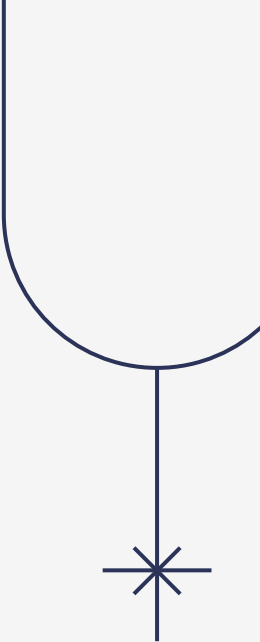
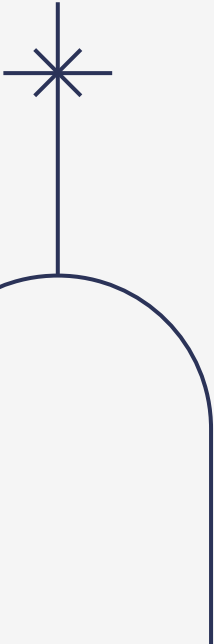




WV DOT Scanning Project



Presented By: WV GIS Technical Center
November 20, 2024





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Overview of our system design and application.

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How we process plans at the WVGISTC.

03

Project Statistics

Current statistics for the project.



01

Project Overview



Project Goals ✦

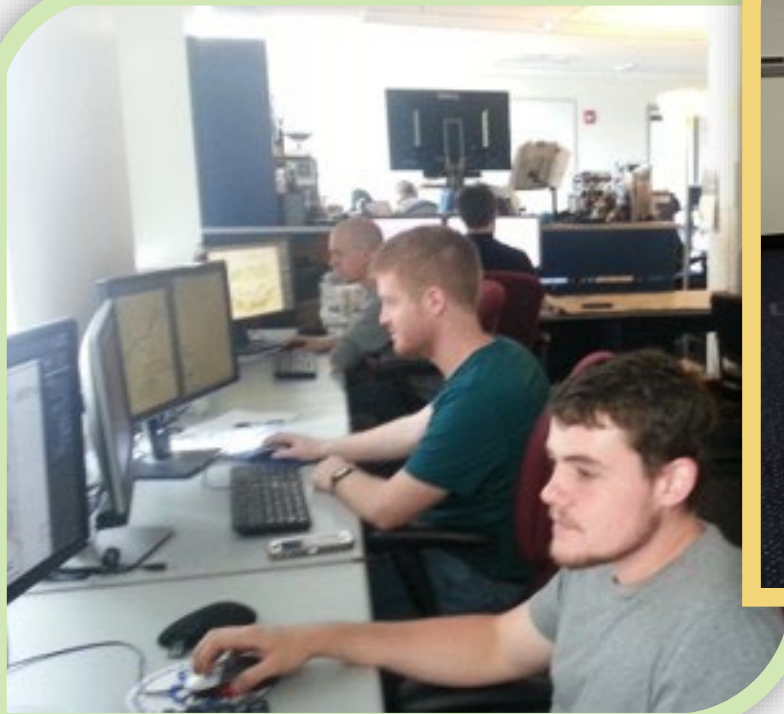


- **Improved Management and Archival System**
 - Electronic database manages plan sets and associated documents.
 - Eliminates lost drawings, misfiled drawings, and deterioration of drawings.
 - Consolidates record plan sets in one location in a digital database.

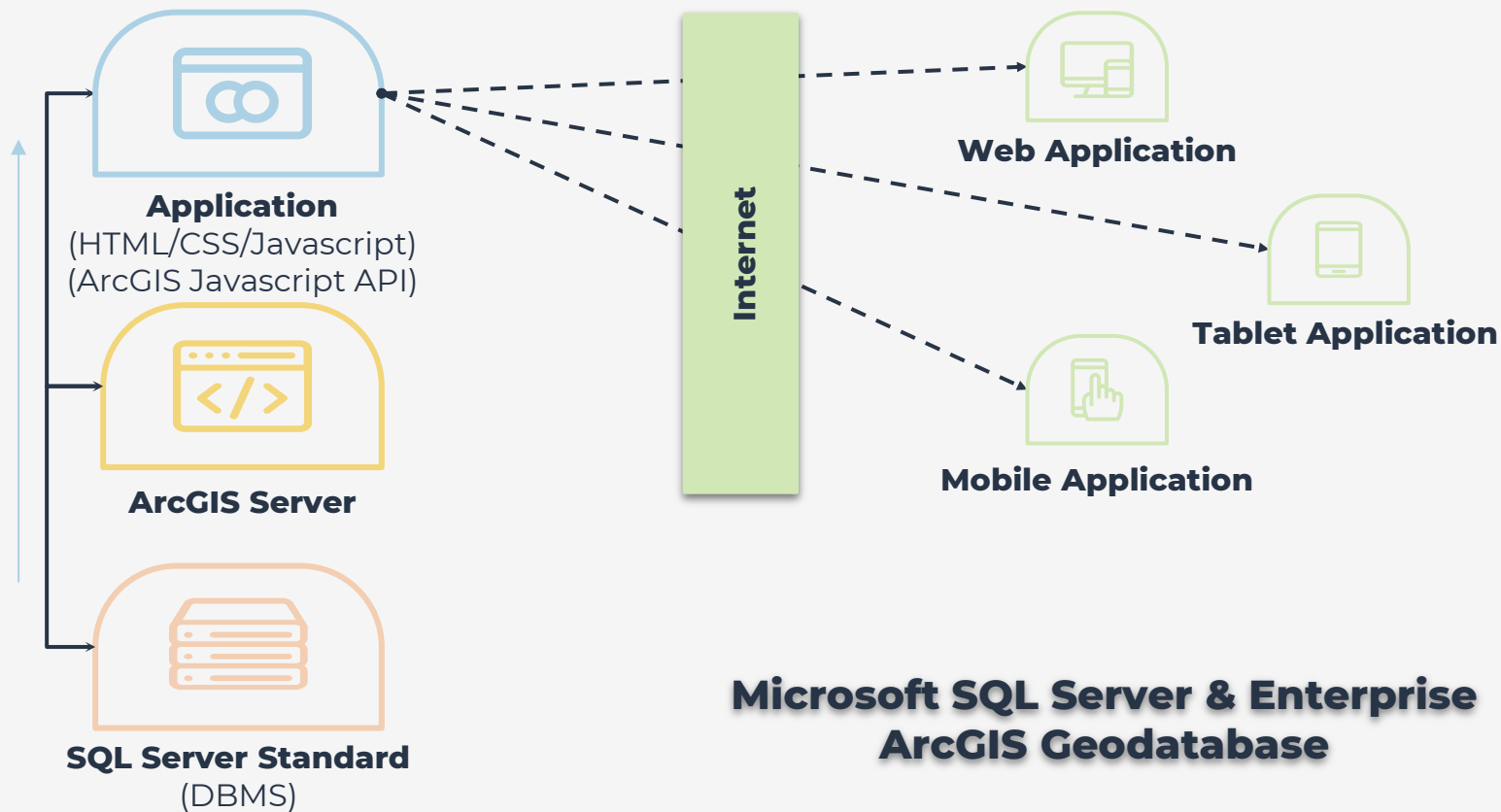
Project Goals

- **Faster and Easier Access to Drawings**
 - Accessible by anyone, at any time, from anywhere.
 - Improved document accessibility for both internal and external users.





System Design



<https://www.mapgw.gov/dotplans/ProjectDetails.php?scanID=6887>

West Virginia

Department of Transportation

Project#

P_24_2_0052_00_000_1930_S06887

Scan ID:	6887
Project Title:	Bottom Creek to LandCraft to Eckman to Keystone
Federal Project:	
State Project:	2048-B
County:	McDowell
District:	10
Plan Type:	Construction Plan
Sign System:	U.S. Highway
Route:	52
Mile:	0
Special ID:	Archiv
Bridges:	
Fiscal Year:	1930
Supplemental Code:	()
Project Status:	Final C
Book Location:	Techn
Scanning:	Scan
PDF:	PDF
GeoTIF:	GeoTI
Map:	Show
Comments:	
ProjectWise:	

Query URL: <https://www.mapgw.gov/dotplans/ProjectDetails.php?scanID=6887>

Email Address:



<http://mapwv.gov/dotplans/>

[illegible]

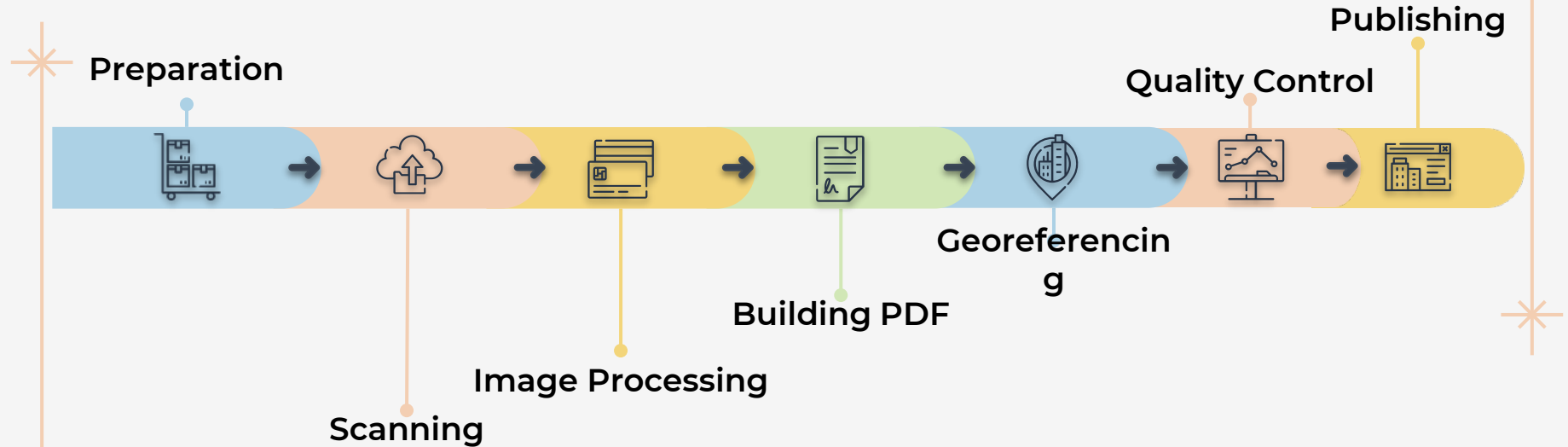


02

Project Operation



Operational Flow



Key Tools & Software



Adobe Photoshop



Adobe Acrobat



ArcGIS Pro



Network Drive



Script Based



Microsoft Access





Project Book Preparation



Unpacking

Plans given by the DOT are moved to the naming pile.



Sorting

Each folder is checked for organization and sorted.



File Naming

Plan information is entered into the Database.



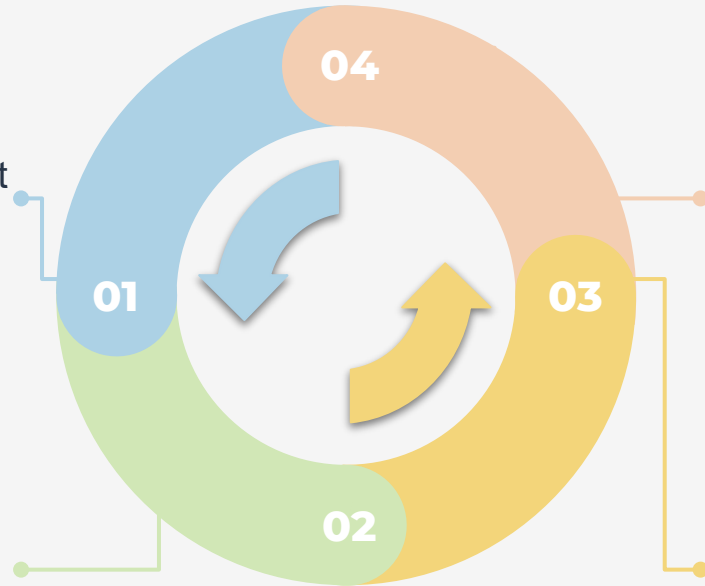
Project Book Scanning



Scanner is cleaned and set up.



Each page is cleaned and repaired as needed.



The original scans are relocated to the network drive.



Each sheet is scanned and checked for errors.

The Tech Center's **Scanning Room**

Finished
Plans

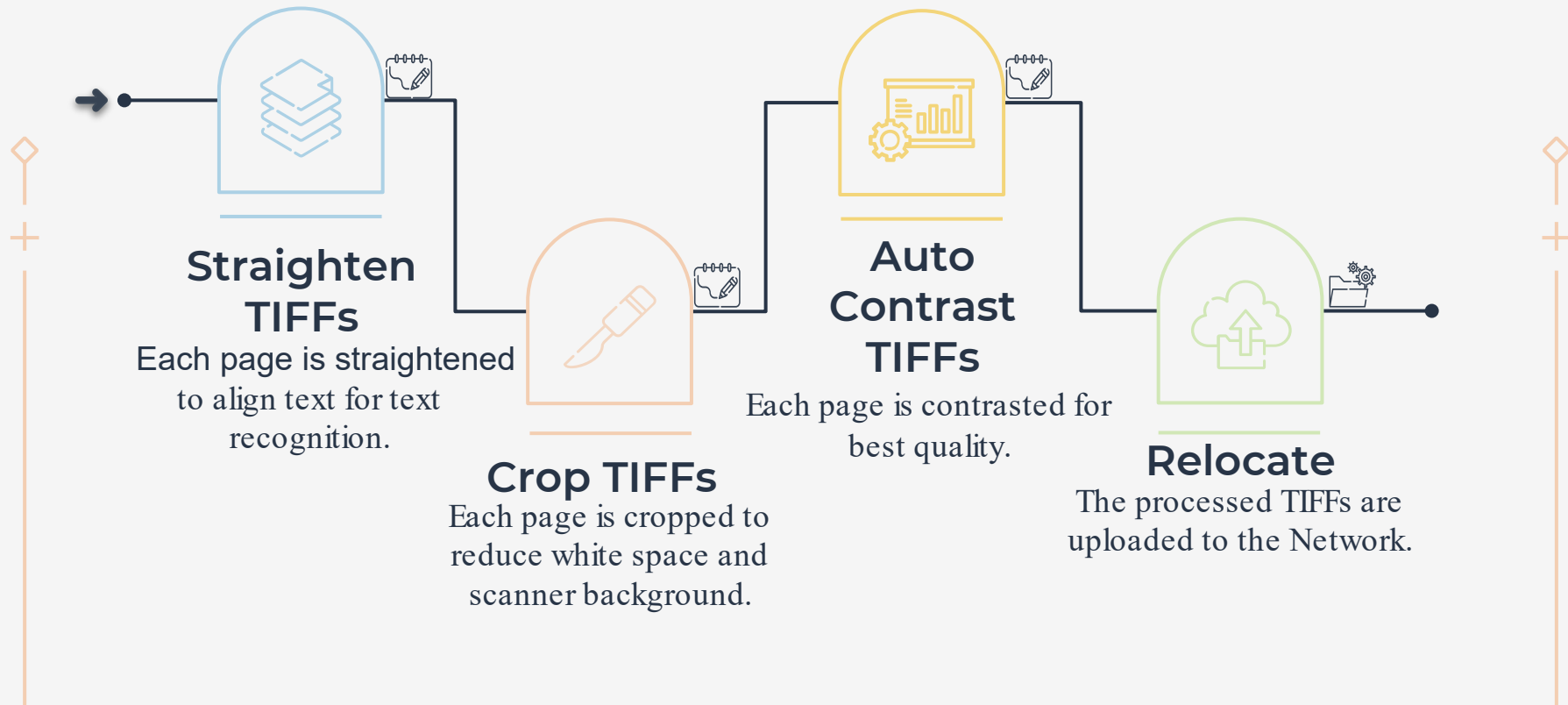
Plans
Needing
Named

Plans
Ready to
Scan

Scanning
Stations



Image Processing



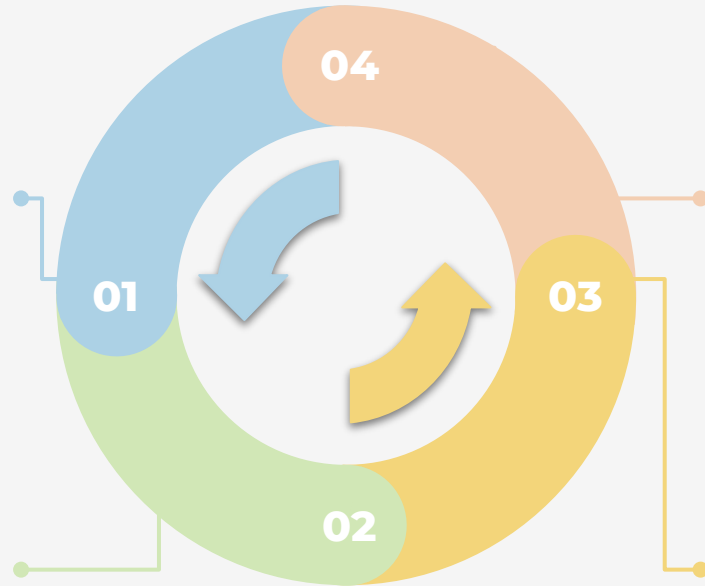
Building the PDF



TIFFs are combined into a single document.



Text Recognition is performed on the document.

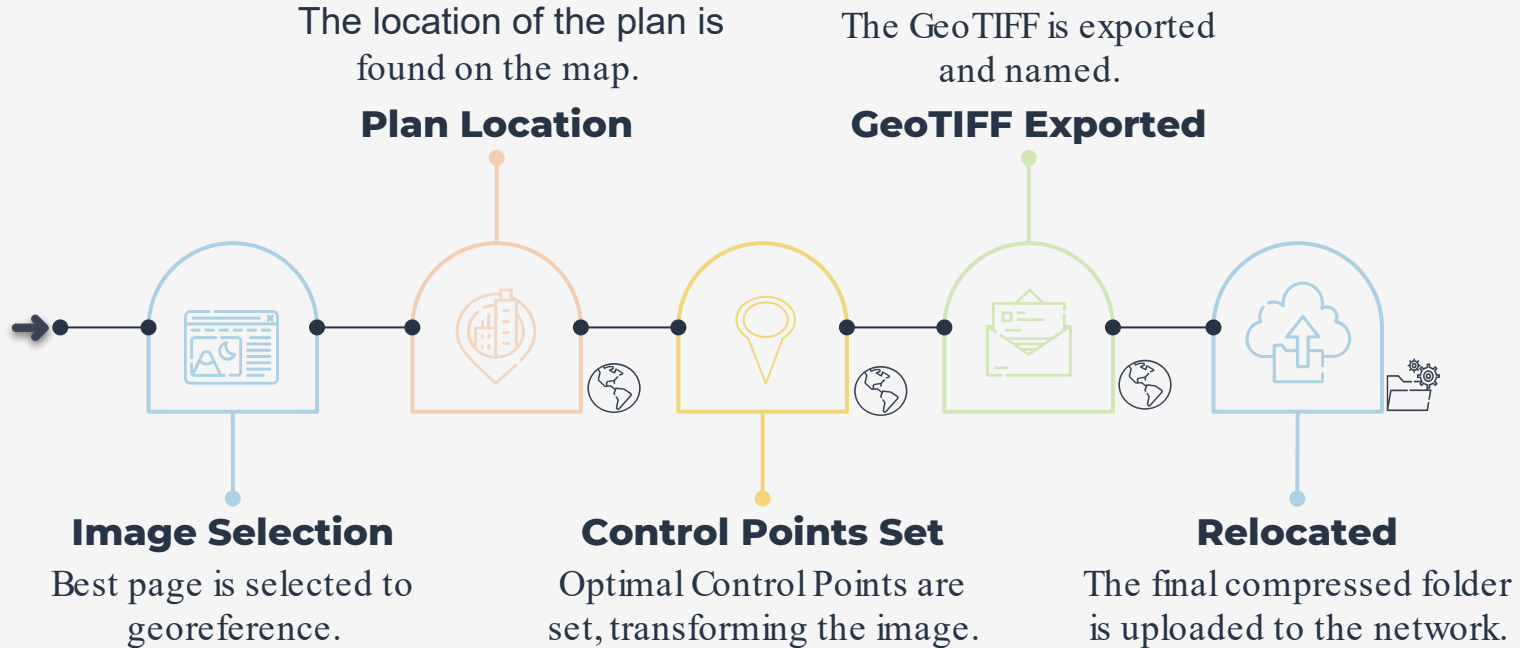


The PDF is relocated to the network drive.

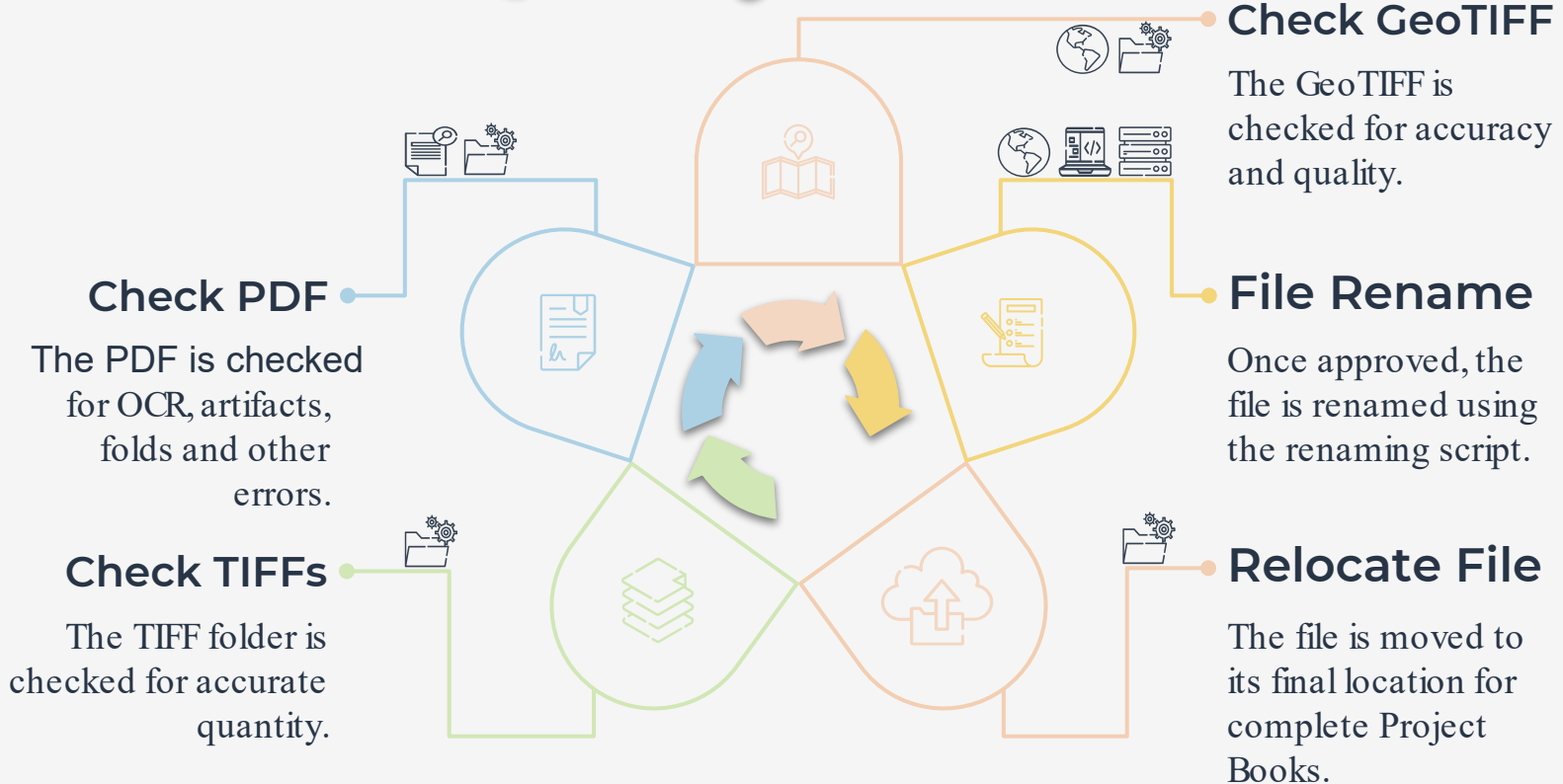


The final product is checked for errors and compressed.

Georeferencing



Quality Control





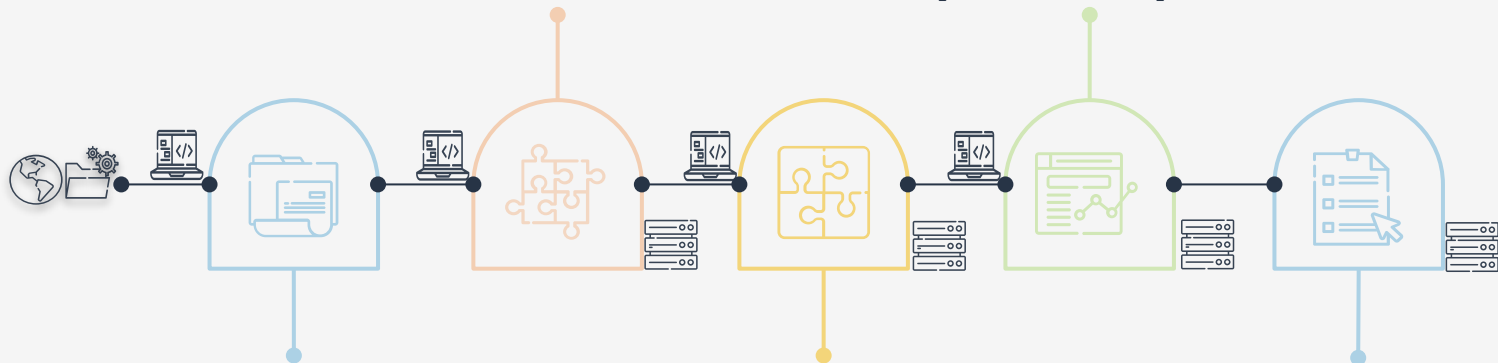
Publishing

The extracted GeoTIFFs are added to the whole raster mosaic.

Add Rasters

The new footprints coordinates are added to the database.

Update Footprints



Publish GeoTIFFs

GeoTIFFs are extracted from their compressed folders.

Build Footprints

Using the added rasters, footprint symbology is built for each.

Publish to Website

Each plan is toggled to 'Published', allowing the website to display them.

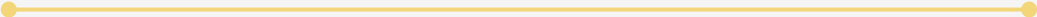




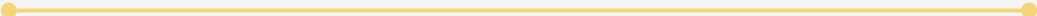
03

Project Statistics





500,000



Estimated sum of Phase III deliverables. An estimated **27,405** sheets remain till reaching the projected end of Phase III.

435,892

Sheets Scanned

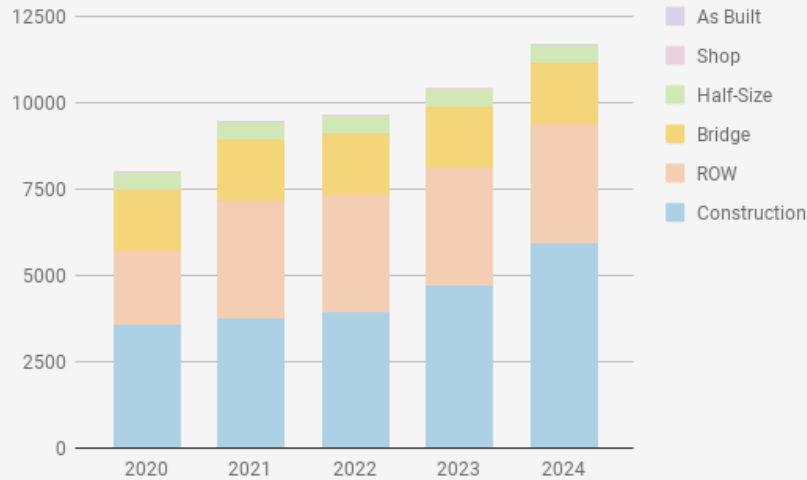
11,505

Plans Scanned

11,448

Plans Published

Plan Type Breakdown



Total Plans as of October 2024:

11,505

Construction Design

Total: 5,907

Right of Way

Total: 3,427

Bridge

Total: 1,787

Half-Size

Total: 497

Shop Drawing

Total: 22

As Built

Total: 17

File Size Breakdown

Uncompressed TIFF Files

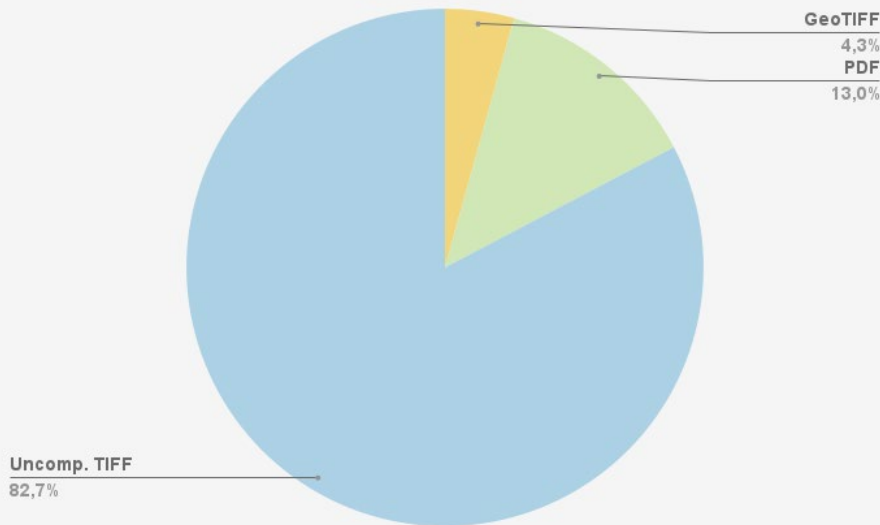
Loose, processed scan files. Does not include the original scans but does include the unzipped GeoTIFF files.

PDF Files

The PDF's consist of all the individual pages which make up a project book. Needed for the website.

Compressed GeoTIFF Files

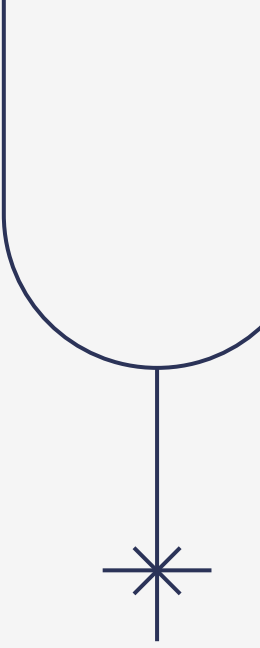
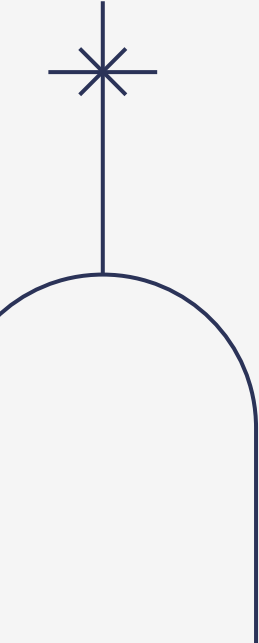
This is the amount of storage the compressed GeoTIFF folders make up. This is needed for publishing.



Our main folder currently holds approximately 7TB of data.



Thank you!



Any questions or feedback?

