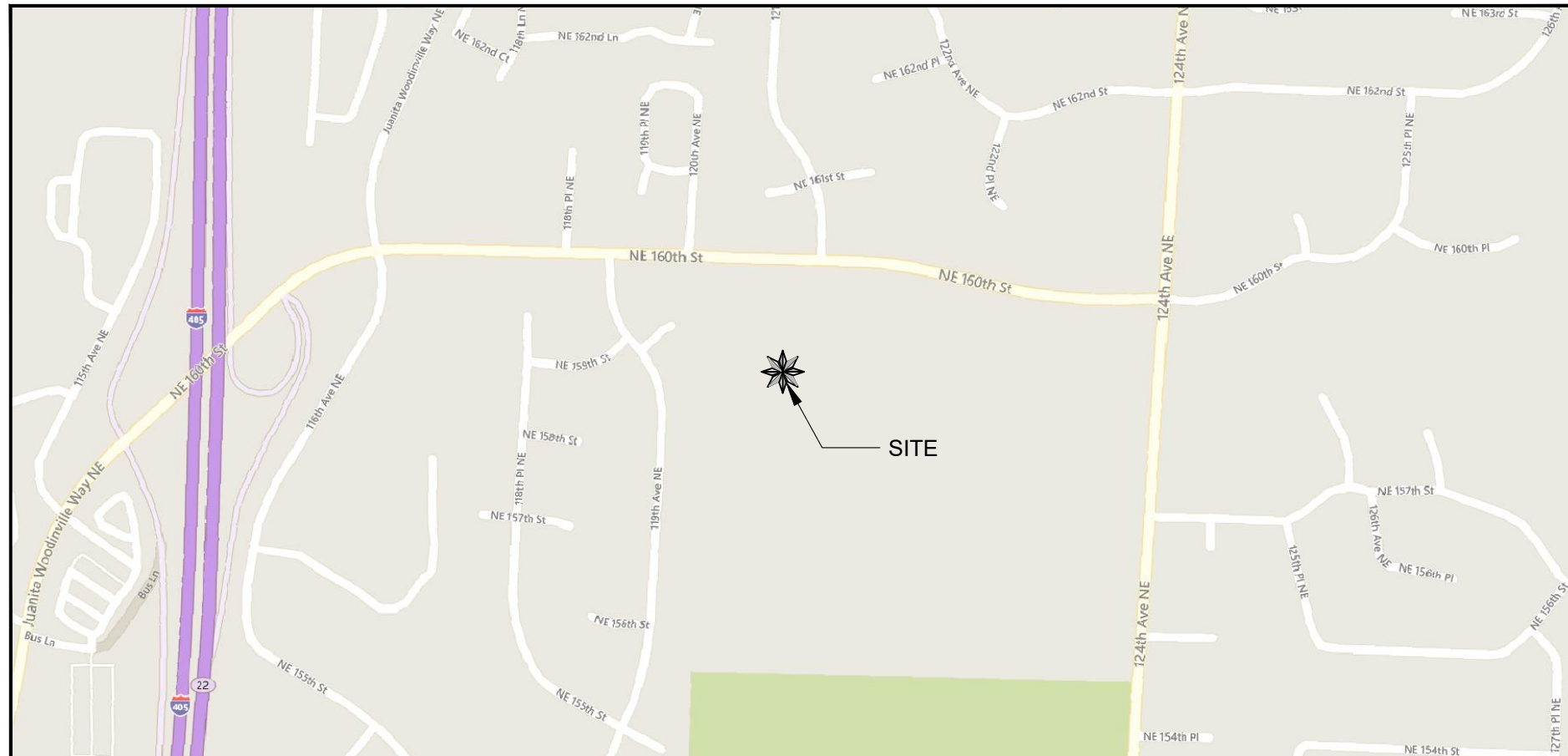


ADDRESS: 12101 NE 160TH ST, BOTHELL, WA 98011  
PROJECT NAME: NORTHSORE MIDDLE SCHOOL - COPPER UPGRADE



## SITE LOCATION

## CONTACTS

ELIZABETH HUNTER  
NORTHSHORE SD  
3300 MONTE VILLA PARKWAY  
BOTHELL, WA 98021  
C. 425.408.7772  
EHUNTER@NSD.ORG

MIKE HAWKER  
NORTHSHORE SD  
3300 MONTE VILLA PARKWAY  
BOTHELL, WA 98021  
C. 425.361.8297  
MHAWKER@NSD.ORG

JOHN SHAFER  
MGC TECHNICAL CONSULTING  
8521 154TH AVE NE  
REDMOND, WA 98052  
C. 206.307.4834  
JOHN@MGCTECHNICAL.COM

## SHEET INDEX

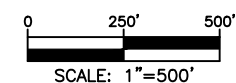
1. COVER SHEET / SITE LOCATION
2. LEGEND
3. GENERAL NOTES
4. FLOOR 1 SOUTH
5. FLOOR 1 SOUTHEAST
6. FLOOR 1 NORTH
7. PORTABLES
8. SITE PHOTOGRAPHS

## SCOPE OF WORK:

INSTALL NEW STATION CABLING TO SUPPORT WIRELESS ACCESS POINTS IN GYM, LOCKER ROOMS, COMMONS, THEATRE, LIBRARY & PORTABLES. REPLACE EXISTING WALL MOUNT CABINET IN PORTABLE 303 WITH NEW WALL MOUNT CABINET.



Know what's **below**.  
**Call** before you dig.



|     |          |          |         |              |
|-----|----------|----------|---------|--------------|
| 3   |          |          |         | AS-BUILT     |
| 2   | 5/9/19   | JLS      | JLS     | REVISION # 2 |
| 1   | 10/16/18 | JLS      | JLS     | ORIGINAL     |
| NO. | DATE     | ENGINEER | DRAFTER | COMMENT      |



|                                                         |
|---------------------------------------------------------|
| <b>CLIENT ENGINEER:</b> IRINA TARASOVA                  |
| <b>ENGINEERING FIRM:</b> MGC TECHNICAL CONSULTING INC.  |
| <b>PROJECT NUMBER:</b> ---                              |
| <b>LOCATION:</b> 12101 NE 160TH ST<br>BOTHELL, WA 98011 |
| <b>DRAWING NAME:</b> NSD - NSMS - COPPER UPGRADE.dwg    |
| ----                                                    |
| <b>CONFIDENTIAL/PROPRIETARY</b>                         |

SHEET: 1 OF

# LEGEND

## LINETYPES

|  |                         |
|--|-------------------------|
|  | AERIAL FIBER – EXISTING |
|  | AERIAL FIBER – ATTACH   |
|  | AERIAL FIBER – OVERLASH |
|  | STRAND – EXISTING       |
|  | STRAND – PROPOSED       |
|  | CONDUIT – EXISTING      |
|  | CONDUIT – PROPOSED      |
|  | INNERDUCT – EXISTING    |
|  | INNERDUCT – PROPOSED    |
|  | EXISTING J-HOOK PATH    |
|  | PROPOSED J-HOOK PATH    |
|  | EXISTING WIRE MOLD      |
|  | PROPOSED WIRE MOLD      |
|  | RIGHT OF WAY            |
|  | EDGE OF PAVEMENT        |

## ABBREVIATIONS

|        |                                |
|--------|--------------------------------|
| ASW    | ASPHALT SIDEWALK               |
| BIP    | BLACK IRON PIPE                |
| BSP    | BLACK STEEL PIPE               |
| CSW    | CONCRETE SIDEWALK              |
| ELECT. | ELECTRIC                       |
| EOP    | EDGE OF PAVEMENT               |
| EOTW   | EDGE OF TRAVEL WAY             |
| FOC    | FACE OF CURB                   |
| F/O    | FIBER OPTIC                    |
| HDPE   | HIGH DENSITY POLYETHYLENE      |
| HH     | HANDHOLE                       |
| JB     | JUNCTION BOX                   |
| MH     | MANHOLE                        |
| MP     | MILE POST                      |
| O/S    | OFFSET                         |
| PR     | POWER RISER                    |
| PVC    | POLY VINYL CHLORIDE            |
| RGS    | RIGID GALVANIZED STEEL CONDUIT |
| ROW    | RIGHT OF WAY                   |
| SEW    | SANITARY SEWER                 |
| SD     | STORM DRAIN                    |
| STA.   | STATION                        |
| STM    | STEAM                          |
| TEL    | TELECOM                        |

## SYMBOLS

|  |                                                                    |  |                                                                                                                                                      |
|--|--------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | RISER – EXISTING                                                   |  | TRANSMISSION/DISTRIBUTION POLE                                                                                                                       |
|  | RISER – PROPOSED                                                   |  | TRANSMISSION POLE                                                                                                                                    |
|  | CATCH BASIN/INLET (RECTANGULAR)                                    |  | DISTRIBUTION POLE                                                                                                                                    |
|  | CATCH BASIN/INLET (ROUND)                                          |  | GROUND/BOND                                                                                                                                          |
|  | FIRE HYDRANT                                                       |  | AERIAL STORAGE – EXISTING                                                                                                                            |
|  | WATER/GAS VALVE                                                    |  | AERIAL STORAGE – PROPOSED                                                                                                                            |
|  | LIGHT POST                                                         |  | VAULT/BUILDING FIBER STORAGE – EXISTING                                                                                                              |
|  | STREET LIGHT                                                       |  | VAULT/BUILDING FIBER STORAGE – PROPOSED                                                                                                              |
|  | TRAFFIC LIGHT ARM                                                  |  | POLE ANCHOR/DOWN GUY – EXISTING                                                                                                                      |
|  | TREE                                                               |  | POLE ANCHOR/DOWN GUY – PROPOSED                                                                                                                      |
|  | CULVERT                                                            |  | DOWN GUY TO EXISTING ANCHOR – PROPOSED                                                                                                               |
|  | WING WALL                                                          |  | SPLICE POINT – EXISTING                                                                                                                              |
|  | BRIDGE                                                             |  | SPLICE POINT – PROPOSED                                                                                                                              |
|  | STREET SIGN                                                        |  | TERMINATION – EXISTING                                                                                                                               |
|  | ADA RAMP                                                           |  | TERMINATION – PROPOSED                                                                                                                               |
|  | UTILITY POLE – EXISTING                                            |  | PULLBOX – EXISTING                                                                                                                                   |
|  | UTILITY POLE – PROPOSED                                            |  | PULLBOX – PROPOSED                                                                                                                                   |
|  | TRAFFIC RATED VAULT – EXISTING<br>(SIZE AND UTILITY TYPE MAY VARY) |  | CONSTRUCTION NOTE / RESTORATION CALLOUT                                                                                                              |
|  | TRAFFIC RATED VAULT – PROPOSED<br>(SIZE MAY VARY)                  |  | PHOTO-MARKER                                                                                                                                         |
|  | HANDHOLE – EXISTING<br>(SIZE AND UTILITY TYPE MAY VARY)            |  | NORTH ARROW                                                                                                                                          |
|  | HANDHOLE – PROPOSED<br>(SIZE MAY VARY)                             |  | (PROPOSED) WALL MOUNTED<br>OUTLET –TERMINATE NEW CABLES                                                                                              |
|  | PEDESTAL – EXISTING<br>(SIZE AND UTILITY TYPE MAY VARY)            |  | (EXISTING) WALL MOUNTED<br>DATA OUTLET – TERMINATE NEW CABLES                                                                                        |
|  | PEDESTAL – PROPOSED<br>(SIZE MAY VARY)                             |  | (EXISTING) WALL MOUNTED<br>DATA OUTLET – WRECK OUT & PULL THROUGH CABLES                                                                             |
|  | WET UTILITY MANHOLE – EXISTING<br>(SIZE AND UTILITY TYPE MAY VARY) |  | (PROPOSED) 10' CABLE COIL (EA. CABLE) ABOVE DROP CEILING.<br>TERMINATE WITH RJ-45 FEMALE IN SURFACE MOUNT ENCLOSURE.<br>SECURE ENCLOSURE TO CEILING. |
|  | BORE PIT – PROPOSED<br>(SIZE MAY VARY)                             |  | EXISTING SECURITY CAMERA                                                                                                                             |
|  | UTILITY POTHOLE                                                    |  |                                                                                                                                                      |

## INFORMATION TABLES

|                  |       |                                                                    |
|------------------|-------|--------------------------------------------------------------------|
| POLE NUMBER      | #     | UTILITY POLE INFORMATION TABLE<br>(NUMBER OF ATTACHMENTS MAY VARY) |
| EXISTING UTILITY | 0'-0" |                                                                    |
| PROPOSED ATTACH  | 0'-0" |                                                                    |

|    |      |                           |
|----|------|---------------------------|
| #F | IN:  | SEQUENTIAL IN/OUT CALLOUT |
|    | OUT: |                           |

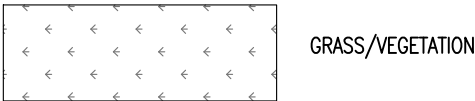
|    |       |                            |
|----|-------|----------------------------|
| #F | IN:   | SEQUENTIAL IN/TAIL CALLOUT |
|    | TAIL: |                            |

|    |       |                             |
|----|-------|-----------------------------|
| #F | TAIL: | SEQUENTIAL TAIL/OUT CALLOUT |
|    | OUT:  |                             |

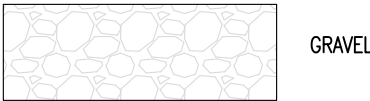
## HATCH PATTERNS



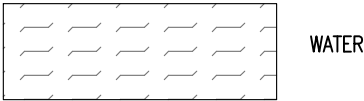
CONCRETE SIDEWALK



GRASS/VEGETATION



GRAVEL



WATER



|                                                  |          |          |         |              |
|--------------------------------------------------|----------|----------|---------|--------------|
| 3                                                |          |          |         | AS-BUILT     |
| 2                                                | 5/9/19   | JLS      | JLS     | REVISION # 2 |
| 1                                                | 10/16/18 | JLS      | JLS     | ORIGINAL     |
| NO.                                              | DATE     | ENGINEER | DRAFTER | COMMENT      |
|                                                  |          |          |         |              |
|                                                  |          |          |         |              |
| CLIENT ENGINEER: IRINA TARASOVA                  |          |          |         |              |
| ENGINEERING FIRM: MGC TECHNICAL CONSULTING INC.  |          |          |         |              |
| PROJECT NUMBER: ----                             |          |          |         |              |
| LOCATION: 12101 NE 160TH ST<br>BOTHELL, WA 98011 |          |          |         |              |
| DRAWING NAME: NSD - NSMS - COPPER UPGRADE.dwg    |          |          |         |              |
| CONFIDENTIAL/PROPRIETARY                         |          |          |         |              |
| SHEET: 2 OF 8                                    |          |          |         |              |

# GENERAL NOTES

**GENERAL NOTES:**

The locations of utilities shown on these drawing are only approximate. MGC TECHNICAL CONSULTING, INC. hereby disclaims any responsibility to third parties for the accuracy of this information. Persons working in the area covered by this drawing must contact the statewide Call-Before-You-Dig System to ascertain the location of underground utilities prior to performing any excavation.

ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF UTILITY IMPROVEMENTS SHALL MEET OR EXCEED SITE WORK STANDARDS AND THE STANDARDS AND SPECIFICATIONS SET FORTH IN THE CITY OF BOTHELL REGULATIONS AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS CONFLICT BETWEEN THESE PLANS AND THE SPECIFICATIONS, OR ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK WITHIN PUBLIC R.O.W. OR EASEMENTS MAY REQUIRE INSPECTED AND APPROVED BY THE CITY OF BOTHELL INSPECTOR. INSPECTION SERVICES AND CONSTRUCTION CERTIFICATION TO BE PROVIDED BY DESIGNEE OF PROJECT SPONSOR/OWNER.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY PERTINENT LOCATIONS AND ELEVATIONS, ESPECIALLY AT THE CONNECTION POINTS AND AT POTENTIAL UTILITY CONFLICTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM ALL APPLICABLE AGENCIES. THE CONTRACTOR SHALL NOTIFY THE CITY OF BOTHELL INSPECTOR AT LEAST 48 HOURS PRIOR TO THE START OF ANY EARTH DISTURBING ACTIVITY OR CONSTRUCTION ON ANY AND ALL PUBLIC IMPROVEMENTS IF REQUIRED.

THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE CITY OF BOTHELL AND ALL UTILITY COMPANIES WITH REGARD TO RELOCATIONS OR ADJUSTMENTS OF EXISTING UTILITIES DURING CONSTRUCTION, TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY FASHION, AND WITH A MINIMUM DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PARTIES AFFECTED BY ANY DISRUPTION OF ANY UTILITY SERVICE.

THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE APPROVED PLANS, ONE (1) COPY OF THE APPROPRIATE STANDARDS AND SPECIFICATIONS, AND ONE (1) COPY OF ANY PERMITS AND EXTENSION AGREEMENTS NEEDED FOR THE JOB ON-SITE AT ALL TIMES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING, BUT NOT LIMITED TO: EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.

ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD, UNLESS SPECIFICALLY STATED OTHERWISE.

FOR WORK AFFECTING PUBLIC ROADWAYS OR IF REQUIRED BY THE CITY OF BOTHELL, THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL AND PHASING PLAN IN ACCORDANCE WITH M.U.T.C.D. FOR APPROVAL. PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN OR AFFECTING THE RIGHT-OF-WAY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY SAID PLANS. PRIOR TO INSTALLATION A PRECONSTRUCTION CONFERENCE SHALL BE HELD WITH CITY OF BOTHELL.

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

PER AGENCY STANDARDS THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADWAYS FREE AND CLEAR OF ALL CONSTRUCTION DEBRIS AND DIRT TRACKED FROM THE SITE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING RECORD INFORMATION ON A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE CITY OF BOTHELL INSPECTOR AT ALL TIMES.

DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. FOR ADDITIONAL INFORMATION CONTACT THE ENGINEER FOR CLARIFICATION AND NOTE ON THE RECORD DRAWINGS.

ALL EROSION AND SEDIMENT CONTROL (E.S.C.) MEASURES SHALL BE INSTALLED AT THE LIMITS OF CONSTRUCTION PRIOR TO GROUND DISTURBING ACTIVITY. ALL E.S.C. MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREAS ARE STABILIZED WITH HARD SURFACE OR LANDSCAPING.

ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY IS SUBJECT TO THE JURISDICTION OF THE CITY OF BOTHELL ENGINEERING DEPARTMENT STANDARD DETAILS AND SPECIFICATIONS.

ALL CONSTRUCTION OPERATIONS, INCLUDING THE WARMING UP, REPAIR, ARRIVAL, DEPARTURE OR RUNNING OF TRUCKS, EARTH MOVING EQUIPMENT, CONSTRUCTION EQUIPMENT AND ANY OTHER ASSOCIATED EQUIPMENT SHALL GENERALLY BE LIMITED TO THE TIME PERIOD APPROVED BY THE CITY OF BOTHELL.

17. ALL CONSTRUCTION IS TO BE PREFORMED TO INDUSTRY ACCEPTABLE STANDARDS.

18. EACH FIBER CABLE SHALL BE TAGGED AT EACH ENDPOINT AND IN EACH VAULT WITH A OUTDOOR RATED FIBER TAG DENOTING THE FIBER TYPE AND ENDPOINTS OF THE CABLE. (EG. "12CT SMF - MDF TO IDF-300").

19. ALL FIBER SHALL BE TERMINATED USING A CORE ALIGNMENT FUSION SPLICER.

20. MULE TAPE SHALL BE LEFT IN ALL CONDUIT PATHWAYS.

21. 3' SERVICE LOOP SHALL BE LEFT ON ALL NEW CAT5E/CAT6A CABLES AT IDF / MDF.

22. REPLACE FACE PLATE ON ALL ABANDONED DATA OUTLETS WITH STAINLESS STEEL BLANK COVER.

23. LABEL ALL STATION CABLING PER NORTHSHORE SCHOOL DISTRICT STANDARDS DOCUMENT AT PATCH PANEL AND AT FAR END DROP LOCATION.

24. ALL NEW CABLE RUNS ALONG WALLS SHALL BE ENCLOSED IN WIRE-MOLD OR EMT TO OUTLET.

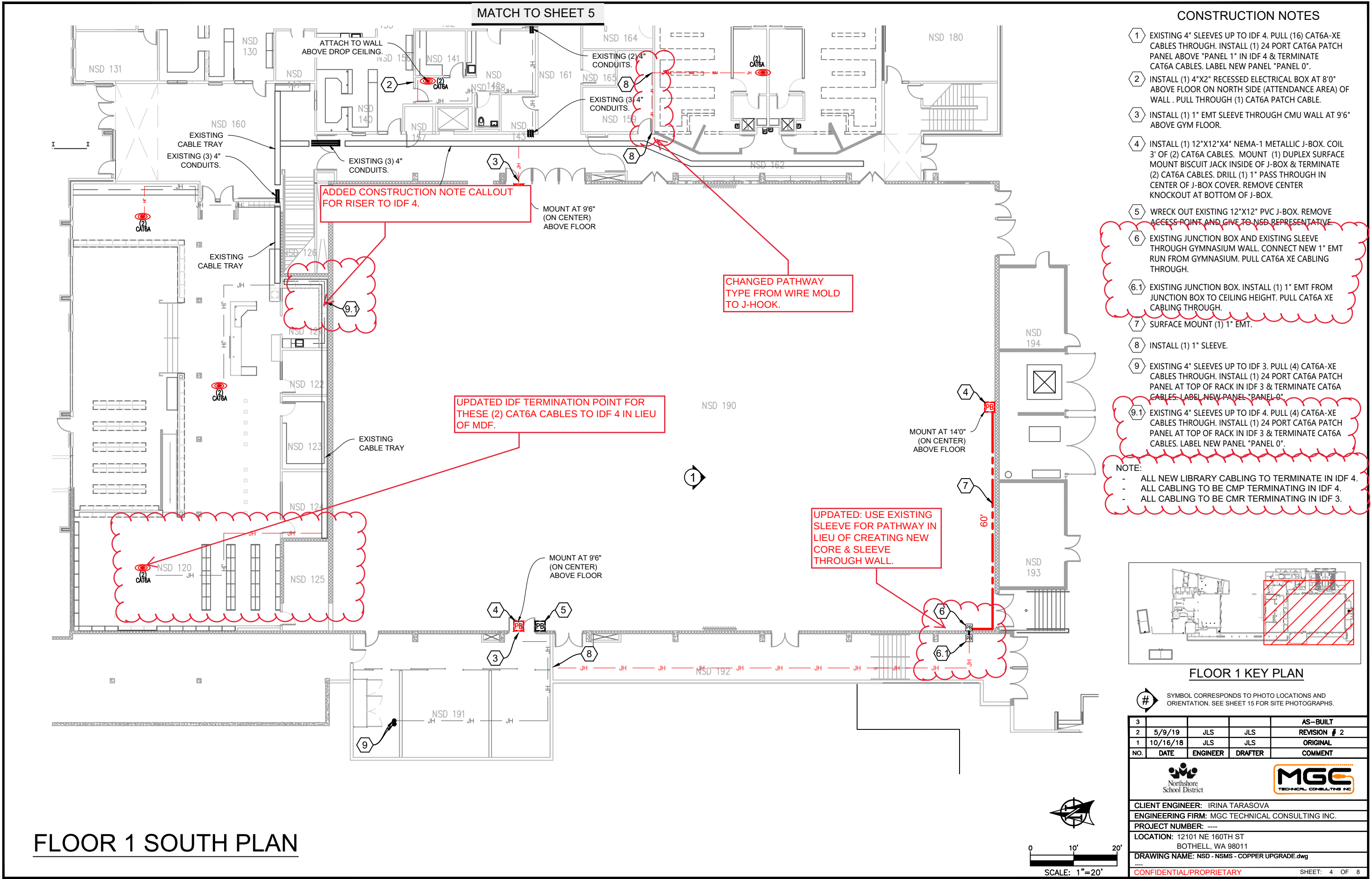
25. ALL NEW CABLING INSTALLED ABOVE DROP CEILING SHALL BE SECURED TO J-HOOK PATHWAY.

26. ALL NEW CABLING PASSING THROUGH UNDERGROUND CONDUITS MUST BE AT A MINIMUM BOTH CM & WET RATED (OSP

27. ALL COPPER CABLING TO BE TERMINATED AS T568A.



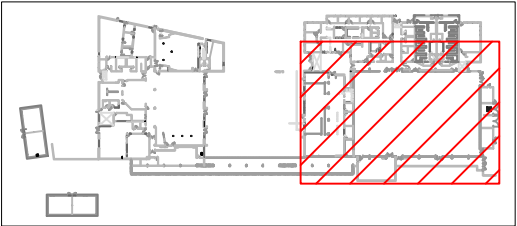
|                                                                                                                                                                                                                                                      |          |          |         |              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|---------|--------------|
| 3                                                                                                                                                                                                                                                    |          |          |         | AS-BUILT     |
| 2                                                                                                                                                                                                                                                    | 5/9/19   | JLS      | JLS     | REVISION # 2 |
| 1                                                                                                                                                                                                                                                    | 10/16/18 | JLS      | JLS     | ORIGINAL     |
| NO.                                                                                                                                                                                                                                                  | DATE     | ENGINEER | DRAFTER | COMMENT      |
| <div><div><div>Northshore<br/>School District</div></div><div></div></div> |          |          |         |              |
| CLIENT ENGINEER: IRINA TARASOVA                                                                                                                                                                                                                      |          |          |         |              |
| ENGINEERING FIRM: MGC TECHNICAL CONSULTING INC.                                                                                                                                                                                                      |          |          |         |              |
| PROJECT NUMBER: ----                                                                                                                                                                                                                                 |          |          |         |              |
| LOCATION: 12101 NE 160TH ST<br>BOTHELL, WA 98011                                                                                                                                                                                                     |          |          |         |              |
| DRAWING NAME: NSD - NSMS - COPPER UPGRADE.dwg                                                                                                                                                                                                        |          |          |         |              |
| CONFIDENTIAL/PROPRIETARY                                                                                                                                                                                                                             |          |          |         |              |
| SHEET: 3 OF 8                                                                                                                                                                                                                                        |          |          |         |              |



CONSTRUCTION NOTES

- 1 EXISTING 4" SLEEVES UP TO IDF 4. PULL (16) CAT6A-XE CABLES THROUGH. INSTALL (1) 24 PORT CAT6A PATCH PANEL ABOVE "PANEL 1" IN IDF 4 & TERMINATE CAT6A CABLES. LABEL NEW PANEL "PANEL 0".
- 2 INSTALL (1) 4"x2" RECESSED ELECTRICAL BOX AT 8'0" ABOVE FLOOR ON NORTH SIDE (ATTENDANCE AREA) OF WALL. PULL THROUGH (1) CAT6A PATCH CABLE.
- 3 INSTALL (1) 1" EMT SLEEVE THROUGH CMU WALL AT 9'6" ABOVE GYM FLOOR.
- 4 INSTALL (1) 12"x12"x4" NEMA-1 METALLIC J-BOX. COIL 3' OF (2) CAT6A CABLES. MOUNT (1) DUPLEX SURFACE MOUNT BISCUIT JACK INSIDE OF J-BOX & TERMINATE (2) CAT6A CABLES. DRILL (1) 1" PASS THROUGH IN CENTER OF J-BOX COVER. REMOVE CENTER KNOCKOUT AT BOTTOM OF J-BOX.
- 5 WRECK OUT EXISTING 12"x12" PVC J-BOX. REMOVE ACCESS POINT AND GIVE TO NSD REPRESENTATIVE.
- 6 EXISTING JUNCTION BOX AND EXISTING SLEEVE THROUGH GYMNASIUM WALL. CONNECT NEW 1" EMT RUN FROM GYMNASIUM. PULL CAT6A XE CABLING THROUGH.
- 6.1 EXISTING JUNCTION BOX. INSTALL (1) 1" EMT FROM JUNCTION BOX TO CEILING HEIGHT. PULL CAT6A XE CABLING THROUGH.
- 7 SURFACE MOUNT (1) 1" EMT.
- 8 INSTALL (1) 1" SLEEVE.
- 9 EXISTING 4" SLEEVES UP TO IDF 3. PULL (4) CAT6A-XE CABLES THROUGH. INSTALL (1) 24 PORT CAT6A PATCH PANEL AT TOP OF RACK IN IDF 3 & TERMINATE CAT6A CABLES. LABEL NEW PANEL "PANEL 0".
- 9.1 EXISTING 4" SLEEVES UP TO IDF 4. PULL (4) CAT6A-XE CABLES THROUGH. INSTALL (1) 24 PORT CAT6A PATCH PANEL AT TOP OF RACK IN IDF 3 & TERMINATE CAT6A CABLES. LABEL NEW PANEL "PANEL 0".

NOTE:  
- ALL NEW LIBRARY CABLING TO TERMINATE IN IDF 4.  
- ALL CABLING TO BE CMP TERMINATING IN IDF 4.  
- ALL CABLING TO BE CMR TERMINATING IN IDF 3.



FLOOR 1 KEY PLAN

# SYMBOL CORRESPONDS TO PHOTO LOCATIONS AND ORIENTATION. SEE SHEET 15 FOR SITE PHOTOGRAPHS.

|     |          |          |         |              |
|-----|----------|----------|---------|--------------|
| 3   |          |          |         | AS-BUILT     |
| 2   | 5/9/19   | JLS      | JLS     | REVISION # 2 |
| 1   | 10/16/18 | JLS      | JLS     | ORIGINAL     |
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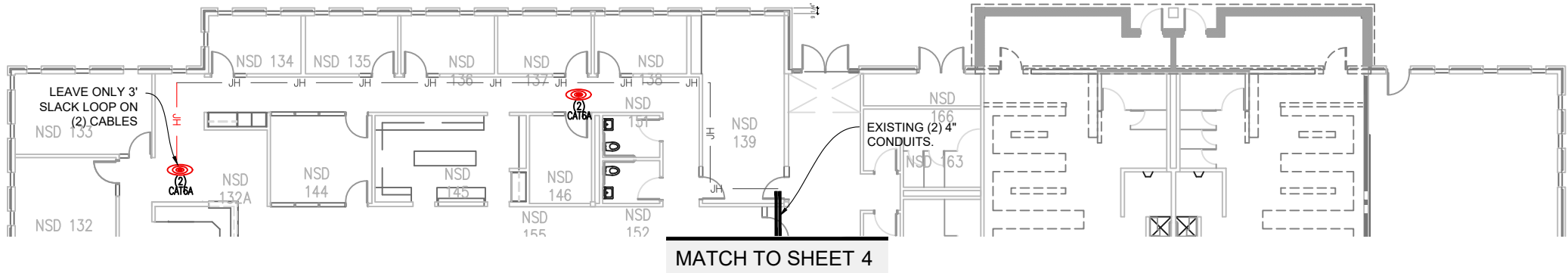


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ENGINEERING FIRM: MGC TECHNICAL CONSULTING INC.  
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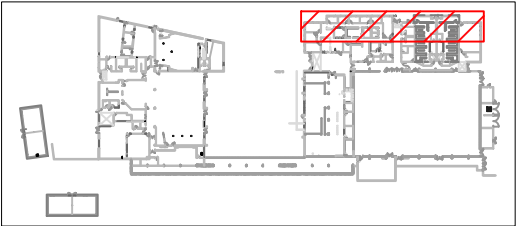
FLOOR 1 SOUTH PLAN



0 10' 20'  
SCALE: 1"=20'



NOTE: ALL CABLING TO BE CMP RATED.



FLOOR 1 KEY PLAN

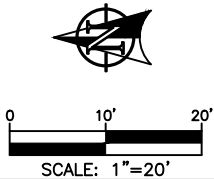
# SYMBOL CORRESPONDS TO PHOTO LOCATIONS AND ORIENTATION. SEE SHEET 15 FOR SITE PHOTOGRAPHS.

|     |          |          |         |              |
|-----|----------|----------|---------|--------------|
| 3   |          |          |         | AS-BUILT     |
| 2   | 5/9/19   | JLS      | JLS     | REVISION # 2 |
| 1   | 10/16/18 | JLS      | JLS     | ORIGINAL     |
| NO. | DATE     | ENGINEER | DRAFTER | COMMENT      |

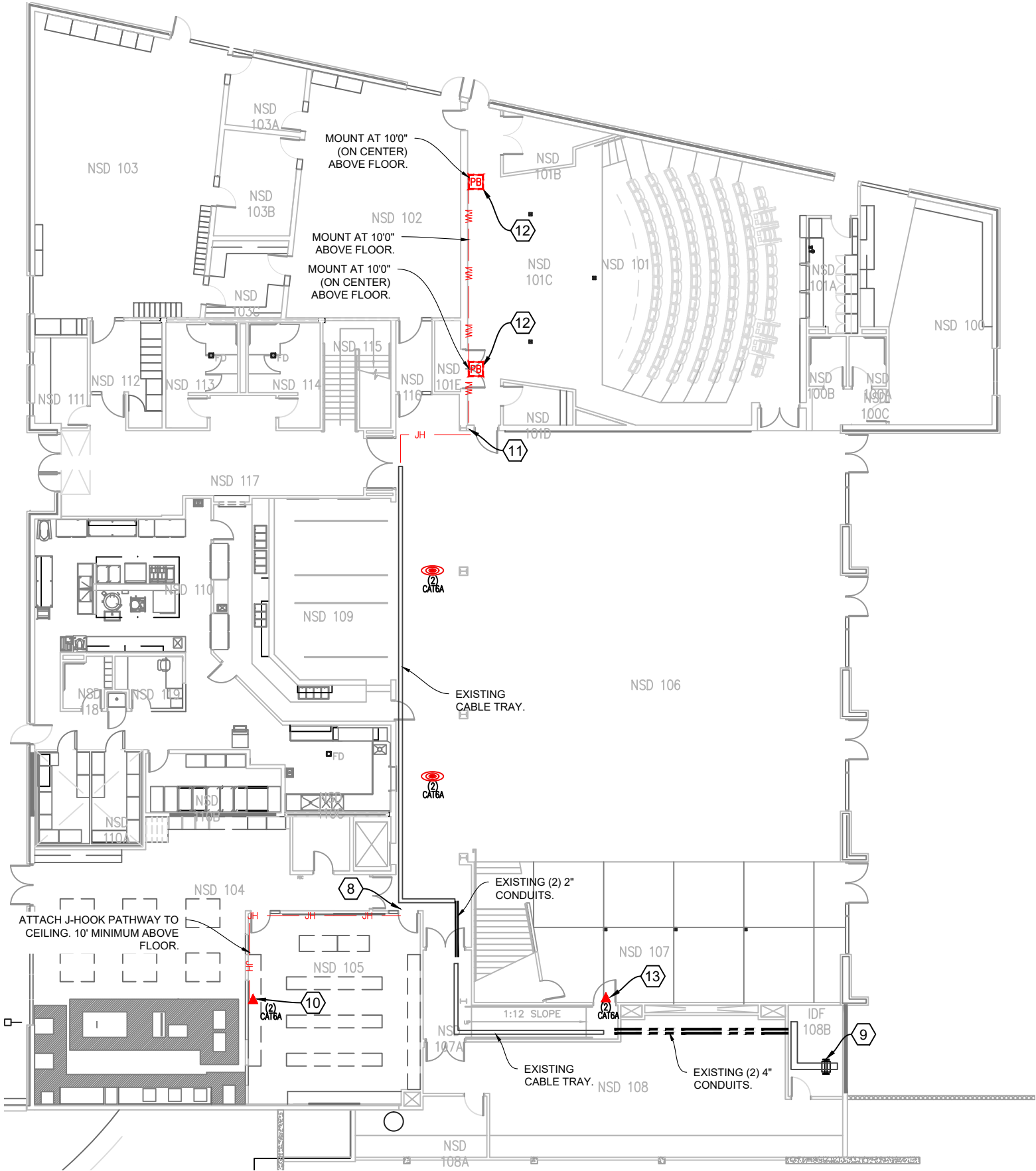


CLIENT ENGINEER: IRINA TARASOVA  
ENGINEERING FIRM: MGC TECHNICAL CONSULTING INC.  
PROJECT NUMBER: ----  
LOCATION: 12101 NE 160TH ST  
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FLOOR 1 SOUTHEAST



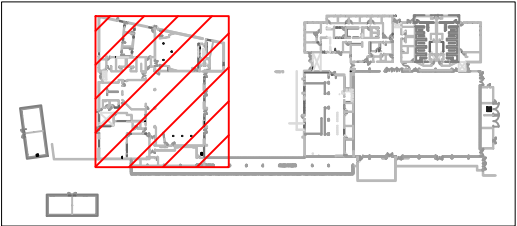
FLOOR 1 NORTH



CONSTRUCTION NOTES

- 8 INSTALL (1) 1" SLEEVE.
- 9 EXISTING 2 POST RACK. INSTALL (1) 24 PORT CAT6A PATCH PANEL ABOVE "PANEL 1". LABEL NEW PANEL "PANEL 0". TERMINATE CAT6A-XE CABLES.
- 10 INSTALL (1) DUPLEX SURFACE MOUNT BISCUIT JACK ON WALL AS HIGH AS POSSIBLE. COIL 5' SLACK OF (2) CAT6A-XE CABLES. TERMINATE (2) CAT6A CABLES.
- 11 INSTALL (1) 1.25" SLEEVE.
- 12 INSTALL (1) 12"x12"x4" NEMA-1 METALLIC J-BOX. COIL 3' OF (2) CAT6A CABLES. MOUNT (1) DUPLEX SURFACE MOUNT BISCUIT JACK INSIDE OF J-BOX & TERMINATE (2) CAT6A CABLES. DRILL (1) 1" PASS THROUGH IN CENTER OF J-BOX COVER.
- 13 INSTALL (1) RECESSED LOW VOLT TERMINATION OUTLET BOX ON COMMONS SIDE OF WALL AS HIGH AS POSSIBLE WITHOUT DISTURBING PAINTED MURAL. TERMINATE (2) CAT6A CABLES TO FEMALE KEYSTONE JACKS.

NOTE: ALL CABLING TO BE CMP RATED.



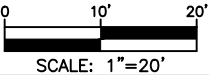
FLOOR 1 KEY PLAN

# SYMBOL CORRESPONDS TO PHOTO LOCATIONS AND ORIENTATION. SEE SHEET 15 FOR SITE PHOTOGRAPHS.

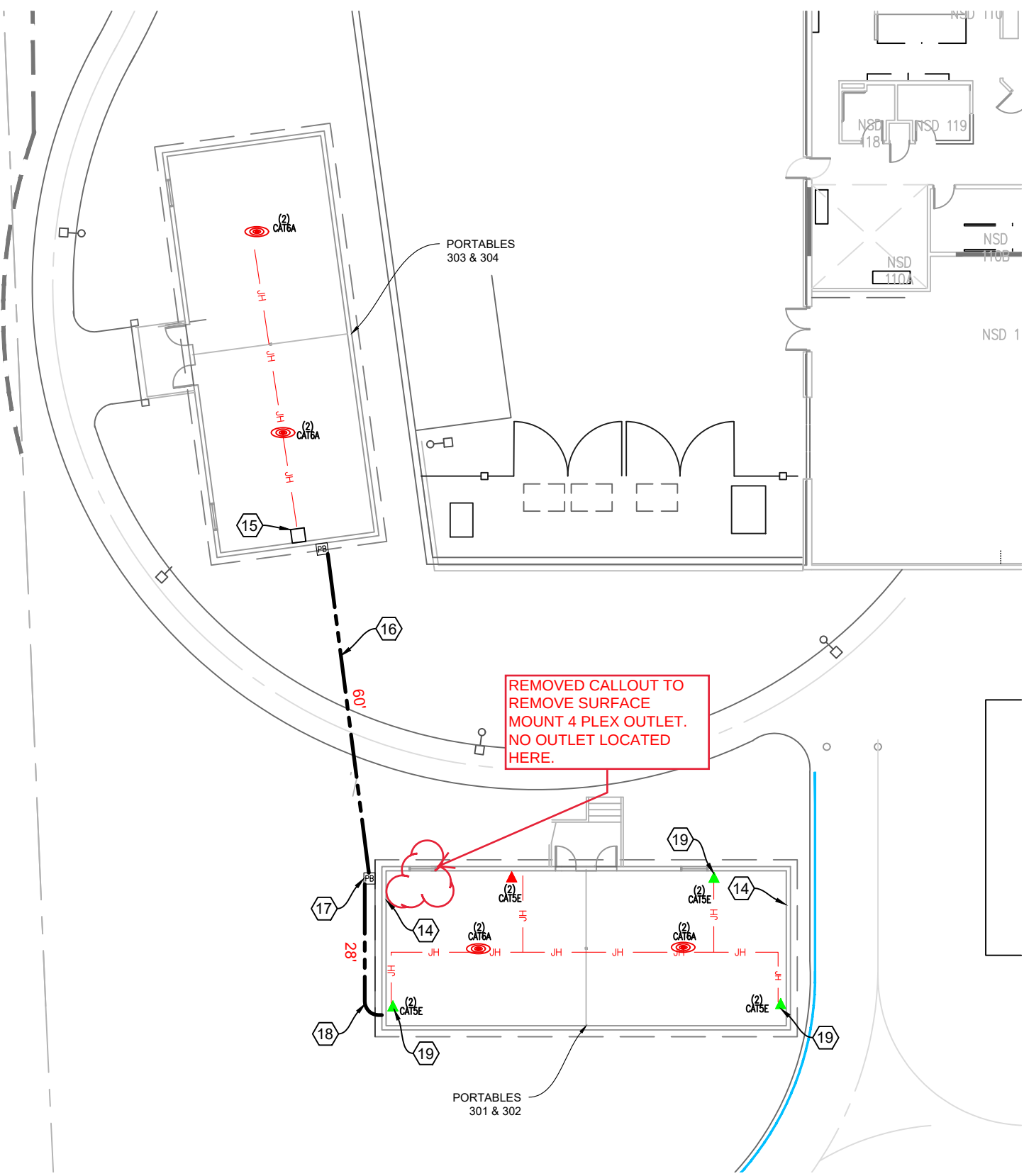
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|-----|----------|----------|---------|--------------|
| 3   |          |          |         | AS-BUILT     |
| 2   | 5/9/19   | JLS      | JLS     | REVISION # 2 |
| 1   | 10/16/18 | JLS      | JLS     | ORIGINAL     |
| NO. | DATE     | ENGINEER | DRAFTER | COMMENT      |



CLIENT ENGINEER: IRINA TARASOVA  
ENGINEERING FIRM: MGC TECHNICAL CONSULTING INC.  
PROJECT NUMBER: ----  
LOCATION: 12101 NE 160TH ST  
BOTHELL, WA 98011  
DRAWING NAME: NSD - NSMS - COPPER UPGRADE.dwg



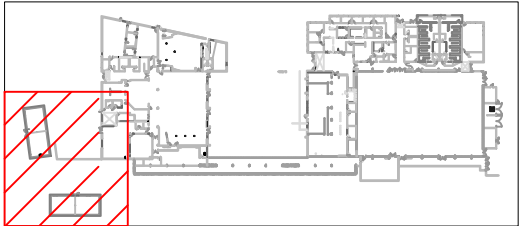
PORTABLES



CONSTRUCTION NOTES

- 14 WRECK OUT EXISTING SURFACE MOUNTED DATA OUTLET AND WIRE MOLD. WRECK OUT EXISTING CAT5E CABLING BACK TO IDF.
- 15 EXISTING WALL MOUNTED CABINET. REPLACE CABINET WITH (1) MIDDLE ATLANTIC DWR-12-22PD WALL MOUNT CABINET. TRANSFER EXISTING 48 PORT CAT5E PATCH PANEL & FIBER TERMINATION PANEL. TERMINATE (8) NEW CAT5E CABLES FROM PORTABLES 301 & 302 TO EXISTING 48 PORT CAT5 PATCH PANEL. WRECK OUT (1) 12 PORT SURFACE MOUNT CAT5E PATCH PANEL AND RE-TERMINATE (3) (BLUE) CAT5E CABLES TO EXISTING 48 PORT CAT5 PATCH PANEL. INSTALL (1) 24 PORT CAT6A PATCH PANEL. TERMINATE (8) NEW CAT6A CABLES.
- 16 EXISTING (1) 2" CONDUIT. WRECK OUT (16) EXISTING CAT5E CABLES. PULL THROUGH (4) SUPERIOR ESSEX ENDURAGAIN OSP SHIELDED INDOOR/OUTDOOR CABLES. PULL THROUGH (8) OSP,CM RATED CAT5E CABLES.
- 17 WRECK OUT & REPLACE EXISTING DAMAGED 12"x12"x6" JUNCTION BOX WITH NEW 12"x12"x6" NEMA-3R OR GREATER JUNCTION BOX.
- 18 EXISTING 2" CONDUIT. PULL CABLING THROUGH.
- 19 EXISTING ORTRONICS SURFACE MOUNT OUTLET BOX. WRECK OUT EXISTING CAT5E CABLING BACK TO IDF. TERMINATE (2) NEW CAT5E CABLES.

- NOTE:
- ALL CABLING IN PORABLES 301 & 302 TO BE OSP & CM RATED
  - CMR CABLING OK FOR PORTABLES 303 & 304



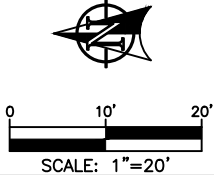
FLOOR 1 KEY PLAN

# SYMBOL CORRESPONDS TO PHOTO LOCATIONS AND ORIENTATION. SEE SHEET 15 FOR SITE PHOTOGRAPHS.

|     |          |          |         |              |
|-----|----------|----------|---------|--------------|
| 3   |          |          |         | AS-BUILT     |
| 2   | 5/9/19   | JLS      | JLS     | REVISION # 2 |
| 1   | 10/16/18 | JLS      | JLS     | ORIGINAL     |
| NO. | DATE     | ENGINEER | DRAFTER | COMMENT      |



CLIENT ENGINEER: IRINA TARASOVA  
ENGINEERING FIRM: MGC TECHNICAL CONSULTING INC.  
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# SITE PHOTOGRAPHS

PHOTO #1: GYM FACING WEST

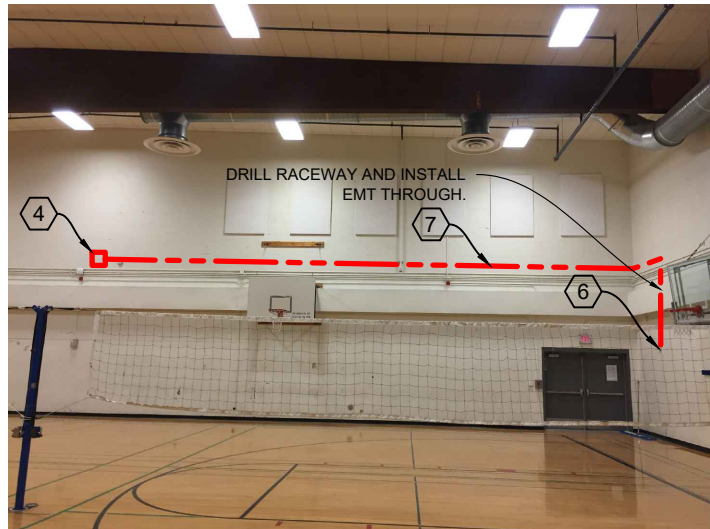


PHOTO #6: WEST OF MAINTENANCE SHED FACING EAST

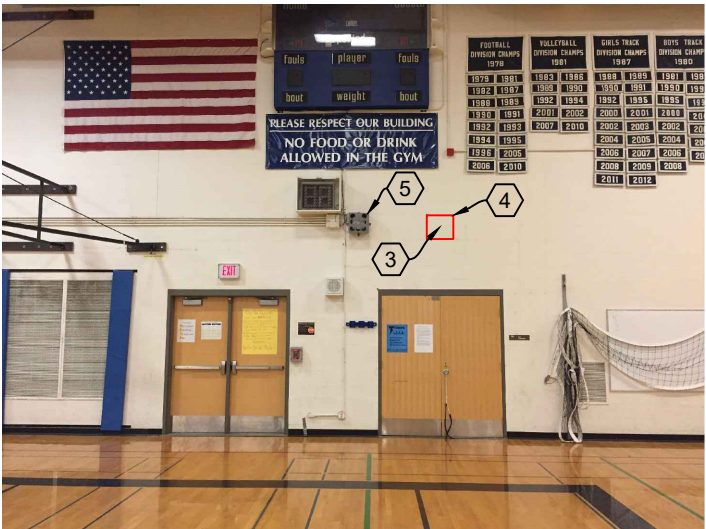


PHOTO #7: MAINTENANCE SHED FACING SOUTH

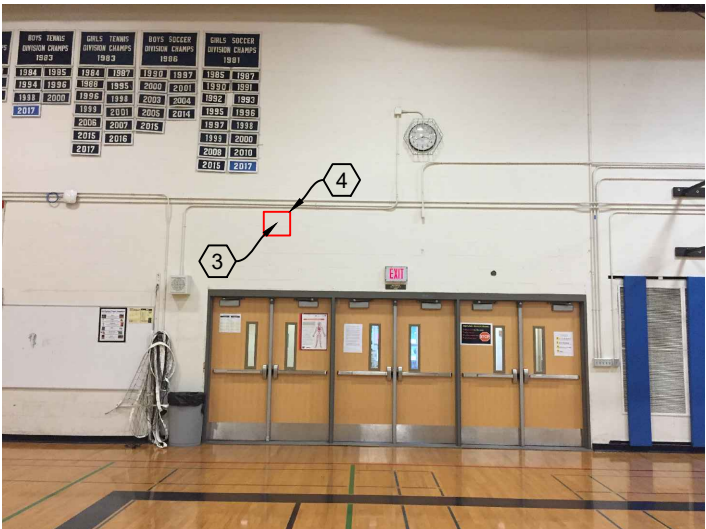


PHOTO #4: COMMONS FACING NORTHWEST



## CONSTRUCTION NOTES

- 3 INSTALL (1) 1" EMT SLEEVE THROUGH CMU WALL AT 9'6" ABOVE GYM FLOOR.
- 4 INSTALL (1) 12"x12"x4" NEMA-1 METALLIC J-BOX. COIL 3' OF (2) CAT6A CABLES. MOUNT (1) DUPLEX SURFACE MOUNT BISCUIT JACK INSIDE OF J-BOX & TERMINATE (2) CAT6A CABLES. DRILL (1) 1" PASS THROUGH IN CENTER OF J-BOX COVER. REMOVE CENTER KNOCKOUT AT BOTTOM OF J-BOX.
- 5 WRECK OUT EXISTING 12"x12" PVC J-BOX. REMOVE ACCESS POINT AND GIVE TO NSD REPRESENTATIVE.
- 6 EXISTING JUNCTION BOX AND EXISTING SLEEVE THROUGH GYMNASIUM WALL. CONNECT NEW 1" EMT RUN FROM GYMNASIUM. PULL CAT6A XE CABLING THROUGH.
- 7 SURFACE MOUNT (1) 1" EMT.
- 13 INSTALL (1) RECESSED LOW VOLT TERMINATION OUTLET BOX ON COMMONS SIDE OF WALL AS HIGH AS POSSIBLE WITHOUT DISTURBING PAINTED MURAL. TERMINATE (2) CAT6A CABLES TO FEMALE KEYSTONE JACKS.



|                                                  |          |          |         |              |
|--------------------------------------------------|----------|----------|---------|--------------|
| 3                                                |          |          |         | AS-BUILT     |
| 2                                                | 5/9/19   | JLS      | JLS     | REVISION # 2 |
| 1                                                | 10/16/18 | JLS      | JLS     | ORIGINAL     |
| NO.                                              | DATE     | ENGINEER | DRAFTER | COMMENT      |
| <div><div></div><div></div></div>                |          |          |         |              |
| CLIENT ENGINEER: IRINA TARASOVA                  |          |          |         |              |
| ENGINEERING FIRM: MGC TECHNICAL CONSULTING INC.  |          |          |         |              |
| PROJECT NUMBER: ----                             |          |          |         |              |
| LOCATION: 12101 NE 160TH ST<br>BOTHELL, WA 98011 |          |          |         |              |
| DRAWING NAME: NSD - NSMS - COPPER UPGRADE.dwg    |          |          |         |              |
| CONFIDENTIAL/PROPRIETARY                         |          |          |         |              |