TABLE OF CONTENTS

TABLE OF CONTENTS 1

LIST OF FIGURES 1
26-2A Survey Envelope Label 1
26-2B Miscellaneous Envelope 1
26-2C Section Corner Reference Card 1
26-2D Sample Disc Label 1
26-2E Location Control Route Survey Plat Example 1

CHAPTER 26 [Rewritten Apr. 2011] 2

26-1.0 GUIDELINES AND PROCEDURES 2
26-1.01 InRoads Format 2
26-1.01(01) Minimum File Requirements 3
26-1.01(02) Aerial-Survey File Requirements 10
26-1.02 Other Formats 10

26-2.0 OTHER SURVEY INFORMATION 10

LIST OF FIGURES

Figure **Title**

26-2A Survey Envelope Label
26-2B Miscellaneous Envelope
26-2C Section Corner Reference Card
26-2D Sample Disc Label
26-2E Location Control Route Survey Plat Example

CHAPTER 26 [Rewritten Apr. 2011]

SURVEY TRANSMITTAL

Transmitting accurate and consistently-formatted survey data to the designer will facilitate an efficient and cost-effective project design. Regardless of the survey method, each electronic survey-data submission shall be in a format that is compatible with the Department's current versions of survey and design software in use. Each submission shall be compatible with InRoads design and survey software. However, with prior written approval from INDOT, a consultant may be permitted to submit electronic files that are in accordance with previously-accepted formats on a project by project basis (See Section 26-1.02). If the survey submittal is for a design consultant's CADD system, the files may be transmitted in a format compatible with the consultant's design application. However, a submittal of the survey data shall also be provided to INDOT that is compatible with the Department's current software. A complete survey transmittal should incorporate all relevant survey information, whether electronic or not.

This Chapter provides the content, style, and format requirements for a survey transmittal that is acceptable to the Department. The guidelines and procedures described herein also include the types of files and the documentation formats that should be utilized in project design.

26-1.0 GUIDELINES AND PROCEDURES

Providers of land-surveying services are required to embrace current technology to improve the quality, consistency, and accuracy of survey data collected in the field and to satisfy INDOT standards. To effectively and efficiently exchange electronic information, INDOT requires standardized file formats that provide compatibility between data collectors, data processors, and data users; and which allow for future reuse of the data by the Department or its consultants.

26-1.01 InRoads Format

Considering that INDOT has adopted Microstation and InRoads as its standard drafting and design software applications, respectively, the CAD Support Team has developed standard resource files such as design templates (seed files) and survey-data processing (.xin) files. The most current INDOT *seed.dgn* and *survey.xin* files made available through the CAD Support Team shall be used.

The Department has established a standard naming convention for all InRoads survey files to make the data more portable so that all users can easily recognize and use the files created by

others. The conventions also provide information on file contents at a glance. Each InRoads survey file submitted to INDOT shall use the format and provide the content as described below.

DES#_SRxx Name.extension

Key:
DES#: designation number for project as provided by INDOT
SRxx: route number of project, for example: SR37, SR162, I64, US150
Name: descriptive name of information in file, for example: Topo, LCRS Plat
Extension: file extension name, for example, .xin, .dgn, .fwd

The files to be submitted to INDOT for each survey are as follows:

1. Des #_SRxx Control Points.fwd
2. Des #_SRxx LCRS Plat.pdf
3. Des #_SRxx LCRS Plat.dgn
4. Des #_SRxx Survey Alignment.alg
5. Des #_SRxx Survey Book.docx
6. Des #_SRxx Survey Surface.dtm
7. Des #_SRxx Survey Surface Boundary.dtm
8. Des #_SRxx Survey.xin
9. Des #_SRxx Topo.dgn
10. Des #_SRxx Topo.fwd

26-1.01(01) Minimum File Requirements

Each file shall include, at a minimum, the data described below.

1. Des #_SRxx Control Points.fwd. This file includes all centerlines, a partial list of fly stations (random control points), bench marks, and United States Public Land Survey (USPLS) subdivision corners, including corners of properties not within USPLS areas, necessary to describe acquisition parcels.

    a. Centerline. All centerline points of each survey line within the survey shall be included in this file.

        (1) The code for centerline points shall be “PSSA”.

        (2) Notes for each “PSSA” shall include location (e.g., POT, PC, POST, etc.) stationing, line letter, PI information (delta angle, degree of curve or radius length, tangent length, arc length, and external length), description

of monument, and location of top of monument relative to ground surface or pavement surface.

b. Fly station. All fly stations traversed through, during establishment or reestablishment of survey lines, shall be included in this file. All fly locations set during topographic collection shall not be in this file, but shall be included in the "Des #_SRxx Topo.fwd" file.

(1) The code for fly station shall be "FLY".

(2) Notes for "FLY" shall include the description of the monument and location of top of monument relative to ground surface or pavement surface for each point.

c. Bench Marks. These used for survey data collection shall be included in this file.

(1) Monuments shall be coded in accordance with the .xin file provided by INDOT.

(2) Bench-mark notes shall include the name and description of each monument, a description of the structure that the monument is placed in or on, the station and offset from the survey line, and the survey-line letters.

Examples: BM#1, Boat Spike in root of 21-in. oak tree, 125 ft left of Station 123+45, Line "A". INDOT BM 19 V 1030, disc in north end of concrete headwall, 55 ft right of Station 35+25, Line "S-1-A".

d. USPLS Corners. These, or corners of properties not within USPLS areas, necessary to describe acquisition parcels, shall be included in this file.

(1) Monuments shall be coded in accordance with the .xin file provided by INDOT.

(2) Notes for monuments shall include the location of the corner.

Example for area within USPLS: "N ¼ Corner of Section 34, T2N, R2W". Example for area not within USPLS: "NE Corner of Division "C" of the Vincennes Commons Lands".

(3) Notes shall include a description and location of each monument relative to the ground surface or pavement surface.

2. Des #_SRxx LCRS Plat.pdf. This file is a copy of the Location Control Route Survey Plat (LCRS) as recorded in the County Recorder' office, for the survey project. This copy shall have the seal and signature of the Licensed Land Surveyor in responsible charge, and all recording information placed on the LCRS by the County Recorder.

3. Des #_SRxx LCRS Plat.dgn. This Microstation file shall include multiple models of the following.

   a. The LCRS used to generate that for recording with the County Recorder. This shall be provided for design reference and use.

   b. Survey control points and references, which include the following:

      (1) description of point along alignment (e.g., POT, PC, POST, etc.);

      (2) stationing of survey-line point (e.g., 123+45.67, etc.);

      (3) line letter (e.g., "A", "S-1-A", etc.);

      (4) description of monument (e.g., 5/8 in. rebar with cap stamped INDOT 0005, Mag Nail with washer stamped INDOT 0005, etc.);

      (5) location of top of monument relative to ground surface (e.g., Flush with surface, 0.1 ft below ground surface, protruding 0.4 ft above ground surface, etc.);

      (6) description of reference monument (e.g., Nail in Bottle Cap in 15-in. Maple, Nail in Bottle Cap in Corner Fence Post, X Cut in Concrete Headwall, etc.); and

      (7) azimuth to nearest degree, and distance to nearest 0.01 ft, from control monument to reference monument.

   c. USPLS corners, or corners within areas not part of the USPLS, and references, including, at a minimum, the following:

      (1) descriptions of USPLS corners (e.g., W ¼ Corner of Section 24, T3N, R5W);

      (2) descriptions of monuments not within USPLS areas (e.g., NE Corner of Division "C" of the Vincennes Commons Lands);

(3) description of monument (e.g., 9" x 6" stone with "S 24 W ¼" cut on side of stone);

(4) location of top of monument relative to ground surface (e.g., Flush with surface, 1.5 ft below ground surface, protruding 0.7 ft above ground surface, etc.);

(5) description of reference monument (e.g., Nail in Bottle Cap in 15-in. Maple, Nail in Bottle Cap in Corner Fence Post, X Cut in Concrete Headwall, etc); and

(6) Azimuth, to the nearest degree, and distance, to the nearest 0.01 ft, from control monument to reference monument.

4. Des #_SRxx Survey Alignment.alg. This file includes all alignments of the survey project.

a. In writing Survey ("Des #_SRxx Control Points.fwd") to Geometry, in the "Project Name" box, enter "Survey Alignment".

b. In creating alignment, in "Name" box, enter "A" for Line "A", etc.

c. If there is an "S" line, under "Survey Alignment", name alignment "S-1-A", "S-SRxx-A", etc.

d. For the description of each alignment, use the applicable route name (e.g., SR 1, CR 250 W, etc.).

e. The alignment shall have the correct stationing applied.

f. Save as "Des #_SRxx Survey Alignment.alg"

5. Des #_SRxx Survey Book.docx. This file includes all supplemental survey information not found in other files. The .docx format is preferred. However, .doc or .pdf is also acceptable. It shall include the following:

a. front page notations, i.e., Des No., Route No., Terminal Points of Project, County, brief description of each line;

b. title page and completed Table of Contents;

c. dates of survey start and survey completion;

d, names of survey crew members;

e. Des number and page numbers at top of each page;

f. Surveyors Report, in accordance with IAC-865, as a minimum requirement;

g. start and end of each line shown with equations and cross references to other surveys;

h. control points labeled, with location (e.g., POT, PC, POST, etc.), stationing, line letters, location relative to surface (e.g. flush, 0.1' below ground level, etc.), and coordinates shown;

i. alignment data shown and checked;

j. references shown and checked, if LCRS not prepared. If an LCRS was prepared, this information will be on the recorded LCRS;

k. source of bearings described;

l. utility ownerships within limits of survey, with mailing addresses, with a notation of utilities not within limits;

m. Underground Utility Reference Number placed on Utilities page;

n. high-water elevation and date, with source and date of information;

o. source of level datum;

p. bench-mark descriptions completed;

q. level notes for all bench marks used for survey;

r. legal flow-line elevations of county ditches; and

s. level equations with other surveys shown, and explained.

6. Des #_SRxx Survey Surface.dtm.

a. In writing Survey to Surface, in "Surface Name" box, enter "Survey Surface" and save as "Des #_SRxx Survey Surface.dtm".

b. For more than one surface within a survey project, use “Survey Surface A”, etc. (see “Des #_SRxx Topo.fwd” below).

c. All string crossings shall be resolved.

d. Upon completion of the survey, with all corrections of field data completed, a “Survey Surface” shall be created. After determining this surface to be correct, create a boundary string named “Boundary” by connecting all points and strings along the exterior of the survey that are to be included in the triangulation. “Survey Surface” will contain the survey surface and the exterior “Boundary” feature. This surface shall be saved as “Des#_SRxx Survey Surface.dtm”.

7. Des #_SRxx Survey Surface Boundary.dtm.

a. After creating the boundary string around the survey perimeter, as described in item 6d above, such boundary shall be saved in a separate surface file as “Des #_SRxx Survey Surface Boundary.dtm", which shall include only that feature.

b. For more than one boundary around a survey project, use “Survey Surface Boundary A” for the boundary of “Survey Surface A”, etc. (see “Des #_SRxx Topo.fwd” file, item 9, below).

8. Des #_SRxx Survey.xin. This is the InRoads “xin” file used for the survey project. InRoads standards for survey data processing have been set up in this file. This file includes the INDOT standards for Feature Codes, Feature Styles, and Feature Filters, Dialog Box Settings, Linestyles, Lineweights, colors, and other settings. This file is critical for use in the InRoads Survey Process, and for accurate DTM and geometry object creation. Additional Names Symbology or Styles should not be added in order for the .xin file to be consistent with the current MicroStation settings. Utilities will therefore function properly.

a. It shall be a copy of INDOT.xin, as provided by the CAD Support Team, at the time of project inception.

b. All modifications to .xin shall not affect the ability of submitted files (.dtm, .alg, .fwd) to interact with later versions of .xin in an error-free manner. Feature names, symbology, etc. shall not be changed.

9. Des #_SRxx Topo.dgn. Secondary display items, such as Contours, Triangles, and Survey Graphics, may be written to additional .dgn files and provided as references.

a. MicroStation files shall be used with InRoads for the survey project.

b. It shall be in accordance with the appropriate unitary system for the survey, i.e., US Survey Feet, seed files as provided by CAD Support.

c. The features to be displayed on separate levels, as defined by INDOT.xin, shall be as follows:

(1) DTM features;

(2) existing contours;

(3) existing triangulation;

(4) survey alignment with annotation;

(5) survey field-book data written to graphics, including symbols, names. elevations, notes, and codes.

10. Des #_SRxx Topo.fwd. This file includes all topographic data for the survey project.

a. All topographic data shall be included in one field book (i.e., Des #_SRxx Topo.fwd"). An exception is if there are isolated survey locations in a lengthy project, for example structure replacements in a resurface project, as discussed below.

b. Under "Survey Data" in InRoads, create a new book named "Des #_SRxx Topo".

c. Import the data collector (controller) or text file into InRoads to create a field book. Save the created field book as "Des #_SRxx Topo.fwd".

d. Data imported from a collector (controller) or a text file shall not have a file name containing more than 15 characters. A file name longer than this will be truncated within InRoads to 15 characters after the field book is saved and then loaded again at the next session. This is not the name of the field book as required in item 10c above, but it is the name of the data file used to create the field book.

e. If more than one survey site is included in the survey project, for sites that are not near each other, create a different .fwd file for each site. For example, for two or more small structure replacements in a resurface project, use "Des #_SRxx Topo A" for the first site (south to north, or west to east) and "Des #_SRxx Topo B" for the second site, and continue using the same procedure.

26-1.01(02) Aerial-Survey File Requirements

1. All files created by an aerial survey shall follow the established InRoads survey file naming and technical conventions.

2. In naming these files, they shall have the suffix "_Aerial" appended at the end of the file name, prior to the file extension, i.e., "Des #_SRxx Topo_Aerial.fwd".

3. If a combination of aerial and ground surveys is submitted, they shall be combined into a single .dtm survey surface.

26-1.02 Other Formats

Although it is preferred for collected survey data to be submitted in the InRoads format as described above, there can be a project or circumstance that necessitates the use of previously-accepted data-submittal formats. For this situation, approval to collect and transmit electronic survey data in a format other than the current version of survey and design software in use must be obtained from INDOT. A written request must be submitted to the appropriate designer and survey-program director through the project manager. Approval will be required prior to the start of field work.

26-2.0 OTHER SURVEY INFORMATION

A complete survey transmittal includes other survey information that is relevant to the project. This is described below. A submittal may be downloaded directly into the INDOT Electronic Records management System (ERMS) or the current version of INDOT's electronic document repository. However, each submittal shall include the minimum amount of information as outlined below, whether in electronic format, hardcopy, or a combination of the two.

1. Survey-Envelope Contents. The survey envelope should be a 9-in. x 12-in. manila envelope, or comparable type. It shall include all property-owner-interview sheets and the recorded LCRS. All other information should be packaged in a separate envelope and submitted with the completed survey.

   Figure 26-2A, Survey-Envelope Label, illustrates how the survey envelope should be labeled. The outside of the survey envelope should include the following:

   a. route number and location description as it appears on the schedule sheet;

b. designation number;
c. project number, if available;
d. structure number, if applicable;
e. county;
f. district;
g. date of survey;
h. survey-party personnel, with designated party chief; and
i. list of envelope contents.

2. Survey Book. The survey book, a hardcopy or .pdf version, shall be submitted with the final survey materials.

3. Miscellaneous Envelope. See Figure 26-2B, Miscellaneous Envelope. The miscellaneous envelope should be placed in the back of the survey book and should include the following:

a. copies of section plats to indicate adjoining property owners;
b. copies of digital photographs; and
c. section-corner reference cards (see Figure 26-2C).

4. Property Deeds. Property deeds that are within the survey limits and those deeds which appear necessary for other reasons shall be obtained by the survey party. Property deeds shall be submitted with the field survey and forwarded to the Office of Real Estate.

5. Subdivision Plat. Subdivision plats and town plats, if applicable, should be placed in the envelope that is submitted to the Department.

6. LCRS. An LCRS is required for an INDOT project that requires the purchase of right of way. The LCRS shall, at a minimum, comply with the requirements established by IAC 865 when conducting a route survey. A copy of the recorded LCRS is required for use by the Office of Real Estate. The recorded LCRS shall be submitted on 24" x 36" media (see Section 14-3.03); however the exact size of the recorded document is subject to requirements of the appropriate Office of the County Recorder. See Figure 26-2D, Location-Control Route-Survey Plat Example. The following guidelines are intended to aid in developing an LCRS to satisfy IAC 865, but are not intended to replace the surveyor's judgment as to what should appear in the survey.

a. The LCRS size may be reduced to satisfy specific requirements for recordation. The reduction should be considered in choosing font sizes and line thickness for the original-sized version.

b. Indicate the scale along with a graphical representation of the scale. A standard engineering scale shall be utilized. Consideration shall be made to ensure legibility at reduced scale that may be required for recordation. See Section 14-3.05(01).

c. Indicate the location of the project by identifying all roads on the plat. If no intersecting roads are within the project limits, include a description for the location in the surveyor's report.

d. Units shall be in US Survey feet. The U.S. Survey foot is defined based on 1 m = 39.37 in. The following conversion factor will be utilized:

1 meter = 3.280833333 U.S Survey feet.

e. Show all edges of pavement, fences, centerline points found or set, approximate locations of apparent property lines, buildings, etc. INDOT uses a separate plat for the LCRS and the Right of Way plat. For the LCRS, showing the right of way is not required. Only physical evidence of right of way is shown. The property lines shown on the field plat are for graphical representation only. They are not intended for a property retracement and may not be to scale.

f. Indicate all centerline points, random control points, and reference baseline points that are set. The stationing used on the centerline should be shown and the basis of the stationing indicated in the surveyor's report. Section corners should also be graphically indicated on the plat where feasible due to scale considerations. All points should have references drawn according to the type of monument (e.g., centerline, section corner, subdivision corner, survey marker, etc.). The arrow for a centerline point indicates the direction of the alignment. For a section corner, the arrow indicates the direction for north. This should be shown in the reference boxes. See Figure 26-2D, Location-Control Route-Survey Plat Example.

g. Indicate as to whether the monument was found or set, and include a description in the surveyor's report. This should include the size, type of monument, vertical description (e.g., flush, buried, protruding), location to physical features around the monument, origin (if known), uncertainty, etc.

h. The location of the monument can be identified with an angle and distance, station and offset, or a coordinate system. Coordinates shall be reproducible with the information contained on the LCRS. Include all necessary information so that this may be accomplished. INDOT uses an assumed ground coordinate system. However, survey control ties shall be referenced to the Indiana State Plane Coordinate System. The metadata required and identified in 865 IAC Rule 12 in

referencing state plane coordinates or utilizing Global Positioning System (GPS) shall be included.

i. Show the property owners' names on the plat at the time of the survey.

j. Include all title-block information known at the time the plat is transmitted to the Office of Real Estate.

7. Recorded Plats. The recorded surveys that were obtained from the recorder's office should be submitted with the survey.

8. Plans. Copies of plans that have been obtained from the Central Office, district office, or other sources should also be submitted to the Department.

9. Electronic Data Submittal. All data or information submitted in digital format shall be copied to and stored on compact disc or digital video disc optical storage media, a copy of which shall be included with the submittal. A submittal can require larger memory storage capacity. If so, approval to submit data on media other than standard discs must be obtained prior to submittal. All submitted discs shall be labeled with the appropriate route number, designation number, location description, survey start and finish dates, and disc number. Disc labels shall not be hand written. The text on the label shall be in the Arial font with a minimum point size of 10. See Figure 26-2E.

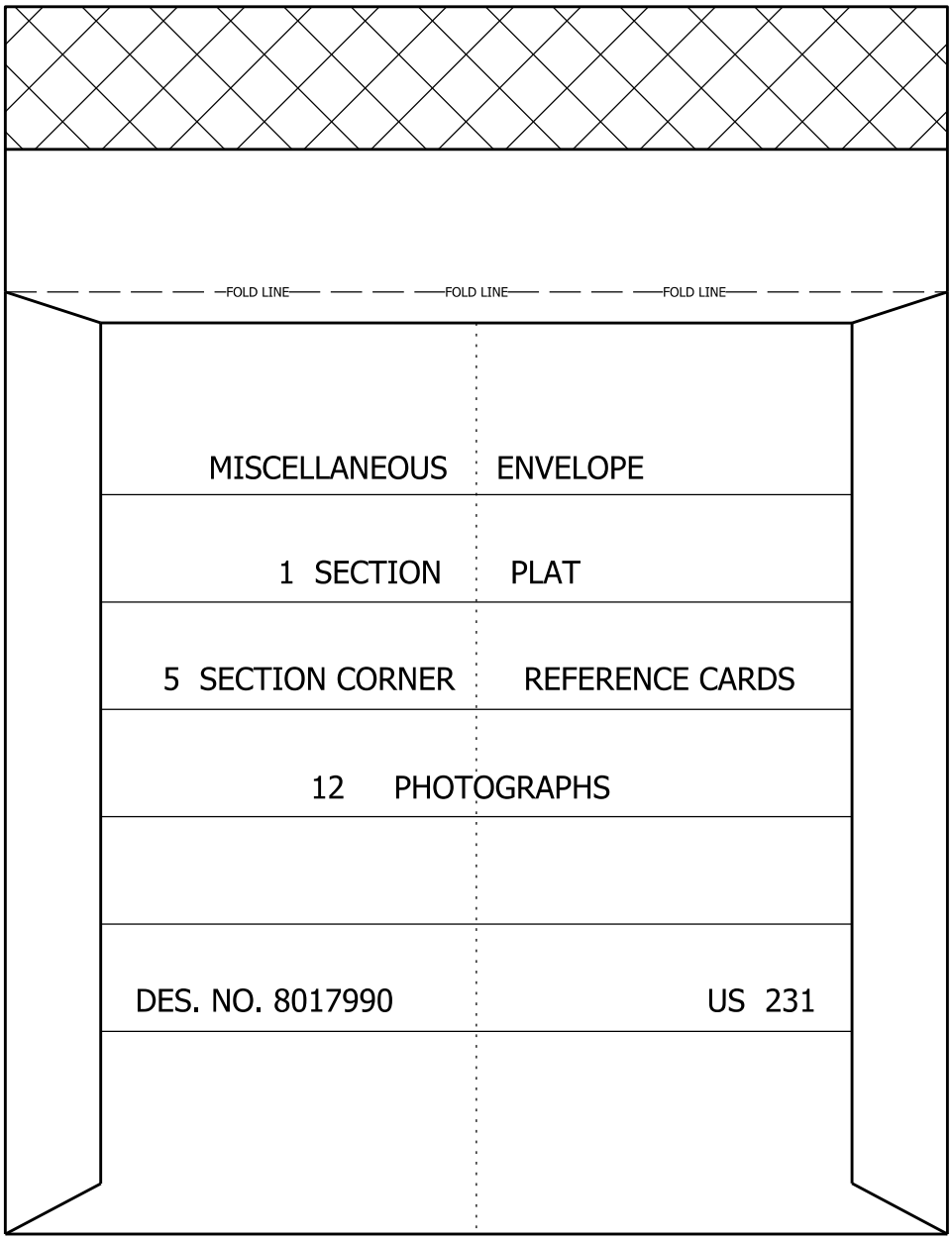
U.S. 231 - BRIDGE OVER FIRST CREEK, 4.0 mi SOUTH OF S.R. 558
DES. NO. 8017990
PROJECT NO. F-075-6(008)
STRUCTURE NO. 231-14-3524 (OLD), 231-14-7332 (NEW)
DAVIESS COUNTY
AUGUST 1994
SURVEY CREW #4 (R. C. HOWELL)

ENVELOPE CONTAINS

1. SECTION PLATS
2. SURVEY NOTICES

SURVEY-ENVELOPE LABEL

Figure 26-2A



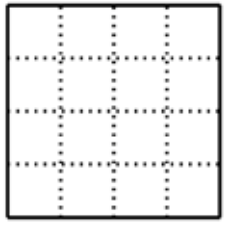
MISCELLANEOUS ENVELOPE

Figure 26-2B

SECTION _____, TOWNSHIP _____, RANGE _____

(Description of Corner Location) _____

_____ COUNTY, INDIANA

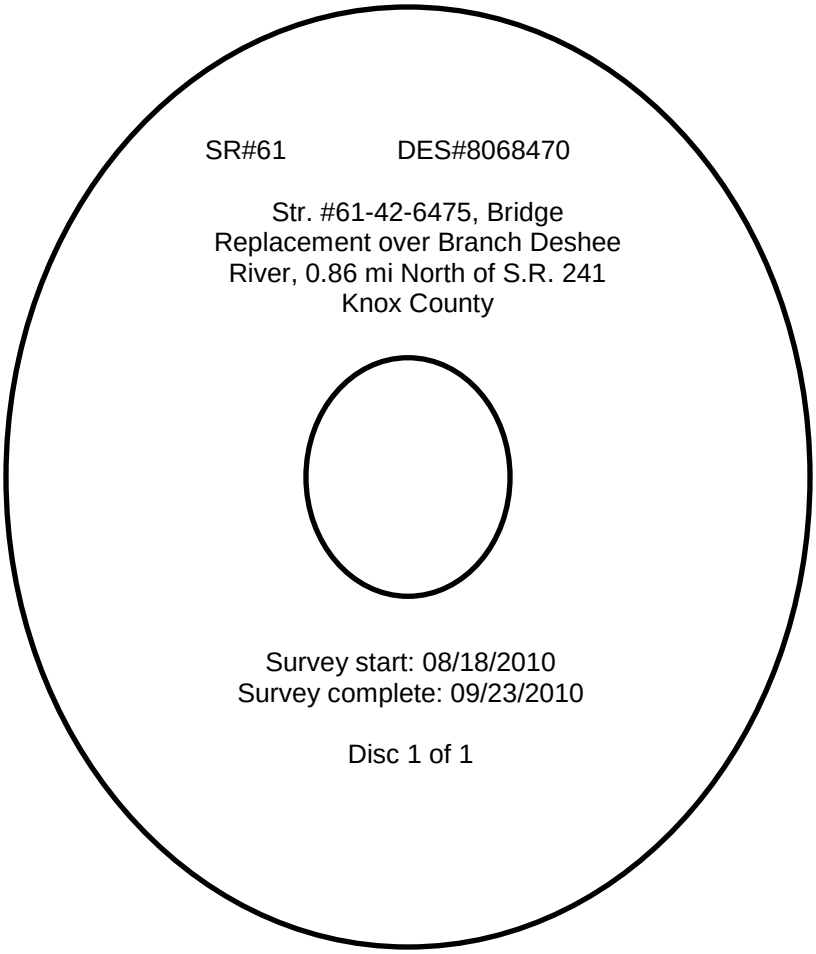


TYPE OF MON.: _____
DEPTH: _____
UNCERTAINTY: _____
BY: _____
DATE: _____
DES. NO.: _____

State Form 40180

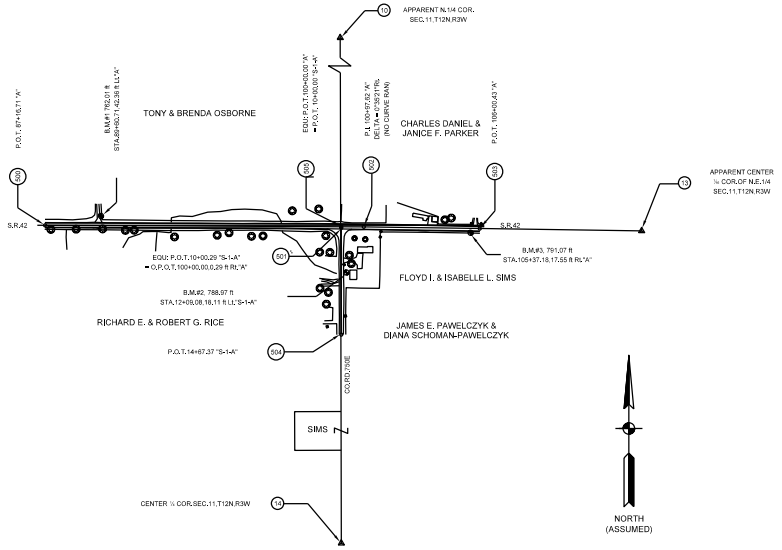
SECTION-CORNER REFERENCE CARD

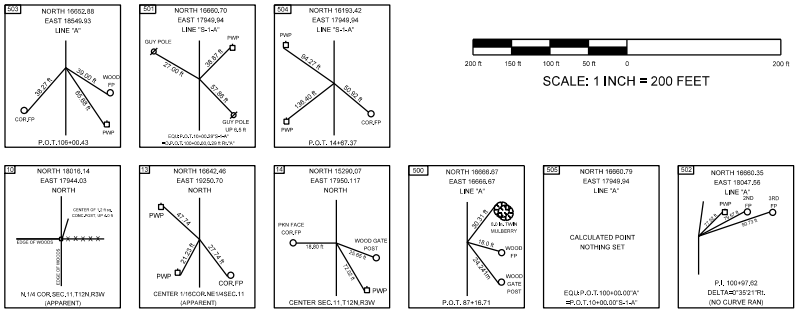
Figure 26-2C



SAMPLE DISC LABEL

Figure 26-2D





SURVEYORS REPORT

FOR

ROUTE SURVEY-INDOT PROJECT NO. STP3267(3) PAGE 1 OF 1
DES # 9607380 DATE SEPT.17,1997

GENERAL:

- ALL MONUMENT REFERENCE TIES ARE SHOWN ON THE ROUTE SURVEY PLAT.
- SHOULD ADDITIONAL USPLS CORNERS BE NEEDED WHERE NONE WERE FOUND, THEY SHOULD BE REESTABLISHED AND TIED INTO THIS SURVEY.
- ITEM NUMBERS ARE ACTUAL FIELD SURVEY POINT NUMBERS USED FOR CONTROL AND TOPOGRAPHY.

ALIGNMENT WAS ESTABLISHED BY CENTERING ON THE PAVEMENT AT THE TOP OF THE HILL JUST EAST OF CO.RD.750E AND USING A BRASS PLUG IN A STEEL POT ½ MILE EAST OF CO.RD.750E. SAID POINT BEING A ⅛ SECTION CORNER. SAID POINT ON HILL DESIGNATED AS A P.I. IN ORDER TO KEEP ALIGNMENT IN THE C.L. OF THE ROAD TO THE WEST. NO CURVE WAS RAN.

STATIONING WAS DETERMINED BY USING THE FIELD REPORT ON THIS PROJECT, CALLING THE INTERSECTION OF S.R.42 AND CO.RD.750E AS STA 1+000.000 ON LINE "A" AND STA 10+000.000 ON LINE "S-1-A" WHICH RUNS SOUTH, THERE ARE NO PLANS AVAILABLE FOR THIS PROJECT.

LEVEL DATUM IS ON NAVD 88 DATUM USING "ISHC PUTN C-1" WHICH WAS INCLUDED IN AN NGS SECOND ORDER CLASS 0 DIFFERENTIAL LEVEL RUN BY NGS IN 1946 AND HAS THE PID #KA0490. SAID BENCH MARK IS IN SW ABUTMENT OF STRUCTURE OVER MILL CREEK WEST OF PROJECT.

THE PURPOSE OF THIS SURVEY IS TO INCREASE THE INTERSECTION SIGHT DISTANCE AT S.R.42 AND CO.RD.750E. A T-INTERSECTION, FOR MORE DETAIL INFORMATION SEE THE ENGINEER'S REPORT FOR DES.#9607380, PROJECT #STP-3267(3).

THIS DATA COLLECTION SURVEY IS FOR THE PURPOSE OF DESIGNING A HIGHWAY IMPROVEMENT PROJECT. IT IS NOT A PROPERTY RETRACEMENT SURVEY. WHERE APPARENT PROPERTY LINES, CORNERS, SUBDIVISION, OR SECTION CORNER INFORMATION IS SHOWN, IT IS BASED ON PHYSICAL EVIDENCE OR TESTIMONY AND VERY LITTLE DEED ANALYSIS WAS DONE.

10. USED THE TOP CENTER OF A 1.2 ft X 1.2 ft CONCRETE FENCE POST, 4.0 ft HIGH FOUND AT THE APPARENT NORTH ¼ CORNER OF SEC.11,T12N,R3W. POST HAS MARKINGS ON TOP, BUT UNABLE TO READ. NO RECENT RECORDS OF THIS CORNER WITH THE COUNTY SURVEYOR. UNCERTAINTY IS ESTIMATED TO BE +/- 10 ft.

13. FOUND BRASS PLUG IN A STEEL POT AT THE APPARENT CENTER ¼ CORNER OF THE N.E.1/4 OF SEC.11,T12N,R3W, LOCATED IN THE C.L. OF S.R.42 AND CO.RD.775E. ACCORDING TO THE PUTNAM CO.SURVEYOR'S OFFICE, THESE STEEL POTS WERE PLACED WHEREVER AN EXISTING MONUMENT WAS FOUND WHEN THE RD. WAS REPAVED A FEW YEARS AGO AND IS AN APPARENT PERPETUATION OF THE CORNER. CORNER UNCERTAINTY IS NEGLIBLE.

14. FOUND IRON PIN WITH A YELLOW PLASTIC CAP STAMPED: "ROSS HOLLOWAY RLS 50530" AT THE CENTER OF SEC.11,T12N,R3W. IN THE C.L.OF CO.RD.750E, AS PER INFORMATION OBTAINED FROM THE CO.SURVEYOR'S OFFICE. CORNER UNCERTAINTY IS NEGLIBLE.

500. SET PK NAIL FLUSH IN THE CENTER OF THE PAVEMENT. ORIGINAL MONUMENT. THEREFORE THERE IS NO UNCERTAINTY.

505. CALCULATED POINT FOR CENTERLINE INTERSECTION. NO MONUMENT SET.

502. SET PK NAIL FLUSH IN THE CENTER OF THE PAVEMENT. ORIGINAL MONUMENT. THEREFORE THERE IS NO UNCERTAINTY.

503. SET PK NAIL FLUSH ON LINE BETWEEN #502 AND #13. ORIGINAL MONUMENT. THEREFORE THERE IS NO UNCERTAINTY.

501. SET PK NAIL FLUSH ON LINE "S-1-A", MISSING LINE "A" BY 0.029m. ORIGINAL MONUMENT. THEREFORE THERE IS NO UNCERTAINTY.

504. SET PK NAIL FLUSH IN THE CENTER OF THE PAVEMENT. ORIGINAL MONUMENT. THEREFORE THERE IS NO UNCERTAINTY.

SURVEY STARTED
7-7-97
SURVEY COMPLETED
7-15-97
ROUTE PLAT SHEETS
1 of 1

FIELD SURVEYOR STATEMENT

THIS SURVEY, TO THE BEST OF MY KNOWLEDGE AND BELIEF, IS EXECUTED ACCORDING TO THE PROVISIONS OF 865 I.A.C. 1-12-20 REGARDING ROUTE SURVEYS, EXCEPT THAT ANY DATA SHOWN REGARDING THE LOCATION OR DESCRIPTION OF THE EXISTING PARCELS IS NOT PART OF THIS SURVEY.

REGISTERED LAND SURVEYOR
No. LS29300018
STATE OF INDIANA
LAND SURVEYOR

RECOMMENDED FOR APPROVAL

REGISTERED LAND SURVEYOR, FIELD DATE

INDIANA
DEPARTMENT OF TRANSPORTATION

LOCATION CONTROL ROUTE SURVEY

HORIZONTAL SCALE	BRIDGE FILE
1:2500	
COUNTY	DESIGNATION
PUTNAM	9607380
SURVEY BOOK	PLAN SHEETS
	of
CONTRACT	PROJECT
	STP3267(3)

LOCATION CONROL ROUTE SURVEY PLAT EXAMPLE

Figure 26-2E