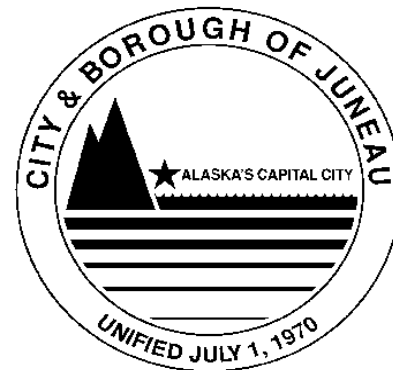


WHITTIER STREET RECONSTRUCTION

VOLUME II of II

Contract No. E16-151

File No. 1907

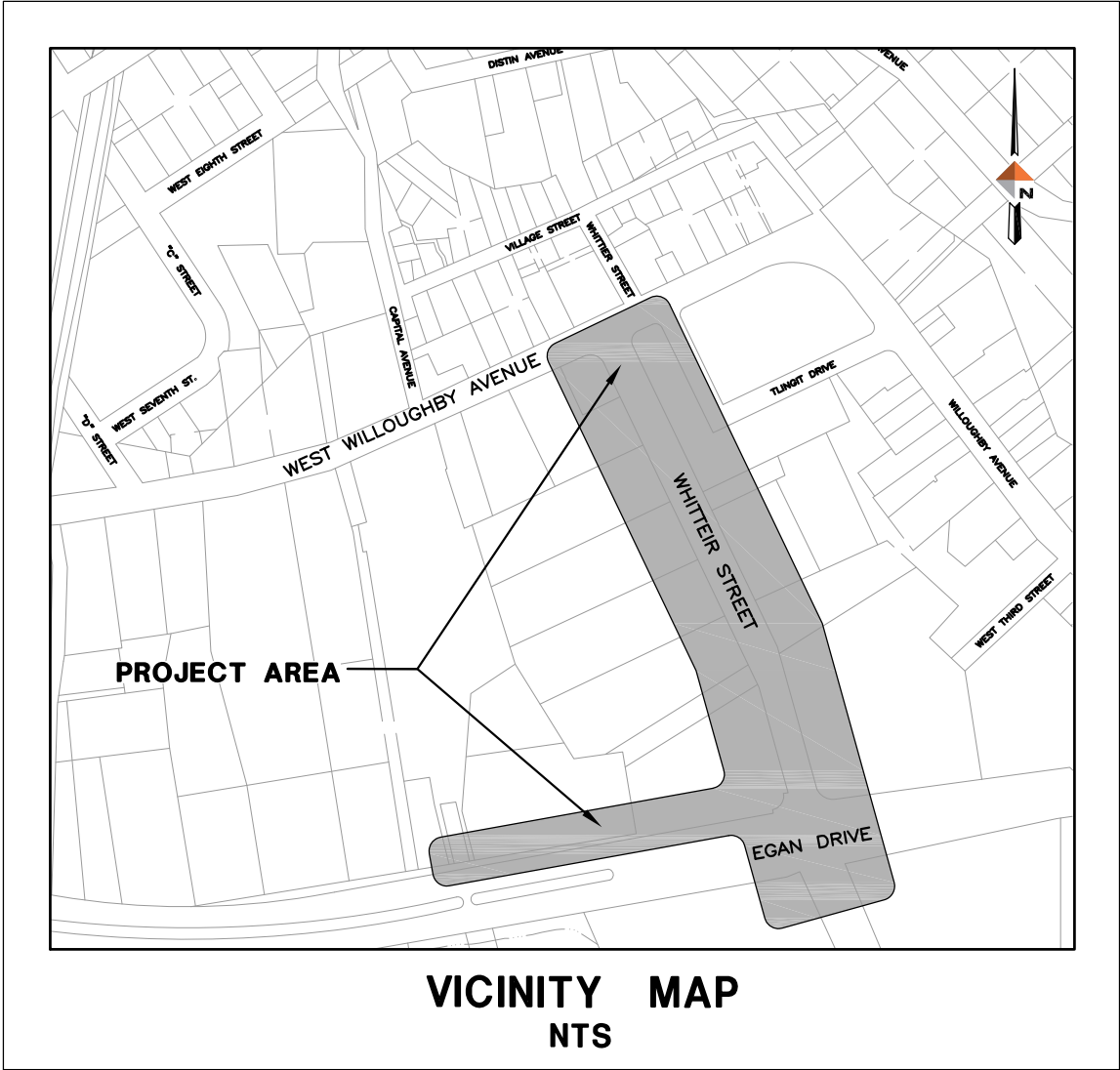


ENGINEERING DEPARTMENT

CIVIL INDEX

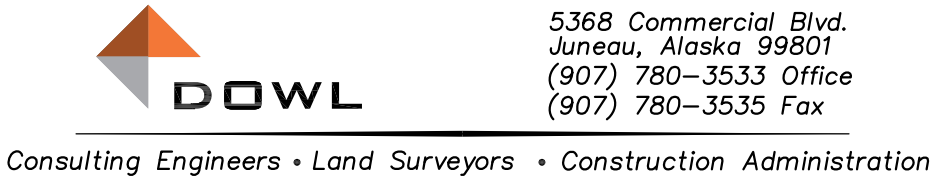
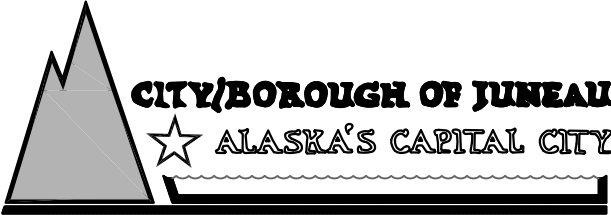
DESCRIPTION	SHEET NO.
COVER SHEET	1 OF 24
LEGEND, ABBREVIATIONS, AND GENERAL NOTES	2 OF 24
TYPICAL SECTIONS, DETAILS, AND STORM DRAIN FRAME AND GRATE SUMMARY	3 OF 24
DETAILS	4 OF 24
TRAFFIC CONTROL – EGAN DRIVE	5 OF 24
TRAFFIC CONTROL – WHITTIER STREET AND PHASING REQUIREMENTS	6 OF 24
PAINTED TRAFFIC MARKINGS AND SIGN LAYOUT TABLE	7 OF 24
HORIZONTAL AND VERTICAL CONTROL CURB AND GUTTER LAYOUT AND GRADES BOP TO STA "W" 13+05	8 OF 24
HORIZONTAL AND VERTICAL CONTROL CURB AND GUTTER LAYOUT AND GRADES STA "W" 13+05 TO STA "W" 16+10	9 OF 24
HORIZONTAL AND VERTICAL CONTROL CURB AND GUTTER LAYOUT AND GRADES STA "W" 16+10 TO EOP	10 OF 24
PLAN – WHITTIER STREET BOP TO STA "W" 13+05	11 OF 24
PLAN – WHITTIER STREET STA "W" 13+05 TO STA "W" 16+10	12 OF 24
PLAN – WHITTIER STREET STA "W" 16+10 TO EOP	13 OF 24
PLAN – PROSPECTOR WATER SERVICE WHITTIER TO 255'RT	14 OF 24
PLAN – PROSPECTOR WATER SERVICE 255'RT TO CONNECTION TO EXISTING	15 OF 24
PROFILE – WHITTIER STREET – BOP TO EOP	16 OF 24
PROFILE – PROSPECTOR WATER SERVICE	17 OF 24

WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151



ELECTRICAL INDEX

DESCRIPTION	SHEET NO.
GENERAL NOTES, INDEX AND LEGEND	18 OF 24
ELECTRICAL – WHITTIER STREET BOP TO STA "W" 13+05	19 OF 24
ELECTRICAL – WHITTIER STREET STA "W" 12+70 TO STA "W" 16+10	20 OF 24
ELECTRICAL – WHITTIER STREET STA "W" 16+10 TO EOP	21 OF 24
LOAD CENTER DETAILS	22 OF 24
LIGHT POLE DETAILS	23 OF 24
TRENCH DETAILS	24 OF 24



5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax

C:\Civil 3D Projects\22\70801-01\Civil\SC14-CT-ID-70801.dwg 2016-1-6 09:55:33

LEGEND

DESCRIPTION	EXISTING	REMOVE	PROPOSED
BURIED ELECTRICAL UTILITIES			
CATCH BASIN			
CONTROL POINT			
CURB & GUTTER			
CUT LIMITS			
DRIVEWAY RAMP			
FILL LIMITS			
FIRE HYDRANT			
HOUSE NO			
MAILBOX			OR
PROJECT CONTROL LINE			
PROPERTY LINE			
LIGHT POLE			
SANITARY SEWER PIPE			
SANITARY SEWER MANHOLE			
SIGN			SEE SIGN ASSEMBLY TABLE
STORM DRAIN PIPE			
STORM DRAIN MANHOLE			
SURVEY MONUMENT-REBAR W/ PLASTIC CAP			
SURVEY MONUMENT BRASS CAP W/ NEW CASE			
TOPSOIL AND SEEDING			
TREE CONIFER			
TREE DECIDUOUS			
WATER LINE PIPE			
WATER VALVE BOX			

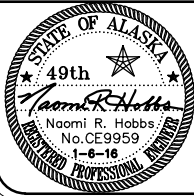
ABBREVIATIONS

AC	ASPHALT PAVING
AP	ANGLE POINT
BOP	BEGINNING OF PROJECT
BRR	BOTTOM RAMP RUN
CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED POLYETHYLENE PIPE
CONC	CONCRETE
CTE	CONNECT TO EXISTING
DI	DUCTILE IRON
DIA	DIAMETER
EOP	END OF PROJECT
FL	FLOW LINE
FG	FINISHED GRADE
GV	GATE VALVE
HP	HIGH PERFORMANCE OR HIGH PRESSURE
INV	INVERT
LG	LIP OF GUTTER
LT	LEFT
MH	MANHOLE
MN	MAGNETIC NAIL
MTE	MATCH TO EXISTING
NO	NUMBER
NTS	NOT TO SCALE
PC	POINT OF CURVATURE
PT	POINT OF TANGENT
PVI	POINT OF VERTICAL INTERSECTION
POC	POINT ON CURVE
PCC	POINT OF COMPOUND CURVE
PVC	POLYVINYL CHLORIDE PIPE
RT	RIGHT
STA	STATION
STD	STANDARD
TBC	TOP BACK OF CURB
TBG	TOP BACK OF VALLEY GUTTER
TP	TOP OF PAVEMENT
TSW	TOP OF SIDEWALK

ABBREVIATIONS TO BE USED WITHOUT PERIODS

GENERAL NOTES

- BEGIN SUBCUT AT 24 INCHES FROM PAVEMENT SAWCUT LINE AT STREET CONNECTIONS, UNLESS OTHERWISE SHOWN ON THE DRAWINGS, OR DIRECTED BY THE ENGINEER. REMOVE AND REPLACE BASE COURSE WITH 6 INCHES OF 2" MINUS SHOT ROCK/BASE COURSE TO 12 INCHES FROM PAVEMENT SAWCUT LINE. SAWCUT AS NECESSARY ALONG ALL STREET, DRIVEWAY AND SIDEWALK APPROACHES TO PROVIDE A NEAT MATCH LINE.
- LARGE BOULDERS, STUMPS, LOGS, ORGANICS AND GROUND WATER MAY BE ENCOUNTERED AT VARIOUS DEPTHS DURING EXCAVATION OPERATIONS.
- CONTRACTOR SHALL ASSURE GARBAGE PICKUP AND DAILY MAIL SERVICE WILL BE UNINTERRUPTED TO ALL RESIDENCES AFFECTED BY THIS PROJECT.
- THE 4TH EDITION OF THE CBJ STANDARD DETAILS, DATED AUGUST 14 2011, IS MADE PART OF THIS CONTRACT, WITH CURRENT REVISIONS AS APPLICABLE.
- ALL EXISTING STORM DRAIN PIPES (6 INCH DIAMETER AND LARGER), AND APPURTENANCES (TO BE ABANDONED) THAT ARE WITHIN THE STREET AND SIDEWALK LIMITS, SHALL BE REMOVED AND DISPOSED OF, UNLESS OTHERWISE NOTED.
- EXISTING PIPE LOCATIONS ARE DERIVED FROM CBJ AS-BUILTS OR FIELD LOCATED. ACTUAL LOCATIONS MAY VARY FROM THOSE SHOWN. DEPTH OF THE EXISTING PIPES SHOWN ON THE ELEVATIONS ARE ASSUMED. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF EACH EXISTING SERVICE PIPE PRIOR TO INSTALLING THE STORM DRAIN PIPES. DIAL BEFORE YOU DIG 586-1333.
- GRADING AND ALIGNMENT ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER.
- LOCATION OF STORM CATCH BASINS, PIPING AND PIPE LENGTHS ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER.
- THE CONTRACTOR SHALL NOTIFY CBJ WATER UTILITIES AT 780-6888 OF PROPOSED WATER MAIN INTERRUPTION AND SUBMIT THE "WATER SYSTEM SPECIAL USE PERMIT" (COSIGNED BY THE ENGINEER) AT LEAST ONE WEEK PRIOR TO SHUTDOWN OF MAINLINE WATER PIPE.
- PROPERTY LINE LOCATIONS USED IN THESE PLANS ARE DERIVED FROM RECORD PLATS AND DO NOT REPRESENT BOUNDARY SURVEY. EXISTING RECORD PLATS DO NOT CLOSE WITH EACH OTHER IN SOME CASES. THE PROPERTY LINES SHOWN ON THESE PLANS ARE A BEST FIT APPROXIMATION OF CLOSURE.
- PROVIDE KNOCKOUTS OR OPENINGS IN CATCH BASINS AND MANHOLES FOR ALL PIPES SHOWN ON THE PLANS.
- CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF EXISTING WATER AND SEWER PIPES, INCLUDING ALL SERVICES ALONG THE STORM DRAIN ALIGNMENT, TO DETERMINE PIPE INSULATION LOCATIONS, AND TO ENSURE DAMAGE DOES NOT OCCUR TO THE SERVICE PIPES. THE SERVICE LOCATIONS SHALL BE MARKED WITH PAINT WHERE CROSSINGS WITH THE NEW PIPING WILL OCCUR PRIOR TO PROCEEDING WITH THE PIPE INSTALLATION.
- ALL ITEMS DESIGNATED TO BE REMOVED SHALL BE DISPOSED OF AT AN APPROVED DISPOSAL SITE, EXCEPT AS NOTED IN THE CONTRACT DOCUMENTS.
- SAWCUT AS NECESSARY ALONG ALL DRIVEWAY APPROACHES TO PROVIDE NEAT MATCH LINE.
- CONTRACTOR SHALL REFERENCE ALL EXISTING PROPERTY CORNER MONUMENTS (I.E. REBARS, CONCRETE NAILS, BRASS CAP MONUMENT AND ETC.) PRIOR TO CONSTRUCTION AND REMONUMENT AFTER SURFACING IS REPLACED. ALL WORK SHALL BE DONE BY, OR UNDER THE DIRECTION OF, AN ALASKA REGISTERED LAND SURVEYOR.
- ALL ASPHALT PAVEMENT TO BE REMOVED AND DISPOSED OF SHALL BE DELIVERED TO A STOCKPILE AREA AT THE LEMON CREEK CITY PIT TO BE DESIGNATED BY THE ENGINEER. CONTACT THE ENGINEER FOR THE EXACT LOCATION OF THE STOCKPILE.
- AEL&P, ACS, AND GCI MAY CONDUCT WORK WITHIN THE PROJECT LIMITS TO RELOCATE UTILITIES AND UPGRADE THEIR RESPECTIVE SYSTEMS. THE CONTRACTOR SHALL COORDINATE ITS ACTIVITIES WITH EACH UTILITY COMPANY AND PROVIDE ACCESS AS NECESSARY FOR UTILITY COMPANIES TO CONDUCT THEIR WORK.
- ONLY HORIZONTAL ELBOW FITTINGS (BENDS) ARE SHOWN ON PLANS. ADDITIONAL FITTINGS WILL BE REQUIRED FOR VERTICAL DEFLECTIONS NEAR CONNECTIONS TO EXISTING PIPES AND AT OTHER LOCATIONS REQUIRING GRADE CHANGES TO AVOID CONFLICTS.
- THE CONTRACTOR SHALL RESTRICT ITS COMPACTION AND OTHER VIBRATION INDUCING OPERATIONS AS NECESSARY TO ASSURE NO DAMAGE OCCURS TO ADJACENT BUILDINGS OR STRUCTURES. REFER TO SECTION 01530, ARTICLE 1.7 FOR FURTHER REQUIREMENTS.
- THE PLAN SHEETS DO NOT SHOW ALL OF THE TREES AND OTHER VEGETATION THAT WILL BE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES. NO TREES OR OTHER VEGETATION ARE TO BE REMOVED OR DAMAGED, UNLESS SHOWN ON THE DRAWINGS OR DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL NOT STORE MATERIALS OR EQUIPMENT, OR OPERATIVE EQUIPMENT WITH ITS TRACKS OR WHEELS PLACED ON PRIVATE PROPERTY, WITHOUT WRITTEN APPROVAL OF THE PROPERTY OWNER.
- THE USE OF GROUT AND QUICKSET CEMENT PRODUCTS WITH ADJUSTING RINGS, BRICKS, WOOD, STONES AND OTHER SIMILAR GRADE ADJUSTMENT DEVICES TO SUPPORT CATCH BASIN FRAMES OVER CATCH BASINS AND MANHOLES WILL NOT BE PERMITTED. CATCH BASIN FRAME AND GRATES SHALL BE SET AT 6-3/4" BELOW TOP BACK OF CURB ELEVATION WITH 3 FOOT LONG CONCRETE TRANSITIONS TO BOTH SIDES OF GRATE. A 6 FOOT LONG SEGMENT OF #4 REBAR SHALL BE CENTERED OVER THE CATCH BASIN HOOD PLACED 1/2 INCH OVER THE TOP OF IRON.
- WITH THE EXCEPTION OF THE PERMANENT DRIVEWAY CLOSURES IDENTIFIED ON THE TRAFFIC CONTROL SHEET FOR WHITTIER, THE CONTRACTOR SHALL NOTIFY EACH PROPERTY OWNER OF DRIVEWAY CLOSURES THE DAY PRECEDING THE DAY THE DRIVEWAY IS TO BE CLOSED TO VEHICULAR ACCESS. THE PROPERTY OWNER SHALL BE INFORMED OF THE PERIOD OF TIME THE CLOSURE WILL BE IN EFFECT. NO DRIVEWAY CLOSURES WILL BE PERMITTED UNTIL THIS REQUIREMENT HAS BEEN MET TO THE SATISFACTION OF THE ENGINEER.
- ALL FORMS FOR CONCRETE SEGMENTS BETWEEN PC'S AND PT'S WITH A RADIUS LESS THAN 200' SHALL BE ARC'D TO MATCH THE REQUIRED CURVATURE. NO STRAIGHT FORMS SHALL BE USED WITHIN ANY CURVED SEGMENT WITH A RADIUS OF LESS THAN 200'. STRAIGHT FORMS USED FOR ANY ARC'D SEGMENT WITH A RADIUS OF MORE THAN 200' SHALL NOT EXCEED 10' IN LENGTH.
- APPLY "CONCRETE INTERNATIONAL CORPORATION" ASHFORD FORMULA CURING COMPOUND, OR APPROVED EQUAL, TO ALL NEWLY PLACED CONCRETE SURFACES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- "JUMPING JACK" OR SIMILAR TYPE COMPACTORS SHALL BE USED TO THOROUGHLY COMPACT ALL LAYERS OF MATERIAL AROUND WATER VALVE BOXES, CATCH BASINS, MANHOLES AND OTHER STRUCTURES.



Consulting Engineers • Land Surveyors • Construction Administration

5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax

JOB No. J70801

DRAWN BY: STAFF

DESIGNED BY: T. LOCKHART

CHECKED BY: N. HOBBS

DATE: JAN. 2016



DEPARTMENT OF ENGINEERING

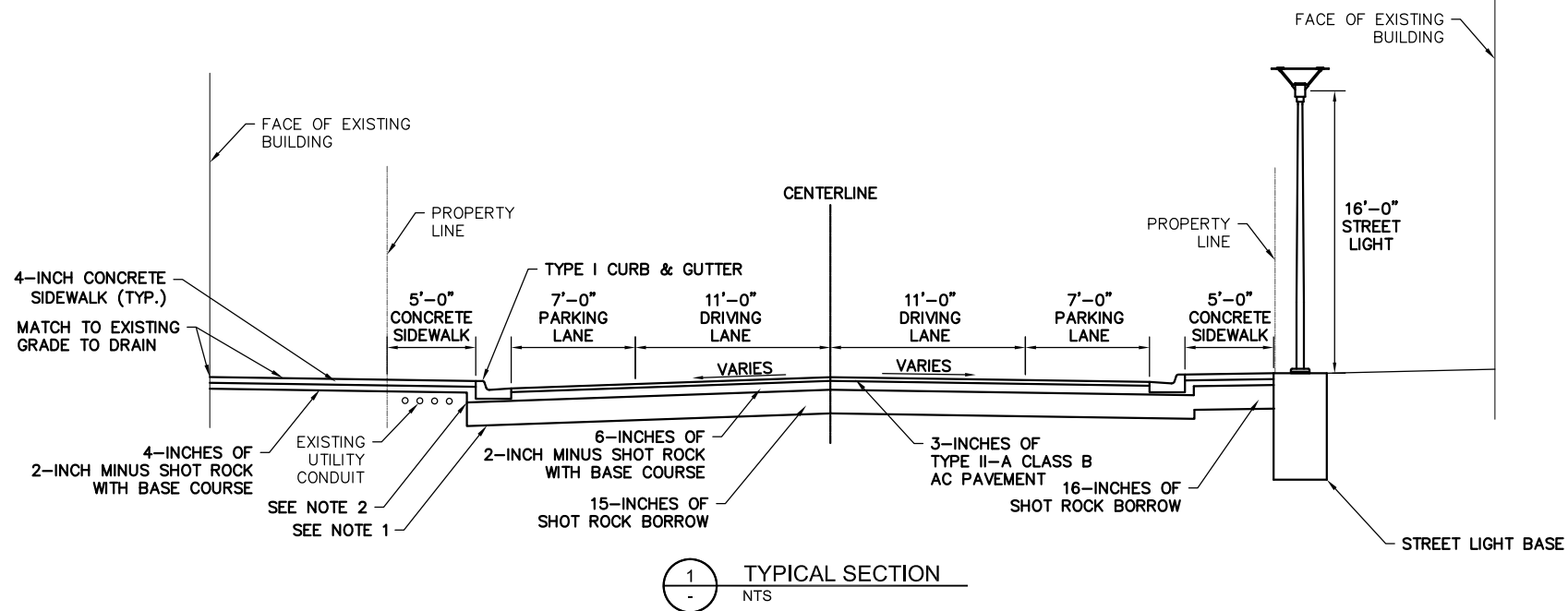
WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151

LEGEND, ABBREVIATIONS,
AND GENERAL NOTES

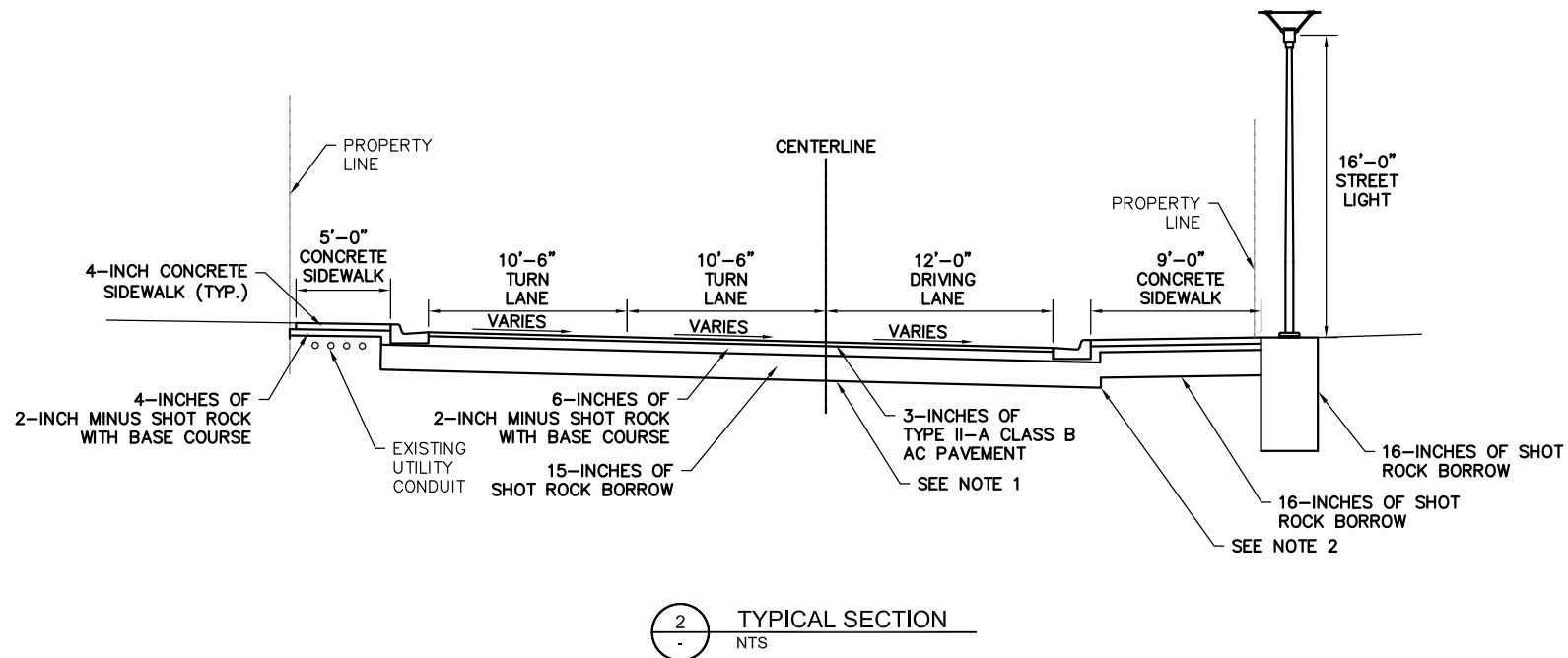
SHEET NO.

2
of
24

C:\Civil 3D Projects\22\70801-01\Civil\SC14-CT-TS-70801.dwg 2016-1-6 10:05:43



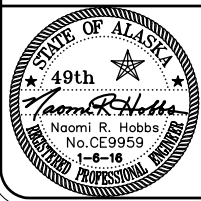
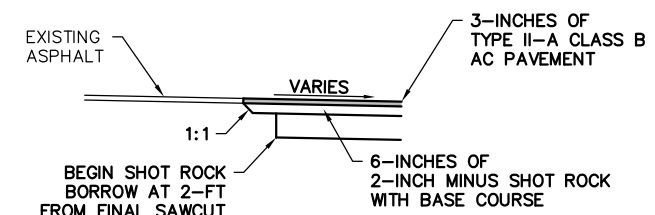
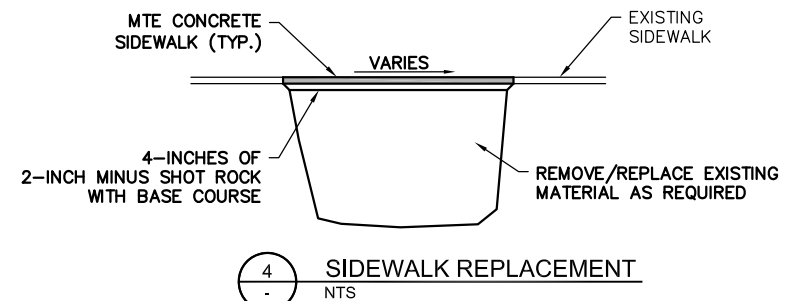
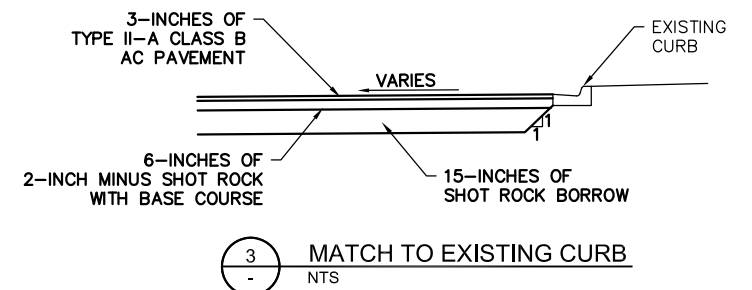
- NOTES**
1. PROOF COMPACT THE BOTTOM OF THE SUBCUT BEFORE INSTALLING SHOT ROCK BORROW. INSTALL STABILIZATION FABRIC BELOW SHOT ROCK BORROW AS REQUIRED AND AS DIRECTED BY THE ENGINEER.
 2. EXTEND SHOT ROCK BORROW AND 2-INCH MINUS SHOT ROCK WITH BASE COURSE 6 INCHES BEYOND BACK OF CURB (TYP.).



CATCH BASIN FRAME AND GRATE TABLE

CATCH BASIN No.	EAST JORDAN IRON WORKS, OLYMPIC FOUNDRY CO., CBJ STANDARD No., OR APPROVED EQUAL
CB-1	EJIW 7701 T2 HOOD W/ 7700 M1 GRATE
CB-2	EJIW 7701 T2 HOOD W/ 7700 M1 GRATE
CB-2A	EJIW 7701 T2 HOOD W/ 7700 M2 GRATE
CB-3	OF SM18
CB-4	EJIW 7701 T2 HOOD W/ 7700 M2 GRATE
CB-5	OF SM18
CB-5A	EXISTING TO REMAIN
CB-6	OF SM18
CB-7	EJIW 7701 T2 HOOD W/ 7700 M2 GRATE
CB-8	EJIW 7701 T2 HOOD W/ 7700 M1 GRATE
CB-9	EXISTING TO REMAIN

CATCH BASIN TOP SLAB OPENINGS SHALL BE DIMENSIONED TO FIT THE FRAME DIMENSIONS. ALL COVERS SHALL BE HEAVY DUTY CONSTRUCTION AND BICYCLE SAFE. ALL FRAMES AND GRATES SHALL BE DUCTILE IRON.

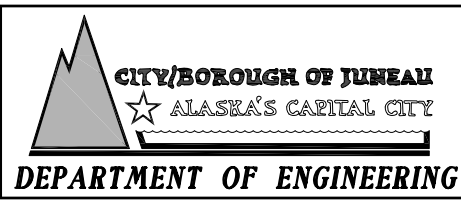


DOWL
Consulting Engineers • Land Surveyors • Construction Administration

5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax

Naomi R. Hobbs
No. CE9959
1-6-16
REGISTERED PROFESSIONAL ENGINEER

JOB No. J70801 DRAWN BY: STAFF DESIGNED BY: T. LOCKHART CHECKED BY: N. HOBBS DATE: JAN. 2016

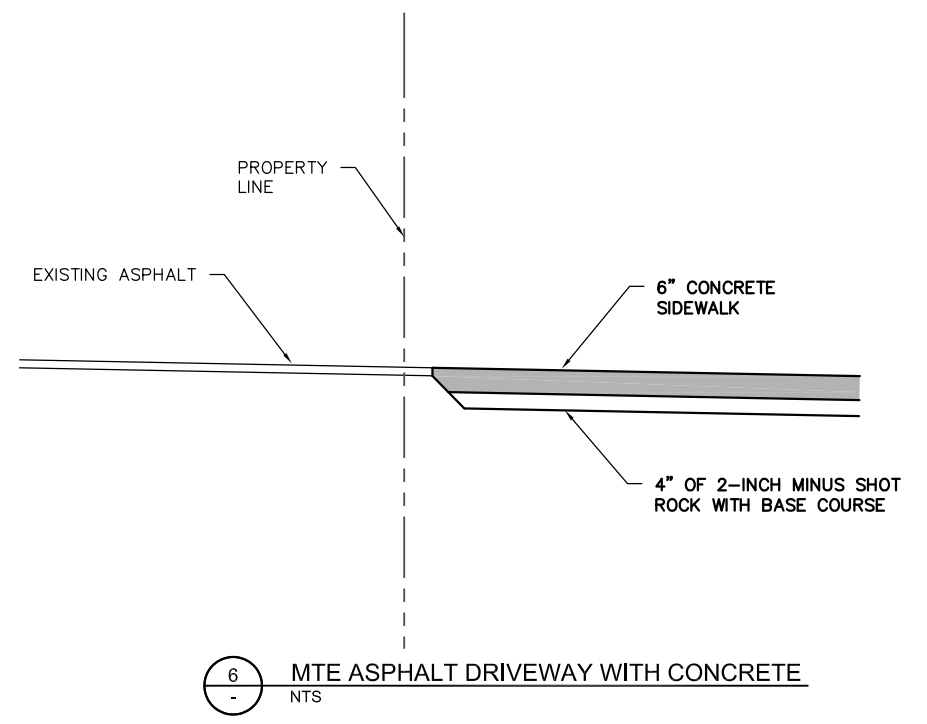
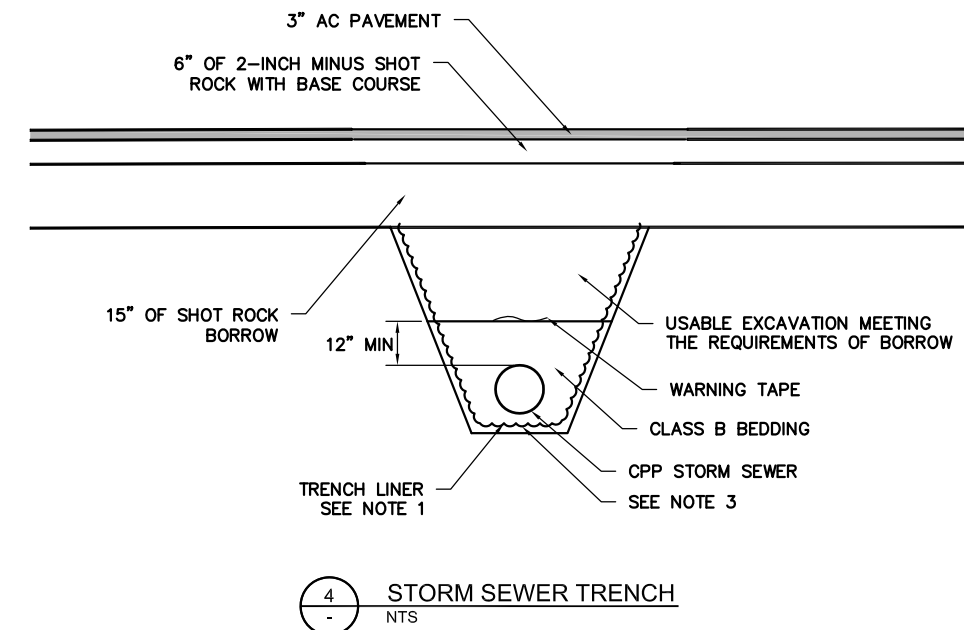
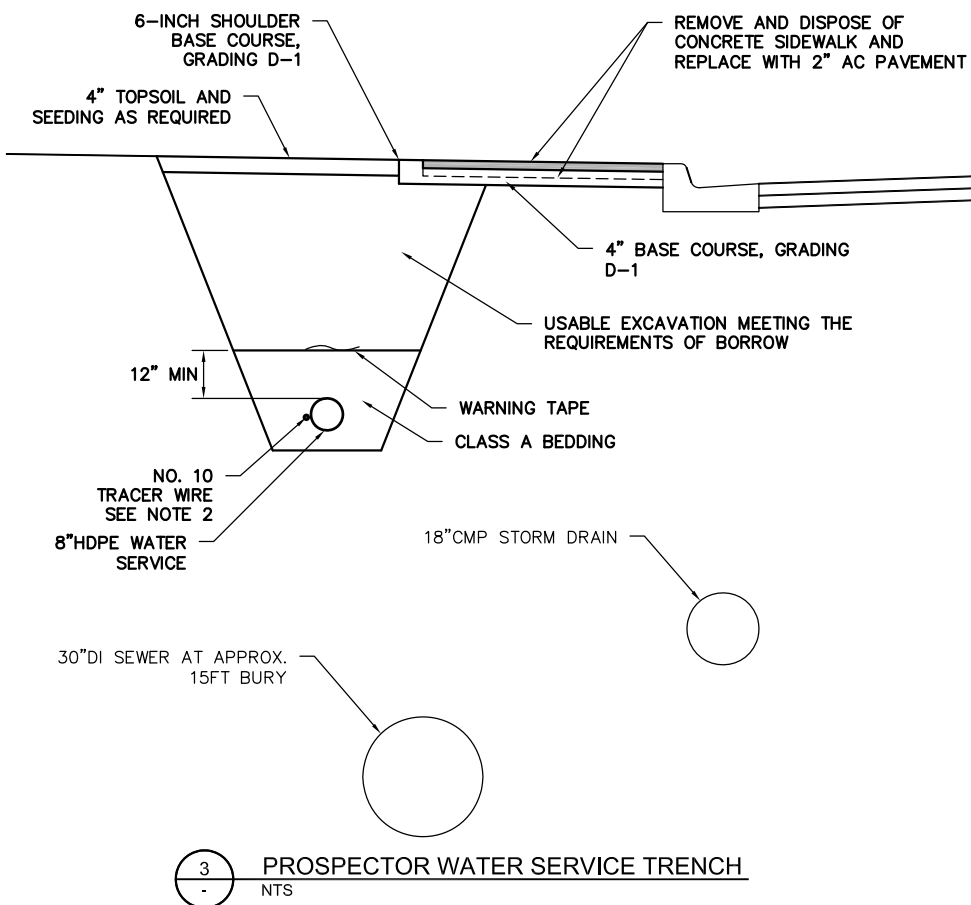
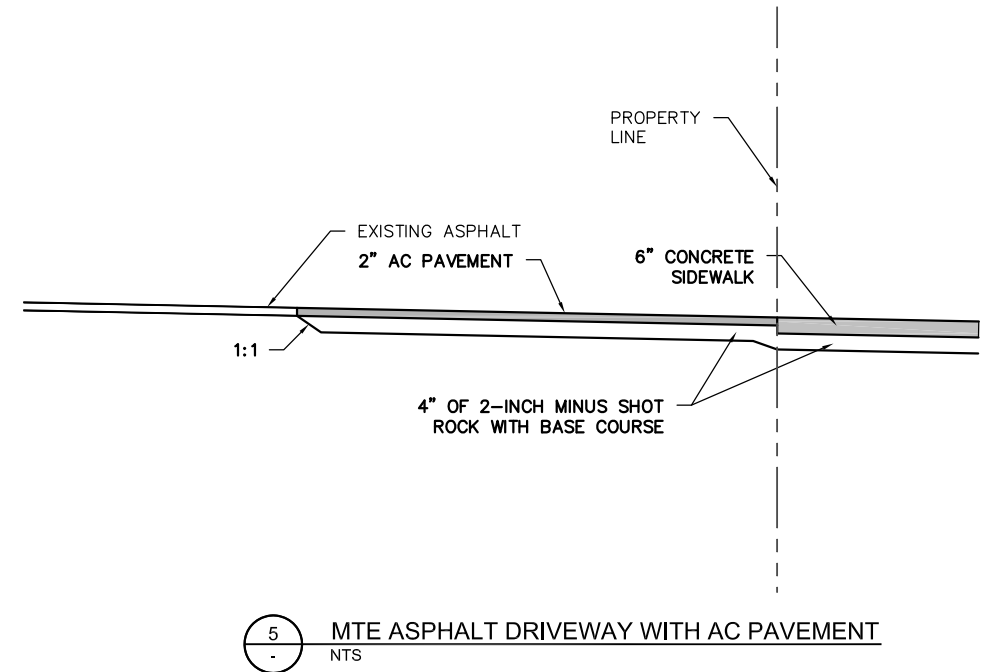
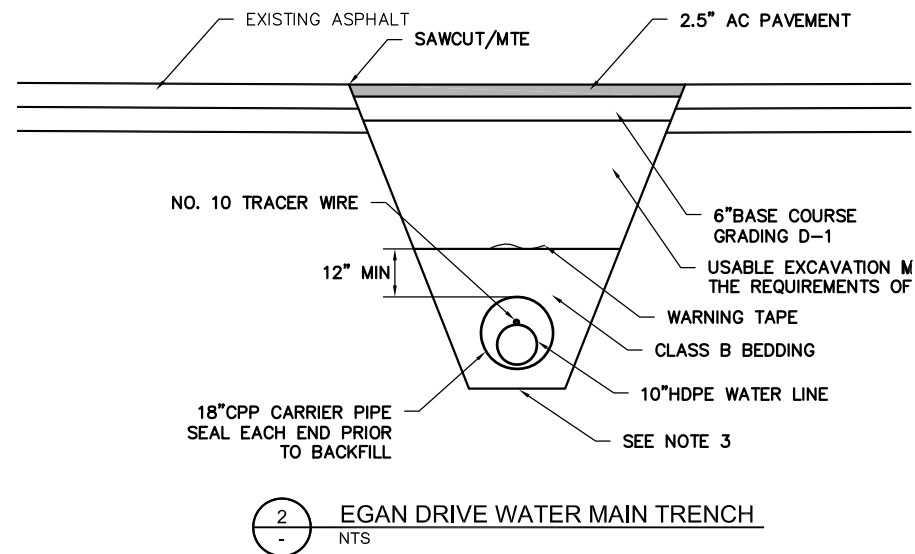
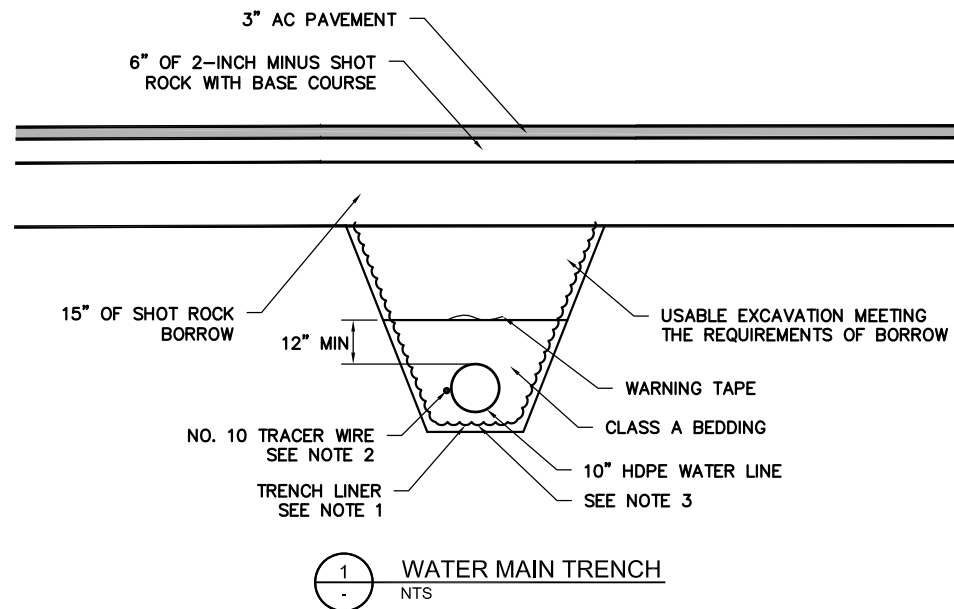


**WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151**

**TYPICAL SECTIONS
DETAILS AND STORM DRAIN
FRAME & GRATE SUMMARY**

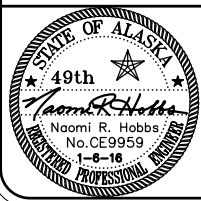
SHEET NO.
3
of
24

C:\Civil 3D Projects\22\70801-01\Civil\SC14-CT-DT-70801.dwg 2016-1-6 13:27:20



NOTES

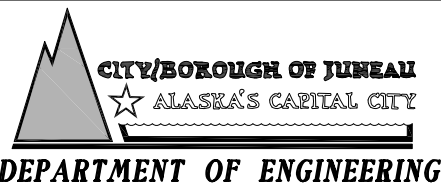
1. LINE TRENCH WITH TYPE C FILTER CLOTH TO THE BOTTOM OF THE ROADWAY SUBCUT AS DIRECTED BY THE ENGINEER. THIS IS A CONTINGENCY ITEM AND WILL ONLY BE USED WHEN TRENCHING THROUGH OPEN-GRADED, POROUS FILL.
2. INSTALL MAINLINE TRACER WIRE BETWEEN MAINLINE VALVE BOXES. ATTACH WIRE TO PIPE NO HIGHER THAN THE SPRINGLINE AND MAINTAIN CONTINUITY WITH ALL SERVICES WITH A CORROSION PROOF WIRE CONNECTOR.
3. PIPE SHALL BE SEPARATED FROM ALL BOULDERS, BEDROCK, OR SIMILAR MATERIAL BY A MINIMUM OF 2-INCHES.



5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax

Consulting Engineers • Land Surveyors • Construction Administration

JOB No. J70801 DRAWN BY: STAFF DESIGNED BY: T. LOCKHART CHECKED BY: N. HOBBS DATE: JAN. 2016



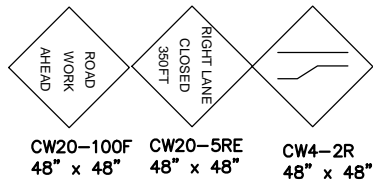
**WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151**

DETAILS

SHEET NO.

**4
of
24**

C:\Civil 3D Projects\22\70801-01\Civil\MC14-CT-TR-70801.dwg 2016-11-5 16:32:42



EGAN DRIVE

TRAFFIC FLOW

TRAFFIC FLOW

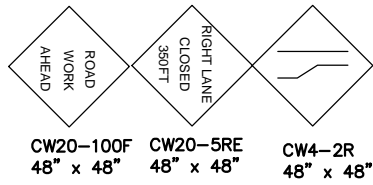
DRUMS

WORK AREA

CONES

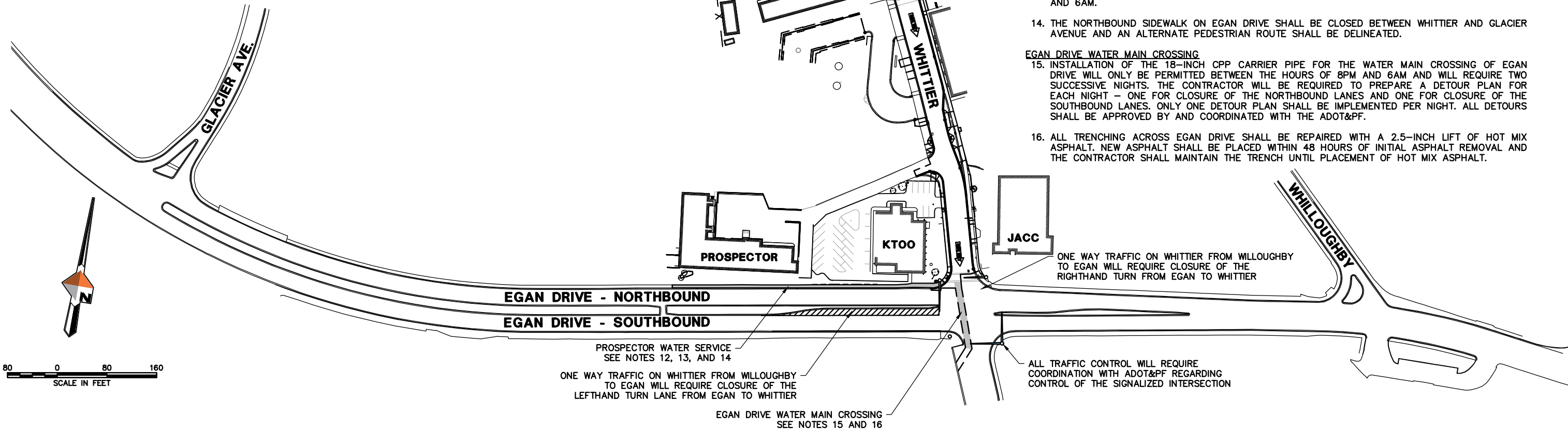
TAPER

BUFFER



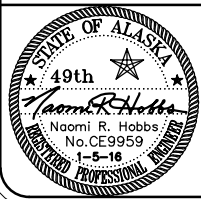
SINGLE LANE CLOSURE

N.T.S.



GENERAL NOTES:

1. THESE PLANS GENERALLY DEPICT THE CONSTRUCTION WITHIN AND ADJACENT TO EGAN DRIVE IN ASSOCIATION WITH THE WHITTIER RECONSTRUCTION PROJECT. OTHER TEMPORARY TRAFFIC CONTROL (TTC) MEASURES MAY BE REQUIRED FOR INTERMITTENT CONSTRUCTION OPERATIONS. ALL TRAFFIC CONTROL OPERATIONS SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE LATEST EDITION OF THE ALASKA TRAFFIC MANUAL AND THE MUTCD. THE FINAL TTC PLANS SHALL BE COMPLETED BY THE CONTRACTOR AND APPROVED BY THE DOT&PF.
2. ALL SIGNS SHALL BE FABRICATED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE ALASKA SIGN SPECIFICATIONS AND THE MUTCD.
3. USE TYPE "B" WARNING LIGHTS ON ADVANCE WARNING SIGNS.
4. TYPE "A" FLASHING WARNING LIGHTS SHALL BE USED TO MARK TYPE III BARRICADES, TYPE II BARRICADES, DRUMS, AND ROAD CLOSURE ADVANCED SIGNING AT NIGHT. WHEN BARRICADES OR DRUMS ARE USED FOR CHANNELIZING TRAFFIC, TYPE "C" STEADY BURN WARNING LIGHTS SHALL BE USED.
5. COVER DIRECTIONAL LANE SIGNS (R3-5 & R3-6 SERIES, TYPICALLY MOUNTED ON SIGNAL POLE MASTARMS) THAT CONTRADICT THE MOVEMENT RESTRICTIONS IN THE TCP.
6. TEMPORARY TRAFFIC LANES SHALL BE A MINIMUM OF 10' WIDE.
7. CONTRACTOR SHALL SUBMIT A DETAILED SCHEDULE FOR WORK TO BE COMPLETED WITHIN OR ADJACENT TO EGAN DRIVE AT LEAST TEN DAYS BEFORE BEGINNING ANY WORK.
8. CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE ADOT&PF PAVEMENT REHABILITATION PROJECT FROM 10TH STREET TO MENDENHALL LOOP ROAD. THE CONTRACTOR SHALL ALSO COORDINATE ALL NIGHT WORK DETOURS WITH ALASKA MARINE LINES.
9. DURING SINGLE LANE CLOSURES, DELAYS SHALL NOT EXCEED 10 MINUTES.
10. MAX CONE OR DRUM SPACING SHALL NOT EXCEED 30-FT ON TAPERS, 60-FT ON TANGENTS AND 20-FT WITHIN CLOSED TURN LANES OR INTERSECTIONS.
11. TRAFFIC CONTROL PLANS ARE SCHEMATIC IN NATURE. CONTRACTOR SHALL SUPPLY BARRIERS, MARKERS, AND SIGNAGE FOR TRAFFIC CONTROL OPERATIONS AS REQUIRED BY THE LATEST EDITION OF THE ALASKA TRAFFIC MANUAL STANDARDS AND MUTCD. ALL MATERIALS ARE SUBSIDIARY TO THE WORK.
12. A SINGLE LANE CLOSURE OR DETOUR WILL BE REQUIRED FOR ALL TRENCHING, BACKFILL AND PAVING OPERATIONS.
13. SINGLE LANE CLOSURES AND DETOURS WILL ONLY BE PERMITTED BETWEEN THE HOURS OF 8PM AND 6AM.
14. THE NORTHBOUND SIDEWALK ON EGAN DRIVE SHALL BE CLOSED BETWEEN WHITTIER AND GLACIER AVENUE AND AN ALTERNATE PEDESTRIAN ROUTE SHALL BE DELINEATED.
15. INSTALLATION OF THE 18-INCH CPP CARRIER PIPE FOR THE WATER MAIN CROSSING OF EGAN DRIVE WILL ONLY BE PERMITTED BETWEEN THE HOURS OF 8PM AND 6AM AND WILL REQUIRE TWO SUCCESSIVE NIGHTS. THE CONTRACTOR WILL BE REQUIRED TO PREPARE A DETOUR PLAN FOR EACH NIGHT - ONE FOR CLOSURE OF THE NORTHBOUND LANES AND ONE FOR CLOSURE OF THE SOUTHBOUND LANES. ONLY ONE DETOUR PLAN SHALL BE IMPLEMENTED PER NIGHT. ALL DETOURS SHALL BE APPROVED BY AND COORDINATED WITH THE ADOT&PF.
16. ALL TRENCHING ACROSS EGAN DRIVE SHALL BE REPAIRED WITH A 2.5-INCH LIFT OF HOT MIX ASPHALT. NEW ASPHALT SHALL BE PLACED WITHIN 48 HOURS OF INITIAL ASPHALT REMOVAL AND THE CONTRACTOR SHALL MAINTAIN THE TRENCH UNTIL PLACEMENT OF HOT MIX ASPHALT.



5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax

Consulting Engineers • Land Surveyors • Construction Administration

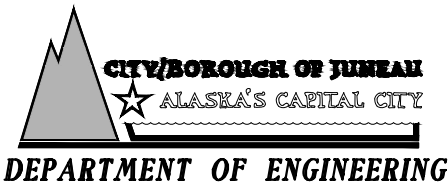
JOB No. J70801

DRAWN BY: STAFF

DESIGNED BY: T. LOCKHART

CHECKED BY: N. HOBBS

DATE: JAN. 2016



WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151

TRAFFIC CONTROL
EGAN DRIVE

SHEET NO.

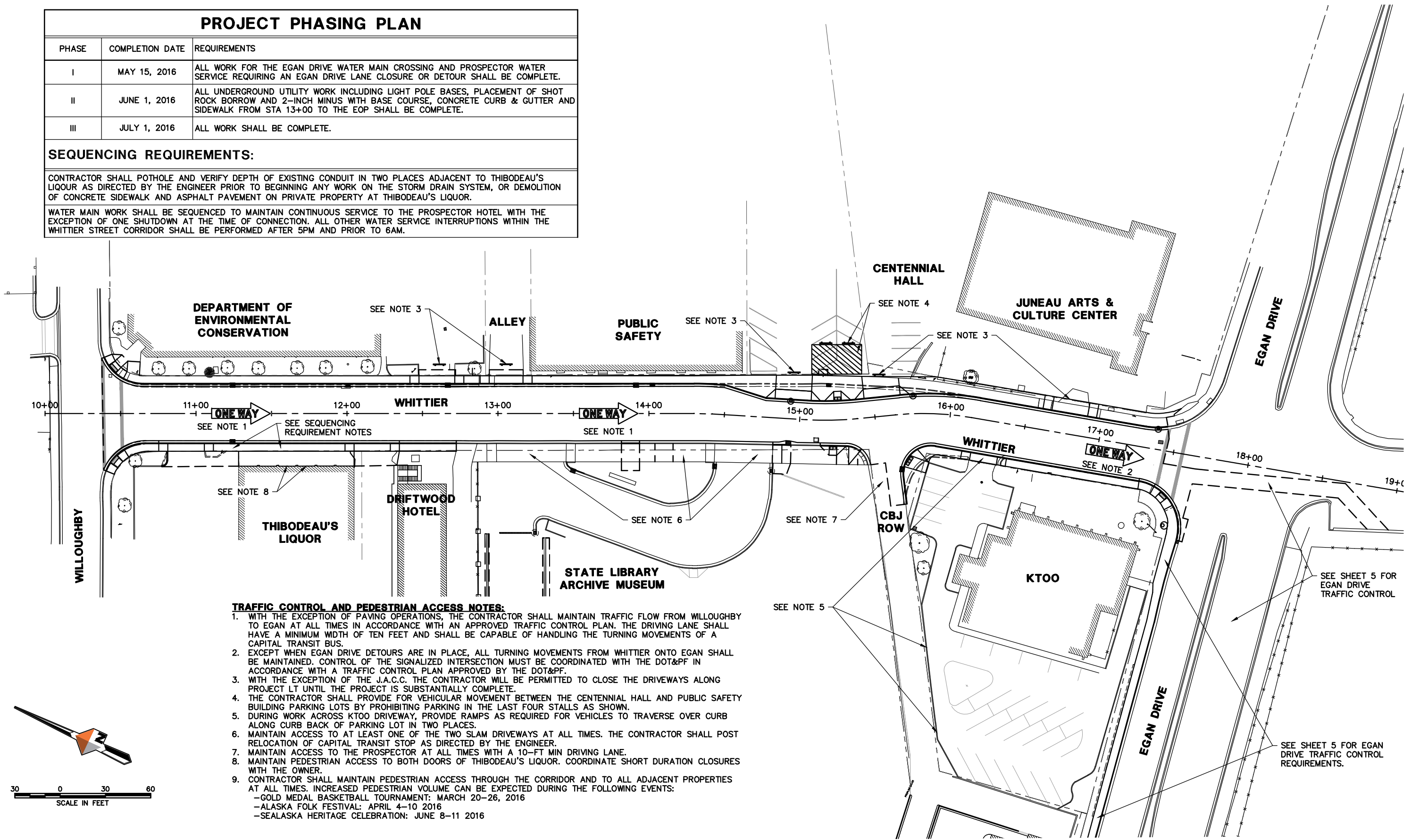
5
of
24

PROJECT PHASING PLAN		
PHASE	COMPLETION DATE	REQUIREMENTS
I	MAY 15, 2016	ALL WORK FOR THE EGAN DRIVE WATER MAIN CROSSING AND PROSPECTOR WATER SERVICE REQUIRING AN EGAN DRIVE LANE CLOSURE OR DETOUR SHALL BE COMPLETE.
II	JUNE 1, 2016	ALL UNDERGROUND UTILITY WORK INCLUDING LIGHT POLE BASES, PLACEMENT OF SHOT ROCK BORROW AND 2-INCH MINUS WITH BASE COURSE, CONCRETE CURB & GUTTER AND SIDEWALK FROM STA 13+00 TO THE EOP SHALL BE COMPLETE.
III	JULY 1, 2016	ALL WORK SHALL BE COMPLETE.

SEQUENCING REQUIREMENTS:

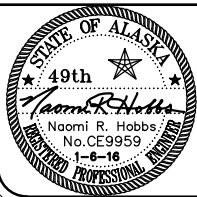
CONTRACTOR SHALL POTHOLE AND VERIFY DEPTH OF EXISTING CONDUIT IN TWO PLACES ADJACENT TO THIBODEAU'S LIQUOR AS DIRECTED BY THE ENGINEER PRIOR TO BEGINNING ANY WORK ON THE STORM DRAIN SYSTEM, OR DEMOLITION OF CONCRETE SIDEWALK AND ASPHALT PAVEMENT ON PRIVATE PROPERTY AT THIBODEAU'S LIQUOR.

WATER MAIN WORK SHALL BE SEQUENCED TO MAINTAIN CONTINUOUS SERVICE TO THE PROSPECTOR HOTEL WITH THE EXCEPTION OF ONE SHUTDOWN AT THE TIME OF CONNECTION. ALL OTHER WATER SERVICE INTERRUPTIONS WITHIN THE WHITTIER STREET CORRIDOR SHALL BE PERFORMED AFTER 5PM AND PRIOR TO 6AM.



TRAFFIC CONTROL AND PEDESTRIAN ACCESS NOTES:

1. WITH THE EXCEPTION OF PAVING OPERATIONS, THE CONTRACTOR SHALL MAINTAIN TRAFFIC FLOW FROM WILLOUGHBY TO EGAN AT ALL TIMES IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. THE DRIVING LANE SHALL HAVE A MINIMUM WIDTH OF TEN FEET AND SHALL BE CAPABLE OF HANDLING THE TURNING MOVEMENTS OF A CAPITAL TRANSIT BUS.
2. EXCEPT WHEN EGAN DRIVE DETOURS ARE IN PLACE, ALL TURNING MOVEMENTS FROM WHITTIER ONTO EGAN SHALL BE MAINTAINED. CONTROL OF THE SIGNALIZED INTERSECTION MUST BE COORDINATED WITH THE DOT&PF IN ACCORDANCE WITH A TRAFFIC CONTROL PLAN APPROVED BY THE DOT&PF.
3. WITH THE EXCEPTION OF THE J.A.C.C. THE CONTRACTOR WILL BE PERMITTED TO CLOSE THE DRIVEWAYS ALONG PROJECT LT UNTIL THE PROJECT IS SUBSTANTIALLY COMPLETE.
4. THE CONTRACTOR SHALL PROVIDE FOR VEHICULAR MOVEMENT BETWEEN THE CENTENNIAL HALL AND PUBLIC SAFETY BUILDING PARKING LOTS BY PROHIBITING PARKING IN THE LAST FOUR STALLS AS SHOWN.
5. DURING WORK ACROSS KTOO DRIVEWAY, PROVIDE RAMPS AS REQUIRED FOR VEHICLES TO TRAVERSE OVER CURB ALONG CURB BACK OF PARKING LOT IN TWO PLACES.
6. MAINTAIN ACCESS TO AT LEAST ONE OF THE TWO SLAM DRIVEWAYS AT ALL TIMES. THE CONTRACTOR SHALL POST RELOCATION OF CAPITAL TRANSIT STOP AS DIRECTED BY THE ENGINEER.
7. MAINTAIN ACCESS TO THE PROSPECTOR AT ALL TIMES WITH A 10-FT MIN DRIVING LANE.
8. MAINTAIN PEDESTRIAN ACCESS TO BOTH DOORS OF THIBODEAU'S LIQUOR. COORDINATE SHORT DURATION CLOSURES WITH THE OWNER.
9. CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS THROUGH THE CORRIDOR AND TO ALL ADJACENT PROPERTIES AT ALL TIMES. INCREASED PEDESTRIAN VOLUME CAN BE EXPECTED DURING THE FOLLOWING EVENTS:
 - GOLD MEDAL BASKETBALL TOURNAMENT: MARCH 20-26, 2016
 - ALASKA FOLK FESTIVAL: APRIL 4-10 2016
 - SEALASKA HERITAGE CELEBRATION: JUNE 8-11 2016



Consulting Engineers • Land Surveyors • Construction Administration

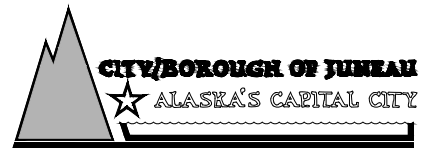
JOB No. J70801

DRAWN BY: STAFF

DESIGNED BY: T. LOCKHART

CHECKED BY: N. HOBBS

DATE: JAN. 2016



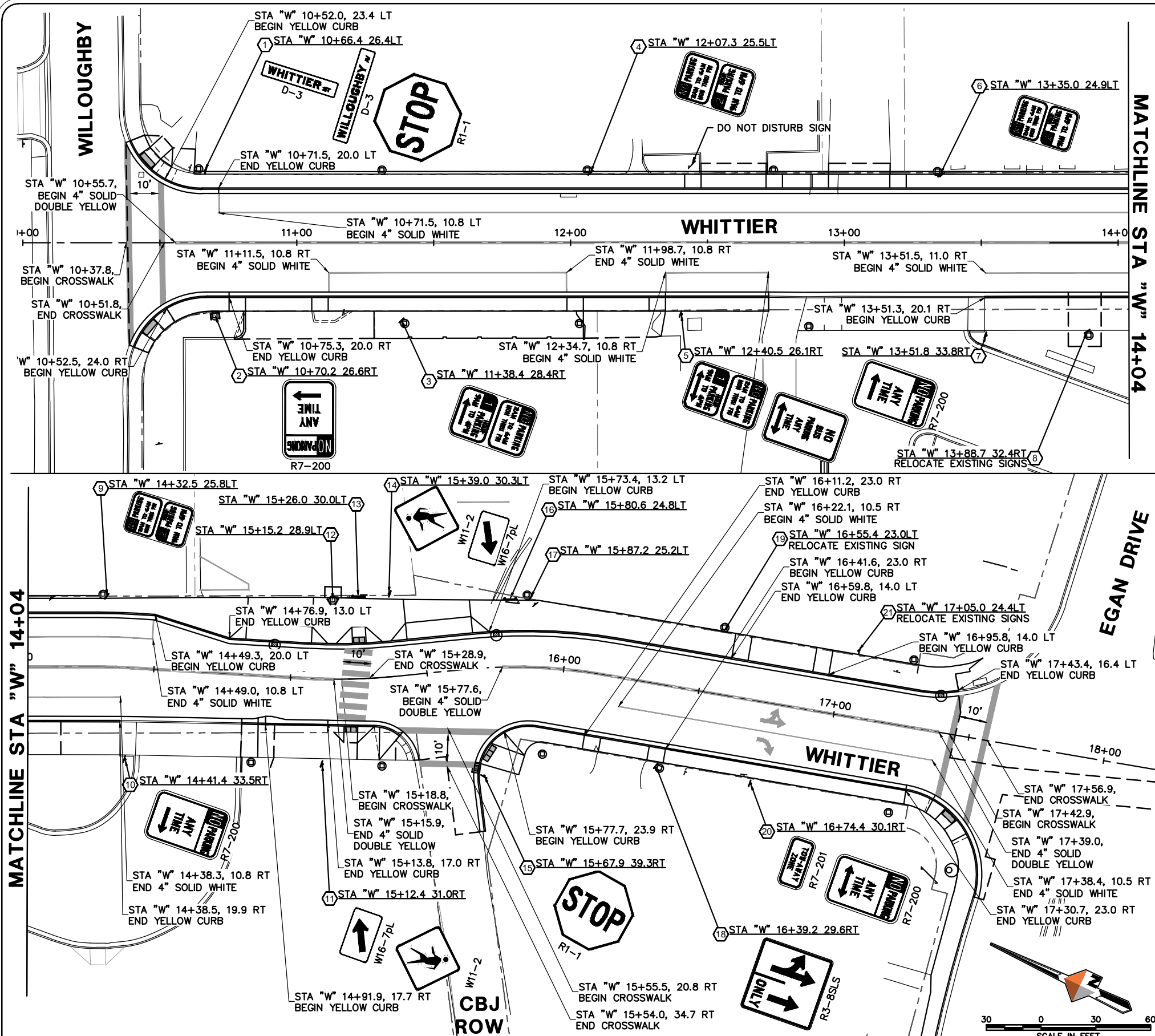
DEPARTMENT OF ENGINEERING

**WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151**

**TRAFFIC CONTROL - WHITTIER STREET
AND PHASING REQUIREMENTS**

SHEET NO.
6
of
24

C:\Civil 3D Projects\22\70801-01\Civil\MC14-CT-SG-70801.dwg 2016-1-5 13:52:16



SIGN ASSEMBLY TABLE				
POST/LUMINAIRE NO.	MUTCD DESIGNATION	DIMENSIONS LxH (in)	FACING	COMMENTS
1	D-3	8x41	E/W	INSTALL NEW SIGN
	D-3	8x50	N/S	INSTALL NEW SIGN
	R1-1	30x30	S	INSTALL NEW SIGN
2	CUSTOM		NW/SE	RELOCATE EXISTING GUIDE SIGNS ON LUMINAIRE
	R7-200	18x12	NE	INSTALL NEW SIGN ON LUMINAIRE
3	CUSTOM	18x12	N	INSTALL NEW SIGN ON LUMINAIRE, CUSTOM NO. 1
4	CUSTOM	18x12	S	INSTALL NEW SIGN, CUSTOM NO. 2
5	CUSTOM	18x12	N	INSTALL NEW SIGN, CUSTOM NO. 3
	CUSTOM	18x12	N	INSTALL NEW SIGN, CUSTOM NO. 4
6	CUSTOM	18x12	S	INSTALL NEW SIGN ON LUMINAIRE, CUSTOM NO. 2
7	R7-200	18x12	N	INSTALL NEW SIGN
8	CUSTOM	18x12	N	RELOCATE EXISTING BUS SIGN ON LUMINAIRE
9	CUSTOM	18x12	S	INSTALL NEW SIGN ON LUMINAIRE, CUSTOM NO. 2
10	R7-200	18x12	N	INSTALL NEW SIGN
	R7-201	6x12	N	INSTALL NEW SIGN
11	W11-2	24x24	N	INSTALL NEW SIGN
	W16-7pL	24x12	N	INSTALL NEW SIGN
12	CUSTOM	18x24	NW	INSTALL NEW SIGN ON LUMINAIRE, MATCH EXISTING
	CUSTOM	18x24	S	INSTALL NEW SIGN ON LUMINAIRE, MATCH EXISTING
13	CUSTOM	48x48	W	INSTALL NEW SIGN, MATCH EXISTING
	CUSTOM	24x24	E	INSTALL NEW SIGN, MATCH EXISTING
14	W11-2	24x24	S	INSTALL NEW SIGN
	W16-7pL	24x12	S	INSTALL NEW SIGN
15	R1-1	30x30	W	INSTALL NEW SIGN
16	CUSTOM	48x48	W	INSTALL NEW SIGN, MATCH EXISTING
17	CUSTOM	8x36	S	INSTALL NEW SIGN, MATCH EXISTING
18	R3-8SLS	30x30	N	INSTALL NEW SIGN ON LUMINAIRE
19	CUSTOM		W	RELOCATE EXISTING SIGN TO LUMINAIRE
20	R7-200	18x12	N	INSTALL NEW SIGN
	R7-201	6x12	N	INSTALL NEW SIGN
21	CUSTOM		NW/SE	RELOCATE EXISTING SIGNS AND POST

CUSTOM SIGN DETAILS



NO. 1



NO. 2



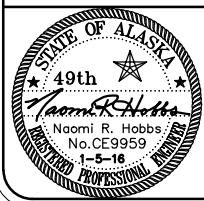
NO. 3



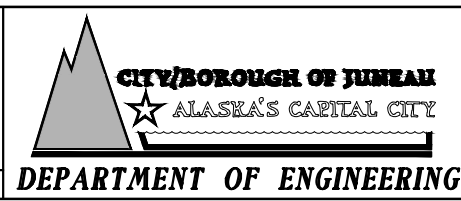
NO. 4

NOTES

1. PAINTED TRAFFIC MARKINGS SHALL BE ALKYD OIL BASED.
2. LOCATION OF PAINTED TRAFFIC MARKINGS AND SIGN POST SHOWN ARE APPROXIMATE AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.



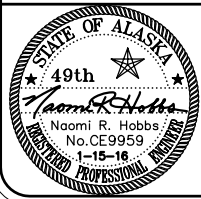
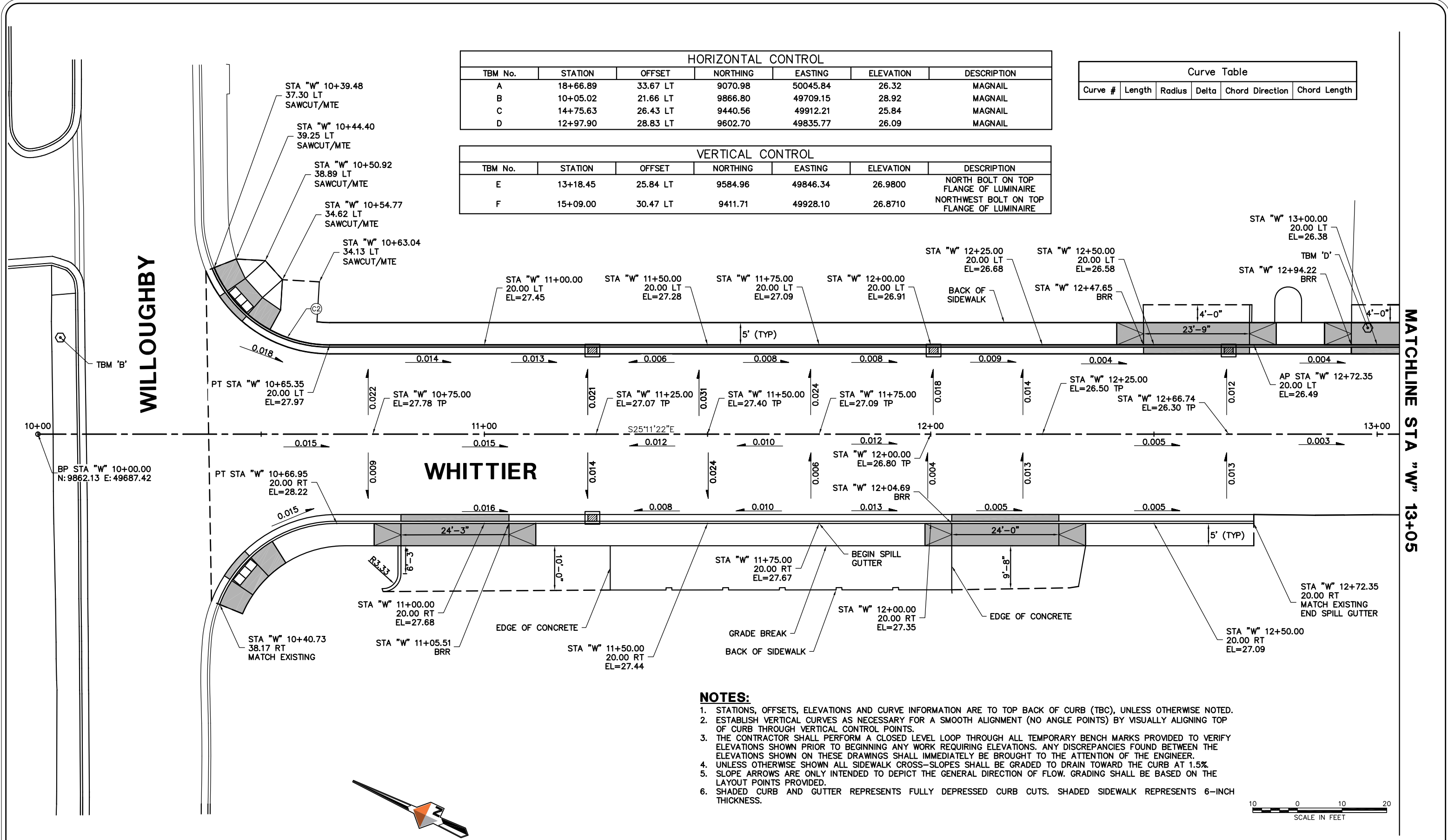
DOWL
Consulting Engineers • Land Surveyors • Construction Administration
5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax
JOB No. J70801 DRAWN BY: STAFF DESIGNED BY: T. LOCKHART CHECKED BY: N. HOBBS DATE: JAN. 2016



WHITTIER STREET RECONSTRUCTION CONTRACT NO. E16-151

PAINTED TRAFFIC MARKINGS AND SIGN LAYOUT TABLE

C:\Civil 3D Projects\22\70801-01\Civil\SC14-C1-CR-70801.dwg 2016-1-15 15:31:24



Consulting Engineers • Land Surveyors • Construction Administration

5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax

JOB No. J70801 DRAWN BY: STAFF DESIGNED BY: T. LOCKHART CHECKED BY: N. HOBBS DATE: JAN. 2016



DEPARTMENT OF ENGINEERING

**WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151**

**HORIZONTAL AND VERTICAL CONTROL
CURB & GUTTER LAYOUT AND GRADES
WHITTIER STREET
BOP TO STA "W" 13+05**

SHEET NO.

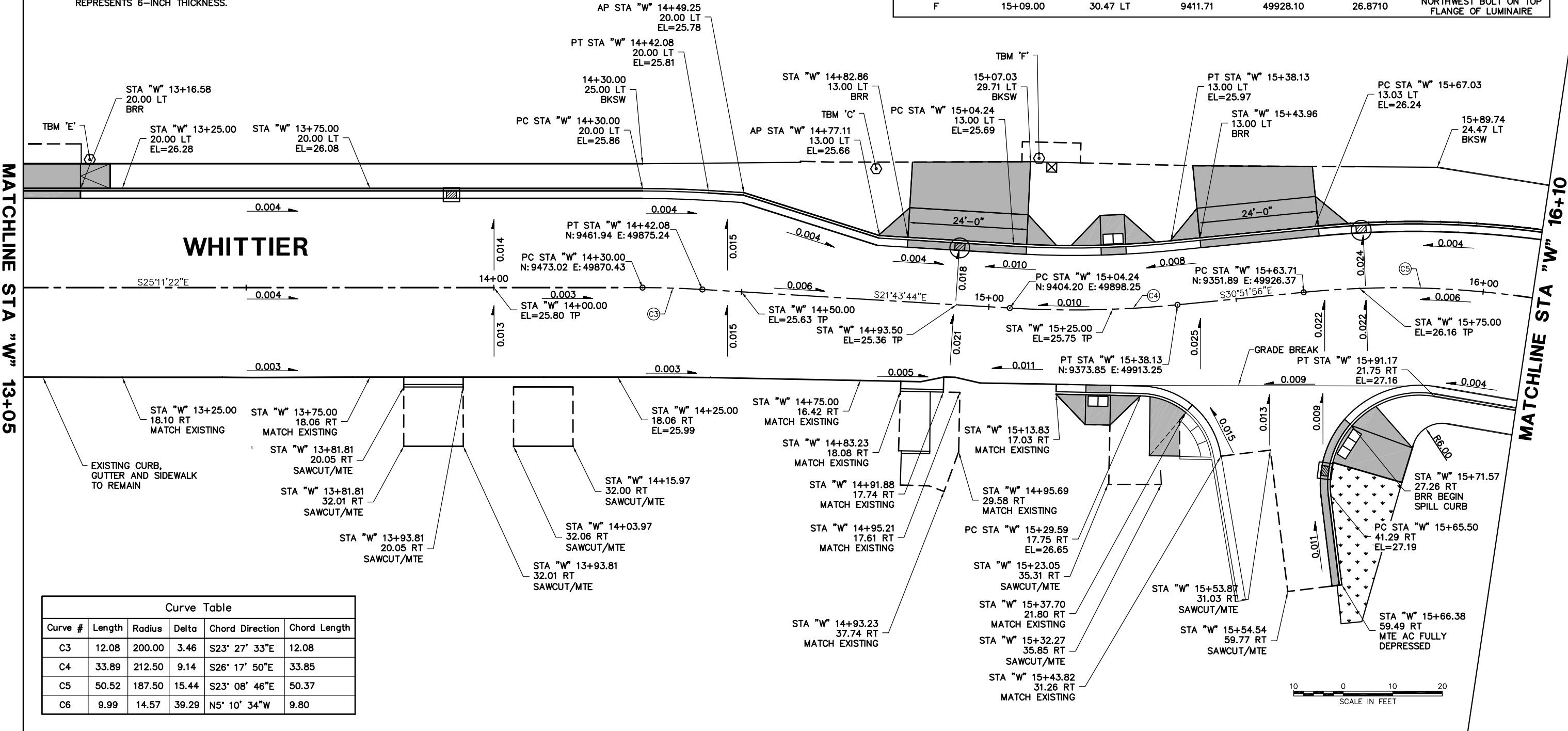
**8
of
24**

NOTES:

- 1. STATIONS, OFFSETS, ELEVATIONS AND CURVE INFORMATION ARE TO TOP BACK OF CURB (TBC), UNLESS OTHERWISE NOTED.
- 2. ESTABLISH VERTICAL CURVES AS NECESSARY FOR A SMOOTH ALIGNMENT (NO ANGLE POINTS) BY VISUALLY ALIGNING TOP OF CURB THROUGH VERTICAL CONTROL POINTS.
- 3. THE CONTRACTOR SHALL PERFORM A CLOSED LEVEL LOOP THROUGH ALL TEMPORARY BENCH MARKS PROVIDED TO VERIFY ELEVATIONS SHOWN PRIOR TO BEGINNING ANY WORK REQUIRING ELEVATIONS. ANY DISCREPANCIES FOUND BETWEEN THE ELEVATIONS SHOWN ON THESE DRAWINGS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- 4. UNLESS OTHERWISE SHOWN ALL SIDEWALK CROSS-SLOPES SHALL BE GRADED TO DRAIN TOWARD THE CURB AT 1.5%.
- 5. SLOPE ARROWS ARE ONLY INTENDED TO DEPICT THE GENERAL DIRECTION OF FLOW. GRADING SHALL BE BASED ON THE LAYOUT POINTS PROVIDED.
- 6. SHADED CURB AND GUTTER REPRESENTS FULLY DEPRESSED CURB CUTS. SHADED SIDEWALK REPRESENTS 6-INCH THICKNESS.

HORIZONTAL CONTROL						
TBM No.	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
A	18+66.89	33.67 LT	9070.98	50045.84	26.32	MAGNAIL
B	10+05.02	21.66 LT	9866.80	49709.15	28.92	MAGNAIL
C	14+75.63	26.43 LT	9440.56	49912.21	25.84	MAGNAIL
D	12+97.90	28.83 LT	9602.70	49835.77	26.09	MAGNAIL

VERTICAL CONTROL						
TBM No.	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
E	13+18.45	25.84 LT	9584.96	49846.34	26.9800	NORTH BOLT ON TOP FLANGE OF LUMINAIRE
F	15+09.00	30.47 LT	9411.71	49928.10	26.8710	NORTHWEST BOLT ON TOP FLANGE OF LUMINAIRE



Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C3	12.08	200.00	3.46	S23° 27' 33"E	12.08
C4	33.89	212.50	9.14	S26° 17' 50"E	33.85
C5	50.52	187.50	15.44	S23° 08' 46"E	50.37
C6	9.99	14.57	39.29	N5° 10' 34"W	9.80

C:\Civil 3D Projects\22\70801-01\Civil\SC14-CT-CR-70801.dwg 2016-1-15 15:31:37

5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax

Consulting Engineers • Land Surveyors • Construction Administration

JOB No. J70801 DRAWN BY: STAFF DESIGNED BY: T. LOCKHART CHECKED BY: N. HOBBS DATE: JAN. 2016

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

DEPARTMENT OF ENGINEERING

WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151

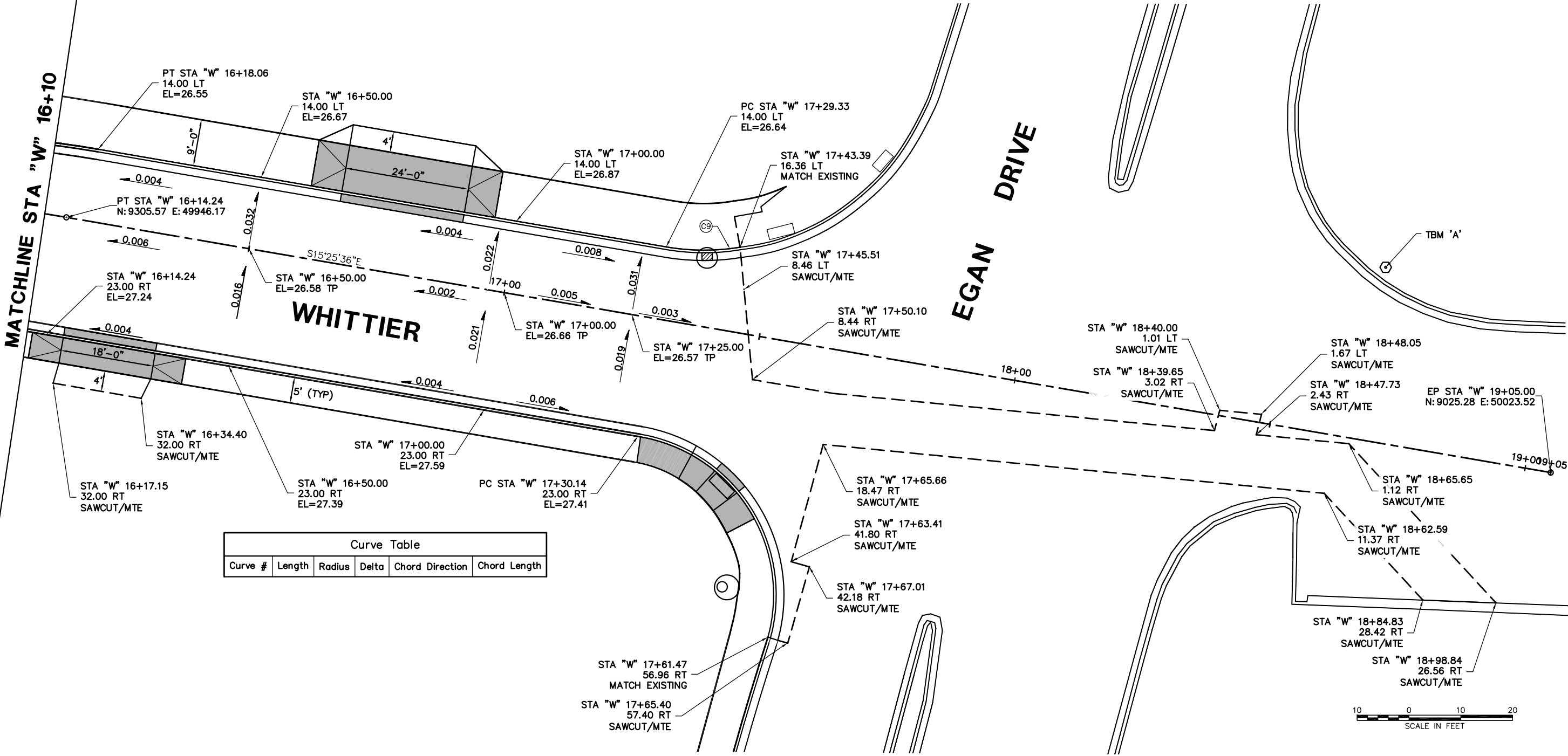
HORIZONTAL AND VERTICAL CONTROL
CURB & GUTTER LAYOUT AND GRADES
WHITTIER STREET
STA "W" 13+05 TO STA "W" 16+10

SHEET NO.
9
of
24

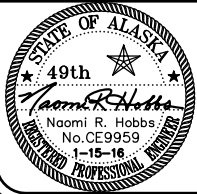
- NOTES:**
1. STATIONS, OFFSETS, ELEVATIONS AND CURVE INFORMATION ARE TO TOP BACK OF CURB (TBC), UNLESS OTHERWISE NOTED.
 2. ESTABLISH VERTICAL CURVES AS NECESSARY FOR A SMOOTH ALIGNMENT (NO ANGLE POINTS) BY VISUALLY ALIGNING TOP OF CURB THROUGH VERTICAL CONTROL POINTS.
 3. THE CONTRACTOR SHALL PERFORM A CLOSED LEVEL LOOP THROUGH ALL TEMPORARY BENCH MARKS PROVIDED TO VERIFY ELEVATIONS SHOWN PRIOR TO BEGINNING ANY WORK REQUIRING ELEVATIONS. ANY DISCREPANCIES FOUND BETWEEN THE ELEVATIONS SHOWN ON THESE DRAWINGS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
 4. UNLESS OTHERWISE SHOWN ALL SIDEWALK CROSS-SLOPES SHALL BE GRADED TO DRAIN TOWARD THE CURB AT 1.5%.
 5. SLOPE ARROWS ARE ONLY INTENDED TO DEPICT THE GENERAL DIRECTION OF FLOW. GRADING SHALL BE BASED ON THE LAYOUT POINTS PROVIDED.
 6. SHADED CURB AND GUTTER REPRESENTS FULLY DEPRESSED CURB CUTS. SHADED SIDEWALK REPRESENTS 6-INCH THICKNESS.

HORIZONTAL CONTROL						
TBM No.	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
A	18+66.89	33.67 LT	9070.98	50045.84	26.32	MAGNAIL
B	10+05.02	21.66 LT	9866.80	49709.15	28.92	MAGNAIL
C	14+75.63	26.43 LT	9440.56	49912.21	25.84	MAGNAIL
D	12+97.90	28.83 LT	9602.70	49835.77	26.09	MAGNAIL

VERTICAL CONTROL						
TBM No.	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
E	13+18.45	25.84 LT	9584.96	49846.34	26.9800	NORTH BOLT ON TOP FLANGE OF LUMINAIRE
F	15+09.00	30.47 LT	9411.71	49928.10	26.8710	NORTHWEST BOLT ON TOP FLANGE OF LUMINAIRE



C:\Civil 3D Projects\22\70801-01\Civil\SC14-CT-GR-70801.dwg 2016-1-15 15:31:39



5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax

Consulting Engineers • Land Surveyors • Construction Administration

JOB No. J70801 DRAWN BY: STAFF DESIGNED BY: T. LOCKHART CHECKED BY: N. HOBBS DATE: JAN. 2016



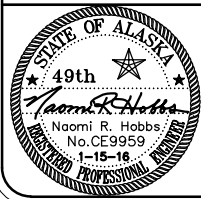
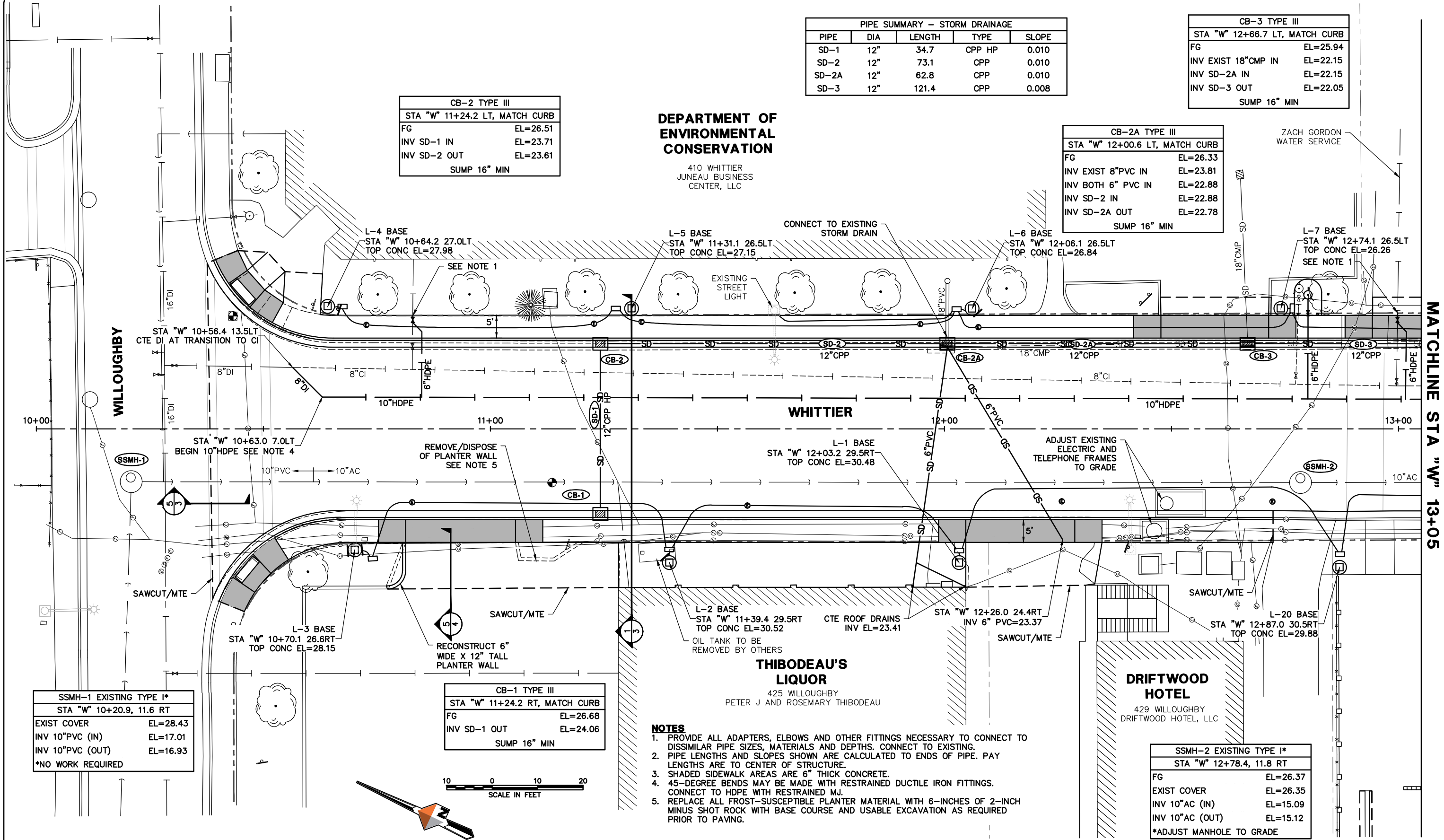
DEPARTMENT OF ENGINEERING

**WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151**

**HORIZONTAL AND VERTICAL CONTROL
CURB & GUTTER LAYOUT AND GRADES
WHITTIER STREET
STA "W" 16+10 TO EOP**

SHEET NO.

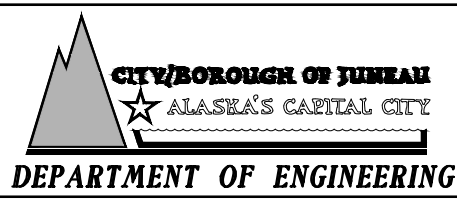
**10
of
24**



DOWL
Consulting Engineers • Land Surveyors • Construction Administration

5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax

JOB No. J70801 DRAWN BY: STAFF DESIGNED BY: T. LOCKHART CHECKED BY: N. HOBBS DATE: JAN. 2016



**WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151**

**PLAN - WHITTIER STREET
BOP TO STA "W" 13+05**

SHEET NO.

**11
of
24**

PIPE SUMMARY - STORM DRAINAGE				
PIPE	DIA	LENGTH	TYPE	SLOPE
SD-3		SEE SHEET 11		
SD-4	12"	99.5	CPP	0.005
SD-5	12"	24.4	CPP HP	0.020
SD-6	18"	73.1	CPP	0.005
SD-7	12"	45.4	CPP HP	0.010
SD-8	12"	24.8	CPP	0.010
SD-9	18"	159.9	CPP	0.005

CB-4 TYPE IV	
STA "W" 13+91.4 LT, MATCH CURB	
FG	EL=25.44
INV SD-3 IN	EL=21.06
INV SD-4 OUT	EL=20.96
SUMP 16" MIN	

CB-5 TYPE I	
STA "W" 14+93.4 LT, MATCH CURB	
FG	EL=25.03
INV SD-4 IN	EL=20.46
INV SD-5 IN	EL=20.46
INV SD-6 OUT	EL=20.36
SUMP 16" MIN	

CB-7 TYPE I	
STA "W" 15+75.7 LT, MATCH CURB	
FG	EL=25.76
INV SD-6 IN	EL=19.97
INV SD-7 IN	EL=21.30
INV SD-9 OUT	EL=19.87
SUMP 16" MIN	

JUNEAU ARTS & CULTURE CENTER

350 WHITTIER
CITY & BOROUGH
OF JUNEAU

PUBLIC SAFETY

450 WHITTIER
ALASKA MENTAL HEALTH
TRUST AUTHORITY

CENTENNIAL HALL

CITY & BOROUGH
OF JUNEAU

ALLEY
CITY & BOROUGH
OF JUNEAU

EXISTING STREET LIGHT

L-8 BASE
STA "W" 13+33.9 26.0LT
TOP CONC EL=26.23
SEE NOTE 1

CTE 4"PVC
SEE NOTE 1
6"PVC

CTE 4"PVC
SEE NOTE 1
6"PVC

L-9 BASE
STA "W" 14+31.2 26.5LT
TOP CONC EL=25.84

INSTALL NEW TRASH CAN AS
DIRECTED BY THE ENGINEER

REMOVE AND DISPOSE OF CHAIN
LINK FENCE TO NEAREST POST
BEHIND NEW BACK OF SIDEWALK

L-10 BASE
STA "W" 15+15.2 28.9LT
TOP CONC EL=25.95

L-11 BASE
STA "W" 15+86.1 26.3LT
TOP CONC EL=26.49

SEE NOTE 1

MATCHLINE STA "W" 13+05

MATCHLINE STA "W" 16+10

WHITTIER

STA "W" 13+72.2 6.4LT
ANGLE POINT

STA "W" 14+90.6 1.6LT
ANGLE POINT

STA "W" 15+66.6 1.9RT
PC SEE NOTE 4

STA "W" 16+03.9 13.3RT
PT SEE NOTE 4

SEE NOTE 5

SEE NOTE 6

EXISTING CURB, GUTTER
AND SIDEWALK TO REMAIN

SAWCUT/MTE
SEE NOTE 7

SAWCUT/MTE
SEE NOTE 7

STATE LIBRARY ARCHIVE MUSEUM

395 WHITTIER
STATE OF ALASKA &
DEPARTMENT OF
EDUCATION AND EARLY
DEVELOPMENT

NOTES

1. PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS. CONNECT TO EXISTING.
2. PIPE LENGTHS AND SLOPES SHOWN ARE CALCULATED TO ENDS OF PIPE. PAY LENGTHS ARE TO CENTER OF STRUCTURE.
3. SHADED SIDEWALK AREAS ARE 6" THICK CONCRETE.
4. HDPE CURVE RADII SHALL BE A MINIMUM OF 40'-FT.
5. CTE 10"AC WITH A SADDLE TEE.
6. WHEN THE MANHOLE AT STA 16+00 RT IS REMOVED VERIFY WITH THE ENGINEER THAT THERE ARE NO ACTIVE INLET PIPES.
7. MATCH EXISTING ARCHITECTURAL SAWCUT PATTERN FOR ALL CONCRETE SIDEWALK REPLACED ALONG THE SLAM PROPERTY.

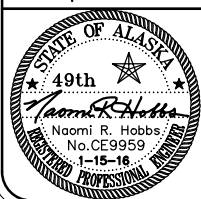
CB-5A EXISTING TYPE IV*	
STA "W" 14+93.5 RT, MATCH CURB	
FG	EL=25.63
INV 12"CMP IN	EL=20.96
INV SD-5 OUT	EL=20.94
*TO REMAIN	

CB-6 TYPE IV	
STA "W" 15+65.5 RT, MATCH CURB	
FG	EL=26.42
INV SD-8 IN	EL=21.85
INV SD-7 OUT	EL=21.75
SUMP 16" MIN	

SSMH-3 EXISTING TYPE I*	
STA "W" 15+65.6, 10.9 RT	
FG	EL=26.28
EXIST COVER	EL=26.37
INV 10"AC (IN)	EL=14.05
INV 10"AC (OUT)	EL=14.05
*ADJUST MANHOLE TO GRADE	

CBJ ROW

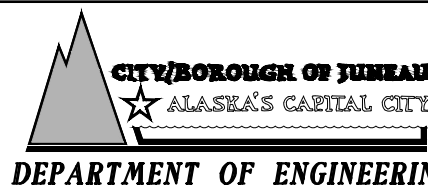
10 0 10 20
SCALE IN FEET



Consulting Engineers • Land Surveyors • Construction Administration

JOB No. J70801 DRAWN BY: STAFF DESIGNED BY: T. LOCKHART CHECKED BY: N. HOBBS DATE: JAN. 2016

5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax



WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151

PLAN - WHITTIER STREET
STA "W" 13+05 TO STA "W" 16+10

SHEET NO.

12
of
24

NOTES

1. PROVIDE ALL ADAPTERS, ELBOWS AND OTHER FITTINGS NECESSARY TO CONNECT TO DISSIMILAR PIPE SIZES, MATERIALS AND DEPTHS. CONNECT TO EXISTING.
2. PIPE LENGTHS AND SLOPES SHOWN ARE CALCULATED TO ENDS OF PIPE. PAY LENGTHS ARE TO CENTER OF STRUCTURE.
3. SHADED SIDEWALK AREAS ARE 6" THICK CONCRETE.
4. HDPE CURVE RADII SHALL BE A MINIMUM OF 40'-FT.
5. VAULT ROOF AND INTEGRAL HATCH TO BE REPLACED BY AEL&P. COORDINATE WORK AS REQUIRED.
6. INSTALL NEW 6"GV WITHIN THE RIGHT OF WAY. REMOVE EXISTING GATE VALVE AND CONNECT TO EXISTING ON PRIVATE SIDE OF EXISTING VALVE. REMOVE AND REPLACE EXISTING SIGN AS REQUIRED.

JUNEAU ARTS & CULTURE CENTER

350 WHITTIER
CITY & BOROUGH
OF JUNEAU

CB-8 TYPE I*	
STA "W" 17+37.3 LT, MATCH CURB	
FG	EL=25.97
INV 6"PVC IN	EL=22.00
INV SD-9 IN	EL=19.07
INV SD-10 OUT	EL=18.97
SUMP 16" MIN	

PIPE SUMMARY - STORM DRAINAGE				
PIPE	DIA	LENGTH	TYPE	SLOPE
SEE SHEET 12				
SD-9				
SD-10	18"	72.7	CPP	0.004
SD-11	18"	72.9	CPP	0.019

SSMH-5 TYPE I*	
STA "W" 17+64.9, 21.0 LT	
EXISTING COVER	EL=26.26
INV 10" AC IN	EL=12.24
INV 10" PVC DROP IN	EL=16.46
INV 8" DI IN	EL=19.01
INV 30"AC IN	EL=10.38
INV 30"AC OUT	EL=10.38
*NO WORK REQUIRED.	

SSMH-6 TYPE I*	
STA "W" 18+59.6, 15.4 RT	
EXISTING COVER	EL=26.02
INV 8" AC IN	EL=19.85
INV 8" AC OUT	EL=19.75
*NO WORK REQUIRED.	

10 0 10 20
SCALE IN FEET

MATCHLINE STA "W" 16+10

EGAN DRIVE

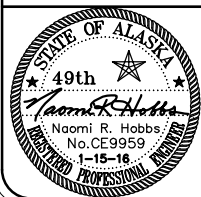
EGAN DRIVE

SSMH-4 TYPE I*	
STA "W" 17+52.0, 48.8 RT	
FG	EL=27.35
INV 8"AC IN	EL=19.37
INV 6"PVC IN	EL=19.60
INV 8"DI OUT	EL=19.27
*REPLACE EXISTING MANHOLE WITH NEW IN SAME LOCATION.	

KTOO

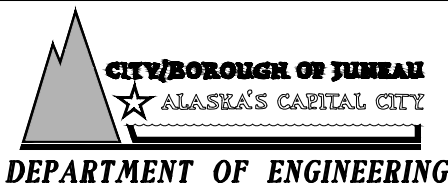
360 WHITTIER
ALASKA MENTAL HEALTH
TRUST AUTHORITY

CB-9 EXISTING DOT TYPE A*	
STA "W" 17+61.4 58.0 RT	
FG	EL=26.41
INV SD-10 IN	EL=18.68
INV EXIST 18"CMP IN	EL=16.74
INV EXIST 18"CMP OUT	EL=16.66
*TO REMAIN.	



Consulting Engineers • Land Surveyors • Construction Administration

JOB No. J70801 DRAWN BY: STAFF DESIGNED BY: T. LOCKHART CHECKED BY: N. HOBBS DATE: JAN. 2016



WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151

PLAN - WHITTIER STREET
STA "W" 16+10 TO EOP

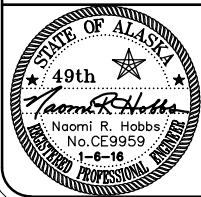
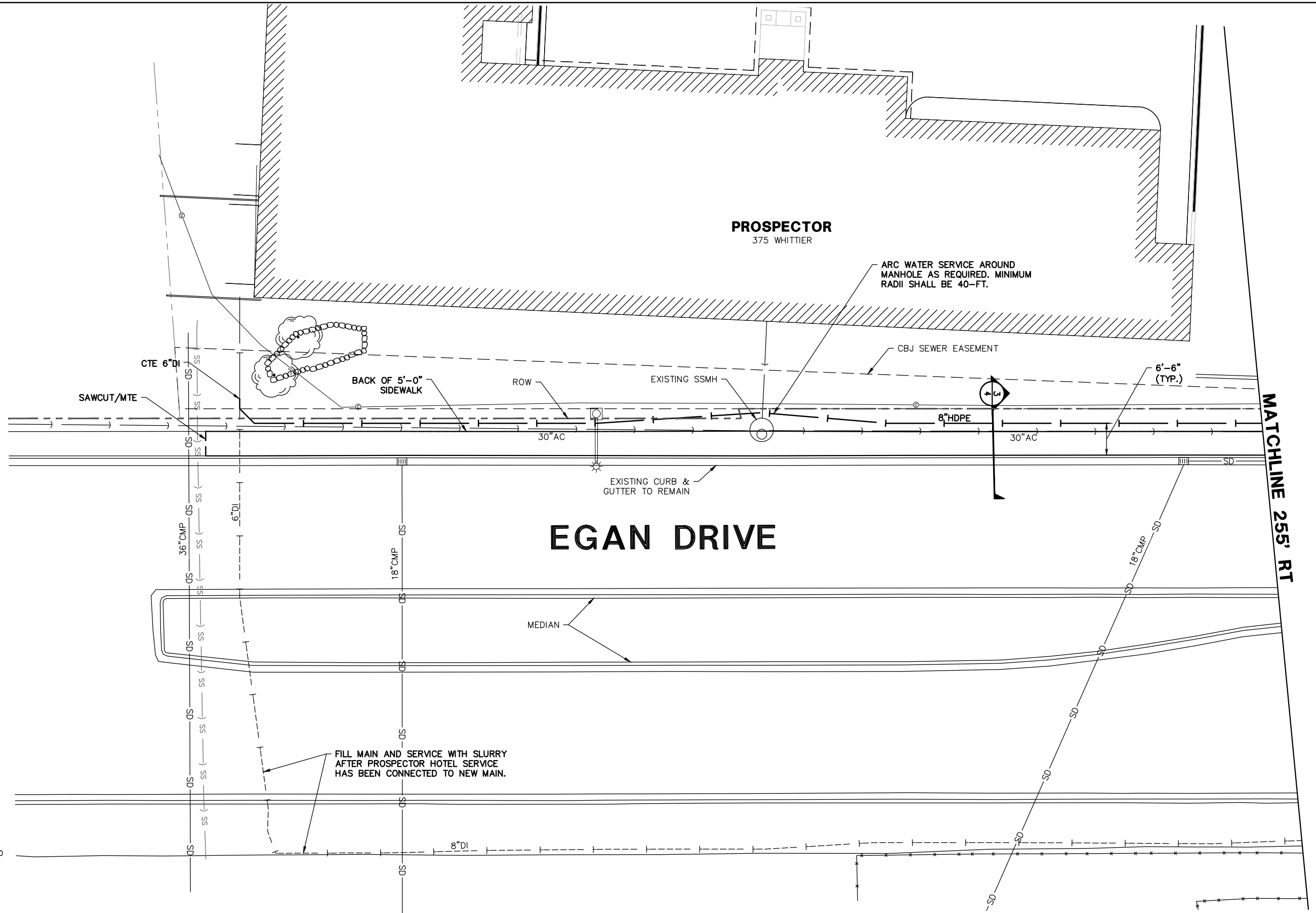
SHEET NO.

13
of
24



C:\Civil_3D\Projects\22\70801-01\Civil\MC14-CT-BA-70601.dwg 2016-1-6 11:05:56

10 0 10 20
SCALE IN FEET



Consulting Engineers • Land Surveyors • Construction Administration

5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax



CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

DEPARTMENT OF ENGINEERING

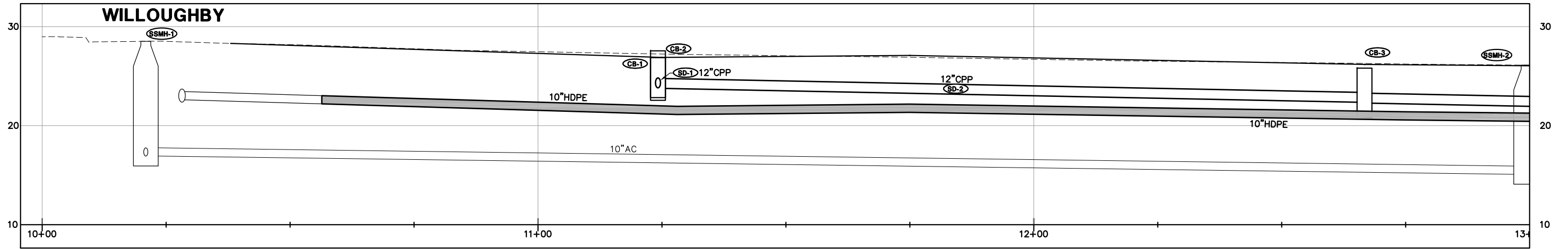
WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151

PLAN - PROSPECTOR WATER SERVICE
255'RT TO CONNECTION TO EXISTING

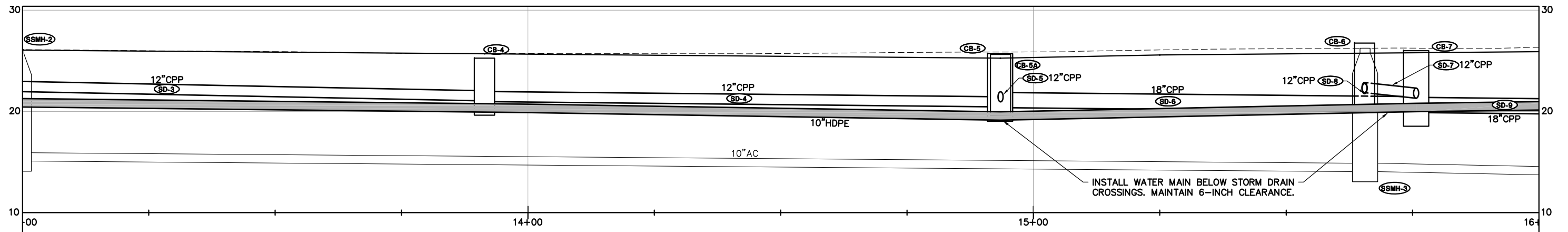
SHEET NO.

15
of
24

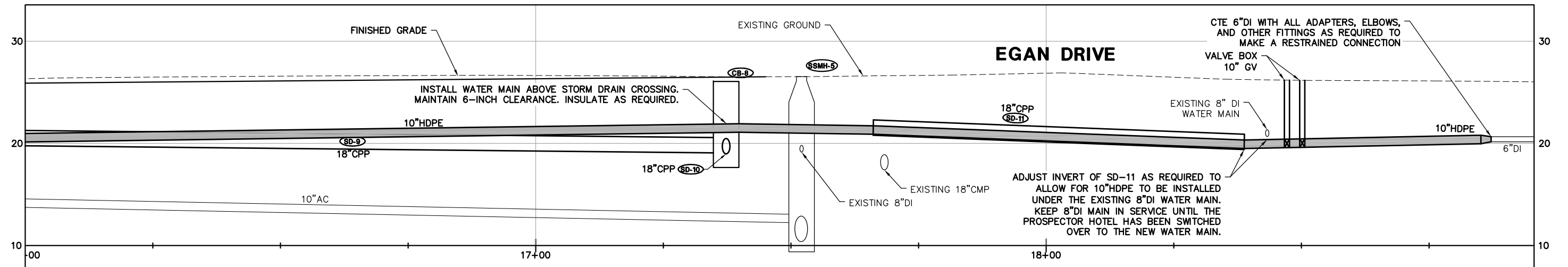
C:\Civil 3D Projects\22\70801-01\Civil\SC14-CT-PR-70801.dwg 2016-1-5 13:05:25



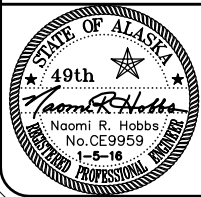
PROFILE - WHITTIER STREET
BOP TO STA "W" 13+00



PROFILE - WHITTIER STREET
STA "W" 13+00 TO STA "W" 16+00

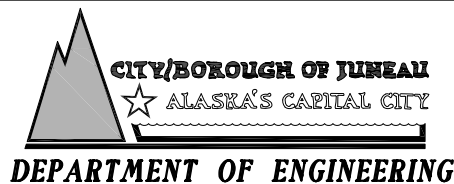


PROFILE - WHITTIER STREET
STA "W" 16+00 TO EOP



5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax

Consulting Engineers • Land Surveyors • Construction Administration

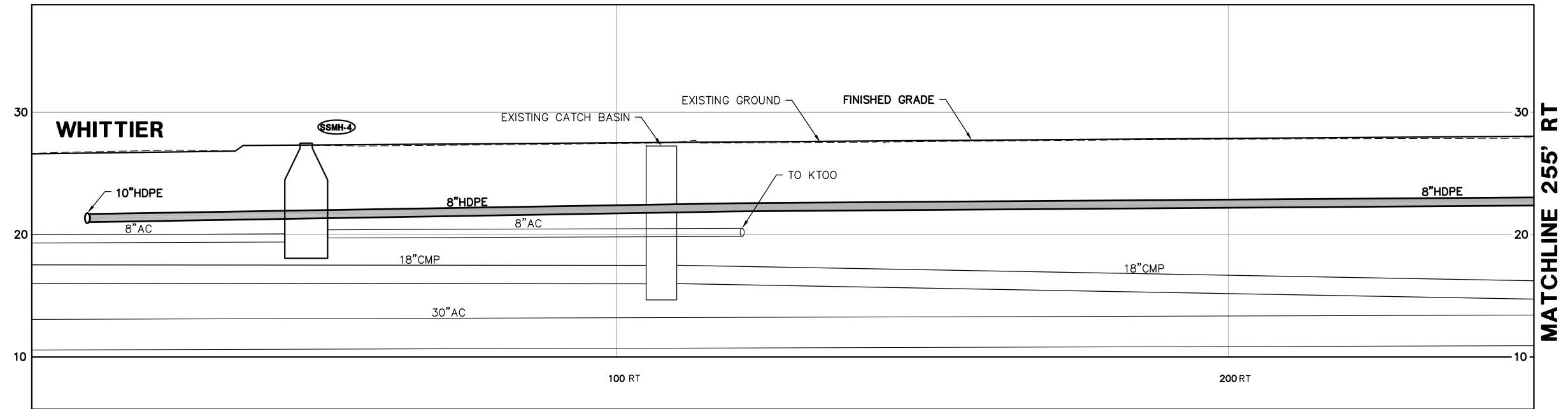


WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151

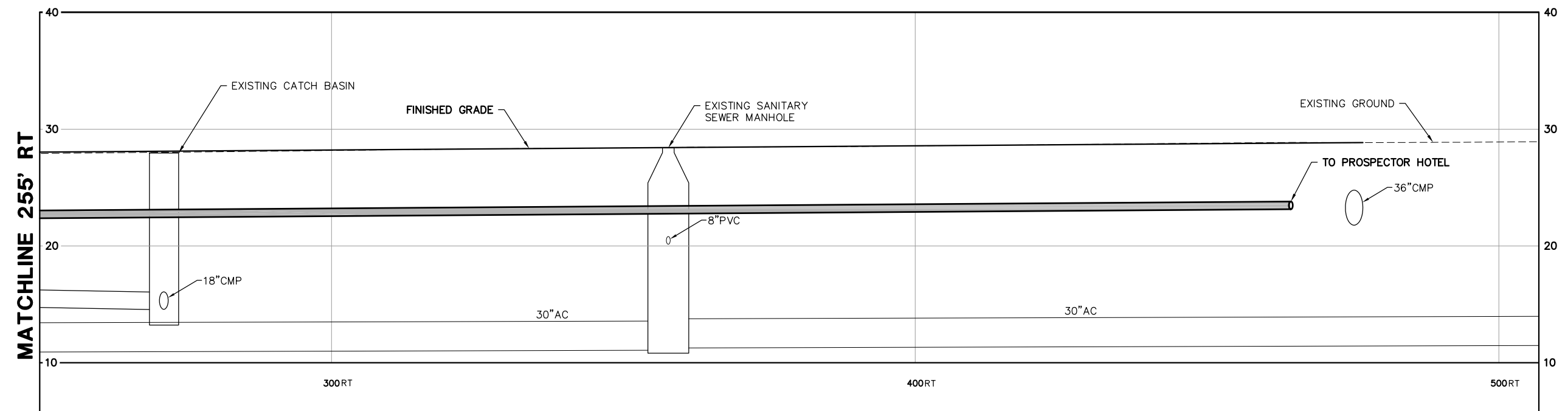
PROFILE - WHITTIER STREET
BOP TO EOP

SHEET NO.

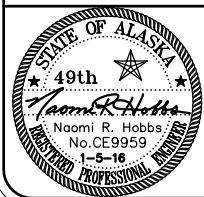
16
of
24



**PROFILE - PROSPECTOR WATER SERVICE
STA "W" 17+18.4, CL TO 250-FT RT**

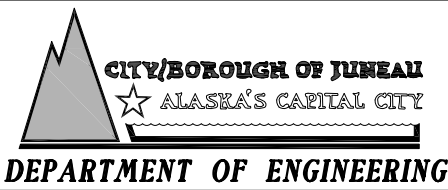


**PROFILE - PROSPECTOR WATER SERVICE
STA "W" 17+18.4, 250-FT RT TO 510-FT RT**



5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax

Consulting Engineers • Land Surveyors • Construction Administration



**WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151**

**PROFILE - PROSPECTOR
WATER SERVICE**













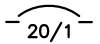


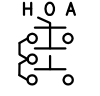





SHEET NO.

**17
of
24**


JOB No. J70801 DRAWN BY: STAFF DESIGNED BY: T. LOCKHART CHECKED BY: N. HOBBS DATE: JAN. 2016

WHITTIER STREET RECONSTRUCTION

SHEET INDEX	
18	GENERAL NOTES, INDEX AND LEGEND
19	ELECTRICAL - WHITTIER STREET BOP TO STA "W" 13+05
20	ELECTRICAL - WHITTIER STREET STA "W" 13+05 TO STA "W" 16+10
21	ELECTRICAL - WHITTIER STREET STA "W" 16+10 TO EOP
22	LOAD CENTER DETAILS
23	LIGHT POLE DETAILS
24	TRENCH DETAILS

LEGEND	
	DUPLEX OUTLET
	ELECTRICAL METER
	FUSE
	GROUND BUSS
	POLE MOUNT LUMINAIRE
	CONDUIT
	ELECTRIC OR ELECTRICAL
	GALVANIZED
	GROUND FAULT INTERRUPTER
	HAND-OFF-AUTO
	GALVANIZED RIGID STEEL
	PHOTOELECTRIC CELL
	CIRCUIT BREAKER
	CONTACT
	LIGHTING CONTACTOR
	HAND-OFF-AUTO (HOA) SWITCH
	TYPICAL
	LIGHTING CONTACTOR
	NATIONAL ELEC CODE
	NUMBER
	GROUND

NOTES:

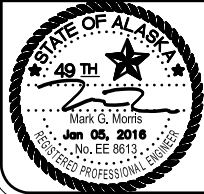
1. KEYNOTES () ON THIS SHEET REFER TO SHEETS 19 TO 21.
2. THE PURPOSE OF THIS PROJECT IS TO PROVIDE NEW STREET LIGHTING FOR THE WHITTIER STREET PROJECT. PROVIDE ALL WORK SHOWN ON THE DRAWINGS AND AS NECESSARY TO PROVIDE NEW STREET LIGHTING AS SHOWN. PERFORM ALL WORK PER THE NATIONAL ELECTRICAL CODE (NEC) AND APPLICABLE STATE AND LOCAL CODES. ALL WORK SHOWN IS NEW UNLESS OTHERWISE NOTED.
3. COORDINATE INSTALLATION WITH OTHER TRADES. OBTAIN LOCATES PRIOR TO DIGGING. RELOCATE CONDUIT, J-BOXES & EQUIPMENT AS NECESSARY TO AVOID CONFLICTS WITH PIPING, CONDUIT, CABLES, AND OTHER STRUCTURES. INSTALL LIGHT BASES WHERE SHOWN. THERE ARE NUMEROUS UNDERGROUND ELECTRICAL UTILITIES AND OTHER PRIVATE CONDUIT AND CABLE IN THE PROJECT AREA. ASSUME CONDUIT WILL HAVE TO BE ROUTED UNDERNEATH THESE EXISTING FACILITIES. ADJUST CONDUIT ROUTING AS REQUIRED. USE PRIVATE LOCATES IN ADDITION TO PUBLIC LOCATES.
4. THIS EXISTING LIGHT POLE IS FED FROM THE EXISTING LOAD CENTER ON WILLOUGHBY STREET (CKT2). REMOVE THE CONDUCTORS FROM THIS POLE BACK TO LOAD CENTER. EXTEND THE CONDUIT AS REQUIRED TO ROUTE IT INTO THE NEW JUNCTION BOX FOR POLE L-3. LEAVE PULL STRING IN EMPTY CONDUIT. LABEL BOTH ENDS.
5. PROVIDE NEW LIGHT POLES PER LIGHT POLE DETAILS ON SHEET 23. THE LUMINARIES SHALL CONSIST OF 120 LED LAMPS, 209W, WITH 525MA, 120-277V ELECTRONIC DRIVER, TYPE 4 DISTRIBUTION, FULL CUTOFF, 4500K, MINIMUM INITIAL 12110 LUMENS, 208V (L-1 TO L-20). TERMINAL BLOCKS INSIDE LUMINAIRE AND ROTO-LOCK RECEPTACLE WITH PHOTOCCELL AND CAST DECORATIVE LIGHT SHIELD COVER ON L-1 ONLY. LUMINAIRE - STERNBERG

6. ALL CONDUIT SHALL BE SCHEDULE 40 PVC, HDPE OR GRS. USE GRS ELBOWS AND SWEEPS. USE THREE CONDUCTOR CABLE WITH COPPER CONDUCTORS WITH XHHW OR RHW INSULATION RATED AT 600V. USE TWO CONDUCTORS FOR POWER AND ONE AS A SPARE. SPLICE CONDUCTORS ONLY IN LIGHT POLES. BURY CONDUIT PER TRENCH DETAIL ON SHEET 24. LOCATE CONDUIT WHERE SHOWN ON THESE DRAWINGS. THE CABLE SHALL HAVE AN OUTER JACKET OF XLP OR APPROVED EQUAL (GENERAL CABLE CVTC 783160). NO PLOWING IN OF CONDUIT. MAINTAIN SEPARATION OF CONDUIT PER TRENCH DETAIL WITH OTHER PIPING AND UTILITY CONDUITS. DO NOT SHARE A TRENCH WITH OTHER UTILITY PIPING. CONDUIT LOCATIONS ARE NOT SCHEMATIC IN NATURE. LOCATE CONDUITS WHERE SHOWN. MODIFY LOCATIONS AS REQUIRED TO AVOID OBSTACLES. OBTAIN ENGINEER'S PERMISSION PRIOR TO RELOCATING CONDUIT.
7. PROVIDE TYPE 1A JUNCTION BOXES PER A.D.O.T. STANDARD DRAWING L-23. INSTALL PER LIGHT POLE MOUNTING DETAIL ON SHEET 23. LOCATE JUNCTION BOXES WHERE SHOWN ON THESE DRAWINGS AND PER THE CIVIL DRAWINGS. ELEVATION OF TOP OF JUNCTION BOX TO BE FLUSH WITH GRADE.
8. COORDINATE WITH UTILITY TO PROVIDE A 120/208V, 1 ϕ , 3W, 100A, SERVICE TO THE LOAD CENTER. PROVIDE 2" C FROM LOAD CENTER TO UTILITY TRANSFORMER. UTILITY TO PROVIDE CONDUCTORS.
9. ORIENT ALL LUMINAIRE DISTRIBUTIONS PERPENDICULAR TO ROADWAY. ADJUST ORIENTATION FROM WHAT IS SHOWN AS NECESSARY.
10. CONNECT NEW LOAD CENTER TO POWER LIGHT POLES L-1 TO L-20. SEE DETAILS SHEET 22.
11. REMOVE THE EXISTING LIGHT POLES INCLUDING THEIR BASES AND LUMINAIRES. REMOVE CONDUIT AND CONDUCTORS. ROUTING UNKNOWN. CUT AND PATCH ASPHALT AND CONCRETE AS REQUIRED. BACKFILL AS REQUIRED. ABANDON CONDUIT IN PLACE WHERE OUTSIDE OF LIMITS OF PROJECT AREA.
12. PROVIDE (2) 4" C WITH CAPPED ENDS AND PULL STRINGS FOR USE BY OTHERS. PROVIDE SWING TIES AT EACH END. BURY 3' OF NO. 4 REBAR AT EACH END.
13. THIS EXISTING LIGHT POLE IS FED FROM THE EXISTING LOAD CENTER ON WILLOUGHBY STREET (CKT 4). REMOVE THE CONDUCTORS FROM THIS POLE BACK TO LOAD CENTER. EXTEND THE CONDUIT AS REQUIRED TO ROUTE IT INTO THE NEW JUNCTION BOX FOR POLE L-6. LEAVE PULL STRING IN EMPTY CONDUIT. LABEL BOTH ENDS.



MORRIS
ENGINEERING GROUP
LLC

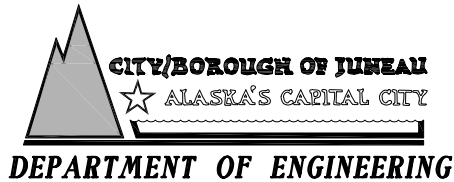
PO Box 210049, Auke Bay, AK 99821
Phone: 907-789-3350



Consulting Engineers • Land Surveyors • Construction Administration

JOB No. J70801 DRAWN BY: LDS DESIGNED BY: B. NELSON CHECKED BY: MGM DATE: JAN. 2016

5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax



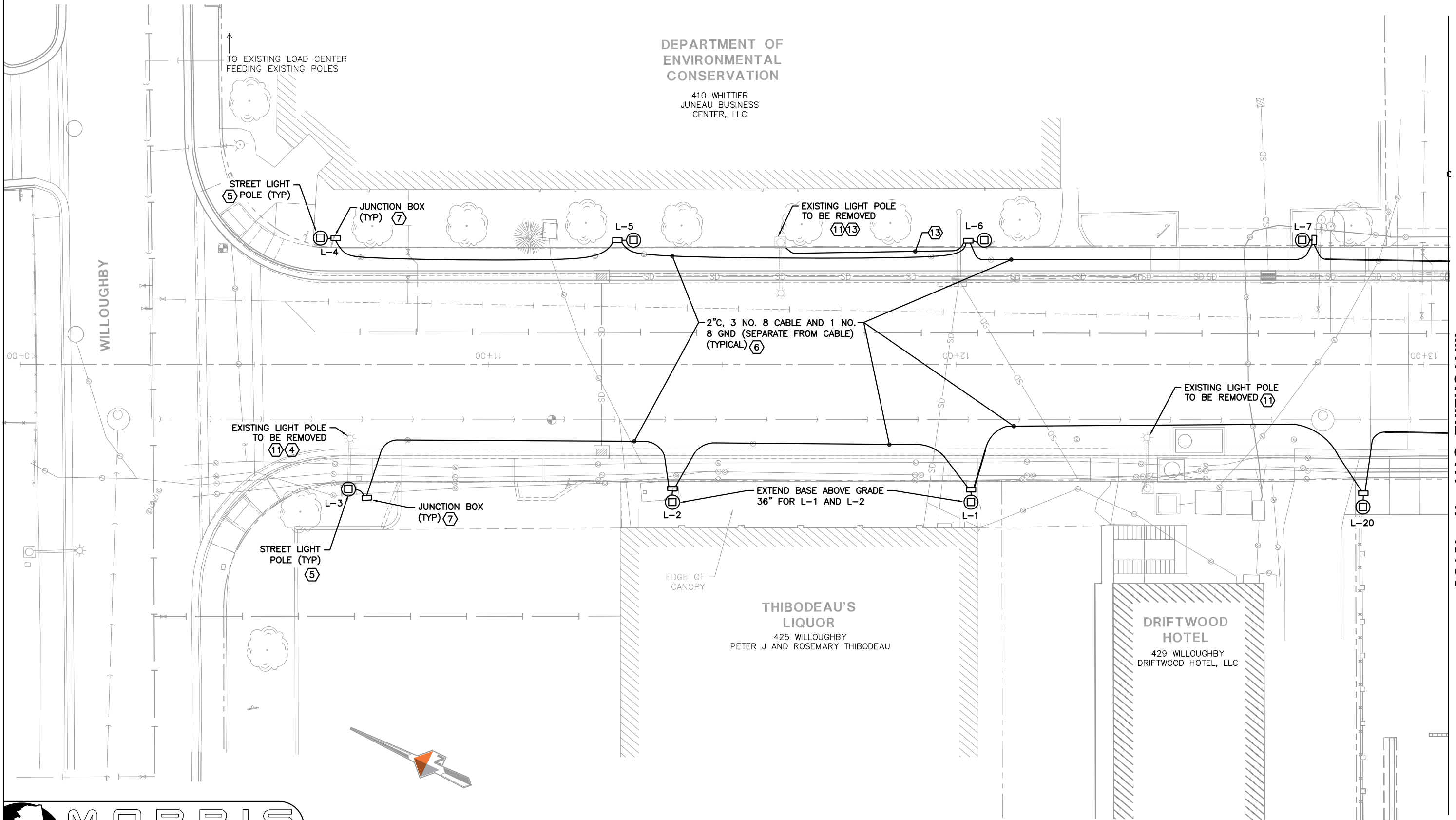
WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151

GENERAL NOTES, INDEX
AND LEGEND

SHEET NO.

18
of
24

Y:\129 Dowl Engineering\22 Whittier Street Reconstruction\Working Drawings\Whittier 95% Check Set.dwg 2016-1-5 12:35:28



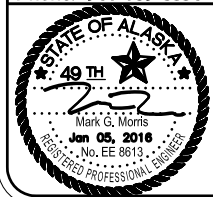
DEPARTMENT OF
ENVIRONMENTAL
CONSERVATION

410 WHITTIER
JUNEAU BUSINESS
CENTER, LLC

MATCHLINE STA "W" 13+05

① WHITTIER STREET - ELECTRICAL

MORRIS
ENGINEERING GROUP
LLC
PO Box 210049, Auke Bay, AK 99821
Phone: 907-789-3350



DOWL
Consulting Engineers • Land Surveyors • Construction Administration
5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax
JOB No. J70801 DRAWN BY: LDS DESIGNED BY: B. NELSON CHECKED BY: MGM DATE: JAN. 2016

CITY/BOROUGH OF JUNEAU
★ ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

**WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151**

**ELECTRICAL - WHITTIER STREET
BOP TO STA "W" 13+05**

SHEET NO.
19
of
24

Y:\129 Dowl Engineering\22 Whittier Street Reconstruction\Working Drawings\Whittier 100%dwg 2016-1-15 15:57:12

MATCHLINE STA "W" 13+05

MATCHLINE STA "W" 16+10

ALLEY
CITY & BOROUGH
OF JUNEAU

PUBLIC SAFETY
450 WHITTIER
ALASKA MENTAL HEALTH
TRUST AUTHORITY

CENTENNIAL
HALL
CITY & BOROUGH
OF JUNEAU

WHITTIER

STATE LIBRARY
ARCHIVE MUSEUM

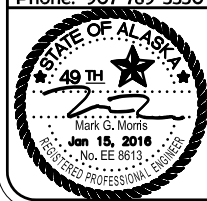
395 WHITTIER
STATE OF ALASKA &
DEPARTMENT OF
EDUCATION AND EARLY
DEVELOPMENT

CBJ ROW

① WHITTIER STREET - ELECTRICAL



MORRIS
ENGINEERING GROUP
LLC
PO Box 210049, Auke Bay, AK 99821
Phone: 907-789-3350



Consulting Engineers • Land Surveyors • Construction Administration

JOB No. J70801 | DRAWN BY: LDS | DESIGNED BY: B. NELSON | CHECKED BY: MGM | DATE: JAN. 2016

5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax



CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

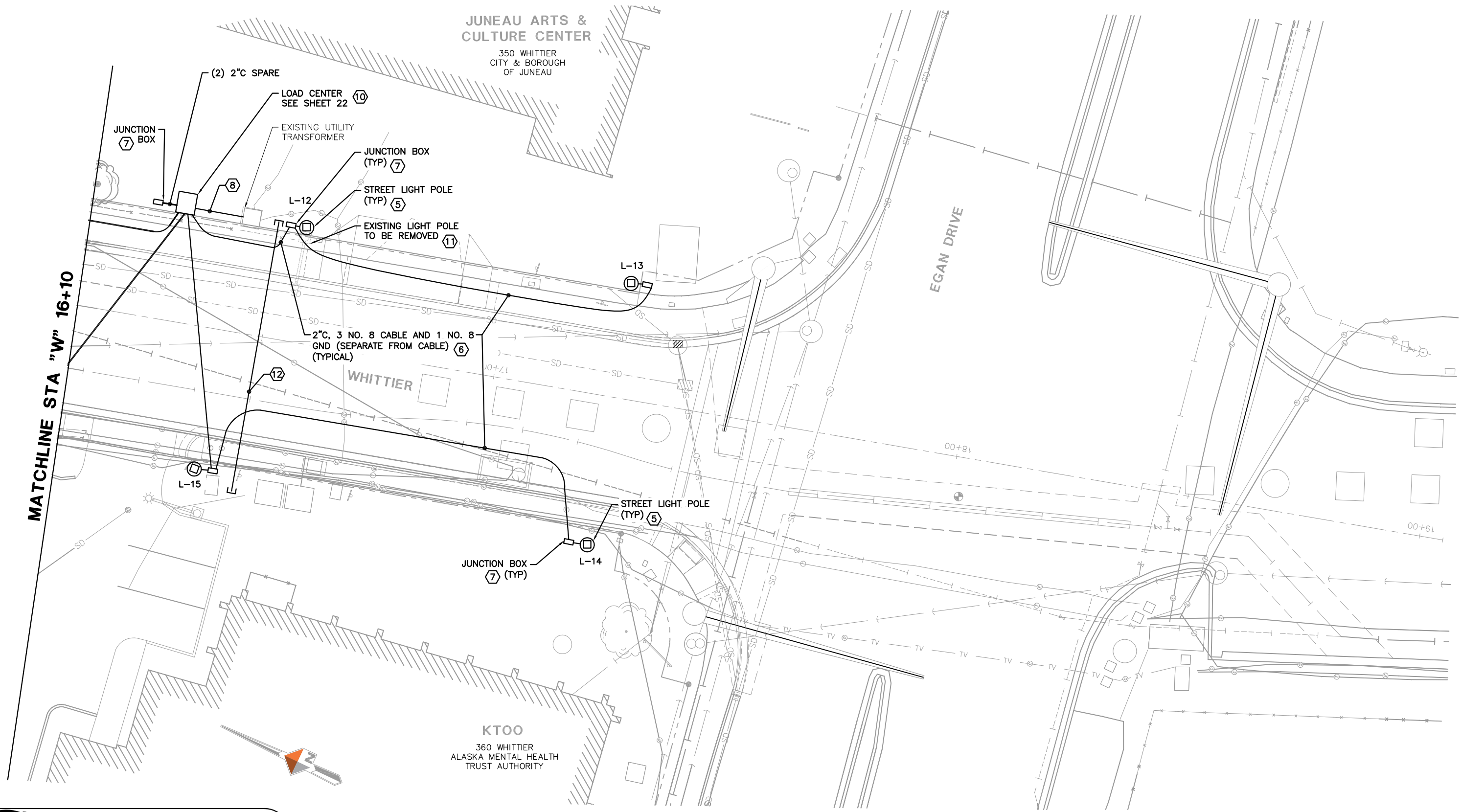
DEPARTMENT OF ENGINEERING

WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151

ELECTRICAL - WHITTIER STREET
STA "W" 13+05 TO STA "W" 16+10

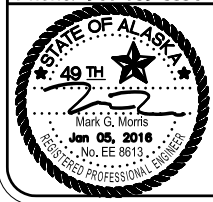
SHEET NO.
20
of
24

Y:\129 Dowl Engineering\22 Whittier Street Reconstruction\Working Drawings\Whittier 95% Check Set.dwg 2016-1-5 12:19:53



① WHITTIER STREET - ELECTRICAL

MORRIS ENGINEERING GROUP LLC
PO Box 210049, Auke Bay, AK 99821
Phone: 907-789-3350



DOWL
Consulting Engineers • Land Surveyors • Construction Administration
5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax

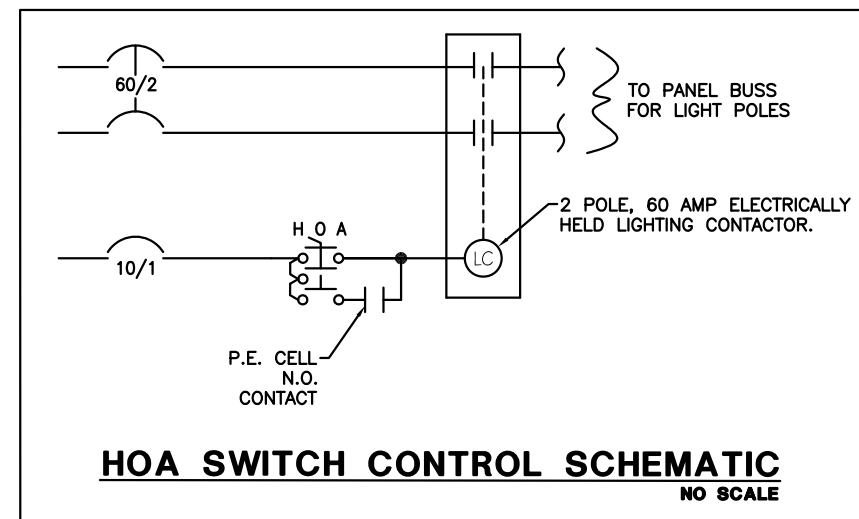
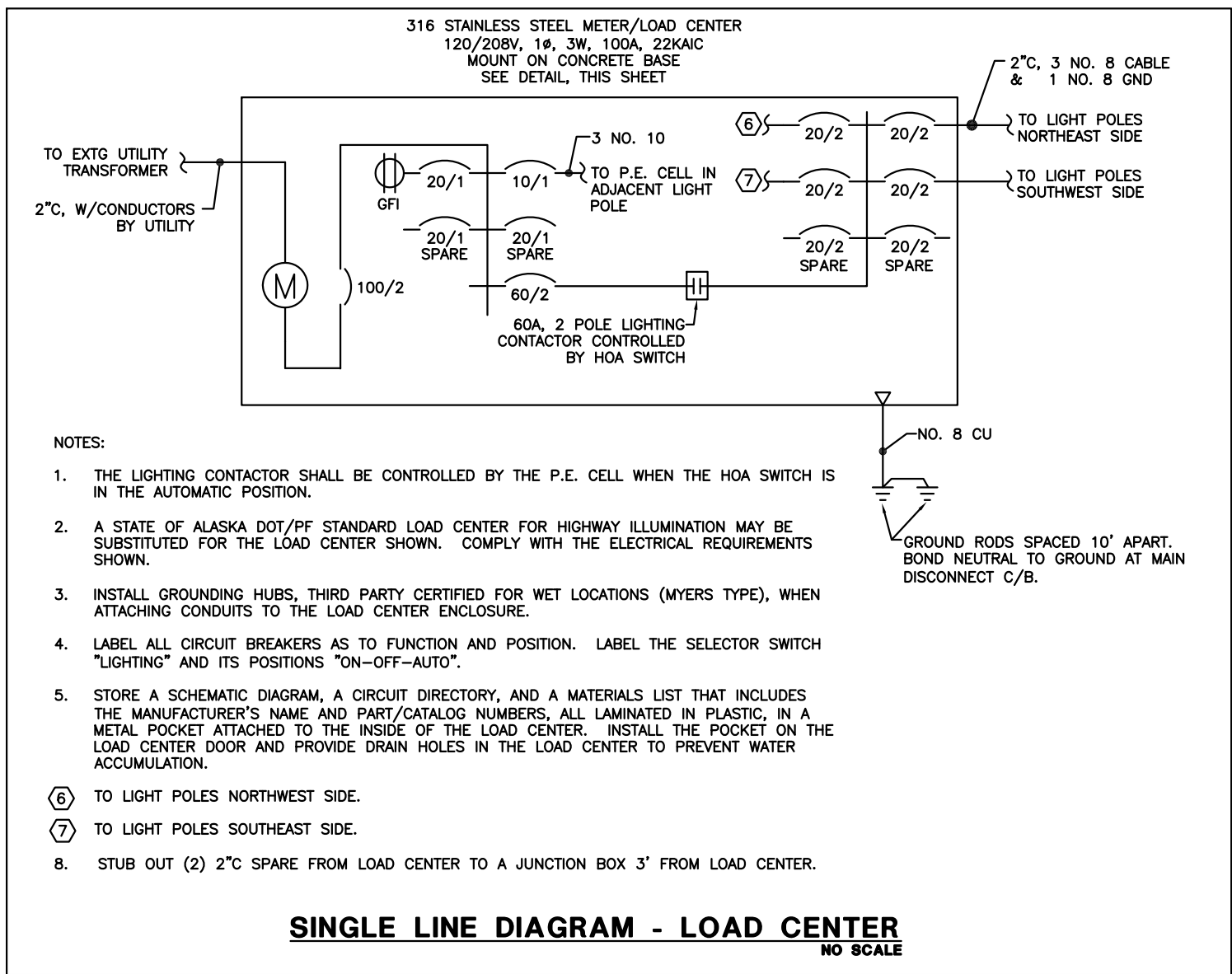
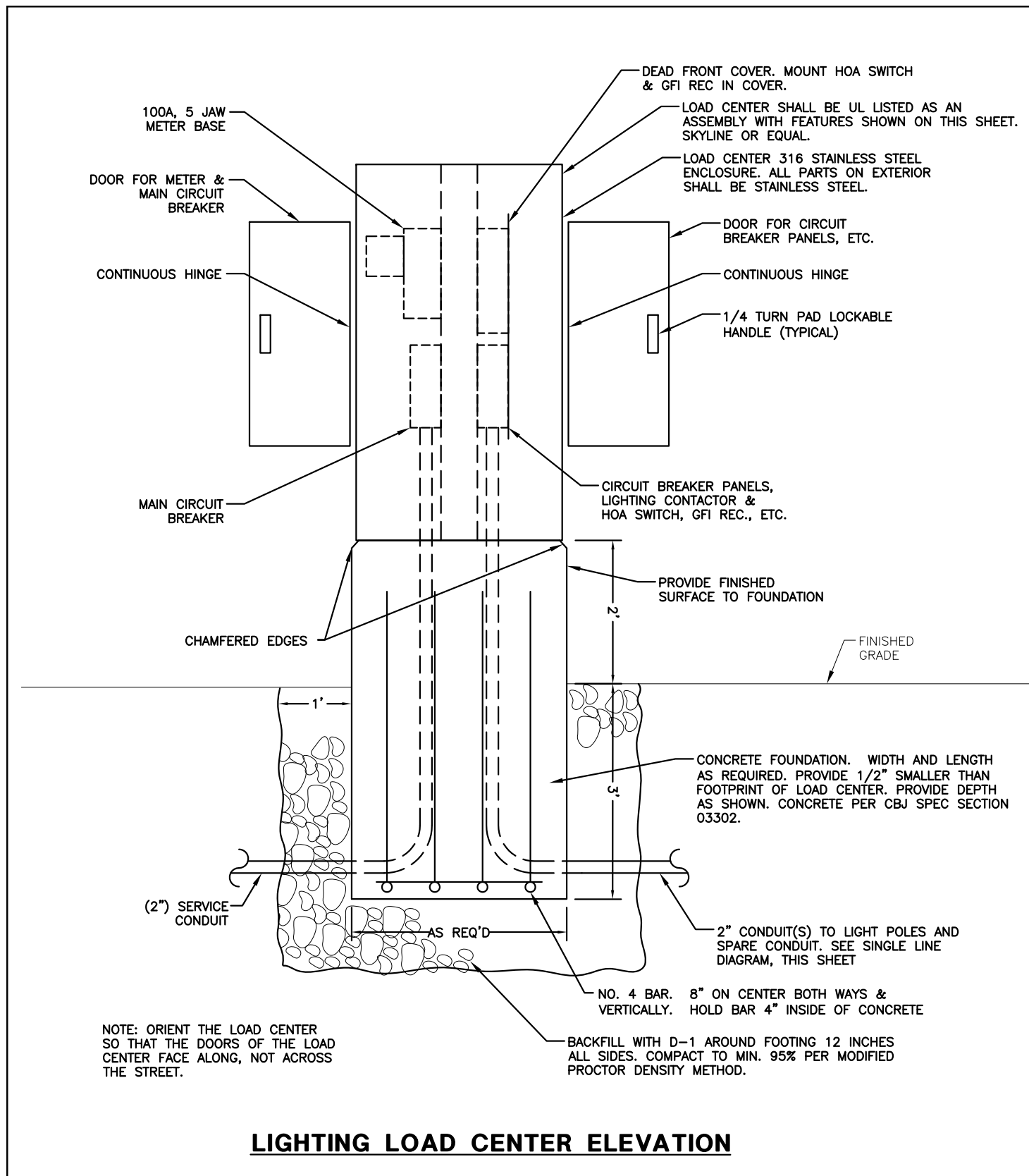
CITY/BOROUGH OF JUNEAU
★ ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

WHITTIER STREET RECONSTRUCTION
CONTRACT NO. E16-151

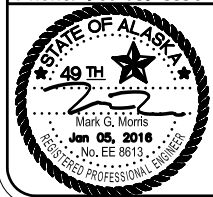
ELECTRICAL - WHITTIER STREET
STA "W" 16+10 TO EOP

SHEET NO.
21
of
24

Y:\129 Dowl Engineering\22 Whittier Street Reconstruction\Working Drawings\Whittier 95% Check Set.dwg 2016-11-5 12:20:11



MORRIS ENGINEERING GROUP LLC
PO Box 210049, Auke Bay, AK 99821
Phone: 907-789-3350



DOWL
Consulting Engineers • Land Surveyors • Construction Administration
5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax
JOB No. J70801 | DRAWN BY: LDS | DESIGNED BY: B. NELSON | CHECKED BY: MGM | DATE: JAN. 2016

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY
DEPARTMENT OF ENGINEERING

WHITTIER STREET RECONSTRUCTION
CONTRACT NO. E16-151

LOAD CENTER DETAILS

SHEET NO.
22
of
24


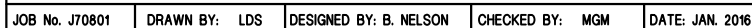
LIGHT NUMBER	DISTRIBUTION TYPE
L-1	3R
L-2	4
L-3	4
L-4	4
L-5	4
L-6	4
L-7	3R
L-8	4
L-9	4
L-10	3R
L-11	4
L-12	4
L-13	3R
L-14	4
L-15	3R
L-16	4
L-17	4
L-18	3R
L-19	4
L-20	3R

1. LIGHT LOCATIONS SHOWN ON SHEETS 18 TO 20.
2. SEE SHEET 17 FOR LUMINAIRE DESCRIPTION.



LIGHT POLE MOUNTING DETAIL

1. ANCHOR BOLTS SHALL BE 3/4" X 4' LONG ASTM F-1554 GRADE 55 GALVANIZED, DOUBLE NUTTED, PLUS LEVELING NUTS, MAX 3.13" BOLT PROTECTION ABOVE CONCRETE +/- .25"
2. EXTEND POLE BASE 3' ABOVE GRADE FOR POLES L-1 AND L-2. THE BASE SHALL BE 9' LONG (6' BELOW GRADE). EXTEND THE REBAR CAGE AND MAINTAIN ALL OTHER FEATURES. SACK THE CONCRETE BASE ABOVE GRADE.

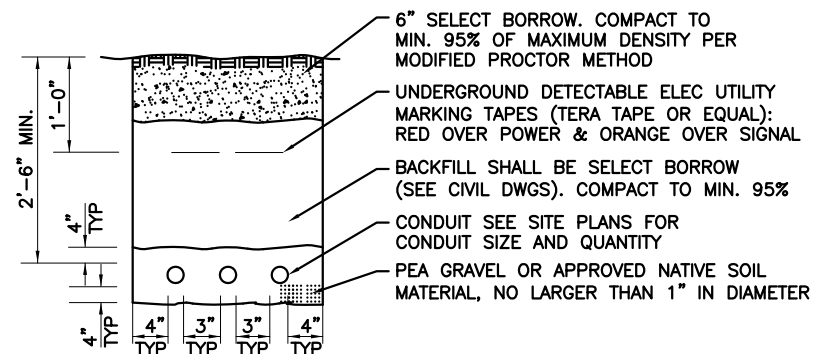


CITY/BOROUGH OF JUNEAU
 ☆ **ALASKA'S CAPITAL CITY**

DEPARTMENT OF ENGINEERING

LIGHT POLE DETAILS

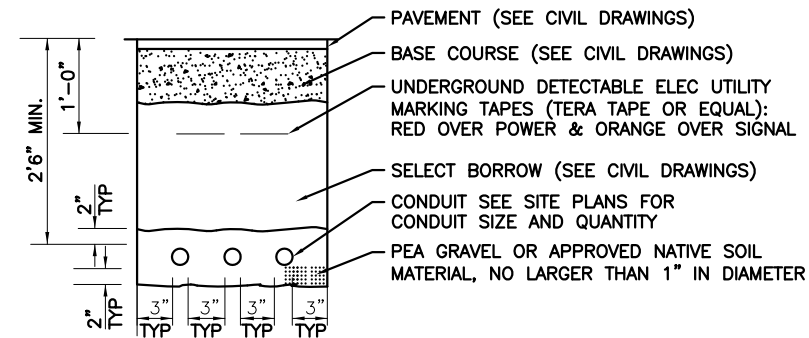
3
of
24



TRENCH DETAIL - NON-PAVED AREAS
NO SCALE

NOTES:

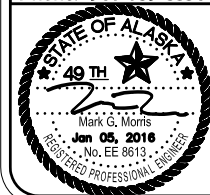
1. ALL DIMENSIONS ARE MINIMUM.
2. THE LOCATION OF ALL EXISTING PIPING, CONDUIT, ETC MAY NOT BE WHERE SHOWN AND MAY NOT BE SHOWN. ALL LOCATIONS THAT ARE SHOWN ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED. OBTAIN UTILITY LOCATES PRIOR TO DIGGING. DIG WITH CAUTION. AVOID WATER, SEWER, DRAINAGE PIPES, CONDUITS, CABLES, AND OTHER CONFLICTS.
3. MAINTAIN 12 INCHES MINIMUM SEPARATION (ALL DIRECTIONS) BETWEEN POWER AND OTHER EXISTING CONDUITS, PIPES, ETC.
4. CUT & REPLACE EXISTING ASPHALT, CONCRETE, CONCRETE CURB, GUTTER, SIDEWALK, ETC AS NECESSARY.
5. ALL TRENCHES SHALL BE 18" WIDE MIN. COMPACT BACKFILL TO 95%.
6. POWER UTILITY CONDUITS SHALL BE BURIED AT A MINIMUM OF 3'-6". BURY CONDUITS DEEPER WHERE REQUIRED TO AVOID OTHER PIPES AND STRUCTURES.
7. MODIFY CONDUIT BURIAL DEPTH WHERE SHOWN ON DRAWINGS AND AS REQUIRED TO AVOID ALL OBSTACLES. ASSUME CONDUIT WILL HAVE TO BE BURIED DEEPER TO AVOID EXISTING ELECTRICAL UTILITIES, PRIVATE CONDUIT AND CABLES, AND OTHER PIPING, STRUCTURES, ETC. ADJUST CONDUIT ROUTING AS REQUIRED. PROVIDE PRIVATE LOCATES.
8. THIS DETAIL APPLIES TO DRAIN CONDUITS AS WELL AS POWER & SIGNAL CONDUITS.



TRENCH DETAIL - PAVED AREAS
NO SCALE

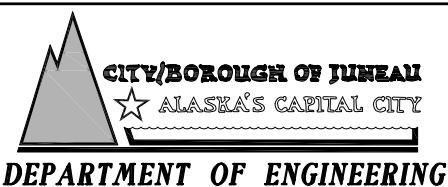
NOTES:

1. ALL DIMENSIONS ARE MINIMUM.
2. SEE CIVIL DRAWINGS FOR TYPICAL SECTIONS UNDER PAVED AREAS. PROVIDE BACKFILL (MATERIAL, COMPACTION, ETC.) PER THE CIVIL DRAWINGS.
3. THE LOCATION OF ALL EXISTING PIPING, CONDUIT, ETC MAY NOT BE WHERE SHOWN AND MAY NOT BE SHOWN. ALL LOCATIONS THAT ARE SHOWN ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED. OBTAIN UTILITY LOCATES PRIOR TO DIGGING. DIG WITH CAUTION. AVOID WATER, SEWER, DRAINAGE PIPES, CONDUITS, CABLES, AND OTHER CONFLICTS.
4. MAINTAIN 12 INCHES MINIMUM SEPARATION (ALL DIRECTIONS) BETWEEN POWER AND OTHER EXISTING CONDUITS, PIPES, ETC.
5. CUT & REPLACE EXISTING ASPHALT, CONCRETE, CONCRETE CURB, GUTTER, SIDEWALK, ETC AS NECESSARY.
6. SAWCUT EXISTING ASPHALT AS REQUIRED TO INSTALL CONDUIT AND OTHER ELECTRICAL ITEMS. SAWCUT ASPHALT BACK 18" ON EACH SIDE OF EDGE OF TRENCH OR EXCAVATION AREA (ALL SIDES). THERE SHALL BE 18" OF UNDISTURBED SOIL BETWEEN EDGE OF SAWCUT AND EXCAVATION LIMITS. MOST TRENCHES SHALL BE 18" WIDE MIN. COMPACT BACKFILL TO 95%. COMPACT D-1 TO 100% WHERE COVERED WITH PAVEMENT. RE-PAVE SAWCUT AREAS PER PAVING SPECIFICATIONS.
7. POWER UTILITY CONDUITS SHALL BE BURIED AT A MINIMUM OF 3'-6". BURY CONDUITS DEEPER WHERE REQUIRED TO AVOID OTHER PIPES AND STRUCTURES.
8. MODIFY CONDUIT BURIAL DEPTH WHERE SHOWN ON DRAWINGS AND AS REQUIRED TO AVOID ALL OBSTACLES. ASSUME CONDUIT WILL HAVE TO BE BURIED DEEPER TO AVOID EXISTING ELECTRICAL UTILITIES, PRIVATE CONDUIT AND CABLES, AND OTHER PIPING, STRUCTURES, ETC. ADJUST CONDUIT ROUTING AS REQUIRED. PROVIDE PRIVATE LOCATES.
9. THIS DETAIL APPLIES TO DRAIN CONDUITS AS WELL AS POWER & SIGNAL CONDUITS.



Consulting Engineers • Land Surveyors • Construction Administration

5368 Commercial Blvd.
Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax



**WHITTIER STREET
RECONSTRUCTION
CONTRACT NO. E16-151**

TRENCH DETAILS

SHEET NO.

24
of
24