

DWG NO.	DESCRIPTION
1.01	ROOF PLAN, NOTES
2.01	BUILDING SECTION & DETAILS

- GENERAL NOTES**
- PRO-BEL ENTERPRISES LIMITED IS TO BE NOTIFIED OF ALL CHANGES TO AND/OR DEVIATIONS FROM THIS DRAWING.
 - GENERAL CONTRACTOR/ARCHITECT/CLIENT IS TO VERIFY THAT THE LOCATION OF THE EQUIPMENT SUPPLIED BY PRO-BEL DOES NOT CONFLICT WITH DOORWAYS, ROOF DRAINS, MECHANICAL UNITS, ETC...
 - TO THE EXTENT POSSIBLE, PRO-BEL EQUIPMENT HAS BEEN LOCATED AND ORIENTED TO WORK WITH THE KNOWN LOCATIONS OF ANY POTENTIAL OBSTRUCTIONS. G.C. TO NOTIFY PRO-BEL OF ANY CHANGES TO THE WORK OF OTHERS WHICH MAY IMPACT OUR EQUIPMENT.
 - THE PORTIONS OF BUILDING STRUCTURE THAT SUPPORT PRO-BEL EQUIPMENT SHALL BE VERIFIED BY THE PROJECT STRUCTURAL ENGINEER/ARCHITECT FOR THE RESULTING FORCES AND MOMENTS DUE TO THE LOADS SHOWN ON PRO-BEL SHOP DRAWING(S). THE LOADS SHOWN ARE UNFACTORED WORKING LOADS UNLESS NOTED OTHERWISE.
 - INSTALLATION OF HORIZONTAL LIFELINES, STATIC LINES AND/OR DOG LINES BETWEEN ANCHORS WITHOUT PRIOR WRITTEN APPROVAL FROM PRO-BEL ENTERPRISES LTD. IS STRICTLY PROHIBITED, AND MAY RESULT IN LEGAL ACTION AGAINST ALL PARTIES INITIATING SUCH ACTION(S).

- ENGINEERING NOTES**
- DESIGN OF THE SAFETY SYSTEM LAYOUT IS BY OTHERS. REFERENCE NO. A2.07 & S&A-05, BY ANBROM MOISAN ARCHITECTURE, DATED OCT. 17, 2007. THE ARCHITECT/CLIENT IS RESPONSIBLE FOR THE LOCATION AND INTENDED USE OF THE ROOF ANCHOR.
 - DESIGNED TO FEDERAL OSHA REGULATION (STANDARDS-29 CFR) PART 1910 OCCUPATIONAL SAFETY & HEALTH STANDARDS:
 - SUBPART D (WALKING-WORKING SURFACES)
 - APPENDIX C TO SUBPART F (PERSONAL FALL ARREST SYSTEM)
 - ALL APPLICABLE INTERPRETATIONS AND MEMORANDUMS, INCLUDING FEDERAL OSHA MEMORANDUM DATED MARCH 12TH, 1991 FROM PATRICIA K. CLARK, REGARDING DESCENT CONTROL DEVICES.
 - ALL STRUCTURAL STEEL IS DESIGNED AS PER AISC SPECIFICATIONS.
 - ALL HOLLOW STRUCTURAL SECTIONS ARE TO BE GRADE 350W ACCORDING TO CSA/CAN3-G40.21-M81 WITH Fy=50.8 ksi AND Fu=65.3 ksi.
 - ALL STEEL PLATE AND OTHER SECTIONS ARE TO BE GRADE 300W ACCORDING TO CSA/CAN3-G40.21-M81 WITH Fy=43.5 ksi AND Fu=65.3 ksi.
 - STAINLESS STEEL IS TO BE TYPE 304.
 - ALL BOLTS ARE TO BE TYPE 304 STAINLESS STEEL WITH COMPATIBLE NUTS AND WASHERS.
 - THE SAFETY ANCHOR HAS BEEN TESTED TO ENSURE THAT FRACTURE OR DETACHMENT DOES NOT OCCUR WITH A 22.2 kN (5,000 lb.) LOAD.
 - THE WORKING LOAD OF THE SAFETY ANCHORS IS 4.45 kN (1,000 lb.).
 - REINFORCING OF BUILDING STRUCTURE BY OTHERS AS REQUIRED BY THE PROJECT STRUCTURAL ENGINEER TO RESIST THE LOADS IMPOSED BY PRO-BEL EQUIPMENT.

- INSTALLATION**
- EQUIPMENT IS TO BE SUPPLIED BY PRO-BEL AND INSTALLED BY OTHERS.
 - ROOFING IN OF PRO-BEL EQUIPMENT IS TO BE BY OTHERS.
 - ALL RETAINING BOLTS MUST HAVE A MINIMUM OF TWO THREADS EXPOSED WHEN THE NUT HAS BEEN TIGHTENED AND THE EXPOSED THREADS MUST BE DEFORMED AFTER INSTALLATION TO PREVENT TAMPERING.
- INSPECTION AND TESTING**
- PRO-BEL EQUIPMENT IS NOT TO BE LOAD TESTED WITHOUT PRIOR CONSULTATION WITH PRO-BEL ENTERPRISES LIMITED.
 - ALL PRO-BEL EQUIPMENT IS TO BE INSPECTED BY A COMPETENT PERSON BEFORE EACH SCHEDULED SERVICE CYCLE AND NOT LESS THAN ONCE A YEAR TO ENSURE THAT IT IS IN GOOD WORKING ORDER. ANY DAMAGED OR DETERIORATED COMPONENT MUST BE REPAIRED OR REPLACED UNDER THE DIRECTION OF A PROFESSIONAL ENGINEER.
 - YIELDING OF THE EQUIPMENT AND/OR SUPPORTING STRUCTURE MAY OCCUR IN THE EVENT OF A FALL ARREST INCIDENT. WHEN THE EQUIPMENT HAS BEEN IMPACTED BY FALL ARREST LOADING, A THOROUGH INSPECTION OF PRO-BEL EQUIPMENT AND THE SUPPORTING STRUCTURE IS TO BE CONDUCTED, AND ANY DAMAGED COMPONENT MUST BE REPAIRED OR REPLACED, UNDER THE DIRECTION OF A PROFESSIONAL ENGINEER.

- USEAGE**
- WORKER MUST BE TIED OFF FOR FALL ARREST PRIOR TO APPROACHING, AND REMAIN CONTINUOUSLY TIED OFF WHEN WORKING, WITHIN 6'-0" OF ROOF EDGE WHERE PARAPET HEIGHT IS LESS THAN SAFETY RAILING HEIGHT.
 - WORKERS MUST PROTECT LINES FROM CHAFING AT ALL TIMES.
 - WORKERS SHALL ARRANGE THEIR LIFE LINES IN SUCH A WAY TO ENSURE THAT THEY CANNOT FALL MORE THAN 6'-0" VERTICAL FREE FALL, OR STRIKE LOWER ROOF LEVELS OR BUILDING WHEN PERFORMING NON-ROUTINE ROOF MAINTENANCE WORK.
 - WORKERS MUST AT ALL TIMES BE TIED OFF TO INDEPENDENT SAFETY ANCHORS WHEN USING A BOSUN'S CHAIR, CAGE, OR ANY OTHER MEANS OF SUSPENSION.
 - PRO-BEL EQUIPMENT SHALL BE RE-CERTIFIED AT PERIODS NOT TO EXCEED 5 YEARS. THE RE-CERTIFICATION RECORD SHALL BE INCLUDED IN THE BUILDING LOGBOOK. IF AN AREA OF SUSPICION IS IDENTIFIED, A TEST PROCEDURE, IF NECESSARY, SHALL BE PERFORMED UNDER THE DIRECTION OF A PROFESSIONAL ENGINEER.
 - USERS MUST COMPLY WITH ALL APPLICABLE SAFETY CODES AND REGULATIONS WHEN USING THIS SYSTEM.
 - THIS DRAWING MUST BE READ AND USED IN CONJUNCTION WITH THE OPERATING INSTRUCTIONS DESCRIBED IN THE LOG BOOK SUPPLIED BY PRO-BEL.

REFERENCES

ARCHITECTURAL	STRUCTURAL
ANBROM MOISAN A2.07	KPFF 52.07a
07/28/2008	04/03/2008

THE ENGINEER'S SEAL INDICATES ONLY THAT THE STRUCTURAL COMPONENTS SUPPLIED BY PRO-BEL:

- WILL RESIST THE LOADS INDICATED ON THIS DRAWING WHEN ANALYZED BY CONVENTIONAL STRUCTURAL TECHNIQUES OR
- HAVE BEEN LAB TESTED FOR THE LOADS INDICATED.

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THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE.

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PRO-BEL ENTERPRISES, LTD.
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 VANCOUVER, B.C. CANADA V6K 4K6
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 Toll Free: 1 (800) 461-0275
 Web: www.pro-bel.ca, E-Mail: info@pro-bel.ca

CLIENT: R & H CONSTRUCTION

PROJECT: MATISSE THE BLOCK 46 PORTLAND, OR

mm/dd/yyyy: 05/09/09

SCALE: INDICATED

DRAWN BY: [Signature]

TITLE: WINDOW CLEANING SAFETY SYSTEM LAYOUT

PRO-BEL SUPPLY ONLY

mm/dd/yyyy: 05/09/09

SCALE: INDICATED

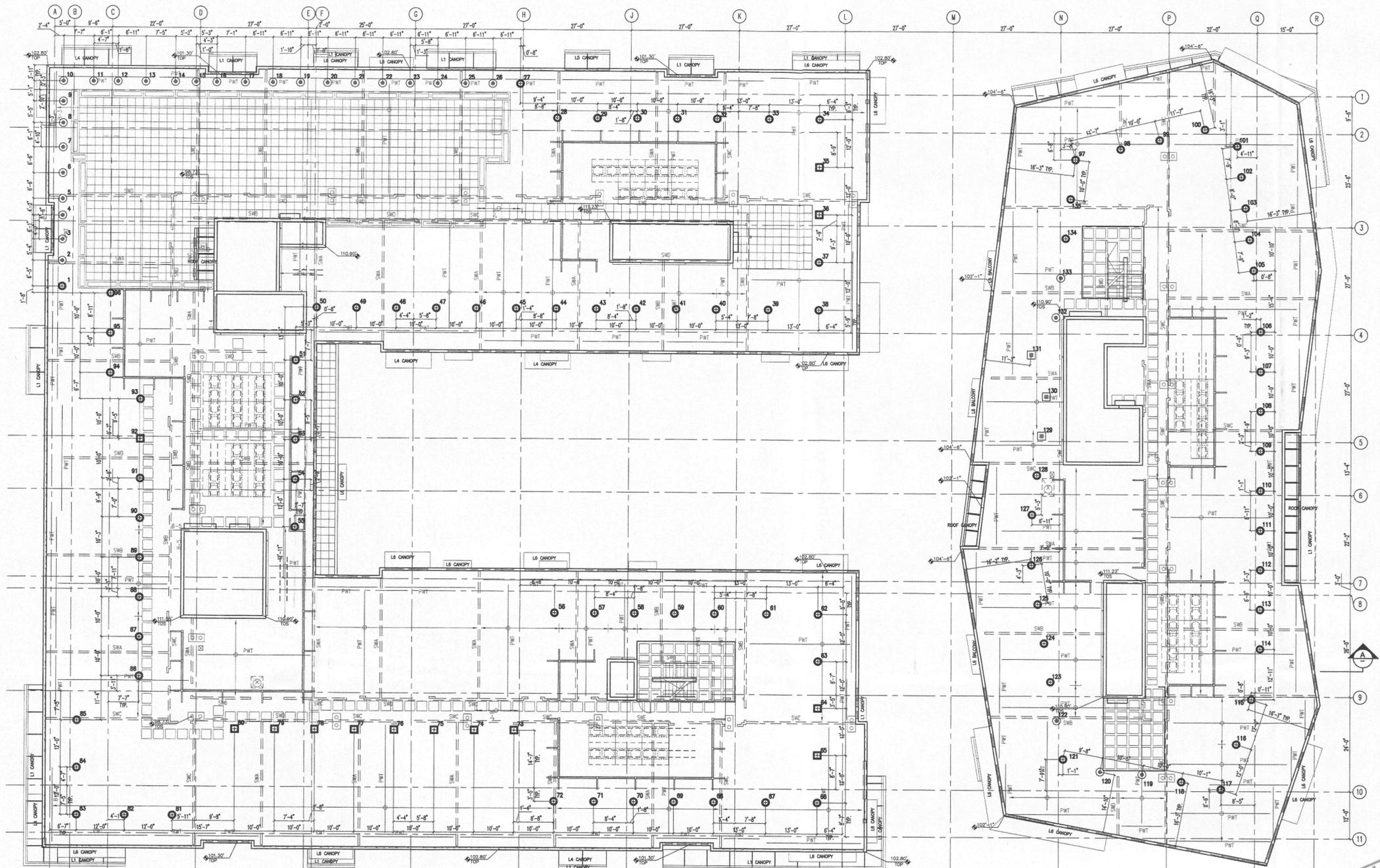
DRAWN BY: [Signature]

TITLE: WINDOW CLEANING SAFETY SYSTEM LAYOUT

JOB NO. 2N1-2009-13919

DRAWING NO. 1.01

REV. NO. 2



ROOF PLAN/SAFETY ANCHOR LAYOUT
 (REF: A2.07) SCALE: 3/32"=1'-0"

EQUIPMENT SCHEDULE:

SYMBOL	DESCRIPTIONS	QUANTITY
⊙	THROUGH BOLT ROOF ANCHOR (FOR 24" SPACING) (16" TALL)	89
⊕	THROUGH BOLT ROOF ANCHOR (FOR 24" SPACING) (24" TALL)	13
⊗	THROUGH BOLT ROOF ANCHOR (FOR 16" SPACING) (16" TALL)	30
⊞	THROUGH BOLT ROOF ANCHOR (FOR 16" SPACING) (24" TALL)	3

OREGON NOTES

NO SPECIAL INSPECTION IS REQUIRED FOR PRO-BEL COMPONENT WELDING PER PORTLAND BUREAU OF DEVELOPMENT SERVICES STAFF ADVISORY DATED 24 APRIL, 2007.

PRO-BEL ENGINEERING REQUIRES INSPECTIONS OF ALL FIELD WELDS TO ATTACH PRO-BEL EQUIPMENT TO BUILDING STRUCTURE. A COPY OF THIS INSPECTION REPORT IS REQUIRED PRIOR TO FINAL STAMPING OF PROJECT DRAWINGS.

APPROVAL STAMPING

CONFORMS TO DESIGN CONCEPT
 CONFORMS TO DESIGN CONCEPT WITH REVISIONS AS SHOWN
 NON-CONFORMING
 REVISE & RESUBMIT

THIS SHOP DRAWING HAS BEEN REVIEWED FOR GENERAL CONFORMANCE WITH DESIGN CONCEPT ONLY AND DOES NOT RELIEVE THE FABRICATOR VENDOR OF RESPONSIBILITY FOR CONFORMANCE WITH DESIGN DRAWINGS AND SPECIFICATIONS. ALL OF WHICH HAVE PRIORITY OVER THIS SHOP DRAWING.

By: [Signature] DATE: 01/09/09
 KPFF

PRO-BEL ROOF ANCHORS HAVE A HOLE CLOSE TO THE TOP OF THE ANCHOR. THE HOLE WAS FOR THE GALVANIZING PROCESS AND HAS BEEN SEALED AFTER FABRICATION.

IMPORTANT NOTES

- CONTRACTOR SHALL ENSURE THAT THE SEAL TO THE HOLE IS IN GOOD CONDITION DURING CONSTRUCTION. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO RESEAL MISSING OR DAMAGED SEALS DURING CONSTRUCTION.
- IT IS THE OWNER'S RESPONSIBILITY, THROUGH ANNUAL INSPECTION, TO ENSURE THAT THE SEAL TO THE HOLE IS IN GOOD CONDITION. ANY LOOSE, CRACKED OR BROKEN-DOWN SEAL MUST BE REMOVED AND RESEALED TO PREVENT WATER FROM LEAKING INSIDE THE ANCHOR.

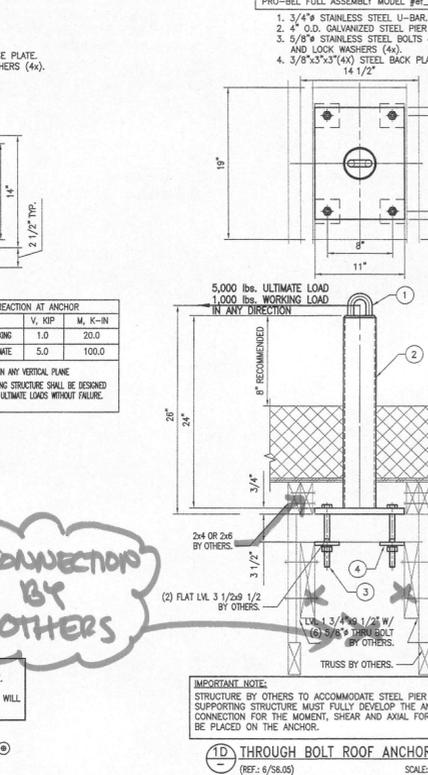
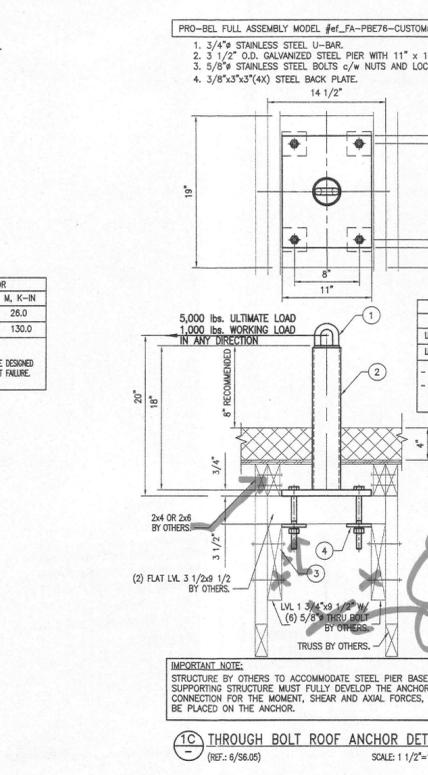
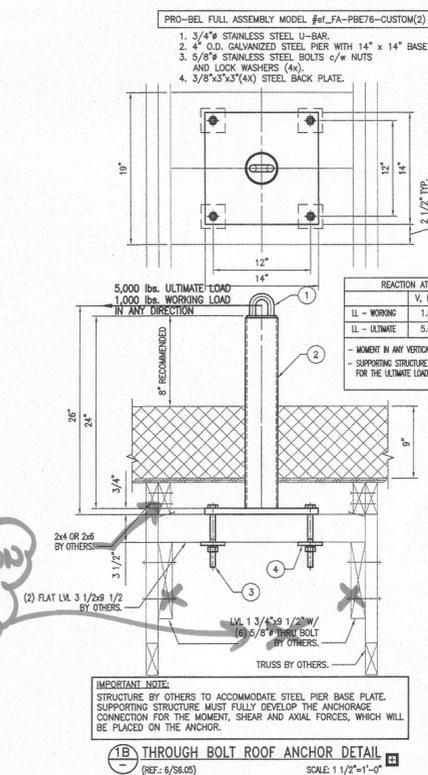
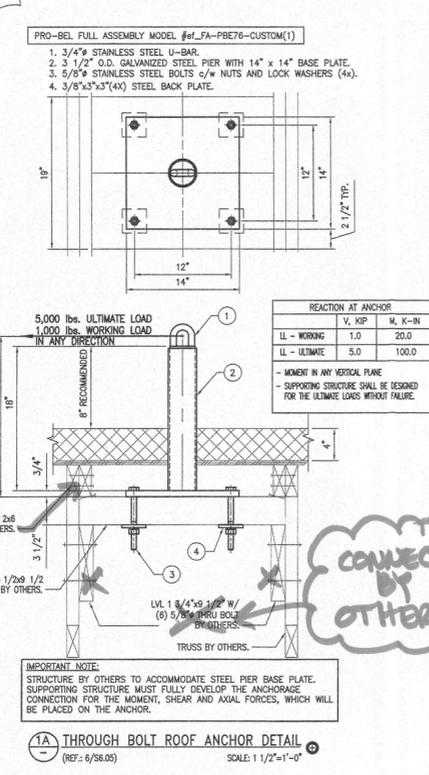
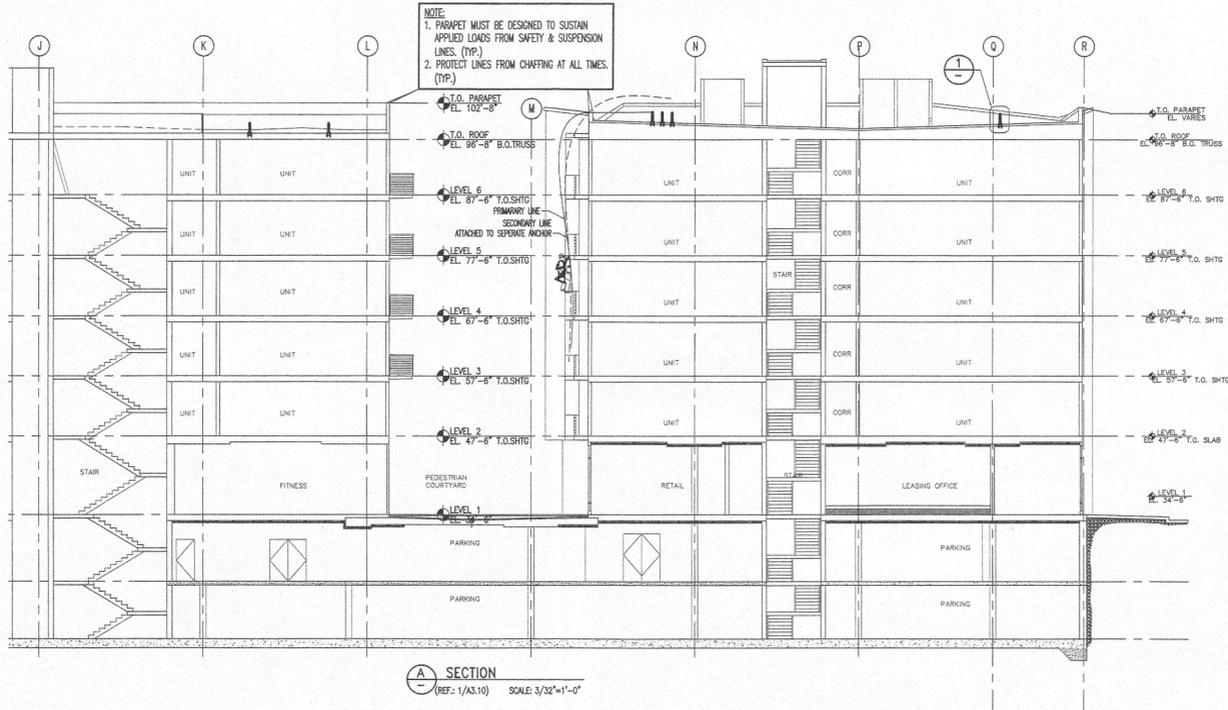
IMPORTANT NOTES

- WORKERS TO USE A SHOCK ABSORBING LANYARD RATED FOR 900 lbs. MAXIMUM ARREST FORCE.
- SUPPORTING STRUCTURE DESIGN: STRUCTURAL ENGINEER FOR THE OVERALL PROJECT IS RESPONSIBLE FOR DESIGN OF THE BUILDING STRUCTURE, AND LOCAL REINFORCEMENT WHERE REQUIRED, TO WITHSTAND THE APPLIED LOADS OF SAFETY EQUIPMENT SUPPLIED BY PRO-BEL.
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- ACCESS TO ANY AREA WITHIN 6'-0" OF ROOF EDGE WHERE THE PARAPET WALL/RAILING IS LESS THAN 42" TALL IS RESTRICTED. WORKERS MUST FIRST BE TIED OFF TO AN ANCHOR OUTSIDE THESE AREAS PRIOR TO APPROACHING AND REMAIN CONTINUOUSLY TIED OFF WHEN WORKING WITHIN THESE AREAS.

2	REVISED AS NOTED	AS	MC	14/09/09
1	REVISED AS NOTED	AS	MC	05/09/09
No.		BY	CHKD	mm/dd/yy

REVISION

07-167442-DFS07-CO
 micro



CONFORMS TO DESIGN CONCEPT
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BY: *[Signature]* DATE: 8/19/09
 kpff

City of Portland
 REVIEWED FOR CODE COMPLIANCE
 SEP 18 2009
 Permit Number

REFERENCES

ARCHITECTURAL	STRUCTURAL
ANCHOR MOISAN	KPFF
AZ.07	07/28/2008 SZ.07g
	103/12/2008

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CLIENT:
 R & H CONSTRUCTION

PROJECT:
 MATISSE
 THE BLOCK 46
 PORTLAND, OR

mm/dd/yyyy	01/30/09	TECH. REVIEW:	
SCALE:	AS INDICATED	SALES	PM, ENG.
DRAWN BY:	REI	JLJ	JRE MC
TITLE:	WINDOW CLEANING SAFETY SYSTEM DETAILS		

JOB NO.
 2N1-2009-13919

DRAWING NO.
 2.01

REV. NO.
 2

2	REVISED AS NOTED	AS	MC	08/11/09
1 <td>REVISED AS NOTED</td> <td>AS</td> <td>MC</td> <td>05/08/09</td>	REVISED AS NOTED	AS	MC	05/08/09
No.		BY	CHKD	mm/ds/yy

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