



**MISSOURI DEPARTMENT OF TRANSPORTATION
 BID GUIDELINES AND DOCUMENTATION**

THIS IS NOT AN ORDER

REQUEST FOR BID

*****THIS DOCUMENT MUST BE RETURNED AS A SEALED BID*****

It is the vendor's responsibility to read and comply with all conditions, specifications, and instructions outlined in this document. This document and any subsequent attachments shall supersede all confirmation forms, receipts, or any other paperwork needed to secure materials, equipment, or services.

TODAY'S DATE: 07-31-2009	BID DUE BY (DATE AND TIME): 08-25-2009 By 1:00 PM CST	F.O.B. REQUIREMENTS: DESTINATION (SEE DELIVERY LOCATIONS BELOW)
TO BE COMPLETED BY: 3 TO 4 MONTHS ARO	BID #: B4-09-012 THIS BID # SHOULD BE REFERENCED ON ALL MAILING LABELS, ENVELOPES, AND ANY OTHER CORRESPONDENCE. ***SEALED BID***	BUYER NAME: ROBIN WARREN 816-622-0054
District Mailing Address: Missouri Department of Transportation – District 4 General Services Procurement Division 600 NE Colbern Road Lee's Summit, MO 64086		Project Locations: See Attached Scope of Work

ALL BIDS SHOULD BE EXTENDED AND TOALED. DELIVERY TIME MUST BE LISTED

Quantity	U/M	DESCRIPTION (including size and/or part #'s)	Total Cost for Project	COMPLETION TIME
1	Total Project	Conversion of Plans and Documents to Digital Format – Per Specifications and Pricing Table herein this Request for Bid		

*****Final Addendums Posted to Website by August 20, 2009*****

TOTAL ORDER EXTENSION	\$
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VENDOR NOTES

Pursuant to 285.530 RSMo, the bidder must affirm its enrollment and participation in a federal work authorization program with respect to the employees proposed to work in connection with the services requested herein by

- submitting a completed, notarized copy of the appropriate **AFFIDAVIT OF WORK AUTHORIZATION** and
- providing documentation affirming the bidder's enrollment and participation in a federal work authorization program (see below) with respect to the employees proposed to work in connection with the services requested herein.

E-Verify is an example of a federal work authorization program. Acceptable enrollment and participation documentation consists of **completed** copy of the E-Verify Memorandum of Understanding (MOU). For vendors that are not already enrolled and participating in a federal work authorization program, E-Verify is available at http://www.dhs.gov/xprevprot/programs/qc_1185221678150.shtm.

Missouri Department of Transportation purchase orders must be issued to the invoicing company/address. If the invoicing company/address will be different from that listed in the vendor information section (below), the vendor must specify the “remit to” company/address in the vendor notes section (above).

VENDOR INFORMATION

Vendor Name/Mailing Address:	Vendor Contact Information (including area codes): Phone #: Fax #: Cellular #:
Printed Name and Title of Responsible Officer or Employee:	Signature:
Is your company registered/certified with the State of Missouri as a (please circle):	
MINORITY BUSINESS ENTERPRISE (MBE) ?	YES NO
WOMEN BUSINESS ENTERPRISE (WBE) ?	YES NO
Would your company like information on becoming a registered/certified MBE/WBE vendor?	YES NO

All responses to this Request for Bid MUST be submitted on this form and all pages MUST be returned to the Buyer listed above at the District mailing address shown.

PREFERENCE IN PURCHASING PRODUCTS

DATE: _____

The bidders attention is directed to Section 34.076 RsMO 1986 which gives preference to Missouri corporations, firms, and individuals when letting contracts or purchasing products.

Bids/Quotations received will be evaluated on the basis of this legislation.

All vendors submitting a bid/quotation must furnish ALL information requested below.

FOR CORPORATIONS:

State in which incorporated: _____

FOR OTHERS:

State of domicile: _____

FOR ALL VENDORS:

List address of Missouri offices or places of business:

THIS SECTION MUST BE COMPLETED AND SIGNED:

FIRM NAME: _____

ADDRESS: _____

CITY: _____ **STATE:** _____ **ZIP:** _____

BY (signature required): _____

Federal Tax I.D. #: _____ **if no Federal Tax I.D. # - list Social Security #:** _____

NOTE: For bid/quotation to be considered, the "Preference in Purchasing Products" form must be on file in the General Services (Procurement) Division and must be dated in the current calendar year.

MISSOURI DOMESTIC PRODUCTS PROCUREMENT ACT

The bidder's attention is directed to the Missouri Domestic Products Procurement Act, Sections 34.350 to 34/359, RsMO, which requires all manufactured goods or commodities used or supplied in the performance of this contract or any subcontract to be manufactured or produced in the United States.

Section 34.355, RsMO, requires the vendor or contractor to certify his compliance with Section 34.353 and, if applicable, Section 34.359, RsMO, at the time of bidding **and** prior to payment. Failure to comply with Section 34.353, RsMO, during the performance of the contract **and** to provide certification of compliance prior to payment will result in nonpayment for those goods or commodities.

Section 34.353.2, RsMO, specifies that it does not apply where the total contract is less than Twenty-Five Thousand Dollars (\$25,000.00). If your total bid is Twenty-Five Thousand Dollars (\$25,000.00) or more, you **must** complete this form as directed below.

Failure to complete and return this document with this bid will cause the State to presume the manufactured goods or products listed in the bid are not manufactured or produced in the United States, and the bid will be evaluated on that basis. Please read the certification appearing below on this form.

- [] If all the goods or products specified in the attached bid which the bidder proposes to supply to the State shall be manufactured or produced in the "United States" as defined in Section 34.350, RsMO, check the box at left.

- [] If only one item of any particular goods or products specified in the attached bid is manufactured or produced in the "United States" as defined in Section 34.350, RsMO, check the box at left and list the items (or item number) here:

- [] If any or all of the goods or products specified in the attached bid which the bidder proposes to supply to the State are **not** manufactured or produced in the "United States" as defined in Section 34.350, RsMO, then: (a) check the box at left; (b) list below, by item (or item number), the country other than the United States where each good or product is manufactured or produced; and (c) check the boxes to the left of the paragraphs below if applicable and list the corresponding items (or item numbers) in the spaces provided.

Item (or item number)	Location Where Item Manufactured or Produced

(attach an additional sheet if necessary)

- [] The following specified goods or products cannot be manufactured or produced in the United States in sufficient quantities or in time to meet the contract specifications. Items (or item numbers): _____

- [] The following specified goods or products must be treated as manufactured or produced in the United States, in accordance with an existing treaty, law, agreement, or regulation of the United States, including a treaty between the United States and any foreign country regarding export-import restrictions or international trade. Items (or item numbers): _____

CERTIFICATION

By submitting this document, completed as directed above, with a bid, the bidder certifies under penalty of making false declaration (Section 575.060, RsMO) that the information contained in this document is true, correct and complete, and may be relied upon by the State in determining the bidders qualifications under and in compliance with the Missouri Domestic Products Procurement Act.

The bidder's failure to complete and return this document with the bid as directed above will cause the State to presume the manufactured goods or products listed in the bid are not manufactured or produced in the United States, and the bid will be evaluated on that basis pursuant to Section 34.353.3(2), RsMO.

MISSOURI SERVICE-DISABLED VETERAN BUSINESS PREFERENCE

By virtue of statutory authority, RSMo 34.074, a preference will be given all contracts for the performance of any job or service to service-disabled veteran business either doing business as Missouri firms, corporations, or individuals; or which maintain Missouri offices or places of business, when the quality of performance promised is equal or better and the price quoted is the same or less or whenever competing bids, in their entirety, are comparable.

Definitions:

Service-Disabled Veteran is defined as any individual who is disabled as certified by the appropriate federal agency responsible for the administration of veterans' affairs.

Service-Disabled Veteran Business is defined as a business concern:

- a. Not less than fifty-one (51) percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than fifty-one (51) percent of the stock of which is owned by one or more service-disabled veterans; and
- b. The management and daily business operations of which are controlled by one or more service-disabled veterans.

If an offeror meets the definitions of a service-disabled veteran and a service-disabled veteran business as defined in 34.074 RSMo and is either doing business as a Missouri firm, corporation, or individual; or maintains a Missouri office or place of business, the offeror **must** provide the following with the proposal in order to receive the Missouri service-disabled veteran business preference over a non-Missouri service-disabled veteran business when the quality of performance promised is equal or better and the price quoted is the same or less or whenever competing proposals, in their entirety, are comparable:

- a. A copy of a letter from the Department of Veterans Affairs (VA), or a copy of the offeror's discharge paper (DD Form 214, Certificate of Release or Discharge from Active Duty) from the branch of service the offeror was in, stating that the offeror has a service-connected disability rating ranging from 0 to 100% disability; and
- b. A completed copy of this exhibit

(NOTE: For ease of evaluation, please attach copy of the above-referenced letter from the VA or a copy of the offeror's discharge paper to this Exhibit.)

By signing below, I certify that I meet the definitions of a service-disabled veteran and a service-disabled veteran business as defined in 34.074 RSMo and that I am either doing business as a Missouri firm, corporation, or individual; or maintain Missouri offices or places of business at the location(s) listed below.

Veteran Information

Business Information

Service-Disabled Veteran's Name, (Please Print)

Service-Disabled Veteran Business Name

Service-Disabled Veteran's Signature

Missouri Address of Service-Disabled Veteran Business

APPLICANT AFFIDAVIT FOR SOLE-PROPRIETORSHIP OR PARTNERSHIP

(a separate affidavit is required for each owner and general partner)

STATE OF _____)
) ss
COUNTY OF _____)

On this _____ day of _____, 20____, before me appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instruments, who being by me duly sworn, deposed as follows:

My name is _____, and I am of sound mind, capable of making this affidavit, and personally certify the facts herein stated, as required by Section 208.009, RSMo, for failure to provide affirmative proof of lawful presence in the United States of America:

I am the _____ of _____, which is applying for a public benefit (grant, contract, and/or loan) administered/provided by the Missouri Highways and Transportation Commission (MHTC), acting by and through the Missouri Department of Transportation (MoDOT).

I am classified by the United States of America as: (check the applicable box)

- a United States citizen.
- an alien lawfully admitted for permanent residence.

I am aware that Missouri law provides that any person who obtains any public benefit by means of a willfully false statement or representation, or by willful concealment or failure to report any fact or event required to be reported, or by other fraudulent device, shall be guilty of the crime of stealing pursuant to Section 570.030, RSMo, which is a Class C felony for stolen public benefits valued between \$500 and \$25,000 (punishable by a term of imprisonment not to exceed 7 years and/or a fine not more than \$5,000 – Sections 558.011 and 560.011, RSMo), and is a Class B felony for stolen public benefits valued at \$25,000 or more (punishable by a term of imprisonment not less than 5 years and not to exceed 15 years – Section 558.011, RSMo).

I recognize that, upon proper submission of this sworn affidavit, I will only be eligible for temporary public benefits until such time as my lawful presence in the United States is determined, or as otherwise provided by Section 208.009, RSMo.

I understand that Missouri law requires MHTC/MoDOT to provide assistance in obtaining appropriate documentation to prove citizenship or lawful presence in the United States, and I agree to submit any requests for such assistance to MHTC/MoDOT in writing.

I acknowledge that I am signing this affidavit as a free act and deed and not under duress.

Affiant Signature

Affiant's Social Security Number or
Applicable Federal Identification Number

Subscribed and sworn to before me this _____ day of _____, 20____.

Notary Public

My commission expires:

SPECIFICATIONS FOR CONVERSION OF PLANS AND DOCUMENTS TO DIGITAL FORMAT

DEFINITIONS

Microfilm – Rolls of film negatives stored on a Microdex roll with a plastic molded case for use with a viewing machine.

Microfiche – Jacketed sheets of film pieces, up to 6 pieces or panes per jacketed sheet.

OCR – Optical Character Recognition

Final Plans – As-built drawings of segments of highway used during construction as a record of construction of MoDOT highways

Highway Resurfacing Plans – As-built documents with some typical drawings of roadways used as construction documents and records of MoDOT resurfacing projects of highways

As-built – Design Construction plans that have been altered to reflect actual on-the-ground built elements such as pavement, bridges, guardrail, culverts, signs, signals, and other elements associated with highways and roads.

Design Plans - Drawings of segments of highway used during construction, similar to Final Plans, but in paper format.

Deed – Any legal document that is used or was used by MoDOT or any Missouri County to record real estate transactions and details between MoDOT and any other party.

INTRODUCTION, PURPOSE, AND BACKGROUND

The purpose of this conversion effort is to preserve and archive District 4 (D4) MoDOT documents in a digital format. Documents under consideration for scanning include microfilm and microfiche as-built plans (commonly known as Final Plans), Municipal agreements, Changes in Route Status Reports, and any other paper format, microfilm, or microfiche documents that need to be converted to digital format for archiving or workflow. The primary objective of this effort is to save time, gain efficiency, and keep information from being lost due to deterioration and lack of organization. This effort of scanning includes only minimal indexing and will be performed in non-proprietary file formats so the digital files will be able to fit any future archival or document management system(s). The document conversion will provide data in a non-proprietary commonly used format for storage and retrieval of records pertaining to MoDOT District 4 business processes.

The scope of this work consists solely of the conversion to digital format of various documents and creating a minimal index for all digital documents and will not include any storage of converted data or development of applications to access converted data.

Historically, MoDOT has stored documents in various formats including microfilm/microfiche images of Final Plans. Other documents have been stored in file cabinets, bank boxes, in MoDOT Maintenance Buildings, and at individual workstations. There have been past efforts of structured archive systems at the District level and the statewide level, but full development of a working archive has not been achieved.

Past methods of archiving Final Plans, prior to about the year 2000, has been to microfilm image Final Plans and other documents. The original construction documents were converted to microfilm/microfiche using a 24 times reduction with 35 mm film resulting in jacketed microfilm/microfiche sheets. Jacketed sheets are 2.4" x 7.5" jacketed film negatives consisting of 6 - 1.8" x 1.2" panes each, 1 plan sheet negative image per pane. The original drawings were D-size (approximately 24" x 36") sheets hand drawn with graphite or ink on vellum or Mylar (originals from the early 1990's back to the 1930's) and some being CAD generated (originals from the early 1990's to present). Final Plans are indexed on Project History Maps commonly known as Rag Maps as well as a tabular index in electronic format. Rag Maps have not been updated in District 4 since about the year 2000. Older plans on routes that have changed designation cannot easily be tracked from their current designation (i.e.; old designation of Barry Rd was MO 152 and before that Route T). No index exists of former route designations. The Final Plans have been maintained as a complete set of microfilm/ microfiche in each MoDOT District and a duplicate set in the Central Office in Jefferson City. Final Plans since about the year 2000 have been disparately maintained through a variety of methods, mostly microfilmed then converted to .pdf format, stored on CD/DVD, with a relaxed practice of indexing. The condition of District 4 Final Plans copies of the microfilm/microfiche are quickly deteriorating through continued and multiple usage and the lack of quality control in the processes of storage/retrieval, indexing, access, and reproduction of the records. Final Plans since 2000 are not consistent in structure, with some projects filed as a single .pdf file and others filed as separate .pdf files for each sheet in the project. Some discs contain Final Plans only, while other discs also include Contract Documents, Proposals, and other Project Documents. Generally there is one project per disc, but the discs have not been indexed to the extent of previous microfilm versions of Final Plans. Current workflow is severely hampered by the condition, disparate formats, and storage/retrieval processes of these records.

There are also many records stored on roll microfilm. The roll microfilm contains negative images of 8.5" x 11" originals of Resurfacing Final Plans. Projects consist of multiple sheets with the film edges marked between projects. Also included in roll microfilm are recorded deeds of real estate transactions by MoDOT and supporting documentation.

Other letter size documents such as paper originals and photocopies of Maintenance agreements, Municipal agreements, and other documents are stored in paper format in various locations, generally with weak indexing practices. There is a need to capture these documents in digital format as well. There are other documents that contain indexing information that need to be digitally captured to assist in future indexing of other documents. They have been stored in cardboard folders bound with prong fasteners (two-slotted fasteners in vertical center on left edge of page), loose filed in manila folders, or in hanging file folders.

There are also large format; B-Size (Tabloid), C-Size (approximately 17" x 22"), and D-Size (approximately 22" x 36") documents that are in need of digital conversion and indexing. There are some original Final Plans (D-Size) stored in some MoDOT Maintenance Buildings that are duplicates of records in the Microfilm archive or, in some cases, are the only records of some plan sets. The latter situation is especially true of routes that MoDOT inherited and did not originally build. Some of these plans may be converted to supplement the microfilm/microfiche conversion.

The technical environment that MoDOT currently operates under is one of varying degrees of automation within many work processes. Current engineering plans are produced via

CAD software but are not yet stored in a full archiving document management system. A statewide MoDOT document management system is under development that the digital files resulting from this conversion contract will be compatible and eventually fit into.

SCOPE OF WORK

MoDOT will receive itemized bids for the conversion of various original document types to digital format as detailed in the bid item specifications below.

General Scope of Work is to perform conversion of various and microfilm/microfiche and paper documents to digital format and create an index including a record for each digital document in tabular format.

It is the intention of MoDOT to have the contractor to perform conversion for a pilot of selected originals to establish acceptable specifications of conversion to be used for the remainder of the originals for each type of original document within each item below.

Approximate quantities of documents to be converted and index records created are as shown in attached Pricing Table.

Item 1: Document Scanning: Microfilm/Microfiche Jacketed Sheets of As Built Plans

1.1 Units of Measure for Payment:

- 1.1.1 One digitally scanned image as part of an image-only multipage .pdf file, each image representing one non-plan-view (any plan sheet that is not top orthographic view) film pane of one jacketed microfiche sheet. Index in accordance with Section 1 and Section 8 is included in the pay item.
- 1.1.2 One digitally scanned image as part of an image-only multipage .pdf file, each image representing one plan-view film pane (any plan sheet that is top orthographic view) of one jacketed microfilm sheet and one digitally scanned .tif image file for each plan-view film pane. Index in accordance with Section 1 and Section 8 is included in the pay item.

1.2 Description of Originals: Originals are 2.4" x 7.5" jacketed sheets consisting of 6 - 1.8" x 1.2" film panes each, 1 plan sheet negative image per film pane. Each film pane was derived from a 35 mm film negative process with a 24 times reduction from original drawings. Recent Era Plans were produced either with CAD or hand drawn with graphite or ink on 24" x 36" vellum or Mylar sheets. Recent Era Plans generally include plans produced from approximately 1989 to 2000 and are generally clean originals with good quality with a relatively small amount of image cleanup required during conversion than Past Era Plans. Past Era Plans were hand drawn with graphite or ink on 24" x 36" sheets but are of considerably less quality than Recent Era Plans, which may require more image cleanup as described in Section 8 during conversion to achieve readable and legible converted images. Past Era Plans generally include those produced from 1989 and prior, with quality of originals generally poorer with age of plans. Each group described above may need different conversion processes, but generally, panes within each plan set are of consistent quality. It is the intent of MoDOT to provide contractor film originals in like conditions in

groups for consistent conversion process and economy of scale. Figure 1 shows the typical format of microfilm/microfiche jacketed sheets. Figure 1 is photocopy quality only, to show shape, format, and index fields of microfiche, not the quality of the film images. Sample originals are available for examination by bidders as described in Section 12.

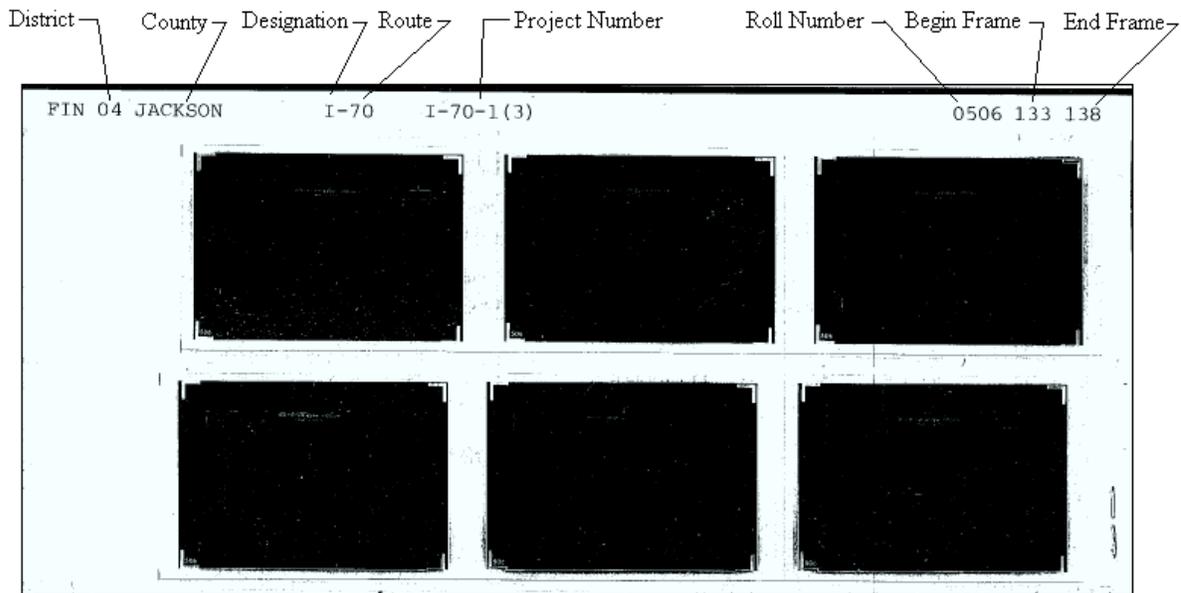


Figure 1. Typical Microfiche Jacketed Sheet with index fields (quality of panes not indicative of actual quality of microfilm)

Sheet numbering on Final Plans does not indicate an exact number of sheets in a plan set. A typical plan set usually includes a title sheet, several sheets numbered sheet 2a, several sheets numbered 2B, then a number of plan view or plan and profile view sheets numbered sequentially 3 through X (usually noted on the Title Sheet. Plan view sheets sometimes will include plan view only (orthographic top view, or looking down on the project area) as well as profile view (orthographic side view, or looking at the project area from one side of the highway or other. Following plan and profile view sheets, there are also sequentially numbered cross section view sheets (orthographic front view, or looking at the project area from a driver view of the project extending down under the highway. Following cross sections are a number of various special sheets, signal sheets, signing sheets, erosion control sheets, traffic control sheets, standards sheets, bridge sheets, and summary sheet, and potentially other sheets.

- 1.3 Quantity: There are originals of varying number that are of like condition. There are a total of approximately 35,000 - 40,000 film panes to be scanned comprising approximately 2000-2500 plan sets. Each jacketed sheet contains up to six (6) film panes. One set of Final Plans ranges from 6 film panes (few sets) to more than 200 film panes (very few sets). Most sets contain 20-80 film panes. One plan set is contained in one index record. The

index for .tif files will be approximately 20,000 – 25,000 records, while the index for .pdf files will be approximately 2500 – 3000 records.

1.3.1 Of the approximately 40,000 film panes described in Section 1.3, there are approximately 5,000-10,000 film panes of Final Plans originating from CAD drawings

1.3.2 Of the approximately 40,000 film panes described in Section 1.3, there are approximately 10,000-20,000 film panes of Recent Era Plans (non-CAD generated originals).

1.3.3 Of the approximately 40,000 film panes described in Section 1.3, there are approximately 10,000-20,000 film panes of Past Era Plans originals.

1.4 Deliverables: The deliverable digital files for Item 1 includes all image files and index files according to Section 1 and Section 8. The files will be delivered to MoDOT via MoDOT provided USB external hard drive, uploaded to the MoDOT password protected public ftp site, or as mutually agreed upon by MoDOT and Contractor.

1.4.1 One .tif image at for each plan view (top orthographic view) film pane or sheet in a plan set.

1.4.2 Index files according to Section 1.6 and Section 8 for each image in Section 1.4.1.

1.4.3 One image-only multipage .pdf file per plan set, one plan sheet (film pane) per .pdf page.

1.4.4 Index files according to Section 1.6 and Section 8 for each multipage .pdf in Section 1.4.3.

For clarification, the deliverables will be one .pdf version of all the images, and additionally one .tif file for all plan view images. There will be one index record in the .pdf index for each multipage .pdf and one index record in the .tif index for each film pane according to Section 1.6 and Section 8. Typical locations of index field information on originals are shown in Figure 2 and Figure 3. Deliverable .tif files shall be as described in Section 1.7 and Section 8.

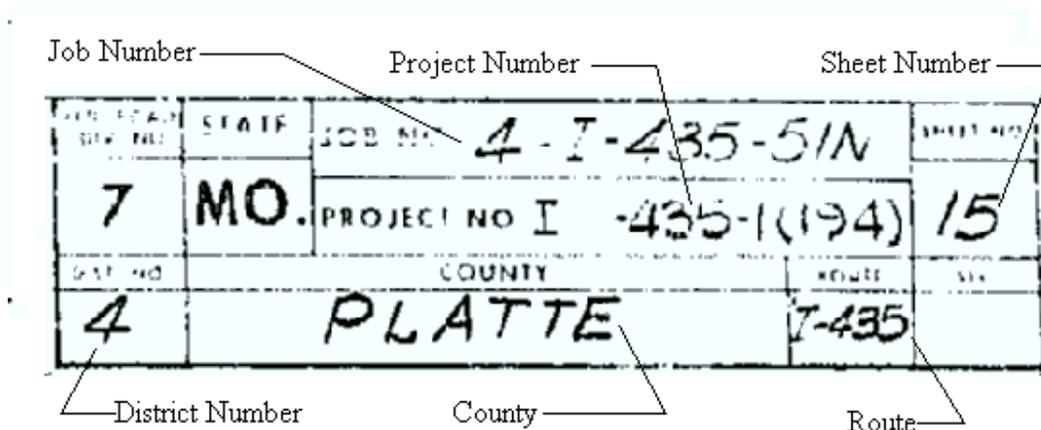


Figure 2. Typical Microfilm/Microfiche Title Block for file naming and index fields

COUNTY <u>JACKSON</u>	
ROUTE <u>I-70</u>	
PROJECT <u>I-70-1(123)</u>	
JOB No. 4-I-70-343 A	
INDEX OF SHEETS	
DESCRIPTION	SHEET NO.
TITLE SHEET	1
TYPICAL SECTIONS (3 SHEETS)	2
SUMMARY (2 SHEETS)	2A
SUMMARY (7 SHEETS)	2B
PLAN-PROFILE	3-6
REFERENCE POINTS	
SPECIAL SHEETS	7-25
LIGHTING (Contract No. 26 deleted)	27-29
SIGNALS	
SIGNING	30-41
CULVERT SECTIONS	42-47
BRIDGE DRAWINGS	48-116
STANDARD PLANS INDEX	117
CROSS SECTIONS	1-16
COMPUTER DATA	

Sheet Index showing Plan view sheet numbers

Figure 3. Typical Index of Sheet Numbers on Title Sheet

- 1.5 Specifications: The jacketed microfiche sheets will require manual review. Many will require cleaning, de-speckling, de-stippling, de-skewing, rebalancing, and other digital image cleanup in accordance to specifications in Section 8 to achieve acceptable readability and legibility. Output spatial resolution will be no less than 300 dots per inch (dpi) at a D-size print or plot. Output image type will be Black and White (1-bit) or Grayscale (8-bit). It is the intention of MoDOT to collaborate with the Contractor to decide on an acceptable industry standard or better scan quality, legibility, and readability which may include decisions regarding whether to convert to black and white or grayscale, resolution, cleanup processes, and any other specifications that may be adjusted to improve quality. It is the intention of MoDOT to achieve an industry standard or better scanning quality. Scanning process of image conversion will be a transmitted light scanning process or comparable industry standard. Production of deliverables will be standard compression .tif files then conversion to .pdf format. Lossless compression .jpeg or .jpg files may be used to convert to .pdf files for images not being delivered as .tif files if improved quality or efficiency of file size is achieved. Bidders may suggest changes to these specifications as described in Section 11.

1.6 Index Requirements: Index components for this item will include a database file for .pdf files, a database file for .tif files, .pdf custom properties, and/or windows custom file properties. There will be two database index files provided as part of the deliverable for Item 1. Index information for database files, .pdf custom properties, and windows custom file properties shall be keyed-in by full time permanent employees of the Contractor and shall be double verified and accurate to 99% or greater character accuracy. All index information will be subject to a MoDOT Quality Assurance/Quality Control (QA/QC) check until accepted according to specifications. Automation of the creation of index information is acceptable if all other specifications are satisfied.

1.6.1 Database file for .pdf files: For .pdf files, a database index will be created and delivered as one or more ODBC Compliant Microsoft Access 2000 (version 9.0) (.mdb) compatible file with field names and field definitions according to Section 8. The file name of the database will be D4_Plans_Archive.mdb or named as directed by MoDOT. Each record represents one set of Final Plans as described in Section 1.2 with a common Project Number (or Job Number if no Project Number exists). The record accuracy shall be 99% or greater, meaning the fields in each record shall have correct values for all fields required for that record. Zone capture of OCR is acceptable if the Contractor meets other requirements for accuracy for the index records according to Section 1.6. The index character and record accuracy will be subject to a MoDOT QA/QC check until accepted according to specifications. Fields required for database index records for .pdf files are: DOC_ID, DOC_NAME, DOC_TYPE, COUNTY, ROUTE, JOB_NUM (if on the plans), PROJ_NUM (if on plans), ROLL_NUM, BEG_FRAME, and END_FRAME according to Section 8. Note that only the BEG_FRAME from the first jacketed sheet in the plan set and the END_FRAME from the last jacketed sheet in the plan set are needed for an index record.

1.6.2 Database file for .tif files: For .tif files, a database index will be created and delivered as one or more ODBC Compliant Microsoft Access 2000 (version 9.0) (.mdb) compatible file with field names and field definitions according to Section 8. The file name of the database will be D4_Plans_Archive_TIF.mdb or named as directed by MoDOT. Each record in the database index will represent one image of one film pane of each plan-view sheet (top orthographic view) as described in Section 1.2. Each record will have a composite unique key of Project Number (or Job Number if no Project Number is found) and Sheet Number (found on the title block on the image), which will be identical to the filename according to Section 1.7. The record accuracy shall be 99% or greater, meaning the fields in each record shall have correct values for all fields required for that record. Zone capture of OCR for index purposes is acceptable if the Contractor meets other requirements for accuracy for the index records according to Section 1.6. The index character and record accuracy will be subject to a MoDOT QA/QC check until accepted according to specifications. Fields required for database index records for .tif files are: DOC_ID and DOC_NAME (same as the DOC_NAME used for the .pdf index according to Section 1.6.1 except with the .tif file extension) according to Section 8.

- 1.6.3 Windows File Properties: For all deliverable files, file properties will be attached to each file in Item 1. At a minimum, this includes the file name, file type, creation date (date final image was produced after editing and all production by Contractor)
- 1.6.4 PDF File Properties: All .pdf files (version 7.0 compatible files), in Item 1, in addition to Windows File Properties according to Section 1.6.3, will include PDF Document Properties for the following as part of the deliverable image file:
- PDF Document Property: Description/Author
Value: Company Name of Contractor
 - PDF Document Property: Description/Created
Value: long date (automatically created upon file creation is acceptable)
 - PDF Document Property: Advanced/PDF Producer
Value: Software application used to create the file (automatically created upon file creation is acceptable)
 - PDF Document Property: Advanced/PDF Version
Value: Version of PDF standard (automatically created upon file creation is acceptable)
 - PDF Document Property: Advanced/Number of Pages
Value: Number of pages in the multipage .pdf (automatically created upon file creation is acceptable)
- 1.6.5 TIF File Properties: All .tif files in Item 1, in addition to Windows File Properties according to Section 1.6.3, will include file properties for the following as part of the deliverable image file:
- Windows File Property (Image): File Type
Value: Tagged Information File Format (TIFF) (automatically created upon file creation is acceptable)
 - Windows File Property (Image): Width
Value: Width of Image in number of pixels as an integer (automatically created upon file creation is acceptable)
 - Windows File Property (Image): Horizontal Resolution
Value: Number of dots per inch (DPI) (or pixels per inch) in horizontal direction as an integer (automatically created upon file creation is acceptable)
 - Windows File Property (Image): Vertical Resolution File Type
Value: Number of dots per inch (DPI) (or pixels per inch) in vertical direction as an integer (automatically created upon file creation is acceptable)
 - Windows File Property (Image): Bit Depth
Value: Number of bits per pixel as an integer (1 for monochrome, 8 for grayscale, 32 for color, etc) (automatically created upon file creation is acceptable)
 - Windows File Property (Image): Color Representation
Value: Common Name of color representation (Monochrome, Grayscale, RGB, etc) (automatically created upon file creation is acceptable)
 - Windows File Property (Image): Compression

Value: Compression type used in the .tif file (automatically created upon file creation is acceptable)

- 1.7 File naming Requirements: File naming for deliverable files will be slightly different for .pdf files and .tif files for this item.
 - 1.7.1 File naming for .pdf files will be the same as the Project Number field on the header of the microfiche sheet. If there is no Project Number, the filename will be the same as the Job Number. Project Number and Job Number formats are described in Section 8. A typical name for a .pdf file would be 4-I-70-IR(12) SEC 6.pdf for a file named using the Project Number. For a Job Number named file, a typical name would be J4U1425.pdf.
 - 1.7.2 File naming for .tif files will be a composite of the Project Number field on the header of the microfiche sheet and the Sheet Number on the title block on the image according to Section 8. If there is no Project Number, the filename will be a composite of the Job Number and the Sheet Number on the title block on the image. Project Number and Job Number field formats are described in Section 8. Sheet numbers are typically found in the title block of the original as shown in Figure 2. The Project Number or Job Number and the sheet number will be separated by an underscore in the filename. Since there are a few plan sets that contain more than 100 sheets, leading zeros will be inserted to form a three-digit sheet number in the filename. A typical name for a .tif file would be 4-I-70-IR(12) SEC 6_003.tif for a file named using the Project Number. For a Job Number named file, a typical name would be J4U1425_003.pdf.
- 1.8 General Considerations: Contractor will perform a pilot sample conversion of film panes in Item 1 to determine acceptable specifications prior to completion of the remainder of items in Item 1. It is the intention of MoDOT for the Contractor to provide 5-10 pilot samples for each group of Item 1 (CAD Plans, Recent Era Plans, and Past Era Plans) to MoDOT to determine the soundness of the specifications and to adjust the specifications to achieve and acceptable image quality, legibility, and readability. See Section 11 for information regarding changing the specifications. The pilot samples shall be considered incidental work, with only 1 image of a given image to be used to quantify pay items. Upon completion and acceptance of a pilot sample, the remainder of items for Item 1 will be converted to the agreed upon specifications. The number of pilot samples is unrelated to the number of QA/QC samples described in Section 1.9.
- 1.9 Quality Assurance/Quality Control (QA/QC): MoDOT reserves the right to examine images to ensure specifications for image quality for all items in Item 1 and have the right to reject any or all of the images based on the specifications. It is the intent of MoDOT to perform a random quality check of scanned images in Item 1 for a QA/QC sample of four hundred (400) images.

Item 2: Document Scanning: Microfilm Rolls (Resurfacing Plans)

2.1 Units of Measure for Payment:

- 2.1.1 One digitally scanned image as part of an image-only multipage .pdf file, each image representing one film pane contained on roll microfilm. Index in accordance with Section 2 and Section 8 is included in the pay item.
- 2.2 Description of Originals: Originals to be converted are roll microfilm negatives derived from letter or tabloid size sheets. Documents consist of Highway Engineering Resurfacing Plans, or Resurfacing Plans. Each film pane on the microfilm roll was derived from 35 mm film negatives with a 24 times reduction from original drawings. Each plan set consists of approximately 7-10 sheets per job number or project number. Original Resurfacing Plans were produced as letter size plan sheet sets that include a title sheet, description sheets, typical section sheets, typical plan views, quantities sheets, special detail sheets, summary sheets, and other sheets. Most originals were hand drawn on letter size Mylar or vellum sheets with graphite or ink. Some originals may have been produced with CAD. Sample originals are available for examination by bidders as described in Section 12.
- 2.3 Quantity: There are 2 rolls of approximately 2000 letter size portrait sheets each. The typical project or plan set consists of 7-10 sheets. One plan set is contained in one index record. Approximately 99% of the film panes are letter size portrait, with approximately 1% potentially being legal or tabloid size output. Of those that are tabloid, all are split into two film panes of letter size portrait on the microfilm roll. The quantity of scanned images will be approximately 4,000 panes contained in 350-500 .pdf files accompanied by an index with an equal number of records according to Section 2 and Section 8. Approximately 90% of the originals are high enough quality line art to convert using black and white conversion.
- 2.4 Deliverables: The deliverable digital files for Item 2 includes all image files and index files according to Section 2 and Section 8. The files will be delivered to MoDOT via MoDOT provided USB external hard drive, uploaded to the MoDOT password protected public ftp site, or as mutually agreed upon by MoDOT and Contractor.
- 2.4.1 One image-only multipage .pdf file per plan set, one plan sheet (film pane) per .pdf page.
- 2.4.2 Index files according to Section 2.6 and Section 8 for each multipage .pdf in Section 2.4.1.
- One plan set is defined as all film panes of a common job number as referenced in the Title Block of the microfilm image. Conversion of tabloid sheets includes splicing of these together into a single seamless output as one tabloid page of the resulting pdf output file.
- 2.5 Specifications: The film panes on the microfilm rolls may require manual review. Many will require cleaning, de-speckling, de-stippling, de-skewing, rebalancing, and other digital image cleanup in accordance to specifications in Section 8 to achieve acceptable readability and legibility. Output spatial resolution will be no less than 300 dots per inch (dpi) at a letter size print or plot. Output image type will be Black and White (1-bit) or Grayscale (8-bit). It is the intention of MoDOT to collaborate with the Contractor to decide on an acceptable industry standard or better scan quality, legibility, and readability which may include decisions regarding whether to convert to black and white or grayscale, resolution, cleanup processes, and any other specifications that may be adjusted to improve quality. Scanning process of image conversion will be a transmitted light scanning process or

comparable industry standard. Production of deliverables will be standard compression .tif files then conversion to .pdf format. Lossless compression .jpeg or .jpg files may be used to convert to .pdf files for images not being delivered as .tif files if improved quality or efficiency of file size is achieved. Bidders may suggest changes to these specifications as described in Section 11.

2.6 Index Requirements: Index components for this item will include a database file for .pdf files. Also required is the inclusion of .pdf custom properties and/or windows custom file properties. Index information for the database file, .pdf custom properties, and windows custom file properties shall be keyed-in by full time permanent employees of the Contractor and shall be double verified and accurate to 99% or greater character accuracy. All index information will be subject to a MoDOT Quality Assurance/Quality Control (QA/QC) check until accepted according to specifications. Automation of the creation of index information is acceptable if all other specifications are satisfied.

2.6.1 Database file for .pdf files: For .pdf files, a database index will be created and delivered as one or more ODBC Compliant Microsoft Access 2000 (version 9.0) (.mdb) compatible file with field names and field definitions according to Section 8. The file name of the database will be D4_Plans_Archive.mdb or named as directed by MoDOT. Each record represents one set of Resurfacing Plans as described in Section 2.2 with a common Project Number (or Job Number if no Project Number exists). The record accuracy shall be 99% or greater, meaning the fields in each record shall have correct values for all fields required for that record. Zone capture of OCR for Index purposes is acceptable if the Contractor meets other requirements for accuracy for the index records according to Section 2.6. The index character and record accuracy will be subject to a MoDOT QA/QC check until accepted according to specifications. Fields required for database index records for .pdf files are: DOC_ID, DOC_NAME, DOC_TYPE, COUNTY, ROUTE, JOB_NUM (if on the plans), PROJ_NUM (if on plans), ROLL_NUM, BEG_FRAME, and END_FRAME according to Section 8. A typical film pane of Resurfacing Plans is shown in Figure 4. It shows typical locations of the title block (which also could be in the lower right corner of a film pane if the plan sheet is landscape orientation), Roll Number, and Frame Number. Figure 5 shows detail views of typical title blocks.

2.6.2 Windows File Properties: For all deliverable files, file properties will be attached to each file in Item 2. At a minimum, this includes the file name, file type, creation date (date final image was produced after editing and all production by Contractor)

2.6.3 PDF File Properties: All .pdf files (version 7.0 compatible files), in Item 2, in addition to Windows File Properties according to Section 2.6.2, will include PDF Document Properties for the following as part of the deliverable image file:

PDF Document Property: Description/Author

Value: Company Name of Contractor

PDF Document Property: Description/Created

Value: long date (automatically created upon file creation is acceptable)

PDF Document Property: Advanced/PDF Producer

Value: Software application used to create the file (automatically created upon file creation is acceptable)

PDF Document Property: Advanced/PDF Version

Value: Version of PDF standard (automatically created upon file creation is acceptable)

PDF Document Property: Advanced/Number of Pages

Value: Number of pages in the multipage .pdf (automatically created upon file creation is acceptable)

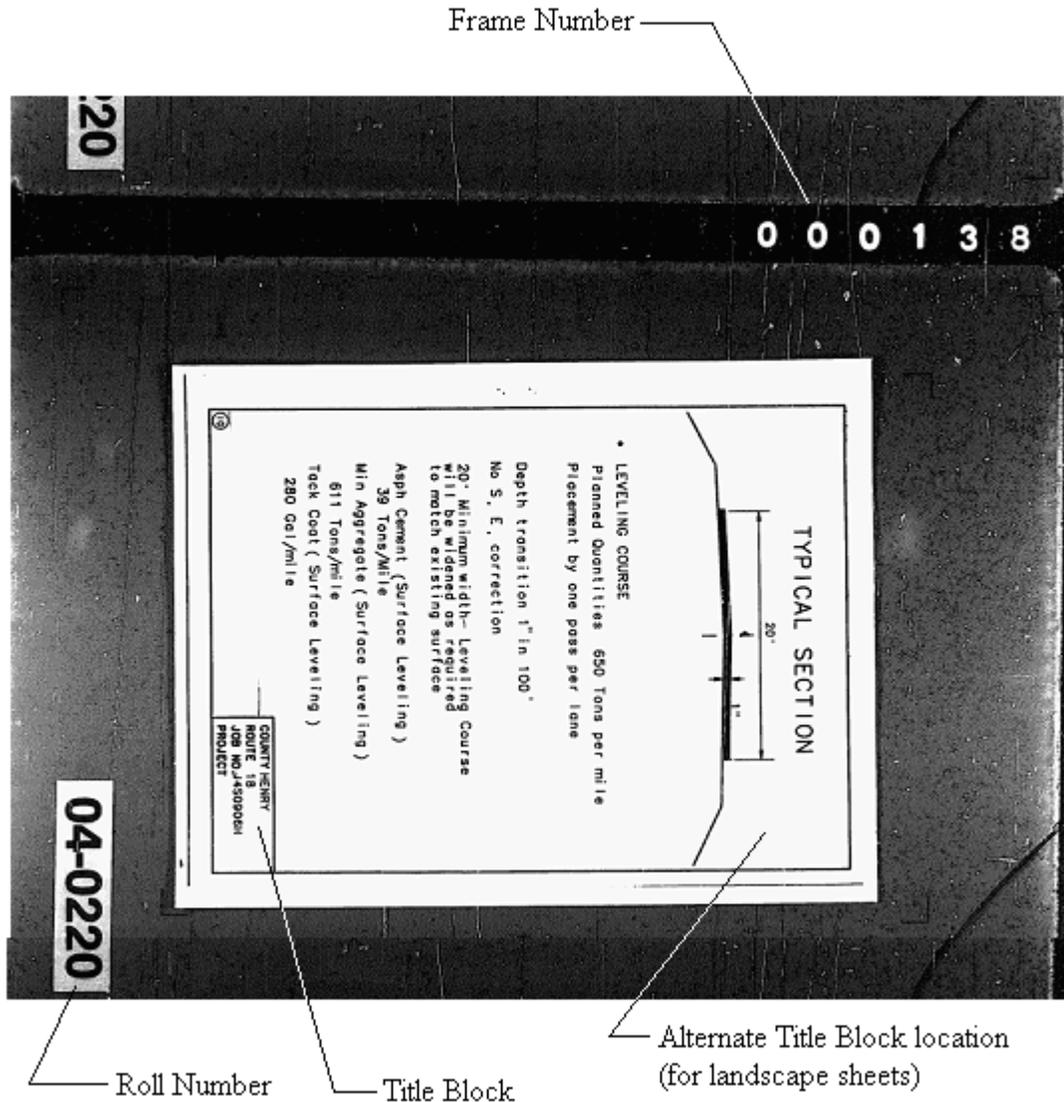


Figure 4. Typical Header information on Roll Microfilm Resurfacing Plans for Indexing.

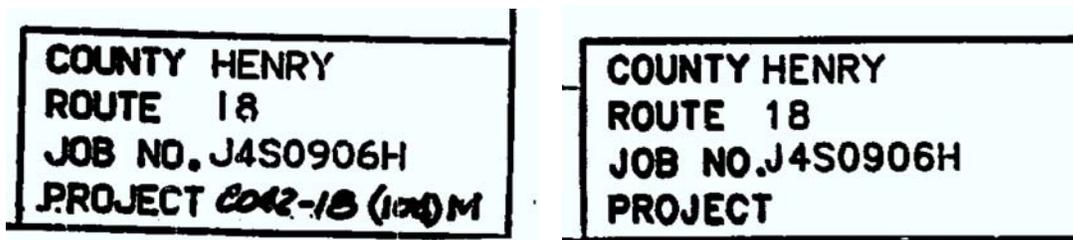


Figure 5. Typical Title Blocks for Resurfacing Plans.

- 2.7 File naming Requirements: File naming for .pdf files will be the same as the Project Number field found on the Title Block of the film panes for a plan set. If there is no Project Number, the filename will be the same as the Job Number. Project Number and Job Number formats are described in Section 8. A typical name for a .pdf file would be CO42-18 (104)M.pdf for a file named using the Project Number. For a Job Number named file, a typical name would be J4S0906H.pdf.
- 2.8 General Considerations: Contractor will perform a pilot sample conversion of film panes in Item 2 to determine acceptable specifications prior to completion of the remainder the items in Item 2. It is the intention of MoDOT for the Contractor to provide 5-10 pilot samples of converted files for Resurfacing Plans to MoDOT to determine the soundness of the specifications and to adjust the specifications to achieve and acceptable image quality, legibility, and readability. See Section 11 for information regarding changes to the specifications. The pilot samples shall be considered incidental work, with only 1 image of a given image to be used to quantify pay items. Upon completion and acceptance of a pilot sample, the remainder of items for Item 2 will be converted to the agreed upon specifications. The number of pilot samples is unrelated to the number of QA/QC samples described in Section 2.9.
- 2.9 Quality Assurance/Quality Control (QAQC): MoDOT reserves the right to examine images to ensure specifications for image quality for all items in Item 2 and have the right to reject any or all of the images based on the specifications. It is the intent of MoDOT to perform a random quality check of scanned images in Item 2 for a QA/QC sample of three hundred fifty (350) images.

Item 3: Document Scanning: Microfilm Rolls (Deeds and Title Commitments)

- 3.1 Units of Measure for Payment:
 - 3.1.1 One digitally scanned image and OCR file as part of a multipage .pdf file, each image representing one film pane contained on roll microfilm. Index according to Section 3 and Section 8 is included in Item 3.
- 3.2 Description: Originals to be converted are roll microfilm negatives derived from letter or legal size sheets. Documents consist of Deeds, Title Commitments, and other legal real estate documents. Each film pane on the microfilm roll was derived from 35 mm film negatives with a 24 times reduction from original drawings. Each plan set consists of

approximately 7-10 sheets per deed or property. Deed and Title Commitment originals were produced by typewriter or word processor, title company forms, stamped information regarding county recorder office book and page numbers, notary stamps, recorder's stamps, signatures, typed information about agreement details, typed information about legal descriptions, and other information. There may be miscellaneous correspondence included, with title information including a common Job Number, County, Route Name, and Tract Number. Sample originals are available for examination by bidders as described in Section 12.

- 3.3 Quantity: There are 221 rolls of approximately 2000 – 2400 film panes each roll. Approximately 99% of those are letter size and 1% legal or tabloid size. All legal and letter sizes are portrait in orientation, the tabloid sheets are split into two film panes. Approximately one third of the documents range from 2-5 sheets for deed only documents and two thirds of the documents consist of 7-10 sheets for deed and title commitment documents. The quantity of scanned images will be approximately 440,000 – 530,000 film panes contained in 350-500 documents to be converted to .pdf files accompanied by an index with an equal number of records according to Section 3 and Section 8. Approximately 90% of the originals are high enough quality line art to convert using black and white conversion.
- 3.4 Deliverables: The deliverable digital files for Item 3 includes all image files and index files according to Section 3 and Section 8. The files will be delivered to MoDOT via MoDOT provided USB external hard drive, uploaded to the MoDOT password protected public ftp site, or as mutually agreed upon by MoDOT and Contractor. A minimal number (1%) of film panes have potential to be tabloid size originals cut into smaller single letter size sheets with header sheets stating “Begin Oversize Document” and End Oversize Document” or similar language. Conversion of tabloid sheets includes splicing of these together into a single seamless output as one tabloid page of the resulting pdf output file. One document is defined as all film panes of a common key of Job Number and Tract Number as referenced in the Title Block of the microfilm image or elsewhere on the image.
- 3.4.1 One image-and-OCR full text searchable multipage .pdf file per document set, one film pane per .pdf page. Each .pdf will include all images and OCR content common to the composite key of Job Number and Tract Number in accordance with Section 3 and Section 8.
- 3.4.2 Index files according to Section 3.6 and Section 8 for each multipage .pdf in Section 3.4.1.
- 3.5 Specifications: The film panes on the microfilm rolls may require manual review. Many will require cleaning, de-speckling, de-stippling, de-skewing, rebalancing, and other digital image cleanup in accordance to specifications in Section 8 to achieve acceptable readability and legibility. Output spatial resolution will be no less than 300 dots per inch (dpi) at a letter size print or plot. Output image type will be Black and White (1-bit) or Grayscale (8-bit). It is the intention of MoDOT to collaborate with the Contractor to decide on an acceptable industry standard or better scan quality, legibility, and readability which may include decisions regarding whether to convert to black and white or grayscale, resolution,

cleanup processes, and any other specifications that may be adjusted to improve quality. Scanning process of image conversion will be a transmitted light scanning process or comparable industry standard. Production of deliverables will be standard compression .tif files then conversion to .pdf format. Lossless compression .jpeg or .jpg files may be used to convert to .pdf files for images not being delivered as .tif files if improved quality or efficiency of file size is achieved. The contractor will perform scan capture to ensure OCR quality consistent with industry standards of readability and legibility as might be acquired through OCR software that includes character training technology, a character and word voting engine, character confidence technology, or comparable technologies. Readability to general industry standards in place currently such as might be found using current OmniPage software, ABBYY Finereader software, PrimeOCR, Caere/Calera/ScanSoft, ExperVision, and NewSoft, or Kofax software. Character accuracy will be no less than 98% and word accuracy will be no less than 98%. OCR will not be included for non-text sheets such as diagrams, drawings, survey sketches, etc. Bidders may suggest changes to these specifications as described in Section 11.

3.6 Index Requirements: Index components for this item will include a database file for .pdf files. Also required is the inclusion of .pdf custom properties and/or windows custom file properties. Index information for the database file, .pdf custom properties, and windows custom file properties shall be keyed-in by full time permanent employees of the Contractor and shall be double verified and accurate to 99% or greater character accuracy. All index information will be subject to a MoDOT Quality Assurance/Quality Control (QA/QC) check until accepted according to specifications. Automation of the creation of index information is acceptable if all other specifications are satisfied.

3.6.1 Database file for .pdf files: For .pdf files, a database index will be created and delivered as one or more ODBC Compliant Microsoft Access 2000 (version 9.0) (.mdb) compatible file with field names and field definitions according to Section 8. The file name of the database will be D4_Plans_Archive.mdb or named as directed by MoDOT. Each record represents one set of real estate Deed and Title Commitment documents for each Tract in each Job Number as described in Section 3.2. Each set of documents will have a common composite key of Job Number and Tract Number in each record. The record accuracy shall be 99% or greater, meaning the fields in each record shall have correct values for all fields required for that record. Zone capture of OCR for Index purposes is acceptable if the Contractor meets other requirements for accuracy for the index records according to Section 3.6. The index character and record accuracy will be subject to a MoDOT QA/QC check until accepted according to specifications. Fields required for database index records for .pdf files are: DOC_ID, DOC_NAME, DOC_TYPE, COUNTY, ROUTE, JOB_NUM, TRACT_NUM, ROLL_NUM, BEG_FRAME, and END_FRAME according to Section 8. Typical film pane details of Deed and Title Commitment documents are shown in Figure 6. These show typical quality of the title block (which could be anywhere on the film pane, but usually at the top. Roll Number, and Frame Number are located similar to that shown in Figure 4.

- 3.6.2 Windows File Properties: For all deliverable files, file properties will be attached to each file in Item 3. At a minimum, this includes the file name, file type, creation date (date final image was produced after editing and all production by Contractor)
- 3.6.3 PDF File Properties: All .pdf files (version 7.0 compatible files), in Item 3, in addition to Windows File Properties according to Section 3.6.2, will include PDF Document Properties for the following as part of the deliverable image file:
- PDF Document Property: Description/Author
Value: Company Name of Contractor
 - PDF Document Property: Description/Created
Value: long date (automatically created upon file creation is acceptable)
 - PDF Document Property: Advanced/PDF Producer
Value: Software application used to create the file (automatically created upon file creation is acceptable)
 - PDF Document Property: Advanced/PDF Version
Value: Version of PDF standard (automatically created upon file creation is acceptable)
 - PDF Document Property: Advanced/Number of Pages
Value: Number of pages in the multipage .pdf (automatically created upon file creation is acceptable)

3.7 File naming Requirements: File naming for .pdf files will be the Job Number field and the Tract Number separated by an underscore. The general location of the index information is shown in Figure 6. The Job Number and Tract Number formats are further described in Section 8. An example filename, for Figure 6, would be J4S1057C_03.pdf.

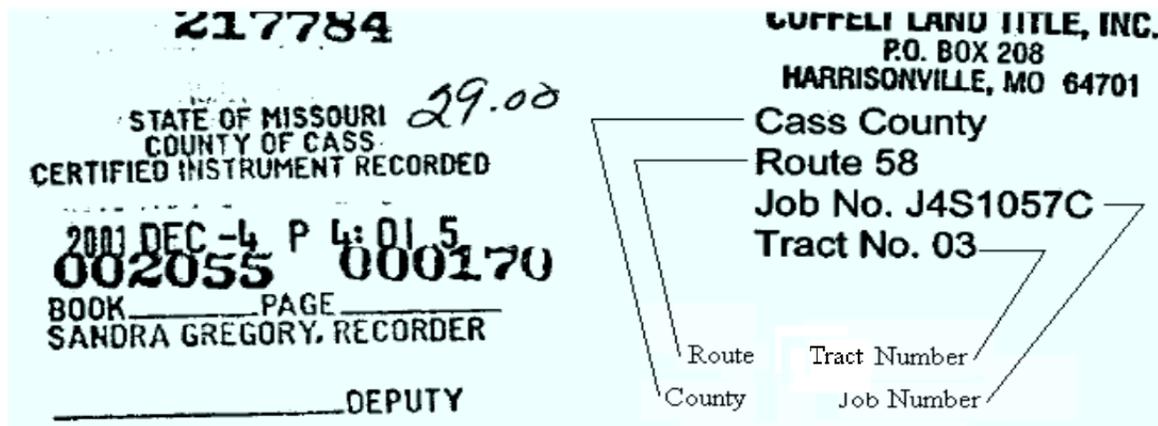


Figure 6. Typical Header information on Roll Microfilm Deed for Indexing.

3.8 General Considerations: Contractor will perform a pilot sample conversion of film panes in Item 3 to determine acceptable specifications prior to completion of the remainder the items in Item 3. It is the intention of MoDOT for the Contractor to provide 5-10 pilot samples of converted files for Deeds, Title Commitments, and related documents to MoDOT to determine the soundness of the specifications and to adjust the specifications to achieve and

acceptable image quality, legibility, and readability. See Section 11 for information regarding changing the specifications. The pilot samples shall be considered incidental work, with only 1 image of a given image to be used to quantify pay items. Upon completion and acceptance of a pilot sample, the remainder of items for Item 3 will be converted to the agreed upon specifications. The number of pilot samples is unrelated to the number of QA/QC samples described in Section 3.9

- 3.9 Quality Assurance/Quality Control (QAQC): MoDOT reserves the right to examine images to ensure specifications for image quality for all items in Item 3 and have the right to reject any or all of the images based on the specifications. It is the intent of MoDOT to perform a random quality check of scanned images in Item 3 for a QA/QC sample of four hundred (400) images.

Item 4: Document Scanning: Letter and Legal Size Paper Documents (Agreements and Correspondence)

4.1 Units of Measure for Payment:

4.1.1 One digitally scanned image and OCR file as part of a multipage .pdf file, each image representing one letter, legal, or tabloid size piece of paper contained in various formats as described in Section 4.2 Index according to Section 4 and Section 8 is included in Item 4.

4.2 Description: Original documents consist of typed or word processor produced text on bond paper or white or yellow trace paper. Originals consist of Municipal Agreements, Change In Route Status Reports, On-Call Engineering Consultant Contracts, and other official archive documents. Some documents may contain signatures, embossed stamps, notary stamps, and other items that are not pure text in nature. There is miscellaneous index information included on a various pages in various locations. Sample originals are available for examination by bidders as described in Section 12.

4.2.1 Municipal Agreements consist of letter size portrait sheets that may include: a cover letter, a typed agreement with signature page(s), and potentially diagrams or drawings of portrait or landscape orientation, some letter size, some tabloid size. Pages are stapled or paper clipped and held in various unbound file folders (pages or stapled/clipped groups are not attached to the folders)

4.2.2 Changes In Route Status Reports consist of memorandum correspondence along with attachments of diagrams and drawings of portrait or landscape orientation, some letter size, and some tabloid size.

4.2.3 On-call Engineering Contracts consist of letter size portrait sheets typed or produced by word processor, stapled or paper clipped in unbound folders.

4.2.4 There may also be portion of Item 4 originals that are legal size portrait orientation or tabloid size landscape orientation, usually included within a document.

4.3 Quantity: There are approximately three hundred (300) unbound manila file folders containing Municipal Agreements and Changes In Route Status Reports. Each folder contains 1 to 2 sets of stapled or paper clipped bond or trace paper. One set of stapled or

paper clipped sets constitutes one index record. There are 10-100 letter size sheets in each stapled set. There are approximately 5000-20000 total sheets of Municipal Agreements and Changes In Route Status Reports with 5% +/- being legal size or tabloid size landscape orientation. There are approximately thirty (30) unbound manila folders containing On Call Engineering Consultant Contracts. Each of these folders contains a single stapled set of 5-10 letter size portrait oriented sheets. Each stapled or paper clipped set is approximately 10-20 sheets. There are a total of approximately 100-300 On Call Engineering Consultant Contracts sheets, 100% being letter size portrait orientation. Approximately 1% of original paper sheets have the potential to be tabloid size.

4.4 Deliverables: The deliverable digital files for Item 4 includes all image files, OCR content, and index files according to Section 4 and Section 8. The files will be delivered to MoDOT via MoDOT provided USB external hard drive, uploaded to the MoDOT password protected public ftp site, or as mutually agreed upon by MoDOT and Contractor. Legal and Tabloid originals will be converted to full size pages and included in multipage .pdf files as a single page. Each document as described in Section 4.2 will be converted to a multipage .pdf file. Index will be included according to Section 4.6 and Section 8. One document is defined as all paper sheets in a stapled set or folder as marked by MoDOT upon delivery for to Contractor for conversion (MoDOT intends to deliver originals in groups for easy identification of what to include in deliverable files and database index records. This may be by marked or Post-It type notes on folders, Post-It type notes between records, marked full sheet tabs between records or some other method mutually acceptable to MoDOT and the Contractor. Each record will have the unique DOC_ID as described in Section 8 to establish uniqueness of a deliverable file and in the index.

4.4.1 One image-and-OCR full text searchable multipage .pdf file per document, one portrait paper sheet (or legal or tabloid size if needed) per .pdf page. Each .pdf will include all images and OCR content common to the record breaks provided by MoDOT as described in this Section.

4.4.2 Index files according to Section 4.6 and Section 8 for each multipage .pdf in Section 4.4.1.

4.5 Specifications: The converted .pdf files documents in Item 4 may require manual review. Many will require cleaning, de-speckling, de-stippling, de-skewing, rebalancing, and other digital image cleanup in accordance to specifications in Section 8 to achieve acceptable readability and legibility. Output spatial resolution will be no less than 300 dots per inch (dpi) at a letter size print or plot. Output image type will be Black and White (1-bit) or Grayscale (8-bit). It is the intention of MoDOT to collaborate with the Contractor to decide on an acceptable industry standard or better scan quality, legibility, and readability which may include decisions regarding whether to convert to black and white or grayscale, resolution, cleanup processes, and any other specifications that may be adjusted to improve quality. Scanning process of image conversion will be a transmitted light scanning process or comparable industry standard. Production of deliverables will be standard compression .tif files then conversion to .pdf format. Lossless compression .jpeg or .jpg files may be used to convert to .pdf files for images not being delivered as .tif files if improved quality or efficiency of file size is achieved. The contractor will perform scan capture to ensure OCR

quality consistent with industry standards of readability and legibility as might be acquired through OCR software that includes character training technology, a character and word voting engine, character confidence technology, or comparable technologies. Readability to general industry standards in place currently such as might be found using current OmniPage software, ABBYY Finereader software, PrimeOCR, Caere/Calera/ScanSoft, ExperVision, and NewSoft, or Kofax software. Character accuracy will be no less than 98% and word accuracy will be no less than 98%. OCR will not be included for non-text sheets such as diagrams, drawings, survey sketches, etc. Bidders may suggest changes to these specifications as described in Section 11.

4.6 Index Requirements: Index components for this item will include a database file for .pdf files. Also required is the inclusion of .pdf custom properties and/or windows custom file properties. Index information for the database file, .pdf custom properties, and windows custom file properties shall be keyed-in by full time permanent employees of the Contractor and shall be double verified and accurate to 99% or greater character accuracy. All index information will be subject to a MoDOT Quality Assurance/Quality Control (QA/QC) check until accepted according to specifications. Automation of the creation of index information is acceptable if all other specifications are satisfied.

4.6.1 Database file for .pdf files: For .pdf files, a database index will be created and delivered as one or more ODBC Compliant Microsoft Access 2000 (version 9.0) (.mdb) compatible file with field names and field definitions according to Section 8. The file name of the database will be D4_Plans_Archive.mdb or named as directed by MoDOT. Each record represents one document as defined and marked by MoDOT upon delivery to the Contractor for conversion. The record accuracy shall be 99% or greater, meaning the fields in each record shall have correct values for all fields required for that record. Zone capture of OCR for Index purposes is acceptable if the Contractor meets other requirements for accuracy for the index records according to Section 4.6. The index character and record accuracy will be subject to a MoDOT QA/QC check until accepted according to specifications. Fields required for database index records for .pdf files are: DOC_ID, DOC_NAME, DOC_TYPE, DOC_SUBTYPE, COUNTY, ROUTE according to Section 8.

4.6.2 Windows File Properties: For all deliverable files, file properties will be attached to each file in Item 4. At a minimum, this includes the file name, file type, creation date (date final image was produced after editing and all production by Contractor).

4.6.3 PDF File Properties: All .pdf files (version 7.0 compatible files), in Item 4, in addition to Windows File Properties according to Section 4.6.2, will include PDF Document Properties for the following as part of the deliverable image file:

PDF Document Property: Description/Author

Value: Company Name of Contractor

PDF Document Property: Description/Created

Value: long date (automatically created upon file creation is acceptable)

PDF Document Property: Advanced/PDF Producer

Value: Software application used to create the file (automatically created upon file creation is acceptable)

PDF Document Property: Advanced/PDF Version

Value: Version of PDF standard (automatically created upon file creation is acceptable)

PDF Document Property: Advanced/Number of Pages

Value: Number of pages in the multipage .pdf (automatically created upon file creation is acceptable)

- 4.7 File naming Requirements: File naming for .pdf files for Item 4 will be the DOC_ID.
- 4.8 General Considerations: Contractor will perform a pilot sample conversion of film panes in Item 4 to determine acceptable specifications prior to completion of the remainder the items in Item 4. It is the intention of MoDOT for the Contractor to provide 5-10 pilot samples of converted files for Item 4 (Agreements, Change In Route Status Reports, and other documents) to MoDOT to determine the soundness of the specifications and to adjust the specifications to achieve and acceptable image quality, legibility, and readability. See Section 11 for information regarding changing the specifications. The pilot samples shall be considered incidental work, with only 1 image of a given image to be used to quantify pay items. Upon completion and acceptance of a pilot sample, the remainder of items for Item 4 will be converted to the agreed upon specifications. The number of pilot samples is unrelated to the number of QA/QC samples described in Section 4.9.
- 4.9 Quality Assurance/Quality Control (QAQC): MoDOT reserves the right to examine images to ensure specifications for image quality for all items in Item 4 and have the right to reject any or all of the images based on the specifications. It is the intent of MoDOT to perform a random quality check of scanned images in Item 4 for a QA/QC sample of three hundred seventy-five (375) images.

Item 5: Document Scanning: Tabloid size paper documents

- 5.1 Units of Measure:
- 5.1.1 One Tabloid Size image as a single or part of a multipage image-only .pdf or image and OCR full text searchable .pdf file. Each image represents one tabloid size piece of paper or other medium contained in various formats as described in Section 5.2. Index according to Section 5 and Section 8 is included in Item 5.
- 5.2 Description: Original documents consist of various Tabloid (B-Size) hand drawn, or CAD produced diagrams, drawings, maps, tables, graphs, or other graphics on bond paper, vellum, Mylar. Some documents may contain black and white line art, grayscale, or color graphics. Some originals may be laminated. Some may be stapled or otherwise bound. Also includes Design Plans similar in quality to CAD produced and Recent Era Final Plans described in Section 1, but originals are on Tabloid size paper instead of on microfiche. Index information will be marked on the originals or provided by MoDOT. Sample originals are available for examination by bidders as described in Section 12.
- 5.3 Quantity: The number of originals for Item 5 includes approximately 100 various format originals and approximately 2000 sheets of bound plan sets contained in 15-20 plan sets.

- 5.4 Deliverables: The deliverable digital files for Item 5 includes all image files, OCR content, and index files according to Section 5 and Section 8. The files will be delivered to MoDOT via MoDOT provided USB external hard drive, uploaded to the MoDOT password protected public ftp site, or as mutually agreed upon by MoDOT and Contractor. Legal and Tabloid originals will be converted to full size pages and included in multipage .pdf files as a single page. Each document as described in Section 5.2 will be converted to a single or multipage .pdf file. Index will be included according to Section 5.6 and Section 8. One document is defined as all paper sheets in a stapled set or folder as marked by MoDOT upon delivery for to Contractor for conversion (MoDOT intends to deliver originals in groups for easy identification of what to include in deliverable files and database index records. This may be by marked or Post-It type notes on folders, Post-It type notes between records, marked full sheet tabs between records or some other method mutually acceptable to MoDOT and the Contractor. Each record will have the unique DOC_ID as described in Section 8 to establish uniqueness of a deliverable file and index record.
- 5.4.1 One tabloid size image as part of a single or multipage image-only .pdf file, one tabloid paper sheet per .pdf page. Each .pdf will include all images common to the record as provided by MoDOT as described in this Section.
- 5.4.2 Index files according to Section 5.6 and Section 8 for each multipage .pdf in Section 5.4.1.
- 5.5 Specifications: The converted .pdf file documents in Item 5 may require manual review. Some will require cleaning, de-speckling, de-stippling, de-skewing, rebalancing, and other digital image cleanup in accordance to specifications in Section 8 to achieve acceptable readability and legibility. Output spatial resolution will be no less than 300 dots per inch (dpi) at a letter size print or plot. Output image type will be Black and White (1-bit) or Grayscale (8-bit) or color (24-bit) as marked by MoDOT upon delivery of originals to the Contractor. It is the intention of MoDOT to collaborate with the Contractor to decide on an acceptable industry standard or better scan quality, legibility, and readability which may include decisions regarding whether to convert to black and white or grayscale, resolution, cleanup processes, and any other specifications that may be adjusted to improve quality. Scanning process of image conversion will be a transmitted light scanning process or comparable industry standard. Production of deliverables will be standard compression .tif files then conversion to .pdf format. Lossless compression .jpeg or .jpg files may be used to convert to .pdf files for images not being delivered as .tif files if improved quality or efficiency of file size is achieved. Bidders may suggest changes to these specifications as described in Section 11.
- 5.6 Index Requirements: Index components for this item will include a database file for .pdf files. Also required is the inclusion of .pdf custom properties and/or windows custom file properties. Index information for the database file, .pdf custom properties, and windows custom file properties shall be keyed-in by full time permanent employees of the Contractor and shall be double verified and accurate to 99% or greater character accuracy. All index information will be subject to a MoDOT Quality Assurance/Quality Control (QA/QC)

check until accepted according to specifications. Automation of the creation of index information is acceptable if all other specifications are satisfied.

5.6.1 Database file for .pdf files: For .pdf files, a database index will be created and delivered as one or more ODBC Compliant Microsoft Access 2000 (version 9.0) (.mdb) compatible file with field names and field definitions according to Section 8. The file name of the database will be D4_Plans_Archive.mdb or named as directed by MoDOT or according to Section 8. Each record represents one document as defined and marked by MoDOT upon delivery to the Contractor for conversion. The record accuracy shall be 99% or greater, meaning the fields in each record shall have correct values for all fields required for that record. Zone capture of OCR for Index purposes is acceptable if the Contractor meets other requirements for accuracy for the index records according to Section 5.6. The index character and record accuracy will be subject to a MoDOT QA/QC check until accepted according to specifications. Fields required for database index records for .pdf files are: DOC_ID, DOC_NAME, DOC_TYPE, COUNTY, ROUTE, JOB_NUM (if applicable) according to Section 8.

5.6.2 Windows File Properties: For all deliverable files, file properties will be attached to each file in Item 5. At a minimum, this includes the file name, file type, creation date (date final image was produced after editing and all production by Contractor).

5.6.3 PDF File Properties: All .pdf files (version 7.0 compatible files), in Item 5, in addition to Windows File Properties according to Section 5.6.2, will include PDF Document Properties for the following as part of the deliverable image file:

PDF Document Property: Description/Author

Value: Company Name of Contractor

PDF Document Property: Description/Created

Value: long date (automatically created upon file creation is acceptable)

PDF Document Property: Advanced/PDF Producer

Value: Software application used to create the file (automatically created upon file creation is acceptable)

PDF Document Property: Advanced/PDF Version

Value: Version of PDF standard (automatically created upon file creation is acceptable)

PDF Document Property: Advanced/Number of Pages

Value: Number of pages in the multipage .pdf (automatically created upon file creation is acceptable)

5.7 File naming Requirements: File naming for .pdf files for Item 5 will be the DOC_ID according to Section 8 for the various originals described in Section 5.2. File naming for Design Plans will be as described or similar to that in Section 1.7.

5.8 General Considerations: Contractor will perform a pilot sample conversion of film panes in Item 5 to determine acceptable specifications prior to completion of the remainder the items in Item 5. It is the intention of MoDOT for the Contractor to provide 5-10 pilot samples of converted files for Item 5 to MoDOT to determine the soundness of the specifications and to adjust the specifications to achieve and acceptable image quality, legibility, and readability. See Section 11 for information regarding changing the specifications. The pilot

samples shall be considered incidental work, with only 1 image of a given image to be used to quantify pay items. Upon completion and acceptance of a pilot sample, the remainder of items for Item 4 will be converted to the agreed upon specifications. The number of pilot samples is unrelated to the number of QA/QC samples described in Section 5.9.

- 5.9 Quality Assurance/Quality Control (QAQC): MoDOT reserves the right to examine images to ensure specifications for image quality for all items in Item 4 and have the right to reject any or all of the images based on the specifications. It is the intent of MoDOT to perform a random quality check of scanned images in Item 4 for a QA/QC sample of three hundred seventy-five (375) images.

Item 6: Document Scanning: C-Size Paper and Laminated Documents

- 6.1 Units of Measure:
- 6.1.1 One C-Size image as a single image-only .pdf. Each image represents one laminated C-Size paper map original as described in Section 6.2. Index according to Section 6 and Section 8 is included in Item 6
- 6.2 Description: Original documents consist of C-Size laminated paper maps produced with color marker hand drawn on printed map copies. Some originals are not laminated. Map documents consist of aerial photo flight line index maps, county maps, and other maps and map indices. Maps will be provided to the Contractor unbound. Sample originals are available for examination according to Section 12.
- 6.3 Quantity: The number of originals for Item 6 includes approximately 75-100 originals. Approximately 75% of the originals are laminated.
- 6.4 Deliverables: The deliverable digital files for Item 6 includes all image files and index files according to Section 6 and Section 8. The files will be delivered to MoDOT via MoDOT provided USB external hard drive, uploaded to the MoDOT password protected public ftp site, or as mutually agreed upon by MoDOT and Contractor. Legal and Tabloid originals will be converted to full size pages and included in multipage .pdf files as a single page. Each document as described in Section 6.2 will be converted to a single or multipage .pdf file. Index will be included according to Section 6.6 and Section 8. Each record will have the unique DOC_ID as described in Section 8 to establish uniqueness of a deliverable file and index record.
- 6.4.1 One C-Size .tif image for each map original.
- 6.4.2 Index files according to Section 6.6 and Section 8 for each .tif file in Section 6.4.1.
- 6.4.3 One C-Size image-only .pdf as a single .pdf file, one C-Size paper sheet per .pdf file.
- 6.4.4 Index files according to Section 6.6 and Section 8 for each image .pdf in Section 6.4.3.
- 6.5 Specifications: Some maps may require manual review. Few will require cleaning, de-speckling, de-stippling, de-skewing, rebalancing, and other digital image cleanup in accordance to specifications in Section 8 to achieve acceptable readability and legibility. Output spatial resolution will be no less than 300 dots per inch (dpi) at a C-Size print or

plot. Output image type will be Color (32-bit). Because laminated medium reflects light, a polarized filter or other industry standard process will be used to convert laminated originals in Item 6. It is the intention of MoDOT to collaborate with the Contractor to decide on an acceptable industry standard or better scan quality, legibility, and readability which may include decisions regarding whether to convert to black and white or grayscale, resolution, cleanup processes, and any other specifications that may be adjusted to improve quality. It is the intention of MoDOT to achieve an industry standard or better scanning quality. Scanning process of image conversion will be a transmitted light scanning process or comparable industry standard. Production of deliverables will be standard compression .tif files then conversion to .pdf format. Lossless compression .jpeg or .jpg files may be used to convert to .pdf files for images not being delivered as .tif files if improved quality or efficiency of file size is achieved. Bidders may suggest changes to these specifications as described in Section 11.

6.6 Index Requirements: Index components for this item will include a database file for .pdf files, a database file for .tif files, .pdf custom properties, and/or windows custom file properties. There will be two database index files provided as part of the deliverable for Item 6. Index information for database files, .pdf custom properties, and windows custom file properties shall be keyed-in by full time permanent employees of the Contractor and shall be double verified and accurate to 99% or greater character accuracy. All index information will be subject to a MoDOT Quality Assurance/Quality Control (QA/QC) check until accepted according to specifications. Automation of the creation of index information is acceptable if all other specifications are satisfied.

6.6.1 Database file for .pdf files: For .pdf files, a database index will be created and delivered as one or more ODBC Compliant Microsoft Access 2000 (version 9.0) (.mdb) compatible file with field names and field definitions according to Section 8. The file name of the database will be D4_Plans_Archive.mdb or named as directed by MoDOT. Each record represents one C-Size map as described in Section 6.2. The record accuracy shall be 99% or greater, meaning the fields in each record shall have correct values for all fields required for that record. Zone capture of OCR is acceptable if the Contractor meets other requirements for accuracy for the index records according to Section 6.6. The index character and record accuracy will be subject to a MoDOT QA/QC check until accepted according to specifications. Fields required for database index records for .pdf files are: DOC_ID, DOC_NAME, DOC_TYPE, COUNTY, BEG_YEAR, END_YEAR, and SHEET_NUM according to Section 8.

6.6.2 Database file for .tif files: For .tif files, a database index will be created and delivered as one or more ODBC Compliant Microsoft Access 2000 (version 9.0) (.mdb) compatible file with field names and field definitions according to Section 8. The filename of the database will be D4_Plans_Archive_TIF.mdb or named as directed by MoDOT or according to Section 8. Each record in the database index will represent one image of each plan-view sheet (top orthographic view) as described in Section 6.2. The record accuracy shall be 99% or greater, meaning the fields in each record shall have correct values for all fields required for that record. Zone capture of OCR for index purposes is acceptable if the Contractor meets other requirements for

- accuracy for the index records according to Section 6.6. The index character and record accuracy will be subject to a MoDOT QA/QC check until accepted according to specifications. Fields required for database index records for .tif files are: DOC_ID and DOC_NAME (same as the DOC_NAME used for the .pdf index according to Section 6.6.1 except with .tif file extension) according to Section 8.
- 6.6.3 Windows File Properties: For all deliverable files, file properties will be attached to each file in Item 6. At a minimum, this includes the file name, file type, creation date (date final image was produced after editing and all production by Contractor)
- 6.6.4 PDF File Properties: All .pdf files (version 7.0 compatible files), in Item 6, in addition to Windows File Properties according to Section 6.6.3, will include PDF Document Properties for the following as part of the deliverable image file:
- PDF Document Property: Description/Author
Value: Company Name of Contractor
 - PDF Document Property: Description/Created
Value: long date (automatically created upon file creation is acceptable)
 - PDF Document Property: Advanced/PDF Producer
Value: Software application used to create the file (automatically created upon file creation is acceptable)
 - PDF Document Property: Advanced/PDF Version
Value: Version of PDF standard (automatically created upon file creation is acceptable)
 - PDF Document Property: Advanced/Number of Pages
Value: Number of pages in the multipage .pdf (automatically created upon file creation is acceptable)
- 6.6.5 TIF File Properties: All .tif files in Item 6, in addition to Windows File Properties according to Section 6.6.3, will include file properties for the following as part of the deliverable image file:
- Windows File Property (Image): File Type
Value: Tagged Information File Format (TIFF) (automatically created upon file creation is acceptable)
 - Windows File Property (Image): Width
Value: Width of Image in number of pixels as an integer (automatically created upon file creation is acceptable)
 - Windows File Property (Image): Horizontal Resolution
Value: Number of dots per inch (DPI) (or pixels per inch) in horizontal direction as an integer (automatically created upon file creation is acceptable)
 - Windows File Property (Image): Vertical Resolution File Type
Value: Number of dots per inch (DPI) (or pixels per inch) in vertical direction as an integer (automatically created upon file creation is acceptable)
 - Windows File Property (Image): Bit Depth

Value: Number of bits per pixel as an integer (1 for monochrome, 8 for grayscale, 32 for color, etc) (automatically created upon file creation is acceptable)

Windows File Property (Image): Color Representation

Value: Common Name of color representation (Monochrome, Grayscale, RGB, etc) (automatically created upon file creation is acceptable)

Windows File Property (Image): Compression

Value: Compression type used in the .tif file (automatically created upon file creation is acceptable)

- 6.7 File naming requirements: File naming for deliverable files will be slightly different for .pdf files and .tif files for this item.
- 6.7.1 File naming for .pdf files will be the same as the DOC_ID as described in Section 6.6 and Section 8.
- 6.7.2 File naming for .tif files will be the same as the DOC_ID as described in Section 6.6 and Section 8.
- 6.8 General Considerations: Contractor will perform a pilot sample conversion of originals in Item 6 to determine acceptable specifications prior to completion of the remainder of items in Item 6. It is the intention of MoDOT for the Contractor to provide 5-10 pilot samples for Item 6 to MoDOT to determine the soundness of the specifications and to adjust the specifications to achieve and acceptable image quality, legibility, and readability. See Section 11 for information regarding changing the specifications. The pilot samples shall be considered incidental work, with only 1 image of a given image to be used to quantify pay items. Upon completion and acceptance of a pilot sample, the remainder of items for Item 6 will be converted to the agreed upon specifications. The number of pilot samples is unrelated to the number of QA/QC samples described in Section 6.9
- 6.9 Quality Assurance/Quality Control (QAQC): MoDOT reserves the right to examine images to ensure specifications for image quality for all items in Item 6 and have the right to reject any or all of the images based on the specifications. It is the intent of MoDOT to perform a random quality check of scanned images in Item 6 for a QA/QC sample of sixty (60) images.

Item 7: Document Scanning: Oversized Documents: D-size Plans, Blueprints, Diagrams, Maps, Drawings, etc.

- 7.1 Units of Measure: One D-Size image as a single image-only .pdf file. Each image represents one D-Size paper sheet as described in Section 7.2. Index according to Section 6 and Section 8 is included in Item 7.
- 7.2 Description: Originals are D-size sheets. Sheets may include maps, plans, index maps, tables, diagrams, drawings, or other graphic content. Some sheets may consist of ink or graphite on Mylar or vellum. Some sheets may be printed-paper, blueprints, or other

formats. Originals will be provided to the Contractor unbound. Sample originals are available for examination according to Section 12.

- 7.3 Quantity: The number of originals for Item 7 includes approximately 200 originals of various mediums and formats.
- 7.4 Deliverables: The deliverable digital files for Item 7 includes all image files and index files according to Section 7 and Section 8. The files will be delivered to MoDOT via MoDOT provided USB external hard drive, uploaded to the MoDOT password protected public ftp site, or as mutually agreed upon by MoDOT and Contractor. Legal and Tabloid originals will be converted to full size pages and included in multipage .pdf files as a single page. Each document as described in Section 7.2 will be converted to a single or multipage .pdf file. Index will be included according to Section 7.6 and Section 8. Each record will have the unique DOC_ID as described in Section 8 to establish uniqueness of a deliverable file and index record.
- 7.4.1 One D-Size .tif image at for each plan view (top orthographic view) original.
MoDOT will mark originals that require a .tif original upon delivery to the Contractor for conversion.
- 7.4.2 Index files according to Section 7.6 and Section 8 for each .tif file in Section 7.4.1.
- 7.4.3 One D-Size image-only .pdf as a single .pdf file, one D-Size paper sheet per .pdf file.
- 7.4.4 Index files according to Section 7.6 and Section 8 for each image .pdf in Section 7.4.3.
- 7.5 Specifications: Some maps may require manual review. Some will require cleaning, de-speckling, de-stippling, de-skewing, rebalancing, and other digital image cleanup in accordance to specifications in Section 8 to achieve acceptable readability and legibility. Output spatial resolution will be no less than 300 dots per inch (dpi) at a D-Size print or plot. Output image type will be Black and White (1-bit), Grayscale (8-bit), or Color (32-bit). It is the intention of MoDOT to collaborate with the Contractor to decide on an acceptable industry standard or better scan quality, legibility, and readability which may include decisions regarding whether to convert to black and white or grayscale, resolution, cleanup processes, and any other specifications that may be adjusted to improve quality. It is the intention of MoDOT to achieve an industry standard or better scanning quality. Scanning process of image conversion will be a transmitted light scanning process or comparable industry standard. Production of deliverables will be standard compression .tif files then conversion to .pdf format. Lossless compression .jpeg or .jpg files may be used to convert to .pdf files for images not being delivered as .tif files if improved quality or efficiency of file size is achieved. Bidders may suggest changes to these specifications as described in Section 11.
- 7.6 Index Requirements: Index components for this item will include a database file for .pdf files, a database file for .tif files, .pdf custom properties, and/or windows custom file properties. There will be two database index files provided as part of the deliverable for Item 7. Index information for database files, .pdf custom properties, and windows custom file properties shall be keyed-in by full time permanent employees of the Contractor and

shall be double verified and accurate to 99% or greater character accuracy. All index information will be subject to a MoDOT Quality Assurance/Quality Control (QA/QC) check until accepted according to specifications. Automation of the creation of index information is acceptable if all other specifications are satisfied.

7.6.1 Database file for .pdf files: For .pdf files, a database index will be created and delivered as one or more ODBC Compliant Microsoft Access 2000 (version 9.0) (.mdb) compatible file with field names and field definitions according to Section 8. The file name of the database will be D4_Plans_Archive.mdb or named as directed by MoDOT or according to Section 8. Each record represents one C-Size map as described in Section 7.2 The record accuracy shall be 99% or greater, meaning the fields in each record shall have correct values for all fields required for that record. Zone capture of OCR is acceptable if the Contractor meets other requirements for accuracy for the index records according to Section 7.6. The index character and record accuracy will be subject to a MoDOT QA/QC check until accepted according to specifications. Fields required for database index records for .pdf files may vary but generally will include: DOC_ID, DOC_NAME, DOC_TYPE, JOB_NUM (if applicable), PROJ_NUM (if applicable), COUNTY (if applicable), ROUTE (if applicable), and other fields as needed described in Section 8.

7.6.2 Database file for .tif files: For .tif files, a database index will be created and delivered as one or more ODBC Compliant Microsoft Access 2000 (version 9.0) (.mdb) compatible file with field names and field definitions according to Section 8. The filename of the database will be D4_Plans_Archive_TIF.mdb or named as directed by MoDOT or according to Section 8. The record accuracy shall be 99% or greater, meaning the fields in each record shall have correct values for all fields required for that record. Zone capture of OCR for index purposes is acceptable if the Contractor meets other requirements for accuracy for the index records according to Section 7.6. The index character and record accuracy will be subject to a MoDOT QA/QC check until accepted according to specifications. Fields required for database index records for .tif files are: DOC_ID and DOC_NAME (same as the DOC_NAME used for the .pdf index according to Section 7.6.1 except with .tif file extension) according to Section 8.

7.6.3 Windows File Properties: For all deliverable files, file properties will be attached to each file in Item 7. At a minimum, this includes the file name, file type, creation date (date final image was produced after editing and all production by Contractor)

7.6.4 PDF File Properties: All .pdf files (version 7.0 compatible files), in Item 7, in addition to Windows File Properties according to Section 7.6.3, will include PDF Document Properties for the following as part of the deliverable image file:

PDF Document Property: Description/Author

Value: Company Name of Contractor

PDF Document Property: Description/Created

Value: long date (automatically created upon file creation is acceptable)

PDF Document Property: Advanced/PDF Producer

Value: Software application used to create the file (automatically created upon file creation is acceptable)

PDF Document Property: Advanced/PDF Version

Value: Version of PDF standard (automatically created upon file creation is acceptable)

PDF Document Property: Advanced/Number of Pages

Value: Number of pages in the multipage .pdf (automatically created upon file creation is acceptable)

7.6.5 TIF File Properties: All .tif files in Item 7, in addition to Windows File Properties according to Section 7.6.3, will include file properties for the following as part of the deliverable image file:

Windows File Property (Image): File Type

Value: Tagged Information File Format (TIFF) (automatically created upon file creation is acceptable)

Windows File Property (Image): Width

Value: Width of Image in number of pixels as an integer (automatically created upon file creation is acceptable)

Windows File Property (Image): Horizontal Resolution

Value: Number of dots per inch (DPI) (or pixels per inch) in horizontal direction as an integer (automatically created upon file creation is acceptable)

Windows File Property (Image): Vertical Resolution File Type

Value: Number of dots per inch (DPI) (or pixels per inch) in vertical direction as an integer (automatically created upon file creation is acceptable)

Windows File Property (Image): Bit Depth

Value: Number of bits per pixel as an integer (1 for monochrome, 8 for grayscale, 32 for color, etc) (automatically created upon file creation is acceptable)

Windows File Property (Image): Color Representation

Value: Common Name of color representation (Monochrome, Grayscale, RGB, etc) (automatically created upon file creation is acceptable)

Windows File Property (Image): Compression

Value: Compression type used in the .tif file (automatically created upon file creation is acceptable)

7.7 File naming requirements: File naming for deliverable files will be slightly different for .pdf files and .tif files for this item.

7.7.1 File naming for .pdf files will be the same as the DOC_ID as described in Section 7.6 and Section 8.

7.7.2 File naming for .tif files will be the same as the DOC_ID as described in Section 7.6 and Section 8.

7.8 General Considerations: Contractor will perform a pilot sample conversion of originals in Item 7 to determine acceptable specifications prior to completion of the remainder of items in Item 7. It is the intention of MoDOT for the Contractor to provide 5-10 pilot samples for Item 7 to MoDOT to determine the soundness of the specifications and to adjust the

specifications to achieve and acceptable image quality, legibility, and readability. See Section 11 for information regarding changing the specifications. The pilot samples shall be considered incidental work, with only 1 image of a given image to be used to quantify pay items. Upon completion and acceptance of a pilot sample, the remainder of items for Item 7 will be converted to the agreed upon specifications. The number of pilot samples is unrelated to the number of QA/QC samples described in Section 7.9

- 7.9 Quality Assurance/Quality Control (QAQC): MoDOT reserves the right to examine images to ensure specifications for image quality for all items in Item 7 and have the right to reject any or all of the images based on the specifications. It is the intent of MoDOT to perform a random quality check of scanned images in Item 7 for a QA/QC sample of one hundred thirty (130) images.

General Specifications

- 8.1 Contractor responsibilities and processes: The Contractor will be responsible for all work involved in creation of the deliverable products (image files and index as specified in items above). This includes digital conversion, imaging, and/or scanning of all MoDOT original documents in a timely manner in accordance with the schedule in the Services Agreement. Auto-feed document scanning shall be utilized whenever possible, although some originals consists of difficult/torn/damaged documents not suitable for auto-feed. Only transmitted light scanning process shall be used for scanning of negative or positive film originals unless otherwise noted in the specifications. Automatic removal of blank pages and auto orientation of images shall be performed where possible for all items. For manually handled originals, proper orientation of image is to be done as part of all items above.
- 8.2 Reporting: An electronic report (.doc, .xls or other mutually acceptable format) of work including a running total of the number, types (by bid item number) of documents scanned, and dates completed will be updated on a weekly basis and submitted returned to MoDOT shall be provided by the Contractor to the MoDOT Contact on a weekly basis.
- 8.3 Image Enhancement: Any or all of the images may need contrast balancing, brightness adjustment, pixel neighborhood balancing, or other image enhancement methodology to achieve desired image quality. Desired image quality for .pdf files in all Items to contain readable text (image-only), with the contrast and brightness across an entire single image to be balanced such that text and graphics are readable throughout the entire image at the spatial resolution specified. Contrast and brightness uniformity will be achieved using a neighborhood pixel comparison process or other industry standard image enhancement. The intent is for images to have uniform quality across the entire image, even though some originals may be darker on one side or have more contrast on one side. If an image conversion of such originals demands higher scanning standards (higher resolution, more cleanup, etc.) to perform OCR to specified accuracy standards, the scanning specifications for image output shall match those specifications needed for OCR and be delivered to MoDOT at the higher resolution. Image quality shall be subject to the approval of MoDOT.

- 8.4 Pilot Conversion: MoDOT will provide sample originals, in an amount specified or an amount mutually agreed on by MoDOT and the Contractor, to be converted until desired acceptable image quality is achieved as determined by MoDOT and Contractor collaboration.
- 8.5 Quality Assurance/Quality Control: MoDOT has the right to examine images regarding specification for image quality and OCR for all Items. MoDOT intends to examine a sample of deliverable images for items in Sections 1 through 7. MoDOT has the right reject any or all of the images based on the specifications and require conversion of documents again by the Contractor until specifications are met. The Contractor is also required to have a previously established QA/QC process. The Contractor QA/QC process must be documentable by written policy or written experience record. The Contractor will provide written documentation of the process to MoDOT prior to the Notice to Proceed.
- 8.6 Index Field Names and Definitions: The index database file will consist of all fields as described in Section 8.6.1 through 8.6.15. The DOC_ID field will be unique for all documents and index records converted in this contract. Other Index fields may be needed for currently unknown conversion needs. MoDOT will direct the Contractor of any other index field requirements upon delivery of originals by MoDOT to the Contractor. In subsections of Section 8.6, values for field names and domain ranges of field values appear after the colon after a description of the item and are case sensitive. Field values will be required for each item as described in Section 1 through Section 7.

8.6.1 Field Name: DOC_ID

Field Description: Document ID

Data type: AutoNumber Integer (or Short Integer)

8.6.2 Field Name: DOC_NAME

Field Description: Document Name

Data Type: Text, 50 characters

Values: (Various text as directed by MoDOT upon delivery of originals conversion)

8.6.3 Field Name: DOC_TYPE

Field Description: Document Type

Data type: Text, 30 characters

Values: (Denoted after the colon in lines below)

Microfilm As-built Final Plans: Final Plans

Resurfacing Projects from roll microfilm: RESURFACING PLANS

Agreements: AGREEMENT

Deeds and Title Commitments: DEED

Change In Route Status Reports: CRSR

On Call Engineering Contracts: ON CALL CONTRACT

8.6.4 Field Name: DOC_SUBTYPE

Field Description: Document Subtype

Data type: Text, 30 Characters

Values: (Denoted after the colon in lines below)
Consultant Agreements: Consultant
Cost Sharing Agreements: COST SHARE
Maintenance Agreements: MAINTENANCE
Municipal Agreements: MUNICIPAL
Urban Agreements: URBAN
Utility Agreements: UTILITY
Other Agreements: OTHER

8.6.5 Field Name: COUNTY

Field Description: County

Data type: Text, 20 characters

Values: (Domain Range listed below, others as needed)

CASS
CLAY
HENRY
JACKSON
JOHNSON
LAFAYETTE
PLATTE
RAY

8.6.6 Field Name: ROUTE

Field Description: Route or Road Name

Data type: Text, 100 characters

Values: (typical but not limited to) 70, 150, B, BARRY RD (Do not include “I-“ for Interstate, “US” for US Routes, “MO” for Missouri Numbered Routes, nor “Route” for lettered routes. Only include standard postal abbreviations for route type as part of the name field: RD for Road, ST for Street, etc.

8.6.7 Field Name: JOB_NUM

Field Description: Job Number

Data type: Text, 8 characters

Values: (typical but not limited to) format like J4U1421, J4X0866B, 4I1214, 4U1649C, J-4-P-24-1234 (prior to 1994), or J-4-X-13-866B (prior to 1994)

8.6.8 Field Name: PROJ_NUM

Field Description: Project Number

Data type: text, 25 characters

Values: various formats similar but not limited to 4-I-70-IR(12) SEC 6, or FAS-13-1(3) If the value contains parentheses, it is likely a Project Number.

8.6.9 Field Name: ROLL_NUM

Field Description: Roll Number

Data type: Number, Short Integer

Values: 4 or 5 digit integer

8.6.10 Field Name: BEG_FRAME

Field Description: Beginning Frame number or exposure number

Data type: Number, Short Integer

Values: 3 or 4 digit integer

8.6.11 Field Name: END_FRAME

Field Description: Ending Frame number or exposure number

Data type: Number, Short Integer

Values: 3 or 4 digit integer

8.6.12 Field Name: TRACT_NUM

Field Description: Tract Number

Data type: Number, Short Integer

Values: 1 to 3-digit integer

8.6.13 Field Name: BEG_YEAR

Field Description: Beginning Year

Data type: Custom Data yyyy format

Values: 4-digit integer denoting a full year date format (i.e.. 1984, 2006, etc)

8.6.14 Field Name: END_YEAR

Field Description: Ending Year

Data type: Custom Date yyyy format

Values: 4-digit integer denoting a full year date format (i.e.. 1984, 2006, etc)

8.6.15 Field Name: SHEET_NUM

Field Description: Sheet Number

Data type: Number, Short Integer

Values: 3-digit integer (with leading zeros if used in filenames. (i.e.. 003, 013, 122)

Handling of Images and Originals

- 9.1 Pick-up and Delivery of Originals: All MoDOT original documents will be picked up and delivered the MoDOT District 4 Office at 600 NE Colbern Rd. Lee's Summit, MO. All expenses incurred with pick-up and delivery will be at the expense of the Contractor. Contractor shall deliver and pickup at least one time per week or as mutually agreed by MoDOT and the Contractor. MoDOT will perform preparation and packaging for transport of originals. Contractor shall return documents as originally received from MoDOT. Image deliverables (.pdf and .tif files) shall be delivered to MoDOT via upload to password protected MoDOT public ftp site or other means as mutually agreed upon by MoDOT and Contractor.

- 9.2 Confidentiality: Original and imaged records and information are to be kept confidential by the Contractor in compliance with the laws and regulations concerning the confidentiality of such records as provided by MoDOT or as specified by Missouri Sunshine Laws (Mo Revised Statute 610). Contractor shall notify its employees that they are subject to the confidentiality requirements and shall provide each employee with a written explanation of the confidentiality requirements before the employee is permitted access to physical or imaged documents.
- 9.3 Ownership and Retainage of electronic Records: MoDOT shall completely own all converted .pdf, .tif, and other files used in the conversion process. The Contractor will retain image files for a maximum of 12 months after completion of contract schedule and payment by MoDOT to the Contractor. Upon written notice from MoDOT to destroy converted electronic file copies, or 12 months, whichever occurs first, the Contractor will delete or destroy any and all copies of images and electronic files associated with this contract.
- 9.4 Handling of Document Bindings: The Contractor is responsible for all tasks involved with preparation to convert originals. This includes separation of documents from folders, removal of staples/paperclips and removal of select document types defined as unnecessary (e.g. post-it notes, envelopes, screen prints). Post-it type notes are to be scanned as a separate image and placed in .pdf file immediately after the page it was removed from. Post-its need only be scanned if considerable content is contained on the note. Contractor shall return originals to MoDOT in the same condition as received. All materials to reassemble, restaple, reclip, refold or rebind or otherwise handle shall be the responsibility of the Contractor. Originals shall be returned to MoDOT in the same packaging as received. Originals shall be considered under the control and responsibility of the Contractor from time of delivery by MoDOT for processing until delivery back to MoDOT. Contractor can be held liable for damage and/or loss of any MoDOT information due to fault of the Contractor.

Contractor Requirements

- 10.1 Contractor Requirements: The Contractor will provide all space, power, network connectivity, software and licensing including the required licenses to scan and process the volume of documents specified, hardware, etc. to process original documents and produce imaging and specified deliverables. This includes, but is not limited to: Operating System, Scanners, Capture software Computer Workstations and peripherals, Paper Joggers, Paper Cutters, etc.
- 10.2 Contractor shall provide Bonding/Insurance regarding all work, originals, products, etc. associated with this contract. (Details of requirements are included in the attached sample contract). The Contractor must be eligible to be classified or have a 1987 (or newer) Standard Industrial Classification (SIC) of 7374 (Computer Processing and Data Preparation and Processing Services), as defined by the U.S. Department of Labor.

Alternatively, the Contractor shall be eligible to be classified or have a 2007 North American Industry Classification System (NAICS), as defined by the U.S. Census Bureau.

10.3 Contractor must have a demonstrated documented quality assurance quality control process in place to ensure OCR accuracy and readability of scanned documents to specifications described in this document.

10.4 Contractor must show documentation that full time key-in personnel have been retained for at least 1 year of experience performing key-in tasks. (Exhibit A)

10.5 Scanning cannot be performed outside the United States nor any of MoDOT originals be taken or stored outside the United States.

Modifications to Specifications

11.1 Bidder Suggested Specification Changes: Any specifications here are subject to change. Any Bidder has the right to request a change in writing to MoDOT Project Manager according to the schedule in Section 14. Potential bidders are encouraged to provide information and recommendations on best practices for document scanning, quality assurance and quality control methodologies to improve the quality of the outcomes. This should be done before the bid opening as any changes to specifications after contract award may constitute cancellation of the contract to ensure fair competition in bidding process.

Examination of Materials

12.1 Contractors are encouraged to make an appointment with Eric Foster at 816-622-6330, the MoDOT Contact, to view and examine sample originals to determine soundness of these Specifications and Schedule and to aid in the bidding process. The examination is recommended to take place prior to submittal of a bid. Failure to examine samples prior to bidding will be at the bidder's risk.

Contact Information

13.1 Procurement: Robin Warren (816) 622-0054
Specifications and Project Management: Eric Foster (816) 622-6330

Project Schedule

14.1 Project Schedule	
July 30, 2009	Request for Bids Issued
August 20, 2009	Final Addendums Posted to Website
August 25, 2009	Bid Opening

SPECIFICATIONS FOR CONVERSION OF PLANS AND DOCUMENTS TO DIGITAL FORMAT

Pricing Table for B4-09-012

Item Number	Description	Unit Cost	Quantity	Total
1	Document Scanning: Microfilm/Microfiche Jacketed Sheets of As Built Plans		35,000	\$ -
2	Document Scanning: Microfilm Rolls (Resurfacing Plans)		4,000	\$ -
3	Document Scanning: Microfilm Rolls (Deeds and Title Commitments)		440,000	\$ -
4	Document Scanning: Letter and Legal Size Paper Documents (Agreements and Correspondence)		5,000	\$ -
5	Document Scanning: Tabloid size paper documents		2,100	\$ -
6	Document Scanning: C-Size Paper and Laminated Documents		75	\$ -
7	Document Scanning: Oversized Documents: D-size Plans, Blueprints, Diagrams, Maps, Drawings, etc.		200	\$ -
Total Bid Amount:				\$ -

EXHIBIT A
B4-09-012
PROFESSIONAL AND ADMINISTRATIVE STAFF
BACKGROUND AND EXPERTISE

(Duplicate this page, or supply the information it requests, for each professional and administrative staff member who will be assigned to perform or supervise work under the Agreement.)

STAFF MEMBER

(Name) (Title or Position)

Specific Role in this Contract Work:

Experience/Previous Related Work Assignments:

Educational Qualifications:

Previous Government Experience:

References:

Name	Title	Address	Telephone
1.			
2.			
3.			

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STANDARD SOLICITATION PROVISIONS

- a. The Missouri Department of Transportation (MoDOT) reserves the right to reject any or all bids/quotes/proposals, and to accept or reject any items thereon, and to waive technicalities. In case of error in the extension of prices in the bid/quote/proposal, unit prices will govern.
- b. All bids/quotes/proposals must be signed with the firm name and by a responsible officer or employee. Obligations assumed by such signature must be fulfilled.
- c. By virtue of statutory authority, a preference will be given to materials, products, supplies, provisions and all other articles produced, manufactured, made or grown, within the State of Missouri.
- d. Time of delivery is a part of the consideration and, if not otherwise stated in the solicitation documents, must be stated in definite terms by the Bidder/Offeror and must be adhered to. If time varies on different items, the Bidder/Offeror shall so state.
- e. If providing bids/quotes/proposals for commodities, the Bidder/Offeror will state brand or make on each item. If bidding or proposing other than the make, model or brand specified, the manufacturer's name, model number or catalog number must be given.
- f. **For bids/proposals of \$25,000 or more**, no bids/proposals by telephone, telegram or telefax will be accepted.
- g. The date specified for the returning of bids/quotes/proposals is a firm deadline and all bids/quotes/proposals must be received at the designated office by that time. The Department does not recognize the U.S. Mail, Railway Express Agency, Air Express, or any other organization, as its agent for purposes of accepting proposals. All proposals arriving at the designated office after the deadline specified will be rejected.

GENERAL TERMS AND CONDITIONS

General Performance

- a. This work is to be performed under the general supervision and direction of the Missouri Department of Transportation (MoDOT) and, if awarded any portion of the work, the Contractor agrees to furnish at his own expense all labor and equipment required to complete the work, it being expressly understood that this solicitation is for completed work based upon the price(s) specified and is not a solicitation for rental of equipment or employment of labor by MoDOT, and MoDOT is to have no direction or control over the employees used by the Contractor in performance of the work.

Deliveries

- a. Unless otherwise specified on the solicitation documents or purchase order, suppliers shall give at least 24 hours advance notice of each delivery. Delivery will only be received between the hours of 8:00 a.m. to 3:00 p.m., Monday through Friday. Material arriving after 3:00 p.m. will not be unloaded until the following workday. No material will be received on Saturday, Sunday or state holidays.
- b. If the prices bid herein include the delivery cost of the material, the Contractor agrees to pay all transportation charges on the material as FOB - Destination. Freight costs must be included in the unit price bid and not listed as a separate line item.
- c. Any demurrage is to be paid by the Contractor direct to the railroad or carrier.

Nondiscrimination

- a. The Contractor shall comply with the Regulations relative to nondiscrimination in federally-assisted programs of the Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- b. All solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or leases of the Contractor's obligations under this contract and the Regulations, will be relative to nondiscrimination on the grounds of race, color, or national origin.
 - 1) **Sanctions for Noncompliance:** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, MoDOT shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - i. withholding of payments to the Contractor under the contract until the Contractor complies, and/or,
 - ii. cancellation, termination or suspension of the contract, in whole or in part.

Contract/Purchase Order

- a. By submitting a bid/quote/proposal, the Bidder/Offeror agrees to furnish any and all equipment, supplies and/or services specified in the solicitation documents, at the prices quoted, pursuant to all requirements and specifications contained therein.
- b. A binding contract shall consist of: (1) the solicitation documents, amendments thereto, and/or Best and Final Offer (BAFO) request(s) with any changes/additions, (2) the Contractor's proposal and/or submitted pricing, and (3) the MHTC's acceptance of the proposal and/or bid by purchase order or post-award contract.
- c. A notice of award does not constitute an authorization for shipment of equipment or supplies or a directive to proceed with services. Before providing equipment, supplies and/or services, the Contractor must receive a properly authorized purchase order and/or notice to proceed.
- d. The contract expresses the complete agreement of the parties and performance shall be governed solely by the specifications and requirements contained therein. Any change, whether by modification and/or supplementation, must be accomplished by a formal contract amendment signed and approved by and between the duly authorized representative of the Contractor and the duly authorized representative of the MHTC, by a modified purchase order prior to the effective date of such modification. The Contractor expressly and explicitly understands and agrees that no other method and/or no other document, including correspondence, acts, and oral communications by or from any person, shall be used or construed as an amendment or modification.

Subcontracting

- a. It is specifically understood that no portion of the material or any interest in the contract, shall be subcontracted, transferred, assigned or otherwise disposed of, except with the written consent of MoDOT. Request for permission to subcontract or otherwise dispose of any part of the work shall be in writing to MoDOT and accompanied by documentation showing that the organization which will perform the work is particularly experienced and

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equipped for such work.

- b. Consent to subcontract or otherwise dispose of any portion of the work shall not be construed to relieve the Contractor of any responsibility for the production and delivery of the contracted work and the completion of the work within the specified time.
- c. All payments for work performed by a subcontractor shall be made to the Contractor to whom the contract was awarded and the purchase order issued.

Invoicing and Payment

- a. MoDOT is exempt from paying Missouri Sales Tax, Missouri Use Tax and Federal Excise Tax. However, the Contractor may themselves be responsible for the payment of taxes on materials they purchase to fulfill the contract. A Project Tax Exemption Certificate will be furnished to the successful Bidder/Offeror upon request if applicable.
- b. Each invoice should be itemized in accordance with items listed on the purchase order and/or contract. The statewide financial management system has been designed to capture certain receipt and payment information. Therefore, each invoice submitted must reference the purchase order number and must be itemized in accordance with items listed on the purchase order. Failure to comply with this requirement may delay processing of invoices for payment.
- c. Unless otherwise provided for in the solicitation documents, payment for all equipment, supplies, and/or services required herein shall be made in arrears. The Missouri Highways and Transportation Commission (MHTC) shall not make any advance deposits.
- d. The MHTC assumes no obligation for equipment, supplies, and/or services shipped or provided in excess of the quantity ordered. Any authorized quantity is subject to the MHTC's rejection and shall be returned at the Contractor's expense.
- e. The MHTC reserves the right to purchase goods and services using the state-purchasing card.

Applicable Laws and Regulations

- a. The contract shall be construed according to the laws of the State of Missouri. The Contractor shall comply with all local, state, and federal laws and regulations related to the performance of the contract.
- b. The Contractor must be registered and maintain good standing with the Secretary of State of the State of Missouri and other regulatory agencies, as may be required by law or regulations. Prior to the issuance of a purchase order and/or notice to proceed, the Contractor may be required to submit to MoDOT a copy of their current Authority Certificate from the Secretary of State of the State of Missouri.
 - 1) Prior to the issuance of a purchase order and/or notice to proceed, all **out-of-state** Contractors **providing services** within the state of Missouri must submit to MoDOT a copy of their current Transient Employer Certificate from the Department of Revenue, in addition to a copy of their current Authority Certificate from the Secretary of State of the State of Missouri.
- c. The exclusive venue for any legal proceeding relating to or arising, out of the contract shall be in the Circuit Court of Cole County, Missouri.

Executive Order

- a. The Contractor shall comply with all the provisions of Executive Order 07-13, issued by the Honorable Matt Blunt, Governor of Missouri, on the sixth (6th) day of March, 2007. This Executive Order, which promulgates the State of Missouri's position to not tolerate persons who contract with the state engaging in or supporting illegal activities of employing individuals who are not eligible to work in the United States, is incorporated herein by reference and made a part of this Agreement.
 - 1) "By signing this Agreement, the Contractor hereby certifies that any employee of the Contractor assigned to perform services under the contract is eligible and authorized to work in the United States in compliance with federal law."
 - 2) In the event the Contractor fails to comply with the provisions of the Executive Order 07-13, or in the event the Commission has reasonable cause to believe that the contractor has knowingly employed individuals who are not eligible to work in the United States in violation of federal law, the Commission reserves the right to impose such contract sanctions as it may determine to be appropriate, including but not limited to contract cancellation, termination or suspension in whole or in part or both.
 - 3) The Contractor shall include the provisions of this paragraph in every subcontract. The Contractor shall take such action with respect to any subcontract as the Commission may direct as a means of enforcing such provisions, including sanctions for noncompliance.

Preferences

- a. In the evaluation of bids/quotes/proposals, preferences shall be applied in accordance with Chapter 34 RSMo. Contractors should apply the same preferences in selecting subcontractors.
- b. By virtue of statutory authority, RSMo. 34.076 and 34.350 to 34.359, a preference will be given to materials, products, supplies, provisions and all other articles produced, manufactured, made or grown within the State of Missouri. Such preference shall be given when quality is equal or better and delivered price is the same or less.
 - 1) If attached, the document entitled "**PREFERENCE IN PURCHASING PRODUCTS**" should be completed and returned with the solicitation documents.

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- 2) If attached, the document entitled "**MISSOURI DOMESTIC PRODUCTS PROCUREMENT ACT**" should be completed and returned with the solicitation documents. **Applies if bid is Twenty-Five Thousand Dollars (\$25,000.00) or more.**
- c. By virtue of statutory authority, RSMo 34.074, a preference will be given all contracts for the performance of any job or service to service-disabled veteran business either doing business as Missouri firms, corporations, or individuals; or which maintain Missouri offices or places of business, when the quality of performance promised is equal or better and the price quoted is the same or less or whenever competing bids, in their entirety, are comparable.
 - 1) If attached, the document entitled "**MISSOURI SERVICE-DISABLED VETERAN PREFERENCE**" should be completed and returned with the solicitation documents.
- d. In the event of a tie of low bids, the MHTC reserves the right to establish the method to be used in determining the award

Remedies and Rights

- a. No provision in the contract shall be construed, expressly or implied, as a waiver by the MHTC of any existing or future right and/or remedy available by law in the event of any claim by the MHTC of the Contractor's default or breach of contract.
- b. The Contractor agrees and understands that the contract shall constitute an assignment by the Contractor to the MHTC of all rights, title and interest in and to all causes of action that the Contractor may have under the antitrust laws of the United States or State of Missouri for which causes of action have accrued or will accrue as the result of or in relation to the particular equipment, supplies, and/or services purchased or produced by the Contractor in the fulfillment of the contract with the MHTC.
- c. In the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request MoDOT to enter into such litigation to protect the interests of the MHTC, and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

Cancellation of Contract

- a. The MHTC may cancel the contract at any time for a material breach of contractual obligations or for convenience by providing the Contractor with written notice of cancellation. Should the MHTC exercise its right to cancel the contract for such reasons, cancellation will become effective upon the date specified in the notice of cancellation sent to the Contractor.
- b. If the MHTC cancels the contract for breach, the MHTC reserves the right to obtain the equipment, supplies, and/or services to be provided pursuant to the contract from other sources and upon such terms and in such manner as the MHTC deems appropriate and charge the Contractor for any additional costs incurred thereby.

Bankruptcy or Insolvency

- a. Upon filing for any bankruptcy or insolvency proceeding by or against the Contractor, whether voluntary or involuntary, or upon the appointment of a receiver, trustee, or assigned the benefit or creditors, the Contractor must notify MoDOT immediately. Upon learning of any such actions, the MHTC reserves the right, at its sole discretion, to either cancel the contract or affirm the contract and hold the Contractor responsible for damages.

Inventions, Patents, and Copyrights

- a. The Contractor shall defend, protect, and hold harmless the MHTC, its officers, agents, and employees against all suits of law or in equity resulting from patent and copyright infringement concerning the Contractor's performance or products produced under the terms of the contract.

Inspection and Acceptance

- a. No equipment, supplies, and/or services received by MoDOT pursuant to a contract shall be deemed accepted until MoDOT has had reasonable opportunity to inspect said equipment, supplies, and/or services.
- b. All equipment, supplies, and/or services which do not comply with the specifications and/or requirements or which are otherwise unacceptable or defective may be rejected. In addition, all equipment, supplies, and/or services which are discovered to be defective or which do not conform to any warranty of the Contractor upon inspection (or at any later time if the defects contained were not reasonably ascertainable upon the initial inspection) may be rejected.
- c. The MHTC reserves the right to return any such rejected shipment at the Contractor's expense for full credit or replacement and to specify a reasonable date by which replacements must be received.
- d. The MHTC's right to reject any unacceptable equipment, supplies, and/or services shall not exclude any other legal, equitable or contractual remedies the MHTC may have.

Warranty

- a. The Contractor expressly warrants that all equipment, supplies, and/or services provided shall: (1) conform to each and every specification, drawing, sample or other description which was furnished to or adopted by MoDOT, (2) be fit and sufficient for the purpose expressed in the solicitation documents, (3) be merchantable, (4) be of good materials and workmanship, and (5) be free from defect.
- b. Such warranty shall survive delivery and shall not be deemed waived either by reason of the MHTC's acceptance of or payment for said equipment, supplies, and/or services.

Status of Independent Contractor

- a. The Contractor represents itself to be an independent Contractor offering such services to the general public and shall not represent itself or its employees to be an employee of the MHTC. Therefore, the Contractor shall assume all legal and financial responsibility for taxes, FICA, employee fringe benefits, workers' compensation, employee insurance, minimum wage requirements, overtime, etc., and agrees to indemnify, save and hold the MHTC, its officers, agents and employees harmless from and against any and all losses (including attorney fees) and damage of any kind related to such matters.

Indemnification

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- a. The Offeror shall defend, indemnify and hold harmless the Commission, including its members and department employees, from any claim or liability whether based on a claim for damages to real or personal property or to a person for any matter relating to or arising out of the Offeror's performance of its obligations under this Agreement.

SPECIAL TERMS AND CONDITIONS

Insurance

The Contractor shall maintain or cause to be maintained at Contractor's own expense commercial general liability, automobile liability, worker's compensation insurance against negligent acts, errors or omissions of the Contractor, or its subcontractors and anyone directly or indirectly employed by any of them. Any insurance policy required as specified in this Section shall be written by a company that is licensed and authorized to issue such insurance in the state of Missouri and shall provide insurance coverage for not less than the following limits of liability:

- a. General Liability: Not less than \$500,000 for any one person in a single accident or occurrence, and not less than \$3,000,000 for all claims arising out of a single occurrence;
- b. Automobile Liability: Not less than \$500,000 for any one person in a single accident or occurrence, and not less than \$3,000,000 for all claims arising out of a single occurrence;
- c. Missouri State Workmen's Compensation policy or equivalent in accordance with state law.

Upon request from the Commission, the Contractor shall provide the Commission with certificates of insurance evidencing the required coverage and that such insurance is in effect.

Required Specifications

- a. All materials, equipment, and/or services bid upon must comply with the provisions outlined in the solicitation documents.

Information and Reports

- a. The Contractor shall provide all information and reports required by the Regulations, or Directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Missouri Department of Transportation or the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations or Directives. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information the Contractor shall so certify to the Missouri Department of Transportation, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.

Permits, Licenses and Safety Issues

- a. The contract price shall include any necessary permits and licenses required by law incidental to the work. Local ordinances requiring building permits are not applicable to state agencies.
- b. The Contractor will comply with local laws involving safety in the prosecution of the work.

Award

- a. Award of this bid will be made on an "All Or Nothing" basis using the "lowest and best" principle of award.

Notice to Proceed

- a. Within **30 days** after the execution of the contract, a "**Notice to Proceed**" will be issued by the Department. A purchase order will be attached to the "Notice to Proceed," which will specify the date or dates that the Contractor can start the project.

Liquidated Damages

- a. In the event the successful Contractor fails to complete the project within the time specified, the Department and the public will sustain damages because of such delay in delivery, the exact extent of which would be difficult to ascertain, and in order to liquidate such damage in advance it is agreed that the **sum of one-hundred dollars (\$100.00) per day, per item**, for each assessable calendar day on which the project has not been completed, is reasonable and the best estimate which the parties can arrive at as liquidated damages, and it is therefore agreed that said amount will be withheld from payments due the Contractor or otherwise collected from the Contractor as liquidated damages.
- b. **Saturdays, Sundays, holidays and days whereas the Department has suspended work** shall not be assessable days.

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Prohibition Of Employment Of Unauthorized Aliens:

- a. Pursuant to RSMo 285.530 (1), no business entity or employer shall knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri. As a condition for the award of any contract or grant in excess of five thousand dollars by the state or by any political subdivision of the state to a business entity, or for any business entity receiving a state-administered or subsidized tax credit, tax abatement, or loan from the state, the business entity shall, by sworn affidavit and provision of documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services. Every such business entity shall sign an affidavit affirming that it does not knowingly employ any person who is unauthorized alien in connection with the contracted services. [RSMO 285.530 (2)] A copy of the affidavit referenced above is provided within this document.

E-Verify is an example of a federal work authorization program. Acceptable enrollment and participation documentation consists of **completed** copy of the E-Verify Memorandum of Understanding (MOU). For vendors that are not already enrolled and participating in a federal work authorization program, E-Verify is available at http://www.dhs.gov/xprevprot/programs/gc_1185221678150.shtm.