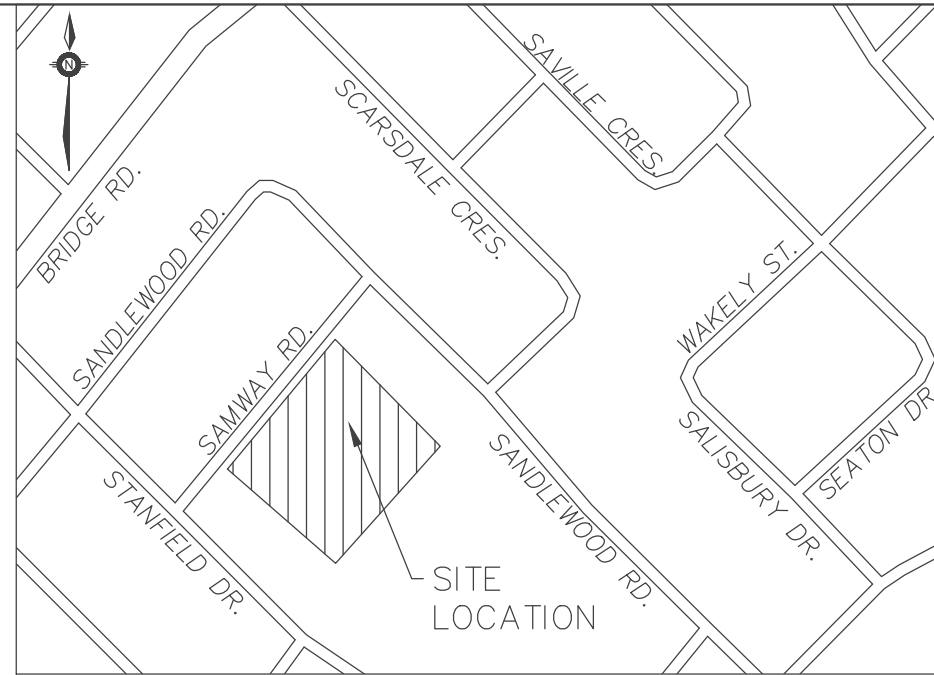
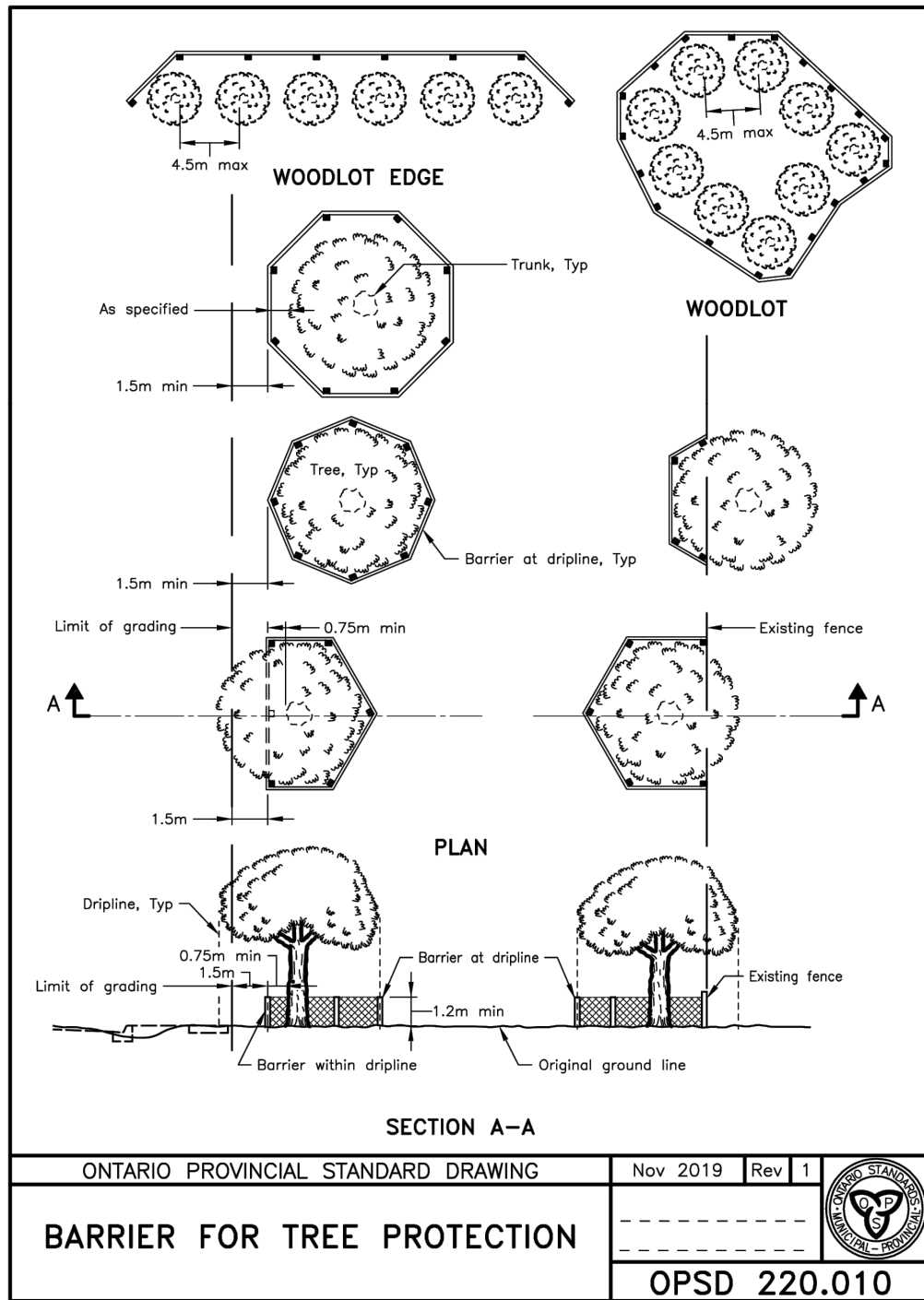
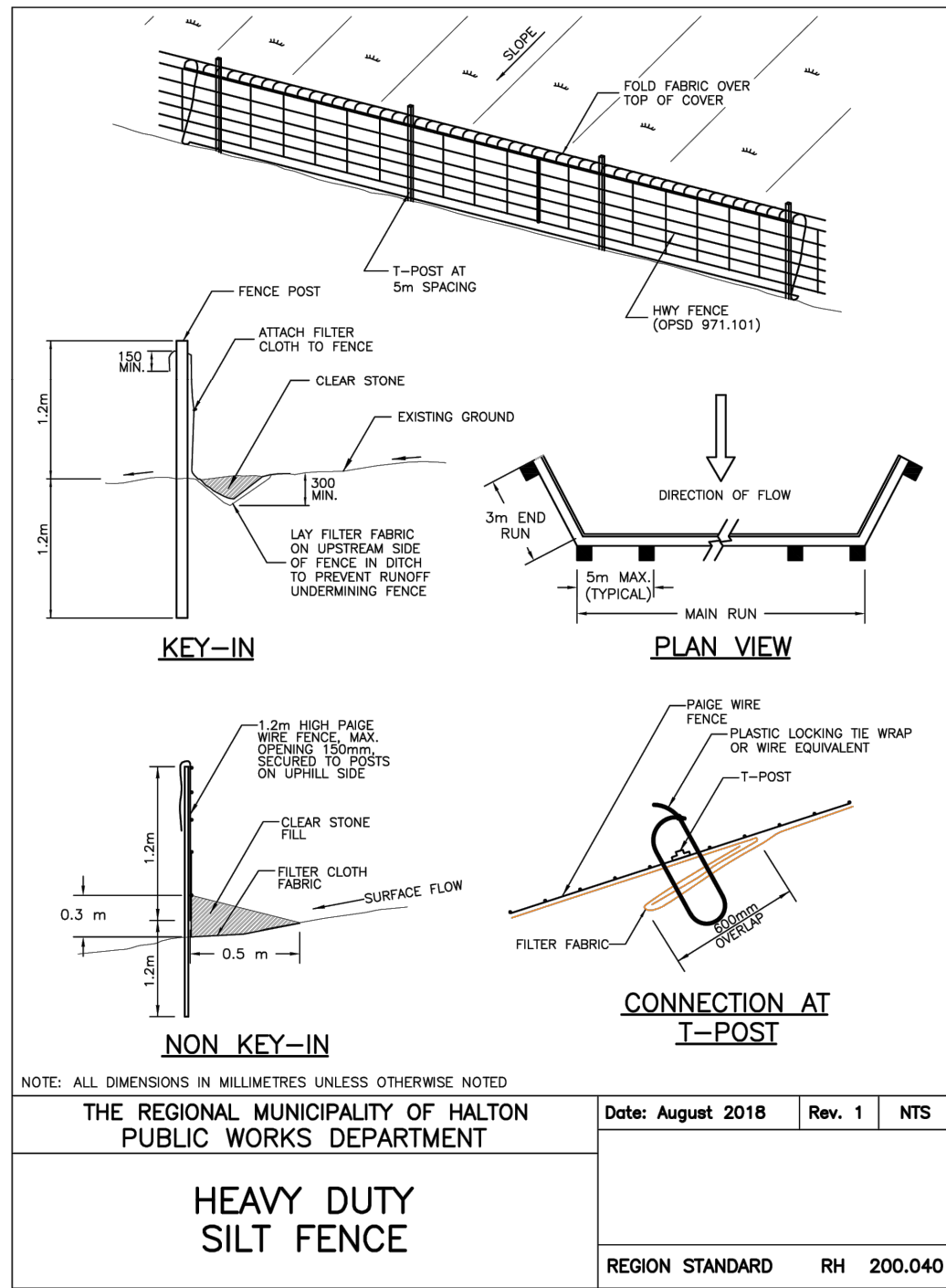
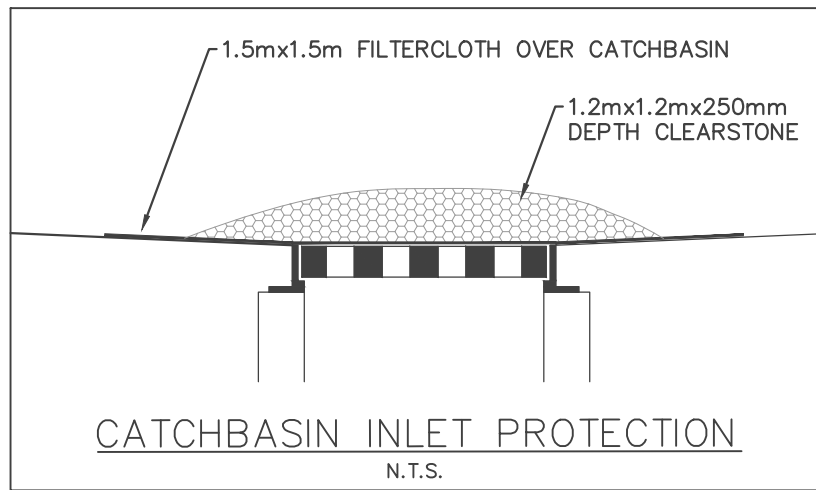


NOTES FOR SEDIMENT & EROSION CONTROL

- DISTURBED AREAS THAT HAVE FAILED TO HAVE STABLE GROUND COVER ESTABLISHED BY OCTOBER 30TH SHALL BE PROTECTED WITH A SILTATION CONTROL FENCE OR STRAW MULCH ETC. AND MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION BECOMES ESTABLISHED IN THE SUBSEQUENT GROWING SEASON.
- ANY DEWATERING WASTE SHALL BE DISCHARGED TO A VEGETATED AREA AT LEAST 30 M FROM ANY WATERCOURSE AND FILTERED. FILTERING METHODS MUST BE APPROVED BY THE SITE ADMINISTRATOR.
- SILT FENCE SHALL BE PUT IN PLACE PRIOR TO AND MAINTAINED DURING ALL GRADING. SILT FENCE SHALL COMPLY WITH OPSD 219.110 FOR LIGHT DUTY AND / OR OPSD 219.130 FOR HEAVY DUTY; UNLESS NOTED OTHERWISE. SILT FENCE TO BE INSPECTED PRIOR TO COMMENCEMENT OF EARTH GRADING ACTIVITIES. SILT FENCE TO BE INSPECTED AND REPAIRED OR REPLACED IF DAMAGED AS DIRECTED BY THE SITE ADMINISTRATOR. SILT CONTROLS TO BE INSPECTED ON A REGULAR BASIS AND AFTER EVERY RAIN EVENT. INSTALLATION SHALL BE TO THE MANUFACTURER'S SUGGESTED SPECIFICATIONS.
- THE CONTRACTOR SHALL BE PREPARED FOR UNEXPECTED CONDITIONS AND ACCORDINGLY HAVE STOCKPILED MATERIALS ON SITE FOR NECESSARY REPAIRS AS A RESULT OF FAILED OR INADEQUATE CONTROL MEASURES. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE A WEEK, AND AFTER EVERY RAINFALL EVENT.
- MUD MATS WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES THE SITE SHALL BE USED. MUD MATS TO BE 300mm IN DEPTH, 6.0m WIDE BY 20.0m LONG, FIRST 10.0m TO 150mmØ CLEAR STONE WITH THE REMAINING 10.0m CONSISTING OF 50mmØ CLEAR STONE; OR MEET MUNICIPAL STANDARDS WHERE IDENTIFIED.
- CONTRACTOR SHALL OBTAIN A CURRENT COPY AND BECOME FAMILIAR WITH OPSS 805, CONSTRUCTION SPECIFICATION FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AS WELL AS ALL APPLICABLE MUNICIPAL STANDARDS.
- THE CONTRACTOR MAY CONSIDER ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES. SUCH MEASURES SHOULD BE PRESENTED IN WRITING FOR APPROVAL OF THE SITE ADMINISTRATOR AND MUST BE APPROVED IN WRITING BY THE CONSERVATION AUTHORITY.
- THE TOPS OF ALL FILTER FABRIC MUST BE A MINIMUM OF 1.0 METRES ABOVE THE GROUND LEVEL AND ATTACHED TO THE FENCE WITH A CONTINUOUS STEEL WIRE. ALTERNATIVELY, THE FILTER FABRIC MUST BE FOLDED OVER THE TOP OF THE FENCE AND ATTACHED TO THE FENCE WITH WIRE LOOPED THROUGH THE FABRIC ON BOTH SIDES OF THE FENCE. FILTER FABRIC IS TO BE TERRAFIX 270R OR EQUIVALENT.
- ALL DISTURBED GROUND LEFT INACTIVE SHALL BE STABILIZED BY SEEDING, SODDING, MULCHING, OR COVERING OR OTHER EQUIVALENT CONTROL MEASURES. THIS PERIOD OF INACTIVITY SHALL BE AT THE DISCRETION OF THE MUNICIPAL DIRECTOR OF ENGINEERING BUT SHALL NOT EXCEED (30) DAYS OR SUCH LONGER PERIOD DEEMED ADVISABLE BY THE MUNICIPAL DIRECTOR OF ENGINEERING.
- CONTRACTOR SHALL INSTALL AND MAINTAIN CATCHBASIN SEDIMENT BARRIERS THROUGHOUT THE SITE DURING ALL CONSTRUCTION ACTIVITIES IN ORDER TO MITIGATE SEDIMENT ENTERING THE STORM STORM SEWERS.
- NO FUEL TO BE STORED ON SITE. IN CASE OF A SPILL PLEASE CONTACT: **MOECC SPILLS ACTION CENTER 1-800-268-6060**.
- SEDIMENT CONTROLS ARE TO REMAIN IN PLACE UNTIL WRITTEN DIRECTION IS RECEIVED FROM THE ENGINEER REGARDING THEIR REMOVAL.
- EROSION AND SEDIMENT CONTROLS WILL BE INSPECTED ON AS PER MUNICIPAL REQUIREMENTS OR AFTER SIGNIFICANT RAINFALL EVENTS.

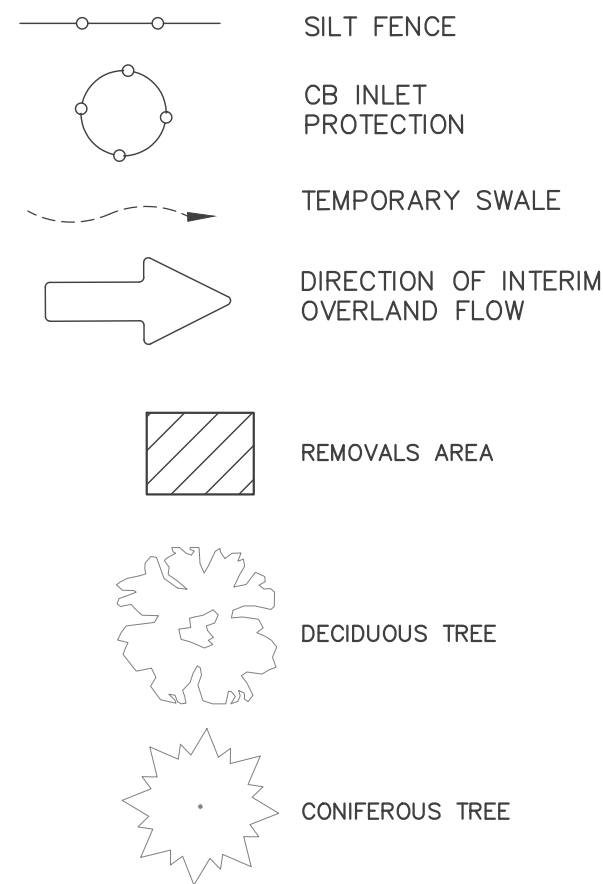
SEQUENCE OF CONSTRUCTION

- ENGINEER AND MUNICIPALITY TO BE NOTIFIED PRIOR TO INITIATION OF ANY ON SITE WORKS.
- SILT FENCE AND CONSTRUCTION ACCESS MATS TO BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY WORKS ON SITE.
- VEGETATION REMOVAL MAY COMMENCE AFTER ALL SILT FENCE IS INSTALLED AND APPROVED BY THE ENGINEER.
- COMMENCE WITH EARTH EXCAVATION AND SITE SERVICING (TO BE REMOVED FROM SITE - NO STOCKPILE).
- EROSION CONTROL MEASURES TO BE MAINTAINED AS DIRECTED BY THE ENGINEER DURING THE CONSTRUCTION PERIOD. ADDITIONAL CONTROL MEASURES MAY BE REQUIRED AT THE DISCRETION OF THE ENGINEER.
- ALL DISTURBED GROUND LEFT INACTIVE FOR MORE THAN 30 DAYS SHALL BE STABILIZED WITH SEED, SOD, MULCH OR OTHER ADEQUATE COVERING, AS INSTRUCTED BY THE ENGINEER.
- ALL CONSTRUCTION VEHICLES TO ACCESS THE SITE VIA THE DESIGNATED CONSTRUCTION ENTRANCES AS SHOWN.



KEY PLAN  
N.T.S.

LEGEND



Revisions				
Ref.	No.	Description	Date	Initial
1.	1.	Client Review	23/06/16	JM
2.	2.	BUILDING PERMIT	23/07/10	JM
3.	3.	BUILDING PERMIT REV-1	24/05/06	JM

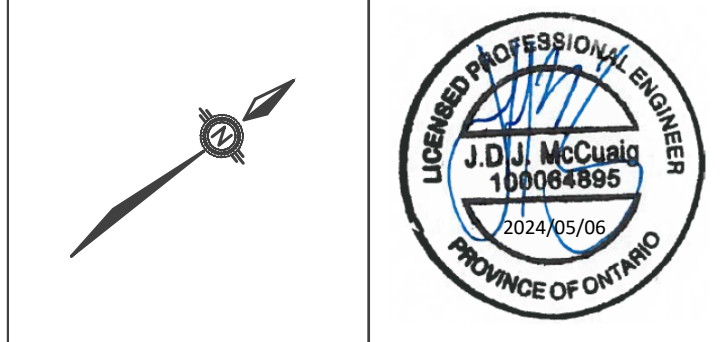


This drawing has been created electronically.  
Handwritten or manual revisions to the drawing are only valid when accompanied by the design engineer's initials.  
Do not scale drawings.  
Check and verify all dimensions and information on the drawings and report all errors or omissions to the Consultant before proceeding with the work.  
This drawing shall not be reproduced in any manner, in part or in whole, for any project other than that for which it was prepared.  
This drawing, and all design concepts it contains, are an instrument of professional service and remain the property of Gerrits Engineering.  
This drawing may have been reduced.  
0 5 10 20 30 40 50mm  
0" 1/4" 1/2" 1" 1 1/2" 2"

Project:  
GLADYS SPEERS PS  
RENOVATIONS  
2150 SAMWAY RD, OAKVILLE,



Unit 100 - 706 Euclid Avenue  
Toronto, Ontario, Canada M6G 2T9  
Tel:(416)591-6575 Fax:(416)591-1010



Consultant:  
**Gerrits**  
ENGINEERING  
222 Mapleview Drive West, Suite 300  
Barrie, ON L4N 9E7 Canada  
Tel.: 705.737.3303  
Fax: F.705.737.1772  
www.gerritseng.com

Title:  
EROSION & SEDIMENT  
CONTROL PLAN

Drawn by: RM	Date: 2024/05/06
Checked by: KF	Plotted: 2024/05/06
Scale: 1:250	Issued: BUILDING PERMIT REV-1
Job No.: 1436-002	Drawing No.: ESC-1
Set No.: N/A	



1. THE NOTES ON THIS SHEET APPLY TO ALL WORKS UNDER THIS CONTRACT UNLESS OTHERWISE NOTED ON THE SPECIFIC DETAIL DWGS.
2. THE STANDARD DRAWINGS OF THE LOCAL MUNICIPALITY, ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS (OPSS) AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) CONSTITUTE PART OF THE PLANS OF THIS CONTRACT.
3. ORDER OF PRECEDENCE OF STANDARD DRAWINGS IS FIRSTLY THE LOCAL MUNICIPALITY AND SECONDLY ONTARIO PROVINCIAL STANDARD DRAWINGS.
4. THE STANDARD DRAWINGS INCLUDED WITH THESE PLANS ARE PROVIDED FOR CONVENIENCE ONLY AND ARE NOT TO BE CONSTRUED TO BE A COMPLETE SET FOR THE PURPOSE OF THE CONTRACT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER STANDARD DRAWINGS AND SPECIFICATIONS AS REQUIRED FOR THIS CONTRACT.

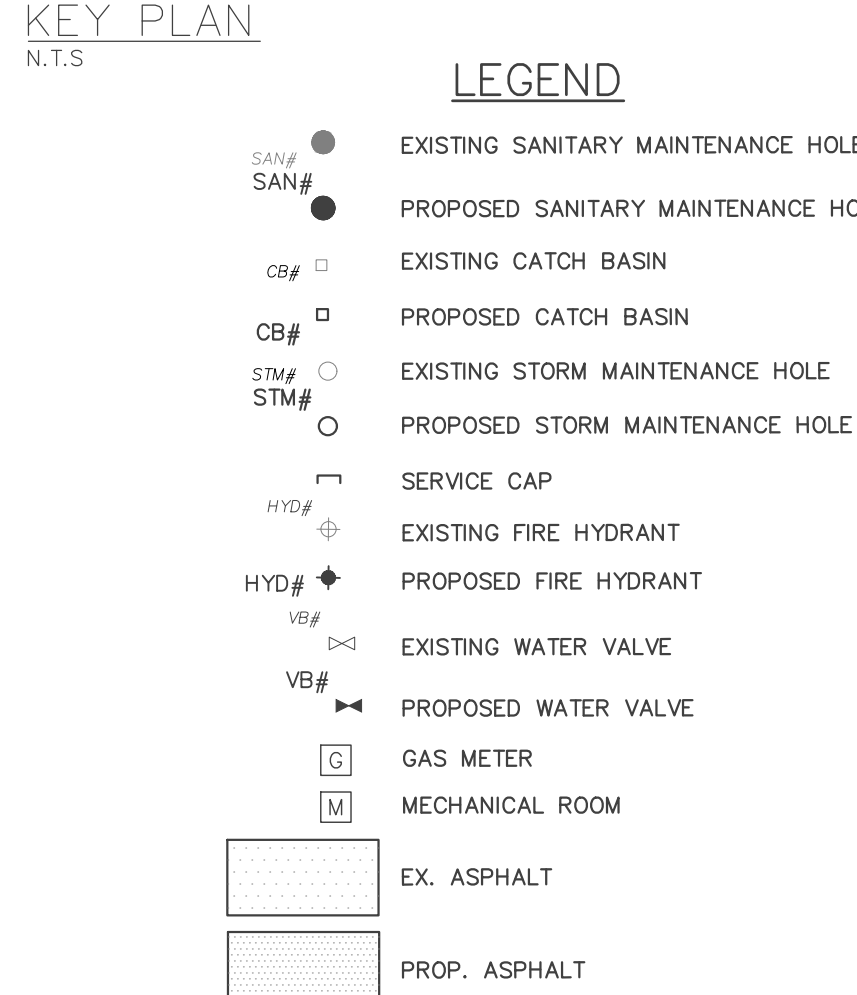
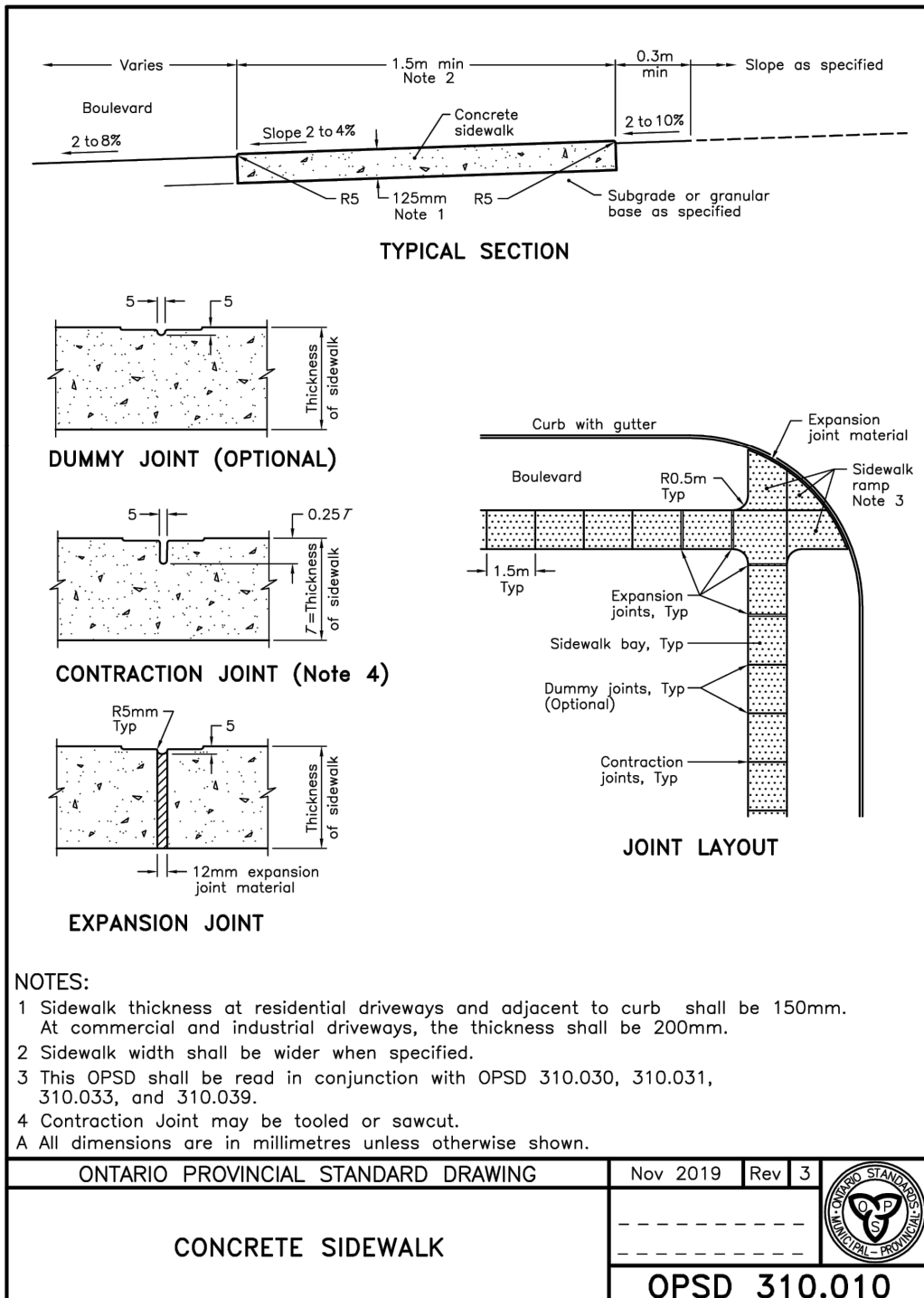
1. ALL DIMENSIONS ARE IN METRES, EXCEPT PIPE DIAMETERS, WHICH ARE IN MILLIMETRES, UNLESS SPECIFIED OTHERWISE.
2. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION, AND ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER

<p>1. EXISTING SERVICES AND UTILITIES SHOWN ON THESE CONTRACT DRAWINGS ARE BASED ON THE BEST INFORMATION AVAILABLE AND THEIR LOCATIONS ARE NOT GUARANTEED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THIS INFORMATION. THEY MUST PROCEED WITH THE UNDERSTANDING THAT THE OWNER DISCLAIMS ALL RESPONSIBILITY FOR ITS ACCURACY AND/OR SUFFICIENCY. THE CONTRACTOR IS REQUIRED TO NOTIFY THE VARIOUS UTILITY COMPANIES 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.</p> <p>2. NATIVE MATERIAL, SUITABLE FOR BACKFILL, SHALL BE COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY.</p> <p>3. GRANULAR MATERIAL, USED FOR BACKFILL, SHALL BE PLACED IN LAYERS 150mm IN DEPTH MAXIMUM AND COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.</p> <p>4. ALL DISTURBED AREAS ARE TO BE REINSTATED TO THEIR ORIGINAL CONDITION OR BETTER, AS DETERMINED BY THE ENGINEER. ALL GRASS AND VEGETATION COVERED AREAS SHALL BE RESTORED BY PLACING 200mm OF APPROVED TOPSOIL AND NURSERY SOD UNLESS NOTED OTHERWISE.</p>	<p>1. AT NO POINT IN TIME WILL THE WATER SERVICE TO THE SCHOOL BE INTERRUPTED DURING THE COURSE OF CONSTRUCTION.</p> <p>2. CONTRACTOR IS RESPONSIBLE FOR EXPLORATORY DIGGING TO VERIFY EXISTING WATER INFRASTRUCTURE THAT MAY OR MAY NOT BE IDENTIFIED ON THE DRAWINGS.</p> <p>3. CONTRACTOR TO ENSURE EXISTING SERVICE AND FIRE WATER INFRASTRUCTURE IS MAINTAINED AND OPERATIONAL DURING THE INSTALLATION OF NEW SERVICES TO THE BUILDING.</p> <p>4. CONTRACTOR TO PREPARE WATER SERVICE CONNECTION PLAN/PROCEDURE TO BE REVIEWED BY THE CONSULTANT, OWNER AND MUNICIPALITY IN ADVANCE OF SERVICE SWITCHOVER FROM WELL.</p> <p>5. EXISTING WATER SERVICE TO BE CAPPED AND DECOMMISSIONED AND/OR REMOVED AS PER O.R.E.G.903 AND THE MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS (MECP) STANDARD GUIDELINES.</p> <p>6. EXISTING WATER SERVICING INFRASTRUCTURE SHALL NOT BE REMOVED UNTIL APPROVAL OF THE CONNECTION PLAN/PROCEDURE. EXISTING TANKS SHALL BE REMOVED AND BACKFILLED AS PER THE SPECIFICATION 31.00.99</p> <p>7. WATER SERVICING SWITCHOVER TO BE DURING NON SCHOOL HOURS OR HOLIDAYS - TO BE DETERMINED WHEN APPROPRIATE.</p>
---	---

1. INTERNAL SANITARY SEWERS AND LATERALS TO BE MINIMUM 150mm DIAMETER PVC D 28 WITH JOINTS CONFORMING TO CSA STANDARD A257.3.
2. SEWERS SHALL BE CONSTRUCTED WITH BEDDING AS PER OPSD 802.010 (GRANULAR "A" EMBEDMENT MATERIAL), UNLESS APPROVED OTHERWISE BY THE ENGINEER.
3. PRECAST MANHOLES SHALL BE 1200mm DIAMETER UNLESS OTHERWISE SPECIFIED, AND SHALL BE IN ACCORDANCE WITH OPSD 701.010. FRAME AND GRATE TO BE "TYPE A" CLOSED COVER AND TO CONFORM TO OPSD 401.010.
4. MANHOLE TOPS ARE TO BE SET TO FINAL GRADE.


1. THE EXISTING ROAD STRUCTURE SHALL BE REHABILITATED TO MATCH EXISTING
2. PAVEMENT STRUCTURE SHALL BE CONFIRMED BY A GEOTECHNICAL ENGINEER
3. CONTRACTOR TO OBTAIN RIGHT-OF-WAY ACTIVITY PERMIT (ROWAP) FROM MUNICIPALITY FOR ROAD CROSSING WORKS

1. AT NO POINT IN TIME WILL THE WATER SERVICE TO THE SCHOOL BE INTERRUPTED DURING THE COURSE OF CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE FOR EXPLORATORY DIGGING TO VERIFY EXISTING WATER INFRASTRUCTURE THAT MAY OR MAY NOT BE IDENTIFIED ON THE DRAWINGS.
3. CONTRACTOR TO ENSURE EXISTING SERVICE AND FIRE WATER INFRASTRUCTURE IS IDENTIFIED AND OPERATIONAL DURING THE INSTALLATION OF NEW SERVICES TO THE BUILDING.
4. CONTRACTOR TO PREPARE WATER SERVICE CONNECTION PLAN/PROCEDURE TO BE REVIEWED BY THE CONSULTANT, OWNER AND MUNICIPALITY IN ADVANCE OF ANY WORKING SWITCHING.
5. EXISTING WATER SERVICE TO BE CAPPED AND DECOMMISSIONED AND/OR REMOVED AS PER OREGON 903 AND THE MINISTRY OF THE ENVIRONMENT, CONSERVATION AND FORESTRY. NO WORKING WATER INFRASTRUCTURE TO BE REMOVED WITHOUT APPROVAL OF THE CONNECTION PLAN/PROCEDURE. EXISTING TANKS SHALL BE REMOVED AND BACKFILLED AS PER NMS SPECIFICATION 31.01 09.
6. EXISTING SWITCHING SHALL BE MAINTAINED THROUGHOUT THE SCHOOL HOURS OR HOLIDAYS - TO BE DETERMINED WHEN APPROPRIATE.



Ref.	No.	Description	Date	Initial
1.	1.	Client Review	23/06/16	JM
2.	2.	BUILDING PERMIT	23/07/10	JM
3.	3.	BUILDING PERMIT REV-1	24/05/06	JM

 <b>BUILDING SERVICES</b> <b>REVIEWED</b>	<b>RECEIVED</b> PLUMBING DEPT JUL 26 2016 08:23 DATE: 7/26/2016 TOWNS OF GAVILLE
	PERMIT NO: 24-160823 Plumbing Plans Review DATE: 8/26/2016 REVIEWED BY: gmo CONSTRUCTION MUST COMPLY TO THE GAVILLE BUILDING CODE

This drawing has been created electronically.

Handwritten or manual revisions to the drawing are only valid when accompanied by the design engineer's initials.

Do not scale drawings.

Check and verify all dimensions and information on the drawings and report all errors or omissions to the Consultant before proceeding with the work.

This drawing shall not be reproduced in any manner, in part or in whole, for any project other than that for which it was prepared.

This drawing, and all design information it contains, are an instrument of professional service and remain the property of Gertis Engineering.

This drawing may have been reduced.

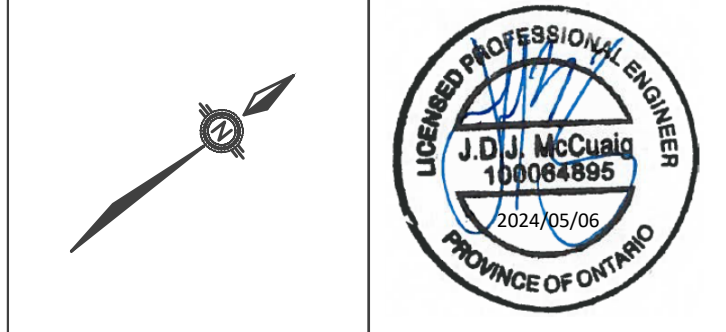
0 6 10 20 30 40 50mm  
1" 1 1/2 2"

0" 1/4" 1/2" 1" 1 1/2" 2"

Project:  
GLADYS SPEERS PS  
RENOVATIONS  
2150 SAMWAY RD, OAKVILLE,



Unit 100 - 706 Euclid Avenue  
Toronto, Ontario, Canada M6G 2T9  
Tel:(416)591-6575 Fax:(416)591-1010



Consultant:

**Gerrits**  
ENGINEERING

222 Mapleview Drive West, Suite 300  
Barrie, ON L4N 9E7 Canada  
Tel.: 705.737.3303  
Fax.: F.705.737.1772  
[www.gerrens.com](http://www.gerrens.com)

Title:

GENERAL SERVICING PLAN

Drawn by: RM	Date: 2024/05/06
-----------------	---------------------

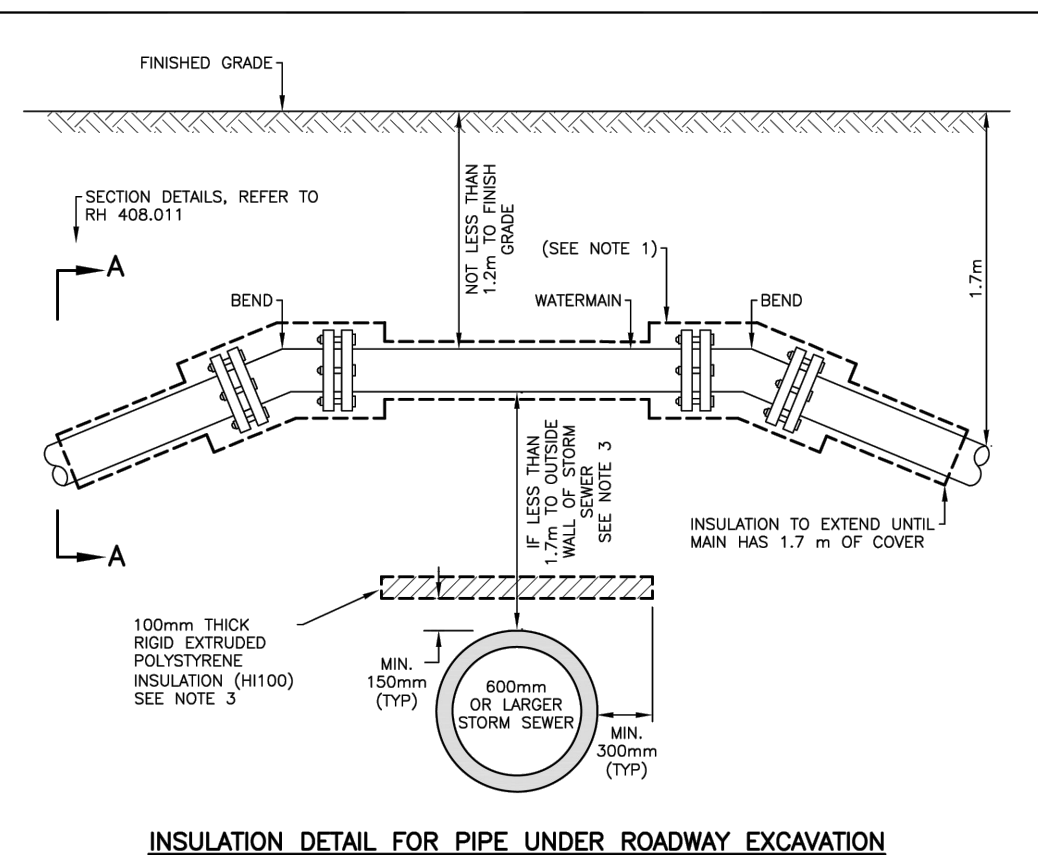
Checked by: KF	Plotted: 2024/05/06
-------------------	------------------------

Scale: 1:250	Issued: BUILDING PERMIT REV-1
Job No.:	Drawing No.:

1436-002	
----------	--

Set No.:	GS-1
N/A	

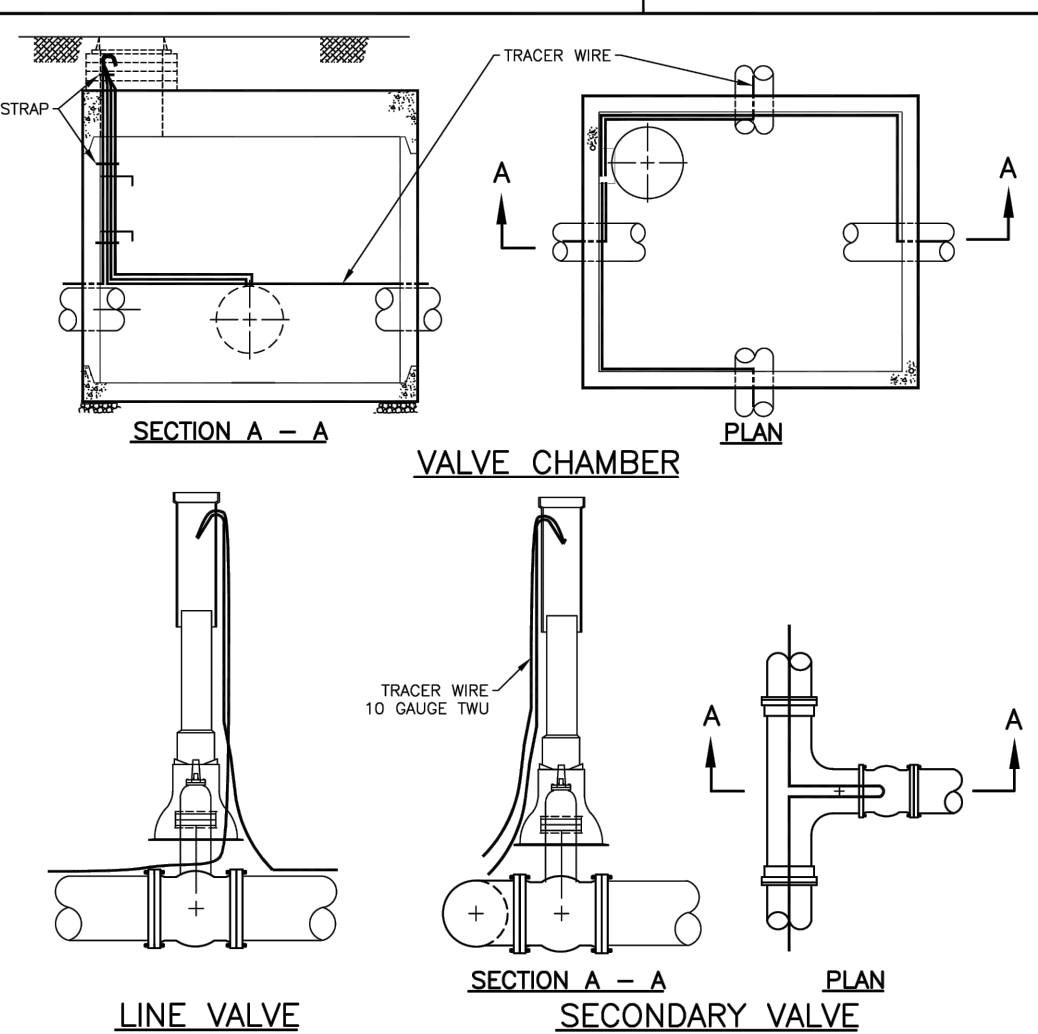
2 of 2



NOTES:

1. USE OF PRE-INSULATED PIPE IS REQUIRED WHEN COVER IS LESS THAN 1.7m.
2. THE LENGTH OF WATERMAIN TO BE PRE-INSULATED SHALL BE FULL LENGTH OF WATERMAIN UNTIL PIPE COVER IS 1.7m MIN.
3. WHERE WATERMAIN CROSSES WITHIN 1.7m OF A 600mm OR LARGER STORM SEWER (FROM OUTSIDE WALL OF STORM SEWER), THE STORM SEWER TO BE INSULATED WITH RIGID POLYSTYRENE INSULATION (PI100) AS INSTRUCTED BY CONTRACT ADMINISTRATOR.
4. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

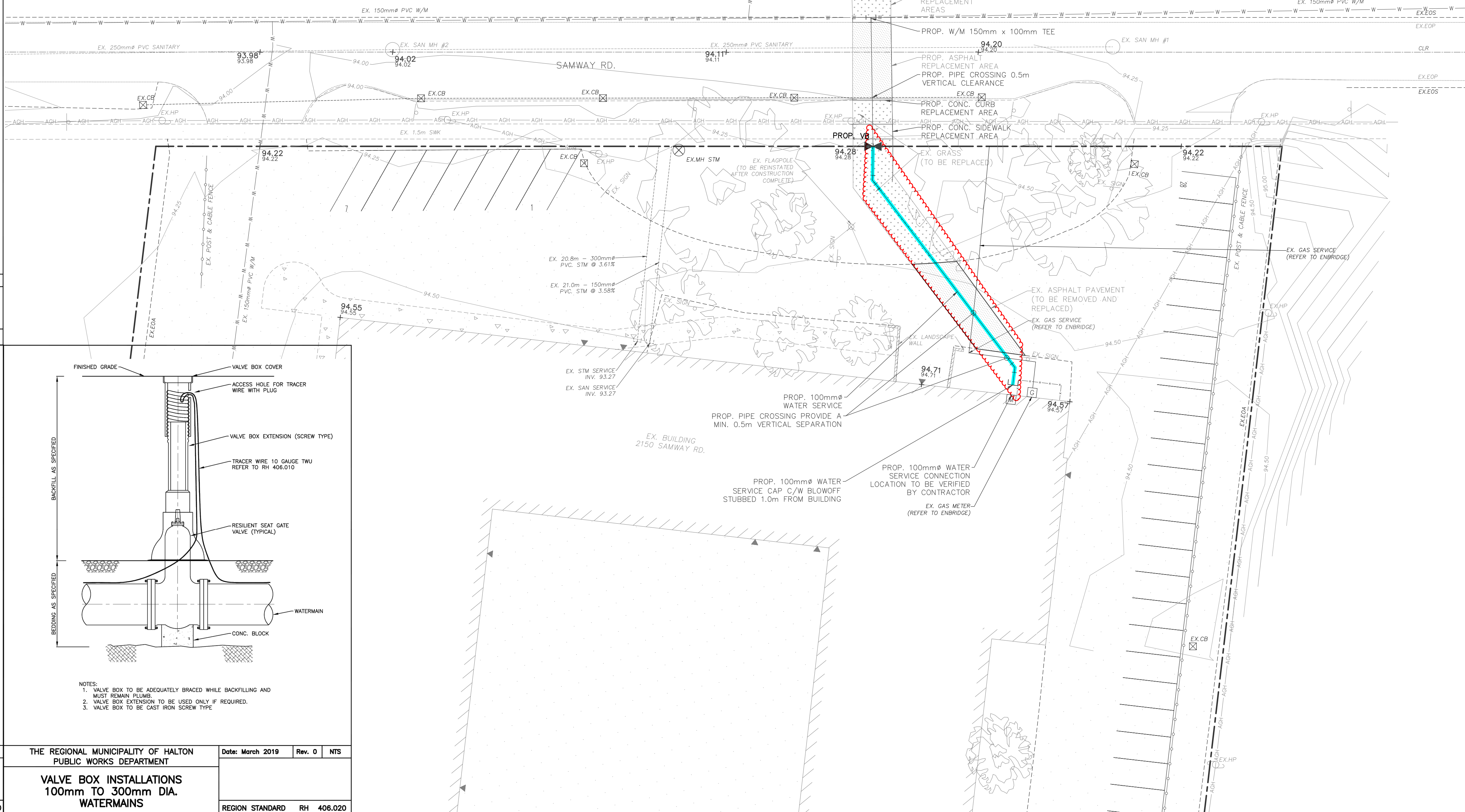
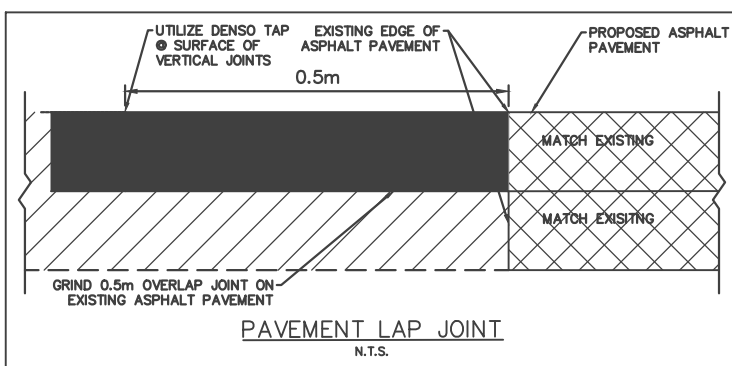
THE REGIONAL MUNICIPALITY OF HALTON PUBLIC WORKS DEPARTMENT	Date: July 2019	Rev. 0	NTS
WATERMAIN AND WATER SERVICE INSULATION DETAIL SITE SPECIFIC – APPROVED BY HALTON REGION	REGION STANDARD RH 408 020		



NOTES:

1. TRACER WIRE TO BE INSTALLED ON OUTSIDE OF VALVE BOX AND THROUGH HOLE.
2. MINIMUM OF 300mm OF TRACER WIRE TO BE LEFT IN THE TOP OF VALVE BOX OR CHAMBER.
3. HOLE TO BE DRILLED IN THE TOP SECTION OF VALVE BOX 50mm BELOW BOTTOM OF LID.
4. TRACER WIRE TO BE ATTACHED TO VALVE CHAMBER WALL AND ADJUSTMENT RINGS WITH STAINLESS STEEL
5. TRACER WIRE IN VALVE CHAMBER TO BE INSTALLED BESIDE CHAMBER STEPS.
6. ENDS OF EACH TRACER WIRE TO BE BROUGHT UP TO THE TOP OF THE VALVE BOX AND/OR WATER VALVE CHAMBER. IN CHAMBERS ENSURE CONNECTION CAN BE MADE TO EACH LINE WITHOUT ENTERING THE CONFINED SPACE.
7. ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE NOTED.

THE REGIONAL MUNICIPALITY OF HALTON PUBLIC WORKS DEPARTMENT	Date: August 2018	Rev. 1	NTS
TRACER WIRE INSTALLATION IN VALVE CHAMBER, VALVE BOX AND SECONDARY VALVE BOX			
	REGION	STANDARD	RH 406.01C

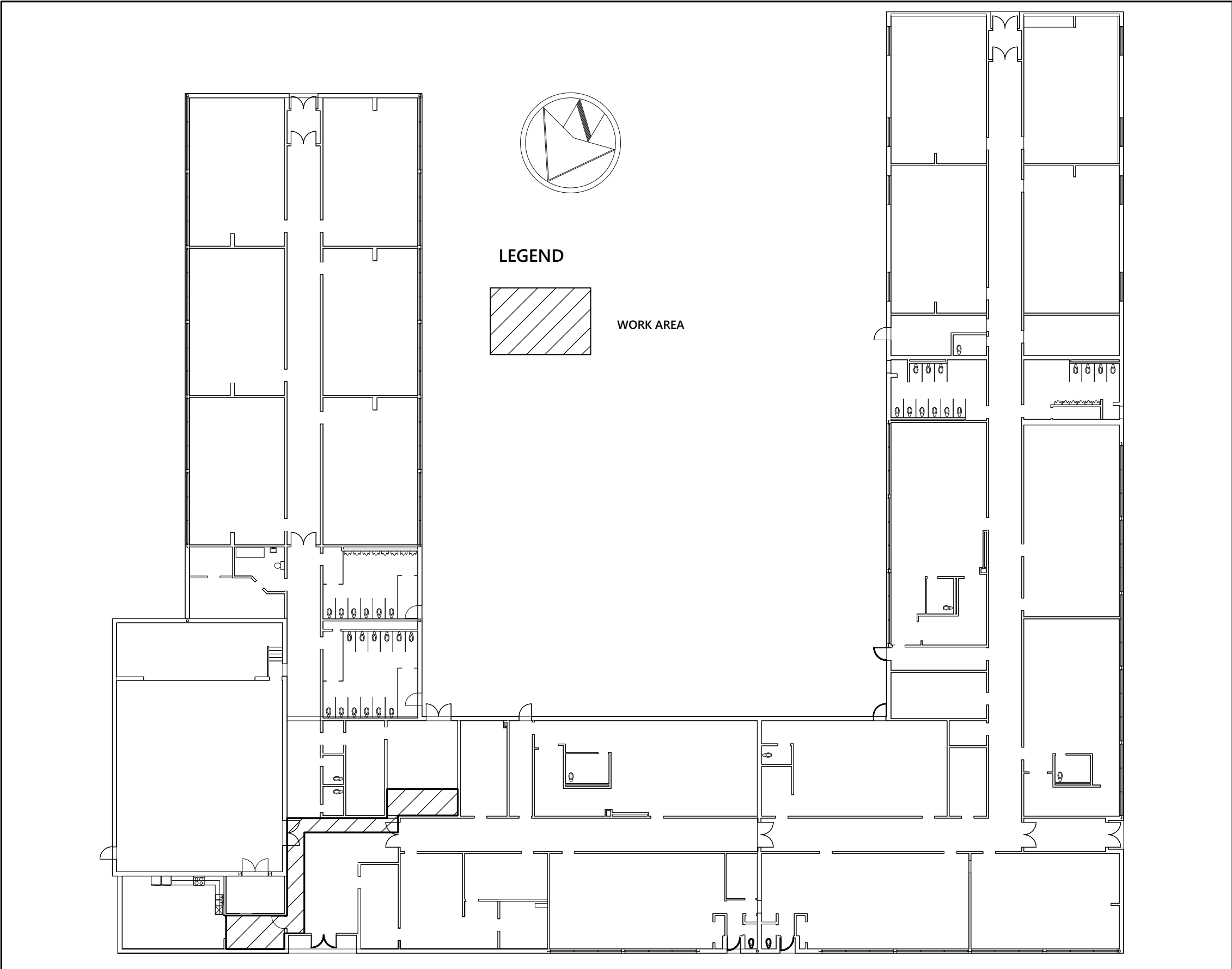


NOTES:

1. VALVE BOX TO BE ADEQUATELY BRACED WHILE BACKFILLING AND MUST REMAIN PLUMB.
2. VALVE BOX EXTENSION TO BE USED ONLY IF REQUIRED.
3. VALVE BOX TO BE CAST IRON SCREW TYPE

THE REGIONAL MUNICIPALITY OF HALTON PUBLIC WORKS DEPARTMENT	Date: March 2019	Rev. 0	NTS
VALVE BOX INSTALLATIONS 100mm TO 300mm DIA. WATERMAINS			
	REGION STANDARD	RH	406.020





SCHOOL KEY PLAN – GROUND FLOOR  
SCALE: N.T.S.

#### 1. DOMESTIC WATER PIPING–COPPER

PIPING: DOMESTIC COLD WATER PIPING, WITHIN BUILDING, COPPER TUBE, HARD DRAWN, TYPE L; TO ASTM B88M–85. ALL PIPING SHALL HAVE CERTIFICATION MARKINGS FOR COMPLIANCE WITH ASTM B88–83.  
FITTINGS: BRASS OR BRONZE FLANGES AND FLANGED FITTINGS; TO ANSI B16.24–1979. BRASS OR BRONZE THREADED FITTINGS: TO ANSI B16.15–1978. CAST BRONZE TO ANSI B16.18–1984 OR WROUGHT COPPER AND BRONZE TO ANSI B16.22–1980.  
GATE VALVES (USE ON ALL DCW PIPING INCLUDING BY-PASS): FLANGED: RISING STEM: TO MSS SP–70–1976, CLASS 125, 860 KPA, FF FLANGE, CAST–IRON BODY, OS&Y BRONZE TRIM. STANDARD OF ACCEPTANCE: JENKINS, CRANE, TOYO, KITZ.  
BALL VALVES (USE FOR EXPANSION TANK ISOLATION AND ITS DRAIN VALVE):  
SOLDERED: CLASS 125, 860KPA, BRONZE BODY, BRONZE BALL, WITH TEFLON SEAL. STANDARD OF ACCEPTANCE: TOYO, JENKINS, CRANE, KITZ.

#### 2. BACK FLOW PREVENTER FIRE LINE

THE DOUBLE CHECK DETECTOR ASSEMBLY SHALL CONSIST OF TWO INDEPENDENT TRI–LINK CHECK MODULES WITHIN A SINGLE HOUSING, SLEEVE ACCESS PORT, FOUR TEST COCKS AND TWO DRIP TIGHT SHUTOFF VALVES. TRI–LINK CHECKS SHALL BE REMOVABLE AND SERVICEABLE, WITHOUT THE USE OF SPECIAL TOOLS. THE HOUSING SHALL BE CONSTRUCTED OF 304 SCHEDULE 40 STAINLESS STEEL PIPE WITH GROOVE END CONNECTIONS. TRI–LINK CHECKS SHALL HAVE REVERSIBLE ELASTOMER DISCS AND IN OPERATION SHALL PRODUCE DRIP TIGHT CLOSURE AGAINST REVERSE FLOW CAUSED BY BACKPRESSURE OR BACKSIPHONAGE. THE BYPASS ASSEMBLY SHALL CONSIST OF A METER, WHICH REGISTERS IN EITHER GALLON OR CUBIC MEASUREMENT, A DOUBLE CHECK BACKFLOW ASSEMBLY AND REQUIRED TEST COCKS. ASSEMBLY SHALL BE A WATTS SERIES 757DCDA QST.

#### 3. DCW PIPING INSULATION

CGSB 51–GP–9M, RIGID MINERAL FIBRE SLEEVING FOR PIPING WITH VAPOUR BARRIER JACKET. THICKNESS: 1". STANDARD OF ACCEPTANCE: FIBERGLAS 850, MANSON, KNAUF.

INSULATION FASTENING – TAPE: SELF ADHESIVE TAPE RATED UNDER 25 FOR FLAME SPREAD AND UNDER 50 FOR SMOKE DEVELOPMENT. LAP SEAL ADHESIVE: QUICK-SETTING ADHESIVE FOR JOINTS AND LAP SEALING OF VAPOUR BARRIERS. FLAME SPREAD 10 SMOKE DEVELOPMENT 0.

JACKETS – PVC OR CANVAS: APPLY IN ALL EXPOSED AREAS: COMPACT, FIRM ULC LISTED HEAVY PLAIN WEAVE, COTTON FABRIC AT 220 G/M2. ON CONCEALED VALVES AND FITTINGS USE ULC LISTED PLAIN WEAVE COTTON FABRIC AT 120 G/M2.

APPLICATION: APPLY INSULATION AFTER REQUIRED TESTS HAVE BEEN COMPLETED AND APPROVED BY THE CONSULTANT. INSULATION AND SURFACES SHALL BE CLEAN AND DRY WHEN INSTALLED AND DURING APPLICATION OF ANY FINISH. APPLY INSULATION AND COVERINGS ON HOT PIPING WHILE SURFACE IS BETWEEN 90 TO 120°F. PROTECT INSULATION WITH INSULATION SHIELDS CONSISTING OF HIGH DENSITY INSULATION AND SHEET STEEL SUPPORT. ALTERNATIVELY BURY PIPE HANGER IN INSULATION AND APPLY INSULATION UP HANGER ROD NOT LESS THAN 4 TIMES THE INSULATION THICKNESS.

#### 4. FIRE PIPE AND FITTINGS

SHALL BE IN ACCORDANCE WITH NFPA 14 AND NFPA 13.THREADED OR FLANGED FITTINGS SHALL BE ANSI B 16.3 CAST IRON, CLASS 125 MINIMUM. THREADED FITTING ARE NOT PERMITTED ON PIPE WITH WALL THICKNESS LESS THAN SCHEDULE 40.

CLAMP–ON FITTINGS WITH RUBBER GASKETS SHALL BE LISTED FOR THE PIPING APPLICATION. PLAIN END PIPE, FITTINGS WITH LOCKING LUGS OR SHEAR BOLTS ARE NOT PERMITTED.

#### 5. FIRE VALVES

DO NOT USE QUARTER TURN BALL VALVES FOR 50mm (2") OR LARGER DRAIN VALVES.

LISTED INDICATING VALVES:

- GATE: OS&Y, 1200KPA (175 PSIG) WOG.
- BUTTERFLY: GEAR OPERATED, INDICATING TYPE, 1200 KPA (175 PSIG) WOG.
- CHECK VALVES: SWING TYPE, RUBBER FACED OR WAFER TYPE SPRING LOADED BUTTERFLY CHECK VALVE, 1200 KPA (175 PSIG) WOG.
- DRAIN VALVES: THREADED BRONZE ANGLE, GLOBE, BALL OR BUTTERFLY, 1000 KPA (150 PSIG.) WOG EQUIPPED WITH REDUCER AND HOSE CONNECTION WITH CAP OR CONNECTED TO A DRAIN LINE.
- AUTOMATIC BALL DRIPS: CAST BRASS 19mm (3/4") IN–LINE AUTOMATIC BALL DRIP WITH BOTH ENDS THREADED WITH IRON PIPE THREADS.

STANDARD OF ACCEPTANCE: TYCO, WILSON AND COUSINS.

#### 6. VALVE SUPERVISORY SWITCHES

PROVIDE EACH INDICATING STANDPIPE AND CONTROL VALVE WITH ADEQUATE MEANS FOR MOUNTING A VALVE SUPERVISORY SWITCH.

MOUNT SWITCH SO AS NOT TO INTERFERE WITH NORMAL OPERATION OF THE VALVE AND ADJUST TO OPERATE WITHIN TWO REVOLUTIONS TOWARD THE CLOSED POSITION OF THE VALVE CONTROL, OR WHEN THE STEM IS MOVED NO MORE THAN ONE FIFTH OF THE DISTANCE FROM ITS NORMAL POSITION.

THE MECHANISM SHALL BE CONTAINED IN A WEATHERPROOF DIE CAST ALUMINUM HOUSING, WHICH SHALL PROVIDE A 19mm (3/4") TAPPED CONDUIT ENTRANCE AND INCORPORATE THE NECESSARY FACILITIES FOR ATTACHMENT TO THE VALVES.

SWITCH HOUSING TO BE FINISHED IN RED BAKED ENAMEL.

VALVE SUPERVISORY SWITCHES FOR BALL AND BUTTERFLY VALVES: MAY BE INTEGRAL WITH THE VALVE.

ALL CONDUIT AND WIRING CONNECTED THERETO SHALL BE PROVIDED.

STANDARD OF ACCEPTANCE: TYCO.

#### DRAWING LIST

NO. DRAWING TITLE

M–1.3 LEGEND, KEY PLAN & NOTES – MECHANICAL

M–2.4 PART OF SCHOOL – EQUIPMENT & PIPING LAYOUT – EXISTING & DEMOLITION – MECHANICAL

M–3.4 PART OF SCHOOL – EQUIPMENT & PIPING LAYOUT – NEW WORK – MECHANICAL

GS–1 EROSION & SEDIMENT CONTROL PLAN

GS–1 GENERAL SERVICING PLAN

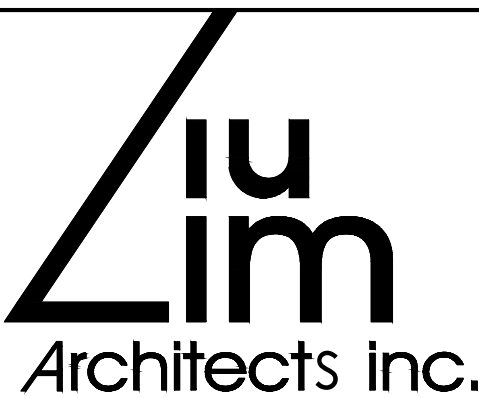
#### SYMBOLS

—→	DOMESTIC COLD WATER SUPPLY
—→	DOMESTIC HOT WATER SUPPLY
—D—→	SANITARY DRAIN
—F—→	FIRE LINE
—M—→	VALVE
—H—→	STRAINER
—N—→	CHECK VALVE
—et—→	PIPE DOWN
—o—→	PIPE UP
NC	NORMALLY CLOSED
—[BPPA]—→	BACKFLOW PREVENTER ASSEMBLY
—[DCVA]—→	DOUBLE CHECK VALVE ASSEMBLY
—(M)—→	WATER METER
—□ F/S	FLOW SWITCH
—PG	PRESSURE GAUGE
CTE	CONNECT TO EXISTING
CUT	CUT POINT OF EXISTING SERVICE



#### Project:

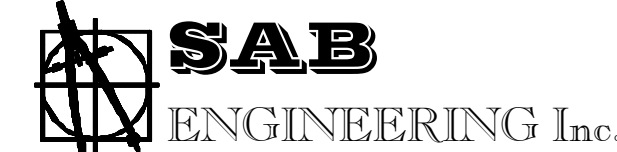
GLADYS SPEERS PS  
RENOVATIONS  
2150 SAMWAY RD, OAKVILLE,  
ON L6L 2P6



Unit 100 – 706 Euclid Avenue  
Toronto, Ontario, Canada M6G 2T9  
Tel:(416)591–6575 Fax:(416)591–1010



#### Consultant:



588 EDWARD AVE., UNIT 25, RICHMOND HILL, ONT., L4C 9Y6  
TEL. (905)-787 8885 FAX (905)-787 8771

#### Title:

LEGEND, KEY PLAN & NOTES  
– MECHANICAL

#### Drawn by:

P.C.

#### Date:

JUNE 2023

#### Checked by:

O.S.

#### Plotted:

#### Scale:

AS SHOWN

#### Issued:

#### Job No.:

2022–01

#### Drawing No.:

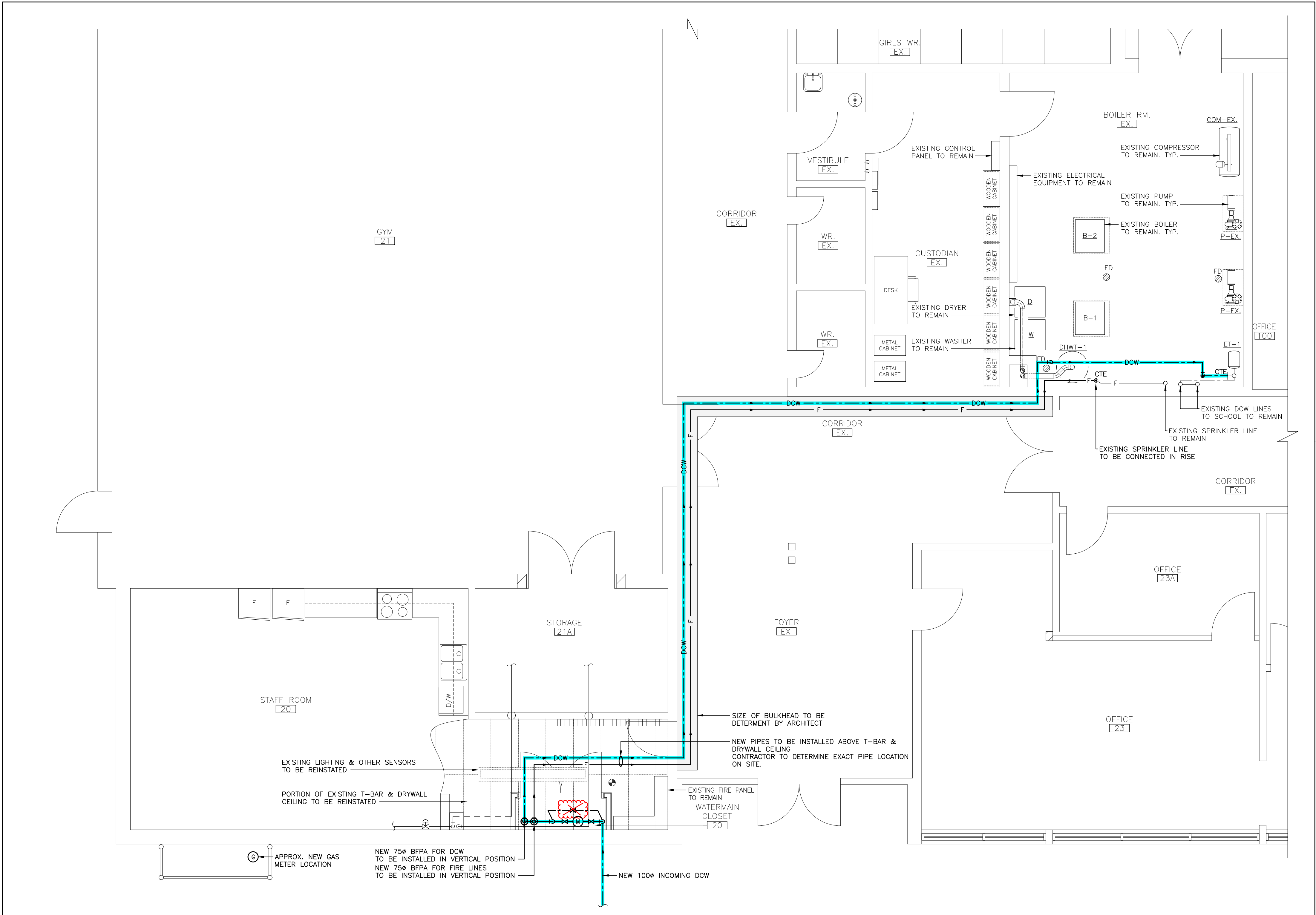
M-1.3

#### Set No.:

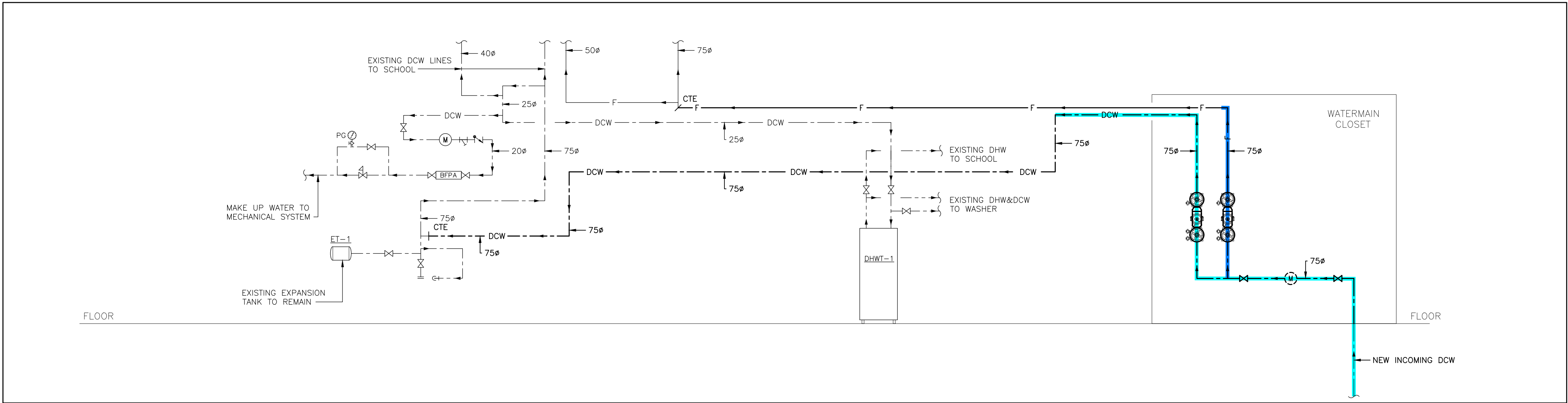
of: 3







PART OF GROUND FLOOR - EQUIPMENT & PIPING LAYOUT - NEW WORK - MECHANICAL  
SCALE: 1:50



PLUMBING PIPING LAYOUT - NEW WORK - MECHANICAL  
SCALE: N.T.S.

#### NEW WORK NOTES:

NEW BACKFLOW PREVENTER (BFP) TO MATCH PIPE SIZE. INSULATE NEW DCW PIPING IN THE MECHANICAL ROOM.

INSTALL NEW BFP BETWEEN 750 [30"] - 1500 [60"] A.F.F. ALLOW A MIN. OF 300 [12"] CLEAR SPACE ABOVE THE NEW BFP. INSTALL BFP TO MAINTAIN MIN. 750MM CLEARANCE IN FRONT. PROVIDE ADEQUATE SUPPORTS FOR ALL NEW PIPING AND BFP.

OFFSET PIPING AS NECESSARY IN ORDER TO MAINTAIN ALL REQUIRED CLEARANCES; COORDINATE INSTALLATION ON SITE; ALLOW FOR ANY ADDITIONAL OFFSETS AS PART OF THIS CONTRACT.

COORDINATE WATER SHUT-DOWN WITH SCHOOL REPRESENTATIVE.

PROVIDE GROUNDING TO THE NEW PIPING SYSTEM AS REQUIRED BY CODE.

PROVIDE A MICROBIOLOGY LAB TEST REPORT FOR THE NEW INCOMING DCW SERVICE.

PROVIDE BACKFLOW PREVENTION DEVICE TEST REPORTS FOR ALL NEW BACKFLOW PREVENTERS.

LOCATIONS OF NEW PIPING AND EQUIPMENT ARE APPROXIMATE. COORDINATE THE LOCATION OF EQUIPMENT AND NEW PIPE INSTALLATION WITH EXISTING SERVICES IN ORDER TO AVOID INTERFERENCE; MAKE ALL NECESSARY ADJUSTMENTS AS PART OF THIS CONTRACT.

ALLOW FOR FIRE ALARM VERIFICATION OF THE NEW AND EXISTING DEVICES LOCATED IN THE MECHANICAL ROOM IN ACCORDANCE WITH AUTHORITIES HAVING JURISDICTION AND FIRE DEPARTMENT.

PROVIDE ALL THE DIGGING (INDOOR AND OUTDOOR) AND CUTTING OF THE SLAB AS REQUIRED FOR THE CAPPING OF THE EXISTING PIPE AND INSTALLATION OF THE NEW ONE. PRIOR TO ANY CUTTING OR DIGGING, CONTRACTOR SHALL SCAN/ X-RAY AS REQUIRED TO IDENTIFY LOCATION OF ALL EXISTING UNDERGROUND SERVICES. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS.

PROVIDE SHORING AS REQUIRED FOR THE TRENCH. THE SHORING SYSTEM SHALL BE DESIGNED AND APPROVED BY A STRUCTURAL ENGINEER.

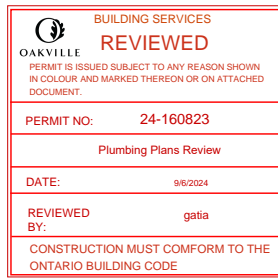
REPAIR THE FLOOR TO MATCH EXISTING AT THE COMPLETION OF THE INSTALLATION.

COORDINATE LOCATION OF THE DCW AND FIRE LINE CONNECTION OUTSIDE THE BUILDING WITH THE CIVIL ENGINEER. TEMPORARY RELOCATE THE EXISTING GAS METER AND ASSOCIATED ENCLOSURE AS REQUIRED TO ALLOW FOR THE INSTALLATION OF THE NEW UNDERGROUND DCW PIPE. COORDINATE WITH CONSUMER GAS AND PAY FOR ALL THE REQUIRED APPROVALS AND WORK.

REINSTATE ALL THE FINISHES OUTSIDE OF THE BUILDING INCLUDING ASPHALT, PAVING, GRASS AFFECTED BY THE WORK.

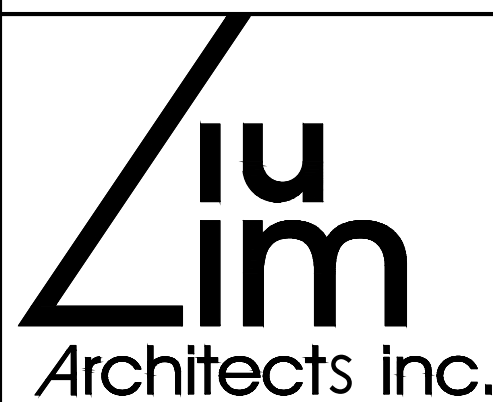
#### Revisions

Ref.	No.	Description	Date	Initial
△	6	ISSUED FOR CCN #6	2023/07/19	
△	2	75% REVIEW	2022/03/09	
△	3	100% REVIEW	2022/03/31	
△	4	ISSUED FOR TENDER	2022/04/26	
△	5	ISSUED FOR CCN #7	2024-04-28	

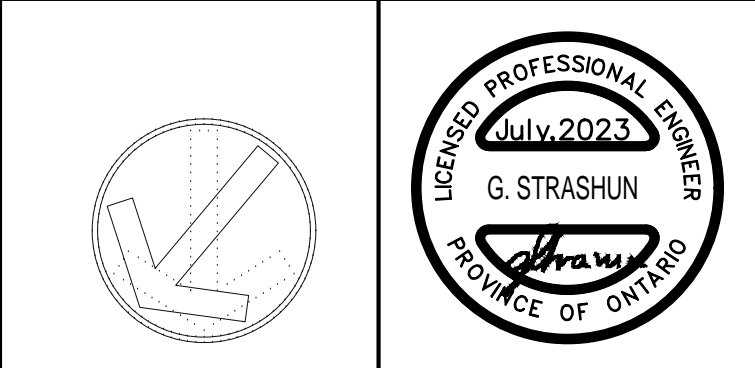


#### Project:

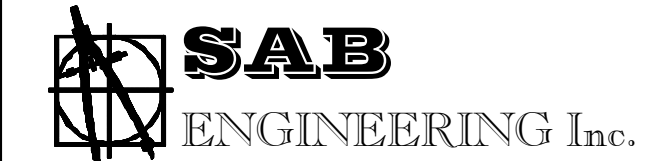
GLADYS SPEERS PS  
RENOVATIONS  
2150 SAMWAY RD, OAKVILLE,  
ON L6L 2P6



Unit 100 - 706 Euclid Avenue  
Toronto, Ontario, Canada M6G 2T9  
Tel:(416)591-6575 Fax:(416)591-1010



#### Consultant:



588 EDWARD AVE., UNIT 25, RICHMOND HILL, ONT., L4C 9Y6  
TEL. (905)-787 8885 FAX (905)-787 8771

#### Title:

PART OF SCHOOL  
- EQUIPMENT & PIPING LAYOUT  
- NEW WORK  
- MECHANICAL

Drawn by: P.C.	Date: JUNE 2023
Checked by: O.S.	Plotted:
Scale: AS SHOWN	Issued:
Job No.: 2022-01	Drawing No.: M-3.4
Set No.:	



Job Name \_\_\_\_\_  
 Job Location \_\_\_\_\_  
 Engineer \_\_\_\_\_  
 Approval \_\_\_\_\_

Contractor \_\_\_\_\_  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative \_\_\_\_\_

# Series 757DCDA, 757NDCDA

## Double Check Detector Assemblies

Sizes: 2½" – 10"

Series 757DCDA, 757NDCDA Double Check Detector Assemblies are used to prevent backflow of non-health hazard pollutants that are objectionable but not toxic, from entering the potable water supply system. The 757DCDA, 757NDCDA may be installed under continuous pressure service and may be subjected to backpressure and backsiphonage. Series 757DCDA, 757NDCDA is used primarily on fire line sprinkler systems when it is necessary to monitor unauthorized use of water.

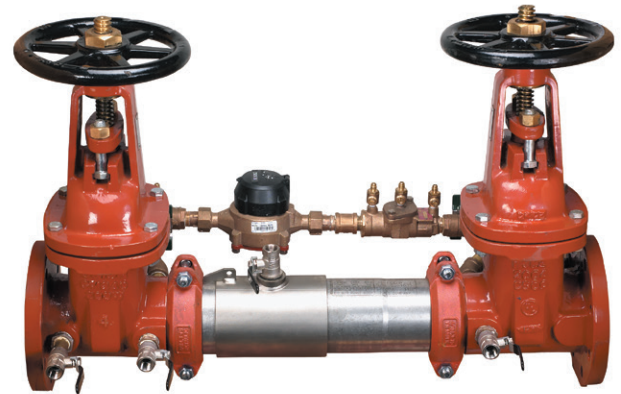
### Features

- Extremely compact design
- 70% Lighter than traditional designs
- 304 (Schedule 40) stainless steel housing & sleeve
- Groove fittings allow integral pipeline adjustment
- Patented tri-link spring check provides lowest pressure loss
- Unmatched ease of serviceability
- Available with grooved butterfly valve shutoffs
- May be used for horizontal, vertical or N pattern installations
- Replaceable check disc rubber

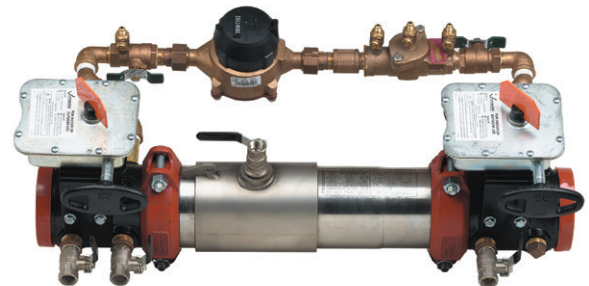


### Specifications

The Double Check Detector Assembly shall consist of two independent tri-link check modules within a single housing, sleeve access port, four test cocks and two drip tight shutoff valves. Tri-link checks shall be removable and serviceable, without the use of special tools. The housing shall be constructed of 304 Schedule 40 stainless steel pipe with groove end connections. Tri-link checks shall have reversible elastomer discs and in operation shall produce drip tight closure against reverse flow caused by backpressure or backsiphonage. The bypass assembly shall consist of a meter, which registers in either gallon or cubic measurement, a double check backflow assembly and required test cocks. Assembly shall be a Watts Series 757DCDA, 757NDCDA.



757DCDAOSY



757DCDABFG



757NDCDAOSY

### NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.



## Available Models

Suffix:

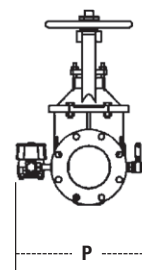
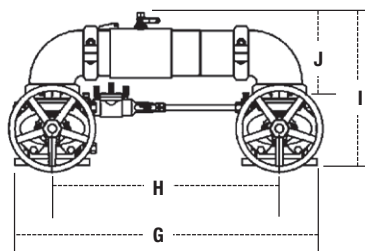
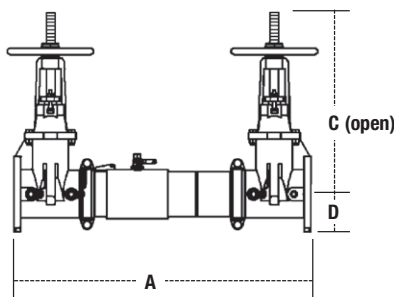
- OSY – UL/FM outside stem and yoke resilient seated gate valves
- BFG – UL/FM grooved gear operated butterfly valves with tamper switch
- \*OSY FxG – Flanged inlet gate connection and grooved outlet gate connection
- \*OSY GxF – Grooved inlet gate connection and flanged outlet gate connection
- \*OSY GxG – Grooved inlet gate connection and grooved outlet gate connection

Available with grooved NRS gate valves - consult factory\*

Post indicator plate and operating nut available - consult factory\*

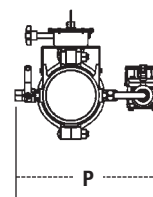
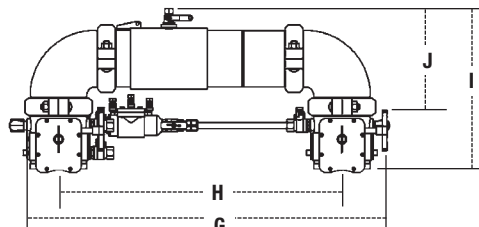
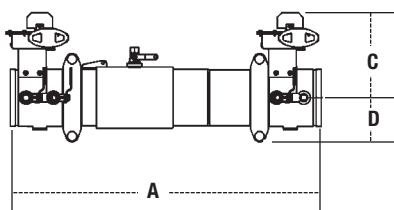
\*Consult factory for dimensions

## Dimensions — Weight



### 757DCDA, 757NDCDA

SIZE			DIMENSIONS										WEIGHT							
	A		C (OSY)		D		G		H		I		J		P		757DCDA		757NDCDA	
<i>in.</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>lbs.</i>	<i>kgs.</i>	<i>lbs.</i>	<i>kgs.</i>
2½	30¾	781	16⅞	416	3½	89	29⅞	738	21½	546	15½	393	8⅓	223	13⅜	335	139	63	147	67
3	31¾	806	18⅞	479	3⅞	94	30¾	768	22¼	565	17⅞	435	9⅞	233	14½	368	159	72	172	78
4	33¾	857	22¾	578	4	102	33	838	23½	597	18½	470	9⅝	252	15⅜	386	175	79	198	90
6	43½	1105	30⅞	765	5½	140	44¾	1137	33¾	845	23⅞	589	13⅞	332	19	483	309	140	350	159
8	49¾	1264	37¾	959	6⅞	170	54⅞	1375	40⅞	1019	27⅞	697	15⅞	399	21⅜	538	494	224	569	258
10	57¾	1467	45¾	1162	8⅞	208	66	1676	49½	1257	32½	826	17⅞	440	24	610	795	361	965	438



### 757DCDABFG, 757NDCDABFG

SIZE		DIMENSIONS										WEIGHT								
	A		C		D		G		H		I		J		P		757DCDABFG		757NDCDA BFG	
<i>in.</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>in.</i>	<i>mm</i>	<i>lbs.</i>	<i>kgs.</i>	<i>lbs.</i>	<i>kgs.</i>
2½	27¾	705	8	203	3½	89	29⅞	759	21½	546	14 <sup>15</sup> / <sub>16</sub>	379	8 <sup>13</sup> / <sub>16</sub>	223	13	330	70	32	78	35
3	28¼	718	8 <sup>5</sup> / <sub>16</sub>	211	3 <sup>11</sup> / <sub>16</sub>	94	30 <sup>11</sup> / <sub>16</sub>	779	22¼	565	15 <sup>7</sup> / <sub>16</sub>	392	9 <sup>3</sup> / <sub>16</sub>	233	13½	343	68	31	81	37
4	29	737	8 <sup>9</sup> / <sub>16</sub>	227	3 <sup>11</sup> / <sub>16</sub>	94	31 <sup>9</sup> / <sub>16</sub>	811	23½	597	16¼	412	9 <sup>5</sup> / <sub>16</sub>	252	14	356	75	34	98	44
6	36½	927	10	254	5	127	43 <sup>3</sup> / <sub>16</sub>	1097	33¾	845	19 <sup>11</sup> / <sub>16</sub>	500	13 <sup>1</sup> / <sub>16</sub>	332	14½	368	131	59	171	78
8	42¾	1086	12¼	311	6½	165	51 <sup>1</sup> / <sub>16</sub>	1297	40 <sup>7</sup> / <sub>8</sub>	1019	23 <sup>5</sup> / <sub>16</sub>	592	15 <sup>11</sup> / <sub>16</sub>	399	18 <sup>3</sup> / <sub>16</sub>	462	275	125	351	159

## Materials

Housing & Sleeve: 304 (Schedule 40) Stainless Steel

Elastomers: EPDM, Silicone and Buna-N

Tri-link Checks: Noryl®, Stainless Steel

Check Discs: Reversible Silicone or EPDM

Test Cocks: Lead Free\* Bronze Body

Pins & Fasteners: 300 Series Stainless Steel

Springs: Stainless Steel

## Pressure — Temperature

Temperature Range: 33°F – 140°F (0.5°C – 60°C)

Maximum Working Pressure: 175psi (12.1 bar)

## Approvals

- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at The University of Southern California (FCCCHR-USC)

- AWWA C510-97



(\*\*BFG & OSY Only)

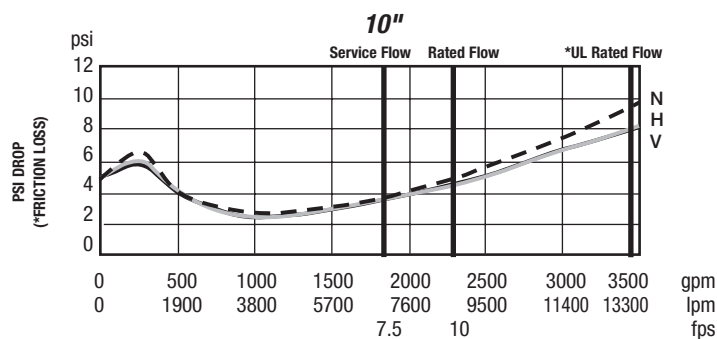
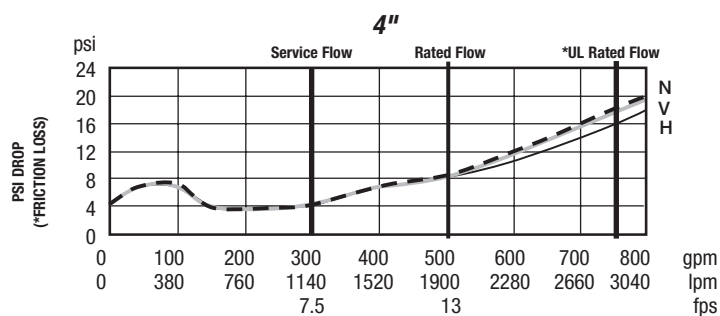
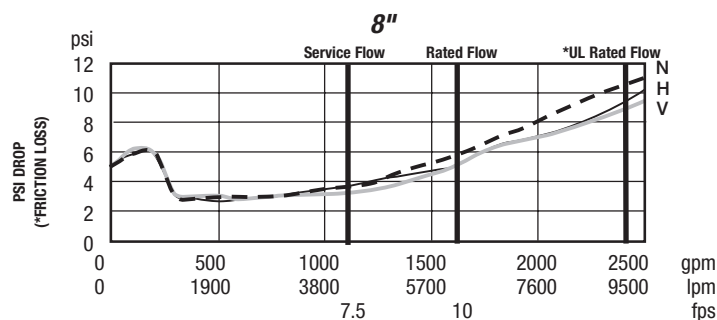
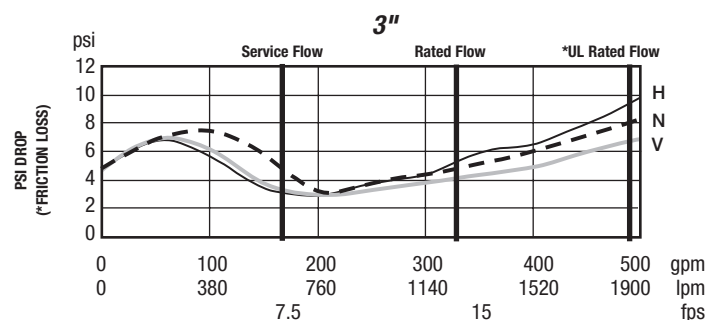
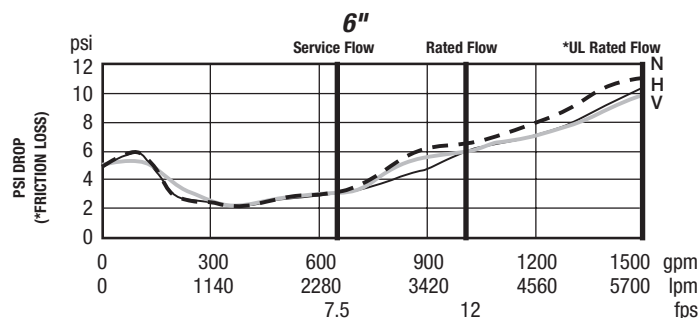
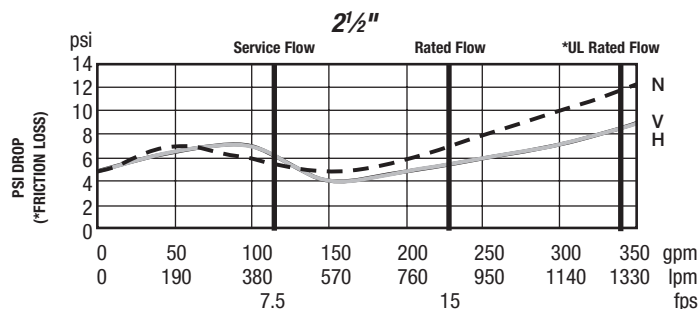


## Capacity

Series 757DCDA, 757NDCDA flow curves as tested by Underwriters Laboratory.

Flow characteristics collected using butterfly shutoff valves

—— Horizontal    —— Vertical    ..... N - Pattern



## Flow capacity chart identifies valve performance based upon rated water velocity up to 25fps

- Service Flow is typically determined by a rated velocity of 7.5fps based upon schedule 40 pipe.
- Rated Flow identifies maximum continuous duty performance determined by AWWA.
- UL Flow Rate is 150% of Rated Flow and is not recommended for continuous duty.
- AWWA Manual M22 [Appendix C] recommends that the maximum water velocity in services be not more than 10fps.

### NOTICE

Inquire with governing authorities for local installation requirements

### ⚠ WARNING

It is illegal to use this product in any plumbing system providing water for human consumption, such as drinking or dishwashing, in the United States. Before installing standard material product, consult your local water authority, building and plumbing codes.



