

60 Victoria Street North, Kitchener

Draft

Temporary Protection Plan Demolition and Stabilization Plan Risk Management Plan

Project Location:

60 Victoria Street North, Kitchener, ON

Prepared for:

Region of Waterloo 150 Frederick Street, 4th Floor Kitchener, ON N2G 4J3

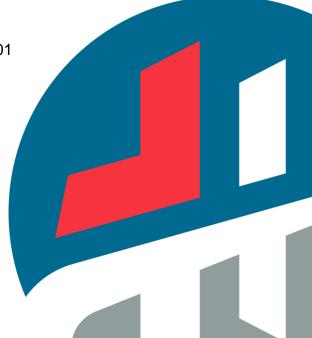
Prepared by:

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Appendix A Demolition Drawings and Details

1.0 EXECUTIVE SUMMARY

MTE Consultants, Inc. has been retained by the Region of Waterloo to prepare a Heritage Conservation Plan for the existing building at 60 Victoria Street North, Kitchener. The subject property contains the Rumpel Felt building, a three-storey felt factory that was built c. 1913 with three additions constructed in 1942, 1962, and 1968, respectively. The Region of Waterloo desires to demolish the three additions while preserving the 1913 building in preparation for the adjacent future transit hub (Kitchener Central Transit Hub). The existing additions will impede on the plans for the Transit Hub and the demolition will allow the transit hub to proceed while conserving the heritage resource on the site, which is the original structure from 1913. The plans for the restoration and redevelopment or adaptive reuse of the original Rumpel Felt building can then proceed separately. The Heritage Impact Assessment, prepared by The Landplan Collaborative Ltd., outlines the character defining elements of the 1913 building to be maintained during reuse or redevelopment. The Demolition and Stabilization Plan is intended to show the means and methods to be used minimize potential damage to the existing 1913 façade during demolition of the building additions.

This plan outlines the means and methods by which these heritage resources, in the form of the existing front and right side façades, shall be preserved through the process of the demolition of the three building additions, and how the 1913 building will be protected and stabilized. Protecting and shoring the structure in place during the demolition of the building additions is the method that has been chosen to preserve the 1913 building. This report elaborates on how this method shall be carried out while preserving the heritage resources of the existing building.

2.0 OWNER CONTACT INFORMATION

Multimodal Hub Project Coordinator- Christa De Wys CDeWys@regionofwaterloo.ca

Regional Municipality of Waterloo 150 Frederick Street Kitchener, ON N2G 4J3

3.0 EXISTING CONDITIONS

The subject property is a three-storey felt factory located at 60 Victoria Street North in Kitchener, Ontario. The original building was built in 1913 and has three later additions built in 1942, 1962, and 1968. The original 1913 structure is a combination of load bearing brick masonry and steel framing bearing on steel columns and beams infilled with board-formed concrete floor slabs. The original 1913 roof is constructed with sloped steel beam and purlin framing with joist infill. There are large arched openings around the building façade with a combination of various window vintages and infilled sections of split face architectural concrete block, along with red metal cladding. The Boiler house portion of the original building is of similar construction. There is an undated shed against the west façade that is not part of the heritage resource of the building.

The 1942 addition was constructed with similar techniques however the floors are panel-formed in contrast to the board-forms of the original structure. The west face of this addition has been removed with the additions of the 1962 and 1968 sections. The foundation wall can still be observed at the main floor level. The south wall now serves as an interior wall. There is a brick chimney that is part of this addition, that is not connected to the original 1913 construction.

The 1962 and 1968 additions are steel framed and the exterior perimeter walls are not load bearing which can be seen through the continuous architectural strip windows and fiberglass translucent panes. Muli-wythe terra cotta masonry units, also known as speedtile, clad the exterior walls. Existing foundations consist of poured in place concrete.

The 1913 building will also be preserved with restoration of the east wall, currently forming part of the 1942 addition. As the 1913 building was in place prior to the addition, demolition is not expected to largely affect the structure except where beam and other connections were made along the east wall. There is a stairwell structure part of the 1942 addition which will remain in place and not be demolished. The 1962 and 1968 additions are connected to the 1942 addition and have no sharing walls with the original structure.

The east wall of the 1913 building has been generally sheltered from weather and is in serviceable condition; however, localized damage was noted in several areas and repairs are expected when the structural connections of the 1942 addition are removed.

Along the remaining façades of the 1913 building there is localized brick deterioration, and the mortar joints are in varying states of repair, with some joints and bricks having been previously repaired with non-matching modern materials. Overall, the brick on the remaining façades appears to be in sound condition with the exception of localized mortar deterioration.

It is concluded that the existing 1913 building and original façades (north, east, west and south) are adequate to sustain the demolition work required.

4.0 TEMPORARY PROTECTION PLAN

It is the intent of the conservation plan to protect and hoard the front entrances (south side) of the 1913 building in place during the demolition of the remaining structure. In addition, the following items highlight the requirements of this plan.

The steel structures from the addition will be shored in place during the demolition of the steel structures of the additions. This will prevent possible movement of steel connected to the original 1913 structure, which will prevent damage to the original construction.

All brick needed for masonry repairs and infills from the demolished chimney shall be salvaged and retained in a secure manner. Brick shall be covered and protected from weather. Brick shall be segregated between sound and unsound brick. Bricks from additions shall be kept separate. Brick that is not reused or incorporated into infills in the east façade of the 1913 building, per OP Policy 12.C.1.32, shall be offered to the City of Kitchener for reuse, archival, display, or commemorative purposes. Specific details of the brick storage shall be included in the Salvage and Documentation Plan.

5.0 DEMOLITION AND STABILIZATION PLAN

Based on the direction provided above, the demolition and stabilization shall be conducted according to the plan outlined below. This plan consists of many steps, which are also illustrated in Drawing S2.2.

Temporary shoring and bracing of the building are indicated on drawing S2.2. This
braced portion indicated by the shaded area will remain in place until the rest of the
building is demolished, and the additions are disconnected from the 1913 building. Once
the structure of the bays between the 1913 building and the shaded area has been
demolished and removed by crane, the braced structure in the shaded area will be
demolished and removed.

- 2. It is anticipated that a crane will be set up on the northeast parking area to initiate the demolition of the east most bay of the building. Demolition will progress from east to west. It is anticipated that the crane will set up at several locations as more building is removed and to facilitate the crane reaching new structure. The sequence is shown on Drawing S3.2. and is included below.
 - The equipment for demolition is not anticipated to produce any significant vibration or impact. Monitoring of equipment will be conducted by the Heritage Professional and the Structural Engineer to ensure no vibratory equipment is used.
 - Shoring and demolition shall be performed per the requirements of the contract documents and reviewed by the design team and submitted for building permit.
- 3. Shoring and demolition shall be performed under the direction of both a professional engineer and the Heritage Professional.

5.1 Demolition Sequence and Temporary Shoring/Bracing Plan

Contractor's Engineer to design building bracing to support the portion of building proposed to be demolished (i.e. the 1942, 1962, 1968 additions). Designer to consider all temporary conditions as the building is progressively demolished generally from east to west. Bracing shown and sequence is one concept. Contractor is to provide all necessary counterweights or helical piles to resist tension/compression if, or as, required. Provide P.Eng. sealed design shop drawings of bracing and demolition sequence for review and approval by MTE prior to installation. Sequence of demolition is proposed as follows:

- 1. Install temporary building braces as shown on levels 1, 2 and 3 to roof, complete with counterweights or helicals as required. Install protection hoarding of entrances as indicated in the HIA report.
- 2. Install vertical shoring of floor framing and slab of levels 2, 3 and roof.
- 3. Demolish building bay from lines 10 to 9.
- 4. Demolish building bay from lines 9 to 8.
- 5. Remove building brace on line 8 and demolish building bay from lines 8 to 7.
- 6. Demolish building area Bx6-Ax7 and Fx6-Ex7, while maintaining the structure in the shaded area and three braces all three levels. Carefully disassemble brick from chimney and reclaim sufficient brick for repairs on 1913 east wall.
- 7. Cut and remove portion of beams that frame into 1913 Building east wall, as well as cutting and removing portion of floor slabs and roof.
- 8. Demolish and remove portion of building between 1913 building and the shaded braced portion.

6.0 STRUCTURAL ASSESSMENT REPORT

A structural assessment was conducted in 2011 by MTE. The report is included in Appendix B of the Heritage Conservation Plan. The purpose of the report was to evaluate and discuss the potential reuse of the 1913 building in adding additional storeys. A Geotechnical investigation was completed during this work to expose column footings and to determine the soil bearing capacity. It was also recommended in this report that shoring be installed to support the roof structure. The Region later installed this, as per MTE's recommendations.

The building condition has not worsened since the 2011 structural assessment. MTE has prepared a current structural assessment report and officially comments that the proposed partial demolition will not adversely affect the 1913 building. The assessment report and the Risk Management plan and demolition drawings will indicate the monitoring of the roof shoring during and after the demolition is complete. A roof condition assessment is recommended to be carried out to determine all potential sources of leaks and to investigate the condition of the roof deck.

7.0 RISK MANAGEMENT PLAN

The Demolition and Stabilization Plan has been developed with the intent to minimize vibration and other construction activities to the property during demolition. The mitigation means are noted below.

- If required, earth retention shoring shall be design using drilled or augured piles for the removal of the foundations of the building additions. Pile driving is not permitted.
- If required, temporary building shoring shall utilize helical screw piles.
- No vibratory equipment shall be used on site.
- Smooth-wheel rollers should be used to compact backfilled soil. Impact rammers and vibratory soil compactors are not allowed.
- The contractor shall regularly monitor the remaining façade during demolition to ensure no degradation of the façade is occurring.
- Continuous vibration monitoring of the 1913 building will be implemented, and the Heritage Professional along with the Structural Engineer shall regularly visit the site during demolition to review the façade of the 1913 building for any impact, shifting or new deterioration.
- If damage to the heritage resource does occur during demolition, work in that area of the structure shall immediately be stopped. The Heritage Professional and a Structural Engineer shall be called in to review the damage and develop a restoration plan. Work shall not continue in that area until the contractor has assessed the cause for the damage and developed updated procedures to prevent it from happening further.
- Salvaged bricks from the chimney shall be removed and cleaned by hand processes to prevent damage. Bricks shall be stored on pallets, protectively wrapped and stored on the ground floor of the 1913 building/ an adequate safe location.
- During demolition, site visits will be summarized in a report to comment on observed conditions and findings. Once demolition is completed, the Heritage Professional and a Structural Engineer shall visit the site on a quarterly basis to review all of the temporary protection measures and facade conditions. After one year of reporting, and assuming no change in observed conditions, reporting will witch to bi-annual reviews for a period of 2 years.
- If there are signs of movement of the 1913 building such as new or widening cracks or changes in condition, monitoring gauges will be installed at the crack location(s), and the frequency of the structural monitoring will be increased to monthly reviews.

 The Region has a security company monitoring the building to check that it is secured.

8.0 REPORT PREPARER

This report has been authored by Kurt Ruhland, P.Eng., CAHP, Cassandra Fusato, P.Eng., CAHP-Intern, and Paul Slater, P.Eng. Kurt has been a professional consulting engineer in the building industry for over 30 years and a member of the Canadian Association of Heritage Professionals (CAHP) since 2016. Kurt has been involved in the structural restoration of dozens of designated and non-designated heritage building across Southern Onterio. Notable projects include the Elora Mill restoration in Elora, the restoration of Devereaux House in Halton Hills and the renovation of Creelman Hall at the University of Guelph.

Cassandra has 10 years of industry experience within building restoration and building science. She has been a CAHP Intern since 2024 and has worked on building and façade restoration of various types. She has been involved in helping with the heritage restoration planning of the Kingston City Hall clock tower and front entrance stone stairs along with the Kingston Courthouse entrance column capitals.

Paul has over 25 years of experience in the structural engineering consulting field. He manages and performs the structural design of commercial, office, industrial and residential projects including new construction, renovations and additions. He has experience in structural building assessment reports, feasibility studies and structural damage reports and repairs. His projects range in fees from \$500 to \$200,000 and include concrete, steel, wood and masonry structures.

9.0 CONCLUSION

The property at 60 Victoria Street North, Kitchener contains a three-storey felt factory that was built c. 1913 with three additions constructed in 1942, 1962, and 1968, respectively. It is understood that the intention is to demolish the 1942, 1962, and 1968 additions while maintaining the original 1913 Rumpel Felt building which contains heritage value. It is proposed to preserve this heritage asset by repairing and protecting the east façade which will become exposed after the demolition, while leaving the remaining building in place without changes to its interior or other façades.

It is proposed that this be accomplished by the shoring the structure in place during demolition, providing vibratory monitoring and control as well as periodic review of the structure during the demolition process by a Heritage Professional and Structural Engineer. This report provides the plans outlining the means and methods by which this is to occur.

All of which is respectfully submitted,

MTE Consultants Inc.

DRAFT DRAFT

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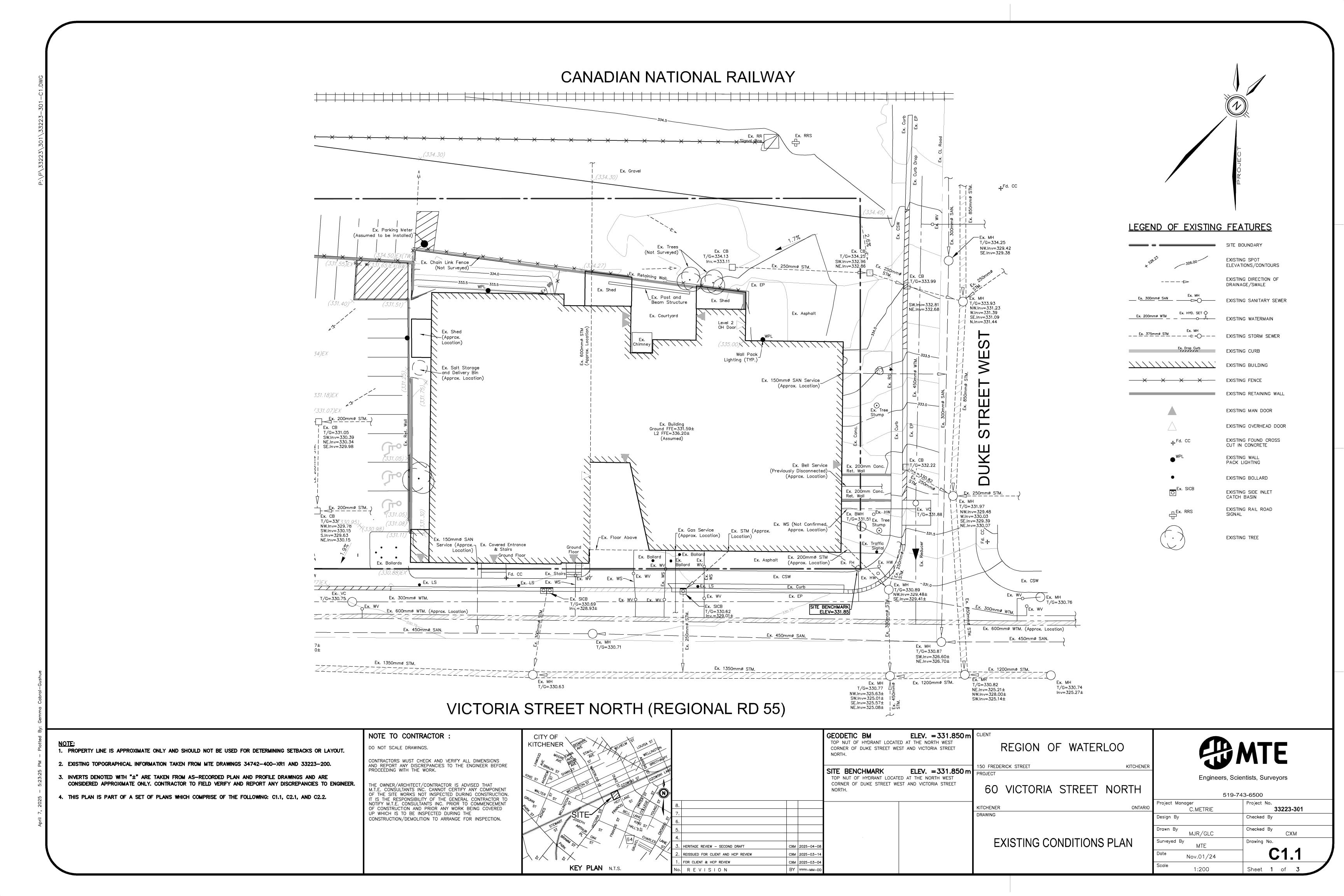
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 $https://mte85.sharepoint.com/sites/33223-301/Shared\ Documents/Heritage/Conservation\ Plan/Risk\ Management\ Plan/33223_301_rpt_Risk\ Management\ Plan_Draft_Rev.01.docx$

Appendix A

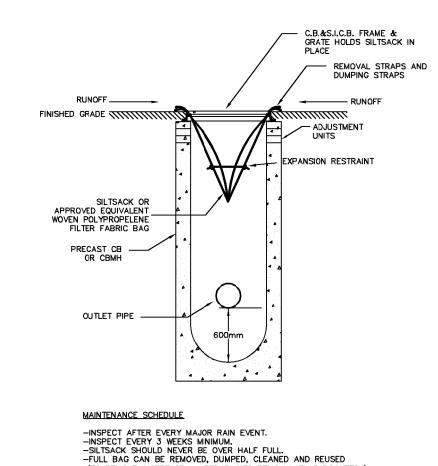
Demolition Drawings and Details





CONSTRUCTION NOTES AND SPECIFICATIONS GENERAL 1.1. THIS PLAN IS NOT FOR CONSTRUCTION UNTIL SIGNED AND SEALED ONLY. THIS PLAN MUST NOT BE USED TO SITE THE PROPOSED DESIGN ENGINEER. WITHOUT THE PERMISSION OF MTE CONSULTANTS INC. 1.5. PRIOR TO CONSTRUCTION, THE CONTRACTOR MUST: ENGINEER PRIOR TO PROCEEDING

- ALL TIMES.
- BY ENGINEER AND APPROVED BY THE CITY OF KITCHENER. 1.2. THIS PLAN IS TO BE USED FOR SERVICING AND GRADING ONLY; ANY OTHER INFORMATION SHOWN IS FOR ILLUSTRATION PURPOSES
- 1.3. NO CHANGES ARE TO BE MADE WITHOUT THE APPROVAL OF THE
- 1.4. THIS PLAN IS NOT TO BE REPRODUCED IN WHOLE OR IN PART
- 1.5.1. CHECK AND VERIFY ALL EXISTING CONDITIONS, LOCATIONS AND ELEVATIONS WHICH INCLUDES BUT IS NOT LIMITED TO THE BENCHMARK ELEVATIONS, EXISTING SERVICE CONNECTIONS AND EXISTING INVERTS. REPORT ALL DISCREPANCIES TO THE
- 1.5.2. OBTAIN ALL UTILITY LOCATES AND REQUIRED PERMITS AND
- 1.5.3. CONFIRM ALL DRAWINGS USED FOR CONSTRUCTION ARE OF THE MOST RECENT REVISION.
- 1.6. THE CONTRACTOR SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO EXISTING WORKS. THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL DAMAGED AND/OR DISTURBED PROPERTY WITHIN THE MUNICIPAL RIGHT-OF-WAY TO CITY OF KITCHENER STANDARDS
- RESTORATION OF ANY DAMAGE CAUSED TO THE ADJACENT DESIGNATED RUMPEL FELT BUILDING SHALL BE IN ACCORDANCE WITH THE HIGHER STANDARDS OF HERITAGE REQUIREMENTS, REFER TO BY-LAW 2024-141 AS APPLICABLE
- 1.8. ALL WORKS ON A MUNICIPAL RIGHT-OF-WAY WITH THE EXCEPTION OF WATERMAIN TAPPING, TO BE INSTALLED BY THE OWNER'S CONTRACTOR AT OWNER'S EXPENSE IN ACCORDANCE WITH THE CITY OF KITCHENER'S "PROCEDURE FOR OFF-SITE WORKS BY PRIVATE CONTRACTOR". THE OWNER AND CONTRACTOR ARE TO ENSURE OFF-SITE WORKS PERMIT IS IN PLACE PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL AFFECTED PROPERTY TO ORIGINAL CONDITION. ALL BOULEVARD AREAS SHALL BE RESTORED WITH 150mm TOPSOIL AND SOD.
- 1.9. ALL UNDERGROUND SERVICES ARE TO BE CONSTRUCTED IN FULL COMPLIANCE WITH THE ONTARIO PROVINCIAL BUILDING CODE (PART PLUMBING), THE ONTARIO PROVINCIAL STANDARD SPECIFICATIONS (OPSS) AND THE REQUIREMENTS OF THE CITY OF KITCHENER AND THE REGIONAL MUNICIPALITY OF WATERLOO; WHICH CODES AND REGULATIONS SHALL SUPERSEDE ALL OTHERS.
- 1.10. CONTRACTOR IS RESPONSIBLE FOR CONTACTING ENGINEER 48 HRS PRIOR TO COMMENCING WORK TO ARRANGE FOR INSPECTION. ENGINEER TO DETERMINE DEGREE OF INSPECTION AND TESTING REQUIRED FOR CERTIFICATION OF UNDERGROUND SERVICE INSTALLATION AS MANDATED BY ONTARIO BUILDING CODE, DIVISION C, PART 1, SECTION 1.2.2, GENERAL REVIEW. FAILURE TO NOTIFY ENGINEER WILL RESULT IN EXTENSIVE POST CONSTRUCTION INSPECTION AT CONTRACTORS EXPENSE.
- 1.11. EXISTING TOPOGRAPHIC AND LEGAL INFORMATION TAKEN FROM PLAN PREPARED BY J.D. BARNES LTD., DATED 2021-04-21 AND PLAN PREPARED BY MTE 2012-02-27. MTE ASSUMES THAT ALL TOPOGRAPHICAL INFORMATION IS AN ACCURATE REPRESENTATION
- 1.12. CONTRACTOR TO OBTAIN WRITTEN PERMISSION FROM ADJACENT PROPERTY OWNER PRIOR TO ENTERING UPON NEIGHBOURING LANDS TO UNDERTAKE ANY WORK. COPIES OF THESE LETTERS OF CONSENT SHALL BE SUBMITTED TO THE DEVELOPMENT SERVICES DEPARTMENT FOR APPROVAL PRIOR TO ANY WORK BEING PERFORMED. FAILURE TO COMPLY WITH THE ABOVE IS AT CONTRACTOR'S OWN RISK.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD INCLUDING THE SUPPLY, INSTALLATION AND REMOVAL OF ALL NECESSARY SIGNALS, DELINEATORS, MARKERS, AND BARRIERS. ALL SIGNS, ETC SHALL CONFORM TO THE STANDARDS OF THE CITY OF KITCHENER AND THE MTO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. ALL TRAFFIC CONTROL TEMPORARY CONDITIONS TO CONFORM TO ONTARIO TRAFFIC MANUAL (OTM) BOOK 7.



(TO DUMP INSERT 25mm REBAR INTO BOTH DUMPING STRAPS)

TEMPORARY SILTSACK SILTATION CONTROL IN CB & SICB

1.14. CONTRACTOR MUST MAINTAIN SINGLE LANE TWO-WAY TRAFFIC AT

1.15. THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM THEM SELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO

2. EROSION AND SEDIMENT CONTROL

- CONTRACTOR TO INSTALL EROSION CONTROL MEASURES AS SHOWN PRIOR TO CONSTRUCTION AND MAINTAIN IN GOOD CONDITION UNTIL CONSTRUCTION IS COMPLETED AND ALL DISTURBED GROUND SURFACES HAVE BEEN RESTABILIZED EITHER BY PAVING OR RESTORATION OF VEGETATIVE COVER.
- 2.2. ALL SEDIMENT CONTROL FENCING TO BE INSTALLED PRIOR TO ANY AREA GRADING, EXCAVATING OR DEMOLITION COMMENCING.
- 2.3. EROSION PROTECTION TO BE PROVIDED AROUND ALL STORM AND SANITARY MHs AND CBs. 2.4. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS
- SITE DEVELOPMENT PROGRESSES. CONTRACTOR TO PROVIDE ALL ADDITIONAL EROSION CONTROL STRUCTURES. 2.5. EROSION CONTROL STRUCTURES TO REMAIN IN PLACE UNTIL ALL
- DISTURBED GROUND SURFACES HAVE BEEN RESTABILIZED. 2.6. NO ALTERNATE METHODS OF EROSION PROTECTION SHALL BE PERMITTED UNLESS APPROVED BY THE ENGINEER AND THE LOCAL

MUNICIPALITY'S DEPARTMENT OF PUBLIC WORKS.

- CONTRACTOR TO CLEAN ROADWAY AND SIDEWALKS OF SEDIMENTS RESULTING FROM CONSTRUCTION TRAFFIC FROM THE SITE EACH
- CONTRACTOR MUST REMOVE EROSION AND SEDIMENTATION FENCING PRIOR TO COMPLETION OF PROJECT. CONTRACTOR TO HAVE EROSION AND SEDIMENTATION FENCE INSPECTED WHEN VEGETATION HAS ESTABLISHED, BUT PRIOR TO FENCE BECOMING OVERGROWN. ENGINEER'S REPRESENTATIVE TO DETERMINE IF VEGETATION HAS REACHED THE CRITICAL POINT AND WILL THEN INSTRUCT CONTRACTOR TO REMOVE FENCE.

MAINTENANCE RECOMMENDATIONS

- EROSION CONTROL STRUCTURES TO BE MONITORED REGULARLY AND ANY DAMAGE REPAIRED IMMEDIATELY. SEDIMENTS TO BE REMOVED WHEN ACCUMULATIONS REACH A MAXIMUM OF 1/3 THE HEIGHT OF THE FENCE.
- 3.2. OWNER'S REPRESENTATIVE TO MONITOR EROSION CONTROL STRUCTURES TO ENSURE FENCING IS INSTALLED AND MAINTENANCE IS PERFORMED TO CITY REQUIREMENTS.

HEALTH AND SAFETY:

— PRIOR TO INITIATION OF ANY SUBSURFACE ACTIVITIES, THE LOCATION MINISTRY OF LABOUR OFFICE SHALL BE NOTIFIED, WHERE SO PRESCRIBED UNDER THE OHSA, OF THE PROPOSED ACTIVITIES AND THA CONTAMINANTS OF CONCERN HAVE BEEN IDENTIFIED IN SOIL AND GROUNDWATER ON THE SITE. THE HASP SHALL BE OVERSEEN BY A COMPETENT PERSON TO REVIEW THE PROVISIONS OF THE PLAN WITH RESPECT TO THE PROPOSED SITE WORK AND CONDUCT DAILY

THE CONTRACTOR HEALTH AND SAFETY COORDINATOR SHALL BE A QUALIFIED PROFESSIONAL PROVIDED BY THE GENERAL CONTRACTOR. EXCAVATION SHALL BE CARRIED OUT IN ACCORDANCE TO THE ATEST EDITION OF THE OCCUPATIONAL HEALTH AND SAFETY ACT

THE LOCATION OF ALL UNDERGROUND PIPES, ELECTRICAL CONDUCTORS, GAS, WATER AND SEWER LINES MUST BE DETERMINED PRIOR TO EXCAVATION WORK, ALL LINES MUST BE DE-ENERGIZED, LOCKED-OUT OR BLINDED WHERE FEASIBLE.

THE SPOILS SHALL BE PLACED FAR ENOUGH FROM THE EDGE OF EXCAVATION SO THAT IT DOES NOT FALL BACK (MINIMUM OF 2 FEET

EXCAVATED SOILS MUST BE CHARACTERIZED PRIOR TO RE-USE ON-SITE OR OFF-SITE DISPOSAL FOLLOWING THE REQUIREMENTS OF THE SOIL AND GROUNDWATER MANAGEMENT PLAN, REFER TO THE SOIL AND GROUNDWATER MANAGEMENT PLAN PREPARED BY MTE DATED MAY 10,

WHEN REQUIRED. AIRBORNE DUST PARTICULATE AND ODOUR SHALL BE CONTROLLED USING WATER SPRAY, SAWDUCT AND/OR A COMMERCIAL DUST SUPPRESSANT AS APPROPRIATE. TARPS MAY ALSO E USED TO COVER SOIL STOCKPILES AND OPEN FACES OF TRENCHES. WORKZONE TO BE DEMARCATED USING FENCING OR BARRIER TAPE,

WORKERS TO FOLLOW OUTLINED PROTOCOLS FOR HEALTH, SAFETY · LIMIT THE HEIGHT OF SOIL STOCKPILES AND LENGTH OF OPEN TRENCH AS WELL AS COVER SOIL STOCKPILES WITH TARPS.

ALL DEWATERING LIQUIDS TO BE PUMPED TO TEMPORARY STORAGE CONTAINER AND SAMPLED TO DETERMINE SUITABILITY FOR DISCHARGE. · A QUALIFIED PERSON IS REQUIRED TO BE RETAINED TO EVALUATION THE SEDIMENT AND LIQUID SAMPLING AND ANALYSIS PROGRAM.

· ANY IMPORTED SOILS USED TO BACKFILL EXCAVATED AREAS MUST B

SAMPLED AND ANALYZED IN ACCORDANCE WITH CURRENT REGULATIONS

AND INDUSTRY BEST MANAGEMENT PRACTICES. REVIEW AND REFER TO SUBSURFACE HEALTH & SAFETY PLAN PREPARED BY MTE DATED MAY 10, 2019 FOR ALL DETAILS AND

REVIEW AND REFER TO THE SOIL AND GROUNDWATER MANAGEMENT PLAN PREPARED BY MTE DATED MAY 10, 2019.

CANADIAN NATIONAL RAILWAY

Ex. Courtvard

BUILDING DEMOLITION

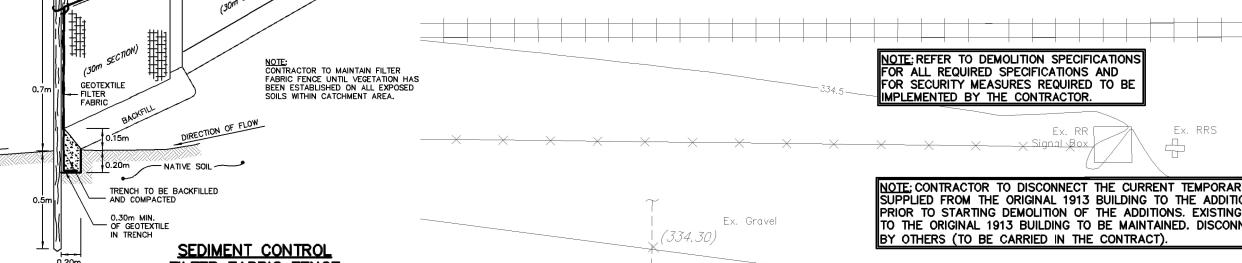
LIMITS (REFER TO

Ex. Building

L2 FFE=336.20±

(Assumed)

STRUCTURAL DWGS



REMOVE PORTION OF EXISTING

ASPHALT REMOVAL, REMOVE

EXISTING TIMBERS ON TOP OF CONCRETE RETAINING WALL.

EX. STORM PIPE TO BE

REMOVED TO THE EXTENT

DSSIBLE WITHOUT DISTURBING

1913 BUILDING AND CAPPED

NOTE: CONTRACTOR TO CONFIRM WHERE ROOF DRAINS ARE CONNECTED PRIOR TO

CONSTRUCTION AND REPORT FINDINGS TO

DESIGN ENGINEER TO DETERMINE WHICH

CONTRACTOR TO CONFIRM

WHAT IS CONNECTED TO

PRIOR TO CONSTRUCTION

THESE STORM PIPES

AND REPORT FINDINGS

Ex. 600mmø WTM, (Approx. Location)

Ex. 1350mmø STM.

STORM SERVICES CAN BE CAPPED/REMOVED

EXISTING ORIGINAL 1913

BUILDING TO REMAIN

ONSERVATION PLAN AND RISK MANAGEMENT PLAN PREPARED BY MTE.

VIBRATION REQUIREMENTS IN HERITAG

WATER SERVICE SERVICES EXISTING

BUILDING. ONCE CONFIRMED, THIS

SPRINKLER SYSTEM IN ORIGINAL 1913

EXISTING WATER SERVICE TO REMAIN.

FENCE WITHIN AREA OF

EQUIVALENT (500 MICRONS MAX OPENING SIZE)

Ex. Parking Meter

k. Chain Link Fence

REMOVE EX. SAL

STORAGE AND

DELIVERY BIN

(Assumed to be installed)

(331.40)

331.18)EX

Ex. CB

T/G = 3.31.05

SW.lnv = 330.39

NE.lnv=330.34

SE.Inv=329.98

T/G = 3377700

NW.Inv=329.78

S.lnv = 329.63

NE.Inv=330.15

SW.lnv = 330.15

<u>IE:</u> CONTRACTOR TO DISCONNECT THE CURRENT TEMPORARY POWE SUPPLIED FROM THE ORIGINAL 1913 BUILDING TO THE ADDITIONS PRIOR TO STARTING DEMOLITION OF THE ADDITIONS. EXISTING POWER TO THE ORIGINAL 1913 BUILDING TO BE MAINTAINED. DISCONNECTION **EXISTING TREES TO BE** REMOVED AND CLEAR & GRUB VEGETATION WITHIN AREA OF HARD

CONSTRUCTION

Ex. Asphal

Ex. 150mmø SAN Service

(Approx, Location)

REMOVE EX. WATER SERVICES (INCLUDING VALVES) TO

THE BUILDING ADDITIONS AND CAP AT MAIN PRIOR TO

DEMOLITION OF BUILDING ADDITIONS (TYP). CONTRACTOR TO COORDINATE DIRECTLY WITH THE CITY OF KITCHENER

FOR WATER SHUT OFF, REFER TO KITCHENER UTILITIES

INACTIVE WATER SERVICE REMOVAL CB-240 FOR

TOP NUT OF HYDRANT LOCATED AT THE NORTH WEST

TOP NUT OF HYDRANT LOCATED AT THE NORTH WEST

CORNER OF DUKE STREET WEST AND VICTORIA STREET

DETAILS. WATER SERVICES TO REMAIN ACTIVE UNTIL

THE START OF THE BUILDING ADDITIONS DEMOLITION.

REMOVE AND CAP

EX. SAN AT

PROPERTY LINE

EX. STM A

PROPERTY LINE

MAINTAIN 6.0m WIDE ASPHALT

FOR FUTURE TRANSIT

CONSTRUCTION PURPOSES

(335.00)(

NOTE: CONTRACTOR TO PROVIDE A THIRD PARTY PRE—CONSTRUCTION

HOTOS AND VIDEOS TO RECORD THE EXISTING PRE-CONSTRUCTION

(PARTIAL DEMOLITION)

CONDITIONS IN PARTICULAR OF THE ADJACENT EXISTING HERITAGE

PHOTOGRAPHIC AND VIDEO SURVEY INCLUDING DATED COLOUR

DESIGNATED RUMPEL FELT 1913 BUILDING TO REMAIN.

NOTE: BUILDING FOUNDATIONS TO BE COMPLETELY SUB

IMPORTED FILL AS REQUIRED. CARE SHALL BE TAKEN 🛚

EXCAVATED AND BACKFILLED WITH EXISTING FILL AND

TO NOT UNDERMINE THE EXISTING FOUNDATIONS TO

CXM 2025-03-

REMAIN. REFER TO STRUCTURAL DWGS.

Wall Pack

CONTRACTOR SHALL COORDINATE WITH KITCHENER

SURROUNDING BOLLARDS. CONTRACTOR TO ENSURE

THAT THE GAS HAS BEEN DISCONNECTED PRIOR TO

STARTING DEMOLITION OF THE BUILDING ADDITIONS.

METER AND EQUIPMENT, AND REMOVAL OF THE

UTILITIES FOR GAS SHUT OFF, REMOVAL OF THE GAS

AS ON-SITE WORKS) AS PER CITY OF KITCHENER PROCEDURI (OR OFFSITE WORKS BY CONTRACTOR). NOTE: ALL HYDRO/CABLE/TELEPHONE SERVICES AND NATURAL GAS TO BE DISCONNECTED OR RELOCATED BY UTILITIES (NOT PART OF MTE SCOPE) PRIOR TO START OF DEMOLITION WORK. THIS IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR (TO BE CARRIED AS PART OF THE CONTRACT). CONTRACTORS TO VERIFY WITH UTILITIES AND CONFIRM WHEN THE BUILDING IS CLEARED FOR DEMOLITION. NOTE: RESTORE LANDSCAPED AREAS

T/G = 334.25

T/G=333.93

NW.lnv=3.31.2.7

SF.Inv = 3.31.09

W.lnv = 3.31.39

N.lnv = 331.44

NW.Inv=329.48

LSF.lnv=329.39

REMOVE EX. WATER SERVICES (INCLUDING

VALVES) TO THE BUILDING ADDITIONS AND

CAP AT MAIN PRIOR TO DEMOLITION OF

BUILDING ADDITIONS (TYP). CONTRACTOR

TO COORDINATE DIRECTLY WITH THE CITY

KITCHENER FOR WATER SHUT OFF.

REFER TO KITCHENER UTILITIES INACTIVE

Ex. 600mmø WTM.

T/G = 330.82

NE.lnv=325.21±

NW.lnv=328.00±

KITCHENER

WATER SERVICE REMOVAL CB-240 FOR

DETAILS. WATER SERVICES TO REMAIN

ACTIVE UNTIL THE START OF THE

BUILDING ADDITIONS DEMOLITION.

→ W.Inv=330.03

NW.lnv=329.4

NOTE: ALL WORKS WITHIN THE MUNICIPAL RIGHT-OF-WAY TO

BE COMPLETED BY OWNER'S CONTRACTOR (SAME CONTRACTOR

TO ORIGINAL CONDITION OR BETTER NOTE: IT IS A REQUIREMENT OF THE RISK ASSESSMENT (RA) TO REINSTATE HARD CAP AND SOIL CAP SURFACES WHEN DISTURBED DURING EXCAVATION. THIS INCLUDES REINSTATEMENT OF GRANULARS, ASPHALT (CONCRETE TO MATCH EXISTING THICKNESS AND GRADE CONTINUED MAINTENANCE, OR ADDITIONAL HARD CAPPING (ASPHALT) OR SOIL CAPPING IS REQUIRED TO PREVENT DIRECT CONTACT (I.E. INGESTION, DERMAL CONTACT AND INHALATION OF DUST) TO SOIL CONTAMINANTS OF CONCERN (COCS) BY LANDSCAPE WORKERS, CONSTRUCTION WORKERS, AND TERRESTRIAL MAMMALS, BIRDS, PLANTS AND SOIL ORGANISMS. REFEI

TO RISK ASSESSMENT NO. 2733-9BALV7

(SEE DETAIL)

LIMIT OF CONSTRUCTION

FENCE (SEE DETAIL)

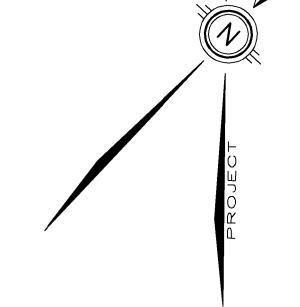
 $\sqrt{NW \ln v} = 329.48 +$

T/G = 330.87

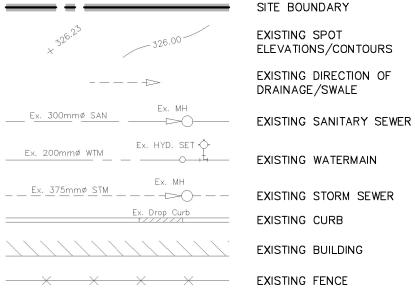
SW.lnv=326.60±

NOTE: EXISTING SAN, WS, AND STM SERVICE OCATIONS ARE APPROXIMATE AND ARE TO BE VERIFIED BY CONTRACTOR, REMOVE SAN AND

STM TO PROPERTY LINE AND CAP. WS TO BE ABANDONED AND CAPPED AT MAIN AS SHOWN



LEGEND OF EXISTING FEATURES



EXISTING RETAINING WALL EXISTING MAN DOOR EXISTING FOUND CROSS CUT IN CONCRETE EXISTING WALL

PACK LIGHTING EXISTING BOLLARD EXISTING SIDE INLET CATCH BASIN EXISTING RAIL ROAD SIGNAL

EXISTING TREE REMOVALS

LEGEND OF PROPOSED FEATURES

HARD SURFACE REMOVALS

SEDIMENT CONTROL FENCE

SILT SACK (SEE DETAIL) **ENGINEERING CONTROLS:** DUST CONTROL MEASURES (E.G., SPRAYING WITH POTABLE WATER), EQUIPMENT

CLEANING, AND THE MINIMIZATION OF CONTAMINANT TRACKING IN EQUIPMENT TRACKS AND TREADS DURING EXCAVATIONS AND ON-SITE SOIL HANDLING TO REDUCE THE COC EXPOSURES AND INADVERTENT RELOCATION OF COSS. TEMPORARY STOCKPILE REQUIREMENTS INCLUDING MEASURES TO CONTRO

CONTACT WITH UNDERLYING MATERIALS THROUGH THE USE OF COVERS AND LINERS (E.G., POLYETHYLENE SHEETING), DESIGNATION OF STOCKPILING AREAS, BERMING OR FENCING TO CONTROL ACCESS, AND STORM WATER RUNOFF CONTRO POTENTIAL TRANSPORT OF COCS OFF-SITE FROM CONSTRUCTION OR

DEVELOPMENT ACTIVITIES. THIS WILL INCLUDE, BUT MAY NOT BE LIMITED TO, SILT

FENCES AND FILTER SOCKS ON CATCH BASINS AND UTILITY COVERS AS

ENVIRONMENTAL COMPLIANCE APPROVAL.

TESTING IN ACCORDANCE WITH O. REG. 558/00 ALONG WITH THE REQUIREMENT ITHAT WASTE SOILS ONLY BE TRANSPORTED BY HAULERS APPROVE FOR WASTE TRANSPORT IN ONTARIO TO WASTE MANAGEMENT FACILITIES APPROVED IN ONTARIO THROUGH A WASTE DISPOSAL SITE CERTIFICATE OF APPROVAL OR

IN THE EVENT THERE IS A NEED FOR TEMPORARY CONSTRUCTION DEWATERING TO KEEP THE EXCAVATION FREE OF GROUNDWATER, DEWATERING ACTIVITIES WILL CONDUCTED IN A MANNER THAT WILL NOT INVOLVE ANY DISCHARGES TO THE NATURAL ENVIRONMENT SUCH AS: TEMPORARY STORAGE ON-SITE PRIOR TO OFF-SITE REMOVAL TO ANY APPROVE WATER TREATMENT FACILITY OR AGREEMEN' WITH THE REGION OF WATERLOO TO DISCHARGE TO THE SANITARY SEWER PER B'

-CONTRACTOR TO DISCHARGE ANY RUNOFF FROM WORK AREA TO SANITARY SEWER AND OBTAIN NECESSARY PERMITS FOR DISCHARGE PER BY-LAW 21-036

VICTORIA STREET NORTH (REGIONAL RD 55)

FOR CLIENT & HCP REVIEW

T/G = 3.30.7

1. PROPERTY LINE IS APPROXIMATE ONLY AND SHOULD NOT BE USED FOR DETERMINING SETBACKS OR LAYOUT.

2. EXISTING TOPOGRAPHICAL INFORMATION TAKEN FROM MTE DRAWINGS 34742-400-XR1 AND 33223-200.

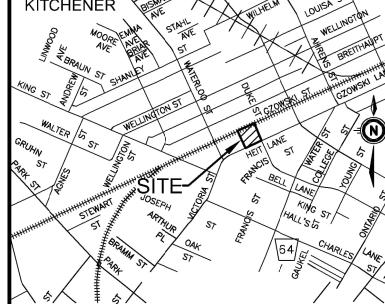
- 3. INVERTS DENOTED WITH "±" ARE TAKEN FROM AS-RECORDED PLAN AND PROFILE DRAWINGS AND ARE CONSIDERED APPROXIMATE ONLY. CONTRACTOR TO FIELD VERIFY AND REPORT ANY DISCREPANCIES TO ENGINEER.
- 4. THIS PLAN IS PART OF A SET OF PLANS WHICH COMPRISE OF THE FOLLOWING: C1.1, C2.1, AND C2.2.

NOTE TO CONTRACTOR

DO NOT SCALE DRAWINGS.

CONTRACTORS MUST CHECK AND VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE

HE OWNER/ARCHITECT/CONTRACTOR IS ADVISED THAT M.T.E. CONSULTANTS INC. CANNOT CERTIFY ANY COMPONENT OF THE SITE WORKS NOT INSPECTED DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO NOTIFY M.T.E. CONSULTANTS INC. PRIOR TO COMMENCEMENT OF CONSTRUCTION AND PRIOR ANY WORK BEING COVERED UP WHICH IS TO BE INSPECTED DURING THE CONSTRUCTION/DEMOLITION TO ARRANGE FOR INSPECTION.



KEY PLAN N.T.S.

REGION OF WATERLOO CORNER OF DUKE STREET WEST AND VICTORIA STREET NORTH. SITE BENCHMARK ELEV. $= 331.850 \, \text{m}$

ELEV. = 331.850 m CLIENT

T/G=330.77

NW.lnv=325.63±

 $SW.lnv = 325.01 \pm$

NE.Inv=325,08±

SE.lnv=325.57±

60 VICTORIA STREET NORTH

DEMOLITION AND EROSION & SEDIMENT CONTROL PLAN



Engineers, Scientists, Surveyors

519-743-6500

3000 300 000	
Project Manager	Project No.
C.METRIE	33223-301
Design By	Checked By
CXM	CXM
Drawn By	Checked By
MJR/GLC	CXM
Surveyed By	Drawing No.
MTE	
Date 0-+ 70 /04	C2 1
Oct.30/24	VZ. 1

Sheet 2 of

