

# DEPARTMENT OF FISHERIES AND OCEANS CANADA

# LIFE SAFETY REFURBISHMENTS

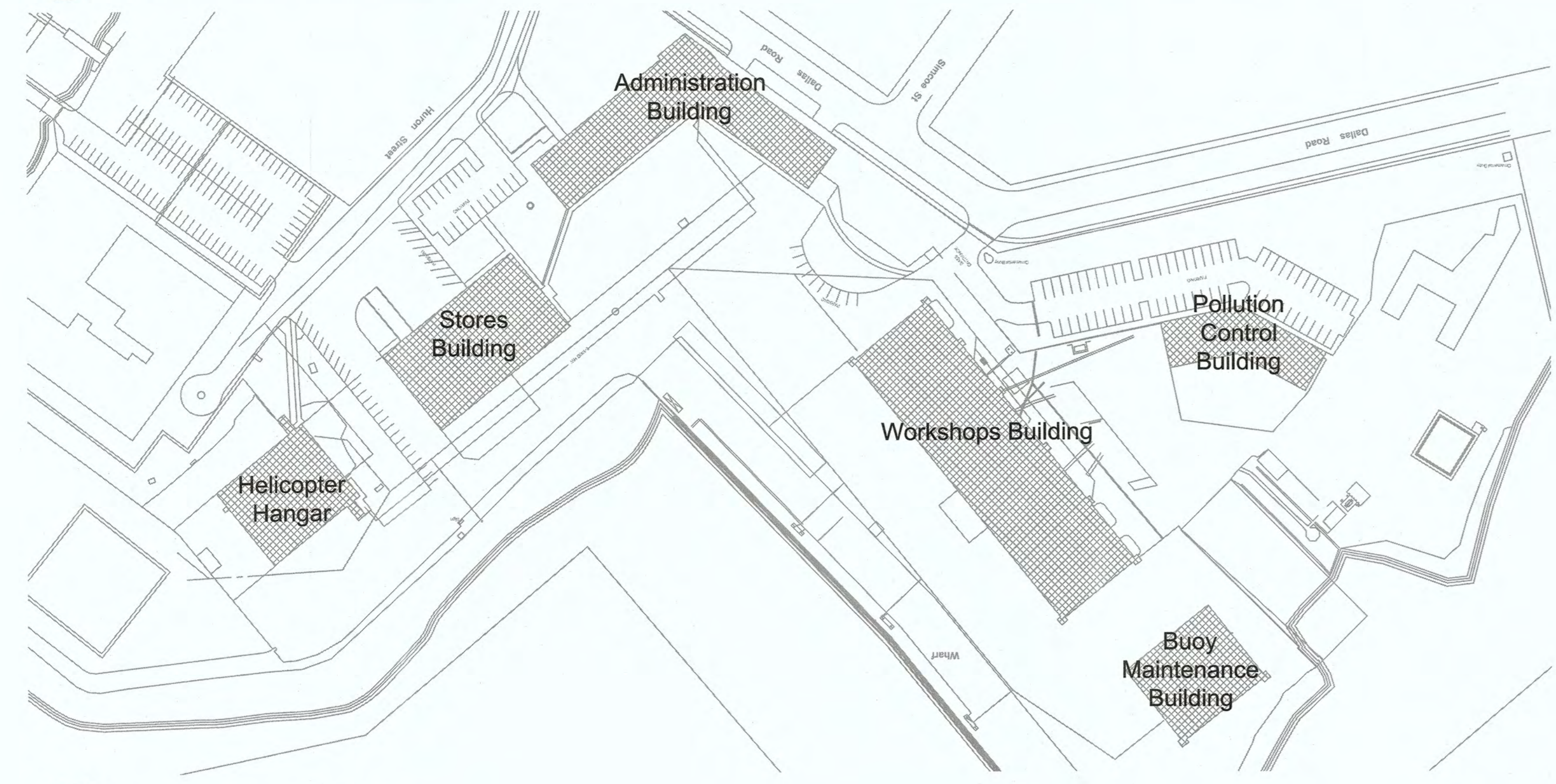
## VICTORIA COAST GUARD BASE, VICTORIA, BRITISH COLUMBIA



Stantec Consulting Ltd.  
www.stantec.com  
STANTEC PROJECT NO: 115615358 - PHASE 2



1 VICTORIA COAST GUARD SITE  
G000 NTS



2 ELECTRICAL KEY PLAN  
G000 NTS

| FIRE ALARM SYMBOL SCHEDULE |  |
|----------------------------|--|
| ☐                          | FIRE ALARM MANUAL STATION  |
| ☐                          | FIRE ALARM BELL  |
| ☐                          | FIRE ALARM BELL c/w STROBE   |
| ☐                          | CEILING MOUNTED FIRE ALARM HORN SPEAKER                            |
| ☐                          | WALL MOUNTED FIRE ALARM HORN SPEAKER                               |
| ☐                          | CEILING MOUNTED FIRE ALARM HORN c/w STROBE                         |
| ☐                          | WALL MOUNTED FIRE ALARM HORN c/w STROBE                            |
| ☐                          | CEILING FIRE ALARM STROBE  |
| ☐                          | WALL MOUNTED FIRE ALARM STROBE                                     |
| ☐                          | CEILING MOUNTED FIRE ALARM SPEAKER                                 |
| ☐                          | WALL MOUNTED FIRE ALARM SPEAKER                                    |
| ☐                          | CEILING MOUNTED FIRE ALARM SPEAKER c/w STROBE                      |
| ☐                          | WALL MOUNTED FIRE ALARM SPEAKER c/w STROBE                         |
| ☐                          | FIRE ALARM PIEZO SOUNDER   |
| ☐                          | FIRE ALARM PIEZO SOUNDER c/w STROBE                                |
| ☐                          | FIRE ALARM ELECTRONIC HORN   |
| ☐                          | FIRE ALARM ELECTRONIC HORN c/w STROBE                              |
| ☐                          | CARBON MONOXIDE ALARM  |
| ☐                          | FIRE ALARM HEAT DETECTOR (RATE OF RISE UNLESS OTHERWISE INDICATED) |
| ☐                          | FIRE ALARM SMOKE DETECTOR  |
| ☐                          | FIRE ALARM SMOKE DETECTOR, DUCT MOUNTED                            |
| ☐                          | SMOKE ALARM  |
| ☐                          | FIRE ALARM ANNUNCIATOR PANEL                                       |
| ☐                          | FIRE ALARM CONTROL PANEL   |
| ☐                          | CENTRAL ALARM & CONTROL FACILITY                                   |
| ☐                          | EMERGENCY TELEPHONE  |
| ☐                          | FIRE ALARM MAGNETIC DOOR HOLD OPEN DEVICE                          |
| ☐                          | FIRE ALARM CONNECTION TO PRESSURE SWITCH                           |
| ☐                          | FIRE ALARM CONNECTION TO FLOW SWITCH                               |
| ☐                          | FIRE ALARM CONNECTION TO TAMPER SWITCH                             |
| ☐                          | FIRE ALARM CONNECTION TO LEVEL SWITCH                              |
| ☐                          | END OF LINE RESISTOR   |
| ☐                          | FIRE ALARM CONTROL MODULE  |
| ☐                          | FIRE ALARM MONITOR MODULE  |
| ☐                          | FIRE ALARM FAULT ISOLATION MODULE                                  |
| ☐                          | FIRE ALARM RELAY   |
| ☐                          | CEILING MOUNTED SPEAKER  |
| ☐                          | WALL MOUNTED SPEAKER   |
| ☐                          | CEILING MOUNTED HORN SPEAKER                                       |
| ☐                          | WALL MOUNTED HORN SPEAKER  |
| ☐                          | WALL MOUNTED EXIT SIGN   |
| ☐                          | WALL MOUNTED EXIT SIGN WITH DIRECTIONAL ARROWS DOUBLE SIDED        |
| RE                         | REMOVE EXISTING DEVICE   |
| WP                         | WEATHERPROOF   |
| EP                         | EXPLOSION PROOF  |

| DRAWING LIST |   |
|--------------|---|
| DWG. NO.     | DESCRIPTION   |
| G000         | KEY PLAN AND DRAWING LIST   |
| E100         | EXISTING & NEW FIRE ALARM PLAN POLLUTION EQUIPMENT, STORES AND WORKSHOPS BUILDING |
| E101         | EXISTING FIRE ALARM - BUOY MAINTENANCE  |
| E102         | NEW FIRE ALARM - BUOY MAINTENANCE BUILDING  |
| E103         | NEW P/A SYSTEM POLLUTION CONTROL, STORES AND BUOY MAINTENANCE BUILDING            |
| E104         | NEW P/A SYSTEM ADMIN BUILDING, HELICOPTER HANGAR AND WORKSHOPS BUILDING           |
| E500         | FIRE ALARM DETAILS  |
| M001         | SITE PLAN - MECHANICAL  |
| M101         | MECHANICAL AUDIT LOCATIONS  |
| M102         | MECHANICAL AUDIT PHOTOS & DETAILS   |



| Revision/ | Description/Description | Date/Date  |
|-----------|-------------------------|------------|
| 1         | ISSUED FOR TENDER       | 2017/01/27 |

Client/client  
**DEPARTMENT OF FISHERIES AND OCEANS CANADA**  
9860 WEST SAANICH ROAD  
SIDNEY B.C.

Project title/Titre du projet  
**VICTORIA COAST GUARD BASE  
25 HURON ST. VICTORIA, B.C.**

**LIFE SAFETY REFURBISHMENTS**

Designed by/Concept par  
**AD**

Drawn by/Dessiné par  
**AG**  
DFO Project Manager/Administrateur de Projets  
**RANDY BURGIN**

Regional Manager, Architectural and Engineering Services  
Gestionnaire régional, Services d'architecture et de génie, TPSGC

Drawing title/Titre du dessin

**KEY PLAN AND DRAWING LIST**

| Project No./No. du projet | Sheet/Feuille | Revision no./La Révision no. |
|---------------------------|---------------|------------------------------|
| F1700-164451              | <b>G000</b>   | <b>1</b>                     |
|                           | 1 OF 10       |                              |

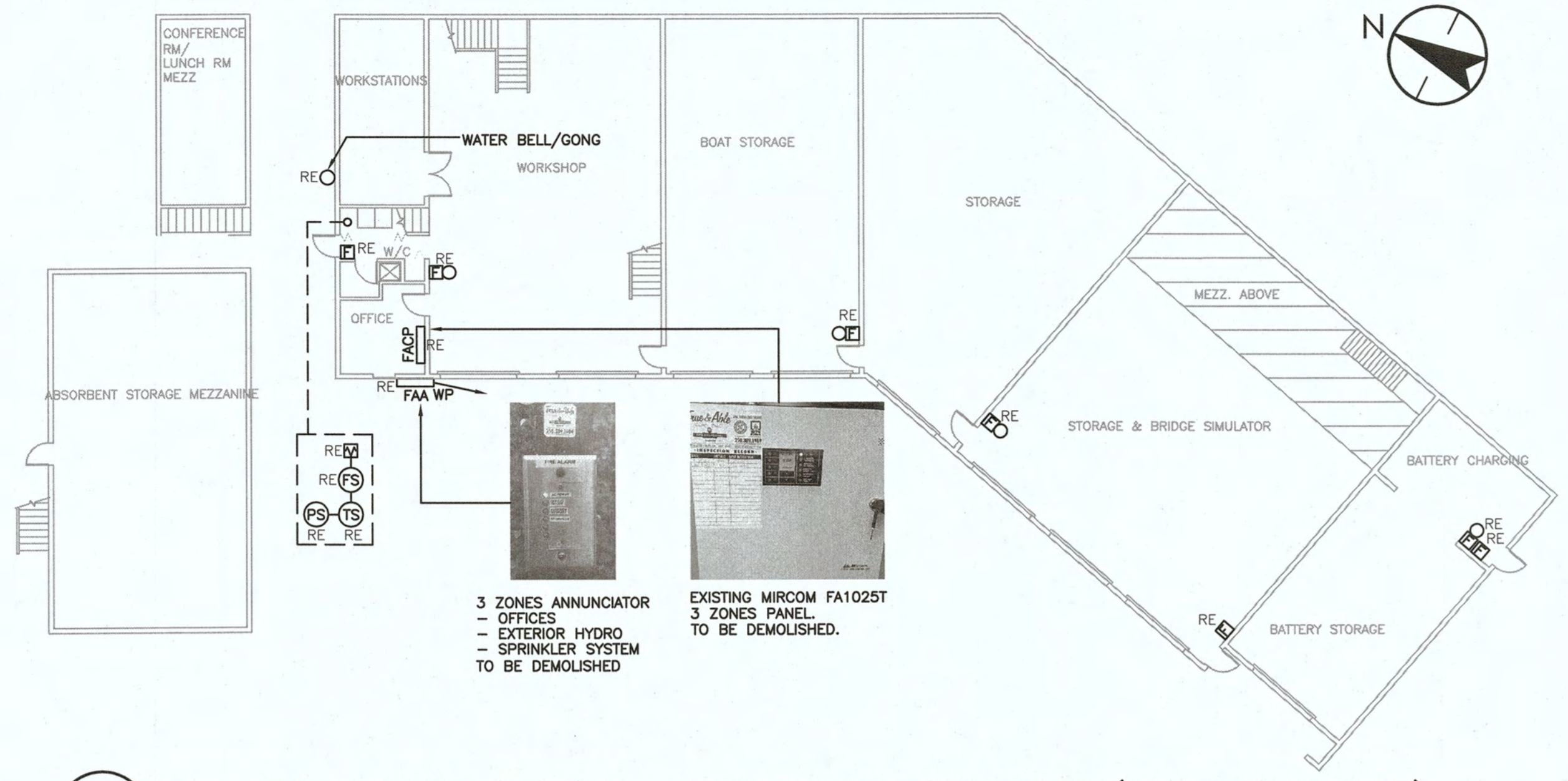




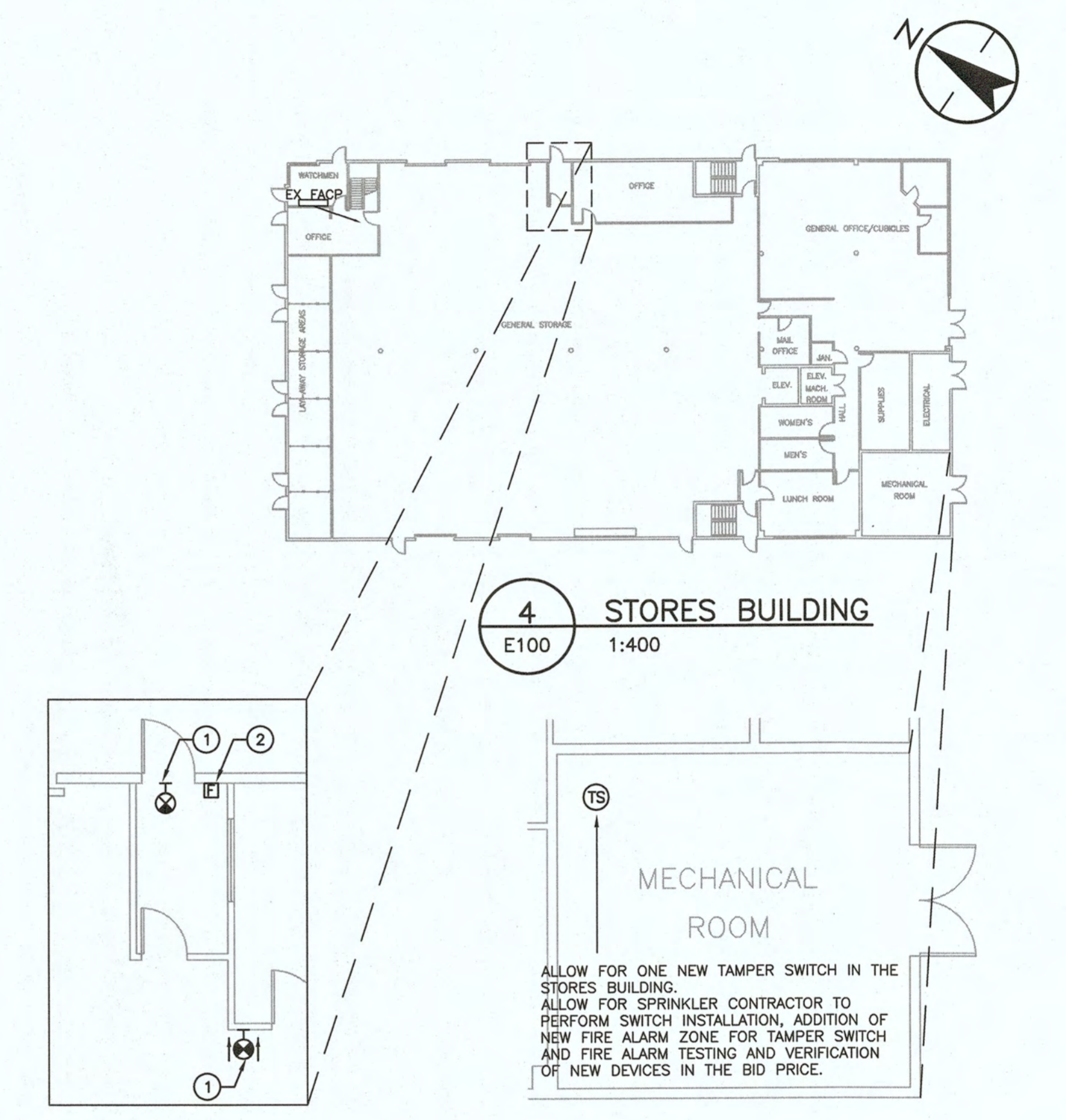
Stantec Consulting Ltd.  
www.stantec.com  
STANTEC PROJECT NO: 115615358 - PHASE 2

| DRAWING NOTES |  |
|---------------|--|
| 1.            | CONTRACTOR TO INSTALL THE NEW SYSTEM AS SHOWN ON THE DRAWINGS. BEFORE DE-COMMISSIONING THE EXISTING SYSTEM, WHERE THERE IS AN OVERLAP BETWEEN THE INSTALLATION AND THE DE-COMMISSIONING, PROVIDE FIRE WATCH. RETAIN SERVICE OF A COMMISSIONAIRE. THE BUILDING SHALL BE PROTECTED AT ALL TIMES. |
| 2.            | ALL WIRING MUST BE INSTALLED INSIDE EMT CONDUITS (MINIMUM 21mm), SURFACE MOUNT IS ACCEPTABLE IN THE WORKSHOPS, STORAGE ROOMS AND SERVICE ROOMS. COLOR CODE 'RED' ALL CONDUITS AND BOXES.   |
| 3.            | DEMOLISH THE EXISTING F.A. SYSTEM. UPON COMPLETION AND VERIFICATION OF THE NEW SYSTEM REMOVE ALL PANELS, DEVICES, WIRES & CONDUITS AND DISPOSE. PATCH AND REPAIR TO MATCH EXISTING SURFACES & FINISHES, INCLUDING PAINT.   |
| 4.            | CONTRACTOR SHALL PROVIDE 2 COPIES OF EACH F.A.P. SPECIFIC SOFTWARE ALONG WITH O&M MANUALS. THE OWNER SHALL HAVE FULL ACCESS TO THE PANEL'S SOFTWARE c/w SOFTWARE COPY PROVIDED ON A DISC.  |

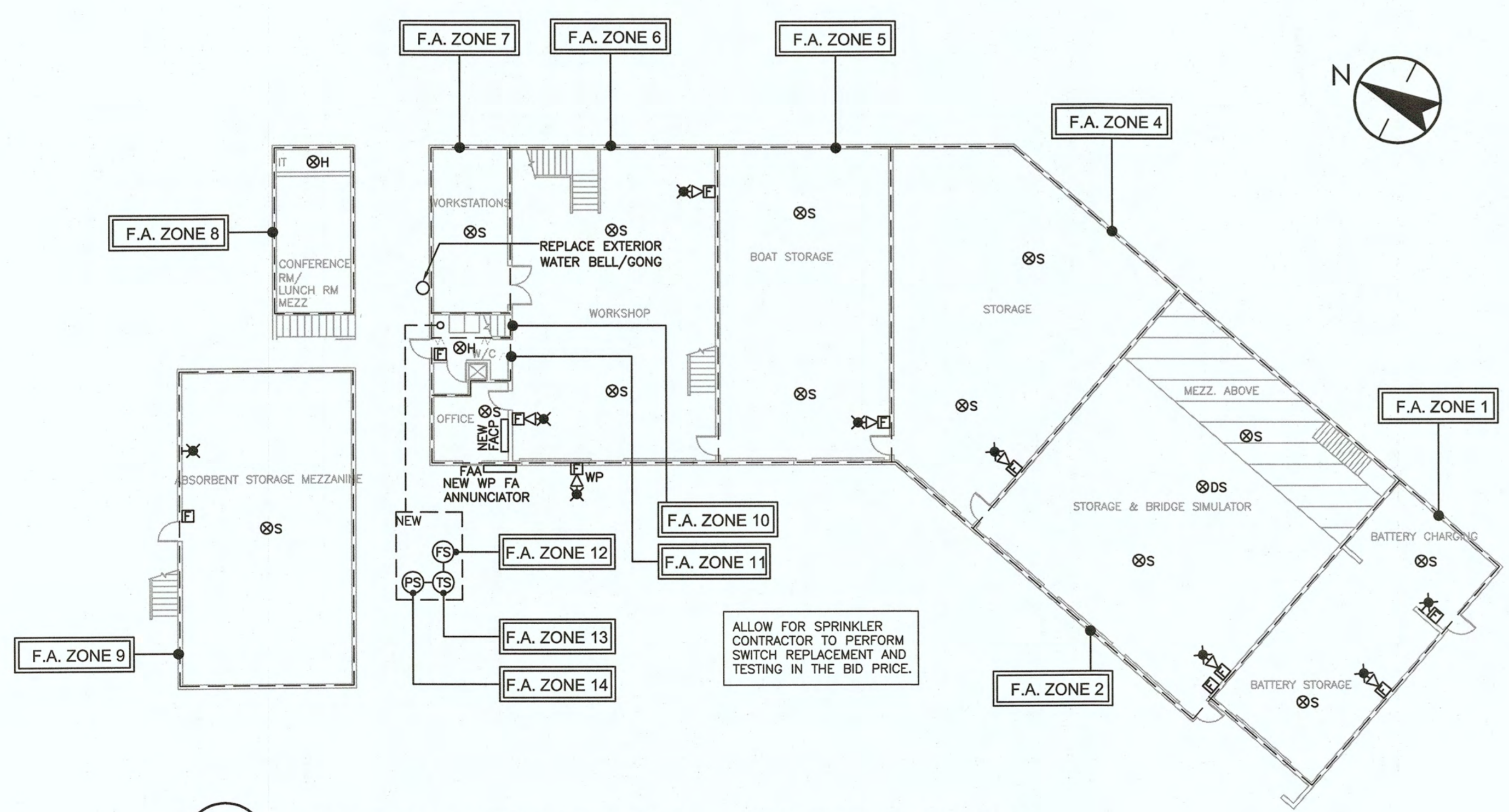
| KEY NOTES |  |
|-----------|--|
| 1.        | CONTRACTOR TO SUPPLY AND INSTALL NEW "GREEN RUNNING MAN" PICTOGRAM EXIT SIGN. EXIT SIGN TO BE SELF-POWERED WITH A 90 MINUTE RUN TIME. FEED EXIT SIGN FROM LOCAL EXIT SIGN CIRCUIT. MINIMUM #12AWG CU IN 3/4" EMT CONDUIT. EXIT SIGN SHALL MEET THE REQUIREMENTS OF CSA 22.2 No.141 STANDARD. |
| 2.        | CONTRACTOR TO INCLUDE COST OF VERIFICATION OF THE NEW FIRE ALARM DEVICE IN THE BID PRICE. EXISTING SYSTEM IS SIEMENS 250 ADDRESSABLE PANEL LOCATED IN THE COMMISSIONAIRE'S OFFICE.   |



1 POLLUTION CONTROL BUILDING - EXISTING FIRE ALARM PLAN (TO BE DEMOLISHED)  
E100 1:200

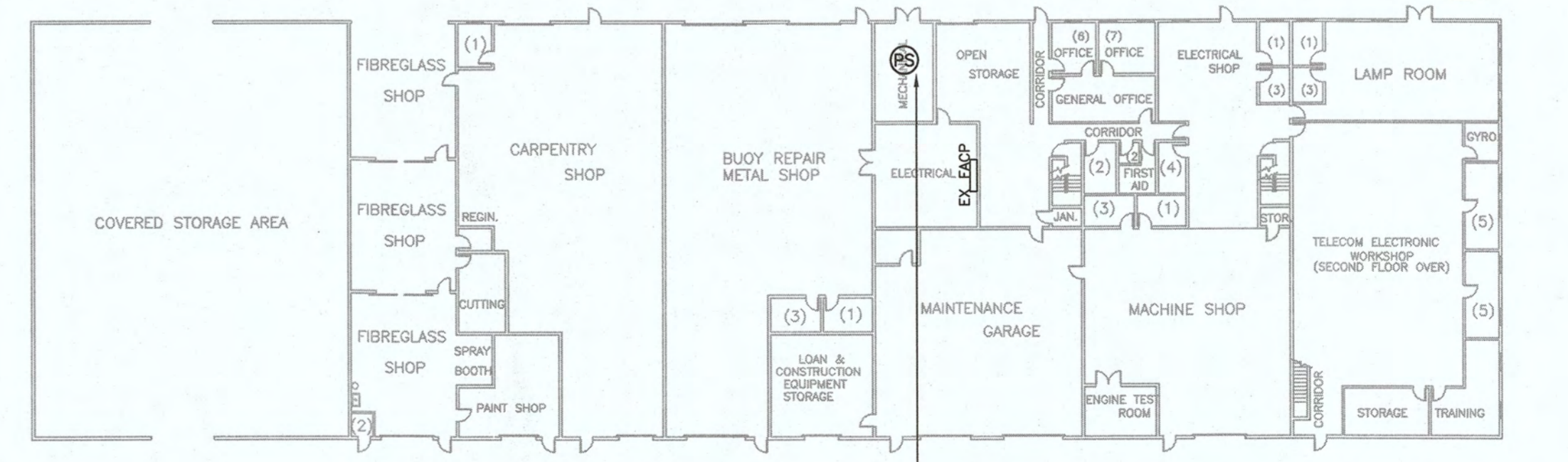


4 STORES BUILDING  
E100 1:400

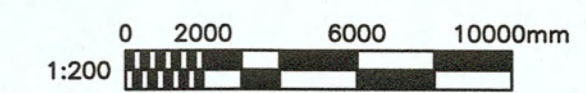


2 POLLUTION CONTROL BUILDING - NEW FIRE ALARM PLAN  
E100 1:200

5 STORES BUILDING AREA OF WORK  
E100 1:100



3 WORKSHOPS BUILDING  
E100 1:400



| Revision/ | Description/Description | Date/Date  |
|-----------|-------------------------|------------|
| 1         | ISSUED FOR TENDER       | 2017/01/27 |

DEPARTMENT OF FISHERIES AND OCEANS CANADA  
9860 WEST SAANICH ROAD  
SIDNEY B.C.

Project title/Titre du projet  
VICTORIA COAST GUARD BASE  
25 HURON ST. VICTORIA, B.C.

LIFE SAFETY REFURBISHMENTS

Consultant Signature Only  
Designed by/Concept par  
AD  
Drawn by/Dessiné par  
AG  
DFO Project Manager/Administrateur de Projets  
RANDY BURGIN  
Regional Manager, Architectural and Engineering Services  
Gestionnaire régionale, Services d'architectural et de génie, TPSCC

EXISTING & NEW FIRE ALARM PLAN  
POLLUTION EQUIPMENT, STORES AND  
WORKSHOPS BUILDING

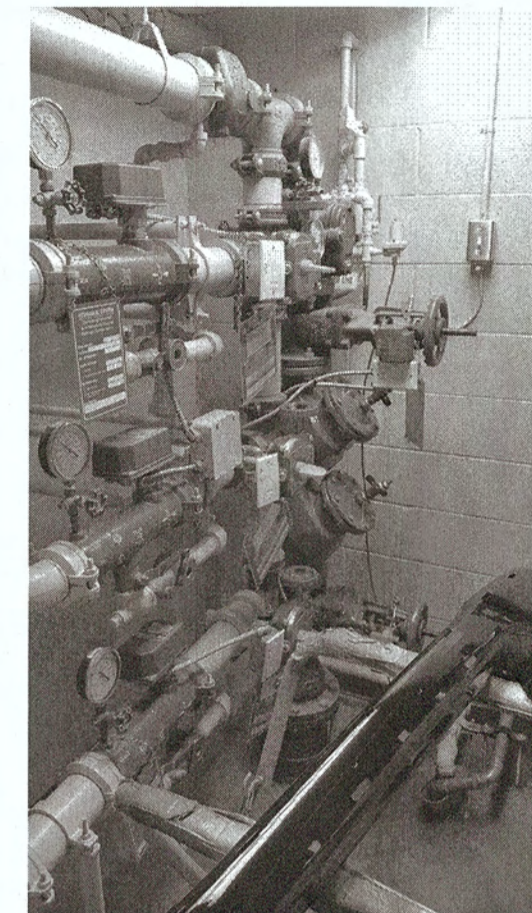
| Project No./No. du projet | Sheet/Feuille   | Revision no./La Révision no. |
|---------------------------|-----------------|------------------------------|
| F1700-164451              | E100<br>2 OF 10 | 1                            |



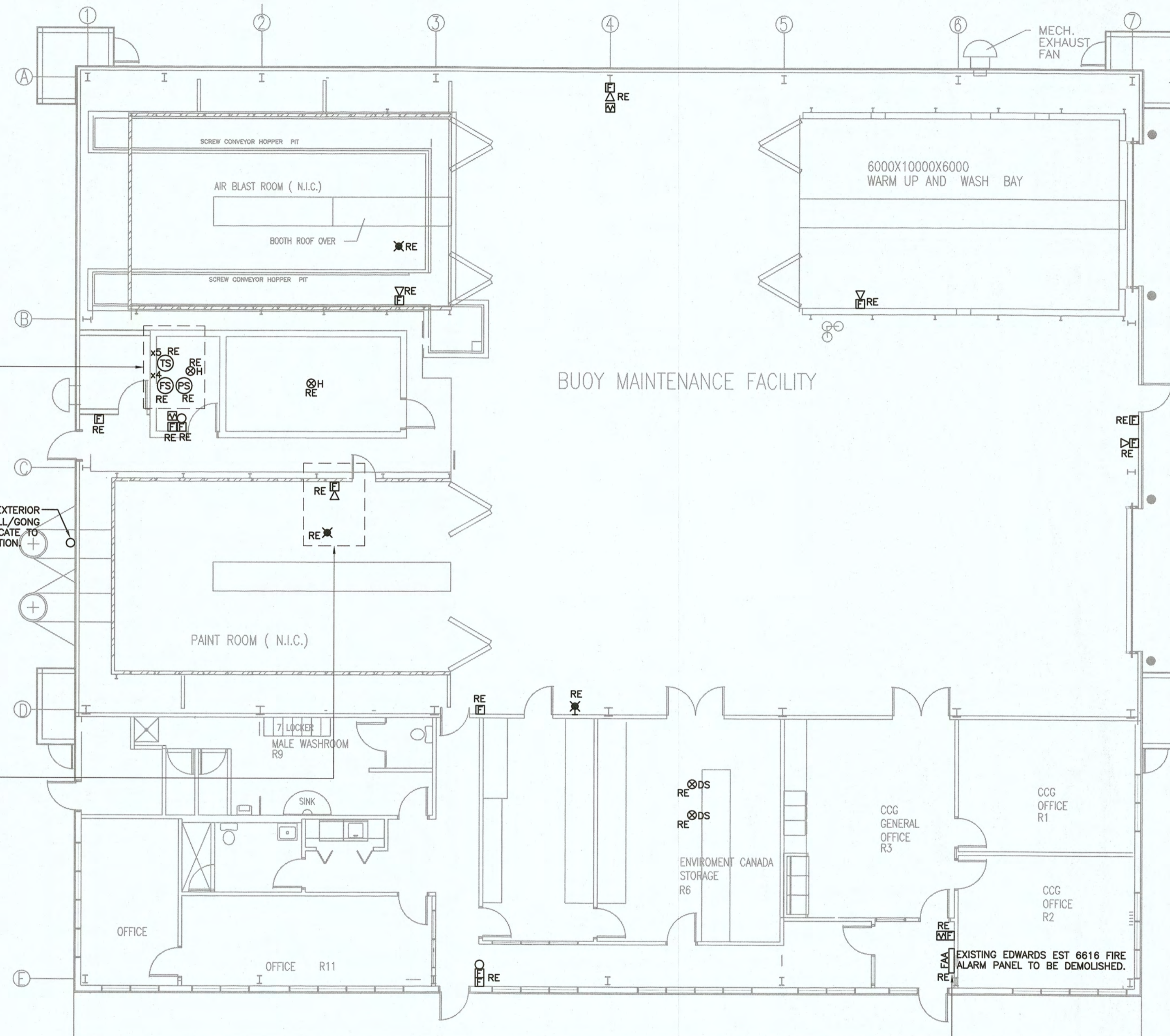


Stantec Consulting Ltd.  
www.stantec.com  
STANTEC PROJECT NO: 115615358 - PHASE 2

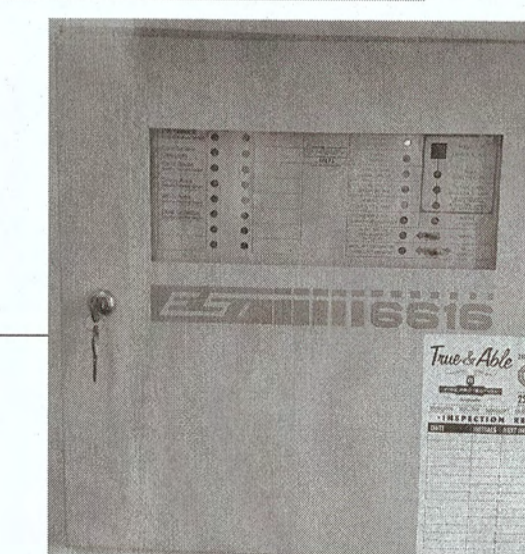
| DRAWING NOTES |   |
|---------------|---|
| 1.            | DEMOLISH THE EXISTING F.A. SYSTEM. UPON COMPLETION AND VERIFICATION OF THE NEW SYSTEM PULL ALL WIRES & CONDUITS AND DISPOSE. PATCH AND REPAIR TO MATCH EXISTING SURFACES & FINISHES, INCLUDING PAINT.   |
| 2.            | CONTRACTOR TO HAND OVER ALL REMOVED FIRE ALARM DEVICES TO THE OWNER, WHERE DIRECTED. ALLOW FOR DISPOSAL OF ANY DEVICES/PANELS WHERE OWNER DOES NOT WANT TO RETAIN. CREATE INVENTORY FOR THE OWNERS REVIEW PRIOR TO THE DISPOSAL OF THE DEVICES. |



REPLACE EXTERIOR WATER BELL/GONG AND RELOCATE TO NEW LOCATION.



1 EXISTING FIRE ALARM PLAN (TO BE DEMOLISHED)  
E101 1:200



| Revision/Revision | Description/Description | Date/Date  |
|-------------------|-------------------------|------------|
| 1                 | ISSUED FOR TENDER       | 2017/01/27 |

Client/client: DEPARTMENT OF FISHERIES AND OCEANS CANADA  
9860 WEST SAANICH ROAD  
SIDNEY B.C.

Project title/Titre du projet: VICTORIA COAST GUARD BASE  
25 HURON ST. VICTORIA, B.C.

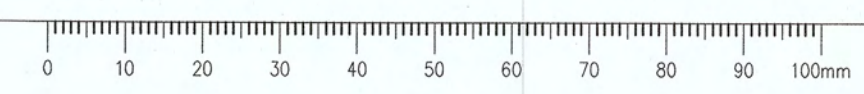
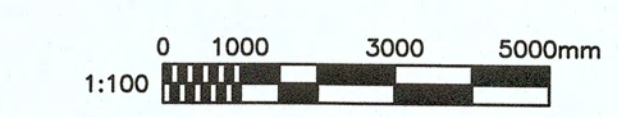
LIFE SAFETY REFURBISHMENTS

Consultant Signature Only  
Designed by/Concept par: AD  
Drawn by/Dessine par: AG  
DFO Project Manager/Administrateur de Projets: RANDY BURGIN  
Regional Manager, Architectural and Engineering Services / Gestionnaire régionale, Services d'architecture et de génie, TPSCC

EXISTING FIRE ALARM BUOY MAINTENANCE BUILDING

| Project No./No. du projet | Sheet/Feuille | Revision no./La Révision no. |
|---------------------------|---------------|------------------------------|
| F1700-164451              | E101          | 1                            |

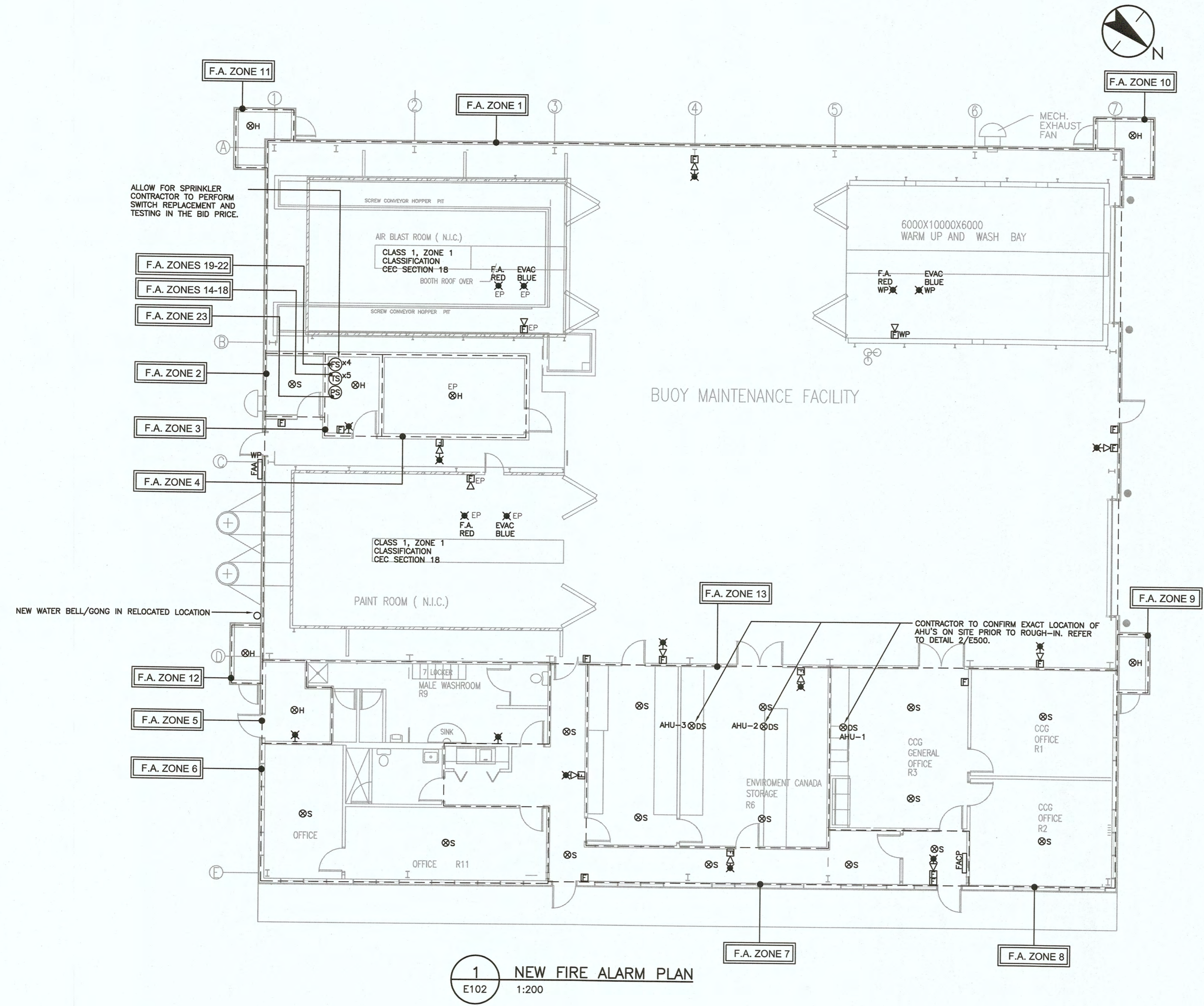
3 OF 10





Stantec Consulting Ltd.  
www.stantec.com  
STANTEC PROJECT NO: 115615358 - PHASE 2

| DRAWING NOTES |  |
|---------------|--|
| 1.            | CONTRACTOR TO INSTALL THE NEW SYSTEM AS SHOWN ON THE DRAWINGS. BEFORE DE-COMMISSIONING THE EXISTING SYSTEM, WHERE THERE IS AN OVERLAP BETWEEN THE INSTALLATION AND THE DE-COMMISSIONING, PROVIDE FIRE WATCH. RETAIN SERVICE OF A COMMISSIONAIRE. THE BUILDING SHALL BE PROTECTED AT ALL TIMES. |
| 2.            | ALL WIRING MUST BE INSTALLED INSIDE EMT CONDUITS (MINIMUM 21mm), SURFACE MOUNT IS ACCEPTABLE IN THE WORKSHOPS, STORAGE ROOMS AND SERVICE ROOMS. COLOR CODE 'RED' ALL CONDUITS AND BOXES.   |
| 3.            | CONTRACTOR SHALL PROVIDE 2 COPIES OF EACH F.A.P. SPECIFIC SOFTWARE ALONG WITH O&M MANUALS. THE OWNER SHALL HAVE FULL ACCESS TO THE PANEL'S SOFTWARE c/w SOFTWARE COPY PROVIDED ON A DISC.  |



| Revision/Revision | Description/Description | Date/Date  |
|-------------------|-------------------------|------------|
| 1                 | ISSUED FOR TENDER       | 2017/01/27 |

**DEPARTMENT OF FISHERIES AND OCEANS CANADA**  
9860 WEST SAANICH ROAD  
SIDNEY B.C.

Project title/Titre du projet  
**VICTORIA COAST GUARD BASE**  
25 HURON ST. VICTORIA, B.C.

**LIFE SAFETY REFURBISHMENTS**

Consultant Signature Only

Designed by/Concept par  
**AD**

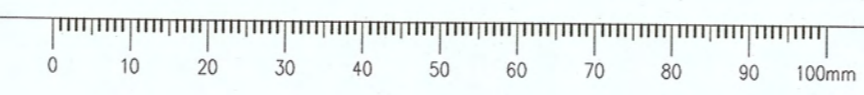
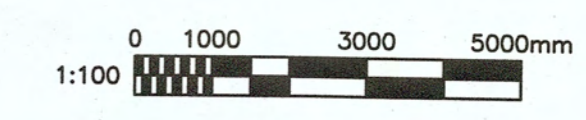
Drawn by/Dessiné par  
**AG**

DFO Project Manager/Administrateur de Projets  
**RANDY BURGIN**

Regional Manager, Architectural and Engineering Services  
Gestionnaire régionale, Services d'architectural et de génie, TPSGC

Drawing title/Titre du dessin  
**NEW FIRE ALARM**  
**BUOY MAINTENANCE BUILDING**

|  |   |  |
|--|---|--|
| Project No./No. du projet<br><b>F1700-164451</b> | Sheet/Feuille<br><b>E102</b><br>4 OF 10 | Revision no./<br>no. de révision<br><b>1</b> |
|--|---|--|





Stantec Consulting Ltd.  
www.stantec.com  
STANTEC PROJECT NO: 115615358 - PHASE 2



|               |                         |            |
|---------------|-------------------------|------------|
| 1             | ISSUED FOR TENDER       | 2017/01/27 |
| Revision/     | Description/Description | Date/Date  |
| Client/client |                         |            |

**DEPARTMENT OF FISHERIES AND OCEANS CANADA**  
9860 WEST SAANICH ROAD  
SIDNEY B.C.

Project title/Titre du projet  
**VICTORIA COAST GUARD BASE  
25 HURON ST. VICTORIA, B.C.**

**LIFE SAFETY REFURBISHMENTS**

Consultant Signature Only

Designed by/Concept par  
**AD**

Drawn by/Dessiné par  
**AG**

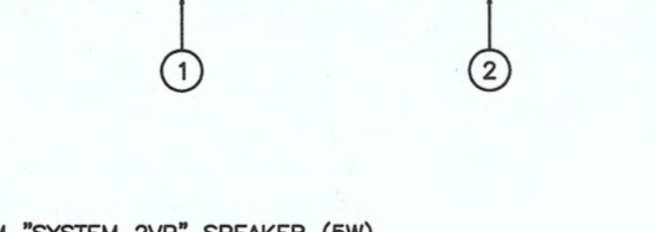
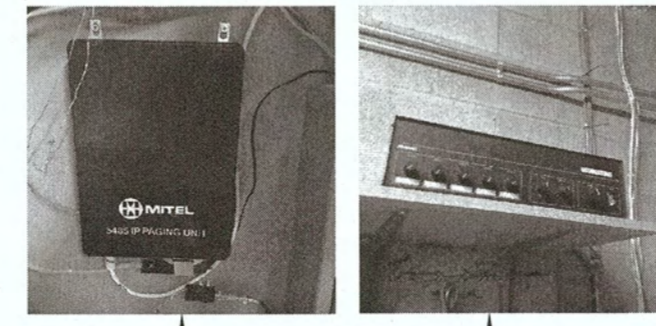
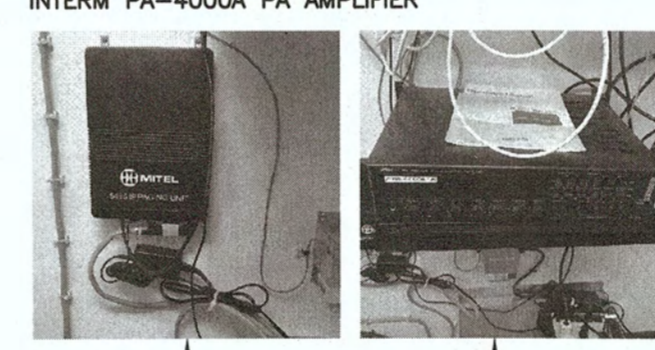
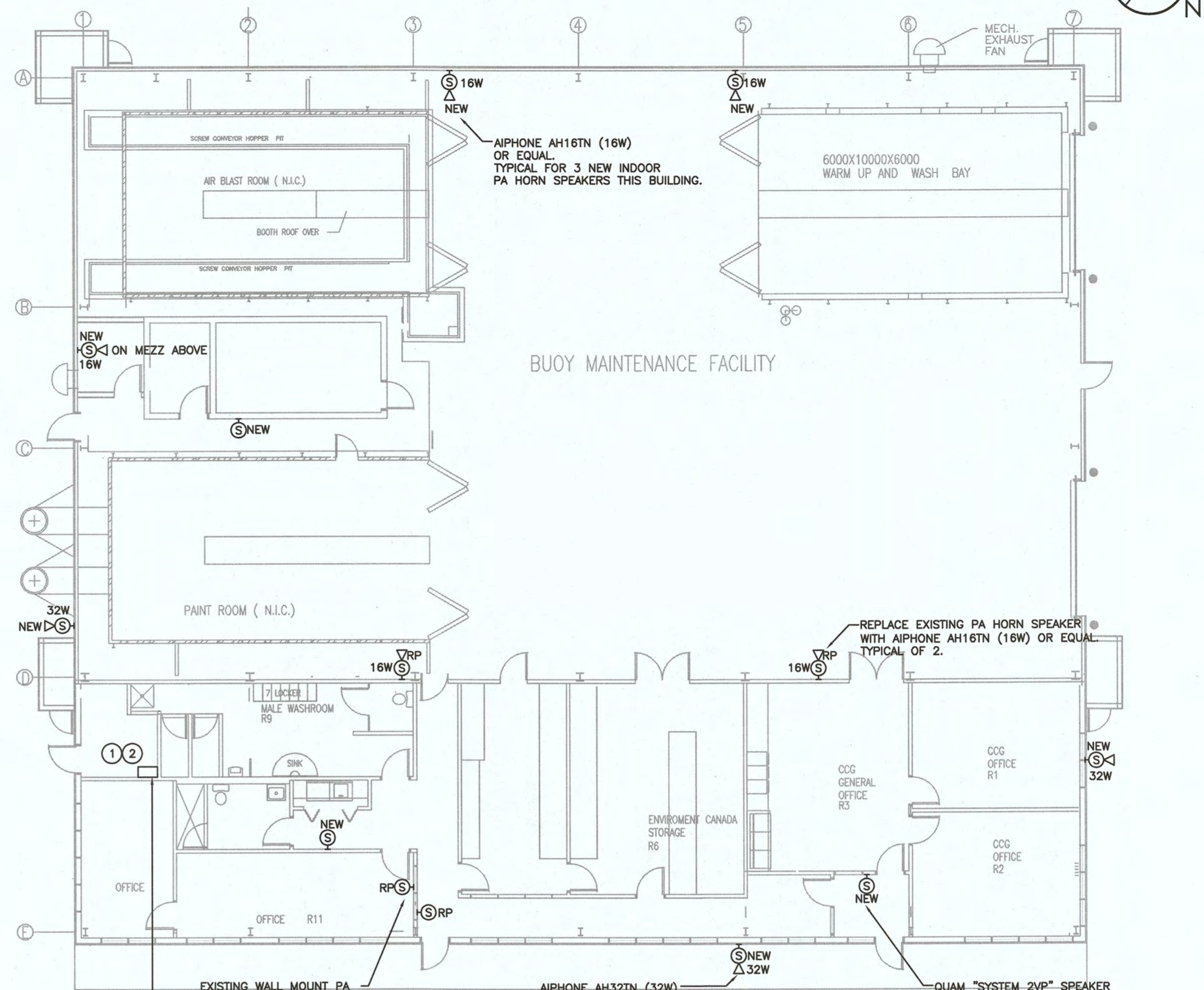
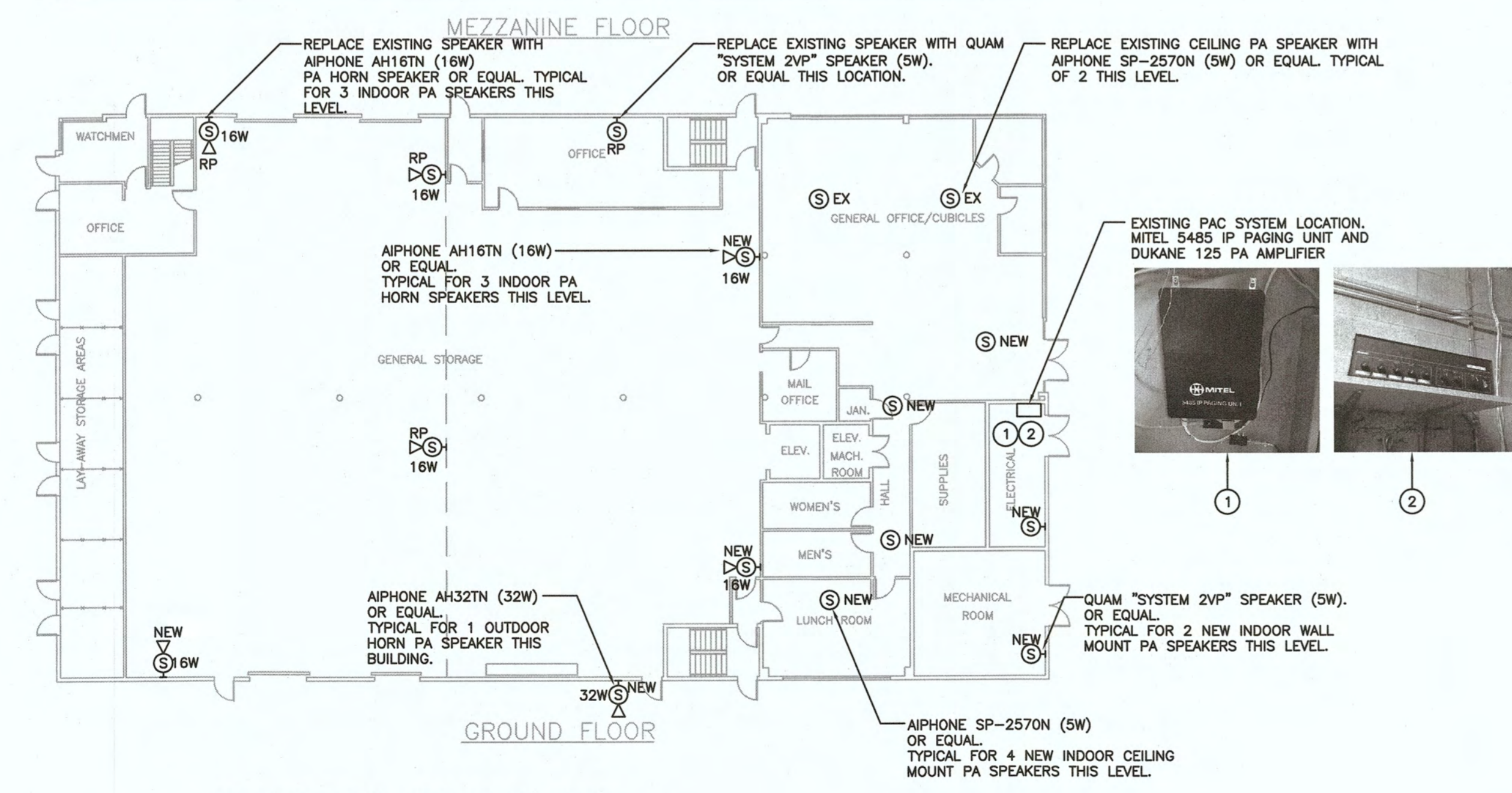
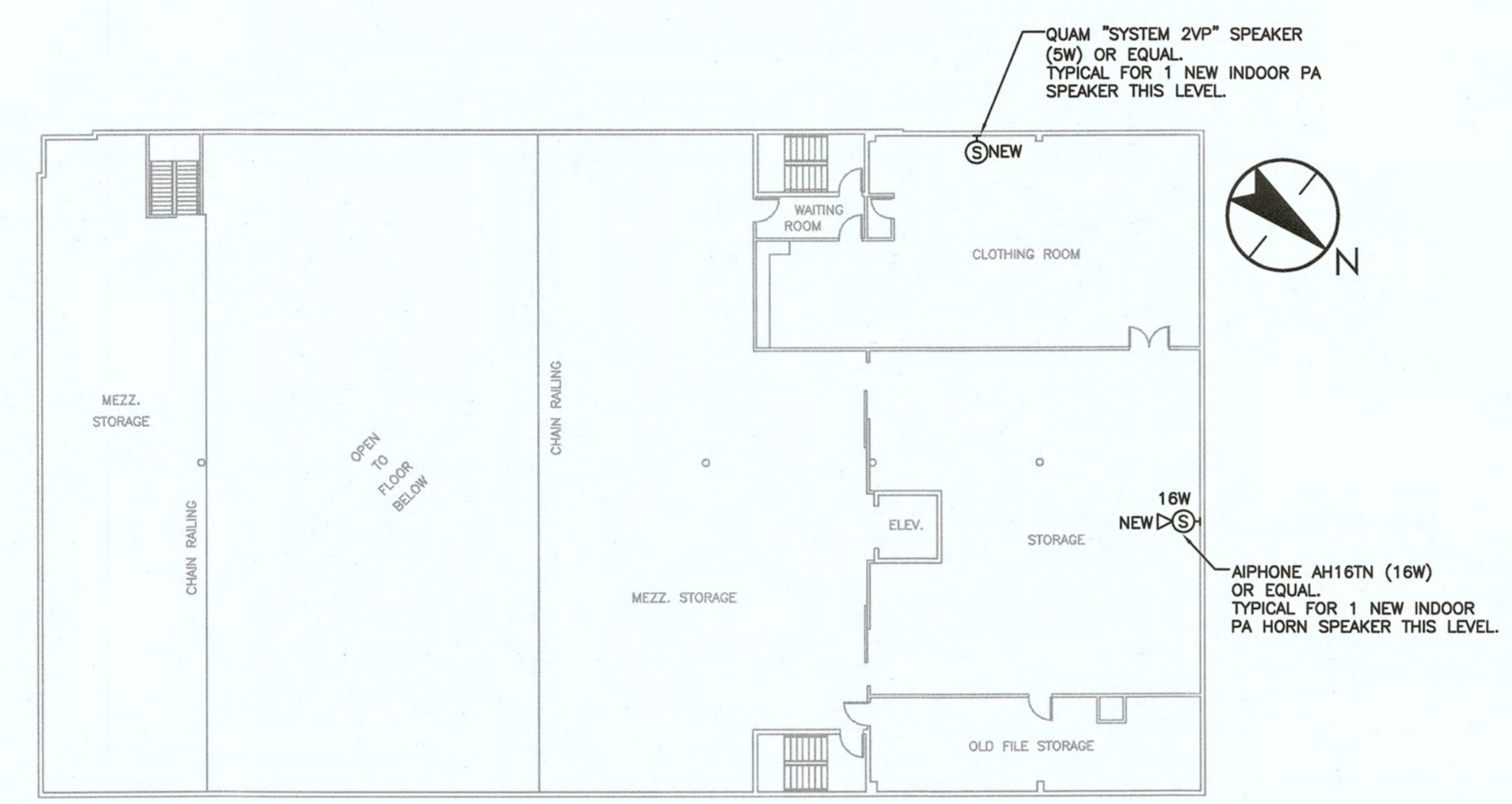
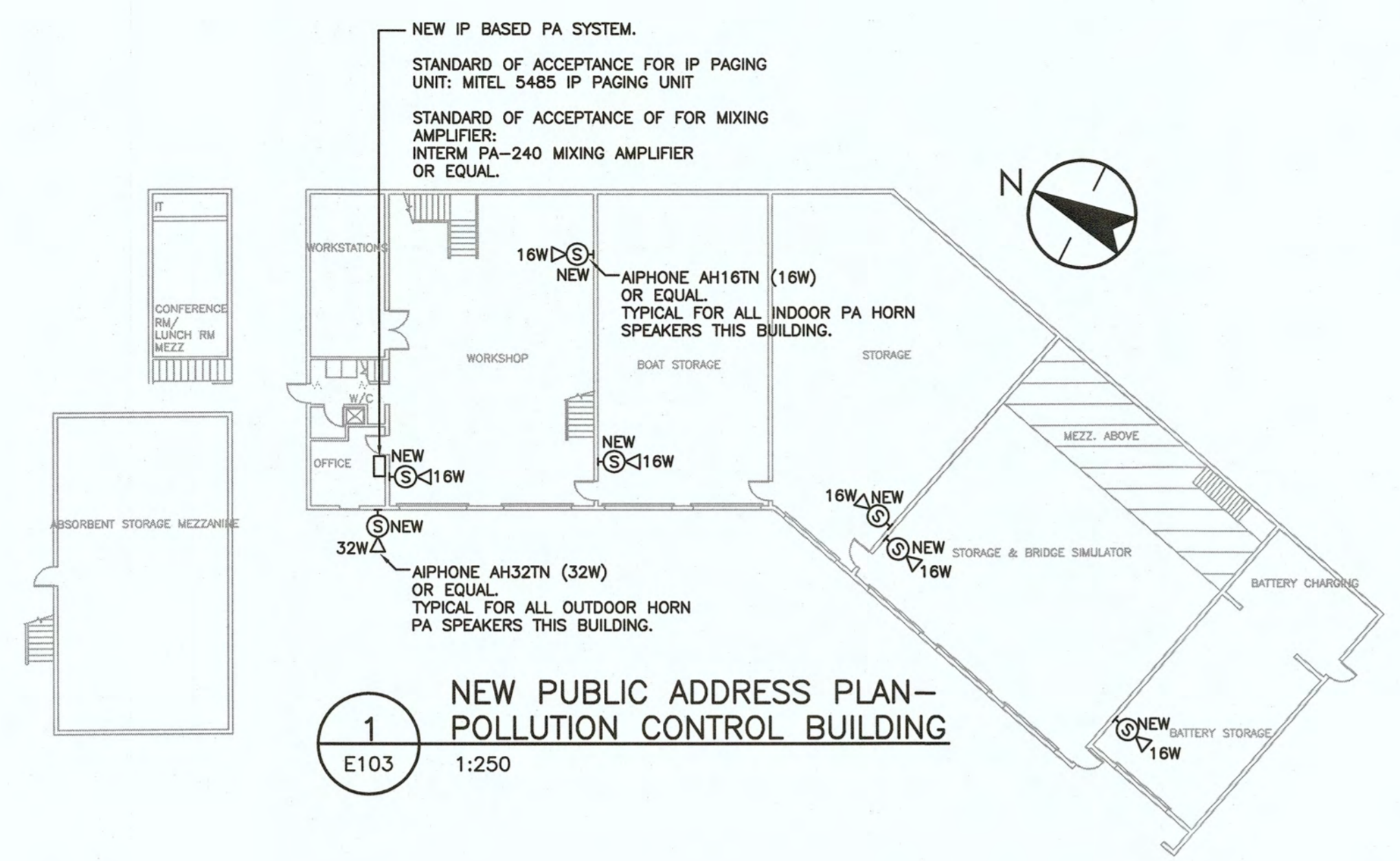
DFO Project Manager/Administrateur de Projets  
**RANDY BURGIN**

Regional Manager, Architectural and Engineering Services  
Gestionnaire régional, Services d'architectural et de génie, TP50C

Drawing title/Titre du dessin

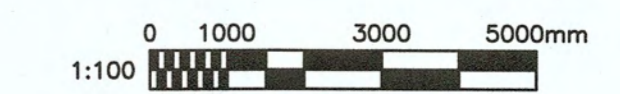
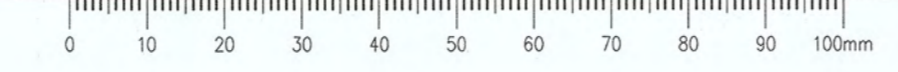
**NEW P/A SYSTEM POLLUTION CONTROL, STORES AND BUOY MAINTENANCE BUILDING**

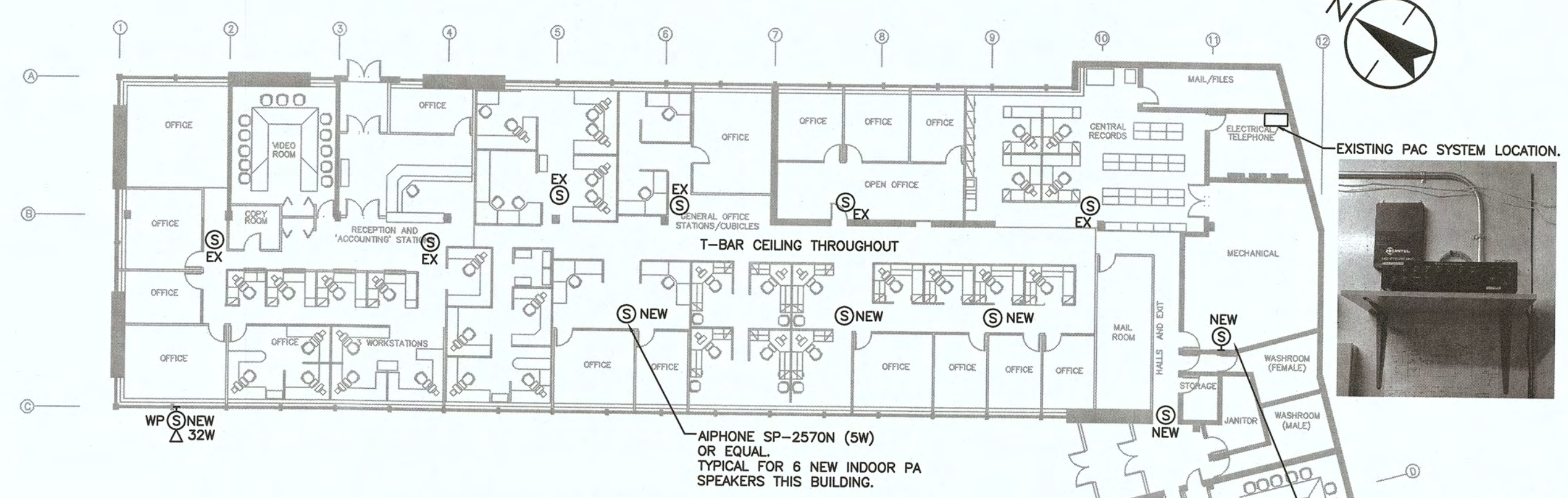
|  |   |  |
|--|---|--|
| Project No./No. du projet<br><b>F1700-164451</b> | Sheet/Feuille<br><b>E103</b><br>5 OF 10 | Revision no./La Révision no.<br><b>1</b> |
|--|---|--|



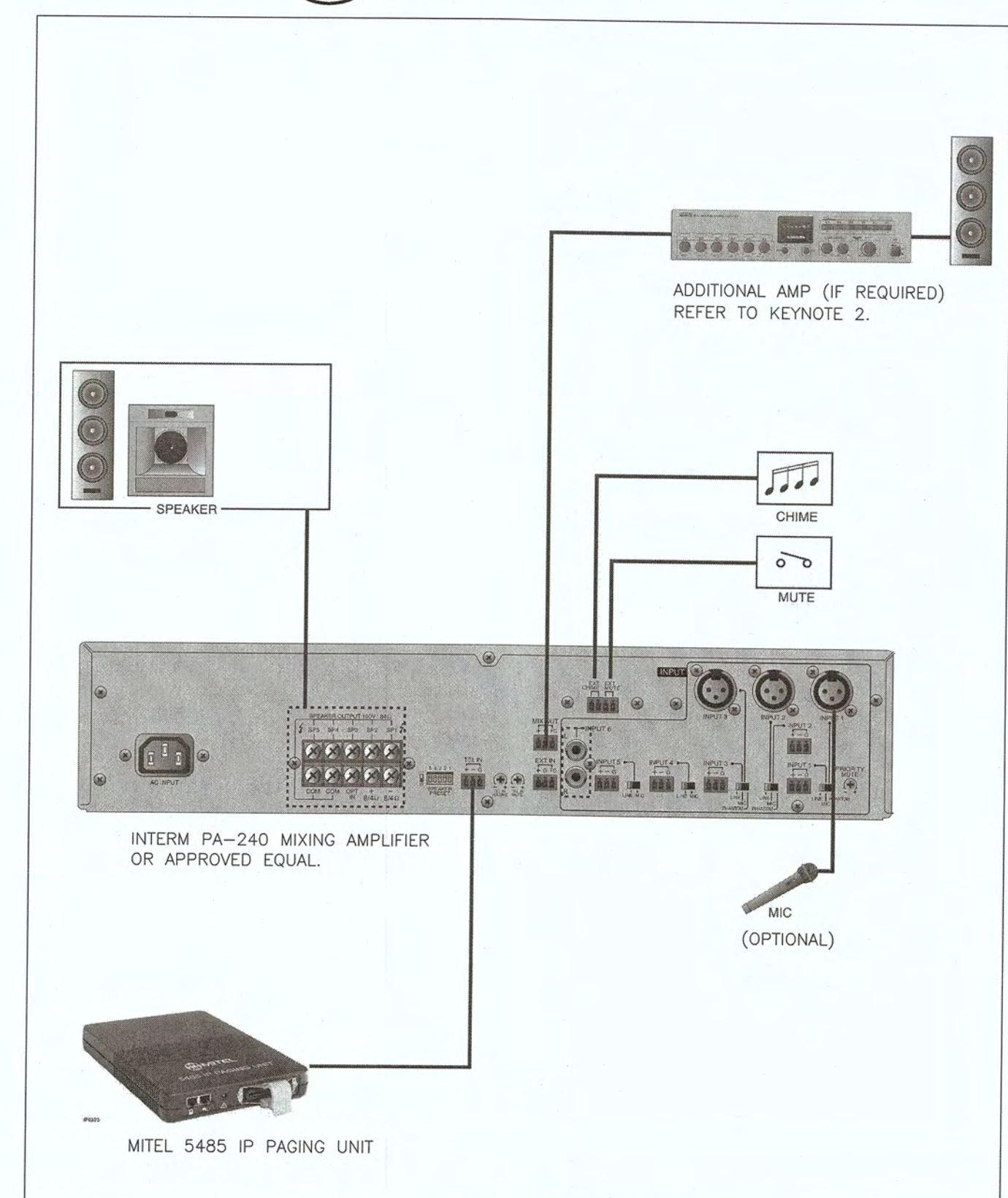
- GENERAL NOTES:**
- EACH BUILDING SHALL BE ON A SEPARATE PUBLIC ADDRESS ZONE.
  - SURFACE MOUNT CONDUIT IS ACCEPTABLE IN THE STORES, WORKSHOPS, SERVICE ROOM'S AND MEZZANINES. ALL NEW WIRING SHALL BE INSTALLED IN EMT CONDUIT. PAINT THE CONDUITS TO MATCH EXISTING WALL COLOR AND COLOR CODE AS PER SPECS.
  - WORKSHOPS BUILDING & POLLUTION CONTROL BUILDING ARE NOT EQUIPPED WITH A PA SYSTEM. CONTRACTOR TO ALLOW FOR NEW FULLY OPERATIONAL SYSTEM TO BE INSTALLED INSIDE THESE BUILDINGS. ALLOW FOR NEW DATA CONNECTION FROM THE EXISTING NETWORK SWITCH TO THE IP UNIT FOR A COMPLETE SYSTEM.
  - STANDARD OF ACCEPTANCE:  
IP UNIT: MITEL 5485  
AMPLIFIER: INTERM PA-240  
16W AND 32W HORN SPEAKER: AIPHONE AH16TN AND AIPHONE AH32TN  
CEILING MOUNTED SPEAKER: AIPHONE SP-2570N  
WALL MOUNTED SPEAKER: QUAM SYSTEM 2VP
  - THE PAGING SYSTEM LAYOUT IS DIAGRAMMATIC ONLY. CONTRACTOR TO SUBMIT DETAILED LAYOUT AND RISER AS PART OF THE SHOP DRAWING SUBMITTALS FOR APPROVAL PRIOR TO ORDERING THE MATERIALS.
  - MOUNT EXTERIOR HORN SPEAKER AT +12' A.F.F.
  - MOUNT INTERIOR HORN SPEAKERS AT HEIGHTS TO MATCH EXISTING WALL MOUNTED SPEAKERS. WHERE CEILING IS ABOVE 16' HIGH, INSTALL AT +12' AFF ON THE INTERIOR WALLS. FOR BUILDINGS WITH CEILING HEIGHT BETWEEN 8' TO 10', MOUNT 6" BELOW FINISHED CEILING.

- KEY NOTES:**
- EXISTING MITEL IP PAGING UNITS TO BE MAINTAINED, ALLOW FOR TROUBLESHOOTING & REPROGRAMMING WHERE NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM.
  - REPLACE EXISTING PA AMPLIFIERS WITH INTERM PA-240, OR EQUAL. TYPICAL FOR ALL EXISTING PA SYSTEMS IN THE BUILDINGS. ALLOW FOR AMP EXPANSION WHERE SYSTEM INPUT EXCEEDS RATED SYSTEM OUTPUT. ADD POWER & CAT 6 DATA DROP BESIDE EACH PA AMPLIFIER LOCATION. SPECIFY APC 1000VA UPS BESIDE EACH UNIT FOR POWER BACKUP.





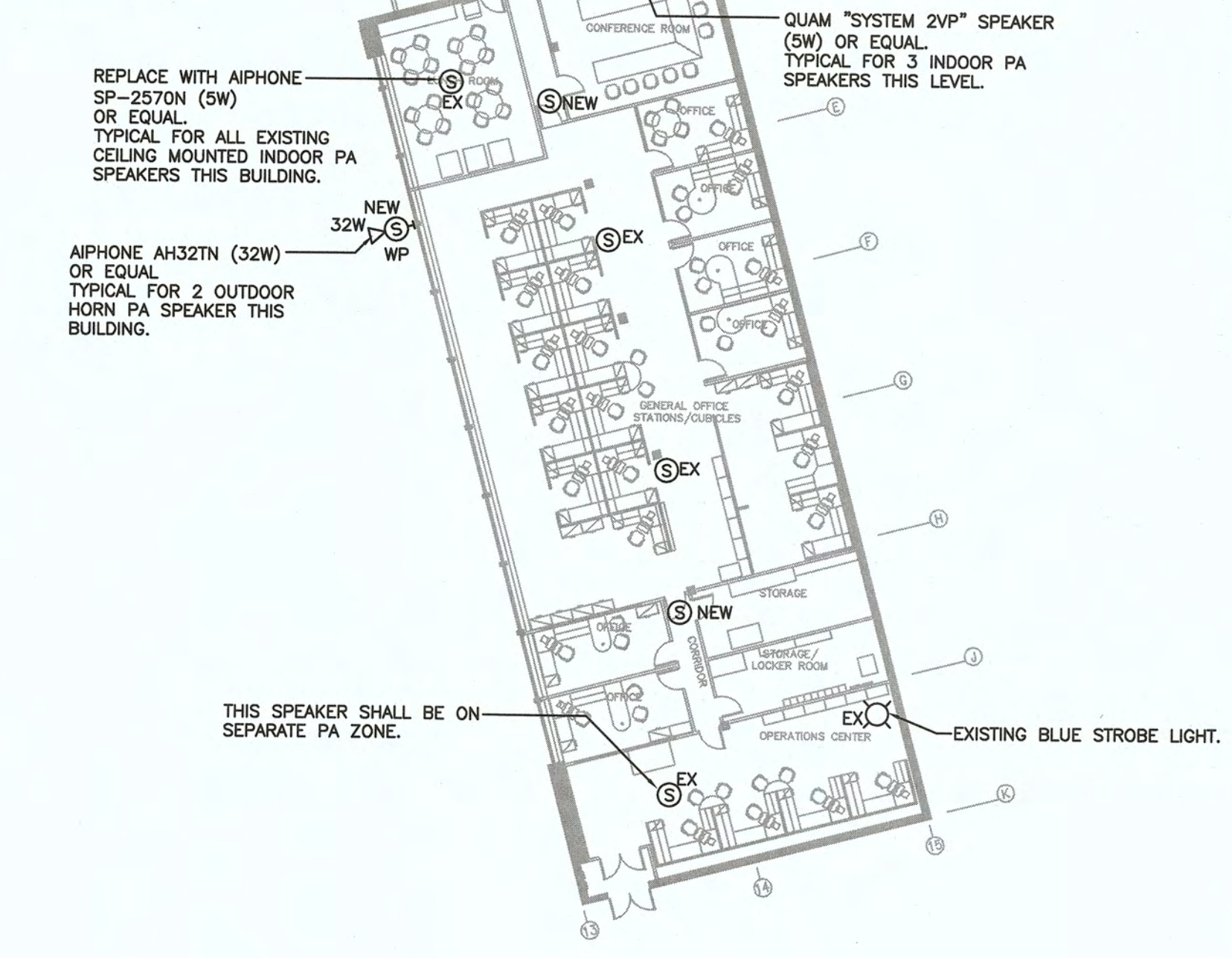
**1**  
 NEW PUBLIC ADDRESS PLAN-  
 ADMIN BUILDING  
 E104 1:250



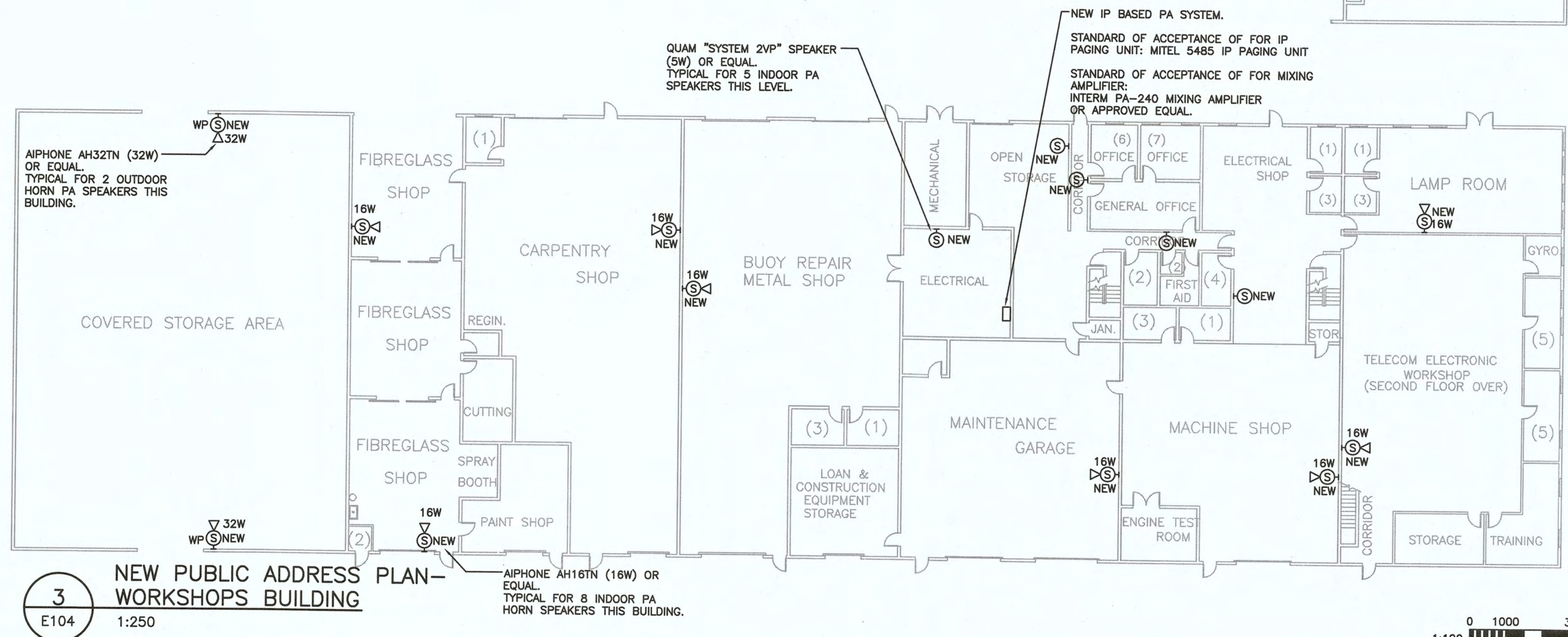
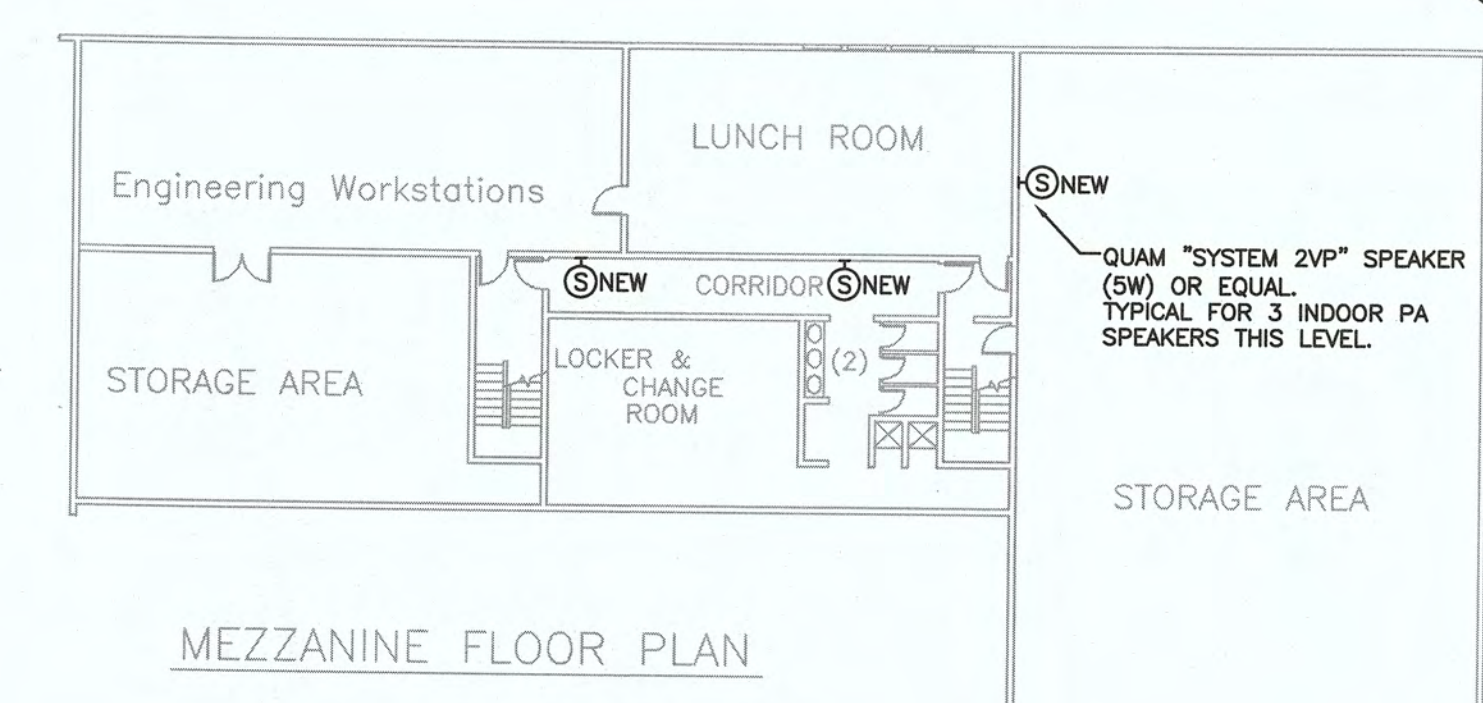
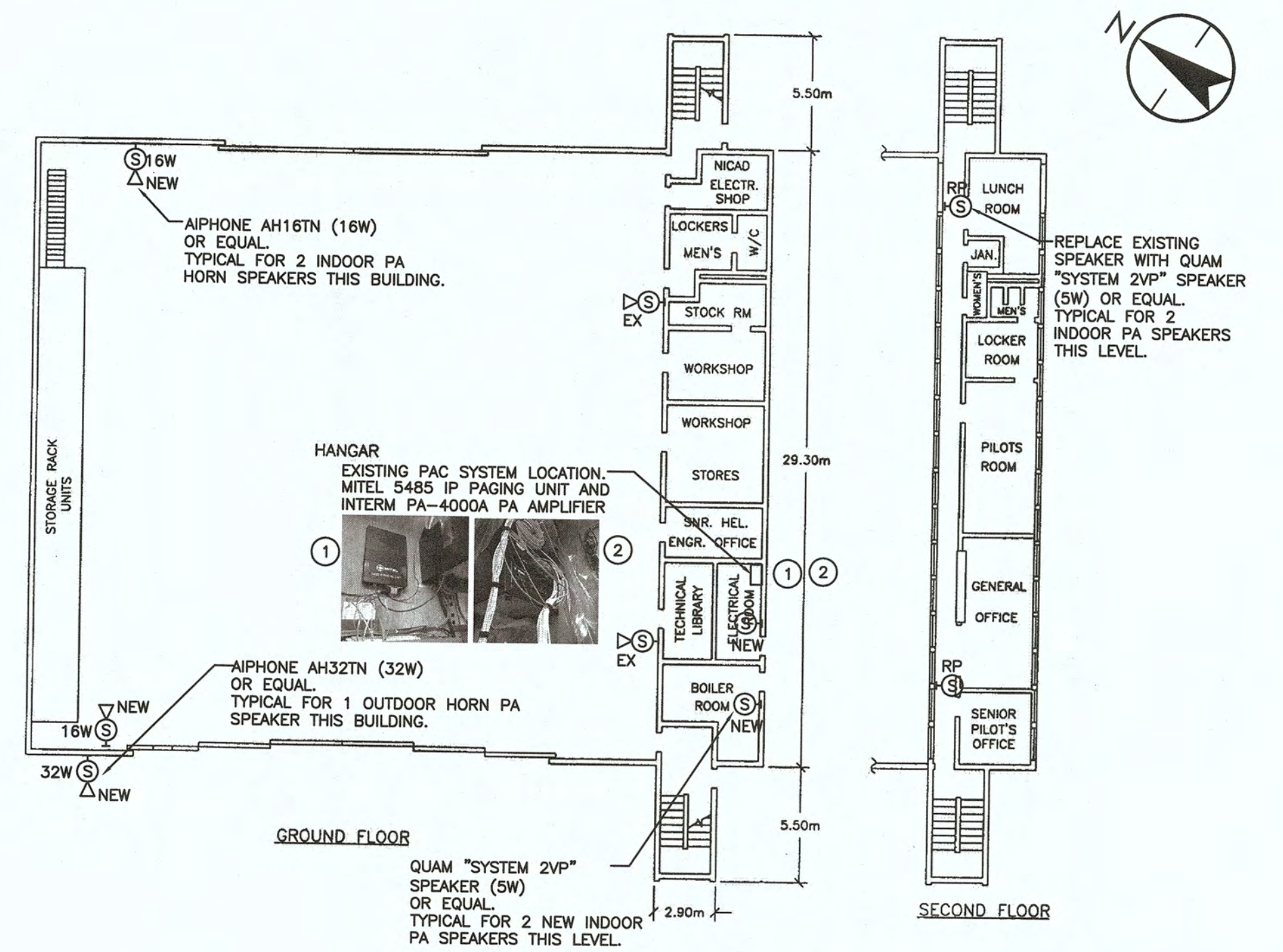
**4**  
 INDICATIVE PAGING SYSTEM RISER  
 E104 NTS

- GENERAL NOTES:**
- EACH BUILDING SHALL BE ON A SEPARATE PUBLIC ADDRESS ZONE.
  - SURFACE MOUNT CONDUIT IS ACCEPTABLE IN THE STORES, WORKSHOPS, SERVICE ROOM'S AND MEZZANINES. ALL NEW WIRING SHALL BE INSTALLED IN EMT CONDUIT. PAINT THE CONDUITS TO MATCH EXISTING WALL COLOR AND COLOR CODE AS PER SPECS.
  - WORKSHOPS BUILDING & POLLUTION CONTROL BUILDING ARE NOT EQUIPPED WITH A PA SYSTEM. CONTRACTOR TO ALLOW FOR NEW FULLY OPERATIONAL SYSTEM TO BE INSTALLED INSIDE THESE BUILDINGS. ALLOW FOR NEW DATA CONNECTION FROM THE EXISTING NETWORK SWITCH TO THE IP UNIT FOR A COMPLETE SYSTEM.
  - STANDARD OF ACCEPTANCE:  
 IP UNIT: MITEL 5485  
 AMPLIFIER: INTERM PA-240  
 16W AND 32W HORN SPEAKER: AIPHONE AH16TN AND AIPHONE AH32TN  
 CEILING MOUNTED SPEAKER: AIPHONE SP-2570N  
 WALL MOUNTED SPEAKER: QUAM SYSTEM 2VP
  - THE PAGING SYSTEM LAYOUT IS DIAGRAMMATIC ONLY. CONTRACTOR TO SUBMIT DETAILED LAYOUT AND RISER AS PART OF THE SHOP DRAWING SUBMITTALS FOR APPROVAL PRIOR TO ORDERING THE MATERIALS.
  - MOUNT EXTERIOR HORN SPEAKER AT +12' A.F.F.
  - MOUNT INTERIOR HORN SPEAKERS AT HEIGHTS TO MATCH EXISTING WALL MOUNTED SPEAKERS. WHERE CEILING IS ABOVE 16' HIGH, INSTALL AT +12' AFF ON THE INTERIOR WALLS. FOR BUILDINGS WITH CEILING HEIGHT BETWEEN 8' TO 10', MOUNT 6" BELOW FINISHED CEILING.

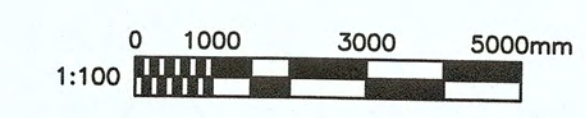
- KEY NOTES:**
- EXISTING MITEL IP PAGING UNITS TO BE MAINTAINED, ALLOW FOR TROUBLESHOOTING & REPROGRAMMING WHERE NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM.
  - REPLACE EXISTING PA AMPLIFIERS WITH INTERM PA-240, OR EQUAL. TYPICAL FOR ALL EXISTING PA SYSTEMS IN THE BUILDINGS. ALLOW FOR AMP EXPANSION WHERE SYSTEM INPUT EXCEEDS RATED SYSTEM OUTPUT. ADD POWER & CAT 6 DATA DROP BESIDE EACH PA AMPLIFIER LOCATION. SPECIFY APC 1000VA UPS BESIDE EACH UNIT FOR POWER BACKUP.



**2**  
 NEW PUBLIC ADDRESS PLAN-  
 HELICOPTER HANGAR  
 E104 1:250



**3**  
 NEW PUBLIC ADDRESS PLAN-  
 WORKSHOPS BUILDING  
 E104 1:250



| Revision/Revision | Description/Description | Date/Date  |
|-------------------|-------------------------|------------|
| 1                 | ISSUED FOR TENDER       | 2017/01/27 |
| Client/client     |                         |            |

**DEPARTMENT OF FISHERIES AND OCEANS CANADA**  
 9860 WEST SAANICH ROAD  
 SIDNEY B.C.

Project title/Titre du projet  
**VICTORIA COAST GUARD BASE  
 25 HURON ST. VICTORIA, B.C.**

**LIFE SAFETY  
 REFURBISHMENTS**

Consultant Signature Only

Designed by/Concept par  
**AD**

Drawn by/Dessiné par  
**AG**

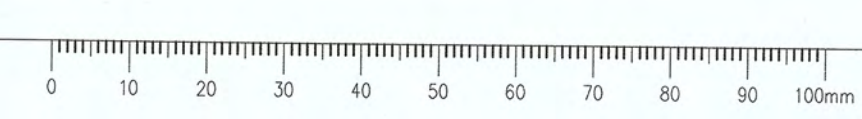
DFO Project Manager/Administrateur de Projets  
**RANDY BURGIN**

Regional Manager, Architectural and Engineering Services  
 Gestionnaire régionale, Services d'architecture et de génie, TPSCC

Drawing title/Titre du dessin

**NEW P/A SYSTEM  
 ADMIN BUILDING, HELICOPTER  
 HANGAR AND WORKSHOPS BUILDING**

|  |                              |  |
|--|------------------------------|--|
| Project No./No. du projet<br><b>F1700-164451</b> | Sheet/Feuille<br><b>E104</b> | Revision no./No. de Révision<br><b>1</b> |
|  |                              | 6 OF 10                                  |





Stantec Consulting Ltd. www.stantec.com STANTEC PROJECT NO: 115615358 - PHASE 2



|               |                         |            |
|---------------|-------------------------|------------|
| 1             | ISSUED FOR TENDER       | 2017/01/27 |
| Revision/     | Description/Description | Date/Date  |
| Client/client |                         |            |

**DEPARTMENT OF FISHERIES AND OCEANS CANADA**  
9860 WEST SAANICH ROAD  
SIDNEY B.C.

Project title/Titre du projet  
**VICTORIA COAST GUARD BASE  
25 HURON ST. VICTORIA, B.C.**

**LIFE SAFETY  
REFURBISHMENTS**

Consultant Signature Only

Designed by/Concept par  
**AD**

Drawn by/Dessiné par  
**AG**

DFO Project Manager/Administrateur de Projets  
**RANDY BURGIN**

Regional Manager, Architectural and Engineering Services  
Gestionnaire régionale, Services d'architectural et de génie, TPSGC

Drawing title/Titre du dessin

**FIRE ALARM DETAILS**

|  |                              |  |
|--|------------------------------|--|
| Project No./No. du projet<br><b>F1700-164451</b> | Sheet/Feuille<br><b>E500</b> | Revision no./La Révision no.<br><b>1</b> |
|  | 7 OF 10                      |  |

**FIRE ALARM NOTES:**

- EXISTING FIRE ALARM ARRANGEMENT TO BE CONFIRMED, FIRE ALARM RISER SHOWN AS EXAMPLE ONLY. NEW PANEL TO BE COMPATIBLE WITH EXISTING SYSTEM FOR MONITORING BY THE EXISTING SIEMENS FS-250 PANEL LOCATED IN THE GATEHOUSE (NEW PANEL TO REPORT ALARM, SUPERVISORY, TROUBLE).
- PROVIDE LABELING FOR ALL THE NEW EQUIPMENT, NEW LABELS TO READ MODULE #, ZONE #, DEVICE #. TYPICAL FOR ALL NEW DEVICES. CONTRACTOR TO COLOR CODE ALL CONDUITS AND JUNCTION BOXES AS DESCRIBED IN THE SPECIFICATIONS.
- USE WEATHERPROOF ENCLOSURES, HORN/STROBE AND PULL STATION FOR ALL DEVICES LOCATED OUTSIDE THE BUILDING.
- FIRE ALARM SYSTEM SHALL BE A FULLY ADDRESSABLE CLASS A, SINGLE STAGE SYSTEM. EVERY ZONE INDICATED ON FIRE ALARM SCHEDULE IS TO BE INSTALLED WITH ISOLATION MODULES SUCH THAT NOT MORE THAN ONE ZONE CAN BE DISABLED BY A SINGLE WIRING FAULT.
- CONTRACTOR TO SUPPLY ALL MONITORING MODULES FOR AUXILIARY TROUBLE CONTACTS AS REQUIRED.
- ALL FIRE ALARM WIRING MUST BE IN MINIMUM 21mm CONDUIT, BX, PVC AND ALUMINUM CONDUITS ARE NOT ACCEPTABLE. CONDUIT BONDING SHALL BE CONTINUOUS. ACS90 FIRE ALARM CABLE IS ACCEPTABLE FOR THE DROPS TO DEVICES WHERE DISTANCE IS LESS THAN 3 METERS.
- ALL FIRE ALARM WIRING TO CONFORM TO THE CLASS A STANDARD. PROVIDE DEDICATED SURGE PROTECTION ON CIRCUIT WHERE REQUIRED AND RECOMMENDED BY THE MANUFACTURER.
- CONNECT ALARM, TROUBLE AND SUPERVISORY CONTACTS TO SPARE INITIATING ZONE IN EXISTING GATEHOUSE PANEL. USE EXISTING CONDUITS/WIRING WHERE POSSIBLE. PROVIDE NEW AUTO-DIALER WHERE REQUIRED.
- ALL ANNUNCIATION CIRCUITS SHALL BE MINIMUM OF #12 AWG COPPER CONDUCTORS INSIDE EMT CONDUITS.
- CONTRACTOR SHALL PROVIDE ALL CONTROL AND MONITORING MODULES FOR AHU'S SHUTDOWN AND DOOR ACCESS INTERFACE. ALLOW FOR ALL SUBTRADES TO PERFORM A FULLY FUNCTIONAL AHU'S SHUTDOWN AND DOOR RELEASE WHEN FIRE ALARM SYSTEM IS ACTIVATED.

**BUOY BUILDING SIGNAL ZONES**

| ZONE | DESCRIPTION    | ALARM TYPE   |
|------|----------------|--------------|
| SZ1  | BUILDING NORTH | AUDIO/VISUAL |
| SZ2  | BUILDING SOUTH | AUDIO/VISUAL |

**BUOY BUILDING FIRE ALARM SCHEDULE**

| ZONE   | DESCRIPTION                      | ALARM TYPE  |
|--------|----------------------------------|-------------|
| Z1     | MAINTENANCE SHOP                 | ALARM       |
| Z2     | ELECTRICAL ROOM                  | ALARM       |
| Z3     | MECHANICAL ROOM                  | ALARM       |
| Z4     | PAINT STORAGE                    | ALARM       |
| Z5     | TELECOMM ROOM                    | ALARM       |
| Z6     | OFFICE'S - WEST                  | ALARM       |
| Z7     | SOUTH CORRIDOR                   | ALARM       |
| Z8     | OFFICE'S EAST                    | ALARM       |
| Z9     | SOUTH EAST EXTERIOR ACCESS HATCH | ALARM       |
| Z10    | NORTH EAST EXTERIOR ACCESS HATCH | ALARM       |
| Z11    | NORTH WEST EXTERIOR ACCESS HATCH | ALARM       |
| Z12    | SOUTH WEST EXTERIOR ACCESS HATCH | ALARM       |
| Z13    | STORAGE                          | ALARM       |
| Z14-18 | TAMPER SWITCHES                  | SUPERVISORY |
| Z19-22 | FLOW SWITCHES                    | SUPERVISORY |
| Z23    | PRESSURE SWITCH                  | SUPERVISORY |
| Z24    | AHU-1                            | ALARM       |
| Z25    | AHU-2                            | ALARM       |
| Z26    | AHU-3                            | ALARM       |
| Z27-32 | SPARE                            | ALARM       |

**POLLUTION CONTROL BUILDING SIGNAL ZONES**

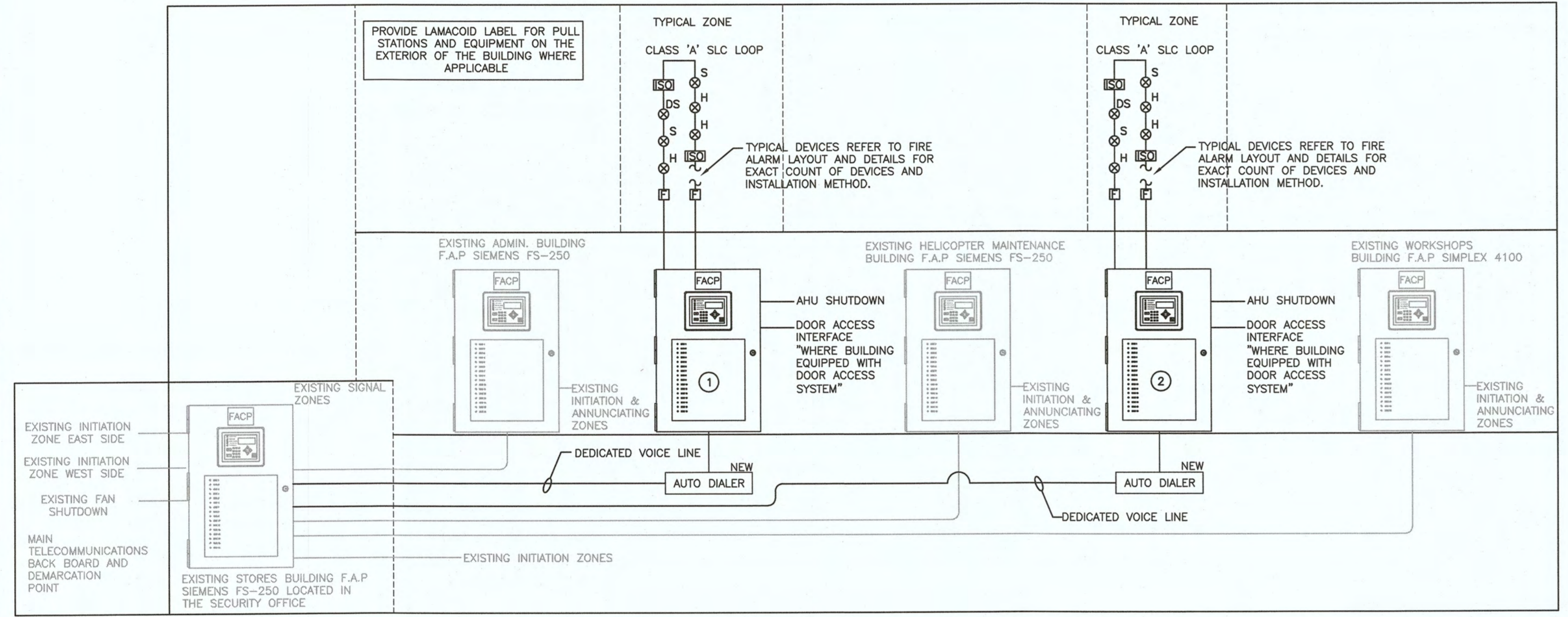
| ZONE | DESCRIPTION     | ALARM TYPE   |
|------|-----------------|--------------|
| SZ1  | MAIN FLOOR      | AUDIO/VISUAL |
| SZ2  | MEZZANINE FLOOR | AUDIO/VISUAL |

**POLLUTION CONTROL BUILDING FIRE ALARM SCHEDULE**

| ZONE    | DESCRIPTION                              | ALARM TYPE  |
|---------|--|-------------|
| Z1      | BATTERY CHARGING / BATTERY STORAGE       | ALARM       |
| Z2      | STORAGE & BRIDGE SIMULATOR               | ALARM       |
| Z3      | SPARE                                    | -           |
| Z4      | STORAGE                                  | ALARM       |
| Z5      | BOAT STORAGE                             | ALARM       |
| Z6      | WORKSHOP                                 | ALARM       |
| Z7      | WORKSTATIONS                             | ALARM       |
| Z8      | MEZZANINE (LUNCH RM/CONFERENCE RM/IT RM) | ALARM       |
| Z9      | MEZZANINE STORAGE                        | ALARM       |
| Z10     | WATER ENTRY CLOSET                       | ALARM       |
| Z11     | BUILDING ENTRY                           | ALARM       |
| Z12     | FLOW SWITCH                              | SUPERVISORY |
| Z13     | TAMPER SWITCH                            | SUPERVISORY |
| Z14     | PRESSURE SWITCH                          | SUPERVISORY |
| Z15-Z32 | SPARE                                    | ALARM       |

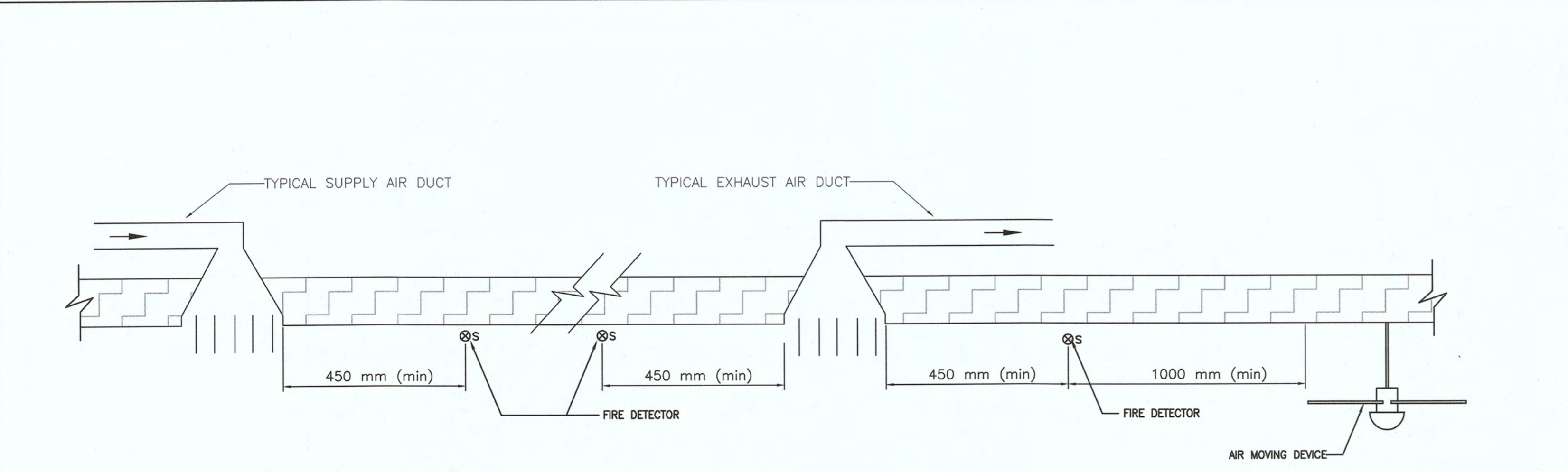
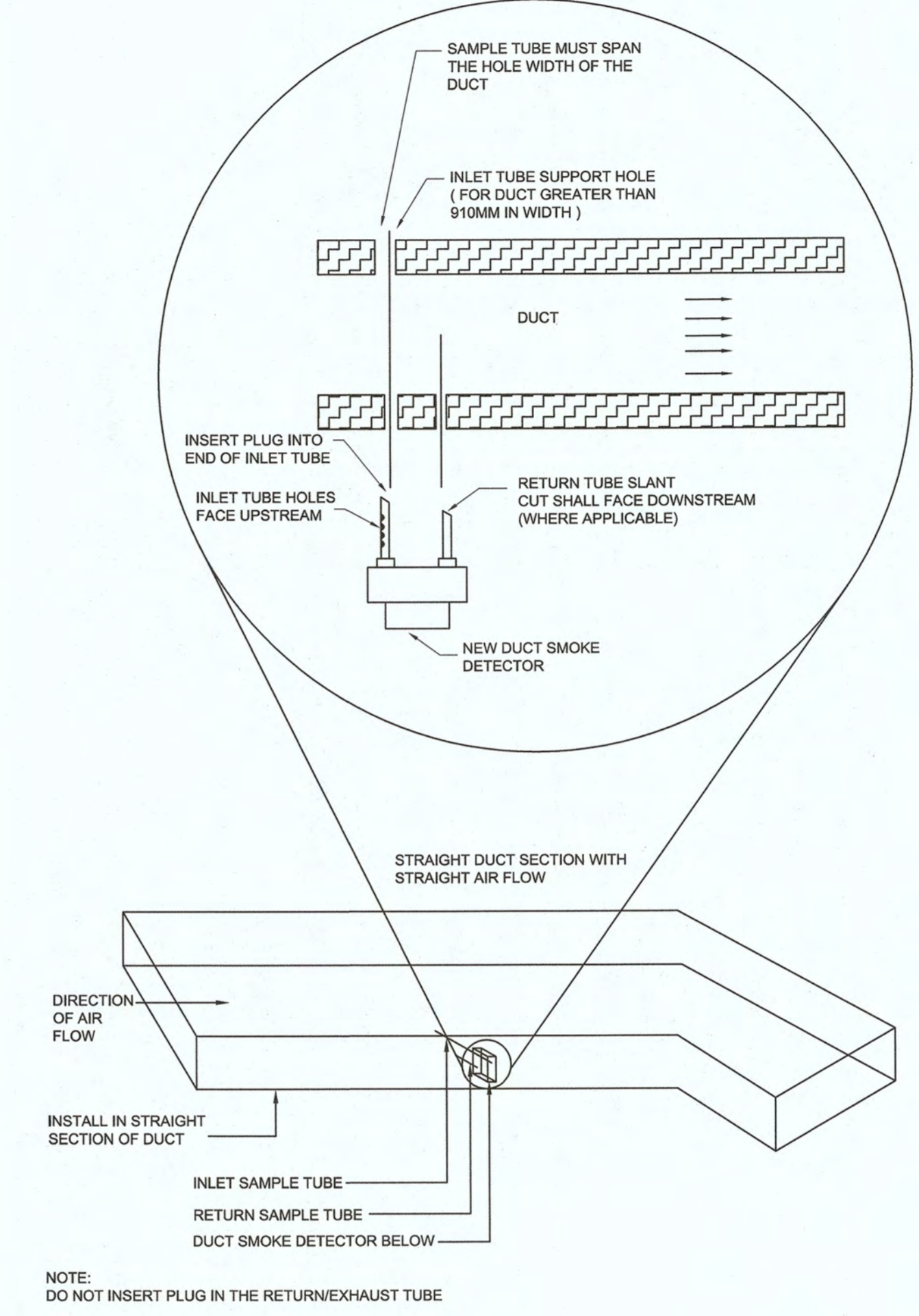
**RISER KEY NOTES:**

- NEW SIEMENS FS-250 OR SIMPLEX 4100 FIRE ALARM PANEL IN EXISTING BUOY BUILDING TO MATCH SITE STANDARD.
- NEW SIEMENS FS-250 OR SIMPLEX 4100 FIRE ALARM PANEL IN EXISTING POLLUTION CONTROL BUILDING TO MATCH SITE STANDARD.

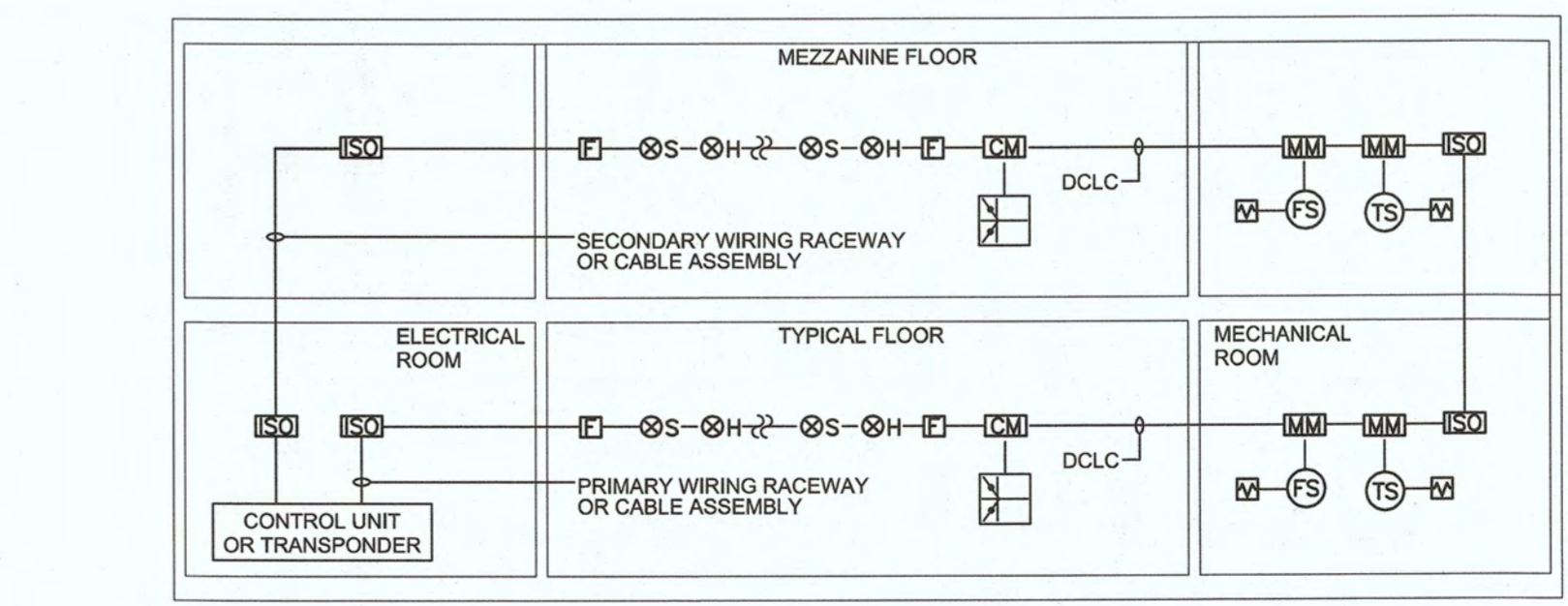


**1 INDICATIVE FIRE ALARM RISER DIAGRAM**  
E500 NTS

**2 TYPICAL SMOKE DUCT DETECTOR INSTALLATION**  
E500 NTS

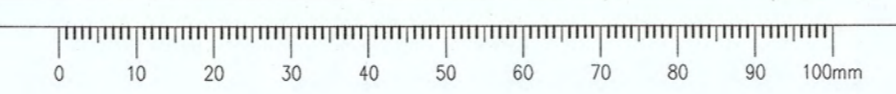


**3 TYPICAL CEILING MOUNTED FIRE DETECTOR INSTALLATION**  
E500 NTS



- LEGEND:**
- CM ADDRESSABLE CONTROL MODULE
  - MM ADDRESSABLE MONITOR MODULE
  - EXH EXHAUST DAMPER
  - AS ADDRESSABLE SMOKE DETECTOR
  - AD ADDRESSABLE MANUAL STATION
  - HD ADDRESSABLE HEAT DETECTOR
  - ISOL ISOLATION MODULE
  - CONT CONTINUATION
  - END END OF LINE DEVICE
  - WFS WATER-FLOW SWITCH
  - TS TAMPER SWITCH
  - PS PRESSURE SWITCH

**4 TYPICAL ACTIVE FIELD WIRING DEVICES AND SUPPORTING FIELD DEVICES CONNECTED TO DATA COMMUNICATION LINK STYLE 'C'**  
E500 NTS

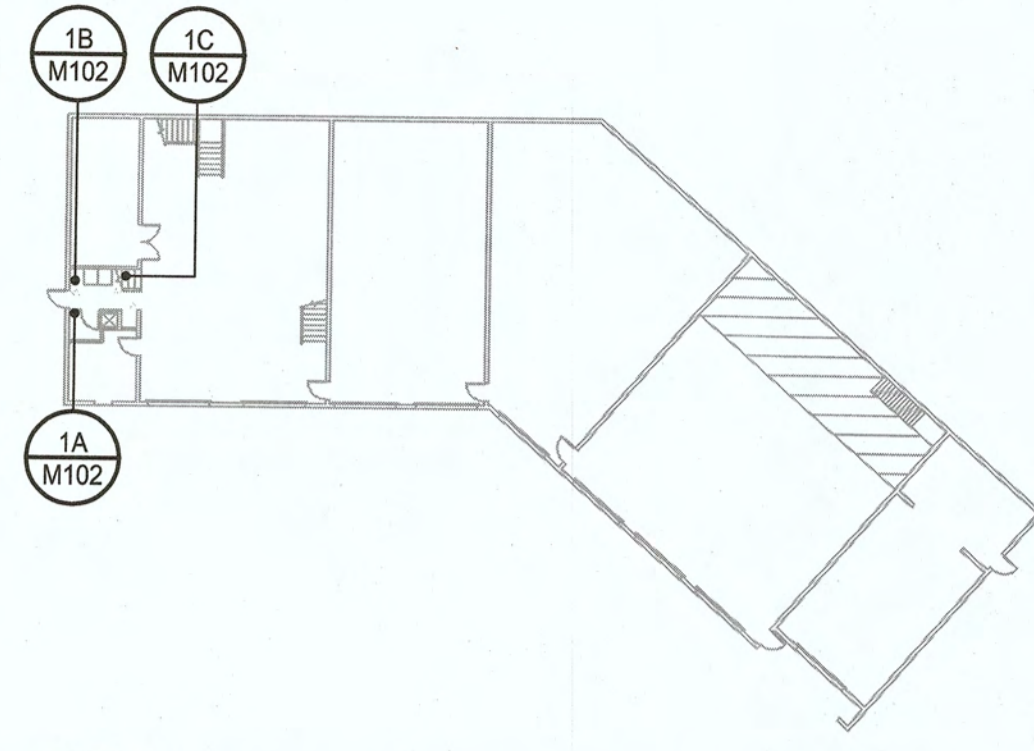




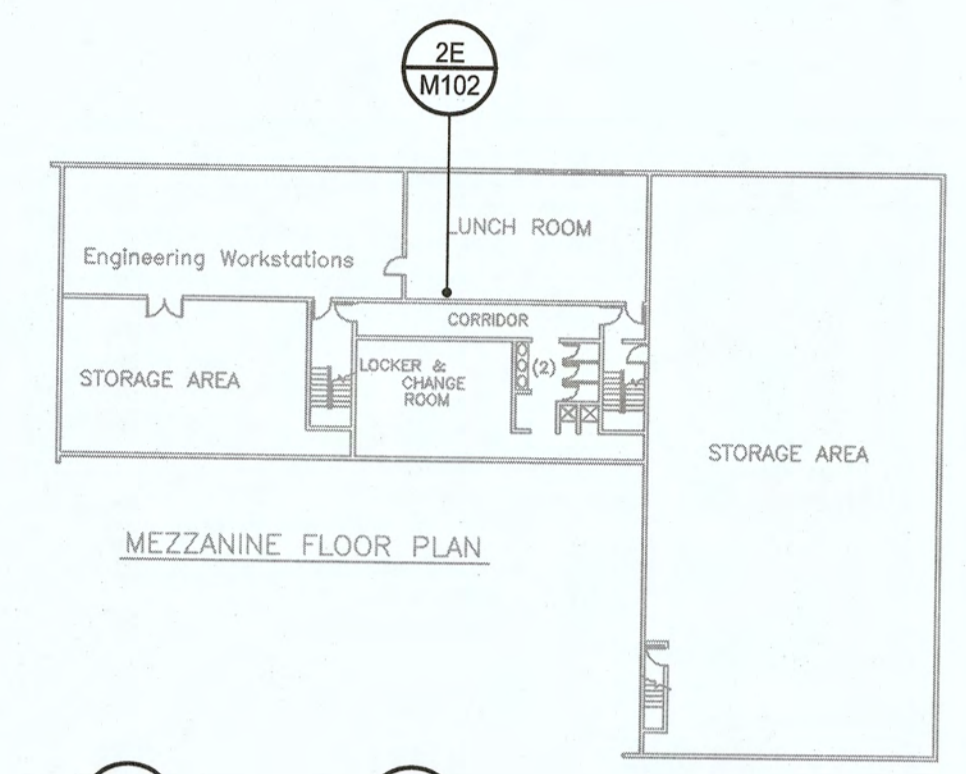




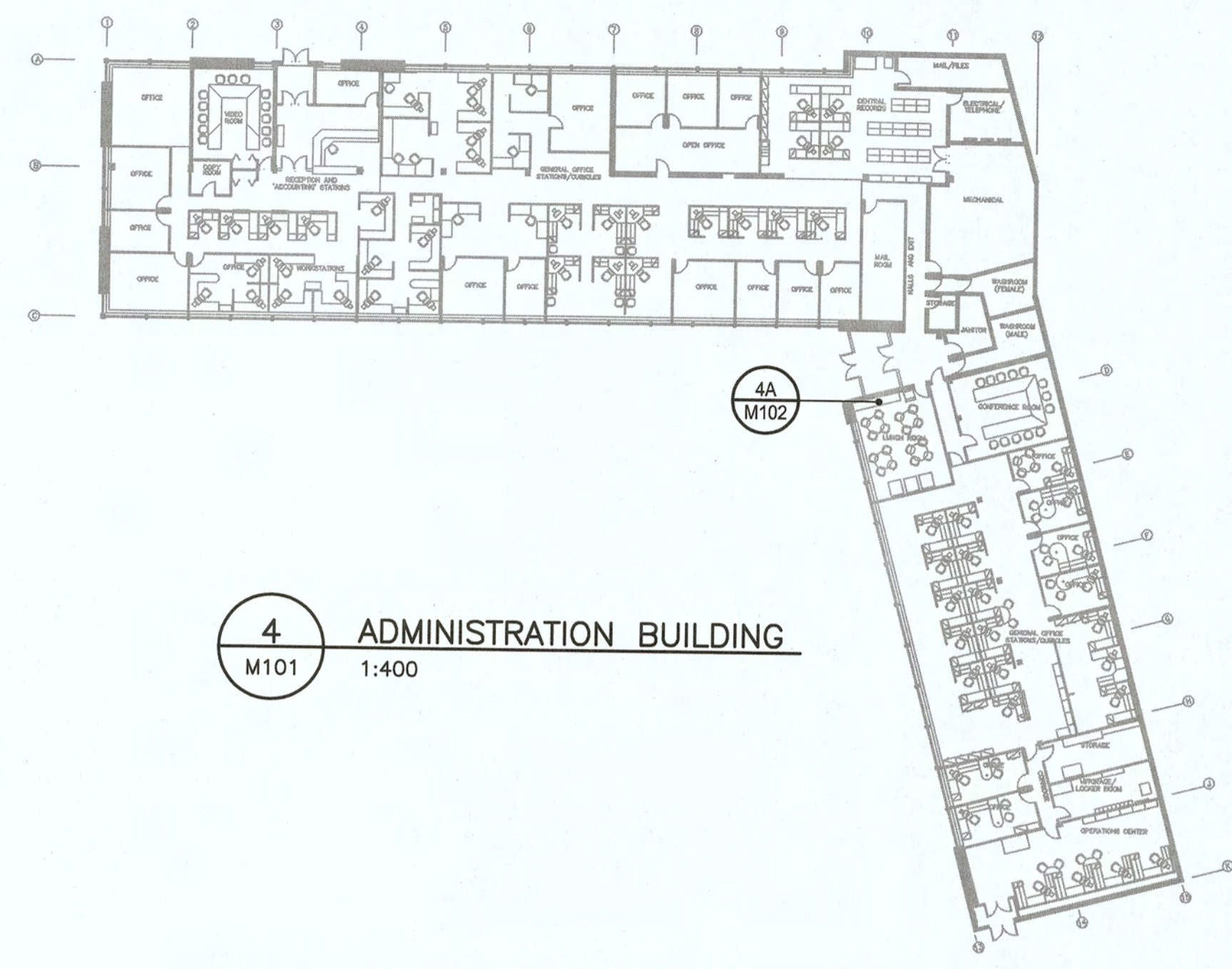
Stantec Consulting Ltd.  
 www.stantec.com  
 STANTEC PROJECT NO: 115615358 - PHASE 2



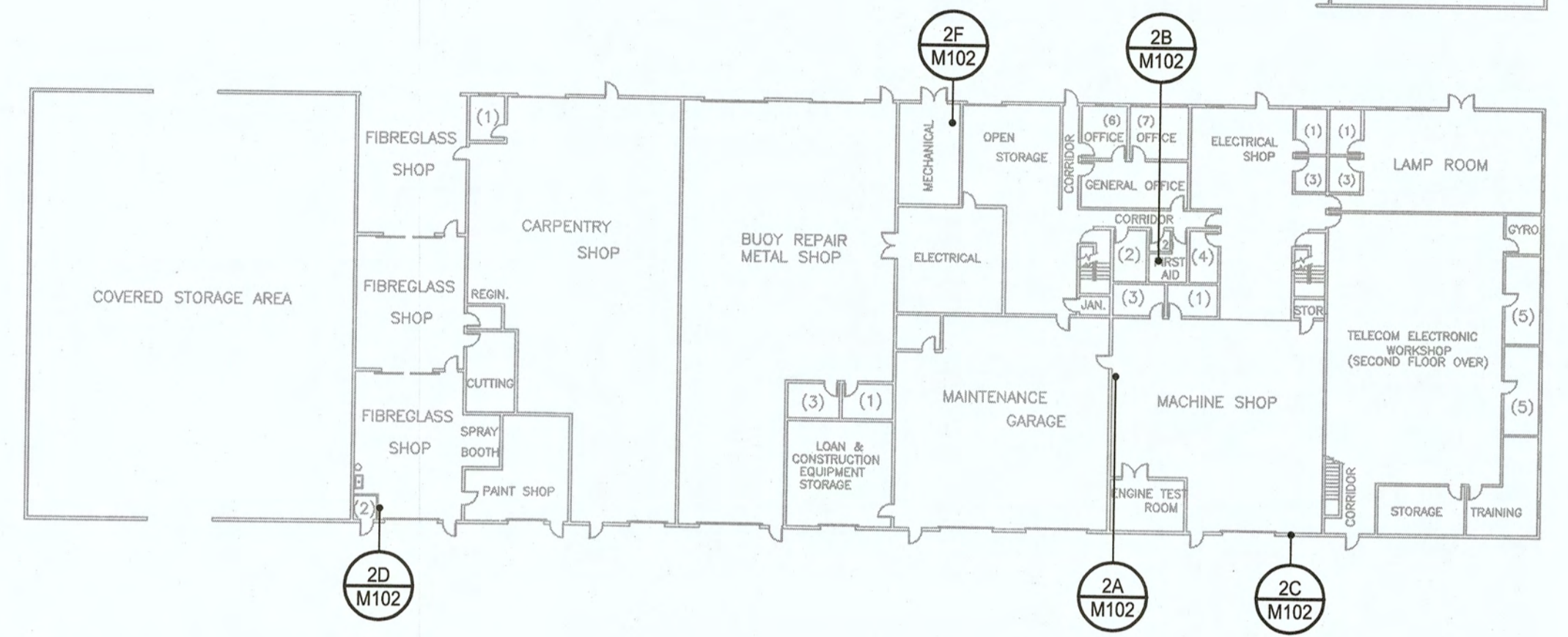
**1 POLLUTION CONTROL BUILDING**  
 M101 1:400



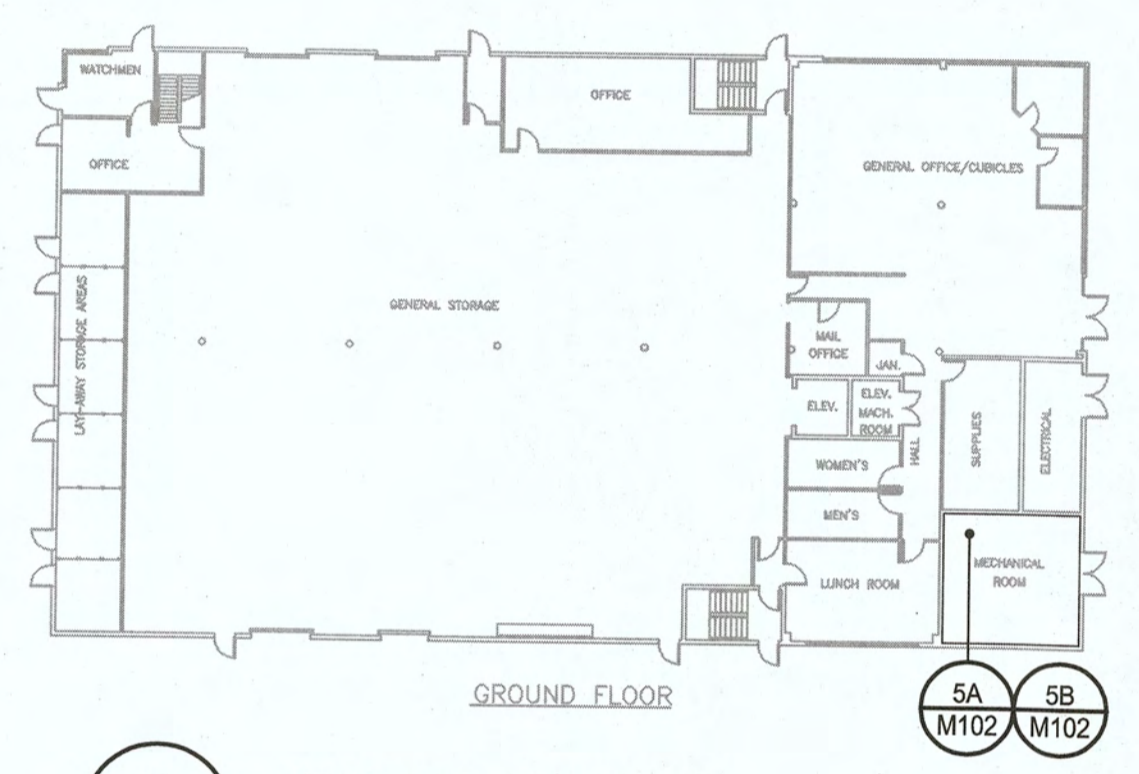
**MEZZANINE FLOOR PLAN**



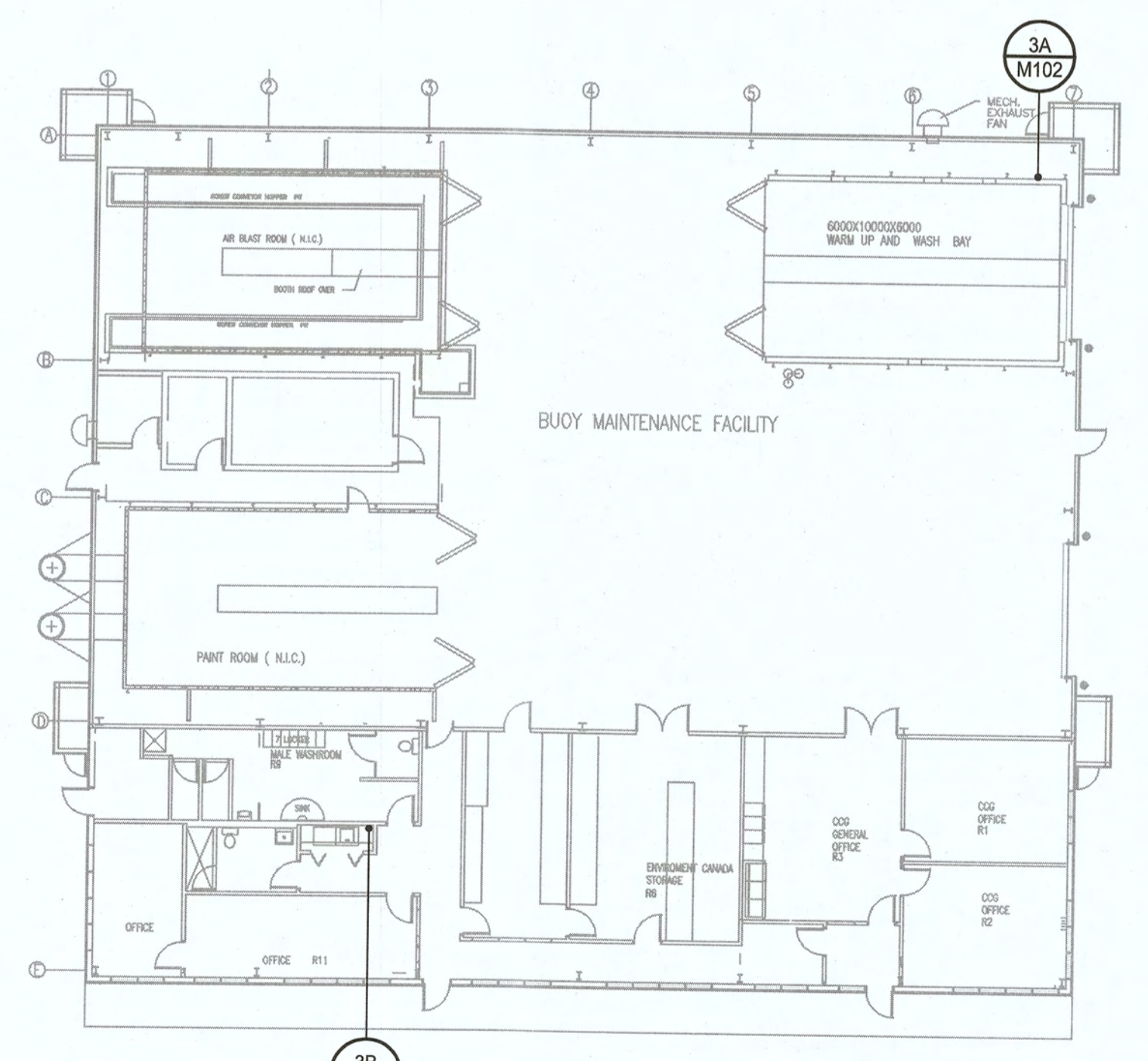
**4 ADMINISTRATION BUILDING**  
 M101 1:400



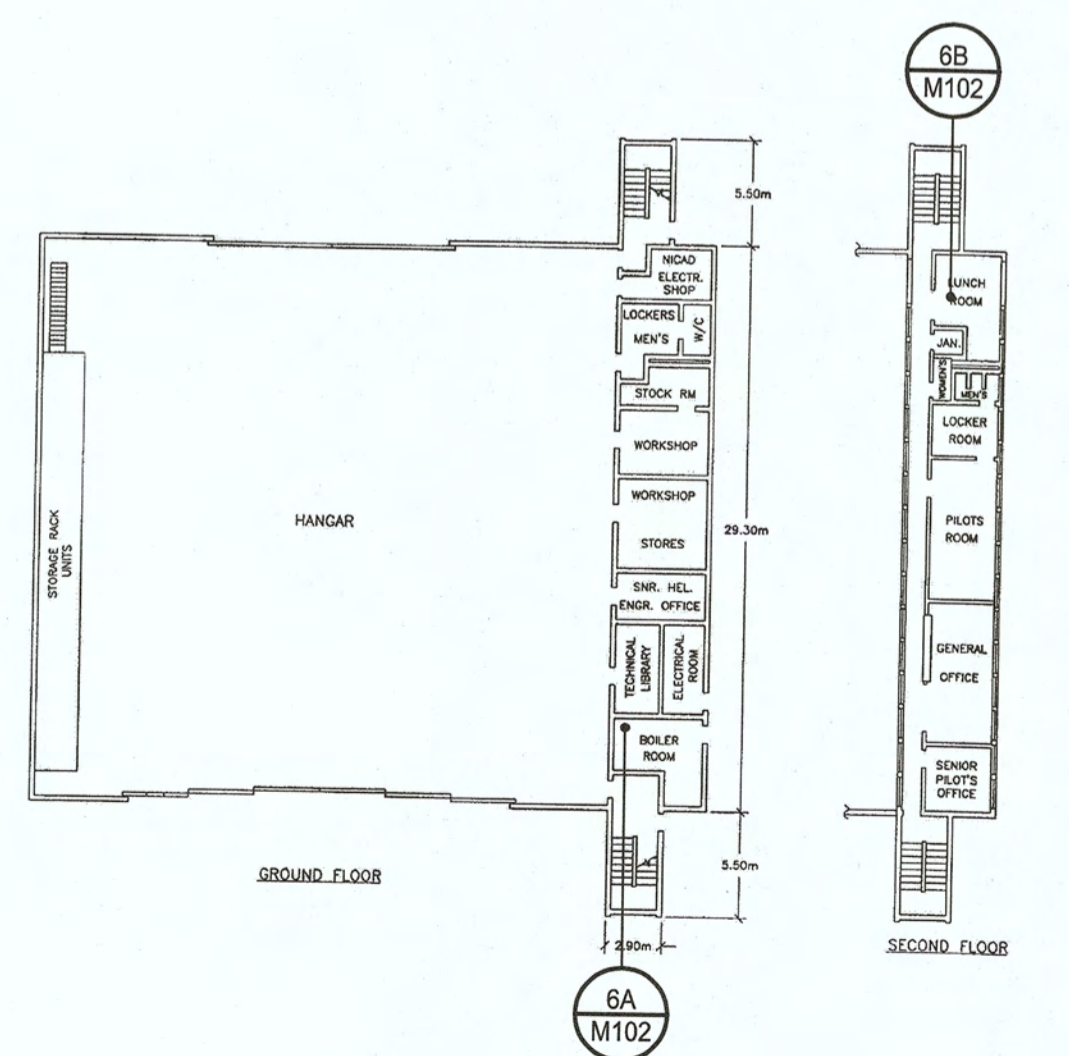
**2 SHOPS COMPLEX**  
 M101 1:400



**5 STORAGE BUILDING**  
 M101 1:400



**3 BUOY MAINTENANCE SHOP**  
 M101 1:400



**6 HELICOPTER HANGAR**  
 M101 1:400

| Revision/ | Description/Description | Date/Date  |
|-----------|-------------------------|------------|
| 1         | ISSUED FOR TENDER       | 2017/01/27 |

**DEPARTMENT OF FISHERIES AND OCEANS CANADA**  
 9860 WEST SAANICH ROAD  
 SIDNEY B.C.

Project title/Titre du projet  
**VICTORIA COAST GUARD BASE**  
 25 HURON ST. VICTORIA, B.C.

**LIFE SAFETY REFURBISHMENTS**

Consultant Signature Only

Designed by/Concept par  
**AD**

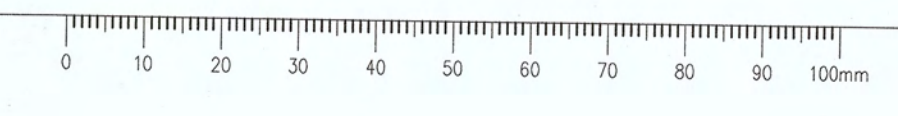
Drawn by/Dessiné par  
**AG**

DFO Project Manager/Administrateur de Projets  
**RANDY BURGIN**

Regional Manager, Architectural and Engineering Services  
 Gestionnaire régionale, Services d'architecture et de génie, TPSC

Drawing title/Titre du dessin  
**MECHANICAL AUDIT LOCATIONS**

|  |                              |  |
|--|------------------------------|--|
| Project No./No. du projet<br><b>F1700-164451</b> | Sheet/Feuille<br><b>M101</b> | Revision no./La Révision no.<br><b>1</b> |
|  | 9 OF 10                      |  |





**1A**  
M102 INCOMING WATER LINE

NOTE:  
PROVIDE AND INSTALL NEW 40mm DCVA ON INCOMING WATER LINE. INSTALL AFTER EXISTING VALVE. RELOCATE EXISTING HOSE BIB AS REQUIRED. PATCH DRYWALL AS REQUIRED. PROVIDE NEW ACCESS PANEL.



**1B**  
M102 FIRE SPRINKLER SYSTEM

NOTE:  
REBUILD EXISTING FIRE PROTECTION VALVE STATION, COMPLETE WITH NEW 100mm DCVA. INTENT OF REBUILDING STATION IS TO PROVIDE SUFFICIENT ROOM FOR NEW DCVA UPSTREAM OF EXISTING MAIN CONTROL VALVE. PROVIDE AND INSTALL NEW MONITORED TAMPER SWITCH UPSTREAM OF NEW DCVA. ALLOW FOR RECONNECTION OF SIAMSESE CONNECTION AND ALL TRIM AS REQUIRED.



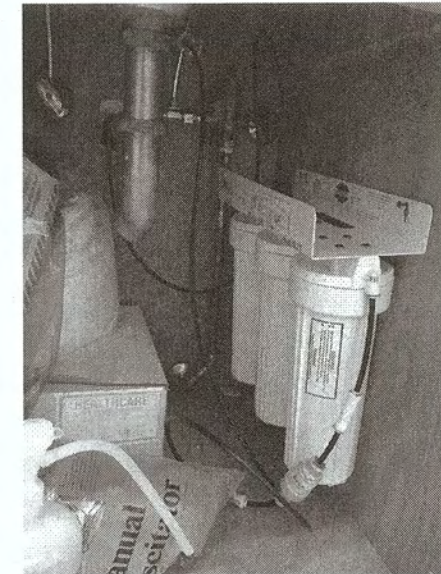
**1C**  
M102 WATER SUPPLY TO WATER COOLER

NOTE:  
INSTALL A 15mm DCVA ON THE WATER SUPPLY TO THE WATER COOLER UPSTREAM OF THE WATER FILTER.



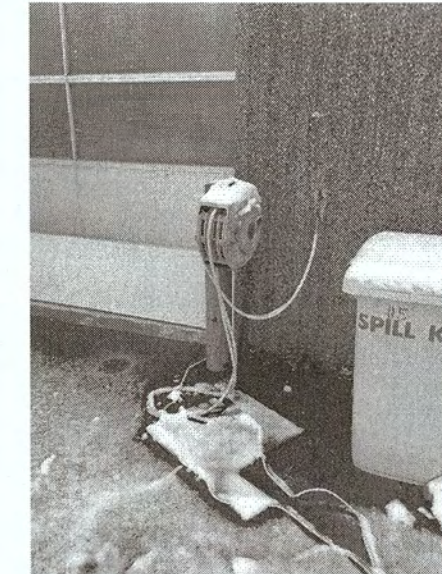
**2A**  
M102 WATER SUPPLY TO PARTS WASHER

NOTE:  
REPLACE EXISTING 15mm PEX HOT AND COLD WATER SUPPLIES TO THE PARTS WASHER, COMPLETE WITH NEW 15mm RPBP'S ON EACH LINE. PROVIDE NEW 50mm DRAIN STANDPIPE FOR RPBP VENTS TO DISCHARGE DIRECTLY INTO ADJACENT FLOOR DRAIN.



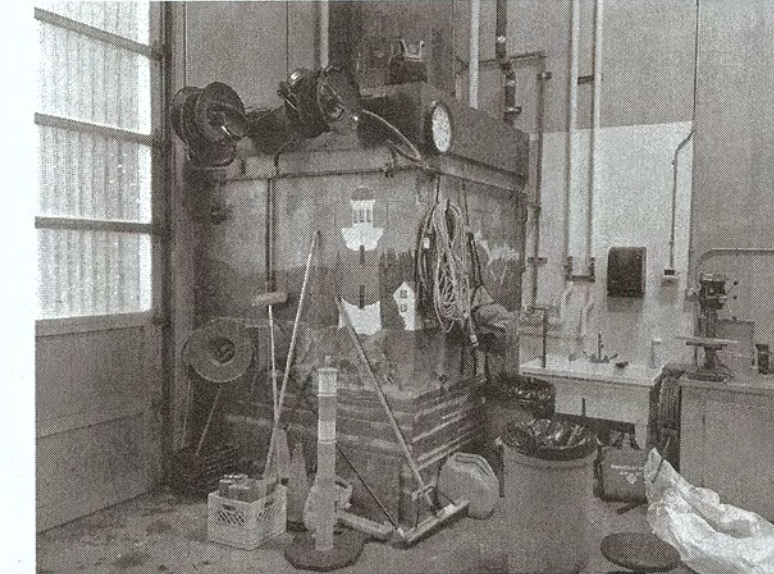
**2B**  
M102 WATER SUPPLY TO WATER COOLER

NOTE:  
INSTALL A 15mm DCVA ON THE WATER SUPPLY TO THE WATER COOLER UPSTREAM OF THE WATER FILTER.



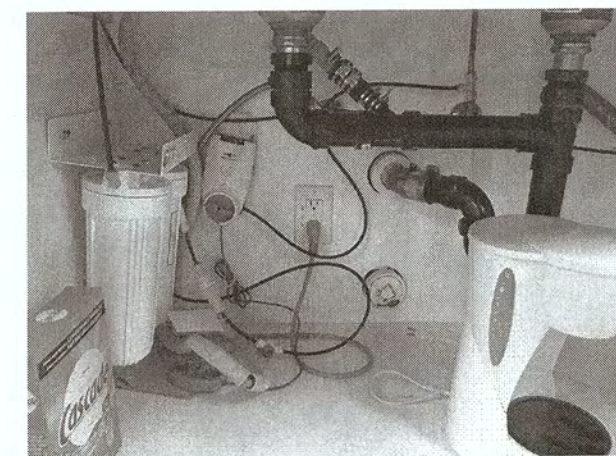
**2C**  
M102 RETRACTABLE HOSE REEL - HOSE BIB RPBP

NOTE:  
PROVIDE NEW 25mm COLD WATER TAKE OFF, COMPLETE WITH RPBP AND DRAIN AT STATION '2A' AND FIELD ROUTE TO SERVE EXISTING EXTERIOR HOSE REEL.



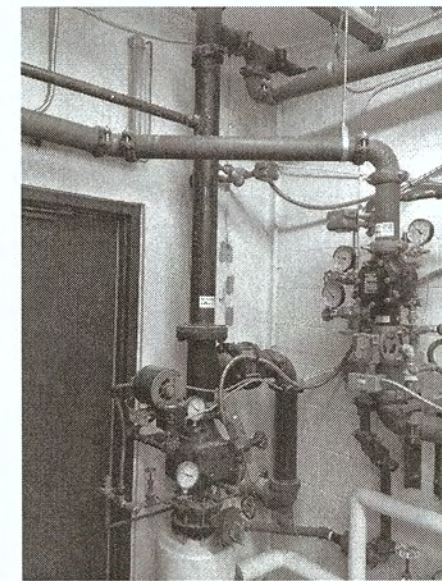
**2D**  
M102 RETRACTABLE HOSE REELS - WATER SUPPLY

NOTE:  
INSTALL NEW 25mm RPBP ON WATER SUPPLY TO RETRACTABLE HOSES. INSTALL NEW 50mm STANDPIPE DRAIN AND CONNECT TO EXISTING ADJACENT FLOOR DRAIN. ALLOW FOR SLAB CUTTING AND REPAIR AS REQUIRED TO MAKE DRAIN CONNECTION.



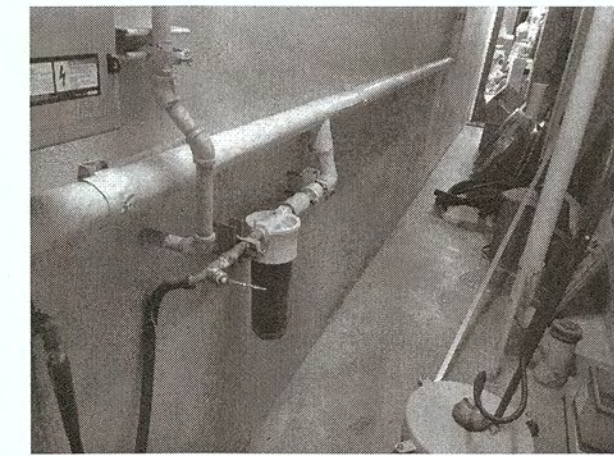
**2E**  
M102 WATER SUPPLY TO WATER COOLER & COFFEE MACHINE

NOTE:  
INSTALL A 15mm DCVA ON THE WATER SUPPLY TO THE WATER COOLER AND COFFEE MACHINE UPSTREAM OF THE WATER FILTER.



**2F**  
M102 FIRE SPRINKLER SYSTEM

NOTE:  
REBUILD EXISTING 100mm FIRE PROTECTION VALVE AND EXISTING 50mm WATER ENTRY STATION, COMPLETE WITH NEW 100mm DCVA TO FIRE SYSTEM AND NEW 50mm DCVA TO POTABLE WATER SYSTEM. NEW 100mm DCVA ON FIRE SYSTEM TO BE INSTALLED UPSTREAM OF MAIN SPRINKLER CONTROL VALVE. PROVIDE NEW MONITORED VALVE UPSTREAM OF NEW 100mm DCVA.



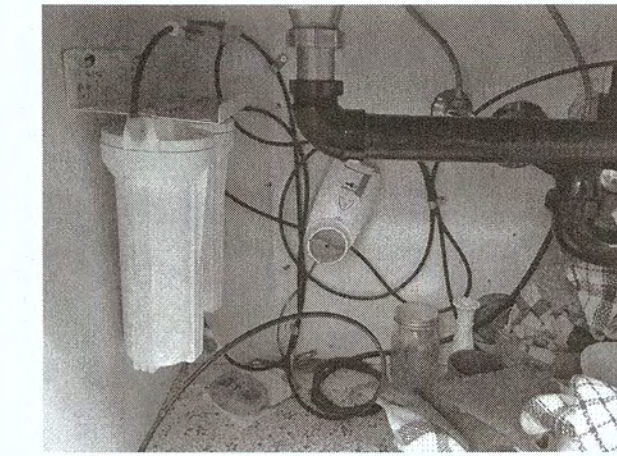
**3A**  
M102 WATER SUPPLY TO PRESSURE WASHER

NOTE:  
RELOCATE FILTER AND WATER LINE SERVING PRESSURE WASHER TO OPPOSITE SIDE (WITHIN STRUCTURAL FRAMING). PROVIDE AND INSTALL NEW 25mm RPBP ON THIS WATER LINE, UPSTREAM OF FILTER AND COMPLETE WITH 50mm STANDPIPE DRAIN FOR RPBP VENT PORT, CONNECTED TO ADJACENT RWL STACK.



**3B**  
M102 WATER SUPPLY TO WATER COOLER

NOTE:  
INSTALL A 15mm DCVA ON THE WATER SUPPLY TO THE WATER COOLER UPSTREAM OF THE WATER FILTER.



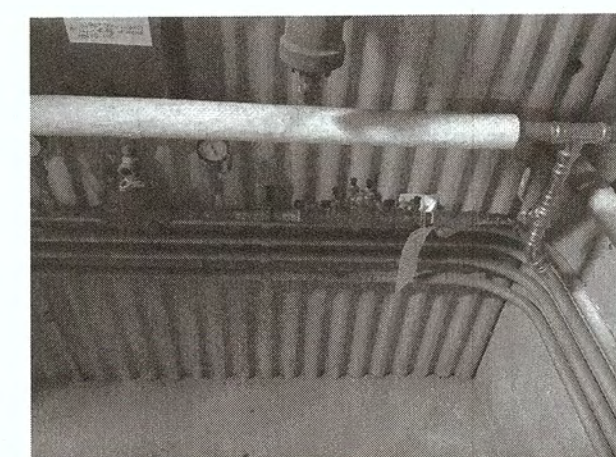
**4A**  
M102 WATER SUPPLY TO WATER COOLER

NOTE:  
INSTALL A 15mm DCVA ON THE WATER SUPPLY TO THE WATER COOLER UPSTREAM OF THE WATER FILTER LOCATED IN THE LUNCH ROOM.



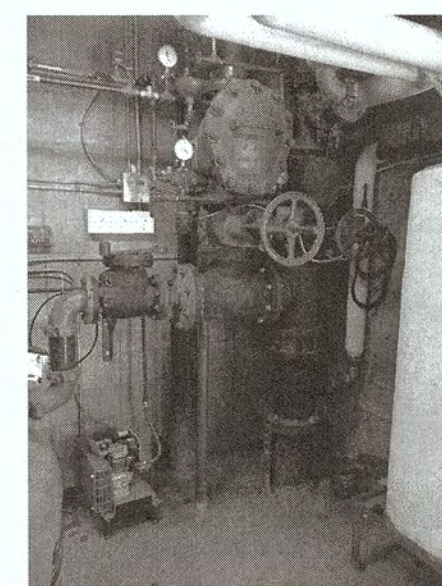
**5A**  
M102 FIRE SPRINKLER SYSTEM

NOTE:  
INSTALL NEW 100mm DCVA ON THE COMBINED WATER LINE TO THE FIRE SUPPRESSION SYSTEM, COMPLETE WITH NEW TAMPER VALVE. RELOCATE 50mm DCV TAKE OFF TO BE UPSTREAM OF NEW 100mm DCVA ON FIRE LINE AND PROVIDE NEW 50mm DCVA ON POTABLE WATER TAKE OFF.



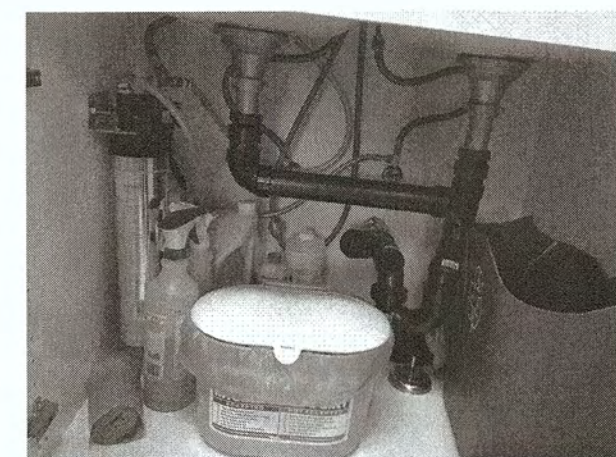
**5B**  
M102 WATER SUPPLY TO BOILER

NOTE:  
PROVIDE NEW 50mm DRAIN STANDPIPE FOR EXISTING 19mm RPBP SERVING BOILER.



**6A**  
M102 FIRE SPRINKLER SYSTEM

NOTE:  
1. INSTALL A 200mm DCVA ON THE DOMESTIC WATER SUPPLY TO THE FIRE SPRINKLER SYSTEM. DCVA TO BE INSTALLED IN NEW CONCRETE SUMP AS SHOWN ON THE IMAGE ABOVE.  
2. RELOCATE BOILER FEED LINE TO TAKE OFF FROM COMBINATION WATER/FIRE MAIN UPSTREAM OF NEW DCVA (ITEM 1, ABOVE) AND PROVIDE NEW 25mm RPBP TO SERVE BOILER SYSTEM.



**6B**  
M102 LUNCH ROOM WATER SUPPLY

NOTE:  
INSTALL A 15mm DCVA ON THE WATER SUPPLY TO THE WATER TAP UPSTREAM OF THE WATER FILTER.



| Revision/Revisión | Description/Description | Date/Date  |
|-------------------|-------------------------|------------|
| 1                 | ISSUED FOR TENDER       | 2017/01/27 |

Client/client

**DEPARTMENT OF FISHERIES AND OCEANS CANADA**  
9860 WEST SAANICH ROAD  
SIDNEY B.C.

Project title/Titre du projet  
**VICTORIA COAST GUARD BASE  
25 HURON ST. VICTORIA, B.C.**

**LIFE SAFETY  
REFURBISHMENTS**

Consultant Signature Only

Designed by/Concept par  
**AD**

Drawn by/Dessiné par  
**AG**

DFO Project Manager/Administrateur de Projets  
**RANDY BURGIN**

Regional Manager, Architectural and Engineering Services  
Gestionnaire régionale, Services d'architectural et de génie, TPSOC

Drawing title/Titre du dessin

**MECHANICAL AUDIT  
PHOTOS & DETAILS**

|  |                              |  |
|--|------------------------------|--|
| Project No./No. du projet<br><b>F1700-164451</b> | Sheet/Feuille<br><b>M102</b> | Revision no./<br>La Révision no.<br><b>1</b> |
|--|------------------------------|--|

