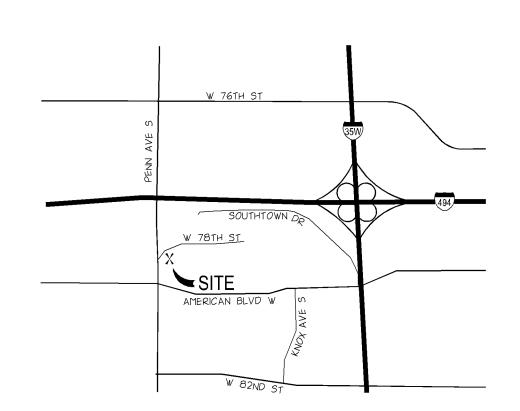
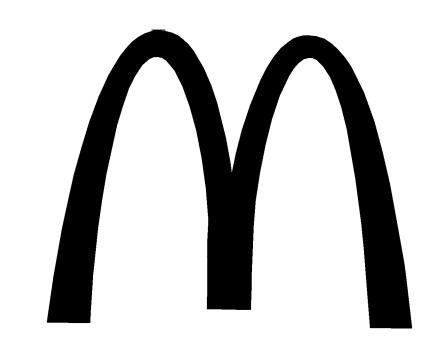
### AREA LOCATION MAP

BLOOMINGTON, MN





# McDONALD'S USA, LLC.



## BLOOMINGTON, MN

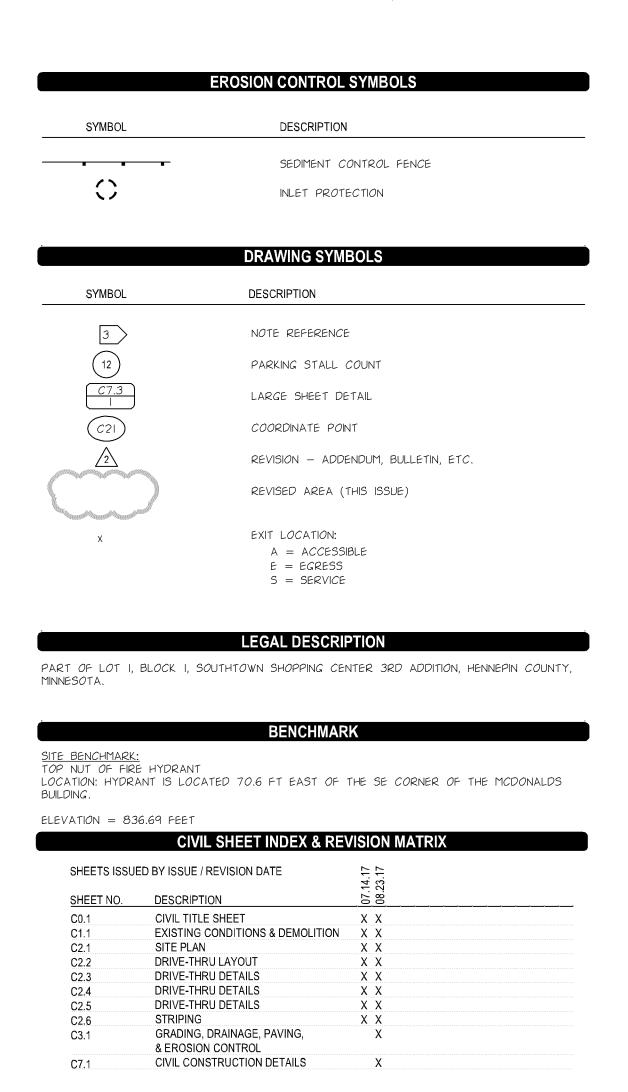
|                  | ABB                                                  | REVIATIONS        |                                                  |
|------------------|------------------------------------------------------|-------------------|--------------------------------------------------|
|                  | ADDI                                                 | KEVIATIONS        |                                                  |
|                  |                                                      |                   |                                                  |
| D                | Angle                                                | L.F.              | Lineal Feet                                      |
| &                | And                                                  | L.P.              | Low Point / Liquid Petroleum                     |
| @                | At                                                   | LB.               | Pound                                            |
| 100 YR.          | IOO Year Flood Elevation                             | LGU               | Local Government Unit                            |
| A.B.             | Anchor Bolt                                          | LONG.             | Lonqitudinal                                     |
| A.D.             | Area Dram                                            | LT.               | Light / Lighting                                 |
| A/C              | Air Conditioning Unit                                | MAINT.<br>MAS.    | Maintenance                                      |
| ADD.             | Addendum                                             | MATL.             | Masonry                                          |
| ADDL.            | Additional                                           |                   | Material                                         |
| ADJ.             | Adjacent / Adjust                                    | MAX.              | Maximum                                          |
| AHU              | Air Handling Unit                                    | ME <i>C</i> H     | Mechanical                                       |
| ALT.             | Alternate                                            | MED.              | Medium                                           |
| ALUM.            | Aluminum                                             | MFR.              | Manufacturer                                     |
| ANOD.            | Anodized                                             | MH                | Manhale                                          |
| APPROX.          |                                                      | MIN.              | Minimum / Minute                                 |
| ARCH             | Approxmate<br>Architect / Architectural              | MISC.<br>MNDOT    | Miscellaneous                                    |
| AUTO.            | Automatic                                            | MOD.              | Minnesota Department Of Transportat              |
| AVG.             | Average                                              |                   | Module / Modular                                 |
| B.C.             | Back of Curb                                         | MUL.              | Mullion                                          |
| B/W              | Bottom of Wall                                       | N.                | North                                            |
| BÉE              | Basement Floor Elevation                             | N.I.C.            | Not In Contract                                  |
| BIT              |                                                      | NO. OR #          | Number                                           |
| BLDG             | Bituminous (Asphaltic)                               | NOM               | Nominal                                          |
|                  | Building                                             | NTS               | Not to Scale                                     |
| BSMT.            | Basement                                             | NWE               | Normal Water Elevation                           |
| C.F.             | Cubic Feet                                           | NWL               | Normal Water Level                               |
| C.F.S.<br>C.G.   | Cubic Feet Per Second<br>Corner Guard                | O.C.              | On Center                                        |
| C.J.             | Control Joint                                        | 0.D.              | Outside Dimension                                |
| C.L.             | Centerline                                           | 0.E.              | Overhead Electric                                |
| C.M.U.           | Concrete Masonry Unit                                | OH.               | Overhead                                         |
| C.O.             |                                                      | OHWL              | Ordinary High Water Level                        |
| C.O.E.           | Cleanout                                             | OPNG.             | Opening                                          |
|                  | U.S. Army Corps Of Engineers                         | ORIG.             | Original                                         |
| C.Y.             | Cubic Yards                                          | P.C.              | Point of Curvature                               |
| CB               | Catch Basin                                          | P.I.              | Point of Intersection                            |
| CBMH<br>CEM.     | Catch Basin Manhole<br>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.<br>P.S.I.  | Pounds Per Square Foot<br>Pounds Per Square Inch |
| CONN.            | Connection                                           | P.T.              | Pont of Tangency                                 |
| CONST.           | Construction                                         | P.V.C.            | Pont of Vertical Curvature                       |
| CONT.            | Continuous                                           | P.V.I.            | Point of Vertical Intersection                   |
| CONTR.           | Contractor                                           | P.V.T.            | Point of Vertical Tangency                       |
| COP.             | Copper<br>Cubic                                      | PE                | Polyethylene                                     |
| D.S.             | Down Spout                                           | PED.              | Pedestal / Pedestrian                            |
| DEG.             | Degree                                               | PERF.             | Perforated                                       |
| DEMO.            | Demolition / Demolish                                | PREP.<br>PROJ.    | Preparation<br>Praject                           |
| DEPT.            | Department                                           | PROP.             | Proposed                                         |
| DET.             | Detail                                               | PVC               | Poly—Vinyl—Chloride (Piping)                     |
| DIA.<br>DIAG.    | Diameter<br>Diagonal                                 | PVMT.             | Pavement                                         |
| DIM.             | Dimension                                            | QTR.              | Quanter                                          |
| DIP              | Ductile Iron Pipe                                    | QTY.              | Quantity                                         |
| DN               | Down                                                 | R                 | Radius                                           |
| DWG.             | Drawing                                              | RAD.              | Radius                                           |
| E.               | East                                                 | R.D.<br>R.E.      | Roof Drain<br>Remove Existing                    |
| E.J.             | Expansion Joint                                      | R.O.              | Rough Opening                                    |
| E.O.             | Emergency Overflow                                   | R.P.              | Radius Point                                     |
| E.O.S.           | Emerqency Overflow Swale                             | RCP               | Reinforced Concrete Pipe                         |
| E.W.             | Each Way                                             |                   | Rough Slab                                       |
| EA.<br>EL.       | Each<br>Elevation                                    | R.S.<br>RSD<br>RE | Roof Storm Drain                                 |
| ELEC.            | Electrical                                           | RE.               | Rim Elevation (Casting)                          |
| ELEV.            | Elevation                                            |                   | Regarding                                        |
| EMER.            | Emergency                                            | REINF.<br>REQ'D   | Reinforced<br>Required                           |
| ENGR.            | Enqineer                                             | REV.              | Revision / Revised                               |
| ENTR.            | Entrance                                             | RGU               | Regulatory Government Unit                       |
| EQ.              | Equal                                                | ROW OR R/W        | Right of Way                                     |
| EQUIP.           | Equipment                                            | S.                | South                                            |
| EQUIV.<br>EXIST. | Equivalent<br>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                                         | SEW <i>O</i>      | Side Exit Walk <i>O</i> ut                       |
| F.D.             | Floor Drain                                          | SHT.<br>SIM.      | Sheet<br>Similar                                 |
| F.D.C.           | Fire Department Connection                           | SLNT.             | Sealant                                          |
| F.V.             | Field Verify                                         | SPEC.             | Specification                                    |
| FB               | Full Basement                                        | SQ.               | Square                                           |
| FBWO             | Full Basement Walk Out                               | SSD               | Subsurface drain                                 |
| FBLO<br>FDN.     | Full Basement Look <i>O</i> ut<br>Foundation         | STMH              | Storm Sewer Manhole                              |
| FES              | Flored End Section                                   | STD.              | Standard                                         |
| FFE              | Finished Floor Elevation                             | STRUCT.           | Structural                                       |
| FLR.             | Floor                                                | SYM.<br>T         | Symmetrical<br>Thickness                         |
| FT. OR (')       | Foot                                                 | T/R               | Top of Rm                                        |
| FUT.             | Future                                               | T/W               | Top of Wall                                      |
| G.B.             | Grade Break                                          | TÉMP.             | Temporary                                        |
| G.C.             | General Contractor                                   | THK.              | Thick / Thickness                                |
| GAL.<br>GALV.    | Gallon<br>Galvanized                                 | T.J.              | Tooled Joint                                     |
| GFE              | Garage Floor Elevation                               | TNH               | Top Nut Hydrant                                  |
| GL.              | Glass                                                | TYP.              | Typical                                          |
| GR.              | Grade                                                | U.N.O.<br>V.B.    | Unless Noted Otherwise<br>Vapor Barrier          |
| H.               | Height                                               | V.C.              | Vertical Curve                                   |
| H.P.             | High Point                                           | V.I.F.            | Verify In Field                                  |
| HDPEP            | High Density Polyethylene Pipe                       | VER.              | Verify                                           |
| HGT.             | Height                                               | VERT.             | Vertical                                         |
| HORIZ.<br>HVAC   | Horizontal<br>Heating, Ventilation, Air Conditioning | VEST.             | Vestibule                                        |
| HYD              | Hydrant                                              | W<br>W.PT.        | Width<br>Working Point                           |
| I.D.             | Inside Dimension                                     | W.W.F.            | Welded Wire Fabric                               |
| IE or I.E.       | Invert Elevation                                     | W/                | With                                             |
| IN. OR (")       | Inches                                               | ₩/ <i>0</i>       | Without                                          |
| INFO.            | Information                                          | ₩ <i>0</i>        | Walk <i>O</i> ut                                 |
| INL.             | Inlet Elevation                                      | WETL.             | Wetland                                          |
| INSUL.           | Insulation                                           | WP                | Waterproof                                       |
| INV.             | Invert Elevation                                     | WT.               | Weight                                           |
| JT.              | Joint                                                | YD.               | Yard                                             |

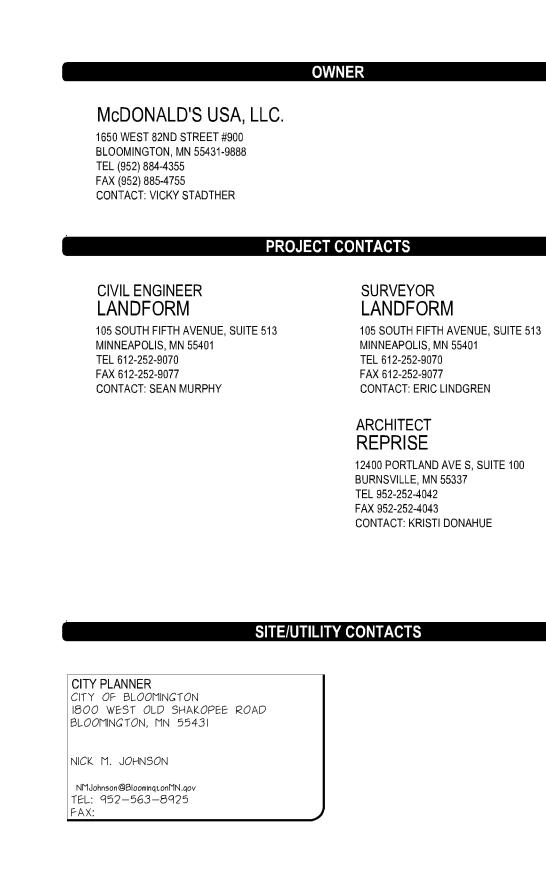
|                                    | SYMB                                 | OLS                                  |                                           |
|------------------------------------|--------------------------------------|--------------------------------------|-------------------------------------------|
| EXISTING                           | DESCRIPTION                          | NEW                                  | DESCRIPTION                               |
| 120                                | MAJOR CONTOUR                        | 120                                  | MAJOR CONTOUR                             |
| ······123                          | MINOR CONTOUR                        | 123                                  | MINOR CONTOUR                             |
| × 234.5                            | SPOT ELEVATION                       | 123.45<br>X                          | SPOT ELEVATION                            |
|                                    | BUILDING                             |                                      | BUILDING                                  |
|                                    | CANOPY / OVERHANG                    |                                      | CANOPY/OVERHANG                           |
| A A A                              | CONCRETE                             |                                      | UNDERGROUND STRUCTURE                     |
|                                    | BITUMINOUS                           | $\Delta_q$                           | CONCRETE                                  |
|                                    | LANDSCAPING                          |                                      | CONCRETE CURB                             |
|                                    | GRAVEL                               | BIT. EDGE                            | EDGE OF PAVEMENT                          |
|                                    | PAVING BLOCK                         | X HEIGHT, TYPE X                     | FENCING                                   |
|                                    | PAVING BLOCK                         |                                      | GUARD RAIL  CONCRETE RETAINING WAL        |
| ■12"STS <b></b> >> <b></b>         | STORM SEWER LINE                     |                                      | MODULAR RETAINING WALL                    |
| ~8"SAN **** > ******               | SANITARY SEWER LINE                  |                                      | FIELDSTONE RETAINING WA                   |
| • 6"WTR -                          | WATER MAIN                           |                                      | EXIT LOCATION                             |
| — OE —                             | OVERHEAD ELECTRIC                    |                                      | LIGHT STANDARD                            |
| —— UT ——                           | UNDERGROUND TELEPHONE                | Ø                                    | POWER POLE                                |
| — UE ——                            | UNDERGROUND ELECTRIC                 | 1.00%                                | SLOPE DIRECTION                           |
| — G —                              | GAS LINE                             |                                      | CATCH BASIN                               |
|                                    | CONCRETE CURB                        | O                                    | MANHOLE                                   |
| —X———X——<br>HEIGHT, TYPE<br>—————— | FENCING                              | . PES                                | BOLLARD                                   |
|                                    | RETAINING WALL                       | RIPRAP                               | STORM SEWER                               |
| U                                  |                                      |                                      | SANITARY SEWER-WASTE                      |
| 0                                  | SET 1/2" X 14" IRON PIPE             | ——FM——>—                             | FORCE MAIN                                |
| •                                  | IRON MONUMENT FOUND                  | —                                    | ROOF DRAIN SYSTEM                         |
| *<br>Ø                             | SURVEY DISK (BENCHMARK)<br>POWERPOLE | GATE VALVE WTR HYD                   | WATERMAIN                                 |
| <del></del>                        | GUY WIRE                             | FIRE                                 | FIRE LINE (IF SEPARATE)                   |
| <b></b>                            | GUARD POST                           | 45                                   | ,                                         |
| GM                                 | GAS METER                            | BLDG.                                | FIRE DEPT. CONNECTION                     |
| T                                  | TRANSFORMER                          | C.O.<br>— X"SSD— — —<br>— — GAS— — — | SOIL SUBDRAIN                             |
| ***                                | WATER SHUT-OFF VALVE                 | — —GAS— — — —<br>— —ELEC— — —        | GAS LINE—UNDERGROUND ELECTRIC—UNDERGROUND |
|                                    | TRAFFIC SIGN                         | — —TELE— — — —                       | TELEPHONE-UNDERGROUND                     |
| <u></u>                            | FLAG POLE                            | ——CATV———                            | UNDERGROUND CABLE/TV                      |
| LT<br>Ö                            | LIGHT POLE                           | ==LSS=====                           | LAWN SPRINKLER SLEEVE                     |
|                                    | TREES                                |                                      |                                           |
|                                    | TREE LINE                            |                                      |                                           |
|                                    | MANHOLE                              |                                      |                                           |
|                                    | CATCH BASIN                          |                                      |                                           |
| ₩                                  | FIRE HYDRANT                         |                                      |                                           |
| $\otimes$                          | WATER VALVE                          |                                      |                                           |
|                                    | FLARED END SECTION                   |                                      |                                           |
| ⊠<br>MB                            | MAILB <i>O</i> X                     |                                      |                                           |
| MB                                 | NATE ANIMORA                         |                                      |                                           |
| $\cup$                             | NOTE NUMBER                          |                                      |                                           |

MEASURED DISTANCE

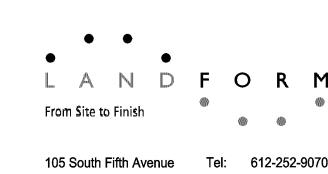
SOIL BORING

DISTANCE PER RECORDED PLAT







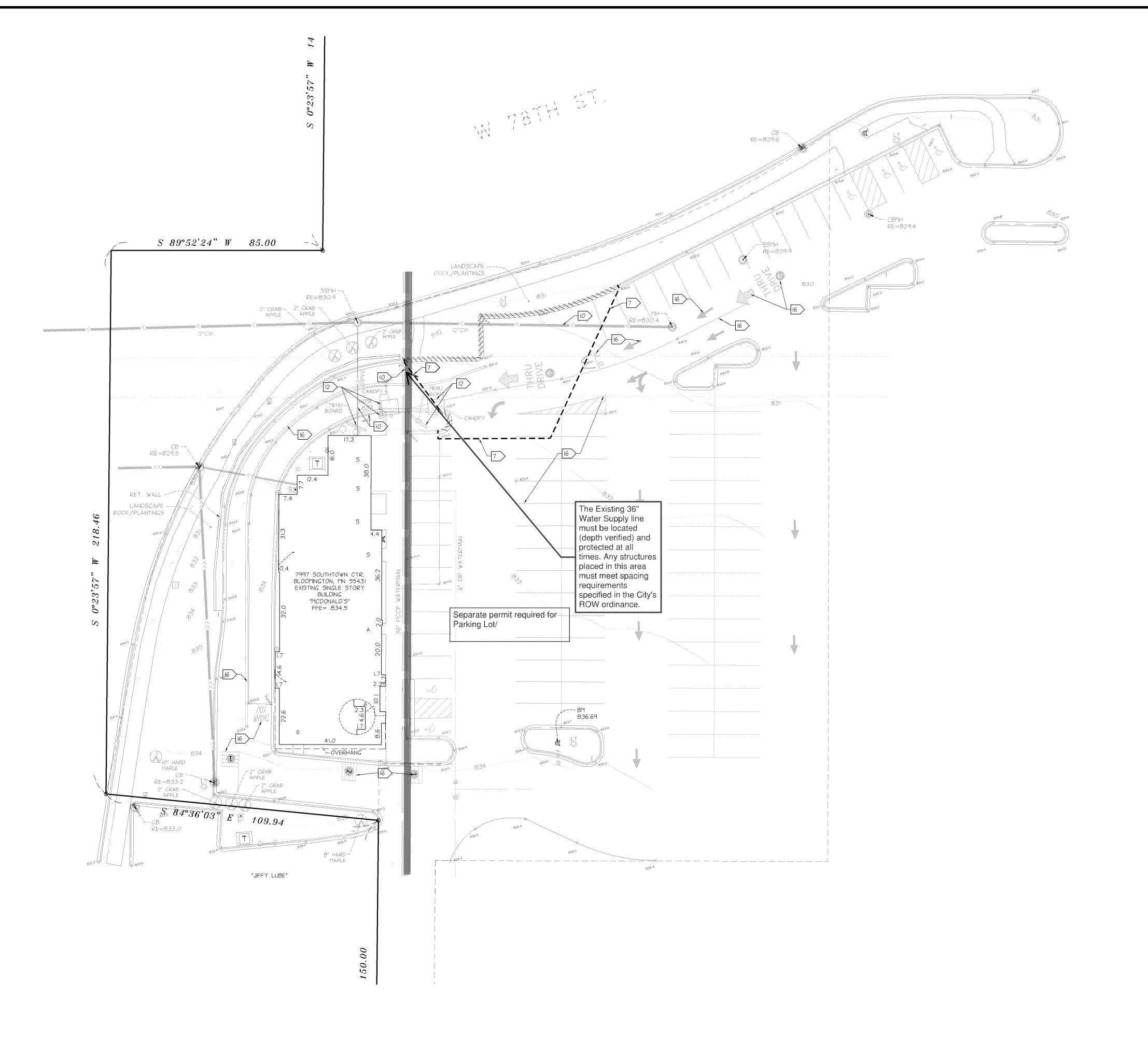


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PROJECT NO. MCD12208

CERTIFICATION



#### **EXISTING CONDITIONS**

I. 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.I 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.
- II. 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.
- 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.

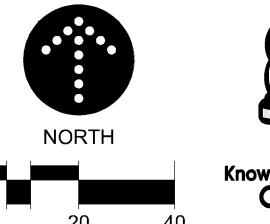
13. COORDINATE REMOVAL, RELOCATION, TERMINATION, AND RE-USE OF EXISTING PRIVATE

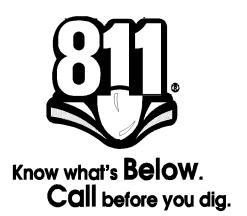
- 14. EXISTING PIPING AND CONDUITS MAY BE ABANDONED IN-PLACE IF FILLED WITH SAND AND IF NOT IN LOCATION OF PROPOSED BUILDING OR IN CONFLICT WITH PROPOSED UTILITIES OR STRUCTURES. TERMINATE EXISTING SERVICES AT THE SUPPLY SIDE IN CONFORMANCE WITH PROVIDER'S STANDARDS.
- 15. HAUL DEMOLITION DEBRIS OFF-SITE TO A FACILITY APPROVED BY REGULATORY AUTHORITIES FOR THE HANDLING OF DEMOLITION DEBRIS.

16. REMOVE PAVEMENT MARKINGS.

#### - DEMOLITION LEGEND -

//////// CURB REMOVAL





|        | •         | •        |        |    |       |        |
|--------|-----------|----------|--------|----|-------|--------|
| •<br>L | А         | Ν        | •<br>D | F  | 0     | R      |
| Fror   | n Site to | o Finish |        | •  | •     | •      |
| 105    | South     | Fifth Δν | enue   | Τe | l· 61 | 2-252- |

Suite 513

Fax: 612-252-9077 Web: landform.net Minneapolis, MN 55401 Landform®and Site to Finish®are registered service marks of Landform Professional Services, LLC.

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PROJECT NO. MCD1220

CERTIFICATION

the State of Minnesota.

ense Number <u>46224</u>

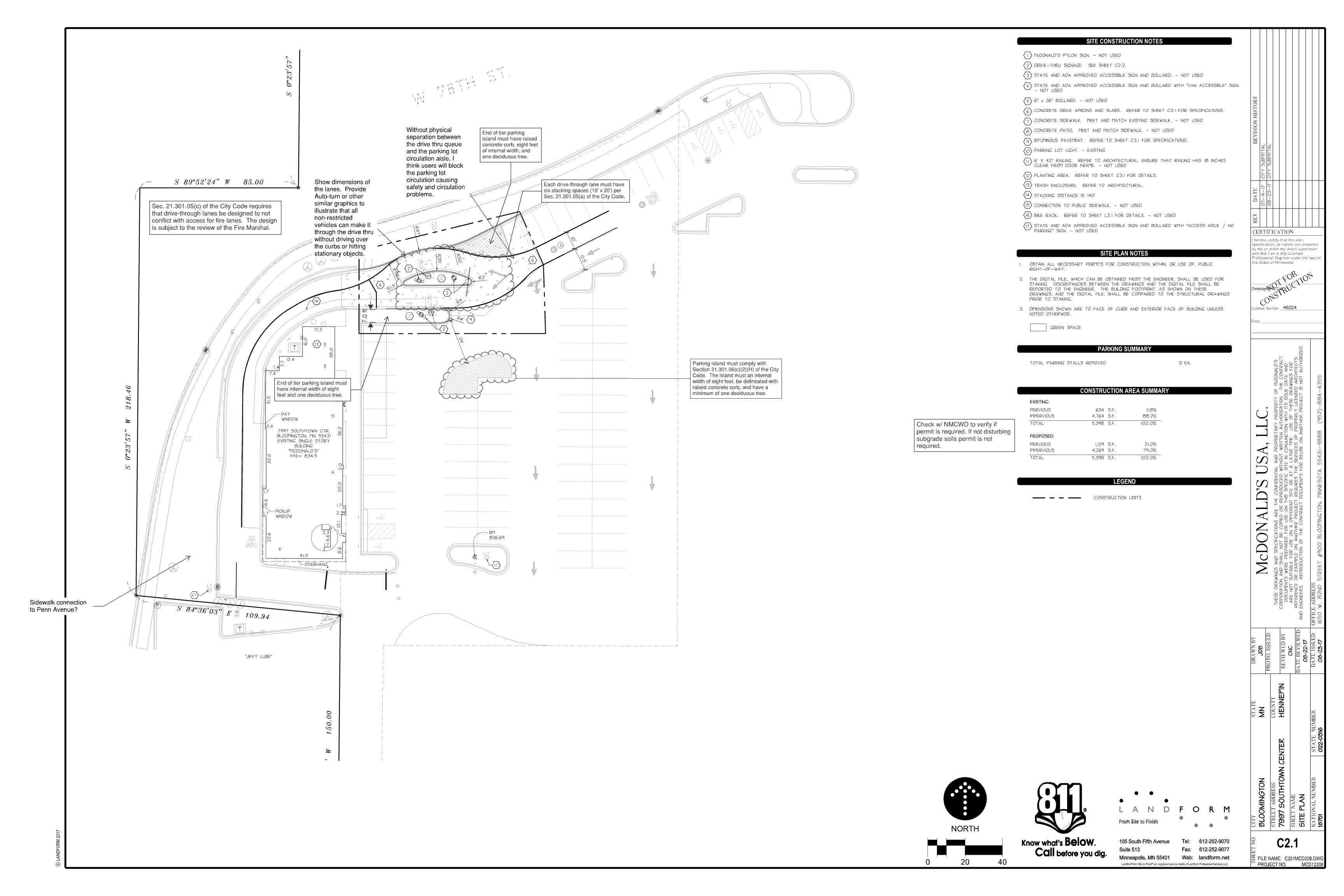
hereby certify that this plan,

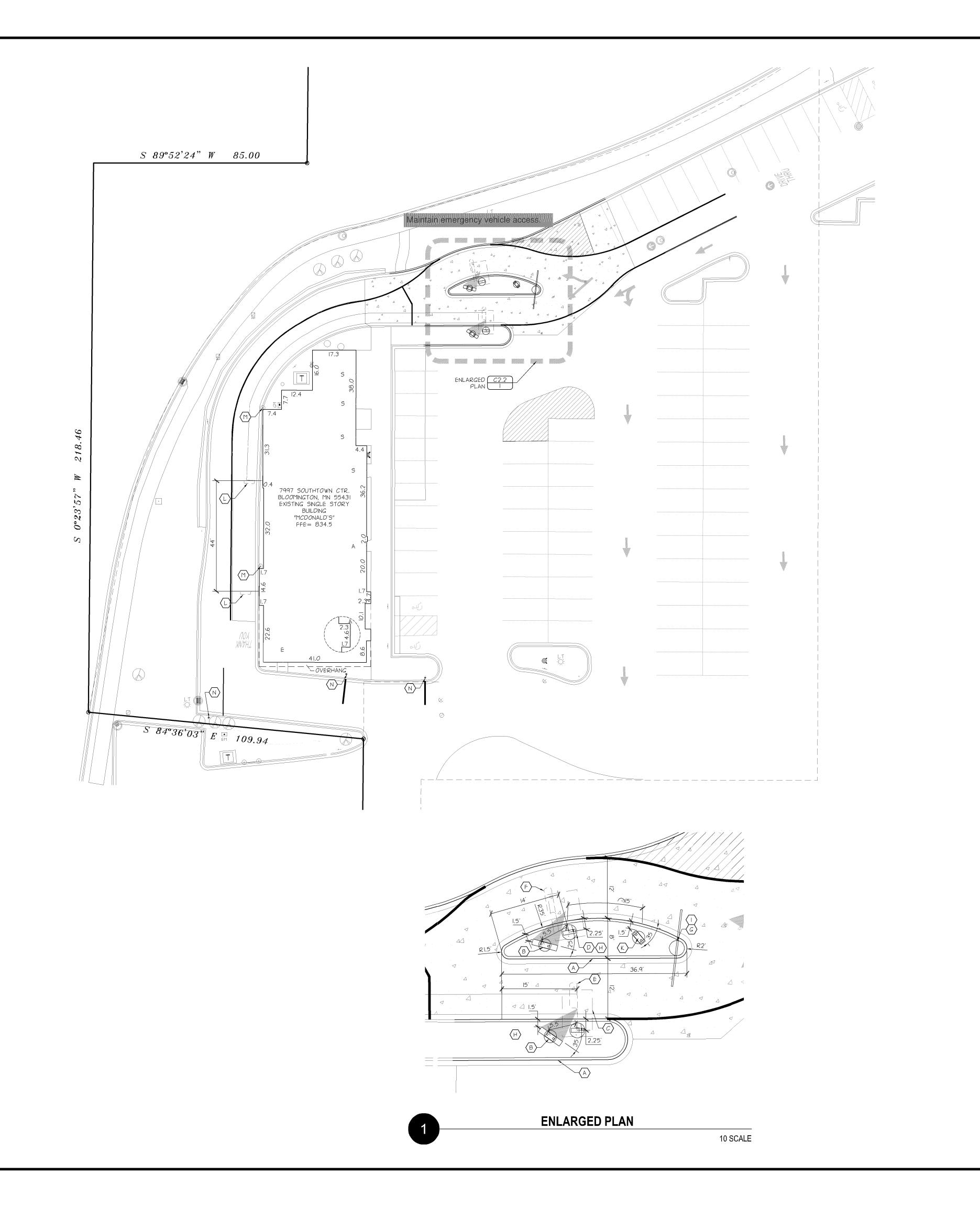
nd that I am a duly Licensed

specification, or report was prepare

by me or under my direct supervision

ofessional Engineer under the laws (





#### DRIVE-THRU CONSTRUCTION NOTES

- $\langle \mathsf{A} \rangle$  NEW CONCRETE CURB AND GUTTER.
- $\stackrel{-}{B}$  Install new outdoor menu board. See sheet C2.3 for foundation detail, sheet C2.5 for schematic detail and see manufacturer for installation
- 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.
- $\stackrel{\textstyle \leftarrow}{\mathsf{F}}$  install secondary lane detector loop 2'-0" forward of c.l. of cod. FLIP LOOP FORWARD.
- 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.
- 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
- 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
- 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.

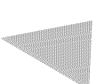
#### **GENERAL NOTES**

- I. <u>SIGNAGE & DRIVE—THRU ELEMENTS:</u> COD, DRIVE—THRU PYLON/CLEARANCE POLE, BOLLARD SIGN, AND FREESTANDING MERCHANDIZER SHALL BE CONSISTENT WITH THE 2013 STANDARD BUILDING DESIGN DRIVE—THRU ELEMENTS. <u>OTHER DESIGNS MAY NOT BE USED.</u>
- 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
- 7. GENERAL CONTRACTOR SHALL VERIFY CONDUIT SIZES REQUIRED BY VEHICLE LOOP DETECTOR SUPPLIER.

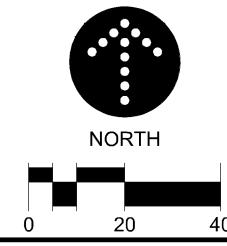
#### DRIVE-THRU LAYOUT NOTES

- I. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS NOTED OTHERWISE ON PLAN.
- 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







From Site to Finish

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Web: landform.net

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DRIVE-THRU LAYOUT

CERTIFICATION

the State of Minnesota.

cense Number <u>46224</u>

hereby certify that this plan, specification, or report was prepare

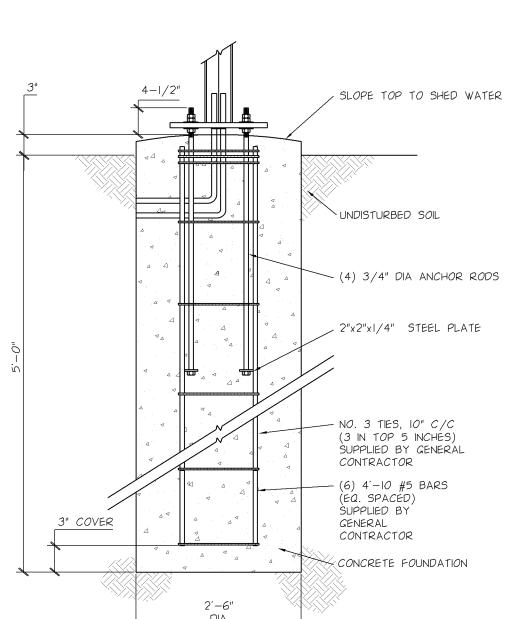
and that I am a duly Licensed

by me or under my direct supervision

rofessional Engineer under the laws (

FILE NAME: C202MCD208.DW PROJECT NO. MCD1220

ANDFORM 2017



FOUNDATION - NTS

-DESIGN CODES

IBC 2009

AWS DI.I

ACCUMULATE.

DEPTH (x2).

ASCE 7-05

ACI 318-08

AISC 13th EDITION

-AXIAL-2600 LBS -SHEAR-2900 LBS

ELECTRICAL REQUIREMENTS.

SLOPE TOP TO

SHED WATER

-EXPOSURE C

-WIND SPEED-100 MPH (MPH 3-SEC GUST)

-OVERTURNING MOMENT-14,500 LB-FT

DEPTH AS DETERMINED BY LOCAL JURISDICTION.

(EMBEDMENT DEPTHS SHOWN ARE FROM GRADE).

-ALL REINFORCING STEEL BY GENERAL CONTRACTOR.

-DESIGN LOADS DERIVED FROM THESE CODES AND FORCES (#, #')

-TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT

-TOP 6" OF SOIL NEGLECTED IN EMBEDMENT DEPTH CALCULATIONS

-FOUNDATION IS DESIGNED FOR SINGLE OR DOUBLE POLE COLUMNS.

-ELECTRICAL CONTRACTOR TO PROVIDE INFORMATION ON CONDUIT AND

-MINIMUM ALLOWABLE LATERAL SOIL BEARING PRESSURE 100 PSF/FT OF

-PROVIDE A MINIMUM OF 3" CONCRETE COVER FOR ALL EMBEDDED STEEL.

AXIAL LOAD-2600 LBS SHEAR FORCE-2900 LBS OVERTURNING MOMENT-14,500 LB-FT MAXIMUMS

AT POLE BASE

3" MIN. COVER

VERTICALS SUPPLIED BY

GENERAL CONTRACTOR

W/(3) #3 TIES @ TOP

GENERAL CONTRACTOR

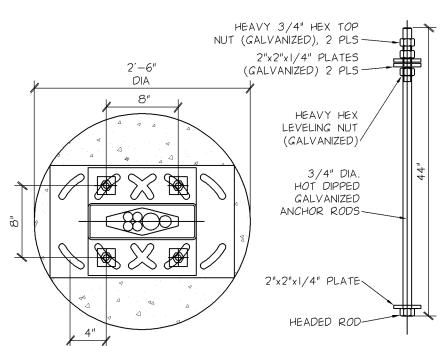
\( #3 TIES @ 12" O.C. \)

5". SUPPLIED BY

-USE CONCRETE WITH A 3000PSI MINIMUM COMPRESSIVE STRENGTH (f'c).

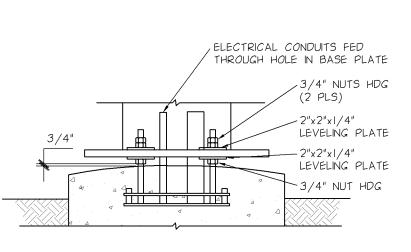
-PIER DEPTHS REQUIRED ARE MINIMUMS. ALL PIERS TO EXTEND TO PROST

-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

-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:

-AISC 14th EDITION -AWS DI.I -WIND SPEED 90 MPH (ULTIMATE WIND SPEED)
-EXPOSURE C -DESIGN LOADS DERIVED FROM THESE CODES AND FORCES -SHEAR

-MOMENT -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

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

-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 -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

SPECIFICATION, SECTION 3.II-E.

-STEEL PIPE SECTION: ASTM A53 OR A252 TYPE E GRADE B (Fy=35ksi) -HSS ROUND SECTION: ASTM A500 GRADE B (Fy=42ksi)
-HSS SQUARE/RECTANGULAR SECTIONS: ASTM A500 GRADE B (Fy=46ksi -HEADED ANCHOR RODS ASTM F1554 GR 55, AN ACCEPTABLE ALTERNATIVE IS ASTM F1554 GR 55, SI 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

-DO NOT PLACE POLES ON CONCRETE UNTIL CONCRETE HAS CURED PER MCDONALDS

-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 -ANY FIELD WELDING SHALL FIRST BE VERIFIED BY ENGINEER AND PERFORMED IN ACCORDANCE -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

ODMB AND PRE-BROWSE FOUNDATION - 90 MPH

-DESIGN CODES IBC 2009 ASCE 7-05 ACI 318-08 AISC 13TH EDITION

NOTE:

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 ÉXTEND 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

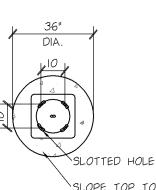
MAXIMUMS AT POLE BASE: AXIAL LOAD -- 960 LBS SHEAR FORCE -- 700 LBS SLOPE TOP TO OVERTURNING MOMENT -- 5500 LB-FT SHED WATER \ GRADE 3" MIN. COVER -(12) 5'-4" #6 VERTICALS SUPPLIED BY GENERAL CONTRACTOR >#3 TIES @ 12" O.C. W/(3) #3 TIES " TOP 5" SUPPLIED BY GENERAL CONTRACTOR

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



SHED WATER

HEAVY HEX TOP NUT (GALVANIZED) -GALVANIZED PLATE WASHERS SUPPLIED BY MANUFACTURER HEAVY HEX LEVELING NUT (GALVANIZED) 3/4" DIA., GRADE 55, HOT

DIPPED GALVANIZED ANCHOR

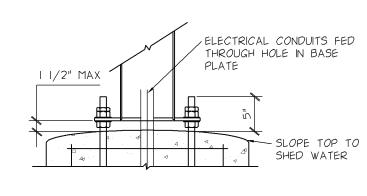
2"x2"x1/4" PLATE ~

1/2 HEIGHT LOCK NUT

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



CONNECTION DETAILS - NTS

GENERAL NOTES

-THE FOLLOWING CODES WERE USED IN DESIGN: -ASCE 7-05

-AISC 13th EDITION -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

-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. ILL PIERS TO EXTEND TO FROST DEPTH AS DETERMINED BY LOCAL -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 MODONALDS CAST-IN-PLACE
CONCRETE SPECIFICATIONS SECTIONS 3.2 & 3.5 PERFORMED BY GENERAL -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.II-E. STEEL:

-STEEL PIPE SECTION: ASTM A53 OR A252 TYPE E GRADE B (Fy = 35ksi)
-HSS ROUND SECTION: ASTM A500 GRADE B (Fy = 42ksi)
-HSS SQUARE/RECTANGULAR SECTIONS: ASTM A500 GRADE B (Fy = 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 DI.I.

-REFER TO SIGN MANUFACTURER DRAWINGS AND INSTRUCTIONS FOR ADDITIONAL -CONTRACTOR (INSTALLER) IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION IN REGARDS TO JOBSITE SAFETY.

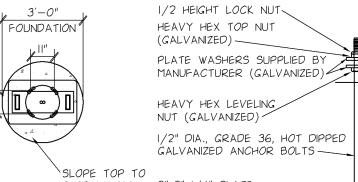
-DETAILS AND STRUCTURAL MEMBERS NOT SHOWN DESIGNED BY OTHERS. -ANY MODIFICATIONS ARE TO BE VERIFIED BY AN ENGINEER

**DOUBLE GATEWAY FOUNDATION - 100 MPH** 

NO SCALE

-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.

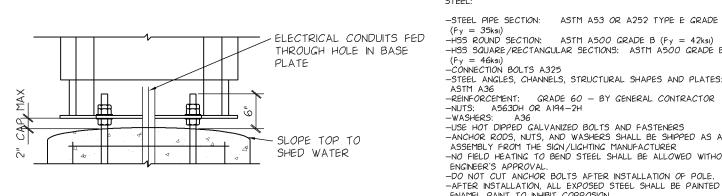


SHED WATER 2"x2"x1/4" PLATE \_\_\_\_

-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



CONNECTION DETAILS - NTS

GENERAL NOTES

-THE FOLLOWING CODES WERE USED IN DESIGN: -ASCE 7-05 -ACI 318-08

-WIND SPEED 100 MPH, 3 SEC GUST -DESIGN LOADS DERIVED FROM THESE CODES AND FORCES -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. -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 MAXIMUN 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 (1°) SHOULD CONFORM WITH MCDONALDS

CAST-IN-PLACE CONCRETE SPECIFICATIONS SECTION 2.13-A. 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-N-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 PIPE SECTION: ASTM A53 OR A252 TYPE E GRADE B (Fy = 35ksi) - ELECTRICAL CONDUITS FED -HSS ROUND SECTION: ASTM A500 GRADE B (Fy = 42ksi) -HSS SQUARE/RECTANGULAR SECTIONS: ASTM A500 GRADE B (Fy = 46ksi)'
-CONNECTION BOLTS A325
-STEEL ANGLES, CHANNELS, STRUCTURAL SHAPES AND PLATES:

> -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. PANY PIELD WELDING SHALL PIRST BE VERIPIED BY ENGINEER AND PERFORMED IN ACCORDANCE WITH AWS DI.I.

> -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.
> -FOUNDATIONS ARE DESIGNED FOR SINGLE OR DOUBLE POLE COLUMNS. -DETAILS AND STRUCTURAL MEMBERS NOT SHOWN DESIGNED BY OTHERS. -ANY MODIFICATIONS ARE TO BE VERIFIED BY AN ENGINEER.

ORDER HERE CANOPY - 100 MPH

UTHTOWN

CERTIFICATION

NO SCALE

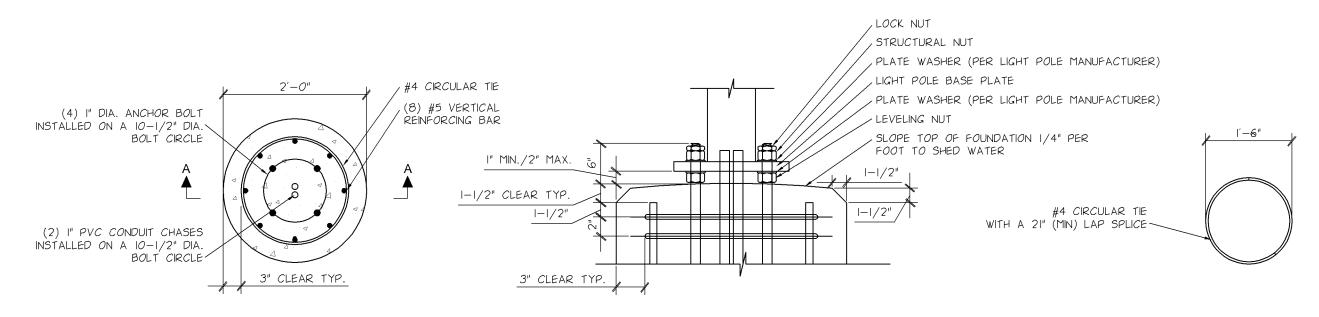
NO SCALE

FOUNDATION - NTS

3'-0"

를 FILE NAME: C203MCD208.DW PROJECT NO. MCD1226

C2.3



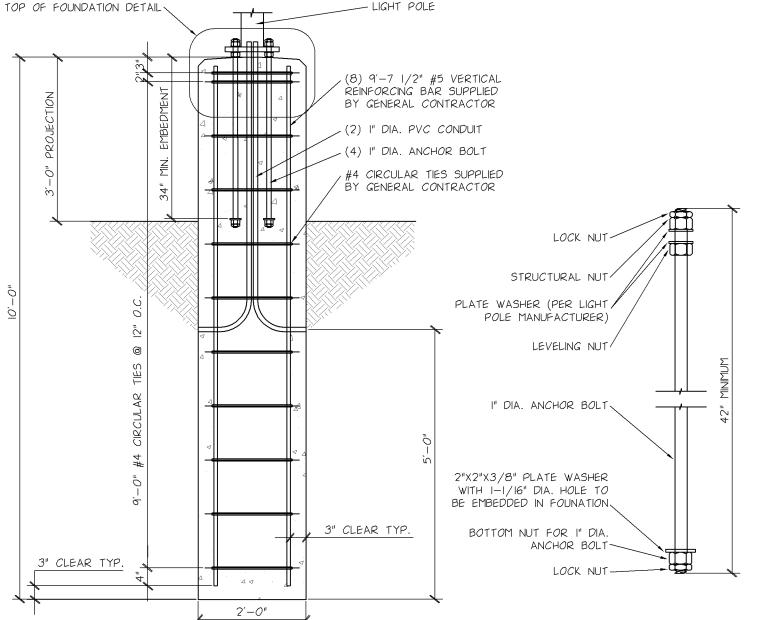
POLE BASE - PLAN VIEW - NTS

VIEW AA - NTS

SEE LIGHT POLE BASE ON

POLE BASE AT FOUNDATION - NTS

CIRCULAR TIE DETAIL - NTS



#### DESIGN CRITERIA:

AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, FIFTH EDITION, 2009 FOUNDATION DESIGN PARAMETERS:

- I. MAXIMUM LIGHT POLE BASE REACTIONS: BASE MOMENT = 16,845 lbs-ft BASE SHEAR = 978 lbs
- 2. MAXIMUM WIND SPEED (3 SECOND GUST) = 120MPH
- MINIMUM REQUIRED SOIL PARAMETERS: COHESIVE SOILS:
- SHEAR STRENGTH = 750 lbs/ft% - 6" MAXIMUM DEPTH OF DISTURBED SOIL OR TOP SOIL
- COHESIONLESS SOILS: - ANGLE OF INTERNAL FRICTION = 27 DEGREES

THE MAXIMUM DESIGN LOADS OR WIND SPEED HAVE BEEN EXCEEDED.

- 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.
- 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
- 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:

- CONCRETE COMPRESSIVE STRENGTH (f'c) SHALL BE A MINIMUM OF 3000psi ANCHOR BOLTS SHALL BE ASTM F1554 GRADE 55, HOT DIP GALVANIZED PER ASTM F2329 REINFORCING STEEL SHALL BE ASTM AGIS GRADE GO, SUPPLIED BY GENERAL CONTRACTOR NUTS SHALL BE HEAVY HEX ASTM A563 GRADE DH, HOT DIP GALVANIZED PER ASTM A153
- PLATE SHALL BE ASTM A572 GRADE 50, HOT DIP GALVANIZED PER ASTM A153 LOCK NUT SHALL BE HOT DIP GALVANIZED PER ASTM A153

#### **TYPICAL LIGHT POLE FOUNDATION DETAILS**

ANCHOR BOLT - NTS

NO SCALE

-DESIGN CODES

IBC 2009

ASCE 7-05

ACI 318-08

-EXPOSURE C

-AXIAL - 130#

-SHEAR - 215#

ELECTRICAL REQUIREMENTS.

SLOPE TOP TO

SHED WATER,

3" PIER PROJECTION

GRADE

-MOMENT - 600#

AWS DIJ

ACCUMULATE.

DEPTH (x2)

AISC 13th EDITION

-WIND SPEED (100 MPH 3-SEC GUST)

DEPTH AS DETERMINED BY LOCAL JURISDICTION.

(EMBEDMENT DEPTHS SHOWN ARE FROM GRADE).

-ALL REINFORCING STEEL BY GENERAL CONTRACTOR.

-DESIGN LOADS DERIVED FROM THESE CODES AND FORCES

-USE CONCRETE WITH A 3000PSI MINIMUM COMPRESSIVE STRENGTH (f'a).

-ELECTRICAL CONTRACTOR TO PROVIDE INFORMATION ON CONDUIT AND

-MINIMUM ALLOWABLE LATERAL SOIL BEARING PRESSURE 100 PSF/FT OF

-PROVIDE A MINIMUM OF 3" CONCRETE COVER FOR ALL EMBEDDED STEEL.

MAXIMUMS AT POLE BASE: AXIAL LOAD -- 180 LBS

SHEAR FORCE -- 270 LBS

OVERTURNING MOMENT -- 1010 LBS

3" MIN. COVER

#3 TIES @ 12" O.C. W/ (3)

#3 TIES @ TOP 5" SUPPLIED

BY GENERAL CONTRACTOR

-- (6) 3'-4" #6 VERTICALS SÚPPLIED BY GENERAL

CONTRACTOR

16" EMBEDMENT DEPTH

-TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT

-TOP 6" OF SOIL NEGLECTED IN EMBEDMENT DEPTH CALCULATIONS

24"

FOUNDATION - NTS

-PIER DEPTHS REQUIRED ARE MINIMUMS. ALL PIERS TO EXTEND TO FROST

-DESIGN CODES IBC 2009 ASCE 7-05 ACI 318-08 AISC 13th EDITION AWS DIJ

-WIND SPEED (100 MPH 3-SEC GUST) -EXPOSURE C

-DESIGN LOADS DERIVED FROM THESE CODES AND FORCES -SHEAR - 270#

-ALL REINFORCING STEEL BY GENERAL CONTRACTOR.

-MOMENT - 1010# -USE CONCRETE WITH "A 3000PSI MINIMUM COMPRESSIVE STRENGTH (F'c). -PIER DEPTHS REQUIRED ARE MINIMUMS. ALL PIERS TO EXTEND TO PROST 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.

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.

-MINIMUM ALLOWABLE LATERAL SOIL BEARING PRESSURE 100 PSF/FT OF

MAXIMUMS AT POLE BASE: AXIAL LOAD -- 180 LBS SLOPE TOP TO SHEAR FORCE -- 270 LBS SHED WATER, OVERTURNING MOMENT -- 1010 LBS 3" PIER PROJECTION 16" EMBEDMENT DEPTH LANDSCAPÉ GRADE 3" MIN. COVER (6) 3'-4" #6 VERTICALS SÚPPLIED BY GENERAL CONTRACTOR #3 TIES @ 12" O.C. W/ (3)

FOUNDATION - NTS

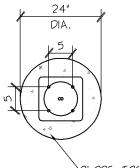
#3 TIES @ TOP 5" SUPPLIED

BY GENERAL CONTRACTOR

-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. 1/2 HEIGHT LOCK NUT HEAVY HEX TOP NUT

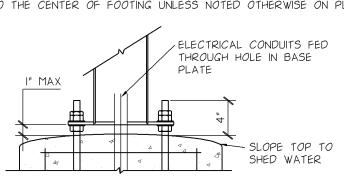


(GALVANIZED) -PLATE WASHERS SUPPLIED BY MANUFACTURER (GALVANIZED) HEAVY HEX LEVELING, NUT (GALVANIZED) / 1/2" DIA., GRADE 36, HOT DIPPED GALVANIZED ANCHOR BOLTS -

SHED WATER 2"x2"x1/4" PLATE

ANCHOR BOLT PATTERN - NTS

-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

-MOMENT - 1010#

-THE FOLLOWING CODES WERE USED IN DESIGN: -IBC 2009 -ASCE 7-05

-ACI 318-08 -AISC 13th EDITION -WIND SPEED (100 MPH 3-SEC GUST) -EXPOSURE C -DESIGN LOADS DERIVED FROM THESE CODES AND FORCES

-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

-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.

-ALL FOOTINGS SHALL BEAR ON FIRM UNDISTURBED RESIDUAL SOIL AND/OR ENCINEERED 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. 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 PIPE SECTION: ASTM A53 OR A252 TYPE E GRADE B (Fy =

-HSS ROUND SECTION: ASTM A500 GRADE B (Fy = 42ksi) -HSS SQUARE/RECTANGULAR SECTIONS: ASTM A500 GRADE B (Fy = 46KB)

-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 DI.I.

-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.

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

#### NO SCALE

-THE FOLLOWING CODES WERE USED IN DESIGN: -ASCE 7-05

ACTUAL SITE SOIL CONDITIONS.

-ACI 318-08 -AISC 13th EDITION -WIND SPEED (100 MPH 3-SEC GUST) -EXPOSURE C -DESIGN LOADS DERIVED FROM THESE CODES AND FORCES

-MOMENT - 600#' -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

(EMBEDMENT DEPTHS SHOWN ARE FROM GRADE). -ELECTRICAL CONTRACTOR TO PROVIDE INFORMATION ON CONDUIT AND ELECTRICAL REQUIREMENTS

-TOP 6" OF SOIL NEGLECTED IN EMBEDMENT DEPTH CALCULATIONS

-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 -ALL PIERS TO EXTEND TO PROST DEPTH AS DETERMINED BY LOCAL JURISDICTION. -TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT ACCUMULATE. -MINIMUM CONCRETE STRENGTH (I'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

-STEEL PIPE SECTION: ASTM A53 OR A252 TYPE E GRADE B (Fy = -HSS ROUND SECTION: ASTM A500 GRADE B (Fy = 42ks); -HSS SQUARE/RECTANGULAR SECTIONS: ASTM À500 GRADÉ B (Fy =

MCDONALDS CAST-IN-PLACE CONCRETE SPECIFICATION, SECTION 3.11-E.

-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 ANY FIELD WELDING SHALL FIRST BE VERIFIED BY ENGINEER AND PERFORMED IN ACCORDANCE WITH AWS DI.I.

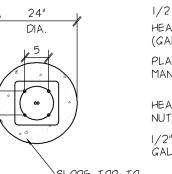
-REFER TO SIGN MANUFACTURER DRAWINGS AND INSTRUCTIONS FOR ADDITIONAL INFORMATION. ONSTRUCTION IN REGARDS TO JOBSITE SAFETY.

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

GENERAL 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.

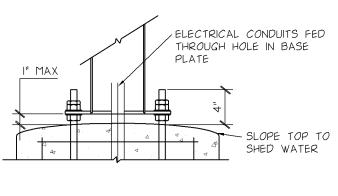


1/2 HEIGHT LOCK NUT HEAVY HEX TOP NUT PLATE WASHERS SUPPLIED BY MANUFACTURER (GALVANIZED) 1/2" DIA., GRADE 36, HOT DIPPED GALVANIZED ANCHOR BOLTS -

(GALVANIZED) ~ HEAVY HEX LEVELING NUT (GALVANIZED) SHED WATER 2"x2"x1/4" PLATE

ANCHOR BOLT PATTERN - NTS

-TOP OF PIERS SHALL BE SLOPED SUCH THAT MOISTURE CANNOT -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.



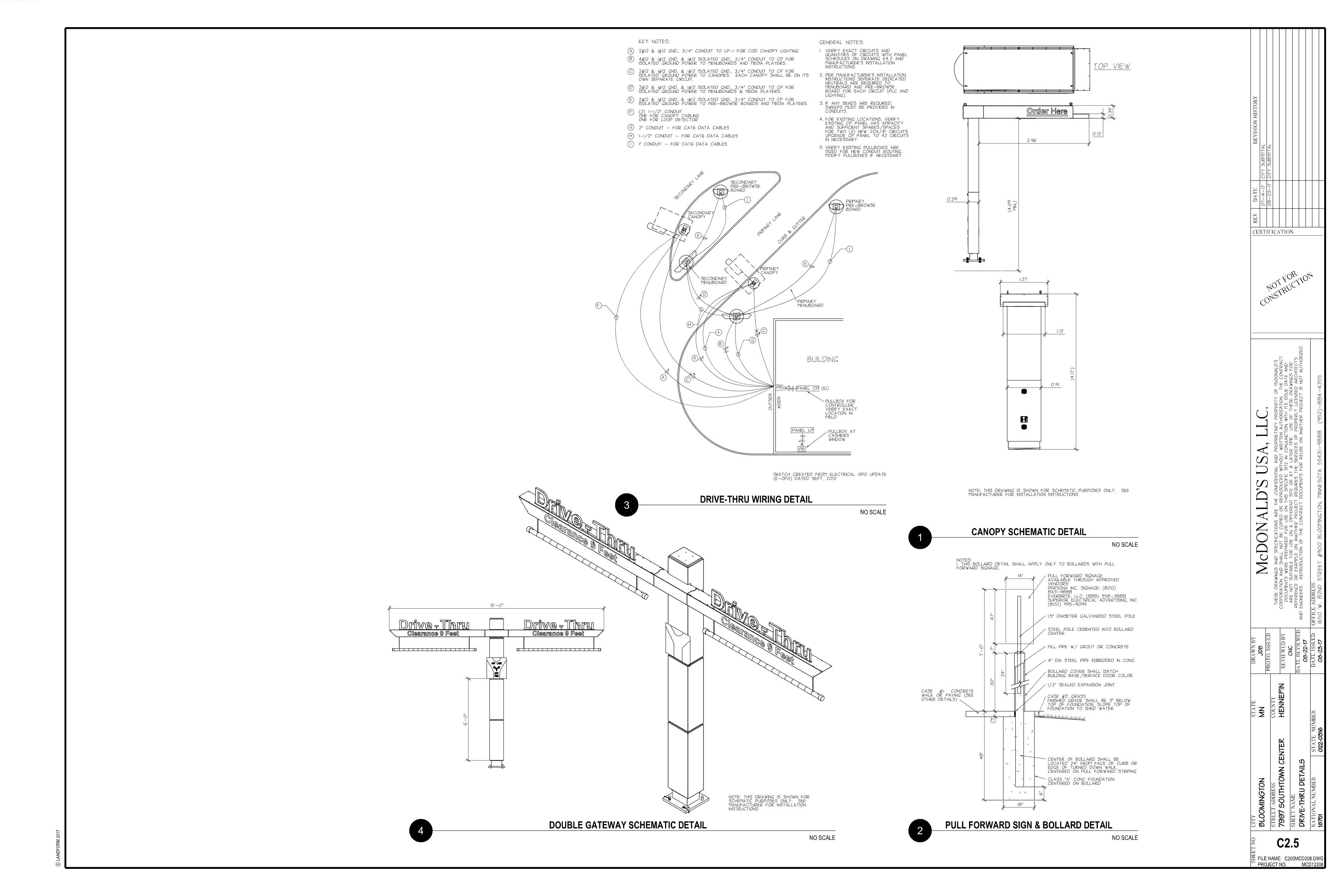
CONNECTION DETAILS - NTS

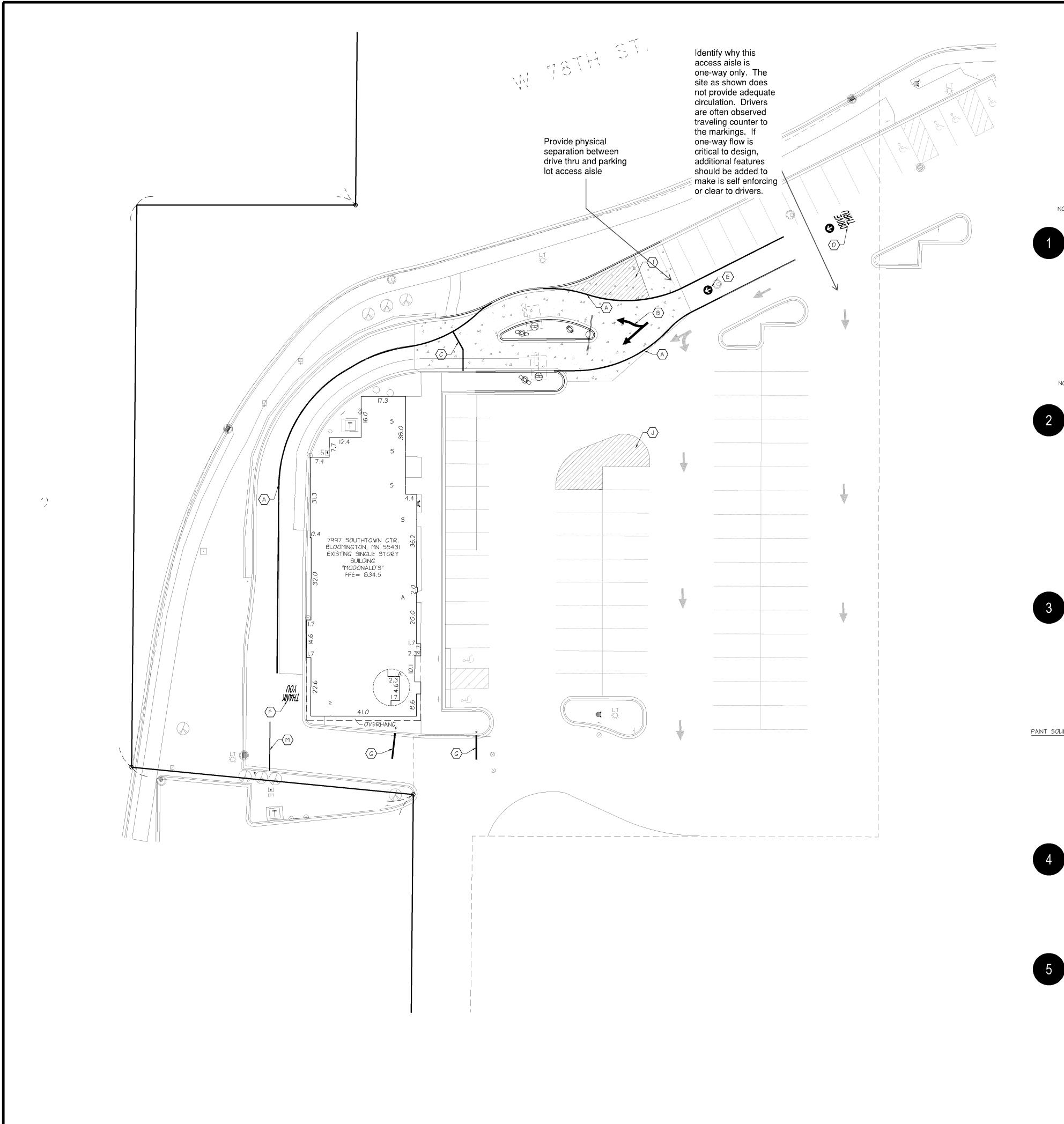
TYPICAL DIRECTIONAL SIGN WITHOUT ARCH FOUNDATION & CONNECTION DETAILS - 100 MPH RATING

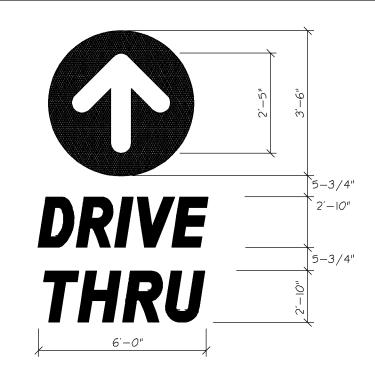
NO SCALE

CERTIFICATION

를 FILE NAME: C204MCD208.DW PROJECT NO. MCD122

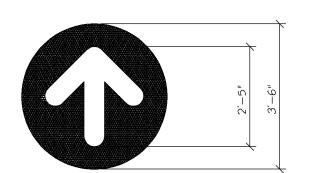






NOTE: ALL TEXT AND ARROW SHALL BE PAINTED YELLOW (PMS 123)

PAINTED 'DRIVE THRU' WITH ARROW NO SCALE



NOTE: ARROW SHALL BE PAINTED YELLOW (PMS 123)

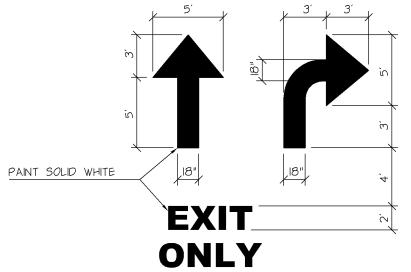
**PAINTED ARROW** 



NO SCALE

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

PAINTED 'THANK YOU' NO SCALE



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



NO = PARKING :

PAINTED 'NO PARKING' NO SCALE

NOTE: TEXT SHALL BE PAINTED WHITE



|         | •       | •        |        |   |  |
|---------|---------|----------|--------|---|--|
| •<br>L. | A       | Ν        | •<br>D | F |  |
| From    | Site to | o Finish |        |   |  |

STRIPING NOTES

B) I'-0" WIDE PAINTED DIRECTIONAL ARROW. PMS 123 YELLOW. SEE GENERAL NOTE 4.

(H) PAINTED SITE CIRCULATION ARROW. SEE DETAIL 4. SEE GENERAL NOTE 4. - NOT USED

 $\left( f J 
ight)$  striped area to be painted with 4" lines at 18" o.C., at 45 degrees to path of travel, white.

 $\langle C 
angle$  6" WIDE PAINTED MERGE POINT. PMS 123 YELLOW. SEE GENERAL NOTE 4.

 $\langle \mathsf{D} \rangle$  painted drive thru graphic. See detail 1. See General note 4.

(E) PAINTED DRIVE THRU GRAPHIC. SEE DETAIL 2. SEE GENERAL NOTE 4.

 $\langle F \rangle$  PAINTED DRIVE THRU GRAPHIC. SEE DETAIL 3. SEE GENERAL NOTE 4.

(1) 4" WIDE CUSTOMER PARKING STRIPING. WHITE. - NOT USED

(K) PAINTED HANDICAP SYMBOL, TYP. WHITE. - NOT USED

 $\langle G \rangle$  8" WIDE, 10' LONG PAINTED PULL FORWARD STRIPE. PMS 123 YELLOW.

 $\langle L \rangle$  2' x 6' PAINTED CROSSWALK STRIPING AT 4' O.C. WHITE. — NOT USED

N PAINTED GRAPHIC. SEE DETAIL 5. SEE GENERAL NOTE 4. - NOT USED

DISCREPANCIES PRIOR TO COMMENCING CONSTRUCTION.

2. SEE SHEET C2.1 FOR ALL RADIUS DIMENSIONS.

PAVEMENT STENCIL COMPANY

P.O. BOX 18034

3. SEE SHEET C2.2 FOR DRIVE-THRU CONSTRUCTION.

ROANOKE, VA. 24014 PH 800-250-5547 FAX 540-427-1326 PAVEMENTSTENCIL.NET

 $\stackrel{ ext{M}}{ ext{M}}$  4" WIDE RESERVED DRIVE—THRU PARKING STALL STRIPING. PMS 123 YELLOW.

**GENERAL NOTES** 

FIELD VERIFY AND CONFIRM EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCING CONSTRUCTION. NOTIFY MCDONALD'S PROJECT MANAGER OF ANY

4. ALL PAVEMENT STENCILS MUST BE PURCHASED FROM THE FOLLOWING AUTHORIZED PROVIDER.

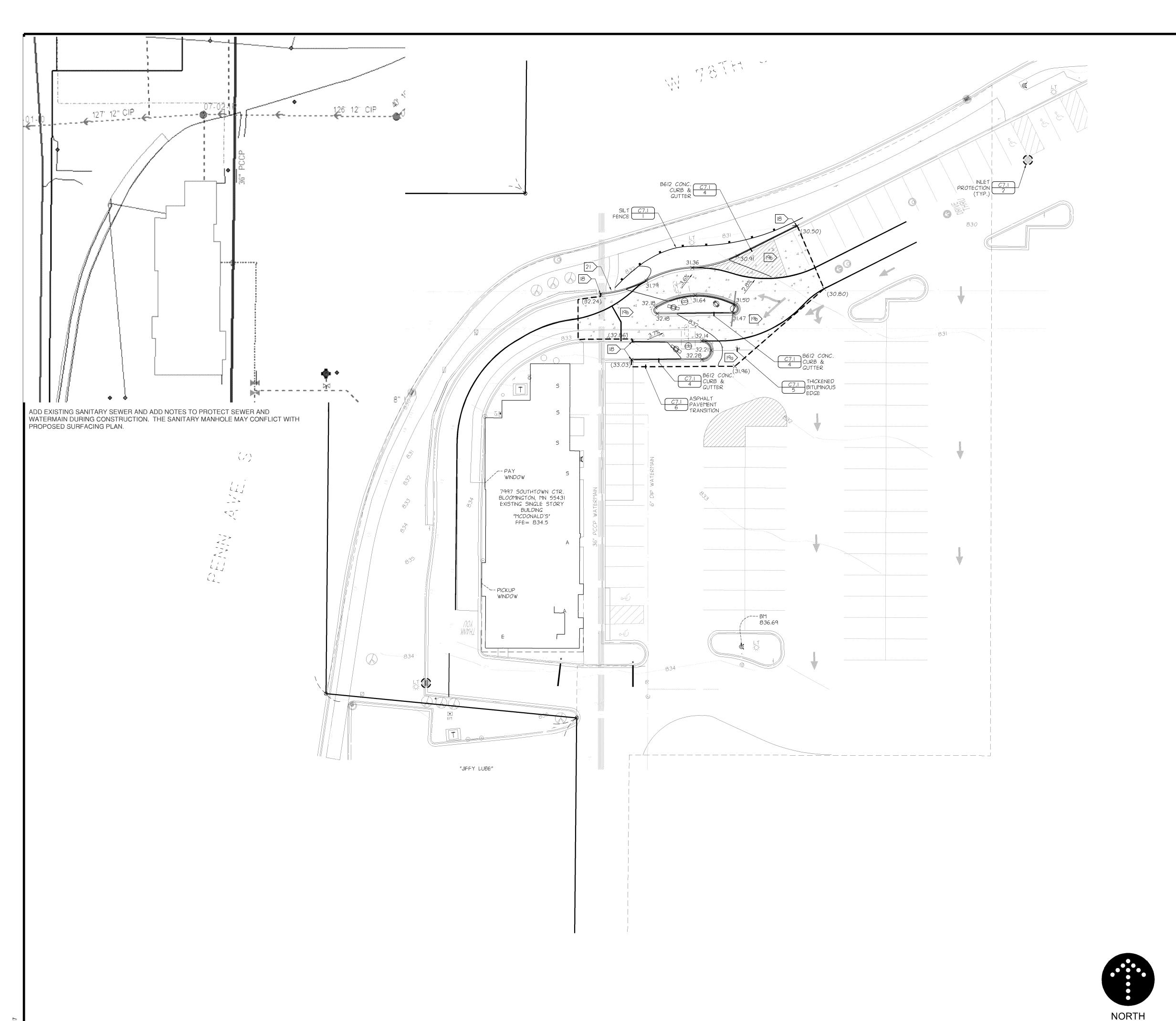
 $\langle A \rangle$  6" WIDE PAINTED STRIPE. PMS 123, YELLOW.

Fax: 612-252-9077 Minneapolis, MN 55401 Web: landform.net

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CERTIFICATION hereby certify that this plan, specification, or report was prepare by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws the State of Minnesota. cense Number 46224

**C2.6** ្តី FILE NAME: C206MCD208.DW PROJECT NO. MCD122



#### EROSION PREVENTION AND SEDIMENT CONTROL NOTES

- I. 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
- 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.

SPECIFICATION NUMBER MNDOT 3878 MND0T 3876

MN TYPE 22-III @ 30.5 LB/AC - TEMPORARY EROSION CONTROL MN TYPE 25-151 @ 120 LB/AC - PERMANENT TURF MND*0*T 3882 (MNDOT TYPE I @ 2 TON/AC, DISC ANCHORED) FERTILIZER MND0T 3881 GENERAL PLACEMENT MND0T 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.
- II. REFER TO STRUCTURAL SPECIFICATIONS FOR EARTHWORK REQUIREMENTS FOR BUILDING
- 12. AN INDEPENDENT TESTING FIRM SHALL VERIFY THE REMOVAL OF ORGANIC AND UNSUITABLE SOILS, SOIL CORRECTION, AND COMPACTION AND PROVIDE PERIODIC REPORTS
- 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.

19 PAVING SECTIONS

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

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.

COMPACTED SUBSOIL

|                 | LEGEND            |                    |  |
|-----------------|-------------------|--------------------|--|
| SYMB <i>O</i> L | DESCRIPTION       | ESTIMATED QUANTITY |  |
| $\bigcirc$      | :INLET PROTECTION | 2 EACH             |  |
|                 | :SILT FENCE       | 90 FEET            |  |
|                 | :TIP OUT CURB     |                    |  |
|                 | :PAVEMENT SAWCUT  |                    |  |







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C3.1

CERTIFICATION

the State of Minnesota.

cense Number <u>46224</u>

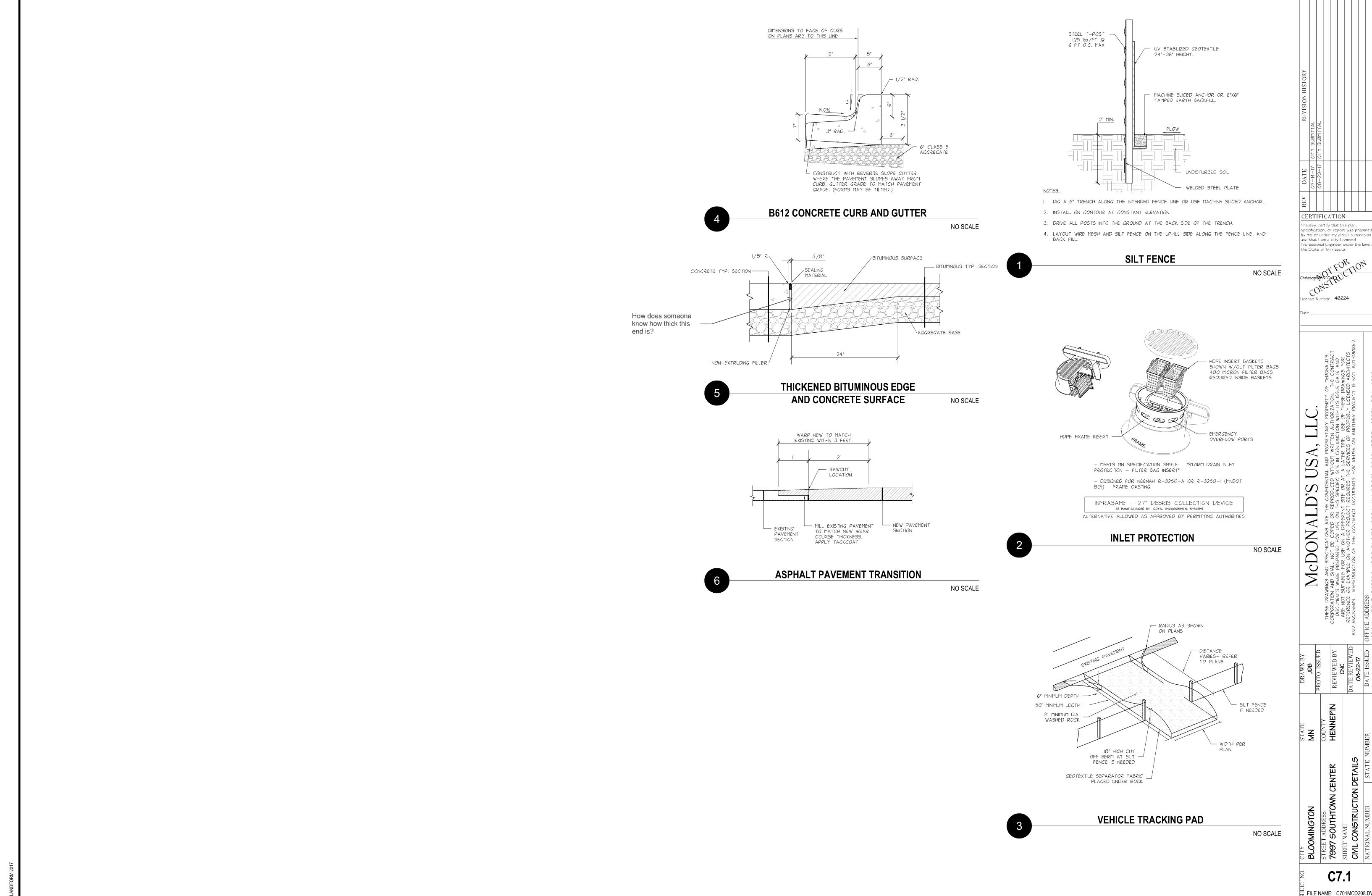
ereby certify that this plan, pecification, or report was prepare

nd that I am a duly Licensed

y me or under my direct supervision

rofessional Engineer under the laws (

FILE NAME: C301MCD208.DW PROJECT NO. MCD1220



FILE NAME: C701MCD208.DWG PROJECT NO. MCD12208