- ALONG ADJOINING PROPERTIES GRADE TO MEET EXISTING OR PROPOSED ELEVATIONS WITH SODDED SLOPES (MIN. 3H TO 1V) AND/OR RETAINING WALLS AS SPECIFIED
- 2. ALL RETAINING WALLS, WALKWAYS, CURBS, ETC., SHALL BE PLACED A MIN. OF 0.45m OFF THE PROPERTY LINE. ALL WALLS 1.0m OR HIGHER SHALL BE DESIGNED BY A P.ENG.
- 3. SHOULD A RETAINING WALL BE REQUIRED, THE TOP OF WALL ELEVATIONS SHALL BE SET 150mm ABOVE THE PROPOSED SIDE YARD SWALES
- RETAINING WALLS 0.6m IN HEIGHT OR GREATER REQUIRE CONSTRUCTION OF A FENCE OR GUARD RAIL AT THE TOP OF THE REAR OF THE WALL. GUARDS FOR
- 5. SLOPES OF SWALES FOR BOTH "BACK TO FRONT" AND "SPLIT" DRAINAGE SHALL BE NO LESS THAN 2.0% GRADE AND NO GREATER THAN 33% GRADE (3:1 SLOPES)
- WHEN MATCHING TO EXISTING PROPERTIES WHERE A 2.0% GRADE CANNOT BE ACHIEVED. A 1.5% GRADE IS PERMITTED PROVIDED A 150mm SUB-DRAIN IS INSTALLED. BELOW THE BOTTOM OF THE SWALE AND DRAINED TO A SUITABLE OUTLET, (WITH A MINIMUM 0.3m COVER OVER THE SUB-DRAIN), OR OTHER MITIGATION MEASURES
- 7. UNLESS OTHERWISE NOTED, THE GROUND BETWEEN PROPOSED ELEVATIONS ON SIDE LOTS SHALL BE GRADED AS A STRAIGHT LINE. 8. TOP OF FOUNDATION WALLS FOR BUILDINGS SHALL BE 150mm (MIN) ABOVE FINISHED GRADE
- 9. DRIVEWAY SLOPES SHALL NOT BE LESS THAN 2% AND NOT MORE THAN 7.0%. REVERSED SLOPED DRIVEWAYS IN NEW DEVELOPMENTS ARE NOT PERMITTED
- 10. ALL FILL PLACED ON LOTS SHALL BE COMPACTED TO A MINIMUM 95% SPD (UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER). ALL MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING 300mm LIFTS
- 11. FOR DELINEATION OF TREE PROTECTION ZONES, BUFFERS, REMOVALS AND PROTECTION SCHEMATICS, ETC., REFER TO TREE PROTECTION PLAN 12. LOT GRADING FOR ALL LOTS IN THE SUBDIVISION SHALL CONFORM STRICTLY WITH THIS PLAN. ANY CHANGES, UNLESS APPROVED PRIOR TO CONSTRUCTION BY THE
- CITY, SHALL RESULT IN NON ACCEPTANCE OF THE SUBDIVISION BY THE CITY
- 13. IF GRADING IS REQUIRED ON LANDS ADJACENT TO THE DEVELOPMENT WHICH ARE NOT OWNED BY THE DEVELOPER, THEN THE DEVELOPER MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNER TO ALLOW THE DEVELOPER TO GRADE ON THE ADJACENT LANDS, OTHERWISE RETAINING WALLS MUST BE USED
- 14. THE WRITTEN PERMISSION REQUIRED FROM THE ADJACENT LANDOWNER SHALL BE OBTAINED PRIOR TO ENTERING THE LANDS. SHOULD PERMISSION NOT BE OBTAINED OR IS WITHDRAWN PRIOR TO COMMENCING THE WORK, THEN THE DEVELOPER SHALL LIMIT HIS ACTIVITIES TO THE LIMITS OF THE DEVELOPMENT SITE
- 15. DRIVEWAY AND DRIVEWAY APPROACHES SHALL BE LOCATED SUCH THAT HYDRO VAULTS AND OTHER STREET FURNITURE ARE A MIN. OF 1.2m FROM THE PROJECTIONS OF THE OUTSIDE GARAGE WALLS

BEFORE STARTING WORK

- THE CONTRACTOR SHALL NOTIFY THE CITY OF HAMILTON AND LANHACK CONSULTANTS INC. AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- THE POSITION OF THE POLE LINES, CONDUITS, WATERMAINS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.
- 3. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ALL BENCHMARKS, ELEVATIONS, DIMENSIONS, AND GRADES MUST BE CHECKED BY THE CONTRACTOR AND ANY
- 4. ALL EXISTING UNDERGROUND UTILITIES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE LOCATED, MARKED AND PROTECTED. ANY UTILITIES DAMAGED OR DISTURBED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.
- 5. AT LEAST TWO DIFFERENT BENCHMARKS MUST BE REFERRED TO AT ALL TIMES.

SILTATION AND EROSION CONTROL NOTES SILTATION CONTROL BARRIERS SHALL BE PLACED AS DETAILED.

- SILTATION AND EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO WORKS COMMENCING ON THE SITE AND SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION AND UNTIL GROUND COVER IS ESTABLISHED AND THE SITE IS FULLY DEVELOPED.
- 3. EROSION AND SEDIMENT CONTROLS MUST BE INSPECTED ON A REGULAR BASIS AND AFTER EVERY RAIN FALL EVENT, AND MUST BE MAINTAINED AND REPAIRED IN A
- 4. EXISTING AND PROPOSED CATCHBASINS ARE TO BE PROTECTED WITH A SILTSAC FOR THE DURATION OF CONSTRUCTION.
- 5. IT IS REQUIRED TO STABILIZE ALL AREAS THAT WILL REMAIN DISTURBED FOR MORE THAN 30 DAYS.

10. ADDITIONAL SILT CONTROL LOCATIONS MAY BE REQUIRED AS DETERMINED BY THE CITY OF HAMILTON.

- 6. SILT FENCE AND CATCHBASIN PROTECTION ARE NOT TO BE REMOVED UNTIL COMPLETION OF CONSTRUCTION. 7. THE SILTATION AND EROSION CONTROL MEASURES ILLUSTRATED ON THIS PLAN ARE CONSIDERED TO BE THE MINIMUM REQUIREMENT. CONDITIONS MAY REQUIRE ADDITIONAL MEASURES WHICH WILL BE IDENTIFIED BY THE ENGINEER DURING CONSTRUCTION.
- 8. ALL EROSION AND SILTATION CONTROL DEVICES SHOULD BE AS PER THE "GREATER GOLDEN HORSESHOE AREA CONSERVATION AUTHORITIES" AND "EROSION AND
- 9. THE OWNER IS RESPONSIBLE FOR THE REMOVAL OF ALL MUD AND DEBRIS THAT ARE TRACKED ONTO THE ROADWAYS FROM VEHICLES ENTERING AND LEAVING THE
- CONSTRUCTION SITE. THE OWNER SHALL, UPON VERBAL AND/OR REQUEST BY THE CITY, IMMEDIATELY PROCEED WITH THE CLEANUP OPERATION AT THEIR EXPENSE. SHOULD THE OWNER FAIL TO MAINTAIN THE ROAD AS DIRECTED, THE CITY WILL HAVE THE CLEANING CARRIED OUT, AND DRAW ON THE SECURITY FOR COSTS

SIDEWALK AND CURB & GUTTER

- 1. CONCRETE CURB AND GUTTER AS PER OPSD 600.040 (BARRIER TYPE), MIN. 30 MPA STRENGTH. A 50mm KEY IS REQUIRED FOR ALL LOCATIONS.
- 2. CURB DEPRESSION AT DRIVEWAYS AS PER OPSD 600.040 AND OPSD 310-050.
- 3. 1.5m WIDE CONCRETE SIDEWALK AS PER OPSD 310.010 (125mm THICKNESS, MIN. 30 mpg STRENGTH WITH GRANULAR 'A' BASE AS REQUIRED TO PROVIDE A LEVELING COURSE FOR THE CONCRETE. AT DRIVEWAYS, CONCRETE DEPTH TO BE MIN. 175mm.
- WHEELCHAIR RAMPS REQUIRED AT ALL INTERSECTIONS AS PER OPSD 310.030.
- 5. ASPHALT RAMPING SHALL BE PLACED TO SUIT THE WHEELCHAIR RAMPS IF SURFACE COURSE ASPHALT IS NOT INSTALLED AT THE SAME TIME. THESE RAMPS ARE TO BE REMOVED JUST PRIOR TO PLACEMENT OF SURFACE COURSE ASPHALT.

COMPACTION REQUIREMENTS

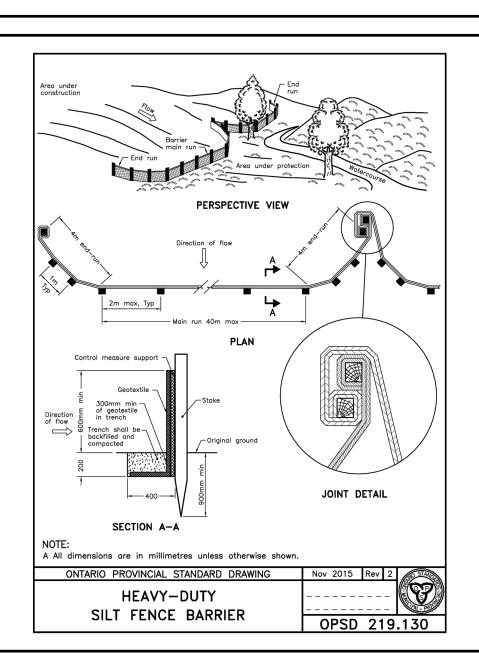
- 1. ALL BEDDING AND BACKFILL MATERIAL, ROAD SUB-GRADES AND GENERALLY ALL MATERIAL USED FOR LOT GRADING AND FILL SECTIONS, ETC., SHALL BE COMPACTED TO MIN. 95% SPD (UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER). ALL MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING 300mm
- 2. ALL GRANULAR ROAD BASE MATERIALS SHALL BE COMPACTED TO 95% SPD.

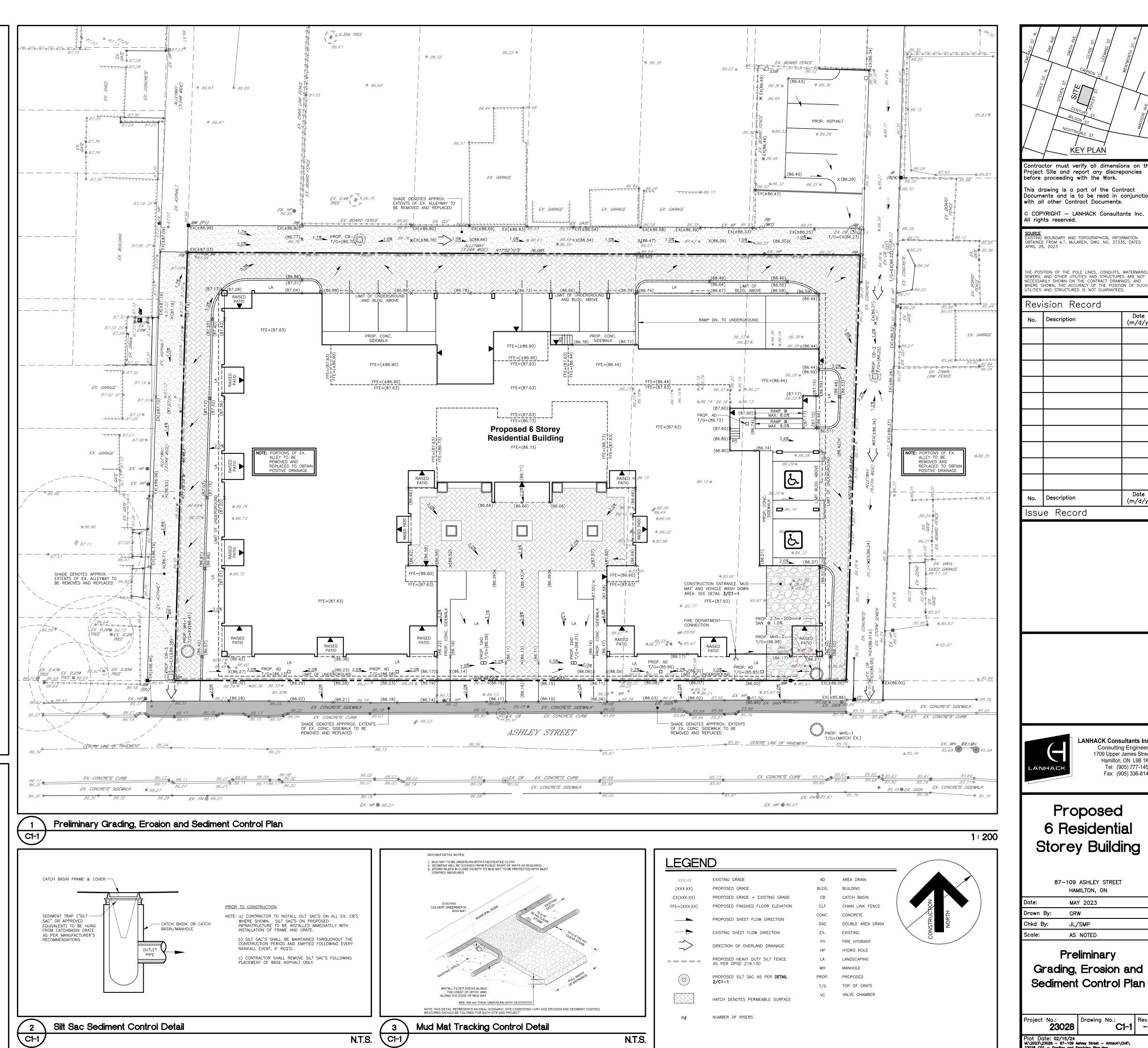
ADDITIONAL NOTES:

- 1. CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SURPLUS AND UNUSABLE MATERIAL OFF SITE AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR TO SUPPLY LANHACK WITH A DIGITALLY PRODUCED AS-CONSTRUCTED SURVEY (ACCEPTABLE TO LANHACK/MUNICIPALITY) OF THE SITE PRIOR TO SITE'S
- 3. CONTRACTOR REQUESTED SITE VISITS/DISCUSSIONS/MEETINGS FOR SUBSTITUTIONS IN MATERIAL OR DESIGN WILL BE AT THE CONTRACTOR'S EXPENSE AS PER LANHACK'S CURRENT BILLING RATES.
- 4. CONTRACTOR TO PREPARE THEIR OWN CUT/FILL CALCULATIONS TO DETERMINE AMOUNT OF FILL TO BE PLACED OR REMOVED OFF SITE.
- 5. NO STORAGE OF UNSUITABLE MATERIAL TO BE LEFT/PLACED ON SITE.
- 6. ALL IMPORTED FILL MUST COME FROM AN APPROVED SITE. CONTRACTOR TO PROVIDE WRITTEN CERTIFICATE FOR IMPORTED FILL
- 7. NO BURNING OF ITEMS (BRUSH/TREES) OR BUILDING MATERIALS WILL BE PERMITTED ON SITE.

9. LANHACK REQUIREDS A MINIMUM OF 48 HOURS NOTICE FOR INSPECTION/PRECONSTRUCTION OR SITE MEETINGS.

- COMPENSATED FOR DOWNTIME OF EQUIPMENT OR EMPLOYEES.
- 10. LANHACK WILL NOT BE RESPONSIBLE, LEGALLY OR FINANCIALLY, FOR CONTRACTOR'S DUTY TO MAINTAIN EROSION AND CONTROL DEVICES THROUGHOUT
- CONSTRUCTION. IF EROSION AND CONTROL DEVICES RE NOT MAINTAINED, A THIRD—PARTY CONTRACTOR WILL BE RETAINED TO RECTIFY THE EROSION AND CONTROL DEVICES AND THE CONTRACTOR WILL BE BILLED.
- 11. LANHACK WILL NOT BE RESPONSIBLE, LEGALLY OR FINANCIALLY, FOR RE-DESIGN OF SITE SERVICES DUE TO NON-DISCLOSED BURIED UTILITIES OR SERVICES OR FOUNDATIONS. 12. CONTRACTOR TO PROVIDE LANHACK WITH COPIES OF VIDEO INSPECTIONS OF ALL SEWERS. LANHACK TO BE PRESENT DURING VIDEO INSPECTION AND DURING THE
- 13. LANHACK TO BE PRESENT FOR WATER PRESSURE AND CHLORINATION TESTS. CONTRACTOR TO PROVIDE LANHACK WITH COPIES OF ALL TEST RESULTS.
- 14. CONTRACTOR TO BE RESPONSIBLE FOR COORDINATING AND ATTENDING ALL INSPECTIONS AND TESTING WITH THE LOCAL MUNICIPALITY.





KEY PLAN

Description

(m/d/y)

(m/d/y)

ANHACK Consultants Inc

Proposed

87-109 ASHLEY STREET

HAMILTON, ON

MAY 2023

GRW

JL/SMP

AS NOTED

Preliminary

Drawing No.:

C1-1

Consulting Engineers

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