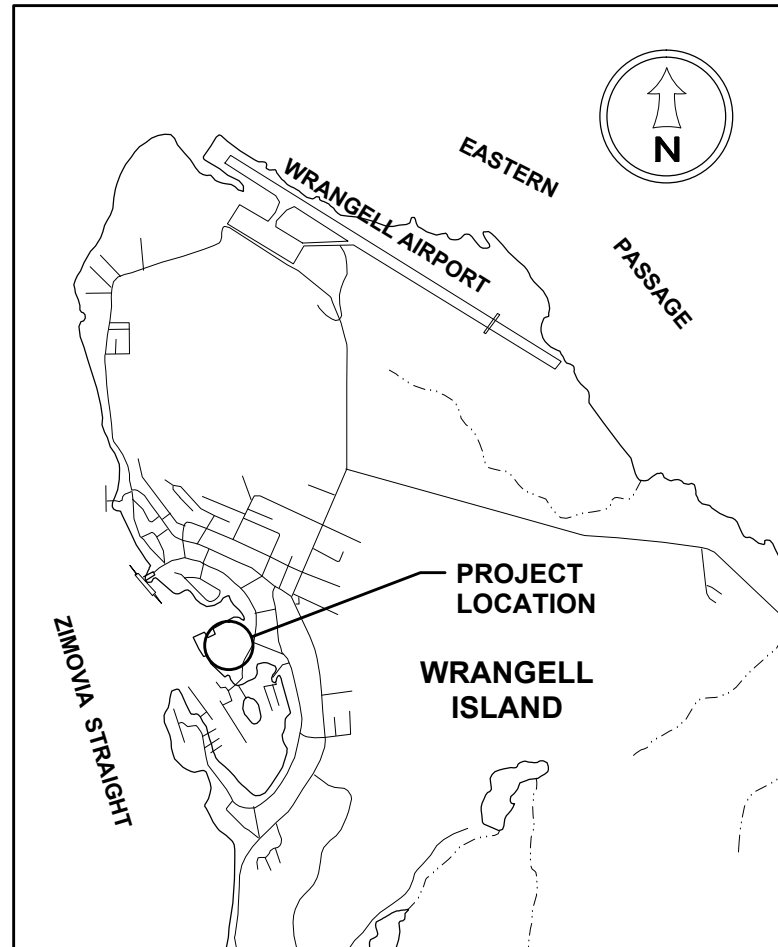
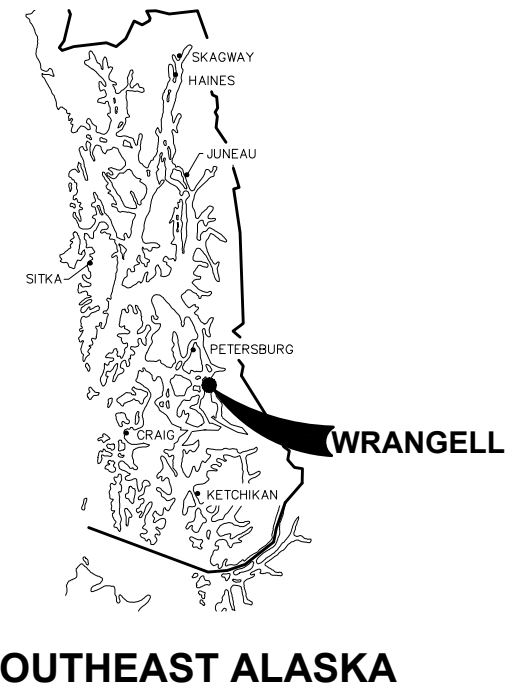
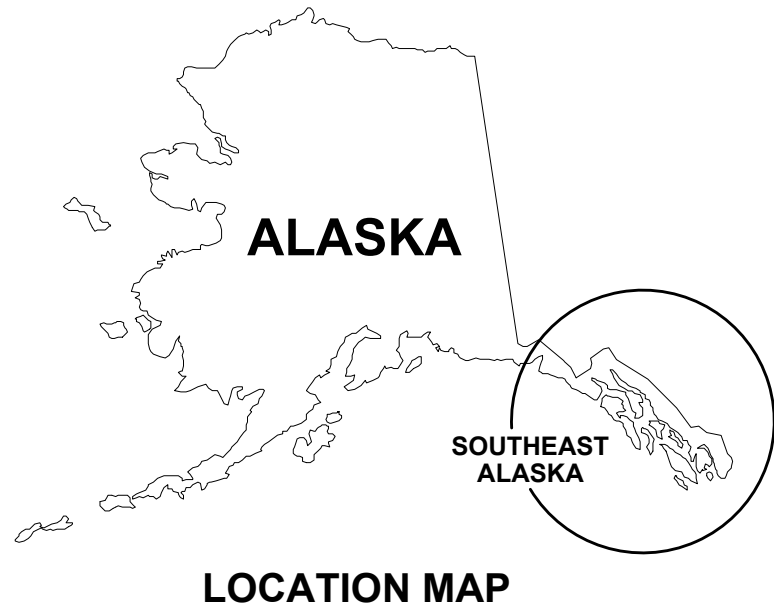


# CITY AND BOROUGH OF WRANGELL WRANGELL MARINE SERVICE CENTER CONCRETE PAVING- PHASE II 2013



**DESIGN PARAMETERS:**

APPLICABLE CODES:

LIVE LOADS:

TRUCK: ASSHTO HS20-44  
 FORKLIFT: 237,000 LBS AXLE, 118,500 LBS PER WHEEL  
 TRAVELIFT: 300 BFM (300 TON) TRAVELIFT, 275,000 LBS WHEEL LOAD  
 UNIFORM LOAD: 1000 PSF

| DRAWING INDEX |          |   |
|---------------|----------|---|
| SHEET NO.     | DWG. NO. | SHEET TITLE   |
| 1 OF 18       | 1.01     | COVER SHEET, VICINITY MAP AND DRAWING INDEX             |
| 2 OF 18       | 1.02     | LEGEND, ABBREVIATIONS & GENERAL NOTES                   |
| 3 OF 18       | 1.03     | EXISTING CONDITIONS AND SURVEY CONTROL                  |
| 4 OF 18       | 1.04     | DEMOLITION SITE PLAN                                    |
|               |          |   |
| 5 OF 18       | 2.01     | OVERALL SITE PLAN – FINAL GRADE CONTOURS                |
| 6 OF 18       | 2.02     | SITE PLAN – PARTIAL AREA 1                              |
| 7 OF 18       | 2.03     | SITE PLAN – PARTIAL AREA 1, AREA 1A AND ADD. ALT. D     |
| 8 OF 18       | 2.04     | SITE PLAN – AREA 2A, AREA 3A, AREA 1B AND ADD. ALT. C   |
| 9 OF 18       | 2.05     | SITE PLAN – AREA 2, AREA 3, ADD. ALT. A AND ADD. ALT. B |
| 10 OF 18      | 2.06     | OVERALL SITE PLAN WATER AND SEWER                       |
|               |          |   |
| 11 OF 18      | 3.01     | SITE SECTIONS   |
| 12 OF 18      | 3.02     | TYPICAL SECTIONS @ 12" THICK CONCRETE SLAB              |
| 13 OF 18      | 3.03     | TYPICAL SECTIONS @ 14" THICK CONCRETE SLAB              |
| 14 OF 18      | 3.04     | TYPICAL SECTIONS AND DETAILS                            |
| 15 OF 18      | 3.05     | TYPICAL SECTIONS AND DETAILS                            |
| 16 OF 18      | 3.06     | STORM DRAIN DETAILS                                     |
| 17 OF 18      | 3.07     | MISCELLANEOUS DETAILS                                   |
| 18 OF 18      | 3.08     | FENCING DETAILS   |
|               |          |   |
| ELECTRICAL    |          |   |
| 1 OF 8        | E1.00    | OVERALL SITE PLAN                                       |
| 2 OF 8        | E1.01    | EXISTING SITE PLAN                                      |
| 3 OF 8        | E1.02    | EXISTING SITE PHOTOS                                    |
| 4 OF 8        | E2.01    | PARTIAL SITE PLAN – NEW                                 |
| 5 OF 8        | E2.02    | SINGLE LINE DIAGRAMS                                    |
| 6 OF 8        | E2.03    | SCHEDULE & DETAILS                                      |
| 7 OF 8        | E2.04    | WIRING DIAGRAMS   |
| 8 OF 8        | E2.05    | DETAILS   |

**PROJECT SCHEDULE**

| DESCRIPTION | EARLIEST START    | SUBSTANTIAL COMPLETION SCHEDULE |
|-------------|-------------------|---------------------------------|
| AREA 1      | NTP               | JUNE 14, 2013                   |
| AREA 1A     | NTP               | JUNE 14, 2013                   |
| AREA 1B     | JUNE 14, 2013     | JULY 8, 2013                    |
| AREA 2      | JULY 1, 2013      | SEPTEMBER 1, 2013               |
| AREA 2A     | JULY 1, 2013      | SEPTEMBER 1, 2013               |
| AREA 3      | SEPTEMBER 1, 2013 | NOVEMBER 20, 2013               |
| AREA 3A     | SEPTEMBER 1, 2013 | NOVEMBER 20, 2013               |
| ADD. ALT. A | MAY 15, 2014      | JUNE 30, 2014                   |
| ADD. ALT. B | JULY 1, 2014      | AUGUST 15, 2014                 |
| ADD. ALT. C | JULY 1, 2014      | AUGUST 15, 2014                 |
| ADD. ALT. D | SPRING 2014       | AUGUST 15, 2014                 |

NOTE: CONCRETE COMPRESSIVE STRENGTH SHALL OBTAIN 80% f<sub>c</sub> BY THE SUBSTANTIAL COMPLETION DATES LISTED.

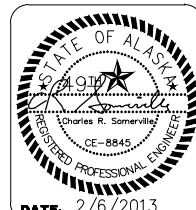
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WRANGELL MARINE SERVICE CENTER  
CONCRETE PAVING- PHASE II

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SHEET TITLE:  
COVER SHEET, VICINITY MAP  
AND DRAWING INDEX

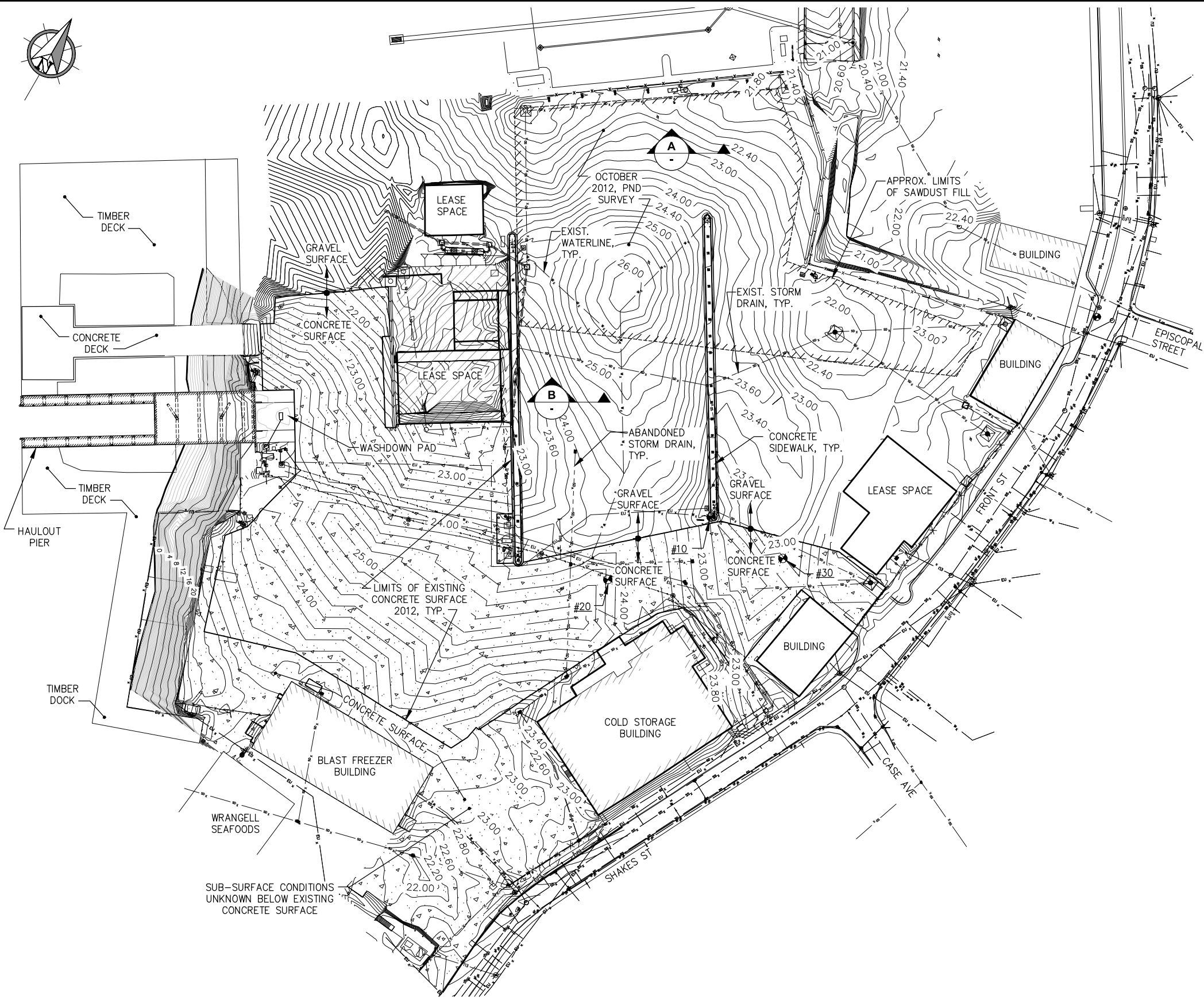
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SHEET  
1 OF 18

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PND PROJECT NO. 112071.03    DWG. FILE: 1.01\*.DWG



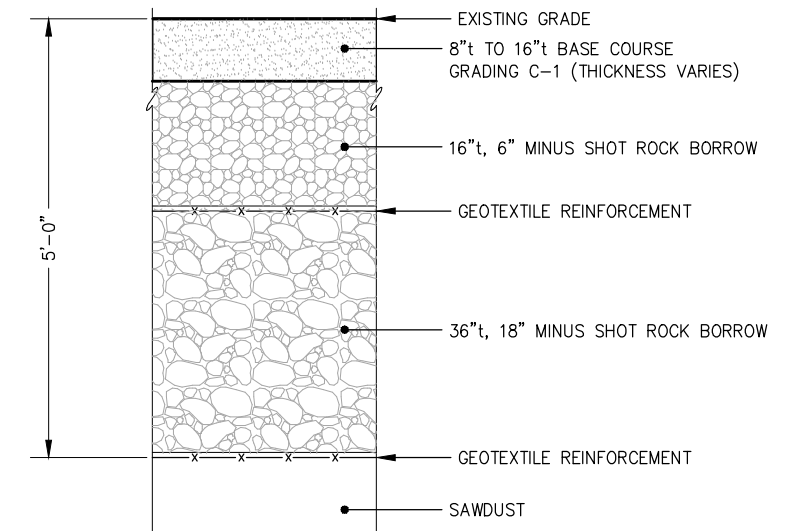


**NOTES**

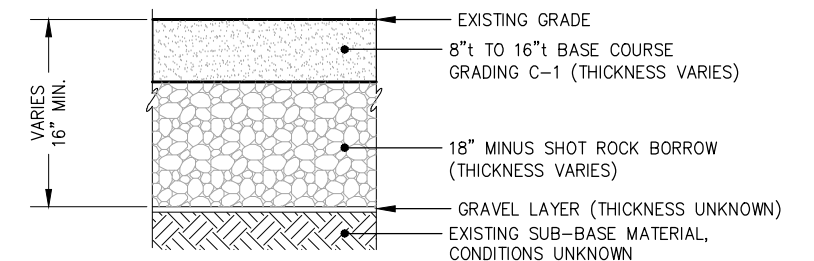
- BOUNDARY INFORMATION IS BASED ON A SURVEY PLAT BY SHEFF & ASSOCIATES. DATE MAY 31, 2005.
- REFERENCE THE FOLLOWING PLATS WITHIN THE WRANGELL RECORDING DISTRICT  
 PLAT #95-8 A.W.L.C. RESUBDIVISION  
 PLAT #2001-3 SORTYARD SUBDIVISION  
 PLAT #2003-1 W.S.I. SUBDIVISION  
 PLAT #2003-2 NOLAN SUBDIVISION
- THE BASIS OF VERTICAL DATUM UTILIZED FOR THIS SURVEY WAS BENCHMARK NO. 6 (1954) AS REPORTED BY THE U.S.C.&G.S. SOUTHEAST ALASKA TIDAL BENCHMARKS DATED 4/25/94 FOR WRANGELL HAVING AN ACCEPTED ELEVATION OF 39.27' M.L.L.W.
- EXISTING TOPOGRAPHY, UTILITIES AND SITE FEATURES WERE SURVEYED AND UPDATED BY PND ENGINEERS IN DECEMBER 2011 AND OCTOBER 2012. UPDATED CONTOURS ARE SHOWN @ 0.2' CONTOUR INTERVALS. THE LIMITS OF THIS SURVEY ARE AS SHOWN.

**SURVEY CONTROL DATA**

| NUMBERS | NORTHING | EASTING  | ELEV  | DESCRIPTION                  |
|---------|----------|----------|-------|------------------------------|
| 10      | 8895.67  | 11142.20 | 22.74 | MAGNAIL IN CONCRETE CURB     |
| 20      | 8799.65  | 11089.27 | 24.25 | R&M ALUMINUM CAP IN CONCRETE |
| 30      | 8895.48  | 11217.26 | 22.82 | R&M ALUMINUM CAP IN CONCRETE |



**A EXISTING FILL OVER SAWDUST**



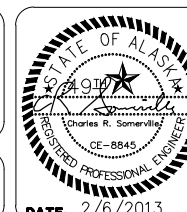
**B EXISTING FILL SECTION**

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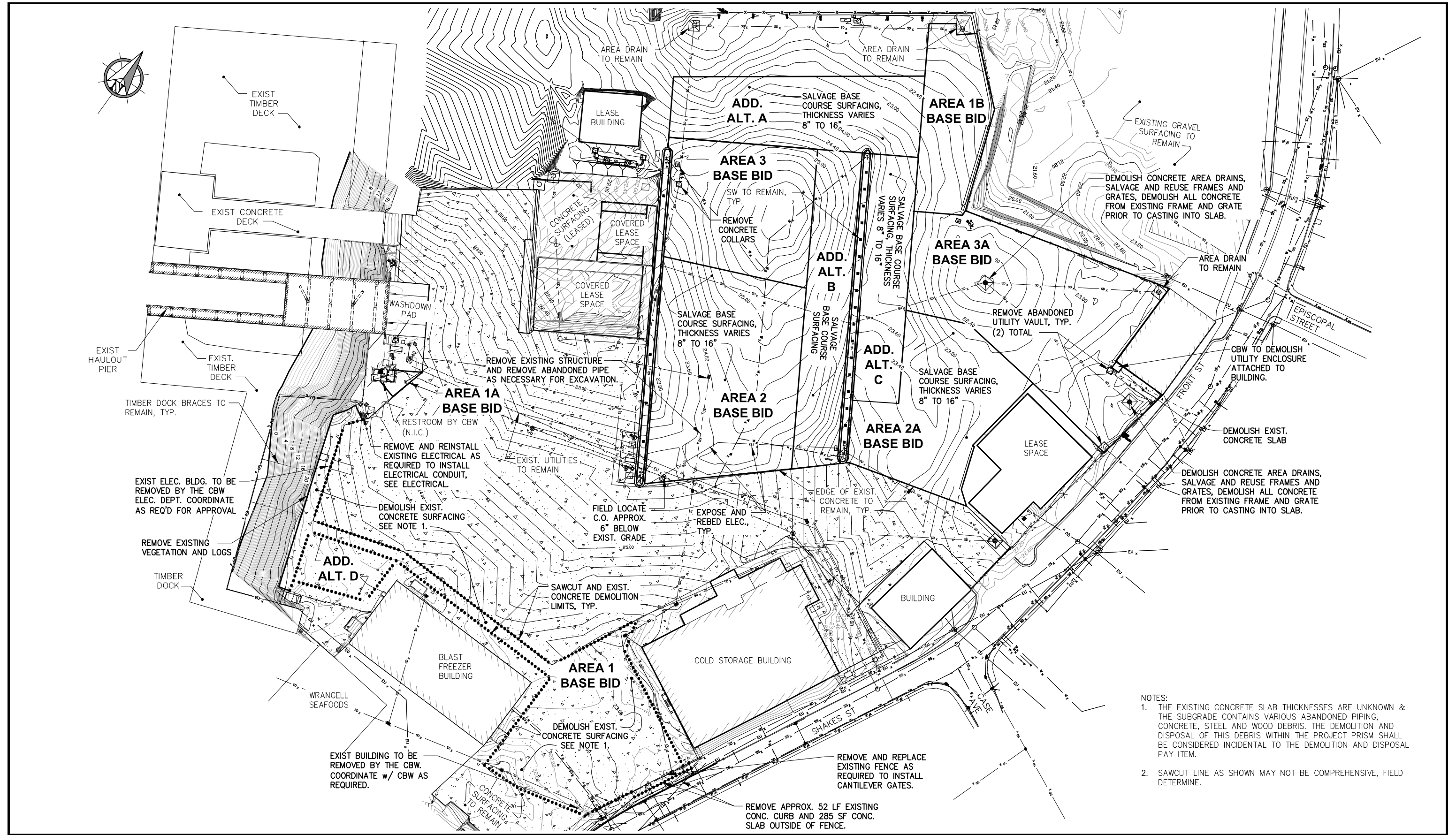


**CITY AND BOROUGH OF WRANGELL, ALASKA  
 WRANGELL MARINE SERVICE CENTER  
 CONCRETE PAVING- PHASE II**

SHEET TITLE:  
**EXISTING CONDITIONS AND  
 SURVEY CONTROL**

PND PROJECT NO. 112071.03 DWG. FILE: 1.03\*.DWG

**1.03**  
 SHEET  
 3 OF 18



- NOTES:
1. THE EXISTING CONCRETE SLAB THICKNESSES ARE UNKNOWN & THE SUBGRADE CONTAINS VARIOUS ABANDONED PIPING, CONCRETE, STEEL AND WOOD DEBRIS. THE DEMOLITION AND DISPOSAL OF THIS DEBRIS WITHIN THE PROJECT PRISM SHALL BE CONSIDERED INCIDENTAL TO THE DEMOLITION AND DISPOSAL PAY ITEM.
  2. SAWCUT LINE AS SHOWN MAY NOT BE COMPREHENSIVE, FIELD DETERMINE.

| REVISIONS |      |             |      |      |      |
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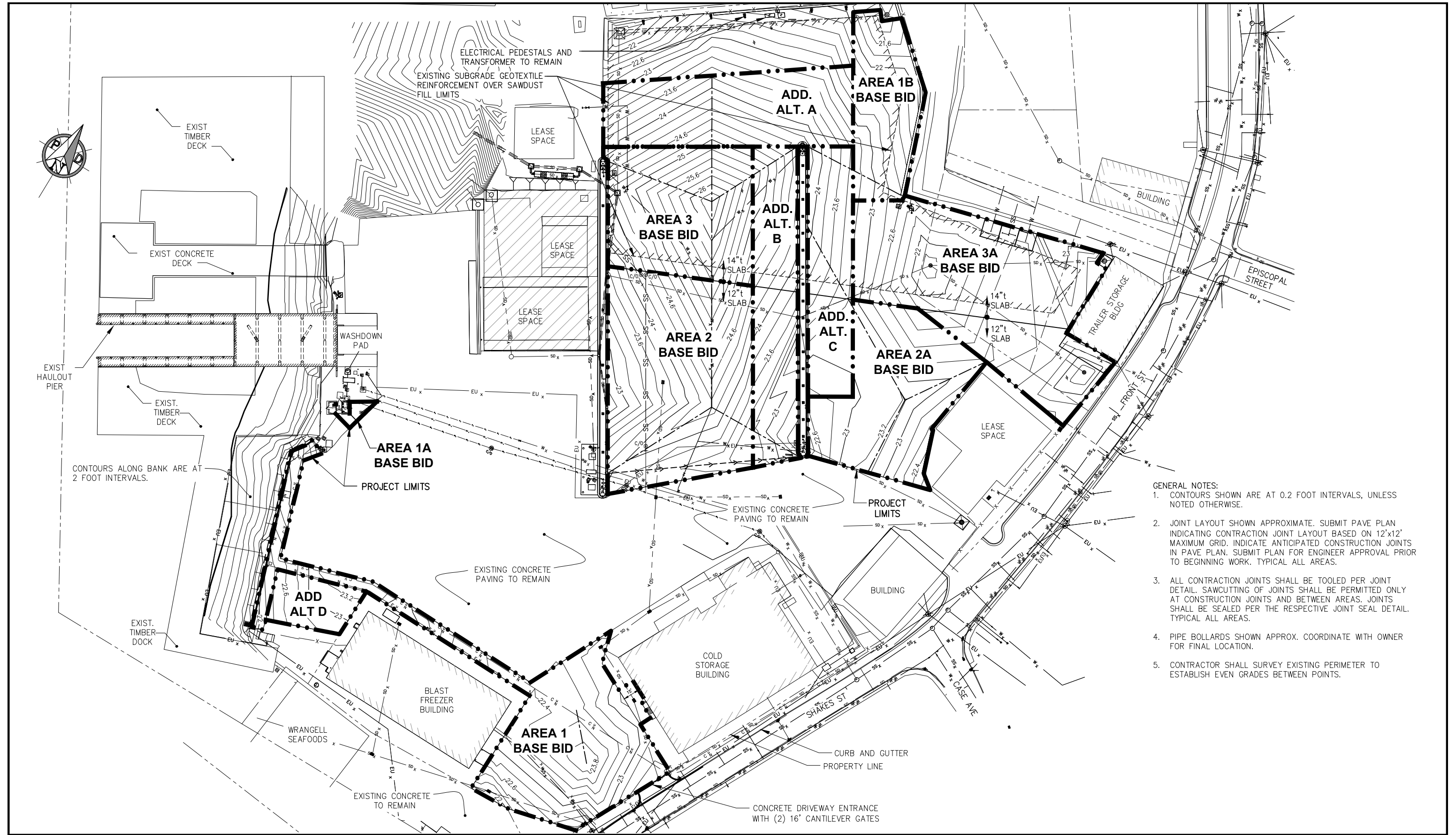
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**WRANGELL MARINE SERVICE CENTER**  
**CONCRETE PAVING- PHASE II**

SHEET TITLE:  
**DEMOLITION SITE PLAN**

DATE: 2/6/2013

PMD PROJECT NO.: 112071.03    DWG. FILE: 1.04\*.DWG

**1.04**  
SHEET  
4 OF 18



- GENERAL NOTES:
1. CONTOURS SHOWN ARE AT 0.2 FOOT INTERVALS, UNLESS NOTED OTHERWISE.
  2. JOINT LAYOUT SHOWN APPROXIMATE. SUBMIT PAVE PLAN INDICATING CONTRACTION JOINT LAYOUT BASED ON 12'x12' MAXIMUM GRID. INDICATE ANTICIPATED CONSTRUCTION JOINTS IN PAVE PLAN. SUBMIT PLAN FOR ENGINEER APPROVAL PRIOR TO BEGINNING WORK. TYPICAL ALL AREAS.
  3. ALL CONTRACTION JOINTS SHALL BE TOOLED PER JOINT DETAIL. SAWCUTTING OF JOINTS SHALL BE PERMITTED ONLY AT CONSTRUCTION JOINTS AND BETWEEN AREAS. JOINTS SHALL BE SEALED PER THE RESPECTIVE JOINT SEAL DETAIL. TYPICAL ALL AREAS.
  4. PIPE BOLLARDS SHOWN APPROX. COORDINATE WITH OWNER FOR FINAL LOCATION.
  5. CONTRACTOR SHALL SURVEY EXISTING PERIMETER TO ESTABLISH EVEN GRADES BETWEEN POINTS.

| REVISIONS |      |             |      |      |      |
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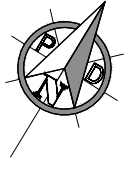


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CONCRETE PAVING- PHASE II**

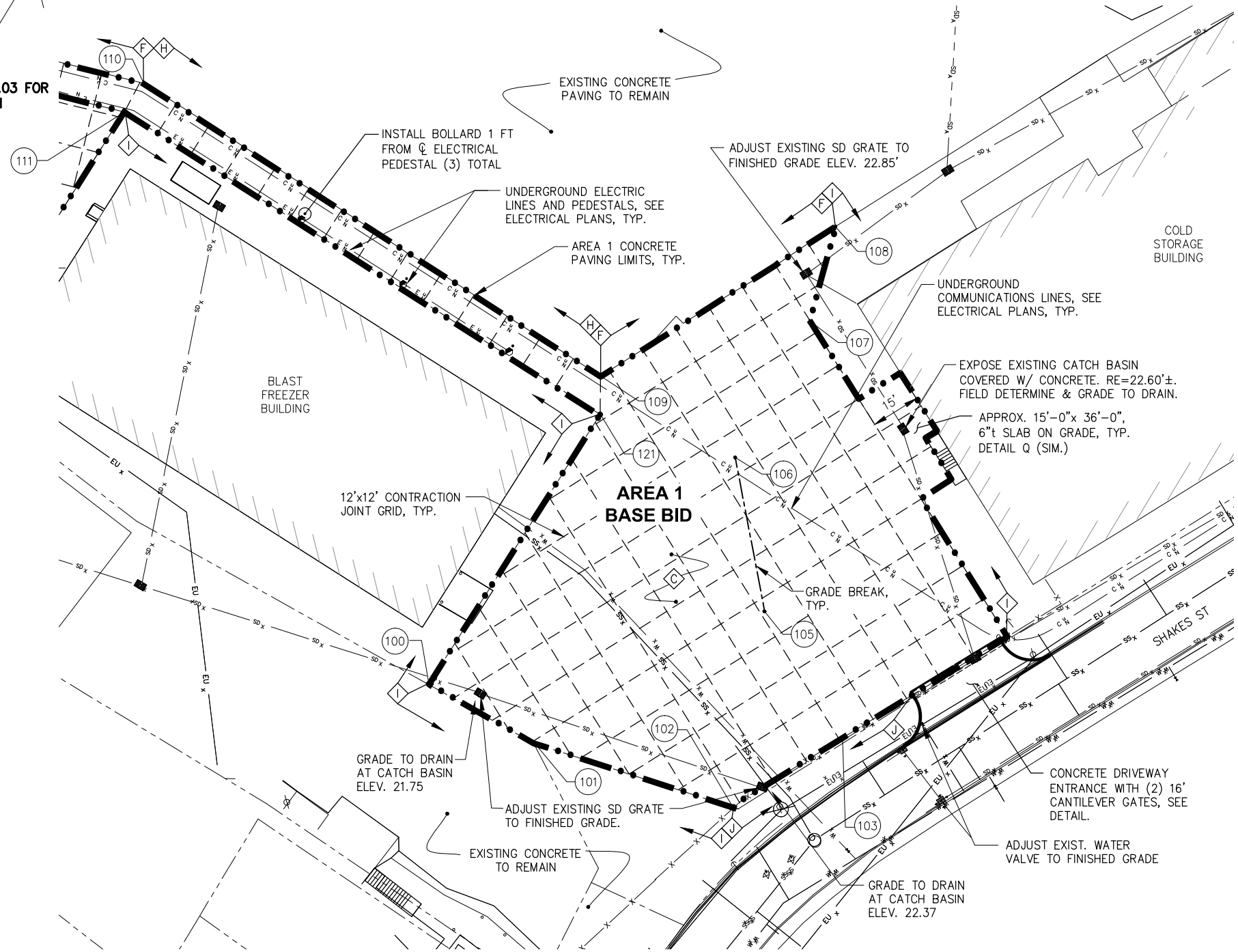
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**OVERALL SITE PLAN -  
FINAL GRADE CONTOURS**

PND PROJECT NO. 112071.03    DWG. FILE: 2.01\*.DWG

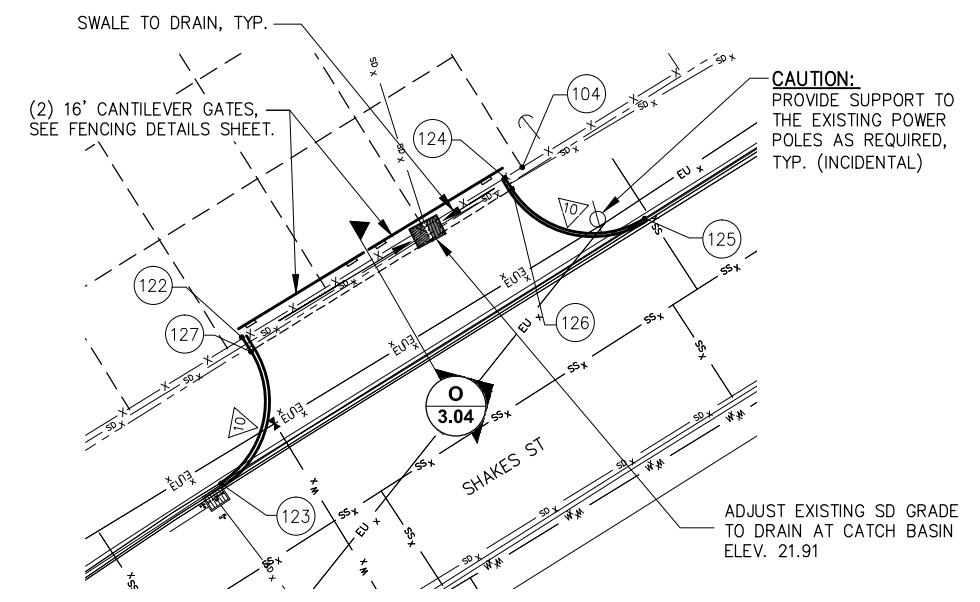
**2.01**  
SHEET  
5 OF 18



SEE SHEET 2.03 FOR CONTINUATION



| LAYOUT TABLE |           |          |          |             |
|--------------|-----------|----------|----------|-------------|
| Point #      | Elevation | Northing | Easting  | Description |
| 100          | 22.02     | 8488.91  | 11046.06 | FG CONC, ME |
| 101          | 22.03     | 8490.12  | 11082.72 | FG CONC, ME |
| 102          | 22.64     | 8504.82  | 11145.14 | FG CONC, ME |
| 103          | 22.91     | 8539.76  | 11162.14 | FG CONC, ME |
| 104          | 21.96     | 8592.64  | 11189.49 | FG CONC     |
| 105          | 23.98     | 8560.69  | 11122.48 | FG CONC     |
| 106          | 23.50     | 8596.39  | 11090.26 | FG CONC     |
| 107          | 23.02     | 8643.87  | 11088.53 | FG CONC, ME |
| 108          | 23.52     | 8672.94  | 11080.26 | FG CONC, ME |
| 109          | 23.42     | 8596.51  | 11042.37 | FG CONC, ME |
| 110          | 23.38     | 8601.12  | 10877.18 | FG CONC, ME |
| 111          | 23.28     | 8590.44  | 10876.36 | FG CONC, ME |
| 121          | 23.39     | 8586.49  | 11048.30 | FG CONC, ME |
| 122          | 22.25     | 8562.32  | 11173.97 | END CURB    |
| 123          | 21.79     | 8548.12  | 11179.74 | PC, ME      |
| 124          | 21.96     | 8590.71  | 11188.69 | END CURB    |
| 125          | 21.43     | 8594.60  | 11203.37 | PC, ME      |
| 126          | 21.95     | 8594.52  | 11203.51 | PT          |
| 127          | 22.23     | 8594.52  | 11203.51 | PT          |



CONCRETE DRIVEWAY ENTRANCE DETAIL

| REVISIONS |      |             |      |      |      |
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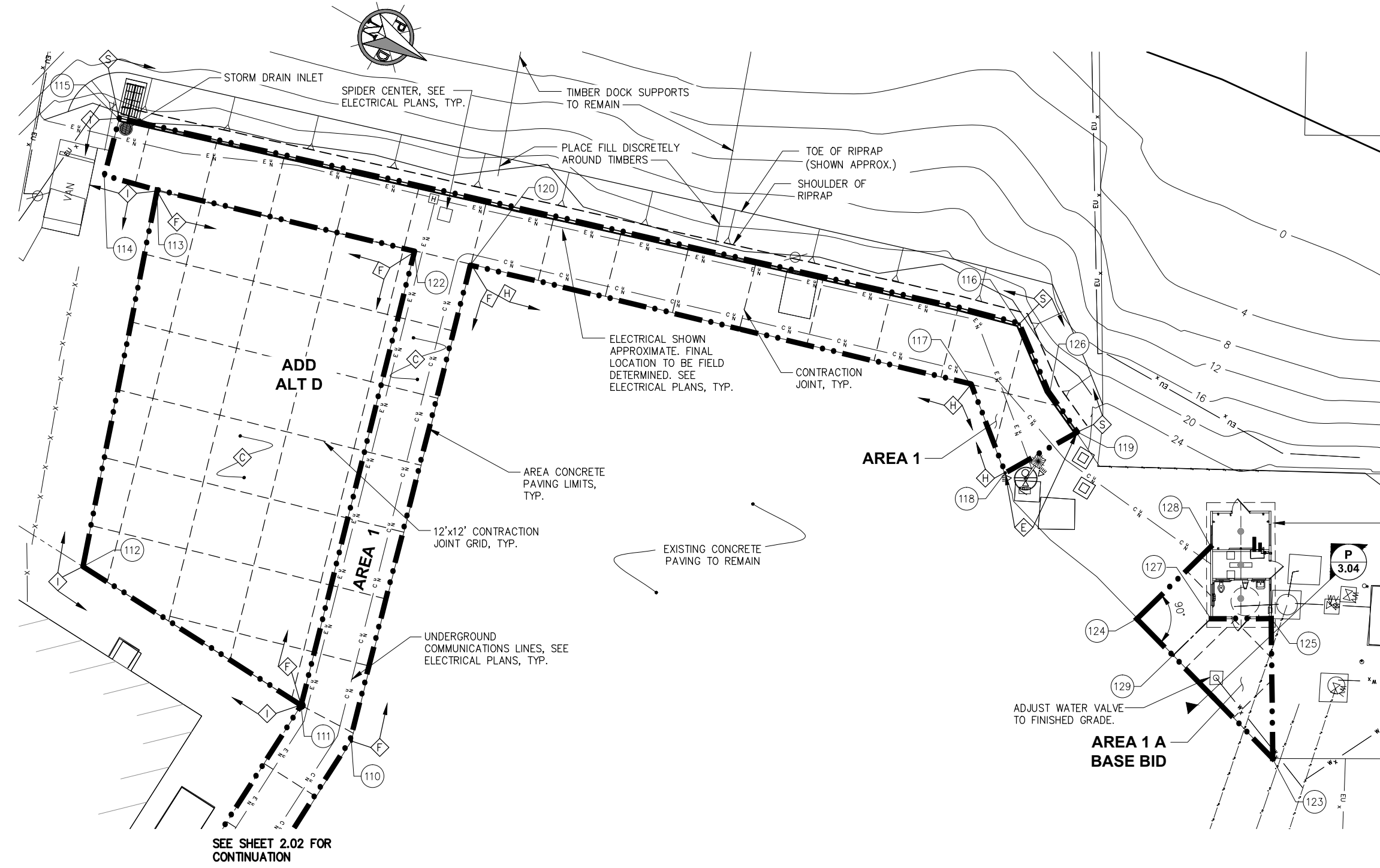
CITY AND BOROUGH OF WRANGELL, ALASKA  
WRANGELL MARINE SERVICE CENTER  
CONCRETE PAVING- PHASE II

SHEET TITLE:  
**SITE PLAN - PARTIAL AREA 1**

PND PROJECT NO.: 112071.03    DWG. FILE: 2.01\_DWG

DATE: 2/6/2013

**2.02**  
SHEET 6 OF 18



| LAYOUT TABLE |           |          |          |             |
|--------------|-----------|----------|----------|-------------|
| Point #      | Elevation | Northing | Easting  | Description |
| 110          | 23.38     | 8601.12  | 10877.18 | FG CONC, ME |
| 111          | 23.28     | 8590.44  | 10876.36 | FG CONC, ME |
| 112          | 22.88     | 8545.60  | 10875.13 | FG CONC, ME |
| 113          | 22.19     | 8522.77  | 10812.65 | FG CONC, ME |
| 114          | 21.99     | 8513.62  | 10815.25 | FG CONC, ME |
| 115          | 21.76     | 8510.70  | 10805.33 | FG CONC     |
| 116          | 22.72     | 8663.01  | 10755.09 | FG CONC     |
| 117          | 23.22     | 8661.36  | 10768.45 | FG CONC, ME |
| 118          | 23.76     | 8674.32  | 10778.58 | FG CONC, ME |
| 119          | 23.61     | 8681.41  | 10766.03 | FG CONC     |
| 120          | 22.55     | 8576.12  | 10795.49 | FG CONC, ME |
| 122          | 22.45     | 8566.58  | 10798.42 | FG CONC, ME |
| 123          | 24.50     | 8739.62  | 10796.85 | FG CONC, ME |
| 124          | 24.31     | 8707.36  | 10788.27 | FG CONC, ME |
| 125          | 24.48     | 8726.98  | 10776.37 | FG CONC     |
| 126          | 23.24     | 8673.37  | 10762.54 | FG CONC     |
| 127          | 24.48     | 8718.07  | 10781.71 | FG CONC     |
| 128          | 24.48     | 8711.80  | 10771.59 | FG CONC     |
| 129          | 24.32     | 8716.54  | 10790.71 | FG CONC, ME |

**RESTROOM INSTALLATION (N.I.C.)**  
 CBW TO COMPLETE RESTROOM INSTALLATION BY MAY 5, 2013. COORDINATE WORK TO PROVIDE ELECTRICAL AND COMMUNICATION SERVICE (SEE ELECTRICAL PLANS) AND PAVING SCHEDULE TO ACCOMMODATE WORK. (INCIDENTAL)

| REVISIONS |      |             |      |      |      |
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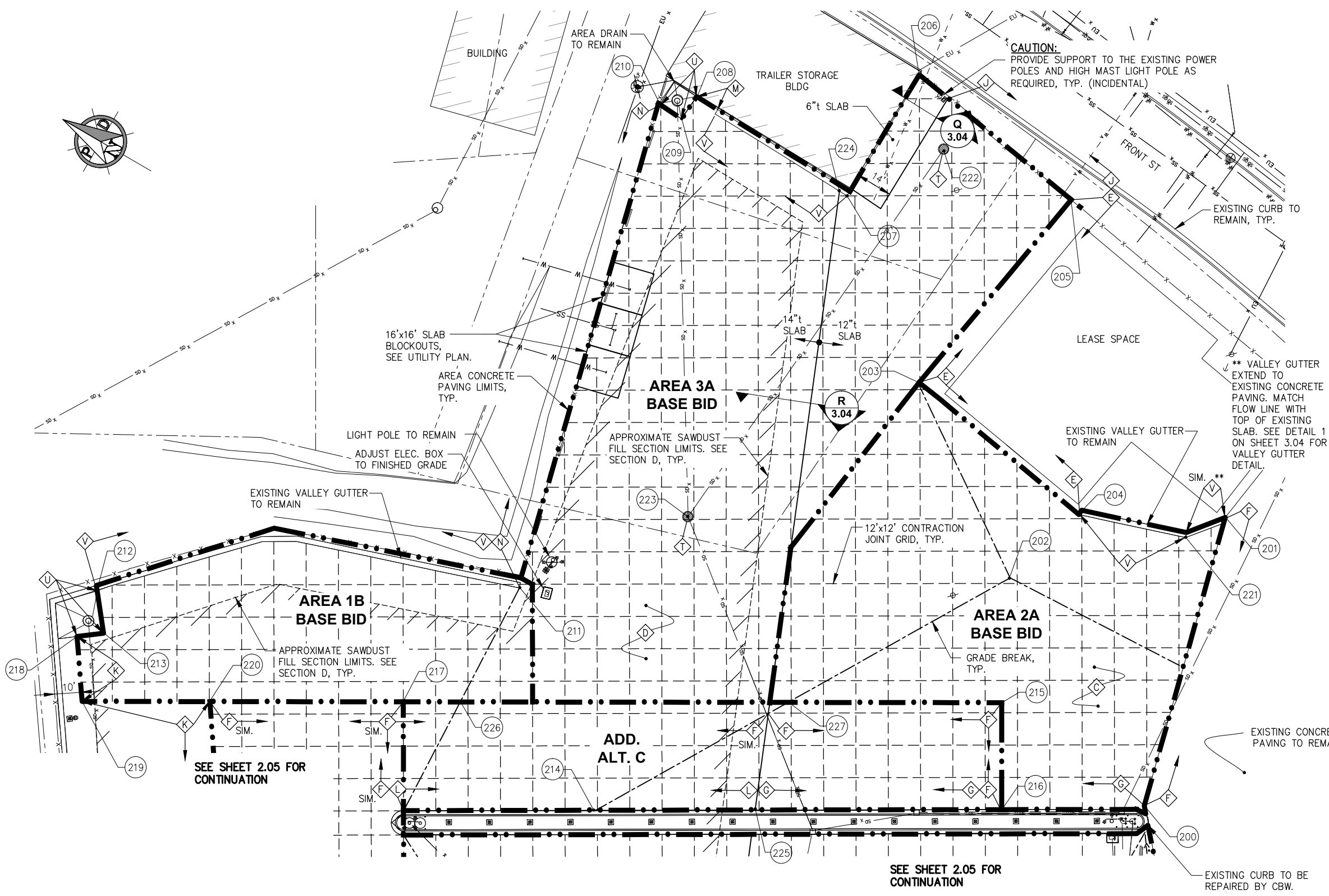
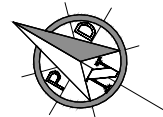


**CITY AND BOROUGH OF WRANGELL, ALASKA  
 WRANGELL MARINE SERVICE CENTER  
 CONCRETE PAVING- PHASE II**

SHEET TITLE:  
**SITE PLAN - PARTIAL AREA 1,  
 AREA 1A AND ADD. ALT D**

**2.03**  
 SHEET  
 7 OF 18

PND PROJECT NO. 112071.03    DWG. FILE: 2.01\_DWG



| LAYOUT TABLE |           |          |          |               |
|--------------|-----------|----------|----------|---------------|
| Point #      | Elevation | Northing | Easting  | Description   |
| 200          | 22.40     | 8896.84  | 11151.71 | FG CONC, ME   |
| 201          | 21.96     | 8926.26  | 11258.38 | FG CONC, ME   |
| 202          | 23.21     | 8983.05  | 11197.87 | FG CONC       |
| 203          | 22.84     | 9049.44  | 11242.45 | FG CONC       |
| 204          | 22.55     | 8973.30  | 11231.23 | FG CONC, ME   |
| 205          | 22.40     | 9036.19  | 11329.82 | FG CONC, ME   |
| 206          | 22.32     | 9108.47  | 11340.19 | FG CONC, ME   |
| 207          | 22.80     | 9108.14  | 11288.06 | FG CONC, ME   |
| 208          | 22.44     | 9174.98  | 11290.71 | FG CONC, ME   |
| 209          | 22.41     | 9175.44  | 11280.74 | FG CONC, ME   |
| 210          | 22.45     | 9185.11  | 11281.19 | FG CONC, ME   |
| 211          | 22.63     | 9137.05  | 11100.56 | FG CONC, ME   |
| 212          | 21.50     | 9270.66  | 11018.73 | FG CONC, ME   |
| 213          | 21.22     | 9260.60  | 11006.37 | FG CONC, ME   |
| 214          | 24.09     | 9070.38  | 11044.16 | FG CONC, ME   |
| 215          | 22.96     | 8962.05  | 11156.63 | FG CONC       |
| 216          | 22.72     | 8941.45  | 11122.58 | FG CONC, ME   |
| 217          | 23.37     | 9152.15  | 11042.08 | FG CONC       |
| 218          | 21.32     | 9268.38  | 11000.26 | FG CONC, ME   |
| 219          | 21.91     | 9254.33  | 10980.59 | FG CONC       |
| 220          | 22.34     | 9213.66  | 11005.06 | FG CONC       |
| 221          | 22.26     | 8935.02  | 11244.34 | FG CONC, ME   |
| 222          | 21.60     | 9086.25  | 11323.68 | GRATE         |
| 223          | 21.63     | 9097.12  | 11155.57 | GRATE         |
| 224          | 22.79     | 9111.47  | 11288.10 | 14" LIMIT, ME |
| 225          | 23.54     | 9019.58  | 11075.16 | 14" LIMIT, ME |
| 226          | 23.33     | 9133.51  | 11052.77 | FG CONC       |
| 227          | 23.11     | 9029.80  | 11115.59 | FG CONC       |

| REVISIONS |      |             |      |      |      |
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SCALE: SCALE IN FEET  
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**CITY AND BOROUGH OF WRANGELL, ALASKA**  
**WRANGELL MARINE SERVICE CENTER**  
**CONCRETE PAVING- PHASE II**

SHEET TITLE:  
**SITE PLAN - AREA 2A, AREA 3A,**  
**AREA 1B AND ADD ALT C**

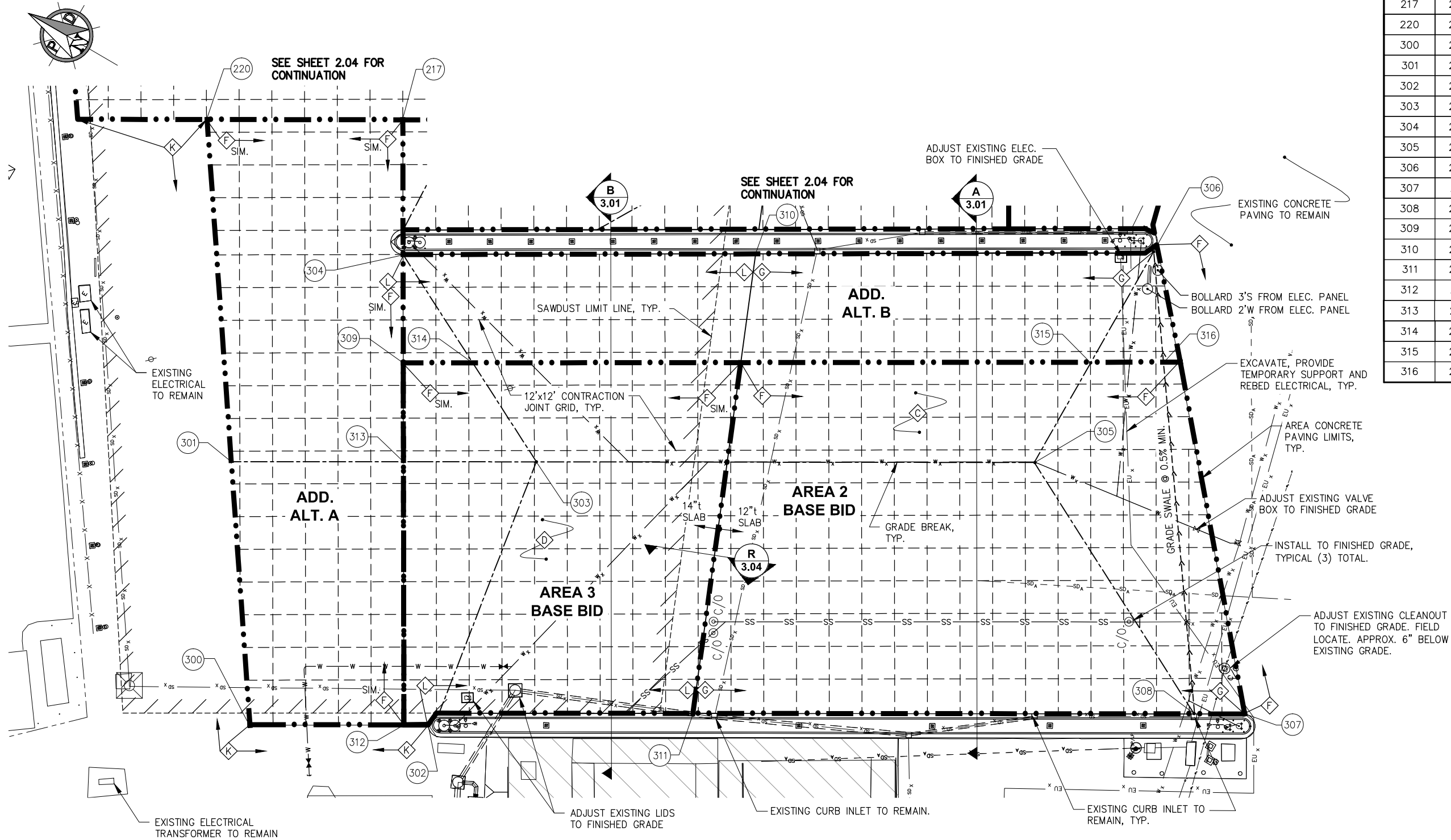
PND PROJECT NO. 112071.03    DWG. FILE: 2.01\_DWG

**2.04**  
SHEET  
8 OF 18



**LAYOUT TABLE**

| Point # | Elevation | Northing | Easting  | Description   |
|---------|-----------|----------|----------|---------------|
| 217     | 23.37     | 9152.15  | 11042.08 | FG CONC       |
| 220     | 22.34     | 9213.66  | 11005.06 | FG CONC       |
| 300     | 22.72     | 9085.38  | 10822.93 | FG CONC       |
| 301     | 23.75     | 9141.21  | 10902.20 | FG CONC       |
| 302     | 24.00     | 9029.49  | 10856.92 | FG CONC, ME   |
| 303     | 26.40     | 9045.39  | 10959.93 | FG CONC       |
| 304     | 24.27     | 9125.92  | 11000.23 | FG CONC, ME   |
| 305     | 24.38     | 8888.93  | 11054.08 | FG CONC       |
| 306     | 22.72     | 8891.84  | 11145.46 | FG CONC, ME   |
| 307     | 23.91     | 8775.25  | 11014.99 | FG CONC, ME   |
| 308     | 23.92     | 8791.05  | 11005.32 | FG CONC, ME   |
| 309     | 24.80     | 9105.16  | 10966.08 | FG CONC       |
| 310     | 23.59     | 9015.96  | 11066.79 | 14" LIMIT, ME |
| 311     | 23.96     | 8948.56  | 10910.58 | 14" LIMIT, ME |
| 312     | 23.81     | 9037.13  | 10852.26 | FG CONC       |
| 313     | 25.16     | 9089.46  | 10935.18 | FG CONC       |
| 314     | 25.38     | 9083.68  | 10979.10 | FG CONC       |
| 315     | 23.26     | 8892.25  | 11094.89 | FG CONC       |
| 316     | 23.26     | 8867.04  | 11110.12 | FG CONC       |



**REVISIONS**

| REV. | DATE | DESCRIPTION | DWN. | CKD. | APP. |
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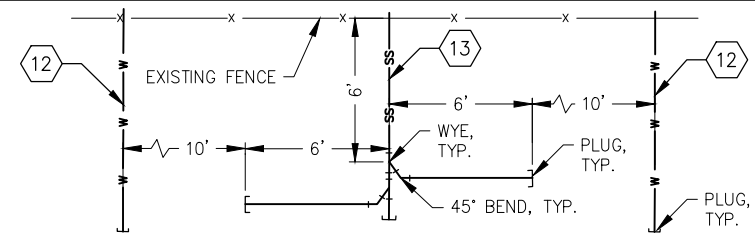
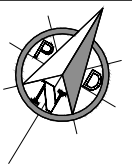


**CITY AND BOROUGH OF WRANGELL, ALASKA  
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CONCRETE PAVING- PHASE II**

SHEET TITLE:  
**SITE PLAN - AREA 2, AREA 3,  
ADD ALT A AND ADD ALT B**

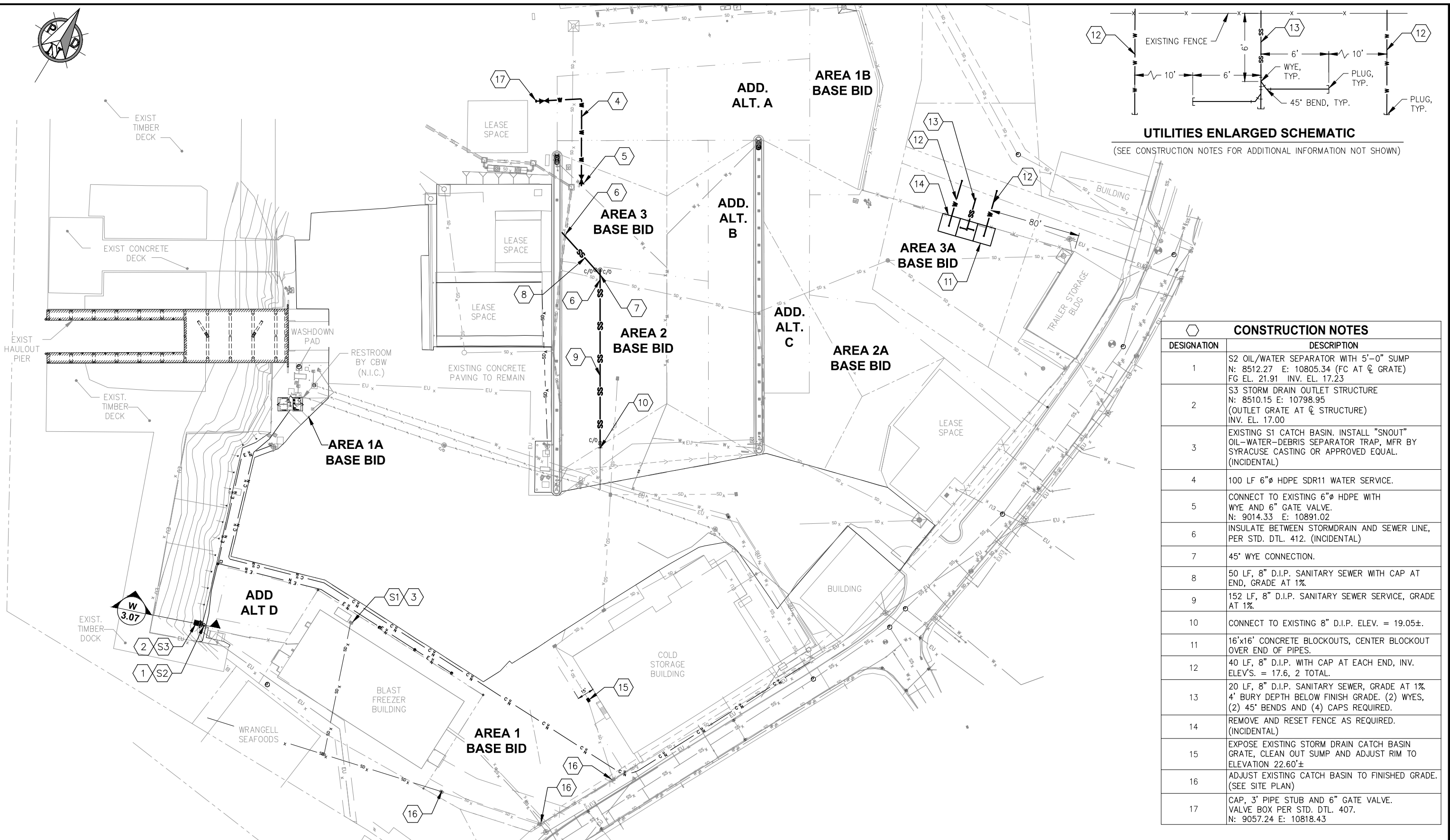
PND PROJECT NO. 112071.03 DWG. FILE: 2.01\_DWG

**2.05**  
SHEET  
9 OF 18



**UTILITIES ENLARGED SCHEMATIC**

(SEE CONSTRUCTION NOTES FOR ADDITIONAL INFORMATION NOT SHOWN)



| CONSTRUCTION NOTES |  |
|--------------------|--|
| DESIGNATION        | DESCRIPTION  |
| 1                  | S2 OIL/WATER SEPARATOR WITH 5'-0" SUMP<br>N: 8512.27 E: 10805.34 (FC AT Q GRATE)<br>FG EL. 21.91 INV. EL. 17.23                            |
| 2                  | S3 STORM DRAIN OUTLET STRUCTURE<br>N: 8510.15 E: 10798.95<br>(OUTLET GRATE AT Q STRUCTURE)<br>INV. EL. 17.00                               |
| 3                  | EXISTING S1 CATCH BASIN. INSTALL "SNOUT"<br>OIL-WATER-DEBRIS SEPARATOR TRAP, MFR BY<br>SYRACUSE CASTING OR APPROVED EQUAL.<br>(INCIDENTAL) |
| 4                  | 100 LF 6"Ø HDPE SDR11 WATER SERVICE.   |
| 5                  | CONNECT TO EXISTING 6"Ø HDPE WITH<br>WYE AND 6" GATE VALVE.<br>N: 9014.33 E: 10891.02  |
| 6                  | INSULATE BETWEEN STORMDRAIN AND SEWER LINE,<br>PER STD. DTL. 412. (INCIDENTAL)   |
| 7                  | 45° WYE CONNECTION.  |
| 8                  | 50 LF, 8" D.I.P. SANITARY SEWER WITH CAP AT<br>END, GRADE AT 1%.   |
| 9                  | 152 LF, 8" D.I.P. SANITARY SEWER SERVICE, GRADE<br>AT 1%.  |
| 10                 | CONNECT TO EXISTING 8" D.I.P. ELEV. = 19.05±.  |
| 11                 | 16'x16' CONCRETE BLOCKOUTS, CENTER BLOCKOUT<br>OVER END OF PIPES.  |
| 12                 | 40 LF, 8" D.I.P. WITH CAP AT EACH END, INV.<br>ELEV'S. = 17.6, 2 TOTAL.  |
| 13                 | 20 LF, 8" D.I.P. SANITARY SEWER, GRADE AT 1%.<br>4' BURY DEPTH BELOW FINISH GRADE. (2) WYES,<br>(2) 45° BENDS AND (4) CAPS REQUIRED.       |
| 14                 | REMOVE AND RESET FENCE AS REQUIRED.<br>(INCIDENTAL)  |
| 15                 | EXPOSE EXISTING STORM DRAIN CATCH BASIN<br>GRATE, CLEAN OUT SUMP AND ADJUST RIM TO<br>ELEVATION 22.60±                                     |
| 16                 | ADJUST EXISTING CATCH BASIN TO FINISHED GRADE.<br>(SEE SITE PLAN)  |
| 17                 | CAP, 3' PIPE STUB AND 6" GATE VALVE.<br>VALVE BOX PER STD. DTL. 407.<br>N: 9057.24 E: 10818.43   |

**REVISIONS**

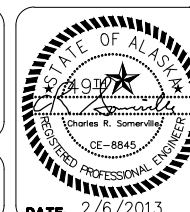
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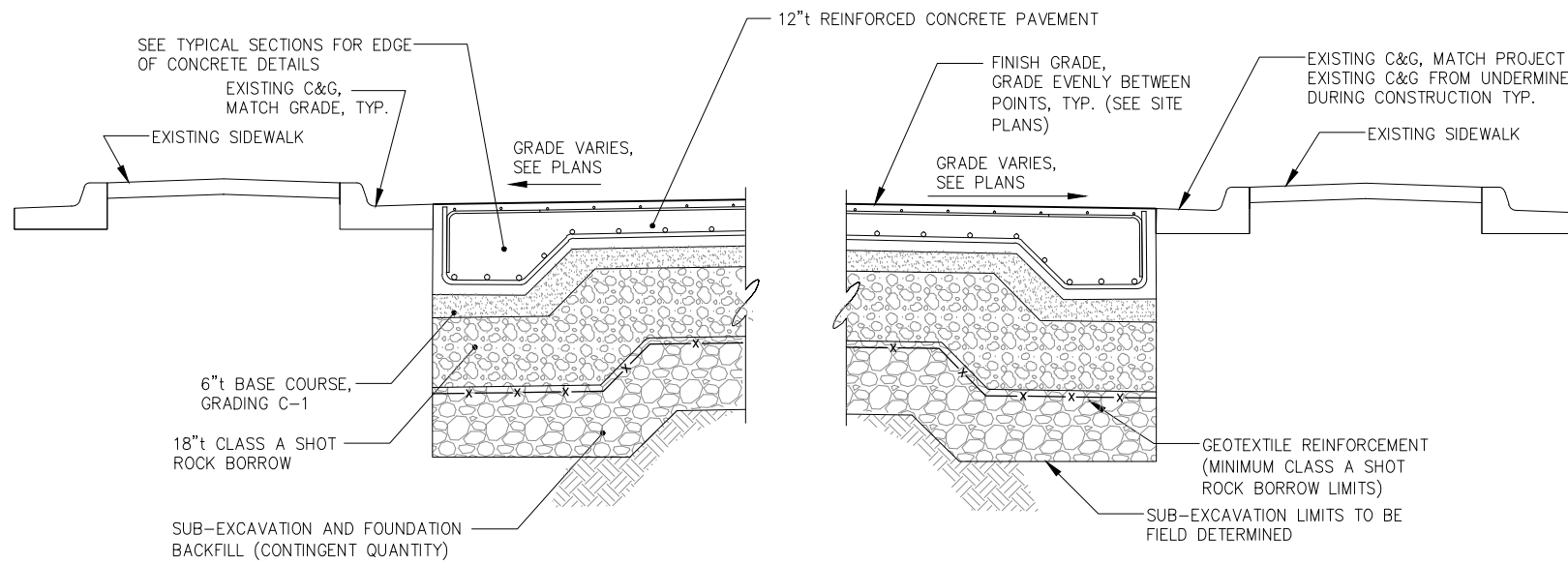
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CONCRETE PAVING- PHASE II**

SHEET TITLE:  
**OVERALL SITE PLAN  
WATER AND SEWER**

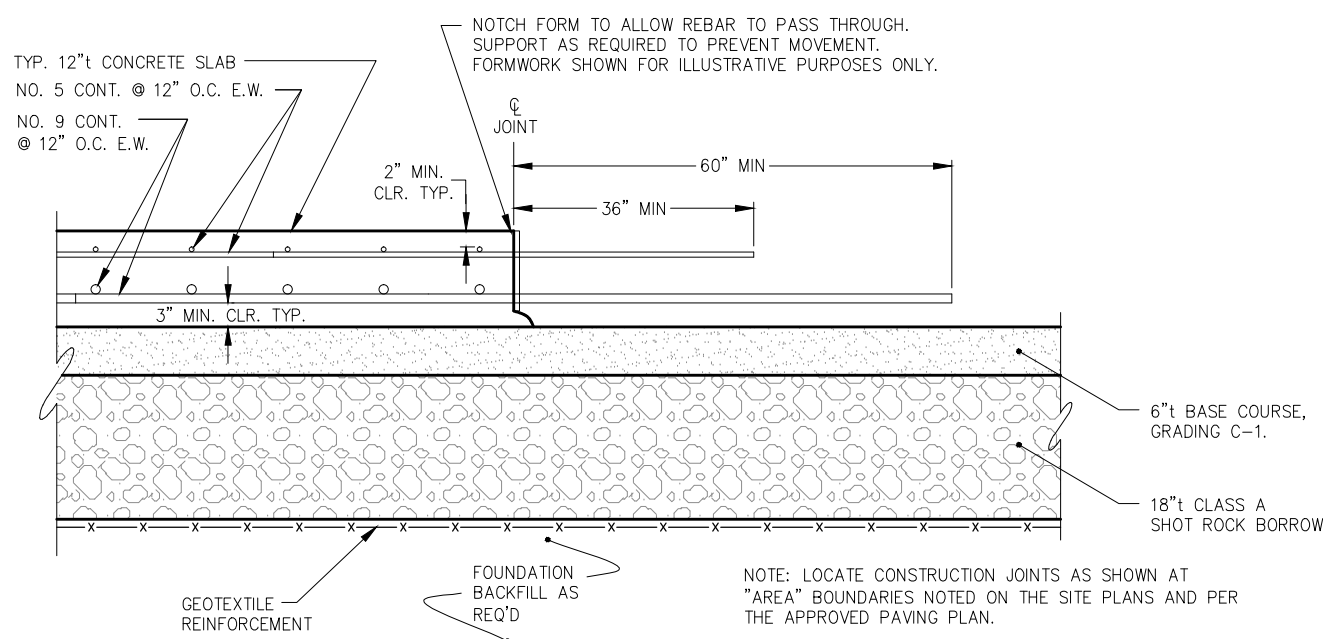
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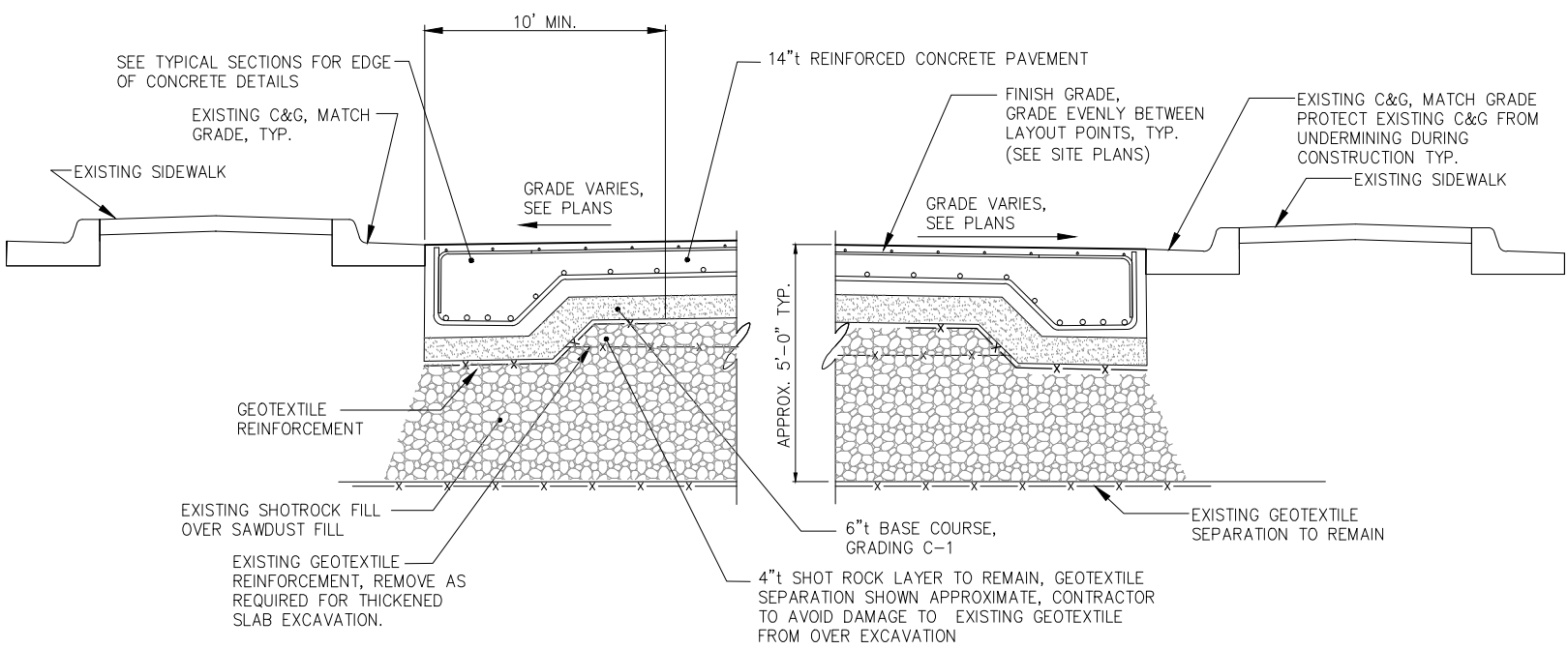
SHEET  
**10 OF 18**



**A SITE SECTION AT 12" THICK SLAB**  
 NTS  
 NOTE: SEE TYPICAL SECTIONS FOR DETAILS NOT SHOWN.

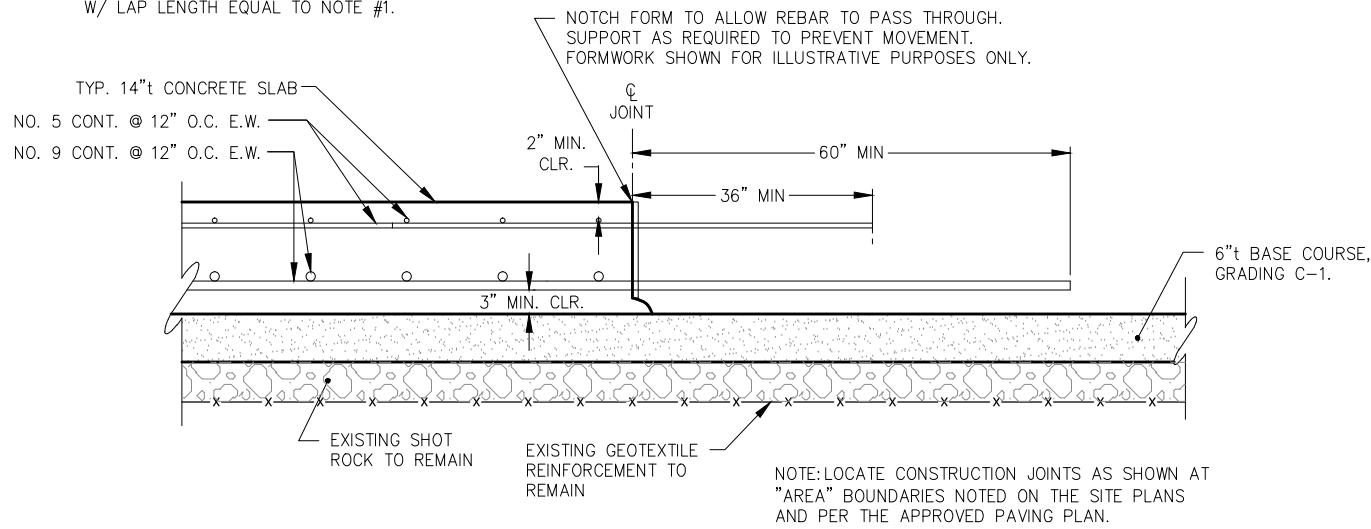


**C TYPICAL SLAB SECTION AND CONSTRUCTION JOINT @ 12" THICK SLAB**



**B SITE SECTION OVER EXISTING SAWDUST FILL**  
 NTS  
 NOTE: SEE TYPICAL SECTIONS FOR DETAILS NOT SHOWN.

- NOTES: (SECTION C AND D)
1. CONTINUOUS. NO. 9 REBAR SHALL HAVE 54" MIN. SPLICE OVERLAP, NO. 5 BARS SHALL HAVE 30" MIN. SPLICE OVERLAP. ALT. JOINT LOCATION FOR EACH RUN OF BARS.
  2. APPLY A CURING AND WATERPROOFING SYSTEM TO THE CONCRETE PAVEMENT, CHEM-CRETE, SOFIX CCC100, PER MANUFACTURERS RECOMMENDATIONS.
  3. ALL CORNERS OF SLAB SHALL HAVE (3) NO. 5 CORNER BARS @ TOP REINFORCEMENT MAT W/ LAP LENGTH EQUAL TO NOTE #1.

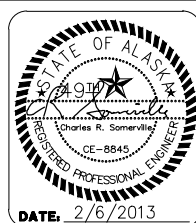


**D TYPICAL SLAB SECTION AND CONSTRUCTION JOINT @ 14" THICK SLAB**

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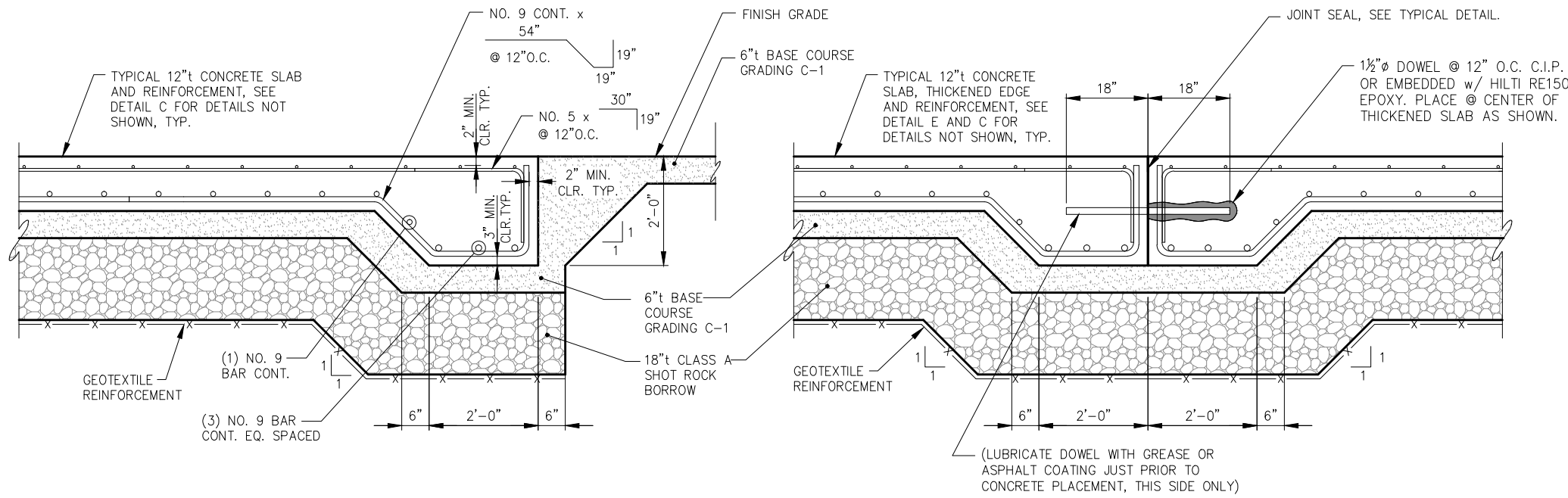
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SHEET TITLE: **SITE SECTIONS**

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**3.01**  
 SHEET 11 OF 18

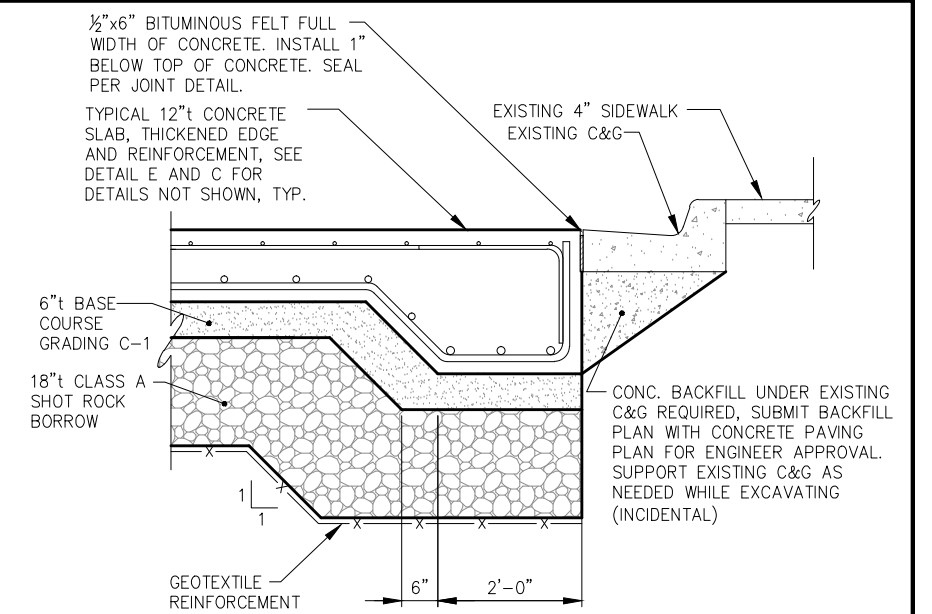


**E** TYPICAL THICKENED SLAB

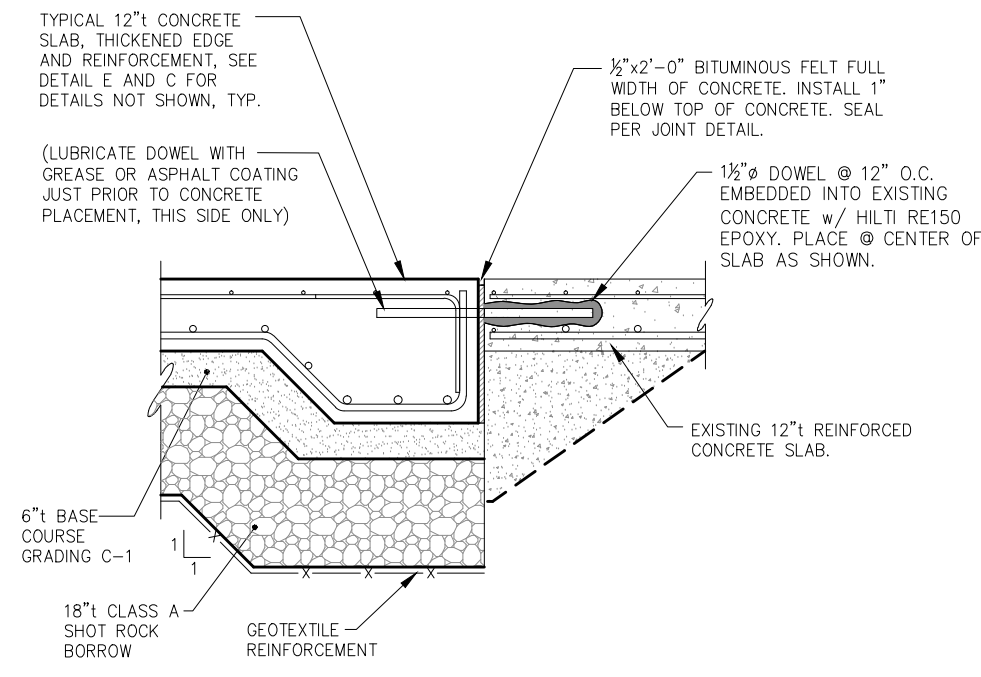
**F** TYPICAL THICKENED EDGE TO THICKENED EDGE

**NOTE:**  
ALL 12"t CONCRETE SLAB EXCAVATION LIMITS PER DETAIL A.

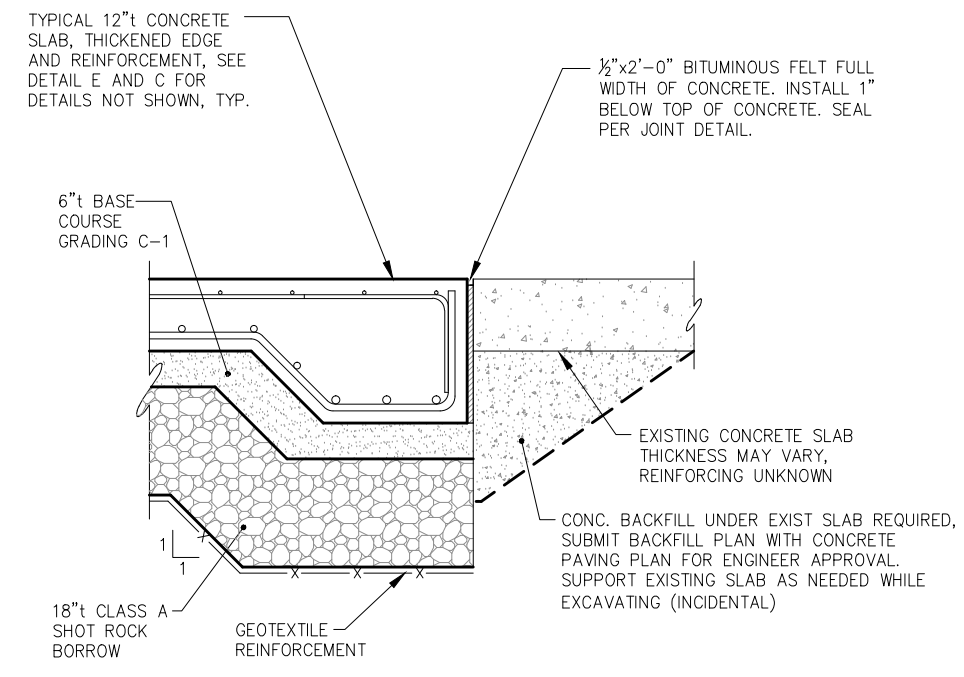
**NOTE:**  
1. FOR "F SIM.", REPLACE 12" THICK SLAB WITH 14" THICK SLAB. SEE DETAIL K FOR 14" SLAB TYP. DETAILS.  
2. 760 OWNER PROVIDED DOWELS SHALL BE UTILIZED. ALL OTHER DOWELS ARE TO BE PROVIDED BY CONTRACTOR.



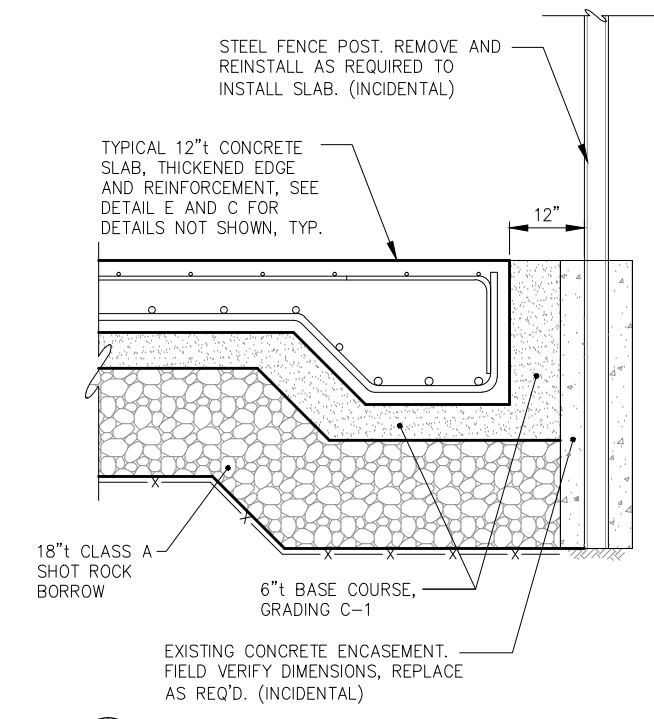
**G** EDGE OF PAVEMENT AT EXISTING CURB



**H** THICKENED SLAB AT EXISTING 12"t SLAB



**I** EDGE OF PAVEMENT AT EXISTING SLAB



**J** TYPICAL SLAB AT FENCE POST

| REVISIONS |      |             |      |      |      |
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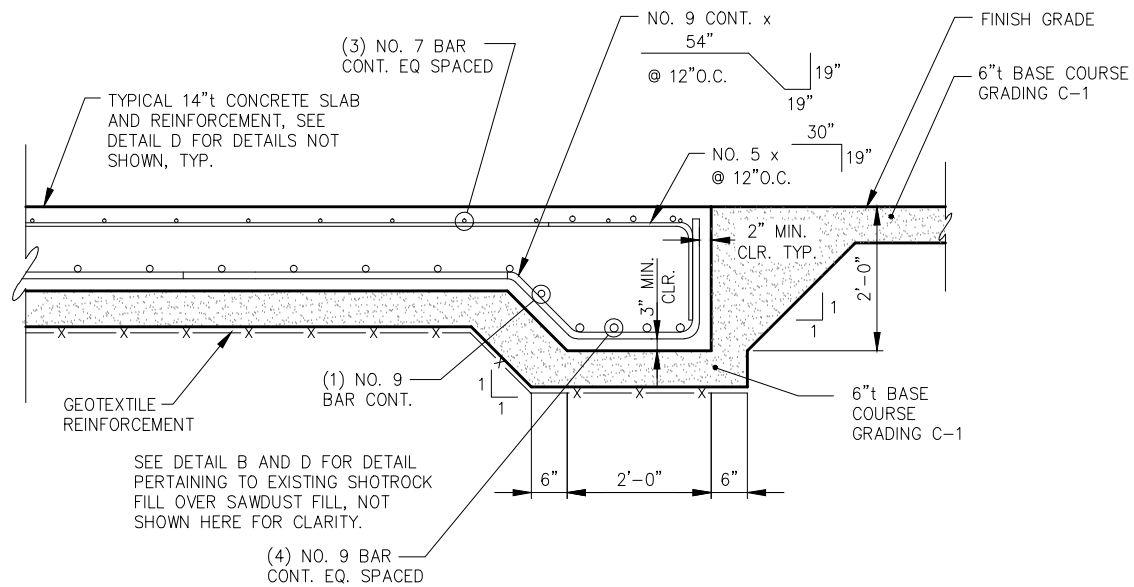
**CITY AND BOROUGH OF WRANGELL, ALASKA**  
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**CONCRETE PAVING- PHASE II**

SHEET TITLE: **TYPICAL SECTIONS @ 12" THICK CONCRETE SLAB**

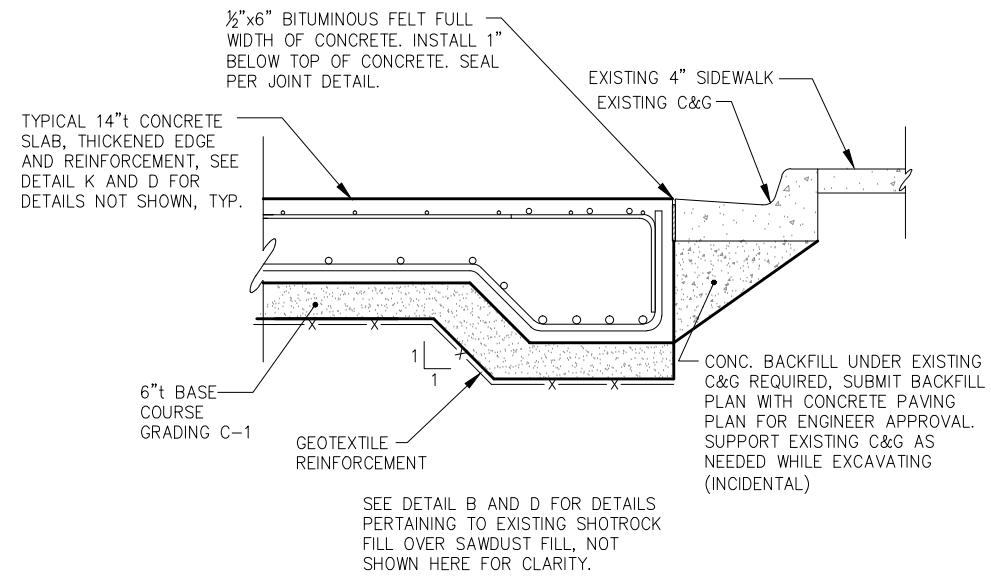
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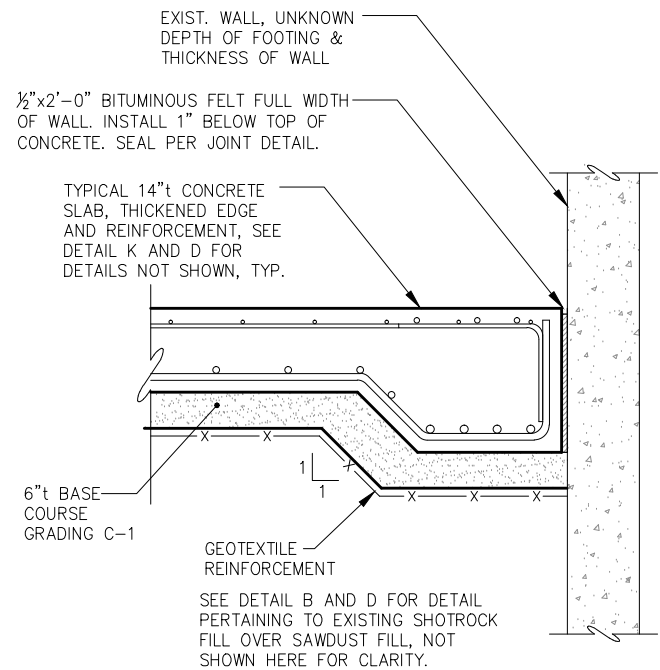
**3.02**  
SHEET 12 OF 18



**K** TYPICAL THICKENED SLAB

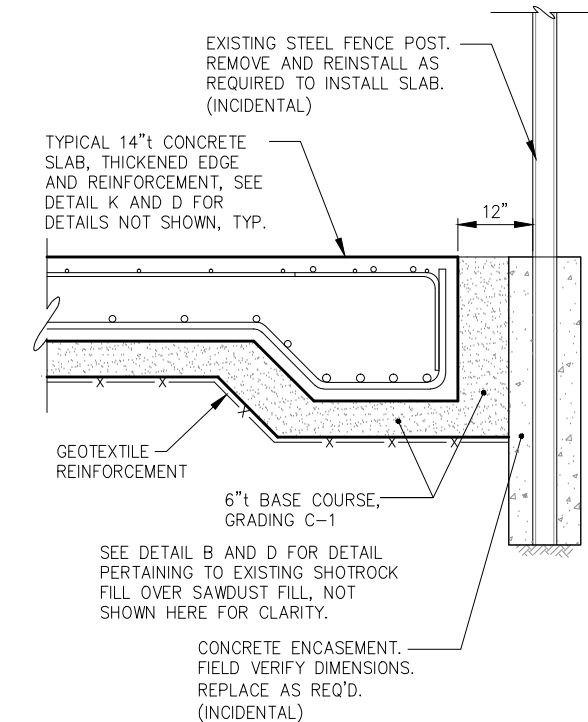


**L** EDGE OF PAVEMENT AT EXISTING CURB



**M** EDGE OF PAVEMENT AT EXISTING WALL

**NOTE:**  
ALL 14"t CONCRETE SLAB EXCAVATION LIMITS PER DETAIL B.



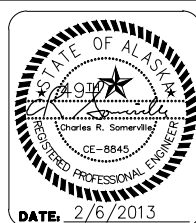
**N** TYPICAL SLAB AT FENCE POST

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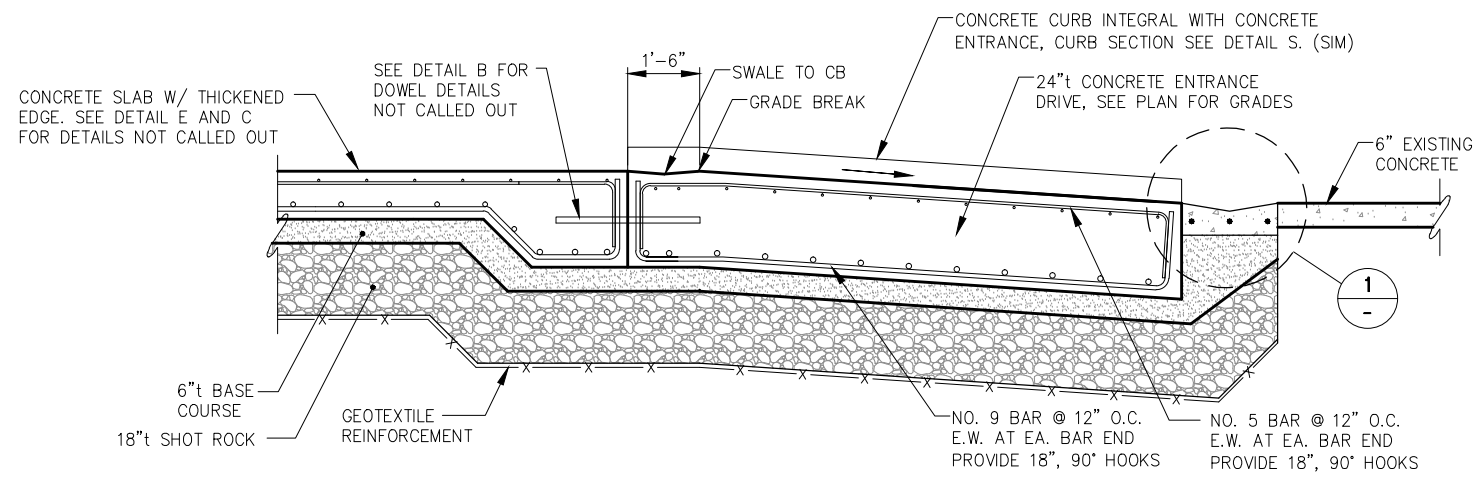


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CONCRETE PAVING- PHASE II

SHEET TITLE: TYPICAL SECTIONS  
@ 14" THICK CONCRETE SLAB

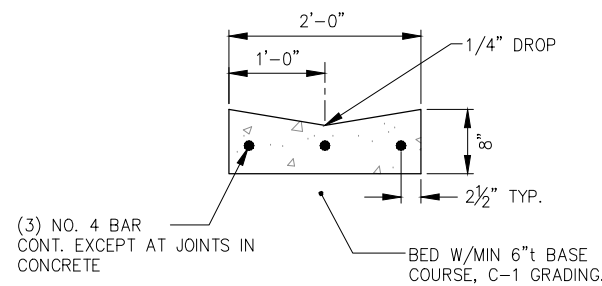
3.03 SHEET 13 OF 18

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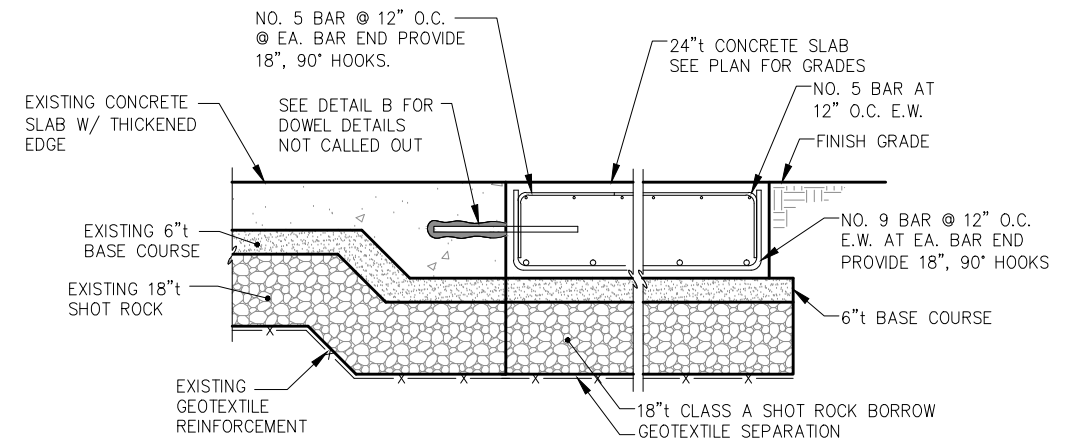


**O** DRIVEWAY SECTION

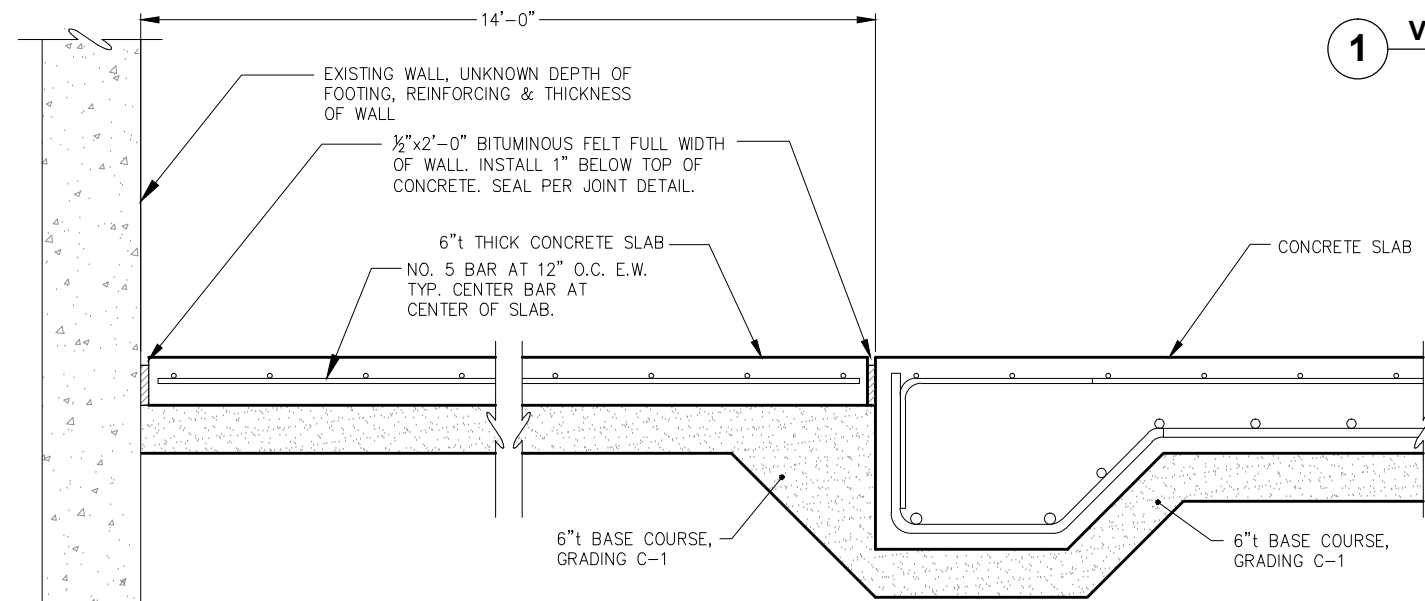
**NOTE:**  
SUBGRADE NOT SHOWN FOR CLARITY. SEE DETAIL A OR B DEPENDING ON LOCATION FOR SUBGRADE CONDITIONS, TYP. THIS SHEET



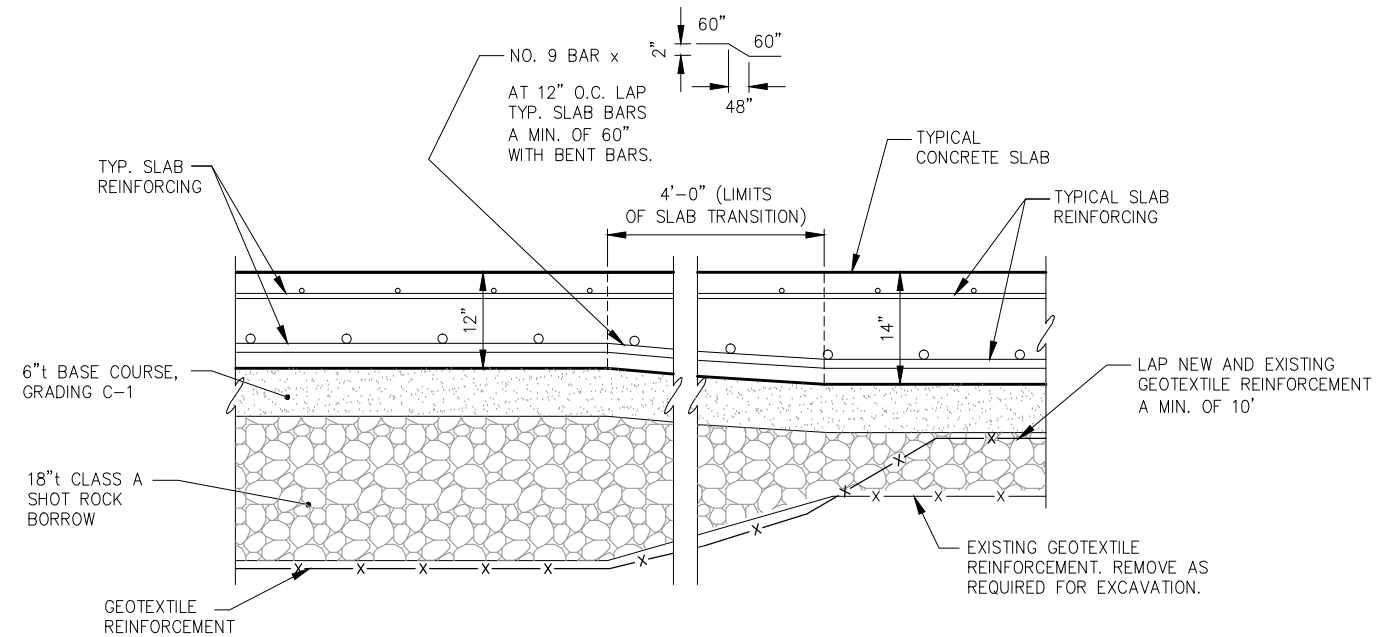
**1** VALLEY GUTTER



**P** 24" THICK SLAB SECTION



**Q** SLAB TRANSITION AT TRAILER STORAGE BUILDING



**R** TYPICAL TRANSITION SECTION

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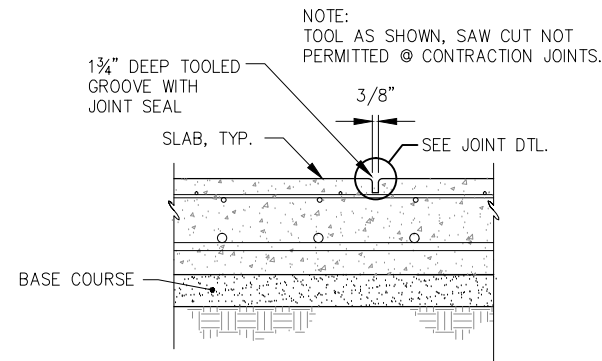


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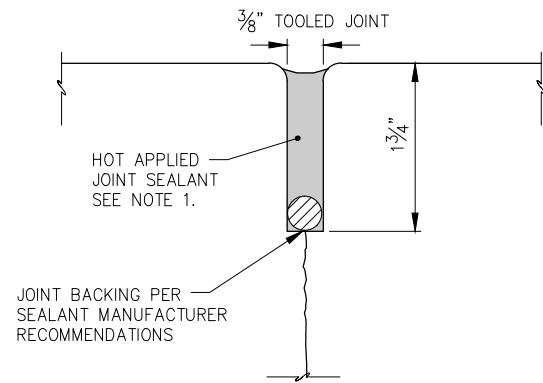
SHEET TITLE: TYPICAL SECTIONS AND DETAILS

3.04 SHEET 14 OF 18

PND PROJECT NO. 112071.03 DWG. FILE: 3.04\*.DWG



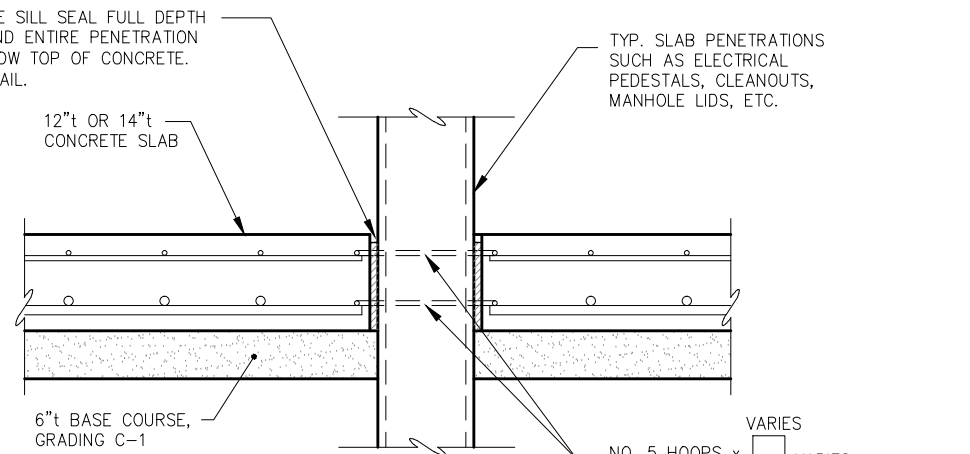
**CONCRETE PAVEMENT - CONTRACTION JOINT**



- NOTE:
1. JOINT SEALANT SHALL BE HOT APPLIED CRAFCO, INC ROADSaver 221 OR APPROVED EQUAL.
  2. TOP OF SEALANT SHALL BE 1/8" TO 1/4" BELOW TOP OF PAVEMENT. REMOVE EXCESS SEALANT IF OVERSPILL OCCURS.

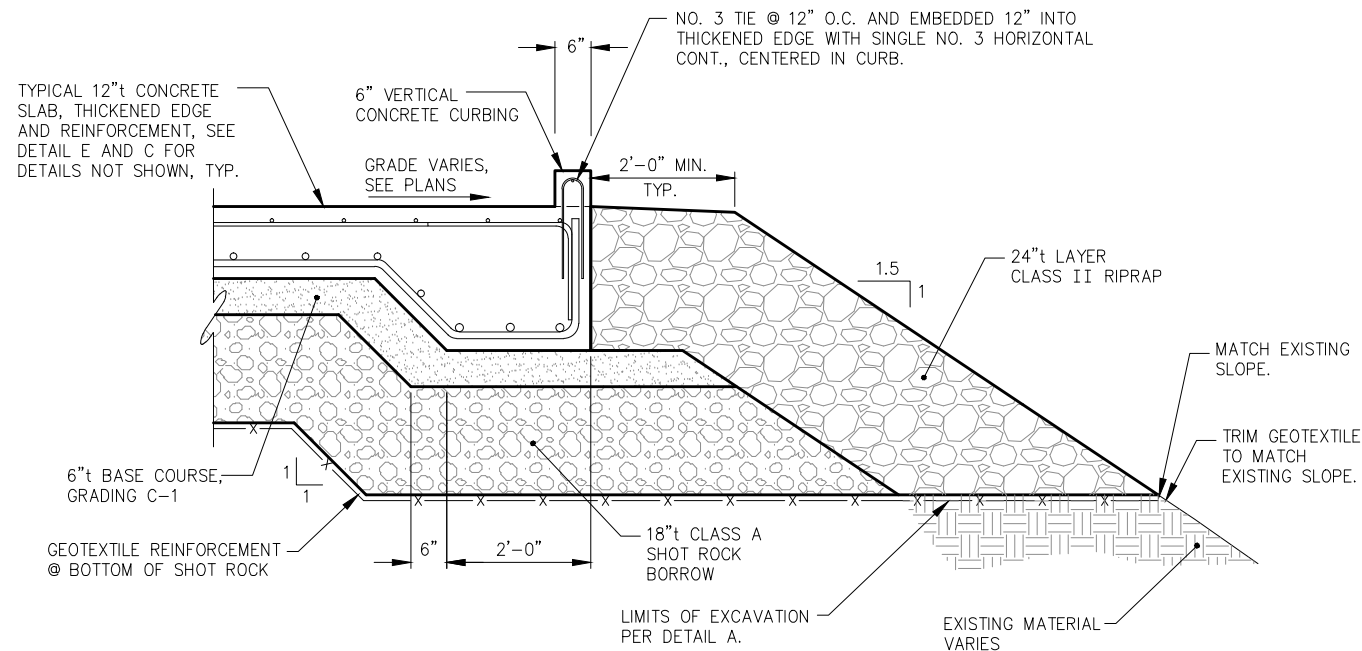
**CONTRACTION / CONSTRUCTION JOINT DETAIL**

1/2"x12" WEATHERMATE SILL SEAL FULL DEPTH OF CONCRETE AROUND ENTIRE PENETRATION AND INSTALL 1" BELOW TOP OF CONCRETE. SEAL PER JOINT DETAIL.

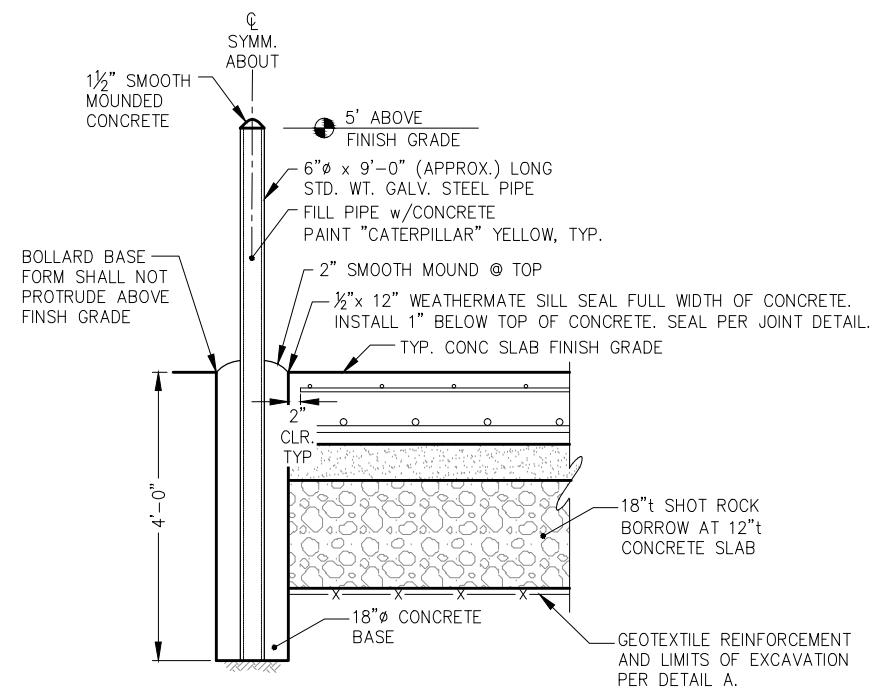


- NOTES:
1. SUB-BASE NOT SHOWN HERE FOR CLARITY.
  2. LIMITS OF EXCAVATION PER DETAIL A OR B FOR 12" AND 14" THICK CONCRETE SLABS RESPECTFULLY.

**TYPICAL SLAB PENETRATION LESS THAN 24"Ø**



**S THICKENED CONCRETE SLAB AT RIPRAP SLOPE**



**PIPE BOLLARD DETAIL**

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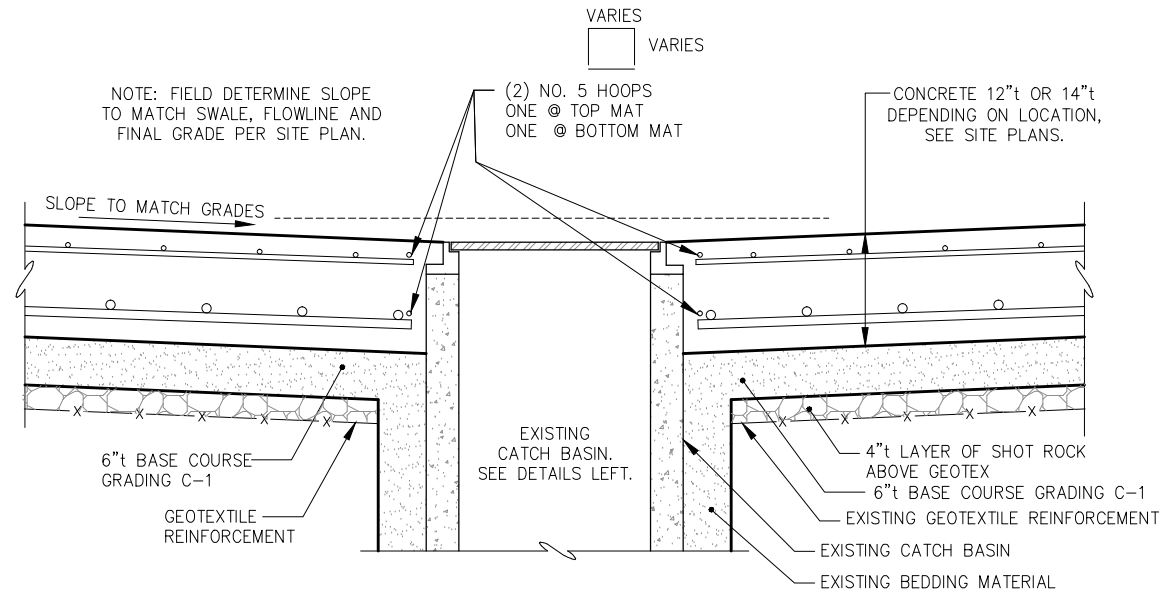
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SHEET TITLE: **TYPICAL SECTIONS AND DETAILS**

DATE: 2/6/2013

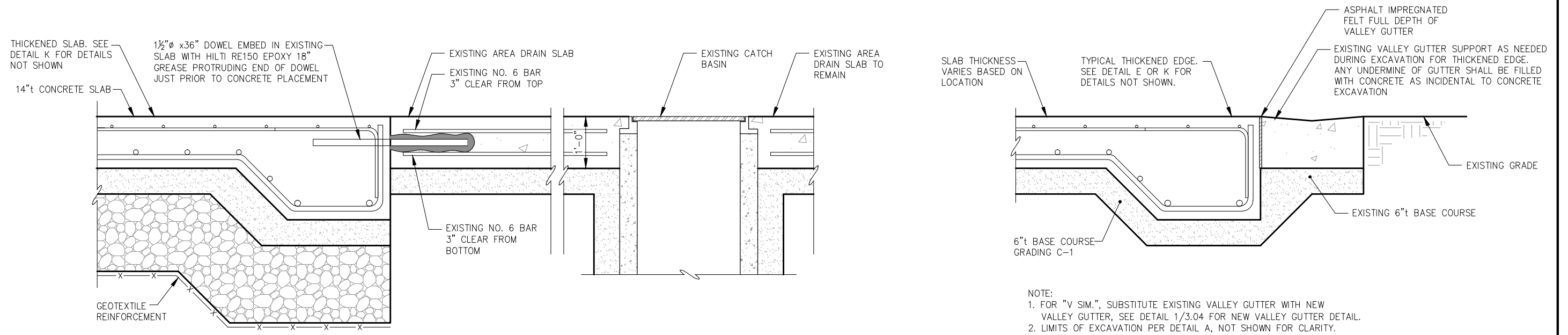
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**3.05**  
SHEET 15 OF 18



NOTE: LIMITS OF EXCAVATION PER DETAIL A OR B FOR 12" AND 14" THICK CONCRETE SLABS RESPECTFULLY.

**T** SLAB AT EXISTING CATCH BASIN



**U** SLAB DETAIL AT AREA DRAIN

**V** THICKENED SLAB AT VALLEY GUTTER

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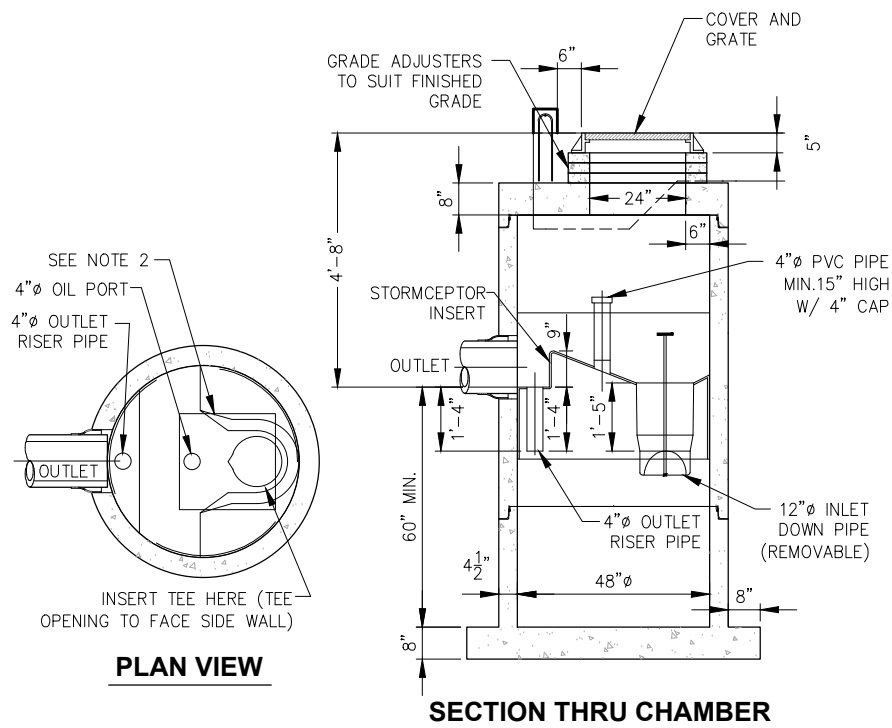
SHEET TITLE: **STORM DRAIN DETAILS**

DATE: 2/6/2013

PND PROJECT NO. 112071.03    DWG. FILE: 3.04\*.DWG

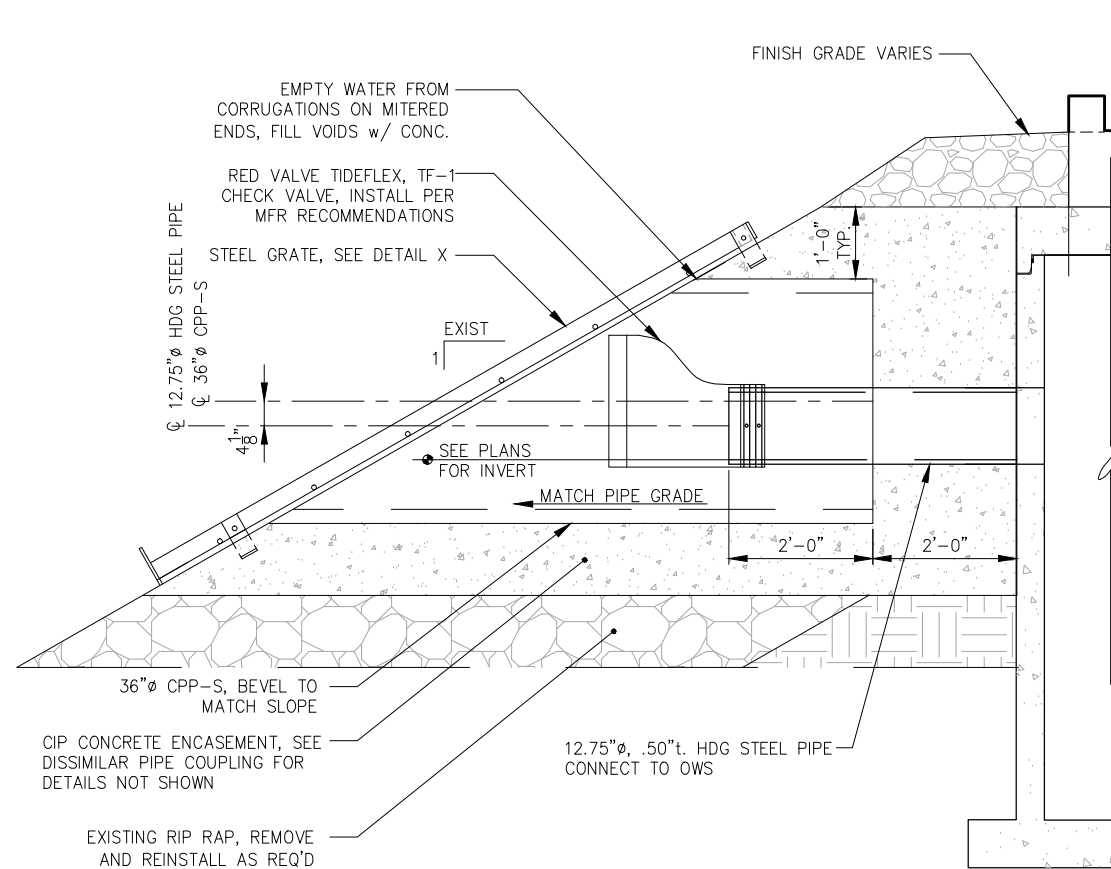
**3.06**  
SHEET 16 OF 18



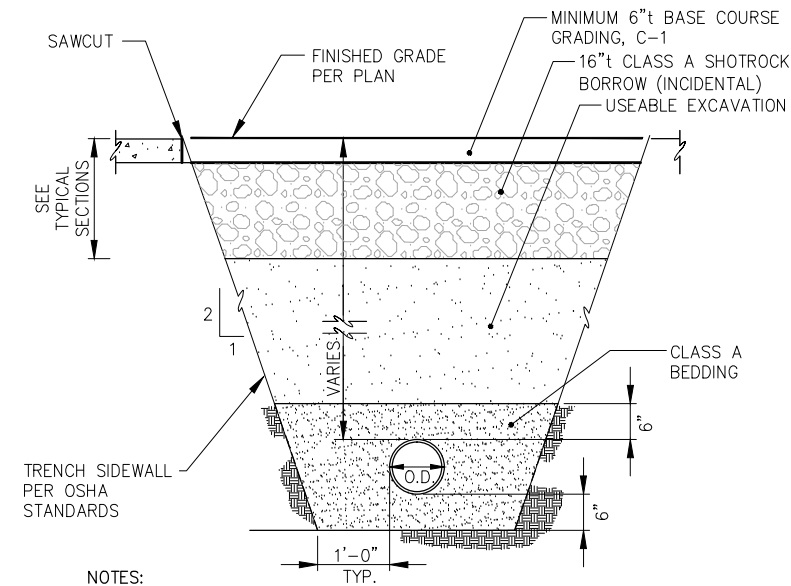


- NOTES:
1. THE USE OF FLEXIBLE CONNECTION IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
  2. THE COVER SHOULD BE POSITIONED OVER THE INLET DROP PIPE AND THE OIL PORT.
  3. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181, #6068765, #6371690.
  4. CONTACT A CONCRETE PIPE DIVISION REPRESENTATIVE FOR FURTHER DETAILS NOT LISTED ON THIS DRAWING.

**STC 450i PRECAST CONCRETE STORMCEPTOR  
(450 U.S. GALLON CAPACITY)**

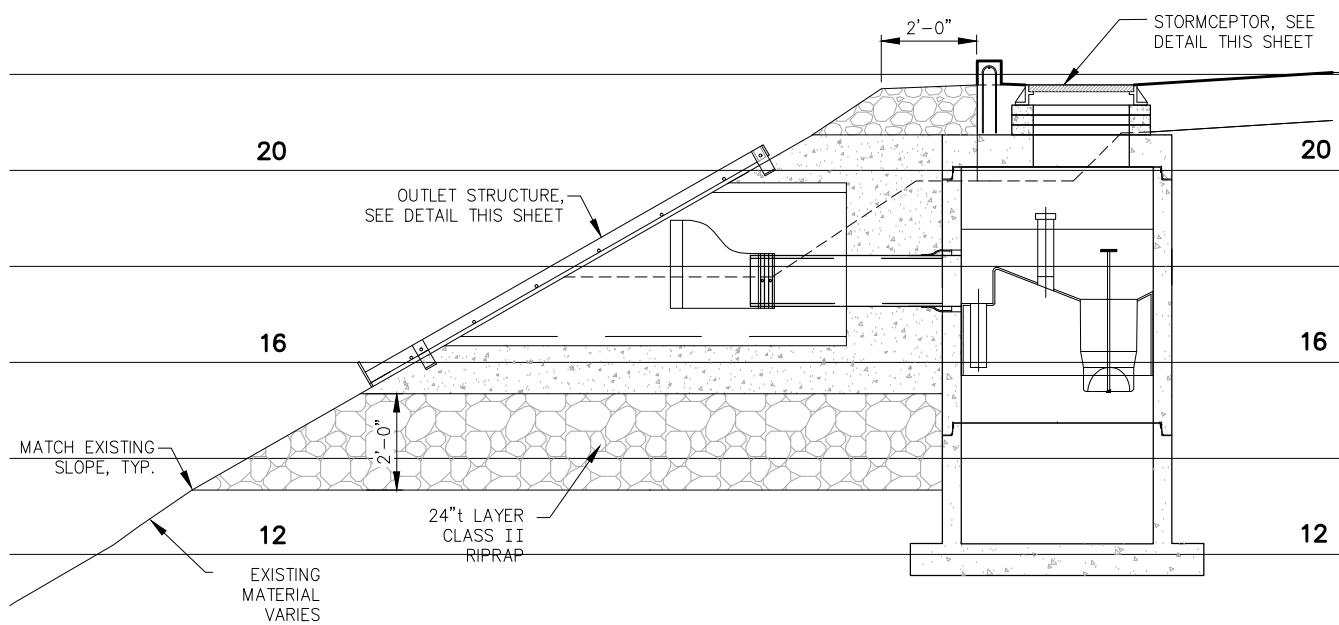


**TYPICAL SECTION - STORM DRAIN OUTLET STRUCTURE**

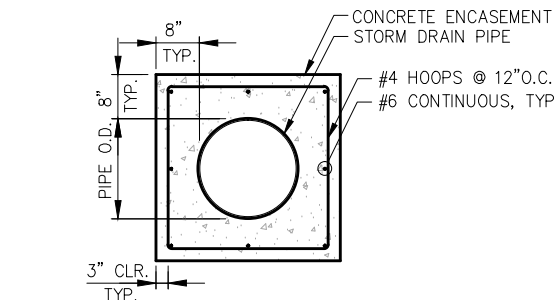
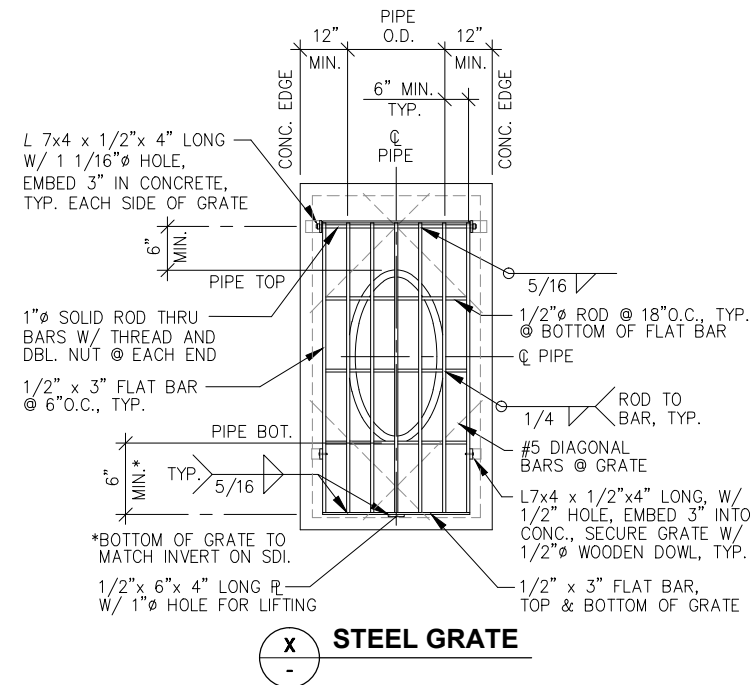


- NOTES:
1. TRENCH WALL SLOPE WILL VARY WITH SOIL STRENGTH AND CHARACTER.
  2. O.D. = OUTSIDE DIAMETER OF PIPE.

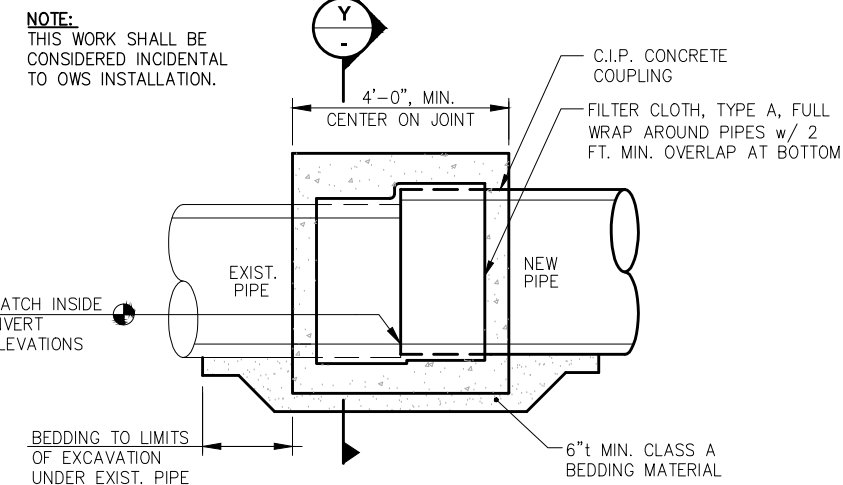
**TYPICAL SECTION - PIPE BEDDING**



**SECTION AT STORM DRAIN OUTLET STRUCTURE**



**DISSIMILAR PIPE COUPLING SECTION**



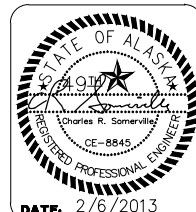
NOTE:  
THIS WORK SHALL BE CONSIDERED INCIDENTAL TO OWS INSTALLATION.

| REVISIONS |      |             |      |      |      |
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| REV.      | DATE | DESCRIPTION | DWN. | CKD. | APP. |
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DRAWN: WRB APPROVED: CRS



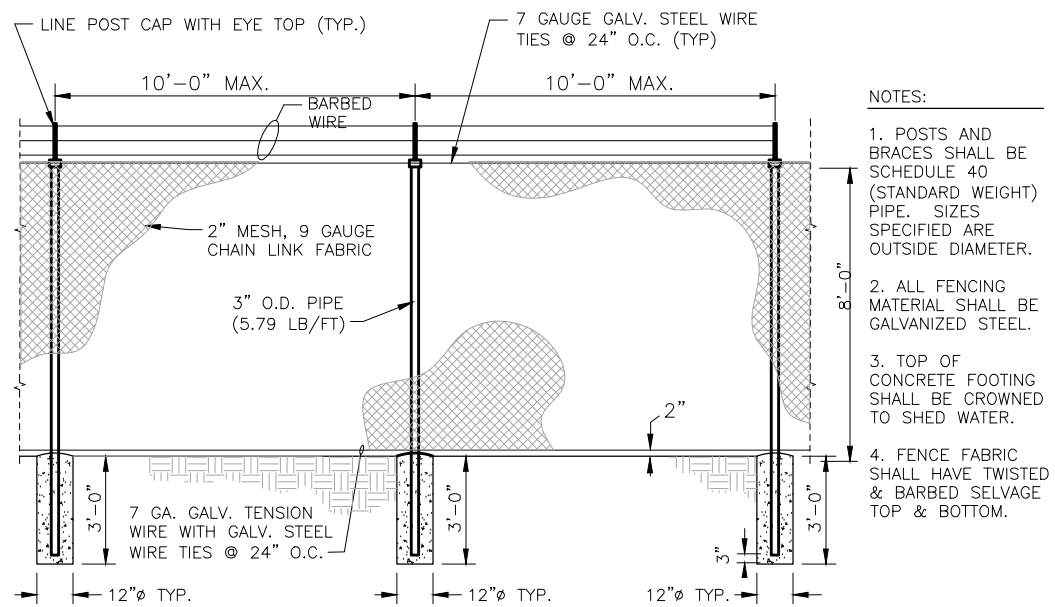
**CITY AND BOROUGH OF WRANGELL, ALASKA  
WRANGELL MARINE SERVICE CENTER  
CONCRETE PAVING- PHASE II**

SHEET TITLE:  
**MISCELLANEOUS DETAILS**

**3.07**

SHEET 17 OF 18

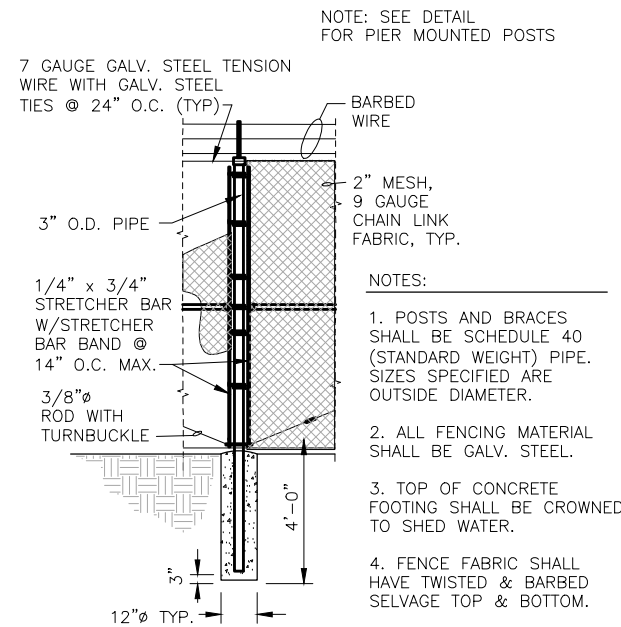
PND PROJECT NO. 112071.03 DWG. FILE: 3.06\_.DWG



- NOTES:
1. POSTS AND BRACES SHALL BE SCHEDULE 40 (STANDARD WEIGHT) PIPE. SIZES SPECIFIED ARE OUTSIDE DIAMETER.
  2. ALL FENCING MATERIAL SHALL BE GALVANIZED STEEL.
  3. TOP OF CONCRETE FOOTING SHALL BE CROWNED TO SHED WATER.
  4. FENCE FABRIC SHALL HAVE TWISTED & BARBED SELVAGE TOP & BOTTOM.

NOTE: SEE DETAIL FOR PIER MOUNTED POSTS

TYPICAL LINE FENCE & POSTS

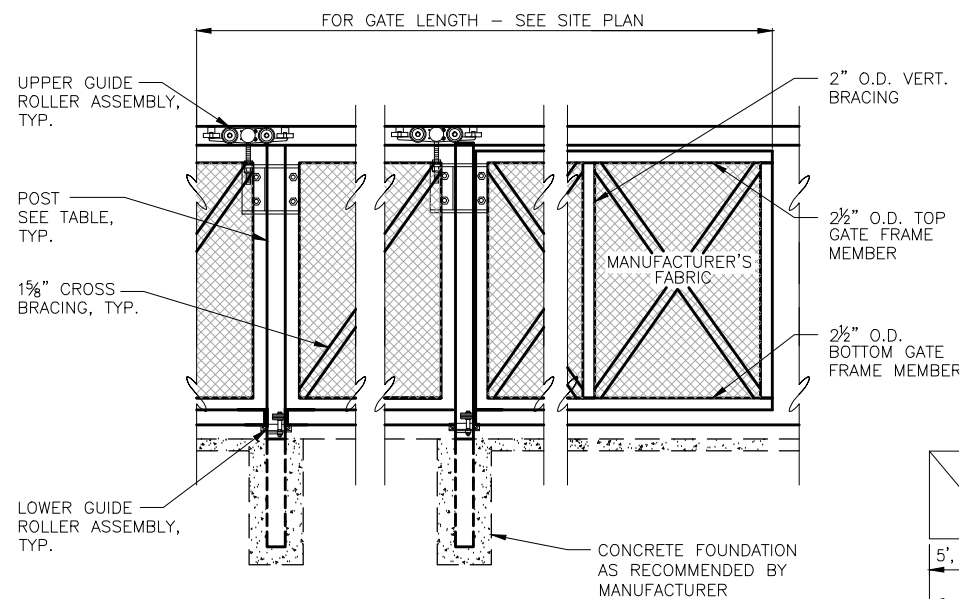


NOTE: SEE DETAIL FOR PIER MOUNTED POSTS

- NOTES:
1. POSTS AND BRACES SHALL BE SCHEDULE 40 (STANDARD WEIGHT) PIPE. SIZES SPECIFIED ARE OUTSIDE DIAMETER.
  2. ALL FENCING MATERIAL SHALL BE GALV. STEEL.
  3. TOP OF CONCRETE FOOTING SHALL BE CROWNED TO SHED WATER.
  4. FENCE FABRIC SHALL HAVE TWISTED & BARBED SELVAGE TOP & BOTTOM.

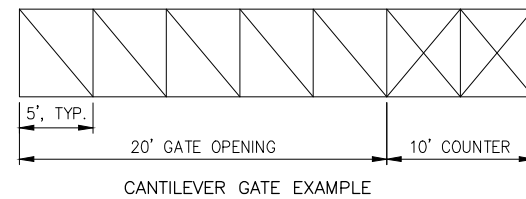
CORNER AND END POST

NOTE: PROVIDE ALL MISCELLANEOUS HARDWARE TO CONNECT TO EXISTING FENCE, TYP.



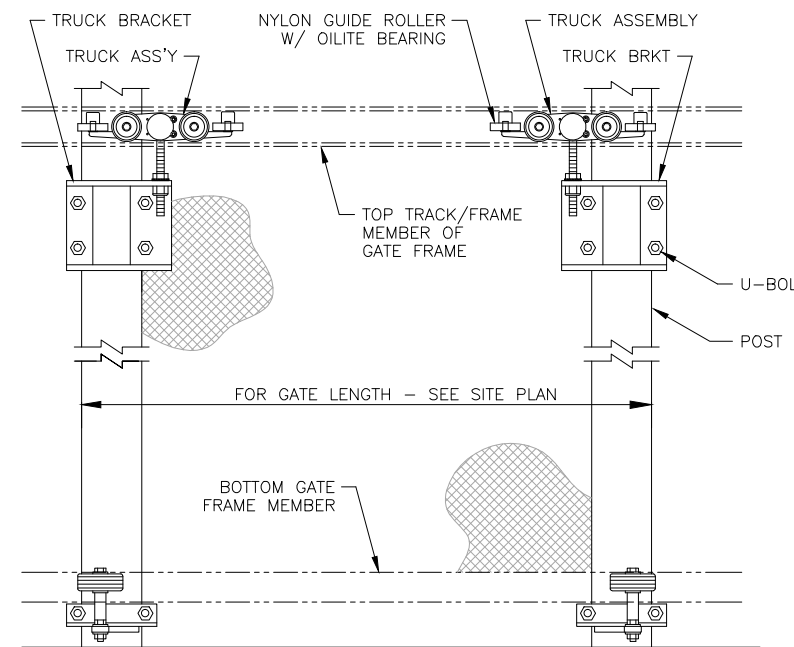
POST SIZE CANTILEVER SLIDING (ROLLING) GATE

| GATE OPENING | POST SIZE |
|--------------|-----------|
| UP TO 20'    | 4"        |
| 20' TO 28'   | 6"        |



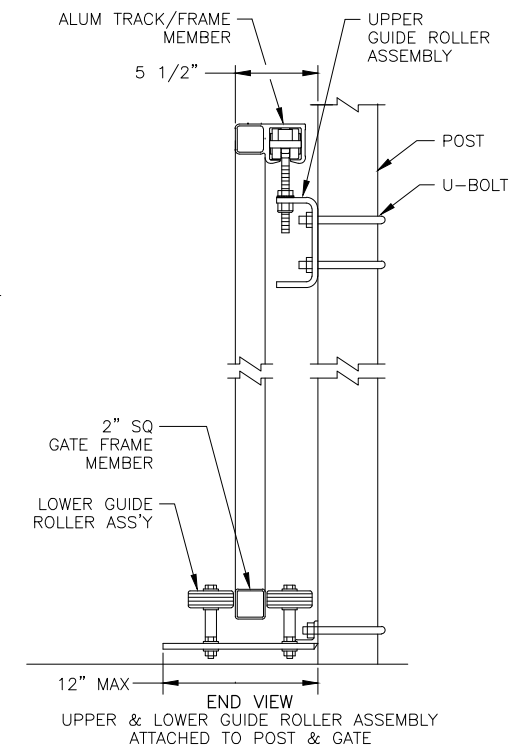
- NOTE:
1. SEE DETAIL FOR PIER MOUNTED POST.
  2. CANTILEVER SLIDING (ROLLING) GATE COUNTER BALANCE SHALL BE 1/2 THE LENGTH OF THE GATE OPENING. MINIMUM COUNTERBALANCE SHALL BE 4' LONG.
  3. DIAGONAL BRACING SHALL BE 4' TO 6' APART.
  4. VERTICAL BRACING SHALL BE 4' TO 6' APART.

CANTILEVER SLIDING (ROLLING) GATE



ELEVATION UPPER & LOWER GUIDE ROLLER ASSEMBLY(S) ATTACHED TO POST

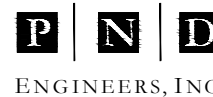
CANTILEVERED SLIDING (ROLLING) GATE



END VIEW UPPER & LOWER GUIDE ROLLER ASSEMBLY ATTACHED TO POST & GATE

REVISIONS

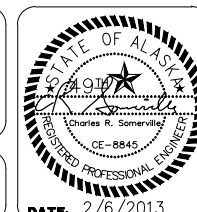
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SCALE: NTS



DATE: 2/6/2013

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CONCRETE PAVING- PHASE II

SHEET TITLE: FENCING DETAILS

3.08

PND PROJECT NO. 112071.03 DWG. FILE: 3.06\_.DWG

SHEET 18 OF 18

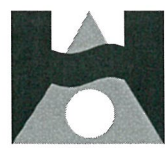
# LEGEND

- GFI      GROUND FAULT INTERRUPTED
- OFCI    OWNER FURNISHED CONTRACTOR INSTALLED
- OH      OVERHEAD
- UG      UNDERGROUND
- XFMR    TRANSFORMER
- ⬡(E)    EXISTING
- ⬡(H)    HANDHOLE
- ⬡(T)    PAD MOUNT TRANSFORMER
- ▬      PANELBOARD
- UTILITY POLE
- ⬡(30A)   30A DUPLEX PEDESTAL
- ⬡(30A/50A)   30A/50A DUPLEX PEDESTAL
- ⬡(30A/50A/60A)   30A/50A/60A DUPLEX PEDESTAL
- (L)    POLE MOUNTED HID LUMINAIRE
- OH —   OVERHEAD CONDUCTORS
- UG —   UNDERGROUND CONDUIT
- ⊗      GROUND ROD
- ⬡(H)    HIGH MAST LIGHT POLE



## 1 OVERALL SITE PLAN

Feb 06, 2013 - 9:09am F:\Projects\137\_PND\2\5b\_WASC\_Phase II\Drawings\Working\E1.00.dwg (layout1 tab)



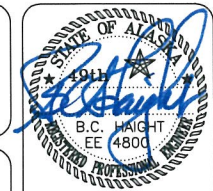
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DATE: 2/6/2013

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**CONCRETE PAVING- PHASE II**

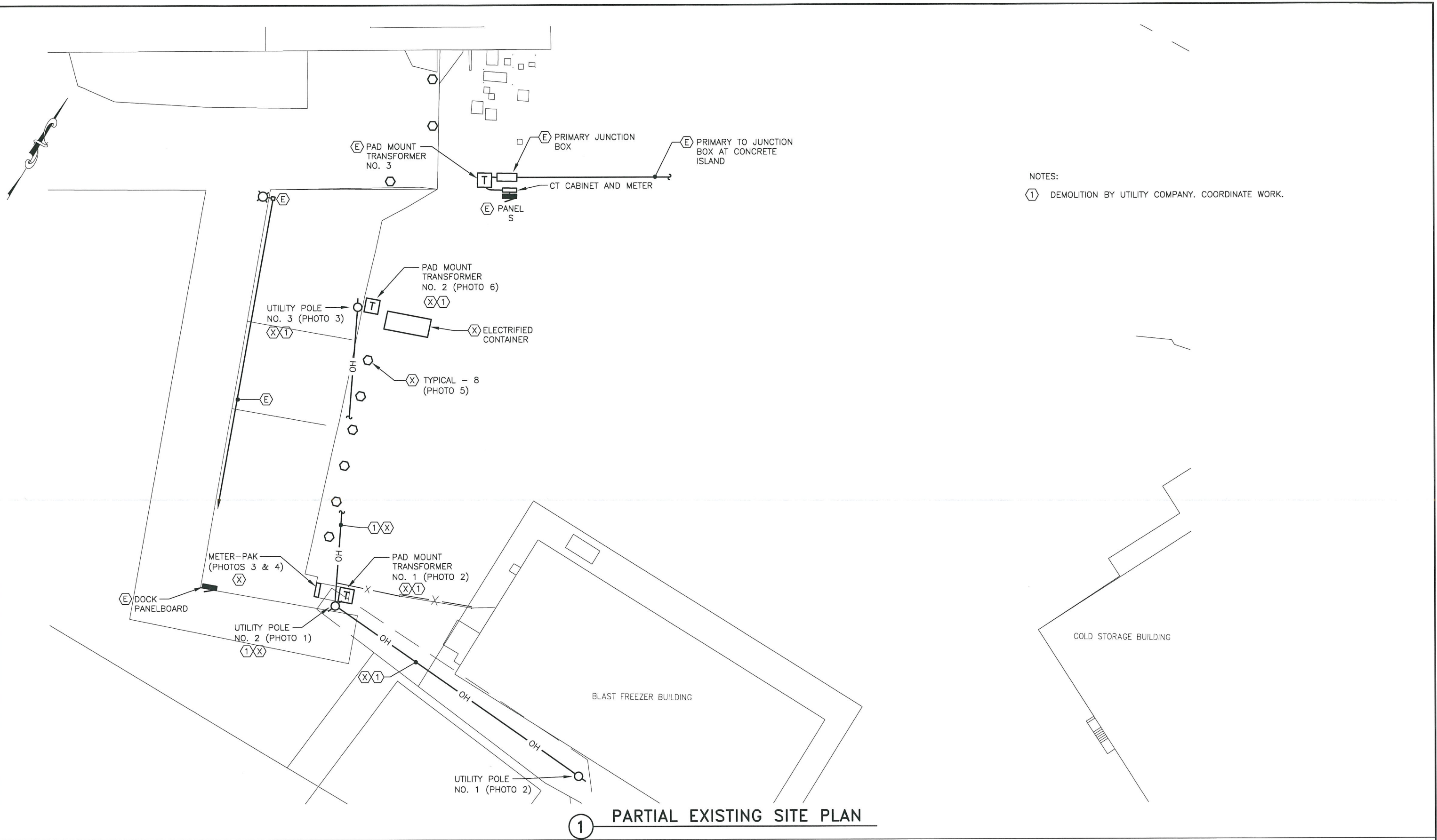
SHEET TITLE:  
**OVREALL SITE PLAN**

PND PROJECT NO. 112071.03      DWG. FILE: E1.00.DWG

**E1.00**

SHEET 1 OF 8

Feb 06, 2013 - 6:10am  
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NOTES:  
 ① DEMOLITION BY UTILITY COMPANY. COORDINATE WORK.

① PARTIAL EXISTING SITE PLAN

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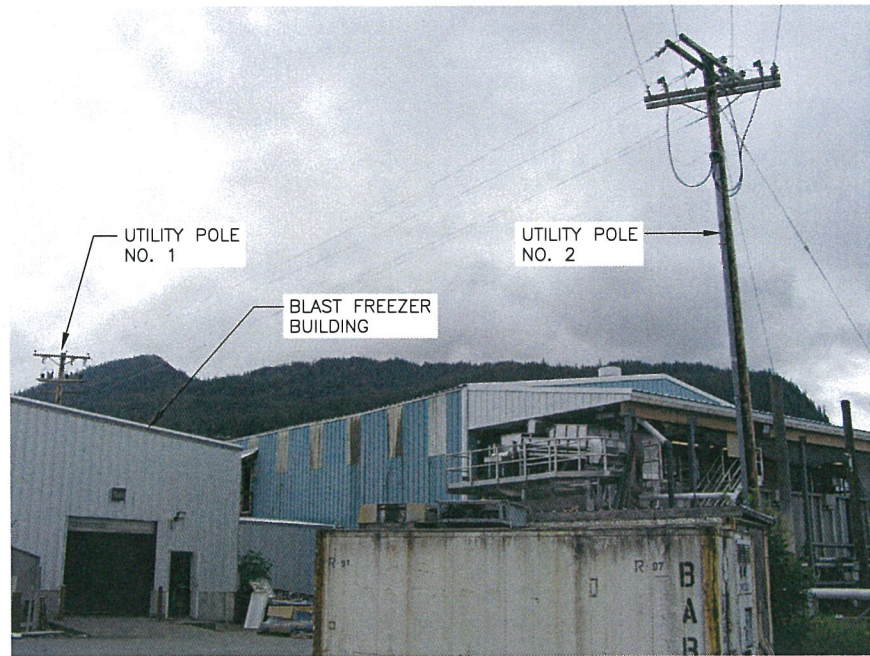
DATE: 2/6/2013

CITY AND BOROUGH OF WRANGELL, ALASKA  
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 CONCRETE PAVING- PHASE II

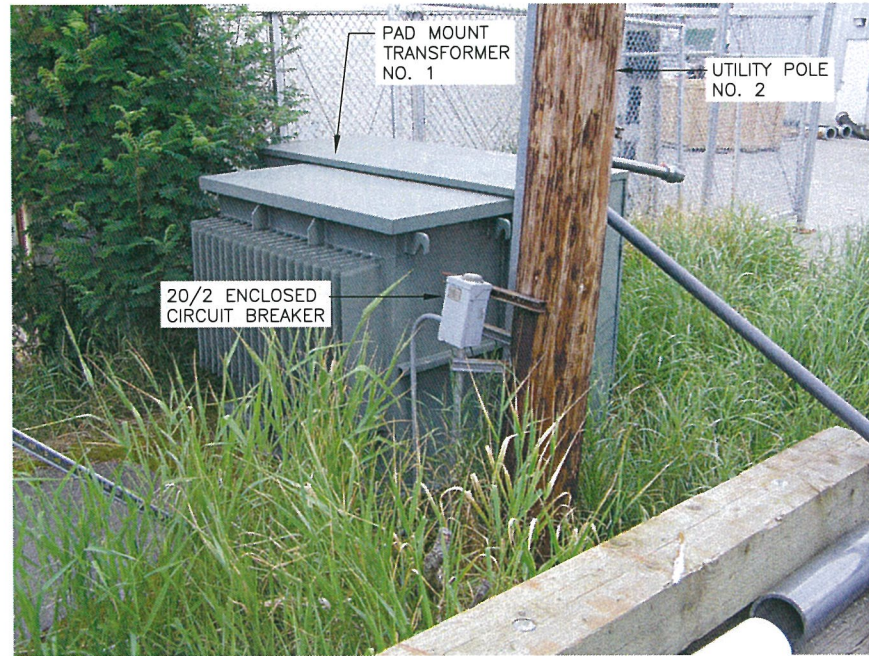
SHEET TITLE: EXISTING SITE PLAN

PND PROJECT NO.: 112071.03 DWG. FILE: E1.01.DWG

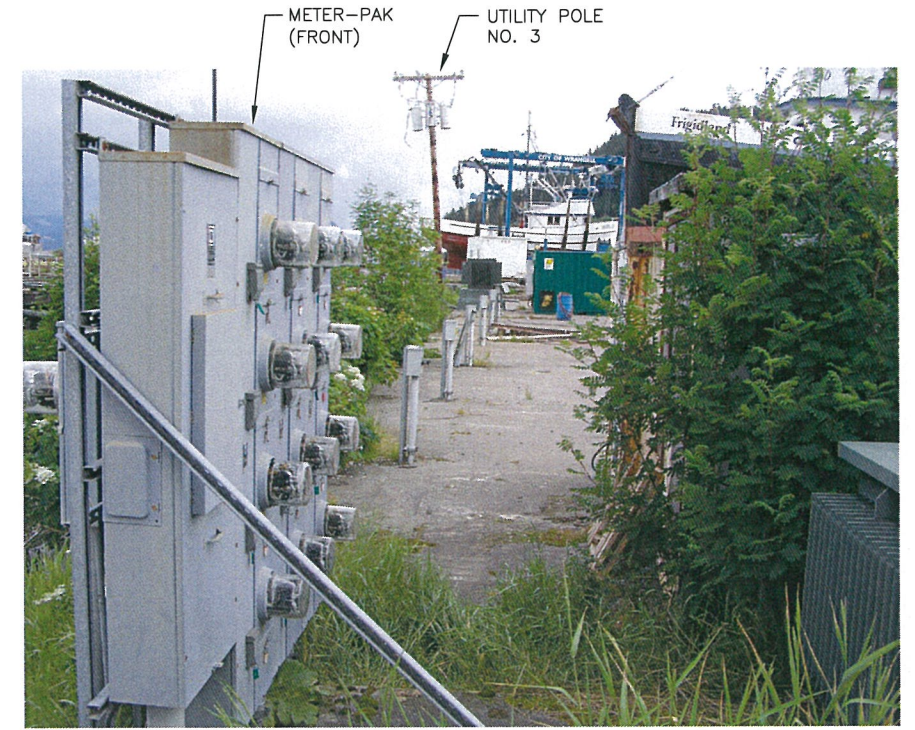
**E1.01**  
 SHEET 2 OF 8



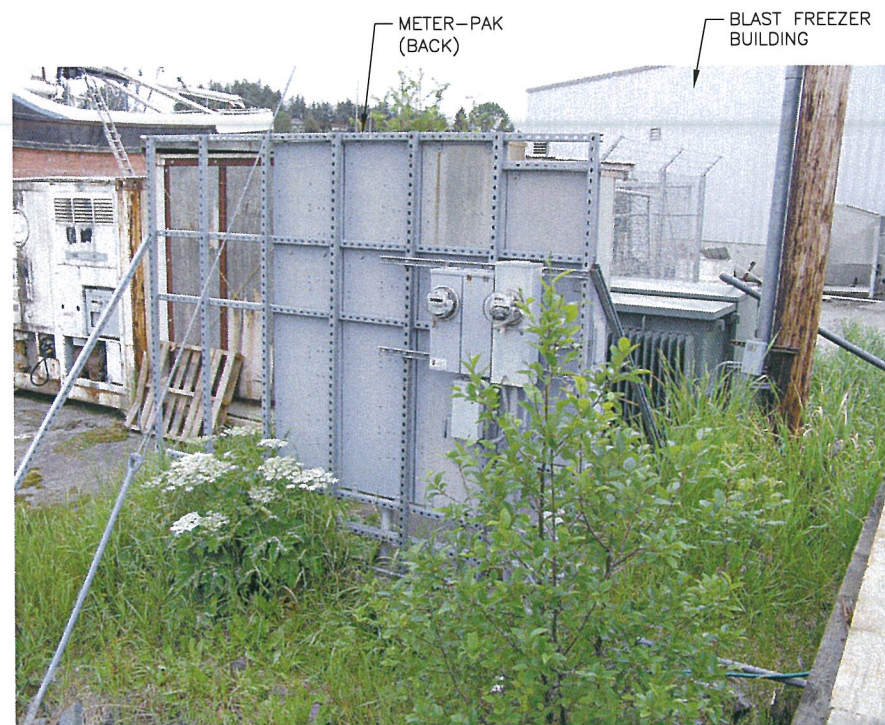
1 PHOTO 1



2 PHOTO 2



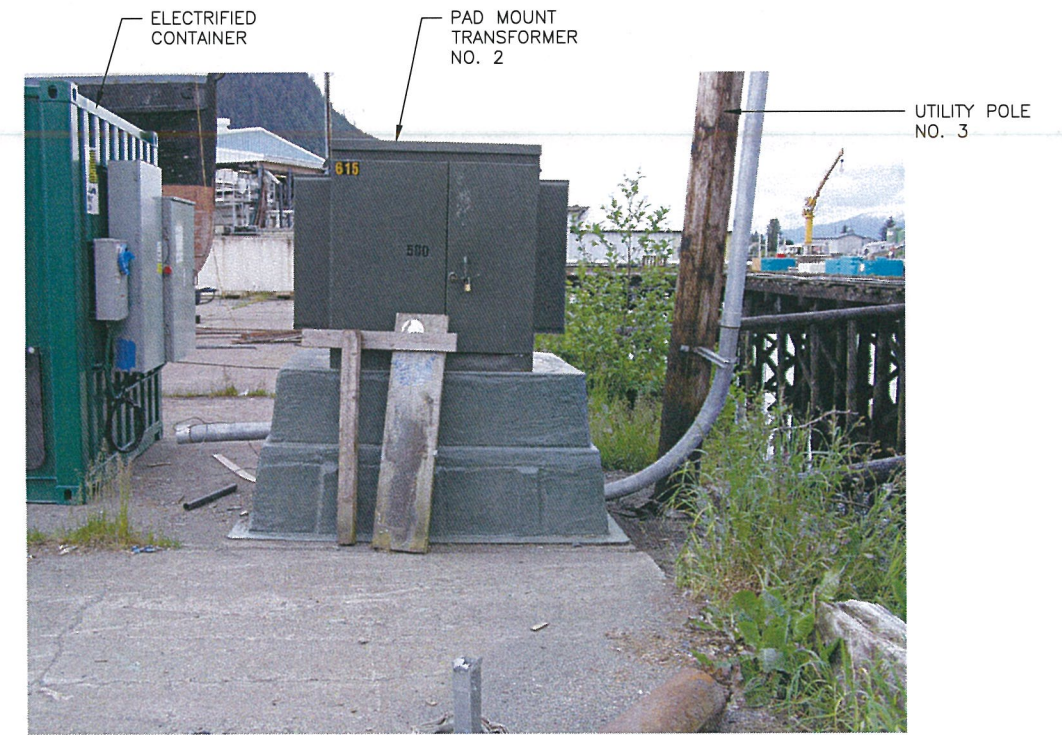
3 PHOTO 3



4 PHOTO 4

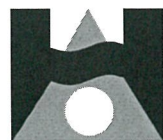


5 PHOTO 5



6 PHOTO 6

Feb 06, 2013 - 9:11am F:\Projects\137\_PND&V\5th\_WMSC\_Permit\_VA\Drawings\Working\E1.02.dwg (Layout1.tsb)



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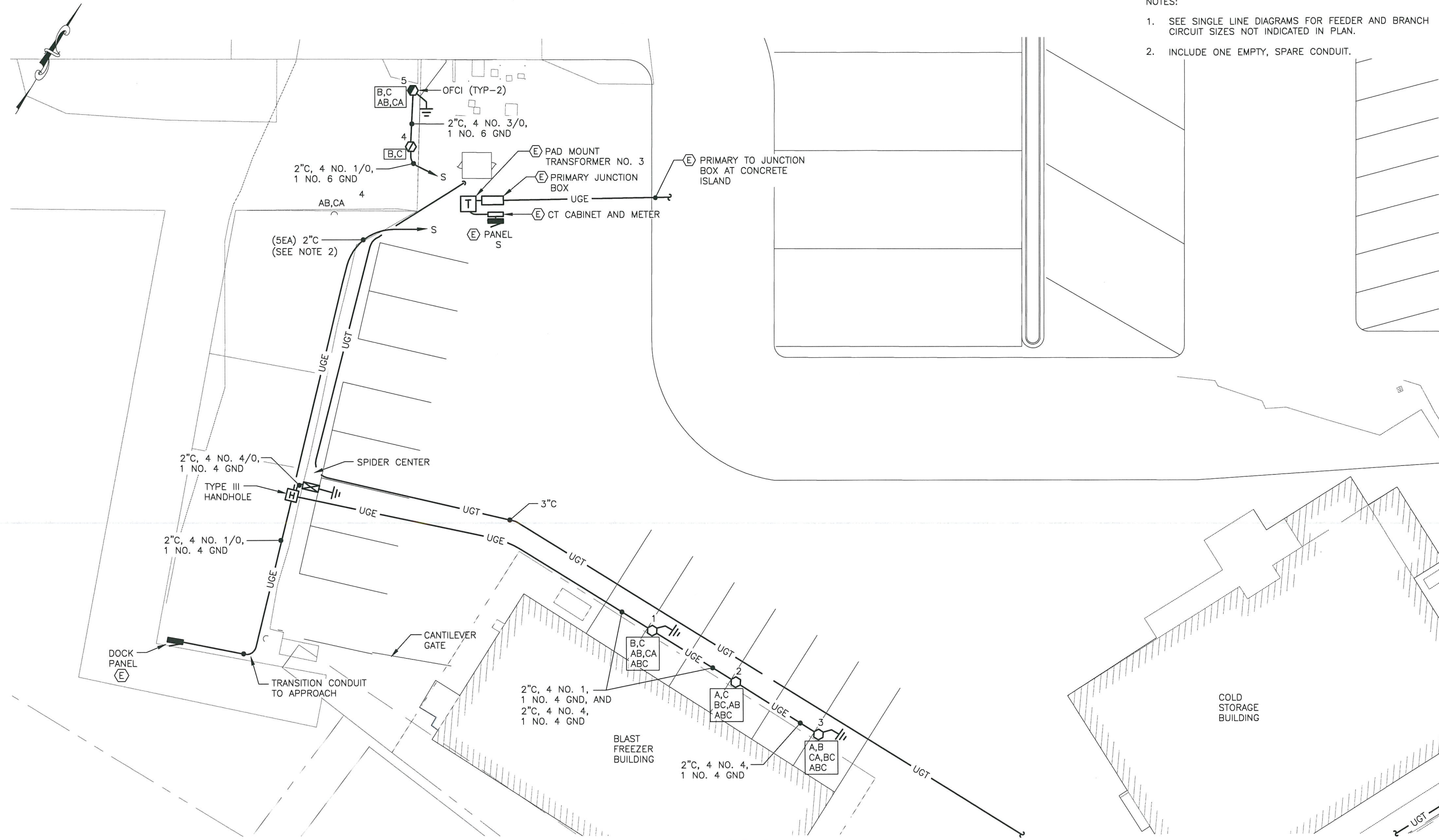
CITY AND BOROUGH OF WRANGELL, ALASKA  
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SHEET TITLE:  
**EXISTING SITE PHOTOS**

PND PROJECT NO. 112071.03 DWG. FILE: E1.02.DWG

**E1.02**  
SHEET  
3 OF 8

- NOTES:
1. SEE SINGLE LINE DIAGRAMS FOR FEEDER AND BRANCH CIRCUIT SIZES NOT INDICATED IN PLAN.
  2. INCLUDE ONE EMPTY, SPARE CONDUIT.



1 PARTIAL SITE PLAN

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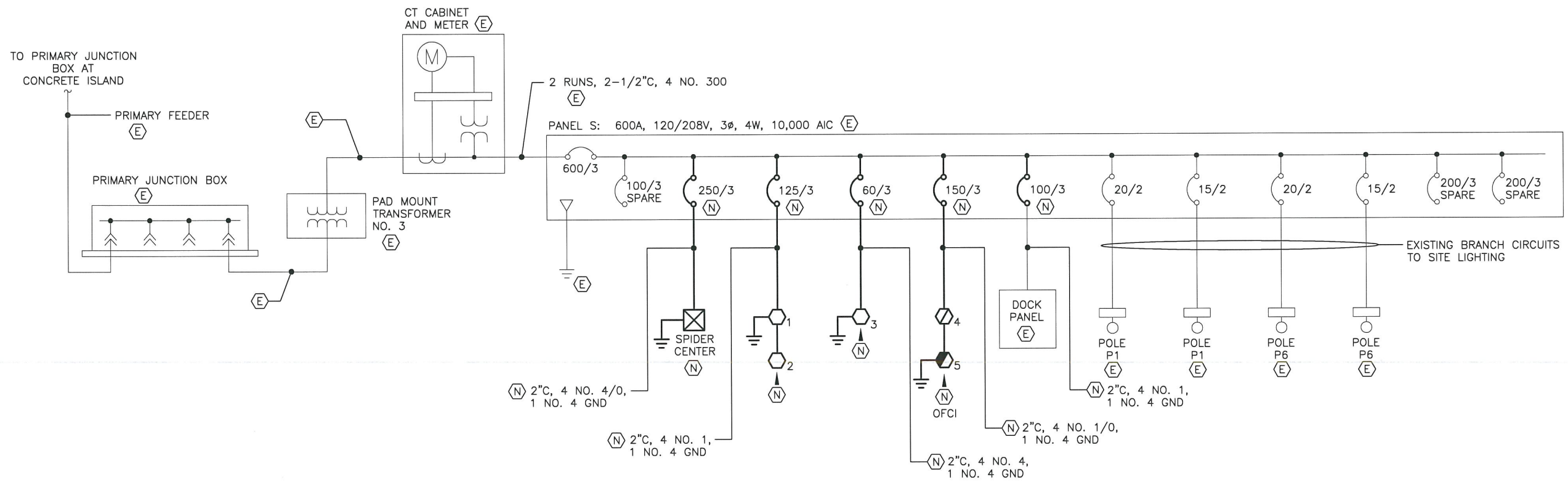
**PND ENGINEERS, INC.**  
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DATE: 2/6/2013

CITY AND BOROUGH OF WRANGELL, ALASKA  
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SHEET TITLE: PARTIAL SITE PLAN - NEW  
PND PROJECT NO. 112071.03    DWG. FILE: E2.01.DWG  
E2.01  
SHEET 4 OF 8



1 SINGLE LINE DIAGRAM – EXISTING PHASE POWER DISTRIBUTION SYSTEM  
NO SCALE

Feb 06, 2013 - 5:43am S:\Projects\1317\_PND\25b\_WMSC\_Planet\A\Drawings\Working\E2.02.dwg (Layout1.rvt)

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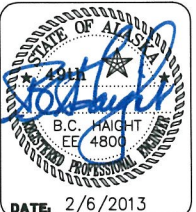
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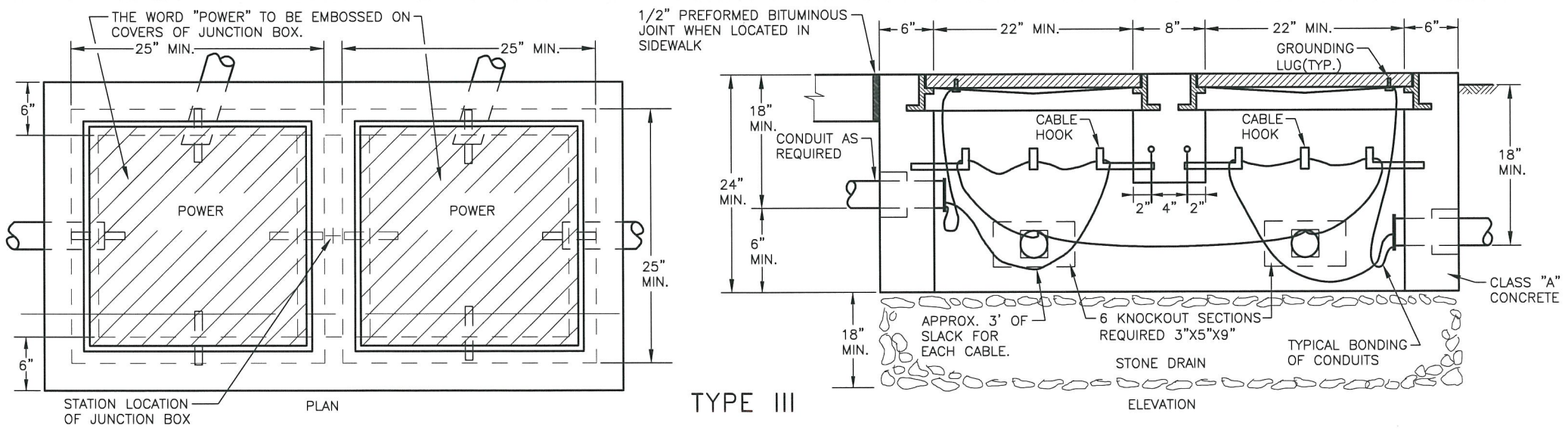
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SHEET TITLE:  
**SINGLE LINE DIAGRAMS**

PND PROJECT NO. 112071.03    DWG. FILE: E2.02.DWG

**E2.02**  
SHEET 5 OF 8

| PANEL S (EXISTING)                              |                    |                         | SIZE     | VOLTS/PHASE     |      |      | MAIN                                       | LOCATION    | MOUNT                        |    |
|---|--------------------|-------------------------|----------|-----------------|------|------|--|-------------|------------------------------|----|
|   |                    |                         | 600 AMPS | 208Y/120V, 3 PH |      |      | 600/3                                      | SOUTH SITE  | SURFACE                      |    |
| C<br>K<br>T<br>NO                               | DESCRIPTION        | BREAKER<br>AMP/<br>POLE | KVA      |                 |      |      | BREAKER<br>AMP/<br>POLE                    | DESCRIPTION | C<br>K<br>T<br>NO            |    |
|   |                    |                         | CKT      | AØ              | BØ   | CØ   |  |             |                              |    |
| 1   | POLE P1            | LTG                     | 20/2     | 0.8             | 18.1 |      | 17.3                                       | 125/3       | PEDESTALS 1 AND 2 (NEW LOAD) | 2  |
| 3   | ----               |                         | --       | 0.8             |      | 18.1 | 17.3                                       | --          | ----                         | 4  |
| 5   | POLE P1 (HAUL OUT) |                         | 15/2     | 0.3             |      |      | 17.6                                       | 17.3        | ----                         | 6  |
| 7   | ----               |                         | --       | 0.3             | 6.1  |      | 5.8  | 60/3        | PEDESTALS 3 (NEW LOAD)       | 8  |
| 9   | POLE P6            |                         | 20/2     | 0.5             |      | 6.3  | 5.8  | --          | ----                         | 10 |
| 11  | ----               |                         | --       | 0.5             |      |      | 6.3  | 5.8         | ----                         | 12 |
| 13  | POLE P6 (HAUL OUT) |                         | 15/2     | 0.3             | 12.8 |      | 12.5                                       | 150/3       | PEDESTALS 4 AND 5 (NEW LOAD) | 14 |
| 15  | ----               |                         | --       | 0.3             |      | 8.0  | 7.7  | --          | ----                         | 16 |
| 17  | LIGHTING CONTROLS  |                         | 20/1     | 0.2             |      |      | 7.9  | 7.7         | ----                         | 18 |
| 19  | SPARE              |                         | 20/1     | 0.0             | 20.8 |      | 20.8                                       | 250/3       | SPIDER CENTER (NEW LOAD)     | 20 |
| 21  |                    |                         | 20/1     | 0.0             |      | 20.8 | 20.8                                       | --          | ----                         | 22 |
| 23  |                    |                         | 20/1     | 0.0             |      |      | 20.8                                       | --          | ----                         | 24 |
| 25  |                    |                         | 20/1     | 0.0             | 0.0  |      | 0.0  | 200/3       | SPARE                        | 26 |
| 27  | SPACE              |                         |          | 0.0             |      | 0.0  | 0.0  | --          | ----                         | 28 |
| 29  |                    |                         |          | 0.0             |      |      | 0.0  | --          | ----                         | 30 |
| 31  |                    |                         |          | 0.0             | 0.0  |      | 0.0  | 200/3       | SPARE                        | 32 |
| 33  |                    |                         |          | 0.0             |      | 0.0  | 0.0  | --          | ----                         | 34 |
| 35  |                    |                         |          | 0.0             |      |      | 0.0  | --          | ----                         | 36 |
| 37  |                    |                         |          | 0.0             | 0.0  |      | 0.0  |             | SPACE                        | 38 |
| 39  |                    |                         |          | 0.0             |      | 0.0  | 0.0  |             |                              | 40 |
| 41  |                    |                         |          | 0.0             |      | 0.0  | 0.0  |             |                              | 42 |
| BALANCED CONNECTED LOAD: 163.6 KVA / 454.4 AMPS |                    |                         |          | 57.8            | 53.2 | 52.6 | BALANCED DEMAND LOAD: 131.7 KVA / 366 AMPS |             |                              |    |
| MAXIMUM PHASE LOAD: 57.8 KVA / 482 AMPS         |                    |                         |          |                 |      |      |  |             |                              |    |




1 DETAIL - HANDHOLES NO SCALE

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DESIGN: BCH    CHECKED: \_\_\_\_\_  
 DRAWN: PEL    APPROVED: \_\_\_\_\_

  
 DATE: 2/6/2013

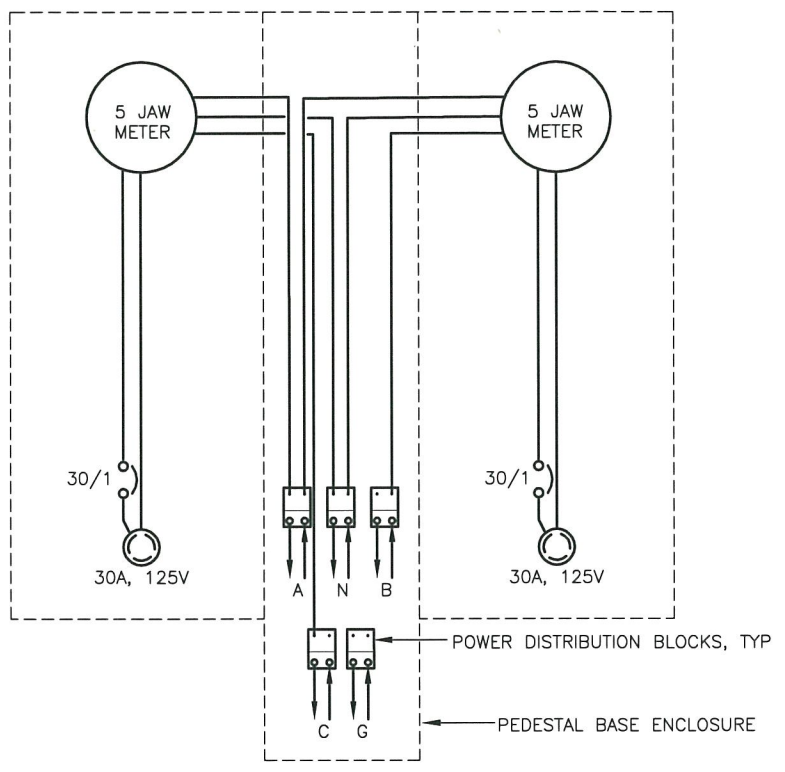
CITY AND BOROUGH OF WRANGELL, ALASKA  
**WRANGELL MARINE SERVICE CENTER**  
**CONCRETE PAVING- PHASE II**

SHEET TITLE: **SCHEDULE & DETAILS**

PND PROJECT NO.: 112071.03    DWG. FILE: E2.03.DWG

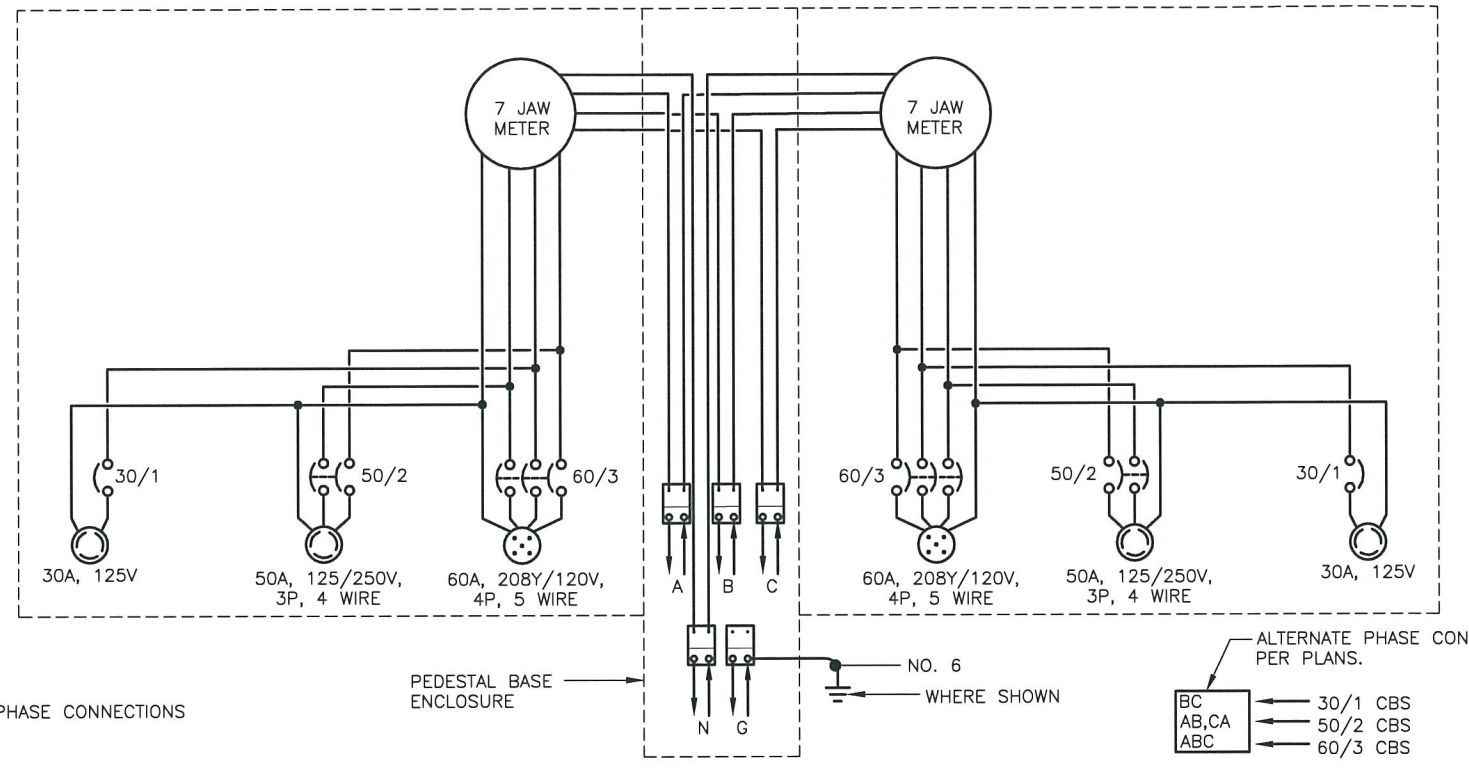
**E2.03**  
 SHEET 6 OF 8





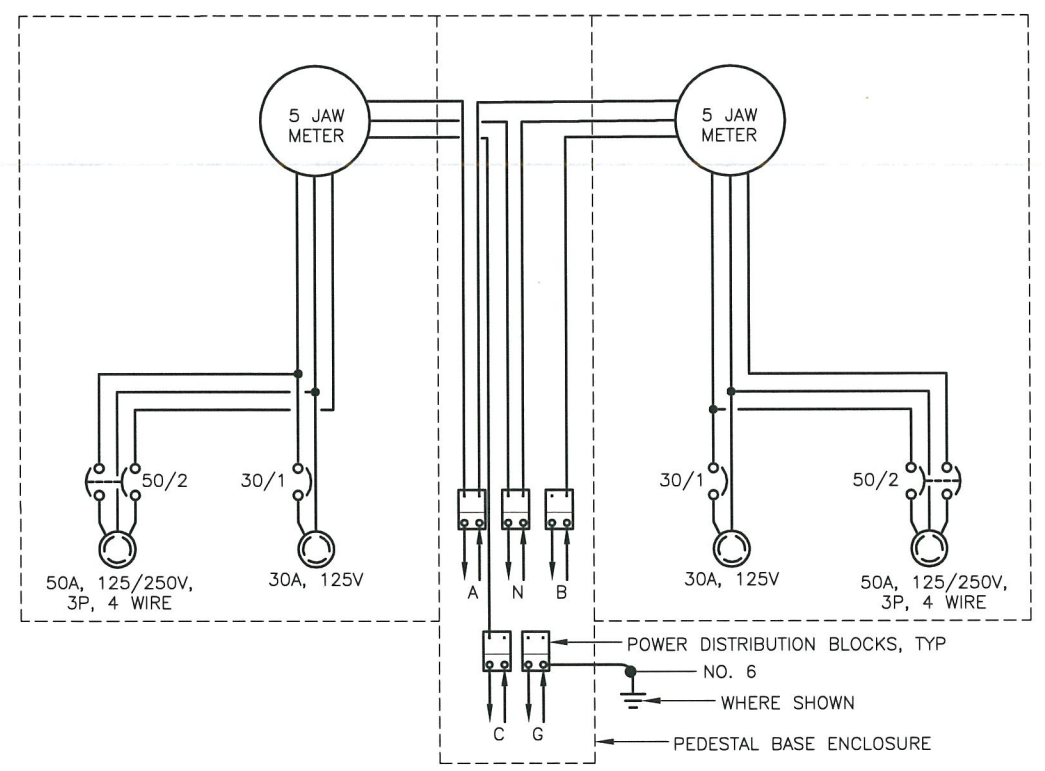
1 WIRING DIAGRAM - DUPLEX 30A PEDESTAL NO SCALE

ALTERNATE PHASE CONNECTIONS PER PLANS.  
 BC ← 30/1 CBS



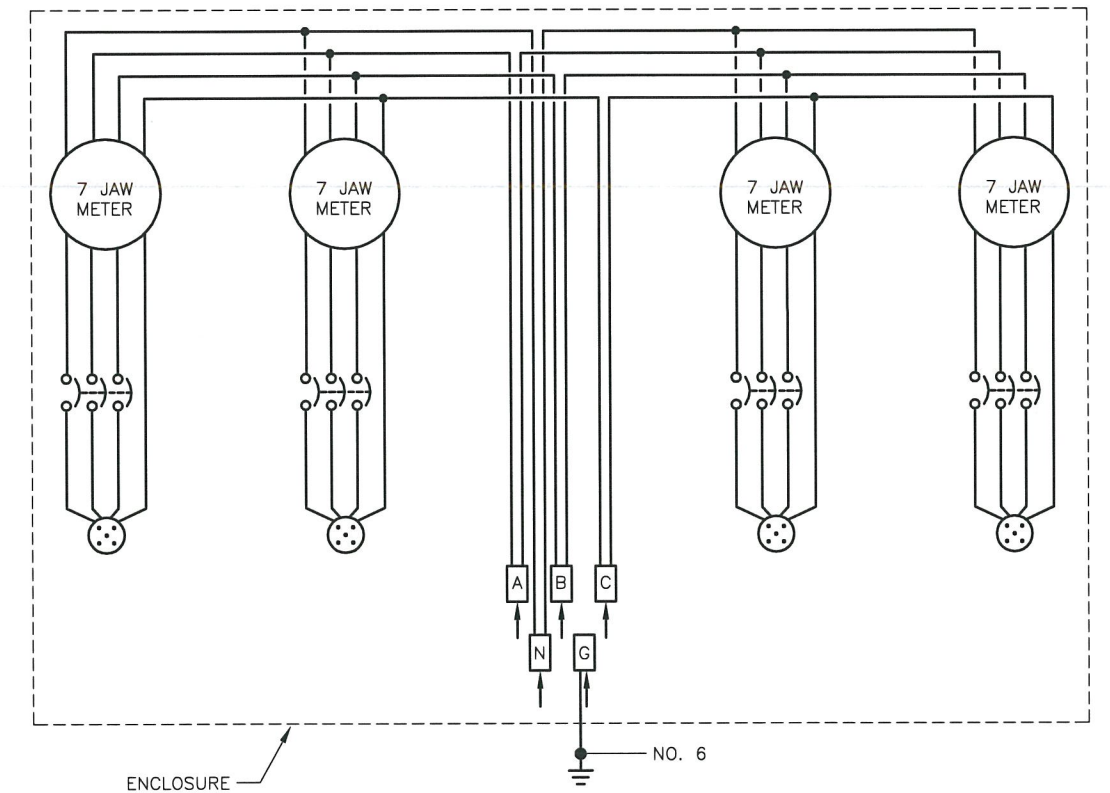
2 WIRING DIAGRAM - DUPLEX 30A/50A/60A PEDESTAL NO SCALE

ALTERNATE PHASE CONNECTIONS PER PLANS.  
 BC ← 30/1 CBS  
 AB, CA ← 50/2 CBS  
 ABC ← 60/3 CBS



3 WIRING DIAGRAM - DUPLEX 50A/30A PEDESTAL NO SCALE

ALTERNATE PHASE CONNECTIONS PER PLANS.  
 BC ← 30/1 CBS  
 AB, CA ← 50/2 CBS



4 WIRING DIAGRAM - SPIDER CENTER NO SCALE

File: 06\_2013\_06.dwg  
 C:\Programs\Working\EF2.dwg (Layout1.rvt)  
 P:\Projects\137\_RANDY\_75b\_WMSC\_Planes\W\Drawings\Working\EF2.dwg (Layout1.rvt)

**HAIGHT & ASSOCIATES**  
 CONSULTING ELECTRICAL ENGINEERS  
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 (907) 586-9788

| REVISIONS |      |             |      |      |      |
|-----------|------|-------------|------|------|------|
| REV.      | DATE | DESCRIPTION | DWN. | CKD. | APP. |
|           |      |             |      |      |      |
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 Juneau, Alaska 99801  
 Phone: 907-586-2093  
 Fax: 907-586-2099  
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DESIGN: BCH CHECKED: \_\_\_\_\_  
 DRAWN: PEL APPROVED: \_\_\_\_\_

SCALE: \_\_\_\_\_

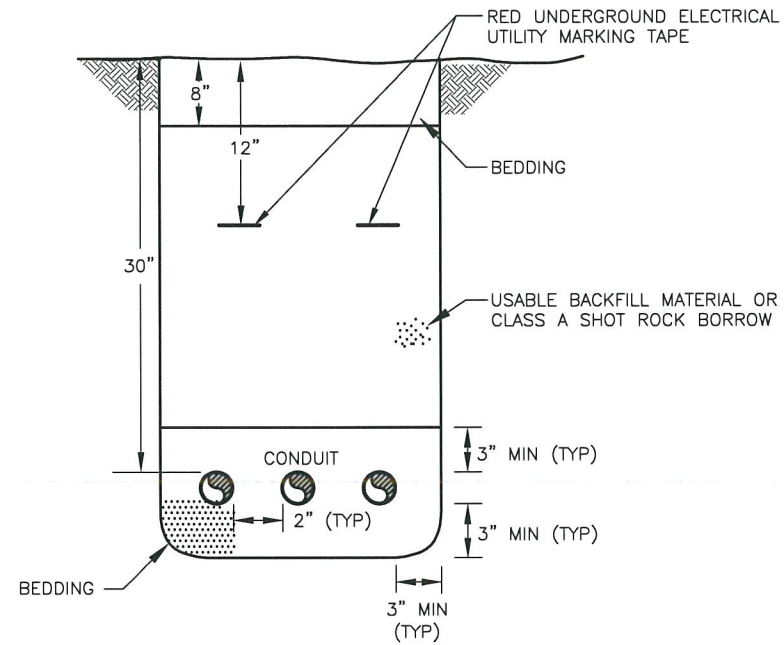
DATE: 2/6/2013

CITY AND BOROUGH OF WRANGELL, ALASKA  
**WRANGELL MARINE SERVICE CENTER  
 CONCRETE PAVING- PHASE II**

SHEET TITLE: **WIRING DIAGRAMS**

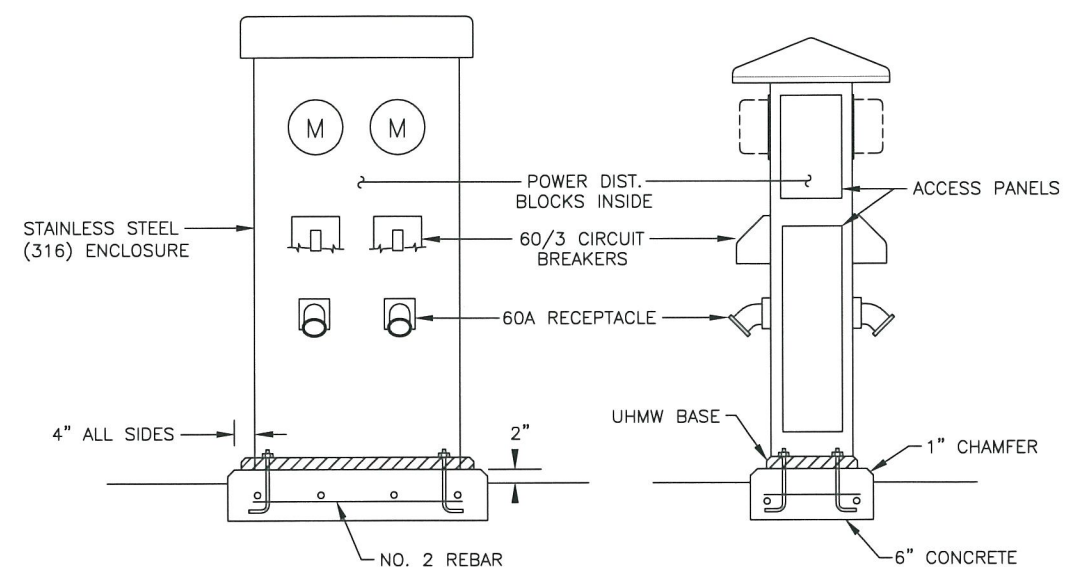
PND PROJECT NO. 112071.03 DWG. FILE: E2.04.DWG

**E2.04**  
 SHEET 7 OF 8

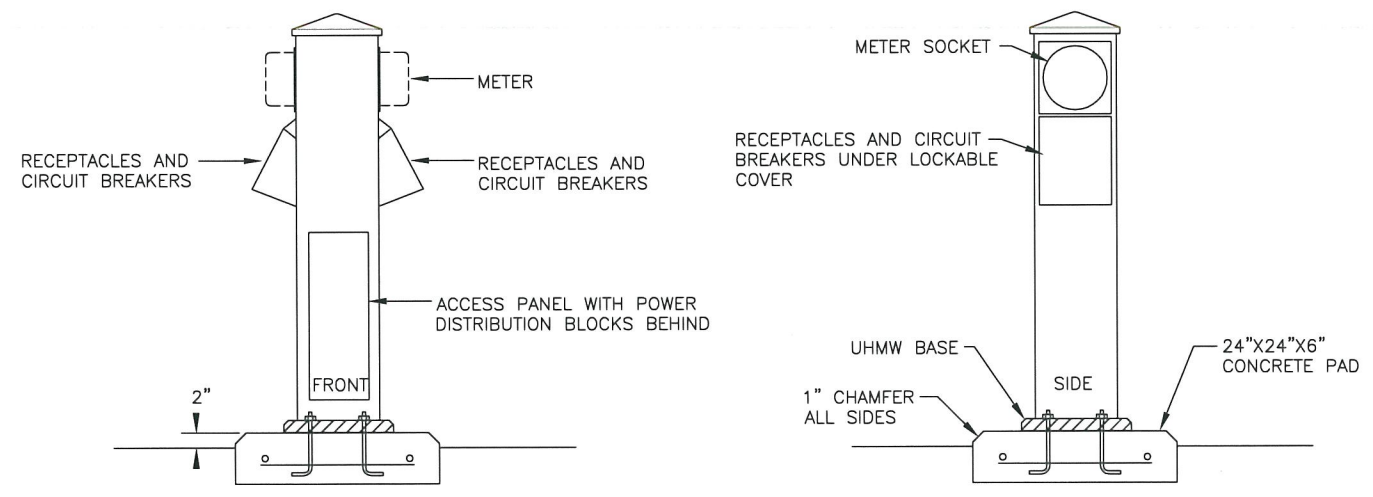


NOTE:  
1. PROVIDE AND COMPACT C-1 BEDDING & BACKFILL PER SPECIFICATIONS.

**1** **DETAIL - TRENCH** NO SCALE



**3** **DETAIL - SPIDER CENTER** NO SCALE



**2** **DETAIL - POWER PEDESTAL** NO SCALE

Feb 06, 2013 9:58am C:\Projects\17\_PND\17\_PND.dwg PND: B.C. HAIGHT (Layout1.tbl)

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| REVISIONS |      |             |      |      |      |
|-----------|------|-------------|------|------|------|
| REV.      | DATE | DESCRIPTION | DWN. | CKD. | APP. |
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DESIGN: BCH CHECKED: \_\_\_\_\_  
DRAWN: PEL APPROVED: \_\_\_\_\_

SCALE: \_\_\_\_\_

**CITY AND BOROUGH OF WRANGELL, ALASKA**  
**WRANGELL MARINE SERVICE CENTER**  
**CONCRETE PAVING- PHASE II**

SHEET TITLE: **DETAILS**

PND PROJECT NO. 112071.03 DWG. FILE: E2.05.DWG

**E2.05**  
SHEET 8 OF 8