FIRE ALARM SCOPE OF WORK:

- EXISTING FIRE ALARM SYSTEM IS SIMPLEX 4100U/4100ES. REFER TO FLOOR PLAN FOR FACP AND ANNUNCIATOR LOCATIONS.
- PROVIDE FIRE ALARM SCOPE TO SUIT UPGRADES. INSTALL IN CONFORMANCE WITH THE ONTARIO BUILDING CODE AND CAN/ULC-S524-M "STANDARD FOR THE INSTALLATION OF FIRE ALARM SYSTEMS".
- PROVIDE NEW FIRE ALARM ALARM ZONE AND SUPERVISORY ZONE TO SUIT NEW SPRINKLER WORK.
- PAINT ALL FIRE ALARM JUNCTION BOXES RED. IDENTIFY EACH JUNCTION BOX AS EITHER SIGNAL OR INITIATING CIRCUIT.
- INCLUDE FOR ALL CUTTING, CORING AND PATCHING NECESSARY FOR THE INSTALLATION. PATCHING SHALL BE SUBJECT TO OWNER'S APPROVAL. REMOVE AND REPLACE CEILING TILES IN AREA OF WORK AS REQUIRED. REPLACE ANY BROKEN CEILING TILES TO MATCH EXISTING.
- OBTAIN ESA PERMIT AND ANY OTHER REQUIRED PERMITS. PAY FOR ALL FEES ASSOCIATED WITH SAME.
- CONFIRM SIGNAL TO FIRE ALARM DEPARTMENT WITH MONITORING COMPANY. OBTAIN THE SERVICES OF SIMPLEX TO TEST AND VERIFY THE FIRE ALARM SYSTEM IN CONFORMANCE WITH CAN/ULC-S537-M "STANDARD FOR THE VERIFICATION OF
- PROVIDE VERIFICATION REPORT TO THE ENGINEER FOR REVIEW. SUBMIT FINAL COPY OF REPORT TO THE BUILDING DEPARTMENT/FIRE PREVENTION.

FIRE ALARM SYSTEMS" TO ENSURE SATISFACTORY OPERATION.

- ARRANGE FOR A SITE INSPECTION BY THE BUILDING DEPARTMENT/FIRE PREVENTION, ENGINEER AND ESA AT COMPLETION OF THE PROJECT FOR FINAL
- . PROVIDE ELECTRONIC COPY IN PDF FORMAT OF CLOSE-OUT DOCUMENTATION TO PRIME CONTRACTOR FOR INCLUSION IN MAINTENANCE MANUALS: - VERIFICATION REPORT
- ESA CERTIFICATE - SHOP DRAWINGS (IF APPLICABLE) - AS-BUILT DRAWINGS

FIRE ALARM SPECIFICATIONS:

- THE CONTRACTOR SHALL PROVIDE LABOUR, SERVICES AND MATERIALS NECESSARY TO COMPLETE THE WORK IN COMPLIANCE WITH ALL PERTINENT CODES, RULES, REGULATIONS AND LAWS OF THE LOCAL JURISDICTION. THE SYSTEM SHALL COMPLY IN ALL RESPECTS WITH THE REQUIREMENTS OF THE SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS AND UNDERWRITERS LABORATORIES OF CANADA (ULC) LISTINGS. ALL COMPONENTS SHALL BE ULC LISTED.
- THE EXISTING SYSTEM IS SIMPLEX 4100U/4100ES.
- THE EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE CURRENT
- PROVISIONS OF THE FOLLOWING CODES AND STANDARDS: LOCAL AND PROVINCIAL BUILDING CODES
- LOCAL AND PROVINCIAL FIRE CODES
- LOCAL, PROVINCIAL AND CANADIAN ELECTRICAL CODES NFPA 72 - NATIONAL FIRE ALARM CODE
- .5 NFPA 101 LIFE SAFETY CODE CAN/ULC-S524 AND OTHER APPLICABLE ULC STANDARDS AUTHORITY HAVING JURISDICTION
- PROVIDE ONE (1) YEAR WARRANTY ON ALL FIRE ALARM WORK.
- ALL SIGNAL DEVICES SHALL HAVE FIELD ADJUSTABLE DB SETTINGS VIA DIP SWITCHES OR PROGRAMMING FOR LOW, MEDIUM AND HIGH. PERMANENT MODIFICATION TO DEVICE TO CHANGE AUDIBLE LEVEL IS NOT ACCEPTABLE.
- END OF LINE RESISTORS TO BE MOUNTED LESS THAN 70" (1800mm) A.F.F
- .1 WIRING SHALL BE IN ACCORDANCE WITH LOCAL, PROVINCIAL AND NATIONAL CODES, AND AS RECOMMENDED BY THE MANUFACTURER OF THE FIRE
- ALARM SYSTEM. NUMBER AND SIZE OF CONDUCTORS SHALL BE AS RECOMMENDED BY THE FIRE ALARM SYSTEM MANUFACTURER, BUT NOT LESS THAN 18 AWG (1.02 MM) FOR INITIATING DEVICE CIRCUITS AND SIGNALING LINE CIRCUITS, AND 14 AWG (1.63 MM) FOR NOTIFICATION APPLIANCE CIRCUITS (UNLESS OTHERWISE DIRECTED BY MANUFACTURER).
- .3 ALL WIRE AND CABLE SHALL BE LISTED AND/OR APPROVED BY A RECOGNIZED TESTING AGENCY FOR USE WITH A PROTECTIVE SIGNALING SYSTEM.
- ALL FIELD WIRING SHALL BE ELECTRICALLY SUPERVISED FOR OPEN CIRCUIT
- ALL WIRE SHALL BE INSTALLED IN CONDUIT. PROVIDE WIREMOLD FOR ALL WIRING IN EXPOSED AREAS: ALL SURFACE MOUNTED CONDUIT MUST BE
- APPROVED BY OWNER OR CONSULTANT PRIOR TO INSTALLATION. WIRE AND CABLE NOT INSTALLED IN CONDUIT SHALL HAVE A FIRE RESISTANCE RATING SUITABLE FOR THE INSTALLATION AS INDICATED IN NFPA 70 (E.G., FPLR) AND AS PER OBC.
- ALL JUNCTION BOXES SHALL BE PAINTED 'RED' AND IDENTIFIED AS SIGNAL OR INITIATING. ALL LBs SHALL BE PAINTED RED. ANY CONDUIT LENGTH EXCEEDING 10'(3m) SHALL HAVE COUPLING PAINTED RED FOR IDENTIFICATION.
- SURFACE DEVICES AND EXPOSED CONDUIT: .1 ALL SURFACE MOUNTED CONDUIT MUST BE APPROVED BY OWNER OR
- CONSULTANT PRIOR TO INSTALLATION EXCEPT WHERE INSTALLED IN UNFINISHED AREAS
- PROVIDE WIREMOLD (PANDUIT) FOR ALL EXPOSED WIRING INSTALLED IN FINISHED AREAS.
- ANY SURFACE BOXES SHALL BE 'FS' (NO KNOCKOUTS) AND BE PRE-APPROVED BY OWNER OR CONSULTANT.
- FIRE STOP ALL CONDUIT THROUGH FIRE SEPARATIONS IN ACCORDANCE WITH OBC.

SPRINKLER NOTES:

- PROVIDE SPRINKLER SYSTEM UPGRADES IN CONFORMANCE WITH NFPA 13, NFPA 14, NFPA 24, OBC AND LOCAL CODES.
- ALL SPRINKLER & STANDPIPE WORK SHALL BE PERFORMED BY A RED SEAL CERTIFIED SPRINKLER AND FIRE PROTECTION INSTALLER, IN GOOD STANDING WITH
- 3. CONFIRM EXISTING CONDITIONS PRIOR TO PRICING AND INSTALLATION.
- ANY SPRINKLER WORK REQUIRING SHUT DOWN OF SPRINKLER OR FIRE ALARM SYSTEMS SHALL BE COORDINATED WITH OWNER. NOTIFY FIRE ALARM MONITORING COMPANY WHEN WORK IS BEING DONE. COORDINATE WITH OWNER AS REQUIRED.
 - PROVIDE FIRE STOPPING AROUND PIPING THROUGH FIRE SEPARATIONS.
 - 6. ALL REQUIRED CUTTING, CORING AND PATCHING IS BY SPRINKLER CONTRACTOR.

CONCEAL ALL NEW PIPING IN CEILING SPACE. EXPOSED PIPING IS ACCEPTABLE IN

- EXPOSED/OPEN CEILING AREAS ONLY UNLESS PRIOR APPROVAL FROM DDSB AND
- COORDINATE INTERLOCK OF SPRINKLER SYSTEM INTO FIRE ALARM SYSTEM AND FIRE ALARM DEVICE TESTING WITH FIRE ALARM SUB-CONTRACTOR.
- IF A REDUCTION IN PIPE SIZE SERVING NEW HYDRANT IS PROPOSED, THE CONTRACTOR SHALL PROVIDE DESIGN DRAWINGS COMPLETE WITH HYDRAULIC CALCULATIONS SEALED AND SIGNED BY A LICENSED ONTARIO PROFESSIONAL ENGINEER. DRAWINGS SHALL BE PREPARED IN AUTOCAD. SUBMIT DRAWINGS FOR ALL COMPONENTS AND DEVICES. PERFORM AND SUBMIT WATER FLOW TEST TO CONFIRM AVAILABLE WATER FLOW & PRESSURE OTHERWISE THEY MUST PERFORM THEIR OWN TEST AND/OR COORDINATE WITH REGION. CONTRACTOR CAN RETAIN TEST FROM MUNICIPALITY WHERE ONE EXISTS WITHIN ONE(1) CALENDAR YEAR. SUBMIT DESIGN PACKAGE TO ENGINEER AND AUTHORITIES HAVING JURISDICTION
- SYSTEM SHALL BE TESTED AS PER NFPA REQUIREMENTS. PROVIDE MATERIAL AND TEST CERTIFICATES SIGNED BY TECHNICIAN WHO PERFORMED THE TESTS UPON COMPLETION OF INSTALLATION AND TESTING. SUBMIT TO ENGINEER AND AUTHORITIES HAVING JURISDICTION.
- THE CONTRACTOR SHALL PROVIDE A LETTER STATING THE SPRINKLER INSTALLATION WAS PERFORMED BY QUALIFIED SPRINKLER CONTRACTOR IN CONFORMANCE WITH NFPA 13, NFPA 14 & NFPA 24.
- 12. PROVIDE ONE(1) YEAR WARRANTY ON ALL MATERIAL AND LABOUR FROM THE DATE OF SUBSTANTIAL COMPLETION.

SPRINKLER PIPING SPECIFICATIONS:

- SPRINKLER PIPING SHALL BE WELDED AND SEAMLESS BLACK STEEL ULC LISTED FOR FIRE PROTECTION USE IN CONFORMANCE WITH ASTM A-795. OR ANSI/ASTM A-53. PIPING IN DAMP OR WET ENVIRONMENTS INCLUDING EXTERIORS SHALL BE HOT-DIPPED GALVANIZED.
- PIPING (2" AND UNDER): STEEL SCHEDULE 40 WITH ULC LISTED THREADED MALLEABLE STEEL FITTINGS TO ASTM A-197 AND ASTM A-153 CLASS A, OR STEEL SCHEDULE 10 WITH ULC LISTED STEEL GROOVED FITTINGS TO ASTM A-47 AND ASTM A536 EQUAL TO "FIRELOCK". PIPING (2-1/2" AND OVER): STEEL SCHEDULE 10 WITH ULC LISTED STEEL GROOVED FITTINGS TO ASTM A-47 AND ASTM A-536 EQUAL TO "FIRELOCK". ALL PIPING IN MOISTURE/WET ENVIRONMENTS SHALL BE
- HANGERS, SUPPORTS AND SPACING SHALL BE IN CONFORMANCE WITH NFPA 13, 14 & 24 HANGERS SHALL BE STEEL ULC LISTED USE ADJUSTABLE GALVANIZED. CLEVIS PIPE SUPPORTS AND HANGERS WITH THREADED HANGER RODS HANGERS SHALL SUPPORT FROM UPPER MEMBERS OF STEEL JOISTS OR PROVIDE LISTED AND APPROVED FASTENERS FOR CONCRETE STRUCTURE (EXCEPT NOT ACCEPTABLE IN CINDER). DO NOT SUPPORT FROM METAL DECK.
- TOP OF RISERS SHALL BE SUPPORTED USING RISER CLAMPS OFF WALLS. A HANGER SHALL ALSO BE INSTALLED ON HORIZONTAL LINE WITHIN 24"(610mm) OF CENTERLINE OF RISER.

4" STORZ WALL HYDRANT SPECIFICATIONS:

WALL HYDRANT: NATIONAL FIRE MODEL 294 (REMOVE BODY TO ACHIEVE 4" CONNECTION - PROVIDE A104 6x4" BUSHING).

WALL HYDRANT PLATE: NATIONAL FIRE MODEL 209-4-4 (RED ALUMINUM)

 $\frac{4"}{\text{STORZ}}$ ADAPTER: NATIONAL FIRE MODEL FSA (4" FEMALE NPT x 4" STORTZ) C/W SC-40A CAP & CHAIN.

EXTERIOR VALVE CONTROL: NATIONAL FIRE MODEL 264 C/W WALL PLATE, EXTENSION ROD, COUPLER, SHOULDER ADAPTER, STANDARD CAVITY CAP

VALVE: NON-RISING GATE VALVE

OTHER DEVICE SPECIFICATIONS:

- SUPERVISORY BUTTERFLY VALVE: UL/FM APPROVED GROOVED MECHANICAL STYLE EQUAL TO NIBCO GD-4865-8N C/W TAMPER SWITCH.
- FLOW SWITCH: UL/FM APPROVED EQUAL TO POTTER VSR VANE TYPE WATER FLOW
- ALARM SWITCH C/W RETARD. OTHER: ALL OTHER MATERIALS SHALL BE ULC LISTED, IN CONFORMANCE WITH NFPA 13, NFPA 14 & NFPA 24 AND SPECIFIC ASTM/ANSI RATINGS.

GENERAL NOTES:

- THE OWNER/ENGINEER HAS APPLIED FOR BUILDING PERMIT. CONTRACTOR TO OBTAIN, ARRANGE AND PAY FOR ALL OTHER REQUIRED PERMITS AND BUILDING
- THE CONTRACTOR AND SUB-TRADES SHALL ATTEND SITE MEETINGS AS ARRANGED OR REQUESTED BY CONSULTANT OR OWNER.
- OBTAIN AND REVIEW THE DESIGNATED SUBSTANCE REPORT FROM THE CLIENT AND COORDINATE ANY DESIGNATED SUBSTANCE ISSUES WITH THE CLIENT PRIOR TO ANY
- PROVIDE SHOP DRAWINGS ELECTRONICALLY IN PDF FORMAT TO CONSULTANT FOR REVIEW. ALL SHOP DRAWINGS MUST BE REVIEWED, STAMPED AND SIGNED BY THE MECHANICAL CONTRACTOR PRIOR TO SUBMITTING TO THE CONSULTANT. REVIEW SHALL INCLUDE BUT NOT BE LIMITED TO: VERIFYING UNIT VOLTAGE WITH ELECTRICIAN AND/OR SITE, EQUIPMENT PERFORMANCE, DIMENSIONS AND
- THOROUGHLY REVIEW AND COORDINATE WITH SITE CONDITIONS AND COMPLETE DRAWING SET PRIOR TO PRICING AND INSTALLATION.
- INSTALL ALL WORK IN CONFORMANCE WITH MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
- MAINTAIN AS-BUILT DRAWINGS ON AN ON-GOING BASIS.
- ALL WORK SHALL COMPLY WITH APPLICABLE CODES.
- REMOVE ALL REDUNDANT EQUIPMENT, MATERIALS AND GARBAGE FROM SITE AND DISPOSE OF IN AN APPROVED MANNER. REDUNDANT EQUIPMENT AND MATERIALS SHALL NOT BE ABANDONED IN PLACE.
- INCLUDE FOR ALL CUTTING, CORING AND PATCHING NECESSARY FOR THE INSTALLATION. PATCHING SHALL BE SUBJECT TO OWNER'S APPROVAL. REMOVE AND REPLACE CEILING TILES IN AREA OF WORK AS REQUIRED. REPLACE ANY BROKEN CEILING TILES TO MATCH EXISTING.
- MAINTAIN REQUIRED ACCESS AND CLEARANCE TO ALL EQUIPMENT AND SYSTEMS AS REQUIRED BY CODE AND AS PER MANUFACTURER'S REQUIREMENTS.
- 12. LABEL PIPING WITH SERVICE AND FLOW ARROWS.

JURISDICTION. SUBMIT REPORTS TO THE ENGINEER.

- THE CONTRACTOR SHALL ARRANGE FOR INSPECTIONS BY THE ENGINEER AND INSPECTIONS BY BUILDING/FIRE INSPECTORS PRIOR TO CEILINGS AND WALLS/CHASES BEING CLOSED.
- PERFORM TESTING AND START UP OF NEW SYSTEMS AS REQUIRED BY CODE, THE ENGINEER, MANUFACTURER'S REQUIREMENTS, AND AUTHORITIES HAVING
- 5. PROVIDE ONE (1) YEAR WARRANTY ON ALL MATERIAL AND LABOUR.
- PROGRESS DRAWS SHALL INCLUDE MINIMUM \$500.00 FOR MANUALS AND AS-BUILT DRAWINGS. TOTAL AMOUNT SHALL REMAIN UNBILLED UNTIL MANUALS AND AS-BUILT DRAWINGS HAVE BEEN SUBMITTED AND APPROVED.
- SUBMIT CLOSE-OUT DOCUMENTATION IN PDF FORMAT TO ENGINEER FOR REVIEW. PROVIDE ONE(1) HARD COPY OF FINAL CLOSE-OUT DOCUMENTATION/MANUAL IN A 3-RING BINDER LABELED ON SPINE AND FRONT AND ONE(1) ELECTRONIC COPY ON USB. MANUAL SHALL INCLUDE:
- CONTRACTOR INFORMATION - WARRANTY LETTER - SHOP DRAWINGS
- TEST REPORTS
- AS-BUILT DRAWINGS
- AS-BUILT DRAWINGS SHALL INCLUDE COMPLETE DRAWING SET WITH ANY CHANGES MARKED CLEARLY AND NEATLY IN COLOUR.

PRE-QUALIFIED ELECTRICAL CONTRACTORS:

THE SPRINKLER (PRIME) CONTRACTOR SHALL RETAIN ONE OF THE PRE-QUALIFIED ELECTRICAL CONTRACTORS FOR ALL ELECTRICAL AND FIRE ALARM WORK. THE ELECTRICAL CONTRACTOR SHALL RETAIN SIMPLEX FOR PROGRAMMING AND VERIFICATION RELATED TO THE FIRE ALARM WORK.

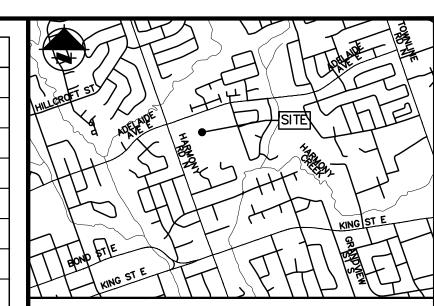
	LEGEND
	NEW
	EXISTING
	DEMOLITION
——F———F——	SPRINKLER LINE
——D———D——	DRAIN LINE
 ∘	ELBOW RISING
— ⇒	ELBOW DROPPING
	BRANCH RISING FROM TEE
	BRANCH DROPPING FROM TEE
-+	HOSEBIBB (HB)
ΙΦΙ	SHUT-OFF BALL VALVE
N	CHECK VALVE
M	NON-RISING STEM VALVE

ABBREVIATIONS			
AFF	ABOVE FINISHED FLOOR		
CTE	CONNECT TO EXISTING		
C/W	COMPLETE WITH		

TAMPER SWITCH

FLOW SWITCH

SUPERVISORY BUTTERFLY VALVE C/W





Phone: 905-697-4464



IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM THEMSELVES OF THE EXACT LOCATION OF, AND ASSUME ALL LIABILITY FOR DAMAGE TO ALL UTILITIES SERVICES AND STRUCTURES WHETHER ABOVE GROUND OR BELOW GRADE BEFORE COMMENCING THE WORK. SUCH INFORMATION IS NOT NECESSARILY SHOWN ON THE DRAWING, AND WHERE SHOWN, THE ACCURACY CANNOT BE GUARANTEED.

WITH THE SOLE EXCEPTION OF THE BENCHMARK(S) SPECIFICALLY DESCRIBED FOR THIS PROJECT, NO ELEVATION INDICATED OR ASSUMED HEREON IS TO BE USED AS A REFERENCE ELEVATION FOR ANY PURPOSE.

ALL DIMENSIONS AND INFORMATION SHALL BE CHECKED AND VERIFIED ON THE JOB AND ANY DISCREPANCIES MUST BE REPORTED TO THE MUNICIPALITY BEFORE COMMENCING THE WORK. DRAWINGS ARE NOT TO BE SCALED.

PROJECT NAME:

DDSB EASTDALE CVI -FIRE PROTECTION UPGRADES 265 HARMONY ROAD NORTH, OSHAWA, ONTARIO

CONTRACT NO. Q25-25

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DRAFTER:	DESIGNER:	DRAWING No:	
M. COFFEE	B. TIMSON		
CHECKER:	APPROVER:	F-001	
B. TIMSON	B. TIMSON		
DATE:		SHEET No:	

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JULY 2025

