Technical Memo

Fire Flow – 2809 Television Rd

Date:	December 16, 2024
To:	Brent Perry, President, PTF Holdings
From:	Luke Parsons, P.Eng., Engage Engineering
Subject:	Fire Flow for Peterborough Truss Building Addition 2809 Television Road, Township of Douro Dummer Engage File No. 21085

Introduction

Engage Engineering has been retained by PTF Holdings to support a Site Plan Application for the proposed addition to the existing Peterborough Truss Building located at 2809 Television Road within the Township of Douro Dummer. The purpose of this memo is to provide an assessment of the fire flow requirements for the site.

Fire Protection

The existing industrial building on the site was constructed in the mid-2000's. Fire flow calculations for the existing building are noted on the existing building design drawings prepared by K. W. Mullen, dated April 2003. An excerpt page from these building design drawings noting the fire flow calculation is attached to this memo. The calculations note a fire flow storage requirement of 343,457 L (343 m^3) or 75,570 gallons (imperial gallons). A fire storage tank (cistern) was placed under the office area of the existing building, in the southwest corner of the existing building. A dry hydrant standpipe is location on the western wall of the existing building, as illustrated on the proposed Grading and Servicing Plan (attached to this memo). The existing cistern and suction pipe details are also attached to this memo. According to the Owner, the existing tank has a volume of 75,000 gallons.

Additional fire storage will be required for the proposed building addition to ensure an adequate volume of water is available for fire suppression. The proposed building addition will be attached to the existing building, and there is no fire separation between the proposed building area and the existing building area. The storage tank volume is supported by fire flow calculations; the calculations are based on the 'Building Code Compendium' manual prepared by Ministry of Municipal Affairs and Housing Building and Development Branch (OBC) dated 2012.

According to the architectural drawings (attached to this memo) the building addition is classified as non-combustible construction with no-sprinklers and no exposure on all sides. According to the building drawings, the proposed addition is classified as F2. A fire flow demand was determined as shown in the calculations attached to this memo. The total fire flow volume for the building addition was determined based on the Buildings Requiring On-Site Water Supply formula in the OBC manual.

The on-site water supply formula (1) utilizes the following in the OBC manual:

$$Q = K * V * S_{tot}$$

$$Q = 17 * 19{,}983 m^3 * 1.0$$

$$Q = 340{,}000 L$$

Where:

- K = Water Supply Coefficient (Table 1)
- V = Building Volume in m^3
- S_{tot} = Spatial Coefficient values (Figure 1)

*Detailed calculations are attached to this memo.

According to Table 2: Minimum Water Supply Flow Rates (attached), the minimum flow rate required is 9,000 L/min. The 340,000L required volume is for the proposed building addition only, and is in addition to the existing storage volume on site. The total storage volume required for the existing and proposed building areas is approximately 683,500 L or 683.5 m^3.

Storage Tank and Dry Hydrant

The Owner has decided to install a tank with a volume of at least 683.5 m^3 beneath the proposed building, which will have enough fire storage for the entire existing and proposed building. The existing 340 m^3 fire storage tank and stand pipe will remain under the existing building, and will not be connected to the proposed tank.

The proposed storage tank will be placed under the north area of the proposed building addition. The tank will be designed by the building designer, Bel-Con, and will be illustrated on the building permit drawings.

In discussion with the Township of Douro Dummer Fire Chief, the Township would prefer a dry hydrant located away from the building, outside of the potential collapse zone associated with the building. A dry hydrant has been proposed to the northwest of the proposed building, and will be connected to the fire storage tank with a pipe near the northwest area of the building. Insulation is proposed around the dry hydrant in an effort to eliminate any freezing that may occur within the dry hydrant or pipe. The exact tank design has not been completed, but it is expected that the water elevation within the tank and dry hydrant pipe will be approximately 0.6m below the ground elevation at the location of the proposed dry hydrant. A standpipe has also been proposed on the building addition, near the northwest corner of the proposed addition. The proposed dry hydrant, pipe and insulation details are illustrated on the proposed Grading and Servicing Plan.

Conclusion

In conclusion, a storage tank with a volume of at least 683.5 m^3 will be constructed beneath the proposed building addition, and will be connected to a dry hydrant to the northwest of the proposed building addition. Supporting calculations that reference the OBC manual are included in this memo.

Attachments:

OBC Fire Flow Sheets

OBC Fire Flow Calculation prepared by Engage Engineering dated November 26, 2024

Peterborough Truss & Floor Limited – Original Building Design Drawings, Fire Flow Calculation Sheet and Fire Storage Tank Design, prepared by K. W. Mullen dated April 2003

Proposed Grading and Servicing Plan prepared by Engage Engineering dated January 3, 2025

Building Design Drawings prepared by Bel-Con dated September 13, 2024

Group B, Division 2
- Facilities for people with developmental disabilities
- Homes for the aged
- Hospitals
- Infirmaries
- Long term care
- Nursing homes
- Psychiatric hospitals without detention quarters
- Reformatories without detention quarters
- Sanatoria without detention quarters

Group B, Division 3 (See also Sentence 3.1.2.5.(1).)
- Children's custodial homes
- Convalescent homes
- Group homes for people with developmental disabilities
- Residential care facilities
- Sanatoria without detention quarters

Group C
- Apartments
- Boarding houses
- Camps for housing workers
- Clubs, residential
- Colleges, residential
- Convents
- Dormitories
- Group homes
- Halfway houses, drug and alcohol treatment
- Hostels
- Hotels
- Houses
- Lodging houses
- Monasteries
- Motels
- Open and semi-secure detention for youth
- Recreational camps
- Rooming houses
- Schools, residential
- Shelters for homeless
- Shelters for women

Group D
- Banks
- Barber and hairdressing shops
- Beauty parlours
- Dental offices
- Dry cleaning establishments, self-service, not using flammable or explosive solvents or cleaners
- Laundries, self-service
- Medical offices
- Offices
- Police stations without detention quarters
- Radio stations
- Small tool and appliance rental and service establishments

Group E
- Department stores
- Exhibition halls
- Markets
- Restaurants with an occupant load not more than 30 persons consuming food and drink
- Shops
- Stores
- Supermarkets

Group F, Division 1
- Bulk plants for flammable liquids
- Bulk storage warehouses for hazardous substances
- Cereal mills
- Chemical manufacturing or processing plants
- Distilleries
- Dry cleaning plants using flammable or explosive solvents or cleaners
- Feed mills
- Flour mills
- Grain elevators
- Lacquer factories
- Paint, varnish and pyroxylin product factories
- Rubber processing plants
- Spray painting operations

Group F, Division 2
- Aircraft hangars
- Cold storage plants
- Dry cleaning establishments not using flammable or explosive solvents or cleaners
- Electrical substations
- Freight depots
- Helicopter landing areas on roofs
- Laboratories
- Laundries, except self-service
- Planing mills
- Printing plants
- Repair garages
- Self-service storage buildings
- Service stations
- Storage rooms
- Television studios not admitting a viewing audience
- Tire storage
- Warehouses
- Woodworking factories

Group F, Division 3
- Creameries
- Laboratories
- Power plants
- Storage garages, including open air parking garages
- Storage rooms
- Warehouses

Table 1					
Water Supply Coefficient - K					
Type of Construction	Classification by Group or Division in Accordance with Table 3.1.2.1. of the Building Code				
	A-2 B-1 B-2 B-3 C D	A-4 F-3	A-1 A-3	E F-2	F-1
Building is of noncombustible construction with fire separations and fire-resistance ratings provided in accordance with Subsection 3.2.2., including loadbearing walls, columns and arches.	10	12	14	17	23
Building is of noncombustible construction or of heavy timber construction conforming to Article 3.1.4.6. Floor assemblies are fire separations but with no fire-resistance rating. Roof assemblies, mezzanines, loadbearing walls, columns and arches do not have a fire-resistance rating.	16	19	22	27	37
Building is of combustible construction with fire separations and fire-resistance ratings provided in accordance with Subsection 3.2.2., including loadbearing walls, columns and arches. Noncombustible construction may be used in lieu of fire-resistance rating where permitted in Subsection 3.2.2.	18	22	25	31	41
Building is of combustible construction. Floor assemblies are fire separations but with no fire-resistance rating. Roof assemblies, mezzanines, loadbearing walls, columns and arches do not have a fire-resistance rating.	23	28	32	39	53
Column 1	2	3	4	5	6

Table 2	
Part 3 Buildings under the Building Code	Required Minimum Water Supply Flow Rate, L/min
One-storey building with building area not exceeding 600 m²	1 800
All other buildings	2 700 (if Q ≤ 108 000 L)(1) 3 600 (if Q > 108 000 L and ≤ 135 000 L)(1) 4 500 (if Q > 135 000 L and ≤ 162 000 L)(1) 5 400 (if Q > 162 000 L and ≤ 190 000 L)(1) 6 300 (if Q > 190 000 L and ≤ 270 000 L)(1) 9 000 (if Q > 270 000 L)(1)

Notes to Table 2:
(1) Q = KVS_{tot} as referenced in Paragraph 3(a)

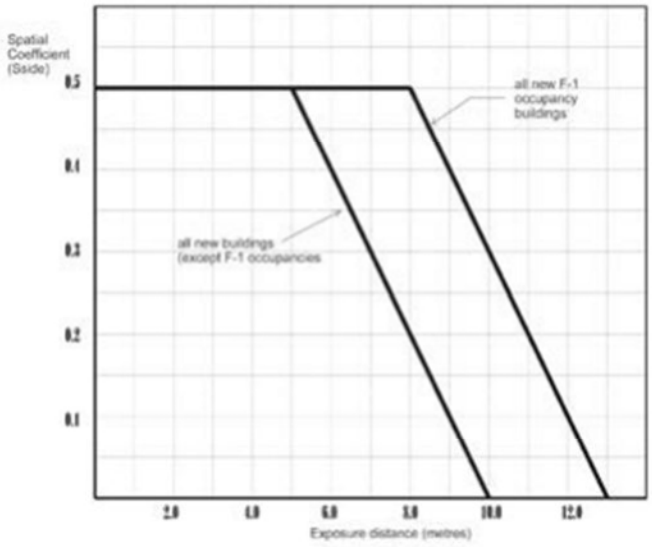


Figure 1
Spatial Coefficient vs Exposure Distance

Further clarification of intent and sample problems and solutions are contained in the "Fire Protection Water Supply Guideline for Part 3 in the Ontario Building Code". This guideline may be obtained through the Office of the Fire Marshal's web site at: "www.ofm.gov.on.ca"

Preliminary Fire Flow Calculations
Peterborough Truss Addition - OBC Calculations

Project Name:	2809 Television Road	**Designed By:**	LP
Project No:	21085	**Date:**	2024-11-27

Criteria

Ontario Building Code
Section A3.2.5.7.

$Q = KVS_{Tot}$

Q = minimum supply of water in litres (L)
K = water supply coefficient from Table 1
V = total building volume in cubic metres
S_{tot} = total of spatial coefficient values from property line exposurses on all sides

Calculations

S_{Tot}

$S_{tot} = 1.0 + [(S_{side1}) + (S_{side2}) + (S_{side3}) + \ldots]$
$= 1.0 + 0$
$S_{tot} = 1.0$

K

Occupancy classification F2
Non-combustible construction
K = 17

V

	Area (m^2)	x	Height (m)	=	Volume (m^3)	
Building Volume =	2289.0	x	7.3	=	16709.7	m^3
Building Truss Volume =	2289.0	x	2.9	=	3273.3	m^3
Total Volume =	19,983		m^3			

* Truss volume is divided by 2 to represent triangular volume

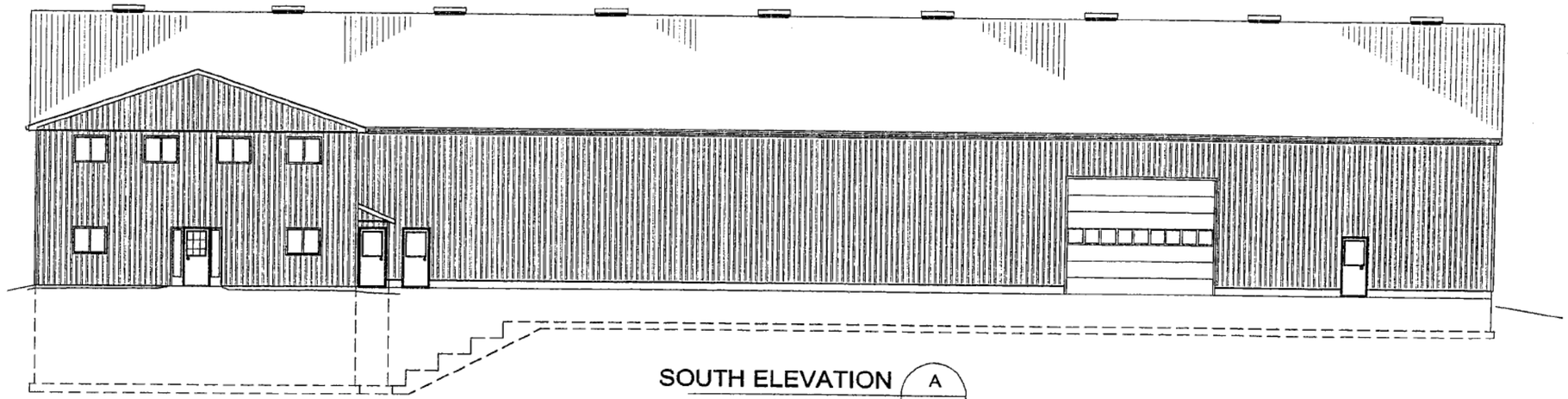
Minimum Water Supply (L)

Q = KVS
= 339,710 L
Q = 340,000 L

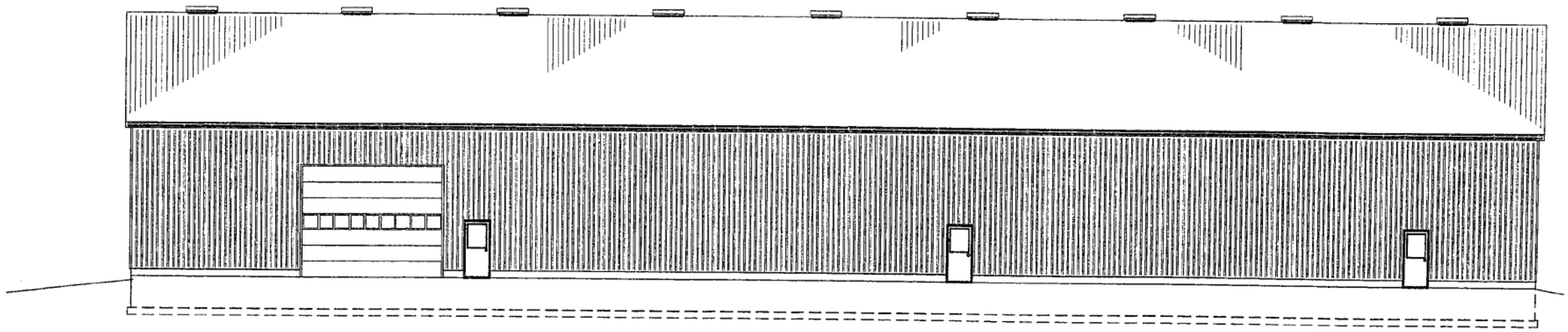
Minimum Flow Rate

From Table 2: Minimum Water Supply Flow Rates (L/min)
F = 9,000 L/min

Notes



SOUTH ELEVATION (A / S1)
SCALE 1/16"=1'-0"



NORTH ELEVATION (B / S1)
SCALE 1/16"=1'-0"

REGISTERED PROFESSIONAL ENGINEER
[redacted]
K. W. MULLEN
May 13, 2003
PROVINCE OF ONTARIO

tel:705-953-9545 fax:705-953-9651

AGRO-DESIGN CONSTRUCTION Ltd.

K. W. MULLEN P.Eng.
Professional Engineer
R. R. # 2, OAKWOOD, ONTARIO K0M 2M0

PETERBOROUGH TRUSS & FLOOR LIMITED
Television Road, Peterborough

PROJECT	108' x 180' INDUSTRIAL BUILDING
DRAWING TITLE	SIDE ELEVATIONS
DATE	APRIL 2003
SCALE	1/16" = 1'-0"
PROJECT	03-42
DR'N BY	KEN MULLEN
SHEET	1 of 21

REV. | SF 192 | DISK 12.1 | FILE NO.

108' x 180' x 18' Stud Wall Truss Manufacturing Building Plans
Code Requirements

Building Classification: F2 medium hazard industrial

Building area: 20640 ft2

Code section: 3.2.2.70
Facing 3 streets - maximum area 25, 800 ft2 - O.K.

Combustible construction and **not sprinklered**:

Roof assemblies - all ceilings
- 45 minute fire resistance rating
- 5/8" Type "X" gypsum board

Load bearing walls
- 45 minute fire resistance rating
- ½" Type "X" gypsum board

Second Floor - office ceiling
- 45 minute fire resistance rating
- 5/8" Type "X" gypsum board
- line support beam with 5/8" Type "X" gypsum board
- steel columns (noncombustible)

Building designed as one unit with office area part of manufacturing unit. No fire walls required.

Second floor of office area (1200 ft2) OBC 3.4.2.1, travel distance less than 82', floor area less than 2150 ft2, occupancy load less than 60, - only one exist required.

Occupancy Load:
based on building area = 416 persons
based on use = 30 persons

Washroom facilities based on occupancy load of 30 persons requiring building to be posted as maximum 30 persons.

Provided washroom facilities = 2 water closets per sex adequate up to 48 persons.
Design provides 2 female plus 2 male plus handicap washroom. Extra urinal provided in mens.

ON SITE WATER SUPPLY:
Required volume
Building volume = 11,079 m3
S tot = 1.0
Q = 31 x 11079 x 1.0
= 343,457 litres = 75, 560 gallons = 12109 ft3 required.

Provided = 12163 ft3 in 10'-8" storage depth.

Exits provided around perimeter as indicated on drawings. Maximum travel distance 98'-5".

Emergency lighting over each exit door with minimum 30 minute time rating.

All exit doors steel framed and rated for 45 minute rating with label on door and frame.

Interconnected smoke detectors at each ceiling level of office section located near stairs.

Fire extinguishers to installed throughout building in accordance with Ontario Fire Code and National Fire Code 1995 requirements.

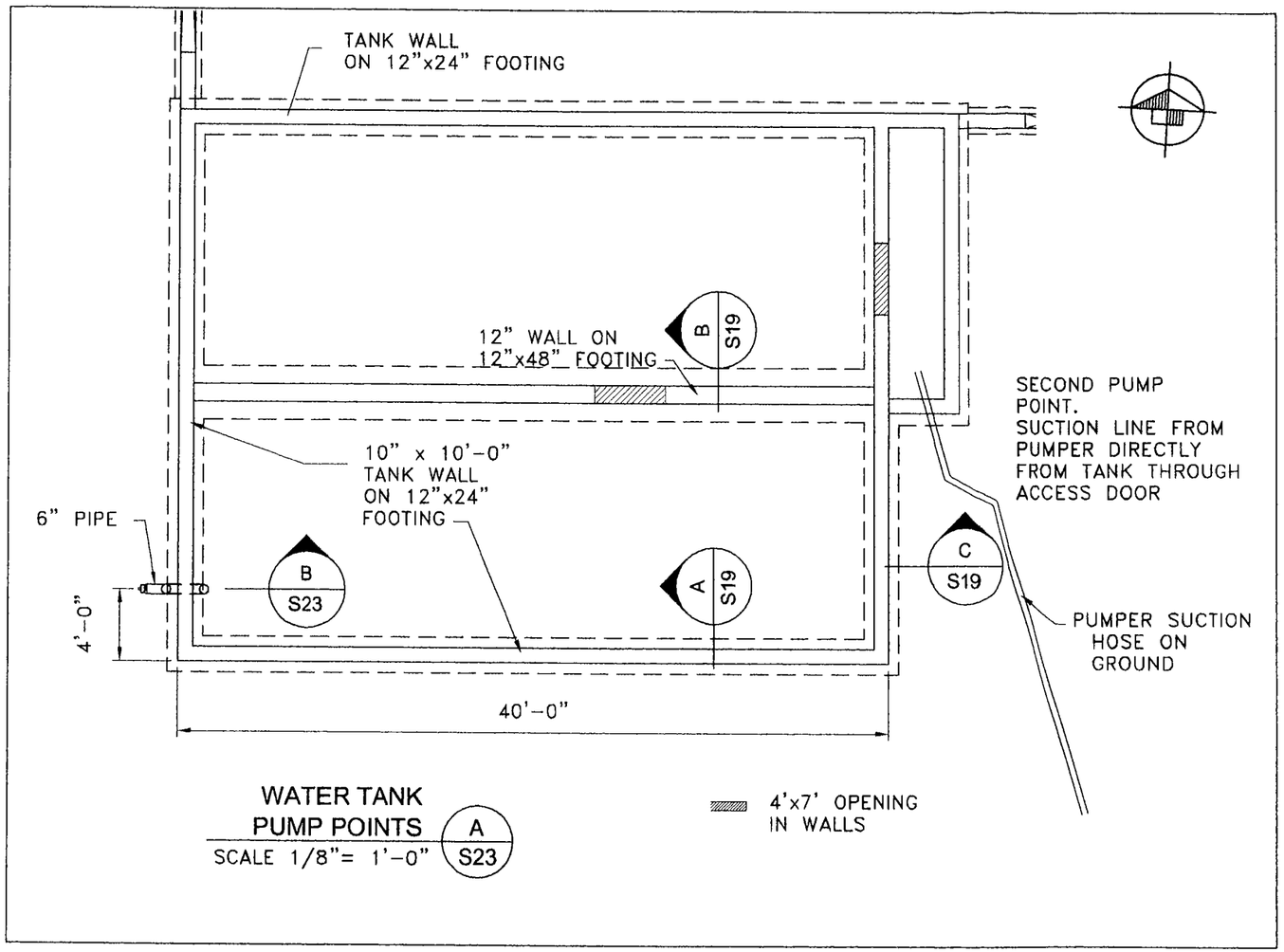
Confined area in attic to be divided with gypsum board into firestop compartments maximum area 3230 ft2 and
maximum length of fire compartment 65'-7". Shown on S11.

REGISTERED PROFESSIONAL [redacted] ENGINEER
K. W. MULLEN
May 14 2003
PROVINCE OF ONTARIO

tel:705-953-9545 fax:705-953-9651
AGRO-DESIGN CONSTRUCTION Ltd.
K. W. MULLEN P.Eng.
Professional Engineer
R. R. # 2, OAKWOOD, ONTARIO K0M 2M0

PETERBOROUGH TRUSS & FLOOR LIMITED
Television Road, Peterborough

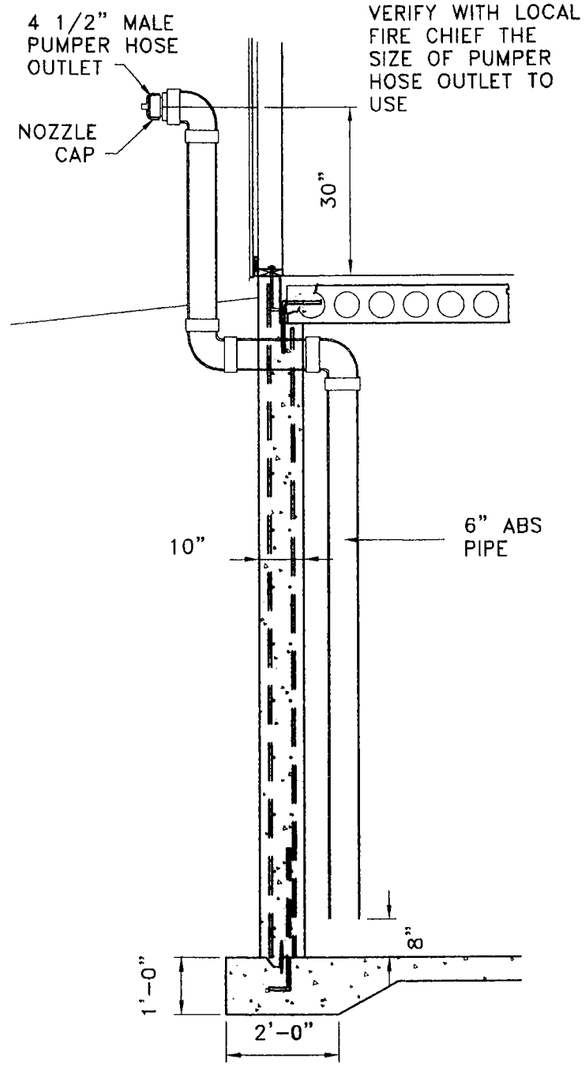
REV.	SF 1	DISK 12.1	FILE NO.		
PROJECT	108' x 180' INDUSTRIAL BUILDING				
DRAWING TITLE	CODE REQUIREMENTS				
DATE	APRIL 2003	SCALE	NTS	PROJECT	03-42
DR'N BY	KEN MULLEN	SHEET	20 of 21		



WATER TANK PUMP POINTS (A / S23)

SCALE 1/8"= 1'-0"

PUMP HOOK UP BY 6" PIPE
FROM TANK.
CONNECTION SAME AS ON
FIRE HYDRANTS FOR PUMP.
VERIFY WITH FIRE CHIEF
THE 4 1/2" SIZE.
ALL JOINTS SEALED TO
ALLOW SUCTION.



SUCTION PIPE DETAIL (B / S23)

SCALE 3/8"=1'-0"

tel:705-953-9545 fax:705-953-9651

AGRO-DESIGN CONSTRUCTION Ltd.

K. W. MULLEN P.Eng.
Professional Engineer
R. R. # 2, OAKWOOD, ONTARIO K0M 2M0

PETERBOROUGH TRUSS & FLOOR LIMITED
Television Road, Peterborough

PROJECT: 108' x 180' INDUSTRIAL BUILDING

DRAWING TITLE: WATER SUPPLY CONNECTION

DATE	REVISION	BY
23/10/04	SHEET ADDED	KWM

REV. 1 | SF 192 | DISK 12.1 | FILE NO.

DATE: APRIL 2003 | SCALE: 1/16" = 1'-0" | PROJECT: 03-42

DR'N BY: KEN MULLEN | SHEET: 23 of

CONCRETE WALL

LIMIT OF GRADING.
DISTURBED AREAS TO BE RE-ESTABLISHED
WITH RECYCLED ASPHALT

1-STOREY
METAL
CLAD
BUILDING

BIN

PROPANE
TANK CAGE

HUSON

CONCRETE WALL W/ GUTTER

TRUSS STACKING AREA

PROPOSED CONCRETE APRON

DELIVERY DOOR

PROPOSED BUILDING
FFE = 223.50
2289.4 m²

EXISTING CONC. PAD & BOLLARDS TO BE REMOVED

CONC. PAD

PROPOSED STANDPIPE.
DESIGN OF STANDPIPE AND FIRE
STORAGE TANK BENEATH BUILDING TO
BE COMPLETED BY BUILDING DESIGNER
AT THE BUILDING PERMIT STAGE

EXISTING TRUSS PLANT
FFE = 223.00
1923.1 m²

PROPOSED
BOLLARDS

PROPOSED 150mmØ
PVC FIREMAIN

PROPOSED DRY HYDRANT
REFER DETAIL 1 ON SHEET 2

LOADING SPACE

EXISTING ROOF DRAIN
TO BE REMOVED

SEPTIC AREA

CSW

GRASS

EXISTING STANDPIPE

FIRE ACCESS ROUTE

CONC. PAD

TRUSS LOADING ROLLERS

PROPOSED ASPHALT AREA

MATCH TO EXISTING GRADE

WAITING SPACE

TOP OF SLOPE

EDGE OF GRAVEL

GATE

EXISTING DRY-POND

CB
T/G=223.23
INV=222.71

SURVEY

TOPOGRAPHIC SURVEY PROVIDED
BY A.R.(SANDY) WAKELING
DATED MAY 29, 2024

BENCHMARK

CUT CROSS ON TOP OF CONCRETE CURB, NORTH EASTERLY CORNER
OF CURB ON EAST SIDE OF STORM WATER MANAGEMENT FACILITY

ELEV: 222.28m

NOTES:

PR.	EX.	FEATURE
		EDGE OF GRAVEL
		CENTRELINE OF ROAD
		DITCH
		SIDEWALK
		FIREROUTE
		EDGE OF PAVEMENT
		LIGHT DUTY ASPHALT
		GRASS/LANDSCAPED
		PROPERTY LINE
		SUBJECT PROPERTY LINE
		RIGHT-OF-WAY
		DEVELOPMENT BOUNDARY (SLD.137)
		RAIL FENCE
		BOARD FENCE
		CHAIN LINK FENCE
		IRON BAR
		POST
		UTILITY POLE
		WELL
		SANITARY MANHOLE
		CATCH BASIN
		CONIFEROUS TREE
		DECIDUOUS TREE
		SHURB
		HEDGE
		PROPOSED PLANTING STRIP

No.	REVISION	BY	DATE
2.	ISSUED FOR SPA	BR	2025-01-03
1.	ISSUED FOR SPA	DJ	2024-07-04

ENGAGE ENGINEERING
www.engageengr.ca • 171 King Street, Suite 120, Peterborough, ON • Phone: (705) 755-0427

2809 TELEVISION ROAD

PTF HOLDINGS

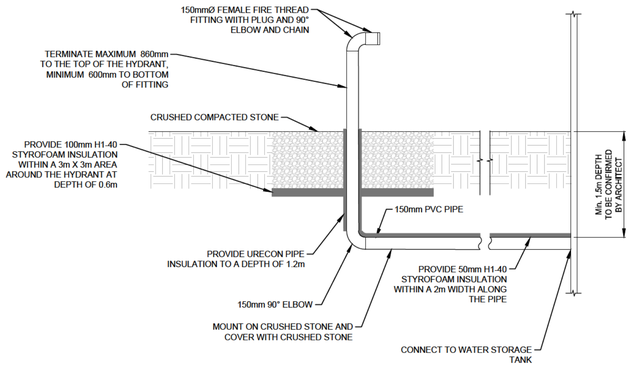
GRADING AND SERVICING PLAN

TOWNSHIP OF DOURO-DUMMER

DRAWN BY: D.JEDRZEJEWSKI	STAMP: LICENSED PROFESSIONAL ENGINEER [redacted] L.T.PARSONS 100516860 2025-01-03 PROVINCE OF ONTARIO
DESIGNED BY: D.JEDRZEJEWSKI	
APPROVED BY: L.PARSONS	
DATE: 2024-06-05	
SCALE: 1:250	

PROJECT NUMBER:	SHEET NAME:	SHEET:
21085	GPSS	1 of 2

21085 - GP
Date: Jan. 03, 2025 - 9:21 am Plotted by: cnorp Filename: S:\01 - Projects\21000\21085 - 2809 Television Road\02 Design\01 - Drawings\01 - Current Drawings\21085 - GP.dwg



NOTES:
1. MINIMUM 150mm PIPE, SCHEDULE 40 TO BE USED THROUGHOUT, NON-METAL ABOVE GRADE
2. TERMINATE MAXIMUM 860mm TO THE TOP OF THE HYDRANT, MINIMUM 600mm TO BOTTOM OF FITTING (SEE NOTE 3 BELOW)
3. TERMINATE WITH A 150mm FEMALE FIRE THREAD FITTING WITH PLUG
4. TERMINATE DRY HYDRANT PERPENDICULAR TO THE ACCESS ROAD

1 DRY HYDRANT DETAIL
SCALE: N.T.S.

SURVEY
TOPOGRAPHIC SURVEY PROVIDED BY A.R.(SANDY) WAKELING DATED MAY 29, 2024

BENCHMARK
CUT CROSS ON TOP OF CONCRETE CURB, NORTH EASTERLY CORNER OF CURB ON EAST SIDE OF STORM WATER MANAGEMENT FACILITY

ELEV: 222.28m

NOTES:

No.	REVISION	BY	DATE
2.	ISSUED FOR SPA	BR	2025-01-03
1.	NOT ISSUED IN THIS REVISION	DJ	2024-07-04

ENGAGE ENGINEERING
www.engageengg.ca • 171 King Street, Suite 120, Peterborough, ON • Phone: (705) 755-0427

2809 TELEVISION ROAD

PTF HOLDINGS

DETAILS

TOWNSHIP OF DOURO-DUMMER

DRAWN BY: B. RAI	STAMP: LICENSED PROFESSIONAL ENGINEER L.T.PARSONS 100516860 2025-01-03 PROVINCE OF ONTARIO
DESIGNED BY: B. RAI	
APPROVED BY: L.PARSONS	
DATE: 2024-12-12	
SCALE: NTS	

PROJECT NUMBER:	SHEET NAME:	SHEET:
21085	DT	2 of 2

21085 - GP
Date: Jan. 03, 2025 - 9:29 am Plotted by: cindy Filename: S:\01 - Projects\21000\21085 - 2809 Television Road\02 Design\01 - Drawings\01 - Current Drawings\21085 - GP.dwg

PETERBOROUGH TRUSS & FLOOR LTD

2809 TELEVISION ROAD
PETERBOROUGH, ON
PROJECT NO. 2411

BUTLER

Structural (Pre-Engineered)

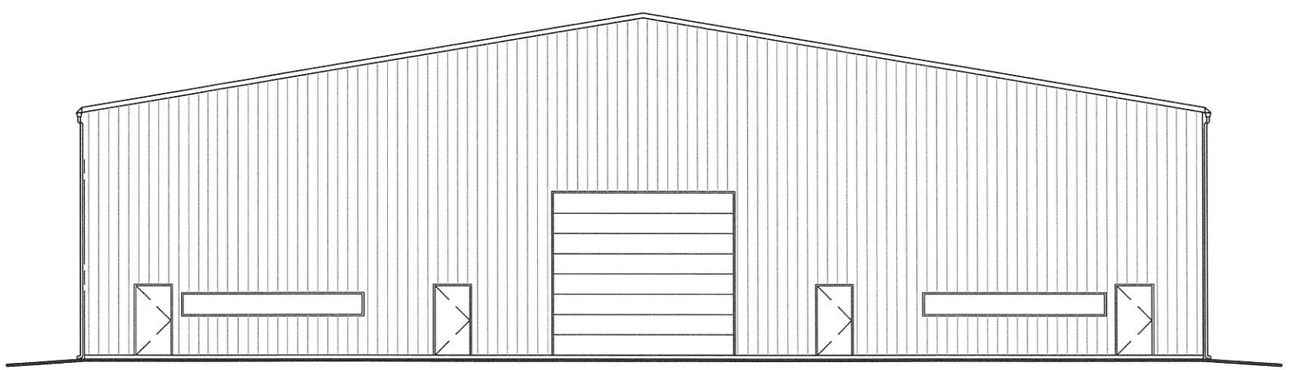
BUTLER MANUFACTURING
1540 Genessee St
Kansas City, Missouri, 64102
1(816) 968-3002

Project Manager

BEL-CON DESIGN-BUILDERS LTD
1-335 University Ave.
Belleville, Ontario, K8N 5T7
Tel. (613) 968-6707
Fax. (613) 968-6700

DRAWING LIST

ARCHITECTURAL	
A0	TITLE SHEET
A1	PLAN & ELEVATIONS



NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE ONTARIO BUILDING CODE, THE ONTARIO ELECTRICAL SAFETY CODE, LOCAL BY-LAWS AND ALL AUTHORITIES HAVING JURISDICTION.
2. THE SUBCONTRACTOR SHALL VISIT THE SITE TO BECOME COMPLETELY FAMILIAR WITH THE SITE CONDITIONS AND LIMITATIONS PRIOR TO SUBMITTING A QUOTATION.
3. THE DRAWINGS, NOTES, SCOPE OF WORK AND SPECIFICATIONS ARE COMPLIMENTARY AND TOGETHER FORM THE TOTAL WORK AS REQUIRED UNDER THIS CONTRACT.
4. NO CHANGES OR ALTERATIONS SHALL BE MADE TO THE WORK AS SET OUT IN THESE DRAWINGS, NOTES, SCOPE OF WORK AND SPECIFICATIONS UNLESS SUCH CHANGES ARE CONFIRMED AND APPROVED BY BEL-CON PROJECT MANAGER.
5. THE SUBCONTRACTOR SHALL ARRANGE FOR TIMELY INSPECTIONS OF THE WORK AS REQUIRED BY ALL THEIR WORK PERMITS.
6. WORK (ALL LABOUR & MATERIALS) TO BE WARRANTED FOR A MINIMUM OF ONE (1) YEAR FROM THE DATE OF COMPLETION OF THE HEAD CONTRACT (OR LONGER IF REQUIRED BY PROJECT DOCUMENTS)
7. THE SUBCONTRACTOR IS RESPONSIBLE TO LOOK AFTER ORGANIZING AND STORING THEIR OWN MATERIAL AND EQUIPMENT
8. TIMELY ON-SITE CLEAN-UP & DISPOSAL OF SUBCONTRACTOR WASTE IS THE SOLE RESPONSIBILITY OF THE SUBCONTRACTOR AND IS INCLUDED IN THE SUBCONTRACT. THIS INCLUDES THE REMOVAL OF ALL LABELS, STICKERS AND PACKING ETC... FROM GLASS, TILE, PLUMBING AND ELECTRICAL FIXTURES ETC...
9. THE SUBCONTRACTOR SHALL PROVIDE A COMPLETE CLOSE OUT PACKAGE OF ALL PLUMBING, MECHANICAL AND ELECTRICAL INSTALLATIONS AS WELL AS ANY SPECIALITY ITEMS INCLUDING REGULAR MAINTENANCE PROCEDURES TO BEL-CON PRIOR TO ACCEPTANCE.
10. BEFORE THEIR CONSTRUCTION START THE SUBCONTRACTOR IS RESPONSIBLE TO ENSURE ALL GRID LINES AND ELEVATIONS ARE CORRECT. COMPARE THE ACTUAL ELEVATIONS WITH THOSE SHOWN ON THE DRAWINGS. REPORT ANY DISCREPANCIES AT ONCE TO BEL-CON.
11. THE SUBCONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING ANY MATERIALS.
12. THE SUBCONTRACTOR SHALL PROTECT AND MAKE GOOD ALL SURFACES, LANDSCAPING ETC... DISTURBED OR DAMAGED AS A RESULT OF THEIR WORK.
13. SUBCONTRACTOR TO PROVIDE ADEQUATE PROTECTION FOR ALL EXPOSED AND UNDERGROUND SERVICES.
14. REFER TO FOREFRONT DRAWINGS FOR GEODETIC ELEVATIONS

Name of Practice:
BEL-CON DESIGN BUILDERS LTD
1-335 UNIVERSITY AVE
BELLEVILLE, ON
613-968-6707

Name of Project:
PETERBOROUGH TRUSS & FLOOR LTD

Location:
2809 TELEVISION ROAD
PETERBOROUGH, ON, K9L 1E9

Item	Ontario Building Code JULY 2022 UPDATE Data Matrix Parts 3 or 9		Building Code Reference (References are to Division B unless noted [A] for Division A or [C] for Division C.)	
1	Project Description: ☐ Change of Use	☐ New X Addition ☐ Alteration / X Part 11 11.1 to 11.4	☐ Part 3 1.1.2. [A]	☐ Part 9 1.1.2. [A] & 9.10.1.3.
2	Major Occupancy(s) - F2		3.1.2.1.(1)	9.10.2.
3	Building Area (m²)	Existing - 1806 New - 2289 Total - 4095	1.4.1.2. [A]	1.4.1.2. [A]
4	Gross Area	Existing - 1806 New - 2289 Total - 4095	1.4.1.2. [A]	1.4.1.2. [A]
5	Number of Storeys	Above grade - 1 Below grade - 0	1.4.1.2. [A]&3.2.1.1.	1.4.1.2[A] & 9.10.4
6	Number of Streets/Fire Fighter Access - 3		3.2.2.10. & 3.2.5.	9.10.20.
7	Building Classification - 3.2.2.70.		3.2.2.20.-.83	9.10.2.
8	Sprinkler System Proposed	☐ entire building ☐ selected compartments ☐ selected floor areas ☐ basement ☐ in lieu of roof rating X not required	3.2.2.20.-.83 3.2.1.5. 3.2.2.17. INDEX	9.10.8.2. INDEX
9	Standpipe required	X Yes ☐ No	3.2.9.	N/A
10	Fire Alarm required	☐ Yes X No	3.2.4.	9.10.18.
11	Water Service/Supply is Adequate	X Yes ☐ No	3.2.5.7.	N/A
12	High Building	☐ Yes X No	3.2.6.	N/A
13	Construction Restrictions	☐ Combustible permitted ☐ Non-combustible required X Both	3.2.2.20.-.83	9.10.6.
	Actual Construction	☐ Combustible X Non-combustible ☐ Both		
14	Mezzanine(s) Area m² - N/A		3.2.1.1.(3)-(8)	9.10.4.1.
15	Occupant load based on 1st Floor	☐ m²/person Occupancy F2	X design of building Load 19 persons	3.1.17.	9.9.1.3.
16	Barrier-free Design	☐ Yes X No (Explain) _____	3.8.	9.5.2.
17	Hazardous Substances	☐ Yes X No	3.3.1.2. & 3.3.1.19.	9.10.1.3.(4)
18	Required Fire Resistance Rating (FRR)	Horizontal Assemblies FRR (Hours) / Listed Design No. or Description (SG-2)	3.2.2.20.-.83 & 3.2.1.4.	9.10.8. 9.10.9.
		Floors 45 M		
		Roof 0 Hours		
		FRR of Supporting Members / Listed Design No. Or Description (SG-2)		
		Floors 0 Hours		
		Roof 0 Hours		
19	Spatial Separation – Construction of Exterior Walls		3.2.3.	9.10.14.

Wall	Area of EBF (m²)	L.D. (m)	L/H or H/L	Permitted Max. % of Openings	Proposed % of Openings	FRR (Hours)	Listed Design or Description	Comb Const	Comb. Constr. Nonc. Cladding	Non-comb. Constr.
North	303	46	3.3	100	14	0HR				X
East	478	31	9.2	80	26	1HR				X
West	478	143	9.2	100	26	0HR				X

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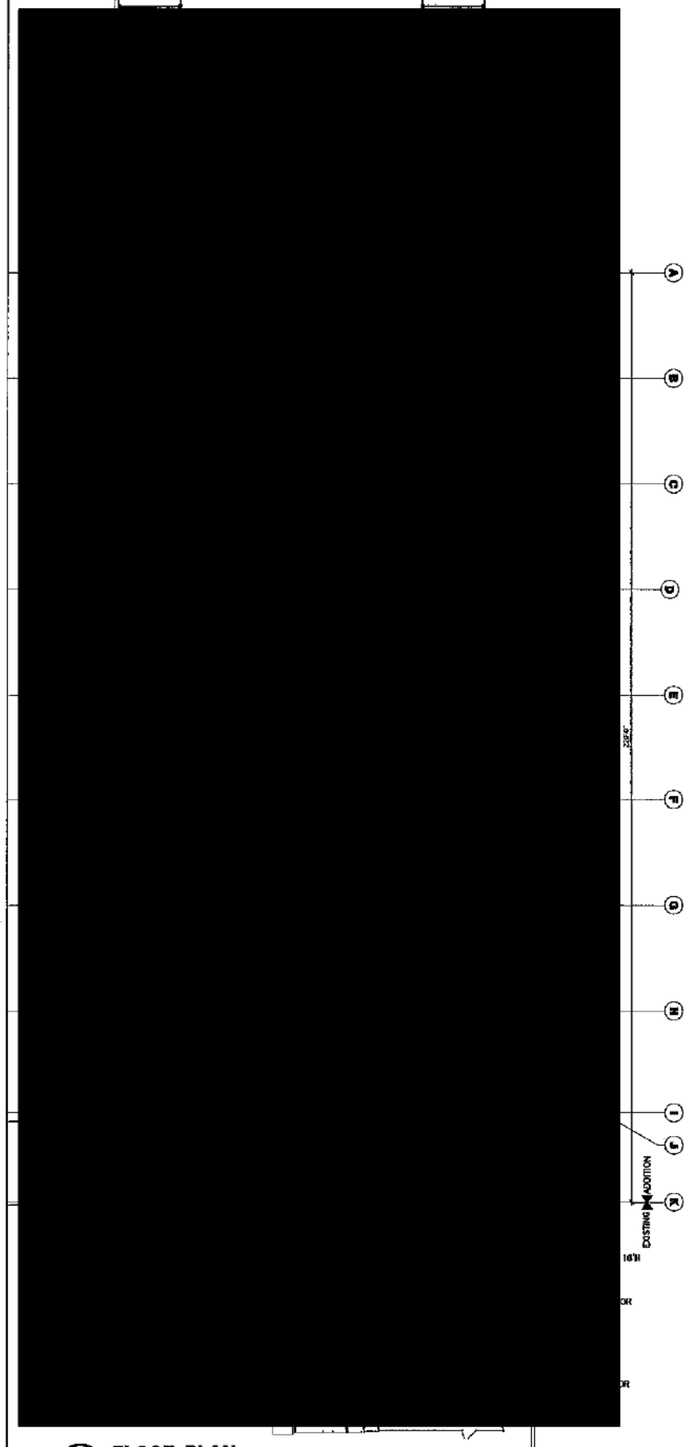
NO.	DATE	REVISIONS	BY

BEL-CON DESIGN-BUILDERS LTD
TELEPHONE: (613) 968-6707 1-335 UNIVERSITY AVE.
WWW.BEL-CON.COM BELLEVILLE, ONTARIO

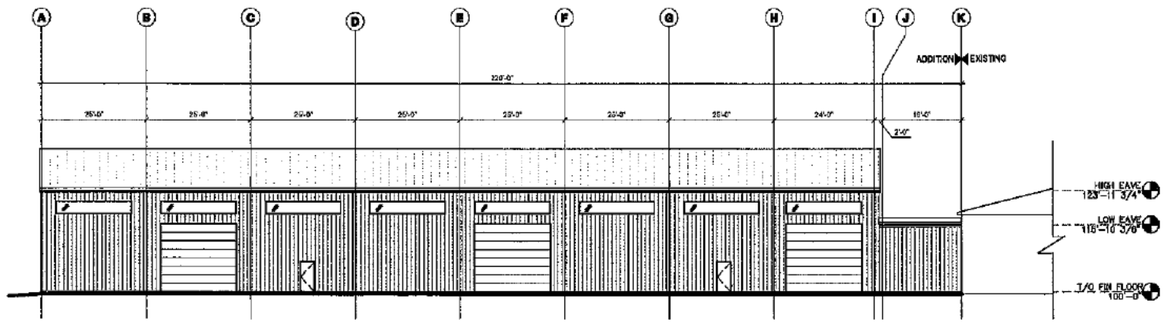
BUILDING ADDITION FOR:
PETERBOROUGH TRUSS & FLOOR LTD
2809 TELEVISION ROAD
PETERBOROUGH, ON

TITLE SHEET

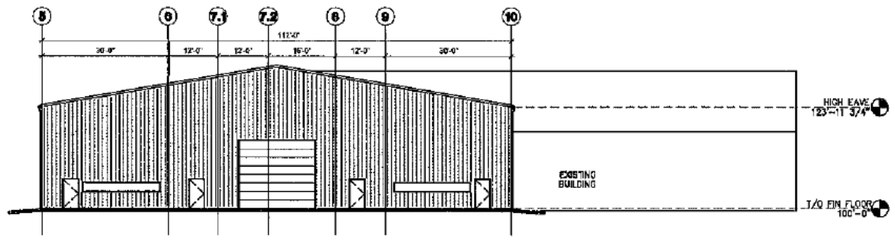
DATE:	CONTRACT No.:
09.13.2024	2411
CHECKED BY:	DWG. No.:
DESIGNED BY: BDN	A0
DRAWN BY: BDN	
SCALE:	



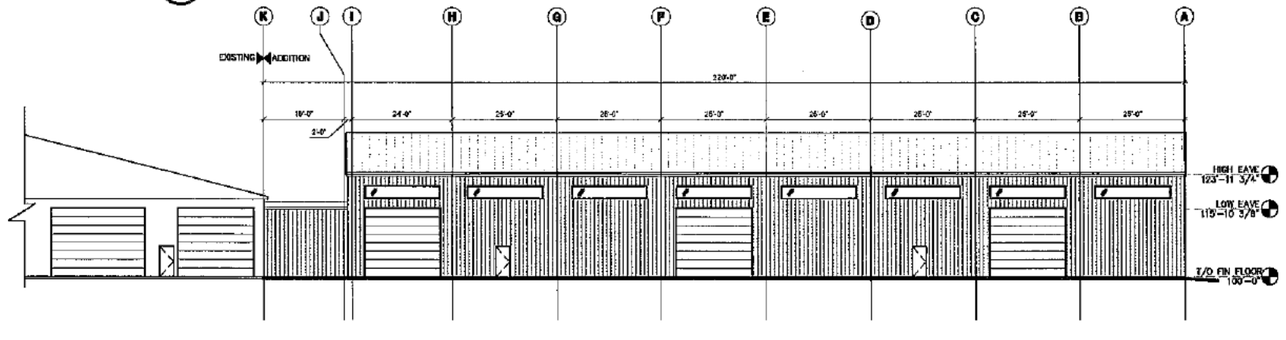
1/A1 **FLOOR PLAN**
SCALE: 1/16" = 1'-0"



4/A1 **WEST ELEVATION**
SCALE: 1/16" = 1'-0"



3/A1 **NORTH ELEVATION**
SCALE: 1/16" = 1'-0"



2/A1 **EAST ELEVATION**
SCALE: 1/16" = 1'-0"

NO.	DATE	REMARKS	BY

BEL-CON DESIGN-BUILDERS LTD
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WWW.BEL-CON.CA BELLEVILLE, ONTARIO

BUILDING ADDITION FOR:
PETERBOROUGH TRUSS
2609 TELEVISION ROAD
PETERBOROUGH, ON

FLOOR PLAN & ELEVATIONS

NORTH

DATE: 04.15.2024	CONTRACT No.: 2411
DESIGNED BY:	DWG. No.: A1
DRAWN BY: BDN	
CHECKED BY: BDN	
SCALE: AS SHOWN	