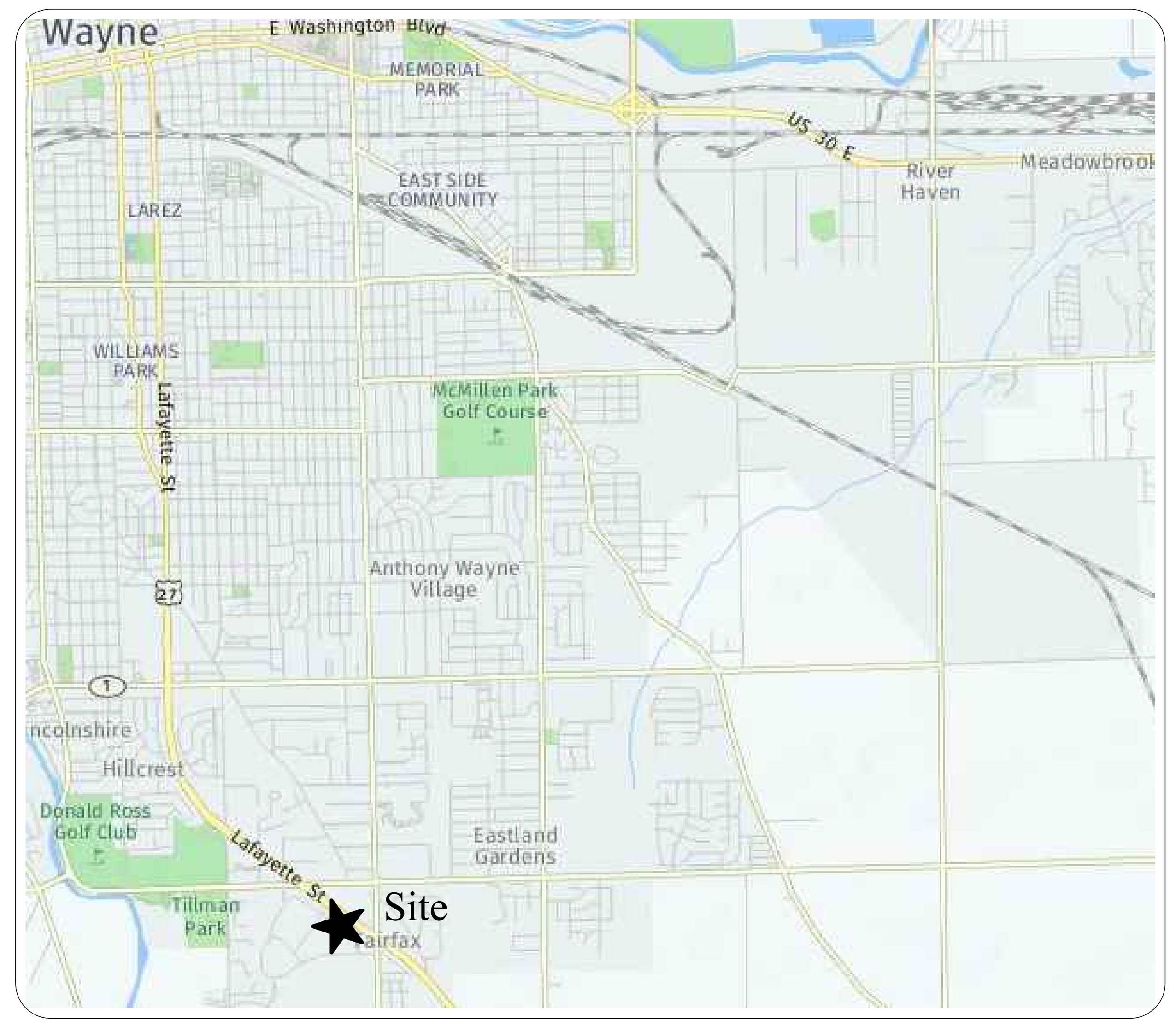
Taco Bell - Southtown Centre
Secondary Development Plans

7719 Southtown Xing
Fort Wayne, IN 46816

Contact Information

Storm Water -	Allen County Surveyor's Office 200 East Berry Street, Suite 350 Fort Wayne, IN 46802 Phone: (260) 449-7627
Sanitary Sewer -	City of Fort Wayne Development Services 200 East Berry Street, Suite 250 Fort Wayne, IN 46802 Phone: (260) 427-5064
Water -	City Of Fort Wayne Development Services 200 East Berry Street, Suite 250 Fort Wayne, IN 46802 Phone: (260) 427-5064
Gas -	(NIPSCO) Northern Indiana Public Service Company Phone: (800) 464-7726
Telephone -	Frontier Communications Phone: (877) 462-8188
Cable Television -	Comcast Phone: (260) 456-9000
Electric -	American Electric Power P.O. Box 60 2101 Spy Run Avenue, Building 3 Fort Wayne, IN 46801 Phone: (260) 421-1769



Location Map
Not to Scale
City of Fort Wayne, Allen County, Indiana

Sheet Index

Taco Bell - Southtown Centre
Secondary Development Plans
Fort Wayne, Indiana

Revisions

Date	Description	Revised Sheets
7/8/2019	Comments Per City of Fort Wayne Addressed	All Sheets

Issued For Construction - August 21, 2019

Planning Jurisdiction
Department of Planning Services
Citizen's Square, Suite 150
200 East Berry Street
Fort Wayne, IN 46802
Phone: (260) 449-7606

Surveyor / Engineer

Miller Land Surveying, Inc.
www.mlswebsite.us
Precision and Professionalism is where we draw the line.

MLS Engineering
Engineering Your Tomorrow...Today

Corporate Office
221 Tower Drive
Monroe, IN 46772
Phone: (260) 692-6166

Brett R. Miller, PS No.LS20300059
Robert J. Marucci, PS No.LS20400028
Derek J. Simon, PE No.PE11500716

Fort Wayne Office
10060 Bent Creek Boulevard
Fort Wayne, IN 46825
Phone: (260) 489-8571

Derek J. Simon Registered No. PE11500716 State of Indiana Professional Engineer
Derek J. Simon, PE

Prepared For:
Richard Krumholz
Delight Restaurant Group
(617) 233-7114

Indiana 811
Know what's below. 811 before you dig.

Surveyor's Report

The purpose of this survey was to create an original survey of a 0.801 acre tract as requested by owner from an existing tract as described in Document Number 205018101 in the Office of the Recorder of Allen County, Indiana.

In accordance with Title 865, Article 1, Rule 12, Section 1 through 30 of the Indiana Administrative Code, the below theory of location was based up the following opinions and observations a result of uncertainties in lines and corners because of the following:

A) AVAILABILITY AND CONDITION OF REFERENCE MONUMENTS
The monuments found are shown on the survey and listed on the survey under monument legend.

No existing monuments of the Public Land Survey corners were found or held as controlling corners. Monuments "A" and "D" were held as the basis of this surveying. The corners of the subject tract are marked and labeled as shown on the survey drawing. Uncertainties based on existing monuments are not readily determinable due to the use of said local corners. The following Public Land Survey corners were looked for but not found:

- Northwest corner Northeast Quarter: Section 36, T30N,R12E: No Monument Found (No County Record)
  The Northwest corner of the subject tract was not found. The location of this monument was determined from record deed distance and bearings found in the description of Document Number 205018101.

1) The Southwestern right-of-way of US Highways 27 & 33 was established by Monuments "A", "L" and "K". Concrete right-of-way markers were also located to verify the position.
2) The Northeastern right-of-way of Southwood Crossing was established by Monuments "D" and "H".

B) OCCUPATION OR POSSESSION LINES
There were no uncertainties based on visual inspection of occupation or possession lines.

C) CLARITY OR AMBIGUITY OF DESCRIPTIONS
There were no ambiguities found within the descriptions used for the survey. Documents used include:
1) Document Number 205018101
2) Document Number 2014008721
3) US Highways 27 & 33 Plans

D) RELATIVE POSITIONAL ACCURACY OF THE MEASUREMENTS
Based on the use of the property (commercial property, industrial property, condominiums, townhouses, apartments, multiunit developments-- single family residential subdivision lots--real estate lying in rural areas) the acceptable relative positional accuracy is urban survey 0.07 feet (21 millimeters) plus 50 ppm..

THEORY OF LOCATION:
The Northerly (225.01 feet) line of subject tract was established per Monuments "A" and "D". These monuments are called for in the adjoiner in Document Number 2014008721 and is the basis of bearings for the newly created tract.

The Easterly (155.00 feet) and Westerly (155.00 feet) lines of the subject tract were established per owner's request. The remaining **Southerly (225.01 feet) line** of the subject tract was established by the ends of both said Easterly and Westerly lines.

This survey is valid only with original signature and seal, full payment of invoice, and complete with all pages of survey. The information shown on the survey documents is intended for this transaction only as dated on said survey documents. Any reuse without written verification and adaptation by the land surveyor for the specific purpose intended will be at the users' sole risk and without liability or legal exposure to the land surveyor.

Since the last date of field work of this survey, conditions beyond the knowledge or control of Miller Land Surveying, Inc. may have altered the validity and circumstances shown or noted hereon.

I affirm, under the penalties for perjury, that I have taken reasonable care to redact each Social Security number in this document, unless required by law, Brett R. Miller.

Flood Plain Certification

This property is within Zone "X" (areas determined to be outside the 0.2% annual chance floodplain) as defined by the FIRM (Flood Insurance Rate Map) for the City of Fort Wayne, Indiana, Community No.180003, Panel No.0315G, dated August 3, 2009.

Notes

Location and sizes of underground utilities are shown from best available record drawings and/or field markings. Utility lines shown hereon are approximate in location and intended for reference only. Call Indiana Underground Plant Protection Services (IUPPS) at 1-800-382-5544 for field marked location of utilities prior to any excavation.

- Indiana Underground Plant Protection Services (IUPPS) Locate Number For This Project: 1903260777 & 1903260894.

Elevations are based upon a INCORS (Indiana Continuously Operating Reference Station Network) Indiana East. Datum = North American Vertical Datum (NAVD88).

Control Table

Point #	Northing	Easting	Elevation	Description
501	2100803.765	479880.218	782.063'	CP - 5/8"Steel Rebar w/"Miller" Control Cap id.
502	2100976.767	480119.254	787.232'	CP - 5/8"Steel Rebar w/"Miller" Control Cap id.
503	2100705.259	480079.567	782.664'	CP - Mag Nail
7777	2100935.484	479908.526	784.544'	TBM - Chiseled Square on NE Corner Transformer Pad

The Above Elevations are Based on North American Vertical Datum (NAVD88)

Title Description

Part of the Northeast Quarter of Section 30, Township 36 North, Range 12 East of the Second Principal Meridian, Wayne Township in Allen County, Indiana, based on an original survey by Brett R, Miller, Indiana Professional Surveyor Number 20300059 of Miller Land Surveying, Inc., Survey No. 19035028, dated April 1, 2019, and being more particularly described as follows:

Commencing at the Northwest corner of said Northeast Quarter; thence North 88 degrees 41 minutes 52 seconds East (Indiana State Plane Coordinate System, 1983 bearing), a distance of 413.00 feet along the North line of said Northeast Quarter and within the right-of-way of Tillman Road; thence South 01 degrees 18 minutes 08 seconds East, a distance of 25.00 feet to the Southwestern right-of-way line of U.S. Highways 27 & 33; thence South 86 degrees 28 minutes 08 seconds East, a distance of 178.20 feet along said right-of-way line; thence South 55 degrees 21 minutes 08 seconds East, a distance of 1173.36 feet along said Southwestern right-of-way line to a 5/8" steel rebar with a "US SURVEYOR 0002" identification cap found on the east line of an existing 1.01 acre tract of land as described in Document Number 2014008721 in the Office of the Recorder in Allen County, Indiana and being the POINT OF BEGINNING of the herein described tract; thence continuing South 55 degrees 21 minutes 08 seconds East, a distance of 155.00 feet along said Southwestern right-of-way line to a 5/8" steel rebar with a "Miller Firm #0095" identification cap set; thence South 34 degrees 02 minutes 38 seconds West, a distance of 225.01 feet to a 5/8" steel rebar with a "Miller Firm #0095" identification cap set on the Northeastern right-of-way line of Southtown Crossing; thence North 55 degrees 21 minutes 08 seconds West, a distance of 155.00 feet along said Southtown Crossing right-of-way to a 5/8" steel rebar with a "US SURVEYOR 0002" identification cap found on the east line of said 1.01 acre tract; thence North 34 degrees 02 minutes 38 seconds East (basis of bearings), a distance of 225.01 feet along said East line to the Point of Beginning. Containing 0.801 Acres, more or less. Subject to easements of record.

Title Commitment - Sch. B - #101900014

Item #1–9 – Not Survey Item
Item #10 – Easement for gas pipe line to Michigan Gas Transmission Corporation recorded December 4, 1936 in Miscellaneous Record 97, page 139, and modified by Partial Release recorded July 1, 1982 as Document Number 82–10781, and modified by Partial Release recorded July 10, 1989 as Document Number 89–25607, and modified by Partial Release recorded May 19, 2005 as Document Number 205030871. (Does Not Affect)
Item #11 – Easement for gas pipe line to Panhandle Eastern Pipe Line Company by Right–of–Way Grant recorded December 11, 1961 in Deed Record 596, pages 164–165, and modified by Partial Release recorded May 19, 2005 as Document Number 205030870. (Does Not Affect)
Item #12 – Easement for gas pipe line to Panhandle Eastern Pipe Line Company by Right–of–Way Grant recorded December 11, 1961 in Deed Record 596, pages 166–167, and modified by Partial Relese recorded May 19, 2005 as Document Number 205030869. (Does Not Affect)
Item #13 – Easement for gas pipe line to Panhandle Eastern Pipe Line Company by Right–of–Way Grant recorded December 11, 1961 in Deed Record 596, pages 168–169, and modified by Partial Release recorded May 19, 2005 as Document Number 205030868. (Does Not Affect)
Item #14 – Easement for gas lines to Northern Indiana Public Service Company recorded July 1, 1982 as Document Number 82–10782. (Does Not Affect)
Item #15 – Easement for gas lines to Northern Indiana Public Service Company recorded April 30, 1985 as Document Number 85–10234, and modified by Partial Release recorded February 16, 2005 as Document Number 205009687, and modified by Partial Release recorded January 30, 2006 as Document Number 206004684. (Does Not Affect)
Item #16 – Easement for gas lines to Northern Indiana Public Service Company recorded October 9, 1991 as Document Number 91–43029. (Does Not Affect)
Item #17 – Utility Easement to Indiana & Michigan Electric Company recorded February 5, 1968 in Deed Record 701, page 503, and modified by Partial Release recorded October 27, 1981 as Document Number 81–21753. (Does Not Affect)
Item #18 – Utility Easement to Indiana & Michigan Electric Company recorded February 7, 1968 in Deed Record 701, page 583, and modified by Partial Release recorded October 27, 1981 as Document Number 81–21754. (Does Not Affect)
Item #19 – Utility Easement to Indiana & Michigan Electric Company and General Telephone Company of Indiana, Inc. recorded August 30, 1968 in Deed Record 712, page 316. (Does Not Affect)
Item #20 – Utility Easement to Indiana & Michigan Electric Company recorded September 29, 1969 in Deed Record 733, pages 110–115, and modified by Partial Release recorded December 17, 1969 in Deed Record 736, page 437, and modified by Modification Of Easement Agreement recorded June 16, 1981 as Document Number 81–11894, and modified by Partial Release recorded October 27, 1981 as Document Number 81–21755, and modified by Partial Release recorded January 21, 2005 as Document Number 205003996. (Does Not Affect)
Item #21 – Utility Easement to Indiana & Michigan Electric Company recorded August 6, 1981 as Document Number 81–16116, and modified by Partial Release recorded January 21, 2005 as Document Number 205003997. (Does Not Affect)
Item #22 – Utility Easement to Indiana & Michigan Electric Company recorded August 19, 1981 as Document Number 81–17109. (Does Not Affect)

Title Commitment - Sch. B Continued

Item #23 – Utility Easement to General Telephone Company of Indiana, Inc. recorded October 7, 1981 as Document Number 81–20331, and modified by First Amendment To Easement Agreement recorded November 19, 1987 as Document Number 87–57868, and modified by Partial Release recorded August 10, 2006 as Document Number 206048295. (Does Not Affect)
Item #24 – Terms and Provisions of Easement Agreement between Merak Corp., an Indiana corporation, and Southtown Mall Development Company, an Indiana partnership, recorded April 11, 1979 as Document Number 79–9092, and modified by Amendment To Easement Agreement recorded May 15, 1987 as Document Number 87–24945; Assignment And Assumption Of Agreements recorded October 8, 2003 as Document Number 203105572. (Does Not Affect)
Item #25 – Terms and Provisions of Grant Of Easement between Southtown Mall Development Company, an Indiana partnership, and Sears, Roebuck and Co., a New York Corporation, Edward Rose of Indiana, an Indiana limited partnership, and Merak Partners, an Indiana partnership, recorded May 15, 1987 as Document Number 8724943, and modified by Supplement To Grant Of Easement recorded May 15, 1987 as Document Number 87–24944. (Does Not Affect)
Item #26 – Terms and Provisions of Utility Easement Agreement between Southtown Mall Development Company, an Indiana Partnership, and Sandlian Investment, an Indiana general partnership, recorded October 28, 1992 as Document Number 92–60334. (Does Not Affect)
Item #27 – Sewer Easement to the City of Fort Wayne recorded February 11, 1970 as Document Number 70–2256. (Does Not Affect)
Item #28 – Sewer Easement (including pumping station) to the City of Fort Wayne recorded December 18, 1970 as Document Number 70–20700, and modified by Partial Release recorded August 25, 2005 as Document Number 205055062, and modified by Partial Release recorded November 16, 2005 as Document Number 205075569. (Does Not Affect)
Item #29 – Sewer Easement as condemned by Sewer Easement Resolution No. 163–78, and modified by Partial Release recorded August 25, 2005 as Document Number 205055062. (Does Not Affect)
Item #30 – Sewer Easement to the City of Fort Wayne recorded July 7, 1982 as Document Number 82–11031, and modified by Partial Release recorded August 25, 2005 as Document Number 205055062, and modified by Partial Release recorded November 16, 2005 as Document Number 205075569. (Depicted on Survey)
Item #31 – Terms and Provisions of Water Contract between Southtown Mall, Inc. and the City of Fort Wayne recorded June 13, 1967 in Miscellaneous Record 306, pages 450–454. (Does Not Affect)
Item #32 – Terms and Provisions of Agreement for Sewer Extension between Fort Wayne Community Schools Building Corporation and the City of Fort Wayne recorded April 20, 1971 as Document Number 71–5984. (Does Not Affect)
Item #33 – Terms and Provisions of Storm Drainage Easement between General Telephone Company of Indiana, Inc., an Indiana corporation, and Sam W. Fletcher, William Moser and Floyd B. Kelsey, Jr. recorded July 15, 1976 as Document Number 76–16894. (Does Not Affect)
Item #34 – Confirmatory Resolution #2002–65 For The Tillman Anthony Redevelopment Area recorded January 3, 2003 as Document Number 203000689.
Item #35 – Terms and Provisions of Resolution No. 77–58–26 recorded March 5, 1987 as Document Number 87–10781. (Does Not Affect)
Item #36 – Utility Easement to Indiana Michigan Power Company recorded November 30, 2004 as Document Number 204085621. (Does Not Affect)

Title Commitment - Sch. B Continued

Item #37 – Terms and Provisions of Street Dedication Deed recorded March 21, 2005 as Document Number 205016501. (Depicted On Access Detail)
Item #38 – Terms and Provisions of Sewer Contract No. 2005–S–12 recorded June 14, 2005 as Document Number 205036209. (Does Not Affect)
Item #39 – Terms and Provisions of Grant Of Drainage Easement And Agreement To Maintain recorded June 15, 2005 as Document Number 205036700, First Amendment recorded September 29, 2005 as Document Number 205063995. (Does Not Affect)
Item #40 – Terms and Provisions of Reciprocal Easement And Operating Agreement recorded July 6, 2005 as Document Number 205041114, First Amendment recorded October 31, 2005 as Document Number 205071309. (Does Not Affect)
Item #41 – Utility Easement to Indiana Michigan Power Company recorded July 18, 2005 as Document Number 205044279, re–recorded September 28, 2005 as Document Number 205063533. (Depicted on Survey)
Item #42 – Any limitation on access to and from the land across the access right of way line of U.S. Highway #27, abutting the insured real estate, recorded October 13, 2005 as Document Number 205067429. (Does Not Affect)
Item #43 – Terms and Provisions of Quitclaim Deed Regarding Access Location dated October 11, 2005 and recorded October 13, 2005 as Document Number 205067430.
Item #44 – Perpetual Highway Easement to the State of Indiana recorded October 17, 2005 as Instrument Number 205067809. (Does Not Affect)
Item #45 – Terms and Provisions of Easements With Covenants And Restrictions Affecting Land ("ECR") dated October 27, 2005 and recorded October 31, 2005 as Instrument Number 205071310. (Does Not Affect)
Item #46 – Terms and Provisions of Consent To Modification Of Easements With Covenants And Restrictions dated November 6, 2006 and recorded November 15, 2006 as Instrument Number 206070025. (Does Not Affect)
Item #47 – Terms and Provisions of Limited Access Fence Removal Covenant recorded January 17, 2006 as Document Number 206001789. (Subject To)
Item #48 – Reservations, restrictions, covenants, limitations, easements, and/or conditions, as established in instruments filed for record July 26, 2006, as Document Number 206044900. (Does Not Affect)
Item #49 – Driveway Easement to the City of Fort Wayne, Indiana, Department of Redevelopment recorded July 26, 2006 as Document Number 206044901.
Item #50 – Stormwater Drainage Easement Agreement between the City of Fort Wayne Department of Redevelopment and the City of Fort Wayne Board of Stormwater Management, recorded December 7, 2012 as Document Number 2012069917. (Depicted on Survey)
Item #51 – Sanitary Sewer Easement Agreement by and between City of Fort Wayne Department of Redevelopment and the City of Fort Wayne Board of Public Works, recorded December 7, 2012 as Document Number 2012069919. (Depicted on Survey)
Item #52 – Terms and provisions Consent to Modification of Reciprocal Easement and Operating Agreement by Menard, Inc., a Wisconsin Corporation, Southtown Centre LLC, an Indiana limited liability company, and City of Fort Wayne, Indiana, Department of Redevelopment, by the Fort Wayne Redevelopment Commission, recorded May 2, 2013 as Document No. 2013024643. (Does Not Affect)
Item #53 – Not Survey Item

ALTA/NSPS Land Title Survey Certification

To:
TB Southtown LLC, a Delaware limited liability company
City of Fort Wayne, Department of Redevelopment
Southtown Centre LLC, an Indiana limited liability company
Fidelity National Title Insurance Company, LLC

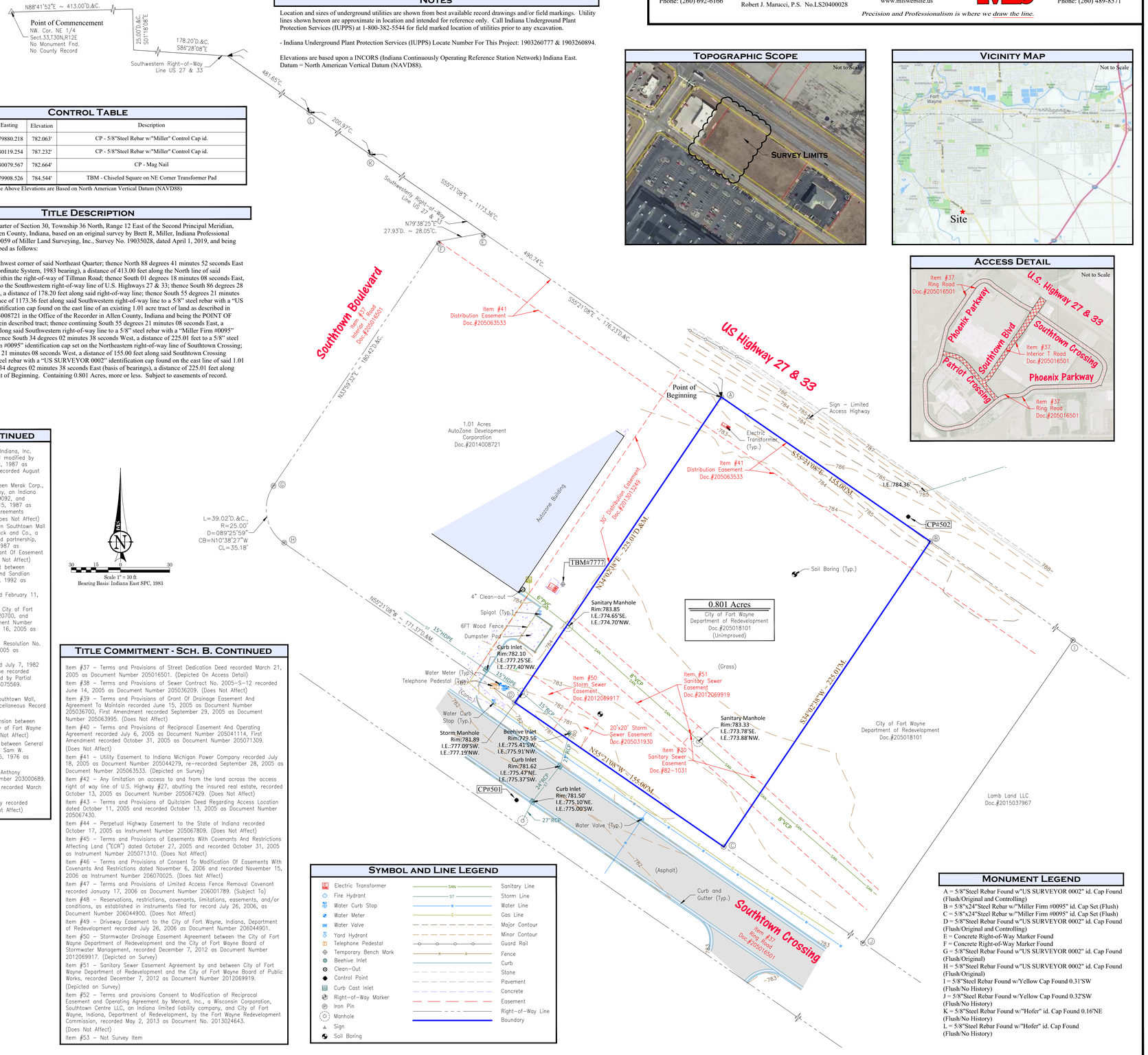
File No: 101900014
Effective Date: April 3, 2019 @ 8:00 am

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 7A, 8, 11, 13 and 20 of Table A thereof. The fieldwork was completed on April 11, 2019.

Date: April 18th, 2019

Brett R. Miller, PLS Registration No. 20300059

BRETT R. MILLER REGISTERED No.LS20300059 STATE OF INDIANA LAND SURVEYOR



Topographic Scope

Vicinity Map

Access Detail

Symbol and Line Legend

- Electric Transformer
- Fire Hydrant
- Water Curb Stop
- Water Meter
- Water Valve
- Yard Hydrant
- Telephone Pedestal
- Temporary Bench Mark
- Beehive Inlet
- Clean-Out
- Control Point
- Curb Cast Inlet
- Right–of–Way Marker
- Iron Pin
- Manhole
- Sign
- Soil Boring
- Sanitary Line
- Storm Line
- Water Line
- Gas Line
- Major Contour
- Minor Contour
- Guard Rail
- Fence
- Curb
- Stone
- Pavement
- Concrete
- Easement
- Right–of–Way Line
- Boundary

Monument Legend

A = 5/8"Steel Rebar Found w/"US SURVEYOR 0002" id. Cap Found (Flush/Original and Controlling)
B = 5/8"x24"Steel Rebar w/"Miller Firm #0095" id. Cap Set (Flush)
C = 5/8"x24"Steel Rebar w/"Miller Firm #0095" id. Cap Set (Flush)
D = 5/8"Steel Rebar Found w/"US SURVEYOR 0002" id. Cap Found (Flush/Original and Controlling)
E = Concrete Right-of-Way Marker Found
F = Concrete Right-of-Way Marker Found
G = 5/8"Steel Rebar Found w/"US SURVEYOR 0002" id. Cap Found (Flush/Original)
H = 5/8"Steel Rebar Found w/"US SURVEYOR 0002" id. Cap Found (Flush/Original)
I = 5/8"Steel Rebar Found w/Yellow Cap Found 0.31'SW (Flush/No History)
J = 5/8"Steel Rebar Found w/Yellow Cap Found 0.32'SW (Flush/No History)
K = 5/8"Steel Rebar Found w/"Hofer" id. Cap Found 0.16'NE (Flush/No History)
L = 5/8"Steel Rebar Found w/"Hofer" id. Cap Found (Flush/No History)

SURVEY COMPLETED BY:

Corporate Office
221 Tower Drive
Monroe, IN 46772
Phone: (260) 692-6166

Miller Land Surveying, Inc.
Brett R. Miller, P.S. No.LS20300059
Robert J. Marucci, P.S. No.LS20400028
www.mlswebsite.us
MLS
Precision and Professionalism is where we draw the line.

Fort Wayne Office
10060 Bent Creek Blvd.
Fort Wayne, IN 46825
Phone: (260) 489-8571

BRETT R. MILLER REGISTERED No.LS20300059 STATE OF INDIANA LAND SURVEYOR

Brett R. Miller P.S.

MLSEngineering
Engineering Your Tomorrow... Today
Monroe Office
221 Tower Drive
Monroe, IN 46772
Phone: (260) 692-6166
www.mlswebsite.us
Brett R. Miller, P.S. No.LS20300059
Derek J. Simon, P.E. No.PE11500716
Fort Wayne Office
10060 Bent Creek Blvd
Fort Wayne, IN 46825
Phone: (260) 489-8571

PREPARED FOR:

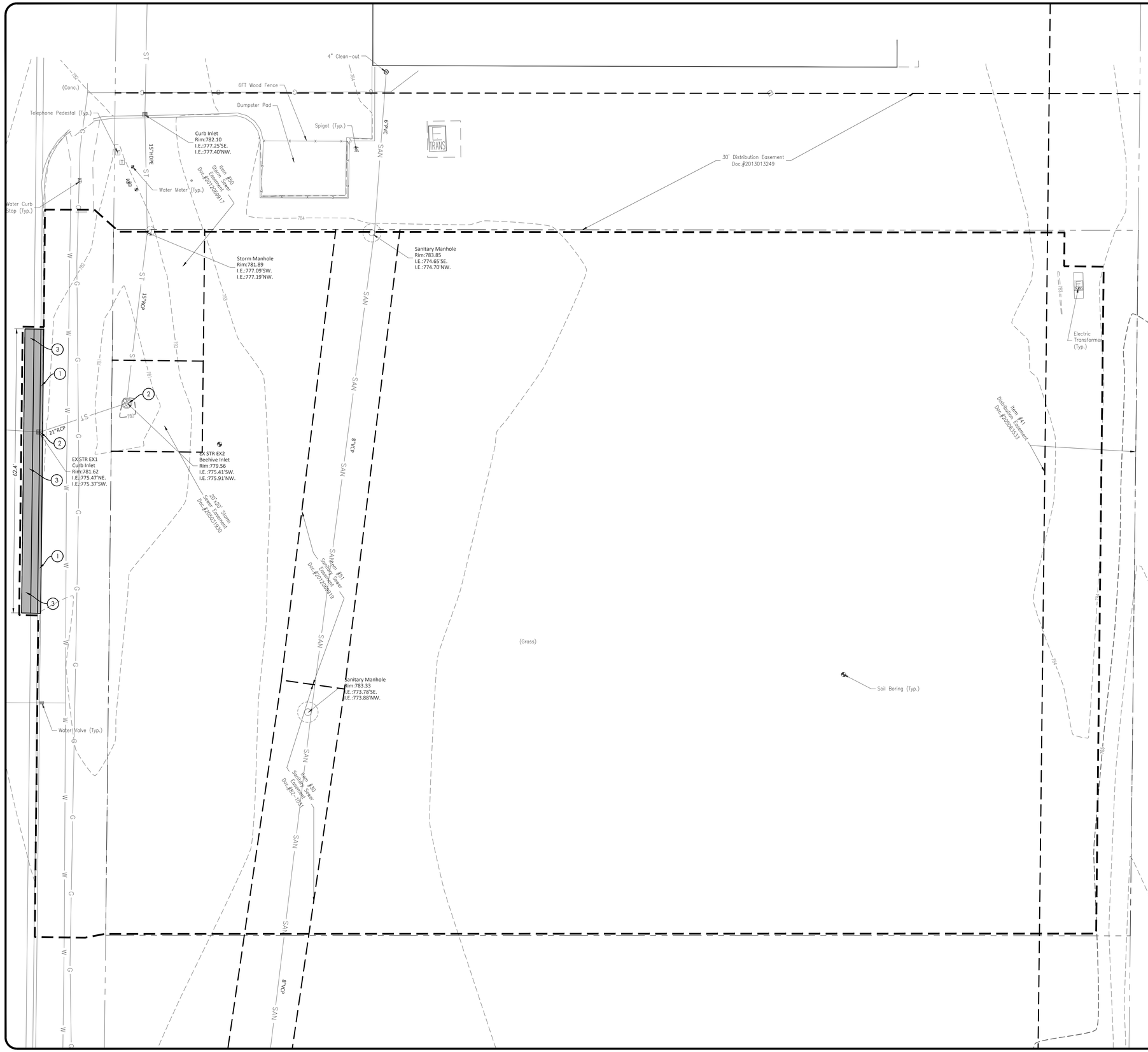
Delight TB Indiana LLC
PO Box 9601
Norfolk, VA 23505

REVISIONS:

Taco Bell
Southtown Crossing
Wayne Twp. Sect.36 T30N,R12E Allen County, IN
ALTA/NSPS LAND TITLE SURVEY & TOPOGRAPHIC SURVEY

Date : 04-18-2019
Drawn By: NRM
Chk'd By: BRM
Project No.: 19035028

Sheet Number
C1.0



Symbol and Line Legend

Electric Transformer	SAN	Sanitary Line
Fire Hydrant	ST	Storm Line
Water Curb Stop	W	Water Line
Water Meter	GAS	Gas Line
Water Valve		Major Contour
Yard Hydrant		Minor Contour
Telephone Pedestal		Guard Rail
Beehive Inlet		Fence
Clean-Out		Curb
Curb Cast Inlet		Stone
Manhole		Pavement
Sign		Concrete
Soil Boring		Easement
		Right-of-Way Line
		Boundary

GENERAL SITE & DEMOLITION PLAN NOTES:

1. LOCATIONS OF EXISTING UTILITIES ON PLANS ARE APPROXIMATE. LENGTHS AND EXTENTS OF UNDERGROUND PIPING ARE NOT FULLY KNOWN. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND DEPTHS BY EXPLORATORY DIGGING, UTILITY LOCATES AND OTHER MEANS NECESSARY PRIOR TO BEGINNING EXCAVATION/DEMOLITION OPERATIONS AND/OR CONSTRUCTION OF PROPOSED UTILITIES.
2. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANY(S) FOR THE REMOVAL, RELOCATION, AND/OR DEMOLITION OF ALL EXISTING UTILITIES.
3. ALL DEMOLISHED MATERIAL SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE UNLESS CONTRACTOR SAVE AND PROVIDE TO OWNER ALL DEMOLISHED ITEMS AND MATERIALS REQUESTED BY THE OWNER.
4. CONTRACTOR SHALL NOT INTERRUPT UTILITY SERVICES TO ADJACENT PROPERTIES WITHOUT GIVING PROPER NOTICE AND OBTAINING WRITTEN AUTHORIZATION FROM PROPERTY OWNER.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPER DRAINAGE IN DEMOLITION AREAS.
6. EXISTING TREES AND VEGETATION SHALL REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION UNLESS NOTED FOR REMOVAL ON THE PLANS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND/OR VERIFYING THAT ALL PERMITS AND APPROVALS ARE OBTAINED FROM ALL LOCAL, STATE, AND FEDERAL AGENCIES PRIOR TO STARTING CONSTRUCTION.
8. THE OWNER/DEVELOPER AND/OR CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING QUALITY CONTROL AT ALL TIMES DURING THE CONSTRUCTION PROCESS.
9. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS FINAL RULE 29 CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH.
10. EXCAVATIONS EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRE THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTER PROFESSIONAL ENGINEER.
11. CONTACT OWNER IMMEDIATELY IF CONTAMINATED SOILS ARE ENCOUNTERED DURING CONSTRUCTION. CONTAMINATED SOILS MUST BE HAULED OFF-SITE AND LEGALLY DISPOSED.
12. CONTACT ENGINEER IF UNKNOWN BURIED PIPES AND/OR DRAINAGE TILES ARE FOUND SO THAT THEY MAY BE EVALUATED AND PERPETUATED AS NECESSARY.
13. DISCREPANCIES OR CONFLICTS IN THE PLANS AND/OR ON-SITE SHALL BE COMMUNICATED TO THE DESIGN ENGINEER TO ENSURE THAT CLARIFICATIONS AND/OR REVISIONS CAN BE MADE PRIOR TO CONSTRUCTION.

DEMOLITION LEGEND

- DEMOLITION LIMITS (CONCRETE)
- CONSTRUCTION LIMITS

DEMOLITION KEYNOTES

1. SAWCUT AND REMOVE CONCRETE CURB AND GUTTER.
2. REMOVE AND REPLACE EXISTING CASTING. COORDINATE WITH OWNER FOR REUSE. SEE SHEET C3.0 FOR DETAILS.
3. SAWCUT AND REMOVE ASPHALT PAVEMENT

Scale 1" = 10 ft

Issued For Construction - August 21st, 2019

DEREK J. SIMON REGISTERED NO. PE11500716 STATE OF INDIANA PROFESSIONAL ENGINEER
Derek J. Simon, PE

MLSEngineering
ENGINEERING YOUR TOMORROW...TODAY
Monroe Office
221 Tower Drive
Monroe, IN 46772
Phone: (260) 692-6166
Brett R. Miller, P.S. No.LS20300059
Derek J. Simon, P.E. No.PE11500716
Fort Wayne Office
10060 Bent Creek Boulevard
Fort Wayne, IN 46825
Phone: (260) 489-8571

PREPARED FOR:
Richard Krumholz
Delight Restaurant Group
PO Box 9601
Norfolk, VA 23505
(617) 233-7114

REVISIONS:		
7/8/2019	BPJ	Comments Per City of Fort Wayne Addressed

Taco Bell - Southtown Centre
7719 Southtown Xing
Fort Wayne, Indiana 46816

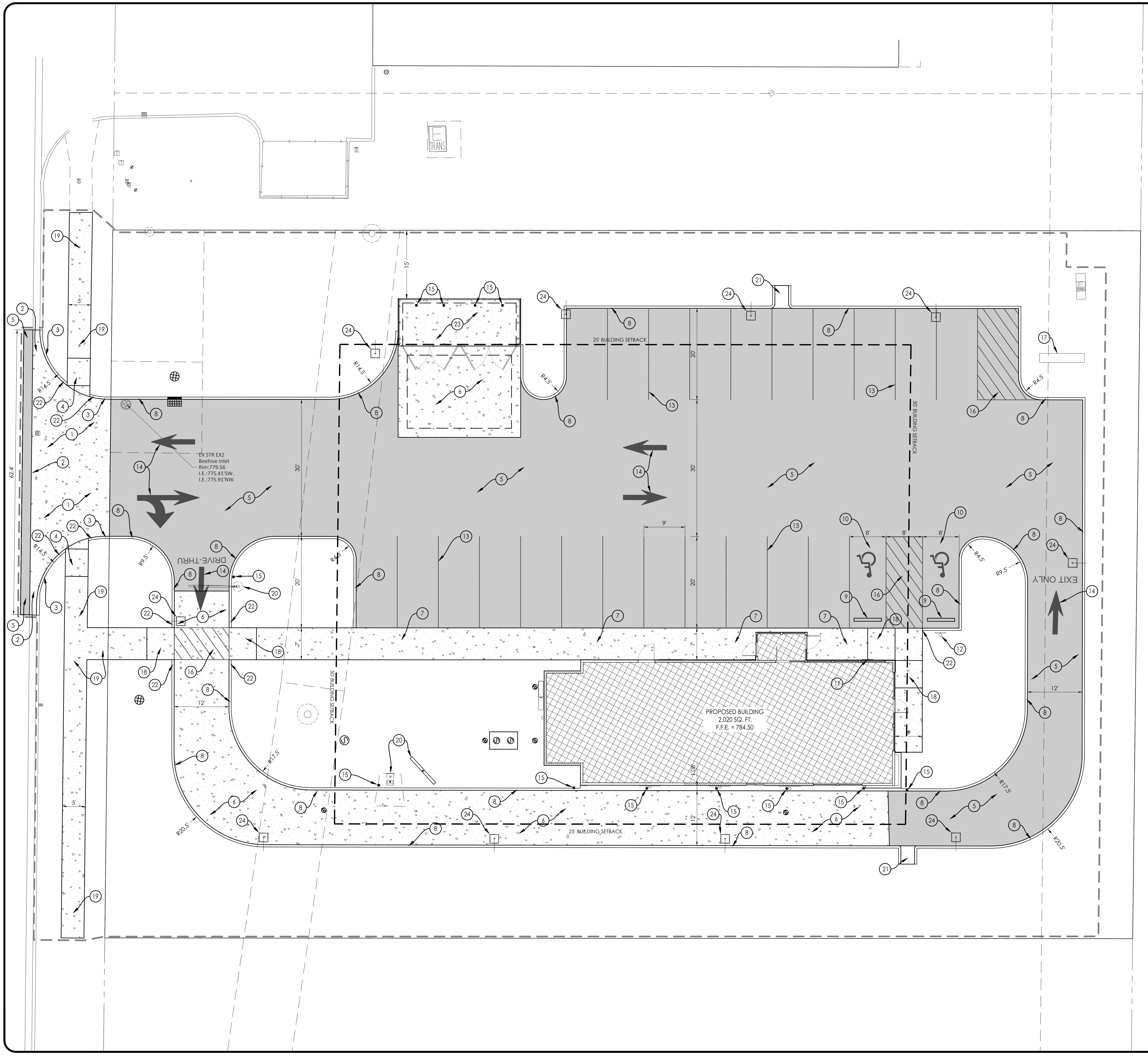
Secondary Development Plan

Demolition Plan

Date: 05-02-2019
Design By: BPJ
Chk'd By: DJS/GML
Project No.: 19035028

Sheet Number
C1.1

S:\MLS Engineering\Projects\Krumholz - Taco Bell\CD Design\13 Drawings (Arch & Plans)\C1.1 - DEMO Plan.dwg, 8/21/2019 7:54:41 AM



PROPOSED FEATURES LEGEND

= CONCRETE SIDEWALK / PAVEMENT (SEE PLAN KEYNOTE FOR SECTION DETAILS)

= ASPHALT PAVEMENT (SEE PLAN KEYNOTE FOR SECTION DETAILS)

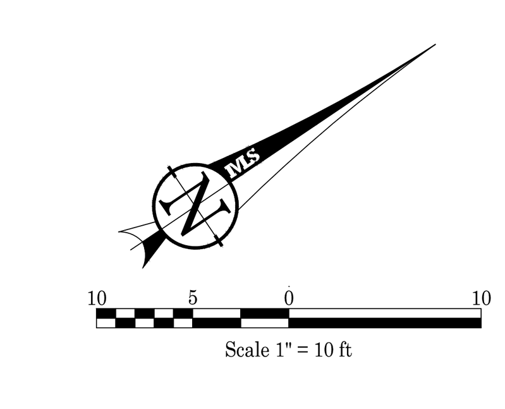
CONSTRUCTION LIMITS

GENERAL SITE PLAN NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, OR VERIFYING, THAT ALL PERMITS AND APPROVALS ARE OBTAINED FROM THE RESPECTIVE CITY, COUNTY, AND STATE AGENCIES PRIOR TO STARTING CONSTRUCTION.
2. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES IN THE VICINITY OF THE CONSTRUCTION AREA PRIOR TO STARTING CONSTRUCTION.
3. IT SHALL BE THE CONTRACTORS RESPONSIBILITY FOR NOTIFICATION AND COORDINATION OF ALL CONSTRUCTION WITH RESPECTIVE UTILITY COMPANIES.
4. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS. FINAL RULE 29 CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH.
5. ALL DIMENSIONS TO THE BUILDING ARE TO THE OUTSIDE OF BUILDING FOUNDATION WALL.
6. SEE RECORD SURVEYS AND PLATS FOR BEARINGS, DIMENSIONS AND EASEMENTS.
7. SEE ARCHITECTURAL PLANS FOR DETAILS OF BUILDINGS AND BUILDING DIMENSIONS.
8. CONTRACTOR SHALL PROVIDE TEMPORARY TRAFFIC CONTROL FOR BOTH PEDESTRIAN AND VEHICULAR TRAFFIC AS NECESSARY DURING THE CONSTRUCTION PROCESS.
9. ANY DISCREPANCIES OR CONFLICTS WHICH BECOME APPARENT BEFORE OR DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER PRIOR TO CONSTRUCTION SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
10. CONTACT ENGINEER IF ADDITIONAL DIMENSIONS ARE NEEDED FOR CONSTRUCTION.
11. SEE ARCHITECTURAL PLANS FOR DETAILS OF CONCRETE STOOPS TO BE CONSTRUCTED OUTSIDE BUILDING AT ENTRY POINTS.

PROPOSED KEYNOTE LEGEND (SEE SHEETS C6.0 - C6.2FOR DETAILS)

1. RIGHT-OF-WAY - COMMERCIAL DRIVE APPROACH (SEE DETAILS ON SHEET C6.2)
2. RIGHT-OF-WAY - CONCRETE DEPRESSED CURB AND GUTTER (SEE DETAIL ON SHEET C6.2)
3. RIGHT-OF-WAY - CONCRETE CURB TYPE II-A (SEE DETAIL ON SHEET C6.2)
4. RIGHT-OF-WAY - CURB RAMP TYPE 'H' (SEE DETAIL ON SHEET C6.2)
5. LIGHT DUTY ASPHALT PAVEMENT SECTION
6. CONCRETE PAVEMENT SECTION
7. INTEGRAL CURB AND WALK (SEE DETAIL ON SHEET C6.0)
8. PIN-ON CONCRETE CURB
9. CONCRETE PARKING BUMPER
10. ACCESSIBLE PARKING SPACE (SEE DETAIL ON SHEET C6.0 FOR STRIPING)
11. ACCESSIBLE PARKING SIGN MOUNTED TO BUILDING (SEE DETAIL ON SHEET C6.0)
12. ACCESSIBLE PARKING SIGN (SEE DETAIL ON SHEET C6.0)
13. PAVEMENT STRIPING (4" SOLID WHITE LINES)
14. PAVEMENT STRIPING - ARROW (SEE DETAIL ON SHEET C6.0)
15. STEEL BOLLARD
16. PAVEMENT STRIPING - PAINTED ISLAND (SEE DETAIL ON SHEET C6.0)
17. SIGN - BY OTHERS
18. ACCESSIBLE RAMP TYPE-I (SEE DETAIL ON SHEET C6.0)
19. CONCRETE SIDEWALK
20. DRIVE THRU ACCESSORIES - BY OTHERS
21. CONCRETE TURN-OUT (SEE DETAIL ON SHEET C6.0)
22. CURB END TRANSITION (SEE DETAIL ON SHEET C6.0)
23. DUMPSTER ENCLOSURE - (SEE DETAIL ON SHEET C6.0)
24. LIGHT POLES - BY OTHERS



Issued For Construction - August 21st, 2019

DEREK J. SIMON
REGISTERED
NO. PE11500716
STATE OF INDIANA
PROFESSIONAL ENGINEER
Derek J. Simon, PE

MLS Engineering
ENGINEERING YOUR TOMORROW...TODAY
Fort Wayne Office
10060 Bent Creek Boulevard
Fort Wayne, IN 46825
Phone: (260) 489-8571
Brett R. Miller, P.S. No.LS20300059
Derek J. Simon, P.E. No.PE11500716
Monroe Office
221 Tower Drive
Monroe, IN 46772
Phone: (260) 692-6166

PREPARED FOR:
Richard Krumholz
Delight Restaurant Group
PO Box 9601
Norfolk, VA 23505
(617) 233-7114

REVISIONS:		
7/8/2019	BPJ	Comments Per City of Fort Wayne Addressed

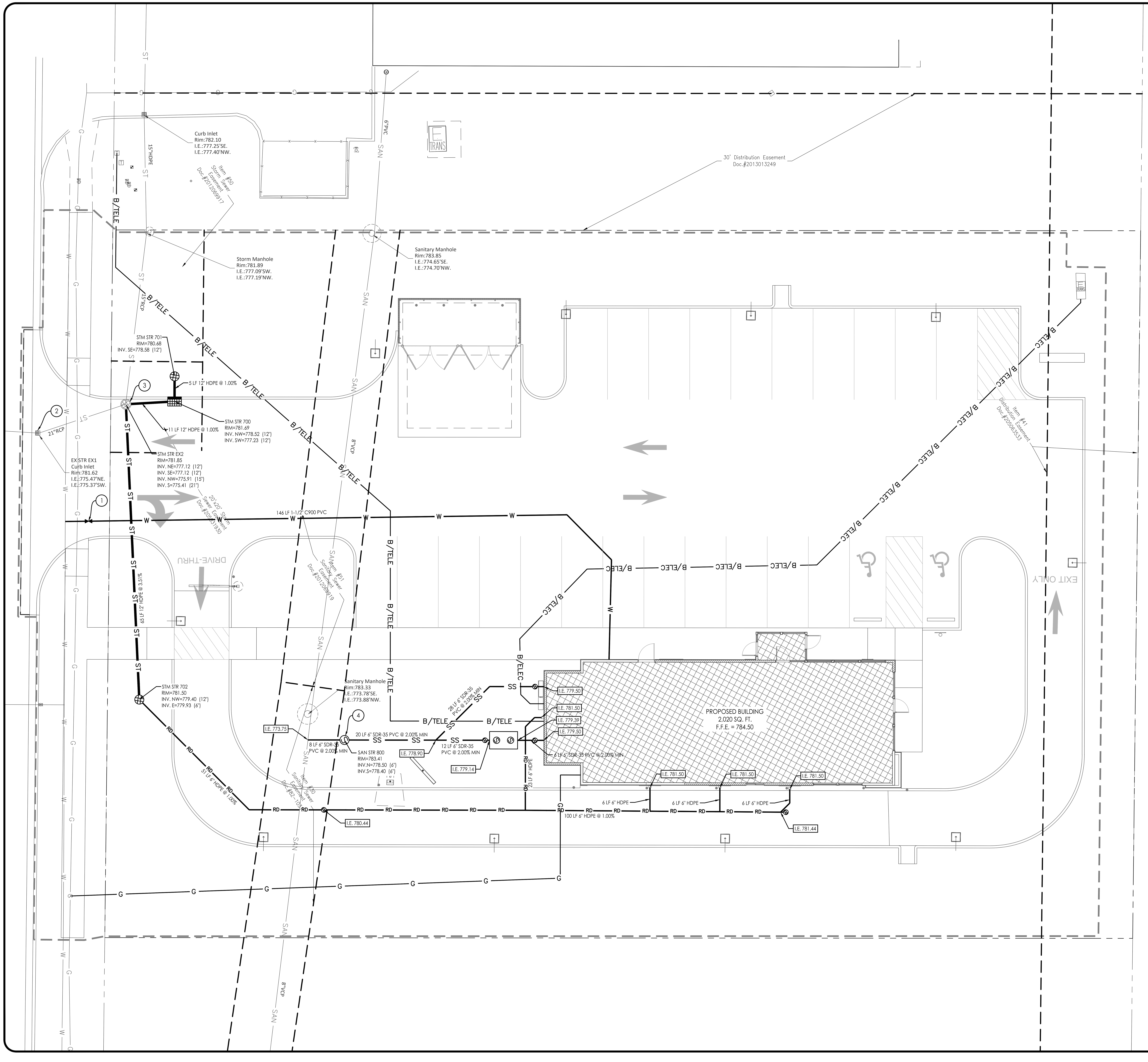
Taco Bell - Southtown Centre
7719 Southtown Xing
Fort Wayne, Indiana 46816

Secondary Development Plan

Site Plan

Date: 05-02-2019
Design By: BPJ
Chk'd By: DJS/GML
Project No.: 19035028

Sheet Number
C2.0



PROPOSED FEATURES LEGEND

- STORM PIPE AND PIPE END SECTION
- SANITARY PIPE
- WATER PIPE
- ROOF DRAIN PIPE
- BURIED TELEPHONE SERVICE LINE
- BURIED CABLE SERVICE LINE
- BURIED ELECTRIC SERVICE LINE
- GAS SERVICE LINE AND METER
- SWALE
- CONSTRUCTION LIMITS
- STORM / SANITARY CLEANOUT
- STORM CATCH BASIN / INLETS
- (D) DRAINAGE / (S) SANITARY STUCTURE
- WATER VALVE

UTILITY PLAN NOTES:

1. RIM ELEVATION EQUALS THE LOWEST POINT ON THE CASTING WHERE WATER ENTERS THE STRUCTURE OR THE TOP OF A SOLID CASTING.
2. PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE OR END OF PIPE END SECTION. SEE STRUCTURE DATA TABLE ON THIS SHEET FOR STRUCTURE TYPE, SIZE, AND CASTINGS.
3. WATER MAINS THROUGHOUT THE PROJECT SHALL BE INSTALLED WITH AT LEAST 60 INCHES OF COVER FROM FINISH GRADE TO TOP OF WATER LINE.
4. LOCATIONS OF EXISTING UTILITIES ON PLANS ARE APPROXIMATE. LENGTHS AND EXTENTS OF UNDERGROUND PIPING ARE NOT FULLY KNOWN. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND DEPTHS BY EXPLORATORY DIGGING, UTILITY LOCATES AND OTHER MEANS NECESSARY PRIOR TO BEGINNING EXCAVATION/DEMOLITION OPERATIONS AND/OR CONSTRUCTION OF PROPOSED UTILITIES.
5. ALL 6" SANITARY SEWER LATERALS ARE TO BE CONSTRUCTED WITH SDR-35 PVC @ 2.00% MINIMUM SLOPE UNLESS NOTED OTHERWISE.
6. SEE CONSTRUCTION DETAIL SHEET C6.1 FOR ALL UTILITY DETAILS.
7. CONTRACTOR IS RESPONSIBLE FOR UTILITY COORDINATION WITH ALL RESPECTIVE UTILITY COMPANIES.
8. CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND PROVIDING TRAFFIC CONTROL PER LOCAL STANDARDS AND REQUIREMENTS. ALL STREET CUTS SHALL BE REPAIRED PER LOCAL REQUIREMENTS.
9. WATER AND SEWER CROSSINGS SHALL BE IN ACCORDANCE WITH 10 STATE STANDARDS. WATER AND SEWER MAINS SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 10 FEET FROM EDGE OF PIPE TO EDGE OF PIPE. WATER PIPES CROSSING ABOVE OR BELOW SEWER PIPES MUST HAVE A MINIMUM VERTICAL SEPARATION OF 18 INCHES CLEARANCE BETWEEN PIPES. IF THESE STANDARDS CANNOT BE MET, THEN THE SEWER PIPE SHALL BE CONSTRUCTED OF WATER WORKS GRADE PIPE MATERIAL MEETING AWWA STANDARDS.
10. THE CONTRACTOR SHALL CONTACT ENGINEER FOR ALL QUESTIONS REGARDING UTILITY PLAN DISCREPANCIES AND/OR CONFLICTS IN THE FIELD.

UTILITY KEYNOTES

(1) 1 1/2" TAPPING SLEEVE, VALVE, AND VALVE BOX. TAP BY CITY OF FORT WAYNE.

(2) REMOVE EXISITNG CASTING AND REPLACE WITH NEENAH R-3036-B

(3) RENIVCE EXISTING CASTING AND REPLACE WITH NEENAH R-2502 AND RAISE WITH 2.25 FEET OF RISER RINGS.

(4) CONTROL MANHOLE - SEE DETAIL ON SHEET C6.1

STRUCTURE DATA TABLE

STRUCTURE (NUMBER)	DESCRIPTION	SIZE/DIA. (FEET)	CASTING (NEENAH)
EX1	EXISTING STRUCTURE	-	R-3036-B
EX2	EXISTING STRUCTURE	-	R-3472-A
700	24" INLET	2	†
701	24" INLET	2	‡
702	24" INLET	2	R-4342
800	MANHOLE	4	R-1772

ALL STORM INLET CASTINGS SHALL BE NPDES PHASE II COMPLAINT - "DUMP NO WASTE, DRAINS TO RIVER" SHALL BE ON THE CASTING.

† REUSE CASTING (E. JORDAN 7010) FROM EXISTING STRUCTURE EX1
‡ REUSED CASTING (E. JORDAN 6509) FROM EXISTING STRUCTURE EX2

Issued For Construction - August 21st, 2019

DEREK J. SIMON
REGISTERED
NO. PE11500716
STATE OF INDIANA
PROFESSIONAL ENGINEER

Derek J. Simon, PE

MLS Engineering
ENGINEERING YOUR TOMORROW...TODAY

Fort Wayne Office
10060 Bent Creek Boulevard
Fort Wayne, IN 46825
Phone: (260) 489-8571

Monroe Office
221 Tower Drive
Monroe, IN 46772
Phone: (260) 692-6166

Brett R. Miller, P.S. No.LS20300059
Derek J. Simon, P.E. No.PE11500716

PREPARED FOR:
Richard Krumholz
Delight Restaurant Group
PO Box 9601
Norfolk, VA 23505
(617) 233-7114

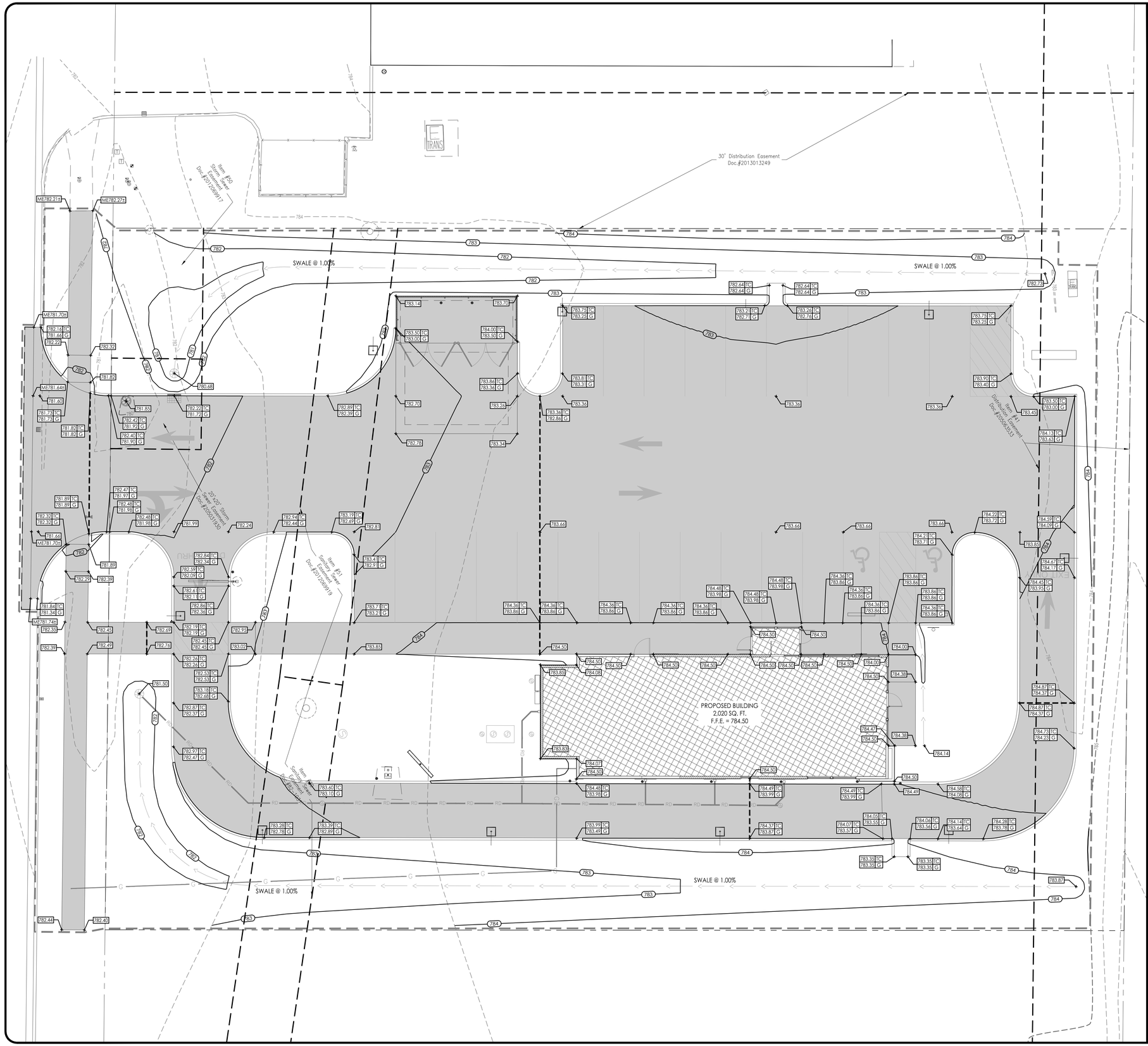
REVISIONS:

Date	By	Description
7/8/2019	BPJ	Comments Per City of Fort Wayne Addressed

Taco Bell - Southtown Centre
7719 Southtown Xing
Fort Wayne, Indiana 46816
Secondary Development Plan
Utility Plan

Date: 05-02-2019
Design By: BPJ
Chk'd By: DJS/GML
Project No.: 19035028

Sheet Number
C3.0



GRADING LEGEND

800.00	FINISH GRADE ELEVATION
800.50 TC / 800.00 G	(TC) TOP OF CURB / (G) GUTTER ELEVATION
ME 800.00±	(ME) MATCH EXISTING ELEVATION

F.F.E. = PROPOSED FINISH FLOOR ELEVATION

XXX	EXISTING MAJOR CONTOUR (5' INTERVAL)
XXX	EXISTING MINOR CONTOUR (1' INTERVAL)
XXX	PROPOSED MAJOR CONTOUR (5' INTERVAL)
XXX	PROPOSED MINOR CONTOUR (1' INTERVAL)
	DRAINAGE SWALE
	CONSTRUCTION LIMITS
	RIDGE LINE / GRADE BREAK LINE

GRADING PLAN NOTES:

1. ALL ELEVATIONS AT CONSTRUCTION LIMITS SHALL MATCH EXISTING GRADE.
2. TOPSOIL SHALL BE PLACED IN ALL LANDSCAPE AND YARD AREAS. TOPSOIL SHALL BE SPREAD TO A MINIMUM DEPTH OF 4 INCHES UNLESS NOTED OTHERWISE.
3. MAINTAIN SITE DRAINAGE AT ALL TIMES DURING EARTHWORK OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY DRAINAGE FACILITIES IF NECESSARY THROUGHOUT CONSTRUCTION.
4. CONTOURS SHOW GRADING INTENT. THE CONTRACTOR MUST USE PROPOSED SPOT GRADE ELEVATIONS TO BUILD SITE. CONTACT ENGINEER IF ADDITIONAL SPOT GRADES ARE NEEDED FOR CONSTRUCTION.
5. PAVEMENT AREAS SHALL BE CONSTRUCTED OF SUITABLE FILL MATERIAL AND COMPACTED PER DETAILS AND/OR SPECIFICATIONS. FILL AREAS FOR PAVEMENTS ARE TO BE STRIPPED OF ALL TOPSOIL PRIOR TO PLACEMENT OF FILL.
6. ANY DISCREPANCIES OR CONFLICTS WHICH BECOME APPARENT BEFORE OR DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER PRIOR TO CONSTRUCTION SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
7. SEE UTILITY PLAN SHEETS FOR ALL SEWER INVERT AND RIM ELEVATIONS.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THAT STAKED GRADES MATCH DESIGN ELEVATIONS AND POSITIVE DRAINAGE TO STORMWATER SYSTEM IS ACHIEVED. CONTACT ENGINEER IF DESIGN ELEVATIONS DO NOT PROVIDE POSITIVE DRAINAGE.
9. ALL SUBGRADE AREAS WITHIN PAVED AREAS SHALL BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY PER STANDARD PROCTOR ASTM D-698. ALL SUBGRADE AREAS WITHIN LAWN AREAS SHALL BE COMPACTED TO 90% OF MAXIMUM DRY DENSITY PER STANDARD PROCTOR ASTM D-698

DEREK J. SIMON
REGISTERED
NO. PE11500716
STATE OF INDIANA
PROFESSIONAL ENGINEER

Derek J. Simon, PE

MLSEngineering
ENGINEERING YOUR TOMORROW...TODAY

Monroe Office
221 Tower Drive
Monroe, IN 46772
Phone: (260) 692-6166

Fort Wayne Office
10060 Bent Creek Boulevard
Fort Wayne, IN 46825
Phone: (260) 489-8571

Brett R. Miller, P.S. No.LS20300059
Derek J. Simon, P.E. No.PE11500716

PREPARED FOR:
Richard Krumholz
Delight Restaurant Group
PO Box 9601
Norfolk, VA 23505
(617) 233-7114

Issued For Construction - August 21st, 2019

REVISIONS:		
7/8/2019	BPJ	Comments Per City of Fort Wayne Addressed

Taco Bell - Southtown Centre
7719 Southtown Xing
Fort Wayne, Indiana 46816

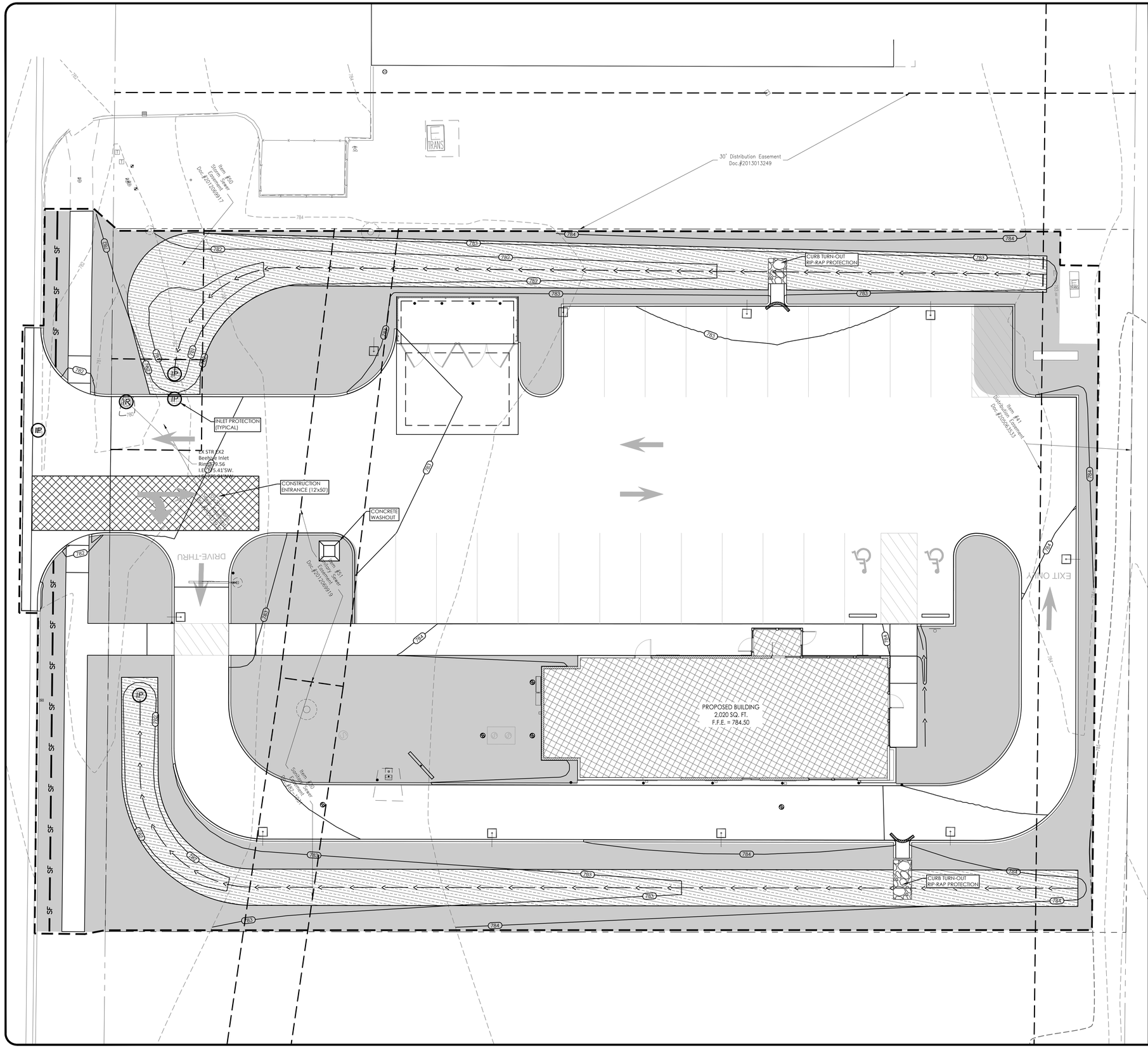
Secondary Development Plan

Grading Plan

Date: 05-02-2019
Design By: BPJ
Chk'd By: DJS/GML
Project No.: 19035028

Sheet Number
C4.0

Scale 1 in. = 10 ft.

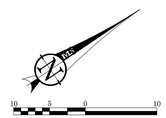


EROSION CONTROL LEGEND:

- SF — SF — SILT FENCE
- CONSTRUCTION LIMITS = 1.64 ACRES
- TEMPORARY OR PERMANENT SEEDING WITH MULCH (SEE SHEET C5.2 FOR SEEDING REQUIREMENTS)
- TEMPORARY CONSTRUCTION ENTRANCE / EXIT
- CONCRETE WASHOUT
- IP — INLET PROTECTION
- EROSION CONTROL BLANKET
- RIP-RAP INLET / OUTLET PROTECTION
- COIR LOG INLET/OUTLET PROTECTION

EROSION CONTROL NOTES:

1. SEE SHEET C5.2 FOR SOILS MAP AND SOIL CHARACTERISTICS.
2. SEE SHEET C5.1 FOR EROSION CONTROL DETAILS.
3. SILT FENCE BARRIER SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
4. A STABLE TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT FROM THE CONSTRUCTION SITE SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
5. SEE EROSION CONTROL SEQUENCE AND IMPLEMENTATION NOTES ON SHEET C5.2
6. EROSION CONTROL MAINTENANCE - SITE TO BE INSPECTED ONCE A WEEK AND AFTER EVERY RAINFALL EVENT. MAKE REPAIRS IMMEDIATELY.
7. EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS AND UNTIL ALL DISTURBED AREAS ARE STABILIZED.
8. AREAS THAT WILL BE DISTURBED FOR MORE THAN 15 DAYS SHALL BE STABLIZED IMMEDIATELY WITH TEMPORARY SEEDING.
9. ALL DISTURBED YARD/GRASS AREAS MUST BE STABLIZED WITH PERMANENT SEEDING MEASURES. SEE SHEET C5.2 FOR GENERAL SEEDING AND SURFACE STABILIZATION PROCEDURES.
10. OWNER/CONTRACTOR SHALL INSTALL, IMPLEMENT, AND MAINTAIN ADDITIONAL EROSION CONTROL MEASURES AT REQUEST OF LOCAL AND/OR STATE STORMWATER AND EROSION CONTROL INSPECTORS TO ACHIEVE A STABLIZED SITE.



DEREK J. SIMON
REGISTERED
NO. PE11500716
STATE OF INDIANA
PROFESSIONAL ENGINEER
Derek J. Simon, PE

MLSEngineering
ENGINEERING YOUR TOMORROW...TODAY
Monroe Office
221 Tower Drive
Monroe, IN 46772
Phone: (260) 692-6166
Brett R. Miller, P.S. No.LS20300059
Derek J. Simon, P.E. No.PE11500716
Fort Wayne Office
10060 Bent Creek Boulevard
Fort Wayne, IN 46825
Phone: (260) 489-8571

PREPARED FOR:
Richard Krumholz
Delight Restaurant Group
PO Box 9601
Norfolk, VA 23505
(617) 233-7114

Issued For Construction - August 21st, 2019

REVISIONS:		
7/8/2019	BPJ	Comments Per City of Fort Wayne Addressed

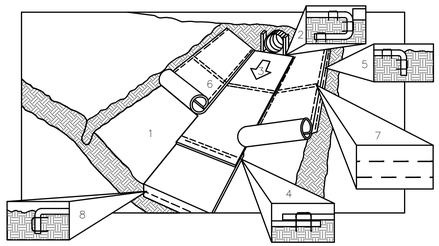
Taco Bell - Southtown Centre
7719 Southtown Xing
Fort Wayne, Indiana 46816

Secondary Development Plan

Erosion Control Plan

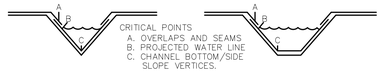
Date: 05-02-2019
Design By: BPJ
Chk'd By: DJS/GML
Project No.: 19035028

Sheet Number
C5.0



INSTALLATION

1. SELECT THE TYPE AND WEIGHT OF EROSION CONTROL BLANKET TO FIT THE SITE CONDITIONS PER THE MANUFACTURER'S SPECIFICATIONS.
2. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME FERTILIZER AND SEED.
3. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
4. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW ON BOTTOM OF CHANNEL.
5. PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH 8" OVERLAP. USE A DOUBLE ROW OF STAGGERED STAPLES 4" APART TO SECURE BLANKETS.
6. FULL LENGTH EDGES OF BLANKETS AT TOP OF SIDE SLOPE MUST BE ANCHORED IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
7. BLANKETS ON SIDE SLOPES MUST BE OVERLAPPED 8" OVER THE CENTER BLANKET AND STAPLED.
8. IN MEDIUM/HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A ROW OF STAPLES 4" APART OVER ENTIRE WIDTH OF THE CHANNEL. PLACE A SECOND ROW 4" BELOW THE FIRST ROW IN A STAGGERED PATTERN.
9. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.



NOTE: HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

MAINTENANCE:

- INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- CHECK FOR EROSION OR DISPLACEMENT OF THE BLANKET.
- IF ANY AREA SHOWS EROSION, PULL BACK THAT PORTION OF THE BLANKET COVERING THE ERODED AREA, ADD SOIL AND TAMP, RESEED THE AREA, REPLACE AND STAPLE THE BLANKET.

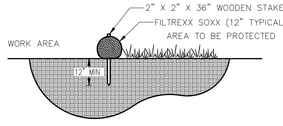
REFER TO STAPLE PATTERN DETAIL FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR CHANNELS.

EROSION CONTROL BLANKET–CHANNEL INSTALLATION

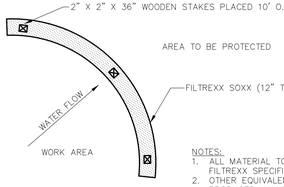
NOT TO SCALE

EROSION CONTROL BLANKET–STAPLE PATTERN

NOT TO SCALE



SECTION

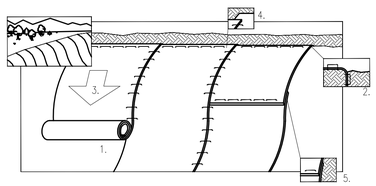


NOTES:
1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. OTHER EQUIVALENT PRODUCTS MAY BE USED WITH PRIOR APPROVAL FROM PROJECT ENGINEER.

PLAN

FILTREXX SOXX SEDIMENT CONTROL

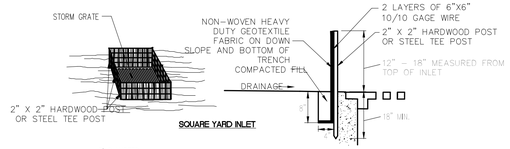
NOT TO SCALE



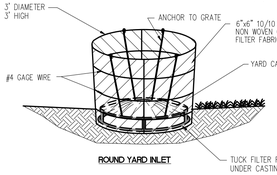
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS DOWN THE SLOPE IN THE DIRECTION OF THE WATER FLOW.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6" OVERLAP, STAPLE THROUGH OVERLAPPED AREA, APPROX. 12" APART.
6. REFER TO STAPLE PATTERN GUIDE FOR CORRECT STAPLE PATTERN RECOMMENDATIONS.

EROSION CONTROL BLANKET–SLOPE INSTALLATION

NOT TO SCALE



SQUARE YARD INLET



ROUND YARD INLET

INSTALLATION:

1. DIG AN EIGHT–INCH DEEP, FOUR–INCH WIDE TRENCH AROUND THE PERIMETER OF THE INLET.
2. IF USING PRE–ASSEMBLED GEOTEXTILE FABRIC AND POSTS, DRIVE THE POSTS INTO THE SOIL, TIGHTLY STRETCHING THE GEOTEXTILE FABRIC BETWEEN POSTS AS EACH IS DRIVEN. (POSTS MUST BE PLACED ON THE INLET SIDE OF THE ANCHOR TRENCH WITH THE GEOTEXTILE FABRIC ON THE SIDE OF THE TRENCH FARTHEST FROM THE INLET.)

NOTE: IF ASSEMBLING THE GEOTEXTILE FABRIC AND POSTS ON–SITE, DRIVE THE POSTS INTO THE SOIL AND THEN SECURE THE GEOTEXTILE FABRIC TO THE POSTS BY PLACING A PIECE OF LATHE OVER THE FABRIC AND FASTENING IT TO THE POST (STRETCHING THE FABRIC BETWEEN POSTS AS IT IS FASTENED).

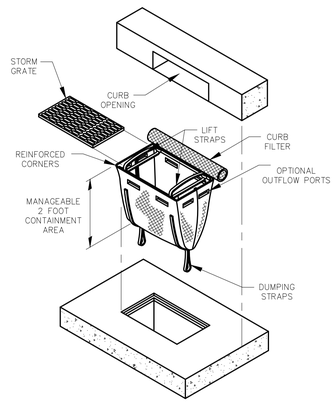
3. USE THE WRAP JOIN METHOD WHEN JOINING POSTS
4. PLACE THE BOTTOM 12 INCHES OF GEOTEXTILE FABRIC INTO THE EIGHT–INCH DEEP TRENCH, LAYING THE REMAINING FOUR INCHES IN THE BOTTOM OF THE TRENCH AND EXTENDING AWAY FROM THE INLET.
5. BACKFILL THE TRENCH WITH SOIL MATERIAL AND COMPACT IT IN PLACE.
6. BRACE THE POSTS BY NAILING BRACES INTO EACH CORNER POST OR UTILIZE RIGID PANELS TO SUPPORT FABRIC.

MAINTENANCE:

- INSPECT DAILY.
- INSPECT GEOTEXTILE FABRIC AND MAKE NEEDED REPAIRS IMMEDIATELY.
- REMOVE SEDIMENT FROM POOL AREA TO PROVIDE STORAGE FOR THE NEXT STORM EVENT. AVOID DAMAGING OR UNDERCUTTING FABRIC DURING SEDIMENT REMOVAL.
- WHEN CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE SEDIMENT, PROPERLY DISPOSE OF ALL CONSTRUCTION MATERIAL, GRADE AREA TO THE ELEVATION OF THE STORM DRAIN INLET TOP, THEN STABILIZE IMMEDIATELY.

YARD INLET PROTECTION

NOT TO SCALE



INSTALLATION AND MAINTENANCE GUIDELINES

INSTALLATION

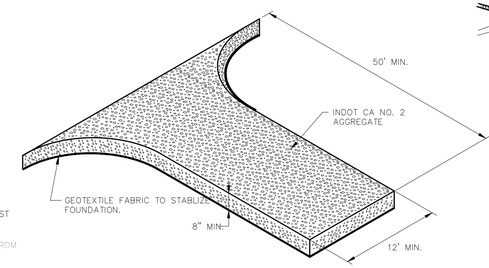
1. REMOVE THE GRATE FROM THE CATCH BASIN.
2. IF USING OPTION OIL ABSORBENTS, PLACE ABSORBENT PILLOW IN UNIT.
3. STAND THE GRATE ON END, MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO THE DANDY SACK SO THAT THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS.
4. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET.
5. MAKE SURE THE CYLINDRICAL PORTION IS UP AGAINST THE CURB OPENING TO PREVENT SILT AND DEBRIS FROM ENTERING THE INLET.

MAINTENANCE

- INSPECT DAILY.
- REMOVE ALL ACCUMULATED SEDIMENT AFTER EACH STORM EVENT. DISPOSE OF SEDIMENT IN AN AREA WHERE IT WILL NOT REENTER THE PAVED AREA OR STORM DRAINS. TO EMPTY UNIT, LIFT THE UNIT OUT OF THE INLET BY USING THE LIFTING STRAPS AND REMOVE THE GRATE.
- WHEN CONTRIBUTING DRAINAGE AREA HAD BEEN STABILIZED, REMOVE INLET PROTECTION.

DROP BAG INLET PROTECTION W/CURB

NOT TO SCALE



INSTALLATION NOTES:

1. REMOVE ALL VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA.
2. GRADE FOUNDATION AND CROWN FOR POSITIVE DRAINAGE. IF THE SLOPE OF THE CONSTRUCTION ENTRANCE IS TOWARD A PUBLIC ROAD AND EXCEEDS TWO PERCENT, CONSTRUCT AN EIGHT INCH HIGH DIVERSION RIDGE WITH A RATIO OF 3–TO–1 SIDE SLOPES ACROSS THE FOUNDATION AREA ABOUT 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE ROAD.
3. INSTALL A CULVERT PIPE UNDER THE PAD IF NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.
4. IF WET CONDITIONS ARE ANTICIPATED, PLACE GEOTEXTILE FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY.
5. PLACE AGGREGATE (INDOT CA NO. 2) TO THE DIMENSIONS AND GRADE SHOWN IN THE CONSTRUCTION PLANS, LEAVING THE SURFACE SMOOTH AND SLOPED FOR DRAINAGE.
6. TOP–DRESS THE FIRST 50 FEET ADJACENT TO THE PUBLIC ROADWAY WITH TWO TO THREE INCHES OF WASHED AGGREGATE (INDOT CA NO. 53) [OPTIONAL, USED PRIMARILY WHERE THE PURPOSED OF THE PAD IS KEEP SOIL FROM ADHERING TO VEHICLE TIRES]
7. WHERE POSSIBLE, DIVERT ALL STORM WATER RUNOFF AND DRAINAGE FROM THE INGRESS,/EGRESS PAD TO A SEDIMENT TRAP OR BASIN.

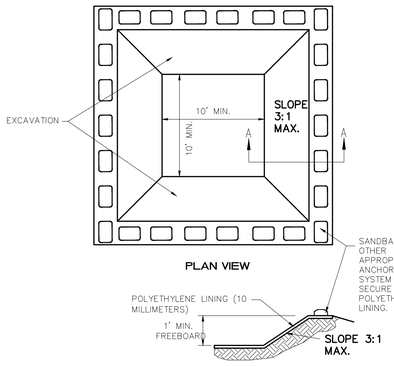
MAINTENANCE NOTES:

8. INSPECT DAILY.
9. RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
10. TOP DRESS WITH CLEAN AGGREGATE AS NEEDED.
11. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS.
12. FLUSHING SHOULD ONLY BE USED IF THE WATER CAN BE CONVEYED INTO A SEDIMENT TRAP OR BASIN.

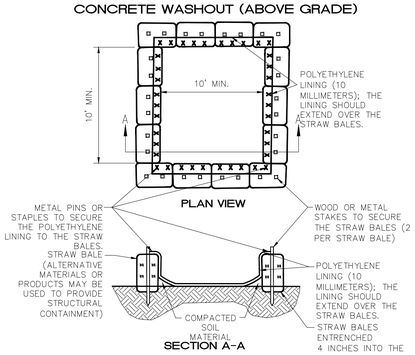
TEMPORARY CONSTRUCTION ENTRANCE

NOT TO SCALE

CONCRETE WASHOUT (BELOW GRADE)

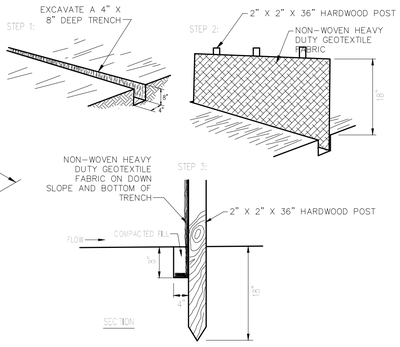


CONCRETE WASHOUT (ABOVE GRADE)



CONCRETE WASHOUT

NOT TO SCALE



INSTALLATION:

1. LAY OUT THE LOCATION OF THE FENCE SO THAT IT IS PARALLEL TO THE CONTOUR OF THE SLOPE AND AT LEAST 10 FEET BEYOND THE TOE OF THE SLOPE TO PROVIDE A SEDIMENT STORAGE AREA. TURN THE ENDS OF THE FENCE UP–SLOPE SUCH THAT THE POINT OF CONTACT BETWEEN THE GROUND AND THE BOTTOM OF THE FENCE END TERMINATES AT A HIGHER ELEVATION THAN THE TOP OF THE FENCE AT ITS LOWEST POINT.
2. EXCAVATE AN EIGHT–INCH DEEP BY FOUR–INCH WIDE TRENCH ALONG THE ENTIRE LENGTH OF THE FENCE LINE. INSTALLATION BY PLOWING IS ALSO ACCEPTABLE.
3. INSTALL THE SILT FENCE WITH THE FILTER FABRIC LOCATED ON THE UP–SLOPE SIDE OF THE EXCAVATED TRENCH AND THE SUPPORT POSTS ON THE DOWN–SLOPE SIDE OF THE TRENCH.
4. DRIVE THE SUPPORT POSTS AT LEAST 18 INCHES INTO THE GROUND, TIGHTLY STRETCHING THE FABRIC BETWEEN THE POSTS AS EACH IS DRIVEN INTO THE SOIL. A MINIMUM OF 12 INCHES OF THE FILTER FABRIC SHOULD EXTEND INTO THE TRENCH.
5. LAY THE LOWER FOUR INCHES OF FILTER FABRIC ON THE BOTTOM OF THE TRENCH AND EXTEND IT TOWARD THE UP–SLOPE SIDE OF THE TRENCH.
6. BACKFILL THE TRENCH WITH SOIL MATERIAL AND COMPACT IT IN PLACE.

NOTE: IF THE SILT FENCE IS BEING CONSTRUCTED ON–SITE, ATTACH THE FILTER FABRIC TO THE SUPPORT POSTS AND ATTACH WOODEN LATHE TO SECURE THE FABRIC TO THE POSTS. ALLOW FOR AT LEAST 12 INCHES OF FABRIC BELOW GROUND LEVEL. COMPLETE THE SILT FENCE INSTALLATION, FOLLOWING STEPS 1 THROUGH 6 ABOVE.

MAINTENANCE:

7. INSPECT WITHIN 24 HOURS OF A RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
8. IF FENCE FABRIC TEARS, STARTS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED PORTION IMMEDIATELY. **NOTE: ALL REPAIRS SHOULD MEET SPECIFICATIONS AS OUTLINED WITHIN THIS MEASURE.**
9. REMOVE DEPOSITED SEDIMENT WHEN IT IS CAUSING THE FILTER FABRIC TO BULGE OR WHEN IT REACHES ONE–HALF THE HEIGHT OF THE FENCE AT ITS LOWEST POINT. WHEN CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE THE FENCE AND SEDIMENT DEPOSITS, GRADE THE SITE TO BLEND WITH THE SURROUNDING AREA, AND STABILIZE.

SILT FENCE BARRIER INSTALLATION

INSTALLATION:

PREFABRICATED WASHOUT SYSTEMS/CONTAINERS

1. INSTALL AND LOCATE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

DESIGNED AND INSTALLED SYSTEMS

2. UTILIZE AND FOLLOW THE DESIGN IN THE STORM WATER POLLUTION PREVENTION PLAN TO INSTALL THE SYSTEM.
3. DEPENDENT UPON THE TYPE OF SYSTEM, EITHER EXCAVATE THE PIT OR INSTALL THE CONTAINMENT SYSTEM.
4. A BASE SHALL BE CONSTRUCTED AND PREPARED THAT IS FREE OF ROCKS AND OTHER DEBRIS THAT MAY CAUSE TEARS OR PUNCTURES IN THE POLYETHYLENE LINING.
5. INSTALL THE POLYETHYLENE LINING. FOR EXCAVATED SYSTEMS, THE LINING SHOULD EXTEND OVER THE ENTIRE EXCAVATION. THE LINING FOR BERMED SYSTEMS SHOULD BE INSTALLED OVER THE POOLING AREA WITH ENOUGH MATERIAL TO EXTEND THE LINING OVER THE BERM OR CONTAINMENT SYSTEM. THE LINING SHOULD BE SECURED WITH PINS, STAPLES, OR OTHER FASTENERS.
6. PLACE FLAGS, SAFETY FENCING, OR EQUIVALENT TO PROVIDE A BARRIER TO CONSTRUCTION EQUIPMENT AND OTHER TRAFFIC.
7. PLACE A NON–COLLAPSING, NON–WATER HOLDING COVER OVER THE WASHOUT FACILITY PRIOR TO A PREDICTED RAINFALL EVENT TO PREVENT ACCUMULATION OF WATER AND POSSIBLE OVERFLOW OF THE SYSTEM (OPTIONAL).
8. INSTALL SIGNAGE THAT IDENTIFIES CONCRETE WASHOUT AREAS.
9. POST SIGNS DIRECTING CONTRACTORS AND SUPPLIERS TO DESIGNATED LOCATIONS.
10. WHERE NECESSARY, PROVIDE STABLE INGRESS AND EGRESS OR ALTERNATIVE APPROACH PAD FOR CONCRETE WASHOUT SYSTEMS.

MAINTENANCE:

11. INSPECT DAILY AND AFTER EACH STORM EVENT.
12. INSPECT THE INTEGRITY OF THE OVERALL STRUCTURE INCLUDING, WHERE APPLICABLE, THE CONTAINMENT SYSTEM.
13. INSPECT THE SYSTEM FOR LEAKS, SPILLS, AND TRACKING OF SOIL BY EQUIPMENT.
14. INSPECT THE POLYETHYLENE LINING FOR FAILURE, INCLUDING TEARS AND PUNCTURES.
15. ONCE CONCRETE WASTES HARDEN, REMOVE AND DISPOSE OF THE MATERIAL.
16. EXCESS CONCRETE SHOULD BE REMOVED WHEN THE WASHOUT SYSTEM REACHES 50 PERCENT OF THE DESIGN CAPACITY. USE OF THE SYSTEM SHOULD BE DISCONTINUED UNTIL APPROPRIATE MEASURES CAN BE INITIATED TO CLEAN THE STRUCTURE. PREFABRICATED SYSTEMS SHOULD ALSO UTILIZE THIS CRITERION, UNLESS THE MANUFACTURER HAS ALTERNATE SPECIFICATIONS.
17. UPON REMOVAL OF THE SOLIDS, INSPECT THE STRUCTURE. REPAIR THE STRUCTURE AS NEEDED OR CONSTRUCT A NEW SYSTEM.
18. DISPOSE OF ALL CONCRETE IN A LEGAL MANNER. REUSE THE MATERIAL ON SITE, RECYCLE, OR HAUL THE MATERIAL TO AN APPROVED CONSTRUCTION/DEMOLITION LANDFILL SITE. RECYCLING OF MATERIAL IS ENCOURAGED. THE WASTE MATERIAL CAN BE USED FOR MULTIPLE APPLICATIONS INCLUDING BUT NOT LIMITED TO ROADBEDS AND BUILDING. THE AVAILABILITY FOR RECYCLING SHOULD BE CHECKED LOCALLY.
19. THE PLASTIC LINER SHOULD BE REPLACED AFTER EVERY CLEANING; THE REMOVAL OF MATERIAL WILL USUALLY DAMAGE THE LINING.
20. THE CONCRETE WASHOUT SYSTEM SHOULD BE REPAIRED OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE.
21. CONCRETE WASHOUT SYSTEMS ARE DESIGNED TO PROMOTE EVAPORATION; HOWEVER, IF THE LIQUIDS DO NOT EVAPORATE AND THE SYSTEM IS NEAR CAPACITY IT MAY BE NECESSARY TO VACUUM OR REMOVE THE LIQUIDS AND DISPOSE OF THEM IN AN ACCEPTABLE METHOD. DISPOSAL MAY BE ALLOWED AT THE LOCAL SANITARY SEWER AUTHORITY PROVIDED THEIR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS ALLOW FOR ACCEPTANCE OF THIS MATERIAL. ANOTHER OPTION WOULD BE TO UTILIZE A SECONDARY CONTAINMENT SYSTEM OR BASIN FOR FURTHER DEWATERING.
22. PREFABRICATED UNITS ARE OFTEN PUMPED AND THE COMPANY SUPPLYING THE UNIT PROVIDES THIS SERVICE.
23. INSPECT CONSTRUCTION ACTIVITIES ON A REGULAR BASIS TO ENSURE SUPPLIERS, CONTRACTORS, AND OTHERS ARE UTILIZING DESIGNATED WASHOUT AREAS. IF CONCRETE WASTE IS BEING DISPOSED OF IMPROPERLY, IDENTIFY THE VIOLATORS AND TAKE APPROPRIATE ACTION.
24. WHEN CONCRETE WASHOUT SYSTEMS ARE NO LONGER REQUIRED, THE CONCRETE WASHOUT SYSTEMS SHALL BE CLOSED. DISPOSE OF ALL HARDENED CONCRETE AND OTHER MATERIALS USED TO CONSTRUCT THE SYSTEM.
25. HOLES, DEPRESSIONS AND OTHER LAND DISTURBANCES ASSOCIATED WITH THE SYSTEM SHOULD BE BACKFILLED, GRADED, AND STABILIZED.

DEREK J. SIMON
REGISTERED
NO. PE11500716
STATE OF INDIANA
PROFESSIONAL ENGINEER
Derek J. Simon, PE

MLSEngineering
ENGINEERING YOUR TOMORROW...TODAY
Monroe Office
221 Tower Drive
Monroe, IN 46772
Phone: (260) 692-6166
Brett R. Miller, P.S. No.LS20300059
Fort Wayne Office
10060 Bent Creek Boulevard
Fort Wayne, IN 46825
Phone: (260) 489-8571
Derek J. Simon, P.E. No.PE11500716

PREPARED FOR:
Richard Krumholz
Delight Restaurant Group
PO Box 9601
Norfolk, VA 23505
(617) 233-7114

Issued For Construction - August 21st, 2019

REVISIONS:	
7/8/2019	BPJ Comments Per City of Fort Wayne Addressed

Taco Bell - Southtown Centre
7719 Southtown Xing
Fort Wayne, Indiana 46816

Secondary Development Plan

Erosion Control Details

Date: 05-02-2019
Design By: BPJ
Chk'd By: DJS/GML
Project No.: 19035028

Sheet Number
C5.1

GENERAL SEEDING and SURFACE STABILIZATION PROCEDURES

(1) TEMPORARY SEEDING

Table 1. Temporary Seeding Specifications

Seed Species 1	Rate per Acre	Planting Depth	Optimum Dates 2
Wheat or Rye	150 lbs.	1 to 1-1/2 inches	Sept. 15 - Oct. 30
Spring Oats	100 lbs.	1 inch	March 1 - April 15
Annual Ryegrass	40 lbs.	1-1/4 inch	March 1 - May 1 Aug. 1 - Sept. 1
German Millet	40 lbs.	1 to 2 inches	May 1 - June 1
Sudangrass	35 lbs.	1 to 2 inches	May 1 - July 30
Buckwheat	60 lbs.	1 to 2 inches	April 15 - June 1
Corn (broadcast)	300 lbs.	1 to 2 inches	May 11 - Aug. 10
Sorghum	35 lbs.	1 to 2 inches	May 1 - July 15

1 Perennial species may be used as a temporary cover, especially if the area to be seeded will remain idle for more than one year (See Permanent Seeding).
2 Seeding done outside the optimum seeding dates increases the chances of seeding failure. Dates may be extended or shortened based on the location of the project site within the state.

Notes
Mulch alone is an acceptable temporary cover and may be used in lieu of temporary seeding, provided that it is appropriately anchored.
A high potential for fertilizer, seed, and mulch to wash exists on steep banks, cuts, and in channels and areas of concentrated flow.

Application

Seedbed Preparation
1. Test soil to determine pH and nutrient levels.
2. Apply soil amendments as recommended by the soil test. If testing is not done, apply 400 to 600 pounds per acre of 12-12-12 analysis fertilizer, or equivalent.
3. Work the soil amendments into the upper two to four inches of the soil with a disk or rake operated across the slope.

Seeding
1. Select a seed species or an appropriate seed mixture and application rate from Table 1.
2. Apply seed uniformly with a drill or cultipacker seeder or by broadcasting. Plant or cover seed to the depth shown in Table 1.

Notes
1. If drilling or broadcasting the seed, ensure good seed-to-soil contact by firming the seedbed with a roller or cultipacker after completing seeding operations. Daily seeding when the soil is moist is usually most effective.
2. If seeding is done with a hydroseeder, fertilizer and mulch can be applied with the seed in a slurry mixture.
3. Apply mulch (See Mulching and Compost Mulching Requirements Below) and anchor it in place.

Maintenance
1. Inspect within 24 hours of each rain event and at least once every seven calendar days.
2. Check for erosion or movement of mulch and repair immediately.
3. Monitor for erosion damage and adequate cover (80 percent density); reseed, fertilize, and apply mulch where necessary.
4. If nitrogen deficiency is apparent, top-dress fall seeded wheat or rye seeding with 50 pounds per acre of nitrogen in February or March.

(2) PERMANENT SEEDING.

Application

Site Preparation
1. Grade the site to achieve positive drainage.
2. Add topsoil or compost mulch to achieve needed depth for establishment of vegetation. (Compost material may be added to improve soil moisture holding capacity, soil friability, and nutrient availability.)

Seedbed Preparation
1. Test soil to determine pH and nutrient levels.
2. Apply soil amendments as recommended by the soil test and work into the upper two to four inches of soil. If testing is not done, apply 400 to 600 pounds per acre of 12-12-12 analysis fertilizer, or equivalent.
3. Till the soil to obtain a uniform seedbed. Use a disk or rake, operated across the slope, to work the soil amendments into the upper two to four inches of the soil.

Seeding
Optimum seeding dates are March 1 to May 10 and August 10 to September 30. Permanent seeding done between May 10 and August 10 may need to be irrigated. Seeding outside or beyond optimum seeding dates is still possible with the understanding that reseeding or overseeding may be required if adequate surface cover is not achieved. Reseeding or overseeding can be easily accomplished if the soil surface remains well protected with mulch.

1. Select a seeding mixture and rate from Table 1 Permanent Seeding Recommendations. Select seed mixture based on site conditions, soil pH, intended land use, and expected level of maintenance.
2. Apply seed uniformly with a drill or cultipacker seeder or by broadcasting. Plant or cover the seed to a depth of one-fourth to one-half inch. If drilling or broadcasting the seed, ensure good seed-to-soil contact by firming the seedbed with a roller or cultipacker after completing seeding operations. (If seeding is done with a hydroseeder fertilizer and mulch can be applied with the seed in a slurry mixture.)
3. Mulch all seeded areas and use appropriate methods to anchor the mulch in place. Consider using erosion control blankets on sloping areas and conveyance channels.

Maintenance
- Inspect within 24 hours of each rain event and at least once every seven calendar days until the vegetation is successfully established.
- Characteristics of a successful stand include vigorous dark green or bluishgreen seedlings with a uniform vegetative cover density of 90 percent or more.
- Check for erosion or movement of mulch.
- Repair damaged, bare, gullied, or sparsely vegetated areas and then fertilize, reseed, and apply and anchor mulch.
- If plant cover is sparse or patchy, evaluate the plant materials chosen, soil fertility, moisture condition, and mulch application; repair affected areas either by overseeding or preparing a new seedbed and reseeding. Apply and anchor mulch on the newly seeded areas.
- If vegetation fails to grow, consider soil testing to determine soil pH or nutrient deficiency problems. (Contact your soil and water conservation district or cooperative extension office for assistance.)
- If additional fertilization is needed to get a satisfactory stand, do so according to soil test recommendations.
- Add fertilizer the following growing season. Fertilize according to soil test recommendations.
- Fertilize turf areas annually. Apply fertilizer in a split application. For cool-season grasses, apply one-half of the fertilizer in late spring and one-half in early fall. For warm-season grasses, apply one-third in early spring, one-third in late spring, and the remaining one-third in middle summer.

Table 1 Permanent Seeding Recommendations
This table provides several seed mixture options. Additional seed mixtures are available commercially. When selecting a mixture, consider intended land use and site conditions, including soil properties (e.g., soil pH and drainage), slope aspect, and the tolerance of each species to shade and drought.

Open Low-Maintenance Areas (Remaining idle more than six months)

Seed Mixtures	Rate per Acre Pure Live Seed	Optimum Soil pH
1. Perennial ryegrass - white clover 1	70 lbs. 2 lbs.	5.6 to 7.0
2. Perennial ryegrass - tall fescue 2	70 lbs. 50 lbs.	5.6 to 7.0
3. Tall fescue 2 - white clover 1	70 lbs. 2 lbs.	5.5 to 7.5

Steep Banks and Cuts, Low-Maintenance Areas (not mowed)

Seed Mixtures	Rate per Acre Pure Live Seed	Optimum Soil pH
1. Smooth brome grass - red clover 1	35 lbs. 20 lbs.	5.5 to 7.0
2. Tall fescue 2 - white clover 1	50 lbs. 2 lbs.	5.5 to 7.5
3. Tall fescue 2 - red clover 1	50 lbs. 20 lbs.	5.5 to 7.5
4. Orchard grass - red clover 1 - white clover 1	30 lbs. 20 lbs. 2 lbs.	5.6 to 7.0
5. Crownvetch 1 - tall fescue 2	12 lbs. 30 lbs.	5.6 to 7.0

Lawns and High-Maintenance Areas

Seed Mixtures	Rate per Acre Pure Live Seed	Optimum Soil pH
1. Bluegrass	140 lbs.	5.5 to 7.0
2. Perennial ryegrass (turf type)	60 lbs. 90 lbs.	5.6 to 7.0
3. Tall fescue (turf type)2 -bluegrass	170 lbs. 30 lbs.	5.6 to 7.5

Channels and Areas of Concentrated Flow

Seed Mixtures	Rate per Acre Pure Live Seed	Optimum Soil pH
1. Perennial ryegrass - white 1	150 lbs. 2 lbs.	5.5 to 7.0
2. Kentucky bluegrass - smooth bromegrass - switchgrass - timothy - perennial ryegrass - white clover	20 lbs. 10 lbs. 3 lbs. 4 lbs. 10 lbs. 2 lbs.	5.5 to 7.5
3. Tall fescue 1 - white clover	150 lbs. 2 lbs.	5.5 to 7.5
4. Tall fescue 2 - perennial ryegrass - Kentucky bluegrass1	150 lbs. 20 lbs. 20 lbs.	5.5 to 7.5

1 For best results: (a) legume seed should be inoculated; (b) seeding mixtures containing legumes should preferably be spring-seeded, although the grass may be fall-seeded and the legume frost-seeded (see Dormant Seeding and Frost Seeding on page 41); and (c) if legumes are fall-seeded, do so in early fall.

2 Tall fescue provides little cover for, and may be toxic to some species of wildlife. The Indiana Department of Natural Resources recognizes the need for additional research on alternatives such as buffalograss, orchardgrass, smooth bromegrass, and switchgrass. This research, in conjunction with demonstration areas, should focus on erosion control characteristics, wildlife toxicity, turf durability, and drought resistance.

Notes
1. An oat or wheat companion or nurse crop may be used with any of the above permanent seeding mixtures, at the following rates:

(a) spring oats - one-fourth to three-fourths bushel per acre
(b) wheat - no more than one-half bushel per acre

2. A high potential for fertilizer, seed, and mulch to wash exists on steep banks, cuts, and in channels and areas of concentrated flow.

(3) SOD

Installation
Sod should not be installed during hot weather, on dry soil, frozen soil, compacted clay, loose sand or gravelly substrate soils, aggregate, or pesticidetreated soil. The ideal time to lay sod is May 1 to June 1 or September 1 to September 30, although it can be installed as early as March 15 if available or June 1 to September 1 if irrigated.

Site Preparation
1. Apply topsoil if existing soil conditions are unsuitable for establishing vegetation.
2. Grade the site to achieve positive drainage and create a smooth, firm soil surface.
3. Where applicable, use a chisel plow, disk, harrow, or rake to break up compacted soils and create a favorable rooting depth of six to eight inches.

Sod Bed Preparation
1. Test soil to determine pH and nutrient levels.
2. If soil pH is too acidic for the grass sod to be installed, apply lime according to soil test results or at the rate recommended by the sod supplier.
3. Apply fertilizer as recommended by the soil test. If testing was not done, apply 400 to 600 pounds per acre of 12-12-12 analysis fertilizer, or equivalent.
4. Work the soil amendments into the upper two to four inches of soil with a disk or rake operated across the slope.
5. Rake or harrow the area to achieve a smooth final grade and then roll or cultipack the soil surface to create a firm surface on which to lay the sod.

Laying the Sod
1. Install sod within thirty-six hours of its cutting.
2. Store the sod in a shaded location during installation.
3. Immediately before laying the sod, rake the soil surface to break any crust. (If the weather is hot, lightly irrigate the soil surface prior to laying the sod.)
4. Lay sod strips in a brick-like pattern.
5. Butt all joints tightly against each other (do not stretch or overlap them), using a knife or mason's trowel to trim and fit sod into irregularly shaped areas.
6. Roll the sod lightly after installation to ensure firm contact between the sod and soil.
7. Irrigate newly sodded areas until the underlying soil is wet to a depth of four inches, and then keep moist until the grass takes root.

Slope Application
1. Install the sod strips with the longest dimension perpendicular to the slope.
2. Where slopes exceed a ratio of 3:1, staple or stake each strip at the corners and in the middle.

Channel Application
(Sodding provides quicker protection than seeding and may reduce the risk of early washout.)

1. Excavate the channel, allowing for the full thickness of the sod.
2. Lay the sod strips with the longest dimension perpendicular to channel flow.
3. Staple or stake each strip of sod at the corners and in the middle.
4. Staple jute or biodegradable polypropylene netting over the sodded area to minimize the potential for washout during establishment.

Maintenance
- Inspect within 24 hours of each rain event and at least once every seven calendar days until sod is well rooted.
- Keep sod moist until fully rooted.
- After sod is well-rooted (two to three weeks), maintain a plant height of two to three inches.
- Time mowing to avoid ruts in turf
- Fertilize turf areas annually. Apply fertilizer in a split application. For coolseason grasses, apply one-half of the fertilizer in late spring and one-half in early fall. For warm-season grasses, apply one-third in early spring, one-third in late spring and one-third in mid-summer.

(4) MULCHING

Table 1. Mulch Specifications

Material 1	Rate per Acre	Comments
Straw or Hay	2 tons	Should be dry, free of undesirable seeds. Spread by hand or machine. Must be crimped or anchored (See Table 2).
Wood fiber or cellulose1	1 ton	Apply with a hydraulic mulch machine and use with tacking agent.

1 Mulching is not recommended in concentrated flows. Consider erosion control blankets or other stabilization methods.

Coverage
The mulch should have a uniform density of at least 75 percent over the soil surface.

Anchoring

Table 2. Mulch Anchoring Methods

Anchoring Method	How to Apply
Mulch anchoring tool or farm disk (dull, serrated, and blades set straight)	Crimp or punch the straw or hay two to four inches into the soil. Operate machinery on the contour of the slope.
Cleating with dozer tracks	Operate dozer up and down slope to prevent formation of rills by dozer cleats
Wood hydromulch fibers	Apply according to manufacturer's recommendations.
Synthetic tackifiers, binders, or soil stabilizers	Apply according to manufacturer's recommendations.
Netting (synthetic or biodegradable material)	Install netting immediately after applying mulch. Anchor netting with staples. Edges of netting strips should overlap with each up-slope strip overlapping four to six inches over the adjacent down-slope strip. Best suited to slope applications. In most instances, installation details are site specific, so manufacturer's recommendations should be followed.

1 All forms of mulch must be anchored to prevent displacement by wind and/or water.

Application
1. Apply mulch at the recommended rate shown in Table 1.
2. Spread the mulch material uniformly by hand, hayfork, mulch blower, or hydraulic mulch machine. After spreading, no more than 25 percent of the ground should be visible.
3. Anchor straw or hay mulch immediately after application. The mulch can be anchored using one of the methods listed below:
   a. Crimp with a mulch anchoring tool, a weighted farm disk with dull serrated blades set straight, or track cleats of a bulldozer,
   b. Apply hydraulic mulch with short cellulose fibers,
   c. Apply a liquid tackifier, or
   d. Cover with netting secured by staples.

Maintenance
- Inspect within 24 hours of each rain event and at least once every seven calendar days.
- Check for erosion or movement of mulch; repair damaged areas, reseed, apply new mulch and anchor the mulch in place.
- Continue inspections until vegetation is firmly established.
- If erosion is severe or recurring, use erosion control blankets or other more substantial stabilization methods to protect the area.

(5) Compost Mulching

Compost Specifications
- Feedstocks may include but are not limited to well-composted vegetable matter, leaves, yard trimmings, food scraps, composted manures, paper fiber, wood bark, Class A biosolids (as defined in Title 40 of the Code of Federal Regulations at 40 CFR Part 503), or any combination thereof.
- Compost shall be produced using an aerobic composting process meeting 40 CFR Part 503 regulations, including time and temperature data indicating effective weed seed, pathogen, and insect larvae kill.
- Compost shall be well decomposed, stable, and weed free.
- Refuse free (less than one percent by weight).
  - Free of any contaminants and materials toxic to plant growth.
- Inert materials not to exceed one percent by dry weight pH of 5.5 to 8.0.
- Carbon-nitrogen ratio not to exceed 100.
- Moisture content not to exceed 45 percent by dry weight.
- Variable particle size with maximum dimensions of three inches in length, one-half inch in width and one-half inch in depth.

Table 1. Compost Particle Size

Percent Passing Sieve Size			
2-Inch Sieve	1-Inch Sieve	3/4-Inch Sieve	>1/4-Inch Sieve
100%	99%	90%	25%

Bonding Agents (optional)
Taclcifiers, flocculants, or microbial additives may be used to remove sediment and/or additional pollutants from storm water runoff. (All additives combined with compost materials should be tested for physical results at a certified erosion and sediment control laboratory and biologically tested for elevated beneficial microorganisms at a United States Compost Council, Seal of Testing Assurance, approved testing laboratory.)

Soil Material (optional)
Five percent to ten percent sandy loam (as classified by the U.S. Department of Agriculture soil classification system).

Cover Density
Ninety percent or greater over the soil surface.

Anchoring Method
- Moisten compost/mulch blanket for a minimum of 60 days.
- Erosion control netting (optional).

Cover Thickness

Table 2. Compost Blanket Thickness

Slope		Thickness of Compost Blanket	Thickness of Compost Blanket with Erosion Control Netting
< 25%	< 4:1	1 to 2 inches	Not Applicable
25% to 50%	4:1 to 2:1	1 to 2 inches	2 inches
> 50%	> 2:1	2 to 3 inches	3 inches

Application
1. Remove existing vegetation, large soil clods, rocks, stumps, large roots, and debris in areas where compost mulch is to be applied and dispose of in designated areas.
2. Scarify sloping areas.
3. Aerate areas to be covered with compost/mulch blanket. (Proper aeration will require a minimum of two passes oriented in opposite directions.)
4. Broadcast a minimum of one pound of nitrogen (N), one-half pound of phosphorous (P205), and one-half pound of potash (K20) per 1,000 square feet or 300 to 400 pounds per acre of 12-12-12 analysis fertilizer, or equivalent, per acre.
5. Apply compost mulch blanket with a pneumatic blower or per manufacturer's directions.
   a. Apply within three days of completing aeration operations.
   b. Overlap top of slope shoulder by five to ten feet.
   c. Seed may be applied at time of installation. (Seed must be evenly blended into the compost if applied with a pneumatic blower or applied with a calibrated seeder attachment prior to installation of the compost blanket.)
6. Water compost mulch blanket for a period of 60 days following application. (On steeper slopes, it may be necessary to install erosion control netting over the compost blanket.)
   a. Mist blanket for first seven days and then every three days throughout the remainder of the 60-day period.
   b. Maintain a constant moisture content of 40 percent to 60 percent.

Maintenance
- Inspect within 24 hours of a rain event and at least once every seven calendar days.
- Repair eroded areas.
- Reseed, if applicable.
- Monitor vegetation and apply appropriate soil amendments (if needed) per a soil test.

Issued For Construction - August 21st, 2019

DEREK J. SIMON
REGISTERED
NO. PE11500716
STATE OF INDIANA
PROFESSIONAL ENGINEER
Derek J. Simon, PE

MLS Engineering
ENGINEERING YOUR TOMORROW...TODAY
Fort Wayne Office
10060 Bent Creek Boulevard
Fort Wayne, IN 46825
Phone: (260) 489-8571
Brett R. Miller, P.S. No.LS20300059
Derek J. Simon, P.E. No.PE11500716
Monroe Office
221 Tower Drive
Monroe, IN 46772
Phone: (260) 692-6166

PREPARED FOR:
Richard Krumholz
Delight Restaurant Group
PO Box 9601
Norfolk, VA 23505
(617) 233-7114

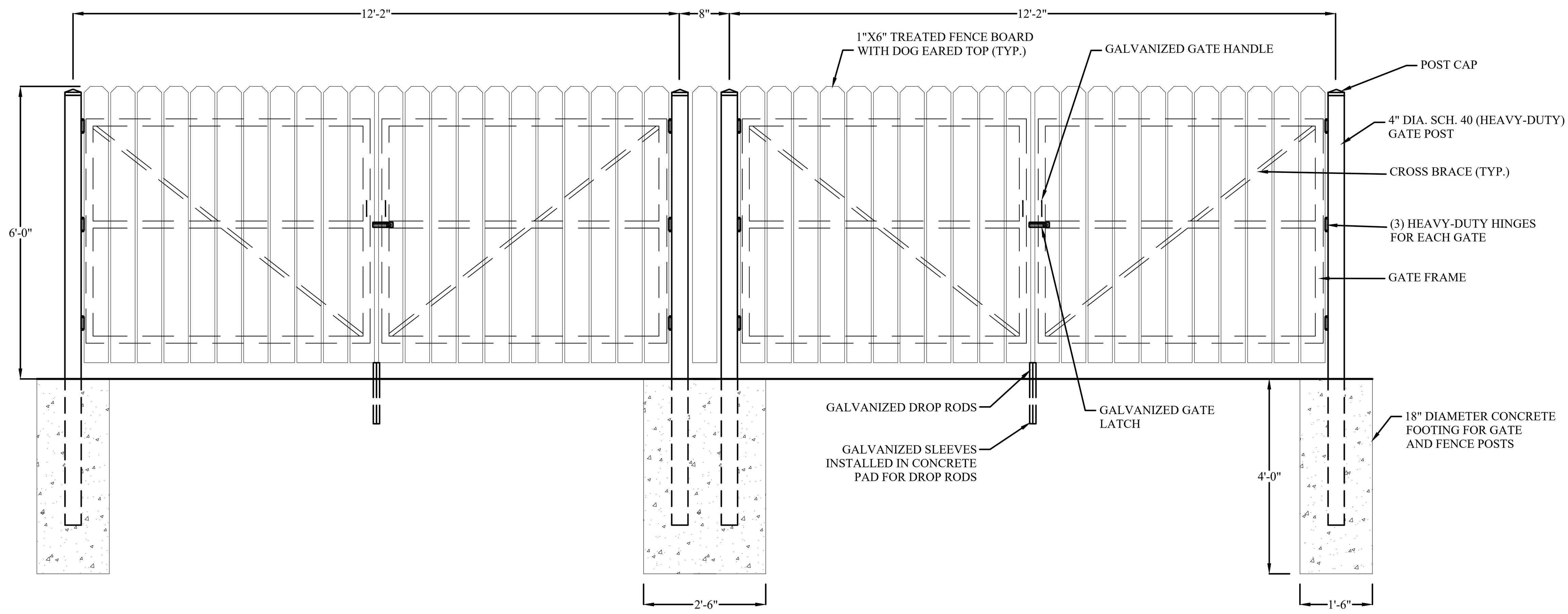
REVISIONS:

Date	By	Description
7/8/2019	BPJ	Comments Per City of Fort Wayne Addressed

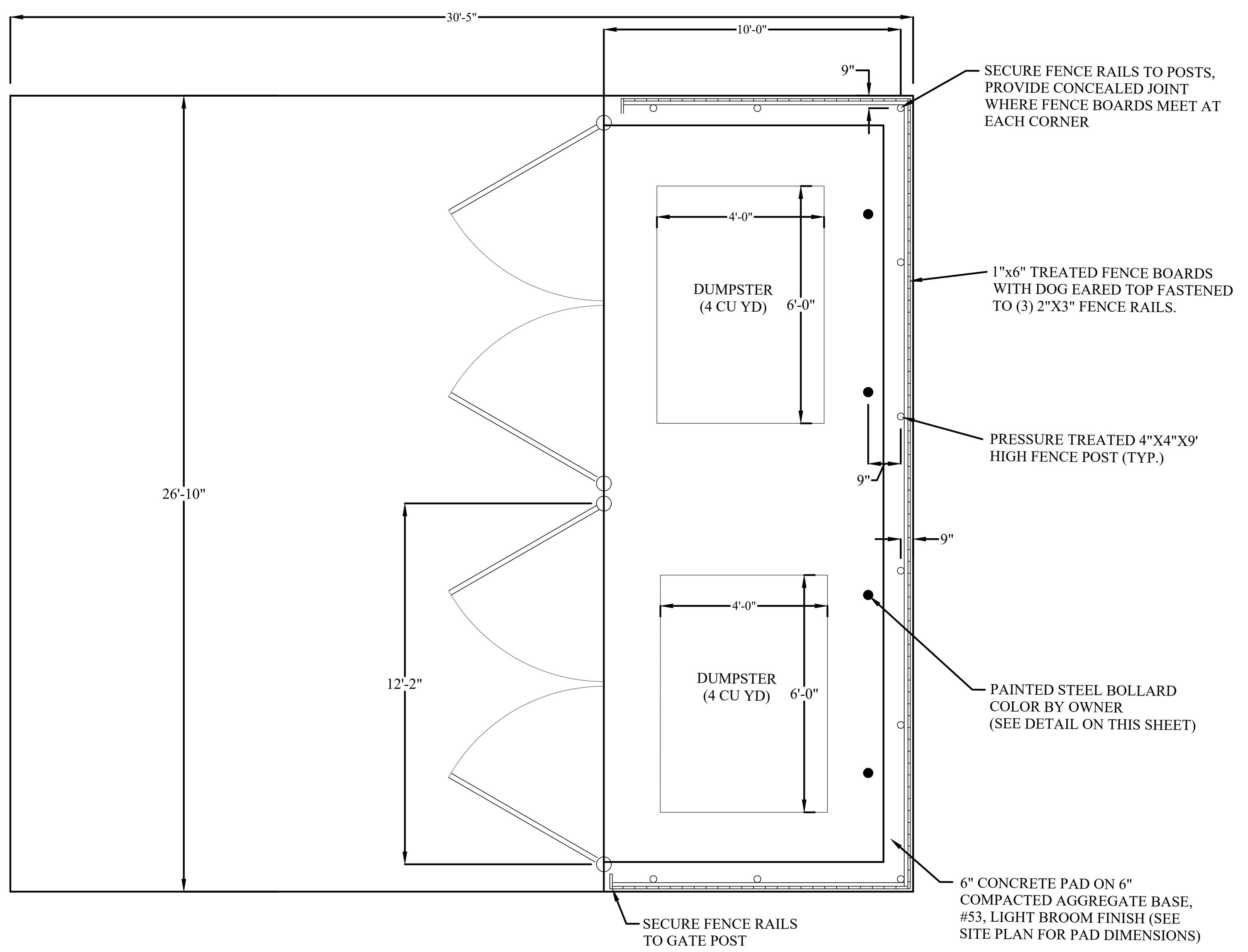
Taco Bell - Southtown Centre
7719 Southtown Xing
Fort Wayne, Indiana 46816
Secondary Development Plan
Erosion Control Detials

Date: 05-02-2019
Design By: BPJ
Chk'd By: DJS/GML
Project No.: 19035028

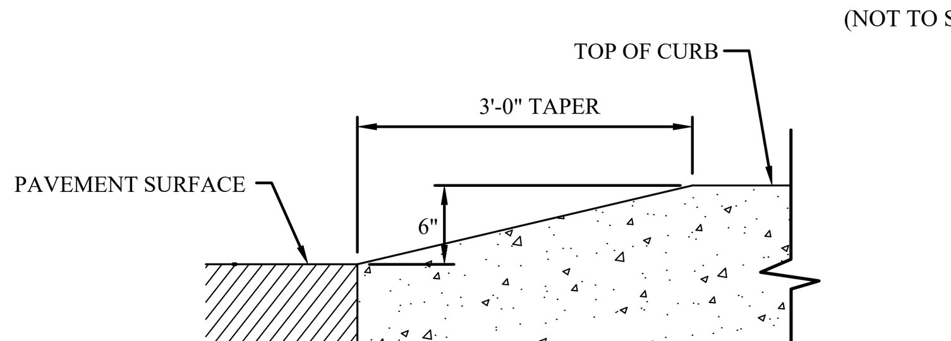
Sheet Number
C5.2



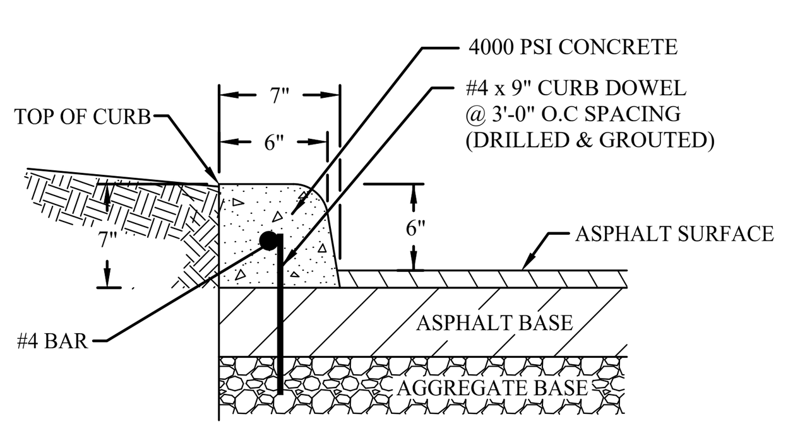
DUMPSTER ENCLOSURE
ELEVATION
(NOT TO SCALE)



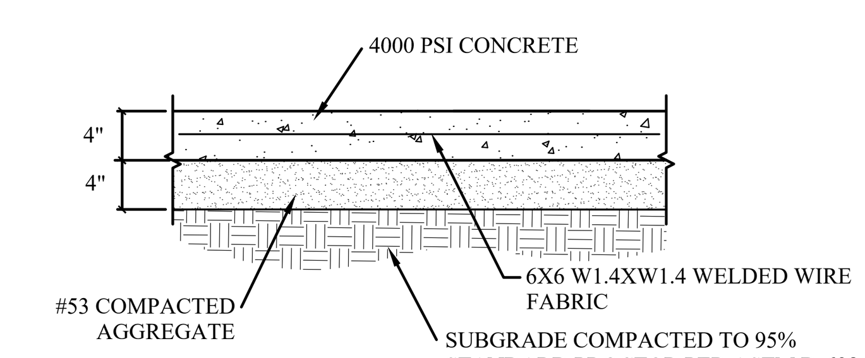
DUMPSTER ENCLOSURE
PLAN VIEW
(NOT TO SCALE)



CURB END TRANSITION
(NOT TO SCALE)



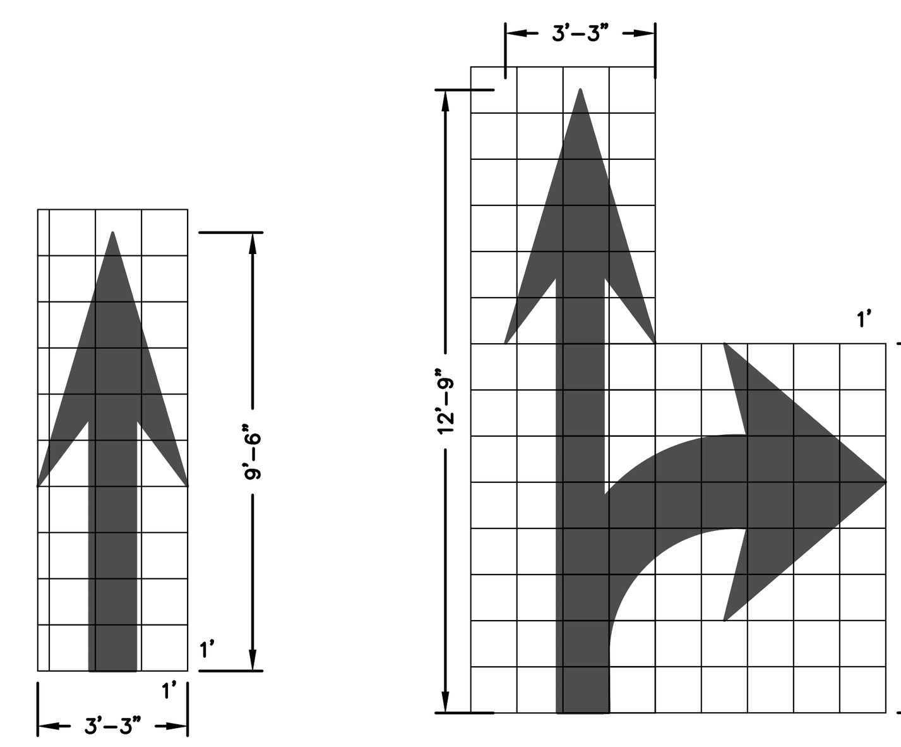
6" CONCRETE PIN-ON CURB
(NOT TO SCALE)



NOTES:

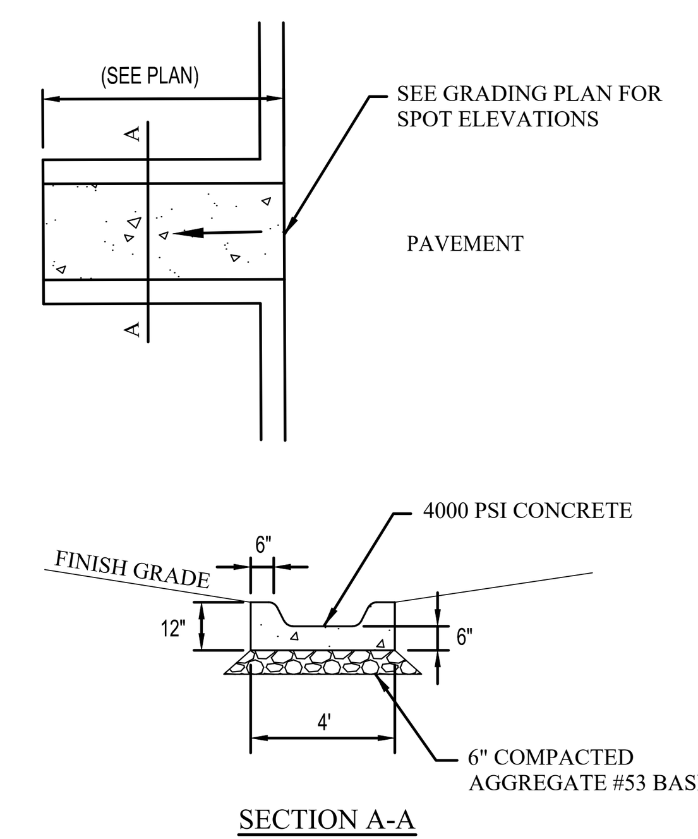
1. 2% CROSS SLOPE (MAX.) ALLOWED UNLESS OTHERWISE NOTED. SLOPE DOWN TOWARDS CURB OR PAVEMENT IF APPLICABLE.
2. TRANSVERSE CONTROL JOINTS SHALL BE PLACED AT EQUAL INTERVALS NOT TO EXCEED 8 FT. AND NORMALLY PLACED AT 5 FT. INTERVALS. EXPANSION JOINTS SHALL BE PLACED A MAXIMUM OF 50 FEET APART.

CONCRETE SIDEWALK
(NOT TO SCALE)

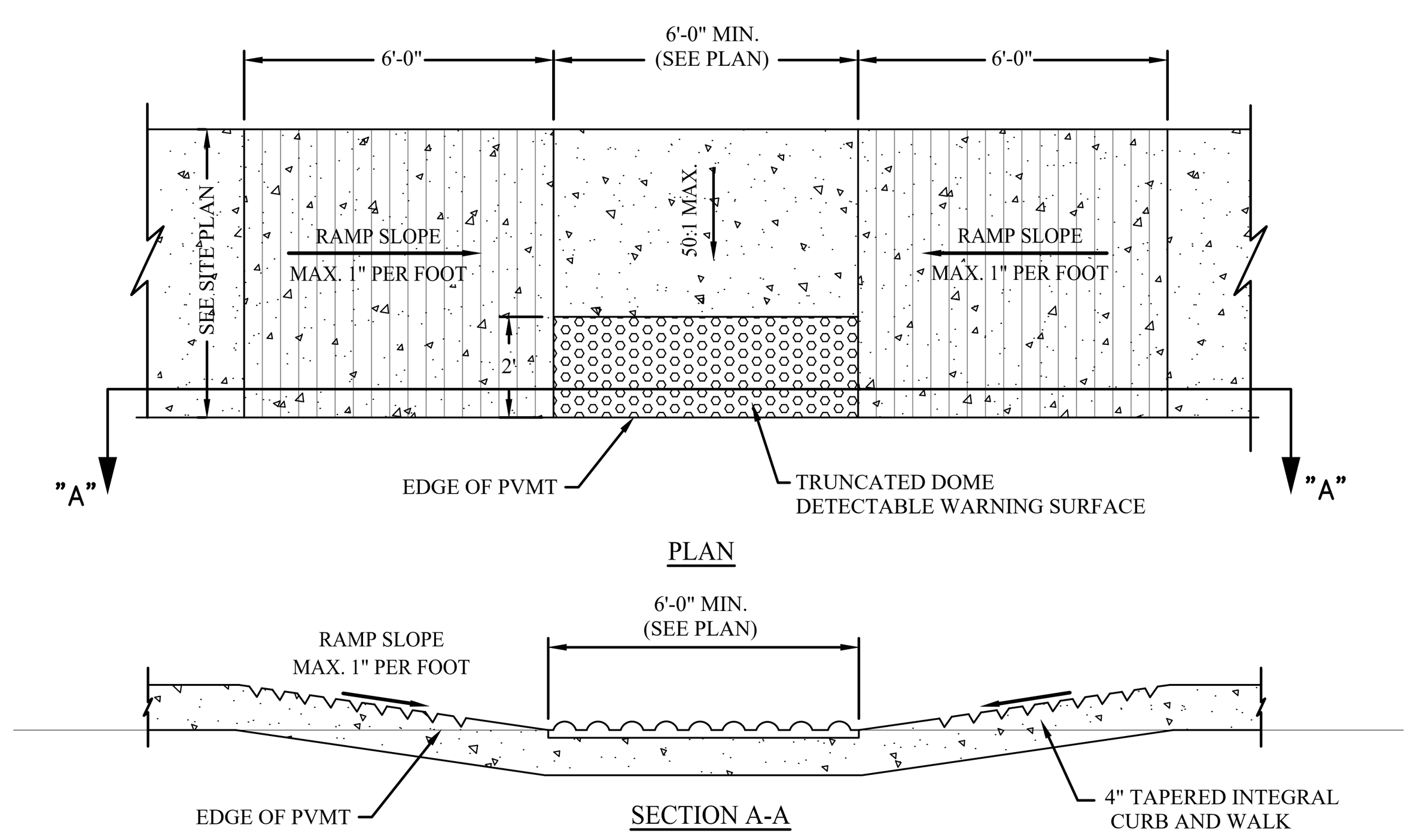


NOTE: ALL PAINT TO BE WHITE UNLESS OTHERWISE NOTED

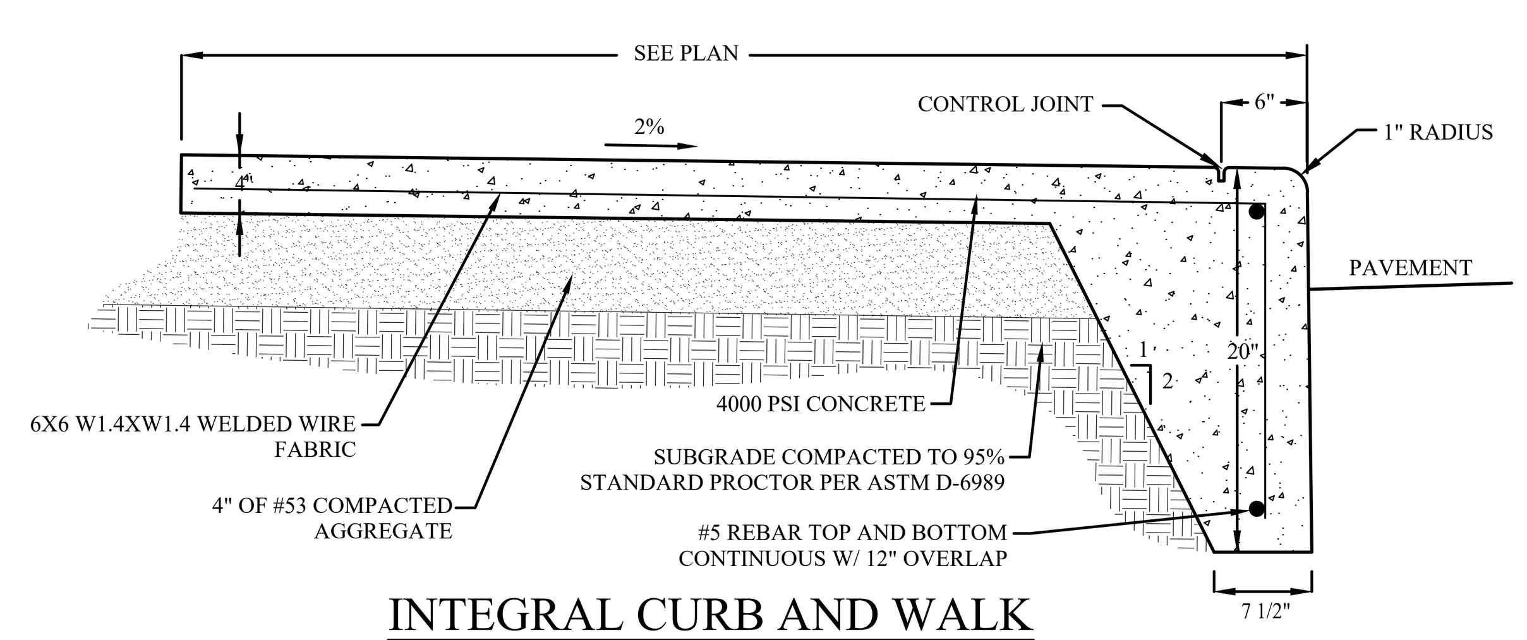
PAVEMENT MARKING
(NOT TO SCALE)



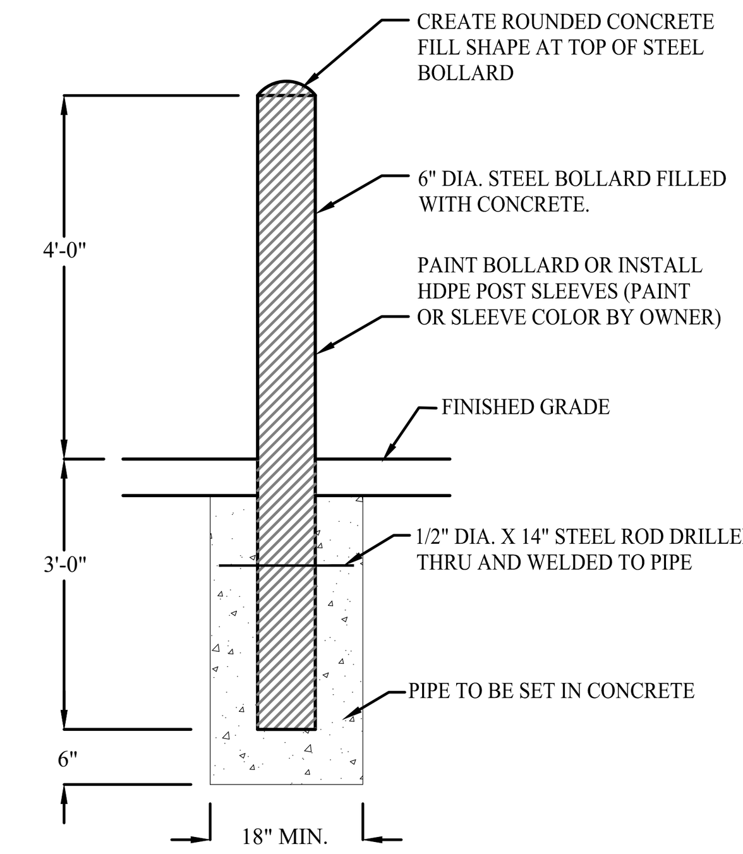
CONCRETE CURB TURNOUT
(NOT TO SCALE)



ACCESSIBLE RAMP TYPE 'I'
(NOT TO SCALE)



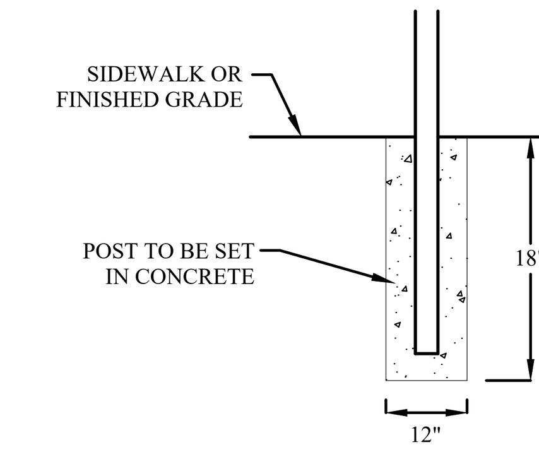
INTEGRAL CURB AND WALK
(NOT TO SCALE)

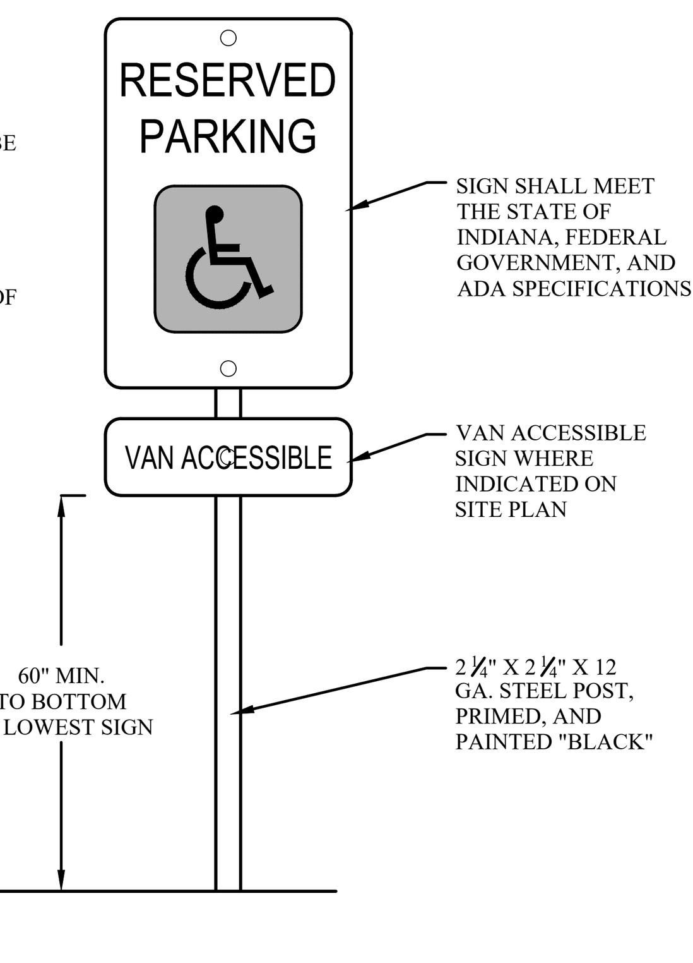


STEEL BOLLARD
(NOT TO SCALE)

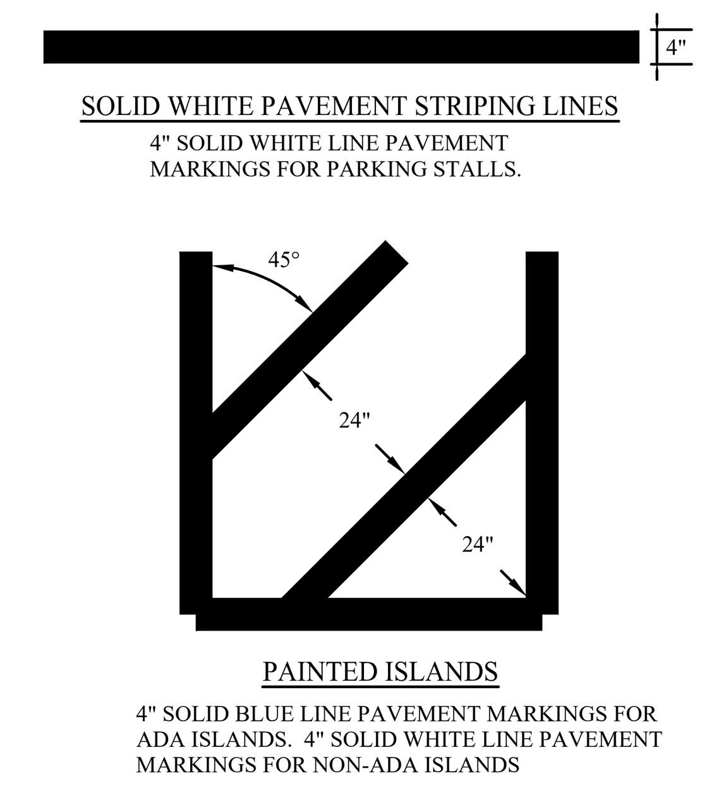
NOTES:

1. EACH PARKING SPACE FOR THE DISABLED SHALL BE IDENTIFIED BY A PERMANENT, REFLECTORIZED, RUST FREE, SHEET ALUMINUM SIGN WITH THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.
2. USE 12"X18" R7-8-100 FEDERAL ADA HANDICAP PARKING SIGN OR APPROVED EQUAL.
3. SIGN SHALL BE CENTERED ON THE INTERIOR END OF THE PARKING SPACE.
4. SIGN AND POLE SUBSTITUTION IS ALLOWED IF APPROVED BY THE ENGINEER AND OWNER.

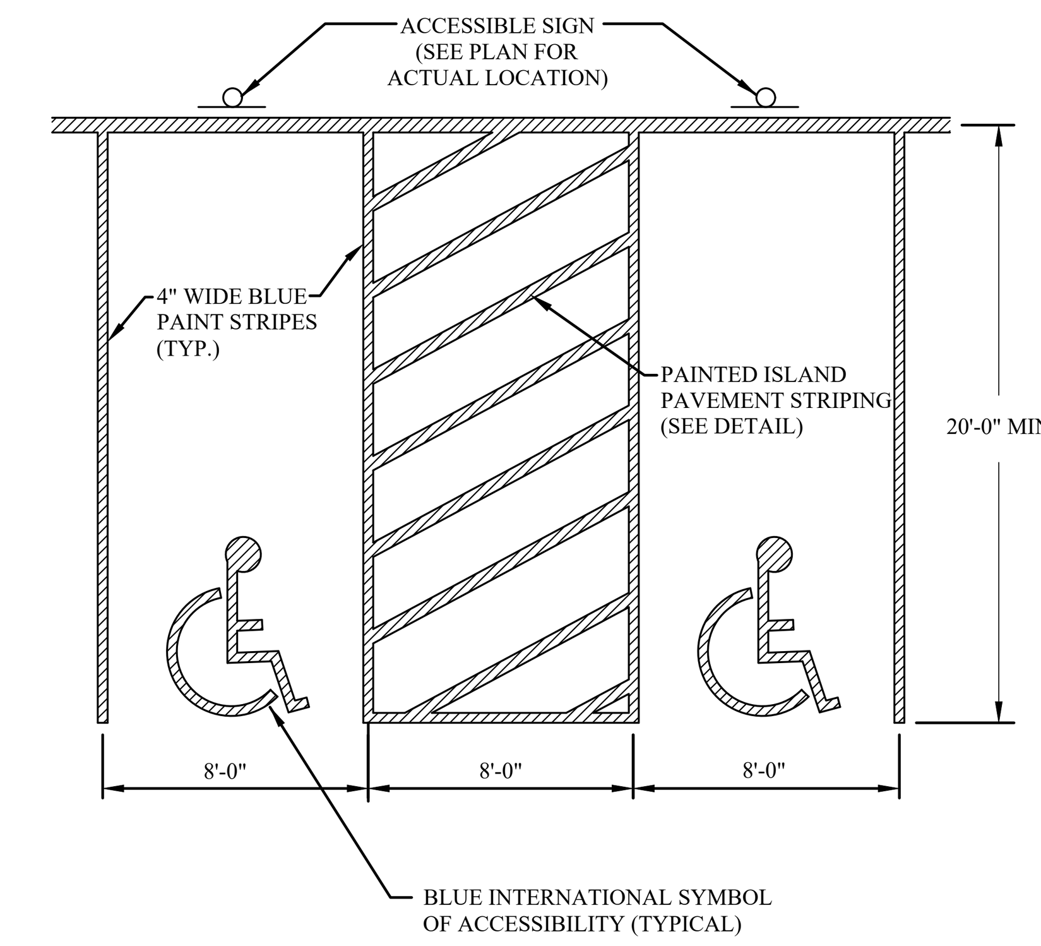




ACCESSIBLE PARKING SIGN
(NOT TO SCALE)



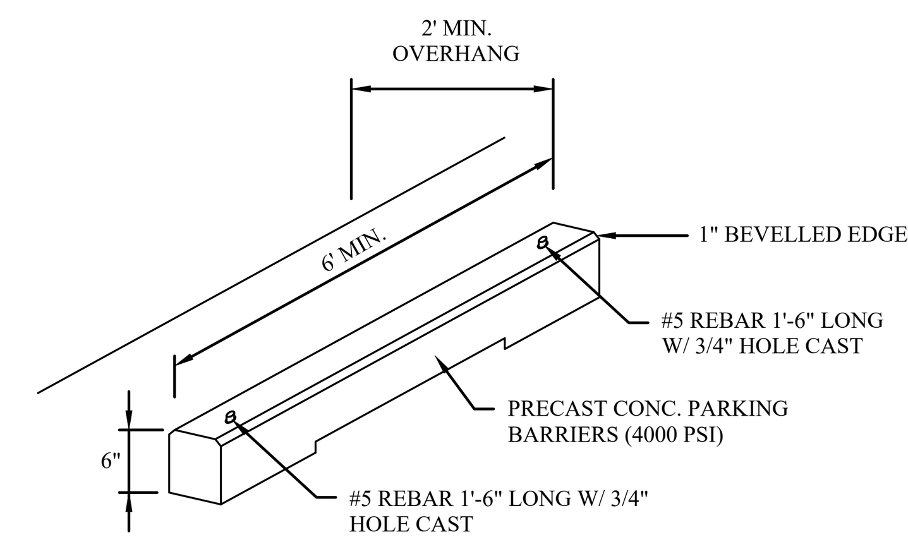
PAVEMENT STRIPING
(NOT TO SCALE)



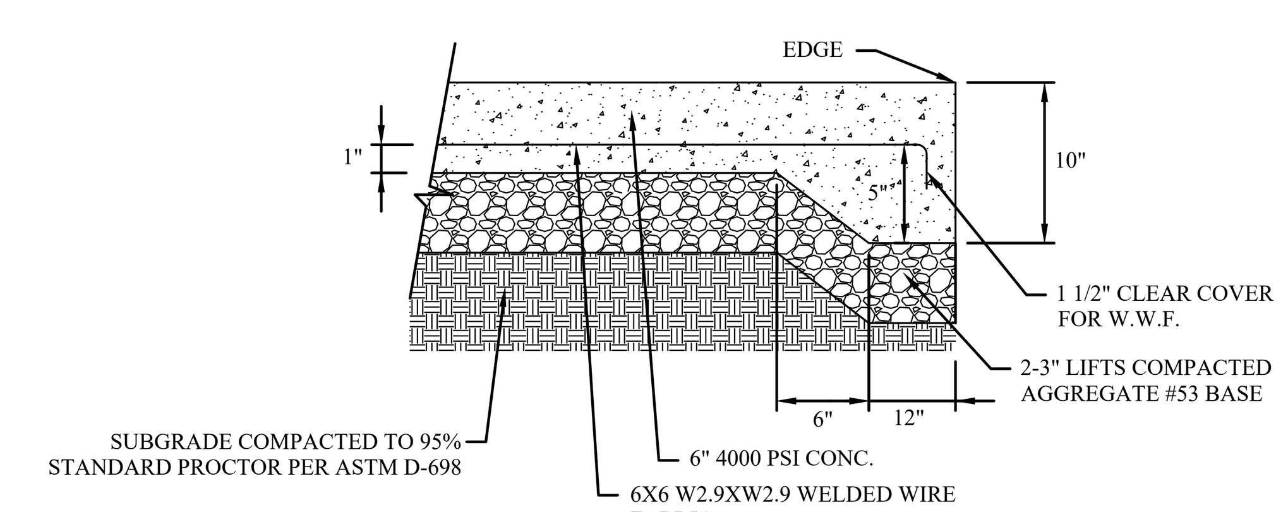
NOTE: ONE IN EIGHT ACCESSIBLE SPACES SHALL BE VAN ACCESSIBLE, BUT NOT LESS THAN ONE. (SEE SITE PLAN)

ACCESSIBLE PARKING SPACES SHALL BE IDENTIFIED BY A SIGN SHOWING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY COMPLYING WITH ANSI 4.28.8. SIGNS SHALL NOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE.

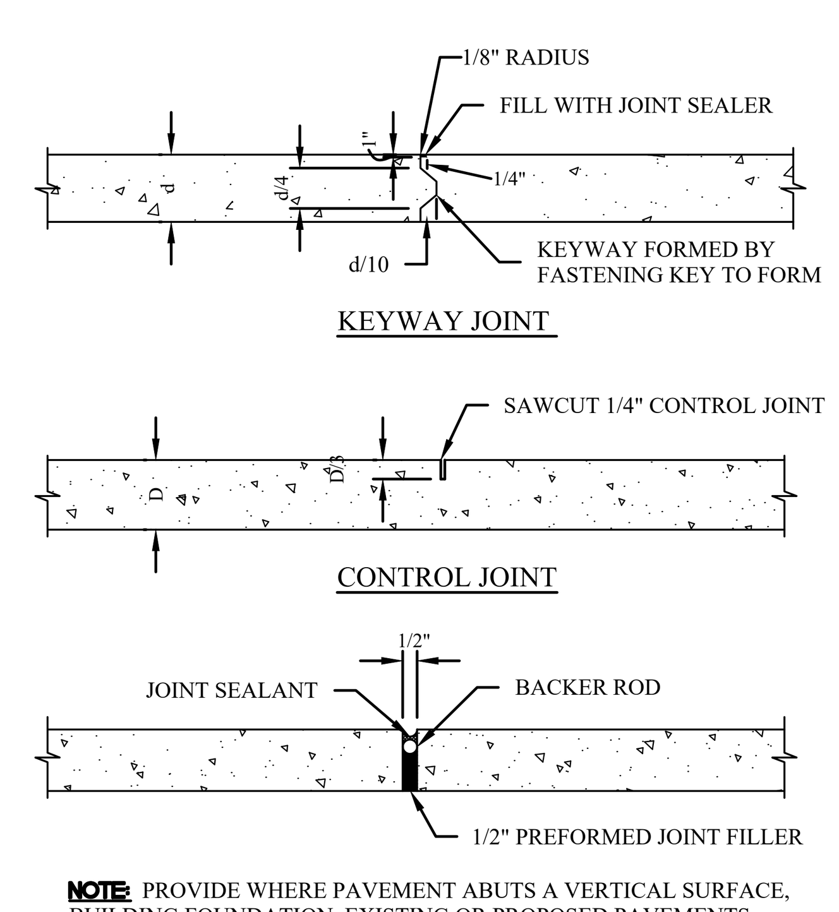
ACCESSIBLE PARKING SPACE
(NOT TO SCALE)



CONCRETE PARKING BUMPER
(NOT TO SCALE)



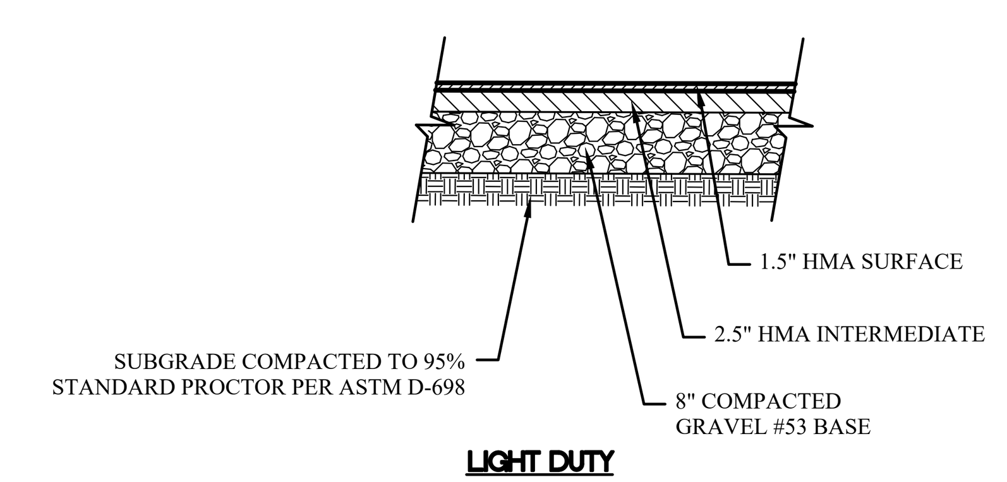
CONCRETE PAVEMENT SECTION
(NOT TO SCALE)



NOTE: PROVIDE WHERE PAVEMENT ABUTS A VERTICAL SURFACE, BUILDING FOUNDATION, EXISTING OR PROPOSED PAVEMENTS, CURBS AND WALKS.

EXPANSION JOINT

CONCRETE JOINTS
(NOT TO SCALE)



PAVEMENT SECTIONS
(NOT TO SCALE)

Derek J. Simon
REGISTERED
NO. PE11500716
STATE OF INDIANA
PROFESSIONAL ENGINEER

Derek J. Simon, PE

MLS Engineering
ENGINEERING YOUR TOMORROW...TODAY

Fort Wayne Office
10060 Bent Creek Boulevard
Fort Wayne, IN 46825
Phone: (260) 489-8571

Brett R. Miller, P.S. No.LS20300059
Derek J. Simon, P.E. No.PE11500716

Monroe Office
221 Tower Drive
Monroe, IN 46772
Phone: (260) 692-6166

PREPARED FOR:
Richard Krumholz
Delight Restaurant Group
PO Box 9601
Norfolk, VA 23505
(617) 233-7114

Issued For Construction - August 21st, 2019

REVISIONS:

Date	By	Description
7/8/2019	BPJ	Comments Per City of Fort Wayne Addressed

Taco Bell - Southtown Centre
7719 Southtown Xing
Fort Wayne, Indiana 46816

Secondary Development Plan

Construction Details

Date: 05-02-2019
Design By: BPJ
Chk'd By: DJS/GML
Project No.: 19035028

Sheet Number
C6.0

City of Fort Wayne - Water Notes

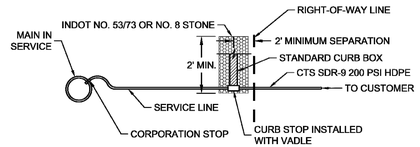
1. Water mains to be constructed according to "City Utilities Engineering Department, (Design Criteria Standards manual Revision May 2015)". Refer to for additional utility specifications and conditions for the installation of transmission and distribution mains.
2. Water main to be installed with a minimum cover of 5'-0" in relation to the proposed final grade.
3. All tees and bends exceeding 11 1/4 degrees shall be restrained. Retainer glands & set screws will not be allowed.
4. All tees, crosses and 90 degree elbows shall be restrained. Retainer glands & set screws will not be allowed.
5. All fire hydrants shall be in accordance with AWWA C-502.
6. All pipe joints shall be in accordance with ASNI specifications of A21.11 (AWWA C-111).
7. All valves 16" or smaller shall be Resilient Wedge Gate Valves Ductile iron body made in accordance with AWWA C-515 and are to be right hand (clockwise) opening.
8. Water main to be disinfected according to ANSI/AWWA C651. See "Pressure Testing Disinfection Policy and Gap Policy"
9. Where sanitary sewer and water main cross, one full length of water main should be centered over the sanitary sewer, and the vertical clearance shall be a minimum of 18 inches; where water lines and sewers cross and the minimum clearance cannot be maintained, the sewer must constructed of waterworks grade ductile iron pipe with mechanical joints or SDR 26 PVC pressure sewer pipe with compression fittings within ten feet of the water line.
10. The minimum horizontal distance between the water main and sanitary & storm main is 10.0 feet.
11. All water lines shall be installed in accordance to ASTM F1962 Class "F" bedding to be used for all flexible pipe. Pipe to be bedded with a minimum of 4" crushed aggregate #5, #8, or #9 stone. Pipe to be covered a minimum of 12" with crushed aggregate. The remaining can be backfilled with excavated material to surface grade.
12. All pipe trenches within the road right-of-way, under parking lots, drives, sidewalks and existing pipes shall be backfilled with #53 or #73 aggregate compacted to 95% modifier proctor test density.
13. Water to be supplied by the City of Fort Wayne Water Utility.
14. All permanent and temporary easements and permits, including street and road cut permits, necessary for the construction of these water mains shall be secured and paid for by the developer and/or contractor and two copies furnished to the water engineering department before construction starts.
15. It is the responsibility of the developer, engineer, and/or the contractor to obtain all permits necessary to either cut or bore under the public way from the jurisdiction having control over the public way. Approval of plans by the water engineering department does not warrant the issuance of the permit by the controlling agency.
16. The contractor shall notify engineering support services at least 48 hours (260/427-5155 or 260/740-1582) before starting construction to arrange for inspection and shut down of existing water mains where required.
17. Where a water main crosses under a sanitary or storm sewer, the main shall use 22 elbows to minimize the length of water main installed in excess of 5.0' cover.
18. Water mains pipe size 6" -16" material to be AWWA C900 PVC.
19. All fire hydrants shall be located on the property side of the main.
20. The contractor shall provide a Maintenance Bond for one year from the date that the water work is accepted by City Utilities.
21. Project contains:
    1,992 L.F. of 8" PVC AWWA C900 water main
    Contractor is to install one-inch (1") tap for each lot in the subdivision.
22. At the completion of the project, the contractor is to provide a record of tap locations on a standard form as provided by engineering support services.
23. The water main is to be located 9.5 feet from the right-of-way.
24. Plans were prepared in compliance with state technical standards, per 327 IAC 8-3.2.
25. All materials are certified in accordance with the american national standards institute (ANSI) national sanitation foundation (NSF) international standard 61.
26. All water mains and their accessories shall be installed and pressure and leak tested in accordance with the applicable provisions of AWWA standard C605-13. All water lines 3" or larger must be disinfected and tested in accordance with AWWA standard C-651.
27. All work to conform to state and local plumbing back flow prevention codes and the specifications of the Fort Wayne Water Utility. Per state code, back flow devices are to be tested upon installation and then periodically thereafter. Submit copies of tests to the water engineering department.
28. No water main shall be within two (2) feet of a storm sewer structure or sanitary manhole from the outside edge of the water main to the outside edge of the structure.
29. Vacuum breakers must be installed on all existing or proposed hose bibbs, mop/service sinks, wall/yard hydrants.
30. All taps will be installed according to the board of public works resolution no 88-36-12.
31. All taps will be installed with curb boxes placed in the specified location: four (4) feet from the side property line or in the exact center of the lot and are to be located in the right-of-way seven (7) feet from the front property line and placed 3" to 4" above grade.
32. All Water pipe material shall be installed with tracing wire. Use #10 or stronger High Strength, Copper Clad Steel Reinforced, HDPE insulated tracing wire with 21% conductivity and a minimum break load of 600lbs. Use a DRYCON direct bury lug to connect mainline tracing wire to service line tracing wire. Tracing wire shall be laid directly over the water main and attached to the pipe at regular intervals not to exceed ten feet. For valves, and hydrants reference Details STR-43 and W-17 for tracing wire installation requirements. Successful completion of conductivity test witnessed by a City Utilities Representative will be required prior to acceptance of water main.
33. All 6", 8", 12" and 16" water main to be PVC pipe conforming to AWWA C900, SDR 18. The material shall conform to ASTM D1784.
34. Bedding- PVC pipe is to be installed in accordance of ANSI/AWWA C605 laying condition standards.
35. The joints for PVC shall be push-on, elastomeric gasketed joints conforming to ASTM D3139. The joint gaskets shall meet ANSI standard A21.11.
36. All chains on fire hydrants must be removed prior to pressure test & disinfection by the utility.
37. All taps shall be identified with pvc pipe 36" in length, with one (1) foot below grade.
38. Tapping saddles shall be used for all service taps in pvc pipe. The tapping saddles and hardware shall be ductile iron with epoxy coating, stainless steel or bronze material with awwa tapered threads. The tapping saddle design shall be hinged or bolted, both with a minimum strap width of two inches (2"). Three (3) piece tapping saddle design is not allowed.
39. Failure to comply with utility standards in regards to the tap installation policy will result in a penalty as determined by the water utility.

City Utilities Design Standards Manual

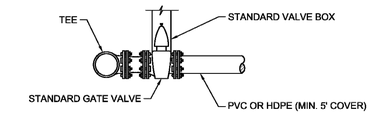
SERVICE INSTALLATIONS

Created: January 1, 2002 — Revised: November 8, 2016

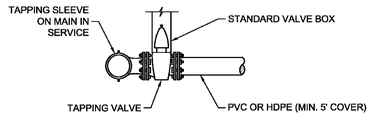
Scale: N.T.S.



SMALL SERVICE INSTALLATION
3/4" THRU 2" (MIN. 5' COVER)



LARGE SERVICE INSTALLATION WITH NEW WATER MAIN INSTALLATION
4" & LARGER



LARGE SERVICE INSTALLATION ON EXISTING WATER MAIN IN SERVICE
4" & LARGER

NOTES:
1. DO NOT PLACE CURB BOX WITHIN PAVED AREAS (SIDEWALKS, DRIVEWAYS, STREETS).
2. HDPE MAIN SERVICE TAPS SHALL USE ELECTRO FUSION SADDLES FOR NEW AND EXISTING MAINS OF ALL SIZES.

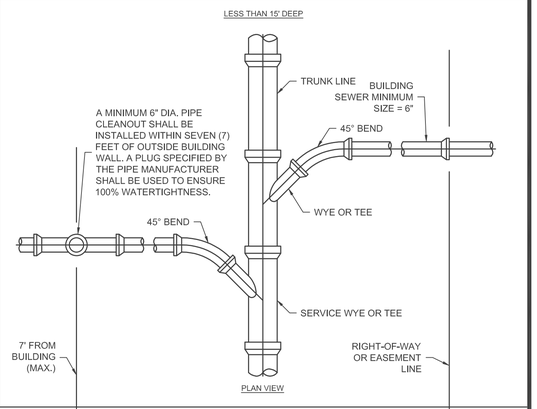
W-40

Fort Wayne City Utilities Design Standards Manual

SHALLOW SERVICE CONNECTION

Created: January 1, 2002 — Revised: December 3, 2014

Scale: N.T.S. — Approved: May 16, 2012



NOTES:
1. COMPACTION OF GRANULAR BACKFILL IS CRITICAL UNDER WYE AND BEND.

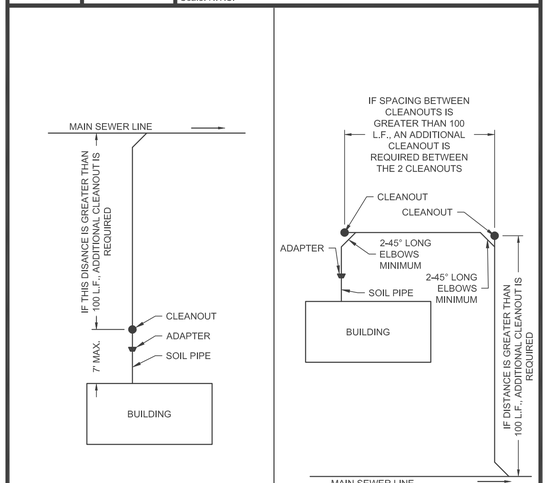
SAN-4

City Utilities Design Standards Manual

BUILDING SEWER CONNECTION LAYOUT

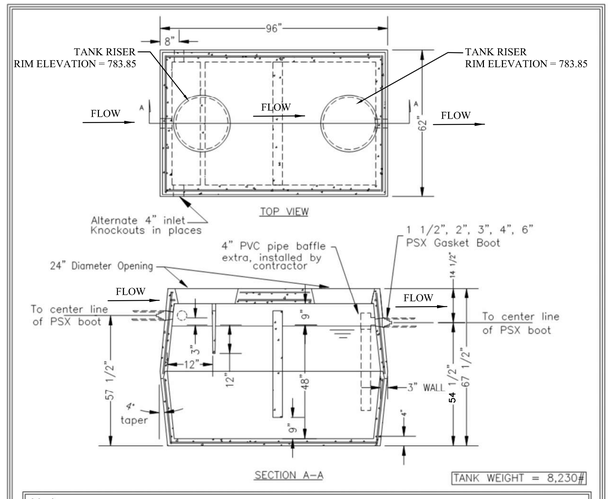
Created: January 1, 2002 — Revised: September 6, 2013

Scale: N.T.S.



NOTES:
1. MAXIMUM DISTANCE BETWEEN THE EXTERIOR WALL AND THE CLEANOUT WYE SHALL BE 7'.
2. NO 90° ELBOW IS PERMITTED IN BUILDING SEWER. TWO 45° LONG ELBOWS MUST BE USED.
3. MINIMUM SLOPE OF BUILDING SEWER SHALL BE 2% (1/4" PER FOOT).
4. MINIMUM SIZE FOR BUILDING SEWER SHALL BE 6" IN DIAMETER.
5. BUILDING SEWER LINE SHALL BE INSPECTED AND APPROVED BEFORE EXCAVATION IS BACKFILLED.
6. NO CLEANOUT CAN BE INSTALLED IN A ROAD OR ALLEY RIGHT-OF-WAY OR IN A DEDICATED EASEMENT UNLESS OTHERWISE APPROVED BY THE GOVERNING AGENCY OR DEPARTMENT.

SAN-1



Notes:
1. Optional tank risers should be ordered to grade.
2. Minimum 4500 psi at 28 days concrete.
3. Reinforcing bars shall conform to ASTM A-615 Grade 60 Steel.
4. All reinforcing bars shall be cut and formed to the dimensional tolerances specified in ACI-315 or ACI-318 except where noted on drawings.
5. All bars shall be bent cold. Bars with kinks and bends not indicated shall not be used. Heating and rebending of bars is not permitted.
6. Reinforcing steel shall be #4 rebar at 12" o.c. both ways tied to 6x6 10/10 Welded Wire Mesh. Top of Grease Trap to have double layer of steel.
7. Earth cover: 2'-0" minimum up to 5'-0" maximum. Size pad according to amount of earth cover.

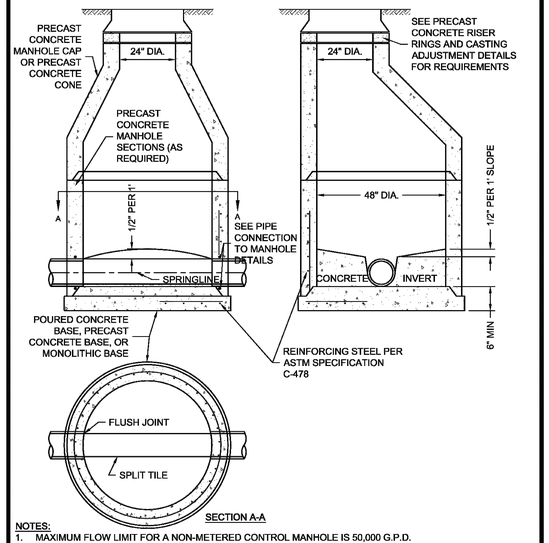
1000 GALLON	MIDWEST TILE & CONCRETE PRODUCTS, INC.	Drawing Name: 1000-ST.DWG
HEAVY DUTY	4309 Webster Road, Woodburn IN 46797, Phone: 260-749-5173, Fax: 260-493-2477	Date: 1/30/04
GREASE TRAP	6209 Ardmore Ave, Fort Wayne IN 46809, Phone: 260-478-9098, Fax: 260-478-6738	Drawn By: Paul Tucker
		Checked By: David Miller

Fort Wayne City Utilities Design Standards Manual

CONTROL MANHOLE - NON-METERED

Created: January 1, 2002 — Revised: July 29, 2014

Scale: N.T.S. — Approved: May 16, 2012



NOTES:
1. MAXIMUM FLOW LIMIT FOR A NON-METERED CONTROL MANHOLE IS 50,000 G.P.D.

GENERAL CONSTRUCTION REQUIREMENTS
1. ALL PRECAST MANHOLES TO BE CONSTRUCTED PER ASTM C-478.
2. PIPE SHALL BE LAID STRAIGHT THROUGH WITH SPLIT TILE OR BROKEN OUT INSIDE TO SMOOTH FINISH.
3. SHOP DRAWINGS SHALL BE APPROVED PRIOR TO CONSTRUCTION.
4. ALL INSIDE JOINTS OF MANHOL COMPONENTS SHALL BE SMOOTHED WITH MORTAR.
5. MINIMUM DIAMETER OF THROUGH PIPE SHALL BE 6".

MANHOLE JOINTS
1. EZ STICK OR APPROVED EQUAL

STR-11-2

DEREK J. SIMON, REGISTERED, NO. PE11500716, STATE OF INDIANA, PROFESSIONAL ENGINEER
Derek J. Simon, PE

MLSEngineering
ENGINEERING YOUR TOMORROW...TODAY
Monroe Office: 221 Tower Drive, Monroe, IN 46772, Phone: (260) 692-6166
Fort Wayne Office: 10060 Rent Creek Boulevard, Fort Wayne, IN 46825, Phone: (260) 489-8571
Brett R. Miller, P.S. No.LS20300059
Derek J. Simon, P.E. No.PE11500716

PREPARED FOR:
Richard Krumholz
Delight Restaurant Group
PO Box 9601
Norfolk, VA 23505
(617) 233-7114

Issued For Construction - August 21st, 2019

REVISIONS:		
7/8/2019	BPJ	Comments Per City of Fort Wayne Addressed

Taco Bell - Southtown Centre
7719 Southtown Xing
Fort Wayne, Indiana 46816

Secondary Development Plan
Construction Details

Date: 05-02-2019
Design By: BPJ
Chk'd By: DJS/GML
Project No.: 19035028

Sheet Number
C6.1

SANITARY SEWER CONSTRUCTION STANDARDS & SPECIFICATIONS
LAST UPDATED 2-2-16

1. ALL MATERIALS AND WORKMANSHIP SHALL MEET THE CITY OF FORT WAYNE DESIGN STANDARDS MANUAL AND TITLE 327 OF THE INDIANA ADMINISTRATION CODE, ARTICLE 3 (STATE CODE), LATEST VERSION.

2. ALL PERMITS REQUIRED FOR THE EXECUTION OF THE WORK SHALL BE OBTAINED AND ALL APPLICABLE FEES PAID FOR BY THE CONTRACTOR OR DEVELOPER TO CITY UTILITIES PRIOR TO COMMENCEMENT OF WORK UNLESS OTHERWISE APPROVED BY CITY UTILITIES.

3. AS-BUILT DRAWINGS (1 SET) TO BE PROVIDED TO CITY OF FORT WAYNE UPON COMPLETION OF SANITARY SEWER.

4. INSPECTION BY CITY REPRESENTATIVE MUST BE PROVIDED FOR ALL SEWER CONSTRUCTION AND PAID FOR BY THE CONTRACTOR OR DEVELOPER. CONTRACTOR MUST NOTIFY CITY UTILITIES 48 HOURS PRIOR TO START OF CONSTRUCTION.

5. PIPE BEDDING - CLASS "F" FOR FLEXIBLE PIPE SHALL BE BEDDED IN GRANULAR FILL, WHICH SHALL BE CARRIED 12 INCHES ABOVE THE TOP OF THE PIPE. ALL BEDDING, HAUNCHING AND INITIAL BACKFILL SHALL BE CRUSHED AGGREGATE INDOT #5, #8 OR #9.

6. ALL SEWER TRENCHES WITHIN THE ROAD RIGHT-OF-WAY, UNDER PARKING LOTS, DRIVES, SIDEWALKS AND EXISTING PIPES SHALL BE BACKFILLED WITH INDOT #53, #73 CRUSHED STONE, COMPACTED TO 95% MODIFIED PROCTOR DENSITY, UNLESS OTHERWISE NOTED.

7. ALL GRAVITY SANITARY SEWER MAINS TO BE PVC CONFORMING TO ASTM D3034, UNLESS NOTED OTHERWISE.

8. ALL SANITARY SEWER JOINTS SHALL BE GASKETED "PUSH ON TYPE" WITH A CONFINED ELASTOMETRIC SEAL (RUBBER GASKET). JOINT TO CONFORM WITH ASTM D3212 AND SEAL TO CONFORM WITH JOINTS ASTM F477.

9. ALL MANHOLES TO BE 48-INCH DIAMETER PRECAST REINFORCED CONCRETE, UNLESS NOTED OTHERWISE.

10. ALL PRE-CAST CONCRETE MANHOLE COMPONENTS (CONES, ADJUSTING RINGS, SECTIONS, ETC.) SHALL CONFORM TO ASTM SPECIFICATION C478.

11. ALL MANHOLE FRAMES TO BE NEENAH R-1772 WITH "SANITARY" LETTERED, SOLID LID OR EAST JORDAN 1022Z1 WITH 1020AHDGS "SANITARY SEWER" LETTERED, SOLID LID, UNLESS OTHERWISE NOTED.

12. SEWER TO WATER MAIN SEPARATION DISTANCES SHALL CONFORM TO THE RECOMMENDED STANDARDS FOR 327 IAC 3-6-9, LATEST VERSION.

CROSSINGS: SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18" BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER. THIS SHALL BE THE CASE WHERE THE WATER MAIN IS EITHER ABOVE OR BELOW THE SEWER. WHEN IT IS IMPOSSIBLE TO OBTAIN THE PROPER HORIZONTAL AND VERTICAL SEPARATION ONE OF THE FOLLOWING METHODS MUST BE SPECIFIED:

a) THE SEWER SHALL BE DESIGNED AND CONSTRUCTED EQUAL TO WATER PIPE, AND SHALL BE PRESSURE TESTED AT 150 PSI TO ASSURE WATERTIGHTNESS.
b) EITHER THE WATER MAIN OR THE SEWER LINE MAY BE ENCASED IN A WATERTIGHT CARRIER PIPE WHICH EXTENDS 10 FEET ON BOTH SIDES OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATER MAIN. THE CARRIER PIPE SHALL BE OF THE MATERIALS APPROVED BY CITY UTILITIES FOR USE OF WATER MAIN CONSTRUCTION.

HORIZONTAL AND VERTICAL SEPARATION: A 10 FOOT HORIZONTAL DISTANCE EDGE TO EDGE SHALL BE MAINTAINED BETWEEN SANITARY SEWER AND EXISTING OR PROPOSED WATER MAIN. FOR GRAVITY SEWERS WHERE IT IS NOT PRACTICAL TO MAINTAIN A 10 FOOT SEPARATION A DEVIATION MAY BE ALLOWED ON A CASE-BY-CASE BASIS. SUCH DEVIATION MAY ALLOW THE INSTALLATION OF THE GRAVITY SEWER CLOSER TO A WATER MAIN, PROVIDED THAT THE WATER MAIN IS IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE GRAVITY SEWER AND AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER. IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION FOR GRAVITY SEWERS, BOTH THE WATER MAIN AND GRAVITY SEWER MUST BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT PIPE COMPLYING WITH CITY UTILITIES DESIGN STANDARDS AND BE PRESSURE TESTED TO 150 PSI TO ASSURE WATERTIGHTNESS.

13. ANY EXISTING PIPE OR TILE(S), WHICH ARE CUT OR DAMAGED DURING CONSTRUCTION, SHALL BE REPLACED WITH EQUAL OR BETTER MATERIALS AND CONSTRUCTION METHODS.

14. ANY PAVEMENT OR IMPROVED ROAD SURFACE OR SIDEWALK CUT DURING CONSTRUCTION SHALL BE REPLACED WITH EQUAL OR BETTER MATERIALS AND CONSTRUCTION METHODS.

15. ALL GRASSED AREAS WHICH ARE DISTURBED DURING THE COURSE OF CONSTRUCTION, SHALL BE SEEDED WITH COMPARABLE GRASS SEED AND COVERED WITH STRAW. WATER SHALL BE APPLIED AS REQUIRED TO ASSURE GROWTH.

16. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE REGRADED TO THE ORIGINAL CONTOURS PRIOR TO COMPLETION OF THE PROJECT.

17. VERTICAL DEFLECTION TEST (MANDREL TEST) SHALL BE PERFORMED ON ALL FLEXIBLE PIPE AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A VERTICAL DEFLECTION OF 5% ACTUAL INSIDE DIAMETER (AS LISTED IN ASTM STANDARDS). DEFLECTION TEST RESULTS SHALL BE SUBMITTED WITH THE INFILTRATION/EXFILTRATION TEST RESULTS. THE FOLLOWING ARE CONSIDERED FLEXIBLE PIPES: DIP, PVC, HDPE, PP AND FRP.

18. ALL MANHOLES SHALL BE AIR TESTED IN ACCORDANCE WITH ASTM C1244, STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY NEGATIVE AIR PRESSURE (VACUUM TEST).

19. LOW PRESSURE AIR TEST FOR GRAVITY SEWER SHALL CONFORM TO ASTM F1417, STANDARD TEST METHOD FOR INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW-PRESSURE AIR, FOR PLASTIC PIPE.

20. THE FORCE MAIN, OR SECTIONS, THEREOF, SHALL BE TESTED BY THE CONTRACTOR IN THE PRESENCE OF THE CITY'S REPRESENTATIVE AND ALL LEAKS SHALL BE MADE TIGHT TO MEET THE REQUIREMENTS BELOW. THE CONTRACTOR SHALL FURNISH ALL PIPE, BULKHEADS, TAPS, PUMPS, GAUGES, AND OTHER EQUIPMENT REQUIRED TO CARRY OUT THE TESTS, USING WATER FROM CITY WATER MAINS. THE SECTION OF MAIN TO BE TESTED SHALL BE FILLED WITH WATER AND THE ENTRAINED AIR WITHIN THE PIPE REMOVED OR ABSORBED. THE FOLLOWING TEST METHODS SHALL BE USED BASED ON THE FOLLOWING PIPE MATERIAL.

a) DI AND PVC PRESSURE PIPE: ADD FLUID AS REQUIRED TO PRESSURIZE LINE TO 150 PSI. MAINTAIN TEST PRESSURE FOR A STABILIZATION PERIOD OF 10 MINUTES BEFORE BEGINNING TEST. TIMED TEST PERIOD SHALL NOT BEGIN UNTIL AFTER PIPE HAS BEEN FILLED, AIR HAS BEEN EXPELLED, AND PRESSURE STABILIZED. AFTER STABILIZATION PERIOD, MAINTAIN TEST PRESSURE FOR AT LEAST 2 HOURS. DURING TIMED TESTING, ADD FLUID AS REQUIRED TO MAINTAIN PRESSURE WITHIN 5 PSIG OF REQUIRED TEST PRESSURE. PUMP FROM TEST CONTAINER TO MAINTAIN TEST PRESSURE. MEASURE VOLUME OF WATER PUMPED FROM TEST CONTAINER AND RECORD ON TEST REPORT. RECORD PRESSURE AT TEST PUMP AT 15 MINUTE INTERVALS FOR DURATION OF TEST.
b) HDPE PRESSURE PIPE: AFTER FILLING PIPELINE AND PURGING AIR, GRADUALLY PRESSURIZE PIPE TO 150 PSI AND MAINTAIN REQUIRED TEST PRESSURE FOR 4 HOURS FOR PIPE TO EXPAND. DURING EXPANSION, ADD FLUID TO MAINTAIN REQUIRED TEST PRESSURE. BEGIN TIMED TEST AFTER EXPANSION PERIOD AND OTHER REQUIREMENTS ARE MET. TIMED TEST PERIOD SHALL NOT BEGIN UNTIL AFTER PIPE HAS BEEN FILLED, EXPOSED TO REQUIRED WETTING PERIOD, AIR HAS BEEN EXPELLED, AND PRESSURE STABILIZED. AFTER 4-HOUR EXPANSION PHASE, REDUCE TEST PRESSURE BY 10 PSIG AND DO NOT ADD LIQUID. TEST PRESSURE SHALL THEN REMAIN STEADY FOR 1 HOUR, INDICATING NO LEAKAGE. IF NO VISIBLE LEAKAGE IS OBSERVED AND PRESSURE REMAIN WITHIN 5% OF THE ORIGINAL TEST PRESSURE FOR 1 HOUR, A PASSING TEST IS INDICATED.

21. HDPE PRESSURE PIPE MINIMUM WALL THICKNESS FOR SANITARY SEWER APPLICATIONS IS DR11, SIZES ARE BASED ON DIP SIZE. PIPE AND JOINTS/CONNECTIONS TO BE RATED FOR A MINIMUM OF 160 PSI.

22. HDPE PRESSURE PIPE MATERIAL DESIGNATION - PIPE MATERIAL USED FOR THE MANUFACTURE OF HDPE SHALL BE EXTRA HIGH MOLECULAR WEIGHT, HIGH DENSITY ETHYLENE/HEXANE COPOLYMER PE 4710 POLYETHYLENE RESIN MEETING THE REQUIREMENTS OF ASTM D3350 WITH A CELL CLASSIFICATION OF PE 445574C.

23. HDPE PRESSURE PIPE JOINTS - ALL JOINTS MUST BE BUTT-FUSED OR JOINTED WITH ELECTROFUSION COUPLINGS. MECHANICAL JOINTS AND COUPLINGS ARE PROHIBITED.

24. FORCE MAIN TRACING WIRE TO BE #10 OR STRONGER HIGH STRENGTH, COPPER CLAD STEEL REINFORCED, HDPE INSULATED TRACING WIRE WITH 21% CONDUCTIVITY FOR LOCATING PURPOSES AND A MINIMUM BREAK LOAD OF 600 LBS. TRACING WIRE INSULATION SHALL BE GREEN. USE A DRYCONN DIRECT BURY LUG TO CONNECT MAINLINE TRACING WIRE TO SERVICE LINE TRACING WIRE AND SPLICE TRACING WIRE. TRACING WIRE IS USED ON ALL FORCE MAINS REGARDLESS OF DIAMETER.

25. CONTINUITY TESTING OF THE TRACING WIRE ON FORCE MAINS SHALL BE PERFORMED BY THE CONTRACTOR IN THE PRESENCE OF THE CITY'S REPRESENTATIVE. CONTINUITY TESTING SHALL BE PERFORMED USING A DIRECT-CONNECT SIGNAL GENERATING DEVICE AND SCHONSTEDT OR EQUIVALENT UNDERGROUND PIPE LOCATING EQUIPMENT ALONG MAINS. BREAKS IN CONDUCTIVITY SHALL BE REPAIRED AND THE WIRE RE-TESTED UNTIL TRACING WIRE PASSES TEST.

TRACER WIRE SPECIFICATIONS

1. SEWER MAIN PIPE SHALL HAVE AN INSULATED #12: SOLID COPPER WIRE OR COPPER HEAD WIRE.
2. TRACER WIRE SHALL BE LAID DIRECTLY OVER THE PIPE AND ATTACHED TO THE PIPE WITH PLASTIC "ZIP" STRAPPING OR METAL WIRE AT REGULAR INTERVALS NOT TO EXCEED 10 FEET.
3. AT VALVES AND AIR RELEASE VALVES THE WIRE SHALL BE DRAWN THRU THE INSIDE AT TOP OF VALVE BOX RISERS. IN PAVEMENT THE WIRE SHOULD BE INSTALLED WITH AN EXCESS LENGTH OF 4' TO 6'
4. EXTRA WIRE IS TO BE FOLDED DOWN THRU THE INSIDE VALVE BOX, WIRE SHALL BE EXTENDED THROUGH THE HOLES IN THE VALVE BOX.
5. WIRES SHALL BE SPLICED USING WATERPROOF CONNECTORS THAT ARE CORROSION RESISTANT.
6. SUCCESSFUL COMPLETION OF CONDUCTIVITY TEST WILL BE REQUIRED PRIOR TO ACCEPTANCE OF ALL SEWER MAINS AND SERVICE LINES.

HDPE TUBING FOR DOMESTIC WATER SERVICE LINES

RESTRICTIONS ON USE:
- HDPE TUBING IS ALLOWED FOR SERVICE SIZES 1", 1.5" AND 2" (NOT 3/4")
- HDPE TUBING MAY BE USED FOR THE ENTIRE SERVICE LENGTH BETWEEN THE WATER MAIN AND STRUCTURE BEING SERVED. HDPE TUBING CANNOT BE USED FOR SPOT REPAIR ON A AN EXISTING SERVICE THAT IS COPPER, LEAD OR ANY OTHER NON-HDPE MATERIAL.
- ALL PIPING DOWNSTREAM OF THE METER MUST BE RIGID OR RESTRAINED AGAINST DEFLECTION REGARDLESS OF PIPING UPSTREAM OF THE METER. IF A SAG OR DEFLECTION IN THE PIPING IS OBSERVED AFTER THE METER IS SET SUPPORT WILL BE REQUIRED. ALL METER SETS MUST CONTINUE TO BE INSTALLED PER CITY UTILITIES DEVELOPMENT CRITERIA/STANDARDS MANUAL, EXHIBIT IV-3-2 AND EXHIBIT IV-3-3.
- HDPE TUBING IS PROHIBITED FOR USE AS A SERVICE TO ANY FACILITY WHERE THERE IS A HIGH RISK OF POTENTIAL PETROLEUM TANKS, ETC.).

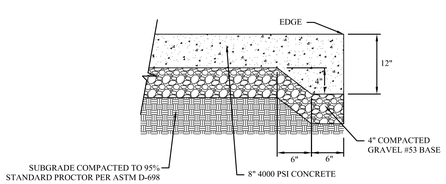
HDPE TUBING SPECIFICATION:
- POLYETHYLENE COMPOUNDS PER PE-3408 WITH MIN. CELL CLASSIFICATION 345444C
  - COPPER TUBING SIZE, CTS, OUTSIDE DIAMETER CONTROLLED
  - SDR 9, 200 PSI WORKING PRESSURE RATED @ 73.4 F, WITH ABILITY TO MAINTAIN 300 PSI FOR 1000 HOURS @73.4 F
  - MEET REQUIREMENTS OF ASTM D-2737, ASTM D-3350, NSF-14, NSF-61, AWWA C-901
  - COLOR - SOLID BLUE EXTERIOR TUBING OR BLACK TUBING WITH BLUE STRIPING
  - TUBING SHALL BE LABELED (PRINTED, NOT STAMPED) AT MINIMUM WITH MANUFACTURER, DIAMETER, OUTSIDE DIAMETER CONTROL, WORKING PRESSURE RATING, ASTM SPECIFICATIONS AND NSF APPROVAL.

CONSTRUCTION - ADDITIONAL MATERIAL REQUIREMENTS:
- ALL CONNECTIONS WITH HDPE TUBING MUST UTILIZE A STIFFENING INSERT. INSERT SHALL BE:
  - 304 STAINLESS STEEL MATERIAL, SEAMLESS (NOT SPLIT)
  - PROPERLY SIZED DIAMETER FOR CTS, SDR 9 200 PSI HDPE TUBING AND LENGTH THAT DOES NOT EXTEND BEYOND THE END OF THE COMPRESSION FITTING.
  - ONE END FLARED TO ENSURE PROPER SEATING INTO END OF HDPE TUBING
  - DESIGNED FOR USE WITH COMPRESSION STYLE CONNECTIONS
- ALL CONNECTIONS AND JOINTS SHALL UTILIZE BRASS MECHANICAL COMPRESSION FITTINGS THAT ARE DESIGNED AND SPECIFIED FOR USE WITH HDPE TUBING.
  - GRIPPING BAND TYPE RESTRAINT SHALL BE USED (I.E. MUELLER C110 COMPRESSION CONNECTION, FORD QUICK JOINT).
- THE CURRENT APPROVED CITY UTILITIES' STYLE OF CORPORATION STOP AND CURB STOP/VALVES SHALL REMAIN THE SAME, WITH EXCEPTION THAT ALL JOINTS SHALL BE COMPRESSION TYPE AND SPECIFIED FOR USE WITH HDPE TUBING.
- ALL HDPE TUBING SHALL REQUIRE INSULATED #10 SOLID COPPER TRACING WIRE INSTALLED ATOP THE SERVICE.
- ALL TRACING WIRE CONNECTIONS AND SPLICES SHALL BE MADE WITH A WATERPROOF DIRECT BURY DEVICE DESIGNED FOR USE WITH UNDERGROUND TRACING WIRE. FOR MAIN LINE SPLICES (DRYCONN DIRECT BURY KING 6 BLUE, COPPERHEAD SCB-01 BLUE). FOR SPLICES BETWEEN THE MAIN LINE AND THE SERVICE LINE (DRYCONN DIRECT BURY LUG, COPPERHEAD- SNAKEBITE # 3WB-01 BLUE).

CONSTRUCTION - INSTALLATION REQUIREMENTS:
- ALL HDPE SERVICES SHALL BE BURIED FIVE (5) FEET BELOW FINISHED GRADE.
- ALL HDPE SERVICES SHALL BE CONSTRUCTED IN A 12" MINIMUM TRENCH WIDTH.
- HDPE SERVICES SHALL BE BEDDED IN SAND, B-BORROW OR OTHER MATERIAL THAT IS ½" OR LESS IN DIAMETER AND FREE FROM ROCKS, SHARP OBJECTS OR DEBRIS AND PER ASTM D2774. HDPE TUBING SHALL HAVE A MINIMUM OF 2" OF BEDDING MATERIAL AROUND THE PIPE.
- ALL HDPE SERVICES LOCATED IN PUBLIC RIGHT-OF-WAY SHALL BE INSTALLED PERPENDICULAR TO THE RIGHT-OF-WAY LINE FROM THE WATER MAIN AND HAVE THE CURB STOP LOCATED WITHIN FOUR (4) FEET OF A SIDE PROPERTY LINE, AND SEVEN (7) FEET OFF THE RIGHT-OF-WAY LINE.
- HDPE SERVICES SHALL BE CONTINUOUS PIPE (NO JOINTS) FROM THE CORPORATION TO THE CURB STOP, AND FROM THE CURB STOP TO THE METER OR COPPER TRANSITION. NO PIPE JOINTS WILL BE ALLOWED UNLESS MADE BY BUTT FUSION.
- NO PIPE LUBRICANTS OR COMPOUNDS SHALL BE USED AT ANY JOINT OR FITTING.
- IF HDPE TUBING IS CUT OR GOUGED GREATER THAN 5% OF WALL THICKNESS, THE ENTIRE LENGTH SHALL BE REMOVED AND DISCARDED.
- HDPE TUBING SHALL BE LAID IN TRENCH WITH MINOR HORIZONTAL WEAVING/SNAKING (DO NOT STRETCH TIGHTLY) TO PROVIDE A MINIMUM OF 12" OF SLACK PER 100' TO ALLOW EXPANSION AND CONTRACTION OF TUBING AND MINIMIZE STRESS IN PIPE AND PULL OUT FORCE AT THE CONNECTIONS.
- THE MINIMUM RADIUS FOR HDPE TUBING SHALL BE 30 DIAMETERS WHEN BENDING WITH THE COIL, AND NO MORE THAN STRAIGHT WHEN BENDING AGAINST THE COIL. NO BENDS SHALL BE MADE WITHIN 10 DIAMETERS OF A FITTING.
- HDPE TUBING MAY BE SOFTENED BY IMMERSING IN HOT WATER PER MANUFACTURER'S RECOMMENDATIONS TO IMPROVE WORKABILITY IN COLD WEATHER. HDPE MAY NOT BE HEATED WITH ANY TYPE OF HEAT SOURCE.
- ALL HDPE SERVICES SHALL HAVE TRACING WIRE RUNNING FROM THE WATER MAIN TO CURB STOP, AND FROM THE CURB STOP TO METER. TRACING WIRE SHALL BE ZIP TIED TO SERVICE LINE EVERY TEN (10) FEET IF INSTALLED BY OPEN TRENCH. CONTRACTOR SHALL TEST CONTINUITY OF TRACING WIRE AFTER BACKFILLING.
  - CONNECTION DETAILS - WATER MAIN TO CURB STOP
    - AT WATER MAIN, TRACING WIRE SHALL BE PROPERLY CONNECTED/SPLICED INTO THE TRACING WIRE RUNNING ALONG PIPE
    - AT CURB STOP, TRACING WIRE SHALL BE BROUGHT TO SURFACE AND 6" OF WIRE WRAPPED AROUND TOP OF CURB BOX
  - CONNECTION DETAILS - CURB STOP TO METER
    - AT CURB STOP, TRACING WIRE SHALL BE BROUGHT TO SURFACE AND SPLICED INTO TRACING WIRE FROM WATER MAIN
    - AT METER, 18" OF WIRE SHALL BE WRAPPED AROUND HDPE TUBING

FORT WAYNE CITY UTILITIES RESERVES THE RIGHT TO DENY WATER SERVICE TO ANY PROPERTY UTILIZING HDPE TUBING IF INSTALLATION WORK DOES NOT MEET THE ABOVE NOTED REQUIREMENTS. THIS INCLUDES, BUT IS NOT LIMITED TO, INADEQUATE DEPTH, FAILURE TO HAVE CONTINUITY IN TRACING WIRE, OR IMPROPER SERVICE LOCATION IN THE PUBLIC RIGHT-OF-WAY.

NO ELECTRICAL SYSTEMS MAY BE GROUNDED TO THE INCOMING WATER SERVICE PIPING OR TRACING WIRE.

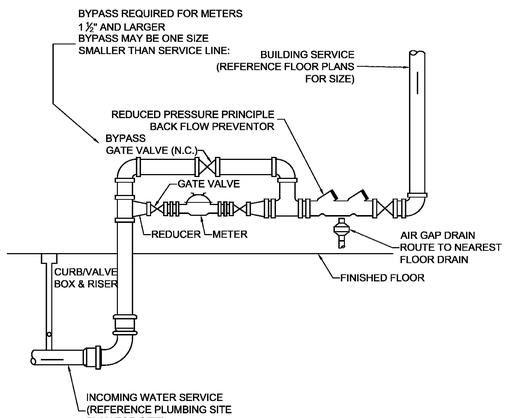


CONCRETE DRIVEWAY SECTION
CITY OF FORT WAYNE RIGHT-OF-WAY
(NOT TO SCALE)

City Utilities Design Standards Manual

DOMESTIC WATER ENTRANCE DETAIL W/BACKFLOW PREVENTION

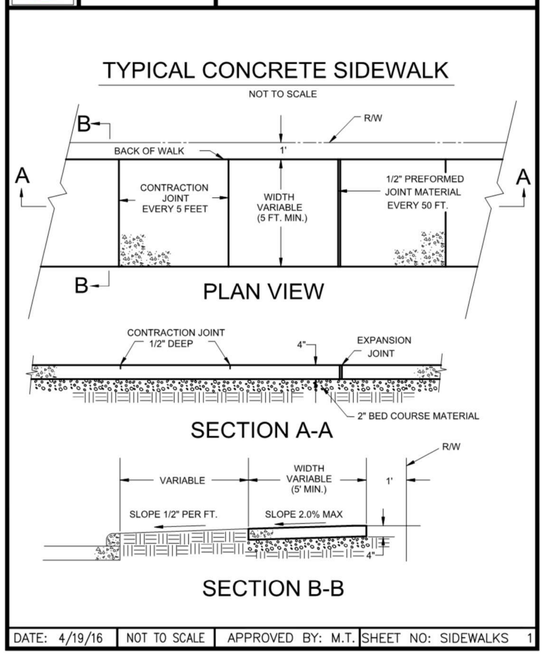
Created: January 1, 2008 — Revised: May 22, 2015
Scale: N.T.S. — Approved: May 22, 2015



W-59

TRANSPORTATION ENGINEERING STANDARD DETAILS

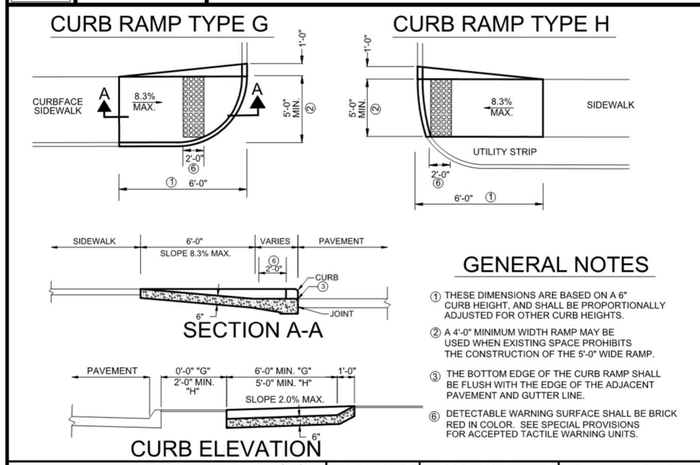
SIDEWALK



DATE: 4/19/16 | NOT TO SCALE | APPROVED BY: M.T. | SHEET NO: SIDEWALKS 1

TRANSPORTATION ENGINEERING STANDARD DETAILS

CURB RAMP TYPE "G & H"



GENERAL NOTES

① THESE DIMENSIONS ARE BASED ON A 6" CURB HEIGHT, AND SHALL BE PROPORTIONALLY ADJUSTED FOR OTHER CURB HEIGHTS.

② A 4'-0" MINIMUM WIDTH RAMP MAY BE USED WHEN EXISTING SPACE PROHIBITS THE CONSTRUCTION OF THE 5'-0" WIDE RAMP.

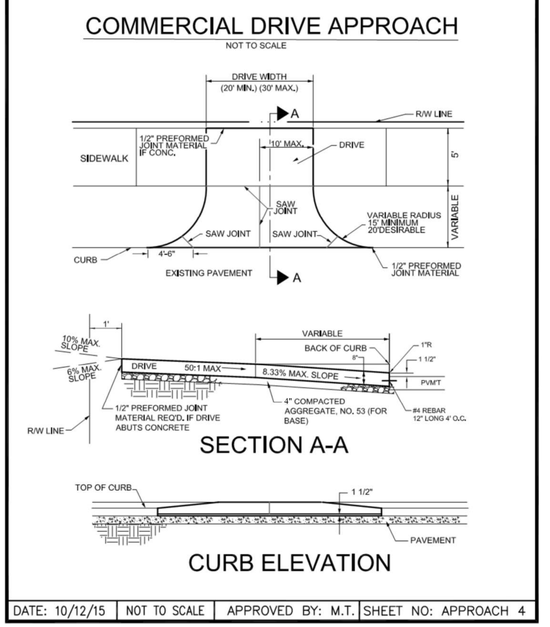
③ THE BOTTOM EDGE OF THE CURB RAMP SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER LINE.

⑥ DETECTABLE WARNING SURFACE SHALL BE BRICK RED IN COLOR. SEE SPECIAL PROVISIONS FOR ACCEPTED TACTILE WARNING UNITS.

DATE: 4/19/16 | NOT TO SCALE | APPROVED BY: M.T. | SHEET NO: RAMPS 7

TRANSPORTATION ENGINEERING STANDARD DETAILS

COMMERCIAL DRIVE APPROACH



DATE: 10/12/15 | NOT TO SCALE | APPROVED BY: M.T. | SHEET NO: APPROACH 4

DEREK J. SIMON REGISTERED NO. PE11500716 STATE OF INDIANA PROFESSIONAL ENGINEER
Derek J. Simon, PE

MLSEngineering
ENGINEERING YOUR TOMORROW...TODAY
Monroe Office: 221 Tower Drive, Monroe, IN 46772, Phone: (260) 692-6166
Fort Wayne Office: 10060 Bent Creek Boulevard, Fort Wayne, IN 46825, Phone: (260) 489-8571
Brett R. Miller, P.S. No.LS20300059
Derek J. Simon, P.E. No.PE11500716

PREPARED FOR:
Richard Krumholz
Delight Restaurant Group
PO Box 9601
Norfolk, VA 23505
(617) 233-7114

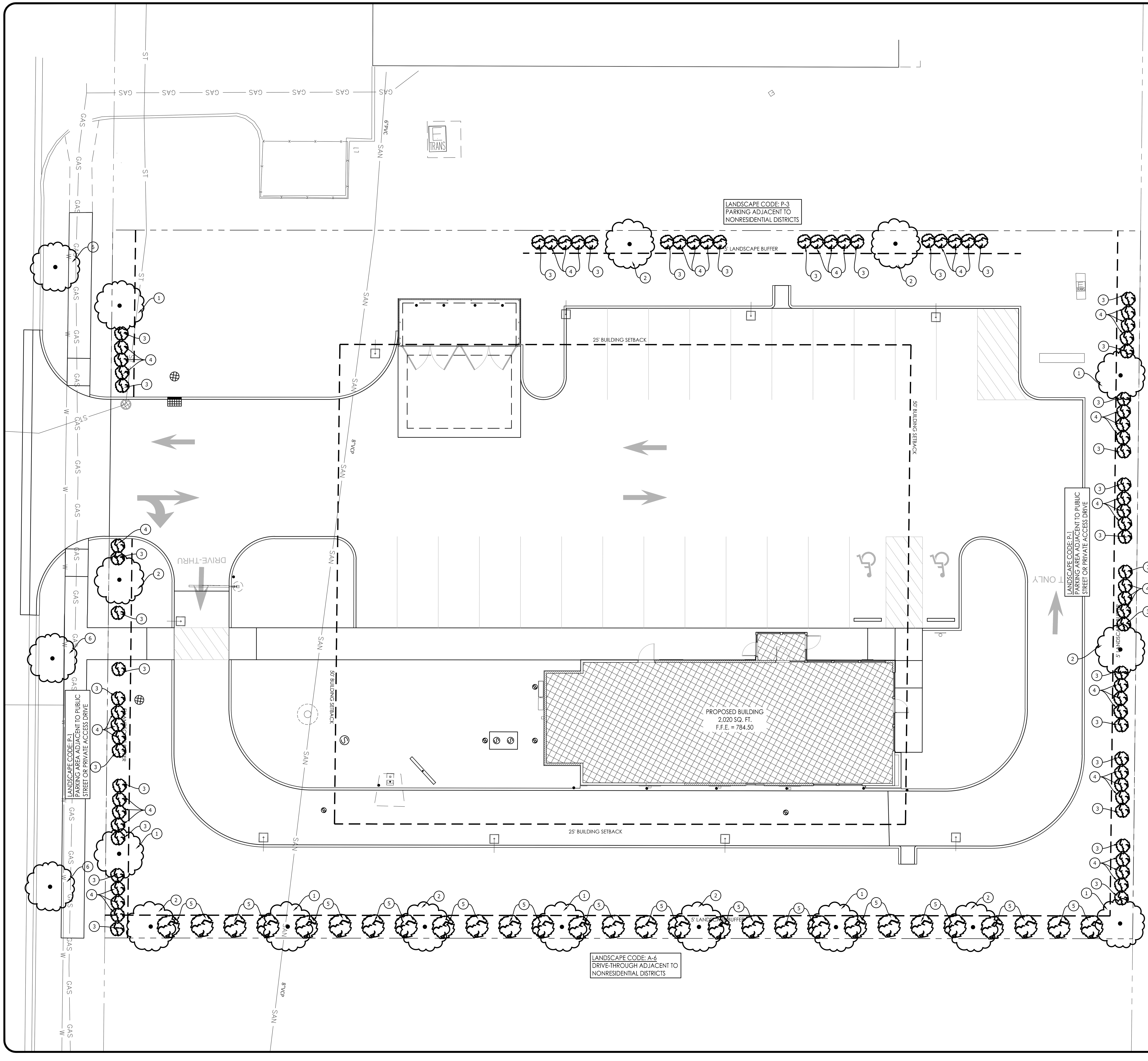
Issued For Construction - August 21st, 2019

REVISIONS:		
7/8/2019	BPJ	Comments Per City of Fort Wayne Addressed

Taco Bell - Southtown Centre
7719 Southtown Xing
Fort Wayne, Indiana 46816
Secondary Development Plan
Construction Details

Date: 05-02-2019
Design By: BPJ
Chk'd By: DJS/GML
Project No.: 19035028

Sheet Number
C6.2



LANDSCAPE LEGEND

(18) - DECIDIOUS TREE

1. (7) SUGAR MAPLE (Acer Saccharum)
2. (8) EXCLAMATION LONDON PLANETREE (Platanus X Acerifolia)
6. (3) JAPANESE TREE LILAC

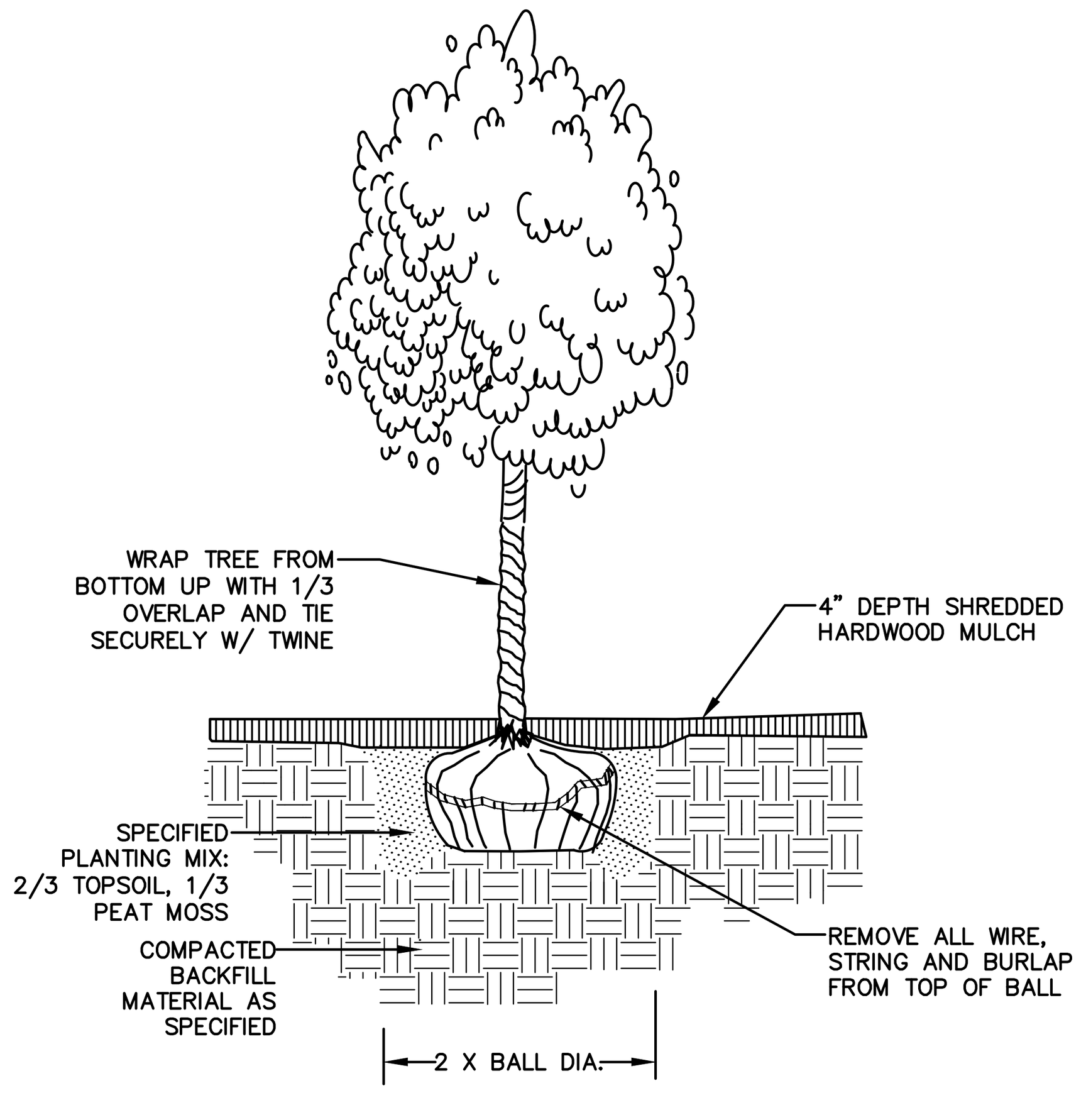
(107) - SHRUB

3. (33) ANTHONY WATERER SPIRAEA
4. (46) GOLD COAST JUNIPER
5. (28) SUNJOY GOLD PILLAR JAPANESE BARBERRY

**ALL TREES, SHRUBS, AND FLOWER BEDS SHALL BE DESIGNED BY LANDSCAPE CONTRACTOR. TREE AND SHRUB SPECIES SHALL MUST BE REVIEWED AND APPROVED BY CITY OF FORT WAYNE

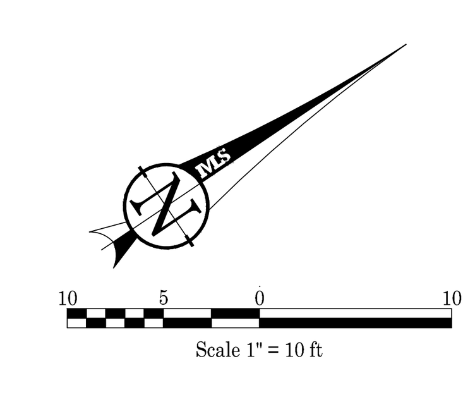
GENERAL LANDSCAPE NOTES:

1. LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO UTILITIES AND SHALL CALL INDIANA 811 FOR UTILITY LOCATIONS TWO DAYS PRIOR TO DIGGING.
2. APPLY PRE-EMERGENT HERBICIDE TO ALL MULCH AREAS.
3. CONDUCT SOIL TEST TO VERIFY FERTILITY OF TOPSOIL. AMEND SOIL IF PH IS LESS THAN 5.0 OR GREATER THAN 7.5. MAKE OTHER ADJUSTMENTS AS SOIL ANALYSIS INDICATES.
4. PLANTING MIX TO BE A 18" MINIMUM DEPTH IN ALL PLANTING BEDS. TOPSOIL TO BE CLEAN FRIABLE LOAM FROM LOCAL SOURCE, FREE FROM STONES OR DEBRIS OVER $\frac{3}{4}$" IN DIA., AND FREE FROM HERBICIDE OR OTHER TOXINS.
5. PLANT TREES SO THAT TOP OF ROOTBALL IS EVEN WITH THE FINISHED GRADE. FOR BACKFILL AREAS, PLANT BALL UP TO 3" HIGH TO ALLOW FOR SETTLING.
6. ALL TREE WRAP/TWINE ETC. TO BE REMOVED FROM TREE IN ONE YEAR AS PART OF MAINTENANCE.
7. ALL TURF AREAS TO RECEIVE 4" TOPSOIL AND BE PERMANENT SEEDED. ANY OTHER AREAS DISTURBED DURING CONSTRUCTION TO BE RESTORED.
8. LANDSCAPE CONTRACTOR SHALL PROVIDE MINIMUM 1 YEAR WARRANTY ON ALL PLANTINGS. IF PLANTINGS DO NOT SURVIVE 1 YEAR PAST THE DATE OF SUBSTANTIAL COMPLETION, THEN PLANTINGS SHALL BE REPLACED AT NO COST TO THE OWNER.



TREE/SHRUB PLANTING SECTION

-NOT TO SCALE-



DEREK J. SIMON REGISTERED NO. PE11500716 STATE OF INDIANA PROFESSIONAL ENGINEER

Derek J. Simon, PE

MLS Engineering
ENGINEERING YOUR TOMORROW...TODAY

Fort Wayne Office
10060 Bent Creek Boulevard
Fort Wayne, IN 46825
Phone: (260) 489-8571

Brett R. Miller, P.S. No.LS20300059
Derek J. Simon, P.E. No.PE11500716

Monroe Office
221 Tower Drive
Monroe, IN 46772
Phone: (260) 692-6166

PREPARED FOR:
Richard Krumholz
Delight Restaurant Group
PO Box 9601
Norfolk, VA 23505
(617) 233-7114

Issued For Construction - August 21st, 2019

REVISIONS:		
7/8/2019	BPJ	Comments Per City of Fort Wayne Addressed

Taco Bell - Southtown Centre
7719 Southtown Xing
Fort Wayne, Indiana 46816

Secondary Development Plan

Landscape Plan

Date: 05-02-2019
Design By: BPJ
Chk'd By: DJS/GML
Project No.: 19035028

Sheet Number
L1.0