

| | | | | |
|-------------------|---------------------|-------------------------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | A1 | -- |
| CDS ROUTE: 176470 | | MILEPOINT: 0.05 TO 0.56 | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

PROPOSED HIGHWAY PROJECT

STP-000S(413)/61725

FAIRBANKS NOBLE STREET UPGRADE

STORM DRAIN, GRADING, PAVING, PAVEMENT MARKINGS, SIGNING,
DRIVEWAYS, DRAINAGE, LIGHTING, TRAFFIC CONTROL

INDEX OF SHEETS

| SHEET NO. | DESCRIPTION |
|-----------|---|
| A1-A3 | TITLE SHEET/SHEET LAYOUT INDEX/PROJECT CONTROL PLAN |
| B1-B2 | TYPICAL SECTIONS |
| C1-C4 | LEGEND, ABBREVIATIONS AND NOTES/QUANTITIES/SCHEDULES |
| E1 | CONCRETE DETAILS |
| F1-F6 | ROADWAY PLAN AND PROFILES |
| G1-G7 | DRIVEWAYS/DRIVEWAY DETAILS |
| H1-H9 | SIGNAGE AND STRIPING, SIGN SUMMARIES |
| H10-H11 | SIGN DETAILS |
| H12-H55 | SIGNAL AND ILLUMINATION PLAN AND DETAILS |
| J1-J3 | INTERSECTION DETAILS |
| J4-J9 | GRADING PLANS |
| J10-J12 | CONTROL POINT TABLES |
| L1-L18 | LANDSCAPE PLANS AND DETAILS |
| M1-M2 | RETAINING WALL PLANS |
| P1 | EROSION CONTROL NOTES & DETAILS |
| P2-P7 | EROSION CONTROL PLANS |
| T1 | TRAFFIC CONTROL PLAN |
| U1-U8 | STORM DRAIN PLAN AND PROFILES |
| U9-U10 | WATER RELOCATIONS/FIRE HYDRANT & WATER RELOCATION |
| U11-U18 | UTILITY IMPROVEMENTS |
| U19-U20 | ELECTRICAL LEGEND, SPECIFICATIONS & SITE PLAN/ELECTRICAL ONE-LINE DIAGRAM & DETAILS |

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:
AK DOT: A-1, C03-10, C-04.12, E-13.00, F-01.01, G-00.01, G-04.06W, I-20.13, I-21.01, I-22.01, L-03.10, L-23.01, L-24.00, L-25.00, L-26.00, M-13.01, M-16.01, S-00.10, S-00.11, S-05.01, S-05.02, S-23.00, S-31.00, T-20.01, T-21.02, T-22.03, T-23.00, T-30.10, T-31.00, T-32.10, T-34.01, T-35.00, T-40.00, T-52.15, U-03.00
CITY OF FAIRBANKS: SD1, SD2, CD1

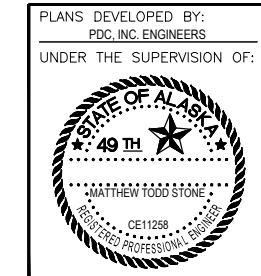
DESIGN DESIGNATIONS

| | |
|-----------------------|-----------|
| ADT (2006) | 11,150 |
| ADT (2020) | 12,820 |
| ADT (2035) | 14,880 |
| DHV (11%) | 1410 |
| PERCENT TRUCKS (T) | 2% |
| DIRECTIONAL SPLIT (D) | 40/60 |
| DESIGN SPEED (V) | 25 MPH |
| DESIGN EAL'S (2035) | |
| FUNCTIONAL - 15YR | 881,050 |
| FATIGUE - 15YR | 1,903,850 |

PROJECT SUMMARY

| | |
|-------------------|---------|
| WIDTH OF PAVEMENT | 34 FT |
| LENGTH OF GRADING | 2917 FT |
| LENGTH OF PAVING | 2917 FT |
| LENGTH OF PROJECT | 0.51 MI |

D.O.T. ENGINEER MANAGER: RUSSEL M. JOHNSON



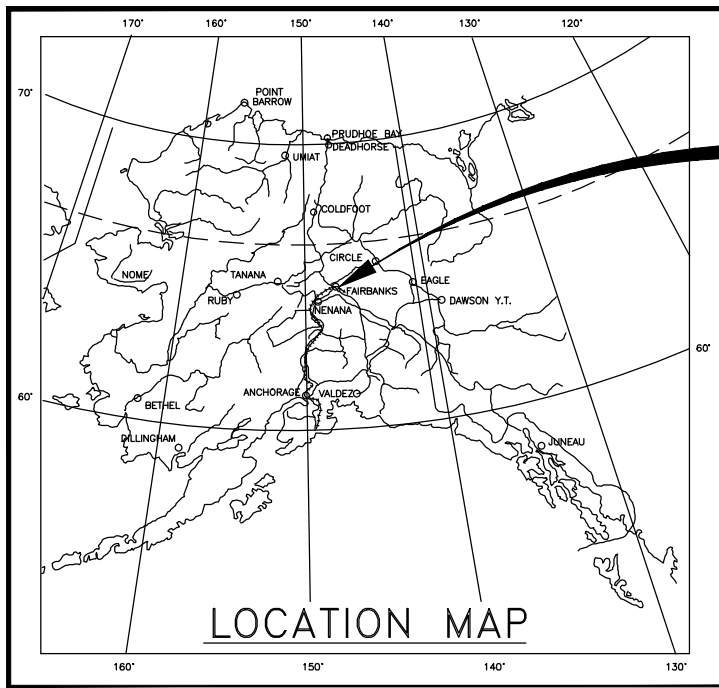
PLANS DEVELOPED BY:
PDC, INC. ENGINEERS
UNDER THE SUPERVISION OF:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

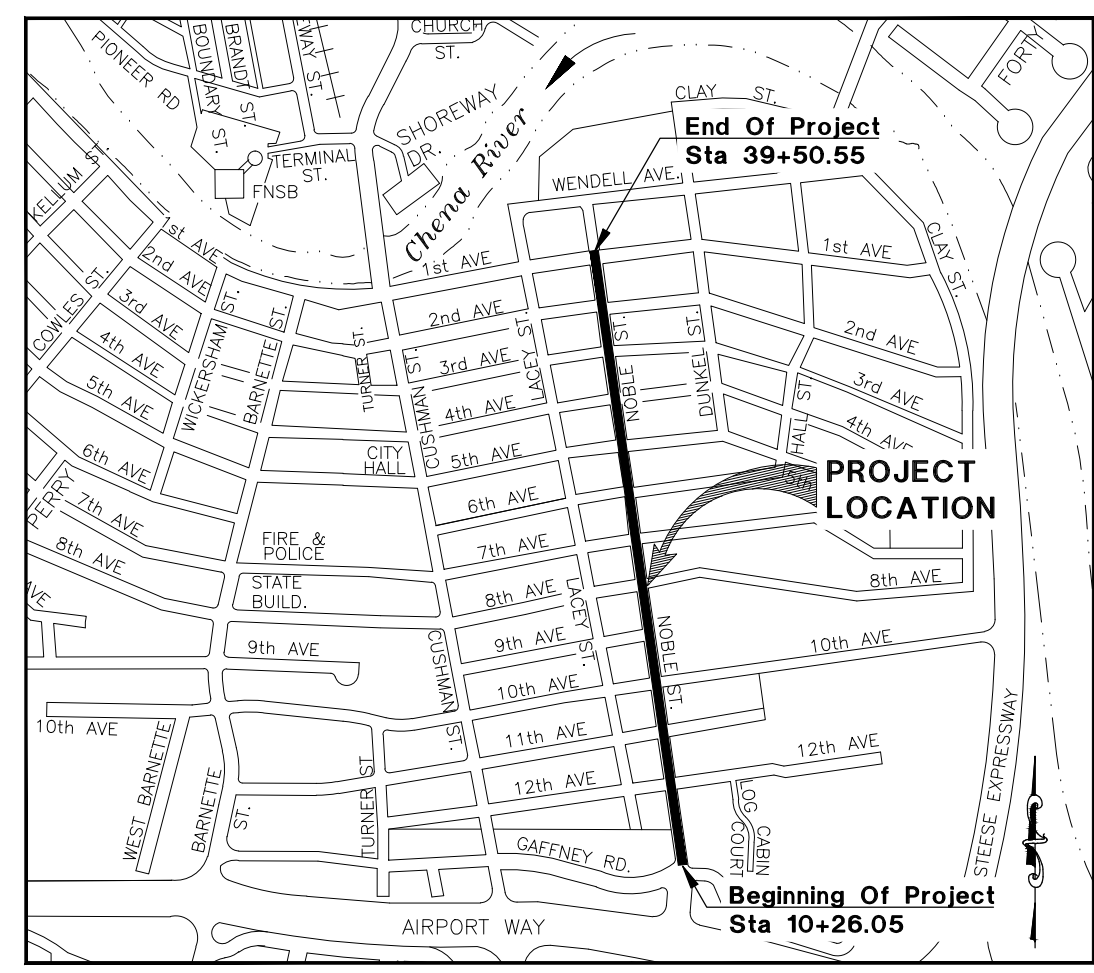
APPROVED BY: _____ DATE _____

Ryan F. Anderson, P.E.
Preconstruction Engineer, Northern Region
ACCEPTED FOR CONSTRUCTION

Robert A. Campbell, P.E.
Acting Regional Director, Northern Region



PROJECT LOCATION



VICINITY MAP
FAIRBANKS

| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | A2 | -- |

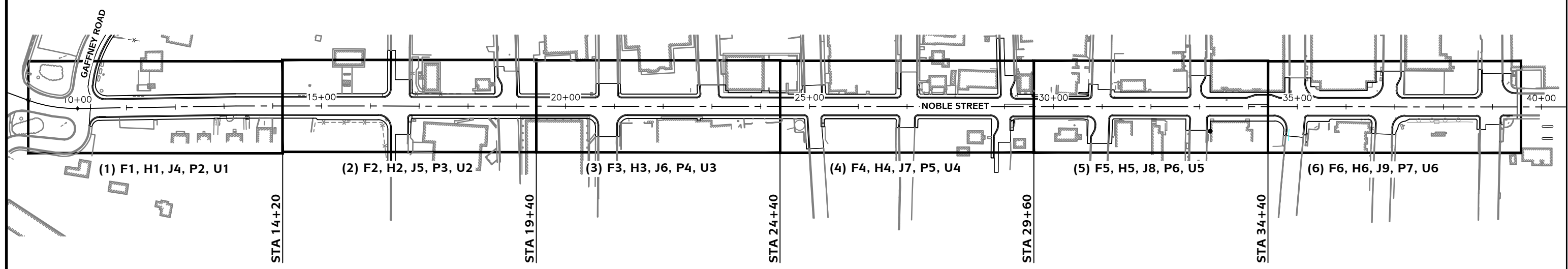
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SHEET INDEX LEGEND:

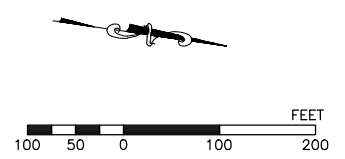
- (F) ROADWAY
- (G) DRIVEWAYS
- (H) SIGNING & STRIPING
- (J) GRADING
- (M) RETAINING WALLS
- (P) ESCP
- (U) STORM DRAIN AND UTILITIES

NOTES:

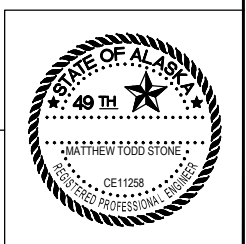
1. SEE SHEET H12 FOR LIGHTING AND SIGNAL SHEET LAYOUT.
2. SEE SHEET L1 FOR LANDSCAPE SHEET LAYOUT.



Friday, December 12, 2014, 12:04 PM

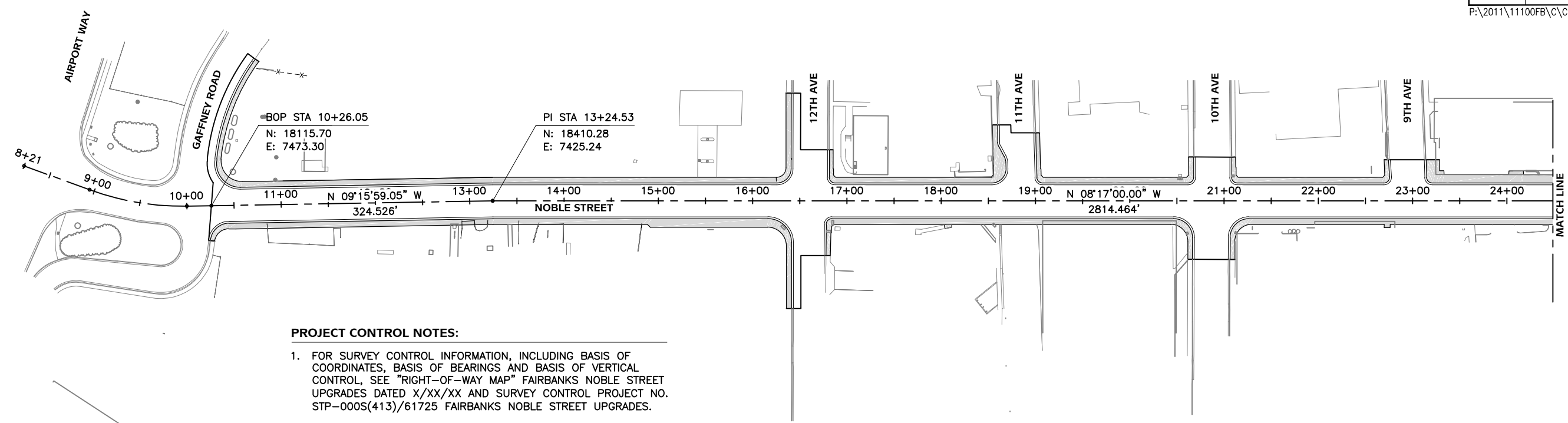


SHEET LAYOUT INDEX



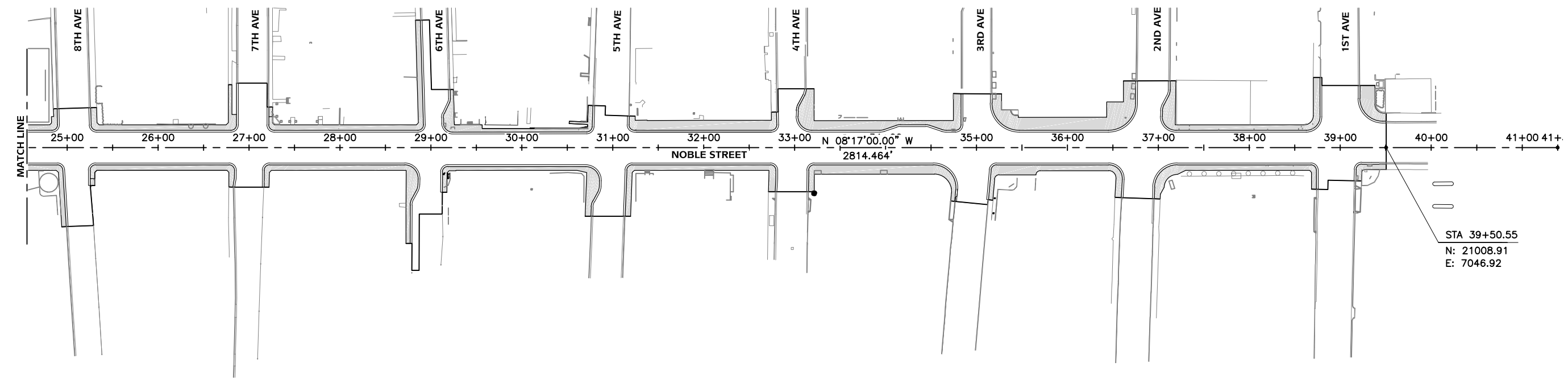
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | A3 | -- |

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PROJECT CONTROL NOTES:

1. FOR SURVEY CONTROL INFORMATION, INCLUDING BASIS OF COORDINATES, BASIS OF BEARINGS AND BASIS OF VERTICAL CONTROL, SEE "RIGHT-OF-WAY MAP" FAIRBANKS NOBLE STREET UPGRADES DATED X/XX/XX AND SURVEY CONTROL PROJECT NO. STP-000S(413)/61725 FAIRBANKS NOBLE STREET UPGRADES.

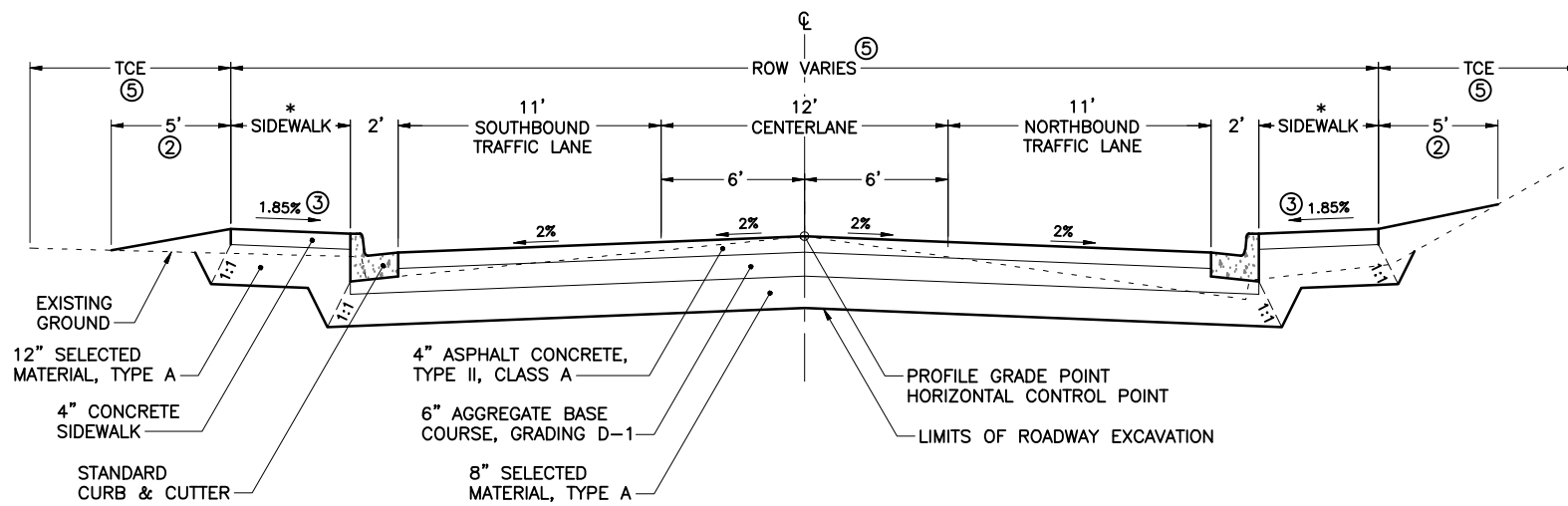


PROJECT CONTROL PLAN



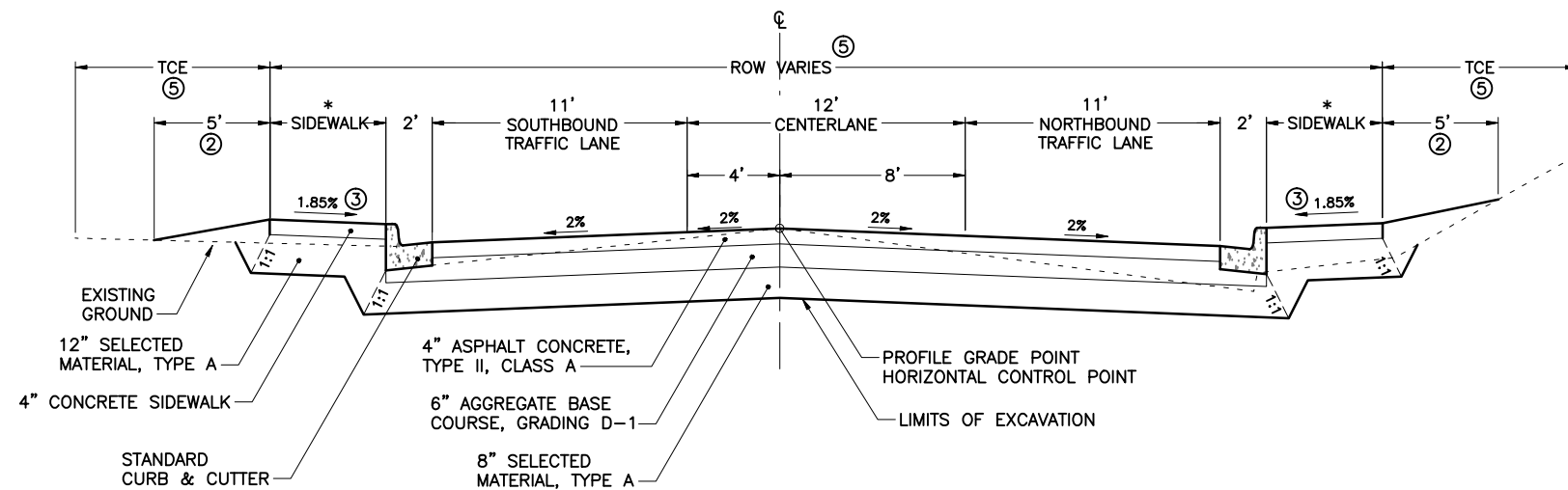
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NOBLE STREET
STA 10+26.05 TO 29+00
31+00 TO 39+50.53

| *SIDEWALK WIDTHS | | | | | |
|------------------|---------|------------|-----------|---------|------------|
| LEFT | | | RIGHT | | |
| BEGIN STA | END STA | WIDTH (FT) | BEGIN STA | END STA | WIDTH (FT) |
| 10+59 | 22+71 | 6 | 10+44 | 28+71 | 6 |
| 23+29 | 24+56 | 9.2 | 29+20 | 30+70 | 4 |
| 24+56 | 28+86 | 6 | 31+24 | 32+72 | 6 |
| 29+26 | 29+56 | 8 | 33+24 | 34+53 | 10.2 |
| 29+56 | 30+63 | 4 | 35+25 | 35+65 | 11 |
| 31+25 | 32+74 | 11 | 35+72 | 38+66 | 6 |
| 33+21 | 34+74 | 10.6 | | | |
| 35+47 | 36+45 | 14 | | | |
| 37+19 | 38+63 | 6 | | | |



NOBLE STREET
STA 29+00 TO 31+00

NOTES:

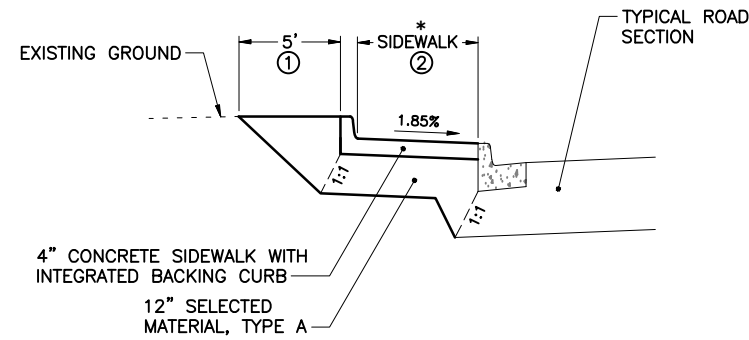
1. MAINTAIN PROPOSED NOBLE STREET PAVEMENT STRUCTURE ON SIDE STREETS.
- ② SLOPE VARIES. WHEN CONCRETE IS TO BE PLACED AT BACK OF SIDEWALK, CONTINUE SIDEWALK STRUCTURE. SEE TABLE ON B2 FOR MATERIAL TYPE.
- ③ SEE GRADING PLAN FOR VARIANCE IN SIDEWALK GRADE. ON SIDE STREETS, MATCH EXISTING WIDTH UNLESS OTHERWISE NOTED ON GRADING PLAN.
4. SEE GRADING PLAN FOR VARIANCE IN LANE GRADES AT INTERSECTIONS.
- ⑤ UNLESS OTHERWISE SHOWN ON PLAN.
6. PRESERVE/PROTECT OR REPLACE EXISTING LANDSCAPING, INCLUDING ROCK AND SHRUB ALONG THE BACK SIDE OF NEW SIDEWALK. PAYMENT IS SUBSIDIARY TO ITEM 608(1a).

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TYPICAL SECTIONS
(1 OF 2)

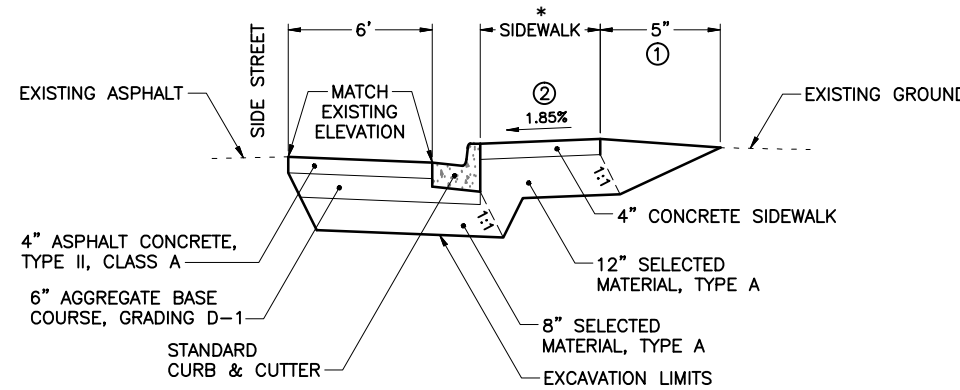


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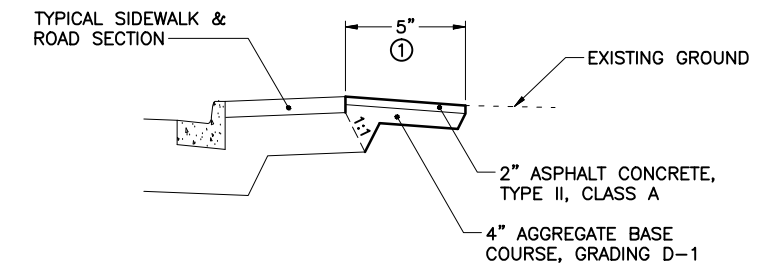


INTEGRATED BACKING CURB

STA 21+25.12 TO 22+60.90 LEFT
STA 22+76.2 TO 23+58.76 RIGHT



SIDEWALK RECONSTRUCTION



ASPHALT AT BACK OF SIDEWALK
SEE BACK OF SIDEWALK MATERIAL TABLE FOR LOCATIONS

| BACK OF SIDEWALK MATERIAL ① | | | | | | | |
|-----------------------------|---------|-----------|-------------------------------|-----------|---------|-----------|------------------------|
| LEFT | | | | RIGHT | | | |
| BEGIN STA | END STA | AREA (SY) | MATERIAL | BEGIN STA | END STA | AREA (SY) | MATERIAL |
| BOP | 16+62 | 345 | 2" ASPHALT | BOP | 13+70 | 102 | 2" ASPHALT |
| 16+62 | 18+83 | 115 | TOPSOIL & SEED | 13+70 | 14+00 | 27 | TOPSOIL & SEED |
| 18+83 | 20+88 | 119 | 2" ASPHALT | 14+00 | 14+85 | 27 | 2" ASPHALT |
| 20+88 | 23+00 | 26 | 18" WIDE TOPSOIL & SEED STRIP | 14+85 | 16+62 | 126 | TOPSOIL & SEED |
| | | 78 | WITH 2" ASPHALT BEYOND | 16+62 | 18+83 | 103 | LANDSCAPING GRAVEL ④ |
| 23+00 | 24+07 | -- | BUILDING | 18+33 | 20+88 | -- | 4" CONCRETE & BUILDING |
| 24+07 | 25+10 | 25 | LANDSCAPING ③ AND 2" ASPHALT | 20+88 | 21+87 | 57 | TOPSOIL & SEED |
| 25+10 | 25+73 | 31 | TOPSOIL & SEED | 21+87 | 23+00 | -- | BUILDING |
| 25+73 | 25+98 | -- | BUILDING | 23+00 | 25+10 | 114 | LANDSCAPING ③ |
| 25+98 | 26+63 | 36 | 2" ASPHALT | 25+10 | 27+00 | 152 | TOPSOIL & SEED |
| 26+63 | 27+76 | 65 | TOPSOIL & SEED | 27+00 | 28+23 | 51 | 4' D-1 |
| 27+76 | 28+06 | 2 | 6" CONCRETE | 28+23 | 29+04 | 30 | TOPSOIL & SEED ⑤ |
| 28+06 | 29+04 | 48 | 4" D-1 | 29+04 | 30+10 | 54 | 4" D-1 |
| 29+04 | 29+56 | -- | BUILDING | 30+10 | 32+00 | 120 | TOPSOIL & SEED |
| 29+56 | 30+06 | 4 | 2" ASPHALT | 32+00 | 32+32 | -- | BUILDING |
| 30+06 | 31+89 | -- | BUILDING | 32+32 | 32+94 | 28 | 2" ASPHALT |
| 31+89 | 32+94 | 29 | 2" ASPHALT | 32+94 | 34+01 | -- | BUILDING |
| 32+94 | 35+00 | -- | BUILDING | 34+01 | 35+00 | 49 | 2" ASPHALT |
| 35+00 | 36+83 | -- | BUILDING | 35+00 | 36+83 | 89 | TOPSOIL & SEED |
| 36+83 | 39+00 | 58 | 2" ASPHALT | 36+83 | 39+00 | 114 | 4" D-1 |
| 39+00 | EOP | 19 | LANDSCAPING ③ | 39+00 | EOP | 19 | LANDSCAPING ③ |

NOTES:

- ① SLOPE VARIES. SEE TABLE FOR MATERIAL TYPE. WHEN CONCRETE IS TO BE PLACED AT BACK OF SIDEWALK, CONTINUE SIDEWALK STRUCTURE.
- ② SEE GRADING PLAN FOR VARIANCE IN SIDEWALK GRADE. ON SIDE STREETS, MATCH EXISTING WIDTH UNLESS OTHERWISE NOTED ON GRADING PLAN.
- ③ SEE LANDSCAPE PLANS.
- ④ PROTECT HEDGE.
- ⑤ SALVAGE AND REPLACE EXISTING.
- 6. BACK OF SIDEWALK MATERIAL IS PAID FOR UNDER THE RESPECTIVE PAY ITEM.

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TYPICAL SECTIONS
(2 OF 2)



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | C1 | -- |

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LEGEND EXISTING:

- CONTROL POINT
- RECOVERED PRIMARY MONUMENT
- RECOVERED SECONDARY MONUMENT
- REBAR
- MANHOLE
- HANDHOLE
- WATER VALVE
- METER BOX
- POST
- CLEANOUT
- POWER POLE
- POWER POLE WITH RISER
- STREETLIGHT
- WALK/DON'T WALK LIGHT
- TRAFFIC CONTROL LIGHT SIGN
- BOLLARD
- FIRE HYDRANT
- SPOT ELEVATION
- CATCH BASIN
- CULVERT
- HEADBOLT HEATER
- VENT PIPE
- FUEL TANK FILL PIPE
- GUYLINE WITH ANCHOR
- SHRUB
- HARDWOOD TREE
- CONIFER TREE
- EDGE OF ASPHALT PAVEMENT LINE
- EDGE OF GRAVEL
- OVERHEAD POWER LINE
- RIGHT-OF-WAY LINE
- SANITARY SEWER LINE
- TREE LINE
- BUILDING LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- FENCE LINE
- UNDERGROUND WATER LINE
- STORM DRAIN LINE
- DISTRICT HEAT HOT WATER LINE
- UNDERGROUND COMM LINE(ACS)
- UNDERGROUND COMM LINE(GCI)
- UNDERGROUND ELECTRIC LINE(STREETLIGHTS)
- UNDERGROUND FIBER OPTIC LINE(ALASKA FIBERSTAR)
- GUARDRAIL
- CONCRETE

LEGEND PROPOSED:

- TRAFFIC CONTROL LIGHT
- DETECTABLE WARNING
- CURB & GUTTER
- CUT
- FILL
- WATER
- RETAINING WALL
- EDGE OF ASPHALT
- STORM DRAIN
- TEMPORARY CONSTRUCTION EASEMENT
- CONCRETE
- SIGN
- MANHOLE
- ROW ACQUISITION
- LIGHT POLE
- STORM DRAIN INLET
- DUCT BANK

ABBREVIATIONS

| | | | |
|----------|--------------------------|------|--------------------------------|
| AC | ACRES | RP | RADIUS POINT |
| APROX | APPROXIMATELY | S | SOUTH |
| AVE | AVENUE | SD | STORM DRAIN |
| BOP | BEGINNING OF PROJECT | SDWK | SIDEWALK |
| CL, CL | CENTERLINE | STA | STATION |
| COM | COMMUNICATION | TBC | TOP BACK OF CURB |
| CONT. | CONTINUOUS | TCP | TEMPORARY CONSTRUCTION PERMIT |
| CY | CUBIC YARDS | E | EAST |
| DESC | DESCRIPTION | W | WEST |
| DIA | DIAMETER | TYP | TYPICAL |
| DRWY | DRIVEWAY | STA | STATION |
| EA | EACH | SS | SANITARY SEWER |
| EL, ELEV | ELEVATION | SD | STORM DRAIN |
| EOP | END OF PROJECT | OC | ON CENTER |
| EP | EDGE OF PAVEMENT | PUE | PUBLIC UTILITY EASEMENT |
| EW | EACH WAY | R | RADIUS |
| EX | EXISTING | ROW | RIGHT OF WAY |
| FG | FINISH GRADE | RT | RIGHT |
| FH | FIRE HYDRANT | S | SLOPE |
| FM | FORCE MAIN | SDWK | SIDEWALK |
| FOC | FACE OF CURB | SF | SQUARE FEET |
| FT | FEET | SY | SQUARE YARD |
| GAL | GALLON | TBC | TOP BACK OF CURB |
| GB | GRADE BREAK | TBM | TEMPORARY BENCH MARK |
| IE | INVERT ELEVATION | TYP | TYPICAL |
| LBS | POUNDS | UG-P | UNDERGROUND POWER |
| LF | LINEAL FEET | VPC | VERTICAL POINT OF CURVE |
| LNDG | LANDING | VPI | VERTICAL POINT OF INTERSECTION |
| LT | LEFT | VPT | VERTICAL POINT OF TANGENT |
| LVC | LENGTH OF VERTICAL CURVE | W | WATER |
| MAX | MAXIMUM | W/ | WITH |
| M.E. | MATCH EXISTING | & | AND |
| MIN | MINIMUM | Ø | DIAMETER |
| N | NORTH | ± | PLUS OR MINUS |
| N.O. | NUMBER | | |
| NTS | NOT TO SCALE | | |
| OHE | OVERHEAD ELECTRIC | | |
| PC | POINT OF CURVE | | |
| PI | POINT OF INTERSECTION | | |
| PT | POINT OF TANGENT | | |

GENERAL NOTES:

- GRADES, ALIGNMENTS, APPROACH LOCATIONS, LENGTHS AND LOCATIONS OF STORM DRAINS AND UTILITIES AND INSULATION SHOWN ON THESE PLANS ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER. ALL DISTANCES SHOWN IN THE PLANS ARE HORIZONTAL MEASUREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING THEIR OWN STAGING AREA.
- RESTORE ALL DISTURBED AREAS DUE TO CONTRACTORS WORK OUTSIDE THE CUT AND FILL LIMITS SHOWN ON THE PLANS.

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LEGEND, ABBREVIATIONS AND NOTES



ESTIMATE OF QUANTITIES

| ITEM NO. | ITEM | UNIT | TOTAL |
|------------|---|----------------|-----------|
| 202(1) | REMOVAL OF STRUCTURES AND OBSTRUCTIONS | LUMP SUM | ALL REQ'D |
| 202(13) | REMOVE AND REPLACE PLANTER | EACH | 1 |
| 203(3) | UNCLASSIFIED EXCAVATION | CUBIC YARD | 10,230 |
| 203(6) | BORROW | TON | 12,150 |
| 301(1) | AGGREGATE BASE COARSE, GRADING D-1 | TON | 5,650 |
| 401(104) | HMA, TYPE II; CLASS A | TON | 3,600 |
| 401(107) | ASPHALT CEMENT, GRADE PG 52-28 | TON | 216 |
| 401(111) | HMA PRICE ADJUSTMENT, TYPE II; CLASS A | CONTINGENT SUM | ALL REQ'D |
| 401(10) | ASPHALT MATERIAL PRICE ADJUSTMENT | CONTINGENT SUM | ALL REQ'D |
| 501(9) | DECORATIVE FINISH | LINEAR FOOT | 155 |
| 501(10) | SOUTH HALL MANOR WALL | LINEAR FOOT | 59 |
| 504(3) | MAJOR MYRTLE THOMAS PARK SIGN | LUMP SUM | 1 |
| 504(4) | MINOR MYRTLE THOMAS PARK SIGN | LUMP SUM | 1 |
| 504(5) | ORNAMENTAL FENCE | LINEAR FOOT | 136 |
| 504(6) | PARK FENCE | LINEAR FOOT | 208 |
| 504(7) | DUMPSTER SCREEN | LUMP SUM | 1 |
| 514(1) | RETAINING WALL | LINEAR FOOT | 190 |
| 603(21)-8 | 8 INCH CORRUGATED POLYETHYLENE PIPE | LINEAR FOOT | 406 |
| 603(21)-10 | 10 INCH CORRUGATED POLYETHYLENE PIPE | LINEAR FOOT | 256 |
| 603(21)-12 | 12 INCH CORRUGATED POLYETHYLENE PIPE | LINEAR FOOT | 1,443 |
| 603(21)-18 | 18 INCH CORRUGATED POLYETHYLENE PIPE | LINEAR FOOT | 736 |
| 603(21)-24 | 24 INCH CORRUGATED POLYETHYLENE PIPE | LINEAR FOOT | 1,436 |
| 603(21)-36 | 36 INCH CORRUGATED POLYETHYLENE PIPE | LINEAR FOOT | 380 |
| 603(26) | INSULATION FOR STORM DRAIN | LUMP SUM | ALL REQ'D |
| 604(1)-48 | STORM SEWER MANHOLE, 48 INCH | EACH | 16 |
| 604(1)-72 | STORM SEWER MANHOLE, 72 INCH | EACH | 3 |
| 604(4) | ADJUST EXISTING MANHOLE | EACH | 13 |
| 604(5)-A | INLET, TYPE A | EACH | 63 |
| 607(4) | RECONSTRUCTED FENCE | LINEAR FOOT | 60 |
| 608(1A) | CONCRETE SIDEWALK, 4 INCHES THICK | SQUARE YARD | 3,525 |
| 608(1B) | CONCRETE SIDEWALK, 6 INCHES THICK | SQUARE YARD | 1,620 |
| 608(6) | CURB RAMP | EACH | 50 |
| 609(1) | CURB, TYPE 4 | LINEAR FOOT | 136 |
| 609(2) | CURB AND GUTTER, TYPE 1 | LINEAR FOOT | 6,920 |
| 615(1) | STANDARD SIGN | SQUARE FOOT | 476 |
| 618(4) | SEEDING | SQUARE YARD | 1,800 |
| 620(1) | TOPSOIL | SQUARE YARD | 1,800 |
| 621(1A) | TREE, BIRCH(BETULA PAPYRIFERA), 3" CAL. | EACH | 48 |
| 621(1B) | TREE, WHITE SPRUCE(PICEA GLAUCA), 24" TALL | EACH | 17 |
| 621(2A) | COTONEASTER (COTONEASTER ACUTIFOLIA), 36" TALL | EACH | 32 |
| 621(5) | PLANT PIT CELLS | SQUARE YARD | 172 |
| 622(15) | PLANTER | EACH | 17 |
| 622(16) | BENCH | EACH | 5 |
| 622(17) | KIOSK | EACH | 1 |
| 622(18) | TREE GRATE | EACH | 25 |
| 626(2) | SEWER SERVICE CONNECTION | EACH | 5 |
| 627(1)-6 | 6 INCH DUCTILE IRON WATER CONDUIT, CLASS 350 | LINEAR FOOT | 42 |
| 627(1)-10 | 10 INCH DUCTILE IRON WATER CONDUIT, CLASS 350 | LINEAR FOOT | 11 |
| 627(1)-16 | 16 INCH DUCTILE IRON WATER CONDUIT, CLASS 350 | LINEAR FOOT | 20 |
| 627(5) | FIRE HYDRANT INSTALLATION | EACH | 2 |
| 627(10) | ADJUSTMENT OF VALVE BOX | EACH | 39 |
| 639(3) | DRIVEWAYS | EACH | 26 |
| 640(1) | MOBILIZATION AND DEMOBILIZATION | LUMP SUM | ALL REQ'D |
| 641(1) | EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION | LUMP SUM | ALL REQ'D |
| 641(3) | TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL | LUMP SUM | ALL REQ'D |
| 641(4) | TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL ADDITIVES | CONTINGENT SUM | ALL REQ'D |
| 641(6) | WITHHOLDINGS | CONTINGENT SUM | ALL REQ'D |
| 641(7) | SWPPP MANAGER | LUMP SUM | ALL REQ'D |
| 642(1) | CONSTRUCTION SURVEYING | LUMP SUM | ALL REQ'D |

ESTIMATE OF QUANTITIES

| ITEM NO. | ITEM | UNIT | TOTAL |
|----------|--|----------------|-----------|
| 642(3) | THREE PERSON SURVEY PARTY | hour | 170 |
| 642(6) | REPLACE EXISTING WITH PRIMARY MONUMENT | EACH | 16 |
| 642(7) | REPLACE EXISTING WITH SECONDARY MONUMENT | EACH | 15 |
| 642(10) | MONUMENT CASE | EACH | 16 |
| 643(2) | TRAFFIC MAINTENANCE | LUMP SUM | ALL REQ'D |
| 643(17) | PUBLIC INFORMATION | LUMP SUM | ALL REQ'D |
| 643(23) | TRAFFIC PRICE ADJUSTMENT | CONTINGENT SUM | ALL REQ'D |
| 643(25) | TRAFFIC CONTROL | CONTINGENT SUM | ALL REQ'D |
| 644(1) | FIELD OFFICE | LUMP SUM | ALL REQ'D |
| 645(1) | TRAINING PROGRAM, 2 TRAINEES/APPRENTICES | hour | 1,000 |
| 646(1) | CPM SCHEDULING | LUMP SUM | ALL REQ'D |
| 660(3) | HIGHWAY LIGHTING SYSTEM COMPLETE | LUMP SUM | ALL REQ'D |
| 660(7A) | TEMPORARY SIGNAL SYSTEM COMPLETE, 10TH AND NOBLE | LUMP SUM | ALL REQ'D |
| 660(7B) | TEMPORARY SIGNAL SYSTEM COMPLETE, 3RD AND NOBLE | LUMP SUM | ALL REQ'D |
| 660(7C) | TEMPORARY SIGNAL SYSTEM COMPLETE, 2ND AND NOBLE | LUMP SUM | ALL REQ'D |
| 660(7D) | TEMPORARY SIGNAL SYSTEM COMPLETE, 1ST AND NOBLE | LUMP SUM | ALL REQ'D |
| 660(10A) | TRAFFIC SIGNAL SYSTEM MODIFICATIONS, 10TH AND NOBLE | LUMP SUM | ALL REQ'D |
| 660(10B) | TRAFFIC SIGNAL SYSTEM MODIFICATIONS, 3RD AND NOBLE | LUMP SUM | ALL REQ'D |
| 660(10C) | TRAFFIC SIGNAL SYSTEM MODIFICATIONS, 2ND AND NOBLE | LUMP SUM | ALL REQ'D |
| 660(10D) | TRAFFIC SIGNAL SYSTEM MODIFICATIONS, 1ST AND NOBLE | LUMP SUM | ALL REQ'D |
| 661(2) | LOAD CENTER TYPE 1A | EACH | 5 |
| 661(6) | TRANSFORMER, 5KVA 240-480V STEP UP | EACH | 1 |
| 662(3) | SIGNAL INTERCONNECT SYSTEM COMPLETE - FIBER | LUMP SUM | ALL REQ'D |
| 663(1)-A | UTILITY RELOCATION, ACS | LUMP SUM | ALL REQ'D |
| 663(1)-B | UTILITY RELOCATION, GCI | LUMP SUM | ALL REQ'D |
| 663(2) | GVEA UNDERGROUND SERVICE CONNECTIONS | LUMP SUM | ALL REQ'D |
| 663(6) | TELECOMMUNICATIONS VAULT, DUCT BANK AND CONDUIT SYSTEM | LUMP SUM | ALL REQ'D |
| 670(10) | METHYL METHACRYLATE PAVEMENT MARKINGS | LUMP SUM | ALL REQ'D |
| 670(11) | METHYL METHACRYLATE TRANSVERSE PAVEMENT MARKING LINES | SQUARE FOOT | 2920 |
| 670(12) | METHYL METHACRYLATE TRANSVERSE MARKINGS, WORDS, SYMBOLS | EACH | 170 |
| 802(1) | CONTAMINATED SOIL SAMPLING AND SCREENING | EACH | 422 |
| 802(2) | CONTAMINATED SOIL REMOVAL AND DISPOSAL-KNOWN CONTAMINATE SITES | CONTINGENT SUM | ALL REQ'D |
| 802(3) | CONTAMINATED SOIL REMOVAL AND DISPOSAL-ADDITIONAL SITES | CONTINGENT SUM | ALL REQ'D |
| 803(1) | GROUNDWATER MONITORING WELL DECOMMISSIONING | CONTINGENT SUM | ALL REQ'D |
| 803(2) | GROUNDWATER MONITORING WELL INSTALLATION | EACH | 1 |

ESTIMATING FACTORS

| ITEM NUMBER | ITEM | FACTOR |
|-------------|------------------------------------|------------------------------|
| 203(6) | BORROW, TYPE A | 1.96 TONS / CUBIC YARDS |
| 301(1) | AGGREGATE BASE COARSE, GRADING D-1 | 1.96 TONS / CUBIC YARDS |
| 401(1) | ASPHALT CONCRETE, TYPE II, CLASS A | 113 LBS / SQUARE YARD / INCH |
| 401(2) | ASPHALT CEMENT, GRADE PG 52-28 | 0.06 OF 404(1) QUANTITY |
| 402(1) | STE-1 ASPHALT FOR TACK COAT | 0.0003 TONS / SQUARE YARD |

202(1) REMOVAL OF STRUCTURES AND OBSTRUCTIONS

| BEGIN | OFFSET | END | OFFSET | QUANTITY | REMARKS |
|-------|---------|-------|----------|----------|--|
| 13+67 | 43.9 RT | 13+99 | 44.3 RT | 66.9 FT | RETAINING WALL |
| 14+84 | 53.0 RT | 16+36 | 129.9 RT | 253.5 FT | CHAIN LINK FENCE |
| 16+05 | 28 RT | 16+05 | 28 RT | 1 | BIRCH TREE |
| 18+14 | 31.1 LT | 18+54 | 80.6 LT | 103.4 FT | RETAINING WALL |
| 30+15 | 20.8 LT | 30+73 | 21.4 LT | 58 FT | RETAINING WALL |
| 30+60 | 28.0 RT | 30+60 | 28.0 RT | 4 | REMOVE 4 BIRCH TREES; LEAVE 1 BIRCH TREE |
| 31+80 | 29 RT | 31+80 | 29 RT | 3 | REMOVE 3 BIRCH TREES |
| 35+20 | 46 RT | 35+20 | 46 RT | 2 | REMOVE 2 SPRUCE TREES; LEAVE 1 SPRUCE TREE |

QUANTITIES



| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | C3 | -- |

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| 608(1A) CONCRETE SIDEWALK, 4 INCHES THICK | | | | |
|---|---------|--------|-----------------|---------|
| BEGIN | END | OFFSET | QUANTITY (S.Y.) | REMARKS |
| 10+24.5 | 16+40.2 | RT | 326.0 | |
| 10+32.8 | 16+40.9 | LT | 360.0 | |
| 16+78.2 | 20+66.5 | RT | 235.9 | |
| 16+81.4 | 18+68.8 | LT | 134.3 | |
| 19+01.3 | 20+67.8 | LT | 113.4 | |
| 21+06.7 | 24+95.8 | RT | 180.9 | |
| 21+08.3 | 22+75 | LT | 92.9 | |
| 23+14.3 | 24+89.2 | LT | 148.6 | |
| 25+25.4 | 26+83.7 | RT | 95.5 | |
| 25+26.2 | 26+86.2 | LT | 108.1 | |
| 27+16.7 | 28+85.9 | RT | 128.9 | |
| 27+21.8 | 28+91.5 | LT | 142.4 | |
| 29+12.7 | 30+85.2 | RT | 102.2 | |
| 29+13.9 | 30+77.8 | LT | 78.6 | |
| 31+15.2 | 32+79.3 | RT | 127.7 | |
| 31+18.0 | 32+80.1 | LT | 128.7 | |
| 33+03.8 | 34+83.0 | LT | 153.9 | |
| 33+15.4 | 34+77.4 | RT | 167.9 | |
| 35+15.0 | 36+59.8 | RT | 78.3 | |
| 35+17.2 | 36+74.2 | LT | 310.7 | |
| 36+95.8 | 38+73.8 | RT | 126.2 | |
| 37+04.8 | 38+77.7 | LT | 123.1 | |
| 39+17.3 | 39+50.6 | RT | 11.9 | |
| 39+21.9 | 39+50.5 | LT | 32.7 | |

| 608(6) CURB RAMP | | | |
|------------------|----------|----------|---------|
| STATION | OFFSET | QUANTITY | REMARKS |
| 10+38.87 | 27.18 LT | 1 | |
| 10+39.04 | 19 RT | 1 | |
| 16+29.97 | 23.08 RT | 1 | |
| 16+35.92 | 22.83 LT | 1 | |
| 16+80.08 | 20.73 RT | 1 | |
| 16+83.11 | 20.77 LT | 1 | |
| 18+58.31 | 19 RT | 1 | |
| 18+61.44 | 21.08 LT | 1 | |
| 19+02.88 | 19 RT | 1 | |
| 19+03.40 | 20.7 LT | 1 | |
| 20+60.68 | 24.88 RT | 1 | |
| 20+66.09 | 20.77 LT | 1 | |
| 21+10.05 | 20.74 LT | 1 | |
| 21+12.62 | 24.76 RT | 1 | |
| 22+73.05 | 19 RT | 1 | |
| 22+73.96 | 20.90 LT | 1 | |
| 23+16.87 | 20.67 LT | 1 | |
| 23+19.13 | 19 RT | 1 | |
| 24+87.77 | 20.82 LT | 1 | |
| 24+93.41 | 20.63 RT | 1 | |
| 25+27.17 | 20.75 RT | 1 | |
| 25+28.25 | 20.70 LT | 1 | |
| 26+82.25 | 20.81 RT | 1 | |
| 26+84.49 | 20.76 LT | 1 | |
| 27+18.66 | 20.72 RT | 1 | |
| 27+23.6 | 20.76 LT | 1 | |
| 28+78.91 | 21.27 RT | 1 | |
| 28+90.02 | 20.82 LT | 1 | |
| 29+14.55 | 22.69 RT | 1 | |
| 29+17.04 | 19.85 LT | 1 | |
| 30+75.6 | 18.74 LT | 1 | |
| 30+75.92 | 22.04 RT | 1 | |
| 31+17.37 | 20.68 RT | 1 | |
| 31+19.70 | 20.80 LT | 1 | |
| 32+77.73 | 20.79 RT | 1 | |
| 32+78.55 | 20.79 LT | 1 | |
| 33+11.36 | 23.50 LT | 1 | |
| 33+17.28 | 20.73 RT | 1 | |
| 34+74.11 | 31.67 RT | 1 | |
| 34+81.27 | 20.76 LT | 1 | |
| 35+18.08 | 20.57 RT | 1 | |
| 35+24.42 | 29.47 LT | 1 | |
| 36+59.07 | 27.97 RT | 1 | |
| 36+65.95 | 27.66 LT | 1 | |
| 37+03.42 | 26.06 RT | 1 | |
| 37+08.63 | 23.50 LT | 1 | |
| 38+72.05 | 20.77 RT | 1 | |
| 38+73.24 | 23.38 LT | 1 | |
| 39+19.26 | 19.88 RT | 1 | |
| 39+31.4 | 34.21 LT | 1 | |

SHEET NOTES:

1. STATION AND OFFSET PROVIDED FOR INFORMATION PURPOSES ONLY.
2. 608(1A) CONCRETE SIDEWALK 4 INCHES THICK EXCLUDES CURB RAMPS AND DRIVEWAY CURB CUTS.

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SCHEDULES



| 609(2) CURB AND GUTTER, TYPE 1 | | | | | |
|--------------------------------|-----------|----------|-----------|---------------|---------|
| BEGIN | OFFSET | END | OFFSET | QUANTITY (LF) | REMARKS |
| 10+24.02 | 37.05 RT | 16+41.78 | 114.04 RT | 711.89 | |
| 10+75.08 | 154.81 LT | 16+41.51 | 114.27 LT | 834.03 | |
| 16+77.41 | 57.89 RT | 20+66.94 | 61.97 RT | 460.50 | |
| 16+80.99 | 54.18 LT | 18+60.33 | 80.60 LT | 278.70 | |
| 18+99.84 | 72.10 LT | 20+68.22 | 46.55 LT | 243.30 | |
| 21+05.95 | 62.09 RT | 24+99.54 | 86.7 RT | 489.90 | |
| 21+07.7 | 46.48 LT | 22+74.89 | 43.63 LT | 215.90 | |
| 23+13.76 | 43.66 LT | 24+89.44 | 42.73 LT | 219.30 | |
| 25+24.87 | 41.69 RT | 26+82.67 | 43.48 RT | 202.30 | |
| 25+25.38 | 43.78 LT | 26+86.74 | 70.68 LT | 187.98 | |
| 27+16.08 | 43.40 RT | 28+77.61 | 105.19 RT | 274.00 | |
| 27+21.34 | 44.57 LT | 28+88.95 | 139.79 LT | 312.70 | |
| 29+12.13 | 48.95 RT | 30+76.57 | 75.34 RT | 249.37 | |
| 29+20.65 | 63.62 LT | 30+78.60 | 46.14 LT | 235.40 | |
| 31+13.07 | 75.34 RT | 32+79.12 | 48.45 RT | 246.10 | |
| 31+17.66 | 34.71 LT | 32+80.55 | 39.09 LT | 194.5 | |
| 33+12.3 | 64.58 LT | 34+83.52 | 59.15 LT | 261.23 | |
| 33+14.73 | 48.45 RT | 34+76.51 | 59.20 RT | 219.80 | |
| 35+12.73 | 57.27 RT | 36+59.71 | 55.06 RT | 211.25 | |
| 35+16.69 | 58.94 LT | 36+75.67 | 73.23 LT | 227.64 | |
| 36+94.97 | 56.16 RT | 38+74.29 | 45.83 RT | 230.20 | |
| 37+12.50 | 73.23 LT | 38+78.28 | 76.87 | 275.9 | |
| 39+16.71 | 36.48 RT | 39+34.33 | 17.69 RT | 33.4 | |
| 39+21.19 | 68.03 LT | 39+50.48 | 28.44 LT | 57.90 | |

| 626(2) SEWER SERVICE CONNECTION | | |
|---------------------------------|-------------|---------|
| STATION | OFFSET (FT) | REMARKS |
| 21+55.95 | 2.87 RT | |
| 22+23.14 | 2.9 RT | |
| 25+94.41 | 3.5 RT | |
| 28+45.96 | 3.8 RT | |
| 31+33.25 | 5.3 RT | |

SEWER SERVICE DEPTHS ARE UNKNOWN. TABLE SHOWS LIKELY CONFLICTS. FIELD VERIFY AND RECONSTRUCT PER ENGINEERS DIRECTION.

| 627(10) ADJUSTMENT OF VALVE BOX | | |
|---------------------------------|-------------|---------|
| STATION | OFFSET (FT) | REMARKS |
| 13+93 | 21.5 RT | |
| 16+80 | 37.5 RT | |
| 20+62 | 49 RT | |
| 22+68 | 12 RT | |
| 25+15 | 10.5 RT | |
| 27+10 | 12 RT | |
| 27+17 | 60.5 LT | |
| 27+18 | 12 LT | |
| 29+05 | 14.5 RT | |
| 29+15 | 37 RT | |
| 30+72 | 47 RT | |
| 30+80 | 46 RT | |
| 31+16 | 55 RT | |
| 33+10 | 16.5 RT | |
| 33+18 | 44.5 LT | |
| 34+86 | 16 RT | |
| 36+58 | 19 RT | |
| 36+59 | 56 RT | |
| 39+45 | 10 LT | |

| 642(6) REPLACE EXISTING WITH PRIMARY MONUMENT | | |
|---|-------------|-------------------------|
| STATION | OFFSET (FT) | DESCRIPTION |
| 13+24.5 | 0 | FOUND BRASS CAP IN CASE |
| 16+60.5 | 0 | FOUND BRASS CAP IN CASE |
| 18+81.5 | 0 | FOUND BRASS CAP IN CASE |
| 20+87.5 | 0 | FOUND BRASS CAP IN CASE |
| 20+94 | 0 | FOUND BRASS CAP IN CASE |
| 22+96.5 | 0 | FOUND BRASS CAP IN CASE |
| 25+08.5 | 0 | FOUND BRASS CAP IN CASE |
| 27+01 | 0 | FOUND BRASS CAP IN CASE |
| 28+95.5 | 0 | FOUND BRASS CAP IN CASE |
| 29+06.5 | 0 | FOUND BRASS CAP IN CASE |
| 30+97.5 | 0 | FOUND BRASS CAP IN CASE |
| 32+97 | 0 | FOUND BRASS CAP IN CASE |
| 34+99 | 0 | FOUND BRASS CAP IN CASE |
| 36+79 | 0 | FOUND BRASS CAP IN CASE |
| 36+93.5 | 0 | FOUND BRASS CAP IN CASE |
| 38+99 | 0 | FOUND BRASS CAP IN CASE |

| 642(7) REPLACE EXISTING WITH SECONDARY MONUMENT | | |
|---|-------------|-------------------|
| STATION | OFFSET (FT) | DESCRIPTION |
| 10+75 | 144.5 LT | 1.5" ALUMINUM CAP |
| 11+80 | 25 RT | 1.5" ALUMINUM CAP |
| 12+21 | 25 LT | REBAR |
| 12+28 | 28.5 LT | 1.5" ALUMINUM CAP |
| 12+30 | 25 RT | 1.5" ALUMINUM CAP |
| 13+52 | 25 RT | REBAR |
| 14+62.5 | 25 RT | REBAR |
| 14+70.5 | 25 LT | 1" IRON PIPE |
| 16+35.5 | 25 LT | 1.5" ALUMINUM CAP |
| 16+35.5 | 25 RT | 1.5" ALUMINUM CAP |
| 17+45.5 | 25 LT | #4 REBAR |
| 21+11.5 | 43 RT | #5 REBAR |
| 21+29.5 | 25 RT | 1.5" ALUMINUM CAP |
| 31+21.5 | 25 RT | 1" IRON PIPE |
| 31+91.5 | 25 RT | 1.5" ALUMINUM CAP |
| 34+70 | 75.5 RT | 1.5" ALUMINUM CAP |

NOTE:

1. ALL PRIMARY MONUMENTS TO BE INSTALLED INSIDE A MONUMENT CASING.

SHEET NOTES:

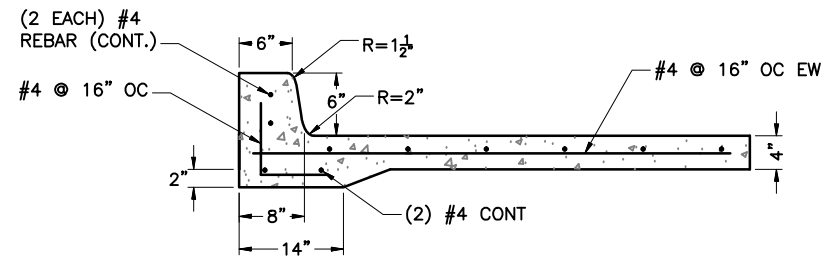
1. STATION AND OFFSET PROVIDED FOR INFORMATION PURPOSES ONLY.

SCHEDULES



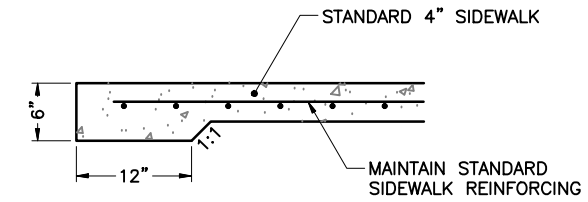
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | E1 | -- |

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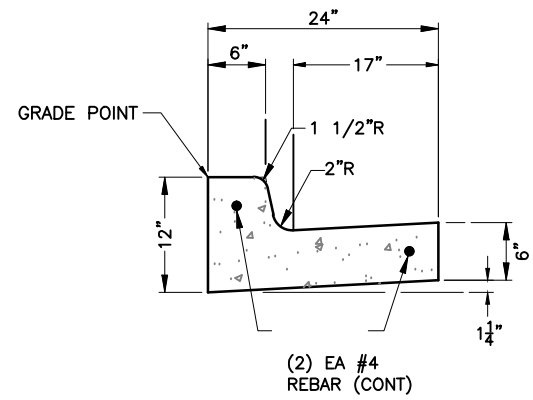
SIDEWALK WITH INTEGRATED BACKING CURB

NTS



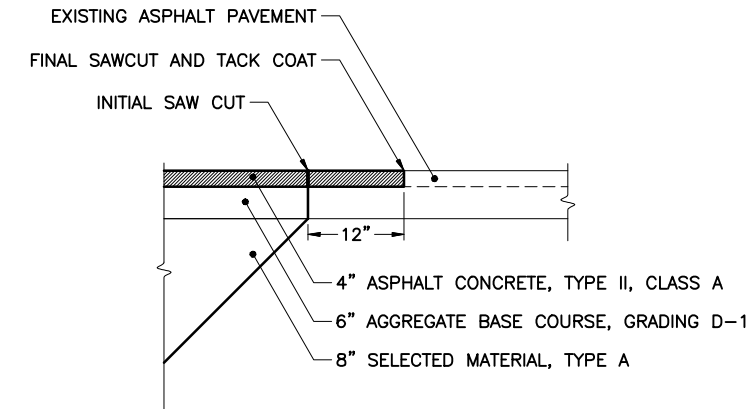
THICKENED EDGE SIDEWALK

NTS
SEE LANDSCAPING FOR LOCATIONS



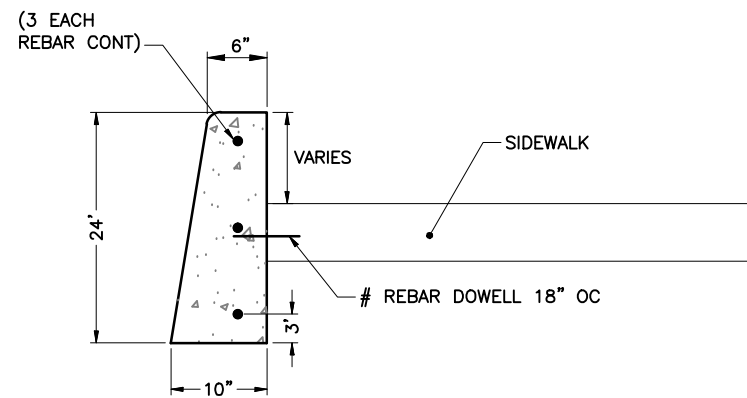
STANDARD CURB & GUTTER

NTS



ASPHALT SAWCUT AND PATCH

NTS



SPECIAL BACKING CURB

NTS
FOR USE AT SPECIAL CURB RAMPS

SHEET NOTES:

1. REFERENCE CITY OF FAIRBANKS, ALASKA STANDARD CONCRETE DETAILS AS MODIFIED FOR NOBLE STREET RECONSTRUCTION FOR FURTHER CONCRETE NOTES.
2. FOR SIDEWALK REINFORCEMENT, POSITION STEEL 1 1/2" UP FROM BOTTOM OF SIDEWALK.
3. CONCRETE SHALL RECEIVE A MEDIUM BROOMED FINISH RUNNING PERPENDICULAR TO THE CURB ON RAMP RUNS AND UPPER LANDINGS AND PARALLEL TO THE DIRECTION OF TRAVEL ON LOWER LANDINGS.
4. SAWCUT ALL MATCH LINES WHERE NEW CONSTRUCTION OF PAVEMENT, SIDEWALK OR CURBING ABUTS EXISTING. SAWCUTS SUBSIDIARY TO 201(1).
5. INTEGRATED BACKING CURB IS SUBSIDIARY TO 608(1A).

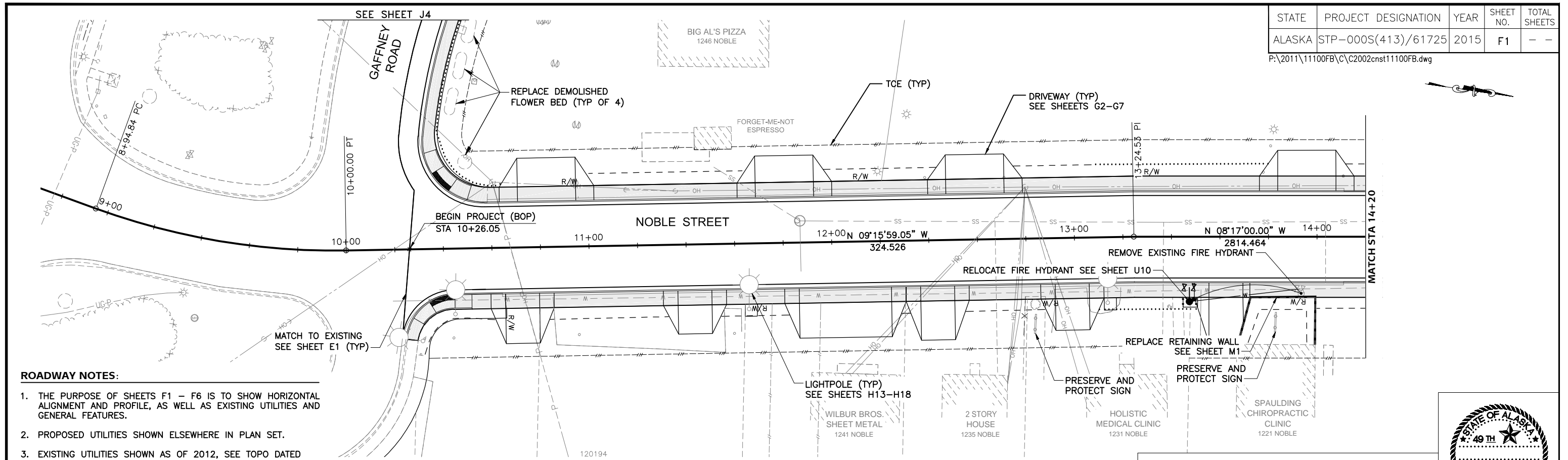
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CONCRETE DETAILS



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | F1 | -- |

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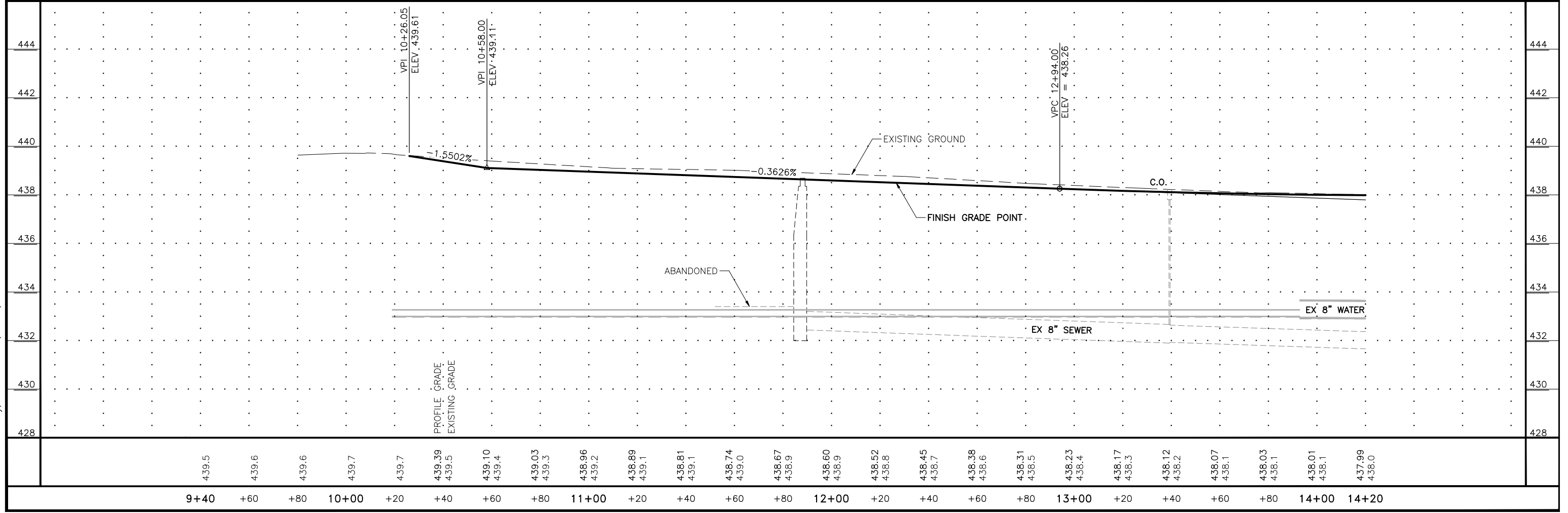


- ROADWAY NOTES:**
1. THE PURPOSE OF SHEETS F1 - F6 IS TO SHOW HORIZONTAL ALIGNMENT AND PROFILE, AS WELL AS EXISTING UTILITIES AND GENERAL FEATURES.
 2. PROPOSED UTILITIES SHOWN ELSEWHERE IN PLAN SET.
 3. EXISTING UTILITIES SHOWN AS OF 2012, SEE TOPO DATED X/XX/XX UPGRADES, FOR ADDITIONAL INFORMATION ON EXISTING UTILITIES AND FEATURES.
 4. REMOVAL OF STORM DRAIN IS SUBSIDIARY TO 603 ITEMS.

ROADWAY 10+58 - 14+20

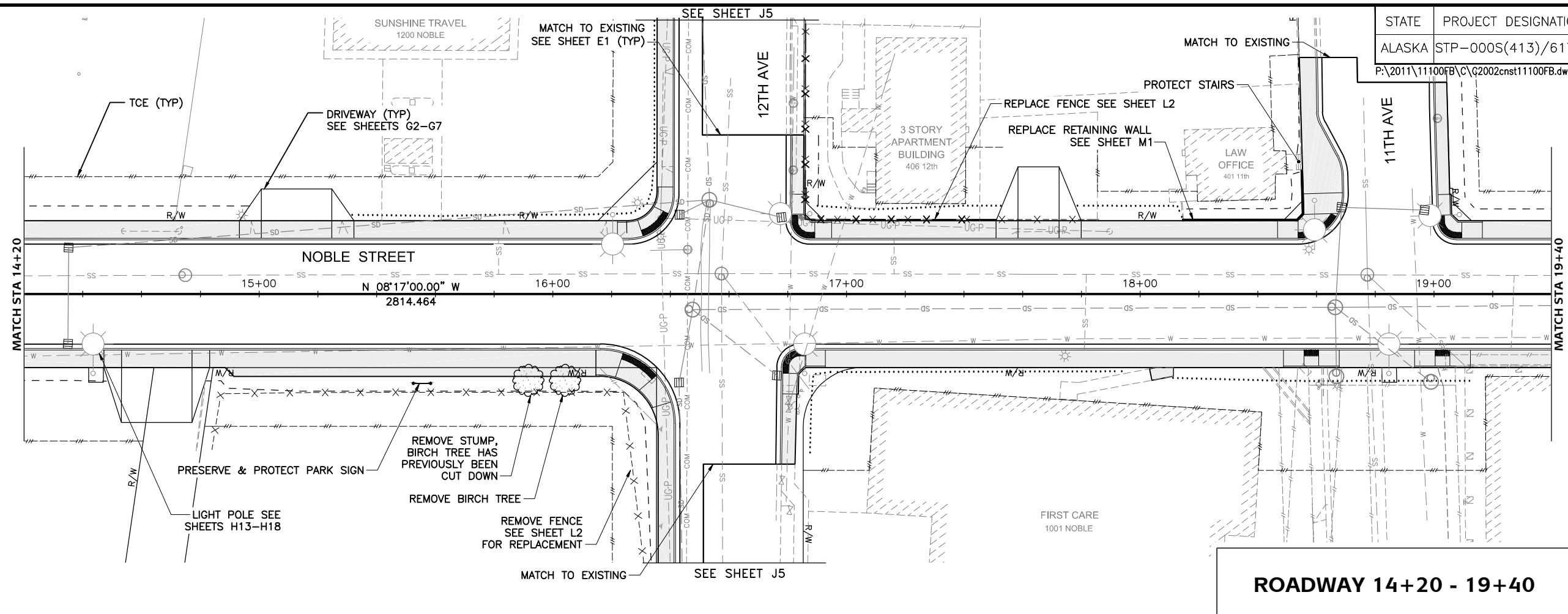


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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | F2 | -- |

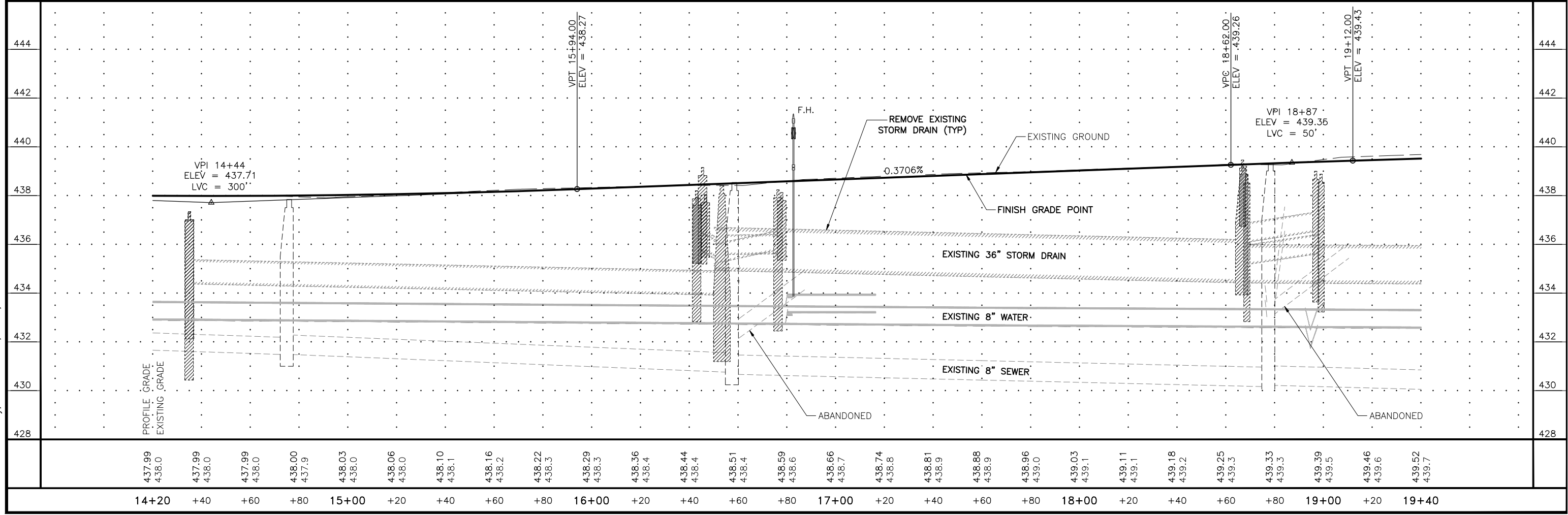
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ROADWAY 14+20 - 19+40

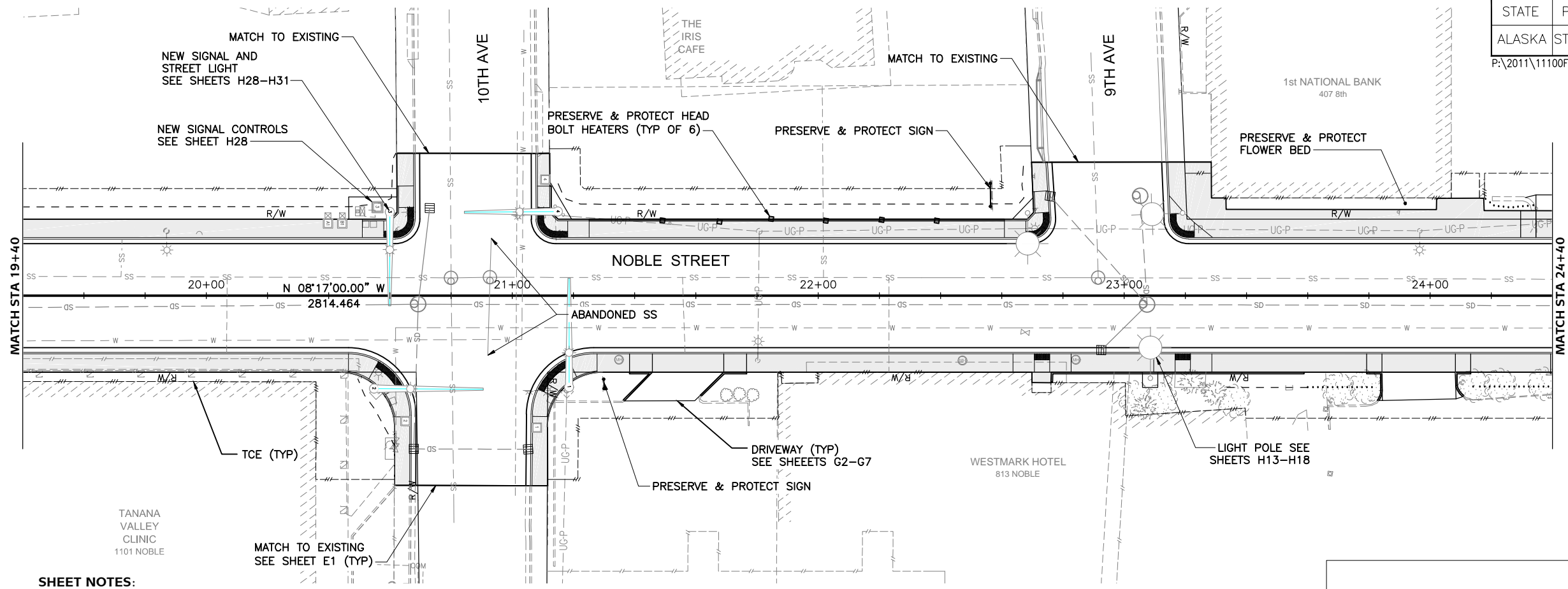


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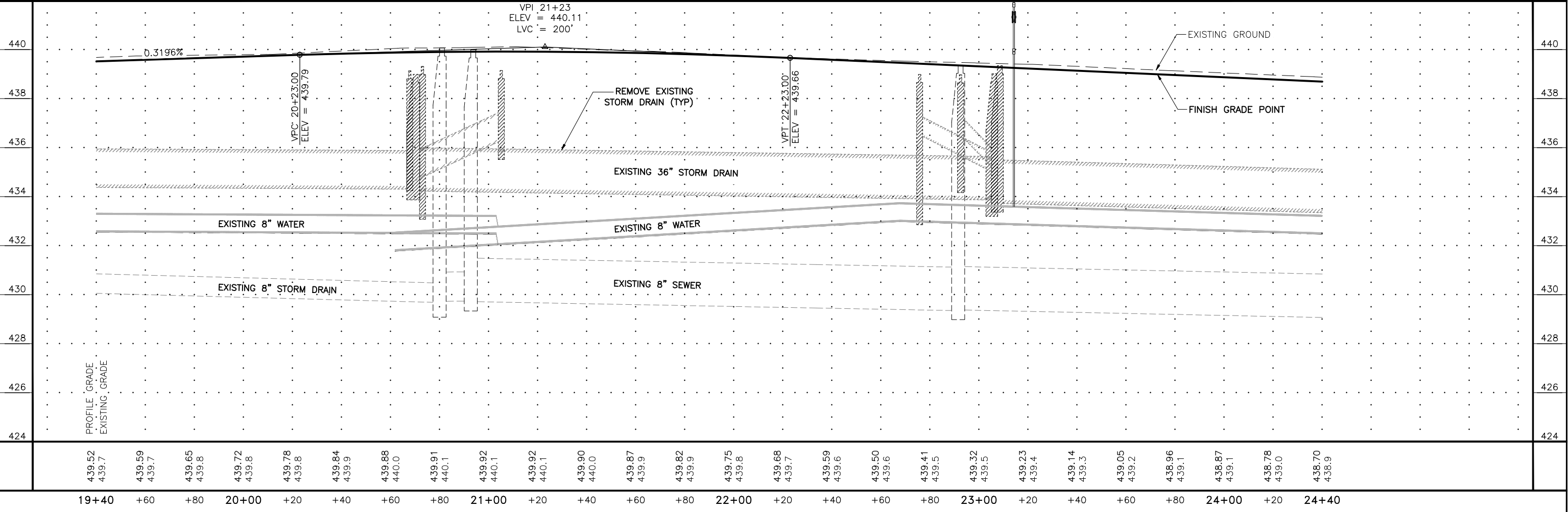
| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | F3 | -- |

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- SHEET NOTES:**
- SEE SHEETS H28 TO H31 FOR SIGNAL POLE MOUNTED ILLUMINATION.

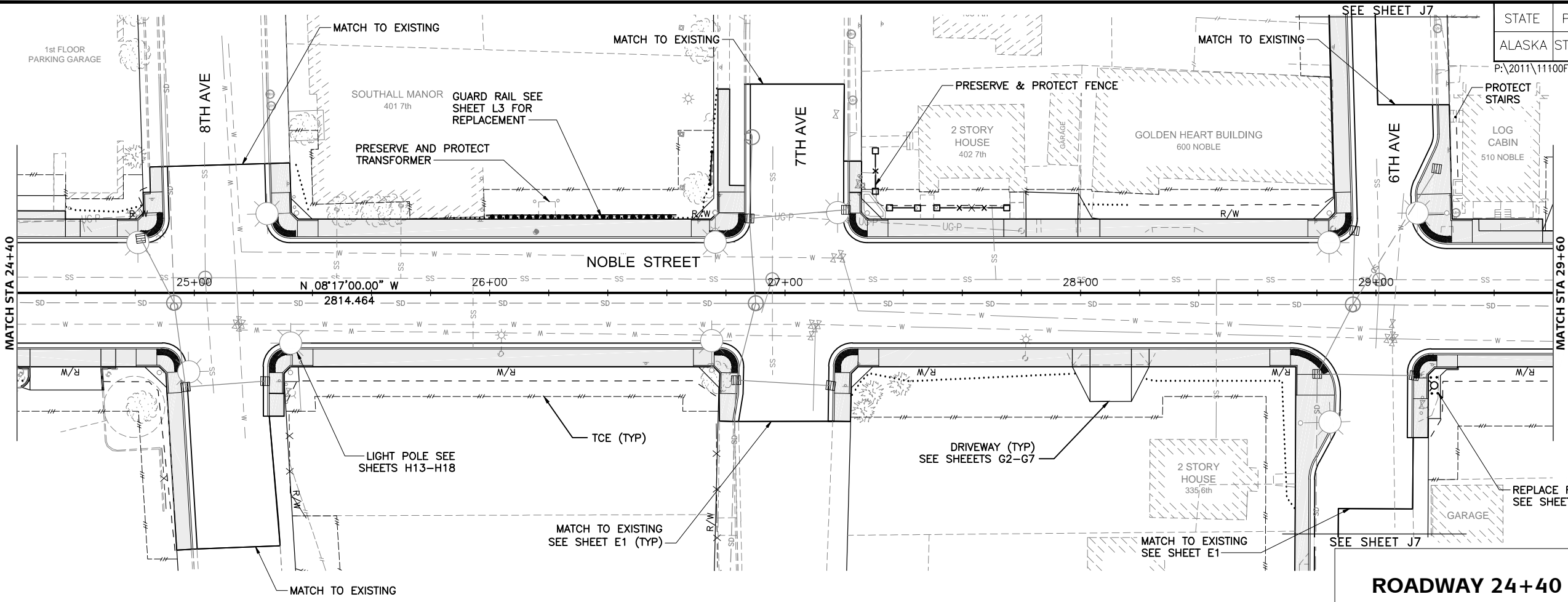
ROADWAY 19+40 - 24+40



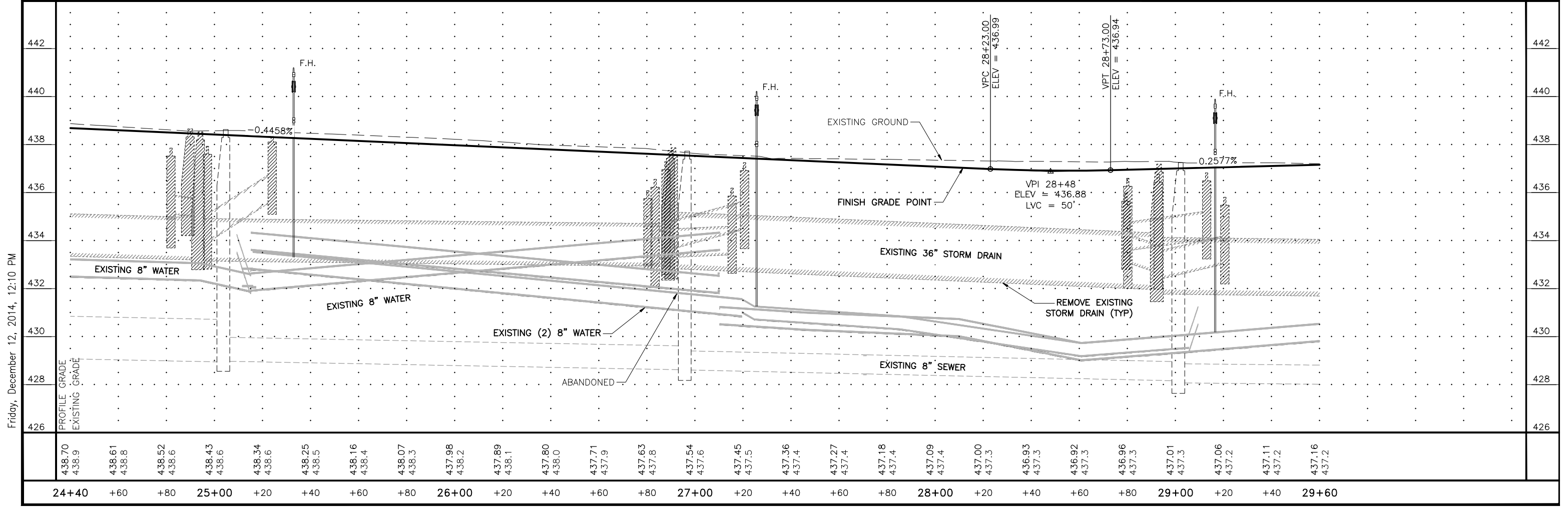
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| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | F4 | -- |

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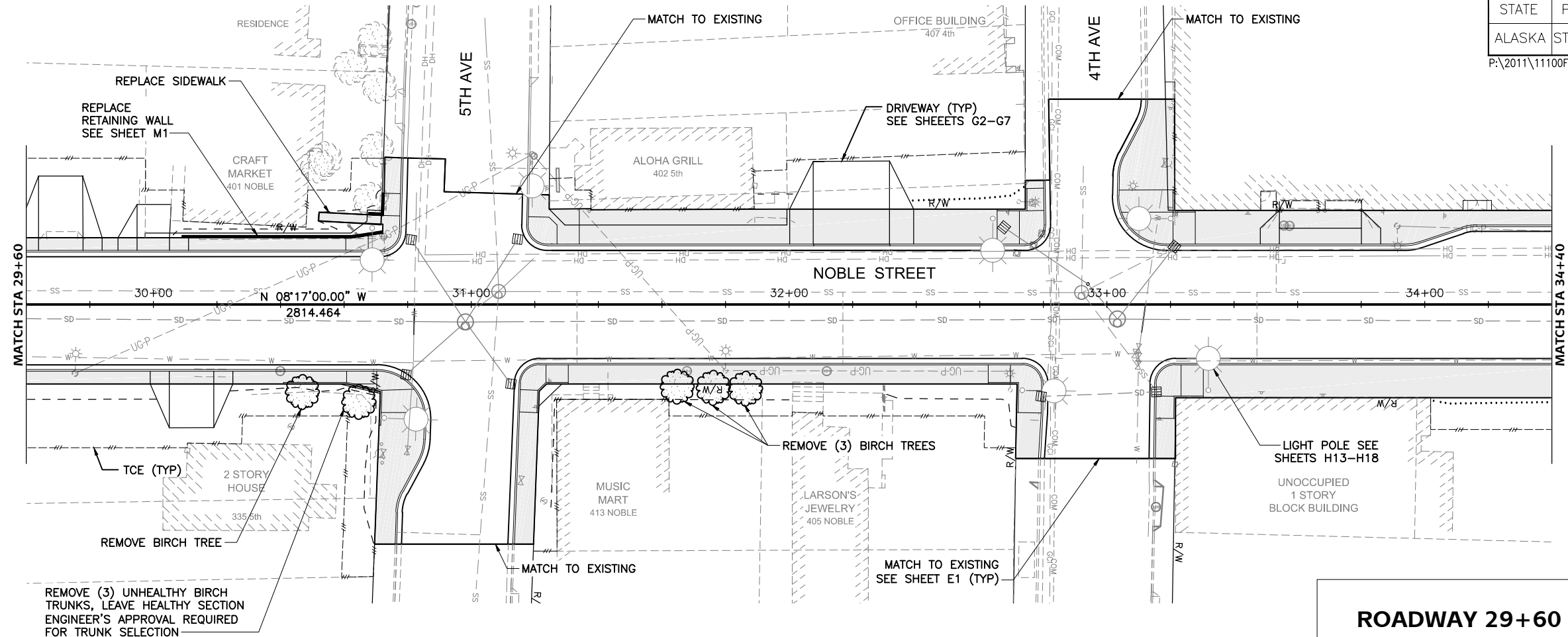
ROADWAY 24+40 - 29+60



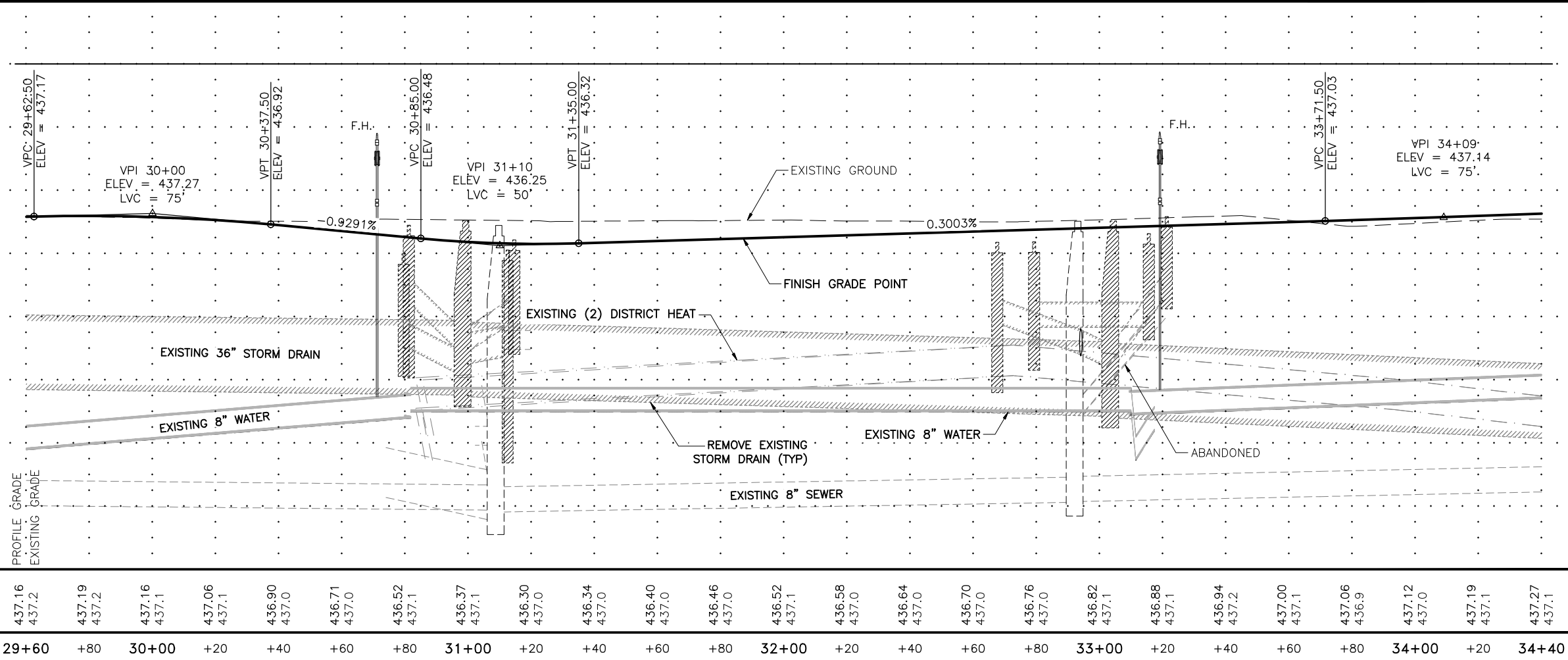
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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | F5 | -- |

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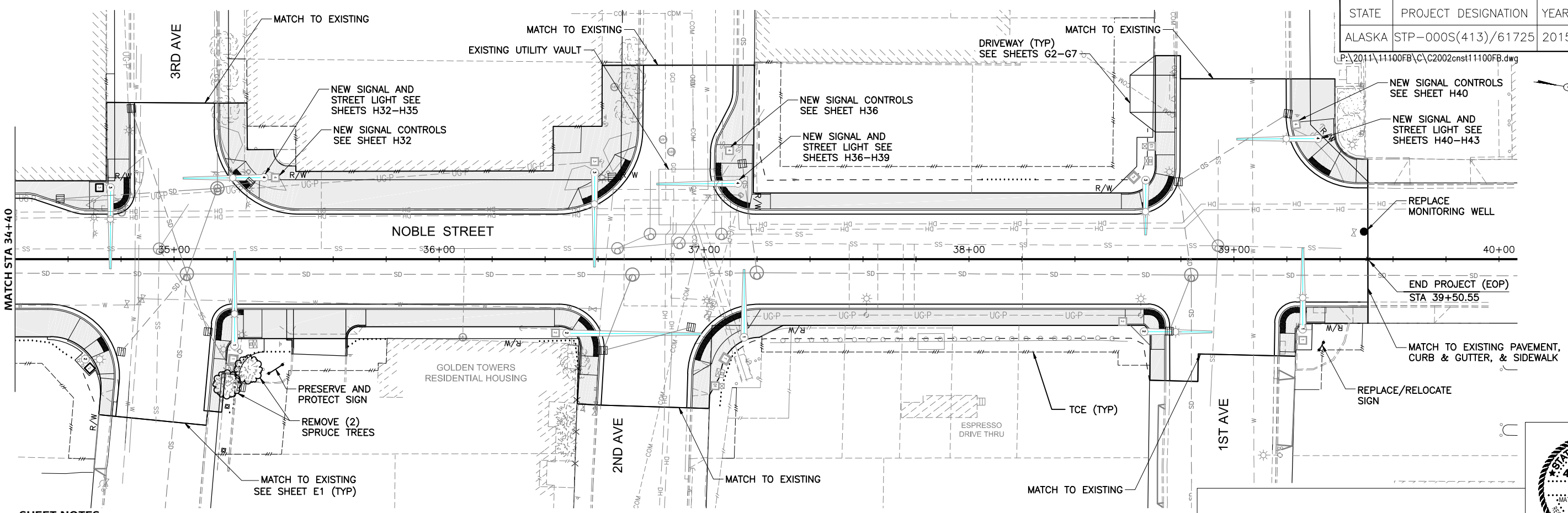


ROADWAY 29+60 - 34+40



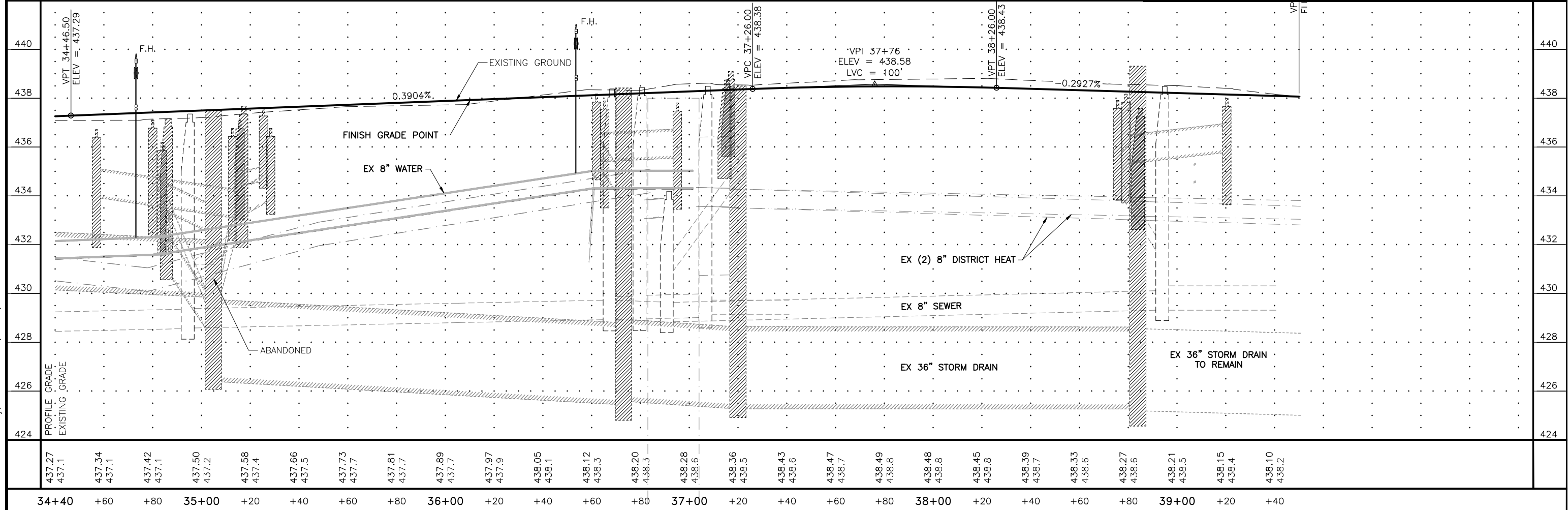
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| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | F6 | -- |



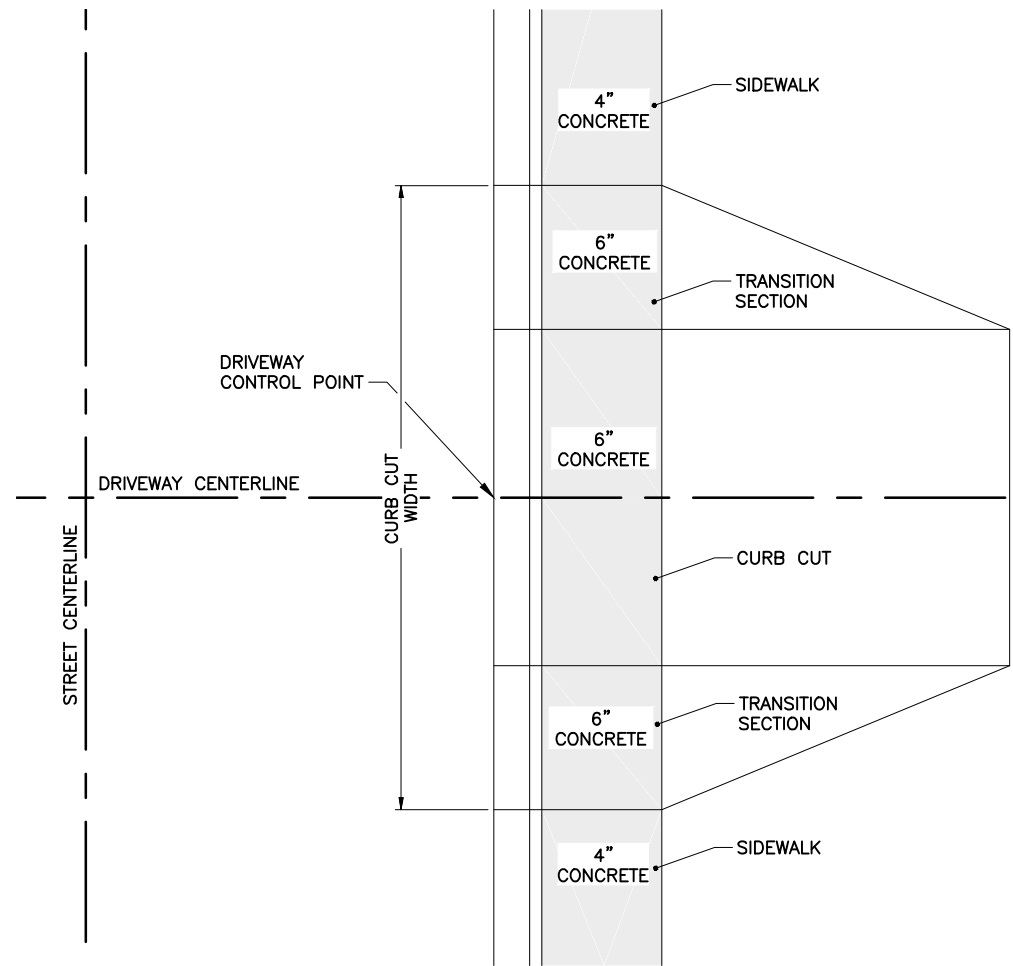
SHEET NOTES:
 1. SEE SHEETS H32 TO H43 FOR SIGNAL POLE MOUNTED ILLUMINATION.

ROADWAY 34+40 - 39+50

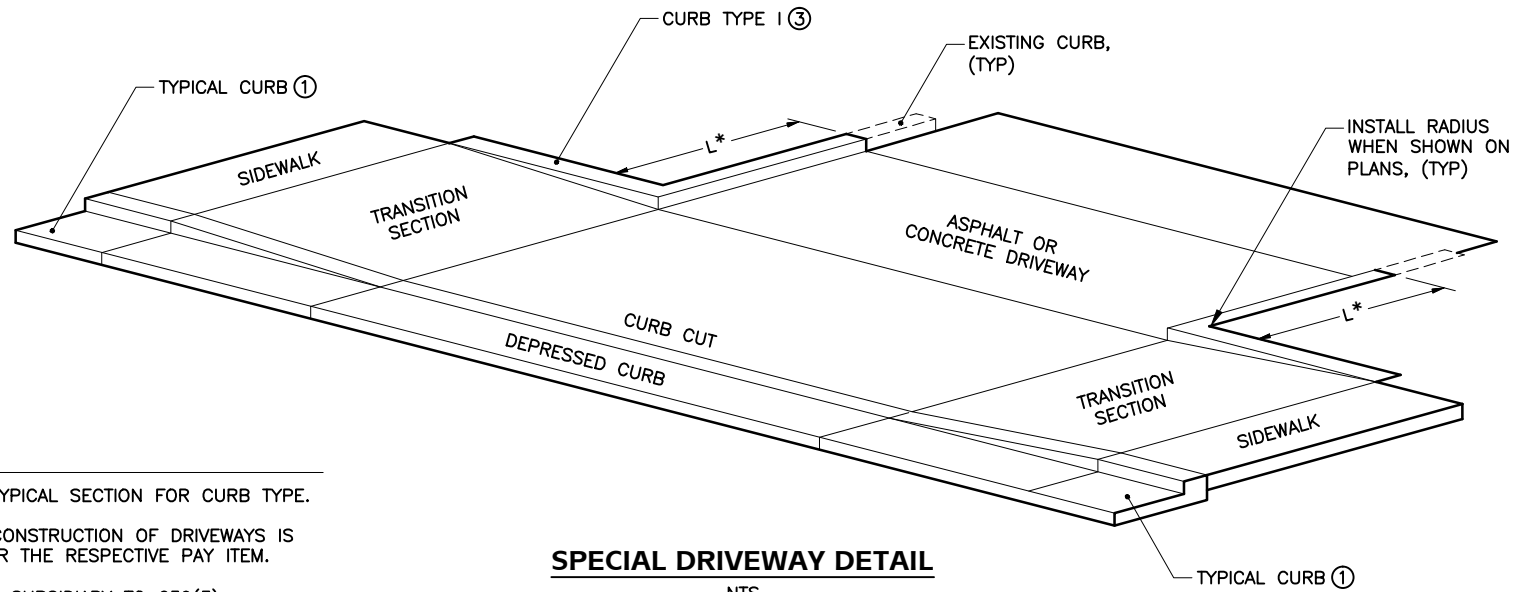


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DRIVEWAY DETAIL
NTS



SPECIAL DRIVEWAY DETAIL

NTS

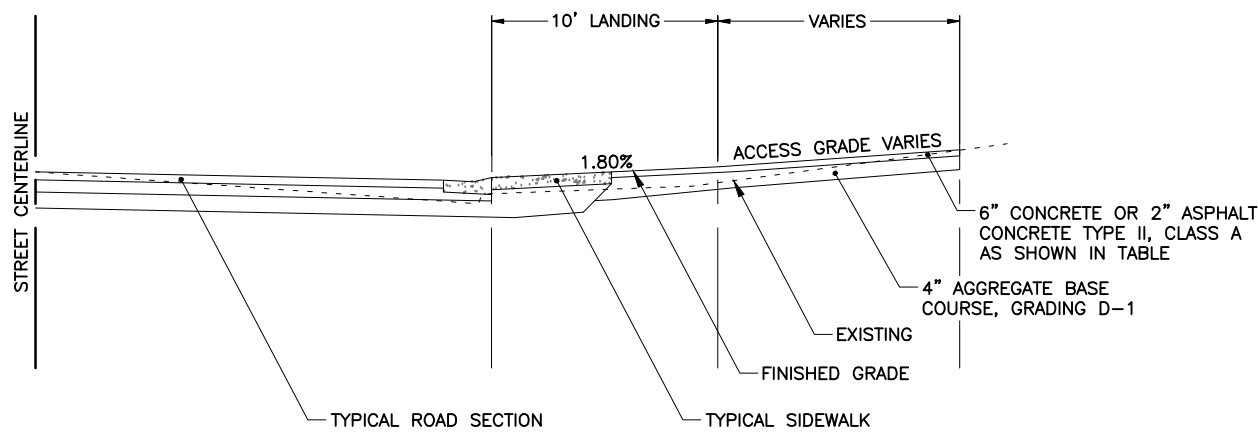
| | | | |
|---|------|----------|-------------|
| * | DRWY | 21+57.48 | L = 13 FT |
| * | DRWY | 23+96.27 | L = 9 FT |
| * | DRWY | 24+56.39 | L = 7.75 FT |
| * | DRWY | 35+54.93 | L = 5.25 FT |

NOTES:

- ① SEE ROADWAY TYPICAL SECTION FOR CURB TYPE.
- ② MATERIAL FOR CONSTRUCTION OF DRIVEWAYS IS PAID FOR UNDER THE RESPECTIVE PAY ITEM.
- ③ CURB TYPE I IS SUBSIDIARY TO 639(3).

639(1) DRIVEWAY SUMMARY②

| DRIVEWAY | OFFSET | CURB CUT WIDTH (FT) | DRIVEWAY SUFACING | AREA (SY) | REMARKS |
|----------------|--------|---------------------|-------------------|-----------|--------------------------------------|
| DRWY D 10+72.3 | RT | 26.0 | ASPHALT | 32.0 | USED CAR LOT |
| DRWY D 10+82.9 | LT | 39.0 | ASPHALT | 41.0 | FORGET ME NOT ESPRESSO |
| DRWY D 11+43.4 | RT | 26.0 | ASPHALT | 26.0 | USED CAR LOT |
| DRWY D 11+80.9 | LT | 39.0 | ASPHALT | 27.0 | FORGET ME NOT ESPRESSO |
| DRWY D 12+05.3 | RT | 50.0 | ASPHALT | 70.0 | WILBUR BROTHERS SHEET METAL |
| DRWY D 12+43.3 | RT | 26.0 | ASPHALT | 36.0 | PRIVATE RESIDENCE; 1235 NOBLE STREET |
| DRWY D 12+59.4 | LT | 39.0 | ASPHALT | 35.0 | PARKING LOT |
| DRWY D 12+98.9 | RT | 26.0 | ASPHALT | 29.0 | PRIVATE RESIDENCE; 1231 NOBLE STREET |
| DRWY D 13+62.5 | RT | 22.9 | ASPHALT | 36.0 | SPAULDING CHIROPRACTIC CLINIC |
| DRWY D 13+95.8 | LT | 39.0 | ASPHALT | 37.0 | PARKING LOT |
| DRWY D 14+65.1 | RT | 36.0 | ASPHALT | 62.0 | SPAULDING CHIROPRACTIC CLINIC |
| DRWY D 15+12.8 | LT | 39.0 | ASPHALT | 38.0 | SUNSHINE TRAVIL PARKING LOT |
| DRWY D 17+65.4 | LT | 29.0 | ASPHALT | 44.0 | EMPTY LOT |
| DRWY D 21+57.4 | RT | 38.3 | ASPHALT | 24.0 | WESTMARK HOTEL PARKING LOT |
| DRWY D 23+96.3 | RT | 34.0 | ASPHALT | 29.0 | WESTMARK HOTEL PARKING LOT |
| DRWY D 24+45.5 | LT | 31.8 | ASPHALT | 14.0 | 1ST NATIONAL BANK PARKING |
| DRWY D 24+56.4 | RT | 34.0 | ASPHALT | 22.0 | WESTMARK HOTEL PARKING LOT |
| DRWY D 27+90.3 | LT | 32.5 | CONCRETE | 20.0 | PRIVATE RESIDENCE; 402 7TH AVE |
| DRWY D 28+10.2 | RT | 26.0 | ASPHALT | 26.0 | PRIVATE RESIDENCE; 335 6TH AVE |
| DRWY D 29+70.9 | LT | 27.5 | ASPHALT | 44.0 | ABSOLUTELY ALASKAN REAL ESTATE |
| DRWY D 30+00.0 | LT | 22.1 | ASPHALT | 16.0 | CRAFT MARKET |
| DRWY D 30+12.0 | RT | 26.0 | ASPHALT | 30.0 | PRIVATE RESIDENCE; 335 5TH AVE |
| DRWY D 32+19.7 | LT | 39.0 | ASPHALT | 53.0 | PARKING LOT |
| DRWY D 33+67.2 | LT | 37.9 | CONCRETE | 0.0 | NORTHWARD BUILDING ENTRANCE |
| DRWY D 35+54.9 | RT | 29.8 | ASPHALT | 15.0 | APARTMENT COMPLEX PARKING |
| DRWY D 38+98.4 | LT | 28.9 | ASPHALT | 23.0 | PARKING LOT |
| TOTAL | | | | 828 | AREA FOR DRIVEWAYS (BEHIND SIDEWALK) |



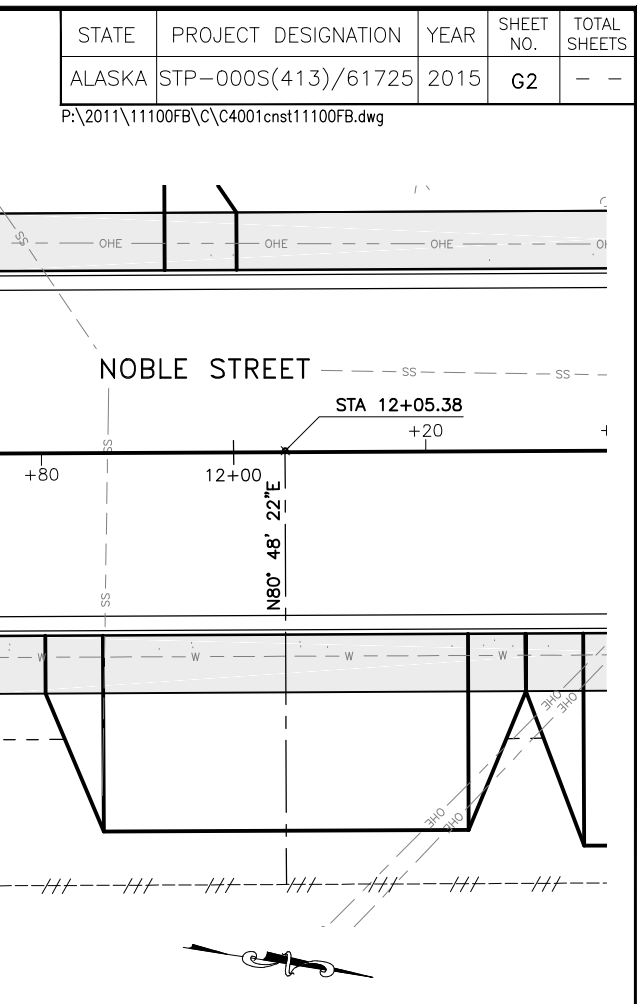
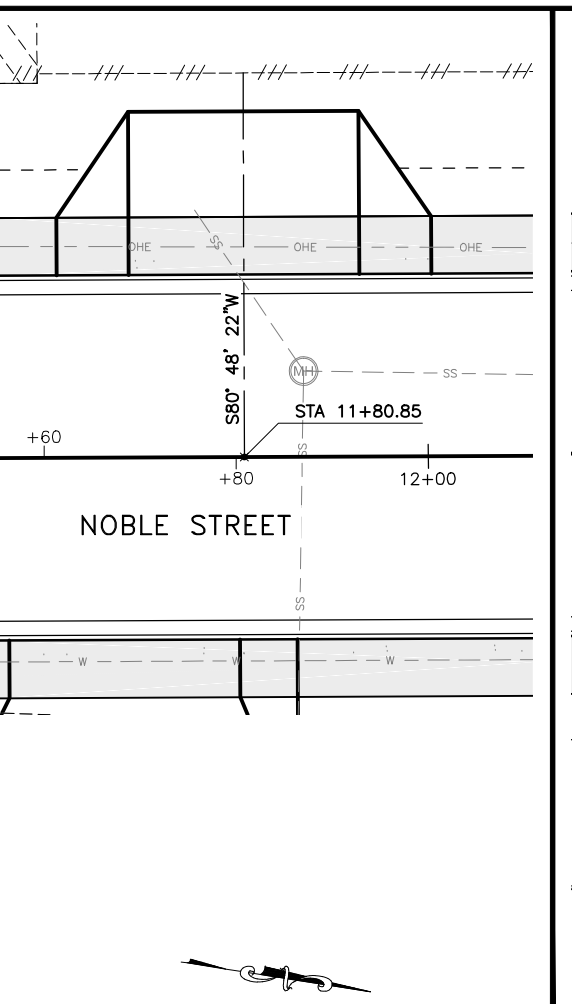
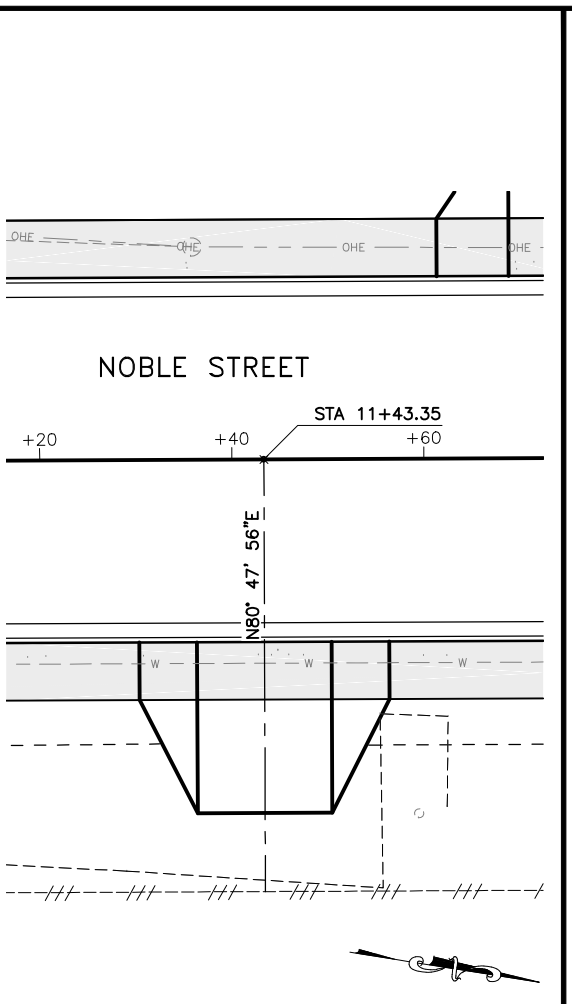
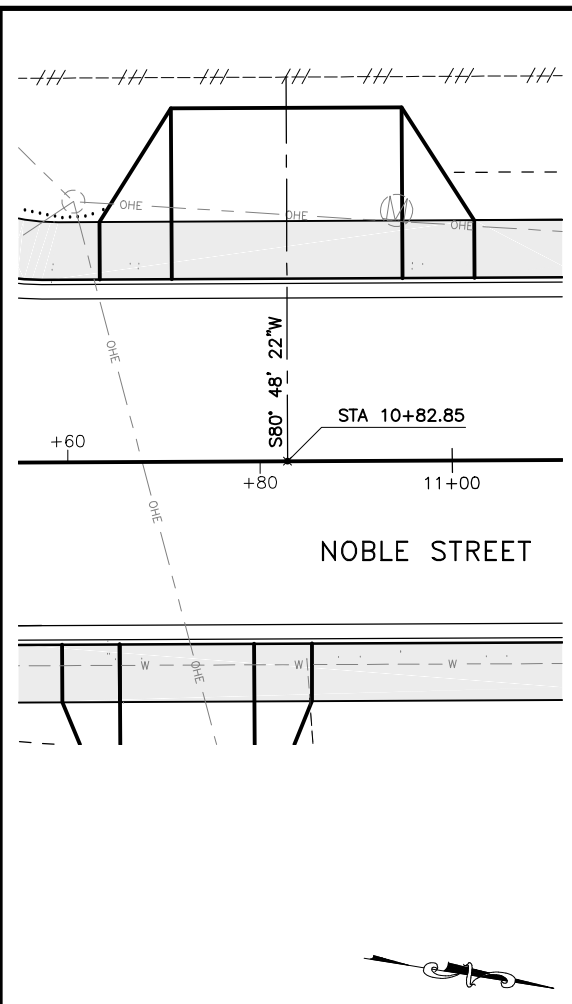
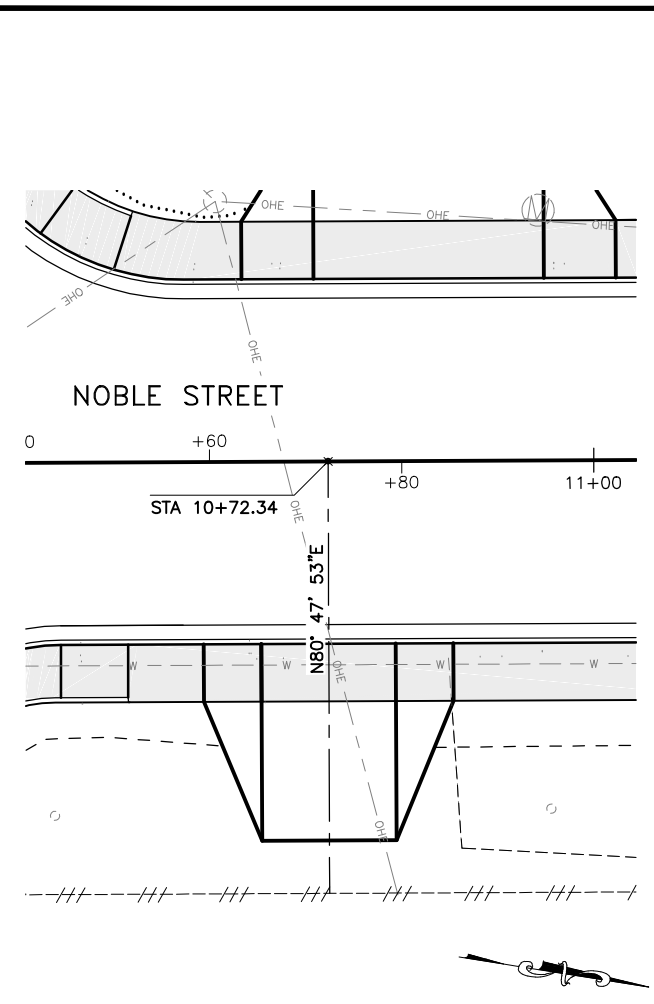
DRIVEWAY SECTION
NTS

DRIVEWAY DETAIL



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | G2 | -- |

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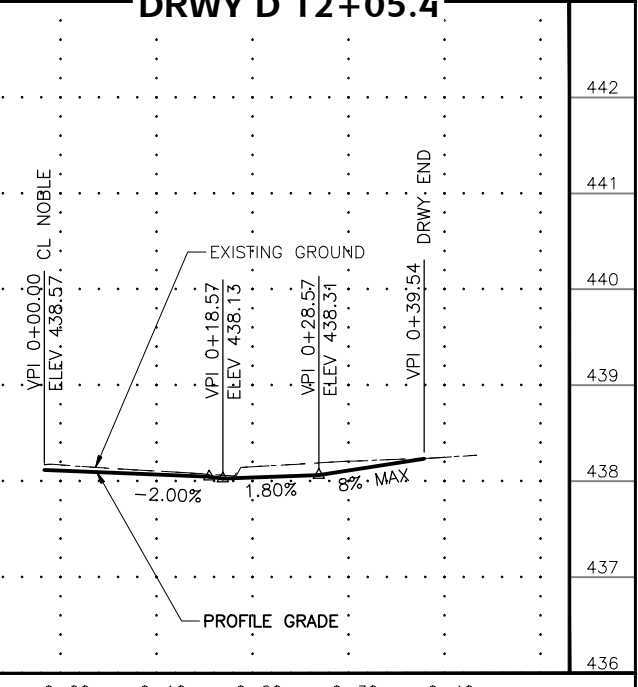
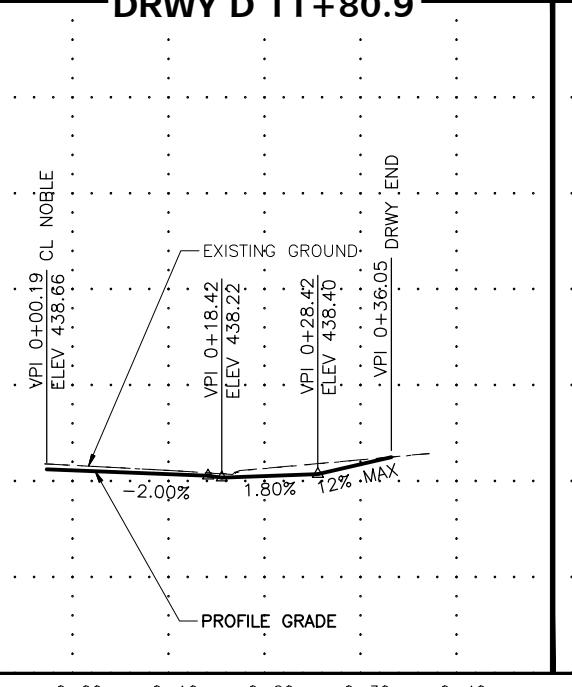
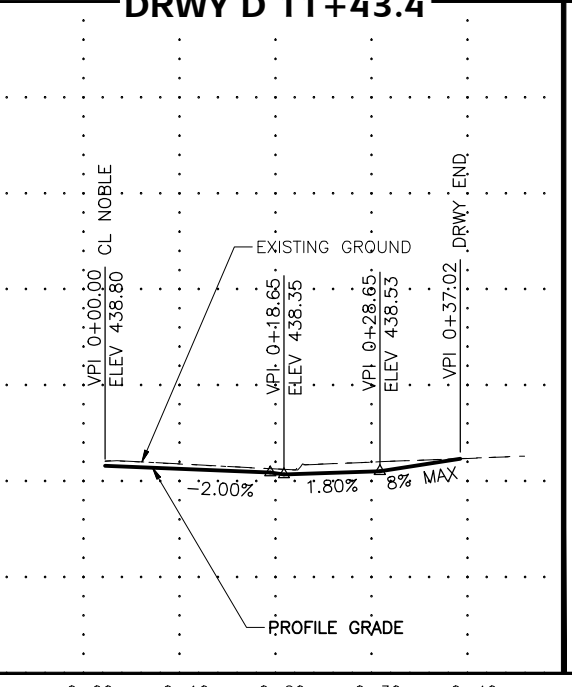
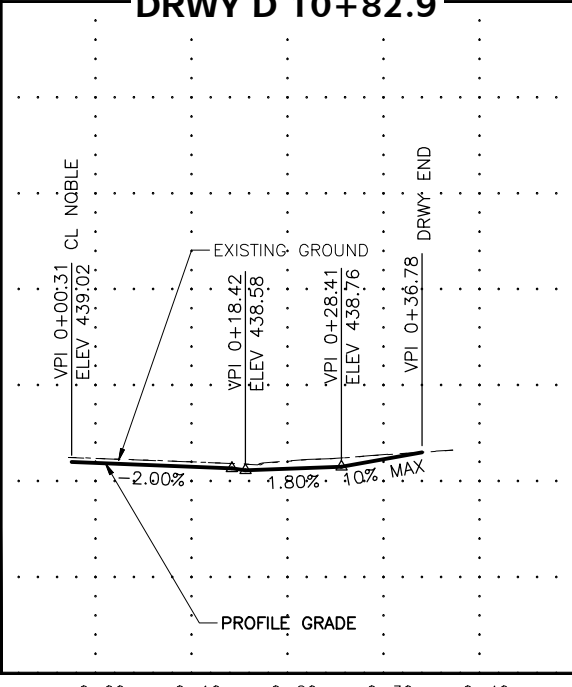
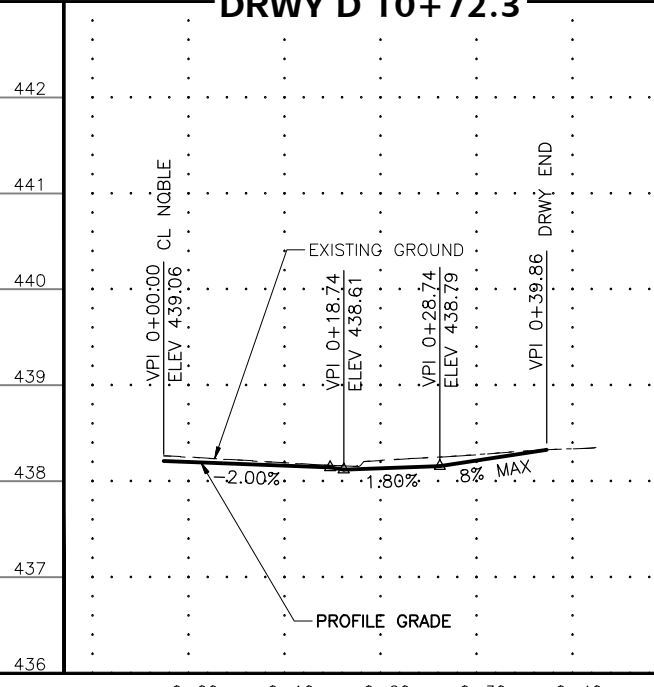
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DRWY D 10+82.9

DRWY D 11+43.4

DRWY D 11+80.9

DRWY D 12+05.4

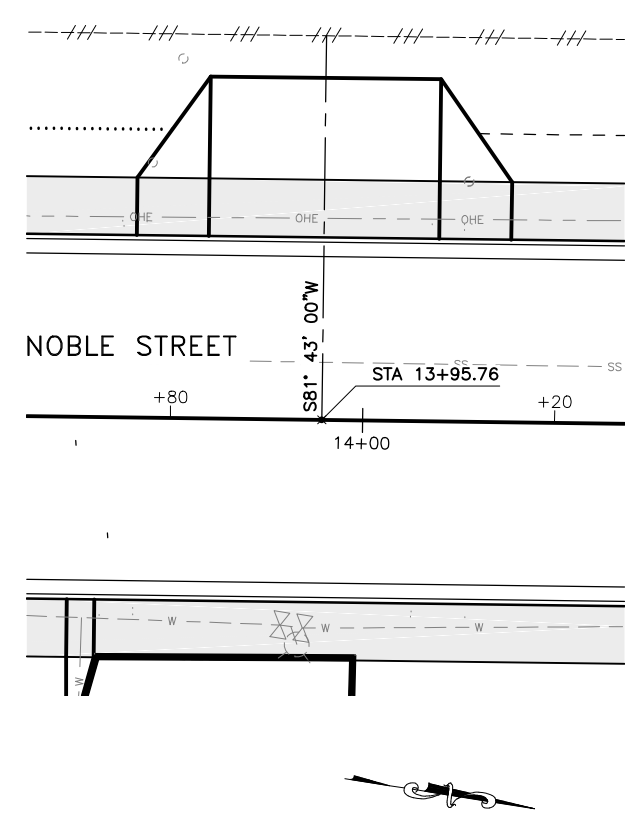
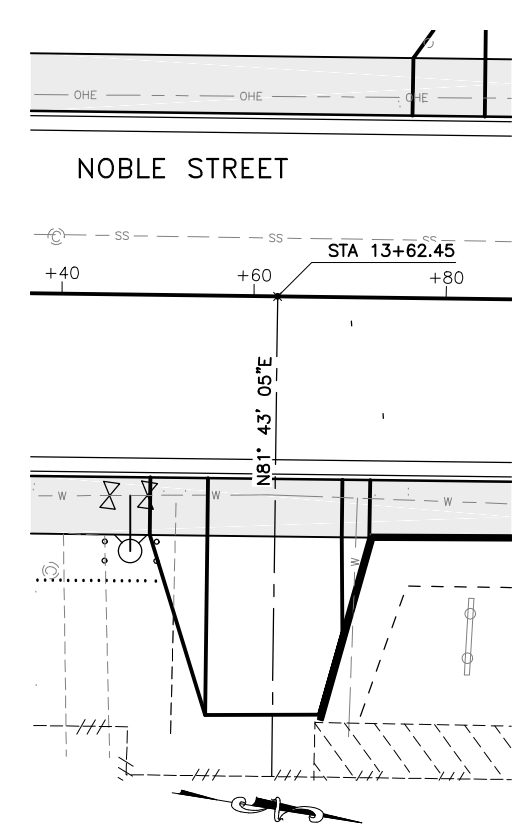
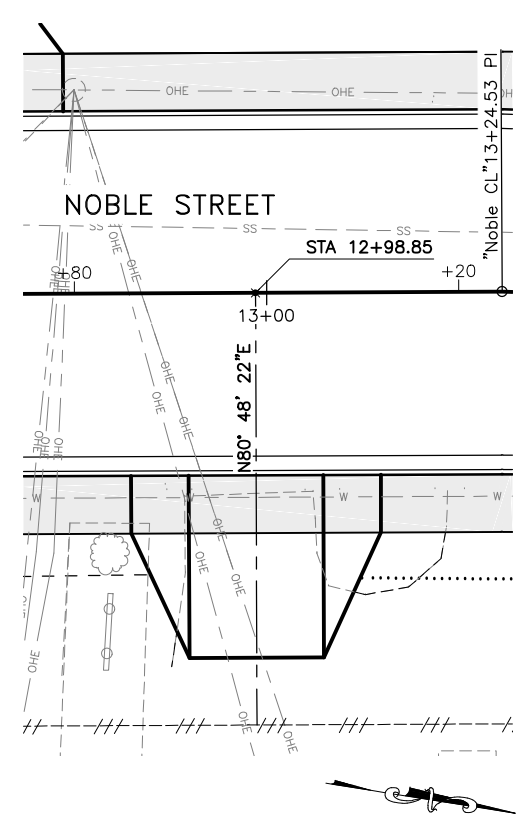
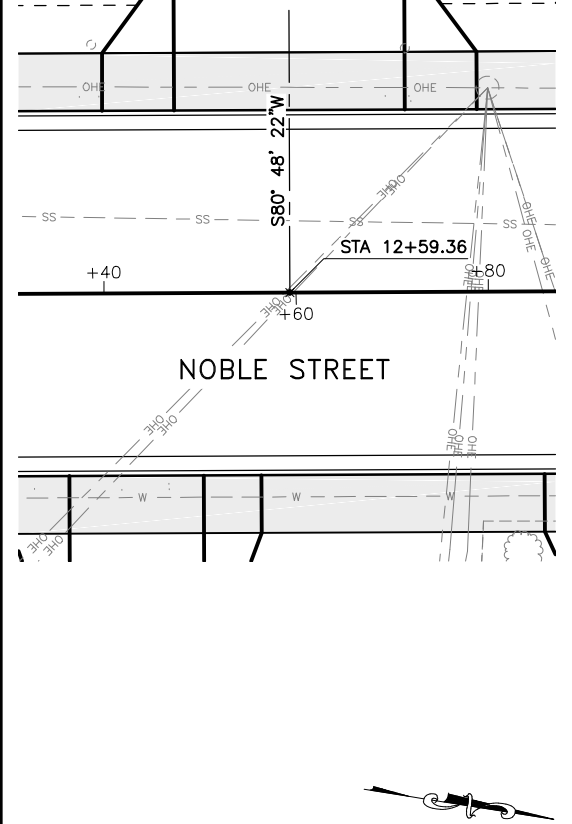
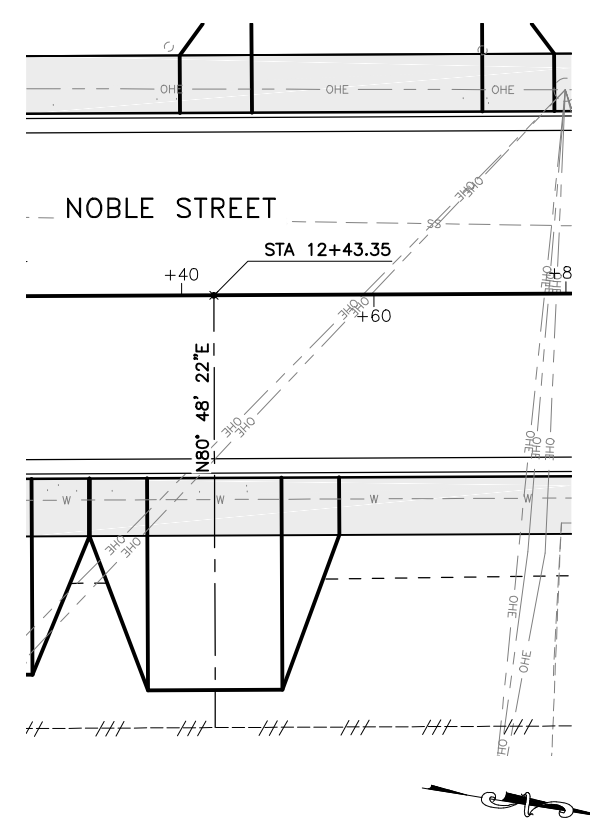


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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | G3 | -- |

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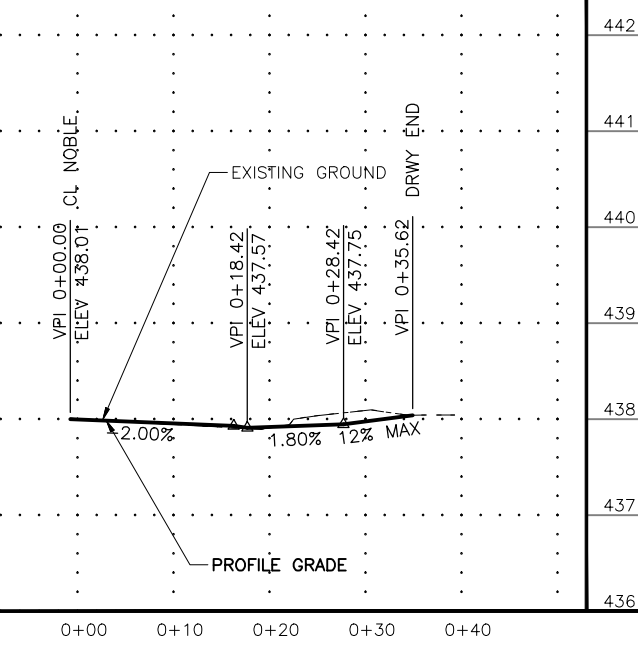
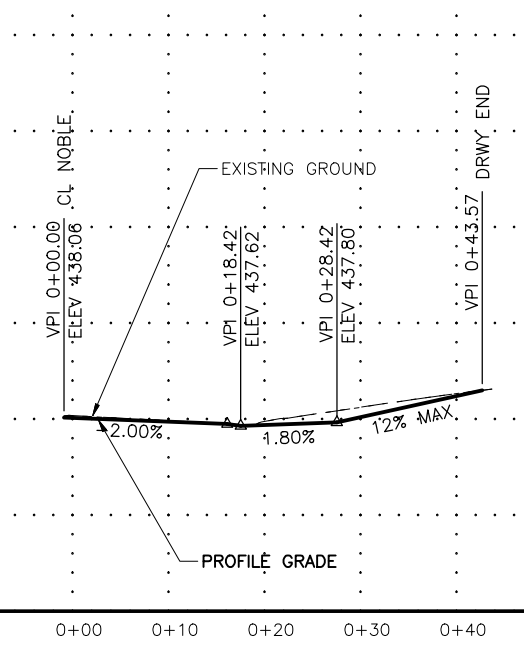
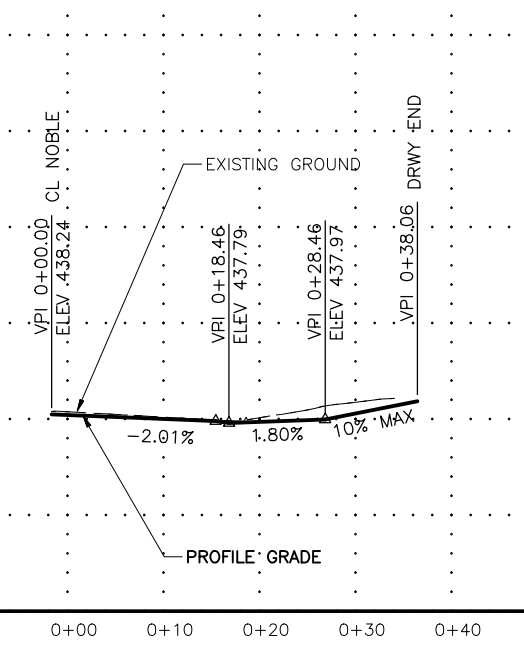
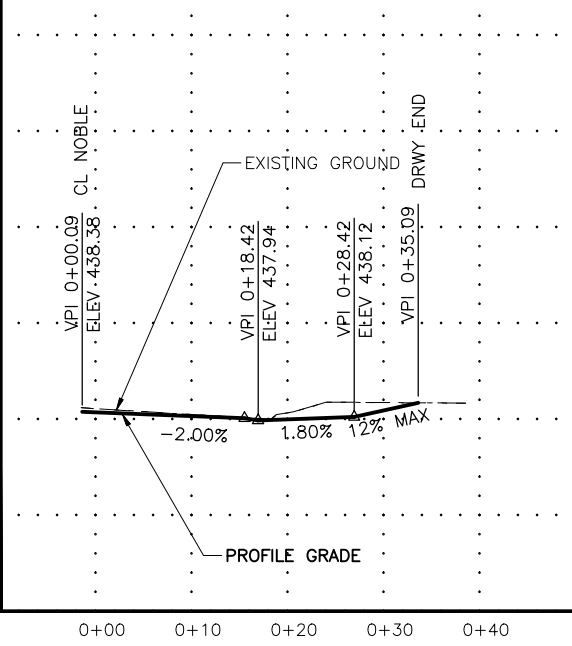
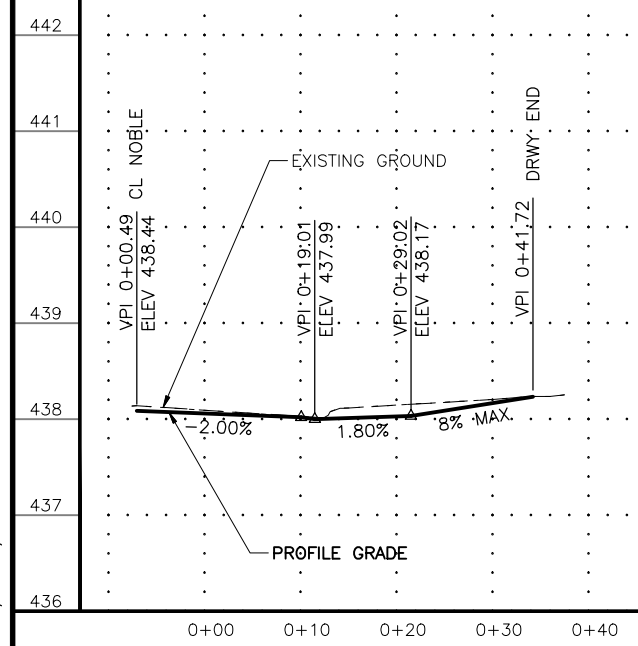
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DRWY D 12+59.4

DRWY D 12+98.9

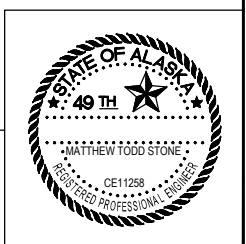
DRWY D 13+62.5

DRWY D 13+95.8



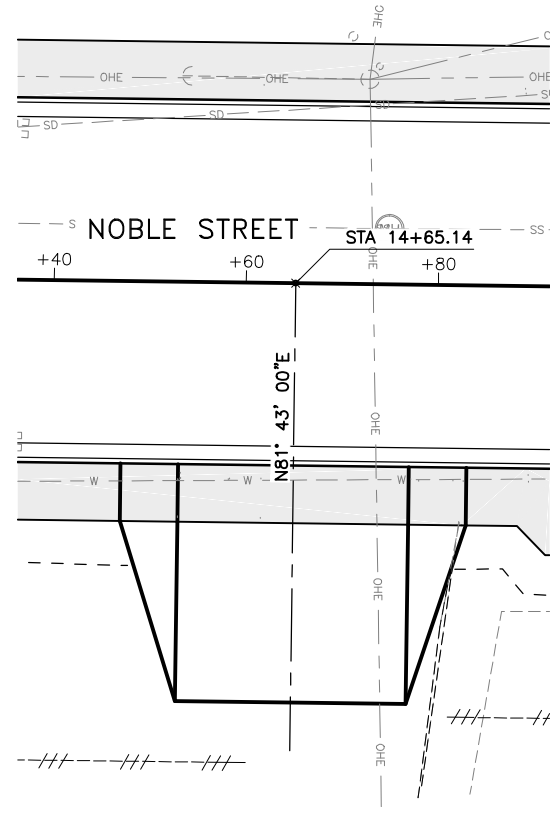
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DRIVEWAYS (2 OF 6)

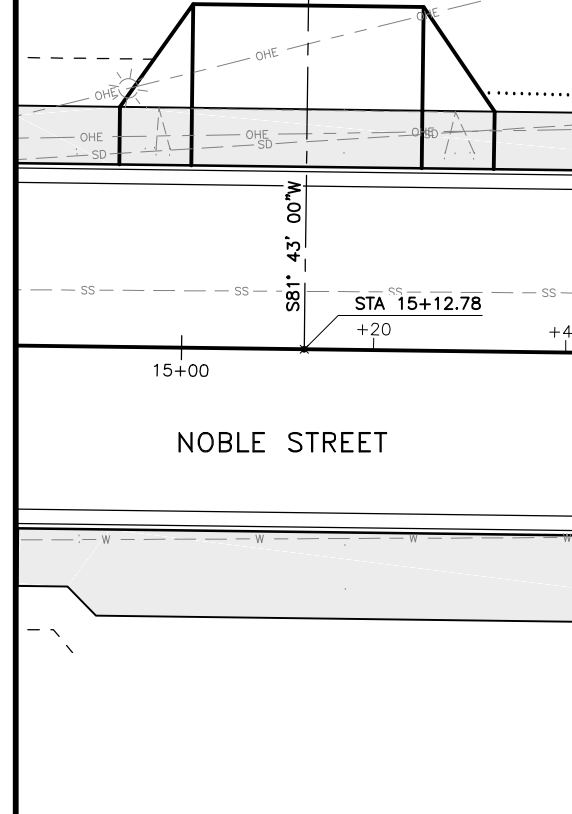


| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | G4 | -- |

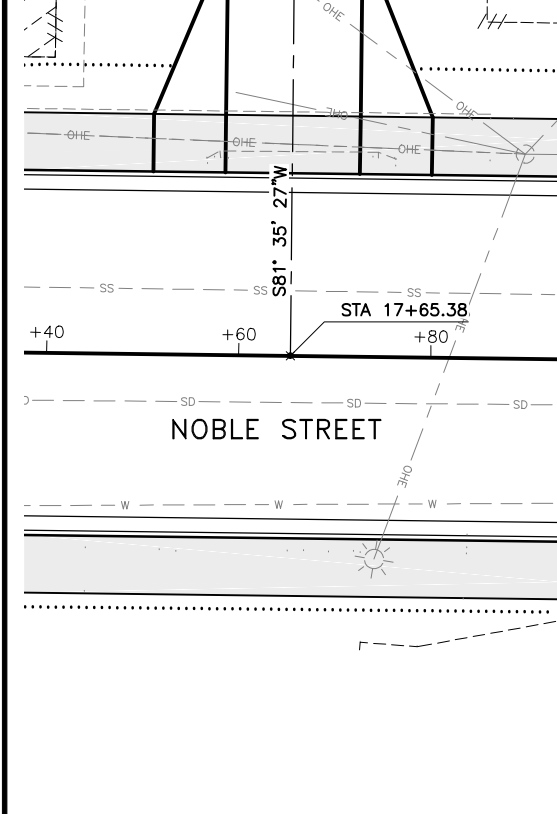
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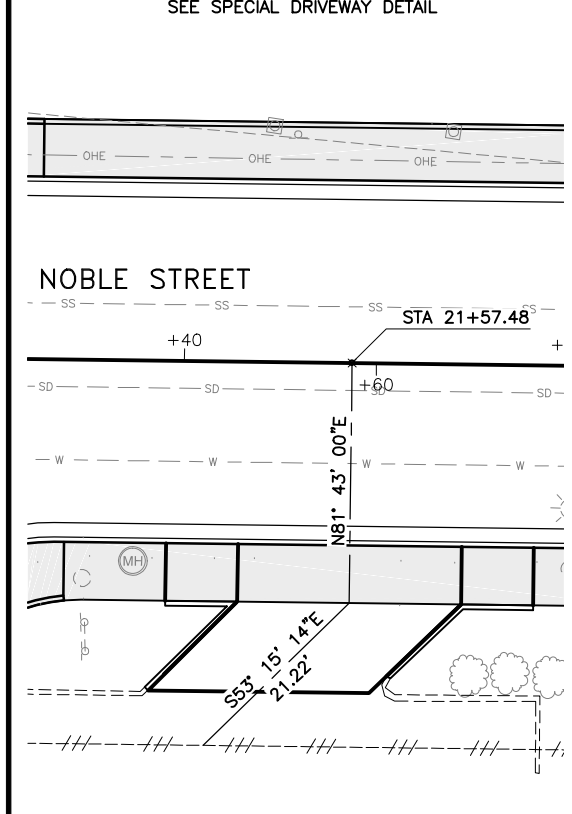
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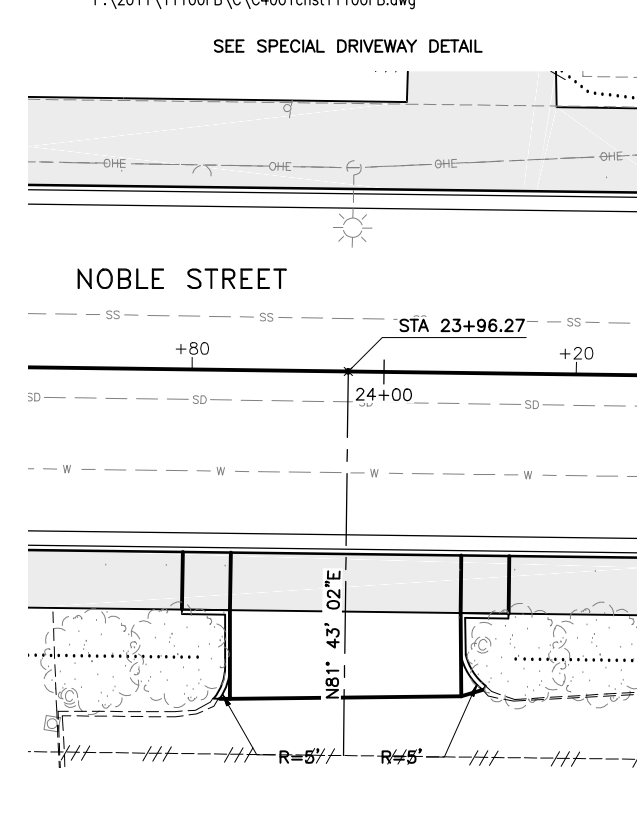
DRWY D 15+12.8



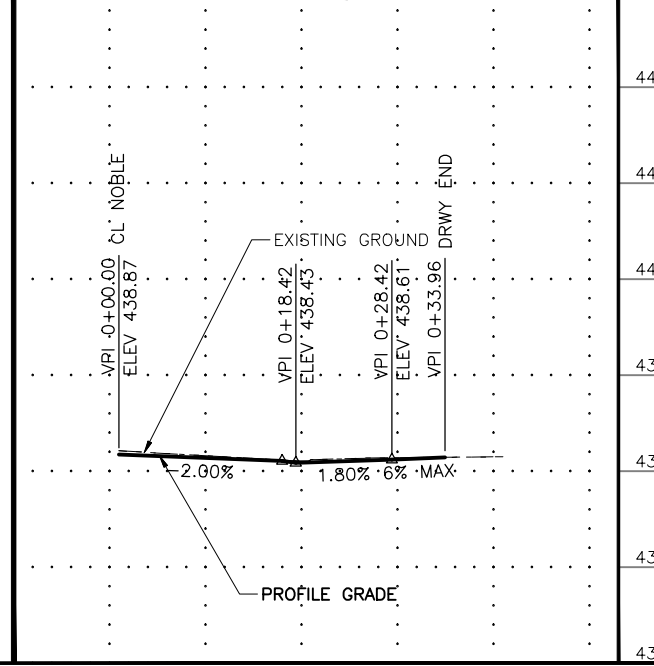
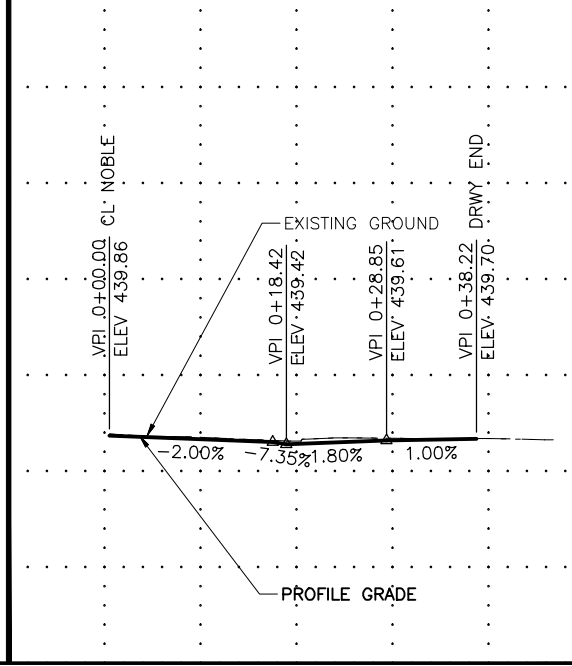
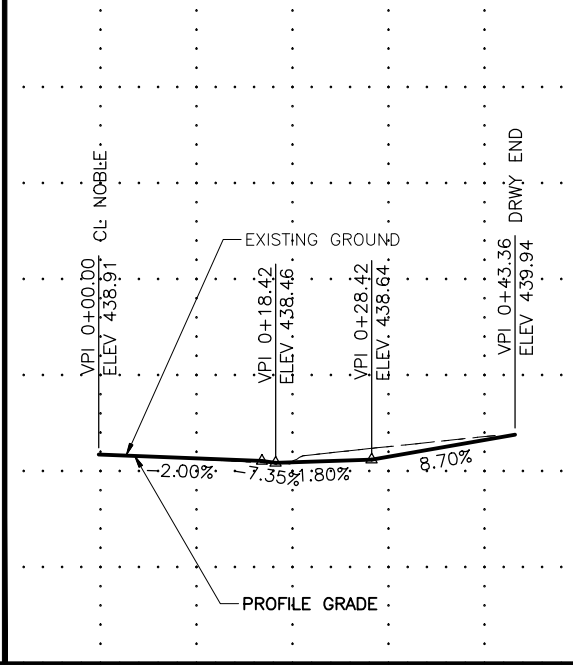
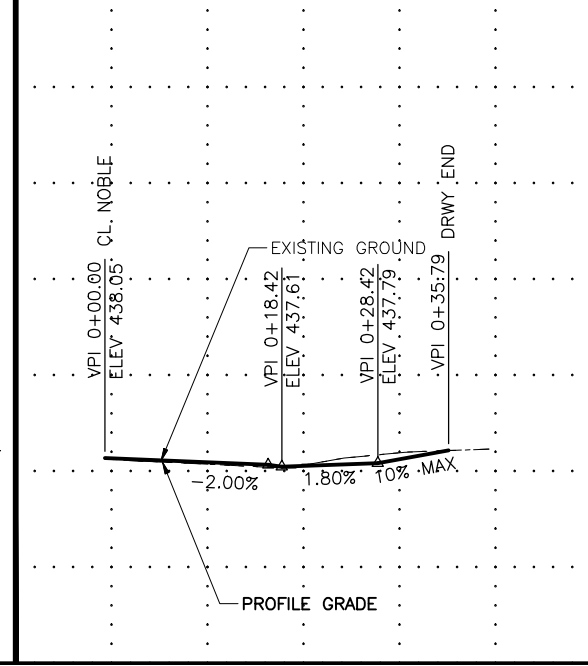
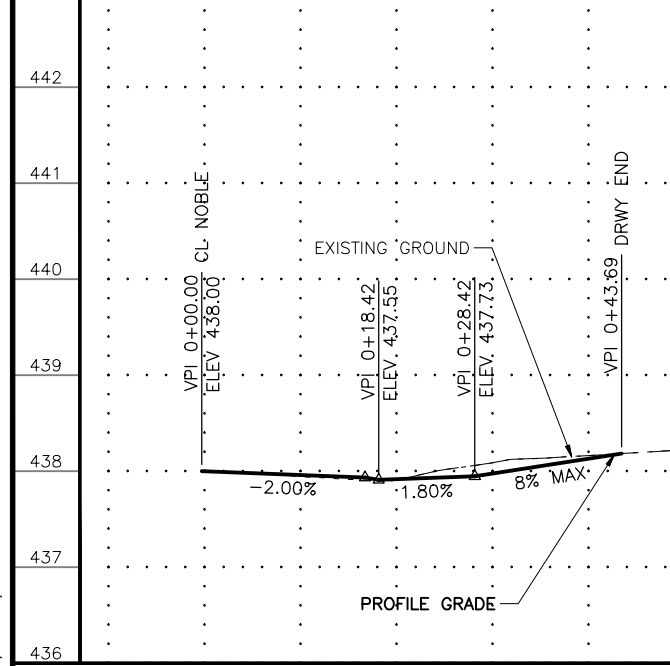
DRWY D 17+65.4



DRWY D 21+57.5



DRWY D 23+96.3

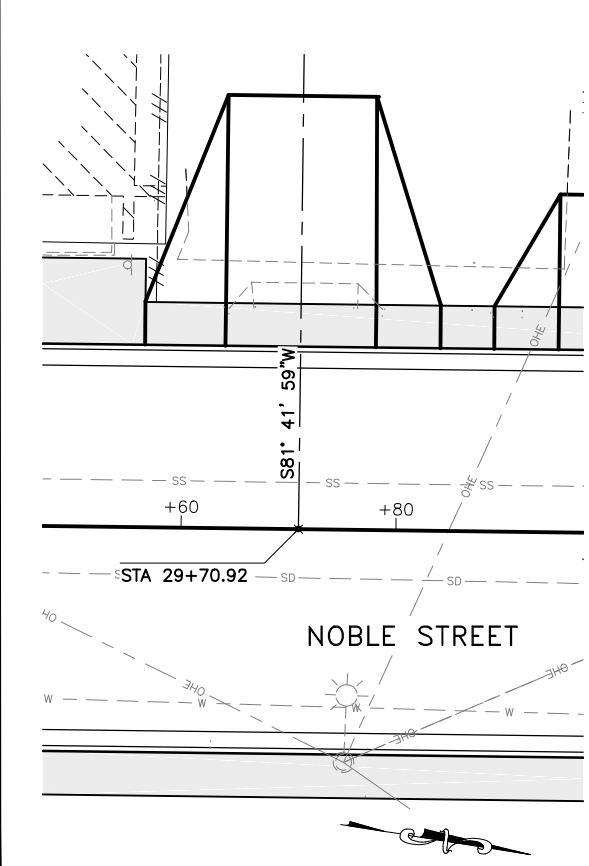
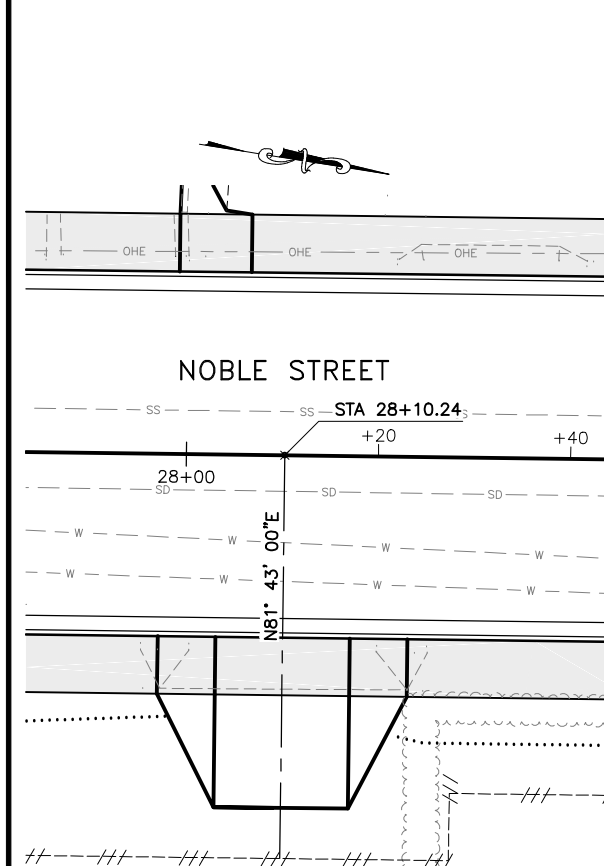
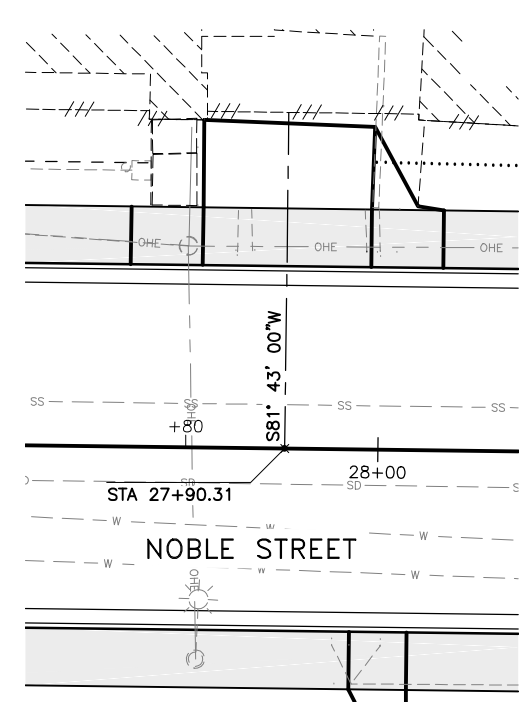
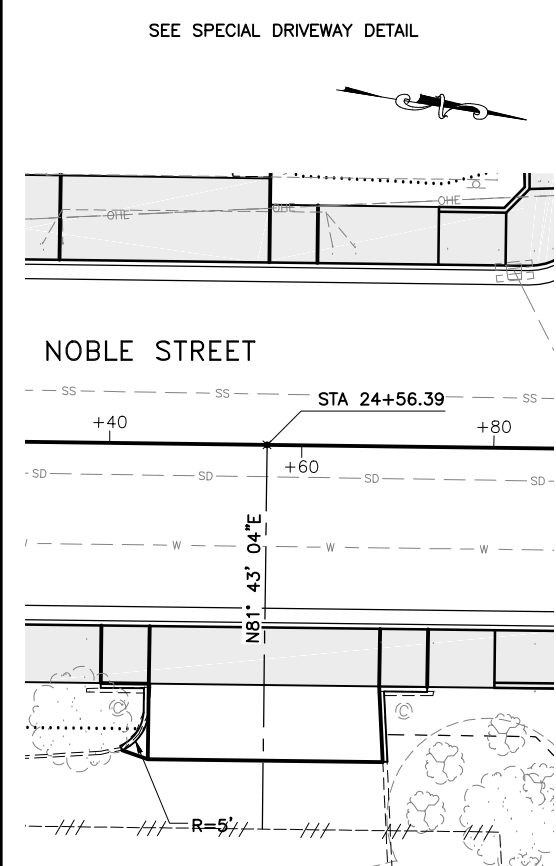
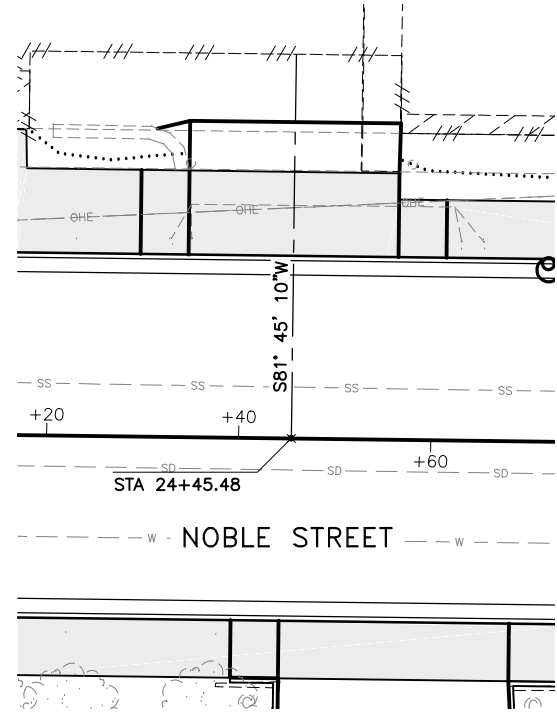


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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | G5 | -- |

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DRWY D 24+45.5

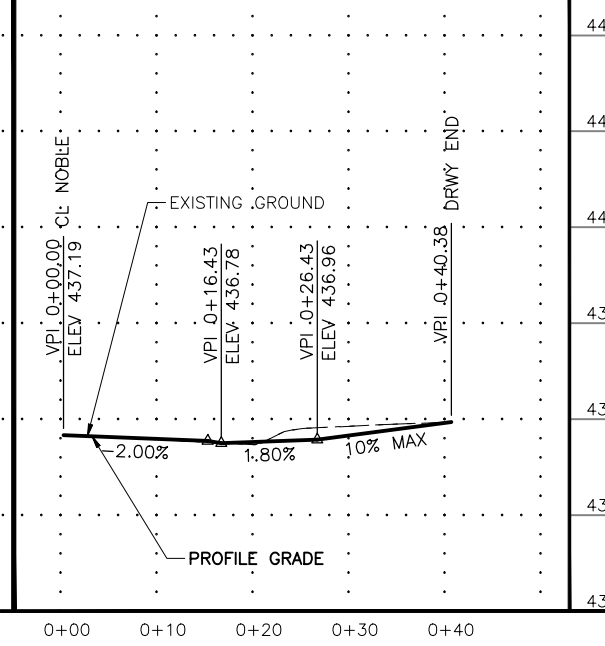
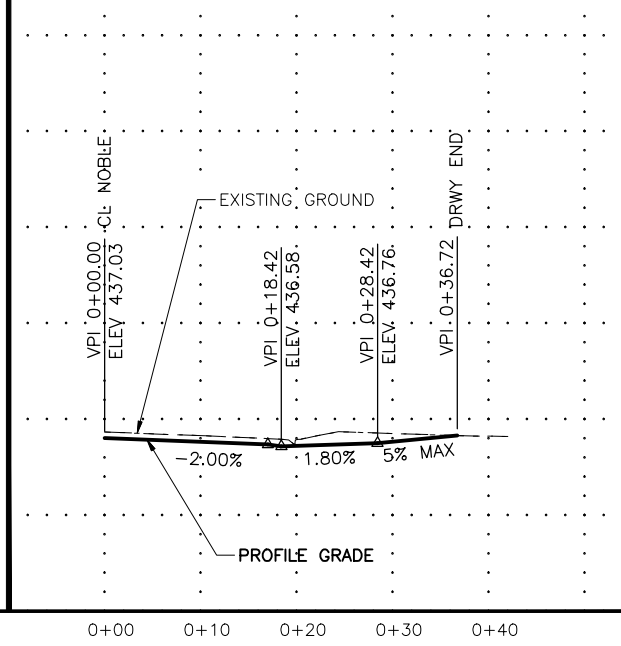
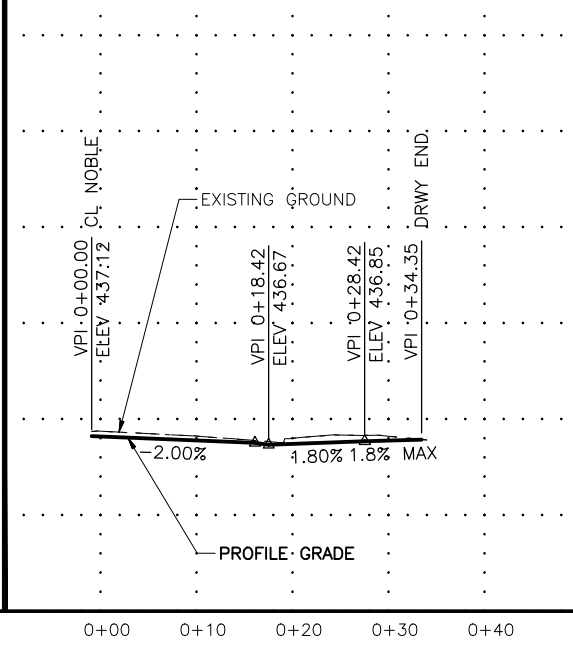
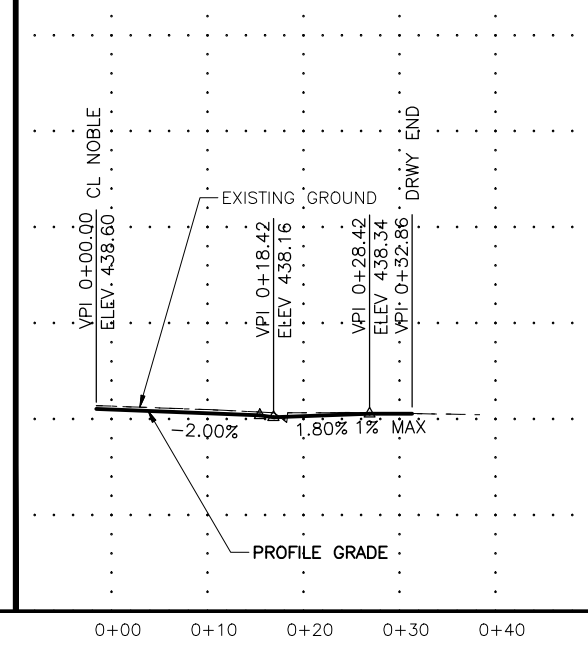
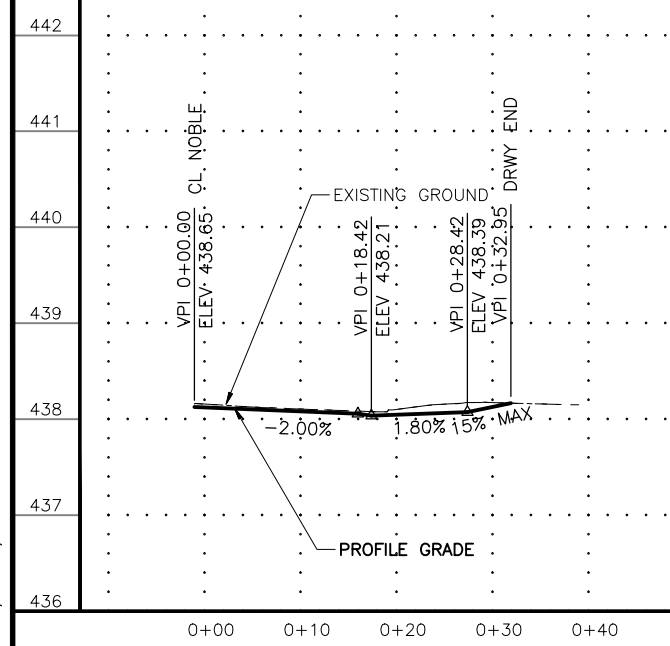
DRWY D 24+56.4

DRWY D 27+90.3

DRWY D 28+10.2

DRWY D 29+70.9

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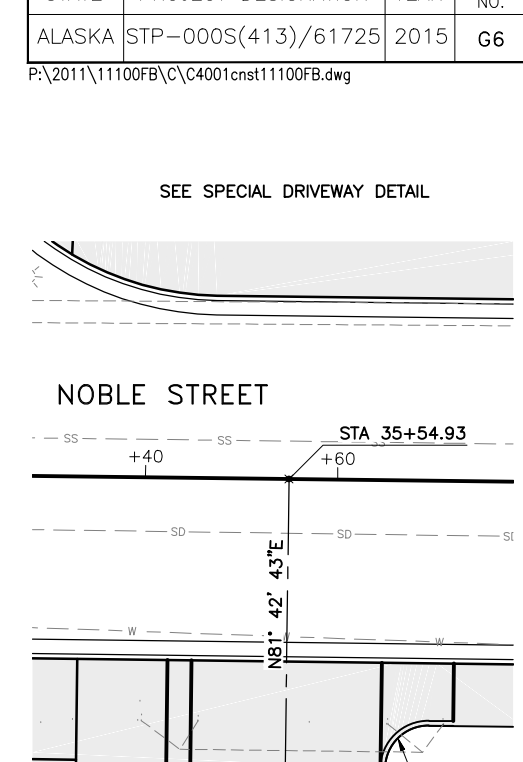
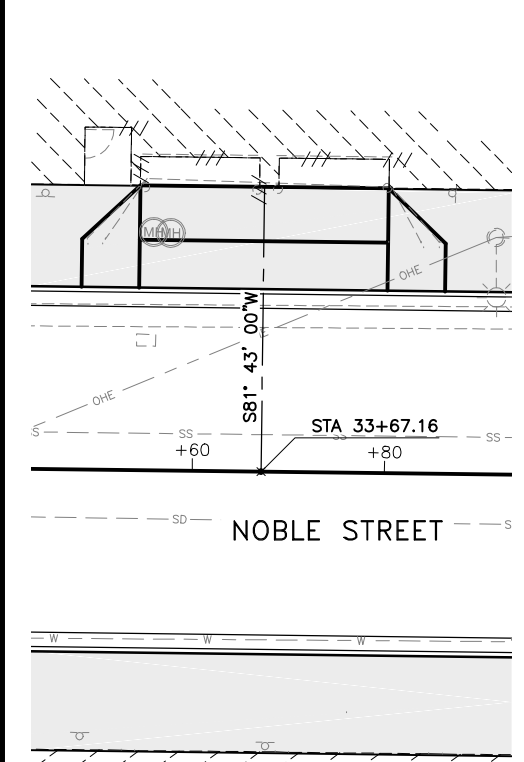
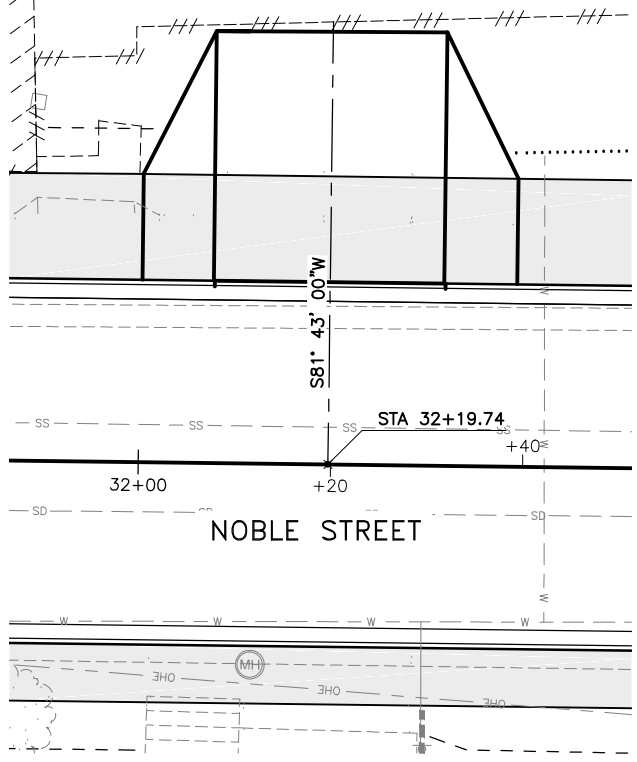
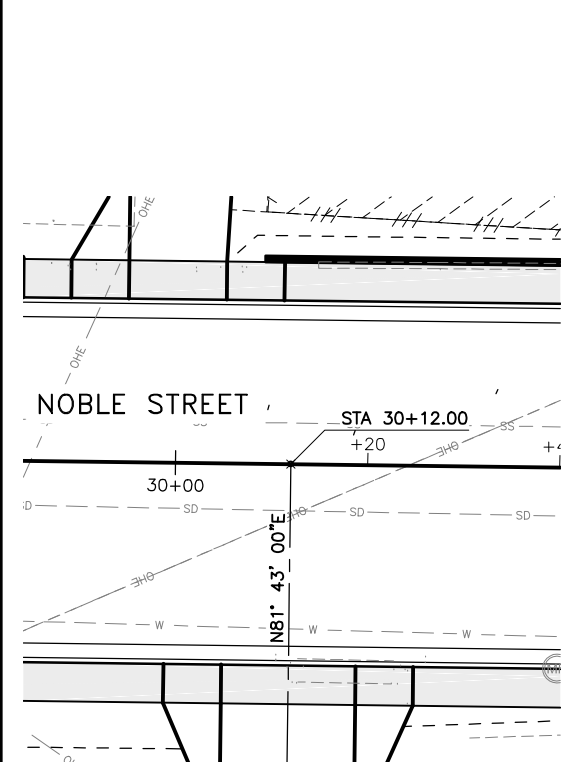
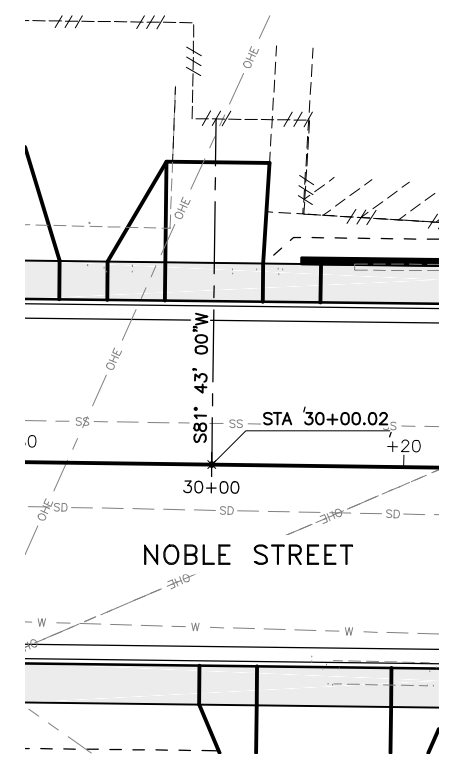


DRIVEWAYS (4 OF 6)



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | G6 | -- |

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DRWY D 30+00.0

DRWY D 30+12.0

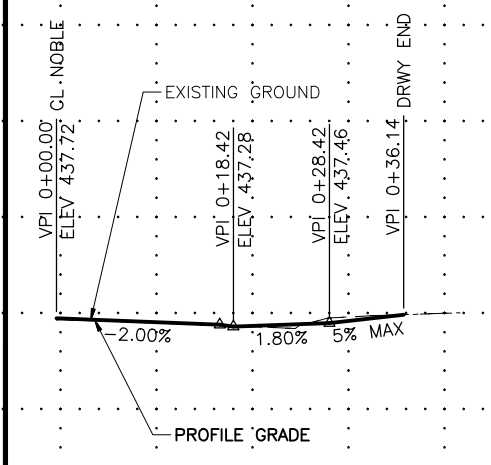
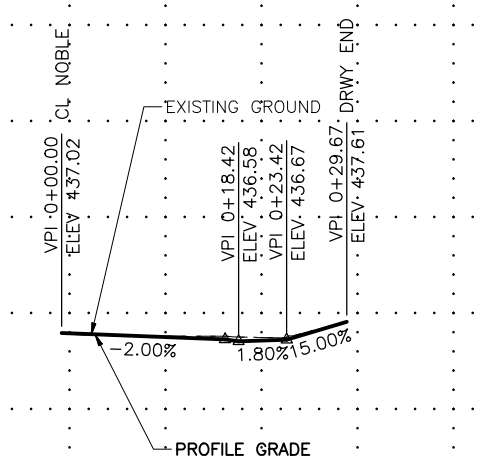
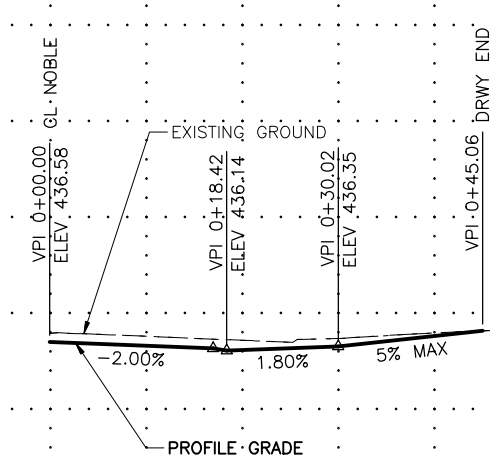
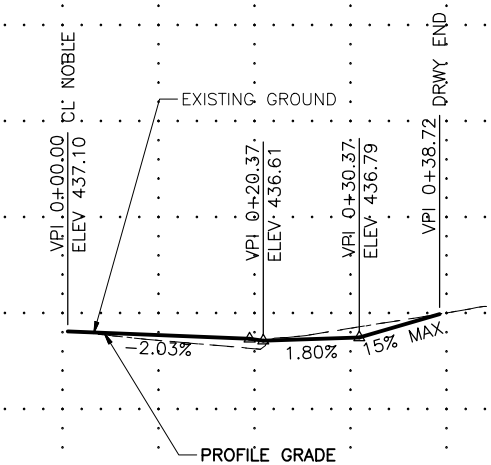
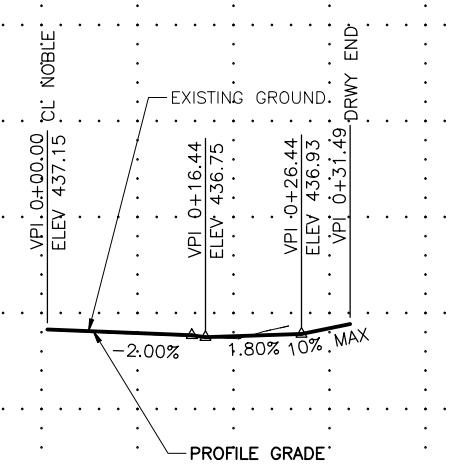
DRWY D 32+19.7

DRWY D 33+67.7

DRWY D 35+54.9

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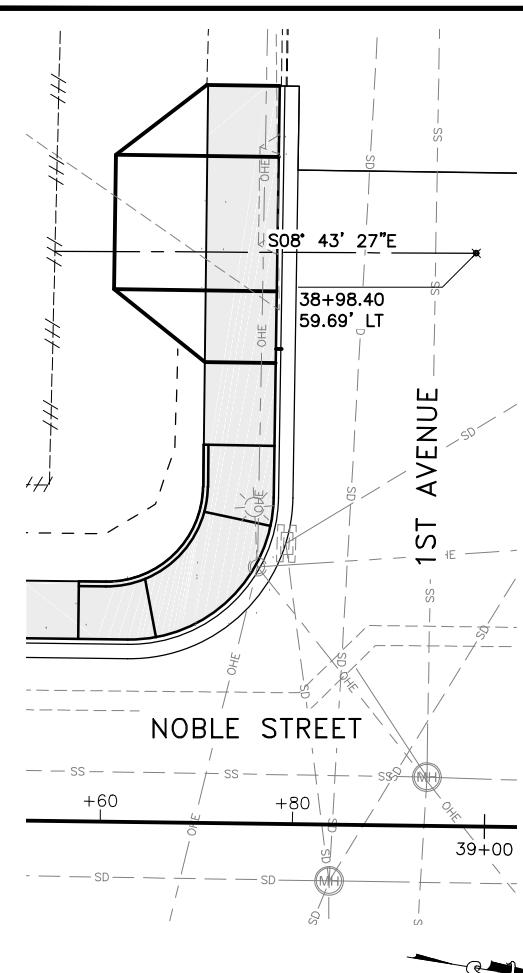
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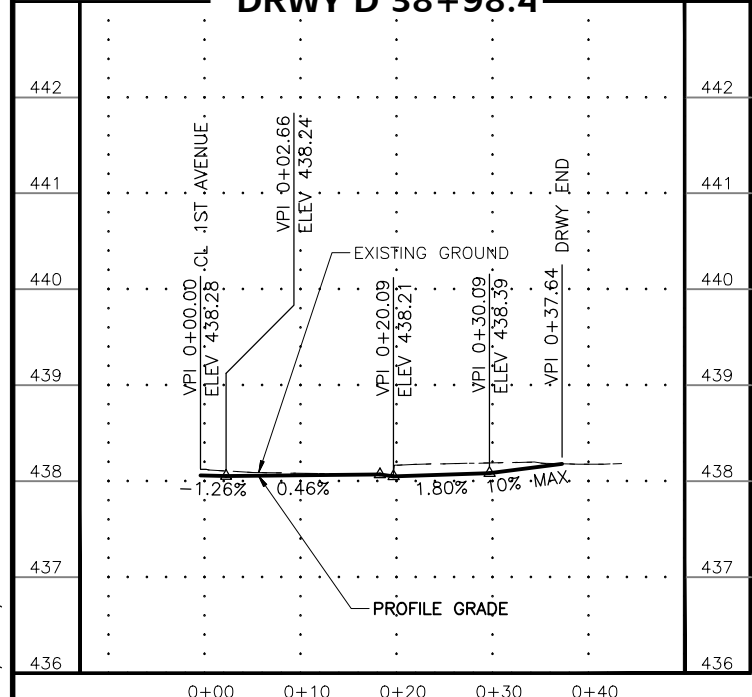
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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | G7 | -- |

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DRWY D 38+98.4



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DRIVEWAYS (6 OF 6)



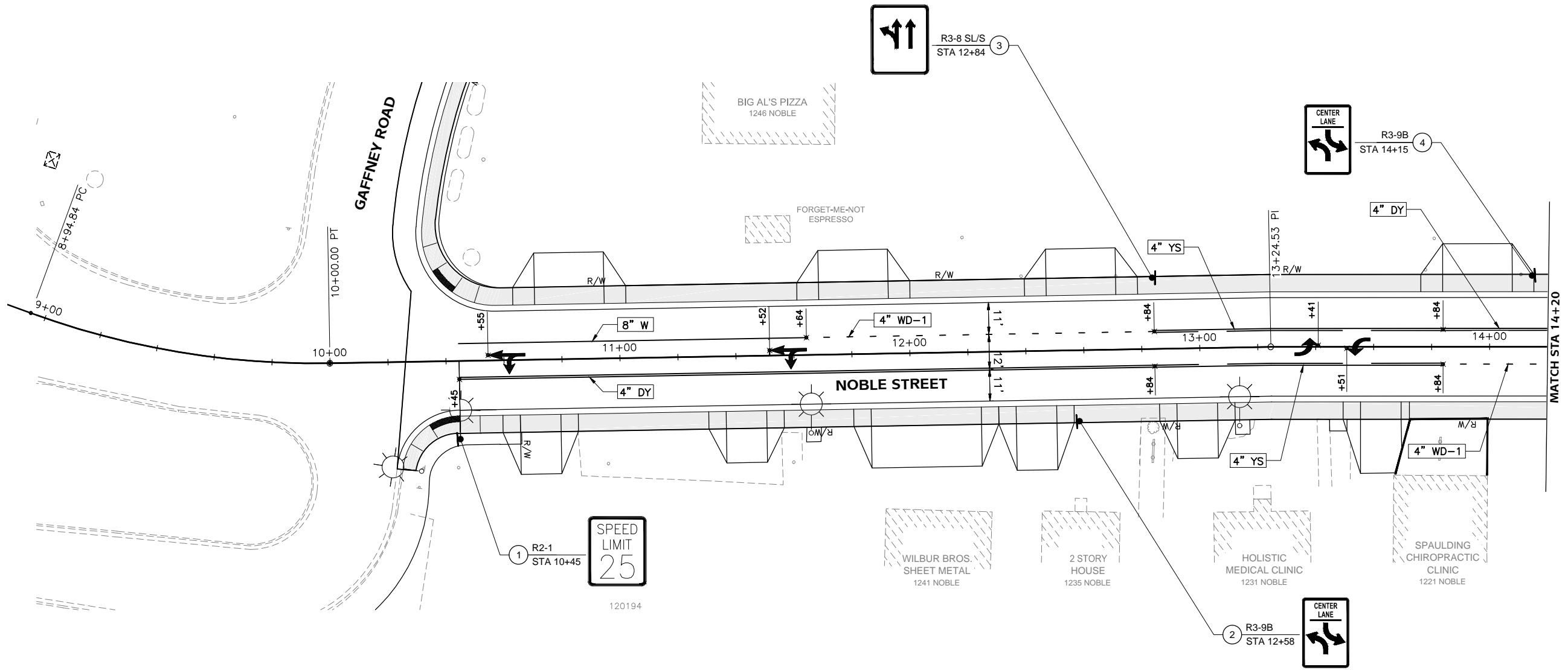
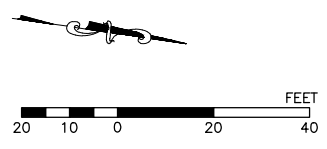
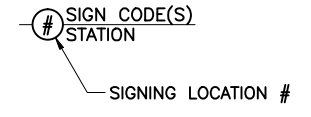
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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | H1 | -- |

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STRIPING NOTES:

1. ALL PROPOSED PAVEMENT MARKINGS SHALL BE INLAID METHYL METHACRYLATE.
2. DIMENSIONS REFER TO THE CENTER OF STRIPE, EDGE OF PAVEMENT OR LIP OF CURB WHEN PRESENT.
3. INSTALL DIRECTIONAL ARROWS IN ACCORDANCE WITH STANDARD DRAWINGS T-21.03 AND T-22.03 OR AS SHOWN ON THESE PLANS.
4. TRANSITION NEW PAVEMENT MARKINGS TO MATCH EXISTING MARKINGS AT A 100:1 TAPER ON THE NEW ASPHALT.
5. FOR CLARITY, UTILITIES ARE NOT SHOWN ON THESE SHEETS.

SIGN SYMBOL KEY:



TRAFFIC MARKING KEY

- | | | | |
|----------------|---|--------------|----------------------|
| 4" W | 4" WHITE LINE | 24" W | 24" WHITE LINE |
| 4" WS | 4" WHITE SKIP LINE (10' STRIPE/30' SKIP PATTERN) | STD | SEE STANDARD DRAWING |
| 4" WD-1 | 4" WHITE DOTTED LINE (2' STRIPE/6' SKIP PATTERN) | SY | SOLID YELLOW |
| 4" YS | 4" YELLOW SKIP LINE (10' STRIPE/30' SKIP PATTERN) | | |
| 4" DY | 4" DOUBLE YELLOW LINE | | |
| 8" W | 8" WHITE LINE | | |

NOTE:
DIMENSIONS ARE TO CENTER OF STRIPE OR STRIPE GROUP.

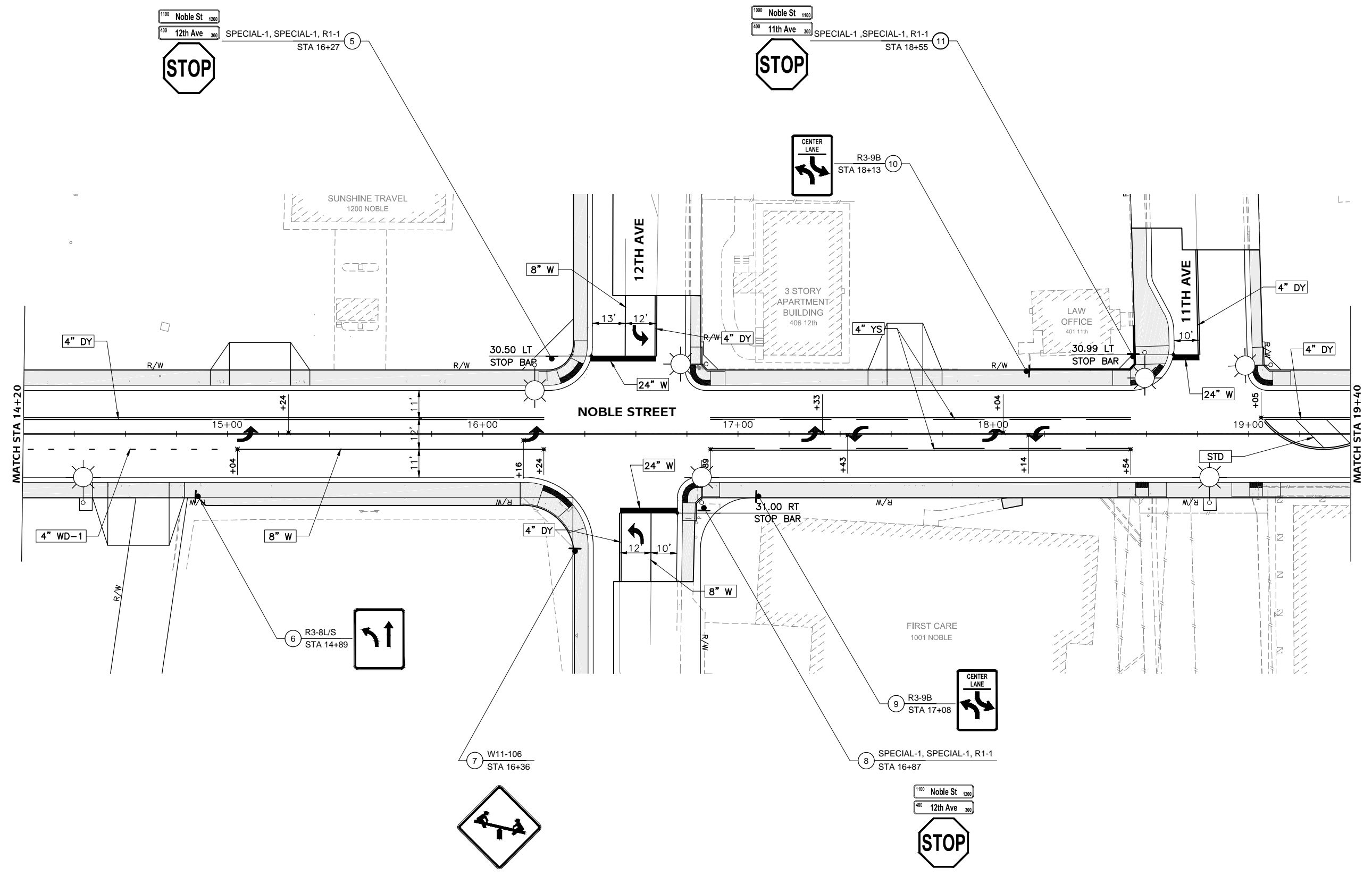
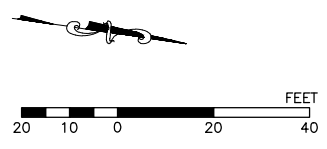
SIGNING & STRIPING
10+58 - 14+20



Friday, December 12, 2014, 12:15 PM

| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H2 | -- |

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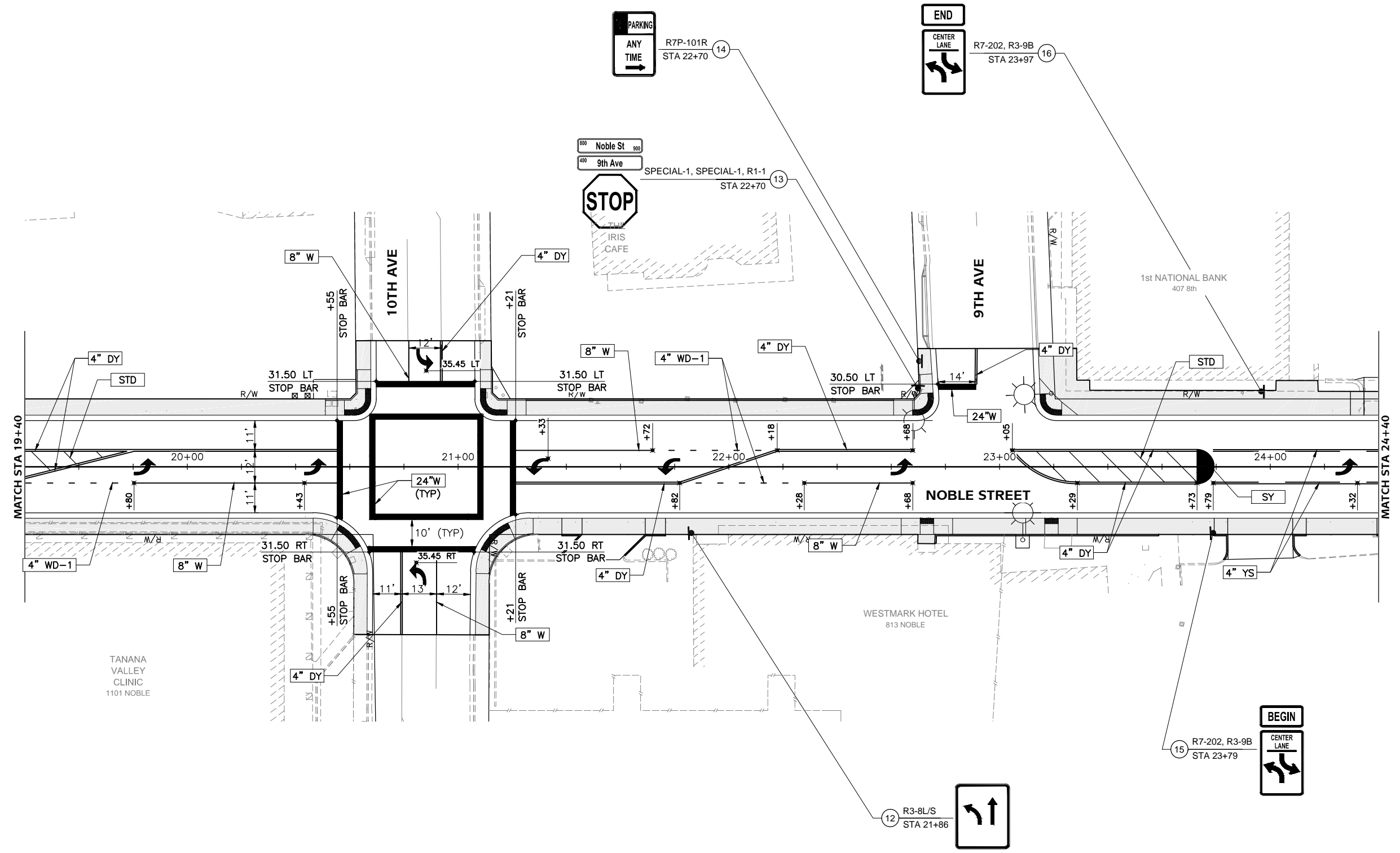
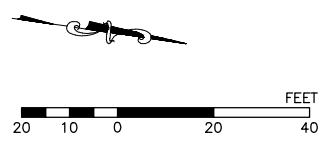
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SIGNING & STRIPING
14+20 - 19+40



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H3 | -- |

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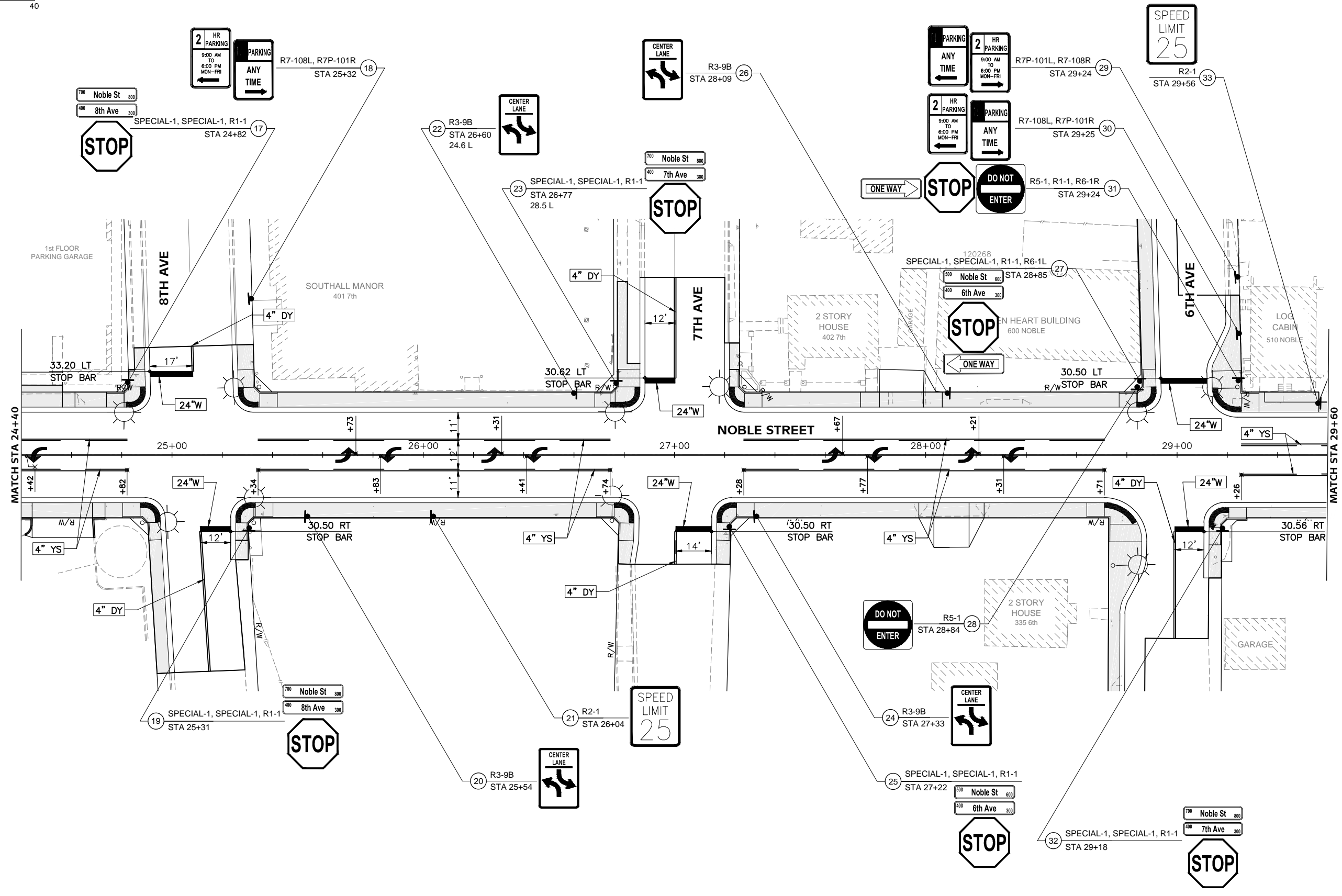
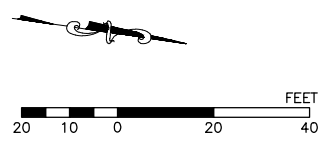
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SIGNING & STRIPING
19+40 - 24+40



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
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| ALASKA | STP-000S(413)/61725 | 2015 | H4 | -- |

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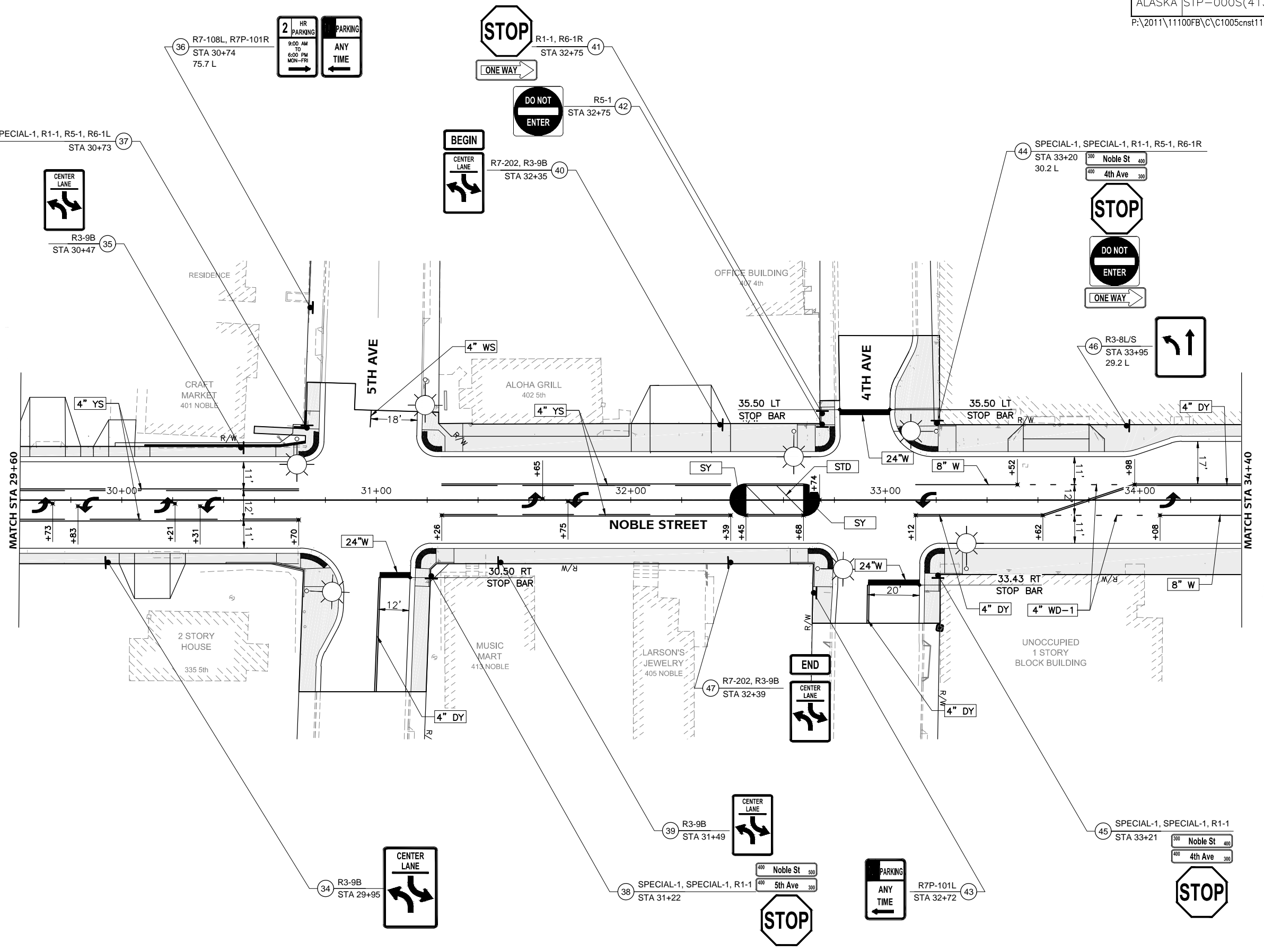
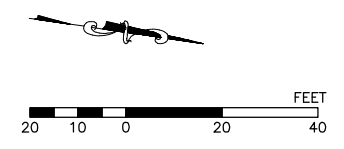
Friday, December 12, 2014, 12:16 PM

SIGNING & STRIPING
24+40 - 29+60



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H5 | -- |

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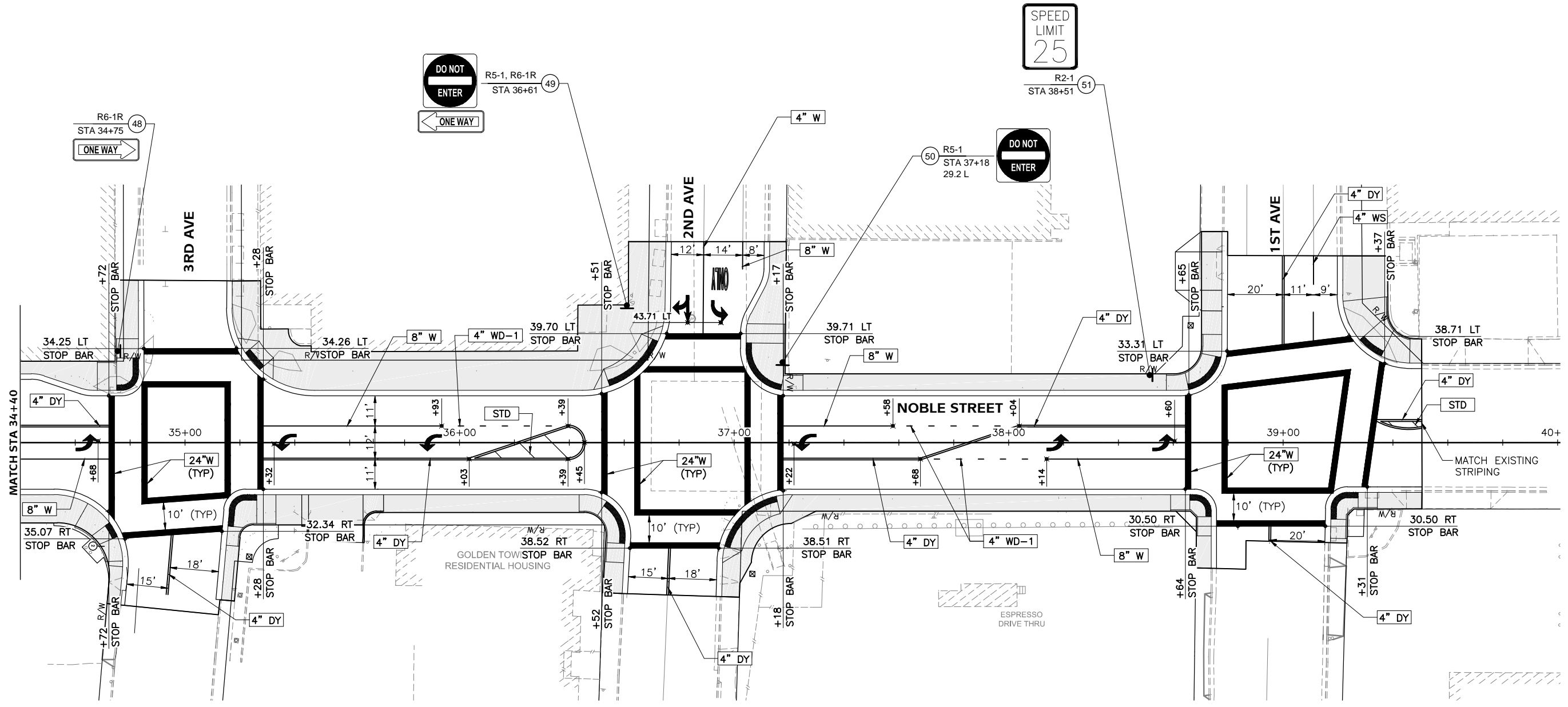
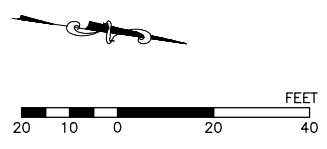
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SIGNING & STRIPING
29+60 - 34+40



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H6 | -- |

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Friday, December 12, 2014, 12:16 PM

SIGNING & STRIPING
34+40 - 38+70



SIGNING SUMMARY

| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | H7 | -- |

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| LOCATION NUMBER | STATION | OFFSET (FT) | LOCATION | | CODE NO. | LEGEND | SIZE HVV (INCHES) | BRACING/FRAMING | | AREA (SQ. FT.) | MOUNTING HEIGHT | DIRECTION | POSTS | | | REMARKS |
|-----------------|---------|-------------|----------|-----|-----------|-----------------------------------|-------------------|-----------------|--------|----------------|-----------------|-----------|-------|-----------|-----|----------------------|
| | | | LT. | RT. | | | | BRACED | FRAMED | | | | TYPE | SIZE (IN) | NO. | |
| 1 | 10+45 | 27.0 | | X | R2-1 | SPEED LIMIT 25 | 24X30 | | | 5 | | S | | | | MOUNT ON LIGHT POLE |
| 2 | 11+58 | 25.6 | | X | R3-9B | CENTER LANE (LT & RT TURN ARROWS) | 24X36 | X | | 6 | | S | PST | 2.5 | 1 | |
| 3 | 12+84 | 27.6 | X | | R3-8SL/S | (LT TURN & STRAIGHT ARROWS) | 30X30 | X | | 6.25 | | N | PST | 2.5 | 1 | |
| 4 | 14+15 | 31.4 | X | | R3-9B | CENTER LANE (LT & RT TURN ARROWS) | 24X36 | X | | 6 | | N | PST | 2.5 | 1 | |
| 5 | 16+27 | 29.4 | X | | SPECIAL 1 | 1200 NOBLE ST 1100 | 42X8 | X | | 2.33 | | E | PST | 2.5 | 1 | MOUNT ABOVE 11TH AVE |
| | | | | | SPECIAL 1 | 1100 NOBLE ST 1200 | 42X8 | X | | 2.33 | | W | | | | |
| | | | | | SPECIAL 1 | 400 12TH AVE 300 | 42X8 | X | | 2.33 | | S | | | | MOUNT ABOVE STOP |
| | | | | | SPECIAL 1 | 300 12TH AVE 400 | 42X8 | X | | 2.33 | | N | | | | |
| | | | | | R1-1 | STOP | 24X24 | X | | 4 | | W | | | | |
| 6 | 14+89 | 27.5 | | X | R3-8L/S | (LT TURN & STRAIGHT ARROWS) | 30X30 | X | | 6.25 | | S | PST | 2.5 | 1 | |
| 7 | 16+36 | 46.0 | | X | W11-106 | CHILDREN PLAYING (IMAGE) | 30X30 | X | | 6.25 | | W | PST | 2.5 | 1 | |
| 8 | 16+87 | 29.0 | | X | SPECIAL 1 | 1200 NOBLE ST 1100 | 42X8 | X | | 2.33 | | E | PST | 2.5 | 1 | MOUNT ABOVE 11TH AVE |
| | | | | | SPECIAL 1 | 1100 NOBLE ST 1200 | 42X8 | X | | 2.33 | | W | | | | |
| | | | | | SPECIAL 1 | 400 12TH AVE 300 | 42X8 | X | | 2.33 | | S | | | | MOUNT ABOVE STOP |
| | | | | | SPECIAL 1 | 300 12TH AVE 400 | 42X8 | X | | 2.33 | | N | | | | |
| | | | | | R1-1 | STOP | 24X24 | X | | 4 | | E | | | | |
| 9 | 17+08 | 23.8 | | X | R3-9B | CENTER LANE (LT & RT TURN ARROWS) | 24X36 | X | | 6 | | S | PST | 2.5 | 1 | |
| 10 | 18+13 | 23.8 | X | | R3-9B | CENTER LANE (LT & RT TURN ARROWS) | 24X36 | X | | 6 | | N | PST | 2.5 | 1 | |
| 11 | 18+55 | 30.3 | X | | SPECIAL 1 | 1100 NOBLE ST 1000 | 42X8 | X | | 2.33 | | E | PST | 2.5 | 1 | MOUNT ABOVE 11TH AVE |
| | | | | | SPECIAL 1 | 1000 NOBLE ST 1100 | 42X8 | X | | 2.33 | | W | | | | |
| | | | | | SPECIAL 1 | 400 11TH AVE | 36X8 | X | | 2 | | S | | | | MOUNT ABOVE STOP |
| | | | | | SPECIAL 1 | 11TH AVE 400 | 36X8 | X | | 2 | | N | | | | |
| | | | | | R1-1 | STOP | 24X24 | X | | 4 | | W | | | | |
| 12 | 21+87 | 23.8 | | X | R3-8L/S | (LT TURN & STRAIGHT ARROWS) | 30X30 | X | | 6.25 | | S | PST | 2.5 | 1 | |
| 13 | 22+70 | 28.9 | X | | SPECIAL 1 | 900 NOBLE ST 800 | 42X8 | X | | 2.33 | | E | PST | 2.5 | 1 | MOUNT ABOVE 9TH AVE |
| | | | | | SPECIAL 1 | 800 NOBLE ST 900 | 42X8 | X | | 2.33 | | W | | | | |
| | | | | | SPECIAL 1 | 400 9TH AVE | 36X8 | X | | 2 | | S | | | | MOUNT ABOVE STOP |
| | | | | | SPECIAL 1 | 9TH AVE 400 | 36X8 | X | | 2 | | N | | | | |
| | | | | | R1-1 | STOP | 24X24 | X | | 4 | | W | | | | |

SIGNING NOTES:

1. REMOVE AND DISPOSE OF ALL EXISTING SIGNS AND FOUNDATIONS WITHIN THE PROJECT LIMITS, EXCEPT THOSE DESIGNATED FOR REINSTALLATION, SALVAGE OR OTHERWISE NOTED.
2. OFFSET DISTANCES LISTED ARE FROM DESIGN CENTERLINE TO SIGN CENTERLINE.
3. INSTALL PST SIGN POSTS WITH SIDEWALK MOUNTING STUB PER DETAIL ON SHEET H10.
4. MOUNTING HEIGHTS ARE PER STANDARD DRAWINGS S-05.01 UNLESS OTHERWISE NOTED.
5. DETERMINE POST LENGTHS IN THE FIELD. DO NOT EXTEND POSTS ABOVE TOP OF SIGN.
6. MOUNT SIGNS THAT PROJECT OVER OR WITHIN 2 FEET OF THE SIDEWALK WITH A MOUNTING HEIGHT OF 8 FEET.
7. INSTALL "TUBE POST SIGN BRACING" AS SHOWN ON STANDARD DRAWING S-01.00 ON ALL SIGNS, EXCEPT D3-1 SERIES AND SPECIAL 1 SIGNS, MOUNTED ON A SINGLE PST POST AND HAVING A HORIZONTAL DIMENSION OF 30 INCHES OR GREATER. INSTEAD OF THE 5/8" GALVANIZED BOLTS AND NYLON LOCKING NUTS SHOWN ON STANDARD DRAWING S-01.00, USE GALVANIZED 3/8" BOLTS, SPLIT LOCK WASHERS AND NUTS. STAINLESS STEEL FASTENER HARDWARE MAY BE USED INSTEAD OF GALVANIZED. 1/4"x1-1/2" ALUMINUM ALLOY 6061-T6 BAR MAY ALSO BE USED TO FABRICATE SIGN BRACES.
8. SIGNS TO BE INSTALLED ON LIGHT POLES MAY REQUIRE TEMPORARY INSTALLATION ON 2-1/2" PST UNTIL THE LIGHT POLES ARE IN PLACE. THIS WORK IS SUBSIDIARY TO PAY ITEM 615(1).
9. SEE SIGNALIZATION PLANS (H30-H45) FOR LOCATION OF MAST ARM MOUNTED SIGNS.
10. STOP (R1-1) SIGN LOCATIONS, ESPECIALLY THOSE AT LARGE RADIUS INTERSECTIONS, MAY NEED ADJUSTMENT IN THE FIELD. THE ENGINEER WILL APPROVE FINAL LOCATIONS.
11. INSTALL D3-1, AND SPECIAL 1 SIGNS ABOVE THEIR RESPECTIVE STOP SIGNS. WHEN TWO D3-1 SERIES OR SPECIAL 1 SIGNS ARE TO BE LOCATED ON THE SAME POST, INSTALL THE CROSS-STREET PANEL IN THE LOWER POSITION.
12. D3-1 SERIES AND SPECIAL 1 SIGNS REQUIRE TWO SEPARATE SINGLE SIDED PANELS. END-BRACE PANELS PER SMALL STREET NAME SIGN BRACING DETAILS IN STANDARD DRAWING S-01.00.
13. MAINTAIN EXISTING SIGNS UNTIL NEW SIGNS ARE INSTALLED. DO NOT LEAVE DUPLICATE OR CONFLICTING SIGNING UP AT ANY TIME.
14. USE SERIES C LETTERS, SERIES 2000 FOR D3-1 SERIES AND SPECIAL 1 SIGNS UNLESS OTHERWISE NOTED. USE UPPER AND LOWER CASE LETTERS. THIS MODIFIES THE ASDS TO BE IN CONFORMANCE WITH THE 2009 MUTCD.
15. USE A 3" HORIZONTAL SPACING BETWEEN WORDS, BETWEEN CARDINAL DIRECTIONS AND WORDS, AND BETWEEN WORDS AND NUMBERS ON D3-1 AND SPECIAL 1 SIGNS UNLESS OTHERWISE NOTED.
16. ALL LETTERING THAT INCLUDES UPPER AND LOWER CASE LETTERS SHALL BE SERIES E- MODIFIED OR AS NOTED IN APPENDIX C OF THE ASDS EXCEPT FOR D3-1 SERIES AND SPECIAL 1 SIGNS WHICH ARE SERIES 2000 LETTERS.
17. LOCATE AND PROTECT ALL NEW AND EXISTING UNDERGROUND UTILITIES, INCLUDING BUT NOT LIMITED TO: PIPELINES, INTERCONNECT CABLES, SIGNAL SYSTEMS, LIGHTING SYSTEMS, STORM AND SANITARY SEWERS, WATER SYSTEMS, AND TELEPHONE AND ELECTRICAL CABLES, PRIOR TO INSTALLING SIGN POSTS. NOT ALL EXISTING UTILITIES MAY BE SHOWN ON THE PLANS.
18. INSTALL WEATHER TIGHT CAPS ON ALL TUBE POSTS, EXCEPT PERFORATED STEEL TUBE.
19. ATTACH ALL SIGNS TO THEIR SUPPORTS WITH 3/8" BOLTS, EXCEPT ATTACH UNFRAMED SIGNS TO PST POSTS WITH ALUMINUM DRIVE RIVETS. WIND WASHERS ARE NOT REQUIRED WITH DRIVE RIVETS. INCLUDE SPLIT LOCK WASHERS WHEN BOLTS ARE USED.
20. ALL SIGNS NOTED FOR REMOVAL AND REINSTALLATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE IF THEY ARE DAMAGED DURING THE RELOCATION EFFORT.
21. ALL FASTENER HARDWARE SHALL MEET THE REQUIREMENTS OF THE FASTENER SPECIFICATION TABLE ON SHEET H10.

POST TYPE CODING:
PST = PERFORATED STEEL TUBING
TS = SQUARE STRUCTURAL STEEL TUBING

SIGN SUMMARY (1 OF 3)
& NOTES



Friday, December 12, 2014, 12:16 PM

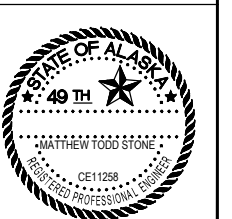
SIGNING SUMMARY

| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | H8 | -- |

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| LOCATION NUMBER | STATION | OFFSET (FT) | LOCATION | | CODE NO. | LEGEND | SIZE HVV (INCHES) | BRACING/FRAMING | | AREA (SQ. FT.) | MOUNTING HEIGHT | DIRECTION | POSTS | | | REMARKS | LOCATION NUMBER | STATION | OFFSET (FT) | LOCATION | | CODE NO. | LEGEND | SIZE HVV (INCHES) | BRACING/FRAMING | | AREA (SQ. FT.) | MOUNTING HEIGHT | DIRECTION | POSTS | | | REMARKS | | | | | | | | | | | | | |
|-----------------|---------|-------------|----------|-----|-----------|-------------------------------------|-------------------|-----------------|-----------|----------------|-----------------|-----------|-------|-----|-----|---------|-----------------|---------|-------------|----------|-----------|--|-----------------------------------|--|-----------------|-----------|----------------|-----------------|-----------|-------|-----|-----|-----------------|--|---------------------|--------------------|--|------------------|--|--|--|--|--|--|--|--|
| | | | LT. | RT. | | | | TYPE | SIZE (IN) | | | | NO. | LT. | RT. | | | | | BRACED | FRAMED | | | | TYPE | SIZE (IN) | | | | NO. | | | | | | | | | | | | | | | | |
| 14 | 22+71 | 39.0 | X | | R7P-101 R | NO PARKING ANY TIME (ARROW RT) | 12X18 | X | | 1.5 | | N | PST | 2.5 | 1 | | 26 | 28+09 | 26.5 | X | | R3-9B | CENTER LANE (LT & RT TURN ARROWS) | 24X36 | | | 6 | | N | PST | 2.5 | 1 | | | | | | | | | | | | | | |
| 15 | 23+09 | 27.0 | | X | R7-202 | BEGIN | 24X12 | | | 2 | | S | | | | 27 | 28+85 | 29.4 | X | | SPECIAL 1 | 600 NOBLE ST 500 | 42X8 | X | | 2.33 | | E | | | | | MOUNT ABOVE 6TH | | | | | | | | | | | | | |
| | | | | | R3-9B | CENTER LANE (LT & RT TURN ARROWS) | 24X36 | | | 6 | | S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | 23+97 | 29.1 | X | | R7-202 | END | 24X12 | | | 2 | | N | | | | 28 | 28+84 | 26.1 | X | | R5-1 | DO NOT ENTER | 30X30 | | | 6.25 | | E | | | | | | | MOUNT ON LIGHT POLE | | | | | | | | | | | |
| | | | | | R3-9B | CENTER LANE (LT & RT TURN ARROWS) | 24X36 | | | 6 | | N | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | 24+83 | 29.1 | X | | SPECIAL 1 | 800 NOBLE ST 700 | 42X8 | X | | 2.33 | | E | | | | 29 | 29+24 | 70.8 | X | | R7P-101L | NO PARKING ANY TIME (ARROW LT) | 12X18 | X | | 1.5 | | S | | | | | | | MOUNT SIDE BY SIDE | | | | | | | | | | | |
| | | | | | SPECIAL 1 | 700 NOBLE ST 800 | 42X8 | X | | 2.33 | | W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | SPECIAL 1 | 400 8TH AVE 300 | 42X8 | X | | 2.33 | | S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | SPECIAL 1 | 300 8TH AVE 400 | 42X8 | X | | 2.33 | | N | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | R1-1 | STOP | 24X24 | X | | 4 | | W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | 25+33 | 62.2 | X | | R7-108L | 2 HR PARKING 9 AM TO 6PM (ARROW LT) | 24X18 | X | | 3 | | S | | | | 30 | 29+25 | 48.3 | X | | R7-108L | 2 HR PARKING 9 00 AM TO 6 00 PM (ARROW LT) | 12X18 | X | | 1.5 | | S | | | | | | | | MOUNT SIDE BY SIDE | | | | | | | | | | |
| | | | | | R7P-101 R | NO PARKING ANY TIME (ARROW RT) | 24X18 | X | | 3 | | S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | 25+31 | 29.1 | X | | SPECIAL 1 | 800 NOBLE ST 700 | 42X8 | X | | 2.33 | | E | | | | 31 | 29+24 | 29.5 | X | | R5-1 | DO NOT ENTER | 30X30 | X | | 6.25 | | E | | | | | | | | MOUNT BEHIND STOP | | | | | | | | | | |
| | | | | | SPECIAL 1 | 700 NOBLE ST 800 | 42X8 | X | | 2.33 | | W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | SPECIAL 1 | 400 8TH AVE 300 | 42X8 | X | | 2.33 | | S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | SPECIAL 1 | 300 8TH AVE 400 | 42X8 | X | | 2.33 | | N | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | R1-1 | STOP | 24X24 | X | | 4 | | E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 25+54 | 23.8 | | X | R3-9B | CENTER LANE (LT & RT TURN ARROWS) | 24X36 | X | | 6 | | S | PST | 2.5 | 1 | | 32 | 29+18 | 29.7 | | X | | SPECIAL 1 | 600 NOBLE ST 500 | 42X8 | X | | 2.33 | | E | | | | | | MOUNT ABOVE 6TH | | | | | | | | | | |
| 21 | 26+04 | 25.8 | | X | R2-1 | SPEED LIMIT 25 | 24X30 | | | 5 | | S | PST | 2.5 | 1 | | 33 | 29+55 | 23.8 | X | | | R2-1 | SPEED LIMIT 25 | 24X30 | X | | 5 | | N | PST | 2.5 | 1 | | | | | | | | | | | | | |
| 22 | 26+60 | 23.8 | | X | R3-9B | CENTER LANE (LT & RT TURN ARROWS) | 24X36 | X | | 6 | | N | PST | 2.5 | 1 | | 34 | 29+95 | 25.9 | | X | | R3-9B | CENTER LANE (LT & RT TURN ARROWS) | 24X36 | X | | 6 | | S | PST | 2.5 | 1 | | | | | | | | | | | | | |
| 23 | 26+77 | 28.5 | X | | SPECIAL 1 | 700 NOBLE ST 600 | 42X8 | X | | 2.33 | | E | | | | 35 | 30+47 | 20.7 | X | | R3-9B | CENTER LANE (LT & RT TURN ARROWS) | 24X36 | | | 6 | | N | PST | 2.5 | 1 | | | | | | | MOUNT ABOVE STOP | | | | | | | | |
| | | | | | SPECIAL 1 | 600 NOBLE ST 700 | 42X8 | X | | 2.33 | | W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | SPECIAL 1 | 400 7TH AVE 300 | 42X8 | X | | 2.33 | | S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | SPECIAL 1 | 300 7TH AVE 400 | 42X8 | X | | 2.33 | | N | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | R1-1 | STOP | 24X24 | X | | 4 | | W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | 27+25 | 24.0 | | X | R3-9B | CENTER LANE (LT & RT TURN ARROWS) | 24X36 | X | | 6 | | S | PST | 2.5 | 1 | | 36 | 30+74 | 75.7 | | X | | R7-108L | 2 HR PARKING 9:00 AM TO 6:00 PM (ARROW RT) | 12X18 | X | | 1.5 | | N | | | | | | MOUNT SIDE BY SIDE | | | | | | | | | | |
| 25 | 27+22 | 28.6 | X | | SPECIAL 1 | 700 NOBLE ST 600 | 42X8 | X | | 2.33 | | E | | | | 36 | 30+74 | 75.7 | X | | R7P-101 R | NO PARKING ANY TIME (ARROW LT) | 12X18 | X | | 1.5 | | N | | | | | | | | | | | | | | | | | | |
| | | | | | SPECIAL 1 | 600 NOBLE ST 700 | 42X8 | X | | 2.33 | | W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | SPECIAL 1 | 400 7TH AVE 300 | 42X8 | X | | 2.33 | | S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | SPECIAL 1 | 300 7TH AVE 400 | 42X8 | X | | 2.33 | | N | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | R1-1 | STOP | 24X24 | X | | 4 | | E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

POST TYPE CODING:
PST = PERFORATED STEEL TUBING
TS = SQUARE STRUCTURAL STEEL TUBING



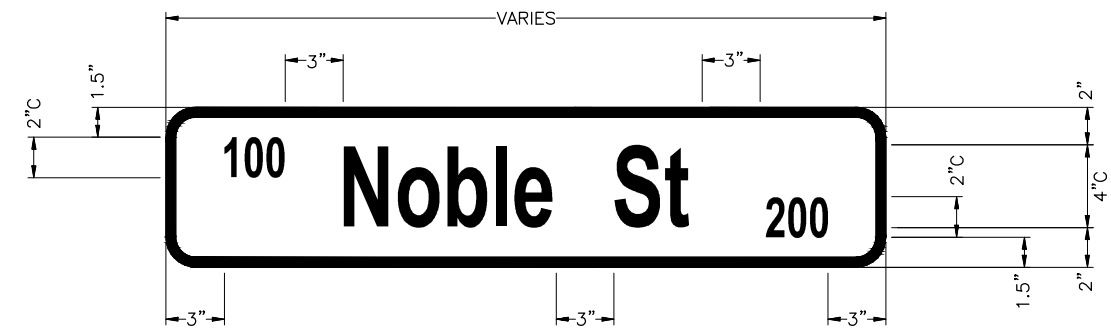
SIGNING SUMMARY

| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | H9 | -- |

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| LOCATION NUMBER | STATION | OFFSET (FT) | LOCATION | | CODE NO. | LEGEND | SIZE HVV (INCHES) | BRACING/FRAMING | | AREA (SQ. FT.) | MOUNTING HEIGHT | DIRECTION | POSTS | | | REMARKS | |
|-----------------|---------|-------------|----------|-----|-----------|-----------------------------------|-------------------|-----------------|--------|----------------|-----------------|-----------|-------|-----------|-----------------------|---------------------|--|
| | | | LT. | RT. | | | | BRACED | FRAMED | | | | TYPE | SIZE (IN) | NO. | | |
| 37 | 30+72 | 27.0 | X | | SPECIAL 1 | 500 NOBLE ST 400 | 42X8 | X | | 2.33 | | E | PST | 2.5 | 1 | MOUNT ABOVE 5TH AVE | |
| | | | | | SPECIAL 1 | 400 NOBLE ST 500 | 42X8 | X | | 2.33 | | W | | | | | |
| | | | | | SPECIAL 1 | 400 5TH AVE 300 | 42X8 | X | | 2.33 | | S | | | | | |
| | | | | | SPECIAL 1 | 300 5TH AVE 400 | 42X8 | X | | 2.33 | | N | | | | | |
| | | | | | R6-1L | ONE WAY (ARROW LT) | 36X12 | X | | 3 | | N | | | | | |
| | | | | | R1-1 | STOP | 24X24 | X | | 4 | | W | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 38 | 31+21 | 29.8 | X | | SPECIAL 1 | 500 NOBLE ST 400 | 42X8 | X | | 2.33 | | E | PST | 2.5 | 1 | MOUNT ABOVE 5TH AVE | |
| | | | | | SPECIAL 1 | 400 NOBLE ST 500 | 42X8 | X | | 2.33 | | W | | | | | |
| | | | | | SPECIAL 1 | 400 5TH AVE 300 | 42X8 | X | | 2.33 | | S | | | | | |
| | | | | | SPECIAL 1 | 300 5TH AVE 400 | 42X8 | X | | 2.33 | | N | | | | | |
| | | | | | R1-1 | STOP | 24X24 | X | | 4 | | E | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 39 | 31+49 | 23.8 | | X | R3-9B | CENTER LANE (LT & RT TURN ARROWS) | 24X36 | X | | 6 | | S | PST | 2.5 | 1 | | |
| 40 | 32+35 | 28.8 | X | | R7-202 | BEGIN | 24X12 | | | 2 | | N | PST | 2.5 | 1 | | |
| | | | | | R3-9B | CENTER LANE (LT & RT TURN ARROWS) | 24X36 | | | 6 | | N | | | | | |
| 41 | 32+76 | 34.0 | X | | R1-1 | STOP | 24X24 | X | | 4 | | W | PST | 2.5 | 1 | MOUNT ABOVE STOP | |
| | | | | | R6-1R | ONE WAY (ARROW RT) | 36x12 | X | | 3 | | S | | | | | |
| 42 | 32+72 | 29.8 | X | | R5-1 | DO NOT ENTER | 30X30 | | | 6.25 | | E | PST | 2.5 | 1 | | |
| 43 | 32+72 | 36.5 | | X | R7P-101L | NO PARKING ANY TIME (ARROW LT) | 12X18 | X | | 1.5 | | N | PST | 2.5 | 1 | | |
| 44 | 33+20 | 30.2 | X | | SPECIAL 1 | 400 NOBLE ST 300 | 42X8 | X | | 2.33 | | E | PST | 2.5 | 1 | MOUNT ABOVE 4TH AVE | |
| | | | | | SPECIAL 1 | 300 NOBLE ST 400 | 42X8 | X | | 2.33 | | W | | | | | |
| | | | | | SPECIAL 1 | 400 4TH AVE 300 | 42X8 | X | | 2.33 | | S | | | | | |
| | | | | | SPECIAL 1 | 300 4TH AVE 400 | 42X8 | X | | 2.33 | | N | | | | | |
| | | | | | R1-1 | STOP | 30X30 | X | | 6.25 | | W | | | | | |
| | | | | | R5-1 | DO NOT ENTER | 30X30 | X | | 6.25 | | E | | | | | |
| | | | | | R6-1R | ONE WAY (ARROW RT) | 36x12 | X | | 3 | | N | | | MOUNT ABOVE STOP SIGN | | |
| 45 | 33+20 | 29.6 | X | | SPECIAL 1 | 400 NOBLE ST 300 | 42X8 | X | | 2.33 | | E | PST | 2.5 | 1 | MOUNT ABOVE 4TH AVE | |
| | | | | | SPECIAL 1 | 300 NOBLE ST 400 | 42X8 | X | | 2.33 | | W | | | | | |
| | | | | | SPECIAL 1 | 400 4TH AVE 300 | 42X8 | X | | 2.33 | | S | | | | | |
| | | | | | SPECIAL 1 | 300 4TH AVE 400 | 42X8 | X | | 2.33 | | N | | | | | |
| | | | | | R1-1 | STOP | 24X24 | X | | 4 | | E | | | | | |
| 46 | 33+95 | 27.8 | X | | R3-8L/S | (LT TURN & STRAIGHT ARROWS) | 30X30 | X | | 6.25 | | N | PST | 2.5 | 1 | | |
| 47 | 33+91 | 28.0 | X | | R7-202 | END | 24X12 | X | | 2 | | S | PST | 2.5 | 1 | | |
| | | | | | R3-9B | CENTER LANE (LT & RT TURN ARROWS) | 24X36 | X | | 6 | | S | | | | | |

| LOCATION NUMBER | STATION | OFFSET (FT) | LOCATION | | CODE NO. | LEGEND | SIZE HVV (INCHES) | BRACING/FRAMING | | AREA (SQ. FT.) | MOUNTING HEIGHT | DIRECTION | POSTS | | | REMARKS |
|-----------------|---------|-------------|----------|-----|----------|--------------------|-------------------|-----------------|--------|----------------|-----------------|-----------|-------|-----------|-----|---------|
| | | | LT. | RT. | | | | BRACED | FRAMED | | | | TYPE | SIZE (IN) | NO. | |
| 48 | 34+75 | 33.2 | X | | R6-1R | ONE WAY (ARROW RT) | 36X12 | X | | 3 | | N | PST | 2.5 | 1 | |
| 49 | 36+61 | 49.9 | X | | R5-1 | DO NOT ENTER | 30X30 | X | | 6.25 | | E | PST | 2.5 | 1 | |
| | | | | | R6-1L | ONE WAY (ARROW LT) | 36X12 | X | | 3 | | N | | | | |
| 50 | 37+17 | 29.2 | X | | R5-1 | DO NOT ENTER | 30X30 | X | | 6.25 | | E | PST | 2.5 | 1 | |
| 51 | 38+51 | 23.8 | X | | R2-1 | SPEED LIMIT 25 | 24X30 | X | | 5 | | N | PST | 2.5 | 1 | |
| TOTAL SIGN AREA | | | | | | | | | | 432.41 | | | | | | |



SPECIAL 1

BORDER
R=1.5"
TH=0.5"
BORDER & LEGEND: WHITE
BACKGROUND: GREEN

POST TYPE CODING:
PST = PERFORATED STEEL TUBING
TS = SQUARE STRUCTURAL STEEL TUBING

Friday, December 12, 2014, 12:17 PM



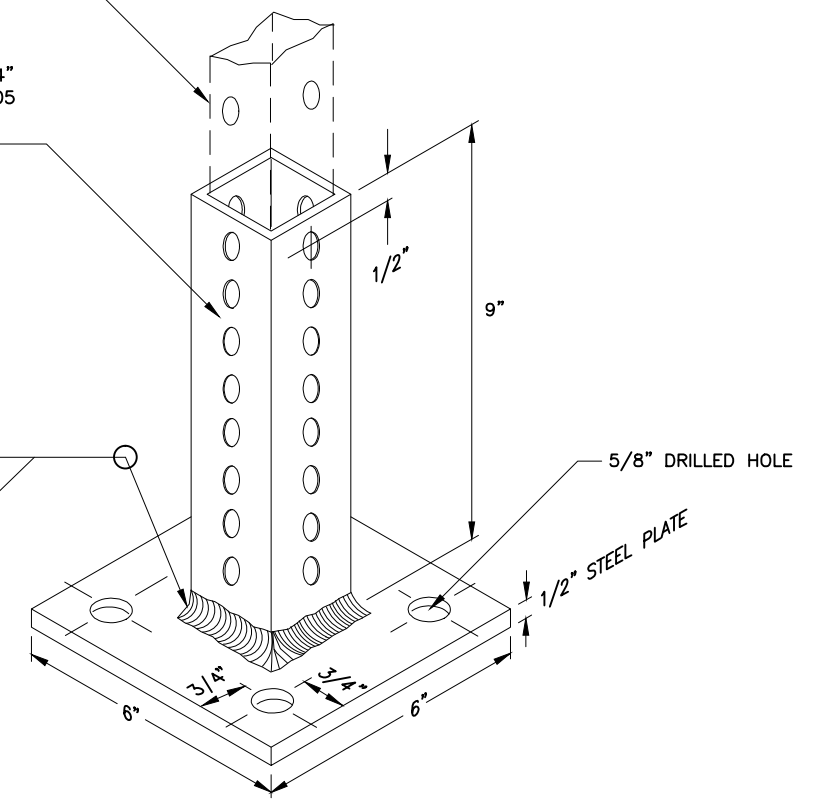
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|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | H10 | -- |

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POST- PERFORATED STEEL TUBE (P.S.T.) (INSTALL POST 7" INTO STUB) (SECURE POST WITH 5/16" GALVANIZED BOLT, NUT, & LOCK WASHER)

3" OD P.S.T. STUB FOR 2-1/2" POST OR 2-1/4" OD P.S.T. STUB FOR 2" POST (GALVANIZED-0.105 WALL THICKNESS) (HOLES AND SPACING SAME AS SIGN POST) (CENTER STUB ON STEEL PLATE)

PREHEAT MAY BE NECESSARY

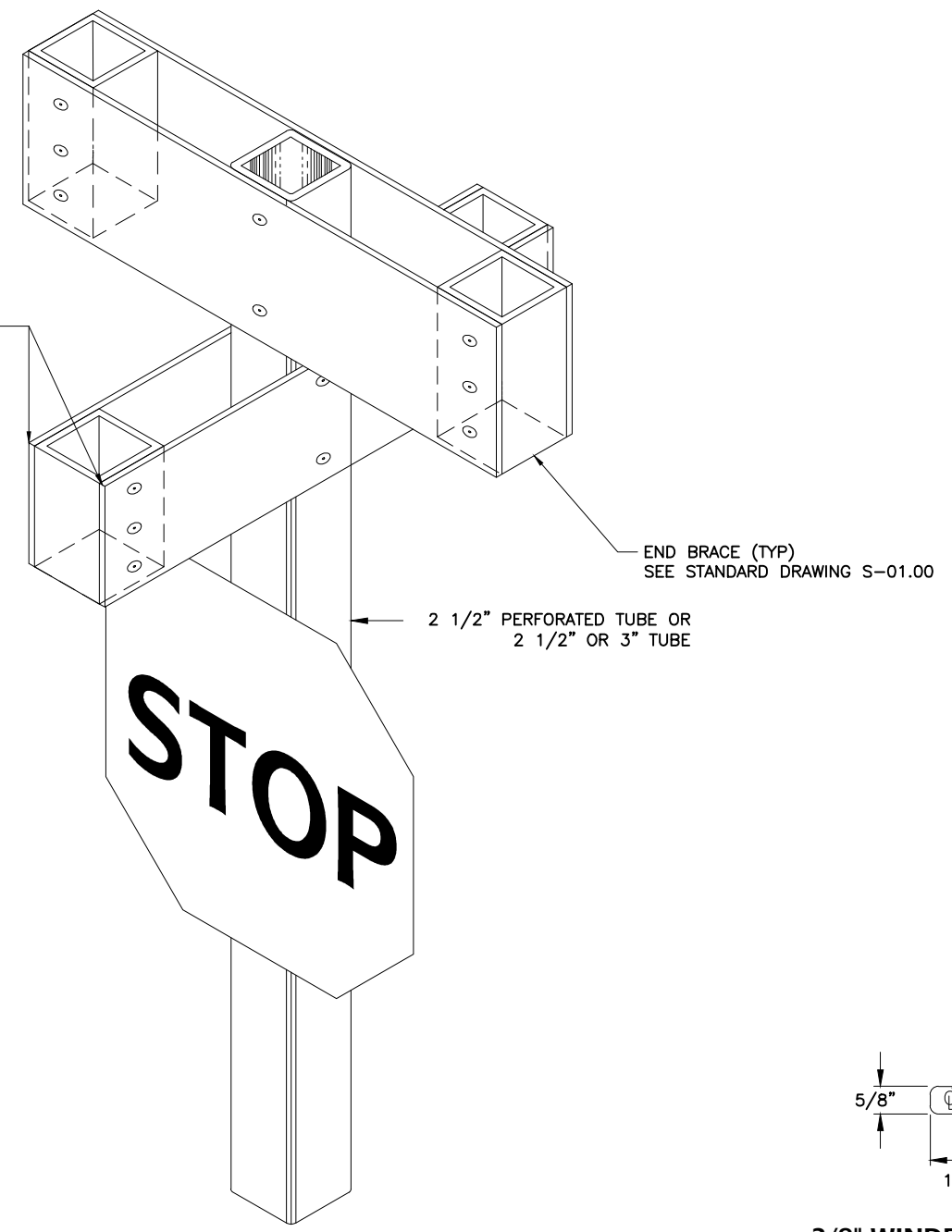


SIDEWALK MOUNTING STUB FOR SIGN POSTS

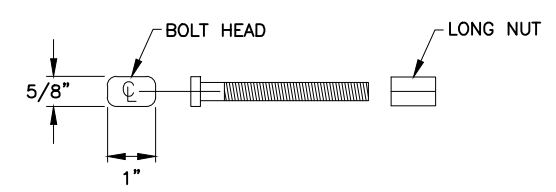
INSTALLATION NOTES

1. DRILL FOUR (4) 1/2" HOLES IN SIDEWALK OR CONCRETE USING PLATE AS TEMPLATE. (DEPTH AS REQUIRED).
2. INSTALL STUB AND PLATE WITH FOUR (4) HILTI EXPANSION ANCHORS CAT. NO. HDI 3/8" OR APPROVED EQUAL. USE FOUR (4) 3/8" GALVANIZED BOLTS AND FLAT WASHERS.
3. DO NOT SHIM BASE, PLUMB STUB BY HEATING AT PLATE.
4. PAINT STUB AND BASE WITH ZINC RICH PAINT PRIOR TO INSTALLATION.
5. INSTALL STUBS FOR NO PARKING SIGNS AT 45° FACING TRAFFIC.

INSTALL TWO D3-1A OR D3-1 CROSS STREET NAME SIGNS BACK TO BACK ON THE POST.



STREET NAME SIGN



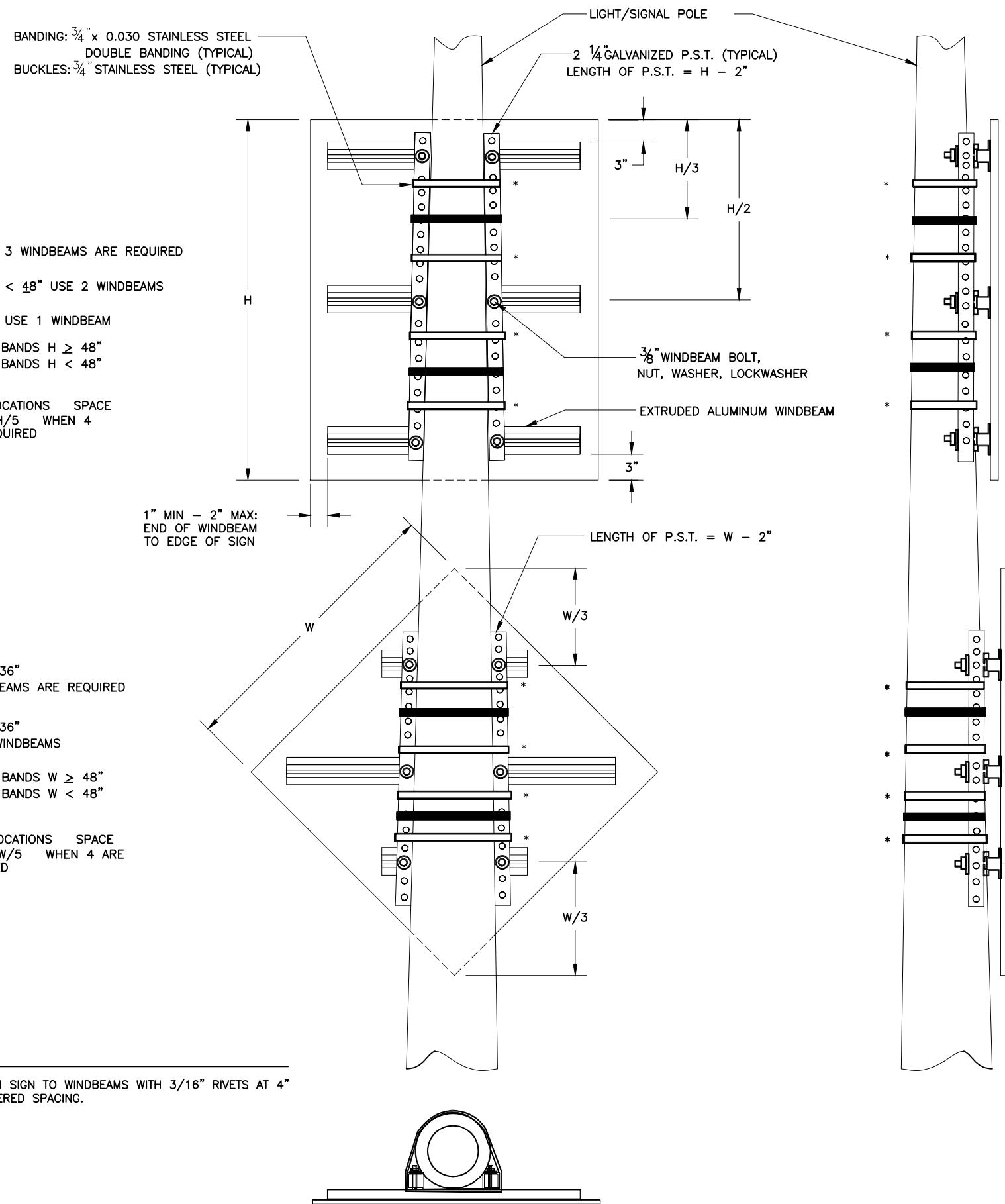
3/8" WINDBEAM BOLT AND LONG NUT

| FASTENER SPECIFICATION TABLE | | |
|------------------------------|------------|-----------------|
| FASTENER | STEEL | STAINLESS STEEL |
| BOLTS | ASTM A 307 | ASTM F 593 |
| NUTS | ASTM A 563 | ASTM F 594 |
| WASHERS | ASTM A 36 | ASTM A 480 |



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H11 | -- |

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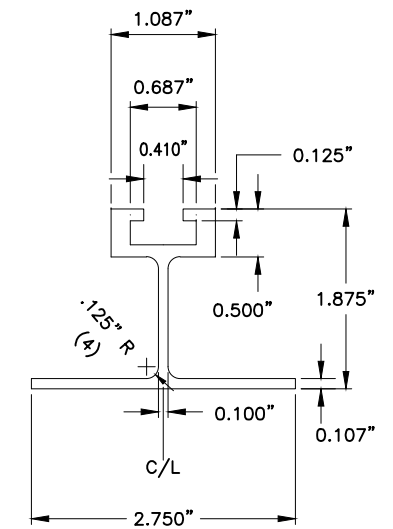
IF $H > 48"$ 3 WINDBEAMS ARE REQUIRED
 IF $15" < H < 48"$ USE 2 WINDBEAMS
 IF $H < 15"$ USE 1 WINDBEAM
 USE 4 BANDS $H \geq 48"$
 USE 2 BANDS $H < 48"$

* BAND LOCATIONS SPACE BANDS $H/5$ WHEN 4 ARE REQUIRED

IF $W \geq 36"$ 3 WINDBEAMS ARE REQUIRED
 IF $W < 36"$ USE 2 WINDBEAMS
 USE 4 BANDS $W \geq 48"$
 USE 2 BANDS $W < 48"$

* BAND LOCATIONS SPACE BANDS $W/5$ WHEN 4 ARE REQUIRED

NOTE:
 1. ATTACH SIGN TO WINDBEAMS WITH 3/16" RIVETS AT 4" STAGGERED SPACING.



- NOTES:**
- ALUMINUM ALLOY 6061-T6 SHALL BE USED FOR EXTRUDED WINDBEAM AND RIVETS.
 - ATTACH SIGN TO WINDBEAM WITH 3/16" RIVETS AT 4" STAGGERED SPACING.

EXTRUDED ALUMINUM WINDBEAM

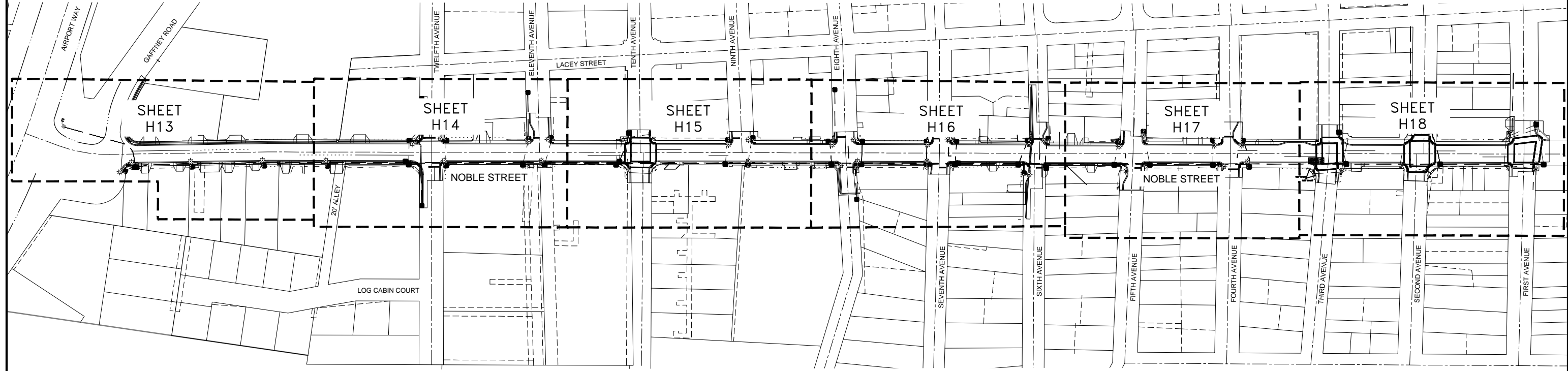
LIGHT / SIGNAL POLE SIGN FRAMING & MOUNTING DETAILS



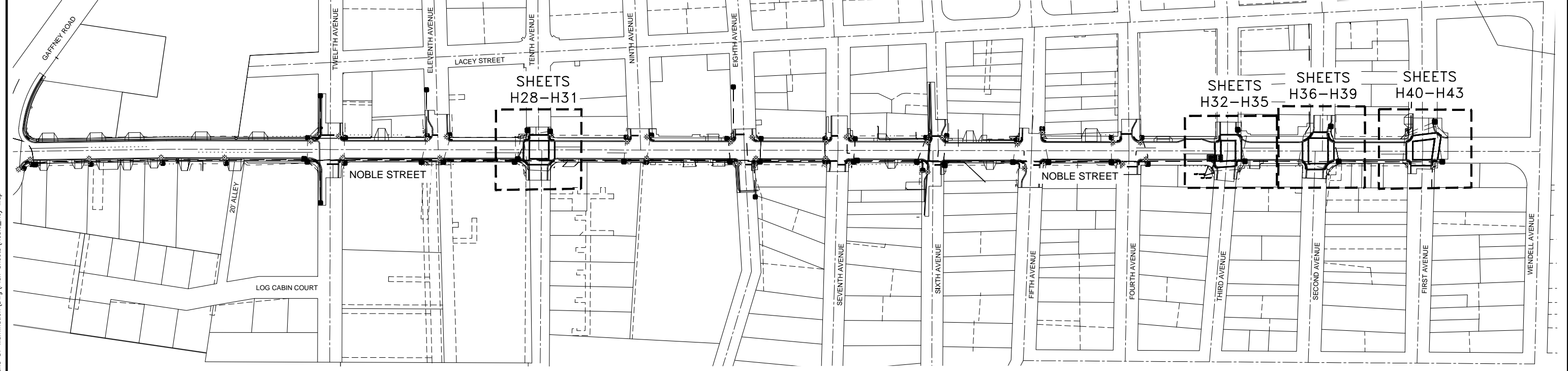
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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H12 | -- |

LIGHTING SHEET LAYOUT



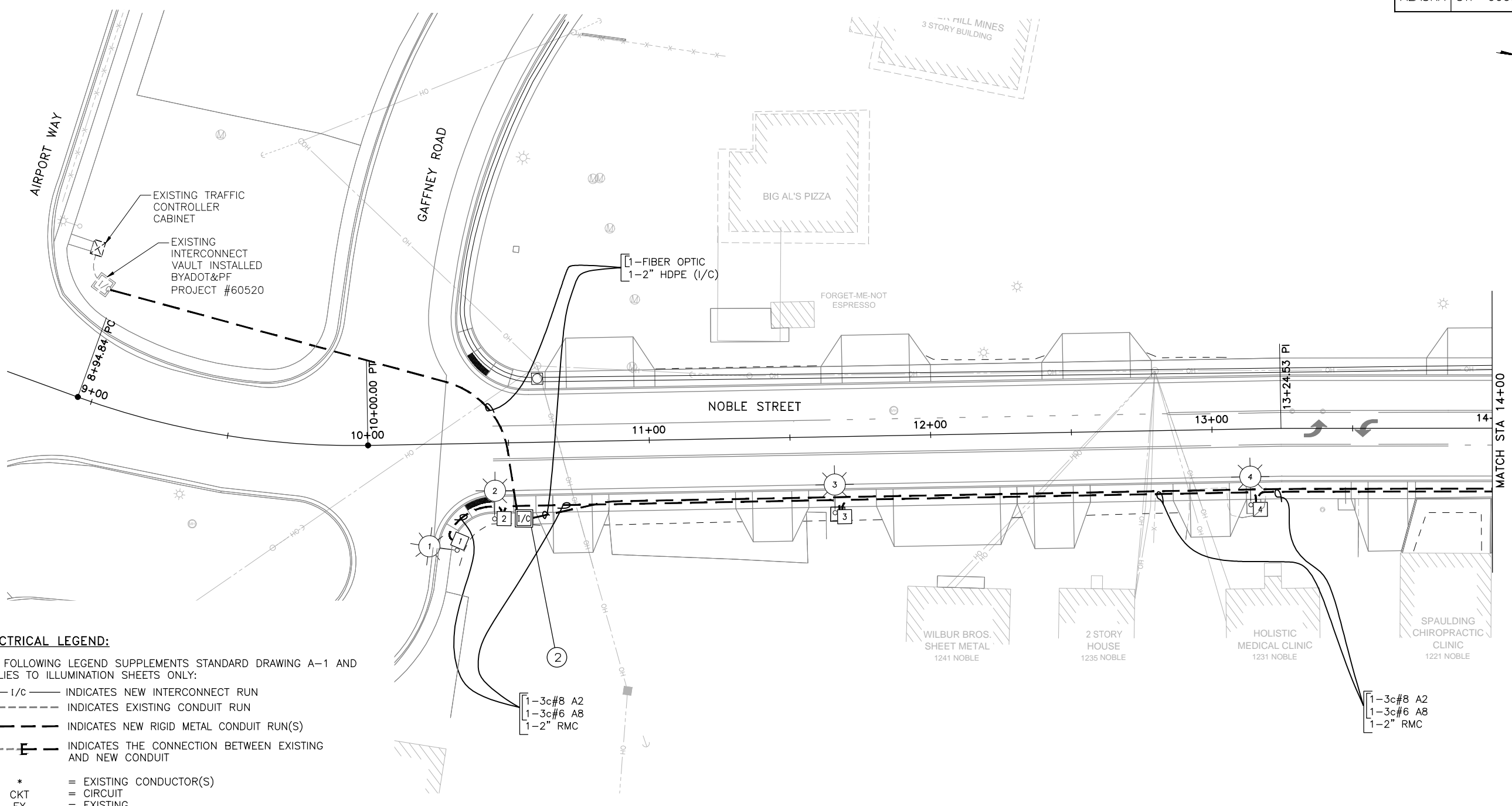
SIGNAL SHEET LAYOUT



SHEET LAYOUT



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H13 | -- |



ELECTRICAL LEGEND:

THE FOLLOWING LEGEND SUPPLEMENTS STANDARD DRAWING A-1 AND APPLIES TO ILLUMINATION SHEETS ONLY:

- I/C — INDICATES NEW INTERCONNECT RUN
- - - - - INDICATES EXISTING CONDUIT RUN
- RMC — INDICATES NEW RIGID METAL CONDUIT RUN(S)
- E — INDICATES THE CONNECTION BETWEEN EXISTING AND NEW CONDUIT

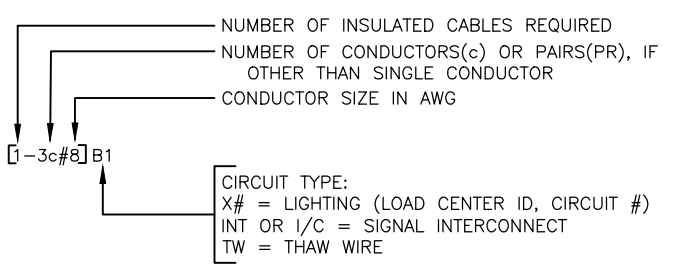
- * = EXISTING CONDUCTOR(S)
- CKT = CIRCUIT
- EX = EXISTING
- GND = BARE COPPER GROUND WIRE
- ILL = ILLUMINATION CONDUCTORS
- JB = JUNCTION BOX
- LC = LOAD CENTER
- RMC = RIGID METAL CONDUIT
- UG = UNDERGROUND
- (X) = CONSTRUCTION SHEET NOTES
- (◇) = UTILITY RISER POLE
- (⊙) = INTERCONNECT VAULT NUMBER

GENERAL INTERCONNECT NOTES:

1. FIBER-OPTIC INTERCONNECT SYSTEM SHALL CONSIST OF ONE 2" HDPE CONDUIT.
2. TRANSITION HDPE CONDUIT TO RMC WHEN CROSSING UNDER ROADWAYS AND NAMED PUBLIC APPROACHES.
3. MAINLINE FIBER-OPTIC CABLE SHALL BE 12 STRAND SINGLE-MODE FIBER, LOOSE TUBE, GEL-FREE, OUTSIDE CABLE.
4. SEE TRAFFIC SIGNAL SHEETS FIBER OPTIC INTERCONNECT CONDUIT AND CABLE REQUIREMENTS, AND ROUTING AT SIGNALIZED INTERSECTIONS.
5. SEE SECTION 662-2.06 FIBER OPTIC MANHOLES AND VAULTS FOR VAULT REQUIREMENTS.

GENERAL ILLUMINATION NOTES:

1. CAUTION! RELOCATED UTILITIES ARE NOT SHOWN. SEE UTILITY SHEETS FOR LOCATIONS. EXPOSE NEARBY UTILITIES BEFORE INSTALLING POLE FOUNDATIONS TO PREVENT CONFLICTS.
2. IF GROUNDING CONDUCTORS ARE NOT SPECIFIED IN A CONDUIT, INSTALL GROUNDING CONDUCTOR IN ACCORDANCE WITH SECTION 660-3.06.
3. SEE ALSO ILLUMINATION SUMMARY TABLES AND DETAILS.
4. COORDINATE CONDUIT LOCATING WITH SIGNALIZATION PLANS AND UTILITIES.

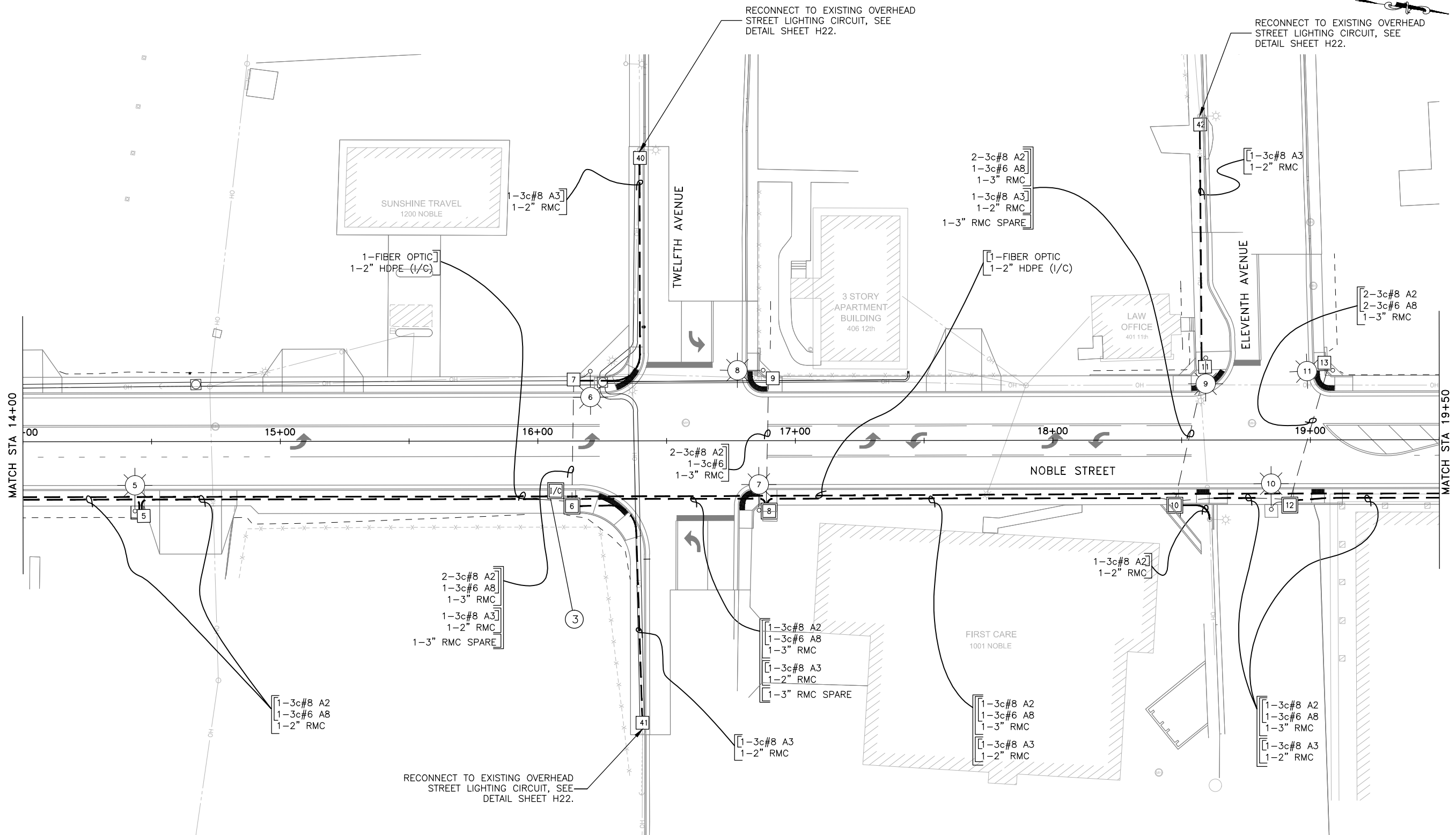


ILLUMINATION PLANS

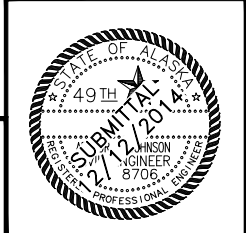


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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H14 | -- |

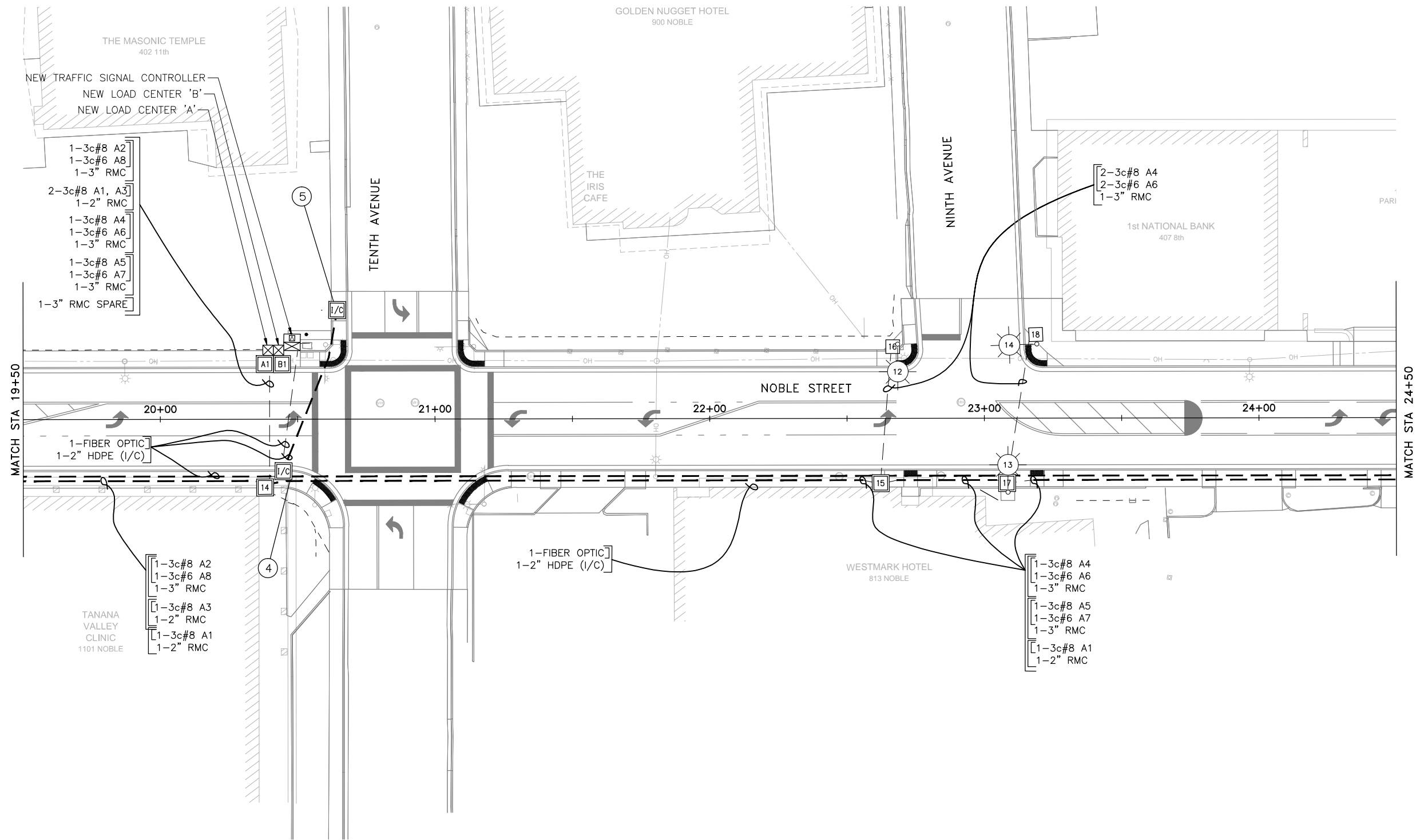


ILLUMINATION PLANS



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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H15 | -- |



- NEW TRAFFIC SIGNAL CONTROLLER
- NEW LOAD CENTER 'B'
- NEW LOAD CENTER 'A'
- 1-3c#8 A2
- 1-3c#6 A8
- 1-3" RMC
- 2-3c#8 A1, A3
- 1-2" RMC
- 1-3c#8 A4
- 1-3c#6 A6
- 1-3" RMC
- 1-3c#8 A5
- 1-3c#6 A7
- 1-3" RMC
- 1-3" RMC SPARE

- 1-FIBER OPTIC
- 1-2" HDPE (I/C)

- 1-3c#8 A2
- 1-3c#6 A8
- 1-3" RMC
- 1-3c#8 A3
- 1-2" RMC
- 1-3c#8 A1
- 1-2" RMC

- 1-FIBER OPTIC
- 1-2" HDPE (I/C)

- 1-3c#8 A4
- 1-3c#6 A6
- 1-3" RMC
- 1-3c#8 A5
- 1-3c#6 A7
- 1-3" RMC
- 1-3c#8 A1
- 1-2" RMC

- 2-3c#8 A4
- 2-3c#6 A6
- 1-3" RMC

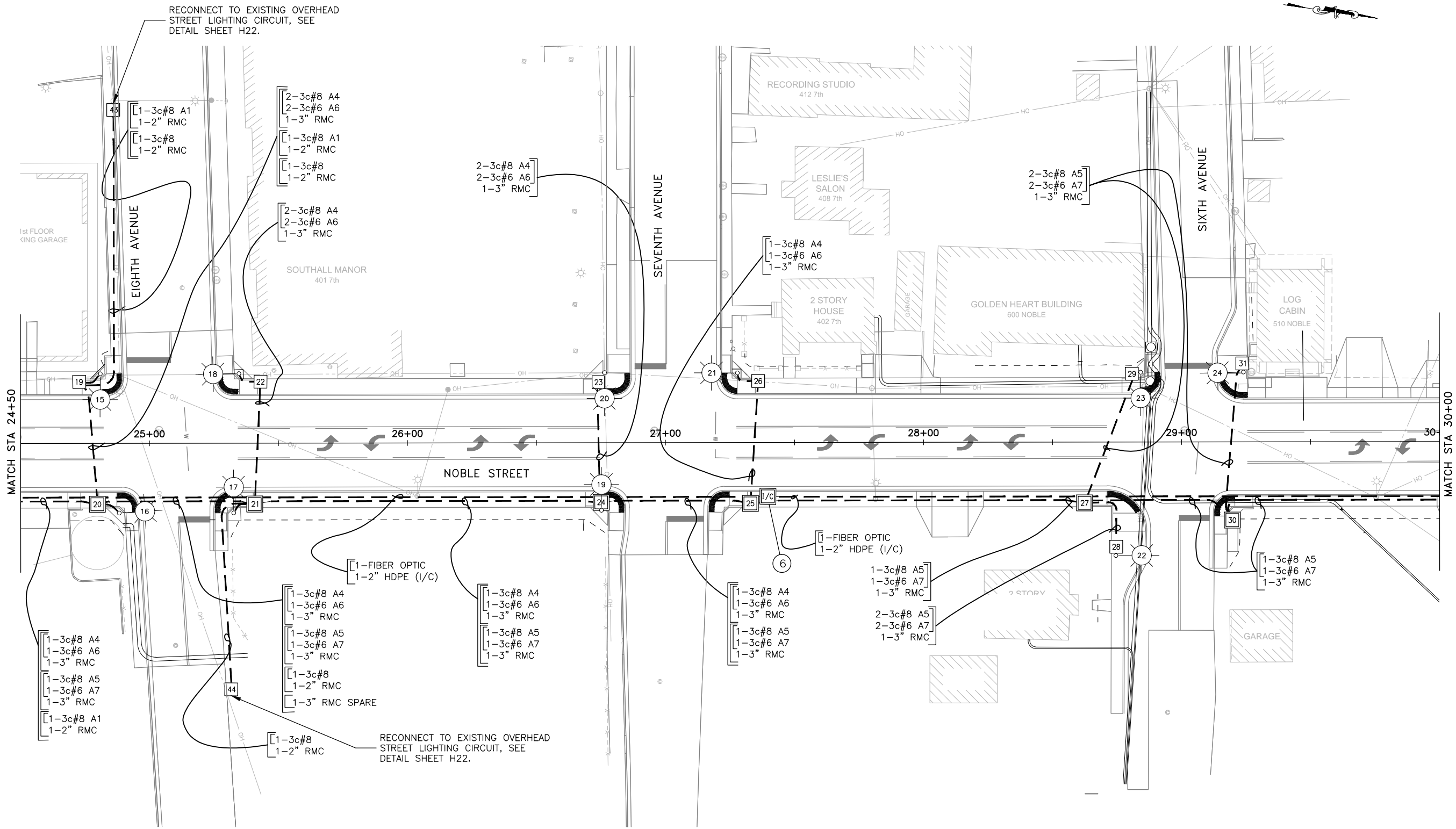


ILLUMINATION PLANS



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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H16 | -- |



MATCH STA 24+50

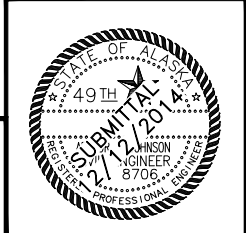
MATCH STA 30+00

RECONNECT TO EXISTING OVERHEAD STREET LIGHTING CIRCUIT, SEE DETAIL SHEET H22.

RECONNECT TO EXISTING OVERHEAD STREET LIGHTING CIRCUIT, SEE DETAIL SHEET H22.

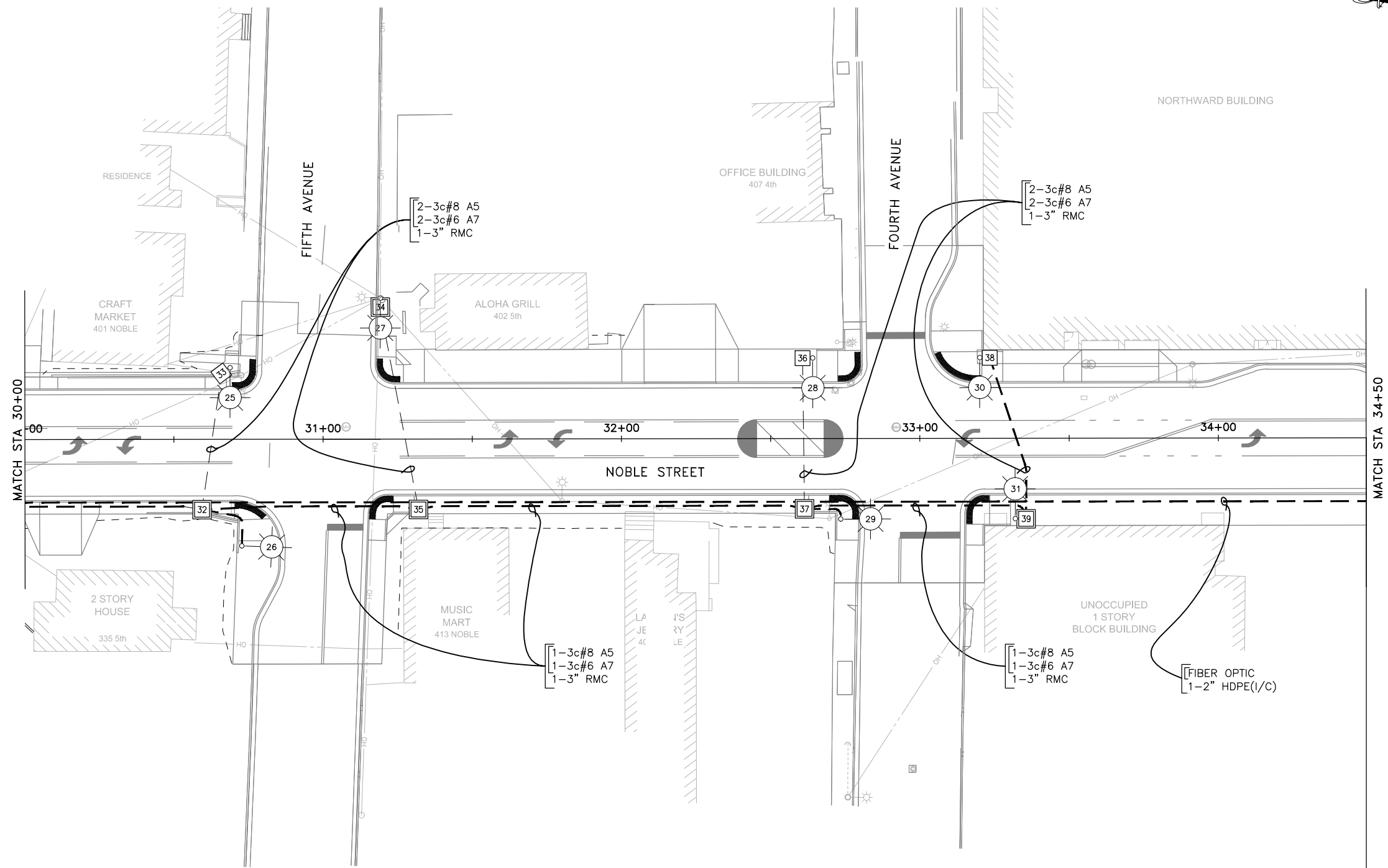


ILLUMINATION PLANS



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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
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| ALASKA | STP-000S(413)/61725 | 2015 | H17 | -- |



ILLUMINATION PLANS



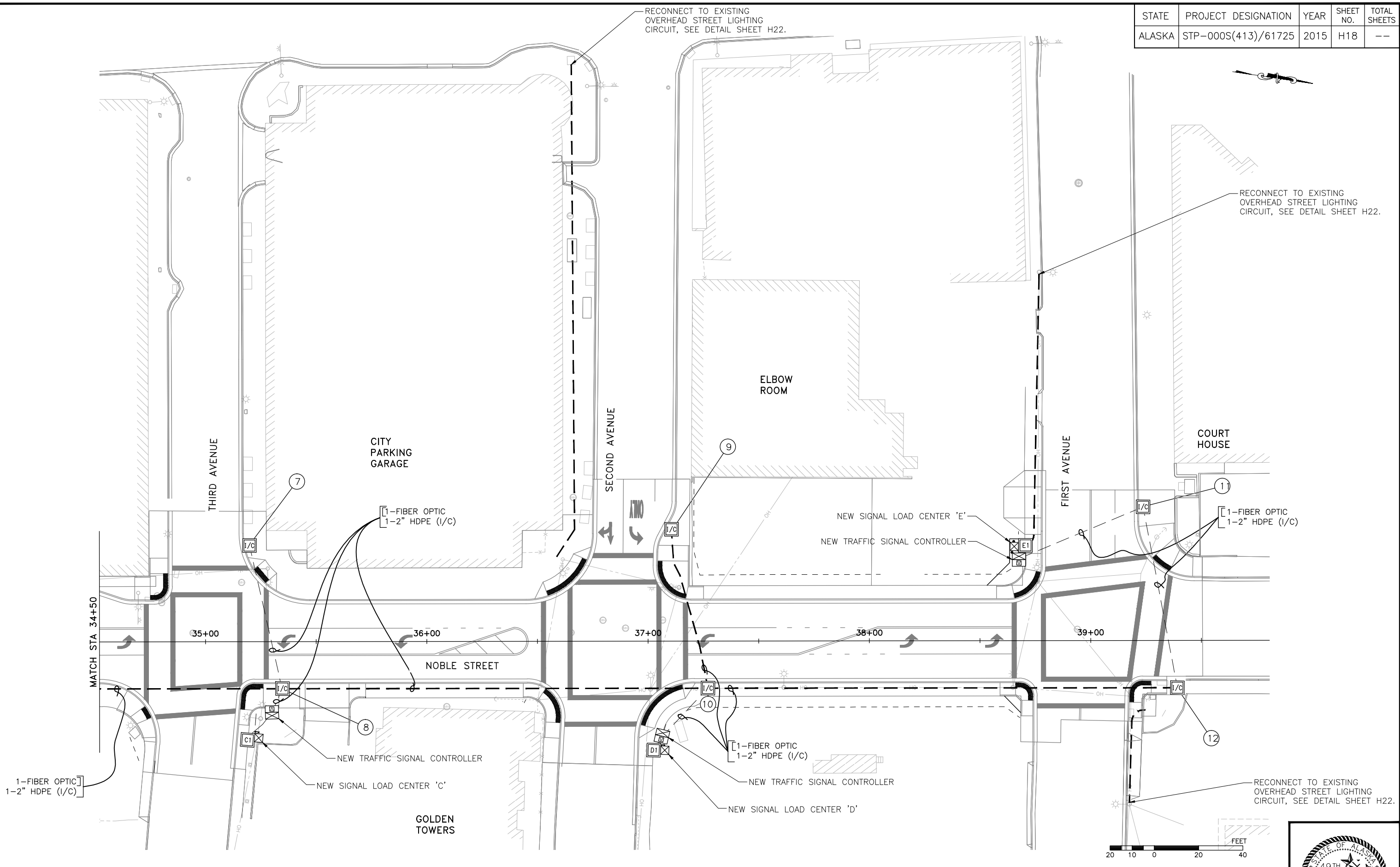
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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H18 | -- |

RECONNECT TO EXISTING OVERHEAD STREET LIGHTING CIRCUIT, SEE DETAIL SHEET H22.

RECONNECT TO EXISTING OVERHEAD STREET LIGHTING CIRCUIT, SEE DETAIL SHEET H22.

RECONNECT TO EXISTING OVERHEAD STREET LIGHTING CIRCUIT, SEE DETAIL SHEET H22.



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1-FIBER OPTIC
1-2" HDPE (1/C)



ILLUMINATION PLANS



| FIBER-OPTIC INTERCONNECT VAULT SCHEDULE | | | |
|---|----------|--------|-------------------|
| I/C VAULT NUMBER | LOCATION | | TYPE |
| | STATION | OFFSET | |
| 1 | 8+95 | LT | PRESERVE EXISTING |
| 2 | 10+55 | RT | 30" X 48" |
| 3 | 16+07 | RT | 30" X 48" |
| 4 | 20+45 | RT | 30" X 48" |
| 5 | 20+64 | LT | 30" X 48" |
| 6 | 27+40 | RT | 30" X 48" |
| 7 | 35+20 | LT | 30" X 48" |
| 8 | 35+35 | RT | 30" X 48" |
| 9 | 37+10 | LT | 30" X 48" |
| 10 | 37+27 | RT | 30" X 48" |
| 11 | 39+24 | LT | 30" X 48" |
| 12 | 39+39 | RT | 30" X 48" |

| LIGHTING JUNCTION BOX SUMMARY | | | | | |
|-------------------------------|---------|----------|-----|------|--|
| NO. | STATION | LOCATION | | TYPE | REMARKS |
| | | LT. | RT. | | |
| 1 | 10+32 | | X | IA | |
| 2 | 10+48 | | X | IA | |
| 3 | 11+69 | | X | IA | |
| 4 | 13+17 | | X | IA | |
| 5 | 14+47 | | X | IA | |
| 6 | 16+13 | | X | II | |
| 7 | 16+14 | X | | IA | |
| 8 | 16+90 | | X | II | |
| 9 | 16+91 | X | | IA | |
| 10 | 18+47 | | X | II | |
| 11 | 18+59 | X | | IA | |
| 12 | 18+92 | | X | II | |
| 13 | 18+05 | X | | IA | |
| 14 | 20+38 | | X | II | |
| 15 | 22+62 | | X | II | |
| 16 | 22+67 | X | | IA | |
| 17 | 23+03 | | X | II | |
| 18 | 23+19 | X | | IA | |
| 19 | 24+73 | X | | IA | |
| 20 | 24+80 | | X | II | |
| 21 | 25+41 | | X | II | |
| 22 | 25+43 | X | | IA | |
| 23 | 26+74 | X | | IA | |
| 24 | 26+75 | | X | II | |
| 25 | 27+33 | | X | II | |
| 26 | 27+36 | X | | IA | |
| 27 | 28+62 | | X | II | |
| 28 | 28+75 | | X | IA | |
| 29 | 28+81 | X | | IA | |
| 30 | 29+20 | | X | II | |
| 31 | 28+24 | X | | IA | |
| 32 | 30+59 | | X | II | |
| 33 | 30+66 | X | | IA | |
| 34 | 31+19 | X | | II | |
| 35 | 31+32 | | X | II | |
| 36 | 32+61 | X | | IA | |
| 37 | 32+61 | | X | II | |
| 38 | 33+23 | X | | IA | |
| 39 | 33+36 | | X | II | |
| 40 | 16+40 | X | | IA | 12TH AVE., LOCATE ADJACENT TO UTILITY POLE |
| 41 | 16+41 | | X | IA | 12TH AVE., LOCATE ADJACENT TO UTILITY POLE |
| 42 | 18+57 | X | | IA | 11TH AVE., LOCATE ADJACENT TO UTILITY POLE |
| 43 | 24+86 | X | | IA | 8TH AVE., LOCATE ADJACENT TO UTILITY POLE |
| 44 | 25+32 | | X | IA | 8TH AVE., LOCATE ADJACENT TO UTILITY POLE |

| LIGHT POLE SUMMARY | | | | | | | | |
|--------------------|---------|----------|-----|--------------|-------------|---------|-----------------------------|---|
| POLE NO. | STATION | LOCATION | | LAMP WATTAGE | LOAD CENTER | CIRCUIT | LUMINAIRE ARM LENGTH (FEET) | REMARKS |
| | | LT. | RT. | | | | | |
| 1 | 10+31 | | X | 160 | A | A1 | 8 | |
| 2 | 10+45 | | X | 160 | A | A1 | 8 | |
| 3 | 11+66 | | X | 160 | A | A1 | 8 | |
| 4 | 13+13 | | X | 160 | A | A1 | 8 | |
| 5 | 14+44 | | X | 160 | A | A1 | 8 | |
| 6 | 16+20 | X | | 160 | A | A1 | 8 | |
| 7 | 16+86 | | X | 160 | A | A1 | 8 | |
| 8 | 16+88 | X | | 160 | A | A1 | 8 | |
| 9 | 18+59 | X | | 160 | A | A1 | 8 | MOUNT ON UTILITY POLE, SEE SHEET H26 FOR DETAIL |
| 10 | 18+85 | | X | 160 | A | A1 | 8 | |
| 11 | 18+09 | X | | 160 | A | A1 | 8 | |
| 12 | 22+68 | X | | 160 | A | A3 | 8 | |
| 13 | 23+08 | | X | 160 | A | A3 | 8 | |
| 14 | 23+19 | X | | 160 | A | A3 | 8 | |
| 15 | 24+81 | X | | 160 | A | A3 | 8 | |
| 16 | 24+88 | | X | 160 | A | A3 | 8 | |
| 17 | 25+33 | | X | 160 | A | A3 | 8 | |
| 18 | 25+35 | X | | 160 | A | A3 | 8 | |
| 19 | 26+75 | | X | 160 | A | A3 | 8 | MOUNT ON UTILITY POLE, SEE SHEET H26 FOR DETAIL |
| 20 | 26+75 | X | | 160 | A | A3 | 8 | MOUNT ON UTILITY POLE, SEE SHEET H26 FOR DETAIL |
| 21 | 27+28 | X | | 160 | A | A3 | 8 | |
| 22 | 28+75 | | X | 160 | A | A3 | 8 | |
| 23 | 28+84 | X | | 160 | A | A3 | 8 | |
| 24 | 29+24 | X | | 160 | A | A3 | 8 | |
| 25 | 30+69 | X | | 160 | A | A3 | 8 | |
| 26 | 30+73 | | X | 160 | A | A3 | 8 | |
| 27 | 31+19 | X | | 160 | A | A3 | 8 | MOUNT ON UTILITY POLE, SEE SHEET H26 FOR DETAIL |
| 28 | 32+64 | X | | 160 | A | A3 | 8 | |
| 29 | 32+73 | | X | 160 | A | A3 | 8 | |
| 30 | 33+21 | X | | 160 | A | A3 | 8 | |
| 31 | 33+32 | | X | 160 | A | A3 | 8 | |

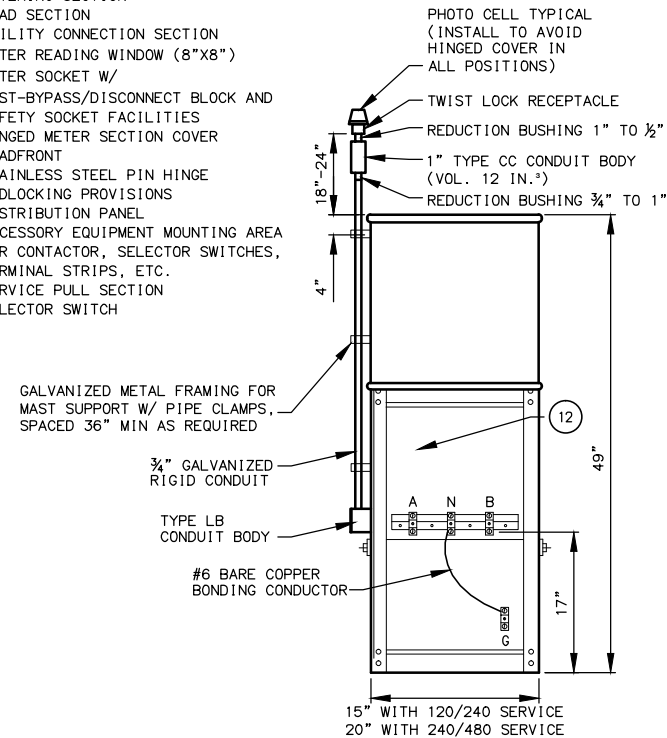
ILLUMINATION SUMMARY



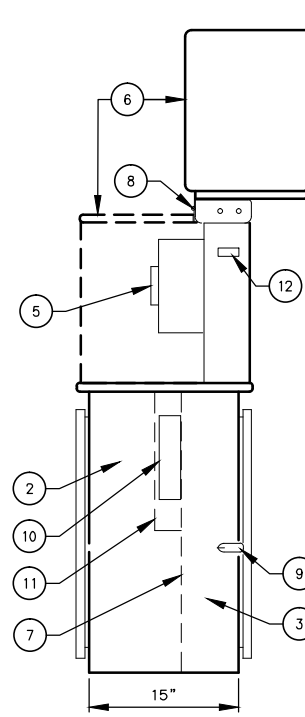
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H20 | -- |

EQUIPMENT LEGEND/DESCRIPTION

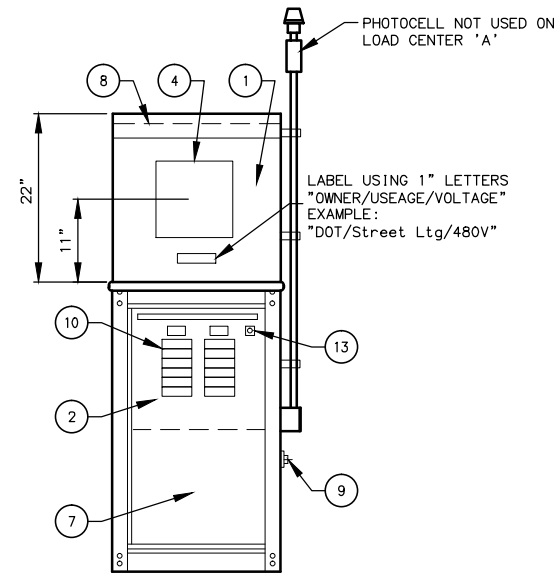
- METERING SECTION
- LOAD SECTION
- UTILITY CONNECTION SECTION
- METER READING WINDOW (8"x8")
- METER SOCKET W/ TEST-BYPASS/DISCONNECT BLOCK AND SAFETY SOCKET FACILITIES
- HINGED METER SECTION COVER
- DEADFRONT
- STAINLESS STEEL PIN HINGE
- PADLOCKING PROVISIONS
- DISTRIBUTION PANEL
- ACCESSORY EQUIPMENT MOUNTING AREA FOR CONTACTOR, SELECTOR SWITCHES, TERMINAL STRIPS, ETC.
- SERVICE PULL SECTION
- SELECTOR SWITCH



REAR VIEW
(W/ DOOR REMOVED)

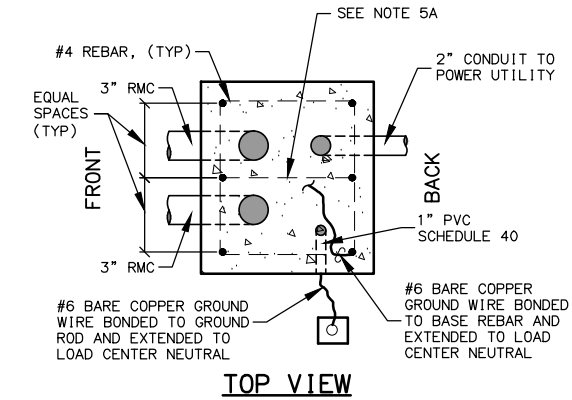


RIGHT SIDE VIEW
(W/ METER SECTION OPEN)



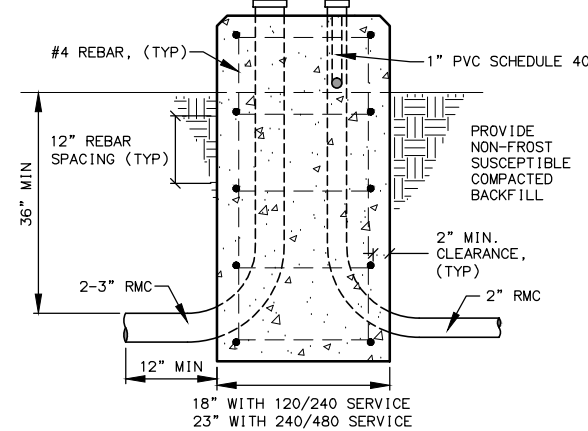
FRONT VIEW
(W/ DOOR REMOVED)

TYPE 1A CABINET DETAILS

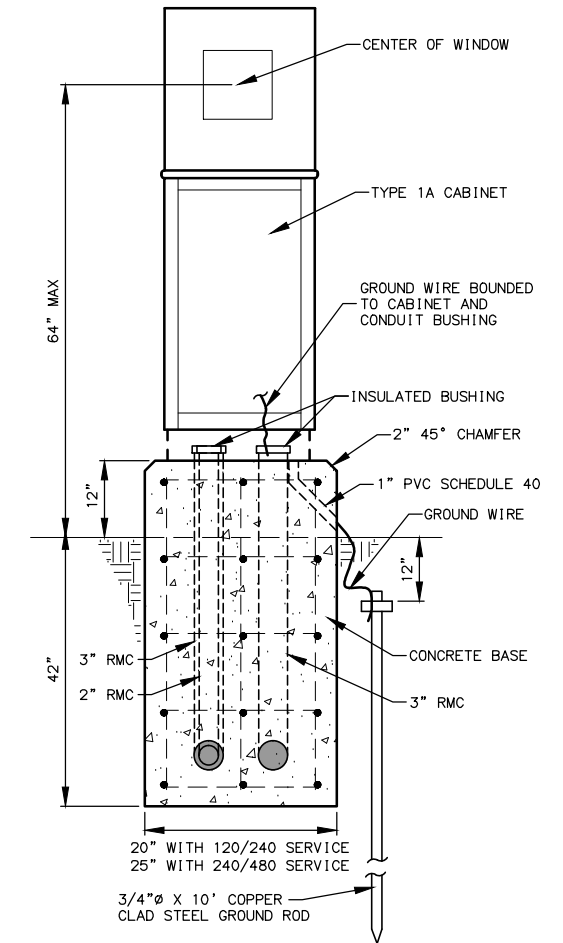


TOP VIEW

PROVIDE "J" ANCHOR BOLTS AS REQUIRED TO MOUNT LOAD CENTER CABINET IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS



RIGHT SIDE VIEW

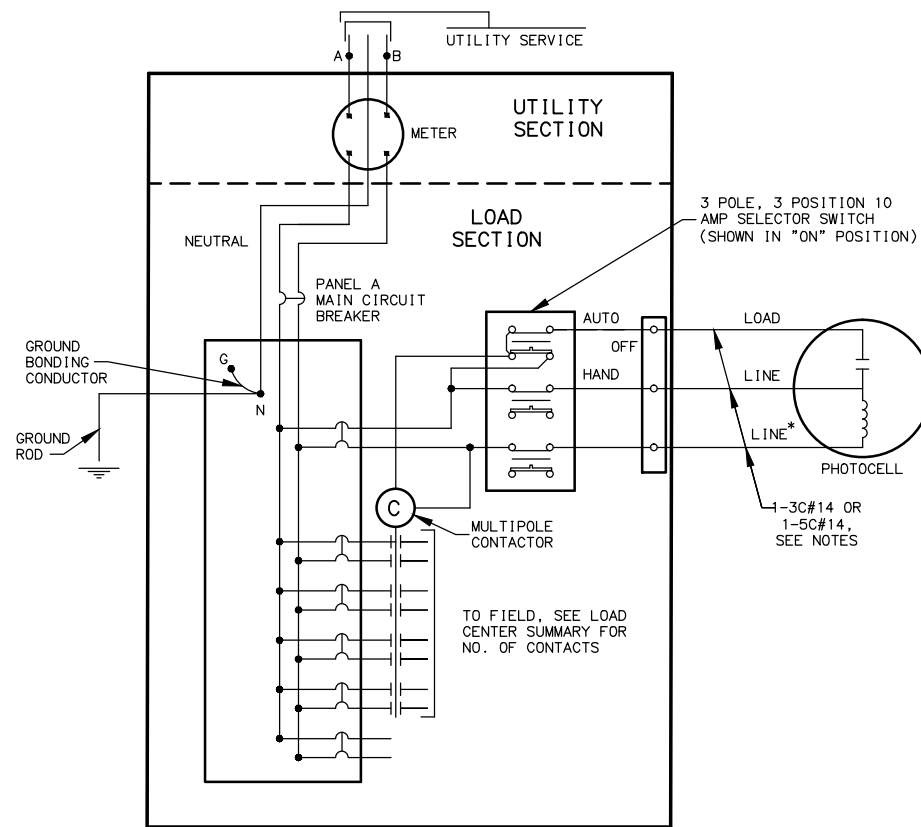


FRONT VIEW

FOUNDATION DETAILS

FOUNDATION NOTES:

- GRADE AWAY FROM THE BASE WITH A MINIMUM SLOPE OF 3%. USE A PRE-MOULDED BITUMINOUS JOINT BETWEEN THE BASE AND CONCRETE SIDEWALK OR PAVING, WHEN ADJACENT TO A SIDEWALK OR PATHWAY.
- PROVIDE ANCHOR BOLTS OR EXPANSION ANCHORS IN THE BASE FOR MOUNTING THE CABINET PER THE MANUFACTURER'S SHOP DRAWINGS. ANCHOR BOLTS, NUTS, AND WASHERS SHALL CONFORM TO EITHER ASTM A307 OR A449 AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153.
- USE GRADE 60 REINFORCING STEEL CONFORMING TO ASTM 615 AND CLASS "A" CONCRETE CONFORMING TO SECTION 501 OF THE SPECIFICATIONS WHEN CASTING THE BASE.
- IF THE BASE IS PRECAST, INSTALL TWO 3/4" FERRULE LOOP INSERTS IN TWO SIDES OPPOSITE ONE ANOTHER FOR LIFTING.



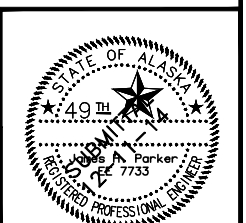
LOAD CENTER ONE LINE DIAGRAM AND SELECTOR SWITCH WIRING

* GROUNDED NEUTRAL, IF SERVICE IS 240/480 VOLT SINGLE PHASE OR 277/480 VOLT THREE-PHASE; AND LINE, IF SERVICE IS 120/240 VOLT SINGLE PHASE.

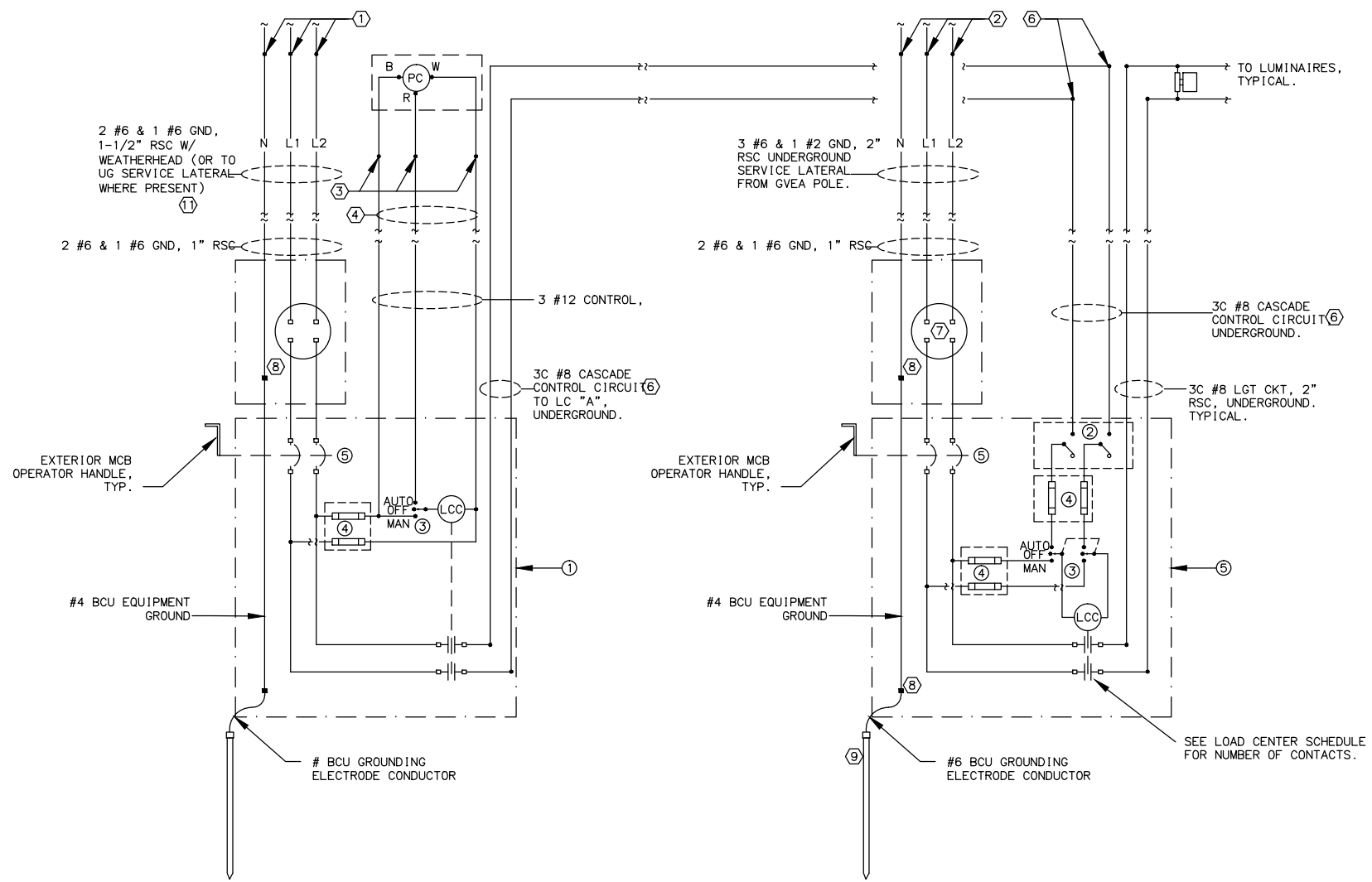
WIRING NOTES:

- FURNISH ALL EQUIPMENT NOTED IN THE LOAD CENTER SUMMARY, PLUS TWO 20-AMP 2-POLE SPARE CIRCUIT BREAKERS, AND SPACE FOR A MINIMUM OF TWO ADDITIONAL 2-POLE CIRCUIT BREAKERS IN EACH LOAD PANEL. SEE THE LOAD CENTER SUMMARIES FOR LOAD PANEL VOLTAGES, CURRENT RATINGS, AND THE NAME OF THE SERVING UTILITY.
- INSTALL GROUNDING HUBS THIRD PARTY CERTIFIED FOR WET LOCATIONS (MYERS TYPE), WHEN ATTACHING CONDUITS TO THE LOAD CENTER ENCLOSURE.
- LABEL ALL CIRCUIT BREAKERS AS TO FUNCTION AND POSITION. LABEL THE SELECTOR SWITCH "LIGHTING" AND ITS POSITIONS "ON-OFF-AUTO".
- METER BASES SHALL NOT BE MOUNTED ON MOVABLE PANELS OR DOORS.
- THE LENGTH AND TYPE OF SERVICE ENTRANCE CONDUIT INSTALLED BY THE CONTRACTOR VARIES BY UTILITY. REGARDLESS OF ITS LENGTH, INSTALL A PULL ROPE IN THE SERVICE CONDUIT AND A CAP ON THE BURIED END; MARK THE BURIED END WITH A 2"x6" STAKE. SEE THE LOAD CENTER SUMMARIES FOR THE FOLLOWING INFORMATION.
 - STATION AND OFFSET OF THE LOAD CENTER AND POWER SOURCE.
 - WHERE THE CONTRACTOR TERMINATES THE SERVICE ENTRANCE CONDUIT.
 - THE TYPE OF SERVICE ENTRANCE CONDUIT (SUCH AS RIGID METAL CONDUIT OR LIQUID-TIGHT FLEXIBLE METAL CONDUIT).
- STORE A SCHEMATIC DIAGRAM, A CIRCUIT DIRECTORY, AND A MATERIALS LIST THAT INCLUDES THE MANUFACTURER'S NAME AND PART/CATALOG NUMBERS, ALL LAMINATED IN PLASTIC, IN A METAL POCKET ATTACHED TO THE INSIDE OF THE LOAD CENTER. INSTALL THE POCKET ON THE LOAD CENTER DOOR, PROVIDING DRAIN HOLES TO PREVENT WATER ACCUMULATION.
- SIZE THE DISTRIBUTION PANEL TO ACCOMMODATE THE CIRCUITS SHOWN ON THE LOAD CENTER SUMMARIES AND SPARE CIRCUITS AS DEFINED IN NOTE 1.
- SEPARATE THE MAIN CIRCUIT BREAKER FROM THE DISTRIBUTION PANEL.
- MOUNT PHOTOCELL RECEPTACLE TO 1/2" CONDUIT WITH SILICONE SEALANT. INSTALL A 3C#14 CABLE FROM THE LOAD CENTER TO THE TYPE CC CONDUIT BODY WHERE THE SPLICE TO THE PHOTOCELL RECEPTACLE CABLE SHALL BE MADE. IF PLANS CALL TO MOUNT PHOTOCELL AWAY FROM LOAD CENTER USE A 5C#14 CABLE FROM LOAD CENTER TO RECEPTACLE.

**LOAD CENTERS 'B', 'C', 'D' AND 'E'
TYPE 1A LOAD CENTER
DETAILS**



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H21 | -- |



'MASTER' LOAD CENTER (PHOTO SWITCH CONTROL)
EXISTING MPC #1 AT 8TH & NOBLE
 SHOWN FOR INFORMATIONAL PURPOSES ONLY

NEW 'CASCADE' CONTROLLED LOAD CENTER "A"
AT 10TH AND NOBLE'
 TYPE 1A LOAD CENTER. SEE SHEET H9 FOR DETAILS

GENERAL NOTES:

- CONTRACTOR IS RESPONSIBLE FOR FIELD INVESTIGATION AND VERIFICATION. WHERE ALTERNATIVE CONNECTIONS AND INSTALLATIONS ARE REQUIRED, SUCH AS UNDERGROUND SERVICE AND LGT CIRCUITS, CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL HARDWARE AND EQUIPMENT REQUIRED AT EACH LOCATION W/O ADDITIONAL COST TO THE PROJECT.
- NOTIFY THE ENGINEER IF EXISTING CONDITIONS VARY FROM THOSE ANTICIPATED IN THE PLAN.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE W/ PLANS, SPECIFICATIONS, AND GOLDEN VALLEY ELECTRIC ASSOCIATION (GVEA) REQUIREMENTS, PHONE (907)452-1151.
- WHERE PLANS CONFLICT W/ GVEA REQUIREMENTS, GVEA REQUIREMENTS TAKE PRECEDENCE.
- COORDINATE AND SCHEDULE ALL OUTAGES W/ PROJECT ENGINEER 72 HOURS IN ADVANCE.
- DISCONNECT AND REMOVE WEATHERHEAD, METER SOCKET, CONTROLS AND WIRING ASSOCIATED W/ STREET LTG LOAD CENTERS.
- UNLESS OTHERWISE NOTED, XFMR SECONDARY CONDUCTORS, STREET LTG CKTS, AND ASSOCIATED ATTACHMENT HARDWARE ARE EXISTING TO REMAIN.
- PROVIDE MINIMUM CLEARANCES BETWEEN POLE AND ALL POLE MTD EQUIPMENT IN ACCORDANCE W/ PLAN AND GVEA REQUIREMENTS.
- MOUNT EQUIPMENT ON QUADRANT OF POLE AS NOTED ON THE LC LOCATION MAPS. ASSURE THAT SELECTED EQUIPMENT MOUNTING AVOIDS CONFLICTS AND HAZARDS TO SIDEWALKS AND TRAFFIC COORDINATE W/ EXISTING POLE MTD EQUIPMENT.
- THE PURPOSE OF THE CONTROL DIAGRAMS IS TO ESTABLISH CONTROL FUNCTION. CONTROLS OF SAME FUNCTIONALITY AND HAVING PROPER THIRD PARTY LISTING ARE ACCEPTABLE AS APPROVED BY THE ENGINEER.
- MANUFACTURE NAMES, TYPES AND CATALOG NUMBERS, WHERE LISTED, ARE INTENDED TO ESTABLISH DESIGN BASIS AND QUALITY. LIKE PRODUCTS OF SAME OR DIFFERENT MANUFACTURER ARE ACCEPTABLE AS APPROVED BY THE ENGINEER
- EACH LC SHOWN ON THE DRAWINGS IS IDENTIFIED AS EITHER A "MASTER LC" OR "CASCADE CL". A "MASTER" LC IS CONTROLLED DIRECTLY BY PHOTO SWITCH. A "CASCADE" LC IS CONTROLLED INDIRECTLY FROM AN ADJACENT LTG CKT.

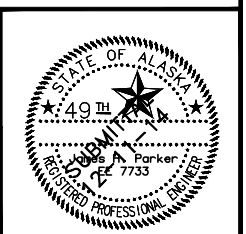
DRAWING KEY NOTES:

- EXISTING SECONDARY POWER CIRCUIT.
- NEW SECONDARY POWER CIRCUIT FROM GVEA.
- CONNECTIONS TO EXISTING PHOTOCCELL.
- EXISTING 1/2" RSC, W/3#12 CONDUCTORS TO CONNECT PHOTOSWITCH.
- NEW LOAD CENTER "A".
- NEW "CASCADE" CONTROL CONNECTIONS FROM MPC#1. ONE CONDUCTOR IS A SPARE.
- NEW METER SOCKET.
- EQUIPMENT GROUNDING LUG.
- CONNECTION TO NEW GROUNDING ELECTRODE: EXOTHERMIC WELD OR IRREVERSIBLE COMPRESSION CONNECTOR TO NEW 5/8" X 8' COPPER CLAD STEEL DRIVEN GROUND ROD.

LIGHTING CONTROL COMPONENT LIST:

- LTG CONTACTOR, 30 AMP, COMBINATION TYPE, SQUARE D CLASS 8903, SPC63, FORM C, F4, Y75, NEMA TYPE 3R ENCLOSURE, 240V, 1 PHASE, 2-WIRE.
- 2-POLE SWITCH ASSEMBLY INTERLOCKED W/ MCB OPERATOR HANDLE - SQUARE D FORM Y75.
- HOA SWITCH, 3 POSITION, CLASS 9001, TYPE SK, SQUARE D, DPDT. HOA SWITCH SHALL BE MOUNTED INSIDE DOOR (NOT ACCESSIBLE W/ DOOR CLOSED).
- CONTROL FUSE BLOCK, 2- POLE FB2211 SQUARE D, 5 AMP AF, OR PROVIDE FUSE RATING AS RECOMMENDED BY MANUFACTURER.
- MAIN CIRCUIT BREAKER, 100/2, OPERATED W/ EXTERIOR LEVER. PROVIDE OPERATING LEVER W/ PADLOCK FEATURE AND INTERLOCKED DOOR LATCH SO THAT DOOR CANNOT BE OPENED UNLESS CIRCUIT BREAKER IS IN OPEN POSITION. PROVIDE FEATURE TO DEFEAT THE DOOR INTERLOCK SO THE MCB CAN BE CLOSED AND CONTACTOR OPERATED BY AUTHORIZED PERSONNEL AFTER THE DOOR IS OPENED.

LOAD CENTER 'A'
LOAD CENTER
WIRING DIAGRAM



| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | H22 | -- |

SUMMARY OF LOAD CENTER: A

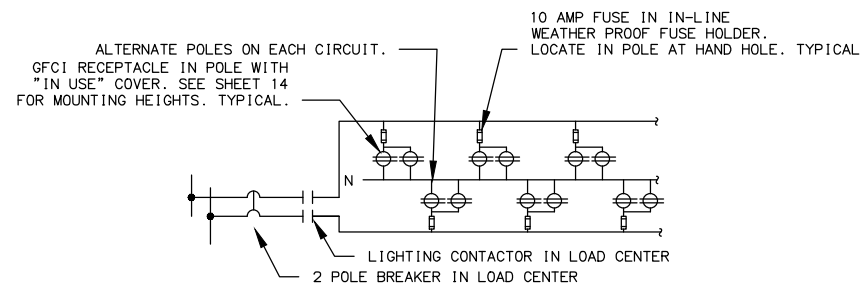
| LOAD CENTER TYPE | 1A | | | |
|--------------------------|--|----------|----------|-------|
| SERVING UTILITY | GVEA | | | |
| SERVICE CONDUIT SIZE | 2" RIGID METAL CONDUIT | | | |
| LOCATION DATA | | | | |
| LOAD CENTER | XX+XX | | | |
| POWER SOURCE: | UNDERGROUND | | | |
| PHOTOELECTRIC CONTROL | NO, CASCADE CONTROLLED | | | |
| SERVICE VOLTAGE | 1 PHASE 3 WIRE, 120/240 VOLTS | | | |
| PROVIDE METER SOCKET? | YES | | | |
| MAIN BREAKER A: | 240 VOLT, 2 POLE, 100 AMPERES | | | |
| CONTACTOR A: | 2 EACH, 300 VOLT, 6 POLE, 30 AM | | | |
| PANEL A | | | | |
| CIRCUIT NUMBER | DESCRIPTION 120/240 V | KVA LOAD | BREAKERS | |
| | | | AMPS | POLES |
| BA1 | LIGHTING CONTROL | 0.10 | 15.00 | 2.00 |
| BA2 | STREET LIGHTING: NOBLE SOUTH OF LOAD CENTER AND EAST 11TH AVE | 1.14 | 20.00 | 2.00 |
| | STREET LIGHTING: 12TH, WEST 11TH, LOG CABIN | | | |
| BA3 | STREET LIGHTING: NOBLE BETWEEN 9TH AVE AND 7TH AVE, 7TH AVE | 1.90 | 20.00 | 2.00 |
| BA4 | STREET LIGHTING: NOBLE & BETWEEN 4TH AVE AND 6TH AVE | 1.26 | 20.00 | 2.00 |
| | RECEPTACLES: 10TH AVE TO 7TH AVE | | | |
| BA5 | RECEPTACLES: 6TH AVE TO 4TH AVE | 3.60 | 30.00 | 2.00 |
| BA6 | RECEPTACLES: 11TH AVE TO GAFFNEY | 1.98 | 20.00 | 2.00 |
| | SPARE | | | |
| BA7 | SPARE | 20.00 | 20.00 | 2.00 |
| BA8 | SPARE | 20.00 | 20.00 | 2.00 |
| BA9 | SPARE | 20.00 | 20.00 | 2.00 |
| BA10 | SPARE | 20.00 | 20.00 | 2.00 |
| TOTAL KVA LOAD PANEL - A | | 16.37 | 68.19 | |

STREET LIGHTING LOAD CENTER "A"

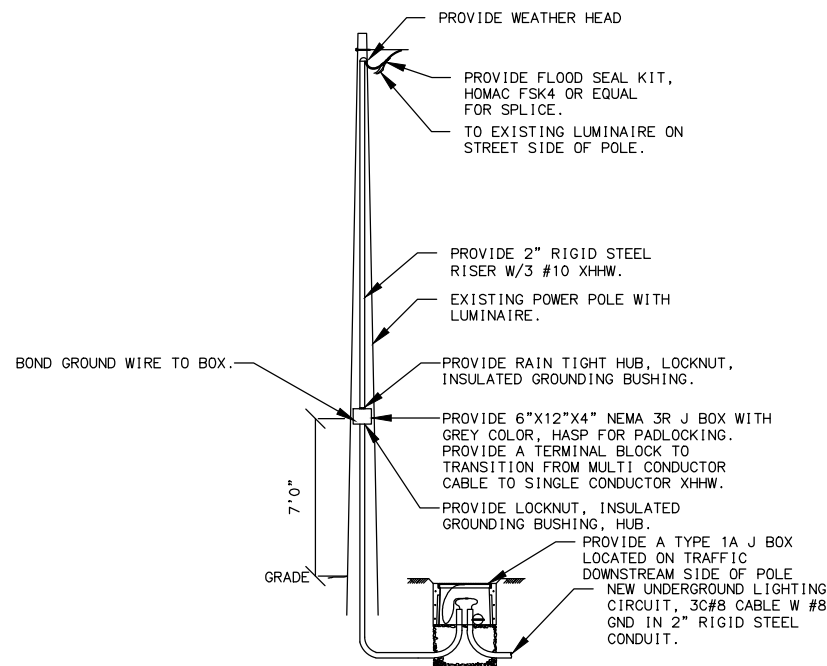
SUMMARY OF LOAD CENTER: B

| LOAD CENTER TYPE | 1A | | | |
|--------------------------|-------------------------------|----------|----------|-------|
| SERVING UTILITY | GVEA | | | |
| SERVICE CONDUIT SIZE | RIGID METAL CONDUIT | | | |
| LOCATION DATA | | | | |
| LOAD CENTER | X | | | |
| POWER SOURCE: | UNDERGROUND | | | |
| PHOTOELECTRIC CONTROL | YES | | | |
| SERVICE VOLTAGE | 1 PHASE 3 WIRE, 120/240 VOLTS | | | |
| PROVIDE METER SOCKET? | YES | | | |
| MAIN BREAKER A: | 240 VOLT, 2 POLE, 100 AMPERES | | | |
| CONTACTOR A: | 300 VOLT, 4 POLE, 30 AMPERES | | | |
| PANEL B | | | | |
| CIRCUIT NUMBER | DESCRIPTION 240/480 V | KVA LOAD | BREAKERS | |
| | | | AMPS | POLES |
| BA1 | LIGHTING CONTROL | 0.1 | 15 | 2 |
| BA2 | TERSECTION LIGHTIN | 0.4 | 20 | 2 |
| BA3 | TRAFFIC CONTROL | 3 | 30 | 1 |
| BA4 | RECEPTACLES, INTERSECTION | 1.08 | 20 | 2 |
| | SPARE | | | |
| BA5 | SPARE | 20 | 20 | 2 |
| BA6 | SPARE | 20 | 20 | 2 |
| BA7 | SPARE | 20 | 20 | 2 |
| BA8 | SPARE | 20 | 20 | 2 |
| TOTAL KVA LOAD PANEL - B | | 4.58 | 19.08 | |

TRAFFIC CONTROLLER AND INTERSECTION LIGHTING LOAD CENTER (TYPICAL FOR B, C, D AND E)

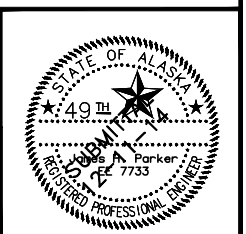


POLE MOUNTED RECEPTACLE WIRING DIAGRAM



TYPICAL TRANSITION BETWEEN AERIAL & UNDERGROUND LIGHTING CIRCUIT

LOAD CENTER SCHEDULES AND DETAILS

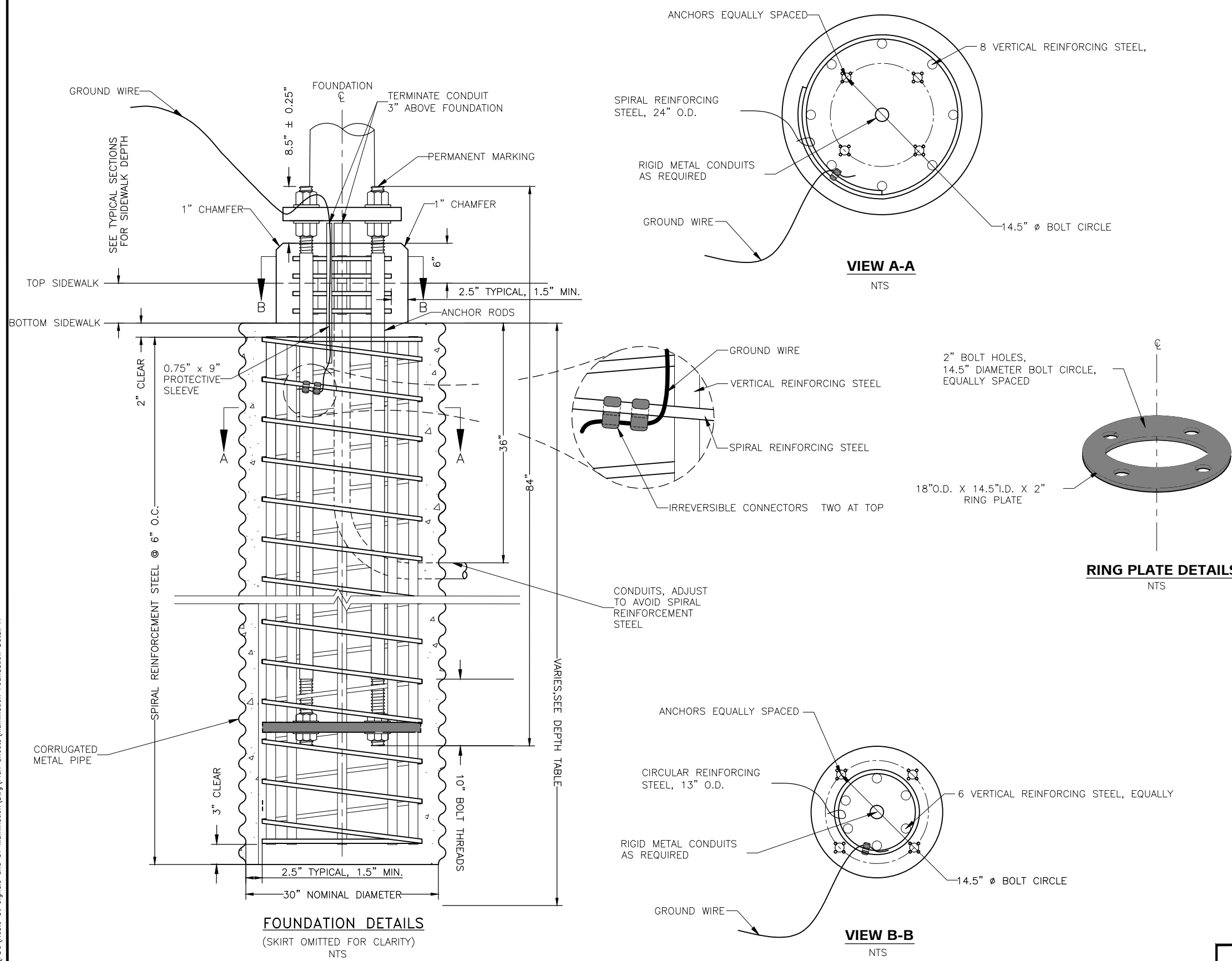


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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | H23 | -- |

NOTES:
 1. THIS DETAIL MODIFIES STANDARD DETAIL L-30.10.

| MATERIAL REQUIREMENTS | | |
|-----------------------------------|----------------------------|--------|
| ANCHOR RODS 2" X 96" | ASTM F1554 S2, S3, & S5 | GR 105 |
| FASTNERS, WASHERS | AASHTO M293 | |
| FASTNERS, NUTS | AASHTO M292 | |
| FINISH, ANCHOR RODS & FASTNERS | AASHTO M232 | |
| RING PLATE | AASHTO M270 | GR 36 |

| DEPTH TABLE | |
|----------------|---------------------------------------|
| GRADE | FOUNDATION DEPTH BY APPLICATION (FT.) |
| | ELECTROLIER * SEE NOTE 9 |
| FLAT TO 6:1 | 8 |
| >=6:1 TO 3:1 | 9 |
| >=3:1 TO 1.5:1 | 10 |



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ILLUMINATION FOUNDATION
 DETAIL "A"

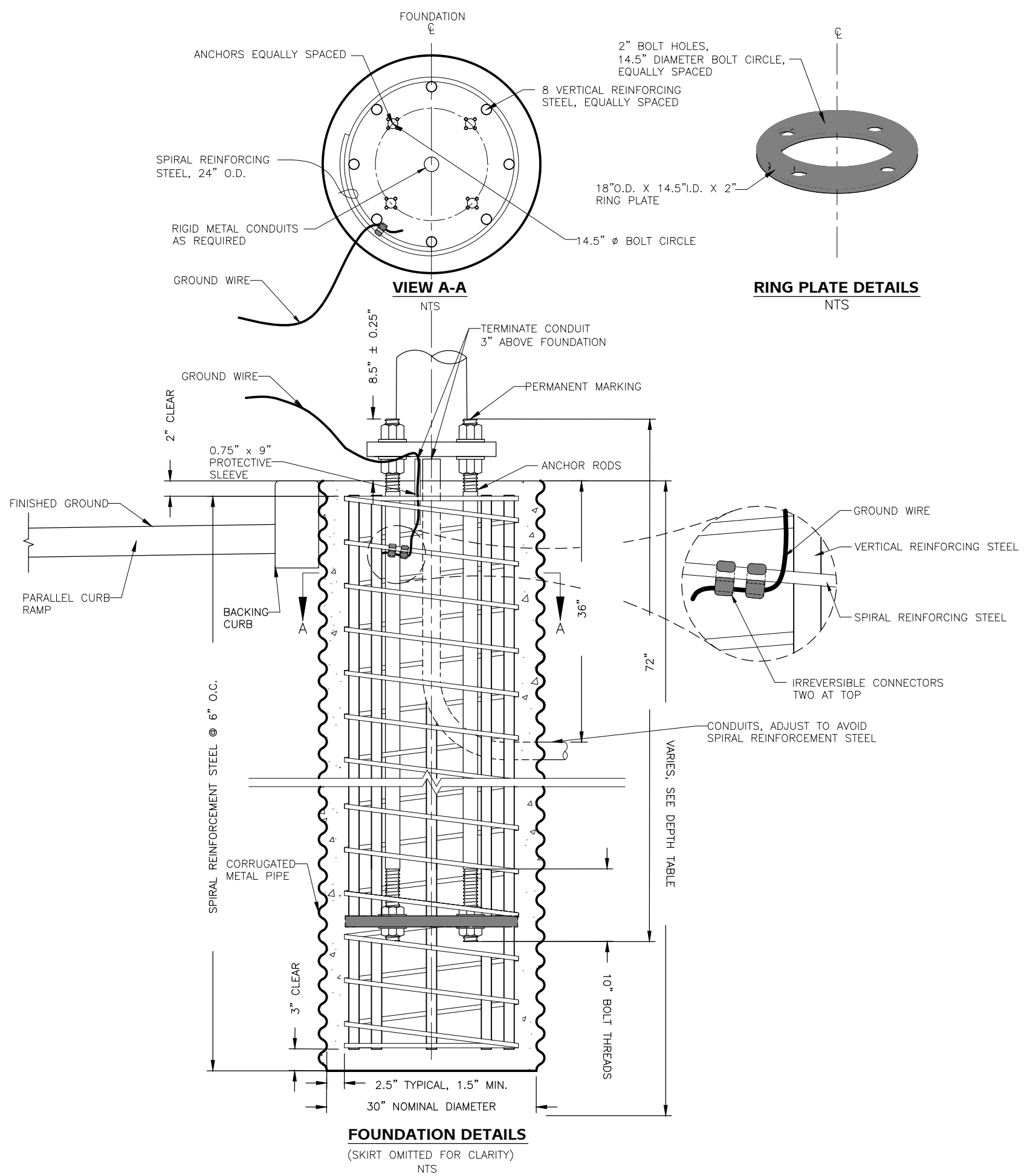


| | | | | |
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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | H24 | -- |

NOTES:
 1. THIS DETAIL MODIFIES STANDARD DETAIL L-30.10.

| MATERIAL REQUIREMENTS | | |
|-----------------------------------|----------------------------|--------|
| ANCHOR RODS 2" X 96" | ASTM F1554 S2, S3, & S5 | GR 105 |
| FASTNERS, WASHERS | AASHTO M293 | |
| FASTNERS, NUTS | AASHTO M292 | |
| FINISH, ANCHOR RODS & FASTNERS | AASHTO M232 | |
| RING PLATE | AASHTO M270 | GR 36 |

| DEPTH TABLE | |
|----------------|---------------------------------------|
| GRADE | FOUNDATION DEPTH BY APPLICATION (FT.) |
| | ELECTROLIER * SEE NOTE 9 |
| FLAT TO 6:1 | 8 |
| >=6:1 TO 3:1 | 9 |
| >=3:1 TO 1.5:1 | 10 |



ILLUMINATION FOUNDATION
 DETAIL "B"

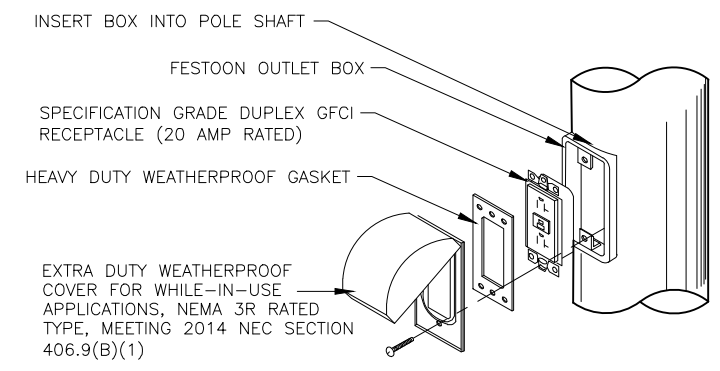
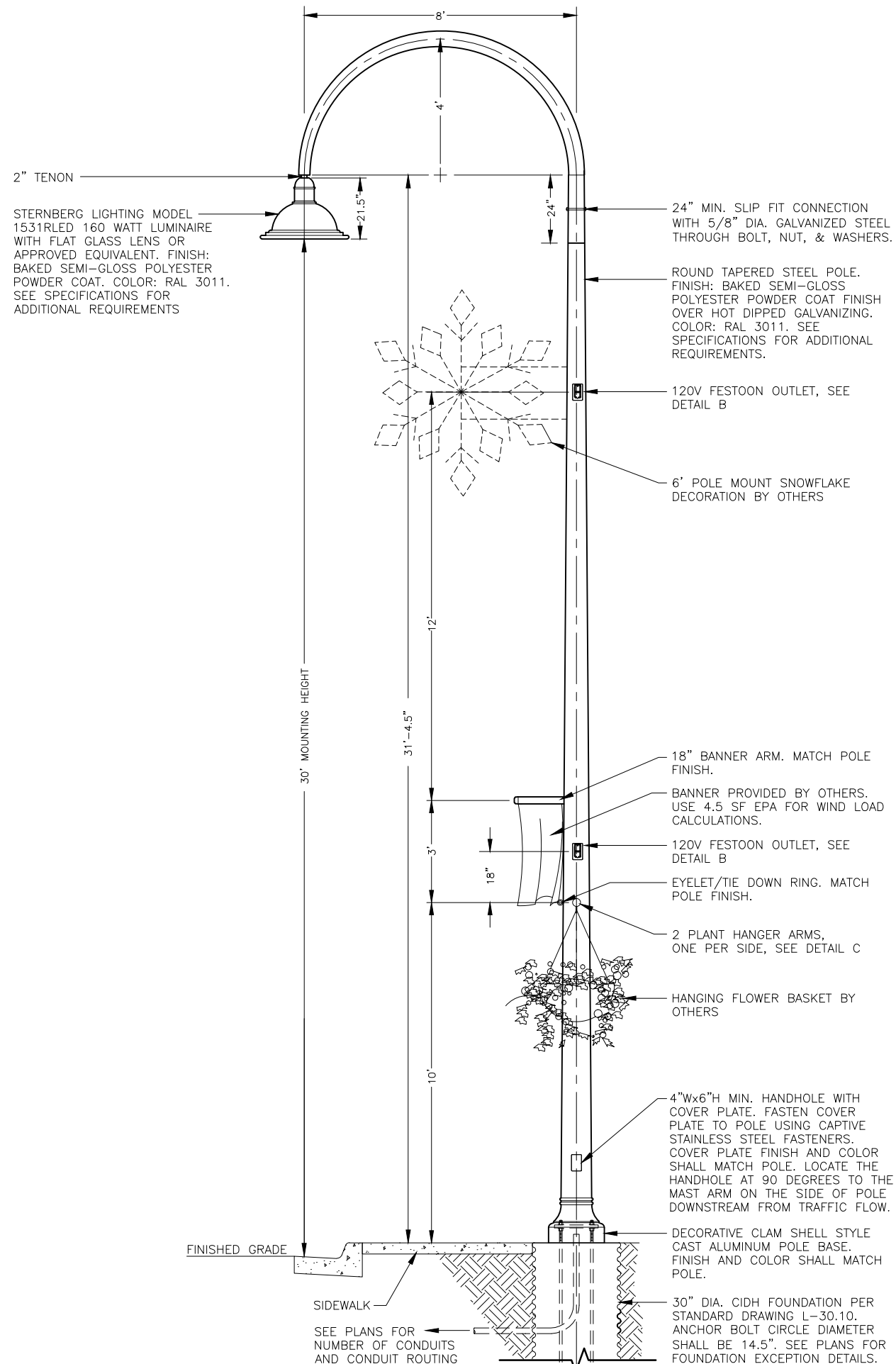


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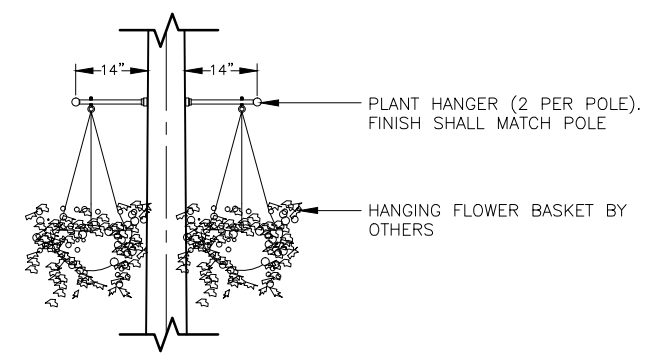
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H25 | -- |

NOTES:

1. WELD SIZE TO BE DETERMINED BY MANUFACTURER.
2. MOUNTING HEIGHT, REFERS TO THE HEIGHT OF LUMINAIRE ABOVE THE ROADWAY. ADJUST EACH POLE'S SHAFT LENGTH TO MAINTAIN THIS DIFFERENCE IN ELEVATION WHENEVER THE FOUNDATION VARIES.
3. MINIMUM OUTSIDE DIAMETER AT THE TOP OF POLE EQUALS 3-7/8". POLE DIAMETER SHALL TAPER UNIFORMLY FROM THE TOP OF POLE TO THE BASE PLATE, WITH A MAXIMUM TAPER RATE OF 0.15" PER FOOT.



B FESTOON OUTLET DETAIL
ISOMETRIC VIEW



C PLANT HANGER DETAIL
FRONT ELEVATION

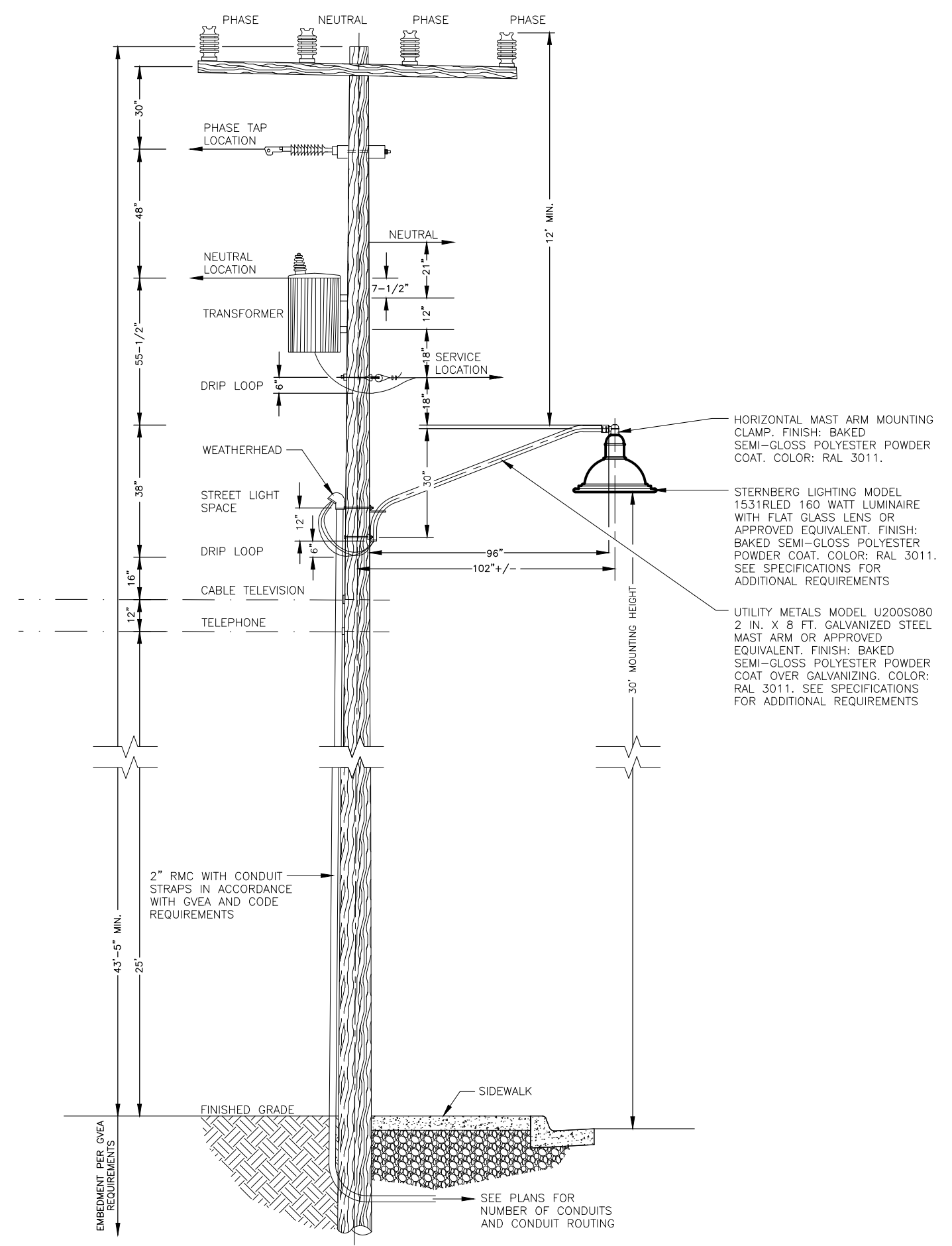
A CBD STREET LIGHT POLE AND LUMINAIRE
RIGHT ELEVATION

CENTRAL BUSINESS DISTRICT STREET LIGHT POLE AND LUMINAIRE DETAILS



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| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | H26 | -- |



A CBD STREET LIGHT LUMINAIRE MOUNTED ON GVEA JOINT USE UTILITY POLE
LEFT ELEVATION

WOOD POLE SIGNAL AND LIGHTING DETAILS

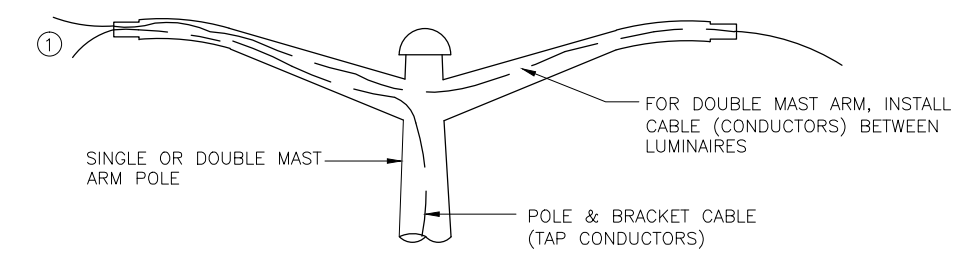
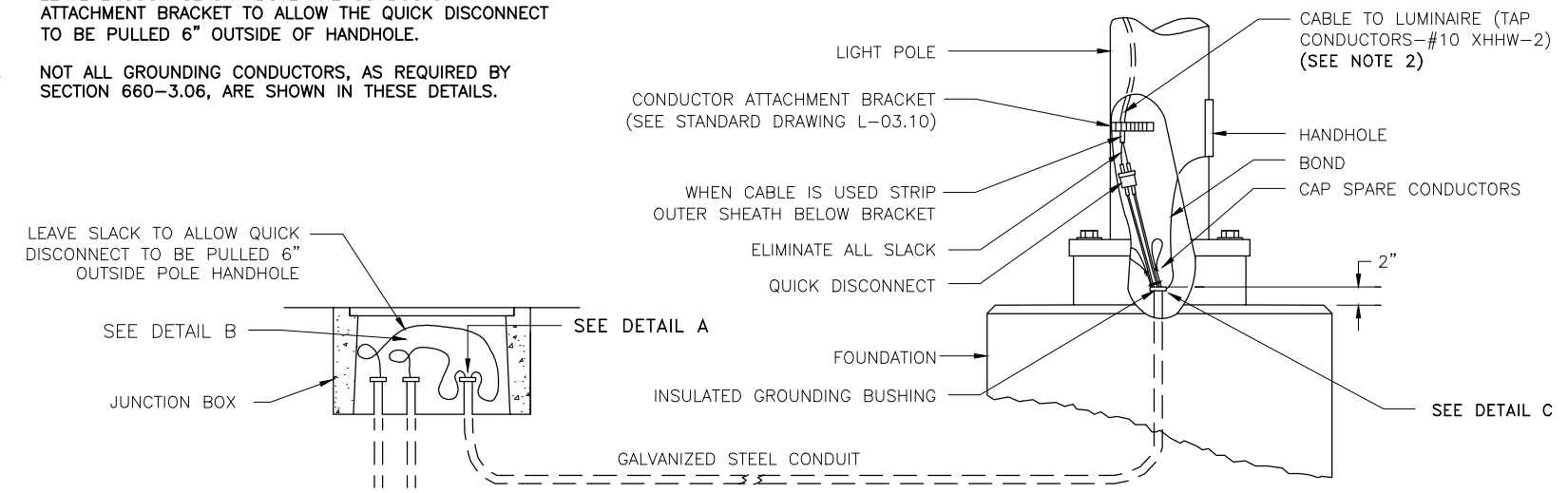


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| | | | | |
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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | H27 | -- |

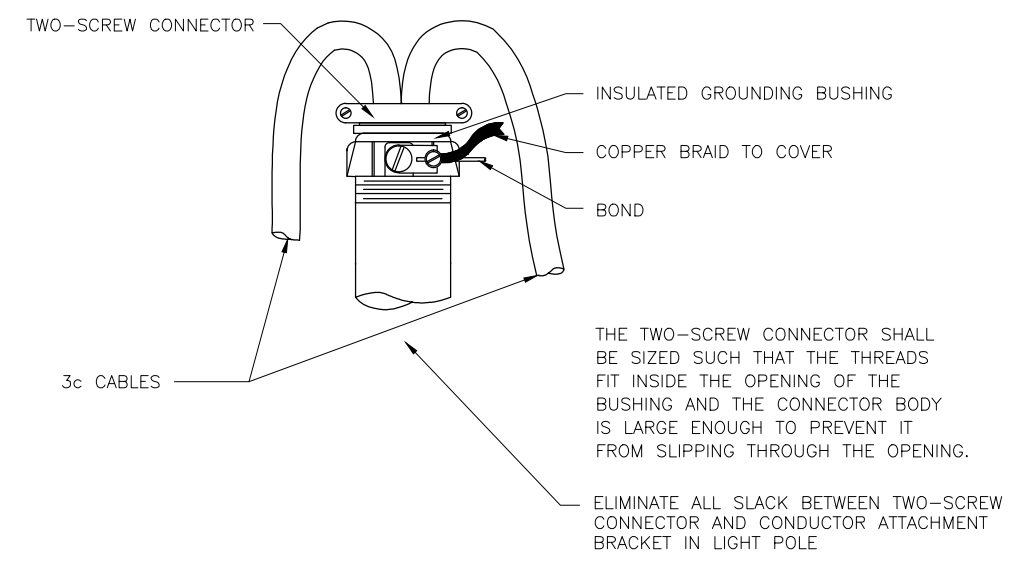
NOTES:

1. LABEL ALL CABLES AND CONDUCTORS IN POLE BASE AND J-BOX.
2. LEAVE ENOUGH SLACK ABOVE THE CONDUCTOR ATTACHMENT BRACKET TO ALLOW THE QUICK DISCONNECT TO BE PULLED 6" OUTSIDE OF HANDHOLE.
3. NOT ALL GROUNDING CONDUCTORS, AS REQUIRED BY SECTION 660-3.06, ARE SHOWN IN THESE DETAILS.

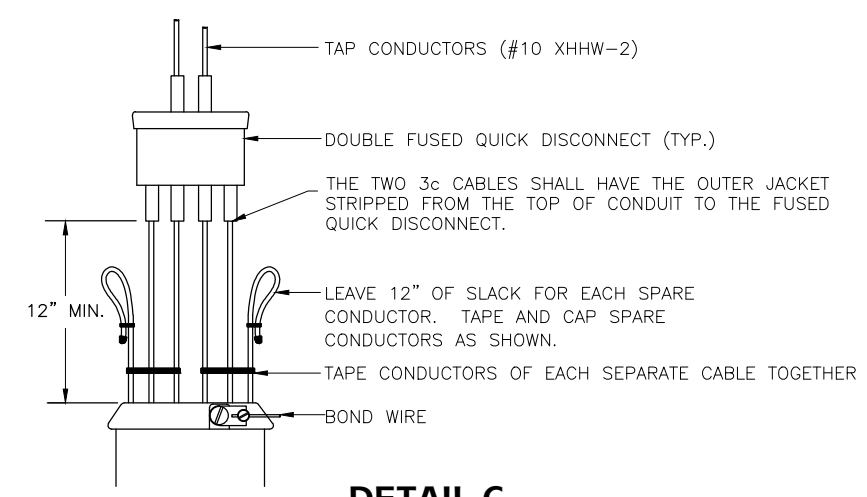


① INSTALL 2"x1" REDUCING WASHER AND 1" CONNECTOR TO SECURE CONDUCTORS AT THE END OF THE MAST ARM

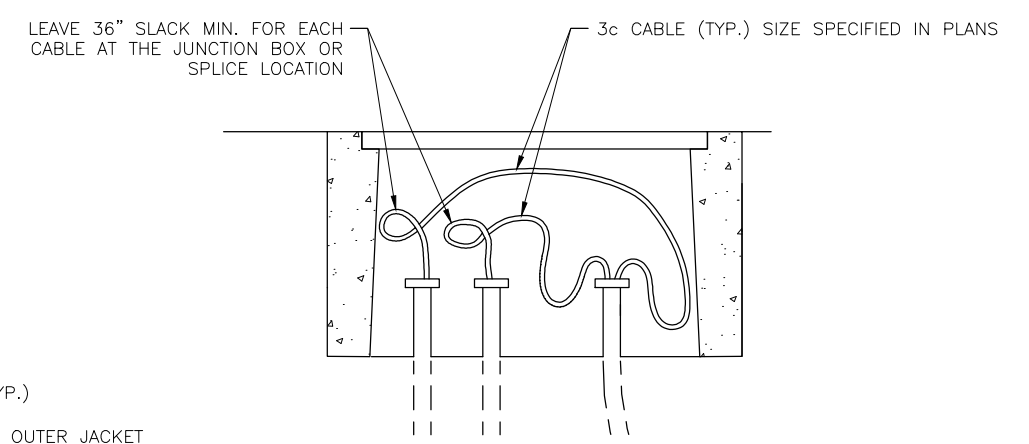
LIGHT STANDARD MAST ARM WIRING DETAIL



DETAIL A



DETAIL C



DETAIL B

LIGHTING SYSTEM POLE AND J-BOX WIRING DETAILS

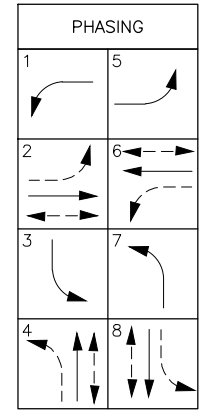
LIGHTING SYSTEM POLE & J-BOX WIRING DETAILS



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|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | H28 | -- |

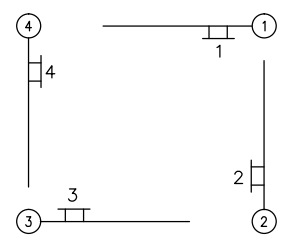
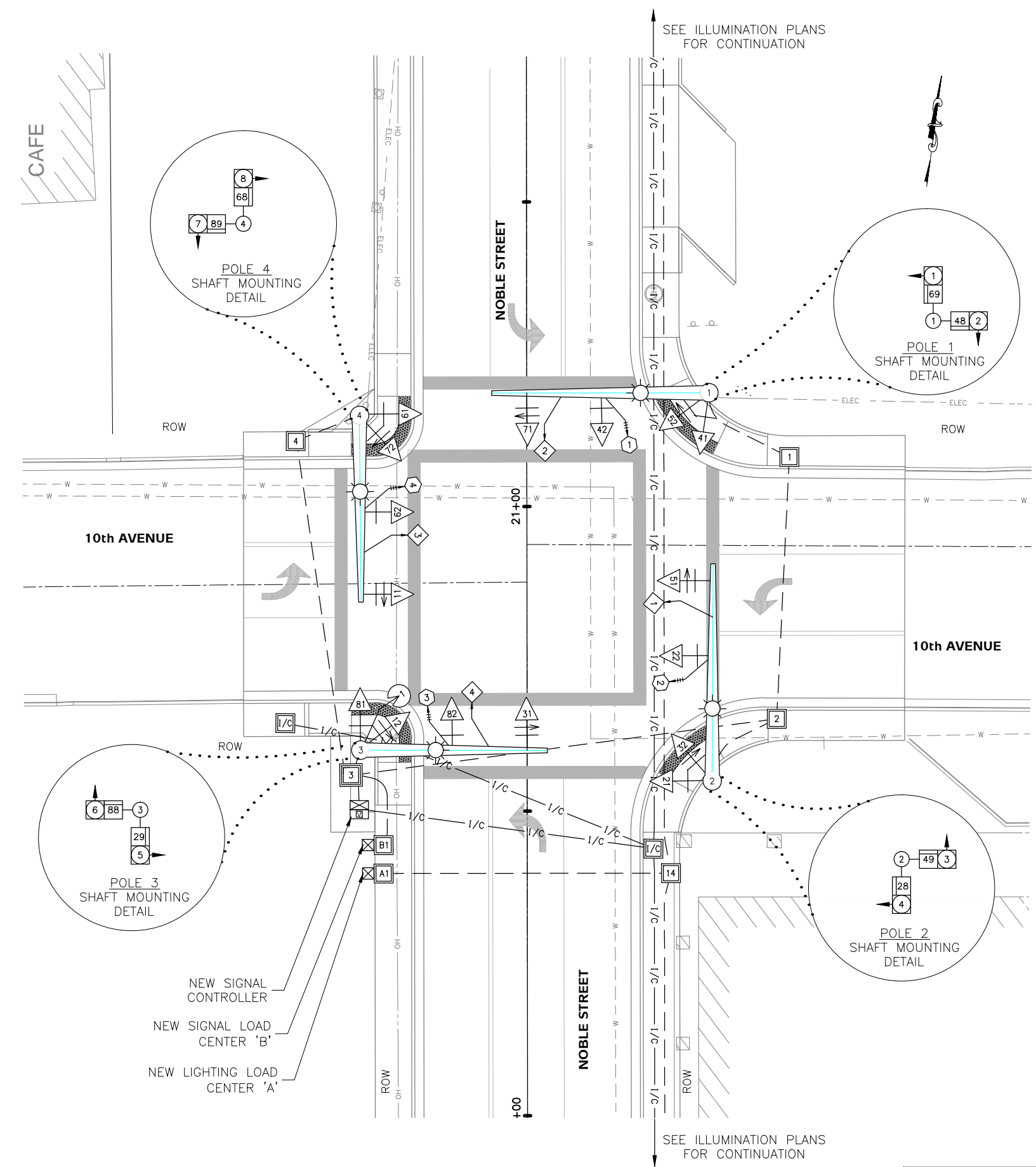
PHASE SEQUENCE



- PED MOVEMENT
- VEH. MOVEMENT
- LEFT TURN MOVEMENT (PROTECTED)
- LEFT TURN MOVEMENT (PERMISSIVE)

SUPPLEMENTAL LEGEND

- RADAR DETECTOR
- OPTICOM DETECTOR
- PAN, TILT, ZOOM CAMERA



SIGN PLACEMENT

NEW SIGNAL CONTROLLER
 NEW SIGNAL LOAD CENTER 'B'
 NEW LIGHTING LOAD CENTER 'A'

SEE ILLUMINATION PLANS FOR CONTINUATION

SEE ILLUMINATION PLANS FOR CONTINUATION

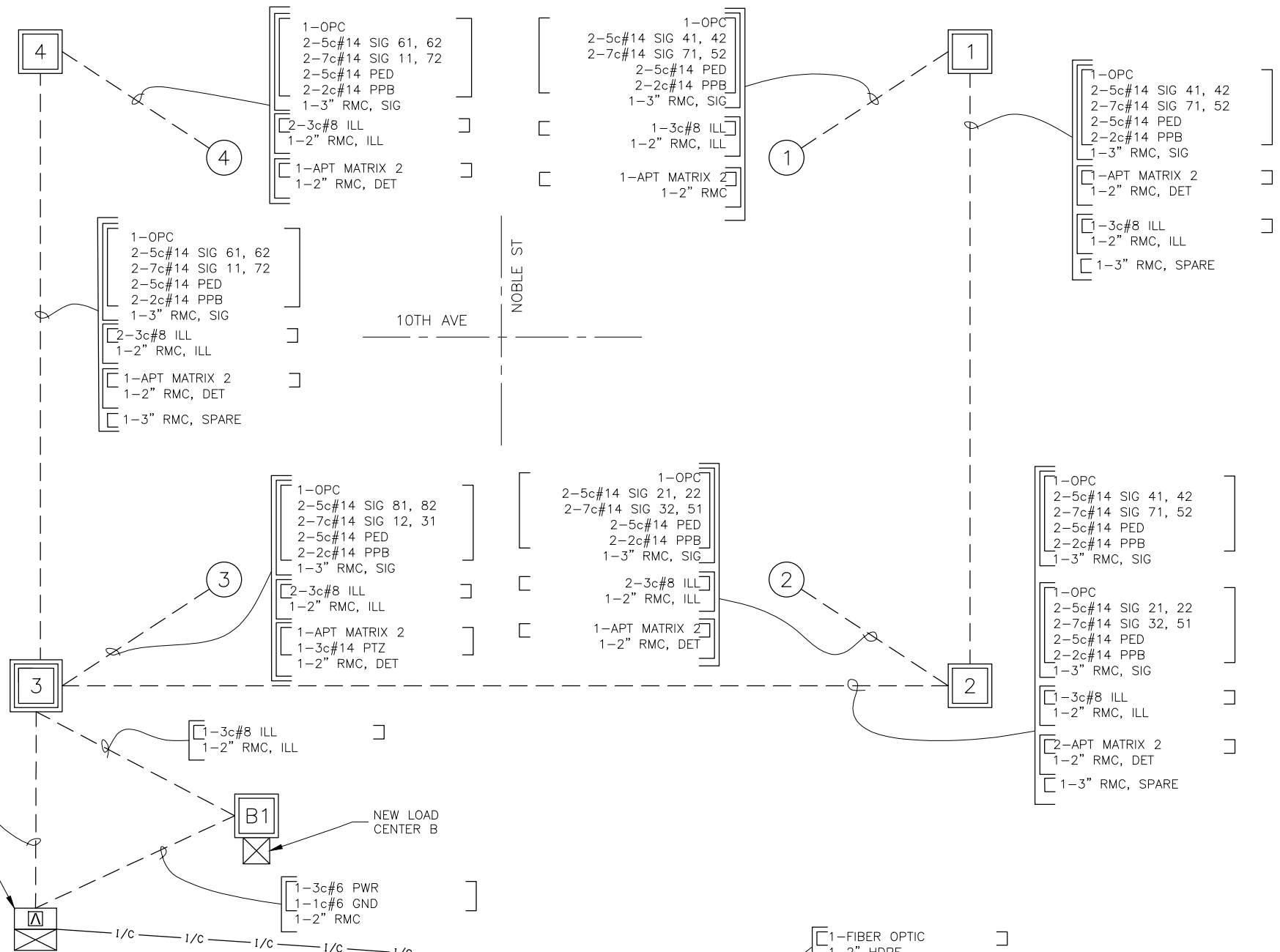
NOBLE ST - 10TH AVE
 SIGNALIZATION PLANS 1 OF 4

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NOTE:
 1. INSTALL 1-1c#8 IN ALL CONDUITS UNLESS ANOTHER GROUND CONDUCTOR IS SPECIFIED.

- 1-OPC
2-5c#14 SIG 41, 42
2-7c#14 SIG 71, 52
2-5c#14 PED
2-2c#14 PPB
1-3" RMC, SIG
- 1-OPC
2-5c#14 SIG 21, 22
2-7c#14 SIG 32, 51
2-5c#14 PED
2-2c#14 PPB
1-3" RMC, SIG
- 1-OPC
2-5c#14 SIG 61, 62
2-7c#14 SIG 72, 11
2-5c#14 PED
2-2c#14 PPB
1-3" RMC, SIG
- 1-OPC
2-5c#14 SIG 81, 82
2-7c#14 SIG 31, 12
2-5c#14 PED
2-2c#14 PPB
1-3" RMC, SIG
- 4-APT MATRIX 2
1-3c#14 PTZ
1-2" RMC, DET
1-3" RMC, SPARE



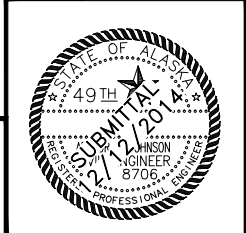
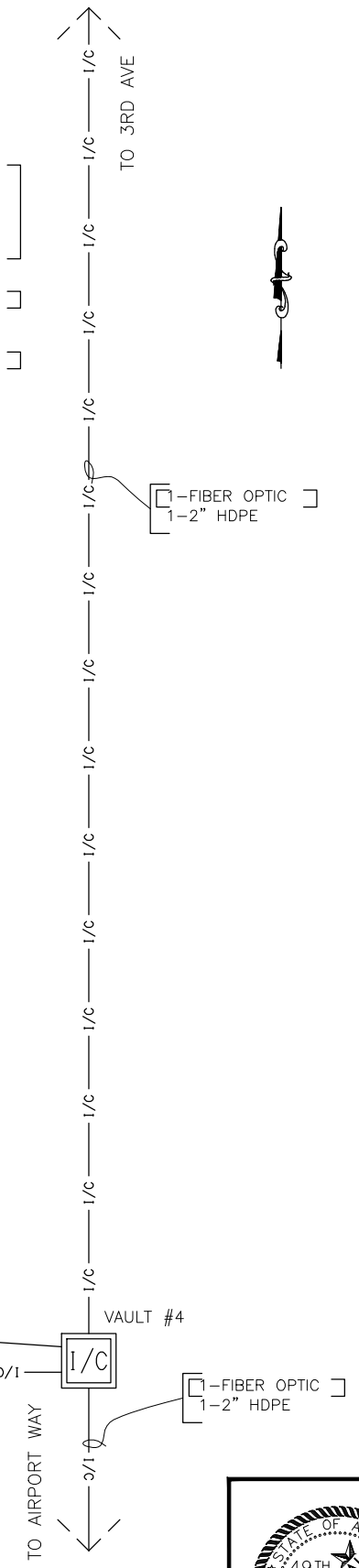
WIRING LEGEND:
 — I/c — INDICATES NEW INTERCONNECT RUN
 - - - - - INDICATES EXISTING CONDUIT RUN
 - - - - - INDICATES NEW RIGID METAL CONDUIT RUN(S)
 - - - - - E - INDICATES THE CONNECTION BETWEEN EXISTING AND NEW CONDUIT

WIRING DIAGRAM CODING LEGEND

- | | |
|--|-------------------------------------|
| OPC = OPTICOM CABLE | 5c#14 TRAFFIC SIGNALS |
| LL = LOOP LEAD-IN | 7c#14 PROTECTED-PERMITTED SIGNALS |
| INT = INTERCONNECT CABLE | 5c#14 PEDESTRIAN SIGNALS |
| PWR = POWER CONDUCTORS FOR SIGNAL CONTROLLER | 2c#14 PEDESTRIAN PUSH-BUTTON |
| T = TRANSFORMER | 3pr#18 } LOOP LEAD-IN CABLE & VD ET |
| | 6pr#18 } |
| | 9pr#18 } |
| GND = GROUND | 15pr#18 } |
| ILL = ILLUMINATION | 3c#8 ILLUMINATION |
| RMC = RIGID METAL CONDUIT | 3c#6 SIGNAL POWER |
| PVC = POLYVINYLCHLORIDE CONDUIT | 1c#8 BARE COPPER GROUND |
| | 18pr#19 PE-39 INTERCONNECT CABLE |
| PPB = PEDESTRIAN PUSH-BUTTON | 1c#6 BARE COPPER GROUND |
| SIG = SIGNAL | 3C#14 PAN, TILT, ZOOM CAMERA |
| PED = PEDESTRIAN SIGNAL | APT MATRIX 2 RDET HOME RUN |
| DET = DETECTION CONDUIT | |
| F = FUTURE USE | |
| PTZ = PAN, TILT, ZOOM CAMERA | |
| E = EXISTING | |
| RDET = RADAR DETECTION | |

VAULT #5
 I/C
 NEATLY COIL 100 FT OF SM FIBER-OPTIC CABLE IN VAULT

FOR FUTURE USE TO EXTEND INTERCONNECT WEST TO LACY ST.



Z:\PROJECTS\POC Noble St Signals and ST Illumination\Drawings\Plan Sheets\Noble_10th Wiring Diagram

| SIGNAL SIGN SCHEDULE | | | | | | | | | |
|-----------------------|----------|--------|-----------|----------|-------------------|--------------|-----------------|--------|---------|
| SIGN NO. | LOCATION | | ASDS CODE | LEGEND | SIZE HxV (INCHES) | AREA (SQ FT) | BRACING/FRAMING | | REMARKS |
| | POLE NO. | OFFSET | | | | | BRACED | FRAMED | |
| 1 | 1 | 8.0 | D3-1 | 10TH AVE | 78x24 | 13.00 | | X | |
| 2 | 2 | 8.0 | D3-1 | NOBLE ST | 78x24 | 13.00 | | X | |
| 3 | 3 | 8.0 | D3-1 | 10TH AVE | 78x24 | 13.00 | | X | |
| 4 | 4 | 8.0 | D3-1 | NOBLE ST | 78x24 | 13.00 | | X | |
| SUBTOTAL SIGNAL SIGNS | | | | | | 52.00 | | | |

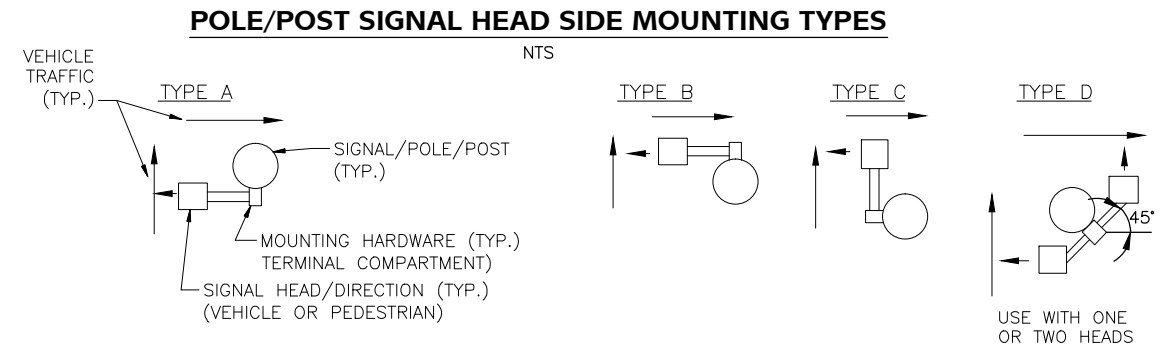
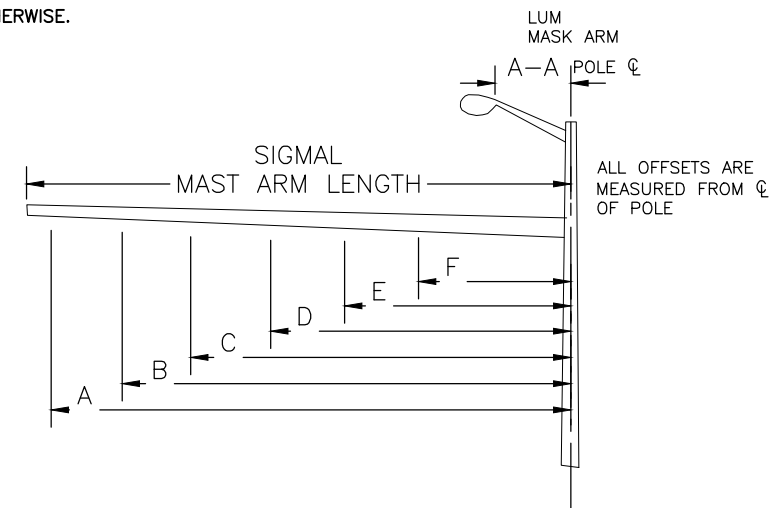
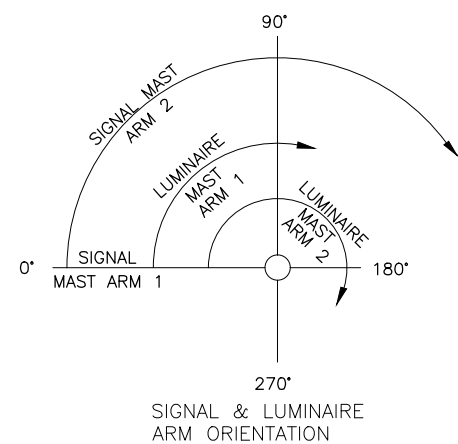
NOTE:
LOCATION OFFSETS ARE FROM CENTER OF SIGNAL HEAD TO ϕ OF SIGNAL POLE

| POLE-POST DESIGN LOADING SCHEDULE | | | | | | | | | | | | |
|-----------------------------------|--------|------------------|--------------------|--------------|--------|-----------|--------|-------|---|-----|---------|--------------------------|
| POLE NO. | CORNER | LUM# ARM L (FT.) | SIGNAL ARM L (FT.) | | | | | | | A-A | REMARKS | |
| | | | | A | B | C | D | E | F | | | |
| 1 | NE | 15.0' | 35' | SIG. OR SIGN | SIGNAL | RADAR DET | SIGNAL | SIGN | | | | MOUNT LUMINAIRE ARM @ 0° |
| | | | | LOC. OFFSET | 29.9 | 23.8 | 17.6 | 8.0 | | | | |
| | | | | LxW OR S.F. | 14.10 | 2.00 | 11.50 | 13.00 | | | | |
| 2 | SE | 15.0' | 35' | SIG. OR SIGN | SIGNAL | RADAR DET | SIGNAL | SIGN | | | | MOUNT LUMINAIRE ARM @ 0° |
| | | | | LOC. OFFSET | 32.9 | 26.2 | 20.6 | 8.0 | | | | |
| | | | | LxW OR S.F. | 14.10 | 2.00 | 11.50 | 13.00 | | | | |
| 3 | SW | 15.0' | 30' | SIG. OR SIGN | SIGNAL | RADAR DET | SIGNAL | SIGN | | | | MOUNT LUMINAIRE ARM @ 0° |
| | | | | LOC. OFFSET | 27.3 | 21.2 | 15.1 | 8.0 | | | | |
| | | | | LxW OR S.F. | 14.10 | 2.00 | 11.50 | 13.00 | | | | |
| 4 | NW | 15.0' | 30' | SIG. OR SIGN | SIGNAL | RADAR DET | SIGNAL | SIGN | | | | MOUNT LUMINAIRE ARM @ 0° |
| | | | | LOC. OFFSET | 29.3 | 21.9 | 15.9 | 8.0 | | | | |
| | | | | LxW OR S.F. | 14.10 | 2.00 | 11.50 | 13.00 | | | | |

NOTES:
1. BOTH SIGNAL AND ILLUMINATION MAST ARMS ARE ORIENTATED IN THE SAME DIRECTION UNLESS NOTED OTHERWISE.
2. ORIENT SIGNAL MAST ARM(S) 90° TO ϕ OF ROADWAY UNLESS NOTED OTHERWISE.

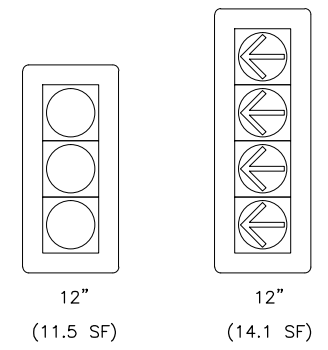
| SIGNAL HEAD SCHEDULE | | | | | | | | | | | | | | | | |
|----------------------|----------|-------------|---|---|-----------|---|----|---------|---|---|----------|-------------|-----------------|---------|-------------|-------------|
| POLE/POST NO. | FACE NO. | INDICATIONS | | | | | | | | | MOUNTING | | | REMARKS | | |
| | | 12" BALL | | | 12" ARROW | | | 8" BALL | | | MAST ARM | | SIDE MTNG. TYPE | | TOP OF POST | |
| | | R | Y | G | R | Y | YF | G | R | Y | G | LOC. OFFSET | | | | ELEV. PLUMB |
| 1 | 52 | | | | L | L | L | L | | | | | | D | | NOTE 3 |
| | 41 | X | X | X | | | | | | | | | | D | | |
| | 42 | X | X | X | | | | | | | 17.6 | X | | D | | |
| | 71 | | | | L | L | L | L | | | 29.9 | X | | D | | NOTE 3 |
| 2 | 32 | | | | L | L | L | L | | | | | | D | | NOTE 3 |
| | 21 | X | X | X | | | | | | | | | | D | | |
| | 22 | X | X | X | | | | | | | 20.6 | X | | D | | |
| | 51 | | | | L | L | L | L | | | 32.9 | | | D | | NOTE 3 |
| 3 | 12 | | | | L | L | L | L | | | | | | D | | NOTE 3 |
| | 81 | X | X | X | | | | | | | | | | D | | |
| | 82 | X | X | X | | | | | | | 15.1 | X | | D | | |
| | 31 | | | | L | L | L | L | | | 27.3 | X | | D | | NOTE 3 |
| 4 | 72 | | | | L | L | L | L | | | | | | D | | NOTE 3 |
| | 61 | X | X | X | | | | | | | | | | D | | |
| | 62 | X | X | X | | | | | | | 15.9 | | | D | | |
| | 11 | | | | L | L | L | L | | | 29.3 | | | D | | NOTE 3 |

NOTES:
1. LOCATION OFFSETS ARE FROM CENTER OF SIGNAL HEAD TO ϕ OF SIGNAL POLE.
2. YF = YELLOW FLASHING ARROW.
3. PLUMBIZE MOUNTING LOCATION SHALL BE BETWEEN YELLOW ARROW AND FLASHING YELLOW ARROW SECTIONS.



SIGNAL HEAD CONFIGURATIONS
(AREAS ARE FOR WIND LOAD CALCULATIONS)

| PED SIGNAL HEAD SCHEDULE | | | | |
|--------------------------|----------|---------------|--|---------|
| POLE/POST NO. | FACE NO. | MOUNTING TYPE | | REMARKS |
| | | | | |
| 1 | 69 | P | | |
| | 48 | P | | |
| 2 | 28 | P | | |
| | 49 | P | | |
| 3 | 29 | P | | |
| | 88 | P | | |
| 4 | 68 | P | | |
| | 89 | P | | |



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| BASE & JUNCTION BOX SCHEDULE | | | | | | | | | | | | |
|------------------------------|-----------|-------------|------------------|------------|------------|---|---|-------------------|----|-----|----|---------|
| LOCATION | | DESCRIPTION | | | BASE TYPE* | | | JUNCTION BOX TYPE | | | | REMARKS |
| STATION | OFFSET | POLE NO. | JUNCTION BOX NO. | CONTROLLER | CIDH | P | A | IA | II | III | IV | |
| 21+19 | 29.9', RT | 1 | | | X | | | | | | | |
| 20+55 | 30.4', RT | 2 | | | X | | | | | | | |
| 20+60 | 27.3', LT | 3 | | | X | | | | | | | |
| 21+15 | 27.5', LT | 4 | | | X | | | | | | | |
| 21+08 | 43.1', RT | | 1 | | | | | | X | | | |
| 20+65 | 41.0', RT | | 2 | | | | | | X | | | |
| 20+56 | 28.9', LT | | 3 | | | | | | | X | | |
| 21+11 | 37.9', LT | | 4 | | | | | | X | | | |
| 20+50 | 27.6', LT | | | X | | | | | | | | |

* P = PRECAST BASE (FOUNDATION)
A = TYPE A SEE T-31
CIDH = CAST IN DRILLED HOLE

| RADAR DETECTION SCHEDULE | | | | | | |
|--------------------------|------------|----------|-------------|----------|------------|--------------------|
| DET. NO. | PHASE CALL | TYPE | FACING DIR. | POLE NO. | LOCATION | RADAR TYPE |
| 1 | 2&5 | STOP BAR | WEST | 2 | SIGNAL ARM | SMARTSENSOR MATRIX |
| 2 | 4&7 | STOP BAR | SOUTH | 1 | SIGNAL ARM | SMARTSENSOR MATRIX |
| 3 | 6&1 | STOP BAR | EAST | 4 | SIGNAL ARM | SMARTSENSOR MATRIX |
| 4 | 8&3 | STOP BAR | NORTH | 3 | SIGNAL ARM | SMARTSENSOR MATRIX |



| OPTICOM DETECTOR SCHEDULE | | | | | |
|---------------------------|----------|------------|-------------|-----------|----------|
| LOCATION | DET. NO. | PHASE CALL | FACING DIR. | PREEMPTOR | PRIORITY |
| ON TOP OF SIGNAL HEAD 42 | 1 | 4, 7 | SOUTH | | |
| ON TOP OF SIGNAL HEAD 22 | 2 | 2, 5 | WEST | | |
| ON TOP OF SIGNAL HEAD 82 | 3 | 3, 8 | NORTH | | |
| ON TOP OF SIGNAL HEAD 62 | 4 | 6, 1 | EAST | | |



| FLASH PROGRAM COLOR | | | | | | | | |
|---------------------|---|---|---|---|---|---|---|---|
| PHASE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| COLOR | R | R | R | R | R | R | R | R |

| PEDESTRIAN DETECTION SCHEDULE | | | |
|-------------------------------|-------------|-------|------------|
| POLE | PUSH BUTTON | PHASE | REMARKS |
| 1 | 1 | 6 | SEE NOTE 2 |
| 1 | 2 | 4 | SEE NOTE 1 |
| 2 | 3 | 4 | SEE NOTE 2 |
| 2 | 4 | 2 | SEE NOTE 1 |
| 3 | 5 | 2 | SEE NOTE 2 |
| 3 | 6 | 8 | SEE NOTE 1 |
| 4 | 7 | 8 | SEE NOTE 2 |
| 4 | 8 | 6 | SEE NOTE 1 |

NOTES:

- INSTALL AN R10-3L SIGN WITH PEDESTRIAN PUSH BUTTON. SIGN SHALL NOT BE MEASURED FOR PAYMENT AND IS SUBSIDIARY TO TRAFFIC SIGNAL PAY ITEMS
- INSTALL AN R10-3R SIGN WITH PEDESTRIAN PUSH BUTTON. SIGN SHALL NOT BE MEASURED FOR PAYMENT AND IS SUBSIDIARY TO TRAFFIC SIGNAL PAY ITEMS

| RADAR DETECTION EQUIPMENT | |
|---------------------------|---|
| QTY | DESCRIPTION |
| 0 | SMARTSENSOR ADVANCE EXTENDED RANGE (WX-SS-200E) |
| 4 | SMARTSENSOR MATRIX (WX-SS-225) |
| 4 | PELCO MOUNT (WX-SS-611) |
| 4 | SMARTSENSOR 6-CONDUCTOR CABLE (WX-SS-704-XXX) |

| NEMA CLOSURE EQUIPMENT | |
|------------------------|---|
| QTY | DESCRIPTION |
| 4 | CLICK 710, SMARTSENSOR 6-CONDUCTOR CABLE JUNCTION BOX (WX-SS-710) |

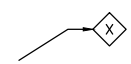
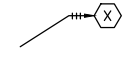
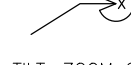
| CABINET EQUIPMENT | |
|-------------------|--|
| QTY | DESCRIPTION |
| 0 | CLICK! 112 RACK CARDS (WX-CLK-112) |
| 0 | CLICK! 114 RACK CARDS (WX-CLK-114) |
| 0 | INTERSECTION PREASSEMBLED BACKPLATE -AC, FOUR SENSOR, (WX-SS-B01-0005) |
| | 1 CLICK! 204 4 AMP POWER SUPPLY |
| | 5 CLICK! 210-02 2 AMP CIRCUIT BREAKERS (WX-CLK-210) |
| | 2 CLICK! 222, SMARTSENSOR SURGE PROTECTOR (WX-CLK-222) |
| | 1 CLICK! 230, AC SURGE PROTECTOR (WX-CLK-230) |
| | 1 T-BUS 5-SCREW TERMINAL BLOCKS (LEFT END) |
| | 5 T-BUS CONNECTORS (POWER AND COMMUNICATION) |
| | 1 T-BUS CONNECTOR (POWER ONLY) |
| | 5 END BRACKETS WITH LABELS |
| | 1 END BRACKET WITHOUT LABEL |
| | 4 TERMINAL BLOCKS FOR AC LINE INPUT: SPRING CAGE TO PLUG SPRING |
| | CAGE 10 AWG (2 GROUNDED) |
| | 28 TERMINAL BLOCKS FOR CABLE TERMINATION: INSULATION DISPLACEMENT |
| | TO PLUG INSULATION DISPLACEMENT (4 GROUNDED) |
| | MOUNTING PLATFORM: TRAFFIC CABINET BACKPLATE |
| | 1 8-FT POWER CORD |
| | 1 8-FT 14 AWG GROUND CABLE |
| | 1 5-FT BLACK RJ-11 PATCH CABLE |
| | 4 5FT WHITE RJ-11 PATCH CABLES |
| 1 | CLICK! 650, CABINET INTERFACE (WX-CLK-650) |

| ADDITIONAL EQUIPMENT | |
|----------------------|--|
| QTY | DESCRIPTION |
| 0 | SMARTSENSOR MANAGER ADVANCE SOFTWARE (WX-550-0001) |
| 1 | SMARTSENSOR MANAGER MATRIX SOFTWARE (WX-550-0004) |

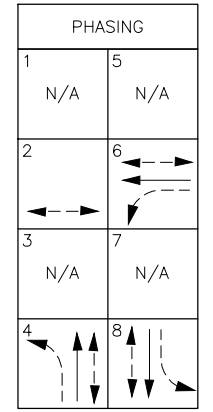






| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H32 | -- |

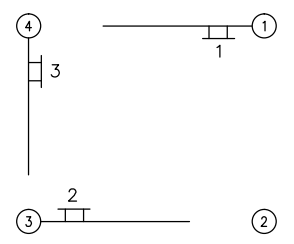
SUPPLEMENTAL LEGEND

-  RADAR DETECTOR
-  OPTICOM DETECTOR
-  PAN, TILT, ZOOM CAMERA

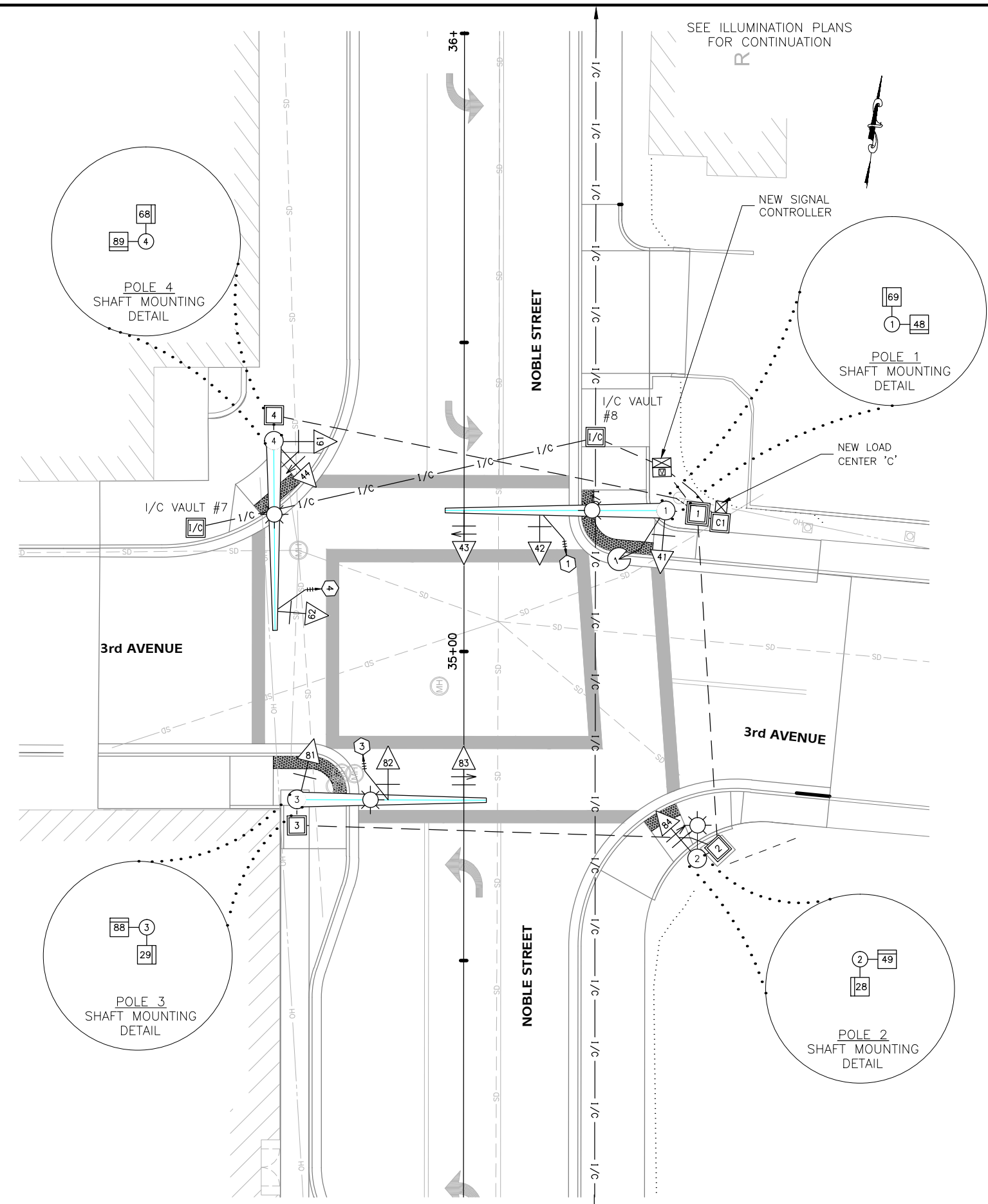
PHASE SEQUENCE



-  PED MOVEMENT
-  VEH. MOVEMENT
-  LEFT TURN MOVEMENT (PROTECTED)
-  LEFT TURN MOVEMENT (PERMISSIVE)

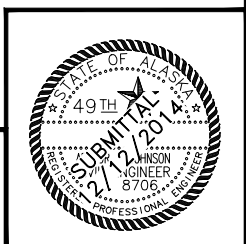


SIGN PLACEMENT



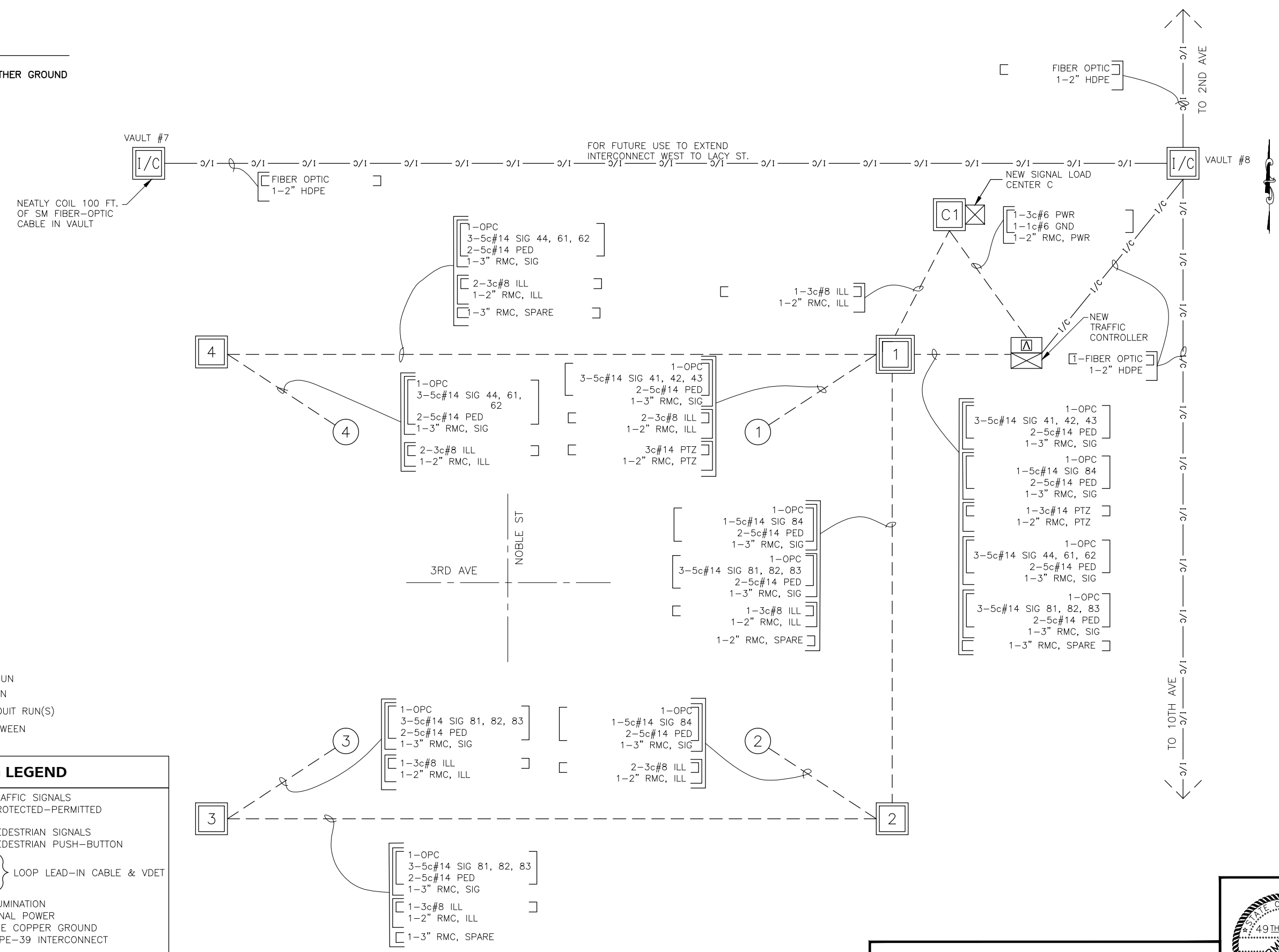
SEE ILLUMINATION PLANS FOR CONTINUATION

NOBLE ST - 3RD AVE
SIGNALIZATION PLANS 1 OF 4



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NOTE:
 1. INSTALL 1-1c#8 IN ALL CONDUITS UNLESS ANOTHER GROUND CONDUCTOR IS SPECIFIED.



WIRING LEGEND:
 — 1/c — INDICATES NEW INTERCONNECT RUN
 - - - - - INDICATES EXISTING CONDUIT RUN
 - - - - - INDICATES NEW RIGID METAL CONDUIT RUN(S)
 - - - - - INDICATES THE CONNECTION BETWEEN EXISTING AND NEW CONDUIT

WIRING DIAGRAM CODING LEGEND

| | |
|--|------------------------------------|
| OPC = OPTICOM CABLE | 5c#14 TRAFFIC SIGNALS |
| LL = LOOP LEAD-IN | 7c#14 PROTECTED-PERMITTED SIGNALS |
| INT = INTERCONNECT CABLE | 5c#14 PEDESTRIAN SIGNALS |
| PWR = POWER CONDUCTORS FOR SIGNAL CONTROLLER | 2c#14 PEDESTRIAN PUSH-BUTTON |
| T = TRANSFORMER | 3pr#18 |
| GND = GROUND | 6pr#18 } LOOP LEAD-IN CABLE & VDET |
| ILL = ILLUMINATION | 9pr#18 |
| RMC = RIGID METAL CONDUIT | 15pr#18 |
| PVC = POLYVINYLCHLORIDE CONDUIT | 3c#8 ILLUMINATION |
| PPB = PEDESTRIAN PUSH-BUTTON | 3c#6 SIGNAL POWER |
| SIG = SIGNAL | 1c#8 BARE COPPER GROUND |
| PED = PEDESTRIAN SIGNAL | 18pr#19 PE-39 INTERCONNECT CABLE |
| DET = DETECTION CONDUIT | 1c#6 BARE COPPER GROUND |
| F = FUTURE USE | 3C#14 PAN, TILT, ZOOM CAMERA |
| PTZ = PAN, TILT, ZOOM CAMERA | APT MATRIX 2 RDET HOME RUN |
| E = EXISTING | CABLE |
| RDET = RADAR DETECTION | |

NOBLE ST - 3RD AVE
 SIGNALIZATION PLANS 2 OF 4



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| SIGNAL SIGN SCHEDULE | | | | | | | | | |
|-----------------------|----------|--------|-----------|----------|-------------------|--------------|-----------------|--------|---------|
| SIGN NO. | LOCATION | | ASDS CODE | LEGEND | SIZE HxV (INCHES) | AREA (SQ FT) | BRACING/FRAMING | | REMARKS |
| | POLE NO. | OFFSET | | | | | BRACED | FRAMED | |
| 1 | 1 | 14.0 | D3-1 | 3RD AVE | 72X24 | 12.00 | | X | |
| 2 | 3 | 8.7 | D3-1 | 3RD AVE | 72X24 | 12.00 | | X | |
| 3 | 4 | 17.7 | D3-1 | NOBLE ST | 78X24 | 13.00 | | X | |
| SUBTOTAL SIGNAL SIGNS | | | | | | 37.00 | | | |

NOTE:
1. LOCATION OFFSETS ARE FROM CENTER OF SIGNAL HEAD TO ϕ OF SIGNAL POLE

| POLE-POST DESIGN LOADING SCHEDULE | | | | | | | | | | | | |
|-----------------------------------|--------|------------------|--------------------|--------------|--------|--------|-------|---|---|---------|--|--|
| POLE NO. | CORNER | LUM# ARM L (FT.) | SIGNAL ARM L (FT.) | | | | | | | REMARKS | | |
| | | | | A | B | C | D | E | F | | | |
| 1 | NE | 15.0' | 35' | SIG. OR SIGN | SIGNAL | SIGNAL | SIGN | | | | | MOUNT LUMINAIRE ARM @ 0° |
| | | | | LOC. OFFSET | 32.6 | 20.4 | 14.0 | | | | | |
| | | | | LxW OR S.F. | 11.50 | 11.50 | 11.00 | | | | | |
| 2 | SE | 15.0' | N/A | SIG. OR SIGN | | | | | | | | MOUNT LUMINAIRE ARM @ 90° TO ϕ 3RD AVENUE |
| | | | | LOC. OFFSET | | | | | | | | |
| | | | | LxW OR S.F. | | | | | | | | |
| 3 | SW | 15.0' | 30' | SIG. OR SIGN | SIGNAL | SIGNAL | SIGN | | | | | MOUNT LUMINAIRE ARM @ 0° |
| | | | | LOC. OFFSET | 27.0 | 14.8 | 8.7 | | | | | |
| | | | | LxW OR S.F. | 11.50 | 11.50 | 11.00 | | | | | |
| 4 | NW | 15.0' | 25' | SIG. OR SIGN | SIGNAL | SIGN | | | | | | MOUNT LUMINAIRE ARM @ 0° |
| | | | | LOC. OFFSET | 27.5 | 17.7 | | | | | | |
| | | | | LxW OR S.F. | 11.50 | 13.00 | | | | | | |

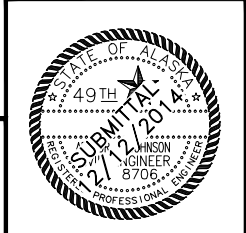
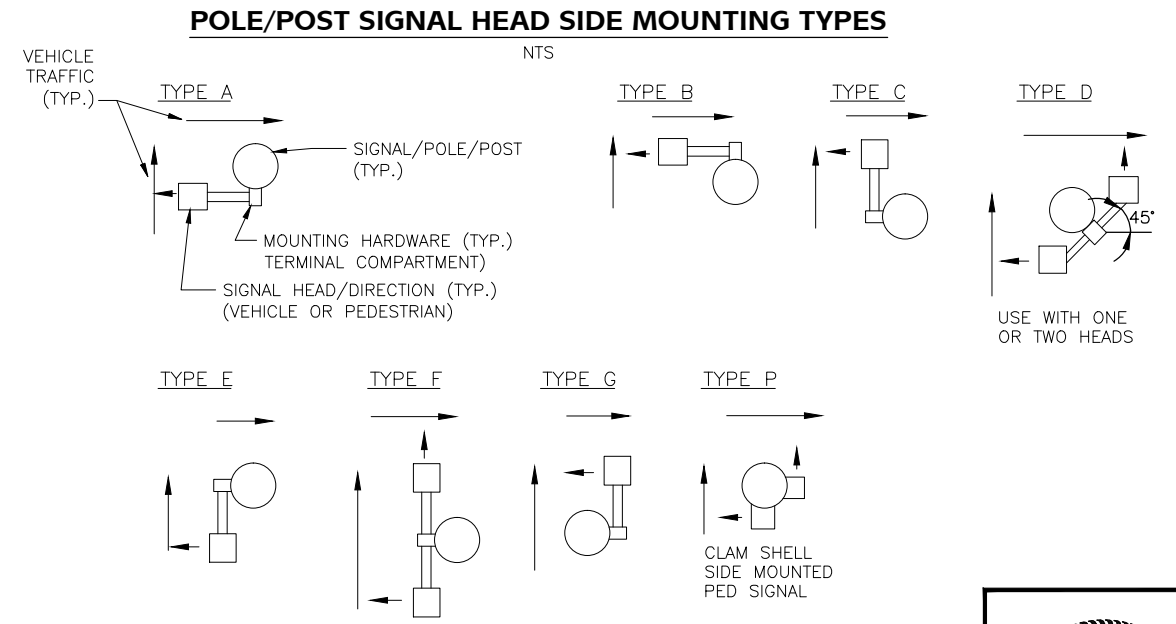
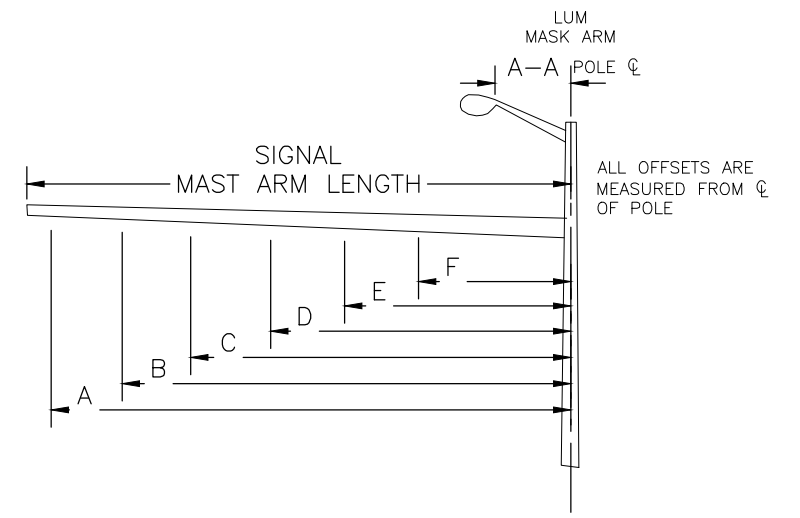
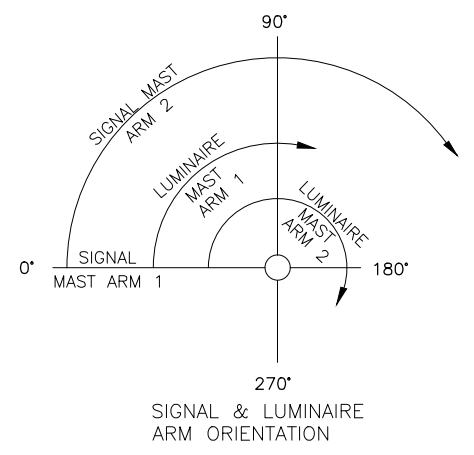
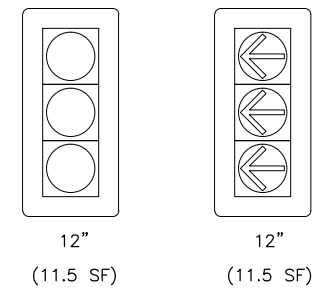
NOTES:
1. BOTH SIGNAL AND ILLUMINATION MAST ARMS ARE ORIENTATED IN THE SAME DIRECTION UNLESS NOTED OTHERWISE.
2. ORIENT SIGNAL MAST ARM(S) 90° TO ϕ OF ROADWAY UNLESS NOTED OTHERWISE.

| POLE/POST NO. | FACE NO. | SIGNAL HEAD SCHEDULE | | | | | | | | | | | | REMARKS |
|---------------|----------|----------------------|---|---|-----------|---|---|----------|---|-------------|-------------|---|----------------|---------|
| | | INDICATIONS | | | | | | MOUNTING | | | | | | |
| | | 12" BALL | | | 12" ARROW | | | 8" BALL | | | MAST ARM | | SIDE MTNG TYPE | |
| R | Y | G | R | Y | YF | G | R | Y | G | LOC. OFFSET | ELEV. PLUMB | | | |
| 1 | 41 | X | X | X | | | | | | | | | D | |
| | 42 | X | X | X | | | | | | | 20.4 | X | | |
| | 43 | | | | L | L | L | | | | 32.6 | X | | |
| 2 | 84 | | | | L | L | L | | | | | | D | |
| | 3 | 81 | X | X | X | | | | | | | | D | |
| | | 82 | X | X | X | | | | | | 14.8 | X | | |
| 3 | 83 | | | | L | L | L | | | | 27.0 | X | | |
| | 44 | | | | L | L | L | | | | | | D | |
| 4 | 61 | X | X | X | | | | | | | | | D | |
| | 62 | X | X | X | | | | | | 27.5 | X | | D | |

NOTES:
1. LOCATION OFFSETS ARE FROM CENTER OF SIGNAL HEAD TO ϕ OF SIGNAL POLE.
2. YF = YELLOW FLASHING ARROW.

SIGNAL HEAD CONFIGURATIONS
(AREAS ARE FOR WIND LOAD CALCULATIONS)

| POLE/POST NO. | FACE NO. | PED SIGNAL HEAD SCHEDULE | |
|---------------|----------|--------------------------|---------|
| | | MOUNTING TYPE | REMARKS |
| 1 | 69 | P | |
| | 48 | P | |
| 2 | 28 | P | |
| | 49 | P | |
| 3 | 29 | P | |
| | 88 | P | |
| 4 | 68 | P | |
| | 89 | P | |

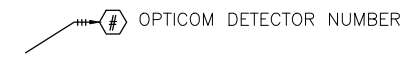


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| BASE & JUNCTION BOX SCHEDULE | | | | | | | | | | | | |
|------------------------------|-----------|-------------|------------------|------------|------------|---|---|-------------------|----|-----|----|-----------------------------|
| LOCATION | | DESCRIPTION | | | BASE TYPE* | | | JUNCTION BOX TYPE | | | | REMARKS |
| STATION | OFFSET | POLE NO. | JUNCTION BOX NO. | CONTROLLER | CIDH | P | A | IA | II | III | IV | |
| | | | | | | | | | | | | |
| 28+06 | 38.8', RT | 2 | | | X | | | | | | | INSTALL AT BACK OF SIDEWALK |
| 28+16 | 27.0', LT | 3 | | | X | | | | | | | |
| 28+74 | 30.8', LT | 4 | | | X | | | | | | | |
| 28+62 | 37.8', RT | | 1 | | | | | | | X | | INSTALL AT BACK OF SIDEWALK |
| 28+08 | 41.2', RT | | 2 | | | | | | X | | | INSTALL AT BACK OF SIDEWALK |
| 28+12 | 27.0', LT | | 3 | | | | | | X | | | |
| 28+78 | 30.8', LT | | 4 | | | | | | X | | | |
| 28+69 | 32.0', RT | | | | X | | | | | | | INSTALL AT BACK OF SIDEWALK |

* P = PRECAST BASE (FOUNDATION)
A = TYPE A SEE T-31
CIDH = CAST IN DRILLED HOLE

| OPTICOM DETECTOR SCHEDULE | | | | |
|---------------------------|----------|------------|-------------|--------------------|
| LOCATION | DET. NO. | PHASE CALL | FACING DIR. | PREEMPTOR PRIORITY |
| ON TOP OF SIGNAL HEAD 42 | 1 | 4, 7 | SOUTH | |
| ON TOP OF SIGNAL HEAD 82 | 3 | 3, 8 | NORTH | |
| ON TOP OF SIGNAL HEAD 62 | 4 | 6 | EAST | |



| FLASH PROGRAM COLOR | | | | | | | | |
|---------------------|-----|-----|---|---|-----|---|---|---|
| PHASE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| COLOR | N/A | N/A | R | R | N/A | R | R | R |

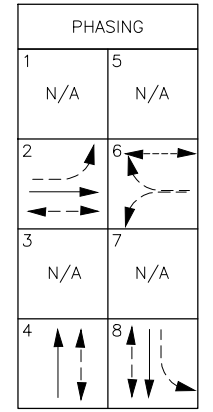
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NOBLE ST - 3RD AVE
SIGNALIZATION PLANS 4 OF 4



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H36 | -- |

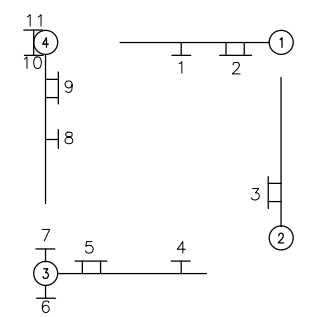
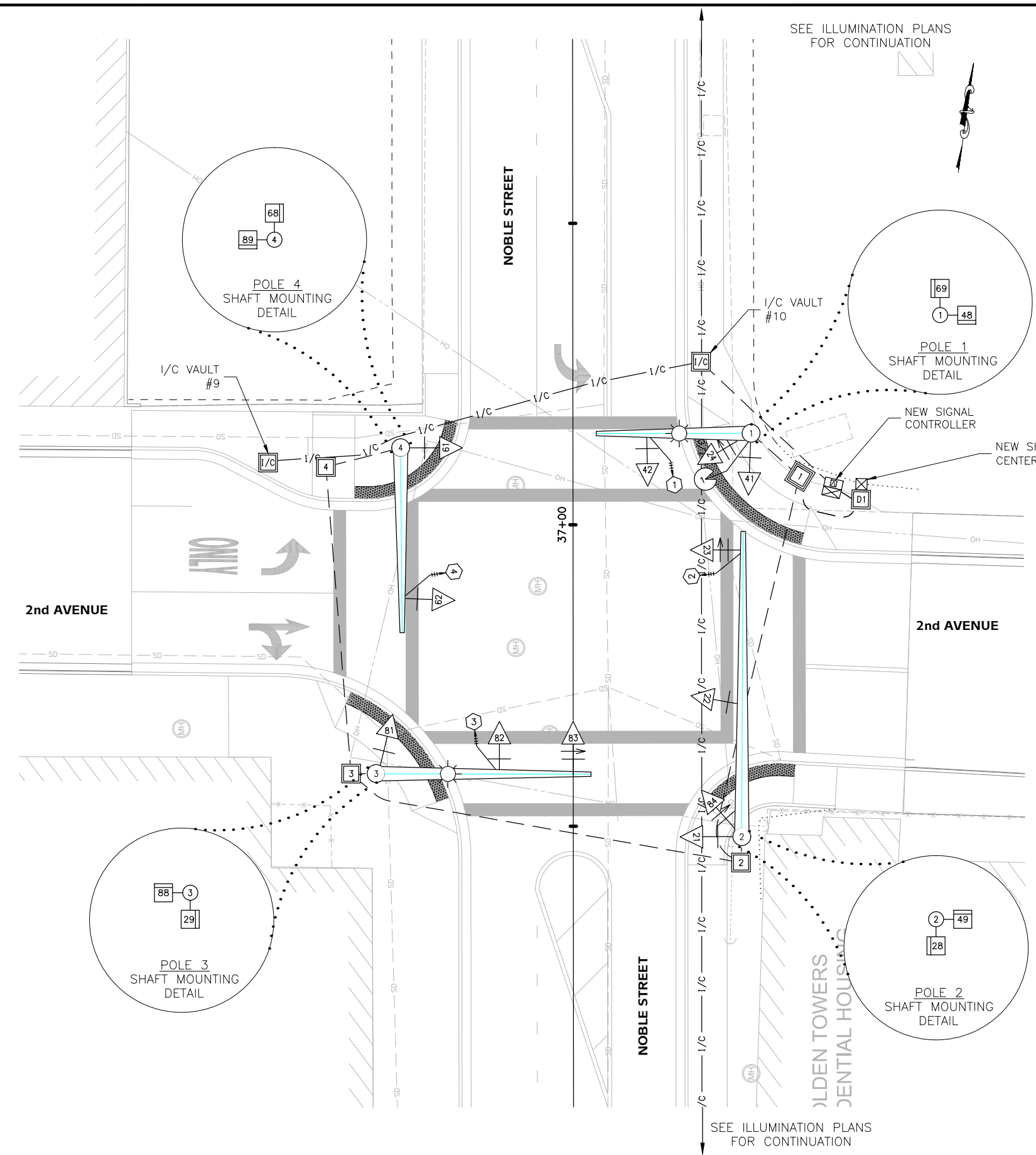
PHASE SEQUENCE



- PED MOVEMENT
- VEH. MOVEMENT
- LEFT TURN MOVEMENT (PROTECTED)
- LEFT TURN MOVEMENT (PERMISSIVE)

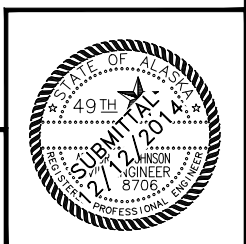
SUPPLEMENTAL LEGEND

- VIDEO DETECTOR
- OPTICOM DETECTOR
- PAN, TILT, ZOOM CAMERA



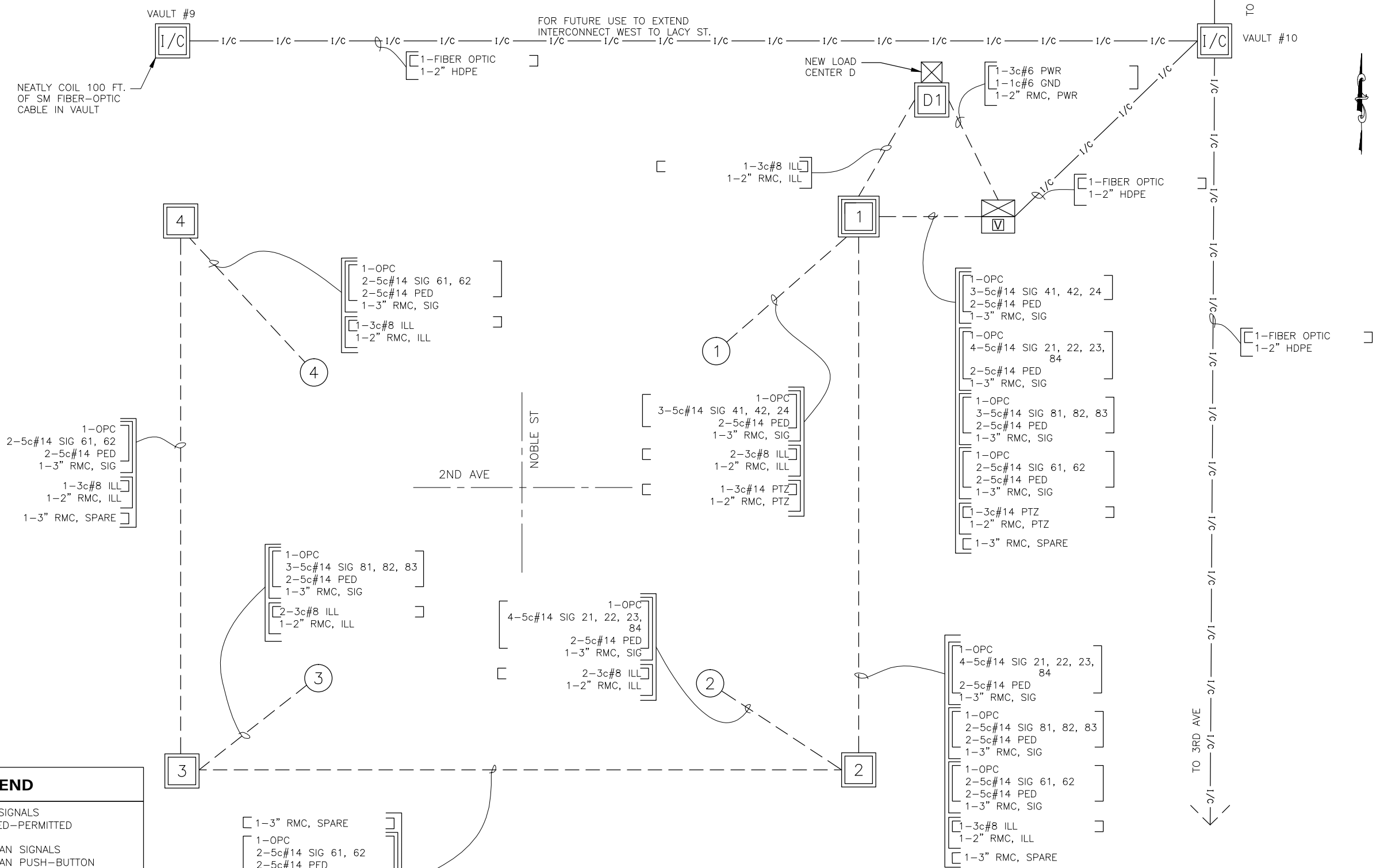
SIGN PLACEMENT

NOBLE ST - 2ND AVE
SIGNALIZATION PLANS 1 OF 4



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NOTE:
 1. INSTALL 1-1c#8 IN ALL CONDUITS UNLESS ANOTHER GROUND CONDUCTOR IS SPECIFIED.



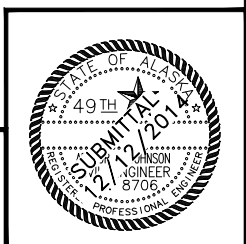
WIRING LEGEND:
 — I/C — INDICATES NEW INTERCONNECT RUN
 - - - - - INDICATES EXISTING CONDUIT RUN
 - - - - - INDICATES NEW RIGID METAL CONDUIT RUN(S)
 - - - - - INDICATES THE CONNECTION BETWEEN EXISTING AND NEW CONDUIT

WIRING DIAGRAM CODING LEGEND

| | |
|--|------------------------------------|
| OPC = OPTICOM CABLE | 5c#14 TRAFFIC SIGNALS |
| LL = LOOP LEAD-IN | 7c#14 PROTECTED-PERMITTED SIGNALS |
| INT = INTERCONNECT CABLE | 5c#14 PEDESTRIAN SIGNALS |
| PWR = POWER CONDUCTORS FOR SIGNAL CONTROLLER | 2c#14 PEDESTRIAN PUSH-BUTTON |
| T = TRANSFORMER | 3pr#18 |
| | 6pr#18 } LOOP LEAD-IN CABLE & VDET |
| | 9pr#18 |
| GND = GROUND | 15pr#18 |
| ILL = ILLUMINATION | 3c#8 ILLUMINATION |
| RMC = RIGID METAL CONDUIT | 3c#6 SIGNAL POWER |
| PVC = POLYVINYLCHLORIDE CONDUIT | 1c#8 BARE COPPER GROUND |
| | 18pr#19 PE-39 INTERCONNECT CABLE |
| PPB = PEDESTRIAN PUSH-BUTTON | 1c#6 BARE COPPER GROUND |
| SIG = SIGNAL | 3C#14 PAN, TILT, ZOOM CAMERA |
| PED = PEDESTRIAN SIGNAL | APT MATRIX 2 RDET HOME RUN CABLE |
| DET = DETECTION CONDUIT | |
| F = FUTURE USE | |
| PTZ = PAN, TILT, ZOOM CAMERA | |
| E = EXISTING | |
| RDET = RADAR DETECTION | |

Z:\PROJECTS\POC\Noble St. Signals and ST Illumination\Drawg\Plan Sheets\Noble_2nd Wiring Diagram

NOBLE ST - 2ND AVE
 SIGNALIZATION PLANS 2 OF 4



| SIGNAL SIGN SCHEDULE | | | | | | | | | |
|-----------------------|----------|--------|-----------|---------------------------|-------------------|--------------|-----------------|--------|-----------------------|
| SIGN NO. | LOCATION | | ASDS CODE | LEGEND | SIZE HxV (INCHES) | AREA (SQ FT) | BRACING/FRAMING | | REMARKS |
| | POLE NO. | OFFSET | | | | | BRACED | FRAMED | |
| 1 | 1 | 20.0 | R3-2 | NO LEFT TURN (SYMBOL) | 24X24 | 4.00 | | | |
| 2 | 1 | 7.0 | D3-1 | 2ND AVE | 72X24 | 12.00 | | X | |
| 3 | 2 | 16.0 | D3-1 | NOBLE ST | 78X24 | 13.00 | | X | |
| 4 | 3 | 12.0 | R3-1 | NO RIGHT TURN (SYMBOL) | 24X24 | 4.00 | | | |
| 5 | 3 | 7.0 | D3-1 | 2ND AVE | 72X24 | 12.00 | | X | |
| 6 | 3 | 0.0 | R3-1L | ONE WAY | 48x16 | 5.33 | | | MOUNT TO SIGNAL SHAFT |
| 7 | 3 | 0.0 | R3-1R | ONE WAY | 48x16 | 5.33 | | | MOUNT TO SIGNAL SHAFT |
| 8 | 4 | 22.0 | R3-27 | NO THRU MOVEMENT (SYMBOL) | 24X24 | 4.00 | | | |
| 9 | 4 | 7.0 | D3-1 | NOBLE ST | 78X24 | 13.00 | | X | |
| 10 | 4 | 0.0 | R3-1L | ONE WAY | 48x16 | 5.33 | | | MOUNT TO SIGNAL SHAFT |
| 11 | 4 | 0.0 | R3-1R | ONE WAY | 48x16 | 5.33 | | | MOUNT TO SIGNAL SHAFT |
| SUBTOTAL SIGNAL SIGNS | | | | | | 83.32 | | | |

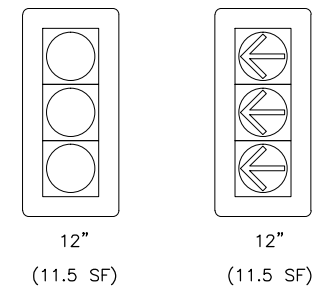
NOTE:
1. LOCATION OFFSETS ARE FROM CENTER OF SIGNAL HEAD TO CL OF SIGNAL POLE

| POLE/POST NO. | FACE NO. | SIGNAL HEAD SCHEDULE | | | | | | | | | | | | REMARKS | | |
|---------------|----------|----------------------|---|---|-----------|---|---|---------|---|-------------|-------------|------|----------------|---------|-------------|--|
| | | INDICATIONS | | | | | | | | | MOUNTING | | | | | |
| | | 12" BALL | | | 12" ARROW | | | 8" BALL | | | MAST ARM | | SIDE MTNG TYPE | | TOP OF POST | |
| R | Y | G | R | Y | YF | G | R | Y | G | LOC. OFFSET | ELEV. PLUMB | | | | | |
| 1 | 41 | X | X | X | | | | | | | | | | | D | |
| | 24 | | | | L | L | L | | | | | | | | D | |
| | 42 | X | X | X | | | | | | | | 17.3 | X | | | |
| 2 | 84 | | | | L | L | L | | | | | | | | D | |
| | 21 | X | X | X | | | | | | | | | | | D | |
| | 22 | X | X | X | | | | | | | | 21.9 | X | | | |
| 23 | | | | L | L | L | | | | | 47.5 | | | | | |
| 3 | 81 | X | X | X | | | | | | | | | | | D | |
| | 82 | X | X | X | | | | | | | | 20.4 | X | | | |
| | 83 | | | | L | L | L | | | | | 32.7 | X | | | |
| 4 | 61 | X | X | X | | | | | | | | | | | D | |
| | 62 | X | X | X | | | | | | | | 24.9 | X | | | |

NOTES:
1. LOCATION OFFSETS ARE FROM CENTER OF SIGNAL HEAD TO CL OF SIGNAL POLE.
2. YF = YELLOW FLASHING ARROW.

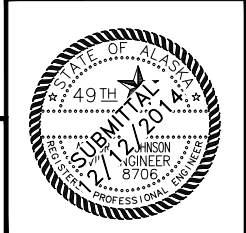
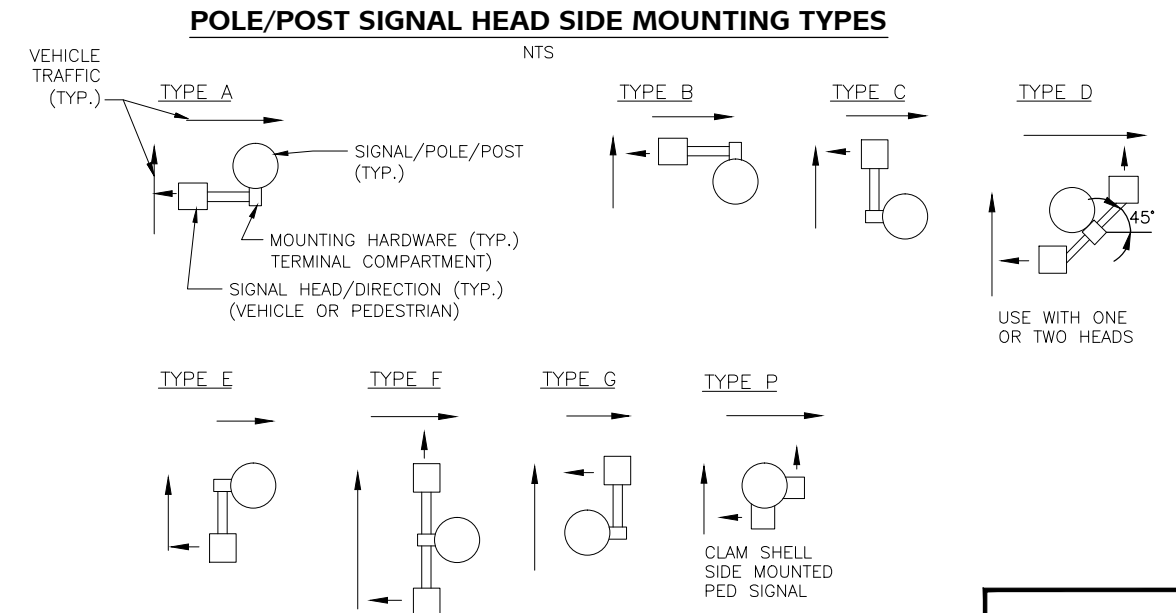
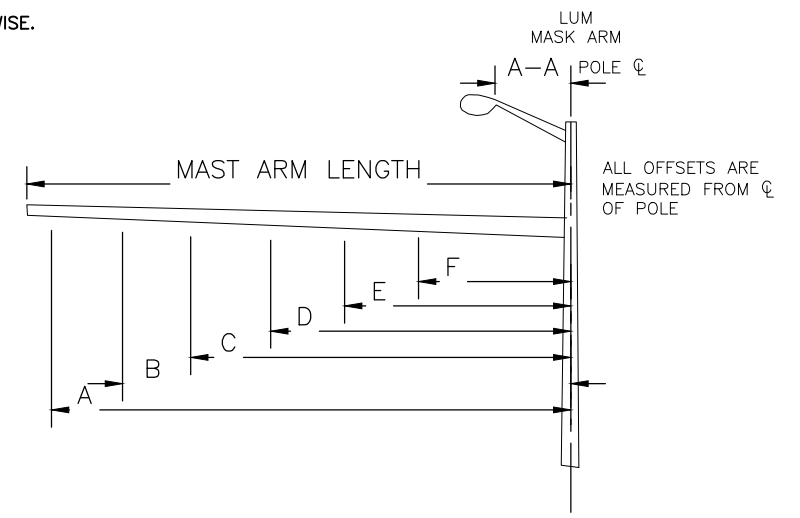
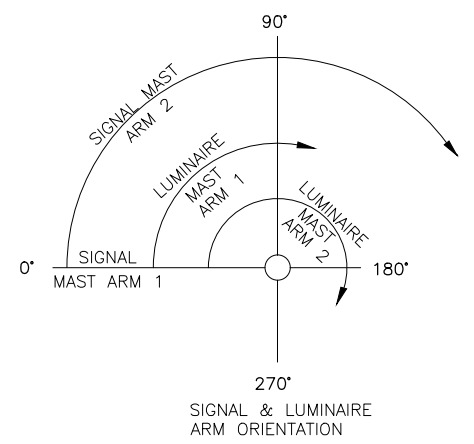
SIGNAL HEAD CONFIGURATIONS
(AREAS ARE FOR WIND LOAD CALCULATIONS)

| POLE/POST NO. | FACE NO. | PED SIGNAL HEAD SCHEDULE | |
|---------------|----------|--------------------------|---------|
| | | MOUNTING TYPE | REMARKS |
| 1 | 69 | P | |
| | 48 | P | |
| 2 | 28 | P | |
| | 49 | P | |
| 3 | 29 | P | |
| | 88 | P | |
| 4 | 68 | P | |
| | 89 | P | |



| POLE-POST DESIGN LOADING SCHEDULE | | | | | | | | | | | | |
|-----------------------------------|--------|------------------|--------------------|--------------|--------------|--------|--------|--------|---|---|-----|--------------------------|
| POLE NO. | CORNER | LUM# ARM L (FT.) | SIGNAL ARM L (FT.) | | A | B | C | D | E | F | A-A | REMARKS |
| | | | | | SIG. OR SIGN | SIGNAL | SIGNAL | SIGNAL | | | | |
| 1 | NE | 15.0' | 25' | SIG. OR SIGN | SIGNAL | SIGNAL | SIGNAL | | | | | MOUNT LUMINAIRE ARM @ 0° |
| | | | | LOC. OFFSET | 20.0 | 17.3 | 7.0 | | | | | |
| | | | | LxW OR S.F. | 4.00 | 11.50 | 11.00 | | | | | |
| 2 | SE | 15.0' | 50' | SIG. OR SIGN | SIGNAL | SIGNAL | SIGNAL | | | | | MOUNT LUMINAIRE ARM @ 0° |
| | | | | LOC. OFFSET | 47.5 | 21.9 | 16.0 | | | | | |
| | | | | LxW OR S.F. | 11.50 | 11.50 | 11.00 | | | | | |
| 3 | SW | 15.0' | 35' | SIG. OR SIGN | SIGNAL | SIGNAL | SIGNAL | SIGNAL | | | | MOUNT LUMINAIRE ARM @ 0° |
| | | | | LOC. OFFSET | 32.7 | 20.4 | 12.0 | 7.0 | | | | |
| | | | | LxW OR S.F. | 11.50 | 11.50 | 4.00 | 11.00 | | | | |
| 4 | NW | 15.0' | 30' | SIG. OR SIGN | SIGNAL | SIGNAL | SIGNAL | SIGNAL | | | | MOUNT LUMINAIRE ARM @ 0° |
| | | | | LOC. OFFSET | 24.9 | 22.0 | 7.0 | | | | | |
| | | | | LxW OR S.F. | 11.50 | 2.00 | 11.00 | | | | | |

NOTES:
1. BOTH SIGNAL AND ILLUMINATION MAST ARMS ARE ORIENTATED IN THE SAME DIRECTION UNLESS NOTED OTHERWISE.
2. ORIENT SIGNAL MAST ARM(S) 90° TO CL OF ROADWAY UNLESS NOTED OTHERWISE.



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| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | H39 | -- |

| BASE & JUNCTION BOX SCHEDULE | | | | | | | | | | | | |
|------------------------------|-----------|-------------|------------------|------------|------------|---|---|-------------------|----|-----|----|-----------------------------|
| LOCATION | | DESCRIPTION | | | BASE TYPE* | | | JUNCTION BOX TYPE | | | | REMARKS |
| STATION | OFFSET | POLE NO. | JUNCTION BOX NO. | CONTROLLER | CIDH | P | A | IA | II | III | IV | |
| 30+55 | 29.5', RT | 1 | | | X | | | | | | | |
| 29+88 | 28.0', RT | 2 | | | X | | | | | | | INSTALL AT BACK OF SIDEWALK |
| 29+98 | 32.7', LT | 3 | | | X | | | | | | | INSTALL AT BACK OF SIDEWALK |
| 30+52 | 28.6', LT | 4 | | | X | | | | | | | |
| 30+48 | 37.6', RT | | 1 | | | | | | | X | | INSTALL AT BACK OF SIDEWALK |
| 29+84 | 27.8', RT | | 2 | | | | | | X | | | INSTALL AT BACK OF SIDEWALK |
| 29+98 | 36.8', LT | | 3 | | | | | | X | | | |
| 30+49 | 41.0', LT | | 4 | | | | | | X | | | INSTALL AT BACK OF SIDEWALK |
| 30+48 | 43.1', RT | | | X | | | | | | | | INSTALL AT BACK OF SIDEWALK |

* P = PRECAST BASE (FOUNDATION)
A = TYPE A SEE T-31
CIDH = CAST IN DRILLED HOLE

| OPTICOM DETECTOR SCHEDULE | | | | |
|---------------------------|----------|------------|-------------|--------------------|
| LOCATION | DET. NO. | PHASE CALL | FACING DIR. | PREEMPTOR PRIORITY |
| ON TOP OF SIGNAL HEAD 42 | 1 | 4 | SOUTH | |
| ON TOP OF SIGNAL HEAD 23 | 2 | 2 | WEST | |
| ON TOP OF SIGNAL HEAD 82 | 3 | 8 | NORTH | |
| ON TOP OF SIGNAL HEAD 62 | 4 | 6 | EAST | |



| FLASH PROGRAM COLOR | | | | | | | | |
|---------------------|-----|---|-----|---|-----|---|-----|---|
| PHASE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| COLOR | N/A | R | N/A | R | N/A | R | N/A | R |

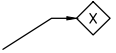
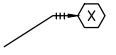

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NOBLE ST - 2ND AVE
SIGNALIZATION PLANS 4 OF 4







| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H40 | -- |

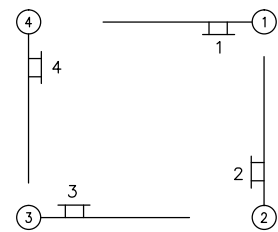
SUPPLEMENTAL LEGEND

-  VIDEO DETECTOR
-  OPTICOM DETECTOR
-  PAN, TILT, ZOOM CAMERA

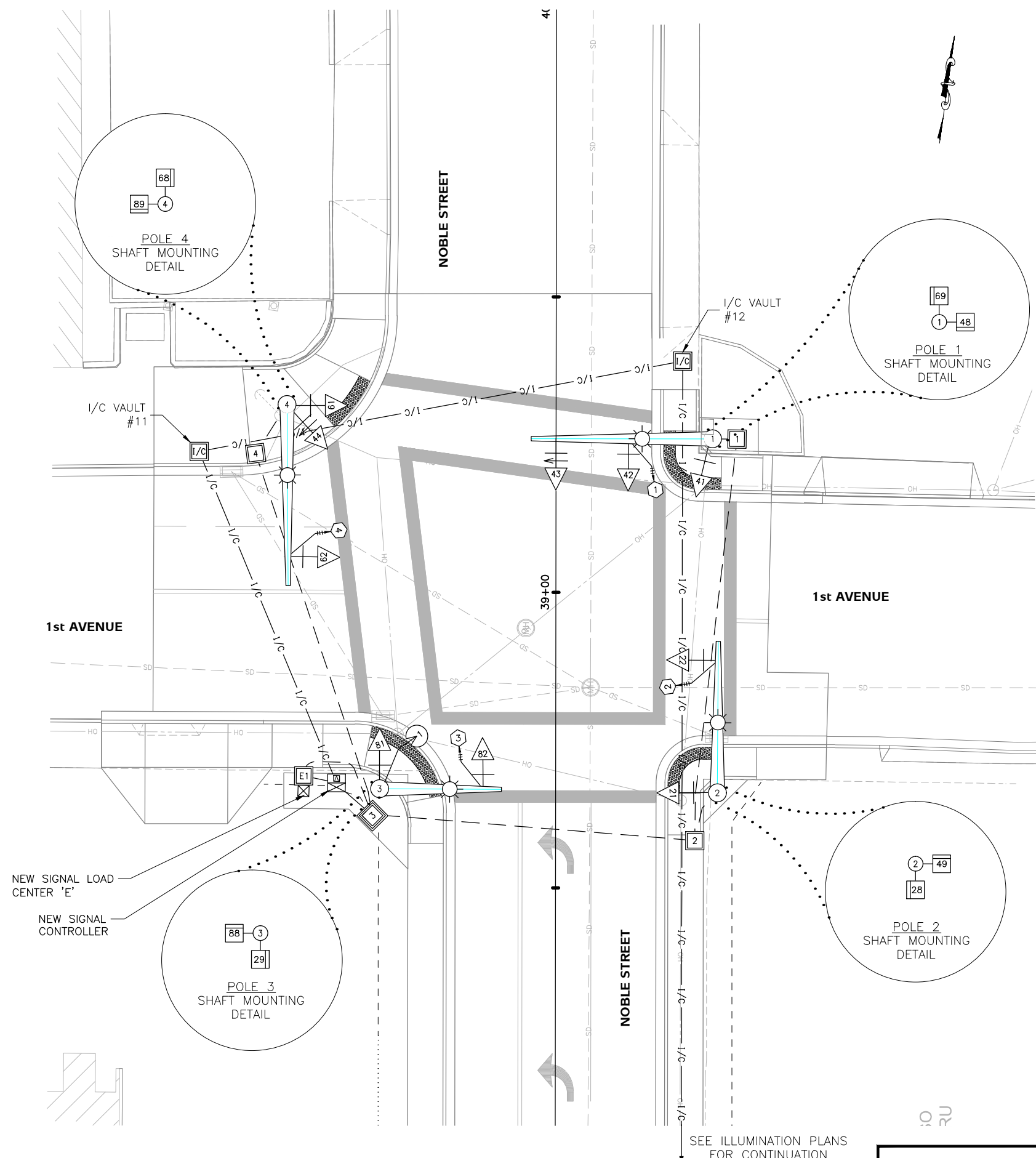
PHASE SEQUENCE

| PHASING | |
|---------|-----|
| 1 | 5 |
| N/A | N/A |
| 2 | 6 |
| ← | → |
| → | ← |
| 3 | 7 |
| N/A | N/A |
| 4 | 8 |
| ↑ | ↓ |
| ↓ | ↑ |

-  PED MOVEMENT
-  VEH. MOVEMENT
-  LEFT TURN MOVEMENT (PROTECTED)
-  LEFT TURN MOVEMENT (PERMISSIVE)

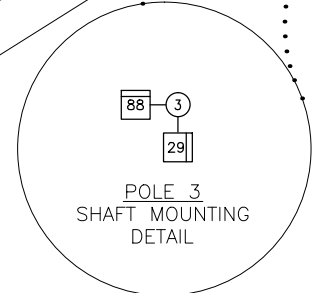


SIGN PLACEMENT

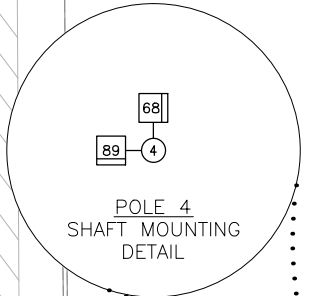


NEW SIGNAL LOAD CENTER 'E'

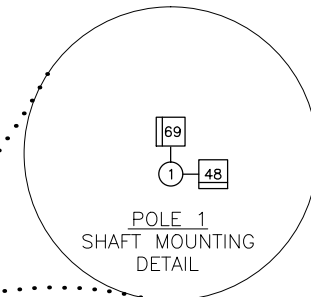
NEW SIGNAL CONTROLLER



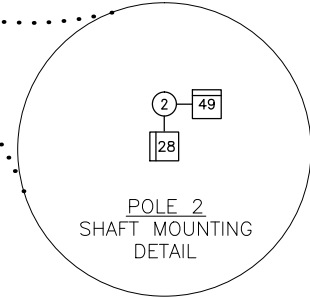
POLE 3
SHAFT MOUNTING
DETAIL



POLE 4
SHAFT MOUNTING
DETAIL



POLE 1
SHAFT MOUNTING
DETAIL



POLE 2
SHAFT MOUNTING
DETAIL

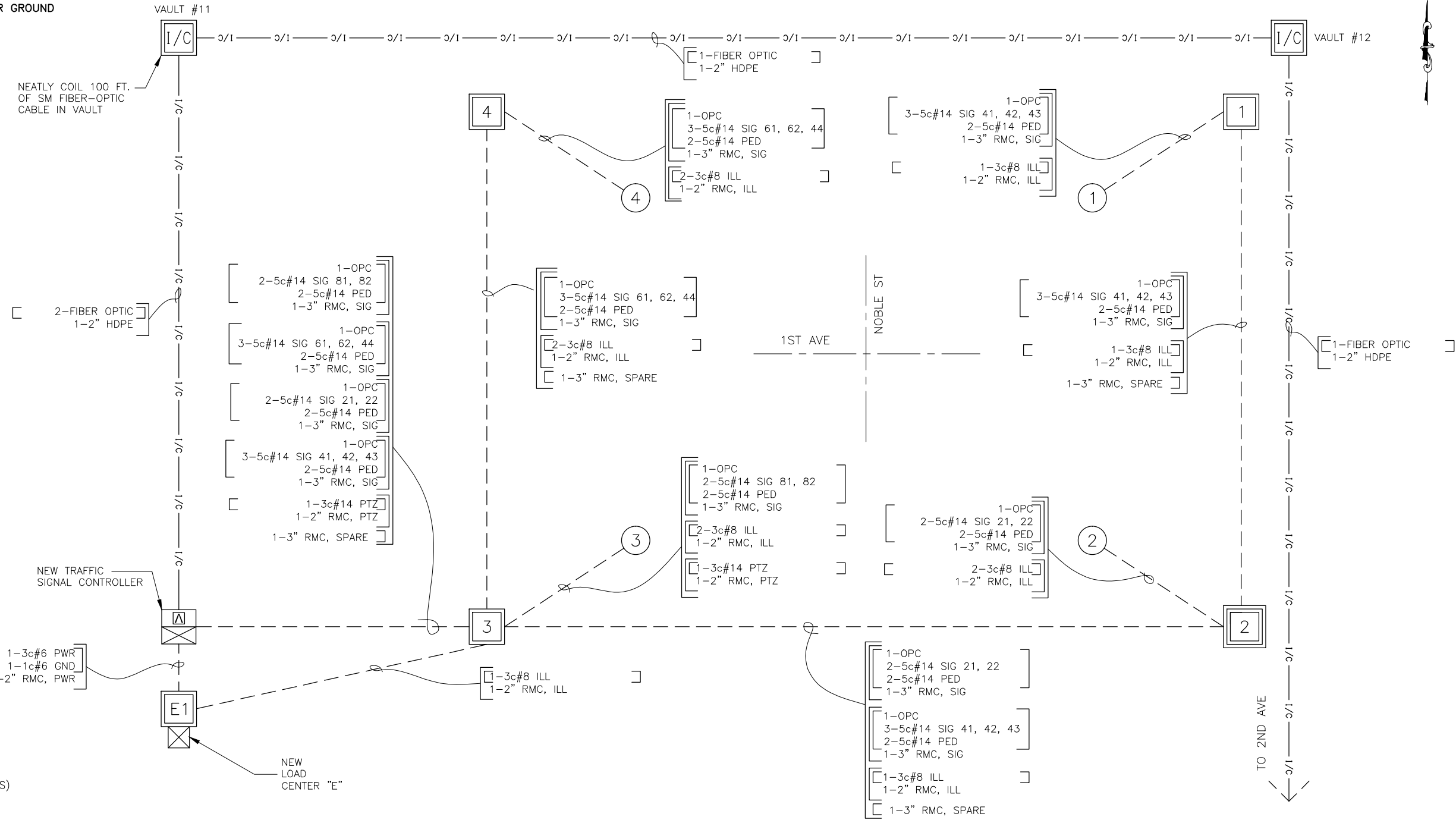
SEE ILLUMINATION PLANS FOR CONTINUATION

10 RU

NOBLE ST - 1ST AVE
SIGNALIZATION PLANS 1 OF 4



NOTE:
 1. INSTALL 1-1c#8 IN ALL CONDUITS UNLESS ANOTHER GROUND CONDUCTOR IS SPECIFIED.



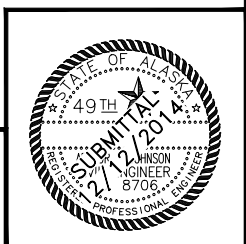
WIRING LEGEND:

- I/C — INDICATES NEW INTERCONNECT RUN
- - - - - INDICATES EXISTING CONDUIT RUN
- - - - - INDICATES NEW RIGID METAL CONDUIT RUN(S)
- - - - - INDICATES THE CONNECTION BETWEEN EXISTING AND NEW CONDUIT

WIRING DIAGRAM CODING LEGEND

| | |
|--|-----------------------------------|
| OPC = OPTICOM CABLE | 5c#14 TRAFFIC SIGNALS |
| LL = LOOP LEAD-IN | 7c#14 PROTECTED-PERMITTED SIGNALS |
| INT = INTERCONNECT CABLE | 5c#14 PEDESTRIAN SIGNALS |
| PWR = POWER CONDUCTORS FOR SIGNAL CONTROLLER | 2c#14 PEDESTRIAN PUSH-BUTTON |
| T = TRANSFORMER | 3pr#18 |
| GND = GROUND | 6pr#18 |
| ILL = ILLUMINATION | 9pr#18 |
| RMC = RIGID METAL CONDUIT | 15pr#18 |
| PVC = POLYVINYLCHLORIDE CONDUIT | 3c#8 ILLUMINATION |
| PPB = PEDESTRIAN PUSH-BUTTON | 3c#6 SIGNAL POWER |
| SIG = SIGNAL | 1c#8 BARE COPPER GROUND |
| PED = PEDESTRIAN SIGNAL | 18pr#19 PE-39 INTERCONNECT CABLE |
| DET = DETECTION CONDUIT | 1c#6 BARE COPPER GROUND |
| F = FUTURE USE | 3C#14 PAN, TILT, ZOOM CAMERA |
| PTZ = PAN, TILT, ZOOM CAMERA | APT MATRIX 2 RDET HOME RUN |
| E = EXISTING | CABLE |
| RDET = RADAR DETECTION | |

NOBLE ST - 1ST AVE
 SIGNALIZATION PLANS 2 OF 4



Z:\PROJECTS\POC\Noble St Signals and ST Illumination\Drawg\Plan Sheets\Noble_1st Wiring Diagram

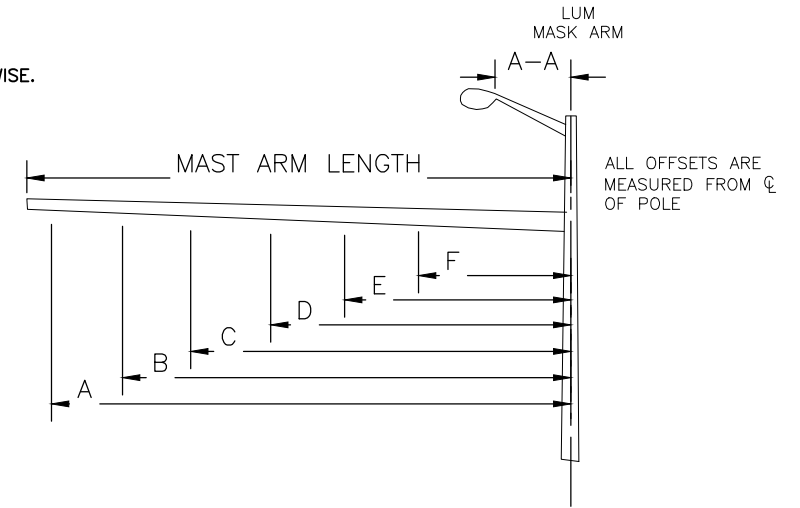
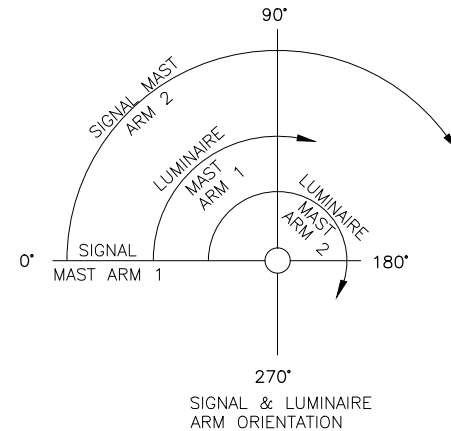
| SIGNAL SIGN SCHEDULE | | | | | | | | | |
|-----------------------|----------|--------|-----------|----------|-------------------|--------------|-----------------|--------|---------|
| SIGN NO. | LOCATION | | ASDS CODE | LEGEND | SIZE HxV (INCHES) | AREA (SQ FT) | BRACING/FRAMING | | REMARKS |
| | POLE NO. | OFFSET | | | | | BRACED | FRAMED | |
| 1 | 1 | 7.0' | D3-1 | 1ST AVE | 66X24 | 11.00 | | X | |
| 2 | 2 | 7.0' | D3-1 | NOBLE ST | 78X24 | 13.00 | | X | |
| 3 | 3 | 7.0' | D3-1 | 1ST AVE | 66X24 | 11.00 | | X | |
| 4 | 4 | 7.0' | D3-1 | NOBLE ST | 78X24 | 13.00 | | X | |
| SUBTOTAL SIGNAL SIGNS | | | | | | 48.00 | | | |

| POLE-POST DESIGN LOADING SCHEDULE | | | | | | | | | | | | |
|-----------------------------------|--------|------------------|--------------------|--------------|--------|--------|-------|---|---|-----|---------|--------------------------|
| POLE NO. | CORNER | LUM# ARM L (FT.) | SIGNAL ARM L (FT.) | | | | | | | | REMARKS | |
| | | | | A | B | C | D | E | F | A-A | | |
| 1 | NE | 15.0' | 30' | SIG. OR SIGN | SIGNAL | SIGNAL | SIGN | | | | | MOUNT LUMINAIRE ARM @ 0° |
| | | | | LOC. OFFSET | 26.4 | 14.2 | 7.0 | | | | | |
| | | | | LxW OR S.F. | 11.50 | 11.50 | 12.00 | | | | | |
| 2 | SE | 15.0' | 25' | SIG. OR SIGN | SIGNAL | SIGN | | | | | | MOUNT LUMINAIRE ARM @ 0° |
| | | | | LOC. OFFSET | 22.5 | 7.0 | | | | | | |
| | | | | LxW OR S.F. | 11.50 | 13.00 | | | | | | |
| 3 | SW | 15.0' | 20' | SIG. OR SIGN | SIGNAL | SIGN | | | | | | MOUNT LUMINAIRE ARM @ 0° |
| | | | | LOC. OFFSET | 17.6 | 7.0 | | | | | | |
| | | | | LxW OR S.F. | 11.50 | 12.00 | | | | | | |
| 4 | NW | 15' | 30' | SIG. OR SIGN | SIGNAL | SIGN | | | | | | MOUNT LUMINAIRE ARM @ 0° |
| | | | | LOC. OFFSET | 25.7 | 7.0 | | | | | | |
| | | | | LxW OR S.F. | 11.50 | 13.00 | | | | | | |

NOTE:
1. LOCATION OFFSETS ARE FROM CENTER OF SIGNAL HEAD TO C OF SIGNAL POLE

NOTES:
1. BOTH SIGNAL AND ILLUMINATION MAST ARMS ARE ORIENTATED IN THE SAME DIRECTION UNLESS NOTED OTHERWISE.
2. ORIENT SIGNAL MAST ARM(S) 90° TO C OF ROADWAY UNLESS NOTED OTHERWISE.

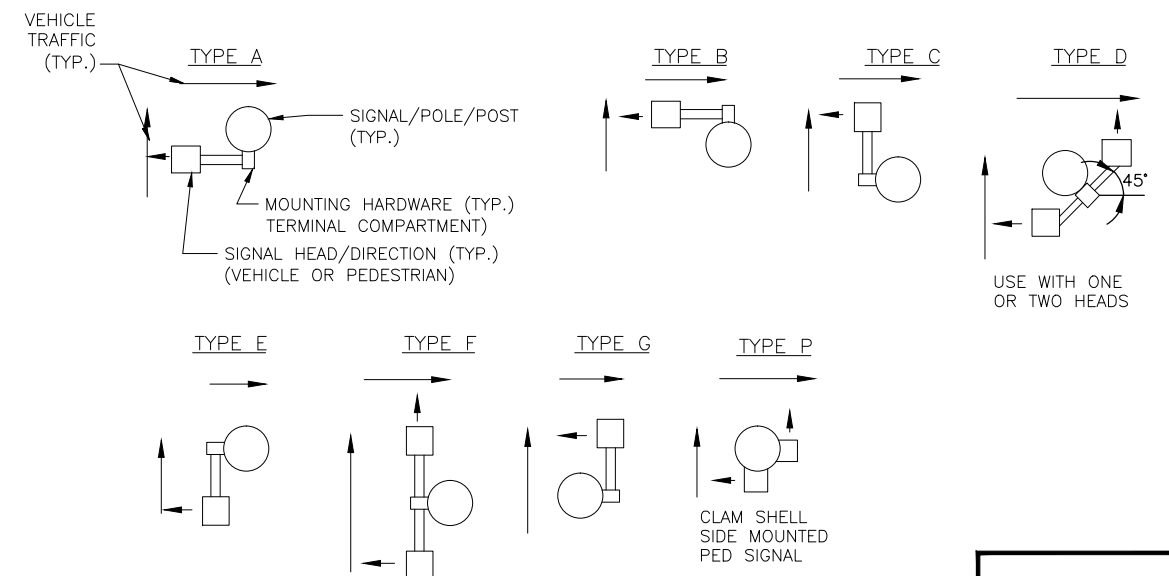
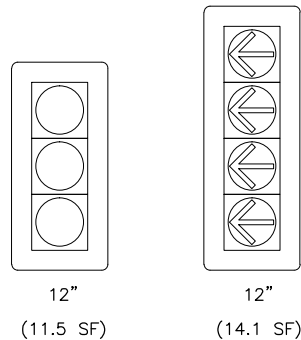
| SIGNAL HEAD SCHEDULE | | | | | | | | | | | | | | | | | | | | |
|----------------------|----------|-------------|---|---|-----------|---|----|---------|---|---|----------|-------------|-----------------|-------------|---------|-------------|--|--|--|--|
| POLE/POST NO. | FACE NO. | INDICATIONS | | | | | | | | | MOUNTING | | | | REMARKS | | | | | |
| | | 12" BALL | | | 12" ARROW | | | 8" BALL | | | MAST ARM | | SIDE MTNG. TYPE | TOP OF POST | | | | | | |
| | | R | Y | G | R | Y | YF | G | R | Y | G | LOC. OFFSET | | | | ELEV. PLUMB | | | | |
| 1 | 41 | X | X | X | | | | | | | | | | | | | | | | |
| | 42 | X | X | X | | | | | | | | 14.2 | X | | | | | | | |
| | 43 | | | | L | L | L | | | | | 26.4 | X | | | | | | | |
| 2 | 21 | X | X | X | | | | | | | | | | | | | | | | |
| | 22 | X | X | X | | | | | | | | 27.4 | X | | | | | | | |
| 3 | 81 | X | X | X | | | | | | | | | | | | | | | | |
| | 82 | X | X | X | | | | | | | | 17.5 | X | | | | | | | |
| 4 | 44 | | | | L | L | L | | | | | | | | | | | | | |
| | 61 | X | X | X | | | | | | | | | | | | | | | | |
| | 62 | X | X | X | | | | | | | | 25.7 | X | | | | | | | |



NOTES:
1. LOCATION OFFSETS ARE FROM CENTER OF SIGNAL HEAD TO C OF SIGNAL POLE.
2. YF = YELLOW FLASHING ARROW.

SIGNAL HEAD CONFIGURATIONS
(AREAS ARE FOR WIND LOAD CALCULATIONS)

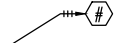
| POLE/POST NO. | FACE NO. | PED SIGNAL HEAD SCHEDULE | |
|---------------|----------|--------------------------|---------|
| | | MOUNTING TYPE | REMARKS |
| 1 | 69 | P | |
| | 48 | P | |
| 2 | 28 | P | |
| | 49 | P | |
| 3 | 29 | P | |
| | 88 | P | |
| 4 | 68 | P | |
| | 89 | P | |



| BASE & JUNCTION BOX SCHEDULE | | | | | | | | | | | | |
|------------------------------|-----------|-------------|------------------|------------|------------|---|---|-------------------|----|-----|----|-----------------------------|
| LOCATION | | DESCRIPTION | | | BASE TYPE* | | | JUNCTION BOX TYPE | | | | REMARKS |
| STATION | OFFSET | POLE NO. | JUNCTION BOX NO. | CONTROLLER | CIDH | P | A | IA | II | III | IV | |
| | | | | | | | | | | | | |
| 32+06 | 27.3', RT | 2 | | | X | | | | | | | INSTALL AT BACK OF SIDEWALK |
| 32+06 | 29.8', LT | 3 | | | X | | | | | | | INSTALL AT BACK OF SIDEWALK |
| 32+71 | 45.5', LT | 4 | | | X | | | | | | | |
| 32+66 | 30.6', RT | | 1 | | | | | | X | | | |
| 31+98 | 23.6', RT | | 2 | | | | | | | X | | INSTALL AT BACK OF SIDEWALK |
| 32+01 | 31.0', LT | | 3 | | | | | | X | | | INSTALL AT BACK OF SIDEWALK |
| 32+63 | 50.8', LT | | 4 | | | | | | X | | | |
| 32+07 | 37.2', LT | | | X | | | | | | | | INSTALL AT BACK OF SIDEWALK |

* P = PRECAST BASE (FOUNDATION)
A = TYPE A SEE T-31
CIDH = CAST IN DRILLED HOLE

| OPTICOM DETECTOR SCHEDULE | | | | |
|---------------------------|----------|------------|-------------|--------------------|
| LOCATION | DET. NO. | PHASE CALL | FACING DIR. | PREEMPTOR PRIORITY |
| ON TOP OF SIGNAL HEAD 42 | 1 | 4 | SOUTH | |
| ON TOP OF SIGNAL HEAD 22 | 2 | 2 | WEST | |
| ON TOP OF SIGNAL HEAD 82 | 3 | 8 | NORTH | |
| ON TOP OF SIGNAL HEAD 62 | 4 | 6 | EAST | |

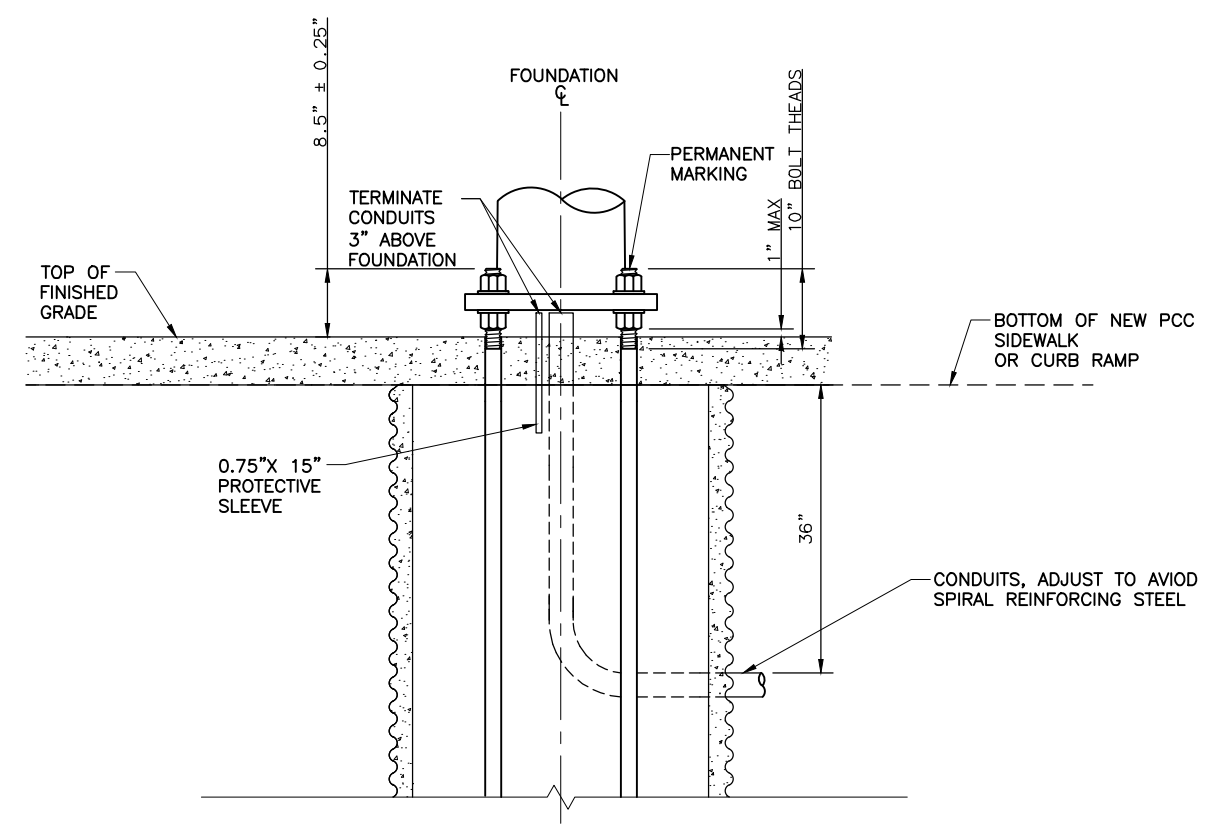
 OPTICOM DETECTOR NUMBER

| FLASH PROGRAM COLOR | | | | | | | | |
|---------------------|-----|---|-----|---|-----|---|-----|---|
| PHASE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| COLOR | N/A | R | N/A | R | N/A | R | N/A | R |

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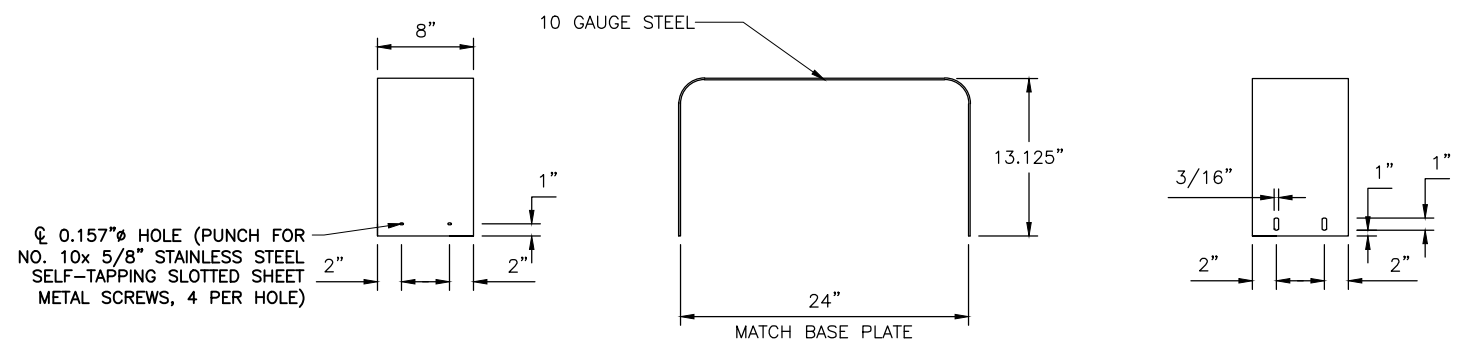
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|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | H44 | -- |



SIGNAL FOUNDATION DETAIL
 NTS
 (SKIRT OMITTED FOR CLARITY)

NOTES:

1. THIS SHEET MODIFIES STANDARD DETAIL T-52.20
2. PROVIDE SKIRT AROUND BASE PLATE. GALVANIZE SKIRT IN ACCORDANCE WITH ASTM A653. MAXIMUM GAP BETWEEN SKIRT AND FOUNDATION IS 1/16".

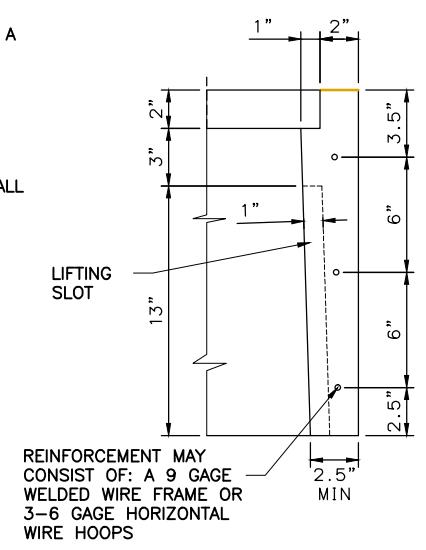
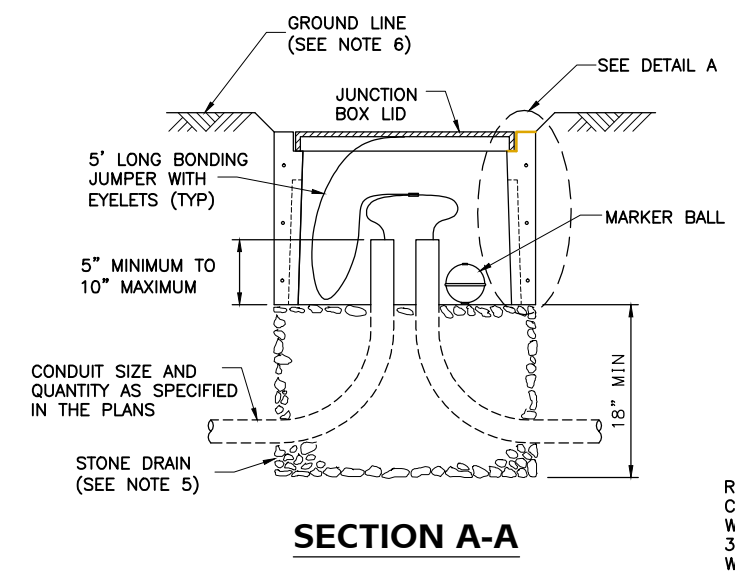
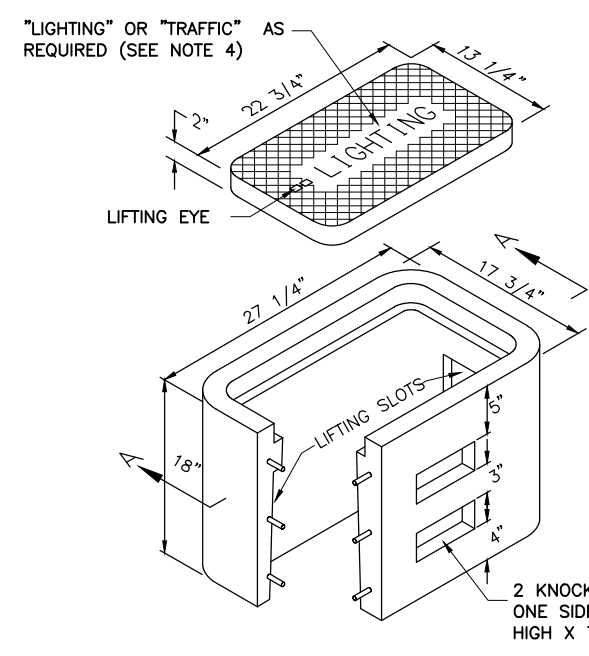


SKIRT DETAILS
 (TWO REQUIRED PER POLE)
 NTS

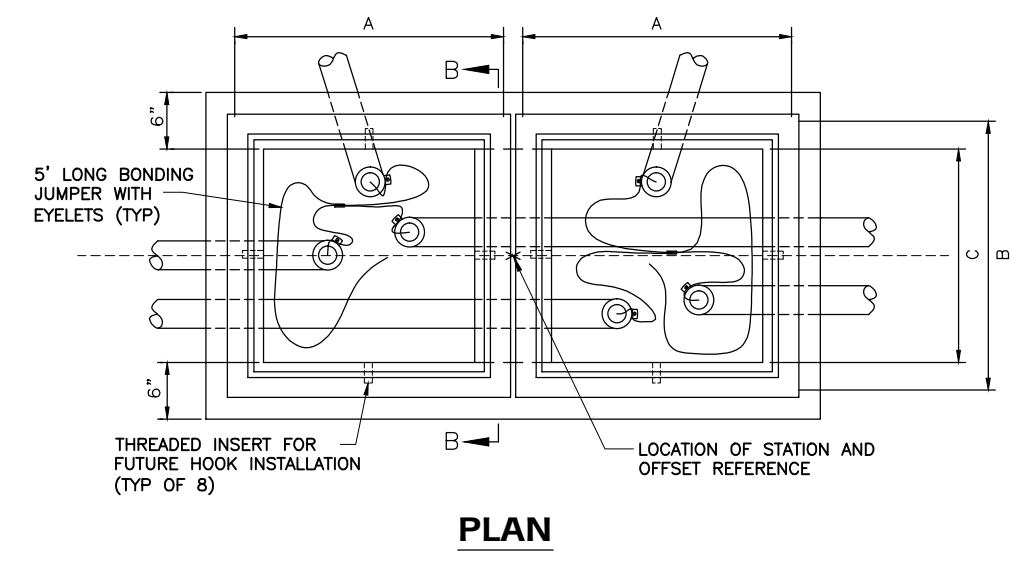
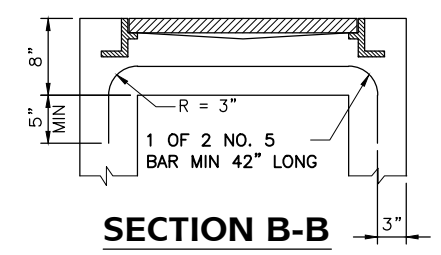
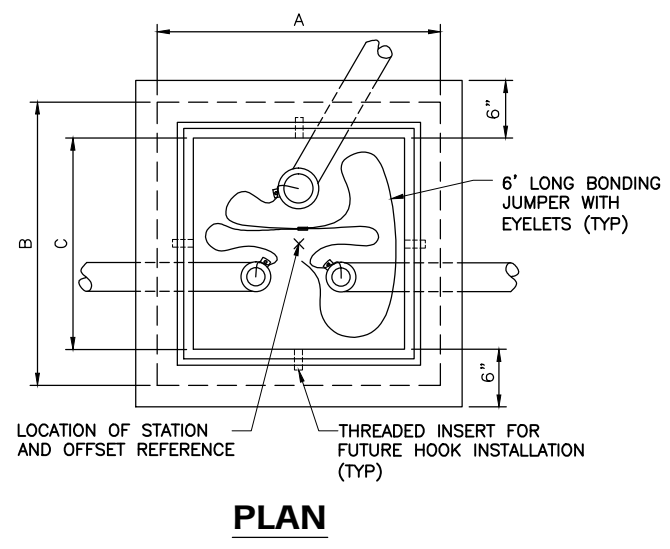
SIGNAL FOUNDATION "A"



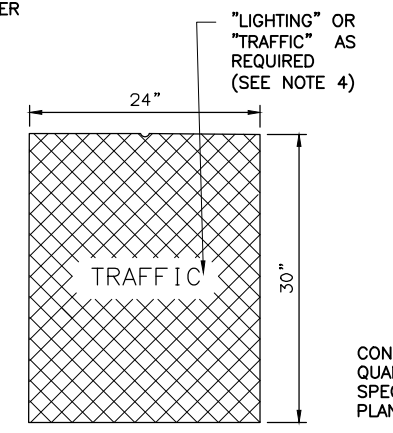
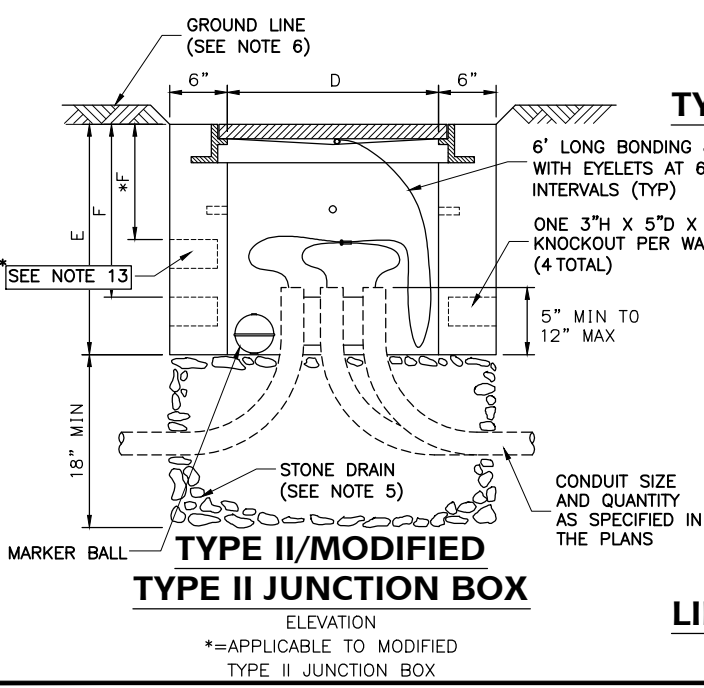
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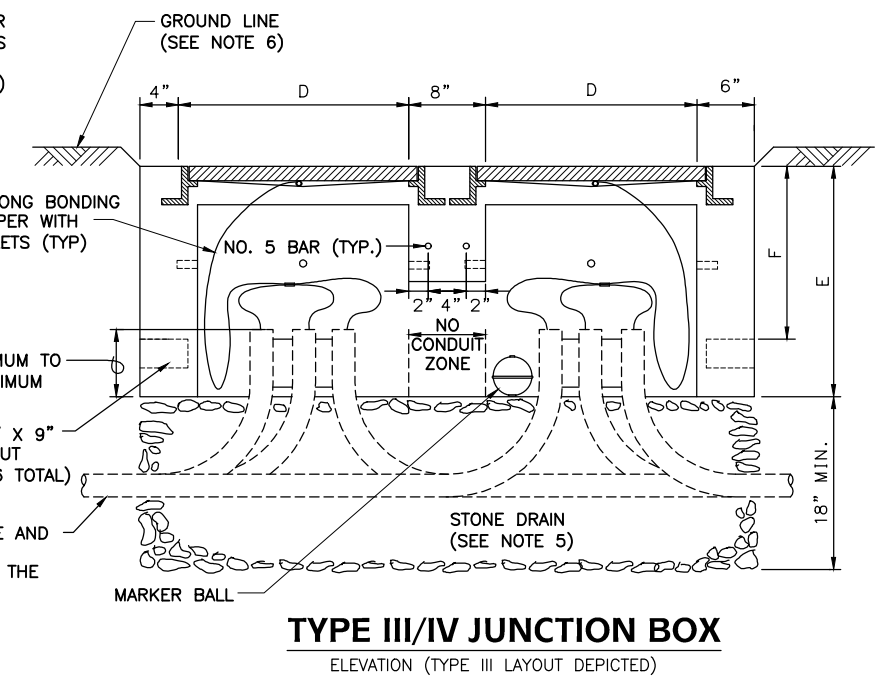
TYPE IA JUNCTION BOX



LID FOR TYPE II, MOD. TYPE II & TYPE III J-BOXES



LID FOR TYPE IV J-BOXES



TYPE III/IV JUNCTION BOX

NOTES:

1. AVOID INSTALLING TYPE IA JUNCTION BOXES IN DRIVEWAYS OR IN LOCATIONS SUBJECT TO USE BY HEAVY TRUCKS. INSTALL JUNCTION BOXES ONLY AT THE LATERAL LOCATIONS ALLOWED IN SUBSECTION 660-3.04.
2. FURNISH TYPE II, III AND IV JUNCTION BOXES WITH CAST IRON FRAMES AND LIDS THAT WEIGH A MINIMUM OF 210 POUNDS AND ARE RATED FOR HEAVY TRAFFIC LOADS IN COMPLIANCE WITH AASHTO M306. FURNISH TYPE IA JUNCTION BOXES WITH CAST IRON LIDS THAT WEIGH A MINIMUM OF 50 POUNDS.
3. CONSTRUCT JUNCTION BOXES ACCORDING TO SECTION 501 USING CLASS A CONCRETE. REINFORCE TYPE IA JUNCTION BOXES AS SHOWN. SYNTHETIC STRUCTURAL FIBER-REINFORCED CONCRETE THAT MEETS ASTM C 1116 AND CONTAINS FIBER IN PROPORTIONS AS RECOMMENDED BY THE FIBER MANUFACTURER MAY BE ADDED FOR STRENGTH.
4. FOR JUNCTION BOXES THAT CONTAIN ILLUMINATION CONDUCTORS EXCLUSIVELY, FURNISH LIDS WITH THE WORD LIGHTING INSCRIBED INTO THEM. FOR OTHER JUNCTION BOXES, FURNISH LIDS WITH THE WORD TRAFFIC INSCRIBED INTO THEM.
5. UNDER JUNCTION BOXES, INSTALL STONE DRAINS THAT CONSIST OF POROUS BACKFILL MATERIAL CONFORMING TO SUBSECTION 703-2.10.
6. SET THE TOPS OF JUNCTION BOXES WITH THE FOLLOWING DIMENSIONS BELOW THE FINISHED SURROUNDING SURFACE:
1" IN PAVED MEDIANS AND ADJACENT TO PEDESTRIAN FACILITIES
1/4" IN PEDESTRIAN FACILITIES
2" IN ALL OTHER AREAS
7. BOND JUNCTION BOX LIDS TO THE SYSTEM OF EQUIPMENT GROUNDING CONDUCTORS ACCORDING TO SUBSECTION 660-3.06. ATTACH BONDING JUMPERS TO THE JUNCTION BOX LIDS WITH STAINLESS STEEL HARDWARE.
8. INSTALL A 1/2" THICK PREFORMED BITUMINOUS JOINT MATERIAL AROUND JUNCTION BOXES INSTALLED IN PORTLAND CEMENT CONCRETE WALKWAYS.
9. INSTALL AN ELECTRONIC MARKER BALL IN ALL JUNCTION BOXES PER SUBSECTION 660-3.04.
10. PROVIDE CONDUIT GROUNDING BUSHINGS AND BOND TO 3/4"x10' COPPER CLAD GROUND ROD WITH #8 BARE COPPER BONDING WIRE (AS REQUIRED).
11. WHERE MODIFIED TYPE II JUNCTION BOXES ARE REQUIRED FOR DETECTOR LOOP TAIL INSTALLATIONS, ADD ONE(1) ADDITIONAL 5" DEEP X 3" HIGH X 18" WIDE KNOCKOUT 12" BELOW TOP OF JUNCTION BOX.

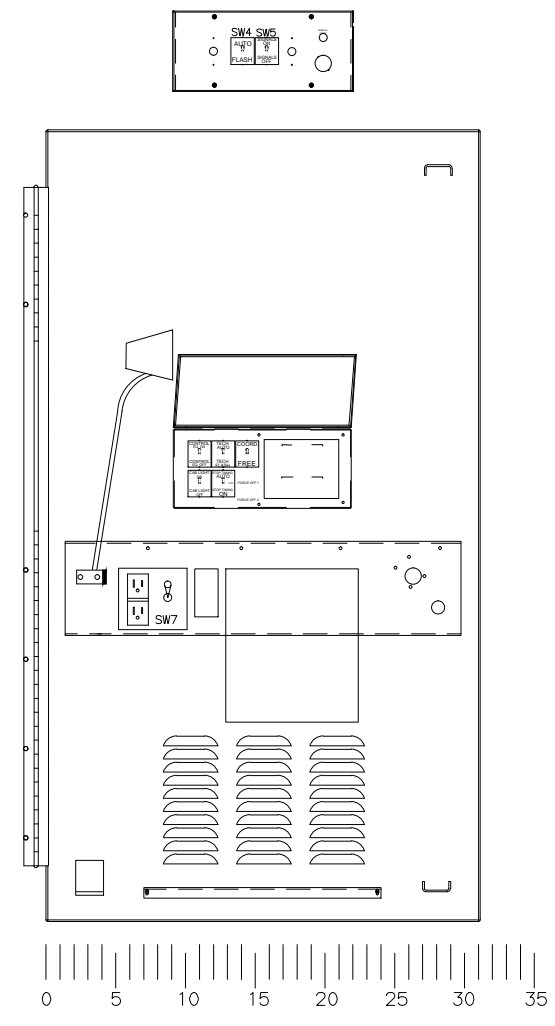
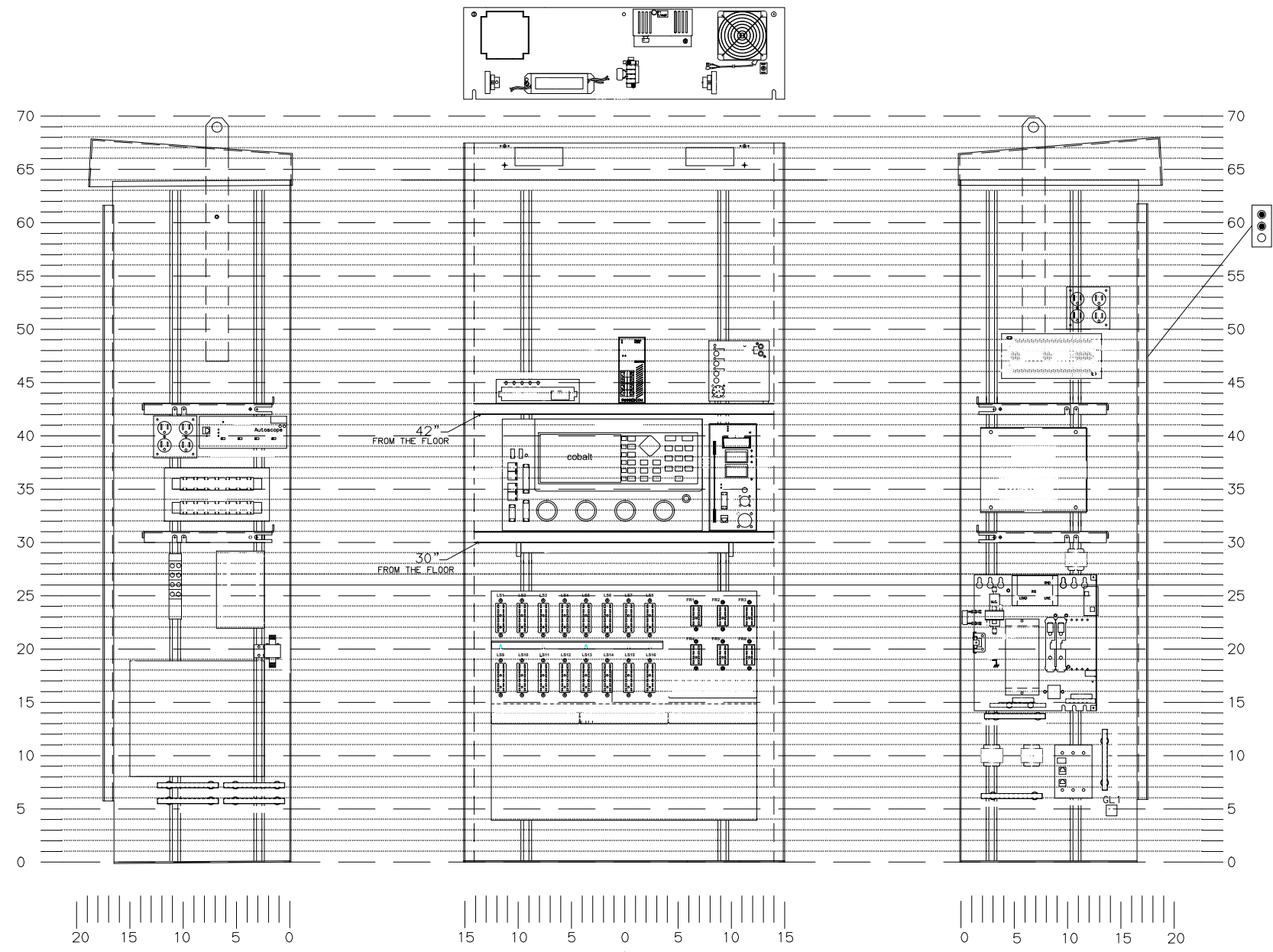
| J-BOX TYPE | DIMENSIONS | | | | | |
|------------|------------|----------|----------|----------|----------|-----|
| | A (MAX.) | B (MAX.) | C (MIN.) | D (MIN.) | E (MIN.) | F |
| II | 29 1/2" | 29 1/2" | 22" | 22" | 24" | 18" |
| MOD.II | 29 1/2" | 29 1/2" | 22" | 22" | 24" | 12" |
| III | 29 1/2" | 29 1/2" | 22" | 22" | 24" | 18" |
| IV | 30" | 36" | 30" | 24" | 30" | 18" |

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JUNCTION BOX DETAILS

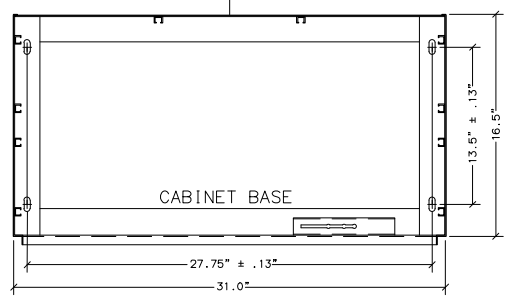


| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H46 | -- |

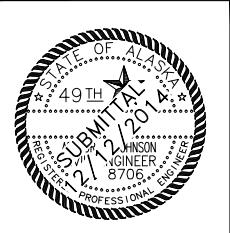


NOTES:

1. PROVIDE SPARE SDLC CABLE IN CABINET.
2. PROVIDE FULLY FUNCTIONING FACTORY WIRED CABINET.
4. PROVIDE TWO SHELVES INSIDE THE CABINET.



CONTROLLER CABINET TYPE "M" EXTENDED

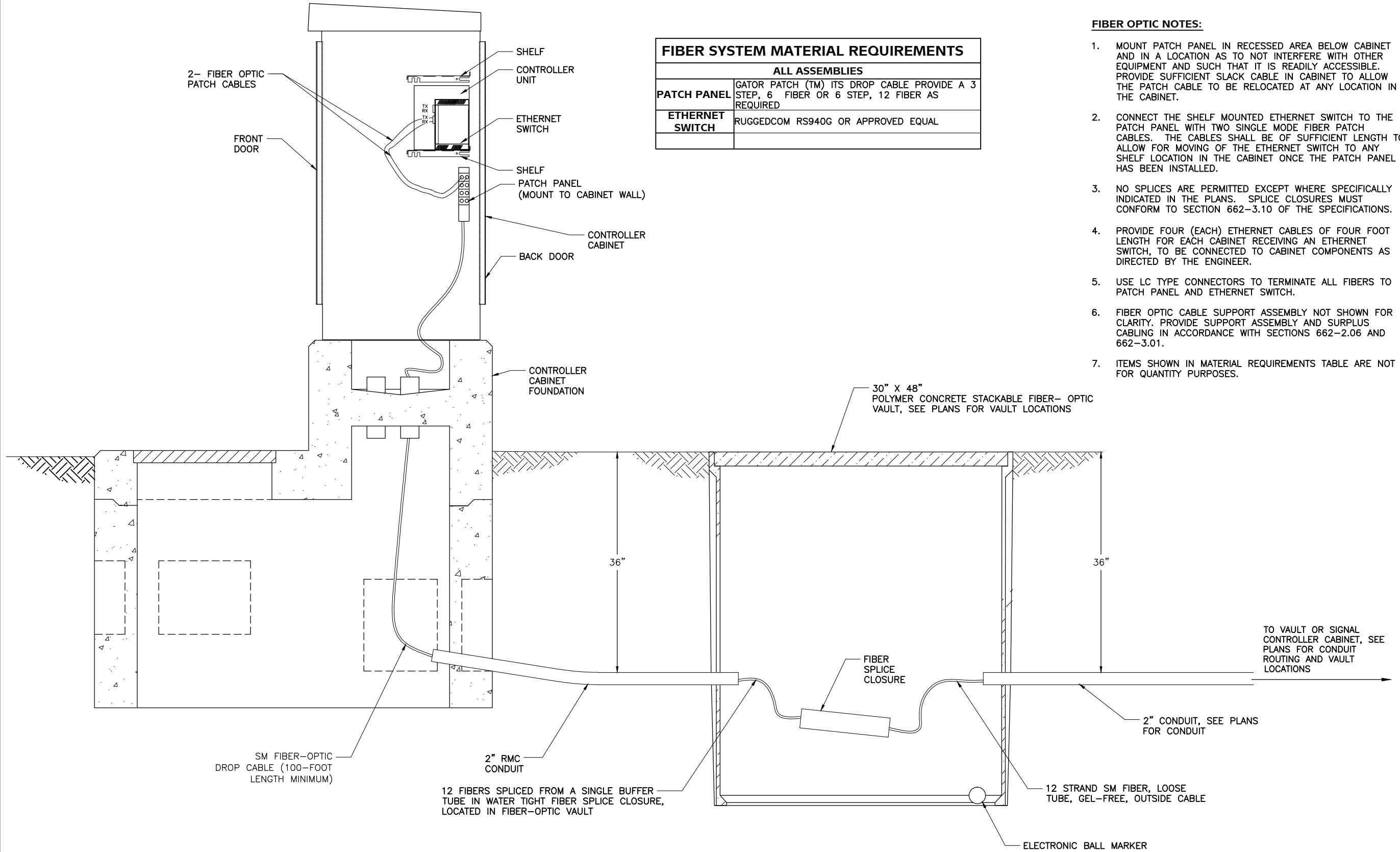


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| FIBER SYSTEM MATERIAL REQUIREMENTS | |
|------------------------------------|---|
| ALL ASSEMBLIES | |
| PATCH PANEL | GATOR PATCH (TM) ITS DROP CABLE PROVIDE A 3 STEP, 6 FIBER OR 6 STEP, 12 FIBER AS REQUIRED |
| ETHERNET SWITCH | RUGGEDCOM RS940G OR APPROVED EQUAL |

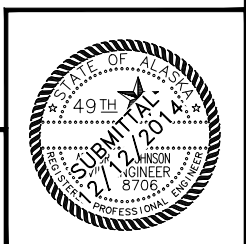
FIBER OPTIC NOTES:

1. MOUNT PATCH PANEL IN RECESSED AREA BELOW CABINET AND IN A LOCATION AS TO NOT INTERFERE WITH OTHER EQUIPMENT AND SUCH THAT IT IS READILY ACCESSIBLE. PROVIDE SUFFICIENT SLACK CABLE IN CABINET TO ALLOW THE PATCH CABLE TO BE RELOCATED AT ANY LOCATION IN THE CABINET.
2. CONNECT THE SHELF MOUNTED ETHERNET SWITCH TO THE PATCH PANEL WITH TWO SINGLE MODE FIBER PATCH CABLES. THE CABLES SHALL BE OF SUFFICIENT LENGTH TO ALLOW FOR MOVING OF THE ETHERNET SWITCH TO ANY SHELF LOCATION IN THE CABINET ONCE THE PATCH PANEL HAS BEEN INSTALLED.
3. NO SPLICES ARE PERMITTED EXCEPT WHERE SPECIFICALLY INDICATED IN THE PLANS. SPLICE CLOSURES MUST CONFORM TO SECTION 662-3.10 OF THE SPECIFICATIONS.
4. PROVIDE FOUR (EACH) ETHERNET CABLES OF FOUR FOOT LENGTH FOR EACH CABINET RECEIVING AN ETHERNET SWITCH, TO BE CONNECTED TO CABINET COMPONENTS AS DIRECTED BY THE ENGINEER.
5. USE LC TYPE CONNECTORS TO TERMINATE ALL FIBERS TO PATCH PANEL AND ETHERNET SWITCH.
6. FIBER OPTIC CABLE SUPPORT ASSEMBLY NOT SHOWN FOR CLARITY. PROVIDE SUPPORT ASSEMBLY AND SURPLUS CABLING IN ACCORDANCE WITH SECTIONS 662-2.06 AND 662-3.01.
7. ITEMS SHOWN IN MATERIAL REQUIREMENTS TABLE ARE NOT FOR QUANTITY PURPOSES.

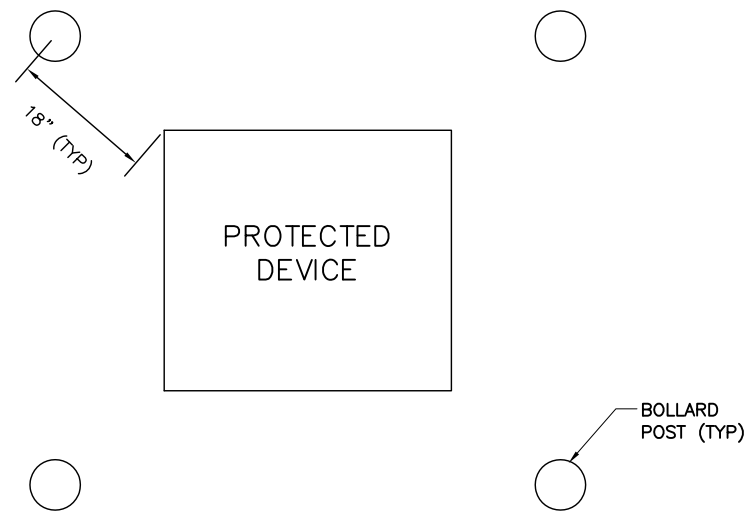


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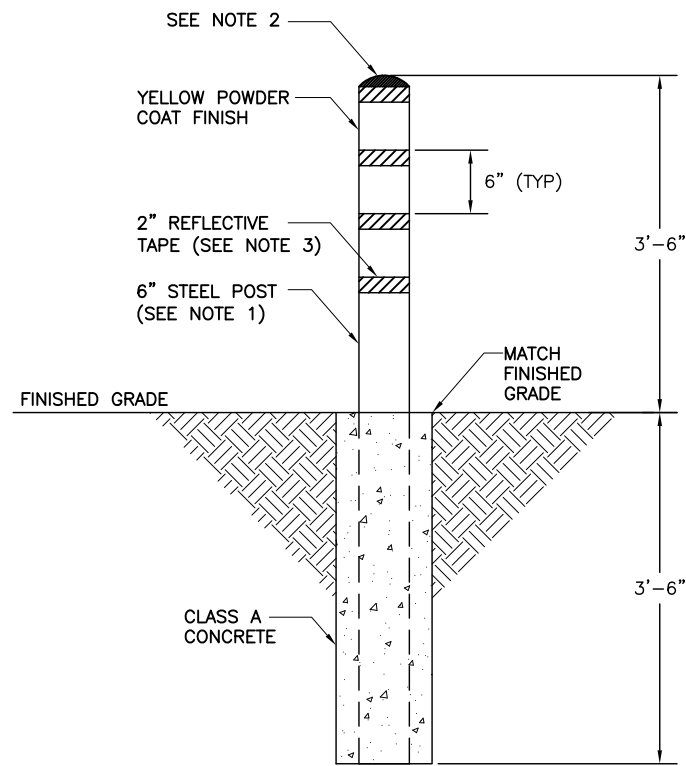
FIBER OPTIC INTERCONNECT DETAILS



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H48 | -- |



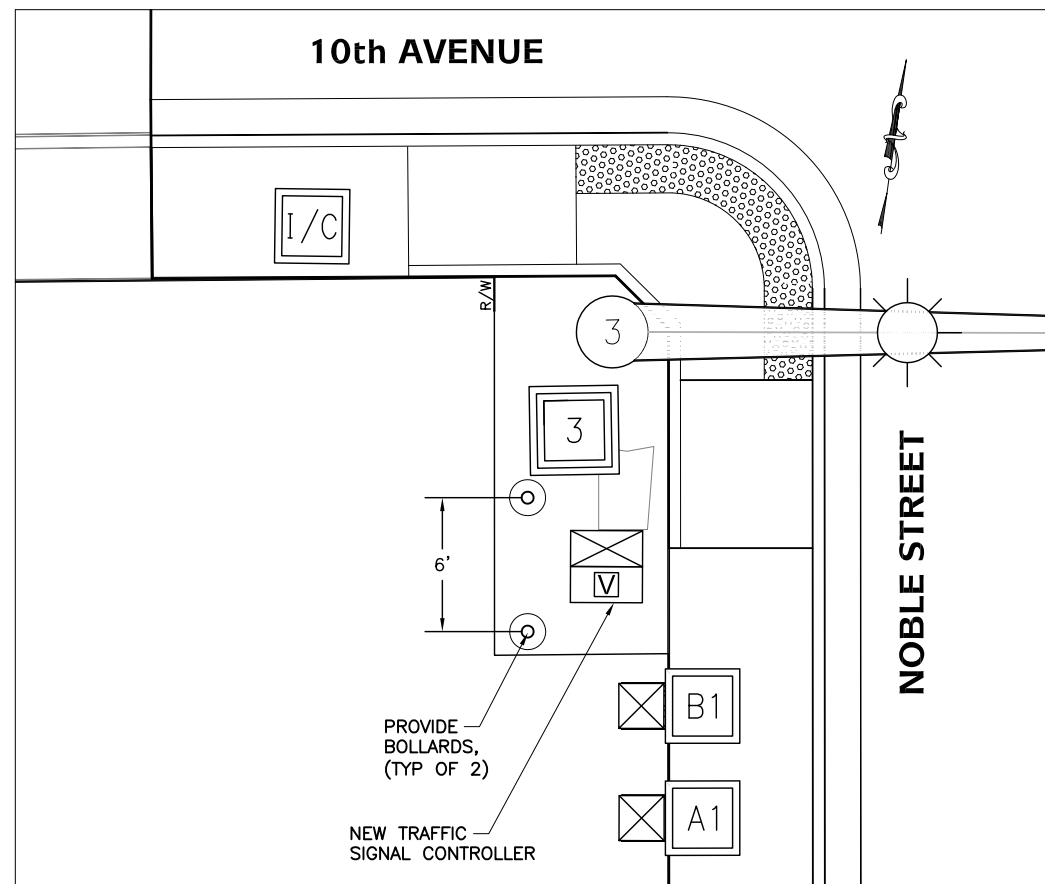
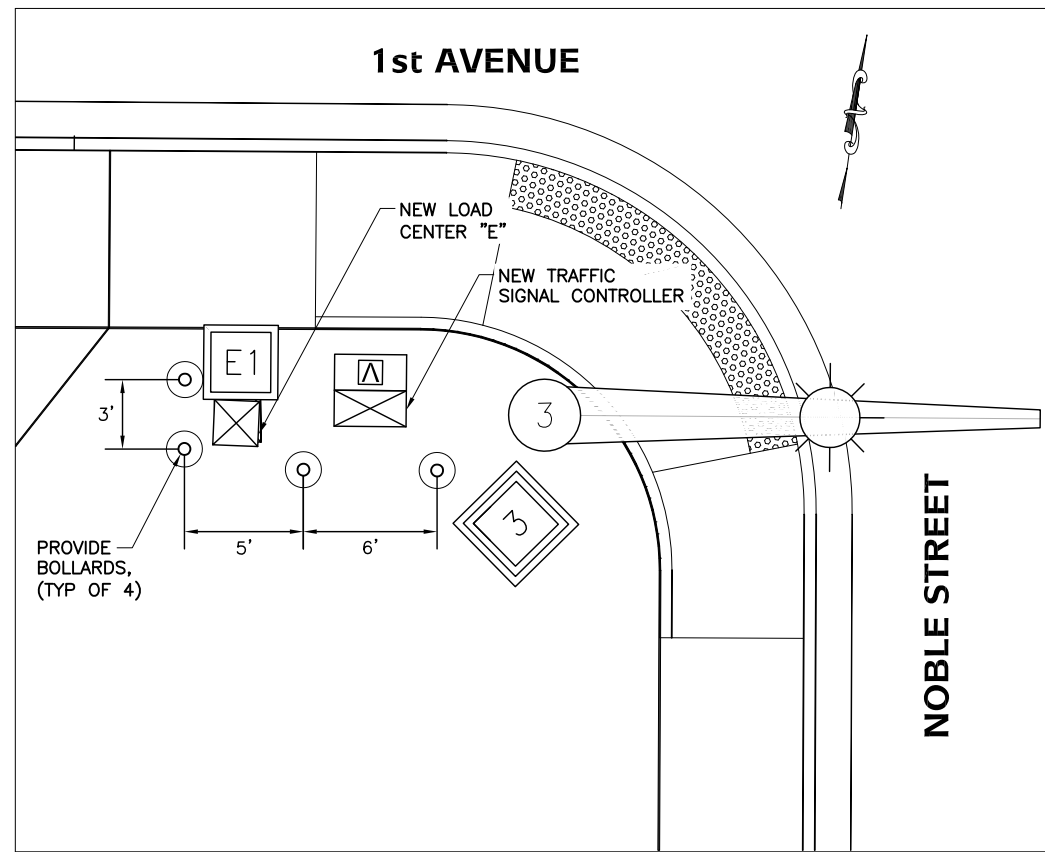
PLAN
LOCATE POSTS AS SHOWN PER PLAN



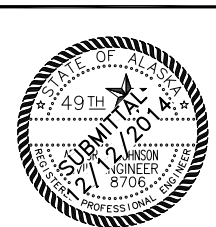
BOLLARD POST DETAIL
ELEVATION

NOTES:

1. PROVIDE 6" DIA. STEEL, SCHEDULE #40 PIPE, FILLED WITH CONCRETE.
2. ROUND CONCRETE AT TOP OF POST SMOOTH AND PAINT YELLOW.
3. INSTALL 4-2" BANDS OF YELLOW REFLECTIVE TAPE AS SHOWN.
4. LOCATION AND QUANTITY OF POSTS AS INDICATED ON DRAWINGS.

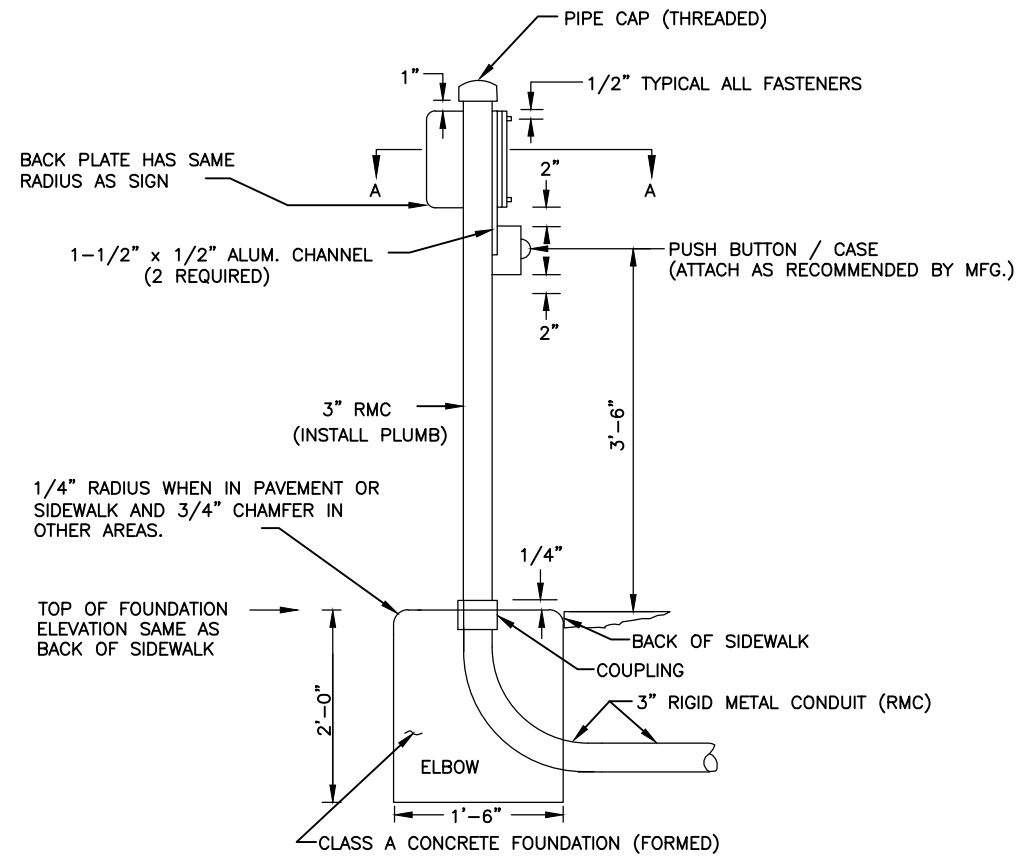


BOLLARD PLAN & DETAILS

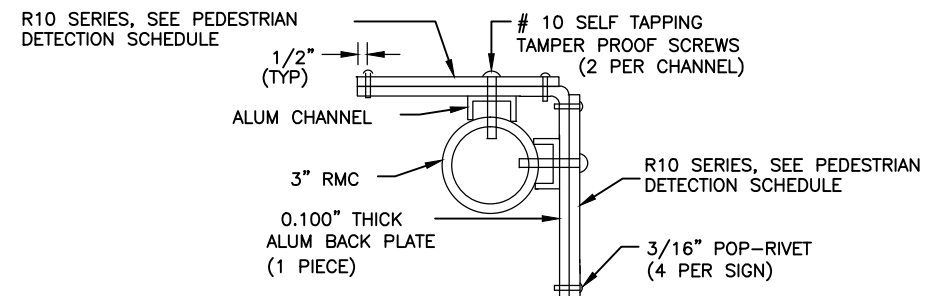


| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H49 | -- |

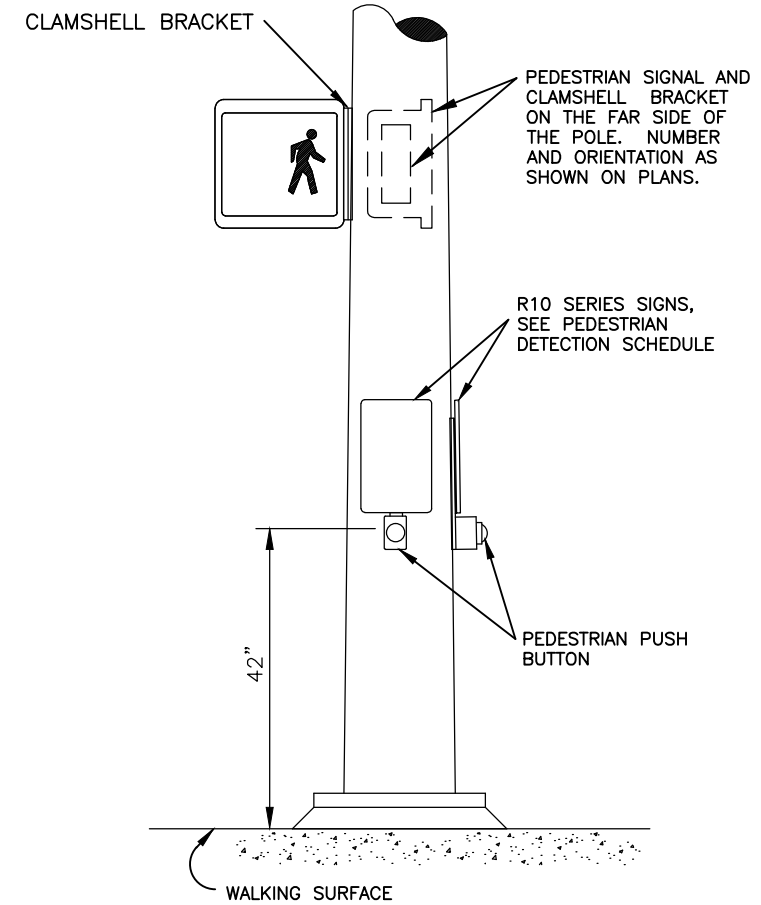
PEDESTRIAN PUSH BUTTON POST & SIGN DETAILS



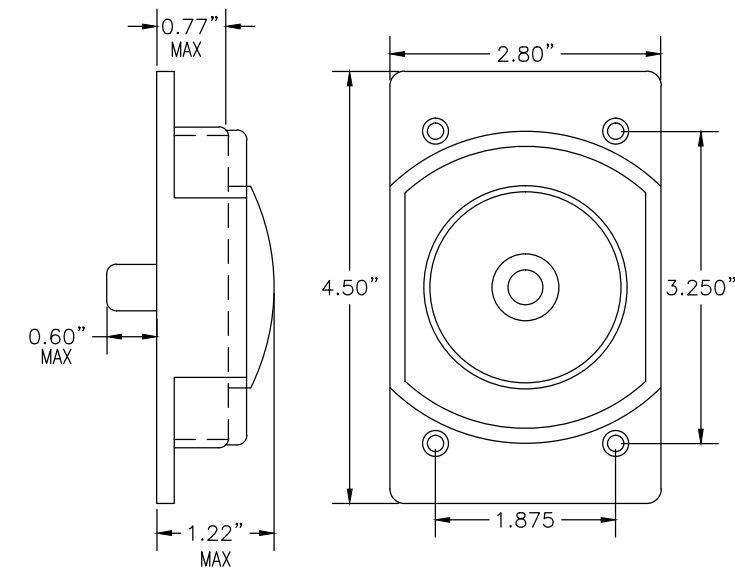
WHEN ONLY ONE SIGN & BUTTON IS REQUIRED THE BACK PLATE SHALL BE THE SAME SIZE AS THE SIGN AND SHALL BE CENTERED ON THE POST AND ALUM. CHANNEL.



SECTION A-A



SIGNAL POLE MOUNTED PEDESTRIAN HARDWARE & SIGNAGE



PEDESTRIAN PUSH BUTTON DETAIL

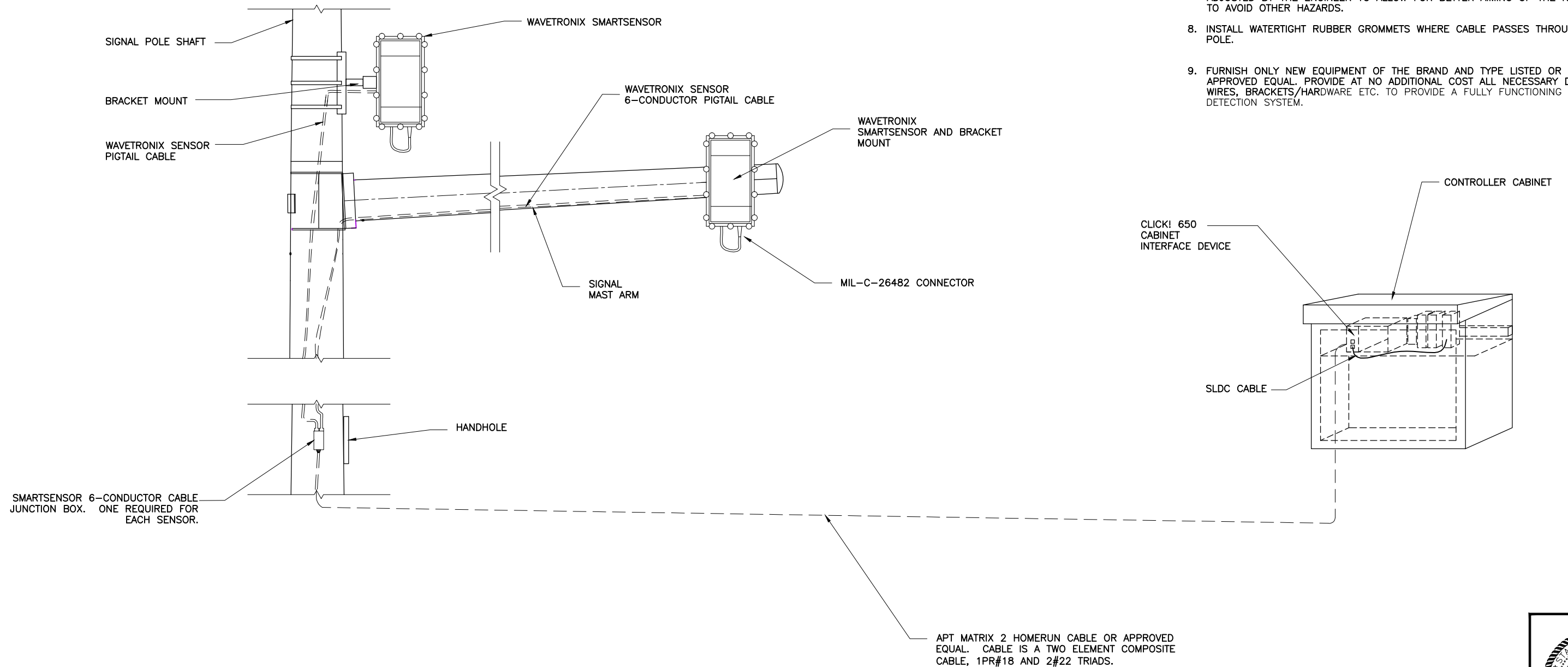
PEDESTRIAN PUSH BUTTON
POST & SIGN DETAILS



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H50 | -- |

RADAR INSTALLATION NOTES:

1. PROTECT CABLE ENDS FROM MOISTURE AT ALL TIMES.
2. PULL CABLE IN ACCORDANCE WITH SECTION 660 OF THE SPECIAL PROVISIONS. PULL CABLE SO THAT THERE IS SUFFICIENT LENGTH TO REACH THE TOP OF THE CONTROLLER CABINET. CABLES ARE TO BE PULLED WITHOUT CONNECTORS ATTACHED. WHEN CABLE HAS BEEN PULLED TO FINAL LOCATIONS INSTALL AND MAKE FINAL CONNECTIONS.
3. CABLE RUNS ARE TO BE MADE CONTINUOUS WITHOUT SPLICES.
4. CABLE WITH DAMAGED INSULATION, OR THAT HAS BEEN CRIMPED OR BENT BEYOND THE MINIMUM BEND RADIUS MUST BE REPLACED AT CONTRACTORS EXPENSE.
5. THE MINIMUM BEND RADIUS SHALL NOT EXCEED MANUFACTURERS RECOMMENDATIONS.
6. ENSURE ADEQUATE LENGTH OF EACH CABLE TO ALLOW WORK ON THE ENDS OF THE CABLE IN THE CONTROLLER CABINET, AT THE POLE MOUNT ENCLOSURE AND RADAR MOUNTING LOCATION.
7. MOUNT THE RADAR AT THE LOCATION STATED IN THE PLANS. PLACEMENT MAY BE ADJUSTED BY THE ENGINEER TO ALLOW FOR BETTER AIMING OF THE RADAR OR TO AVOID OTHER HAZARDS.
8. INSTALL WATERTIGHT RUBBER GROMMETS WHERE CABLE PASSES THROUGH THE POLE.
9. FURNISH ONLY NEW EQUIPMENT OF THE BRAND AND TYPE LISTED OR ITS APPROVED EQUAL. PROVIDE AT NO ADDITIONAL COST ALL NECESSARY DEVICES, WIRES, BRACKETS/HARDWARE ETC. TO PROVIDE A FULLY FUNCTIONING RADAR DETECTION SYSTEM.

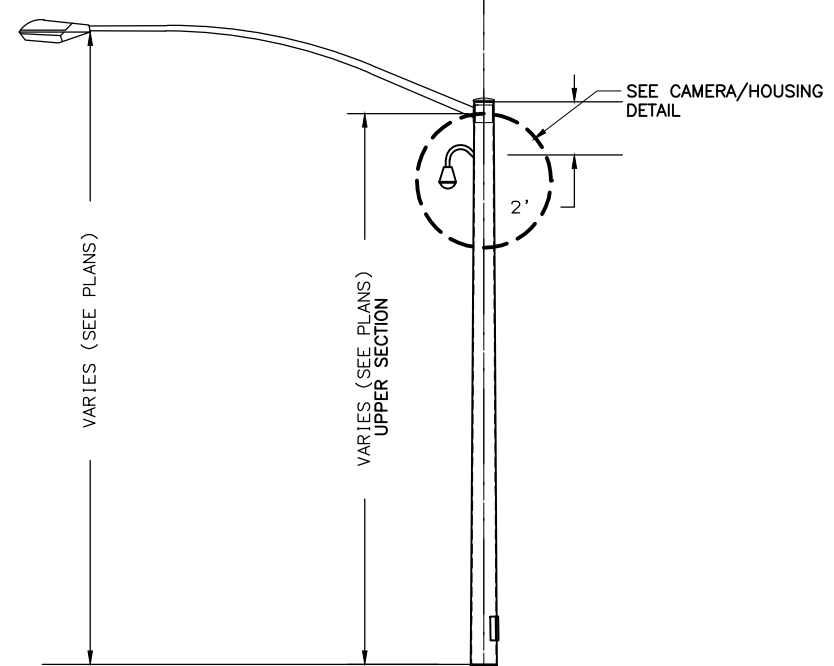


RADAR INSTALLATION DETAIL
NTS

RADAR DETAIL



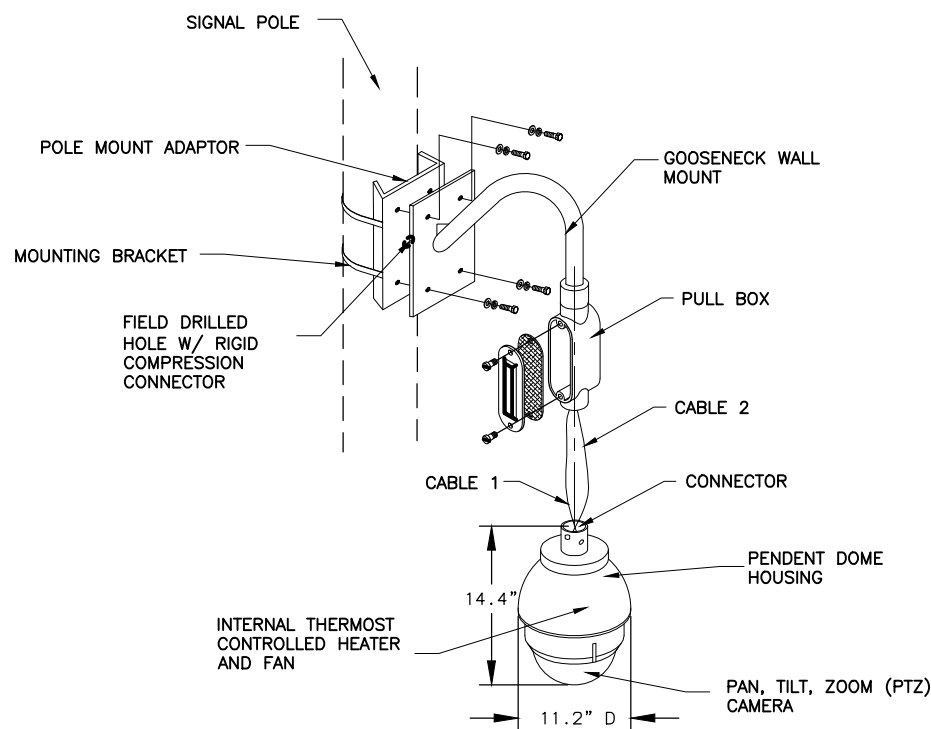
CAMERA LOCATION



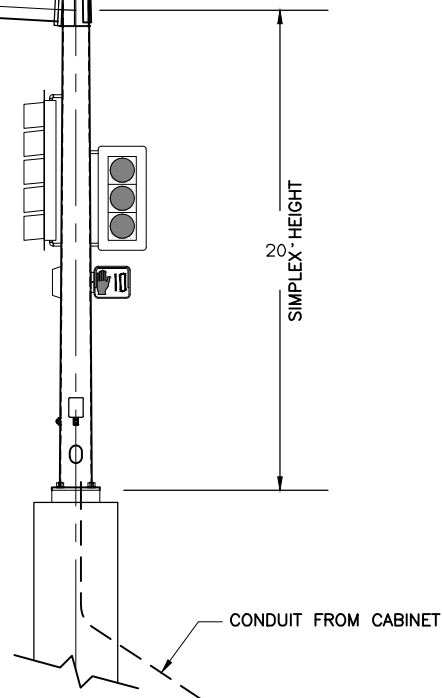
| MATERIAL REQUIREMENTS | |
|-----------------------|--|
| ALL ASSEMBLIES | |
| MOUNTING BRACKET | PELCO TRITON BRACKET OR APPROVED EQUAL |
| POLE MOUNT ADAPTOR | SONY UNI-PMA1 OR APPROVED EQUAL |
| GOOSENECK WALL MOUNT | SONY UNI-WMB1 OR APPROVED EQUAL |
| 24V AC TRANSFORMER | PSH100AB10 OR APPROVED EQUAL |
| CABLE 1 | CAT-5E, SHIELDED, DIRECT BURIAL |
| CABLE 2 | 3C14 (ACCORDING TO MANUFACTURES RECOMMENDATIONS) |
| CONNECTOR | ENVIRONMENTALLY HARDENED RJ-45 |
| STRAIN RELIEF | REMKE 2201-013 OR APPROVED EQUAL |
| CAMERA | |
| CAMERA | SONY NETWORK CAMERA SNC-EP520 OR APPROVED EQUAL |
| HOUSING | |
| PENDANT DOME HOUSING | SONY HOUSING UNI-ORL7T2 OR APPROVED EQUAL |

NOTES:

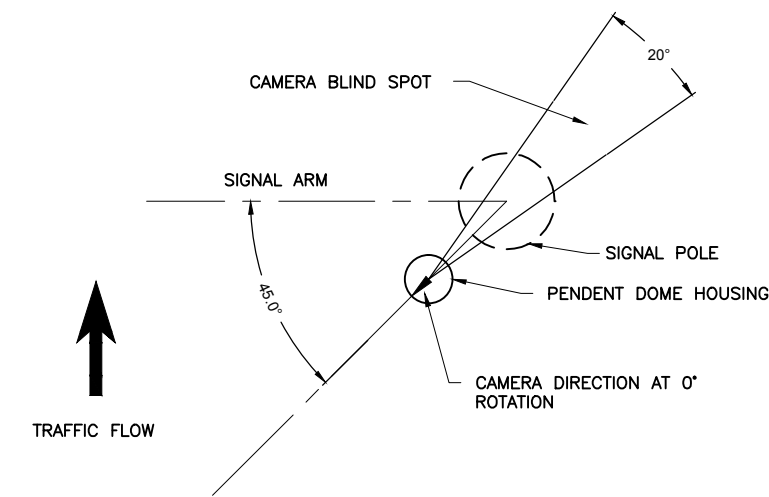
1. PROTECT CABLE ENDS FROM MOISTURE AT ALL TIMES.
2. PULL CABLE IN ACCORDANCE WITH SECTION 660 OF THE SPECIAL PROVISIONS. PULL CABLE SO THAT THERE IS SUFFICIENT LENGTH TO REACH THE TOP OF THE CONTROLLER CABINET. CABLES ARE TO BE PULLED WITHOUT CONNECTORS ATTACHED. WHEN CABLE HAS BEEN PULLED TO FINAL LOCATIONS INSTALL AND MAKE FINAL CONNECTIONS.
3. CABLE RUNS ARE TO BE MADE CONTINUOUS WITHOUT SPLICES EXCEPT FOR IN LOCATION SHOWN IN SPICE DETAIL WITH SPECIFIED CONNECTOR.
4. CABLE WITH DAMAGED INSULATION, OR THAT HAS BEEN CRIMPED OR BENT BEYOND THE MINIMUM BEND RADIUS MUST BE REPLACED AT NO ADDITIONAL COST.
5. THE MIN BEND RADIUS SHALL NOT EXCEED THE MANUFACTURERS RECOMMENDATIONS.
6. ENSURE ADEQUATE LENGTH OF EACH CABLE TO ALLOW WORK ON THE ENDS OF THE CABLE IN THE CONTROLLER CABINET AND THE CAMERA MOUNTING LOCATION.
7. MOUNT THE PENDENT DOME HOUSING AT A 45° ANGLE AT THE REQUIRED HEIGHT. ANGLE AND HEIGHT MAY BE ADJUSTED BY THE ENGINEER TO AVOID WELDS, APPENDICES AND TO APPROVE SITE DISTANCE.
8. ADJUST CAMERA INSIDE THE PENDENT DOME HOUSING AS SHOWN. ENSURE THAT THE CAMERA IS MOUNTED AT A 0° TILT ANGLE.
9. INSTALL WATERTIGHT THREADED RIGID COMPRESSION CONNECTOR WHERE CABLE PASSES THROUGH THE POLE.
10. AT SPLICE LOCATION PROVIDE A SECURE CONNECTION USING CONNECTOR PARTS SPECIFIED. AFTER CONNECTION IS MADE COVER SPLICE WITH HEAT SHRINK. PROVIDE A STRAIN RELIEF CABLE AS NECESSARY.



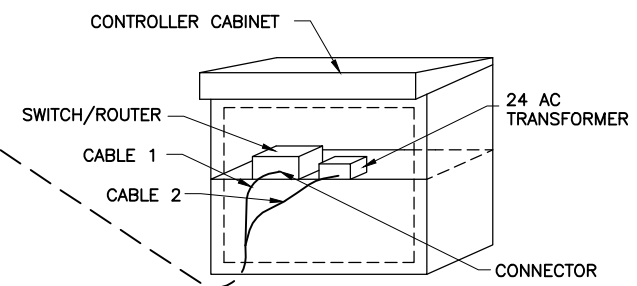
CAMERA/HOUSING DETAIL
NTS



SYSTEM LAYOUT
NTS



CAMERA/PENDENT DOME ORIENTATION
NTS

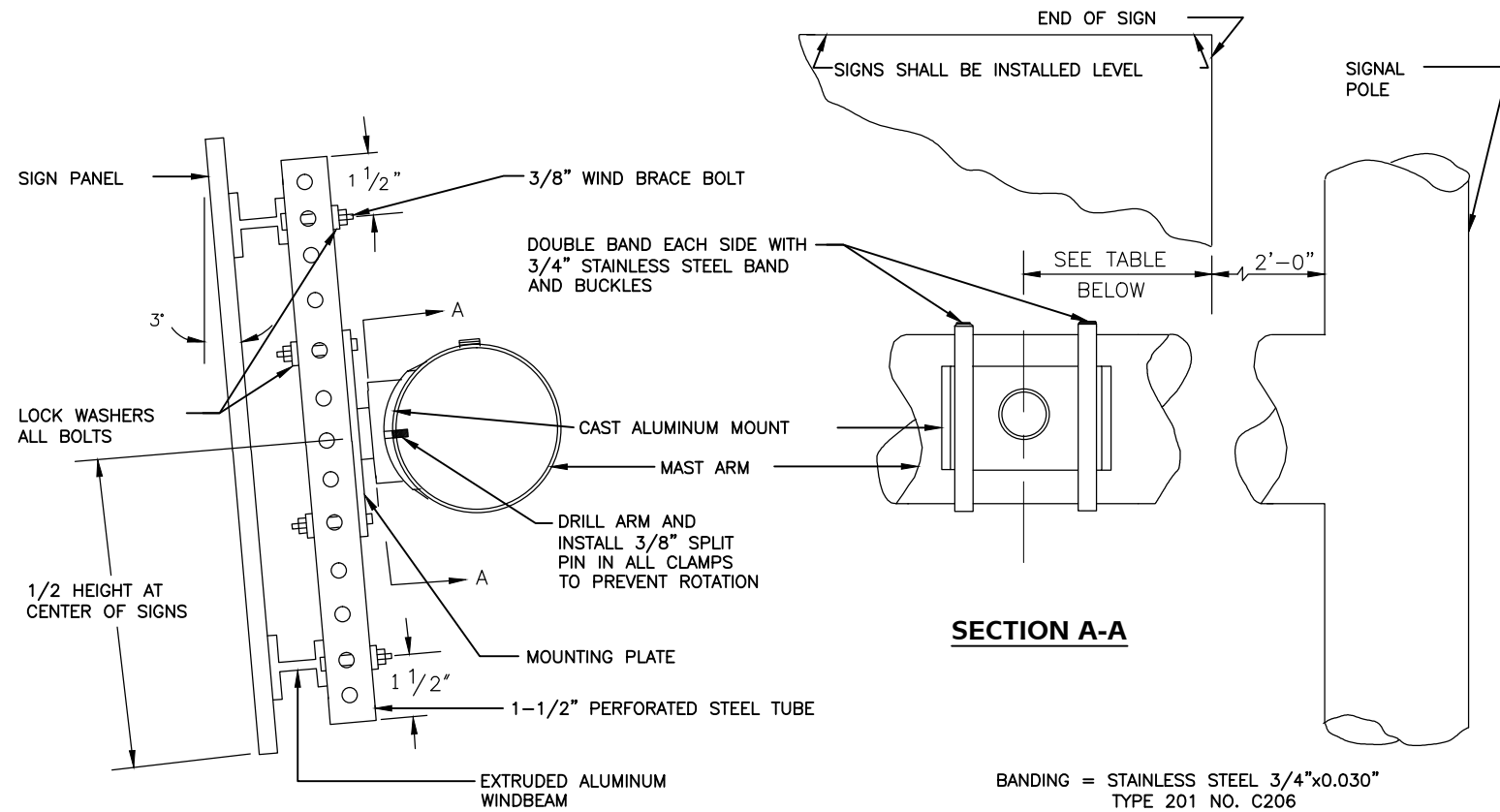


PAN, TILT, ZOOM CAMERA MOUNTING DETAIL



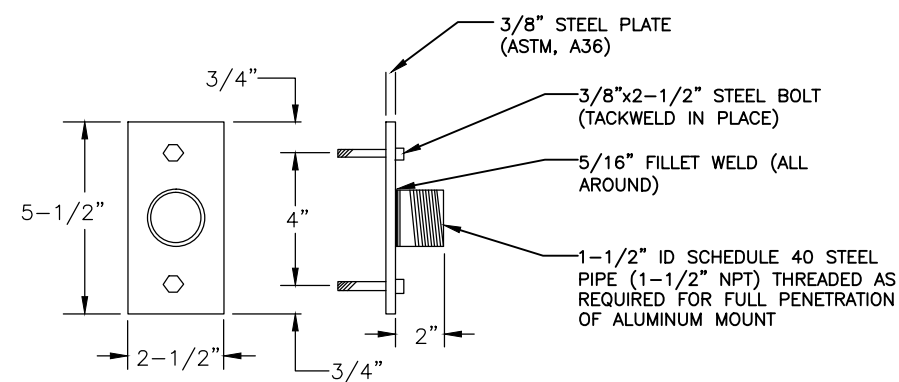
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SIGNAL MAST ARM MOUNTED SIGNS (NOT FOR "R" SERIES SIGNS)



BANDING = STAINLESS STEEL 3/4"x0.030"
TYPE 201 NO. C206
BUCKLES = STAINLESS STEEL 3/4"
TYPE 201 NO. C256
ALUMINUM MOUNT (SIGNAL) = 1-1/2"NPT
NO. D040
PIN = NO. D042

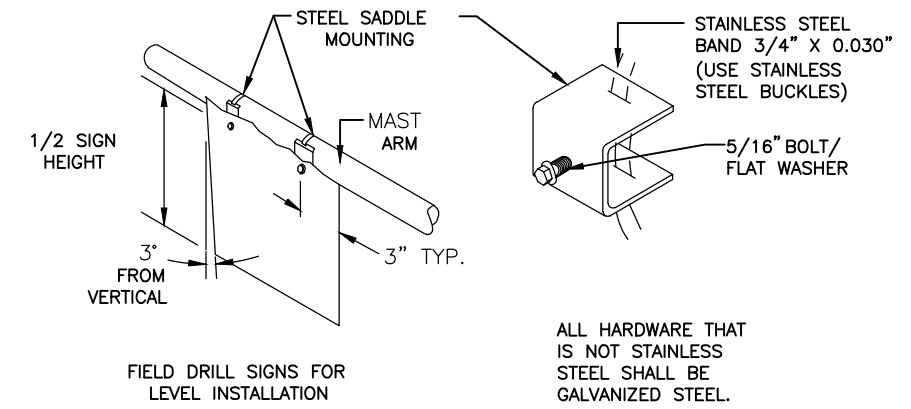
| SIGN WIDTH(W) | NO. OF CLAMPS | CLAMP SPACING | | |
|---------------|---------------|---------------|-------------------|----------|
| | | OVERHANG | BETWEEN CLAMPS | OVERHANG |
| 0-12 1/2' | 2 | 0.2W | 1 SPACE AT 0.6W | 0.2W |
| 13' TO 21' | 3 | 0.15W | 2 SPACES AT 0.35W | 0.15W |



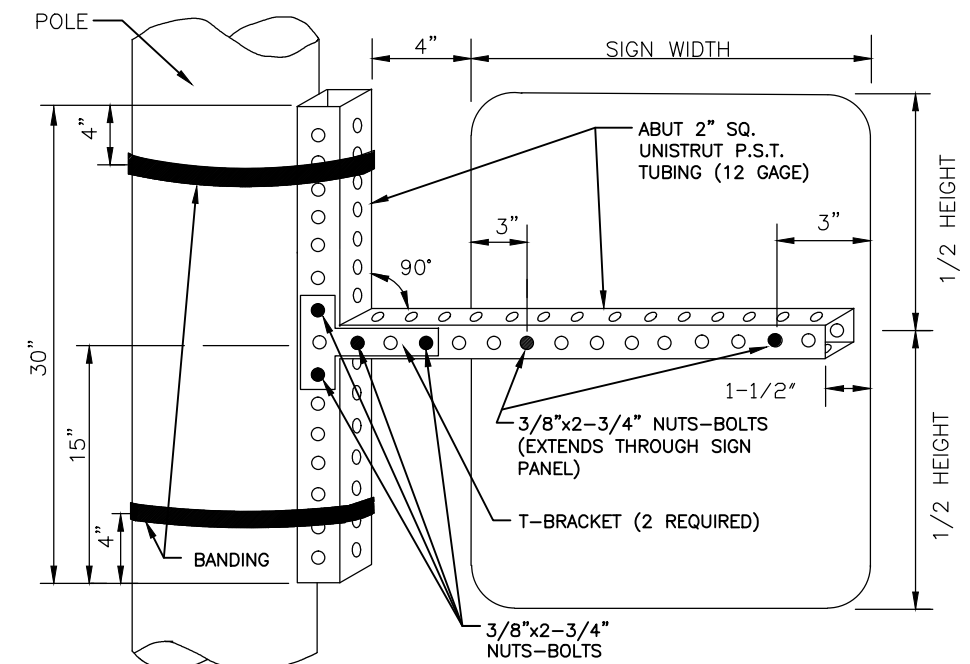
MOUNTING PLATE DETAIL

- CAST ALUMINUM MOUNTS AND BANDING MATERIALS SHALL BE "BAND-IT" OR APPROVED EQUAL.
- MOUNTING PLATE SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123.
- ALL WELDING SHALL MEET AMERICAN WELDING SOCIETY SPECS.
- BOLTS, NUTS AND WASHERS SHALL MEET THE REQUIREMENTS OF STANDARD DRAWING S-20.10

MAST ARM MOUNTING FOR "R" SERIES SIGNS



POLE/POST SIDE MOUNTED SIGN BRACKET



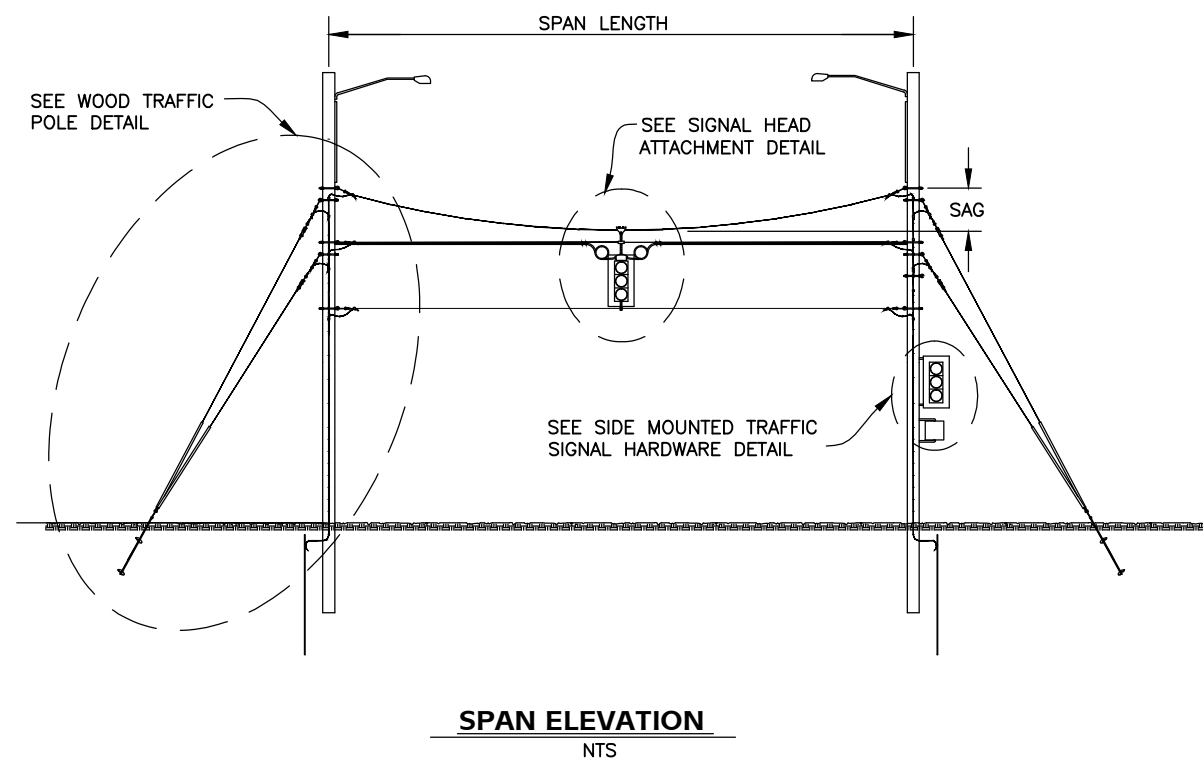
ALL NUTS SHALL BE INSTALLED WITH LOCK WASHERS
BANDING = STAINLESS STEEL 3/4"x0.030" (DOUBLE BANDING REQUIRED)
BUCKLES = STAINLESS STEEL 3/4"

Z:\PROJECTS\POC\Noble St. Signals and ST Illumination\Drawg\Plan Sheets\MOBILE SIGNAL MOUNTED SIGN DETAILS

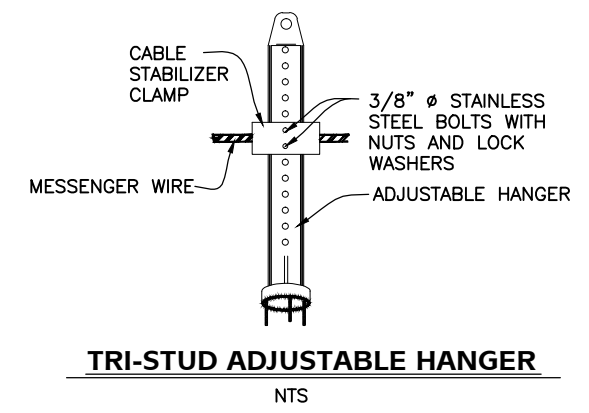
SIGNAL MOUNTED
SIGN DETAILS



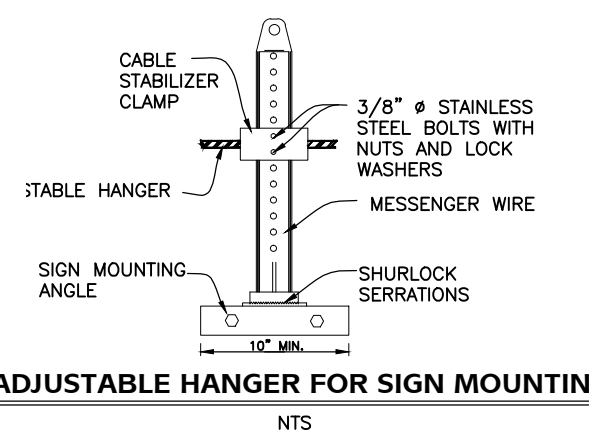
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H53 | -- |



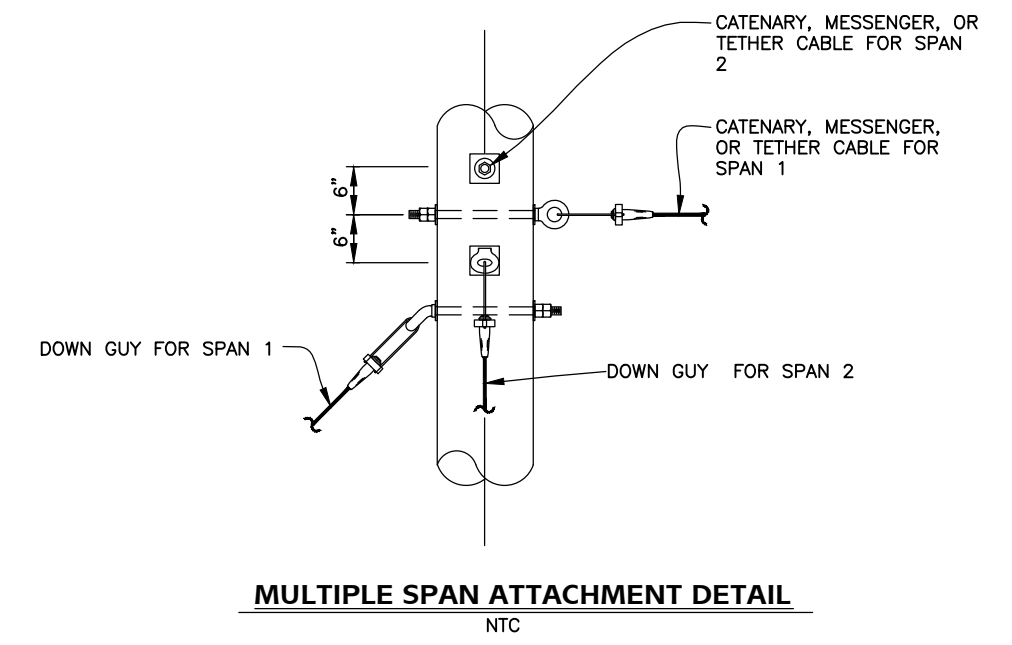
SPAN ELEVATION
NTS



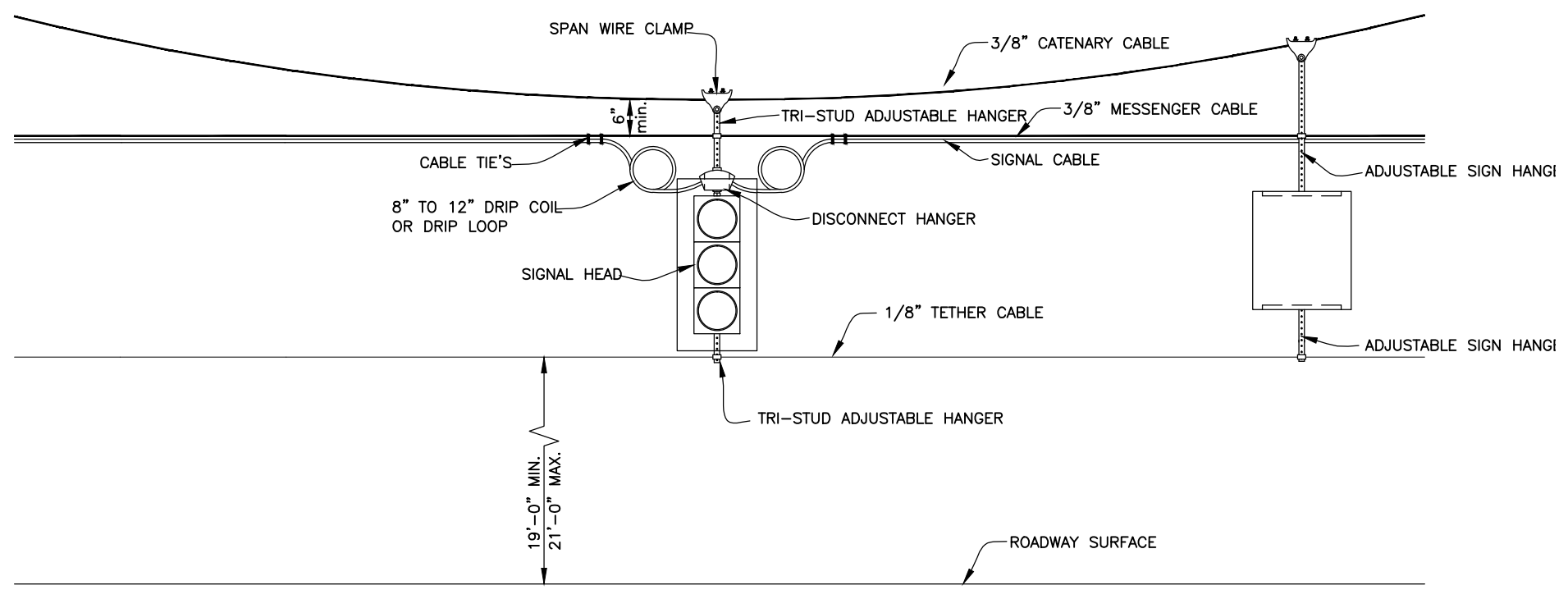
TRI-STUD ADJUSTABLE HANGER
NTS



ADJUSTABLE HANGER FOR SIGN MOUNTING
NTS



MULTIPLE SPAN ATTACHMENT DETAIL
NTC



SIGNAL HEAD AND SIGN ATTACHMENT DETAIL
NTS

GENERAL NOTES:

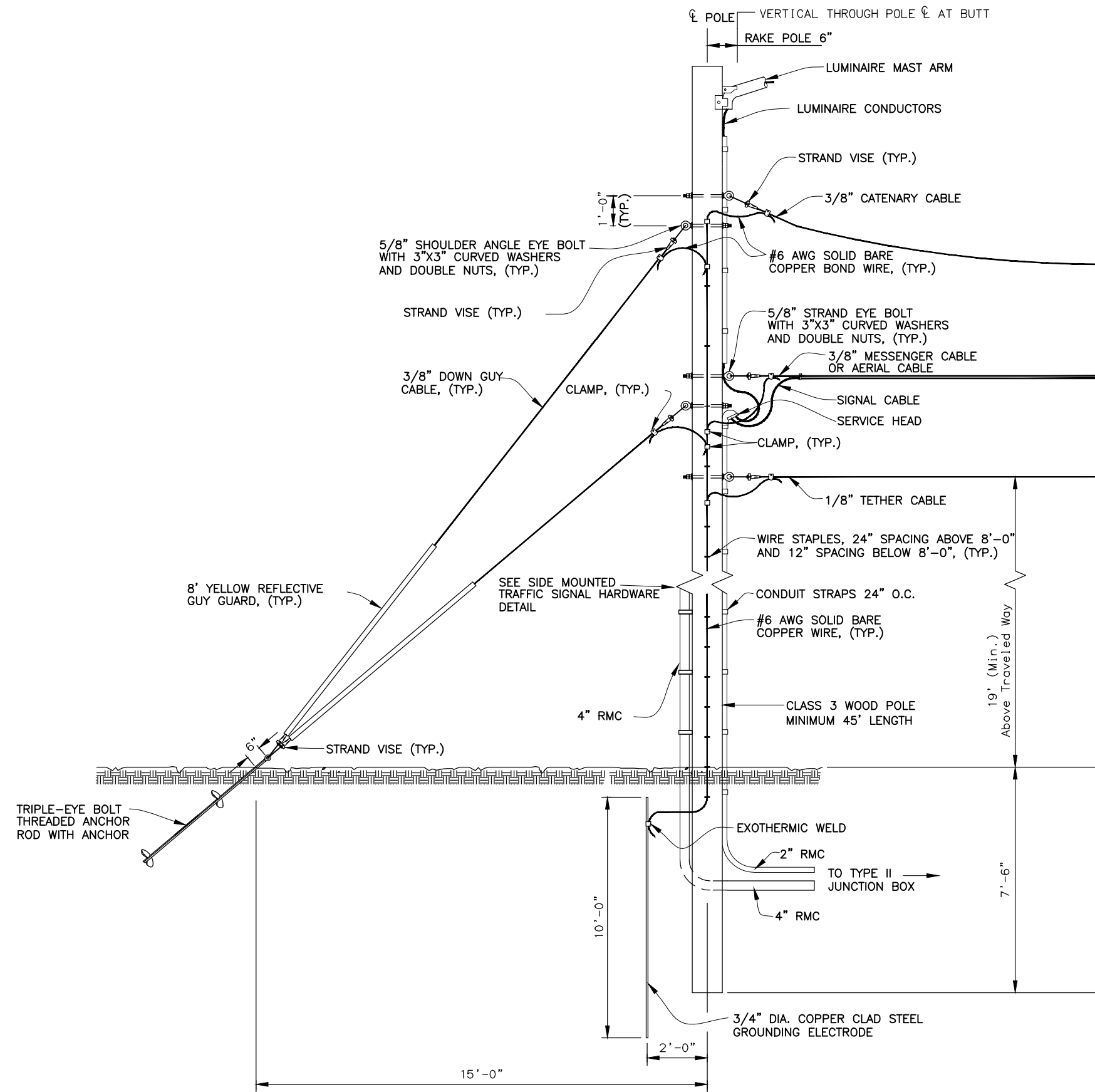
1. ATTACH ADJUSTABLE HANGERS TO THE MESSENGER AND TETHER CABLES WITH CABLE STABILIZER CLAMPS.
2. ATTACH SIGNAL CABLES TO MESSENGER CABLE EVERY 1' USING 3M HEAVY DUTY BLACK CABLE TIES. CABLE TIES SHALL BE WEATHER RESISTANT BLACK NYLON GREATER THAN 0.065" THICK, HAVE A TENSILE STRENGTH GREATER THAN 110LBS, AND HAVE A TEMPERATURE RANGE BETTER THAN -35°F TO 180°F. USE TWO TIES BEFORE/AFTER DRIP LOOPS. CABLE TIES SHALL BE ATTACHED "SNUG TIGHT", DO NOT OVER TIGHTEN.
3. INSTALL SIGNS SO THAT THE BOTTOM EDGES ARE AT APPROXIMATELY THE SAME ELEVATION.
4. SAG=4% TO 5% OF SPAN LENGTH.

Z:\PROJECTS\POC\Noble St. Signals and ST Illumination\Drawg\Plan Sheets\NOBLE SIGNAL Span Wire Detail

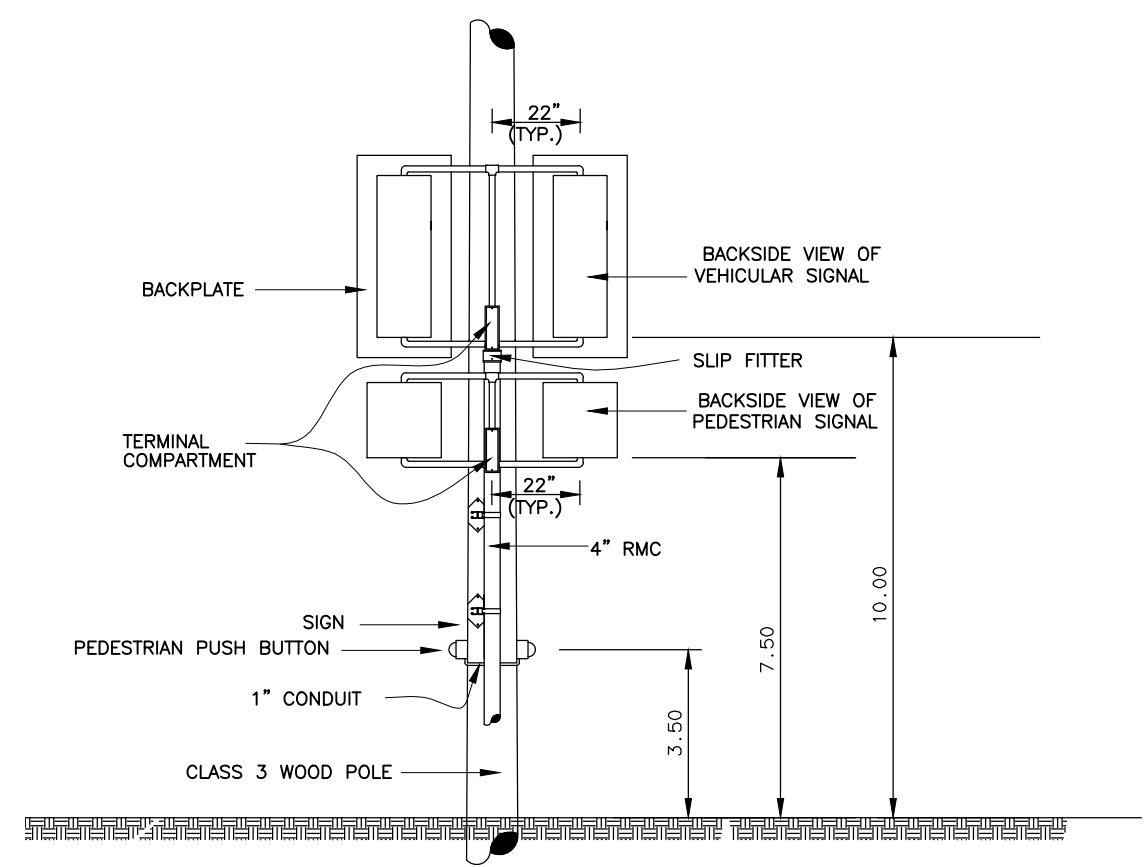
TEMPORARY TRAFFIC SIGNAL
SPAN WIRE DETAILS



| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | H54 | -- |



WOOD TRAFFIC POLE DETAIL
NTS
(SINGLE SPAN ATTACHMENT SHOWN)



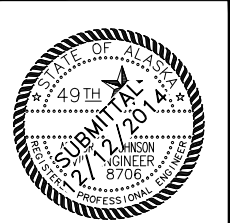
SIDE MOUNTED TRAFFIC SIGNAL HARDWARE
NTS

GENERAL NOTES:

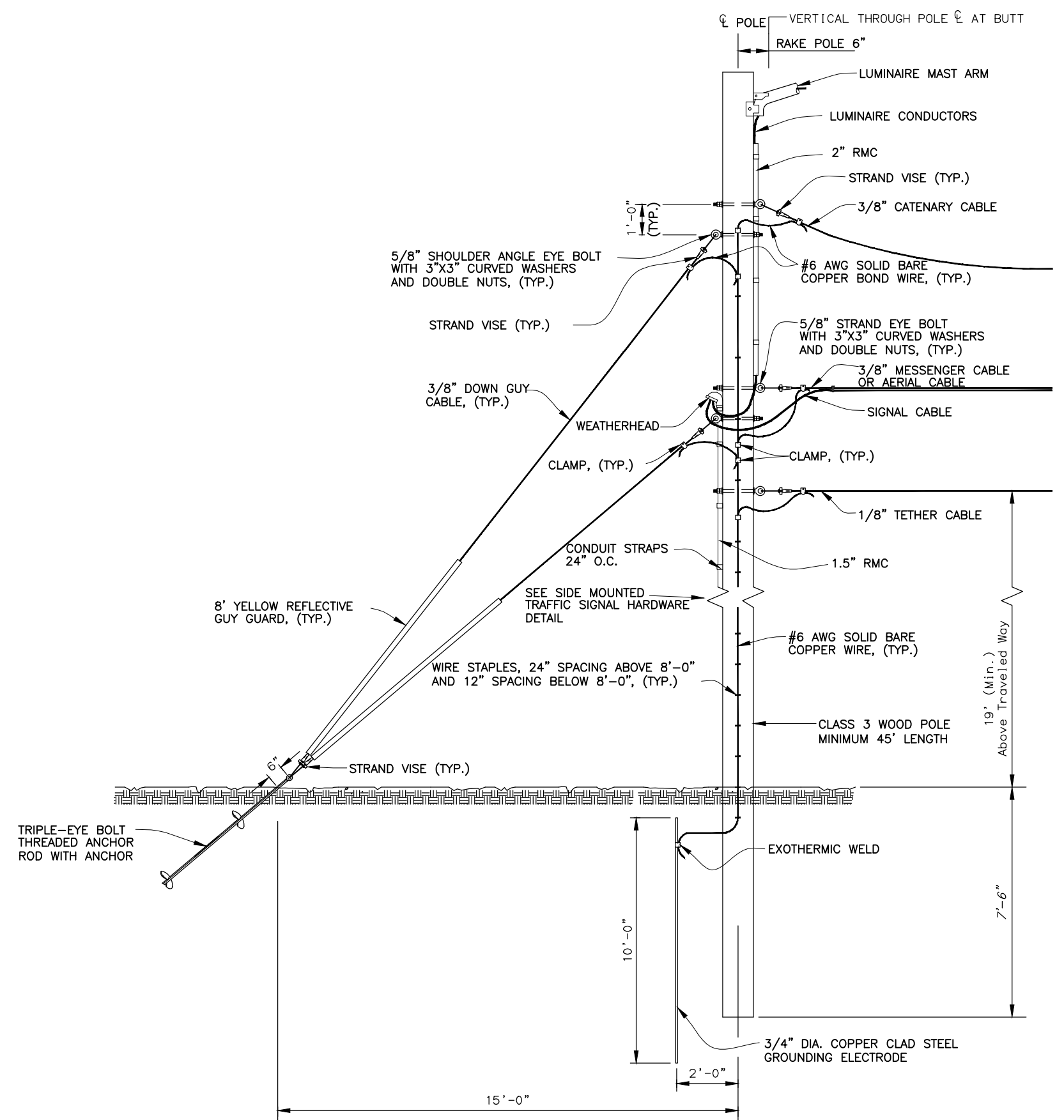
1. ATTACH A 4 INCH RIGID METAL CONDUIT TO THE WOOD POLE, USING UNISTRUT P9014 WITH P4101 CHANNEL, AND P1121 PIPE CLAMPS, OR APPROVED EQUAL.
2. INSTALL THE 4" CONDUIT ON THE SIDE OF THE POLE AT A LOCATION WHERE A LINE PARALLEL TO THE LONG CORD (P.C. TO P.T.) OF THE RADIUS IS TANGENT TO THE POLE, AS SHOWN IN STANDARD DRAWING T-30.10 OR THE SIGNAL HARDWARE DETAIL SHEET IN PLANS FOR TERMINAL COMPARTMENT LOCATIONS.
3. USE POST TOP SIGNAL FRAMES WITH TERMINAL COMPARTMENTS TO INSTALL THE VEHICULAR SIGNAL HEADS ON TOP OF THE 4 INCH CONDUIT.
4. USE SIDE MOUNTED SIGNAL FRAMES WITH TERMINAL COMPARTMENTS TO INSTALL THE PEDESTRIAN SIGNAL HEADS ON THE 4 INCH CONDUIT.
5. THE VERTICAL CLEARANCES SHOWN ARE FROM THE WALKING SURFACE FOR THE PEDESTRIAN GEAR AND THE TRAVELED WAY FOR THE VEHICULAR SIGNALS.
6. TERMINATE POLES WITH NO LUMINAIRE A MINIMUM OF 2 FEET ABOVE THE CATENARY CABLE CONNECTION.
7. SEE STANDARD DRAWING T-30.10 OR THE SIGNAL HARDWARE DETAIL SHEET IN PLANS FOR ADDITIONAL TRAFFIC SIGNAL HARDWARE DETAILS.

Z:\PROJECTS\POC\Noble St. Signals and ST Illumination\Draw\Plan Sheets\MOBILE SIGNAL Wood Pole Signal

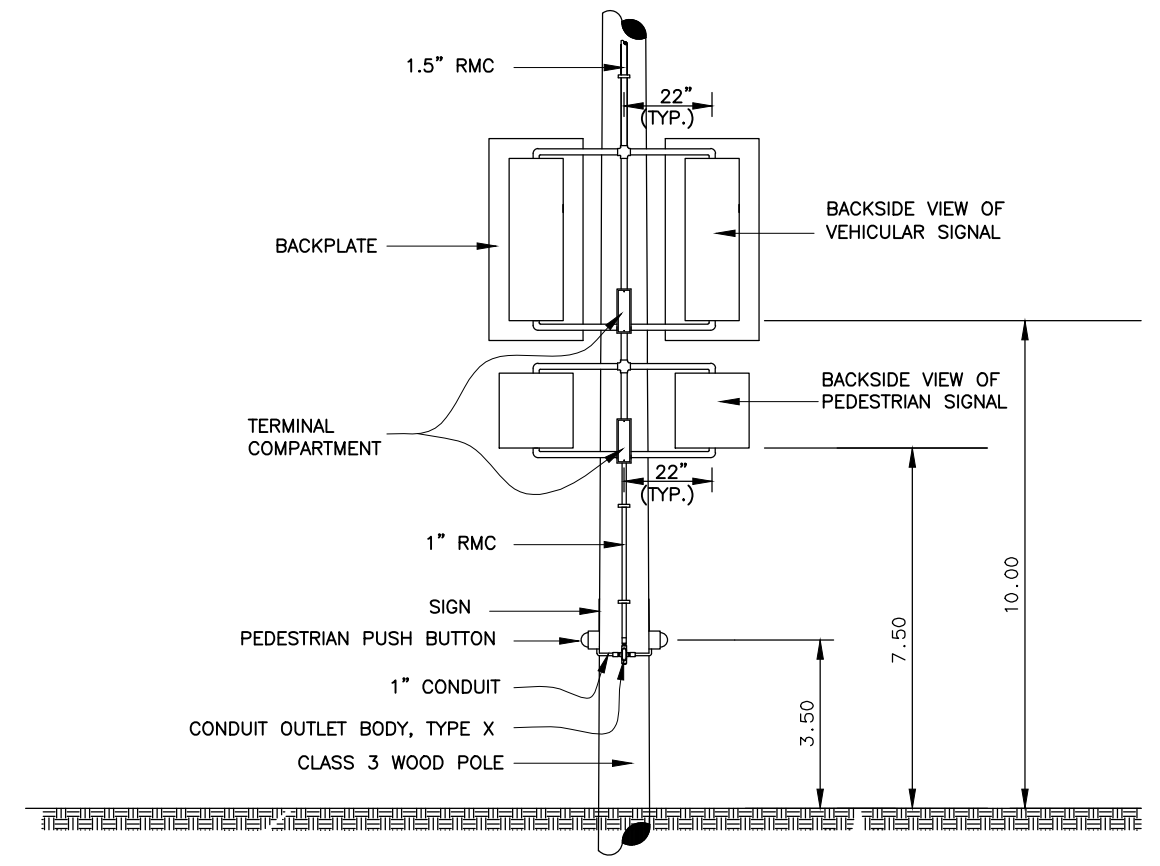
TEMPORARY WOOD TRAFFIC
SIGNAL DETAILS
UNDERGROUND SERVICE



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | H55 | -- |



WOOD TRAFFIC POLE DETAIL
NTS
(SINGLE SPAN ATTACHMENT SHOWN)



SIDE MOUNTED TRAFFIC SIGNAL HARDWARE
NTS

GENERAL NOTES:

1. USE SIGNAL FRAMES WITH TERMINAL COMPARTMENTS TO INSTALL THE VEHICULAR AND PEDESTRIAN SIGNAL HEADS ON THE SIDES OF THE WOOD POLES.
2. SECURELY ATTACH THE TERMINAL COMPARTMENTS TO THE WOOD POLES AT THE LOCATIONS SHOWN ON STANDARD DRAWING T-30.10 OR THE SIGNAL HARDWARE DETAIL SHEET IN PLANS.
3. THE VERTICAL CLEARANCES SHOWN ARE FROM THE WALKING SURFACE FOR THE PEDESTRIAN GEAR AND THE TRAVELED WAY FOR THE VEHICULAR SIGNALS.
4. TERMINATE POLES WITH NO LUMINAIRE A MINIMUM OF 2 FEET ABOVE THE CATENARY CABLE CONNECTION.
5. SEE STANDARD DRAWING T-30.10 OR THE SIGNAL HARDWARE DETAIL SHEET IN PLANS FOR ADDITIONAL TRAFFIC SIGNAL HARDWARE DETAILS.

TEMPORARY WOOD TRAFFIC
SIGNAL POLE DETAIL
OVERHEAD SERVICE



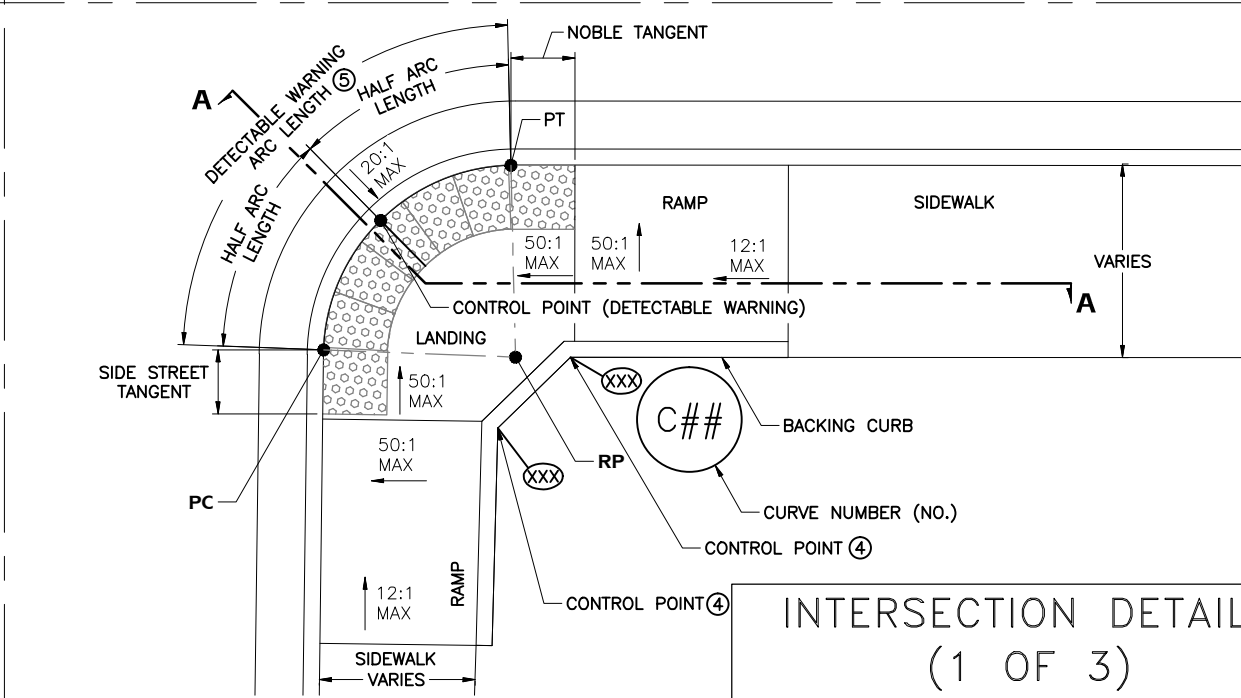
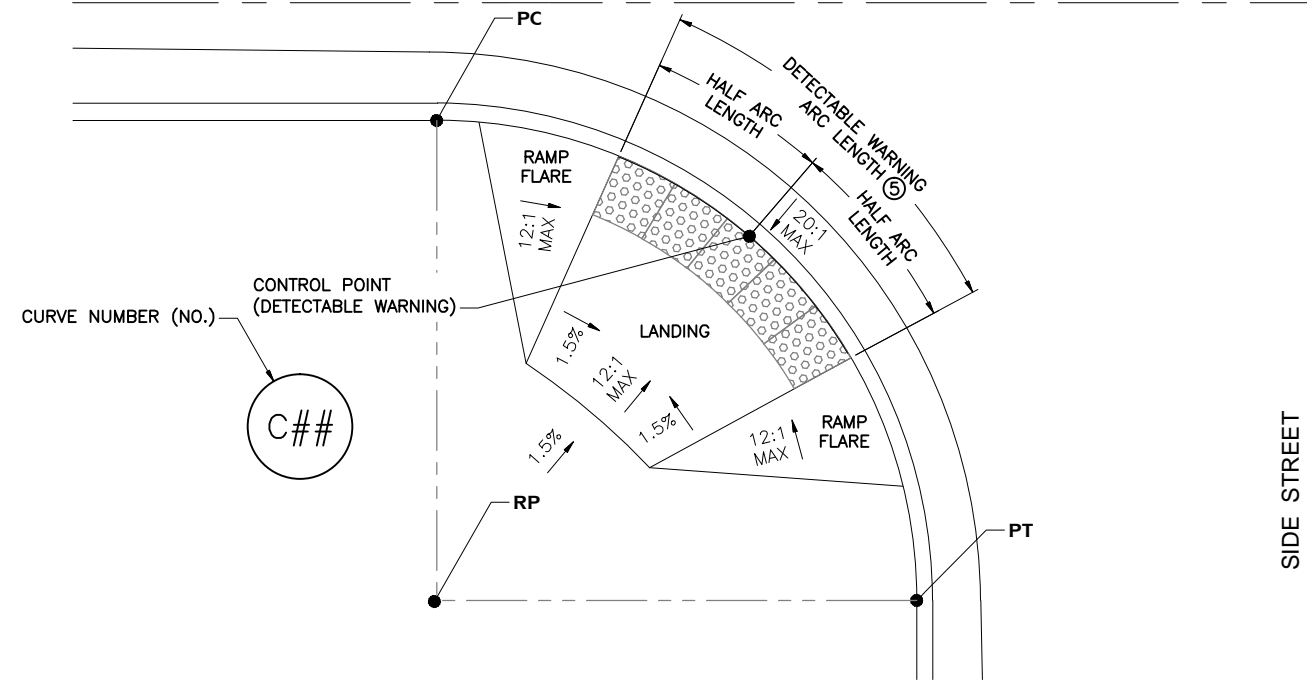
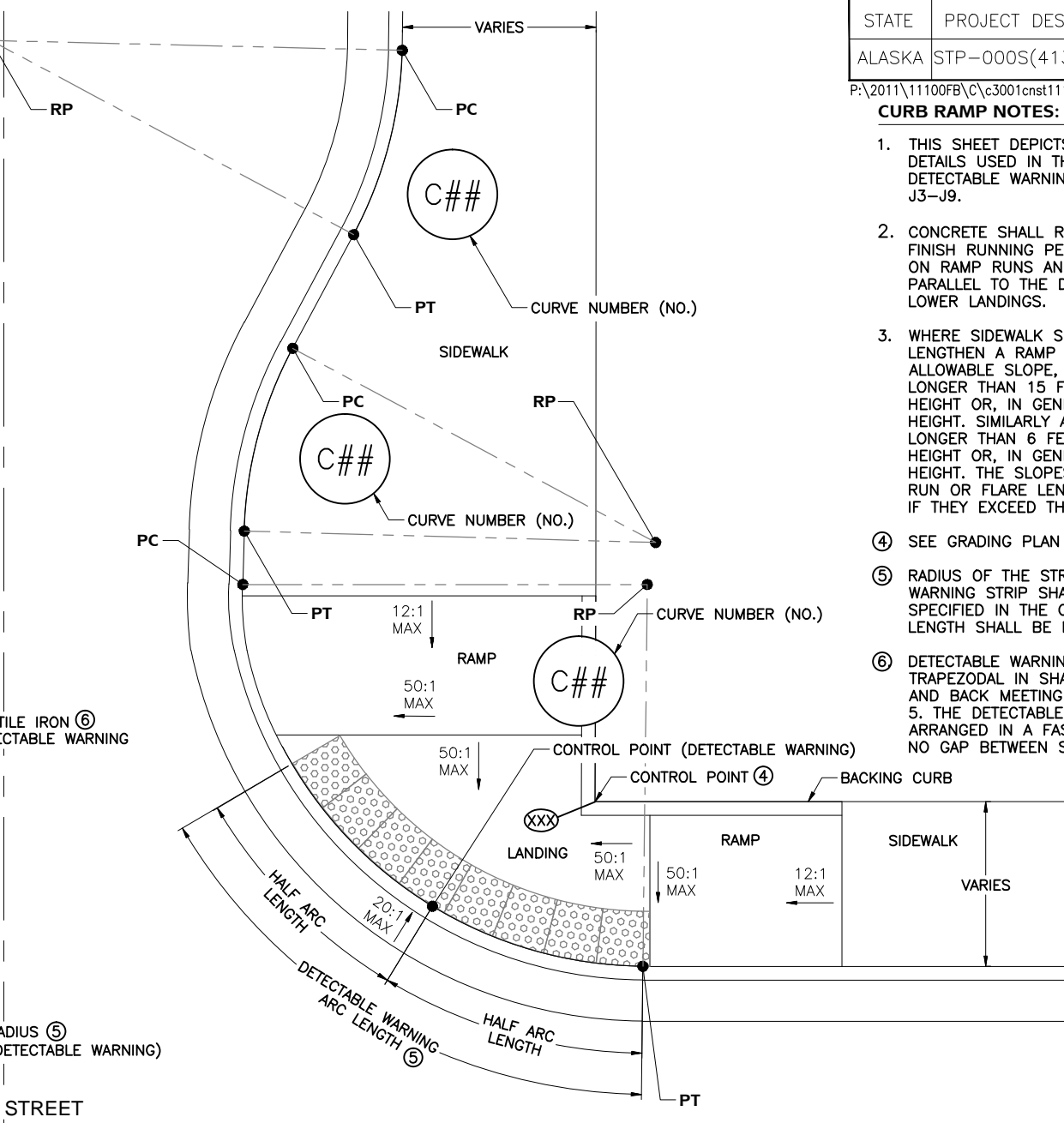
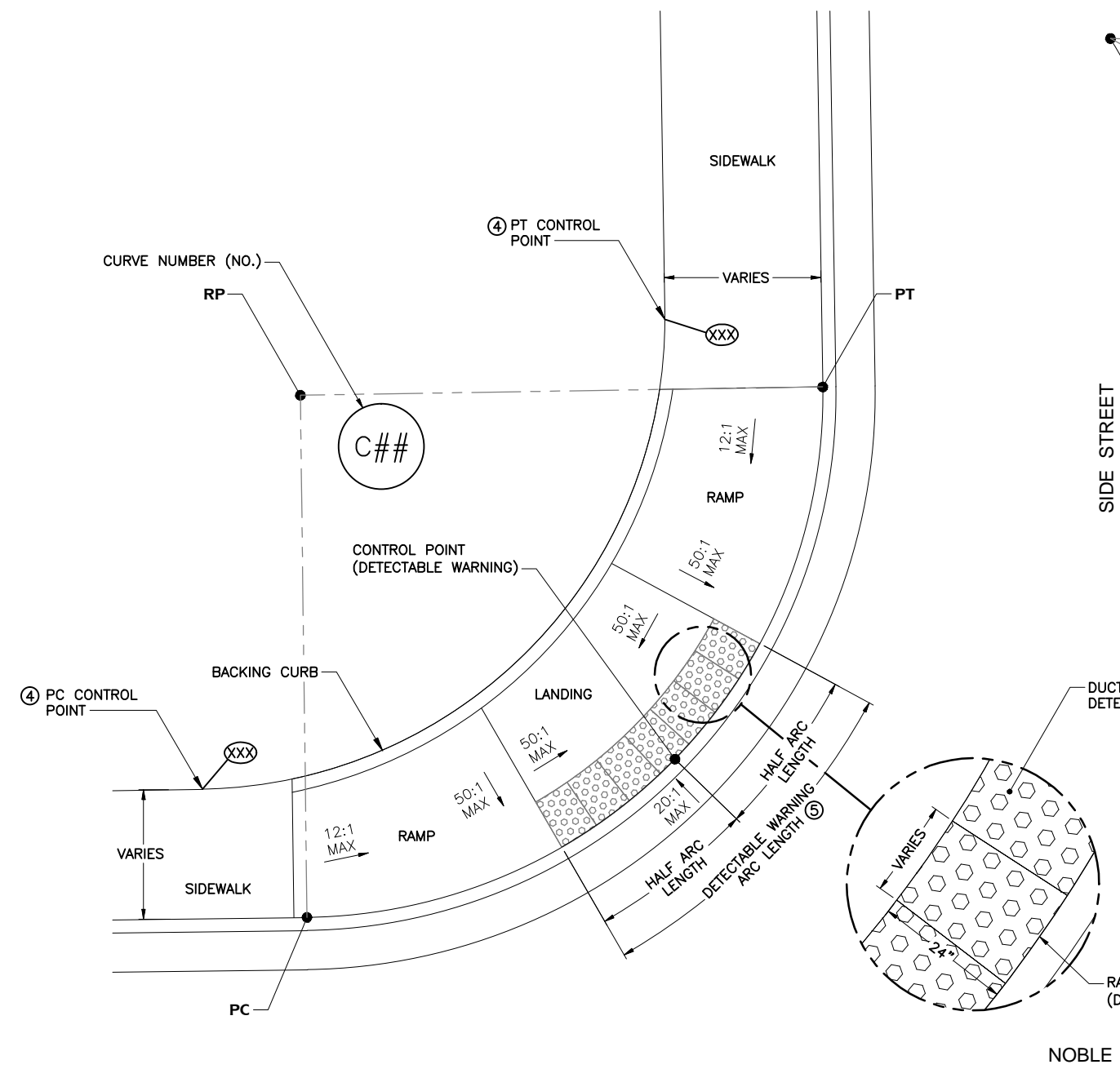
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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | J1 | -- |

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CURB RAMP NOTES:

1. THIS SHEET DEPICTS THE GENERAL CURB RAMP DETAILS USED IN THE CURVE LAYOUT AND DETECTABLE WARNING TABLES FOUND ON SHEETS J3-J9.
2. CONCRETE SHALL RECEIVE A MEDIUM BROOMED FINISH RUNNING PERPENDUCULAR TO THE CURB ON RAMP RUNS AND UPPER LANDINGS AND PARALLEL TO THE DIRECTION OF TRAVEL ON LOWER LANDINGS.
3. WHERE SIDEWALK SLOPE MAKES IT NECESSARY TO LENGTHEN A RAMP RUN TO AVOID EXCEEDING THE ALLOWABLE SLOPE, IT SHOULD NOT BE MADE LONGER THAN 15 FEET FOR A 6 INCH CURB HEIGHT OR, IN GENERAL, 30 TIMES THE CURB HEIGHT. SIMILARLY A FLARE SHOULD NOT BE MADE LONGER THAN 6 FEET FOR A 6 INCH CURB HEIGHT OR, IN GENERAL, 12 TIMES THE CURB HEIGHT. THE SLOPES RESULTING FROM THOSE RUN OR FLARE LENGTHS ARE ACCEPTABLE, EVEN IF THEY EXCEED THE MAXIMUM SLOPES SHOWN.
- ④ SEE GRADING PLAN FOR CONTROL POINTS.
- ⑤ RADIUS OF THE STREET SIDE OF THE DETECTABLE WARNING STRIP SHALL MATCH THE RADIUS SPECIFIED IN THE CURVE LAYOUT TABLES. ARC LENGTH SHALL BE MEASURED ALONG THIS RADIUS.
- ⑥ DETECTABLE WARNING STRIPS SHALL BE TRAPEZODAL IN SHAPE WITH A CURVED FRONT AND BACK MEETING THE REQUIREMENTS OF NOTE 5. THE DETECTABLE WARNING STRIPS WILL BE ARRANGED IN A FASHION SUCH THAT THERE IS NO GAP BETWEEN STRIPS.



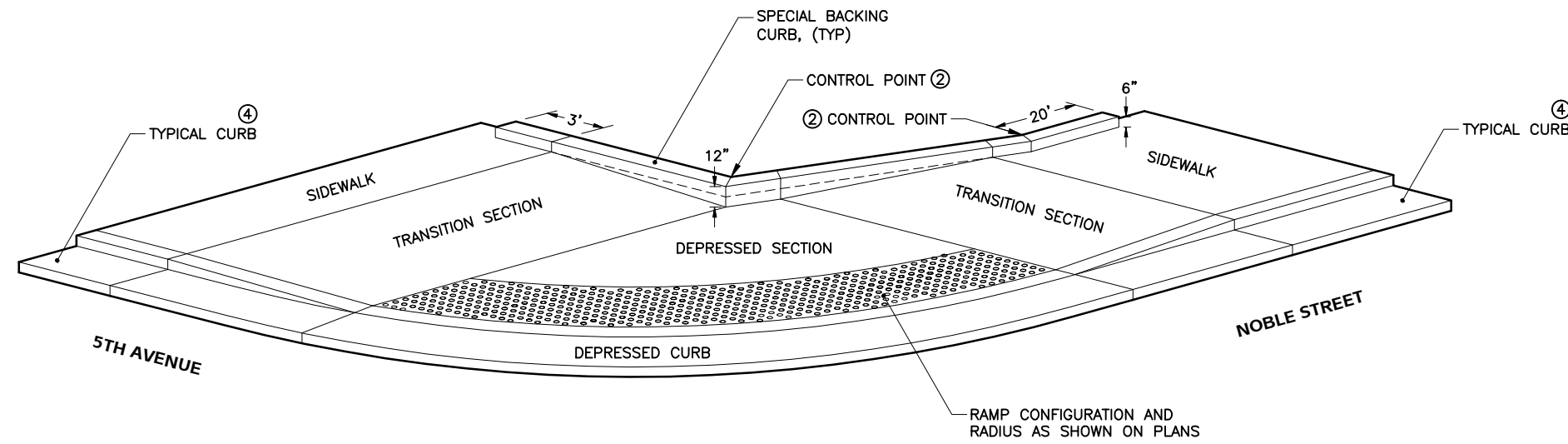
**INTERSECTION DETAILS
(1 OF 3)**



Friday, December 12, 2014, 12:22 PM

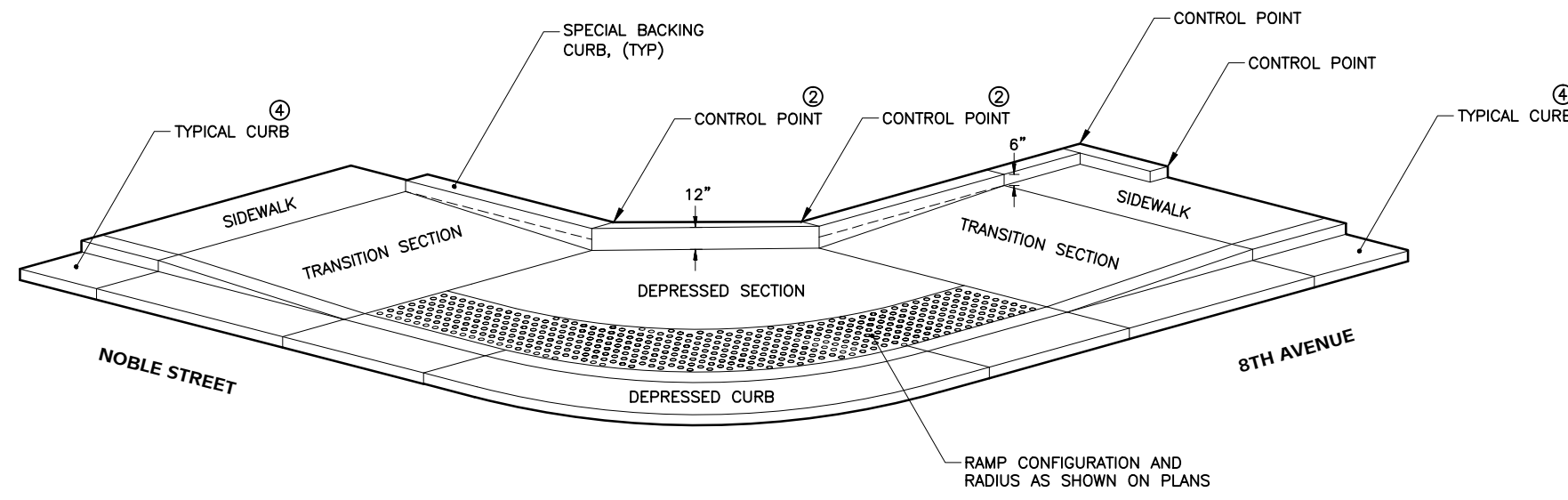
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
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| ALASKA | STP-000S(413)/61725 | 2015 | J2 | -- |

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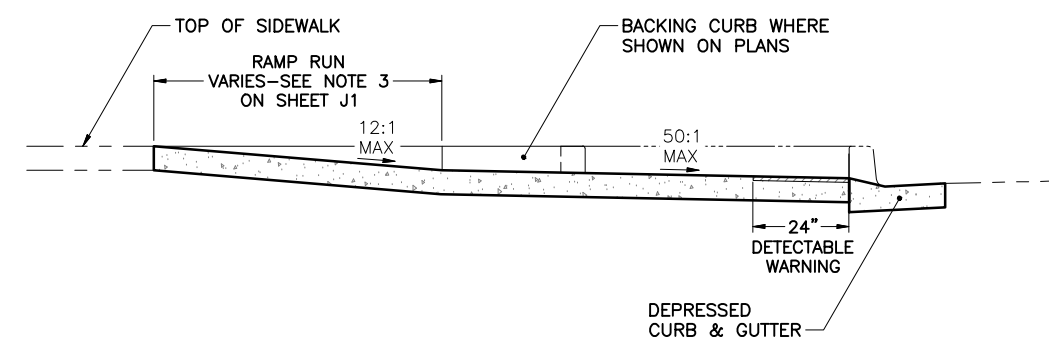


SPECIAL CURB RAMP DETAIL
5TH AVENUE & NOBLE STREET SOUTHEAST CORNER
NTS

- SHEET NOTES:**
1. USE STANDARD SLOPES FOR SIDEWALK AND CURB TRANSITION AND DEPRESSED SECTIONS AS SHOWN ON J1.
 2. SEE GRADING PLAN FOR CONTROL POINTS.
 3. SEE PLAN FOR SIDEWALK WIDTHS.
 4. SEE ROADWAY TYPICAL SECTION FOR CURB TYPE.
 5. SPECIAL BACKING CURB SUBSIDIARY TO 608(6).



SPECIAL CURB RAMP DETAIL
8TH AVENUE & NOBLE STREET SOUTHWEST CORNER
NTS



SECTION A-A
NTS

Friday, December 12, 2014, 12:22 PM

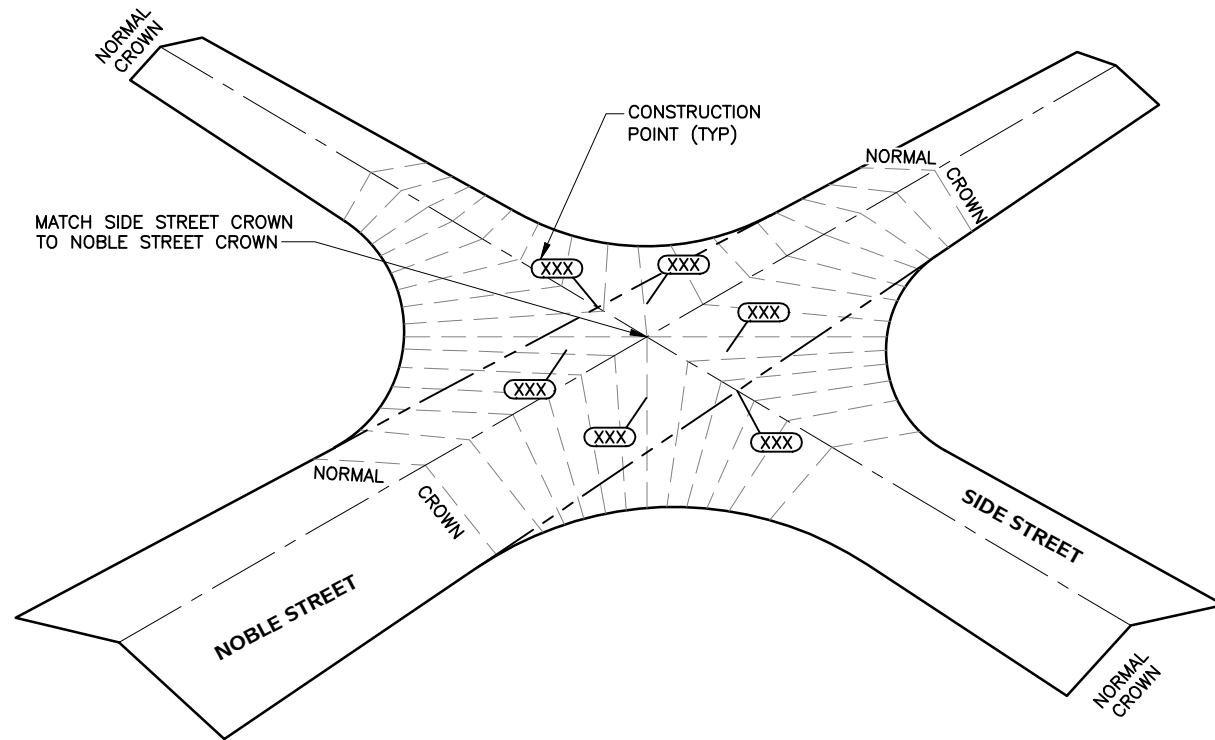


| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | J3 | -- |

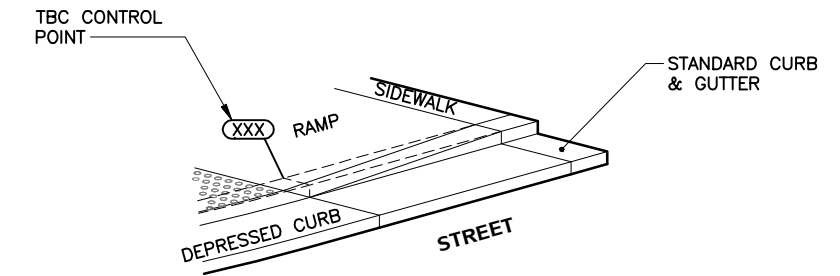
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DETAIL NOTES:

1. CROWN SHALL BE MAINTAINED ON ALL APPROACHES TO INTERSECTION. THIS DETAIL IS INTENDED TO REPRESENT THE TYPICAL GRADING PLAN AT INTERSECTIONS.
2. CURB & GUTTER AND SIDEWALK NOT SHOWN FOR CLARITY.



INTERSECTION GRADING DETAIL
NTS



DETAIL NOTES:

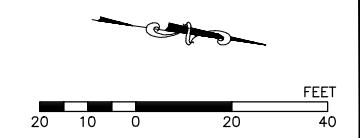
1. TBC CONTROL POINTS AT CURB RAMP REPRESENT A PHANTOM BACK OF CURB ELEVATION AS IF THE STANDARD CURB AND GUTTER WERE CONTINUED. ELEVATIONS PROVIDED AT THESE LOCATIONS DO NOT REPRESENT FINISH GRADE ELEVATIONS.

PHANTOM TBC CONTROL POINT DETAIL
NTS

Friday, December 12, 2014, 12:22 PM

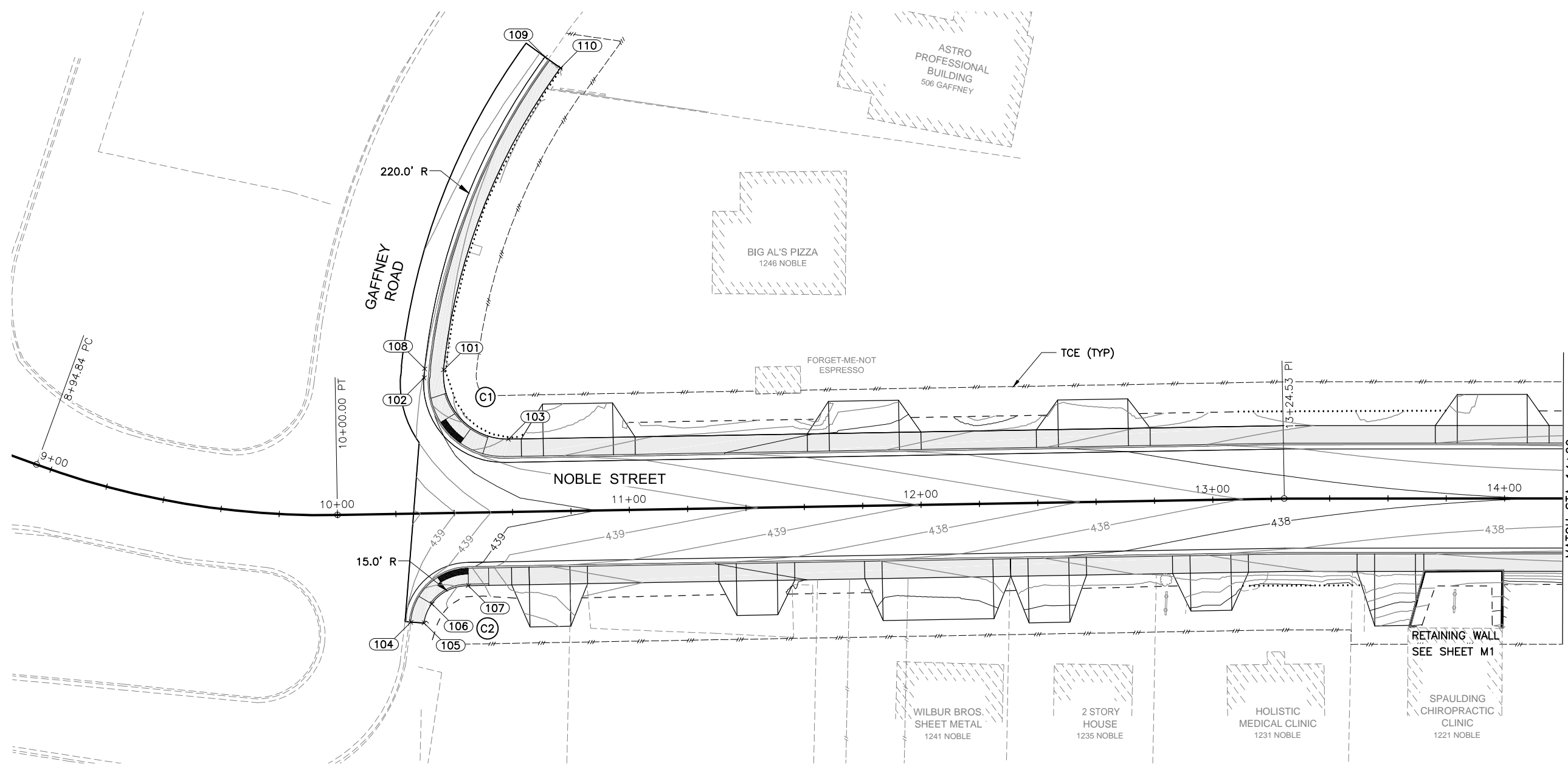


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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | J4 | -- |



GRADING NOTES:

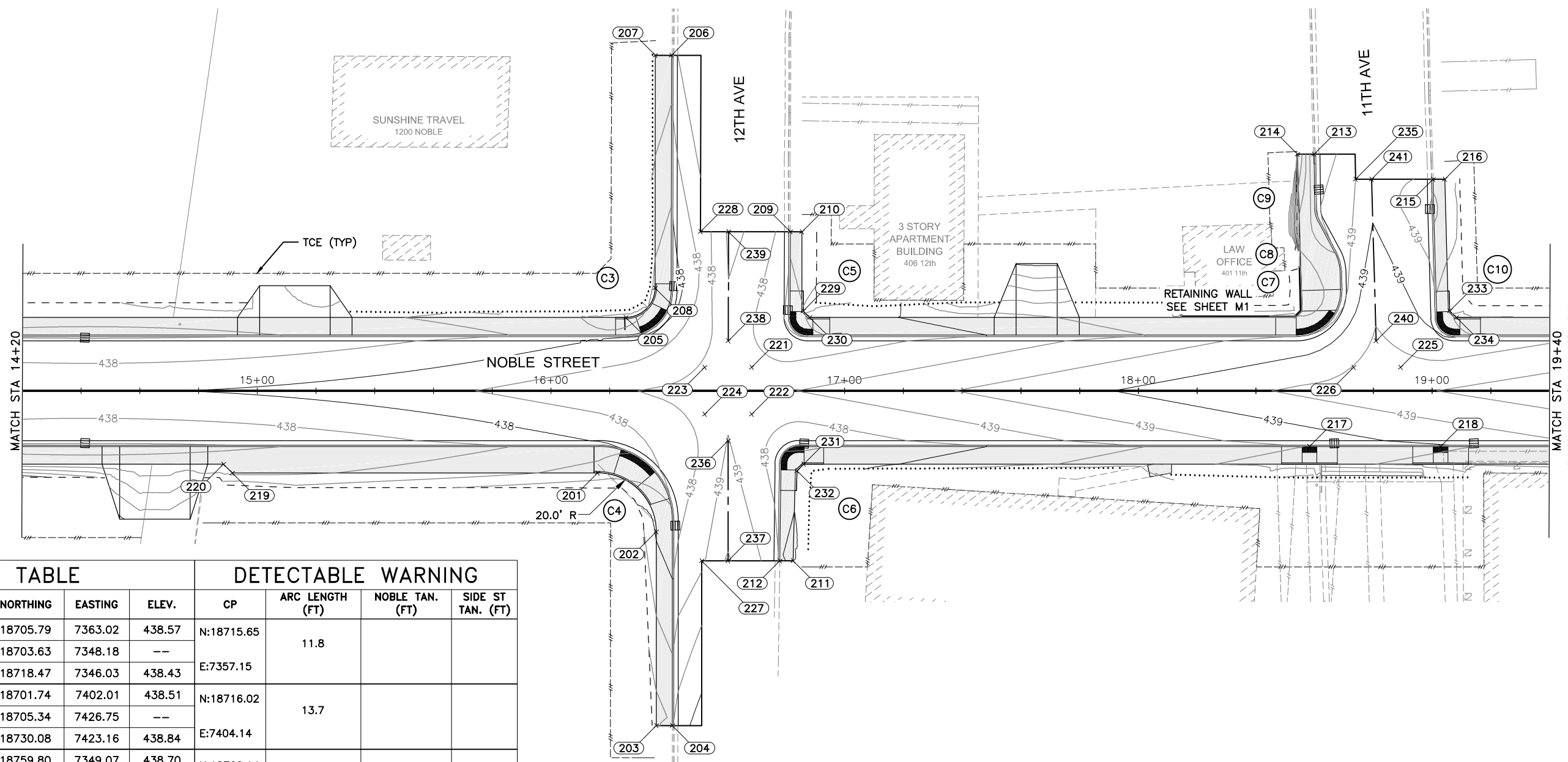
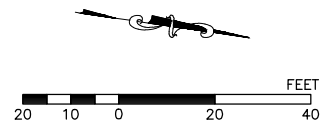
1. TYPICAL SECTIONS AND PROFILES CONTROL GRADES UNLESS NOTED ON THESE GRADING PLANS.
2. CONTOURS ARE APPROXIMATE AND FOR REFERENCE ONLY.
3. FOR CLARITY, EXISTING UTILITIES, WATER CONFLICTS AND NEW DUCT BANK NOT SHOWN.
4. CONTROL POINTS INDICATED BY A FLAG ARE SHOWN ON SHEETS J10-J11.
5. SEE SHEETS G2-G7 FOR DRIVEWAY GRADING.



| CURVE LAYOUT TABLE | | | | | | | DETECTABLE WARNING | | | | |
|--------------------|--------|-------|----------|-----------|----------|---------|--------------------|------------|-----------------|-----------------|-------------------|
| NO. | R (FT) | DESC. | STATION | OFFSET | NORTHING | EASTING | ELEV. | CP | ARC LENGTH (FT) | NOBLE TAN. (FT) | SIDE ST TAN. (FT) |
| C1 | 25 | PC | 10+32.48 | 46.373 LT | 18114.58 | 7426.50 | 439.70 | N:18123.97 | 9.8 | | |
| | | RP | 10+57.36 | 44.000 LT | 18139.52 | 7424.84 | -- | E:7444.41 | | | |
| | | PT | 10+57.36 | 19.000 LT | 18143.55 | 7449.51 | 439.29 | | | | |
| C2 | 20 | PC | 10+24.52 | 37.102 RT | 18120.16 | 7510.17 | 439.92 | N:18131.65 | 11 | | |
| | | RP | 10+45.06 | 41.754 RT | 18141.19 | 7511.45 | -- | E:7490.72 | | | |
| | | PT | 10+44.43 | 19.000 RT | 18136.90 | 7489.10 | 439.64 | | | | |

GRADING PLAN
10+58 - 14+20



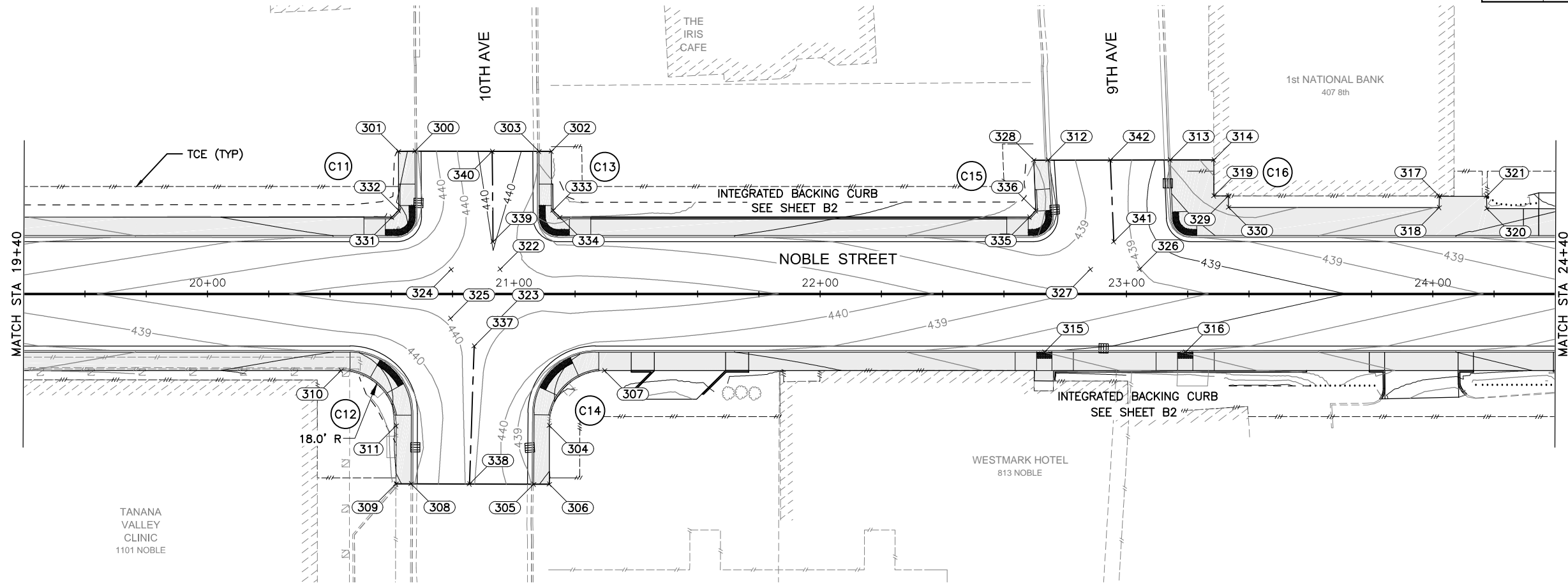


| CURVE LAYOUT TABLE | | | | | | | DETECTABLE WARNING | | | | |
|--------------------|--------|-------|----------|-----------|----------|---------|--------------------|------------|-----------------|-----------------|-------------------|
| NO. | R (FT) | DESC. | STATION | OFFSET | NORTHING | EASTING | ELEV. | CP | ARC LENGTH (FT) | NOBLE TAN. (FT) | SIDE ST TAN. (FT) |
| C3 | 15 | PC | 16+25.91 | 19.000 LT | 18705.79 | 7363.02 | 438.57 | N:18715.65 | 11.8 | | |
| | | RP | 16+25.91 | 34.000 LT | 18703.63 | 7348.18 | -- | E:7357.15 | | | |
| | | PT | 16+40.91 | 33.981 LT | 18718.47 | 7346.03 | 438.43 | | | | |
| C4 | 25 | PC | 16+16.29 | 19.000 RT | 18701.74 | 7402.01 | 438.51 | N:18716.02 | 13.7 | | |
| | | RP | 16+16.29 | 44.000 RT | 18705.34 | 7426.75 | -- | E:7404.14 | | | |
| | | PT | 16+41.29 | 44.012 RT | 18730.08 | 7423.16 | 438.84 | | | | |
| C5 | 6 | PC | 16+81.37 | 25.026 LT | 18759.80 | 7349.07 | 438.70 | N:18762.14 | 8.9 | 2 | 2 |
| | | RP | 16+87.37 | 25.000 LT | 18765.74 | 7348.23 | -- | E:7353.03 | | | |
| | | PT | 16+87.37 | 19.000 LT | 18766.60 | 7354.17 | 438.77 | | | | |
| C6 | 6 | PC | 16+78.31 | 24.703 RT | 18763.96 | 7398.94 | 438.84 | N:18765.12 | 8.9 | 2 | 2 |
| | | RP | 16+84.30 | 25.000 RT | 18769.91 | 7398.15 | -- | E:7394.53 | | | |
| | | PT | 16+84.30 | 19.000 RT | 18769.04 | 7392.21 | 438.77 | | | | |
| C7 | 15 | PC | 18+53.82 | 19.000 LT | 18931.32 | 7330.19 | 439.39 | N:18937.58 | 15.7 | | |
| | | RP | 18+53.82 | 34.000 LT | 18929.16 | 7315.34 | -- | E:7327.75 | | | |
| | | PT | 18+68.81 | 34.386 LT | 18943.94 | 7312.80 | 439.28 | | | | |
| C8 | 15 | PC | 18+68.66 | 40.384 LT | 18942.92 | 7306.89 | 439.25 | | | | |
| | | RP | 18+53.66 | 39.998 LT | 18928.14 | 7309.43 | -- | | | | |
| | | PT | 18+66.90 | 47.049 LT | 18940.22 | 7300.54 | 439.20 | | | | |
| C9 | 10 | PC | 18+61.27 | 57.622 LT | 18933.13 | 7290.89 | 439.13 | | | | |
| | | RP | 18+70.10 | 62.323 LT | 18941.19 | 7284.97 | -- | | | | |
| | | PT | 18+60.10 | 62.050 LT | 18931.33 | 7286.68 | 439.11 | | | | |
| C10 | 6 | PC | 19+01.59 | 24.830 LT | 18977.75 | 7317.54 | 439.47 | N:18980.14 | 8.9 | 2 | 2 |
| | | RP | 19+07.59 | 25.000 LT | 18983.66 | 7316.50 | -- | E:7321.36 | | | |
| | | PT | 19+07.59 | 19.000 LT | 18984.52 | 7322.44 | 439.57 | | | | |

GRADING PLAN
14+20 - 19+40

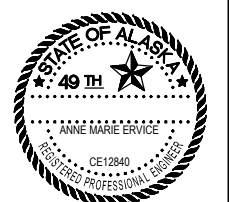


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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | J6 | -- |

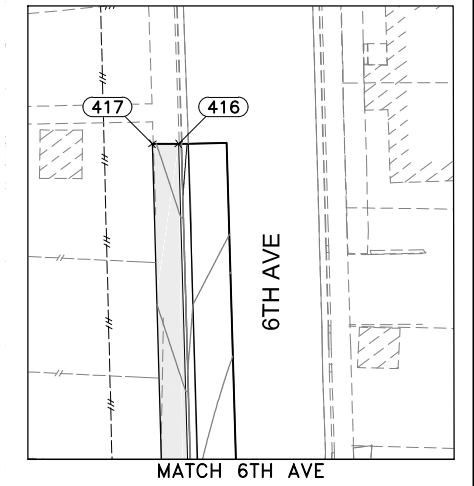
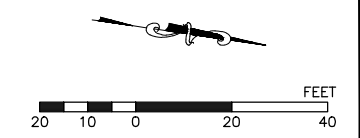
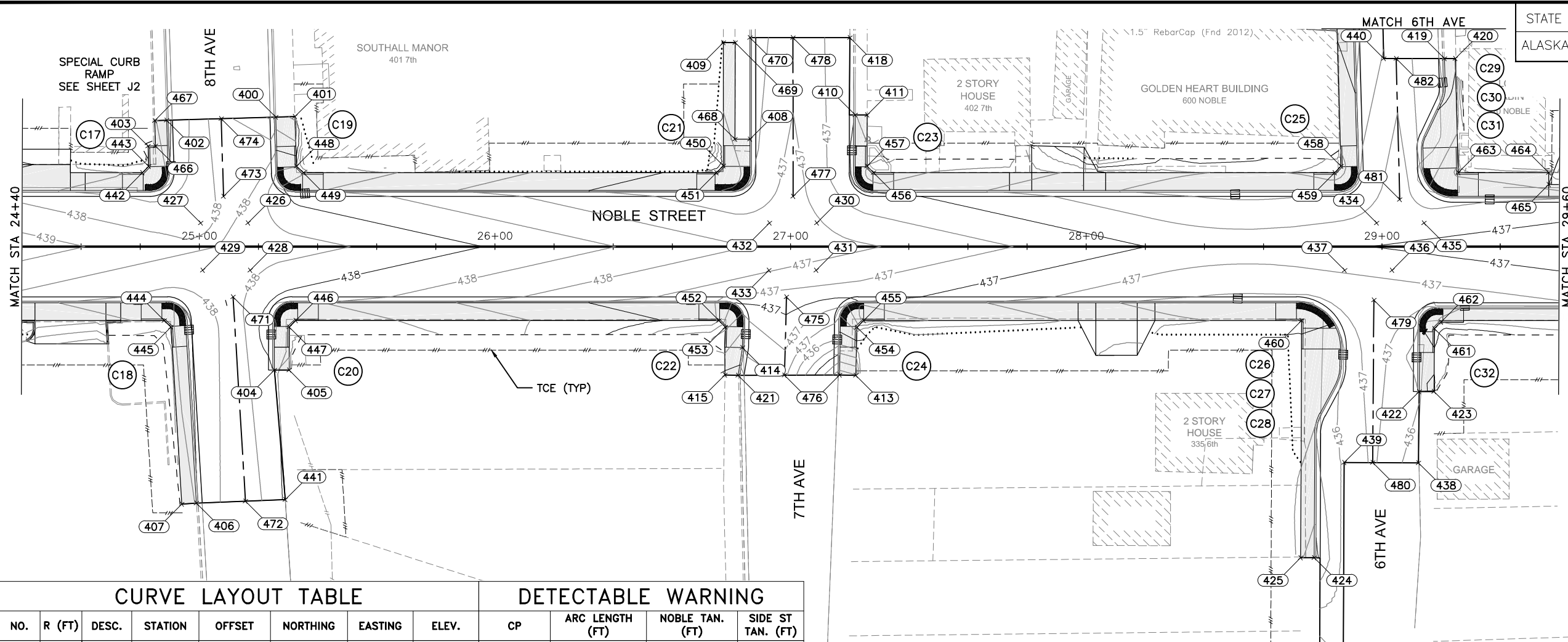


| CURVE LAYOUT TABLE | | | | | | | DETECTABLE WARNING | | | | |
|--------------------|--------|-------|----------|-----------|----------|---------|--------------------|------------|-----------------|-----------------|-------------------|
| NO. | R (FT) | DESC. | STATION | OFFSET | NORTHING | EASTING | ELEV. | CP | ARC LENGTH (FT) | NOBLE TAN. (FT) | SIDE ST TAN. (FT) |
| C11 | 6 | PC | 20+61.83 | 19.000 LT | 19137.16 | 7300.22 | 440.04 | N:19141.12 | 8.9 | 4 | 4 |
| | | RP | 20+61.83 | 25.000 LT | 19136.29 | 7294.28 | -- | E:7297.85 | | | |
| | | PT | 20+67.83 | 25.043 LT | 19142.22 | 7293.37 | 439.93 | | | | |
| C12 | 20 | PC | 20+46.51 | 19.000 RT | 19127.48 | 7340.03 | 440.01 | N:19142.34 | 11 | | |
| | | RP | 20+42.12 | 44.331 RT | 19126.78 | 7365.73 | -- | E:7343.81 | | | |
| | | PT | 20+66.51 | 39.062 RT | 19150.16 | 7357.00 | 439.87 | | | | |
| C13 | 6 | PC | 21+08.28 | 24.799 LT | 19182.26 | 7287.63 | 440.21 | N:19184.62 | 8.9 | 4 | 4 |
| | | RP | 21+14.28 | 25.000 LT | 19188.19 | 7286.72 | -- | E:7291.55 | | | |
| | | PT | 21+14.28 | 19.000 LT | 19189.06 | 7292.66 | 440.08 | | | | |
| C14 | 20 | PC | 21+06.66 | 38.720 RT | 19189.84 | 7350.88 | 439.86 | N:19193.72 | 14.2 | | |
| | | RP | 21+30.11 | 43.640 RT | 19213.75 | 7352.37 | -- | E:7336.20 | | | |
| | | PT | 21+26.66 | 19.000 RT | 19206.79 | 7328.48 | 440.03 | | | | |
| C15 | 6 | PC | 22+69.59 | 19.000 LT | 19342.75 | 7270.29 | 439.61 | N:19346.81 | 8.9 | 2 | 2 |
| | | RP | 22+69.59 | 25.000 LT | 19341.88 | 7264.35 | -- | E:7267.78 | | | |
| | | PT | 22+75.57 | 25.388 LT | 19347.75 | 7263.10 | 439.53 | | | | |
| C16 | 6 | PC | 23+15.03 | 24.757 LT | 19386.88 | 7258.04 | 439.35 | N:19389.29 | 8.9 | 2 | 2 |
| | | RP | 23+21.02 | 25.000 LT | 19392.78 | 7256.94 | -- | E:7261.82 | | | |
| | | PT | 23+21.02 | 19.000 LT | 19393.64 | 7262.88 | 439.38 | | | | |

GRADING PLAN
19+40 - 24+40



| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | J7 | -- |



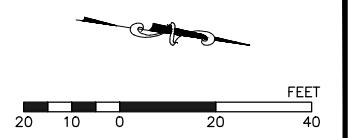
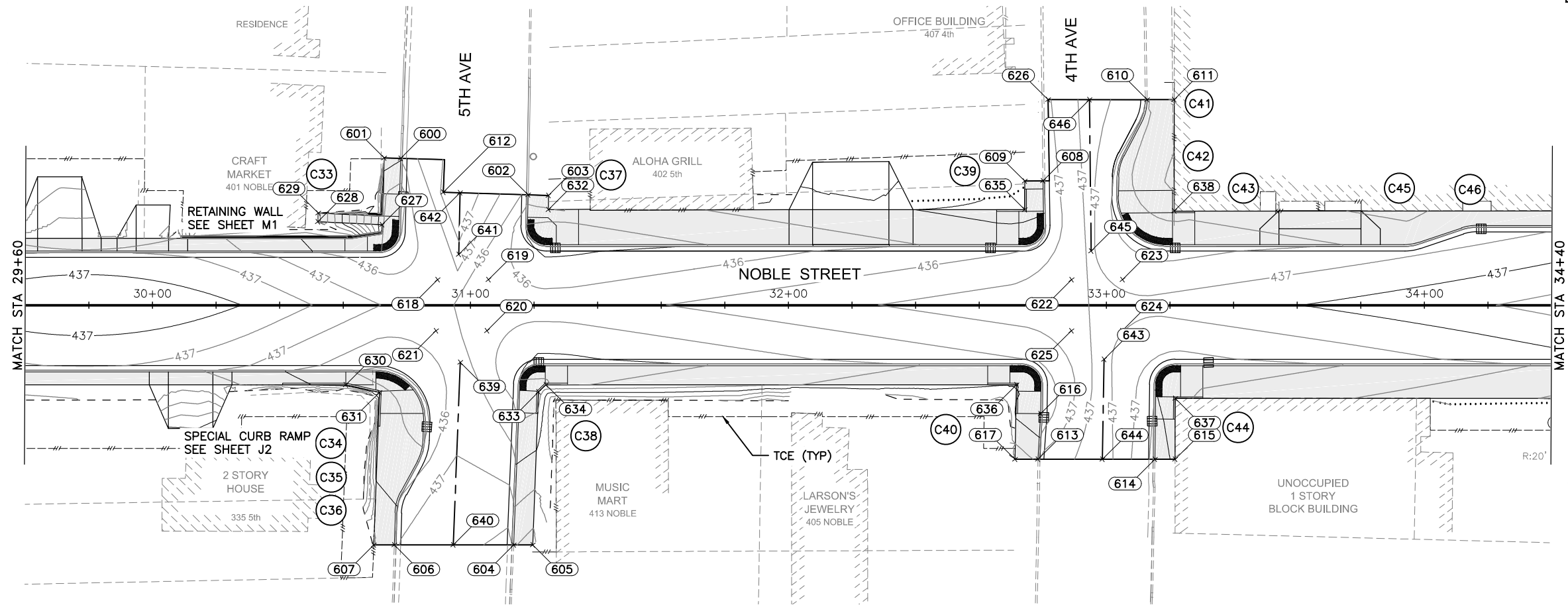
| CURVE LAYOUT TABLE | | | | | | | DETECTABLE WARNING | | | | |
|--------------------|--------|-------|----------|-----------|----------|---------|--------------------|------------|-----------------|-----------------|-------------------|
| NO. | R (FT) | DESC. | STATION | OFFSET | NORTHING | EASTING | ELEV. | CP | ARC LENGTH (FT) | NOBLE TAN. (FT) | SIDE ST TAN. (FT) |
| C17 | 6 | PC | 24+83.46 | 19.000 LT | 19554.39 | 7239.47 | 438.66 | N:19558.39 | 8.9 | 2 | 2 |
| | | RP | 24+83.46 | 25.000 LT | 19553.53 | 7233.54 | -- | E:7237.05 | | | |
| | | PT | 24+89.46 | 25.183 LT | 19559.44 | 7232.49 | 438.58 | | | | |
| C18 | 6 | PC | 24+89.30 | 19.000 RT | 19565.64 | 7276.24 | 438.62 | N:19569.95 | 8.9 | 2 | 2 |
| | | RP | 24+89.30 | 25.000 RT | 19566.51 | 7282.17 | -- | E:7277.26 | | | |
| | | PT | 24+95.29 | 24.638 RT | 19572.38 | 7280.95 | 438.53 | | | | |
| C19 | 6 | PC | 25+26.43 | 24.826 LT | 19596.07 | 7227.52 | 438.78 | N:19598.46 | 8.9 | 2 | 2 |
| | | RP | 25+32.43 | 25.000 LT | 19601.98 | 7226.48 | -- | E:7231.34 | | | |
| | | PT | 25+32.43 | 19.000 LT | 19602.84 | 7232.42 | 438.43 | | | | |
| C20 | 6 | PC | 25+25.40 | 24.984 RT | 19602.23 | 7276.96 | 438.40 | N:19603.37 | 8.9 | 2 | 2 |
| | | RP | 25+31.40 | 25.000 RT | 19608.17 | 7276.11 | -- | E:7272.52 | | | |
| | | PT | 25+31.40 | 19.000 RT | 19607.31 | 7270.17 | 438.45 | | | | |
| C21 | 6 | PC | 26+80.25 | 19.000 LT | 19749.12 | 7211.12 | 437.78 | N:19751.73 | 8.9 | 6 | 2 |
| | | RP | 26+80.25 | 25.000 LT | 19748.26 | 7205.19 | -- | E:7210.08 | | | |
| | | PT | 26+86.25 | 25.004 LT | 19754.20 | 7204.32 | 437.72 | | | | |
| C22 | 6 | PC | 26+77.95 | 19.000 RT | 19752.33 | 7249.06 | 437.68 | N:19756.84 | 8.9 | 2 | 2 |
| | | RP | 26+77.95 | 25.000 RT | 19753.19 | 7255.00 | -- | E:7250.23 | | | |
| | | PT | 26+83.95 | 25.143 RT | 19759.15 | 7254.27 | 437.30 | | | | |
| C23 | 6 | PC | 27+21.84 | 24.995 LT | 19789.42 | 7199.20 | 437.53 | N:19791.18 | 8.9 | | 2 |
| | | RP | 27+27.84 | 25.000 LT | 19795.36 | 7198.33 | -- | E:7202.64 | | | |
| | | PT | 27+27.84 | 19.000 LT | 19796.22 | 7204.27 | 437.56 | | | | |
| C24 | 6 | PC | 27+16.87 | 24.905 RT | 19791.69 | 7249.29 | 437.14 | N:19792.86 | 8.9 | 2 | 2 |
| | | RP | 27+22.87 | 25.000 RT | 19797.64 | 7248.52 | -- | E:7244.90 | | | |
| | | PT | 27+22.87 | 19.000 RT | 19796.78 | 7242.59 | 437.58 | | | | |
| C25 | 6 | PC | 28+85.72 | 19.000 LT | 19952.45 | 7181.52 | 437.13 | N:19956.44 | 8.9 | 2 | 2 |
| | | RP | 28+85.72 | 25.000 LT | 19951.58 | 7175.59 | -- | E:7179.10 | | | |
| | | PT | 28+91.71 | 25.170 LT | 19957.50 | 7174.55 | 437.15 | | | | |

| CURVE LAYOUT TABLE | | | | | | | DETECTABLE WARNING | | | | |
|--------------------|--------|-------|----------|-----------|----------|---------|--------------------|------------|-----------------|-----------------|-------------------|
| NO. | R (FT) | DESC. | STATION | OFFSET | NORTHING | EASTING | ELEV. | CP | ARC LENGTH (FT) | NOBLE TAN. (FT) | SIDE ST TAN. (FT) |
| C26 | 15 | PC | 28+71.10 | 19.000 RT | 19943.46 | 7221.23 | 437.10 | | 15.7 | | |
| | | RP | 28+70.97 | 33.999 RT | 19945.49 | 7236.09 | -- | | | | |
| | | PT | 28+85.97 | 34.417 RT | 19960.39 | 7234.35 | 436.94 | | | | |
| C27 | 15 | PC | 28+85.80 | 40.415 RT | 19961.09 | 7240.31 | 436.94 | | | | |
| | | RP | 28+70.81 | 39.997 RT | 19946.19 | 7242.05 | -- | | | | |
| | | PT | 28+84.03 | 47.076 RT | 19960.30 | 7247.15 | 436.91 | | | | |
| C28 | 15 | PC | 28+79.09 | 56.309 RT | 19956.74 | 7257.00 | 436.81 | | | | |
| | | RP | 28+92.31 | 63.388 RT | 19970.84 | 7262.10 | -- | | | | |
| | | PT | 28+77.32 | 63.027 RT | 19955.95 | 7263.90 | 436.79 | | | | |
| C29 | 10 | PC | 29+21.43 | 53.670 LT | 19982.79 | 7142.07 | 436.95 | | | | |
| | | RP | 29+11.43 | 53.444 LT | 19972.93 | 7143.73 | -- | | | | |
| | | PT | 29+20.47 | 49.175 LT | 19982.49 | 7146.66 | 436.98 | | | | |
| C30 | 10 | PC | 29+14.85 | 37.268 LT | 19978.65 | 7159.25 | 437.07 | N:19978.23 | | | |
| | | RP | 29+23.89 | 32.998 LT | 19988.21 | 7162.17 | -- | E:7161.52 | | | |
| | | PT | 29+13.89 | 32.773 LT | 19978.35 | 7163.83 | 437.11 | | | | |
| C31 | 10 | PC | 29+14.03 | 26.775 LT | 19979.35 | 7169.75 | 437.15 | N:19983.50 | 14.5 | 2 | |
| | | RP | 29+24.03 | 27.000 LT | 19989.21 | 7168.09 | -- | E:7176.30 | | | |
| | | PT | 29+24.03 | 17.000 LT | 19990.65 | 7177.98 | 437.27 | | | | |
| C32 | 6 | PC | 29+12.78 | 26.910 RT | 19985.84 | 7223.06 | 436.99 | N:19986.99 | 8.9 | 2 | 2 |
| | | RP | 29+18.78 | 26.950 RT | 19991.78 | 7222.23 | -- | E:7218.63 | | | |
| | | PT | 29+18.78 | 20.950 RT | 19990.92 | 7216.29 | 437.18 | | | | |

GRADING PLAN
24+40 - 29+60



| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | J8 | -- |



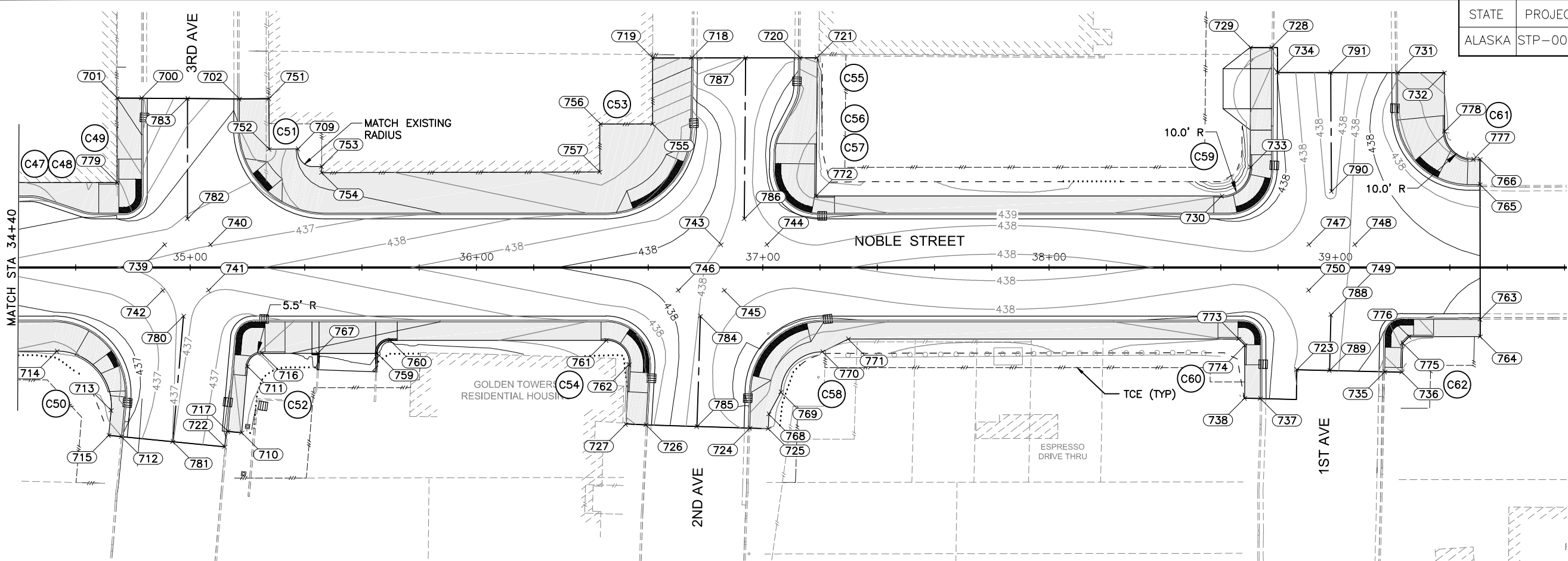
| CURVE LAYOUT TABLE | | | | | | | | DETECTABLE WARNING | | | |
|--------------------|--------|-------|----------|-----------|----------|---------|--------|--------------------|-----------------|-----------------|-------------------|
| NO. | R (FT) | DESC. | STATION | OFFSET | NORTHING | EASTING | ELEV. | CP | ARC LENGTH (FT) | NOBLE TAN. (FT) | SIDE ST TAN. (FT) |
| C33 | 6 | PC | 30+71.43 | 17.050 LT | 20136.50 | 7156.70 | 436.80 | N:20140.39 | 8.9 | 2 | 4 |
| | | RP | 30+71.42 | 23.050 LT | 20135.64 | 7150.76 | -- | | | | |
| | | PT | 30+77.42 | 22.869 LT | 20141.60 | 7150.08 | 436.75 | | | | |
| C34 | 15 | PC | 30+70.30 | 20.950 RT | 20140.86 | 7194.46 | 436.74 | N:20146.69 | 11.8 | | |
| | | RP | 30+70.30 | 35.950 RT | 20143.02 | 7209.31 | -- | | | | |
| | | PT | 30+85.29 | 36.400 RT | 20157.92 | 7207.59 | 436.72 | | | | |
| C35 | 15 | PC | 30+85.11 | 42.397 RT | 20158.61 | 7213.55 | 436.78 | | | | |
| | | RP | 30+70.12 | 41.947 RT | 20143.71 | 7215.27 | -- | | | | |
| | | PT | 30+83.33 | 49.055 RT | 20157.80 | 7220.40 | 436.85 | | | | |
| C36 | 15 | PC | 30+78.17 | 58.637 RT | 20154.08 | 7230.62 | 436.96 | | | | |
| | | RP | 30+91.38 | 65.745 RT | 20168.18 | 7235.75 | -- | | | | |
| | | PT | 30+76.39 | 65.255 RT | 20153.27 | 7237.43 | 437.02 | | | | |
| C37 | 6 | PC | 31+17.98 | 25.115 LT | 20181.41 | 7142.01 | 436.59 | N:20183.73 | 8.9 | 2 | 2 |
| | | RP | 31+23.98 | 25.000 LT | 20187.36 | 7141.26 | -- | | | | |
| | | PT | 31+23.98 | 19.000 LT | 20188.23 | 7147.20 | 436.46 | | | | |
| C38 | 6 | PC | 31+15.53 | 24.771 RT | 20186.17 | 7191.73 | 436.62 | N:20187.40 | 8.9 | 2 | 2 |
| | | RP | 31+21.60 | 25.000 RT | 20192.21 | 7191.08 | -- | | | | |
| | | PT | 31+21.53 | 19.000 RT | 20191.27 | 7185.15 | 436.47 | | | | |
| C39 | 6 | PC | 32+74.27 | 19.000 LT | 20336.95 | 7125.54 | 436.90 | N:20340.92 | 8.9 | 2 | 4 |
| | | RP | 32+74.27 | 25.000 LT | 20336.09 | 7119.61 | -- | | | | |
| | | PT | 32+80.27 | 25.094 LT | 20342.01 | 7118.65 | 436.97 | | | | |
| C40 | 6 | PC | 32+73.46 | 19.000 RT | 20341.62 | 7163.27 | 436.90 | N:20346.10 | 8.9 | 4 | 2 |
| | | RP | 32+73.46 | 25.000 RT | 20342.48 | 7169.20 | -- | | | | |
| | | PT | 32+79.46 | 25.087 RT | 20348.43 | 7168.42 | 436.85 | | | | |

| CURVE LAYOUT TABLE | | | | | | | | DETECTABLE WARNING | | | |
|--------------------|--------|-------|----------|-----------|----------|---------|--------|--------------------|-----------------|-----------------|-------------------|
| NO. | R (FT) | DESC. | STATION | OFFSET | NORTHING | EASTING | ELEV. | CP | ARC LENGTH (FT) | NOBLE TAN. (FT) | SIDE ST TAN. (FT) |
| C41 | 15 | PC | 33+12.80 | 64.590 LT | 20368.51 | 7074.88 | 437.18 | | | | |
| | | RP | 32+97.80 | 64.382 LT | 20353.70 | 7077.25 | -- | | | | |
| | | PT | 33+11.09 | 57.418 LT | 20367.85 | 7082.22 | 437.16 | | | | |
| C42 | 15 | PC | 33+05.61 | 46.961 LT | 20363.93 | 7093.36 | 437.13 | | | | |
| | | RP | 33+18.89 | 39.998 LT | 20378.08 | 7098.34 | -- | | | | |
| | | PT | 33+03.89 | 40.285 LT | 20363.20 | 7100.21 | 437.11 | | | | |
| C43 | 15 | PC | 33+03.78 | 34.287 LT | 20363.95 | 7106.17 | 437.10 | N:20372.40 | 17.6 | 2 | |
| | | RP | 33+18.78 | 33.999 LT | 20378.83 | 7104.29 | -- | | | | |
| | | PT | 33+18.98 | 19.000 LT | 20381.19 | 7119.10 | 437.03 | | | | |
| C44 | 6 | PC | 33+15.50 | 24.931 RT | 20384.08 | 7163.08 | 437.01 | N:20385.23 | 8.9 | 2 | 4 |
| | | RP | 33+21.50 | 25.000 RT | 20390.02 | 7162.28 | -- | | | | |
| | | PT | 33+21.50 | 19.000 RT | 20389.16 | 7156.34 | 437.07 | | | | |
| C45 | 15 | PC | 33+93.58 | 19.000 LT | 20455.02 | 7108.36 | 437.26 | | | | |
| | | RP | 33+93.66 | 33.500 LT | 20453.01 | 7093.99 | -- | | | | |
| | | PT | 33+97.27 | 19.460 LT | 20458.60 | 7107.37 | 437.26 | | | | |
| C46 | 15 | PC | 34+11.71 | 24.230 LT | 20472.20 | 7100.57 | 437.22 | | | | |
| | | RP | 34+16.45 | 10.000 LT | 20478.94 | 7113.97 | -- | | | | |
| | | PT | 34+16.45 | 25.000 LT | 20476.78 | 7099.12 | 437.22 | | | | |

GRADING PLAN
29+60 - 34+40



| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | J9 | -- |



| CURVE LAYOUT TABLE | | | | | | | |
|--------------------|--------|-------|----------|-----------|----------|---------|--------|
| NO. | R (FT) | DESC. | STATION | OFFSET | NORTHING | EASTING | ELEV. |
| C47 | 15 | PC | 34+44.01 | 25.000 LT | 20504.06 | 7095.15 | 437.32 |
| | | RP | 34+44.01 | 10.000 LT | 20506.22 | 7110.00 | -- |
| | | PT | 34+48.76 | 24.230 LT | 20508.86 | 7095.23 | 437.35 |
| C48 | 15 | PC | 34+62.14 | 19.770 LT | 20522.75 | 7097.72 | 437.49 |
| | | RP | 34+66.80 | 33.500 LT | 20525.38 | 7083.46 | -- |
| | | PT | 34+66.88 | 19.000 LT | 20527.55 | 7097.79 | 437.53 |
| C49 | 6 | PC | 34+77.03 | 19.000 LT | 20537.59 | 7096.33 | 437.44 |
| | | RP | 34+77.03 | 25.000 LT | 20536.73 | 7090.40 | -- |
| | | PT | 34+83.03 | 25.001 LT | 20542.66 | 7089.53 | 437.31 |
| C50 | 25 | PC | 34+52.36 | 19.000 RT | 20518.66 | 7137.49 | 437.47 |
| | | RP | 34+52.36 | 44.000 RT | 20522.26 | 7162.23 | -- |
| | | PT | 34+77.24 | 46.403 RT | 20547.23 | 7161.02 | 437.36 |
| C51 | 30 | PC | 35+18.20 | 41.336 LT | 20575.12 | 7068.30 | 437.64 |
| | | RP | 35+47.20 | 49.000 LT | 20602.71 | 7056.54 | -- |
| | | PT | 35+47.20 | 19.000 LT | 20607.04 | 7086.22 | 437.85 |
| C52 | 6 | PC | 35+16.16 | 24.466 RT | 20582.58 | 7133.71 | 437.64 |
| | | RP | 35+22.13 | 25.000 RT | 20588.57 | 7133.38 | -- |
| | | PT | 35+22.13 | 19.000 RT | 20587.70 | 7127.44 | 437.69 |
| C53 | 30 | PC | 36+44.86 | 19.000 LT | 20703.68 | 7072.15 | 438.22 |
| | | RP | 36+44.86 | 49.000 LT | 20699.36 | 7042.47 | -- |
| | | PT | 36+74.86 | 48.631 LT | 20729.09 | 7038.51 | 438.13 |
| C54 | 15 | PC | 36+45.35 | 19.000 RT | 20709.63 | 7109.69 | 438.23 |
| | | RP | 36+45.35 | 34.000 RT | 20711.79 | 7124.53 | -- |
| | | PT | 36+60.32 | 34.823 RT | 20726.73 | 7123.19 | 438.17 |
| C55 | 15 | PC | 37+12.89 | 63.187 LT | 20764.63 | 7018.63 | 438.37 |
| | | RP | 36+97.90 | 63.474 LT | 20749.75 | 7020.50 | -- |
| | | PT | 37+11.18 | 56.511 LT | 20763.90 | 7025.48 | 438.39 |

| DETECTABLE WARNING | | | |
|--------------------|-----------------|-----------------|-------------------|
| CP | ARC LENGTH (FT) | NOBLE TAN. (FT) | SIDE ST TAN. (FT) |
| | | | |
| N:20541.54 | 8.9 | 2 | 6 |
| E:7093.98 | | | |
| N:20542.00 | 5.9 | | |
| E:7146.89 | | | |
| N:20582.98 | 8.0 | | |
| E:7079.13 | | | |
| N:20583.92 | 8.9 | 4 | 6 |
| E:7129.58 | | | |
| N:20723.29 | 24.6 | | |
| E:7060.55 | | | |
| N:20724.07 | 15.7 | | 2 |
| E:7115.91 | | | |

| CURVE LAYOUT TABLE | | | | | | | |
|--------------------|--------|-------|----------|-----------|----------|---------|--------|
| NO. | R (FT) | DESC. | STATION | OFFSET | NORTHING | EASTING | ELEV. |
| C56 | 15 | PC | 37+06.17 | 46.939 LT | 20760.31 | 7035.67 | 438.41 |
| | | RP | 37+19.45 | 39.976 LT | 20774.46 | 7040.65 | -- |
| | | PT | 37+04.45 | 40.263 LT | 20759.58 | 7042.53 | 438.43 |
| C57 | 15 | PC | 37+04.34 | 34.287 LT | 20760.33 | 7048.46 | 438.45 |
| | | RP | 37+19.34 | 34.000 LT | 20775.21 | 7046.58 | -- |
| | | PT | 37+19.34 | 19.000 LT | 20777.37 | 7061.42 | 438.52 |
| C58 | 25 | PC | 36+95.85 | 43.263 RT | 20763.10 | 7126.42 | 438.48 |
| | | RP | 37+20.84 | 44.000 RT | 20787.93 | 7123.55 | -- |
| | | PT | 37+20.84 | 19.000 RT | 20784.33 | 7098.81 | 438.53 |
| C59 | 15 | PC | 38+62.65 | 19.000 LT | 20919.19 | 7040.78 | 438.48 |
| | | RP | 38+62.65 | 34.000 LT | 20917.04 | 7025.93 | -- |
| | | PT | 38+77.65 | 33.968 LT | 20931.87 | 7023.81 | 438.41 |
| C60 | 6 | PC | 38+67.80 | 19.000 RT | 20929.76 | 7077.64 | 438.48 |
| | | RP | 38+67.80 | 25.000 RT | 20930.62 | 7083.58 | -- |
| | | PT | 38+73.80 | 25.024 RT | 20936.56 | 7082.74 | 438.45 |
| C61 | 25 | PC | 39+21.74 | 53.810 LT | 20972.65 | 6997.82 | 438.15 |
| | | RP | 39+46.74 | 53.944 LT | 20997.37 | 6994.08 | -- |
| | | PT | 39+46.75 | 28.944 LT | 21000.98 | 7018.82 | 438.26 |
| C62 | 6 | PC | 39+17.46 | 24.047 RT | 20979.63 | 7075.48 | 438.54 |
| | | RP | 39+23.46 | 24.168 RT | 20985.58 | 7074.73 | -- |
| | | PT | 39+23.47 | 18.168 RT | 20984.73 | 7068.80 | 438.67 |

| DETECTABLE WARNING | | | |
|--------------------|-----------------|-----------------|-------------------|
| CP | ARC LENGTH (FT) | NOBLE TAN. (FT) | SIDE ST TAN. (FT) |
| | | | |
| N:20766.13 | 21.5 | | 2 |
| E:7058.52 | | | |
| N:20768.12 | 27.5 | | |
| E:7108.31 | | | |
| N:20929.04 | 17.6 | | |
| E:7034.92 | | | |
| N:20934.22 | 8.9 | 2 | 2 |
| E:7078.77 | | | |
| N:20985.20 | 9.8 | | |
| E:7015.92 | | | |
| N:20980.81 | 8.9 | 4 | 4 |
| E:7071.09 | | | |

GRADING PLAN
34+40 - 38+70



SHEET J3 CONTROL POINT TABLE

Table with 7 columns: POINT #, STATION, OFFSET, NORTHING, EASTING, ELEVATION, DESCRIPTION. Contains 11 rows of control point data for Sheet J3.

SHEET J4 CONTROL POINT TABLE

Table with 7 columns: POINT #, STATION, OFFSET, NORTHING, EASTING, ELEVATION, DESCRIPTION. Contains 48 rows of control point data for Sheet J4.

SHEET J4 CONTROL POINT TABLE

Table with 7 columns: POINT #, STATION, OFFSET, NORTHING, EASTING, ELEVATION, DESCRIPTION. Contains 48 rows of control point data for Sheet J4.

SHEET J5 CONTROL POINT TABLE

Table with 7 columns: POINT #, STATION, OFFSET, NORTHING, EASTING, ELEVATION, DESCRIPTION. Contains 46 rows of control point data for Sheet J5.

Summary table with 5 columns: STATE, PROJECT DESIGNATION, YEAR, SHEET NO., TOTAL SHEETS. Values: ALASKA, STP-000S(413)/61725, 2015, J10, --

GRADING PLAN CONTROL POINT TABLES



| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | J12 | -- |

SHEET J7 CONTROL POINT TABLE

| POINT # | STATION | OFFSET | NORTHING | EASTING | ELEVATION | DESCRIPTION |
|---------|----------|---------|----------|---------|----------------|-------------|
| 767 | 35+44.52 | 30.000 | 20611.44 | 7135.10 | | TBC |
| 768 | 37+02.10 | 51.279 | 20770.45 | 7133.45 | | SDWK |
| 769 | 37+06.34 | 43.573 | 20773.53 | 7125.22 | | SDWK |
| 770 | 37+20.84 | 29.500 | 20785.84 | 7109.20 | | SDWK |
| 771 | 37+29.84 | 25.000 | 20794.10 | 7103.45 | | SDWK |
| 772 | 37+18.59 | -25.000 | 20775.77 | 7055.59 | | TBC |
| 773 | 38+66.23 | 25.001 | 20929.07 | 7083.80 | | TBC |
| 774 | 38+68.40 | 27.202 | 20931.54 | 7085.67 | | TBC |
| 775 | 39+23.51 | 26.416 | 20985.96 | 7076.95 | | TBC |
| 776 | 39+25.79 | 24.200 | 20987.89 | 7074.43 | | TBC |
| 777 | 39+48.23 | -37.764 | 21001.17 | 7009.88 | | SDWK-PC |
| 778 | 39+38.14 | -47.596 | 20989.78 | 7001.60 | | TBC-PT |
| 779 | 34+74.58 | -29.626 | 20533.64 | 7086.17 | | TBC |
| 780 | 34+97.66 | 17.000 | 20563.20 | 7128.98 | 437.45 | BREAK |
| 781 | 34+93.96 | 60.922 | 20565.87 | 7172.98 | MATCH EXISTING | BREAK |
| 782 | 34+99.08 | -17.000 | 20559.71 | 7095.13 | 437.22 | BREAK |
| 783 | 34+99.06 | -59.041 | 20553.62 | 7053.54 | MATCH EXISTING | BREAK |
| 784 | 36+78.22 | 17.000 | 20741.87 | 7102.97 | 438.24 | BREAK |
| 785 | 36+77.01 | 55.597 | 20746.24 | 7141.34 | MATCH EXISTING | BREAK |
| 786 | 36+93.51 | -17.000 | 20752.11 | 7067.12 | 438.28 | BREAK |
| 787 | 36+94.03 | -73.226 | 20744.52 | 7011.41 | MATCH EXISTING | BREAK |
| 788 | 38+98.45 | 16.542 | 20959.74 | 7070.79 | 438.38 | BREAK |
| 789 | 38+97.97 | 36.032 | 20962.07 | 7090.15 | MATCH EXISTING | BREAK |
| 790 | 38+98.66 | -26.574 | 20953.73 | 7028.09 | 438.48 | BREAK |
| 791 | 38+98.34 | -68.084 | 20947.44 | 6987.06 | MATCH EXISTING | BREAK |

GRADING PLAN
CONTROL POINT TABLES



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | L1 | -- |

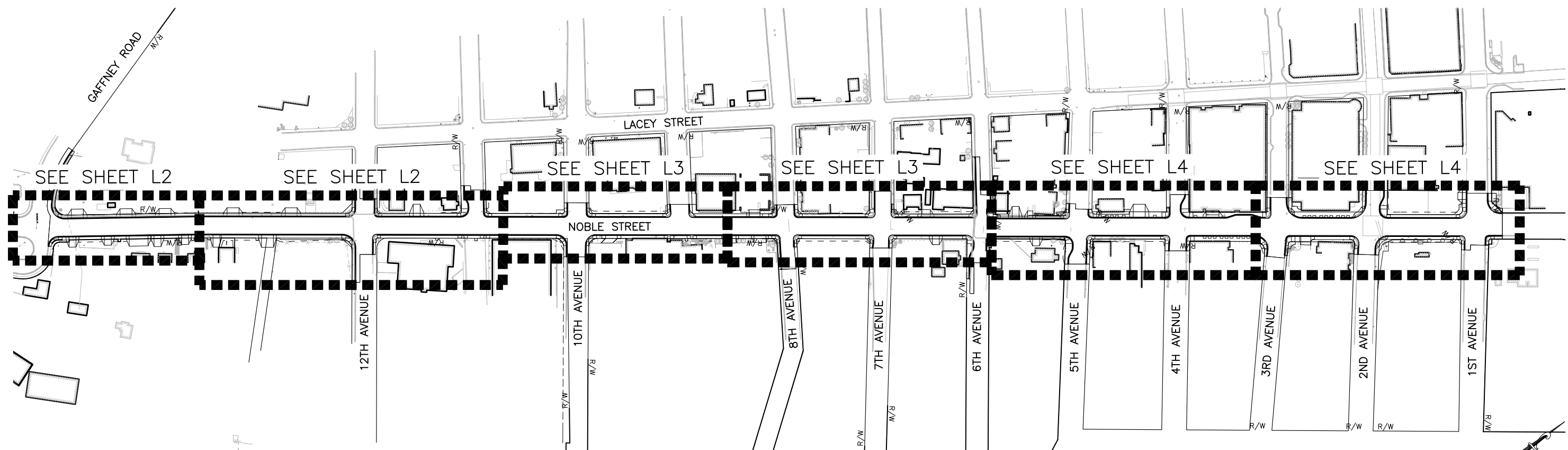
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PLANT SCHEDULE

| COMMON NAME | BOTANICAL NAME | QUANTITY | SPACING (MIN.) | SIZE | NOTES |
|-------------|-------------------------|----------|----------------|----------|---------------|
| TREES | | | | | |
| BIRCH | BETULA Papyrifera | 48 | 10' O.C. | 3" CAL. | NURSERY GROWN |
| SPRUCE | PICEA GLAUCA | 17 | AS SHOWN | 2' TALL | |
| SHRUBS | | | | | |
| COTONEASTER | COTONEASTER ACUTIFOLIUS | 32 | 3' O.C. | 36' TALL | FOR PLANTERS |

NOTES

- ALL PLANTS SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI) Z60.1-2004 (AMERICAN NURSERY & LANDSCAPE ASSOCIATION (ANLA) 1200 G ST., NW, SUITE 800 WASHINGTON, DC 20005 WWW.ANLA.ORG)
- ALL BIRCH SHALL HAVE A CANOPY NO LESS THAN ONE HALF THE OVERALL HEIGHT.
- MULCH CONTINUOUSLY THROUGHOUT ALL PLANTING BEDS WITH 3" SHREDDED BARK MULCH (OR GRAVEL MULCH WHERE SPECIFIED). KEEP MULCH 6" AWAY FROM STEMS AND TRUNKS. TRANSITION MULCH TO EDGING AND ADJACENT SURFACES. SEE MULCH LIMIT DETAIL.
- TOPSOIL AND SEED ALL DISTURBED AREAS, SEE CIVIL FOR WORK LIMITS. DO NOT SEED PLANTING BEDS. TOPSOIL DEPTH SHALL BE 4".
- SEE PLANTING DETAILS FOR ADDITIONAL INFORMATION.
- HEIGHT TO SPREAD RATIO OF EVERGREEN TREES EQUAL 5 (HEIGHT):3 (SPREAD). EVERGREENS TO BE FULLY BRANCHED TO GROUND AND HAVE A MINIMUM OPACITY OF 80%.



NOBLE STREET LANDSCAPE KEY



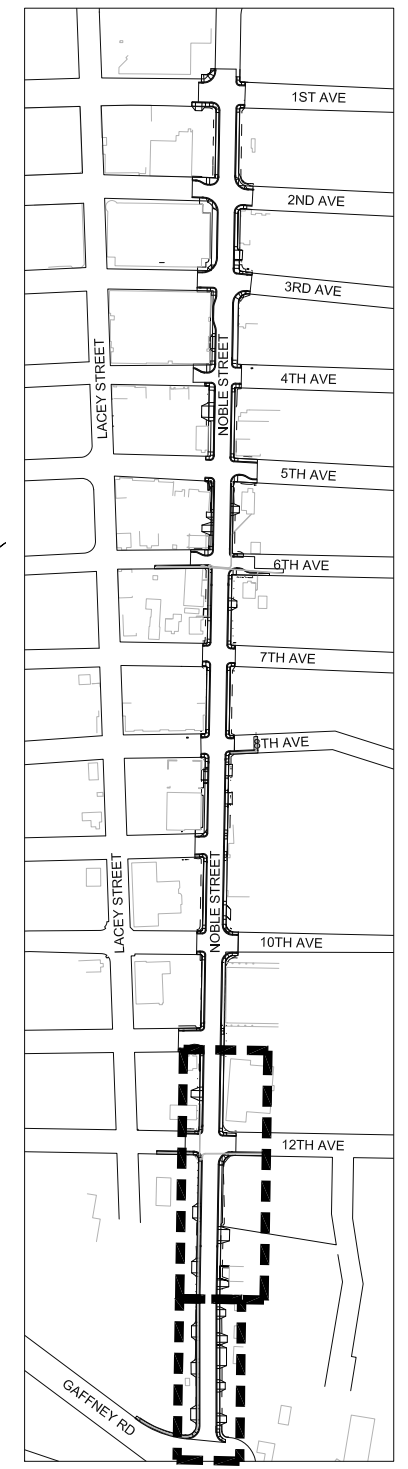
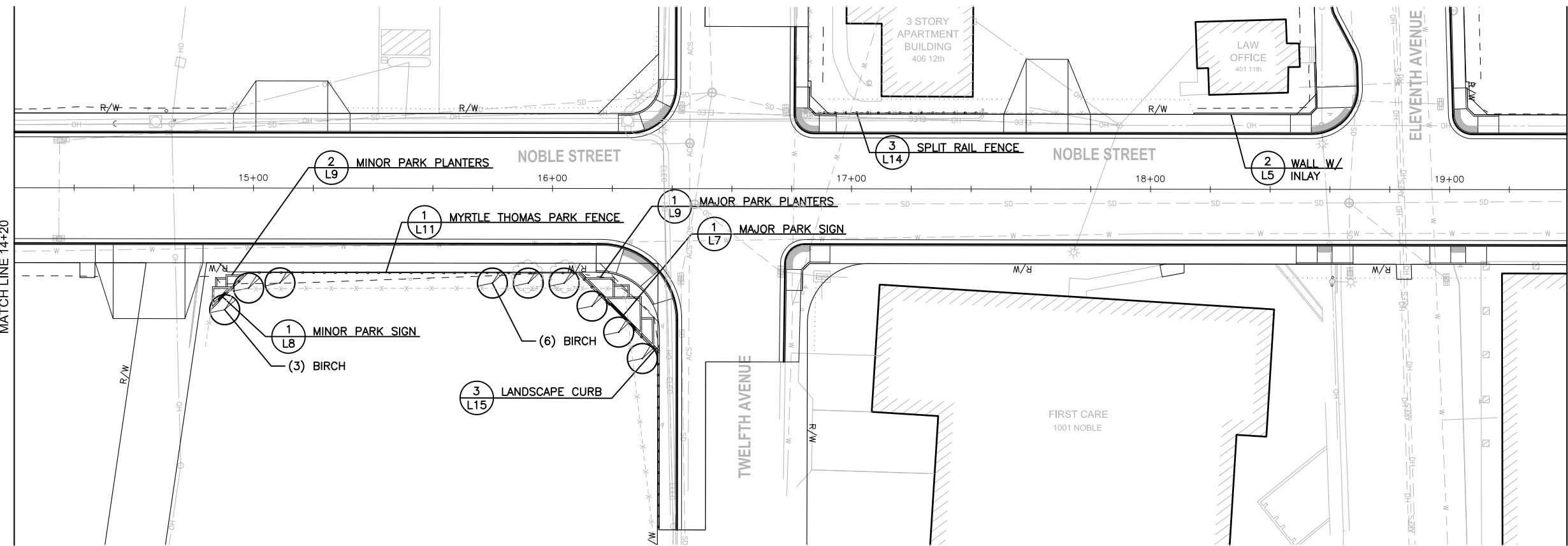
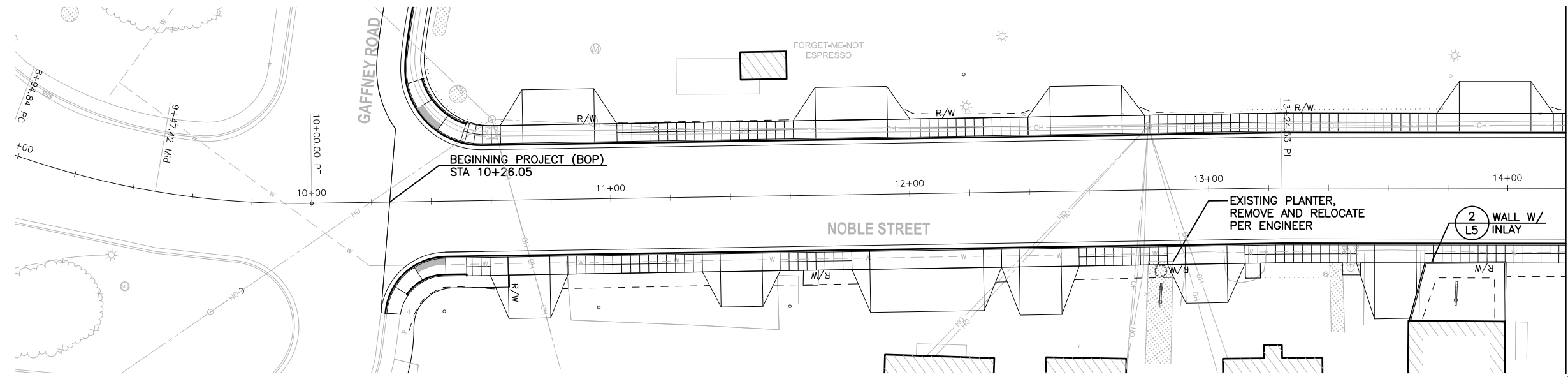
Wednesday, December 10, 2014, 5:05 PM

LANDSCAPE SHEET LAYOUT INDEX



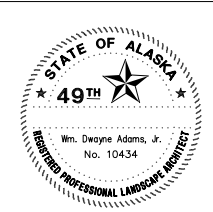
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| ALASKA | STP-000S(413)/61725 | 2015 | L2 | -- |

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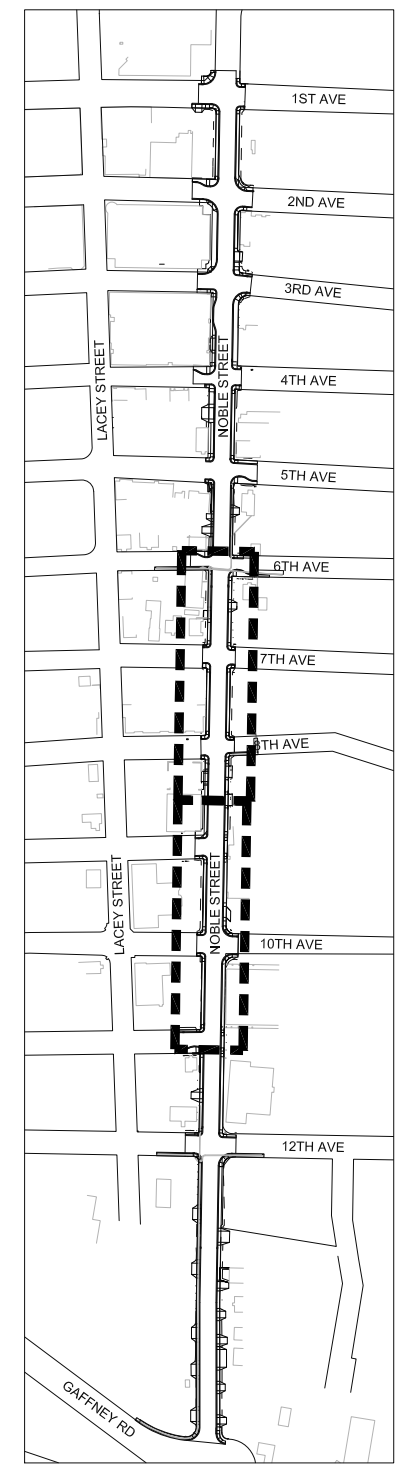
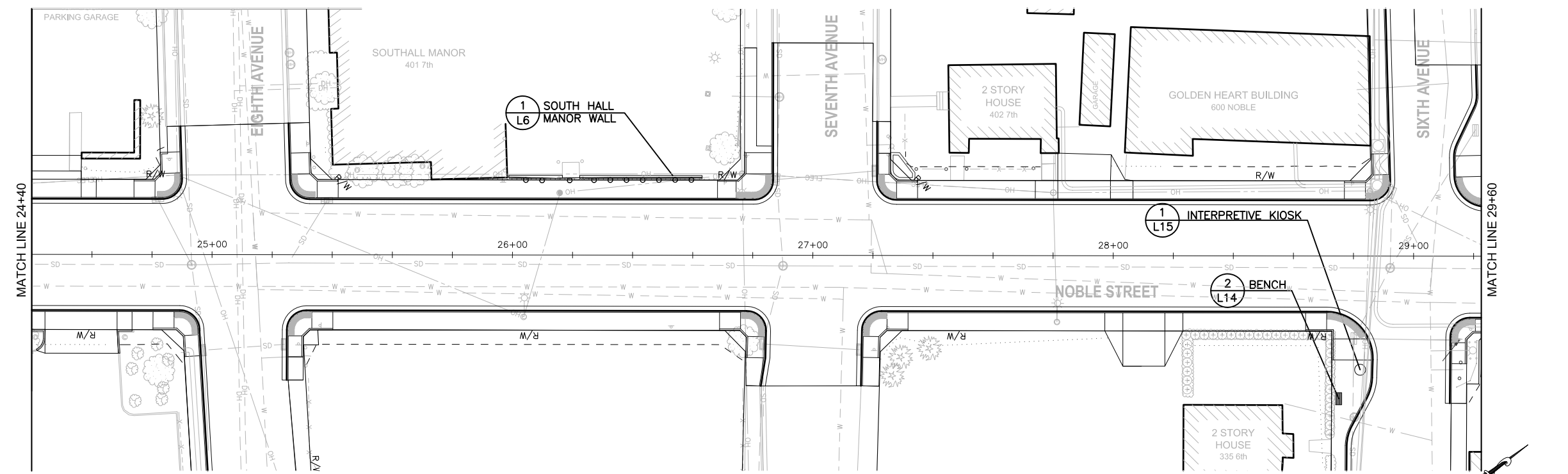
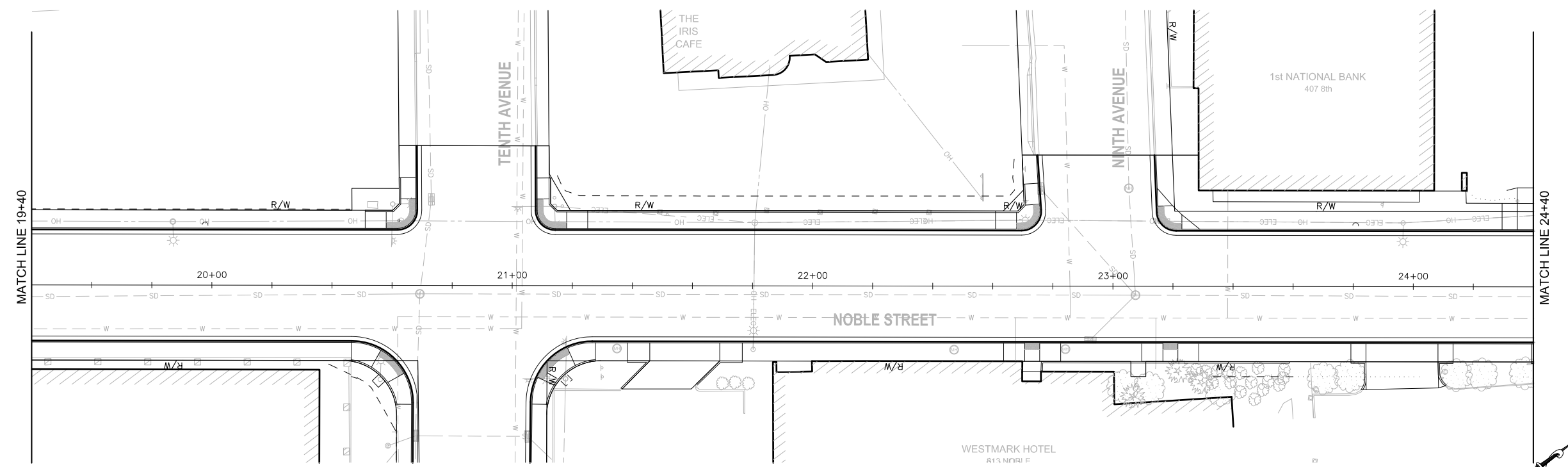
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LANDSCAPE PLAN 9+58-19+40



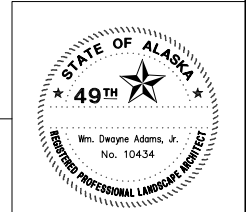
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|--------|---------------------|------|-----------|--------------|
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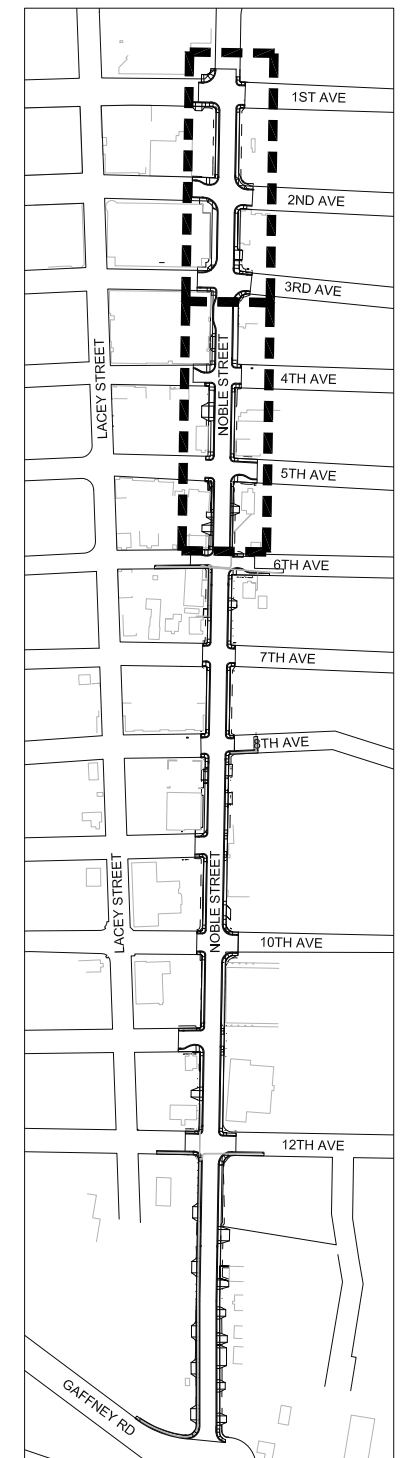
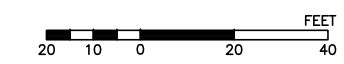
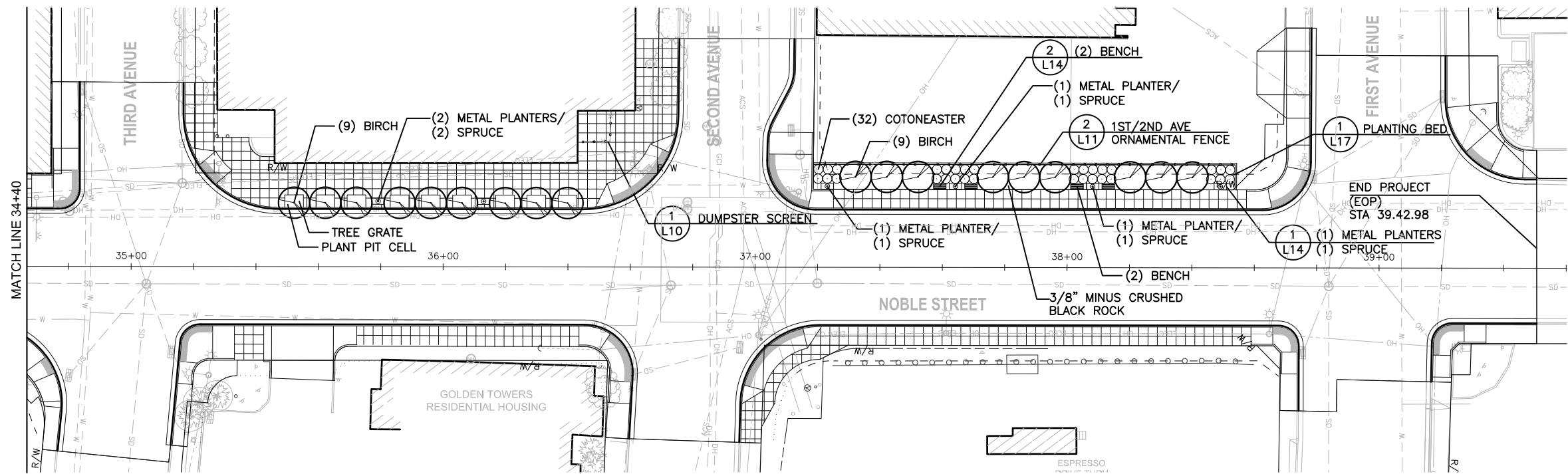
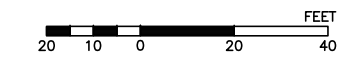
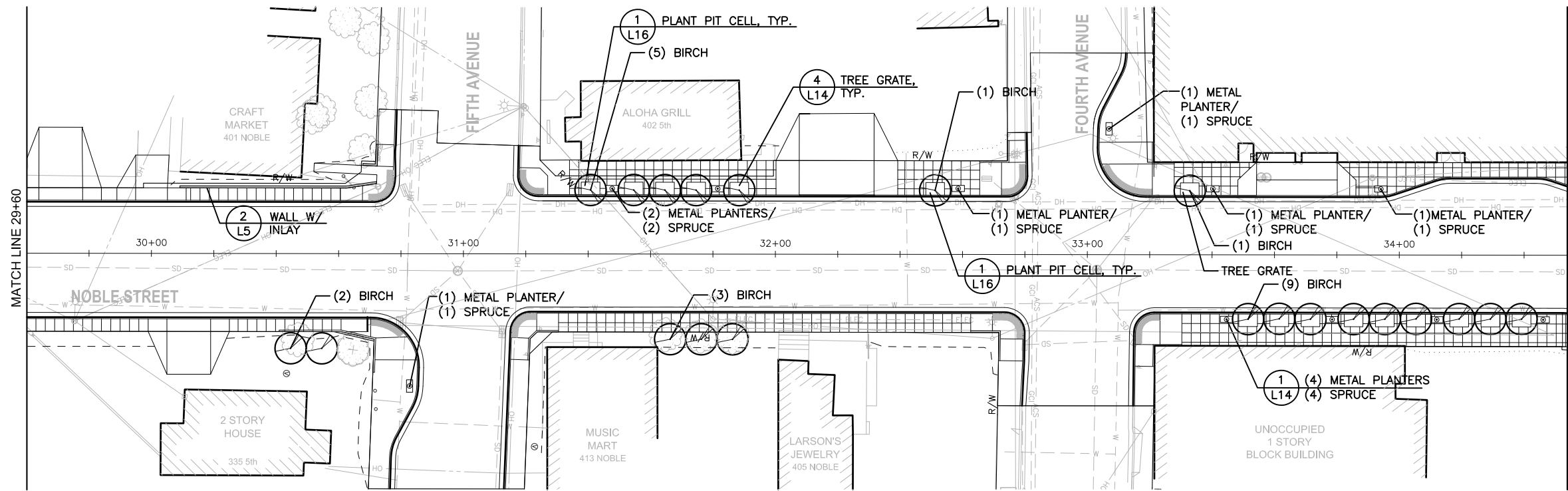
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LANDSCAPE PLAN 19+40-29+60



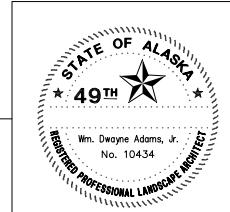
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| ALASKA | STP-000S(413)/61725 | 2015 | L4 | -- |

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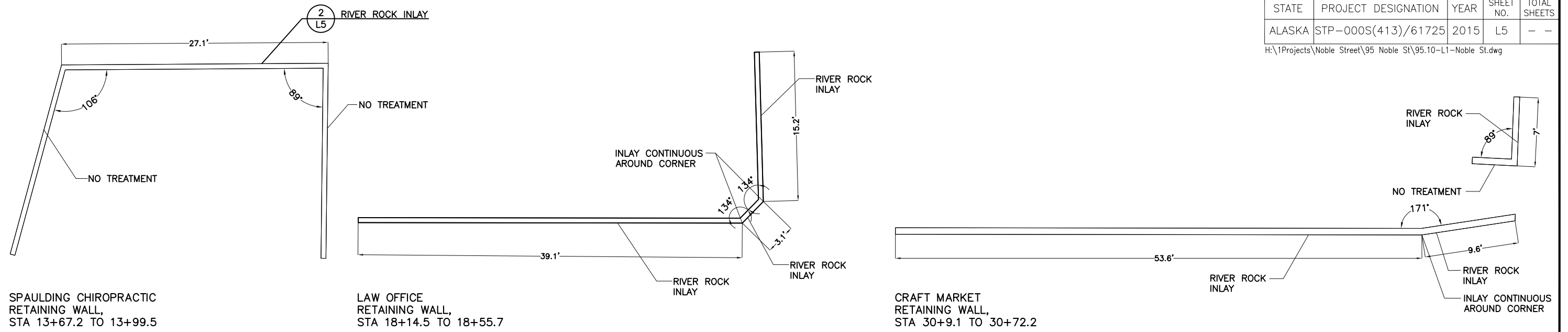
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LANDSCAPE PLAN 29+60-39+50



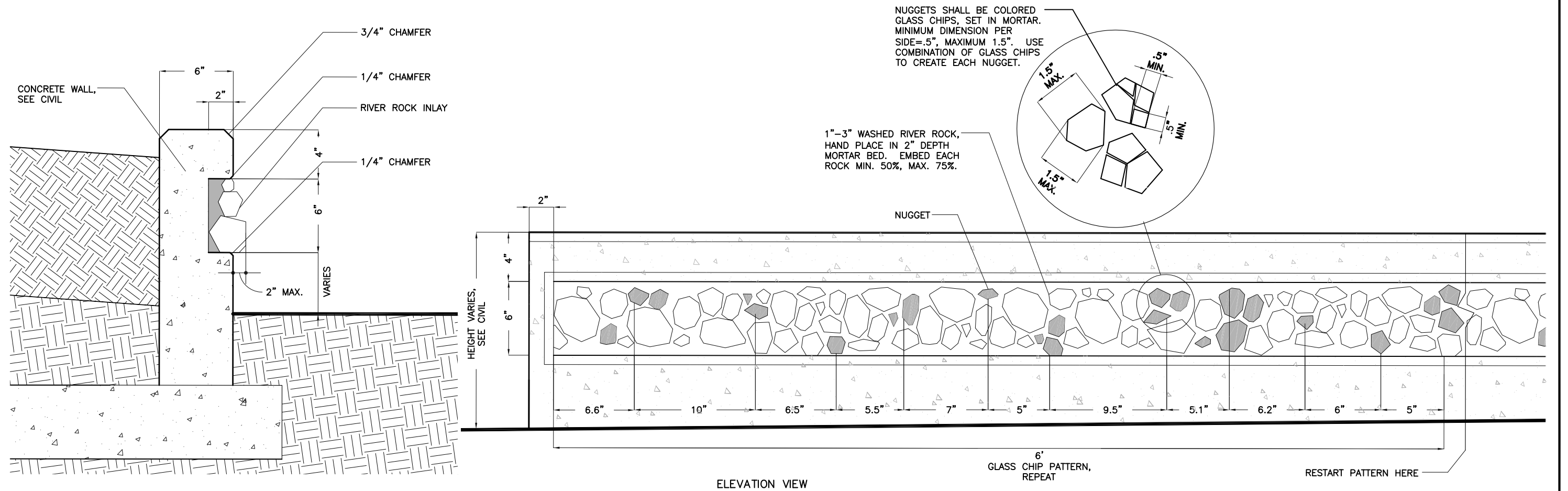
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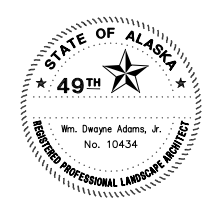
1
L5 WALL LAYOUT PLAN VIEW

SCALE: NTS



2
L5 RIVER ROCK INLAY DETAIL

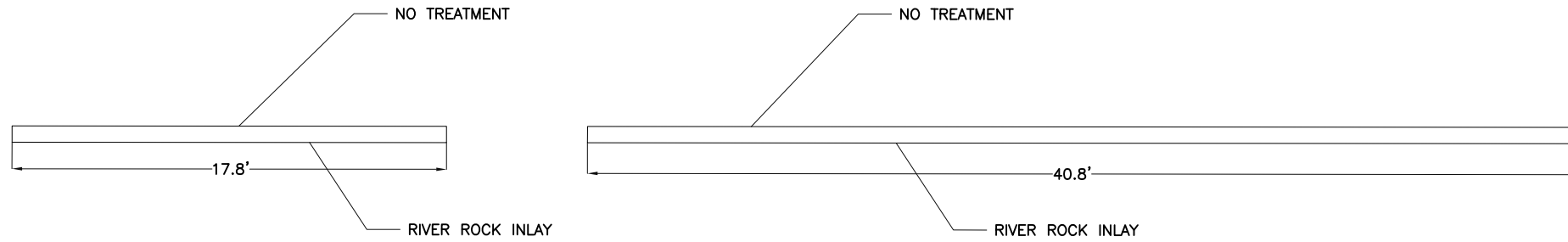
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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
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| ALASKA | STP-000S(413)/61725 | 2015 | L6 | -- |

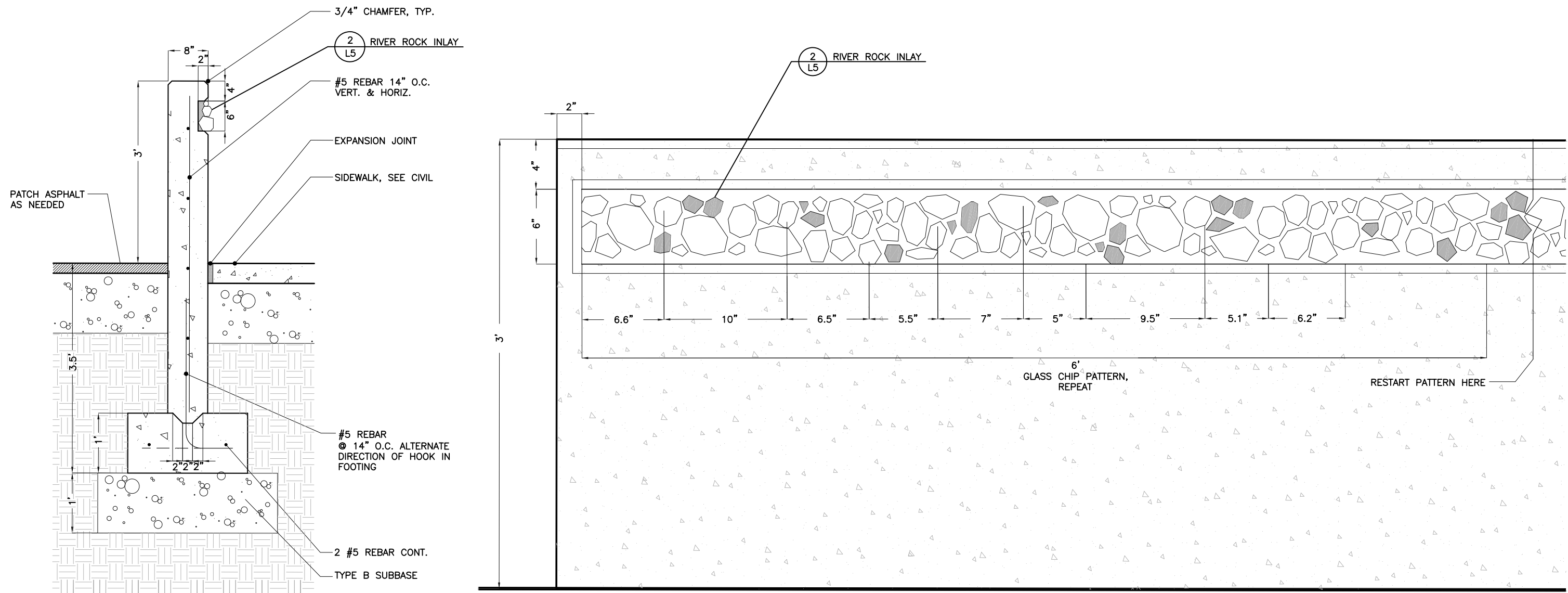
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SOUTH HALL MANOR
RETAINING WALL,
STA 25+98.81 TO 26+63.12

1 SOUTH HALL MANOR WALL PLAN VIEW
L6

SCALE: NTS

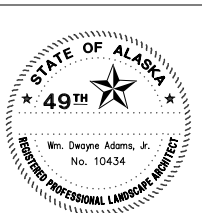


ELEVATION VIEW

2 SOUTH HALL MANOR WALL DETAIL
L6

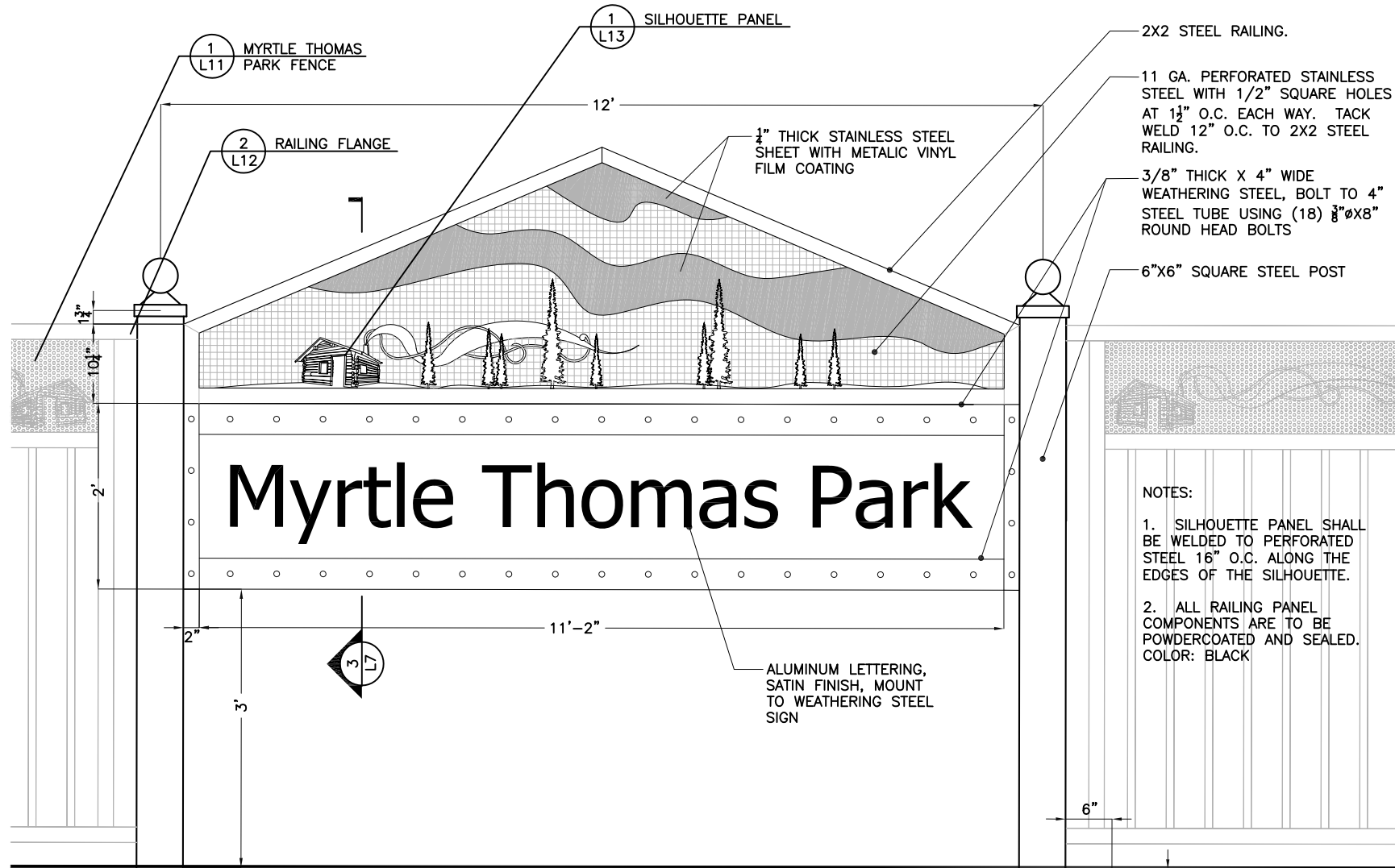
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LANDSCAPE DETAILS (2 OF 13)

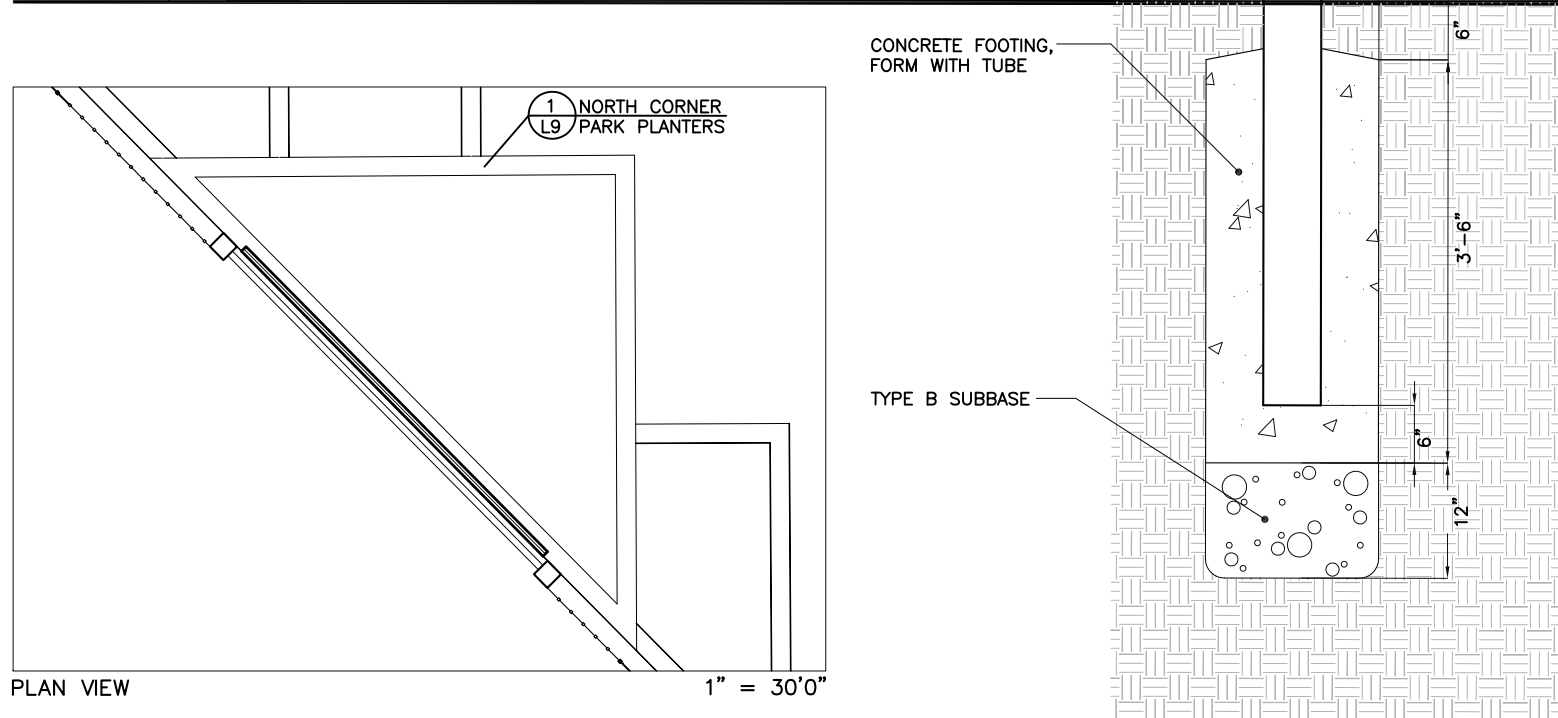


| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | L7 | -- |

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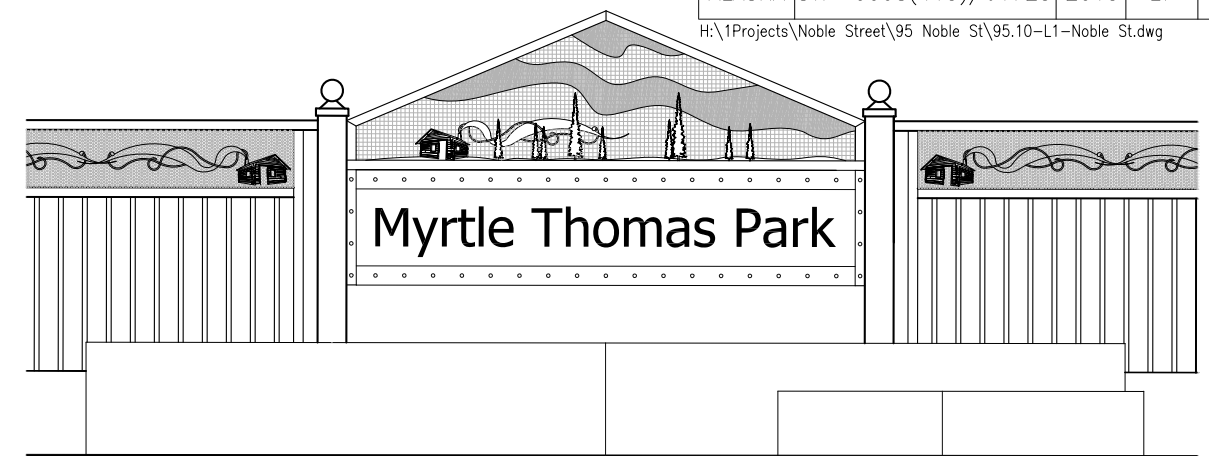


- NOTES:
- SILHOUETTE PANEL SHALL BE WELDED TO PERFORATED STEEL 16" O.C. ALONG THE EDGES OF THE SILHOUETTE.
 - ALL RAILING PANEL COMPONENTS ARE TO BE POWDERCOATED AND SEALED. COLOR: BLACK



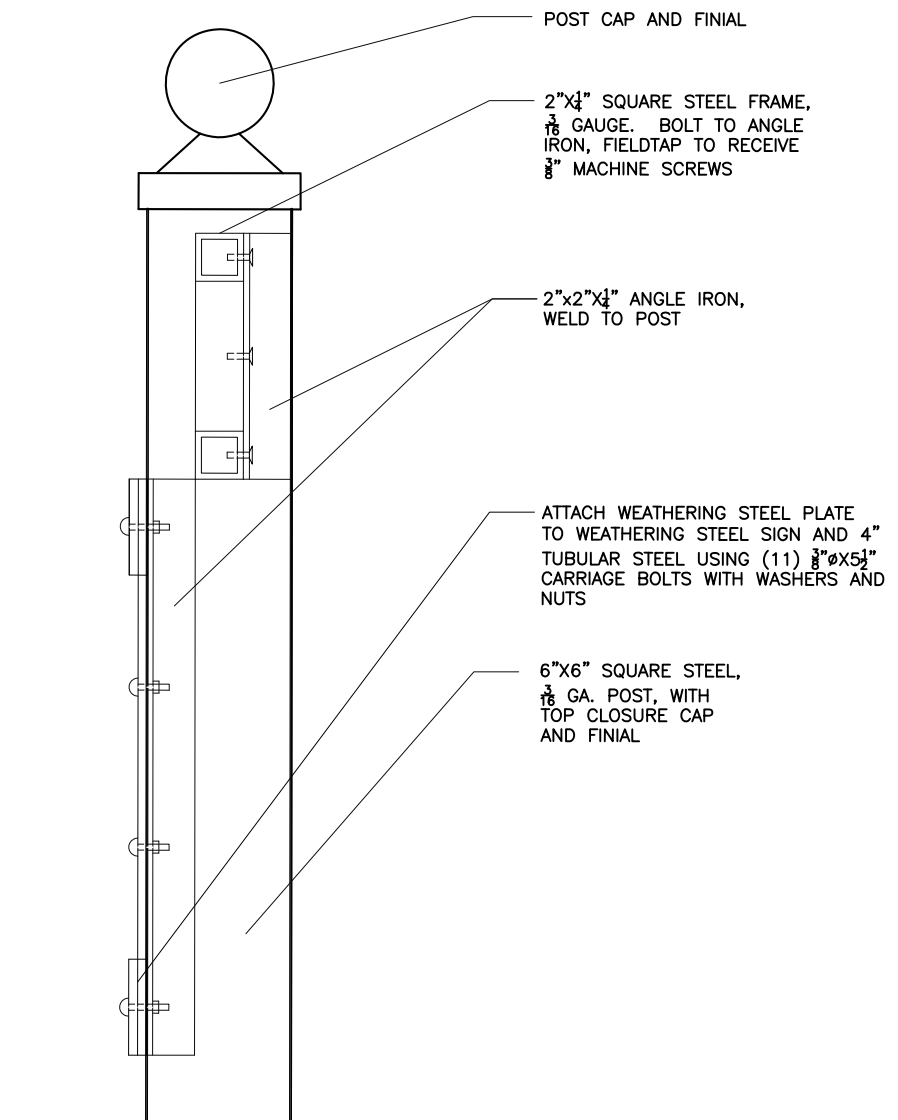
1 MAJOR PARK SIGN
L7

SCALE: NTS



2 MINOR PARK SIGN ELEVATION
L7

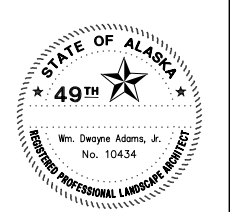
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3 MINOR PARK SIGN CROSS SECTION
L7

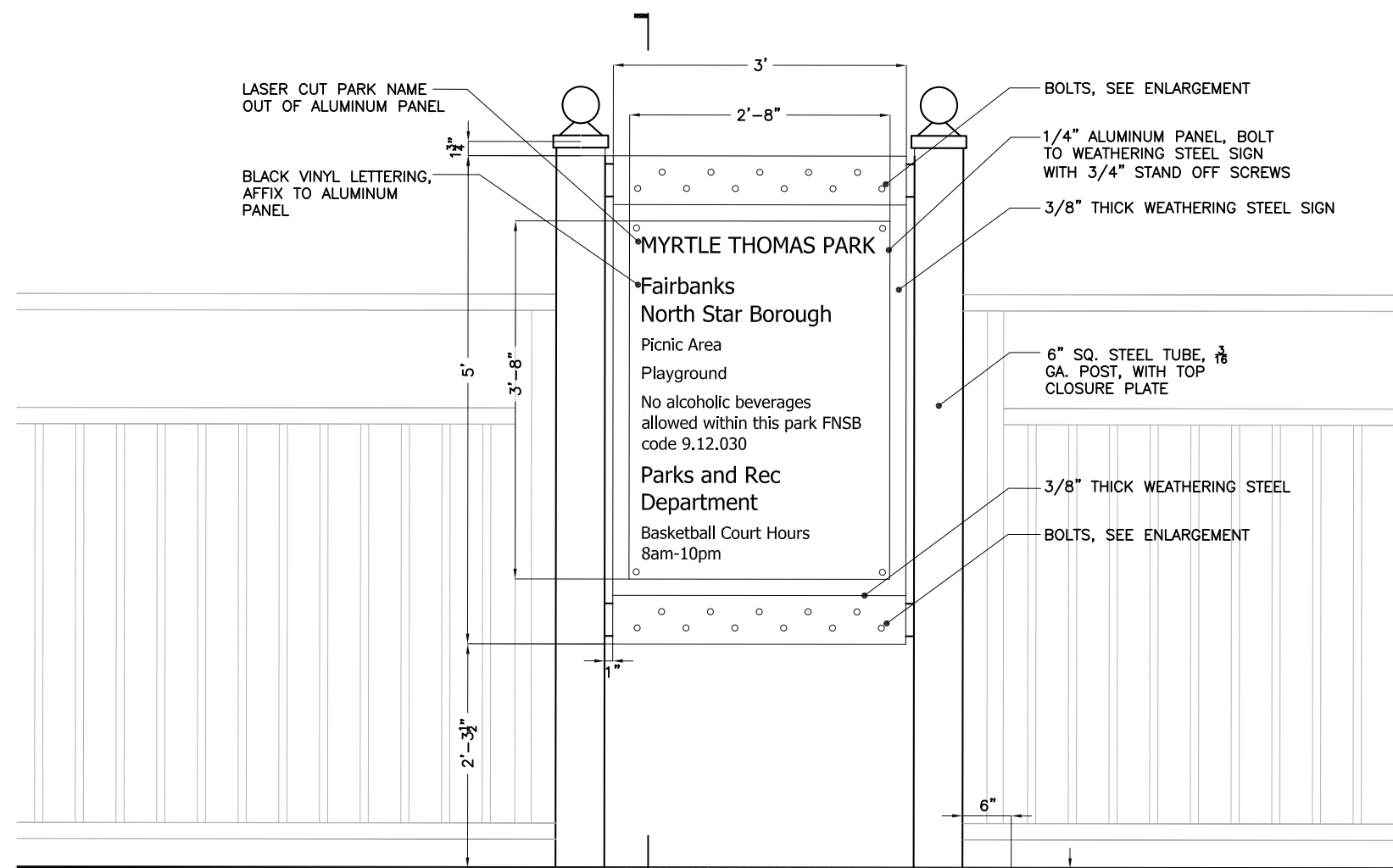
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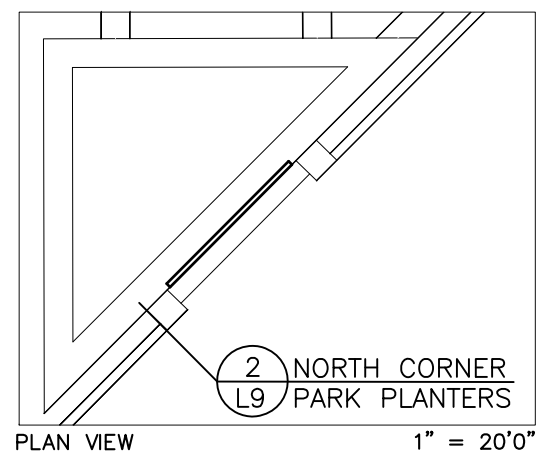


| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
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| ALASKA | STP-000S(413)/61725 | 2015 | L8 | -- |

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FRONT VIEW

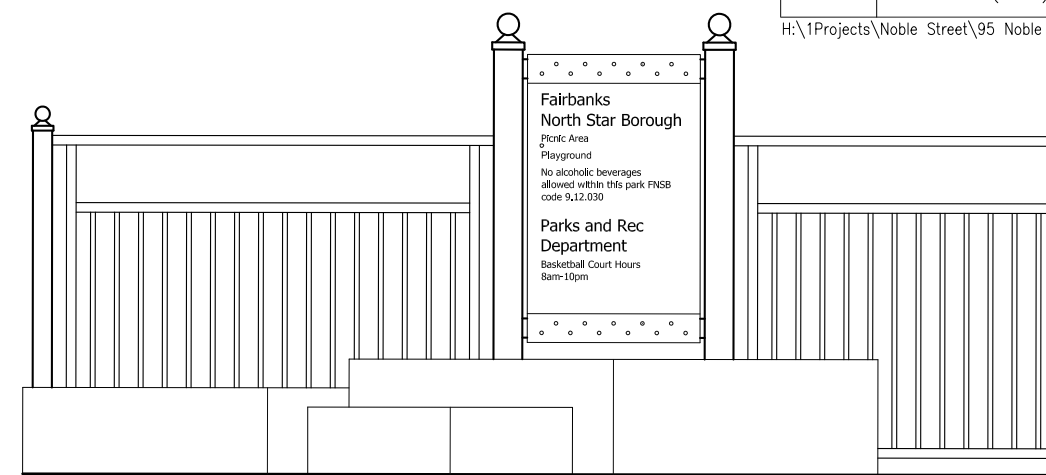


PLAN VIEW

1" = 20'0"

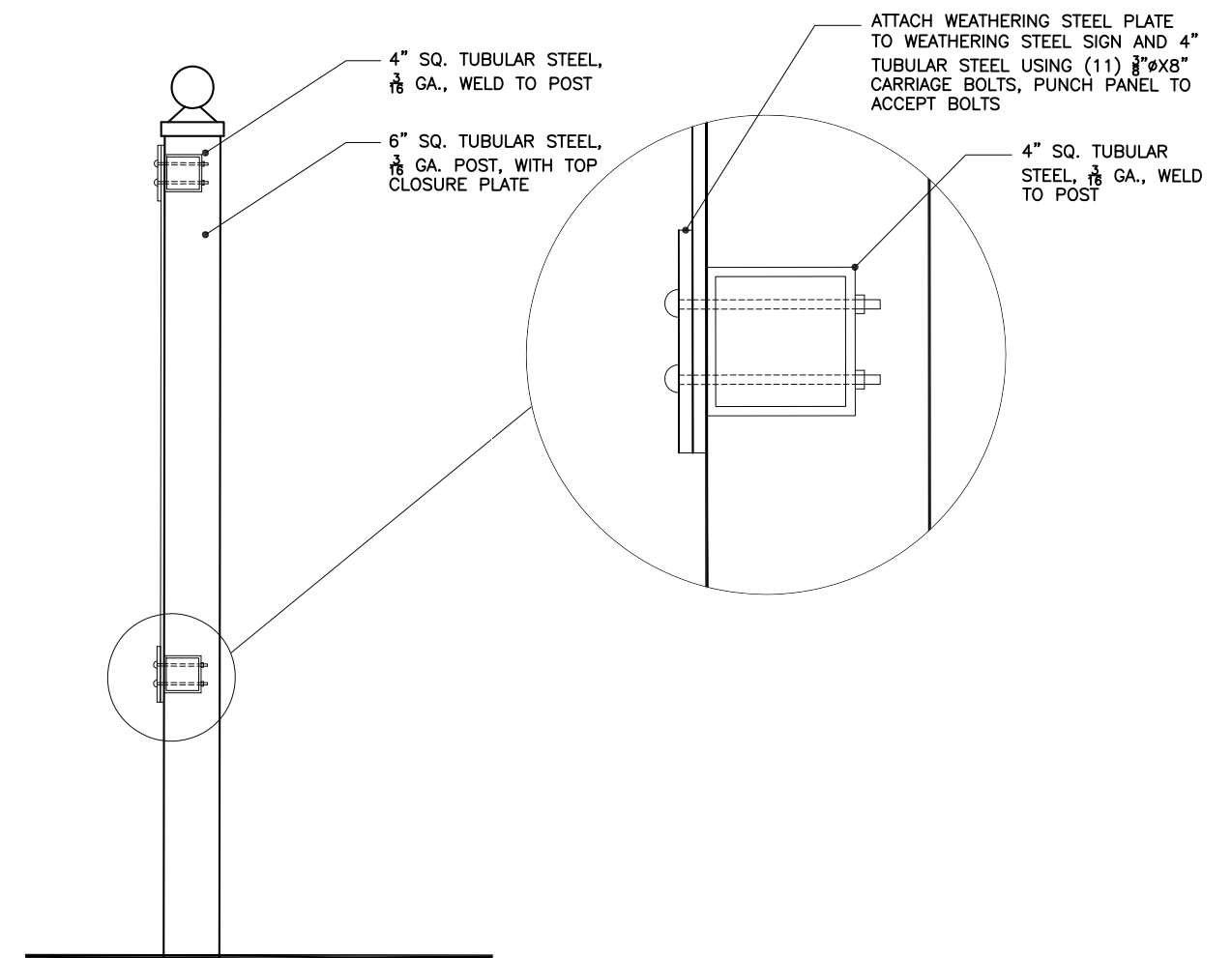
1
L8
MINOR PARK SIGN

SCALE: NTS



2
L8
MINOR PARK SIGN ELEVATION

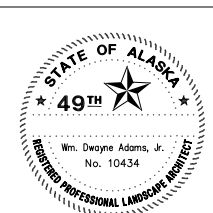
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3
L8
MINOR PARK SIGN CROSS SECTION

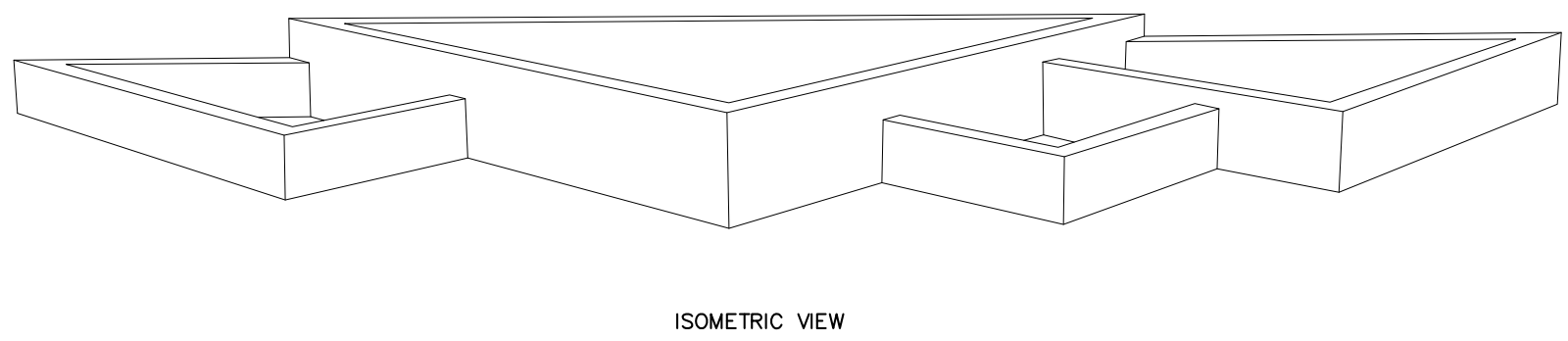
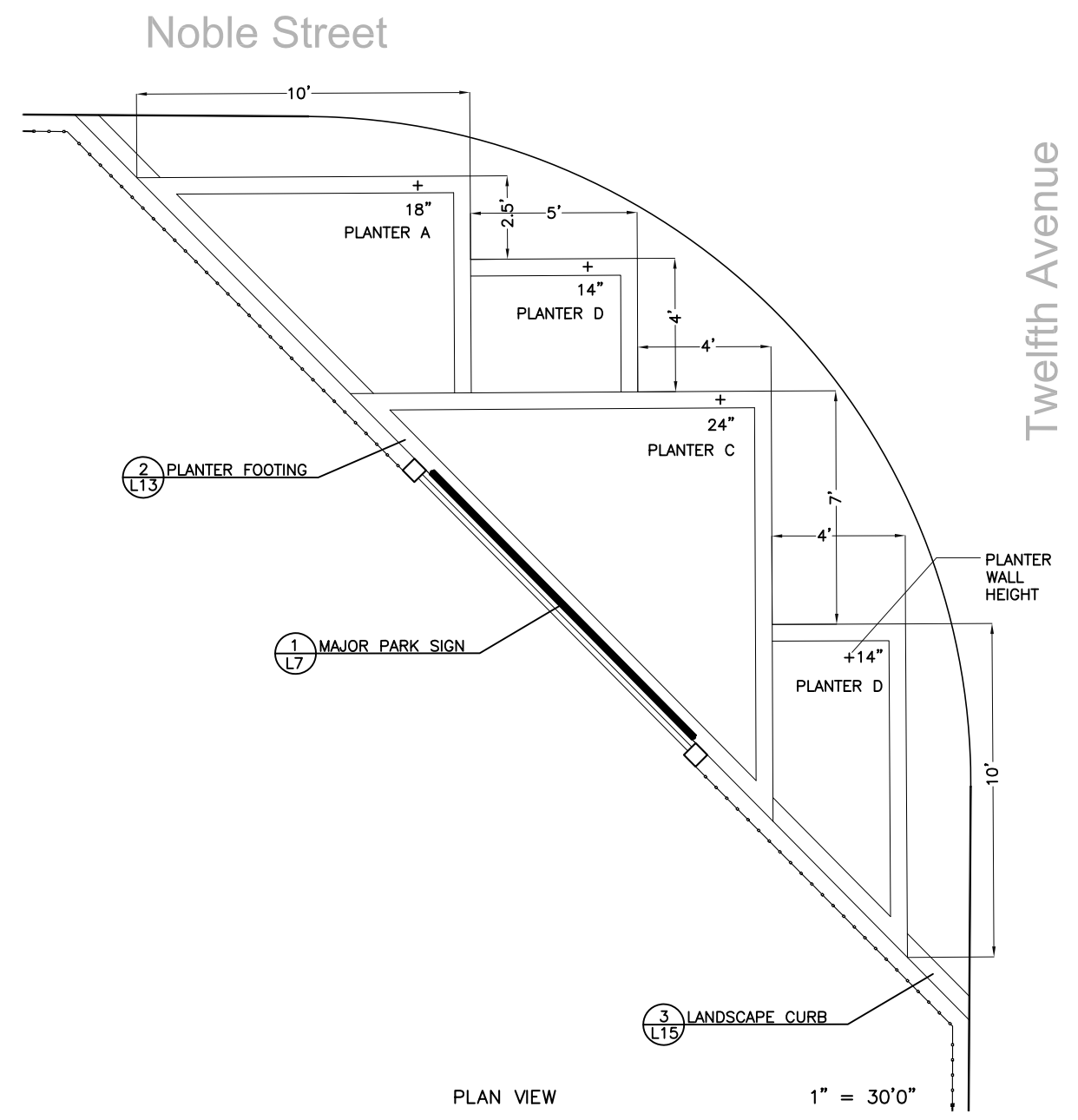
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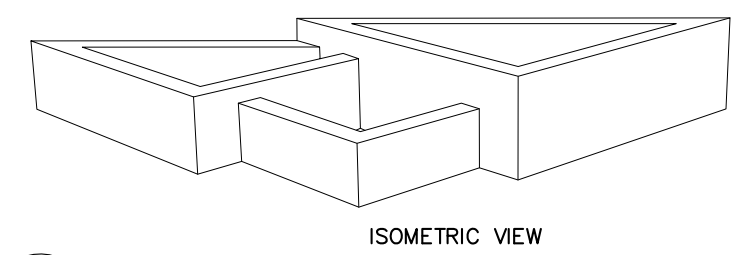
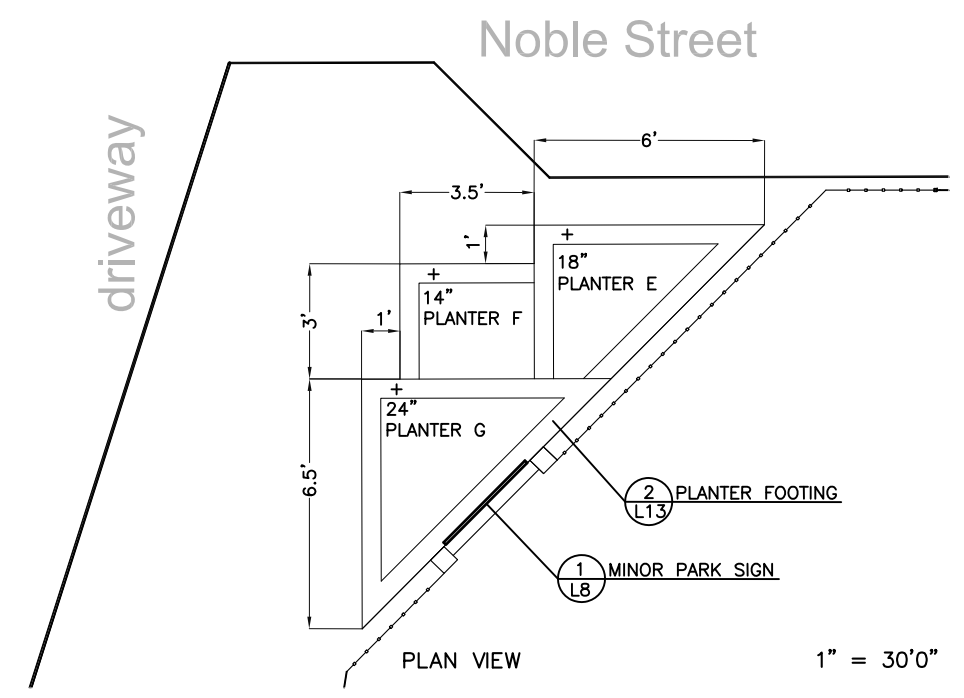


| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | L9 | -- |

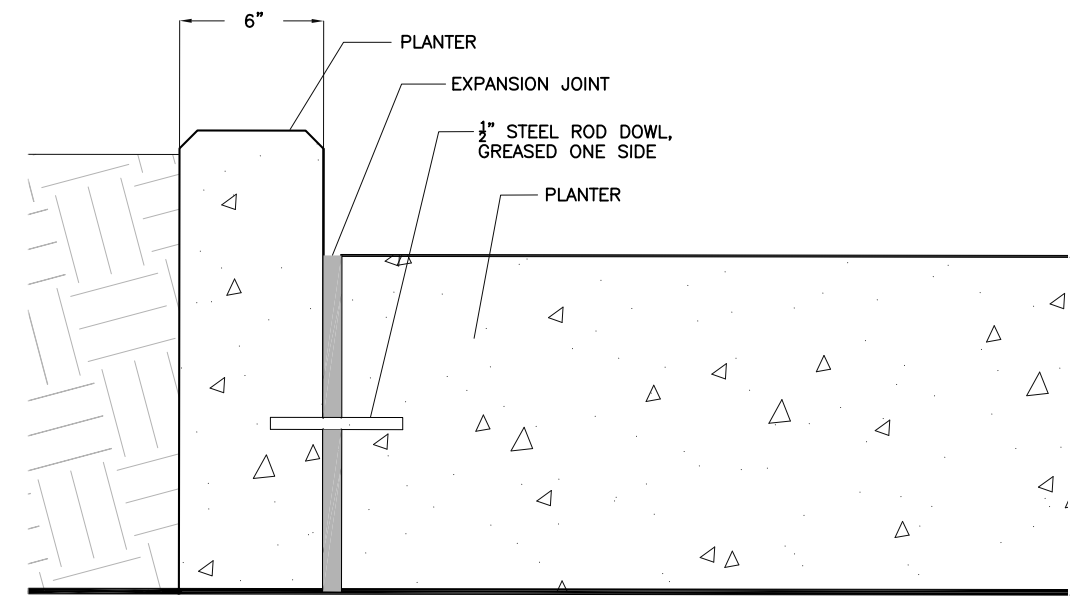
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1 NORTH CORNER PARK PLANTERS (MAJOR PARK SIGN)
L9 SCALE: NTS



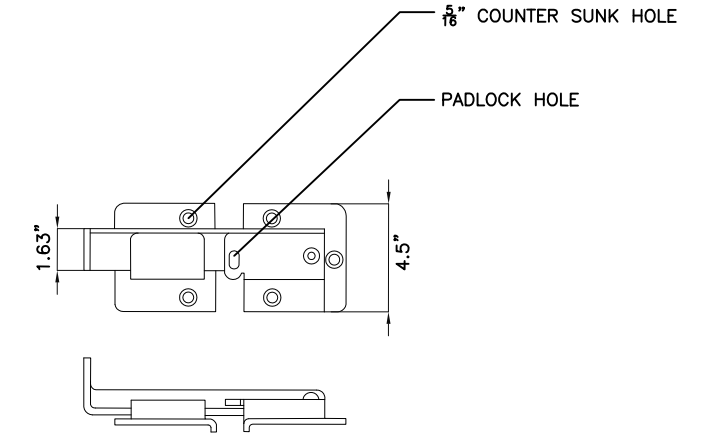
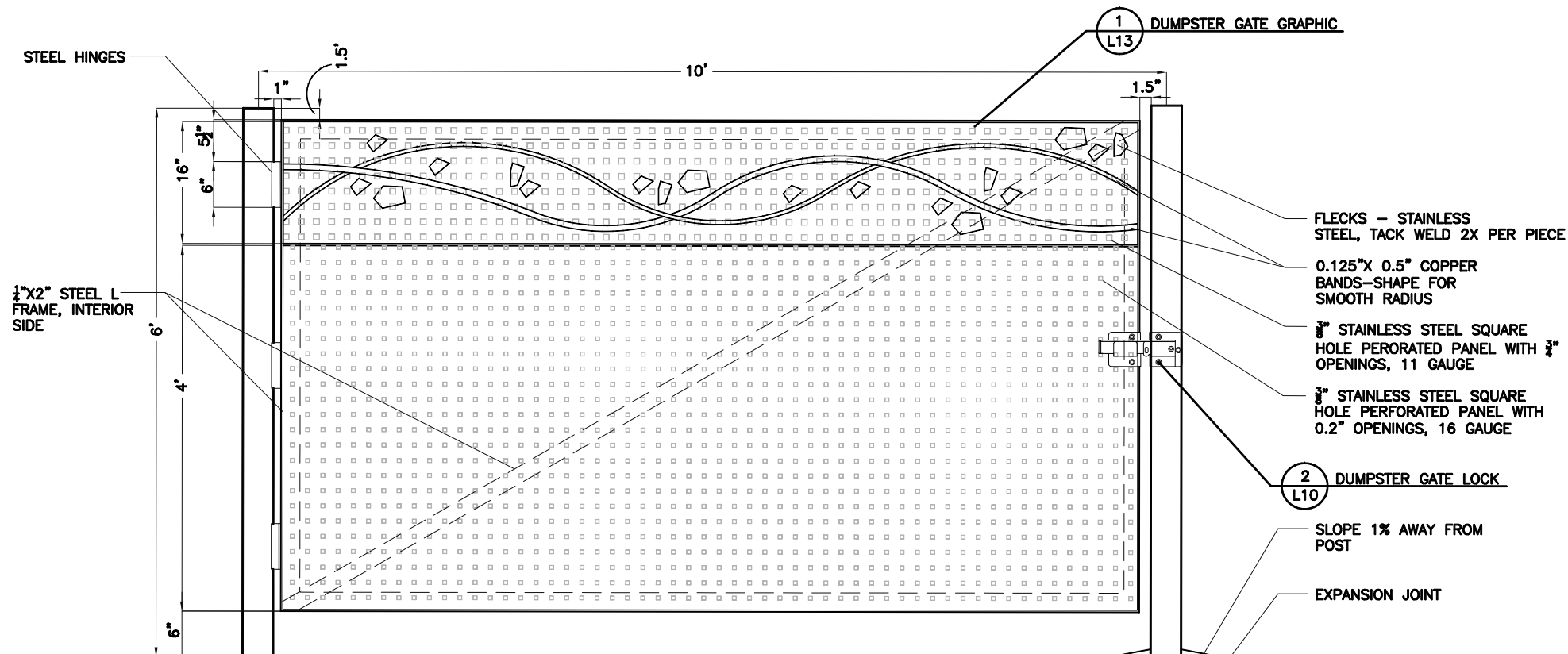
2 SOUTH CORNER PARK PLANTERS (MINOR PARK SIGN)
L9 SCALE: NTS



3 PLANTER EXPANSION JOINTS
L9 SCALE: NTS



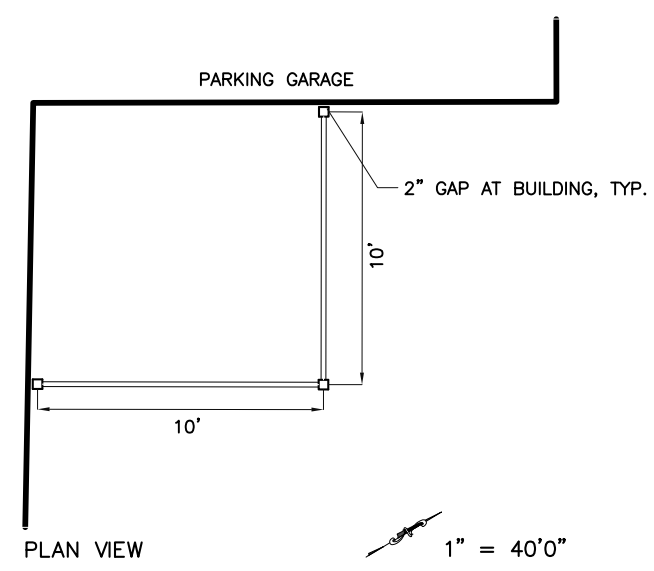
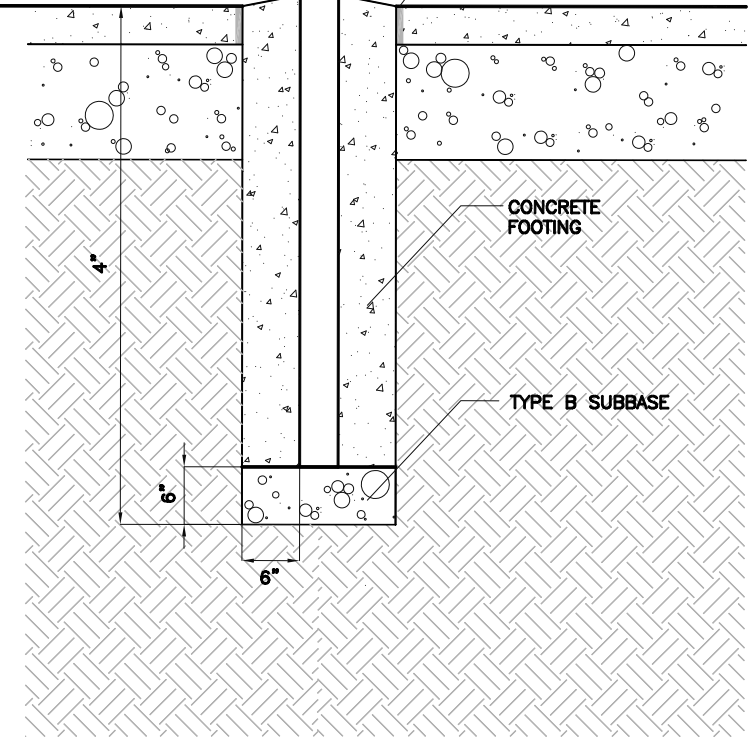
Wednesday, December 10, 2014, 5:05 PM



- NOTES:
1. ALLOW ACCESS ONLY FROM OUTSIDE OF GATE.
 2. POWDER COATED AND SEALED, COLOR BLACK.
 3. LOCKABLE, USING XX LOCK.
 4. USE STAINLESS STEEL FLAT HEAD MACHINE SCREWS.
 5. DROP ROD RECOMMENDED.

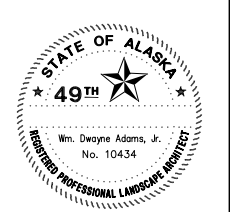
2 DUMPSTER GATE LOCK (L10) SCALE: NTS

VIEW FROM NOBLE STREET



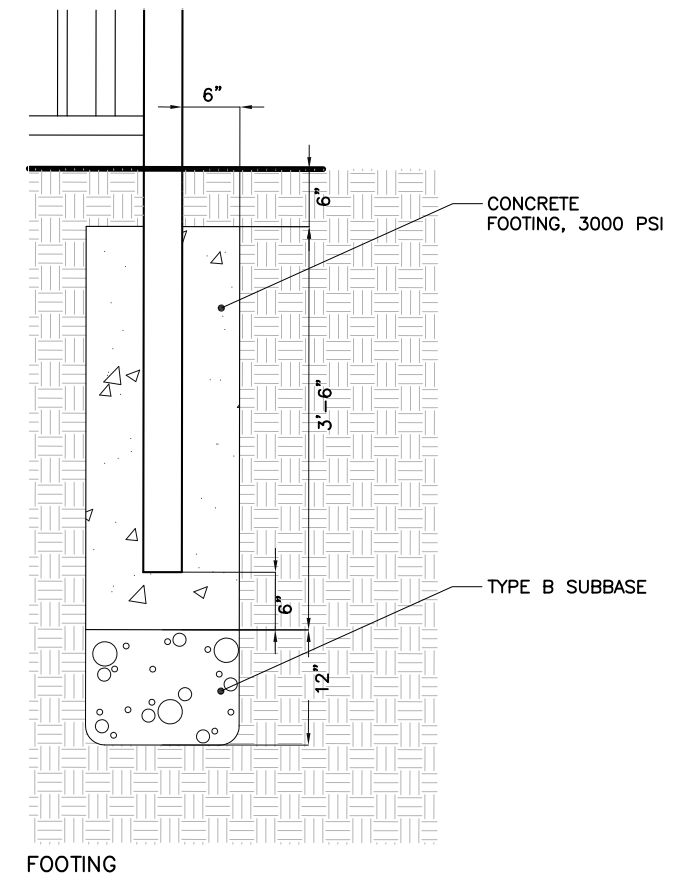
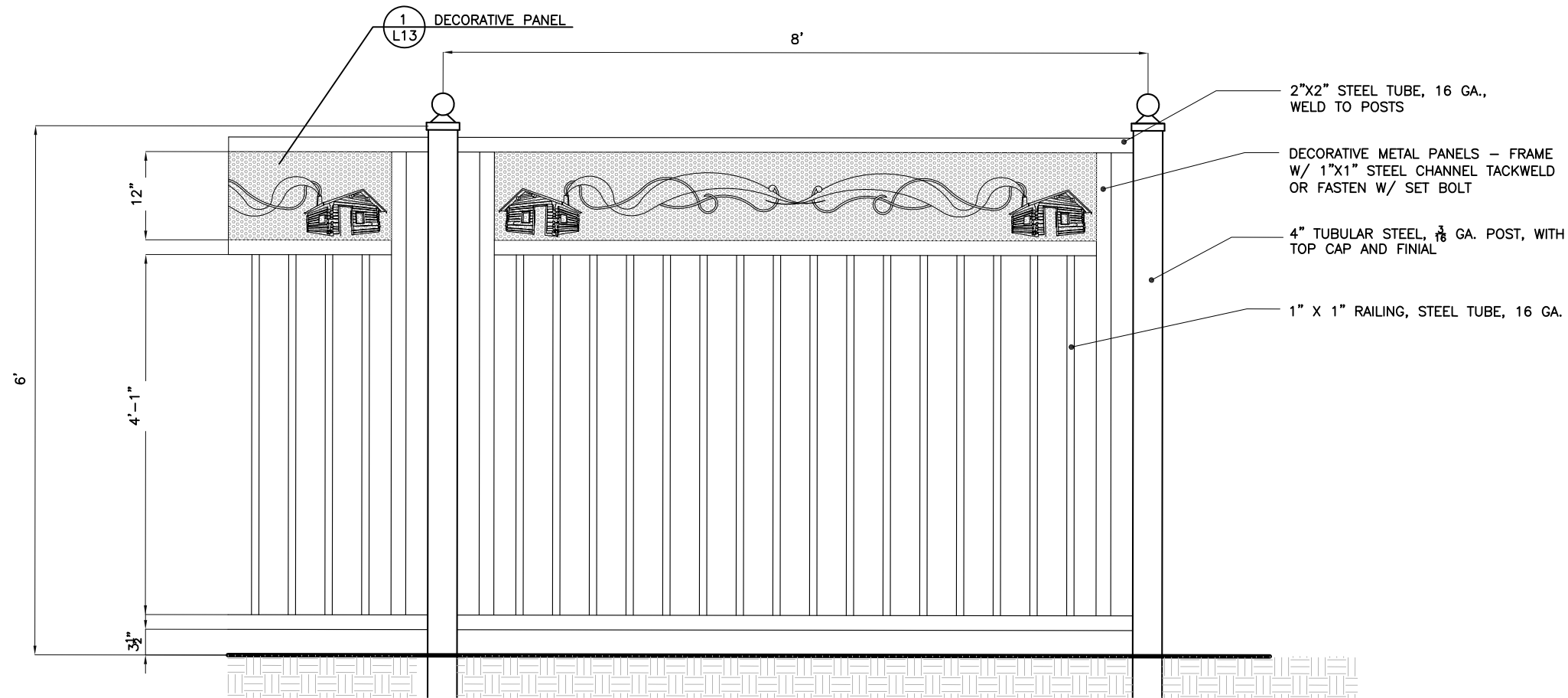
1 DUMPSTER SCREEN (L10) SCALE: NTS

Wednesday, December 10, 2014, 5:05 PM



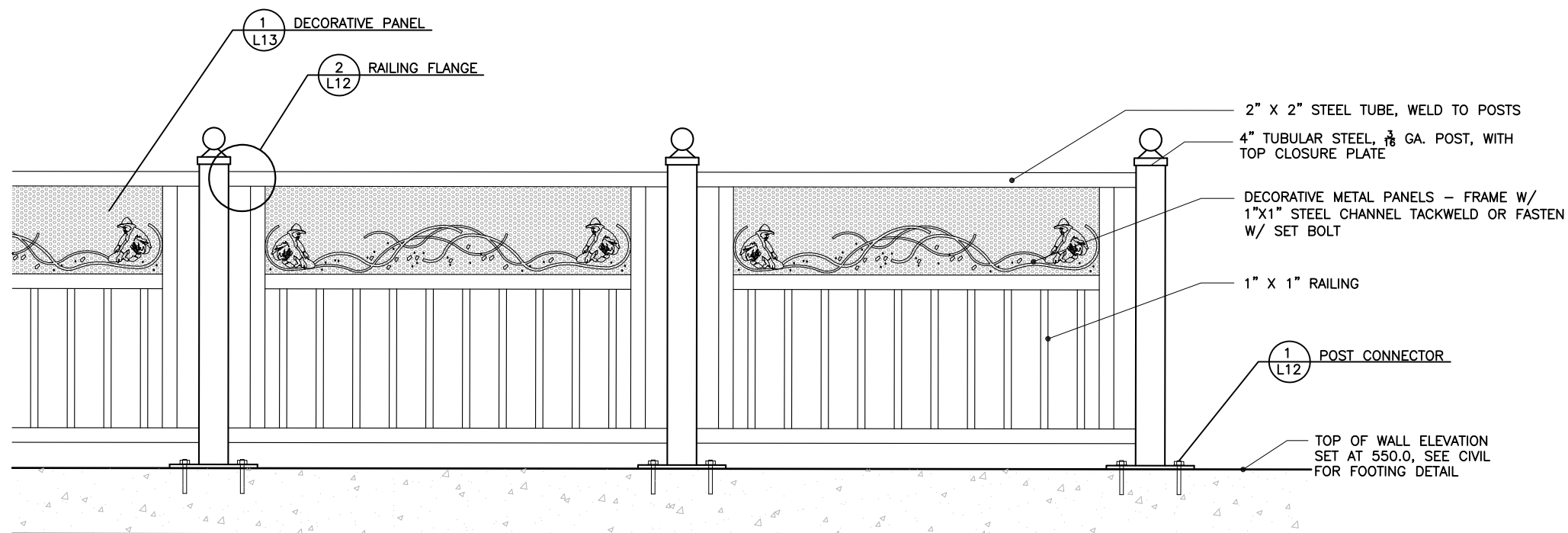
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | L11 | -- |

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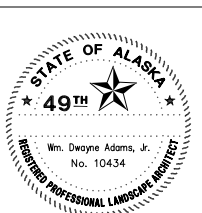
1 MYRTLE THOMAS PARK FENCE
L11

SCALE: NTS



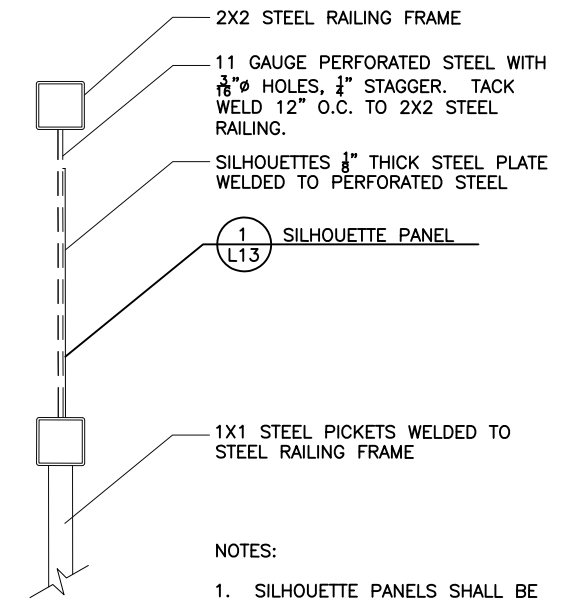
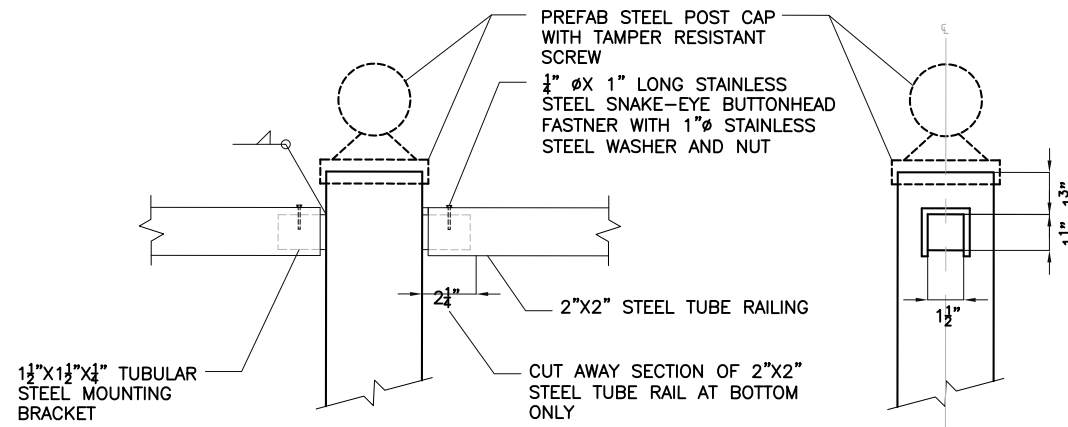
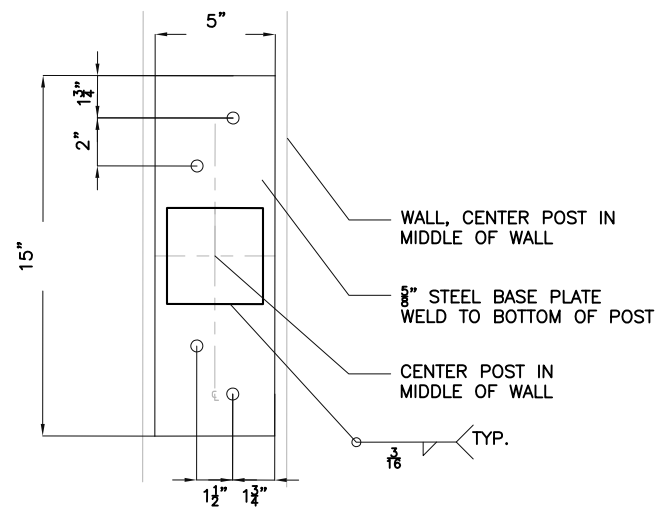
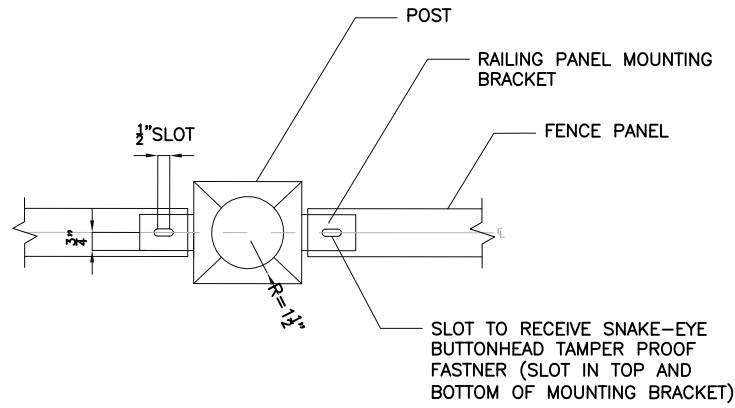
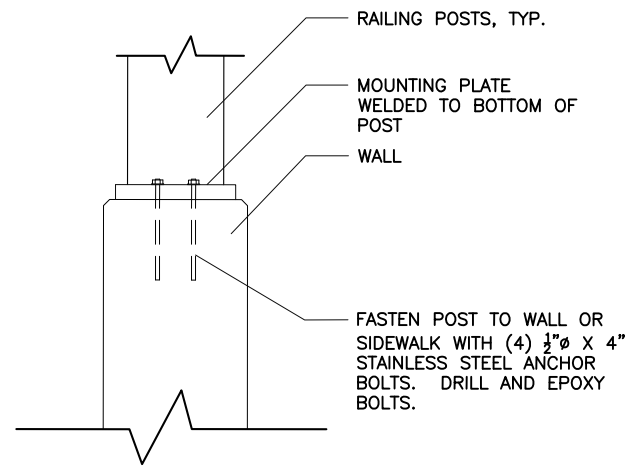
2 1ST/2ND AVENUE ORNAMENTAL FENCE DETAIL
L11

SCALE: NTS



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | L12 | -- |

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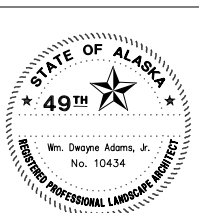


- NOTES:
- SILHOUETTE PANELS SHALL BE WELDED TO PERFORATED STEEL 16" O.C. ALONG THE EDGES OF THE SILHOUETTE.
 - ALL RAILING PANEL COMPONENTS ARE TO BE POWDERCOATED AND SEALED. COLOR: BLACK

1 1ST/2ND AVE ORNAMENTAL FENCE CONNECTION DETAILS SCALE: NTS

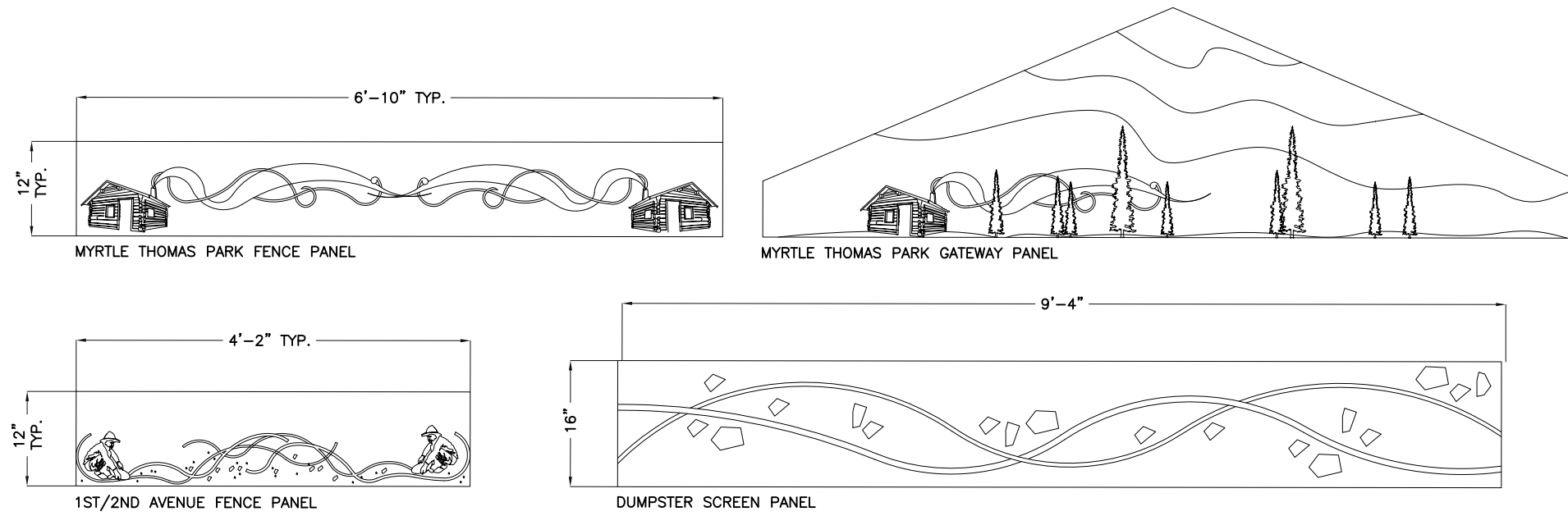
2 RAILING FLANGE SCALE: NTS

3 STEEL PANELS CONNECTION SCALE: NTS



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | L13 | -- |

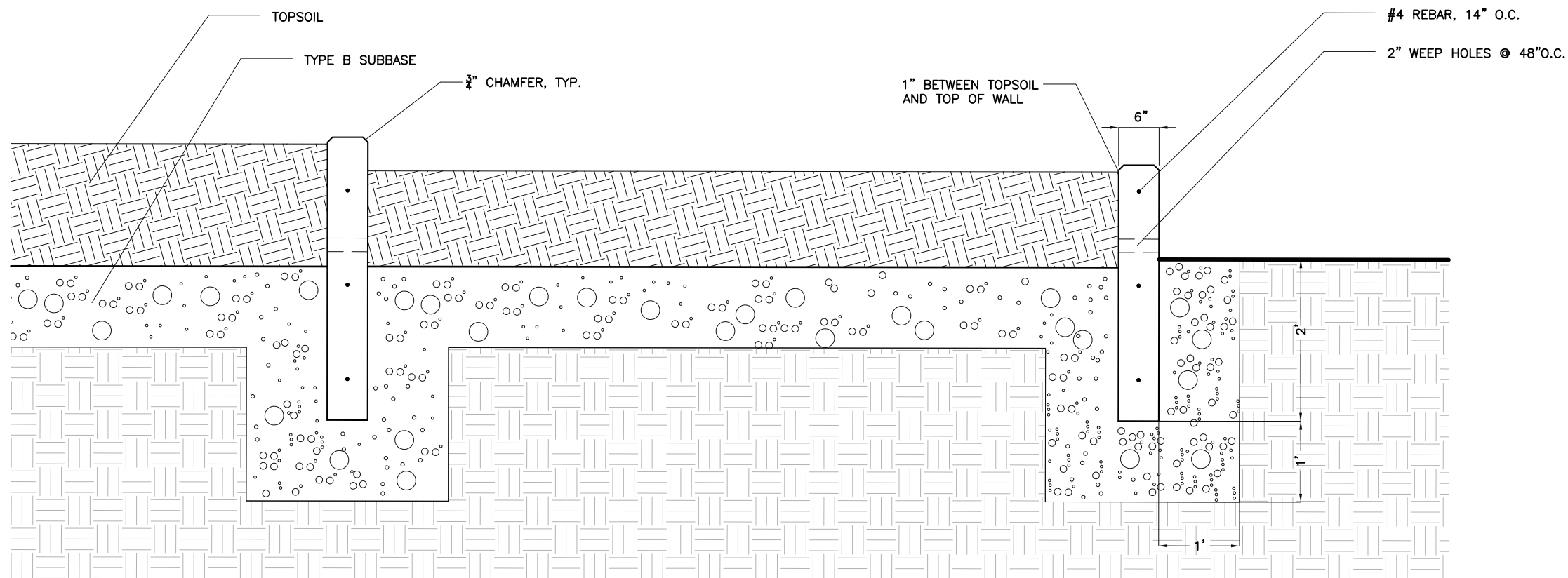
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NOTE: CAD TEMPLATES TO BE PROVIDED BY LANDSCAPE ARCHITECT

1 FENCE PANELS
L13

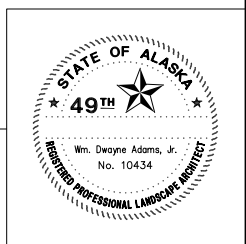
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2 CONCRETE PLANTER FOOTINGS
L13

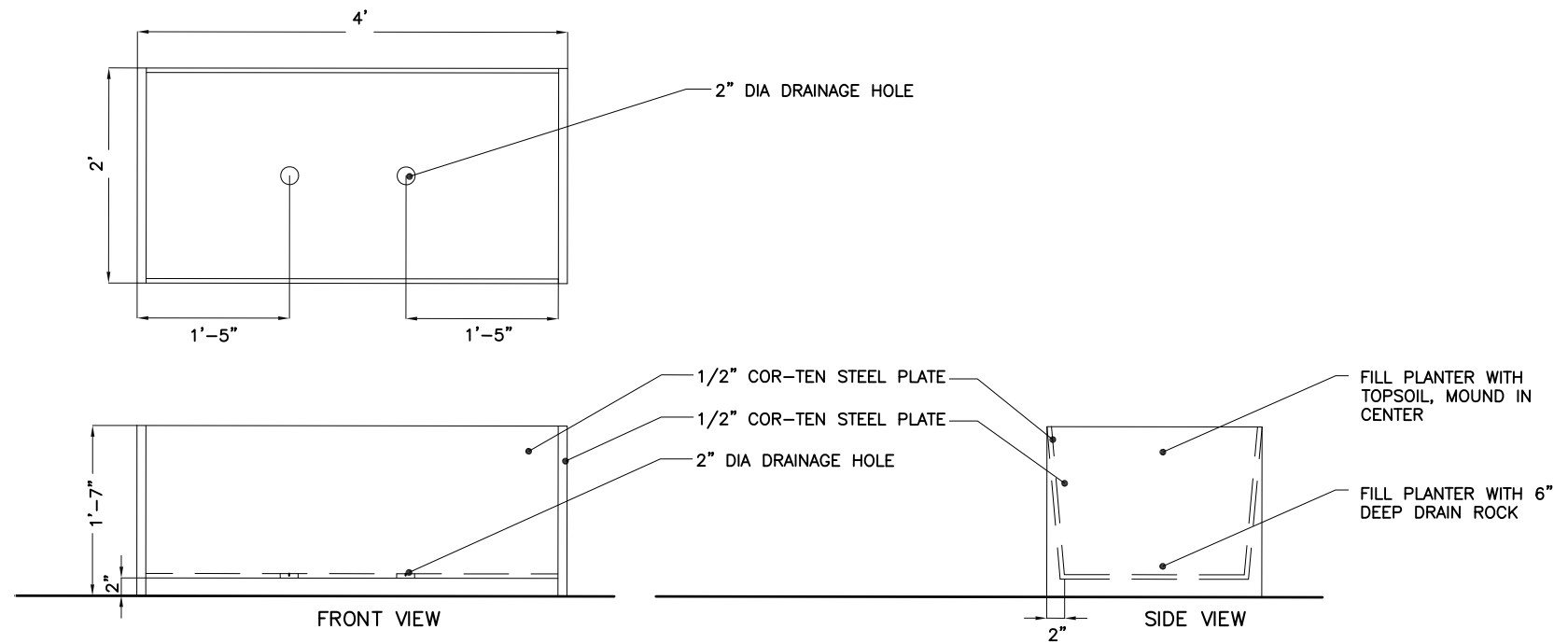
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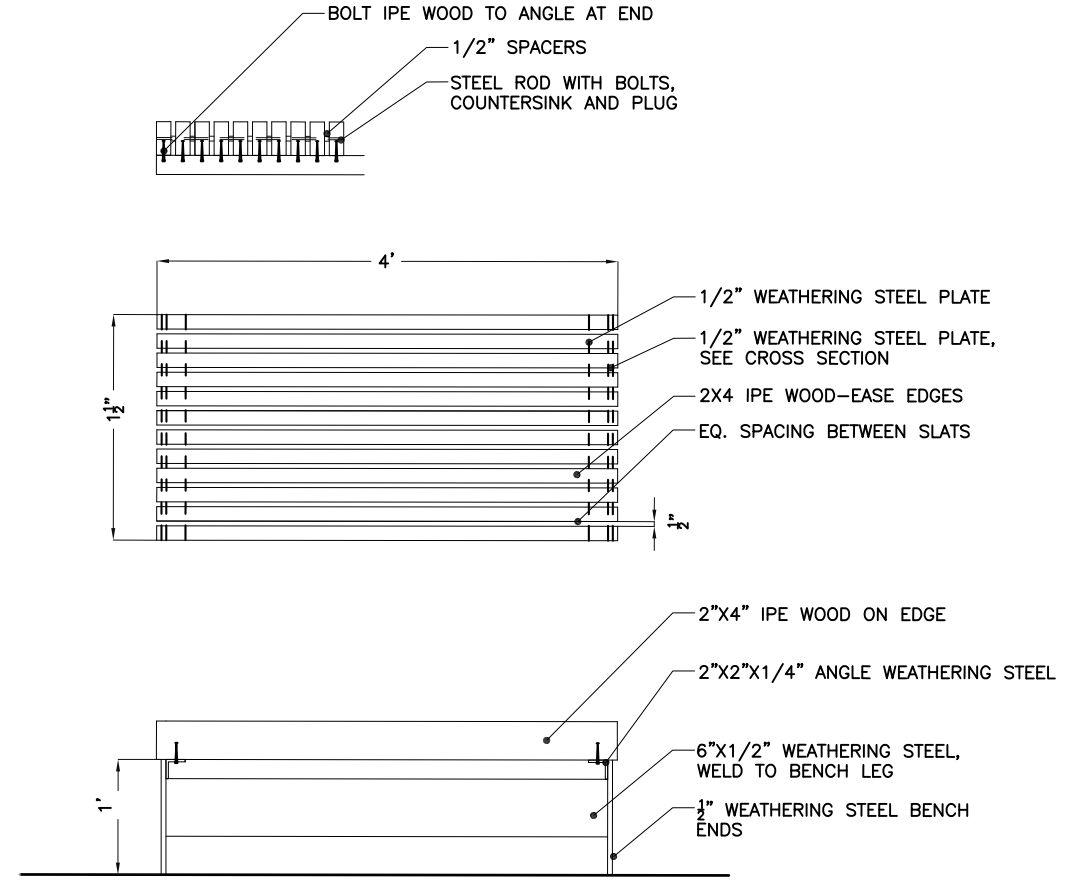


| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
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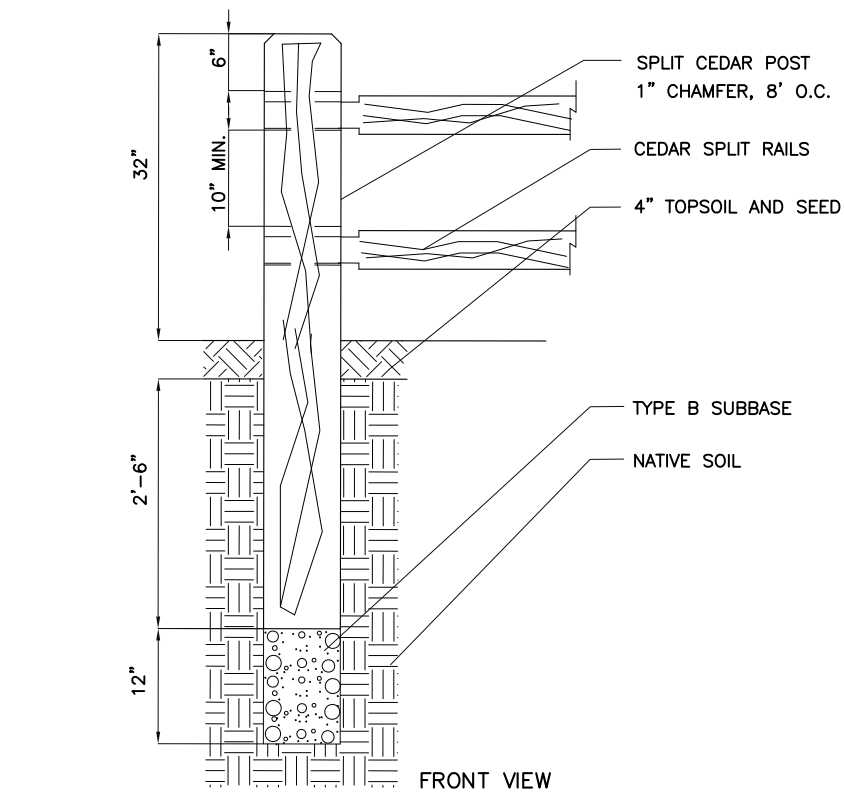
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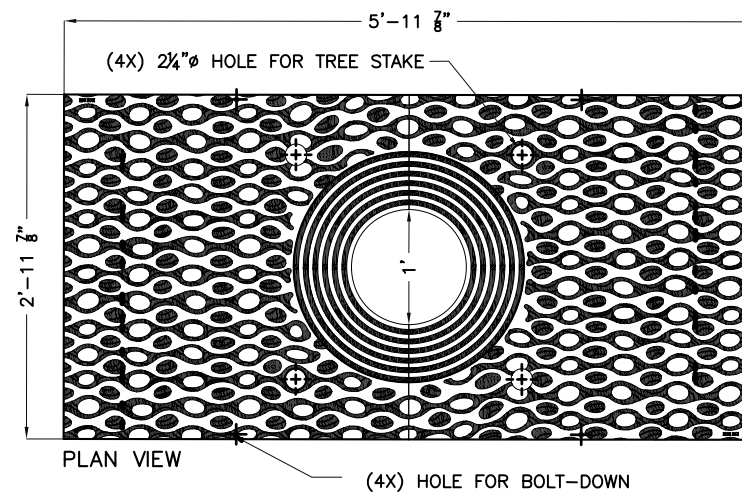
1 METAL PLANTER DETAIL
L14 SCALE: NTS



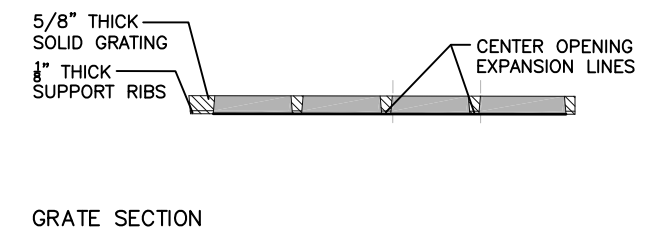
2 BENCH DETAIL
L14 SCALE: NTS



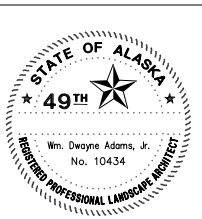
3 SPLIT RAIL FENCE DETAIL
L14 SCALE: NTS



4 TREE GRATE DETAIL
L14 SCALE: NTS

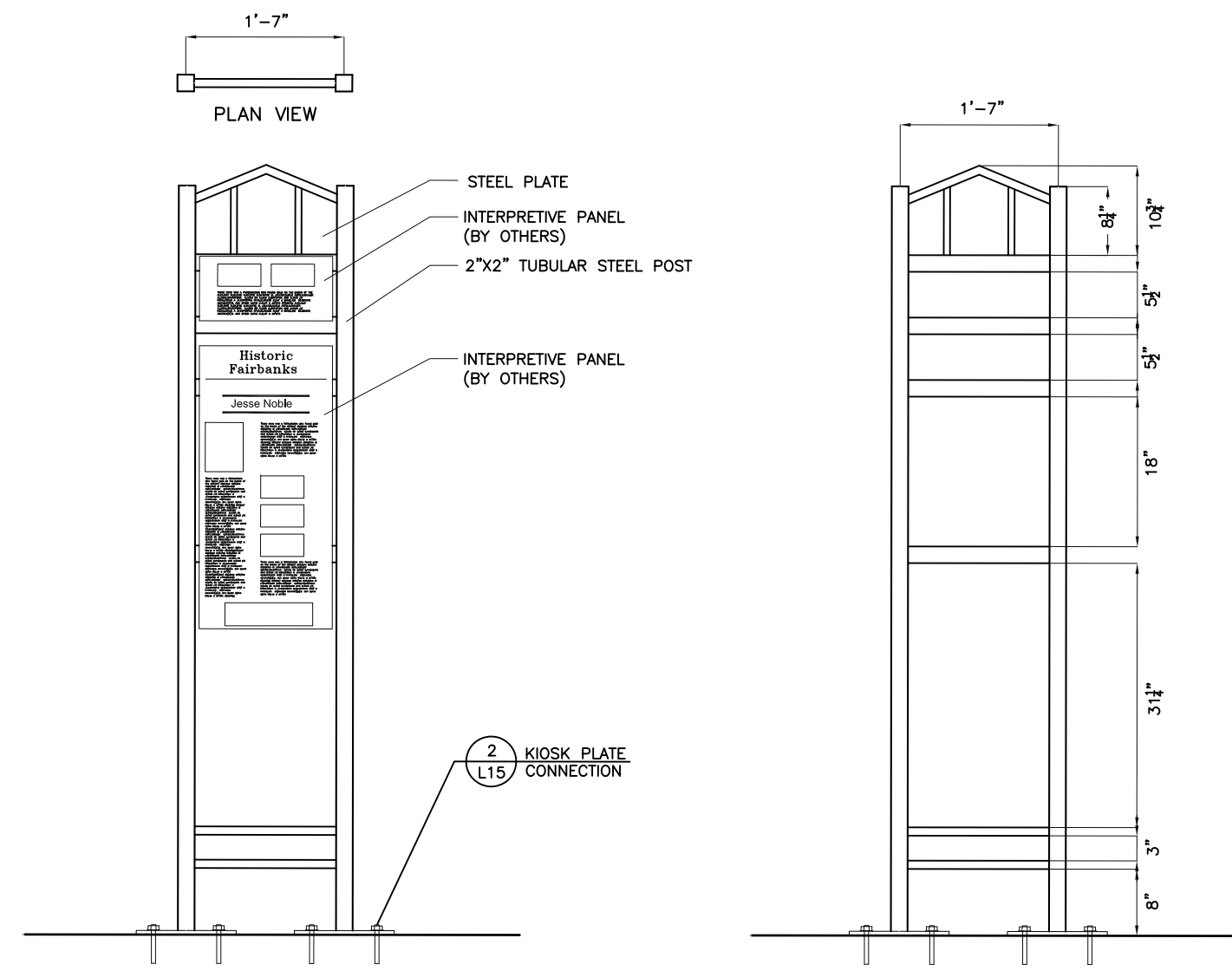


GRATE SECTION

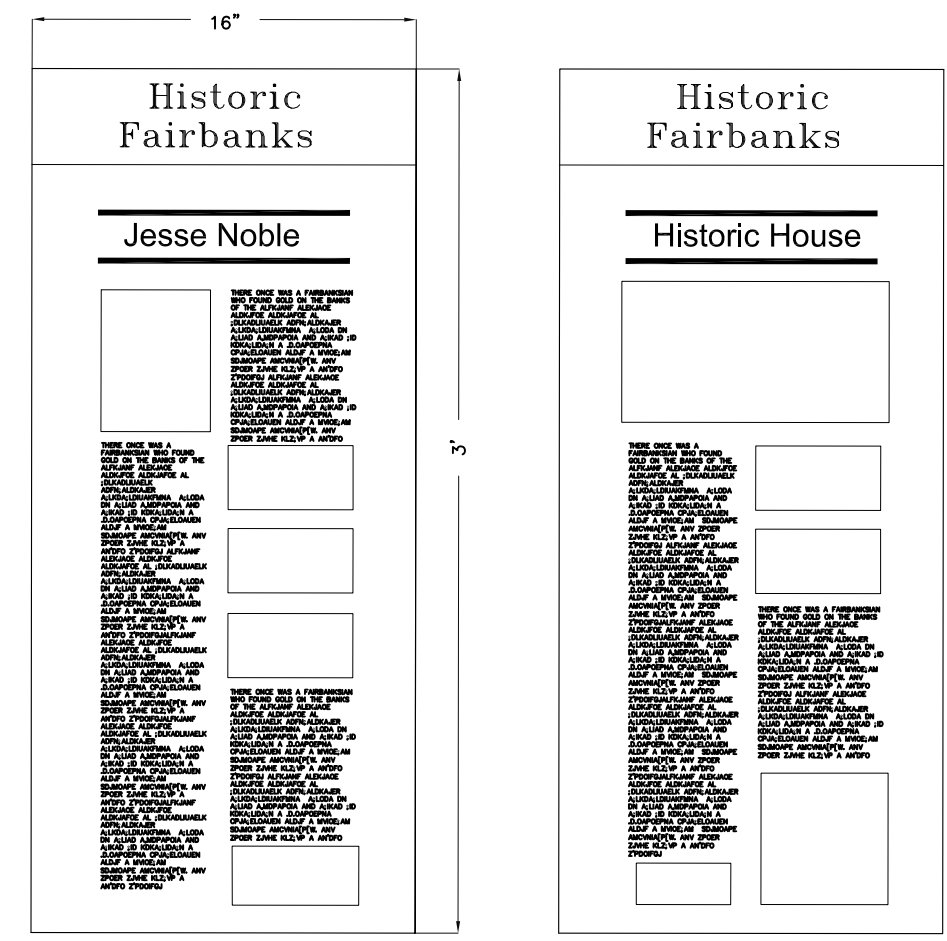


| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | L15 | -- |

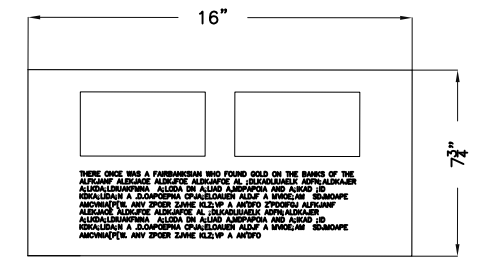
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1 KIOSK DETAIL
L15

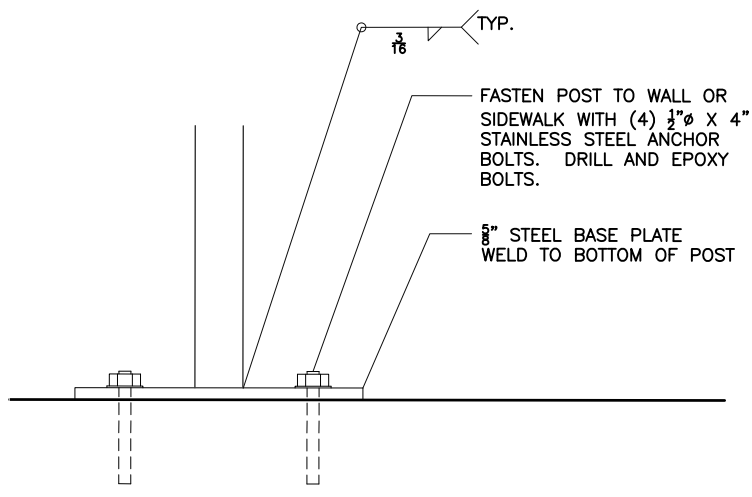


NOBLE INTERPRETIVE PANEL (BY OTHERS)
HISTORIC HOUSE INTERPRETIVE PANEL (BY OTHERS)

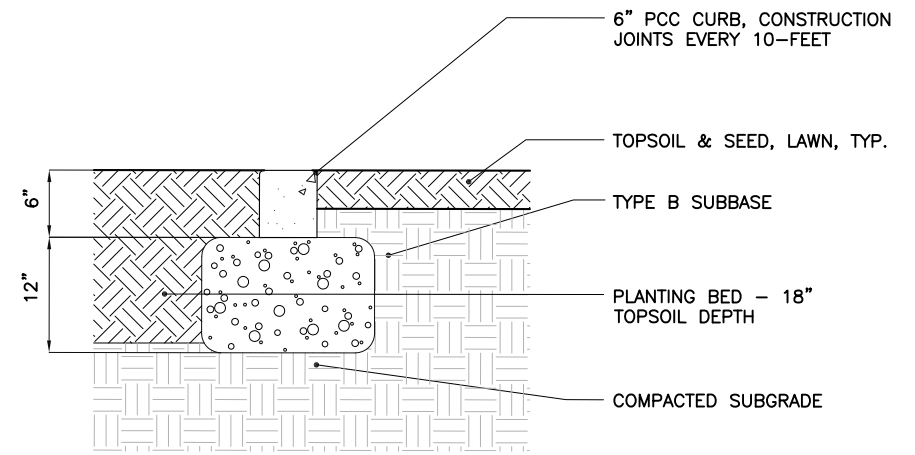
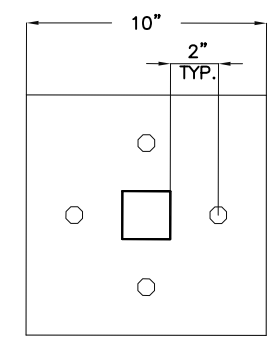


TOP INTERPRETIVE PANEL (BY OTHERS)

SCALE: NTS

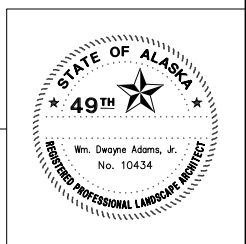


2 KIOSK CONNECTION PLATE
L15

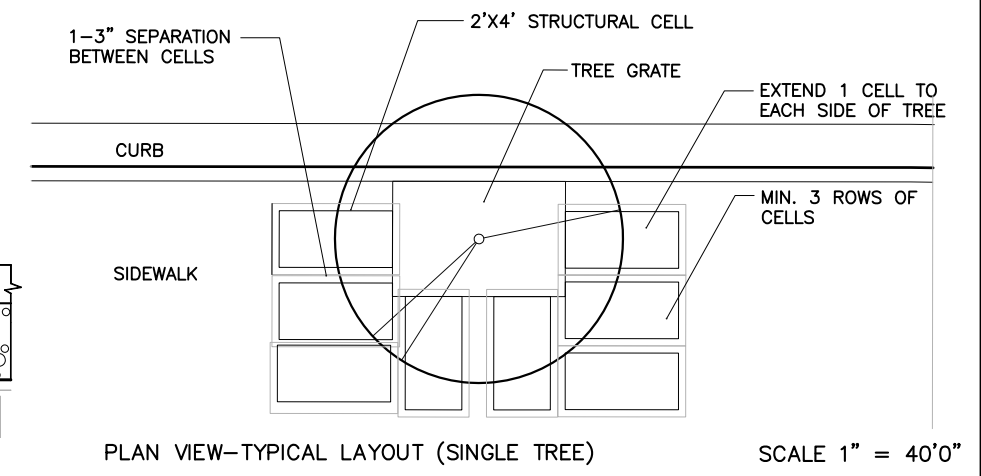
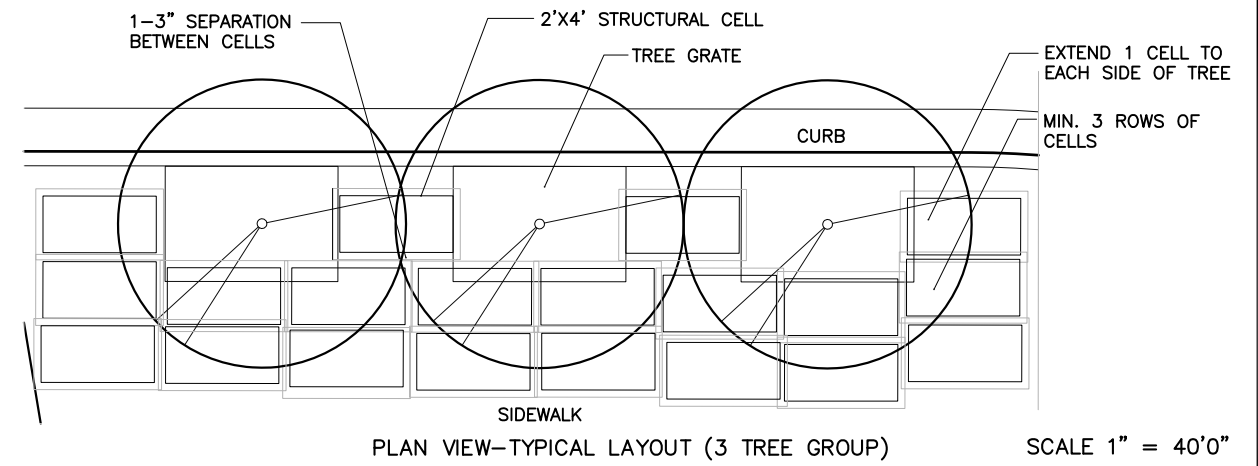
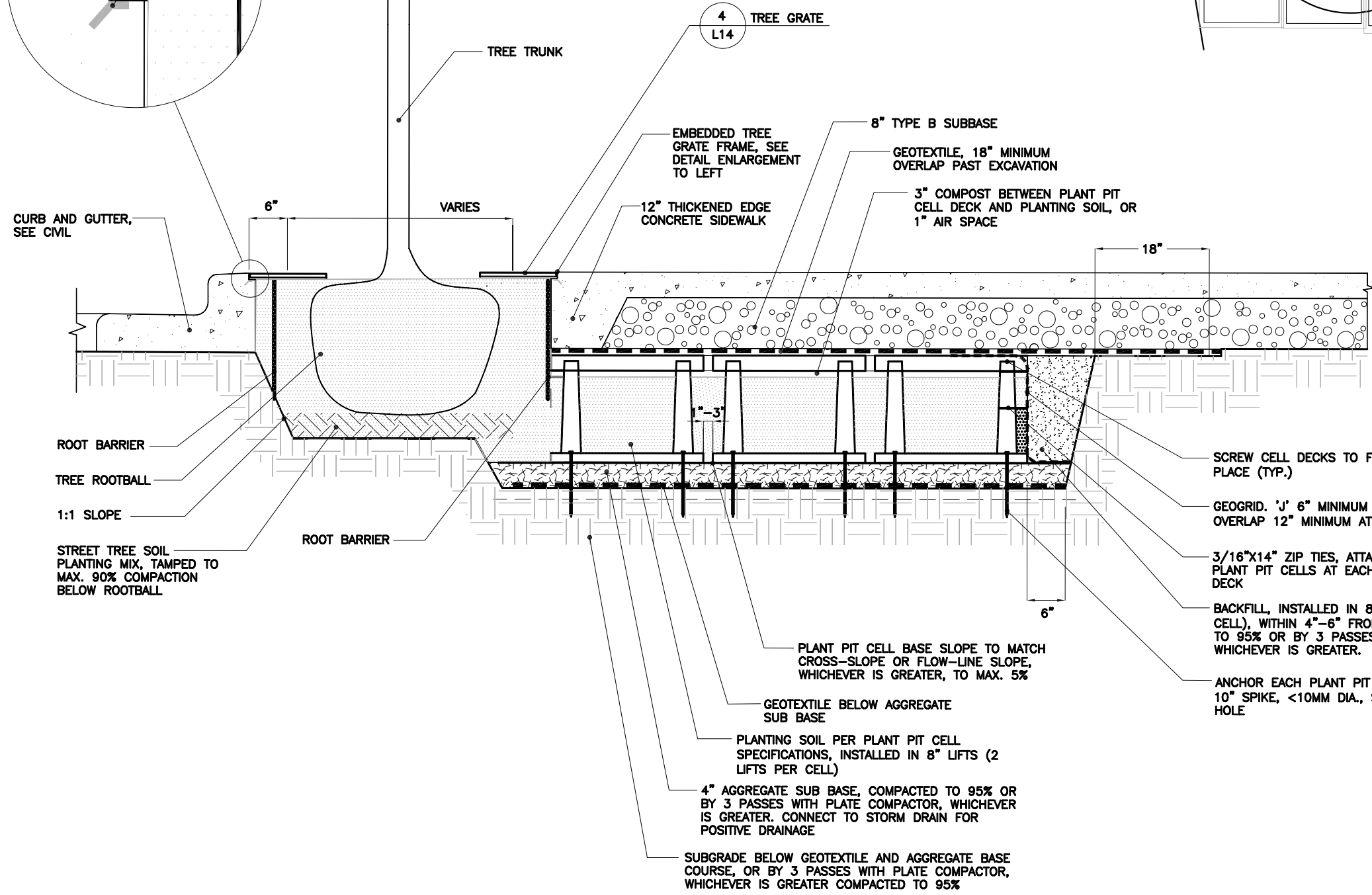
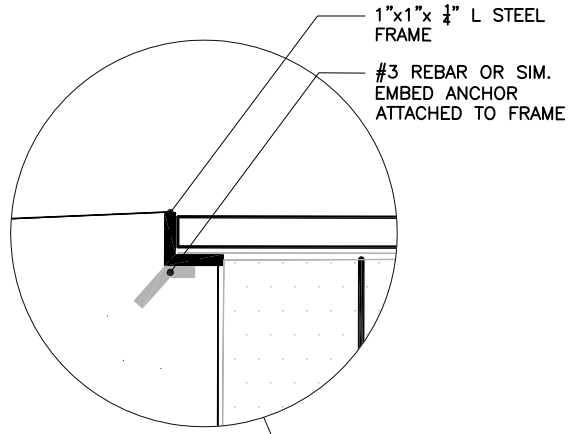


3 LANDSCAPE CURB DETAIL
L15

SCALE: NTS



Wednesday, December 10, 2014, 5:05 PM

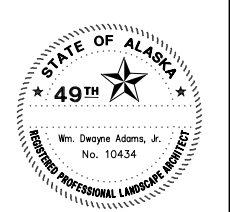


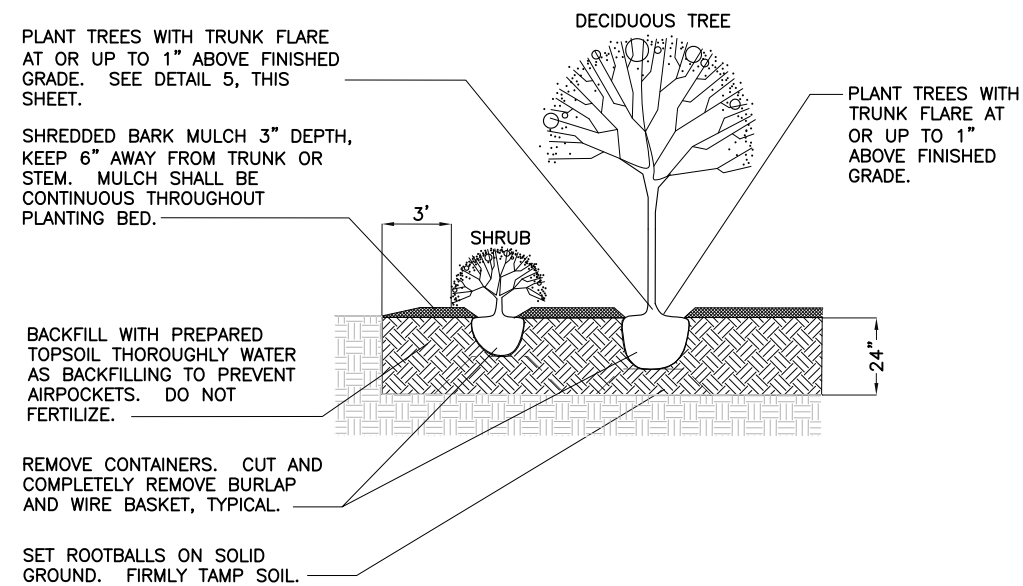
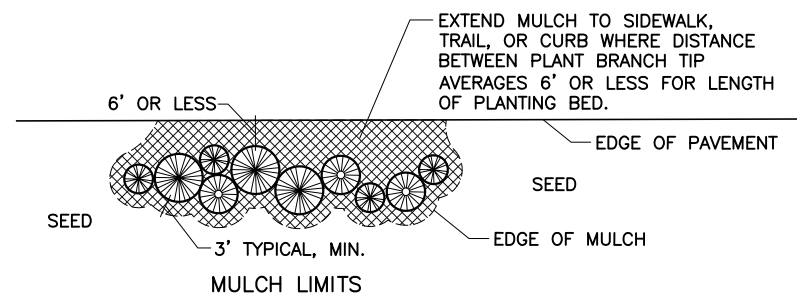
- SCREW CELL DECKS TO FRAMES AFTER SNAPPING IN PLACE (TYP.)
- GEORRID, 'J' 6" MINIMUM BELOW BACKFILL AT BASE. OVERLAP 12" MINIMUM AT TOP OF CELLS.
- 3/16"x14" ZIP TIES, ATTACHING GEORRID TO PLANT PIT CELLS AT EACH LEVEL AND AT CELL DECK
- BACKFILL, INSTALLED IN 8" MAX. LIFTS (2 LIFTS PER CELL), WITHIN 4"-6" FROM TOP OF DECKS, COMPACTED TO 95% OR BY 3 PASSES WITH PLATE COMPACTOR, WHICHEVER IS GREATER.
- ANCHOR EACH PLANT PIT CELL TO GROUND WITH (4) 10" SPIKE, <10MM DIA., SEE CELL BASE FOR SPIKE HOLE

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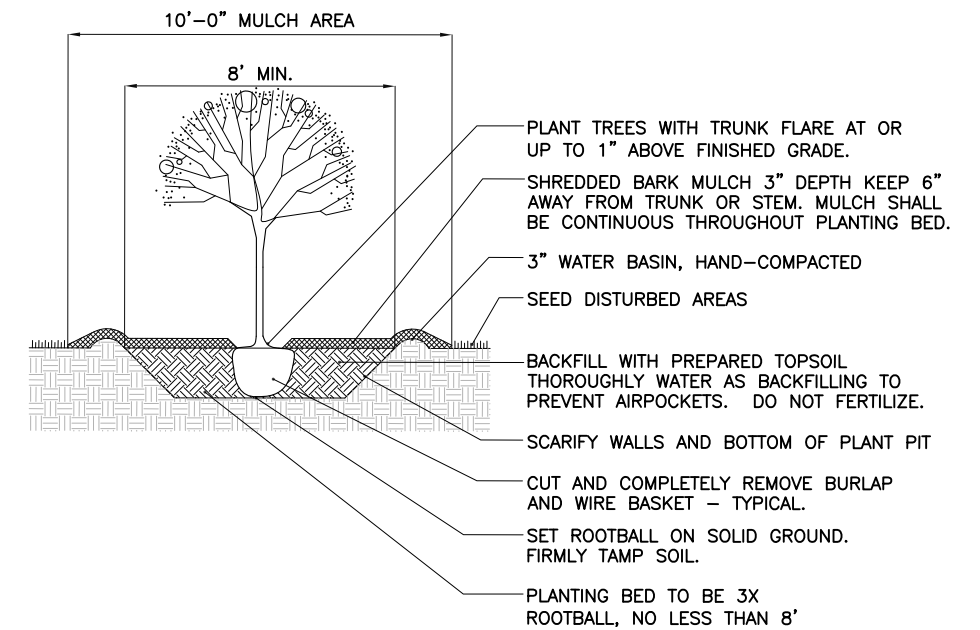
1 STREET TREE - PLANT PIT CELL DETAIL
L16

SCALE: NTS

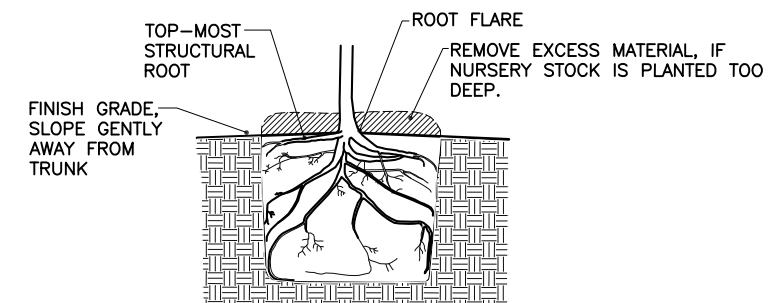




- NOTES:
- PREPARE PLANTING BED AS SHOWN ON PLANS:
 - EXCAVATE AND REMOVE SOIL
 - TILL SUBGRADE
 - VERIFY DRAINAGE IS ADEQUATE
 - BACKFILL WITH TOPSOIL
 - PLANT TREES AND SHRUBS AFTER LANDSCAPE ARCHITECT HAS APPROVED STAKED LOCATIONS
 - CONTRACTOR TO VERIFY LOCATION OF UTILITIES PRIOR TO EXCAVATION
 - SEVERAL AREAS ON PLANS REQUIRE LARGE AREAS OF MULCH. CONTRACTOR TO PROVIDE MULCH BETWEEN PLANTINGS AND BUILDING, UP TO PROPERTY LINE, EDGING OR EXISTING VEGETATION, WHERE PLANTING BEDS ARE ADJACENT TO EXISTING VEGETATION.



2 SINGLE TREE PLANTING SCALE: NTS

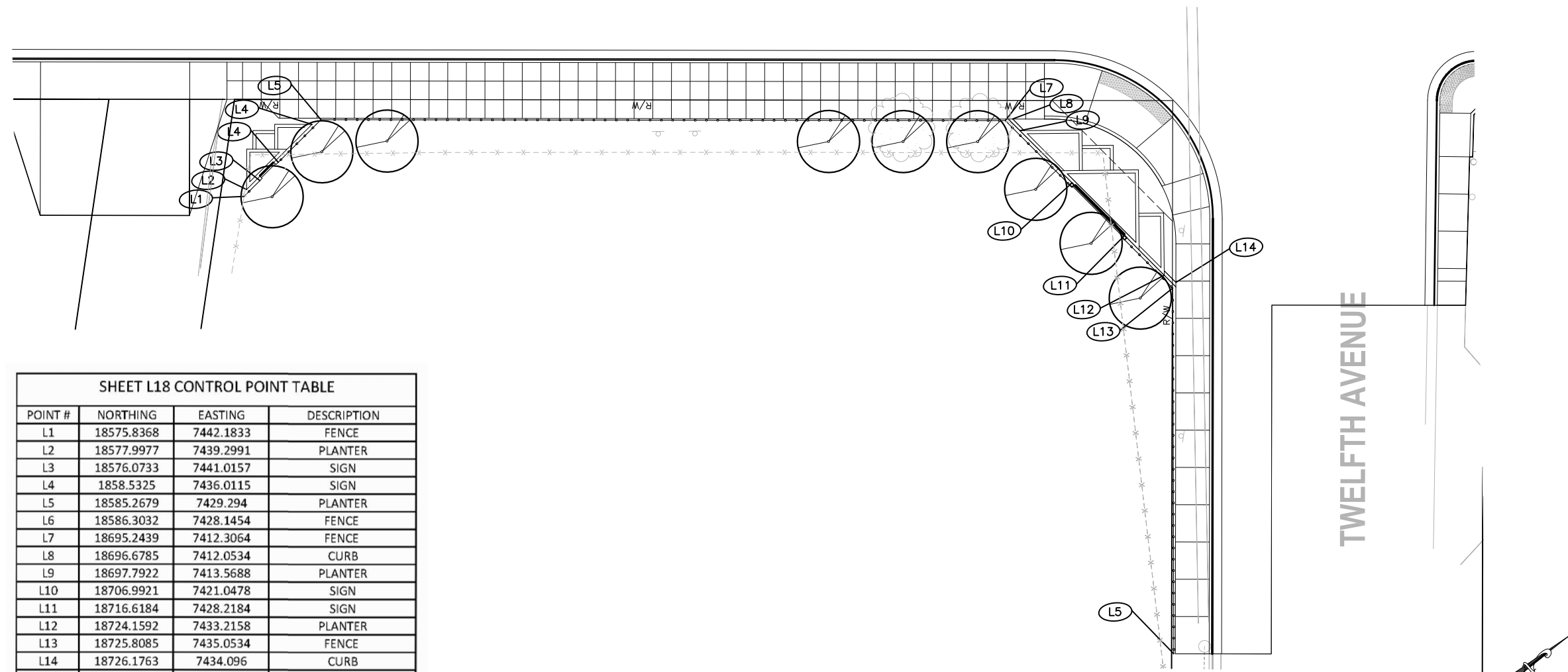


3 PLANTING DEPTH DETAIL SCALE: NTS

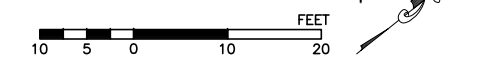
1 PLANTING BED DETAIL SCALE: NTS

| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | L18 | -- |

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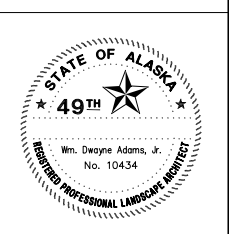


| SHEET L18 CONTROL POINT TABLE | | | |
|-------------------------------|------------|-----------|-------------|
| POINT # | NORTHING | EASTING | DESCRIPTION |
| L1 | 18575.8368 | 7442.1833 | FENCE |
| L2 | 18577.9977 | 7439.2991 | PLANTER |
| L3 | 18576.0733 | 7441.0157 | SIGN |
| L4 | 1858.5325 | 7436.0115 | SIGN |
| L5 | 18585.2679 | 7429.294 | PLANTER |
| L6 | 18586.3032 | 7428.1454 | FENCE |
| L7 | 18695.2439 | 7412.3064 | FENCE |
| L8 | 18696.6785 | 7412.0534 | CURB |
| L9 | 18697.7922 | 7413.5688 | PLANTER |
| L10 | 18706.9921 | 7421.0478 | SIGN |
| L11 | 18716.6184 | 7428.2184 | SIGN |
| L12 | 18724.1592 | 7433.2158 | PLANTER |
| L13 | 18725.8085 | 7435.0534 | FENCE |
| L14 | 18726.1763 | 7434.096 | CURB |
| L15 | 18734.5352 | 7493.2808 | FENCE |



Wednesday, December 10, 2014, 5:05 PM

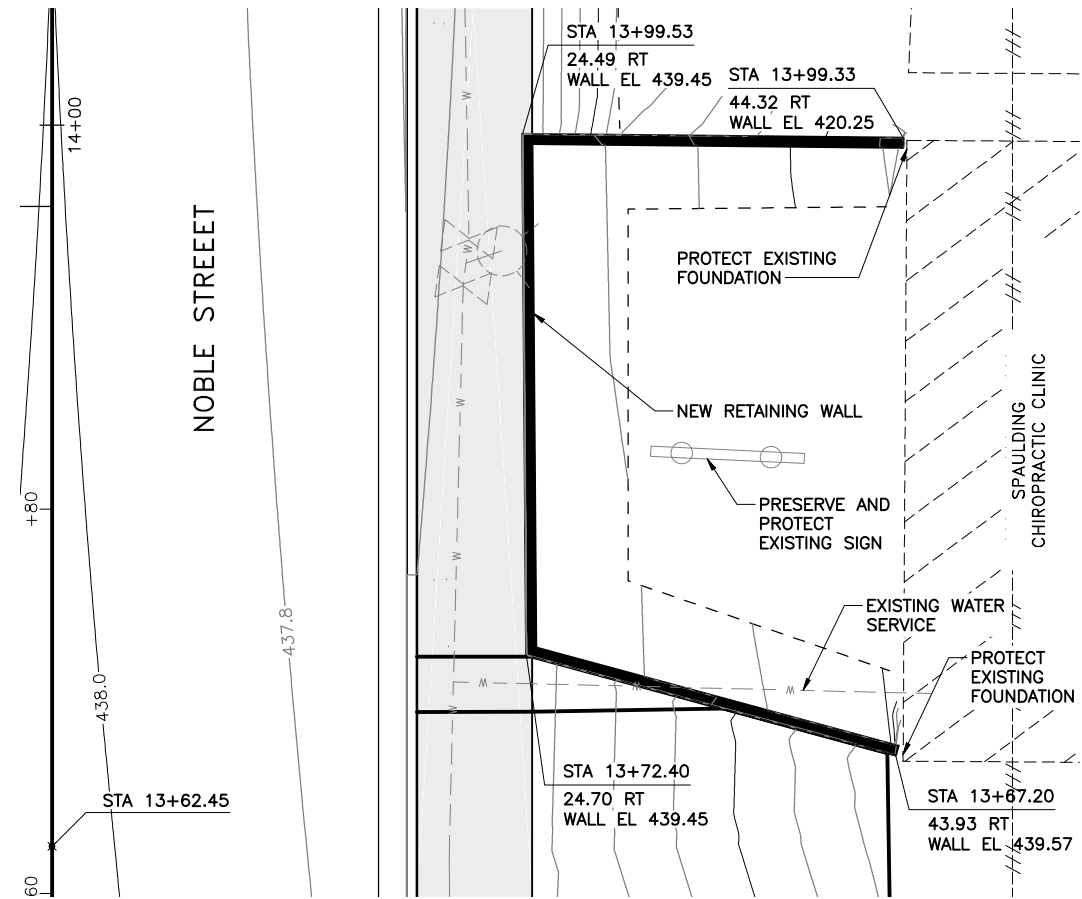
LANDSCAPE CONTROL POINTS



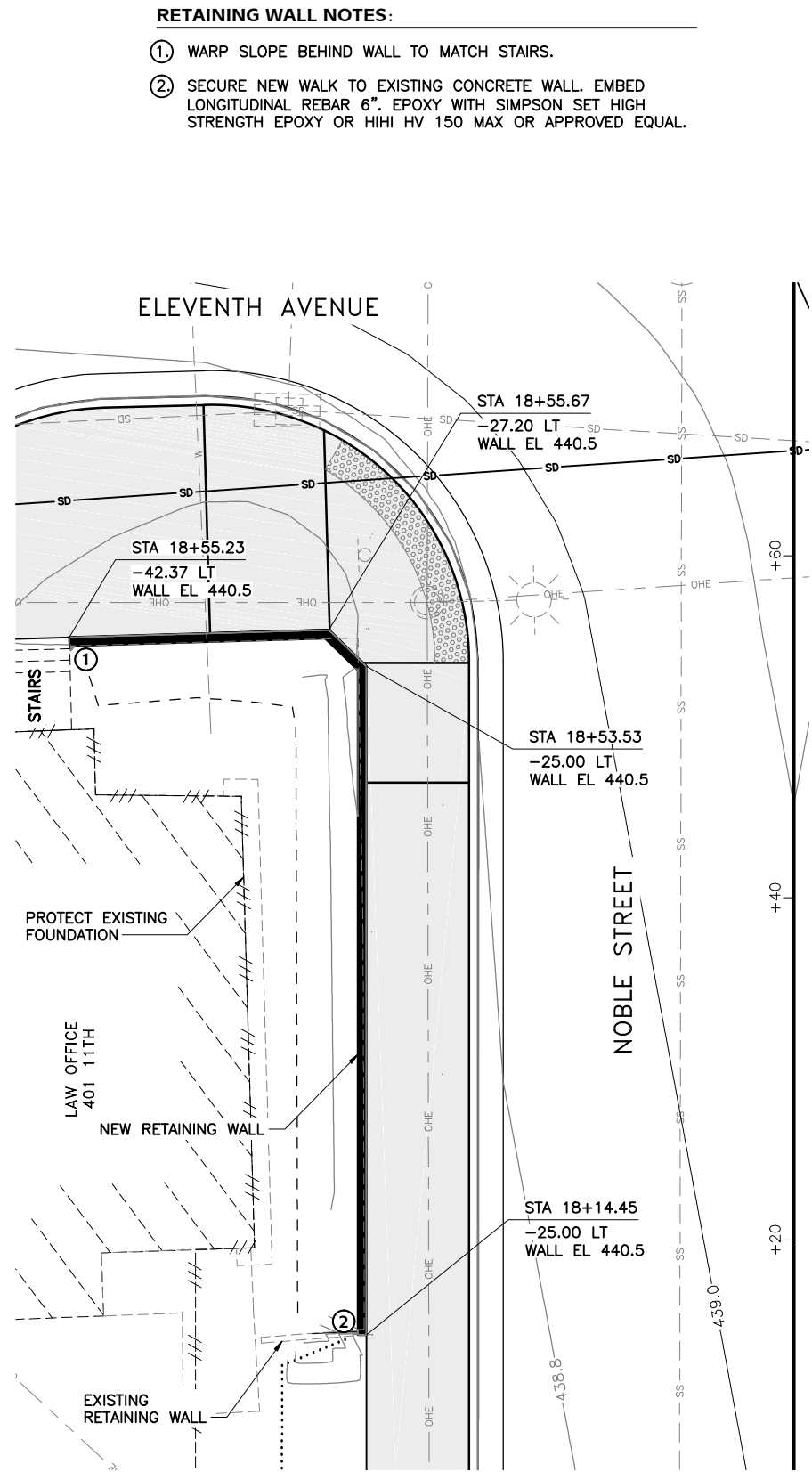
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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | M1 | -- |

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SPAULDING CHIROPRACTIC RETAINING WALL

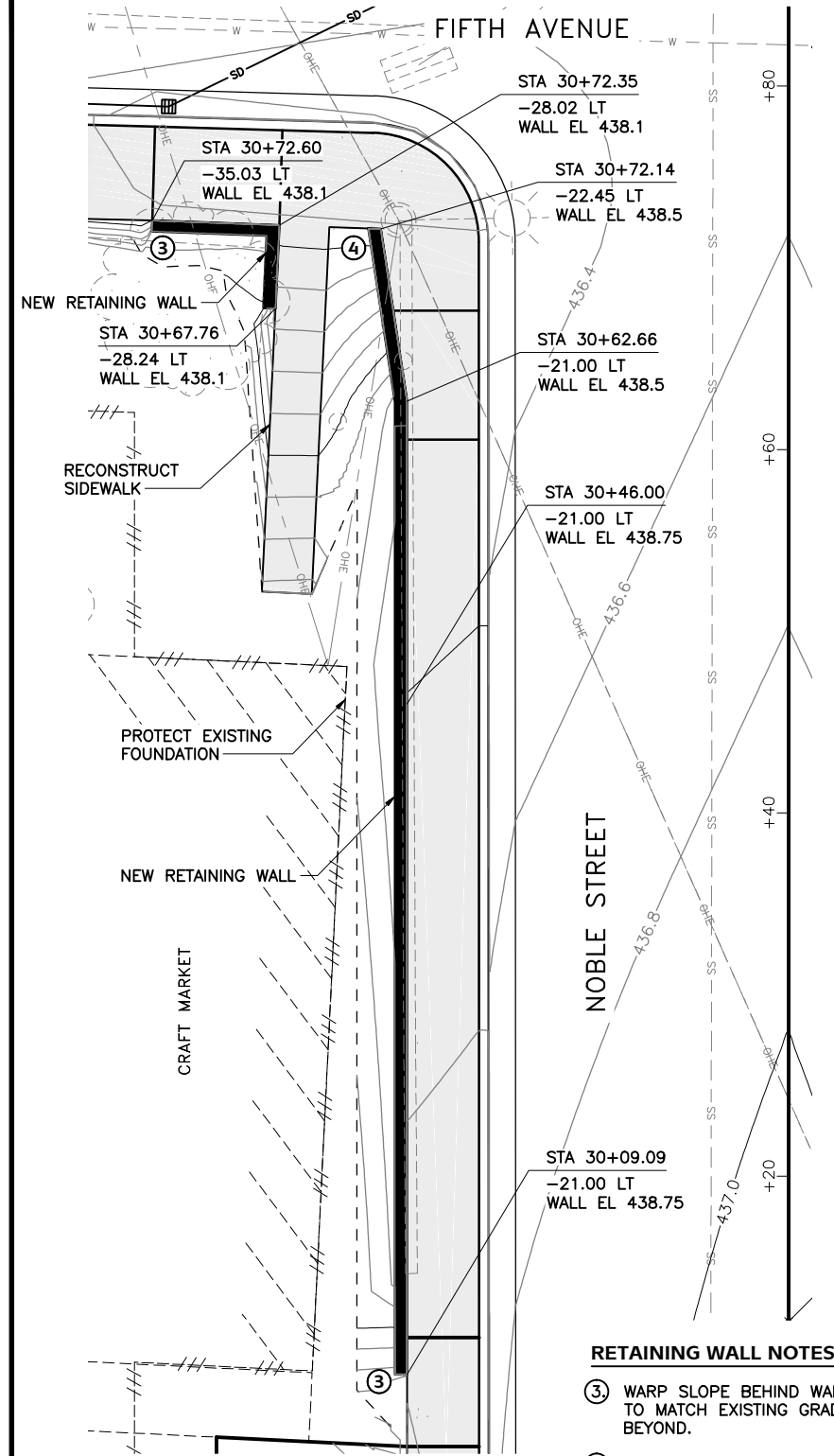


LAW OFFICE RETAINING WALL



RETAINING WALL NOTES:

- ① WARP SLOPE BEHIND WALL TO MATCH STAIRS.
- ② SECURE NEW WALK TO EXISTING CONCRETE WALL. EMBED LONGITUDINAL REBAR 6". EPOXY WITH SIMPSON SET HIGH STRENGTH EPOXY OR HIHI HV 150 MAX OR APPROVED EQUAL.



CRAFT MARKET RETAINING WALL



RETAINING WALL NOTES:

- ③ WARP SLOPE BEHIND WALL TO MATCH EXISTING GRADE BEYOND.
- ④ WARP SLOPE BEHIND WALL TO MATCH NEW SIDEWALK.

RETAINING WALL PLANS



RETAINING WALL NOTES:

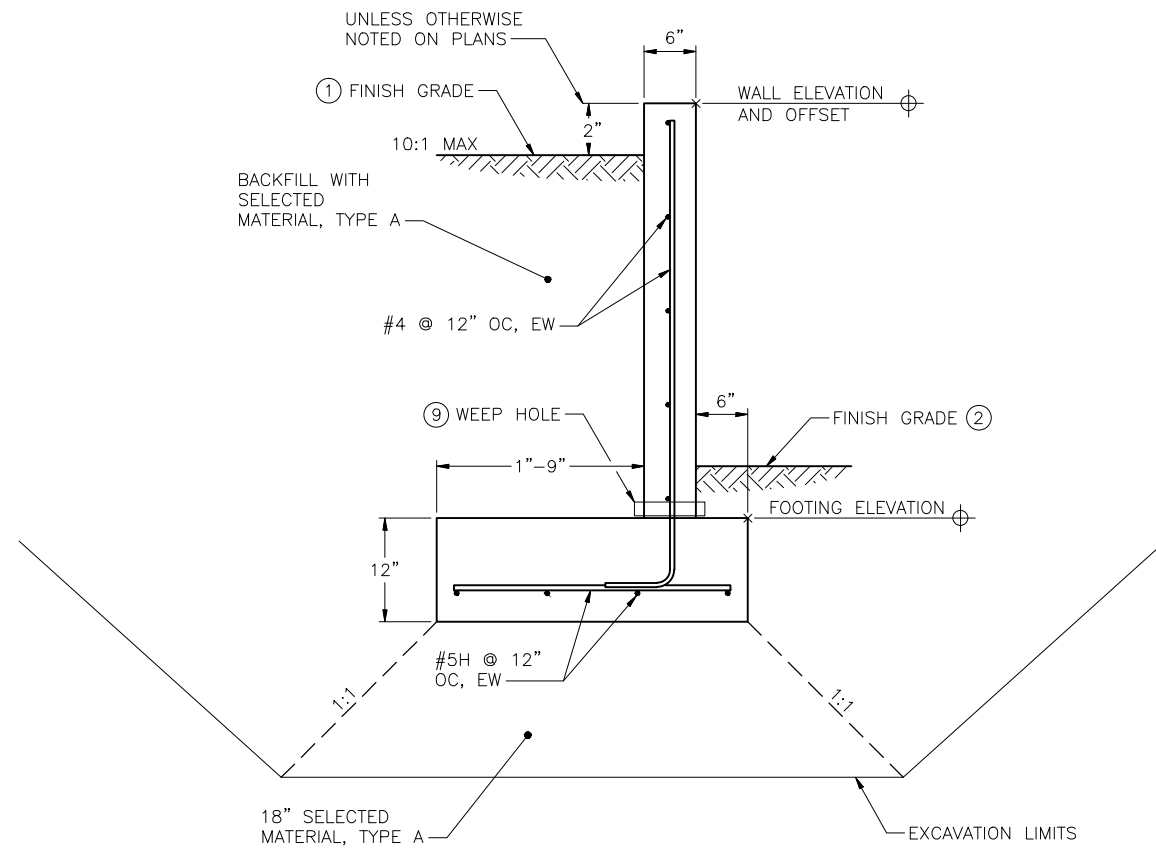
- ① SLOPE VARIES MATCH EXISTING MATERIAL. SEE TYPICAL SECTION FOR MATERIAL TYPE LOCATIONS.
- ② SEE TYPICAL SECTIONS FOR SIDEWALK ELEVATIONS.
3. ALL CAST-IN-PLACE CONCRETE SHALL HAVE THE FOLLOWING MINIMUM 28 DAY COMPRESSIVE STRENGTHS.
4. ALL CONCRETE 4500 psi
5. ALL CONCRETE PERMANENTLY EXPOSED TO THE WEATHER SHALL CONTAIN AN APPROVED AIR-EXTRANING ADMIXTURE.
6. ALL REINFORCING BARS, EXCEPT AS NOTED, SHALL BE NEW BILLET STEEL CONFORMING TO THE STANDARDS OF ASTM A615, GRADE 60.
7. MINIMUM CONCRETE COVER SHALL BE:
 - A. 3" FOR CONCRETE CAST AGAINST THE EARTH
 - B. 1½" FOR BARS EXPOSED TO WEATHER AND WALLS
 - C. ¾" FOR SLABS
8. PLACE 1.5" CHAMFER CONTROL JOINT @ 10'-0" O.C. ALONG THE LENGTH OF WALL. CUT EVERY OTHER HORIZONTAL BAR.
- ⑨ 1"Ø WEEP HOLES TO BE PLACED AT 10'-0" O.C.

| LAP LENGTH TABLE | | |
|------------------|---------------------|---------------------|
| BAR SIZE | L _B (IN) | L _T (IN) |
| 4 | 25 | 32 |
| 5 | 31 | 40 |

REBAR NOTES:

1. L_B = LAP LENGTH OF VERTICAL BARS AND HORIZONTAL BARS WITH LESS THAN 12 INCHES OF FRESH CONCRETE BELOW.
2. L_T = LAP LENGTH OF HORIZONTAL BARS WITH MORE THAN 12 INCHES OF FRESH CONCRETE BELOW.

| FOOTING ELEVATION | |
|------------------------|-----------|
| RETAINING WALL | ELEVATION |
| SPAULDING CHIROPRACTIC | 436.60 |
| LAW OFFICE | 437.75 |
| CRAFT MARKET | 435.30 |



RETAINING WALL SECTION
NTS

RETAINING WALL DETAILS



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | P1 | -- |

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SITE INFORMATION:

1. SITE FUNCTION: ROAD
2. 2-YEAR, 24-HOUR RAINFALL EVENT: 1.09 INCHES (SOURCE: http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_ak.html) FAIRBANKS, AK)
3. AVERAGE ANNUAL PRECIPITATION: 10.53 INCHES RAINFALL (SOURCE: WESTERN REGIONAL CLIMATE CENTER) FOR FAIRBANKS WSO AIRPORT.
4. STAGING AND STOCKPILE AREAS: CONTRACTOR MUST SEEK LOCATIONS FOR STOCKPILING MATERIAL, AND STAGING AND STORAGE OF EQUIPMENT. STAGING AREAS MUST COMPLY WITH CGP, SWPPP, SECTION 641, AND ALL PERMITS.
5. PROJECT AREAS ARE LISTED BELOW (MATERIAL SITES NOT INCLUDED):

| PROJECT INFORMATION TABLE | |
|--|------|
| PROJECT AREA (ACRE) | 6.47 |
| DISTURBED AREA (ACRE) | 5.75 |
| USACE SECTION 404 PERMIT AREA (ACRE) | NA |
| CONSTRUCTION GENERAL PERMIT AREA (ACRE) | 6.47 |
| PRE-CONSTRUCTION IMPERVIOUS AREA (ACRE) | 84 |
| POST-CONSTRUCTION IMPERVIOUS AREA (ACRE) | 84 |
| PRE-CONSTRUCTION RUNOFF COEFFICIENT | 0.70 |
| POST-CONSTRUCTION RUNOFF COEFFICIENT | 0.70 |

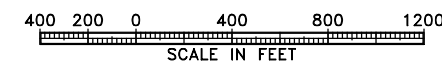
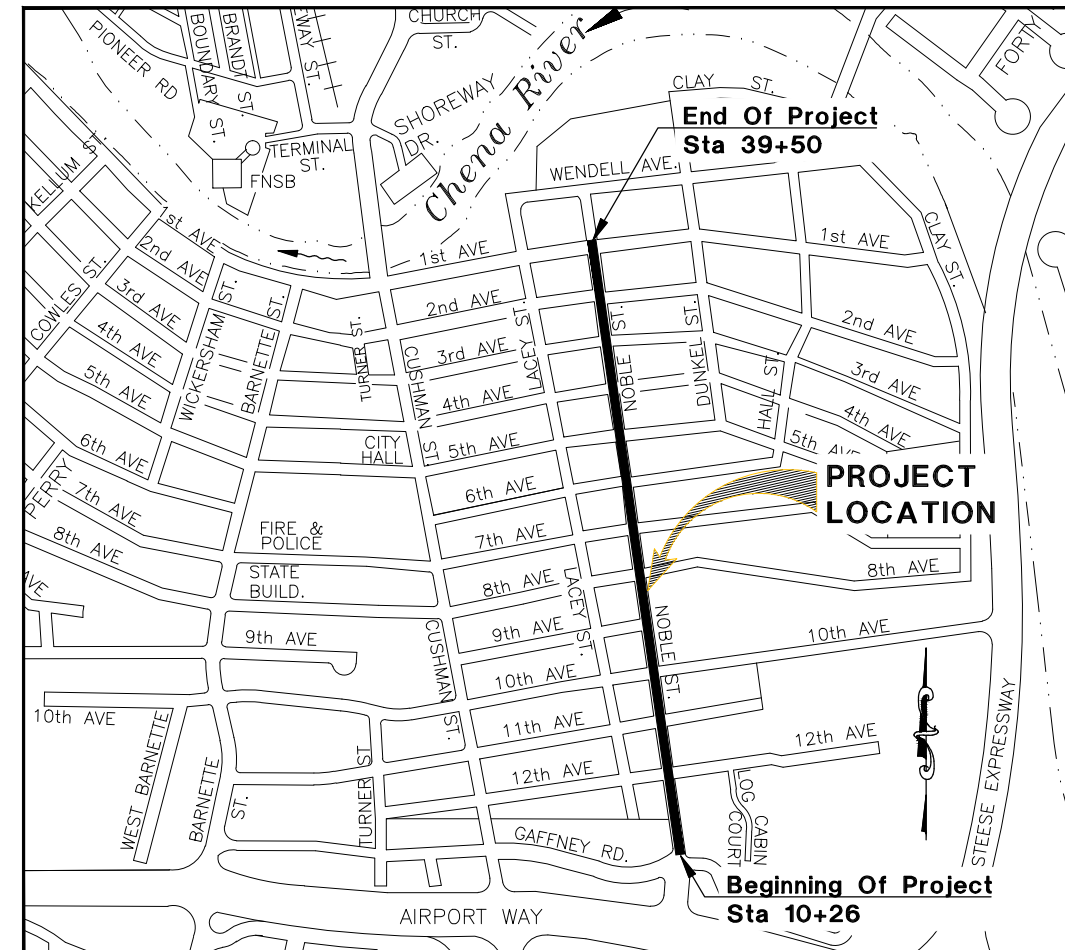
6. LANDSCAPE TOPOGRAPHY: VERY FLAT HIGHLY URBANIZED.
7. DRAINAGE PATTERNS: WATER FLOWS NORTH BY NORTHWEST ACROSS THE PROJECT AREA.
8. APPROXIMATE GROWING SEASON: MAY 3 THROUGH OCTOBER 3 (SOURCE: USACE WETLANDS DELINEATION MANUAL: ALASKA REGION (VERSION 2)).
9. EXISTING VEGETATION: LIMITED LANDSCAPED GRASS, TREES AND SHRUBS.
10. HISTORIC SITE CONTAMINATION: CONTAMINATED SITES HAVE BEEN IDENTIFIED WITHIN THE PROJECT AREA. REFER TO SECTION 802.

ENVIRONMENTAL INFORMATION:

1. RECEIVING WATERS: CHENA RIVER LOCATED APPROXIMATELY 500 FT NORTHWEST OF THE PROJECT.
2. IMPAIRED WATER BODIES: CHENA RIVER
3. TOTAL MAXIMUM DAILY LOAD (TMDL): NONE
4. STORM SEWER/DRAINAGE SYSTEMS: FAIRBANKS MS4
5. THREATENED AND ENDANGERED SPECIES: NONE
6. HISTORICAL & CULTURAL RESOURCE PRESENCE: HISTORIC AND CULTURAL RESOURCES ARE FOUND NEAR THE PROJECT AREA BUT NO ADVERSE IMPACTS ANTICIPATED.
7. FISH & WILDLIFE HABITAT PRESENCE: NONE

GENERAL:

1. READ AND COMPLY WITH THE CGP AND SECTION 641 OF THE PROJECT SPECIFICATIONS.
2. A SWPPP AND HMCP ARE REQUIRED FOR THIS PROJECT.
3. EROSION AND SEDIMENT CONTROL FEATURES MUST BE BASED ON THE DOT&PF MANUAL "ALASKA STORM WATER POLLUTION PREVENTION PLAN GUIDE" (FEBRUARY 2011 OR LATEST VERSION) AND LATEST BMPs.
4. DEVICES MAY NEED TO BE REMOVED AND REINSTALLED TO ALLOW CONSTRUCTION ACTIVITIES TO PROCEED. MAINTAIN ALL DEVICES DAILY INCLUDING, BUT NOT LIMITED TO REMOVAL AND DISPOSAL OF ACCUMULATED SOILS, CLEANING DEVICES AND REPLACEMENT OF DAMAGED DEVICES.
5. STOCKPILE AND STAGING LOCATIONS MUST BE RECLAIMED TO THEIR ORIGINAL CONDITION.
6. ENSURE LOADS ARE STABLE OR COVERED SO NO MATERIAL ESCAPES DURING HAULING ACTIVITIES.
7. PROVIDE CONCRETE WASHOUT FACILITIES.
8. PROVIDE VEHICLE CLEANING EQUIPMENT OR OTHER APPROVED CONTROLS TO PREVENT TRACKING OF DIRT AND GRAVEL ONTO PAVED SURFACES.



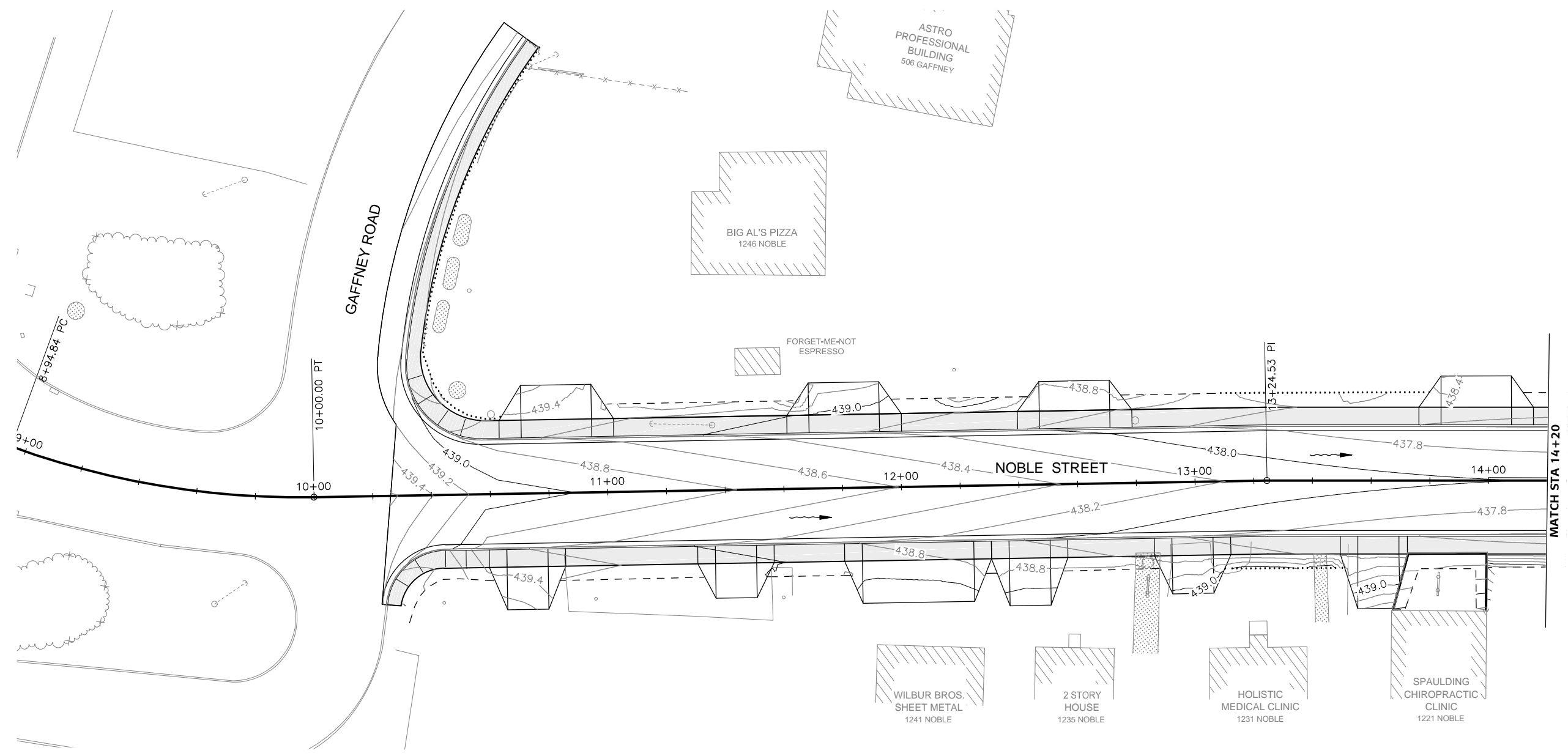
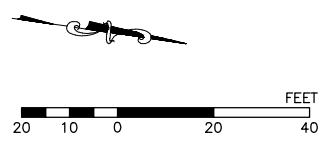
ESCP LEGEND:

- R/W RIGHT OF WAY
- SURFACE WATER FLOW DIRECTION
- TEMPORARY PERIMETER CONTROL - VEGETATIVE BUFFER STRIPS OR FIBER ROLLS (BMP AK-16 OR AK-8, ALASKA SWPPP GUIDE) OR FUNCTIONAL EQUIVALENT TO MANUFACTURER'S SPECIFICATIONS
- INLET PROTECTION (BMP AK-19)

EROSION CONTROL NOTES

| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | P2 | -- |

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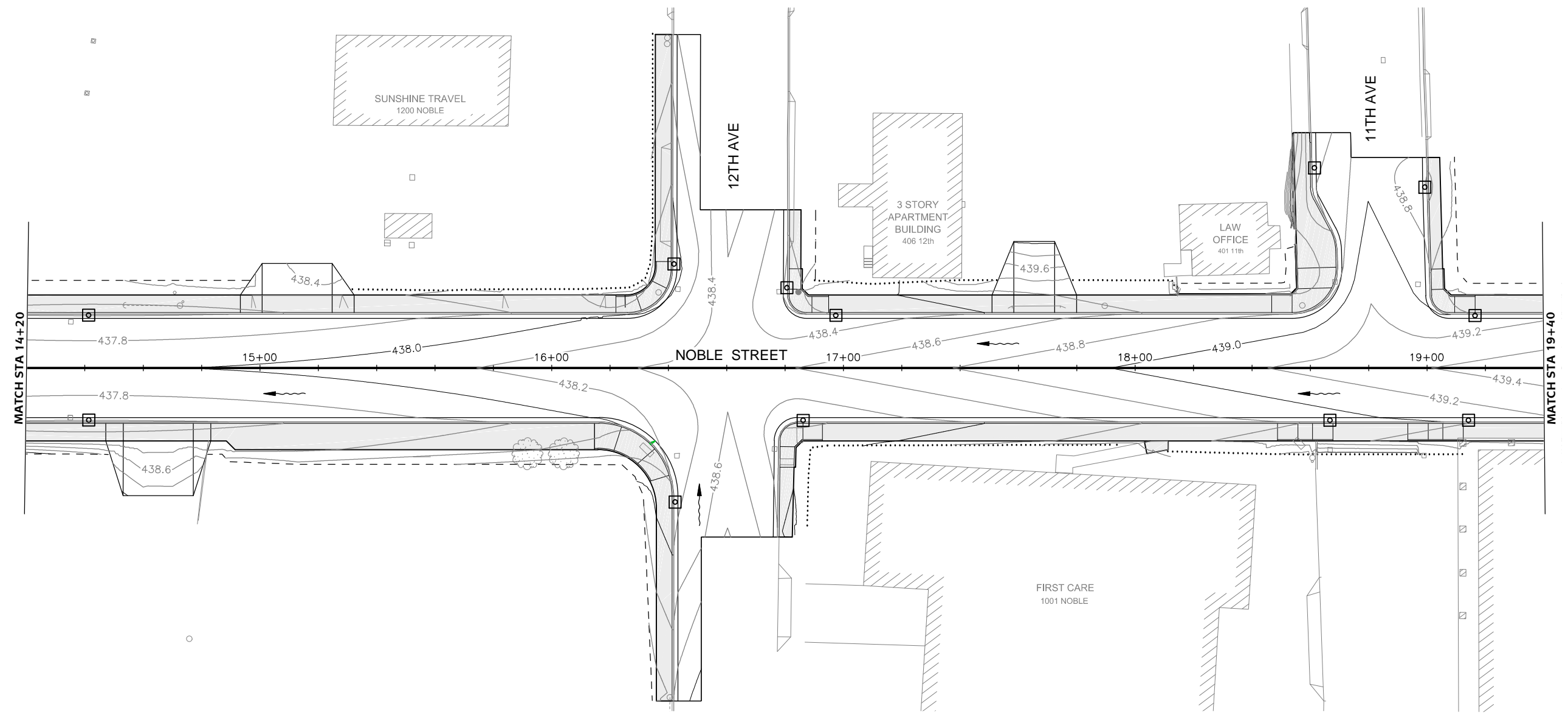
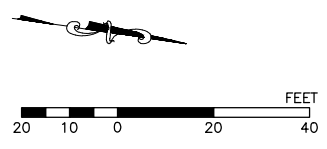


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EROSION AND SEDIMENT CONTROL PLAN (1 OF 6)

| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | P3 | -- |

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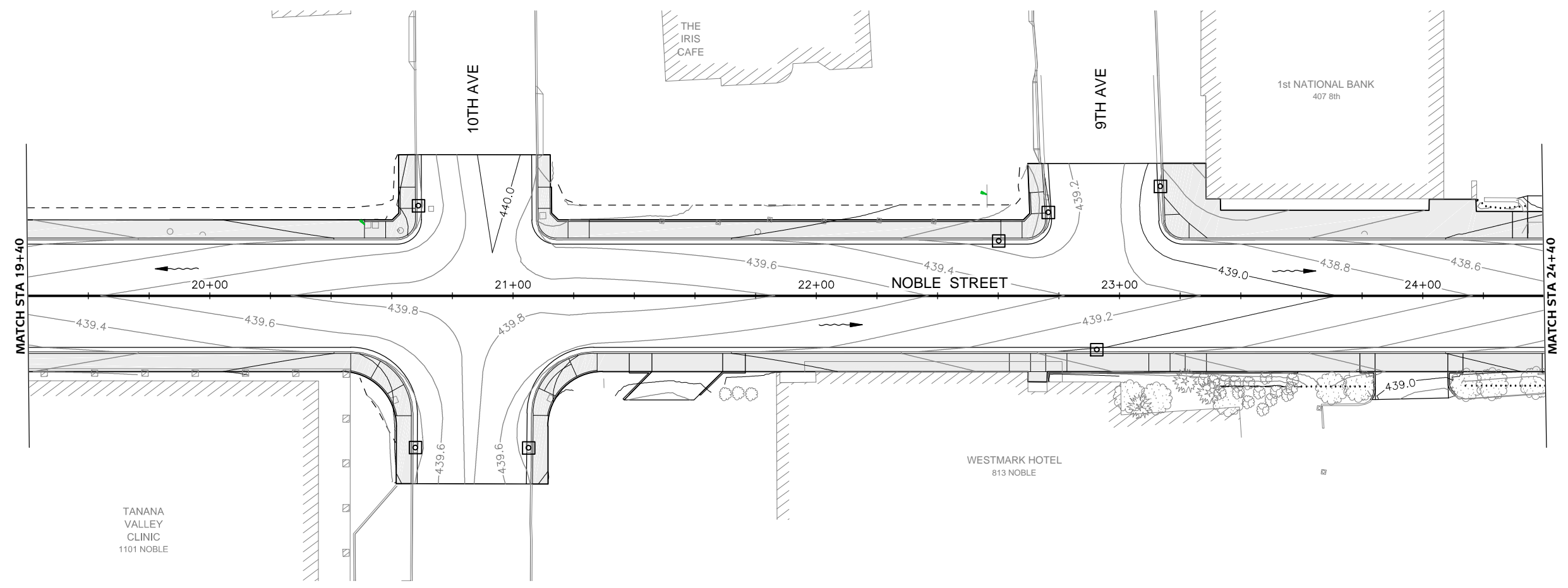
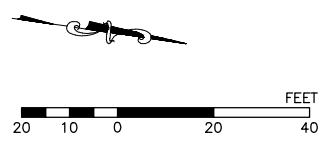


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EROSION AND SEDIMENT CONTROL PLAN (2 OF 6)

| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | P4 | -- |

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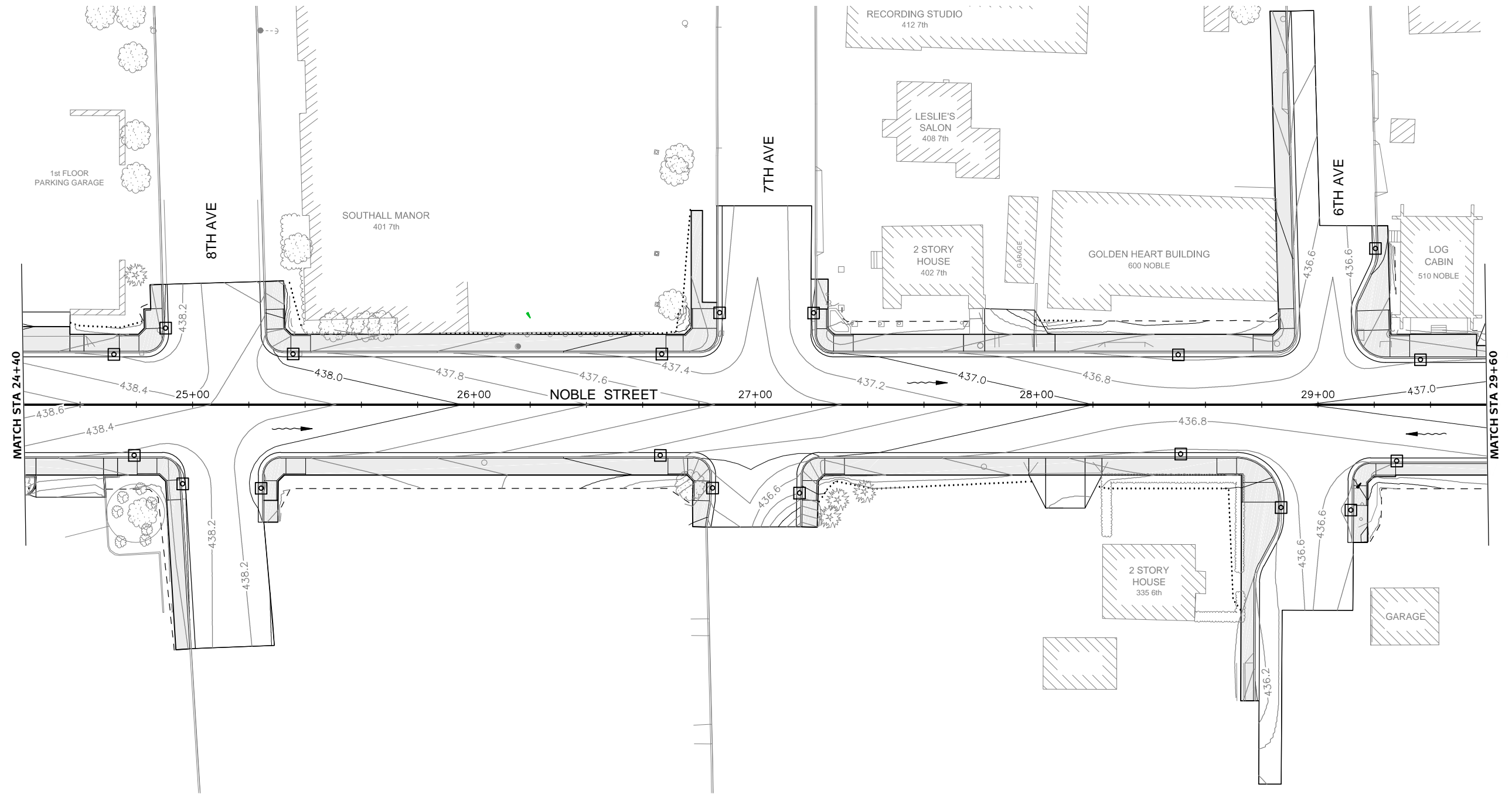
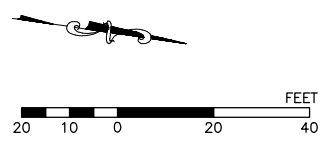


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EROSION AND SEDIMENT CONTROL PLAN (3 OF 6)

| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | P5 | -- |

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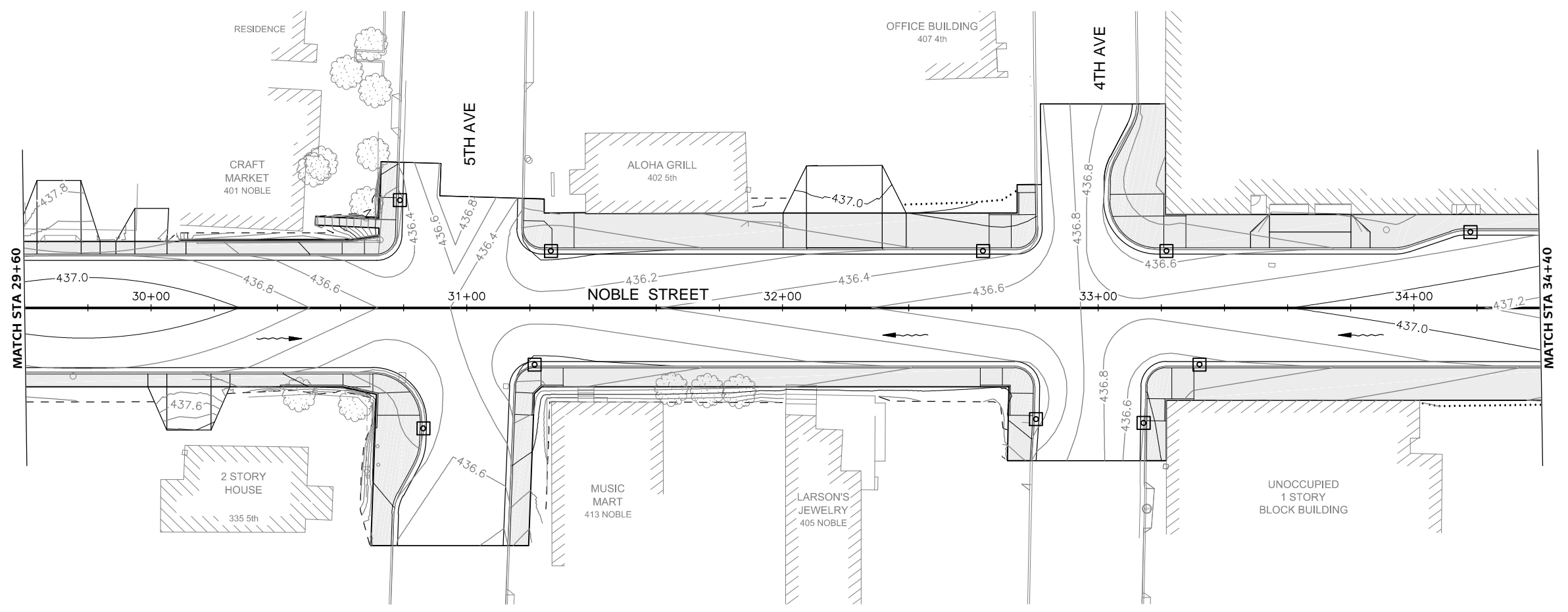
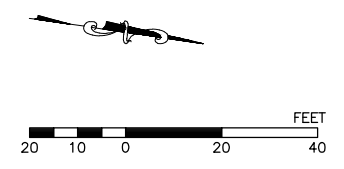


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EROSION AND SEDIMENT CONTROL PLAN (4 OF 6)

| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | P6 | -- |

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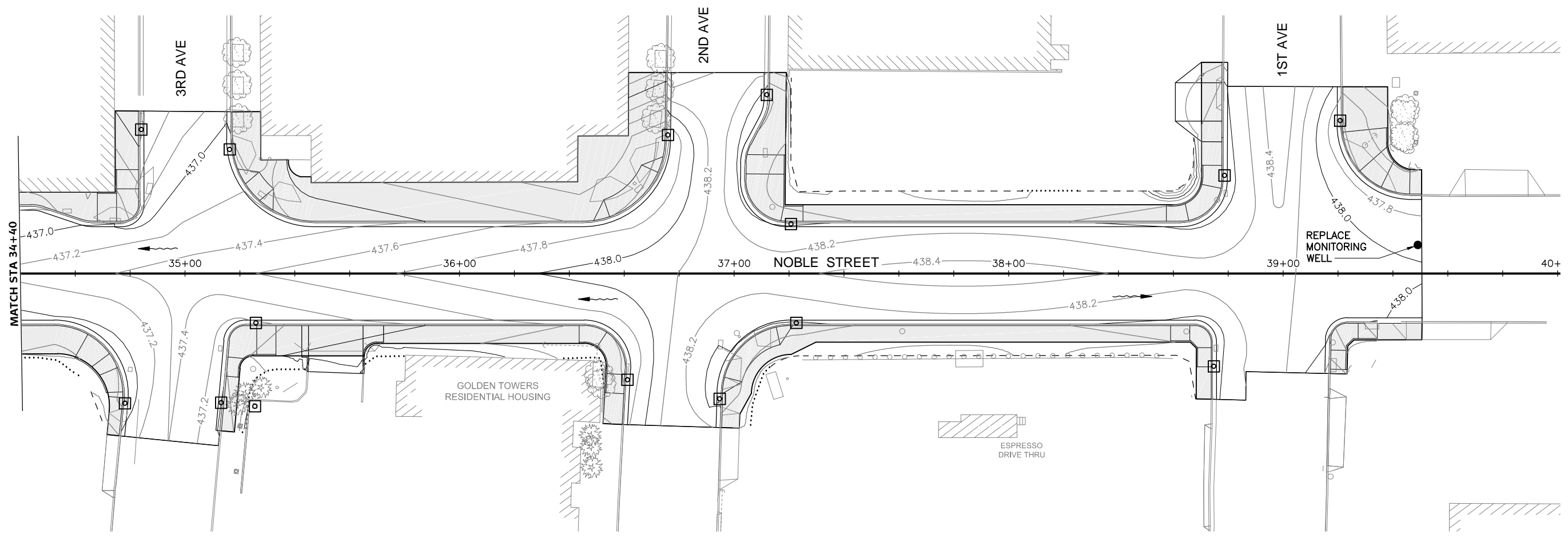
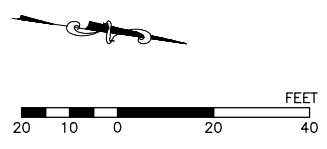


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EROSION AND SEDIMENT CONTROL PLAN (5 OF 6)

| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | P7 | -- |

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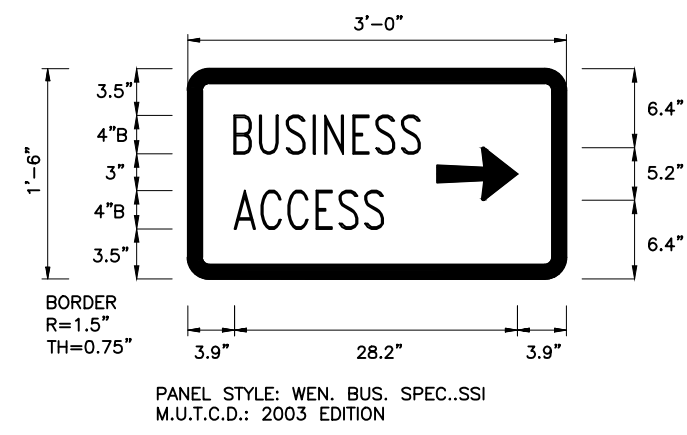


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EROSION AND SEDIMENT CONTROL PLAN (6 OF 6)

| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | T1 | -- |

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BORDER
R=1.5"
TH=0.75"

PANEL STYLE: WEN. BUS. SPEC..SSI
M.U.T.C.D.: 2003 EDITION

TRAFFIC CONTROL GENERAL NOTES

1. MAINTAIN ACCESS TO BUSINESSES DURING BUSINESS HOURS. MAINTAIN CONTINUOUS, 24 HR/7 DAYS PER WEEK ACCESS TO RESIDENCE AND HOTELS. BUSINESSES WITHIN THE PROJECT LIMITS MAY HAVE DELIVERIES AND GARBAGE PICK-UP DURING NON-BUSINESS HOURS. CONTRACTOR SHALL CONTACT ALL BUSINESSES IN THE PROJECT LIMITS AND COORDINATE WITH THEM TO ENSURE ACCESS. PAYMENT FOR THIS WORK IS SUBSIDIARY TO BID ITEM 643(2) TRAFFIC MAINTENANCE.
2. NO CONSTRUCTION SHALL OCCUR BETWEEN 11 PM AND 7 AM IN ACCORDANCE WITH CITY OF FAIRBANKS CODE OF ORDINANCES. THE CONTRACTOR MAY APPLY FOR A VARIANCE TO THE NOISE ORDINANCE THROUGH THE CITY OF FAIRBANKS FOR SPECIFIC ACTIVITIES OR DURATIONS.
3. CONTRACTOR TO DETERMINE CONSTRUCTION SEQUENCING AS APPROVED BY ENGINEER. PAYMENT FOR ALL TRAFFIC CONTROL REQUIRED FOR WORK DONE BY UTILITY COMPANIES SHALL BE SUBSIDIARY TO BID ITEM 643(2) TRAFFIC MAINTENANCE.
4. PROVIDE, INSTALL, MAINTAIN, MOVE AND REMOVE TRAFFIC CONTROL DEVICES AND ACCESS ACCORDING TO CURRENT ALASKA TRAFFIC MANUAL, ALASKA SIGN DESIGN SPECIFICATIONS, AND APPROVED TRAFFIC CONTROL PLAN.
5. PUBLIC NOTICE OF ROAD CLOSURES SHALL BE MADE IN ACCORDANCE WITH PUBLIC NOTIFICATION NOTES.
6. MOUNT SIGNS SECURELY. MAINTAIN WORK SITE AND AFFECTED AREAS DAILY.
7. COVER EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION SIGNING. COORDINATE REMOVAL WITH CITY OF FAIRBANKS PUBLIC WORKS DEPARTMENT.
8. CONSTRUCTION SIGNING MAY BE ALTERED BY THE ENGINEER TO MEET CHANGING CONDITIONS AND TO PROTECT THE TRAVELING PUBLIC.
9. ALL BARRICADES SHALL HAVE 1 OPERABLE FLASHING LIGHT FOR EACH 10 FEET OF BARRICADE, WITH A MINIMUM OF 2 LIGHTS PER TYPE III BARRICADE EXCEPT IN A TAPER WHERE ONLY THE FIRST TWO LIGHTS SHALL FLASH (TYPE A) AND THE REMAINDER SHALL BE STEADY BURN (TYPE C).
10. ACCESS SHALL BE MAINTAINED FOR THE PASSAGE FOR EMERGENCY VEHICLES THROUGH THE PROJECT.
11. PROVIDE REASONABLE VEHICULAR ACCESS TO COMMERCIAL PROPERTIES DURING THEIR BUSINESS HOURS. ALTERNATIVE ACCESS MAY ALSO BE USED AS PART OF AN APPROVED TRAFFIC CONTROL PLAN.
12. TYPE "A" FLASHING WARNING LIGHTS SHALL BE USED TO MARK THE TYPE III BARRICADES, ROAD CLOSURES AND ADVANCE DETOUR SIGNING AT NIGHT.
13. INTEGRATE TRAFFIC CONTROL WITH OTHER CONSTRUCTION IN THE AREA.
14. ALL SPECIAL SIGNS SHALL BE BLACK ON ORANGE BACKGROUND WITH BORDERS HAVING 1.5" RADIUS AND 0.75" THICKNESS. SEE SPECIFICATIONS.
15. DRIVEWAYS ADJACENT TO AN EXCAVATION SHALL BE RAMPED TO PROVIDE ACCESS. DELINEATE WITH CONES.
16. INSTALL PEDESTRIAN FENCING AROUND ALL OPEN EXCAVATIONS AT NIGHT.
17. AVOID ROUTING PEDESTRIAN DETOURS ON ROAD SHOULDERS OR STREETS.
18. ALL PEDESTRIAN DETOURS MUST MEET THE ACCESSIBILITY REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA).
19. USE EXPRESSWAY/FREEWAY DIMENSIONS SPECIFIED IN THE AKDOT'S ALASKA SIGN DESIGN SPECIFICATIONS MANUAL FOR ALL SIGNS PLACED ON AIRPORT WAY AND STEESE EXPRESSWAY. USE LISTED CONVENTIONAL DIMENSIONS FOR ALL SIGNS ON OTHER ROADS. REFERENCE AKDOT&PF WEBSITE: [HTTP://WWW.DOT.STATE.AK.US/STWDDDES/DCSTRAFFIC/ASDMSG.SHTML](http://www.dot.state.ak.us/stwddes/dcstraffic/asdmsg.shtml)
20. COORDINATED WITH THE CITY OF FAIRBANKS TO ACCOMMODATE SPECIAL EVENTS SUCH AS THE GOLDEN DAYS PARADE AND STREET FAIRS.
21. FIVE MACS BUS LINES HAVE ROUTES THAT PASS WITHIN THE PROJECT LIMITS (GREEN, BROWN, GOLD, BLUE, AND PURPLE BUS LINES). CONTRACTOR SHALL COORDINATED ROUTE CHANGES AND BUS ACCOMMODATIONS DURING CONSTRUCTION WITH FNSB. PAYMENT IS SUBSIDIARY TO BID ITEM 643(2) TRAFFIC MAINTENANCE
22. EACH SEGMENT OF NOBLE MAY ONLY BE CLOSED FOR XX WEEKS BEFORE REOPENING TO TRAFFIC. EACH DAY DELAY IN OPENING THE ROAD TO TRAFFIC WILL BE PENALIZED PER 643(23) TRAFFIC PRICE ADJUSTMENT.
23. WHEN SIDEWALKS ARE CLOSED TO PEDESTRIANS, PROVIDE PEDESTRIAN TRAFFIC CONTROL PER STANDARD DRAWING C-03.10.

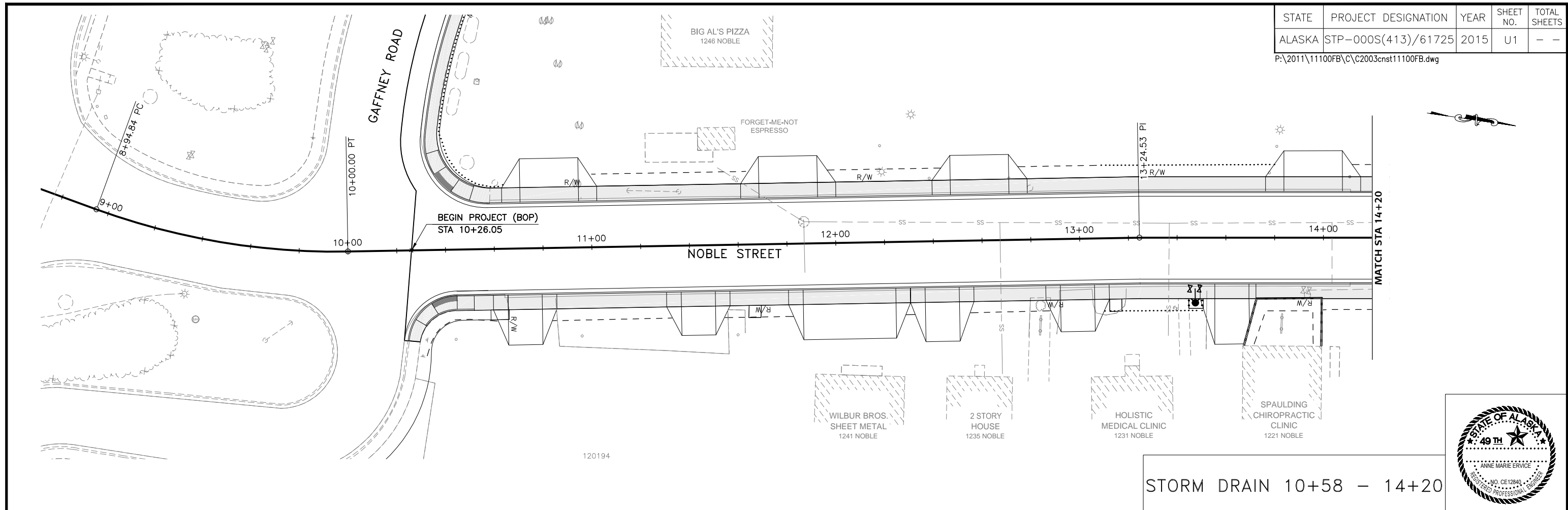
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TRAFFIC CONTROL PLAN



| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | U1 | -- |

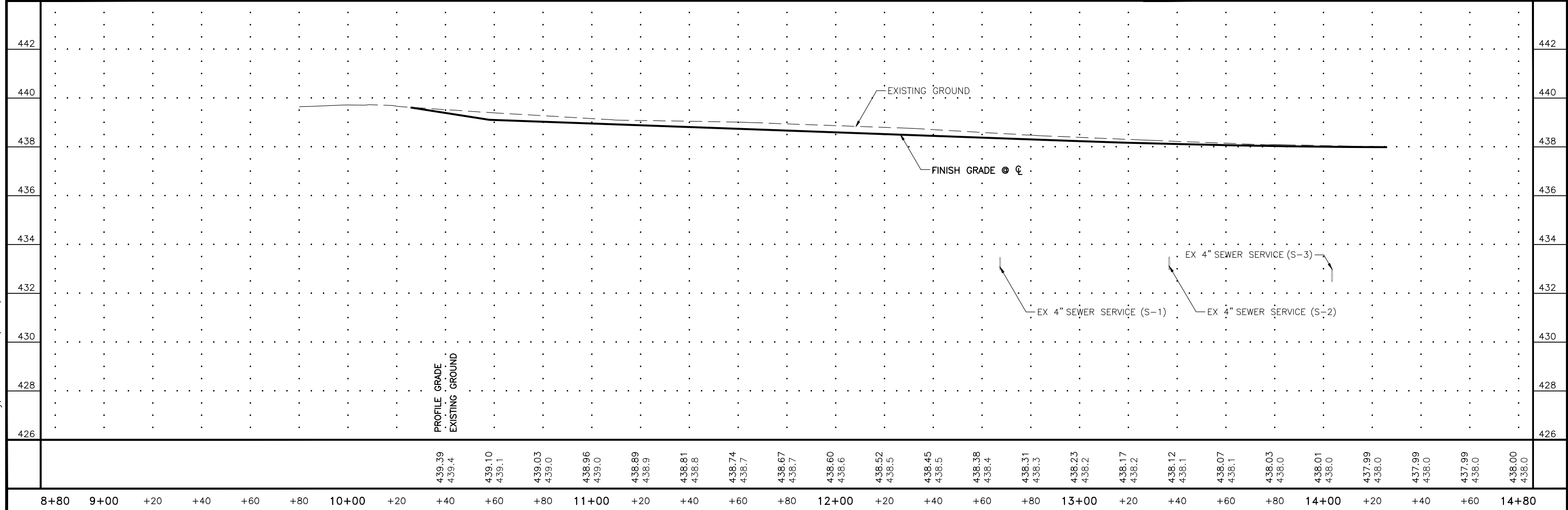
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STORM DRAIN 10+58 - 14+20

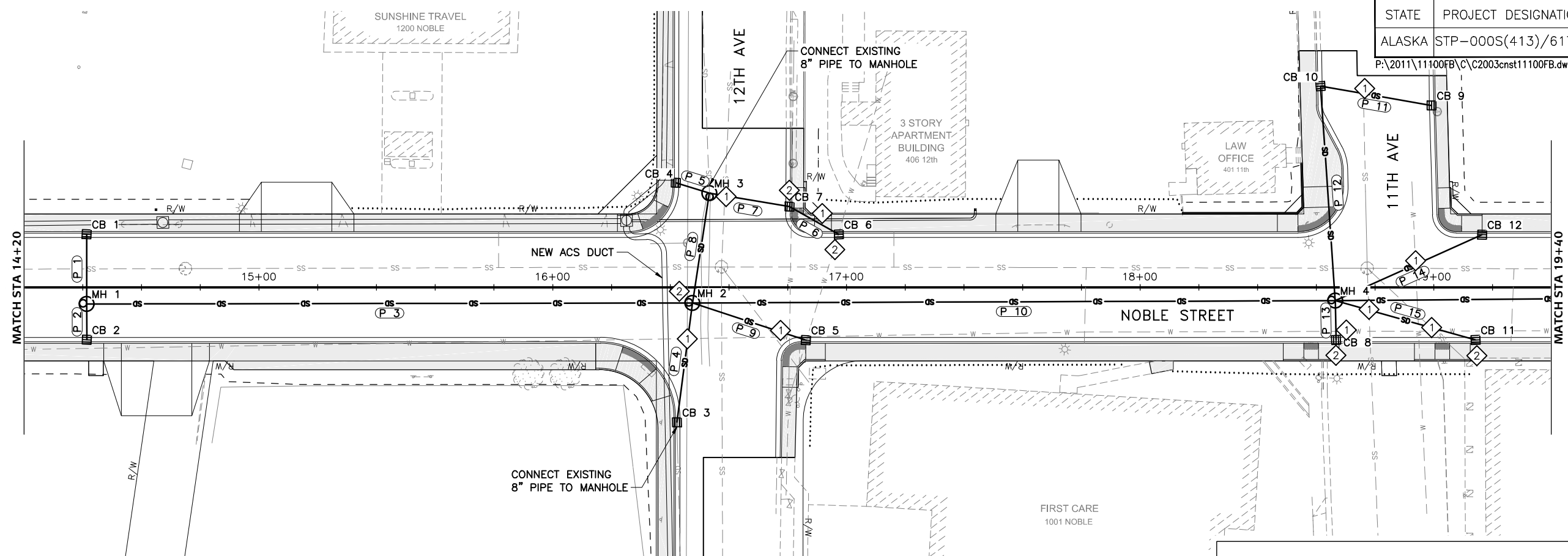


Monday, December 15, 2014, 1:42 PM



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | U2 | -- |

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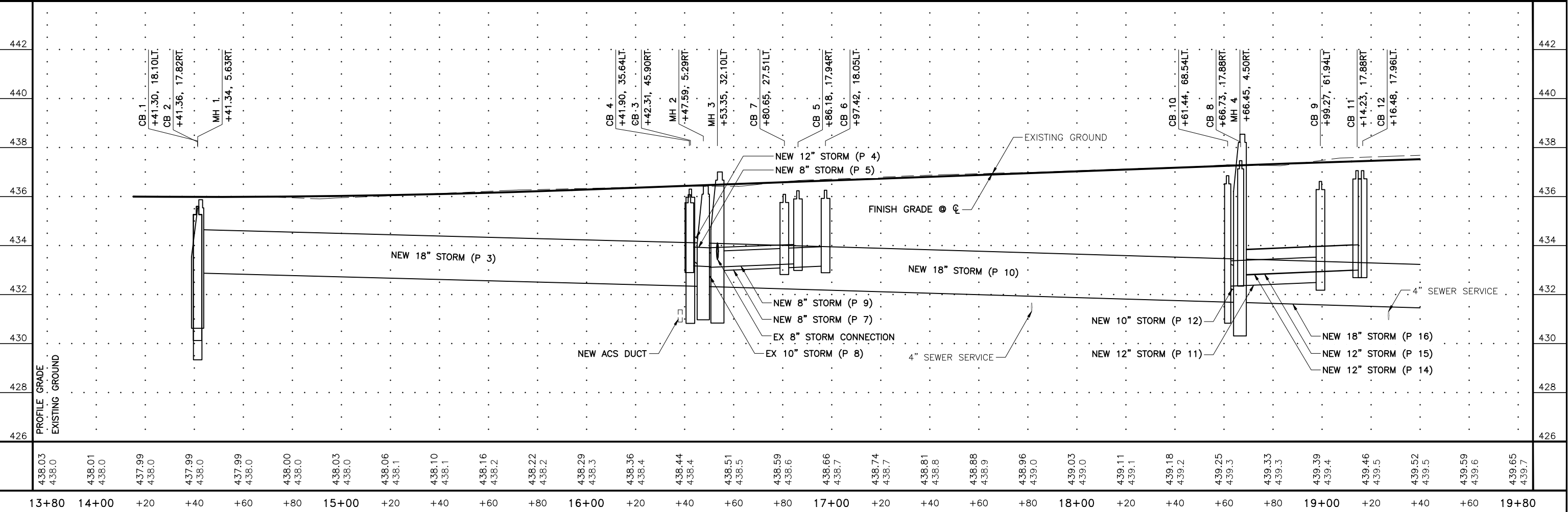


- NOTES: 1 INSULATE PIPE AT WATER LINE CROSSING.
 2 INSULATE STRUCTURE.

STORM DRAIN 14+20 - 19+40



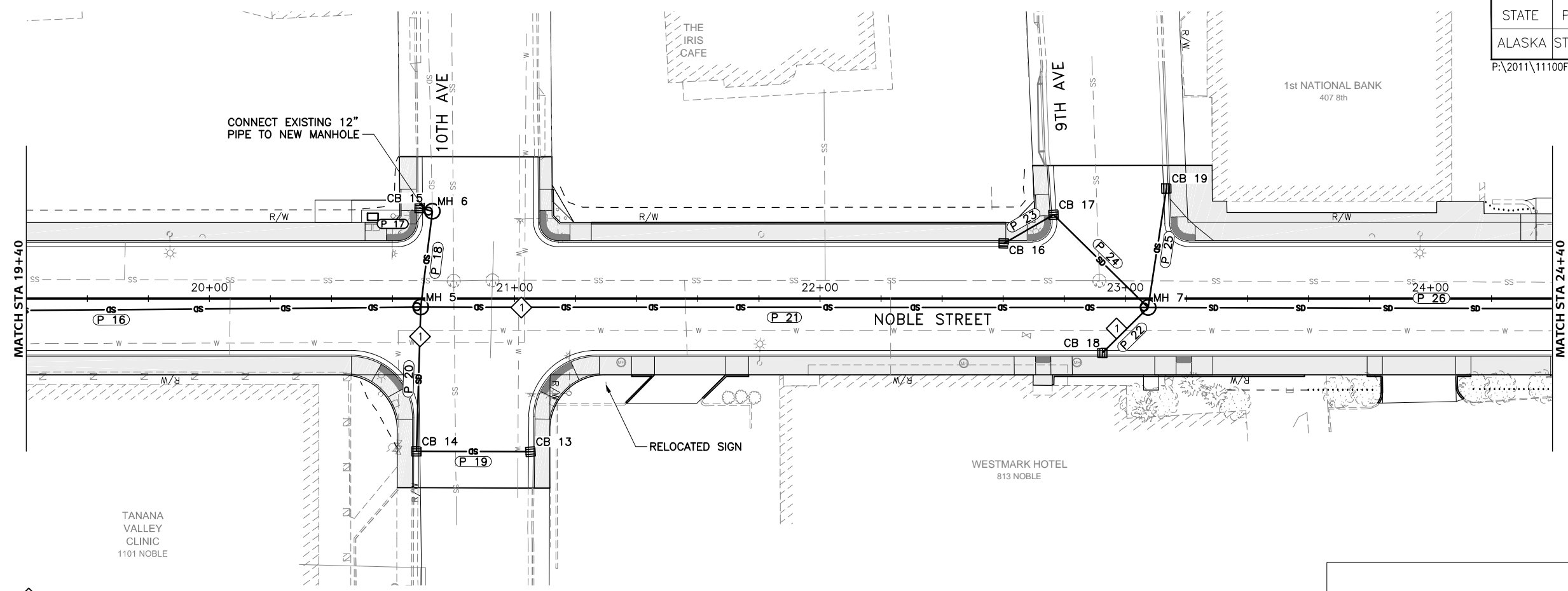
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|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
| 438.03 | 438.0 | 438.01 | 438.0 | 437.99 | 438.0 | 437.99 | 438.0 | 438.00 | 438.0 | 438.03 | 438.0 | 438.06 | 438.1 | 438.10 | 438.1 | 438.16 | 438.2 | 438.22 | 438.2 | 438.29 | 438.3 | 438.36 | 438.4 | 438.44 | 438.4 | 438.51 | 438.5 | 438.59 | 438.6 | 438.66 | 438.7 | 438.74 | 438.7 | 438.81 | 438.8 | 438.88 | 438.9 | 438.96 | 439.0 | 439.03 | 439.0 | 439.11 | 439.1 | 439.18 | 439.2 | 439.25 | 439.3 | 439.33 | 439.3 | 439.39 | 439.4 | 439.46 | 439.5 | 439.52 | 439.5 | 439.59 | 439.6 | 439.65 | 439.7 |
| 13+80 | 14+00 | +20 | +40 | +60 | +80 | 15+00 | +20 | +40 | +60 | +80 | 16+00 | +20 | +40 | +60 | +80 | 17+00 | +20 | +40 | +60 | +80 | 18+00 | +20 | +40 | +60 | +80 | 19+00 | +20 | +40 | +60 | +80 | 19+40 | +20 | +40 | +60 | +80 | 19+80 | | | | | | | | | | | | | | | | | | | | | | | |

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|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | U3 | -- |

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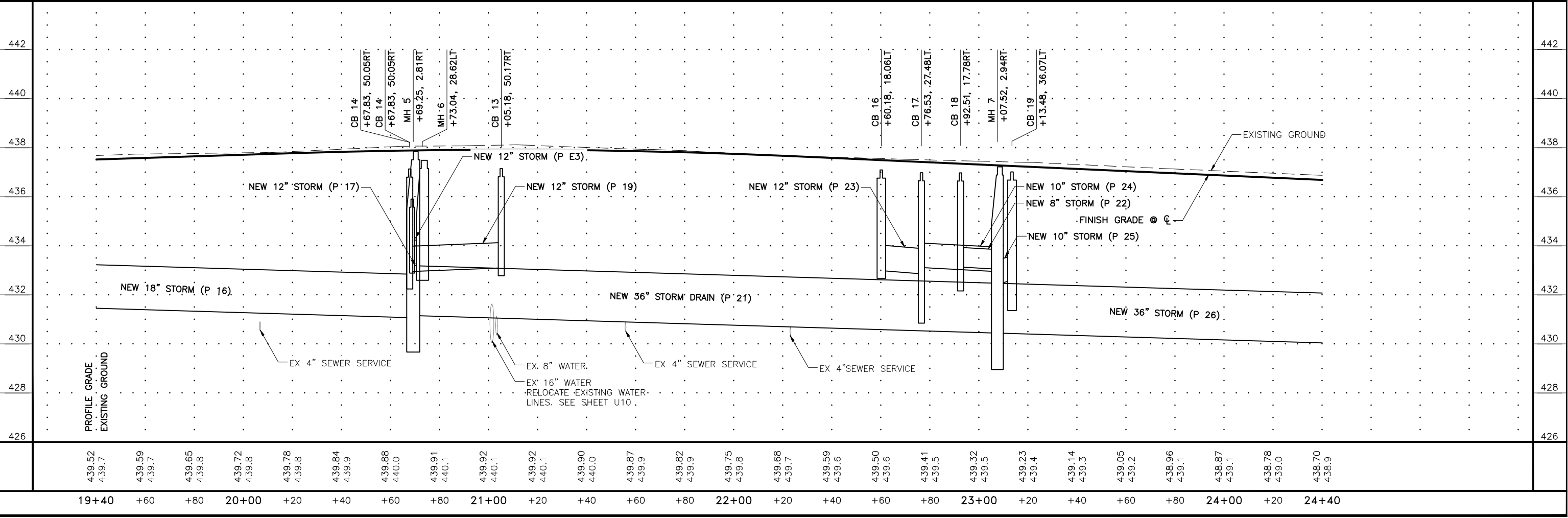


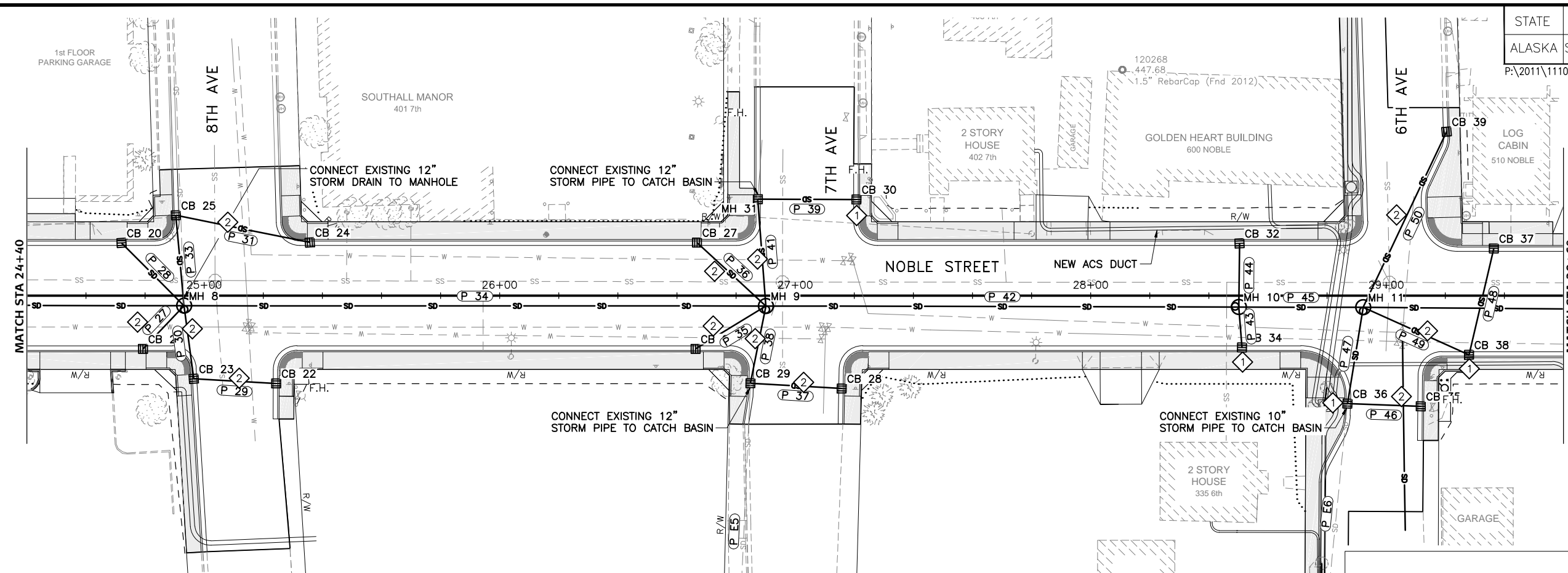
NOTES: INSULATE PIPE AT WATER LINE CROSSING.

STORM DRAIN 19+40 - 24+40



Monday, December 15, 2014, 3:19 PM



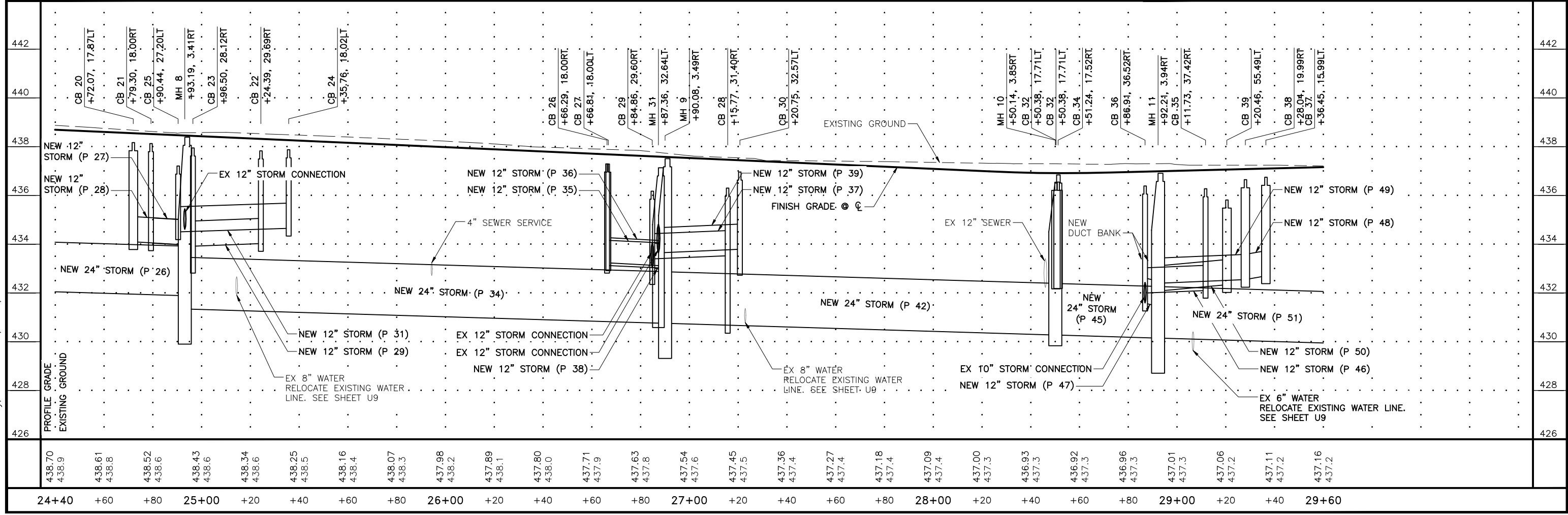


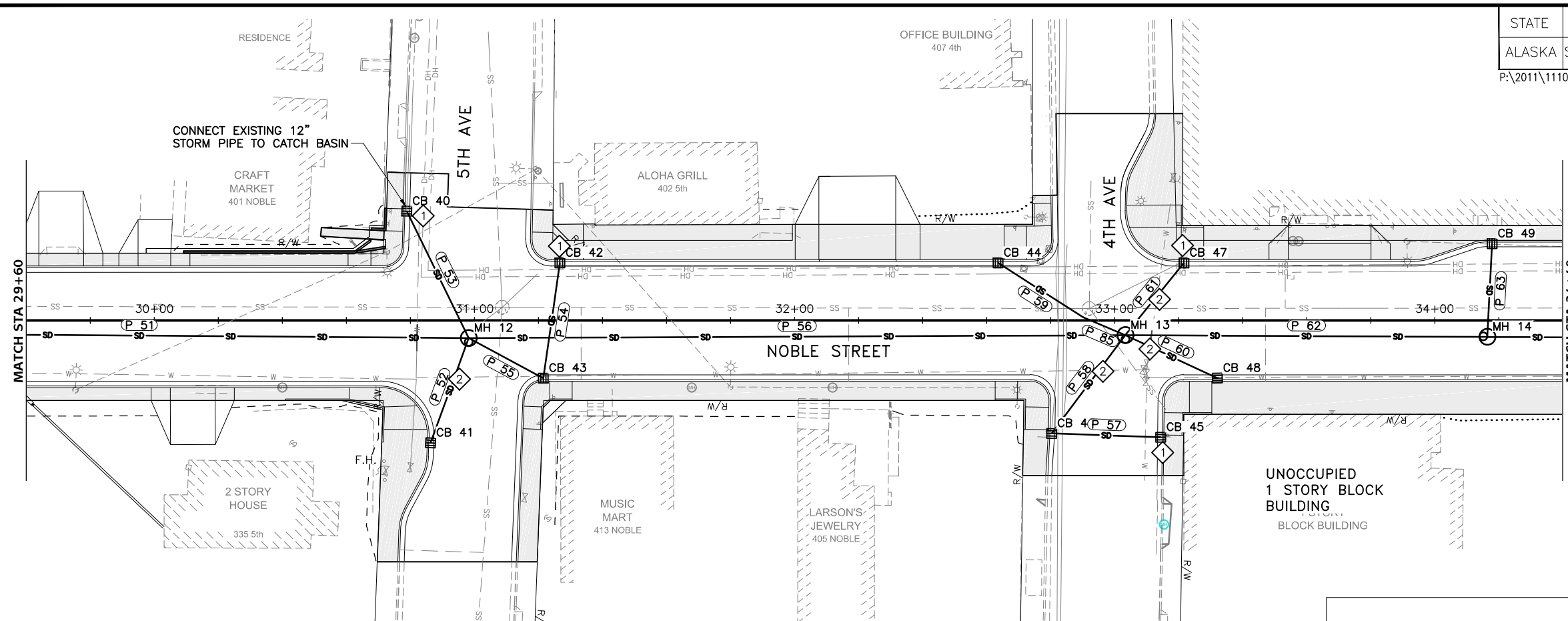
- NOTES: 1 INSULATE CATCH BASIN(S).
 2 INSULATE PIPE(S) AT WATER LINE CROSSING.

STORM DRAIN 24+40 - 29+60



Monday, December 15, 2014, 1:44 PM





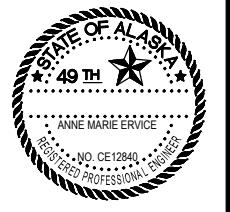
GENERAL NOTES:

- APPROXIMATE GROUNDWATER LEVEL DETERMINED FROM 9/2011 GEOTECHNICAL BORINGS. SHOWN FOR INFORMATION ONLY. ELEVATION DURING CONSTRUCTION MAY VARY SIGNIFICANTLY.

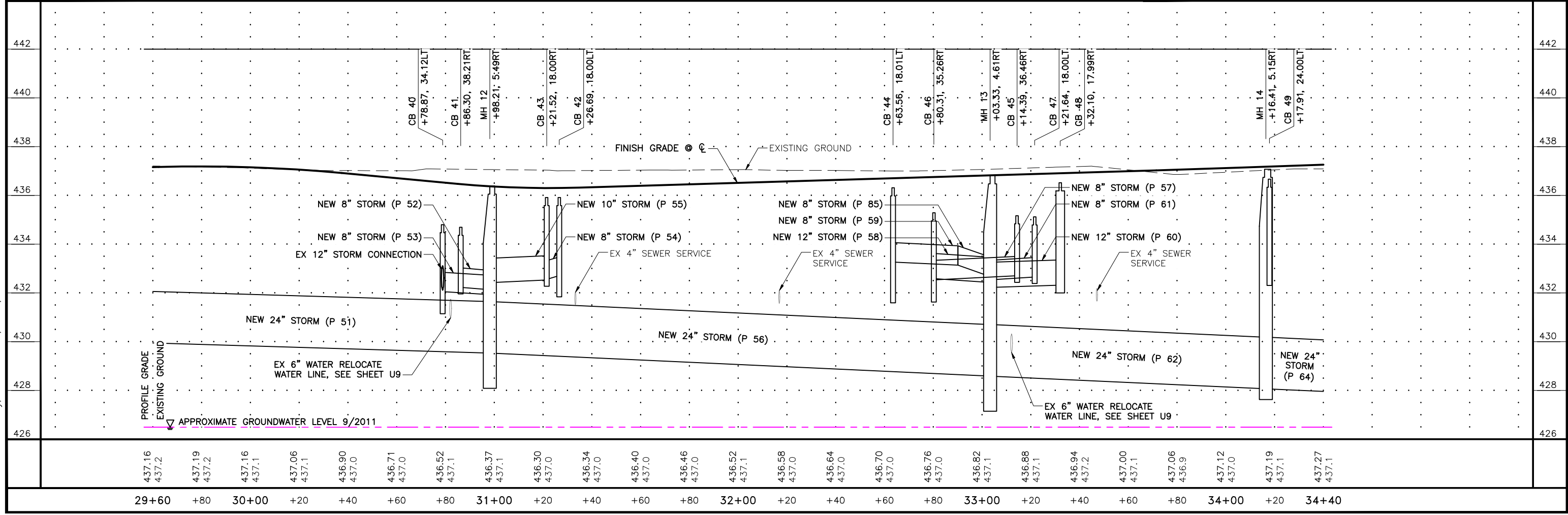
NOTES:

- ① INSULATE CATCH BASIN(S).
- ② INSULATE PIPE(S) AT WATER LINE CROSSING.

STORM DRAIN 29+60 - 34+40

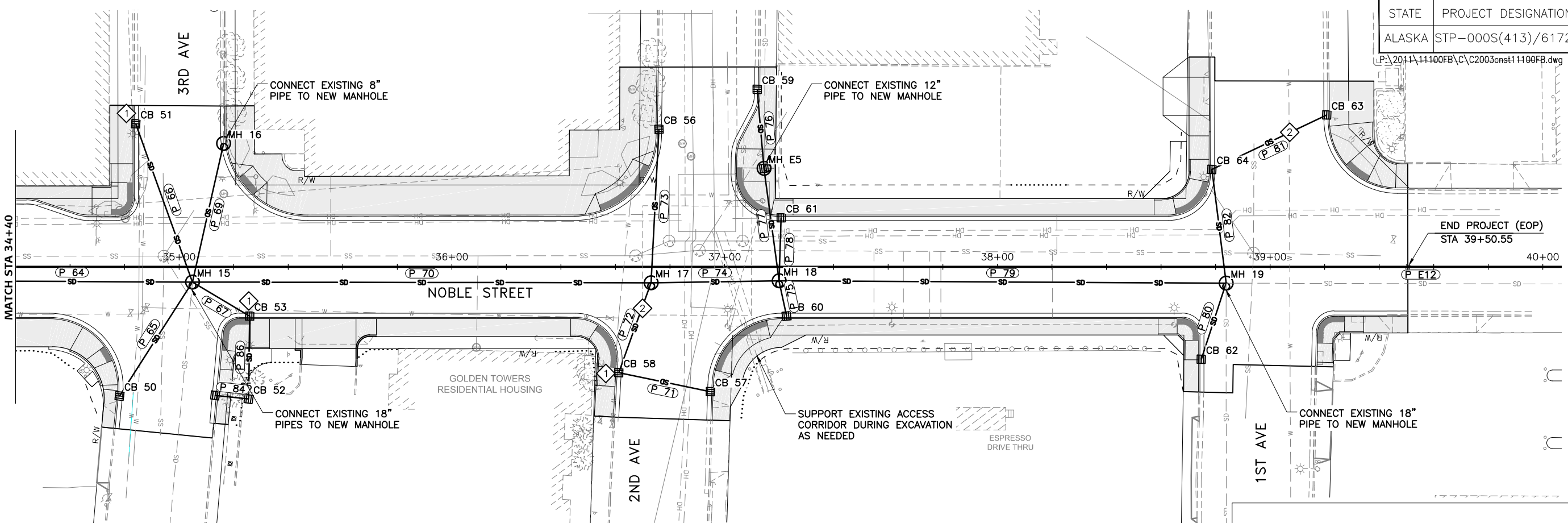


Monday, December 15, 2014, 1:44 PM



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|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 437.16 | 437.19 | 437.16 | 437.06 | 436.90 | 436.71 | 436.52 | 436.37 | 436.30 | 436.34 | 436.40 | 436.46 | 436.52 | 436.58 | 436.64 | 436.70 | 436.76 | 436.82 | 436.88 | 436.94 | 437.00 | 437.06 | 437.12 | 437.19 | 437.27 |
| 437.2 | 437.2 | 437.1 | 437.1 | 437.0 | 437.0 | 437.1 | 437.1 | 437.0 | 437.0 | 437.0 | 437.0 | 437.1 | 437.0 | 437.0 | 437.0 | 437.0 | 437.1 | 437.1 | 437.2 | 437.1 | 436.9 | 437.0 | 437.1 | 437.1 |
| 29+60 | +80 | 30+00 | +20 | +40 | +60 | +80 | 31+00 | +20 | +40 | +60 | +80 | 32+00 | +20 | +40 | +60 | +80 | 33+00 | +20 | +40 | +60 | +80 | 34+00 | +20 | 34+40 |

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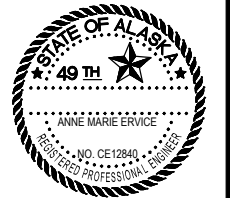


GENERAL NOTES:

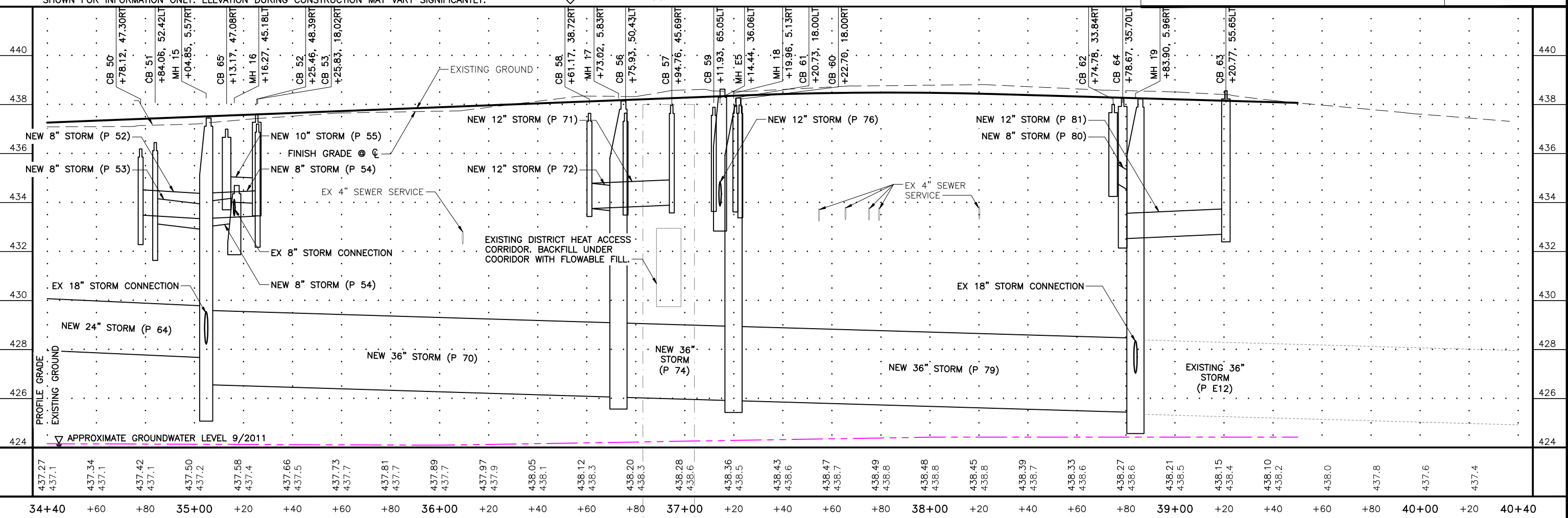
- APPROXIMATE GROUNDWATER LEVEL DETERMINED FROM 9/2011 GEOTECHNICAL BORINGS. SHOWN FOR INFORMATION ONLY. ELEVATION DURING CONSTRUCTION MAY VARY SIGNIFICANTLY.

- NOTES:**
- ◇ INSULATE CATCH BASIN(S).
 - ◇ INSULATE PIPE(S) AT WATER LINE CROSSINGS.

STORM DRAIN 34+40 - 38+70



Monday, December 15, 2014, 1:45 PM



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|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|-------|-------|-------|-------|
| 437.27 | 437.1 | 437.34 | 437.1 | 437.42 | 437.1 | 437.50 | 437.2 | 437.58 | 437.4 | 437.66 | 437.5 | 437.73 | 437.7 | 437.81 | 437.7 | 437.89 | 437.7 | 437.97 | 437.9 | 438.05 | 438.1 | 438.12 | 438.3 | 438.20 | 438.3 | 438.28 | 438.6 | 438.36 | 438.5 | 438.43 | 438.6 | 438.47 | 438.7 | 438.49 | 438.8 | 438.48 | 438.8 | 438.45 | 438.8 | 438.39 | 438.7 | 438.33 | 438.6 | 438.27 | 438.6 | 438.21 | 438.5 | 438.15 | 438.4 | 438.10 | 438.2 | 438.0 | 437.8 | 437.6 | 437.4 |
| 34+40 | +60 | +80 | 35+00 | +20 | +40 | +60 | +80 | 36+00 | +20 | +40 | +60 | +80 | 37+00 | +20 | +40 | +60 | +80 | 38+00 | +20 | +40 | +60 | +80 | 39+00 | +20 | +40 | +60 | +80 | 40+00 | +20 | 40+40 | | | | | | | | | | | | | | | | | | | | | | | | | |

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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | U7 | -- |

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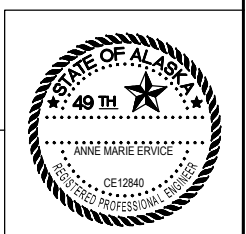
STRUCTURE SUMMARY

| NAME: | TYPE | STATION | OFFSET | RIM | SUMP | PIPES IN INVERTS | PIPES OUT INVERTS |
|-------|---------------|----------|----------|--------|--------|--------------------------------------|-------------------|
| CB 1 | INLET, TYPE A | 14+41.30 | -18.10 L | 437.59 | 432.46 | | (P 1) 433.22' E |
| CB 2 | INLET, TYPE A | 14+41.36 | 17.82 R | 437.60 | 431.67 | | (P 2) 433.67' W |
| CB 3 | INLET, TYPE A | 16+42.31 | 45.90 R | 438.31 | 433.16 | (P E2) 435.52' E | (P 4) 435.47' W |
| CB 4 | INLET, TYPE A | 16+41.90 | -35.64 L | 438.08 | 435.23 | | (P 5) 435.23' N |
| CB 5 | INLET, TYPE A | 16+86.18 | 17.94 R | 438.24 | 435.32 | | (P 9) 435.32' S |
| CB 6 | INLET, TYPE A | 16+97.42 | -18.05 L | 438.26 | 435.23 | | (P 6) 435.23' S |
| CB 7 | INLET, TYPE A | 16+80.65 | -27.51 L | 438.09 | 435.16 | (P 6) 435.16' N | (P 7) 435.16' S |
| CB 8 | INLET, TYPE A | 18+66.73 | 17.88 R | 439.46 | 434.68 | | (P 13) 437.08' W |
| CB 9 | INLET, TYPE A | 18+99.27 | -61.94 L | 438.62 | 434.51 | | (P 11) 434.51' S |
| CB 10 | INLET, TYPE A | 18+61.44 | -68.54 L | 438.85 | 433.17 | (P 11) 434.36' N | (P 12) 434.36' E |
| CB 11 | INLET, TYPE A | 19+14.23 | 17.88 R | 439.06 | 435.02 | | (P 15) 435.02' S |
| CB 12 | INLET, TYPE A | 19+16.48 | -17.96 L | 439.06 | 435.03 | | (P 14) 435.03' SE |
| CB 13 | INLET, TYPE A | 21+05.18 | 50.17 R | 439.15 | 435.12 | | (P 19) 435.12' S |
| CB 14 | INLET, TYPE A | 20+67.83 | 50.05 R | 439.14 | 434.58 | (P 19) 434.97' N | (P 20) 435.17' W |
| CB 15 | INLET, TYPE A | 20+68.85 | -29.66 L | 437.91 | 435.23 | | (P 17) 435.23' N |
| CB 16 | INLET, TYPE A | 22+60.18 | -18.06 L | 439.10 | 435.01 | | (P 23) 435.01' NW |
| CB 17 | INLET, TYPE A | 22+76.53 | -27.48 L | 438.99 | 433.19 | (P 23) 434.88' SE | (P 24) 435.20' NE |
| CB 18 | INLET, TYPE A | 22+92.51 | 17.78 R | 438.98 | 434.50 | | (P 22) 435.21' NW |
| CB 19 | INLET, TYPE A | 23+13.48 | -36.07 L | 439.02 | 433.70 | | (P 25) 434.70' E |
| CB 20 | INLET, TYPE A | 24+72.07 | -17.87 L | 438.17 | 434.11 | | (P 28) 434.11' NE |
| CB 21 | INLET, TYPE A | 24+79.30 | 18.00 R | 438.13 | 434.07 | | (P 27) 434.07' NW |
| CB 22 | INLET, TYPE A | 25+24.39 | 29.69 R | 437.83 | 434.04 | | (P 29) 434.04' S |
| CB 23 | INLET, TYPE A | 24+96.50 | 28.12 R | 437.95 | 433.15 | (P 29) 433.93' N | (P 30) 433.83' W |
| CB 24 | INLET, TYPE A | 25+35.76 | -18.02 L | 437.88 | 434.67 | | (P 31) 434.67' S |
| CB 25 | INLET, TYPE A | 24+90.44 | -27.20 L | 437.21 | 434.52 | (P 31) 434.52' N | (P 33) 434.52' E |
| CB 26 | INLET, TYPE A | 26+66.29 | 18.00 R | 437.29 | 433.15 | | (P 35) 433.15' NW |
| CB 27 | INLET, TYPE A | 26+66.81 | -18.00 L | 437.29 | 433.25 | | (P 36) 433.25' NE |
| CB 28 | INLET, TYPE A | 27+15.77 | 31.40 R | 436.30 | 430.68 | | (P 37) 433.54' S |
| CB 29 | INLET, TYPE A | 26+84.86 | 29.60 R | 436.18 | 432.69 | (P 37) 433.42' N (P E5) 433.05' E | (P 38) 433.05' W |
| CB 30 | INLET, TYPE A | 27+20.75 | -32.57 L | 436.96 | 433.06 | | (P 39) 433.81' S |
| CB 32 | INLET, TYPE A | 28+50.38 | -17.71 L | 436.54 | 432.50 | | (P 44) 432.50' E |
| CB 34 | INLET, TYPE A | 28+51.24 | 17.52 R | 436.55 | 432.52 | | (P 43) 432.52' W |
| CB 35 | INLET, TYPE A | 29+11.73 | 37.42 R | 436.27 | 432.12 | | (P 46) 432.12' S |
| CB 36 | INLET, TYPE A | 28+86.91 | 36.52 R | 436.39 | 431.60 | (P E6) 431.60' E (P 46) 432.02' N | (P 47) 431.60' W |
| CB 37 | INLET, TYPE A | 29+36.45 | -15.99 L | 436.75 | 432.72 | | (P 48) 432.72' E |
| CB 38 | INLET, TYPE A | 29+28.04 | 19.99 R | 436.65 | 432.57 | (P 48) 432.57' W | (P 49) 432.57' S |
| CB 39 | INLET, TYPE A | 29+20.46 | -55.49 L | 435.81 | 432.36 | | (P 50) 432.36' E |
| CB 40 | INLET, TYPE A | 30+78.87 | -34.12 L | 434.80 | 431.48 | (P E7) 432.12' W | (P 53) 432.12' NE |
| CB 41 | INLET, TYPE A | 30+86.30 | 38.21 R | 434.70 | 432.30 | | (P 52) 432.30' W |
| CB 42 | INLET, TYPE A | 31+26.69 | -18.00 L | 435.91 | 432.18 | | (P 54) 432.76' E |
| CB 43 | INLET, TYPE A | 31+21.52 | 18.00 R | 435.91 | 432.61 | (P 54) 432.61' W | (P 55) 432.61' S |
| CB 44 | INLET, TYPE A | 32+63.56 | -18.01 L | 436.31 | 431.93 | | (P 59) 433.33' NE |
| CB 45 | INLET, TYPE A | 33+14.39 | 36.46 R | 435.17 | 432.77 | | (P 57) 432.77' S |

STRUCTURE SUMMARY

| NAME: | TYPE | STATION | OFFSET | RIM | SUMP | PIPES IN INVERTS | PIPES OUT INVERTS |
|-------|------------------------------|----------|----------|--------|--------|--|-------------------|
| CB 46 | INLET, TYPE A | 32+80.31 | 35.26 R | 435.29 | 431.96 | (P 57) 432.60' N | (P 58) 432.60' NW |
| CB 47 | INLET, TYPE A | 33+21.64 | -18.00 L | 435.12 | 432.72 | | (P 61) 432.72' SE |
| CB 48 | INLET, TYPE A | 33+32.10 | 17.99 R | 436.52 | 432.34 | | (P 60) 432.34' S |
| CB 49 | INLET, TYPE A | 34+17.91 | -24.00 L | 436.67 | 432.64 | | (P 63) 432.64' E |
| CB 50 | INLET, TYPE A | 34+78.12 | 47.30 R | 436.19 | 432.62 | | (P 65) 433.50' NW |
| CB 51 | INLET, TYPE A | 34+84.06 | -52.42 L | 436.45 | 431.97 | | (P 66) 433.15' NE |
| CB 52 | INLET, TYPE A | 35+25.46 | 48.39 R | 437.61 | 433.79 | (P 84) 433.99' S | (P 86) 433.79' W |
| CB 53 | INLET, TYPE A | 35+25.83 | 18.02 R | 437.20 | 432.51 | (P 86) 433.67' E | (P 67) 433.46' S |
| CB 56 | INLET, TYPE A | 36+75.93 | -50.43 L | 437.65 | 433.82 | | (P 73) 433.82' E |
| CB 57 | INLET, TYPE A | 36+94.76 | 45.69 R | 437.97 | 433.91 | | (P 71) 433.91' S |
| CB 58 | INLET, TYPE A | 36+61.17 | 38.72 R | 437.64 | 433.77 | (P 71) 433.77' N | (P 72) 433.78' W |
| CB 59 | INLET, TYPE A | 37+11.93 | -65.05 L | 437.89 | 433.97 | | (P 76) 433.97' E |
| CB 60 | INLET, TYPE A | 37+22.70 | 18.00 R | 437.98 | 433.71 | | (P 75) 433.71' W |
| CB 61 | INLET, TYPE A | 37+20.73 | -18.00 L | 437.97 | 433.95 | | (P 78) 433.95' E |
| CB 62 | INLET, TYPE A | 38+74.78 | 33.84 R | 438.00 | 434.58 | | (P 80) 434.94' W |
| CB 63 | INLET, TYPE A | 39+20.77 | -55.65 L | 438.56 | 432.73 | | (P 81) 432.73' SE |
| CB 64 | INLET, TYPE A | 38+78.67 | -35.70 L | 438.25 | 432.48 | (P 81) 432.54' NW | (P 82) 432.48' E |
| CB 65 | INLET, TYPE A | 35+13.17 | 47.08 R | 437.00 | 434.04 | | (P 84) 434.04' N |
| MH 1 | STORM SEWER MANHOLE, 48 INCH | 14+41.34 | 5.63 R | 437.87 | 433.13 | (P 2) 433.62' E (P 1) 433.13' W | (P 3) 435.02' N |
| MH 2 | STORM SEWER MANHOLE, 48 INCH | 16+47.59 | 5.29 R | 438.43 | 433.47 | (P 8) 434.77' W (P 4) 435.11' E (P 9) 435.17' N (P 3) 434.47' S | (P 10) 434.47' N |
| MH 3 | STORM SEWER MANHOLE, 48 INCH | 16+53.35 | -32.10 L | 438.34 | 433.34 | (P 5) 435.17' S (P 7) 435.04' N (P E1) 435.44' W | (P 8) 434.84' E |
| MH 4 | STORM SEWER MANHOLE, 48 INCH | 18+66.45 | 4.50 R | 440.54 | 432.82 | (P 10) 433.82' S (P 13) 436.99' E (P 12) 434.19' W (P 14) 434.81' NW (P 15) 434.83' N | (P 16) 433.82' N |
| MH 5 | STORM SEWER MANHOLE, 48 INCH | 20+69.25 | 2.81 R | 439.84 | 432.18 | (P 16) 433.21' S (P 18) 434.97' W (P 20) 434.98' E | (P 21) 433.18' N |
| MH 6 | STORM SEWER MANHOLE, 48 INCH | 20+73.04 | -28.62 L | 439.49 | 435.10 | (P E3) 435.20' W (P 17) 435.21' S | (P 18) 435.10' E |
| MH 7 | STORM SEWER MANHOLE, 48 INCH | 23+07.52 | 2.94 R | 439.23 | 431.46 | (P 21) 432.46' S (P 25) 434.50' W (P 24) 435.04' SW (P 22) 435.12' SE | (P 26) 432.46' N |
| MH 8 | STORM SEWER MANHOLE, 48 INCH | 24+93.19 | 3.41 R | 438.39 | 430.41 | (P 26) 431.91' S (P 33) 434.41' W (P 30) 433.73' E (P E4) 434.62' W (P 27) 433.99' SE (P 28) 433.99' SW | (P 34) 431.41' N |
| MH 9 | STORM SEWER MANHOLE, 48 INCH | 26+90.08 | 3.49 R | 437.51 | 429.81 | (P 34) 430.81' S (P 41) 433.42' W (P 38) 432.95' E (P 35) 433.04' SE (P 36) 433.13' SW | (P 42) 430.81' N |

SUMMARY TABLES
(1 OF 2)



STRUCTURE SUMMARY

| NAME: | TYPE | STATION | OFFSET | RIM | SUMP | PIPES IN INVERTS | PIPES OUT INVERTS |
|-------|------------------------------|----------|----------|--------|--------|--|-------------------|
| MH 10 | STORM SEWER MANHOLE, 48 INCH | 28+50.14 | 3.85 R | 436.84 | 430.33 | (P 42) 430.33' S (P 44) 432.42' W (P 43) 432.46' E | (P 45) 430.33' N |
| MH 11 | STORM SEWER MANHOLE, 48 INCH | 28+92.21 | 3.94 R | 436.91 | 429.21 | (P 45) 430.21' S (P 47) 431.46' E (P 50) 432.09' W (P 49) 432.41' N | (P 51) 430.21' N |
| MH 12 | STORM SEWER MANHOLE, 48 INCH | 30+98.21 | 5.49 R | 436.39 | 428.59 | (P 51) 429.59' S (P 55) 432.51' N (P 53) 432.00' SW (P 52) 432.20' E | (P 56) 429.59' N |
| MH 13 | STORM SEWER MANHOLE, 48 INCH | 33+03.33 | 4.61 R | 436.81 | 427.65 | (P 56) 428.65' S (P 61) 432.61' NW (P 85) 432.74' S (P 60) 432.24' N (P 58) 432.45' SE | (P 62) 428.65' N |
| MH 14 | STORM SEWER MANHOLE, 48 INCH | 34+16.41 | 5.15 R | 437.08 | 428.13 | (P 62) 428.13' S (P 63) 432.52' W | (P 64) 428.13' N |
| MH 15 | STORM SEWER MANHOLE, 48 INCH | 35+04.85 | 5.57 R | 437.45 | 425.58 | (P 64) 427.72' S (P 67) 433.37' N (P 65) 433.34' SE (P 69) 433.03' W (P 66) 432.90' SW (P 68) 428.22' E | (P 70) 426.58' N |
| MH 16 | STORM SEWER MANHOLE, 48 INCH | 35+16.27 | -45.18 L | 434.69 | 432.37 | (P E9) 433.46' W | (P 69) 433.17' E |
| MH 17 | STORM SEWER MANHOLE, 72 INCH | 36+73.02 | 5.83 R | 438.14 | 426.07 | (P 70) 426.07' S (P 72) 433.65' E (P 73) 433.69' W | (P 74) 426.07' N |
| MH 18 | STORM SEWER MANHOLE, 72 INCH | 37+19.96 | 5.13 R | 438.26 | 425.93 | (P 74) 425.93' S (P 77) 433.17' W (P 75) 433.66' E (P 78) 433.86' W | (P 79) 425.93' N |
| MH 19 | STORM SEWER MANHOLE, 72 INCH | 38+83.90 | 5.96 R | 438.23 | 425.07 | (P 79) 425.45' S (P 80) 434.39' E (P 82) 432.34' W (P E11) 427.03' E | (P E12) 425.38' N |
| MH 31 | STORM SEWER MANHOLE, 48 INCH | 26+87.36 | -32.64 L | 437.14 | 431.08 | (P E40) 433.65' W (P 39) 433.66' N | (P 41) 433.54' E |
| MH E5 | STORM SEWER MANHOLE, 48 INCH | 37+14.44 | -36.06 L | 438.69 | 433.33 | (P E10) 433.86' W (P 76) 433.86' W | (P 77) 433.33' E |

PIPE SUMMARY

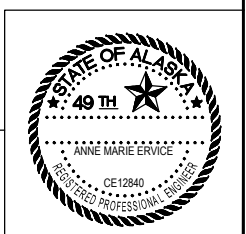
| NAME | SIZE (in) | MATERIAL | SLOPE | START INVERT | END INVERT |
|------|-----------|----------|-------|--------------|------------|
| P 1 | 10 | HDPE | 0.40% | 433.13' | 433.22' |
| P 2 | 10 | HDPE | 0.40% | 433.67' | 433.62' |
| P 3 | 18 | HDPE | 0.27% | 434.47' | 435.02' |
| P 4 | 12 | HDPE | 0.88% | 435.47' | 435.11' |
| P 5 | 8 | HDPE | 0.48% | 435.23' | 435.17' |
| P 6 | 8 | HDPE | 0.38% | 435.23' | 435.16' |
| P 7 | 8 | HDPE | 0.41% | 435.16' | 435.04' |
| P 8 | 10 | HDPE | 0.20% | 434.77' | 434.84' |
| P 9 | 8 | HDPE | 0.37% | 435.32' | 435.17' |
| P 10 | 18 | HDPE | 0.30% | 433.82' | 434.47' |
| P 11 | 12 | HDPE | 0.40% | 434.51' | 434.36' |
| P 12 | 10 | HDPE | 0.23% | 434.36' | 434.19' |
| P 13 | 8 | HDPE | 0.65% | 437.08' | 436.99' |
| P 14 | 12 | HDPE | 0.40% | 435.03' | 434.81' |
| P 15 | 12 | HDPE | 0.40% | 434.83' | 435.02' |
| P 16 | 18 | HDPE | 0.30% | 433.21' | 433.82' |
| P 17 | 12 | HDPE | 0.42% | 435.21' | 435.23' |
| P 18 | 12 | HDPE | 0.40% | 435.10' | 434.97' |
| P 19 | 12 | HDPE | 0.40% | 435.12' | 434.97' |
| P 20 | 18 | HDPE | 0.40% | 435.17' | 434.98' |
| P 21 | 24 | HDPE | 0.30% | 432.46' | 433.18' |
| P 22 | 8 | HDPE | 0.40% | 435.12' | 435.21' |
| P 23 | 12 | HDPE | 0.73% | 435.01' | 434.88' |
| P 24 | 10 | HDPE | 0.38% | 435.20' | 435.04' |
| P 25 | 10 | HDPE | 0.50% | 434.70' | 434.50' |
| P 26 | 24 | HDPE | 0.30% | 432.46' | 431.91' |
| P 27 | 12 | HDPE | 0.40% | 434.07' | 433.99' |
| P 28 | 12 | HDPE | 0.40% | 434.11' | 433.99' |
| P 29 | 12 | HDPE | 0.39% | 434.04' | 433.93' |
| P 30 | 18 | HDPE | 0.40% | 433.83' | 433.73' |
| P 31 | 12 | HDPE | 0.31% | 434.67' | 434.52' |
| P 33 | 12 | HDPE | 0.38% | 434.52' | 434.41' |
| P 34 | 24 | HDPE | 0.30% | 431.41' | 430.81' |
| P 35 | 12 | HDPE | 0.40% | 433.04' | 433.15' |
| P 36 | 12 | HDPE | 0.40% | 433.25' | 433.13' |
| P 37 | 12 | HDPE | 0.40% | 433.54' | 433.42' |
| P 38 | 12 | HDPE | 0.40% | 433.05' | 432.95' |
| P 39 | 12 | HDPE | 0.44% | 433.81' | 433.66' |
| P 41 | 18 | HDPE | 0.32% | 433.54' | 433.42' |
| P 42 | 24 | HDPE | 0.30% | 430.81' | 430.33' |
| P 43 | 12 | HDPE | 0.40% | 432.46' | 432.52' |
| P 44 | 12 | HDPE | 0.40% | 432.50' | 432.42' |
| P 45 | 24 | HDPE | 0.30% | 430.33' | 430.21' |
| P 46 | 12 | HDPE | 0.42% | 432.12' | 432.02' |
| P 47 | 12 | HDPE | 0.40% | 431.60' | 431.46' |
| P 48 | 12 | HDPE | 0.40% | 432.72' | 432.57' |
| P 49 | 12 | HDPE | 0.40% | 432.57' | 432.41' |

PIPE SUMMARY

| NAME | SIZE (in) | MATERIAL | SLOPE | START INVERT | END INVERT |
|------|-----------|----------|-------|--------------|------------|
| P 50 | 12 | HDPE | 0.40% | 432.36' | 432.09' |
| P 51 | 24 | HDPE | 0.30% | 430.21' | 429.59' |
| P 52 | 8 | HDPE | 0.29% | 432.30' | 432.20' |
| P 53 | 8 | HDPE | 0.28% | 432.12' | 432.00' |
| P 54 | 8 | HDPE | 0.40% | 432.76' | 432.61' |
| P 55 | 10 | HDPE | 0.40% | 432.61' | 432.51' |
| P 56 | 24 | HDPE | 0.46% | 429.59' | 428.65' |
| P 57 | 8 | HDPE | 0.49% | 432.60' | 432.77' |
| P 58 | 12 | HDPE | 0.40% | 432.60' | 432.45' |
| P 59 | 8 | HDPE | 0.40% | 433.21' | 433.33' |
| P 60 | 12 | HDPE | 0.30% | 432.24' | 432.34' |
| P 61 | 8 | HDPE | 0.40% | 432.61' | 432.72' |
| P 62 | 24 | HDPE | 0.46% | 428.65' | 428.13' |
| P 63 | 12 | HDPE | 0.40% | 432.64' | 432.52' |
| P 64 | 24 | HDPE | 0.46% | 428.13' | 427.72' |
| P 65 | 12 | HDPE | 0.32% | 433.50' | 433.34' |
| P 66 | 12 | HDPE | 0.40% | 433.15' | 432.90' |
| P 67 | 12 | HDPE | 0.40% | 433.46' | 433.37' |
| P 69 | 12 | HDPE | 0.26% | 433.17' | 433.03' |
| P 70 | 36 | HDPE | 0.30% | 426.58' | 426.07' |
| P 71 | 12 | HDPE | 0.41% | 433.91' | 433.77' |
| P 72 | 12 | HDPE | 0.35% | 433.78' | 433.65' |
| P 73 | 12 | HDPE | 0.23% | 433.82' | 433.69' |
| P 74 | 36 | HDPE | 0.30% | 426.07' | 425.93' |
| P 75 | 12 | HDPE | 0.39% | 433.66' | 433.71' |
| P 76 | 12 | HDPE | 0.40% | 433.97' | 433.86' |
| P 77 | 12 | HDPE | 0.40% | 433.17' | 433.33' |
| P 78 | 12 | HDPE | 0.40% | 433.95' | 433.86' |
| P 79 | 36 | HDPE | 0.29% | 425.93' | 425.45' |
| P 80 | 8 | HDPE | 1.87% | 434.94' | 434.39' |
| P 81 | 12 | HDPE | 0.42% | 432.73' | 432.54' |
| P 82 | 12 | HDPE | 0.34% | 432.48' | 432.34' |
| P 84 | 12 | HDPE | 0.41% | 434.04' | 433.99' |
| P 85 | 8 | HDPE | 3.24% | 432.74' | 433.21' |
| P 86 | 12 | HDPE | 0.40% | 433.79' | 433.67' |

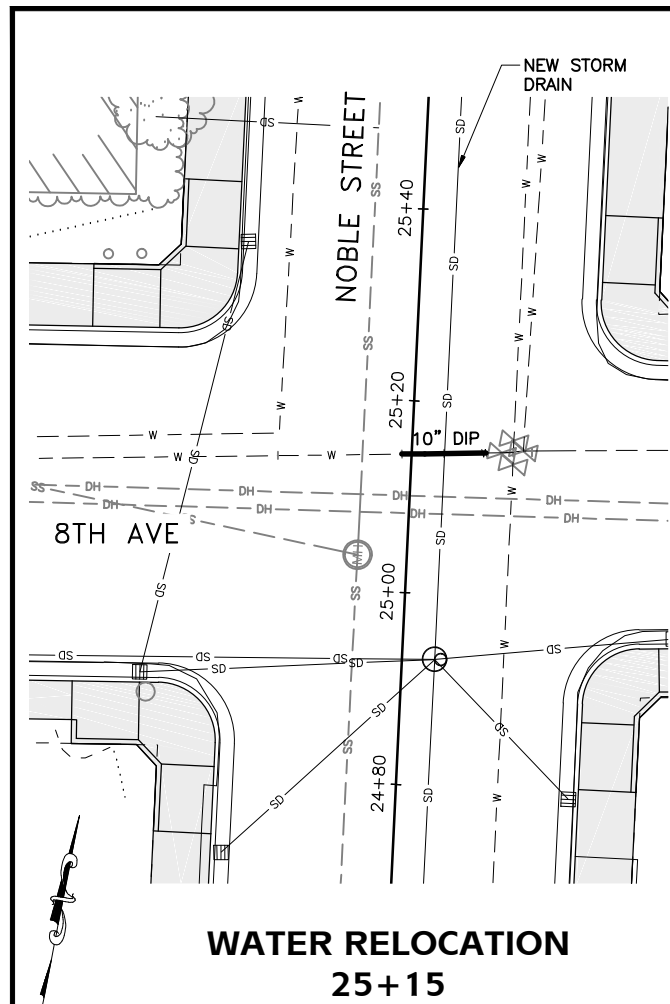
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SUMMARY TABLES
(2 OF 2)

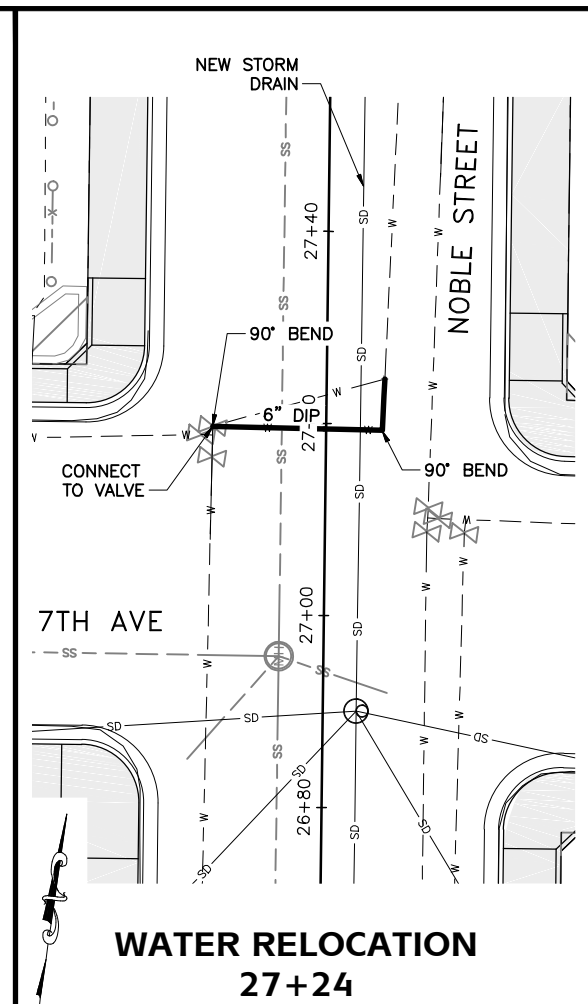


| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | U9 | -- |

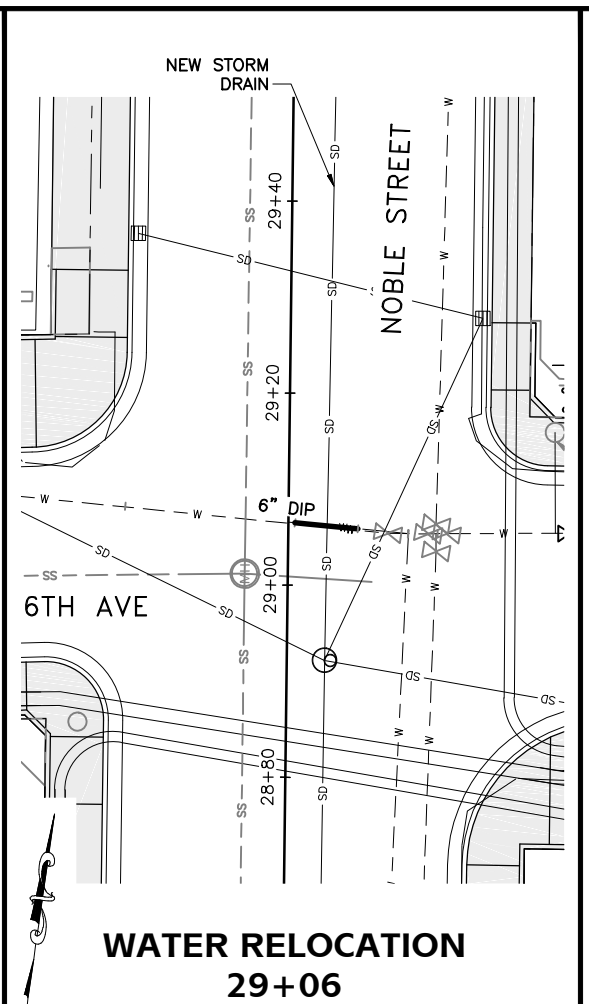
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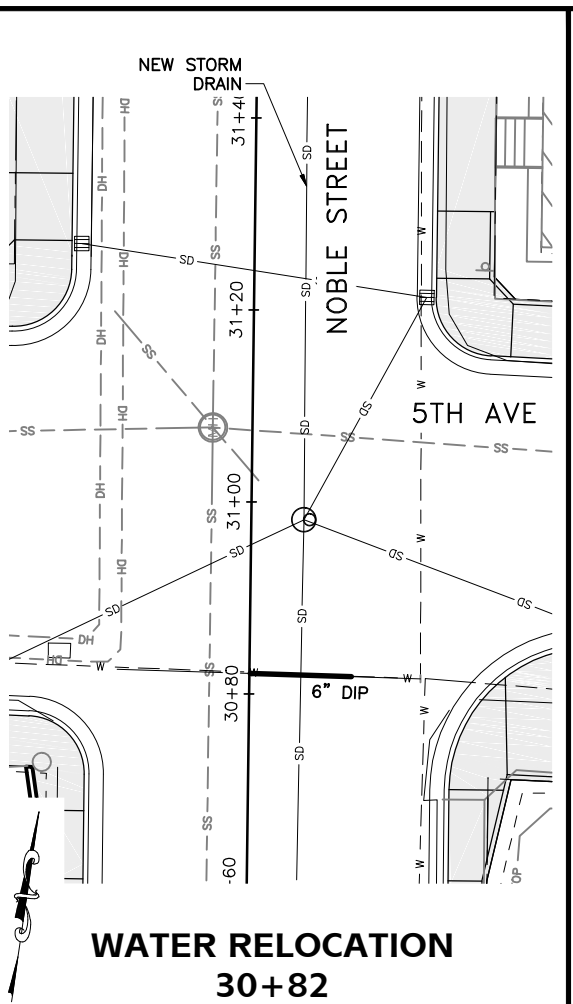
**WATER RELOCATION
25+15**



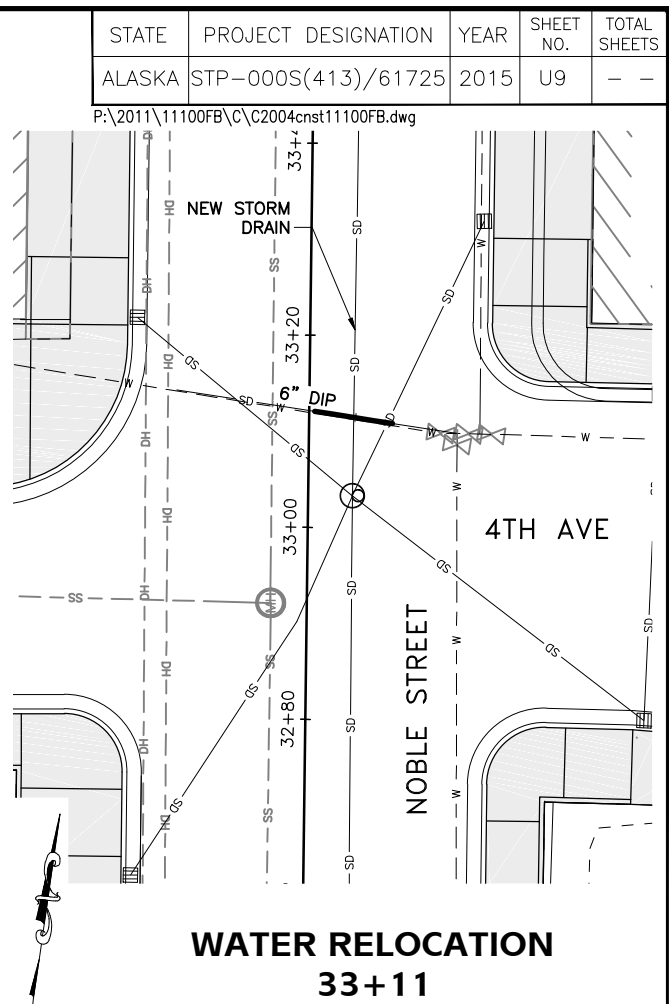
**WATER RELOCATION
27+24**



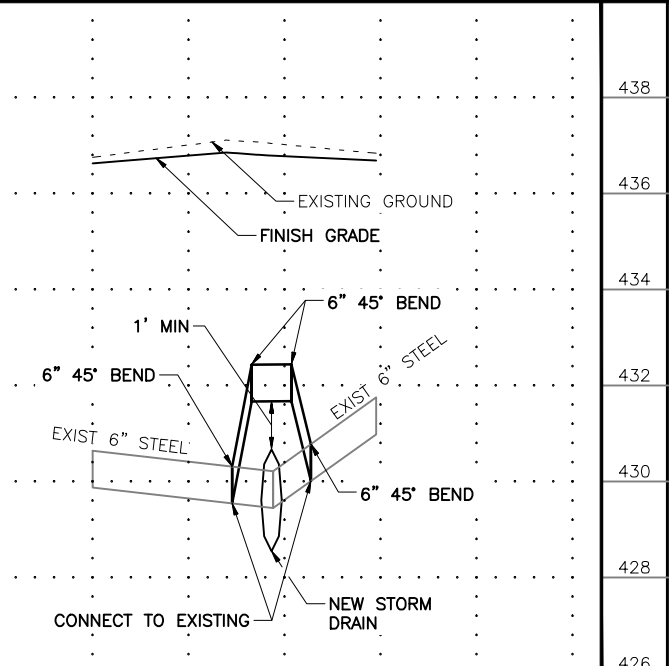
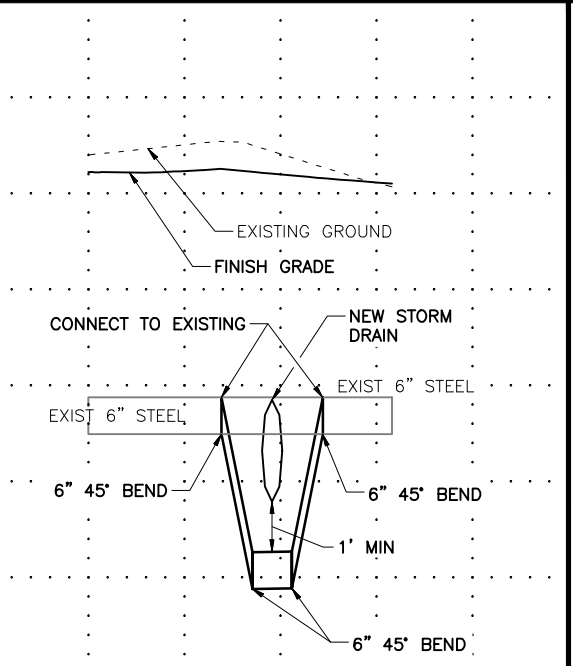
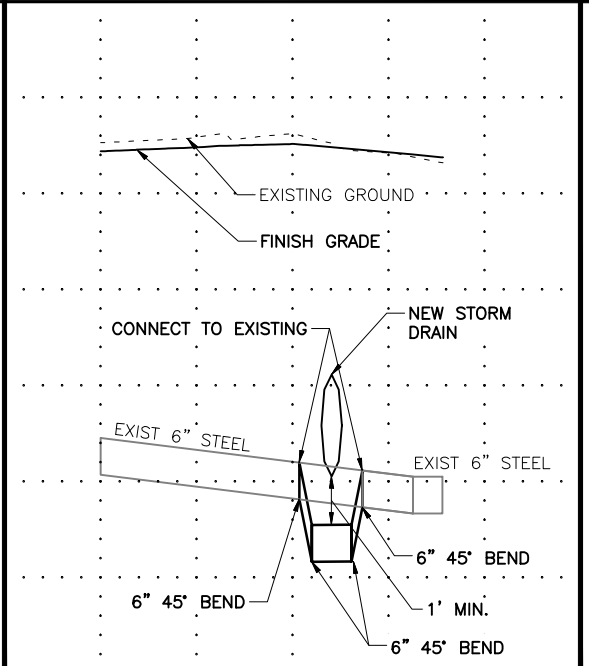
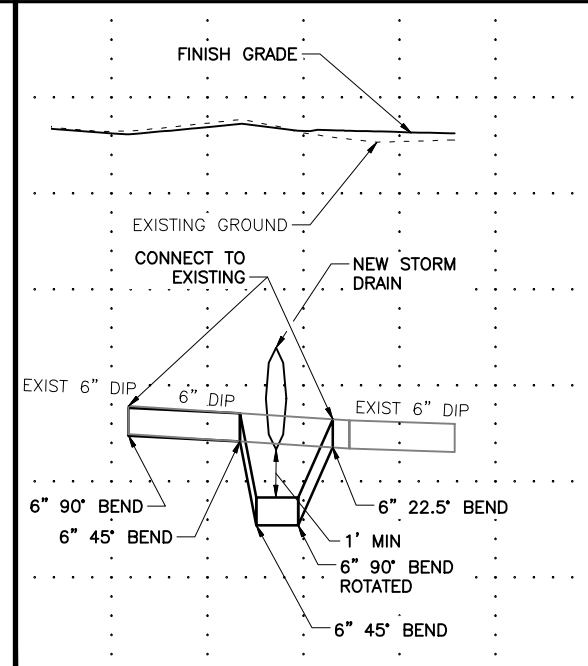
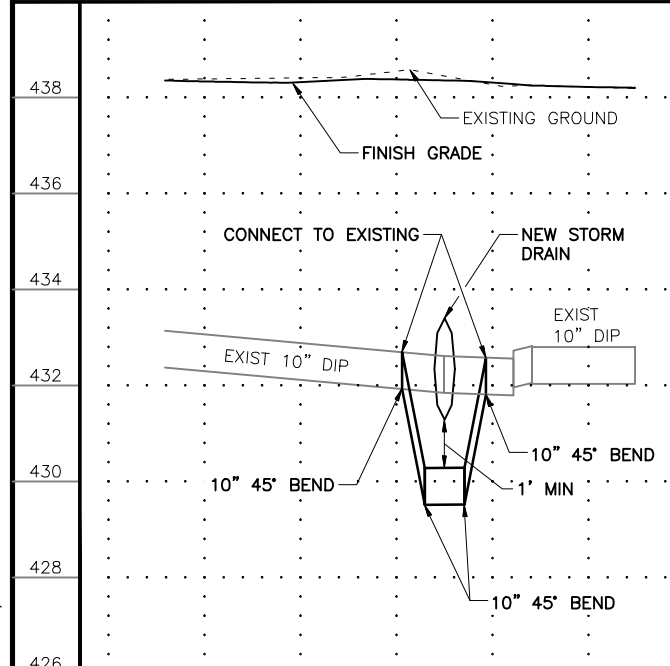
**WATER RELOCATION
29+06**



**WATER RELOCATION
30+82**



**WATER RELOCATION
33+11**



- NOTES:**
1. DEPTH OF EXISTING PIPE SHOWN IS APPROXIMATE.
 2. CONSTRUCT CROSSINGS PER UTILITY SERVICES OF ALASKA STANDARD DRAWING WD2.
 3. DEMO'D EXISTING STORM DRAIN NOT SHOWN FOR CLARITY.
 4. USE THRUST BLOCKS FOR RESTRAINT OF JOINTS AT WATER RELOCATION 29+06, 30+82, 33+11 AND HYDRANT RELOCATION AT 6TH AVE. CONSTRUCT THRUST BLOCKS ACCORDING TO GOLDEN HEART UTILITIES STANDARDS.

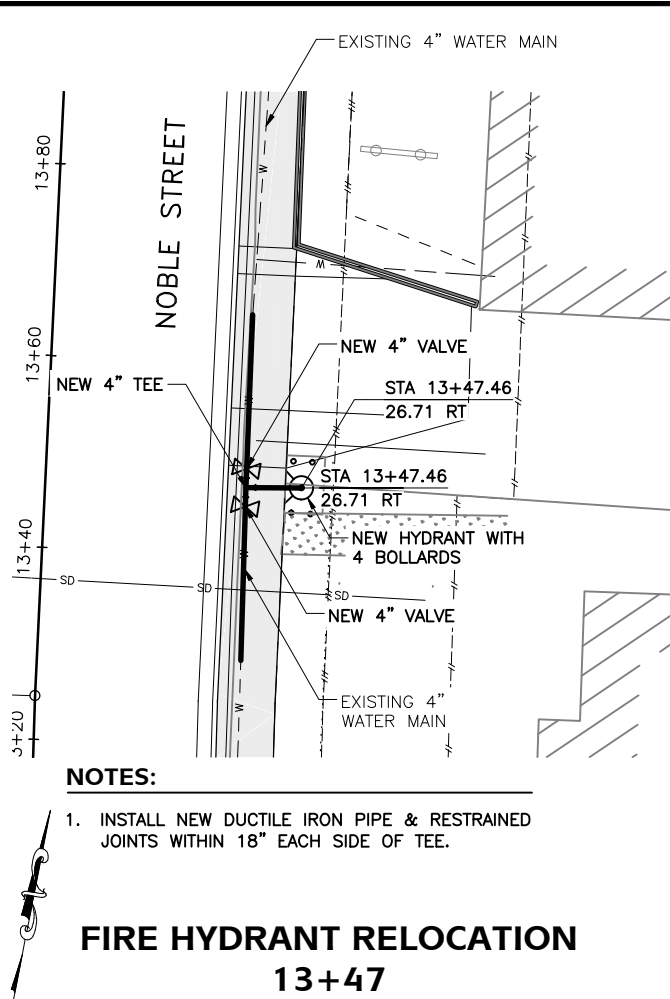
WATER RELOCATIONS



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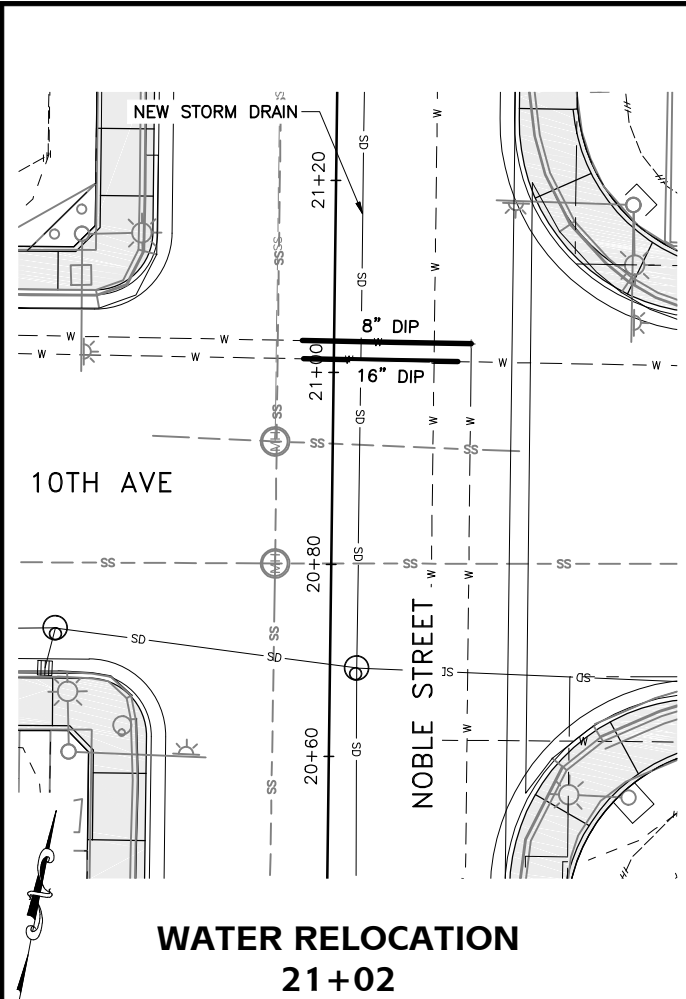
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | U10 | -- |

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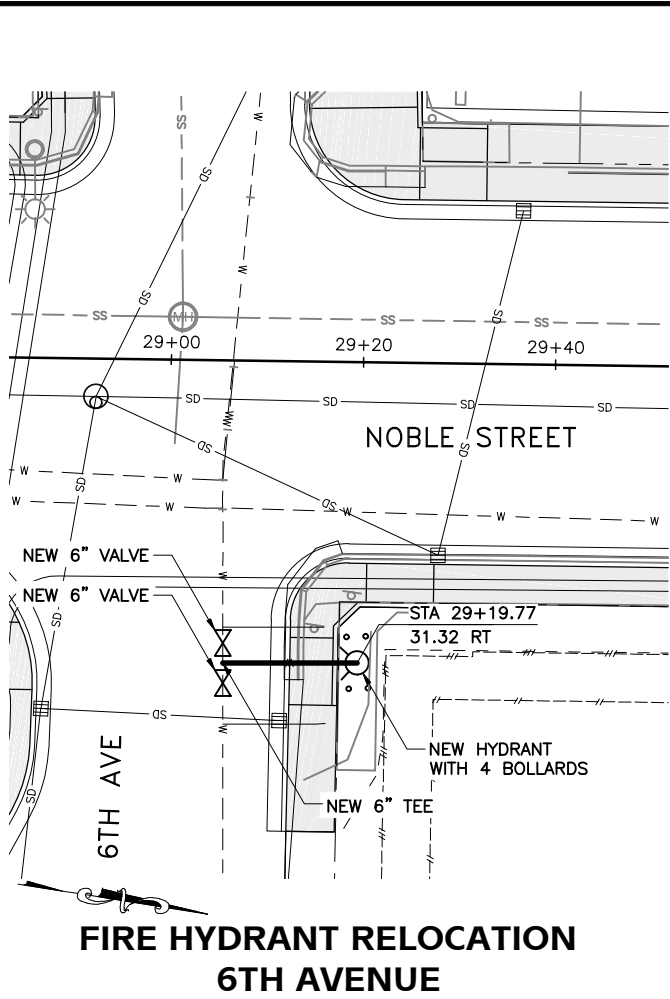


- NOTES:**
1. INSTALL NEW DUCTILE IRON PIPE & RESTRAINED JOINTS WITHIN 18" EACH SIDE OF TEE.

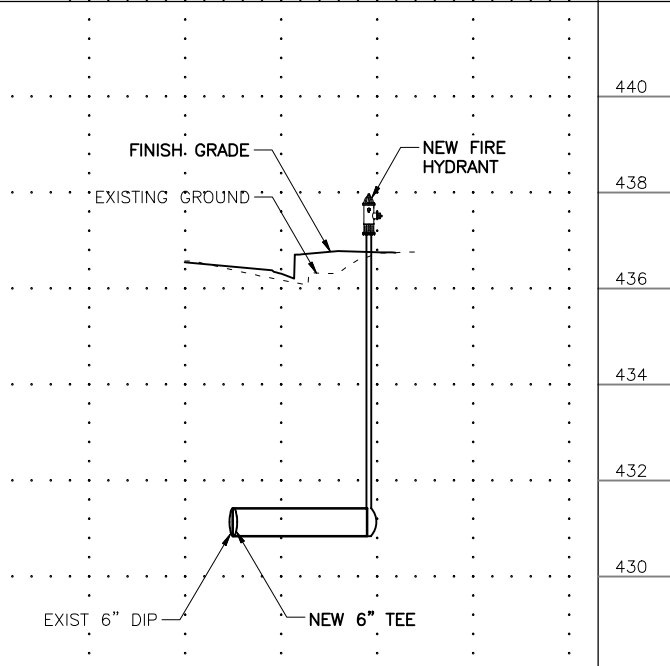
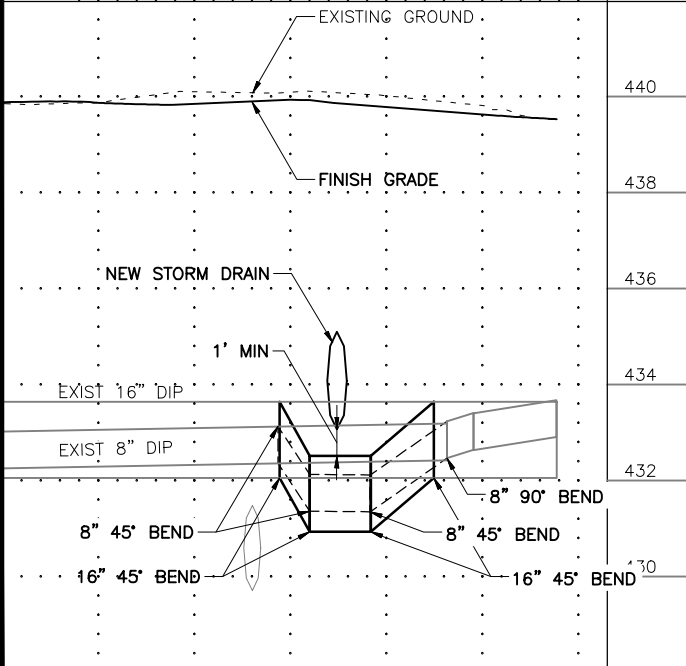
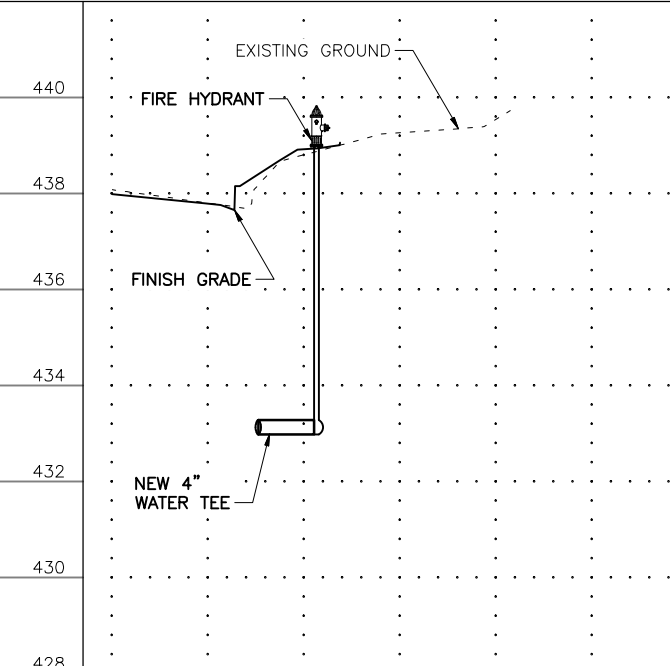
**FIRE HYDRANT RELOCATION
13+47**



**WATER RELOCATION
21+02**



**FIRE HYDRANT RELOCATION
6TH AVENUE**



- NOTES:**
1. DEPTH OF EXISTING PIPE SHOWN IS APPROXIMATE.
 2. CONSTRUCT CROSSINGS PER UTILITY SERVICES OF ALASKA STANDARD DRAWING WD2.
 3. DEMO'D EXISTING STORM DRAIN NOT SHOWN FOR CLARITY.
 4. USE THRUST BLOCKS FOR RESTRAINT OF JOINTS AT WATER RELOCATION 29+06, 30+82, 33+11 AND HYDRANT RELOCATION AT 6TH AVE. CONSTRUCT THRUST BLOCKS ACCORDING TO GOLDEN HEART UTILITIES STANDARDS.

UTILITY NOTES:

1. WORK IS REQUIRED UNDER EXISTING OVERHEAD CABLES. PROTECT EQUIPMENT AND PERSONNEL AS REQUIRED SUBSIDIARY TO THOSE WORK ITEMS.
2. VERIFY ELEVATION OF EXISTING STORM DRAIN CONNECTION POINT AND REPORT THESE SURVEY ELEVATIONS TO THE ENGINEER SO CHANGES CAN BE MADE IN THE GRADES AS REQUIRED TO MATCH EXISTING IMPROVEMENTS. PAYMENT SUBSIDIARY TO 642(1).
3. ALL ACCESS FRAMES & COVERS/LIDS IN ASPHALT SHALL BE INSTALLED TO GRADE BEFORE ASPHALT IS INSTALLED. NO CUTTING OUT ASPHALT SHALL BE ALLOWED WITHOUT APPROVAL OF THE ENGINEER.
4. FIELD STAKE ALL STORM DRAIN LOCATIONS FOR APPROVAL BY ENGINEER PRIOR TO INSTALLATION.
5. MAINTAIN EXISTING UTILITY CUSTOMER SERVICE EXCEPT MAXIMUM 4 HOUR OUTAGE FOR NEW MAIN OR SERVICE RECONNECTIONS. PUBLIC NOTICE REQUIRED.
6. RESTRAIN ALL MECHANICAL JOINT BENDS AND PUSH ON JOINTS FROM BENDS OR FITTINGS TO TRANSITION COUPLINGS OR WITHIN 45 FEET OF A BEND. RESTRAIN ALL PUSH ON JOINTS SHOWN TO BE DEFLECTED IN THE PLANS, RESTRAIN ALL VALVES OR REDUCERS WITH MEG-A-LUGS OR APPROVED EQUAL. USE MJ ADAPTERS INSTEAD OF SHORT RESTRAINED PUPS.
7. SEWER SERVICE RECONNECTIONS MAY REQUIRE GRADE CHANGES TO AVOID CONFLICT WITH STORM DRAIN. PAYMENT FOR THIS WORK IS SUBSIDIARY TO SEWER SERVICE CONNECTIONS.
8. SCHEDULE ALL UTILITY OUTAGES TO TAKE PLACE DURING NON BUSINESS HOURS. ALL COSTS TO PROVIDE AND INSTALL TEMPORARY MEASURES ON EXISTING UTILITIES ARE SUBSIDIARY TO THE UTILITY BID ITEMS. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES THAT RESULT FROM OUTAGES BEYOND THE PRESCRIBED PERIOD.
9. PAYMENT FOR ALL SHORING, BRACING, TRENCH BOXES, ETC. TO PROTECT BUILDINGS, TRAFFIC, AND PERSONS SHALL BE SUBSIDIARY TO THE STRUCTURE BEING INSTALLED.
10. NUMEROUS UNDERGROUND UTILITIES EXIST WITHIN THE PROJECT CORRIDOR. THE CONTRACTOR SHALL CONTACT UTILITY OWNERS AND GET LOCATES PRIOR TO ANY EXCAVATION.
11. THE DEPTH OF EXISTING UTILITIES SHOWN ON THE PLANS ARE BASED ON AVAILABLE INFORMATION FROM LIMITED SURVEY AND AS BUILT DRAWINGS AND ARE APPROXIMATE ONLY. CONTRACTOR SHALL DETERMINE ACTUAL DEPTH PRIOR TO INSTALLING NEW UTILITIES.
12. PROTECT, OR REMOVE AND REPLACE IN SAME LOCATION OR TO THE SIDE OF ROADWAY. EXISTING MARKER POSTS FOR UTILITIES. THIS IS SUBSIDIARY TO OTHER WORK ITEMS.
13. ALL SANITARY SEWER AND WATER WORK SHALL COMPLY WITH THE LATEST EDITION OF GOLDEN HEART UTILITIES "STANDARDS OF DESIGN AND CONSTRUCTION".
14. INSULATING PIPES, INLETS, MANHOLES, FITTINGS, APPURTENANCES AND CROSSING UTILITIES AS INDICATED ON THE PLANS WILL NOT BE MEASURED FOR PAYMENT. THIS WORK IS SUBSIDIARY TO ALL UTILITY AND STORM DRAIN INSTALLATIONS.
15. SEE INDIVIDUAL SHEETS FOR ADDITIONAL NOTES.

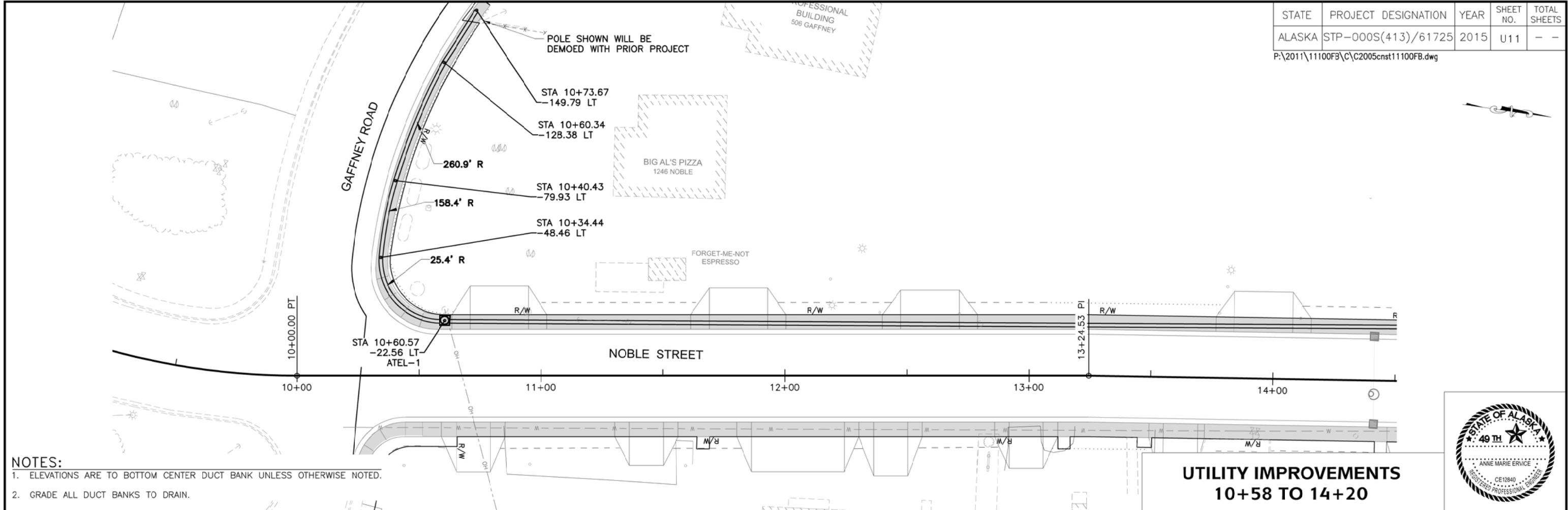
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**FIRE HYDRANT & WATER
RELOCATION**



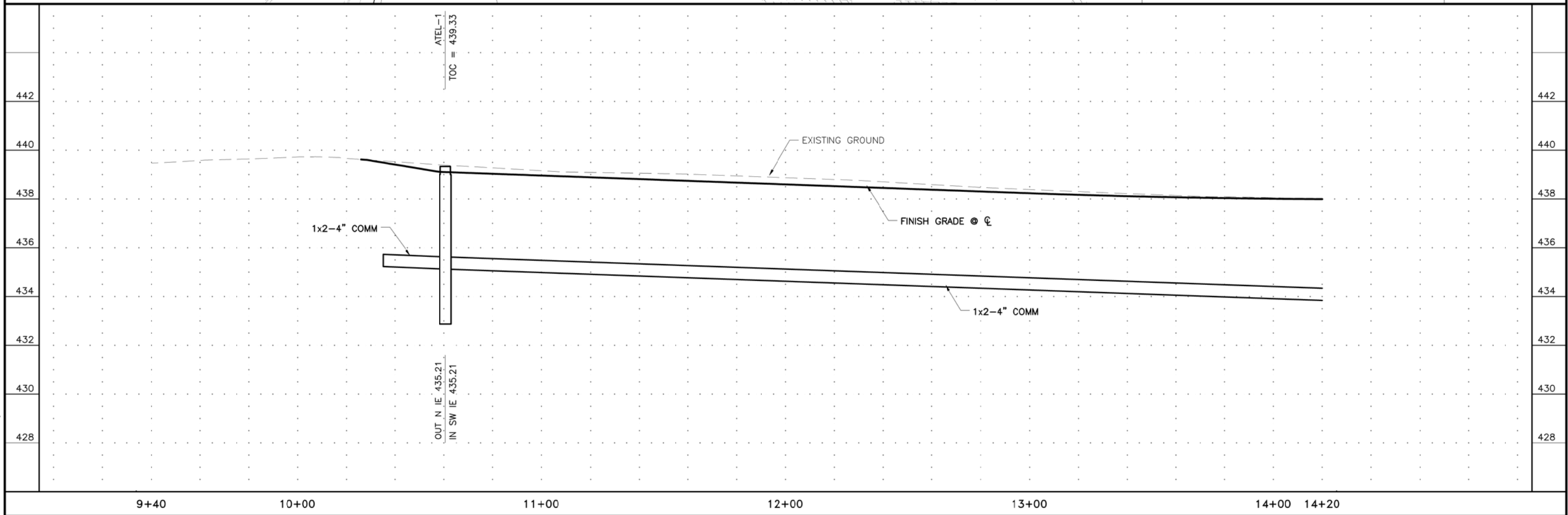
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | U11 | -- |

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- NOTES:**
- ELEVATIONS ARE TO BOTTOM CENTER DUCT BANK UNLESS OTHERWISE NOTED.
 - GRADE ALL DUCT BANKS TO DRAIN.

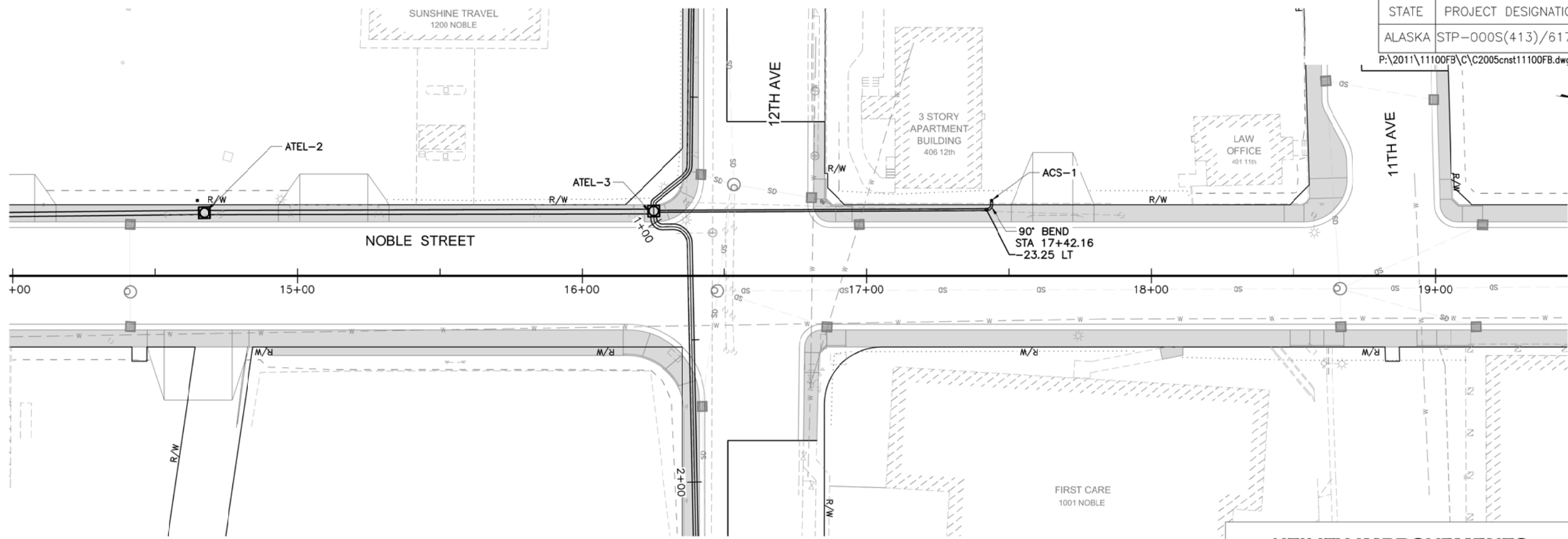
**UTILITY IMPROVEMENTS
10+58 TO 14+20**



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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | U12 | -- |

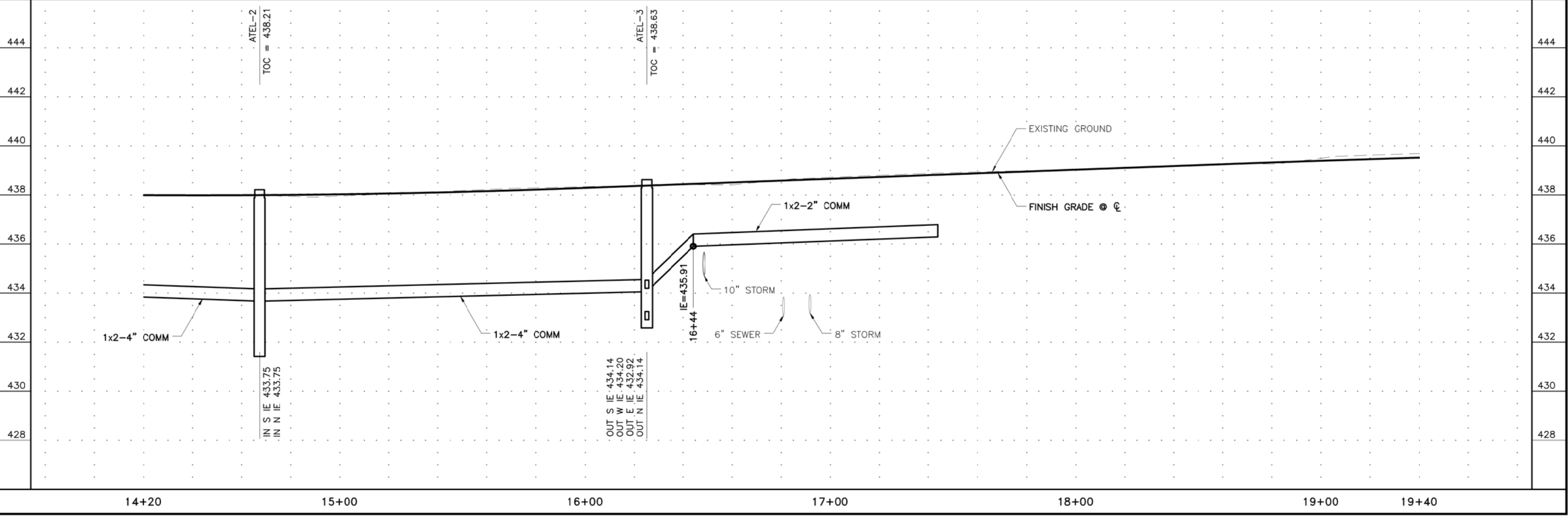
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**UTILITY IMPROVEMENTS
14+20 TO 19+40**

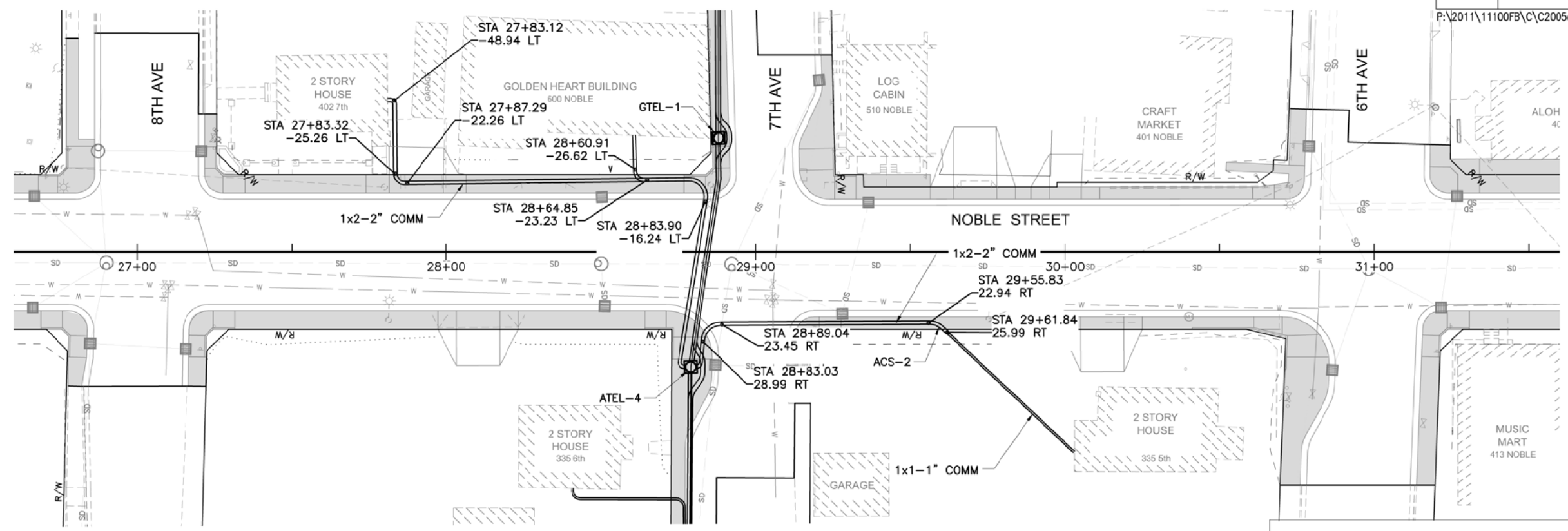


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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | U13 | -- |

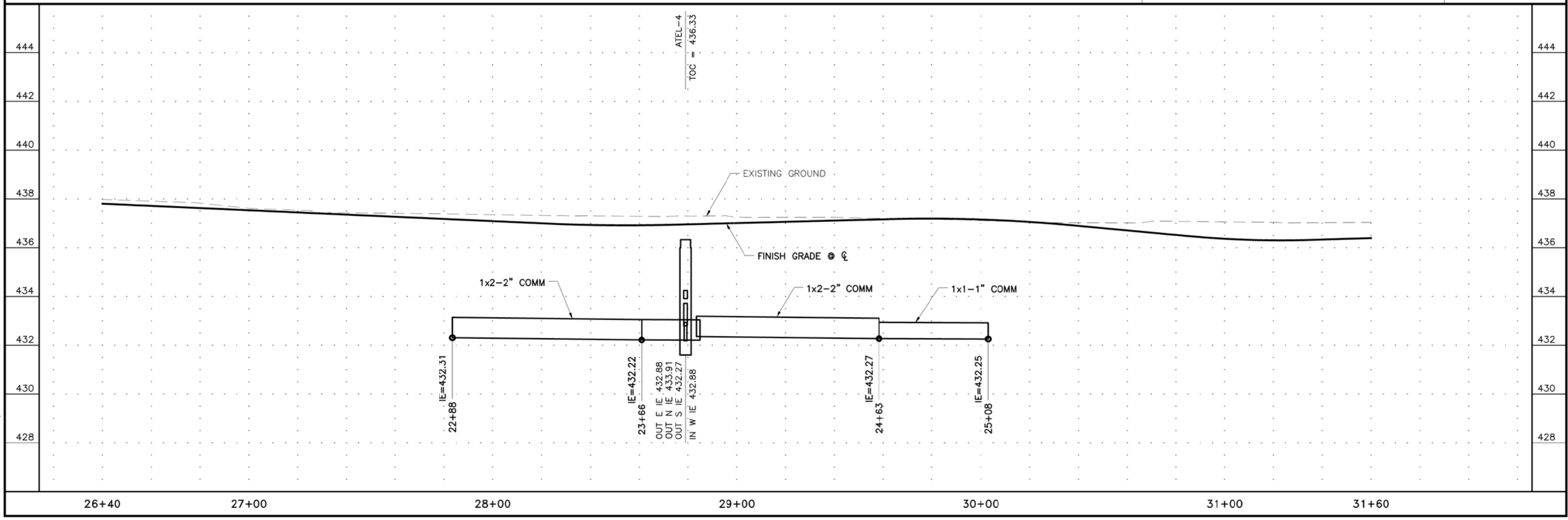
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**UTILITY IMPROVEMENTS
26+60 TO 31+60**

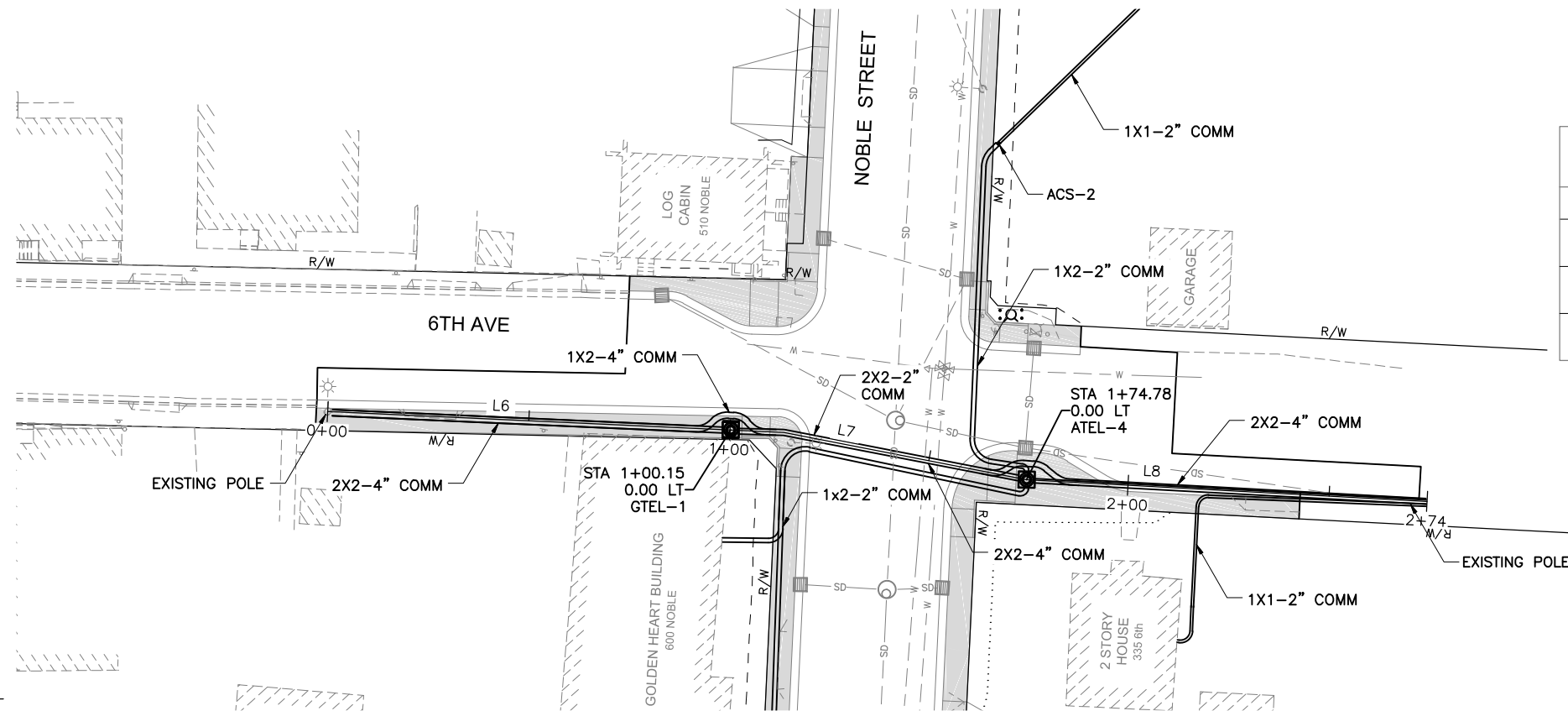


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| | | | | |
|--------|---------------------|------|-----------|--------------|
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | U14 | -- |

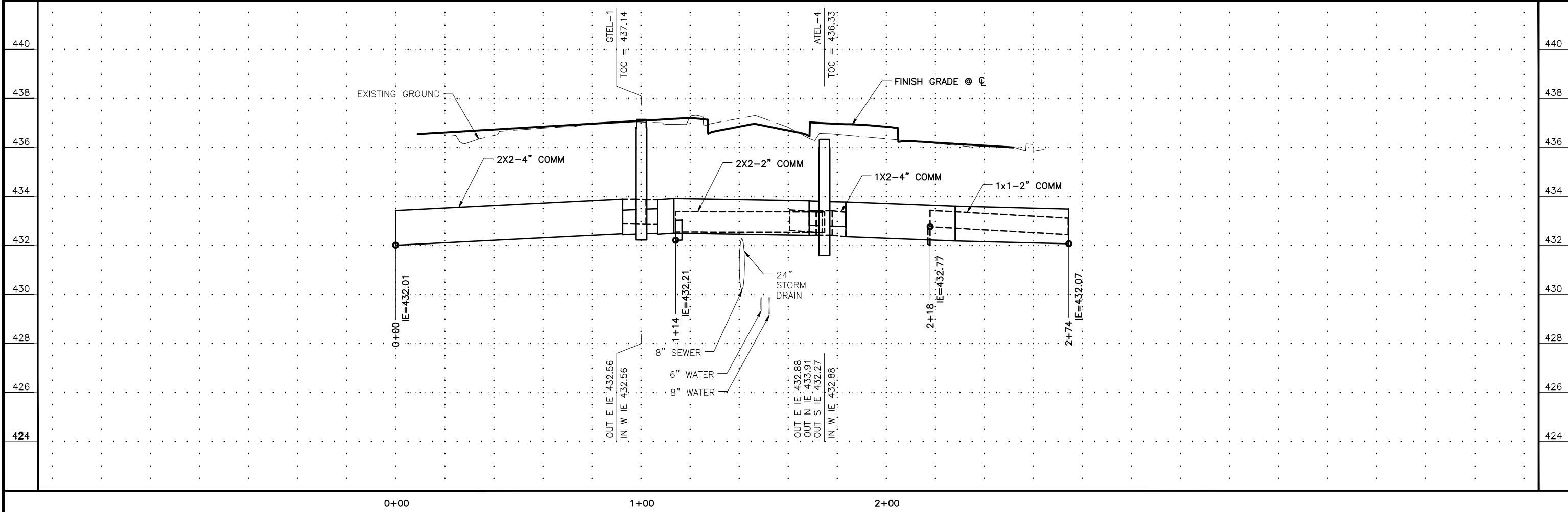
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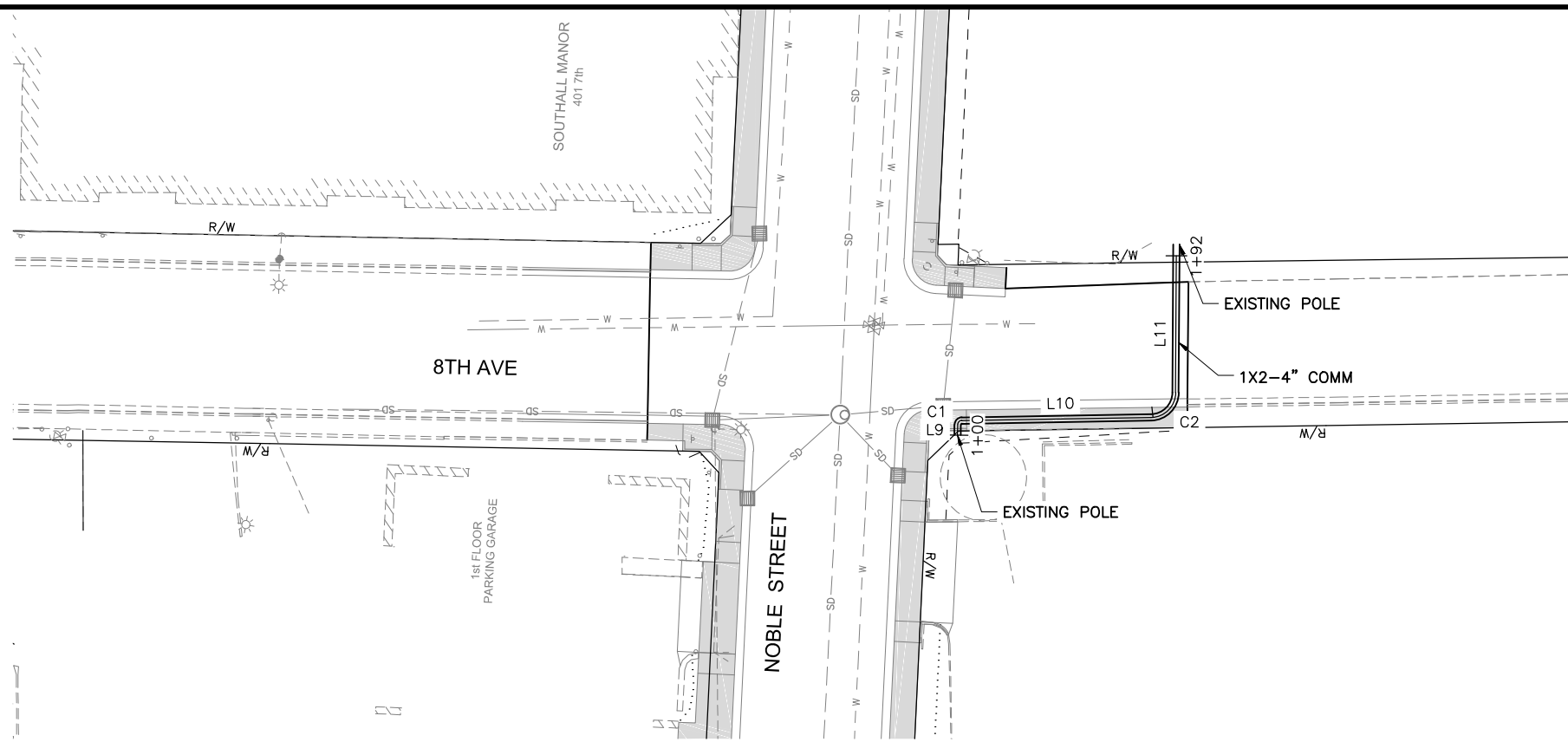
| 6TH AVE DUCT BANK | | | | | |
|-------------------|---------|------------------|-------------------------------|-------------------------------|--------|
| NUMBER | LENGTH | BEARING | START | END | RADIUS |
| L6 | 113.393 | N81° 36' 52.58"E | N: 19937.4144 E: 7064.5088 | N: 19953.9506 E: 7176.6897 | |
| L7 | 61.382 | N89° 59' 34.20"E | N: 19953.9506 E: 7176.6897 | N: 19953.9583 E: 7238.0717 | |
| L8 | 99.599 | N82° 07' 23.98"E | N: 19953.9583 E: 7238.0717 | N: 19967.6075 E: 7336.7313 | |

NOTES:
1. VAULTS AND DUCTS STATIONED OFF "6TH AVE DUCT BANK" REFERENCE LINE. SEE TABLE FOR LAYOUT.

**UTILITY IMPROVEMENTS
6TH AVE**



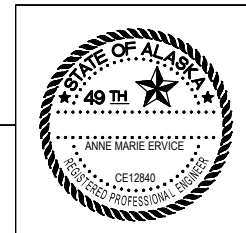
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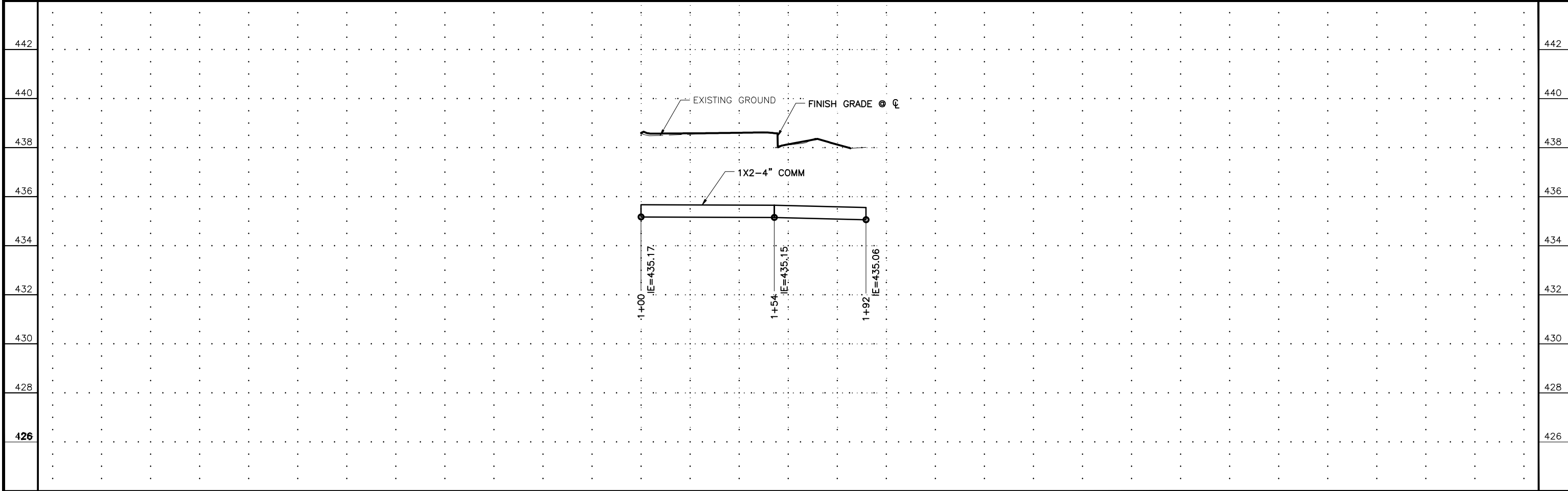
| 8TH AVE DUCT BANK | | | | | |
|-------------------|--------|------------------|-------------------------------|-------------------------------|--------|
| NUMBER | LENGTH | BEARING | START | END | RADIUS |
| L9 | 2.470 | N10° 37' 16.63"W | N: 19567.8420 E: 7288.8980 | N: 19570.2699 E: 7288.4427 | |
| C1 | 1.547 | N33° 41' 53.80"E | N: 19570.2699 E: 7288.4427 | N: 19571.4325 E: 7289.2180 | 1.000 |
| L10 | 45.496 | N78° 01' 04.23"E | N: 19571.4325 E: 7289.2180 | N: 19580.8777 E: 7333.7225 | |
| C2 | 9.287 | N33° 40' 33.07"E | N: 19580.8777 E: 7333.7225 | N: 19587.8575 E: 7338.3731 | 6.000 |
| L11 | 32.858 | N10° 39' 58.08"W | N: 19587.8575 E: 7338.3731 | N: 19620.1477 E: 7332.2916 | |

NOTES:
 1. DUCT BANK STATIONED OFF "8TH AVE DUCT BANK" REFERENCE LINE. SEE TABLE FOR LAYOUT.

**UTILITY IMPROVEMENTS
8TH AVE**



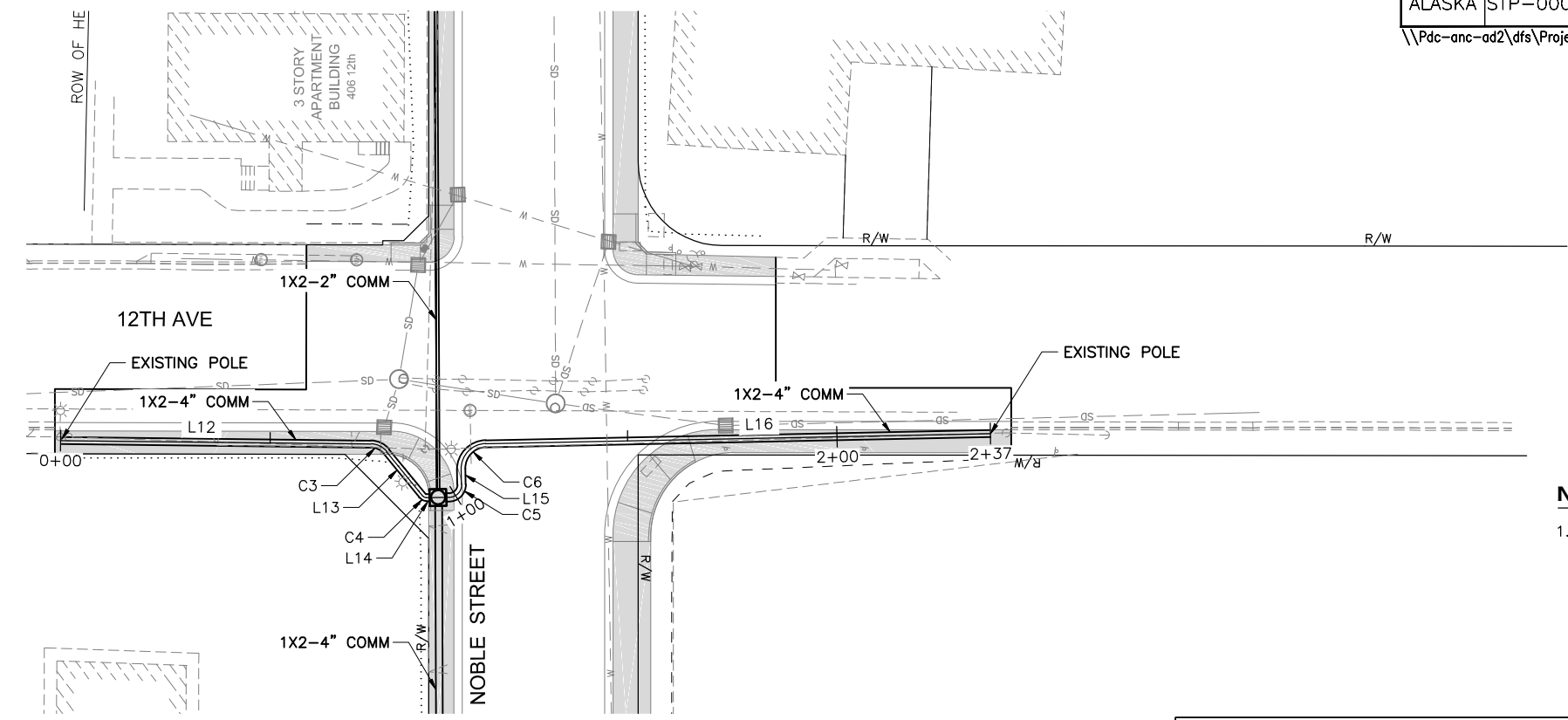
Friday, December 12, 2014, 1:16 PM



1+00 2+00

12TH AVE DUCT BANK

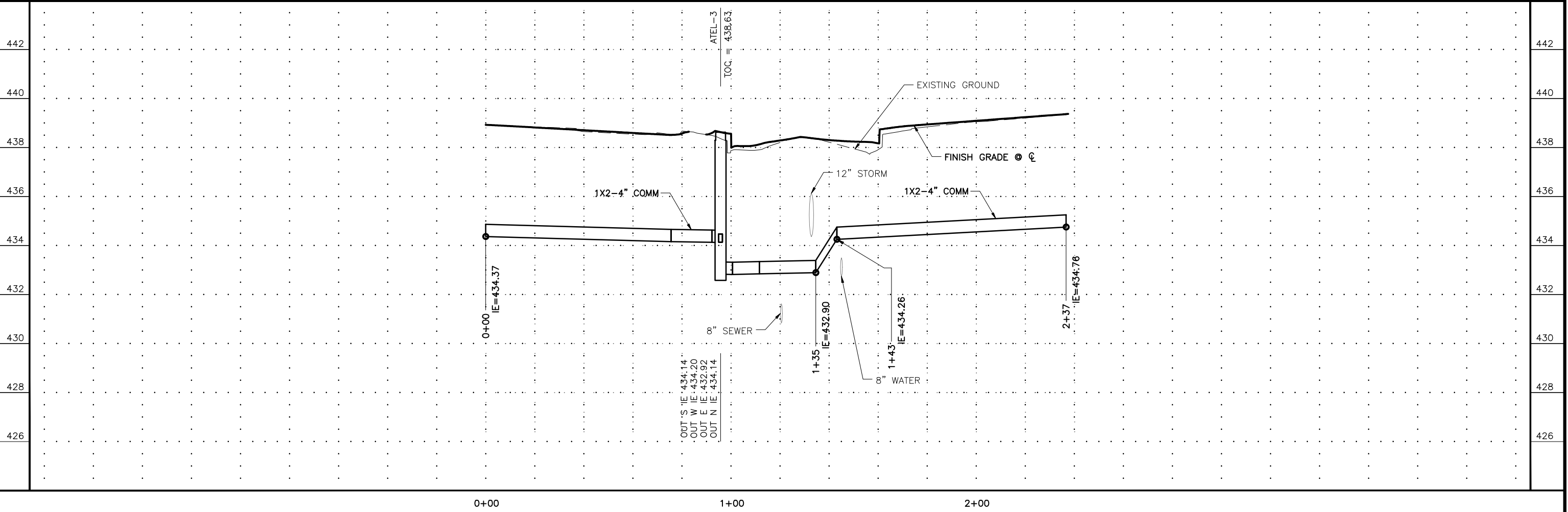
| NUMBER | LENGTH | BEARING | START | END | RADIUS |
|--------|---------|------------------|-------------------------------|-------------------------------|--------|
| L12 | 73.985 | N82° 21' 29.05"E | N: 18704.9435 E: 7268.2917 | N: 18714.7822 E: 7341.6195 | |
| C3 | 4.362 | S72° 38' 52.13"E | N: 18714.7822 E: 7341.6195 | N: 18713.5220 E: 7345.6525 | 5.000 |
| L13 | 13.727 | S47° 39' 13.30"E | N: 18713.5220 E: 7345.6525 | N: 18704.2754 E: 7355.7979 | |
| C4 | 0.905 | S73° 34' 02.38"E | N: 18704.2754 E: 7355.7979 | N: 18704.0281 E: 7356.6362 | 1.000 |
| L14 | 5.436 | N80° 31' 08.53"E | N: 18704.0281 E: 7356.6362 | N: 18704.9235 E: 7361.9978 | |
| C5 | 4.710 | N35° 32' 24.19"E | N: 18704.9235 E: 7361.9978 | N: 18708.3745 E: 7364.4630 | 3.000 |
| L15 | 3.557 | N9° 26' 20.16"W | N: 18708.3745 E: 7364.4630 | N: 18711.8837 E: 7363.8796 | |
| C6 | 9.425 | N35° 33' 39.70"E | N: 18711.8837 E: 7363.8796 | N: 18718.7865 E: 7368.8144 | 6.000 |
| L16 | 120.526 | N80° 33' 39.56"E | N: 18718.7865 E: 7368.8144 | N: 18738.5524 E: 7487.7085 | |



NOTES:
 1. VAULTS AND DUCTS STATIONED OFF "12TH AVE DUCT BANK" REFERENCE LINE. SEE TABLE FOR LAYOUT.



UTILITY IMPROVEMENTS 12TH AVE



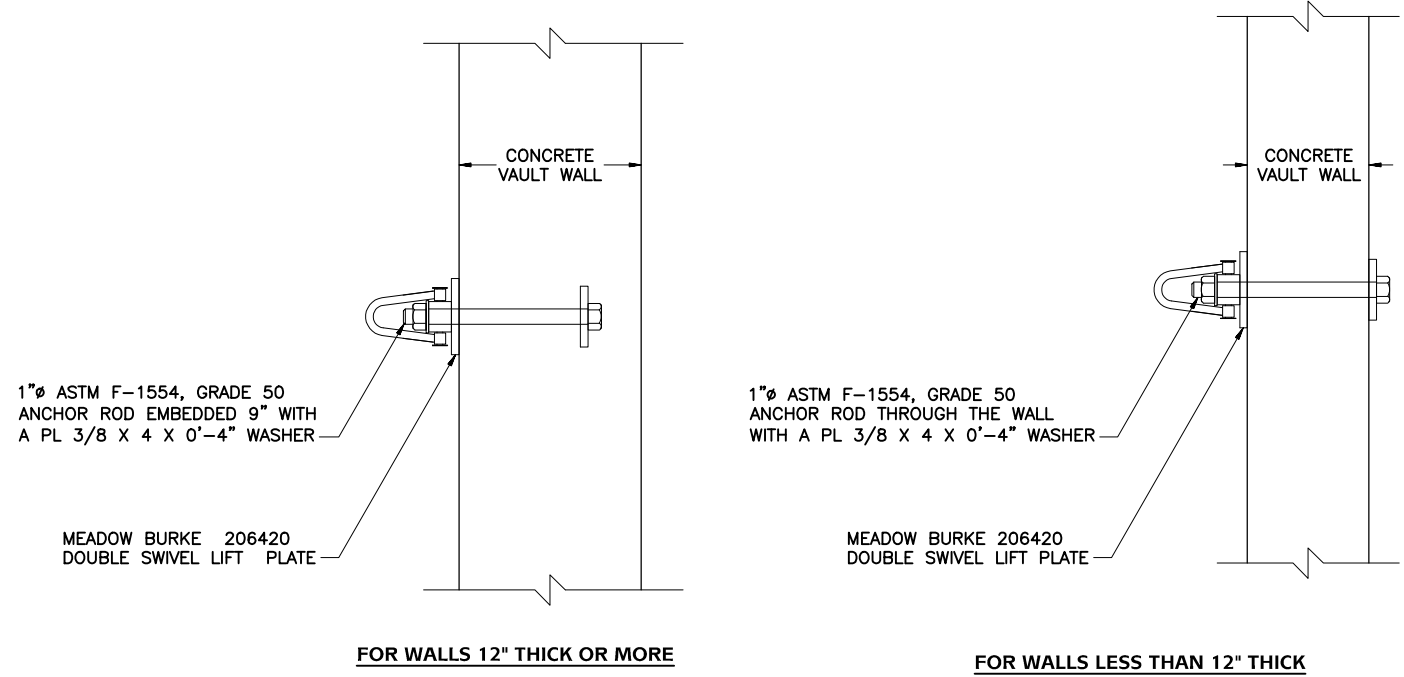
Friday, December 12, 2014, 1:16 PM

| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | STP-000S(413)/61725 | 2015 | U17 | -- |

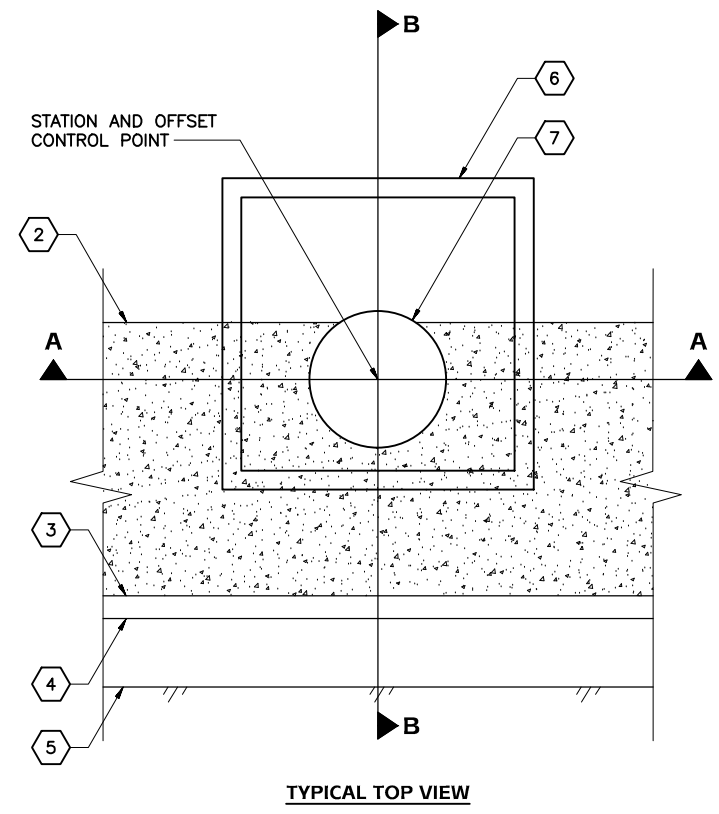
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SHEET NOTES:

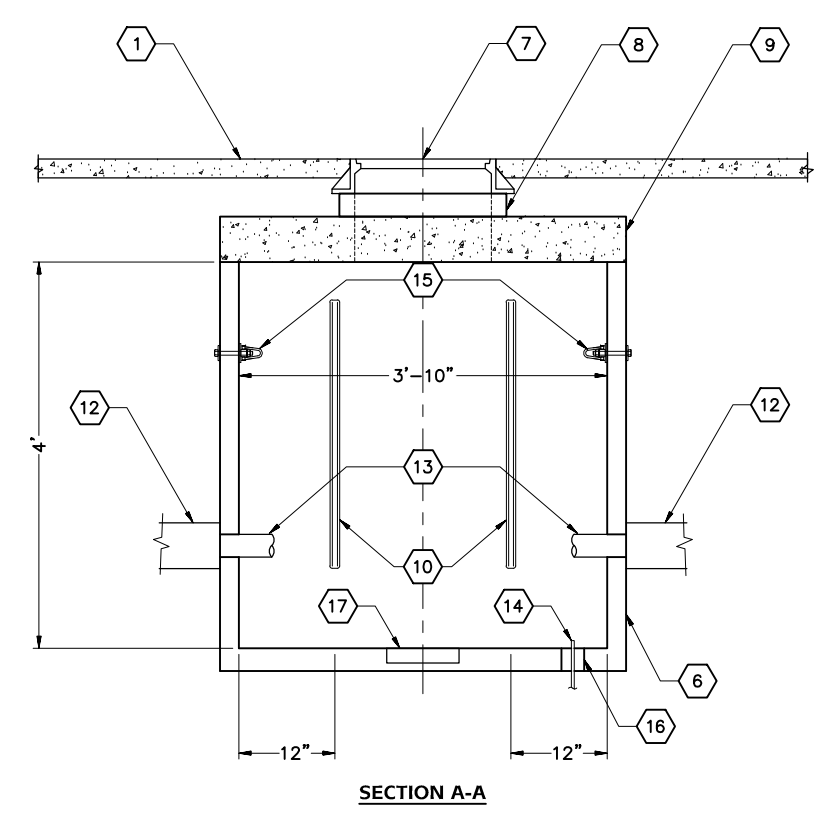
- 1 SIDEWALK
- 2 BACK OF SIDEWALK
- 3 TOP BACK OF CURB
- 4 FACE OF CURB/CURB FLOW LINE
- 5 LIP OF GUTTER/EDGE OF PAVEMENT
- 6 VAULT STRUCTURE
- 7 MANHOLE COVER: ADJUST RIM ELEVATION USING GROUT AND ADJUSTING RINGS.
- 8 PRECAST CONCRETE GRADE RING: AS NEEDED
- 9 VAULT LID
- 10 VERTICAL 16-HOLE RACK MOUNTED TO WALL OR "C" CHANNEL WITH CABLE RACK SUPPORTS. TWO (2) PER WALL. CABLE RACK HOOK NOT SHOWN FOR CLARITY.
- 11 GROUT TO MATCH SIDEWALK CROSS SLOPE.
- 12 DUCT BANK
- 13 CONDUITS
- 14 3/4"x10' GROUND ROD
- 15 PULL EYE (OR ALTERNATE DESIGN) AS APPROVED: SEE DETAIL 2/6.061D
- 16 6" SLEEVE
- 17 12" DIA. SUMP PAN WITH COVER PLACED DIRECTLY UNDER ACCESS OPENING



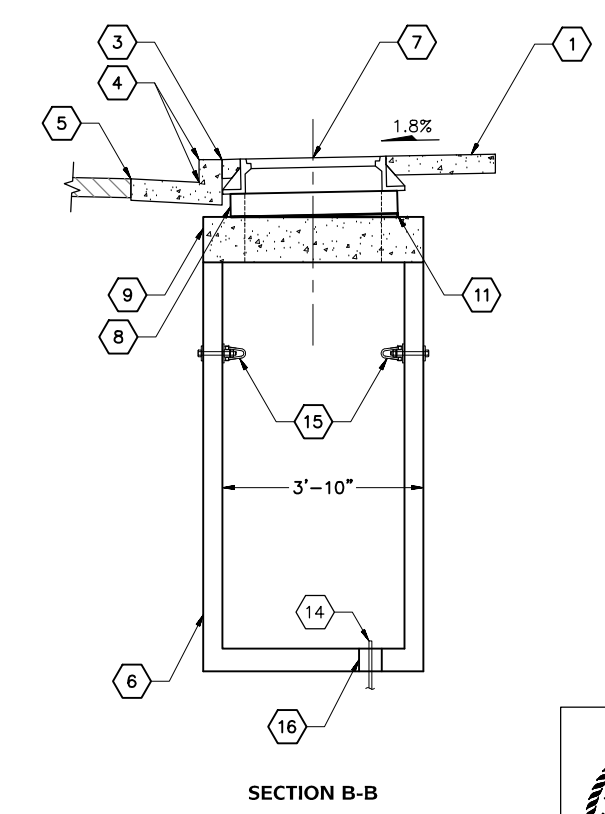
DETAIL: PULL EYE
NTS



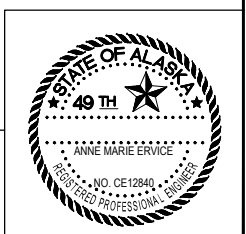
DETAIL: COMM VAULT
NTS



GENERAL NOTE:
1. ALL INTERIOR METAL APPURTENANCES SHALL BE BONDED TO GROUND.
2. FAIRBANKS PRECAST AND REBAR VAULT MODEL 444 VAULT



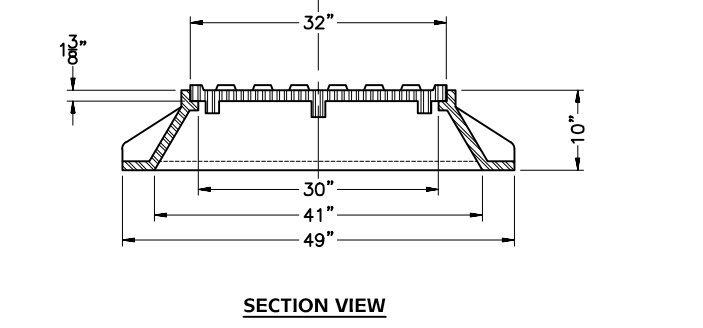
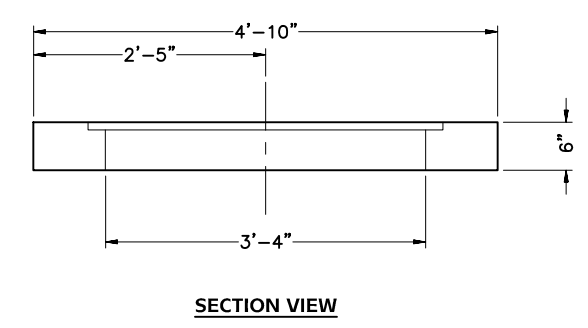
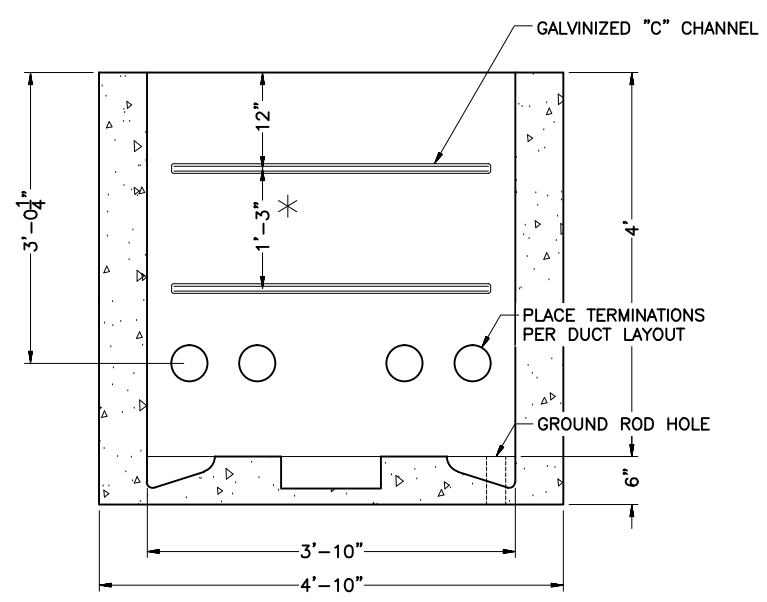
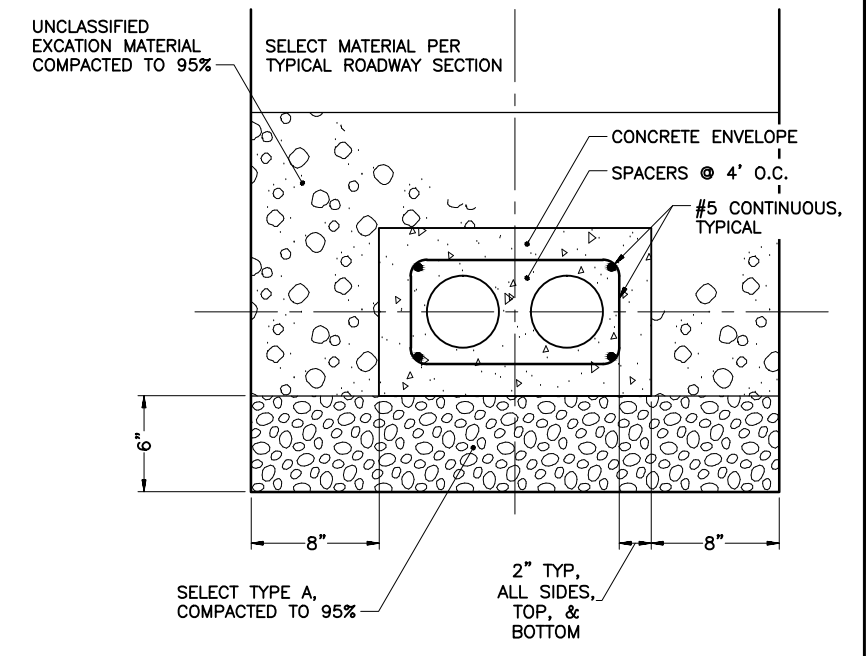
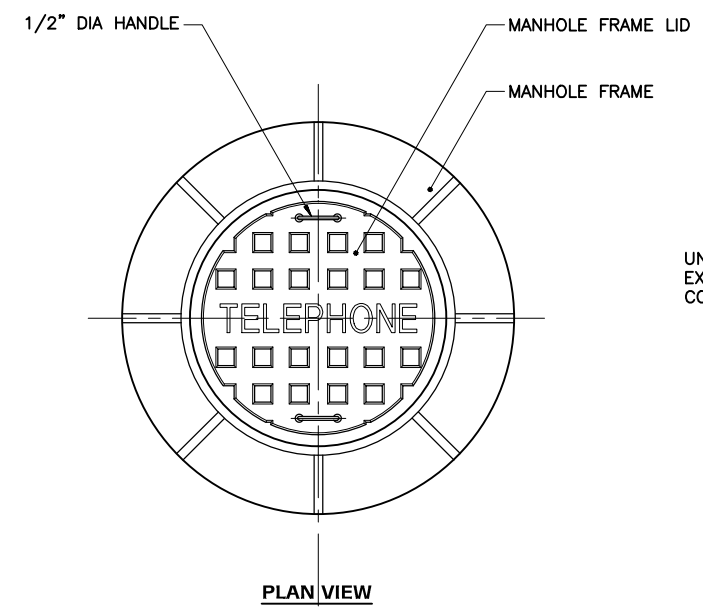
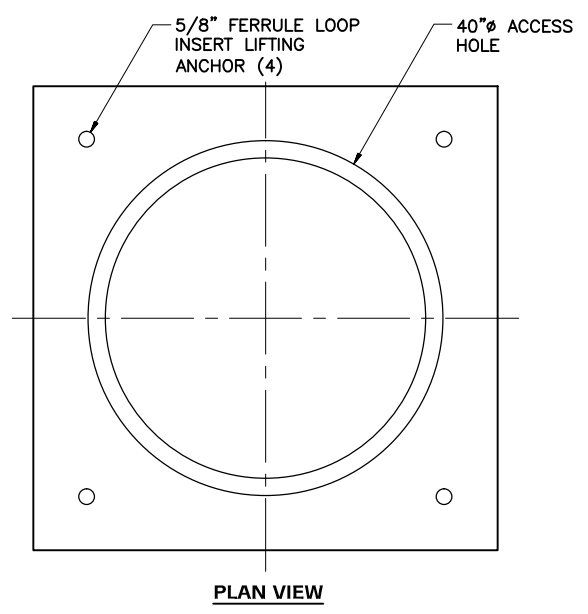
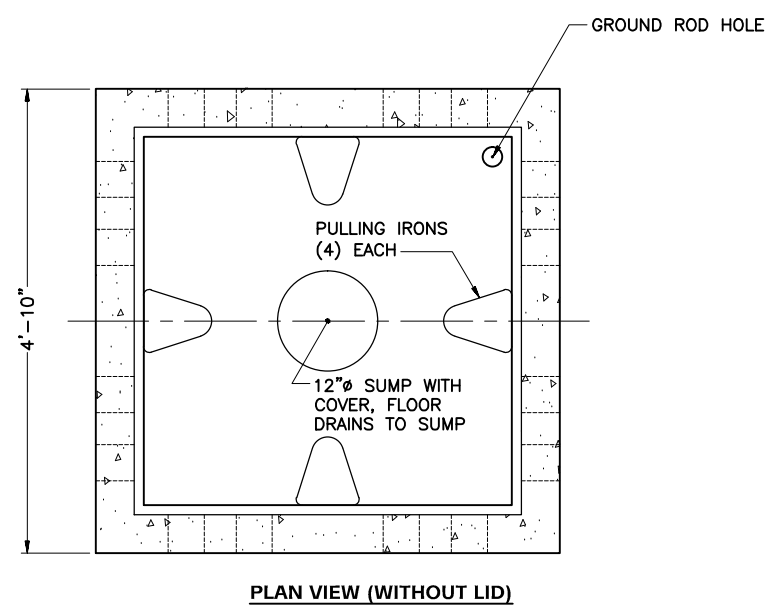
UTILITIES AND IMPROVEMENTS
COMM VAULT DETAILS (1 OF 2)



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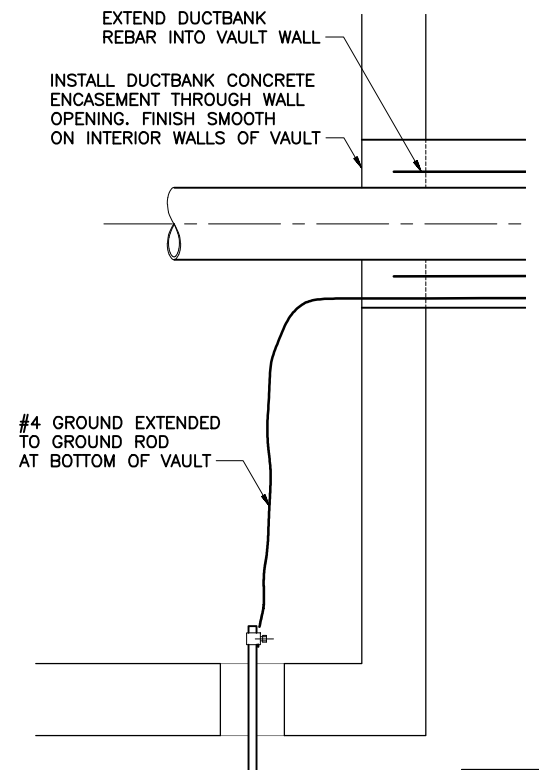
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| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| ALASKA | STP-000S(413)/61725 | 2015 | U18 | -- |

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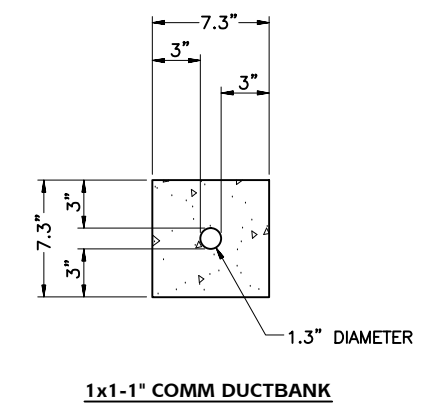
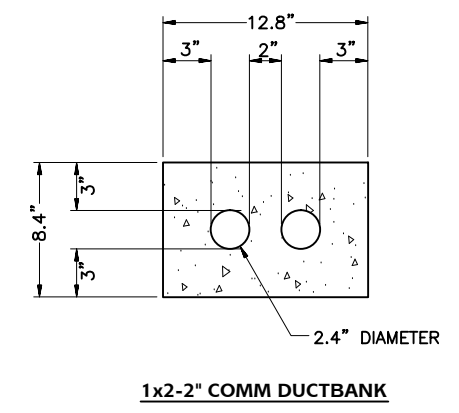
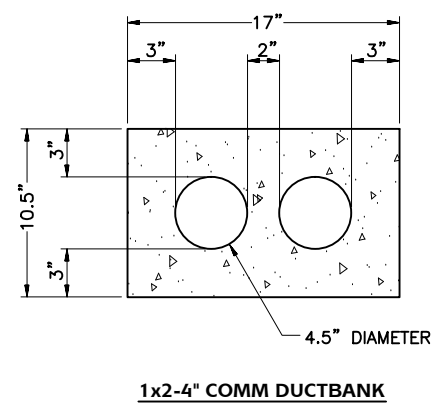


DETAIL: VAULT TOP-PLAN & CENTERLINE SECTION VIEW
NTS

DETAIL: ACCESS MANHOLE-PLAN & CENTERLINE SECTION VIEW
NTS

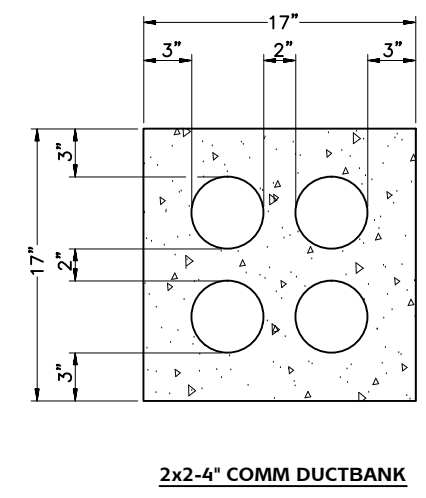


* TO MATCH VERTICAL RACK SUPPORT SPACING
SECTION VIEW (WITHOUT LID)
DETAIL: VAULT-PLAN & CENTERLINE SECTION VIEW
NTS



DETAIL NOTE: DUCTS ENVELOPED IN CONCRETE, CLASS A. SEE TYPICAL DUCTBANK SECTION THIS SHEET.

TYPICAL: DUCT BANK CONFIGURATIONS
NTS

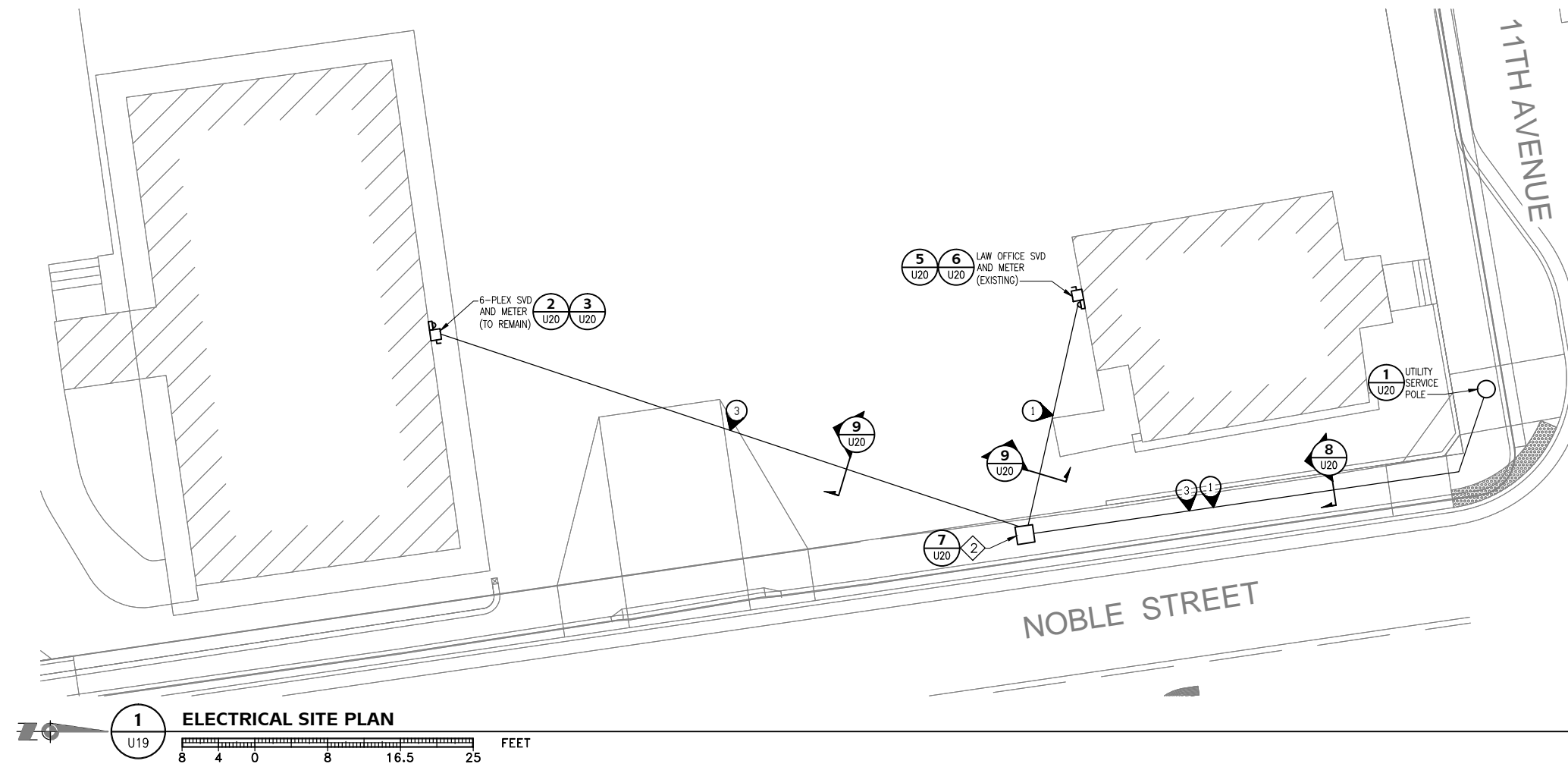


UTILITIES AND IMPROVEMENTS
COMM VAULT DETAILS (2 OF 2)



GENERAL NOTES

- ALL CONDUCTORS SHALL BE TYPE XHHW UON.
- PROVIDE TYPE 1 PULL BOX.



| POWER SYMBOLS | |
|--------------------------|--------------------------|
| | NONFUSIBLE SWITCH |
| | FEEDER NUMBER DESIGNATOR |
| | METER SOCKET |
| NOT ALL SYMBOLS ARE USED | |

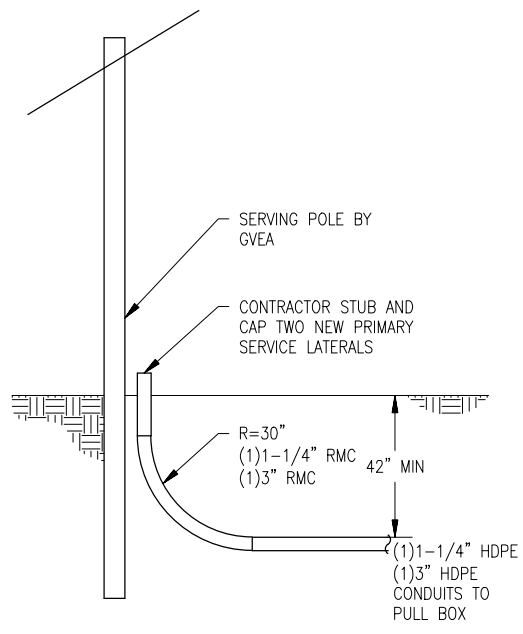
| ABBREVIATIONS | |
|--------------------------------|---|
| A | AMPERES |
| AF | AMP FRAME |
| AFG | ABOVE FINISH GRADE |
| AIC | AMPS INTERRUPTING CAPACITY |
| BCU | BARE COPPER WIRE |
| C | CONDUIT |
| CB | CIRCUIT BREAKER |
| CKT | CIRCUIT |
| CNDR | CONDUCTOR |
| CT | CURRENT TRANSFORMER |
| CU | COPPER |
| DISC | DISCONNECT |
| DWG | DRAWING |
| E | EAST |
| EBJ | EQUIPMENT BONDING JUMPER |
| EGC | EQUIPMENT GROUNDING CONDUCTOR |
| GEC | GROUNDING ELECTRODE CONDUCTOR |
| GND | GROUND OR GROUNDED |
| HDPE | HIGH-DENSITY POLYETHYLENE |
| JB | JUNCTION BOX |
| LFMC | LIQUIDTIGHT FLEXIBLE METAL CONDUIT |
| MTD | MOUNTED |
| MTM | MOLDED CASE THERMAL MAGNETIC BREAKER |
| P | POLE |
| PH | PHASE |
| PRI | PRIMARY |
| RMC | RIGID METAL CONDUIT (HOT-DIPPED GALVANIZED) |
| SEC | SECONDARY |
| SPEC | SPECIFICATION |
| SVD | SERVICE DISCONNECT |
| TYP | TYPICAL |
| UG | UNDERGROUND |
| UL | UNDERWRITERS' LABORATORIES |
| V | VOLTS |
| VA | VOLT AMPERES |
| W | WATT, WEST or WIRE |
| XFMR | TRANSFORMER |
| NOT ALL ABBREVIATIONS ARE USED | |

ELECTRICAL SPECIFICATIONS

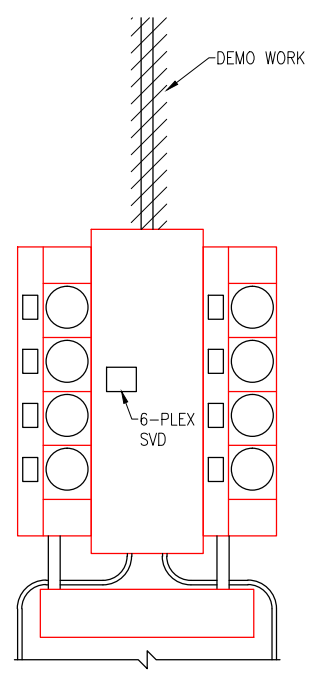
- GENERAL REGULATORY REQUIREMENTS
 - COMPLY WITH NFPA 70, NATIONAL ELECTRICAL CODE 2011 EDITION; NECA 1, STANDARD FOR GOOD WORKMANSHIP IN ELECTRICAL CONSTRUCTION; AND NATIONAL ELECTRICAL SAFETY CODE.
 - ELECTRICAL COMPONENTS, DEVICES, ASSEMBLIES, AND ACCESSORIES ARE REQUIRED TO BE LISTED AND LABELED AS DEFINED IN NFPA 70, ARTICLE 100, BY A TESTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, AND MARKED FOR INTENDED USE.
 - DELIVER, STORE, PROTECT, AND HANDLE PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. PROTECT PRODUCTS FROM WEATHER.
 - ACCEPT PRODUCTS ON SITE IN MANUFACTURER'S PACKAGING. INSPECT FOR DAMAGE. NOTIFY PROJECT MANAGER OF ALL DAMAGED PRODUCTS.
 - THE CONTRACT DOCUMENTS ARE COMPLEMENTARY; WHAT IS REQUIRED BY ONE IS AS BINDING AS IF REQUIRED BY ALL.
 - DRAWINGS SHOW THE GENERAL LOCATIONS OF THE ELECTRICAL FEATURES ONLY, UNLESS OTHERWISE INDICATED. MAKE MINOR RELOCATIONS AS REQUIRED FOR PROJECT CONDITIONS WHEN NECESSARY TO PRESENT SYMMETRICAL APPEARANCE OR TO AVOID INTERFERENCE WITH OTHER INSTALLATIONS.
 - REVIEW AND COORDINATE THIS WORK WITH ALL ASSOCIATED CIVIL WORK AND ALL OTHER DRAWINGS AND SPECIFICATIONS. ADJUST THE WORK AS REQUIRED TO COORDINATE WITH OTHER WORK AND BE COMPATIBLE WITH CONDITIONS.
 - WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL STATE, FEDERAL, AND OSHA SAFETY REQUIREMENTS.
 - CONTRACTOR COORDINATION
 - CONTRACTOR SHALL COORDINATE START-UP AND ENERGIZING OF ALL ELECTRICAL EQUIPMENT WITH PROJECT MANAGER.
 - CONTRACTOR SHALL COORDINATE POWER OUTAGES AND DE-ENERGIZING OF ALL EXISTING ELECTRICAL EQUIPMENT WITH PROJECT MANAGER.
- SUBMITTALS
 - SEE ADOT SPECIFICATION SECTION 106-1.08 FOR SUBMITTAL PROCEDURE.
- DEMOLITION
 - EXISTING ELECTRICAL CONDITIONS BASED ON AS-BUILT DOCUMENTS AND LIMITED FIELD OBSERVATION BY THE ENGINEER. CONTRACTOR SHALL FIELD VERIFY.
 - RECONNECT AND LABEL EXISTING BRANCH CIRCUITS NOT BEING REMOVED WHICH PASS THROUGH, OR CONNECT INTO, THE PROJECT AREA.
 - ELECTRICAL EQUIPMENT REMOVED AND DEEMED UNUSABLE BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE PROPERLY DISPOSED OF. EQUIPMENT DEEMED USABLE BY THE OWNER SHALL BE DELIVERED WITHOUT DAMAGE TO A LOCATION DESIGNATED BY THE OWNER, UNLESS OTHERWISE INDICATED.
- CONDUCTORS
 - CONDUCTOR MATERIAL: COPPER. SOLID FOR NO. 10 AWG AND SMALLER; STRANDED FOR NO. 8 AWG AND LARGER.
 - FIELD QUALITY CONTROL: AFTER INSTALLING CONDUCTORS AND CABLES AND BEFORE ELECTRICAL CIRCUITRY HAS BEEN ENERGIZED, TEST FOR UNINTENDED OPENS, SHORTS, AND GROUNDS.
- GROUNDING AND BONDING
 - INSULATED CONDUCTORS: COPPER WIRE OR CABLE INSULATED FOR 600 V UNLESS OTHERWISE INDICATED.
 - CONNECTORS: LISTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING LABORATORY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION FOR APPLICATIONS IN WHICH USED, AND FOR SPECIFIC TYPES, SIZES, AND COMBINATIONS OF CONDUCTORS AND OTHER ITEMS CONNECTED.
 - GROUND RODS: COPPER-CLAD STEEL; 3/4 INCH BY 10 FEET.
 - INSTALLATION: INSTALL INSULATED EQUIPMENT GROUNDING CONDUCTORS WITH ALL FEEDERS AND BRANCH CIRCUITS. TERMINATE EACH END ON SUITABLE LUG, BUS OR BUSHING. SIZE EQUIPMENT GROUNDING CONDUCTORS IN ACCORDANCE WITH NEC, UNLESS OTHERWISE INDICATED, BUT NOT SMALLER THAN NO. 12 AWG.
- RACEWAY
 - RMC: COMPLY WITH ANSI C80.1 AND UL 6, HOT-DIPPED ZINC GALVANIZED.
 - RIGID HDPE: TYPE SCHEDULE 40, COMPLY WITH UL 651A.
 - COLOR DESIGNATION: THREE LONGITUDINALLY CO-EXTRUDED STRIPES SPACED AT APPROXIMATELY EQUAL DISTANCE CIRCUMFERENTIALLY APART.
 - STRIPE COLOR FOR POWER, RED.
 - CONTINUOUS HDPE: TYPE SCHEDULE 40, COMPLY WITH UL 651A.
 - COLOR DESIGNATION: THREE LONGITUDINALLY CO-EXTRUDED STRIPES SPACED AT APPROXIMATELY EQUAL DISTANCE CIRCUMFERENTIALLY APART.
 - STRIPE COLOR FOR POWER, RED.
 - FITTINGS FOR METAL CONDUIT: COMPLY WITH NEMA FB 1 AND UL 514B.
 - FITTINGS FOR HDPE: MECHANICAL TYPE.
 - INSTALLATION
 - OUTDOORS: ABOVEGROUND USE RMC AND UNDERGROUND USE RMC UNLESS OTHERWISE INDICATED.
 - UNDERGROUND USE HDPE WHERE INDICATED ON DRAWINGS; THE SWEEPS, ELBOWS, AND ABOVE GRADE CONDUIT FOR CONDUIT RUNS OF HDPE SHALL BE RMC.
 - COMPLETE RACEWAY INSTALLATION BEFORE STARTING CONDUCTOR INSTALLATION.
 - HDPE CONDUIT SHALL BE RUN THROUGH APPROVED RE-ROUNDING AND STRAIGHTENING EQUIPMENT DURING INSTALLATION.
- ELECTRICITY METERING
 - METER SOCKET: NEMA 3R WITH PROVISIONS FOR SEALS.
 - SERVICE DISCONNECT: NEMA 3R.
 - FIELD QUALITY CONTROL
 - COMPLY WITH REQUIREMENTS OF ELECTRICAL-POWER UTILITY COMPANY.
 - HUBS AND RACEWAY FITTINGS SHALL BE OF THE WET LOCATION SEALING TYPE.
- ENCLOSED CIRCUIT BREAKERS
 - GENERAL REQUIREMENTS: COMPLY WITH UL 489, NEMA AB1, AND NEMA AB3, WITH INTERRUPTING CAPACITY TO COMPLY WITH AVAILABLE FAULT CURRENTS.
 - ENCLOSURES: NEMA 250, TYPE 3R.
 - ALL CONDUCTOR TERMINATIONS SHALL BE LISTED AND LABELED FOR WIRE APPLIED AT 75 DEG C AMPACITY.
 - FIELD QUALITY CONTROL: PERFORM EACH VISUAL AND MECHANICAL INSPECTION AND ELECTRICAL TEST IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

ELECTRICAL LEGEND,
SPECIFICATIONS AND SITE PLAN

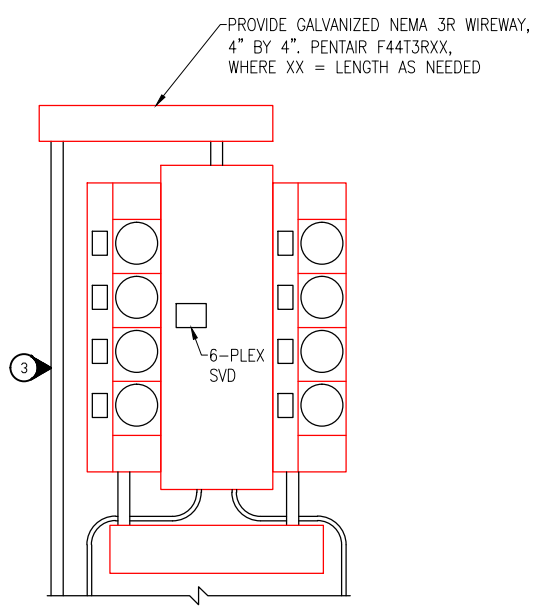




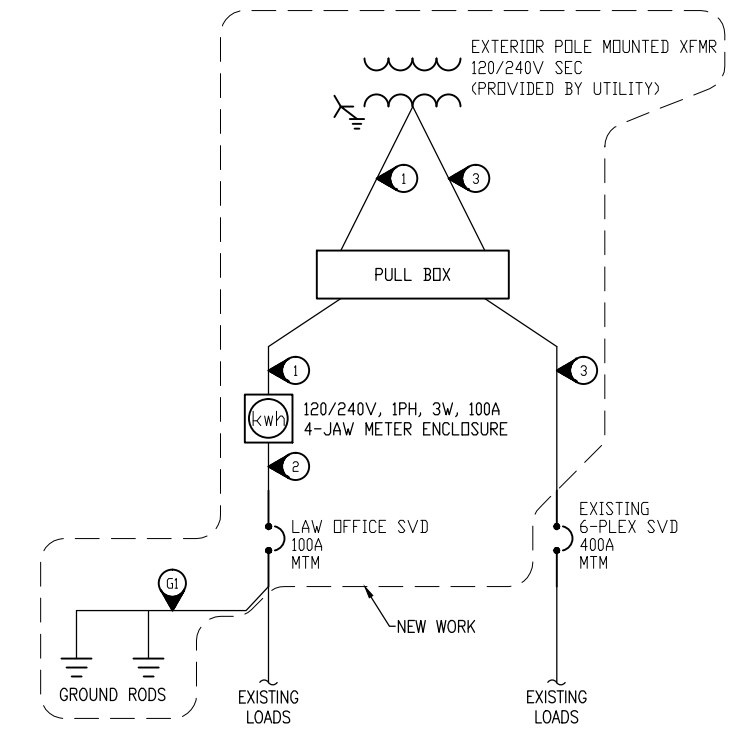
1 CONDUIT INSTALLATION AT GVEA POLE
U20 NTS



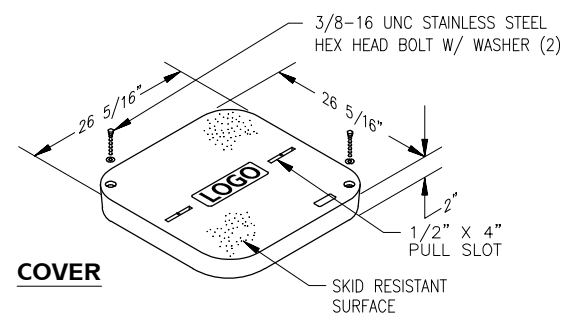
2 DEMO WORK: 6-PLEX SVD
U20 NTS



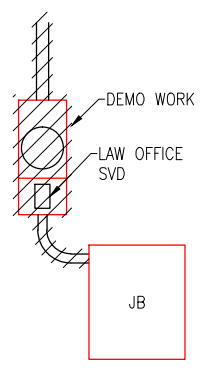
3 NEW WORK: 6-PLEX SVD
U20 NTS



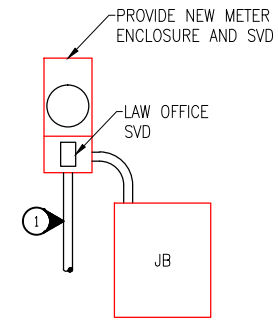
4 ELECTRICAL ONE-LINE DIAGRAM
U20 NTS



COVER

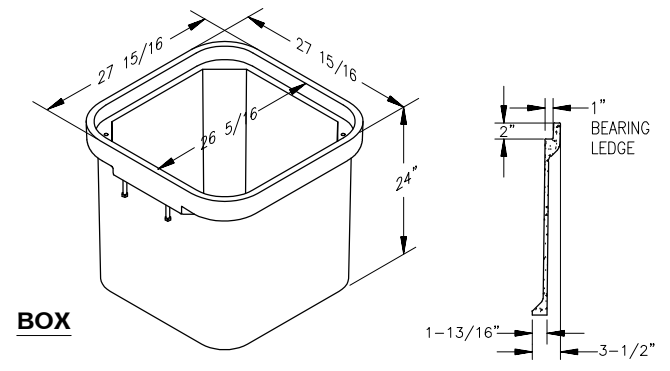


5 DEMO WORK: LAW OFFICE SVD
U20 NTS



6 NEW WORK: LAW OFFICE SVD
U20 NTS

| FEEDER SCHEDULE | | | |
|-----------------|----------------------------------|---------------------------|---|
| NO. | CONDUCTORS | RACEWAY TYPE | REMARKS |
| 1 | 3 NO. 2 XHHW | 1-1/4" RMC 1-1/4" HDPE | UNDERGROUND SERVICE PROVIDE RMC ABOVE GROUND AND FOR SWEEPS; PROVIDE HDPE BELOW GROUND BETWEEN SWEEPS |
| 2 | 3 NO. 2 XHHW 1 NO. 8 XHHW EBJ | 1-1/4" RMC | |
| 3 | 3 NO. 500 KCML XHHW | 3" RMC 3" HDPE | UNDERGROUND SERVICE PROVIDE RMC ABOVE GROUND AND FOR SWEEPS; PROVIDE HDPE BELOW GROUND BETWEEN SWEEPS |
| G1 | 1 NO. 4 BCU GEC | 1/2" RHM | GROUNDING ELECTRODE CONDUCTOR CONDUIT WHERE REQUIRED FOR PROTECTION |

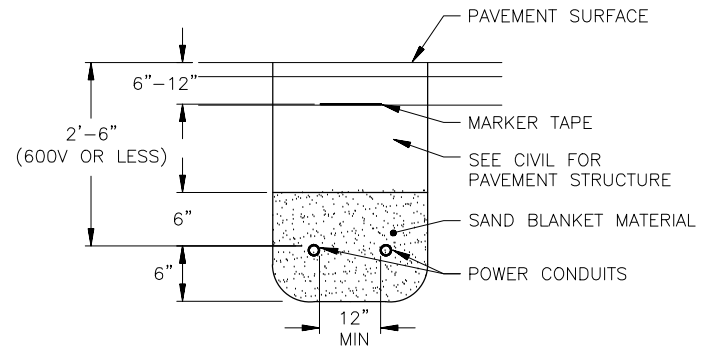


BOX

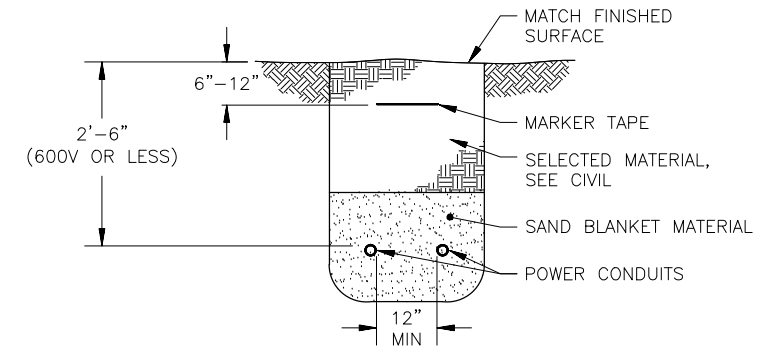
7 POWER TYPE I PULL BOX DETAIL
U20 NTS

TYPE 1 PULL BOX NOTES

- EACH UNDERGROUND ENCLOSURE SHALL BE A HEAVY DUTY, FIBERGLASS REINFORCED POLYMER CONCRETE STRUCTURE, OPEN BOTTOM, UL LISTED UNDERGROUND ELECTRICAL ENCLOSURE, TOP OPENING DIMENSIONS APPROXIMATELY 24 BY 24 INCHES, ANSI TIER 22 LOADING (22,500 LBS DESIGN, 33,750 LBS TEST), HUBBELL QUAZITE PART NUMBER PG2424BA24 FOR ENCLOSURE AND PG2424HH00 FOR COVER WITH THE WORD "POWER" CAST IN COVER, OR ACCEPTED EQUAL FOR BOTH.
- BOXES SHALL BE SET ON COMPACTED STRUCTURAL FILL, EXTENDING 12 INCHES BEYOND THE BOX IN ALL DIRECTIONS AND BEING 12 INCHES DEEP MINIMUM. BOXES SHALL BE SET WITH TOP EVEN WITH FINISH GRADE.



8 BURIAL DETAIL (PAVEMENT)
U20 NTS



9 BURIAL DETAIL (NON-PAVEMENT)
U20 NTS

ELECTRICAL ONE-LINE DIAGRAM AND DETAILS

