

Title: Dawson City and Klondike Valley Flood Mapping Study
Composite Flood Hazard Map - Yukon River
0.5% Annual Exceedance Probability (AEP)

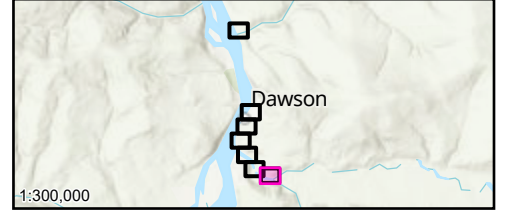
Client/Project:
Government of Yukon
Department of Environment
Water Resources Branch

Project: 123222713

Project Location: Dawson, Yukon
Prepared by MANDERSON on 2025-07-29
Requested by JMUIRHEAD on 2024-03-30
Review by JMUIRHEAD on 2025-07-29

- | | | | |
|--|--|--|--|
| | WSC Stations | | Surveyed Cross-Sections Used in Hydraulic Model |
| | HPW Drainage Culverts | | Trondék Hwëch'in Settlement Land |
| | Cross-Section Number WSE (m) Along Cross-Section | | Inundation Under Modelled Open Water Runs |
| | Surveyed Culvert | | Inundation Under Modelled Breakup Ice Jam Runs |
| | Bridge | | Approximate 50% AEP Open Water Flood Inundation |
| | Highway | | Composite Open Water and Ice Jam Inundation Extent |
| | Local Road | | Ice Coverage in Breakup Jam Scenarios |
| | Major Contour (5m) | | |
| | Minor Contour (1m) | | |

Map Publication Date: 7/29/2025
0 25 50 75 100 125 m
(At original document size of 11x 17) 1:2,500



- Notes**
1. Coordinate System: NAD 1983 CSRS UTM Zone 7N Vertical Datum: CGVD2013, Geoid: CGG2013a
 2. Data Sources: GeoYukon, Canada Lands Survey (CLS) CCM 982, CANVEC
 3. Flood hazard extents shown on these maps are based on LIDAR collected in July, 2019 and topographical and bathymetric data that was collected in June and September 2024.
 4. 50% AEP inundation lines are based on the 50% AEP flow estimate simulation in the hydraulic model which has been calibrated for higher AEP flood events and therefore should be considered approximate.
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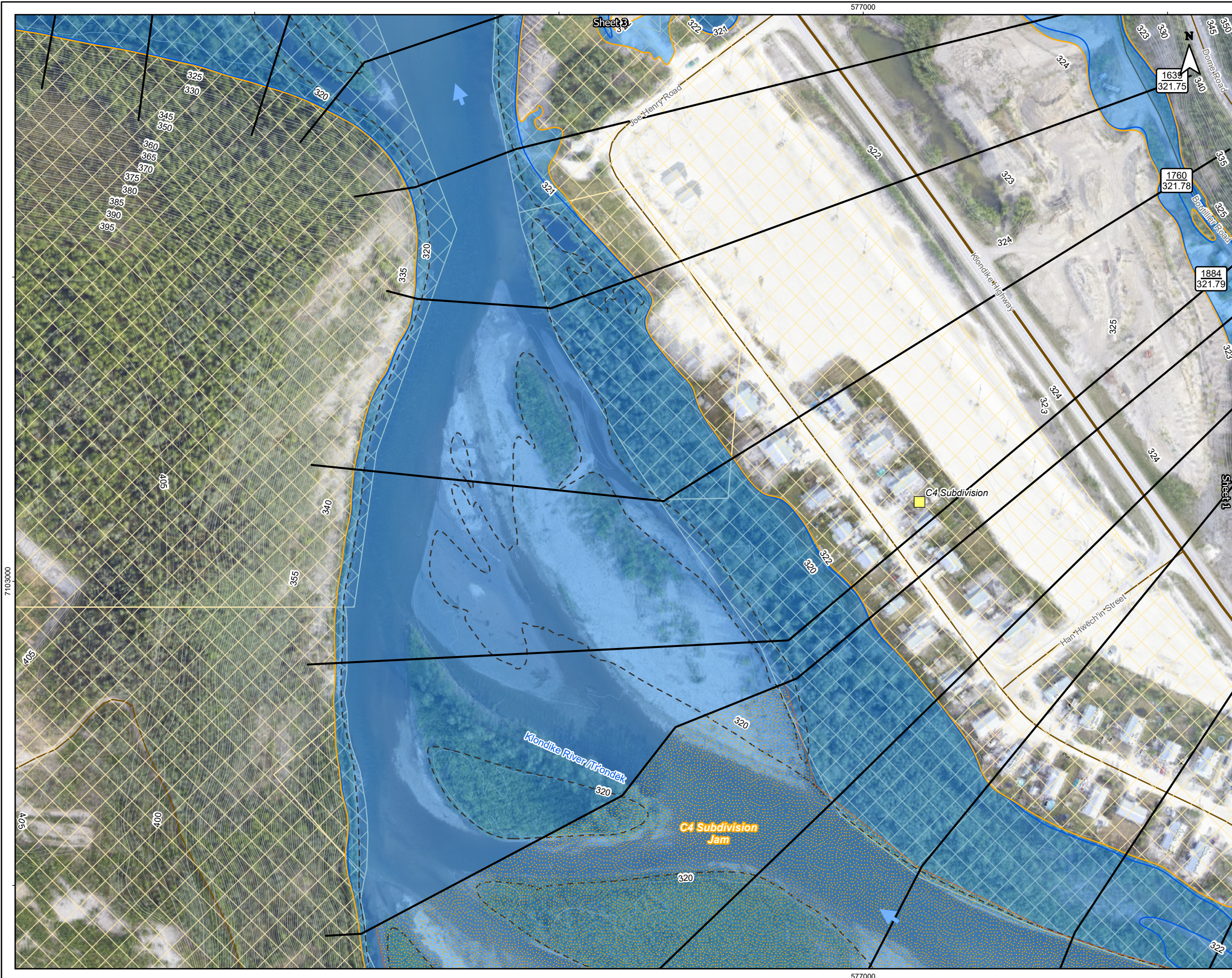


Figure No. **DC-0.5-02** Sheet 02 of 07

Title: **Dawson City and Klondike Valley Flood Mapping Study
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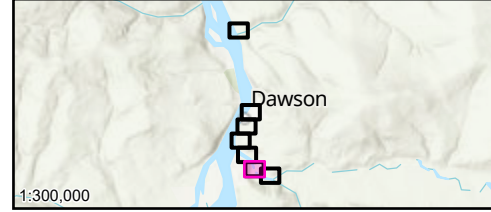
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- Community Developments
- Tr'ondék Hwéché In Settlement Land
- Cross-Section Number WSE (m) Along Cross-Section
- Inundation Under Modelled Open Water Runs
- Highway
- Inundation Under Modelled Breakup Ice Jam Runs
- Local Road
- Approximate 50% AEP Open Water Flood Inundation
- Major Contour (5m)
- Minor Contour (1m)
- Surveyed Cross-Sections Used in Hydraulic Model
- Composite Open Water and Ice Jam Inundation Extent
- Ice Coverage in Breakup Jam Scenarios

Map Publication Date: 7/29/2025
0 25 50 75 100 125 m
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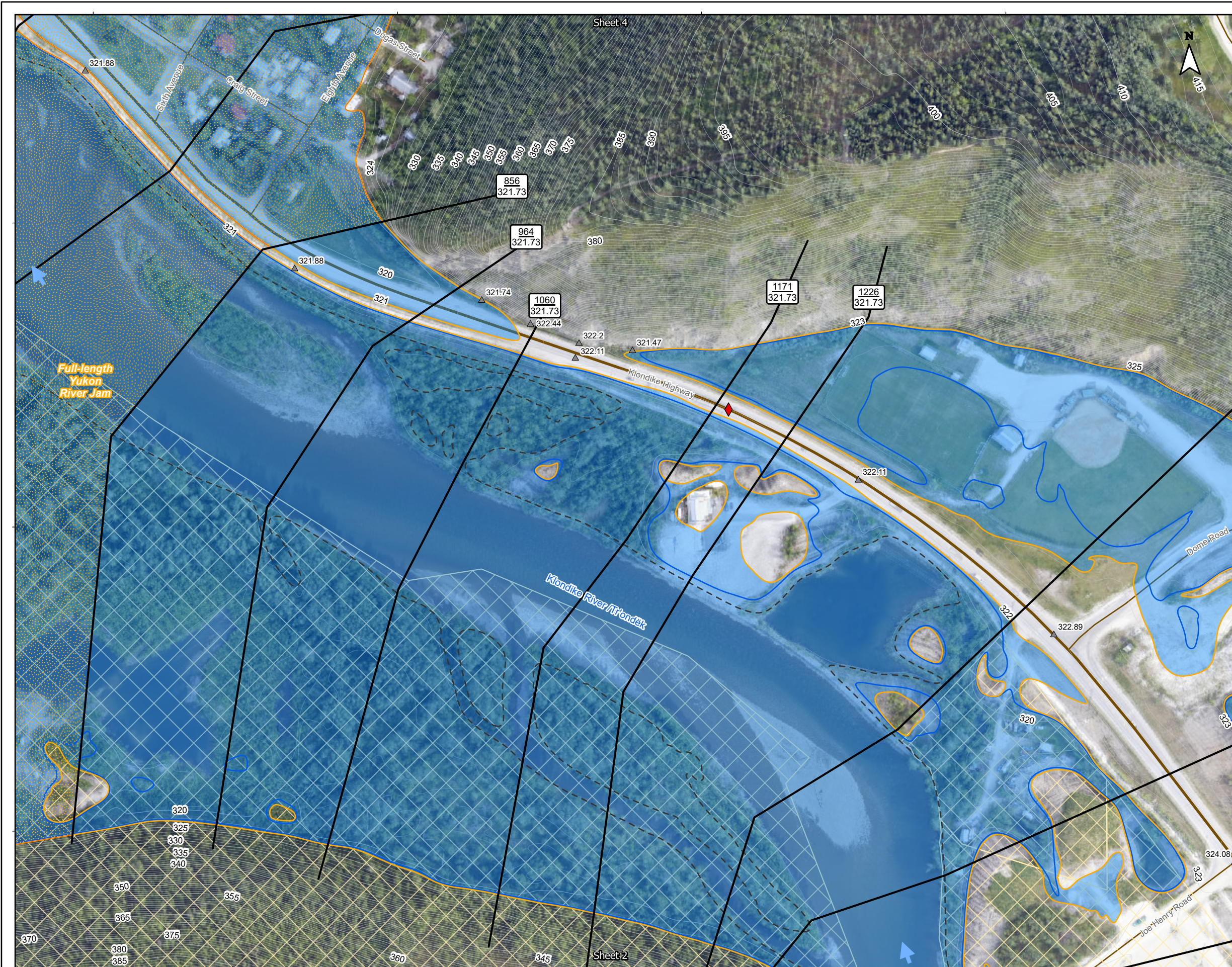


Figure No. **DC-0.5-03** Sheet 03 of 07

Title: **Dawson City and Klondike Valley Flood Mapping Study
Composite Flood Hazard Map - Yukon River
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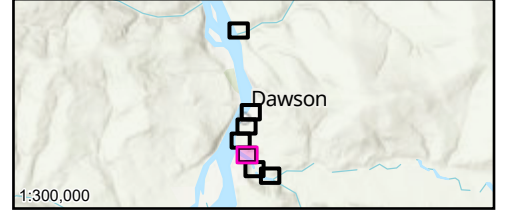
Client/Project:
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Department of Environment
Water Resources Branch

Project: 123222713

Project Location: Dawson, Yukon
Prepared by MANDERSON on 2025-07-29
Requested by JMUIRHEAD on 2024-03-30
Review by JMUIRHEAD on 2025-07-29

- ▲ Ground Elevations of Interest
- ◆ HPW Drainage Culverts
- 57 / 517.2 Cross-Section Number WSE (m) Along Cross-Section
- Highway
- Local Road
- Major Contour (5m)
- Minor Contour (1m)
- Surveyed Cross-Sections Used in Hydraulic Model
- Tr'ondëk Hwëch'in Settlement Land
- Inundation Under Modelled Open Water Runs
- Inundation Under Modelled Breakup Ice Jam Runs
- Approximate 50% AEP Open Water Flood Inundation
- Composite Open Water and Ice Jam Inundation Extent
- Ice Coverage in Breakup Jam Scenarios

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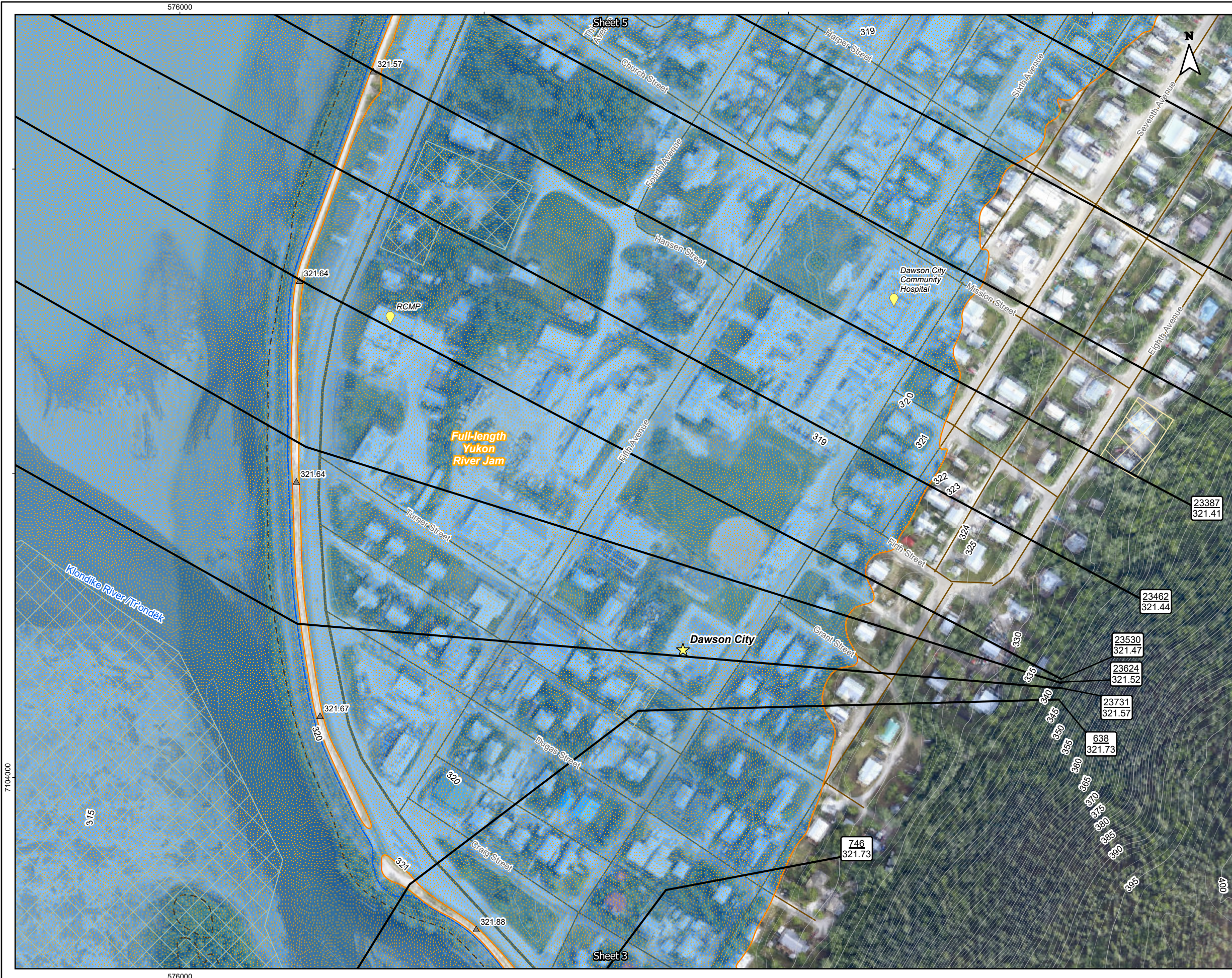


Figure No. **DC-0.5-04** Sheet 04 of 07

Title: **Dawson City and Klondike Valley Flood Mapping Study
Composite Flood Hazard Map - Yukon River
0.5% Annual Exceedance Probability (AEP)**

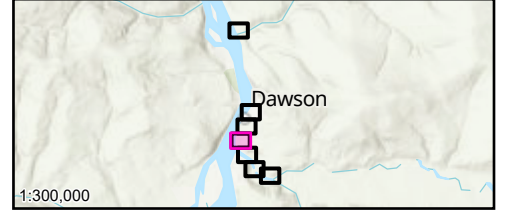
Client/Project:
Government of Yukon
Department of Environment
Water Resources Branch

Project: 123222713

Project Location: Dawson, Yukon
Prepared by MANDERSON on 2025-07-29
Requested by JMUIRHEAD on 2024-03-30
Review by JMUIRHEAD on 2025-07-29

- ▲ Ground Elevations of Interest
- ★ Municipality
- Point of Interest
- 57 / 517.2 Cross-Section Number WSE (m) Along Cross-Section
- Highway
- Local Road
- Major Contour (5m)
- Minor Contour (1m)
- Surveved Cross-Sections Used in Hydraulic Model
- Tr'ondëk Hwëch'in Settlement Land
- Inundation Under Modelled Open Water Runs
- Inundation Under Modelled Breakup Ice Jam Runs
- Approximate 50% AEP Open Water Flood Inundation
- Composite Open Water and Ice Jam Inundation Extent
- Ice Coverage in Breakup Jam Scenarios

Map Publication Date: 7/29/2025
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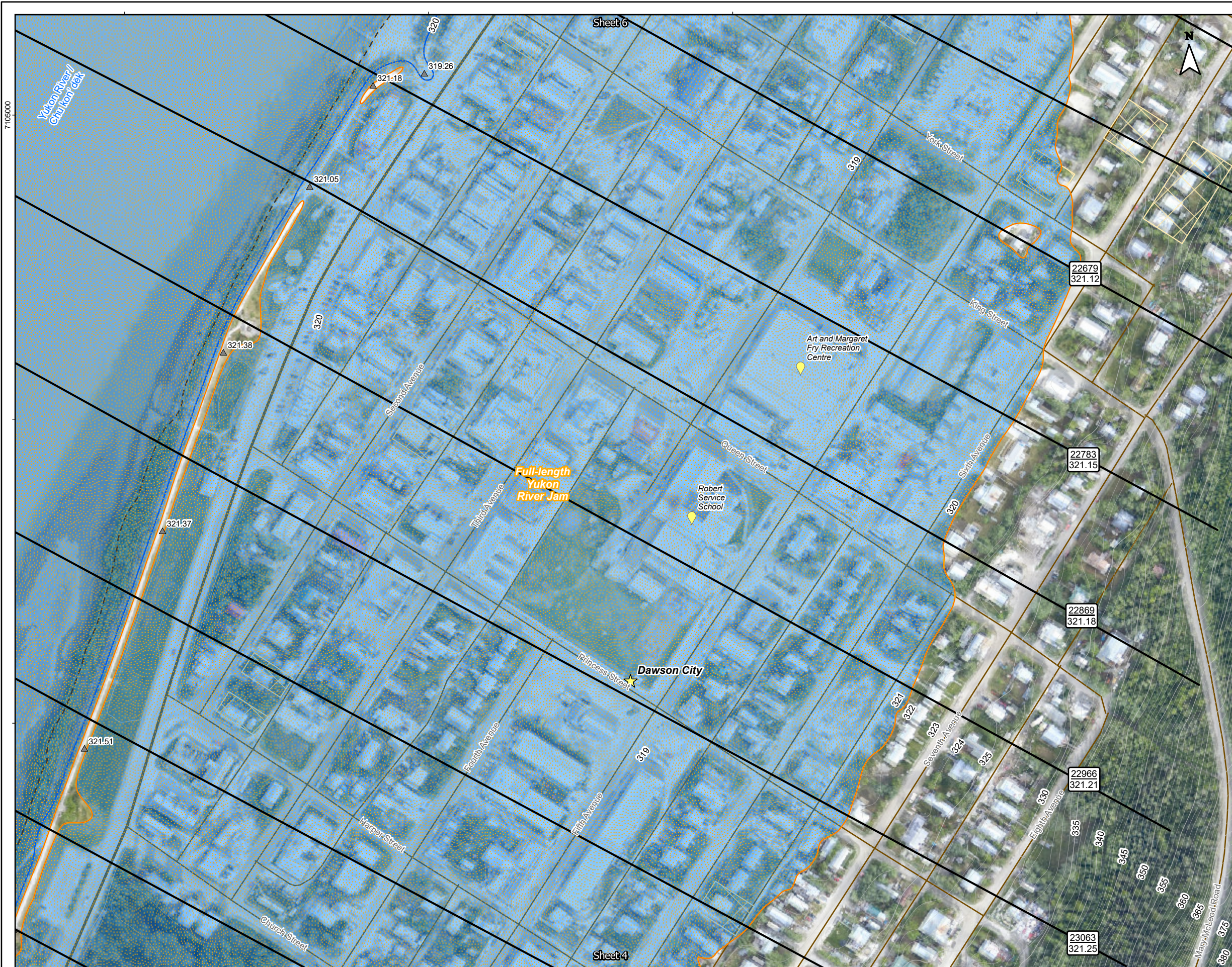


Figure No. **DC-0.5-05** Sheet 05 of 07

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Composite Flood Hazard Map - Yukon River
0.5% Annual Exceedance Probability (AEP)**

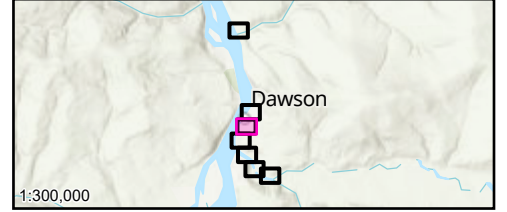
Client/Project:
**Government of Yukon
Department of Environment
Water Resources Branch**

Project: 123222713

Project Location: Dawson, Yukon
Prepared by MANDERSON on 2025-07-29
Requested by JMUIRHEAD on 2024-03-30
Review by JMUIRHEAD on 2025-07-29

- ▲ Ground Elevations of Interest
- ★ Municipality
- Point of Interest
- 57 / 517.2 Cross-Section Number WSE (m) Along Cross-Section
- Highway
- Local Road
- Major Contour (5m)
- Minor Contour (1m)
- Surveved Cross-Sections Used in Hydraulic Model
- Tr'ondëk Hwëch'in Settlement Land
- Inundation Under Modelled Open Water Runs
- Inundation Under Modelled Breakup Ice Jam Runs
- - - Approximate 50% AEP Open Water Flood Inundation
- Composite Open Water and Ice Jam Inundation Extent
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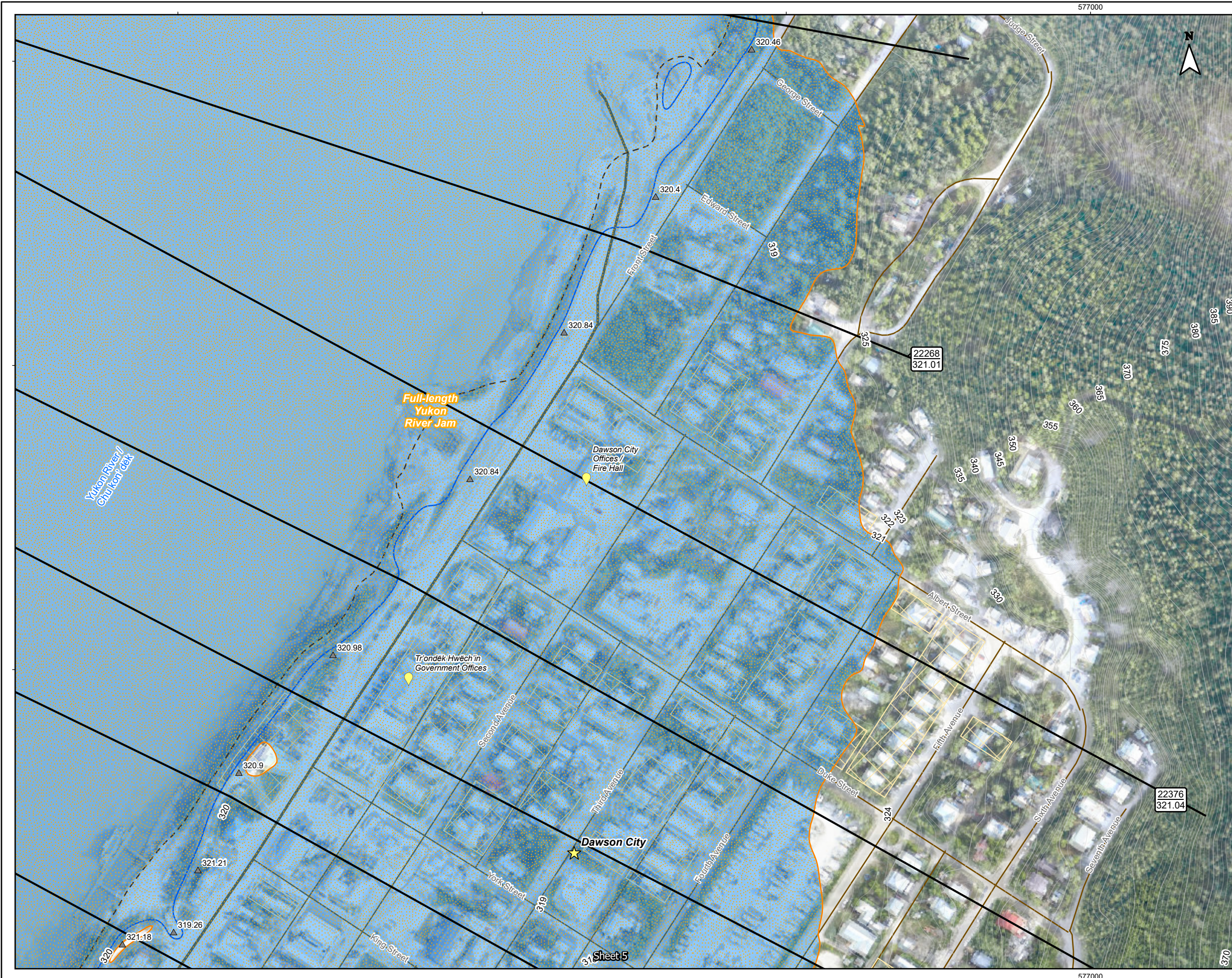


Figure No. **DC-0.5-06** Sheet 06 of 07

Title: **Dawson City and Klondike Valley Flood Mapping Study
Composite Flood Hazard Map - Yukon River
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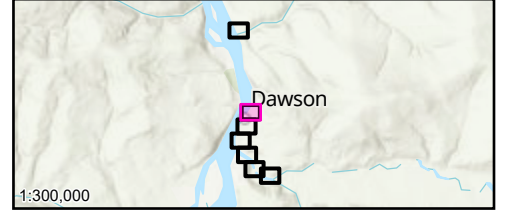
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Water Resources Branch

Project: 123222713

Project Location: Dawson, Yukon
Prepared by MANDERSON on 2025-07-29
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- Local Road
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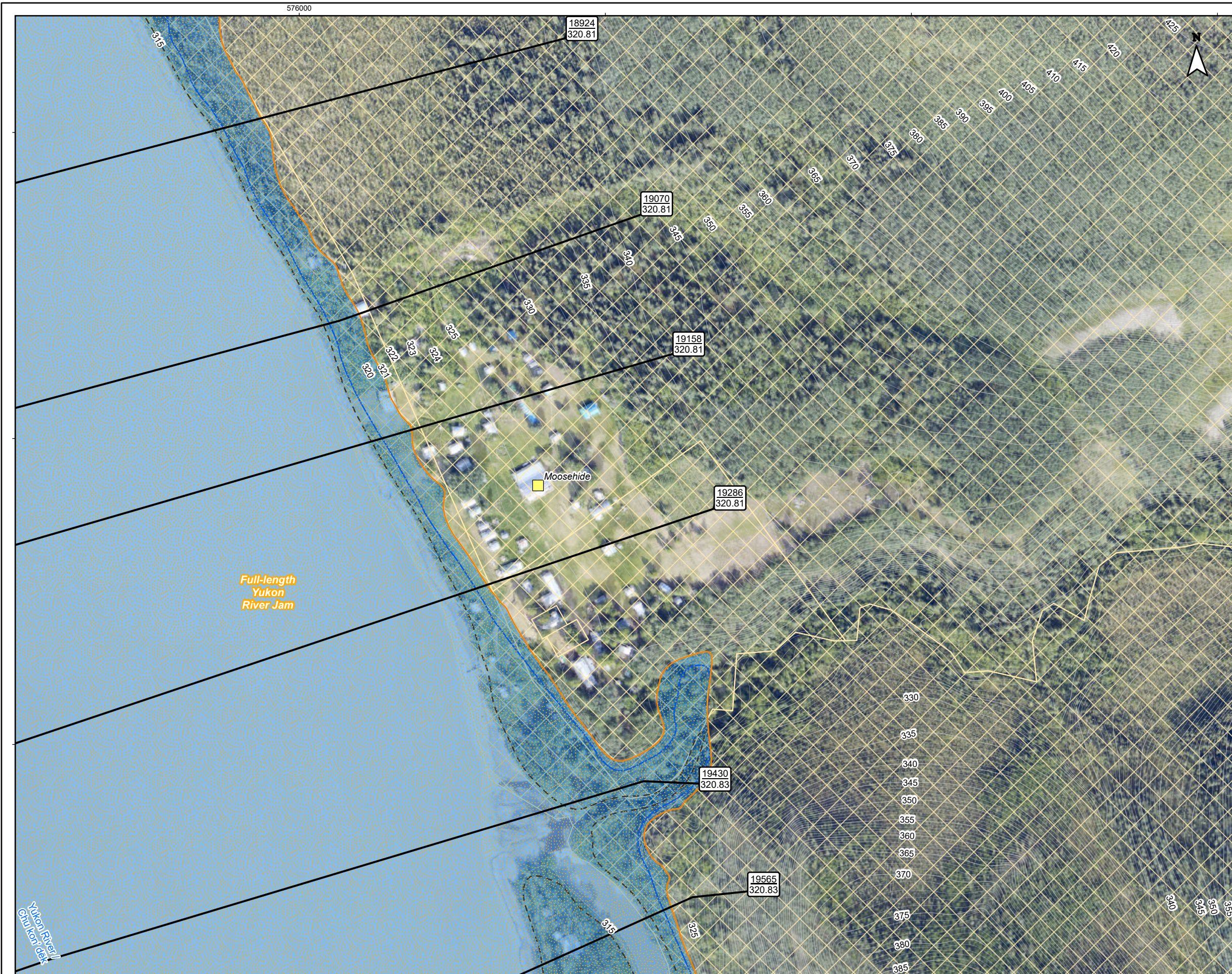


Figure No. **DC-0.5-07** Sheet 07 of 07

Title: **Dawson City and Klondike Valley Flood Mapping Study
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Client/Project:
Government of Yukon
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Water Resources Branch

Project: 123222713

Project Location: Dawson, Yukon

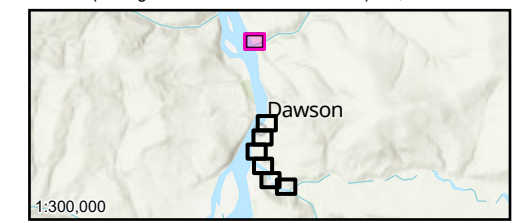
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