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Redesigning Intranet with Google Sites

Prepared by
Nana Aba Ackah

For
IBW Surveyors

Executive Summary

At IBW Surveyors, I led the complete redesign of the company's internal intranet, transforming it from a static, cluttered information hub into a modern, user-centered platform that enhanced communication, resource access, and team productivity.

Using Google Sites as the foundation, I introduced embedded custom HTML, CSS, and JavaScript to go beyond native capabilities, enabling responsive layouts, interactive UI components, and improved navigation flows. The redesign was guided by wireframes and high-fidelity prototypes built in Figma and Canva, which were presented to department leads for iterative feedback and approval.

The final site included a categorized document repository, integrated quick links, team-specific dashboards, and a searchable resource center. All components were fully tested across screen sizes and browsers to ensure accessibility and consistency.

As a result, the new intranet:

- Reduced internal support requests by over 30%
- Improved resource discoverability
- Enhanced team-wide engagement with centralized tools and content

This project demonstrated my ability to blend design thinking with technical implementation, delivering a scalable internal platform aligned with business needs.

Project Background

IBW Surveyors is a multidisciplinary firm with multiple departments handling land surveying, engineering, and administrative operations. Prior to this project, the company's internal intranet, built using Google Sites, had become cluttered, outdated, and difficult to navigate. Content was fragmented, important documents were buried or duplicated, and users across departments struggled to locate the tools and resources they needed to perform their work efficiently.

The lack of a clear information hierarchy and limited design flexibility in the original setup contributed to frequent internal support requests and delays in communication. As the organization grew, so did the need for a more structured, intuitive, and scalable internal platform.

The intranet redesign was initiated to address these issues by creating a more centralized, visually consistent, and user-focused internal portal. The goal was not only to refresh the look and feel of the intranet but to improve the way information was categorized, accessed, and maintained — ultimately enhancing collaboration and operational efficiency across the company.

Project Objectives

The IBW intranet redesign was initiated to create a structured, modern, and user-focused internal platform that aligned with the evolving needs of the organization. The project aimed to improve navigation, enhance usability, and support cross-team collaboration, while expanding the intranet's functionality and value.

Key objectives included:

01

Improve Usability and Navigation
Redesign the site's structure to help employees locate tools, resources, and information quickly, with minimal training or support.

02

Create a Centralized Resource Hub
Consolidate documents, shared assets, and links into clearly categorized, searchable sections by department and function.

03

Enhance Design and Brand Consistency
Apply a clean, responsive layout aligned with IBW's brand, using visual design tools and embedded styling for a more polished user experience.

04

Add a Dedicated LMS Page for Learning Resources
Introduce a centralized learning hub to preserve and organize educational materials, including recorded seminars, regulatory guidelines, onboarding documents, and industry references, ensuring long-term knowledge retention.

Develop a Field Team Resource Page
Build a dedicated section for field employees with quick access to operational forms, safety protocols, checklists, and reporting tools, designed with mobile-first accessibility.

Encourage Team Collaboration and Ownership
Collect feedback from each department to guide design and content decisions, increasing engagement and ensuring the platform meets real-world team needs.

Increase Customization through Embedded Code
Use HTML, CSS, and JavaScript to introduce interactive components, flexible layouts, and features not supported natively by Google Sites.

By meeting these objectives, the new intranet not only improved user experience and efficiency, but also laid the foundation for scalable knowledge-sharing, better team alignment, and operational consistency.

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Tools & Technologies Used

PLATFORM

GOOGLE SITES

Base platform for the intranet, chosen for its speed and integration with Google Workspace.

GOOGLE DRIVE

Used to organize and embed key documents and folders, including LMS content.

DESIGN & PROTOTYPE

FIGMA

Created responsive wireframes and mockups

CANVA

Designed branded graphics and UI elements.

CONTENT & PROJECT MANAGEMENT

SHARED DRIVES

Centralized storage for documents, LMS archives, and templates.

TRELLO

Managed content planning, page tracking, and project milestones.

Design & Planning Process

The intranet redesign began with a discovery phase where feedback was gathered from department leads to understand how the existing platform was being used and where it was falling short. Common challenges included poor navigation, inconsistent content formatting, and difficulty accessing essential resources, especially for field teams.

Using this input, I developed wireframes and mockups in Figma, mapping out a new structure that prioritized clarity, simplicity, and ease of use. The design process focused on creating an intuitive layout with clear categories, reusable components, and responsive elements that could scale with future content.

Branded UI assets, such as icons, headers, and banners, were created using Canva, ensuring visual alignment with IBW's existing identity. Each page layout was tailored to the specific needs of its intended audience, for example, the LMS page emphasized content libraries and learning paths, while the field team page prioritized quick-access links and mobile optimization.

All project tasks including page development, content gathering, and stakeholder feedback were tracked and managed using Trello, providing transparency and organization throughout the project lifecycle.

Throughout the design phase, prototypes were shared with internal stakeholders for feedback and approval. This iterative loop allowed for adjustments before development began, ensuring the final structure met the expectations and functional needs of every team.

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Testing & Quality Assurance

Content Access Verification

Reviewed Google Drive link permissions for all embedded folders and documents

Ensured that shared files were accessible to all relevant user groups

Usability Review with Stakeholders

Conducted page walk-throughs with department leads to verify structure, layout, and content accuracy

Collected feedback and made final content or styling refinements

Functionality Testing for Embedded Code

Tested custom HTML, CSS, and JavaScript across all pages

Ensured interactive elements (accordion menus, hover effects, links) worked as expected

Load Time and Page Speed Review

Optimized image sizes and external embeds to prevent slow load times

Confirmed smooth navigation experience across all sections

Final Sign-Off

Reviewed all pages with stakeholders before launch

Archived legacy content and ensured a smooth transition to the new intranet

Outcomes & Results

The redesigned IBW intranet led to significant improvements in usability, access to resources, and internal communication. With a cleaner layout and intuitive navigation, employees were able to locate files faster, leading to a 30% reduction in support requests.

The new LMS page centralized training materials, recorded seminars, and onboarding content — creating a scalable space for professional development. Field staff also benefited from a mobile-optimized resource page, which provided quick access to forms and procedures while on-site.

By empowering departments to manage their own content, the redesign reduced reliance on IT and encouraged broader team engagement. The result is a more accessible, organized, and maintainable platform that supports both day-to-day operations and long-term knowledge sharing.

Challenges & Resolutions

The redesign came with key challenges, particularly around the limitations of Google Sites, coordinating department content, and ensuring responsiveness across devices.

Since Google Sites lacks advanced styling tools, I embedded custom HTML, CSS, and JavaScript to enable responsive layouts, collapsible menus, and improved UI functionality. This required extensive testing across browsers and screen sizes to ensure consistency.

Managing content across teams was also complex. Many documents were stored in various formats and locations. I worked directly with department leads to organize materials into structured Google Drive folders, then embedded them into the appropriate intranet pages.

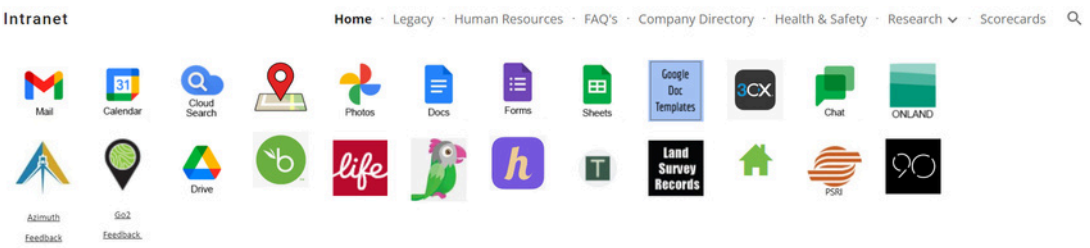
To streamline communication and approvals, I used Trello for tracking tasks, feedback, and timelines, which kept the project on track and transparent. Despite the constraints, these challenges led to better design decisions and a more scalable, user-friendly platform that supports both office and field teams.

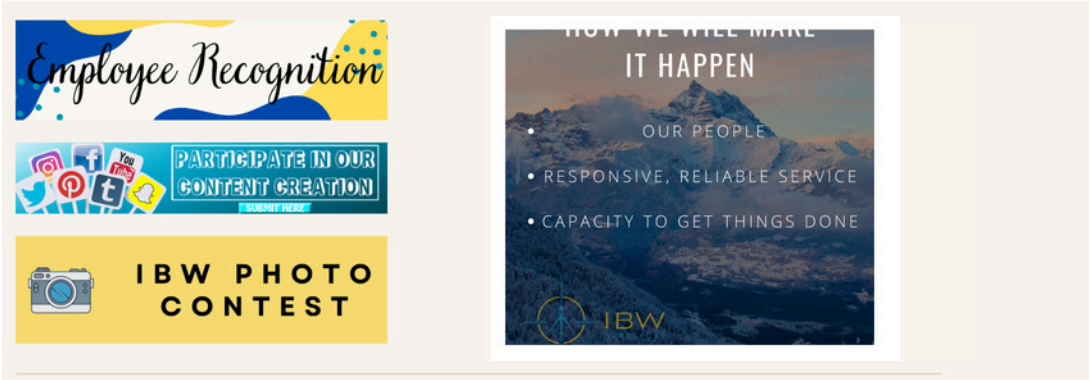
Screenshots & Visuals

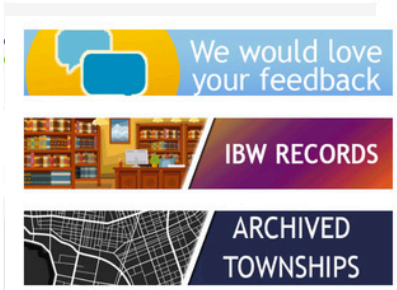
Before the Redesign

The original intranet layout had several limitations:

- Cluttered and inconsistent design
- Difficult navigation across departments
- Poor mobile responsiveness
- Fragmented document storage and outdated pages







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IBW Intranet

Home | Legacy | HR | Company Directory | Health & Safety | Research | Scorecards | The IBW Way

Head of Human Resources - Nathan VanWoudenberg - 365-662-1052

Employee Handbook

Bamboo HR

HR Process

Accountability Chart

Telus Health

Human Resources Links

- Benefits Booklet
- Benefits Summary
- GRSP Program

IBW Intranet

Home | Legacy | HR | Company Directory | Health & Safety | Research | Scorecards | The IBW Way

Office Locations

3CX USER MANUAL | 3CX WEB CLIENT | 3CX CHROME EXT. INSTALL

Email Groups

Group extensions

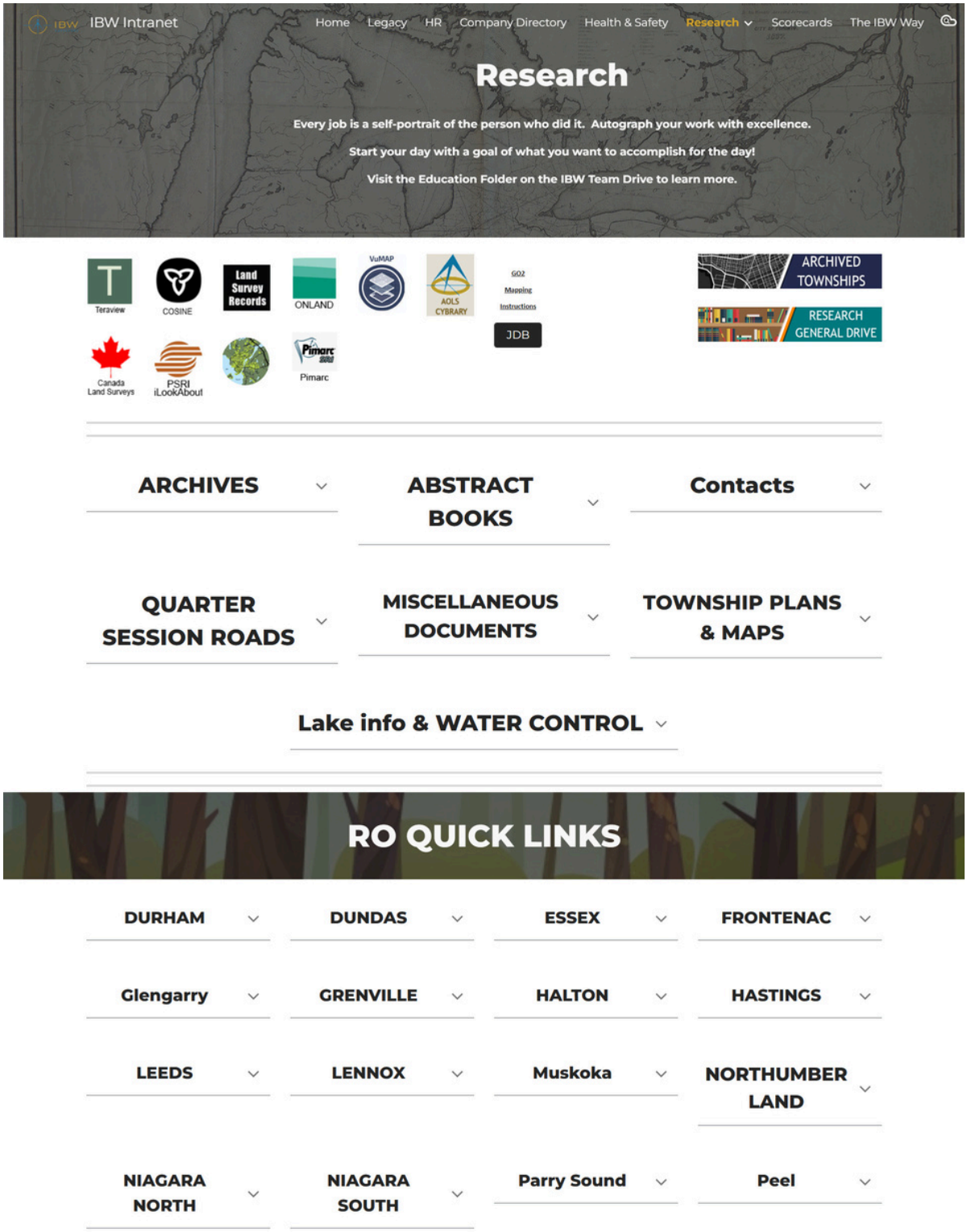
Technical Support and other contacts

IBW Health & Safety Manual

IBW Virtual Health and Safety Board

Forms

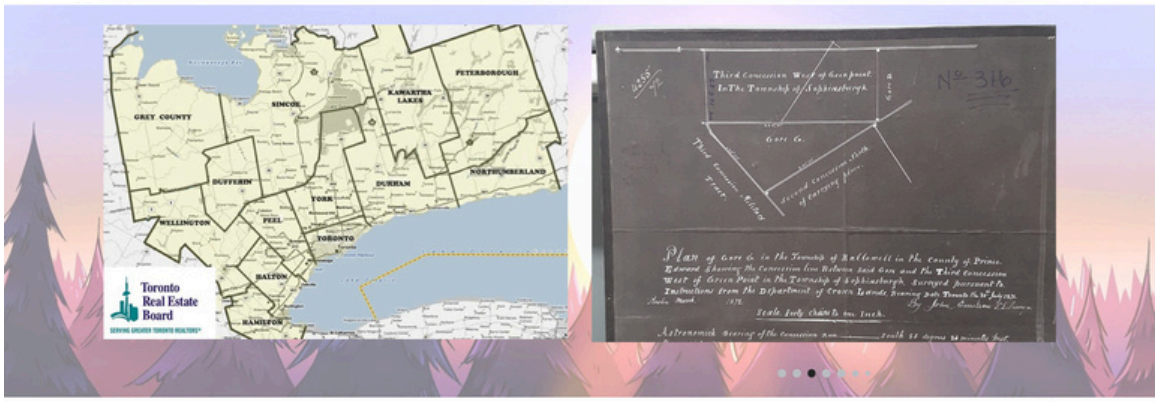
- Daily Tailgate and Traffic Protection Plan
- Evacuation Drill Checklist
- IBW Accident/Incident/Near Miss Form
- Monthly Office Inspection Form


IBW Intranet
Home
Legacy
HR
Company Directory
Health & Safety
Research
Scorecards
The IBW Way
Research
Every job is a self-portrait of the person who did it. Autograph your work with excellence.
Start your day with a goal of what you want to accomplish for the day!
Visit the Education Folder on the IBW Team Drive to learn more.
Teraview
COSINE
Land Survey Records
ONLAND
VuMAP
AOLS CYBRARY
GO2
Mapping
Instructions
JDB
ARCHIVED TOWNSHIPS
RESEARCH GENERAL DRIVE
Canada Land Surveys
PSRI iLookAbout
Pimarc
ARCHIVES
ABSTRACT BOOKS
Contacts
QUARTER SESSION ROADS
MISCELLANEOUS DOCUMENTS
TOWNSHIP PLANS & MAPS
Lake info & WATER CONTROL
RO QUICK LINKS
DURHAM
DUNDAS
ESSEX
FRONTENAC
Glengarry
GRENVILLE
HALTON
HASTINGS
LEEDS
LENNOX
Muskoka
NORTHUMBER LAND
NIAGARA NORTH
NIAGARA SOUTH
Parry Sound
Peel

PETERBOROUGH | prescott | RENFREW | SIMCOE

STORMONT | TORONTO | VICTORIA | WATERLOO

WELLINGTON | YORK



IBW Project Set up Checklist

IBW Owned Records

File Room Tracking

COSINE

Severance Process Applications

UTM Zoning Map

Project Administrator Manual

- *PA Handbook*
- *Abstract Mook Manual*
- *Teraview Manual*
- *JDB Website Manual*
- *PSRI Tutorial*
- *IBW Research Presentation*
- *Scanning & Renaming*

OTHER OLS SITES

DFP

J.D. Barnes Records

Protect Your Boundaries

SURVEY INDEXES

Tony Stauskas Record Index

Land Survey Records

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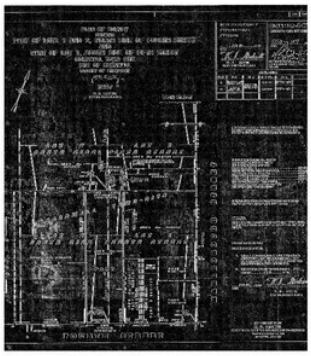
Teraview | COSINE | Land Survey Records | PORT HOPE ARCHIVES | ONLAND | PYE GEO | AOLS CYBRARY | ARCHIVED TOWNSHIPS

Canada Land Surveys | PSRI iLookAbout | LSR Coding App | JD Barnes Surveys | DFP Surveys | Pimarc | MNR Surveys | Parry Sound GIS | RESEARCH GENERAL DRIVE

Access Archived Tracking Form here



Please fill out every day when you are archiving!

Use the drop downs below to pick your geographic township

*Townships in **RED** have not been archived and will still be found in the file room.*

This is only relevant to LOT/CON, not registered plans.

archived surveyor records

Durham 40 | **Frontenac 13** | **Northumberland 39** | **Victoria 57**

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IBW Intranet | Home | Legacy | HR | Company Directory | Health & Safety | Research | **Scorecards** | The IBW Way

Scorecards

Leadership

Business Services

Production

Business Development

- Geographic Market Insights
- Quotes Follow-up

Finance

PRODUCTION

- Compliance Checks

Drafting

Project Management

- PM Metrics
- PM Huddle / WIP %
- SOW On-time Delivery %

Quality Control

Field

- Tailgate Form Check

Research

IBW Intranet | Home | Legacy | HR | Company Directory | Health & Safety | Research | Scorecards | **The IBW Way**

The IBW Way

The Processes That Define Us

The "IBW Way" is the combination of our Core Processes, outlining how our business runs day-to-day. The Core Processes are outlined at a high level such that they are not rigid, using the **80-20** rule - which means we have 20% of the steps documented to achieve 80% of the result. This allows for being 'smart' in our day-to-day work. For more detailed training and education materials, refer to our Legacy page.

The Client Satisfaction Process

The Quoting Process

The Project Process

The Finance Process

The Human Resources Process

The Errors & Omissions Process

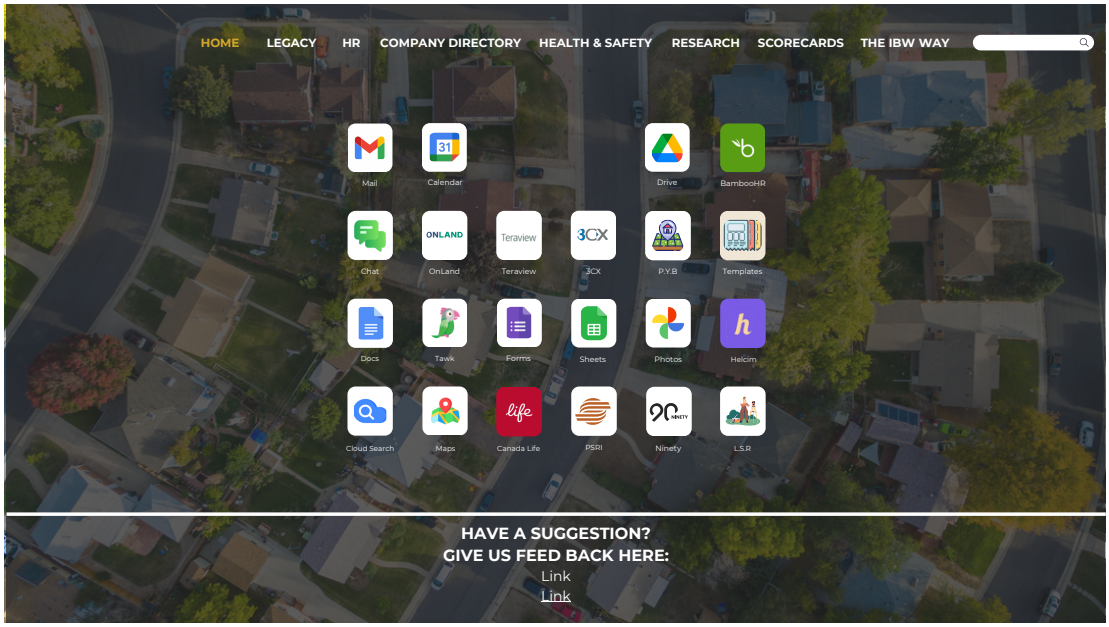
Screenshots & Visuals

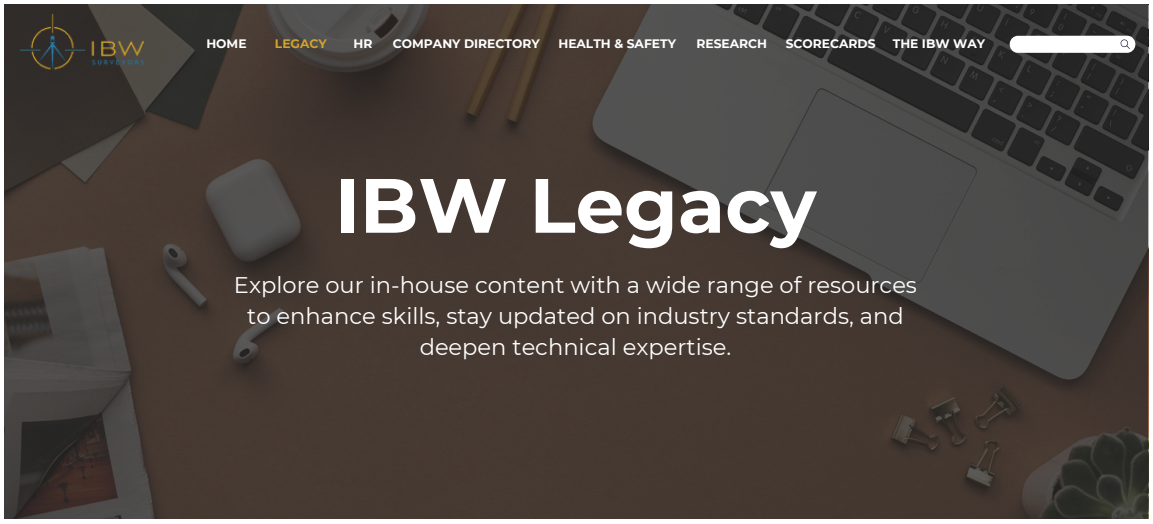
After the Redesign

Screenshots of the live site demonstrate the applied improvements:

- Clean, consistent navigation
- Department pages with embedded Drive folders
- Accordion menus and custom UI components

Note some content is left out intentionally





Type here to search

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EDUCATIONAL COURSES

Choose Course

Cadastral Core Competencies
Recorded Lectures, Quizzes, Reading Material

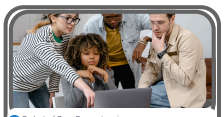
Business Practices
Necessary Cadastral Skills for Modern Business

Course Duration: Flexible, Self-Paced

Additional Competencies
Reading Material, Research Guides

Canada Lands
Knowledge and research on Canada Lands

Course Duration: Flexible, Self-Paced



Cadastral Core Competencies
Recorded Lectures, Quizzes, Reading Material

Communication
Essential Communication Skills for Modern Business

Course Duration: Flexible, Self-Paced

Additional Competencies
Bulletins, Recorded Lectures, Quizzes, Reading Material, Sample Plans

Condominiums
Learn more about acts and regulations for condominiums in Canada

Course Duration: Flexible, Self-Paced

Cadastral Core Competencies
Case Laws, Deed Examples, Recorded Lectures, Reading Material

Descriptions
Appropriate Terminology for describing properties

Course Duration: Flexible, Self-Paced

Cadastral Core Competencies
Case laws, Recorded Lectures, Quizzes, Reading Material

Easements
Understand Easements and its intricacies

Course Duration: Flexible, Self-Paced

Cadastral Core Competencies
Case laws, Recorded Lectures, Quizzes, Reading Material

Ethics
Understand the importance of integrity, fairness and responsibilities

Course Duration: Flexible, Self-Paced

Cadastral Core Competencies
Recorded Lectures, Reading Material

General Boundary Retracement
Ins & outs of re-establishing property boundaries

Course Duration: Flexible, Self-Paced

Additional Competencies
Guides, Health Safety, Publications

Human Resources
Managing employees in a Modern Business

Course Duration: Flexible, Self-Paced

Cadastral Core Competencies
Recorded Lectures, Case Examples

Land & Resource Development
Necessary information for land-use planning

Course Duration: Flexible, Self-Paced

Additional Competencies
Recorded Lectures

Monitoring
Explore the importance of monitoring

Course Duration: Flexible, Self-Paced

Additional Competencies
Recorded Lectures, Lists

Municipal Surveys
Discover municipal surveys and how they can be used.

Course Duration: Flexible, Self-Paced

Cadastral Core Competencies
Recorded Lectures

Original Township Retracement
Historical knowledge of Original Townships

Course Duration: Flexible, Self-Paced

Cadastral Core Competencies
Recorded Lectures, Quizzes, Reading Material

Possessory Interests & Adverse Possession
Understanding ownership claims

Course Duration: Flexible, Self-Paced

Cadastral Core Competencies
Recorded Lectures

Research
Understanding what information is necessary

Course Duration: Flexible, Self-Paced

Cadastral Core Competencies
Case Laws, Recorded Lectures, Plan Types, Quizzes, Reading Material

Roads
Knowledge on terminology and types of roads.

Course Duration: Flexible, Self-Paced

Cadastral Core Competencies
Recorded Lectures, Reading Material, Regulations

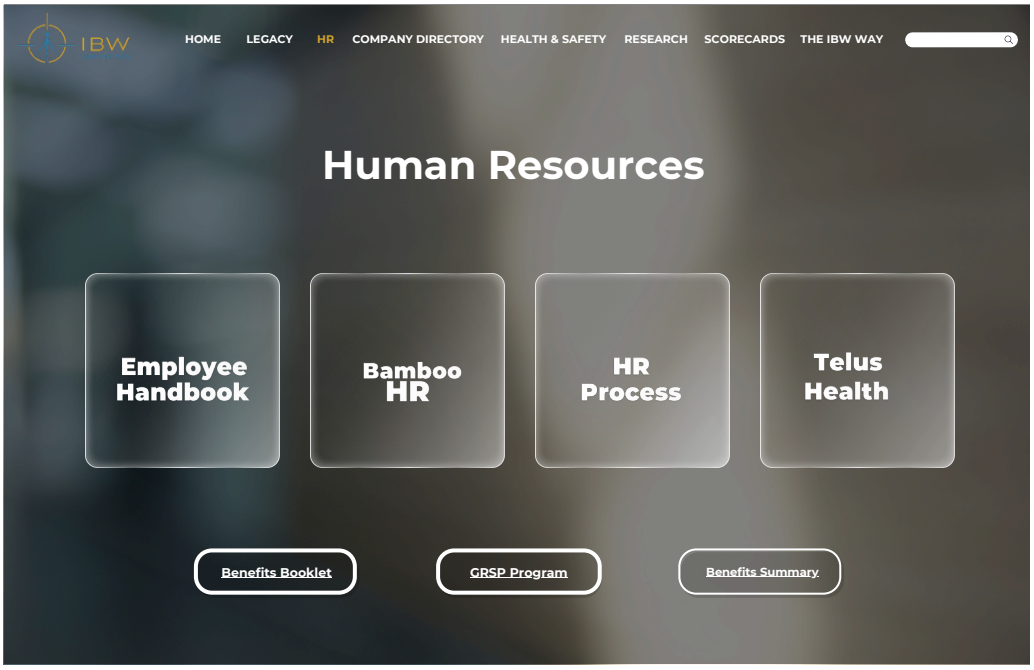
Spatial Reference
Frameworks for Mapping and Geospatial Analysis

Course Duration: Flexible, Self-Paced

Cadastral Core Competencies
Case Law, Georgian Bay, Navigability, Reading Material, Rideau Canal, Shore Road Allowances, Trent Severn Waterway

Water Boundaries
Defining Boundaries Along Rivers, Lakes, and Coastal Waters

Course Duration: Flexible, Self-Paced



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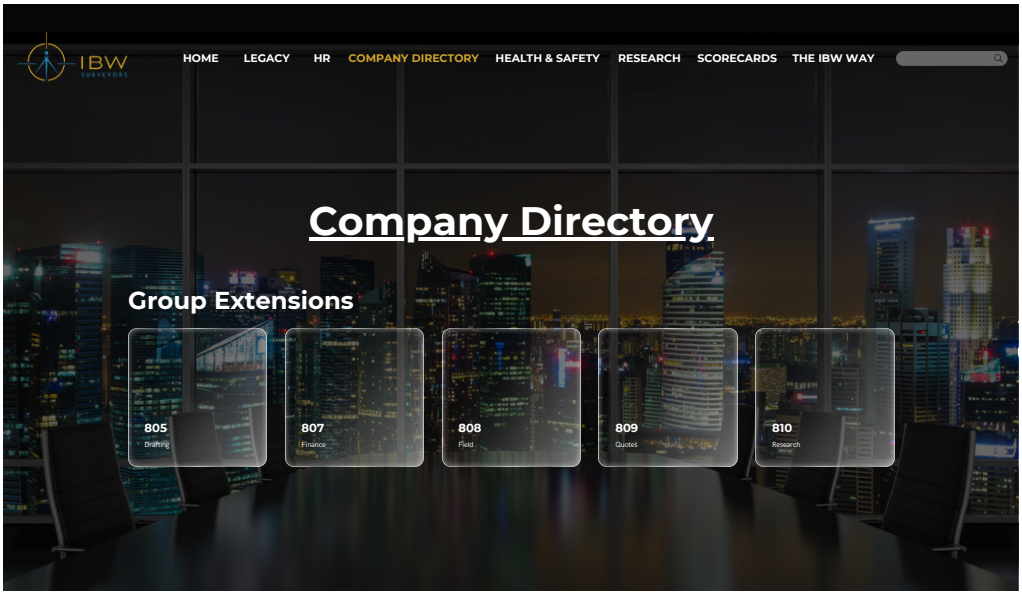

3CX USER MANUAL | 3CX WEB CLIENT | 3CX CHROME EXTENSION

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Fax: 905-623-0612
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parrysound@ibwsurveyors.com

Richmond Hill
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Unit 10
Richmond Hill, ON L4B 1C1

Phone: 905-731-7834
richmondhill@ibwsurveyors.com

Email Groups

Other Ways to Reach Us

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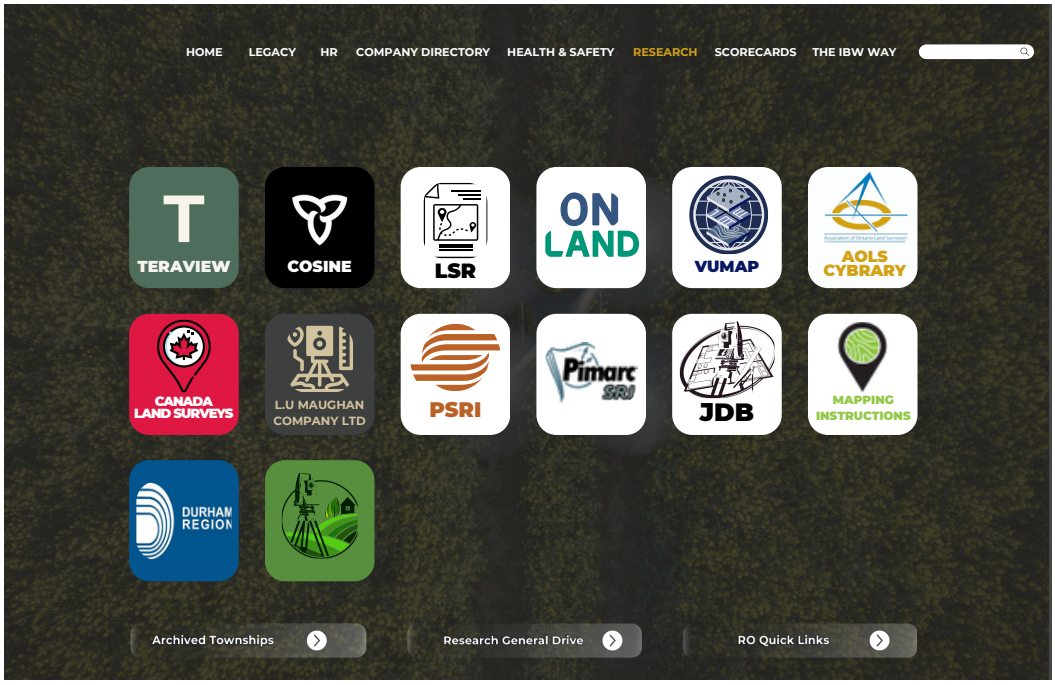

Research

Sub-Heading

ARCHIVES

ABSTRACT BOOKS

CONTACTS

LAKE INFO & WATER CONTROL

MISCELLANEOUS DOCUMENTS

QUARTER SESSION ROADS

TOWNSHIP PLANS & MAPS

Links

Directory

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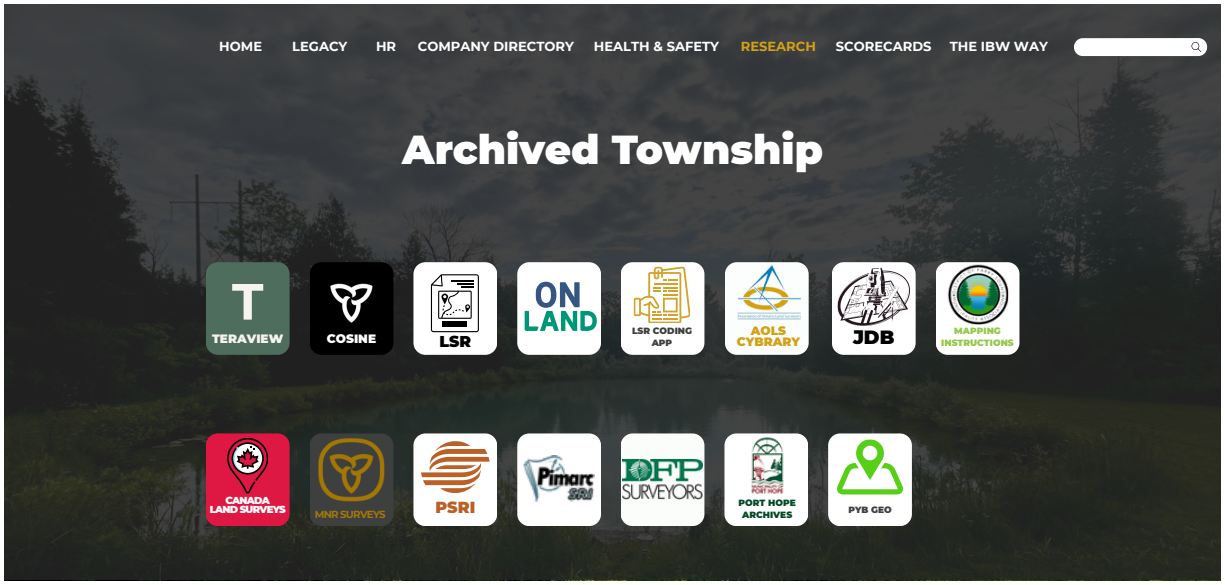

SEARCH

D - H

- DURHAM
- DUNDAS
- ESSEX
- FRONTENAC
- GLENGARRY
- GRENVILLE
- HALTON
- HASTINGS

L - P

- LEEDS
- LENNOX
- MUSKOKA
- NORTHUMBERLAND
- NIAGARA NORTH
- NIAGARA SOUTH
- PARRY SOUND
- PEEL
- PETERBOROUGH
- PRESCOTT

R - Y

- RENFREW
- SIMCOE
- STORMONT
- TORONTO
- VICTORIA
- WATERLOO
- WELLINGTON
- YORK

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HOME LEGACY HR COMPANY DIRECTORY HEALTH & SAFETY RESEARCH SCORECARDS THE IBW WAY

Field Team

Educational Content

Field Note Content

Legacy

Educational Content

- Drone Surveying — IBW Field Education
- Retaining Wall — IBW Survey Procedures
- Field Work Best Practices — IBW Field Education
- Redundant Checks — IBW Field Education
- Trimble Access Template Setting — IBW Field Education
- Site Caliberation — IBW Survey Procedures
- RTK Procedures — IBW Field Education
- Monumentation Regulations — IBW Field Education
- Integration — IBW Field Education
- BM Transfer — IBW Survey Procedures
- CANNET & SMARTNET Settings — IBW Field Education
- Construction Sheets — IBW Field Education

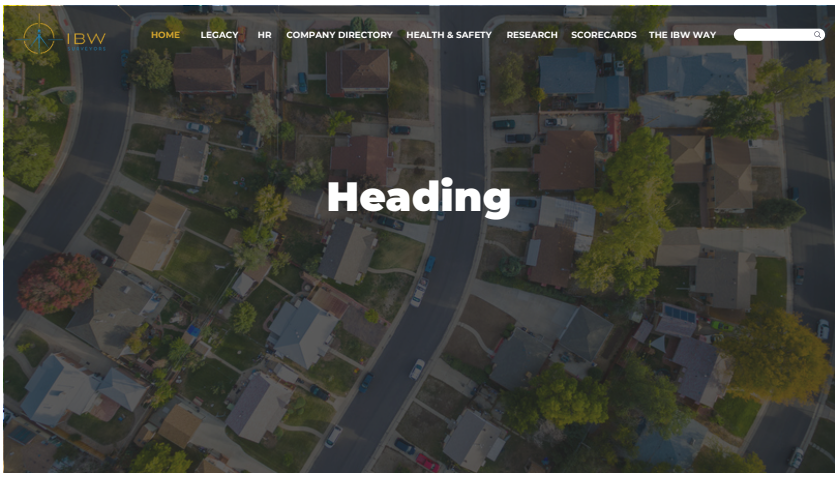
Screenshots & Visuals

Visual Assets

Design elements were created in Canva to maintain brand consistency across the site:

- Section headers and banners
- Custom icons and accent graphics
- Color palette and typography aligned with IBW's identity

New Header design implemented throughout website



Redesigned images and buttons on core values etc.

New footer with relevant links applied to all pages

Conclusion

Summary

This redesign is not just a one-time update, but a foundation for ongoing collaboration, learning, and digital innovation within IBW. It proves that thoughtful design, even within the constraints of a no-code platform like Google Sites, can deliver meaningful, measurable value when combined with strategy, customization, and team alignment.

MADE TO MATTER.
MADE BY NANA

Thank you!

Thank you for taking the time to read this report. If you have any questions or would like to discuss our findings further, please don't hesitate to reach out to us.

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