

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEAST REGION
DESIGN AND CONSTRUCTION DIVISION

IN COOPERATION WITH THE
BUREAU OF INDIAN AFFAIRS
(U.S. DEPARTMENT OF THE INTERIOR)
AND THE ORGANIZED VILLAGE OF KAKE

KAKE, ALASKA

*KAKE CITY STREETS PAVING
GRADING, PAVING
AND DRAINAGE*

STATE OF ALASKA PROJECT NO. 72053
B.I.A. PROJECT NO. 229(1)

SHEET NO.	DESCRIPTION
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2	PROJECT LAYOUT
3-4	TYPICAL SECTIONS
5	ESTIMATE OF QUANTITIES
6-29	STREET LAYOUT PLAN
30-33	INTERSECTION DETAILS
34	PIPE AND STRUCTURE SUMMARIES
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37	MISC. SIDEWALK & CURB DRAIN DETAILS
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THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

A-1, C-01.03, D-01.02, D-05.10, D-20.02, D-23.00, D-24.00, D-26.01, F-01.01, G-04.04S, G-04.05W, G-18.00S, G-18.00W, I-20.11, S-00.00, S-05.00, S-20.00, S-30.01, S-34.00, T-20.00, T-21.01, U-03.00

DESIGN DESIGNATION

ADT 1996..... 1,069
ADT 2014.....
DHV 12% (2014)..... 2,166
% T..... 1.5%
V..... 20 M.P.H.

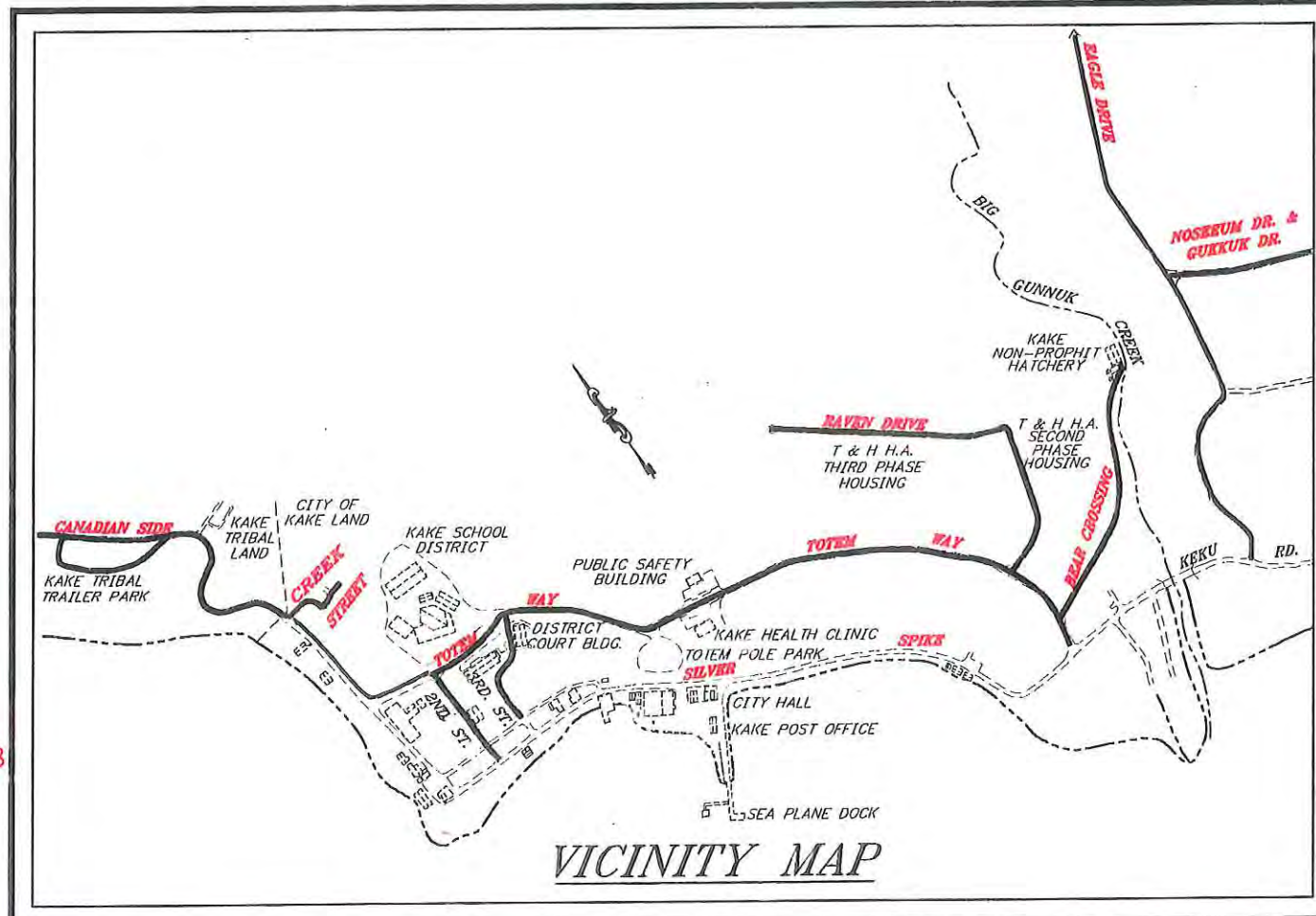
PROJECT SUMMARY

LENGTH OF PROJECT.....15,351' (2.91 MILES)
LENGTH OF GRADING.....15,351' (2.91 MILES)
LENGTH OF PAVING.....15,351' (2.91 MILES)
WIDTH OF PAVING.....VARIES

As-Built Plans

CONTRACTOR: ORGANIZED VILLAGE OF KAKE AND
KAKE TRIBAL LOGGING AND TIMBER
PROJECT ENGINEER: JIM MAYER
NOTICE TO PROCEED: 6/3/97
BEGIN WORK: 6/8/97
COMPLETION DATE: 6/30/98, EXTENDED TO 9/30/98
ACTUAL COMPLETION DATE: 9/25/98
CONTRACT AMOUNT: \$2,606,214.00
ACTUAL FINAL AMOUNT: \$2,725,762.68

James G. Mayer
2/2/99



Preconstruction Engineer
Bureau of Indian Affairs
Juneau Area _____ Date _____

Construction Engineer
Bureau of Indian Affairs
Juneau Area _____ Date _____

Area Roads Engineer
Bureau of Indian Affairs
Juneau Area _____ Date _____

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEAST REGION DESIGN SECTION

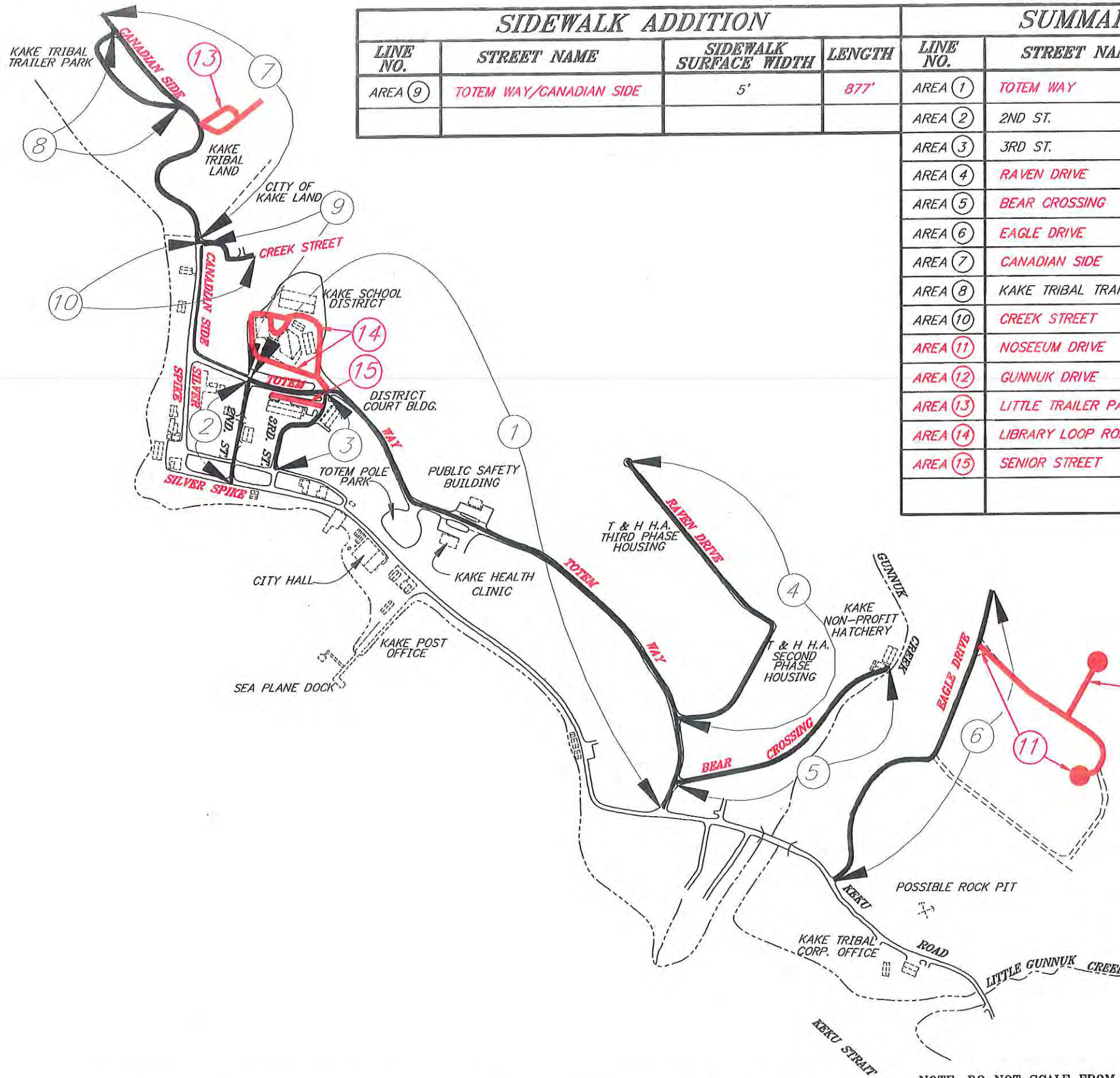
APPROVED _____ Date _____

Regional Preconstruction Engineer _____ Date _____

APPROVED _____ Date _____

Director, S.E. Region Design & Construction _____ Date _____

PROJECT NUMBER: 72053	ENGINEER'S SEAL
DATE: 1996	
SHEET 1 OF 45	



SIDEWALK ADDITION			
LINE NO.	STREET NAME	SIDEWALK SURFACE WIDTH	LENGTH
AREA 9	TOTEM WAY/CANADIAN SIDE	5'	877'

SUMMARY OF STREETS				
LINE NO.	STREET NAME	ASPHALT SURFACE WIDTH	LENGTH	
AREA 1	TOTEM WAY	21'	3,418'	
AREA 2	2ND ST.	16'	512'	
AREA 3	3RD ST.	16'	499'	
AREA 4	RAVEN DRIVE	22'	1,940'	
AREA 5	BEAR CROSSING	VARIES 10'-15'	1,175'	
AREA 6	EAGLE DRIVE	20'	1,513'	
AREA 7	CANADIAN SIDE	23'	1,575'	
AREA 8	KAKE TRIBAL TRAILER COURT	18'	664'	
AREA 10	CREEK STREET	16'	340'	
AREA 11	NOSEEUM DRIVE	24'	755'	
AREA 12	GUNNUK DRIVE	24'	200'	
AREA 13	LITTLE TRAILER PARK LOOP	20'	426'	
AREA 14	LIBRARY LOOP ROAD	20'	1,195'	
AREA 15	SENIOR STREET	16'	262'	
TOTAL			15,351' (2.91 MILES)	

STREET NAMES WERE CHANGED PER THE CONTRACT. SEE SHEETS 43-43A FOR OLD/NEW STREET NAMES.

As-Built Plans

James Moore 2/4/99

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

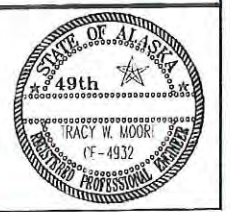
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BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

KAKE
KAKE CITY STREETS
GRADING, PAVING AND DRAINAGE
ALASKA
B.I.A. PROJECT NO. 229(1)/STATE PROJECT NO. 72053
PROJECT LAYOUT MAP

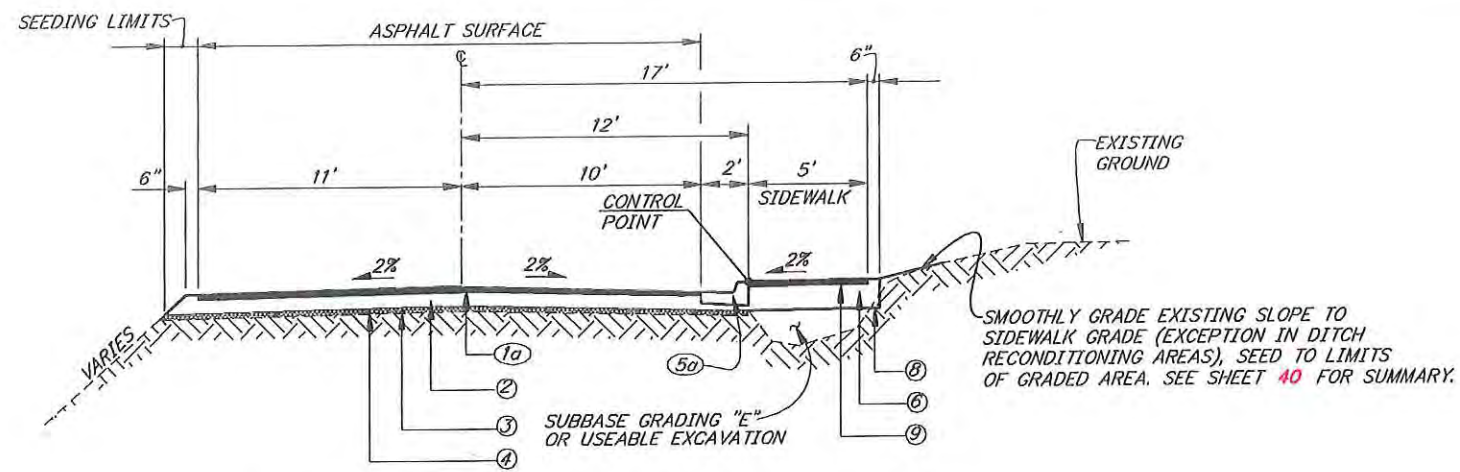
DESIGNED BY:
P. JONES
DRAWN BY:
B. A.
CHECKED BY:
T. MOORE

PROJECT NO.
72053
DATE:
1996
SHEET 2 OF 45



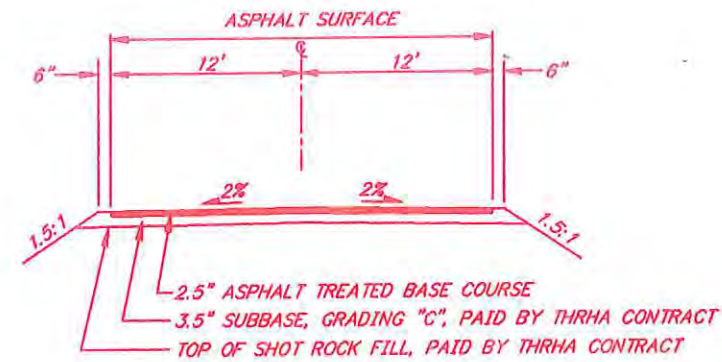
LABELING INDEX

- ① 2 1/2" ASPHALT TREATED BASE
 - ⑩ 3" ASPHALT TREATED BASE
 - ② 6" AGGREGATE FOR SUBGRADE MODIFICATION MEASURED AND PAID AS SUBBASE GRADING "C"
 - ③ PROCESSING FOR SUBGRADE MODIFICATIONS
 - ④ EXISTING SURFACE.
 - ⑤a CURB & GUTTER, TYPE 1 (STANDARD)
 - ⑤b CURB & GUTTER, TYPE 1 (GUTTER)
 - ⑥ 6" SUBBASE GRADING "C"
 - ⑦ 18" SUBBASE GRADING "E"
 - ⑧ UNCLASSIFIED EXCAVATION
 - ⑨ 1 1/2" ASPHALT TREATED BASE
- } AT LOCATION SHOWN ON PLANS



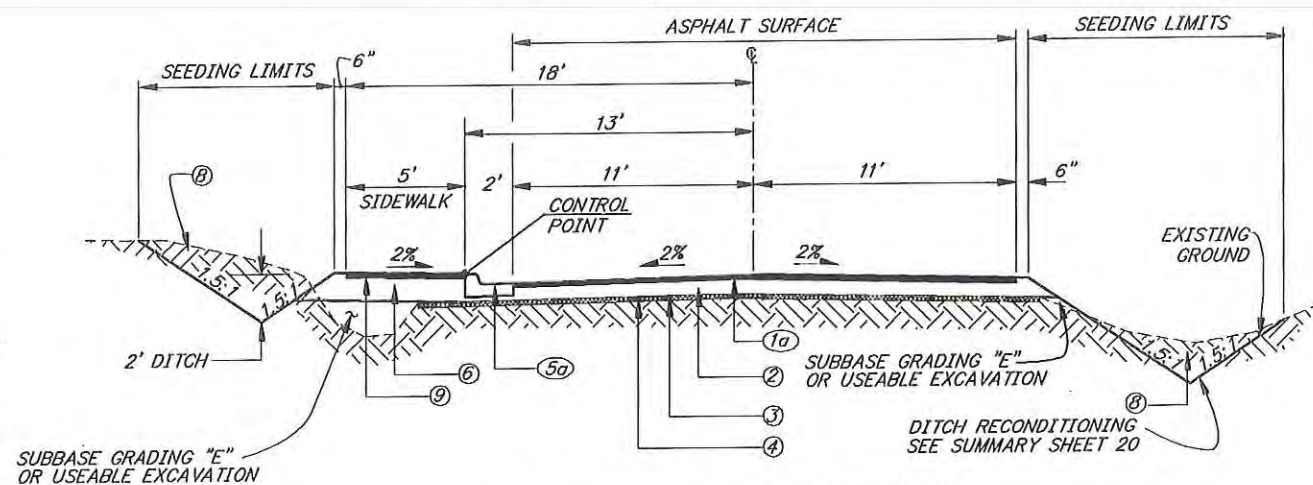
TYPICAL SECTION "1"

TOTEM WAY
STA. 0+12 TO STA. 34+30



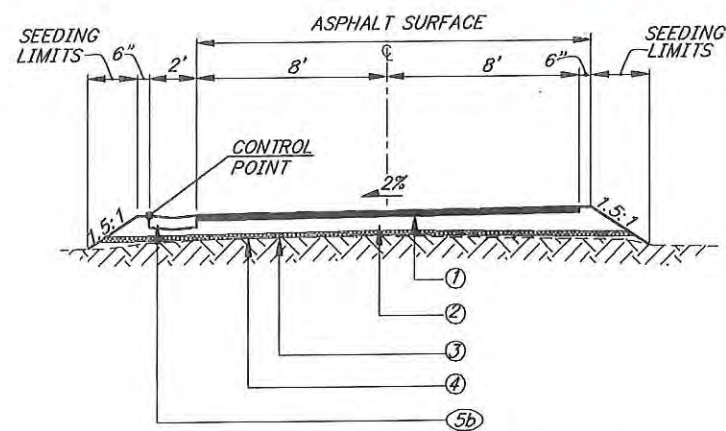
NOSEEUUM AND GUNNUK STREETS

STA. 0+20 TO STA. 7+75 (NOSEEUUM ST.)
STA. 0+20 TO STA. 2+20 (GUNNUK ST.)



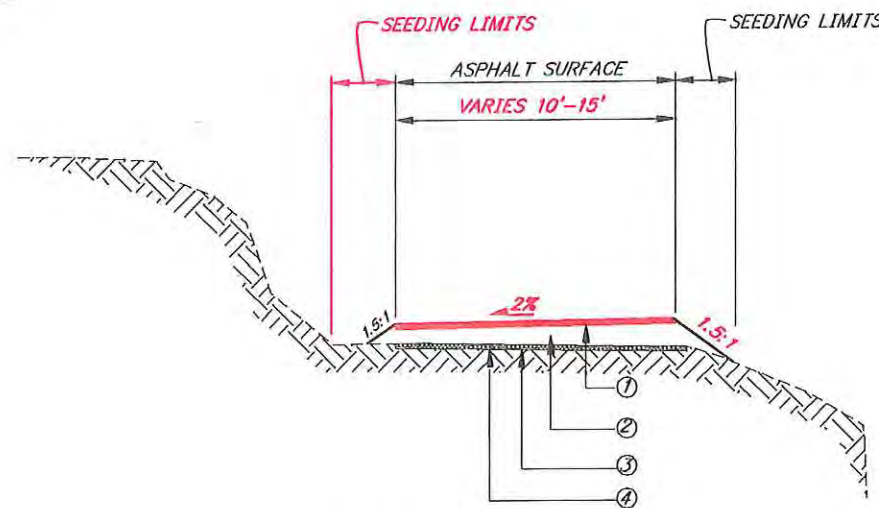
TYPICAL SECTION "4"

RAVEN DRIVE
STA. 0+10 TO STA. 19+50



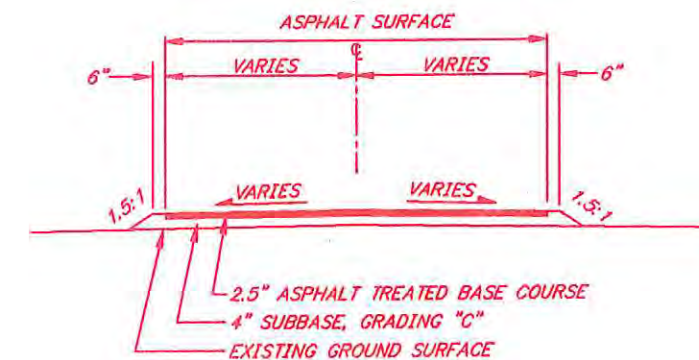
TYPICAL SECTION "2" & "3"

2ND. STREET AND 3RD. STREET
STA. 0+11 TO STA. 5+23 (2ND. STREET)
STA. 0+11 TO STA. 5+10 (3RD. STREET)



TYPICAL SECTION "5"

BEAR CROSSING
STA. 0+10 TO STA. 11+85



**SENIOR STREET,
LIBRARY LOOP ROAD AND
LITTLE TRAILER PARK LOOP**

STA. 0+08 TO STA. 2+70 (SENIOR ST.)
STA. 0+10 TO STA. 12+05 (LIBRARY LOOP ROAD)
STA. 0+12 TO STA. 2+50 & STA. 0+12 TO 2+00 (LITTLE TRAILER PARK LOOP)

STREET NAMES WERE CHANGED PER THE CONTRACT. SEE SHEETS 43-43A FOR OLD/NEW STREET NAMES.

As-Built Plans

James O'May 2/11/99

NOTE: DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS

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BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

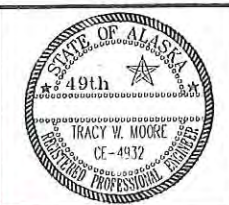
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

KAKE
KAKE CITY STREETS
GRADING, PAVING AND DRAINAGE
B.I.A. PROJECT NO. 229(1)/STATE PROJECT NO. 72053
TYPICAL SECTIONS

ALASKA

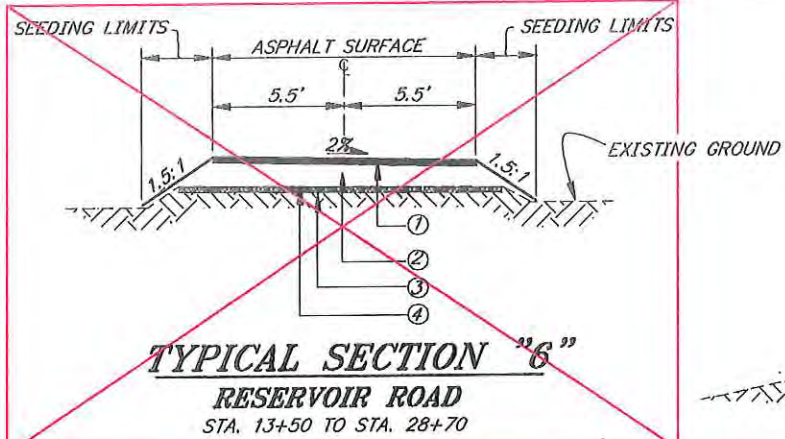
DESIGNED BY:
P. JONES
DRAWN BY:
BA/KS
CHECKED BY:
T. MOORE

PROJECT NO.
72053
DATE:
1996
SHEET 3 OF 45



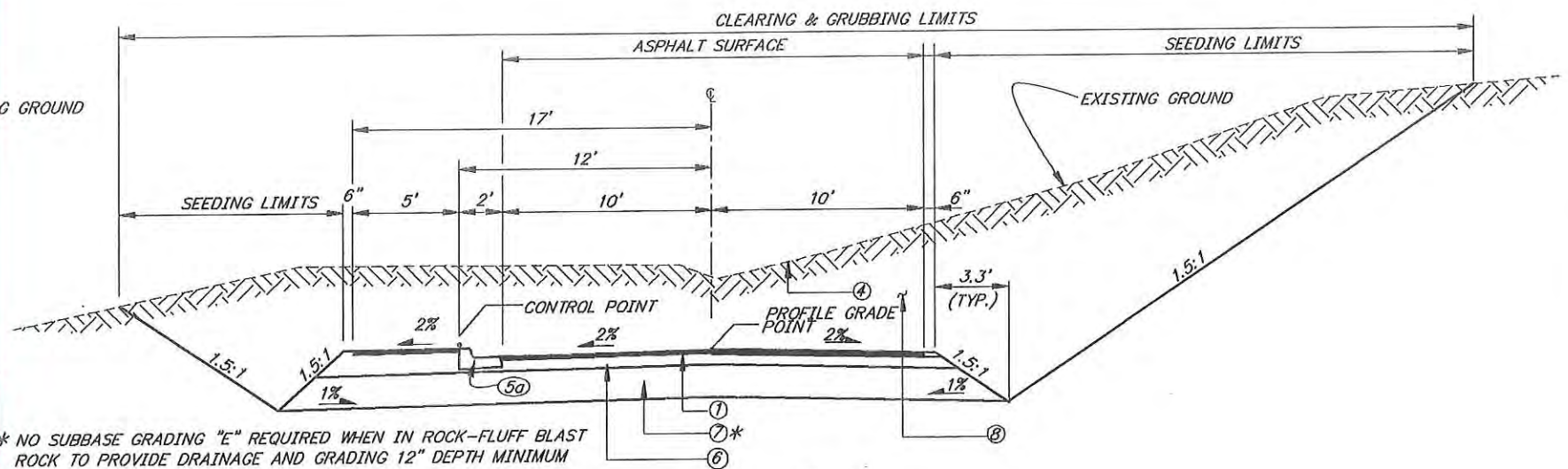
LABELING INDEX

- ① 2 1/2" ASPHALT TREATED BASE
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- ③ PROCESSING FOR SUBGRADE MODIFICATIONS
- ④ EXISTING SURFACE.
- ⑤a CURB & GUTTER, TYPE 1 (STANDARD)
- ⑤b CURB & GUTTER, TYPE 1 (GUTTER)
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- ⑧ UNCLASSIFIED EXCAVATION
- ⑨ 1 1/2" ASPHALT TREATED BASE



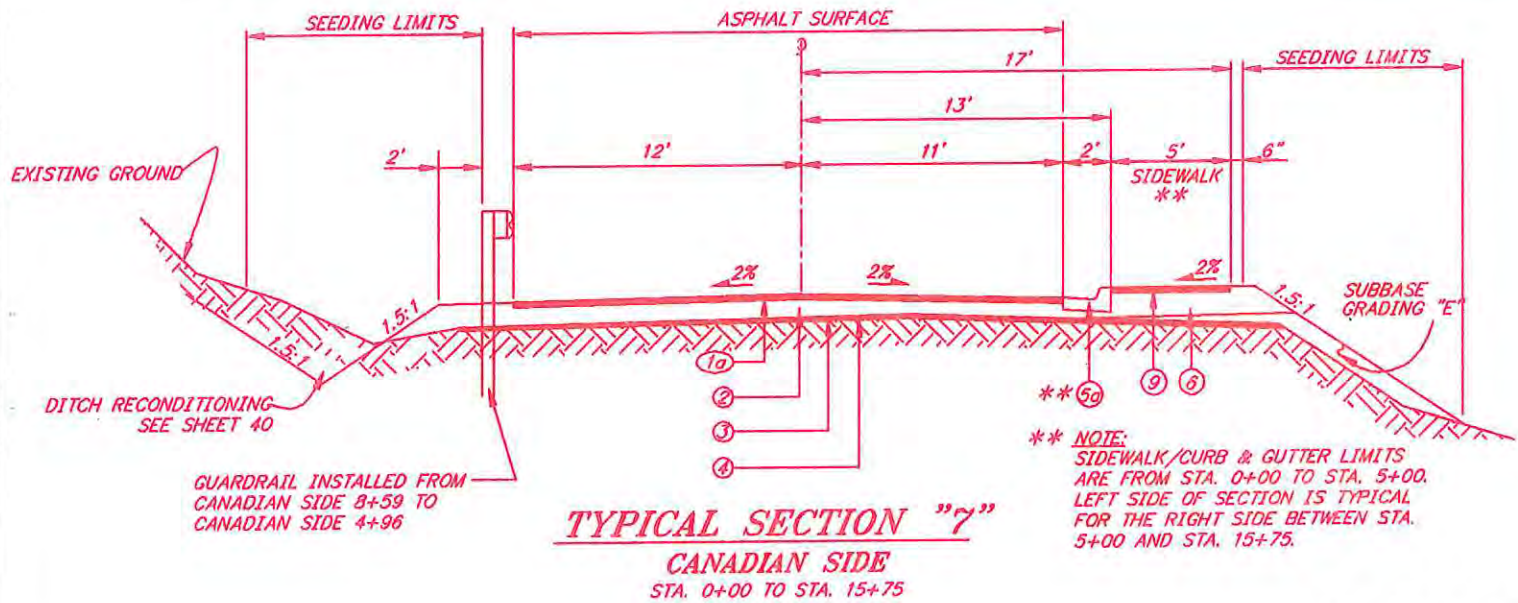
TYPICAL SECTION "6"
RESERVOIR ROAD
STA. 13+50 TO STA. 28+70

THIS DETAIL WAS UNUSED. THE EXISTING WATER MAIN IS WITHIN THE ROADWAY PRISM AND IS SCHEDULED FOR REPLACEMENT IN THE NEAR FUTURE. DUE TO THIS WE STOPPED THE PAVEMENT ON EAGLE DRIVE AT STA. 15+25.



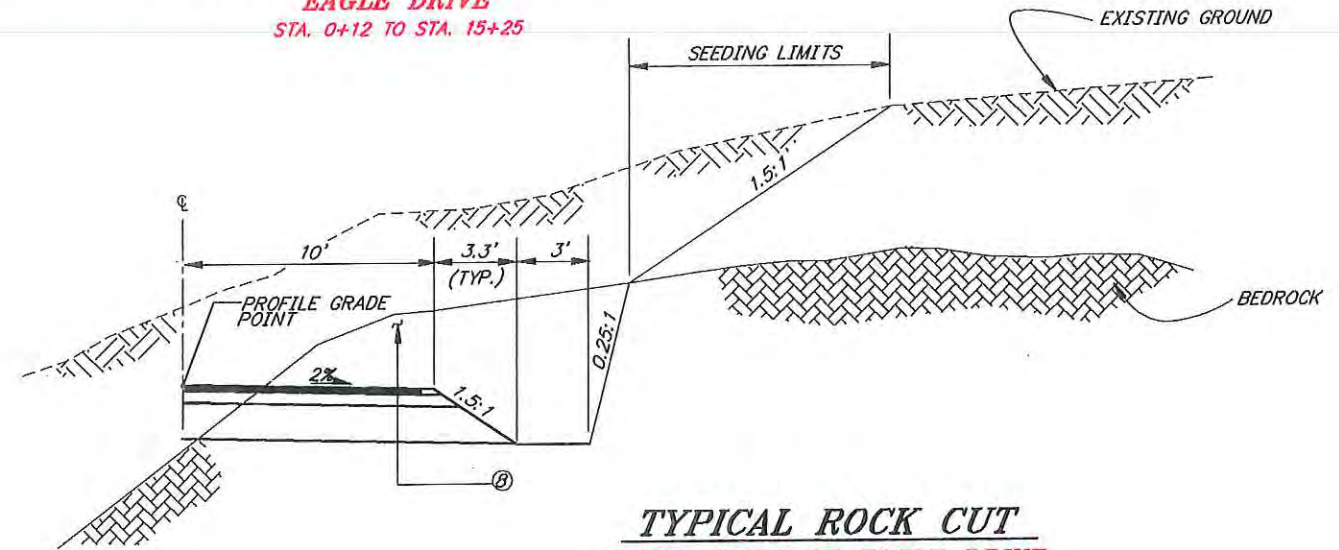
TYPICAL SECTION "6"
EAGLE DRIVE
STA. 0+12 TO STA. 15+25

* NO SUBBASE GRADING "E" REQUIRED WHEN IN ROCK-FLUFF BLAST ROCK TO PROVIDE DRAINAGE AND GRADING 12" DEPTH MINIMUM
EAGLE DR. TRANSITIONS FROM 20' PAVED WIDTH TO 14' PAVED WIDTH FROM 11+00 TO 12+00, THEN REMAINS 14' WIDTH TO 15+25

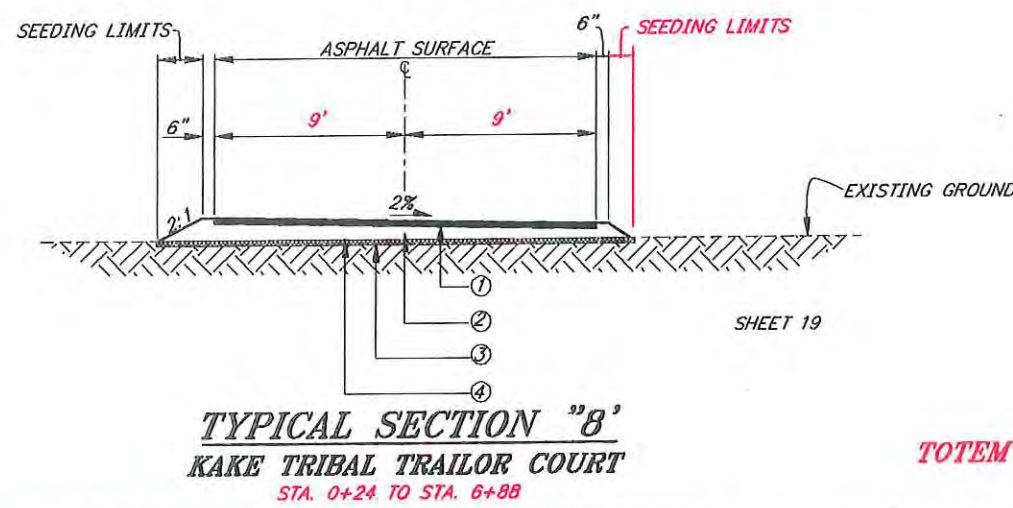


TYPICAL SECTION "7"
CANADIAN SIDE
STA. 0+00 TO STA. 15+75

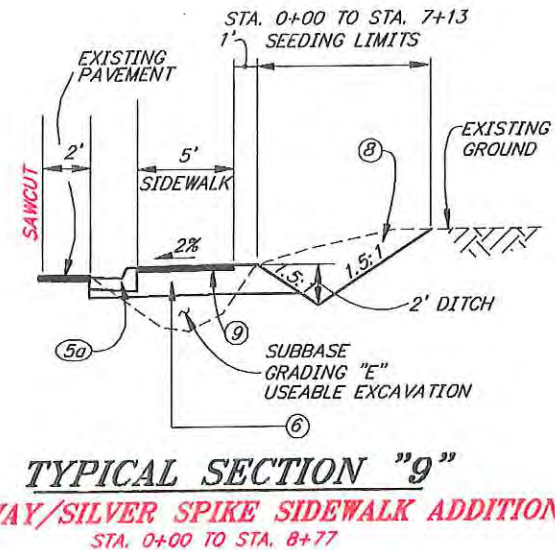
** NOTE: SIDEWALK/CURB & GUTTER LIMITS ARE FROM STA. 0+00 TO STA. 5+00. LEFT SIDE OF SECTION IS TYPICAL FOR THE RIGHT SIDE BETWEEN STA. 5+00 AND STA. 15+75.



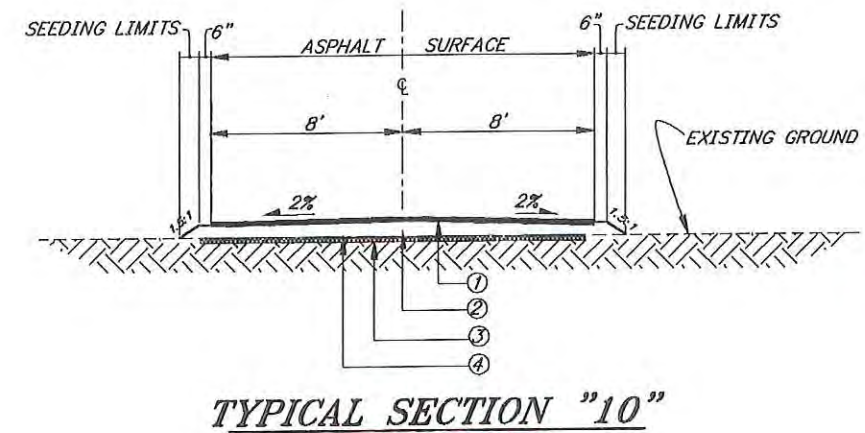
TYPICAL ROCK CUT
BOTH SIDES OF EAGLE DRIVE



TYPICAL SECTION "8"
KAKE TRIBAL TRAILOR COURT
STA. 0+24 TO STA. 6+88



TYPICAL SECTION "9"
TOTEM WAY/SILVER SPIKE SIDEWALK ADDITION
STA. 0+00 TO STA. 8+77



TYPICAL SECTION "10"
CREEK STREET
STA. 0+10 TO STA. 3+50

STREET NAMES WERE CHANGED PER THE CONTRACT. SEE SHEETS 43-43A FOR OLD/NEW STREET NAMES.

As-Built Plans
James E. Wayne 2/11/99

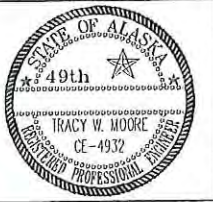
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

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BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

KAKE
KAKE CITY STREETS
GRADING, PAVING AND DRAINAGE
ALASKA
B.I.A. PROJECT NO. 229(1)/STATE PROJECT NO. 72053
TYPICAL SECTIONS

DESIGNED BY: P. JONES	PROJECT NO. 72053
DRAWN BY: BA/KS	DATE: 1996
CHECKED BY: T. MOORE	SHEET 4 OF 45



GENERAL NOTES

ESTIMATE OF QUANTITIES				
ITEM NO.	ITEM	UNIT	PLAN QUANTITY	ACTUAL QUANTITY
201(3B)	CLEARING AND GRUBBING	LUMP SUM	ALL REQ'D.	ALL REQUIRED
202(2)	REMOVAL OF PAVEMENT	SQUARE YARD	1,234	3,340
202(4)	REMOVAL OF CULVERT PIPE	LINEAR FOOT	1,564	1,826
203(3)	UNCLASSIFIED EXCAVATION	CUBIC YARD	37,000	ITEM DELETED BY BIA CONTRACT MOD. 4
203(12)	DITCH RECONDITIONING	STATION	39.0	ITEM DELETED BY BIA CONTRACT MOD. 5
203(13)	SPECIAL DITCHING	LINEAR FOOT	3,595	ITEM DELETED BY BIA CONTRACT MOD. 5
203(14)	ROAD DRAIN	EACH	3	6
302(3)	PROCESSING FOR SUBGRADE MODIFICATION	STATION	108.1	101.3
304(1C)	SUBBASE, GRADING "C"	TON	18,800	15,756.67
304(1E)	SUBBASE GRADING "E"	TON	5,800	ITEM DELETED BY BIA CONTRACT MOD. 5
306(1)	ASPHALT TREATED BASE COURSE	TON	6,555	5,976.33
306(2)	ASPHALT MATERIAL, TYPE PBA-2	TON	366	348.95
506(5)	STAIRWAY	LUMP SUM	ALL REQ'D.	ALL REQUIRED
603(1-12)	12 INCH CORRUGATED STEEL PIPE	LINEAR FOOT	2,174	2,496
603(1-24)	24 INCH CORRUGATED STEEL PIPE	LINEAR FOOT	504	692
603(1-30)	30 INCH CORRUGATED STEEL PIPE	LINEAR FOOT	10	0
603(1-36)	36 INCH CORRUGATED STEEL PIPE	LINEAR FOOT	12	66
603(23)	CURB DRAIN	EACH	11	14
604(3)	RECONSTRUCT EXISTING MANHOLE	EACH	1	1
604(4)	ADJUST EXISTING MANHOLE	EACH	19	21
604(5)	INLET TYPE A	EACH	23	23
604(8)	GMP FIELD INLET	EACH	6	8
604(9)	EXPLORATORY INVENTORY	LUMP SUM	ALL REQ'D.	ALL REQUIRED
604(10)	EXPLORATORY STOCKPILE	LUMP SUM	ALL REQ'D.	ALL REQUIRED
606(1)	W-BEAM GUARDRAIL	LINEAR FOOT	560	537.5
606(6)	END ANCHORAGES	EACH	2	2
607(3)	CHAIN LINK FENCE	LINEAR FOOT	500	284
608(3)	ASPHALT SIDEWALK	SQUARE YARD	4,472	4,273.33
609(2)	CURB AND GUTTER, TYPE 1	LINEAR FOOT	8,651	8,259
615(1)	STANDARD SIGNS	SQUARE FOOT	101.43	171.33
618(5)	SEEDING	LUMP SUM	ALL REQ'D.	ALL REQUIRED
619(3)	STRAW BALES	EACH	25	5
627(1-12)	12" DUCTILE IRON WATER CONDUIT	LINEAR FOOT	660	1,266
627(6)	FIRE HYDRANT RELOCATION	EACH	9	8
627(9)	INSTALL 12 INCH GATE VALVE	EACH	3	3
627(10)	ADJUSTMENT OF VALVE BOX	EACH	3	17
633(1)	SILT FENCE	LINEAR FOOT	800	200
640(1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQ'D.	ALL REQUIRED
641(1)	EROSION AND POLLUTION CONTROL	LUMP SUM	ALL REQ'D.	ALL REQUIRED
642(1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQ'D.	ALL REQUIRED
642(2)	THREE PERSON SURVEY PARTY	hour	20	30
643(2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQ'D.	ALL REQUIRED
643(3)	PERMANENT CONSTRUCTION SIGN	LUMP SUM	ALL REQ'D.	ALL REQUIRED
643(4)	CONSTRUCTION SIGN	EACH PER DAY	5,000	985
643(5)	TYPE II BARRICADE	EACH PER DAY	500	388
643(7)	TRAFFIC CONES	EACH PER DAY	5,000	2,123
643(8)	DRUM	EACH PER DAY	2,000	416
643(15)	FLAGGING	hour	2,000	2,547
644(1)	FIELD OFFICE	LUMP SUM	ALL REQ'D.	ALL REQUIRED
644(6)	ENGINEERING TRANSPORTATION	LUMP SUM	ALL REQ'D.	ALL REQUIRED
670(1)	PAINTED TRAFFIC MARKINGS	LUMP SUM	ALL REQ'D.	ALL REQUIRED

NOTE:

WITH THE EXCEPTION OF RESERVOIR ROAD (EAGLE DRIVE), ALL COORDINATES AND ELEVATIONS ASSOCIATED WITH THIS PROJECT ARE DETERMINED FROM POINT 1, NAMED KA-1, NEAR THE INTERSECTION OF TOTEM WAY AND SILVER SPIKE RD. WITH ASSUMED COORDINATES OF NORTH 30,000.00 AND EAST 30,000.00 AND AN ASSUMED ELEVATION OF 1,000.00'. FOR RESERVOIR ROAD THE COORDINATES AND ELEVATIONS GIVEN ARE DETERMINED FROM POINT 4001, NAMED EGGS-1, IN THE KAKE TRIBAL LOGGING OFFICE BLDG. PARKING LOT. THIS POINT HAS COORDINATES OF NORTH 4,132.46 AND EAST 5,468.28 AND AN ELEVATION OF 23.56.'

HORIZONTAL AND VERTICAL ALIGNMENTS ARE SHOWN ON THE PLAN SHEETS.

FINAL LOCATIONS OF ALL IMPROVEMENTS ARE SHOWN ON THE PLAN SHEETS OR ARE INCLUDED IN THE SUMMARY TABLES

- HORIZONTAL ALIGNMENT IS BASED ON THE CENTERLINE OF THE EXISTING DRIVING SURFACE, OR AS SHOWN ON THE PLANS. VERTICAL CONTROL IS APPROXIMATELY 1/2' ABOVE THE EXISTING ROADWAY SURFACE AND SHALL BE BASED UPON FIELD GRADING AFTER THE ROADWAY IS SCARIFIED AND THE PROCESSING FOR SUBGRADE MODIFICATION COMPLETED. A VERTICAL GRADE SHALL BE COMPLETED BY THE CONTRACTOR ON ALL ROADWAYS CONTAINING A CURB WITH THE CONTROL POINT SHOWN ON THE TYPICAL SECTION. SEE SECTION 642 FOR MORE INFORMATION.
- THE LOCATIONS OF EXISTING TOPOGRAPHY, UTILITIES, BUILDINGS, ETC., AS SHOWN ON THESE PLANS ARE APPROXIMATE ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- THE LOCATIONS OF PROPOSED IMPROVEMENTS (IE., CULVERTS, INLETS, SIGNS, APPROACHES, WATER MAIN VALVES, FIRE HYDRANTS, CURB CUTS, ETC.) ARE SUBJECT TO MINOR FIELD REVISIONS BY THE ENGINEER.
- ALL UNUSEABLE UNCLASSIFIED EXCAVATION WILL BE WASTED AT AN UPLANDS WASTE SITE WHICH HAS BEEN APPROVED, IN WRITING BY THE ENGINEER.
- ALL INTERSECTIONS, AND FIRE HYDRANT PADS SHALL BE CONSTRUCTED WITH THE SAME STRUCTURAL SECTION AS THAT SHOWN FOR THE MAIN LINE.
- THE CONTRACTOR SHALL DELIVER ALL EXISTING FIRE HYDRANTS DESIGNATED TO BE REPLACED TO THE CITY OF KAKE MAINTENANCE SHOP.
- WHERE THE PAVEMENT WIDTH VARIES, THE TRANSITION LENGTH SHALL BE 100'.
- THE CONTRACTOR SHALL PAINT STOP BARS HALF THE WIDTH OF THE PAVED SURFACE AT 12 INCHES WIDE FOR ALL MAJOR INTERSECTIONS AND SIDE STREETS. STOP BARS WILL BE LOCATED IN CLOSE PROXIMITY TO STOP SIGNS.
- BEDROCK MAY BE ENCOUNTERED IN PORTIONS OF THE DITCH AND EXCAVATION AREAS.
- THE SUPERELEVATION CONTROL FOR THE PROJECT IS BASED UPON THE FOLLOWING INFORMATION:
 - ALL TRANSITION LENGTHS SHALL BE 150' WITH 2/3 OF THE TRANSITION OUTSIDE OF THE CURVE.
 - THE MAXIMUM SUPERELEVATION RATE SHALL BE 4% AND BASED UPON A DESIGN SPEED OF 30MPH.
 - THE CONTRACTOR SHALL DETERMINE THE CURVE RADIUS AND SELECT A SUPER RATE BETWEEN 2% AND 4% ON ALL CURVES WITH A RADIUS LESS THAN 1,000'.
- ALL CURB CUTS SHALL MATCH THE EXISTING APPROACH AND PARKING PAD WIDTHS ON KAKE ROAD, CHURCH ROAD AND HUD HOUSING ROAD.
- WHEEL CHAIR RAMP SHALL BE INCIDENTAL TO CURB AND GUTTER.
- ALL SUMMARY TABLES WERE COMPUTED FROM SCALED DISTANCES AND HAVE NOT BEEN FIELD VERIFIED. THE CONTRACTOR SHALL FIELD VERIFY ALL SUMMARY STATIONING.

SUPERELEVATION TRANSITION LENGTHS AND RATES ARE SHOWN ON THE PLAN SHEETS.

NEW ITEMS ESTABLISHED BY CHANGE ORDER				
ITEM NO.	ITEM	BIA CONTRACT MOD. NO.	UNIT	QUANTITY
203(15)	UNCLASSIFIED EXCAVATION	4	L.S.	ALL REQUIRED
203(16)	DITCHING	5	L.S.	ALL REQUIRED
203(17)	DITCH DRAIN	7	L.F.	178
203(18)	DITCH LINING AND SLOPE STABILIZATION	7	L.F.	740
304(4E)	SUBBASE, GRADING "E"	5	L.S.	ALL REQUIRED
627(4)	FIRE HYDRANT ADJUSTMENT	12	EACH	4
628(1)	MISCELLANEOUS UTILITY SERVICE REPAIR	7	C.S.	ALL REQUIRED
690(1)	LIBRARY/SENIOR ST. DEVELOPMENT	13	L.S.	ALL REQUIRED

As-Built Plans

James O'May 2/11/99

BASIS OF ESTIMATE		
ITEM NO.	ITEM	QUANTITY
304(1-C)	SUBBASE, GRADING "C"	1.96 TON/PER CU. YD.
304(1-E)	SUBBASE, GRADING "E"	1.90 TON/PER CU. YD.
306(1)	ASPHALT TREATED BASE COURSE	115LB/SQ. YD./INCH DEPTH
306(2)	ASPHALT MATERIAL, TYPE PBA2	5.5% OF ITEM 306(1)

NOTE: DO NOT SCALE FROM THESE PLANS--USE DIMENSIONS

RECORD OF REVISIONS			
BY:	DATE:	DESCRIPTION OF CHANGE:	
P: KAE 72053 ASBLT EST			

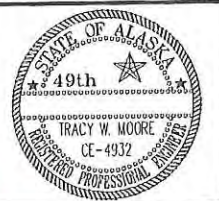
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

KAKE

KAKE CITY STREETS
GRADING, PAVING AND DRAINAGE
B.I.A. PROJECT NO. 229(1)/STATE PROJECT NO. 72053
ESTIMATE OF QUANTITIES

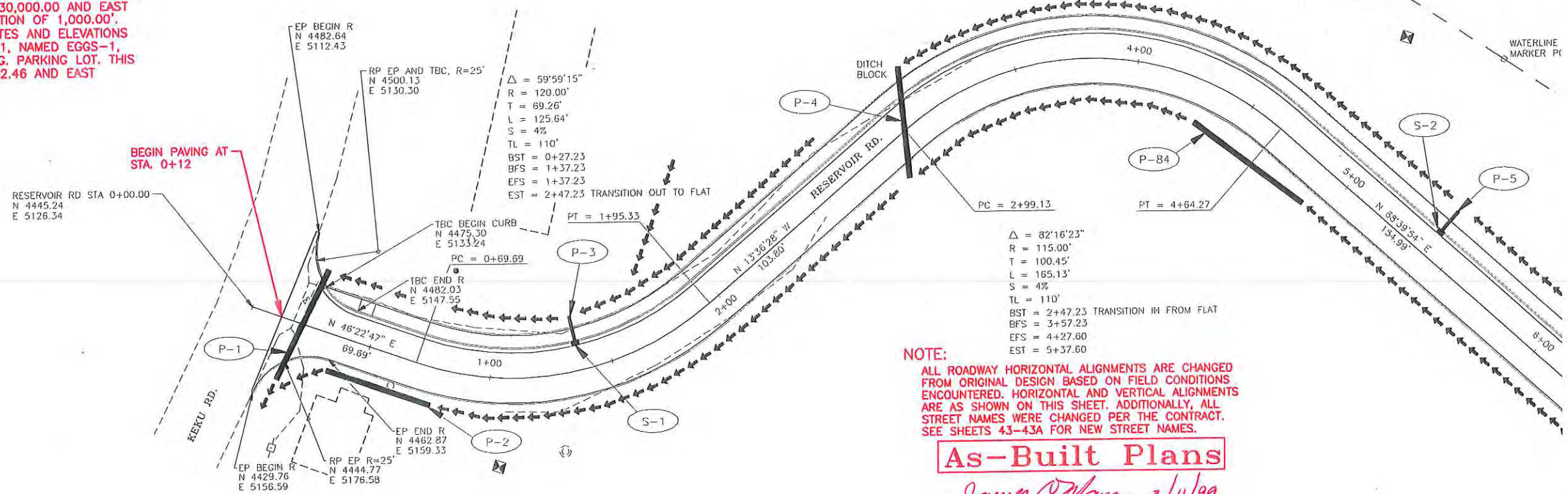
ALASKA

DESIGNED BY: P. JONES	PROJECT NO. 72053
DRAWN BY: B. A.	DATE: 1996
CHECKED BY: T. MOORE	SHEET 5 OF 46



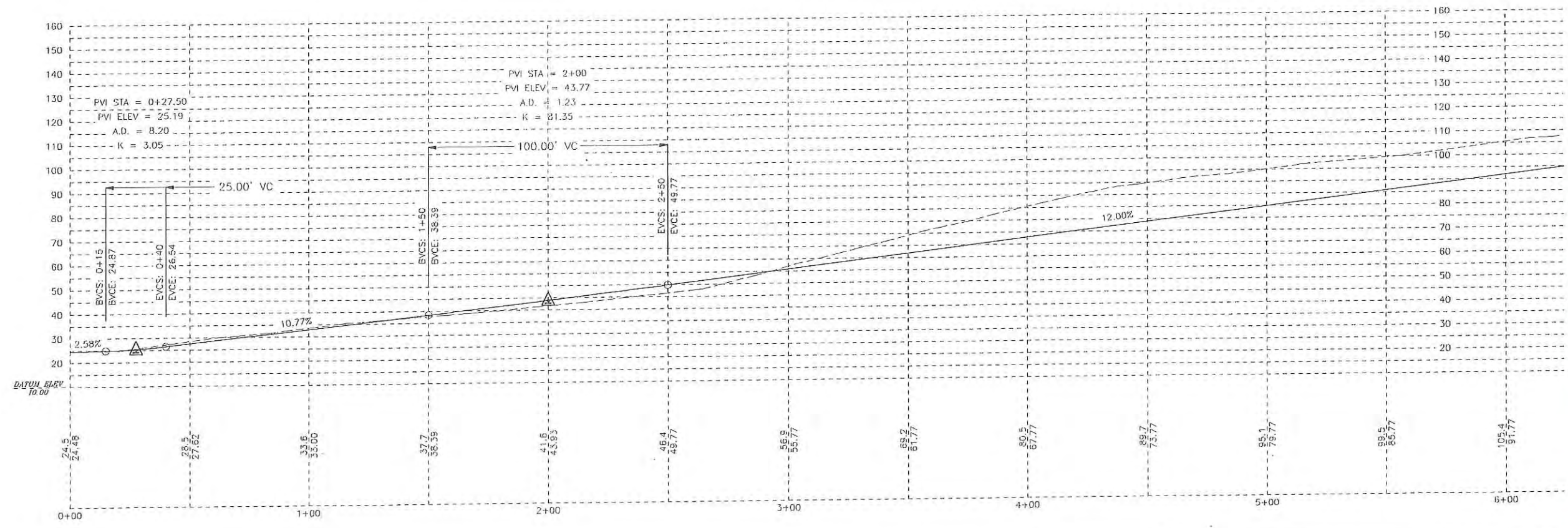
NOTE:

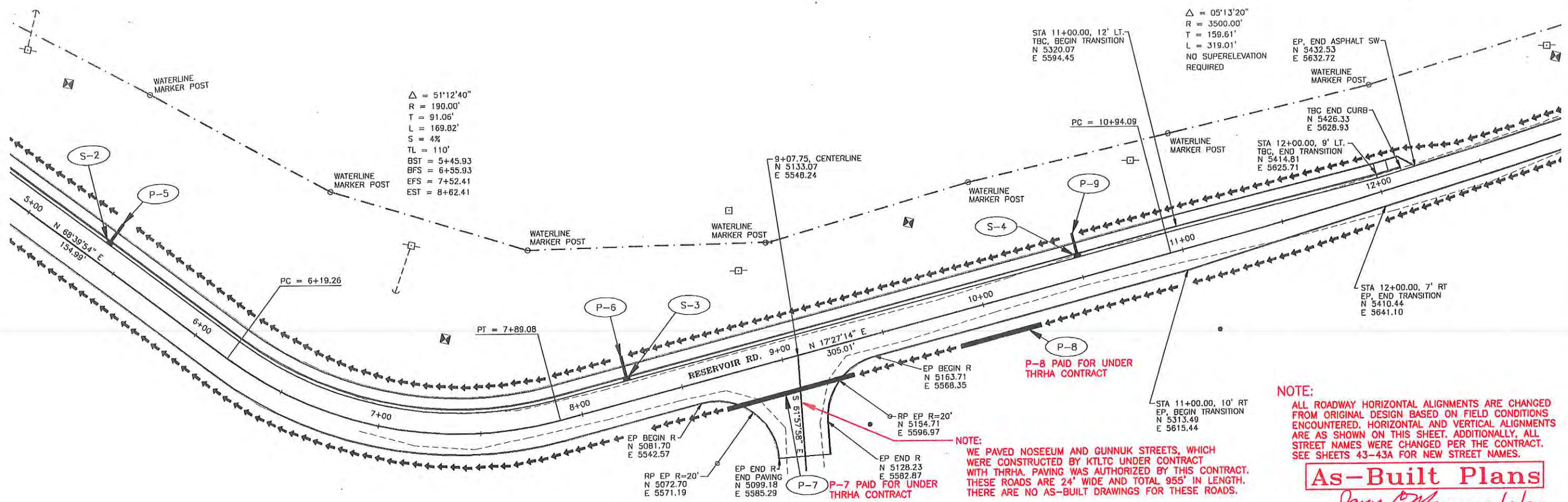
WITH THE EXCEPTION OF RESERVOIR ROAD (EAGLE DRIVE), ALL COORDINATES AND ELEVATIONS ASSOCIATED WITH THIS PROJECT ARE DETERMINED FROM POINT 1, NAMED KA-1, NEAR THE INTERSECTION OF TOTEM WAY AND SILVER SPIKE RD. WITH ASSUMED COORDINATES OF NORTH 30,000.00 AND EAST 30,000.00 AND AN ASSUMED ELEVATION OF 1,000.00'.
 FOR RESERVOIR ROAD THE COORDINATES AND ELEVATIONS GIVEN ARE DETERMINED FROM POINT 4001, NAMED EGGS-1, IN THE KAKE TRIBAL LOGGING OFFICE BLDG. PARKING LOT. THIS POINT HAS COORDINATES OF NORTH 4,132.46 AND EAST 5,468.28 AND AN ELEVATION OF 23.56'.



NOTE:
 ALL ROADWAY HORIZONTAL ALIGNMENTS ARE CHANGED FROM ORIGINAL DESIGN BASED ON FIELD CONDITIONS ENCOUNTERED. HORIZONTAL AND VERTICAL ALIGNMENTS ARE AS SHOWN ON THIS SHEET. ADDITIONALLY, ALL STREET NAMES WERE CHANGED PER THE CONTRACT. SEE SHEETS 43-43A FOR NEW STREET NAMES.

As-Built Plans
James O'May 2/11/99

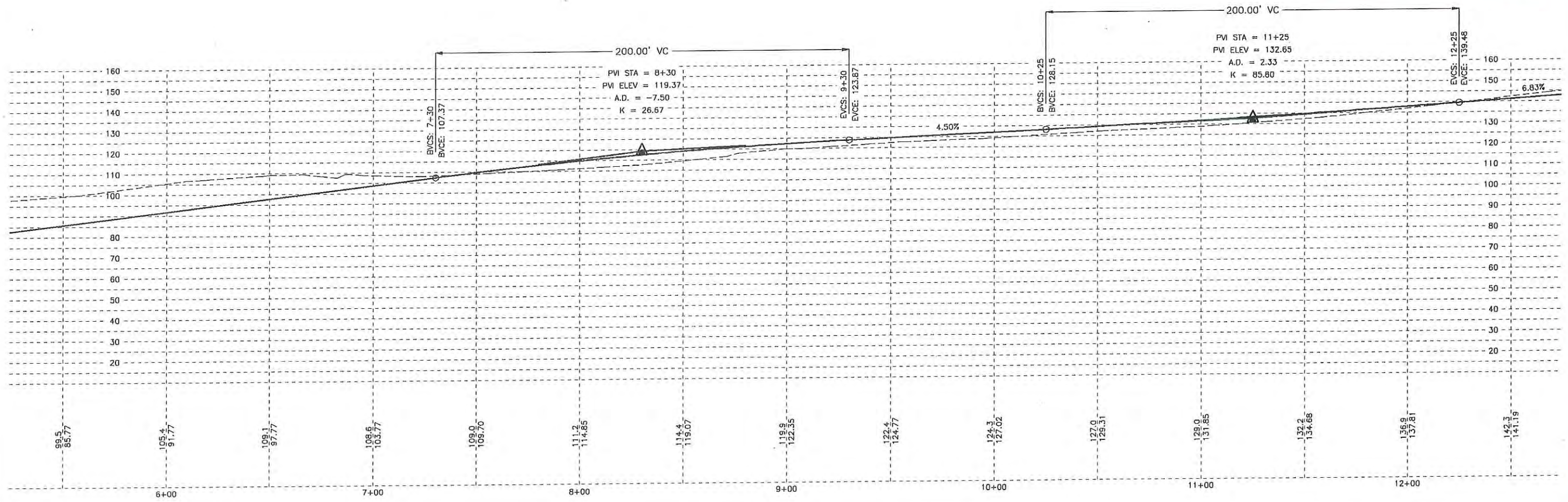


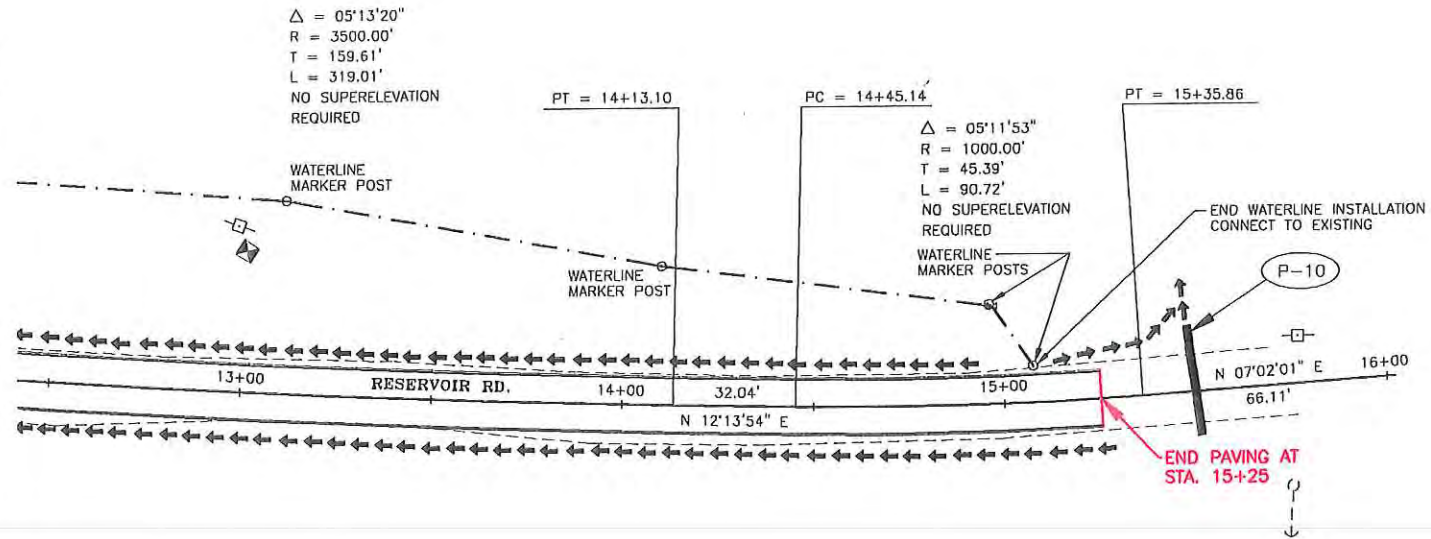


NOTE:
 WE PAVED NOSEUM AND GUNNUK STREETS, WHICH WERE CONSTRUCTED BY KILTC UNDER CONTRACT WITH THRHA. PAVING WAS AUTHORIZED BY THIS CONTRACT. THESE ROADS ARE 24' WIDE AND TOTAL 955' IN LENGTH. THERE ARE NO AS-BUILT DRAWINGS FOR THESE ROADS.

NOTE:
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As-Built Plans
James P. Mayne 2/3/99



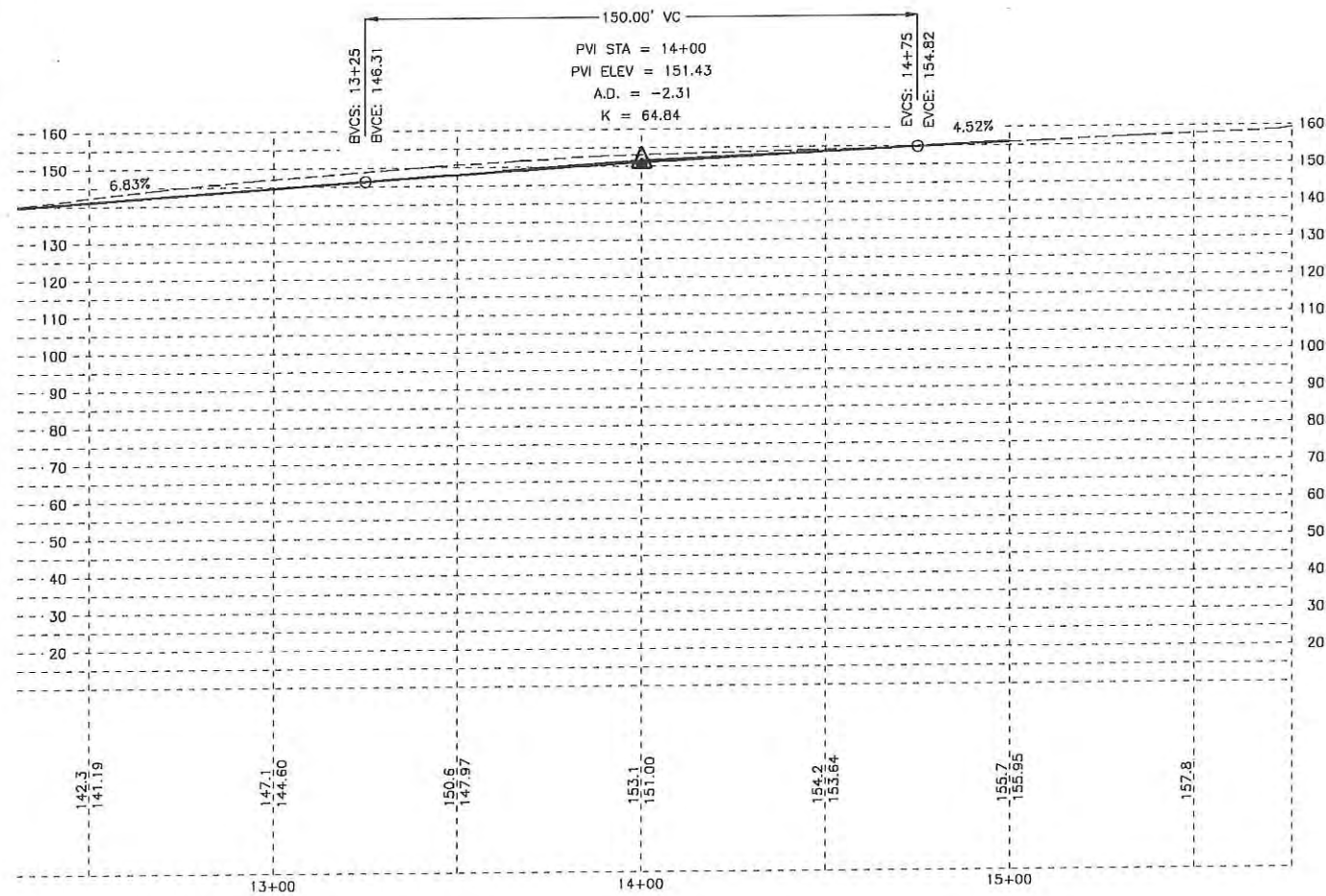


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As-Built Plans

James D. Mayne
2/3/99

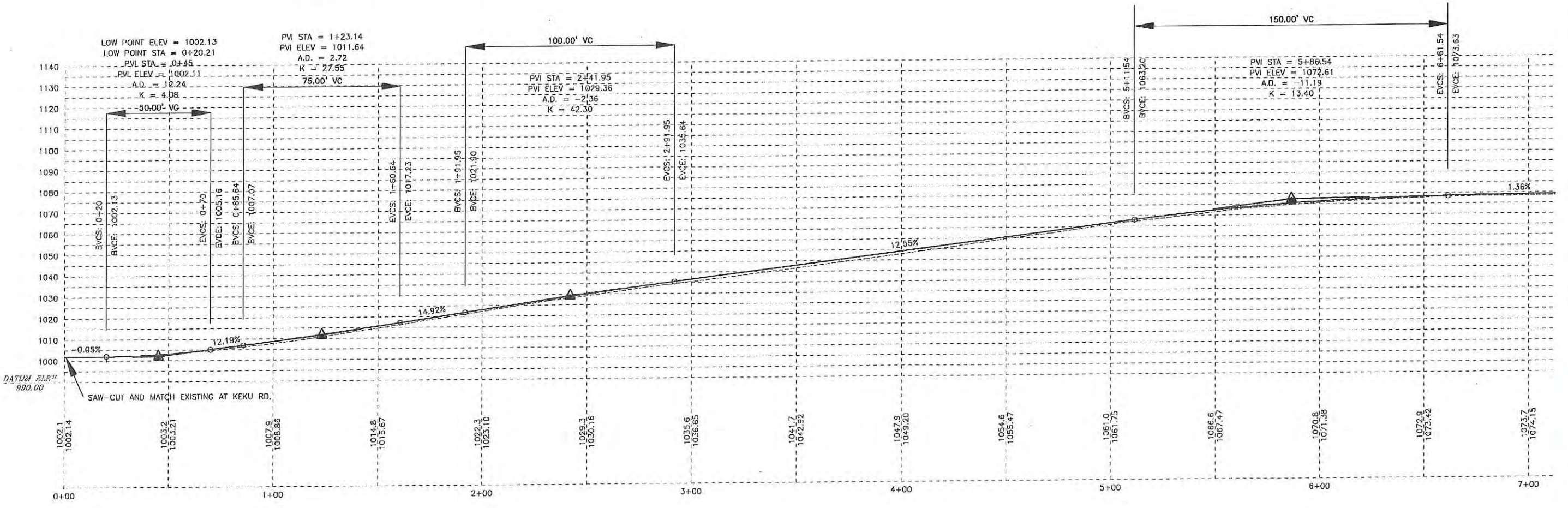
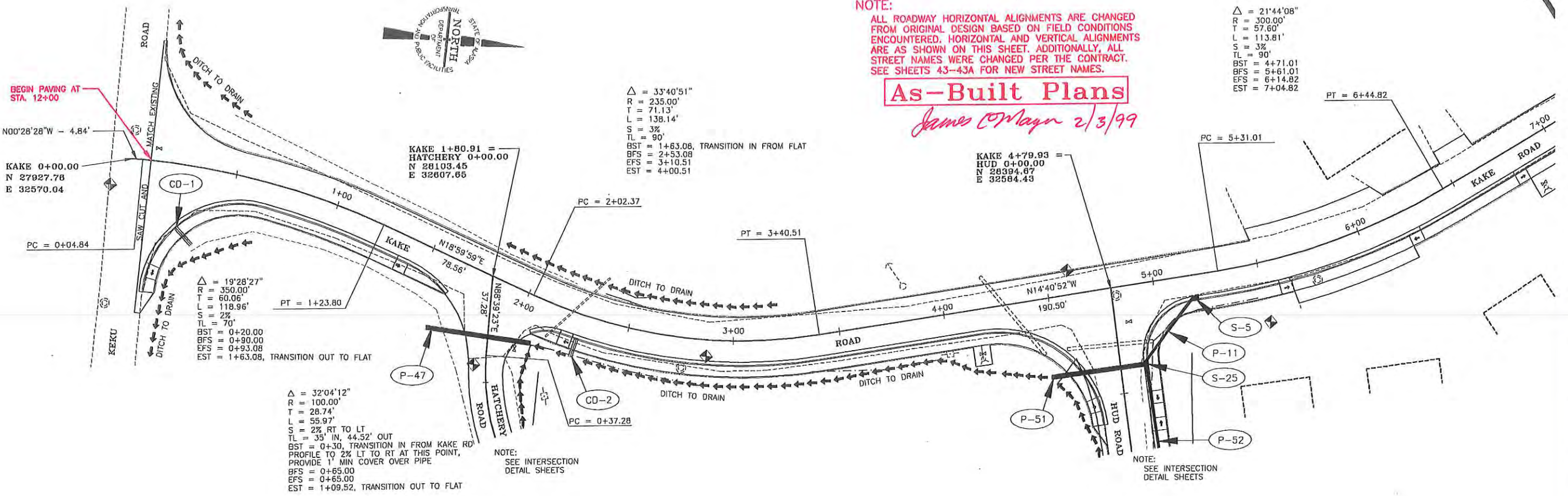


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As-Built Plans

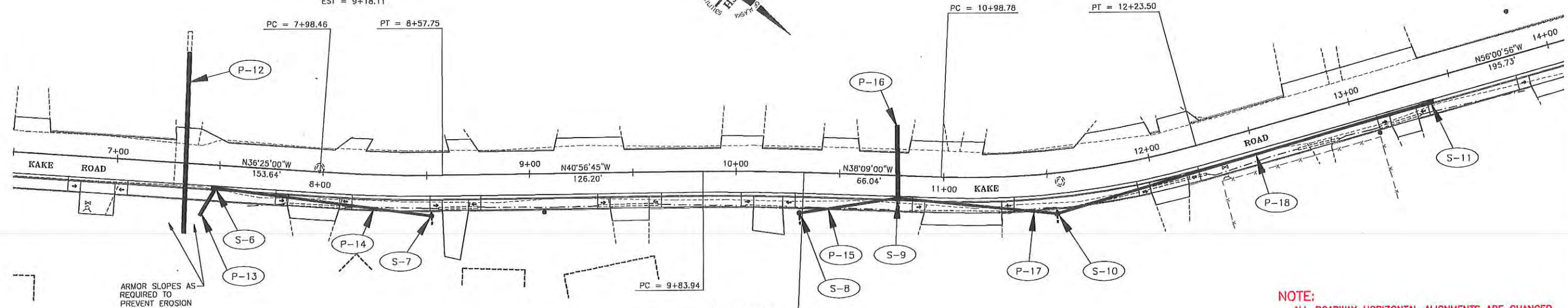
James Conroy 2/3/99

$\Delta = 21'44.08"$
R = 300.00'
T = 57.60'
L = 113.81'
S = 3%
TL = 90'
BST = 4+71.01
BFS = 5+61.01
EFS = 6+14.82
EST = 7+04.82



$\Delta = 04^{\circ}31'45''$
 $R = 750.00'$
 $T = 29.66'$
 $L = 59.29'$
 $S = 2\%$
 $TL = 90'$
 $BST = 7+38.11$
 $BFS = 8+28.11$
 $EFS = 8+28.11$
 $EST = 9+18.11$

$\Delta = 17^{\circ}51'57''$
 $R = 400.00'$
 $T = 62.87'$
 $L = 124.73'$
 $S = 3\%$
 $TL = 90'$
 $BST = 10+38.78$
 $BFS = 11+28.78$
 $EFS = 11+93.50$
 $EST = 12+83.50$



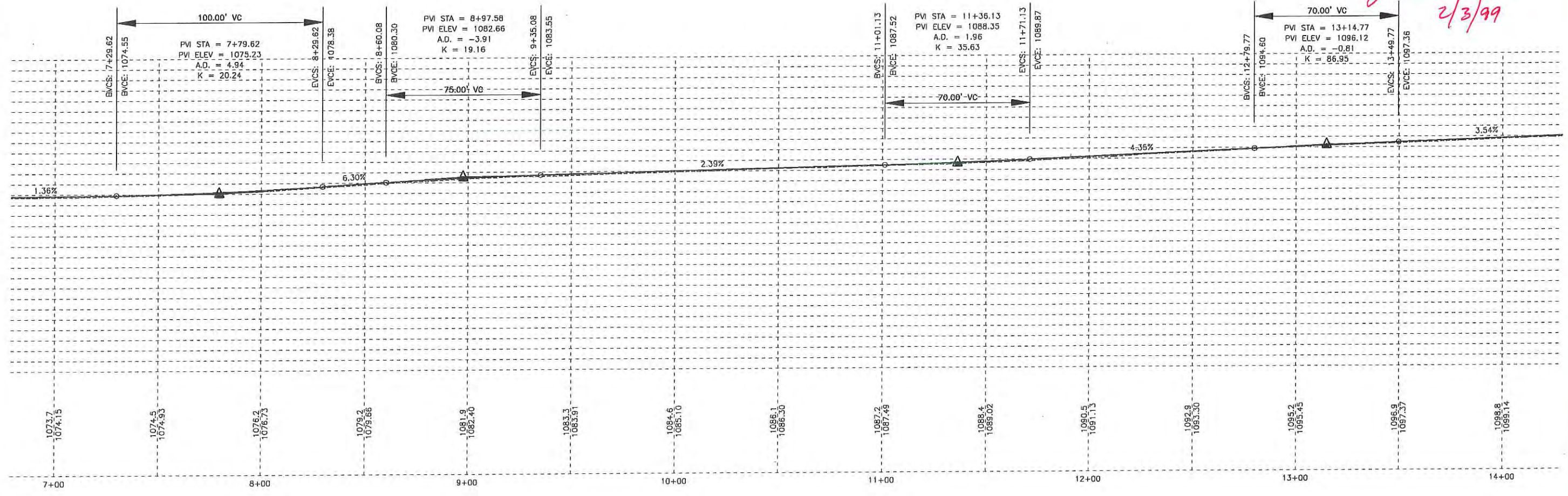
ARMOR SLOPES AS REQUIRED TO PREVENT EROSION

$\Delta = 02^{\circ}47'45''$
 $R = 1000.00'$
 $T = 24.40'$
 $L = 48.80'$
 NO SUPERELEVATION REQUIRED
 2% CROWN THROUGH CURVE

NOTE:
 ALL ROADWAY HORIZONTAL ALIGNMENTS ARE CHANGED FROM ORIGINAL DESIGN BASED ON FIELD CONDITIONS ENCOUNTERED. HORIZONTAL AND VERTICAL ALIGNMENTS ARE AS SHOWN ON THIS SHEET. ADDITIONALLY, ALL STREET NAMES WERE CHANGED PER THE CONTRACT. SEE SHEETS 43-43A FOR NEW STREET NAMES.

As-Built Plans

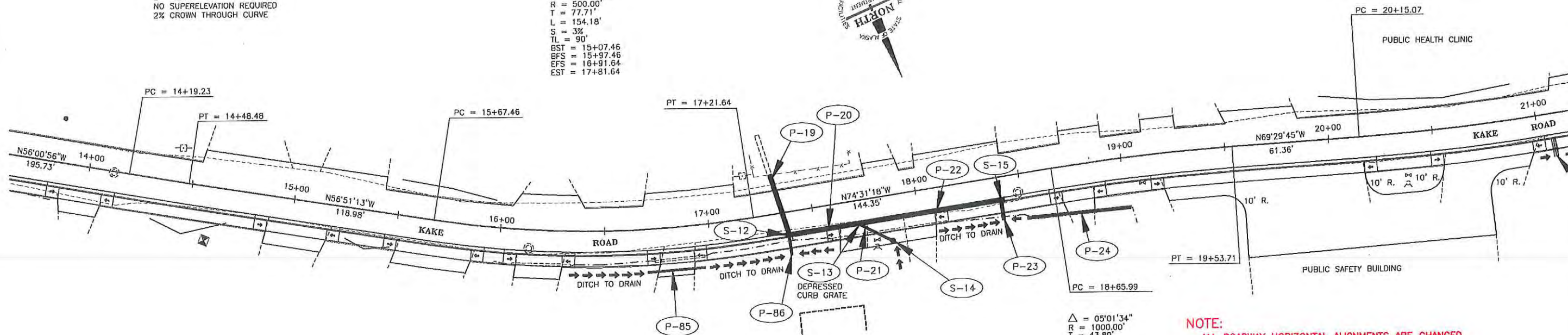
James D. Meyer
2/3/99



$\Delta = 00^{\circ}50'16''$
 $R = 2000.00'$
 $T = 14.62'$
 $L = 29.25'$
 NO SUPERELEVATION REQUIRED
 2% CROWN THROUGH CURVE

$\Delta = 17^{\circ}40'06''$
 $R = 500.00'$
 $T = 77.71'$
 $L = 154.18'$
 $S = 3\%$
 $TL = 90'$
 $BST = 15+07.46$
 $BFS = 15+97.46$
 $EFS = 16+91.64$
 $EST = 17+81.64$

$\Delta = 07^{\circ}06'32''$
 $R = 1000.00'$
 $T = 62.12'$
 $L = 124.07'$
 NO SUPERELEVATION REQUIRED
 2% CROWN THROUGH CURVE

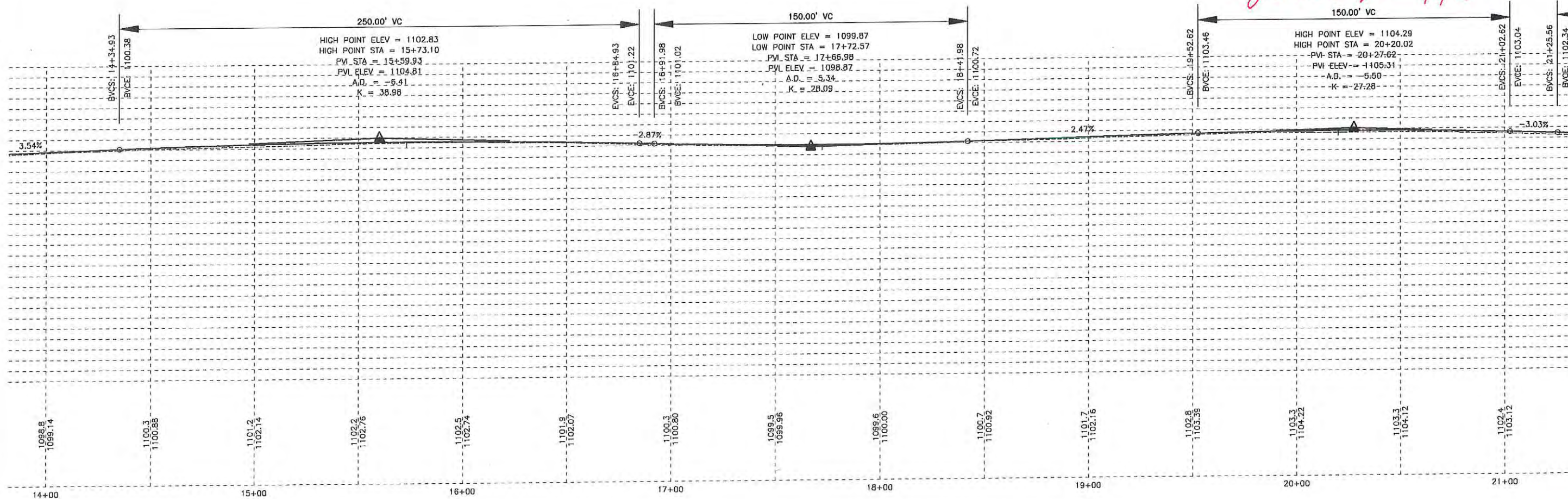


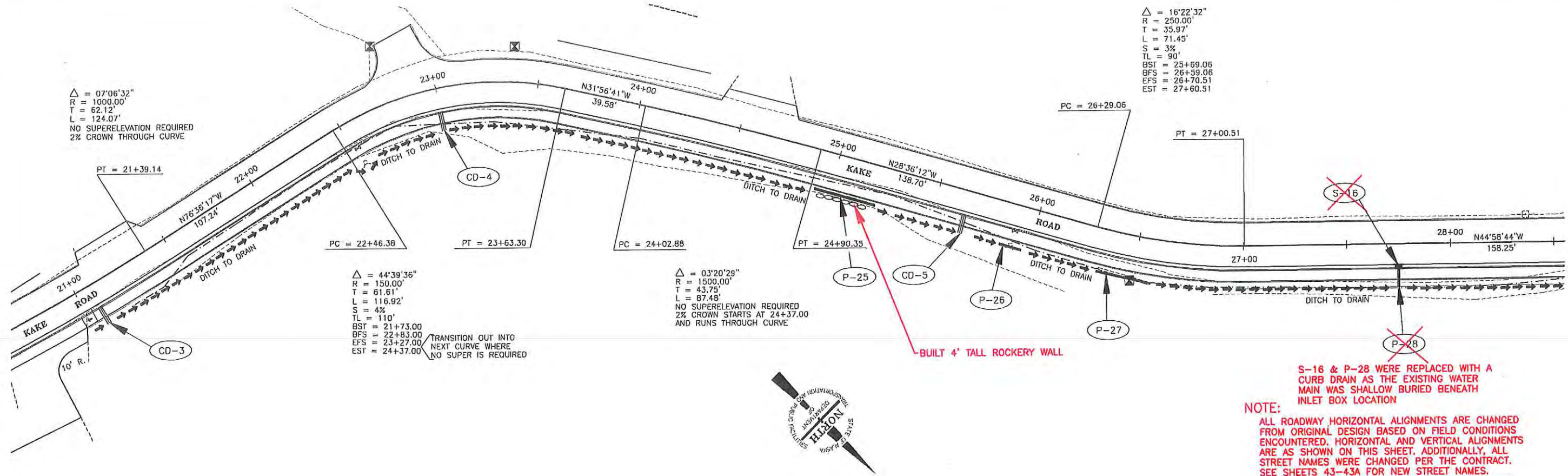
$\Delta = 05^{\circ}01'34''$
 $R = 1000.00'$
 $T = 43.89'$
 $L = 87.72'$
 NO SUPERELEVATION REQUIRED
 2% CROWN THROUGH CURVE

NOTE:
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As-Built Plans

James Wayne 2/3/99

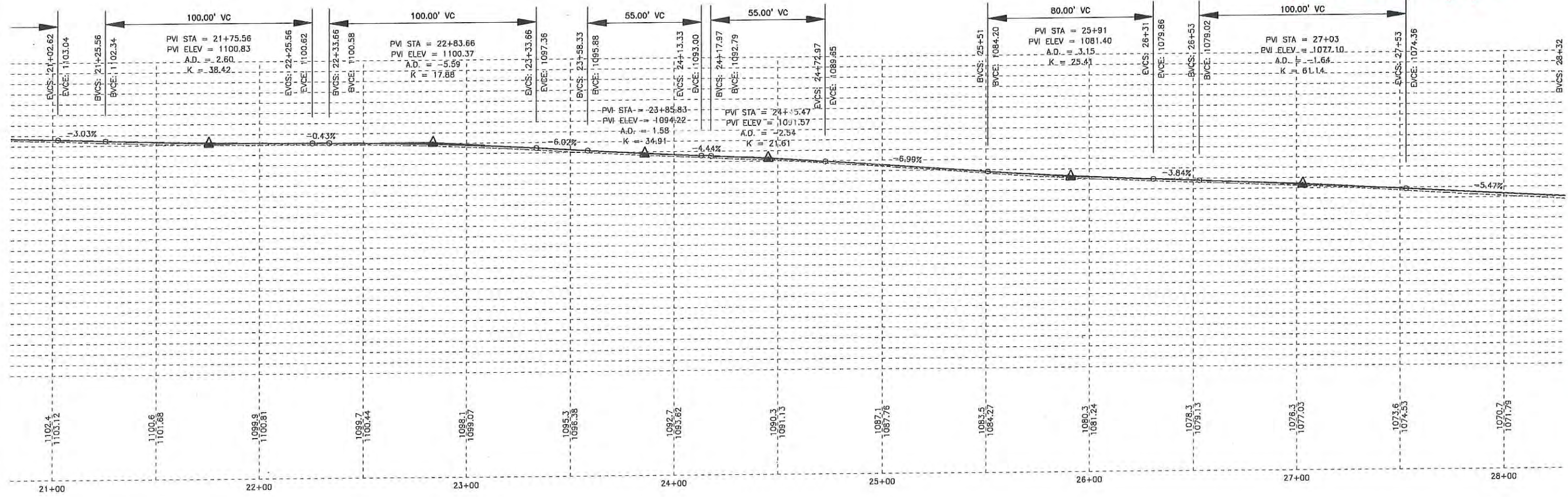


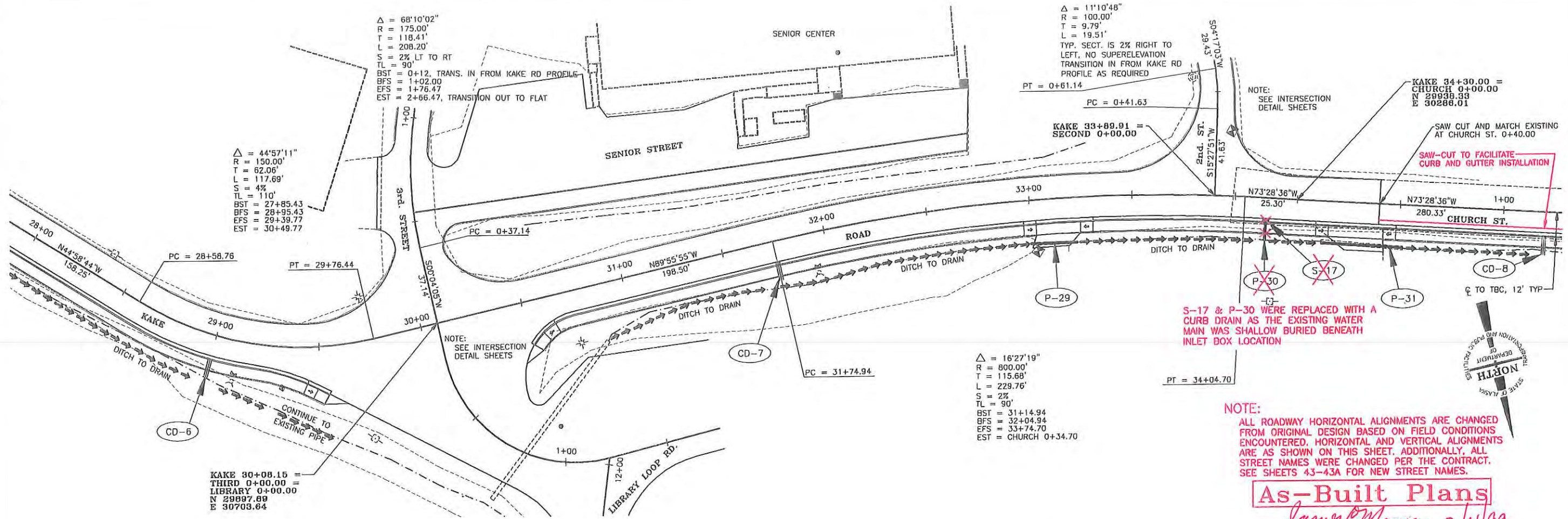


NOTE:
 S-16 & P-28 WERE REPLACED WITH A CURB DRAIN AS THE EXISTING WATER MAIN WAS SHALLOW BURIED BENEATH INLET BOX LOCATION

ALL ROADWAY HORIZONTAL ALIGNMENTS ARE CHANGED FROM ORIGINAL DESIGN BASED ON FIELD CONDITIONS ENCOUNTERED. HORIZONTAL AND VERTICAL ALIGNMENTS ARE AS SHOWN ON THIS SHEET. ADDITIONALLY, ALL STREET NAMES WERE CHANGED PER THE CONTRACT. SEE SHEETS 43-43A FOR NEW STREET NAMES.

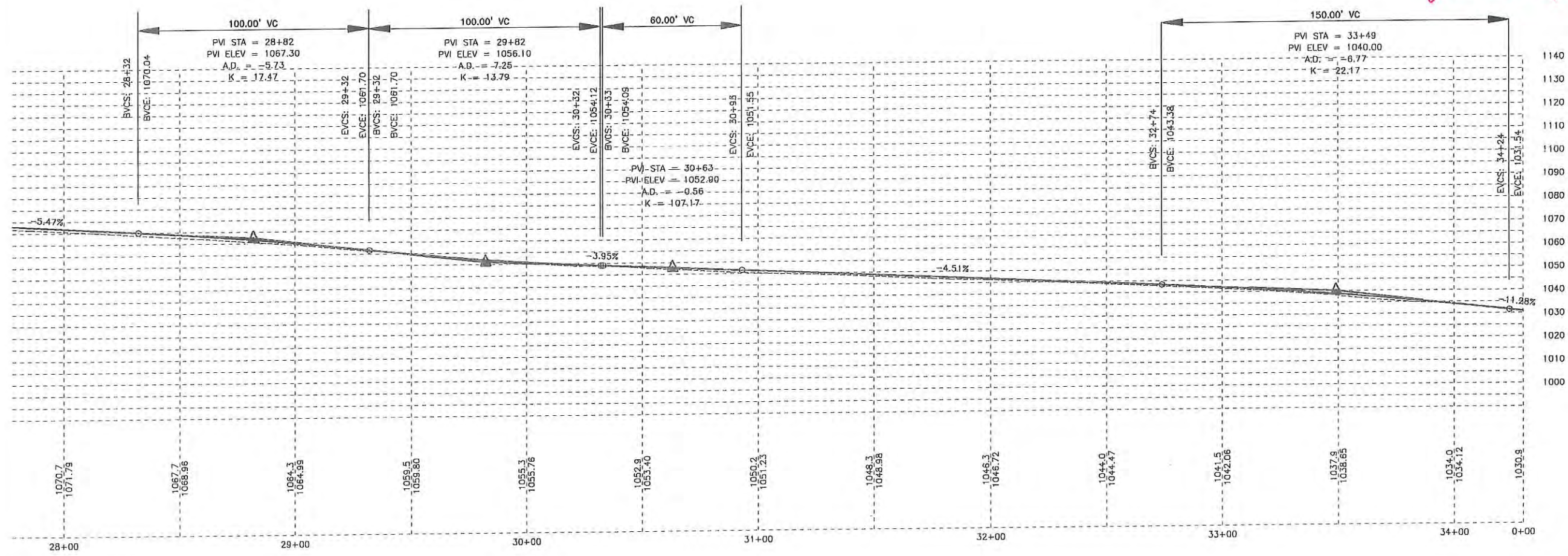
As-Built Plans
James Enlager 2/8/98

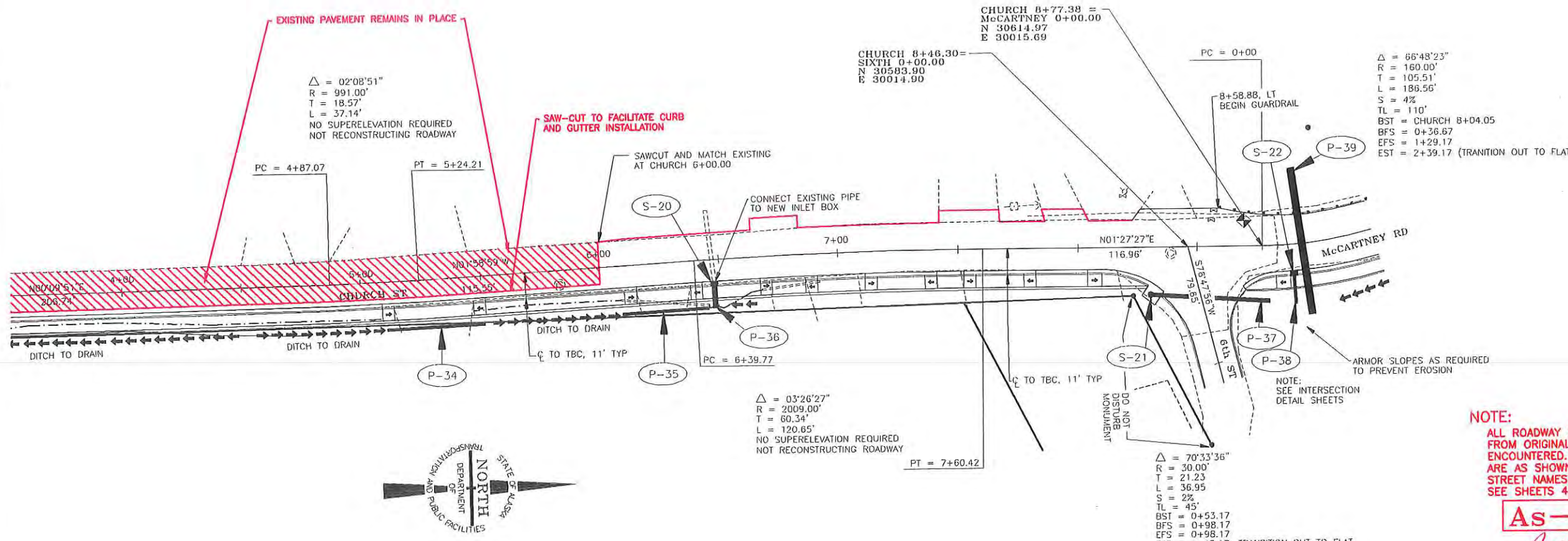




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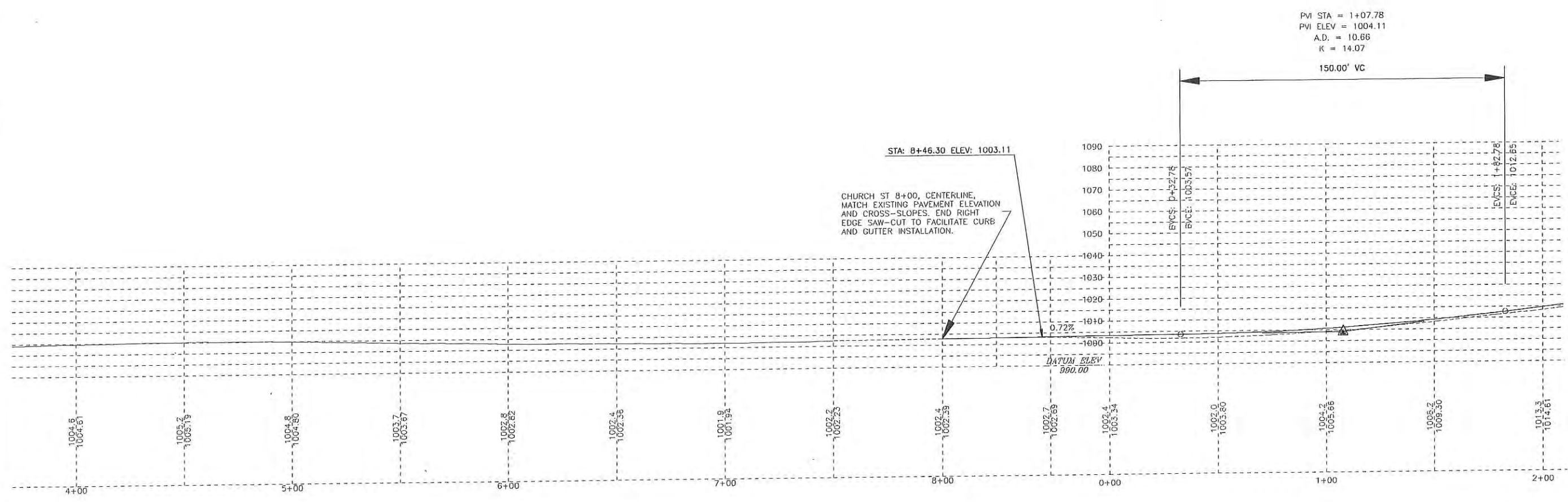
As-Built Plans
James E. Meyer 2/4/99





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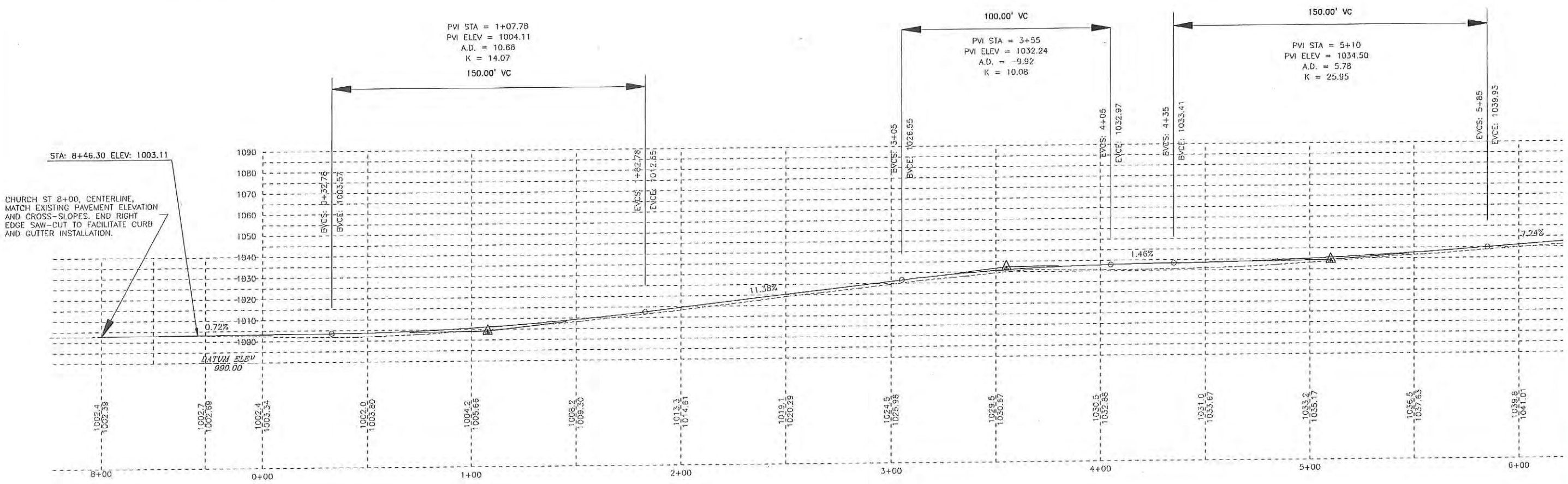
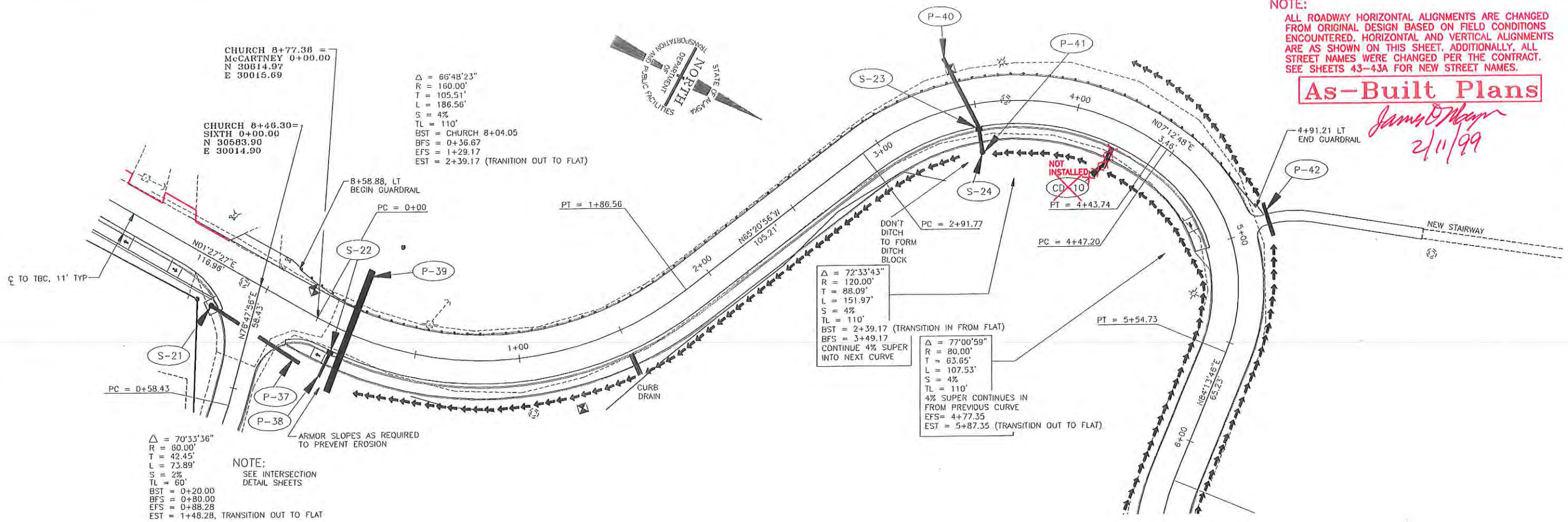
As-Built Plans
James E. Mayne 2/11/99



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As-Built Plans

James D. May
 2/11/99



$\Delta = 86^{\circ}16'02''$
 $R = 90.00'$
 $T = 84.32'$
 $L = 135.51'$
 $S = 4\%$
 $TL = 110'$
 $BST = 5+87.35$ (TRANSITION IN FROM FLAT)
 $BFS = 6+97.35$
 CONTINUE 4% SUPER INTO NEXT CURVE

$\Delta = 55^{\circ}25'44''$
 $R = 120.00'$
 $T = 63.04'$
 $L = 116.09'$
 $S = 4\%$
 $TL = 110'$
 4% SUPER CONTINUES IN FROM PREVIOUS CURVE
 $EFS = 8+60.49$
 $EST = 9+70.49$ (SUPER TRANSITIONS INTO NEXT CURVE)

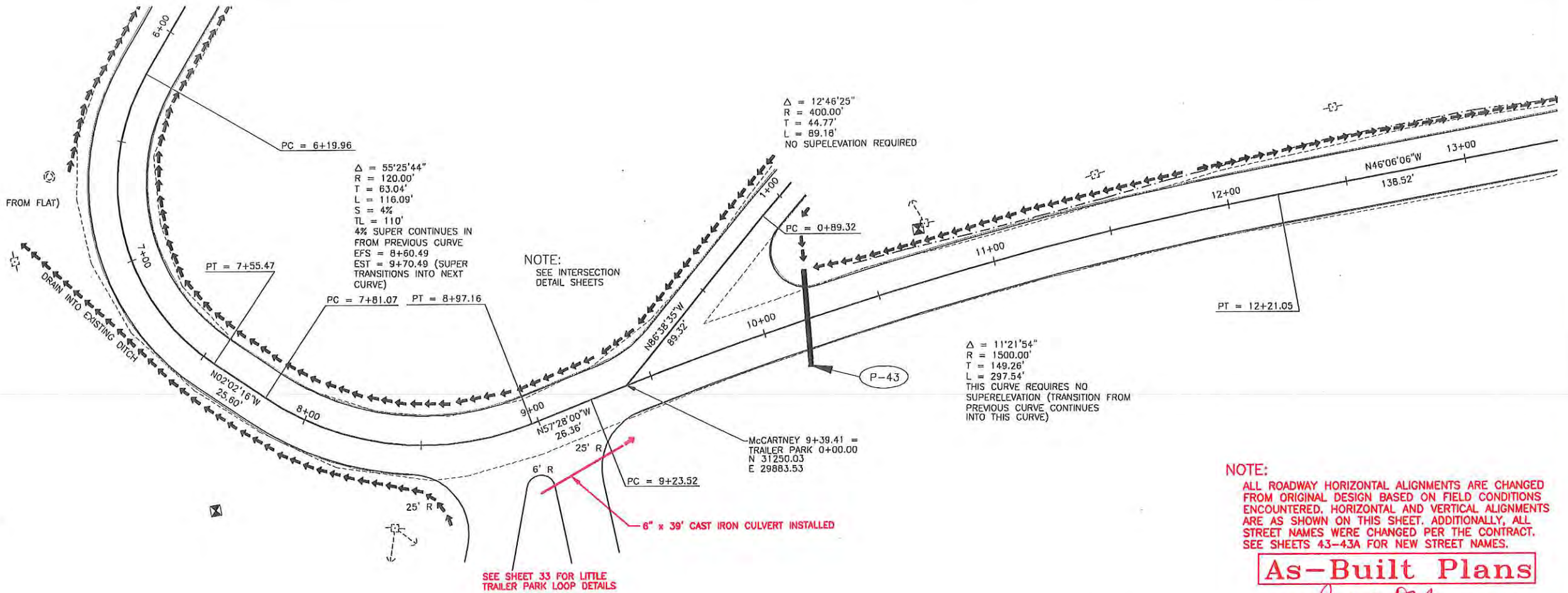
$\Delta = 12^{\circ}46'25''$
 $R = 400.00'$
 $T = 44.77'$
 $L = 89.18'$
 NO SUPERELEVATION REQUIRED

$\Delta = 11^{\circ}21'54''$
 $R = 1500.00'$
 $T = 149.26'$
 $L = 297.54'$
 THIS CURVE REQUIRES NO SUPERELEVATION (TRANSITION FROM PREVIOUS CURVE CONTINUES INTO THIS CURVE)

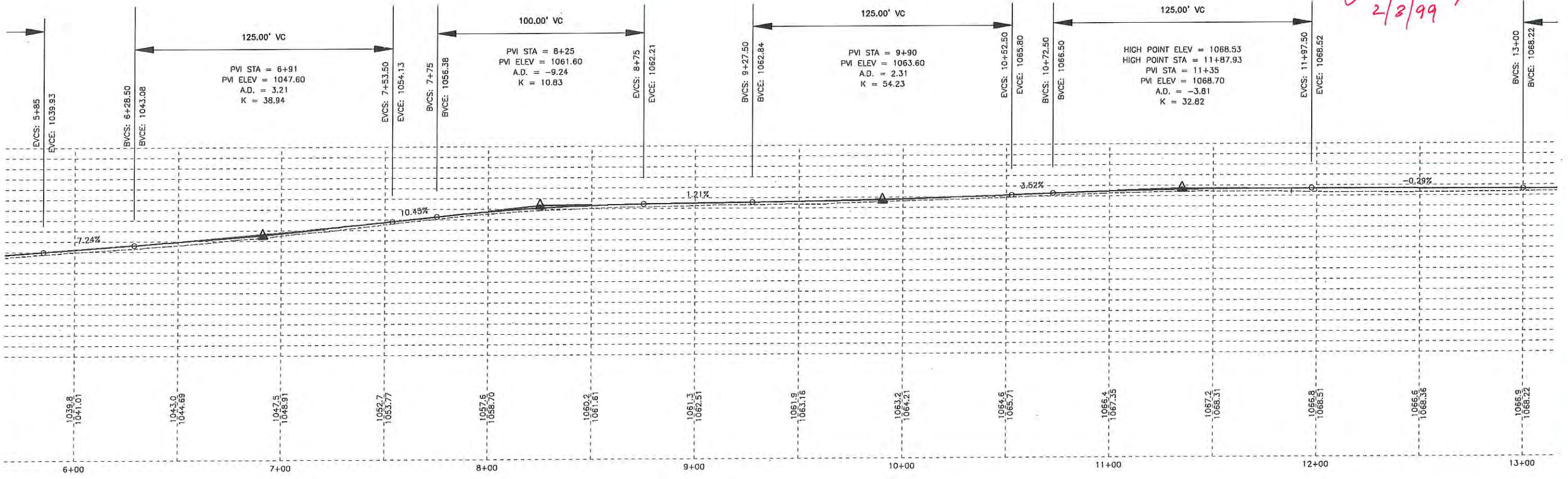
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As-Built Plans

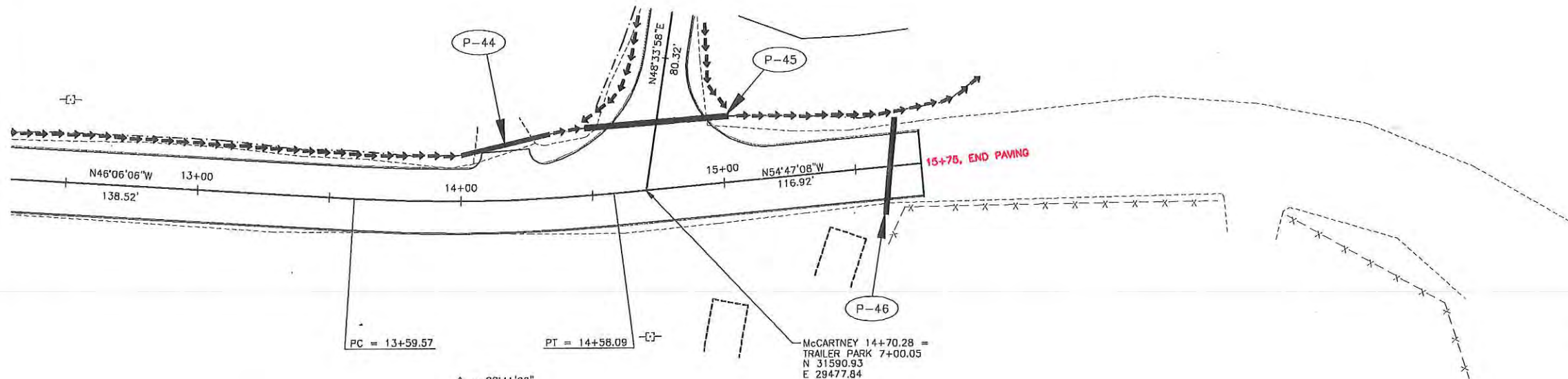
James Mayer
2/2/99



SEE SHEET 33 FOR LITTLE TRAILER PARK LOOP DETAILS



NOTE:
SEE INTERSECTION
DETAIL SHEETS



$\Delta = 08'41'02''$
 $R = 650.00'$
 $T = 49.35'$
 $L = 98.52'$
 $S = 2\%$
 $TL = 90'$
 $BST = 12+99.57$
 $BFS = 13+89.57$
 $EFS = 14+28.09$
 $EST = 15+18.09$

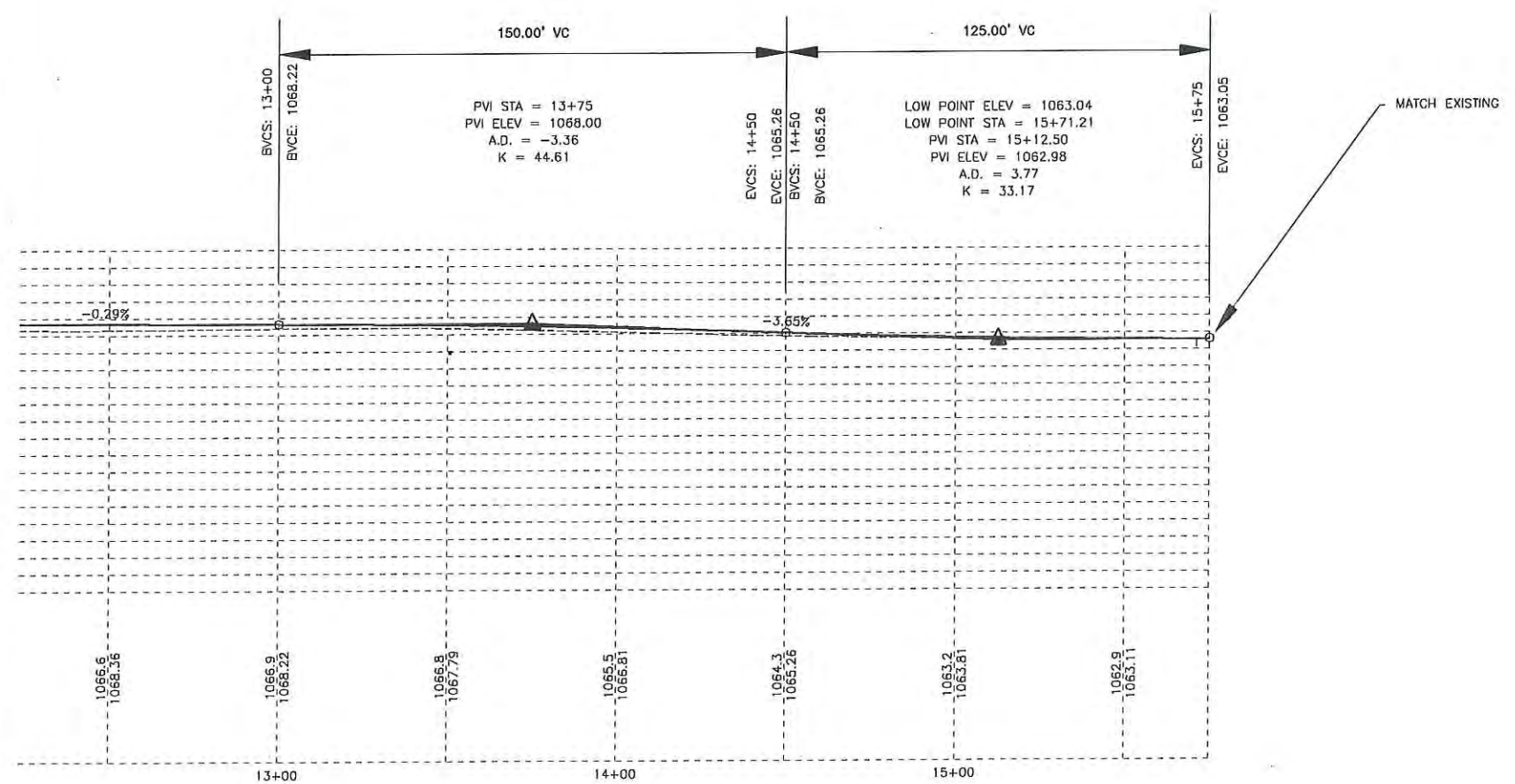
McCARTNEY 14+70.28 =
 TRAILER PARK 7+00.05
 N 31590.93
 E 29477.84

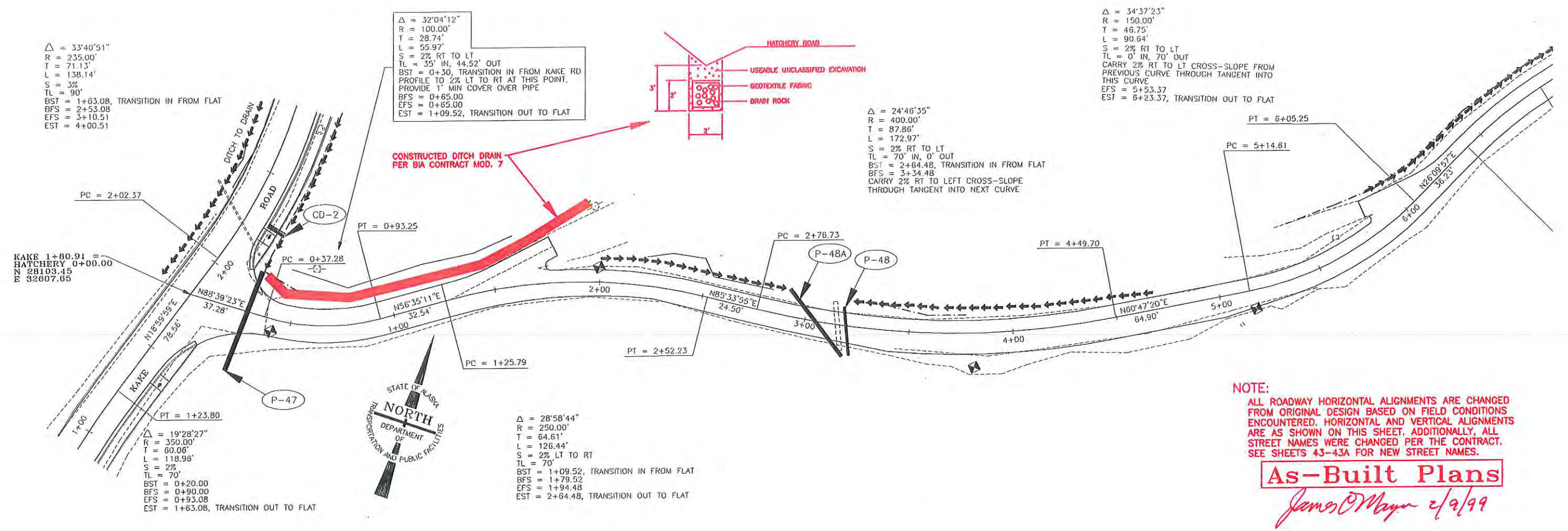


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As-Built Plans

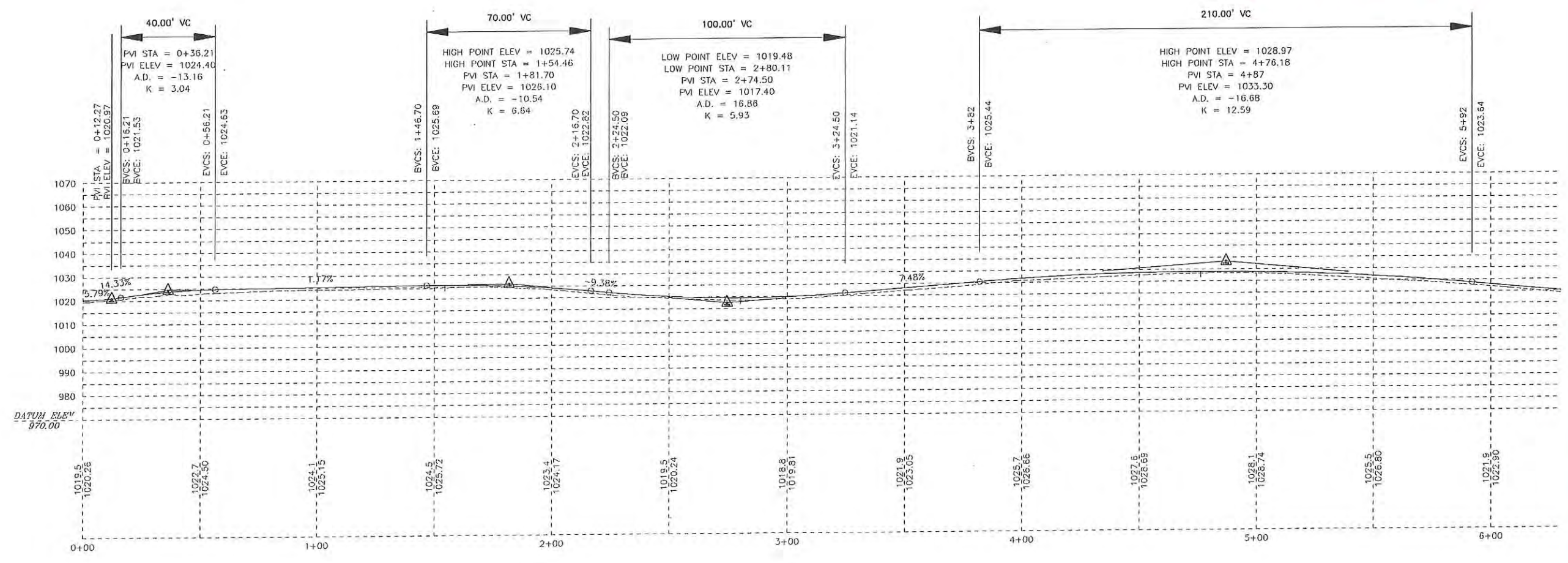
James C. Mayer
 2/3/99

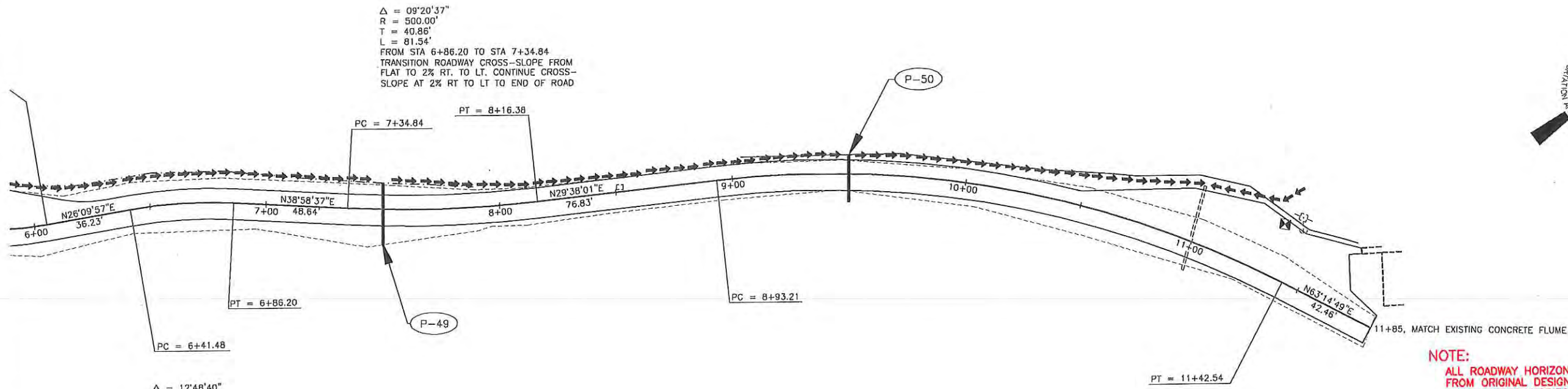




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As-Built Plans
James O'May 2/2/99

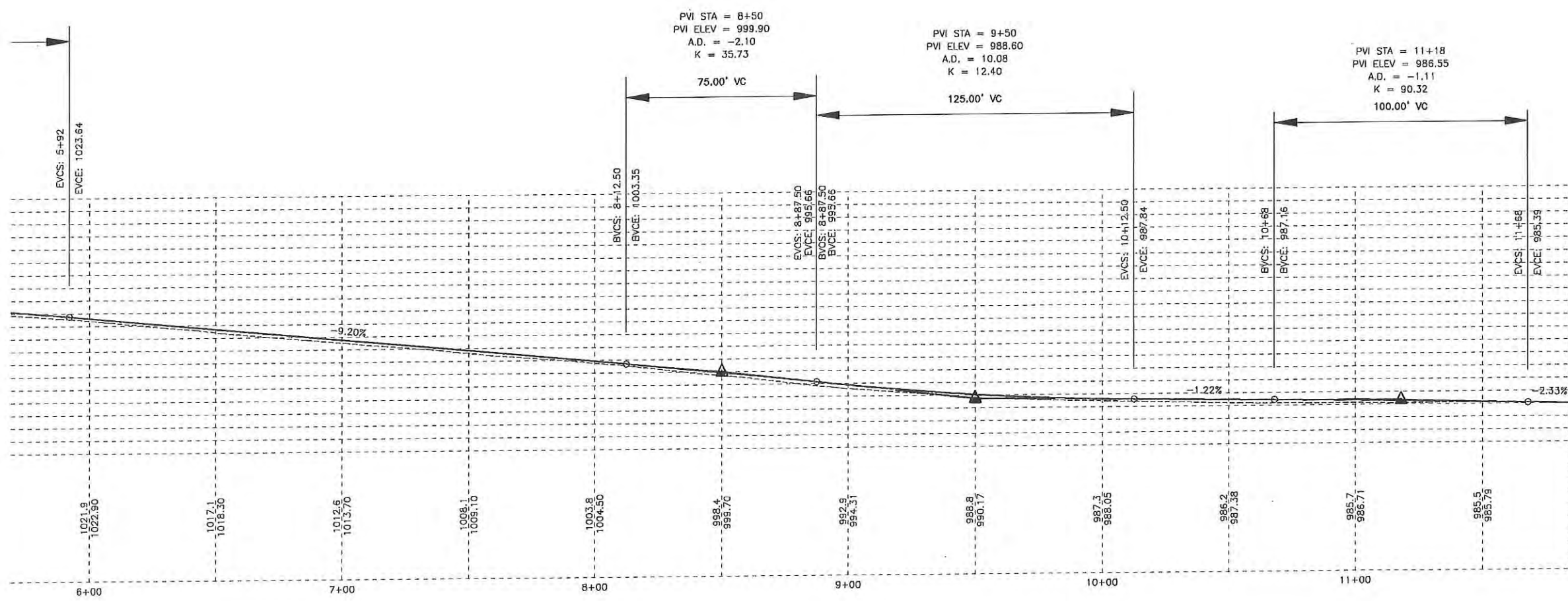




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As-Built Plans

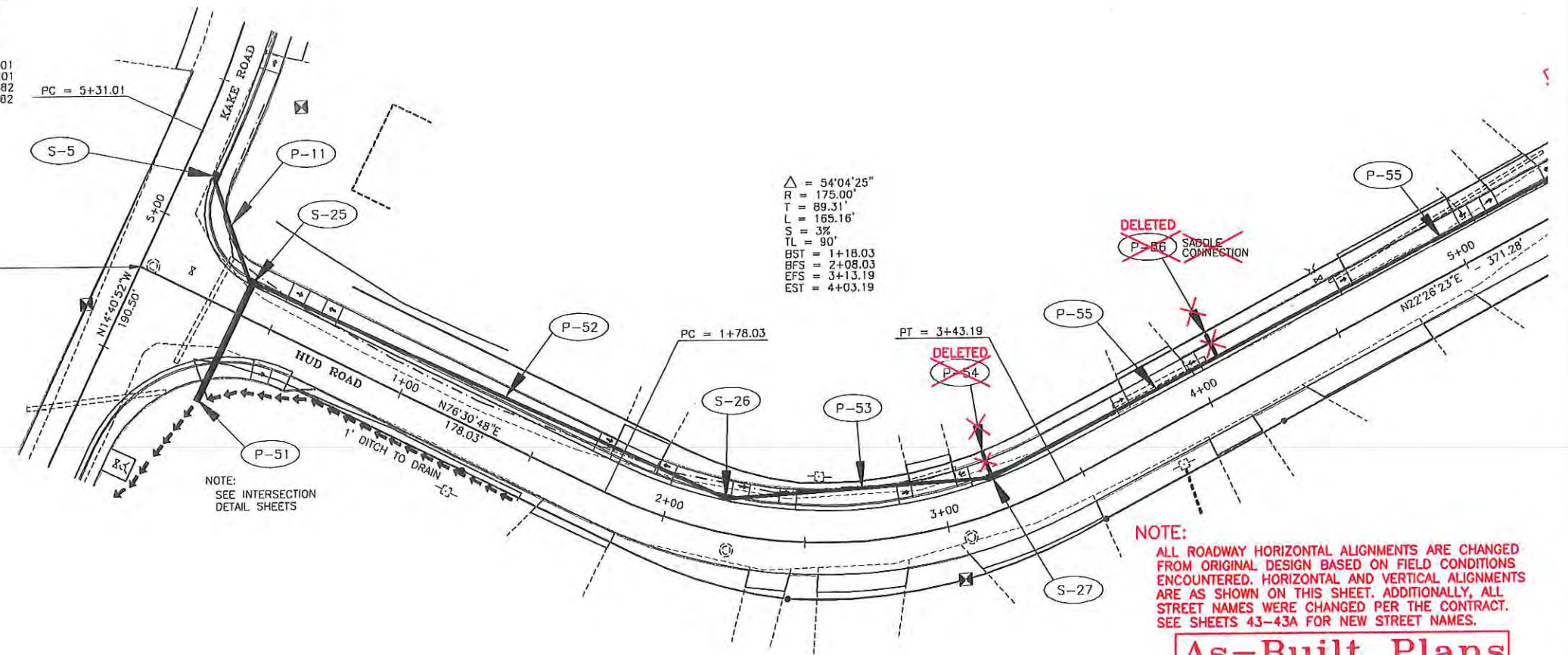
James P. Wayne
 2/4/99





$\Delta = 21'44'08''$
 $R = 300.00'$
 $T = 57.60'$
 $L = 113.81'$
 $S = 3\%$
 $TL = 90'$
 $BST = 4+71.01$
 $BFS = 3+61.01$
 $EFS = 6+14.82$
 $EST = 7+04.82$

KAKE 4+79.93 =
 HUD 0+00.00
 N 28394.67
 E 32584.43



$\Delta = 54'04'25''$
 $R = 175.00'$
 $T = 89.31'$
 $L = 165.16'$
 $S = 3\%$
 $TL = 90'$
 $BST = 1+18.03$
 $BFS = 2+08.03$
 $EFS = 3+13.19$
 $EST = 4+03.19$

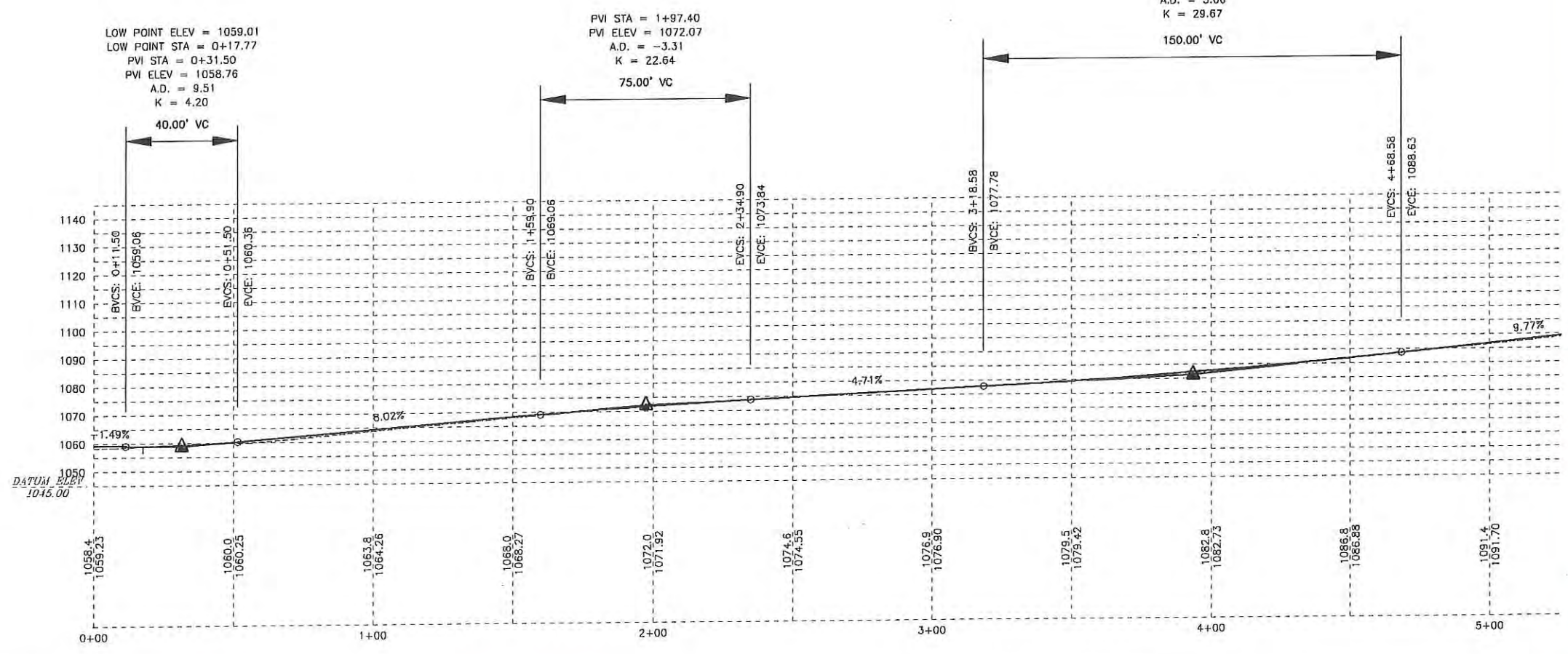
NOTE:
SEE INTERSECTION
DETAIL SHEETS

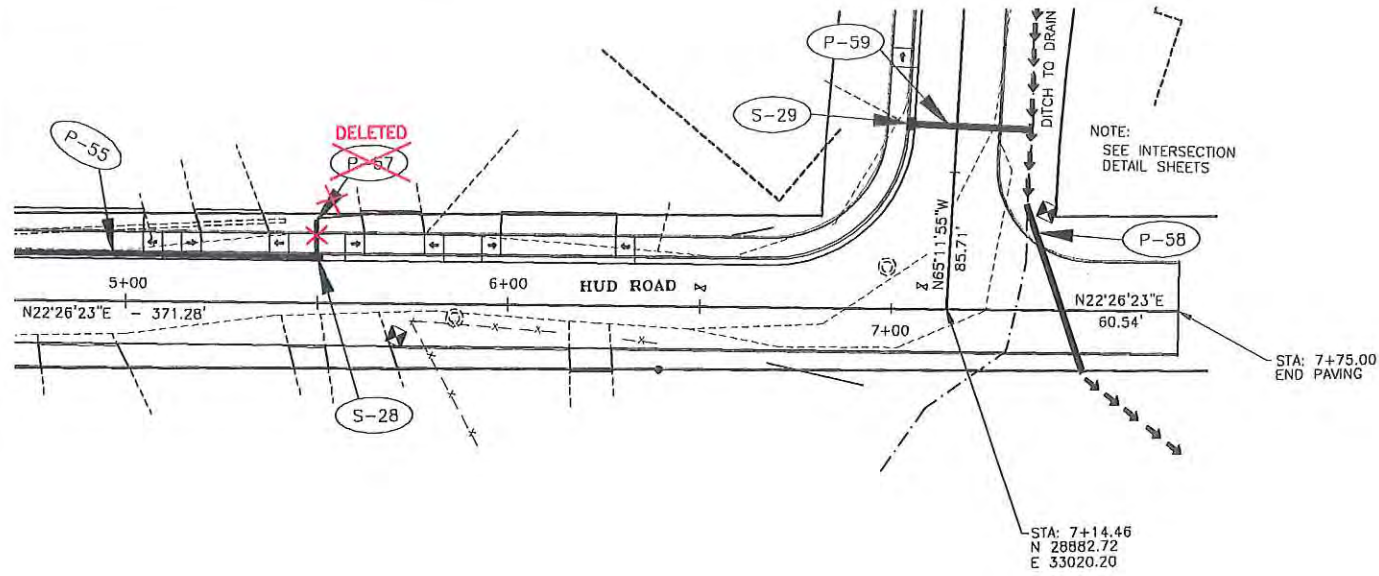
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As-Built Plans

James O'Mayne
2/8/99

PVI STA = 3+93.58
 PVI ELEV = 1081.31
 A.D. = 5.06
 K = 29.67

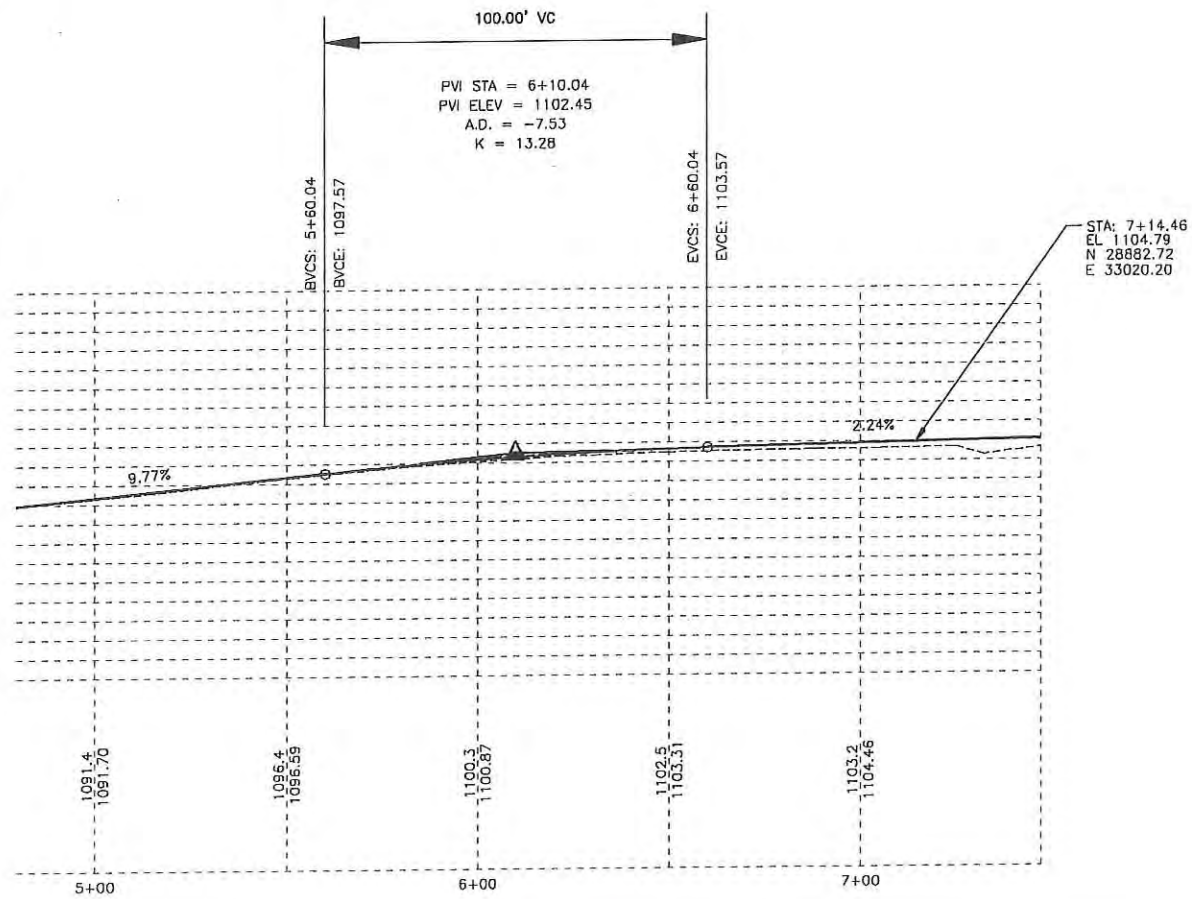


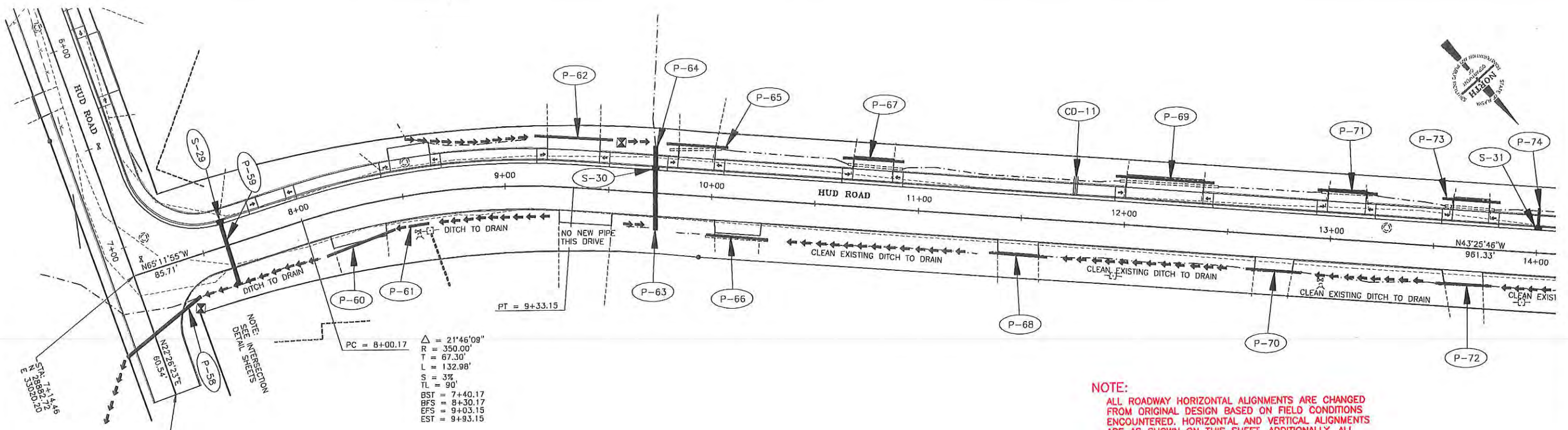


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As-Built Plans

James O'Malley
 2/8/99



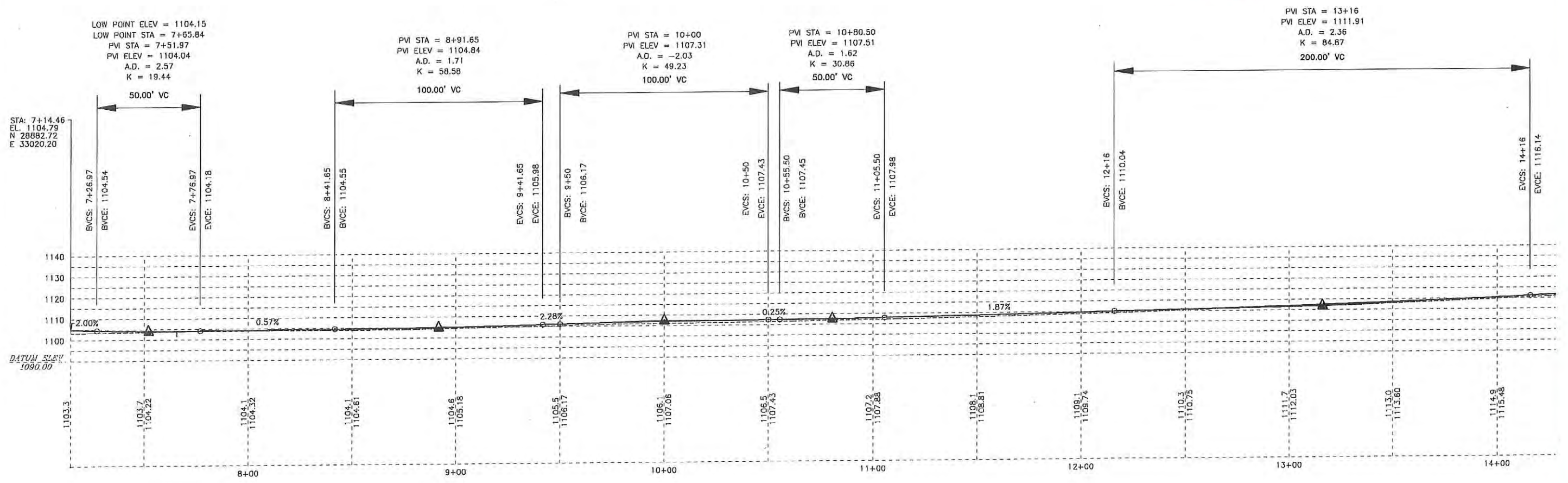


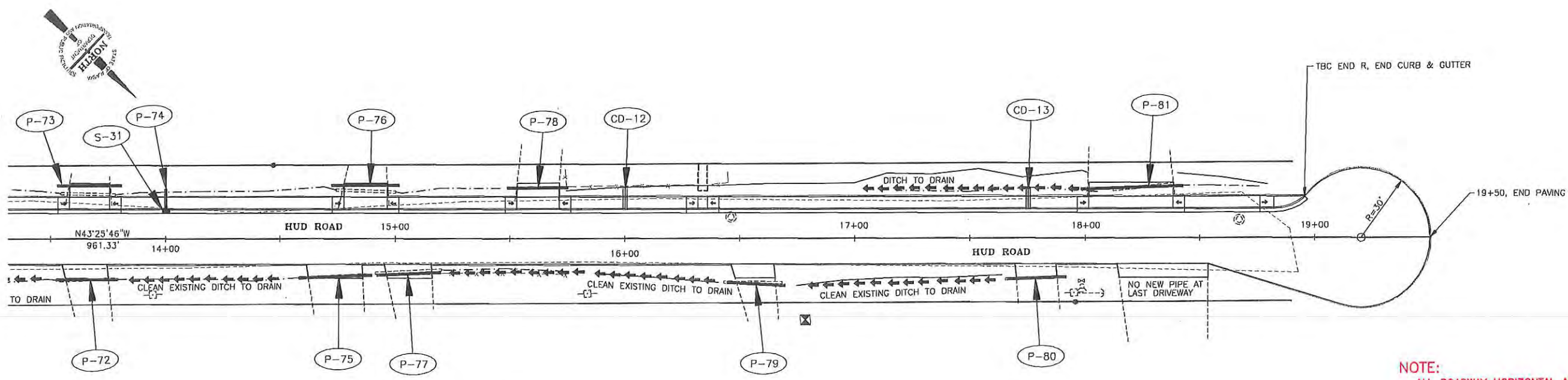
$\Delta = 21'46''09''$
 $R = 350.00'$
 $T = 67.30'$
 $L = 132.98'$
 $S = 3\%$
 $TL = 90'$
 $BST = 7+40.17$
 $BFS = 8+30.17$
 $EFS = 9+03.15$
 $EST = 9+93.15$

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As-Built Plans

James P. Mayer
2/4/99

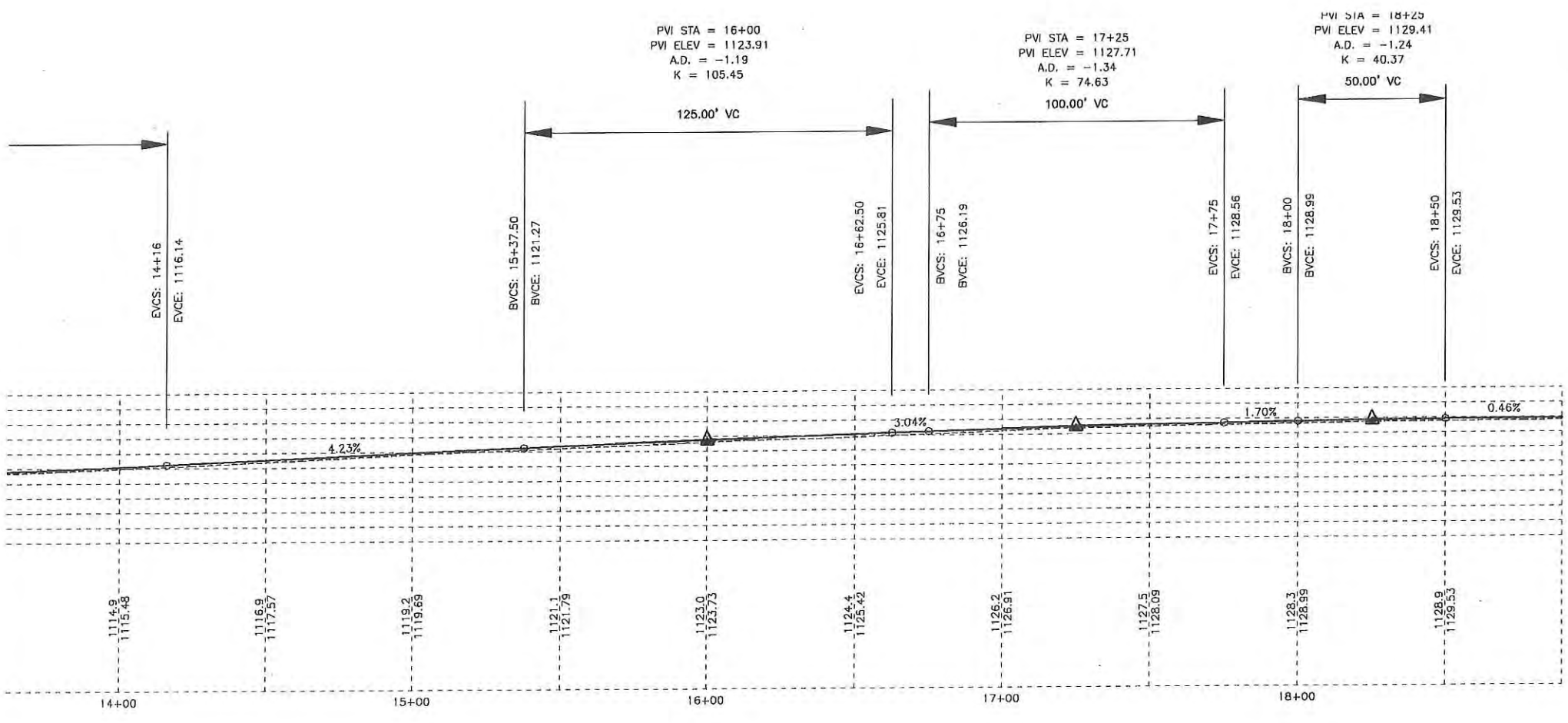


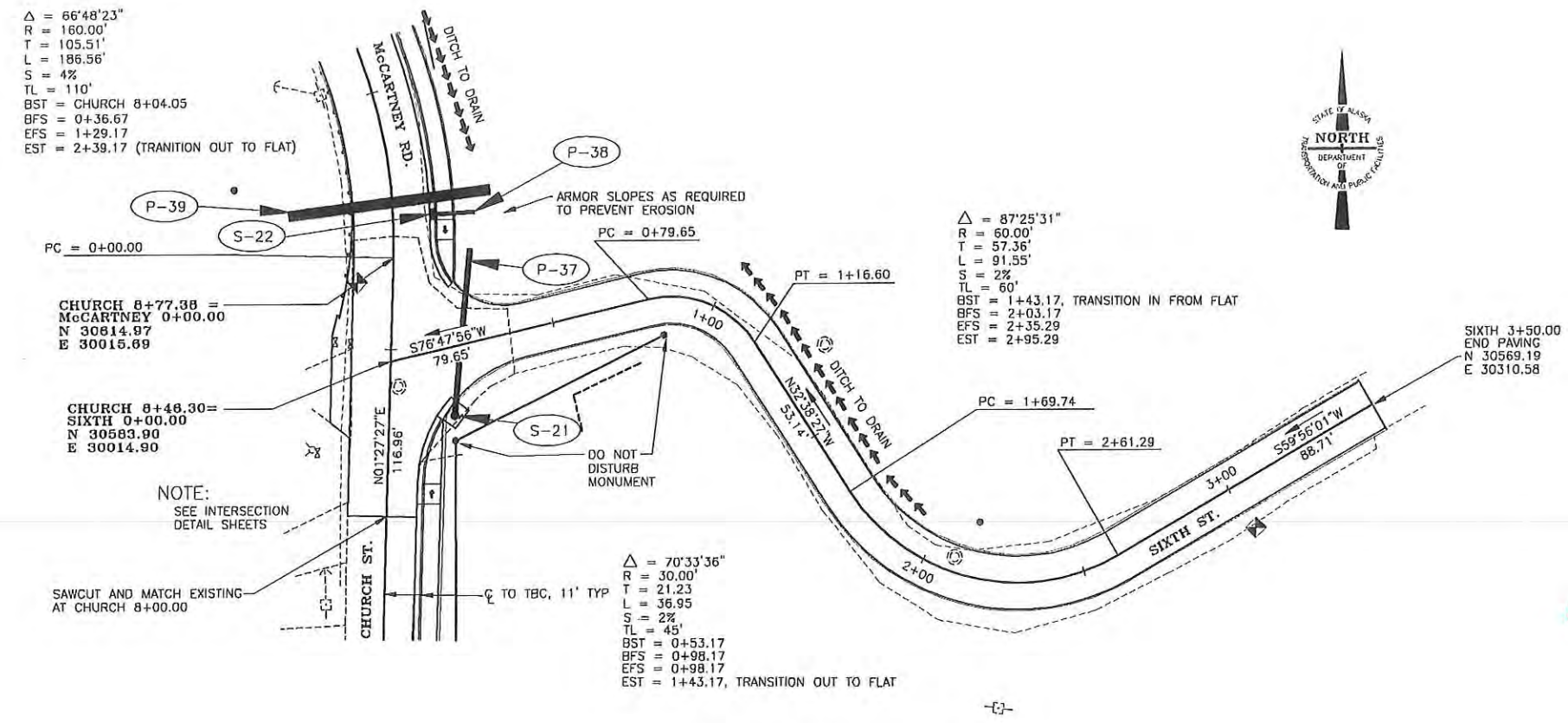


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As-Built Plans

James M. Mayne
2/4/99

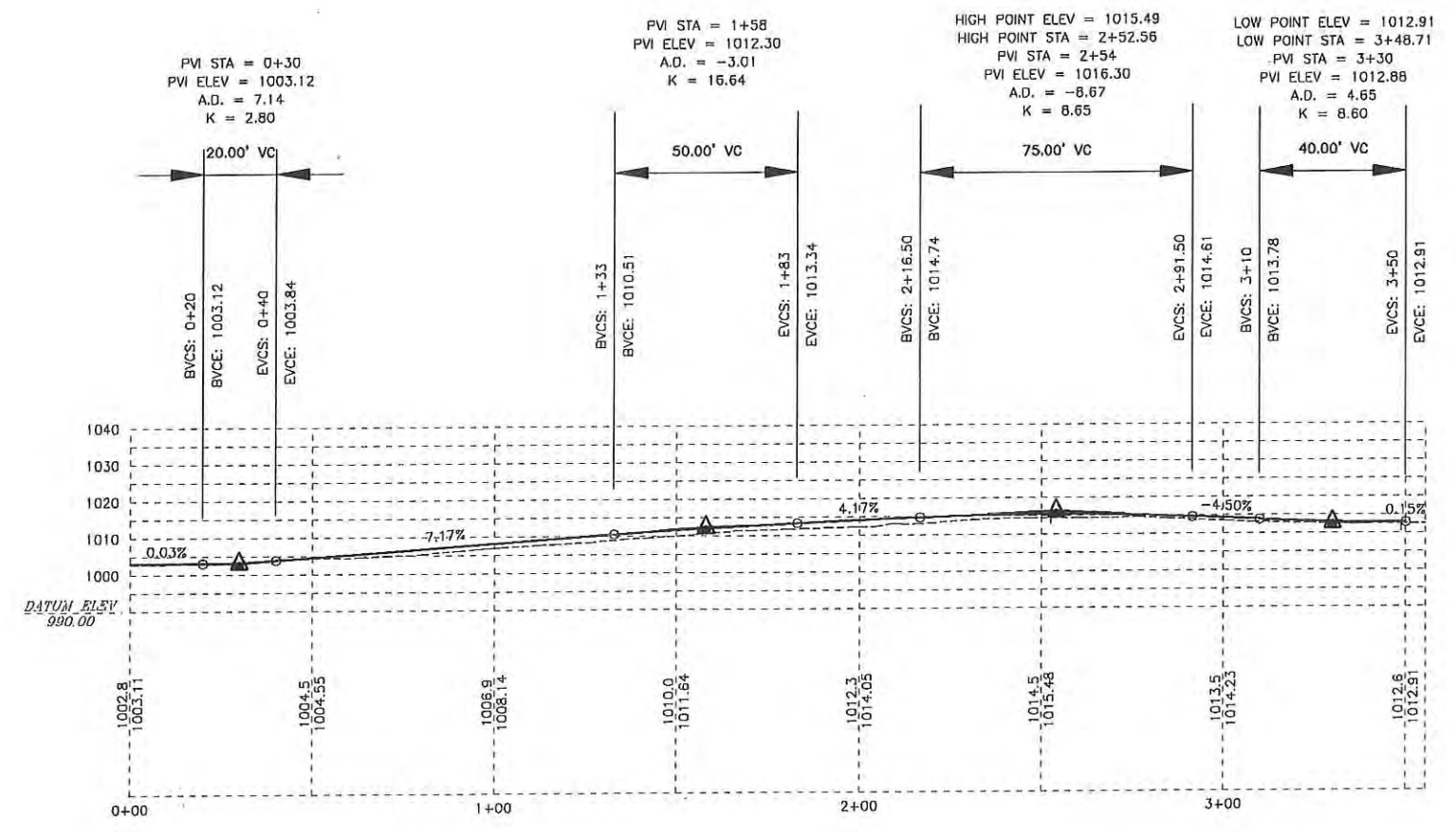




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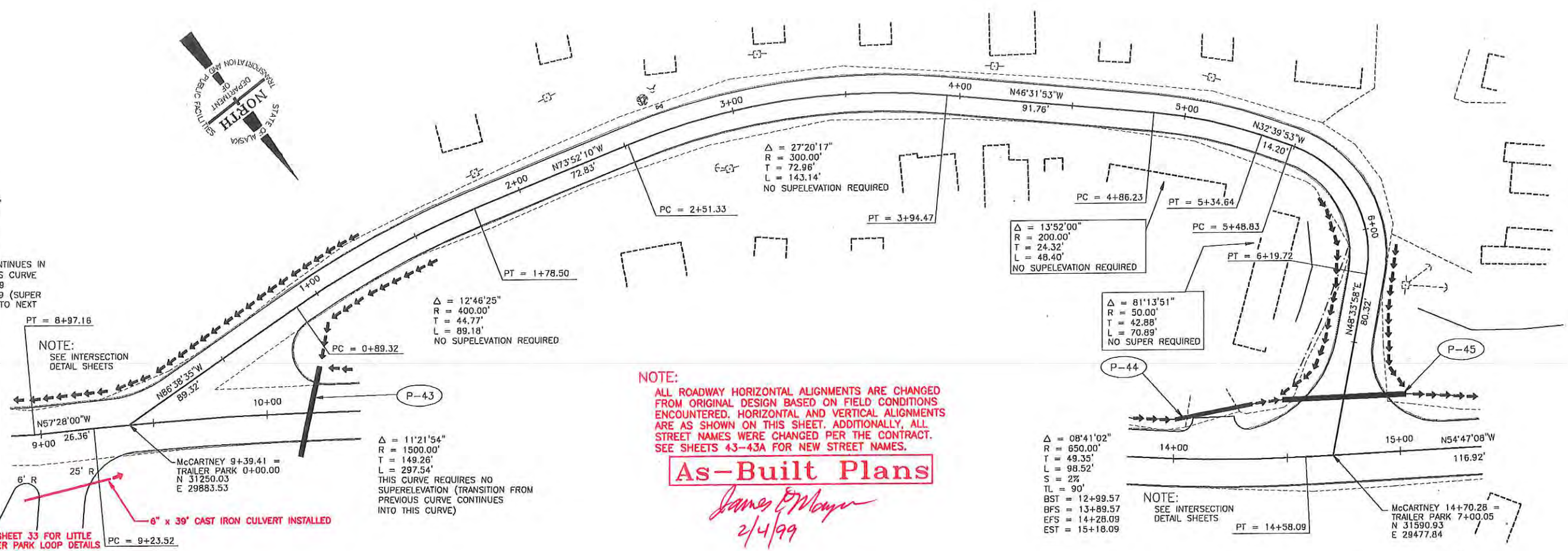
As-Built Plans

James O'Mayr
 2/4/99





$\Delta = 55^{\circ}25'44''$
 $R = 120.00'$
 $T = 63.04'$
 $L = 116.09'$
 $S = 4\%$
 $TL = 110'$
 4% SUPER CONTINUES IN FROM PREVIOUS CURVE
 EFS = 8+60.49
 EST = 9+70.49 (SUPER TRANSITIONS INTO NEXT CURVE)



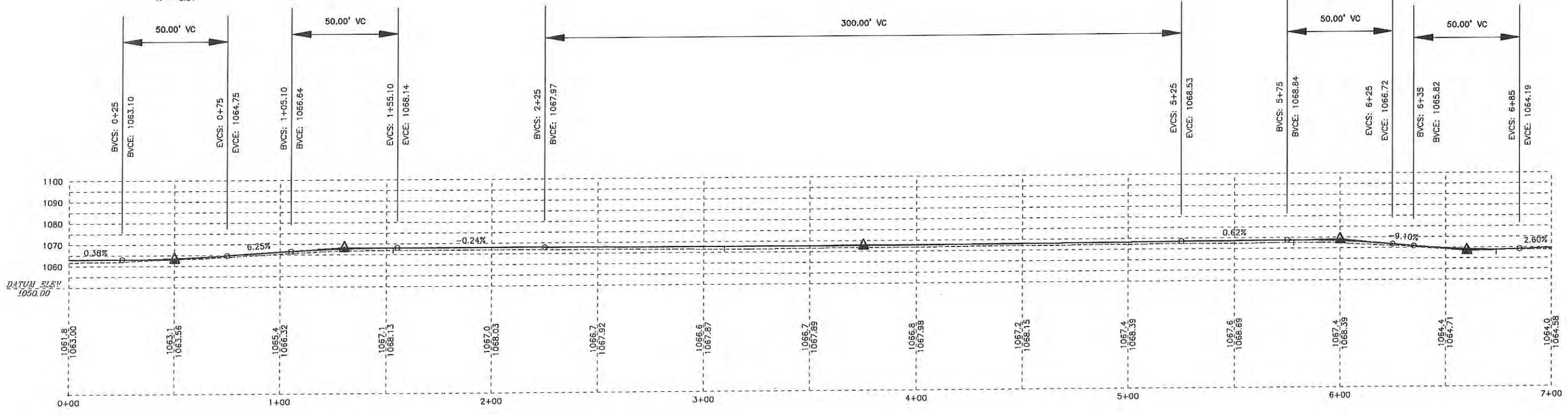
SEE SHEET 33 FOR LITTLE TRAILER PARK LOOP DETAILS

6" x 39' CAST IRON CULVERT INSTALLED

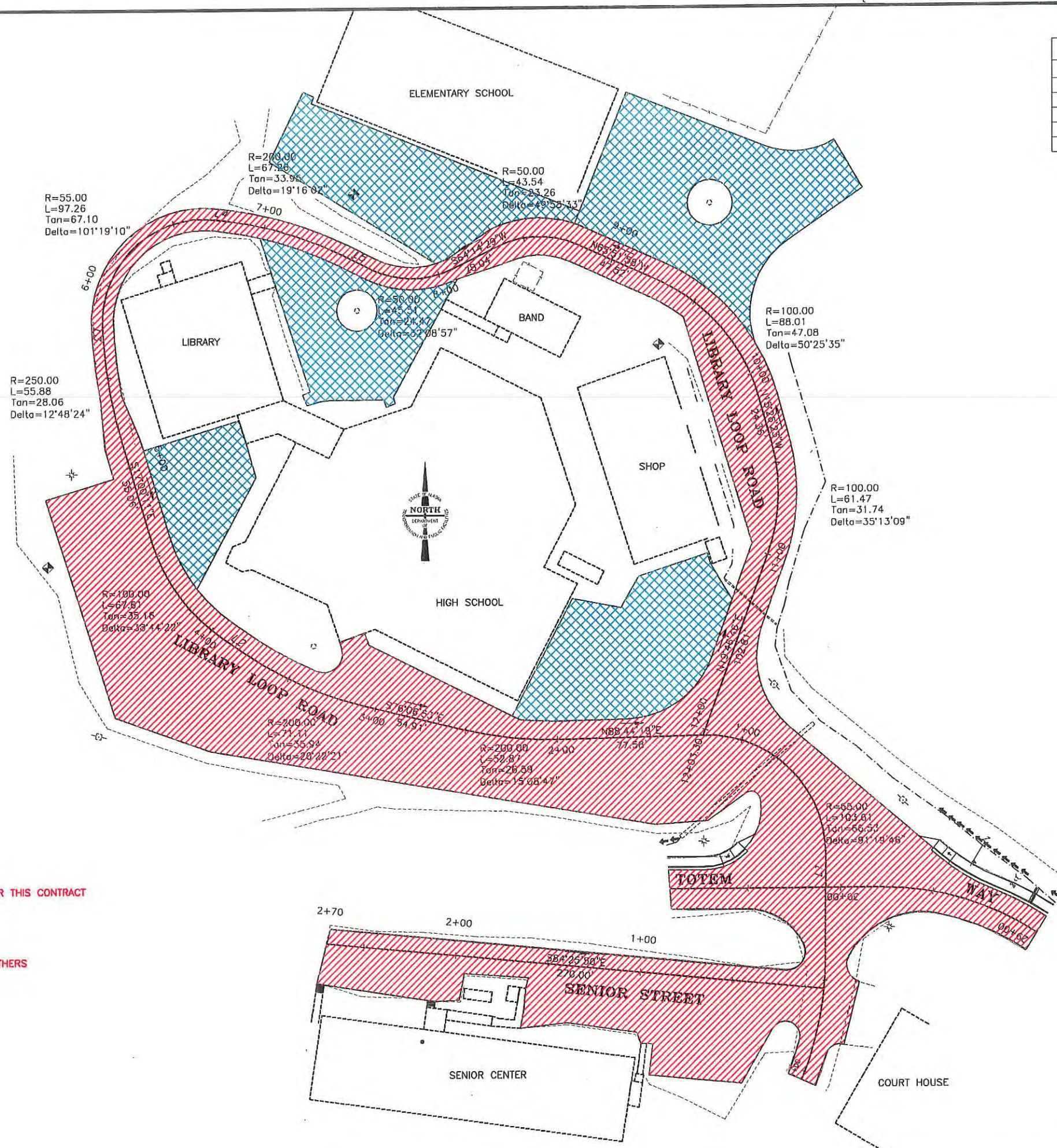
McCARTNEY 9+39.41 = TRAILER PARK 0+00.00
 N 31250.03
 E 29883.53


McCARTNEY 14+70.28 = TRAILER PARK 7+00.05
 N 31590.93
 E 29477.84

PVI STA = 0+50 PVI ELEV = 1063.19 A.D. = 5.87 K = 8.51	HIGH POINT ELEV = 1068.14 HIGH POINT STA = 1+53.22 PVI STA = 1+30.10 PVI ELEV = 1068.20 A.D. = -6.50 K = 7.69	LOW POINT ELEV = 1067.86 LOW POINT STA = 3+09.75 PVI STA = 3+75 PVI ELEV = 1067.60 A.D. = 0.87 K = 345.93	HIGH POINT ELEV = 1068.85 HIGH POINT STA = 5+78.20 PVI STA = 6+00 PVI ELEV = 1069.00 A.D. = -9.72 K = 5.14	LOW POINT ELEV = 1064.05 LOW POINT STA = 6+73.90 PVI STA = 6+60 PVI ELEV = 1063.54 A.D. = 11.70 K = 4.27
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LINE TABLE		
LINE	LENGTH	BEARING
L1	17.71	S00°04'05"W
L2	13.40	S55°44'32"E
L3	6.34	S04°11'47"E
L4	4.93	N82°52'37"W
L5	16.50	N63°36'35"W

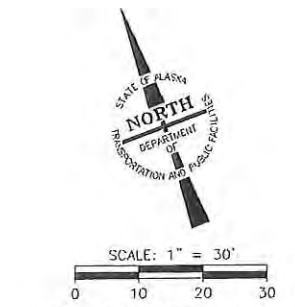


-  AREAS PAVED UNDER THIS CONTRACT
-  AREAS PAVED BY OTHERS

As-Built Plans
James Mayo
 2/5/99

$\Delta = 33^{\circ}40'51''$
 $R = 235.00'$
 $T = 71.13'$
 $L = 138.14'$
 $S = 3\%$
 $TL = 90'$
 $BST = 1+63.08$, TRANSITION IN FROM FLAT
 $BFS = 2+53.08$
 $EFS = 3+10.51$
 $EST = 4+00.51$

KAKE 1+80.91 =
HATCHERY 0+00.00
N 28103.45
E 32807.65



KAKE/KEKU RD
INTERSECTION
AND
KAKE/HATCHERY RD
INTERSECTION

NOTE: PAVE 1st DRIVE ON KEKU RD PAST INTERSECTION AS PAYMENT FOR EASEMENT

EP BEGIN R
N 27937.80
E 32513.46

TBC END R
N 28137.82
E 32631.41

TBC R=20'
N 28132.77
E 32650.77

TBC END CG&SW
N 28124.21
E 32632.69

EP BEGIN R
N 28112.90
E 32653.04

EP BEGIN R
N 28097.03
E 32655.10

EP END R
N 28096.18
E 32647.81

TBC END CG&SW
N 28081.77
E 32618.16

TBC R=50'
N 28046.51
E 32653.61

TBC BEGIN R
N 28062.79
E 32606.34

PT = 1+23.80

$\Delta = 19^{\circ}28'27''$
 $R = 350.00'$
 $T = 60.06'$
 $L = 118.96'$
 $S = 2\%$
 $TL = 70'$
 $BST = 0+20.00$
 $BFS = 0+90.00$
 $EFS = 0+93.08$
 $EST = 1+63.08$, TRANSITION OUT TO FLAT

TBC END R
N 27991.88
E 32586.72

TBC R=45'
N 27955.14
E 32596.88

TBC BEGIN R
N 27939.38
E 32631.58

EP END R
N 27981.42
E 32561.92

EP R=50'
N 27987.78
E 32512.32

KEKU

MATCH EXISTING
PC = 0+04.84
ROAD

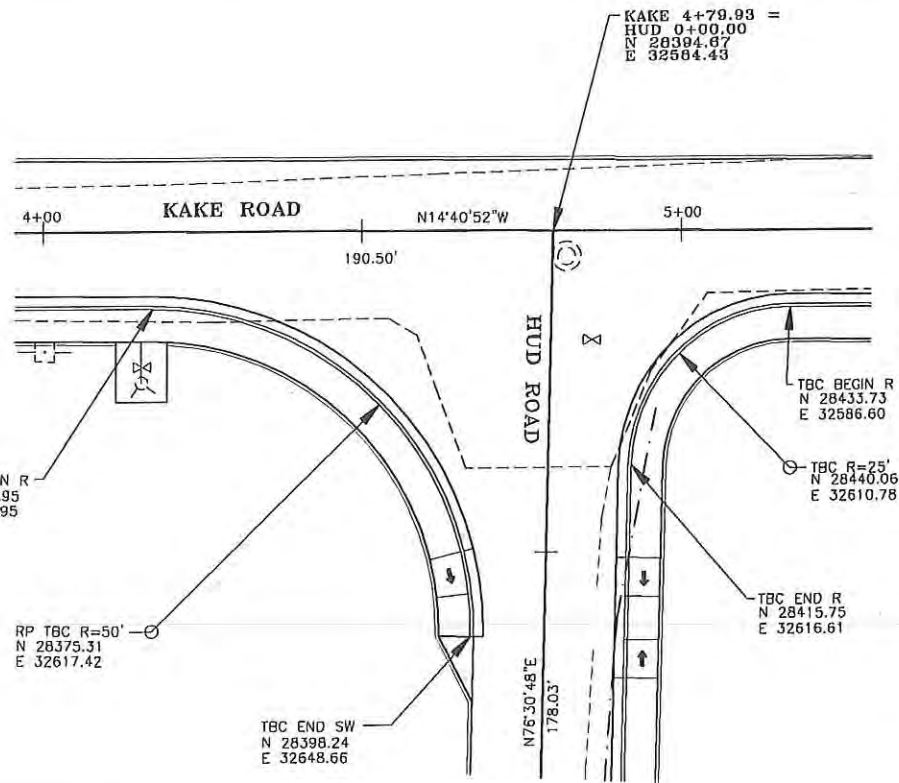
KAKE 0+00.00
N 27927.76
E 32570.04

$\Delta = 32^{\circ}04'12''$
 $R = 100.00'$
 $T = 28.74'$
 $L = 55.97'$
 $S = 2\%$ RT TO LT
 $TL = 35'$ IN, 44.52' OUT
 $BST = 0+30$, TRANSITION IN FROM KAKE RD
 PROFILE TO 2% LT TO RT AT THIS POINT,
 PROVIDE 1' MIN COVER OVER PIPE
 $BFS = 0+65.00$
 $EFS = 0+65.00$
 $EST = 1+09.52$, TRANSITION OUT TO FLAT

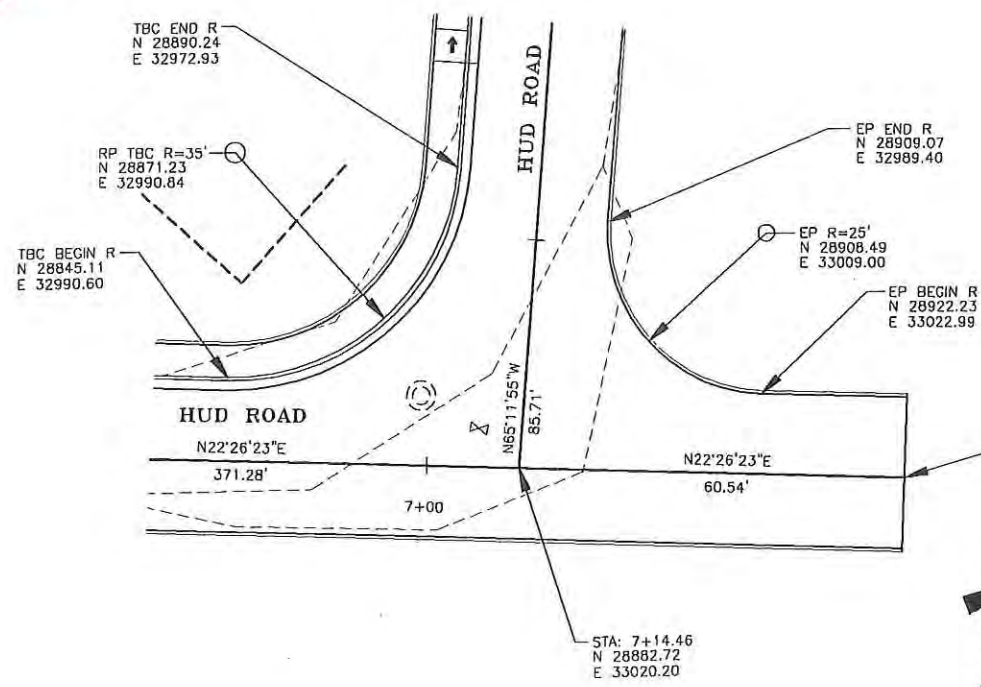
NOTE:
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As-Built Plans

James Mayne 2/8/99



SCALE: 1" = 30'
KAKE/HUD RD
INTERSECTION



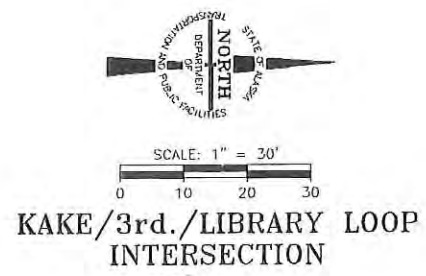
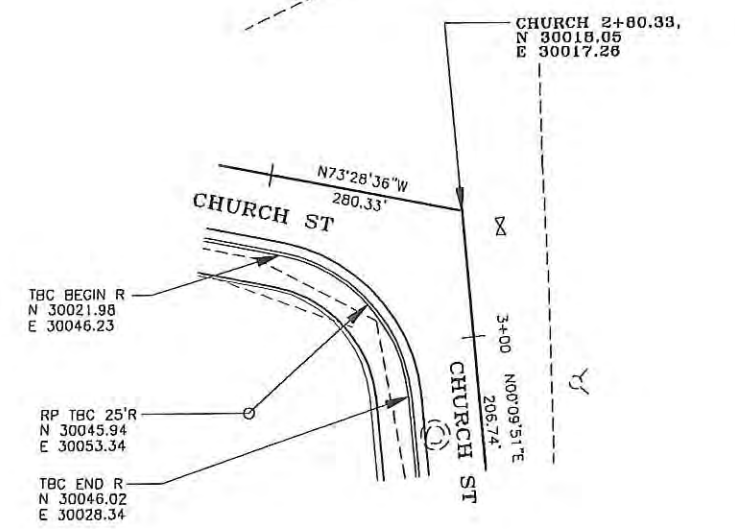
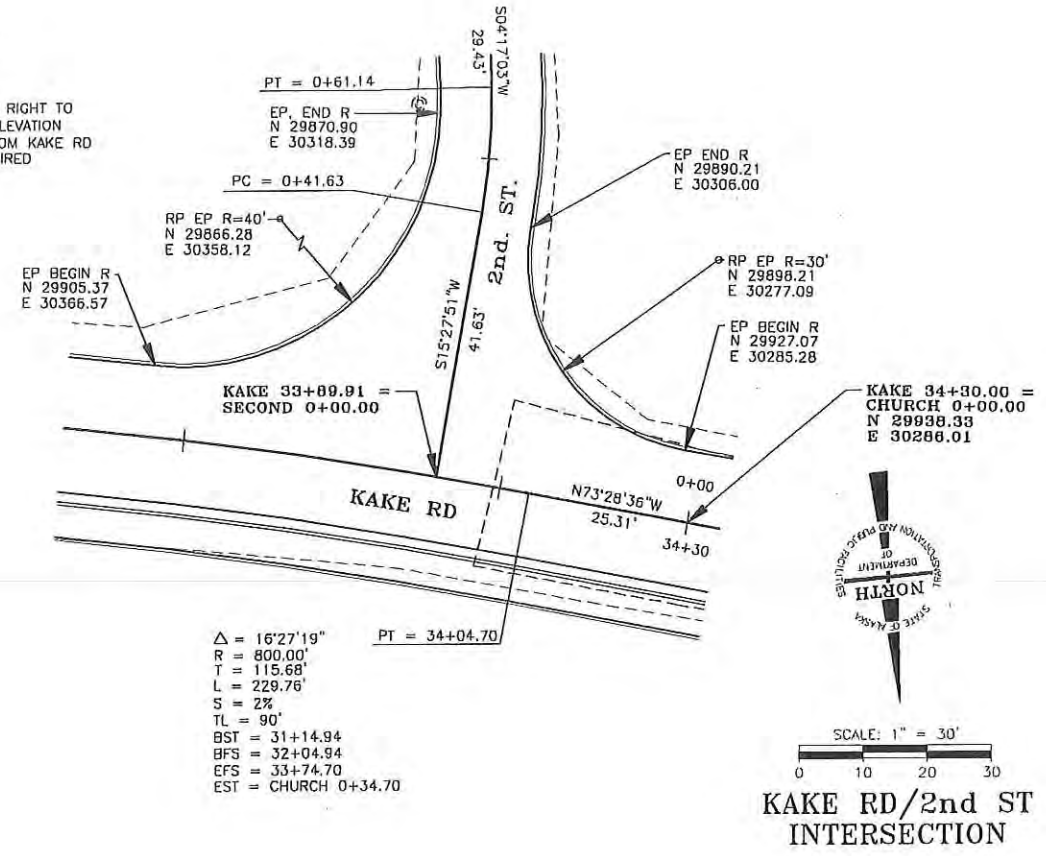
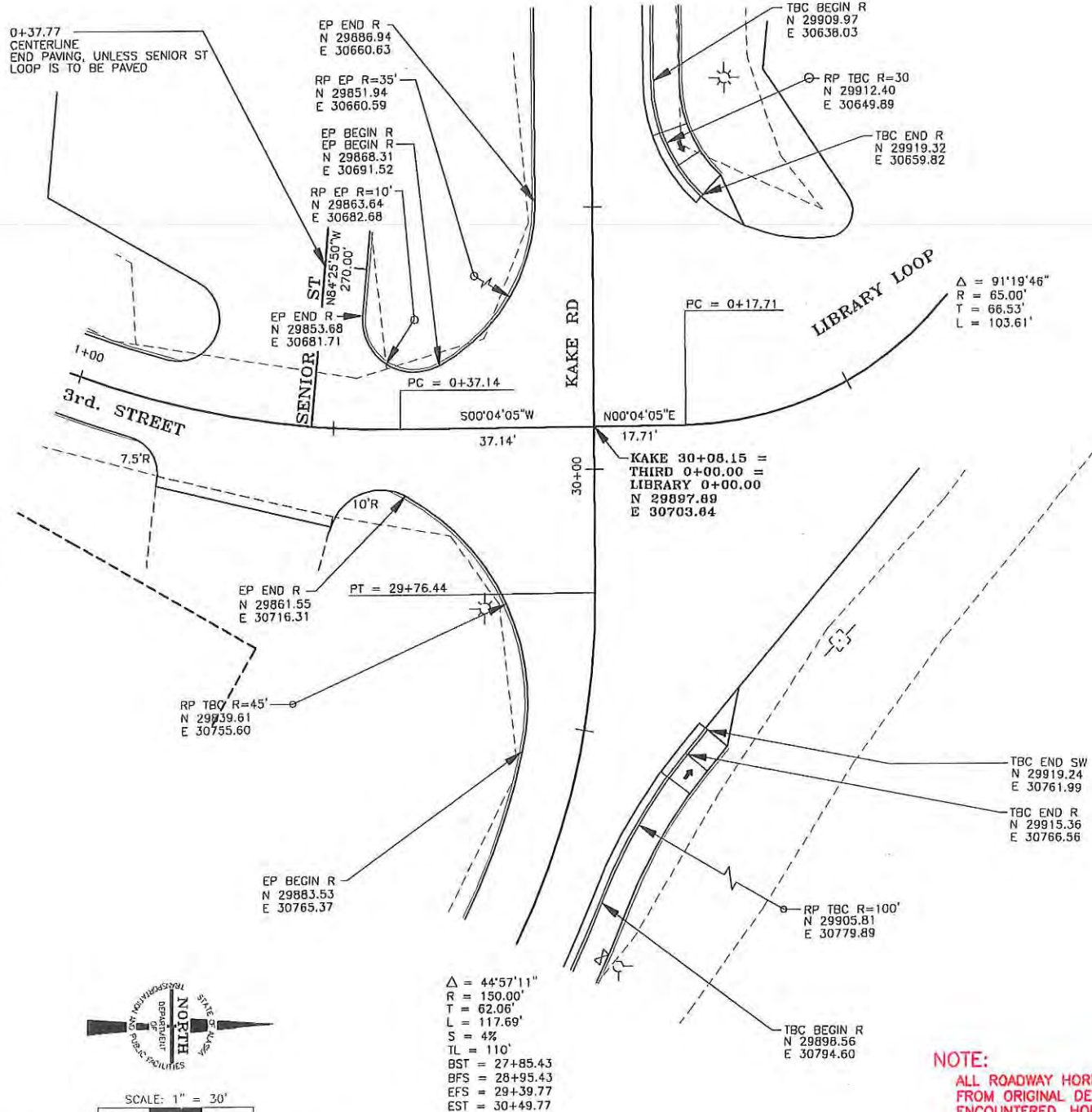
SCALE: 1" = 30'
HUD/HUD RD
INTERSECTION

STA: 7+75.00 END PAVING

STA: 7+14.46
N 28882.72
E 33020.20

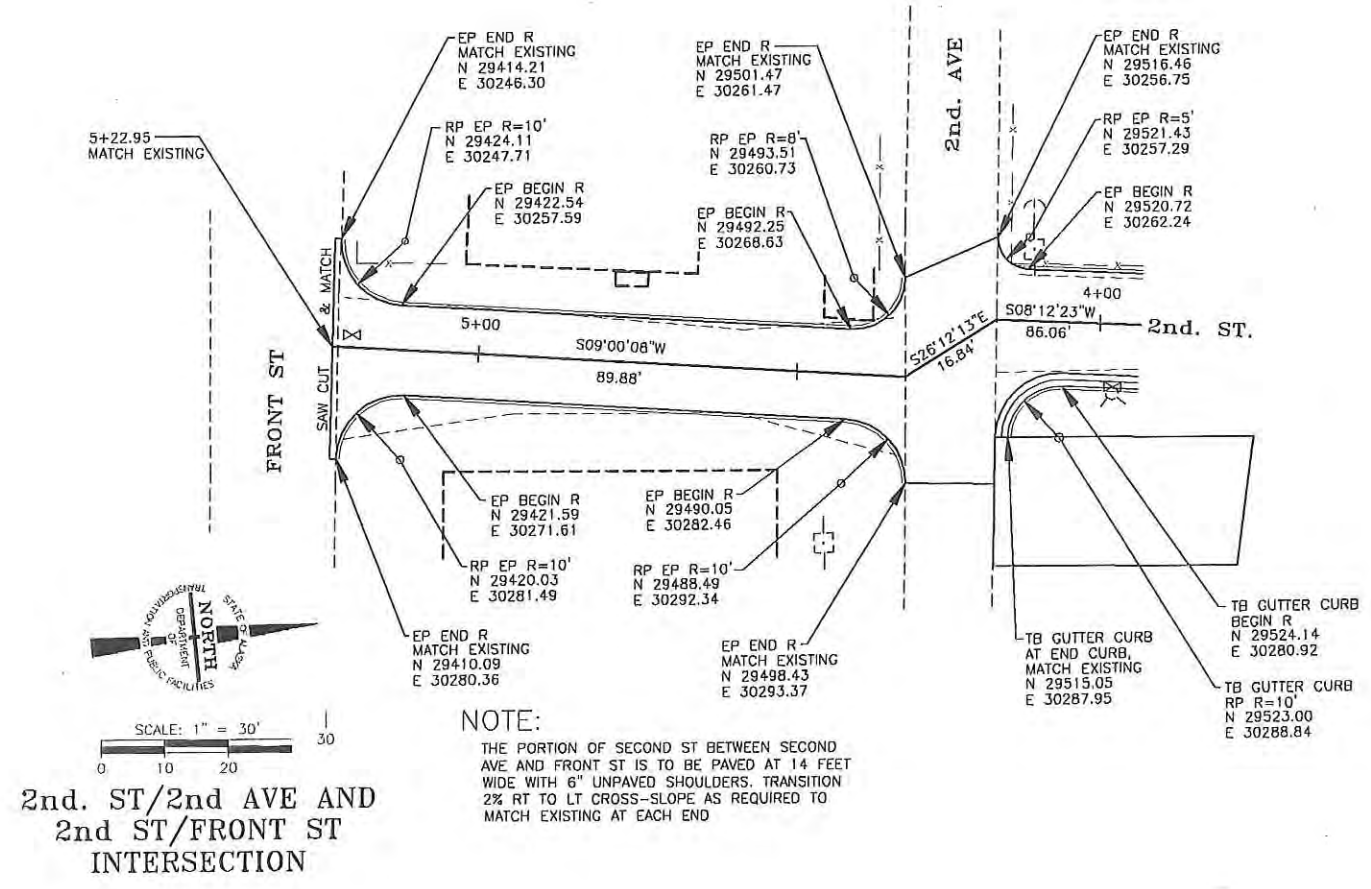
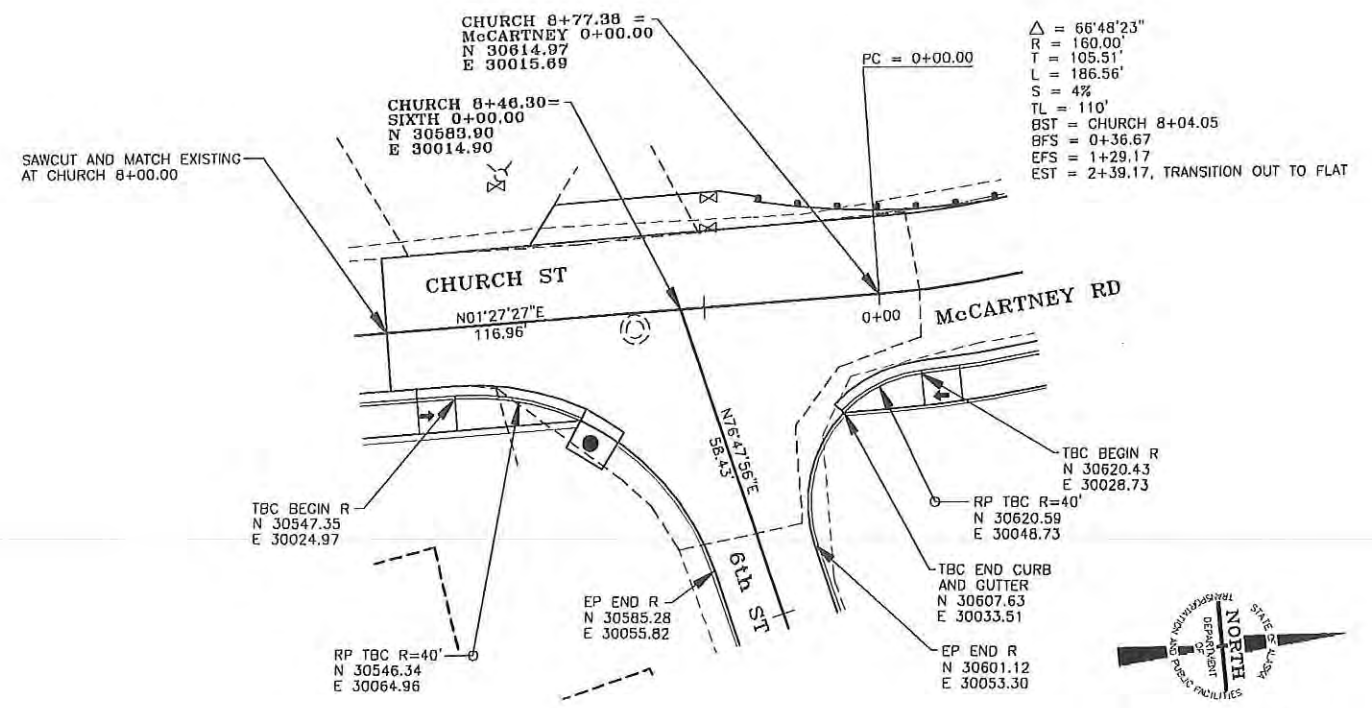
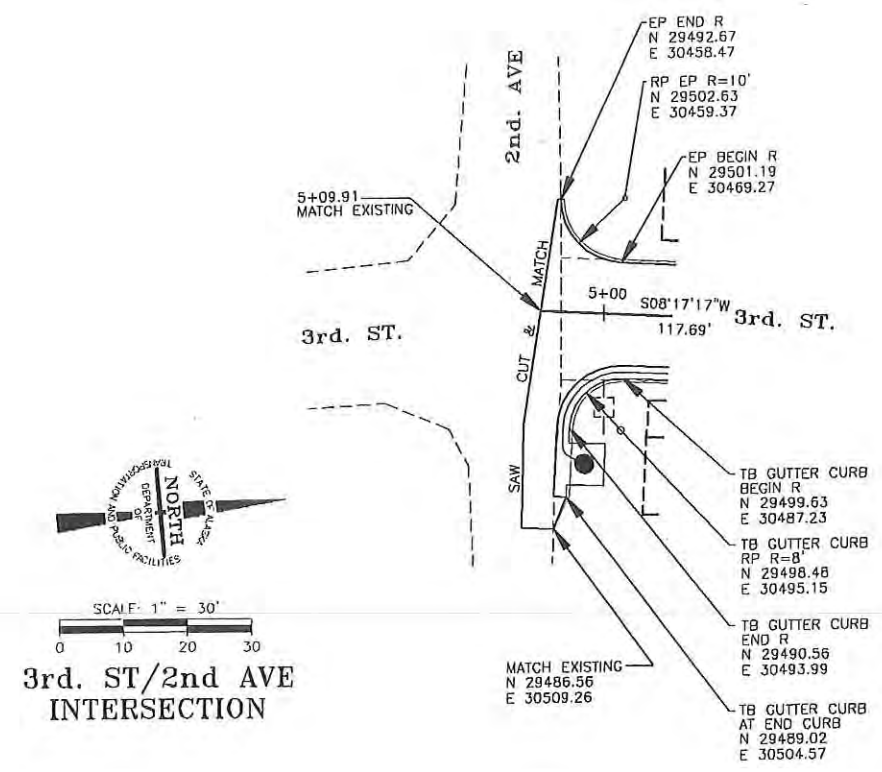
$\Delta = 68^{\circ}10'02''$
 $R = 175.00'$
 $T = 118.41'$
 $L = 208.20'$
 $S = 2\%$ LT TO RT
 $TL = 90'$
 $BST = 0+12$, TRANS. IN FROM KAKE RD PROFILE
 $BFS = 1+02.00$
 $EFS = 1+76.47$
 $EST = 2+66.47$, TRANSITION OUT TO FLAT

$\Delta = 11^{\circ}10'48''$
 $R = 100.00'$
 $T = 9.79'$
 $L = 19.51'$
 TYP. SECT. IS 2% RIGHT TO LEFT, NO SUPERELEVATION TRANSITION IN FROM KAKE RD PROFILE AS REQUIRED



NOTE:
 ALL ROADWAY HORIZONTAL ALIGNMENTS ARE CHANGED FROM ORIGINAL DESIGN BASED ON FIELD CONDITIONS ENCOUNTERED. HORIZONTAL AND VERTICAL ALIGNMENTS ARE AS SHOWN ON THIS SHEET. ADDITIONALLY, ALL STREET NAMES WERE CHANGED PER THE CONTRACT. SEE SHEETS 43-43A FOR NEW STREET NAMES.

As-Built Plans
James T. Mayne 2/8/99



NOTE:
ALL ROADWAY HORIZONTAL ALIGNMENTS ARE CHANGED FROM ORIGINAL DESIGN BASED ON FIELD CONDITIONS ENCOUNTERED. HORIZONTAL AND VERTICAL ALIGNMENTS ARE AS SHOWN ON THIS SHEET. ADDITIONALLY, ALL STREET NAMES WERE CHANGED PER THE CONTRACT. SEE SHEETS 43-43A FOR NEW STREET NAMES.

As-Built Plans
Jane O'Malley 2/8/99

NOTE:
THE PORTION OF SECOND ST BETWEEN SECOND AVE AND FRONT ST IS TO BE PAVED AT 14 FEET WIDE WITH 6" UNPAVED SHOULDERS. TRANSITION 2% RT TO LT CROSS-SLOPE AS REQUIRED TO MATCH EXISTING AT EACH END

EP END R
N 31263.25
E 29794.83

EP R=15'
N 31273.11
E 29809.81

EP BEGIN R
N 31290.28
E 29804.62

$\Delta = 12'46'25''$
R = 400.00'
T = 44.77'
L = 89.18'
NO SUPERELEVATION



$\Delta = 11'21'54''$
R = 1500.00'
T = 149.26'
L = 297.54'
THIS CURVE REQUIRES NO SUPERELEVATION (TRANSITION FROM PREVIOUS CURVE CONTIGUES INTO THIS CURVE)

EP END R
N 31551.26
E 29444.99

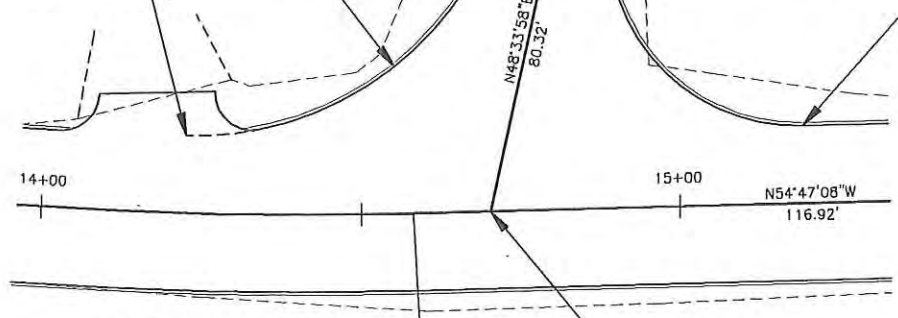
RP EP R=50'
N 31513.78
E 29478.07

EP BEGIN R
N 31552.97
E 29509.12

EP END R
N 31562.39
E 29433.42

RP EP R=30'
N 31584.89
E 29413.57

EP BEGIN R
N 31609.40
E 29430.87



$\Delta = 08'41'02''$
R = 650.00'
T = 49.35'
L = 98.52'
S = 2%
TL = 90'
BST = 12+99.57
BFS = 13+89.57
EFS = 14+28.09
EST = 15+18.09

PT = 14+58.09

McCARTNEY 14+70.28 =
TRAILER PARK 7+00.05
N 31590.93
E 29477.84



SCALE: 1" = 30'
0 10 20 30

McCARTNEY/KAKE TRIBAL TRAILER PARK INT. 2
INTERSECTION

EP END R
N 31243.42
E 29859.67

McCARTNEY 9+39.41 =
TRAILER PARK 0+00.00
N 31250.03

EP R=50'
N 31193.50
E 29856.74

EP BEGIN R
N 31235.52
E 29883.85

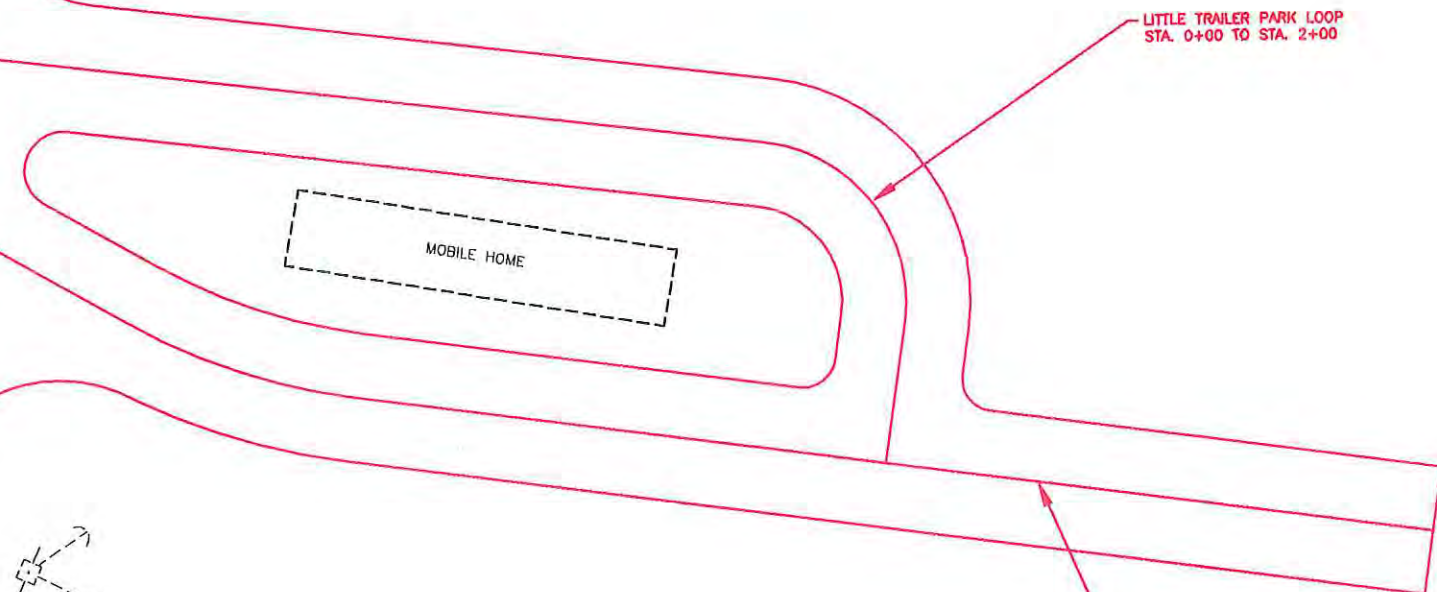
PC = 9+23.52

PT = 8+97.16

$\Delta = 55'25'44''$
R = 120.00'
T = 63.04'
L = 116.09'
S = 4%
TL = 110'
4% SUPER CONTIGUES IN FROM PREVIOUS CURVE
EFS = 8+60.49
EST = 9+70.49 (SUPER TRANSITIONS INTO NEXT CURVE)

N57°28'00"W
28.36'

9+00



LITTLE TRAILER PARK LOOP
STA. 0+00 TO STA. 2+00

LITTLE TRAILER PARK LOOP
STA. 0+00 TO STA. 2+00



SCALE: 1" = 30'
0 10 20 30

McCARTNEY/KAKE TRIBAL TRAILER PARK INT. 1
AND LITTLE TRAILER PARK LOOP
INTERSECTIONS

NOTE:
ALL ROADWAY HORIZONTAL ALIGNMENTS ARE CHANGED FROM ORIGINAL DESIGN BASED ON FIELD CONDITIONS ENCOUNTERED. HORIZONTAL AND VERTICAL ALIGNMENTS ARE AS SHOWN ON THIS SHEET. ADDITIONALLY, ALL STREET NAMES WERE CHANGED PER THE CONTRACT. SEE SHEETS 43-43A FOR NEW STREET NAMES.

As-Built Plans

James Mayer 2/8/99

PIPE INSTALLATION SUMMARY

ROADWAY	PIPE	STATION	OFFSET	SIZE	FROM	TO	REMARKS
RESERVOIR ROAD	P-1	0+22	CENTERLINE	18" x 55'			
RESERVOIR ROAD	P-2	0+59	RIGHT	24" x 58'			
RESERVOIR ROAD	P-3	1+37.23	LEFT	12" x 10'	S-1	DITCH	
RESERVOIR ROAD	P-4	2+99	CENTERLINE	24" x 47'			DITCH BLOCK LEFT, SKEW AS SHOWN
RESERVOIR ROAD	P-84	4+63	RIGHT	24" x 57'			UNSURVEYED APPROACH
RESERVOIR ROAD	P-5	5+40	LEFT	12" x 10'	S-2	DITCH	
RESERVOIR ROAD	P-6	8+25	LEFT	12" x 10'	S-3	DITCH	
RESERVOIR ROAD	P-7	9+00	RIGHT	24" x 64'			NEW THRU-APPROACH- N.I.C.
RESERVOIR ROAD	P-8	10+05	RIGHT	24" x 40'			UNSURVEYED DRIVEWAY- N.I.C.
RESERVOIR ROAD	P-9	10+50	LEFT	12" x 10'	S-4	DITCH	
RESERVOIR ROAD	P-10	15+50	CENTERLINE	18" x 31'			
KAKE ROAD	P-11	5+04	RIGHT	12" x 38'	S-5	S-25	
KAKE ROAD	P-12	7+33	CENTERLINE	24" x 80'			
KAKE ROAD	P-13	7+48	RIGHT	12" x 14'	S-6	OUTFALL	ARMOR SLOPES AS REQUIRED
KAKE ROAD	P-14	8+02	RIGHT	12" x 108'	S-7	S-8	
KAKE ROAD	P-15	10+54	RIGHT	12" x 48'	S-8	S-9	
KAKE ROAD	P-16	10+77	CENTERLINE	24" x 41'	S-9	OUTFALL	
KAKE ROAD	P-17	11+17	RIGHT	12" x 78'	S-10	S-9	
KAKE ROAD	P-18	12+43	RIGHT	12" x 189'	S-11	S-10	
KAKE ROAD	P-05	16+83	RIGHT	12" x 26'			
KAKE ROAD	P-19	17+36	CENTERLINE	24" x 29'	S-12	OUTFALL	CONNECT OUTLET TO EXISTING PIPE
KAKE ROAD	P-86	17+37.21	RIGHT	12" x 10'	DITCH	S-12	
KAKE ROAD	P-20	17+55	RIGHT	18" x 33'	S-13	S-12	
KAKE ROAD	P-21	17+79	RIGHT	12" x 16'	S-14	S-13	
KAKE ROAD	P-22	18+05	RIGHT	18" x 70'	S-15	S-13	
KAKE ROAD	P-23	18+40	RIGHT	18" x 10'	DITCH	S-15	
KAKE ROAD	P-24	18+77	RIGHT	18" x 48'			
KAKE ROAD	P-25	24+75	RIGHT	12" x 30'			
KAKE ROAD	P-26	25+90	RIGHT	12" x 14'			
KAKE ROAD	P-27	26+46	RIGHT	12" x 27'			
KAKE ROAD	P-28	27+75	RIGHT	12" x 10'	S-16	DITCH	REPLACED BY CURB DRAIN
KAKE ROAD	P-29	33+12	RIGHT	24" x 27'			
KAKE ROAD	P-30	34+15	RIGHT	12" x 10'	S-17	DITCH	REPLACED BY CURB DRAIN
CHURCH STREET	P-31	0+30	RIGHT	24" x 48'			
CHURCH STREET	P-32	2+52.12	RIGHT	12" x 10'	DITCH	S-18	
CHURCH STREET	P-33	3+02.43	RIGHT	18" x 24'	DITCH	S-19	AND S-19 TO EXISTING PIPE (10')
CHURCH STREET	P-34	5+30	RIGHT	12" x 30'			
CHURCH STREET	P-35	6+30	RIGHT	12" x 30'			
CHURCH STREET	P-36	6+48	RIGHT	18" x 13'	DITCH	S-20	
CHURCH STREET	P-37	8+53	RIGHT	12" x 60'	S-21	OUTFALL	BENEATH 6th ST., ARMOR SLOPE AS REQ'D.
McCARTNEY ROAD	P-38	0+12.33	RIGHT	12" x 12'	S-22	OUTFALL	ARMOR SLOPE AS REQ'D.
McCARTNEY ROAD	P-39	0+15	CENTERLINE	36" x 66'			ALIGN NEW PIPE TO FIT STREAM
McCARTNEY ROAD	P-40	3+50	CENTERLINE	18" x 37'	S-23	OUTFALL	SKEW AS SHOWN, ARMOR SLOPE AS REQ'D.
McCARTNEY ROAD	P-41	3+50	RIGHT	18" x 10'	S-24	S-23	
McCARTNEY ROAD	P-42	4+95	LEFT	18" x 20'			BENEATH STAIR APPROACH
McCARTNEY ROAD		9+10	RIGHT	6" x 39'			
McCARTNEY ROAD	P-43	10+19	CENTERLINE	24" x 40'			
McCARTNEY ROAD	P-44	14+20	LEFT	18" x 34'			
McCARTNEY ROAD	P-45	14+76	LEFT	24" x 54'			BENEATH TRAILER PARK ROAD
McCARTNEY ROAD	P-46	15+63	CENTERLINE	24" x 36'			
HATCHERY ROAD	P-47	0+28	CENTERLINE	24" x 49'			
HATCHERY ROAD	P-48	3+20	CENTERLINE	12" x 23'			
HATCHERY ROAD	P-48A	3+05	CENTERLINE	18" x 40'			SKEWED AHEAD RIGHT
HATCHERY ROAD	P-49	7+50	CENTERLINE	12" x 27'			LOCATE AT EXISTING PIPE TO BE REMOVED
HATCHERY ROAD	P-50	9+50	CENTERLINE	12" x 24'			LOCATE AT EXISTING PIPE TO BE REMOVED
HUD ROAD	P-51	0+38	CENTERLINE	24" x 47'	S-25	DITCH	
HUD ROAD	P-52	1+27	LEFT	12" x 178'	S-26	S-25	
HUD ROAD	P-53	2+70	LEFT	12" x 90'	S-27	S-26	
HUD ROAD	P-54	3+20	LEFT	12" x 10'	DITCH	S-27	DELETED
HUD ROAD	P-55	4+36	LEFT	12" x 226'	S-28	S-27	
HUD ROAD	P-56	4+69	LEFT	12" x 16'	DITCH	P-55	SAGGIE CONNECTION TO P-55- DELETED
HUD ROAD	P-57	5+19.44	LEFT	12" x 16'	DITCH	S-28	DELETED
HUD ROAD	P-58	7+45	CENTERLINE	18" x 47'			
HUD ROAD	P-59	7+62	CENTERLINE	12" x 32'	S-29	DITCH	
HUD ROAD	P-60	8+24	RIGHT	12" x 36'			
HUD ROAD	P-61	8+55	RIGHT	12" x 10'			
HUD ROAD	P-62	9+30	LEFT	12" x 39'			
HUD ROAD	P-63	9+73	CENTERLINE	24" x 30'	DITCH	S-30	
HUD ROAD	P-64	9+73	LEFT	24" x 12'	S-30	OUTFALL	
HUD ROAD	P-65	9+91	LEFT	12" x 32'			
HUD ROAD	P-66	10+14	RIGHT	12" x 31'			
HUD ROAD	P-67	10+76	LEFT	12" x 27'			
HUD ROAD	P-68	11+49	RIGHT	12" x 28'			
HUD ROAD	P-69	12+17	LEFT	12" x 48'			
HUD ROAD	P-70	12+82	RIGHT	12" x 46'			
HUD ROAD	P-71	13+08	LEFT	12" x 29'			

NOTE:
 PIPE LENGTHS AND LOCATIONS AND STRUCTURE LOCATIONS DIFFER FROM THE ORIGINAL DESIGN BASED ON FIELD CONDITIONS ENCOUNTERED. ADDITIONALLY, STREET NAMES WERE CHANGED PER THE CONTRACT. SEE SHEETS 43-43A FOR NEW STREET NAMES.

2/9/99
 James P. [Signature]

As-Built Plans

PIPE INSTALLATION SUMMARY

ROADWAY	PIPE	STATION	OFFSET	SIZE	FROM	TO	REMARKS
HUD ROAD	P-72	13+65	RIGHT	12" x 27'			
HUD ROAD	P-73	13+66	LEFT	12" x 28'			
HUD ROAD	P-74	14+00	LEFT	12" x 8'	S-31	DITCH	
HUD ROAD	P-75	14+75	RIGHT	12" x 32'			
HUD ROAD	P-76	14+87	LEFT	12" x 30'			
HUD ROAD	P-77	15+04	RIGHT	12" x 28'			
HUD ROAD	P-78	15+61	LEFT	12" x 27'			
HUD ROAD	P-79	16+56	RIGHT	12" x 26'			
HUD ROAD	P-80	17+78	RIGHT	12" x 29'			
HUD ROAD	P-81	18+27	LEFT	12" x 31'			ACTUAL LENGTH 40', 9' BY OTHERS
THIRD STREET	P-82	5+03	LEFT	18" x 4'	S-32	EXIST. PIPE	
THIRD STREET	P-87	5+66	LEFT	4' LONG SECTION	S-32	EXIST. PIPE	DELETED
SECOND STREET	P-83	4+21	LEFT	18" x 49'	S-33	DITCH	

STRUCTURE INSTALLATION SUMMARY

ROADWAY	STRUCTURE	STATION	OFFSET	TYPE	TBC EL	REMARKS
RESERVOIR ROAD	S-1	1+37.23	TBC 12' LEFT	A	37.01	
RESERVOIR ROAD	S-2	3+40	TBC 12' LEFT	A	84.77	
RESERVOIR ROAD	S-3	8+25	TBC 12' LEFT	A	117.28	
RESERVOIR ROAD	S-4	10+50	TBC 12' LEFT	A	129.50	
KAKE ROAD	S-5	5+19	TBC 12' RIGHT	A	1084.43	
KAKE ROAD	S-6	7+48	TBC 12' RIGHT	A	1075.08	
KAKE ROAD	S-7	8+52.3	CENTER 19.5' RIGHT	FIELD	N/A, AS REQ'D.	CONNECT YARD DRAIN
KAKE ROAD	S-8	10+31.3	CENTER 19.5' RIGHT	FIELD	N/A, AS REQ'D.	CONNECT YARD DRAIN
KAKE ROAD	S-9	10+78.29	TBC 12' RIGHT	A	1087.37	
KAKE ROAD	S-10	11+53.3	CENTER 19.5' RIGHT	FIELD	N/A, AS REQ'D.	
KAKE ROAD	S-11	13+38.11	TBC 12' RIGHT	A	1097.14	
KAKE ROAD	S-12	17+37.21	TBC 12' RIGHT	A	1100.60	
KAKE ROAD	S-13	17+72	TBC 12' RIGHT	A	1100.24	DEPRESSED GRATE, ELEV. NOT CORRECTED
KAKE ROAD	S-14	17+86	CENTER 22' RIGHT	FIELD	N/A, AS REQ'D.	
KAKE ROAD	S-15	18+40	TBC 12' RIGHT	A	1100.87	
KAKE ROAD	S-16	27+75	TBC 12' RIGHT	A	1075.05	DELETED, SEE CD-14 BELOW
KAKE ROAD	S-17	34+15	TBC 12' RIGHT	A	1032.75	DELETED, SEE CD-15 BELOW
CHURCH STREET	S-18	2+52	TBC 12' RIGHT	A	TBC EL CONTROLLED BY EXIST. PAVEMENT	
CHURCH STREET	S-19	3+06	TBC 11.30' R.GHT	A	TBC EL CONTROLLED BY EXIST. PAVEMENT	
CHURCH STREET	S-20	6+48	TBC 11' RIGHT	A	TBC EL CONTROLLED BY EXIST. PAVEMENT	
CHURCH STREET	S-21	8+30	CENTER 20' RIGHT	FIELD	N/A, AS REQ'D.	
McCARTNEY ROAD	S-22	0+12	TBC 13' RIGHT	A	1004.12	
McCARTNEY ROAD	S-23	3+50	TBC 13' RIGHT	A	1030.62	
McCARTNEY ROAD	S-24	3+50	CENTER 23' RIGHT	FIELD	N/A, AS REQ'D.	
HUD ROAD	S-25	0+38	TBC 13' LEFT	A	1059.66	
HUD ROAD	S-26	2+20	TBC 13' LEFT	A	1073.15	
HUD ROAD	S-27	3+20	TBC 13' LEFT	A	1077.95	
HUD ROAD	S-28	3+50	TBC 13' LEFT	A	1096.71	
HUD ROAD	S-29	7+62	TBC 13' LEFT	A	1104.39	
HUD ROAD	S-30	9+72	TBC 13' LEFT	A	1107.06	
HUD ROAD	S-31	14+00	TBC 13' LEFT	A	1115.65	
THIRD STREET	S-32	5+05	TBC 22' LEFT	FIELD	AS REQUIRED	
SECOND STREET	S-33	4+11.45	TBC 12.72' LEFT	A	AS REQUIRED	GUTTER PAN GRATE (PAID AS FIELD INLET)

CURB DRAIN INSTALLATION SUMMARY

ROADWAY	CURB DRAIN	STATION	OFFSET	TBC EL	REMARKS
KAKE ROAD	CD-1	0+25	RIGHT		
KAKE ROAD	CD-2	2+28	RIGHT	1027.73	
KAKE ROAD	CD-3	22+20	RIGHT	1103.10	
KAKE ROAD	CD-4	24+00	RIGHT	1099.07	
KAKE ROAD	CD-5	25+55	RIGHT	1083.45	
KAKE ROAD	CD-6	29+13	RIGHT	1065.79	
KAKE ROAD	CD-7	32+20	RIGHT	1048.04	
CHURCH STREET	CD-8	1+05	RIGHT		TBC EL CONTROLLED BY EXISTING PAVEMENT
McCARTNEY ROAD	CD-9	1+50	RIGHT	1010.05	
McCARTNEY ROAD	CD-10	4+10	RIGHT	1052.77	DELETED
HUD ROAD	CD-11	11+75	LEFT	1109.45	
HUD ROAD	CD-12	16+00	LEFT	1123.90	
HUD ROAD	CD-13	17+75	LEFT	1128.74	
KAKE RD	CD-14	27+55	RIGHT	1073.35	CURB DRAIN REPLACES INLET TYPE "A"
KAKE RD	CD-15	33+70	RIGHT	1032.73	CURB DRAIN REPLACES INLET TYPE "A"

NOTES:
 1. ALL STATIONING AND ELEVATION INFORMATION GIVEN IS BASED OFF OF SURVEY INFORMATION PROVIDED BY THE CONTRACTOR. FIELD ADJUSTMENTS MAY BE NECESSARY. THE CONTRACTOR SHOULD CHECK THIS INFORMATION WITH HIS SURVEYOR FOR ACCURACY.
 2. STATIONING GIVEN FOR PIPES NOT CROSSING CENTERLINE IS AT THE MIDPOINT OF THE PIPE.
 3. PIPE LENGTHS ARE APPROXIMATE ONLY. FIELD ADJUSTMENTS MAY BE NECESSARY.

DATE: 3/11/98
 SHEET 34 OF 45
 PIPE, STRUCTURE AND CURB DRAIN INSTALLATION SUMMARIES
 BIA PROJECT No. 229 (1) AKSAS No. 72053 P:\KAE\72053\ASBUILT\SUMMARY

APPROACH & CURB CUT SUMMARY

STREET NAME	STATION	CURB CUT WIDTH	APPROACH WIDTH	REMARKS
RESERVOIR ROAD	0+71, RT.		14'	
RESERVOIR ROAD	4+64, RT.		22'	CITY OF KAKE PROPERTY ACCESS
RESERVOIR ROAD	10+06, RT.		24'	
KAKE ROAD	5+80, LT.		60'	
KAKE ROAD	5+93, RT.	60'		
KAKE ROAD	6+58, LT.		16'	
KAKE ROAD	6+91, RT.	16'		
KAKE ROAD	7+34, LT.		12'	
KAKE ROAD	7+95, RT.	25'		
KAKE ROAD	8+14, LT.		14'	
KAKE ROAD	8+63, RT.	12'		
KAKE ROAD	8+67, LT.		14'	
KAKE ROAD	9+28, LT.		30'	
KAKE ROAD	9+47, RT.	20'		
KAKE ROAD	10+02, LT.		20'	
KAKE ROAD	10+16, RT.	14'		
KAKE ROAD	10+49, LT.		18'	
KAKE ROAD	11+01, LT.		34'	
KAKE ROAD	11+08, RT.	36'		
KAKE ROAD	11+85, LT.		26'	
KAKE ROAD	12+06, RT.	18'		
KAKE ROAD	12+17, LT.		16'	
KAKE ROAD	12+81, RT.	12'		
KAKE ROAD	13+03, LT.		64'	2 APPROACHES
KAKE ROAD	13+23, RT.	14'		
KAKE ROAD	13+97, RT.	20'		
KAKE ROAD	14+95, LT.		86'	2 APPROACHES
KAKE ROAD	15+03, RT.	30'		
KAKE ROAD	15+70, RT.	36'		
KAKE ROAD	16+19, RT.	22'		
KAKE ROAD	16+23, LT.		26'	
KAKE ROAD	16+83, RT.	16'		
KAKE ROAD	16+92, LT.		42'	
KAKE ROAD	17+84, RT.	46'		2 APPROACHES
KAKE ROAD	17+84, LT.		16'	
KAKE ROAD	18+21, LT.		40'	
KAKE ROAD	18+76, RT.	16'		
KAKE ROAD	18+81, LT.		20'	
KAKE ROAD	19+18, LT.		16'	
KAKE ROAD	19+67, LT.		34'	PUBLIC HEALTH CLINIC
KAKE ROAD	19+69, RT.	96'		FIRE HALL
KAKE ROAD	20+75, RT.	42'		FIRE HALL
KAKE ROAD	21+25, LT.		28'	PUBLIC HEALTH CLINIC
KAKE ROAD	22+87, LT.		20'	TOTEM POLE
KAKE ROAD	24+56, LT.		32'	
KAKE ROAD	33+13, RT.	22'		
CHURCH ST.	0+29, RT.		26'	
CHURCH ST.	5+31, RT.		32'	
CHURCH ST.	6+26, RT.		22'	
CHURCH ST.	6+72, LT.		20'	
CHURCH ST.	6+79, RT.		14'	
CHURCH ST.	7+26, RT.		20'	
CHURCH ST.	7+54, LT.		24'	
CHURCH ST.	7+93, RT.	22'		
CHURCH ST.	7+95, LT.		16'	
CHURCH ST.	8+37, LT.		20'	
McCARTNEY ROAD	8+92, RT.		50'	LITTLE TRAILER PARK LOOP
McCARTNEY ROAD	14+16, LT.		18'	
HATCHERY ROAD	1+79, LT.		12'	
HATCHERY ROAD	5+83, LT.		10'	
HUD ROAD	1+73, RT.		28'	
HUD ROAD	1+83, RT.	16'		
HUD ROAD	2+34, LT.	10'		
HUD ROAD	2+59, RT.		56'	2 APPROACHES
HUD ROAD	2+99, LT.	16'		
HUD ROAD	3+30, RT.		46'	
HUD ROAD	3+87, LT.	22'		

APPROACH & CURB CUT SUMMARY, CONT.

STREET NAME	STATION	CURB CUT WIDTH	APPROACH WIDTH	REMARKS
HUD ROAD	4+03, RT.		18'	
HUD ROAD	4+58, RT.		42'	
HUD ROAD	5+03, LT.	74'		2 APPROACHES
HUD ROAD	5+22, RT.		42'	
HUD ROAD	5+62, RT.		18'	
HUD ROAD	5+69, LT.	16'		
HUD ROAD	6+13, LT.	30'		
HUD ROAD	6+22, RT.		12'	
HUD ROAD	7+88, LT.	14'		
HUD ROAD	8+26, RT.		26'	
HUD ROAD	8+55, LT.	20'		
HUD ROAD	9+31, LT.	24'		
HUD ROAD	9+40, RT.		24'	
HUD ROAD	9+91, LT.	18'		
HUD ROAD	10+13, RT.		22'	
HUD ROAD	10+76, LT.	20'		
HUD ROAD	11+49, RT.		20'	
HUD ROAD	12+18, LT.	36'		
HUD ROAD	12+73, RT.		18'	
HUD ROAD	13+07, LT.	18'		
HUD ROAD	13+64, RT.		18'	
HUD ROAD	13+66, LT.	18'		
HUD ROAD	14+73, RT.		24'	
HUD ROAD	14+86, LT.	18'		
HUD ROAD	15+06, RT.		20'	
HUD ROAD	15+62, LT.	18'		
HUD ROAD	16+56, RT.		18'	
HUD ROAD	17+78, RT.		18'	
HUD ROAD	18+20, LT.	36'		
HUD ROAD	18+33, RT.		38'	
THIRD STREET	0+64, LT.		36'	
THIRD STREET	1+47, LT.		20'	
THIRD STREET	3+64, LT.		20'	
THIRD STREET	3+84, RT.		22'	
THIRD STREET	4+36, LT.		30'	
SECOND STREET	2+12, RT.		20'	
SECOND STREET	2+15, LT.		20'	
SECOND STREET	3+25, LT.		24'	
SECOND STREET	4+31, LT.		20'	

* SEE APRON DETAIL SHEET NO. 17.

NOTE:

STATIONS, OFFSETS AND WIDTHS SHOWN ON THIS SHEET DIFFER FROM ORIGINAL DESIGN BASED ON FIELD CONDITIONS ENCOUNTERED. STREET NAMES WERE CHANGED PER THE CONTRACT. SEE SHEETS 43-43A FOR NEW STREET NAMES.

As-Built Plans

James O'Mayor 2/9/99

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PLOT:		
BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

KAKE
KAKE CITY STREETS
GRADING, PAVING AND DRAINAGE
ALASKA
B.I.A. PROJECT NO. 220(1)/STATE PROJECT NO. 72053
APPROACH & CURB CUT SUMMARY

DESIGNED BY: P. JONES	PROJECT NO. 72053
DRAWN BY: AUTOCADD	DATE: 1996
CHECKED BY: T. MOORE	SHEET 36 OF 45



CULVERT SUMMARY						
PIPE NO	STREET NAME	STATION	12"	24"	REMARKS	HOUSE #
P-2	KAKE ROAD	5+40		40	S-2 TO DITCH	
P-3	KAKE ROAD	7+20		40	S-5 TO DITCH	
P-4	KAKE ROAD	7+20 TO 8+70	150		S-3 TO S-4	
P-5	KAKE ROAD	10+30 TO 10+70	40		S-4 TO S-6	
P-6	KAKE ROAD	10+70		40	S-6 TO DITCH	
P-7	KAKE ROAD	10+70 TO 11+45	80		S-6 TO S-7	
P-8	KAKE ROAD	11+45 TO 12+60	110		S-7 TO S-8	
P-9	KAKE ROAD	17+10		40	S-9 TO DITCH	
P-10	KAKE ROAD	17+10 TO 18+20	110		S-9 TO S-10	
P-10A	KAKE ROAD	18+20 TO 18+50	30		S-10 TO S-11	
P-10B	KAKE ROAD	19+20		30	CROSS PIPE	
P-10C	KAKE ROAD	19+20		10	P-10B PIPE EXTENSION TO EXISTING DITCH	
P-11	KAKE ROAD	22+20RT	24		SCHOOL	
P-12	KAKE ROAD	26+30RT	24		SCHOOL	
P-13	KAKE ROAD	28+50RT	24		SCHOOL	
P-14	KAKE ROAD	32+90RT	23		APPROACH CULVERT	
TOTAL			620	200		
SEE SHEET 34						
P-1	HUD HOUSING ROAD	0+45		40	S-1 TO DITCH	
P-2	HUD HOUSING ROAD	0+45 TO 2+00	145		S-1 TO S-1	
P-3	HUD HOUSING ROAD	2+00 TO 3+00	95		S-1 TO S-2	
P-4	HUD HOUSING ROAD	3+00 TO 5+55	250		S-2 TO S-3	
P-5	HUD HOUSING ROAD	8+00RT	20		APPROACH CULVERT	#479
P-6	HUD HOUSING ROAD	8+30RT	10		FIRE HYDRANT	
P-7	HUD HOUSING ROAD	9+05LT	20		APPROACH CULVERT	#480
P-8	HUD HOUSING ROAD	9+05RT	24		APPROACH CULVERT	#481
P-9	HUD HOUSING ROAD	9+45		10	S-4 TO DITCH	
P-10	HUD HOUSING ROAD	9+10LT	20		APPROACH CULVERT	#482
P-11	HUD HOUSING ROAD	9+90LT	20		APPROACH CULVERT	#483
P-12	HUD HOUSING ROAD	10+50LT	24		APPROACH CULVERT	#484
P-13	HUD HOUSING ROAD	11+20LT	24		APPROACH CULVERT	#485
P-14	HUD HOUSING ROAD	11+80LT	20		APPROACH CULVERT	#486
P-15	HUD HOUSING ROAD	11+80LT	10		APPROACH CULVERT	
P-16	HUD HOUSING ROAD	12+10LT	24		APPROACH CULVERT	#487
P-17	HUD HOUSING ROAD	12+80LT	20		APPROACH CULVERT	#488
P-18	HUD HOUSING ROAD	13+40RT	20		APPROACH CULVERT	#489
P-19	HUD HOUSING ROAD	13+40LT	20		APPROACH CULVERT	#490
P-20	HUD HOUSING ROAD	14+50RT	16		APPROACH CULVERT	#491
P-21	HUD HOUSING ROAD	14+60LT	16		APPROACH CULVERT	#492
P-22	HUD HOUSING ROAD	14+80RT	20		APPROACH CULVERT	#493
P-23	HUD HOUSING ROAD	15+35LT	14		APPROACH CULVERT	#494
P-24	HUD HOUSING ROAD	16+30RT	14		APPROACH CULVERT	#495
P-25	HUD HOUSING ROAD	17+50RT	20		APPROACH CULVERT	#497
P-26	HUD HOUSING ROAD	17+70RT	10		FIRE HYDRANT	
P-27	HUD HOUSING ROAD	18+00	20		APPROACH CULVERT	#496
P-28	HUD HOUSING ROAD	18+75	20		APPROACH CULVERT	#499
TOTAL			916	80	LF	
SEE SHEET 34						
P-1	CHURCH STREET	0+20	10		S-1 DRAIN PIPE	
P-2	CHURCH STREET	0+20	30		APPROACH CULVERT	SCHOOL
P-3	CHURCH STREET	2+70 TO 6+30	332		S-1 TO S-2	
TOTAL			372		LF	

CULVERT SUMMARY - CONT.						
PIPE NO	STREET NAME	STATION	12"	24"	REMARKS	HOUSE #
P-1	McCARTNEY STREET	0+10LT			CULVERT EXTENSION 36"x12"	
P-2	McCARTNEY STREET	1+15	10		S-1 DRAIN PIPE	
P-3	McCARTNEY STREET	3+05	10		S-2 DRAIN PIPE	
P-4	McCARTNEY STREET	4+55	10		S-3 DRAIN PIPE	
P-5	McCARTNEY STREET	8+80RT	24		APPROACH CULVERT	
P-6	McCARTNEY STREET	9+75RT	24		APPROACH CULVERT	
P-7	McCARTNEY STREET	9+97		40	CROSS CULVERT	
P-8	McCARTNEY STREET	15+15		40	CROSS CULVERT	
TOTAL			78	80	LF	
SEE SHEET 34						
P-1	KAKE TRIBAL TRAILER COURT	1+15LT	18		APPROACH CULVERT	
P-2	KAKE TRIBAL TRAILER COURT	2+30RT	24		APPROACH CULVERT	
P-3	KAKE TRIBAL TRAILER COURT	4+15RT	34		APPROACH CULVERT	
P-4	KAKE TRIBAL TRAILER COURT	7+00	30		EOP	
TOTAL			106		LF	
SEE SHEET 34						
P-1	HATCHERY ROAD	0+20		20	CROSS CULVERT	
P-2	HATCHERY ROAD	3+50	30		APPROACH CULVERT	
P-3	HATCHERY ROAD	3+50		20	CROSS CULVERT	
P-4	HATCHERY ROAD	7+00		20	CROSS CULVERT	
P-5	HATCHERY ROAD	9+50		24	CROSS CULVERT	
TOTAL			30	80	LF	
SEE SHEET 34						
P-1	RESERVOIR ROAD	0+20		10	CROSS CULVERT	
P-2	RESERVOIR ROAD	1+36	10		CROSS CULVERT	
P-3	RESERVOIR ROAD	5+75		10	S-1 DRAIN PIPE	
P-4	RESERVOIR ROAD	8+10		10	S-2 DRAIN PIPE	
P-5	RESERVOIR ROAD	11+00		10	S-3 DRAIN PIPE	
P-6	RESERVOIR ROAD	15+6		30	S-4 DRAIN PIPE	
TOTAL			40	60	LF	
SEE SHEET 34						
P-1	2ND STREET	3+90 TO 4+15	12		S-1 TO S-2	
TOTAL			12		LF	

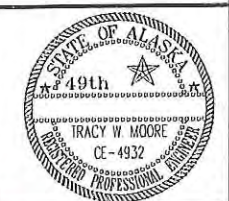
CULVERT REMOVAL SUMMARY				
STREET NAME	STATION	LENGTH	REMARKS	HOUSE #
RESERVOIR ROAD	0+20	24'		
RESERVOIR ROAD	15+60	30'		
KAKE ROAD	4+29	48'		
KAKE ROAD	7+33	80'		
KAKE ROAD	7+96	30'		
KAKE ROAD	8+64, RT.	20'		
KAKE ROAD	9+47, RT.	30'		
KAKE ROAD	10+15, RT.	20'		
KAKE ROAD	10+78	40'		
KAKE ROAD	11+07, RT.	48'		
KAKE ROAD	11+92	68'		
KAKE ROAD	12+80	20'		
KAKE ROAD	13+22	20'		
KAKE ROAD	16+20	30'		
KAKE ROAD	16+85, RT.	24'		
KAKE ROAD	17+36	33'		
KAKE ROAD	17+68, RT.	20'		
KAKE ROAD	17+98, RT.	28'		
KAKE ROAD	18+77, RT.	44'		
KAKE ROAD	26+46, RT.	26'		
KAKE ROAD	33+11, RT.	20'		
CHURCH STREET	0+32, RT.	40'		
CHURCH STREET	3+03, RT.	25'		
CHURCH STREET	6+30, RT.	36'		
CHURCH STREET	6+75, RT.	30'		
McCARTNEY ROAD	0+17	52'		
HATCHERY ROAD	0+28	50'		
HATCHERY ROAD	2+90	20'		
HATCHERY ROAD	3+15	24'		
HATCHERY ROAD	7+50	26'		
HATCHERY ROAD	9+50	40'		
HUD ROAD	0+27	40'		
HUD ROAD	1+84, LT.	20'		
HUD ROAD	3+00, LT.	20'		
HUD ROAD	3+87, LT.	38'		
HUD ROAD	4+55, LT.	85'		
HUD ROAD	9+40, RT.	33'		
HUD ROAD	9+73	40'		
HUD ROAD	9+90, LT.	22'		
HUD ROAD	10+14, RT.	30'		
HUD ROAD	10+76, LT.	26'		
HUD ROAD	11+50, RT.	26'		
HUD ROAD	12+18, RT.	46'		
HUD ROAD	12+73, RT.	24'		
HUD ROAD	13+06, LT.	24'		
HUD ROAD	13+65, RT.	26'		
HUD ROAD	13+66, LT.	24'		
HUD ROAD	14+50, RT.	15'		
HUD ROAD	14+74, RT.	30'		
HUD ROAD	14+86, LT.	26'		
HUD ROAD	15+05, RT.	30'		
HUD ROAD	15+62, LT.	26'		
HUD ROAD	16+56, RT.	26'		
HUD ROAD	17+78, RT.	24'		
HUD ROAD	18+27, LT.	30'		

CULVERT REMOVAL SUMMARY-CONT.				
STREET NAME	STATION	LENGTH	REMARKS	HOUSE #
3rd. STREET	5+05, LT.	4'		
2nd. STREET	4+25, LT.	45'		

LEGEND:
 △ SEE CROSS CULVERT INSTALLATION DETAIL, SHEET 18

NOTE:
 LOCATIONS AND LENGTHS GIVEN DIFFER FROM THE ORIGINAL DESIGN BASED ON FIELD CONDITIONS ENCOUNTERED.
 STREET NAMES WERE CHANGED PER THE CONTRACT. SEE SHEETS 43-43A FOR NEW STREET NAMES.

As-Built Plans
 James C. Moore 2/9/99

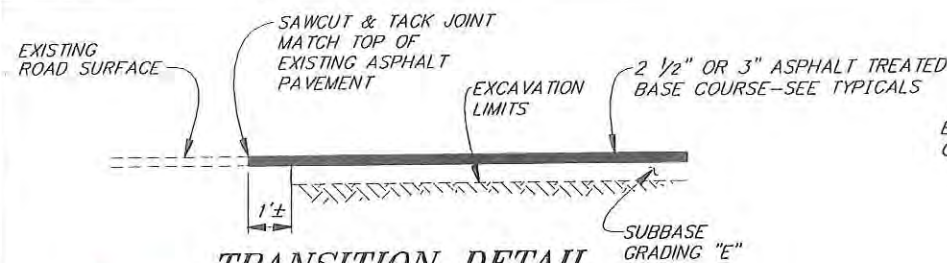


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RECORD OF REVISIONS		

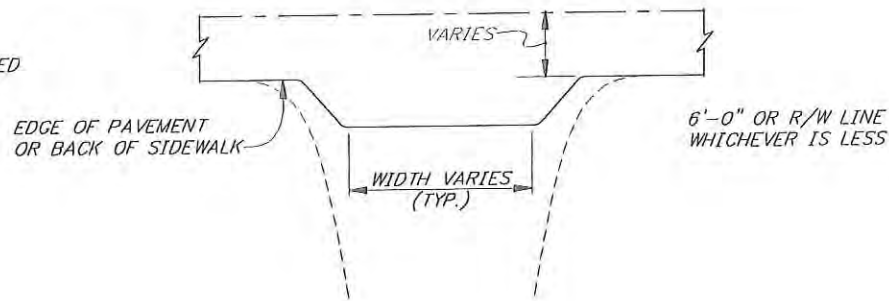
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

KAKE
 KAKE CITY STREETS
 GRADING, PAVING AND DRAINAGE
 B.I.A. PROJECT NO. 229(1)/STATE PROJECT NO. 72053
CULVERT INSTALLATION & REMOVAL SUMMARY

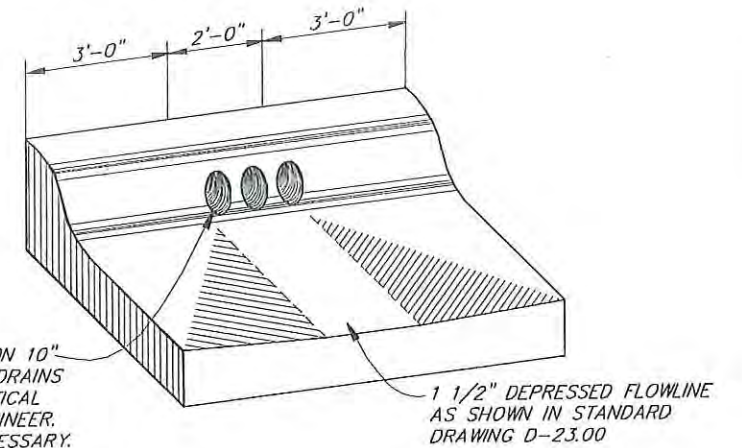
DESIGNED BY: P. JONES	PROJECT NO. 72053
DRAWN BY: BA/KS	DATE: 1996
CHECKED BY: T. MOORE	SHEET 36 OF 46



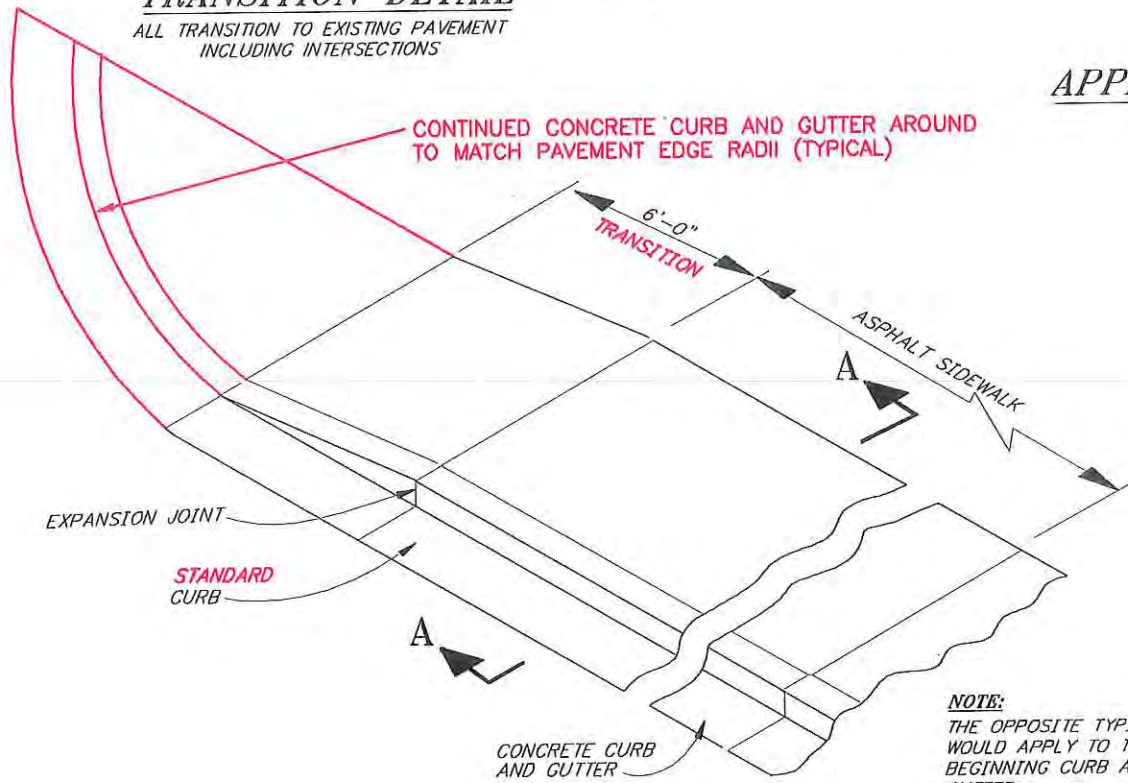
TRANSITION DETAIL
ALL TRANSITION TO EXISTING PAVEMENT INCLUDING INTERSECTIONS



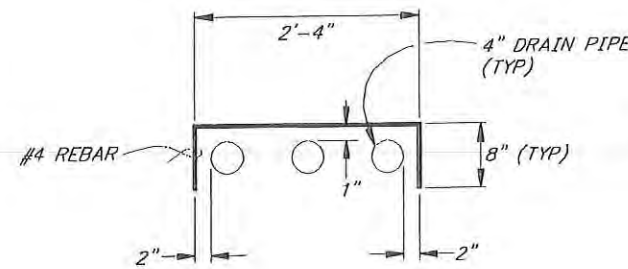
APPROACH APRON DETAIL
SEE APPROACH SUMMARY SHEET 35



3 - 4" GALVANIZED RMC DRAIN PIPES ON 10" CENTERS. (7 FT. MIN. LENGTH) CURB DRAINS SHALL BE LOCATED AT ALL "SAG" VERTICAL CURVES AND BE APPROVED BY THE ENGINEER. MINOR FIELD ADJUSTMENTS MAY BE NECESSARY.

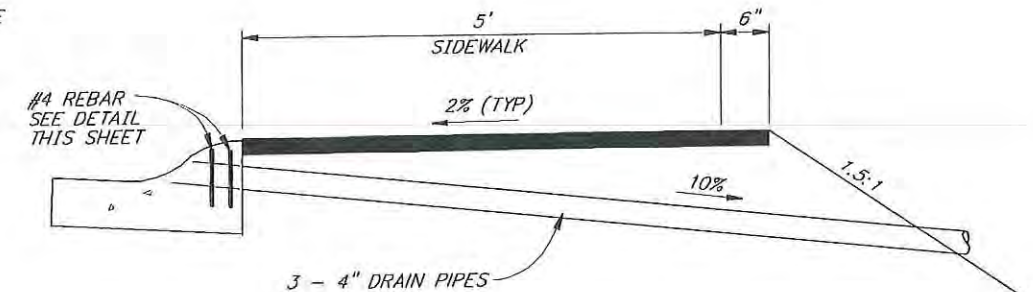


TYPICAL SIDEWALK, CURB & GUTTER DETAIL

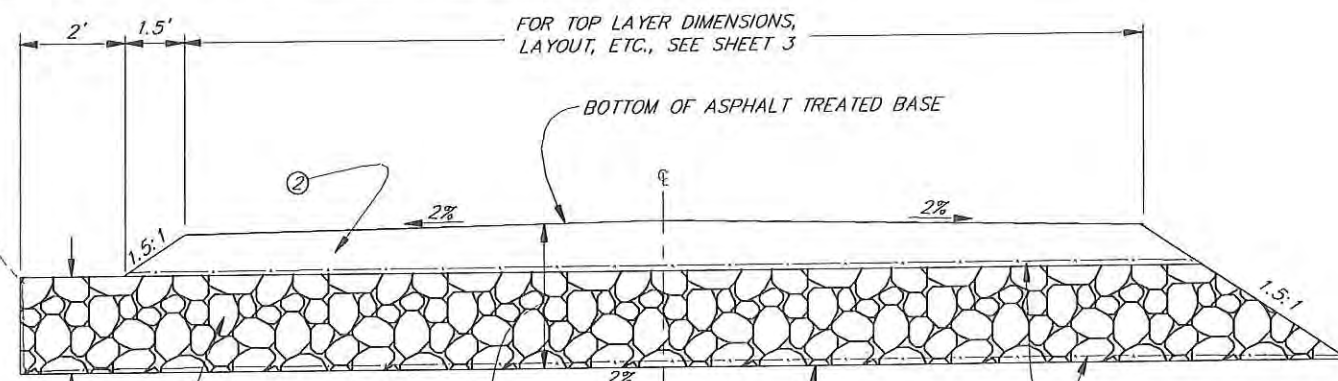


REBAR DETAIL

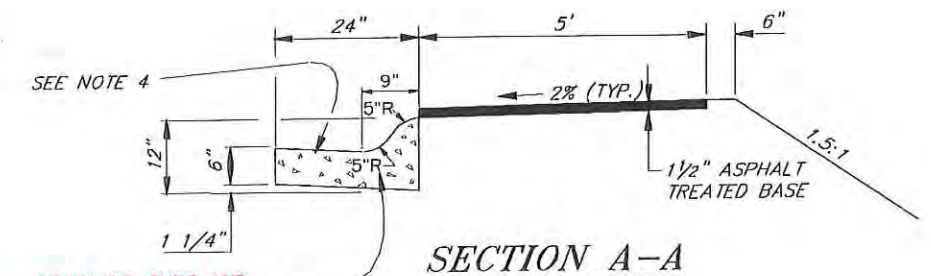
REBAR NOTE:
2-NO. 4, GRADE 50 REBARS SHALL BE PLACED AS SHOWN FOR EACH CURB DRAIN. 2 INCHES OF CLEARANCE FROM THE DRAIN PIPES SHALL BE MAINTAINED ON ALL SIDES.



CURB DRAIN DETAILS
SEE SUMMARY ON SHEET 20.



ROAD DRAIN TYPICAL SECTION



STANDARD CURB AND GUTTER TYPE 1 (CONCRETE)
SEE STD. DWG. I-20.11

SECTION A-A

SIDEWALK, CURB AND GUTTER NOTES

1. CURB AND GUTTER EXPANSION JOINTS SHALL BE AT EACH END OF CURB RETURNS AND CURB CUTS. SPACING SHALL BE AT 30'-0" MAX. INTERVALS. JOINT FILLER SHALL EXTEND THE FULL DEPTH OF THE CONCRETE.
2. ALL CURB AND GUTTER SHALL BE CLASS "A" CONCRETE.
3. DUMMY JOINTS SHALL EXTEND INTO THE CONCRETE 2" AND BE 1/8" WIDE ON TEN FOOT CENTERS.

NOTE:

STREET NAMES WERE CHANGED PER THE CONTRACT. SEE SHEETS 43-43A FOR NEW STREET NAMES.

As-Built Plans

James O. Moore 2/9/99

- LEGEND**
- ① EXISTING GROUND
 - ② 12" SUBBASE, GRADING "E"
 - ③ UNCLASSIFIED EXCAVATION
 - ④ GEOTEXTILE SEPARATION FABRIC
 - ⑤ 2 FT. MINIMUM DRAIN ROCK
 - ⑥ LIMITS OF EXCAVATION

KAKE ROAD, 1+90
KAKE ROAD, 2+25
KAKE ROAD, 3+50
KAKE ROAD, 25+50
McCARTNEY ROAD, 7+25
3rd STREET, 1+60
3rd STREET, 2+70

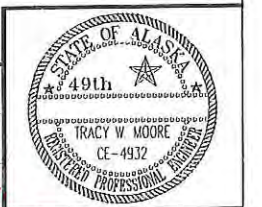
THESE DRAINS BUILT 12' WIDE, RATHER THAN 25' WIDE, PAID AS SINGLE DRAIN

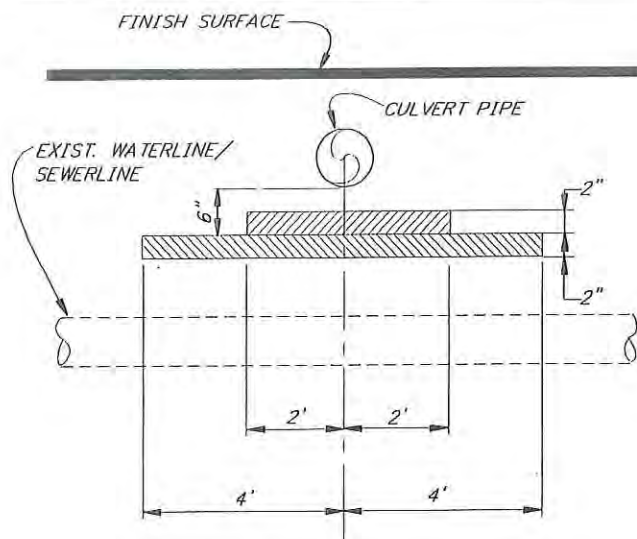
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BY: DATE: DESCRIPTION OF CHANGE:		
RECORD OF REVISIONS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

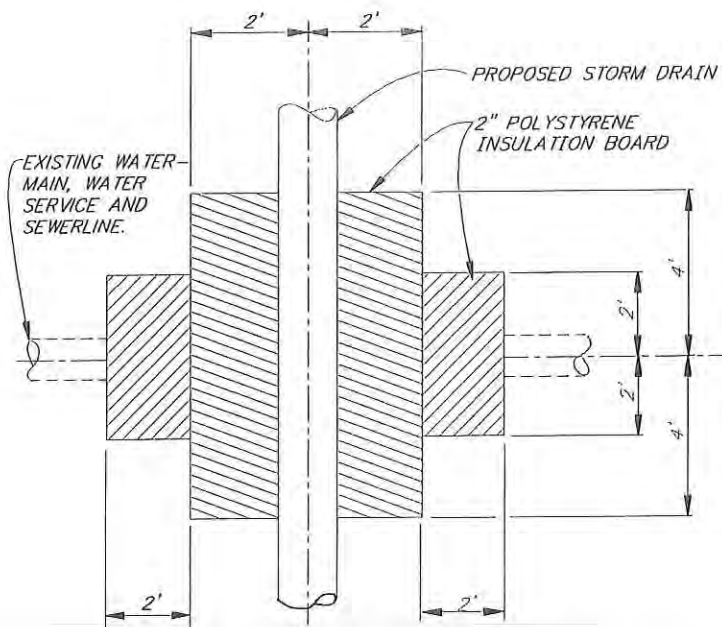
KAKE
KAKE CITY STREETS
GRADING, PAVING AND DRAINAGE
B.I.A. PROJECT NO. 229(1)/STATE PROJECT NO. 72053
ALASKA
MISCELLANEOUS SIDEWALK & CURB DRAIN DETAILS

DESIGNED BY: P. JONES	PROJECT NO. 72053
DRAWN BY: B.A.	DATE: 1996
CHECKED BY: T. MOORE	SHEET 37 OF 46

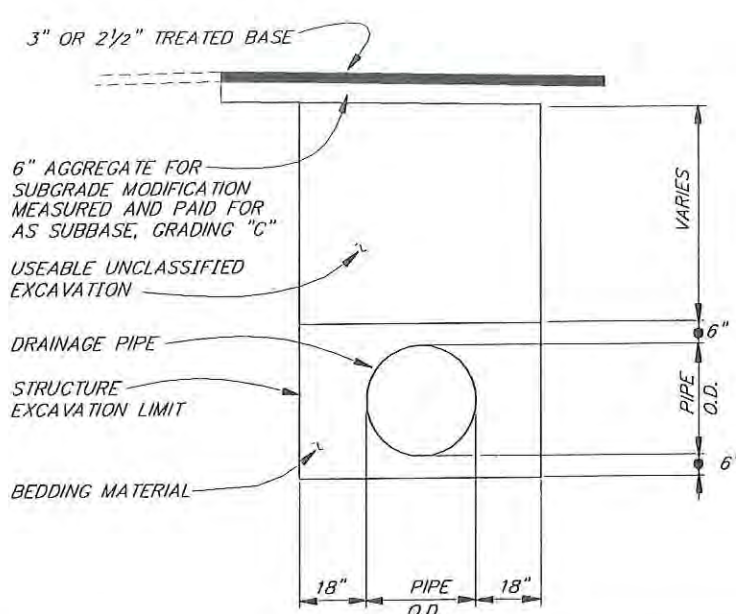




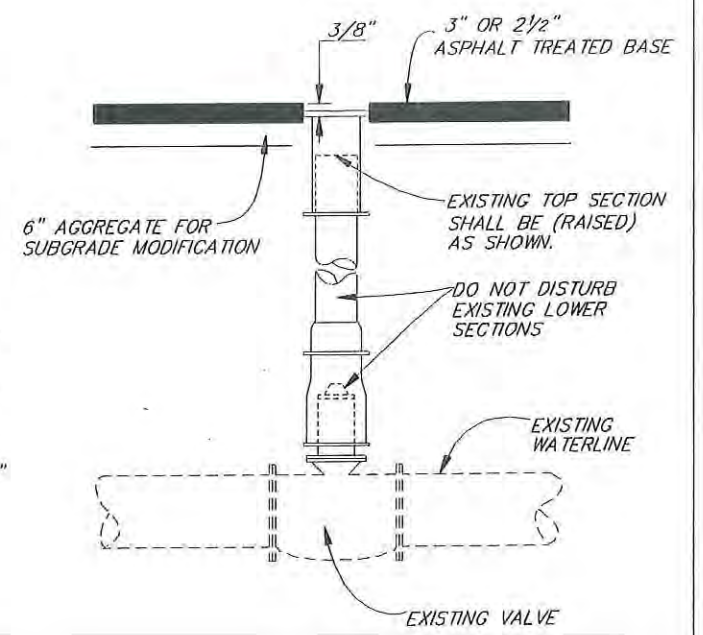
**SECTION
RIGID INSULATION**



PLAN

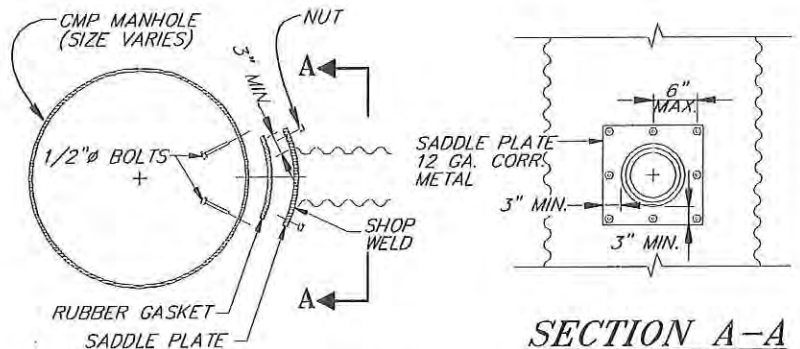


**CROSS CULVERT, UNDERDRAIN
INSTALLATION DETAIL**
SEE SUMMARY TABLE SHEET 34 FOR LOCATIONS



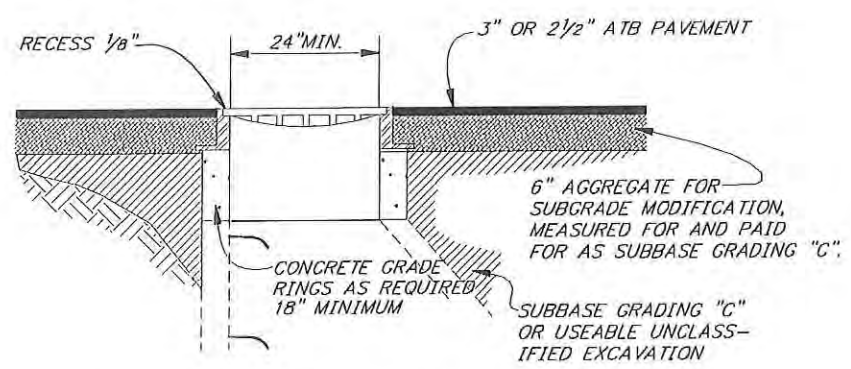
**VALVE BOX
ADJUSTMENT DETAIL**
SEE SUMMARY TABLE SHEET 40 FOR LOCATIONS

- NOTES:**
1. INSTALL INSULATION AS SHOWN.
 2. WRAP AROUND INSULATION WITH R-FACTOR EQUAL TO 4" RIGID BOARD MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.

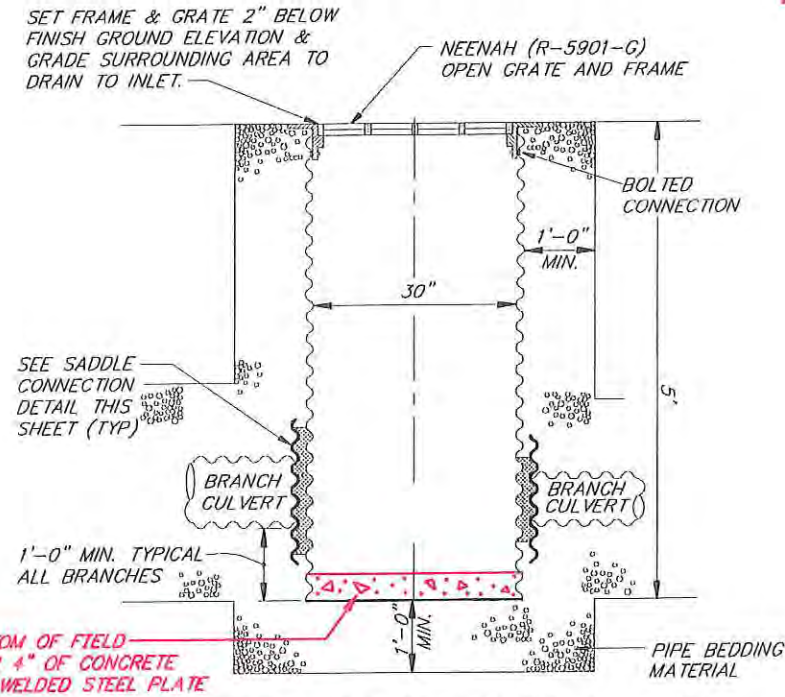


SADDLE CONNECTION DETAIL

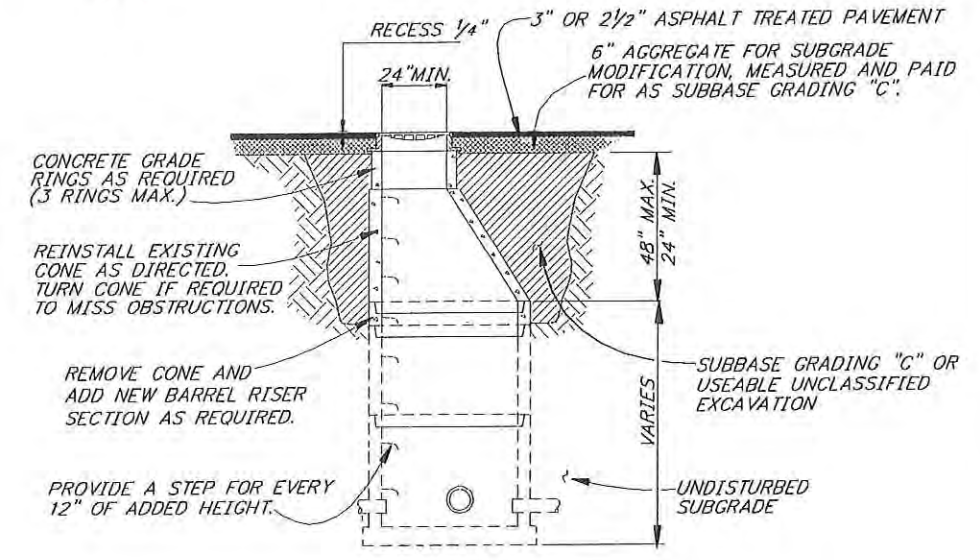
NOTE:
AT THE CONTRACTOR'S OPTION, FACTORY BRANCH CULVERT SECTIONS MAY BE FABRICATED ONTO THE FIELD INLETS IN LIEU OF SADDLE CONNECTION.



ADJUST SEWER MANHOLE DETAIL
SEE SUMMARY TABLE SHEET 40 FOR LOCATIONS



TYPICAL FIELD INLET DETAIL
SEE SUMMARY TABLE SHEET 34 FOR LOCATIONS



RECONSTRUCT SEWER MANHOLE DETAIL
SEE SUMMARY TABLE SHEET 40 FOR LOCATIONS

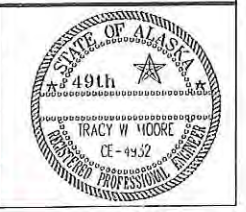
As-Built Plans
James O'Way 2/9/99

PATH: P:\KAE\72053\ASBUILT\MISC2		
PLOT:		
BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

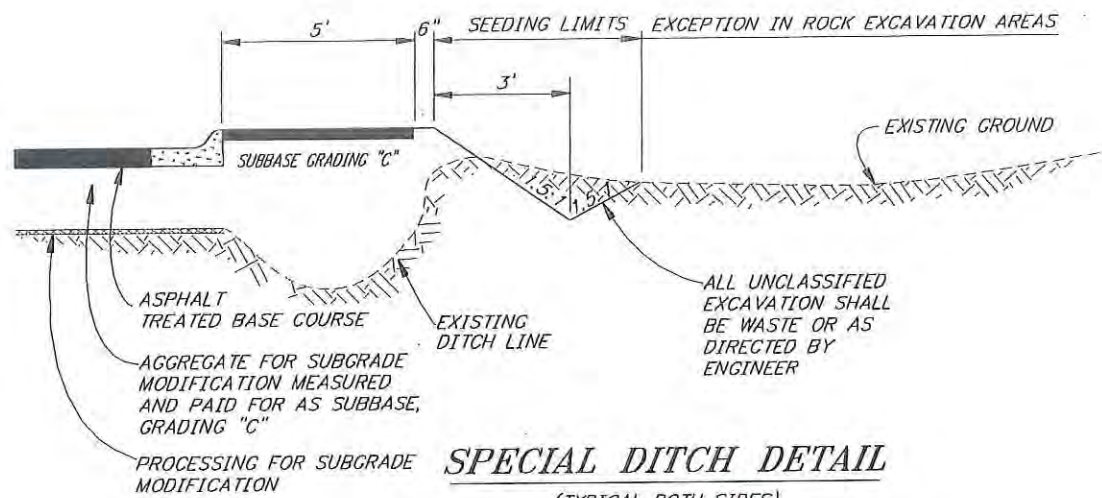
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

KAKE
KAKE CITY STREETS
GRADING, PAVING AND DRAINAGE
ALASKA
B.I.A. PROJECT NO. 229(1)/STATE PROJECT NO. 72053
MISCELLANEOUS MANHOLE & FIELD INLET DETAILS

DESIGNED BY:	P. JONES	PROJECT NO.	72053
DRAWN BY:	B.A.	DATE:	1996
CHECKED BY:	T. MOORE	SHEET	30 OF 45



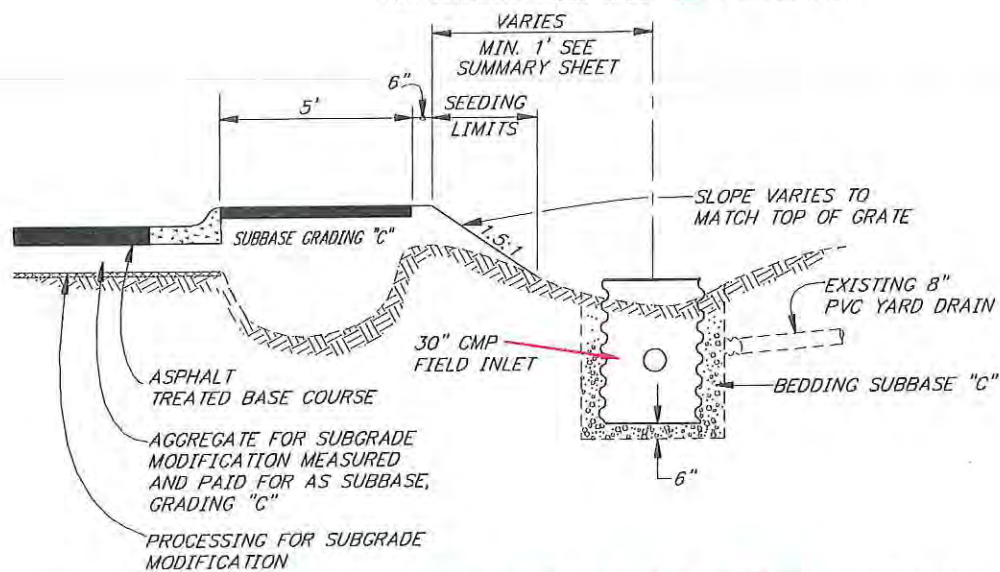
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS



SPECIAL DITCH DETAIL

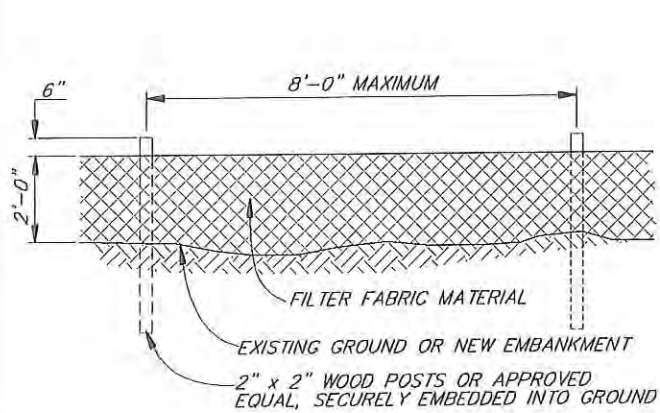
(TYPICAL BOTH SIDES)

SEE SUMMARY TABLE SHEET 40 FOR LOCATION



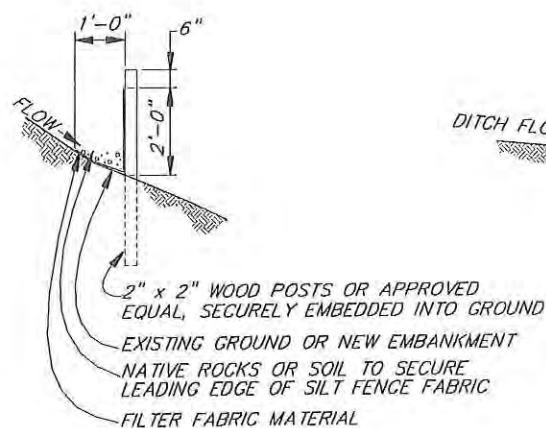
YARD DRAIN CONNECTS TO FIELD INLET DETAIL

SEE SUMMARY TABLE SHEET 34 FOR LOCATION

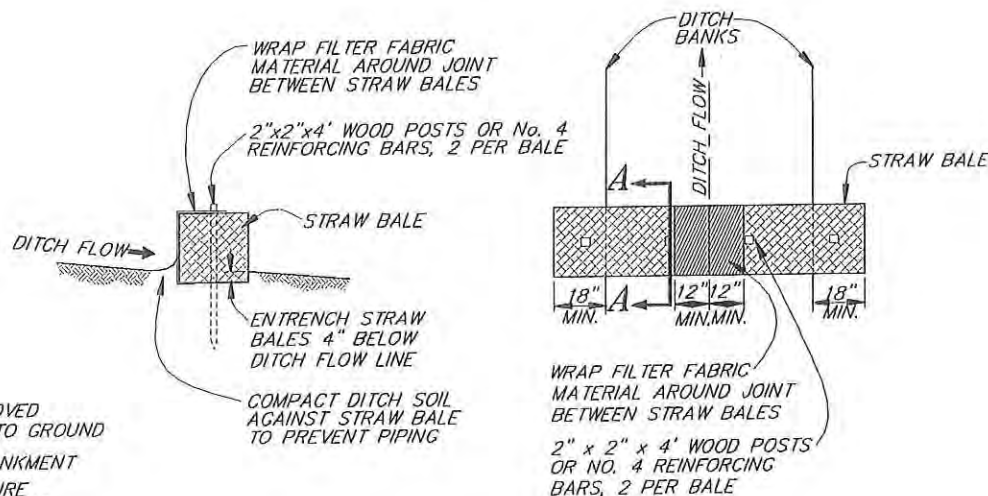


ELEVATION

SILT FENCE DETAILS



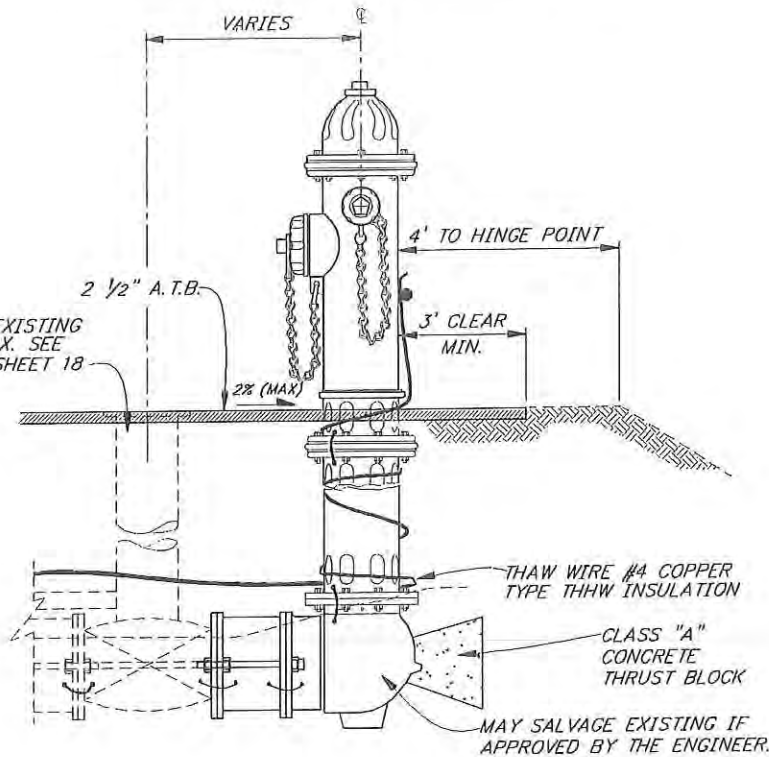
SECTION



SECTION

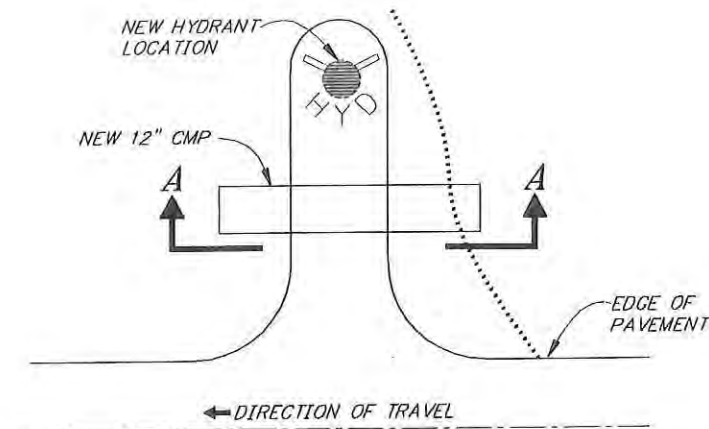
PLAN

TYPICAL STRAW BALE SEDIMENT CONTROL FILTER INSTALLATION DETAILS



NEW FIRE HYDRANT DETAIL

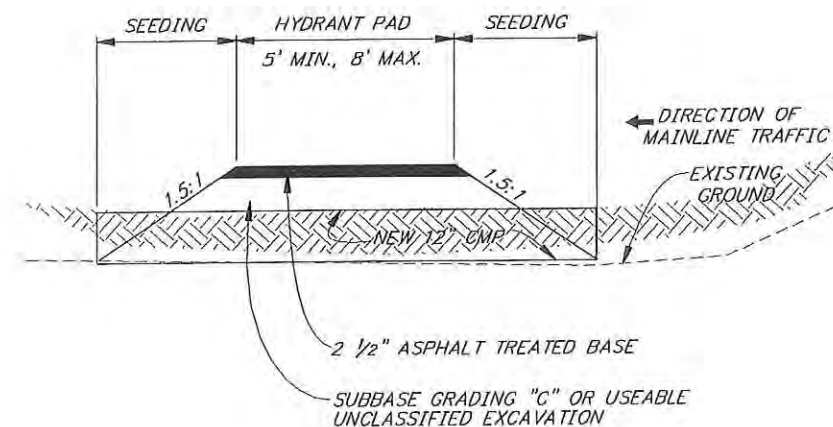
SEE SUMMARY TABLE SHEET 40 FOR LOCATIONS



HYDRANT PAD DETAIL

SEE SUMMARY TABLE SHEET 40 FOR LOCATIONS

ACCESS PAD TO BE MIN. 5' WIDE WITH NOMINAL 1.5:1 SIDE SLOPES. BACKFILL ACCESS PAD WITH SUBBASE, GRADING "C" MATERIAL, OR USEABLE UNCLASSIFIED EXCAVATION. COMPACT TO 95% MAX. DENSITY. SEED SIDE SLOPES OF ACCESS PAD IN ACCORDANCE WITH STANDARD SPECIFICATIONS.



SECTION A-A

As-Built Plans

James O'Malley 2/11/99

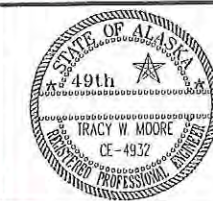
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

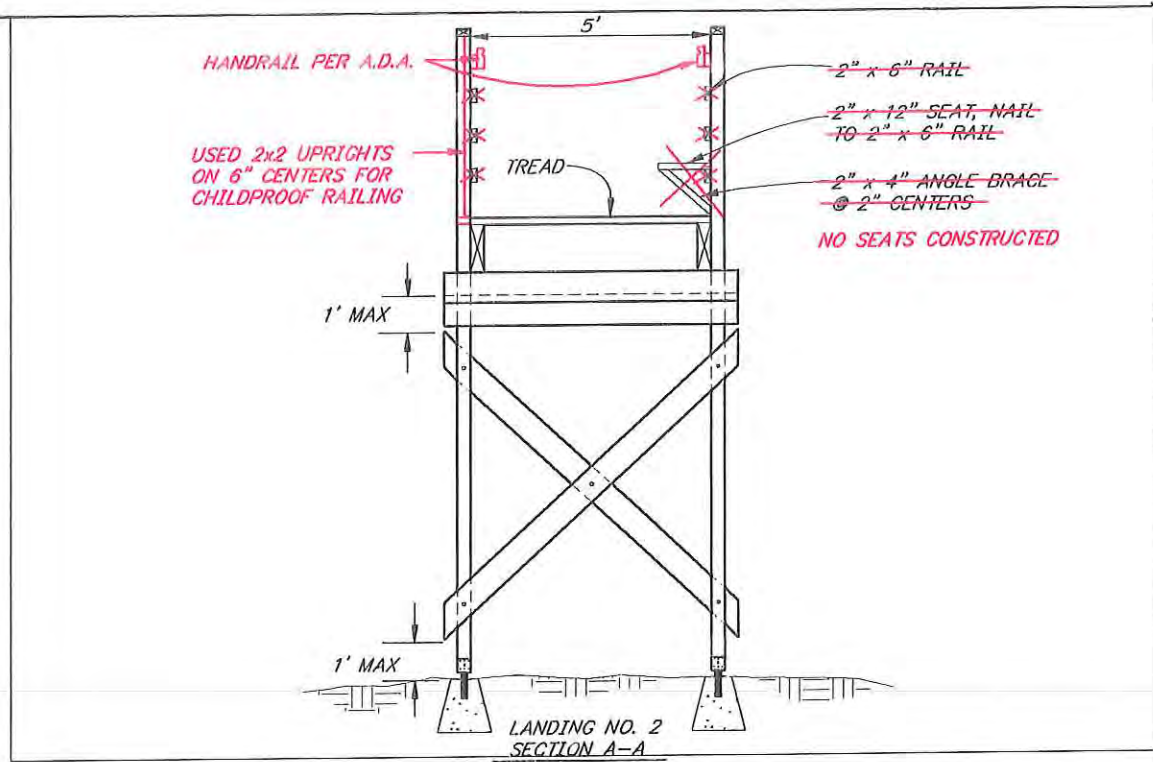
PATH: P:\KAE\72053\ASBUILT\MISC1		
PLOT:		
BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

KAKE
KAKE CITY STREETS
GRADING, PAVING AND DRAINAGE
B.I.A. PROJECT NO. 229(1)/STATE PROJECT NO. 72053
MISCELLANEOUS DETAILS

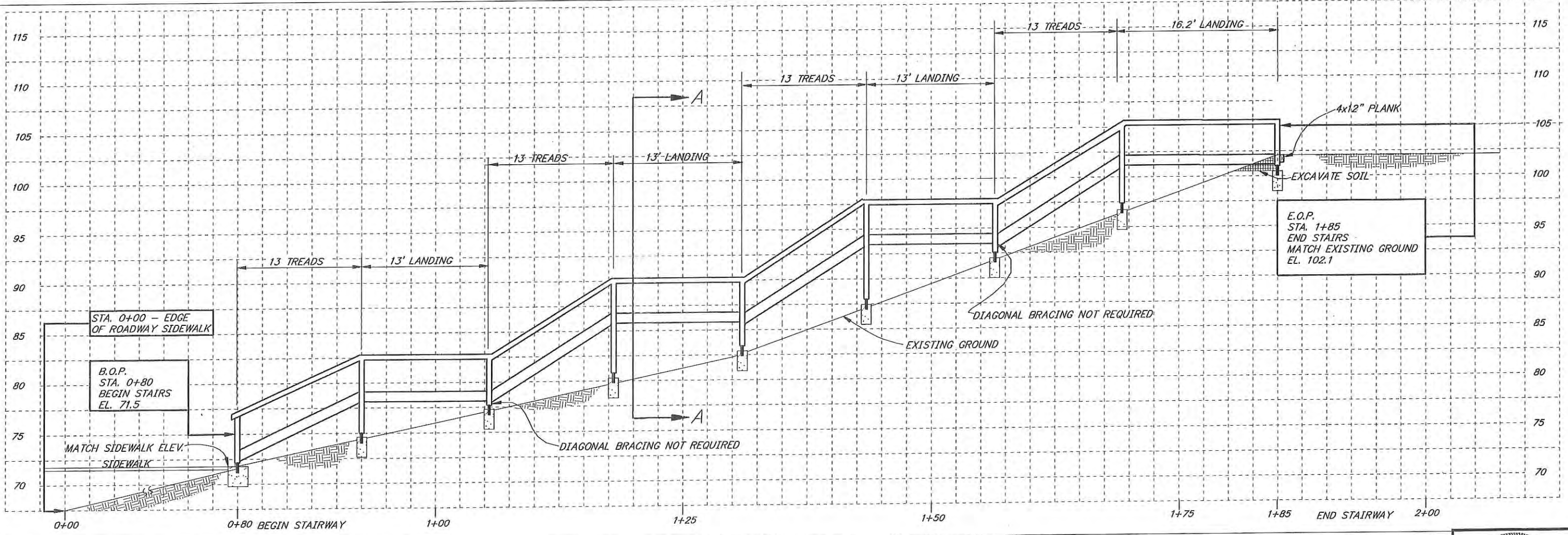
DESIGNED BY:	P. JONES	PROJECT NO.	72053
DRAWN BY:	B.A.	DATE:	1998
CHECKED BY:	T. MOORE	SHEET	39 OF 45





NOTES
 1. LENGTHS ARE APPROXIMATE ONLY AND ARE SUBJECT TO REVISIONS.

As-Built Plans
James Moore 2/10/99



NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

RECORD OF REVISIONS		
BY:	DATE:	DESCRIPTION OF CHANGE:

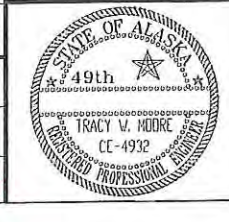
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

KAKE
 KAKE CITY STREETS
 BIA PROJECT NO. 229(1) PROJECT NO. 72053
STANDARD STAIRWAY DETAIL

ALASKA

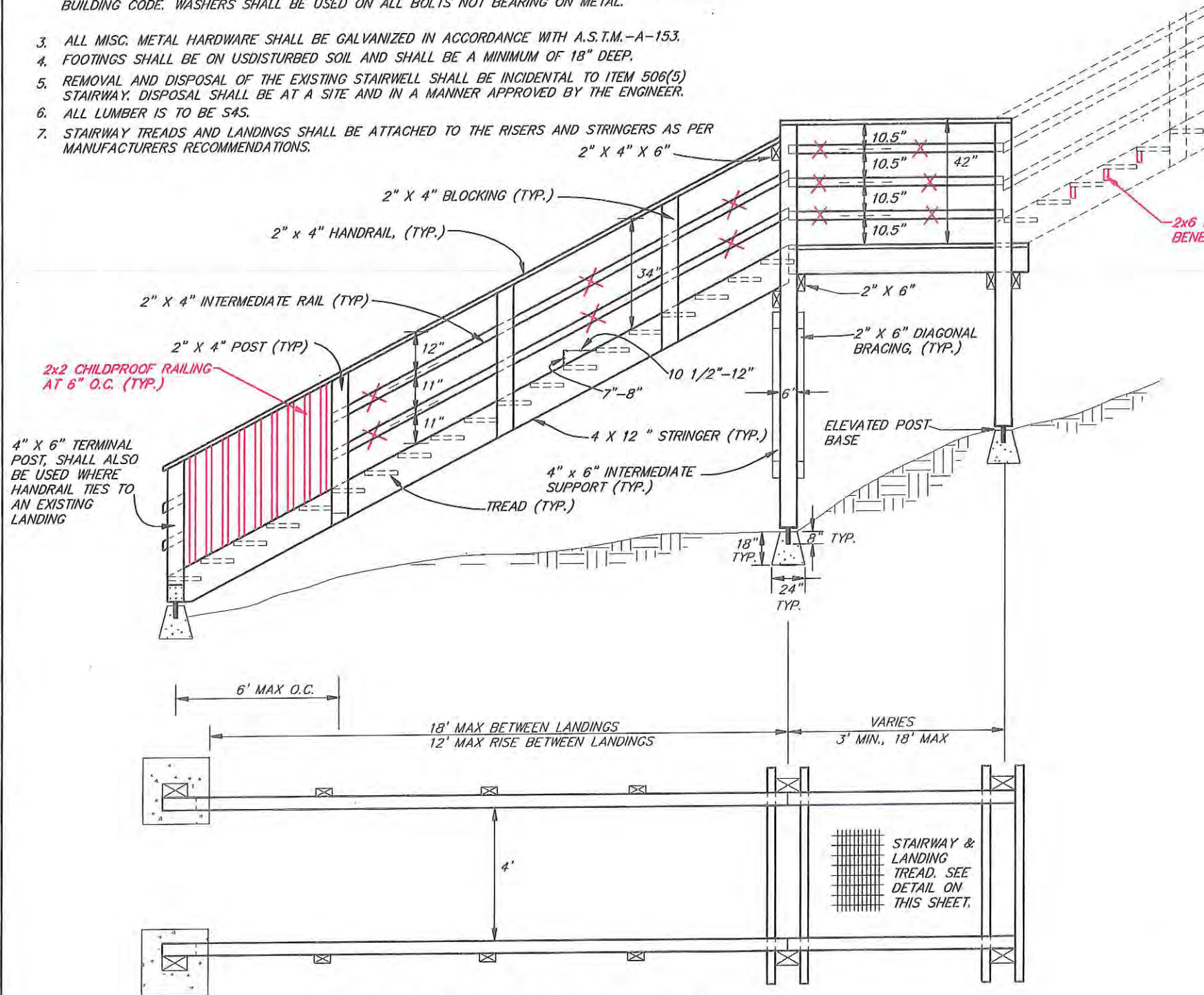
DESIGNED BY:
P. JONES
 DRAWN BY:
W. HICKOK
 CHECKED BY:
T. MOORE

PROJECT NO.
 72053
 DATE:
 1996
 SHEET 41 OF 45

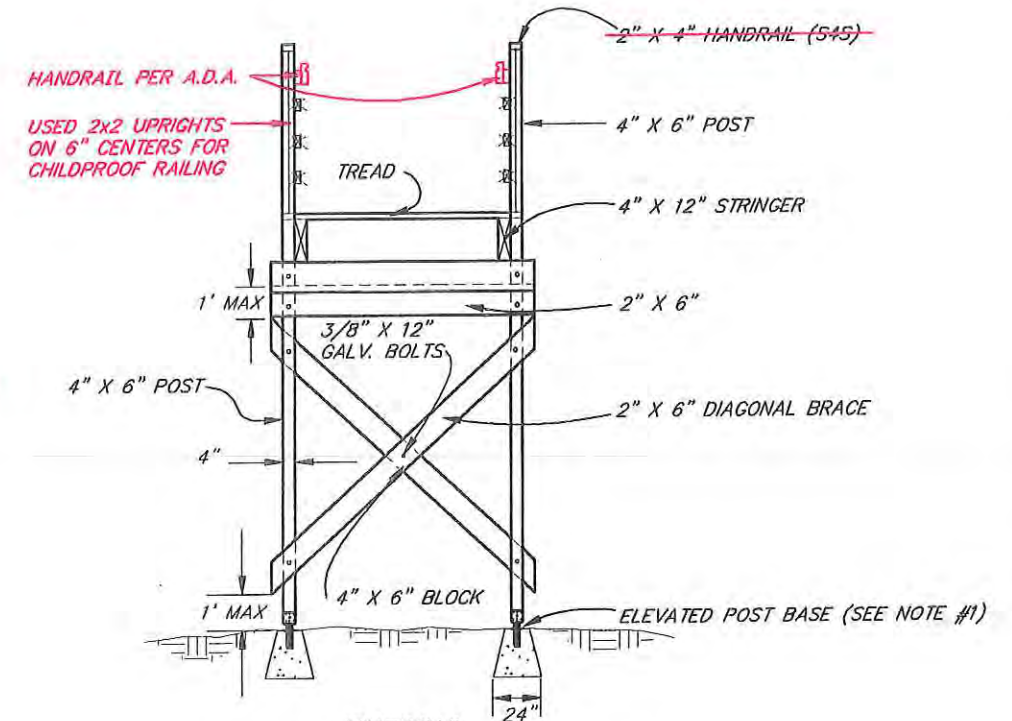


NOTES

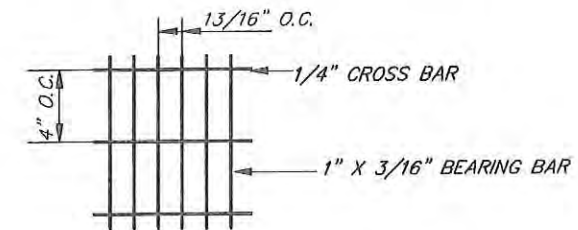
- POST BASES SHALL BE HECKMAN NO. 568, SIMPSON E.P.B. 46 WITH 9/16" CENTER HOLE OR EQUAL
- FASTENERS:
 DIAGONAL BRACING TO INTERMEDIATE SUPPORT: 4" X 3/8" GALV. LAG BOLTS (2 EACH)
 TREADS TO STRINGERS: 3" X 3/8" GALV. LAG BOLTS (3 EACH)
 HANDRAIL POST TO STRINGER: 4" X 3/8" GALV. LAG BOLTS (2 EACH)
 STRINGER TO INTERMEDIATE SUPPORT: 6" X 3/8" GALV. LAG BOLTS (2 EACH)
 INTERMEDIATE SUPPORT TO PAST BASE: 8" X 1/2" GALV. BOLTS (2 EACH)
 ALL OTHER CONNECTIONS MAY BE MADE WITH GALV 16d NAILS IN ACCORDANCE WITH THE UNIFORM BUILDING CODE. WASHERS SHALL BE USED ON ALL BOLTS NOT BEARING ON METAL.
- ALL MISC. METAL HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH A.S.T.M.-A-153.
- FOOTINGS SHALL BE ON UNDISTURBED SOIL AND SHALL BE A MINIMUM OF 18" DEEP.
- REMOVAL AND DISPOSAL OF THE EXISTING STAIRWELL SHALL BE INCIDENTAL TO ITEM 506(5) STAIRWAY. DISPOSAL SHALL BE AT A SITE AND IN A MANNER APPROVED BY THE ENGINEER.
- ALL LUMBER IS TO BE S4S.
- STAIRWAY TREADS AND LANDINGS SHALL BE ATTACHED TO THE RISERS AND STRINGERS AS PER MANUFACTURERS RECOMMENDATIONS.



STAIRWAY PLAN & PROFILE TYPICAL
SCALE: 1/2" = 1'



TYPICAL INTERMEDIATE SUPPORT DETAIL
SCALE 1/2" = 1'



TREAD DETAIL
NO SCALE

As-Built Plans
James C. Mayer 2/10/99

PATH: P:\-KAE\72053\ASBUILT\STAIR1		
PLOT: P:\-LIB\-PLOT\PL0T.PCP(1) OR PLOTH.PCP(2)		
BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU

KAKE CITY STREETS
 FED. NO. 229 (1) PROJECT NO. 72053

ALASKA

STANDARD STAIRWAY DETAILS

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

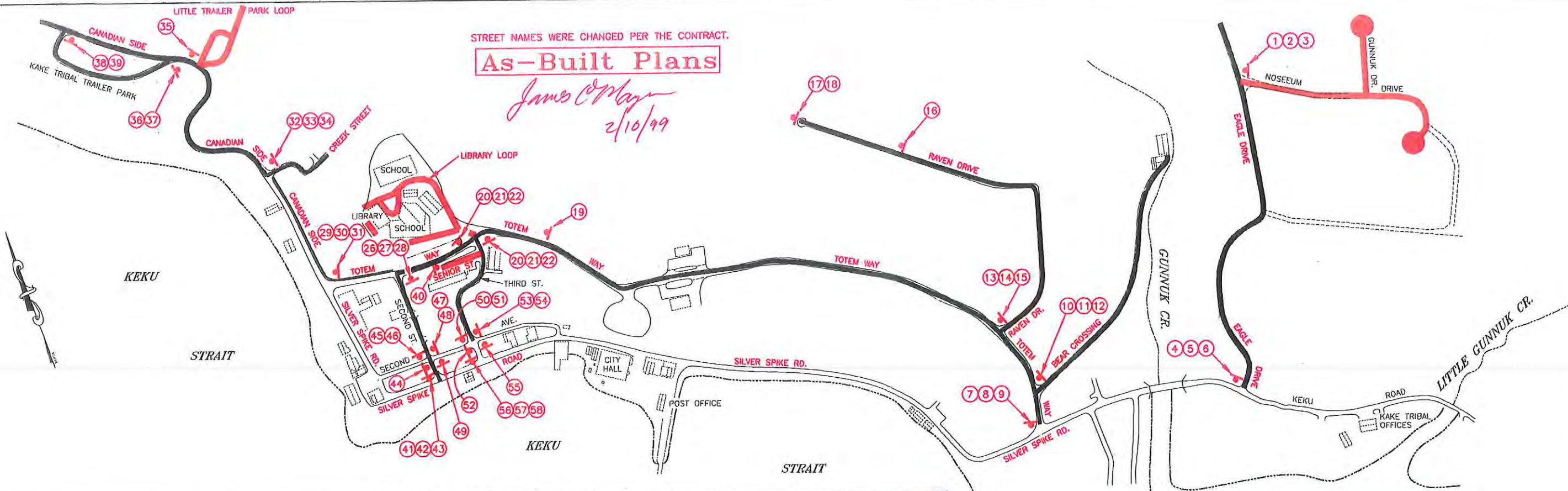
DESIGNED BY: P. JONES	PROJECT NO. 72053
DRAWN BY: WMM	DATE: 1996
CHECKED BY: T. MOORE	SHEET 48 OF 48



STREET NAMES WERE CHANGED PER THE CONTRACT.

As-Built Plans

James C. Payne
2/10/99



SIGN SUMMARY

SIGN NO.	STATION	OFFSET LT. RT.	CODE NO. (ASDS)	LEGEND	SIZE IN.	AREA SQ. FT.	FACING TRAFFIC	NO. OF POSTS	POST SIZE IN.	LOCATION	REMARKS
1	0+20	X	R1-1	STOP	24X24	4.00	SB	1	2.5 PST	RESERVOIR RD/KEKU RD	
2	0+20	X	D3-1	RESERVOIR RD	36X8	2.00	E/WB			RESERVOIR RD/KEKU RD	MOUNT ABOVE #1
3	0+20	X	D3-1	KEKU RD.	24X8	1.33	SB			RESERVOIR RD/KEKU RD	MOUNT ABOVE #1
4	0+15	X	R1-1	STOP	24X24	4.00	WB	1	2.5 PST	HATCHERY RD/KAKE RD	
5	0+15	X	D3-1	HATCHERY RD	30X8	1.66	N/SB			HATCHERY RD/KAKE RD	MOUNT ABOVE #4
6	0+15	X	D3-1	KAKE RD	24X8	1.33	WB			HATCHERY RD/KAKE RD	MOUNT ABOVE #4
7	0+22	X	R1-1	STOP	24X24	4.00	WB	1	2.5 PST	HUD HOUSING RD/KAKE RD	
8	0+22	X	D3-1	HUD HOUSING RD	36X8	2.00	N/SB			HUD HOUSING RD/KAKE RD	MOUNT ABOVE #7
9	0+22	X	D3-1	KAKE RD	24X8	1.33	WB			HUD HOUSING RD/KAKE RD	MOUNT ABOVE #7
10	28+52	X	S1-1	(SCHOOL ADVANCE SYMBOL)	30X30	6.25	WB			KAKE RD 150' FROM SCHOOL ENTRNACE	
11	0+25	X	R1-1	STOP	24X24	4.00	NB	1	2.5 PST	KAKE RD/3RD ST	
12	0+25	X	D3-1	3RD ST	24X8	1.33	E/WB			KAKE RD/3RD ST	MOUNT ABOVE #11
13	0+25	X	D3-1	KAKE RD	24X8	1.33	NB			KAKE RD/3RD ST	MOUNT ABOVE #11
14	33+00	X	S1-1	(SCHOOL ADVANCE SYMBOL)	30X30	6.25	EB			KAKE RD 150' FROM SCHOOL ENTRNACE	
15	0+25	X	R1-1	STOP	24X24	4.00	NB	1		KAKE RD/2ND ST	
16	0+25	X	D3-1	2ND ST	24X8	1.33	E/WB			KAKE RD/2ND ST	MOUNT ABOVE #15
17	0+25	X	D3-1	KAKE RD	24X8	1.33	NB			KAKE RD/2ND ST	MOUNT ABOVE #15
18	5+18	X	R1-1	STOP	24X24	4.00	SB	1	2.5 PST	2ND AVE/2ND ST	
19	5+18	X	D3-1	2ND ST	24X8	1.33	SB			2ND AVE/2ND ST	MOUNT ABOVE #18
20	5+18	X	D3-1	2ND AVE	24X8	1.33	E/WB			2ND AVE/2ND ST	MOUNT ABOVE #18
21	4+15	X	R1-1	STOP	24X24	4.00	SB	1	2.5 PST	2ND AVE/3RD ST	
22	4+15	X	D3-1	2ND AVE	24X8	1.33	SB			2ND AVE/3RD ST	MOUNT ABOVE #13
23	4+15	X	D3-1	3RD ST	24X8	1.33	E/WB			2ND AVE/3RD ST	MOUNT ABOVE #13
24	2+25	X	R1-1	STOP	24X24	4.00	WB	1	2.5 PST	KAKE RD/CHURCH ST	
25	2+25	X	D3-1	KAKE RD	24X8	1.33	N/SB			KAKE RD/CHURCH ST	MOUNT ABOVE #25
26	2+25	X	D3-1	CHURCH ST	30X8	1.66	WB			KAKE RD/CHURCH ST	MOUNT ABOVE #25
27	9+00	X	R1-1	STOP	24X24	4.00		1	2.5 PST	MCCARTNEY RD/KAKE TRIBAL TRAILER COURT	
28	10+25	X	R1-1	STOP	24X24	4.00		1	2.5 PST	MCCARTNEY RD/KAKE TRIBAL TRAILER COURT	
29	0+25	X	R1-1	STOP	24X24	4.00	WB	1	2.5 PST	CHURCH ST/SIXTH AVE.	
30	0+25	X	D3-1	CHURCH ST	30X8	1.66	WB			CHURCH ST/SIXTH AVE.	MOUNT ABOVE #29
31	0+25	X	D3-1	SIXTH AVE	24X8	1.33	WB			CHURCH ST/SIXTH AVE.	MOUNT ABOVE #29
32	6+50	X	R1-1	STOP	24X24	4.00	NB	1	2.5 PST	HUD HOUSING	
33	7+00	X	R1-1	STOP	24X24	4.00	EB	1	2.5 PST	HUD HOUSING	
34	18+78	X	W14-1	DEAD END	24X24	4.00	WB			HUD HOUSING	
35	0+25	X	R1-1	STOP	24X24	4.00		1	2.5 PST	KAKE RD/KEKU RD	
36	0+25	X	D3-1	KAKE RD	24X8	1.33				KAKE RD/KEKU RD	MOUNT ABOVE #35
37	0+25	X	D3-1	KEKU RD	24X8	1.33				KAKE RD/KEKU RD	MOUNT ABOVE #35
TOTAL						101.43					

ROADWAY NAME CHANGE SUMMARY

NEW ROAD NAME	OLD ROAD NAME
NO CHANGE	NOSEUM DRIVE (THRHA HOUSING PROJECT)
NO CHANGE	GUNNUK DRIVE (THRHA HOUSING PROJECT)
EAGLE DRIVE	RESERVOIR ROAD
TOTEM WAY	KAKE ROAD
SILVER SPIKE ROAD	CHURCH STREET
SILVER SPIKE ROAD	FRONT STREET
CANADIAN SIDE	MCCARTNEY ROAD
NO CHANGE	KAKE TRIBAL TRAILER PARK
BEAR CROSSING	HATCHERY ROAD
RAVEN DRIVE	HUD ROAD
NO CHANGE	THIRD STREET
NO CHANGE	SECOND STREET
CREEK STREET	SIXTH STREET
SENIOR STREET	NEW ROAD THIS PROJECT
LIBRARY LOOP	NEW ROAD THIS PROJECT

SIGNING NOTES

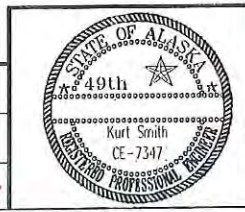
- ALL SIGN PANELS SHALL BE INSTALLED SUCH THAT THE BOTTOM EDGE OF THE LOWEST PANEL IS 7 FEET ABOVE THE HINGE POINT OF THE ROADWAY.
- ALL SIGN PANELS SHALL BE OF 0.080" THICK ALUMINUM.
- SIGN POST MATERIAL SHALL BE AS INDICATED: 2.5 X 2.5 P.T. - 2.5" X 2.5" PERFORATED GALVANIZED STEEL POSTS WITH 2.75" X 2.75" TELESCOPING PERFORATED GALVANIZED STEEL SLEEVES.
- SEE STANDARD DRAWING S-30.01 FOR SLEEVE TYPE SOIL EMBEDMENT DETAILS.
- ALL EXISTING SIGN PANELS WITHIN THE PROJECT LIMITS SHALL BE SALVAGED AND DELIVERED TO THE KAKE CITY MAINTENANCE SHOP.
- ALL STREET NAME SIGNS SHALL BE THE EXTRUDED BLADE TYPE.
- ALL STREET NAME SIGNS ARE SUBJECT TO CHANGE AND THE CONTRACTOR SHALL COORDINATE STREET NAMES WITH THE MAYOR PRIOR TO ORDERING STREET SIGNS.

PATH: P:\KAE\72053\ASBUILT\SIGN
PLOT:
BY:
DATE:
DESCRIPTION OF CHANGE:
RECORD OF REVISIONS


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

KAKE
KAKE CITY STREETS
GRADING, PAVING AND DRAINAGE
B.I.A. PROJECT NO. 229(1)/STATE PROJECT NO. 72053
SIGN LOCATIONS AND SIGN SUMMARY

DESIGNED BY:	K. MATTSON	PROJECT NO.	72053
DRAWN BY:	B.A.	DATE:	1996
CHECKED BY:	K. SMITH	SHEET	43 OF 45



SIGNING SUMMARY

SIGN NUMBER	CODE	LEGEND	SIZE	AREA	REMARKS	SIGN NUMBER	CODE	LEGEND	SIZE	AREA	REMARKS
1	R1-1	STOP	24 x 24	4.00 SF		33	D3-1	CANADIAN SIDE	8 x 36	2.00 SF	MOUNT ABOVE 32
2	D3-1	EAGLE DRIVE	8 x 24	1.33 SF	MOUNT ABOVE 1	34	D3-1	CREEK STREET	8 x 24	1.33 SF	MOUNT ABOVE 33
3	D3-1	NOSEEUUM AVE	8 x 36	2.00 SF	MOUNT ABOVE 2	35	R1-1	STOP	24 x 24	4.00 SF	
4	R1-1	STOP	24 x 24	4.00 SF		36	R1-1	STOP	24 x 24	4.00 SF	
5	D3-1	KEKU ROAD	8 x 24	1.33 SF	MOUNT ABOVE 4	37	D3-1	CANADIAN SIDE	8 x 36	2.00 SF	MOUNT ABOVE 36
6	D3-1	EAGLE DRIVE	8 x 24	1.33 SF	MOUNT ABOVE 5	38	R1-1	STOP	24 x 24	4.00 SF	
7	R1-1	STOP	24 x 24	4.00 SF		39	D3-1	CANADIAN SIDE	8 x 36	2.00 SF	MOUNT ABOVE 38
8	D3-1	SILVER SPIKE ROAD	8 x 42	2.33 SF	MOUNT ABOVE 7	40	S1-1	SCHOOL ADVANCE SYMBOL	30 x 30	6.25 SF	
9	D3-1	TOTEM WAY	8 x 30	1.67 SF	MOUNT ABOVE 8	41	R1-1	STOP	24 x 24	4.00 SF	
10	R1-1	STOP	24 x 24	4.00 SF		42	D3-1	SILVER SPIKE ROAD	8 x 42	2.33 SF	MOUNT ABOVE 41
11	D3-1	TOTEM WAY	8 x 30	1.67 SF	MOUNT ABOVE 10	43	D3-1	SECOND STREET	8 x 30	1.67 SF	MOUNT ABOVE 42
12	D3-1	BEAR CROSSING	d x 36	2.00 SF	MOUNT ABOVE 11	44	R1-1	STOP	24 x 24	4.00 SF	
13	R1-1	STOP	24 x 24	4.00 SF		45	R1-1	STOP	24 x 24	4.00 SF	
14	D3-1	TOTEM WAY	8 x 30	1.67 SF	MOUNT ABOVE 13	46	D3-1	SECOND AVE	8 x 36	2.00 SF	MOUNT ABOVE 45
15	D3-1	RAVEN DRIVE	8 x 24	1.33 SF	MOUNT ABOVE 14	47	R1-1	STOP	24 x 24	4.00 SF	
16	W14-2B	END ROAD 500 FT	30 x 30	6.25 SF		48	D3-1	SECOND STREET	8 x 30	1.67 SF	MOUNT ABOVE 47
17	W14-2A	END	24 x 24	4.00 SF		49	R1-1	STOP	24 x 24	4.00 SF	
18		RED REFLECTOR  OBJECT MARKER	18 x 18	2.25 SF		50	R1-1	STOP	24 x 24	4.00 SF	
19	S1-1	SCHOOL ADVANCE SYMBOL	30 x 30	6.25 SF		51	D3-1	SECOND AVE	8 x 36	2.00 SF	MOUNT ABOVE 50
20	R1-1	STOP	24 x 24	4.00 SF		52	R1-1	STOP	24 x 24	4.00 SF	
21	D3-1	TOTEM WAY	8 x 30	1.67 SF	MOUNT ABOVE 20	53	R1-1	STOP	24 x 24	4.00 SF	
22	D3-1	THIRD STREET	8 x 24	1.33 SF	MOUNT ABOVE 21	54	D3-1	THIRD STREET	8 x 24	1.33 SF	MOUNT ABOVE 53
23	R1-1	STOP	24 x 24	4.00 SF		55	R1-1	STOP	24 x 24	4.00 SF	
24	D3-1	TOTEM WAY	8 x 30	1.67 SF	MOUNT ABOVE 23	56	R1-1	STOP	24 x 24	4.00 SF	
25	D3-1	LIBRARY LOOP ROAD	8 x 36	4.00 SF	MOUNT ABOVE 24	57	D3-1	SILVER SPIKE ROAD	8 x 42	2.33 SF	MOUNT ABOVE 56
26	R1-1	STOP	24 x 24	4.00 SF		58	D3-1	THIRD STREET	8 x 24	1.33 SF	MOUNT ABOVE 57
27	D3-1	TOTEM WAY	8 x 30	1.67 SF	MOUNT ABOVE 26						
28	D3-1	SECOND STREET	8 x 30	1.67 SF	MOUNT ABOVE 27						
29	R1-1	STOP	24 x 24	4.00 SF							
30	D3-1	CANADIAN SIDE	8 x 36	2.00 SF	MOUNT ABOVE 29						
31	D3-1	TOTEM WAY	8 x 30	1.67 SF	MOUNT ABOVE 30						
32	R1-1	STOP	24 x 24	4.00 SF							

STREET NAMES WERE CHANGED PER THE CONTRACT.

As-Built Plans

James C. Mayne 2/10/99

PATH: P:\KAE\72053\ASBUILT\SIGN		
PLOT:		
BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

KAKE

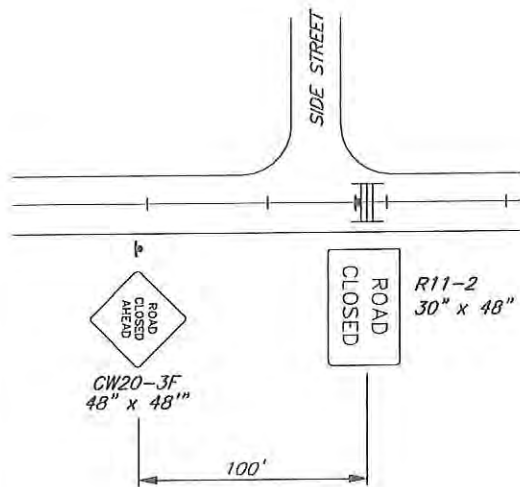
KAKE CITY STREETS
GRADING, PAVING AND DRAINAGE
B.I.A. PROJECT NO. 229(1)/STATE PROJECT NO. 72053
SIGN LOCATIONS AND SIGN SUMMARY

ALASKA

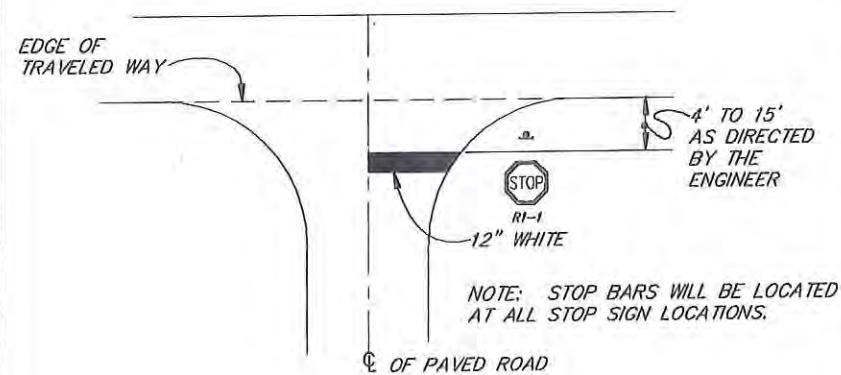
DESIGNED BY:
K. MATTSON
DRAWN BY:
B.A.
CHECKED BY:
K. SMITH

PROJECT NO.
72053
DATE:
1998
SHEET **43A** OF **45**





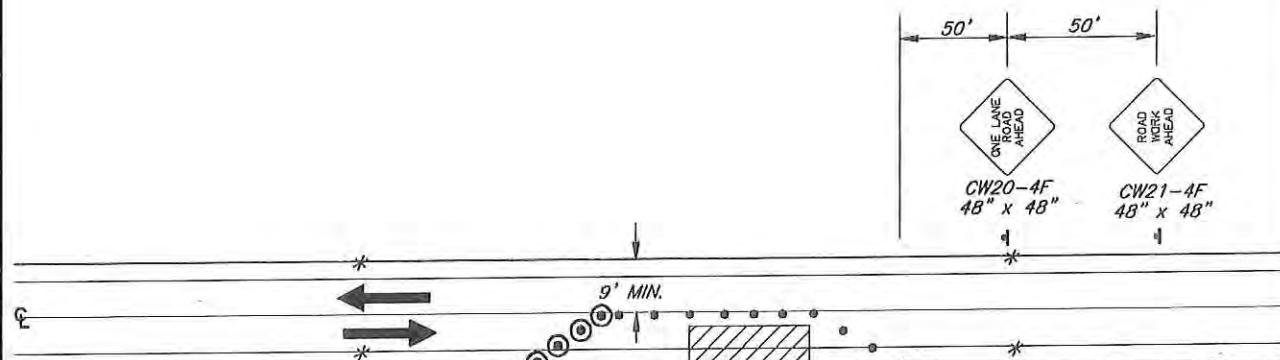
ROAD CLOSURE DETAIL



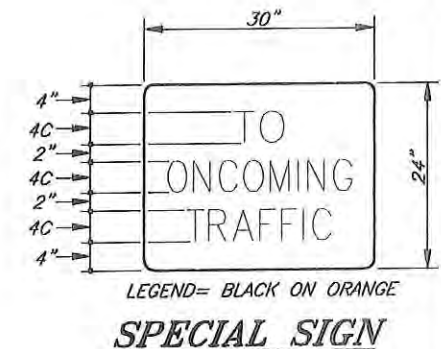
STOP BAR LOCATION DETAIL

GENERAL NOTES

1. A ROAD CLOSURE MAY BE USED SUBJECT TO THE FOLLOWING RESTRICTIONS:
 - A. THE ROADWAY CLOSURE SHALL BE POSTED AT LEAST 24 HOURS PRIOR TO ANY SHUTDOWN. RESIDENTS DIRECTLY AFFECTED BY THE CLOSURE SHALL BE NOTIFIED AND IN ADDITION, PUBLIC NOTICES SHALL BE POSTED AS PROVIDED IN SECTION 643-3.03 OF THE SPECIAL PROVISIONS.
 - B. THE ROADWAY MAY BE CLOSED FOR A MAXIMUM OF 8 HOURS.
 - C. THE ROADWAY SHALL BE OPEN DURING ALL NON-WORKING HOURS.
2. A SINGLE LANE CLOSURE UTILIZING THE YIELD SIGN (SEE DETAIL) MAY BE USED WHEN:
 - A. THE WORK ZONE IS LESS THAN 200 FEET LONG.
 - B. TRAFFIC IS VISIBLE THROUGHOUT THE ENTIRE LENGTH OF THE WORK ZONE.
 - C. CONSTRUCTION EQUIPMENT DOES NOT ENCRoACH INTO THE ADJACENT (OPEN) LANE.
3. A SINGLE LANE CLOSURE UTILIZING A SINGLE FLAGGER MAY BE USED WHEN:
 - A. THE WORK ZONE IS LESS THAN 400 FEET LONG.
 - B. TRAFFIC APPROACHING THE WORK ZONE FROM EITHER DIRECTION IS VISIBLE TO THE FLAGGER.
4. A SINGLE LANE CLOSURE UTILIZING TWO FLAGGERS SHALL BE USED DURING THE PAVING OPERATION, WHEN THE STIPULATIONS OF NOTES 2 AND 3 ARE NOT MET OR WHEN DIRECTED BY THE ENGINEER.
5. THERE SHALL BE A MINIMUM OF 1000' SEPARATION BETWEEN WORK ZONES.
6. TWO TRAFFIC LANES ON ROADWAYS THAT ARE NORMALLY TWO LANE SHALL BE MAINTAINED AT ALL TIMES IN NON-WORK AREAS AND DURING NON-WORKING HOURS.
7. TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 9 FEET.
8. CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS FOR WHICH THOSE SIGNS ARE INTENDED EXIST.
9. DRIVEWAYS MAY BE CLOSED ONLY DURING ACTUAL WORK ON A GIVEN DRIVEWAY AND PROVIDED THAT THE CLOSURE DOES NOT EXCEED 8 HOURS. PROPERTY OWNERS AND/OR EFFECTED RESIDENTS SHALL BE GIVEN 24 HOURS NOTICE PRIOR TO ANY DRIVEWAY CLOSURE.
10. IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (T.C.P.) TO ILLUSTRATE SOME, BUT NOT ALL, OF THE TRAFFIC CONTROL CONFIGURATIONS WHICH WILL BE REQUIRED ON THIS PROJECT. TRAFFIC CONTROL PLANS FOR CONFIGURATIONS NOT COVERED BY THIS T.C.P. SHALL BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL, PRIOR TO USE. CONTRACTOR DEVELOPED TRAFFIC CONTROL PLANS SHALL, WHERE APPROPRIATE, INCORPORATE APPLICABLE PORTIONS OF THE DETAILS GIVEN IN THIS T.C.P.



SINGLE LANE CLOSURE USING YIELD SIGN



SPECIAL SIGN

LEGEND

- SIGN
- CONE
- DRUM
- TYPE III BARRICADE
- FLAGGING STATION
- HI-LEVEL WARNING DEVICE

FORMULAS FOR L (TAPER LENGTH)

40 MPH OR LESS $L = \frac{W \times S}{60}$

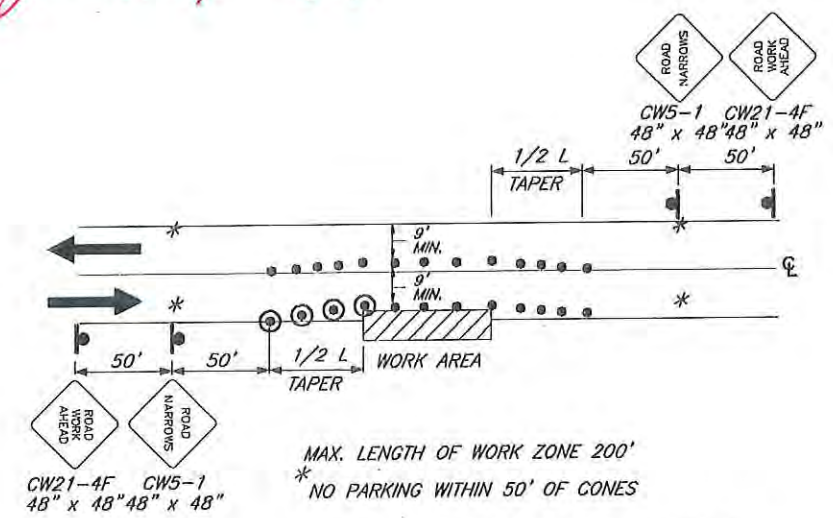
45 MPH OR GREATER $L = W \times S$

WHERE W = WIDTH OF OFFSET
S = POSTED SPEED LIMIT OR ANTICIPATED OPERATING SPEED

DRUM OR CONE SPACING = S (IN FEET)

MIN. BUFFER S'	LENGTH
20	35
25	55
30	85
35	120
40	170
45	220
50	280
55	335
60	415
65	485

As-Built Plans
James P. May 2/10/99



ROADWAY ENCROACHMENT

NOTE:
IF ONLY ONE LANE IS EFFECTED BY ROAD WORK (THAT IS, THE CONES ALONG THE WORK AREA ARE NO CLOSER THAN 10' TO CENTERLINE) THE CENTERLINE CONES FOR THE OPPOSING LANE MAY BE DELETED.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\KAE\72053\ASBUILT\STCP1

PLOT:

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

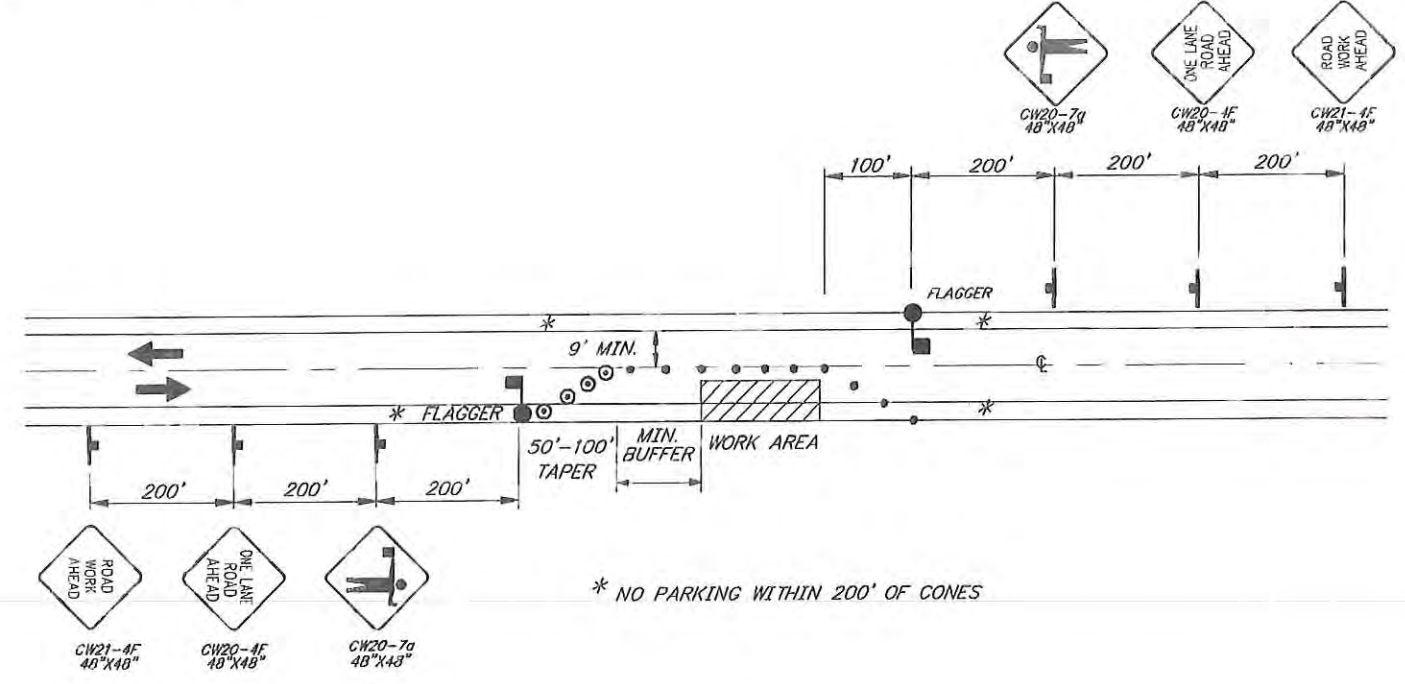
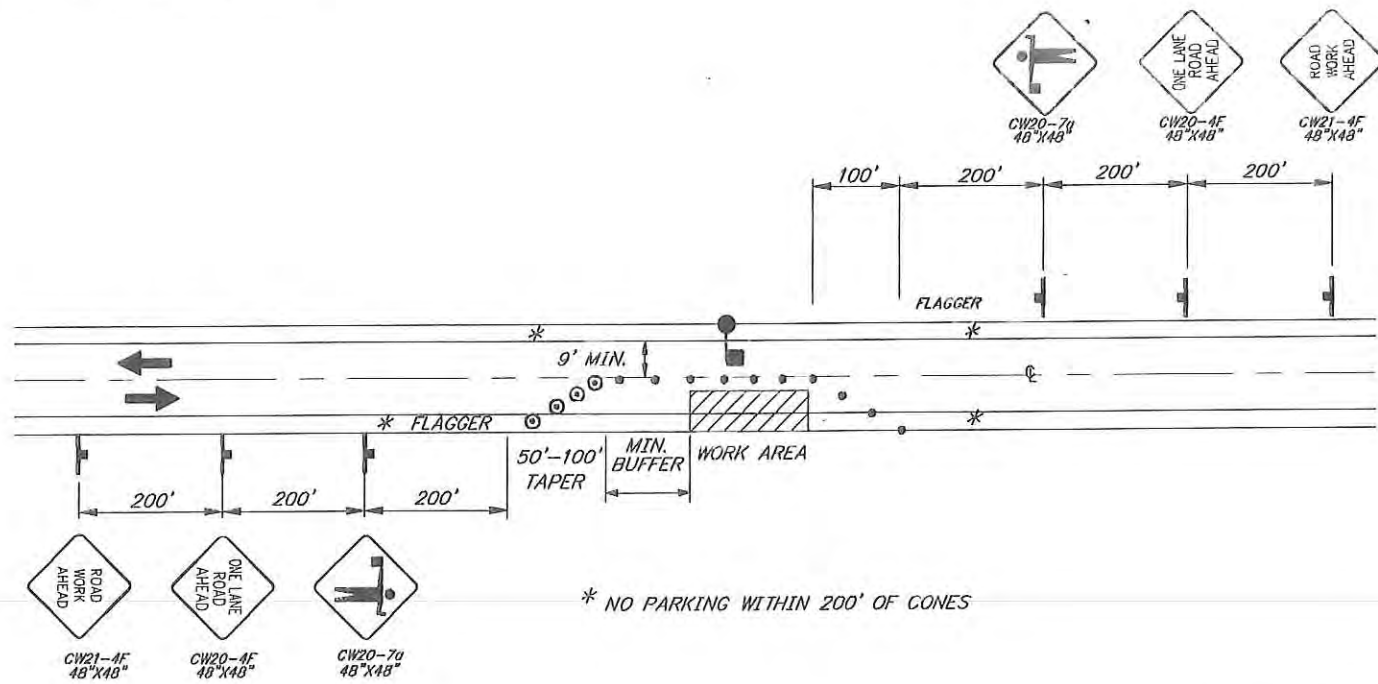
KAKE
KAKE CITY STREETS
GRADING, PAVING AND DRAINAGE
B.I.A. PROJECT NO. 229(1)/STATE PROJECT NO. 72053
TRAFFIC CONTROL PLAN

DESIGNED BY: K. MATTSON	PROJECT NO. 72053
DRAWN BY: K. MATTSON	DATE: 1998
CHECKED BY: T. MOORE	SHEET 44 OF 45



SINGLE FLAGGER

DOUBLE FLAGGER



**SINGLE LANE CLOSURE
TWO LANE ROAD**

**SINGLE LANE CLOSURE
TWO LANE ROAD**

LEGEND

- SIGN
- CONE
- DRUM
- TYPE III BARRICADE
- FLAGGING STATION

FORMULAS FOR L (TAPER LENGTH)

40 MPH OR LESS $L = \frac{W \times S}{60}$

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WHERE W= WIDTH OF OFFSET
S= POSTED SPEED LIMIT
OR ANTICIPATED
OPERATING SPEED

DRUM OR CONE SPACING = S (IN FEET)

S	MIN. BUFFER LENGTH
20	35
25	55
30	85
35	120
40	170
45	220
50	280
55	335
60	415
65	485

As-Built Plans

James C. Mayr 2/10/99

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\KAE\72053\ASBUILT\TCP2		
PLOT:		
BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

KAKE

KAKE CITY STREETS
GRADING, PAVING AND DRAINAGE
ALASKA
B.I.A. PROJECT NO. 229(1)/STATE PROJECT NO. 72053
TRAFFIC CONTROL PLAN

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