PORT METRO vancouver

December 23rd, 2014

PP# 2014-036
EMAIL & MAIL

Mr. Peter Idema
Viterra Inc.
3333 New Brighton Road
Vancouver, BC V5K 5J7

Dear Mr. Idema,

RE: VFPA Project Permit No. 2014-036
Viterra Inc. - Modernization of Dust Control System @ 1803 Stewart Street, Vancouver

On behalf of the Vancouver Fraser Port Authority (VFPA) doing business as Port Metro Vancouver, I am pleased to advise that your Project Permit for the above-noted work has been approved. The enclosed VFPA Project Permit 2014-036 is valid until December 31st, 2016.

Prior to the commencement of works, confirmation of tenure arrangements is required. Viterra Inc. is responsible for carrying out the works in the manner described in your application and according to the conditions listed in the Project Permit. Please ensure that those involved in undertaking the approved works are aware of these conditions and that a copy of the Permit is maintained on site during the project.

Upon completion of your project, VFPA will require a record of the project including as constructed drawings and site photographs to ensure an accurate record of all site improvements. Please submit these materials electronically to port_planning@portmetrovancouver.com.

Should you have any questions, please contact me at 604-665-9561.

Sincerely,

Gord Tycho
Senior Planner

Encl. Project Permit No. 2014-036

CC: Lilian Chau, Planning, Port Metro Vancouver
Raymond Tsow, Real Estate, Port Metro Vancouver
Kim Keskinen, Environmental Programs, Port Metro Vancouver

PORT METRO vancouver

PROJECT PERMIT NUMBER 2014-036

DATE OF APPROVAL	**December 23, 2014**
APPLICANT	**Viterra Inc.**
ADDRESS OF APPLICANT	**3333 New Brighton Road, Vancouver, BC V5K 5J7**
PROJECT LOCATION	**1803 Stewart Street, Vancouver, BC V5L 5G1**
PROJECT TITLE	**Modernization of Dust Control System, 1803 Stewart Street, Vancouver**

PROJECT DESCRIPTION:

For the purposes of this Permit, the Project is understood to include the following "Works" on Vancouver Fraser Port Authority property:

- Installation of a 10.4 m (34 ft.) high steel framed structure that is between Annex 1, Workhouse 1 and Annex 2 to support the new dust control system;
- The total height of the new elevated structure will be approximately 18.9 m (62 ft.) with the new dust control equipment;
- Excavation of soils will be to an approximate depth of 2.4 m (8 ft.) below grade and to be replaced with clean fill;
- Installation of a new concrete sub-grade foundation mat of approximately 30.5 m (100 ft.) long, 12 m (40 ft.) wide and 3 m (10 ft.) high for the new elevated structure;
- Installation of a new bucket elevator on the south side of the new elevated structure adjacent to Annex 1 with associated foundation and steel structures;
- Installation of 10 dust control filters and fans that are approximately 8.5 m (28 ft.) high, equipped with silencers, fire protection system and automatic shut-offs;
- Installation of a new dust transport system, including five drag conveyors connecting to the Raw Screenings Bin (B1310);
- Removal of five existing dust filters located on existing Workhouse 1, Annex 1 and Annex 2 buildings;
- Installation of a new truck load-out system capable of loading Super B trucks on the new elevated structure and associated modifications of internal road configurations;
- Transfer of truck load out operations from the north apron of the Pacific 1 Workhouse to the new elevated structure;
- Installation of associated exterior lighting that will limit light pollution from the south side of the facility;
- Installation of new metal handrails around the perimeter of the roof of Annex 1; and
- Associated relocation and replacement of existing water, sewer and utility lines as required.

GENERAL CONDITIONS OF APPROVAL:

1. This Permit is conditional on a valid tenure agreement with respect to the subject premises being in place. NO CONSTRUCTION MAY COMMENCE IN THE ABSENCE OF A VALID TENURE AGREEMENT.

2. This Permit is granted subject to the fulfillment of all other requirements of the Vancouver Fraser Port Authority (VFPA), doing business as Port Metro Vancouver, relating to the Project, and subject to all applicable laws and other necessary approvals being obtained. Prior to commencing construction the Applicant shall ensure that it has complied with all necessary legal requirements and that all necessary regulatory approvals have been obtained. Furthermore, the issuance of the VFPA Project Review Permit does not preclude compliance with the regulatory processes and requirements of any other applicable agencies;

3. This Permit in no way endorses or warrants the design, engineering, or construction of the construction works contemplated under this Permit and no person may rely upon this Permit for any purpose other than the fact that VFPA has permitted the contemplated construction works to commence, subsequent to the issuance of this Permit, in accordance with the terms and conditions of this Permit;

4. In consideration of the granting of this Permit by VFPA the Applicant agrees to indemnify and save harmless VFPA against any and all actions, claims, loss, damages or other expenses in any way arising or following from or caused by the granting of this Permit or the construction of any works as contemplated by this Permit;

5. Development shall be generally in accordance with the application submitted by *Peter Idema, Manager, Terminal Engineering and Maintenance Systems,* on behalf of Viterra Inc. submitted February 24, 2014 including the attached drawings titled, numbered and dated:
   - "Key Plan Drawing Index Site Plan (Partial)" No. 13296-S-01, November 3, 2014, Revision No. E;
   - "General Notes and Design Parameters", No. 13296-S-02, November 3, 2014, Revision No. E;
   - "Standards Ladder Details", No. 13296-S-03, November 3, 2014, Revision No. D;
   - "Standards Handrail, Stair Details", No. 13296-S-04, November 3, 2014, Revision No. E;
   - "Steel Base Plate U/S Plate EL. 107'-7 ½"", No. 13296-S-05, November 3, 2014, Revision No. D;
   - "Steel Framing Plan T.O.S. EL. 124' – 0"", No. 13296-S-06, November 3, 2014, Revision No. D;
   - "Steel Framing Plan T.O.S. EL. 142' – 6"", No. 13296-S-07, November 3, 2014, Revision No. D;
   - "Catwalk Framing Plan T.O.S. EL. 161' - 0"", No. 13296-S-08, November 3, 2014, Revision No. E;
   - "Steel Elevation Line 4'", No. 13296-S-09, November 3, 2014, Revision No. E;
   - "Steel Elevation Line 5'", No. 13296-S-10, November 3, 2014, Revision No. E;
   - "Steel Elevation Line 6'", No. 13296-S-11, November 3, 2014, Revision No. E;
   - "Steel Elevation Line 7'", No. 13296-S-12, November 3, 2014, Revision No. E;
   - "Steel Elevation Line 8'", No. 13296-S-13, November 3, 2014, Revision No. E;
   - "Steel Elevation Line 9'", No. 13296-S-14, November 3, 2014, Revision No. F;
   - "Steel Elevation Line 10'", No. 13296-S-15, November 3, 2014, Revision No. D;
   - "Steel Elevation Line C1", No. 13296-S-16, November 3, 2014, Revision No. D;
   - "Steel Elevation Line B1", No. 13296-S-17, November 3, 2014, Revision No. E;
   - "Steel Elevation Line A1", No. 13296-S-18, November 3, 2014, Revision No. D;
   - "Steel Details and Sections", No. 13296-S-19, November 3, 2014, Revision No. D;
   - "Foundation Plan", No. 13296-S-20, November 3, 2014, Revision No. D;
   - "Concrete Sections and Details", No. 13296-S-21, November 3, 2014, Revision No. E;
   - "Concrete Miscellaneous Details & Sections", No. 13296-S-22, November 3, 2014, Revision No. E;
   - "Bucket Elevator Plans, Sections and Details", No. 13296-S-23, November 3, 2014, Revision No. C;
   - "Bucket Elevator Plans, Sections and Details", No. 13296-S-24, November 3, 2014,

Revision No. C;
- "Fan Support Plan and Details", No. 13296-S-25, November 3, 2014, Revision No. C;
- "Cable Tray Support T.O.S. EL. 121'-6", No. 13296-S-26, November 3, 2014, Revision No. C;
- "Filter Silo Anchorage Plan, Sections and Details", No. 13296-S-27, November 3, 2014, Revision No. C;
- "Annex #1 Roof EL. 214'-10"", No. 13296-S-28, November 3, 2014, Revision No. C;
- "Steel Framing Plan and Details", No. 13296-S-29, November 3, 2014, Revision No. B;
- "Civil Underground Service Plan", No. 13296-C-01, November 3, 2014, Revision No. E;
- "Dust Control Upgrade Filter Plan Elevation 142'-6"", No. DC501, November 4, 2014, Revision F;
- "Dust Control Upgrade Fan Plan Elevation 124'-0"", No. DC502, November 4, 2014, Revision F;
- "Dust Control Upgrade Filter Fan & Conveyor Elevation Views 1 of 2", No. DC503, November 4, 2014, Revision G;
- "Dust Control Upgrade Filter Fan & Conveyor Elevation Views 2 of 2", No. DC504, November 4, 2014, Revision J;
- "Dust Control Upgrade pacific 1 West Exterior Elevation", No. DC505, November 4, 2014, Revision C;
- "Location of Slab Excavation", December 9, 2014; and
- "Location of filters (1F4, 1F6, 1F10, 1F20, and Annex 2 Wheelabrator) to be removed from Workhouse 1, Annex 1 and Annex 2", December 22, 2014.

6. The Applicant shall adhere to the conditions listed on the attached VFPA Schedule of Environmental Conditions numbered 14-036;

7. The applicant shall cap all abandoned utilities and remove all abandoned utilities, both underground and aboveground, to the satisfaction of VFPA;

8. The Applicant is responsible for locating all existing site services and utilities including any located underground and the Applicant shall ensure that these services and utilities are protected during construction and operation of the Project. The Applicant is responsible to employ best practices and meet applicable code requirements with respect to protection of existing site services and clearance between existing and proposed site services. The Applicant is responsible for repair or replacement of any damage to existing site services and utilities, to the satisfaction of VFPA, that result from construction and operation of the Project;

9. Details of any significant proposed changes to the Project or relating to the application must be submitted to VFPA for consideration of an amendment to this Permit;

10. Prior to commencement of construction, the Applicant shall submit signed and sealed drawings and professional letters of assurance, and shall obtain a VFPA Building Permit;

11. Prior to commencement of construction, the Applicant shall submit signed and sealed drawings for proposed works approved for construction by a professional engineer licensed to practice in the Province of British Columbia;

12. The Applicant shall notify VFPA upon commencement of construction of the approved works and upon completion of the Project;

13. All noise levels resulting from construction activities shall not exceed maximum levels stated in the City of Vancouver Noise Control By-Law No. 6555 without prior approval from VFPA;

14. Any construction activities proposed outside of the City of Vancouver Noise Control By-Law No. 6555, shall require prior approval by VFPA, and shall require prior community notification, as determined by VFPA;

15. The Applicant may place temporary construction trailers on site while this permit remains in effect, provided that the Applicant shall not connect such trailers to any underground utilities without the prior written consent of VFPA which may include, without limitation and at VFPA's discretion, a VFPA Building Permit;

16. The Applicant shall provide as-built drawings, in both AutoCAD and Adobe (PDF) format, within 60 days of completion of all works; and,

17. The granting of this permit shall not be construed as any indication of whether or not any other permit applications, that may or may not be related in scope or considered part of a larger project, submitted in conjunction with or separate from this application, will be approved or denied;

18. The approved works must commence by December 31, 2015 (the "Commencement Date") and be complete no later than December 31, 2016 (the "Completion Date"). For an extension to the Commencement Date, the Applicant must apply to VFPA in writing no later than 30 days following that date. For an extension to the Completion Date, the Applicant must apply in writing to VFPA no later than 30 days prior to that date. Failure to apply for an extension as required may, at the sole discretion of VFPA, result in termination of this approval.

VFPA reserves the right to rescind or revise these conditions at any time that new information warranting this action is made available to us.

Peter Xotta
Vice President Planning and Operations

PROJECT NORTH

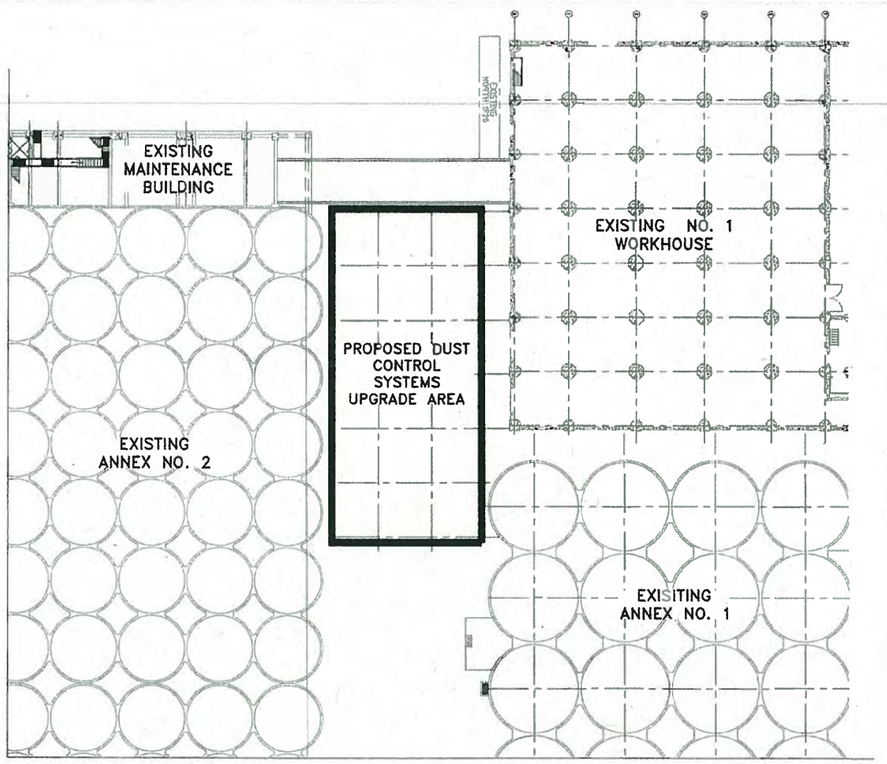
VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
This drawing has been reviewed by the Vancouver Fraser Port Authority solely for the purpose of VFPA's issuance of a Project Permit. This permit in no way denotes design, engineering or structural approval or endorsement.
Signed:
Dated: DEC 23/2014

VITERRA™

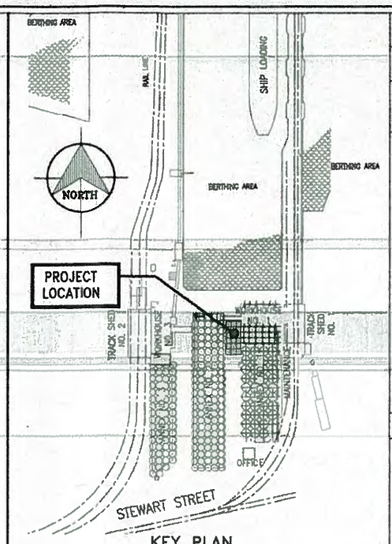
PACIFIC GRAIN TERMINAL
VANCOUVER, B.C.

DUST CONTROL SYSTEM UPGRADE

PROJECT # 13296



SITE PLAN (PARTIAL)
SCALE: 1"=20'-0"



KEY PLAN
SCALE: 1"=200'

DWG NO.	DRAWING TITLE
	STRUCTURAL
13296-S-01	Key Plan,Drawing Index, Site Plan (Partial)
13296-S-02	General Notes and Design Parameters
13296-S-03	Standards- Ladder Details
13296-S-04	Standards- Handrail, Stair Details
13296-S-05	Steel Base Plate U/S Base Plate El. 107'-7 1/2"
13296-S-06	Steel Framing Plan T.O.S. El 124'-0"
13296-S-07	Steel Framing Plan T.O.S. El 142'-6"
13296-S-08	Catwalk Framing Plan T.O.S. El 161'-0"
13296-S-09	Steel Elevation-Line 4'
13296-S-10	Steel Elevation-Line 5'
13296-S-11	Steel Elevation-Line 6'
13296-S-12	Steel Elevation-Line 7'
13296-S-13	Steel Elevation-Line 8'
13296-S-14	Steel Elevation-Line 9'
13296-S-15	Steel Elevation-Line 10'
13296-S-16	Steel Elevation-Line C1
13296-S-17	Steel Elevation-Line B1
13296-S-18	Steel Elevation-Line A1
13296-S-19	Steel Details and Sections
13296-S-20	Foundation Plan
13296-S-21	Concrete Sections and Details
13296-S-22	Concrete Miscellaneous Details and Sections
13296-S-23	Bucket Elevator Plans, Sections and Details
13296-S-24	Bucket Elevator Plans, Sections and Details
13296-S-25	Fan Support Plan and Details
13296-S-26	Cable Tray Support T.O.S. EL 121'-6"
13296-S-27	Filter Silo Anchorage Plan, Sections and Details
13296-S-28	Annex #1 Roof EL. 214'-10"-New Handrail installation
13296-S-29	Steel Framing Plan and Details
	CIVIL
13296-C-01	Underground Service Plan

REV	DESCRIPTION	DATE	APP.
E	RE-ISSUED FOR PERMIT	14NOV03	PC FP
D	DRAWING INDEX UPDATED-REISSUED FOR TENDER	14OCT20	PC FP
C	EXISTING ROOF PLAN ADDED	14JUL04	PC FP
B	ISSUED FOR TENDER	14JUNE09	PC FP
A	ISSUED FOR BUILDING PERMIT	14/FEB/03	PC FP

REFERENCE DRAWING DESCRIPTION

VANCOUVER FRASER PORT AUTHORITY
PLANS COMPRISED OF 44 PAGES, EACH STAMPED WITH A COMBINATION OF LETTERS AND NUMBERS OF A PERMIT, HAVE BEEN REVIEWED AND FORM PART OF THAT PERMIT
December 1, 2014
SIGNATURE/DATE

IMPORTANT
THE ISSUANCE OF A PERMIT DOES NOT REPRESENT OR WARRANT THAT THE APPLICATION OR PLANS COMPLY WITH THE PROVISIONS OF THE NATIONAL BUILDING CODE OR ANY OTHER CODE REGULATING SIGNS OR THE CONSTRUCTION OF BUILDINGS, NOR DOES IT PREVENT THE VFPA FROM ENFORCING ANY SUCH CODE AS IT SEES FIT. THE RESPONSIBILITY TO COMPLY WITH THE CODE AT ALL TIMES REMAINS WITH THE OWNER AND DEVELOPER.

PIONEER ENGINEERING CONSULTANTS LTD.
01 DEC 2014

ISSUED FOR PERMIT

EDWARDS CM Engineering & Project Management
267 Bremner Road East, North Vancouver, BC, V7H 1B2
Phone: (604) 980-8664 Fax: (604) 980-8468

DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

03 NOV 2014

VITERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B.C.
DUST CONTROL SYSTEM UPGRADE

TITLE: KEY PLAN, DRAWING INDEX, SITE PLAN (PARTIAL)
DWG. No.: 13296-S-01
REVISION: E
SCALE: AS NOTED

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

1/44

SPECIFICATIONS:

A. DESIGN CRITERIA

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE FOLLOWING CODES:
1) NATIONAL BUILDING CODE OF CANADA 2010 (B)
2) CAN/CSA S16.1-01
3) CAN/CSA-A23.1-04
4) CAN/CSA-A23.2-04

DESIGN LOADS

1) FLOOR LIVE LOAD = 4.8 kPa

2) SEISMIC:

Sa(0.2)	= 0.95
Sa(0.5)	= 0.65
Sa(1.0)	= 0.34
Sa(2.0)	= 0.17
PGA	= 0.47
Ie	= 1.0
SITE CLASS	= C

3) WIND LOAD: q(1/50) = 0.46 kPa

4) SNOW LOAD
Ss = 1.9kPa
Sr = 0.3kPa

5) EQUIPMENT LOAD:

EQUIPMENT	MODEL	DEAD LOAD (LBS)	LIVE LOAD (LBS)
FU101MACFILTER	120MCF416	25,000	18,500
FU102MACFILTER	120MCF416	25,000	18,500
FU103MACFILTER	120MCF416	25,000	18,500
FU104MACFILTER	120MCF416	25,000	18,500
FU105MACFILTER	120MCF416	25,000	18,500
FU106MACFILTER	120MCF416	25,000	18,500
FU107MACFILTER	120MCF416	25,000	18,500
FU108MACFILTER	120MCF416	25,000	18,500
FU201MACFILTER	120MCF416	25,000	18,500
FU202MACFILTER	120MCF416	25,000	18,500
FT01MACFILTER	120MCF112	10,000	6,000
VACUUM SEPARATOR	GARDNER DENVER	5,000	1,000
FN101	FAN	7,800	
FN102	FAN	7,800	
FN103	FAN	7,800	
FN104	FAN	6,000	
FN105	FAN	7,800	
FN106	FAN	7,800	
FN107	FAN	7,800	
FN108	FAN	7,800	
FN201	FAN	7,800	
FN202	FAN	7,800	
VACUUM SEPARATOR BLOWER	GARDNER DENVER	3,000	
DUD01	DRAG CONVEYOR	8,500	1,000
DUD02	DRAG CONVEYOR	9,500	1,100
DUD03	DRAG CONVEYOR	6,000	650
BIN		8,700	180,000
B/E	BUCKET ELEVATOR	22,500	10,000

(B) (D)

6) SEE GEOTECHNICAL REPORT BY GEOPACIFIC FROM SEPT. 04, 2013

B. GENERAL

1. ALL DRAWINGS, DESIGNS, SPECIFICATIONS AND OTHER DOCUMENTS PREPARED FOR THIS PROJECT BY ECM (EDWARDS CM ENGINEERING AND PROJECT MANAGEMENT) SHALL NOT BE USED FOR ANY OTHER WORK OR PROJECT.
2. THE CONTRACTOR TO VERIFY ALL DIMENSIONS AND DETAILS IN FIELD AND NOTIFY THE ENGINEER, SHOULD ANY DISCREPANCIES BE FOUND.
3. THE CONTRACTOR IS RESPONSIBLE FOR DESIGN OF ALL TEMPORARY SUPPORTS.

C. CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF CSA STANDARD CAN/CSA-A23.1-04 AND CAN/CSA-A23.2-04 AND TO THE PROJECT SPECIFICATIONS.
2. MINIMUM CONCRETE STRENGTH AT 28 DAYS SHALL BE fc' = 35 MPa. (D)
3. AIR ENTRAINMENT AT POINT OF DISCHARGE ON SITE SHALL BE WITHIN THE RANGE 4% TO 7%.
4. MAXIMUM AGGREGATE SIZE SHALL BE 20mm.
5. UNLESS OTHERWISE NOTED ON THE DRAWINGS, CLEAR CONCRETE COVER FOR REINFORCEMENT SHALL BE AS FOLLOWS:
   A. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 75mm
   B. EXPOSED TO EARTH OR WEATHER 40mm
   C. NOT EXPOSED TO WEATHER OR NOT IN CONTACT WITH THE GROUND... 20mm
   SUITABLE PLASTIC OR CONCRETE SPACERS AND CHAIRS SHALL BE INSTALLED TO FURNISH THE REQUIRED COVER.
6. ALL EXPOSED CORNERS SHALL BE CHAMFERED TO 25mm BY 45 DEGREES. UPPER CORNERS OF WALLS SHALL BE NEATLY TOOLED.
7. THE CONTRACTOR SHALL RETAIN A CONCRETE TESTING AGENCY APPROVED BY THE ENGINEER TO TEST AGGREGATES, DESIGN MIX AND CONCRETE CYLINDERS TO CAN/CSA-A23.1-04 AND CAN/CSA-A23.2-04. REPORTS SHALL BE SUBMITTED TO THE ENGINEER IN DUPLICATE.
8. REINFORCING STEEL SHALL CONFORM TO CSA G30.12 GRADE 400 DEFORMED BARS. DETAILING OF ALL HOOKS AND BENDS SHALL CONFORM TO CSN/CSA-A23.1-04.
9. ALL SPLICING IN REINFORCING STEEL SHALL HAVE A MINIMUM OVERLAP OF 36 BAR DIAMETERS.
10. ALL CONCRETE FORMWORK SHALL BE RIGIDLY CONSTRUCTED WITH TIGHT JOINTS TO AVOID SAGGING, DEFLECTION AND LEAKAGE OF CEMENT PASTE.

D. STRUCTURAL STEEL

1. FABRICATE AND ERECT STRUCTURAL STEEL TO CONFORM TO CSA S16.1-01.
2. STRUCTURAL STEEL SHALL CONFORM TO CSA G40-21-M350W. HOLLOW STRUCTURAL STEEL SECTIONS SHALL CONFORM TO CSA G40-21-M350W CLASS C.
3. STEEL SUPPLIER SHALL PREPARE ALL ERECTION AND SHOP DETAIL DRAWINGS. DETAIL DRAWINGS SHALL INCLUDE ALL CONNECTION DESIGN. TWO SETS OF SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. FABRICATION SHALL NOT COMMENCE UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED BY EDWARDS CM ENGINEERING AND PROJECT MANAGEMENT.
4. ALL STRUCTURAL STEEL IS TO BE SANDBLASTED OR WHEELABRATED TO REMOVE ALL MILL SCALE TO A COMMERCIAL FINISH AS DEFINE IN THE STRUCTURAL STEEL PAINTING COUNCIL MANUAL SSPC-SP6-85.
5. ALL STRUCTURAL ERECTION BOLTS SHALL BE 3/4" MINIMUM DIAMETER CADMIUM ELECTROPLATED U.N.O CONFORMING TO ASTM A325M-08. ALL ANCHOR BOLTS TO CONFORM TO ASTM A307M-08, UNLESS SHOWN OTHERWISE ON THE DRAWINGS. TIGHTEN ALL BOLTS WITH IMPACT WRENCH. (C)
6. CONNECTION DESIGN SHALL BE IN ACCORDANCE WITH CSA S16.1-01.
7. ALL BRACING IS TO BE CONNECTED FOR THE LOADS INDICATED OR 50% OF THE NET SECTION IN TENSION, WHICHEVER IS THE GREATER.
8. THE WORK-POINT FOR VERTICAL AND HORIZONTAL BRACING MEMBERS SHALL BE AT THE INTERSECTION POINT OF MEMBER CENTRE LINES UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
9. PROVIDE CONTINUOUS GROUT BED BENEATH ALL BASE PLATES AND OTHER CONNECTIONS BEARING ON CONCRETE OR MASONRY.
10. ALL STEEL SHALL BE HOT-DIPPED GALVANIZED. ALL FIELD WELDING SHALL BE TOUCHED UP WITH GALVICON.
11. ALL WELDING SHALL BE IN ACCORDANCE WITH CSA W59-1989-WELDED STEEL CONSTRUCTION (METAL ARC WELDING) USING E49XX ELECTRODES.
12. ALL STRUCTURAL WELDING IS TO BE PERFORMED ONLY BY COMPANY CERTIFIED TO DIVISION 1 OR 2.1 OF CSA W47.1.
13. ALL GRATING SHALL BE FISHER & LUDLOW STANDARD BAR SERRATED GRATING TYPE 19-2, BEARING BAR SIZE 1 1/2"x3/16" HOT-DIP GALVANIZED, FOR FASTENING USE TYPE "D" SADDLE CLIP C/W 1/4" SELF-TAPPING SCREW DIRECTLY TO "C" OR "W". (B)

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
This drawing has been reviewed by the Vancouver Fraser Port Authority solely for the purpose of VFPA's issuance of a Project Permit. This permit in no way denotes design, engineering or structural approval or endorsement.
Canada
Signed:
Dated: Dec 23/2014

ISSUED FOR PERMIT

REV	DESCRIPTION	DATE	APP.
E	RE-ISSUED FOR PERMIT	03NOV14	PC FP
D	REVISIONS CLOUDED--REISSUED FOR TENDER	20OCT14	PC FP
C	NOTE 5 REVISED	14AUG06	PC FP
B	EQUIPMENT LOADS ADDED, ISSUED FOR TENDER	14JUN09	PC FP
A	ISSUED FOR BUILDING PERMIT	14FEB03	PC FP

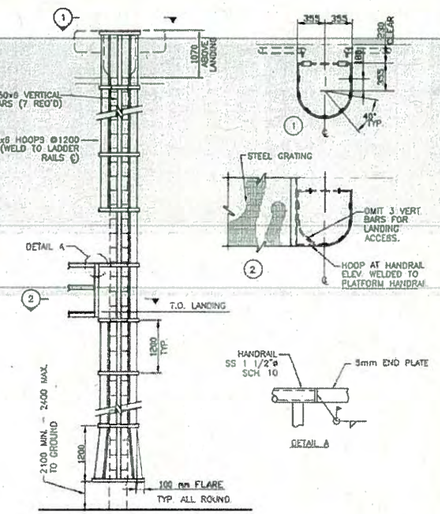
EDWARDS CM Engineering & Project Management
257 Bremner Blvd East, North Vancouver BC, V7N 1R2
Phone: (604) 980-5664 Fax: (604) 980-8468
DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

03 NOV 2014

VITERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B. C.
DUST CONTROL SYSTEM UPGRADE
TITLE: GENERAL NOTES AND DESIGN PARAMETERS
DWG. No.: 13296-S-02
REVISION: E
SCALE: NTS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

2



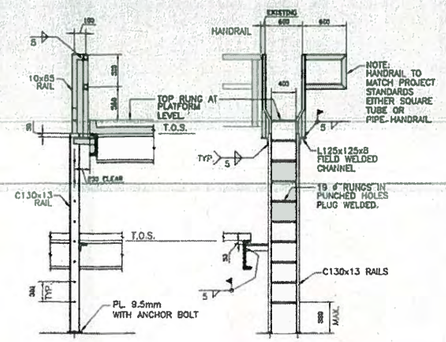
ELEVATION, SECTIONS & DETAILS

TITLE	SAFETY CAGE AND LANDING DETAILS (METRIC)		
	Prep. by:	DESIGN STANDARD / SPECIFICATION	
	Chked by:	SHEET OF	
	Apprd by:		REV
ISSUED FOR PROJECT / PROJECT APPROVAL	DATE OF ISSUE	S-S-SCG-003	

NOTES:

1. SAFETY CAGE AND LANDINGS TO BE MILD STEEL WELDED CONSTRUCTION WITH ALL JOINTS GROUND SMOOTH.
2. SAFETY CAGES SHALL BE PROVIDED ON LADDERS WHERE THE LENGTH OF CLIMB IS MORE THAN 6100.
3. THE SAFETY CAGES SHALL BE PROVIDED WHEREVER ANY PART OF THE LADDER IS MORE THAN 6100 ABOVE GROUND LEVEL, FLOOR OR ROOF (SEE NOTE 6 BELOW).
4. LADDERS SHALL MEET THE FOLLOWING REQUIREMENTS:
   A) LADDERS SHALL CONSIST OF MULTIPLE SECTIONS WITH PLATFORMS OR LANDINGS BETWEEN EACH SECTION.
   B) EACH LADDER SECTION SHALL BE OFFSET 840 FROM ADJACENT LADDER SECTIONS.
   C) SAFETY CAGES SHALL BE PROVIDED ON ALL SECTIONS OF LADDER MORE THAN 6100 ABOVE GROUND LEVEL, FLOOR OR ROOF (SEE NOTE 6 BELOW)
5. FOR THE PURPOSES OF NOTES 4 AND 5D A FLOOR OR ROOF MUST EXTEND A MINIMUM OF 3300 IN ALL DIRECTIONS FROM THE FOOT OF THE LADDER EXCEPT WHERE PROTECTED BY A WALL. OTHERWISE THE HEIGHT OF THE LADDER SHALL BE CONSIDERED AS BEING ABOVE THE NEXT LOWER LEVEL SATISFYING THIS REQUIREMENT.
6. ROOFS REFERRED TO ABOVE ARE ASSUMED TO BE FLAT OR SLOPED AT NO MORE THAN 5 DEGREES. LADDERS ABOVE ROOFS SLOPING MORE THAN 5 DEGREES SHALL BE PROVIDED WITH SAFETY CAGES.
7. FOR LADDER DETAILS SEE S-S-LAD-004.
8. COATING SHALL BE PAINTED WITH "SAFETY YELLOW" OVER GALVANIZED SURFACE. C

TITLE	SAFETY CAGE AND LANDING DETAILS (METRIC)		
	Prep. by:	DESIGN STANDARD / SPECIFICATION	
	Chked by:	SHEET OF	
	Apprd by:		REV
ISSUED FOR PROJECT / PROJECT APPROVAL	DATE OF ISSUE	S-S-SCG-004	



ELEVATIONS

TITLE	LADDER DETAIL-TANKS & BUILDING (METRIC)		
	Prep. by:	DESIGN STANDARD / SPECIFICATION	
	Chked by:	SHEET OF	
	Apprd by:		REV
ISSUED FOR PROJECT / PROJECT APPROVAL	DATE OF ISSUE	S-S-LAD-004	

NOTES:

1. LADDERS TO BE MILD STEEL WELDED CONSTRUCTION.
2. LADDERS TO TANKS TO BE FIELD WELDED TO TANK SHELL.
3. IF SUPPORT BRACKETS ARE NOT POSSIBLE, SEE WORKING DRAWINGS FOR TYPE AND SIZE OF RAILS.
4. IF LADDER USED FOR ACCESS TO TANK OR BUILDING ROOF, PROVIDE MINIMUM 600 mm HANDRAIL LOOP EACH SIDE OF LADDER.
5. IF LADDER MEETS PLATFORM HANDRAIL DO NOT USE HANDRAIL LOOP EXTENSION PLATFORM HANDRAIL DOES NOT CONNECT TO LADDER HANDRAIL.
6. COATING SHALL BE PAINTED WITH "SAFETY YELLOW" OVER GALVANIZED SURFACE
7. FOR SAFETY CAGE AND PLATFORM DETAIL, SEE S-S-SCG-003 C

TITLE	LADDER DETAIL-TANKS & BUILDING (METRIC)		
	Prep. by:	DESIGN STANDARD / SPECIFICATION	
	Chked by:	SHEET OF	
	Apprd by:		REV
ISSUED FOR PROJECT / PROJECT APPROVAL	DATE OF ISSUE	S-S-LAD-005	

REV	DESCRIPTION	DATE	APP.
D	RE-ISSUED FOR PERMIT	03NOV14	PC
C	REVISIONS CLOUDED-REISSUED FOR TENDER		FP
B	ISSUED FOR TENDER	14JUN13	PC
A	ISSUED FOR BUILDING PERMIT		FP

REFERENCE DRAWING

DWG No.

EDWARDS CM
Engineering & Project Management
287 Bremner Road East
North Vancouver
BC, V7H 1B2
Phone: (604) 980-8664
Fax: (604) 980-8468

DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
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Canada
Signed:
Dated: DEC 23/2014

NOTE:
BOLTED CONNECTIONS ARE REQUIRED IN AREAS SUCH AS INSIDE THE FACILITY THAT WELDING WILL NOT BE PERMITTED.

ISSUED FOR PERMIT

03 NOV 2014

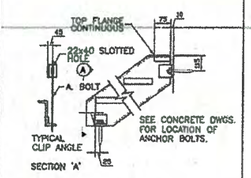
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA P. CELKO

SEAL

TERRA	PACIFIC GRAIN TERMINAL VANCOUVER, B.C.	
DUST CONTROL SYSTEM UPGRADE		
TITLE: STANDARDS LADDER DETAILS	DWG No.: 13296-S-03	
	REVISION: D	SCALE: NTS

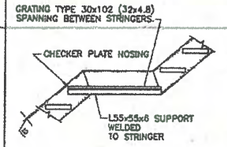
3

TYPE A



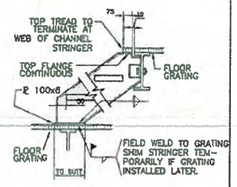
CONCRETE FLOORS

TYPE B



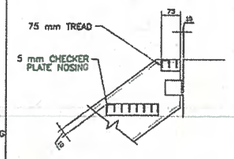
INTERMEDIATE STAIR LANDING

TYPE C



GRATING FLOORS

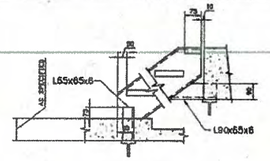
TYPE D



TREAD AND NOSING DETAIL FOR GRATING TREADS

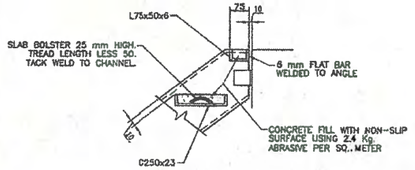
TITLE	STEEL STAIR DETAILS		
		Prep. by:	DESIGN STANDARD / SPECIFICATION
		Chked by:	SHEET 1 OF 2
		Apprd by:	S-CD-2-005
ISSUED FOR PROJECT	PROJECT APPROVAL	DATE OF ISSUE	REV

TYPE E



CONCRETE SLAB

TYPE F

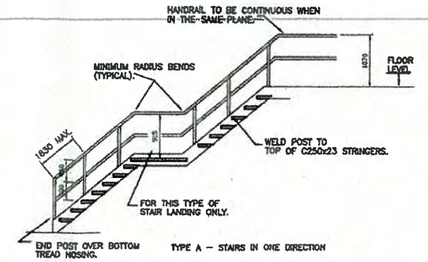


CONCRETE FILL TREAD

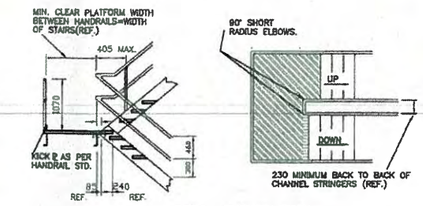
NOTES:

1. ALL CLIP ANGLES TO BE SHOP WELDED TO STRINGERS.
2. GRATING FOR TREADS SHALL BE TYPE 30x102 (32x4.8).
3. STRUCTURAL STEEL MEMBERS TO BE COATED AS PER PROJECT SPECIFICATIONS
4. FOR STEEL GRATING SEE 10-10.01.

TITLE	STEEL STAIR DETAILS		
		Prep. by:	DESIGN STANDARD / SPECIFICATION
		Chked by:	SHEET 2 OF 2
		Apprd by:	S-CD-2-005
ISSUED FOR PROJECT	PROJECT APPROVAL	DATE OF ISSUE	REV



TYPE A – STAIRS IN ONE DIRECTION

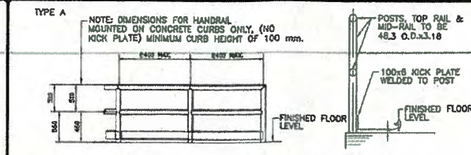


TYPE B – STAIRS WITH RETURN

INTERMEDIATE STAIR LANDINGS

TITLE	STEEL PIPE STAIR HANDRAIL		
		Prep. by:	DESIGN STANDARD / SPECIFICATION
		Chked by:	SHEET 1 OF 1
		Apprd by:	S-CD-2-009
ISSUED FOR PROJECT	PROJECT APPROVAL	DATE OF ISSUE	REV

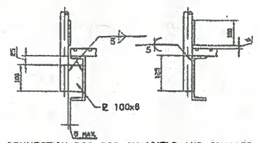
TYPE A



STANDARD FIXED HANDRAIL

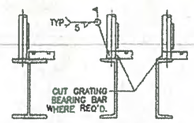
HANDRAIL WITH KICK PLATE

TYPE B



CONNECTION FOR 200 CHANNELS AND SMALLER

TYPE C



CONNECTION FOR W SHAPES AND CHANNELS LARGER THAN 200

MOUNTED HANDRAILS

TITLE	STEEL PIPE HANDRAIL – FIXED		
		Prep. by:	DESIGN STANDARD / SPECIFICATION
		Chked by:	SHEET 1 OF 2
		Apprd by:	S-CD-2-014
ISSUED FOR PROJECT	PROJECT APPROVAL	DATE OF ISSUE	REV

REV	DESCRIPTION	DATE	APP.
D	RE-ISSUED FOR PERMIT	03NOV14	FP
C	RE-ISSUED FOR TENDER	14OCT20	FP
B	ISSUED FOR TENDER	14JUN09	FP
A	ISSUED FOR BUILDING PERMIT	14FEB03	FP

REFERENCE DRAWING DESCRIPTION | DWG No.

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
This drawing has been reviewed by the Vancouver Fraser Port Authority solely for the purpose of VFPA's issuance of a Project Permit. This permit in no way denotes design, engineering or structural approval or endorsement.
Signed:
Dated: DEC 23/2014
Canada

ISSUED FOR PERMIT

NOTE:
BOLTED CONNECTIONS ARE REQUIRED IN AREAS SUCH AS INSIDE THE FACILITY THAT WELDING WILL NOT BE PERMITTED.

EDWARDS CM Engineering & Project Management
257 Bosmer Road East North Vancouver BC, V7N 1R2
Phone: (604) 980-8884 Fax: (604) 980-9468
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DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

VITERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B C.

DUST CONTROL SYSTEM UPGRADE

TITLE:	DWG No.:	
STANDARDS HANDRAIL, STAIR DETAILS	13296-S-04	
	REVISION: D	SCALE: NTS

03 NOV 2014

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA P. CELKO

4

NORTH

4 5 6 7 8

4' 5' 6' 7' 8'

10" 16'-0" 16'-0" 16'-0" 16'-0"

9'-11⅜"

EXISTING WORKHOUSE

T.O.C. STAIR LANDING EL. 106'-6" (4'-0"x4'-0"x10" THK).

¾"ø THREADED ROD. USING HILTI HIT HY150MAX. 2 ¾" EMBEDMENT (TYP.)

10'-8"

2'-6"

UP

3'-0"

1'-0"

2'-7"

2'-0"

2'-0"

1/22

A1

2"ø PVC DRAIN (TYP.)

EXISTING ANNEX NO. 1

FOR BUCKET ELEVATOR FOUNDATION REFER TO DWG 13296-S-22

9' 10'

A1

55'-0" (REF) BETWEEN EXISTING STRUCTURE

CONCRETE PIER SEE DETAIL A/22 (TYP.)

TYP. PEDESTAL DIMENSIONS

1'-8"

2'-0"

2'-0"

2'-4"

C

B1

43'-0"

TYP. PEDESTAL

TYP. CONCRETE CURB. FOR T.O.C. ELEVATION REFER TO DWG 13296-C-01

COLUMN BASE PLATE SEE DETAIL C/19 (TYP.)

19'-0"

B1

C1

1'-10"

1'-6"

2'-0"

T.O.C. LADDER LANDING = T.O.C. CURB

EXISTING ANNEX NO. 2

CAGED LADDER ABOVE

16'-0" 16'-0" 16'-0" 16'-0" 16'-0" 16'-0" 96'-0"

24'-0"

D

C1

STEEL-U/S BASE PLATE EL. 107'-7 1/2"'

SCALE: 1/4"=1'-0"

LEGEND:

A — INDICATES EXISTING BAYLINE

--------→ INDICATES CROSS BRACE

VANCOUVER FRASER PORT AUTHORITY

PROJECT PERMIT 2014-036

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Signed:

Dated: DEC 23/2014

Canada

ISSUED FOR PERMIT

REV	DATE	APP.	REVISION DESCRIPTION
E	03NOV14	PC	RE-ISSUED FOR PERMIT
D	14OCT20	PC	REVISION CLOUDED-REISSUED FOR TENDER
C	14AUG06	PC	PEDESTAL DIM REVISED, CONC. LAND'G ADDED
B	14AUG09	PC	ISSUED FOR TENDER
A	14FEB03	PC	ISSUED FOR BUILDING PERMIT

13296-C-01 UNDERGROUND SERVICES AND SURFACE ELEVATIONS

DC501 DUST COLLECTORS & FANS PLAN BY CAMPANER CONSULTING

DWG No. REFERENCE DRAWING DESCRIPTION

EDWARDS CM
Engineering & Project Management
267 Brunner Road East
North Vancouver
BC, V7N 1R2
Phone: (604) 980-8664
Fax: (604) 980-8488

DESIGNED BY P. CELKO
DRAWN BY F. PASCAL
CHECKED BY J. ANGUSTIA

03 NOV 2014

SEAL

VITERRA

PACIFIC GRAIN TERMINAL
VANCOUVER, B.C.

DUST CONTROL SYSTEM UPGRADE

TITLE: STEEL BASE PLATE U/S PLATE EL. 107'-7 1/2"

DWG. No.: 13296-S-05

REVISION: E

SCALE: 1/4"=1'-0"

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

SEAL

NOTE:
1. FOR BOLT HOLE LOCATIONS FOR FANS REFER TO DWG 13296-S-25.
2. FOR LOCATION OF CABLE SUPPORT FRAME (UNDERSIDE THIS LEVEL OF STEEL) REFER TO DWG 13296-26.

REV.	REVISION DESCRIPTION	DATE	APP.
D	RE-ISSUED FOR PERMIT	03NOV14	PC FP
C	REVISIONS CLOUDED-REISSUED FOR TENDER	14OCT20	PC FP
B	ISSUED FOR TENDER	14JUNE09	PC FP
A	ISSUED FOR BUILDING PERMIT	14FEB03	PC FP

DWG No.	
13296-S-26	CABLE TRAY
13296-S-25	FAN SUPPORT
DC501	DUST COLLECTORS

EDWARDS CM Engineering & Project Management
267 Brosmar Road East, Kelowna, BC. V1W 1B2
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DESIGNED BY: P. CELKO
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CHECKED BY: J. ANGUSTIA

03 NOV 2014

PROFESSIONAL ENGINEER — PROVINCE OF — P. CELKO — SEAL

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
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Signed:
Dated: DEC 23/2014
Canada

ISSUED FOR PERMIT

VITERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B.C.
DUST CONTROL SYSTEM UPGRADE

TITLE: STEEL FRAMING PLAN T.O.S. EL. 124'-0"
DWG No.: 13296-S-06
REVISION: D
SCALE: 1/4"=1'-0"

STEEL FRAMING PLAN (T.O.S. EL. 124'-0")
SCALE: 1/4"=1'-0"
LEGEND:
[A] INDICATES EXISTING BAYLINE
INDICATES CROSS BRACE
MC INDICATES CROSS BRACE

6

NOTE:
1. FOR TANK (LINE A1/4') ANCHORAGE DETAILS REFER TO DWG 13296-S-27.
2. FOR FILTER SILO ANCHORAGE DETAILS REFER TO DWG 13296-S-27.

EXISTING WORKHOUSE

EXISTING ANNEX NO. 1

EXISTING ANNEX NO. 2

BUCKET ELEVATOR BRACE SEE DETAIL C/24

FOR ENLARGED PLAN REFER TO DWG 13296-S-29

SILO WALL

STEEL FRAMING PLAN (T.O.S. EL. 142'-6")
SCALE: 1/4"=1'-0"

LEGEND:
- A — INDICATES EXISTING BAYLINE
- INDICATES T.O.S. DISTANCE FROM EL. 142'-6"
- INDICATES HANDRAILING LOCATION
- INDICATES CROSS BRACE

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
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Dated: DEC 23/2014

ISSUED FOR PERMIT

REV	DATE	APP.
D	03NOV14	PC FP
RE-ISSUED FOR PERMIT		
C	20OCT14	PC FP
REVISIONS CLOUDED-REISSUED FOR TENDER		
B	14JUN09	PC FP
ISSUED FOR TENDER		
A	14FEB03	PC FP
ISSUED FOR BUILDING PERMIT		

REVISION DESCRIPTION

EDWARDS CM
Engineering & Project Management
267 Brasmar Road East
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B.C. V7H 1K5
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Fax: (604) 980-8488

DESIGNED BY P. CELKO
DRAWN BY F. PASCAL
CHECKED BY J. ANGUSTIA

13296-S-27
DC501
DWG No.

PACIFIC GRAIN TERMINAL
VANCOUVER, B. C.

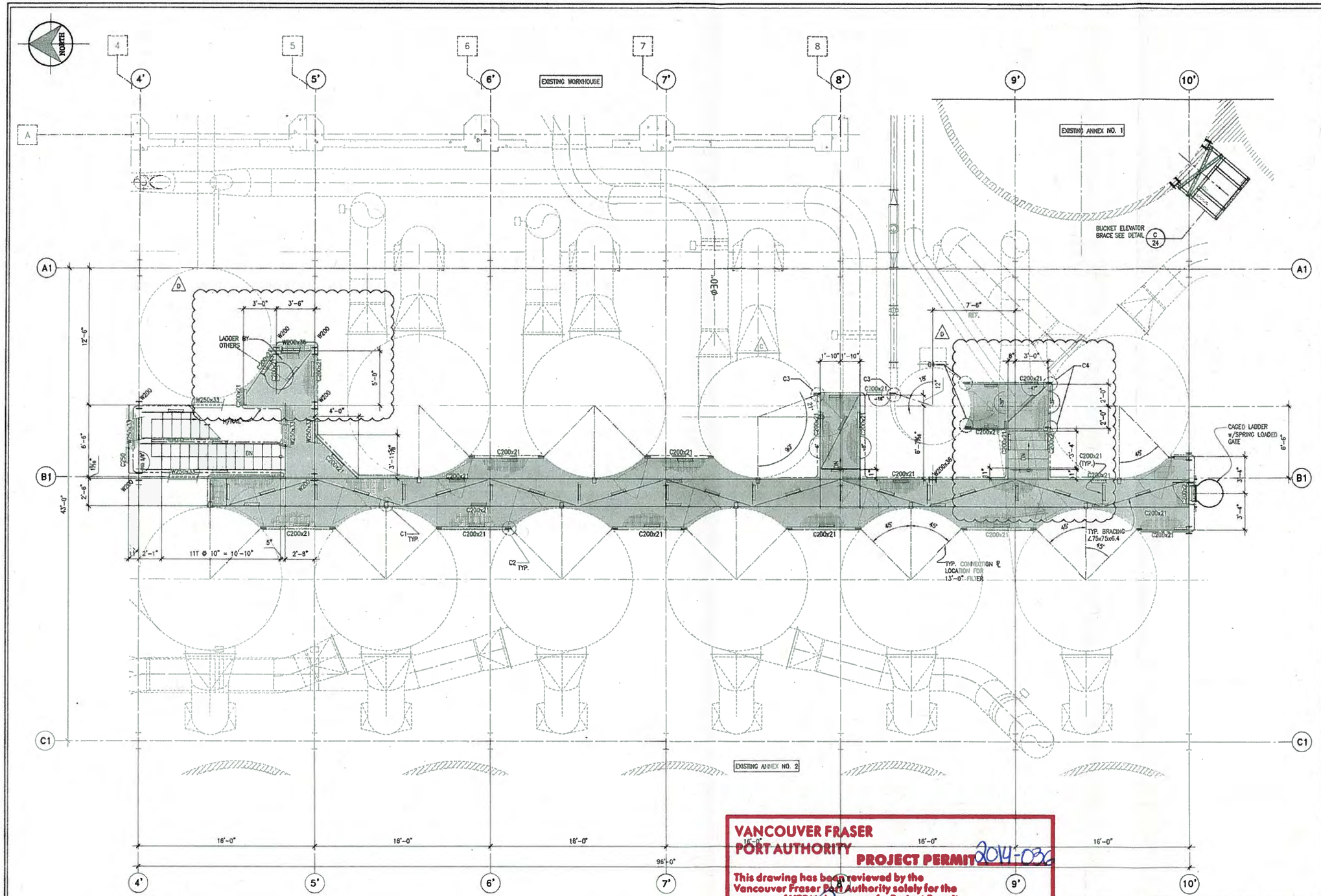
DUST CONTROL SYSTEM UPGRADE

TITLE: STEEL FRAMING PLAN T.O.S. EL. 142'-6"

DWG. No.: 13296-S-07
REVISION: D
SCALE: 1/4"=1'-0"

03 NOV 2014

7



CATWALK FRAMING PLAN (T.O.S. EL. 161'-0")

SCALE: 1/4"=1'-0"

LEGEND:

- A — INDICATES EXISTING BAYLINE
- INDICATES T.O.S. DISTANCE FROM EL. 142'-6"
- INDICATES HANDRAILING LOCATION
- C1 — INDICATES CATWALK SUPPORT PLATE TYPE C1 SEE DETAIL D/19 FOR DETAILS
- C2 — INDICATES CATWALK SUPPORT PLATE TYPE C2 SEE DETAIL E/19 FOR DETAILS
- C3 — INDICATES CATWALK SUPPORT PLATE TYPE C3 SEE DETAIL F/19 FOR DETAILS
- C4 — INDICATES CATWALK SUPPORT PLATE TYPE C4 SEE DETAIL G/19 FOR DETAILS

VANCOUVER FRASER PORT AUTHORITY

PROJECT PERMIT 2014-086

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Dated: DEC 23/2014

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ISSUED FOR PERMIT

REV	REVISION DESCRIPTION	DATE	APP.
E	RE-ISSUED FOR PERMIT	03NOV14	PC FP
D	LINE 5' & 8' STAIR REVISED	14OCT23	PC FP
C	REVISIONS CLOUDED--REISSUED FOR TENDER	14OCT20	PC FP
B	ISSUED FOR TENDER	14JUN09	PC FP
A	ISSUED FOR BUILDING PERMIT	14FEB03	PC FP

DUST COLLECTORS & FANS PLAN BY CAMPNER CONSULTING — DWG No. DC501

REFERENCE DRAWING DESCRIPTION

EDWARDS CM Engineering & Project Management
357 Panorama Road East North Vancouver BC, V7N 1R2
Phone: (604) 980-3664 Fax: (604) 980-8488
DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

VITERRA

PACIFIC GRAIN TERMINAL
VANCOUVER, B.C.

DUST CONTROL SYSTEM UPGRADE

TITLE: CATWALK FRAMING PLAN T.O.S. EL. 161'-0"

DWG No.: 13296-S-08

REVISION: E

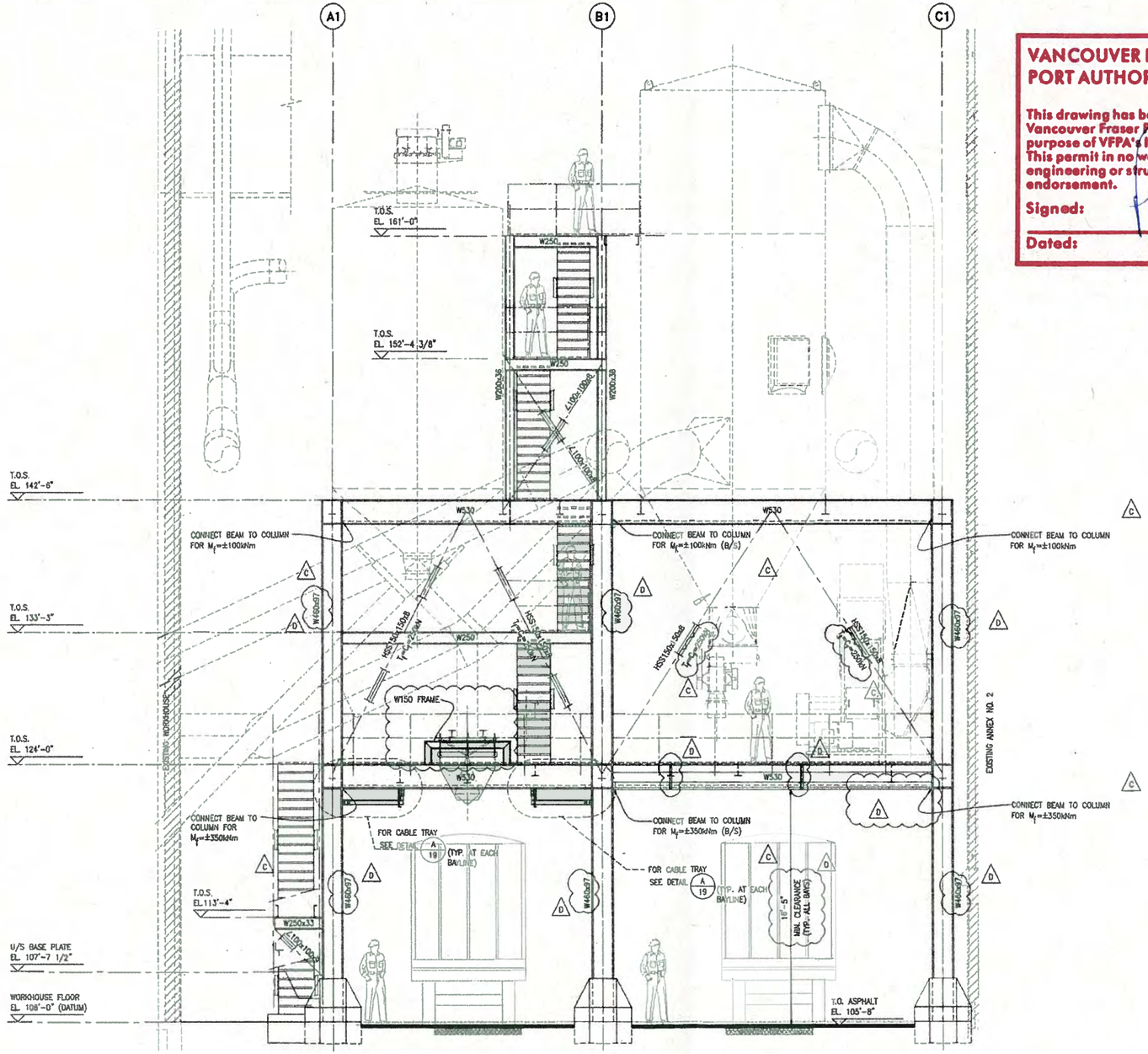
SCALE: 1/4"=1'-0"

03 NOV 2014

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA

SEAL

8



VIEW ON LINE 4' (LOOKING SOUTH)
SCALE: 1/4"=1'-0"

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
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Canada
Signed:
Dated: DEC 23/2014

REV	DESCRIPTION	DATE	APP.
E	RE-ISSUED FOR PERMIT	03NOV14	PC FP
D	REVISIONS CLOUDED-REISSUED FOR TENDER	14OCT20	PC FP
C	CONNECTION FORCES ADDED	14AUG06	PC FP
B	ISSUED FOR TENDER	14JUN09	PC FP
A	ISSUED FOR BUILDING PERMIT	14FEB03	PC FP

REFERENCE DRAWING DESCRIPTION

DUST COLLECTORS & FAN PLAN BY CAMPANER CONSULTING

DWG No. DC501

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Engineering & Project Management
257 Brunner Road East
North Vancouver
BC, V7H 1R2
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Fax: (604) 980-8488

DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

03 NOV 2014

SEAL

ISSUED FOR PERMIT

TERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B.C.

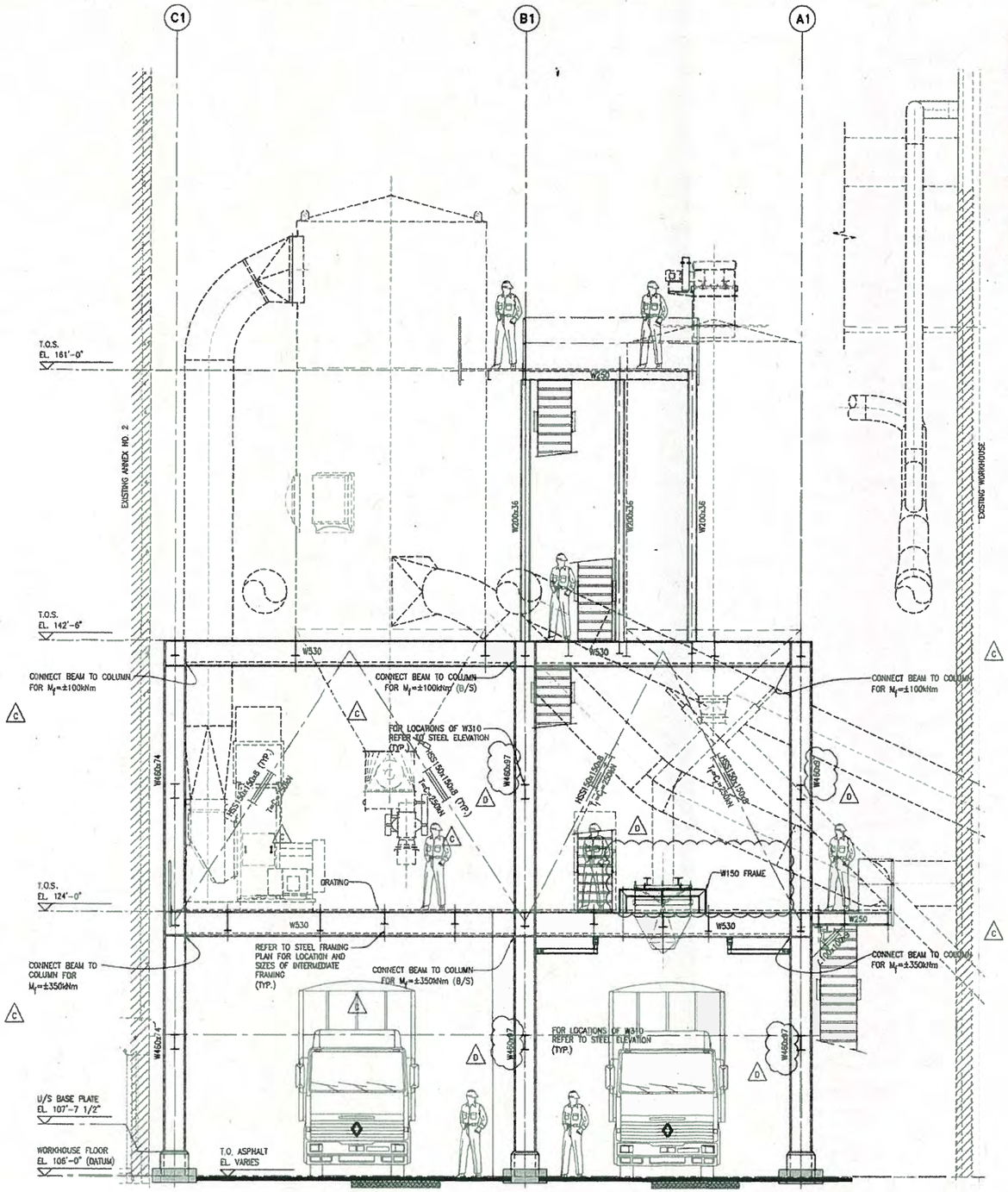
DUST CONTROL SYSTEM UPGRADE

TITLE: STEEL ELEVATION LINE 4'

DWG. No.: 13296-S-09

REVISION: E
SCALE: 1/4"=1'-0"

9



VIEW ON LINE 5' (LOOKING NORTH)
SCALE: 1/4"=1'-0"

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
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Signed:
Dated: DEC 23/2014

Canada

ISSUED FOR PERMIT

REV	REVISION DESCRIPTION	DATE	APP.
E	RE-ISSUED FOR PERMIT	03NOV14	PC FP
D	REVISIONS ADDED-REISSUED FOR TENDER	14OCT20	PC FP
C	CONNECTION FORCES ADDED	14AUG06	PC FP
B	ISSUED FOR TENDER	14JUN09	PC FP
A	ISSUED FOR BUILDING PERMIT	14FEB03	PC FP

DWG No. DC501
DUST COLLECTORS & FAN PLAN BY CAMPANER CONSULTING
REFERENCE DRAWING DESCRIPTION

EDWARDS CM Engineering & Project Management
207 Bronsmar Road East
North Vancouver
BC. V7N 1B2
Phone: (604) 980-8884
Fax: (604) 980-8488

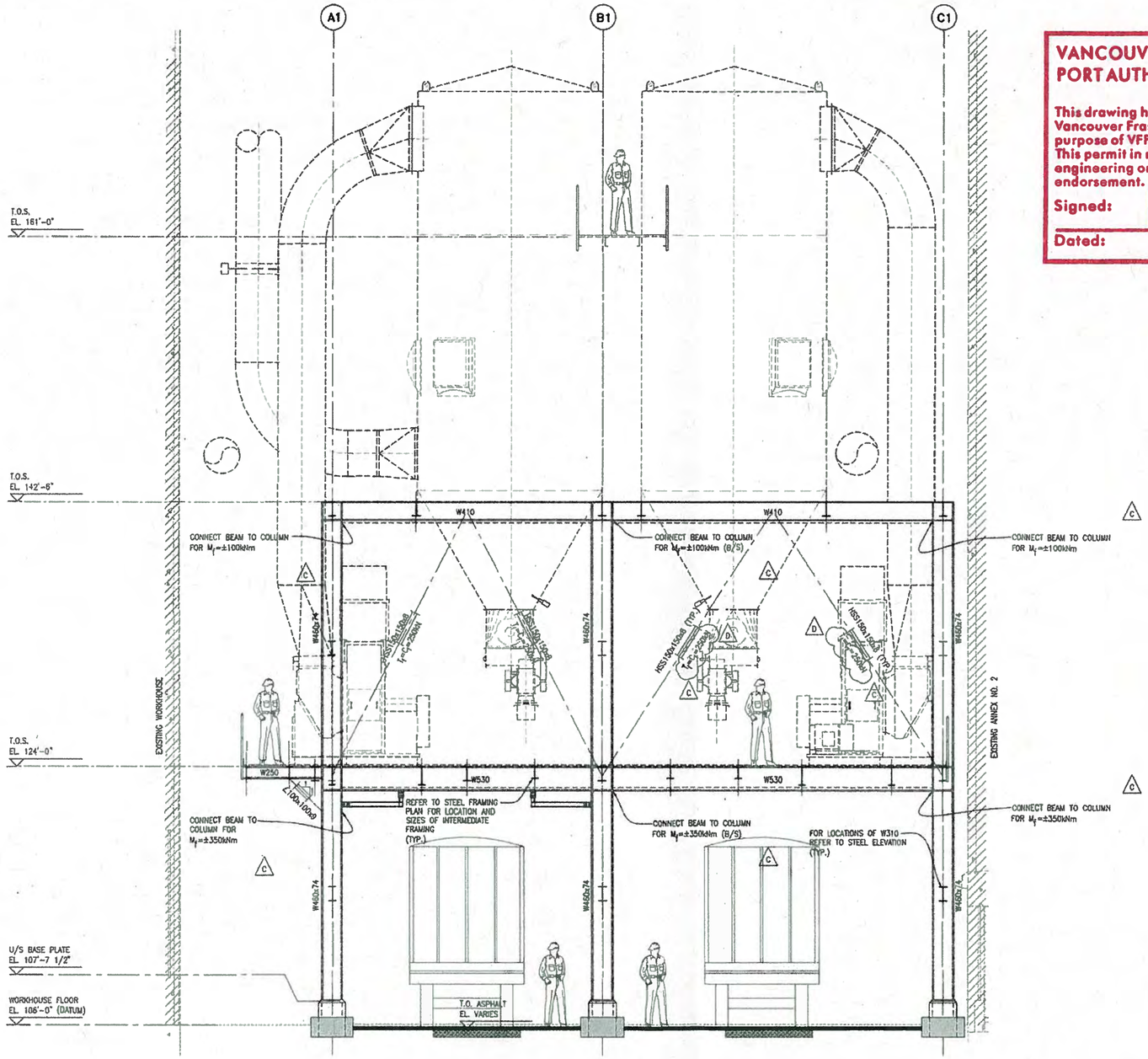
DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

03 NOV 2014

PACIFIC GRAIN TERMINAL
VANCOUVER, B. C.
DUST CONTROL SYSTEM UPGRADE
TITLE: STEEL ELEVATION LINE 5'
DWG. No.: 13296-S-10
REVISION: E
SCALE: 1/4"=1'-0"

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA P. CELKO

10



VIEW ON LINE 6' (LOOKING SOUTH)
SCALE: 1/4"=1'-0"

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
This drawing has been reviewed by the Vancouver Fraser Port Authority solely for the purpose of VFPA's issuance of a Project Permit. This permit in no way denotes design, engineering or structural approval or endorsement.
Canada
Signed:
Dated: DEC 23/2014

ISSUED FOR PERMIT

REV	REVISION DESCRIPTION	DATE	APP.
E	RE-ISSUED FOR PERMIT	03NOV14	PC FP
D	REVISIONS CLOUDED-REISSUED FOR TENDER	14OCT20	PC FP
C	CONNECTION FORCES ADDED	14AUG06	PC FP
B	ISSUED FOR TENDER	14JUN09	PC FP
A	ISSUED FOR BUILDING PERMIT	14FEB03	PC FP

COLLECTORS & FAN PLAN BY CAMPANER CONSULTING
REFERENCE DRAWING DESCRIPTION

EDWARDS CM
Engineering & Project Management
267 Brooman Road East
North Vancouver
BC, V7N 1B2
Phone: (604) 880-8564
Fax: (604) 880-8468

DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

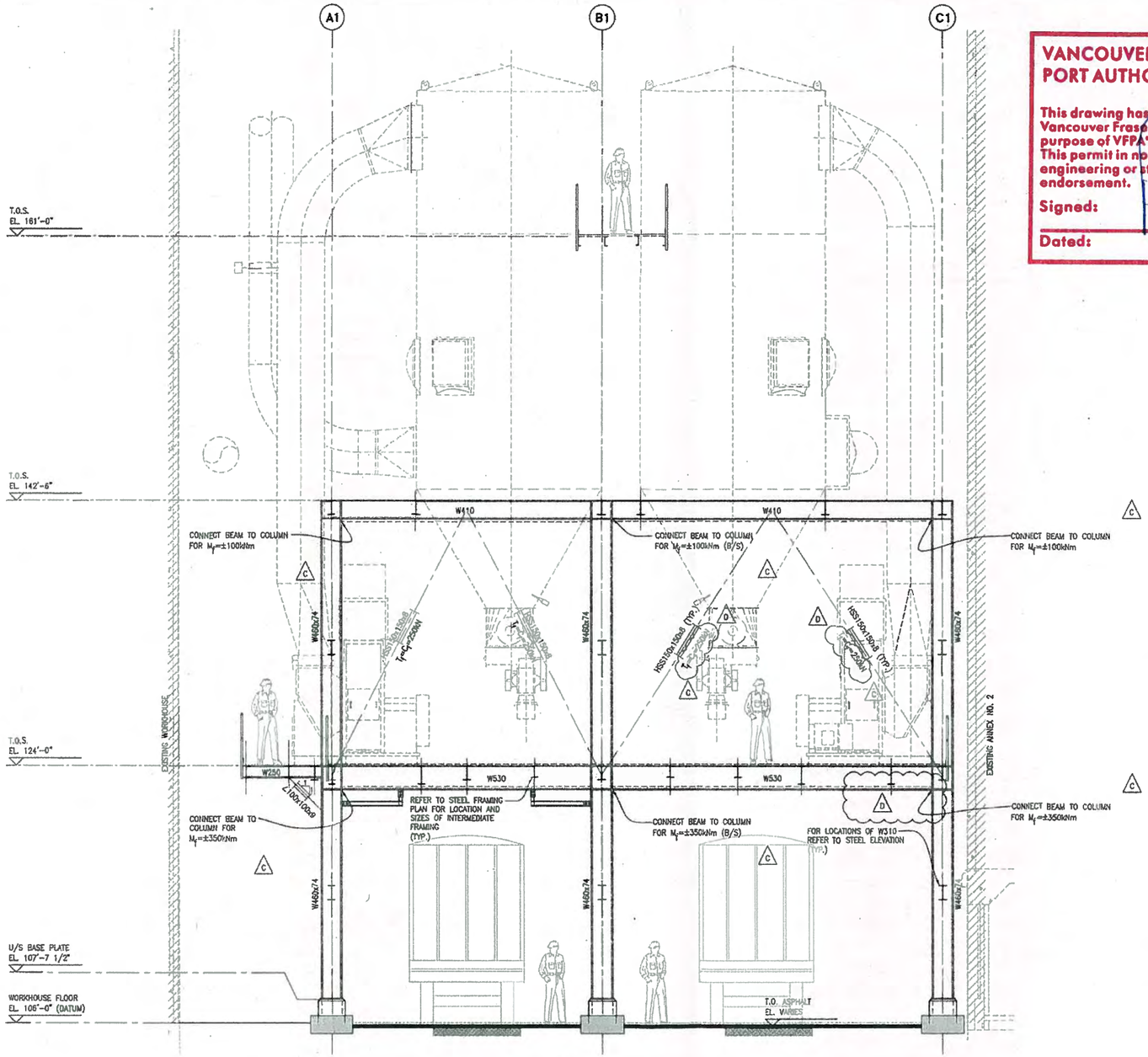
DC501 DUST COLLECTOR
DWG No.

03 NOV 2014
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
P. CELKO
SEAL

TERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B. C.
DUST CONTROL SYSTEM UPGRADE

TITLE: STEEL ELEVATION LINE 6'
DWG. No.: 13296-S-11
REVISION: E
SCALE: 1/4"=1'-0"

11



VIEW ON LINE 7' (LOOKING SOUTH)
SCALE: 1/4"=1'-0"

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
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Dated: DEC 23/2014
Canada

REV	DESCRIPTION	DATE	APP.
E	RE-ISSUED PERMIT	03NOV14	PC FP
D	REVISIONS CLOUDED-REISSUED FOR TENDER	14OCT20	PC FP
C	CONNECTION FORCES ADDED	14AUG06	PC FP
B	ISSUED FOR TENDER	14JUN09	PC FP
A	ISSUED FOR BUILDING PERMIT	14FEB03	PC FP

DUST COLLECTORS & FAN PLAN BY CAMPANER CONSULTING
REFERENCE DRAWING DESCRIPTION

EDWARDS CM Engineering & Project Management
287 Bremner Road East, North Vancouver, BC, V7N 1R2
Phone: (604) 980-8664 Fax: (604) 980-8488

DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

DWG No. DC501

ITERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B. C.

DUST CONTROL SYSTEM UPGRADE

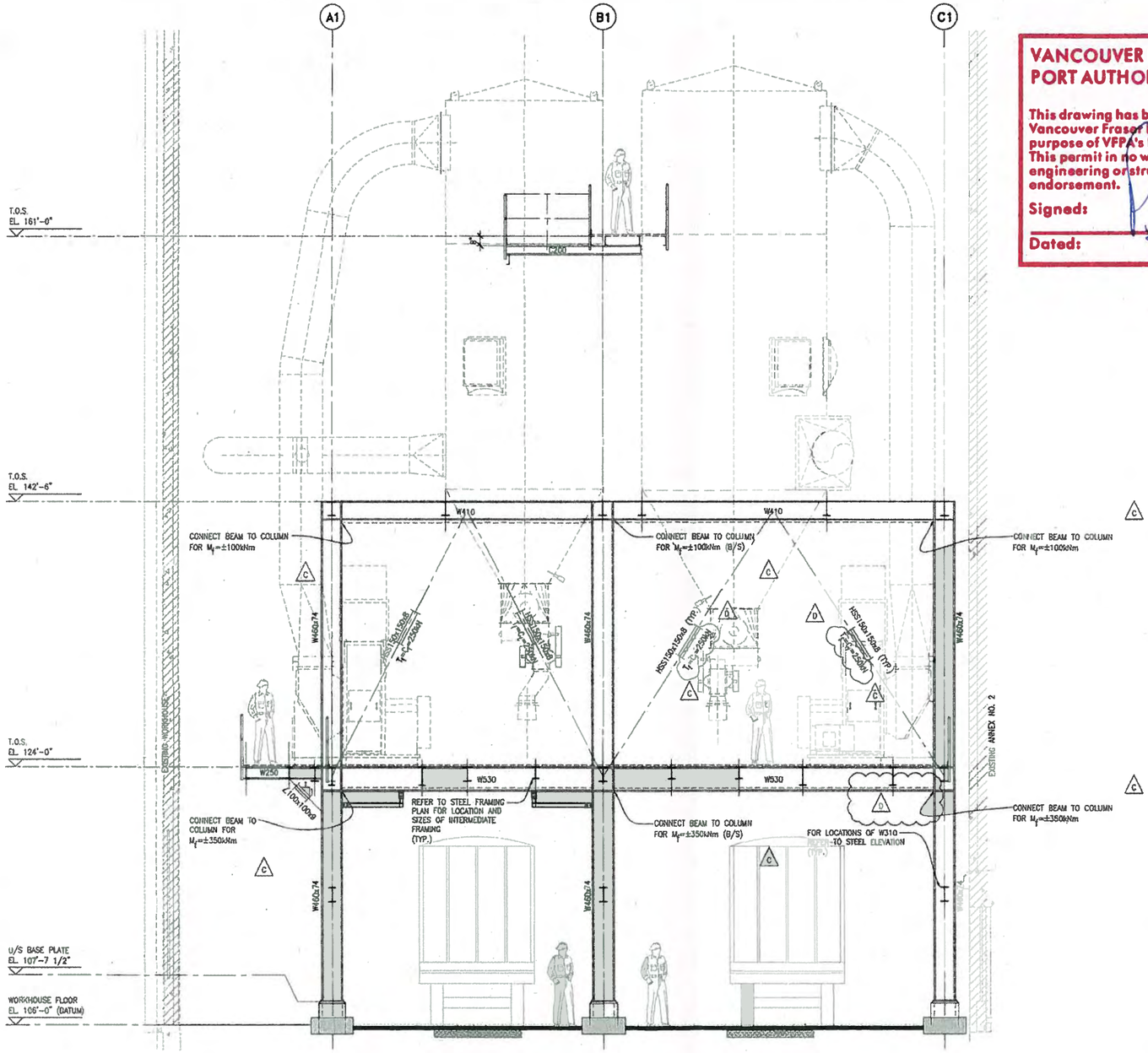
TITLE: STEEL ELEVATION LINE 7'

DWG. No.: 13296-S-12
REVISION: E
SCALE: 1/4"=1'-0"

ISSUED FOR PERMIT

SEAL

12



VIEW ON LINE 8' (LOOKING SOUTH)
SCALE: 1/4"=1'-0"

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
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Canada
Signed:
Dated: DEC 23/2014

ISSUED FOR PERMIT

REV.	DATE	REVISION DESCRIPTION	APP.
E	03NOV14	RE-ISSUED FOR PERMIT	PC FP
D	14OCT20	REVISIONS CLOUDED-REISSUED FOR TENDER	PC FP
C	14AUG06	CONNECTION FORCES ADDED	PC FP
B	14JUN09	ISSUED FOR TENDER	PC FP
A	14FEB03	ISSUED FOR BUILDING PERMIT	PC FP

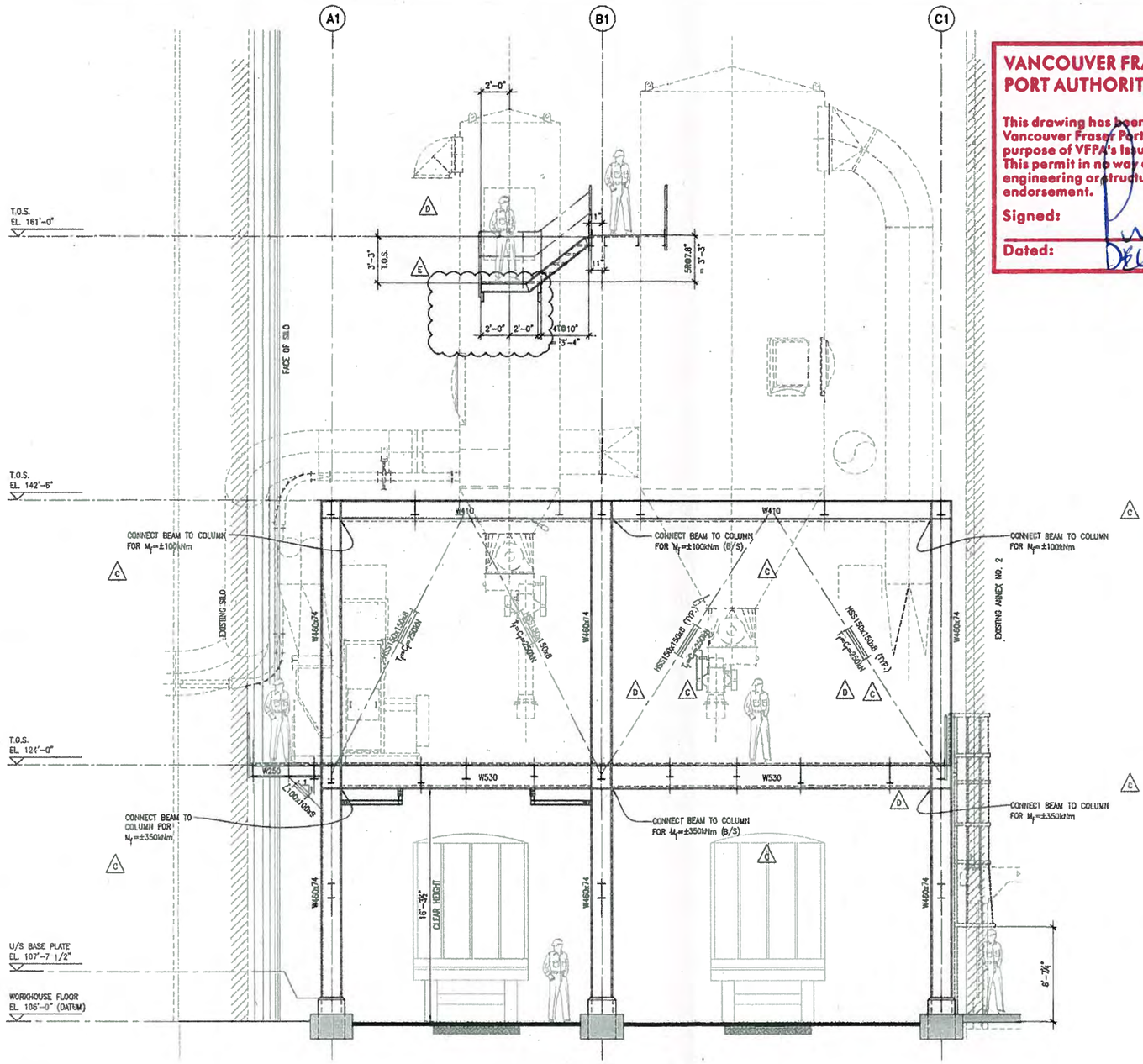
DUST COLLECTORS & FAN PLAN BY CAMPANER CONSULTING
DWG No. DC501

EDWARDS CM
Engineering & Project Management
257 Brannan Road East, North Vancouver, BC, V7N 1R2 Phone: (604) 880-8664 Fax: (604) 880-8468
DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

TERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B. C.
DUST CONTROL SYSTEM UPGRADE
TITLE: STEEL ELEVATION LINE 8'
DWG. No.: 13296-S-13
REVISION: E
SCALE: 1/4"=1'-0"

03 NOV 2014
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
P. CELKO
SEAL

13



VIEW ON LINE 9' (LOOKING SOUTH)
SCALE: 1/4"=1'-0"

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT: 2014-036
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Signed:
Dated: DEC 23 2014

Canada

ISSUED FOR PERMIT

REV	DESCRIPTION	DATE	APP.
F	RE-ISSUED FOR PERMIT	03NOV14	PC FP
E	STAIR LANDING REVISED	14OCT23	PC FP
D	REVISIONS CLOUDED-REISSUED FOR TENDER	14OCT20	PC FP
C	CONNECTION FORCES ADDED	14AUG06	PC FP
B	ISSUED FOR TENDER	14JUN09	PC FP
A	ISSUED FOR BUILDING PERMIT	14FEB03	PC FP

DUST COLLECTORS & FAN PLAN BY CAMPANER CONSULTING

TERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B. C.
DUST CONTROL SYSTEM UPGRADE

TITLE: STEEL ELEVATION LINE 9'
DWG. No.: 13296-S-14
REVISION: F
SCALE: 1/4"=1'-0"

EDWARDS CM
Engineering & Project Management
257 Brannan Road East
North Vancouver
BC, V7N 1R2
Phone: (604) 980-8864
Fax: (604) 980-8468

DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA
DC501
DWG. No.

03 NOV 2014
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA P. CELKO
SEAL

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
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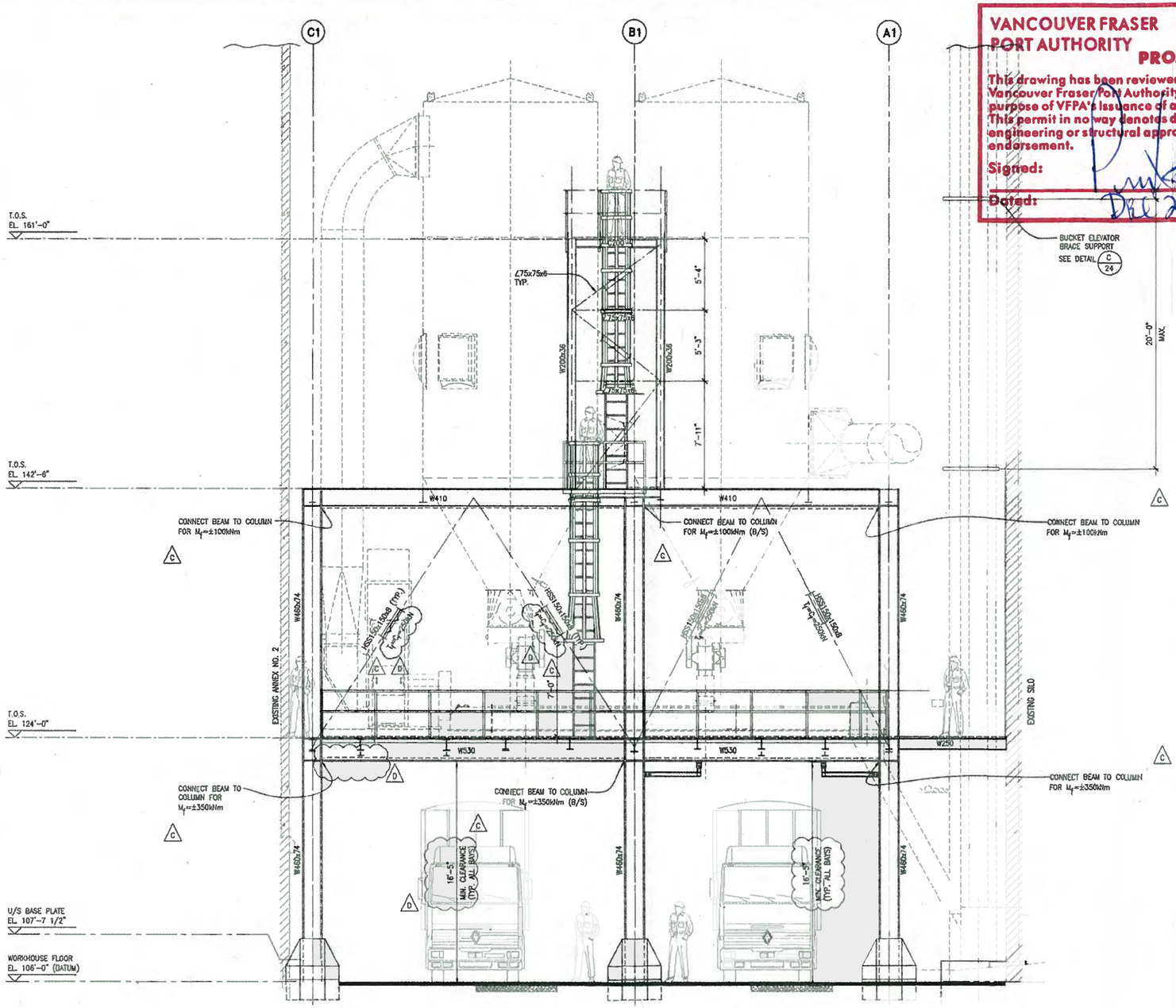
Dated: DEC 23/2014
Canada



VIEW ON LINE 10' (LOOKING NORTH)
SCALE 1/4"=1'-0"

ISSUED FOR PERMIT

REV	DATE	DESCRIPTION	APP.
E	03NOV14	RE-ISSUED FOR PERMIT	PC FP
D	140CT20	REVISIONS CLOUDED-REISSUED FOR TENDER	PC FP
C	14AUG08	CONNECTION FORCES ADDED	PC FP
B	14JUN09	ISSUED FOR TENDER	PC FP
A	14FEB03	ISSUED FOR BUILDING PERMIT	PC FP

COLLECTORS & FAN PLAN BY CAMPANER CONSULTING
REFERENCE DRAWING DESCRIPTION

EDWARDS CM Engineering & Project Management
267 Brunner Road East, North Vancouver, BC, V7N 1R2
Phone: (604) 980-8564 Fax: (604) 980-8468
DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

DC501 DUST COLLECTOR
DWG No.

TERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B.C.
DUST CONTROL SYSTEM UPGRADE

TITLE: STEEL ELEVATION LINE 10'
DWG. No.: 13296-S-15
REVISION: E
SCALE: 1/4"=1'-0"

03 NOV 2014
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA P. CELKO
SEAL

15

VANCOUVER FRASER PORT AUTHORITY

PROJECT PERMIT 2014-036

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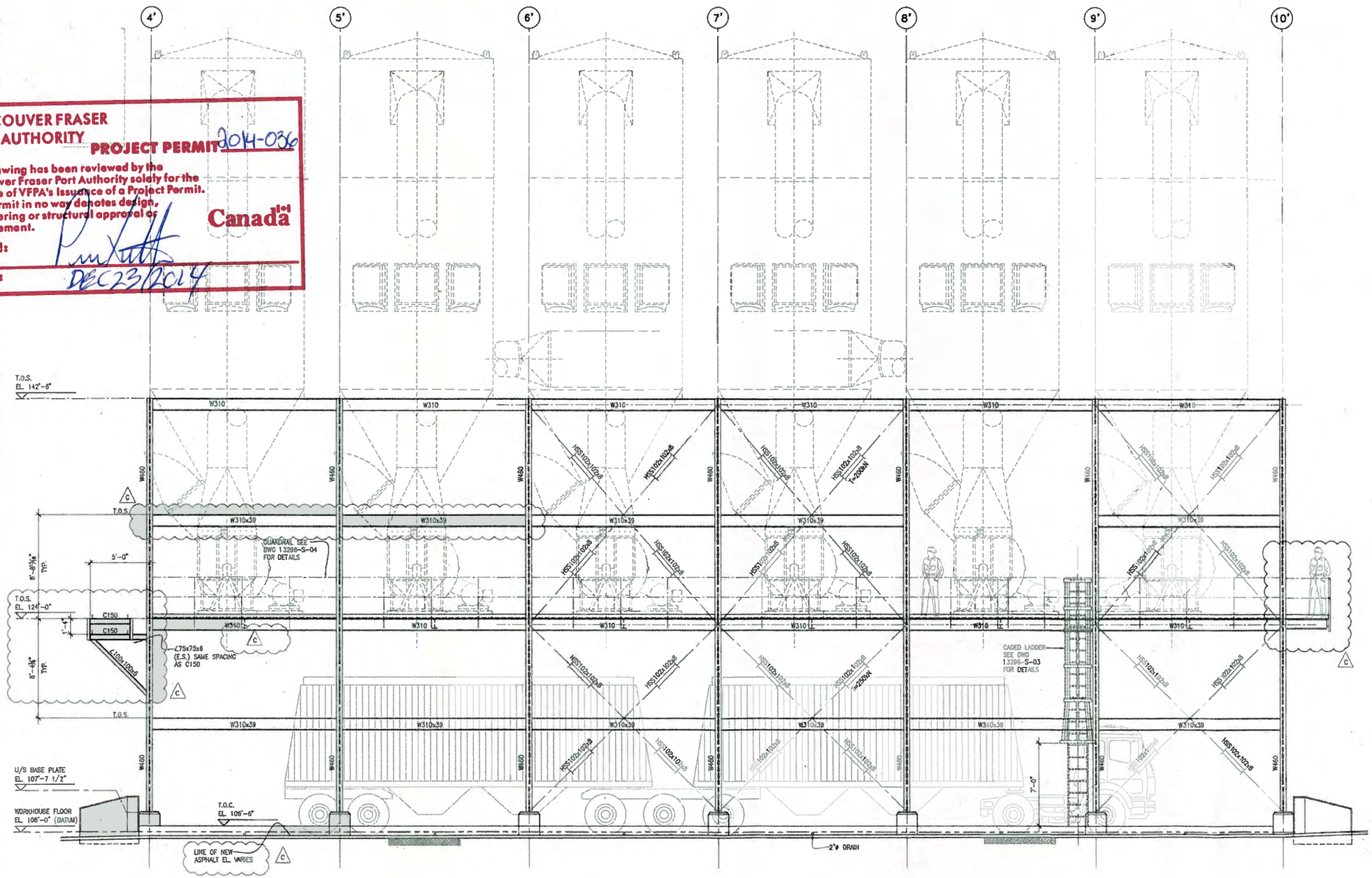
Signed:

Dated: DEC 23 2014

Canada



VIEW ON LINE C1 (LOOKING EAST)
SCALE: 1/4"=1'-0"

ISSUED FOR PERMIT

REV	DATE	APP.
D	RE-ISSUED FOR PERMIT	03NOV14	PC	FP
C	REVISIONS CLOUDED-REISSUED FOR TENDER	14OCT20	PC	FP
B	ISSUED FOR TENDER	14JUN09	PC	FP
A	ISSUED FOR BUILDING PERMIT	14FEB03	PC	FP

DUST COLLECTORS & FAN PLAN BY CAMPANER CONSULTING
REFERENCE DRAWING DESCRIPTION

DWG No. DC501
DUST COLLECTOR

EDWARDS CM
Engineering & Project Management
267 Brosmar Road East
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BC, V7N 1K2
Phone: (604) 980-8564
Fax: (604) 980-6485

DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

VITERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B. C.

DUST CONTROL SYSTEM UPGRADE

TITLE: STEEL ELEVATION LINE C1

DWG. No.: 13296-S-16

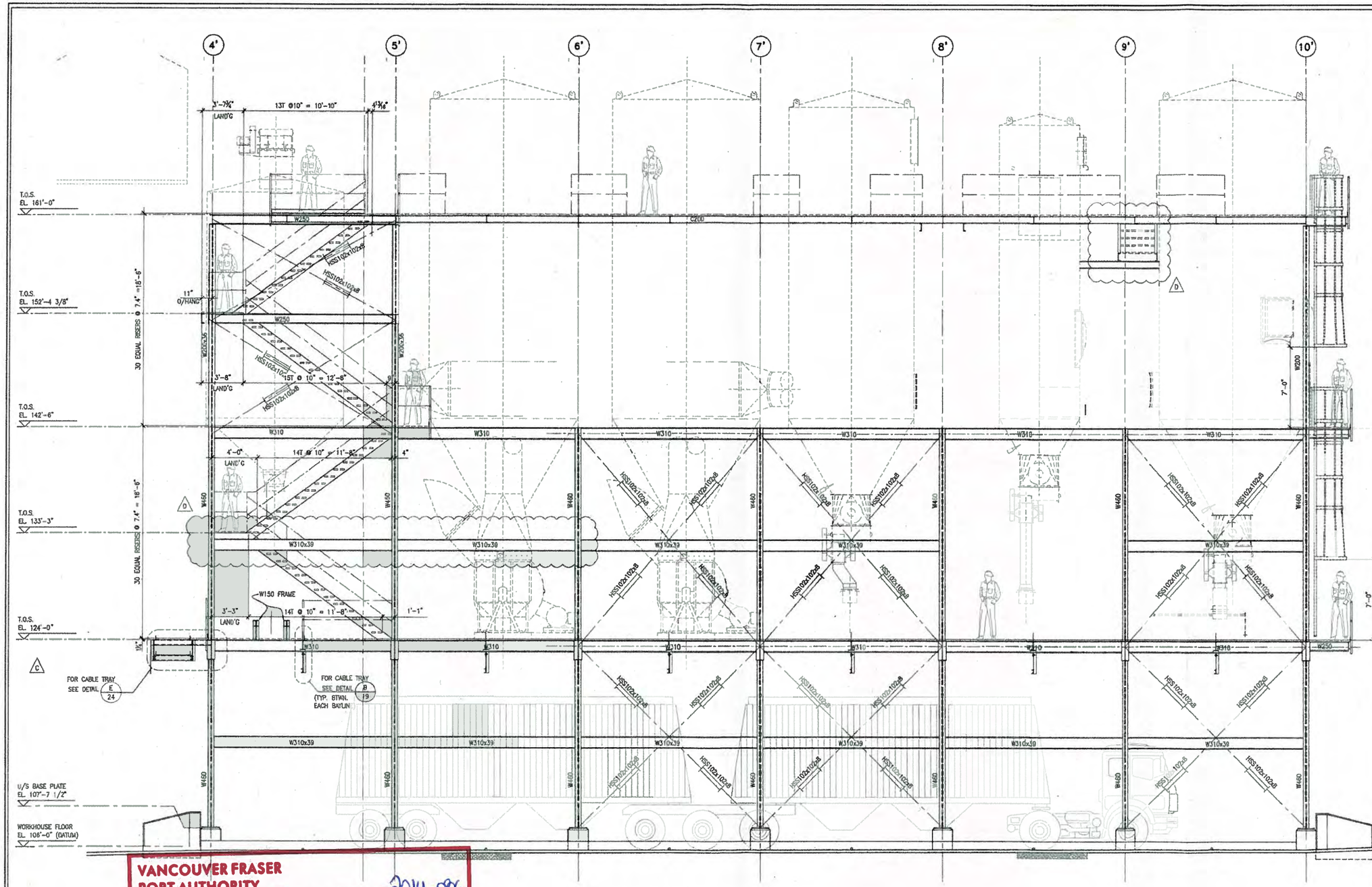
REVISION: D

SCALE: 1/4"=1'-0"

03 NOV 2014

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
P. CELKO

16



VIEW ON LINE B1 (LOOKING EAST)
SCALE: 1/4"=1'-0"

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
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Signed:
Dated: DEC 23/2014
Canada

ISSUED FOR PERMIT

REV	REVISION DESCRIPTION	DATE	APP.
E	RE-ISSUED FOR PERMIT	03NOV14	PC FP
D	REVISIONS CLOUDED	14OCT20	PC FP
C	CABLE TRAY ELEVATION REVISED	14AUG06	PC FP
B	ISSUED FOR TENDER	14JUN09	PC FP
A	ISSUED FOR BUILDING PERMIT	14FEB03	PC FP

DWG No. DC501
REFERENCE DRAWING DESCRIPTION: DUST COLLECTORS & FAN PLAN BY CAMPANER CONSULTING

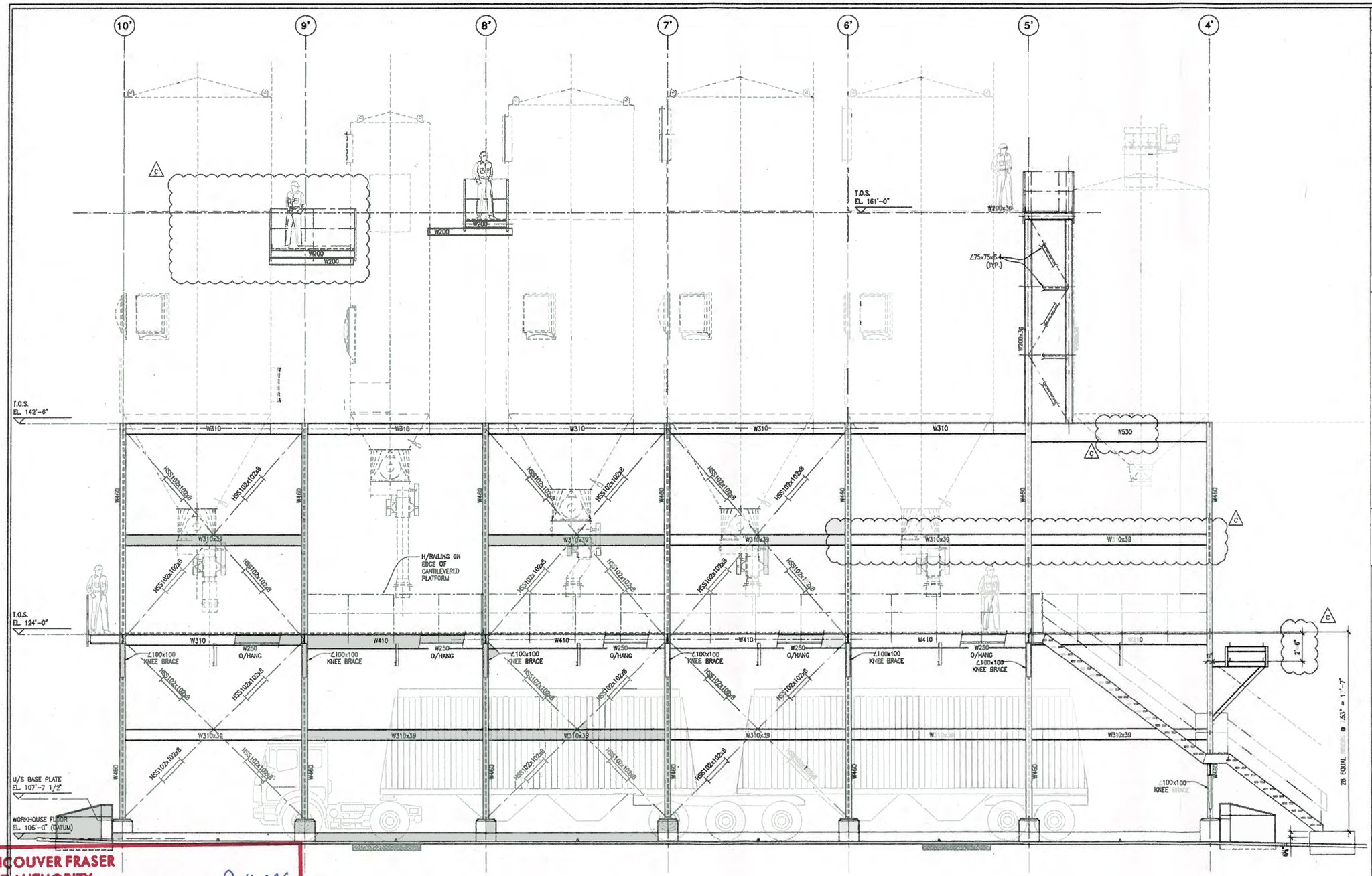
EDWARDS CM
Engineering & Project Management
267 Braemar Road East
North Vancouver
BC, V7N 1R2
Phone: (604) 980-8664
Fax: (604) 980-8468

DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

VITERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B. C.
DUST CONTROL SYSTEM UPGRADE
TITLE: STEEL ELEVATION LINE B1
DWG. No.: 13296-S-17
REVISION: E
SCALE: 1/4"=1'-0"

03 NOV 2014
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
P. CELKO

17



VIEW ON LINE A1 (LOOKING WEST)
SCALE: 1/4"=1'-0"

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
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Canada
Signed:
Dated: DEC 23/2014

ISSUED FOR PERMIT

REV	REVISION DESCRIPTION	DATE	APP.
D	RE-ISSUED FOR PERMIT	03NOV14	PC
C	REVISIONS CLOUDED-REISSUED FOR TENDER	14OCT20	FP
B	ISSUED FOR TENDER	14JUN09	PC
A	ISSUED FOR BUILDING PERMIT	14FEB03	PC

DUST COLLECTORS & FAN PLAN BY CAMPANER CONSULTING

EDWARDS CM
Engineering & Project Management
267 Brooman Road East
North Vancouver
BC, V7N 1B2
Phone: (604) 980-8664
Fax: (604) 980-8468

DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

DC501
DWG No.

03 NOV 2014
SEAL

TERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B. C

DUST CONTROL SYSTEM UPGRADE

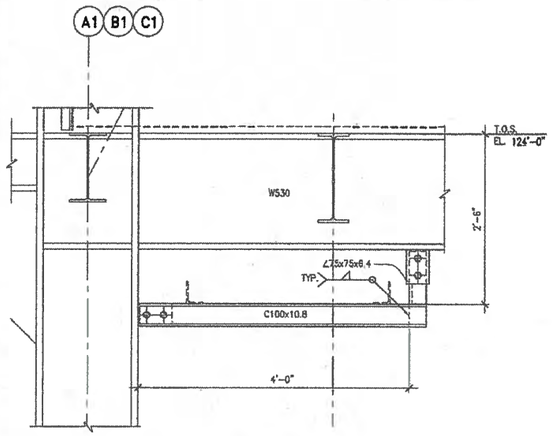
TITLE: STEEL ELEVATION LINE A1

DWG No.: 13296-S-18

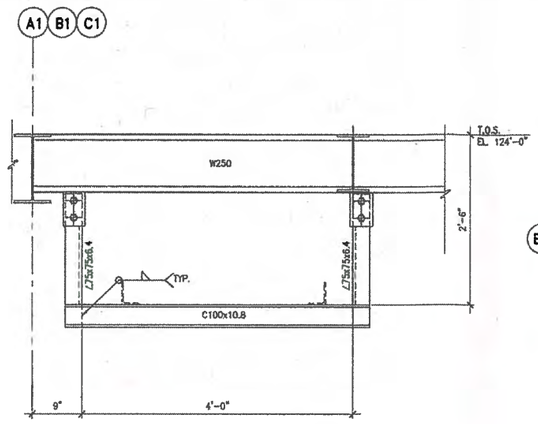
REVISION: D

SCALE: 1/4"=1'-0"

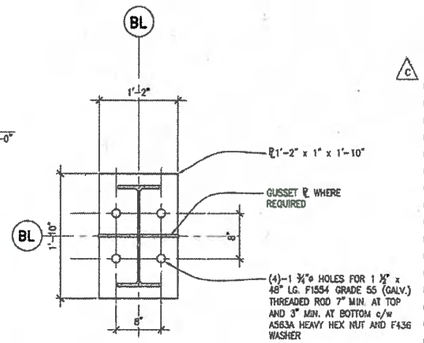
18



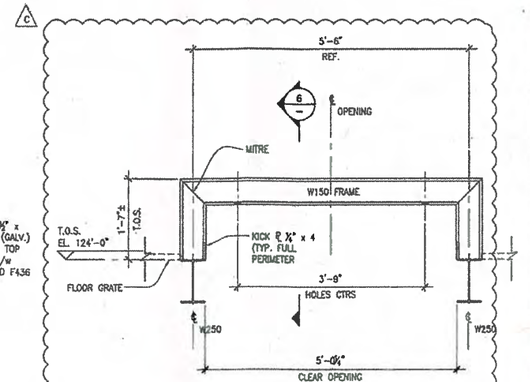
DETAIL A (09,26) (CABLE TRAY SUPPORT EACH BAYLINE)
SCALE: 1"=1'-0"



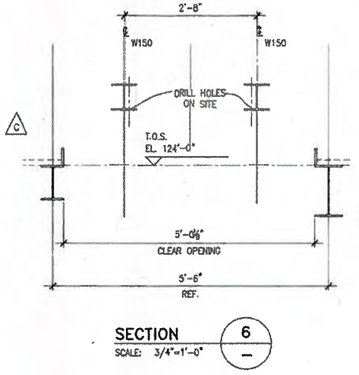
DETAIL B (17,26) (CABLE TRAY SUPPORT BETWEEN BAYLINES)
SCALE: 1"=1'-0"



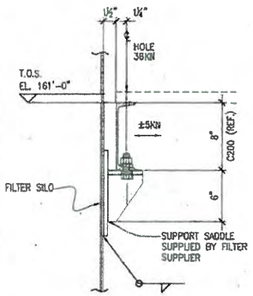
COLUMN BASE PLATE
DETAIL C (05)
SCALE: 1"=1'-0"



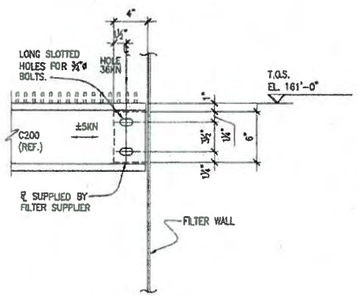
SECTION 5 (29)
SCALE: 3/4"=1'-0"
NOTE: T.O. FRAME TO BE DETERMINED LATER



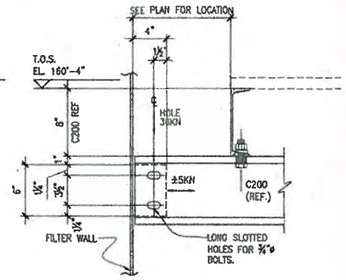
SECTION 6 (—)
SCALE: 3/4"=1'-0"



SECTION 1 (—)
SCALE: 1 1/2"=1'-0"



SECTION 2 (—)
SCALE: 1 1/2"=1'-0"



SECTION 3 (—)
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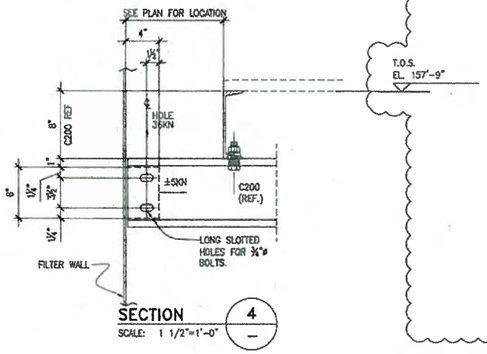
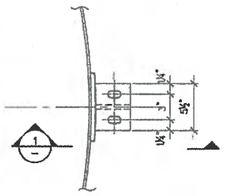
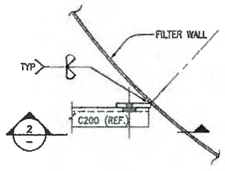


SECTION 4 (—)
SCALE: 1 1/2"=1'-0"



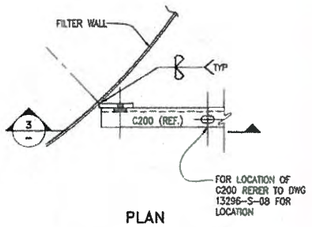
PLAN

CONNECTION PLATE TYPE C1
DETAIL D (08)
SCALE: 1 1/2"=1'-0"



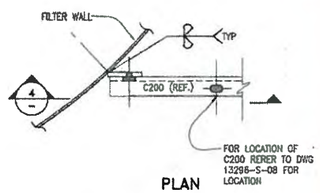
PLAN

CONNECTION PLATE TYPE C2
DETAIL E (08)
SCALE: 1 1/2"=1'-0"



PLAN

CONNECTION PLATE TYPE C3
DETAIL F (08)
SCALE: 1 1/2"=1'-0"



PLAN

CONNECTION PLATE TYPE C4
DETAIL G (08)
SCALE: 1 1/2"=1'-0"

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
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Signed:
Dated: DEC 23/2014

ISSUED FOR PERMIT

REV	DESCRIPTION	DATE	APP.
D	RFI--ISSUED FOR PERMIT	03NOV14	PC FP
C	REVISIONS CLOUDED--REISSUED FOR TENDER	14OCT30	PC FP
B	ISSUED FOR TENDER	14JUN09	PC FP
A	ISSUED FOR BUILDING PERMIT	14FEB03	PC FP

DWG No. DC501
DUST COLLECTORS & FAN PLAN BY CANPANER CONSULTING
REFERENCE DRAWING DESCRIPTION

EDWARDS CM Engineering & Project Management
267 Brosnan Road East, North Vancouver, BC, V7N 1B2
Phone: (604) 980-8884 Fax: (604) 980-8468
DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

03 NOV 2014
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA
SEAL

TERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B. C.
DUST CONTROL SYSTEM UPGRADE
TITLE: STEEL DETAILS AND SECTIONS
DWG. No.: 13296-S-19
REVISION: D
SCALE: AS NOTED

19

NORTH

4 5 6 7 8 9 10

4' 5' 6' 7' 8' 9' 10'

10" 16'-0" 16'-0" 16'-0" 16'-0" 16'-0" 16'-0" 6'-0"

A

EXISTING WORKHOUSE

EXISTING ANNEX NO. 1

FOR BUCKET ELEVATOR FOUNDATION DETAILS REFER TO DWG 13296-S-22

1/21 2/21 3/21 4/21 5/21

6'-0"

C

A1

B1

C1

10'-8"

43'-0"

55'-6" (REF.) BETWEEN EXISTING STRUCTURE

19'-0"

24'-0"

6'-6" 3'-3" 3'-3"

20M (T&B)

15M (T&B)

4'-0" TYP. 2'-0" 2'-0"

6'-6" 5'-0"

1'-10" 1'-6"

T.O. FOOTING EL. 101.0'

EXISTING ANNEX NO. 2

6'-0" 16'-0" 16'-0" 16'-0" 16'-0" 16'-0" 16'-0" 8'-0"

112'-0"

FOUNDATION PLAN (T.O. FOOTING 101'-0")

SCALE: 1/4"=1'-0"

LEGEND:

A INDICATES EXISTING BAYLINE

VANCOUVER FRASER PORT AUTHORITY

PROJECT PERMIT 2014-036

This drawing has been reviewed by the Vancouver Fraser Port Authority solely for the purpose of VFPA's issuance of a Project Permit. This permit in no way denotes design, engineering or structural approval or endorsement.

Canada

Signed:

Dated: DEC 23/2014

ISSUED FOR PERMIT

REV	DATE	APP.
D	RE-ISSUED FOR PERMIT	03NOV14	PC FP
C	REVISIONS CLOUDED--REISSUED FOR TENDER	14OCT20	PC FP
B	ISSUED FOR TENDER	14JUN09	PC FP
A	ISSUED FOR BUILDING PERMIT	14FEB03	PC FP

REVISION DESCRIPTION

DUST COLLECTORS & FANS PLAN BY CAMPAINER CONSULTING

REFERENCE DRAWING DESCRIPTION

DC501 DWG No.

EDWARDS CM Engineering & Project Management

267 Rosemar Road East North Vancouver BC, V7N 1R2 Phone: (604) 980-5664 Fax: (604) 980-5485

DESIGNED BY: P. CELKO

DRAWN BY: F. PASCAL

CHECKED BY: J. ANGUSTIA

03 NOV 2014

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA P. CELKO

VITERRA

PACIFIC GRAIN TERMINAL VANCOUVER, B. C.

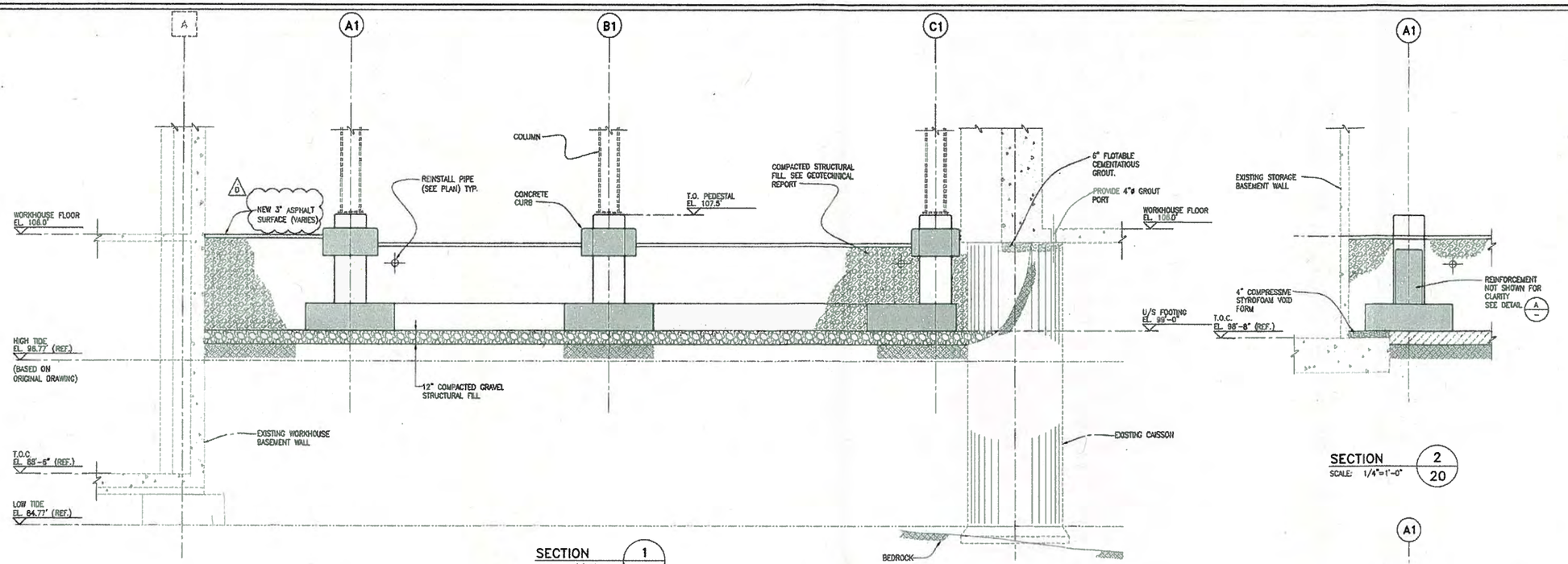
DUST CONTROL SYSTEM UPGRADE

TITLE: FOUNDATION PLAN

DWG. No.: 13296-S-20

REVISION: D SCALE: 1/4"=1'-0"

20



VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
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Signed:
Dated: Dec 23/2014
Canada

ISSUED FOR PERMIT

REV.	DESCRIPTION	DATE	APP.
E	RE-ISSUED FOR PERMIT	03NOV14	PC FP
D	REVISIONS CLOUDED-REISSUED FOR TENDER	14OCT30	PC FP
C	ANCHOR BOLT REVISED	14AUG06	PC FP
B	ISSUED FOR TENDER	14JUN09	PC FP
A	ISSUED FOR BUILDING PERMIT	14FEB03	PC FP

DUST COLLECTORS & FANS PLAN BY CAMPANER CONSULTING
REFERENCE DRAWING DESCRIPTION

EDWARDS CM Engineering & Project Management
267 Brasmar Road East North Vancouver BC, V7H 1B2 Phone: (604) 980-8564 Fax: (604) 980-8465

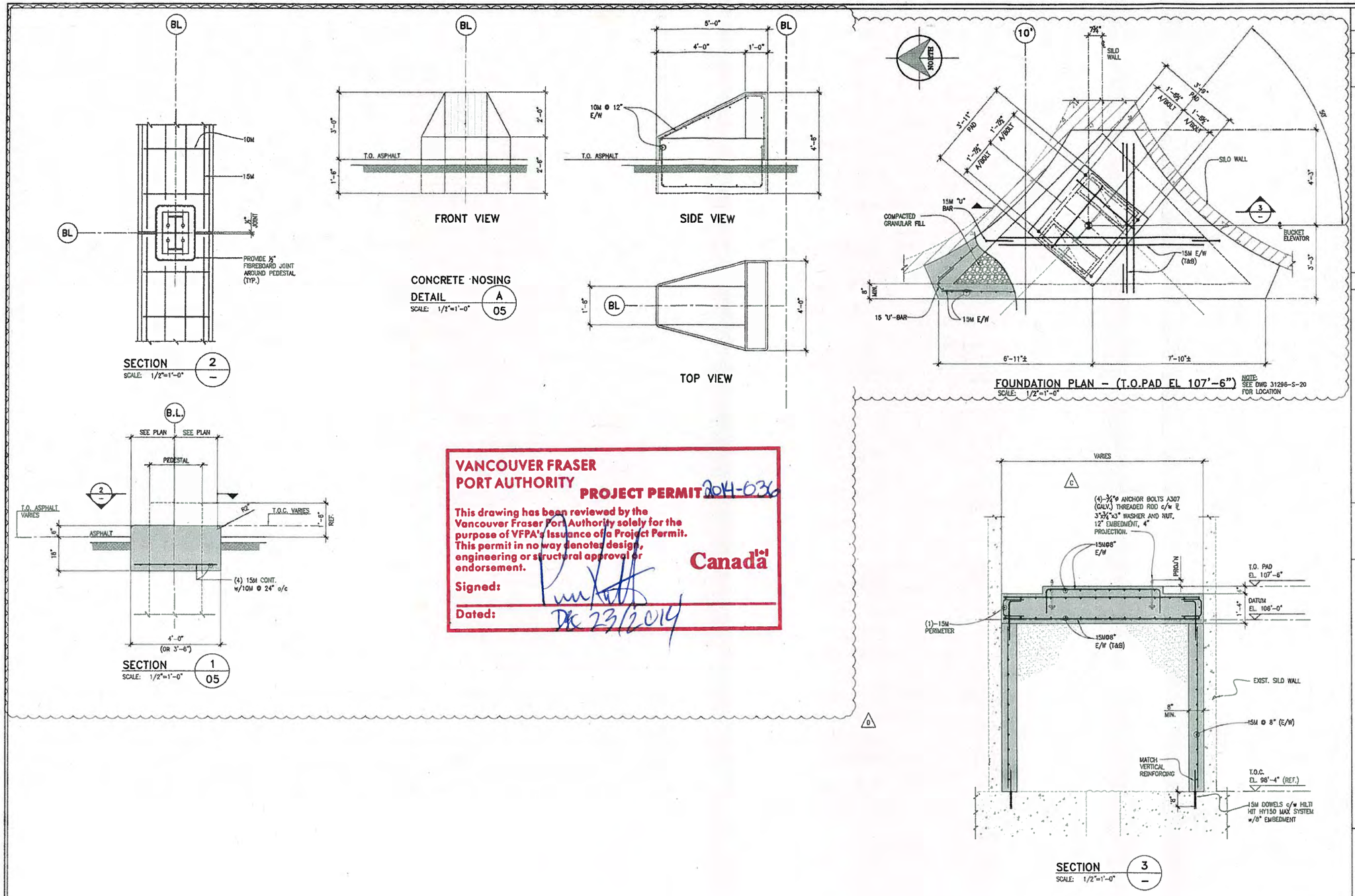
DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA
DWG No. DC501

VITERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B.C.

DUST CONTROL SYSTEM UPGRADE

TITLE: CONCRETE SECTIONS AND DETAILS
DWG No.: 13296-S-21
REVISION: E
SCALE: AS NOTED

03 NOV 2014
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA P. CELKO



VANCOUVER FRASER PORT AUTHORITY

PROJECT PERMIT 2014-036

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Signed:

Dated: Dec 23/2014

Canada

REV	REVISION DESCRIPTION	DATE	APP.
E	RE-ISSUED FOR PERMIT	03NOV14	PC FP
D	REVISIONS CLOUDED-REISSUED FOR TENDER	14OCT20	PC FP
C	ANCHOR BOLT REVISED	14AUG06	PC FP
B	ISSUED FOR TENDER	14JUN09	PC FP
A	ISSUED FOR BUILDING PERMIT	14FEB03	PC FP

DC501 DUST COLLECTORS & FANS PLAN BY CAMPANER CONSULTING

DWG No. REFERENCE DRAWING DESCRIPTION

EDWARDS CM Engineering & Project Management
267 Braemar Road East North Vancouver BC, V7N 1R2
Phone: (604) 980-8564 Fax: (604) 980-8468

DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

ISSUED FOR PERMIT

VITERRA PACIFIC GRAIN TERMINAL VANCOUVER, B. C.

DUST CONTROL SYSTEM UPGRADE

TITLE: CONCRETE MISCELLANEOUS DETAILS & SECTIONS

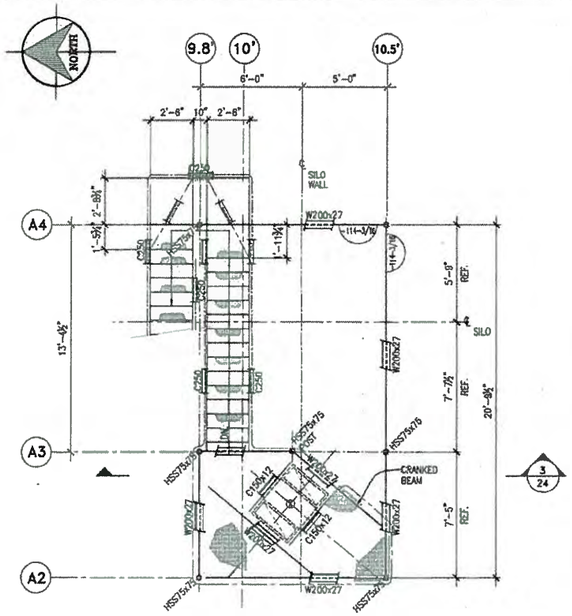
DWG. No.: 13296-S-22

REVISION: E SCALE: AS NOTED

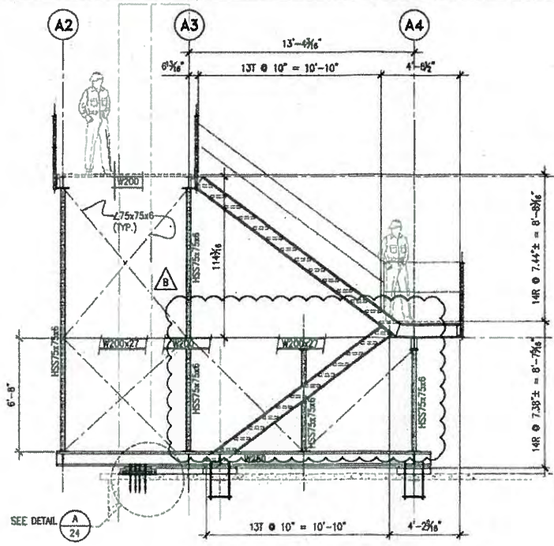
03 NOV 2014

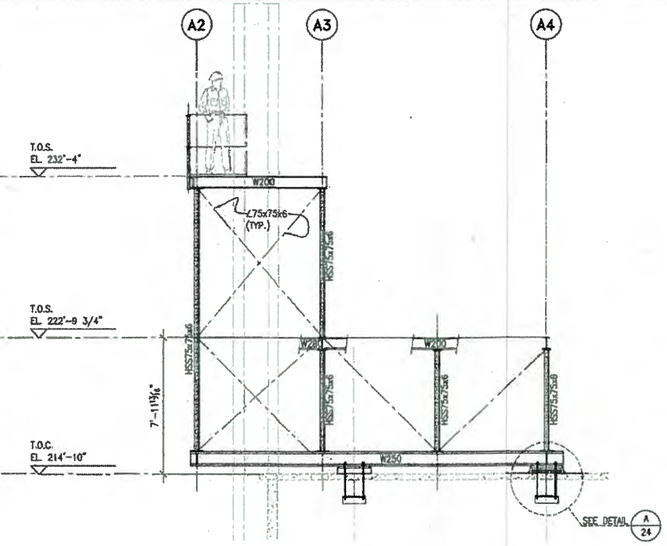
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA P. CELKO

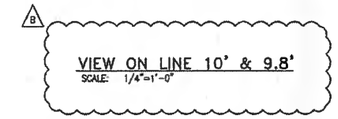
22



T.O.S. EL. 232'-4"
SCALE: 1/4"=1'-0"

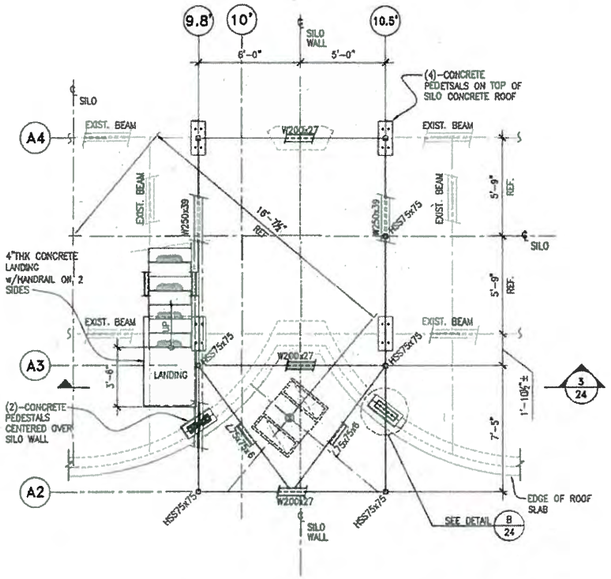






VIEW ON LINE 10' & 9.8'
SCALE: 1/4"=1'-0"

VIEW ON LINE 10.5'
SCALE: 1/4"=1'-0"



T.O.S. EL. 216'-2"
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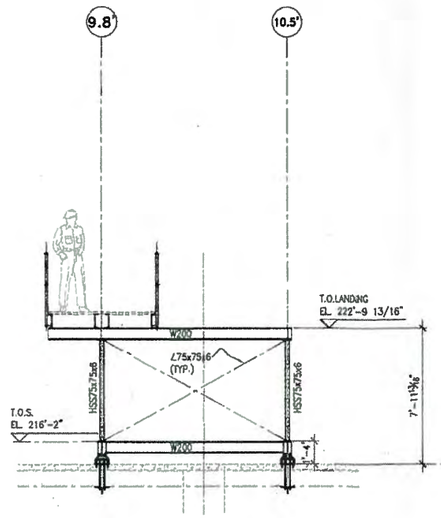
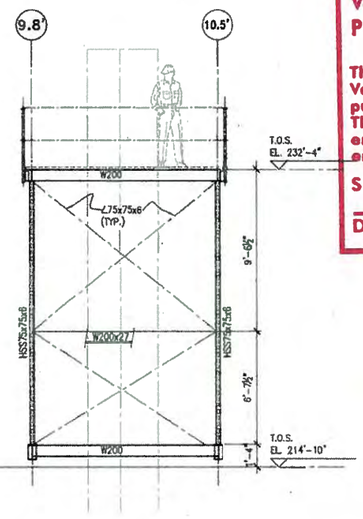


VIEW ON LINE A4
SCALE: 1/4"=1'-0"



VIEW ON LINE A2
SCALE: 1/4"=1'-0"

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
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Signed:
Dated: DEC 23/2014

ISSUED FOR PERMIT

REV	DESCRIPTION	DATE	APP.
A	ISSUED FOR TENDER	14JUN09	FP
B	REVISION CLOUDED-REISSUED FOR TENDER	14OCT20	FP
C	ISSUED FOR PERMIT	03NOV14	FP

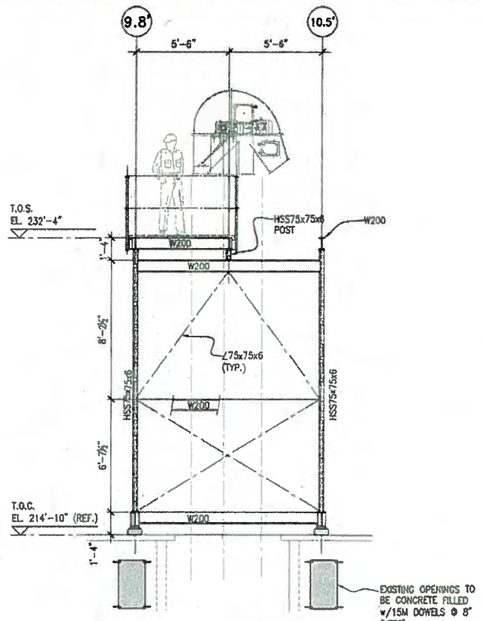
13296-S-22 CONCRETE SECTIONS AND DETAILS
D-501 DUST COLLECTORS & FANS PLAN BY CAMPANER CONSULTING
DWG No. REFERENCE DRAWING DESCRIPTION

EDWARDS CM
Engineering & Project Management
267 Bremner Road East
Delta, Vancouver
BC, V7H 1B2
Phone: (604) 980-8864
Fax: (604) 980-8488
DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

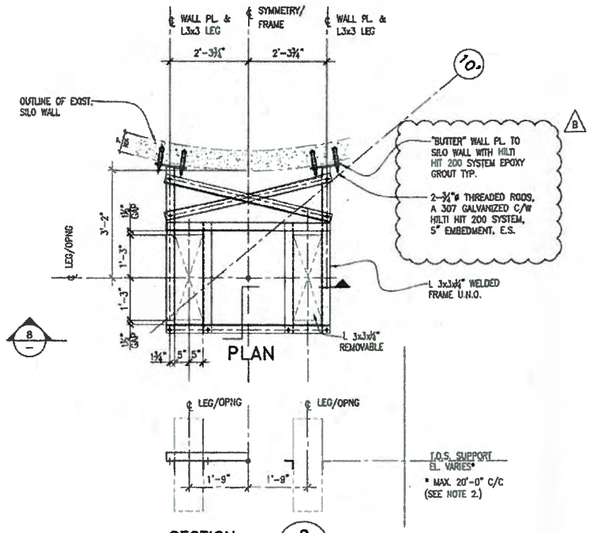
03 NOV 2014
SEAL

TERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B. C.
DUST CONTROL SYSTEM UPGRADE
TITLE: BUCKET ELEVATOR PLANS, SECTIONS AND DETAILS
DWG. No.: 13296-S-23
REVISION: C
SCALE: AS NOTED

23



SECTION 3 / 23
SCALE: 1/4"=1'-0"



SECTION 8 / –
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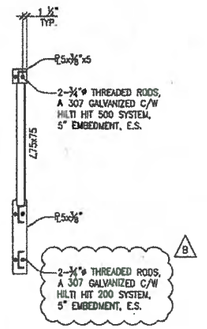

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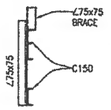

SECTION 5 / –
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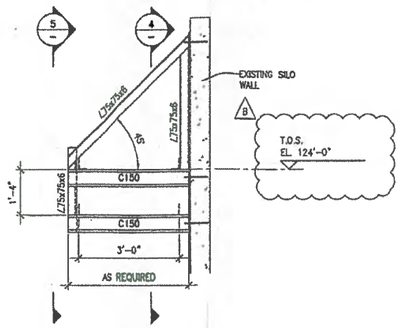
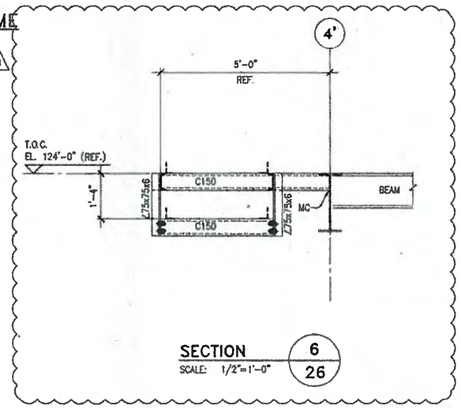


DETAIL D / 26
SCALE: 1/2"=1'-0"

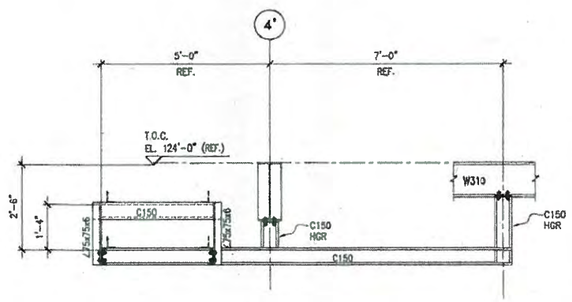
NOTE:
1. REMOVE ROOFING AND MECHANICALLY ROUGHEN EXISTING CONCRETE SURFACE TO A MINIMUM ¼" AMPLITUDE. CLEAN AND THOROUGHLY WET SURFACE FOR A MINIMUM OF 24 HOURS PRIOR TO POURING NEW CONCRETE.
2. BUCKET ELEVATOR SUPPORT FRAME LOCATED BETWEEN STEEL ELEVATIONS 124'-0" TO EL. 214'-0"±

SCREENING LEGS SUPPORT FRAME

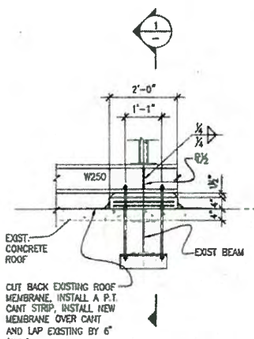
DETAIL C / 07,08
SCALE: 1/2"=1'-0"



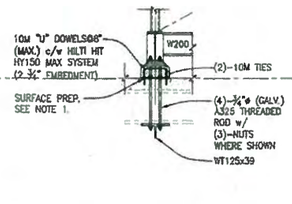
SECTION 6 / 26
SCALE: 1/2"=1'-0"



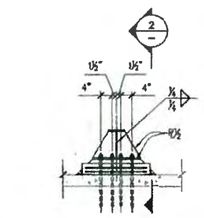
SECTION 7 / 26
SCALE: 1/2"=1'-0"



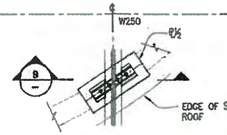
DETAIL A / 23
SCALE: 1/2"=1'-0"



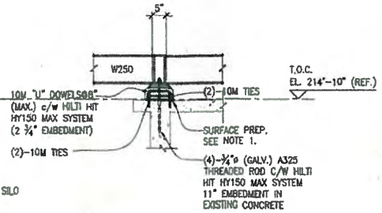
SECTION 1 / –
SCALE: 1/2"=1'-0"



DETAIL 9 / –
SCALE: 1/2"=1'-0"



DETAIL B / 23
SCALE: 1/2"=1'-0"



SECTION 2 / –
SCALE: 1/2"=1'-0"

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
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Signed:
Dated: DEC 23/2014
Canada

ISSUED FOR PERMIT

REV	DATE	APP.	REVISION DESCRIPTION
C	03NOV14	PC	ISSUED FOR PERMIT
B	14OCT30	PC	REVISIONS CLOUDED--REISSUED FOR TENDER
A	14JUN09	PC	ISSUED FOR TENDER

COLLECTORS & FANS PLAN BY CAMPAGNER CONSULTING
REFERENCE DRAWING DESCRIPTION

EDWARDS CM
Engineering & Project Management
267 Bremner Road East
North Vancouver
BC, V7N 1R2
Phone: (604) 980-8664
Fax: (604) 980-8468

DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

DWG No. DC501 DUST COLLECTORS
REFERENCE DRAWING DESCRIPTION

03 NOV 2014

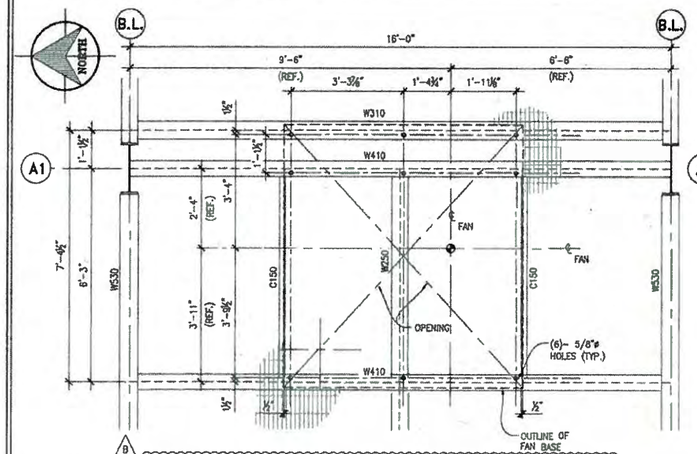
VITERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B. C.

DUST CONTROL SYSTEM UPGRADE

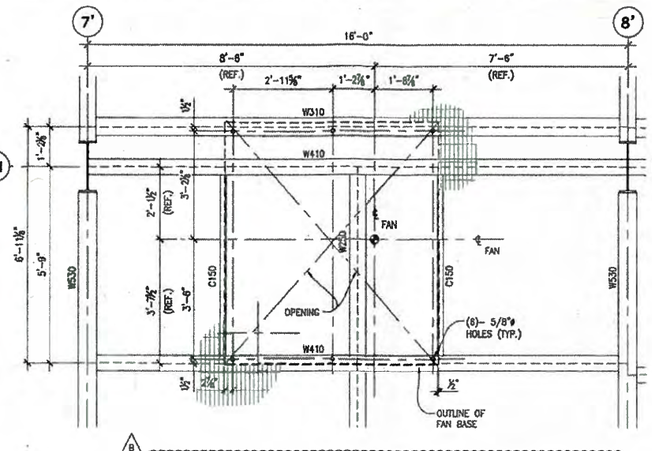
TITLE: BUCKET ELEVATOR PLANS, SECTIONS AND DETAILS

DWG. No.: 13296-S-24
REVISION: C
SCALE: AS NOTED

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA P. CELKO



FN101 & FN102 FRAMING PLAN (T.O.S. EL. 124'-0")
SCALE: 1/2"=1'-0"



FN103 FRAMING PLAN (T.O.S. EL. 124'-0")
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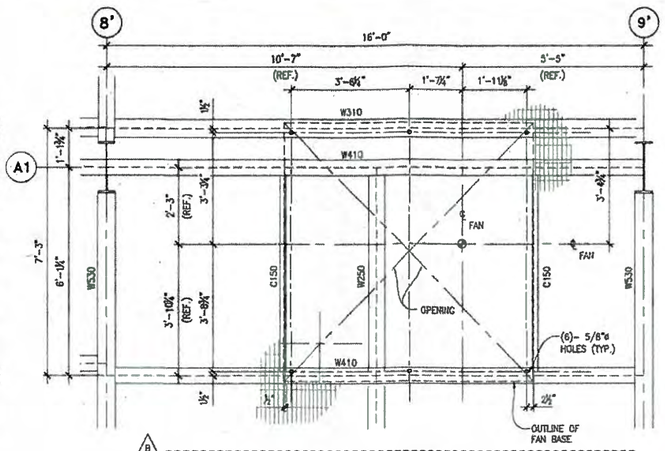

FN104 FRAMING PLAN (T.O.S. EL. 124'-0")
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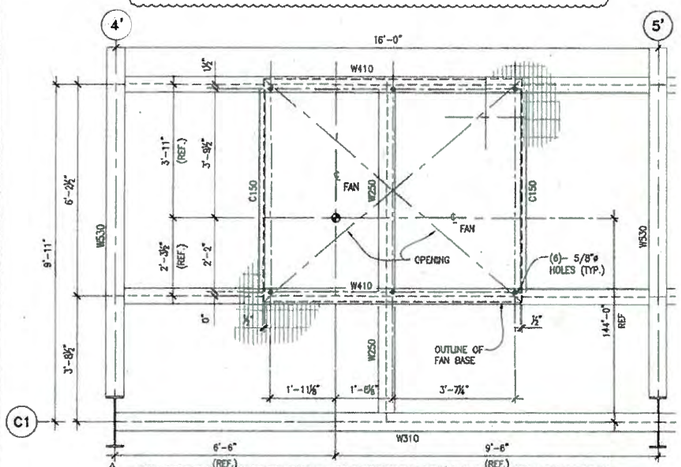

FN105 FRAMING PLAN (T.O.S. EL. 124'-0")
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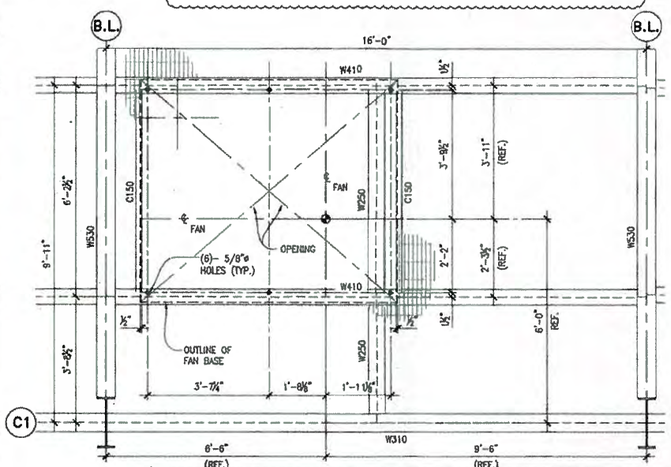
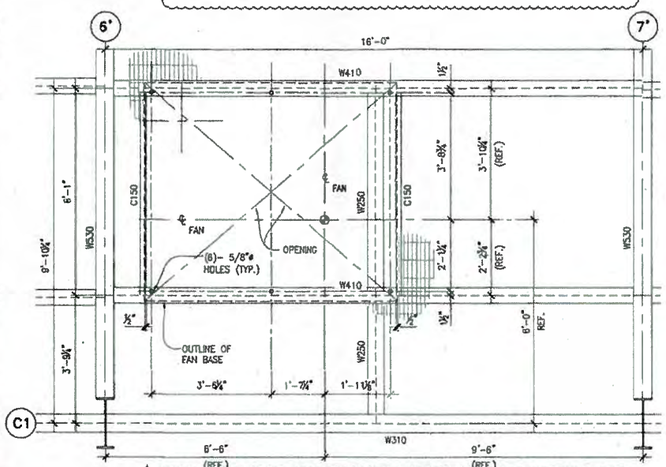
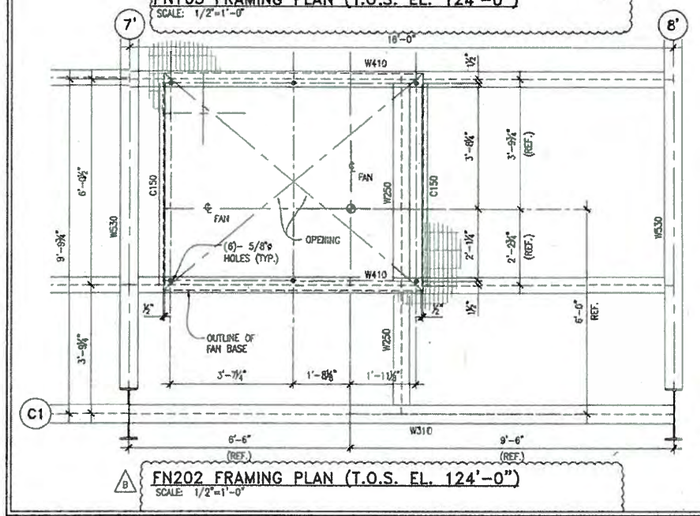


FN106,107 & 08 FRAMING PLAN (T.O.S. EL. 124'-0")
SCALE: 1/2"=1'-0"



FN201 FRAMING PLAN (T.O.S. EL. 124'-0")
SCALE: 1/2"=1'-0"



FN202 FRAMING PLAN (T.O.S. EL. 124'-0")
SCALE: 1/2"=1'-0"

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
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Signed:
Dated: DEC 23/2014

ISSUED FOR PERMIT

REV	DATE	REVISION DESCRIPTION	APP.	APP.
C	03NOV14	ISSUED FOR PERMIT	PC	FP
B	14OCT30	BOLT CENTRES REVISED ON ALL FAN FRAMING -REISSUED FOR TENDER	PC	FP
A	14JUN09	ISSUED FOR TENDER	PC	FP

STEEL FRAMING PLAN T.O.S. EL. 124'-0"
DUST COLLECTORS & FANS PLAN BY CAMPANER CONSULTING
REFERENCE DRAWING: DESCRIPTION

EDWARDS CM
Engineering & Project Management
267 Brunsmar Road East
North Vancouver
BC, V7N 1K2
Phone: (604) 980-8564
Fax: (604) 980-3468

DESIGNED BY: P. CELKO
DRAWN BY: P. PIN
CHECKED BY: J. ANGUSTIA

13296-S-08
DWG No. QC501

VITERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B. C.
DUST CONTROL SYSTEM UPGRADE
TITLE: FAN SUPPORT PLAN AND DETAILS
DWG. No.: 13296-S-25
REVISION: C
SCALE: 1/2"=1'-0"

03 NOV 2014
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA
SEAL

NORTH

EXISTING WORKHOUSE

EXISTING ANNEX NO. 1

EXISTING ANNEX NO. 2

FN101 FN102 FN103 FN104 FN105 FN106 FN201 FN202 FN107 FN108

CABLE TRAY SUPPORT SEE DETAIL A/19

CABLE TRAY SUPPORT SEE DETAIL B/19

CABLE TRAY SUPPORT SEE DETAIL D/24

KNEE BRACE C150x16

C150x16 HANGER

CABLETRAY OUTLINE

C150x16 (T&B) TYP.

C150x16 HANGER (TYP.)

SUPPORT FRAME

W460

W530

W310x39

W250x33

W-10

MC

CABLE TRAY SUPPORT PLAN (T.O.S. EL. 121'-6") U.N.O.

SCALE: 1/4"=1'-0"

LEGEND:

A — INDICATES EXISTING BAYLINE

±XX° — INDICATES DISTANCE FROM T.O.S. EL. 121'-6"

MC — INDICATES MOMENT CONNECTION

VANCOUVER FRASER PORT AUTHORITY

PROJECT PERMIT 2014-036

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Signed:

Dated: DEC 23/2014

ISSUED FOR PERMIT

REV	REVISION DESCRIPTION	DATE	APP.
C	ISSUED FOR PERMIT	03NOV14	PC
B	REVISIONS CLOUDED--REISSUED FOR TENDER	14OCT29	PC
A	ISSUED FOR TENDER	14JUN09	PC

DWG No.	
13296-S-24	BUCKET ELEVATOR PLANS, SECTIONS AND DETAILS
13296-S-06	STEEL FRAMING PLAN T.O.S. EL. 124'-0"
13296-S-25	FAN SUPPORT PLAN AND DETAILS
DCS01	DUST COLLECTORS & FANS PLAN BY CAMPAIGNER CONSULTING

EDWARDS CM
Engineering & Project Management
257 Brannan Road East
North Vancouver
BC, V7H 1R2
Phone: (604) 980-8884
Fax: (604) 980-8468

DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY:

VITERRA

PACIFIC GRAIN TERMINAL
VANCOUVER, B. C.

DUST CONTROL SYSTEM UPGRADE

TITLE: CABLE TRAY SUPPORT T.O.S. EL. 121'-6"

DWG. No.: 13296-S-26

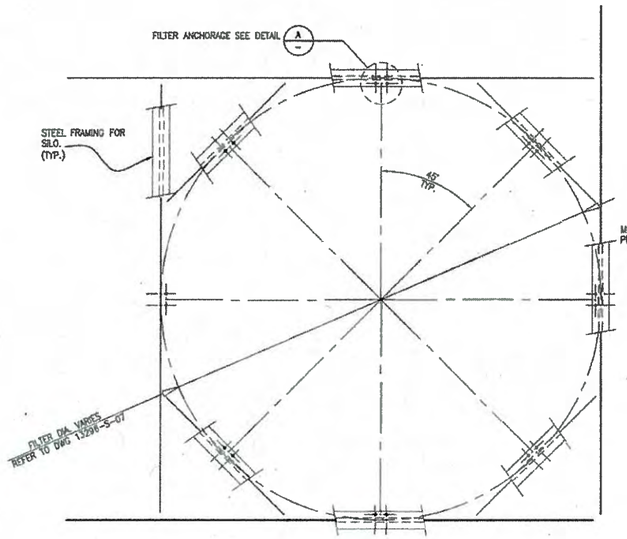
REVISION: C SCALE: 1/4"=1'-0"

03 NOV 2014

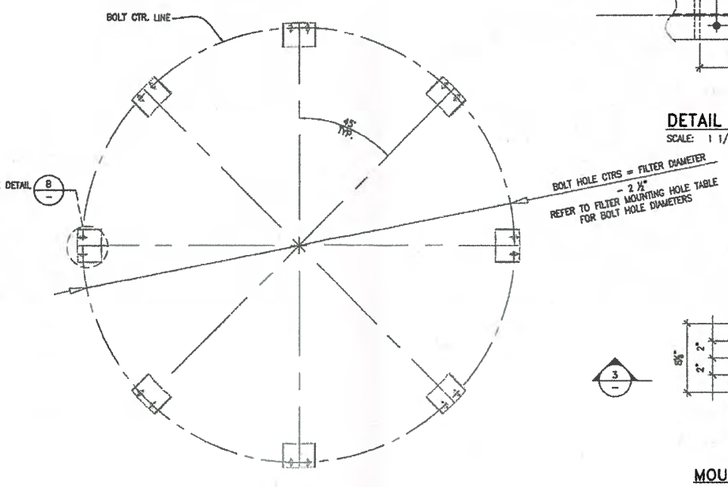
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

SEAL

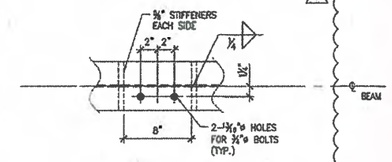
26



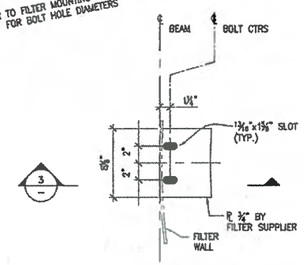
FILTER SUPPORT FRAMING–T.O.S. EL 142'–6"
SCALE: 1/2"=1'-0"
NOTE:
FOR LOCATION REFER TO DWG 13296-S-07



FILTER MOUNTING PLATE (TYP.) – REF.
SCALE: NTS

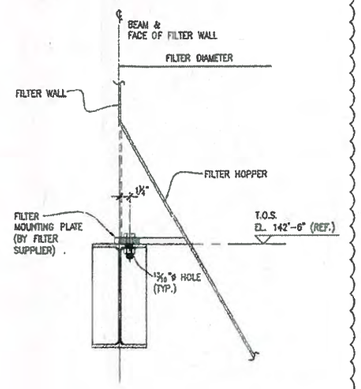


DETAIL A
SCALE: 1 1/2"=1'-0"

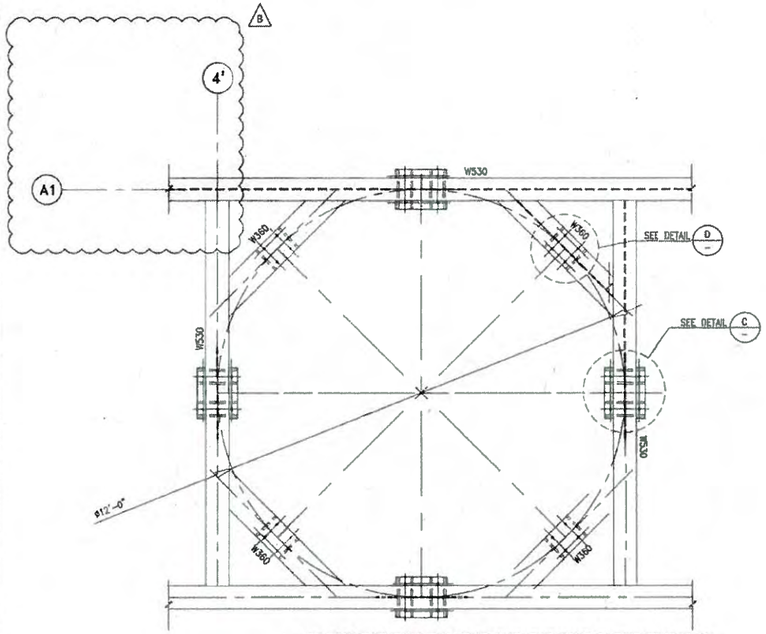


MOUNTING PLATE (REF.)
DETAIL B
SCALE: 1 1/2"=1'-0"

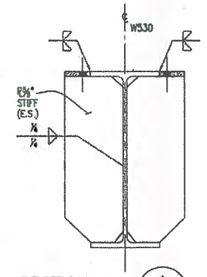
FILTER MOUNTING HOLE TABLE	
FILTER NO.	BOLT HOLE CTRS
FT01	81 ½"
FU101	153 ½"
FU102	153 ½"
FU103	129 ½"
FU104	153 ½"
FU105	153 ½"
FU106	153 ½"
FU107	153 ½"
FU108	153 ½"
FU201	153 ½"
FU202	153 ½"
TB100	141 ½"



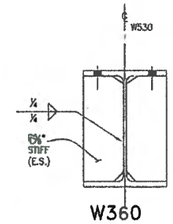
SECTION 3
SCALE: 1 1/2"=1'-0"



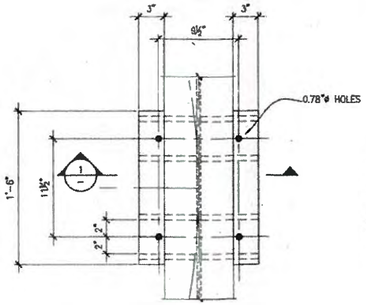
TANK MOUNTING PLATE (T.O.S. EL. 142'–6")
SCALE: 1/2"=1'-0"
NOTE:
FOR LOCATION REFER TO DWG 13296-S-07



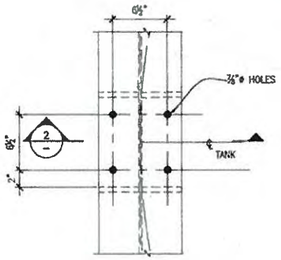
SECTION 1
SCALE: 1 1/2"=1'-0"



SECTION 2
SCALE: 1 1/2"=1'-0"



DETAIL C (TYP. OF 4)
SCALE: 1 1/2"=1'-0"



DETAIL D (TYP. OF 4)
SCALE: 1 1/2"=1'-0"

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
This drawing has been reviewed by the Vancouver Fraser Port Authority solely for the purpose of VFPA's issuance of a Project Permit. This permit in no way denotes design, engineering or structural approval or endorsement.
Signed:
Dated: DEC 23/2014
Canada

ISSUED FOR PERMIT

REV	REVISION DESCRIPTION	DATE	APP.	APP.
C	ISSUED FOR PERMIT	03NOV14	PC	FP
B	REVISIONS CLOUDED–REISSUED FOR TENDER	14OCT20	PC	FP
A	ISSUED FOR TENDER	14JUN09	PC	FP

DWG No.	REFERENCE DRAWING DESCRIPTION
13296-S-07	STEEL FRAMING PLAN T.O.S. EL. 142'–6"
DC501	DUST COLLECTORS & FAN PLAN BY CAMPANER CONSULTING

EDWARDS CM
Engineering & Project Management
267 Brasmar Road East
North Vancouver
BC, V7N 1R2
Phone: (604) 980-8664
Fax: (604) 980-8468

DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY:

03 NOV 2014

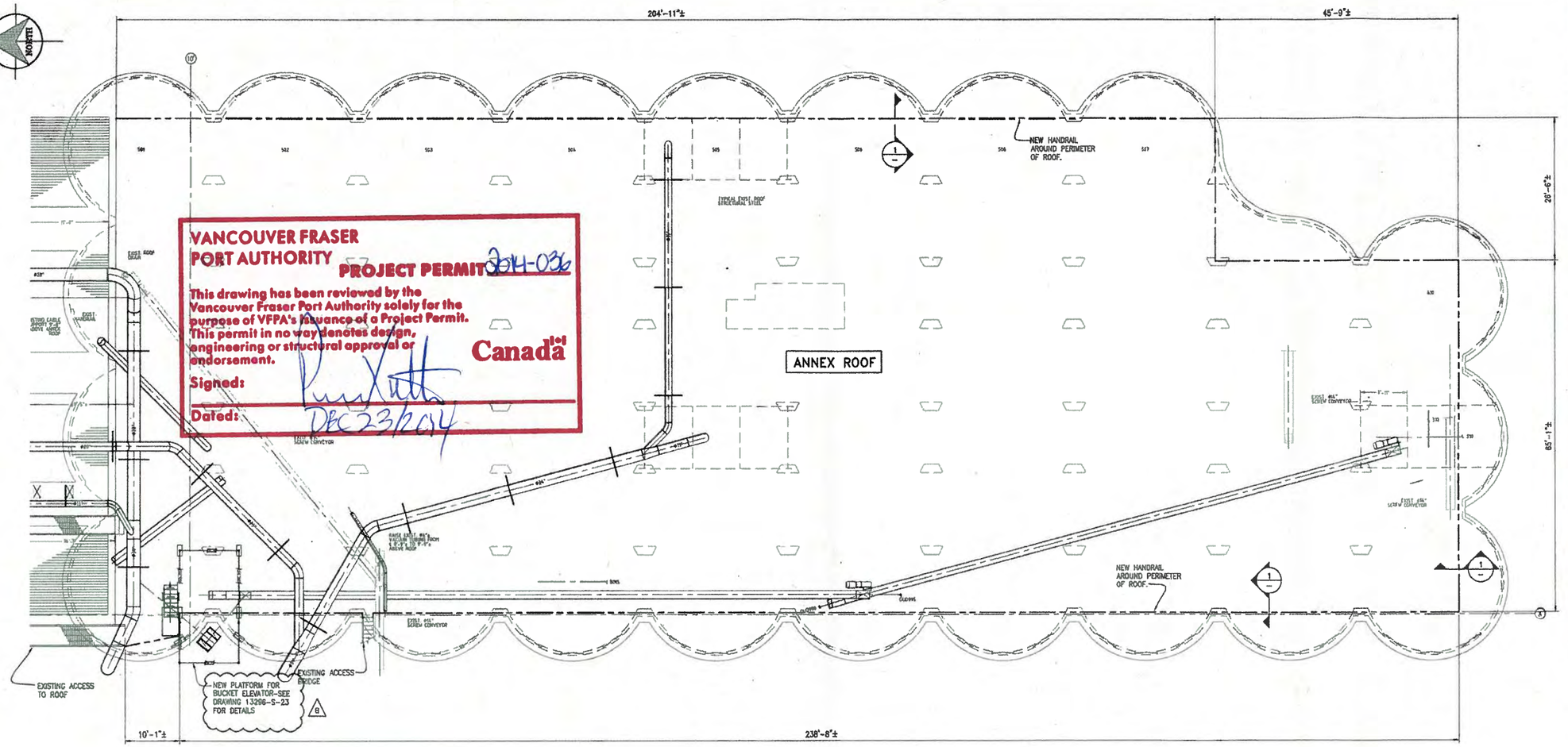
VITERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B. C.

DUST CONTROL SYSTEM UPGRADE

TITLE: FILTER SILO ANCHORAGE PLAN, SECTIONS AND DETAILS
DWG. No.: 13296-S-27
REVISION: C
SCALE: AS NOTED

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA P. CELKO

27



VANCOUVER FRASER PORT AUTHORITY

PROJECT PERMIT 2014-036

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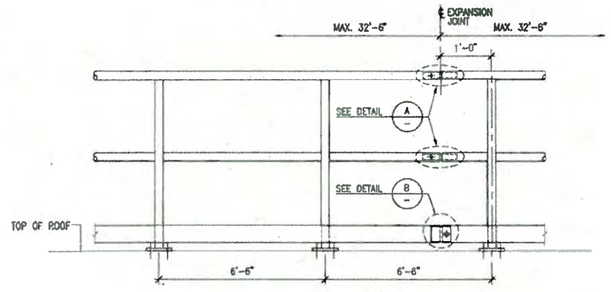
Canada

Signed:

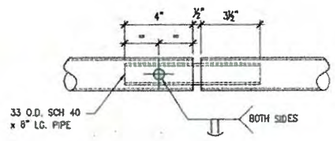
Dated: DEC 23/2014

ANNEX #1 ROOF EL. 214'-10"
SCALE: 1"=10'-0"

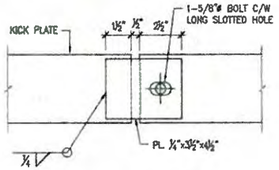
ISSUED FOR PERMIT



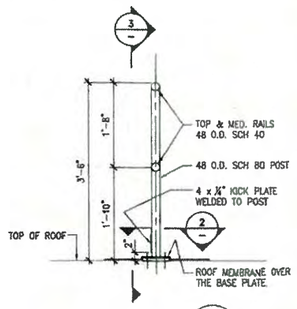
SECTION 3
SCALE: 3/4"=1'-0"



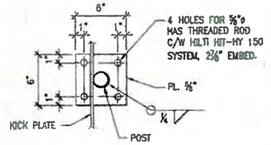
DETAIL A
SCALE: 3"=1'-0"



DETAIL B
SCALE: 3"=1'-0"



SECTION 1
SCALE: 3/4"=1'-0"



SECTION 2
SCALE: 1 1/2"=1'-0"

NOTE:
1. ROUTING OF NEW HANDRAIL IS APPROXIMATE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL HANDRAIL WITHOUT INTERFERENCE OF EQUIPMENT AND ACCESS TO EQUIPMENT.
2. SITE MEASURE PRIOR TO FABRICATION.
3. CONTRACTOR TO CONSULT WITH OWNER AND SITE ENGINEER FOR LOCATION OF HAND RAIL PRIOR TO INSTALLATION.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING EQUIPMENT, PRIOR TO FABRICATION

REV	REVISION DESCRIPTION	DATE	APP.
C	ISSUED FOR PERMIT	03NOV14	PC
B	REISSUED FOR TENDER	14OCT20	PC
A	ISSUED FOR TENDER	14JUL04	PC

DUST COLLECTORS & FAN PLAN BY CAMPANER CONSULTING
REFERENCE DRAWING DESCRIPTION

EDWARDS CM
Engineering & Project Management
257 Brasamar Road East
North Vancouver
BC, V7H 1B2
Phone: (604) 980-6664
Fax: (604) 980-6465

DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY:

DWG No. DC501 DUST

PACIFIC GRAIN TERMINAL
VANCOUVER, B. C.

DUST CONTROL SYSTEM UPGRADE

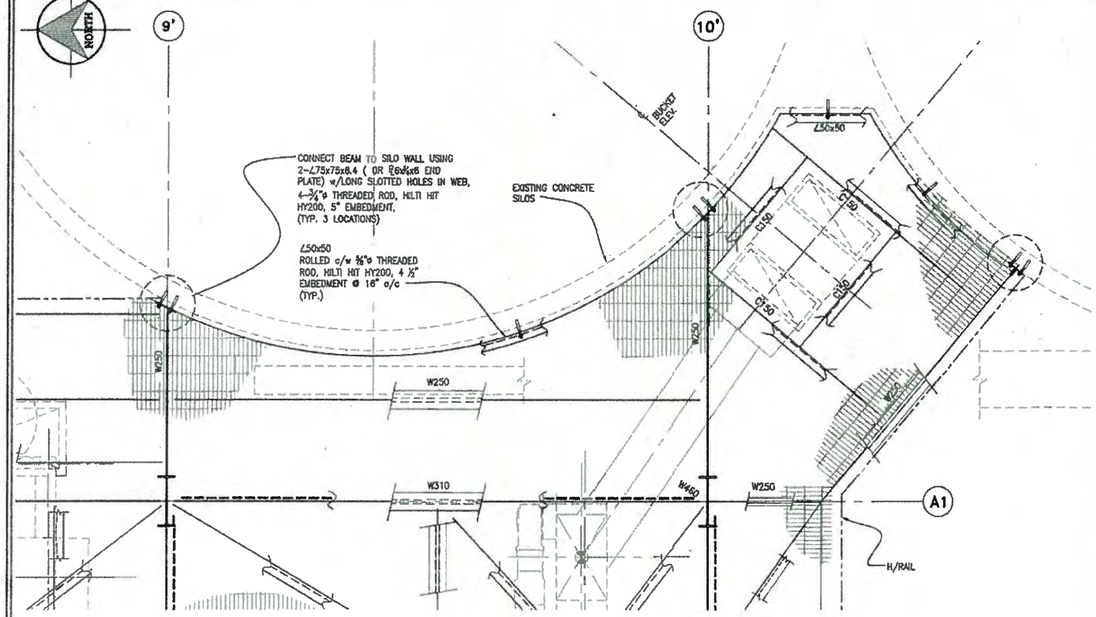
TITLE: ANNEX #1 ROOF EL. 214'-10" NEW HANDRAIL INSTALLATION

DWG. No.: 13296-S-28
REVISION: C
SCALE: AS NOTED

03 NOV 2014

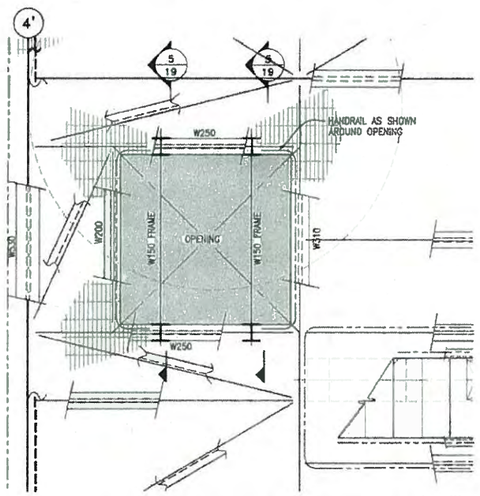
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

28



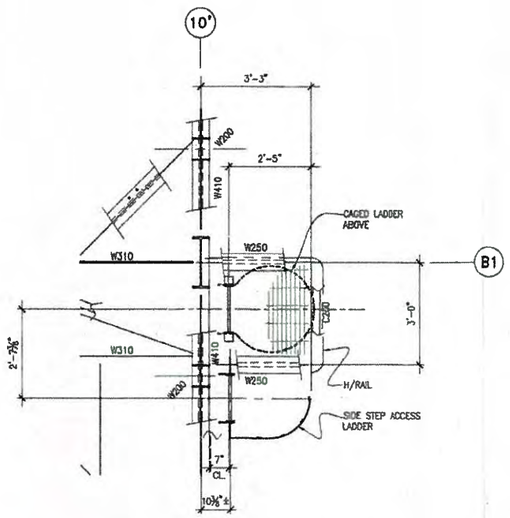
STEEL FRAMING PLAN (T.O.S. EL. 124'-0") – PARTIAL
SCALE: 1/2"=1'-0"

NOTE: FOR LOCATION REFER TO DWG 13296-S-08



STEEL FRAMING PLAN (T.O.S. EL. 124'-0") – PARTIAL
SCALE: 1/2"=1'-0"

NOTE: FOR LOCATION REFER TO DWG 13296-S-08



ACCESS PLATFORM PLAN (T.O.S. EL. 142'-6")
SCALE: 1/2"=1'-0"

NOTE: FOR LOCATION REFER TO DWG 13296-S-07

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
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Signed:
Dated: DEC 23/2014
Canada

ISSUED FOR PERMIT

REV	DATE	APP.
B	ISSUED FOR PERMIT	03NOV14 PC FP
A	ISSUED FOR TENDER	14OCT20 PC FP
	REVISION DESCRIPTION	DATE APP.

STEEL FRAMING PLAN EL. 124'-0"

EDWARDS CM
Engineering & Project Management
257 Bremner Road East, North Vancouver, BC, V7N 1B2
Phone: (604) 980-8864
Fax: (604) 980-8468

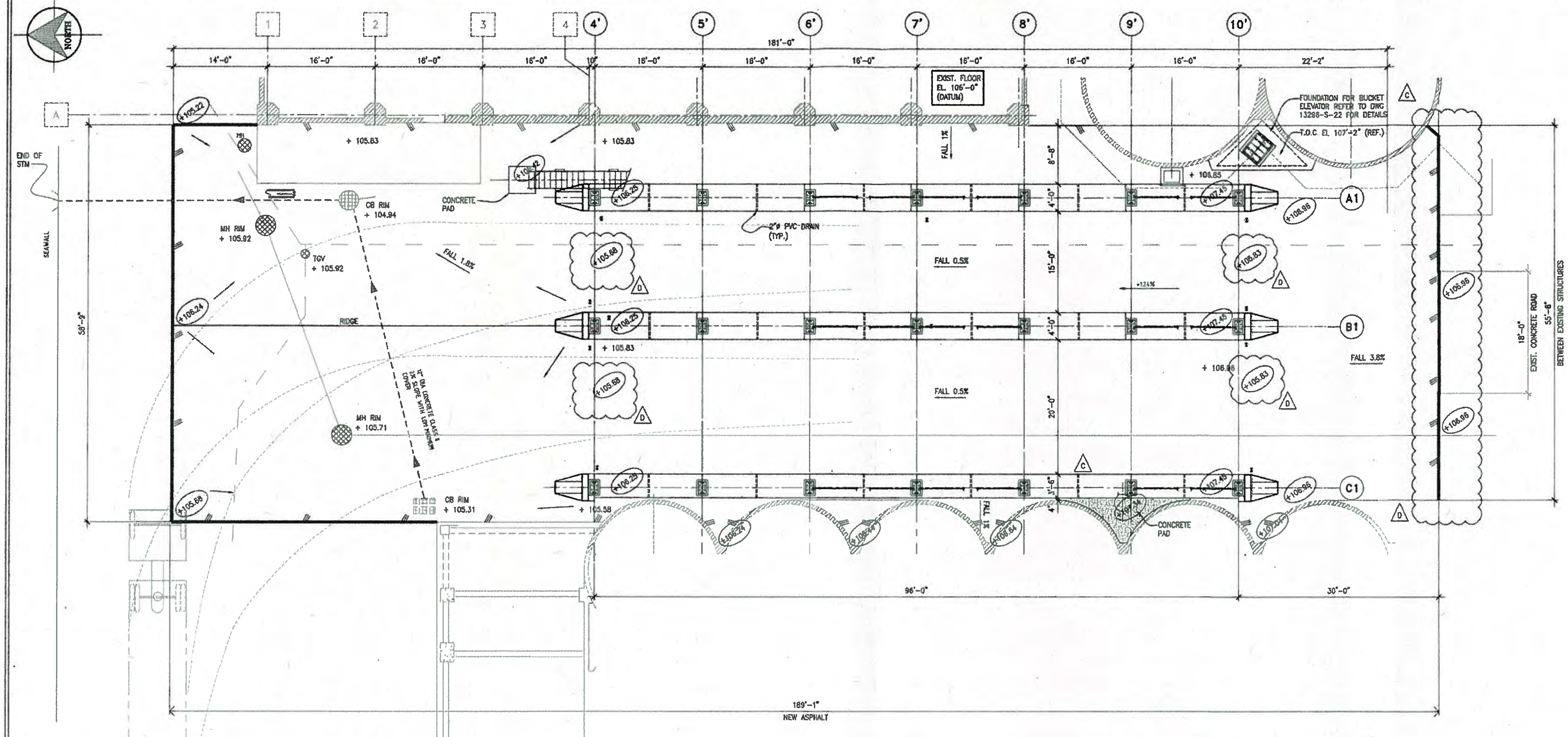
DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY:

13296-S-06 - DWG No.

VITERRA
PACIFIC GRAIN TERMINAL
VANCOUVER, B. C.
DUST CONTROL SYSTEM UPGRADE
TITLE: STEEL FRAMING PLAN AND DETAILS
DWG. NO.: 13296-S-29
REVISION: B
SCALE: AS NOTED

03 NOV 2014
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA P. CELKO
SEAL

29



UNDERGROUND SERVICE PLAN

SCALE: 1/8"=1-0"

LEGEND:

——— ———	INDICATES EXISTING WATER LINE
———————	INDICATES EXISTING SANITARY LINE
- - - - - - -	INDICATES EXISTING STORM LINE
(+106.58)	INDICATES DESIGN ELEVATION
+105.44	INDICATES EXISTING ELEVATION
TOP	INDICATES TOP OF PEDESTAL
TOC	INDICATES TOP OF CONCRETE
MH	INDICATES MANHOLE
CB	INDICATES CATCH BASIN
///	EDGE OF NEW ASPHALT
╲	INDICATES DRAINAGE DIRECTION

VANCOUVER FRASER PORT AUTHORITY

PROJECT PERMIT 2014-036

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Signed:

Dated: DEC 23/2014

Canada

ISSUED FOR PERMIT

REV	REVISION DESCRIPTION	DATE	APP.	APP.
E	RE-ISSUED FOR PERMIT	03NOV14	PC	FP
D	REVISIONS CLOUDED-REISSUED FOR TENDER	14OCT20	PC	FP
C	GENERAL UPDATES	14AUG06	PC	FP
B	ISSUED FOR TENDER	14JUN08	PC	FP
A	ISSUED FOR BUILDING PERMIT	14FEB03	PC	FP

DWG No.	REFERENCE DRAWING DESCRIPTION
DC501	DUST COLLECTORS & FAN PLAN BY CAMPANER CONSULTING

EDWARDS CM
Engineering & Project Management
287 Braemar Road East
North Vancouver
BC, V7N 1R2
Phone: (604) 980-8664
Fax: (604) 980-8468

DESIGNED BY: P. CELKO
DRAWN BY: F. PASCAL
CHECKED BY: J. ANGUSTIA

SEAL: 03 NOV 2014 PROFESSIONAL PROVINCE OF ... CELKO

VITERRA — PACIFIC GRAIN TERMINAL, VANCOUVER, B. C.

DUST CONTROL SYSTEM UPGRADE

TITLE: CIVIL UNDERGROUND SERVICE PLAN

DWG. No.: 13296-C-01

REVISION: E — SCALE: AS NOTED

30

MAC DUST COLLECTORS			
ITEM	MODEL	DEAD LOAD (LBS)	LIVE LOAD (LBS)
FU101	120MCF416-300	25,000±	18,500±
FU102	120MCF416-290	25,000±	18,500±
FU103	120MCF306-210	16,000±	11,000±
FU104	120MCF416-280	25,000±	18,500±
FU105	120MCF416-280	25,000±	18,500±
FU106	120MCF416-290	25,000±	18,500±
FU107	120MCF416-290	25,000±	18,500±
FU108	120MCF416-280	25,000±	18,500±
FU201	120MCF416-270	25,000±	18,500±
FU202	120MCF416-280	25,000±	18,500±
FT01	120MCF112	10,000±	6,000±

VANCOUVER FRASER PORT AUTHORITY

PROJECT PERMIT 2014-036

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Signed:

Dated: DEC 23/2014

Canada

VANCOUVER FRASER PORT AUTHORITY

PLANS COMPRISED OF 44 PAGES, EACH STAMPED WITH A COMBINATION OF LETTERS AND NUMBERS OF A PERMIT, HAVE BEEN REVIEWED AND FORM PART OF THAT PERMIT

December 1, 2014
SIGNATURE/DATE

IMPORTANT

THE ISSUANCE OF A PERMIT DOES NOT REPRESENT OR WARRANT THAT THE APPLICATION OR PLANS COMPLY WITH THE PROVISIONS OF THE NATIONAL BUILDING CODE OR ANY OTHER CODE REGULATING SIGNS OR THE CONSTRUCTION OF BUILDINGS, NOR DOES IT PREVENT THE VFPA FROM ENFORCING ANY SUCH CODE AS IT SEES FIT. THE RESPONSIBILITY TO COMPLY WITH THE CODE AT ALL TIMES REMAINS WITH THE OWNER AND DEVELOPER.

PIONEER ENGINEERING CONSULTANTS LTD.

01 DEC 2014

FOR CONTINUATION REFER TO DWG. DC516

FILTER PLAN @ ELEV. 142'-6" TO 161'-0"

SCALE: 3/16"=1'-0"

REV	DATE	DESCRIPTION	BY
B	09/05/14	ISSUED FOR TENDER	FC
D	04/02/25	ISSUED FOR DUST COLLECTOR RFQ	FC
C	04/02/14	ISSUED FOR PROJECT PERMIT	FC
B	30/01/14	CHANGES TO SUIT STRUCTURAL INCLUDING FILTERS 103 & 108	FC
A	30/11/13	PRELIMINARY REVIEW ISSUE	FC
		DESIGN IN PROGRESS	
P	30/10/14	REVISED STAIR LOCATION TO FT01	FC

ISSUED FOR PERMIT

Nov 4 2014

TERRA

PACIFIC TERMINAL VANCOUVER, B.C.

CAMPANER CONSULTING

NORTH VANCOUVER, B.C. (604)329-0643

DUST CONTROL UPGRADE
FILTER PLAN
ELEVATION 142'-6" 3/44

VITERRA PROJECT NO.	P14-0008	DRAWING NO.	REV.
DATE	DRAWN BY	SCALE	DC501	F
JUN 27/13	FC	AS NOTED	

CAD FILE: DUST CONTROL UPGRADE PLANS & DETAILS

FANS - NORTHERN BLOWER DESIGN 4750			
ITEM	SIZE- WIDTH	RPM	LOAD (LBS)
FN101	3650- 100%	1757	5410
FN102	3650- 100%	1686	5410
FN103	3300- 85%	1987	4280
FN104	3650- 100%	1877	5300
FN105	3650- 100%	1713	5300
FN106	3650- 100%	1707	5300
FN107	3650- 100%	1707	5300
FN108	3650- 100%	1735	5300
FN201	3650- 85%	1886	5250
FN202	3650- 85%	1945	5700
WEIGHT OF FAN OUTLET SILENCERS (800± LBS) NOT INCLUDED WITH ABOVE FAN LOADS			

DRAG CONVEYORS & DUST LEG		
ITEM	DEAD LOAD (LBS)	LIVE LOAD (LBS)
DUD991	7,000±	2,000±
DUD992	8,000±	2,500±
DUD993	4,500±	2,000±
DUL994	22,500±	10,000±
DUD995	14,500±	6,500±
DUD998	13,000±	5,800±

VANCOUVER FRASER PORT AUTHORITY

PROJECT PERMIT 2014-036

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Canada

Signed:

Dated: Dec 23/2014

WORKHOUSE CLEANER FLR.

ANNEX 1

ANNEX 2

EXISTING SPOUTING

18"X16" LINED SPOUTING

18"X18" DISCHARGE

18"X18" MODULATING SHUTOFF VALVE

TB100 45T TRUCK BIN

ENCLOSE TOP WITH 16 GA. GALV.

DSH 4 HOPPER

RELOCATE EXIST. CABLE TRAY

24"X16" LINED SPOUT

EXISTING PIPING

FN101 100 HP · FN102 100 HP · FN103 125 HP · FN104 100 HP · FN105 100 HP · FN106 100 HP · FN201 100 HP · FN202 125 HP · FN107 100 HP · FN108 100 HP

FU101 FU102 FU103 FT01 FU104 FU105 FU106 FU201 FU202 FU107 FU108

FU101BW FU102BW FU103BW FT01BW FU108BW FU104BW FU105BW FU106BW FU201BW FU202BW FU107BW

MPE

FILTERS DUD991 DUD992 DUD993 FANS

B2900 B2902

FAN & CONVEYOR PLAN @ ELEV. 124'-0"

SCALE: 3/16"=1'-0"

Nov 4 2014

ISSUED FOR PERMIT

REV	DATE	DESCRIPTION	BY
E	20/05/14	FN104 CORRECTION	FC
D	16/05/14	UPDATED ALL FANS ACCORDING TO NS SHOP DRAWINGS	FC
C	04/03/14	ISSUED FOR PROJECT PERMIT	FC
B	30/01/14	CHANGES TO SUIT STRUCTURAL AND ADDING FILTERS 105 & 106	FC
A	30/11/13	PRELIMINARY REVIEW ISSUE DESIGN IN PROGRESS	FC
F	09/09/14	ISSUED FOR TENDER	FC

TERRA

PACIFIC TERMINAL VANCOUVER, B. C.

CAMPANER CONSULTING

NORTH VANCOUVER, B. C. (604)329-0843

DUST CONTROL UPGRADE

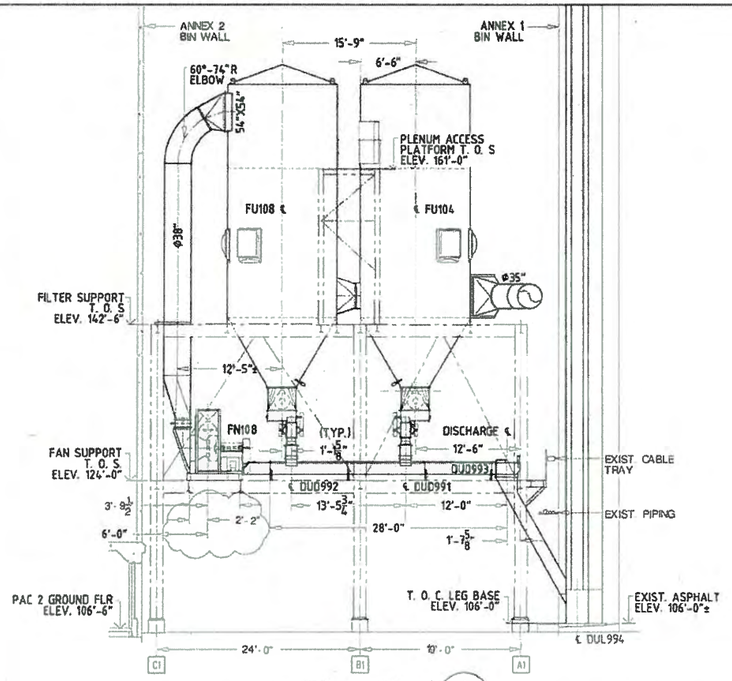
FAN PLAN

ELEVATION 124'-0" 32

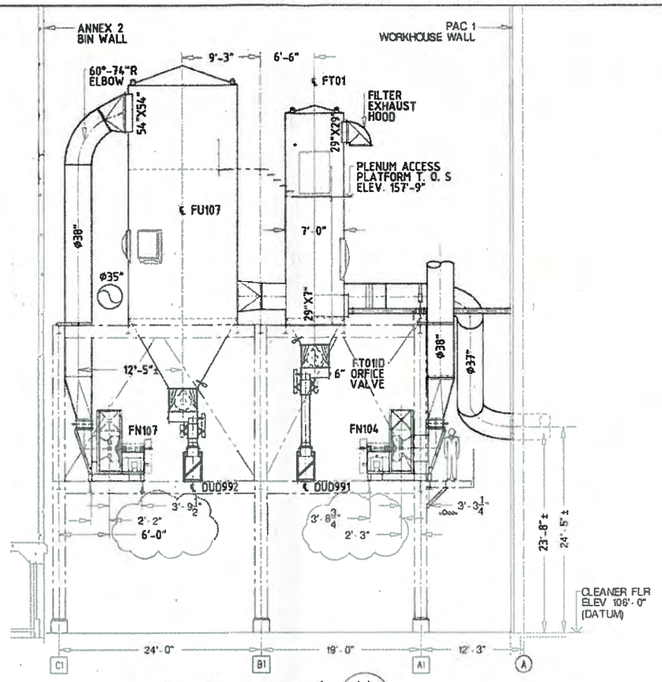
TERRA PROJECT NO.	DRAWING NO.	REV.
P14-9808	DC502	F

DATE	DRAWN BY	SCALE
NOV -13	FC	AS NOTED

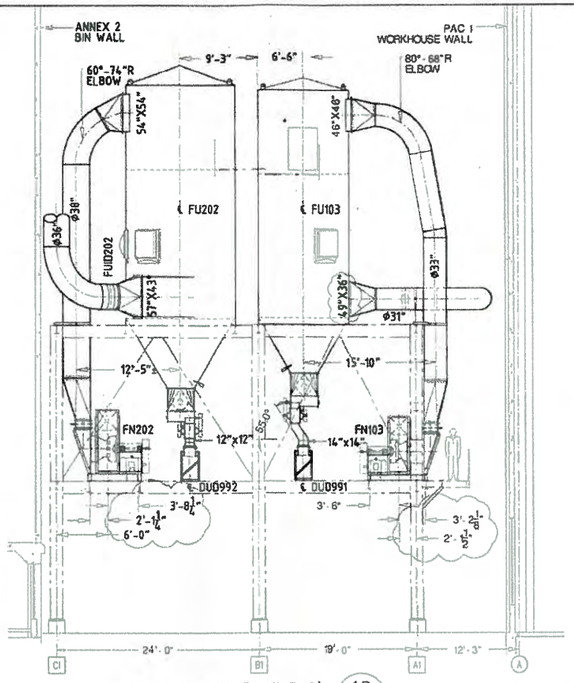
CAD FILE: DUST CONTROL UPGRADE PLANS & DETAILS



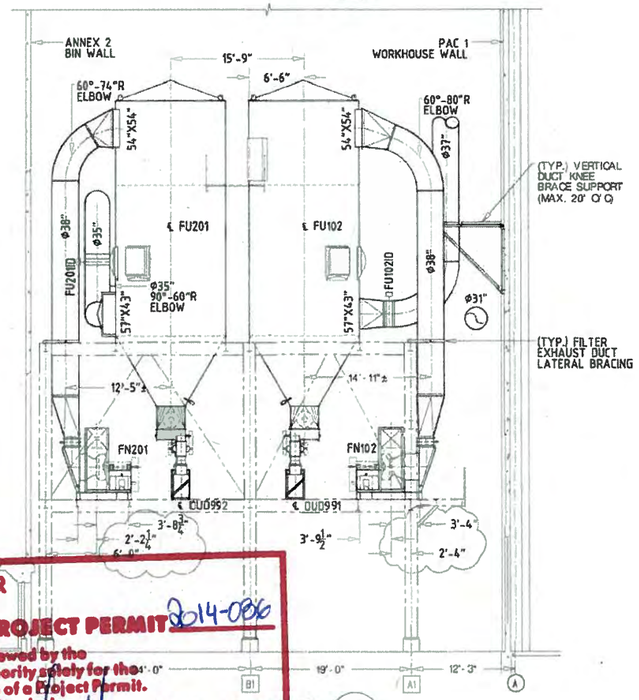
NORTH VIEW @ LINE 10' (1/501)
SCALE: 1'-0"=1/8"



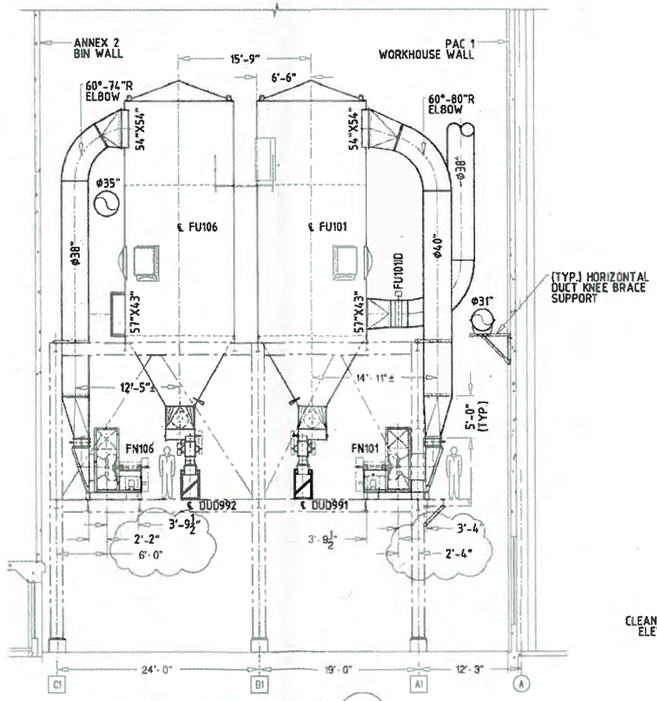
NORTH VIEW @ LINE 9' (1A/501)
SCALE: 1'-0"=1/8"



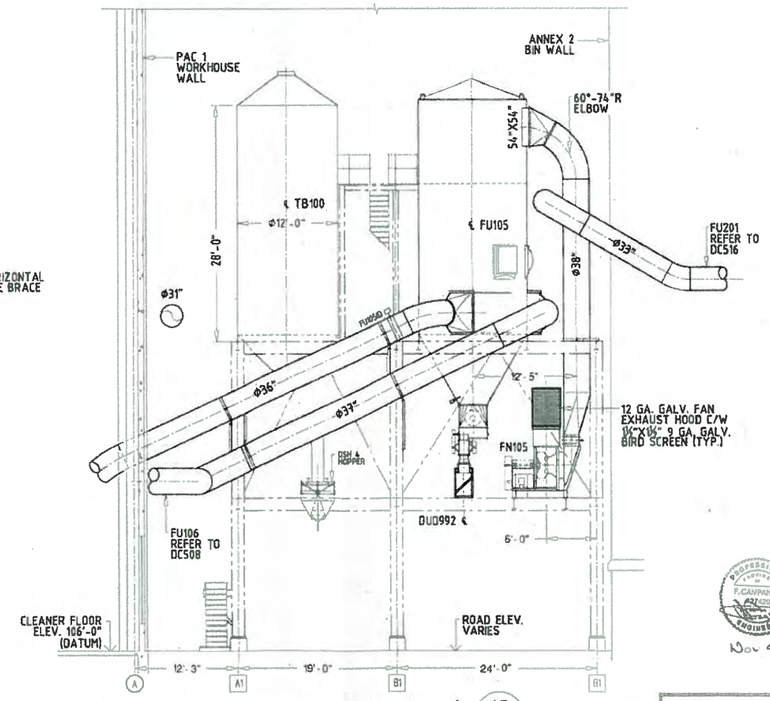
NORTH VIEW @ LINE 8' (1B/501)
SCALE: 1'-0"=1/8"



NORTH VIEW @ LINE 7' (1C/501)
SCALE: 1'-0"=1/8"



NORTH VIEW @ LINE 6' (1D/501)
SCALE: 1'-0"=1/8"



SOUTH VIEW @ LINE 4' (1E/501)
SCALE: 1'-0"=1/8"

P. CAMPANER — 25121 — PROFESSIONAL ENGINEER — Nov 4 2014

ISSUED FOR PERMIT

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-086
This drawing has been reviewed by the Vancouver Fraser Port Authority solely for the purpose of VFPA's issuance of a Project Permit. This permit in no way denotes design, engineering or structural approval or endorsement.
Signed:
Dated: DEC 23/2014

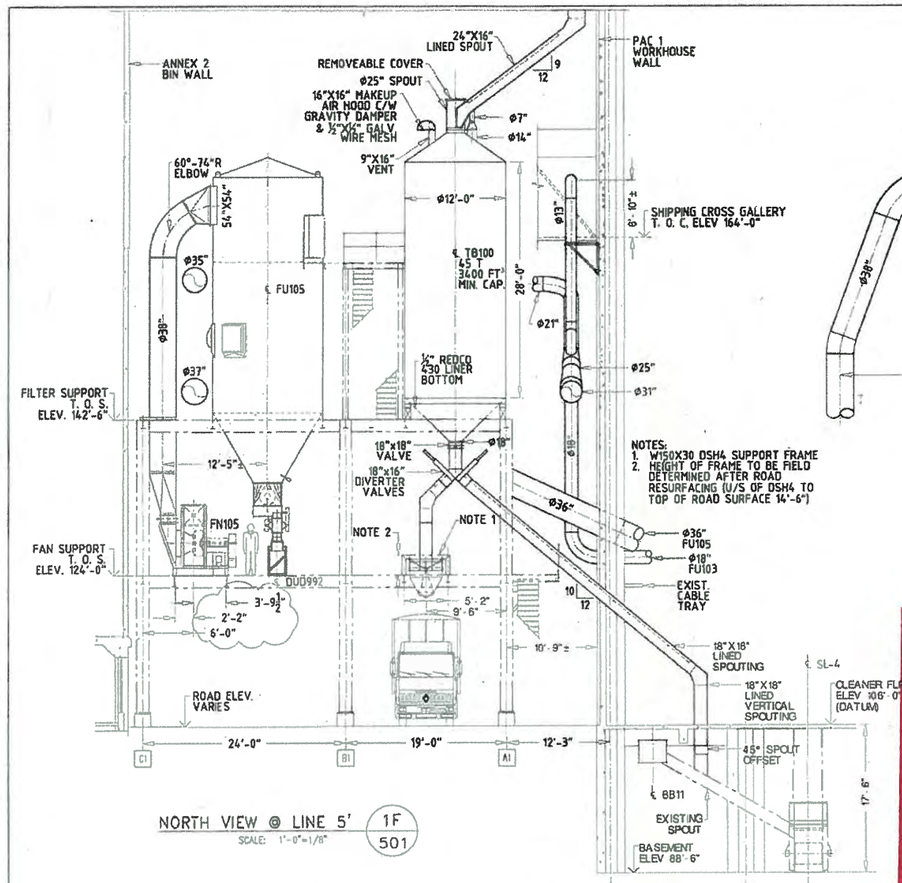
REV	DATE	DESCRIPTION	BY
G	15/10/14	UPDATE FAN ANCHOR BOLT DIMENSIONS	FC
F	09/06/14	ISSUED FOR TENDER	FC
E	16/05/14	UPDATED ALL FAN ELEV ACCORDING TO N/B SHOP DRAWINGS	FC
D	04/02/25	ISSUED FOR DUST COLLECTOR RFQ	FC
C	04/03/14	ISSUED FOR PROJECT PERMIT	FC
B	30/01/14	CHANGES TO SUIT STRUCTURAL INCLUDING FA TAGS 109 & 108	FC
A	30/11/13	PRELIMINARY REVIEW ISSUE DESIGN IN PROGRESS	FC

VITERRA
PACIFIC TERMINAL VANCOUVER, B. C.
CAMPANER CONSULTING
NORTH VANCOUVER, B.C. (604)329-0643

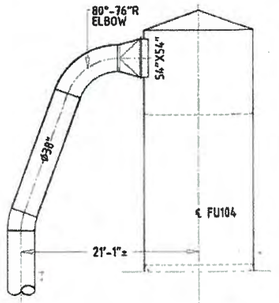
DUST CONTROL UPGRADE
FILTER FAN & CONVEYOR
ELEVATION VIEWS 1 OF 2

WITERRA PROJECT NO.	P14-9805	DRAWING NO.	REV.
DATE	DRAWN BY	SCALE	
JUN 27-13	FC	AS NOTED	DC503 G

CAD FILE: DUST CONTROL UPGRADE PLANS & DETAILS

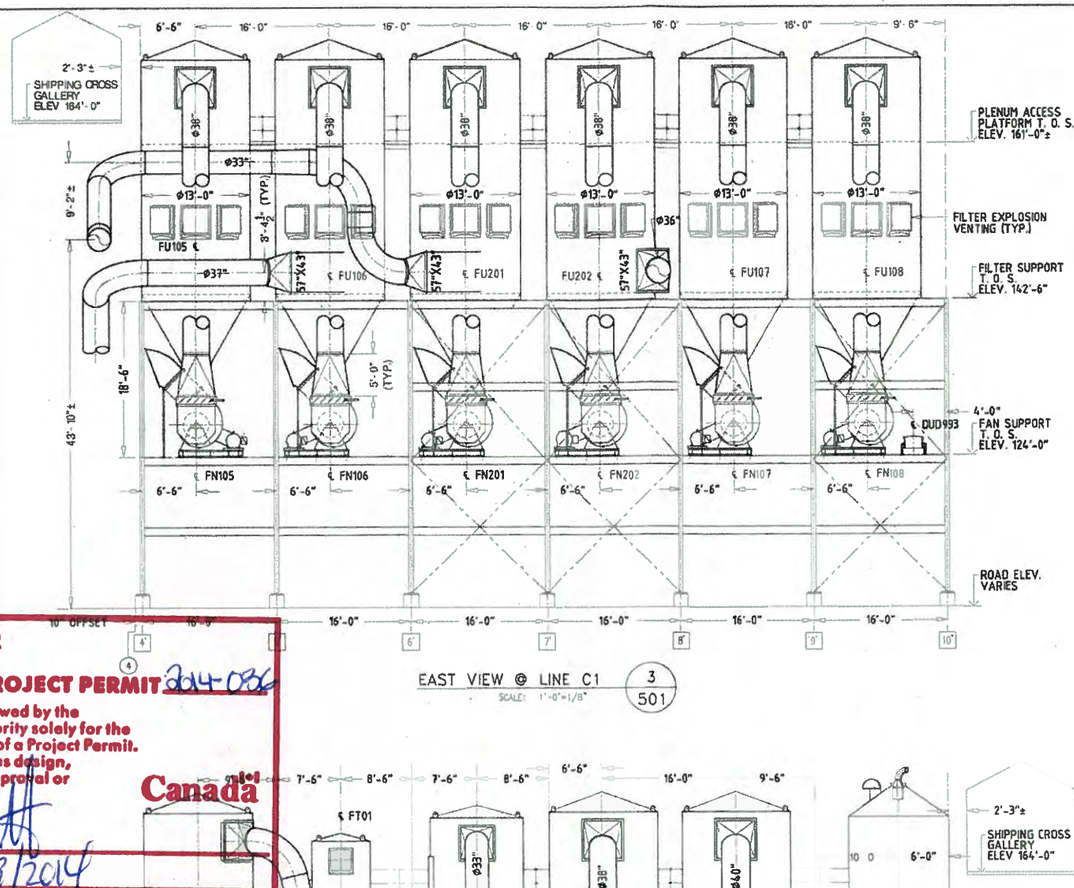


NORTH VIEW @ LINE 5' (1F / 501)
SCALE: 1'-0"=1/8"

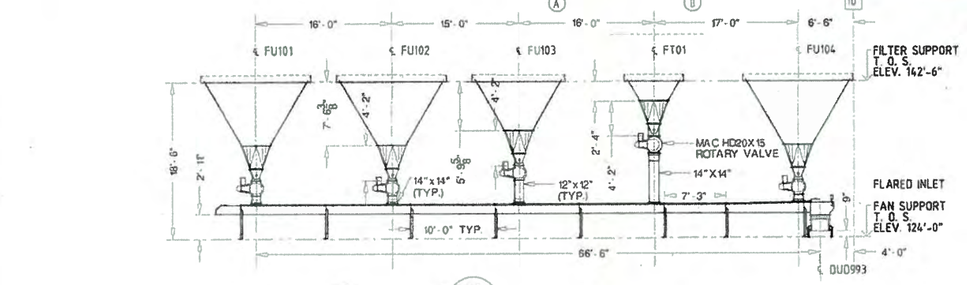


VIEW (2 / 501)
SCALE: 1'-0"=1/8"

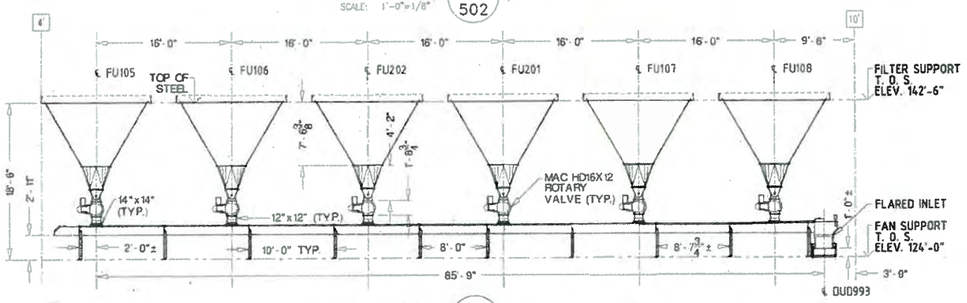
NOTES:
1. W150X30 DSH4 SUPPORT FRAME
2. HEIGHT OF FRAME TO BE FIELD DETERMINED AFTER ROAD RESURFACING (U/S OF DSH4 TO TOP OF ROAD SURFACE 14'-6")



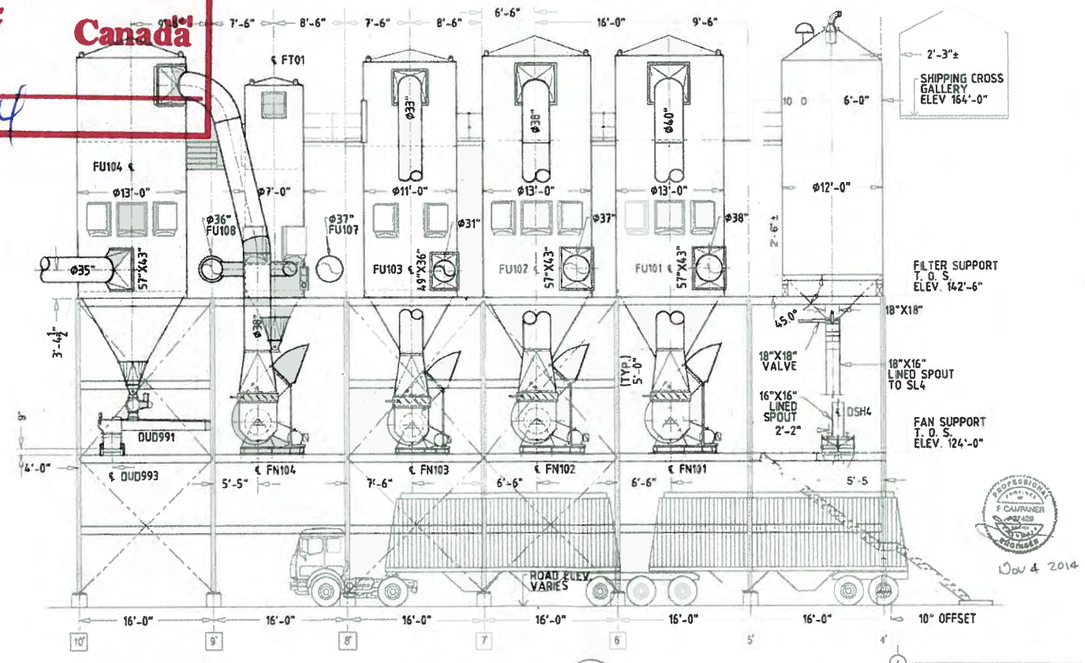
EAST VIEW @ LINE C1 (3 / 501)
SCALE: 1'-0"=1/8"



VIEW DUD 991 (4A / 502)
SCALE: 1'-0"=1/8"



VIEW DUD992 (4B / 502)
SCALE: 1'-0"=1/8"



WEST VIEW @ LINE A1 (3A / 501)
SCALE: 1'-0"=1/8"

ISSUED FOR PERMIT

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 14-036
This drawing has been reviewed by the Vancouver Fraser Port Authority solely for the purpose of VFPA's Issuance of a Project Permit. This permit in no way denotes design, engineering or structural approval or endorsement.
Signed:
Dated: DEC 23/2014
Canada

REV	DATE	DESCRIPTION	BY
J	30/10/14	REVISED STAIR LOCATION TO FT01	FC
I	15/10/14	UPDATE FAN ANCHOR BOLT DIMENSIONS	FC
H	08/08/14	ALTERED HEIGHT OF DSH4 TRUCK LOADER	FC
G	08/08/14	ISSUED FOR TENDER	FC
F	20/05/14	FN104 #CORRECTION	FC
E	19/05/14	UPDATED ALL FAN ELEV. ACCORDING TO 1/8 SHOP DRAWINGS	FC
D	04/02/25	ISSUED FOR DUST COLLECTOR RFQ	FC
C	04/02/14	ISSUED FOR PROJECT PERMIT	FC
B	30/01/14	CHANGES TO SUIT STRUCTURAL INCLUDING FILTER 105 & 108 PRELIMINARY REVIEW ISSUE DESIGN IN PROGRESS	FC
A	30/11/13		FC

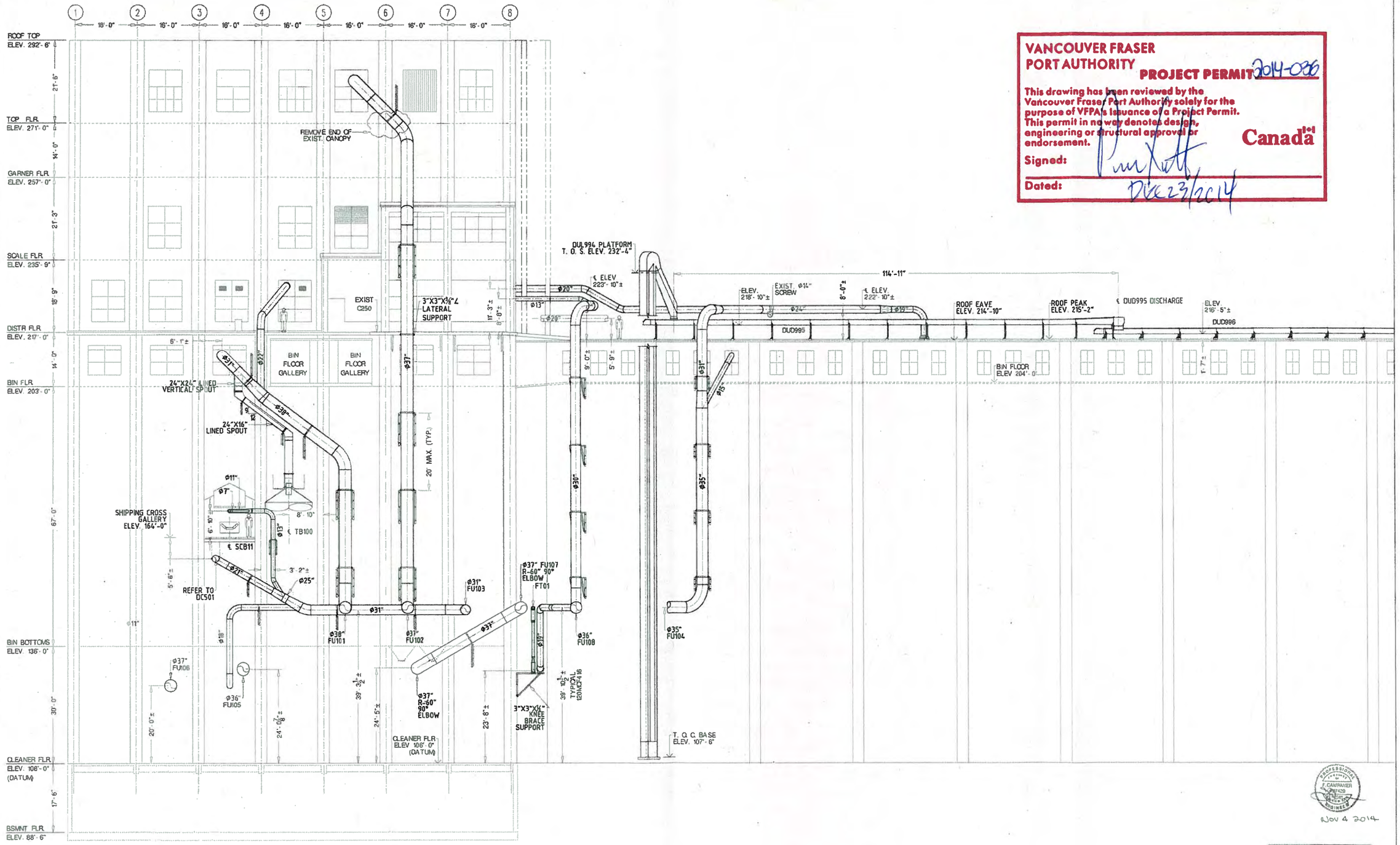
VITERRA
PACIFIC TERMINAL VANCOUVER, B. C.

DUST CONTROL UPGRADE
FILTER FAN & CONVEYOR
ELEVATION VIEWS 2 OF 2

CAMPANER CONSULTING
NORTH VANCOUVER, B.C. (604)329-0643

VITERRA PROJECT NO. P14-9806 | DRAWING NO. DC504 | REV. J
DATE AUG 21-13 | DRAWN BY FC | SCALE AS NOTED

CAD FILE: DUST CONTROL UPGRADE PLANS & DETAILS



VANCOUVER FRASER PORT AUTHORITY

PROJECT PERMIT 2014-086

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Canada

Signed:

Dated: Dec 23/2014

PAC1 WEST EXTERIOR ELEVATION

SCALE: 3/32"=1'-0"

REV	DATE	DESCRIPTION	BY
C	09/06/14	ISSUED FOR TENDER	FC
B	04/02/14	ISSUED FOR PROJECT PERMIT	FC
A	30/11/13	PRELIMINARY REVIEW ISSUE DESIGN IN PROGRESS	FC

TERRA

PACIFIC TERMINAL VANCOUVER, B. C.

CAMPANER CONSULTING

NORTH VANCOUVER, B.C. (604)329-0543

DUST CONTROL UPGRADE
PACIFIC 1
WEST EXTERIOR ELEVATION

35

TERRA PROJECT NO.	P14-9806	DRAWING NO.	REV.
DATE	DRAWN BY	SCALE	
AUG 10-13	FC	AS NOTED	DC505 C

CAD FILE: DUST CONTROL UPGRADE PLANS & DETAILS

PROFESSIONAL ENGINEER F. CAMPANER 29429 PROVINCE OF BRITISH COLUMBIA

Nov 4 2014

ISSUED FOR PERMIT

Location of Slab Excavation. Dated December 9, 2014.

VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
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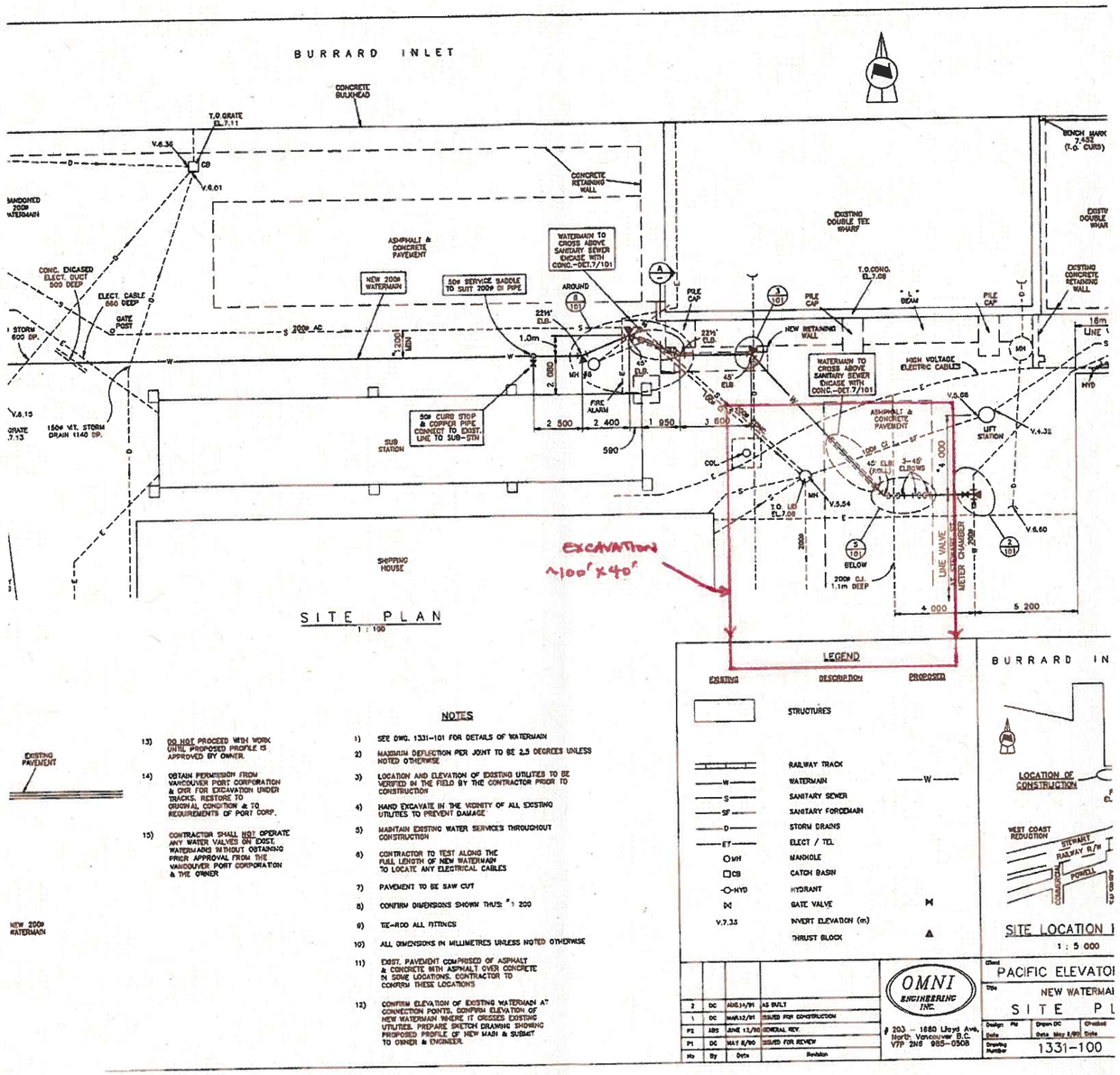
Signed:
Dated: DEC 23/2014
Canada



EXISTING PAVEMENT

NEW 200ø WATERMAIN

NOTES

1) SEE DWG. 1331-101 FOR DETAILS OF WATERMAIN
2) MAXIMUM DEFLECTION PER JOINT TO BE 2.5 DEGREES UNLESS NOTED OTHERWISE
3) LOCATION AND ELEVATION OF EXISTING UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION
4) HAND EXCAVATE IN THE VICINITY OF ALL EXISTING UTILITIES TO PREVENT DAMAGE
5) MAINTAIN EXISTING WATER SERVICES THROUGHOUT CONSTRUCTION
6) CONTRACTOR TO TEST ALONG THE FULL LENGTH OF NEW WATERMAIN TO LOCATE ANY ELECTRICAL CABLES
7) PAVEMENT TO BE SAW CUT
8) CONFIRM DIMENSIONS SHOWN THUS: # 200
9) TIE-ROD ALL FITTINGS
10) ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE
11) EXIST. PAVEMENT COMPRISED OF ASPHALT & CONCRETE WITH ASPHALT OVER CONCRETE IN SOME LOCATIONS. CONTRACTOR TO CONFIRM THESE LOCATIONS
12) CONFIRM ELEVATION OF EXISTING WATERMAIN AT CONNECTION POINTS. CONFIRM ELEVATION OF NEW WATERMAIN WHERE IT CROSSES EXISTING UTILITIES. PREPARE SKETCH DRAWING SHOWING PROPOSED PROFILE OF NEW MAIN & SUBMIT TO OWNER & ENGINEER.
13) DO NOT PROCEED WITH WORK UNTIL PROPOSED PROFILE IS APPROVED BY OWNER.
14) OBTAIN PERMISSION FROM VANCOUVER PORT CORPORATION & CNR FOR EXCAVATION UNDER TRACKS. RESTORE TO ORIGINAL CONDITION & TO REQUIREMENTS OF PORT CORP.
15) CONTRACTOR SHALL NOT OPERATE ANY WATER VALVES ON EXIST. WATERMAINS WITHOUT OBTAINING PRIOR APPROVAL FROM THE VANCOUVER PORT CORPORATION & THE OWNER

No	By	Date	Revision
2	DC	AUG 14/91	AS BUILT
1	DC	MAR 12/91	ISSUED FOR CONSTRUCTION
P2	ABS	JUNE 12/90	GENERAL REV.
P1	DC	MAY 8/90	ISSUED FOR REVIEW

OMNI ENGINEERING INC.
203 – 1880 Lloyd Ave, North Vancouver B.C. V7P 2N6 985-0308

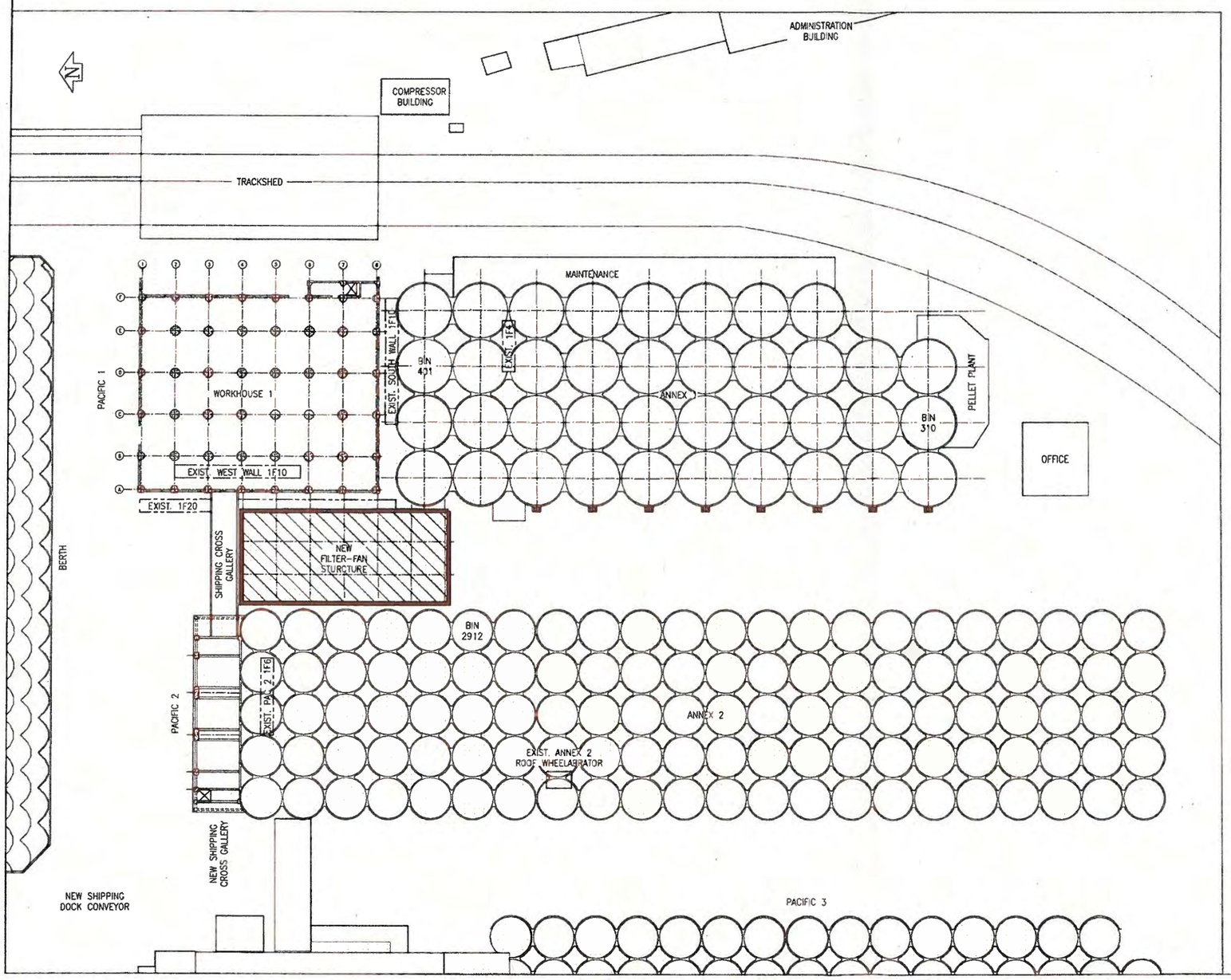
Client: PACIFIC ELEVATO
Title: NEW WATERMA
SITE PL
Design: PM | Drawn: DC | Checked:
Date: | Date: May 8/90 | Date:
Drawing Number: 1331-100

VITERRA™

PACIFIC GRAIN TERMINAL
VANCOUVER, B.C.

DUST CONTROL SYSTEM REPLACEMENT
MECHANICAL

Location of filters (1F4, 1F6, 1F10, 1F20, and Annex 2 Wheelabrator) to be removed from Workhouse 1, Annex 1 and Annex 2. Date, December 22, 2014.



VANCOUVER FRASER PORT AUTHORITY
PROJECT PERMIT 2014-036
This drawing has been reviewed by the Vancouver Fraser Port Authority solely for the purpose of VFPA's issuance of a Project Permit. This permit in no way denotes design, engineering or structural approval or endorsement.
Canada
Signed:
Dated: DEC 23/2014

DRAWING INDEX

DC500 KEY PLAN & DRAWING LIST
DC501 FILTER PLAN ELEVATION 142'-6"
DC502 FAN PLAN ELEVATION 124'-0"
DC503 FILTER FAN & CONVEYOR ELEVATION VIEWS 1 OF 2
DC504 FILTER FAN & CONVEYOR ELEVATION VIEWS 2 OF 2
DC505 PACIFIC 1 WEST EXTERIOR ELEVATION
DC506 PACIFIC 1 WORKHOUSE BASEMENT PLAN
DC507 PACIFIC 1 TRACKSHED BASEMENT PLAN
DC508 PACIFIC 1 CLEANER FLOOR & SHIPPING CROSS GALLERY
DC509 PACIFIC 1 TRACKSHED FLOOR PLAN
DC510 PACIFIC 1 BIN FLOOR PLAN & SECTION
DC511 PACIFIC 1 DISTRIBUTING FLOOR PLAN
DC512 PACIFIC 1 TOP FLOOR PLAN & SECTION
DC513 PACIFIC 1 ANNEX BIN FLOOR PLAN & SECTIONS
DC514 PACIFIC 1 ANNEX ROOF PLAN & SECTIONS
DC515 PACIFIC 2 GROUND FLOOR PLAN
DC516 PACIFIC 2 LOWER FLOOR PLANS
DC517 PACIFIC 2 UPPER FLOOR PLANS & SECTIONS
DC518 PACIFIC 2 ANNEX DISTRIBUTING FLOOR & NORTH ROOF PLANS
DC519 PACIFIC 2 ANNEX SOUTH BIN FLOOR PLAN & SECTIONS
DC520 PAC1 TRACKSHED SECTIONS & PAC 2 SHIPPING GALLERY WEST END
DC521 DUCTWORK SUPPORT DETAILS
DC522 DRAG CONVEYOR SUPPORT & ROOFING OPENING DETAILS

ISSUED FOR TENDER

REV	DATE	DESCRIPTION	BY
A	27/05/14	ISSUED FOR TENDER	FC

VITERRA
PACIFIC TERMINAL VANCOUVER, B.C.

DUST CONTROL UPGRADE
DUCTWORK INSTALLATION
KEY PLAN & DRAWING INDEX

CAMPANER CONSULTING
NORTH VANCOUVER, B.C. (604)329-0843

VITERRA PROJECT NO.	DRAWN BY	SCALE	DRAWING NO.	REV.
P14-0808				
DATE: MAY 27-14	FC	1"=25'-0"	DC500	A

CAD FILE: DC500 KEY PLAN & DRAWING INDEX

Project:	**Modernization of Dust Control Systems at Pacific Terminal**	Location:	**1803 Stewart Street Vancouver, BC**
		VFPA Site/Area No.:	**VAN069**
Proponent(s):	**Viterra Inc.**		

Project Description

In this Schedule, "**Project**" means the physical activities authorized by VFPA to be carried out pursuant to Review Number 14-036, as described below.

- Viterra Inc. (Viterra, the "**Proponent**") proposes to upgrade dust control infrastructure at the Pacific Terminal facility, 1803 Stewart Street, Vancouver, BC. The purpose of the Project is to upgrade infrastructure to be in compliance with pending changes in the Canadian Occupational Health and Safety Regulations for suspended dust levels in grain handling facilities and to support future capacity growth at the facility. Future facility upgrades include a new ship loading system, currently under separate review as Review Number 14-081.
- The Project includes:
  - Excavating unsuitable soils to an approximate depth of 2.4 m below grade and replacing with clean fill;
  - Pouring a new concrete sub-grade foundation mat;
  - Installing a 10.4 m high steel framed structure to support the new dust control system;
  - Installing ten dust control filters and one transport filter on the new elevated structure;
  - Installing a new truck loadout system on the new elevated structure;
  - Installing a new dust transport system, including five drag conveyors;
  - Removing five existing filters; and,
  - Potentially relocating water and sewer lines, as required.
- All soils excavated as part of the Project will be removed from the site.
- Groundwater was encountered at a depth of 4.0 m during an August 2013 geotechnical excavation. Excavation dewatering is not expected to be required as part of the Project.
- The new dust control system and elevated structure will be located approximately 20 m from Burrard Inlet. The structure will be installed between two existing silos in an area that is paved and essentially flat. The structure height will be approximately 18.9 m with the new equipment.
- The existing filters to be removed are located on the walls of the workhouses. Cranes will be used to remove the filters from the walls. Once on the ground, the filters will be processed and loaded into scrap bins for off-site disposal or recycling.
- The existing Metro Vancouver Air Quality Emissions Permit will be amended to reflect the changes to the dust control system. The current permit allows air discharge up to 1.1 mcfm. The proposed changes to the facility are expected to decrease this to 0.4 mcfm.
- An air quality assessment of both the dust control systems project (14-036) and the ship loading system upgrade project (14-081) will be conducted and submitted to VFPA prior to the start of construction of the ship loading system upgrades.
- A noise impact assessment predicted no net increase in total noise as a result of the Project. The Project is not expected to have a noise impact in the community.

Project:	**Modernization of Dust Control Systems at Pacific Terminal**	Location:	**1803 Stewart Street Vancouver, BC**
		VFPA Site/Area No.:	**VAN069**
Proponent(s):	**Viterra Inc.**		

- A hazardous materials survey identified lead containing paint and asbestos containing materials in the housings of the dust filter component systems and associated structural footings.
- The building upgrades are anticipated to commence in January 2015 with completion in spring 2016.

Information Sources

VFPA has relied upon the following sources of information in its assessment of the potential adverse environmental effects of the Project:

- Letter report re: "Geotechnical Investigation Report for Proposed Dust Control System Upgrade Viterra Pacific Terminal, Commissioner Street, Vancouver, B.C.", prepared by GeoPacific Consultants Ltd., dated September 4, 2013.
- VFPA Project Review Application Form, dated February 14, 2014.
- Document titled "Pacific Terminal Dust Control Upgrade", prepared by Viterra.
- Email correspondence from Peter Idema (Viterra) to Gord Tycho (VFPA), June 28, 2014, 8:28 am, *re: RE: Viterra – shiploader and associated projects – anticipated shipping increases*.
- Document titled "Preliminary Air Assessment Requirements Viterra (Pacific Terminal) Shiploading System Upgrade (14-081) and Dust Control Modernization (14-036)" prepared by Christine Rigby (VFPA), dated July 15, 2014.
- Letter report re: "Targeted Pre-Demolition Hazardous Materials Survey of Dust Filter Component Structures Located at Site 1803 Stewart Street, Vancouver, BC", prepared by Pacific EHS, dated August 29, 2014.
- Memo prepared by Dynamic Installations, dated October 28, 2014.
- Report titled "Viterra's Pacific Terminal Dust Control & Ship Loader Upgrades Community Noise Assessment Report", prepared by BAP Acoustics Ltd., dated October 2014.
- Conversation between Christine Rigby (VFPA) and Kim Keskinen (VFPA), December 16, 2014.

Environmental Conditions

If the "project description" summary does not accurately reflect the subject proposal, please advise VFPA Environmental Programs immediately as this may affect the assumptions underlying this assessment. If the summary does accurately reflect the subject proposal, the following are the minimum conditions that must be followed to mitigate potential or foreseeable adverse environmental effects.

1. The Proponent shall undertake and deliver the Project to total completion in a professional, timely and diligent manner in accordance with the applicable standards and specifications set out in the sections above entitled "Project Description" and "Information Sources". The Proponent shall not carry out any other physical activities unless expressly authorized by VFPA.
2. The Proponent shall at all times and in all respects comply with and abide by all applicable federal, provincial and municipal laws, statutes, by-laws, regulations, orders and policies from time to time in force and effect including, without limiting the generality of the foregoing, all rules and directions established by VFPA from time to time

(collectively, "**Applicable Law**"). Any reference below to a specific law, statute, by-law, regulation, order or policy is for clarity only and in no way limits the generality of the foregoing.

3. The Proponent shall not, directly or indirectly: (i) deposit or permit the deposit of a deleterious substance of any type in water frequented by fish in a manner contrary to Section 36(3) of the *Fisheries Act*; or (ii) adversely affect fish or fish habitat in a manner contrary to Section 35(1) of the *Fisheries Act*.

4. The Proponent shall ensure that debris and waste material resulting from the Project are contained, collected, and disposed of at suitable upland locations using standards, practices, methods and procedures to a good commercial standard, conforming to Applicable Law and using that degree of skill and care, diligence, prudence and foresight which would be reasonably and ordinarily expected from a qualified, skilled and experienced person engaged in a similar type of undertaking under the same or similar circumstances. The Proponent shall have due regard for the applicable prohibitions and restrictions for burning a wide range of materials in British Columbia, such as creosote-treated wood.

5. Materials brought onto the property to be used for backfilling, site preparation, or other uses shall be from sources demonstrated to be clean and free of environmental contamination.

6. Any soils excavated from the site during the proposed works must be handled in a manner that prevents their release into an aquatic environment, either directly or indirectly as silt in storm runoff.

7. In the event that archaeological resources are encountered, the Proponent shall cease all physical activities immediately and notify VFPA. The Proponent shall not resume physical activities until authorized by VFPA in writing.

8. Should contaminated materials be encountered, the Proponent shall ensure that all contaminated materials are removed, contained, and disposed of at appropriate off-site facilities using standards, practices, methods and procedures to a good commercial standard, conforming to Applicable Law and using that degree of skill and care, diligence, prudence and foresight which would be reasonably and ordinarily expected from a qualified, skilled and experienced person engaged in a similar type of undertaking under the same or similar circumstances. Suspect materials should be treated as contaminated or stockpiled until their environmental quality has been determined.

9. The Proponent shall not dewater excavations unless a dewatering plan has been reviewed and accepted by VFPA Environmental Programs.

10. Project works involving the use of concrete, cement, mortars and other Portland cement or lime-containing construction materials shall be conducted so as to ensure that sediments, debris, concrete (cured or uncured), and concrete fines are not deposited into the aquatic environment, either directly or indirectly. Water that has contacted uncured or partly cured concrete or Portland cement or lime-containing construction materials, such as the water that may be used for exposed aggregate wash-off, wet curing, equipment and truck washing, etc. shall not be permitted to enter the aquatic environment.

11. Equipment shall be in good mechanical condition and shall be maintained free of fluid leaks, invasive species, and noxious weeds.

12. Prior to commencing any physical activities, the Proponent shall establish a spill prevention, containment and clean-up plan for hydrocarbon products (including fuel, oil and hydraulic fluid) and any other deleterious substances using standards, practices, methods and procedures to a good commercial standard, conforming to Applicable Law and using that degree of skill and care, diligence, prudence and foresight which would be reasonably and ordinarily expected from a qualified, skilled and experienced person engaged in a similar type of undertaking under the same or similar circumstances. The Proponent shall ensure that appropriate spill containment and clean-up supplies are available on site at all times and that all personnel working on the Project are familiar with the spill prevention, containment and clean-up plan.

13. An air quality assessment of both the dust control systems project (14-036) and the ship loading system upgrade project (14-081) shall be completed to the satisfaction of VFPA and submitted prior to the issuance of Project Permit 14-081.

14. Air emissions such as vehicle/equipment exhaust, dust and vapours, associated with Project deconstruction, demolition and/or construction as applicable shall be minimized and managed to avoid adverse health, safety, nuisance and other environmental effects on and off site. In this regard, emission control measures shall be implemented as required and may include but are not limited to the following:

    a) No visible dust or track out beyond the lease boundary; and,
    b) Onsite speed limit.

    More detailed guidance is available in *Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities* prepared for Environment Canada (Cheminfo Services Inc. March 2005).

15. The Proponent shall also:

    a) Make reasonable efforts to ensure that heavy duty diesel powered road licensed vehicles and engines are model year 2007 or newer;
    b) Make reasonable efforts to ensure that diesel-powered non-road or off-road equipment is Tier 3 or better, or equivalent for emissions;
    c) Ensure the use of well-maintained engines and exhaust systems, in good operating order;
    d) Ensure that vehicle and equipment idling are limited to the greatest practical and safe extent.

16. The Proponent shall cooperate fully with VFPA in respect of any review by VFPA of the Proponent's compliance with these conditions including, without limitation, providing any information or documentation required by VFPA.

17. The Proponent shall provide a copy of this Schedule to all employees, agents, contractors, licensees and invitees prior to commencing any physical activities. The Proponent shall be solely responsible for ensuring that all such employees, agents, contractors, licensees and invitees comply with these conditions.

18. The Proponent shall make available upon request by any regulatory authority (such as a Fishery Officer) a copy of this Schedule.

The VFPA reserves the right to rescind or revise these conditions at any time that new information warranting this action is made available to the Port.

Project:	**Modernization of Dust Control Systems at Pacific Terminal**	Location:	**1803 Stewart Street Vancouver, BC**
		VFPA Site/Area No.:	**VAN069**
Proponent(s):	**Viterra Inc.**		

The above conditions are based solely upon VFPA's review of the Project and in no way limits the authority of, or constitutes any form of permit, authorization or approval by, any other governmental authority having jurisdiction. The Proponent is solely responsible for obtaining any and all required permits, authorizations and approvals from any other governmental authority having jurisdiction.

Review History		
Draft	December 15, 2014	KK
Final	December 16, 2014	KK