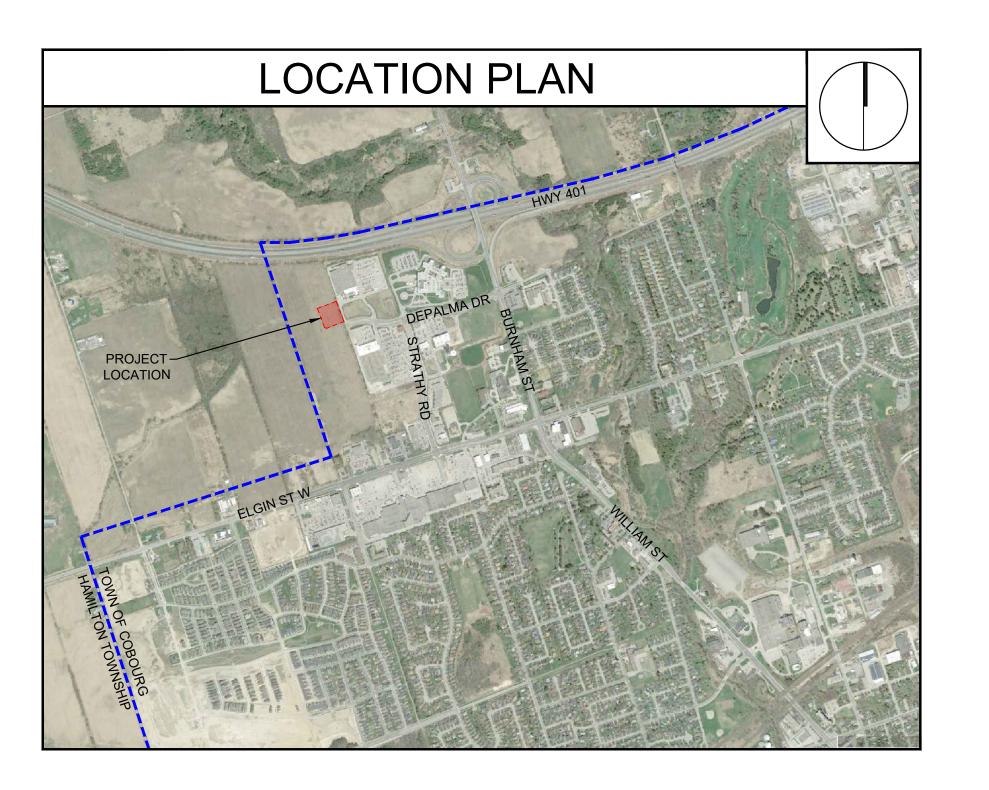
# COBOURG HOLIDAY INN EXPRESS

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TOWN OF COBOURG ENGAGE PROJECT No. 20005



DRAWING INDEX			
DRAWING	SHEET		
STANDARD NOTES & LEGEND	01		
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**2648888 ONTARIO INC** 



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TOWN OF COBOURG ENGAGE PROJECT No. - 20005

COBOURG H



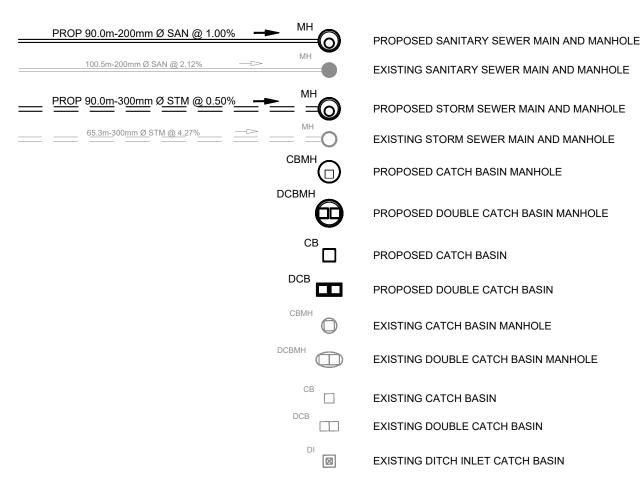
# **LEGEND**

#### REMOVAL AND ADJUSTMENTS

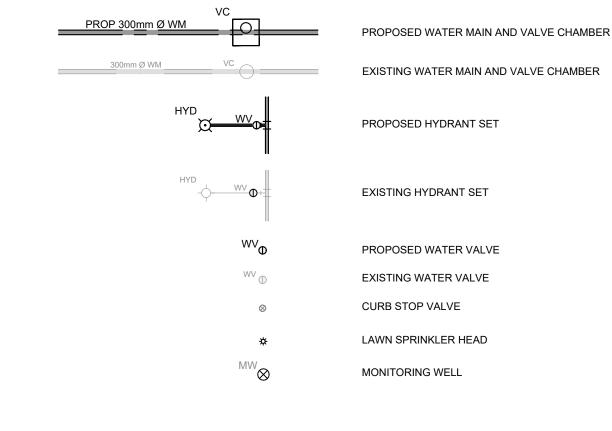
#### APPURTENANCE ADJUSTMENT BY CONTRACTOR (CB,MH,WV etc.) ADJUSTMENT BY OTHERS RELOCATE EXISTING CATCHBASIN EXCAVATE/BACKFILL EXIST. CATCHBASIN/MANHOLE REMOVE, SALVAGE AND REINSTALL TO BE EXPOSED BY CONTRACTOR FENCE REMOVAL MAINTENANCE HOLE AND SEWER REMOVAL VALVE CHAMBER AND WATERMAIN REMOVAL CONCRETE PAVEMENT WITH BITUMINOUS SURFACE TO BE REMOVED

# **UNDERGROUND SERVICES**

#### **SEWERS:**



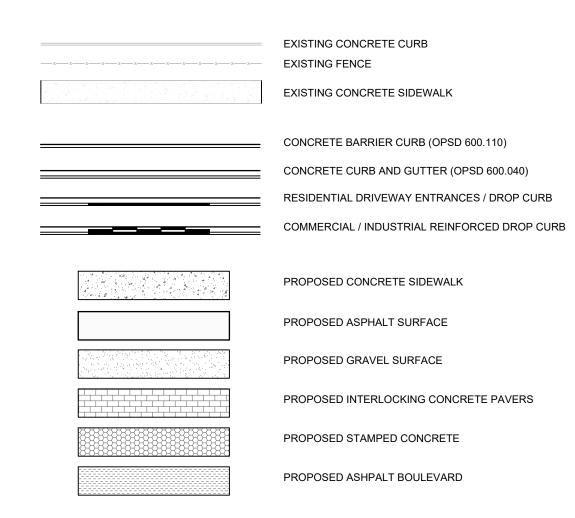
#### WATER:



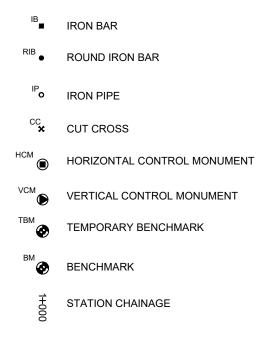
#### **NATURAL GAS:**



#### **ROAD SURFACE FEATURES:**



## LEGAL AND CONTROL **SYMBOLS:**



# **UTILITIES:**

#### **ELECTRICAL**:

HP ●	HYDRO POLE
HPLS	HYDRO POLE LIGHT STANDARD
HPLS <b>●</b> ──	HYDRO POLE LIGHT STANDARD WITH TRANSFORM
LS <b>●</b> —	LIGHT STANDARD
TS 👩	TRAFFIC SIGNAL POLE
HWO	HANDWELL
(	GUY ANCHOR
	DIRECT BURIED ELECTRICAL DUCT/CABLE
	CONCRETE ENCASED ELECTRICAL DUCT

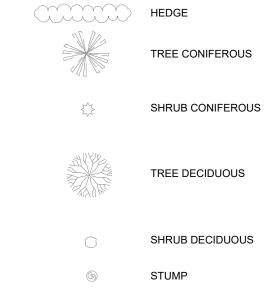
#### TELECOMMUNICATIONS

TELECOMMUNICATIONS:			
ВНР	BELL HYDRO POLE		
BP⊕	BELL POLE		
BRP	BELL ROGERS POLE		
PED 🛛	PEDESTAL		
=:=:=	DIRECT BURIED TELECOMM DUCT/CABLE		
	DIRECT BURIED TELECOMM DUCT		

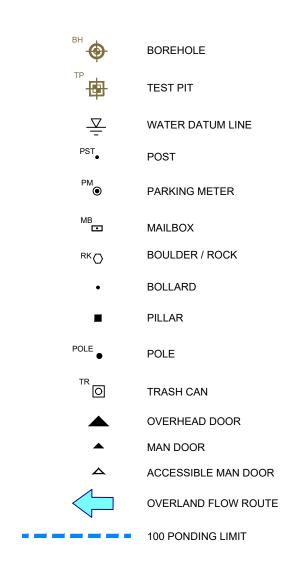
#### SIGNAGE:

RRS RAIL ROAD SIGN RS ■ ROAD SIGN SIGN DISPLAY BOARD SIGN

#### **VEGETATION:**



# **MISCELLANEOUS:**



## ONTARIO PROVINCIAL STANDARDS

LIGHT DU	TY SILT FENCE	OPSD-219.110	OPSS-805 (NOV 2010
STRAW B	ALE FLOW CHECK	OPSD-219.180	OPSS-805 (NOV 2010
CATCH BA	ASIN AND CATCH BASIN MANHOLE FRAME TE	OPSD-400.020	OPSS-407 (NOV 2014 OPSS-402 (NOV 2013
MAINTENA COVER	ANCE HOLE, SQUARE FRAME, CIRCULAR	OPSD-401.010	OPSS-407 (NOV 2014 OPSS-402 (NOV 2013
MAINTENA	ANCE HOLE STEPS SOLID ALUMINUM	OPSD-405.020	OPSS-407 (NOV 2014
CONCRET	E BARRIER CURB	OPSD-600.110	OPSS-353 (NOV 2010
TACTILE V	WALKING SURFACE INDICATORS	OPSD-310.039	OPSS-353 (NOV 2010
1200mm P	RECAST MANHOLE	OPSD-701.010	OPSS-407 (NOV 2014 OPSS-402 (NOV 2013
SANITARY	MANHOLE BENCHING DETAILS	OPSD-701.021	OPSS-407 (NOV 2014
1200mm P	RECAST MANHOLE COMPONENTS	OPSD-701.030	OPSS-407 (NOV 2014
PRECAST	CONCRETE CATCH BASIN	OPSD-705.010	OPSS-407 (NOV 2014 OPSS-402 (NOV 2013
PRECAST	CONCRETE DITCH INLET CATCH BASIN	OPSD-705.030	OPSS-407 (NOV 2014 OPSS-402 (NOV 2013
FLEXIBLE	PIPE EMBEDMENT AND BACKFILL EARTH EXCA	VATION OPSD-802.010	OPSS-410 (NOV 2013
RIGID PIP OR 2 SOIL	E EMBEDMENT AND BACKFILL EARTH EXCAVAT	ION TYPE 1 OPSD-802.030	OPSS-410 (NOV 2013
CONCRET	TE SIDEWALK	OPSD-310.010 OPSD-310.020	OPSS-351 (NOV 2010

#### STORM SEWER:

- 1. THE CONTRACTOR SHALL INSTALL BEDDING, BACKFILL AND COVER PER ONTARIO PROVINCIAL STANDARD DRAWING (OPSD) 802.010 FOR PVC PIPE AND SERVICES, AND OPSD 802.030 FOR CONCRETE AND CORRUGATED STEEL PIPE.
- 2. THE CONTRACTOR SHALL INSTALL PRECAST CONCRETE MANHOLES AS PER OPSD 701.010, 701.011, 701.012, 401.010, 404.020, 405.010 AND 405.020, UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS. CONCRETE MANHOLES SHALL BE BENCHED AS PER OPSD 701.021.
- 3. THE CONTRACTOR SHALL INSTALL CONCRETE CATCHBASIN MANHOLES AS PER OPSD 701.010, 701.011, 701.012, 401.020, 404.020, 405.010 AND 405.020, UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS. CATCHBASIN MANHOLES SHALL BE PROVIDED WITH A 300mm SUMP.
- 4. THE CONTRACTOR SHALL INSTALL CONCRETE CATCHBASINS COMPLETE WITH FRAME, GRATE AND 300mm PVC LEAD AS PER OPSD 705.010 AND OPSD 400.020, UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS. CATCHBASINS SHALL BE PROVIDED WITH A 600mm SUMP.
- 5. THE CONTRACTOR SHALL INSTALL 100mm SUBDRAIN PIPE UNDER CONCRETE CURB AND PAVEMENT STRUCTURE AS PER OPSD 216.021, UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS
- 6. THE CONTRACTOR SHALL PERFORM AIR AND DEFLECTION TESTING ON ALL STORM SEWERS IN ACCORDANCE WITH MUNICIPAL STANDARDS AND OPSS 410
- 7. THE CONTRACTOR SHALL CLEAN AND PERFORM CCTV INSPECTION ON ALL STORM SEWERS IN ACCORDANCE WITH OPSS 409. THE SUBDIVIDERS CONSULTING ENGINEER SHALL REPORT ALL IDENTIFIED DEFECTS IN THE NEW STORM SEWER SYSTEM AND PROVIDE PROPOSED CORRECTIVE ACTIONS TO THE TOWN ENGINEER FOR REVIEW AND APPROVAL. ALL DEFECTS SHALL BE CORRECTED TO THE SATISFACTION OF THE TOWN ENGINEER PRIOR TO PUTTING THE SEWERS
- 8. THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE TO THE TOWN'S ENGINEER PRIOR TO CONDUCTING PIPE AIR AND DEFLECTION TESTING, CCTV INSPECTIONS AND/OR CLEANING OF THE STORM SEWER.
- 9. THE CONTRACTOR SHALL PROVIDE 3 COPIES OF PIPE AIR AND DEFLECTION TESTING RESULTS AND CCTV INSPECTION REPORTS.

#### SANITARY SEWER:

- 1. THE CONTRACTOR SHALL INSTALL BEDDING, BACKFILL AND COVER PER ONTARIO PROVINCIAL STANDARD DRAWING (OPSD) 802.010 FOR PVC PIPE AND SERVICES.
- 2. THE CONTRACTOR SHALL INSTALL PRECAST CONCRETE MANHOLES AS PER OPSD 701.010, 401.010, 404.020, 405.010 AND 405.020, UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS.
- 3. THE CONTRACTOR SHALL BENCH ALL SANITARY MANHOLES AS PER OPSD 701.021.
- 4. THE CONTRACTOR SHALL PERFORM AIR AND DEFLECTION TESTING ON ALL SANITARY SEWERS IN ACCORDANCE WITH MUNICIPAL STANDARDS AND OPSS 410
- 5. THE CONTRACTOR SHALL CLEAN AND PERFORM CCTV INSPECTION ON ALL SANITARY SEWERS IN ACCORDANCE WITH OPSS 409, THE SUBDIVIDERS CONSULTING ENGINEER SHALL REPORT ALL IDENTIFIED DEFECTS IN THE NEW SANITARY SEWER SYSTEM AN PROVIDE PROPOSED CORRECTIVE ACTIONS TO THE TOWN'S ENGINEER FOR REVIEW AND APPROVAL. ALL DEFECTS SHALL BE CORRECTED TO THE SATISFACTION OF THE TOWN'S ENGINEER PRIOR TO PUTTING THE SEWERS
- 6. THE CONTRACTOR SHALL PERFORM DEFLECTION TESTING OF ALL FLEXIBLE SANITARY SEWERS SHALL BE COMPLETED IN ACCORDANCE WITH OPSS MUNI 410.07.16.05. THE SUBDIVIDER'S CONSULTING ENGINEER SHALL PREPARE AND SUBMIT A RECORD OF THE TEST RESULTS TO THE TOWN'S ENGINEER PRIOR TO PUTTING THE SANITARY SEWER INTO OPERATION,
- 7. THE CONTRACTOR SHALL PERFORM LEAKAGE TESTING OF ALL SANITARY SEWERS SHALL BE COMPLETED IN ACCORDANCE WITH OPSS MUNI 410.07.16.04, EXFILTRATION TEST. THE SUBDIVIDER'S CONSULTING ENGINEER SHALL PREPARE AND SUBMIT A RECORD OF THE TEST RESULTS TO THE TOWN'S ENGINEER PRIOR TO PUTTING THE SANITARY SEWERS INTO SERVICE.
- 8. THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE TO THE TOWN'S ENGINEER PRIOR TO CONDUCTING PIPE AIR AND DEFLECTION TESTING, CCTV INSPECTIONS AND/OR CLEANING OF THE SANITARY SEWER.
- 9. THE CONTRACTOR SHALL PROVIDE 3 COPIES OF PIPE AIR AND DEFLECTION TESTING RESULTS AND CCTV INSPECTION REPORTS.

#### WATERMAIN:

- 1. THE CONTRACTOR SHALL PROVIDE 48HR NOTICE TO LUSI'S ENGINEER PRIOR TO COMMENCING WATERMAIN CONSTRUCTION.
- 2. ONLY REPRESENTATIVES OF LAKEFRONT UTILITY SERVICES INC. (LUSI) ARE AUTHORIZED TO OPERATE VALVES OR HYDRANTS OF THE EXISTING WATER
- THE CONTRACTOR SHALL INSTALL TRACER WIRE ON ALL NEW PVC WATERMAIN
- 4. THE CONTRACTOR SHALL INSTALL CATHODIC PROTECTION AS PER OPSD 1109.0110.
- 5. THE CONTRACTOR SHALL INSTALL RETAINING GLAND RINGS ON ALL WATERMAIN FITTINGS AND CONNECTIONS WHERE THRUST BLOCKS CANNOT BE CONSTRUCTED
- 6. THE CONTRACTOR SHALL INSTALL BEDDING AND BACKFILL AS PER OPSD 802.010.
- 7. THE CONTRACTOR SHALL INSTALL ALL WATERMAIN AND SERVICES AT A MINIMUM DEPTH OF 1.85 METRES FROM THE PROPOSED FINISH GRADE TO THE TOP OF PIPE.
- 8. THE CONTRACTOR SHALL MAINTAIN A MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER OF 0.50 METRES BELOW OR 0.15 METRES ABOVE.
- 9. THE CONTRACTOR SHALL INSTALL WATER SERVICES AS PER OPSD 1104.0100, AND AT RIGHT ANGLES TO THE WATERMAIN WHERE POSSIBLE.
- 10. THE CONTRACTOR SHALL INSTALL ANODE PROTECTION ON ALL WATER SERVICES.
- 11. THE CONTRACTOR SHALL INSTALL 19mmø TYPE 'K' COPPER SERVICE CONNECTIONS.
- 12. THE CONTRACTOR SHALL INSTALL WATER SERVICE BOXES ON ALL WATER SERVICES. WATER SERVICE BOXES SHALL BE LOCATED BETWEEN PROPERTY LINE AND 0.30 METRES TOWARD THE CENTERLINE OF ROAD. SERVICE BOXES SHALL UNDER NO CIRCUMSTANCES BE LOCATED ON PRIVATE PROPERTY.
- 13. THE CONTRACTOR SHALL INSTALL A 2x4 AT THE END OF THE SERVICE THAT IS VISIBLE, CLEARLY LABELED, PAINTED BLUE, AND IDENTIFIES THE DEPTH TO THE
- 14. THE CONTRACTOR SHALL INSTALL ALL WATER SERVICES WITH A MINIMUM OFFSET OF 0,30 METRES FROM THE PROPOSED DRIVEWAY, SERVICE BOXES SHALL UNDER NO CIRCUMSTANCES BE LOCATED WITHIN THE PROPOSED DRIVEWAY.
- 15. THE CONTRACTOR SHALL INSTALL THRUST BLOCKS FOR VERTICAL BENDS AS PER OPSD 1103.020. THE CONTRACTOR SHALL INSTALL THRUST BLOCKS FOR HORIZONTAL BENDS AS PER OPSD 1103.010.
- 16. THE CONTRACTOR SHALL INSTALL HYDRANTS AS PER OPSD 1105.010.
- 17. THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE TO THE LUSI'S ENGINEER PRIOR TO CONDUCTING WATERMAIN TESTING.
- 18. THE CONTRACTOR SHALL COMPLETE FLUSHING AND DISINFECTING OPERATIONS IN ACCORDANCE WITH MECP WATERMAIN DISINFECTION PROCEDURES. PRIOR TO FILLING THE NEW WATERMAIN FROM THE EXISTING WATER DISTRIBUTION SYSTEM THE SUBDIVIDER'S CONSULTING ENGINEER SHALL MEET WITH LUSI STAFF AND THE LUSI ENGINEER TO REVIEW THE MECP PRODEDURES AND THE MANDATORY BACKFLOW PROTECTION MEASURES OF ANSI/AWWA STANDARD C651 TO BE IMPLEMENTED TO COORDINATE THE COMPLETION OF THE FILLING, TESTING, WITNESSING, FLUSHING AND DISINFECTION OF THE NEW WATERMAIN CONSTRUCTION
- 19. THE CONTRACTOR SHALL COMPLETE HYDROSTATIC TESTING OF THE NEW WATERMAIN IN ACCORDANCE WITH OPSS 441.07.24.01 AND OPSS 441.07.24.03 AND WITNESSED BY A REPRESENTATIVE OF LUSI. IF THE WATERMAIN IS FILLED FROM THE EXISTING WATER DISTRIBUTION SYSTEM THE BACKFLOW PROTECTION MEASURES OF ANSI/AWWA STANDARD C651 SHALL BE IMPLEMENTED TO THE SATISFACTION OF LUSI'S CERTIFIED OPERATOR WITHIN THE MEANING OF O.REG. 170/03, THE SUBDIVIDERS CONSULTING ENGINEER SHALL DOCUMENT ALL TESTING CALCULATIONS AND SHALL HAVE A LUSI REPRESENTATIVE PRESENT TO WITNESS ALL TEST RESULTS UNTIL A SATISFACTORY RESULT IS ACHIEVED.
- 20. THE CONTRACTOR SHALL PROVIDE ALL WATERMAIN TESTING RESULTS (INCLUDING CHLORINATION, BACTERIOLOGICAL, PRESSURE AND FLOW) IN ACCORDANCE WITH LUSI SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE 2 COPIES OF ALL TEST RESULTS.

SURVEY

OPOGRAPHIC SURVEY PROVIDED BY DONEVAN FLEISCHMANN PETRICH LTD.

GEODEDIC BENCHMARK No. 0011910U171

CONSTRUCTION PROJECTS.

BENCHMARK

#### NOTES:

ALL CONSTRUCTION AND MATERIALS TO BE IN ACCORDANCE

ELEV: 80.156m

- -TOWN OF COBOURG DESIGN STANDARDS -ONTARIO PROVINCIAL STANDARD DRAWINGS & SPECIFICATIONS -APPLICABLE CONTRACT DOCUMENTS AND ALL
- SPECIFICATIONS REFERENCED HEREIN. THE CONTRACTOR SHALL CONSTRUCT ALL WORK IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT, HEALTH AND SAFETY REGULATIONS FOR
- THE CONTRACTOR SHALL COORDINATE AND PAY FOR ALL PERMITS OR THIRD PARTY WORKS ASSOCIATED WITH

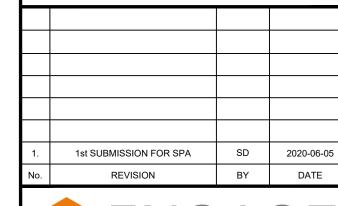
WORKING IN PROXIMITY TO EXISTING SERVICES.

- SERVICING CONNECTIONS. THE CONTRACTOR SHALL TAKE EXTREME CARE WHEN
- THE CONTRACTOR SHALL RESTORE OR REPLACE DAMAGED SERVICES TO EXISTING OR BETER CONDITION.
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO EXISTING OR BETTER CONDITION, OR PER THE ENGINEERING AND LANDSCAPE SPECIFICATIONS
- REFERENCED HEREIN. THE CONTRACTOR SHALL COORDINATE AND PAY FOR ALL TRAFFIC CONTROL AND SAFETY MEASURES IN ACCORDANCE

WITH THE ONTARIO TRAFFIC MANUAL, BOOK 7, TEMPORARY

THE CONTRACTOR SHALL DISPOSE OF ALL WASTE MATERIALS IN ACCORDANCE WITH THE MINISTRY OF THE

ENVIRONMENT GUIDELINES AND LOCAL MUNICIPAL BYLAWS

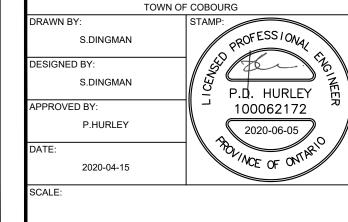




# COBOURG **HOLIDAY INN EXPRESS**

TOWN OF COBOURG

# STANDARD NOTES & LEGEND



ROJECT NUMBER 20005 1 of 4

