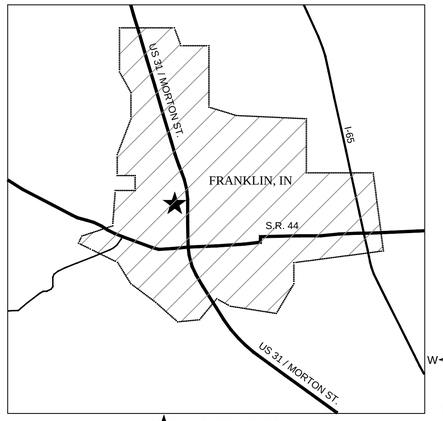
SITE CONSTRUCTION PLANS FOR

IN FRANKLIN MORTON, LLC

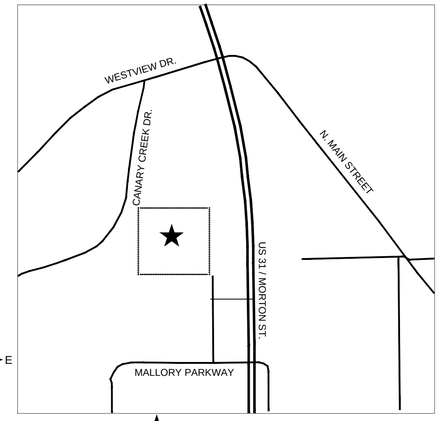
XXX NORTH MORTON STREET (US 31)
FRANKLIN, IN 46131

PLANS PREPARED FOR
IN FRANKLIN MORTON, LLC
550 SOUTH MAIN STREET, SUITE 300
GREENVILLE, SC 29601
TELEPHONE: (864) 263-5439
CONTACT PERSON: COLBY PRICE
EMAIL: CPRICE@REALTYLINKDEV.COM

PLANS PREPARED BY
WEIHE ENGINEERS, INC.
10505 N. COLLEGE AVE.
INDIANAPOLIS, INDIANA 46280
TELEPHONE: (317) 846-6611
FAX: (317) 843-0546
CONTACT PERSON: BRAD SCHOEFF
EMAIL: SCHOEFFB@WEIHE.NET



AREA MAP



LOCATION MAP

IN MORTON FRANKLIN	
Sheet Number	Sheet Title
C001	TITLE SHEET
1 of 4	ALTA ACSM LAND TITLE SURVEY
2 of 4	ALTA ACSM LAND TITLE SURVEY
3 of 4	ALTA ACSM LAND TITLE SURVEY
4 of 4	ALTA ACSM LAND TITLE SURVEY
C100	STORMWATER POLLUTION PREVENTION PLAN PHASE I
C101	STORMWATER POLLUTION PREVENTION PLAN PHASE II
C102	STORMWATER POLLUTION PREVENTION PLAN PHASE III
C103	STORMWATER POLLUTION PREVENTION PLAN SPECIFICATIONS
C104	STORMWATER POLLUTION PREVENTION PLAN DETAILS
C105	STORMWATER POLLUTION PREVENTION PLAN DETAILS
C200	SITE PLAN
C201	SITE DETAILS
C202	SITE DETAILS
C203	DIMENSION PLAN
C204	LIGHTING PLAN
C205	LIGHTING PLAN
C300	GRADING PLAN
C301	ENLARGED GRADING PLAN
C302	ENLARGED GRADING PLAN
C303	DRAINAGE AND FLOOD ROUTING PLAN
C400	PAVING PLAN
C500	SANITARY SEWER PLAN AND PROFILE
C501	SANITARY SEWER DETAILS
C600	STORM SEWER PLAN AND PROFILE
C601	STORM SEWER PLAN AND PROFILE
C602	STORM SEWER DETAILS
C603	STORM SEWER DETAILS
C800	UTILITY PLAN
C801	UTILITY DETAILS
C802	UTILITY DETAILS
L100	LANDSCAPE PLAN LOT 1
L101	LANDSCAPE PLAN LOT 2
L200	LANDSCAPE DETAILS

GENERAL 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 TO NOTIFY AND COORDINATE CONSTRUCTION WITH ALL RESPECTIVE UTILITIES.
4. ALL QUANTITIES GIVEN ON THESE PRINTS, VERBALLY OR IN THE SCOPE OF WORK SECTION ARE ESTIMATES AND SHALL BE CONFIRMED BY THE BIDDING CONTRACTORS.
5. 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.
6. IN ADDITION, EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRE THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER.
7. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND CONTRACTOR TO MAINTAIN QUALITY CONTROL THROUGHOUT THIS PROJECT.
8. TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL STANDARDS.
9. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
10. INDIANA STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS LATEST EDITION TO BE USED WITH THESE PLANS.
11. ANY FIELD TILES ENCOUNTERED DURING EXCAVATION SHALL BE REPAIRED AND CONNECTED TO NEW STORM SEWERS AND POSITIVE DRAINAGE PRESERVED.
12. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER THAT ALL LANDSCAPE REQUIREMENTS ARE MET AND CONFORM TO APPLICABLE LOCAL STANDARDS.
13. THE SITE DOES LIE IN A SPECIAL FLOOD HAZARD AREA 'X' AS ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY - NATIONAL FLOOD INSURANCE PROGRAM, WHEN PLOTTED BY SCALE ON FLOOD INSURANCE RATE MAP #18081C0227 D, DATED AUGUST 2, 2007.
14. BEARINGS, DIMENSIONS AND EASEMENTS ARE SHOWN FOR REFERENCE ONLY. SEE RECORD SURVEYS & PLAT FOR EXACT INFORMATION.
15. THIS SITE DOES NOT CONTAIN ANY WETLANDS AS SHOWN ON THE U.S. DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE; ONLINE MAPPER TOOL, NATIONAL WETLANDS INVENTORY MAP DATED 2014.

CITY OF FRANKLIN STANDARD NOTES

1. OWNER OR CONTRACTOR WILL SCHEDULE AND ATTEND A PRE-CONSTRUCTION CONFERENCE. CONTACT THE CITY OF FRANKLIN ENGINEERING AND PLANNING DEPARTMENTS PRIOR TO ANY CONSTRUCTION ON THE SITE BEING STARTED TO SCHEDULE A MEETING TIME AND PLACE. THE INSPECTING ENGINEER WILL BE ASSIGNED AT THIS MEETING. CONTRACTOR ATTENDANCE IS MANDATORY.
2. THE DESIGN & CONSTRUCTION SHALL COMPLY WITH THE CURRENT CITY OF FRANKLIN STORMWATER DESIGN & CONSTRUCTION SPECIFICATIONS AND STANDARD CONSTRUCTION DETAILS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT.
3. THESE PLANS COMPLY WITH ALL ADA REQUIREMENTS.

LAND DESCRIPTION

SURVEYED LEGAL DESCRIPTION

ORIGINAL SURVEYED DESCRIPTION

A PART OF THE NORTHEAST QUARTER OF SECTION 15, TOWNSHIP 12 NORTH, RANGE 4 EAST OF THE SECOND PRINCIPAL MERIDIAN, CITY OF FRANKLIN, JOHNSON COUNTY, INDIANA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID QUARTER PROCEED THENCE SOUTH 00 DEGREES 11 MINUTES 50 SECONDS EAST ALONG THE EAST LINE OF SAID QUARTER 766.97 FEET TO THE NORTH LINE OF THE LANDS OF THE NATIONAL BANK OF GREENWOOD AS DESCRIBED IN DEED BOOK 245, PAGE 193 IN THE OFFICE OF THE RECORDER OF JOHNSON COUNTY; PROCEED THENCE ALONG THE NORTH LINE OF SAID BANK LANDS SOUTH 88 DEGREES 00 MINUTES 40 SECONDS WEST 317.73 FEET TO THE WEST LINE OF SAID BANK LANDS, AND THE POINT OF BEGINNING; THENCE SOUTH 05 DEGREES 27 MINUTES 00 SECONDS EAST ALONG SAID WEST LINE 200.35 FEET TO THE NORTHWEST CORNER OF THE LANDS OF CAROLYN ROGERS AS DESCRIBED IN INSTRUMENT NUMBER 2013003799 IN SAID RECORDER'S OFFICE, MARKED BY A REBAR WITH CAP STAMPED ESW LS20200016" (HEREAFTER REFERRED TO AS ESW REBAR) THENCE NORTH 88 DEGREES 00 MINUTES 40 SECONDS, EAST ALONG THE NORTH LINE OF SAID ROGERS LANDS 157.10 FEET TO THE NORTHWEST CORNER OF LOT 1 OF PRESNELL/MORTON STREET MINOR SUBDIVISION AS RECORDED IN PLAT CABINET C, SLIDE 640 IN SAID RECORDER'S OFFICE, MARKED BY A REBAR WITH ILLEGIBLE CAP; THENCE SOUTH 00 DEGREES 49 MINUTES 24 SECONDS EAST ALONG THE WEST LINE OF SAID LOT 150.50 FEET TO THE SOUTHWEST CORNER OF SAID LOT; THENCE SOUTH 00 DEGREES 20 MINUTES 13 SECONDS WEST 200.98 TO A REBAR WITH A CAP STAMPED "BANNING ENG FIRM #0060" (HEREAFTER REFERRED TO AS BANNING REBAR); THENCE NORTH 89 DEGREES 39 MINUTES 20 SECONDS WEST 736.19 FEET TO THE EAST LINE OF THE LANDS OF CC CINEMAS, LLC AS DESCRIBED IN INSTRUMENT NUMBER 2006033562 IN SAID RECORDER'S OFFICE, MARKED BY A BANNING REBAR; THENCE NORTH 00 DEGREES 20 MINUTES 45 SECONDS EAST ALONG SAID EAST LINE AND ITS EXTENSION 551.78 FEET; THENCE NORTH 88 DEGREES 00 MINUTES 40 SECONDS EAST 543.34 FEET TO THE WEST LINE OF FRANKLIN GW HOLDINGS, LLC AS DESCRIBED IN INSTRUMENT NUMBER 2008013737 IN SAID RECORDER'S OFFICE; THENCE SOUTH 05 DEGREES 27 MINUTES 00 SECONDS EAST ALONG SAID WEST LINE 29.67 FEET TO THE POINT OF BEGINNING, AND CONTAINING 8.534 ACRES OF LAND, MORE OR LESS.

BENCHMARK INFORMATION

BENCHMARK INFORMATION
DNR TBM CD 1, 1988 IN JOHNSON COUNTY, FRANKLIN QUADRANGLE, IN THE NE ¼ OF SECTION 10, TOWNSHIP 12 NORTH, RANGE 4 EAST, 2ND P.M., AT FRANKLIN; AT THE U.S. 31 BRIDGE OVER CANARY DITCH; SET IN THE TOP OF THE SOUTHEAST CONCRETE WINGWALL OF THE BRIDGE, 25.8 FEET EAST OF THE CENTERLINE OF THE BRIDGE, 0.6 FOOT NORTH OF THE SOUTH END OF THE WINGWALL 1.0 FOOT BELOW THE LEVEL OF THE ROAD; A "PK" NAIL SET IN A DRILL HOLE, INSIDE A CUT CIRCLE.
2ND ORDER ELEVATION
REVISED ELEVATION 229.240 METERS N,G,V,D, 1929
752.099 FEET N.G.V.D. 1929 (751.693 FEET N.A.V.D.1988)

TBM #1 ELEV: 745.81 CUT SQUARE ON TOP ON A CONCRETE LIGHT BASE ON THE WEST EDGE OF CONCRETE, DUE WEST OF THE SOUTHWEST CORNER OF THE SHERWIN WILLIAMS BUILDING SQUARE IS APPROXIMATELY 15 FEET NORTHEAST OF A DRIVE STUB BEHIND THE BUILDING.

TBM #2 ELEV: 747.77 CUT SQUARE IN THE NORTHWEST CORNER OF A CONCRETE WATER VAULT ON THE EAST SIDE OF THE MIDDLE KOHL'S ENTRANCE LOCATED ON THE SOUTH SIDE OF MALLORY PARKWAY.

TBM #3 ELEV: 742.94 CUT SQUARE IN THE SOUTHEAST CORNER OF A CONCRETE WATER VAULT DUE EAST OF THE SOUTHEAST CORNER OF CANARY CREEK CINEMA BUILDING.

OPERATING AUTHORITIES

CITY OF FRANKLIN PLANNING
70 E. MONROE STREET
FRANKLIN, IN 46131
SENIOR PLANNER: JOANNA MYERS
BUILDING OFFICIAL: DAVID PARSLEY
P. 317.736.3631

CITY OF FRANKLIN ENGINEERING
70 E. MONROE STREET
FRANKLIN, IN 46131
CITY ENGINEER: TRAVIS UNDERHILL
BUILDING OFFICIAL: DAVID PARSLEY
P. 317.736.3631

CITY OF FRANKLIN BUILDING
70 E. MONROE STREET
FRANKLIN, IN 46131
BUILDING OFFICIAL: DAVID PARSLEY
P. 317.736.3631

CITY OF FRANKLIN - SANITARY DEPT.
796 S. STATE STREET
FRANKLIN, IN 46131
SUPERINTENDENT: RICK LITTLETON
TEL: 317.736.3640

CITY OF FRANKLIN - STORMWATER DEPT.
2851 N. MORTON STREET
FRANKLIN, IN 46131
MS4 COORDINATOR: RICHARD DEWITT
TEL: 888.736.3640 X1280

CITY OF FRANKLIN - FIRE DEPT.
1800 THORNBURG LANE
FRANKLIN, IN 46131
TEL: 317.736.3650

CITY OF FRANKLIN - PUBLIC WORKS DEPT.
796 S. STATE STREET
FRANKLIN, IN 46131
TEL: 317.736.3640

JOHNSON COUNTY SURVEYOR
COURTHOUSE ANNEX BUILDING
86 W. COURT STREET
FRANKLIN, IN 46131
TEL: 317.7736.3933

JOHNSON COUNTY HIGHWAY DEPT
1051 HOSPITAL ROAD
FRANKLIN, IN 46131
TEL: 317.346.4630

JOHNSON COUNTY SOIL & WATER
550 E. JEFFERSON STREET
FRANKLIN, IN 46131
TEL: 317.736.9540

JOHNSON COUNTY HEALTH DEPARTMENT
COURTHOUSE ANNEX BUILDING
86 W. COURT STREET
FRANKLIN, IN 46131
TEL: 317.346.4365

DUKE ENERGY
TROY BURTON
TEL: 317.736.2017

INDIANA AMERICAN WATER
TROY BRYANT
TEL: 317.881.3385 X2

COMCAST
SCOTT CRIPE
TEL: 812.355.7814

VECTREN GAS
DAVID SHERRY
317.776.5585

EMBARQ
LARRY TALBOT
TEL: 317.736.4863

DEPARTMENT OF PUBLIC WORKS
70 EAST MONROE STREET
FRANKLIN, IN 46131
(317) 736-3631

INDIANA STATE DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS LATEST EDITION TO BE USED
WITH THESE PLANS.

PLAN CERTIFICATE NOTE:

ORIGINAL ALTA, TOPOGRAPHY, UTILITIES, STORM SEWERS, AND ALL OTHER EXISTING CONDITIONS ITEMS WERE PREPARED BY BANNING ENGINEERING.

FINAL DRAWINGS FOR THE IN FRANKLIN MORTON, LLC SITE WERE PREPARED BY WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER. FINAL CONSTRUCTION PLANS ARE THOSE PLANS CONTAINING A FINAL REVISION DATE AFTER 03/17/2016. WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER ACCEPT RESPONSIBILITY ONLY FOR THE IN FRANKLIN MORTON, LLC SITE IMPROVEMENTS RELATED TO THE ENGINEERING WORK SHOWN ON THESE PLANS.

Know what's **below.**
Call before you dig.
Within Indiana Call
811 or 800-382-5544
24 Hours a Day, 7 Days a Week.
PER INDIANA STATE LAW IC 8-1-26, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net
317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER
WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

REVISIONS AND ISSUES	DATE:	BY:
CITY SUBMITTAL	03.17.2016	BJS

PROJECT NO: W15.0351
DWG NAME: w15035L-C001-title.dwg
DESIGNED BY: RSS/PAM
DRAWN BY: RAM
CHECKED BY: BJS
DATE: 03.17.2016

STATE OF INDIANA
STEVEN SCOTT RUCKER
REGISTERED
PE.N.300279
PROFESSIONAL ENGINEER
APPROVED DESIGN
NOT FOR CONSTRUCTION

STEVEN SCOTT RUCKER P.E. 11300279

PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

TITLE SHEET
Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C001

PROJECT NO.
W15.0351

LOCATION: H:\2015\W15035\Engineering\design\conset\w15035L-C001 title.dwg
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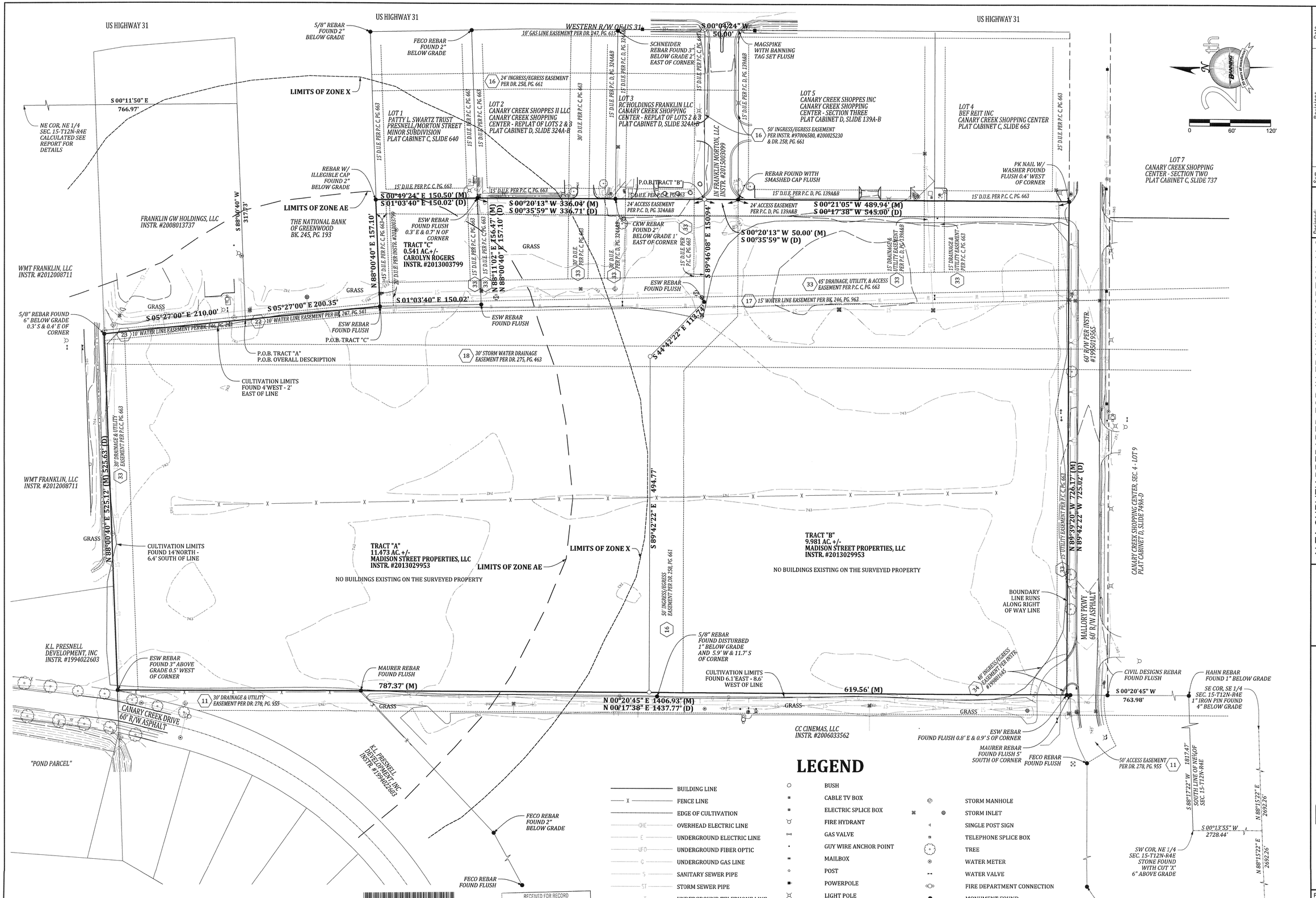
PLOTTED BY: wsgiere



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Fee Amt: $35.00 Page 1 of 5
Workflow# 0000113779-0001
Johnson County-Recorded as Presented
Jill L. Jackson County Recorder
File 2015-024851

RECEIVED FOR RECORD
FILE N PAGE A 144
JILL L. JACKSON
JOHNSON COUNTY RECORDER

09/23/2015
SCALE: 60.0000 ' / in.

Sym.	Revisions	Date
	ADDED ROGER'S PARCEL	5-29-15
	REVISED PER ATTORNEY COMMENTS	6-11-15

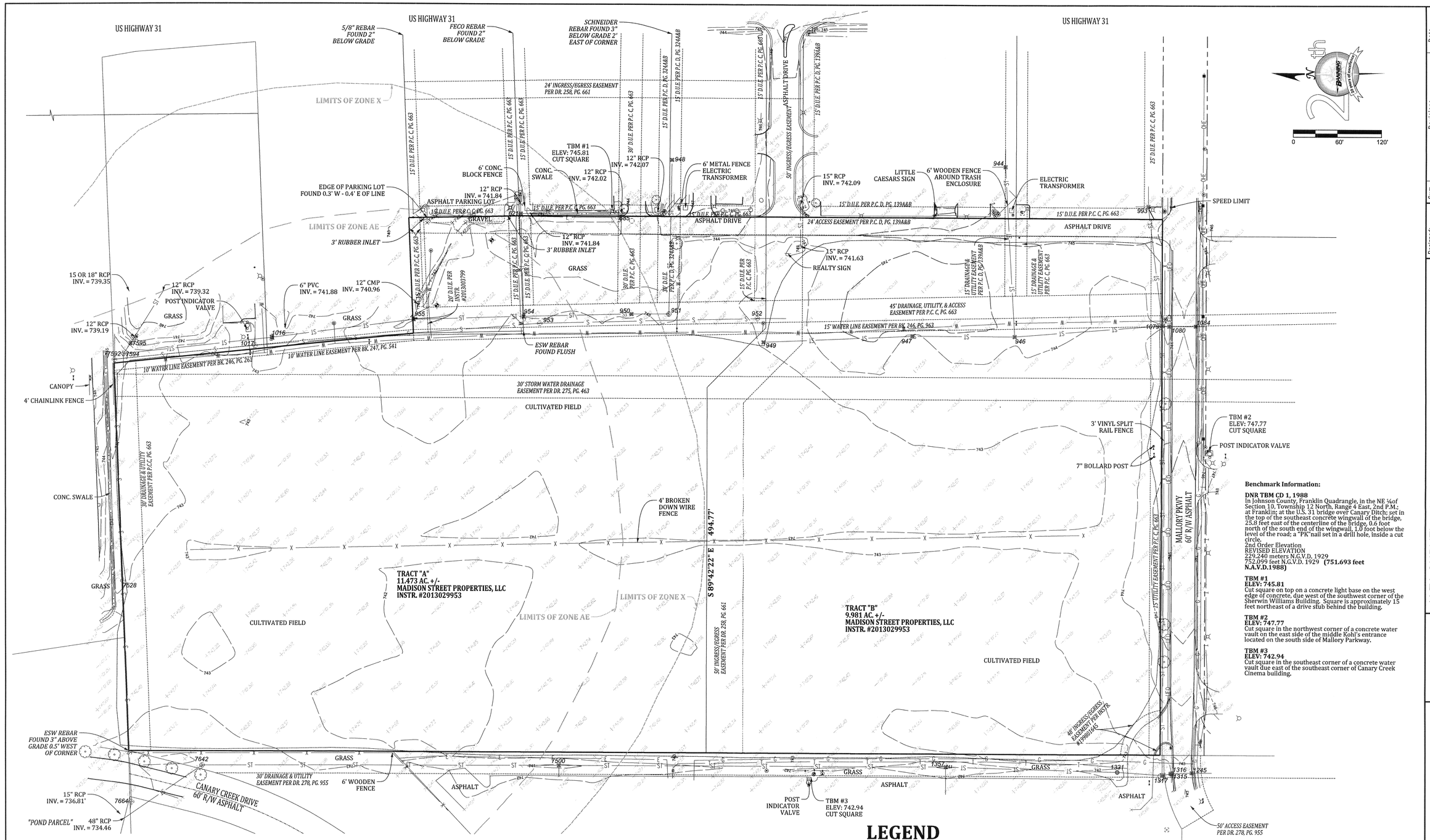
Designed:
Drawn: JTH
Checked: BLH
Scale: 1"=60'
Date: 12-5-14

ALTA SURVEY PREPARED FOR IN FRANKLIN MORTON, LLC
BOUNDARY PAGE
SEC. 15-T12N-R4E
FRANKLIN, JOHNSON COUNTY, INDIANA

BRIAN L. HAGGARD REGISTERED No. LS29800001 STATE OF INDIANA LAND SURVEYOR

BANNING ENGINEERING
853 COLUMBIA ROAD, SUITE #101
PLAINFIELD, IN 46168
BUS: (317) 707-3700, FAX: (317) 707-3800
E-MAIL: Banning@BanningEngineering.com
WEB: www.BanningEngineering.com

Project No: 14250
Sheet No: 1 OF 4



Benchmark Information:

DNR TBM CD 1, 1988
In Johnson County, Franklin Quadrangle, in the NE ¼of Section 10, Township 12 North, Range 4 East, 2nd P.M.; at Franklin; at the U.S. 31 bridge over Canary Ditch; set in the top of the southeast concrete wingwall of the bridge, 25.8 feet east of the centerline of the bridge, 0.6 foot north of the south end of the wingwall, 1.0 foot below the level of the road; a "PK" nail set in a drill hole, inside a cut circle.
2nd Order Elevation
REVISED ELEVATION
229.240 meters N.G.V.D. 1929
752.099 feet N.G.V.D. 1929 **(751.693 feet N.A.V.D.1988)**

TBM #1
ELEV: 745.81
Cut square on top on a concrete light base on the west edge of concrete, due west of the southwest corner of the Sherwin Williams Building. Square is approximately 15 feet northeast of a drive stub behind the building.

TBM #2
ELEV: 747.77
Cut square in the northwest corner of a concrete water vault on the east side of the middle Kohl's entrance located on the south side of Mallory Parkway.

TBM #3
ELEV: 742.94
Cut square in the southeast corner of a concrete water vault due east of the southeast corner of Canary Creek Cinema building.

STRUCTURE INFORMATION			INVERT ELEVATIONS							PIPE SIZES							NOTES
TYPE	IN NUMBER	S/C ELEV	N	NE	E	SE	S	SW	W	NW	N	NE	E	SE	S	SW	W	NW	
STORM INLET	621	748.24			741.84		741.74		741.74				12" RCP		12" RCP		12" RCP		
UNKNOWN MH	685	774.25																	STRUCTURE IS FULL OF WATER
STORM INLET	944	744.11	740.86		740.51				740.51		12" RCP		15" RCP				15" RCP		
STORM INLET	946	744.03	739.29		739.79		739.29				15" RCP		15" RCP		18" RCP				
STORM INLET	947	748.67	739.97				739.97				12" RCP				15" RCP				
STORM INLET	948	746.31							742.91								12" RCP		
STORM INLET	949	745.10					742.50								12" RCP				NO CASTING
STORM INLET	950	743.16	741.76				741.61				12" RCP				12" RCP				
STORM MH	951	744.81	742.06		742.06						12" RCP		12" RCP						
SAN MH	952	742.59	740.14				740.14				8" IRON				8" IRON				
SAN MH	953	749.65	739.29				739.29				8" IRON				8" IRON				
STORM INLET	954	744.04	741.54		741.39		741.39				15" RCP		12" RCP		12" RCP				
STORM INLET	955	746.05	740.95	741.05		741.05					15" RCP			12" CMP	15" RCP				
CURB INLET	993	745.16	742.06		742.16				741.96		12" RCP		12" RCP				15" RCP		
STORM INLET	1016	748.33	740.65				740.65				15" RCP				15" RCP				
SAN MH	1017	745.78	737.58		737.58		738.16				8" PVC		6"		8" IRON				NO CASTING, EASTERN PIPE RECEIVED COULD NOT OBTAIN TYPE
STORM INLET	1079	748.98	738.58		741.48		738.48		738.28		18" RCP		15" RCP		18" RCP		24" RCP		
CURB INLET	1080	749.80	738.40				738.40				18" RCP				18" RCP				
CURB INLET	1084	744.05	738.60				738.78				18" RCP				15" RCP				
CURB INLET	1245	742.93	735.83				735.93				36" RCP				36" RCP				
CURB INLET	1313	748.06																	NO PIPES. STR DIAMPS INCORRECTLY NTD 1316
STORM MH	1315	745.04			735.88		736.03				36" RCP				36" RCP		24" RCP		NORTHERN PIPE IS MISSEDS COULD NOT OBTAIN SIZE / INVERT
STORM INLET	1317	741.75	735.75		735.75						36" RCP		24" RCP		36" RCP				
STORM INLET	1331	742.52																	COULD NOT SEE PIPES, STR BOTTOM ELEV 735.32'
STORM INLET	1357	742.83	735.33				735.33		736.18		48" RCP				36" RCP		24" RCP		NORTHERN PIPE IS RECEIVED AND COULD BE 36" OR 48"
STORM INLET	7500	742.73	734.68				734.75		734.83		48" RCP				48" RCP		18" RCP		SOUTH-EN PIPE IS RECEIVED AND COULD BE 36" OR 48"
SAN MH	7528	746.64			735.64				735.64				8" PVC				8" PVC		
SAN MH	7642	744.17			738.27		735.97		735.92						8" PVC		8" PVC		EASTERN PIPE IS RECEIVED, COULD NOT OBTAIN SIZE/TYPE
STORM MH	7664	741.83		739.13		739.83			739.33				12" RCP		15" RCP		15" RCP		
STORM INLET	7665	742.27			739.17				739.07								12" RCP		
STORM MH	7842	742.49					733.99			733.99					48" RCP			48" RCP	
STORM MH	7861	744.71			735.26				732.41										WESTERN PIPE RECEIVED COULD NOT OBTAIN SIZE/TYPE, EASTERN PIPE IS A 24INP PIPE AND ELEVATION IS TO THE TOP OF PIPE

LEGEND

BUILDING LINE	BUSH		STORM MANHOLE
X FENCE LINE	CABLE TV BOX		STORM INLET
EDGE OF CULTIVATION	ELECTRIC SPLICE BOX		SINGLE POST SIGN
OHE OVERHEAD ELECTRIC LINE	FIRE HYDRANT		TELEPHONE SPLICE BOX
E UNDERGROUND ELECTRIC LINE	GAS VALVE		TREE
UFO UNDERGROUND FIBER OPTIC	GUY WIRE ANCHOR POINT		WATER METER
G UNDERGROUND GAS LINE	MAILBOX		WATER VALVE
S SANITARY SEWER PIPE	POST		FIRE DEPARTMENT CONNECTION
ST STORM SEWER PIPE	POWERPOLE		SPOT ELEVATION
T UNDERGROUND TELEPHONE LINE	LIGHT POLE		SOIL BORING LOCATION
W UNDERGROUND WATER LINE	SANITARY CLEANOUT		
CONCRETE	SANITARY SEWER MANHOLE		
RIPRAP	D.U.E. DRAINAGE AND UTILITY EASEMENT		

Sym.	Revisions	Date
	ADDED ADDITIONAL TOPO	5-28-15
	ADDED BENCHMARK INFORMATION	6-29-15

Designed:
Drawn: JTH
Checked: BLH
Scale: 1"=60'
Date: 12-28-14

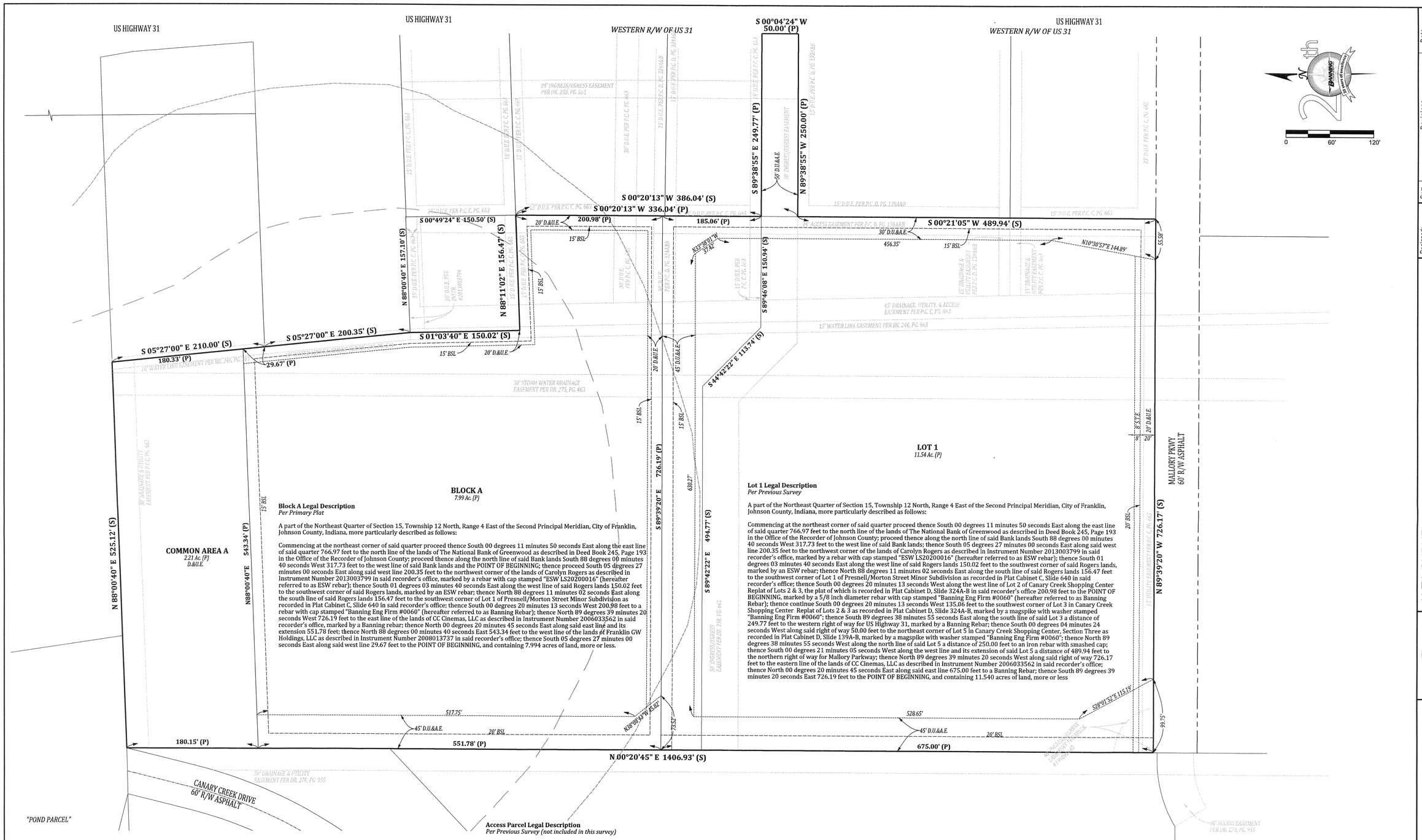
ALTA SURVEY PREPARED FOR IN FRANKLIN MORTON, LLC
EXISTING TOPOGRAPHY
SEC. 15-T12N-R4E
FRANKLIN, JOHNSON COUNTY, INDIANA

BRIAN L. HAGGARD REGISTERED No. LS29800001 STATE OF INDIANA LAND SURVEYOR

BANNING ENGINEERING
853 COLUMBIA ROAD, SUITE #101
PLAINFIELD, IN 46168
BUS.: (317) 707-3700, FAX: (317) 707-3800
E-MAIL: Banning@BanningEngineering.com
WEB: www.BanningEngineering.com

Project No: 14250
Sheet No: 2 OF 4

06/29/2015
SCALE: 60.0000 ' / in.



Block A Legal Description
Per Primary Plat

A part of the Northeast Quarter of Section 15, Township 12 North, Range 4 East of the Second Principal Meridian, City of Franklin, Johnson County, Indiana, more particularly described as follows:

Commencing at the northeast corner of said quarter proceed thence South 00 degrees 11 minutes 50 seconds East along the east line of said quarter 766.97 feet to the north line of the lands of The National Bank of Greenwood as described in Deed Book 245, Page 193 in the Office of the Recorder of Johnson County; proceed thence along the north line of said Bank lands South 88 degrees 00 minutes 40 seconds West 317.73 feet to the west line of said Bank lands and the POINT OF BEGINNING; thence proceed South 05 degrees 27 minutes 00 seconds East along said west line 200.35 feet to the northwest corner of the lands of Carolyn Rogers as described in Instrument Number 2013003799 in said recorder's office, marked by a rebar with cap stamped "ESW LS20200016" (hereafter referred to as ESW rebar); thence South 01 degrees 03 minutes 40 seconds East along the west line of said Rogers lands 150.02 feet to the southwest corner of said Rogers lands, marked by an ESW rebar; thence North 88 degrees 11 minutes 02 seconds East along the south line of said Rogers lands 156.47 feet to the southwest corner of Lot 1 of Presnell/Morton Street Minor Subdivision as recorded in Plat Cabinet C, Slide 640 in said recorder's office; thence South 00 degrees 20 minutes 13 seconds West 200.98 feet to a rebar with cap stamped "Banning Eng Firm #0060" (hereafter referred to as Banning Rebar); thence North 89 degrees 39 minutes 20 seconds West 726.19 feet to the east line of the lands of CC Cinemas, LLC as described in Instrument Number 2006033562 in said recorder's office, marked by a Banning rebar; thence North 00 degrees 20 minutes 45 seconds East along said east line and its extension 551.78 feet; thence North 88 degrees 00 minutes 40 seconds East 543.34 feet to the west line of the lands of Franklin GW Holdings, LLC as described in Instrument Number 2008013737 in said recorder's office; thence South 05 degrees 27 minutes 00 seconds East along said west line 29.67 feet to the POINT OF BEGINNING, and containing 7.994 acres of land, more or less.

Lot 1 Legal Description
Per Previous Survey

A part of the Northeast Quarter of Section 15, Township 12 North, Range 4 East of the Second Principal Meridian, City of Franklin, Johnson County, Indiana, more particularly described as follows:

Commencing at the northeast corner of said quarter proceed thence South 00 degrees 11 minutes 50 seconds East along the east line of said quarter 766.97 feet to the north line of the lands of The National Bank of Greenwood as described in Deed Book 245, Page 193 in the Office of the Recorder of Johnson County; proceed thence along the north line of said Bank lands South 88 degrees 00 minutes 40 seconds West 317.73 feet to the west line of said Bank lands; thence South 05 degrees 27 minutes 00 seconds East along said west line 200.35 feet to the northwest corner of the lands of Carolyn Rogers as described in Instrument Number 2013003799 in said recorder's office, marked by a rebar with cap stamped "ESW LS20200016" (hereafter referred to as ESW rebar); thence South 01 degrees 03 minutes 40 seconds East along the west line of said Rogers lands 150.02 feet to the southwest corner of said Rogers lands, marked by an ESW rebar; thence North 88 degrees 11 minutes 02 seconds East along the south line of said Rogers lands 156.47 feet to the southwest corner of Lot 1 of Presnell/Morton Street Minor Subdivision as recorded in Plat Cabinet C, Slide 640 in said recorder's office; thence South 00 degrees 20 minutes 13 seconds West along the west line of Lot 2 of Canary Creek Shopping Center Replat of Lots 2 & 3, the plat of which is recorded in Plat Cabinet D, Slide 324A-B in said recorder's office 200.98 feet to the POINT OF BEGINNING, marked by a 5/8 inch diameter rebar with cap stamped "Banning Eng Firm #0060" (hereafter referred to as Banning Rebar); thence continue South 00 degrees 20 minutes 13 seconds West 135.06 feet to the southwest corner of Lot 3 in Canary Creek Shopping Center Replat of Lots 2 & 3 as recorded in Plat Cabinet D, Slide 324A-B, marked by a magspike with washer stamped "Banning Eng Firm #0060"; thence South 89 degrees 38 minutes 55 seconds East along the south line of said Lot 3 a distance of 249.77 feet to the western right of way for US Highway 31, marked by a Banning Rebar; thence South 00 degrees 04 minutes 24 seconds West along said right of way 50.00 feet to the northeast corner of Lot 5 in Canary Creek Shopping Center, Section Three as recorded in Plat Cabinet D, Slide 139A-B, marked by a magspike with washer stamped "Banning Eng Firm #0060"; thence North 89 degrees 38 minutes 55 seconds West along the north line of said Lot 5 a distance of 250.00 feet to an iron rebar with smashed cap; thence South 00 degrees 21 minutes 05 seconds West along the west line and its extension of said Lot 5 a distance of 489.94 feet to the northern right of way for Mallory Parkway; thence North 89 degrees 39 minutes 20 seconds West along said right of way 726.17 feet to the eastern line of the lands of CC Cinemas, LLC as described in Instrument Number 2006033562 in said recorder's office; thence North 00 degrees 20 minutes 45 seconds East along said east line 675.00 feet to a Banning Rebar; thence South 89 degrees 39 minutes 20 seconds East 726.19 feet to the POINT OF BEGINNING, and containing 11.540 acres of land, more or less

Access Parcel Legal Description
Per Previous Survey (not included in this survey)

A part of the Northeast Quarter of Section 15, Township 12 North, Range 4 East of the Second Principal Meridian, City of Franklin, Johnson County, Indiana, more particularly described as follows:

Commencing at the northeast corner of said quarter proceed thence South 00 degrees 11 minutes 50 seconds East along the east line of said quarter 766.97 feet to the north line of the lands of The National Bank of Greenwood as described in Deed Book 245, Page 193 in the Office of the Recorder of Johnson County; proceed thence along the north line of said Bank lands South 88 degrees 00 minutes 40 seconds West 317.73 feet to the west line of said Bank lands; thence South 05 degrees 27 minutes 00 seconds East along said west line 200.35 feet to the northwest corner of the lands of Carolyn Rogers as described in Instrument Number 2013003799 in said recorder's office, marked by a rebar with cap stamped "ESW LS20200016" (hereafter referred to as ESW rebar); thence South 01 degrees 03 minutes 40 seconds East along the west line of said Rogers lands 150.02 feet to the southwest corner of said Rogers lands, marked by an ESW rebar; thence North 88 degrees 11 minutes 02 seconds East along the south line of said Rogers lands 156.47 feet to the southwest corner of Lot 1 of Presnell/Morton Street Minor Subdivision as recorded in Plat Cabinet C, Slide 640 in said recorder's office; thence South 00 degrees 20 minutes 13 seconds West along the west line of Lot 2 of Canary Creek Shopping Center Replat of Lots 2 & 3, the plat of which is recorded in Plat Cabinet D, Slide 324A-B in said recorder's office 336.04 feet to the southwest corner of Lot 3 in Canary Creek Shopping Center Replat of Lots 2 & 3 as recorded in Plat Cabinet D, Slide 324A-B, marked by a magnail, and also being THE POINT OF BEGINNING; thence South 89 degrees 38 minutes 55 seconds East along the south line of said Lot 3 a distance of 249.77 feet to the western right of way for US Highway 31, marked by a rebar with cap stamped "Banning Eng Firm #0060" thence South 00 degrees 04 minutes 24 seconds West along said right of way 50.00 feet to the northeast corner of Lot 5 in Canary Creek Shopping Center, Section Three as recorded in Plat Cabinet D, Slide 139A-B, marked by a magspike with washer stamped "Banning Eng Firm #0060"; thence North 89 degrees 38 minutes 55 seconds West along the north line of said Lot 5 a distance of 250.00 feet to an iron rebar with smashed cap; thence North 00 degrees 20 minutes 13 seconds East 50.00 feet to the POINT OF BEGINNING, and containing 0.287 acres of land, more or less

Common Area A Legal Description
Per Primary Plat

A part of the Northeast Quarter of Section 15, Township 12 North, Range 4 East of the Second Principal Meridian, City of Franklin, Johnson County, Indiana, more particularly described as follows:

Commencing at the northeast corner of said quarter proceed thence South 00 degrees 11 minutes 50 seconds East along the east line of said quarter 766.97 feet to the north line of the lands of The National Bank of Greenwood as described in Deed Book 245, Page 193 in the Office of the Recorder of Johnson County; proceed thence along the north line of said Bank lands South 88 degrees 00 minutes 40 seconds West 317.73 feet to the west line of the lands of Franklin GW Holdings, LLC as described in Instrument Number 2008013737 in said recorder's office; thence North 05 degrees 27 minutes 00 seconds West along said west line 29.67 feet to the POINT OF BEGINNING; thence continue along said west line North 05 degrees 27 minutes 00 seconds West 180.33 feet; thence South 88 degrees 00 minutes 40 seconds West 525.12 feet to the extension of the east line of the lands of CC Cinemas, LLC as described in Instrument Number 2006033562 in said recorder's office; thence South 00 degrees 20 minutes 45 seconds West along said extended east line 180.15 feet; thence North 88 degrees 00 minutes 40 seconds East 543.34 feet to the POINT OF BEGINNING, and containing 2.208 acres of land, more or less.

NOTES:

1). An unsigned pro forma copy of a primary plat prepared by Weihe Engineers was provided by the client and the information shown on the plat was shown on this page of the survey at the request of the client.

2). The primary plat was found to be in compliance with the surveyed lines of this ALTA survey.

3). All lines labeled (S) are lines that were surveyed during this ALTA survey and all lines labeled (P) were placed on this survey based upon the information shown on the provided primary plat.

4). All areas shown on this plat were placed as shown on the primary plat.

5). All easements labeled D.U.&A.E. are drainage, utility, and access easements shown on the primary plat.

6). All easements labeled D.&U.E. are drainage and utility easements shown on the primary plat.

7). All easements labeled S.T.E. are street tree easments shown on the primary plat.

8). All lines labeled BSL are building setback lines shown on the primary plat.

08/28/2015
SCALE: 60.0000 1 / in.

Sym.	Revisions	Date
	ADDED LEGAL DESCRIPTIONS	6-29-15

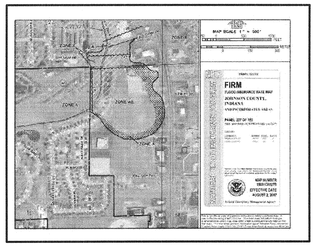
Designed:
Drawn: JTH
Checked: BLH
Scale: 1"=60'
Date: 06-09-15

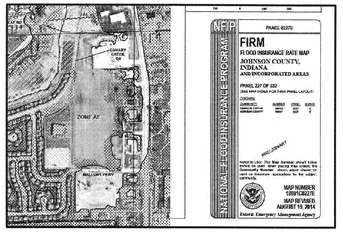
ALTA SURVEY PREPARED FOR IN FRANKLIN MORTON, LLC
PRIMARY PLAT INFORMATION
SEC. 15-T12N-R4E
FRANKLIN, JOHNSON COUNTY, INDIANA

BRIAN L. HAGGARD REGISTERED No. LS29800001 STATE OF INDIANA LAND SURVEYOR

BANNING ENGINEERING
853 COLUMBIA ROAD, SUITE #101
PLAINFIELD, IN. 46168
BUS: (317) 707-3700, FAX: (317) 707-3800
E-MAIL: Banning@BanningEngineering.com
WEB: www.BanningEngineering.com

Project No: 14250
Sheet No: 3 OF 4





Legal Description
Per Title Work

A part of the Northeast Quarter of Section 15, and a part of the Northwest Quarter of Section 14, all in Township 12 North, Range 4 East of the Second Principal Meridian, City of Franklin, Johnson County, Indiana, more particularly described as follows:

Commencing at the Northeast corner of said Quarter Section; thence South 00 degrees 11 minutes 50 seconds East on and along the East line thereof a distance of 766.97 feet; thence South 88 degrees 00 minutes 40 seconds West a distance of 317.73 feet to the point of beginning of this description; thence South 05 degrees 27 minutes 00 seconds East a distance of 200.35 feet; thence North 88 degrees 00 minutes 40 seconds East a distance of 157.10 feet; thence South 00 degrees 03 minutes 40 seconds East a distance of 150.02 feet; thence South 00 degrees 35 minutes 59 seconds West a distance of 336.71 feet ;thence South 00 degrees 17 minutes 38 seconds West a distance of 545.00 feet to a point on the North right-of-way line of Mallory Parkway; thence North 89 degrees 42 minutes 22 seconds West a distance of 725.02 feet; thence North 00 degrees 17 minutes 38 seconds East a distance of 1437.77 feet; thence North 88 degrees 00 minutes 40 seconds East a distance of 525.63 feet; thence South 05 degrees 27 minutes 00 seconds East a distance of 210.00 feet to the point of beginning, containing 22.66 acres, more or less.

LESS AND EXCEPT: That portion of the above described property conveyed to SJSK Corporation, an Indiana corporation, by Corporate Warranty Deed dated July 26, 1994 and recorded July 26, 1994 as Instrument Number 94017262, in Deed Record 277, page 744, described as follows:

Part of the Northeast Quarter of Section 15, Township 12 North, Range 4 East of the Second Principal Meridian, Franklin Township, Johnson County, Indiana, described as follows:

Commencing at the Northeast corner of the said Quarter Section; thence South 00 degrees 11 minutes 50 seconds East on and along the East line thereof 967.05 feet; thence South 88 degrees 00 minutes 40 seconds West 142.28 feet to the Point of Beginning of this described tract; thence continuing South 88 degrees 00 minutes 40 seconds West 157.10 feet to the Southwest corner of a tract described in Deed Record No. 245, page 193 in the Office of the Recorder of Johnson County, Indiana; thence South 01 degrees 03 minutes 40 seconds East 150.02 feet; thence North 88 degrees 00 minutes 40 seconds East 157.10 feet; thence North 01 degrees 03 minutes 40 seconds West 150.02 feet to the Point of Beginning.

ALSO Part of the Northeast quarter of Section 15, Township 12 North, Range 4 East of the Second Principal Meridian, Franklin Township, Johnson County, Indiana, described as follows:

Commencing at the Northeast corner of the said quarter section; thence South 00 degrees 11 minutes 50 seconds East on and along the East line thereof 967.05 feet; thence South 88 degrees 00 minutes 40 seconds West 142.28 feet to the Point of Beginning of this described tract; thence continuing South 88 degrees 00 minutes 40 seconds West 157.10 feet to the Southwest corner of a tract described in Deed Record No. 245, page 193; in the Office of the Recorder of Johnson County, Indiana; thence South 01 degree 03 minutes 40 seconds East 150.02 feet; thence North 88 degrees 00 minutes 40 seconds East 157.10 feet; thence North 01 degree 03 minutes 40 seconds West 150.02 feet to the Point of Beginning.

Subject to an easement 20.0 feet in width off the entire North side thereof for drainage and public utilities.

Overall Legal Description
Written for Clarification

A part of the Northeast Quarter of Section 15, Township 12 North, Range 4 East of the Second Principal Meridian, City of Franklin, Johnson County, Indiana, more particularly described as follows:

Commencing at the northeast corner of said quarter proceed thence South 00 degrees 11 minutes 50 seconds East along the east line of said quarter 766.97 feet to the north line of the lands of The National Bank of Greenwood as described in Deed Book 245, Page 193 in the Office of the Recorder of Johnson County; proceed thence along the north line of said Bank lands South 88 degrees 00 minutes 40 seconds West 317.73 feet to the point of BEGINNING; thence South 05 degrees 27 minutes 00 seconds East along the west line of said Bank lands 200.35 feet to the northwest corner of the lands of Carolyn Rogers as described in Instrument Number 2013003799 in said recorder's office, marked by a rebar with cap stamped "ESW LS20200016"(hereafter referred to as ESW rebar); thence North 88 degrees 00 minutes 40 seconds East along the north line of said Rogers lands 157.10 feet to a rebar found marking the northwest corner of Lot 1 of Presnell/Morton Street Minor Subdivision as recorded in Plat Cabinet C, Slide 640 in said recorder's office; thence South 00 degrees 49 minutes 24 seconds East along the west line of said Lot 1 a distance of 150.50 feet to the southwest corner of said Lot 1; thence South 00 degrees 20 minutes 13 seconds West 386.04 feet to the northwest corner of Lot 5 in Canary Creek Shopping Center Section Three as recorded in Place Cabinet D, Slide 139A-B, marked by a 5/8 inch diameter rebar; thence South 00 degrees 21 minutes 05 seconds West along the west line and its extension of said Lot 5 a distance of 489.94 feet to the northern right of way for Mallory Parkway; thence North 89 degrees 39 minutes 20 seconds West along said right of way 726.17 feet to the eastern line of the lands of CC Cinemas, LLC as described in Instrument Number 2006033562 in said recorder's office; thence North 00 degrees 20 minutes 45 seconds East along the said east line and its extension 1,406.93 feet; thence North 88 degrees 00 minutes 40 seconds East 525.12 feet; thence South 05 degrees 27 minutes 00 seconds East 210.00 feet to the POINT OF BEGINNING, and containing 21.995 acres of land, more or less.

Tract "C"Legal Description

A part of the Northeast Quarter of Section 15, Township 12 North, Range 4 East of the Second Principal Meridian, City of Franklin, Johnson County, Indiana, more particularly described as follows:

Commencing at the northeast corner of said quarter proceed thence South 00 degrees 11 minutes 50 seconds East along the east line of said quarter 766.97 feet to the north line of the lands of The National Bank of Greenwood as described in Deed Book 245, Page 193 in the Office of the Recorder of Johnson County; proceed thence along the north line of said Bank lands South 88 degrees 00 minutes 40 seconds West 317.73 feet to the west line of said Bank lands; thence South 05 degrees 27 minutes 00 seconds East along the west line of said Bank lands 200.35 feet to the northwest corner of the lands of Carolyn Rogers as described in Instrument Number 2013003799 in said recorder's office, marked by a rebar with cap stamped "ESW LS20200016"(hereafter referred to as ESW rebar); thence North 88 degrees 00 minutes 40 seconds East along the north line of said Rogers lands 157.10 feet to a rebar found marking the northwest corner of Lot 1 of Presnell/Morton Street Minor Subdivision as recorded in Plat Cabinet C, Slide 640 in said recorder's office; thence South 00 degrees 49 minutes 24 seconds East along the west line of said Lot 1 a distance of 150.50 feet to the southwest corner of said Lot 1; thence South 00 degrees 20 minutes 13 seconds West 386.04 feet to the northwest corner of Lot 5 in Canary Creek Shopping Center Section Three as recorded in Place Cabinet D, Slide 139A-B, marked by a 5/8 inch diameter rebar; thence South 00 degrees 21 minutes 05 seconds West along the west line and its extension of said Lot 5 a distance of 489.94 feet to the northern right of way for Mallory Parkway; thence North 89 degrees 39 minutes 20 seconds West along said right of way 726.17 feet to the eastern line of the lands of CC Cinemas, LLC as described in Instrument Number 2006033562 in said recorder's office; thence North 00 degrees 20 minutes 45 seconds East along the said east line and its extension 1,406.93 feet; thence North 88 degrees 00 minutes 40 seconds East 525.12 feet; thence South 05 degrees 27 minutes 00 seconds East 210.00 feet to the POINT OF BEGINNING, and containing 0.541 acres of land, more or less.

Block A and Common Area A Combined Legal Description

A part of the Northeast Quarter of Section 15, Township 12 North, Range 4 East of the Second Principal Meridian, City of Franklin, Johnson County, Indiana, more particularly described as follows:

Commencing at the northeast corner of said quarter proceed thence South 00 degrees 11 minutes 50 seconds East along the east line of said quarter 766.97 feet to the north line of the lands of The National Bank of Greenwood as described in Deed Book 245, Page 193 in the Office of the Recorder of Johnson County; proceed thence along the north line of said Bank lands South 88 degrees 00 minutes 40 seconds West 317.73 feet to the west line of said Bank lands; thence South 05 degrees 27 minutes 00 seconds East along the west line of said Bank lands 200.35 feet to the northwest corner of the lands of Carolyn Rogers as described in Instrument Number 2013003799 in said recorder's office, marked by a rebar with cap stamped "ESW LS20200016"(hereafter referred to as ESW rebar) and also being the POINT OF BEGINNING; thence South 01 degrees 03 minutes 40 seconds East along the west line of said Rogers lands 150.02 feet to the southwest corner of said Rogers lands, marked by an ESW rebar; thence North 88 degrees 11 minutes 02 seconds East along the south line of said Rogers lands 156.47 feet to the southwest corner of Lot 1 of Presnell/Morton Street Minor Subdivision as recorded in Plat Cabinet C, Slide 640 in said recorder's office; thence North 00 degrees 49 minutes 24 seconds West along the west line of said Lot 1 a distance of 150.50 feet to a rebar found marking the northwest corner of said Lot 1; thence South 88 degrees 00 minutes 40 seconds West along the north line of said Roger's land 157.10 feet to the POINT OF BEGINNING, and containing 0.541 acres of land, more or less.

Block A and Common Area A Combined Legal Description

A part of the Northeast Quarter of Section 15, Township 12 North, Range 4 East of the Second Principal Meridian, City of Franklin, Johnson County, Indiana, more particularly described as follows:

Commencing at the northeast corner of said quarter proceed thence South 00 degrees 11 minutes 50 seconds East along the east line of said quarter 766.97 feet to the north line of the lands of The National Bank of Greenwood as described in Deed Book 245, Page 193 in the Office of the Recorder of Johnson County; proceed thence along the north line of said Bank lands South 88 degrees 00 minutes 40 seconds West 317.73 feet to the west line of said Bank lands; thence South 05 degrees 27 minutes 00 seconds East along the west line of said Bank lands 200.35 feet to the northwest corner of the lands of Carolyn Rogers as described in Instrument Number 2013003799 in said recorder's office, marked by a rebar with cap stamped "ESW LS20200016"(hereafter referred to as ESW rebar); thence North 88 degrees 00 minutes 40 seconds East along the north line of said Rogers lands 157.10 feet to a rebar found marking the northwest corner of Lot 1 of Presnell/Morton Street Minor Subdivision as recorded in Plat Cabinet C, Slide 640 in said recorder's office; thence South 00 degrees 49 minutes 24 seconds East along the west line of said Lot 1 a distance of 150.50 feet to the southwest corner of said Lot 1; thence South 00 degrees 20 minutes 13 seconds West 386.04 feet to the northwest corner of Lot 5 in Canary Creek Shopping Center Section Three as recorded in Place Cabinet D, Slide 139A-B, marked by a 5/8 inch diameter rebar; thence South 00 degrees 21 minutes 05 seconds West along the west line and its extension of said Lot 5 a distance of 489.94 feet to the northern right of way for Mallory Parkway; thence North 89 degrees 39 minutes 20 seconds West along said right of way 726.17 feet to the eastern line of the lands of CC Cinemas, LLC as described in Instrument Number 2006033562 in said recorder's office; thence North 00 degrees 20 minutes 45 seconds East along the said east line and its extension 1,406.93 feet; thence North 88 degrees 00 minutes 40 seconds East 525.12 feet; thence South 05 degrees 27 minutes 00 seconds East 210.00 feet to the POINT OF BEGINNING, and containing 10.201 acres of land, more or less.

Block A and Parcel "C" Combined Legal Description

A part of the Northeast Quarter of Section 15, Township 12 North, Range 4 East of the Second Principal Meridian, City of Franklin, Johnson County, Indiana, more particularly described as follows:

Commencing at the northeast corner of said quarter proceed thence South 00 degrees 11 minutes 50 seconds East along the east line of said quarter 766.97 feet to the north line of the lands of The National Bank of Greenwood as described in Deed Book 245, Page 193 in the Office of the Recorder of Johnson County; proceed thence along the north line of said Bank lands South 88 degrees 00 minutes 40 seconds West 317.73 feet to the west line of said Bank lands and the POINT OF BEGINNING; thence proceed South 05 degrees 27 minutes 00 seconds East along said west line 200.35 feet to the northwest corner of the lands of Carolyn Rogers as described in Instrument Number 2013003799 in said recorder's office, marked by a rebar with cap stamped "ESW LS20200016"(hereafter referred to as ESW rebar); thence North 88 degrees 00 minutes 40 seconds East along the north line of said Rogers lands 157.10 feet to the westerly line of said Bank lands; thence South 01 degrees 03 minutes 40 seconds East along said west line 150.02 feet; thence North 88 degrees 11 minutes 02 seconds East along the south line of said Rogers lands 156.47 feet to the southwest corner of Lot 1 of Presnell/Morton Street Minor Subdivision as recorded in Plat Cabinet C, Slide 640 in said recorder's office; thence North 00 degrees 49 minutes 24 seconds East along said west line and its extension 731.93 feet; thence North 88 degrees 00 minutes 40 seconds East 525.12 feet; thence South 05 degrees 27 minutes 00 seconds East 210.00 feet to the POINT OF BEGINNING, and containing 10.201 acres of land, more or less.

Block A, Common Area A, and Parcel "C" CombinedLegal Description

A part of the Northeast Quarter of Section 15, Township 12 North, Range 4 East of the Second Principal Meridian, City of Franklin, Johnson County, Indiana, more particularly described as follows:

Commencing at the northeast corner of said quarter proceed thence South 00 degrees 11 minutes 50 seconds East along the east line of said quarter 766.97 feet to the north line of the lands of The National Bank of Greenwood as described in Deed Book 245, Page 193 in the Office of the Recorder of Johnson County; proceed thence along the north line of said Bank lands South 88 degrees 00 minutes 40 seconds West 317.73 feet to the west line of said Bank lands and the POINT OF BEGINNING; thence proceed South 05 degrees 27 minutes 00 seconds East along said west line 200.35 feet to the northwest corner of the lands of Carolyn Rogers as described in Instrument Number 2013003799 in said recorder's office, marked by a rebar with cap stamped "ESW LS20200016"(hereafter referred to as ESW rebar); thence North 88 degrees 00 minutes 40 seconds East along the north line of said Rogers lands 157.10 feet to the northwest corner of Lot 1 of Presnell/Morton Street Minor Subdivision as recorded in Plat Cabinet C, Slide 640 in said recorder's office, marked by a rebar with illegible cap; thence South 00 degrees 49 minutes 24 seconds East along the west line of said lot 150.50 feet to the southwest corner of said lot; thence South 00 degrees 20 minutes 13 seconds West 200.98 feet to a rebar with cap stamped "Banning Eng Firm #0060" (hereafter referred to as Banning Rebar); thence North 89 degrees 39 minutes 20 seconds West 726.19 feet to the east line of the lands of CC Cinemas, LLC as described in Instrument Number 2006033562 in said recorder's office, marked by a Banning rebar; thence North 00 degrees 20 minutes 45 seconds East along said east line and its extension 531.78 feet; thence North 88 degrees 00 minutes 40 seconds East 543.34 feet to the west line of the lands of Franklin GW Holdings, LLC as described in Instrument Number 2008013737 in said recorder's office; thence South 05 degrees 27 minutes 00 seconds East along said west line 29.67 feet to the POINT OF BEGINNING, and containing 8.534 acres of land, more or less.

Zoning Standards
Mixed-Use: Community Center (MXC)

Minimum Lot Area:	10,000 sq. ft.
Maximum Lot Area:	10 Acres
Minimum Lot Width (at setback):	80 feet
Maximum Lot Depth:	N/A
Maximum Lot Coverage (all hard surfaces):	75%
Minimum Front Yard Primary Structure Setback:	50 feet (US 31) 20 feet (Mallory Parkway)
Minimum Side Yard Primary Street Setback:	15 feet
Minimum Rear Yard Primary Street Setback:	20 feet
Minimum Living Area per Dwelling (primary structures):	650 sq. ft.
Minimum Ground Floor Living Area (primary structures):	N/A
Maximum Primary Structures per Lot:	1
Maximum Height (primary structures):	45 feet
Maximum Height (accessory structures):	25 feet

SURVEYOR'S REPORT

In accordance with Title 865, Article 1, Chapter 12 of the Indiana Administrative Code ("Rule 12"), the following observations, opinions, and comments are declared regarding the various uncertainties in the locations of lines and corners found or established this survey as a result of the uncertainties in reference monumentation; in record description and plats; in lines of occupation; and as introduced by random errors in measurements ("Relative Positional Accuracy"). There may be unwritten rights associated with these uncertainties. The client should assume there is an amount of uncertainty along any title line equal in magnitude to the discrepancy in the location of the lines of possession from the surveyed lines.

The purpose of this survey was to perform an ALTA survey of part of the parcel owned by Madison Street Properties and recorded as 2013029953 in the Office of the Recorder of Johnson County. Information and data used to perform this survey includes, but is not limited to, the following: the deeds and/or plats of the subject property and adjoining properties, and monuments and physical evidence found as shown on the plat of the survey.

Reference documents recovered, analyzed and used in this survey consisted of the following:

An ALTA/ACSM Land Title Survey for K.L. Presnell Development, Inc., performed on the surveyed property by Steven B. Williams Engineering and Surveying, certified by Eric Steven Williams, dated November 18, 2013, and having a project number of SW-520.

An ALTA/ACSM Survey for CC Cinemas, LLC., performed on the movie theater adjoining the surveyed property on the west by Maurer Surveying, Inc, certified by Paul Maurer, dated September 8, 2014, and having a project number of 1776-ALTA.

The plat for Presnell/Morton Street Minor Subdivision, performed and certified by Steven B. Williams, dated April 19, 1994, and recorded as Instrument Number 1994017260 in the Office of the Recorder of Johnson County.

The plat for Canary Creek Shopping Center, performed and certified by Steven B. Williams, dated November 4, 1994, and recorded as Instrument Number 1994024814 in the Office of the Recorder of Johnson County.

The plat for Canary Creek Shopping Center, Section Three, performed and certified by Steven B. Williams, dated August 10, 1998, and recorded as Instrument Number 1998022920 in the Office of the Recorder of Johnson County.

An ALTA/ACSM Land Title Situation Survey for Donato's Pizza, performed on Lot 3 of Canary Creek Shopping Center by The Schneider Corporation, certified by Richard H. Miller, dated October 4, 2000, and having a project number of 3282.001.

The replat for Canary Creek Shopping Center Lots 2 and 3, performed by Franklin Engineering Company, certified by Steven B. Williams, dated October 2, 2000, and recorded as Instrument Number 2000023358 in the Office of the Recorder of Johnson County.

The plat for Canary Creek Shopping Center, Section Four-Lot 9, performed by Civil Designs, certified by Bradley P. Ott, dated February 8, 2008, and recorded as Instrument Number 2008003841 in the Office of the Recorder of Johnson County.

The plat for Canary Creek Estates, Section Three, performed by Franklin Engineering Company, certified by Steven B. Williams, dated February 23, 1999, and recorded as Instrument Number 1999007428 in the Office of the Recorder of Johnson County.

The surveyed deed bearing on the east line of the Northeast Quarter of Section 15, Township 12 North Range 4 East was held as a deed basis of bearing. The bearing was set as South 00 degrees 11 minutes 50 seconds East. This survey has been performed in US Survey Feet. All measurements on this survey are derived from grid coordinates. The elevations shown hereon were derived from GPS observation using NAVD 88 Datum from the VRS (Virtual Reference Station) Control Network established by Seiler Company. The elevations were established for this network by continuously streaming data through fixed reference stations ((CORS)-Continuously Operating Reference Station) distributed throughout the network area to a central server running Trimble GPSNet and RTKNet software. The system was also verified by locating DNR Benchmark T1988 which the published elevation matched the measured elevation within 0.2 feet. Differential leveling was performed between the control points prior to data collection to ensure vertical tolerances were met. All data collection was obtained using standard radial surveying techniques. All elevations shown hereon are relative to each other and should be used as such. Elevations on hard surfaces, natural surfaces, and structures are accurate to within 0.1 +/- feet. The contours shown were plotted based upon interpolation of spot elevations and other topographic information and are accurate to within one half of a contour interval.

There may be differences of deed dimensions versus measured dimensions along the title lines shown hereon and, likewise, survey markers may be found near, but not precisely on, the corners. In cases where the magnitude of this difference is less than the Relative Positional Accuracy (stated below) and/or less than the uncertainty identified for the reference monumentation (discussed below), the difference may be considered insignificant and is shown only for the purposes of mathematical closure. Such differences that are greater than the Relative Positional Accuracy and/or the uncertainty in reference monumentation shall be considered worthy of notice and are therefore discussed further below.

The Relative Positional Accuracy (due to random errors in measurement) of the corners of the subject tract established this survey is within the specification for an Urban Survey (+/- 0.07 feet + 50 parts per million) as defined in IAC 865.

Various inconsistencies between the description and reference surveys, plats, and adjoining deeds were found as outlined in this report. The uncertainties as stated in this report led the undersigned to believe that a corrected description be prepared for this property to be used in future transfers of land.

The corners of the Northeast quarter of Section 15, Township 12 North, Range 4 East were used to perform this survey. A stone with a cut "X"on top was found 6 inches above grade at the center of section. A 1 inch diameter iron pin in concrete was found 4 inches below grade at the southwest corner of said section. A 1 inch diameter iron pin in concrete was found flush with the ground at the southwest corner of said section. These monuments were found in good, stable condition and per the references of the Johnson County Surveyor's Office and have an estimated uncertainty of 0.3 feet. No monument was found at the northeast corner of the Section and the County Surveyor did not have any perpetuation information on the corner. The Williams survey stated that a nail was found at the corner per common report, the Canary Creek Shopping Center plats did not call for a monument at the corner, and the WMT deed called for a spike found at the corner. The corner's location was reestablished by holding the geometry of the Williams survey and differed from holding the geometry of the Canary Creek Shopping Center Plats by 1 foot. The Williams survey location matched the adjoining deeds and surveyed deeds better than holding the location from the Canary Creek Shopping Center Plats. The estimated uncertainty of this corner is 2 feet. No information was recovered on the east quarter corner of the section and no monument was recovered in its area. The south line of the northeast quarter was established by holding the south line of the plat for Canary Creek Shopping Center, Section 4 and seemed to match the deed calls in the area. The east line of said quarter was established by holding the location of the line as shown on the Williams survey.

The location of the lines and corners of the subject tract are dependent upon the geometric data shown and the monuments found, accepted, and/or located with this survey. Those monuments shown with no variation were found to be within 0.3 feet of the computed position and it is my opinion that their variations do not need to be addressed. Additional monuments were located during the course of this survey that aided in the establishment of the parcel lines and were recovered as shown on the plat of survey.

Various FECO rebars and Maurer rebars were recovered along the corners of the CC Cinemas property and were found to measure within 0.2 feet of their locations shown on the survey. All corners found as shown on the Maurer survey were held this survey. The monuments found at the northeast, northwest, and southeast corners of Lot 1 of Presnell/Morton Street Minor Subdivision were found as shown on the above referenced plat. The plat states that iron reinforcing bars were set at the corners and the monuments found measured within 0.2 feet of their locations shown on the plat. The monuments were held and accepted during this survey. The rebar found at the northwest corner of Lot 5 of Canary Creek Shopping Center, Section Three is believed to be the same as shown on the above referenced plat. The plat states that a rebar was located at the corner and the Schneider survey held this rebar as an original monument. The rebar was also held this survey as an original monument. The Schneider rebar found at the northeast corner of Lot 4 measured within 0.2 feet of the north line of Lot 3, but was found 1 foot east of the northeast corner. The Schneider rebar also agreed with the CKW rebar found at the northwest corner of the lot. The Schneider survey used original monuments found at the corners of Lot 5 and projected the lines up to fine Lot 3's corners. We used original monuments found on Lots 1 and 5 and projected between the two lots to recreate the corners. If the line between the northwest corner of Lot 1 and the northwest corner of Lot 4 would have shortened the north line of Lot 1 by 2.2 feet. The Schneider and CKW pins were not held during this survey, however they lent credence to the north-south location of the lot lines. The Civil Designs capped rebar was set during the platting of Canary Creek Shopping Center, Section 4. Several additional monuments were recovered along the south side of the Williams survey and all monuments measured within their locations shown on the plat within 0.1 feet. The rebar was held as an original monument and was used to establish the southern right of way for Mallory Parkway. The Hahn rebar shown on the Civil Designs plat was also held and used to establish the south line of the quarter section. The ESW rebars found near the corners of the surveyed property were measured within their locations shown on the Williams survey within 0.3 feet unless otherwise noted. The Williams survey also called for a 5/8 inch iron pin found at the northeast corner of the property that was recovered during this survey. The iron pin was measured 0.5 feet southwest of the corner as shown on the Williams survey and there was no history of the monument shown on the survey. None of the reference documents used during this survey showed the iron pin at the corner so the origin of this pin is unknown at this time. The pk nail shown near the southeast corner of the surveyed property was held as the corner on the Williams survey. The Williams survey stated that the pk nail was found at the corner but gives no history of the monument. No other reference surveys or plats showed this nail at the corner so the origin of this nail is unknown at this time. The ESW rebar found near the southwest corner of the surveyed property was not called for on the Williams survey, however it is the opinion of the undersigned that the rebar found agreed with other found monuments and was held this survey. A 5/8 inch disturbed rebar was found near the southwest corner of Tract "A" of the Williams survey. The survey states that a 5/8 inch iron pin with cap was set at the corner, however the rebar measured 13 feet southwest of the location shown on the Williams survey. The ESW monuments found along the south line of Lot 3 B were treated as original monuments and were held. The other ESW monuments were not original and were treated as additional pieces of evidence in determining the boundaries of the surveyed property as described below.

The lines of Lot 1 of Presnell/Morton Street Minor Subdivision were established by holding the above referenced monuments and holding the plat geometry to recreate the southwest corner of the subdivision. The westlines of the above mentioned Lots 2 and 3 were found the lie along a line held between the southwest corner of said Lot 1 and the northwest corner of Lot 5. The plat for Canary Creek Shopping Center established lots numbered 2, 3, and 4 and the subdivision was established by holding the above referenced monumentation. The west lines of Lots 2 and 3 were recreated by holding a line between the southwest corner of Lot 1 and the northwest corner of Lot 5. The geometry of the plat of Lot 5 was then held and extended south to recreate the west line of Lot 4. This seemed to match the existing pavement edge and magnail found near the southwest corner of the surveyed property better than holding record distances off of the western right of way of US 31 to establish the west lines of the lots. The plat for Canary Creek Shopping Center, Section 4 was used to establish the rights of way for Mallory Parkway. The Civil Designs rebar was held and the geometry of the plat was used to establish the south line of the right of way. When the right of way was offset to the north it matched the PK nail with washer found near the southwest corner of the surveyed property. It also matched the right of way location shown on the Maurer survey and was held as the right of way during this survey. The WMT deed was plotted by holding the north line of Franklin GW deed and holding the northeast corner of said deed. The WMT Franklin deed has insufficient information pertaining to the curve calls and the called for monuments in the deed were not recovered during this survey. However the west line of the WMT Franklin deed matched up with the east line of the K.L. Presnell deed within 1 foot, so the adjoining line was held as stated and has an estimated uncertainty of 2 feet. The north line of the property and the east lines around the Franklin GW, National Bank of Greenwood, and Rogers were held per the geometry of the surveyed deed and the Williams survey. The south line of the Rogers property was held as a line between the southwest corner of Presnel/Morton Street subdivision and the southwest corner shown on the Williams survey. The west lines of the Canary Creek Shopping Center were held as the east line of the surveyed property. The northern right of way for Mallory Parkway was held as the southern line of the surveyed property.

The east line of the western adjoiners as shown on the Maurer survey was held as the west line of the surveyed property. The Williams survey on the surveyed property showed the bend in the east line of the property to be on the north side of the 50 feet wide ingress/egress easement while the previous plats for Lots 2, 3, and 4 showed the bend to be located on the south side of the easement. There were also various discrepancies between the record description on the survey and the lines on the survey that were not fully clarified in the survey report. There was a discrepancy of 5 feet along the east line of the surveyed property. The Williams survey states that originally the right of way for Mallory Parkway was planned to be 50 feet instead of the 60 feet that was shown on the record plats and dedications. This may account for the 5 foot discrepancy between the survey and the description. The survey states that there was a typographical error along the western line of Arby's (Lot 1 of Presnell/Morton Street Minor Subdivision) and that the original deed and ALTA description had a bearing showing 0 degrees 03 minutes 40 seconds when it should be 1 degree 03 minutes 40 seconds. This would match the bearings shown on the plats in the area, but the survey still calls the bearing along the line as 0 degrees 03 minutes 40 seconds. There is also a 30 foot discrepancy along the west line of the surveyed property. The Williams survey states that the description calls to the center of a planned 50 foot right of way, however the description's only controlling call is along the east line to the north right of way for Mallory Parkway. It is the opinion of the undersigned that the description at one time called to the center of Mallory Parkway and that the description was not fully corrected to hold the 60 foot right of way line. This would explain the 30 foot discrepancy between the legal and the line shown on the survey. There was also approx 5 feet along the east line of confusion on the survey to the location of the right of way. The survey calls the 60 foot right of way location on two separate and parallel lines. The survey also calls monuments in locations that were inconsistent with the locations that were recovered during this survey. It appears that a setback and easement line was incorrectly labeled as the right of way line and the monuments were shown along that line instead of their locations recovered during this survey. No centerline monuments were recovered inside of Canary Creek Estates, Section 3, and no property corners were recovered as well. The plat for the subdivision shows centerline monumentation only and does not show any original monuments set at the corners of the lots. The plat was placed on the survey holding the origin of the corner and section line shown on the plat. The east line of the plat matched up with the west line of the Maurer survey and the road locations matched back of curb splits within 0.2 feet.

The Title Commitment description was found to not close by 25 feet. The title description contained only one controlling call to the north right of way for Mallory Parkway. All other calls were bearing and distance calls.

There was a 0.7-0.8 foot gap found between the surveyed deed and the K.L. Presnell northern adjoiner. This was most likely caused by the lack of monumented section corners and the fact that the deed's lead in call is along the north line of the section and the surveyed properties lead in call is along the east line of the section. A gap of 2-3 feet was found between the surveyed deed and the Canary Creek Shopping Center plats. An overlap of 3.1-1.9 feet was found between the west line of the surveyed description and the east line of the adjoining deeds.

Fences, drives and utilities were found at, along, and near the lines of the surveyed parcel. Several fences were found near the north, west, and south lines with the exception of the fences being 1.8 feet and the farthest being 3.5 feet off of the lines. The edge of cultivation was found to lie between 6 feet east and 9 feet west of the west line. The edge of cultivation was found to lie between 4 feet west and 2 feet east of the northern portion of the west line. The edge of cultivation was found to lie between 6 feet south and 14 feet north of the north line. See the plat of survey for further information about evidence of possession.

The uncertainties of the survey are shown as follows:

Availability and condition of reference monuments: 4 feet
Occupation or possession lines: 14 feet
Clarity or ambiguity of record descriptions and/or adjoin descriptions: 25 feet

I affirm, under the penalties of perjury, that I have taken reasonable care to redact each Social Security number in the document, unless required by law. Brian L. Haggard

Evidence of source of title for the subject tract was provided in the form of Fidelity National Title Insurance Company Commitment Number 14-008276, effective November 25, 2014 and Fidelity National Title Insurance Company Commitment Number 15-008580, effective May 8, 2015. Part of the items shown thereon may have been depicted on the survey and are identified by their recording data. Should any additional items need to be depicted on the survey please advise and provide the appropriate documents. The within plat and survey were prepared without benefit of current evidence of source of title for the adjoiners to the subject tract and are therefore subject to any statement of facts revealed by examination of such documents.

Title Work Special Exceptions (Commitment #14-008276):

Item 10 Neither surveyed tract is subject to the terms and conditions relating to a gas line easement to the Indiana Gas Company, Inc. as recorded March 10, 1988 in Deed Record 247, page 615. The easement is located 10 feet west of and parallel to the west right of way line of US 31 and the surveyed parcel does not extend to within 10 feet of US 31.

Item 11 Both surveyed tracts are subject to easements called out in a Declaration of Easement dated October 12, 1994 and recorded October 13, 1994 in Deed Record 278, Page 955. The easements called for in the declaration were shown on the plat of survey per their geometry.

Item 12 Neither surveyed tract is subject to the terms and conditions relating to a Purchase Agreement Addendum and Agreement Surviving Warranties of Title recorded March 8, 1994 in Miscellaneous Record 66, page 907. The document concerns a tract currently occupied by Wendy's and is located 500 feet +/- south of the surveyed tracts.

Item 13 Surveyed Tract B may be subject to terms and provisions called out in a Purchase Agreement Addendum and Agreement Surviving Warranties of Title recorded March 8, 1994 in Miscellaneous Record 67, page 798. Exhibits A and B of the document describe land directly west of and adjacent to the surveyed tracts. Surveyed Tract B in entirely enclosed by the "North Half Tract A" portion of Exhibit C.

Item 14 Neither surveyed tract is subject to the terms and conditions relating to an Agreement for Construction of Sanitary Sewer under Private Contract recorded March 24, 1994 in Miscellaneous Record 66, page 964. The sewer described in the document is located 500 feet +/- south of the surveyed tracts.

Item 15 Both surveyed tracts are subject to terms and conditions called out in a Declaration of Easements and Restrictions from Presnell Development, Inc. dated February 19, 2008 and recorded February 20, 2008, as Instrument No. 2008-003840. Tract 3 as shown on the document corresponds to both surveyed tracts.

Item 16 Surveyed Tract B is subject to covenants, easements, conditions and restrictions set forth in Warranty Deed recorded August 31, 1990 in Deed Record 258, page 661. Exhibit B of the document corresponds to an easement that is not located within the survey limits. Exhibits C and D of the document were found to partially lie within the boundary of surveyed Tract B. The easement was shown on the plat of survey by holding the north line of Tract B and holding the geometry stated in the document.

Item 17 Both surveyed tracts are subject to terms and conditions set forth in a Right of Way and Easement Grant recorded December 28, 1987 in Deed Record 246, page 963 granted to Indiana Cities Water Corporation. The easement was placed on the plat of survey based upon the south line of the National Bank of Greenwood parcel.

Item 18 Both surveyed tracts are subject to terms and conditions set forth in an Easement Grant for Sanitary and Storm Sewers recorded March 8, 1994 in Deed Record 275, page 463 to Hurricane Food, Inc. Exhibits A, B, and C were all found to be south of the surveyed property, however Exhibit D was found to lie with both surveyed tracts . The easement was shown on the plat of survey based upon its geometry.

Item 19 Both surveyed tracts are subject to terms, provisions, easements as contained in the Declaration of Covenants, Restrictions for Canary Creek Phase I, a commercial subdivision dated November 11, 1994 in Miscellaneous Record 67, page 913 and re- recorded in Miscellaneous Record 68, page 249, as modified by Affidavit of Scriveners Error dated February 21, 1997 and recorded March 7, 1997 as Instrument No. 97004341. The land described in Exhibit A was found to be the same as Lot 1 of Presnell/Morton Street Minor Subdivision and Lot 4 of Canary Creek Shopping Center. The document states that the enforcement of the covenants as specifically assigned by the Developer shall also be for the benefit and run with any other land that the Developer owns or may acquire in the future located within 1,000 feet of the property described in Exhibit A. Both surveyed tracts are located with the specified distance from the lands described in Exhibit A.

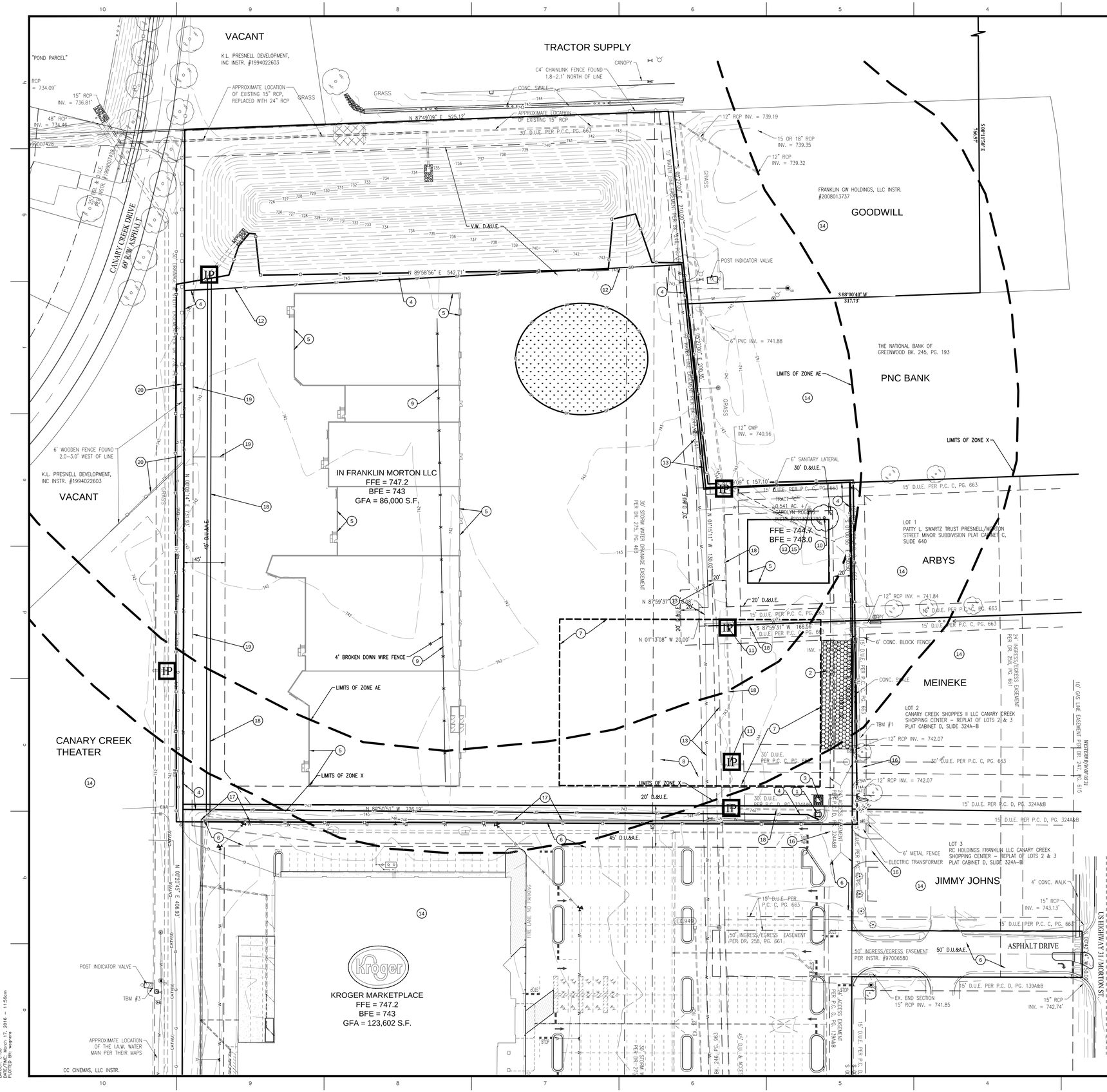
Item 20 Surveyed Tract A may be subject to terms, provisions and easements recorded in Deed Record 249, page 793. The retained and access easements were found to lie outside of the bounds of the surveyed properties, however the sewer and drainage easement was found to lie along the north line of Tract A. The easement described in the document is completely contained within a 30' Drainage and Utility Easement as shown on the plat for Canary Creek Shopping Center Lots 2, 3, and 4 so the easement was not shown on the plat of survey.

Item 21 Surveyed Tract B may be subject to terms and conditions found in a Right of Way easement granted recorded November 16, 1994 in Deed Record 279, page 489 granted to Indiana Cities Water Corporation. The easement described in the document is the same as a 15' Utility Easement as shown on the plat for Canary Creek Shopping Center Lots 2, 3, and 4 so the easement was not shown on the plat of survey.

Item 22 Surveyed Tract A is subject to terms and conditions found in an Easement for Water Main and Incidental Purposes in favor of Indiana Cities Water Corporation, an Indiana corporation recorded March 2, 1988 in Deed Record 247, page 541. The easement was shown on the plat of survey per its geometry.

Item 23 Surveyed Tract A is subject to terms and conditions found in an Easement for Water Main and Incidental Purposes in favor of Indiana Cities Water Corporation, an Indiana corporation recorded October 28, 1987, in Deed Record 246, page 261. The easement was shown on the plat of survey per its geometry.

Item 24 Surveyed Tract A may be subject to terms and provisions found in an Easement for Sanitary Sewer and Storm Water Drainage Lines, Mains, Pipes, Valves and Other Related Facilities and Appurtenances and Incidental Purposes in favor of



SITE PREPARATION / SWPPP PHASE I NOTES

1. INSTALL PERMIT POSTING AREA. 4" PVC TUBE WITH END CAPS ATTACHED TO PROJECT CONSTRUCTION SIGN TO CONTAIN APPROVED CONSTRUCTION DRAWINGS AND PERMITS FOR INSPECTORS.
2. INSTALL CONSTRUCTION ENTRANCE. REFER TO DETAIL ON SHEET C105
3. INSTALL CONCRETE WASHOUT. REFER TO DETAIL ON SHEET C105
4. INSTALL SILT FENCE. REFER TO DETAIL ON SHEET C105
5. LIMITS OF PROPOSED BUILDING
6. EXISTING ASPHALT DRIVES TO BE KEPT CLEAN AT ALL TIMES
7. CONSTRUCTION STAGING AREA
8. CONSTRUCTION DUMPSTER, FUELING AREA, FUEL TANK AND PORT-O-LET TO BE LOCATED AND NOTED ONSITE BY CONTRACTOR
9. REMOVE EXISTING FENCE LINE WHERE SHOWN
10. REMOVE EXISTING TREES
11. EXISTING FRAME AND GRATE TO BE ADJUSTED TO THE PROPOSED PAVEMENT GRADES
12. COIR LOG
13. UTILITIES EXIST WITHIN THE LIMITS OF DISTURBANCE. UTILITIES SHOWN WERE LOCATED BY THE UTILITY COMPANY AND A PRIVATE LOCATE SERVICE. ADDITIONAL UTILITIES MAY EXIST WITHIN THIS CORRIDOR THAT COULD NOT BE TRACED AND LOCATED. PROCEED WITH CAUTION.
14. CONTRACTOR TO NOTIFY THE ADJOINER(S) AND CITY ENGINEER 1 WEEK PRIOR TO COMMENCING WITH WORK IN CLOSE PROXIMITY OF THE EXISTING BUILDINGS.
15. EXISTING WATER SERVICE TO ARBY'S TO REMAIN
16. MAINTAIN ACCESS TO ADJOINERS AT ALL TIMES
17. SAWCUT AND REMOVE EXISTING CURB
18. EXISTING STORM SEWER TO REMAIN
19. EXISTING SANITARY SEWER TO REMAIN
20. FENCE MAY NEED REMOVED AND REPLACED FOR INSTALLATION OF UTILITIES. REPLACE WITH LIKE SIZE AND MATERIALS.

SWPPP 1 LEGEND

- IP - INLET PROTECTION - USE SUBSURFACE INLET PROTECTION WITH OVERFLOW CAPABILITY (DANDY SAC)
- CONSTRUCTION ENTRANCE
- STAGING AREA
- POSTING AREA - 4" PVC TUBE WITH END CAPS ATTACHED TO PROJECT CONSTRUCTION SIGN TO CONTAIN APPROVED CONSTRUCTION DRAWINGS AND PERMITS FOR INSPECTORS.
- SD - INSTALL COIR LOGS AS SHOWN. CONTRACTOR TO ADD ADDITIONAL MEASURES AS CONSTRUCTION PHASING AND SITE CONDITIONS DICTATE
- CONCRETE WASHOUT
- STOCKPILE AREA (TEMPORARY SEEDING REQUIRED)
- SF - SILT FENCE
- D - LIMITS OF DISTURBANCE

LEGEND

FH	=	EXIST. FIRE HYDRANT
WM	=	EXIST. WATER METER/VALVE
	=	EXIST. SIGN
	=	EXIST. MONITOR WELL
PKF	=	EXIST. IRON PIN & OR PK (SET/FOUND)
GM	=	EXIST. GAS METER
	=	EXIST. GAS VALVE
	=	EXIST. STORM INLET
	=	EXIST. STORM/SAN./TELE. MANHOLE
EM	=	EXIST. ELECTRIC METER
	=	EXIST. POWER POLE/POWER POLE w/ LIGHT
GA	=	EXIST. GUY ANCHOR
T.Ped.	=	EXIST. TELEPHONE PEDESTAL
AC	=	HVAC UNIT
CO	=	CLEANOUT
MB	=	MAILBOX
	=	LIGHT POLE
BOL	=	EXIST. BOLLARD
	=	EXIST. SANITARY SEWER LINE
	=	EXIST. STORM SEWER LINE
892	=	EXIST. CONTOURS
	=	CONCRETE END SECTION (C.E.S.)
	=	TRANSFORMER
	=	RIGHT-OF-WAY LINE
	=	DRAINAGE FLOW ARROW
	=	EXISTING TREE LINE
F.F.E.	=	FINISH FLOOR ELEVATION
TC	=	TOP OF (MANHOLE / INLET) CASTING
INV	=	INVERT ELEVATION
RCP	=	REINFORCED CONCRETE PIPE
CMP	=	CORRUGATED METAL PIPE
PVC	=	POLYVINYL CHLORIDE PIPE
HDPE	=	HIGH DENSITY POLYETHYLENE
	=	FLOW LINE
STR.	=	STRUCTURE
TOW OR TW	=	TOP OF WALL
SSD	=	SUB-SURFACE DRAINAGE
TOC	=	TOP OF CURB
GUT	=	GUTTER
W	=	WATER LINE
G	=	GAS LINE
OHU	=	OVERHEAD UTILITY LINE
T	=	TELEPHONE LINE
E	=	ELECTRIC LINE
TBM	=	TEMPORARY BENCHMARK

GENERAL NOTES

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WITH THE OWNER DURING BIDDING AND DURING CONSTRUCTION ACTIVITIES ALL ITEMS TO BE REMOVED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE ANY MATERIALS AND/OR STRUCTURES NOT LOCATED ON THIS SURVEY FOR THE INSTALLATION OF THE NEW WORK.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PERTAINING TO THEIR PHASE OF WORK, AND TO VERIFY WHICH UTILITIES WILL BE REMOVED BY UTILITY COMPANY. ANY AND ALL UTILITIES NOT REMOVED BY THE UTILITY COMPANY SHALL BE REMOVED BY THE CONTRACTOR.
3. UTILITIES ARE SHOWN TO BE APPROXIMATE AND SHALL BE RELOCATED AND/OR CAPPED AND ABANDONED BEFORE CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
4. ALL DEMOLITION MATERIAL AND SALVAGEABLE MATERIAL IS THE PROPERTY OF THE DEMOLITION CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF THE SITE.
5. SLABS ON GRADE MUST BE REMOVED COMPLETELY AND TAKEN OFF THE SITE.
6. ALL UTILITIES MUST REMAIN ACTIVE FOR AREA TENANTS THAT ARE REMAINING. NO UTILITY SERVICE SHALL BE INTERRUPTED DURING THE CONSTRUCTION PROCESS.
7. BEARINGS, DIMENSIONS, AND EASEMENTS ARE SHOWN FOR REFERENCE ONLY. SEE RECORD SURVEYS AND PLATS FOR EXACT INFORMATION.
8. IF THERE ARE ANY QUESTIONS CONCERNING THIS DEMOLITION PLAN, PLEASE CONTACT THE ENGINEER BEFORE CONTINUING WORK.

WEIHE ENGINEERS, INC.
10505 NORTH COLLEGE AVENUE
INDIANAPOLIS, INDIANA 42680
(317) 846-6611 OR
TOLL FREE 1-800-452-6408

CONTACT PERSON FOR EROSION CONTROL & SEDIMENT PRACTICES

WEIHE ENGINEERS, INC.
10505 N. COLLEGE AVE.
INDIANAPOLIS, IN 46268
TELEPHONE: (317) 846-6611
FAX: (317) 843-0546
EMAIL: PARKERFF@WEIHE.NET
CONTACT PERSON: FRED PARKER, CPESC

EXISTING AREAS

TOTAL SITE	=	8.68	AC.
DISTURBED	=	9.24	AC.
PERVIOUS	=	9.20	AC.
IMPERVIOUS	=	0.04	AC.

EROSION CONTROL NOTES

1. ALL DISTURBED AREAS SHALL BE SODDED OR SEEDED, EXCEPT BUILDING PAD AND LANDSCAPE BEDS. SEE LANDSCAPE PLANS FOR LOCATION OF LANDSCAPE BEDS.
2. INSTALL SILT FENCE ALONG ALL DOWNSTREAM SLOPES. SILT FENCE TO FOLLOW CONTOUR.
3. THERE SHALL BE NO DIRT, DEBRIS OR STORAGE OF MATERIAL IN THE STREET.
4. CONTRACTOR TO COORDINATE THE SWPPP PROGRAM WITH SPECIFICATION SECTION 312500.
5. ANY EXISTING TREE(S) THAT MAY REQUIRE REMOVAL BUT ARE NOT SHOWN ON THE PLAN AS BEING REMOVED MAY BE DONE SO, AS LONG AS THE TREE(S) ARE RELOCATED TO AN APPROVED ALTERNATIVE LOCATION ON SITE.

PLAN CERTIFICATE NOTE:

ORIGINAL ALTA, TOPOGRAPHY, UTILITIES, STORM SEWERS, AND ALL OTHER EXISTING CONDITIONS ITEMS WERE PREPARED BY BANNING ENGINEERING.

FINAL DRAWINGS FOR THE IN FRANKLIN MORTON, LLC SITE WERE PREPARED BY WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER. FINAL CONSTRUCTION PLANS ARE THOSE PLANS CONTAINING A FINAL REVISION DATE AFTER 03/17/2016. WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER ACCEPT RESPONSIBILITY ONLY FOR THE IN FRANKLIN MORTON, LLC SITE IMPROVEMENTS RELATED TO THE ENGINEERING WORK SHOWN ON THESE PLANS.

N W E S

SCALE: 1" = 50'

0 25 50 100

811 Know what's below. Call before you dig.
Within Indiana Call 811 or 800-382-5544
24 Hours a Day, 7 Days a Week.
PER INDIANA STATE LAW IC 8-1-26, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net
317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

PROJECT NO.	W15.0351	
DWG NAME:	#15020-C100 swppp1.dwg	
DESIGNED BY:	BJS/SMM	
DRAWN BY:	RAM	
CHECKED BY:	BJS	
DATE:	02.17.2016	

REVISIONS AND ISSUES	DATE	BY
CITY SUBMITTAL	03.17.2016	BJS

STEVEN SCOTT RUCKER REGISTERED P.E. 11300279 STATE OF INDIANA PROFESSIONAL ENGINEER

STEVEN SCOTT RUCKER P.E. 11300279

PREPARED FOR:
IN FRANKLIN MORTON, LLC

xxx NORTH MORTON STREET, FRANKLIN, IN 46131

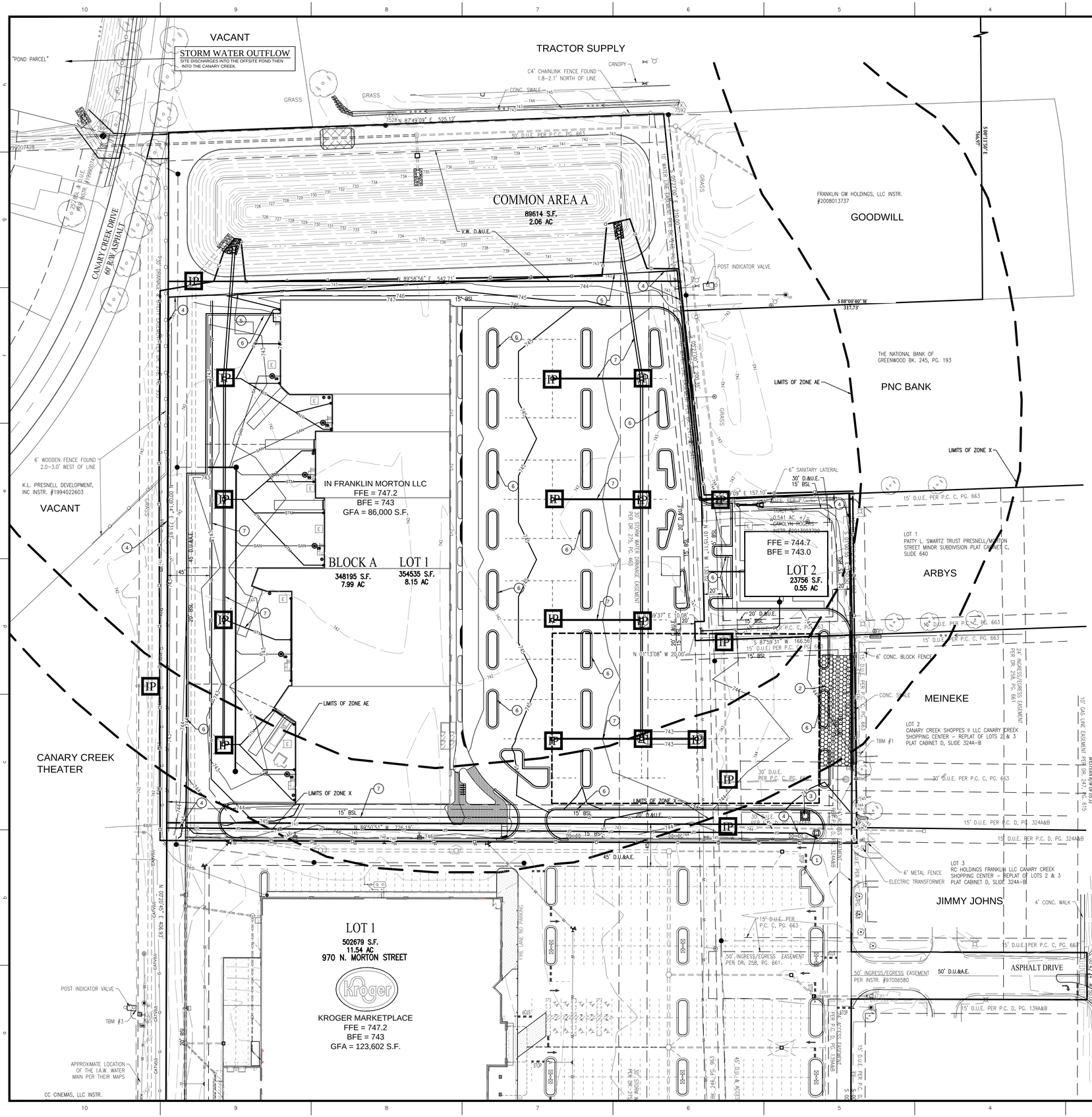
STORMWATER POLLUTION PREVENTION PLAN PHASE I

Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C100

PROJECT NO.
W15.0351

LOCATION: H:\2015\W15035\1\Engineering\design\contset\w150351-C100 swppp1.dwg
LAYOUT: C100 - PLAN
DATE/TIME: March 17, 2016 – 11:56am
PLOTTED BY: weihe\rmb



SWPPP PHASE II NOTES

1. MAINTAIN PERMIT POSTING AREA. 4" PVC TUBE WITH END CAPS ATTACHED TO PROJECT CONSTRUCTION SIGN TO CONTAIN APPROVED CONSTRUCTION DRAWINGS AND PERMITS FOR INSPECTORS.
2. MAINTAIN CONSTRUCTION ENTRANCE. REFER TO DETAIL ON SHEET C105
3. MAINTAIN CONCRETE WASHOUT. REFER TO DETAIL ON SHEET C105
4. MAINTAIN SILT FENCE. REFER TO DETAIL ON SHEET C105
5. MAINTAIN COIR LOG
6. INSTALL CURBS ONCE FINAL GRADE HAS BEEN ESTABLISHED
7. INSTALL WATER, STORM AND SANITARY SEWERS

SWPPP II LEGEND

- IP - INLET PROTECTION - USE SUBSURFACE INLET PROTECTION WITH OVERFLOW CAPABILITY (DANDY SAC)
- CONSTRUCTION ENTRANCE
- STAGING AREA
- POSTING AREA - 4" PVC TUBE WITH END CAPS ATTACHED TO PROJECT CONSTRUCTION SIGN TO CONTAIN APPROVED CONSTRUCTION DRAWINGS AND PERMITS FOR INSPECTORS.
- SD - INSTALL COIR LOGS AS SHOWN. CONTRACTOR TO ADD ADDITIONAL MEASURES AS CONSTRUCTION PHASING AND SITE CONDITIONS DICTATE
- CONCRETE WASHOUT
- SF - SILT FENCE
- D - LIMITS OF DISTURBANCE

GENERAL NOTES

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WITH THE OWNER DURING BIDDING AND DURING CONSTRUCTION ACTIVITIES ALL ITEMS TO BE REMOVED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE ANY MATERIALS AND/OR STRUCTURES NOT LOCATED ON THIS SURVEY FOR THE INSTALLATION OF THE NEW WORK.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PERTAINING TO THEIR PHASE OF WORK, AND TO VERIFY WHICH UTILITIES WILL BE REMOVED BY UTILITY COMPANY, ANY AND ALL UTILITIES NOT REMOVED BY THE UTILITY COMPANY SHALL BE REMOVED BY THE CONTRACTOR.
3. UTILITIES ARE SHOWN TO BE APPROXIMATE AND SHALL BE RELOCATED AND/OR CAPPED AND ABANDONED BEFORE CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
4. ALL DEMOLITION MATERIAL AND SALVAGEABLE MATERIAL IS THE PROPERTY OF THE DEMOLITION CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF THE SITE.
5. SLABS ON GRADE MUST BE REMOVED COMPLETELY AND TAKEN OFF THE SITE.
6. ALL UTILITIES MUST REMAIN ACTIVE FOR AREA TENANTS THAT ARE REMAINING. NO UTILITY SERVICE SHALL BE INTERRUPTED DURING THE CONSTRUCTION PROCESS.
7. BEARINGS, DIMENSIONS, AND EASEMENTS ARE SHOWN FOR REFERENCE ONLY. SEE RECORD SURVEYS AND PLATS FOR EXACT INFORMATION.
8. IF THERE ARE ANY QUESTIONS CONCERNING THIS DEMOLITION PLAN, PLEASE CONTACT THE ENGINEER BEFORE CONTINUING WORK.

WEIHE ENGINEERS, INC.
10505 NORTH COLLEGE AVENUE
INDIANAPOLIS, INDIANA 42680
(317) 846-6611 OR
TOLL FREE 1-800-452-6408

EROSION CONTROL NOTES

1. ALL DISTURBED AREAS SHALL BE SODDED OR SEEDED, EXCEPT BUILDING PAD AND LANDSCAPE BEDS. SEE LANDSCAPE PLANS FOR LOCATION OF LANDSCAPE BEDS.
2. INSTALL SILT FENCE ALONG ALL DOWNSTREAM SLOPES. SILT FENCE TO FOLLOW CONTOUR.
3. THERE SHALL BE NO DIRT, DEBRIS OR STORAGE OF MATERIAL IN THE STREET.
4. CONTRACTOR TO COORDINATE THE SWPPP PROGRAM WITH SPECIFICATION SECTION 312500.
5. ANY EXISTING TREE(S) THAT MAY REQUIRE REMOVAL BUT ARE NOT SHOWN ON THE PLAN AS BEING REMOVED MAY BE DONE SO, AS LONG AS THE TREE(S) ARE RELOCATED TO AN APPROVED ALTERNATIVE LOCATION ON SITE.

CONTACT PERSON FOR EROSION CONTROL & SEDIMENT PRACTICES

WEIHE ENGINEERS, INC.
10505 N. COLLEGE AVE.
INDIANAPOLIS, IN 46268
TELEPHONE: (317) 846-6611
FAX: (317) 843-0546
EMAIL: PARKERF@WEIHE.NET
CONTACT PERSON: FRED PARKER, CPESC

LEGEND

FH	=	EXIST. FIRE HYDRANT
WM	=	EXIST. WATER METER/VALVE
	=	EXIST. SIGN
	=	EXIST. MONITOR WELL
PKF	=	EXIST. IRON PIN & OR PK (SET/FOUND)
GM	=	EXIST. GAS METER
	=	EXIST. GAS VALVE
	=	EXIST. STORM INLET
	=	EXIST. STORM/SAN./TELE. MANHOLE
EM	=	EXIST. ELECTRIC METER
	=	EXIST. POWER POLE/POWER POLE w/ LIGHT
GA	=	EXIST. GUY ANCHOR
T.Ped.	=	EXIST. TELEPHONE PEDESTAL
AC	=	HVAC UNIT
CO	=	CLEANOUT
MB	=	MAILBOX
	=	LIGHT POLE
BOL	=	EXIST. BOLLARD
	=	EXIST. SANITARY SEWER LINE
	=	EXIST. STORM SEWER LINE
892	=	EXIST. CONTOURS
	=	CONCRETE END SECTION (C.E.S.)
GP	=	GATE POST
	=	TRANSFORMER
	=	RIGHT-OF-WAY LINE
	=	DRAINAGE FLOW ARROW
	=	EXISTING TREE LINE
F.F.E.	=	FINISH FLOOR ELEVATION
TC	=	TOP OF (MANHOLE / INLET) CASTING
INV	=	INVERT ELEVATION
RCP	=	REINFORCED CONCRETE PIPE
CMP	=	CORRUGATED METAL PIPE
PVC	=	POLYVINYL CHLORIDE PIPE
HDPE	=	HIGH DENSITY POLYETHYLENE
	=	FLOW LINE
STR.	=	STRUCTURE
TOW OR TW	=	TOP OF WALL
SSD	=	SUB-SURFACE DRAINAGE
TOC	=	TOP OF CURB
GUT	=	GUTTER
W	=	WATER LINE
G	=	GAS LINE
OHU	=	OVERHEAD UTILITY LINE
T	=	TELEPHONE LINE
E	=	ELECTRIC LINE
TBM	=	TEMPORARY BENCHMARK
XX	=	PARKING COUNT

EXISTING AREAS

TOTAL SITE	=	8.68	AC.
DISTURBED	=	9.24	AC.
PERVIOUS	=	9.20	AC.
IMPERVIOUS	=	0.04	AC.

-WARNING-

THIS PLAN TO BE USED FOR EROSION CONTROL PURPOSES ONLY. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED IN THE FIELD BY THE INSPECTOR.

-NOTE-

THIS PLAN INDICATES EROSION CONTROL MEASURES REQUIRED AFTER SOIL STRIPPING AND PAD BUILDING HAS TAKEN PLACE. COORDINATE WITH DEVELOPER FOR MEASURES REQUIRED UNTIL PROPERTY TURNED OVER FOR DEVELOPMENT. COORDINATE WITH SOIL CONSERVATION DISTRICT REPRESENTATIVE FOR ANY OTHER MEASURES REQUIRED DUE TO SITE CONDITIONS.

PLAN CERTIFICATE NOTE:

ORIGINAL ALTA, TOPOGRAPHY, UTILITIES, STORM SEWERS, AND ALL OTHER EXISTING CONDITIONS ITEMS WERE PREPARED BY BANNING ENGINEERING.

FINAL DRAWINGS FOR THE IN FRANKLIN MORTON, LLC SITE WERE PREPARED BY WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER. FINAL CONSTRUCTION PLANS ARE THOSE PLANS CONTAINING A FINAL REVISION DATE AFTER 03/17/2016. WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER ACCEPT RESPONSIBILITY ONLY FOR THE IN FRANKLIN MORTON, LLC SITE IMPROVEMENTS RELATED TO THE ENGINEERING WORK SHOWN ON THESE PLANS.

N
W E
S

SCALE: 1" = 50'
0 25 50 100

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PER INDIANA STATE LAW IC 8-1-26, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net
317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER
WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

REVISIONS AND ISSUES	DATE:	BY:
CITY SUBMITTAL	03.17.2016	BJS

PROJECT NO.: W15.0351
DWG NAME: w150351-C101 swppp2.dwg
DESIGNED BY: BJS/RAM
DRAWN BY: RAM
CHECKED BY: BJS
DATE: 02.17.2016

STEVEN SCOTT RUCKER
REGISTERED
PE.11300279
STATE OF INDIANA
PROFESSIONAL ENGINEER
APPROVED DESIGN
NOT VALID UNLESS SEALED

STEVEN SCOTT RUCKER P.E. 11300279

PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

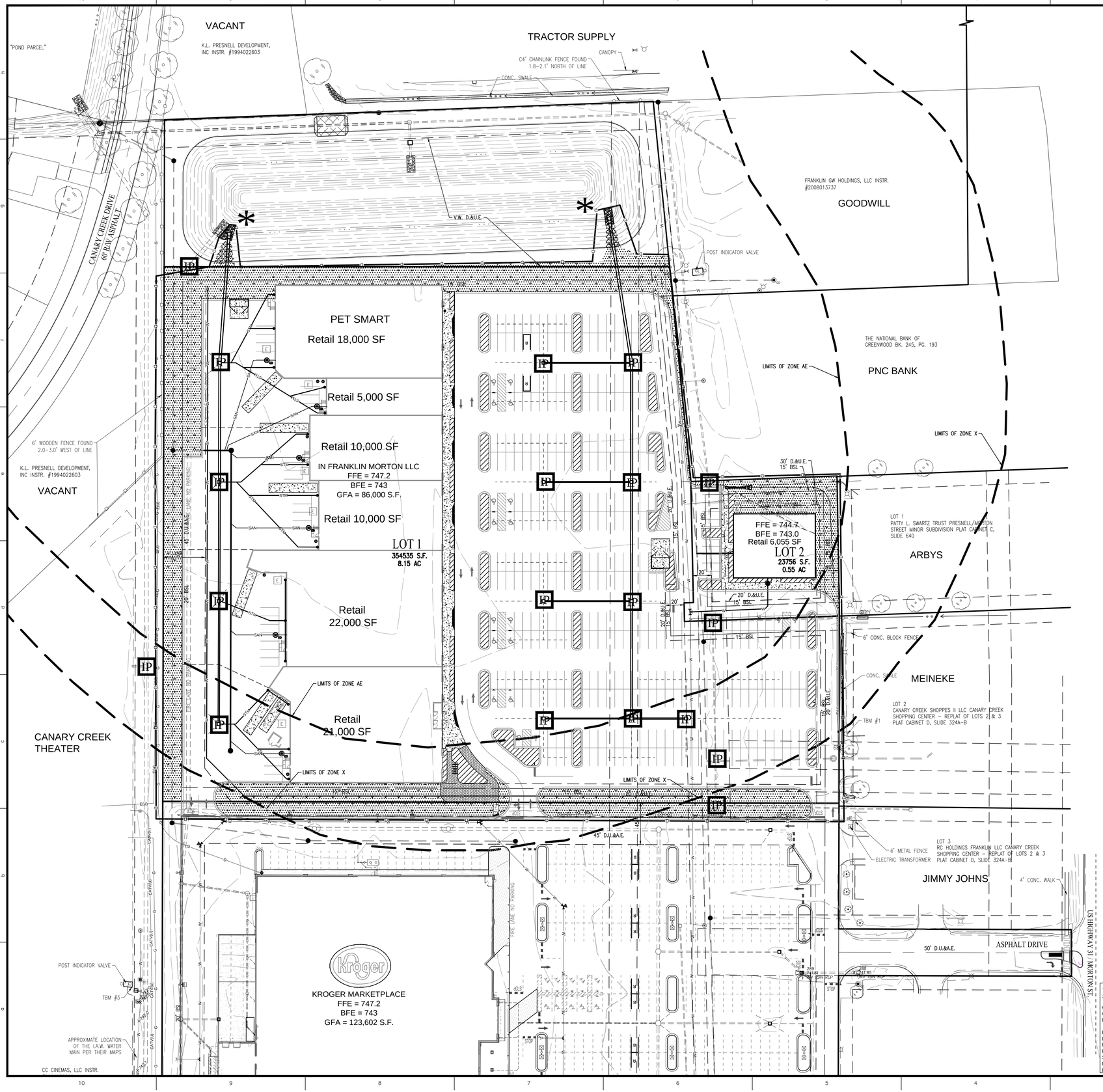
STORMWATER POLLUTION PREVENTION PLAN PHASE II

Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C101

PROJECT NO.
W15.0351

LOCATION: H:\2015\W150351\Engineering\design\consrt\w150351-C101 swppp2.dwg
LAYOUT: C101 - SWPPP
DATE/TIME: March 17, 2016 – 11:57am
PLOTTED BY: engineerp



EROSION CONTROL SPECIFICATIONS

1. THIS PLAN IS DESIGNED AS AN ATTEMPT TO PREVENT ANY AND ALL SEDIMENT FROM LEAVING THE CONSTRUCTION SITE BY WAY OF EROSION. IF EROSION OF SEDIMENT FROM THE SITE IS TAKING PLACE, THE CONTRACTOR AND/OR OWNER SHALL TAKE PREVENTATIVE ACTION IMMEDIATELY. THE ENGINEER SHALL BE CONSULTED IN THE EVENT THIS HAPPENS.
2. TEMPORARY SEEDING IS TO BE APPLIED TO ANY DISTURBED AREA THAT WILL REMAIN UNALTERED IN EXCESS OF 15 DAYS.
3. PERMANENT SEEDING IS TO BE APPLIED IMMEDIATELY TO AREAS THAT HAVE ACHIEVED FINAL AND FINISHED GRADE.
4. PRESERVE EXISTING VEGETATION ON THE SITE WHENEVER AND WHEREVER POSSIBLE TO PREVENT TOPSOIL EROSION.
5. ALL SEDIMENT CAPTURING MEASURES SHALL BE IMPLEMENTED PRIOR TO THE DISTURBANCE OF THE CONSTRUCTION AREA THEY ARE INTENDED TO SERVICE. ALL EROSION CONTROL MEASURES PROPOSED ARE TO BE PROPERLY MAINTAINED TO CONTINUE THEIR EFFECTIVENESS.
6. IF GRADING OCCURS DURING THE MONTHS OF DECEMBER, JANUARY OR FEBRUARY DORMANT SEEDING PROCEDURES SHALL BE USED.
7. DURING DRY WEATHER, KEEP LAWNS WATERED WITH SPRINKLERS OR OTHER APPROVED METHODS. RESEED ANY AREAS NOT GERMINATING OR DAMAGED AT INTERVALS AS MAY BE REQUIRED ACCORDING TO SEASONAL CONDITION AND/OR CONSTRUCTION ACTIVITY. WATER GRASS AND EXECUTE NECESSARY WEEDING UNTIL FULL STAND OF GRASS HAS BEEN OBTAINED.
8. THE IMPLEMENTATION AND MAINTENANCE OF THE EROSION CONTROL IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER.
9. IT SHALL BE THE CONTRACTOR'S AND/OR OWNER'S RESPONSIBILITY TO MINIMIZE SEDIMENTATION (FROM ON-SITE CONSTRUCTION ACTIVITIES) FROM BEING DEPOSITED ONTO ADJACENT PROPERTIES AND RECEIVING STREAMS/DITCHES IN STRICT COMPLIANCE WITH "RULE 5" (327 IAC 15-5, CONSTRUCTION ACTIVITY STORM WATER RUNOFF CONTROL). IT SHALL ALSO BE THE CONTRACTOR'S AND/OR OWNER'S RESPONSIBILITY TO OBTAIN ANY APPROVALS REQUIRED FROM THE LOCAL AUTHORITY AND TO SUBMIT A COMPLETE NOTICE OF INTENT LETTER TO THE OFFICE OF WATER MANAGEMENT, INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT PRIOR TO ANY CONSTRUCTION ACTIVITY.
10. FOR SEASONAL VARIATIONS - SEE SEASONAL SOIL PROTECTION CHART IN THESE PLANS.

SWPPP III LEGEND

- IP - INLET PROTECTION - USE SUBSURFACE INLET PROTECTION WITH OVERFLOW CAPABILITY (DANDY SAC)
- PERMANENT/TEMPORARY SEEDING USE PLANTING CHART
- EROSION CONTROL BLANKET - USE S150BN BIO-NET AS SUPPLIED BY NORTH AMERICAN GREEN OR APPROVED EQUAL. AREA MUST ALSO BE SEEDED.
- MULCHED AREA
- LIMITS OF DISTURBANCE (CONSTRUCTION LIMITS)
- SITE DISCHARGE POINT

DISTURBED ACREAGE
= 9.24± AC.

-WARNING-
THIS PLAN TO BE USED FOR EROSION CONTROL PURPOSES ONLY. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED IN THE FIELD BY THE INSPECTOR.

LAND DESCRIPTION

SURVEYED LEGAL DESCRIPTION

ORIGINAL SURVEYED DESCRIPTION

A PART OF THE NORTHEAST QUARTER OF SECTION 15, TOWNSHIP 12 NORTH, RANGE 4 EAST OF THE SECOND PRINCIPAL MERIDIAN, CITY OF FRANKLIN, JOHNSON COUNTY, INDIANA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID QUARTER PROCEED THENCE SOUTH 00 DEGREES 11 MINUTES 50 SECONDS EAST ALONG THE EAST LINE OF SAID QUARTER 766.97 FEET TO THE NORTH LINE OF THE LANDS OF THE NATIONAL BANK OF GREENWOOD AS DESCRIBED IN DEED BOOK 245, PAGE 193 IN THE OFFICE OF THE RECORDER OF JOHNSON COUNTY; PROCEED THENCE ALONG THE NORTH LINE OF SAID BANK LANDS SOUTH 88 DEGREES 00 MINUTES 40 SECONDS WEST 317.73 FEET TO THE WEST LINE OF SAID BANK LANDS, AND THE POINT OF BEGINNING; THENCE SOUTH 05 DEGREES 27 MINUTES 00 SECONDS EAST ALONG SAID WEST LINE 200.35 FEET TO THE NORTHWEST CORNER OF THE LANDS OF CAROLYN ROGERS AS DESCRIBED IN INSTRUMENT NUMBER 2013003799 IN SAID RECORDER'S OFFICE, MARKED BY A REBAR WITH CAP STAMPED ESW LS20200016" (HEREAFTER REFERRED TO AS ESW REBAR) THENCE NORTH 88 DEGREES 00 MINUTES 40 SECONDS, EAST ALONG THE NORTH LINE OF SAID ROGERS LANDS 157.10 FEET TO THE NORTHWEST CORNER OF LOT 1 OF PRESNELL/MORTON STREET MINOR SUBDIVISION AS RECORDED IN PLAT CABINET C, SLIDE 640 IN SAID RECORDER'S OFFICE, MARKED BY A REBAR WITH ILLEGIBLE CAP; THENCE SOUTH 00 DEGREES 49 MINUTES 24 SECONDS EAST ALONG THE WEST LINE OF SAID LOT 150.50 FEET TO THE SOUTHWEST CORNER OF SAID LOT; THENCE SOUTH 00 DEGREES 20 MINUTES 13 SECONDS WEST 200.98 TO A REBAR WITH A CAP STAMPED "BANNING ENG FIRM #0060" (HEREAFTER REFERRED TO AS BANNING REBAR); THENCE NORTH 89 DEGREES 39 MINUTES 20 SECONDS WEST 726.19 FEET TO THE EAST LINE OF THE LANDS OF CC CINEMAS, LLC AS DESCRIBED IN INSTRUMENT NUMBER 2006033562 IN SAID RECORDER'S OFFICE, MARKED BY A BANNING REBAR; THENCE NORTH 00 DEGREES 20 MINUTES 45 SECONDS EAST ALONG SAID EAST LINE AND ITS EXTENSION 551.78 FEET; THENCE NORTH 88 DEGREES 00 MINUTES 40 SECONDS EAST 543.34 FEET TO THE WEST LINE OF FRANKLIN GW HOLDINGS, LLC AS DESCRIBED IN INSTRUMENT NUMBER 2008013737 IN SAID RECORDER'S OFFICE; THENCE SOUTH 05 DEGREES 27 MINUTES 00 SECONDS EAST ALONG SAID WEST LINE 29.67 FEET TO THE POINT OF BEGINNING, AND CONTAINING 8.534 ACRES OF LAND, MORE OR LESS.

BENCHMARK INFORMATION

BENCHMARK INFORMATION
DNR TBM CD 1, 1988 IN JOHNSON COUNTY, FRANKLIN QUADRANGLE, IN THE NE ¼ OF SECTION 10, TOWNSHIP 12 NORTH, RANGE 4 EAST, 2ND P.M.; AT FRANKLIN; AT THE U.S. 31 BRIDGE OVER CANARY DITCH; SET IN THE TOP OF THE SOUTHEAST CONCRETE WINGWALL OF THE BRIDGE, 25.8 FEET EAST OF THE CENTERLINE OF THE BRIDGE, 0.6 FOOT NORTH OF THE SOUTH END OF THE WINGWALL 1.0 FOOT BELOW THE LEVEL OF THE ROAD; A "PK" NAIL SET IN A DRILL HOLE, INSIDE A CUT CIRCLE.
2ND ORDER ELEVATION
REVISED ELEVATION 229.240 METERS N.G.V.D. 1929
752.099 FEET N.G.V.D. 1929 (751.693 FEET N.A.V.D.1988)

TBM #1 ELEV: 745.81 CUT SQUARE ON TOP ON A CONCRETE LIGHT BASE ON THE WEST EDGE OF CONCRETE, DUE WEST OF THE SOUTHWEST CORNER OF THE SHERWIN WILLIAMS BUILDING SQUARE IS APPROXIMATELY 15 FEET NORTHEAST OF A DRIVE STUB BEHIND THE BUILDING.

TBM #2 ELEV: 747.77 CUT SQUARE IN THE NORTHWEST CORNER OF A CONCRETE WATER VAULT ON THE EAST SIDE OF THE MIDDLE KOHL'S ENTRANCE LOCATED ON THE SOUTH SIDE OF MALLORY PARKWAY.

TBM #3 ELEV: 742.94 CUT SQUARE IN THE SOUTHEAST CORNER OF A CONCRETE WATER VAULT DUE EAST OF THE SOUTHEAST CORNER OF CANARY CREEK CINEMA BUILDING.

CONTACT PERSON FOR EROSION CONTROL & SEDIMENT PRACTICES

WEIHE ENGINEERS, INC.
10505 N. COLLEGE AVE.
INDIANAPOLIS, IN 46268
TELEPHONE: (317) 846-6611
FAX: (317) 843-0546
EMAIL: PARKERF@WEIHE.NET
CONTACT PERSON: FRED PARKER

EROSION CONTROL NOTES

1. ALL DISTURBED AREAS SHALL BE SODDED OR SEEDED, EXCEPT BUILDING PAD AND LANDSCAPE BEDS. SEE LANDSCAPE PLANS FOR LOCATION OF LANDSCAPE BEDS.
2. INSTALL SILT FENCE ALONG ALL DOWNSTREAM SLOPES. SILT FENCE TO FOLLOW CONTOUR.
3. THERE SHALL BE NO DIRT, DEBRIS OR STORAGE OF MATERIAL IN THE STREET.
4. CONTRACTOR TO COORDINATE THE SWPPP PROGRAM WITH SPECIFICATION SECTION 312500.
5. THIS PLAN INDICATES EROSION CONTROL MEASURES REQUIRED AFTER SOIL STRIPPING AND PAD BUILDING HAS TAKEN PLACE. COORDINATE WITH DEVELOPER FOR MEASURES REQUIRED UNTIL PROPERTY TURNED OVER FOR DEVELOPMENT. COORDINATE WITH SOIL CONSERVATION DISTRICT REPRESENTATIVE FOR ANY OTHER MEASURES REQUIRED DUE TO SITE CONDITIONS.

PLAN CERTIFICATE NOTE:

ORIGINAL ALTA, TOPOGRAPHY, UTILITIES, STORM SEWERS, AND ALL OTHER EXISTING CONDITIONS ITEMS WERE PREPARED BY BANNING ENGINEERING.

FINAL DRAWINGS FOR THE IN FRANKLIN MORTON, LLC SITE WERE PREPARED BY WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER. FINAL CONSTRUCTION PLANS ARE THOSE PLANS CONTAINING A FINAL REVISION DATE AFTER 03/17/2016. WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER ACCEPT RESPONSIBILITY ONLY FOR THE IN FRANKLIN MORTON, LLC SITE IMPROVEMENTS RELATED TO THE ENGINEERING WORK SHOWN ON THESE PLANS.

N W E S
SCALE: 1" = 50'
0 25 50 100

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10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net
317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

		BY:
PROJECT NO.: W15.0351	DATE: 03.17.2016	BJS
DWG NAME: w150351-C102 swppp3.dwg	REVISIONS AND ISSUES: CITY SUBMITTAL	
DESIGNED BY: BJS/SGM		
DRAWN BY: RAM		
CHECKED BY: BJS		
DATE: 02.17.2016		

STEVEN SCOTT RUCKER
REGISTERED
PE.11300279
STATE OF INDIANA
PROFESSIONAL ENGINEER
NOT VALID WITHOUT ORIGINAL SEAL

STEVEN SCOTT RUCKER P.E. 11300279

PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

STORMWATER POLLUTION PREVENTION PLAN PHASE III

Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C102
PROJECT NO.
W15.0351

LOCATION: H:\2015\W150351\Engineering\design\consent\w150351-C102 swppp3.dwg
LAYOUT: C102 SWPPP
DATE/TIME: March 17, 2016 – 11:58am
PLOTTED BY: engineer

SECTION A - CONSTRUCTION PLAN ELEMENTS

A1 PLAN INDEX - SEE BELOW
A2 11"x17" PLAT - (REDUCTION OF STORMWATER POLLUTION PREVENTION PLAN TO BE SUBMITTED WITH FULL SIZE PLAN)
A3 PROJECT NARRATIVE - THIS IS A PROPOSED COMMERCIAL DEVELOPMENT ON APPROXIMATELY 9.24 ACRES. THE CONSTRUCTION SHALL CONSIST OF 1 BUILDING, 1 MULTI TENANT BUILDING, ASPHALT PARKING, LANDSCAPE ISLANDS, AND ENTRY DRIVES.
A4 VICINITY MAP - SEE BOTTOM RIGHT SIDE OF THIS SHEET
A5 LEGAL DESCRIPTION - SEE RIGHT SIDE OF SHEETS CC1.05 AND C1.06, LAT: 39°29'19"N LONG: 86°03'59"W
A6 LOCATION OF ALL LOTS AND PROPOSED SITE IMPROVEMENTS - SEE STORMWATER POLLUTION PREVENTION PLAN
A7 HYDROLOGIC UNIT CODE (14 DIGIT): 05120204090040, WEST SIDE: 05120204090030
A8 NOTATION OF ANY STATE OR FEDERAL WATER QUALITY PERMITS - NOT APPLICABLE
A9 SPECIFIC POINTS WHERE STORMWATER DISCHARGE LEAVES SITE - THE SITE IS RATHER FLAT AND SEEKS ITS COURSE TO THE EXISTING INFRASTRUCTURE. THE FINAL PRODUCT CAPTURES THE WATERSHED AND PIPES IT UNDERGROUND TO AN ONSITE POND, THEN EVENTUALLY INTO CANARY CREEK WEST OF THE SITE.
A10 LOCATION AND NAME OF WETLANDS, LAKES AND WATER COURSES ON AND ADJACENT TO SITE - CANARY CREEK IS OFFSITE AND TO THE WEST OF THE SITE
A11 IDENTIFICATION OF ALL RECEIVING WATERS - CANARY CREEK
A12 IDENTIFICATION OF POTENTIAL DISCHARGE TO GROUND WATER - NOT APPLICABLE
A13 100 YEAR FLOODPLAINS, FLOODWAYS, AND FLOODWAY FRINGES - THE 100 YEAR ELEVATION WAS ESTABLISHED AT THE 743 ELEVATION FOR CANARY CREEK.
A14 PRE-CONSTRUCTION AND POST-CONSTRUCTION ESTIMATE OF PEAK DISCHARGE (10 YEAR) - Q10PRE = 5.51 CFS Q10POST = 2.11 CFS
A15 ADJACENT LANDUSE INCLUDING UPSTREAM WATERSHED - SEE STORMWATER POLLUTION PREVENTION PLAN
A16 CONSTRUCTION LIMITS - SEE STORMWATER POLLUTION PREVENTION PLAN
A17 IDENTIFICATION OF EXISTING VEGETATIVE COVER - ROW CROPS
A18 SOILS MAP W/ SOIL DESCRIPTIONS AND LIMITATIONS - SEE BOTTOM RIGHT SIDE OF THIS SHEET
A19 LOCATIONS, SIZE & DIMENSIONS OF PROPOSED STORMWATER SYSTEMS - GRADING PLANS (C300 TO C302) AND DRAINAGE PLANS (C303)
A20 PLANS FOR OFF-SITE CONSTRUCTION ACTIVITIES - NOT APPLICABLE
A21 LOCATIONS OF PROPOSED SOIL STOCKPILES AND/OR BORROW/DISPOSAL AREAS - N/A AT THIS TIME. IF STOCKPILES ARE USED, THEY MUST BE RINGED WITH SILT FENCE AND STABILIZED IF LEFT IN UNDISTURBED FOR MORE THAN 1 DAYS.
A22 EXISTING SITE TOPOGRAPHY - THE SITE IS BASICALLY SITTING AT THE 743 ELEVATION ON ALL SIDES. THE SITE IS RATHER FLAT.
A23 PROPOSED FINAL TOPOGRAPHY - THE PROPOSED GRADES WILL FOLLOW THE SAME WATERSHED PATTERN BASED OFF OF THE EXISTING CONDITIONS. THE SITE WILL DRAIN FROM THE SOUTH TO THE NORTH PART OF THE COMBINED TRACT.

SECTION B - SWPPP - CONSTRUCTION PHASE

B1 DESCRIPTION OF POTENTIAL POLLUTANT SOURCES - POTENTIAL POLLUTANTS FROM CONSTRUCTION ACTIVITY SUCH AS ASPHALT FROM PAVING; CONCRETE FROM CURBING, SIDEWALKS, OIL, GREASE, ANTIFREEZE, GASOLINE AND DIESEL FUEL FROM CONSTRUCTION EQUIPMENT; SOIL EROSION; FERTILIZER AND PESTICIDES FROM LANDSCAPING AND TRASH SHOULD BE PROPERLY ATTENDED TO TO REDUCE THE CONTAMINANTS FROM ENTERING THE STORM SYSTEM. TRASH SHOULD BE CLEANED UP TO REDUCE CLOGGING OF STORM SYSTEMS AND REDUCE POTENTIAL BACTERIA AND/OR OTHER BIOLOGICAL AGENTS FROM ENTERING IN THE STORM SYSTEM.
B2 SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION RELATIVE TO LAND DISTURBING ACTIVITIES -
1. A PRE-CONSTRUCTION MEETING WITH THE CITY OF FRANKLIN IS REQUIRED PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK. ADDITIONALLY, IDEM IS REQUIRED TO BE CONTACTED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
2. CONSTRUCTION ENTRANCE - REMOVE TOPSOIL AND PLACE STONE AT ACCESS POINT ALONG THE EAST SIDE ACCESS ROAD STUB.
3. INSTALL SILT FENCING AND ALL OTHER EROSION CONTROL MEASURES PRIOR TO ANY EARTH MOVING.
POST AL APPLICABLE SIGNS, INCLUDING THE NOTICE OF INTENT (NOI), AND HAVE THIS SWPPP WITH EROSION AND SEDIMENT CONTROL PLANS AT THE SITE FOR CONTINUAL USE AND MODIFICATION. (SEE ATTACHED "CONSTRUCTION SITE NOTICE" (FOR POSTING AT THE CONSTRUCTION ENTRANCE).
5. PHASING OF WORK TO ALLOW EXISTING VEGETATIVE AREAS OR BUFFERS TO REMAIN AS LONG AS POSSIBLE IS ENCOURAGED.
6. EROSION CONTROLS MUST BE INSPECTED AS SPECIFIED IN SECTION VIA AND PER THE ATTACHED INSPECTION CHECKLIST.
7. EARTHWORK - STRIP TOPSOIL, BEGIN ROUGH GRADING AND PREPARE BUILDING PAD AND ROUGH GRADE.
8. STORM SEWER - INSTALL STORM SEWER SYSTEM AND CORRESPONDING INLET PROTECTION.
9. SANITARY SEWER - INSTALL SANITARY SEWER SYSTEMS
10. WATER - INSTALL WATER VAULT, WATER SYSTEMS AND ASSOCIATED FIRE PROTECTION.
11. REMOVE ACCUMULATED SEDIMENT FROM EROSION CONTROLS AS NECESSARY.
12. CONTINUE INSTALLING/MODIFYING EROSION CONTROLS AS THE CONSTRUCTION OF SITE UTILITIES, FOUNDATIONS, AND STRUCTURES CHANGE THE TOPOGRAPHY OF THE SITE.
13. ESTABLISH TEMPORARY STABILIZATION/SEEDING ON ALL AREAS THAT ARE TO REMAIN UNDISTURBED.
14. FINISH GRADING AND PERMANENT EROSION CONTROL - FINISH GRADE AND PERMANENTLY SEED ALL PROPERTY PERIMETER AREAS.
15. UTILITIES - COORDINATE INSTALLATION OF UTILITIES.
16. PAVEMENT - INSTALL STONE, BASE COURSES AND PAVEMENT FOR ENTRY DRIVES, PARKING LOTS AND ADJOINER CONNECTIONS.
17. CLEANUP - CONTRACTOR SHALL SPOIL ALL EXCESS MATERIALS, RE-GRADE AND STABILIZE ALL AREAS DISTURBED BY UTILITY INSTALLATIONS AND RESEED.
18. FINAL LANDSCAPING - INSTALL FINAL LANDSCAPING.
19. PROVIDE FINAL STABILIZATION IMMEDIATELY AS AREAS ARE MADE AVAILABLE. FINAL STABILIZATION, 70 PERCENT COVERAGE OF TURF GRASS, IS SPECIFIED IN THE TEXT OF THE APPLICABLE PERMIT.
20. REMOVE TEMPORARY OR SEDIMENT CONTROL PRACTICES ONCE FINAL STABILIZATION/ VEGETATION HAS BEEN ESTABLISHED.
21. FILE THE APPROPRIATE NOTICE OF TERMINATION (NOT) WHEN THE ENTIRE PROJECT IS COMPLETE.
22. KEEP ALL SWPPP DOCUMENTS, INCLUDING INSPECTION CHECKLISTS, ON FILE FOR THREE YEARS FROM TERMINATION.
B3 CONSTRUCTION ENTRANCE - SEE STORMWATER POLLUTION PREVENTION PLANS AND SEE DETAIL ON SHEET C105.
B4 SEDIMENT CONTROL PLAN FOR SHEET FLOW AREAS - SEE STORMWATER POLLUTION PREVENTION PLANS AND THE VARIOUS DETAILS TO BE USED SUCH AS SILT FENCE, DIVERSION SWALES, TEMPORARY SEDIMENT BASINS, ETC., AS FOUND IN SHEETS C104 THROUGH C105.
B5 SEDIMENT CONTROL PLAN FOR CONCENTRATED FLOW AREAS - SEE STORMWATER POLLUTION PREVENTION PLANS AND THE VARIOUS DETAILS TO BE USED SUCH AS SILT FENCE, TEMPORARY SEDIMENT BASINS, ETC., AS FOUND IN SHEETS C104 THROUGH C105.
B6 STORM SEWER INLET PROTECTION MEASURE LOCATIONS AND SPECS - SEE STORMWATER POLLUTION PREVENTION PLANS AND THE VARIOUS DETAILS TO BE USED SUCH AS DROP INLET PROTECTION, COCONUT INLET MATS, ETC., AS FOUND IN SHEETS C104 THROUGH C105.
B7 RUNOFF CONTROL MEASURES - NOT APPLICABLE
B8 STORM WATER OUTLET PROTECTION SPECS - SEE STORMWATER POLLUTION PREVENTION PLANS AND THE VARIOUS DETAILS TO BE USED SUCH AS DIVERSION SWALES, DIVERSION BERMS, TEMPORARY SEDIMENT BASINS, ETC., AS FOUND IN SHEETS C104 THROUGH C105. THE PERMANENT OUTLET IS TO BE EXTENDED INTO THE SITE AND BE USED DURING THE SWPPP PHASING OF THE SITE UNTIL THE FINAL STORM SEWER SYSTEM HAS BEEN INSTALLED.
B9 GRADE STABILIZATION STRUCTURE LOCATIONS AND SPECS - SEE STORMWATER POLLUTION PREVENTION PLANS AND THE VARIOUS DETAILS TO BE USED SUCH AS TEMPORARY SEED, PERMANENT SEED, SOD(ALTERANTE), EROSION BLANKET, ETC., AS FOUND IN SHEETS C104 THROUGH C105.
B10 STORMWATER QUALITY CONSTRUCTION DETAILS - SEE STORMWATER POLLUTION PREVENTION PLAN.
B11 TEMPORARY SURFACE STABILIZATION METHOD FOR EACH SEASON - SEE SEASONAL SOIL PROTECTION CHART
B12 PERMANENT SURFACE STABILIZATIONS - SEE SEASONAL SOIL PROTECTION CHART
B13 MATERIAL HANDLING AND SPILL PREVENTION PLAN - POTENTIAL POLLUTANTS FROM CONSTRUCTION ACTIVITY SUCH AS ASPHALT FROM PAVING; CONCRETE FROM CURBING, SIDEWALKS. A CONCRETE WASHOUT AREA HAS BEEN DESIGNATED OIL, GREASE, ANTIFREEZE, GASOLINE AND DIESEL FUEL FROM CONSTRUCTION EQUIPMENT. IF THERE IS A SPILL FROM ONE OF THESE, IMMEDIATE CLEANUP SHOULD OCCUR; SOIL EROSION; FERTILIZER AND PESTICIDES FROM LANDSCAPING AND TRASH SHOULD BE PROPERLY ATTENDED TO TO REDUCE THE CONTAMINANTS FROM ENTERING THE STORM SYSTEM. TRASH SHOULD BE CLEANED UP TO REDUCE CLOGGING OF STORM SYSTEMS AND REDUCE POTENTIAL BACTERIA AND/OR OTHER BIOLOGICAL AGENTS FROM ENTERING IN THE STORM SYSTEM.
SHALL MEET THE REQUIREMENTS OF IAC 2-6.1. FOLLOW MATERIAL SAFETY DATA SHEET (MSDS) GUIDELINES FOR CONTAMINANTS PRESENT ON SITE.
B14 MONITORING AND MAINTENANCE GUIDELINES FOR EACH STORMWATER QUALITY MEASURE - INSPECT ALL EROSION CONTROL MEASURES WEEKLY AND AFTER EACH STORM EVENT OR HEAVY USE. REPAIR/REPLACE ANY COMPROMISED OR FAILED MEASURE AS REQUIRED. MORE SPECIFIC GUIDELINES ARE INCLUDED ON INDIVIDUAL DETAILS.
B15 EROSION & SEDIMENT CONTROL SPECS - N/A
B17 SEDIMENT CONTROL ASSOCIATED WITH DEWATERING AND DIRECTIONAL BORING OPERATIONS - IN THE EVENT THAT DEWATERING IS REQUIRED ON SITE, PROVIDE SEDIMENT AND OIL CONTAINMENT WITH THE USE OF THE ULTRA DEWATERING BAG, PART #9724-O/S AS PROVIDED BY ULTRATECH INTERNATIONAL, INC. AND SUPPLIED BY D2 LAND & WATER RESOURCES. REFER TO MANUFACTURER SPECIFICATIONS FOR ALTERNATE SIZES OF BAGS IF NEEDED. ALTERNATE EQUAL MEASURES OF CONTAINMENT MAY BE APPROVED BY THE ENGINEER OR EROSION CONTACT PERSON IF ANOTHER PRODUCT OR METHOD OF CONTAINMENT IS DESIRED.

SECTION C - SWPPP - POST-CONSTRUCTION PHASE

C1 DESCRIPTION OF POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH THE PROPOSED LAND USE - POTENTIAL POLLUTANTS FROM POST-CONSTRUCTION ACTIVITY SUCH AS SANDS AND SALTS FROM SNOW REMOVAL; OIL, GREASE, ANTIFREEZE, ETC. FROM VEHICLES INCLUDING HEAVY METAL FROM BRAKE PAD WEAR SHOULD BE PROPERLY ATTENDED TO TO REDUCE THE CONTAMINANTS FROM ENTERING THE STORM SYSTEM. TRASH SHOULD BE CLEANED UP TO REDUCE CLOGGING OF STORM SYSTEMS AND REDUCE POTENTIAL BACTERIA AND/OR OTHER BIOLOGICAL AGENTS FROM ENTERING IN THE STORM SYSTEM. EXCESS FERTILIZERS AND HERBICIDES SHOULD BE AVOIDED. CLEAN UP IMMEDIATELY IF ANY IS SPILLED.
C2 SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION - WATER QUALITY IS PROVIDED BY THE TIME OF TRAVEL ACROSS THE PROPOSED STORMWATER MANAGEMENT AREA AT THE NORTH END OF THE COMBINED TRACTS AS SHOWN ON THE PLANS, AND VARIOUS CATCH BASINS AROUND THE SITE. ADDITIONAL WATER QUALITY MEASURES WILL BE IMPLEMENTED BY THE SITE OWNER AS PART OF THEIR SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN. DETAILS ARE PROVIDED IN SHEETS C602 THROUGH C603.
C3 DESCRIPTION OF PROPOSED POST-CONSTRUCTION STORMWATER QUALITY MEASURES - WATER QUALITY IS PROVIDED BY THE TIME OF TRAVEL ACROSS THE PROPOSED STORMWATER MANAGEMENT AREA AT THE NORTH END OF THE COMBINED TRACTS AS SHOWN ON THE PLANS, AND VARIOUS CATCH BASINS AROUND THE SITE. ADDITIONAL WATER QUALITY MEASURES WILL BE IMPLEMENTED BY THE SITE OWNER AS PART OF THEIR SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN. DETAILS ARE PROVIDED IN SHEETS C602 THROUGH C603.
C4 LOCATION, DIMENSIONS, SPECIFICATIONS, AND CONSTRUCTION DETAILS OF EACH STORM WATER QUALITY MEASURE - WATER QUALITY IS PROVIDED BY THE TIME OF TRAVEL ACROSS THE PROPOSED STORMWATER MANAGEMENT AREA AT THE NORTH END OF THE COMBINED TRACTS AS SHOWN ON THE PLANS, AND VARIOUS CATCH BASINS AROUND THE SITE. ADDITIONAL WATER QUALITY MEASURES WILL BE IMPLEMENTED BY THE SITE OWNER AS PART OF THEIR SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN. DETAILS ARE PROVIDED IN SHEETS C602 THROUGH C603.
C5 DESCRIPTION OF MAINTENANCE GUIDELINES FOR POST CONSTRUCTION STORMWATER QUALITY MEASURES - MAINTENANCE GUIDELINES FOR THE STORMWATER MANAGEMENT AREA AND CATCH BASINS ARE INDICATED IN THE O&M MANUAL PROVIDED, AND AS STATED BELOW..

CATCH BASINS:
CATCH BASIN/INLET CLEANING AND REPAIR HAS TRADITIONALLY BEEN PERFORMED TO RESPOND TO LOCALIZED FLOODING PROBLEMS IN STREETS. CATCH BASINS ARE INLETS AT THE CURB WITH A SMALL TRAP (USUALLY SIX INCHES TO ONE FOOT DEEP) BELOW THE SEWER PIPE. THESE DEVICES HELP TO CLEAN STORM WATER BECAUSE PARTICLES IN STREET RUNOFF SETTLE INTO THE TRAP BEFORE THE WATER ENTERS THE STORM SEWERS. CATCH BASINS REQUIRE REGULAR CLEANING OF THE SEDIMENT TRAP TO BE. THE INLETS DO NOT TRAP SEDIMENTS AND DON'T NEED CLEANING UNLESS THEY ARE PLUGGED. CLEANING FOR EITHER CATCH BASINS OR INLETS CAN BE DONE BY HAND (E.G., WITH A CLAMSHELL OR SHOVEL) OR WITH A VACUUM TRUCK.

CONVEYANCE STORM PIPES:
A GOOD RULE OF THUMB IS TO CONDUCT INSPECTION OF STORM DRAIN INLETS, DITCHES, CHANNELS, PONDS AND OTHER TREATMENT FACILITIES AT LEAST ONCE A YEAR, PRIOR TO THE BEGINNING OF THE RAINY SEASON. COMPLETE INSPECTIONS EARLY ENOUGH SO THAT REPAIRS CAN BE MADE DURING DRY WEATHER. CATCH BASINS SHOULD BE INSPECTED AT LEAST ONCE EVERY SIX MONTHS. SOME STORM WATER TREATMENT DEVICES, SUCH AS OIL/WATER SEPARATORS, MAY REQUIRE MORE FREQUENT INSPECTION. FOR THESE, CHECK THE MANUFACTURER'S SPECIFICATION OR OTHER DESIGN GUIDANCE HANDBOOKS. SEWER PIPES AND CULVERTS SHOULD BE INSPECTED EVERY THREE TO FIVE YEARS, OR IN RESPONSE TO A REPORTED PROBLEM. MOST AGENCIES INSPECT THEIR SEWER PIPES SIX INCHES OR LARGER WITH A TV CAMERA, AND PIPES 36 INCHES OR LARGER WITH A WALK-THROUGH INSPECTION. ALL OTHER PARTS OF THE SYSTEM ARE INSPECTED VISUALLY.

LOOK FOR EXCESSIVE SILT BUILD-UP, EROSION, UNUSUAL ALGAL GROWTH, CRACKED OR COLLAPSED PIPES, MISALIGNED JOINTS, AND OTHER SIGNS OF PROBLEMS SUCH AS A SHEEN ON THE WATER SURFACE, DISCOLORED WATER, OR AN UNPLEASANT ODOR. CHECK WITH PRODUCT MANUFACTURERS OR STORM WATER HANDBOOKS FOR ADVICE ON WHAT TO LOOK FOR WHEN INSPECTING MORE SOPHISTICATED TREATMENT DEVICES SUCH AS FLOW SPLITTERS AND DIVERTERS. WHEN A PROBLEM IS NOTED, TAKE STEPS TO CORRECT THE PROBLEM. OR ROUTE THIS INFORMATION IMMEDIATELY TO THE APPROPRIATE INDIVIDUAL(S) IN YOUR ORGANIZATION WHO CAN RESPOND. IF NEEDED, DEVELOP A GOOD RESPONSE PLAN TO ENSURE QUICK FOLLOW-UP IN THE FUTURE.

WET DETENTION BASIN:
ALSO CALLED STORMWATER PONDS, RETENTION PONDS OR WET EXTENDED DETENTION PONDS, THESE FACILITIES ARE BASINS THAT HAVE A PERMANENT POOL OF WATER THROUGH OUT THE YEAR. THE WET POND IS CONSTRUCTED TO STORE RUNOFF DURING AND AFTER STORMS. WET PONDS TREAT AND FILTER STORMWATER RUNOFF THROUGH SETTLING AND THROUGH NUTRIENT UPTAKE BY PLANTS AND OTHER AQUATIC ORGANISMS.

SECTION 1 - EMERGENCY RESPONSE NUMBERS

EMERGENCY RESPONSE TO ANY LIFE THREATENING PHONE DIAL	911
JOHNSON COUNTY FIRE DEPARTMENT	911
JOHNSON COUNTY POLICE DEPARTMENT	911
INDIANA DEPARTMENT OF NATURAL RESOURCES	812-477-8773
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT	317-233-7745
JOHNSON COUNTY SOIL AND WATER	317-342-5594

SECTION 2 MATERIAL HANDLING AND SPILL PREVENTION PLAN

IN ORDER TO MINIMIZE THE RELEASE OF POTENTIAL POLLUTANTS DURING CONSTRUCTION THE CONTRACTORS SHALL IMPLEMENT THIS MATERIAL HANDLING AND SPILL PREVENTION PLAN. THE CONTRACTOR SHALL REVIEW THIS PLAN WITH ALL SUBCONTRACTORS AND REQUIRE THAT THEY IMPLEMENT THE PLAN AS WELL.

1. CONSTRUCTION EQUIPMENT
A. FUELING, LUBRICATION AND FLUIDS: ALL OPERATIONS INVOLVING THE ADDITION OF FLUIDS TO EQUIPMENT SHOULD BE DONE IN ONE LOCATION, AS DESIGNATED BY THE CONSTRUCTION MANAGER. SPILLS ARE LIMITED TO ONE LOCATION ON THE LOCATION ON THE SITE, WHICH WILL FACILITATE THE CLEANUP OF SPILLS. IF AN ONSITE-FUELING TANK IS PLANNED TO BE ON SITE, IT SHALL BE DOUBLE WALLED AND STORED IN THIS DESIGNED AREA. THIS LOCATION IS AN AREA THAT WILL NOT ALLOW SPILLED FLUIDS TO MIGRATE INTO SUBSURFACE SOILS. IN THE EVENT OF A SPILL, THE FLUID SHALL IMMEDIATELY BE CLEANED UP BY REMOVING THE CONTAMINATED SOIL OR STONE, WHICH SHALL BE DISPOSED OF IN AN ACCEPTABLE MANNER. SPILLS ON HARD SURFACES SHALL BE SOAKED UP BY AN ACCEPTABLE MATERIAL SUCH AS OIL DRY AND THE ABSORBENT MATERIAL DISPOSED OF IN A PROPER MANNER. THE SPILL SHALL ALSO BE REPORTED IMMEDIATELY TO THE CONSTRUCTION MANAGER'S SUPERINTENDENT.
B. EQUIPMENT REPAIR, ESPECIALLY WHEN FLUIDS MUST BE REMOVED FROM THE EQUIPMENT OR THE POSSIBILITY OF FLUID SPILLS IS HIGH, SHOULD ALWAYS BE DONE OFFSITE AT A FACILITY THAT IS MORE SUITABLE THAN A CONSTRUCTION SITE TO HANDLE SPILLS. WHEN EQUIPMENT MUST BE REPAIRED ONSITE IT SHOULD BE MOVED TO THE MAINTENANCE AND FUELING AREA IF POSSIBLE. OTHERWISE, SUITABLE ON SITE CONTAINERS SHOULD BE PLACED UNDER THE EQUIPMENT DURING REPAIR TO CATCH ANY SPILLED FLUIDS AND THESE FLUIDS SHOULD BE DISPOSED OF IN A PROPER MANNER.
C. ALL REUSABLE FLUID CONTAINERS, SUCH AS GASOLINE CANS, SHALL BE INSPECTED FOR LEAKS EACH TIME THEY ARE USED. IF LEAKS ARE FOUND, THE FLUID SHALL BE REMOVED FROM THE CONTAINER IN A PROPER MANNER AND THE CONTAINER DISPOSED OF IN AN ACCEPTABLE MANNER. EMPTY DISPOSABLE CONTAINER, SUCH AS GREASE TUBES AND LUBRICATING OIL AND BRAKE FLUID CONTAINERS, AND THEIR PACKAGING, SHALL BE DISPOSED OF IN A PROPER MANNER AND SHALL NOT BE LEFT ON THE GROUND OR IN THE DRAINAGE SYSTEM THE CONSTRUCTION SITE.
2. CONSTRUCTION MATERIALS AND THEIR PACKAGING
A. EROSION CONTROL MEASURE SHOWN ON THE SUBJECT PROJECT SHALL BE IMPLEMENTED PRIOR TO ANY DISTURBING CONSTRUCTION ACTIVITIES TO PROPER SEQUENCING TO MINIMIZE SOIL EROSION. EROSION CONTROLS SHALL BE INSPECTED AND MAINTAINED AS DESCRIBED ELSEWHERE ON THE PLANS. EXCESSIVE DUSTING OF SOIL ON THE SITE SHALL BE MINIMIZED BY REDUCING CONSTRUCTION ACTIVITY ACROSS BARE SOIL DURING DRY AND/OR WINDY WEATHER, AND BY APPLYING WATER OR OTHER ACCEPTABLE DUST CONTROL MEASURES TO THE SOIL. UPON COMPLETION OF CONSTRUCTION AND SUITABLE ESTABLISHMENT OF PERMANENT VEGETATION, TEMPORARY EROSION CONTROL MEASURES SUCH AS SILT FENCE, CHECK DAMS AND INLET PROTECTION DEVICES SHALL BE REMOVED IN A MANNER TO MINIMIZE ADDITIONAL LAND DISTURBANCE. ANY AREAS DISTURBED BY THESE OPERATIONS SHALL BE PROPERLY REVEGETATED.
B. LARGE WASTE MATERIALS CREATED BY CUTTING, SAWING, DRILLING, OR OTHER OPERATIONS SHALL BE PROPERLY DISPOSED OF IN SUITABLE WASTE CONTAINERS. THE SITE SHALL BE CHECKED AT THE END OF THE DAY, AS A MINIMUM, AND ALL WASTE MATERIALS, INCLUDING THOSE BLOWN ACROSS OFF THE SITE BY WIND SHALL BE PICKED UP AND DISPOSED OF IN SUITABLE CONTAINERS. WHERE POSSIBLE, OPERATIONS SUCH AS SAWING THAT CREATE SMALL PARTICLES SHOULD BE PERFORMED IN ONE STOP IN AN ADEQUATELY DESIGNED AREA WHERE THE PARTICLES COLLECTED AND DISPOSED OF FREQUENTLY TO MINIMIZE WIND DISPERSAL. PACKAGING USED TO TRANSPORT MATERIALS TO THE SITE FOR CONSTRUCTION OF THE FACILITY SHALL BE DISPOSED OF PROPERLY, WHETHER THE MATERIAL IS TAKEN OUT OF ITS PACKAGE AND INCORPORATED INTO THE PROJECT IMMEDIATELY OR STORED ONSITE FOR FUTURE USE. PACKAGED MATERIALS STORED ONSITE SHALL BE INSPECTED REGULARLY AND ANY LOOSE PACKAGING SHALL BE REPAIRED OR DISPOSED OF PROPERLY.
C. ALL DEWATERING OF ACTIVITIES SHALL BE DONE IN ACCORDANCE TO GOOD EROSION CONTROL PRACTICES. THESE PRACTICES SHOULD INCLUDE THE USE OF DIRT BAGS SUCH AS SILT FENCE INLET PROTECTION. THE USE OF THESE TYPES OF DEWATERING DEVICES WILL REMOVE LARGE QUANTITIES OF SILT, SEDIMENT, AND DIRT AND PREVENT THESE MATERIALS TO ENTER THE STORM SEWER SYSTEM.
D. IF THE USE OF LIME IS USED TO STABILIZE THE SOIL OF THE SITE THEN ALL CONSTRUCTION EQUIPMENT USED SHALL BE CLEANED OF ALL EXCESS MATERIAL WITH WATER IN THE MAINTENANCE AND REFUELING AREA AS SHOWN WITHIN THESE PLANS.
E. NUTRIENTS AND FERTILIZERS SHALL ONLY BE USED TO ESTABLISH RAPID VEGETATION. WHEN THESE PRODUCTS ARE UTILIZED, THE USER SHOULD PAY STRICT ATTENTION TO THE PRODUCTS RECOMMENDED USAGE.
3. CONCRETE WASTE WATER
A. ALL CONCRETE WASTEWATER SHALL BE DISPOSED OF IN THE DESIGNED AREA AS DIRECTED BY THE CONSTRUCTION MANAGER. THIS AREA IS TO BE A 3' DEEP, 10' SQUARE PIT AS DETAILED ON THE EROSION CONTROL PLAN. THIS AREA SHALL BE INSPECTED ON A DAILY BASIS AT A MINIMUM. WHEN THIS AREA BECOMES FULL, THE POLLUTANTS SHALL BE EXCAVATED, PLACED IN AN ACCEPTABLE CONTAINER AND DISPOSED OF IN PROPER MANNER, BY THE EXCAVATION CONTRACTOR.
4. PAINT PRODUCTS
A. ALL EXCESS PAINT AND THEIR RELATED PRODUCTS SHALL BE DISPOSED OF IN THE MANNER AT WHICH THE MANUFACTURER SUGGESTS. UNDER NO CIRCUMSTANCES WILL PAINT OR THEIR RELATED PRODUCTS BE CLEANED OR DISPOSED OF IN SOIL, SANITARY SEWERS, STORM SEWERS OR DETENTION BASINS. ANY VIOLATION OF THIS SHALL BE REPORTED TO THE JOB SUPERINTENDENT.
IN THE EVENT OF ACCIDENTAL CONTAMINATION ALL EFFORTS SHOULD BE MADE TO REMOVE CONTAMINANTS IN AN APPROPRIATE MANNER. THE FRANKLIN FIRE DEPARTMENT SHOULD BE CONTACTED IMMEDIATELY TO DETERMINE IF FURTHER MEASURES ARE NEEDED.

RULE 6. SPILLS OF OIL AND OTHER OBJECTIONABLE SUBSTANCES; REPORTING, CONTAINMENT AND CLEANUP

(REPEALED BY WATER POLLUTION CONTROL BOARD; FILED FEB 25, 1997, 1:00 P.M.: 20 IR 1734)

RULE 6.1. SPILLS; REPORTING, CONTAINMENT, AND RESPONSE

327 IAC 2-6.1-1 APPLICABILITY

AUTHORITY: IC 13-14-8-7
AFFECTED: IC 13-11-2; IC 13-18-1; IC 13-18-3; IC 13-18-8; IC 13-18-17
SEC. 1. THIS RULE APPLIES TO THE REPORTING AND CONTAINMENT OF, AND THE RESPONSE TO THOSE SPILLS OF HAZARDOUS SUBSTANCES, EXTREMELY HAZARDOUS SUBSTANCES, PETROLEUM, AND OBJECTIONABLE SUBSTANCES THAT ARE OF A QUANTITY, TYPE, DURATION AND IN A LOCATION AS TO DAMAGE THE WATERS OF THE STATE. NOTHING IN THIS RULE IS INTENDED TO AFFECT REPORTING OR CLEAN-UP REQUIREMENTS SET FORTH BY OTHER FEDERAL, STATE, OR LOCAL LAWS. (WATER POLLUTION CONTROL BOARD; 327 IAC 2-6.1-1; FILED FEB 25, 1997, 1:00 P.M.: 20 IR 1721; READOPTED FILED JAN 10, 2001, 3:23 P.M.: 24 IR 1518; READOPTED FILED NOV 21, 2007, 1:16 P.M.: 20071219-IR-327070553BFA)

327 IAC 2-6.1-2 SPECIAL AREAS

AUTHORITY: IC 13-14-8-7
AFFECTED: IC 13-11-2; IC 13-18-1; IC 13-18-3; IC 13-18-8; IC 13-18-17
SEC. 2. CERTAIN AREAS OF THE STATE ARE RECOGNIZED AS HAVING UNIQUE GEOLOGY. A LARGE SECTION OF THE MID-SOUTHERN PART OF THE STATE IS A KARST REGION. PORTIONS OF SAINT JOSEPH, ELKHART, KOSCIUSKO, AND LAGRANGE COUNTIES CONTAIN A SOLE SOURCE AQUIFER AS REFERENCED IN 42 U.S.C. 300H-3(E). THE WATERS OF THE STATE ARE PARTICULARLY VULNERABLE TO DAMAGE FROM SPILLS IN THESE AREAS, AND CARE SHOULD BE EXERCISED WHEN EVALUATING DAMAGE FROM SPILLS. INFORMATION ABOUT THESE AREAS CAN BE OBTAINED BY CALLING THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, OFFICE OF LAND QUALITY, EMERGENCY RESPONSE SECTION: AREA CODE 1-888-233-7745 FOR IN-STATE CALLS (TOLL FREE), (317) 233-7745 FOR OUT-OF-STATE CALLS. (WATER POLLUTION CONTROL BOARD; 327 IAC 2-6.1-2; FILED FEB 25, 1997, 1:00 P.M.: 20 IR 1731; READOPTED FILED JAN 10, 2001, 3:23 P.M.: 24 IR 1518; READOPTED FILED NOV 21, 2007, 1:16 P.M.: 20071219-IR-327070553BFA; ERRATA FILED MAY 27, 2008, 2:06 P.M.: 20080625-IR-327080419ACA)

327 IAC 2-6.1-3 EXCLUSIONS

AUTHORITY: IC 13-14-8-7
AFFECTED: IC 13-11-2; IC 13-18-1; IC 13-18-3; IC 13-18-8; IC 13-18-17
SEC. 3. NOTWITHSTANDING ANY OTHER SECTION OF THIS RULE, THE REPORTING REQUIREMENT OF THIS RULE DOES NOT APPLY TO THE FOLLOWING OCCURRENCES:
(1) DISCHARGES OR EXCEEDANCES THAT ARE WITHIN AND UNDER THE JURISDICTION OF AN APPLICABLE PERMIT WHEN THE SUBSTANCE IN QUESTION IS COVERED BY THE PERMIT AND DEATH OR ACUTE INJURY OR ILLNESS TO ANIMALS OR HUMANS DOES NOT OCCUR.
(2) LAWFUL APPLICATION OF MATERIALS, INCLUDING, BUT NOT LIMITED TO:
(A) COMMERCIAL OR NATURAL FERTILIZERS AND PESTICIDES ON OR TO LAND OR WATER; OR
(B) DUST SUPPRESSION MATERIALS.
(3) THE APPLICATION OF PETROLEUM NECESSARY FOR CONSTRUCTION THAT DOES NOT DAMAGE WATERS OF THE STATE.
(4) SPILLS OF LESS THAN ONE (1) POUND OR ONE (1) PINT.
(5) SPILLS OF INTEGRAL OPERATING FLUIDS, IN THE USE OF MOTOR VEHICLES OR OTHER EQUIPMENT, THE TOTAL VOLUME OF WHICH IS LESS THAN OR EQUAL TO FIFTY-FIVE (55) GALLONS AND WHICH DO NOT DAMAGE WATERS OF THE STATE.
(6) OIL SHEENS PRODUCED AS A RESULT OF THE NORMAL OPERATION OF PROPERLY FUNCTIONING WATERCRAFT
(7) A RELEASE OF A SUBSTANCE INTEGRAL TO A SPILL RESPONSE ACTIVITY THAT HAS BEEN APPROVED AND AUTHORIZED BY A STATE OR FEDERAL ONSCENE COORDINATOR. (WATER POLLUTION CONTROL BOARD; 327 IAC 2-6.1-3; FILED FEB 25, 1997, 1:00 P.M.: 20 IR 1731; ERRATA FILED MAR 7, 1997, 2:25 P.M.: 20 IR 1738; READOPTED FILED JAN 10, 2001, 3:23 P.M.: 24 IR 1518; READOPTED FILED NOV 21, 2007, 1:16 P.M.: 20071219-IR-327070553BFA)

327 IAC 2-6.1-4 DEFINITIONS

AUTHORITY: IC 13-14-8-7
AFFECTED: IC 13-11-2; IC 13-18-1; IC 13-18-3; IC 13-18-8; IC 13-18-17; IC 14-8-2-7; IC 14-25-7-13; IC 14-25-7-15
SEC. 4. IN ADDITION TO THE DEF

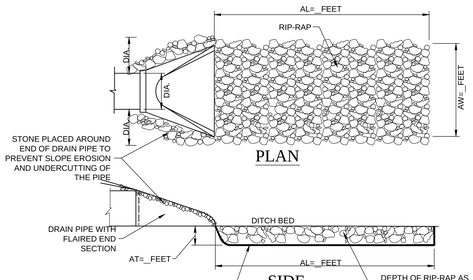


TABLE 1. SIZING FOR FLOW DISSIPATERS AT CULVERT PIPE OUTLETS

PIPE SIZE (D50)	AVERAGE RIPRAP DIAMETER	APRON WIDTH	APRON LENGTH
8 IN.	3 IN.	2 TO 3 FEET	5 TO 7 FEET
12 IN.	5 IN.	3 TO 4 FEET	6 TO 12 FEET
18 IN.	8 IN.	4 TO 6 FEET	8 TO 18 FEET
24 IN.	10 IN.	6 TO 8 FEET	12 TO 22 FEET
30 IN.	12 IN.	8 TO 10 FEET	14 TO 28 FEET
36 IN.	14 IN.	10 TO 12 FEET	16 TO 32 FEET

AT=1.5' X D50 15" OR LESS, 1.2' X D50 15" OR LARGER STONE.

ENERGY DISSIPATER (OUTLET PROTECTION)

1. DIVERT SURFACE WATER RUNOFF AROUND THE STRUCTURE DURING CONSTRUCTION SO THAT THE SITE CAN BE PROPERLY DEWATERED FOR FOUNDATION PREPARATION.
2. EXCAVATE FOUNDATION AND APRON AREA SUBGRADES BELOW DESIGN ELEVATION TO ALLOW FOR THICKNESS OF THE FILTER MEDIUM AND RIPRAP.
3. COMPACT ANY FILL USED IN SUBGRADE PREPARATION TO THE DENSITY OF SURROUNDING UNDISTURBED SOIL MATERIAL.
4. SMOOTH SUBGRADE ENOUGH TO PROTECT GEOTEXTILE FABRIC FROM TEARING.
5. PLACE GEOTEXTILE FABRIC OR AGGREGATE BEDDING MATERIAL (FOR STABILIZATION AND FILTRATION) ON THE COMPACTED AND SMOOTHED FOUNDATION.
6. INSTALL RIPRAP TO THE LINES AND ELEVATIONS SHOWN IN THE CONSTRUCTION PLANS. BLEND RIPRAP SMOOTHLY TO SURROUNDING GRADE. IF THE CHANNEL IS WELL DEFINED, EXTEND THE APRON ACROSS THE CHANNEL BOTTOM AND UP THE CHANNEL BANKS TO AN ELEVATION OF SIX INCHES ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.
7. IF GEOTEXTILE FABRIC TEARS WHEN PLACING RIPRAP, REPAIR IMMEDIATELY BY LAYING AND STAPLING A PIECE OF FABRIC OVER DAMAGED AREA, OVERLAPPING THE UNDAMAGED AREAS BY AT LEAST 12 INCHES.
8. CONSTRUCT A SMALL PLUNGE POOL WITHIN THE OUTLET APRON. (RIPRAP APRONS MUST BE LEVEL WITH OR SLIGHTLY LOWER THAN THE RECEIVING CHANNEL AND SHOULD NOT PRODUCE AN OVERFALL OR RESTRICT FLOW OF THE WATER CONVEYANCE STRUCTURE.)

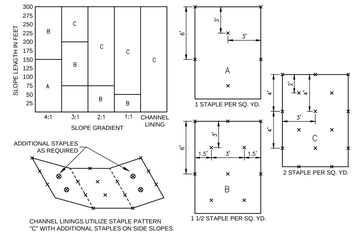
MAINTENANCE

_ INSPECT WITHIN 24 HOURS OF A RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
_ INSPECT FOR STONE DISPLACEMENT; REPLACE STONES ENSURING PLACEMENT AT FINISHED GRADE.
_ CHECK FOR EROSION OR SCOURING AROUND SIDES OF THE APRON; REPAIR IMMEDIATELY.
_ CHECK FOR PIPING OR UNDERCUTTING; REPAIR IMMEDIATELY.

REFERENCE IN CHAPTER 7 PAGE 121 IN THE INDIANA STORM WATER QUALITY MANUAL

OUTLET EROSION CONTROL PROTECTION

(NO SCALE)



EROSION CONTROL BLANKET STAPLE PATTERN

(NO SCALE)

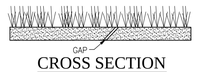
GENERAL STAPLE RECOMMENDATIONS

STAPLE PATTERNS APPLY TO ALL NORTH AMERICAN GREEN EROSION CONTROL BLANKETS. STAPLE PATTERNS MAY VARY DEPENDING UPON SOIL TYPE AND AVERAGE ANNUAL RAINFALL.

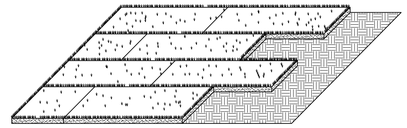
AT SLOPE LENGTHS GREATER THAN 300 FEET OR WHERE DRAINAGE OVER LARGE AREAS IS DIRECTED ONTO THE BLANKETS, STAPLE PATTERN "C" SHOULD BE UTILIZED.

CHANNEL LININGS REQUIRED A 2.0' MINIMUM OVERLAP AT LONGITUDINAL JOINTS. SIDESLOPES SHALL REQUIRE A 6" MINIMUM OVERLAP. WHERE OVERLAPS OCCUR, THE UPSTREAM BLANKET SHALL OVERLAP THE DOWNSTREAM.

IF OTHER THAN NORTH AMERICAN GREEN EROSION CONTROL BLANKETS ARE INSTALLED FOLLOW THE INSTALLATION DIRECTIONS RECOMMENDED BY THAT PRODUCTS COMPANY.



CROSS SECTION



PERSPECTIVE VIEW

SPECIFICATIONS

SITE PREPARATION

_ GRADE THE SITE TO ACHIEVE POSITIVE DRAINAGE.
_ PREPARE A SMOOTH, FIRM SOIL SURFACE AND APPLY SOIL AMENDMENTS. IRRIGATION IRRIGATE AS NEEDED TO ENSURE ROOTING OF SOD.

MATERIALS

_ SOIL AMENDMENTS - SELECT MATERIALS AND RATES AS DETERMINED BY A SOIL TEST (CONTACT YOUR COUNTY SOIL AND WATER CONSERVATION DISTRICT OR COOPERATIVE EXTENSION OFFICE FOR ASSISTANCE AND SOIL INFORMATION, INCLUDING AVAILABLE SOIL TESTING SERVICES.) OR 400 TO 600 POUNDS OF 12-12-12 ANALYSIS FERTILIZER, OR EQUIVALENT.
_ SOD - SELECT A HIGH QUALITY, HEALTHY, VIGOROUS VARIETY WELL ADAPTED TO THE REGION AND COMPATIBLE WITH THE INTENDED USE.

INSTALLATION

SOD SHOULD NOT BE INSTALLED DURING HOT WEATHER, ON DRY SOIL, FROZEN SOIL, COMPACTED CLAY, LOOSE SAND OR GRAVELLY SUBSTRATE SOILS, AGGREGATE, OR PESTICIDE TREATED 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 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 ONE-THIRD IN MID-SUMMER.

REFERENCE IN CHAPTER 7 PAGES 47-50 IN THE INDIANA STORM WATER QUALITY MANUAL

SOD APPLICATION DETAIL

(NO SCALE)

TABLE 1. TEMPORARY SEEDING SPECIFICATIONS

SEED SPECIES 1	RATE PER ACRE	PLANTING DEPTH	OPTIMUM DATES 2
WHEAT OR RYE	150 LBS.	1 TO 1½ INCHES	SEPT. 15 - OCT. 30
SPRING OATS	100 LBS.	1 INCH	MARCH 1 - APRIL 15
ANNUAL RYEGRASS	40 LBS.	¼ 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.
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.

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
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

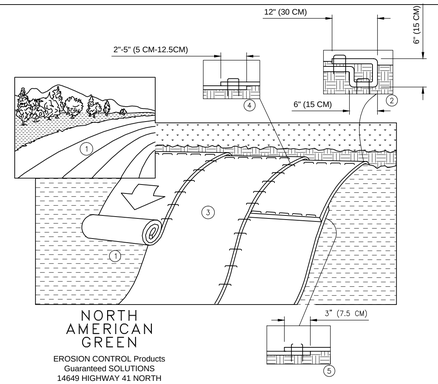
1. IF DRILLING OR BROADCASTING THE SEED, ENSURE GOOD SEED-TO-SOIL CONTACT BY FIRMING THE SEEDBED WITH A ROLLER OR CULTIPACKER AFTER COMPLETING SEEDING OPERATIONS.
2. DAILY SEEDING WHEN THE SOIL IS MOIST IS USUALLY MOST EFFECTIVE.
3. IF SEEDING IS DONE WITH A HYDROSEEDER, FERTILIZER AND MULCH CAN BE APPLIED WITH THE SEED IN A SLURRY MIXTURE.
3. APPLY MULCH AND ANCHOR IT IN PLACE.

MAINTENANCE

_ INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
_ CHECK FOR EROSION OR MOVEMENT OF MULCH AND REPAIR IMMEDIATELY.
_ MONITOR FOR EROSION DAMAGE AND ADEQUATE COVER (80 PERCENT DENSITY); RESEED, FERTILIZE, AND APPLY MULCH WHERE NECESSARY.
_ IF NITROGEN DEFICIENCY IS APPARENT, TOP-DRESS FALL SEEDED WHEAT OR RYE SEEDING WITH 50 POUNDS PER ACRE OF NITROGEN IN FEBRUARY OR MARCH.

REFERENCE IN CHAPTER 7 PAGES 31-33 IN THE INDIANA STORM WATER QUALITY MANUAL

TEMPORARY SEED



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.

2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S COVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP'S.

3. ROLL THE RECP'S (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM , STAPLES/STAKES SHOULD BE PLACED THOUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.

4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON RECP's TYPE.

5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP's WIDTH. NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE R STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSAY TO PROPERLY SECURE THE RECP's.

SLOPE INSTALLATION

(NO SCALE)

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	70 LBS. 2 LBS.	5.6 TO 7.0
2. PERENNIAL RYEGRASS - TALL FESCUE	70 LBS. 50 LBS.	5.6 TO 7.0
3. TALL FESCUE - WHITE CLOVER	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	35 LBS. 20 LBS.	5.5 TO 7.0
2. TALL FESCUE - WHITE CLOVER	50 LBS. 2 LBS.	5.5 TO 7.5
3. TALL FESCUE - RED CLOVER	50 LBS. 20 LBS.	5.5 TO 7.5
4. ORCHARD GRASS - RED CLOVER - WHITE CLOVER	30 LBS. 20 LBS. 2 LBS.	5.6 TO 7.0
5. CROWNVETCH - TALL FESCUE	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) - 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	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 - WHITE CLOVER	150 LBS. 2 LBS.	5.5 TO 7.5
4. TALL FESCUE - PERENNIAL RYEGRASS - KENTUCKY BLUEGRASS	150 LBS. 20 LBS. 20 LBS.	5.5 TO 7.5

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

INSTALLATION

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. 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

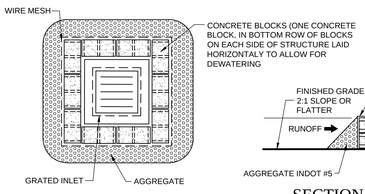
MAINTENANCE

_ 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 HALFIN 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.

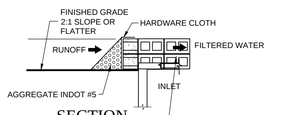
TABLE 1. PERMANENT SEEDING RECOMMENDATIONS
THIS TABLE PROVIDES SEVERAL SEED MIXTURE OPTIONS. ADDITIONAL SEED MIXTURES ARE AVAILABLE COMMERCIALLY. WHEN SELECTING A MIXTURE, CONSIDER INTENDED LAND USE AND SITE CONDITIONS, INCLUDING SOIL PROPERTIES (E.G., SOIL PH AND DRAINAGE), SLOPE ASPECT, AND THE TOLERANCE OF EACH SPECIES TO SHADE AND DROUGHT.

REFERENCE IN CHAPTER 7 PAGES 35-40 IN THE INDIANA STORM WATER QUALITY MANUAL

PERMANENT SEED



PLAN



SECTION

INSTALLATION

1. EXCAVATE THE FOUNDATION FOR THE CONCRETE BLOCKS ON LEVEL GRADE AND AT LEAST TWO INCHES BELOW THE TOP OF THE STORM DRAIN INLET.
2. PLACE THE BOTTOM ROW OF CONCRETE BLOCKS AROUND THE PERIMETER OF THE STORM DRAIN. LAY BLOCKS WITH OPENINGS FACING UP, ABUTTING THE BLOCKS FIRMLY TOGETHER AND OVERLAPPING THE CORNERS.
3. IF NECESSARY, SUPPORT THE BLOCKS BY DRIVING SHARPENED 2 X 4 INCH WOOD STUDS OR REBAR (NOT MORTAR) THROUGH THE BLOCK OPENINGS AND INTO THE UNDERLYING SOIL.
4. ON EACH SIDE OF THE BOTTOM ROW, TURN ONE CONCRETE BLOCK WITH ITS OPENINGS FACING HORIZONTALLY TO ALLOW FOR DEWATERING.
5. PLACE HARDWARE CLOTH OVER THE OPENINGS TO HOLD THE AGGREGATE IN PLACE.
6. PLACE THE FILTER MEDIUM (INDOT CA NO. 5 AGGREGATE) AROUND THE OUTSIDE OF THE CONCRETE BLOCKS TO CONTROL DRAINAGE RATE; LIMIT FILTER MEDIUM SIDE SLOPES TO 2:1 RATIO OR FLATTER.

NOTE: IN SITUATIONS WHERE STORM WATER MAY BYPASS THE STRUCTURE, EITHER:
_ SET THE TOP OF THE CONCRETE BLOCKS AT LEAST SIX INCHES LOWER THAN THE GROUND ELEVATION ON THE DOWN-SLOPE SIDE OF THE STORM DRAIN INLET,
_ BUILD A TEMPORARY DIKE, COMPACTED TO SIX INCHES HIGHER THAN THE CONCRETE BLOCKS, ON THE DOWN-SLOPE SIDE OF THE STORM DRAIN INLET, AND/OR
_ USE IN CONJUNCTION WITH EXCAVATED DROP INLET PROTECTION (SEE EXCAVATED DROP INLET PROTECTION ON PAGE 145).

MAINTENANCE

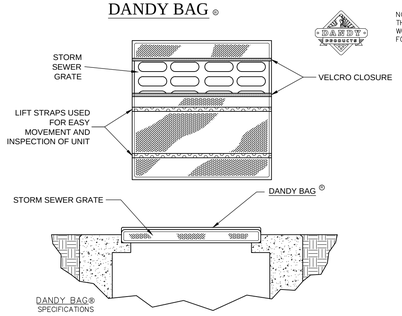
_ INSPECT DAILY.
_ REMOVE SEDIMENT AND DEBRIS AND MAKE NEEDED REPAIRS IMMEDIATELY.
_ WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE AND PROPERLY DISPOSE OF ALL CONSTRUCTION MATERIAL AND SEDIMENT, THEN STABILIZE.

REFERENCED IN CHAPTER 7 PAGE 163 TO 166 IN THE INDIANA STORM WATER QUALITY MANUAL.

BLOCK AND AGGREGATE INLET SEDIMENT DEVICE

(NO SCALE)

DANDY BAG ®



NOTE:
THE DANDY BAG® WILL BE **MANUFACTURED IN THE U.S.A.** FROM A WOVEN MONOFILAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

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Grab Tensile Elongation	ASTM D 4632	%	24 X 10
Puncture Strength	ASTM D 4833	kN (lbs)	0.40 (90)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	3097 (450)
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.51 (115) X 0.33 (75)
UV Resistence	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.425 (40)
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DETAIL OF INLET SEDIMENT CONTROL DEVICE

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PROJECT NO. W150351
DWG NAME: w150351-C104 swppp det.dwg
DESIGNED BY: BJS/RAM
DRAWN BY: RAM
CHECKED BY: BJS
DATE: 03.17.2016

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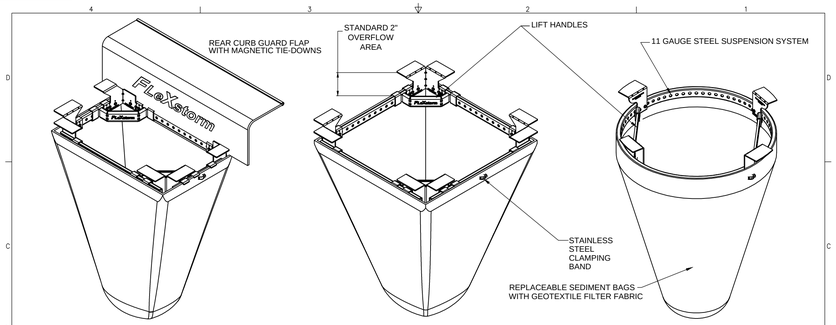
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

STORM

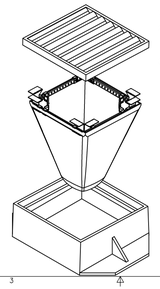


TYPICAL CURB BOX INLET FILTER

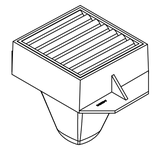
TYPICAL FLAT/RECTANGULAR/ROLLED CURB INLET FILTER

TYPICAL ROUND INLET FILTER

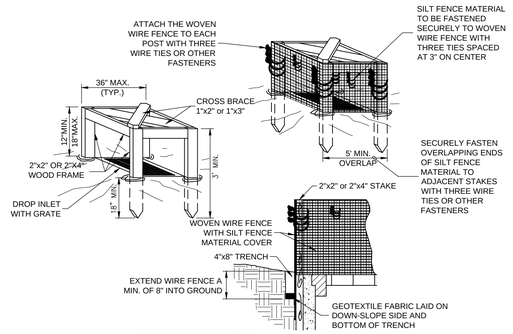
FLEXSTORM Inlet Filter Specifications		
WOVEN Geotextile Sediment Bag Specs (2 ft^3 vol)		
Material Property	Test Method	Value (ave)
Grab Tensile	ASTM D 4632	255 x 275
Puncture Strength	ASTM D 4833	135 lbs
Trapezoidal Tear	ASTM D 4533	75 lbs
UV Resistance	ASTM D 4355	90%
App Open Size (AOS)	ASTM D 4751	20 sieve
Permittivity	ASTM D 4491	1.5 / sec
Water Flow Rate	ASTM D 4491	200 gpm/sqft
Sediment Removal Efficiency (8% mix)	ASTM D 7351	82%



INSTALLATION:
1. REMOVE GRATE
2. DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
3. REPLACE GRATE



DRAWN	ALL PRODUCTS MANUFACTURED BY INLET & PIPE PROTECTION, INC DISTRIBUTED BY ADS WWW.INLETFILTERS.COM (866) 287-8655 PH (630) 355-3477 FX INFO@INLETFILTERS.COM		
IPP			
CHECKED			
QA			
MFG			
APPROVED			
	SIZE C	DWG NO FLEXSTORM_SPECS	REV
	SCALE	SHEET 1 OF 1	



POSTS: 2 X 4 WOODEN STAKE
FENCE: WOVEN WIRE, 14-1/2 GA., 6" MAX. MESH OPENING
FABRIC: IN ACCORDANCE WITH ASTM D 6461 LATEST EDITION.

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.

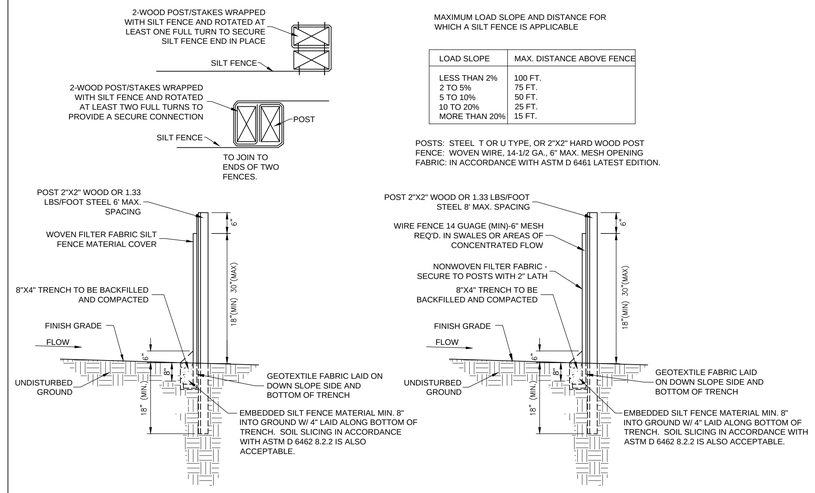
NOTE: IN SITUATIONS WHERE STORM WATER MAY BYPASS THE STRUCTURE, EITHER: SET THE TOP OF THE GEOTEXTILE FABRIC FILTER AT LEAST SIX INCHES LOWER THAN THE GROUND ELEVATION ON THE DOWN-SLOPE SIDE OF THE STORM DRAIN INLET, BUILD A TEMPORARY DIKE, COMPACTED TO SIX INCHES HIGHER THAN THE FABRIC, ON THE DOWN-SLOPE SIDE OF THE STORM DRAIN INLET, AND/OR USE IN CONJUNCTION WITH EXCAVATED DROP INLET PROTECTION.

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.

REFERENCED IN CHAPTER 7 PAGE 153-157 IN THE INDIANA STORM WATER QUALITY MANUAL.

SILT FENCE INLET PROTECTION

FOR NON PAVED AREAS (NO SCALE)



MAXIMUM LOAD SLOPE AND DISTANCE FOR WHICH A SILT FENCE IS APPLICABLE

LOAD SLOPE	MAX. DISTANCE ABOVE FENCE
LESS THAN 2%	100 FT.
2 TO 5%	75 FT.
5 TO 10%	50 FT.
10 TO 20%	25 FT.
MORE THAN 20%	15 FT.

POSTS: STEEL T OR U TYPE, OR 2"X2" HARD WOOD POST
FENCE: WOVEN WIRE, 14-1/2 GA., 6" MAX. MESH OPENING
FABRIC: IN ACCORDANCE WITH ASTM D 6461 LATEST EDITION.

WITHOUT WIRE SUPPORT

WITH WIRE SUPPORT

INSTALLATION
PREFABRICATED SILT FENCE
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. 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
_ INSPECT WITHIN 24 HOURS OF A RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
_ 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.
_ 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.

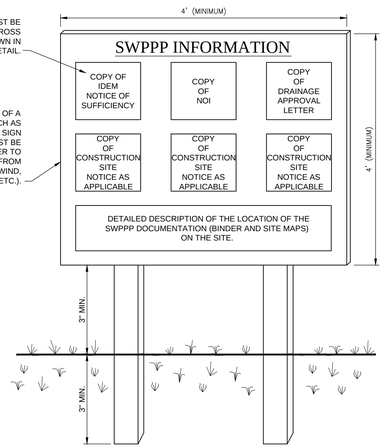
REFERENCE IN CHAPTER 7 PAGES 215-221 IN THE INDIANA STORM WATER QUALITY MANUAL

SEDIMENTATION/SILT FENCE

(NO SCALE)

"SWPPP INFORMATION" MUST BE DISPLAYED PROMINENTLY ACROSS THE TOP OF THE SIGN, AS SHOWN IN THE DETAIL.

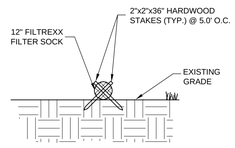
SIGN TO BE CONSTRUCTED OF A RIGID MATERIAL, SUCH AS PLYWOOD OR OUTDOOR SIGN BOARD. SIGN MUST BE CONSTRUCTED IN A MANNER TO PROTECT DOCUMENTS FROM DAMAGE DUE TO WEATHER (WIND, SUN, MOISTURE, ETC.).



SWPPP INFORMATION SIGN

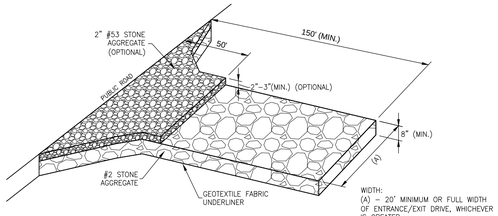
(NO SCALE)

NOTES:
1. THE SWPPP INFORMATION SIGN MUST BE LOCATED NEAR THE CONSTRUCTION EXIT OF THE SITE, SUCH THAT IT IS ACCESSIBLE AND VIEWABLE BY THE GENERAL PUBLIC, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A SAFETY HAZARD.
2. ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE-OF-TERMINATION (NOT) IS FILED FOR THE PERMIT.
3. CONTRACTOR SHALL POST OTHER STORM WATER AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE GOVERNING AGENCY.
4. SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.
5. CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY OF THE SWPPP INFORMATION SIGN.



COIR LOG (FIBER ROLL)

MAINTENANCE:
- INSPECT DAILY.
- REMOVE ACCUMULATED SEDIMENT FROM PAVED AREA (DO NOT FLUSH WITH WATER) AFTER EACH STORM EVENT. DEPOSIT SEDIMENT IN AN AREA WHERE IT WILL NOT RE-ENTER THE PAVED AREA OR STORM DRAINS.
- INSPECT FOR DAMAGE BY VEHICULAR TRAFFIC AND REPAIR IF NEEDED.



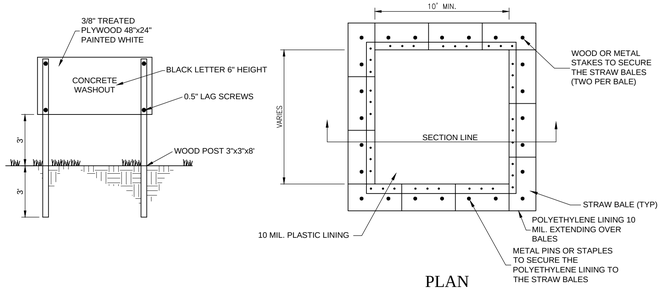
INSTALLATION:
1. REMOVE ALL VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA.
2. GRADE FOUNDATION AND CROWN FOR POSITIVE DRAINAGE. IF THE SLOPE OF THE CONSTRUCTION ENTRANCE IS TOWARD A PUBLIC ROAD AND EXCEEDS TWO PERCENT, CONSTRUCT AN EIGHT INCH HIGH DIVERSION RIDGE WITH A RATIO OF 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 PURPOSE OF THE PAD IS TO 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:
- INSPECT DAILY.
- RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
- TOP DRESS WITH CLEAN AGGREGATE AS NEEDED.
- IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS.
- FLUSHING SHOULD ONLY BE USED IF THE WATER CAN BE CONVEYED INTO A SEDIMENT TRAP OR BASIN.

REFRENCED IN CHAPTER 7 PAGE 17-20 IN INIANA STORM WATER QUALITY MANUAL.

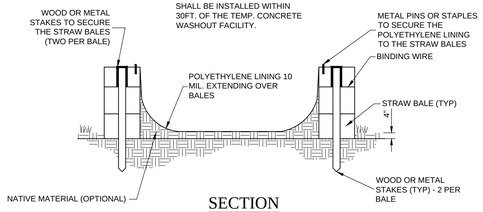
TEMPORARY CONSTRUCTION INGRESS/EGRESS PAD

LARGE SITES - TWO ACRES OR LARGER (NO SCALE)



PLAN

NOTES:
1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30FT. OF THE TEMP. CONCRETE WASHOUT FACILITY.



SECTION

ALTERNATE
CONTRACTOR MAY USE A 10 MIL. POLYETHYLENE LINED DUMPSTER FOR CONCRETE WASHOUT.

INSTALLATION
1. UTILIZE AND FOLLOW THE DESIGN IN THE STORM WATER POLLUTION PREVENTION PLAN TO INSTALL THE SYSTEM.
2. DEPENDENT UPON THE TYPE OF SYSTEM, EITHER EXCAVATE THE PIT OR INSTALL THE CONTAINMENT SYSTEM.
3. 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.
4. 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.
5. PLACE FLAGS, SAFETY FENCING, OR EQUIVALENT TO PROVIDE A BARRIER TO CONSTRUCTION EQUIPMENT AND OTHER TRAFFIC.
6. 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).
7. INSTALL SIGNAGE THAT IDENTIFIES CONCRETE WASHOUT AREAS.
8. POST SIGNS DIRECTING CONTRACTORS AND SUPPLIERS TO DESIGNATED LOCATIONS.
9. WHERE NECESSARY, PROVIDE STABLE INGRESS AND EGRESS (SEE TEMPORARY CONSTRUCTION INGRESS/EGRESS PAD ON PAGE 17) OR ALTERNATIVE APPROACH PAD FOR CONCRETE WASHOUT SYSTEMS.
10. USE A 10 MIL. POLYETHYLENE LINED DUMPSTER AS AN ALTERNATE.

CONCRETE WASHOUT

TYPE "ABOVE GRADE W/ STRAW BALES" (NO SCALE)

10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net
317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER
WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

PROJECT NO.	W15-0351
DWG NAME:	w150351-C104 swppp det.dwg
DESIGNED BY:	BJS/BAM
DRAWN BY:	BAM
CHECKED BY:	BJS
DATE:	02.17.2016

REVISIONS AND ISSUES	BY:	DATE:
CITY SUBMITTAL	BJS	02.17.2016

STEVEN SCOTT RUCKER REGISTERED PROFESSIONAL ENGINEER PE-11300279 STATE OF INDIANA

STEVEN SCOTT RUCKER P.E. 11300279

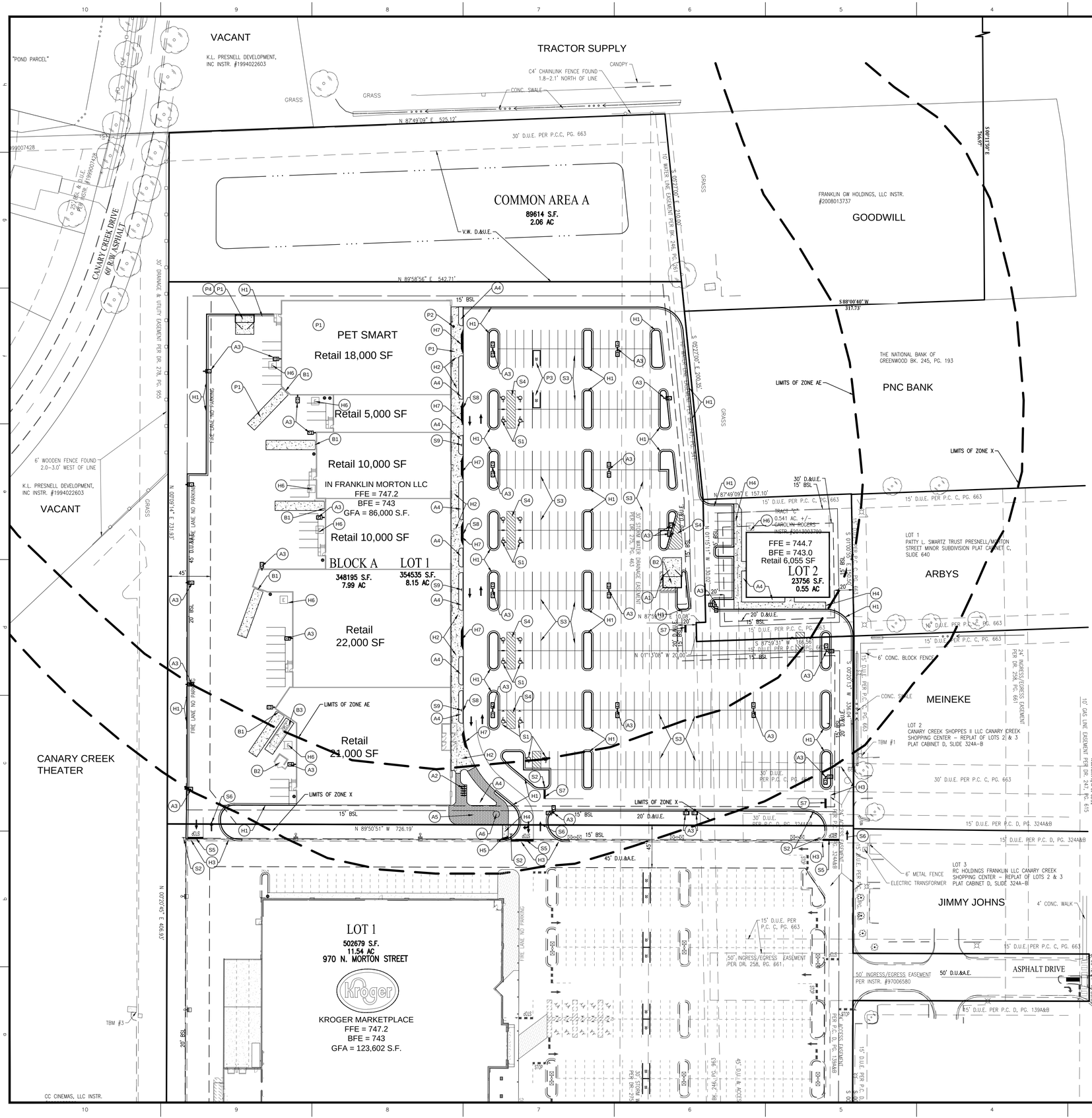
PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

STORMWATER POLLUTION PREVENTION PLAN DETAILS
Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C105

PROJECT NO.
W15.0351

LOCATION: H:\W2015\W150351\Engineering\design\consent\w150351-C104 swppp det.dwg
LAYOUT: C105
DATE/TIME: March 17, 2016 - 11:59am
PLOTTED BY: wagnerc



SITE PLAN NOTES

HARDSCAPE

- H1 6" CURB AND GUTTER
- H2 INTEGRAL CONCRETE WALK AND CURB. COORDINATE WITH ARCHITECTURAL PLANS.
- H3 MATCH EXISTING PAVEMENT ALIGNMENT AND ELEVATION
- H4 CONCRETE SIDEWALK
- H5 ADA ACCESSIBLE RAMP WITH DETECTABLE WARNING.
  - PRIVATE WARNINGS TO BE GROOVED CONCRETE
  - RIGHT OF WAY WARNINGS TO BE TRUNCATED DOMES
- H6 TRANSFORMER PAD LOCATION
- H7 15' ADA RAMP WITH 5' WINGS. REFER TO ARCHITECTURAL DRAWINGS

BUILDING ACCESSORIES (REFER TO ARCH. DRAWINGS)

- B1 LOADING DOCK
- B2 TRASH ENCLOSURE
- B3 TRASH COMPACTOR

ACCESSORIES

- A1 BOLLARD (TYP. ON ALL)
- A2 BIKE RACK
- A3 LIGHT POLE AND BASE
- A4 LANDSCAPE PLANTER ISLAND TO BE LOCATED WITHIN THE SIDEWALK
- A5 2000 S.F. PUBLIC AREA REQUIRED BY CITY ORDINANCE. USE DECORATIVE STAMPED CONCRETE. REFER TO THE ARCHITECTURAL DRAWINGS FOR DETAILS.
- A6 PUBLIC ART TO BE LOCATED ALONG THE BUILDING FACADE. FINAL DESIGN TO BE COORDINATED AND FILED WITH THE CITY FOR APPROVAL.

SIGNAGE & MARKINGS

- S1 ADA PARKING SPACE. ALL ADA STRIPING SHALL BE BLUE.
- S2 STOP SIGN
- S3 4" PAINTED YELLOW SOLID LINES (TYP)
- S4 4" PAINTED YELLOW SOLID LINE ISLAND. BLUE FOR ADA PARKING
- S5 24" PAINTED WHITE STOP BAR WITH "STOP" TEXT
- S6 PAINTED WHITE DIRECTIONAL TRAFFIC ARROWS
- S7 24" PAINTED WHITE STOP BAR
- S8 PAINTED "FIRE LANE NO PARKING" ALONG CURB
- S9 SIGN "FIRE LANE NO PARKING"

BUILDING ACCESSORIES FOR PETSMART

- P1 CONCRETE PER ARCHITECTURAL PLANS
  - SALES - 4" DEPTH
  - RECEIVING - 6" DEPTH
  - SIDEWALKS - 4" DEPTH
  - TRUCK WELL - 6" DEPTH
  - DUMPSTER AREA - 6" DEPTH
- P2 ASH/TRASH RECEPTACLE (RUBBERMAID ASH/TRASH CLASSIC CONTAINER WITH DOORS #8180-88
- P3 CART CORRAL (NATIONAL CART COMPANY CART CORRAL #8030149 & SIGN #3030054)
- P4 TRASH ENCLOSURE, MINIMUM INSIDE CLEARANCE 19'-4" X 8'

SITE PLAN GENERAL 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. ALL QUANTITIES GIVEN ON THESE PRINTS, VERBALLY OR IN THE SCOPE OF WORK SECTION ARE ESTIMATES AND SHALL BE CONFIRMED BY THE BIDDING CONTRACTORS.
3. 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. IN ADDITION, EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRE THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER.
4. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND CONTRACTOR TO MAINTAIN QUALITY CONTROL THROUGHOUT THIS PROJECT.
5. TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL STANDARDS.
6. BEARINGS, DIMENSIONS, AND EASEMENTS ARE SHOWN FOR REFERENCE ONLY. SEE RECORD SURVEYS AND PLATS FOR EXACT INFORMATION.
7. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT.
8. ALL DIMENSIONS ARE BASED ON FACE OF CURB OR BACK OF ROLL CURB OR FACE OF BUILDING.
9. SEE ARCHITECTURAL PLANS FOR DETAILS OF BUILDING, BUILDING DIMENSIONS, ATM RELATED DETAILS, AND SIGNAGE SPECIFICATIONS. DO NOT STAKE BUILDING FROM THESE PLANS.
10. COORDINATE CONSTRUCTION ACTIVITIES WITH ADJOINING WORK IF APPLICABLE. VERIFY EXTENT OF ADJOINING WORK AND COORDINATE AS REQUIRED.
11. FIELD VERIFY EXISTING CURBS AND TAPER PROPOSED VERTICAL CURBS TO MATCH WITHIN A MIN. OF THREE (3) FEET.
12. ± DIMENSIONS INDICATE FIELD DIMENSION ADJUSTMENT AREA BASED ON ACTUAL FIELD LAYOUT COORDINATES.
13. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS. IF ANY DISCREPANCIES ARE FOUND IN THESE PLANS FROM ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
14. PROVIDE SMOOTH TRANSITION FROM NEWLY PAVED AREAS TO EXISTING AREAS AS NECESSARY. ALL AREAS WHERE PROPOSED PAVEMENT MEETS EXISTING PAVEMENT, THE EXISTING EDGE OF PAVEMENT SHALL BE FREE OF ALL LOOSE DEBRIS. THE EDGE OF EXISTING ASPHALT PAVEMENT SHALL BE PROPERLY SEALED WITH A TACK COAT MATERIAL IN ALL AREAS WHERE NEW ASPHALT PAVEMENT IS INDICATED TO JOIN EXISTING.
15. RESURFACE OR RECONSTRUCT AT LEAST TO ORIGINAL CONDITIONS ALL AREAS WHERE THE EXISTING PAVEMENT OR LAWNS ARE DAMAGED DURING CONSTRUCTION FROM TRAFFIC BY CONTRACTORS, SUBCONTRACTORS, OR SUPPLIERS AFTER CONSTRUCTION WORK IS COMPLETE.
16. THE CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
17. REFER TO ARCHITECTURAL PLANS FOR BUILDING ACCESSORY DETAILS.
18. REFER TO SHEET C201, AND C202 FOR SITE PLAN DETAILS UNLESS OTHERWISE NOTED.

SITE DATA

SITE AREA = 8.68 AC
BUILDING AREA = 92,030 SF
ZONING = MXC & GW-OL

FRONT YARD BSL REQUIRED	= 20	FT
REAR YARD BSL REQUIRED	= 20	FT
SIDE YARD BSL REQUIRED	= 15	FT

PARKING REQUIRED:
PARKING REQUIREMENT: 1 SPACE/300S.F. +1 PER EMPLOYEE ON LARGEST SHIFT (90± EMPLOYEES)

PARKING REQUIRED	= 409 SPACES
PARKING DIMENSIONS	= 9' x 20' or 10' x 20'
ADA PARKING SPACES	= 18 (4.4% OF TOTAL)
PARKING RATIO PROVIDED	= 4.60 spaces / 1000 S.F.

PARKING PROVIDED:
404 - STANDARD SPACES
+18 - ADA SPACES
422 - TOTAL

SITE PLAN LEGEND

- SIGN
- BOLLARD
- PARKING WHEEL STOP
- HANDICAPPED SPACE
- PARKING COUNT
- FIRE DEPT HOOKUP
- FIRE HYDRANT
- POST INDICATOR VALVE
- WATER MANHOLE
- WATER METER
- WATER VALVE
- GAS METER
- GAS VALVE
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRICAL RISER
- TRANSFORMER
- GUY ANCHOR
- ELECTRIC JUNCTION BOX
- UTILITY POLE
- UTILITY POLE W/ TRANSFORMER
- ORNAMENTAL LIGHT
- STREET LIGHT
- PARKING LOT LIGHT (1 HEAD)
- PARKING LOT LIGHT (2 HEAD)
- PARKING LOT LIGHT (3 HEAD)
- PARKING LOT LIGHT (4 HEAD)
- COMMUNICATIONS JUNCTION BOX
- COMMUNICATIONS MANHOLE
- COMMUNICATIONS PEDESTAL
- COMMUNICATIONS RISER
- TRAFFIC SIGNAL POLE
- TRAFFIC SIGNAL
- STORM CLEANOUT
- BEEHIVE INLET
- CURB INLET
- ROUND INLET
- SQUARE INLET
- STORM MANHOLE
- DOWN SPOUT
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- CART CORRAL

PAVEMENT (REFER TO SHEET C400)

- CONCRETE PAVEMENT

LINE TYPES

- RIGHT OF WAY LINE
- FENCE
- GUARD RAIL
- BUILDING SETBACK
- BOUNDARY LINE
- SECTION LINE

ABBREVIATIONS

ROW	RIGHT OF WAY
BSL	BUILDING SETBACK LINE
ESMT	EASEMENT
D.&U.E.	DRAINAGE AND UTILITY EASEMENT
FFE	FINISH FLOOR ELEVATION

PLAN CERTIFICATE NOTE:

ORIGINAL ALTA, TOPOGRAPHY, UTILITIES, STORM SEWERS, AND ALL OTHER EXISTING CONDITIONS ITEMS WERE PREPARED BY BANNING ENGINEERING.

FINAL DRAWINGS FOR THE IN FRANKLIN MORTON, LLC SITE WERE PREPARED BY WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER. FINAL CONSTRUCTION PLANS ARE THOSE PLANS CONTAINING A FINAL REVISION DATE AFTER 03/17/2016. WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER ACCEPT RESPONSIBILITY ONLY FOR THE IN FRANKLIN MORTON, LLC SITE IMPROVEMENTS RELATED TO THE ENGINEERING WORK SHOWN ON THESE PLANS.

N
W E
S

SCALE: 1" = 50'
0 25 50 100

Know what's below. Call before you dig.
Within Indiana Call 811 or 800-382-5544
24 Hours a Day, 7 Days a Week.
PER INDIANA STATE LAW IC 8-1-26. IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

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Indianapolis, Indiana 46280
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317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

PROJECT NO:	W15.0351
DWG NAME:	w150351-C200 site.dwg
DESIGNED BY:	D.SPOHAR
DRAWN BY:	RAM
CHECKED BY:	BJS
DATE:	03.17.2016

REVISIONS AND ISSUES	DATE:	BY:
CITY SUBMITTAL	03.17.2016	BJS

STEVEN SCOTT RUCKER
REGISTERED
PE.11300279
STATE OF INDIANA
PROFESSIONAL ENGINEER
NOT VALID WITHOUT THE ORIGINAL SEAL

STEVEN SCOTT RUCKER P.E. 11300279

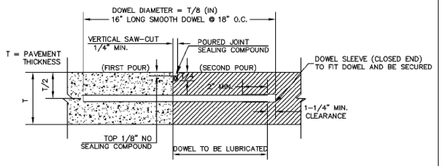
PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

SITE PLAN
Part of the NE/4 of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C200

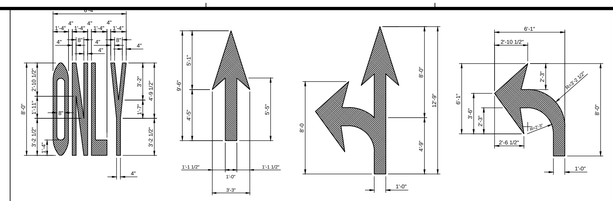
PROJECT NO.
W15.0351

LOCATION: H:\2015\W150351\Engineering\design\connet\w150351-C200 site.dwg
LAYOUT: C200
DATE/TIME: March 17, 2016 - 12:00pm
PLOTTED BY: wagnerd



NOTE:
1. DOWELS SHALL BE SUPPORTED BY AN APPROVED DEVICE.

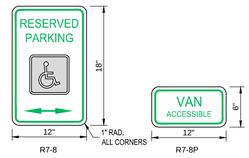
CONSTRUCTION JOINT
(NO SCALE)



NOTE:
LANE CONTROL ARROWS SHALL BE WHITE AND SHALL BE PLACED IN ACCORDANCE WITH IMUTCD. THE ARROW SHOULD BE 20 FEET IN ADVANCE OF THE STOPLINE. THE WORD "ONLY" SHOULD BE LOCATED IN ADVANCE OF THE PAVEMENT ARROW.

NOTE:
TYPICAL SIZES FOR NORMAL INSTALLATION; SIZES MAY BE REDUCED APPROXIMATELY ONE-THIRD FOR LOW-SPEED URBAN CONDITIONS.

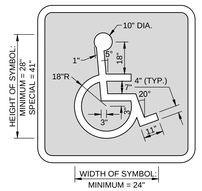
TRAFFIC MARKING DETAILS
(NO SCALE)



NOTE:
12"X18" 18 GAUGE HOT DIP GALVANIZED NON-REFLECTIVE SIGN WITH 12' POST DRIVEN 4 FEET INTO GROUND. POST SHALL BE 12' LONG GALVANIZED 2 1/2" OD STEEL POSTS. SET BOTTOM OF SIGN 7' ABOVE GRADE.
NOTE:
WHERE PARKING SPACES THAT ARE RESERVED FOR PERSONS WITH DISABILITIES ARE DESIGNATED TO ACCOMMODATE WHEELCHAIR VANS, A VAN ACCESSIBLE (R7-8P) PLAQUE SHALL BE MOUNTED BELOW THE R7-8 SIGN. THE R7-8SIGN SHALL HAVE A GREEN LEGEND AND BORDER AND A WHITE WHEELCHAIR SYMBOL ON A BLUE SQUARE ALL ON A WHITE BACKGROUND. THE R7-8P PLAQUE SHALL HAVE A GREEN LEGEND AND BORDER ON A WHITE BACKGROUND.

ADA SIGNS
(NO SCALE)

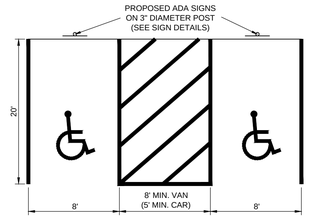
NOTE:
ALL STRIPES TO BE PAINTED WHITE.
MINIMUM = 3"
SPECIAL = 4"



NOTE:
BLUE BACKGROUND AND WHITE BORDER ARE OPTIONAL

ADA PARKING SYMBOL DETAIL
(NO SCALE)

NOTE:
ALL PAINT TO BE BLUE NON-SKID SURFACE APPLICATION OF CILICA SAND OR GLASS BEAD BY METHOD OF MIXTURE AND OR BROADCASTING.

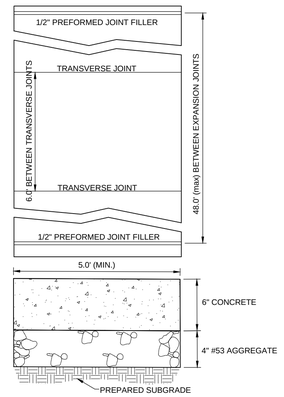


"ADA" PARKING SPACES
(NO SCALE)

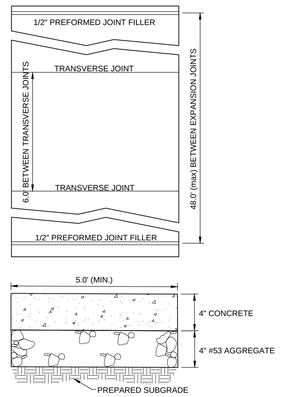
FIRE LANE GUIDELINES:
- LETTER SIZE - A MINIMUM OF 18" HIGH AND 2" WIDE
- PAINT COLOR - YELLOW
- DIAGONAL STRIPES & PARALLEL LINES - A MINIMUM OF 4" WIDE
- PAINTED DIAGONAL STRIPES SHALL BE PLACED AT 45 DEGREE ANGLES BETWEEN THE PARALLEL LINES AT 4' INTERVALS PER DETAIL
- SIGNAGE TO READ "FIRE LANE - NO PARKING - TOW AWAY ZONE"
- SIGNAGE TO MEET MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES
- ANY APPLICABLE STANDARD MUNICIPAL FIRE LANE MARKING DETAIL SHALL SUPERCEDE THIS DETAIL

FIRE LANE MARKING DETAIL
(NO SCALE)

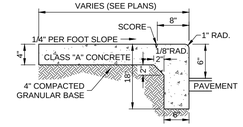
"NO PARKING - FIRE LANE" SIGN
(NO SCALE)



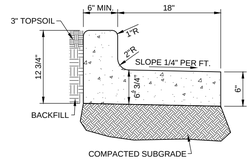
SIDEWALK SECTION - DRIVEWAY CROSSING
(NO SCALE)



TYPICAL SIDEWALK SECTION
(NO SCALE)

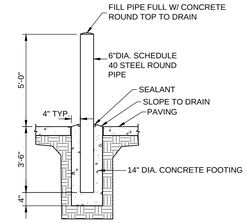


INTEGRAL WALK AND CURB DETAIL
(NO SCALE)

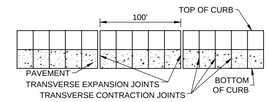


SEE STD. SHT. 12-03 FOR GENERAL NOTES
SEE STD. SHT.12-04 FOR JOINT SPACING DETAILS

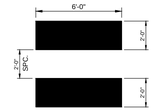
COMBINED CONCRETE CURB & GUTTER
TYPE III
(NO SCALE)



PIPE BOLLARD DETAIL
(NO SCALE)

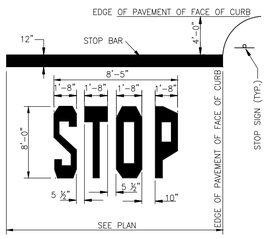


CURB JOINT DETAIL
(NO SCALE)



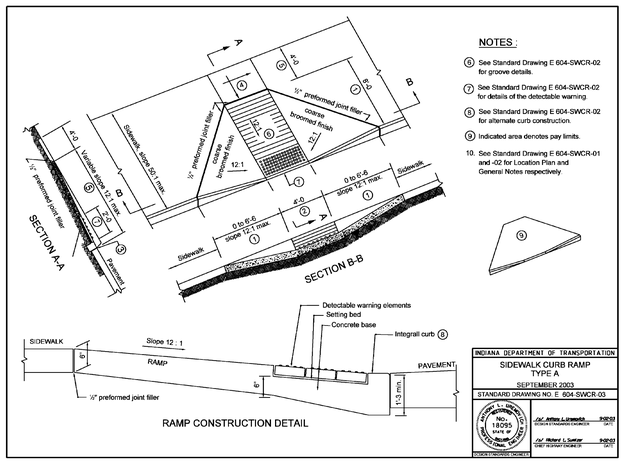
NOTES:
- CONTRACTOR SHALL PROPERLY RE-ALIGN STOP BARS AND OTHER PAVEMENT MARKERS AS NECESSARY TO INSTALL CROSSWALK.
- CROSSWALK STRIPES SHALL BE APPLIED IN ACCORDANCE WITH MUNICIPAL STANDARDS.
- STRIPES ARE THERMOPLASTIC WHITE WITHIN R.O.W.; OTHERWISE PAINTED WHITE.
- CONTRACTOR SHALL APPLY LONG LIFE MARKING MATERIALS ONLY.

PEDESTRIAN CROSSWALK
(NO SCALE)



NOTE:
1. WORDS AND ARROWS FOR DRIVEWAYS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN SECTION 3B OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS
2. THESE WORDS AND BAR ARE TO BE PAINTED REFLECTIVE WHITE.

STOP BAR



NOTES :
6. See Standard Drawing E 604-SWCR-02 for groove details.
7. See Standard Drawing E 604-SWCR-02 for details of the detectable warning.
8. See Standard Drawing E 604-SWCR-02 for alternate curb construction.
9. Indicated area denotes pay limits.
10. See Standard Drawing E 604-SWCR-01 and -02 for Location Plan and General Notes respectively.

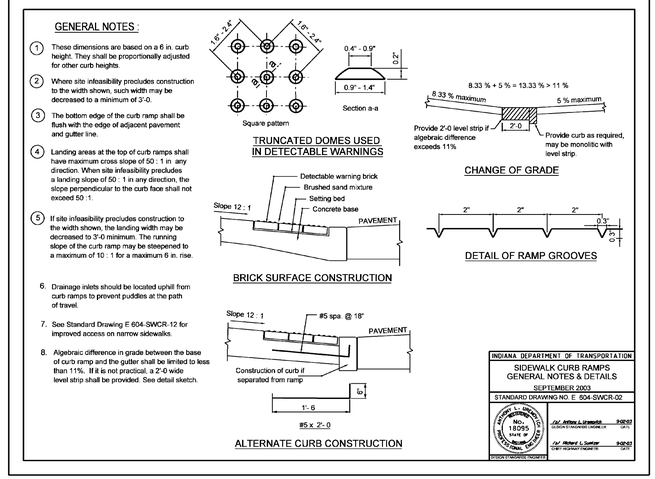


Diagram 1: Bicycle Rack Type

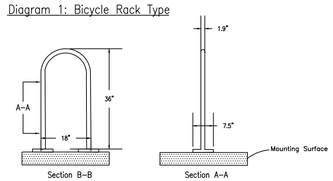
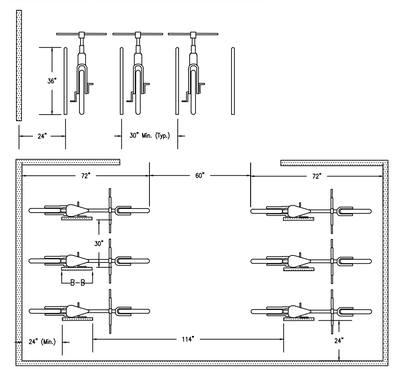
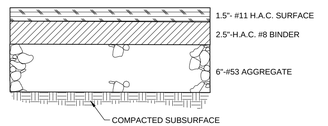


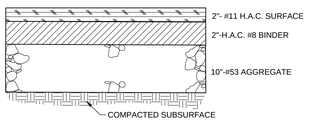
Diagram 2: Bicycle Parking Location and Design



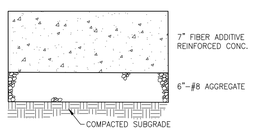
BICYCLE PARKING DETAIL
(NO SCALE)



STANDARD DUTY ASPHALT PAVING SECTION
(NO SCALE)



HEAVY DUTY ASPHALT PAVING SECTION
(NO SCALE)
NOTE: THE AGGREGATE BASE COURSE SHOULD CONTAIN NO MORE THAN 10% FINES AND BE WELL-GRADED



CONCRETE PAVING SECTION
(NO SCALE)

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WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

REVISIONS AND ISSUES	BY:	DATE:
CITY SUBMITTAL	BJS	03.17.2016

PROJECT NAME: W150351-C201 site det.dwg
DESIGNED BY: BJS/RAM
DRAWN BY: RAM
CHECKED BY: BJS
DATE: 03.17.2016

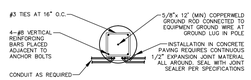
STEVEN SCOTT RUCKER
REGISTERED
PE.11-300279
STATE OF INDIANA
PROFESSIONAL ENGINEER
NOT VALID UNLESS PRINTED
STEVEN SCOTT RUCKER P.E. 11300279

PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

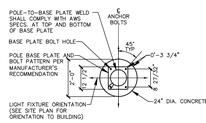
SITE DETAILS
Part of the NE/4 of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C201
PROJECT NO.
W15.0351

LOCATION: H:\2015\W150351\Engineering\design\consult\w150351-c201 site det.dwg
LAYOUT: C201
DATE/TIME: March 17, 2016 - 12:16pm
PLOTTED BY: bsheffer

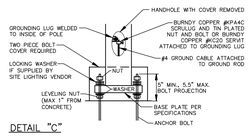


SECTION "A-A"

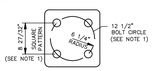


BOLT COVER TYPICAL

SECTION "B-B"

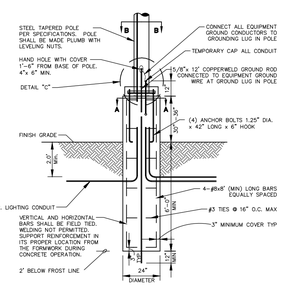


DETAIL "C"



TYPICAL ANCHOR BOLT SPACING

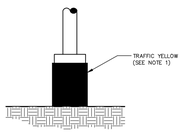
NOTES:
1. CONTRACTOR TO OBTAIN VENDOR SPECIFIC ANCHOR BOLT PATTERN PRIOR TO INSTALLATION



NOTES:
1. 3500 PSI MIN. 28 DAY COMPRESSIVE STRENGTH CONCRETE WITH GRADE 60 REINFORCING STEEL
2. IF WATER IS PRESENT IN HOLE, REMOVE BEFORE POURING CONCRETE.
3. FOUNDATION EXCAVATION SHALL BE BY 24" AUGER IN UNDISTURBED OR PROPERLY COMPACTED FILL PER SPECIFICATIONS.
4. FOUNDATION SHALL HAVE A MINIMUM ALLOWABLE END BEARING OF 2000 PSF.
5. FOUNDATION HAS BEEN DESIGNED FOR A COHESIVE SOIL BASED ON A MINIMUM COHESIVE VALUE OF 1000 PSF.
6. FOUNDATION HAS BEEN DESIGNED FOR A GRANULAR SOIL BASED ON A MINIMUM LATERAL SOIL PRESSURE OF 1000 PSF, UTILIZING AASHTO FIGURE 1.8.2(C4) OF "EMBEDMENT OF POSTS WITH OVERTURNING LOADS".
7. ALL LIGHT POLE BASE FOUNDATIONS SHALL BE CAST-IN-PLACE. PRE-CAST LIGHT POLE BASE FOUNDATIONS ARE NOT ACCEPTABLE.

TYPICAL LIGHTING POLE BASE DETAIL

(NO SCALE)



ELEVATION

NOTES:
1. EXPOSED CONCRETE SHALL BE PAINTED TRAFFIC YELLOW.

LIGHT BASE DETAIL

(NO SCALE)

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weihe.net

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317 | 843 - 0546 *fax*

ALLAN H. WEIHE, P.E., L.S. - FOUNDER

REVISIONS AND ISSUES	DATE	BY
CITY SUBMITTAL	02.17.2016	BJS

PROJECT NO.: W15-0351
TAWG NAME: w150351-C201 site det.dwg
DESIGNED BY: BJS/RAM
DRAWN BY: RAM
CHECKED BY: BJS
DATE: 02.17.2016

STEVEN SCOTT RUCKER
REGISTERED
PE.11300279
STATE OF INDIANA
PROFESSIONAL ENGINEER
NOT VALID WITHOUT THE ORIGINAL SEAL

STEVEN SCOTT RUCKER P.E. 11300279

PREPARED FOR:
IN FRANKLIN MORTON, LLC
XXX NORTH MORTON STREET, FRANKLIN, IN 46131

SITE DETAILS
Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C202

PROJECT NO.
W15.0351

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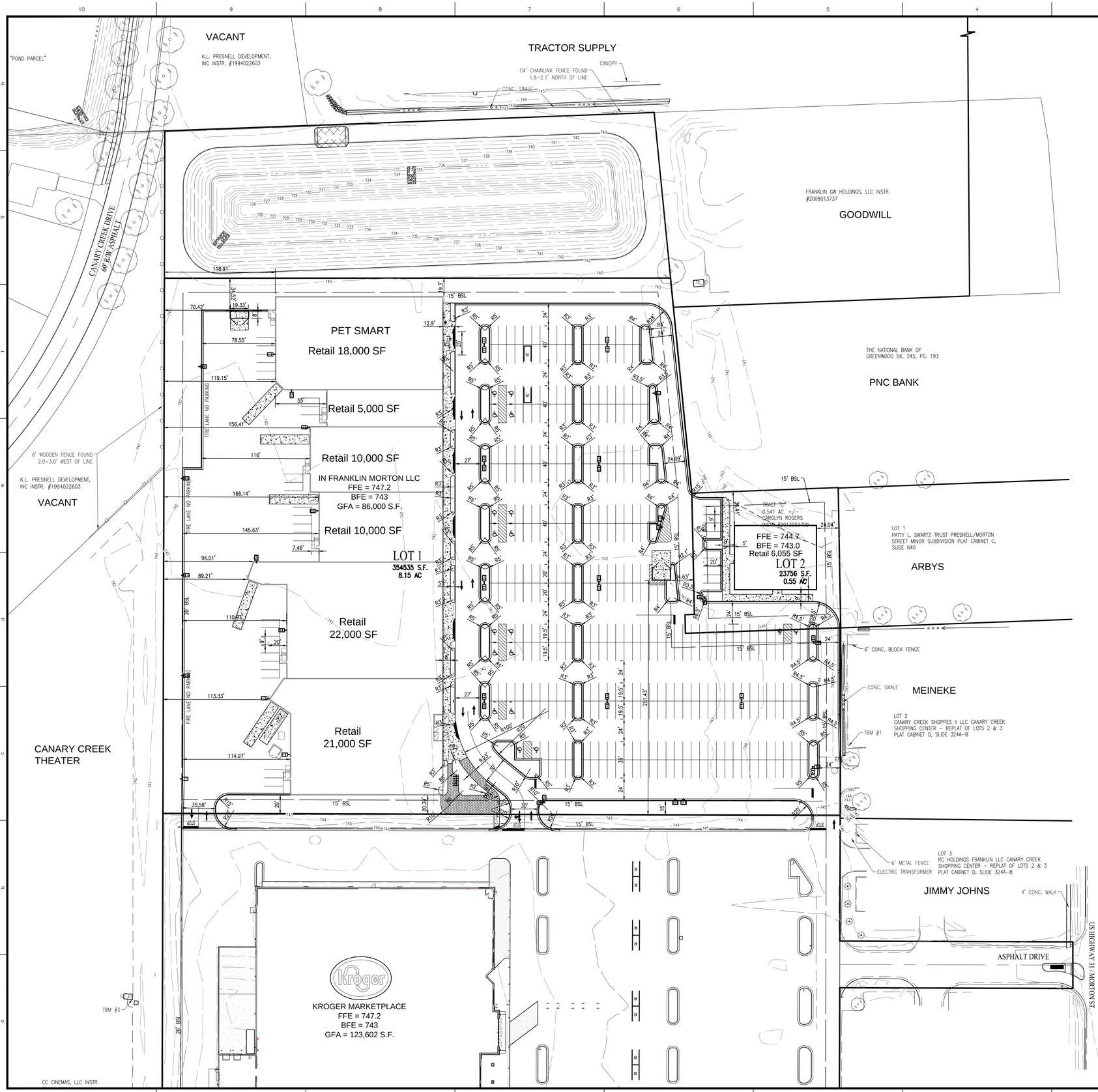
LOCATION: H:\2015\W150351\Engineering\design\consent\w150351-C201 site det.dwg
LAYOUT: C202 SITE DETAILS
DATE/TIME: March 17, 2016 - 12:16pm
PLOTTED BY: mcbeth



SITE PLAN GENERAL 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. ALL QUANTITIES GIVEN ON THESE PRINTS, VERBALLY OR IN THE SCOPE OF WORK SECTION ARE ESTIMATES AND SHALL BE CONFIRMED BY THE BIDDING CONTRACTORS.
3. 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. IN ADDITION, EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRE THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER.
4. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND CONTRACTOR TO MAINTAIN QUALITY CONTROL THROUGHOUT THIS PROJECT.
5. TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL STANDARDS.
6. BEARINGS, DIMENSIONS, AND EASEMENTS ARE SHOWN FOR REFERENCE ONLY. SEE RECORD SURVEYS AND PLATS FOR EXACT INFORMATION.
7. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT.
8. ALL DIMENSIONS ARE BASED ON FACE OF CURB OR BACK OF ROLL CURB OR FACE OF BUILDING.
9. SEE ARCHITECTURAL PLANS FOR DETAILS OF BUILDING, BUILDING DIMENSIONS, ATM RELATED DETAILS, AND SIGNAGE SPECIFICATIONS. DO NOT STAKE BUILDING FROM THESE PLANS.
10. COORDINATE CONSTRUCTION ACTIVITIES WITH ADJOINING WORK IF APPLICABLE. VERIFY EXTENT OF ADJOINING WORK AND COORDINATE AS REQUIRED.
11. FIELD VERIFY EXISTING CURBS AND TAPER PROPOSED VERTICAL CURBS TO MATCH WITHIN A MIN. OF THREE (3) FEET.
12. ± DIMENSIONS INDICATE FIELD DIMENSION ADJUSTMENT AREA BASED ON ACTUAL FIELD LAYOUT COORDINATES.
13. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS. IF ANY DISCREPANCIES ARE FOUND IN THESE PLANS FROM ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
14. PROVIDE SMOOTH TRANSITION FROM NEWLY PAVED AREAS TO EXISTING AREAS AS NECESSARY. ALL AREAS WHERE PROPOSED PAVEMENT MEETS EXISTING PAVEMENT, THE EXISTING EDGE OF PAVEMENT SHALL BE FREE OF ALL LOOSE DEBRIS. THE EDGE OF EXISTING ASPHALT PAVEMENT SHALL BE PROPERLY SEALED WITH A TACK COAT MATERIAL IN ALL AREAS WHERE NEW ASPHALT PAVEMENT IS INDICATED TO JOIN EXISTING.
15. RESURFACE OR RECONSTRUCT AT LEAST TO ORIGINAL CONDITIONS ALL AREAS WHERE THE EXISTING PAVEMENT OR LAWNS ARE DAMAGED DURING CONSTRUCTION FROM TRAFFIC BY CONTRACTORS, SUBCONTRACTORS, OR SUPPLIERS AFTER CONSTRUCTION WORK IS COMPLETE.
16. THE CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
17. REFER TO ARCHITECTURAL PLANS FOR BUILDING ACCESSORY DETAILS.
18. REFER TO SHEET C201, AND C202 FOR SITE PLAN DETAILS UNLESS OTHERWISE NOTED.

SITE PLAN LEGEND

	=	EXISTING SIGN
MB	=	MAILBOX
	=	EXISTING LIGHT
BOL	=	EXISTING BOLLARD
GP	=	GATE POST
	=	TRANSFORMER
	=	RIGHT-OF-WAY LINE
R.O.W.	=	RIGHT-OF-WAY
F.F.E.	=	FINISH FLOOR ELEVATION
12	=	PARKING COUNT
	=	ADA PARKING
BSL	=	BUILDING SETBACK LINE
ESMT	=	EASEMENT
D&UE	=	DRAINAGE AND UTILITY EASEMENT
• PKF	=	EXISTING IRON PIN & OR PK (SET/FOUND)
	=	EXISTING TREE LINE
	=	PROPOSED DIRECTIONAL SIGN

PLAN CERTIFICATE NOTE:

ORIGINAL ALTA, TOPOGRAPHY, UTILITIES, STORM SEWERS, AND ALL OTHER EXISTING CONDITIONS ITEMS WERE PREPARED BY BANNING ENGINEERING.

FINAL DRAWINGS FOR THE IN FRANKLIN MORTON, LLC SITE WERE PREPARED BY WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER. FINAL CONSTRUCTION PLANS ARE THOSE PLANS CONTAINING A FINAL REVISION DATE AFTER 03/17/2016. WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER ACCEPT RESPONSIBILITY ONLY FOR THE IN FRANKLIN MORTON, LLC SITE IMPROVEMENTS RELATED TO THE ENGINEERING WORK SHOWN ON THESE PLANS.

N W E S

SCALE: 1" = 50'

0 25 50 100

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

Within Indiana Call 811 or 800–382–5544
24 Hours a Day, 7 Days a Week.

PER INDIANA STATE LAW IC 8–1–26, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net

317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 *fax*

ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

REVISIONS AND ISSUES	DATE:	BY:
CITY SUBMITTAL	03.17.2016	BJS

PROJECT NA: W15.0351
DWG NAME: w150351-C210 DM.dwg
DESIGNED BY: BJS/SMM
DRAWN BY: RAM
CHECKED BY: BJS
DATE: 02.17.2016

STEVEN SCOTT RUCKER
REGISTERED
PE.11300279
STATE OF INDIANA
PROFESSIONAL ENGINEER
NOT APPROVED UNLESS SIGNED

STEVEN SCOTT RUCKER P.E. 11300279

PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

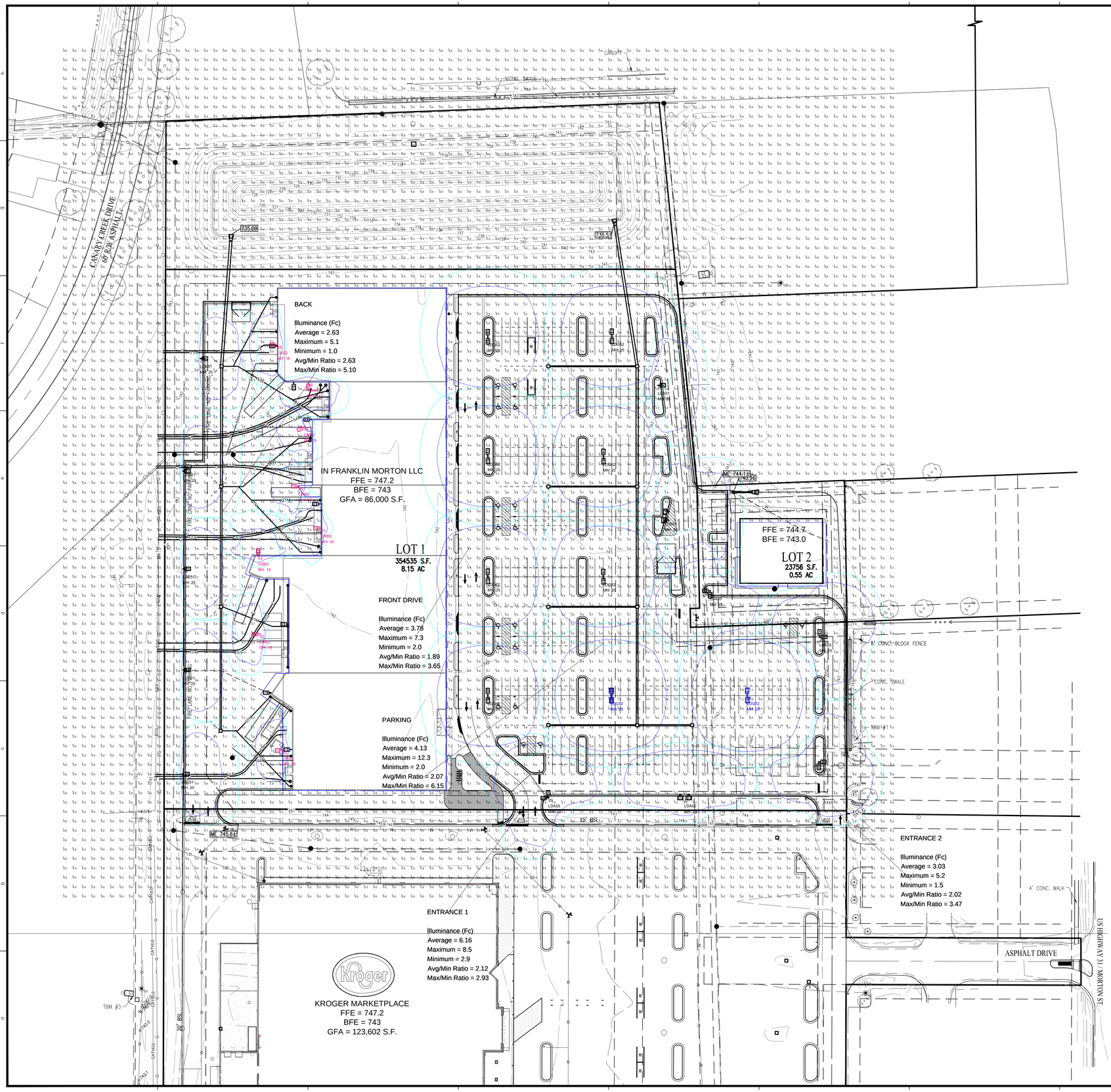
DIMENSION PLAN

Part of the NE/4 of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C203

PROJECT NO.
W15.0351

LOCATION: H:\2015\W150351\Engineering\design\consel\w150351-C210 DM.dwg
LAYOUT: C203
DATE/TIME: March 17, 2016 – 12:05pm
PLOTTED By: schaefb



Luminaire Location Summary						
LumNo	Label	X	Y	Z	Orient	Tilt
1	LDG62	468.602	603.837	25	90	0
2	LDG62	468.602	476.837	25	90	0
3	LDG62	468.602	348.837	25	90	0
4	LDG62	468.602	221.837	25	90	0
5	LDG62	600.533	604.354	25	90	0
6	LDG62	591.598	476.384	25	90	0
7	LDG62	591.533	348.578	25	90	0
8	LDG72	599.468	221.966	25	90	0
15	LDG72	744.646	222.036	25	90	0
17	LDB52	657.244	413.105	25	0	0
18	LDA51	649.71	552.19	25	0	0
19	LDA55	705.071	333.516	25	225	0
20	LDA55	533.144	112.99	25	135	0
21	LDA52	677.909	112.989	25	90	0
25	LDA55	820.67	151.364	25	315	0
26	LDA55	821.689	284.272	25	45	0
27	LDE51	162.648	580.763	25	0	0
28	LDE51	145.005	465.46	25	0	0
29	LDE51	144.32	356.811	25	0	0
30	LDE51	144.165	249.182	25	0	0
31	LDE51	143.039	138.41	25	0	0
32	LWA2	250.595	163.694	18	180	0
46	LWB2	273.104	507.963	18	207.733	0
48	LWA2	244.558	595.247	18	180	0
49	LWA2	277.505	555.178	18	270	0
51	LWB2	291.231	400.097	18	180	0
52	LWA2	225.932	287.512	18	180	0
53	LWB2	224.33	370.459	18	90	0
54	LWB2	267.43	444.701	18	180	0

* SITE LIGHTING AND PHOTOMETRICS FOR REALTYLINK ARE PROVIDED BY:

EATON APPLICATIONS ENGINEERING
1121 HIGHWAY 74 SOUTH
PEACHTREE CITY, GA 30269

N W E S

SCALE: 1" = 50'
0 25 50 100

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ALLAN H. WEIHE, P.E., L.S. - FOUNDER

REVISIONS AND ISSUES	DATE	BY
CITY SUBMITTAL	03.17.2016	BJS

PROJECT NO.: W15.0351
DWG NAME: w150351-C220 light.dwg
DESIGNED BY: BJS/RAM
DRAWN BY: RAM
CHECKED BY: BJS
DATE: 03.17.2016

STEVEN SCOTT RUCKER
REGISTERED PROFESSIONAL ENGINEER
PE-11300279
STATE OF INDIANA
NOT VALID UNLESS PRINTED ON ALTERED DOCUMENTS

STEVEN SCOTT RUCKER P.E. 11300279

PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

LIGHTING PLAN

Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C204

PROJECT NO.
W15.0351

LOCATION: J:\2015\W150351\Engineering\design\concept\w150351-C220 light.dwg
LAYOUT: C204
DATE/TIME: March 17, 2016 - 12:18pm
PLOTTED BY: schoffb

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Lum. Watts	Lum. Lumens	LLF	Description
	2	LDG72	BACK-BACK	370	38230	0.912	QTY 2 GLEON-AE-07-LED-E1-5WQ
	4	LWA2	SINGLE	109.6	10894	0.912	GWC-AE-02-LED-E1-T3 BLDG MONTED
	4	LWB2	SINGLE	109.5	10922	0.912	GWC-AE-02-LED-E1-T4FT BLDG MOUNTED
	1	LDA51	SINGLE	264	25652	0.912	GLEON-AE-05-LED-E1-T3
	1	LDA52	ROTATED OPTICS	264	25652	0.912	QTY 2 GLEON-AE-05-LED-E1-T3-L90 & GLEON-AE-05-LED-E1-T3-R90
	4	LDA55	2 @ 90°	264	25652	0.912	QTY 2 GLEON-AE-05-LED-E1-T3 2@90
	5	LDE51	SINGLE	264	20815	0.912	GLEON-AE-05-LED-E1-SL4-HSS
	1	LDB52	ROTATED OPTICS	264	25801	0.912	QTY 2 GLEON-AE-05-LED-E1-T4FT-L90 & GLEON-AE-05-LED-E1-T4FT-R90
	7	LDG62	BACK-BACK	315	32327	0.912	QTY 2 GLEON-AE-06-LED-E1-5WQ

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts_1	Illuminance	Fc	1.36	12.3	0.0	N.A.	N.A.
BACK	Illuminance	Fc	2.63	5.1	1.0	2.63	5.10
ENTRANCE 1	Illuminance	Fc	6.16	8.5	2.9	2.12	2.93
ENTRANCE 2	Illuminance	Fc	3.03	5.2	1.5	2.02	3.47
FRONT DRIVE	Illuminance	Fc	3.78	7.3	2.0	1.89	3.65
PARKING	Illuminance	Fc	4.13	12.3	2.0	2.07	6.15

Project Name:

MARKETPLACE
NORTH MORTON ST FRANKLIN, IN

Client:

BRUCE FELDMAN
SPECIFIED LIGHTING SYSTEMS

Drawn By: Arnel Uy

Date: 1/29/2016

Project No: 1600169.AGI

We make no representation as to its completeness, currency or accuracy because of reasons inherent to CAD and the additional digital data used to produce a lighting application. All digital CAD data appear to be extremely accurate, however, this apparent accuracy is an artifact of the techniques used to generate it, and is in no way intended to imply actual accuracy. The user of this data takes full responsibilityfor the accuracy and correctness of all measurements, area, inventories or other data extracted from this, either manually or with the use of a computer. This light level analysis is an estimate only, and is based on estimated reflectance values for interior applications or estimated pole locations based on specified light levels for exterior applications. Any variance from reflectance values, obstructions,light loss factors or dimensional data will affect the actual light levels obtained. This analysis is a mathematical model and can be only as accurate as is permitted by the third party software and the IES standards used. In addition calculated values may vary from actual measurements in certain situations due to variances, such as but not limited to, lamp output, input voltage ballast variances,manufacturing tolerances and application variances. The presence of objects will decrease light levels and may cause some shadowing.
Lighting application drawings are being provided to the recipient of this disclaimer.

Applications Engineering
1121 Highway 74 South
Peachtree City, GA 30269

tel no: 770-486-4579

fax no: 770-486-4599

e-mail:
mkt-lightingapplications@
Eaton.com

* SITE LIGHTING AND PHOTOMETRICS FOR REALTYLINK ARE PROVIDED BY:

EATON APPLICATIONS ENGINEERING
1121 HIGHWAY 74 SOUTH
PEACHTREE CITY, GA 30269

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Indianapolis, Indiana 46280
weihe.net

317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 *fax*

ALLAN H. WEIHE, P.E., L.S. - FOUNDER

REVISIONS AND ISSUES	DATE	BY
CITY SUBMITTAL	02.17.2016	BJS

PROJECT NO.: W15.0351
DWG NAME: w15035L-C220 light.dwg
DESIGNED BY: BJS/RAM
DRAWN BY: RAM
CHECKED BY: BJS
DATE: 02.17.2016

STEVEN SCOTT RUCKER
REGISTERED
PE.11300279
STATE OF INDIANA
PROFESSIONAL ENGINEER
NOT VALID WITHOUT THE ORIGINAL SEAL

STEVEN SCOTT RUCKER P.E. 11300279

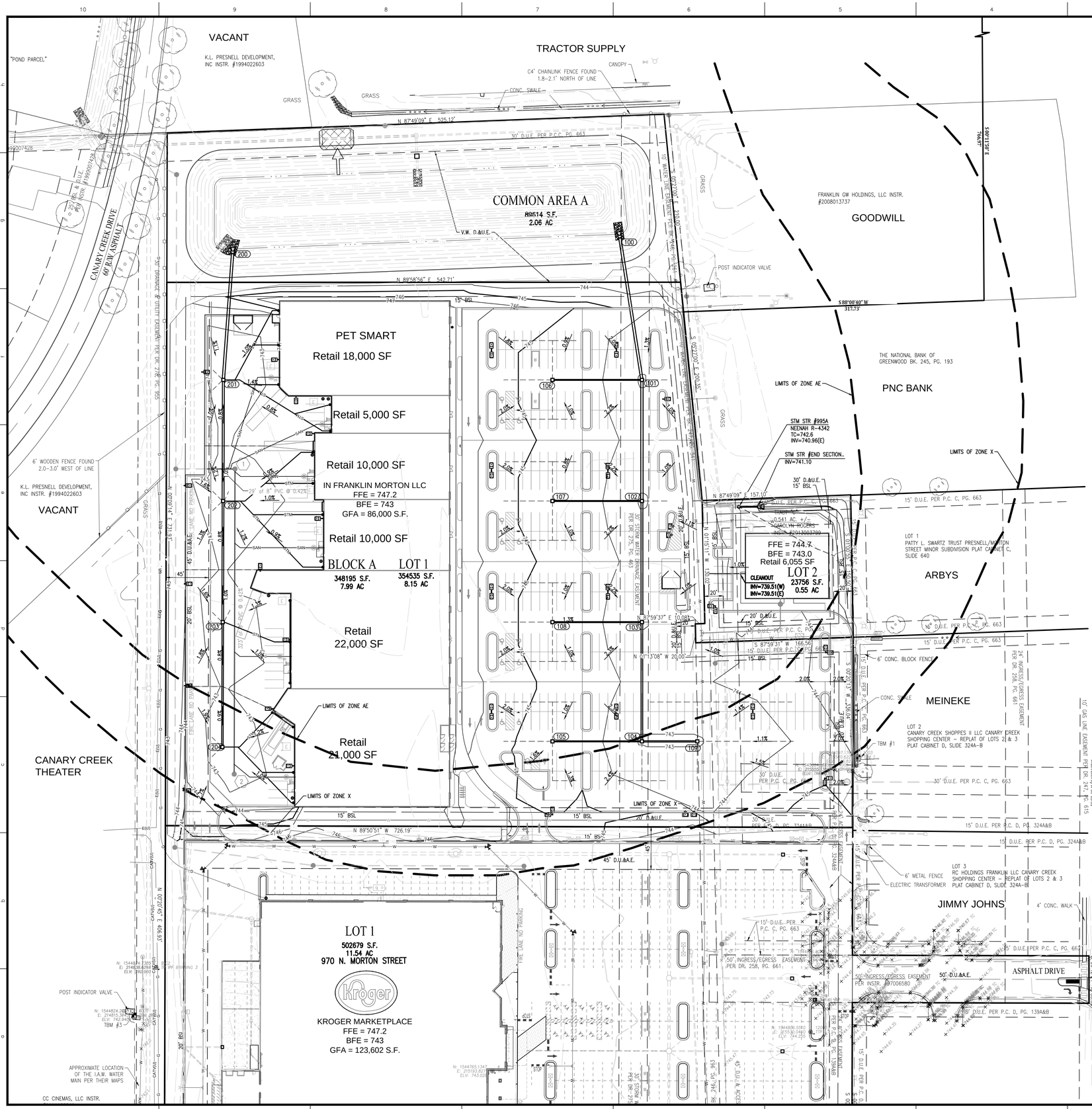
PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

LIGHTING PLAN
Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C205

PROJECT NO.
W15.0351

LOCATION: H:\2015\W15035\Engineering\design\cover\w15035L-C220 light.dwg
LAYOUT: C205
DATE/TIME: March 17, 2016 - 12:18pm
PLOTTED BY: acuetto



LOCATION: H:\2015\W15\0351\Engineering\design\consel\w150351-c300 grad.dwg
USER NAME: STEVEN SCOTT RUCKER
DATE/TIME: March 17, 2016 – 12:03pm
PLOTTED BY: wsgwerz

GENERAL GRADING NOTES

1. REFER TO THE INDIANA DEPARTMENT OF TRANSPORTATION (INDOT) STANDARD SPECIFICATIONS, LATEST EDITION, FOR BASIC MATERIALS AND CONSTRUCTION METHODS. THE SECTIONS BELOW FOR VARIOUS ITEMS ARE TO CLARIFY THE INTENT OF THE REQUIREMENTS FOR THIS PROJECT. PLEASE NOTE THAT OTHER SECTIONS OF THE INDOT STANDARD SPECIFICATIONS MAY ALSO BE APPLICABLE.
2. FILL MATERIAL SHALL CONSIST OF EARTH OBTAINED FROM CUT AREAS, BORROW PITS OR OTHER APPROVED SOURCES. EARTH SHALL BE FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES AND LARGE ROCKS. THE FILL MATERIAL SHALL BE PLACED IN LAYERS NOT TO EXCEED SIX INCHES FOLLOWING COMPACTION. PROPER MOISTURE CONTENT OF FILL MATERIAL WILL BE SUCH TO ACHIEVE SPECIFIED COMPACTION DENSITY AS SPECIFIED IN SPECIFICATION SECTION 312000 EARTH MOVING. FIELD COMPACTING TEST SHALL BE RUN ON EACH LIFT, IN FILL SECTIONS, AND THE REQUIRED COMPACTION ON EACH LIFT SHALL BE IN ACCORDANCE WITH INDOT SECTION 211.
3. MAXIMUM LAWN SLOPE IS 3:1.
4. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES TO LOCATE MAINS, CONDUITS, SERVICE LINES, ETC. IN THE AFFECTED CONSTRUCTION AREA. EXISTING UTILITY STRUCTURES ARE SHOWN HERE IN ACCORDANCE WITH AVAILABLE INFORMATION. THE LOCATION AND PROTECTION OF UTILITY STRUCTURES, THEIR SUPPORT AND MAINTENANCE DURING CONSTRUCTION (IN COOPERATION WITH APPLICABLE UTILITY COMPANY) IS THE EXPRESSED RESPONSIBILITY OF THE CONTRACTOR.
5. ALL SPOT ELEVATIONS ARE TO FINISHED GRADE.
6. COMPACTED "B" BORROW BACK FILL REQ'D. OVER ALL UTILITIES IN PAVED AREAS.
7. ALL GRADES AT BOUNDARY SHALL MEET EXISTING.
8. ANY PART OF SANITARY OR STORM SEWER TRENCHES RUNNING UNDER OR WITHIN 5' OF PAVEMENT TO BE BACKFILLED WITH GRANULAR MATERIAL.
9. ALL CONSTRUCTION ON THIS SITE TO BE PERFORMED IN COMPLIANCE WITH O.S.H.A. STANDARDS FOR WORKER SAFETY.
10. THE CONTRACTOR SHALL CONFIRM ALL EARTHWORK QUANTITIES PRIOR TO THE START OF CONSTRUCTION. IF AN EXCESS OR SHORTAGE OF EARTH IS ENCOUNTERED, THE CONTRACTOR SHALL CONFIRM WITH THE OWNER AND ENGINEER THE REQUIREMENTS FOR STOCKPILING, REMOVAL OR IMPORTING OF EARTH.
11. PROVIDE POSITIVE DRAINAGE WITHOUT PONDING IN ALL AREAS AFTER INSTALLATION. CONTRACTOR TO TEST FOR AND CORRECT ANY PONDING CONDITIONS. ANY AREAS THAT HOLD WATER MORE THAN 1/8" DEEP SHALL BE CUT OUT AND CORRECTED TO POSITIVE DRAINAGE AT NO COST TO THE OWNER/ DEVELOPER/ OR ENGINEER.
12. VERTICAL CURVES, WITH A MINIMUM LENGTH OF 50', SHALL BE USED WHERE POSSIBLE BETWEEN VERTICAL CHANGES IN DIRECTION (SLOPE) TO ALLOW FOR POSITIVE DRAINAGE AND SMOOTH TRANSITIONS.
13. CONTRACTOR TO INSTALL CONCRETE CRADLES WHEN THE VERTICAL SEPARATION (AS MEASURED FROM THE EXTERIOR OF THE PIPES) BETWEEN SANITARY SEWER FACILITIES, WATER MAIN, AND STORM SEWERS IS 18" OR LESS.
14. ALL HDPE PIPE SHALL BE DUAL WALLED, HANCOR HQ, ADS N-12 PIPE OR APPROVED EQUAL
15. ALL FITTINGS AND ACCESSORIES INCLUDING BUT NOT LIMITED TO END CAPS, CLEANOUTS, REDUCERS, ETC., SHALL BE OF HDPE MATERIAL COMPARABLE WITH STORAGE PIPES
16. VERIFY EXISTING STORM INVERT ELEVATIONS PRIOR TO STARTING NEW STORM SEWER CONNECTION
17. THE SITE DOES LIE IN A SPECIAL FLOOD HAZARD AREA 'X' AS ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY - NATIONAL FLOOD INSURANCE PROGRAM, WHEN PLOTTED BY SCALE ON FLOOD INSURANCE RATE MAP #18081C0227 D, DATED AUGUST 2, 2007.

LEGEND

FH	= EXIST. FIRE HYDRANT
WM	= EXIST. WATER METER/VALVE
	= EXIST. SIGN
	= EXIST. MONITOR WELL
PKF	= EXIST. IRON PIN & OR PK (SET/FOUND)
GM GV	= EXIST. GAS METER
	= EXIST. GAS VALVE
	= EXIST. STORM INLET
MH	= EXIST. STORM/SAN./TELE. MANHOLE
EM	= EXIST. ELECTRIC METER
	= EXIST. POWER POLE/POWER POLE w/ LIGHT
GA	= EXIST. GUY ANCHOR
T.Ped. T	= EXIST. TELEPHONE PEDESTAL
AC	= HVAC UNIT
CO	= CLEANOUT
MB	= MAILBOX
	= LIGHT POLE
BOL	= EXIST. BOLLARD
	= EXIST. SANITARY SEWER LINE
	= EXIST. STORM SEWER LINE
892	= EXIST. CONTOURS
	= CONCRETE END SECTION (C.E.S.)
GP	= GATE POST
	= TRANSFORMER
	= RIGHT-OF-WAY LINE
	= PROPOSED SANITARY SEWER LINE
	= PROPOSED STORM SEWER LINE
STM	= PROPOSED HDPE ROOF DRAIN
	= PROPOSED PIPE BOLLARD
	= PROPOSED MANHOLE (MH)
892	= PROPOSED CONTOURS
894.50	= PROPOSED ELEVATION
	= DRAINAGE FLOW ARROW
	= EXISTING TREE LINE
	= PROPOSED DIRECTIONAL SIGN
F.F.E.	= FINISH FLOOR ELEVATION
TC	= TOP OF (MANHOLE / INLET) CASTING
INV	= INVERT ELEVATION
RCP	= REINFORCED CONCRETE PIPE
CMP	= CORRUGATED METAL PIPE
PVC	= POLYVINYL CHLORIDE PIPE
HDPE	= HIGH DENSITY POLYETHYLENE
	= FLOW LINE
STR.	= STRUCTURE
M.E.G. OR M.E.	= MATCH EXISTING GRADE
TOW OR TW	= TOP OF WALL
SSD	= SUB-SURFACE DRAINAGE
TOC	= TOP OF CURB
GUT	= GUTTER
W	= WATER LINE
G	= GAS LINE
OHU	= OVERHEAD UTILITY LINE
T	= TELEPHONE LINE
E	= ELECTRIC LINE
TBM	= TEMPORARY BENCHMARK
	= PARKING COUNT
	= EMERGENCY FLOOD ROUTE

EXISTING AREAS

PERVIOUS	=	9.20 AC.
IMPERVIOUS	=	0.04 AC.

PROPOSED AREAS

PERVIOUS	=	1.31 AC.
IMPERVIOUS	=	7.37 AC.

BENCHMARK INFORMATION

BENCHMARK INFORMATION
DNR TBM CD 1, 1988 IN JOHNSON COUNTY, FRANKLIN QUADRANGLE, IN THE NE ¼ OF SECTION 10, TOWNSHIP 12 NORTH, RANGE 4 EAST, 2ND P.M.; AT FRANKLIN; AT THE U.S. 31 BRIDGE OVER CANARY DITCH; SET IN THE TOP OF THE SOUTHEAST CONCRETE WINGWALL OF THE BRIDGE, 25.8 FEET EAST OF THE CENTERLINE OF THE BRIDGE, 0.6 FOOT NORTH OF THE SOUTH END OF THE WINGWALL 1.0 FOOT BELOW THE LEVEL OF THE ROAD; A "PK" NAIL SET IN A DRILL HOLE, INSIDE A CUT CIRCLE.
2ND ORDER ELEVATION
REVISED ELEVATION 229.240 METERS N.G.V.D. 1929
752.099 FEET N.G.V.D. 1929 (751.693 FEET N.A.V.D.1988)

TBM #1 ELEV: 745.81 CUT SQUARE ON TOP ON A CONCRETE LIGHT BASE ON THE WEST EDGE OF CONCRETE, DUE WEST OF THE SOUTHWEST CORNER OF THE SHERWIN WILLIAMS BUILDING SQUARE IS APPROXIMATELY 15 FEET NORTHEAST OF A DRIVE STUB BEHIND THE BUILDING.

TBM #2 ELEV: 747.77 CUT SQUARE IN THE NORTHWEST CORNER OF A CONCRETE WATER VAULT ON THE EAST SIDE OF THE MIDDLE KOHL'S ENTRANCE LOCATED ON THE SOUTH SIDE OF MALLORY PARKWAY.

TBM #3 ELEV: 742.94 CUT SQUARE IN THE SOUTHEAST CORNER OF A CONCRETE WATER VAULT DUE EAST OF THE SOUTHEAST CORNER OF CANARY CREEK CINEMA BUILDING.

POND

N.P.	= 735.50
2 YR.	= 739.52
10 YR.	= 740.76
100 YR.	= 741.97
SPILLWAY	= 742.00
BOTTOM	= 726.00
BFE	= 743.00

PLAN CERTIFICATE NOTE:

ORIGINAL ALTA, TOPOGRAPHY, UTILITIES, STORM SEWERS, AND ALL OTHER EXISTING CONDITIONS ITEMS WERE PREPARED BY BANNING ENGINEERING.

FINAL DRAWINGS FOR THE IN FRANKLIN MORTON, LLC SITE WERE PREPARED BY WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER. FINAL CONSTRUCTION PLANS ARE THOSE PLANS CONTAINING A FINAL REVISION DATE AFTER 03/17/2016. WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER ACCEPT RESPONSIBILITY ONLY FOR THE IN FRANKLIN MORTON, LLC SITE IMPROVEMENTS RELATED TO THE ENGINEERING WORK SHOWN ON THESE PLANS.

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ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

		BY:
PROJECT NO: W15.0351		
DWG NAME: w150351-C300 grad.dwg		
DESIGNED BY:	BJS/SAM	
DRAWN BY:	RAM	
CHECKED BY:	BJS	
DATE:	02.17.2016	

REVISIONS AND ISSUES	DATE:	BY:
CITY SUBMITTAL	03.17.2016	BJS

STEVEN SCOTT RUCKER
REGISTERED
PE.11300279
STATE OF INDIANA
PROFESSIONAL ENGINEER
NOT VALID UNLESS PRINTED

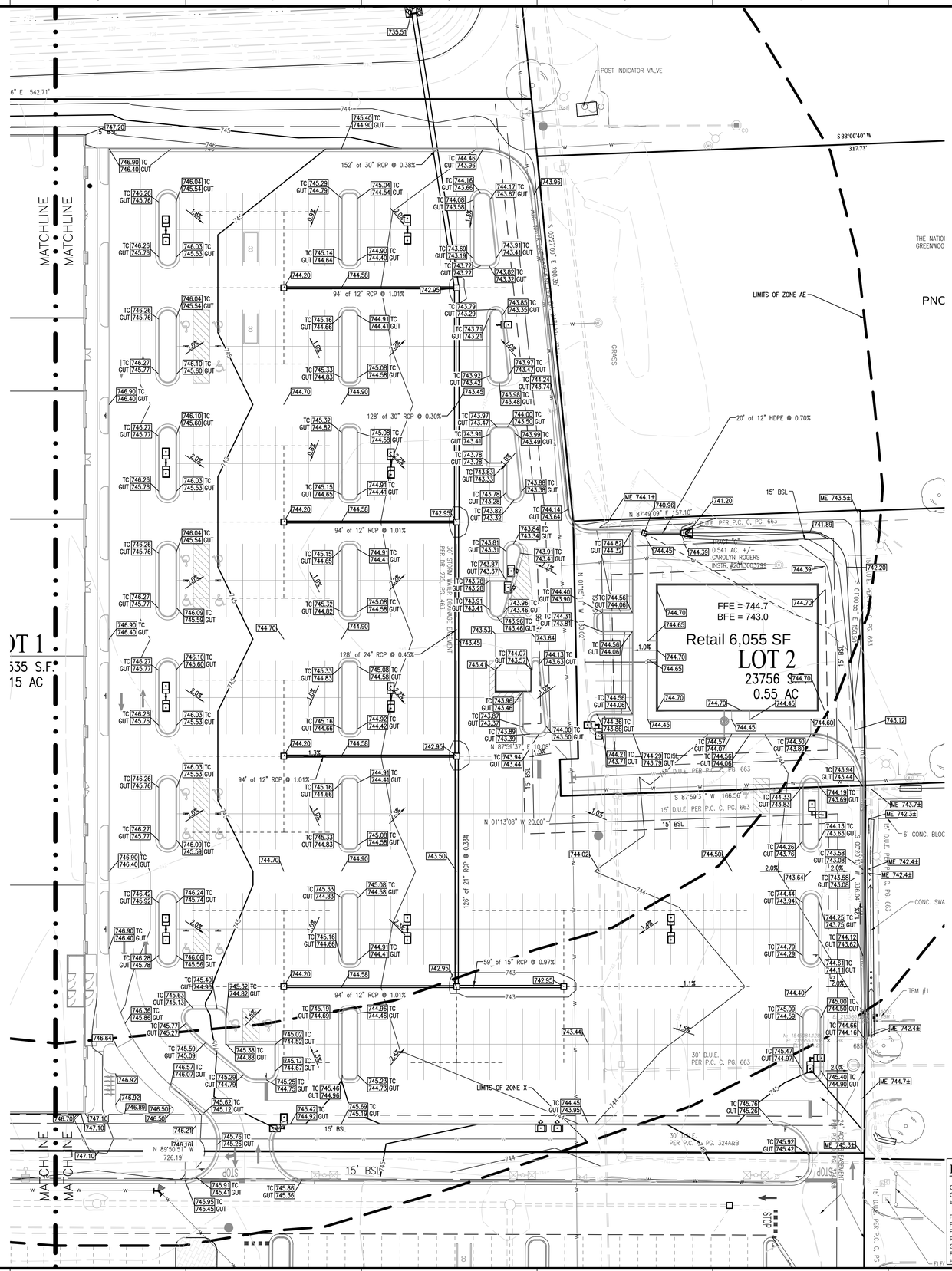
STEVEN SCOTT RUCKER P.E. 11300279

PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

GRADING PLAN
Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C300

PROJECT NO.
W15.0351



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3. MAXIMUM LAWN SLOPE IS 3:1.
4. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES TO LOCATE MAINS, CONDUITS, SERVICE LINES, ETC. IN THE AFFECTED CONSTRUCTION AREA. EXISTING UTILITY STRUCTURES ARE SHOWN HERE IN ACCORDANCE WITH AVAILABLE INFORMATION. THE LOCATION AND PROTECTION OF UTILITY STRUCTURES, THEIR SUPPORT AND MAINTENANCE DURING CONSTRUCTION (IN COOPERATION WITH APPLICABLE UTILITY COMPANY) IS THE EXPRESSED RESPONSIBILITY OF THE CONTRACTOR.
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9. ALL CONSTRUCTION ON THIS SITE TO BE PERFORMED IN COMPLIANCE WITH O.S.H.A. STANDARDS FOR WORKER SAFETY.
10. THE CONTRACTOR SHALL CONFIRM ALL EARTHWORK QUANTITIES PRIOR TO THE START OF CONSTRUCTION. IF AN EXCESS OR SHORTAGE OF EARTH IS ENCOUNTERED, THE CONTRACTOR SHALL CONFIRM WITH THE OWNER AND ENGINEER THE REQUIREMENTS FOR STOCKPILING, REMOVAL OR IMPORTING OF EARTH.
11. PROVIDE POSITIVE DRAINAGE WITHOUT PONDING IN ALL AREAS AFTER INSTALLATION. CONTRACTOR TO TEST FOR AND CORRECT ANY PONDING CONDITIONS. ANY AREAS THAT HOLD WATER MORE THAN 1/8" DEEP SHALL BE CUT OUT AND CORRECTED TO POSITIVE DRAINAGE AT NO COST TO THE OWNER/ DEVELOPER/ OR ENGINEER.
12. VERTICAL CURVES, WITH A MINIMUM LENGTH OF 50', SHALL BE USED WHERE POSSIBLE BETWEEN VERTICAL CHANGES IN DIRECTION (SLOPE) TO ALLOW FOR POSITIVE DRAINAGE AND SMOOTH TRANSITIONS.
13. CONTRACTOR TO INSTALL CONCRETE CRADLES WHEN THE VERTICAL SEPARATION (AS MEASURED FROM THE EXTERIOR OF THE PIPES) BETWEEN SANITARY SEWER FACILITIES, WATER MAIN, AND STORM SEWERS IS 18" OR LESS.
14. ALL HDPE PIPE SHALL BE DUAL WALLED, HANCOR HQ, ADS N-12 PIPE OR APPROVED EQUAL
15. ALL FITTINGS AND ACCESSORIES INCLUDING BUT NOT LIMITED TO END CAPS, CLEANOUTS, REDUCERS, ETC., SHALL BE OF HDPE MATERIAL COMPARABLE WITH STORAGE PIPES
16. PROVIDE BACKFILL WITH A MINIMUM OF 4" BEDDING MATERIAL OF #8 AGGREGATE COMPACTED IN 8" LIFTS TO 95% MAXIMUM DRY DENSITY
17. VERIFY EXISTING STORM INVERT ELEVATIONS PRIOR TO STARTING NEW STORM SEWER CONNECTION
18. THE SITE DOES LIE IN A SPECIAL FLOOD HAZARD AREA 'X' AS ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY - NATIONAL FLOOD INSURANCE PROGRAM, WHEN PLOTTED BY SCALE ON FLOOD INSURANCE RATE MAP #18081C0227 D, DATED AUGUST 2, 2007.

LEGEND

FH	=	EXIST. FIRE HYDRANT
WM	=	EXIST. WATER METER/VALVE
	=	EXIST. SIGN
	=	EXIST. MONITOR WELL
PKF	=	EXIST. IRON PIN & OR PK (SET/FOUND)
GM	=	EXIST. GAS METER
	=	EXIST. GAS VALVE
	=	EXIST. STORM INLET
	=	EXIST. STORM/SAN./TELE. MANHOLE
EM	=	EXIST. ELECTRIC METER
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T.Ped.	=	EXIST. TELEPHONE PEDESTAL
AC	=	HVAC UNIT
CO	=	CLEANOUT
MB	=	MAILBOX
	=	LIGHT POLE
BOL	=	EXIST. BOLLARD
	=	EXIST. SANITARY SEWER LINE
	=	EXIST. STORM SEWER LINE
892	=	EXIST. CONTOURS
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GP	=	GATE POST
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894.50	=	PROPOSED ELEVATION
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OHU	=	OVERHEAD UTILITY LINE
T	=	TELEPHONE LINE
E	=	ELECTRIC LINE
TBM	=	TEMPORARY BENCHMARK
	=	PARKING COUNT
	=	EMERGENCY FLOOD ROUTE

PLAN CERTIFICATE NOTE:

ORIGINAL ALTA, TOPOGRAPHY, UTILITIES, STORM SEWERS, AND ALL OTHER EXISTING CONDITIONS ITEMS WERE PREPARED BY BANNING ENGINEERING.

FINAL DRAWINGS FOR THE IN FRANKLIN MORTON, LLC SITE WERE PREPARED BY WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER. FINAL CONSTRUCTION PLANS ARE THOSE PLANS CONTAINING A FINAL REVISION DATE AFTER 03/17/2016. WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER ACCEPT RESPONSIBILITY ONLY FOR THE IN FRANKLIN MORTON, LLC SITE IMPROVEMENTS RELATED TO THE ENGINEERING WORK SHOWN ON THESE PLANS.

N W E S

SCALE: 1" = 30'

0 15 30 60

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Indianapolis, Indiana 46280
weihe.net

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800 | 452 - 6408
317 | 843 - 0546 fax

ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS

Land Surveying | Civil Engineering
Landscape Architecture

DATE:	BY:	REVISIONS AND ISSUES
03.17.2016	B.J.S.	CITY SUBMITTAL

PROJECT NO.: W15.0351
DWG NAME: w150351-C300 grading quad.dwg
DESIGNED BY: B.J.S/HAM
DRAWN BY: HAM
CHECKED BY: B.J.S
DATE: 02.17.2016

STEVEN SCOTT RUCKER
REGISTERED
PE.11-300279
STATE OF INDIANA
PROFESSIONAL ENGINEER
NOT VALID WITHOUT THE ORIGINAL SEAL

STEVEN SCOTT RUCKER P.E. 11300279

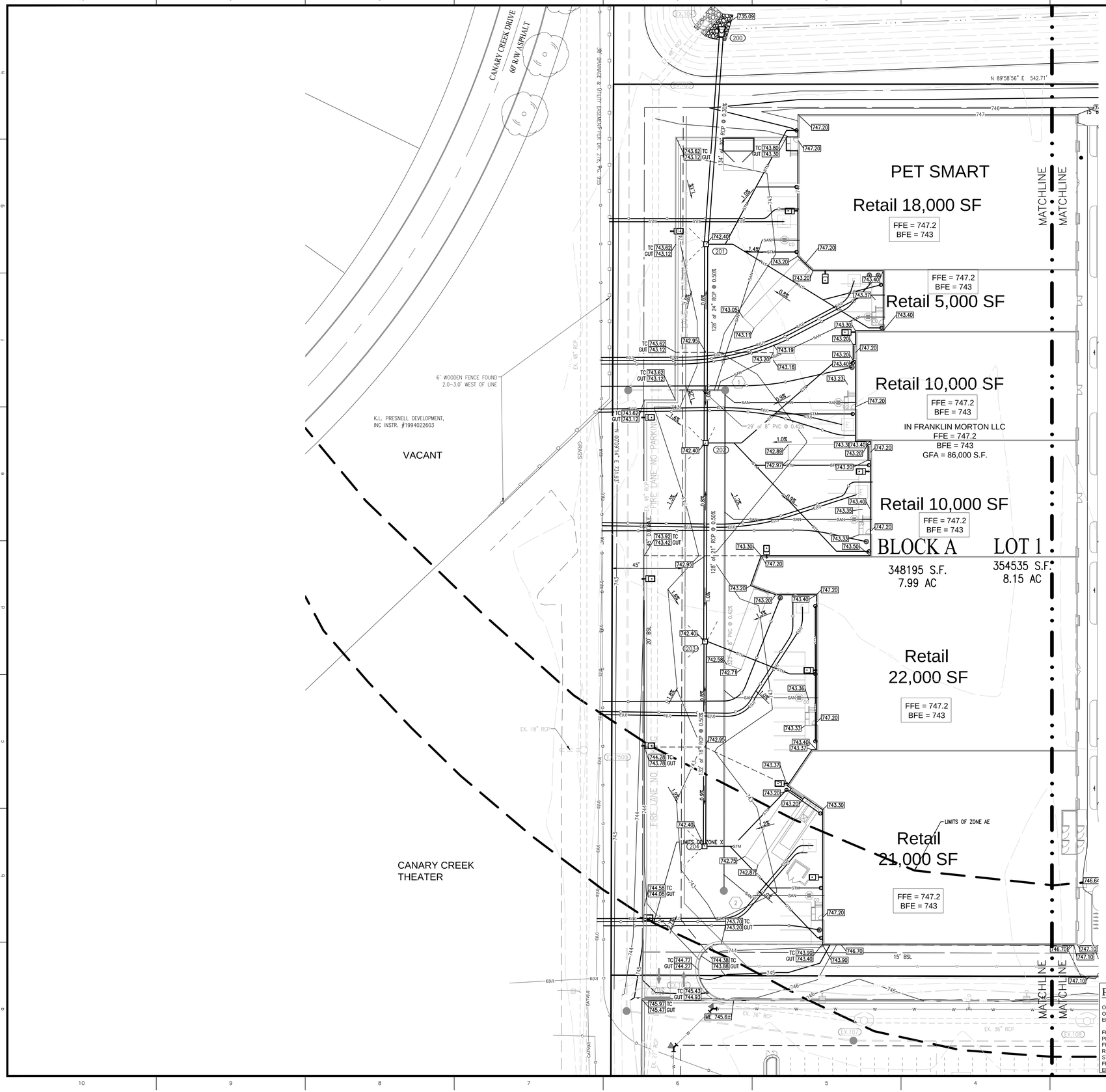
PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

ENLARGED GRADING PLAN
Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C301

PROJECT NO.
W15.0351

LOCATION: H:\2015\W150351\Engineering\design\conset\w150351-C300 grading quad.dwg
LAYOUT: C301
DATE/TIME: March 17, 2016 - 12:04pm
PLOTTED BY: wagnerb



GENERAL GRADING NOTES

1. REFER TO THE INDIANA DEPARTMENT OF TRANSPORTATION (INDOT) STANDARD SPECIFICATIONS, LATEST EDITION, FOR BASIC MATERIALS AND CONSTRUCTION METHODS. THE SECTIONS BELOW FOR VARIOUS ITEMS ARE TO CLARIFY THE INTENT OF THE REQUIREMENTS FOR THIS PROJECT. PLEASE NOTE THAT OTHER SECTIONS OF THE INDOT STANDARD SPECIFICATIONS MAY ALSO BE APPLICABLE.
2. FILL MATERIAL SHALL CONSIST OF EARTH OBTAINED FROM CUT AREAS, BORROW PITS OR OTHER APPROVED SOURCES. EARTH SHALL BE FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES AND LARGE ROCKS. THE FILL MATERIAL SHALL BE PLACED IN LAYERS NOT TO EXCEED SIX INCHES FOLLOWING COMPACTION, PROPER MOISTURE CONTENT OF FILL MATERIAL WILL BE SUCH TO ACHIEVE SPECIFIED COMPACTION DENSITY. ALL FILL BENEATH PAVED AREAS, FLOOR SLABS AND FUTURE BUILDINGS SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY PER ASTM D-1557. FIELD COMPACTING TEST SHALL BE RUN ON EACH LIFT, IN FILL SECTIONS, AND THE REQUIRED COMPACTION ON EACH LIFT SHALL BE IN ACCORDANCE WITH INDOT SECTION 211.
3. MAXIMUM LAWN SLOPE IS 3:1.
4. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES TO LOCATE MAINS, CONDUITS, SERVICE LINES, ETC. IN THE AFFECTED CONSTRUCTION AREA. EXISTING UTILITY STRUCTURES ARE SHOWN HERE IN ACCORDANCE WITH AVAILABLE INFORMATION. THE LOCATION AND PROTECTION OF UTILITY STRUCTURES, THEIR SUPPORT AND MAINTENANCE DURING CONSTRUCTION (IN COOPERATION WITH APPLICABLE UTILITY COMPANY) IS THE EXPRESSED RESPONSIBILITY OF THE CONTRACTOR.
5. ALL SPOT ELEVATIONS ARE TO FINISHED GRADE.
6. COMPACTED "B" BORROW BACK FILL REQ'D. OVER ALL UTILITIES IN PAVED AREAS.
7. ALL GRADES AT BOUNDARY SHALL MEET EXISTING.
8. ANY PART OF SANITARY OR STORM SEWER TRENCHES RUNNING UNDER OR WITHIN 5' OF PAVEMENT TO BE BACKFILLED WITH GRANULAR MATERIAL.
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PLAN CERTIFICATE NOTE:

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ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

PROJECT NO.	W15.0351	
DWG NAME:	w150351-C300 grading quad.dwg	
DESIGNED BY:	BJS/BAM	
DRAWN BY:	RAM	
CHECKED BY:	BJS	
DATE:	03.17.2016	

REVISIONS AND ISSUES FOR CITY SUBMITTAL	DATE:	BY:
	03.17.2016	BJS

STEVEN SCOTT RUCKER
REGISTERED
PE.11300279
STATE OF INDIANA
PROFESSIONAL ENGINEER
NOT VALID UNLESS PRINTED

STEVEN SCOTT RUCKER P.E. 11300279

PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

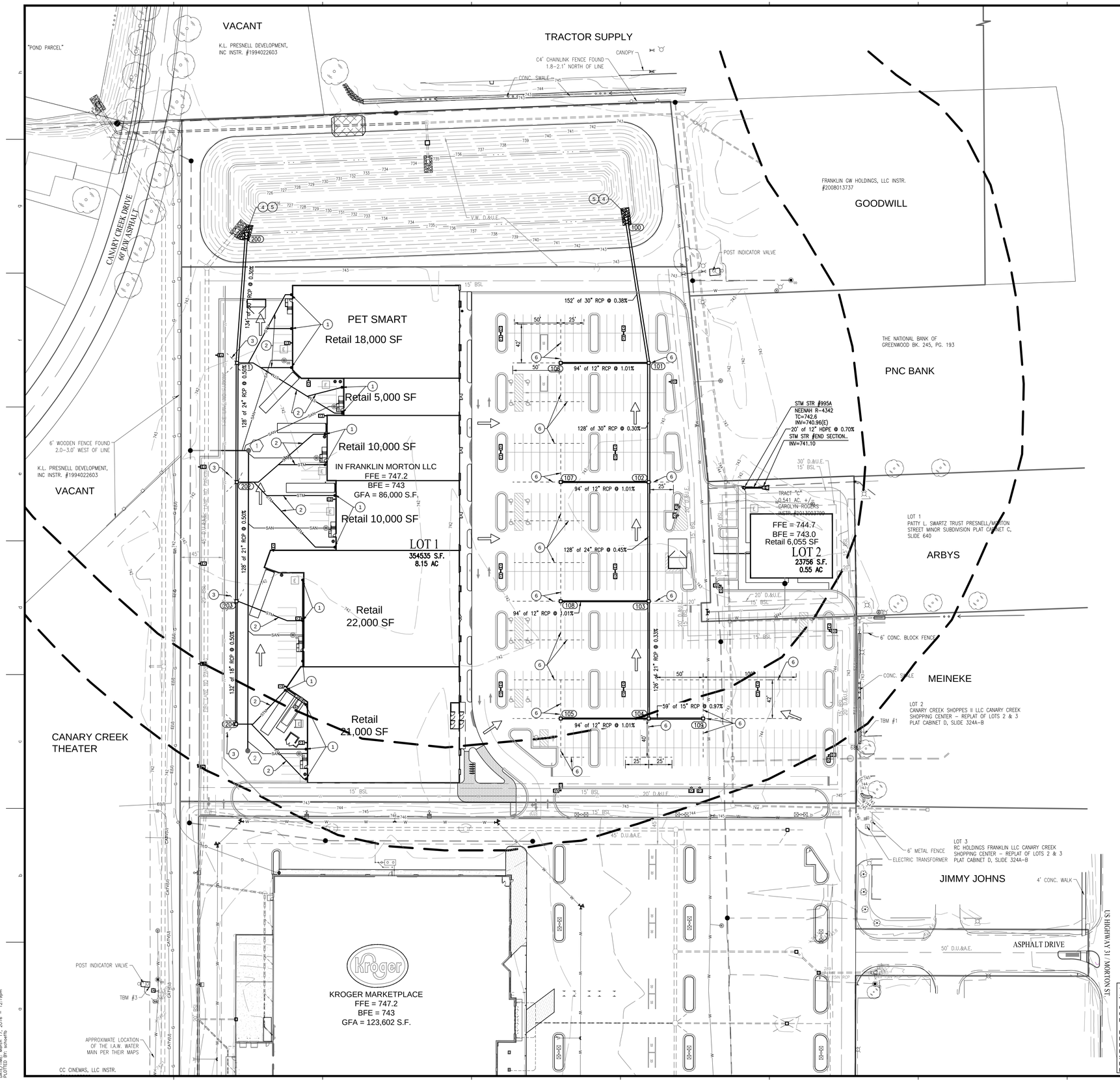
ENLARGED GRADING PLAN

Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C302

PROJECT NO.
W15.0351

LOCATION: H:\2015\W150351\Engineering\design\consel\w150351-c300 grading quad.dwg
LAYOUT: C302
DATE/TIME: March 17, 2016 - 12:04pm
PLOTTED BY: wagnerc



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TBM	=	TEMPORARY BENCHMARK
XX	=	PARKING COUNT
	=	EMERGENCY SPILLWAY

DRAINAGE PLAN NOTES

1. 6" PVC ROOF DRAIN @ 1.0% MINIMUM, START INVERT = 744.0.
2. 8" AND 10" PVC ROOF DRAINS LATERALS SEE PLAN FOR MINIMUM SLOPE, CONNECT TO MAIN WITH WYE AND REDUCER PIPE FITTINGS.
3. 10' OF 4" SUBSURFACE DRAINS
4. INSTALL 10' x 20' x 1.5' REVETMENT RIP-RAP ON FILTER FABRIC
5. PROVIDE TRASH/DEBRIS GUARD AT THE END SECTION PIPE.
6. 4" SUBSURFACE DRAINS ARE RECOMMENDED TO BE PLACED WITHIN THE PARKING AND DRIVE AISLES 2'-3' BENEATH THE GRANULAR BASE COURSE LAYER PER GEOTECH REPORT BY ALT & WITZIG (15N0340) DATED JUNE 1, 2015. ADDITIONAL SUBSURFACE DRAINS MAY BE REQUIRED DURING CONSTRUCTION.

GENERAL NOTES

1. ALL HDPE PIPE SHALL BE DUAL WALLED, HANCOR HQ, ADS N-12 PIPE OR APPROVED EQUAL
2. ALL FITTINGS AND ACCESSORIES INCLUDING BUT NOT LIMITED TO END CAPS, CLEANOUTS, REDUCERS, ETC., SHALL BE OF HDPE MATERIAL COMPARABLE WITH STORAGE PIPES
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BENCHMARK INFORMATION

BENCHMARK INFORMATION
DNR TBM CD 1, 1988 IN JOHNSON COUNTY, FRANKLIN QUADRANGLE, IN THE NE ¼ OF SECTION 10, TOWNSHIP 12 NORTH, RANGE 4 EAST, 2ND P.M.; AT FRANKLIN; AT THE U.S. 31 BRIDGE OVER CANARY DITCH; SET IN THE TOP OF THE SOUTHEAST CONCRETE WINGWALL OF THE BRIDGE, 25.8 FEET EAST OF THE CENTERLINE OF THE BRIDGE, 0.6 FOOT NORTH OF THE SOUTH END OF THE WINGWALL 1.0 FOOT BELOW THE LEVEL OF THE ROAD; A "PK" NAIL SET IN A DRILL HOLE, INSIDE A CUT CIRCLE.
2ND ORDER ELEVATION
REVISED ELEVATION 229.240 METERS N.G.V.D. 1929
752.099 FEET N.G.V.D. 1929 (751.693 FEET N.A.V.D.1988)

TBM #1 ELEV: 745.81 CUT SQUARE ON TOP ON A CONCRETE LIGHT BASE ON THE WEST EDGE OF CONCRETE, DUE WEST OF THE SOUTHWEST CORNER OF THE SHERWIN WILLIAMS BUILDING SQUARE IS APPROXIMATELY 15 FEET NORTHEAST OF A DRIVE STUB BEHIND THE BUILDING.

TBM #2 ELEV: 747.77 CUT SQUARE IN THE NORTHWEST CORNER OF A CONCRETE WATER VAULT ON THE EAST SIDE OF THE MIDDLE KOHL'S ENTRANCE LOCATED ON THE SOUTH SIDE OF MALLORY PARKWAY.

TBM #3 ELEV: 742.94 CUT SQUARE IN THE SOUTHEAST CORNER OF A CONCRETE WATER VAULT DUE EAST OF THE SOUTHEAST CORNER OF CANARY CREEK CINEMA BUILDING.

PLAN CERTIFICATE NOTE:

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317 | 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

		BY:
PROJECT NO.: W15.0351		
DWG NAME: w15035L-C600 drain.dwg		
DESIGNED BY: BJSHAM		
DRAWN BY: RAM		
CHECKED BY: BJS		
DATE: 03.17.2016	DATE: 03.17.2016	BJS

BENNING NOTINGS AND COMMENTS
CITY SUBMITTAL

STEVEN SCOTT RUCKER
REGISTERED
PE.11300279
STATE OF INDIANA
PROFESSIONAL ENGINEER
NOT VALID UNLESS PRINTED

STEVEN SCOTT RUCKER P.E. 11300279

PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

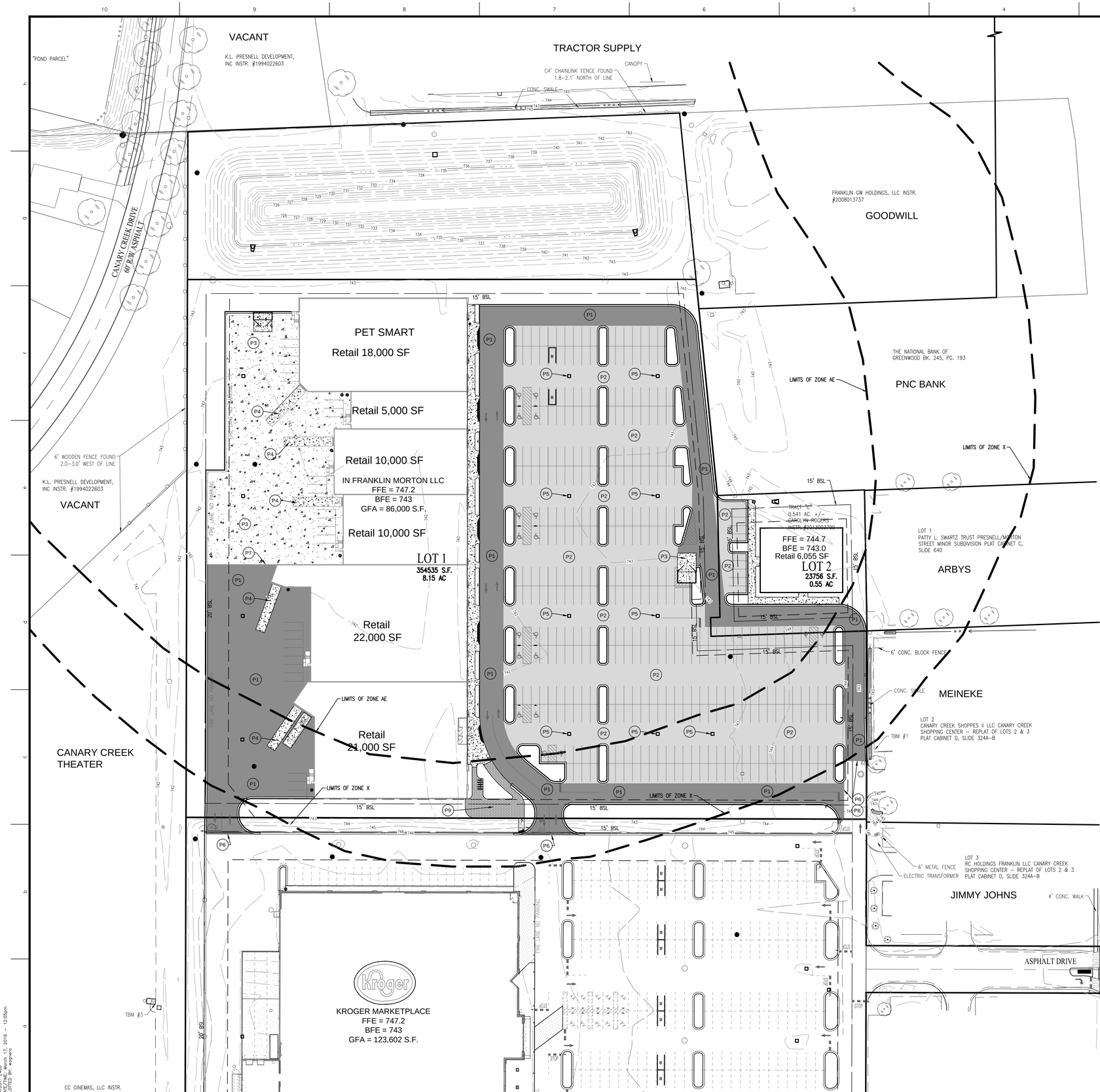
DRAINAGE AND FLOOD ROUTING PLAN

Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C303

PROJECT NO.
W15.0351

LOCATION: H:\2015\W15035\1\Engineering\design\consent\w15035l-C600 grdnr.dwg
LAYOUT: 1 - 24x36 ARCH E1 - 1 PLAN
DATE/TIME: March 17, 2016 - 12:18pm
PLOTTED BY: scrucker



PAVEMENT PLAN NOTES

HARDSCAPE

- P1 HEAVY DUTY ASPHALT PAVING
- P2 STANDARD DUTY ASPHALT PAVING
- P3 HEAVY DUTY CONCRETE WITH 1' CHAMFERED CORNERS
- P4 HEAVY DUTY CONCRETE FOR TRUCK DOCK RAMPS
- P5 STORM INLET WITH CONCRETE APRON SHOWN ON SHEET C602
- P6 MATCH EXISTING PAVEMENT
- P7 JOINT BETWEEN HEAVY DUTY ASPHALT AND HEAVY DUTY CONCRETE PAVEMENT
- P8 EXISTING DRIVES TO ADJACENT BUSINESSES TO BE OPEN AND AVAILABLE FOR ACCESS DURING CONSTRUCTION.
- P9 2000 S.F. PUBLIC AREA REQUIRED BY CITY ORDINANCE. USE DECORATIVE STAMPED CONCRETE.

PLAN LEGEND

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	=	TRANSFORMER
	=	RIGHT-OF-WAY LINE
R.O.W.	=	RIGHT-OF-WAY
F.F.E.	=	FINISH FLOOR ELEVATION
12	=	PARKING COUNT
	=	ADA PARKING
BSL	=	BUILDING SETBACK LINE
ESMT	=	EASEMENT
D&UE	=	DRAINAGE AND UTILITY EASEMENT
• PKF	=	EXISTING IRON PIN & OR PK (SET/FOUND)
	=	EXISTING TREE LINE
	=	PROPOSED DIRECTIONAL SIGN

HATCH LEGEND

PAVEMENT

- STANDARD DUTY ASPHALT
- HEAVY DUTY ASPHALT
- HEAVY DUTY CONCRETE
- DECORATIVE STAMPED CONCRETE

PLAN CERTIFICATE NOTE:

ORIGINAL ALTA, TOPOGRAPHY, UTILITIES, STORM SEWERS, AND ALL OTHER EXISTING CONDITIONS ITEMS WERE PREPARED BY BANNING ENGINEERING.

FINAL DRAWINGS FOR THE IN FRANKLIN MORTON, LLC SITE WERE PREPARED BY WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER. FINAL CONSTRUCTION PLANS ARE THOSE PLANS CONTAINING A FINAL REVISION DATE AFTER 03/17/2016. WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER ACCEPT RESPONSIBILITY ONLY FOR THE IN FRANKLIN MORTON, LLC SITE IMPROVEMENTS RELATED TO THE ENGINEERING WORK SHOWN ON THESE PLANS.

N W E S

SCALE: 1" = 50'

0 25 50 100

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Within Indiana Call 811 or 800-382-5544
24 Hours a Day, 7 Days a Week.

PER INDIANA STATE LAW IC 8-1-26, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net

317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 *fax*

ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS

Land Surveying | Civil Engineering
Landscape Architecture

	DATE:	BY:
REVISIONS AND ISSUES	03.17.2016	BJS
CITY SUBMITTAL		

PROJECT NO.: W15.0351
DWG NAME: w150351-C400 paver.dwg
DESIGNED BY: BJS/BAM
DRAWN BY: BAM
CHECKED BY: BJS
DATE: 02.17.2016

STEVEN SCOTT RUCKER
REGISTERED
P.E. 11300279
STATE OF INDIANA
PROFESSIONAL ENGINEER
APPROVED PER ORIGINAL
NOT VALID WITHOUT SIGNATURE

STEVEN SCOTT RUCKER P.E. 11300279

PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

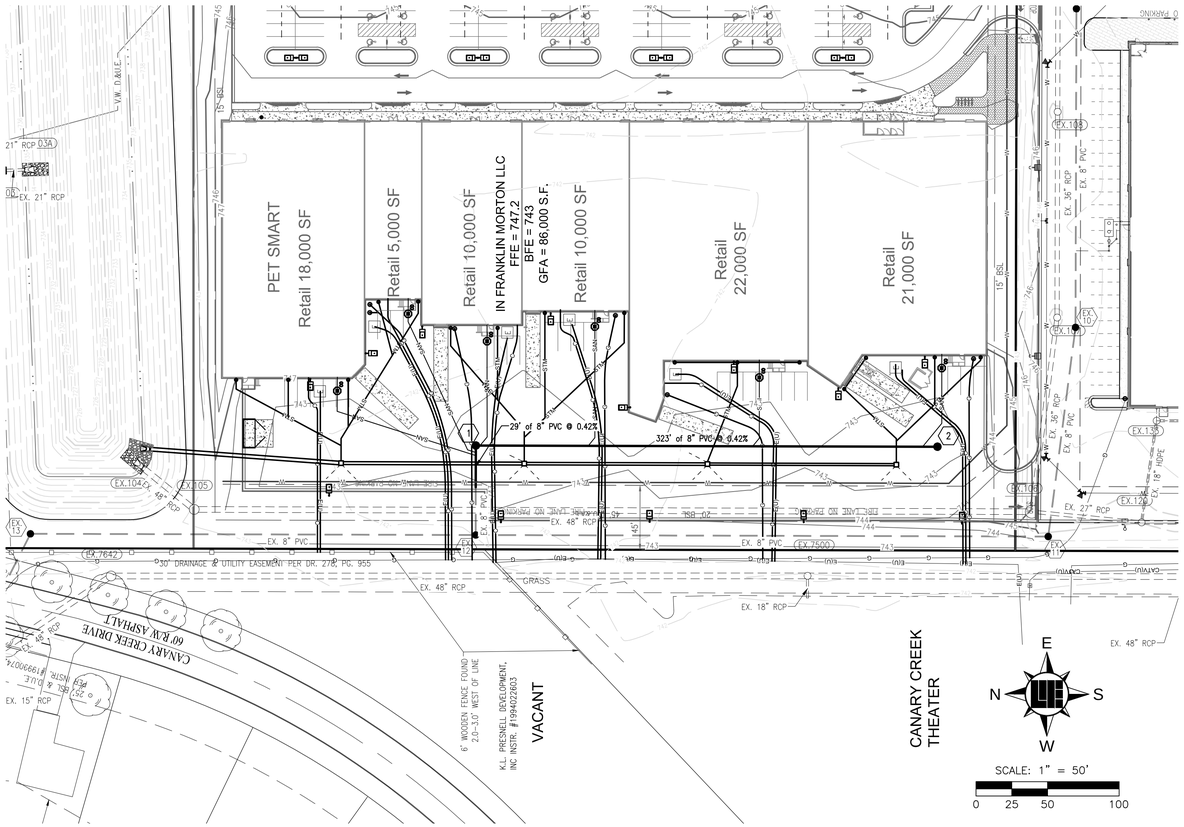
PAVING PLAN

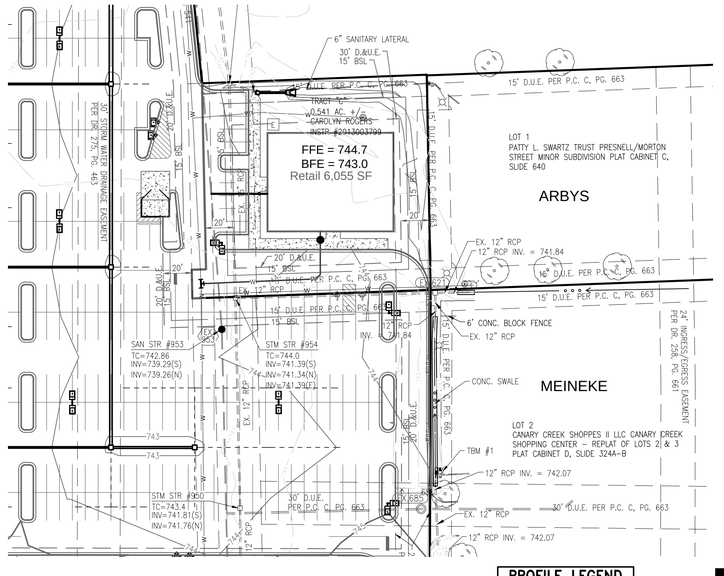
Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C400

PROJECT NO.
W15.0351

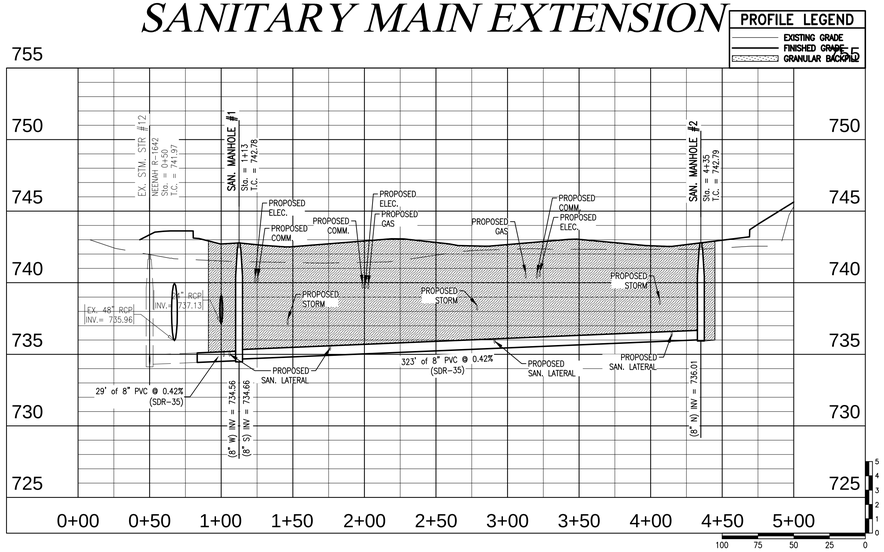
LOCATION: H:\2015\W150351\Engineering\Design\consel\w150351-c400 paver.dwg
LAYOUT: C400 PAVING PLAN
DATE/TIME: March 17, 2016 - 12:05pm
PLOTTED BY: wagnerd





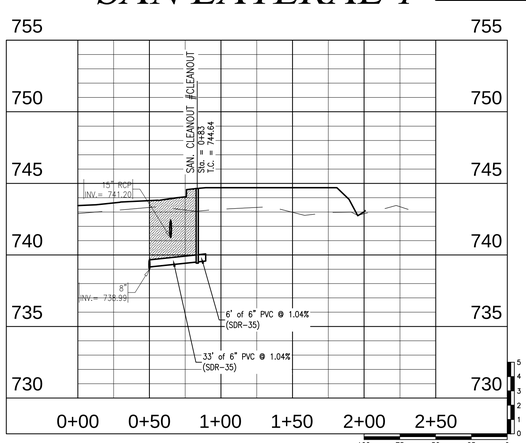
SANITARY MAIN EXTENSION

PROFILE LEGEND
EXISTING GRADE
FINISHED GRADE
GRANULAR BACKFILL



SAN LATERAL 1

PROFILE LEGEND
EXISTING GRADE
FINISHED GRADE
GRANULAR BACKFILL



-NOTE-
RUN WATER LINE A MINIMUM OF 54" DEEP.
PROVIDE MINIMUM OF 10' HORIZONTAL & 18" VERTICAL CLEARANCE BETWEEN WATER & SANITARY LINE. SANITARY SEWER LINE IN PROXIMITY OF WATER LINE SHALL BE C900 WATER MAIN GRADE PVC.

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317 | 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

PROJECT NO.:	W15.0351
DWG NAME:	w150351-C500 san prp.dwg
DESIGNED BY:	BJS/RAM
DRAWN BY:	RAM
CHECKED BY:	BJS
DATE:	03.17.2016

REVISIONS AND ISSUES	DATE:	BY:
CITY SUBMITTAL	03.17.2016	BJS

STEVEN SCOTT RUCKER
REGISTERED
PE11300279
STATE OF INDIANA
PROFESSIONAL ENGINEER
ALL NOTES AND DRAWINGS ARE NOT TO BE REPRODUCED

STEVEN SCOTT RUCKER P.E. 11300279

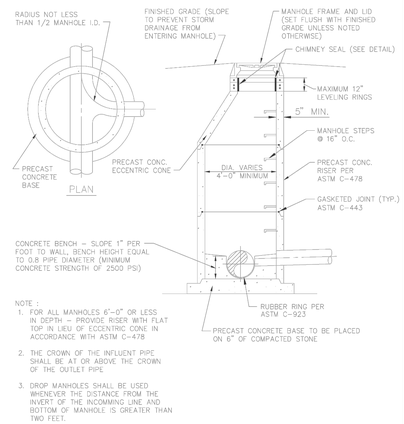
PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

SANITARY SEWER PLAN AND PROFILE
Part of the NE/4 of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C500

PROJECT NO.
W15.0351

LOCATION: H:\2015\W150351\Engineering\design\consent\w150351-C500 san prp.dwg
LAYOUT: C500
DATE/TIME: March 17, 2016 - 12:06pm
PLOTTED BY: wagner



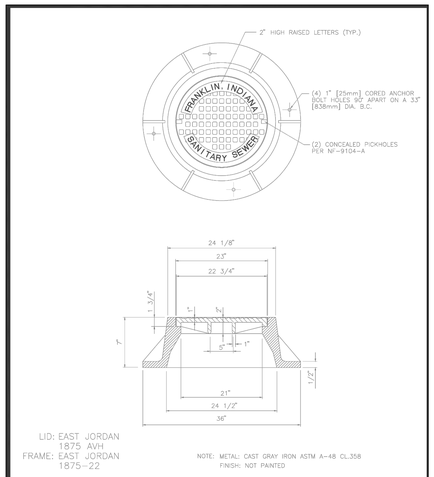
STANDARD MANHOLE DETAIL

REVISION DATE

CITY of FRANKLIN, INDIANA

DPW

FIGURE



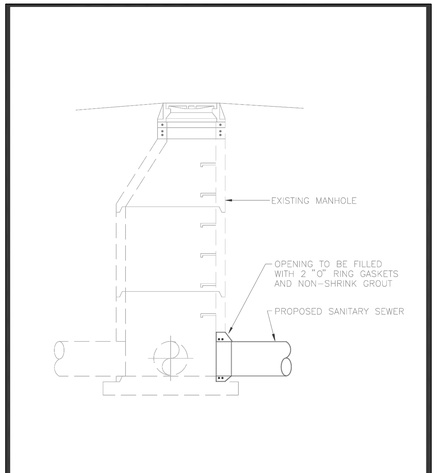
STANDARD FRAME AND LID

REVISION DATE

CITY of FRANKLIN, INDIANA

DPW

FIGURE



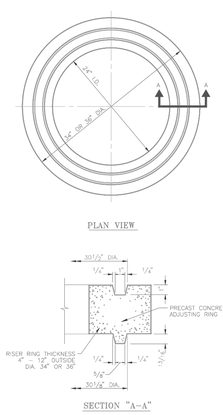
TYPICAL EXISTING MANHOLE ENTRY DETAIL

REVISION DATE

CITY of FRANKLIN, INDIANA

DPW

FIGURE



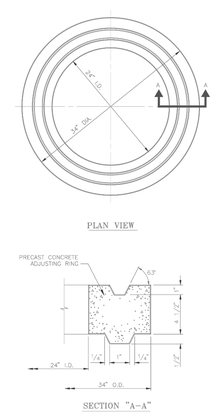
TYPICAL 5/8" ADJUSTING RING

REVISION DATE

CITY of FRANKLIN, INDIANA

DPW

FIGURE



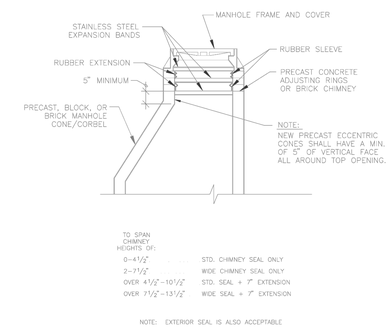
TYPICAL 1" ADJUSTING RING

REVISION DATE

CITY of FRANKLIN, INDIANA

DPW

FIGURE



TO SPAN CHIMNEY HEIGHTS OF:	
0-4 1/2"	STD. CHIMNEY SEAL ONLY
2-7 1/2"	WIDE CHIMNEY SEAL ONLY
OVER 4 1/2"-10 1/2"	STD. SEAL + 7" EXTENSION
OVER 7 1/2"-13 1/2"	WIDE SEAL + 7" EXTENSION

NOTE: EXTERIOR SEAL IS ALSO ACCEPTABLE

TYPICAL CHIMNEY SEAL DETAIL

REVISION DATE

CITY of FRANKLIN, INDIANA

DPW

FIGURE

10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net

317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 *fax*

ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS

Land Surveying | Civil Engineering
Landscape Architecture

REVISIONS AND ISSUES	DATE	BY
CITY SUBMITTAL	03.17.2016	BJS

PROJECT NO.: W15.0351
DWG NAME: w150351-C500 details.dwg
DESIGNED BY: BJS/SHAM
DRAWN BY: RAM
CHECKED BY: BJS
DATE: 03.17.2016

STEVEN SCOTT RUCKER
REGISTERED
PE.11300279
STATE OF INDIANA
PROFESSIONAL ENGINEER
NOT VALID WITHOUT THE ORIGINAL SEAL

STEVEN SCOTT RUCKER P.E. 11300279

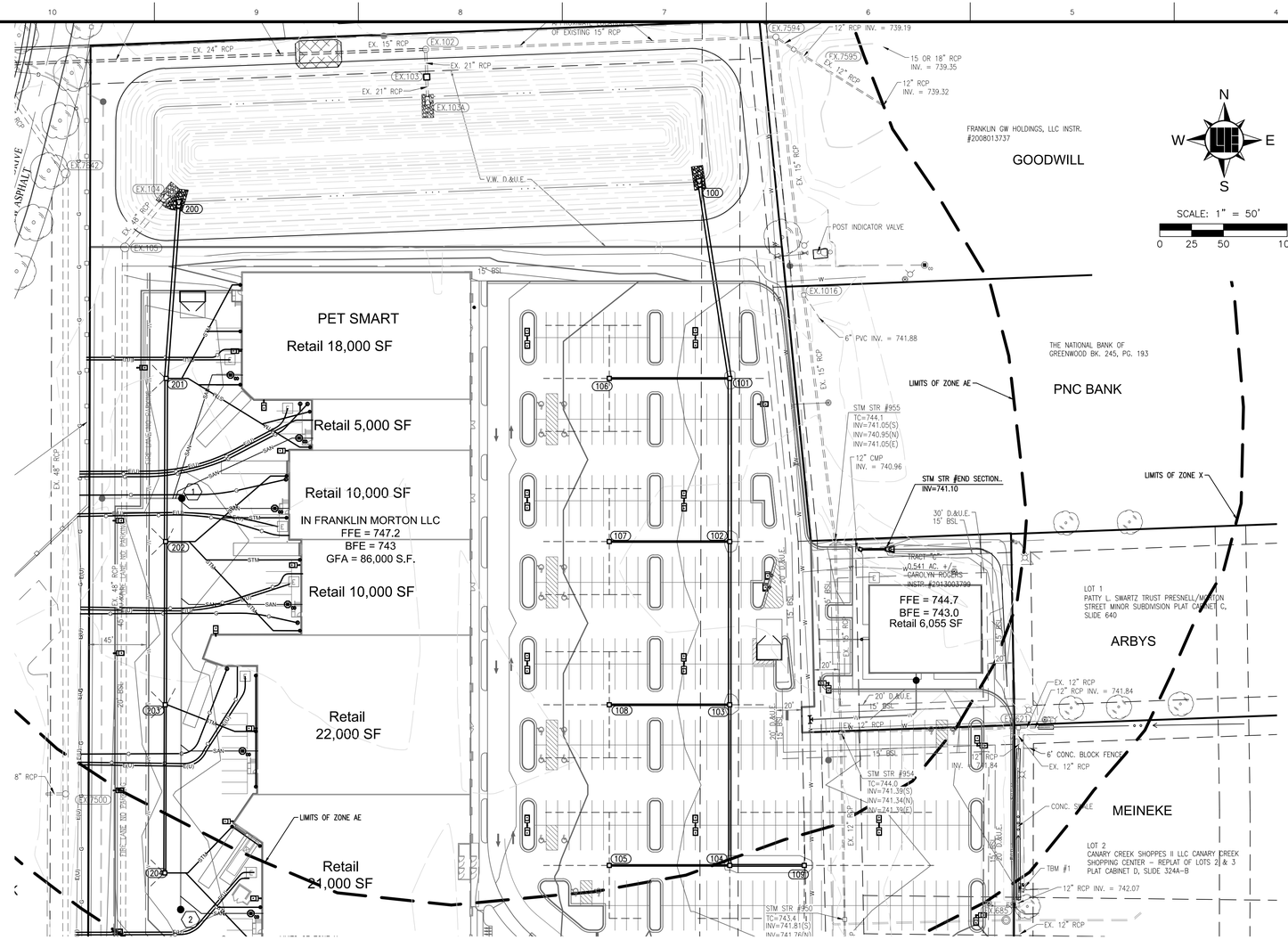
PREPARED FOR:
IN FRANKLIN MORTON, LLC
XXX NORTH MORTON STREET, FRANKLIN, IN 46131

SANITARY SEWER DETAILS
Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

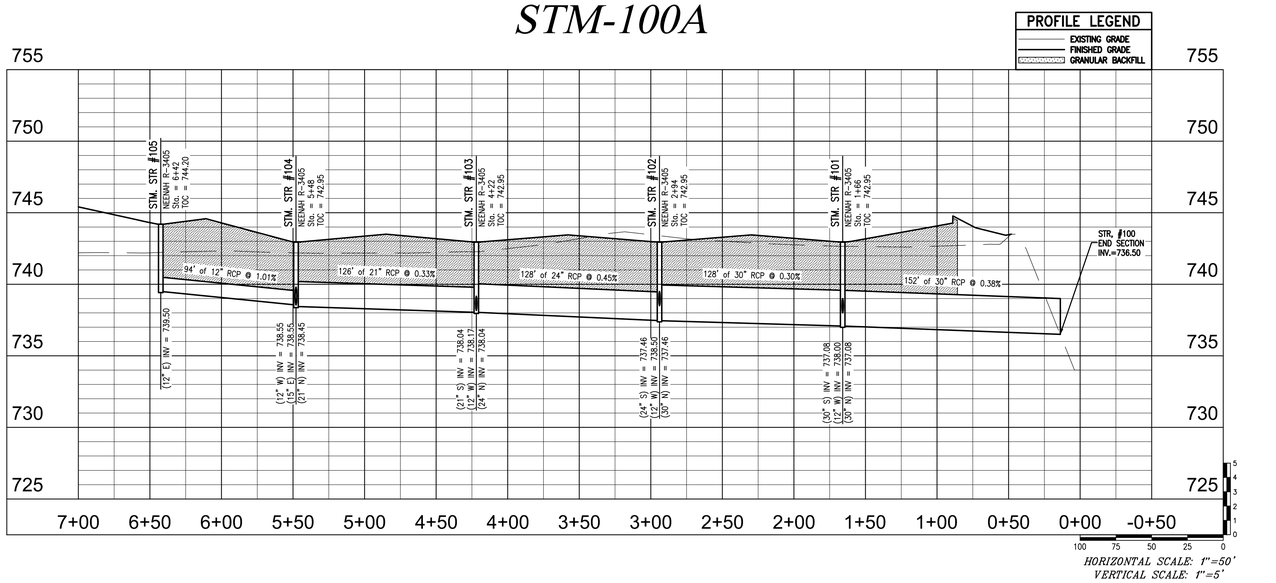
SHEET NO.
C501

PROJECT NO.
W15.0351

LOCATION: H:\2015\W150351\Engineering\design\construct\w150351-C500 details.dwg
LAYOUT: C501
DATE/TIME: March 17, 2016 - 12:07pm
PLOTTED BY: ragnero



STM-100A



STORM SEWER PLAN AND PROFILE LEGEND

UTILITIES

- FIRE DEPT HOOKUP
- FIRE HYDRANT
- POST INDICATOR VALVE
- WATER MANHOLE
- WATER METER
- WATER VALVE
- GAS METER
- GAS VALVE
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRICAL RISER
- TRANSFORMER
- GUY ANCHOR
- ELECTRIC JUNCTION BOX
- GENERATOR
- UTILITY POLE
- UTILITY POLE W/ TRANSFORMER
- ORNAMENTAL LIGHT
- STREET LIGHT
- PARKING LOT LIGHT (1 HEAD)
- PARKING LOT LIGHT (2 HEAD)
- PARKING LOT LIGHT (3 HEAD)
- PARKING LOT LIGHT (4 HEAD)
- COMMUNICATIONS JUNCTION BOX
- COMMUNICATIONS MANHOLE
- COMMUNICATIONS PEDESTAL
- COMMUNICATIONS RISER
- TRAFFIC SIGNAL
- STORM CLEANOUT
- BEEHIVE INLET
- CURB INLET
- FLOOR DRAIN
- SQUARE INLET
- STORM MANHOLE
- ROUND INLET
- DOWN SPOUT
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- SANITARY STUB MARKER

OTHER

- FLAG POLE
- SIGN
- POST
- GATE POST
- BOLLARD
- PARKING WHEEL STOP
- HANDICAPPED SPACE
- EMERGENCY FLOOD ROUTE
- FLOW DIRECTION AND SLOPE

ABBREVIATIONS

ROW	RIGHT OF WAY
ESMT	EASEMENT
D.&U.E.	DRAINAGE AND UTILITY EASEMENT
FFE	FINISH FLOOR ELEVATION
TOC	TOP OF CASTING
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYL CHLORIDE PIPE
VCP	VITRIFIED CLAY PIPE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
DIP	DUCTILE IRON PIPE
SSD	SUB SURFACE DRAIN PIPE
STM	STORM
SAN	SANITARY
STR	STRUCTURE
CO	CLEANOUT

PAVEMENT

- STANDARD DUTY ASPHALT
- HEAVY DUTY ASPHALT
- CONCRETE PAVEMENT
- STONE

LINE TYPES

- RIGHT OF WAY LINE
- FENCE
- GUARD RAIL
- BOUNDARY LINE
- FLOW LINE
- INDEX CONTOUR
- INTERMEDIATE CONTOUR
- UNDERGROUND GAS
- UNDERGROUND WATER
- AERIAL ELECTRIC
- UNDERGROUND ELECTRIC
- UNDERGROUND COMMUNICATIONS
- AERIAL COMMUNICATIONS
- UNDERGROUND FIBER OPTIC
- AERIAL FIBER OPTIC CABLE
- OVERHEAD UTILITY
- SANITARY SEWER LATERAL
- SANITARY SEWER MAIN
- ROOF DRAIN
- SUB SURFACE DRAIN
- STORM SEWER MAIN

STORM SEWER NOTES

1. THE CONTRACTOR SHALL ADHERE TO ALL TERMS AND CONDITIONS AS OUTLINED IN THE EPA OR APPLICABLE STATE GENERAL N.P.D.E.S. PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES AND STORMWATER POLLUTION PREVENTION PLAN.
2. REFER TO THE INDIANA DEPARTMENT OF TRANSPORTATION (INDOT) STANDARD SPECIFICATIONS, LATEST EDITION, FOR BASIC MATERIALS AND CONSTRUCTION METHODS. THE SECTIONS BELOW FOR VARIOUS ITEMS ARE TO CLARIFY THE INTENT OF THE REQUIREMENTS FOR THIS PROJECT. PLEASE NOTE THAT OTHER SECTIONS OF THE INDOT STANDARD SPECIFICATIONS MAY ALSO BE APPLICABLE.
3. THE CONTRACTOR SHALL CONTACT APPLICABLE STATE UNDERGROUND LOCATION SERVICE AT LEAST 72 HOURS PRIOR TO ANY WORK AND SHALL CONTACT THE OWNER AND/OR ENGINEER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
4. THE PLANS SHOW THE LOCATION OF ALL KNOWN UTILITIES LOCATED WITHIN THE LIMITS OF CONSTRUCTION ACCORDING TO INFORMATION PROVIDED BY THE VARIOUS UTILITY COMPANIES, PREVIOUS CONSTRUCTION PLANS AND AS EVIDENCED BY OBSERVATION OF ABOVE GROUND CONDITIONS BY THE SURVEYOR. THE ACCURACY OF THIS INFORMATION IS NOT GUARANTEED.
5. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES TO LOCATE MAINS, CONDUITS, SERVICE LINES, ETC. WITHIN THE CONSTRUCTION LIMITS. THE LOCATION AND PROTECTION OF UTILITY STRUCTURES, THEIR SUPPORT AND MAINTENANCE DURING CONSTRUCTION (IN COOPERATION WITH APPLICABLE UTILITY COMPANY) IS THE EXPRESSED RESPONSIBILITY OF THE CONTRACTOR.
6. THE CONTRACTOR SHALL CONTACT ALL APPLICABLE UTILITIES AND VERIFY ANY AND ALL FEES ASSOCIATED WITH THE INSTALLATION OF ALL UTILITIES.
7. ALL CONSTRUCTION ON THIS SITE TO BE PERFORMED IN COMPLIANCE WITH O.S.H.A. STANDARDS FOR WORKER SAFETY.
8. ANY PART OF STORM SEWER TRENCHES RUNNING UNDER OR WITHIN 5' OF PAVEMENT TO BE BACKFILLED WITH GRANULAR MATERIAL.
9. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY LOCATION, SIZE, AND ELEVATION OF EXISTING UTILITIES, STRUCTURES, PIPES, PAVEMENTS, ETC. AS RELATED TO THEIR WORK. NOTIFY ENGINEER OF ANY CONFLICT AND/OR DISCREPANCIES IN THE CONSTRUCTION DOCUMENTS.
10. MAINTAIN 10' HORIZONTAL AND 18" VERTICAL CLEARANCE BETWEEN STORM / SANITARY SEWER SYSTEMS AND DOMESTIC/FIRE LINE SERVICE. SANITARY SEWER LINE IN PROXIMITY OF WATER LINE SHALL BE C900 WATER MAIN GRADE PVC.
11. CONTRACTOR TO INSTALL CONCRETE CRADLES WHEN THE VERTICAL SEPARATION (AS MEASURED FROM THE EXTERIOR OF THE PIPES) BETWEEN SANITARY SEWERS, WATER MAINS AND STORM SEWERS IS 18" OR LESS.
12. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
13. WHEN PERFORMING EXCAVATIONS DURING PERIODS OF WET WEATHER, PROVIDE ADEQUATE DEWATERING, DRAINAGE AND GROUND WATER MANAGEMENT TO CONTROL MOISTURE OF SOILS.
14. COMPACTED "B" BORROW BACK FILL REQUIRED OVER ALL UTILITIES IN PAVED AREAS.
15. ALL UTILITY STRUCTURES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT AND SHALL HAVE TRAFFIC BEARING RING AND COVERS.
16. COORDINATE LOCATIONS AND CONNECTIONS OF BUILDING STORM LINES WITH PLUMBING DRAWINGS.
17. FOLLOW ALL LOCAL AND STATE CODES IN REFERENCE TO STORM SEWER INSTALLATION.
18. ALL EXISTING MANHOLE AND CATCH BASIN GRATES SHALL BE ADJUSTED TO NEW FINISH GRADE ELEVATIONS.
19. EXISTING PIPES WITHIN CONSTRUCTION LIMITS ARE TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
20. ALL STORM PIPE CONNECTIONS AT STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
21. ALL STORM SEWER STRUCTURES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT AND SHALL HAVE TRAFFIC BEARING RING AND COVERS.
22. ALL STORM SEWER STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR CHANNEL FROM INVERT IN TO INVERT OUT.
23. NEW PIPES AND STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS PRIOR TO FINAL TURNOVER TO THE OWNER.
24. ALL HDPE PIPE SHALL BE DUAL WALLED, HANCOR HQ, ADS N-12 PIPE OR APPROVED EQUAL.
25. ALL FITTINGS AND ACCESSORIES INCLUDING BUT NOT LIMITED TO END CAPS, CLEANOUTS, REDUCERS, ETC., SHALL BE OF HDPE MATERIAL COMPARABLE WITH STORAGE PIPES.
26. PROVIDE BACKFILL WITH A MINIMUM OF 4" BEDDING MATERIAL OF #8 AGGREGATE COMPACTED IN 8" LIFTS TO 95% MAXIMUM DRY DENSITY.
27. VERIFY EXISTING STORM INVERT ELEVATIONS PRIOR TO STARTING NEW STORM SEWER CONNECTION.

-NOTE-

RUN WATER LINE A MINIMUM OF 54" DEEP.
PROVIDE MINIMUM OF 10' HORIZONTAL & 2' VERTICAL CLEARANCE BETWEEN WATER & SANITARY LINE. SANITARY SEWER LINE IN PROXIMITY OF WATER LINE SHALL BE C900 WATER MAIN GRADE PVC.

PLAN CERTIFICATE NOTE:

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Indianapolis, Indiana 46280
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317 | 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

REVISIONS AND ISSUES	DATE:	BY:
CITY SUBMITTAL	03.17.2016	BJS

PROJECT NO.: W15.0351
DWG. NAME: W150351-C600 STM prp.dwg
DESIGNED BY: BJS/RAM
DRAWN BY: RAM
CHECKED BY: BJS
DATE: 03.17.2016

STEVEN SCOTT RUCKER
REGISTERED
PE.N.1300279
STATE OF INDIANA
PROFESSIONAL ENGINEER
NOT VALID WITHOUT THE ORIGINAL SEAL AND SIGNATURE OF THE ENGINEER

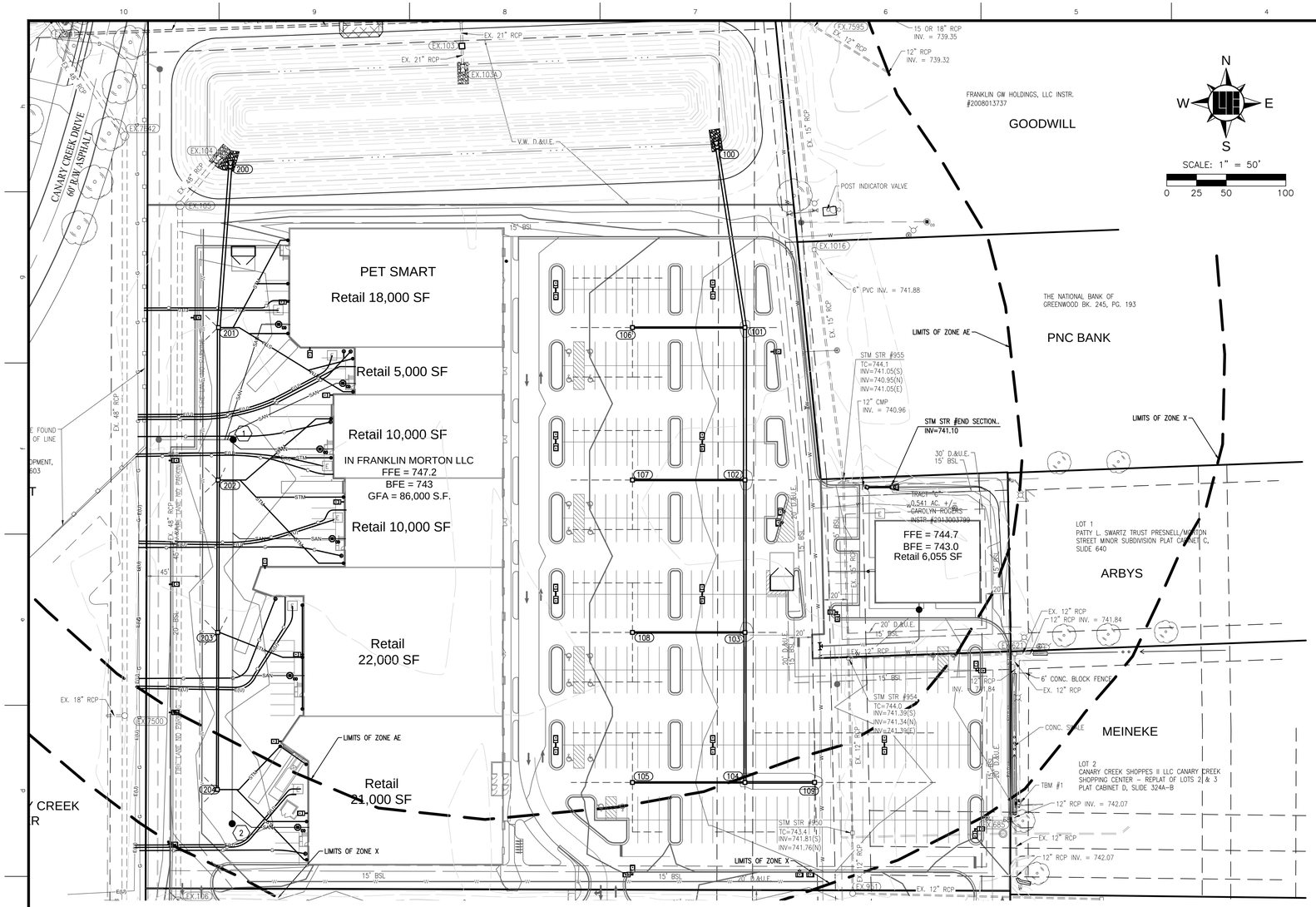
STEVEN SCOTT RUCKER P.E. 11300279

PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

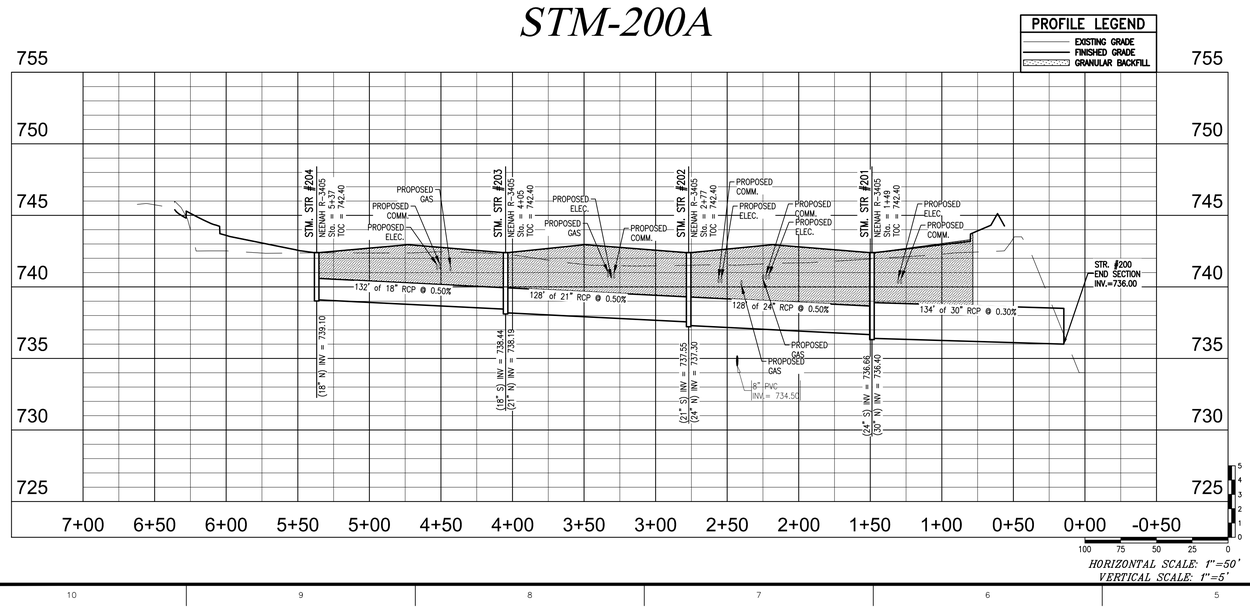
STORM SEWER PLAN AND PROFILE
Part of the NE/4 of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C600
PROJECT NO.
W15.0351

LOCATION: H:\2015\W150351\Engineering\design\conset\W150351-C600 STM prp.dwg
LAYOUT: C600
DATE/TIME: March 17, 2016 - 12:08pm
PLOTTED BY: wagnerc



STM-200A



STORM SEWER PLAN AND PROFILE LEGEND

UTILITIES

- FIRE DEPT HOOKUP
- FIRE HYDRANT
- POST INDICATOR VALVE
- WATER MANHOLE
- WATER METER
- WATER VALVE
- GAS METER
- GAS VALVE
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRICAL RISER
- TRANSFORMER
- GUY ANCHOR
- ELECTRIC JUNCTION BOX
- GENERATOR
- UTILITY POLE
- UTILITY POLE W/ TRANSFORMER
- ORNAMENTAL LIGHT
- STREET LIGHT
- PARKING LOT LIGHT (1 HEAD)
- PARKING LOT LIGHT (2 HEAD)
- PARKING LOT LIGHT (3 HEAD)
- PARKING LOT LIGHT (4 HEAD)
- COMMUNICATIONS JUNCTION BOX
- COMMUNICATIONS MANHOLE
- COMMUNICATIONS PEDESTAL
- COMMUNICATIONS RISER
- TRAFFIC SIGNAL
- STORM CLEANOUT
- BEEHIVE INLET
- CURB INLET
- FLOOR DRAIN
- SQUARE INLET
- STORM MANHOLE
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- DOWN SPOUT
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- SANITARY STUB MARKER

OTHER

- FLAG POLE
- SIGN
- POST
- GATE POST
- BOLLARD
- PARKING WHEEL STOP
- HANDICAPPED SPACE
- EMERGENCY FLOOD ROUTE
- FLOW DIRECTION AND SLOPE

ABBREVIATIONS

ROW	RIGHT OF WAY
ESMT	EASEMENT
D.&U.E.	DRAINAGE AND UTILITY EASEMENT
FFE	FINISH FLOOR ELEVATION
TOC	TOP OF CASTING
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYL CHLORIDE PIPE
VCP	VITRIFIED CLAY PIPE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
DIP	DUCTILE IRON PIPE
SSD	SUB SURFACE DRAIN PIPE
STM	STORM
SAN	SANITARY
STR	STRUCTURE
CO	CLEANOUT

PAVEMENT

- STANDARD DUTY ASPHALT
- HEAVY DUTY ASPHALT
- CONCRETE PAVEMENT
- STONE

STORM SEWER NOTES

1. THE CONTRACTOR SHALL ADHERE TO ALL TERMS AND CONDITIONS AS OUTLINED IN THE EPA OR APPLICABLE STATE GENERAL N.P.D.E.S. PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES AND STORMWATER POLLUTION PREVENTION PLAN.
2. REFER TO THE INDIANA DEPARTMENT OF TRANSPORTATION (INDOT) STANDARD SPECIFICATIONS, LATEST EDITION, FOR BASIC MATERIALS AND CONSTRUCTION METHODS. THE SECTIONS BELOW FOR VARIOUS ITEMS ARE TO CLARIFY THE INTENT OF THE REQUIREMENTS FOR THIS PROJECT. PLEASE NOTE THAT OTHER SECTIONS OF THE INDOT STANDARD SPECIFICATIONS MAY ALSO BE APPLICABLE.
3. THE CONTRACTOR SHALL CONTACT APPLICABLE STATE UNDERGROUND LOCATION SERVICE AT LEAST 72 HOURS PRIOR TO ANY WORK AND SHALL CONTACT THE OWNER AND/OR ENGINEER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
4. THE PLANS SHOW THE LOCATION OF ALL KNOWN UTILITIES LOCATED WITHIN THE LIMITS OF CONSTRUCTION ACCORDING TO INFORMATION PROVIDED BY THE VARIOUS UTILITY COMPANIES, PREVIOUS CONSTRUCTION PLANS AND AS EVIDENCED BY OBSERVATION OF ABOVE GROUND CONDITIONS BY THE SURVEYOR. THE ACCURACY OF THIS INFORMATION IS NOT GUARANTEED.
5. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES TO LOCATE MAINS, CONDUITS, SERVICE LINES, ETC. WITHIN THE CONSTRUCTION LIMITS. THE LOCATION AND PROTECTION OF UTILITY STRUCTURES, THEIR SUPPORT AND MAINTENANCE DURING CONSTRUCTION (IN COOPERATION WITH APPLICABLE UTILITY COMPANY) IS THE EXPRESSED RESPONSIBILITY OF THE CONTRACTOR.
6. THE CONTRACTOR SHALL CONTACT ALL APPLICABLE UTILITIES AND VERIFY ANY AND ALL FEES ASSOCIATED WITH THE INSTALLATION OF ALL UTILITIES.
7. ALL CONSTRUCTION ON THIS SITE TO BE PERFORMED IN COMPLIANCE WITH O.S.H.A. STANDARDS FOR WORKER SAFETY.
8. ANY PART OF STORM SEWER TRENCHES RUNNING UNDER OR WITHIN 5' OF PAVEMENT TO BE BACKFILLED WITH GRANULAR MATERIAL.
9. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY LOCATION, SIZE, AND ELEVATION OF EXISTING UTILITIES, STRUCTURES, PIPES, PAVEMENTS, ETC. AS RELATED TO THEIR WORK. NOTIFY ENGINEER OF ANY CONFLICT AND/OR DISCREPANCIES IN THE CONSTRUCTION DOCUMENTS.
10. MAINTAIN 10' HORIZONTAL AND 18" VERTICAL CLEARANCE BETWEEN STORM / SANITARY SEWER SYSTEMS AND DOMESTIC/FIRE LINE SERVICE. SANITARY SEWER LINE IN PROXIMITY OF WATER LINE SHALL BE C900 WATER MAIN GRADE PVC.
11. CONTRACTOR TO INSTALL CONCRETE CRADLES WHEN THE VERTICAL SEPARATION (AS MEASURED FROM THE EXTERIOR OF THE PIPES) BETWEEN SANITARY SEWERS, WATER MAINS AND STORM SEWERS IS 18" OR LESS.
12. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
13. WHEN PERFORMING EXCAVATIONS DURING PERIODS OF WET WEATHER, PROVIDE ADEQUATE DEWATERING, DRAINAGE AND GROUND WATER MANAGEMENT TO CONTROL MOISTURE OF SOILS.
14. COMPACTED "B" BORROW BACK FILL REQUIRED OVER ALL UTILITIES IN PAVED AREAS.
15. ALL UTILITY STRUCTURES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT AND SHALL HAVE TRAFFIC BEARING RING AND COVERS.
16. COORDINATE LOCATIONS AND CONNECTIONS OF BUILDING STORM LINES WITH PLUMBING DRAWINGS.
17. FOLLOW ALL LOCAL AND STATE CODES IN REFERENCE TO STORM SEWER INSTALLATION.
18. ALL EXISTING MANHOLE AND CATCH BASIN GRATES SHALL BE ADJUSTED TO NEW FINISH GRADE ELEVATIONS.
19. EXISTING PIPES WITHIN CONSTRUCTION LIMITS ARE TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
20. ALL STORM PIPE CONNECTIONS AT STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
21. ALL STORM SEWER STRUCTURES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT AND SHALL HAVE TRAFFIC BEARING RING AND COVERS.
22. ALL STORM SEWER STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR CHANNEL FROM INVERT IN TO INVERT OUT.
23. NEW PIPES AND STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS PRIOR TO FINAL TURNOVER TO THE OWNER.
24. ALL HDPE PIPE SHALL BE DUAL WALLED, HANCOR HQ, ADS N-12 PIPE OR APPROVED EQUAL.
25. ALL FITTINGS AND ACCESSORIES INCLUDING BUT NOT LIMITED TO END CAPS, CLEANOUTS, REDUCERS, ETC., SHALL BE OF HDPE MATERIAL COMPARABLE WITH STORAGE PIPES.
26. PROVIDE BACKFILL WITH A MINIMUM OF 4" BEDDING MATERIAL OF #8 AGGREGATE COMPACTED IN 8" LIFTS TO 95% MAXIMUM DRY DENSITY.
27. VERIFY EXISTING STORM INVERT ELEVATIONS PRIOR TO STARTING NEW STORM SEWER CONNECTION.

LINE TYPES

- RIGHT OF WAY LINE
- FENCE
- GUARD RAIL
- BOUNDARY LINE
- FLOW LINE
- INDEX CONTOUR
- INTERMEDIATE CONTOUR
- UNDERGROUND GAS
- UNDERGROUND WATER
- AERIAL ELECTRIC
- UNDERGROUND ELECTRIC
- UNDERGROUND COMMUNICATIONS
- AERIAL COMMUNICATIONS
- UNDERGROUND FIBER OPTIC
- AERIAL FIBER OPTIC CABLE
- OVERHEAD UTILITY
- SANITARY SEWER LATERAL
- SANITARY SEWER MAIN
- ROOF DRAIN
- SUB SURFACE DRAIN
- STORM SEWER MAIN

-NOTE-

RUN WATER LINE A MINIMUM OF 54" DEEP.
PROVIDE MINIMUM OF 10' HORIZONTAL & 2' VERTICAL CLEARANCE BETWEEN WATER & SANITARY LINE. SANITARY SEWER LINE IN PROXIMITY OF WATER LINE SHALL BE C900 WATER MAIN GRADE PVC.

PLAN CERTIFICATE NOTE:

ORIGINAL ALTA, TOPOGRAPHY, UTILITIES, STORM SEWERS, AND ALL OTHER EXISTING CONDITIONS ITEMS WERE PREPARED BY BANNING ENGINEERING.

FINAL DRAWINGS FOR THE IN FRANKLIN MORTON, LLC SITE WERE PREPARED BY WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER. FINAL CONSTRUCTION PLANS ARE THOSE PLANS CONTAINING A FINAL REVISION DATE AFTER 03/17/2016. WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER ACCEPT RESPONSIBILITY ONLY FOR THE IN FRANKLIN MORTON, LLC SITE IMPROVEMENTS RELATED TO THE ENGINEERING WORK SHOWN ON THESE PLANS.

811 Know what's below. Call before you dig.
Within Indiana Call 811 or 800-382-5544
24 Hours a Day, 7 Days a Week.
PER INDIANA STATE LAW IC 8-1-26, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net
317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

REVISIONS AND ISSUES	DATE	BY
CITY SUBMITTAL	03-17-2016	BJS

PROJECT NO.: W15.0351
DWG NAME: 15051-C600 STM prp.dwg
DESIGNED BY: BJS/PAM
DRAWN BY: PAM
CHECKED BY: BJS
DATE: 03-17-2016

STEVEN SCOTT RUCKER P.E. 11300279

PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

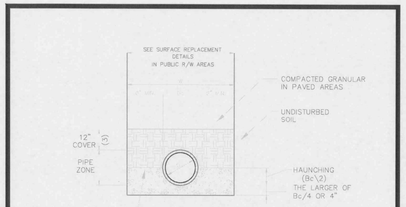
STORM SEWER PLAN AND PROFILE

Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C601

PROJECT NO.
W15.0351

LOCATION: H:\15\W15050351\Engineering\design\consent\w150351-C600 STM prp.dwg
LAYOUT: C601 STM
DATE/TIME: March 17, 2016 - 12:06pm
PLOTTED BY: wagnerp



W = MAXIMUM ALLOWABLE TRENCH WIDTH FOR PIPE AS PER ASTM NOT TO EXCEED FOUR (4) FEET FOR 6" THROUGH 24" PIPE NOR SIX (6) FEET FOR 27" THROUGH 48" PIPE.
D = PIPE DIAMETER (INTERNAL)
Bc = PIPE DIAMETER (EXTERNAL)

NOTES:

1. BEDDING STOPS AT SPRINGLINE OF THE PIPE. BACKFILLING ABOVE THIS POINT SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.
2. WORK FALLING UNDER THE JURISDICTION OF THE INDIANA STATE HIGHWAY COMMISSION SHALL UTILIZE COMPACTED GRANULAR BACKFILL MATERIAL FOR INITIAL AND FINAL BACKFILL ANYWHERE WITHIN 12 FEET OF THE EDGE OF PAVEMENT. OTHERWISE, COMPACTED GRANULAR BACKFILL MATERIAL SHALL ONLY BE USED UNDER PAVEMENT SURFACES OR OTHER SPECIFICALLY DESIGNATED AREAS.
3. GRANULAR FILL IN PAVED AREAS.

FIRST CLASS PIPE LAYING METHOD FOR: RIGID CONDUITS (RCP & CMP)

REVISION DATE

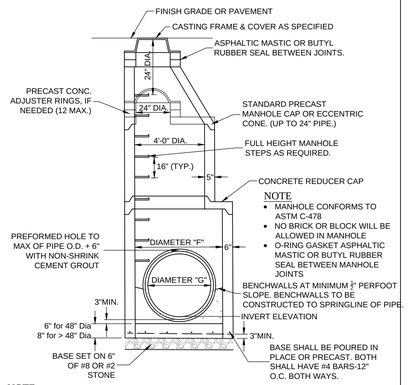
CITY of FRANKLIN, INDIANA

DPW

FIGURE

Illustration 7-2

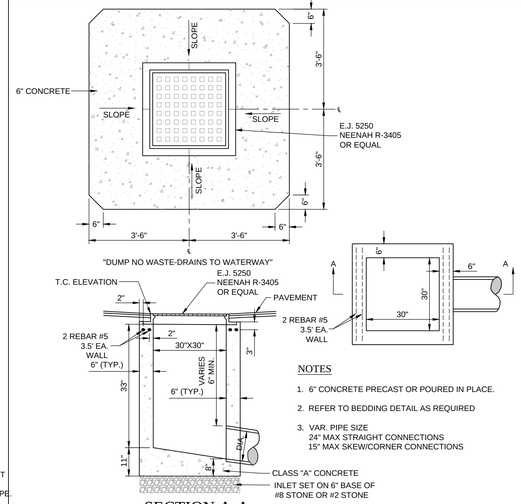
PIPE SIZE (DIA. "G")	MANHOLE (DIA. "F") PIPES ENTERING/ LEAVING AT 0-45 DEGREES	MANHOLE (DIA. "F") PIPES ENTERING/ LEAVING AT 45-90 DEGREES	UP TO 60 DEGREES
12"-21"	48"	48"	N/A
24"	48"	60"	N/A
27"-30"	60"	60"	N/A
33"-36"	60"	72"	N/A
42"	72"	84"	N/A
48"	84"	96"	N/A
54"	N/A	N/A	96"
60"	N/A	N/A	96"
66"	N/A	N/A	96"



NOTE
- MANHOLE CONFORMS TO ASTM C-478
- NO BRICK OR BLOCK WILL BE ALLOWED IN MANHOLE
- O-RING GASKET ASPHALTIC MASTIC OR BUTYL RUBBER SEAL BETWEEN MANHOLE JOINTS

NOTE
MANHOLE STEPS SHALL BE POLYPROPYLENE, POLYPROPYLENE COATED STEEL REINFORCING OR AN APPROVED NON-CORROSIVE FIBERGLASS MATERIAL. THE COPOLYMER POLYPROPYLENE SHALL MEET THE REQUIREMENTS OF ASTM D-4101 REINFORCED WITH DEFORMED 3/8" MIN. DIAMETER REINFORCED STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A-615, GRADE 60. NON-COATED CAST IRON STEPS ARE NOT ACCEPTABLE.

STANDARD STORM MANHOLE
(NO SCALE)

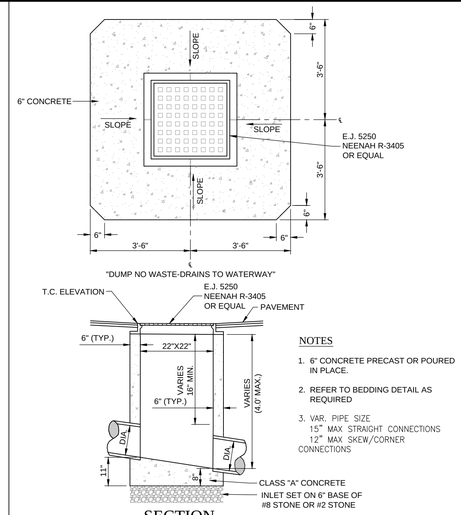


NOTES
1. 6" CONCRETE PRECAST OR POURED IN PLACE.
2. REFER TO BEDDING DETAIL AS REQUIRED
3. VAR. PIPE SIZE
   24" MAX STRAIGHT CONNECTIONS
   15" MAX SKEW/CORNER CONNECTIONS

SECTION A-A

1. STRAIGHT-OUT CONNECTIONS SHOULD NOT BE MADE TO EITHER PRECAST BOX OR INLET WALL TOUCHED BY A SKEW/CORNER CONNECTION UNLESS SUFFICIENT BOX INLET WALL AREA REMAINS ON EACH SIDE OF THE CONNECTING PIPE TO ENSURE STRUCTURAL INTEGRITY OF THE PRECAST BOX.
2. A MAXIMUM OF TWO (2) SKEW/CORNER CONNECTIONS WILL BE ALLOWED FOR EACH PRECAST BOX INLET.
3. REFER TO PRECAST CONCRETE ADJUSTING RING DETAIL AS REQUIRED

PAVED AREA INLET TYPE "E"
(NO SCALE)

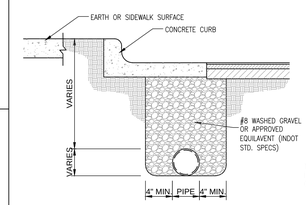


NOTES
1. 6" CONCRETE PRECAST OR POURED IN PLACE.
2. REFER TO BEDDING DETAIL AS REQUIRED
3. VAR. PIPE SIZE
   15" MAX STRAIGHT CONNECTIONS
   12" MAX SKEW/CORNER CONNECTIONS

SECTION

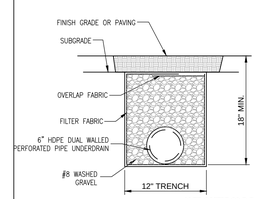
1. STRAIGHT-OUT CONNECTIONS SHOULD NOT BE MADE TO EITHER PRECAST BOX OR INLET WALL TOUCHED BY A SKEW/CORNER CONNECTION UNLESS SUFFICIENT BOX INLET WALL AREA REMAINS ON EACH SIDE OF THE CONNECTING PIPE TO ENSURE STRUCTURAL INTEGRITY OF THE PRECAST BOX.
2. A MAXIMUM OF TWO (2) SKEW/CORNER CONNECTIONS WILL BE ALLOWED FOR EACH PRECAST BOX INLET.
3. REFER TO PRECAST CONCRETE ADJUSTING RING DETAIL AS REQUIRED

PAVED AREA INLET TYPE "A"
PIPE SIZES 12" TO 15" (NO SCALE)



CURB UNDERDRAIN DETAIL
(NO SCALE)

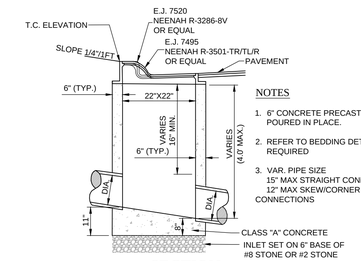
NOTE:
INSTALLATION REQUIRED: BOTH SIDES OF ALL PAVEMENT.



NOTE:
INVERT TO BE 18" WHEN PLACED IN SWALE.
INVERT TO BE 36" WHEN PLACED FROM A PAVED INLET.

SUB-SURFACE UNDERDRAIN TILE
IN PAVEMENT (NO SCALE)

SECTION



NOTES
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2. REFER TO BEDDING DETAIL AS REQUIRED
3. VAR. PIPE SIZE
   15" MAX STRAIGHT CONNECTIONS
   12" MAX SKEW/CORNER CONNECTIONS

SECTION

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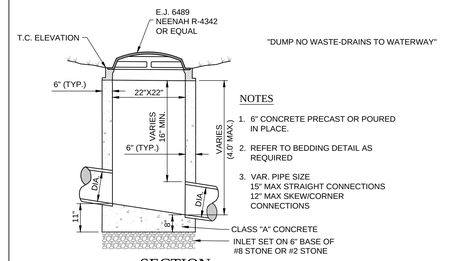
3. REFER TO PRECAST CONCRETE ADJUSTING RING DETAIL AS REQUIRED

CURB INLET TYPE "A"
PIPE SIZES 12" TO 15" (NO SCALE)



NOTES
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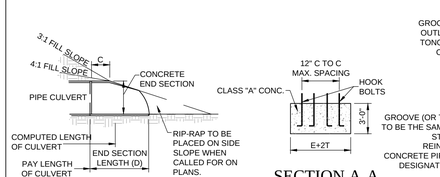
3. REFER TO PRECAST CONCRETE ADJUSTING RING DETAIL AS REQUIRED

BEEHIVE INLET TYPE "A"
PIPE SIZES 12" TO 15" (NO SCALE)



SLOPE DETAIL

SECTION A-A
CONC. PIPE TOE ANCHOR

LONGITUDINAL SECTION

DIA.	T (MIN)	A=	C=	D=	E=	K=	R 1	R 2	APPROX. WEIGHT
12"	2"	5"	4'-3"	6'-2"	2'-0"	1.3	10 1/8"	9"	800
15"	2 1/4"	7"	4'-0"	6'-3"	2'-6"	1.5	12 1/2"	11"	1100
18"	2 1/2"	11"	4'-1"	6'-2"	3'-0"	1.8	15 1/2"	12"	1300
21"	2 3/4"	11"	3'-6"	6'-3"	3'-6"	2.1	16 1/8"	13"	1500
24"	3"	1'-0"	2'-6"	6'-3"	4'-0"	2.3	16 3/16"	14"	1800
27"	3 1/4"	1'-1"	2'-5"	6'-3"	4'-6"	2.6	18 9/16"	14 1/2"	2100
30"	3 1/2"	1'-2"	1'-10"	6'-3"	5'-0"	2.9	18 1/2"	15"	2400
33"	3 3/4"	1'-3"	3'-6"	8'-3"	5'-6"	3.1	23 3/4"	17 1/2"	4100
36"	4"	1'-5"	3'-1"	8'-3"	6'-0"	3.4	24 5/16"	20"	4200
TOLERANCE ± 1"									

CONCRETE IN THESE END SECTIONS SHALL BE THE SAME GRADE AND STRENGTH AS SPECIFIED FOR REINFORCED CONCRETE PIPE, A.S.T.M. DESIGNATION C-76 CLASS II, (AS SET OUT IN INDOT STANDARD SPECIFICATIONS).

REINFORCEMENT IN THE "C" PORTION SHALL BE THE SAME AS SPECIFIED FOR REINFORCED CONCRETE, A.S.T.M. DESIGNATION C-76 CLASS II, FOR THE SIZE OF CONNECTING PIPE.

REINFORCEMENT IN THE "B" PORTION SHALL HAVE A CROSS SECTIONAL AREA EQUAL TO THAT OF ONE LAYER OF STEEL IN THE "C" PORTION.

THE END OF THE PIPE CULVERT SHALL BE PLACED IN THE CONCRETE END SECTION SO THAT THE FLOW LINES ARE FLUSH. THE JOINT SHALL BE COMPLETELY FILLED WITH MORTAR.

IN 3:1 OR 4:1 FILL SLOPE, CHANGE TO THE SLOPE OF THE END SECTION IN A SMOOTH, PLEASING TRANSITION APPROXIMATELY 10'-0" IN LENGTH.

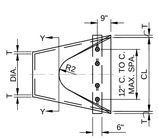
VARIATIONS IN DIMENSIONS - THE THICKNESS OF THE CONCRETE, THE POSITION OF STEEL, AND THE INTERNAL DIAMETER OF THE PIPE SHALL CONFORM WITH THE VARIATIONS IN DIMENSIONS AS PROVIDED IN THE SPECIFICATIONS FOR REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, A.S.T.M.

WHERE VITRIFIED CLAY CULVERT OR CAST IRON CULVERT PIPE IS USED, A "PIPE END SECTION" COMPARABLE TO THAT AS SHOWN FOR METAL OR CONCRETE SHALL BE FURNISHED AND SHALL BE AS APPROVED BY THE ENGINEER, EXCEPT IN AREAS OF ACID OR MINE WATER THEN THE USE OF METAL END SECTION IS PROHIBITED.

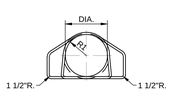
END SECTIONS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "PIPE END SECTION" COMPLETE.

CONCRETE PIPE TOE ANCHORS SHALL BE REQUIRED ON ALL CONCRETE PIPE END SECTIONS. THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER EACH FOR "PIPE END SECTION."

NOTE:
METAL PIPE END SECTIONS MAY BE USED WITH CONCRETE PIPE, PROVIDING THE METHOD OF CONNECTION IS APPROVED BY THE ENGINEER PRIOR TO INSTALLATION OF PIPE. (EXCEPT IN INDIANAPOLIS)



PLAN VIEW



SECTION Y-Y

PRECAST CONCRETE END SECTION DETAIL
(NO SCALE)

REQUIREMENTS FOR ALL STORM SEWER BENCH WALLS

BENCH WALLS SHALL BE SHAPED AND FORMED FOR A CLEAN TRANSITION WITH PROPER HYDRAULICS TO ALLOW THE SMOOTH CONVEYANCE OF FLOWS THROUGH THE MANHOLE OR BOX INLET. THE BENCH WALL SHALL FORM A DEFINED CHANNEL, TO A MINIMUM HEIGHT OF 80-PERCENT OF THE INSIDE DIAMETER OF THE INLET AND OUTLET PIPES TO FORM A "U" SHAPED CHANNEL, CONSTRUCTED AT A MINIMUM ½-INCH PER FOOT SLOPE TO THE MANHOLE WALL.

WHERE A FLOW CHANNEL IS CONSTRUCTED AS AN INTEGRAL PART OF THE PRE-CAST BASE, IT SHALL BE SHAPED AND FORMED AS DESCRIBED ABOVE, WITH THE EXCEPTION THAT THE BOTTOM OF THE FLOW CHANNEL MAY BE FORMED FROM THE BOTTOM OF INLET AND OUTLET PIPES IF THE PIPE WALL THICKNESS IS NOT GREATER THAN ONE (1) INCH.

FOR CAST-IN-PLACE FLOW CHANNELS, THE BOTTOM INVERT OF ALL PIPES ENTERING A MANHOLE SHALL BE AT LEAST THREE (3) INCHES ABOVE THE TOP OF THE BASE SLAB TO THE OUTLET INVERT SO THE FINISHED SEWER CHANNEL MAY BE INSTALLED AND SHAPED.
FOR CONNECTIONS TO EXISTING STORM SEWER STRUCTURES, FLOW CHANNELS SHALL BE SHAPED, AS SPECIFIED HEREIN, AS IF IT WERE A NEW MANHOLE OR BOX INLET STRUCTURE.

SPECIFICATIONS FOR ALL STORM SEWER CASTINGS

ALL STORM WATER INLETS AND CATCH BASINS SHALL HAVE THE WORDS "NO DUMPING, DRAINS TO STREAM", OR SIMILARLY APPROVED MESSAGE, CAST IN RAISED OR RECESSED LETTERS AT A MINIMUM OF 1" IN HEIGHT. IN ADDITION, A SYMBOL OF A FISH SHALL ALSO BE CAST WITH THE LETTERS.

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800 | 452 - 6408
317 | 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER
WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

PROJECT NO: W15-0351
DWG NAME: w150351-C600 details.dwg
DESIGNED BY: BJSHAM
DRAWN BY: RAM
CHECKED BY: BJS
DATE: 02.17.2016

REVISIONS AND ISSUES	BY:	DATE:
CITY SUBMITTAL	BJS	03.17.2016

STEVEN SCOTT RUCKER REGISTERED PE.11300279 STATE OF INDIANA PROFESSIONAL ENGINEER
NOT VALID UNLESS PRINTED

STEVEN SCOTT RUCKER P.E. 11300279

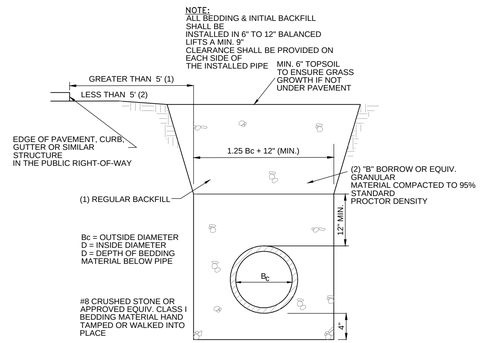
PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

STORM SEWER DETAILS
Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C602

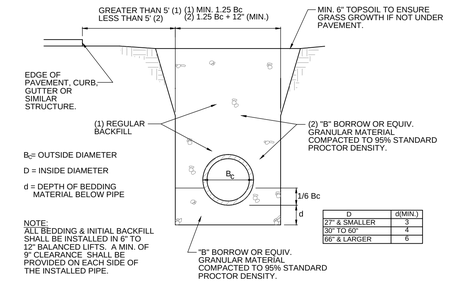
PROJECT NO.
W15.0351

LOCATION: H:\2015\W150351\Engineering\design\Const\w150351-C600 details.dwg
LAYOUT: C602
DATE/TIME: March 17, 2016 - 12:09pm
PLOTTED BY: wagnerc



TYPICAL BEDDING SECTION - PVC & HDPE

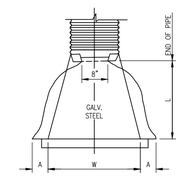
(NO SCALE)



D	d(MIN.)
27" & SMALLER	3
30" TO 60"	4
66" & LARGER	6

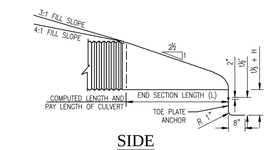
TYPICAL BEDDING SECTION - RCP PIPE

(NO SCALE)



PLAN

PIPE ARCH DIMEN.		G.A.	DIMENSIONS					SLOPE (APP.)	BODY
SPAN	RISE		A 1"±	B	H MAX.	L 1.5±	W 2±		
17	13	16	6.5	8.5	6	20	30	2.5	1 PC.
21	15	16	7.5	11	6	24	36	2.5	1 PC.
24	18	16	8	12	6	28	42	2.5	1 PC.
28	20	16	8	16	6	32	48	2.5	1 PC.
35	24	14	10	16	6	39	60	2.5	1 PC.
42	29	14	12	12	7.5	46	75	2.5	1 PC.



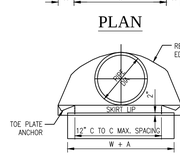
SIDE

NOTES:

1. END SECTIONS AND TOE PLATE ANCHORS SHALL CONFORM TO ALL APPLICABLE REQUIREMENTS AS SET OUT IN THE INDOT STANDARD SPECIFICATIONS.
2. IF ALUMINUM ALLOY PIPE CULVERT IS FURNISHED, ALUMINUM ALLOY END SECTIONS SHALL ALSO BE USED AND ALL COMPONENT PARTS SHALL BE ALUMINUM ALLOY AS SET OUT IN THE STANDARD SPECIFICATIONS.
3. MULTIPLE PANEL BODIES SHALL HAVE LAP SEAMS WHICH SHALL BE TIGHTLY JOINED WITH 3/8" DIA. GALVANIZED RIVETS OR BOLTS. THE TOE PLATE ANCHOR SHALL BE CONSTRUCTED OR 10 GAGE.
4. GALVANIZED STEEL AND BE REQUIRED ON ALL STEEL PIPE END SECTIONS. IT SHALL BE MATCHED-PUNCHED TO FIT HOLES IN SKIRT LIP, AND SUPPLIED LOOSE, COMPLETE WITH 3/8" DIA. GALVANIZED BOLTS. COST THEREOF SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER EACH FOR "PIPE END SECTION."
5. WHERE VITRIFIED CLAY CULVERT OR CAST IRON CULVERT PIPE IS USED A "PIPE END SECTION" COMPARABLE TO THAT AS SHOWN FOR METAL OR CONCRETE SHALL BE FURNISHED AND SHALL BE AS APPROVED BY THE ENGINEER.
6. END SECTIONS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "PIPE END SECTION" COMPLETE IN PLACE AND ACCEPTED.
7. PIMPLED CONNECTION BAND MAY BE USED TO CONNECT PIPE END SECTION TO HELICALLY CORRUGATED PIPE.
8. MECHANICAL RESTRAINTS TO BE USED PER LOCAL REQUIREMENTS.

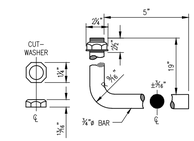
SPECIFICATIONS FOR HOOK BOLT AND NUT:

HOOK BOLT MATERIAL SHALL MEET THE CURRENT A.S.T.M. A-307. THREADS SHALL BE AMERICAN STANDARD COARSE THREAD SERIES, CLASS II FREE FIT, BOLTS SHALL BE GALVANIZED TO MEET CURRENT A.S.T.M. SPECIFICATION A-153. THE THREADED PORTION SHALL NOT PREVENT TURNING THE NUT BY HAND. NUT AND WASHERS SHALL BE CARBON STEEL HOT DIP GALVANIZED TO MEET A.S.T.M. SPECIFICATION A-153. NUT THREADS SHALL BE AMERICAN STANDARD COARSE THREAD SERIES (1/64 MAXIMUM OVERSIZE), CLEANED AFTER GALVANIZING TO PROVIDE A FREE RUNNING FIT ON THE CLASS II BOLT. NUTS SHALL BE 1 1/4" ACROSS FLATS, 13/16" THICK, CURVE CROWNED TO APPROX. 1" RADIUS.



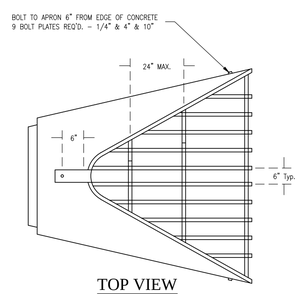
END

PIPE DIA.	G.A.	DIMENSIONS					SLOPE (APP.)	BODY
		A 1"±	B MAX.	H 1"±	L 1.5±	W 2±		
12	16	6	6	6	21	24	2.5	1 PC.
15	16	7	8	6	26	30	2.5	1 PC.
18	16	8	10	6	31	36	2.5	1 PC.
21	16	9	12	6	36	42	2.5	1 PC.
24	16	10	13	6	41	48	2.5	1 PC.
30	14	12	16	8	51	60	2.5	1 PC.
36	14	14	19	9	60	72	2.5	1 PC.

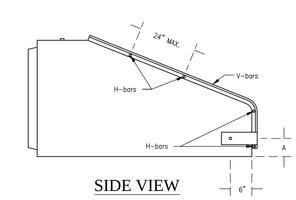


METAL END SECTION

(NO SCALE)



TOP VIEW



SIDE VIEW

	Apron Size	V-bar Size	H-bar Size	No. of H-bars Req'd.	Bolt Dia.	"A" Dim.
		Inches			Inches	
Arch Pipe Aprons	18	1/2 ø	5/8 ø	3	1/2	5
	24	5/8 ø	3/4 ø	4	1/2	7
	30	5/8 ø	3/4 ø	4	1/2	7 1/2
	36	3/4 ø	1 ø	4	1/2	10 1/2
	42	3/4 ø	1 ø	4	3/4	11
	48	3/4 ø	1 1/2 Pipe	4	3/4	12
	54	3/4 ø	1 1/2 Pipe	4	3/4	12
	60	3/4 ø	1 1/2 Pipe	5	3/4	14
	72	3/4 ø	1 1/2 Pipe	5	3/4	14
	84	3/4 ø	1 1/2 Pipe	6	3/4	15
Round Pipe Aprons	12	1/2 ø	5/8 ø	3	1/2	4
	15	1/2 ø	5/8 ø	3	1/2	4 1/2
	18	1/2 ø	5/8 ø	4	1/2	4 1/2
	21	1/2 ø	5/8 ø	4	1/2	5
	24	5/8 ø	3/4 ø	4	1/2	5
	27	5/8 ø	3/4 ø	4	1/2	5 1/2
	30	5/8 ø	3/4 ø	4	1/2	5 1/2
	36	3/4 ø	1 ø	4	3/4	8
	42	3/4 ø	1 ø	4	3/4	8
	48	3/4 ø	1 ø	5	3/4	8
	54	3/4 ø	1 1/2 Pipe	5	3/4	8
	60	3/4 ø	1 1/2 Pipe	5	3/4	8
	66	3/4 ø	1 1/2 Pipe	6	3/4	8
	72	3/4 ø	1 1/2 Pipe	6	3/4	9
	84	3/4 ø	1 1/2 Pipe	7	3/4	10
	90	3/4 ø	1 1/2 Pipe	7	3/4	14

NOTES:
1. BARS & PLATES ARE HOT-ROLLED STEEL.
2. BARS, PLATES, & PIPE ARE FINISHED WITH 2 COATS OF ALUMINUM PAINT.
3. BOLTS ARE GALVANIZED.
4. NO REBAR THROUGH PIPES WILL BE ALLOWED.
5. DEBRIS GUARD SHALL BE REMOVABLE.

TRASH GUARDS FOR CONC. END SECTIONS

(NO SCALE)

10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net
317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

DATE:	BY:	REVISIONS AND ISSUES
03.17.2016	B.J.S.	CITY SUBMITTAL

PROJECT NO.: W15.0351
DWG NAME: w150351-C600 details.dwg
DESIGNED BY: B.J.S/RAM
DRAWN BY: RAM
CHECKED BY: B.J.S
DATE: 03.17.2016

STEVEN SCOTT RUCKER REGISTERED PE.# 11300279 STATE OF INDIANA PROFESSIONAL ENGINEER
NOT VALID WITHOUT ORIGINAL SEAL

STEVEN SCOTT RUCKER P.E. 11300279

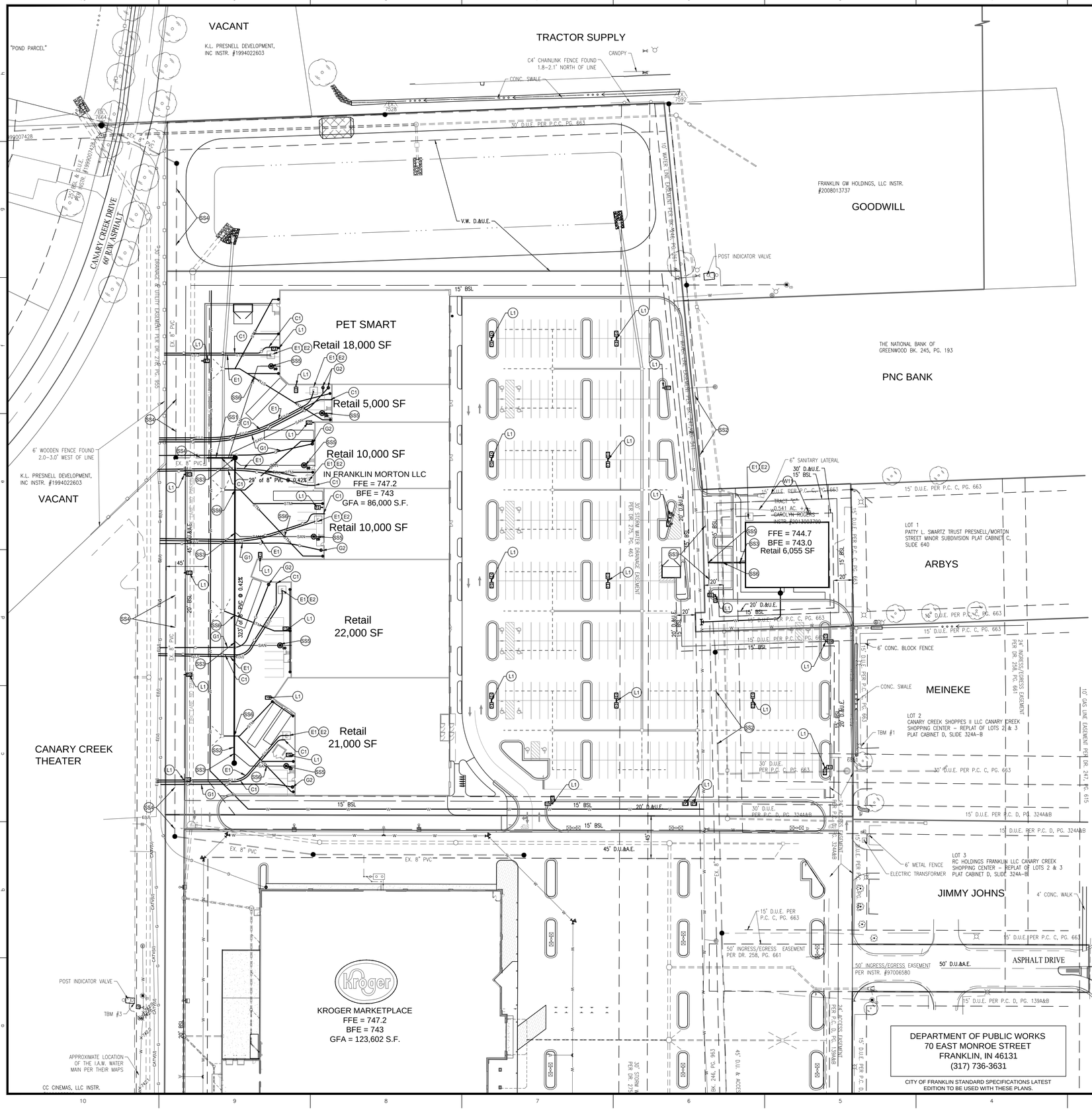
PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

STORM SEWER DETAILS
Part of the NE4 of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C603

PROJECT NO.
W15.0351

LOCATION: H:\2015\W150351\Engineering\design\consel\w150351-C600 details.dwg
LAYOUT: C603
DATE/TIME: March 17, 2016 - 12:09pm
PLOTTED BY: wagnerc



CITY OF FRANKLIN STANDARD SPECIFICATIONS LATEST EDITION TO BE USED WITH THESE PLANS.

UTILITY PLAN NOTES

SANITARY SEWER NOTES

SS1 CONNECT THE PROPOSED SANITARY SEWER MAIN TO THE EXISTING 8" SANITARY STUB PIPE. PROVIDE TRACER WIRE OVER THE MAIN PER DPW STANDARDS.

SS2 PROPOSED 8" SANITARY SEWER MAIN EXTENSION.

SS3 CONNECT PROPOSED 6" SANITARY SEWER LATERAL TO THE PROPOSED SANITARY SEWER MAIN. COORDINATE CONNECTION WITH MEP. PROVIDE CLEANOUTS AS REQUIRED/SHOWN. VERIFY INVERTS ON EXISTING LINE AND COORDINATE CONDITIONS WITH MEP. ADJUST AS REQUIRED.

SS4 EXISTING 8" SANITARY SEWER.

SS5 PROPOSED SANITARY LATERAL CLEANOUT TYPE 2 (IN PAVED AREAS OUTSIDE OF 3' OF BUILDING). REFER TO DETAIL ON SHEET C801.

SS6 PROVIDE 18" MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY/WATER/STORM SEWER PIPES AND ALL OTHER PIPES. INSTALL CONCRETE CRADLE IF CLEARANCE IS LESS THAN 18"

WATER SERVICE NOTES:

W1 COORDINATE AND CONNECT THE 8" WATER SERVICE TO THE EXISTING 12" WATER MAIN WITH A TAPPING SLEEVE AND VALVE. THIS TAP TO BE OBSERVED BY A REPRESENTATIVE FROM I.A.W. BEFORE THE CONNECTION CAN BE MADE TO THE METER VAULT. CONTACT INDIANA AMERICAN WATER PRIOR TO ANY INSTALLATION.

W2 PROPOSED FIRE HYDRANT ASSEMBLY TO BE RED WITH TOP CAP COLOR CODED TO SHOW WATER FLOW (1500 GPM=BLUE, 1000-1499=GREEN, 500-999=ORANGE) AND CONTAIN A S.T.O.R.Z. CONNECTION.

W3 2" WATER METER SET, VALVES, ETC. TO BE LOCATED INSIDE THE METER PIT IN ADDITION TO THE WATER VAULT.

W4 FIRE DEPARTMENT CONNECTION (6" PVC, C900 D.R.18) TO BE LOCATED ON THE METER VAULT AND CONTAIN A 30 DEGREE DOWN TURN S.T.O.R.Z. CONNECTION.

W5 PROPOSED WATER VALVE.

W6 PROPOSED 8" PVC, C900 D.R. 18 FIRE SERVICE LINE

W7 PROPOSED 2" SDR 21 CLASS 200 DOMESTIC SERVICE LINE TO TAP THE 8" PRIVATE MAIN PRIOR TO THE VAULT AS SHOWN. ADJUST IN THE FIELD AS NEEDED. SEE DETAIL 2.

W8 PROVIDE POST INDICATOR VALVE (P.I.V.)TO BE ELECTRONICALLY MONITORED.

W9 WATER VAULT AND ASSOCIATED BACKFLOW PREVENTER, VALVES, ETC. TO BE LOCATED INSIDE THE METER VAULT PER INDIANA AMERICAN WATER DETAILS AND SPECIFICATIONS

W10 FIRE SERVICE LINE FROM THE TAPPING SLEEVE AND VALVE ASSEMBLY TO THE DOUBLE DETECTOR CHECK ASSEMBLY SHALL BE 8" PVC C900 DR-14. PIPE BEDDING FOR THIS SECTION TO BE COMPACTED 3/4 CLEAN GRANULAR FILL MATERIAL FROM 6" BELOW THE PIPE TO BOTTOM OF PIPE.

W11 DO NOT DISRUPT THE ARBY'S SERVICE LINE AND METER CONNECTION.

ELECTRIC NOTES:

E1 COORDINATE AND CONNECT BUILDING ELECTRICAL LINE FROM SERVICE DROP LOCATION TO TRANSFORMER. COORDINATE CONNECTION WITH POWER COMPANY AND ELECTRICAL DRAWINGS. ADJUST AS REQUIRED. 2-4" EC CONDUITS TO BE INSTALLED WITH PULL STRINGS.

E2 PROPOSED TRANSFORMER PAD LOCATION. COORDINATE WITH UTILITY PROVIDER IF A NEW TRANSFORMER IS REQUIRED.

COMMUNICATION NOTES:

C1 COORDINATE AND CONNECT BUILDING COMMUNICATION SERVICE LINE(S) TO CONNECTION POINT AS SHOWN. ADJUST AS REQUIRED. 2-4" PVC CONDUITS TO BE INSTALLED WITH PULL STRINGS.

GAS SERVICE NOTES:

G1 CONNECT PROPOSED GAS SERVICE TO EXISTING GAS LINE. REFER TO PLUMBING DRAWINGS AND COORDINATE WITH SERVICE PROVIDER.

G2 PROPOSED GAS METER LOCATION. REFER TO PLUMBING DRAWINGS AND COORDINATE WITH SERVICE PROVIDER.

LIGHTING CONDUIT NOTES

L1 INSTALL SCHEDULE 40 PVC PLASTIC CONDUIT AND TYPE TW WIRE, TO BE LOCATED BELOW ANY PAVING AND AGGREGATE SUBGRADE.

GENERAL UTILITY NOTES

1. THE CONTRACTOR SHALL CONTACT APPLICABLE STATE UNDERGROUND LOCATION SERVICE AT LEAST 72 HOURS PRIOR TO ANY WORK AND SHALL CONTACT THE OWNER AND/OR ENGINEER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. THE PLANS SHOW THE LOCATION OF ALL KNOWN UTILITIES LOCATED WITHIN THE LIMITS OF CONSTRUCTION ACCORDING TO INFORMATION PROVIDED BY THE VARIOUS UTILITY COMPANIES, PREVIOUS CONSTRUCTION PLANS AND AS EVIDENCED BY OBSERVATION OF ABOVE GROUND CONDITIONS BY THE SURVEYOR. THE ACCURACY OF THIS INFORMATION IS NOT GUARANTEED.
3. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES TO LOCATE MAINS, CONDUITS, SERVICE LINES, ETC. WITHIN THE CONSTRUCTION LIMITS. THE LOCATION AND PROTECTION OF UTILITY STRUCTURES, THEIR SUPPORT AND MAINTENANCE DURING CONSTRUCTION (IN COOPERATION WITH APPLICABLE UTILITY COMPANY) IS THE EXPRESSED RESPONSIBILITY OF THE CONTRACTOR.
4. THE CONTRACTOR SHALL CONTACT ALL APPLICABLE UTILITIES AND VERIFY ANY AND ALL FEES ASSOCIATED WITH THE INSTALLATION OF ALL UTILITIES.
5. ALL CONSTRUCTION ON THIS SITE TO BE PERFORMED IN COMPLIANCE WITH O.S.H.A. STANDARDS FOR WORKER SAFETY.
6. ANY PART OF SANITARY OR STORM SEWER TRENCHES RUNNING UNDER OR WITHIN 5' OF PAVEMENT TO BE BACKFILLED WITH GRANULAR MATERIAL.
7. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY LOCATION, SIZE, AND ELEVATION OF EXISTING UTILITIES, STRUCTURES, PIPES, PAVEMENTS, ETC. AS RELATED TO THEIR WORK. NOTIFY ENGINEER OF ANY CONFLICT AND/OR DISCREPANCIES IN THE CONSTRUCTION DOCUMENTS.
8. MAINTAIN 10' HORIZONTAL AND 18" VERTICAL CLEARANCE BETWEEN STORM / SANITARY SEWER SYSTEMS AND DOMESTIC/FIRE LINE SERVICE. SANITARY SEWER LINE IN PROXIMITY OF WATER LINE SHALL BE C900 WATER MAIN GRADE PVC.
9. CONTRACTOR TO INSTALL CONCRETE CRADLES WHEN THE VERTICAL SEPARATION (AS MEASURED FROM THE EXTERIOR OF THE PIPES) BETWEEN SANITARY SEWERS, WATER MAINS AND STORM SEWERS IS 18" OR LESS.
10. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
11. WHEN PERFORMING EXCAVATIONS DURING PERIODS OF WET WEATHER, PROVIDE ADEQUATE DEWATERING, DRAINAGE AND GROUND WATER MANAGEMENT TO CONTROL MOISTURE OF SOILS.
12. COMPACTED "B" BORROW BACK FILL REQUIRED OVER ALL UTILITIES IN PAVED AREAS.
13. ALL UTILITY STRUCTURES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT AND SHALL HAVE TRAFFIC BEARING RING AND COVERS.
14. PROVIDE THRUST BLOCKS FOR ALL WATER LINE BENDS AND TEES, INCLUDING TAP CONNECTION.
15. CONTRACTOR SHALL COORDINATE WITH WATER COMPANY FOR DOMESTIC AND FIRE SERVICE. CONNECT TO BUILDING DOMESTIC AND FIRE LINE. COORDINATE WITH PLUMBING DRAWINGS.
16. COORDINATE LOCATION OF ELECTRICAL AND COMMUNICATION LINES WITH LOCAL UTILITIES.
17. COORDINATE LOCATION OF REQUIRED CONDUITS FOR ELECTRIC SERVICE, LIGHT POLES, COMMUNICATION SERVICE AND IRRIGATION SYSTEM.
18. COORDINATE LOCATION AND SIZE OF GAS SERVICE CONNECTION AND INSTALLATION OF SERVICE LINE AND METER WITH GAS COMPANY.
19. COORDINATE LOCATIONS AND CONNECTIONS OF BUILDING STORM LINES WITH PLUMBING DRAWINGS.
20. FOLLOW ALL LOCAL AND STATE CODES IN REFERENCE TO DOMESTIC/FIRE LINE INSTALLATION AND STORM SEWER / SANITARY SEWER INSTALLATION.
21. SANITARY SEWER LATERAL, WATER SERVICE, & ELECTRICAL/COMMUNICATION CONDUITS SHALL BE GRANULAR BACKFILL FOR ENTIRE RUN.
22. ALL EXISTING MANHOLE AND CATCH BASIN GRATES, WATER OR GAS VALVES SHALL BE ADJUSTED TO NEW FINISH GRADE ELEVATIONS.

UTILITY PLAN LEGEND

UTILITIES

- FIRE DEPT HOOKUP
- FIRE HYDRANT
- POST INDICATOR VALVE
- WATER METER
- WATER VALVE
- GAS METER
- GAS VALVE
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRICAL RISER
- TRANSFORMER
- GUY ANCHOR
- ELECTRIC JUNCTION BOX
- GENERATOR
- UTILITY POLE
- UTILITY POLE W/ TRANSFORMER
- ORNAMENTAL LIGHT
- STREET LIGHT
- PARKING LOT LIGHT (1 HEAD)
- PARKING LOT LIGHT (2 HEAD)
- PARKING LOT LIGHT (3 HEAD)
- PARKING LOT LIGHT (4 HEAD)
- COMMUNICATIONS JUNCTION BOX
- COMMUNICATIONS MANHOLE
- COMMUNICATIONS PEDESTAL
- COMMUNICATIONS RISER
- TRAFFIC SIGNAL
- STORM CLEANOUT
- CURB INLET
- FLOOR DRAIN
- SQUARE INLET
- STORM MANHOLE
- DOWN SPOUT
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- SANITARY STUB MARKER

OTHER

- FLAG POLE
- SIGN
- POST
- BOLLARD
- PARKING WHEEL STOP
- HANDICAPPED SPACE

PAVEMENT

- STANDARD DUTY ASPHALT
- HEAVY DUTY ASPHALT
- CONCRETE PAVEMENT

LINE TYPES

- SANITARY SEWER LATERAL
- SANITARY SEWER MAIN
- UNDERGROUND WATER
- AERIAL ELECTRIC
- UNDERGROUND ELECTRIC
- OVERHEAD UTILITY
- COMMUNICATIONS
- AERIAL COMMUNICATIONS
- UNDERGROUND FIBER OPTIC
- UNDERGROUND GAS
- STORM SEWER MAIN
- ROOF DRAIN
- SUB SURFACE DRAIN
- FLOW LINE
- RIGHT OF WAY LINE
- FENCE
- GUARD RAIL
- BOUNDARY LINE

ABBREVIATIONS

ROW	RIGHT OF WAY
ESMT	EASEMENT
D.&U.E.	DRAINAGE AND UTILITY EASEMENT
FFE	FINISH FLOOR ELEVATION
TOC	TOP OF CASTING
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYL CHLORIDE PIPE
VCP	VITRIFIED CLAY PIPE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
DIP	DUCTILE IRON PIPE
SSD	SUB SURFACE DRAIN PIPE
STM	STORM
SAN	SANITARY
STR	STRUCTURE
CO	CLEANOUT

PLAN CERTIFICATE NOTE:

ORIGINAL ALTA, TOPOGRAPHY, UTILITIES, STORM SEWERS, AND ALL OTHER EXISTING CONDITIONS ITEMS WERE PREPARED BY BANNING ENGINEERING.

FINAL DRAWINGS FOR THE IN FRANKLIN MORTON, LLC SITE WERE PREPARED BY WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER. FINAL CONSTRUCTION PLANS ARE THOSE PLANS CONTAINING A FINAL REVISION DATE AFTER 03/17/2016. WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER ACCEPT RESPONSIBILITY ONLY FOR THE IN FRANKLIN MORTON, LLC SITE IMPROVEMENTS RELATED TO THE ENGINEERING WORK SHOWN ON THESE PLANS.

N W E S

SCALE: 1" = 50'

0 25 50 100

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

Within Indiana Call 811 or 800-382-5544

24 Hours a Day, 7 Days a Week.

PER INDIANA STATE LAW IC 8-1-26, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net

317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 fax

ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS

Land Surveying | Civil Engineering
Landscape Architecture

PROJECT NO.	W15.0351
DWG NAME:	w150351-C800 utl.dwg
DESIGNED BY:	BJS/SAM
DRAWN BY:	RAM
CHECKED BY:	BJS
DATE:	02.17.2016

DATE:	BY:	REVISIONS AND ISSUES
03.17.2016	BJS	CITY SUBMITTAL

STEVEN SCOTT RUCKER REGISTERED PE.L.S. 11300279 STATE OF INDIANA PROFESSIONAL ENGINEER

STEVEN SCOTT RUCKER P.E. 11300279

PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

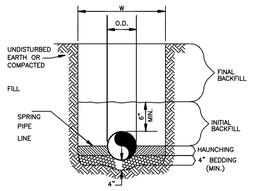
UTILITY PLAN
Part of the NE/4 of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C800

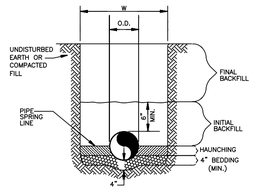
PROJECT NO.
W15.0351

LOCATION: H:\2015\W150351\Engineering\design\consat\w150351-C800 utl.dwg
LAYOUT: C800 UTILITY PLAN
DATE/TIME: March 17, 2016 - 12:10pm
PLOTTED BY: waylandc

PIPE DIA.	W
≤12"	O.D. OF PIPE + (12" TO 18")
>12"	≥ O.D. OF PIPE + 18"



WATER LINE
(NO SCALE)



SANITARY SEWER
(NO SCALE)

GENERAL NOTES

1. BEDDING SHALL BE CLASS I–A WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I–B COMPACTED TO 85% STANDARD PROCTOR.

2. HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I–A OR CLASS I–B OR CLASS II COMPACTED TO 85% PROCTOR.

3. INITIAL BACKFILL SHALL BE CLASS I–A WORKED BY HAND, OR CLASS I–B OR CLASS II COMPACTED TO 85% STANDARD PROCTOR.

4. INITIAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS III COMPACTED TO 90% STANDARD PROCTOR.

5. FINAL BACKFILL SHALL BE CLASS I, II, OR III COMPACTED AS NOTED IN NOTES 3. AND 4.

6. FINAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS IV–A COMPACTED TO 95% STANDARD PROCTOR.

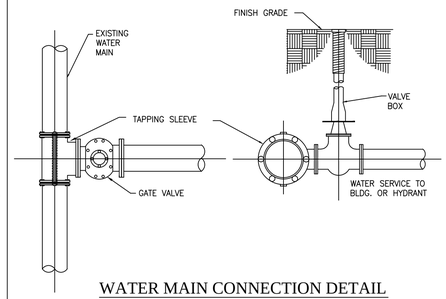
7. ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321–89.

8. ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698. CLASS III AND IV–A MATERIALS SHALL BE COMPACTED NEAR OPTIMUM MOISTURE CONTENT.

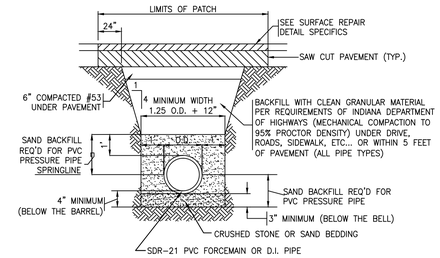
9. FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".

10. ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES. (SEE SPECIFICATIONS)

UTILITY TRENCH AND BEDDING
(NO SCALE)

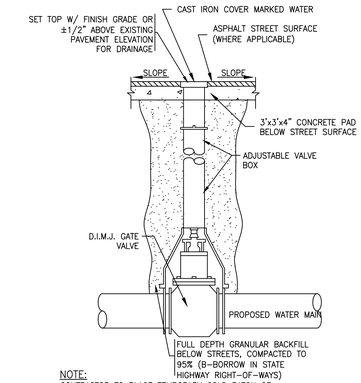


WATER MAIN CONNECTION DETAIL
(NO SCALE)



NOTE:
1. BITUMINOUS PAVEMENT TACK COAT SHALL BE PLACED BETWEEN THE SUBSURFACE AND ALONG THE SAW CUTS.
2. TRENCH WIDTHS AND BACKFILL REQUIREMENTS SHALL BE IN CONFORMANCE WITH MANUFACTURER'S RECOMMENDATIONS.

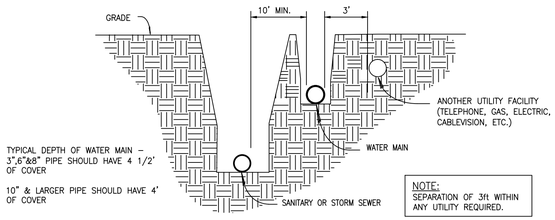
TYPICAL WATERMAIN TRENCH DETAIL
(NO SCALE)



NOTE:
CONTRACTOR TO PLACE TEMPORARY COLD PATCH OR CONCRETE RAMP AROUND VALVE BOXES IF NOT ASPHALTED PRIOR TO SEASONAL ASPHALT SHUT–DOWN

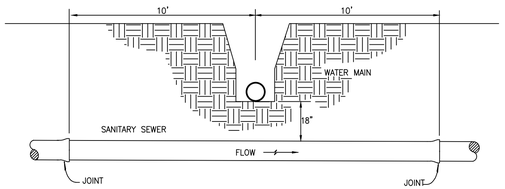
GATE VALVE AND BOX DETAIL
(NO SCALE)

WATER MAIN SHALL NOT BE LOCATED IN THE SAME TRENCH AS SANITARY SEWERS.



NOTE:
SEPARATION OF 3ft WITHIN ANY UTILITY REQUIRED.

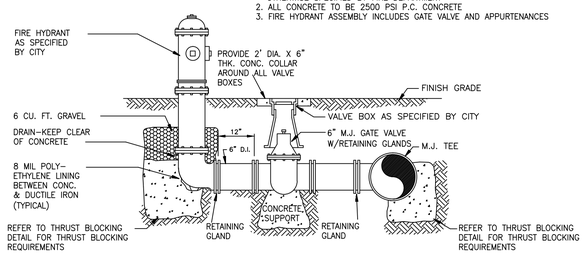
WATER MAIN LYING PARALLEL TO SEWER



WATER MAIN CROSSING SEWER

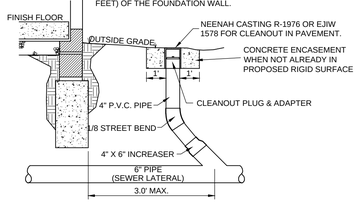
WATER & SEWER DETAIL
(NO SCALE)

NOTE:
1. ALL HYDRANTS TO BE SET PLUMB W/ NOZZLE FACING STREET UNLESS OTHERWISE SPECIFIED BY FIRE DEPARTMENT
2. ALL CONCRETE TO BE 2500 PSI P.C. CONCRETE
3. FIRE HYDRANT ASSEMBLY INCLUDES GATE VALVE AND APPURTENANCES



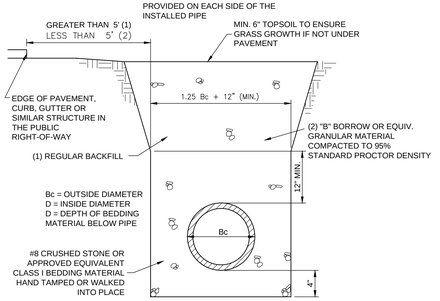
FIRE HYDRANT ASSEMBLY
(NO SCALE)

NOTE:
LATERAL CONNECTION TO CLEANOUT STRUCTURE TO BE WITHIN 3.0' (THREE FEET) OF THE FOUNDATION WALL.

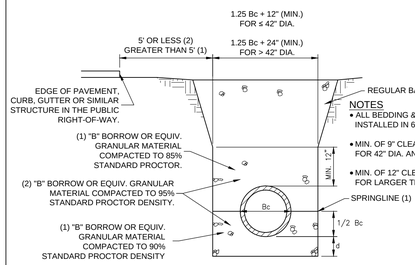


TYPICAL CLEANOUT SECTION
TYPE I (NO SCALE)

NOTE:
ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS A MIN. 9" CLEARANCE SHALL BE PROVIDED ON EACH SIDE OF THE INSTALLED PIPE



TYPICAL BEDDING SECTION - PVC & HDPE
(NO SCALE)

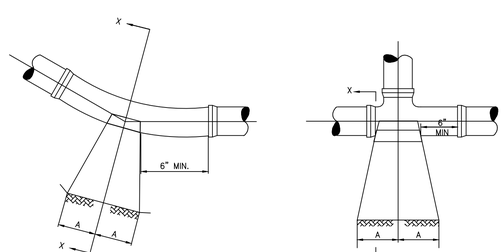


NOTES
- ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS.
- MIN. OF 9" CLEARANCE EACH SIDE OF PIPE FOR 42" DIA. AND LESS.
- MIN. OF 12" CLEARANCE EACH SIDE OF PIPE FOR LARGER THAN 42" DIA.

D	d(MIN.)
27" & SMALLER	3
30" TO 60"	4
66" & LARGER	6

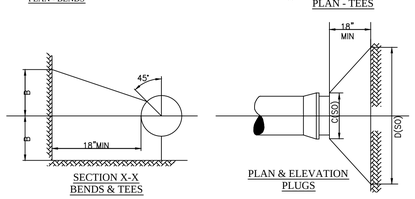
Bc= OUTSIDE DIAMETER
D = INSIDE DIAMETER
d = DEPTH OF BEDDING MATERIAL BELOW PIPE

TYP. BEDDING SECTION - CMP
(NO SCALE)



PLAN - BENDS

PLAN - TEES



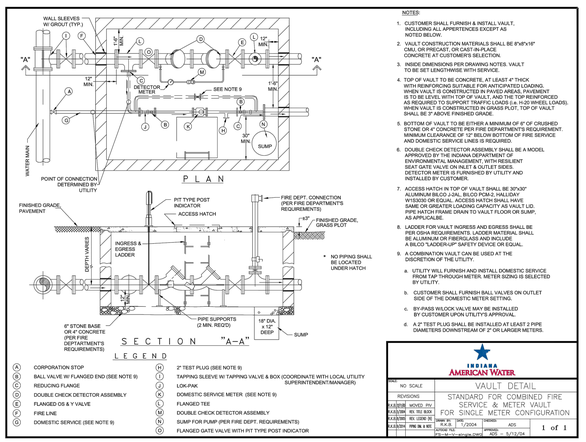
SECTION X-X BENDS & TEES

PLAN & ELEVATION PLUGS

TYPE	SIZE	1/4 BENDS		1/8 BENDS		1/16 BENDS		TEES		PLUGS	
		A	B	A	B	A	B	A	B	C	D
TYPE I 4000 PSF SOIL	6"	6"	10"	6"	8"	3"	8"	8"	8"	10"	15"
	8"	12"	12"	8"	10"	5"	9"	9"	12"	12"	20"
TYPE II 2000 PSF SOIL	6"	16"	10"	9"	10"	6"	8"	10"	12"	10"	20"
	8"	22"	13"	12"	13"	8"	10"	13"	16"	12"	29"

NOTE:
BASED ON 100 PSI STATIC PRESSURE PLUS A W W A WATER HAMMER CONCRETE TO BE CAST AGAINST UNDISTURBED BEARING SURFACE

THRUST BLOCKS FOR WATER MAINS
(NO SCALE)



NOTES:
1. CUSTOMER SHALL FURNISH & INSTALL VAULT, INCLUDING ALL APPURTENCES EXCEPT AS NOTED BELOW.
2. VAULT CONSTRUCTION MATERIALS SHALL BE 6"x6"x16" CMU, OR PRECAST, OR CAST-IN-PLACE CONCRETE AT CUSTOMER'S SELECTION.
3. INSIDE DIMENSIONS PER DRAWING NOTES. VAULT TO BE SET LENGTHWISE WITH SERVICE.
4. TOP OF VAULT TO BE CONCRETE, AT LEAST 4" THICK WITH REINFORCING SCHEDULE FOR ANTICIPATED LOADING. WHEN VAULT IS CONSTRUCTED IN PAVED AREAS, PAVEMENT IS TO BE LEVEL WITH TOP OF VAULT, AND THE TOP REINFORCED AS REQUIRED TO SUPPORT TRAFFIC LOADS (i.e. H-20 WHEEL LOADS). WHEN VAULT IS CONSTRUCTED IN GRASS PLOT, TOP OF VAULT SHALL BE 3" ABOVE FINISHED GRADE.
5. BOTTOM OF VAULT TO BE EITHER A MINIMUM OF 8" OF CRUSHED STONE OR 4" CONCRETE PER FIRE DEPARTMENT'S REQUIREMENT. MINIMUM CLEARANCE OF 12" BELOW BOTTOM OF FIRE SERVICE AND DOMESTIC SERVICE LINES IS REQUIRED.
6. DOUBLE CHECK DETECTOR ASSEMBLY SHALL BE A MODEL APPROVED BY THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, WITH RESILIENT SEAT GATE VALVE ON INLET & OUTLET SIDES. DETECTOR METER IS FURNISHED BY UTILITY AND INSTALLED BY CUSTOMER.
7. ACCESS HATCH IN TOP OF VAULT SHALL BE 30"x30" ALUMINUM BILCO J-3AL, BILCO PDM-2, HALLIDAY W1S3030 OR EQUAL. ACCESS HATCH SHALL HAVE SAME OR GREATER LOADING CAPACITY AS VAULT LID. PROVIDE SUMP DRAIN TO VAULT FLOOR OR SUMP, AS APPLICABLE.
8. LADDER FOR VAULT INGRESS AND EGRESS SHALL BE PER OSHA REQUIREMENTS. LADDER MATERIAL SHALL BE ALUMINUM OR FIBERGLASS AND INCLUDE A BILCO "LADDER-UP" SAFETY DEVICE OR EQUAL.
9. A COMBINATION VAULT CAN BE USED AT THE DISCRETION OF THE UTILITY.
   a. UTILITY WILL FURNISH AND INSTALL DOMESTIC SERVICE FROM TAP THROUGH METER. METER SIZING IS SELECTED BY UTILITY.
   b. CUSTOMER SHALL FURNISH BALL VALVES ON OUTLET SIDE OF THE DOMESTIC METER SETTING.
   c. BY-PASS WILCOX VALVE MAY BE INSTALLED BY CUSTOMER UPON UTILITY'S APPROVAL.
   d. A 2" TEST PLUG SHALL BE INSTALLED AT LEAST 2 PIPE DIAMETERS DOWNSTREAM OF 2" OR LARGER METERS.

LEGEND

A	CORPORATION STOP	H	2" TEST PLUG (SEE NOTE 9)
B	BALL VALVE W/ FLANGED END (SEE NOTE 9)	I	TAPPING SLEEVE W/ TAPPING VALVE & BOX (COORDINATE WITH LOCAL UTILITY SUPERINTENDENT/MANAGER)
C	REDUCING FLANGE	J	LOK-PAK
D	DOUBLE CHECK DETECTOR ASSEMBLY	K	DOMESTIC SERVICE METER (SEE NOTE 9)
E	FLANGED OS & Y VALVE	L	FLANGED TEE
F	FIRE LINE	M	DOUBLE CHECK DETECTOR ASSEMBLY
G	DOMESTIC SERVICE (SEE NOTE 9)	N	SUMP FOR PUMP (PER FIRE DEPT. REQUIREMENTS)
		O	FLANGED GATE VALVE WITH PIT TYPE POST INDICATOR

INDIANA AMERICAN WATER

NO SCALE	VAULT DETAIL		
REVISIONS	STANDARD FOR COMBINED FIRE SERVICE & METER VAULT FOR SINGLE METER CONFIGURATION		
4/14/98 MOVED PIV			
4/14/98 RS 192 BOX			
4/14/98 RS 1200 20	DRAWN BY: R.A.B.	7/7/2004	DRAWING: A05
4/14/98 RRE 8& & MS	DESIGN NO:		SHEET NO: 1 of 1
	APPROVED BY:		DATE: 5/12/04

METER VAULT DETAIL
NOT TO SCALE

** COORDINATE DETAILS OF THE VAULT WITH IAW
** PIV AND FDC TO BE LOCATED ON THE WATER VAULT

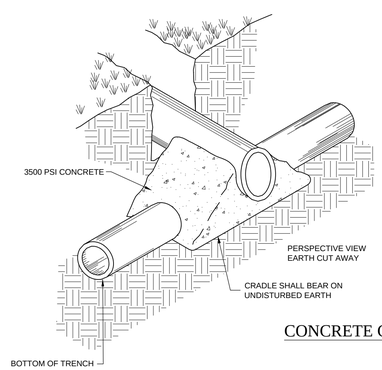
INDIANA AMERICAN WATER ASBUILT REQUIREMENTS:

1) CONTRACTOR IS AWARE OF THE REQUIREMENTS SET FORTH BY THE LOCAL REPRESENTATIVE OF IAW AND THE MEANS OF THE INDIANA AMERICAN WATER COMPANY, INC. DEVELOPER PACKET FOR WATER MAIN EXTENSIONS FOR ALL ITEMS TO BE FULFILLED PRIOR TO GETTING WATER SERVICE TURNED ON FOR THE STORE.

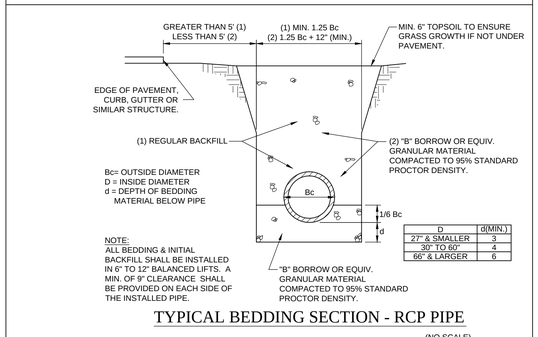
CONTACT PERSON:
TROY BRYANT
425 WEST MAIN STREET
MOORESVILLE, IN 46158
317.831.3385 EXT. 2

2) CONTRACTOR TO HAVE THE WATER MAIN EXTENSION AND ALL APPURTENANCES ASSOCIATED WITH SERVICE TO BE COORDINATED WITH WEIHE ENGINEERS,INC. FOR SURVEYING DURING INSTALLATION TO PREPARE ASBUILT DRAWING AND CERTIFICATION TO IAW PRIOR TO GETTING WATER SERVICE TURNED ON FOR THE STORE.

NOTE: TO BE USED WHEN CLEAR DISTANCE (FROM EXTERIOR PIPE DIAMETER TO EXTERIOR PIPE DIAMETER) BETWEEN SANITARY SEWER PIPING (MAINS, LATERALS, FORCE MAINS, ETC.) AND ALL OTHER PIPES IS 18" OR LESS, PER INSPECTOR'S DIRECTION, OR WHERE NOTED ON THE DRAWINGS. A MINIMUM CLEAR DISTANCE OF 3" MUST BE PROVIDED TO MAINTAIN STRUCTURAL INTEGRITY OF THE CONCRETE.



CONCRETE CRADLE DETAIL
(NO SCALE)



NOTE:
ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS. A MIN. OF 9" CLEARANCE SHALL BE PROVIDED ON EACH SIDE OF THE INSTALLED PIPE.

D	d(MIN.)
27" & SMALLER	3
30" TO 60"	4
66" & LARGER	6

TYPICAL BEDDING SECTION - RCP PIPE
(NO SCALE)

10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net
317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 *fax*
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

REVISIONS AND ISSUES	BY:	DATE:
CITY SUBMITTAL	BJS	03.17.2016

PROJECT NO:	W15.0351
DWG NAME:	w150351-C800 util det.dwg
DESIGNED BY:	BJS/RAM
DRAWN BY:	BJS/RAM
CHECKED BY:	BJS
DATE:	03.17.2016

STEVEN SCOTT RUCKER
REGISTERED
PE.17300279
STATE OF INDIANA
PROFESSIONAL ENGINEER

STEVEN SCOTT RUCKER P.E. 11300279

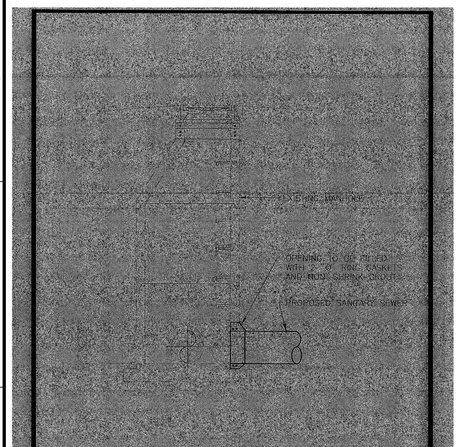
PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

UTILITY DETAILS
Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C801

PROJECT NO.
W15.0351

LOCATION: H:\2015\W150351\Engineering\design\conset\w150351-C800 util det.dwg
LAYOUT: C801
DATE/TIME: March 17, 2016 – 12:10pm
PLOTTED BY: wagnerb

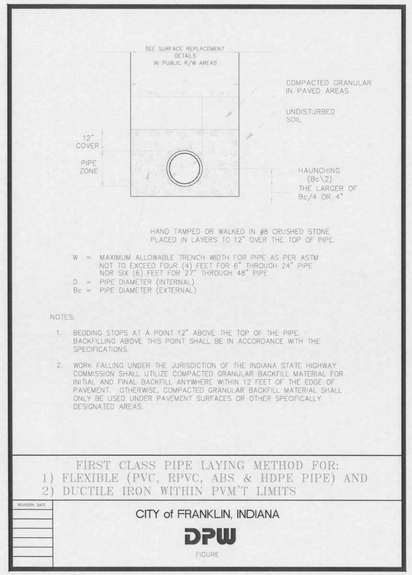


TYPICAL EXISTING MANHOLE ENTRY DETAIL

CITY of FRANKLIN, INDIANA

DPW

FIGURE



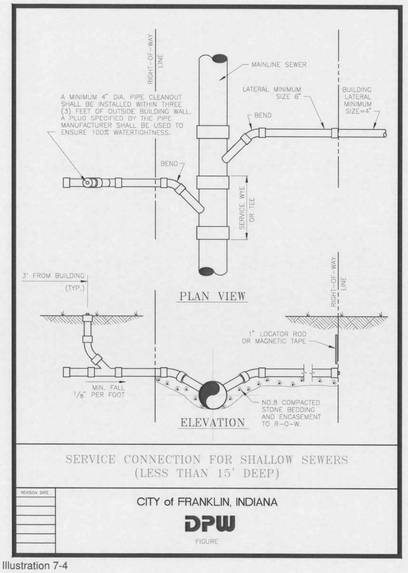
FIRST CLASS PIPE LAYING METHOD FOR:
1) FLEXIBLE (PVC, RPVC, ABS & HDPE PIPE) AND
2) DUCTILE IRON WITHIN PVM'T LIMITS

CITY of FRANKLIN, INDIANA

DPW

FIGURE

Illustration 7-1



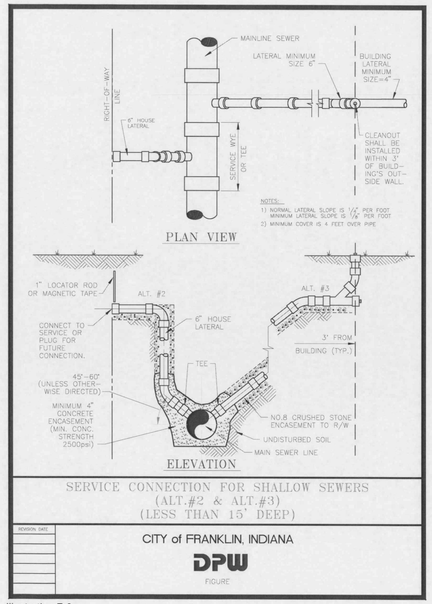
SERVICE CONNECTION FOR SHALLOW SEWERS
(LESS THAN 15' DEEP)

CITY of FRANKLIN, INDIANA

DPW

FIGURE

Illustration 7-4



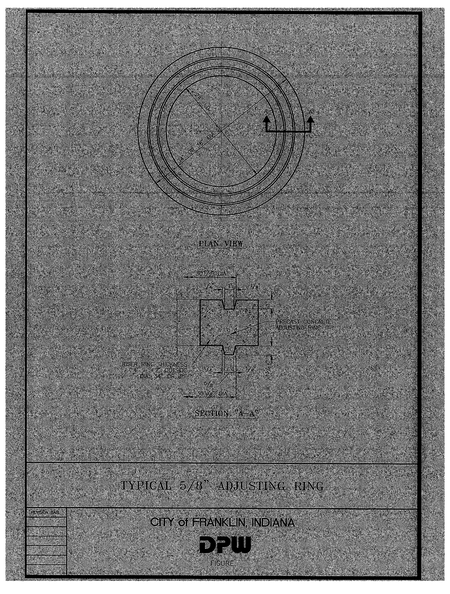
SERVICE CONNECTION FOR SHALLOW SEWERS
(ALT.#2 & ALT.#3)
(LESS THAN 15' DEEP)

CITY of FRANKLIN, INDIANA

DPW

FIGURE

Illustration 7-6

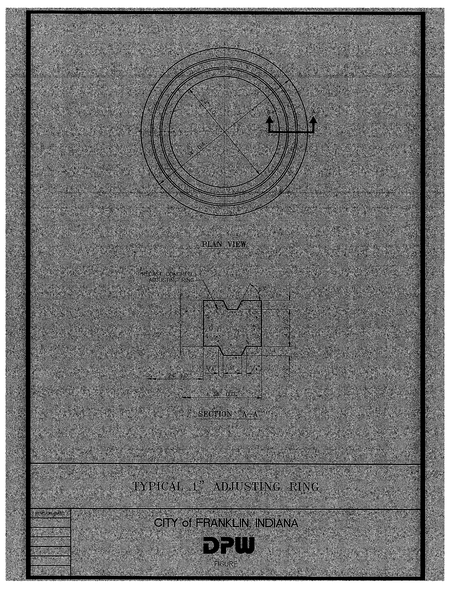


TYPICAL 5/8" ADJUSTING RING

CITY of FRANKLIN, INDIANA

DPW

FIGURE

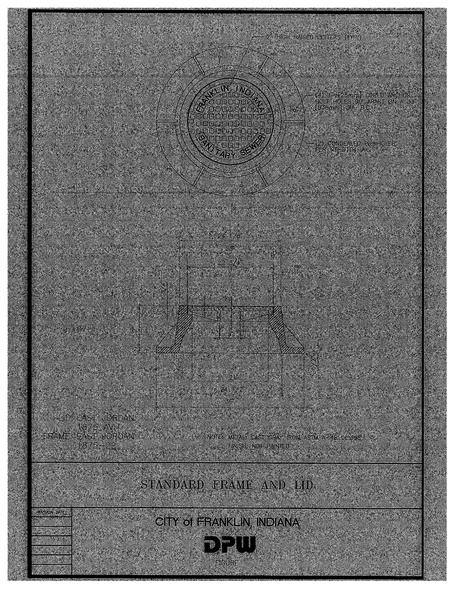


TYPICAL 1" ADJUSTING RING

CITY of FRANKLIN, INDIANA

DPW

FIGURE

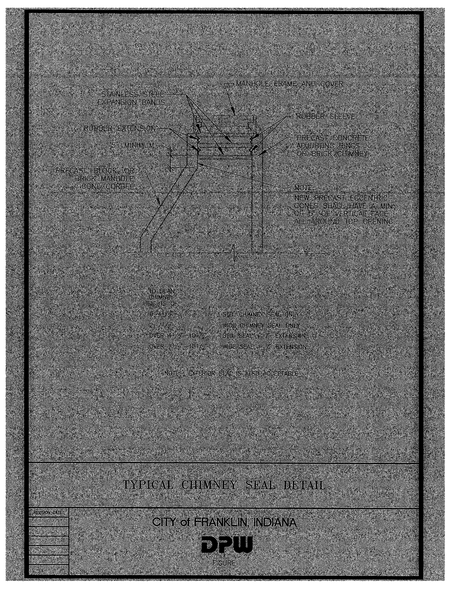


STANDARD FRAME AND LID

CITY of FRANKLIN, INDIANA

DPW

FIGURE

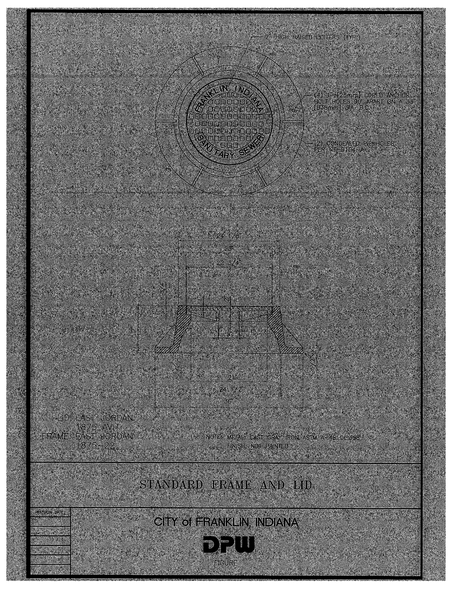


TYPICAL CHIMNEY SEAL DETAIL

CITY of FRANKLIN, INDIANA

DPW

FIGURE



STANDARD FRAME AND LID

CITY of FRANKLIN, INDIANA

DPW

FIGURE

* ALL DETAILS SHOWN ON THIS SHEET
WERE PROVIDED BY THE CITY OF FRANKLIN DPW

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture
10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net
317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

PROJECT NO:	W15.0351
DWG NAME:	w150351-C800 utl det.dwg
DESIGNED BY:	BJS/SAM
DRAWN BY:	RAM
CHECKED BY:	BJS
DATE:	02.17.2016

REVISIONS AND ISSUES	DATE:	BY:
CITY SUBMITTAL	02.17.2016	BJS

STEVEN SCOTT RUCKER REGISTERED PE.11300279 STATE OF INDIANA PROFESSIONAL ENGINEER
NOT VALID WITHOUT ORIGINAL SEAL

STEVEN SCOTT RUCKER P.E. 11300279

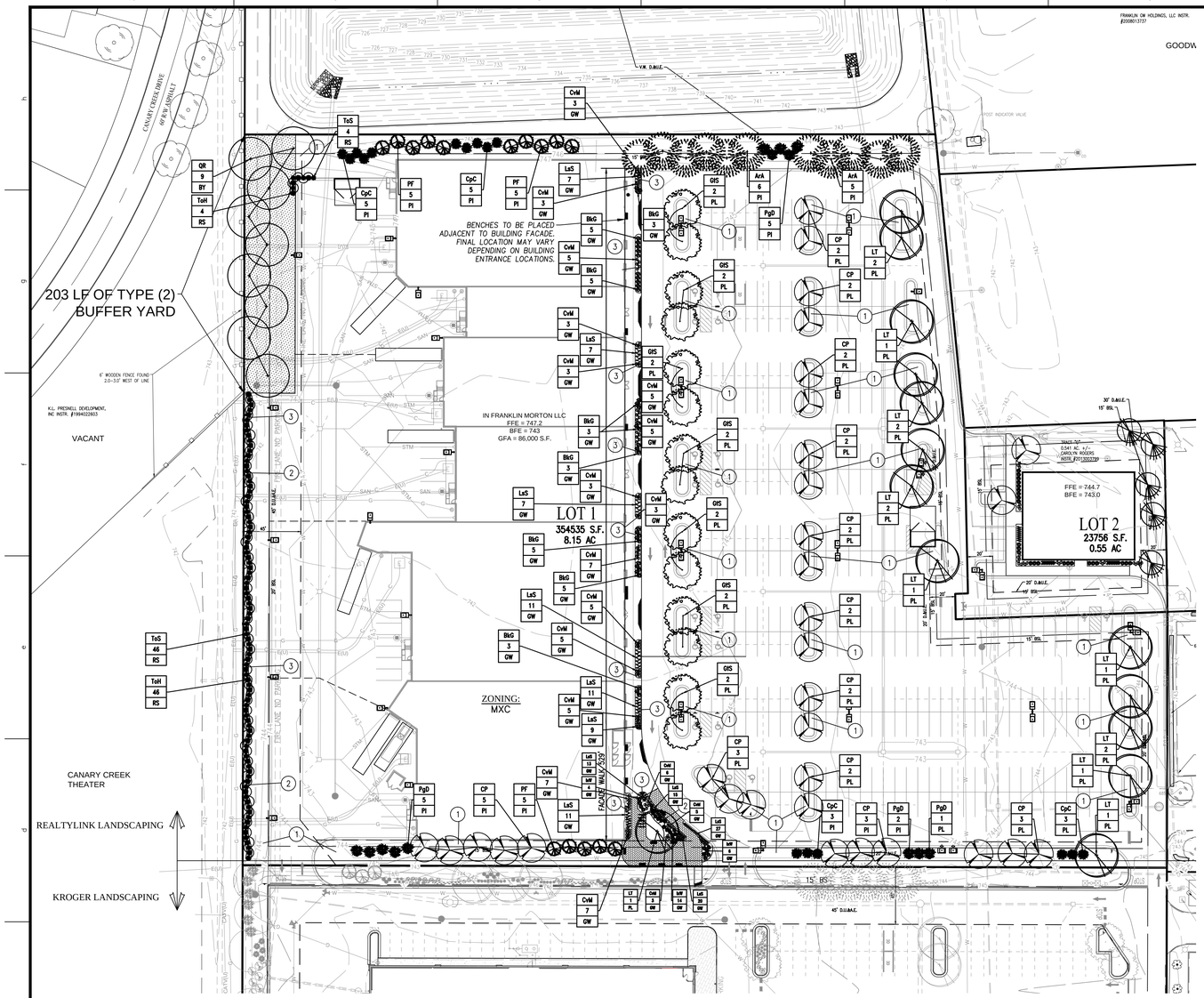
PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

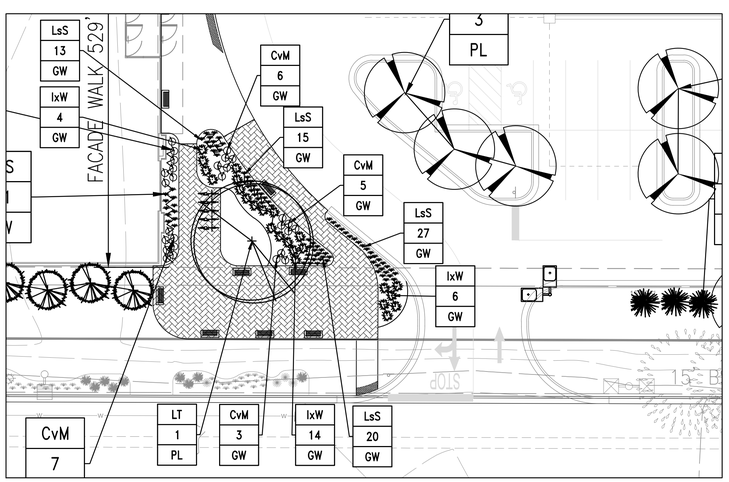
UTILITY DETAILS
Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
C802

PROJECT NO.
W15.0351

LOCATION: H:\2015\W150351\Engineering\design\construct\w150351-C800 utl det.dwg
LAYOUT: C802
DATE/TIME: March 17, 2016 – 12:10pm
PLOTTED BY: wagnerc





SIDEWALK PLANTING DETAIL

SCALE: 1" = 20'

GENERAL NOTES

1. IN CASE OF DISCREPANCIES BETWEEN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE. IF IN QUESTION, CONTACT THE LANDSCAPE DESIGNER.
2. ALL SHRUBS PLANTING AREAS TO BE COVERED WITH 4" THICK LAYER OF SHREDDED HARDWOOD BARK MULCH. ALL GROUND COVER BEDS SHALL BE COVERED WITH 1" SHREDDED HARDWOOD BARK MULCH. BARK MULCH SHALL BE APPROVED BY LANDSCAPE DESIGNER AND SHALL BE UNIFORM IN TEXTURE AND COLOR AND SHALL BE OBTAINED FROM SAWMILL OR LUMBERING OPERATIONS. NO UTILITY MULCH OR PROCESSED TREE TRIMMINGS WILL BE ALLOWED.
3. AN APPROVED PRE-EMERGENT HERBICIDE SHALL BE APPLIED IN ALL PLANTING AND GROUND COVER BEDS AT RATES SPECIFIED BY MANUFACTURER FOR EACH VARIETY OF PLANT.
4. FINAL PLACEMENT OF PLANT MATERIALS, ETC. SHALL BE APPROVED BY LANDSCAPE DESIGNER BEFORE PLANTING OPERATIONS ARE TO PROCEED. ALL TREE LOCATIONS SHALL BE MARKED WITH A WOODED STAKE INDICATING VARIETY AND SIZE OF TREE. ALL GROUND COVER AND MULCH BED LINES SHALL BE MARKED BY A HIGHLY VISIBLE PAINT LINE WITH OCCASIONAL WOOD STAKES FOR REFERENCE. ALL STAKES SHALL BE REMOVED FOLLOWING PLANTINGS OPERATIONS. LANDSCAPE DESIGNER RESERVES THE RIGHT TO ADJUST PLANT LOCATIONS ON SITE.
5. NO SUBSTITUTIONS OF PLANT MATERIAL WILL BE ALLOWED. IF PLANTS ARE SHOWN TO BE UNAVAILABLE, THE CONTRACTOR SHALL NOTIFY LANDSCAPE DESIGNER PRIOR TO BID DATE IN WRITING. ALL PLANTS SHALL BE INSPECTED AND TAGGED WITH PROJECT IDENTIFICATION AT NURSERY OR CONTRACTORS OPERATION PRIOR TO MOVING TO JOB SITE. PLANTS MAY ALSO BE INSPECTED AND APPROVED OR REJECTED ON THE JOB SITE.
6. ALL PLANTS ARE TO MEET OR EXCEED AMERICAN STANDARDS FOR NURSERY STOCK, LATEST EDITION, AS SET FORTH BY AMERICAN ASSOCIATION OF NURSERYMEN.
7. PLANTS AND ALL OTHER MATERIALS TO BE STORED ON SITE WILL BE PLACED WHERE THEY WILL NOT CONFLICT WITH CONSTRUCTION OPERATIONS AND AS DIRECTED BY OWNER.
8. ALL NEW LANDSCAPE PLANTINGS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FOLLOWING FINAL INSPECTION BY LANDSCAPE DESIGNER. AT THE END OF THIS PERIOD, PLANT MATERIAL TERMED DEAD OR UNSATISFACTORY BY LANDSCAPE DESIGNER SHALL BE REPLACED AT NO ADDITIONAL CHARGE BY THE LANDSCAPE CONTRACTOR.
9. THE LANDSCAPE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND FEES THAT MAY BE REQUIRED FOR HIS PORTION OF WORK.
10. PEAT MOSS TO BE USED ON PROJECT SHALL BE A DOMESTIC OR IMPORTED MATERIAL, CHOCOLATE BROWN IN COLOR AND COMPOSED OF PARTIALLY DECOMPOSED VEGETABLE MATERIAL. PEAT MOSS TO ALSO BE MILDLY ACIDIC IN CHARACTER AND SHALL MEET APPROVAL OF LANDSCAPE DESIGNER.
11. LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE DESIGNER IN WRITING PRIOR TO BID DATE OF ANY PLANTS THAT HE FEELS MAY NOT SURVIVE IN LOCATIONS NOTED.
12. ALL LANDSCAPING PLANTINGS TO BE MAINTAINED FOR 1 YEAR FOLLOWING TURNOVER. MAINTENANCE TO INCLUDE WATERING, WEEDING, CULTIVATION, MULCHING, MOWING AND ALL OTHER NECESSARY OPERATIONS REQUIRED FOR PROPER ESTABLISHMENT OF PLANTINGS. NOTE: AT END OF MAINTENANCE PERIOD, CONTRACTOR TO REMOVE GUYING AND STAKING FROM TREES.
13. CONTRACTOR TO SUBMIT UNIT PRICES ON EVERY TYPE OF WORK AS REQUESTED BY LANDSCAPE DESIGNER.
14. BACKFILL FOR TREE AND SHRUB PLANTING SHALL BE 75% APPROVED TOPSOIL AND 25% APPROVED PEAT MOSS. TOP LAYER OF BACKFILL SHALL BE 100% EXISTING TOPSOIL. A 5-10-5 ANALYSIS SLOW RELEASE FERTILIZER SHALL BE INCORPORATED INTO BACKFILL AT APPROVED RATES.
15. PROVIDE MINIMUM 4" PLANTING SOIL IN ALL GROUND COVER AND FLOWER AREAS WITH MIXTURE COMPRISING OF ONE PART COMMERCIAL GRADE 'POTTING SOIL,' 5 PARTS TOPSOIL AND 4 PARTS PEAT MOSS. A FULL 4" LAYER OF APPROVED SHREDDED FIBROUS PEAT MOSS MAY BE USED IN LIEU OF PLANTING MIX.
16. PLANTS SHALL BEAR A TAG SHOWING GENUS, SPECIES AND VARIETY.
17. PLANTS SHALL BE CERTIFIED BY THE STATE OF INDIANA DEPARTMENT OF NATURAL RESOURCES AND FREE FROM DISEASE OR HAZARDOUS INSECTS.
18. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PERTAINING TO THEIR PHASE OF WORK. UTILITIES ARE SHOWN TO BE APPROXIMATE. CALL UTILITY LOCATE PRIOR TO ANY PLACEMENT OF PLANT MATERIAL OR OTHER LANDSCAPE MATERIAL.

LANDSCAPE REQUIREMENTS SUMMERY PER ORDINANCE

REQUIREMENT:	REQUIRED:	PROVIDED:
SECTION 3.3: STANDARDS (MXC) - MAXIMUM LOT COVERAGE (ALL HARD SURFACES), LOT 2 = 354741 S.F. (8.14 AC.) X 75% = (266056 S.F.)	75% MAX. (266056 S.F.)	86,000 S.F.BLDG. + 222,878 S.F.PVMNT./ 354,741 LOT S.F. X 100 = 87.1% **VARIANCE REQUIRED**
SECTION 5.4: GATEWAY (GW-OL) C.2.i. SIDEWALKS & PEDESTRIAN WALKWAYS - SITE CONNECTING WALKWAYS SHALL BE BORDERED ON EACH SIDE BY A PLANTING AREA THAT IS A MINIMUM OF 2' IN WIDTH. THE PLANTING AREAS ON EACH SIDE OF THE WALKS SHALL EACH INCLUDE FLOWERS, SHRUBS, AND TREES A MIMIMUM OF 50% OF THEIR LENGTH. - WALKWAYS ALONG THE FACADES OF THE BUILDING SHALL BE CONCRETE, 5' WIDE AND SEPARATED FROM THE BUILDING BY A LANDSCAPE AREA THAT I S A MINIMUM OF 5' IN WIDTH. THE LANDSCAPE AREA SHALL INCLUDE BENCHES AND SEATING AREAS, AND BE PLANTED WITH FLOWERS, TREES, AND SHRUBS FOR A MINIMUM OF 50% OF ITS LENGTH.	- 111 LINEAR FT. OF WALK x 50% = 68.5 L.F. BY 2' WIDE ON EACH SIDE OF THE WALK - 529 LINEAR FT. x 50% = 264.5 LF BY 5' WIDE = 1322.5 SF OF PLANTING AREA REQUIRED.	- 111 LINEAR FT. OF WALK x 50% = 68.5 L.F. BY 2' WIDE ON EACH SIDE OF THE WALK - 1374 S.F. 5' PLANTING AREA LOCATED ALONG FACADE WALK AND 110 S.F. IN GREEN SPACE AT SOUTHEAST CORNER OF BUILDING. 5 BENCHES ALONG BUILDING FACADE.
SECTION 7.16: LANDSCAPING STANDARDS D. PROPERTY INTERIOR REQUIREMENTS - PROVIDE 1 BROADLEAF, DECIDUOUS TREE AND/OR EVERGREEN CONIFER FOR EVERY1,500 SQ. FT. OF REQUIRED YARD AREA.	- 88,685 SF GREEN SPACE - 59 TREES	48,583 SF GREEN SPACE **VARIANCE REQUIRED** - 59 TREES
SECTION 7.16: LANDSCAPING STANDARDS F. PARKING LOT INTERIOR REQUIREMENTS: - LANDSCAPE ISLANDS WITH A SURFACE AREA EQUAL TO 5% OF THE AREA OF THE PAVED SURFACE SHALL BE PROVIDED IN ALL PARKING LOTS. - ALL LANDSCAPE ISLANDS MUST BE A MINIMUM OF 300 SQ. FT. IN AREA. - A MINIMUM OF 1 BROADLEAF/DECIDUOUS TREE SHALL BE PROVIDED FOR EVERY 300 SQ.FT. OF LANDSCAPED AREA REQUIRED.	- 224,720 SF PAVED AREA x 5% = 11,236 SF PLANTING ISLANDS - 38 TREES	- 12,429 SF OF PLANTING ISLANDS **VARIANCE REQUIRED** - 54 TREES
SECTION 7.17: BUFFERING & SCREENING STANDARDS BUFFER YARD TYPE 2: - BUFFER YARD TYPE 2 SHALL INCLUDE A MINIMUM SETBACK OF 20 FEET IN ADDITION TO THE YARD SETBACK OTHERWISE REQUIRED BY THE ORDINANCE. IN ADDITION, ONE BROAD-LEAF DECIDUOUS CANOPY TREE OR 2 EVERGREEN CONIFERS SHALL BE PLANTED IN THE BUFFER YARD FOR EVERY 25 FEET OF BOUNDARY BETWEEN THE PROPERTIES. NO BUFFER YARD REQUIRED PLANTING SHALL BE PLACED WITHIN ANY EASEMENT OR RIGHT-OF-WAY.	- 203 LF OF 40' WIDE TYPE 2 BUFFER YARD ALONG PRESNELL PROPERTY - 9 DECIDUOUS CANOPY TREES OR 18 CONIFEROUS EVERGREEN TREES	- 203 LF OF 40' WIDE BUFFER YARD (WITHIN 45' D.U.& A.E. EASEMENT AND 20' DRIVE ENCROACHMENT) - 9 DECIDUOUS CANOPY TREES
SECTION 7.19: LARGE SCALE RETAIL STANDARDS C. PARKING LOT DESIGN, VEHICLE ACESS AND PEDESTRIAN SAFTY: 1. PEDESTRIAN FACILITIES: A CONTINUOUS, DELINIATED PEDESTRIAN PATHWAY A MINIMUM OF 6' WIDE FROM PERIMETER PUBLIC WALKWAY TO CUSTOMER ENTRANCE. - SIDEWALK, NO LESS THAN 8' WIDE ALONG FULL LENGTH OF BUILDING FACADE THAT FEATURES CUSTOMER ENTRANCE. - ALL INTERNAL WALKWAYS MUST FEATURE ANY COMBINATION OF LANDSCAPING, BENCHES, DECORATIVE LIGHTING, KIOSKS AND DECORATIVE BOLLARDS FOR 50% OF THEIR LENGTH. 2. PUBLIC SPACE: EACH ESABLISHMENT MUST CONTRIBUTE TO THE ENHANCEMENT OF THE COMMUNITY AND ITS PUBLIC SPACES BY PROVIDING AT LEAST 2 OF THE FOLLOWING AMENITIES. - A LANDSCAPE PATIO/OUTDOOR SEATING AREA THAT IS A MINIMUM OF 2000 SQUARE FEET IN AREA. - A WATER FEATURE (EXCLUDING ANY REQUIRED DETENTION/ RETENTION PONDS) - A CLOCK TOWER (EITHER AS A FREE STANDING STRUCTURE OR IN CONJUNCTION WITH THE PRIMARY ENTRANCE FEATURES.) - BUS/PUBLIC TRANSPOTATION SHELTER AND TURN OFF LANES. - PUBLIC ART	- 111 LINEAR FT. OF MIN. 6' WIDE WALK x 50% = 68.5 L.F. BY 2' WIDE ON EACH SIDE OF THE WALK	- 111 LINEAR FT. OF 6' MIN. WIDTH WALK x 50% = 68.5 L.F. BY 2' WIDE ON EACH SIDE OF THE WALK - 1282 S.F. 5' PLANTING AREA LOCATED ALONG FACADE WALK AND 906 S.F. IN GREEN SPACE AT SOUTHEAST CORNER OF BUILDING. 5 BENCHES ALONG BUILDING FACADE.
D. OUTDOOR STORAGE, SERVICE AND LOADING AREAS: AREAS FOR OUTDOOR STORAGE, TRUCK PARKING, TRASH COLLECTION/COMPACTION, LOADING AND UNLOADING SHALL NOT BE VISABLE FROM ABUTTING STREETS (PUBLIC OR PRIVATE), OR ADJACENT NON-INDUSTRIAL PROPERTIES.	- 8' MASONARY WALL EXTENDING THE ENTIRE LENGTH OF SERVICE AREA, WITH MIN. 4' HIGH OPAQUE PLANTING.	- EVERGREEN TREES EXTENDING THE ENTIRE LENGTH OF SERVICE AREA.

PLANT SCHEDULE

PLAN KEY	BOTANICAL NAME	COMMON NAME (AVERAGE MATURE HT.)	SIZE	QUANTITY	ROOT CONDITION B & B	BARE	CONDITION CONT	ON CENTER SPACING	SPECIAL INSTRUCTIONS
	CANOPY DECIDUOUS TREES								
ArA	ACER RUBRUM 'AUTUMN FLAME'	AUTUMN FLAME RED MAPLE (40')	2 1/2"	11	X			SEE PLAN	X
GiS	GLEDITSIA TRIACANTHOS INERMIS 'SKYLINE'	SKYLINE HONEYLOCUST (40')	2 1/2"	14	X			SEE PLAN	X
LT	LIRIODENDRON TULIPIFERA	TULIP TREE (45')	2 1/2"	14	X			SEE PLAN	X
QR	QUERCUS RUBRA	RED OAK (45')	2 1/2"	9	X			SEE PLAN	X
	ORNAMENTAL TREES								
CP	CRATAEGUS PHAENOPYRUM	WASHINGTON HAWTHORN (30')	2 1/2"	30			X	SEE PLAN	MIN. 24"
	EVERGREEN TREES								
CpC	CHAMAECYPARIS PISIFERA 'CYANO VIRIDIS'	BOULEVARD FALSECYPRESS (10')	5'	16			X	SEE PLAN	MIN. 24"
PF	PINUS FLEXILIS	LIMBER PINE (15')	5'	15			X	SEE PLAN	MIN. 24"
PgD	PICEA GLAUCA 'DENSATA'	BLACK HILLS SPRUCE (12')	5'	13			X	SEE PLAN	MIN. 24"
	EVERGREEN SHRUBS								
BkG	BUXUS X KOREANA 'GREEN GEM'	GREEN GEM BOXWOOD (3.5')	18"	35	X			SEE PLAN	MIN 18"
IxW	ILEX X 'WILLEMER'	EMERALD MAGIC HOLLY (3.5')	#3	24			X	SEE PLAN	MIN. 18"
ToH	THUJA OCCIDENTALIS 'HOLMSTRUP'	HOLMSTRUP ARBORVITAE (12')	4'	50	X			SEE PLAN	MIN 4'
ToS	THUJA OCCIDENTALIS 'SMARAGD'	AMERICAN ARBORVITAE (14')	4'	50	X			SEE PLAN	MIN 4'
	PERENNIALS								
CvM	COREOPSIS VERTICILLATA 'MOONBEAM'	MOONBEAM COREOPSIS	#1	76			X	2'	X
LsS	LIRIOPE SPICATA 'SILVER DRAGON'	SILVER DRAGON LILYTUFT	#1	138			X	1.5'	X

LANDSCAPE PLAN NOTES

1. SOD (ALTERNATE)- ALL SOD SHALL BE CERTIFIED GRADE CULTIVATED GRASS SOD OF "ADVENTURE BLEND" TURF TYPE TALL FESCUE (BY GENERAL CONTRACTOR)
2. MULCH
3. REFER TO THE SIDEWALK PLANTING DETAIL ON THIS SHEET FOR ADDITIONAL LANDSCAPE QUANTITIES.

LEGEND

TYPE 2 BUFFER YARD

SYMBOL
QUANTITY
PLANTING AREA

PLANTING AREA LEGEND
GW = GATEWAY REQUIREMENTS
PI = PROPERTY INTERIOR REQUIREMENTS
PL = PARKING LOT REQUIREMENTS
BY = BUFFER YARD REQUIREMENTS
RS = RETAIL STANDARDS

PLAN CERTIFICATE NOTE:

ORIGINAL ALTA, TOPOGRAPHY, UTILITIES, STORM SEWERS, AND ALL OTHER EXISTING CONDITIONS ITEMS WERE PREPARED BY BANNING ENGINEERING.

FINAL DRAWINGS FOR THE IN FRANKLIN MORTON, LLC SITE WERE PREPARED BY WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER. FINAL CONSTRUCTION PLANS ARE THOSE PLANS CONTAINING A FINAL REVISION DATE AFTER 03/17/2016. WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER ACCEPT RESPONSIBILITY ONLY FOR THE IN FRANKLIN MORTON, LLC SITE IMPROVEMENTS RELATED TO THE ENGINEERING WORK SHOWN ON THESE PLANS.

N W E S

SCALE: 1" = 50'
0 25 50 100

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10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net
317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

REVISIONS AND ISSUES	DATE:	BY:
CITY SUBMITTAL	02.17.2016	BSS

PROJECT NO: W15.0351
DWG. NAME: w150351-L101.dwg
DESIGNED BY: BJS/PSAM
DRAWN BY: PSAM
CHECKED BY: BJS
DATE: 02.17.2016

ROBERT A. MEZYKOWSKI
REGISTERED LANDSCAPE ARCHITECT
No.80050080
STATE OF INDIANA
NOT VALID UNLESS PRINTED IN BLUE INK

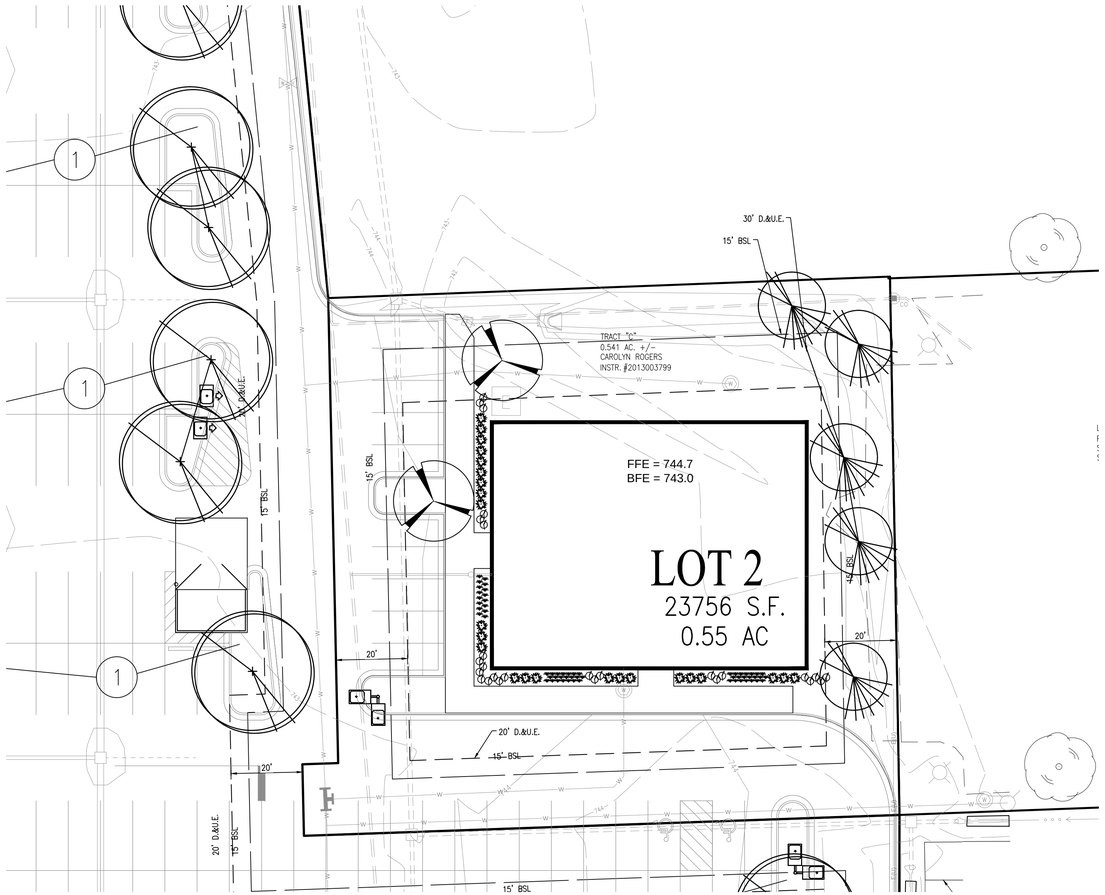
ROBERT A. MEZYKOWSKI L.A.80050080

PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

LANDSCAPE PLAN LOT 1
Part of the NE/4 of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
L100
PROJECT NO.
W15.0351

LOCATION: J:\2015\W150351\Engineering\design\contset\w150351-L101.dwg
LAYOUT TAB: Layout1
DATE/TIME: March 17, 2016 - 12:19pm
PLOTTED BY: schoettb



LANDSCAPE PLAN NOTES

1. SOD (ALTERNATE)- ALL SOD SHALL BE CERTIFIED GRADE CULTIVATED GRASS SOD. OF "ADVENTURE BLEND" TURF TYPE TALL FESCUE (BY GENERAL CONTRACTOR)
2. MULCH
3. REFER TO THE SIDEWALK PLANTING DETAIL ON THIS SHEET FOR ADDITIONAL LANDSCAPE QUANTITIES.

SYMBOL
QUANTITY
PLANTING AREA

PLANTING AREA LEGEND
GW = GATEWAY REQUIREMENTS
PI = PROPERTY INTERIOR REQUIREMENTS
PL = PARKING LOT REQUIREMENTS

GENERAL NOTES

1. IN CASE OF DISCREPANCIES BETWEEN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE. IF IN QUESTION, CONTACT THE LANDSCAPE DESIGNER.
2. ALL SHRUBS PLANTING AREAS TO BE COVERED WITH 4" THICK LAYER OF SHREDDED HARDWOOD BARK MULCH. ALL GROUND COVER BEDS SHALL BE COVERED WITH 1" SHREDDED HARDWOOD BARK MULCH. BARK MULCH SHALL BE APPROVED BY LANDSCAPE DESIGNER AND SHALL BE UNIFORM IN TEXTURE AND COLOR AND SHALL BE OBTAINED FROM SAWMILL OR LUMBERING OPERATIONS. NO UTILITY MULCH OR PROCESSED TREE TRIMMINGS WILL BE ALLOWED.
3. AN APPROVED PRE-EMERGENT HERBICIDE SHALL BE APPLIED IN ALL PLANTING AND GROUND COVER BEDS AT RATES SPECIFIED BY MANUFACTURER FOR EACH VARIETY OF PLANT.
4. FINAL PLACEMENT OF PLANT MATERIALS, ETC. SHALL BE APPROVED BY LANDSCAPE DESIGNER BEFORE PLANTING OPERATIONS ARE TO PROCEED. ALL TREE LOCATIONS SHALL BE MARKED WITH A WOODED STAKE INDICATING VARIETY AND SIZE OF TREE. ALL GROUND COVER AND MULCH BED LINES SHALL BE MARKED BY A HIGHLY VISIBLE PAINT LINE WITH OCCASIONAL WOOD STAKES FOR REFERENCE. ALL STAKES SHALL BE REMOVED FOLLOWING PLANTINGS OPERATIONS. LANDSCAPE DESIGNER RESERVES THE RIGHT TO ADJUST PLANT LOCATIONS ON SITE.
5. NO SUBSTITUTIONS OF PLANT MATERIAL WILL BE ALLOWED. IF PLANTS ARE SHOWN TO BE UNAVAILABLE, THE CONTRACTOR SHALL NOTIFY LANDSCAPE DESIGNER PRIOR TO BID DATE IN WRITING. ALL PLANTS SHALL BE INSPECTED AND TAGGED WITH PROJECT IDENTIFICATION AT NURSERY OR CONTRACTORS OPERATION PRIOR TO MOVING TO JOB SITE. PLANTS MAY ALSO BE INSPECTED AND APPROVED OR REJECTED ON THE JOB SITE.
6. ALL PLANTS ARE TO MEET OR EXCEED AMERICAN STANDARDS FOR NURSERY STOCK, LATEST EDITION, AS SET FORTH BY AMERICAN ASSOCIATION OF NURSERYMEN.
7. PLANTS AND ALL OTHER MATERIALS TO BE STORED ON SITE WILL BE PLACED WHERE THEY WILL NOT CONFLICT WITH CONSTRUCTION OPERATIONS AND AS DIRECTED BY OWNER.
8. ALL NEW LANDSCAPE PLANTINGS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FOLLOWING FINAL INSPECTION BY LANDSCAPE DESIGNER. AT THE END OF THIS PERIOD, PLANT MATERIAL TERMED DEAD OR UNSATISFACTORY BY LANDSCAPE DESIGNER SHALL BE REPLACED AT NO ADDITIONAL CHARGE BY THE LANDSCAPE CONTRACTOR.
9. THE LANDSCAPE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND FEES THAT MAY BE REQUIRED FOR HIS PORTION OF WORK.
10. PEAT MOSS TO BE USED ON PROJECT SHALL BE A DOMESTIC OR IMPORTED MATERIAL, CHOCOLATE BROWN IN COLOR AND COMPOSED OF PARTIALLY DECOMPOSED VEGETABLE MATERIAL. PEAT MOSS TO ALSO BE MILDLY ACIDIC IN CHARACTER AND SHALL MEET APPROVAL OF LANDSCAPE DESIGNER.
11. LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE DESIGNER IN WRITING PRIOR TO BID DATE OF ANY PLANTS THAT HE FEELS MAY NOT SURVIVE IN LOCATIONS NOTED.
12. ALL LANDSCAPING PLANTINGS TO BE MAINTAINED FOR 1 YEAR FOLLOWING TURNOVER. MAINTENANCE TO INCLUDE WATERING, WEEDING, CULTIVATION, MULCHING, MOWING AND ALL OTHER NECESSARY OPERATIONS REQUIRED FOR PROPER ESTABLISHMENT OF PLANTINGS. NOTE: AT END OF MAINTENANCE PERIOD, CONTRACTOR TO REMOVE GUYING AND STAKING FROM TREES.
13. CONTRACTOR TO SUBMIT UNIT PRICES ON EVERY TYPE OF WORK AS REQUESTED BY LANDSCAPE DESIGNER.
14. BACKFILL FOR TREE AND SHRUB PLANTING SHALL BE 75% APPROVED TOPSOIL AND 25% APPROVED PEAT MOSS. TOP LAYER OF BACKFILL SHALL BE 100% EXISTING TOPSOIL. A 5-10-5 ANALYSIS SLOW RELEASE FERTILIZER SHALL BE INCORPORATED INTO BACKFILL AT APPROVED RATES.
15. PROVIDE MINIMUM 4" PLANTING SOIL IN ALL GROUND COVER AND FLOWER AREAS WITH MIXTURE COMPRISING OF ONE PART COMMERCIAL GRADE 'POTTING SOIL;' 5 PARTS TOPSOIL AND 4 PARTS PEAT MOSS. A FULL 4" LAYER OF APPROVED SHREDDED FIBROUS PEAT MOSS MAY BE USED IN LIEU OF PLANTING MIX.
16. PLANTS SHALL BEAR A TAG SHOWING GENUS, SPECIES AND VARIETY.
17. PLANTS SHALL BE CERTIFIED BY THE STATE OF INDIANA DEPARTMENT OF NATURAL RESOURCES AND FREE FROM DISEASE OR HAZARDOUS INSECTS.
18. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PERTAINING TO THEIR PHASE OF WORK. UTILITIES ARE SHOWN TO BE APPROXIMATE. CALL UTILITY LOCATE PRIOR TO ANY PLACEMENT OF PLANT MATERIAL OR OTHER LANDSCAPE MATERIAL.

PLANT SCHEDULE

PLAN KEY	BOTANICAL NAME	COMMON NAME (AVERAGE MATURE HT.)	SIZE	QUANTITY	ROOT CONDITION B & B	BARE	CONT	ON CENTER SPACING	SPECIAL INSTRUCTIONS
	CANOPY DECIDUOUS TREES								
CC	CARPINUS CAROLINIANA	AMERICAN HORNBEAM (25')	2 1/2"	5	X			SEE PLAN	X
	ORNAMENTAL TREES								
CP	CRATAEGUS PHAENOPYRUM	WASHINGTON HAWTHORN (30')	2 1/2"	2			X	SEE PLAN	MIN. 24"
	EVERGREEN SHRUBS								
Ix W	ILEX X 'WILLEMER'	EMERALD MAGIC HOLLY (3.5')	#3	24			X	SEE PLAN	MIN. 18"
	PERENNIALS								
CvM	COREOPSIS VERTICILLATA 'MOONBEAM'	MOONBEAM COREOPSIS	#1	26			X	SEE PLAN	X
LsS	LIRIOPE SPICATA 'SILVER DRAGON'	SILVER DRAGON LILYTUFT	#1	58			X	SEE PLAN	X

LANDSCAPE REQUIREMENTS SUMMERY PER ORDINANCE

REQUIREMENT:	REQUIRED:	PROVIDED:
SECTION 3.3: STANDARDS (MXC) - MAXIMUM LOT COVERAGE (ALL HARD SURFACES) = 75%	**(23,761 SF = LOT AREA)** - 5,941 SF OPEN SPACE (25%) REQUIRED	- 7,780 SF (32.7%)
SECTION 5.4: GATEWAY (GW-OL) C.2.i. SIDEWALKS & PEDESTRIAN WALKWAYS - WALKWAYS ALONG THE FACADES OF THE BUILDING SHALL BE CONCRETE, 5' WIDE AND SEPARATED FROM THE BUILDING BY A LANDSCAPE AREA THAT I S A MINIMUM OF 5' IN WIDTH. THE LANDSCAPE AREA SHALL INCLUDE BENCHES AND SEATING AREAS, AND BE PLANTED WITH FLOWERS, TREES, AND SHRUBS FOR A MINIMUM OF 50% OF ITS LENGTH.	- 158 LINEAR FT. x 50% = 79 LF BY 5' WIDE = 395 SF OF PLANTING AREA REQUIRED.	- 787 SF PLANTING AREA
SECTION 7.16: LANDSCAPING STANDARDS D. PROPERTY INTERIOR REQUIREMENTS - PROVIDE 1 BROADLEAF, DECIDUOUS TREE AND/OR EVERGREEN CONIFER FOR EVERY1,500 SQ. FT. OF REQUIRED YARD AREA.	- 5,941 SF GREEN SPACE - 4 TREES	- 7,780 SF GREEN SPACE - 4 TREES
SECTION 7.16: LANDSCAPING STANDARDS F. PARKING LOT INTERIOR REQUIREMENTS: - LANDSCAPE ISLANDS WITH A SURFACE AREA EQUAL TO 5% OF THE AREA OF THE PAVED SURFACE SHALL BE PROVIDED IN ALL PARKING LOTS. - ALL LANDSCAPE ISLANDS MUST BE A MINIMUM OF 300 SQ. FT. IN AREA. - A MINIMUM OF 1 BROADLEAF/DECIDUOUS TREE SHALL BE PROVIDED FOR EVERY 300 SQ.FT. OF LANDSCAPED AREA REQUIRED.	- 7,830 SF PAVED AREA x 5% = 391 SF PLANTING ISLANDS - 2 TREES	- 401 SF ISLANDS - 2 TREES

PLAN CERTIFICATE NOTE:

ORIGINAL ALTA, TOPOGRAPHY, UTILITIES, STORM SEWERS, AND ALL OTHER EXISTING CONDITIONS ITEMS WERE PREPARED BY BANNING ENGINEERING.

FINAL DRAWINGS FOR THE IN FRANKLIN MORTON, LLC SITE WERE PREPARED BY WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER. FINAL CONSTRUCTION PLANS ARE THOSE PLANS CONTAINING A FINAL REVISION DATE AFTER 03/17/2016. WEIHE ENGINEERS, INC. AND STEVEN SCOTT RUCKER ACCEPT RESPONSIBILITY ONLY FOR THE IN FRANKLIN MORTON, LLC SITE IMPROVEMENTS RELATED TO THE ENGINEERING WORK SHOWN ON THESE PLANS.

N
W E
S

SCALE: 1" = 20'
0 10 2 40

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PER INDIANA STATE LAW IC 8-1-26, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

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Indianapolis, Indiana 46280
weihe.net
317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 *fax*
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

REVISIONS AND ISSUES	DATE:	BY:
CITY SUBMITTAL	02.17.2016	BSS

PROJECT NO.: W15.0351
DWG. NAME: w150351-L101.dwg
DESIGNED BY: BJS/RAM
DRAWN BY: RAM
CHECKED BY: BJS
DATE: 02.17.2016

ROBERT A. MEZYKOWSKI REGISTERED No.80050080 STATE OF INDIANA LANDSCAPE ARCHITECT
NOT VALID UNLESS PRINTED

ROBERT A. MEZYKOWSKI L.A.80050080

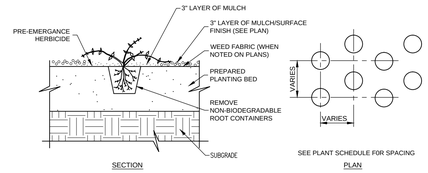
PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

LANDSCAPE PLAN LOT 2
Part of the NE¼ of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
L101

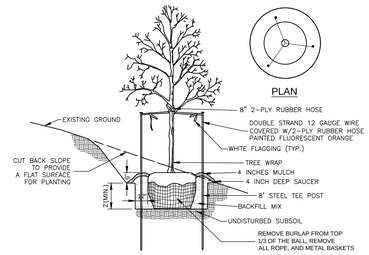
PROJECT NO.
W15.0351

LOCATION: H:\2015\W150351\Engineering\Design\Consent\w150351-L101.dwg
LAYOUT: L101 - LANDSCAPE
DATE/TIME: March 17, 2016 - 12:19pm
PLOTTED BY: schoolfb



GROUNDCOVER PLANTING

(NO SCALE)

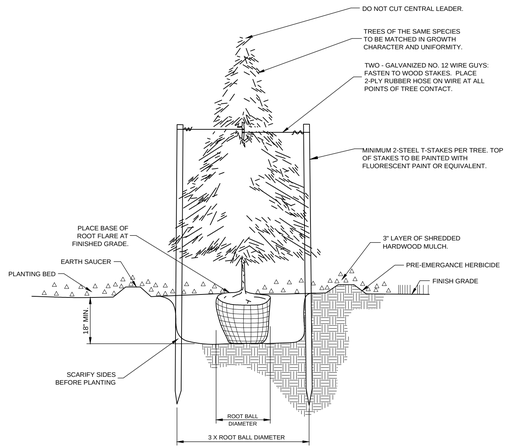


NOTES:

- SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.
- TOP OF ROOT BALL TO BE SET 4" HIGHER THAN ADJACENT EARTH GRADE.

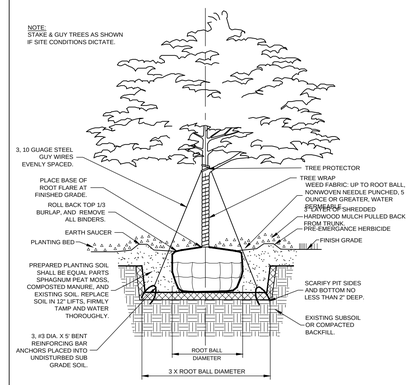
TREE PLANTING ON SLOPE

(NO SCALE)



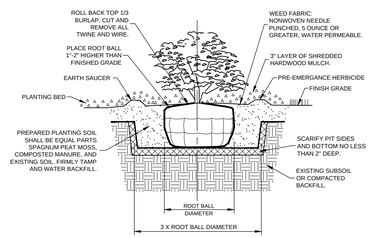
EVERGREEN PLANTING & STAKING

(NO SCALE)



SHADE TREE PLANTING DETAIL

(NO SCALE)



SHRUB & SMALL TREE PLANTING DETAIL

(NO SCALE)

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

Within Indiana Call
811 or 800-382-5544
24 Hours a Day, 7 Days a Week.

PER INDIANA STATE LAW IC 8-1-26, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net

317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 *fax*

ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

PROJECT NO:	W15.0351	
DWG. NAME:	w150351-L101.dwg	
DESIGNED BY:	BJS/PAM	
DRAWN BY:	PAM	
CHECKED BY:	BJS	
DATE:	02-17-2016	

DATE:	BY:
02-17-2016	BJS

REVISIONS AND ISSUES
CITY SUBMITTAL

ROBERT A. MEZYKOWSKI
REGISTERED
No. 80050080
STATE OF INDIANA
LANDSCAPE ARCHITECT
NOT VALID UNLESS SEALED

ROBERT A. MEZYKOWSKI L.A.80050080

PREPARED FOR:
IN FRANKLIN MORTON, LLC
xxx NORTH MORTON STREET, FRANKLIN, IN 46131

LANDSCAPE DETAILS
Part of the NE/4 of Section 15, Township 12 North, Range 4 East, Franklin Township, Johnson County, Indiana

SHEET NO.
L200

PROJECT NO.
W15.0351

LOCATION: H:\2015\W15351\Engineering\design\conset\w150351-L101.dwg
LAYOUT: L200 XREF: 0351-TB
DATE/TIME: March 17, 2016 - 12:22pm
PLOTTED BY: schoeffb