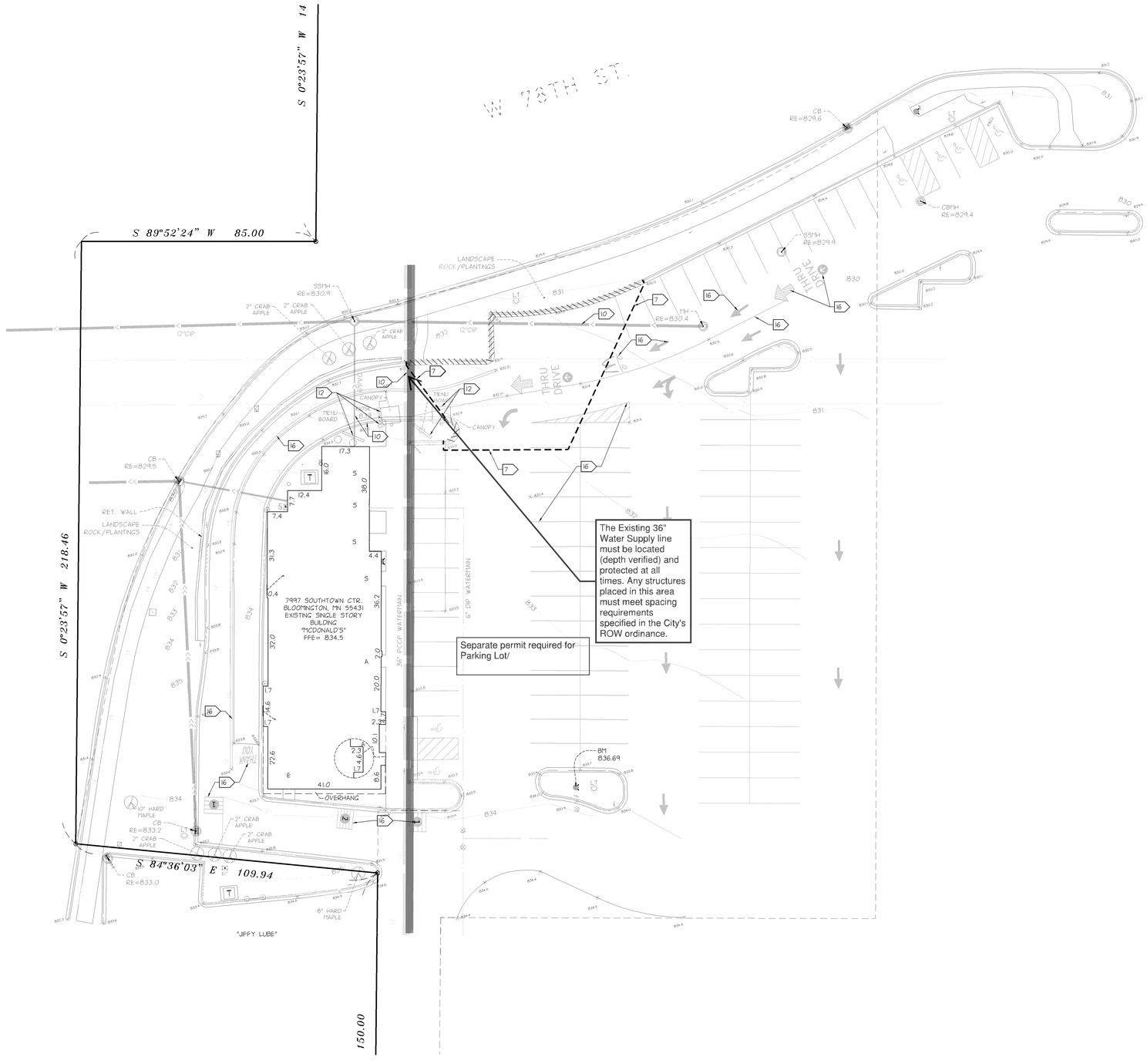
NOT FOR CONSTRUCTION

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	CIVIL TITLE SHEET		
NATIONAL NUMBER	18751	STATE NUMBER	022-0316

DRAWN BY	JDB	PROTO ISSUED	
REVIEWED BY	CNC	DATE REVIEWED	08-22-17
DATE ISSUED	08-23-17		

SHEET NO. C0.1
FILE NAME: C001MCD208.DWG
PROJECT NO. MCD12208



EXISTING CONDITIONS

1. BACKGROUND INFORMATION SHOWN IS FROM SURVEY BY LANDFORM PROFESSIONAL SERVICES, LLC, MINNEAPOLIS, MN, ON JUNE 17, 2011, 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. SEE SHEET C3.1 FOR EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THAT MUST BE IN PLACE PRIOR TO DISTURBANCES TO SITE.
5. BUILDING DEMOLITION: VERIFY WITH OWNER THAT BUILDING HAS BEEN CLEARED OF REGULATED MATERIALS REQUIRING SPECIAL HANDLING OR DISPOSAL AND EXAMINED BY COMPETENT PERSON. REMOVE STRUCTURE, COLUMNS, CANOPIES, AND ANY ASSOCIATED CONSTRUCTION IN ITS ENTIRETY. REFER TO ARCHITECTURE.
6. DIMENSIONS SHOWN FOR REMOVAL ARE APPROXIMATE. COORDINATE WITH NEW CONSTRUCTION TO ENSURE APPROPRIATE REMOVAL OF EXISTING FACILITIES.
7. SAWCUT EXISTING PAVEMENT. REMOVE CONCRETE WALKS AND CURBING TO THE NEAREST EXISTING JOINT BEYOND CONSTRUCTION LIMITS.
8. COMPLETE DEMOLITION WITH MINIMAL DISRUPTION OF TRAFFIC. COORDINATE LANE CLOSURES WITH THE REGULATORY AUTHORITY AND PROVIDE ADVANCE NOTIFICATION TO AFFECTED EMERGENCY RESPONSE PROVIDERS.
9. 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.
10. 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.
11. REMOVE TREES NOTED, INCLUDING ROOT STRUCTURES, FROM THE SITE. COORDINATE WITH OWNER TO MARK TREES TO BE SAVED OR TRANSPLANTED PRIOR TO CLEARING.
12. 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.
13. 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.
14. EXISTING PIPING AND CONDUITS MAY BE ABANDONED IN-PLACE IF FILLED WITH SAND AND IF NOT IN LOCATION OF PROPOSED BUILDING OR IN CONFLICT WITH PROPOSED UTILITIES OR STRUCTURES. TERMINATE EXISTING SERVICES AT THE SUPPLY SIDE IN CONFORMANCE WITH PROVIDER'S STANDARDS.
15. HAUL DEMOLITION DEBRIS OFF-SITE TO A FACILITY APPROVED BY REGULATORY AUTHORITIES FOR THE HANDLING OF DEMOLITION DEBRIS.
16. REMOVE PAVEMENT MARKINGS.

DEMOLITION LEGEND

////////// CURB REMOVAL

- - - - - - - - PAVEMENT SAWCUT

NORTH

0 20 40

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REVISION HISTORY

REV	DATE	
	07-14-17	CITY SUBMITTAL
	08-23-17	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. Gray

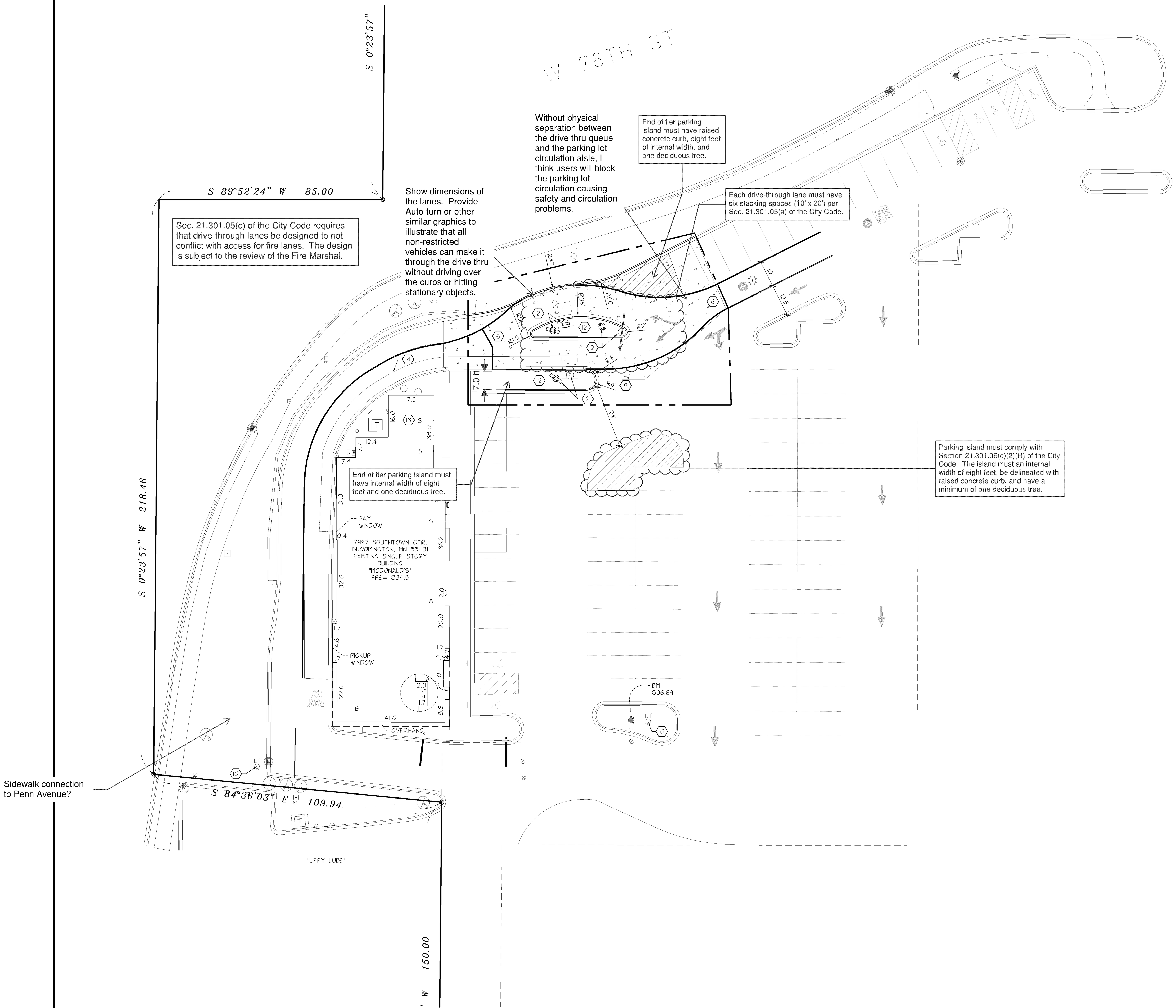
NOT FOR CONSTRUCTION

License Number 46224

Date

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

CITY	BLOOMINGTON
STATE	MN
STREET ADDRESS	7997 SOUTHTOWN CENTER
COUNTY	HENNEPIN
SHEET NAME	EXISTING CONDITIONS & DEMOLITION
NATIONAL NUMBER	19751
STATE NUMBER	022-0316
DRAWN BY	JDB
PROJ'D ISSUED	
REVIEWED BY	CNG
DATE REVIEWED	08-22-17
DATE ISSUED	08-23-17
SHEET NO	C1.1
FILE NAME	C101MCD208.DWG
PROJECT NO.	MCD12208



Check w/ NMCWD to verify if permit is required. If not disturbing subgrade soils permit is not required.

SITE CONSTRUCTION NOTES

1. McDONALD'S PYLON SIGN. – NOT USED
2. DRIVE–THRU SIGNAGE. SEE SHEET C2.2.
3. STATE AND ADA APPROVED ACCESSIBLE SIGN AND BOLLARD. – NOT USED
4. STATE AND ADA APPROVED ACCESSIBLE SIGN AND BOLLARD WITH "VAN ACCESSIBLE" SIGN. – NOT USED
5. 6" x 36" BOLLARD. – NOT USED
6. CONCRETE DRIVE APRONS AND SLABS. REFER TO SHEET C3.1 FOR SPECIFICATIONS.
7. CONCRETE SIDEWALK. MEET AND MATCH EXISTING SIDEWALK. – NOT USED
8. CONCRETE PATIO. MEET AND MATCH SIDEWALK. – NOT USED
9. BITUMINOUS PAVEMENT. REFER TO SHEET C3.1 FOR SPECIFICATIONS.
10. PARKING LOT LIGHT. – EXISTING
11. 6' X 42" RAILING. REFER TO ARCHITECTURAL. ENSURE THAT RAILING HAS 18 INCHES CLEAR FROM DOOR FRAME. – NOT USED
12. PLANTING AREA. REFER TO SHEET C3.1 FOR DETAILS.
13. TRASH ENCLOSURE. REFER TO ARCHITECTURAL.
14. STACKING DISTANCE IS 140'
15. CONNECTION TO PUBLIC SIDEWALK. – NOT USED
16. BIKE RACK. REFER TO SHEET L2.1 FOR DETAILS. – NOT USED
17. STATE AND ADA APPROVED ACCESSIBLE SIGN AND BOLLARD WITH "ACCESS AISLE / NO PARKING" SIGN. – NOT USED

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

PARKING SUMMARY

TOTAL PARKING STALLS REMOVED	12 EA.

CONSTRUCTION AREA SUMMARY

EXISTING:			
PERVIOUS	634	S.F.	11.8%
IMPERVIOUS	4,764	S.F.	88.2%
TOTAL	5,398	S.F.	100.0%
PROPOSED:			
PERVIOUS	1,129	S.F.	21.0%
IMPERVIOUS	4,269	S.F.	79.0%
TOTAL	5,398	S.F.	100.0%

LEGEND

:CONSTRUCTION LIMITS

NORTH

0 20 40

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REVISION HISTORY

REV	DATE	
	07–14–17	CITY SUBMITTAL
	08–23–17	CITY SUBMITTAL

CERTIFICATION

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NOT FOR CONSTRUCTION

Christopher N. Call

License Number 46224

Date

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

DRAWN BY	JDB
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REVIEWED BY	CNC
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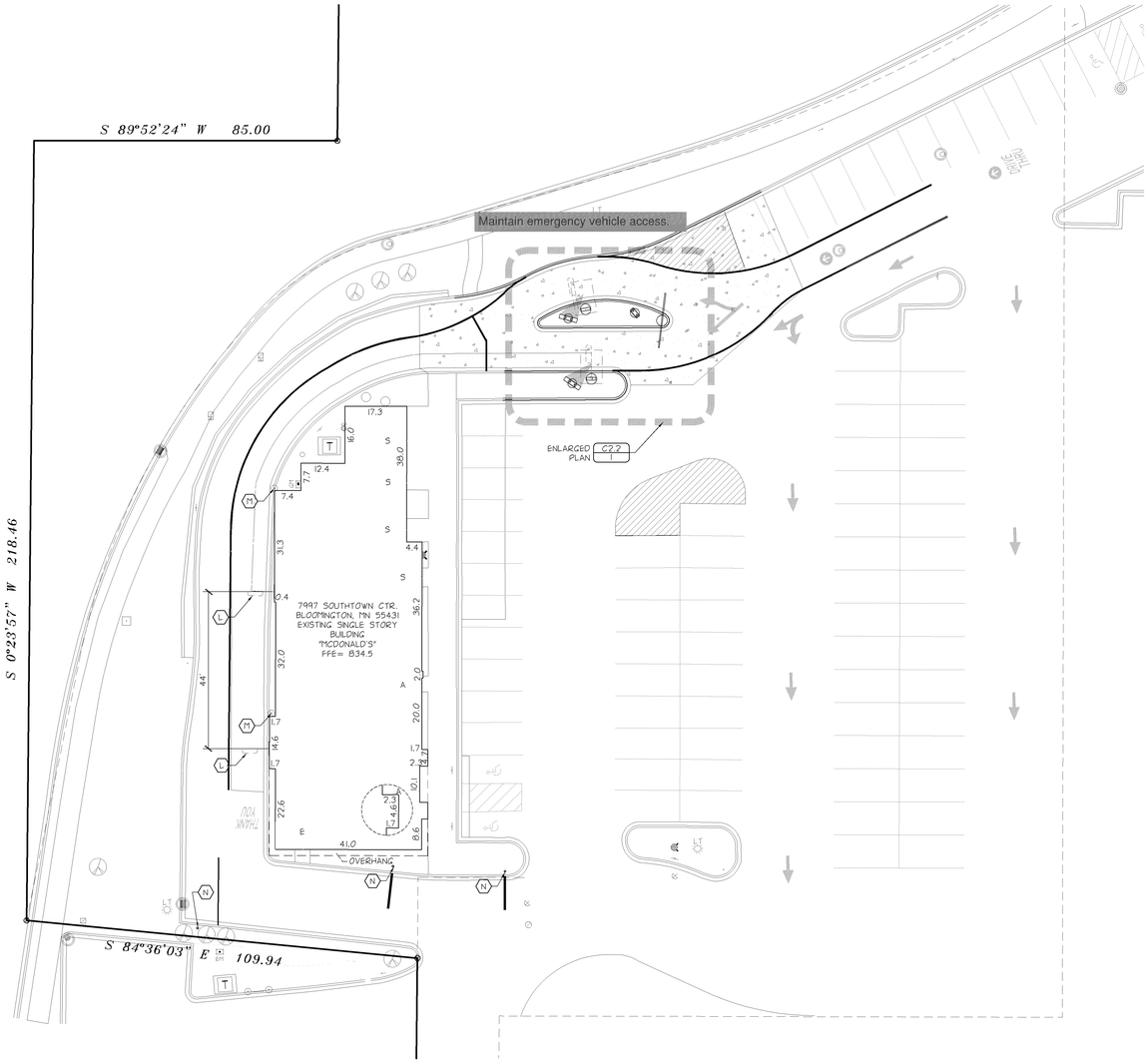
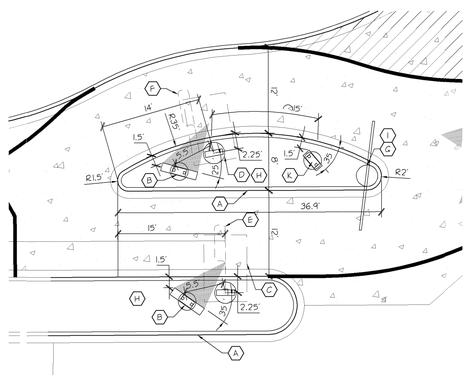
CITY	BLOOMINGTON
STATE	MN
STREET ADDRESS	7997 SOUTHTOWN CENTER
COUNTY	HENNEPIN
SHEET NAME	SITE PLAN
NATIONAL NUMBER	18751
STATE NUMBER	022-0316
SHEET NO.	C2.1
FILE NAME:	C201MCD208.DWG
PROJECT NO.	MCD12208





1 **ENLARGED PLAN**

10 SCALE

DRIVE-THRU CONSTRUCTION NOTES

(A) NEW CONCRETE CURB AND GUTTER.

(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 140' 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.

(D) SECONDARY LANE CANOPY. LOCATE 14'-0" FROM NOSE OF CONCRETE ISLAND. SEE SHEET C2.3 FOR FOUNDATION DETAIL, SHEET C2.5 FOR SCHEMATIC DETAIL AND MANUFACTURER FOR INSTALLATION INSTRUCTIONS.

(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.

(G) DOUBLE 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.

(H) LANDSCAPED AREA.

(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.

(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.

(L) INSTALL DETECTOR LOOPS AT CASH AND PRESENT WINDOWS.

(M) INSTALL BOLLARD AT THE CORNER OF THE BUILDING ON THE DRIVE THRU SIDE. BOLLARD SHALL BE FLUSH AGAINST THE BUILDING AND THE FACE OF THE BOLLARD SHALL BE TIGHT AGAINST THE BACK OF CURB. – EXISTING

(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

NORTH

0 20 40

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REV	DATE	REVISION HISTORY
	07-14-17	CITY SUBMITTAL
	08-23-17	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 Nagel

NOT FOR CONSTRUCTION

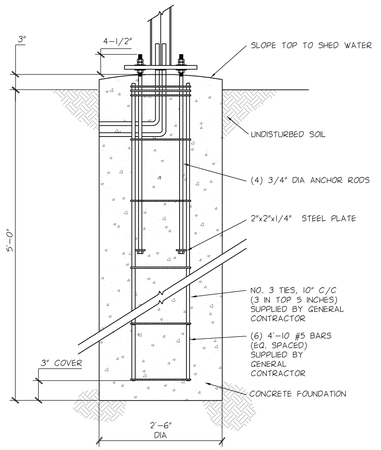
License Number 46224

Date

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

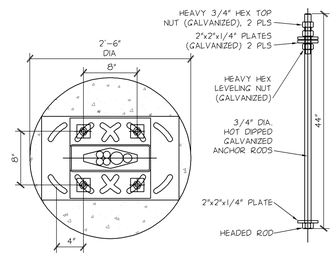
CITY	BLOOMINGTON
STATE	MN
STREET ADDRESS	7997 SOUTHTOWN CENTER
COUNTY	HENNEPIN
SHEET NAME	DRIVE-THRU LAYOUT
NATIONAL NUMBER	18751
STATE NUMBER	022-0316
DRAWN BY	JDB
PROTO ISSUED	
REVIEWED BY	CNC
DATE REVIEWED	08-22-17
DATE ISSUED	08-23-17
SHEET NO	C2.2
FILE NAME	C202MCD208.DWG
PROJECT NO.	MCD12208

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
-DO NOT CUT ANCHOR BOLTS AFTER INSTALLATION OF POLE



ANCHOR BOLT PATTERN — NTS

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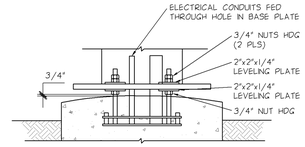


CONNECTION DETAILS — NTS

GENERAL NOTES

-THE FOLLOWING CODES WERE USED IN DESIGN:
-IBC 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

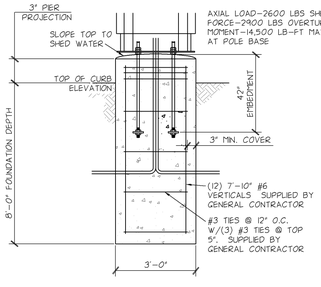
	SINGLE	DOUBLE
-AXIAL	- 325#	-590#
-SHEAR	- 104#	-184#
-MOMENT	- 427#	-764#

-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 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)
-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.

3 ODMB AND PRE-BROWSE FOUNDATION - 90 MPH

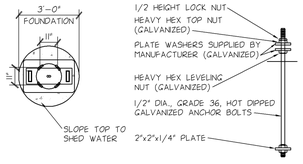
NO SCALE

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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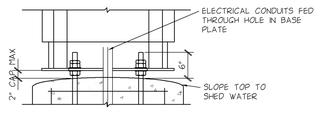

CONNECTION DETAILS — NTS

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).
-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.
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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: A36
-USE HOT DIPPED GALVANIZED BOLTS AND FASTENERS.
-ANCHOR RODS, NUTS, AND WASHERS SHALL BE SHIPPED AS AN ASSEMBLY FROM THE SIGN/LIGHTING MANUFACTURER.
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-DO NOT CUT ANCHOR BOLTS AFTER INSTALLATION OF POLE.
-AFTER INSTALLATION, ALL EXPOSED STEEL SHALL BE PAINTED WITH AN ENAMEL PAINT TO INHIBIT CORROSION.
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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, 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.
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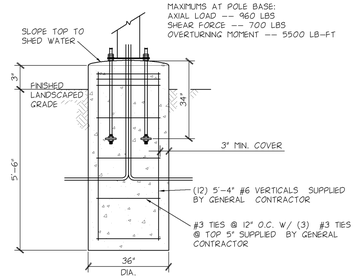
-3" MIN. CONCRETE COVER FOR REINFORCEMENT
-ALL REINFORCING STEEL BY GENERAL CONTRACTOR



FOUNDATION — NTS

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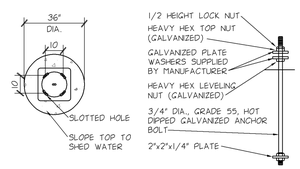

ANCHOR BOLT PATTERN — NTS

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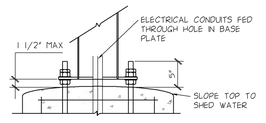

CONNECTION DETAILS — NTS

GENERAL NOTES

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-ACI 318-08
-AISC 13th EDITION
-AWS D1.1
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-DESIGN LOADS DERIVED FROM THESE CODES AND FORCES
-AXIAL - 960 LBS
-SHEAR - 700 LBS
-MOMENT - 5500 LB-FT

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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
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-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

REV	DATE	REVISION HISTORY
	07-14-17	CITY SUBMITTAL
	08-23-17	CITY SUBMITTAL

CERTIFICATION

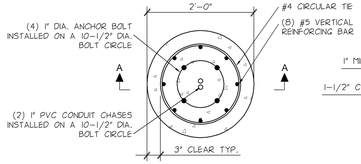
NOT FOR CONSTRUCTION

McDONALD'S USA, LLC.
OFFICE ADDRESS
650 W. 82ND STREET #400 BLOOMINGTON, MINNESOTA 55431-9888 (952)-884-4355
AND ENGINEERS.

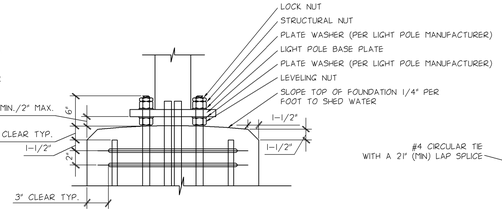
CITY	BLOOMINGTON
STATE	MN
STREET ADDRESS	7997 SOUTHTOWN CENTER
COUNTY	HENNEPIN
SHEET NAME	DRIVE-THRU DETAILS
NATIONAL NUMBER	18751
STATE NUMBER	022-0316
DRAWN BY	JDB
PROJ'D ISSUED	
REVIEWED BY	CNC
DATE REVIEWED	08-22-17
DATE ISSUED	08-23-17

SHEET NO: C2.3

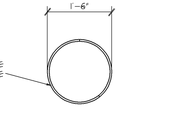
FILE NAME: C203MCD208.DWG
PROJECT NO. MCD12208



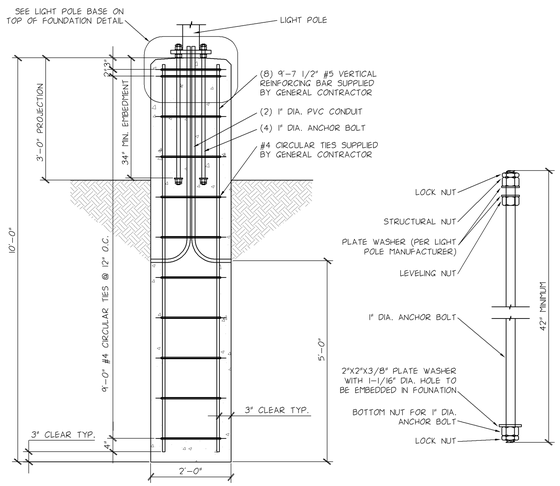
POLE BASE – PLAN VIEW – NTS



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, LUMINAIRES 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/ft$_{sq}$
   - 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:

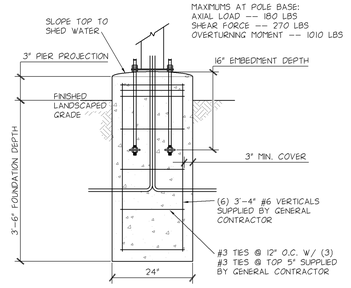
1. CONCRETE COMPRESSIVE STRENGTH (f'c) SHALL BE A MINIMUM OF 3000psi
2. ANCHOR BOLTS SHALL BE ASTM F1554 GRADE 55, HOT DIP GALVANIZED PER ASTM F2329
3. REINFORCING STEEL SHALL BE ASTM A615 GRADE 60, SUPPLIED BY GENERAL CONTRACTOR
4. NUTS SHALL BE HEAVY HEX ASTM A563 GRADE DH, HOT DIP GALVANIZED PER ASTM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

TYPICAL LIGHT POLE FOUNDATION DETAILS

3

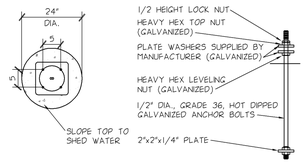
NO SCALE

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 – 180#
-SHEAR – 270#
-MOMENT – 1010#
-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 (v2)
-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.



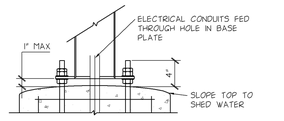
FOUNDATION – NTS

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 – 180#
-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 (v2)
-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: 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.

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-CONTRACTOR (INSTALLER) IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION IN REGARDS TO JOBSITE SAFETY.
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TYPICAL DIRECTIONAL SIGN WITH ARCH FOUNDATION & CONNECTION DETAILS - 100 MPH RATING

1

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.
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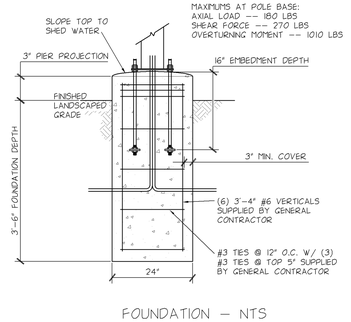

FOUNDATION – NTS

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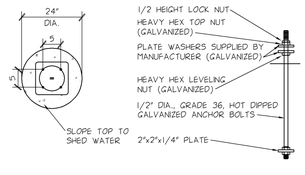

ANCHOR BOLT PATTERN – NTS

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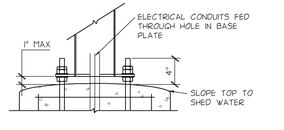

CONNECTION DETAILS – NTS

GENERAL NOTES

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-IBC 2009
-ASCE 7-05
-ACI 318-08
-AISC 13th EDITION
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TYPICAL DIRECTIONAL SIGN WITHOUT ARCH FOUNDATION & CONNECTION DETAILS - 100 MPH RATING

2

NO SCALE

REVISION HISTORY

REV	DATE	
	07-14-17	CITY SUBMITTAL
	08-23-17	CITY SUBMITTAL

CERTIFICATION

NOT FOR CONSTRUCTION

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		
NATIONAL NUMBER	12751	STATE NUMBER	022-0316

DRAWN BY	JDB	REVIEWED BY	CNC
PHOTO ISSUED		DATE REVIEWED	08-22-17
		DATE ISSUED	08-23-17

SHEET NO.
C2.4

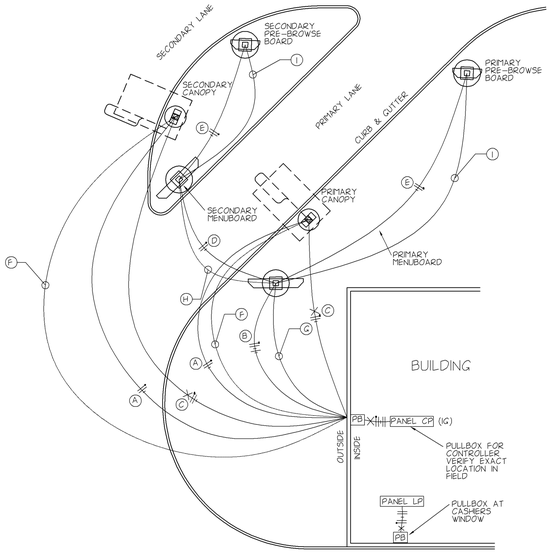
FILE NAME: C204MCD208.DWG
PROJECT NO. MCD12208

KEY NOTES:

- (A) 2#12 & 1#12 GND., 3/4" CONDUIT TO LP-1 FOR COD CANOPY LIGHTING
- (B) 4#12 & 1#12 GND. & 1#12 ISOLATED GND., 3/4" CONDUIT TO CP FOR ISOLATED GROUND POWER TO MENUBOARDS AND MEDIA PLAYERS.
- (C) 2#12 & 1#12 GND. & 1#12 ISOLATED GND., 3/4" CONDUIT TO CP FOR ISOLATED GROUND POWER TO CANOPIES. EACH CANOPY SHALL BE ON ITS OWN SEPARATE CIRCUIT.
- (D) 2#12 & 1#12 GND. & 1#12 ISOLATED GND., 3/4" CONDUIT TO CP FOR ISOLATED GROUND POWER TO MENUBOARDS & MEDIA PLAYERS.
- (E) 2#12 & 1#12 GND. & 1#12 ISOLATED GND., 3/4" CONDUIT TO CP FOR ISOLATED GROUND POWER TO PRE-BROWSE BOARDS AND MEDIA PLAYERS.
- (F) (2) 1-1/2" CONDUIT
  ONE FOR CANOPY CABLING
  ONE FOR LOOP DETECTOR
- (G) 2" CONDUIT – FOR CAT6 DATA CABLES
- (H) 1-1/2" CONDUIT – FOR CAT6 DATA CABLES
- (I) 1" CONDUIT – FOR CAT6 DATA CABLES

GENERAL NOTES:

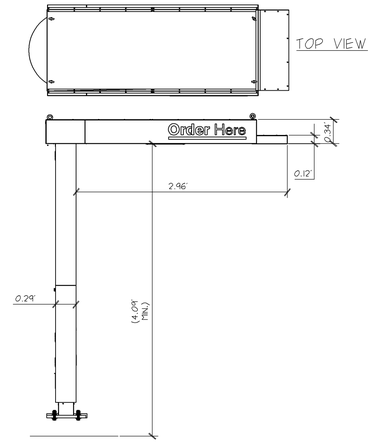
1. VERIFY EXACT CIRCUITS AND QUANTITIES OF CIRCUITS WITH PANEL SCHEDULES ON DRAWING E4.2 AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. PER MANUFACTURER'S INSTALLATION INSTRUCTIONS SEPERATE DEDICATED NEUTRALS ARE REQUIRED TO MENUBOARD AND PRE-BROWSE BOARD FOR EACH CIRCUIT (PLC AND LIGHTING).
3. IF ANY BENDS ARE REQUIRED, SWEEPS MUST BE PROVIDED IN CONDUITS.
4. FOR EXISTING LOCATIONS, VERIFY EXISTING CP PANEL HAS APACITY AND SUFFICIENT SPARES/SPACES FOR TWO (2) NEW 20A/1P CIRCUITS. UPGRADE CP PANEL TO 42 CIRCUITS IN NECESSARY.
5. VERIFY EXISTING PULLBOXES ARE SIZED FOR NEW CONDUIT ROUTING. MODIFY PULLBOXES IF NECESSARY.



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

3 DRIVE-THRU WIRING DETAIL

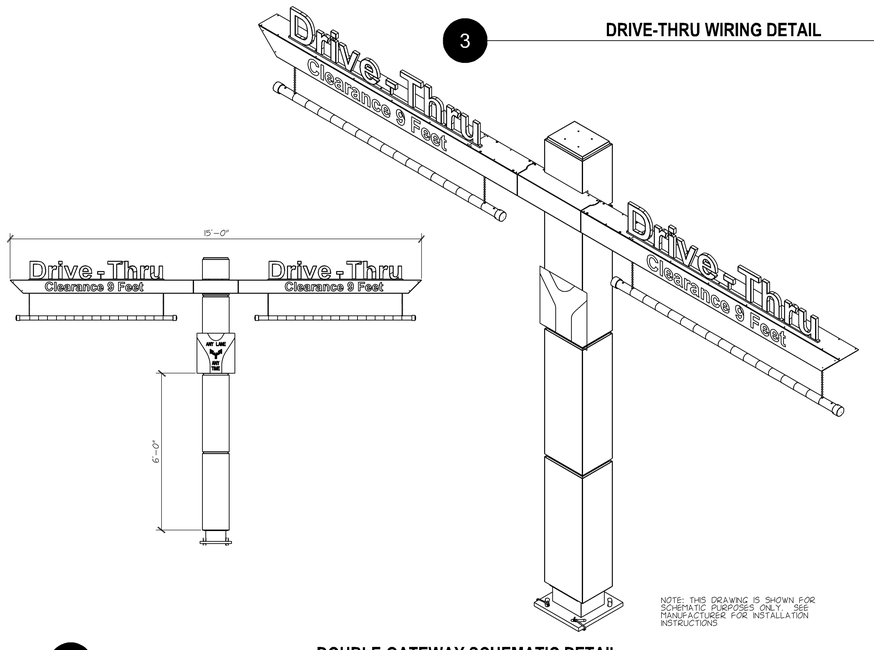
NO SCALE



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

1 CANOPY SCHEMATIC DETAIL

NO SCALE

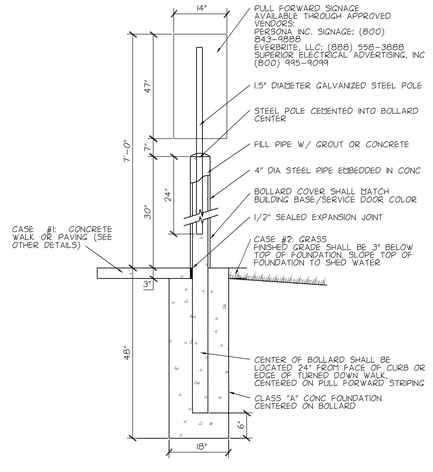


NOTE: THIS DRAWING IS SHOWN FOR SCHEMATIC PURPOSES ONLY. SEE MANUFACTURER FOR INSTALLATION INSTRUCTIONS

4 DOUBLE GATEWAY 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

REVISION HISTORY

REV	DATE	
	07-14-17	CITY SUBMITTAL
	08-23-17	CITY SUBMITTAL

CERTIFICATION

NOT FOR CONSTRUCTION

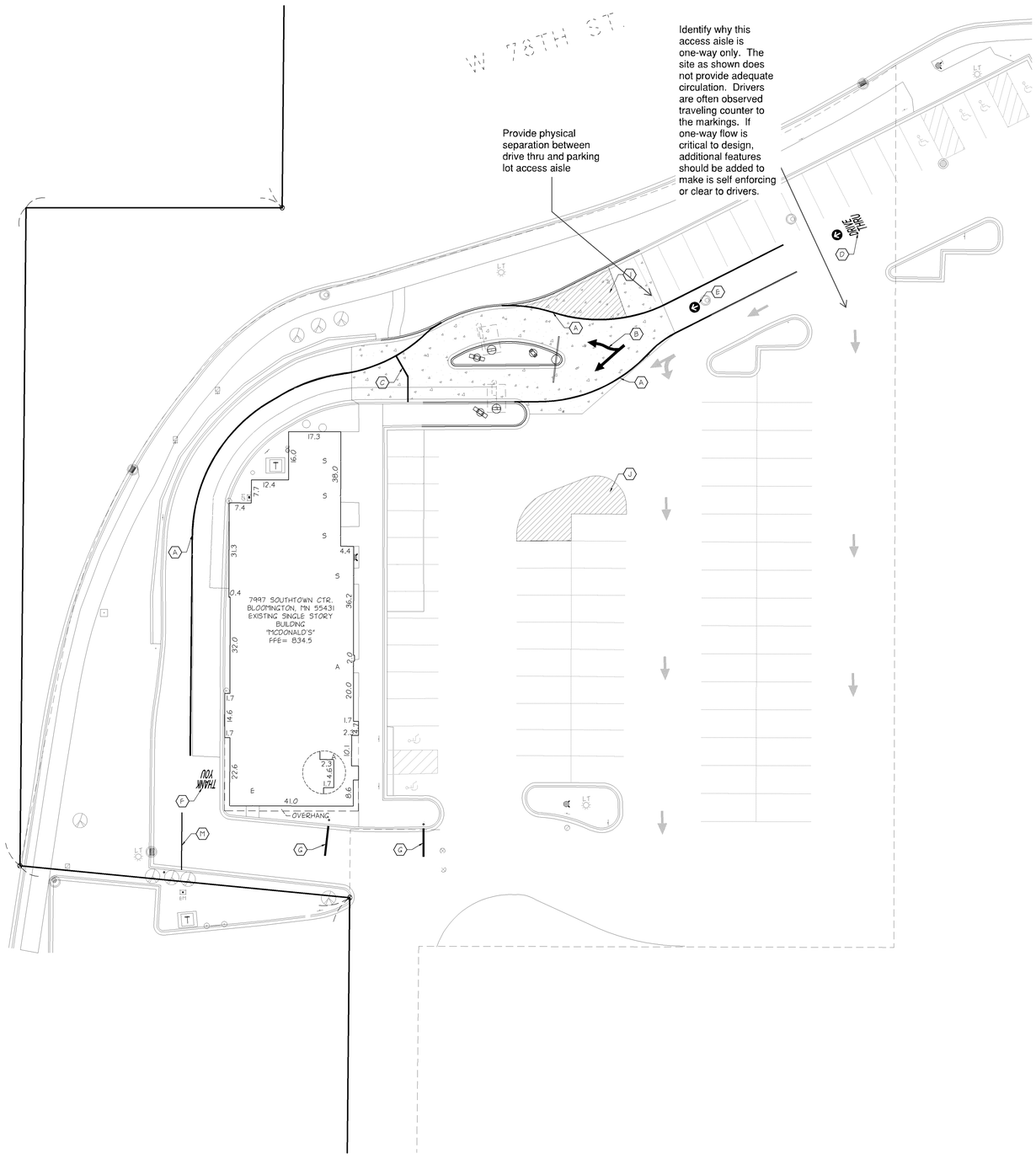
McDONALD'S USA, LLC.
650 W. 82ND STREET #900 BLOOMINGTON, MINNESOTA 55431-9888 (952)-884-4355

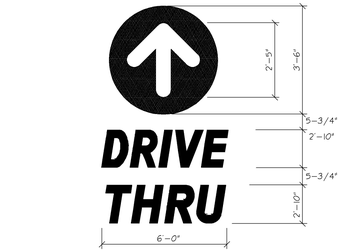
CITY	BLOOMINGTON	STATE	MN
STREET ADDRESS	7997 SOUTHTOWN CENTER	COUNTY	HENNEPIN
SHEET NAME	DRIVE-THRU DETAILS		
NATIONAL NUMBER	18751	STATE NUMBER	022-0316

DRAWN BY	JDB
PROTO ISSUED	
REVIEWED BY	CNC
DATE REVIEWED	08-22-17
DATE ISSUED	08-23-17
OFFICE ADDRESS	650 W. 82ND STREET #900 BLOOMINGTON, MINNESOTA 55431-9888 (952)-884-4355

SHEET NO: C2.5

FILE NAME: C205MCD208.DWG
PROJECT NO. MCD12208

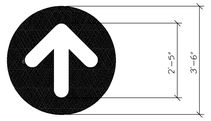




NOTE: ALL TEXT AND ARROW SHALL BE PAINTED YELLOW (PMS 123)

1 PAINTED 'DRIVE THRU' WITH ARROW

NO SCALE



NOTE: ARROW SHALL BE PAINTED YELLOW (PMS 123)

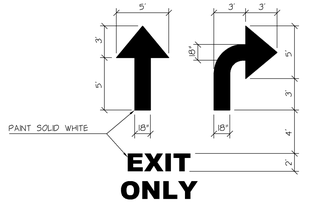
2 PAINTED ARROW

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 ACHEVE 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.
- (B) 1'-0" WIDE PAINTED DIRECTIONAL ARROW. PMS 123 YELLOW. SEE GENERAL NOTE 4.
- (C) 6" WIDE PAINTED MERGE POINT. PMS 123 YELLOW. SEE GENERAL NOTE 4.
- (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.
- (K) PAINTED HANDICAP SYMBOL, TYP. WHITE. – NOT USED
- (L) 2' x 6' 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
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REVISION HISTORY

REV	DATE	
	07-14-17	CITY SUBMITTAL
	08-23-17	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. Cullen

NOT FOR CONSTRUCTION

License Number 46224

Date

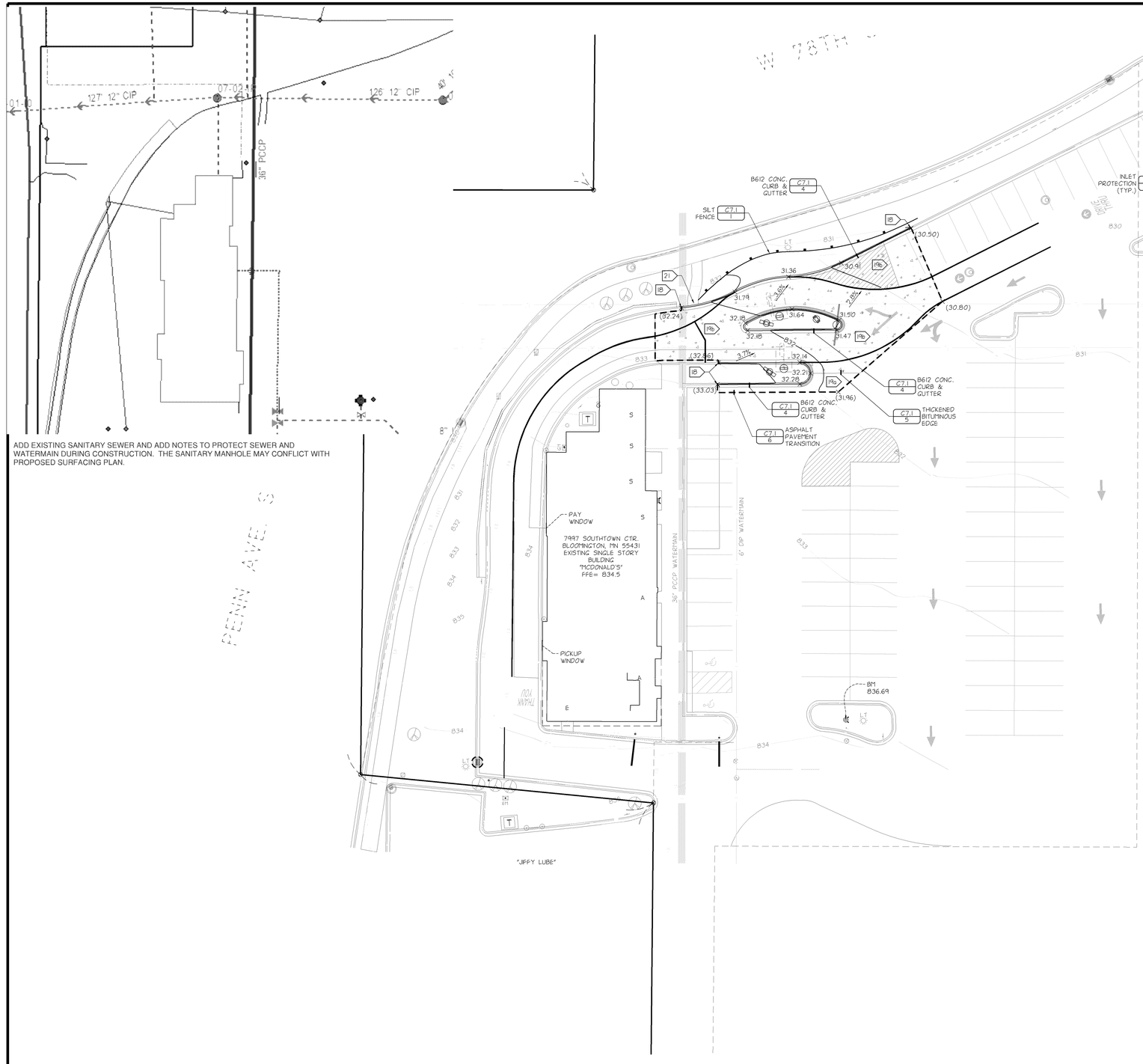
McDONALD'S USA, LLC.
OFFICE ADDRESS
1650 W. 82ND STREET #400 BLOOMINGTON, MINNESOTA 55431-9888 (952)-884-4355

CITY	BLOOMINGTON	STATE	MN
STREET ADDRESS	7997 SOUTHTOWN CENTER	COUNTY	HENNEPIN
SHEET NAME	STRIPING		
NATIONAL NUMBER	12751	STATE NUMBER	022-0316

DRAWN BY	JDB
PROJECT ISSUED	
REVIEWED BY	CNC
DATE REVIEWED	08-22-17
DATE ISSUED	08-23-17

SHEET NO C2.6

FILE NAME: C206MCD208.DWG
PROJECT NO. MCD12208



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.

18 MEET AND MATCH EXISTING CURB. PROVIDE 10 FOOT TRANSITION.

19a PAVING SECTIONS
- a. BITUMINOUS PAVING
  - 1.5-INCH BITUMINOUS WEAR (MNDOT 2360, SPWEA240B)
  - TACK COAT (MNDOT 2357)
  - 2.5-INCH BITUMINOUS BASE (MNDOT 2360 SPNWB230B)
  - 6-INCH AGGREGATE BASE (MNDOT 3138, CLASS 5)
- b. CONCRETE DRIVES, APRONS, AND EXTERIOR SLABS
  - 7-INCH CONCRETE, 4,000 PSI, 5%-8% AIR ENTRAINED, MAX. 4" SLUMP (MNDOT 2301)
  - 7-INCH AGGREGATE BASE (MNDOT 3138, CLASS 5)
  - COMPACTED SUBSOIL

20. CONCRETE JOINTS
  - JOINTING TO BE DESIGNED AND INSTALLED BY CONTRACTOR. INSTALL JOINTS ACROSS SIDEWALKS, CURBS AND PAVEMENTS, PAYING ATTENTION TO SPACING OF EXPANSION JOINTS. JOINT SPACING SHALL BE AS FOLLOWS:
  - a. TOOLED JOINTS: DIVIDE PANELS INTO NOMINALLY EQUAL AREAS.
  - b. EXPANSION JOINTS: SIDEWALKS – 40 FEET MAX.; CURBS – 60 FEET MAX.; PAVEMENT: 80 FEET MAX.; ADJACENT TO BUILDING FOUNDATIONS AND STOOPS.
  - c. CONTRACTION JOINTS: SIDEWALKS – 8 TO 10 FEET; CURBS AND APRONS – 12 TO 15 FEET.

21 RELAY PAVER WALK TO MATCH NEW CURB LINE.

LEGEND

SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
	:INLET PROTECTION	2 EACH
	:SILT FENCE	90 FEET
	:TIP OUT CURB	
	:PAVEMENT SAWCUT	

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REV	DATE	REVISION HISTORY
	07-14-17	CITY SUBMITTAL
	08-23-17	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. Cichosz

NOT FOR CONSTRUCTION

License Number 46224

Date

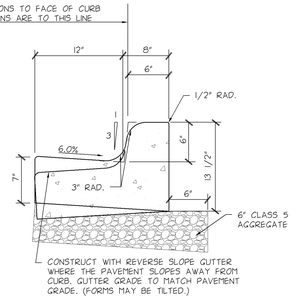
McDONALD'S USA, LLC.

OFFICE ADDRESS
1650 W. 82ND STREET #900 BLOOMINGTON, MINNESOTA 55431-4888 (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	JDB
PROJ ISSUED	
REVIEWED BY	CNC
DATE REVIEWED	08-22-17
DATE ISSUED	08-23-17

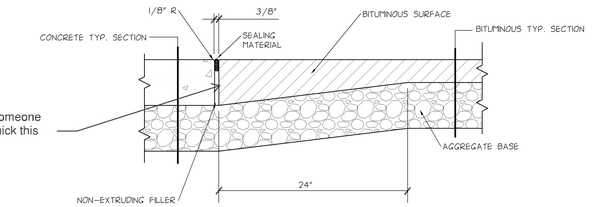
SHEET NO. C3.1

FILE NAME: C301MCD208.DWG
PROJECT NO. MCD12208



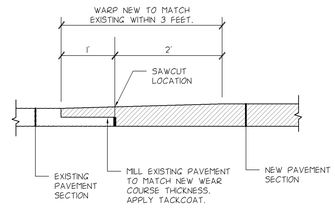
4 B612 CONCRETE CURB AND GUTTER

NO SCALE



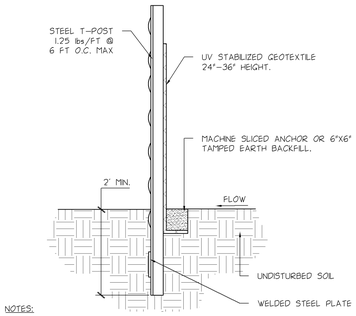
5 THICKENED BITUMINOUS EDGE AND CONCRETE SURFACE

NO SCALE



6 ASPHALT PAVEMENT TRANSITION

NO SCALE

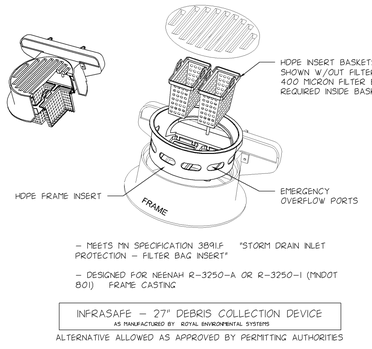


NOTES:

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



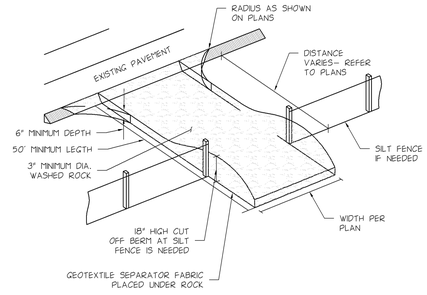
- MEETS MN SPECIFICATION 3891.F. "STORM DRAIN INLET PROTECTION - FILTER BAG INSERT"
- DESIGNED FOR NEENAH R-3250-A OR R-3250-I (MNDOT 801) FRAME CASTING

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

REVISION HISTORY

REV	DATE	
	07-14-17	CITY SUBMITTAL
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DRAWN BY	JDB
PROTO ISSUED	
REVIEWED BY	CNC
DATE REVIEWED	08-22-17
DATE ISSUED	08-23-17
SHEET NO	C7.1

FILE NAME: C701MCD208.DWG
PROJECT NO. MCD12208