MINNESOTA DEPARTMENT OF TRANSPORTATION

THE COUNTY OF OLMSTED

CONSTRUCTION PLAN FOR BRIDGE No. 55576, CONCRETE PAVEMENT, BITUMINOUS SHOULDERING AND CONCRETE CURB AND GUTTER

LOCATED ON C.S.A.H. 1 BETWEEN THE JUNCTION OF T.H. 52 AND THE JUNCTION OF 16TH STREET S.E. (GEOGRAPHIC DESCRIPTION)

FROM 933.08 FEET SOUTH AND 214.59 FEET WEST OF THE N.E. CORNER OF SEC. 24, T 106 N, R 14 W TO 204.64 FEET NORTH AND 693.01 FEET EAST OF THE CENTER OF SEC. 12, T 106 N, R 14 W (LEGAL DESCRIPTION)

S.A.P. NO. 55-601-14

GROSS LENGTH	9243.66	FEET	1.751	MILES
BRIDGES LENGTH	120.75	FEET	0.023	MILES
EXCEPTIONS LENGTH	0.00	FEET	0.000	MILES
NET LENGTH	9243.66	FEET	1.751	MILES

Minn. Proj. No.

GOVERNING SPECIFICATIONS

THE 2000 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

INDEX

SHEET No.		DESCRIPTION
1		TITLE SHEET
2	*	ESTIMATED QUANTITIES AND STANDARD PLATES
3-5		TYPICAL SECTIONS
6-7		QUANTITY TABULATIONS
8		MISCELLANEOUS DETAILS
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22-36		C.S.A.H. 1 PLAN AND PROFILE
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64-66		TRAFFIC CONTROL PLAN
B2-B30		BRIDGE PLANS

THIS PLAN CONTAINS 95 SHEETS

PLAN SYMBOLS

ROAD AND ROADWAY FEATURES

PROJECTED ROAD
PRIMITIVE ROAD
UNIMPROVED ROAD
GRADED AND DRAINED ROAD
SOIL SURFACE ROAD
GRAVEL OR STONE ROAD
BITUMINOUS ROAD
PAVED ROAD
DIVIDED ROAD
TRUNK HIGHWAY UNDER CONSTRUCTION
ROADS IN UNINCORPORATED COMMUNITIES, EXTENSIONS OF LOCAL ROADS (NOT F.A.S.) WITHIN MUNICIPALITIES AND FRONTAGE ROADS
POINTS BETWEEN WHICH DISTANCES ARE MEASURED INDICATED THUS * B2 *

ROAD SYSTEM DESIGNATIONS

INTERSTATE TRUNK HIGHWAY (35)
U.S. NUMBERED TRUNK HIGHWAY (52)
STATE NUMBERED TRUNK HIGHWAY (30)
COUNTY STATE AID HIGHWAY (5)
COUNTY ROAD (12)
COUNTY STATE AID IN ADJOINING COUNTY (5)
FEDERAL AID INTERSTATE SYSTEM F.A.I.
NATIONAL FOREST HIGHWAY N.F.H.
NATIONAL FOREST DEVELOPMENT N.F.D.
STATE FOREST ROAD S.F.R.
STATE PARK ROAD S.P.R.

RAILROADS

RAILROAD (ANY NUMBER OF TRACKS) USED BY A SINGLE OPERATING COMPANY OR BY TRACKS OF ANOTHER CARRIER UNDER TRACKAGE RIGHTS
RAILROADS IN JUXTAPOSITION (TWO OR MORE TRACKS OF SEPARATELY OPERATED COMPANIES ON ADJACENT RIGHTS OF WAY
RAILROAD STATION
GRADE CROSSING
UNDERPASS (HIGHWAY BELOW)
OVERPASS (HIGHWAY ABOVE)

AIRWAYS

RUNWAY
MILITARY FIELD
COMMERCIAL OR MUNICIPAL FIELD
LANDING AREA OR STRIP
AIRWAY LIGHT BEACON, GENERAL

STRUCTURES

General Symbols (over 20' span)
HIGHWAY BRIDGE
SMALL BRIDGES CLOSELY SPACED
DRAWBRIDGE
TRUSS
Other Structures
PEDESTRIAN BRIDGE
DAM WITH ROAD
DAM WITHOUT ROAD
LEVEE OR DIKE WITH ROAD
LEVEE OR DIKE WITHOUT ROAD
MINOR STRUCTURES (5' TO 20' SPAN)
CONCRETE FORD OR DIP
FORD – ROAD ESTABLISHED

BOUNDARIES

NATIONAL OR STATE
COUNTY
CIVIL TOWNSHIP
CONGRESSIONAL TOWNSHIP (U.S. LAND)
CORPORATE LINE
SECTION LINE
CONGESTED AREA
NATIONAL OR STATE PARK
NATIONAL OR STATE FOREST
GAME REFUGE
AIRPORT
WILDLIFE MANAGEMENT AREA (STATE) OR WATERFOWL AREA (FEDERAL)

DRAINAGE

NARROW STREAM
WIDE STREAM
MARSH OR SWAMP LAND
DRAINAGE DITCH
LAKE OR POND

CONSERVATION

FOREST RANGER STATION
GUARD OR RANGER STATION (NOT PERMANENTLY OCCUPIED)
FISH HATCHERY
GAME PRESERVE
OBSERVATION OR LOOKOUT TOWER
SMALL PARKS (SP = STATE, CP = COUNTY, MP = MUNICIPAL, WP = WAYSIDE (WP)
PUBLIC ACCESS POINT

RECREATION

GOLF COURSE OR COUNTRY CLUB
GUN CLUB
ATHLETIC FIELD
AMUSEMENT PARK
PICNIC GROUND
PLAYGROUND, BALLFIELD ETC.
BATHING BEACH OR SWIMMING POOL
SKIING SITE
CAMP SITE
CAMP OR LODGE

FARM AND DWELLING UNITS

FARM UNIT
DWELLING OTHER THAN FARM
BARRACKS OR DORMITORIES FOR STUDENTS, WORKERS, MIGRANTS ETC.
SEASONAL DWELLING
RUNS OR GROUPS OF DWELLINGS CLOSELY SPACED NUMBER ADJACENT TO SYMBOL INDICATES NUMBER OF EACH UNIT 8

INDUSTRIAL

FACTORY OR INDUSTRIAL PLANT
SAWMILL
STORAGE TANKS, OIL OR GAS
GRAIN ELEVATOR
BEET DUMP
STOCKYARD, FEEDLOT
QUARRY
MILK DEPOT, CREAMERY OR CHEESE FACTORY
WAREHOUSE

COMMERCIAL

STORE OR SMALL BUSINESS ESTABLISHMENT
HOTEL
MOTEL
TOURIST COURT
DRIVE-IN THEATRE
NURSERY
GREENHOUSE

PUBLIC SERVICE FACILITIES

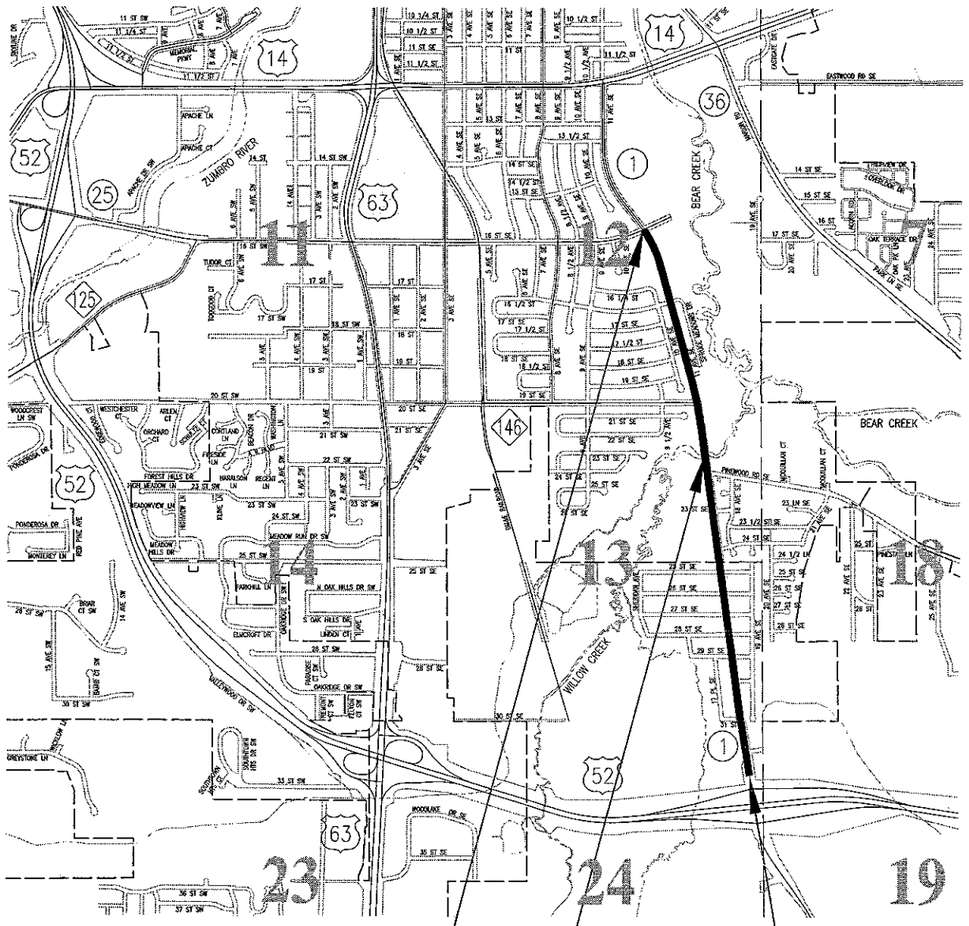
POST OFFICE
FIRE STATION
MUSEUM
PUBLIC LIBRARY
SCHOOL
RADIO STATION
SEWAGE DISPOSAL PLANT
HOSPITAL
TOWN HALL

CITY CENTERS

COUNTY SEAT
CITY CENTER
INCORPORATED CITY (GENERALIZED)
UNINCORPORATED COMMUNITY

MISCELLANEOUS MAP FEATURES

CHURCH, OTHER RELIGIOUS INSTITUTIONS
CEMETERY
FAIRGROUND, RACE COURSE, SPEEDWAY
GRAVEL PIT
SANITARY LANDFILL
AUTO JUNKYARD
HIGHWAY GARAGE
DEPARTMENT OF TRANSPORTATION DISTRICT OFFICE
VALVE HOUSE NATURAL GAS, PETROLEUM PRODUCTS, CRUDE OIL OR WATER
GAUGING OR PUMPING STATION NATURAL GAS, PETROLEUM PRODUCTS, CRUDE OIL OR WATER
PIPELINE, NATURAL GAS
PIPELINE, PETROLEUM PRODUCTS
PIPELINE, CRUDE OIL
PIPELINE, WATER
TRANSMISSION LINE (33kV OR OVER)
POWER PLANT
TRANSFORMER STATION
LATITUDE AND LONGITUDE INTERSECTION
HISTORIC SITE, STATE OR NATIONAL, OPEN TO PUBLIC



SCALES

PLAN: 50 FEET
PROFILE: 50 FEET HORIZ. / 10 FEET VERT.
CROSS SECTIONS: 20 FEET HORIZ. and VERT
INDEX MAP: 1/2 MILE

DESIGN DESIGNATION: S.A.P. 55-601-14
RURAL - STA. 233+82.87 to STA. 286+00.00

ADT (Current Year)	= 5,638 (2003)
ADT (Future Year)	= 9,021 (2023)
HCADT (Heavy Commercial)	= 7.5%
Functional Classification	= Minor Arterial
10 Ton Design	
Soil Factor	= 130%
No. of Traffic Lanes	= 4 at 12 Ft.
Shoulder Width	= 8 Ft.

Design Speed 45 MPH Based on Stopping Sight Distance
Stopping Sight Distance based on 3.5 Ft. Height of Eye and 0.5 Ft. Height of Object
Design Speed not achieved at:

DESIGN DESIGNATION: S.A.P. 55-601-14
URBAN - STA. 286+00.00 to STA. 326+26.53

ADT (Current Year)	= 8,405 (2003)
ADT (Future Year)	= 13,448 (2023)
HCADT (Heavy Commercial)	= 7.5%
Functional Classification	= Minor Arterial
10 Ton Design	
Soil Factor	= 130%
No. of Traffic Lanes	= 4 at 12 Ft.
Shoulder Width	= N/A

Design Speed 45 MPH Based on Stopping Sight Distance
Stopping Sight Distance based on 3.5 Ft. Height of Eye and 0.5 Ft. Height of Object
Design Speed not achieved at:

AS-BUILT
MAR 0 8 2005
ENGINEERING

DESIGN ENGINEER: I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE 4/25/03 REG. NUMBER 19917
PRINTED NAME: KAYE M. BIENIEK
SIGNED NAME: Kaye M Bieniek
COUNTY DESIGN ENGINEER

DESIGNED BY: J. GOODMAN

DATE 4/25/03 REG. NUMBER 10397
Michael J Sheehan
APPROVED: OLMSTED COUNTY ENGINEER

Neil W. Freese DATE: 9/27/03
APPROVED: CITY OF ROCHESTER ENGINEER

Douglas C. Rovang DATE: 4/28/03
APPROVED: CITY OF ROCHESTER WATER DEPARTMENT

Wm. L. Wagner DATE: 9/15/03
RECOMMENDED FOR APPROVAL: STATE BRIDGE ENGINEER

DATE: 9/9/03
ASST DISTRICT STATE AID ENGINEER: REVIEWED FOR COMPLIANCE WITH STATE-AID RULES/POLICY

DATE: 9-22-03
STATE AID ENGINEER: APPROVED FOR STATE-AID & FEDERAL-AID FUNDING

FILE NAME: C01-CT01.DWG DATE: 07-15-03

STATEMENT OF ESTIMATED QUANTITIES

SPECIFICATION NO.	ITEM	ITEM NOTES	UNITS	S.A.P. 55-601-14 PARTICIPATING	S.A.P. 55-601-14 NON PARTICIPATING	100% CITY LOCAL	TOTAL ~~ESTIMATED~~ QUANTITIES	
2104.501	REMOVE CURB AND GUTTER		LIN. FT.	7935 ~~8829~~			~~8829~~	7935
2104.505	REMOVE CONCRETE MEDIAN		SQ. YD.	93			93	
2104.505	REMOVE CONCRETE WALK		SQ. YD.	1231 ~~1370~~			~~1370~~	1231
2104.505	REMOVE CONCRETE PAVEMENT		SQ. YD.	45273 ~~46677~~			~~46677~~	45273
2104.505	REMOVE CONCRETE APPROACH PANEL		SQ. YD.	582			582	
2104.505	REMOVE BITUMINOUS PAVEMENT		SQ. YD.	21172 ~~19919~~			~~19919~~	21172
2104.509	REMOVE METAL APRON		EACH	1			1	
2104.509	REMOVE MANHOLE	(1)	EACH	2			2	
2104.509	REMOVE CATCH BASIN	(1) (2)	EACH	2			2	
2104.511	SAWING CONCRETE PAVEMENT		LIN. FT.	225 ~~119~~			~~119~~	225
2104.513	SAWING BITUMINOUS PAVEMENT		LIN. FT.	637 ~~667~~			~~667~~	637
2104.521	SALVAGE CONCRETE PIPE CULVERT	(3)	LIN. FT.	112			112	
2104.523	SALVAGE HYDRANT & VALVE	(4)	EACH			2	2	
2104.523	SALVAGE METAL APRON	(5)	EACH	1			1	
2105.515	UNCLASSIFIED EXCAVATION	(6)	CU. YD.	9395 ~~9497~~			~~9497~~	9395
2112.501	SUBGRADE PREPARATION	(7)	ROAD STA.	92			(P) 92	
2130.501	WATER	(8)	M-GALLONS	0 ~~100~~			~~100~~	0
2211.501	AGGREGATE BASE, CLASS 5	(9) (10)	TON	13412 ~~17885~~			~~17885~~	13412
2301.502	CONCRETE PAVEMENT STANDARD WIDTH 8"		SQ. YD.	57019 ~~56972~~			(P) ~~56972~~	57019
2301.503	CONCRETE PAVEMENT IRREGULAR WIDTH 8"		SQ. YD.	4033 ~~3718~~			(P) ~~3718~~	4033
2301.511	STRUCTURAL CONCRETE	(11)	CU. YD.	13568 ~~13506~~			(P) ~~13506~~	13568
2301.531	EXPANSION JOINT DESIGN E8S		LIN. FT.	120			120	
2301.538	DOWEL BAR (EPOXY COATED)	(12)	EACH	31761 ~~31792~~			(P) ~~31792~~	31761
2301.545	CONCRETE CORING		EACH	62 ~~61~~			(P) ~~61~~	62
2301.602	DRILL & GROUT REINF. BAR (EPOXY COATED)		EACH	107 ~~108~~			~~108~~	107
2350.501	TYPE MV4 WEARING COURSE MIXTURE (C)	(13)	TON	578 ~~420~~			~~420~~	578
2350.501	TYPE LV4 WEARING COURSE MIXTURE (B)	(14)	TON	703 ~~644~~		23 ~~20~~	~~661~~	726
2350.502	TYPE MV4 NON WEARING COURSE MIXTURE (C)	(15)	TON	613 ~~656~~			~~656~~	613
2350.502	TYPE MV3 NON WEARING COURSE MIXTURE (C)	(16)	TON	383 ~~277~~			~~277~~	383
2350.502	TYPE LV4 NON WEARING COURSE MIXTURE (B)	(17)	TON	528 ~~604~~			~~604~~	528
2501.511	24" CS PIPE CULVERT		LIN. FT.	4			4	
2501.515	24" GS PIPE APRON		EACH	1			1	
2501.521	24" SPAN CS PIPE-ARCH CULVERT		LIN. FT.	~~16~~			~~16~~	
2501.571	INSTALL RC PIPE-ARCH CULVERT	(3)	LIN. FT.	88			88	
2502.501	4" PRECAST CONCRETE HEADWALL		EACH	17 ~~18~~			~~18~~	17
2502.521	4" T.P. PIPE DRAIN		LIN. FT.	298 ~~270~~			~~270~~	298
2502.541	4" PERF. P.E. PIPE DRAIN		LIN. FT.	8685 ~~8974~~			~~8974~~	8685
2503.511	12" RC PIPE SEWER		LIN. FT.	258 ~~184~~			~~184~~	258
2504.602	HYDRANT		EACH			1	1	
2504.602	ADJUST HYDRANT AND GATE VALVE		EACH	1			1	
2504.602	ADJUST GATE VALVE BOX		EACH	10 ~~8~~			~~8~~	10
2504.602	8" x 6" WET TAP		EACH			1	1	
2504.603	6" WATER MAIN DUCTILE IRON CL. 52		LIN. FT.			28	28	
2504.603	12" WATER MAIN DUCTILE IRON CL. 52		LIN. FT.			176 ~~175~~	~~175~~	176
2504.608	DUCTILE IRON FITTINGS		POUND			688 ~~724~~	~~724~~	688
2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN G		EACH	4 ~~2~~			~~2~~	4
2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN H		EACH	2 ~~1~~			~~1~~	2
2506.602	ADJUST DRAINAGE STRUCTURE	(18)	EACH	18 ~~17~~			~~17~~	18
2506.602	ADJUST FRAME AND RING CASTING	(19)	EACH	18 ~~10~~			~~10~~	18
2506.602	CONNECT INTO EXISTING DRAINAGE STRUCTURE		EACH	1			1	
2521.501	4" CONCRETE WALK	(20) (21)	SQ. FT.	11485 ~~12616~~			~~12616~~	11485
2521.501	6" CONCRETE WALK	(22)	SQ. FT.	155 ~~107~~			~~107~~	155
2531.501	CONCRETE CURB AND GUTTER DESIGN B624		LIN. FT.	11019 ~~10349~~		9698 ~~9627~~	~~10976~~	11019
2531.507	6" CONCRETE DRIVEWAY PAVEMENT		SQ. YD.	57 ~~99~~			~~99~~	57
2545.521	4" RIGID STEEL CONDUIT		LIN. FT.	213 ~~288~~			~~288~~	213
2545.553	PULL BOX (PVC WITH METAL COVER)		EACH	6			6	
2545.602	ADJUST PULL BOX		EACH	10 ~~11~~			~~11~~	10

STATEMENT OF ESTIMATED QUANTITIES

SPECIFICATION NO.	ITEM	ITEM NOTES	UNITS	S.A.P. 55-601-14 PARTICIPATING	S.A.P. 55-601-14 NON PARTICIPATING	100% CITY LOCAL	TOTAL ESTIMATED QUANTITIES	
2563.601	TRAFFIC CONTROL		LUMP SUM	1			1	
2563.602	RAISED PAVEMENT MARKER TEMPORARY	(23)	EACH	998 ~~1340~~			~~1340~~	998
2563.602	TUBE DELINEATOR	(23)	EACH	217 ~~270~~			~~270~~	217
2564.602	PAVEMENT MESSAGE (LEFT ARROW) EPOXY		EACH	~~27~~			~~27~~	
2564.602	PAVEMENT MESSAGE (RIGHT ARROW) EPOXY		EACH	11 ~~9~~			~~9~~	11
2564.603	4" DOUBLE SOLID LINE YELLOW - PAINT	(23)	LIN. FT.	2965 ~~5900~~			~~5900~~	2965
2564.603	4" SOLID LINE WHITE - EPOXY		LIN. FT.	14530 ~~20866~~			~~20866~~	14530
2564.603	24" SOLID LINE WHITE - EPOXY		LIN. FT.	94 ~~122~~			~~122~~	94
2564.603	4" BROKEN LINE WHITE - EPOXY		LIN. FT.	3980 ~~3718~~			~~3718~~	3980
2564.603	4" SOLID LINE YELLOW - EPOXY		LIN. FT.	4184 ~~1165~~			~~1165~~	4184
2564.603	4" DOUBLE SOLID LINE YELLOW - EPOXY		LIN. FT.	9222 ~~9991~~			~~9991~~	9222
2564.603	24" SOLID LINE YELLOW - EPOXY		LIN. FT.	510 ~~351~~			~~361~~	510
2564.618	ZEBRA CROSSWALK WHITE - EPOXY		SQ. FT.	936 ~~918~~			~~918~~	936
2575.505	SODDING TYPE LAWN		SQ. YD.	21181 ~~26487~~			~~26487~~	21181
2575.532	COMMERCIAL FERTILIZER ANALYSIS 12-12-12		POUND	2300 ~~1188~~			~~1188~~	2300

(1) INCLUDES PLUGGING OF EXISTING PIPE SEWERS AS NOTED ON PLAN SHEETS.

(2) INCLUDES REMOVAL OF 5 L.F OF 12" R.C.P SEWER AT STA. 296+00.14 - 31.02' LT

(3) INCLUDES APRON LENGTHS.

(4) 6" HYDRANT AND 6" GATE VALVE & BOX SHALL REMAIN THE PROPERTY OF ROCHESTER PUBLIC UTILITIES.

(5) INCLUDES INSTALLATION AT END OF CULVERT EXTENSION AT STA. 268+17.09 - 48.00' LT

(6) INCLUDES 2516 CU. YDS. OF TOPSOIL EXCAVATION.

(7) STA. 233+82.87 TO STA. 287+27.00 AND STA. 288+67 75 TO STA. 326+26.53.

(8) INCLUDED FOR DUST CONTROL WITHIN THE PROJECT LIMITS ONLY, AS DIRECTED BY THE ENGINEER.

(9) SPECIFICATION 1903 SHALL NOT APPLY FOR THESE ITEMS.

(10) INCLUDES 13251 TON FOR MAINLINE, 3949 TON FOR SHOULDERS AND TURN LANES, AND 685 TON FOR ENTRANCES, DRIVEWAYS, SIDEWALKS AND BIKE PATHS.

(11) INCLUDES FURNISHING AND PLACEMENT OF REINFORCEMENT BARS. ALL REINFORCEMENT BARS SHALL BE EPOXY COATED.

(12) TOTAL NUMBER OF DOWEL BARS REQUIRED IS 36328. OLMSTED COUNTY HAS 4536 DOWEL BARS (378 BASKETS) LOCATED AT THE OLMSTED COUNTY MAINTENANCE YARD WHICH SHALL BE USED ON THIS PROJECT DOWEL BARS SHALL BE 1-1/4 INCH.

(13) MIX DESIGNATION MVWE45035C.

(14) MIX DESIGNATION LVWE45030B.

(15) MIX DESIGNATION MVNW45035C.

(16) MIX DESIGNATION MVNW35035C.

(17) MIX DESIGNATION LVNW45030B.

(18) INCLUDES REMOVAL AND REPLACEMENT OF FRAME, GRATE AND CASTING WITH RING OR FRAME CASTING No. 802A, CURB BOX No. 823A AND GRATE CASTING No. 811

(19) INCLUDES REMOVAL AND REPLACEMENT CASTINGS PLACED IN CONCRETE PAVEMENT SHALL BE NEENAH R-1916-C OR APPROVED EQUAL.

(20) PEDESTRIAN CURB RAMPS PAID FOR AS 4" CONCRETE WALK.

(21) MEDIAN CONCRETE AT STA. 233+82.87 TO STA. 238+63.83 AND STA. 320+53.41 TO STA. 325+95.89 PAID FOR AS 4" CONCRETE WALK.

(22) CONCRETE APPROACH NOSES PAID FOR AS 6" CONCRETE WALK.

(23) TEMPORARY RAISED PAVEMENT MARKERS, TUBE DELINEATORS AND 4" DOUBLE SOLID LINE YELLOW - PAINT SHALL BE USED AS DIRECTED BY THE ENGINEER IN THE FIELD.

BASIS OF QUANTITY

AGGREGATE BASE, CLASS 5 - 140 LBS./CU. FT. COMPACTED
BITUMINOUS MIXTURE - 110 LBS./SQ. YD./1 INCH DEPTH
COMMERCIAL FERTILIZER - 200 LBS./ACRE

AS-BUILT

MAR 08 2005

ENGINEERING

STANDARD PLATES

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION SHALL APPLY ON THIS PROJECT.

PLATE NO.	DESCRIPTION
1103J	TYPICAL DOWEL BAR ASSEMBLY
1141D	PAVEMENT KEYWAY FOR KEYED JOINT CONSTRUCTION
1150Q	CONSTRUCTION OF HEADER JOINTS
3000L	REINFORCED CONCRETE PIPE
3006G	GASKET JOINT FOR R.C. PIPE
3040F	CORRUGATED METAL PIPE CULVERT
3123J	METAL APRON FOR C.S. PIPE
3124B	METAL APRON CONNECTION
3131C	PRECAST CONCRETE HEADWALL FOR SUBSURFACE DRAINS
3145E	CONCRETE PIPE TIES
4002F	MANHOLE OR CATCH BASIN (DESIGN C)
4006L	MANHOLE OR CATCH BASIN (DESIGN G OR H)
4011E	PRECAST CONCRETE BASE
4026A	CONCRETE ENCASED CONCRETE ADJUSTING RINGS
4129G	CATCH BASIN FRAME CASTING
4151B	GRATE CASTING FOR CATCH BASIN
4160D	CURB BOX CASTING FOR CATCH BASIN
7035L	CONCRETE WALK AND CURB RETURNS AT ENTRANCES
7036E	PEDESTRIAN CURB RAMP
7100G	CONCRETE CURB AND GUTTER
7111J	INSTALLATION OF CATCH BASIN CASTINGS
7112C	INSTALLATION & REINFORCEMENT OF CATCH BASIN & MANHOLE CASTINGS
7113A	CONCRETE APPROACH NOSE DETAIL
8000I	STANDARD BARRICADES
8114A	P.V.C. HANDHOLE/PULLBOX

FILE NAME: C01-EQ01.DWG DATE: 12-15-03

CERTIFIED BY Kaye M Kiernick LICENSED PROFESSIONAL ENGINEER REG. NO. 19917 12/15 2003

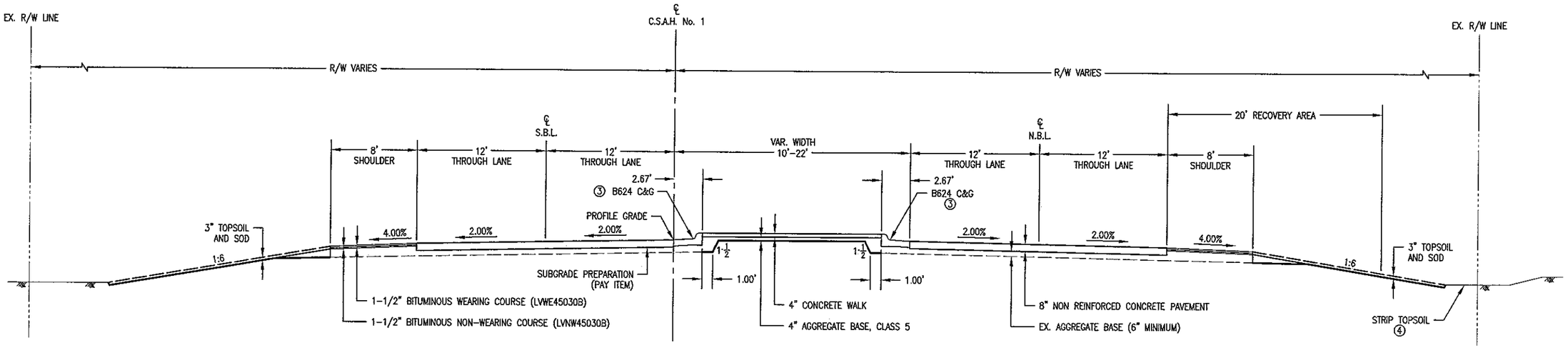
S.A.P. 55-601-14

TITLE: ESTIMATED QUANTITIES

Sheet No. 2 of 66 Sheets

DETAILS SHOWN ON THE RIGHT OR LEFT SIDE OF SECTIONS ARE NOT INTENDED TO APPLY EXCLUSIVELY TO THE SIDE OF THE ROADWAY SHOWN, BUT MAY BE APPLICABLE TO THE OTHER SIDE OF THE ROADWAY SEE PLAN SHEETS.

ALL UTILITY POLES AND OTHER UNYIELDING OBJECTS SHALL BE REMOVED AND RELOCATED OUTSIDE OF THE RECOVERY AREA.



TYPICAL SECTION
STA. 233+82.87 TO STA. 238+68.83

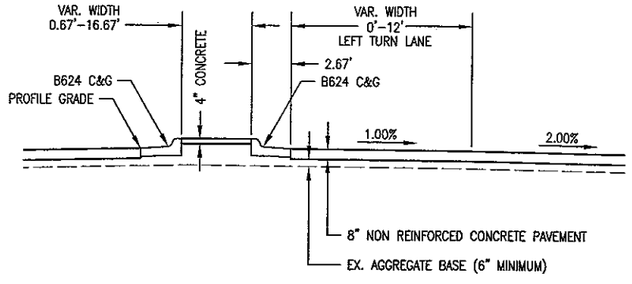
NOTES:

① SEE SUPERELEVATION PLANS FOR ADDITIONAL CROSS SLOPE INFORMATION.

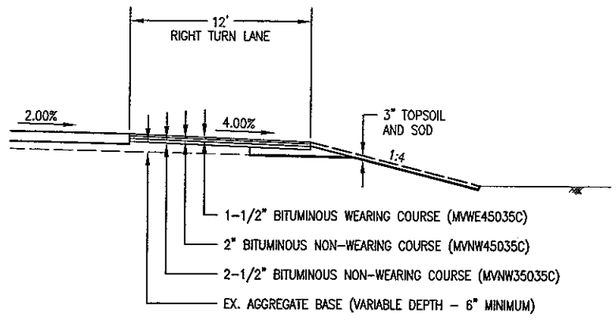
② SEE SURFACING PLANS FOR ADDITIONAL SIDE STREET AND DRIVEWAY INFORMATION.

③ B624 CURB AND GUTTER SHALL HAVE REJECT GUTTER ON ALL MEDIANS.

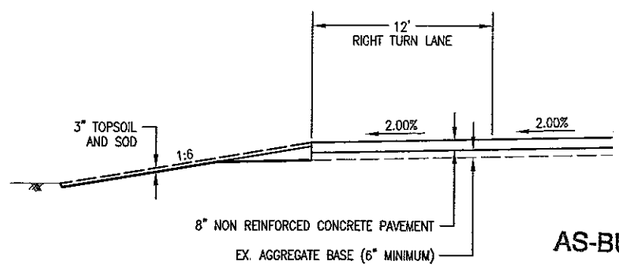
④ SALVAGE THE EXISTING TOPSOIL AND USE AS SLOPE DRESSING TO THE EXTENT AVAILABLE. TOPSOIL EXCAVATION SHALL BE INCLUDED IN UNCLASSIFIED EXCAVATION FOR PAYMENT AND NO ADDITIONAL COMPENSATION WILL BE MADE FOR STOCKPILING AND RESPREADING OF THE TOPSOIL.



LEFT TURN LANE SECTION
STA. 234+48.83 TO STA. 238+68.83 RT.
STA. 320+48.42 TO STA. 323+03.99 LT.
STA. 322+05.05 TO STA. 326+00.90 RT.



BITUMINOUS RIGHT TURN LANE SECTION
STA. 234+48.83 TO STA. 239+35.76 RT.
STA. 277+90.38 TO STA. 283+00.41 LT.
STA. 281+85.86 TO STA. 284+95.75 RT.
STA. 242+66.63 TO STA. 238+79.03 LT.



CONCRETE RIGHT TURN LANE SECTION
STA. 233+82.87 TO STA. 236+80.00 LT.

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MAR 0 8 2005
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FILE NAME: C01-TY01.DWG DATE: 07-09-03

TITLE: TYPICAL SECTIONS

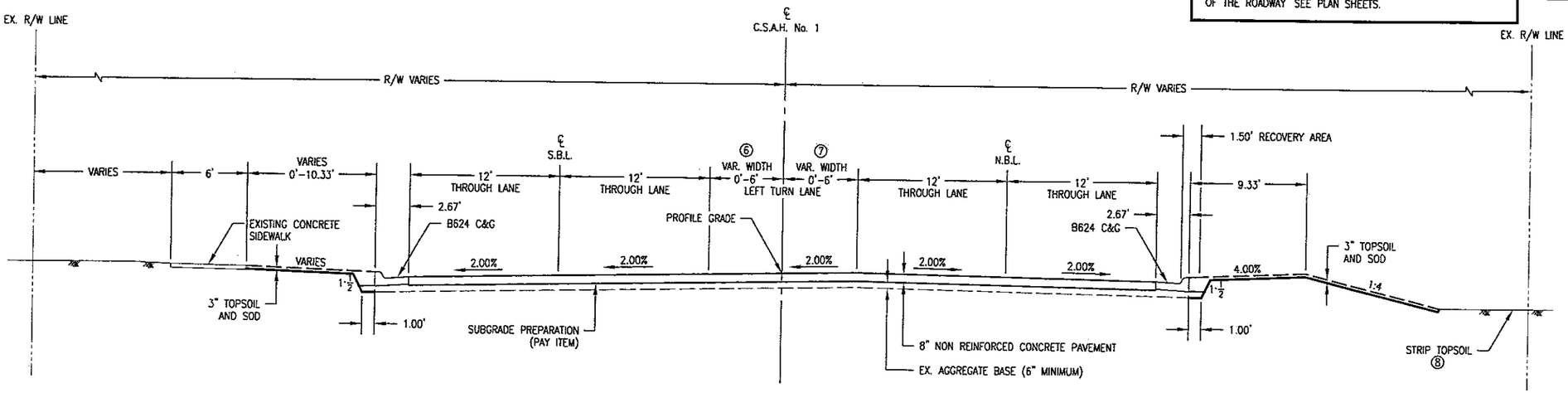
CERTIFIED BY Kaye M Bienick REG. NO. 19917 4/25 2003
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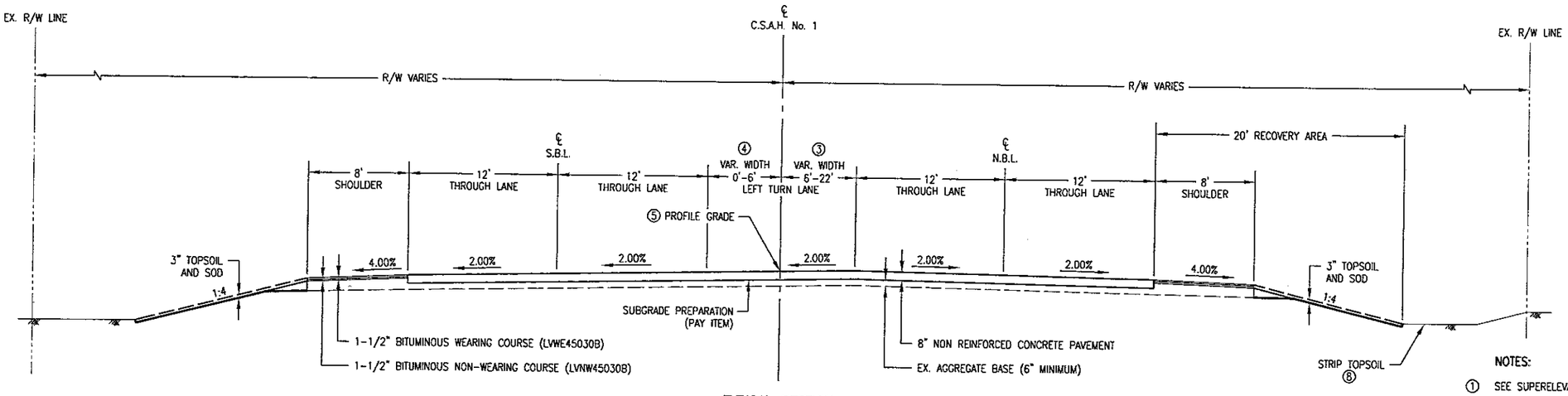
Sheet No. 3 of 66 Sheets

DETAILS SHOWN ON THE RIGHT OR LEFT SIDE OF SECTIONS ARE NOT INTENDED TO APPLY EXCLUSIVELY TO THE SIDE OF THE ROADWAY SHOWN, BUT MAY BE APPLICABLE TO THE OTHER SIDE OF THE ROADWAY SEE PLAN SHEETS.

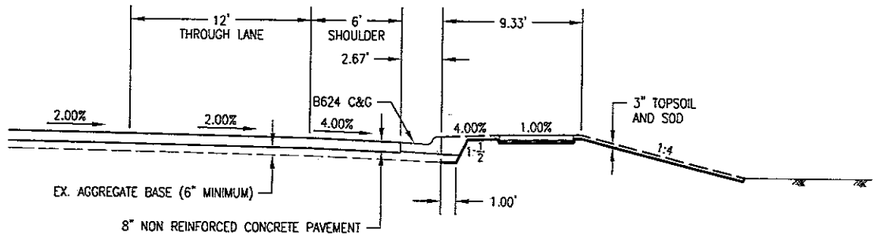
ALL UTILITY POLES AND OTHER UNYIELDING OBJECTS SHALL BE REMOVED AND RELOCATED OUTSIDE OF THE RECOVERY AREA.



TYPICAL SECTION
STA. 286+00.00 TO STA. 303+43.42



TYPICAL SECTION
STA. 238+68.83 TO STA. 286+00.00



CONCRETE SHOULDER WITH CURB AND GUTTER SECTION
~~STA. 263+50.00 TO STA. 264+25.21 LT.~~
STA. 264+82.03 TO STA. 267+72.18 RT
STA. 268+46.86 TO STA. 271+53.95 RT.
STA. 268+64.27 TO STA. 271+42.34 LT.

AS-BUILT
MAR 0 8 2005
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NOTES:

① SEE SUPERELEVATION PLANS FOR ADDITIONAL CROSS SLOPE INFORMATION.

② SEE SURFACING PLANS FOR ADDITIONAL SIDE STREET AND DRIVEWAY INFORMATION.

③ WIDTH VARIES FROM 22.00 FEET AT STA. 239+07.83 TO 6.00 FEET AT STA. 245+40.17

④ WIDTH VARIES FROM 0.00 FEET AT STA. 242+19.55 TO 6.00 FEET AT STA. 245+39.50.

⑤ PROFILE GRADE FOLLOWS C/L ALIGNMENT FROM STA. 242+19.55 TO STA. 245+39.80.

⑥ WIDTH VARIES FROM 6.00 FEET AT STA. 298+82.27 TO 0.00 FEET AT STA. 302+16.12.

⑦ WIDTH VARIES FROM 6.00 FEET AT STA. 300+09.57 TO 0.00 FEET AT STA. 303+43.42.

⑧ SALVAGE THE EXISTING TOPSOIL AND USE AS SLOPE DRESSING TO THE EXTENT AVAILABLE. TOPSOIL EXCAVATION SHALL BE INCLUDED IN UNCLASSIFIED EXCAVATION FOR PAYMENT AND NO ADDITIONAL COMPENSATION WILL BE MADE FOR STOCKPILING AND RESPREADING OF THE TOPSOIL.

CERTIFIED BY Kevin M Reinerich REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

TITLE: TYPICAL SECTIONS

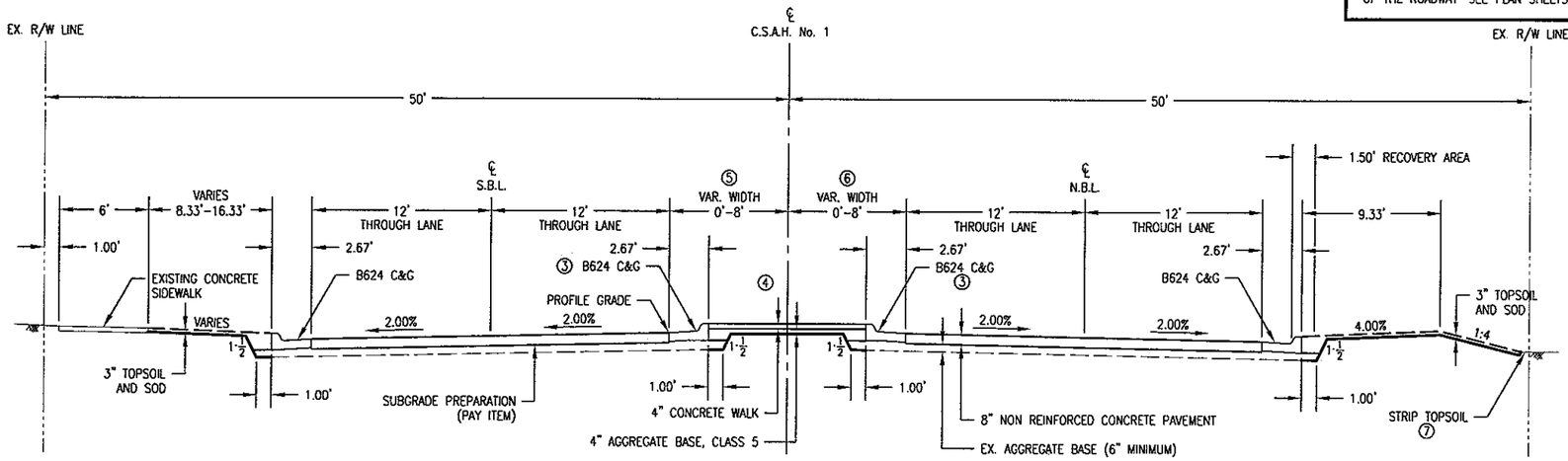
S.A.P. 55-601-14

Sheet No. 4 of 66 Sheets

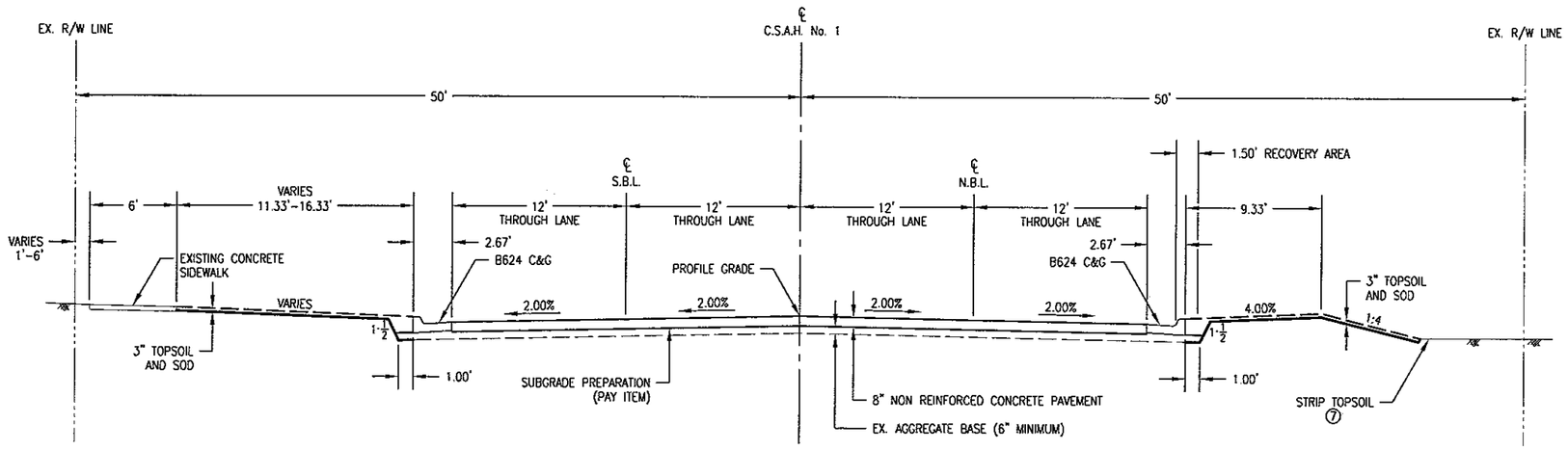
FILE NAME: C01-TY02.DWG DATE: 04-21-03

DETAILS SHOWN ON THE RIGHT OR LEFT SIDE OF SECTIONS ARE NOT INTENDED TO APPLY EXCLUSIVELY TO THE SIDE OF THE ROADWAY SHOWN, BUT MAY BE APPLICABLE TO THE OTHER SIDE OF THE ROADWAY SEE PLAN SHEETS.

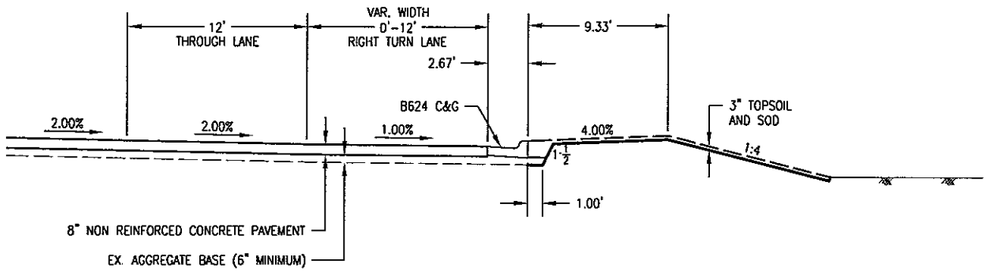
ALL UTILITY POLES AND OTHER UNYIELDING OBJECTS SHALL BE REMOVED AND RELOCATED OUTSIDE OF THE RECOVERY AREA.



TYPICAL SECTION
STA. 316+11.08 TO STA. 326+26.53



TYPICAL SECTION
STA. 303+43.42 TO STA. 316+11.08



RIGHT TURN LANE SECTION
STA. 289+21.94 TO STA. 292+10.44 RT
STA. 310+27.26 TO STA. 314+04.93 RT
STA. 317+77.98 TO STA. 320+38.44 RT

NOTES:

① SEE SUPERELEVATION PLANS FOR ADDITIONAL CROSS SLOPE INFORMATION.

② SEE SURFACING PLANS FOR ADDITIONAL SIDE STREET AND DRIVEWAY INFORMATION.

③ B624 CURB AND GUTTER SHALL HAVE REJECT GUTTER ON ALL MEDIANS.

④ MEDIAN CURB BEGINS AT STA. 320+48.42 AND ENDS AT STA. 326+00.90.

⑤ WIDTH VARIES FROM 0.00 FEET AT STA. 319+00.97 TO 8.00 FEET AT STA. 320+98.51

⑥ WIDTH VARIES FROM 0.00 FEET AT STA. 316+11.08 TO 8.00 FEET AT STA. 319+92.52.

⑦ SALVAGE THE EXISTING TOPSOIL AND USE AS SLOPE DRESSING TO THE EXTENT AVAILABLE. TOPSOIL EXCAVATION SHALL BE INCLUDED IN UNCLASSIFIED EXCAVATION FOR PAYMENT AND NO ADDITIONAL COMPENSATION WILL BE MADE FOR STOCKPILING AND RESPREADING OF THE TOPSOIL.

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MAR 0 8 2005
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FILE NAME: C01-TY03.DWG DATE: 07-09-03

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LICENSED PROFESSIONAL ENGINEER

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TITLE: TYPICAL SECTIONS

Sheet No. 5 of 66 Sheets

CONCRETE QUANTITIES

STATION	LOCATION	4" CONCRETE WALK	6" CONCRETE WALK	B624 CURB & GUTTER	6" DRIVEWAY PAVEMENT
		SQ. FT.	SQ. FT.	LIN. FT.	SQ. YD.
233+82.87-238+63.83	RT.	4886		983	
238+63.83-238+68.83	RT.		50		
263+50.00-264+25.51	LT.			76	
264+82.03-267+72.18	RT.			290	
268+17.09-271+94.34	LT.	2181			
268+17.09-271+96.80	RT.	1952			
268+46.86-271+96.80	RT.			357	
268+64.27-271+94.34	LT.			341	
272+24.28	RT.	75			
272+26.82	LT.	138			
286+05.00-287+27.00	LT. & RT.			254	
286+50.00-287+27.00	LT.	463			
288+87.75-290+39.91	LT.	905			
288+87.75-291+83.60	RT.			295	
288+87.75-296+47.12	LT.			796	
289+91.08	RT.				43
290+18.91	LT.				56
291+83.60-313+63.26	RT.			2200	
296+15.98	LT.	382			
296+47.12-313+63.26	LT.			1722	
297+04.50	LT.	175			
313+38.01	LT.	327			
313+63.26-320+10.00	RT.			652	
313+63.26-326+26.53	LT.			1279	
313+88.19	LT.	335			
320+10.00-326+26.53	RT.			646	
320+48.42-320+53.41	RT.		27		
320+53.41-325+95.89	LT. & RT.	350		1085	
325+95.89-326+00.90	LT.		30		
326+04.82	RT.	208			
326+18.15	LT.	239			
TOTALS		11485 ~~12610~~	155 ~~187~~	11019 ~~10970~~	57 ~~99~~

BITUMINOUS QUANTITIES

STATION	LOCATION	BITUMINOUS WEAR		BITUMINOUS NON WEAR		
		LVWE45030B	MVWE45035C	LVNW45030B	MVNW45035C	MVNW35035C
		TON	TON	TON	TON	TON
SHOULDERS & TURN LANES						
233+82.87-234+48.83	RT.	6		6		
234+48.83-239+35.76	RT.		56		76	95
236+80.00-263+50.00	LT.	205		207		
239+35.76-264+82.03	RT.	195		197		
264+25.51-268+64.27	LT.	34		34		
267+72.18-268+46.86	RT.	6		6		
271+42.34-277+90.38	LT.	46		47		
271+53.95-281+85.56	RT.	79		80		
277+90.38-283+00.41	LT.		60		81	102
281+85.56-284+95.75	RT.		47		63	80
283+00.41-286+00.00	LT.	25		25		
284+95.75-286+00.00	RT.	2		2		
SIDE STREETS & DRIVEWAYS						
238+27.03	LT.	7				
239+07.83	RT.		10		17	
239+24.10	LT.	4				
243+60.12	LT.		12		21	
253+97.40	RT.		14		24	
254+15.99	LT.		10		18	
257+65.18	LT.		12		20	
257+73.55	RT.		11		18	
261+02.31	RT.		10		18	
261+10.84	LT.		11		18	
263+30.73	RT.	6				
263+31.48	LT.	6				
264+55.28	LT.		11		17	
264+55.28	RT.		10		17	
268+17.09	LT.		13		22	
268+17.09	RT.		10		16	
271+94.34	LT.		21		36	
271+96.80	RT.		15		26	
278+25.41	LT.		20		35	
278+26.05	RT.		14		25	
284+87.33	RT.		28		48	
291+83.60	RT.	4				
313+63.26	LT.		11		19	
313+63.26	RT.		10		17	
320+10.00	RT.	4				
326+26.53	LT.		2		2	
326+26.53	RT.		2		2	
BIKE PATHS						
284+03.50	LT.	3				
284+03.50	RT.	8				
285+59.75-287+27.00	RT.	11 (1)				
287+87.75-289+73.68	RT.	9 (1)				
289+98.00-290+03.00	RT.	1				
TOTALS		726 ~~661~~	578 ~~420~~	528 ~~604~~	613 ~~656~~	383 ~~277~~

(1) CITY PORTION.

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MAR 0 8 2005

ENGINEERING

TITLE: QUANTITY TABULATIONS

CERTIFIED BY Kevin Pierick REG. NO. 19917 8/15 20 03
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

Sheet No. 6 of 66 Sheets

FILE NAME: C01-QT01.DWG DATE: 07-11-03

CONCRETE PAVEMENT AND JOINT SUMMARY

STATION	LOCATION	DEPTH	CONCRETE PAVEMENT STANDARD WIDTH	CONCRETE PAVEMENT IRREGULAR WIDTH	STRUCTURAL CONCRETE	DOWEL BAR (1)	DRILL & GROUT REINF. TIE BAR (1)	INCIDENTAL ITEMS				
								CONTRACTION JOINT		LONGITUDINAL JOINT		
		INCH	SQ. YD.	SQ. YD.	CU. YD.	EACH	EACH	C2B LIN. FT.	C2B-D LIN. FT.	L1TH LIN. FT.	L2KTH LIN. FT.	L3H LIN. FT.
C.S.A.H. 1												
233+82.87-236+80.00	LT.	8	396		88	240	12		240			
233+82.87-287+27.00	LT.	8	14251		3167	8544	24		8544	5344	1637	4485
233+82.87-287+27.00	RT.	8	14251		3167	8544	24		8544	5344	6068	
234+48.83-235+68.83	RT.	8		80	18	52			52		121	
235+68.83-238+68.83	RT.	8	400		89	240			240		300	
238+68.83-245+39.80	LT. & RT.	8		1246	277	735			735			374
245+39.80-287+27.00	LT. & RT.	8	5582		1241	3348			3348			
263+50.00-264+25.51	LT.	8		50	11	30			30		76	
264+82.03-267+72.18	RT.	8		193	43	114			114		290	
268+46.86-271+53.95	RT.	8		205	46	120			120		307	
268+64.27-271+42.34	LT.	8		185	41	114			114		278	
288+87.75-298+82.27	LT. & RT.	8	1326		295	792			792			
288+87.75-326+26.53	LT.	8	9956		2212	5976			5976	3733	4409	2967
288+87.75-326+26.53	RT.	8	9986		2219	5952			5952	3745	5666	341
289+21.94-290+21.94	RT.	8		56	12	28			28		100	
290+21.94-291+94.83	RT.	8		192	43	120			120		135	
291+94.83-292+10.44	RT.	8		5	1	2			2		20	
298+82.27-303+43.42	LT. & RT.	8		307	68	194			194			
310+27.26-311+47.26	RT.	8		80	18	46			46		121	
311+47.26-313+82.12	RT.	8	314		70	192			192		185	
313+82.12-314+04.93	RT.	8		9	2	3			3		27	
316+11.08-320+48.42	LT. & RT.	8		293	65	173			173			
317+77.98-318+97.68	RT.	8		80	18	45			45		121	
318+97.68-320+22.46	RT.	8	167		56	96			96		84	
320+22.46-320+38.44	RT.	8		6	1	11			11		22	
320+48.42-322+05.01	LT. & RT.	8		174	39	110			110		157	
322+05.01-323+03.99	LT. & RT.	8		50	11	27			27		99	
322+05.05-323+04.01	LT. & RT.	8		60	13	33			33		100	
323+04.01-326+26.53	LT. & RT.	8		358	80	220			220		296	
326+00.89-326+26.53	LT.	8		18	4	12			12			
20TH ST. S.E.												
54+04.77-54+69.36	LT. & RT.	8	343		76	168	48		168	129	129	65
54+22.18-54+69.36	LT.	8		44	10	34		34			61	
54+44.81-54+69.36	RT.	8		19	5	13		13			50	
TOTALS			~~56972~~ 57019	~~3710~~ 4033	~~13506~~ 13568	(2) ~~36328~~ 31741	~~108~~ 107	47	36281	18295	20859	8232

(1) USE 1-1/4 INCH DOWEL BARS.

(2) OLMSTED COUNTY HAS 4536 DOWEL BARS (378 BASKETS) LOCATED AT THE OLMSTED COUNTY MAINTENANCE YARD WHICH SHALL BE USED ON THIS PROJECT QUANTITY SHOWN REFLECTS TOTAL NUMBER OF DOWEL BARS FOR THIS PROJECT

SODDING - TYPE LAWN

STATION	LOCATION	LAWN SOD
		SQ. YD.
233+82.87-238+17.03	LT.	544
23382.87-238+87.83	RT.	950
238+37.03-239+18.10	LT.	147
239+27.83-253+75.66	RT.	2858
239+30.10-243+49.70	LT.	747
243+71.34-254+15.02	LT.	1138
254+00.71-257+52.82	RT.	495
254+36.12-257+64.71	LT.	456
257+77.87-260+83.59	RT.	484
257+86.83-261+08.86	LT.	372
261+06.62-263+20.73	RT.	372
261+31.98-263+19.48	LT.	205
263+40.73-264+34.14	RT.	144
263+43.48-264+52.30	LT.	77
264+55.24-267+98.97	RT.	263
264+75.42-268+12.41	LT.	430
268+20.07-271+78.28	RT.	263
268+37.48-271+71.67	LT.	376
272+14.34-278+05.41	LT.	1204
272+14.61-278+09.70	RT.	1447
278+41.36-284+38.96	RT.	1321
278+45.41-287+40.88	LT.	1234
284+75.02-287+40.88	RT.	484
288+73.88-289+74.18	RT.	164
288+73.88-290+02.91	LT.	236
289+98.18-291+68.57	RT.	140
290+34.91-296+32.02	LT.	773
291+95.94-313+46.59	RT.	3555
296+89.52-313+44.93	LT.	2134
313+79.93-319+95.78	RT.	889
313+81.27-326+26.53	LT.	1813
320+24.22-326+26.53	RT.	772
TOTALS		~~26487~~ 21181

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MAR 0 8 2005

ENGINEERING

FILE NAME: C01-01102.DWG DATE: 07-15-03

TITLE: QUANTITY TABULATIONS

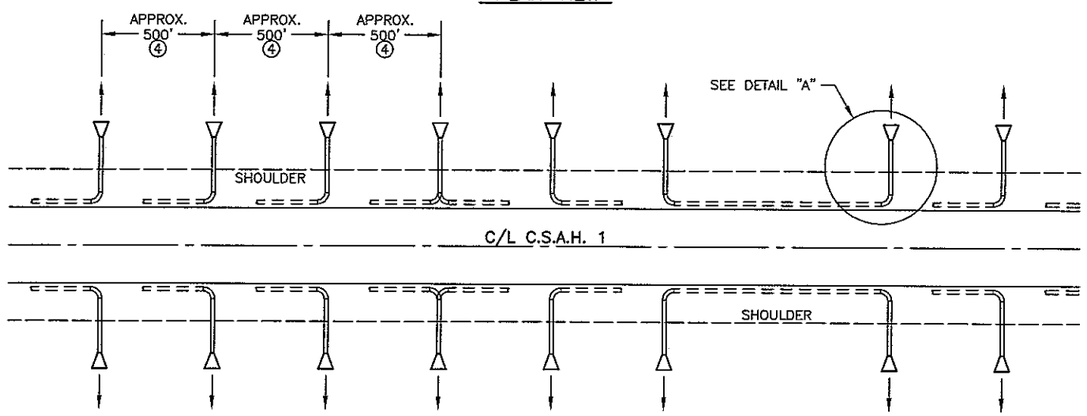
CERTIFIED BY Kaye M Boenick REG. NO. 19917 8/15 2003
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Sheet No. 7 of 66 Sheets

EDGE DRAIN DETAILS AND CONSTRUCTION NOTES

PLAN VIEW



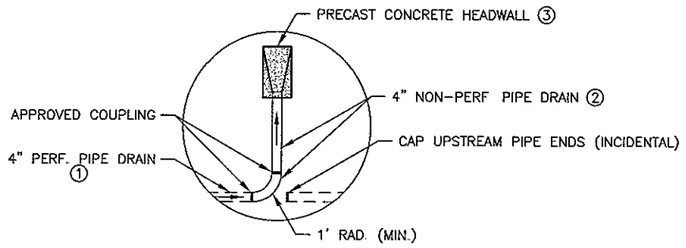


LEGEND

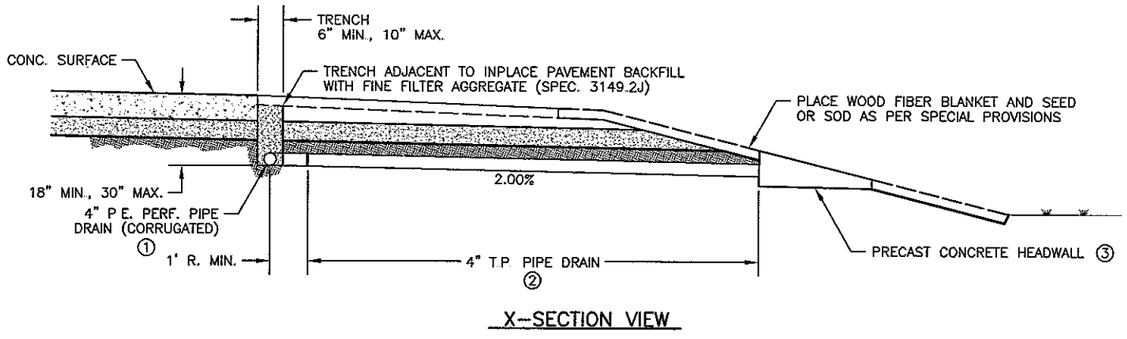
= = = ⇒ 4" PERFORATED PIPE DRAIN

═══ 4" NON-PERFORATED PIPE DRAIN

▷ PRECAST CONCRETE HEADWALL



DETAIL "A"



X-SECTION VIEW

PAVEMENT EDGE DRAINS					
STATION	LOCATION	4" PERF. P.E. PIPE DRAIN	4" NON-PERF. T.P PIPE DRAIN	PRECAST CONCRETE HEADWALL	HEADWALL LOCATION
		LIN. FT.	LIN. FT.	EACH	
233+83–238+50	LT. & RT.	934	30	2	238+~~50~~35 Rt. 242+55 Lt.
238+50–243+00	LT. & RT.	900	30	2	243+~~00~~03 Rt. 248+56 Lt.
243+00–248+00	LT. & RT.	1000	30	2	248+00 Rt. 253+70 Lt.
248+00–253+00	LT. & RT.	1000	30	2	253+00 Rt. 258+41 Lt.
253+00–258+00	LT. & RT.	1000	30	2	258+~~00~~05 Rt. 262+85 Lt.
258+00–262+80	LT. & RT.	960	30	2	262+~~80~~00 Rt. 267+57 Lt.
262+80–264+10	RT.	130	15	1	264+10 Rt.
265+00–267+90	LT.	290	15	1	267+90 277+57 Lt.
272+40–277+50	LT. & RT.	1020	30	2	277+~~50~~60 Rt. 257+50 Lt.
277+50–286+20	LT. & RT.	1740	30	2	281+64 (LOW PT.) Rt. & Lt.
TOTALS		~~8974~~ 8685	~~270~~ 298	~~18~~ 17	

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MAR 0 8 2005

ENGINEERING

CONSTRUCTION NOTES

① PAYMENT FOR 4" PERFORATED PIPE DRAIN SHALL BE FULL COMPENSATION FOR TRENCHING, FABRIC WRAPPED P.E. PIPE, INSTALLATION, FILTER AGGREGATE BACKFILL AND COMPACTION, BITUMINOUS OR AGGREGATE CAP, AND ALL OTHER ASSOCIATED WORK.

② PAYMENT FOR 4" NON-PERFORATED PIPE DRAIN SHALL BE FULL COMPENSATION FOR TRENCHING, FURNISHING AND PLACING PIPE AND CONNECTIONS, BACKFILL AND COMPACTION, AND ALL OTHER ASSOCIATED WORK.

③ PAYMENT FOR PRECAST CONCRETE HEADWALLS SHALL BE FULL COMPENSATION FOR PLACING HEADWALL, WOOD FIBER BLANKET AND SEED, AND ALL OTHER ASSOCIATED WORK.

④ IF AN OUTLET HAPPENS TO FALL WITHIN A CROSS-OVER OR DITCH BLOCK, INCREASE THE LENGTH OF THE PERFORATED PIPE TO A POINT WHERE AN OUTLET CAN BE SATISFACTORILY CONSTRUCTED AS DIRECTED BY THE ENGINEER.

⑤ EXCESS EXCAVATED MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH SPEC. 2104.3C3.

⑥ NO EDGE DRAINS WILL BE PLACED ON SUPERELEVATED SIDES AS DIRECTED BY THE ENGINEER.

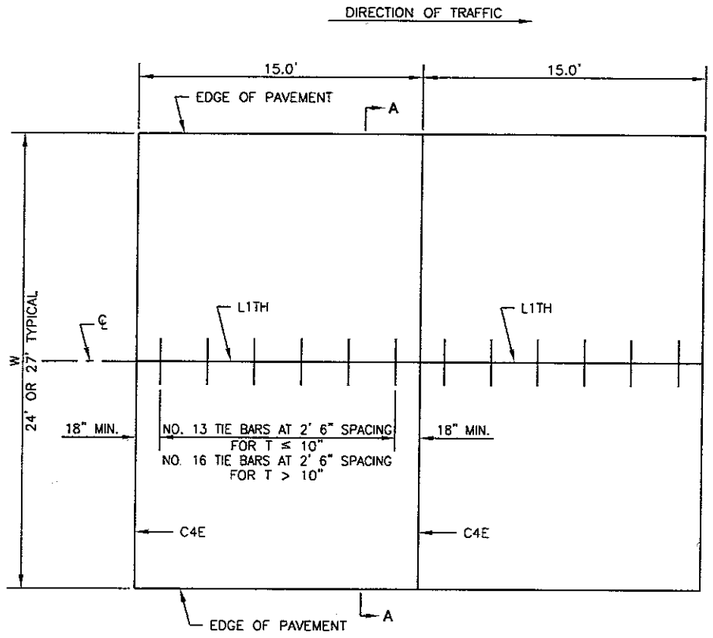
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CERTIFIED BY Kaye M Bienick REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

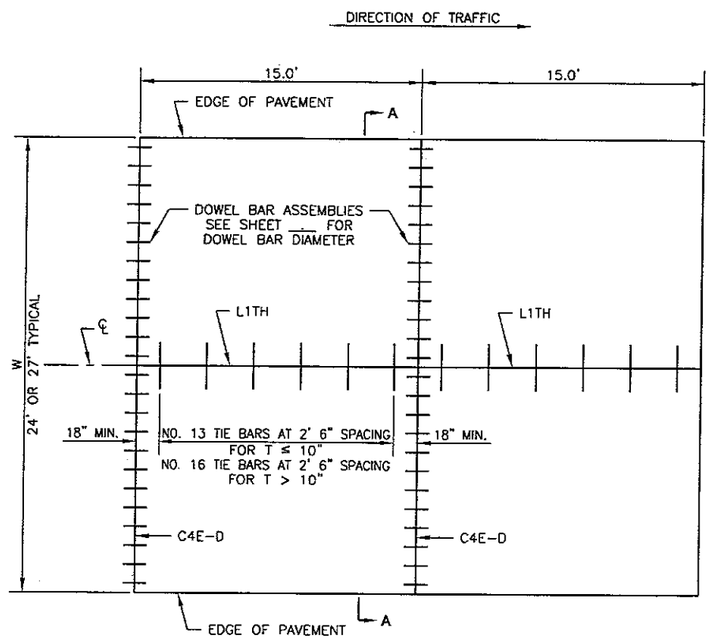
S.A.P. 55-601-14

TITLE: MISCELLANEOUS DETAILS

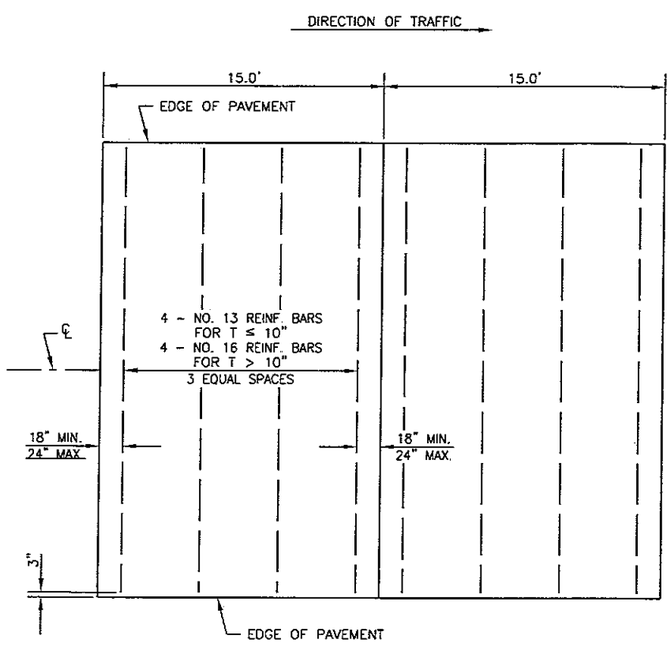
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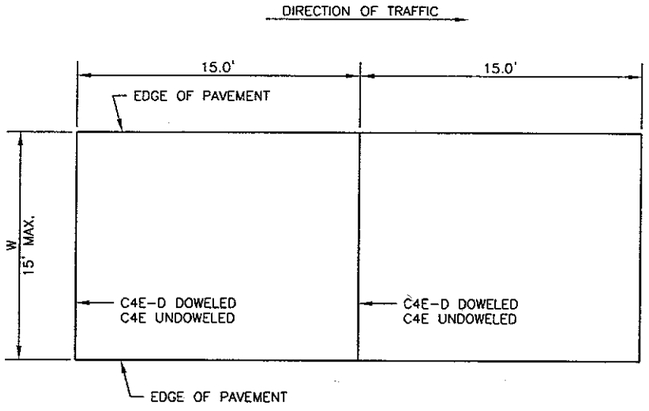
MAINLINE PAVEMENT
UNDOWELED



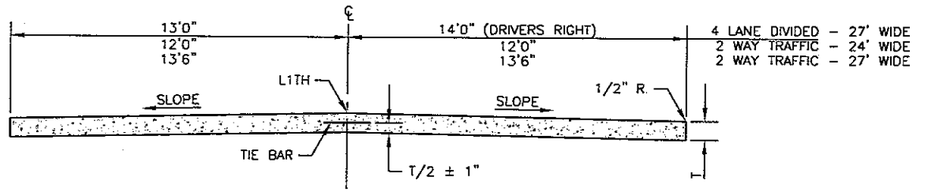
MAINLINE PAVEMENT
DOWELED



SUPPLEMENTAL PANEL REINFORCEMENT



PAVEMENT 2 FT. THRU 15 FT. WIDTH



SECTION A–A

AS-BUILT

MAR 0 8 2005

ENGINEERING

GENERAL NOTES:

ALL REBARS ARE IN METRIC DESIGNATIONS

SEE TYPICAL SECTIONS AND PLAN SHEETS FOR CROSS SLOPES AND PAVEMENT THICKNESS, T

WHEN RIGID PAVEMENT ADJOINS FLEXIBLE PAVEMENT, BRIDGE APPROACHES, R.R. CROSSINGS OR OTHER TYPES OF FREE ENDS, THE FOLLOWING MODIFICATIONS SHALL BE MADE: THE FIRST OR LAST 10 JOINTS SHALL BE DOWELED CONTRACTION JOINTS, C4E–D.

DOWEL BAR ASSEMBLIES, WHEN REQUIRED, SHALL BE SIMILAR TO THOSE SHOWN ON STANDARD PLATE 1103.

ALL REINFORCING BARS SHALL BE EPOXY COATED IN ACCORDANCE WITH SPEC. 3301 AND SHALL MEET THE REQUIREMENTS OF GRADE 60 FOR AASHTO M–31 OR M–53. FOR ADDITIONAL REINFORCEMENT OVER CULVERTS, SEE STANDARD PLATE 1070.

TIE BARS:
USE NO. 13 BARS 2'–6" LONG, AT 2'–6" SPACING, FOR T ≤ 10". USE NO. 16 BARS 3'–0" LONG, AT 2'–6" SPACING, FOR T > 10"

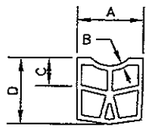
SUPPLEMENTAL PANEL REINFORCEMENT:
PLACE IN PANELS WHERE PAVEMENT WIDTH EXCEEDS 15.0' WITHOUT A LONGITUDINAL JOINT, AND IN THE MIDDLE LANE(S) WHERE TIED PAVEMENT WIDTH EXCEEDS 4 LANES. USE NO. 13 BARS FOR PAVEMENT THICKNESS 10" OR LESS. USE NO. 16 BARS FOR PAVEMENT THICKNESS GREATER THAN 10". PLACEMENT DEPTH SHALL BE PLANNED T/2 ± 1"

NO MORE THAN TWO LANES SHALL BE PAVED AT THE SAME TIME.

FILE NAME: C01-SP01.DWG DATE: 04-18-03

STANDARD SHEET NO. 5-297.217	TITLE: CONCRETE MAINLINE PAVEMENT 15.0 FT. PANEL LENGTH
STANDARD APPROVED: OCTOBER 1, 1998	
REVISION DATE 01-21-2000	~~State Proj. No.~~ S.A.P. 55-601-14

REQUIRED DIMENSIONS	
JOINT TYPE	TRANSVERSE
NOMINAL SEALER SIZE	11/16" USE IN ALL 3/8" JOINTS
A	0.80" +0.14" −0.05"
B	0.08" ±0.02"
C	0.60" MIN.
D	0.80" MIN.
WEB AND WALL THICKNESS, UNLESS NOTED	0.03" MIN.



SPEC. REFERENCE 3721

TYPICAL SHAPE FOR SATISFACTORY INSTALLATION IN JOINT (5 CELL MIN.)

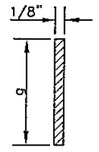
NOTES:

"A" DIMENSION SHALL APPLY AT ANY POINT THROUGHOUT "C" DEPTH. IN ITS FINAL POSITION, THE TOP CORNERS OF THE PREFORMED JOINT SEALER SHALL BE PLACED NOT LESS THAN 1/8 IN., NOR MORE THAN 5/16 IN. BELOW THE PAVEMENT SURFACE.

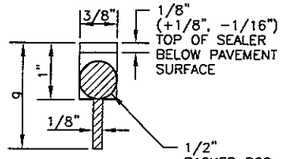
SHARP INTERNAL CORNERS WILL NOT BE PERMITTED. ALL CORNERS SHALL BE PROVIDED WITH SUITABLE FILLET. CURRENTLY APPROVED CONFIGURATIONS ARE ON FILE IN THE MATERIALS ENGINEERING SECTION, MINNESOTA DEPARTMENT OF TRANSPORTATION

CONTRACTION JOINT SEALER

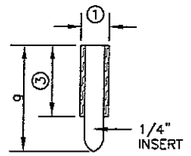
PREFORMED ELASTIC TYPE



DETAIL A
FORMED & SAWED



DETAIL B (X)
SAWED
(MODIFIED)



DETAIL C
FORMED
(INSERT TO BE REMOVED)

CONTRACTION JOINT CLASS DESIGNATION, DETAIL & SEALER SPEC. TABLE

CLASS DESIGNATION		JOINT DETAIL	JOINT SEALER SPEC.
WITHOUT DOWELS	WITH DOWELS		
C1A	C1A-D	A	UNSEALED
C2B	C2B-D	B	3725
C2X	C2X-D	B OR C	3725
C3D	C3D-D	D	3721
C3X	C3X-D	C OR D	3721
C4E	C4E-D	E	POLYMERIC

(MODIFIED)

CONTRACTION JOINT DEPTH & DOWEL BAR TABLE ⑤

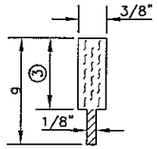
PAVEMENT THICKNESS T	CONCRETE BASE JOINT DEPTH g	DOWEL BAR DIAMETER
6"-6-1/4"	1-1/4"	1"
6-1/2"-10-1/4"	2"	1-1/4"
10-1/2"-12-1/2"	—	1-1/2"
13"-14"	—	1-3/4"

LEGEND

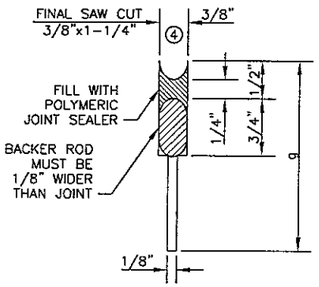
C = CONTRACTION JOINT
NO = SEALANT TYPE
1 = UNSEALED
2 = 3725
3 = 3721
4 = MOISTURE CURED POLYMERIC
LETTER = DETAIL
X = MORE THAN 1 DETAIL
−D = DOWEL BARS

EXAMPLE

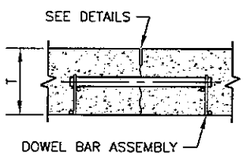
C2B-D



DETAIL D
SAWED



DETAIL E
SAWED



SECTION AT JOINT

CONTRACTION JOINT NOTES:

IN CONCRETE BASE CONSTRUCTION THE CONTRACTION JOINTS SHALL BE SPACED AT 30 FT. INTERVALS AND AT RIGHT ANGLES TO THE LONGITUDINAL JOINTS, EXCEPT AS NOTED BELOW. WHERE THE CONCRETE BASE IS CONSTRUCTED ADJACENT TO EXISTING PAVEMENT OR BASE, THE CONTRACTION JOINTS IN THE NEW BASE SHALL MATCH THOSE IN THE EXISTING PAVEMENT OR BASE, EXCEPT THAT THE SPACING SHALL NOT BE LESS THAN 15 FT., NOR MORE THAN 30 FT.

JOINT WIDTH TOLERANCES: +1/16 IN. AND −1/32 IN.

GENERAL NOTES:

SEE THE FOLLOWING STANDARD PLATES AND STANDARD PLAN SHEETS FOR ADDITIONAL DETAILS: DOWEL BAR ASSEMBLY, 1103; CONSTRUCTION OF HEADER JOINTS, 1150; AND CONCRETE MAINLINE/RAMP PAVEMENT, 5-297.217 & 219

SEE PAVING LAYOUTS IN THE PLANS FOR JOINT CLASS DESIGNATION TO BE USED AND SPECIAL REINFORCEMENT REQUIRED

NOTES:

① **DESIGN C3X OR C3X-D** – PRIOR TO INSTALLING PREFORMED JOINT SEALER IN THE FORMED JOINT (DETAIL C), THE JOINT SHALL BE WIDENED TO A NOMINAL WIDTH OF 3/8" BY SAWING ALONG THE FULL LENGTH OF THE FORMED JOINT.

DESIGN C2X OR C2X-D – PRIOR TO SEALING FORMED JOINT (DETAIL C) WITH HOT POUR SEALER, THE JOINT SHALL BE WIDENED TO A NOMINAL WIDTH OF 1/2" FOR A DEPTH OF 3/4", +1/8", −1/16", BY SAWING ALONG THE FULL LENGTH OF THE FORMED JOINT. THE SEALER SHALL BE FILLED TO THE SAME DEPTH AS SHOWN IN DETAIL B.

② **DESIGN C2B OR C2B-D** – PRIOR TO SEALING JOINT (DETAIL B) WITH HOT POUR JOINT SEALER, A STRIP OF PAPER 1/2" WIDE SHALL BE PLACED ON THE BOTTOM OF THE 1/2" WIDE JOINT

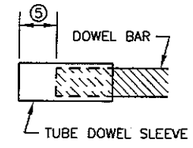
③ WHEN USING PREFORMED JOINT SEALER, THE DEPTH SHALL BE 1/4" MORE THAN THE PREFORMED SEALER, WHEN COMPRESSED, TO FIT THE JOINT DESIGN WIDTH.

④ THE JOINT FACES SHALL BE CLEANED AND DRIED BY SANDBLASTING AND AIR BLASTING. PRIOR TO SEALING THE JOINT, A 1/2" DIA. CLOSED CELL BACKER ROD SHALL BE PLACED SUCH THAT THE TOP OF THE BACKER ROD IS 1/2" BELOW THE SURFACE OF THE PAVEMENT. POLYMERIC SHALL BE TOOLED INTO THE JOINT MAINTAINING A SEALANT BEAD THICKNESS OF 1/4"

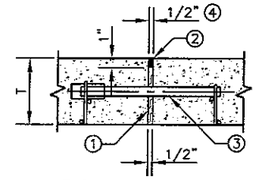
⑤ FOR UNBONDED OVERLAYS, THE JOINT DEPTH "g" SHALL BE T/3.
FOR CONCRETE PAVEMENT, THE JOINT DEPTH "g" SHALL BE T/4.

CONTRACTION JOINTS

DESIGN C

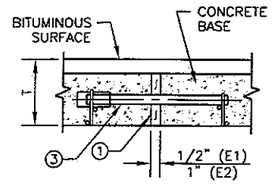


DOWEL BAR SLEEVE DETAIL



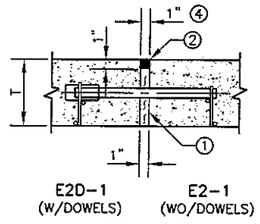
E1D-1 (W/DOWELS) E1-1 (WO/DOWELS)

DETAIL A



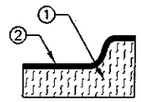
E1DB & E2DB (W/DOWELS) E1B & E2B (WO/DOWELS)

DETAIL B

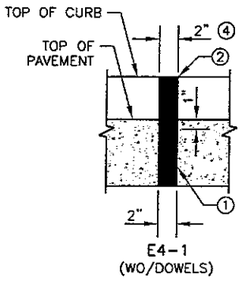


E2D-1 (W/DOWELS) E2-1 (WO/DOWELS)

DETAIL C

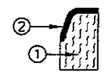


SECTION THRU CURB E2-1

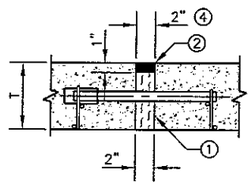


E4-1 (WO/DOWELS)

DETAIL D



SECTION THRU CURB E4-1



E4D-1 (W/DOWELS)

DETAIL E

AS-BUILT

MAR 0 8 2005

ENGINEERING

EXPANSION JOINTS

CLASS DESIGNATION		JOINT DETAIL	JOINT SEALER SPEC.
WITH DOWELS	WITHOUT DOWELS		
E1D-1	E1-1	A	②
E1DB	E1B	B	UNSEALED
E2D-1	E2-1	C	②
E2DB	E2B	B	UNSEALED
	E4-1	D	②
E4D-1		E	②

LEGEND

E = EXPANSION JOINT
NO. = JOINT REFERENCE
-1 = HOT POURED SEAL ②
D = DOWEL BARS
B = CONCRETE BASE
S = CONCRETE SILL

EXAMPLE

E1D-1
HOT POURED SEAL ②
DOWEL BARS
JOINT REFERENCE
EXPANSION JOINT

NOTES:

① PREFORMED JOINT FILLER MATERIAL, SPEC. 3702

② JOINT SEALER SPEC. 3723. TOP OF SEALER, FLUSH TO 1/8 IN. BELOW TOP OF PAVEMENT SURFACE. MAKE TOP OF SEALER FOR CURB SECTION E JOINTS FLUSH WITH SURFACE ±1/8 IN.

③ DOWEL BAR ASSEMBLY, SEE STANDARD PLATE 1103.

④ JOINT WIDTH IS EQUAL TO HALF OF THE JOINT NUMBER IN 1/2 IN. INTERVALS. (i.e. E1=1/2 IN., E2=1 IN., E3=1-1/2 IN., E4=2 IN., E8=4 IN.)

⑤ SPACE FROM END OF DOWEL BAR TO END OF SLEEVE TO BE EQUAL TO EXPANSION JOINT WIDTH.

EXPANSION JOINTS

DESIGN E

CERTIFIED BY Kay M Brunner LICENSED PROFESSIONAL ENGINEER REG. NO 19917 4/25 2003

REVISION DATE 12-21-1999

STANDARD SHEET NO. 5-297.221 (1 OF 2)

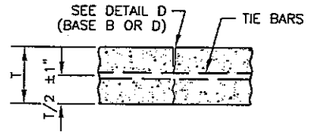
STANDARD APPROVED: JANUARY 25, 1993

TITLE: **PAVEMENT JOINTS**
CONTRACTION (DESIGN C) AND EXPANSION (DESIGN E)

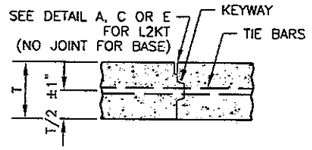
~~State Proj. No.~~ S.A.P. 55-601-14

Sheet No. 10 of 66 Sheets

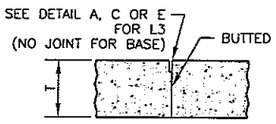
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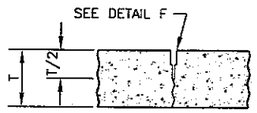
L1, L1T, L1B & L1TB



L2KT & L2KTB



L3 & L3B



L4

LONGITUDINAL JOINT CLASS DESIGNATION, DETAIL & SEALER SPEC. TABLE

CLASS DESIGNATION				JOINT DETAIL	JOINT SEALER SPEC.
WITHOUT TIE BARS	WITH TIE BARS	WITH KEYWAY & TIE BARS	BUTTED		
L1H	L1TH			B	3723
L1BU	L1TBU			A OR B	UNSEALED
		L2KTH		D OR E	3723
		L2KTS		C	POLYMERIC
			L3H	D OR E	3723
			L3S	C	POLYMERIC
L4S				F	POLYMERIC

LEGEND

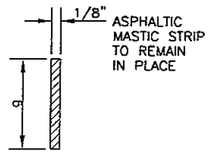
L = LONGITUDINAL JOINT
NO. = JOINT REFERENCE
K = KEYWAY
T = TIE BARS
B = CONCRETE BASE
U = UNSEALED
H = HOT POUR
S = MOISTURE CURED POLYMERIC

JOINT REFERENCE NUMBERS

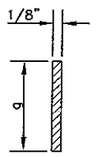
1 = SAWED TO A DEPTH OF T/3
2 = KEYED CONSTRUCTION JOINT
3 = BUTTED CONSTRUCTION JOINT
4 = SAWED TO A DEPTH OF T/2

LONGITUDINAL JOINT DEPTH TABLE ③

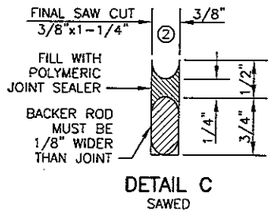
PAVEMENT THICKNESS T	CONCRETE BASE JOINT DEPTH g
6"-6-1/2"	2"
7"-7-1/2"	2-1/4"
8"-8-1/2"	2-1/2"
9"-9-1/2"	3"



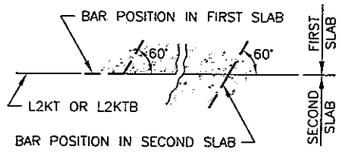
DETAIL A
FORMED & UNSEALED



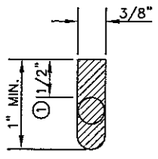
DETAIL B
SAWED & SEALER, SPEC. 3723
(BASE JOINTS UNSEALED)



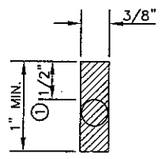
DETAIL C
SAWED



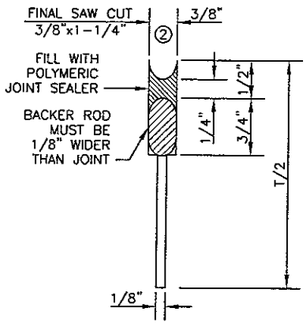
TIE BAR BENDING DETAIL



DETAIL D
FORMED & SEALED
SPEC. 3723



DETAIL E
FORMED & SEALER
SPEC. 3723



DETAIL F
SAWED

AS-BUILT

MAR 0 8 2005

ENGINEERING

LONGITUDINAL JOINT NOTES:

ALL REBARS ARE IN METRIC DESIGNATIONS

TIE BARS FOR L1TB JOINTS SHALL BE THE SAME SIZE AND SPACING AS SHOWN ON STANDARD PLAN SHEETS 5-297.217 & 219.

EXCEPT WHEN NOTED OTHERWISE IN THE PLANS, THE TIE BAR SPACING FOR ALL L2KT AND L2KTB JOINTS SHALL BE 2' 6" C. TO C. AND BENT 60° AS SHOWN.

TIE BARS IN THE L2KT AND L2KTB JOINTS SHALL BE THE SAME SIZE AND LENGTH AS USED FOR THE L1T OR L1TB JOINTS, WHEN TYING PAVEMENT TO PAVEMENT OR BASE TO BASE. TIE BARS IN THE L2KT OR L2KTB JOINTS SHALL BE NO. 13 x 2' 6", WHEN TYING CURB & GUTTER TO PAVEMENT OR BASE.

ALL TIE BARS SHALL MEET THE REQUIREMENTS OF GRADE 60 FOR AASHTO M-31 OR M-53.

NORMALLY, TIED PAVEMENT WIDTHS SHALL NOT EXCEED 4 LANES, EXCEPT BRIDGE APPROACH PANELS AND PAVEMENT TAPERS.

JOINT WIDTH TOLERANCE IS +1/16 IN. TO -1/32 IN.

SPEC. 3723 SEALER - TOP OF SEALER FLUSH TO -3/16 IN. BELOW TOP OF PAVEMENT SURFACE.

① THE JOINT FACES SHALL BE CLEANED AND DRIED BY SANDBLASTING AND AIR BLASTING. PRIOR TO SEALING THE JOINT, A CLOSED CELL BACKER ROD CAPABLE OF WITHSTANDING SEALANT TEMPERATURES OF 400 DEGREES F, WITH A DIAMETER 1/8 IN. LARGER THAN THE JOINT OPENING, MAY BE PLACED 1/2 IN. BELOW THE TOP OF THE PAVEMENT.

② THE JOINT FACES SHALL BE CLEANED AND DRIED BY SANDBLASTING AND AIR BLASTING. PRIOR TO SEALING THE JOINT, A 1/2 IN. DIAMETER CLOSED CELL BACKER ROD SHALL BE PLACED SUCH THAT THE TOP OF THE BACKER ROD IS 1/2 IN. BELOW THE SURFACE OF THE PAVEMENT. POLYMERIC SHALL BE TOOLED INTO THE JOINT MAINTAINING A SEALANT BEAD THICKNESS OF 1/4 IN.

③ FOR CONCRETE PAVEMENT, THE JOINT DEPTH "g" SHALL BE T/3.

GENERAL NOTES:

SEE THE FOLLOWING STANDARD PLATES AND STANDARD PLAN SHEETS FOR ADDITIONAL DETAILS: DOWEL BAR ASSEMBLY, 1103; PAVEMENT KEYWAY, 1141; AND CONCRETE MAINLINE/RAMP PAVEMENT, 5-297.217 & .219.

SEE PAVING LAYOUTS IN THE PLANS FOR JOINT CLASS DESIGNATION TO BE USED AND SPECIAL REINFORCEMENT REQUIRED.

FILE NAME: C01-5703.DWG DATE: 04-18-02

STANDARD SHEET NO. 5-297.221 (2 OF 2)	TITLE: PAVEMENT JOINTS LONGITUDINAL (DESIGN L)
STANDARD APPROVED: JANUARY 25, 1993	
REVISION DATE 04-03-2000	~~State Proj. No.~~ S.A.P. 55-601-14

ALIGNMENT TABULATION

CURVE NO.	POINT	STATION	CURVE DATA					COORDINATES		BEARING
			DELTA	DEGREE	RADIUS	TANGENT	LENGTH	X	Y	
C.S.A.H. 1 (11TH AVE. S.E.)										
	P.O.T.	STA. 231+93.86 - C/L T.H. 52 ENTRANCE & EXIT RAMP						625675.5124	151860.5645	
	P.O.T.	STA. 233+82.87 - BEGIN CONSTRUCTION						625645.8175	152047.1912	N 09°06'03" W
	P.C.	STA. 242+19.55						625513.4775	152873.3386	
1	P.I.	STA. 243+26.92	01°04'25" RT.	00°30'00"	11459.16	107.37	214.73	625496.4950	152979.3533	
	R.P.							636828.3831	154685.8666	
	P.O.C.	STA. 243+60.12 - C/L 31ST ST. S.E. (WEST)						625492.0942	153012.2773	
	P.T.	STA. 244+34.28						625481.5020	153085.6676	
	P.O.T.	STA. 249+93.01 - C/L 31ST ST. S.E. (EAST)						625403.4779	153638.9300	
	P.O.T.	STA. 253+97.40 - C/L 29TH ST. S.E. (EAST)						625347.0076	154039.3565	
	P.O.T.	STA. 254+15.99 - C/L 29TH ST. S.E. (WEST)						625344.4121	154057.7610	
	P.O.T.	STA. 257+65.18 - C/L 28TH ST. S.E. (WEST)						625295.6499	154403.5296	
	P.O.T.	STA. 257+73.55 - C/L 28TH ST. S.E. (EAST)						625294.4804	154411.8230	
	P.O.T.	STA. 261+02.31 - C/L 27TH ST. S.E. (EAST)						625248.5718	154737.3567	N 08°01'38" W
	P.O.T.	STA. 261+10.84 - C/L 27TH ST. S.E. (WEST)						625247.3810	154745.8006	
	P.O.T.	STA. 264+55.28 - C/L 26TH ST. S.E.						625199.2812	155086.8724	
	P.O.T.	STA. 268+17.09 - C/L 25TH ST. S.E.						625148.7573	155445.1335	
	P.O.T.	STA. 271+96.80 - C/L 24TH ST. S.E.						625095.7330	155821.1242	
	P.O.T.	STA. 278+26.05 - C/L 23RD ST. S.E.						625007.8620	156444.2103	
	P.O.T.	STA. 284+87.33 - C/L PINEWOOD RD. S.E.						624915.5185	157099.0104	
	P.O.T.	STA. 287+47.00 - BEGIN BRIDGE No. 55576						624879.2573	157356.1358	
	P.O.T.	STA. 288+67.75 - END BRIDGE No. 55576						624862.3953	157475.7027	
	P.C.	STA. 292+40.24						624810.3796	157844.5422	
2	P.I.	STA. 296+25.48	07°41'36" LT.	01°00'00"	5729.58	385.24	769.33	624756.5826	158226.0118	
	R.P.							619136.9390	157044.4427	
	P.O.C.	STA. 296+47.12 - C/L 20TH ST. S.E.						624739.3096	158245.0805	
	P.T.	STA. 300+09.57						624652.2025	158596.8459	N 15°43'14" W
	P.O.T.	STA. 313+63.26 - C/L 16 1/2 ST. & SPRUCE MEADOWS DR. S.E						624285.4265	159899.9007	
	P.C.	STA. 319+92.52						624114.9322	160505.6203	
3	P.I.	STA. 323+79.64	22°55'01" LT.	03°00'00"	1909.86	387.12	763.90	624010.0428	160878.2635	
	R.P.							622276.5110	159988.1526	
	P.O.C.	STA. 326+26.53 - END CONSTRUCTION						623845.9169	161076.5139	N 38°38'15" W
	P.O.C.	STA. 326+52.91 - C/L 16TH ST. S.E.						623830.7295	161098.0940	
	P.T.	STA. 327+56.41						623768.3265	161180.6507	
31ST ST. S.E. (WEST)										
	P.O.T.	STA. 9+00.00						625392.0946	153012.0079	N 89°50'44" E
	P.I.	STA. 10+00.00 - C/L C.S.A.H. 1 (11TH AVE. S.E.)						625492.0942	153012.2773	
29TH ST. S.E. (EAST)										
	P.I.	STA. 15+00.00 - C/L C.S.A.H. 1 (11TH AVE. S.E.)						625347.0076	154039.3565	N 89°23'44" E
	P.O.T.	STA. 16+00.00						625447.0020	154040.4116	
29TH ST. S.E. (WEST)										
	P.O.T.	STA. 14+00.00						625244.4133	154057.2782	N 89°43'24" E
	P.I.	STA. 15+00.00 - C/L C.S.A.H. 1 (11TH AVE. S.E.)						625344.4121	154057.7610	
28TH ST. S.E. (WEST)										
	P.O.T.	STA. 19+00.00						625195.6511	154403.0469	N 89°43'24" E
	P.I.	STA. 20+00.00 - C/L C.S.A.H. 1 (11TH AVE. S.E.)						625295.6499	154403.5296	
28TH ST. S.E. (EAST)										
	P.I.	STA. 20+00.00 - C/L C.S.A.H. 1 (11TH AVE. S.E.)						625294.4804	154411.8230	N 89°23'44" E
	P.O.T.	STA. 21+00.00						625394.4748	154412.8781	

AS-BUILT

MAR 0 8 2005

ENGINEERING

DATE: 07-08-03

FILE NAME: C01-AT01.DWG

CERTIFIED BY Kay M Brierley REG. NO. 19917 8/15 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

TITLE: ALIGNMENT TABULATION

ALIGNMENT TABULATION

CURVE NO.	POINT	STATION	CURVE DATA					COORDINATES		BEARING
			DELTA	DEGREE	RADIUS	TANGENT	LENGTH	X	Y	
27TH ST. S.E. (EAST)										
	P.I.	STA. 25+00.00 - C/L C.S.A.H. 1 (11TH AVE. S.E.)						625248.5718	154737.3567	
	P.O.T.	STA. 26+00.00						625348.5662	154738.4118	N 89°23'44" E
27TH ST. S.E. (WEST)										
	P.O.T.	STA. 24+00.00						625147.3822	154745.3178	
	P.I.	STA. 25+00.00 - C/L C.S.A.H. 1 (11TH AVE. S.E.)						625247.3810	154745.8006	N 89°43'24" E
26TH ST. S.E.										
	P.O.T.	STA. 29+00.00						625099.2824	155086.3896	
	P.O.T.	STA. 30+00.00 - C/L C.S.A.H. 1 (11TH AVE. S.E.)						625199.2812	155086.8724	N 89°43'24" E
	P.O.T.	STA. 31+00.00						625299.2800	155087.3551	
25TH ST. S.E.										
	P.O.T.	STA. 34+00.00						625048.7584	155444.6507	
	P.O.T.	STA. 35+00.00 - C/L C.S.A.H. 1 (11TH AVE. S.E.)						625148.7573	155445.1335	N 89°43'24" E
	P.O.T.	STA. 36+00.00						625248.7561	155445.6162	
24TH ST. S.E.										
	P.I.	STA. 40+00.00 - C/L C.S.A.H. 1 (11TH AVE. S.E.)						625095.7330	155821.1242	
	P.C.	STA. 40+75.90						625170.8956	155831.6998	N 81°59'27" E
23RD ST. S.E.										
	P.I.	STA. 45+00.00 - C/L C.S.A.H. 1 (11TH AVE. S.E.)						625007.8620	156444.2103	
	P.C.	STA. 45+74.61						625081.7481	156454.6062	N 81°59'27" E
PINEWOOD RD. S.E.										
	P.I.	STA. 50+00.00 - C/L C.S.A.H. 1 (11TH AVE. S.E.)						624915.5185	157099.0104	
	P.O.T.	STA. 52+00.00						625112.8486	157066.4399	S 80°37'39" E
20TH ST. S.E.										
	P.O.T.	STA. 53+00.00						624539.3148	158243.6339	
	P.I.	STA. 55+00.00 - C/L C.S.A.H. 1 (11TH AVE. S.E.)						624739.3096	158245.0805	N 89°35'08" E
16 1/2 ST. & SPRUCE MEADOWS DR. S.E.										
	P.O.T.	STA. 59+00.00						624189.1670	159872.8062	
	P.I.	STA. 60+00.00 - C/L C.S.A.H. 1 (11TH AVE. S.E.)						624285.4265	159899.9007	N 74°16'46" E
	P.C.	STA. 60+98.00						624379.7607	159926.4534	
16TH ST. S.E.										
	P.T.	STA. 64+35.87						623772.7437	161070.6946	
	P.I.	STA. 65+00.00 - C/L C.S.A.H. 1 (11TH AVE. S.E.)						623830.7295	161098.0940	N 64°42'30" E
	P.O.T.	STA. 66+00.00						623921.1441	161140.8166	

AS-BUILT

MAR 0 8 2005

ENGINEERING

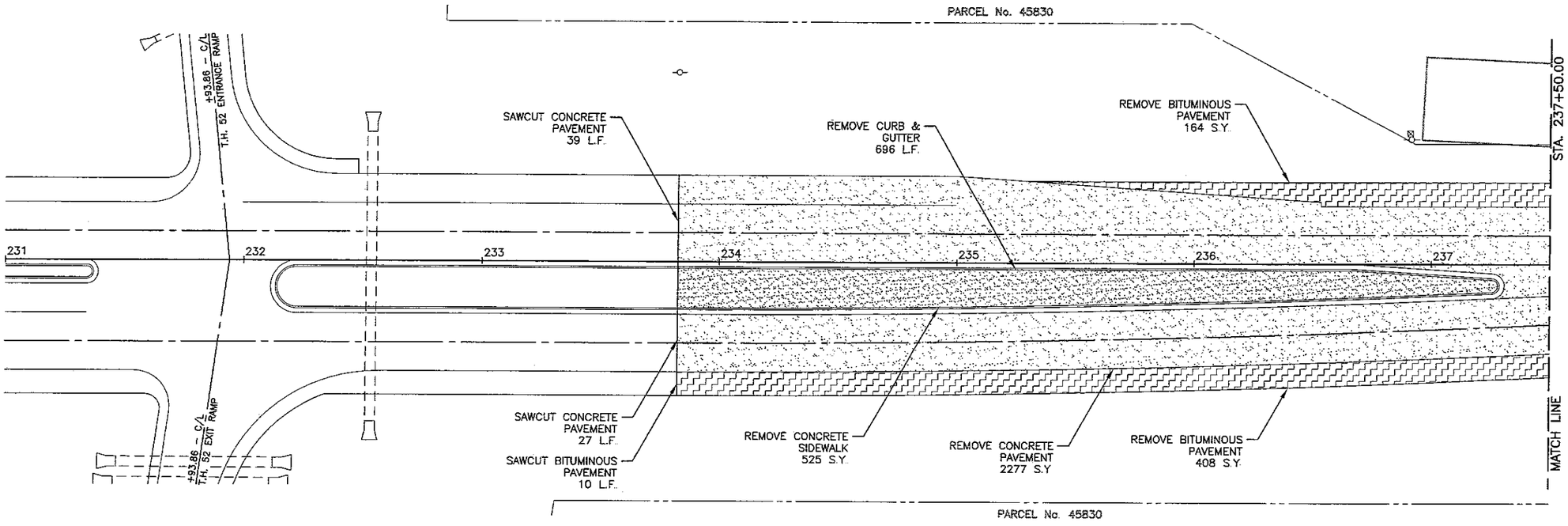
DATE: 04-19-03

FILE NAME: C01-AT02.DWG

CERTIFIED BY Kevin M Brennick REG. NO 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

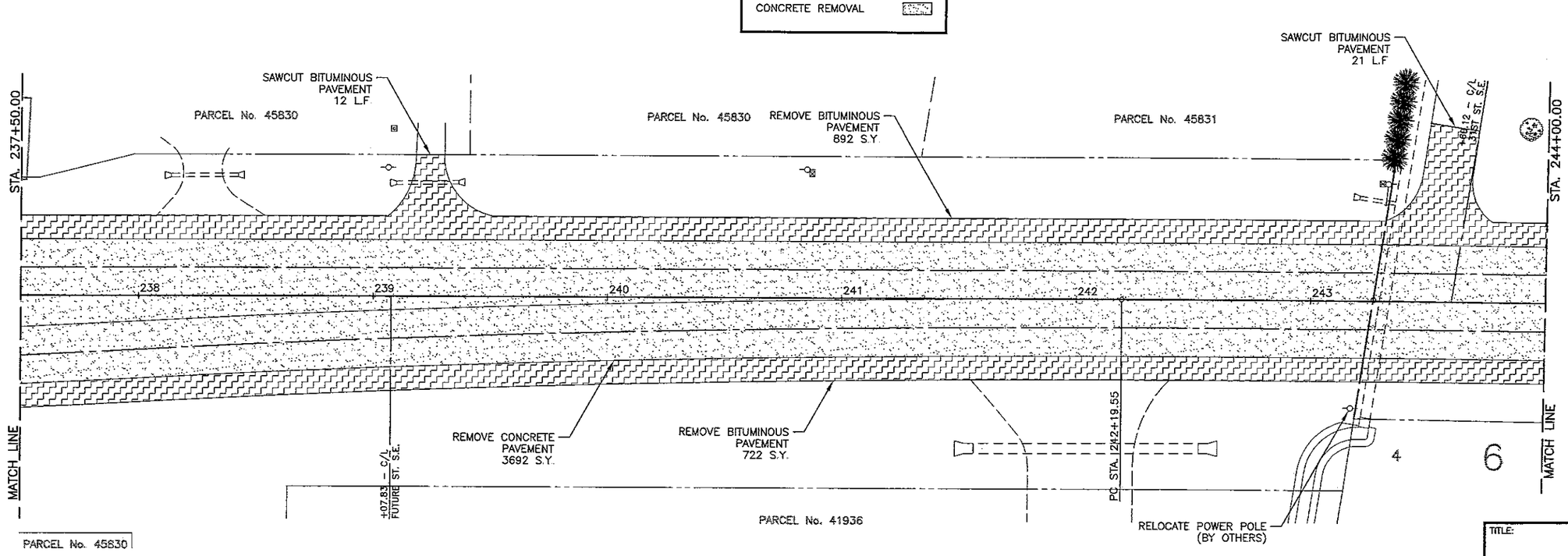
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LEGEND
BITUMINOUS REMOVAL
CONCRETE REMOVAL

0 25 50
SCALE IN FEET

NOTES
1. ALL UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.



AS-BUILT
MAR 0 8 2005
ENGINEERING

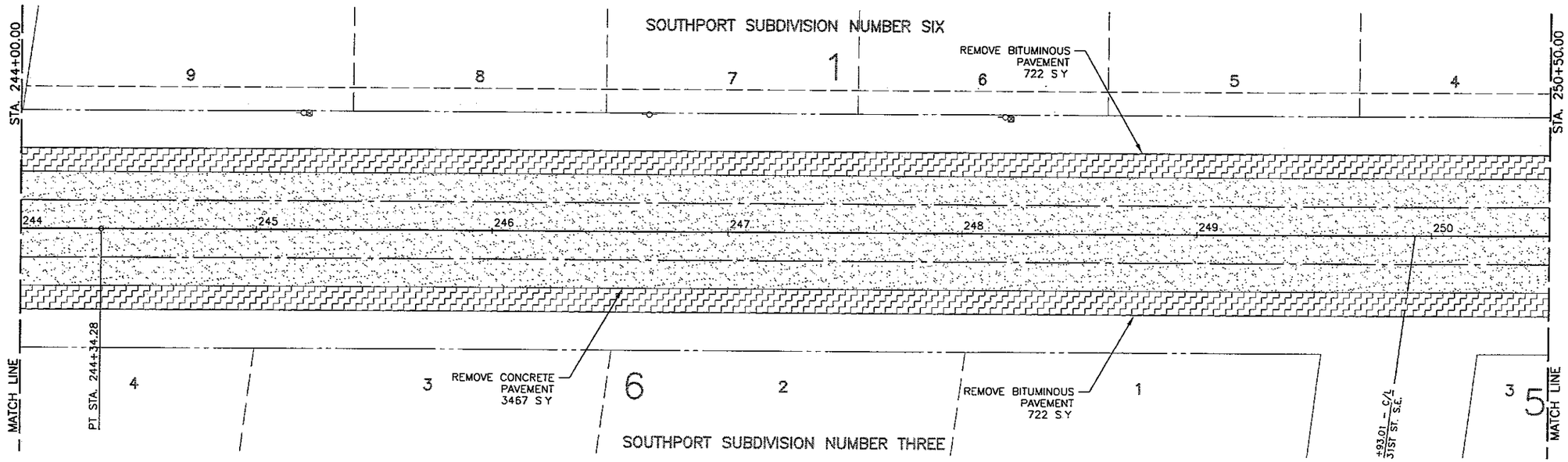
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C.S.A.H. No. 1
REMOVAL PLAN
STA. 233+82.87 to STA. 244+00.00

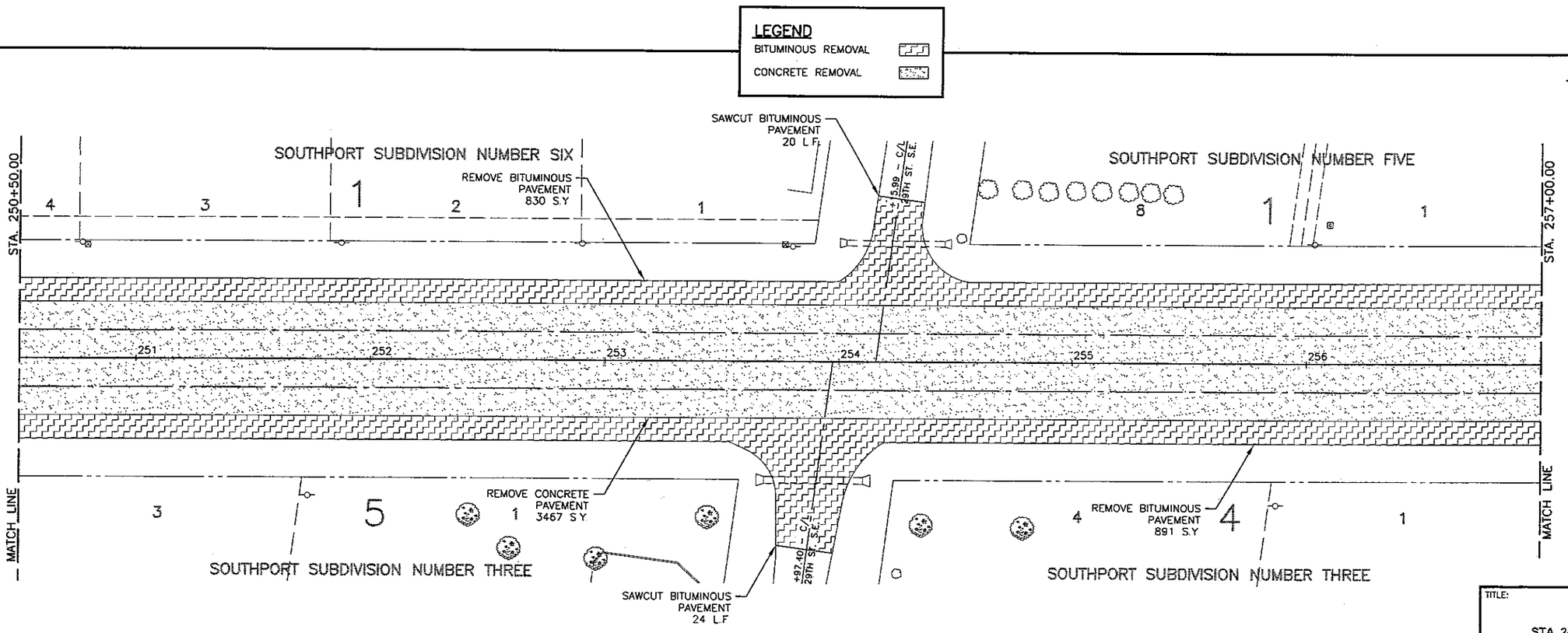
CERTIFIED BY Kevin M Brenick REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

Sheet No. 14 of 66 Sheets

FILE NAME: C01-CR01.DWG DATE: 04-18-03





NOTES
1 ALL UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.

AS-BUILT
MAR 0 8 2005
ENGINEERING

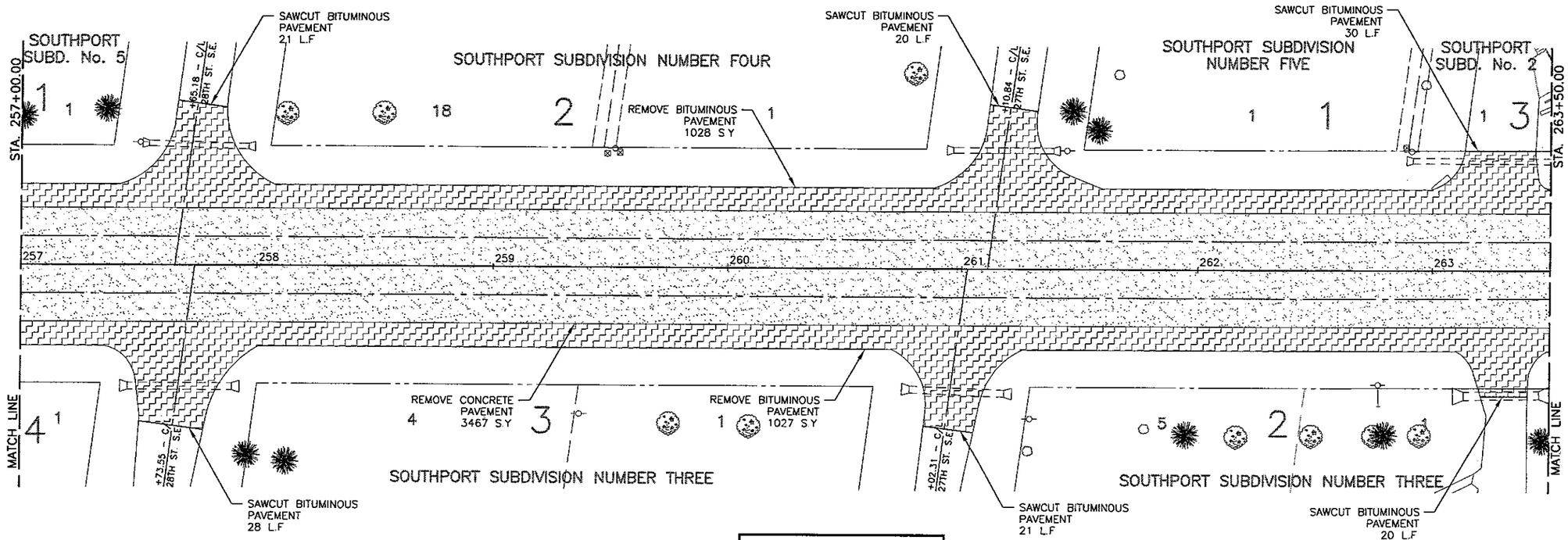
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LICENSED PROFESSIONAL ENGINEER

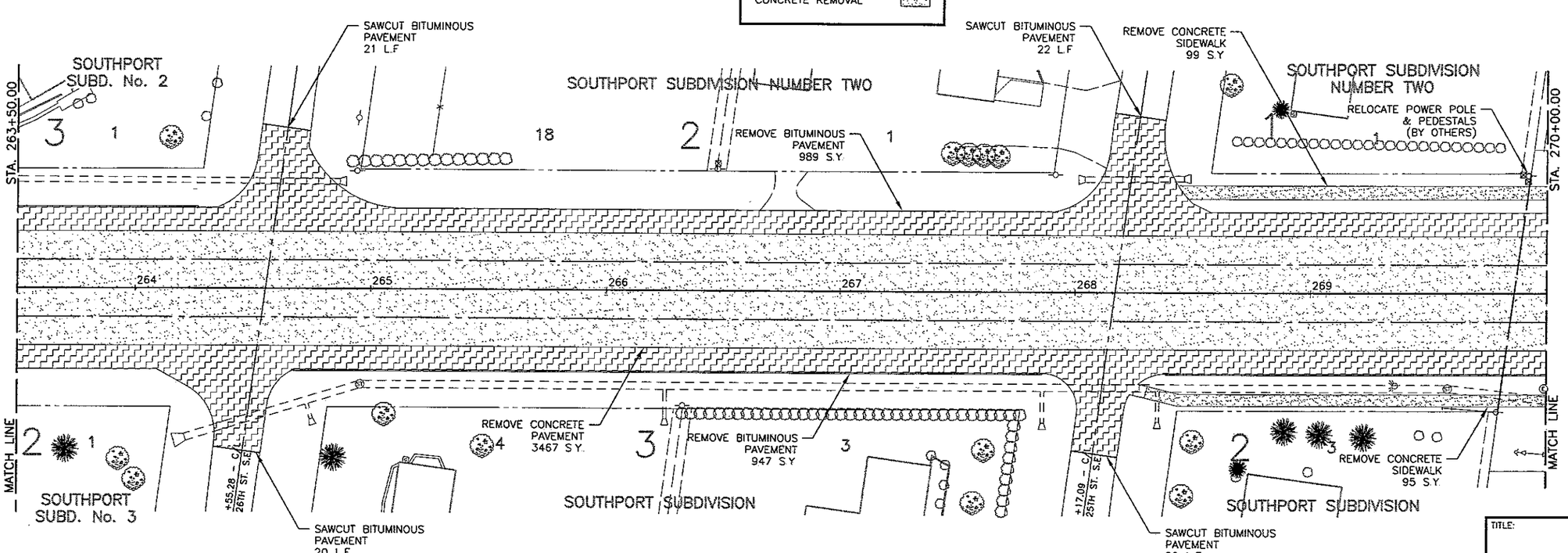
TITLE:
C.S.A.H. No. 1
REMOVAL PLAN
STA. 244+00.00 to STA. 257+00.00

S.A.P. 55-601-14

Sheet No. 15 of 66 Sheets

FILE NAME: C01-CR02.DWG DATE: 04-18-03





NOTES
1 ALL UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR

AS-BUILT
MAR 0 8 2005
ENGINEERING

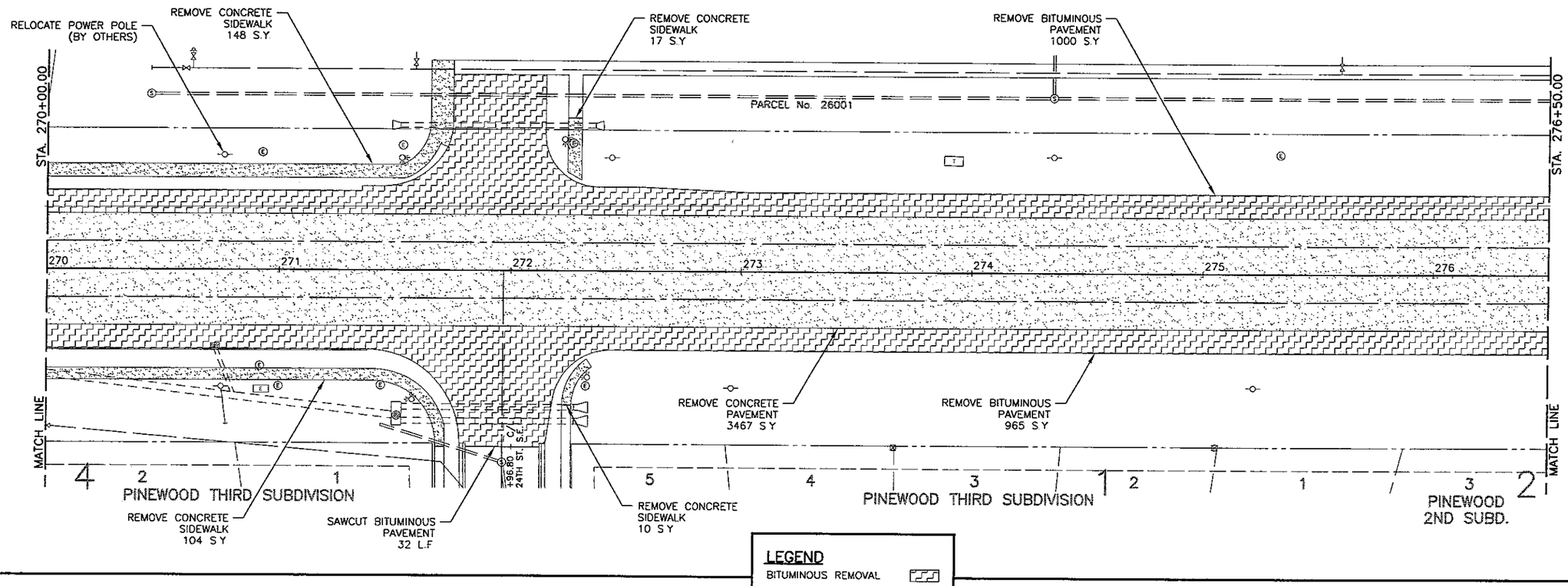
CERTIFIED BY Karen M Palermo REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

TITLE:
C.S.A.H. No. 1
REMOVAL PLAN
STA. 257+00.00 to STA. 270+00.00

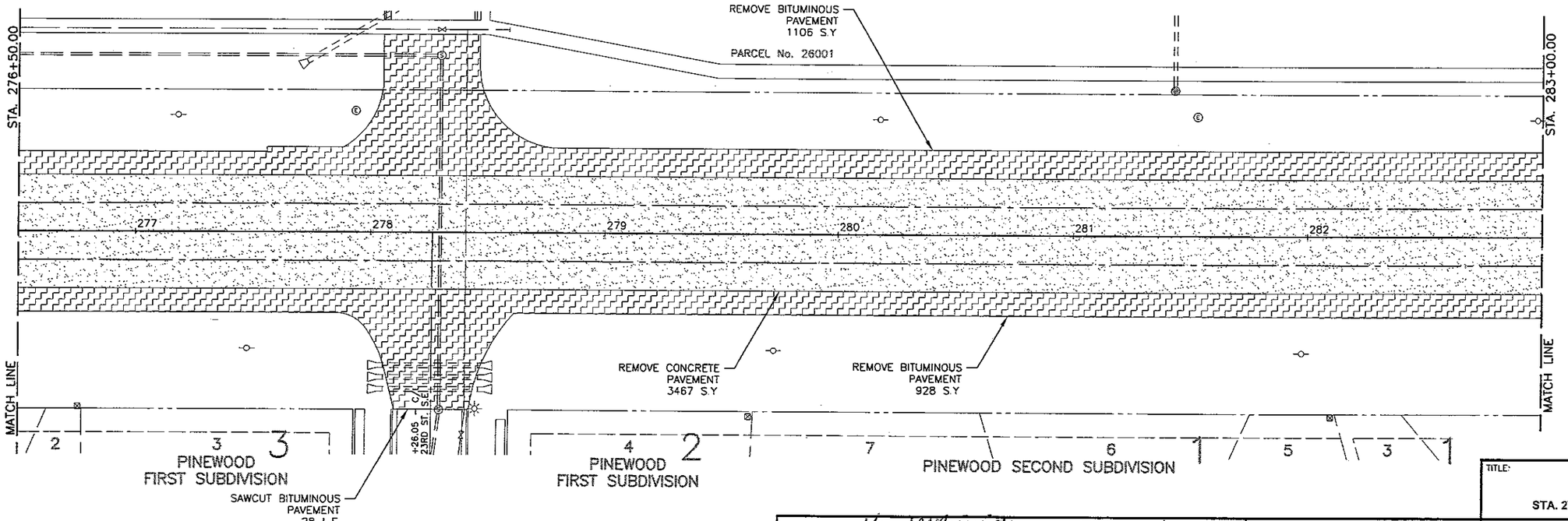
Sheet No. 16 of 66 Sheets

FILE NAME: C01-CR03.DWG DATE: 04-18-03



NOTES

1 ALL UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.



AS-BUILT

MAR 0 8 2005

ENGINEERING

FILE NAME: 001-CROA.DWG DATE: 04-17-03

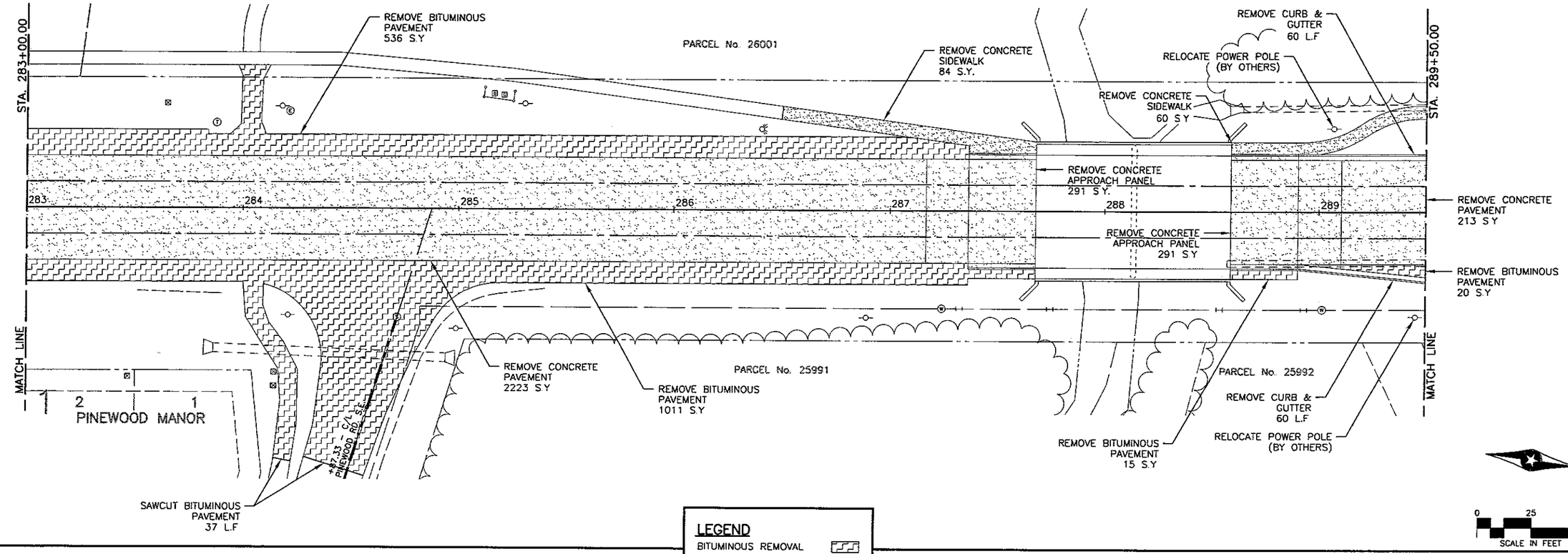
CERTIFIED BY Kenneth M Brenner LICENSED PROFESSIONAL ENGINEER REG. NO. 19917 4/25 2003

TITLE:

C.S.A.H. No. 1
REMOVAL PLAN
STA. 270+00.00 to STA. 283+00.00

S.A.P. 55-601-14

Sheet No. 17 of 66 Sheets



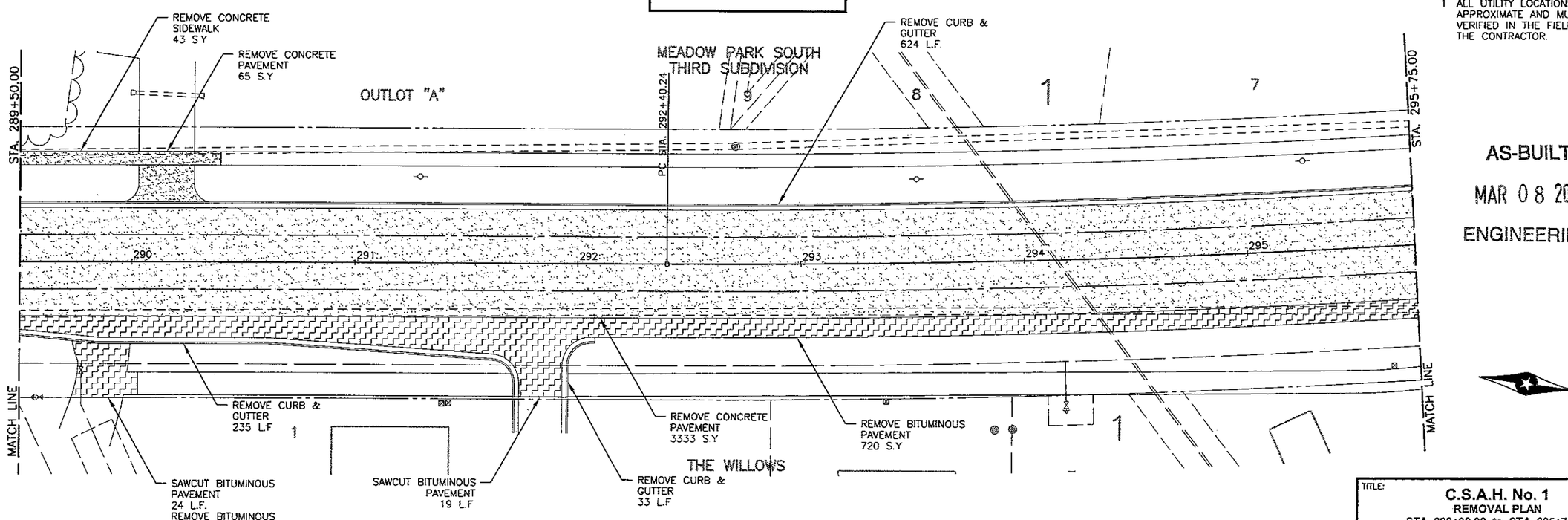
LEGEND

BITUMINOUS REMOVAL

CONCRETE REMOVAL

NOTES

1 ALL UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.



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MAR 0 8 2005

ENGINEERING

CERTIFIED BY Kaye M Briesch REG. NO 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

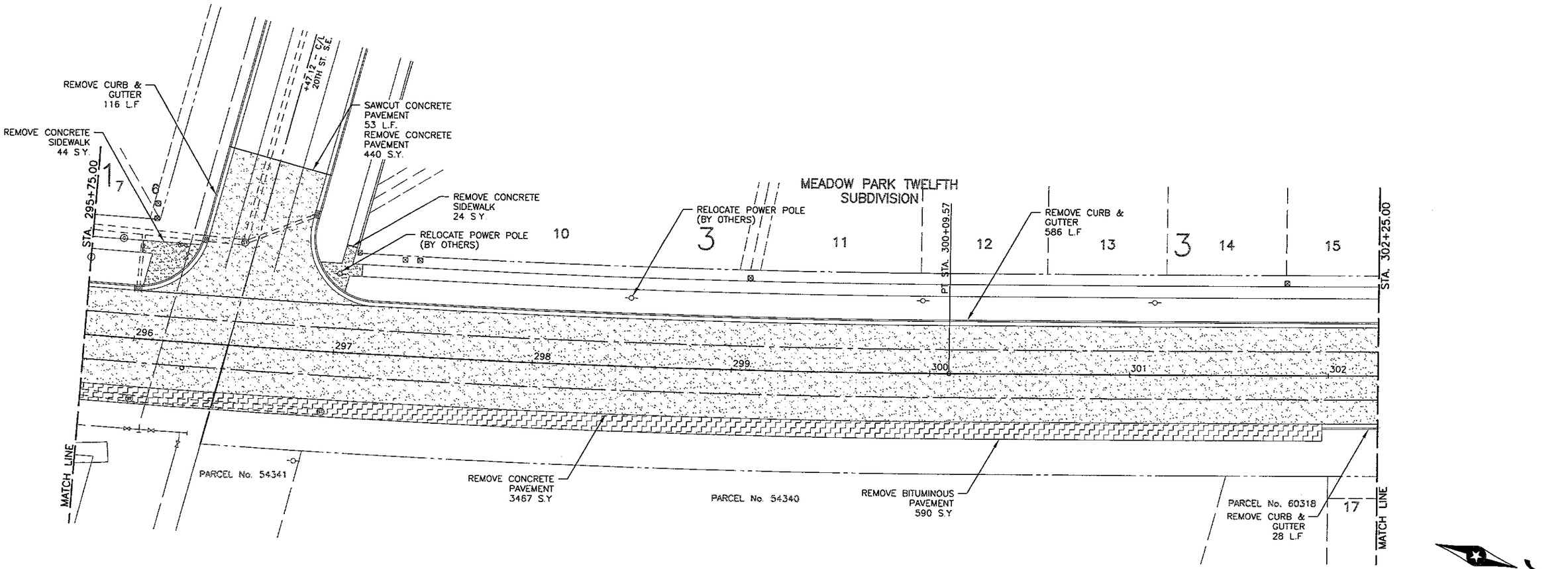
S.A.P. 55-601-14

TITLE:

C.S.A.H. No. 1
REMOVAL PLAN
STA. 283+00.00 to STA. 295+75.00

Sheet No. 18 of 66 Sheets

FILE NAME: C01-CR05.DWG DATE: 04-18-03



LEGEND
BITUMINOUS REMOVAL
CONCRETE REMOVAL

NOTES
1 ALL UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.

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MAR 08 2005
ENGINEERING

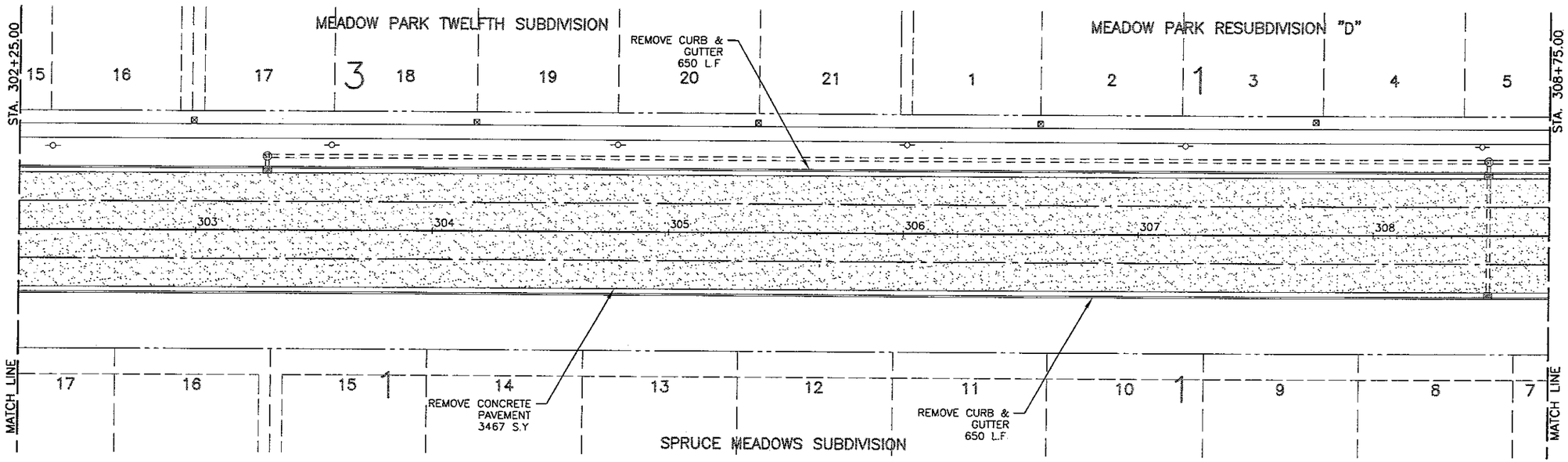
CERTIFIED BY Kurt M. Bauer REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

TITLE:
C.S.A.H. No. 1
REMOVAL PLAN
STA. 295+75.00 to STA. 302+25.00

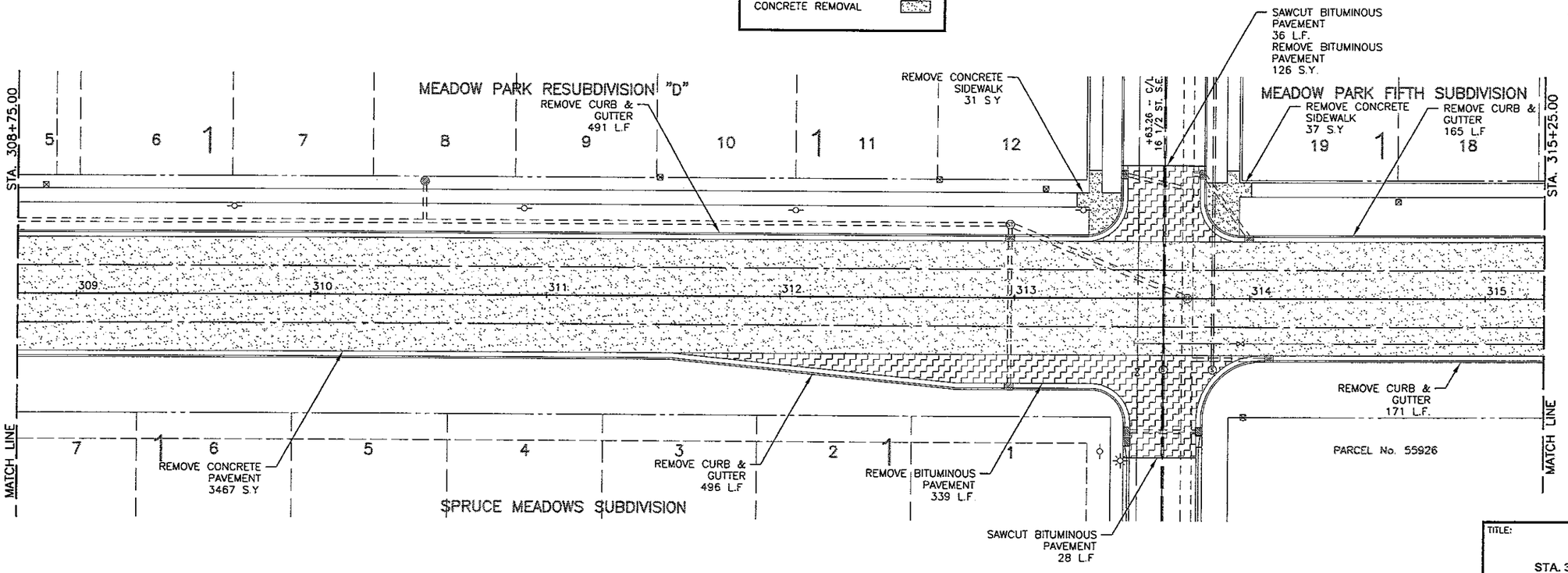
Sheet No. 19 of 66 Sheets

FILE NAME: C01-CR06.DWG DATE: 04-17-03



LEGEND
BITUMINOUS REMOVAL
CONCRETE REMOVAL

0 25 50
SCALE IN FEET



NOTES
1 ALL UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR

AS-BUILT
MAR 0 8 2005
ENGINEERING

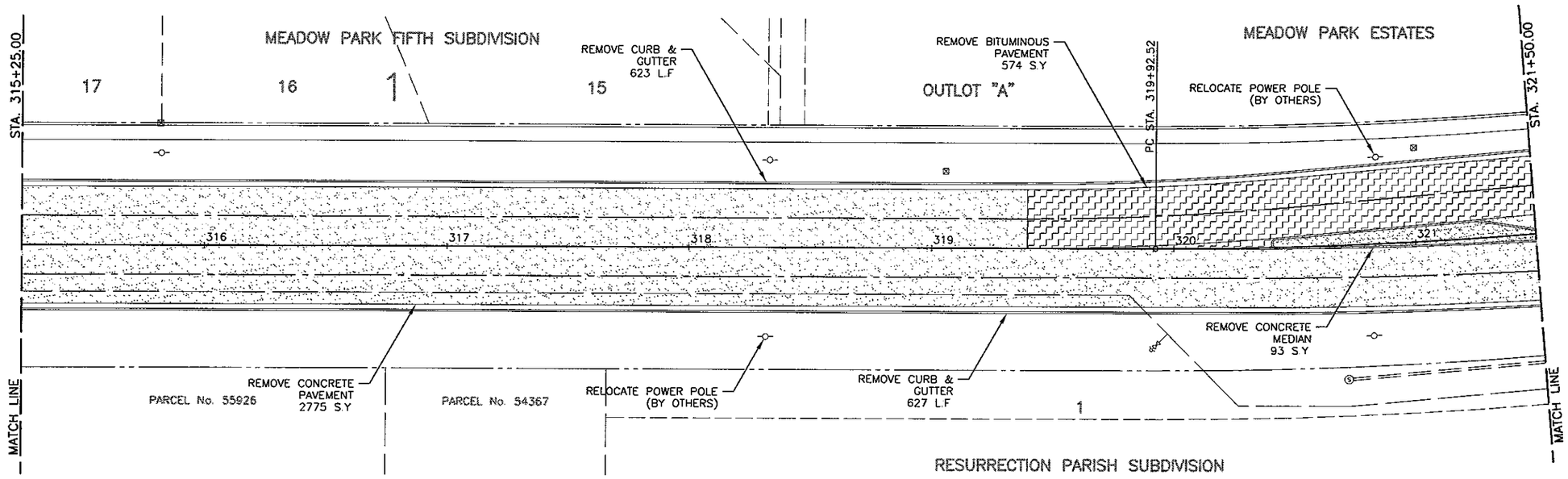
CERTIFIED BY Kevin M Roerwick REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

TITLE:
C.S.A.H. No. 1
REMOVAL PLAN
STA. 302+25.00 to STA. 315+25.00

S.A.P. 55-601-14

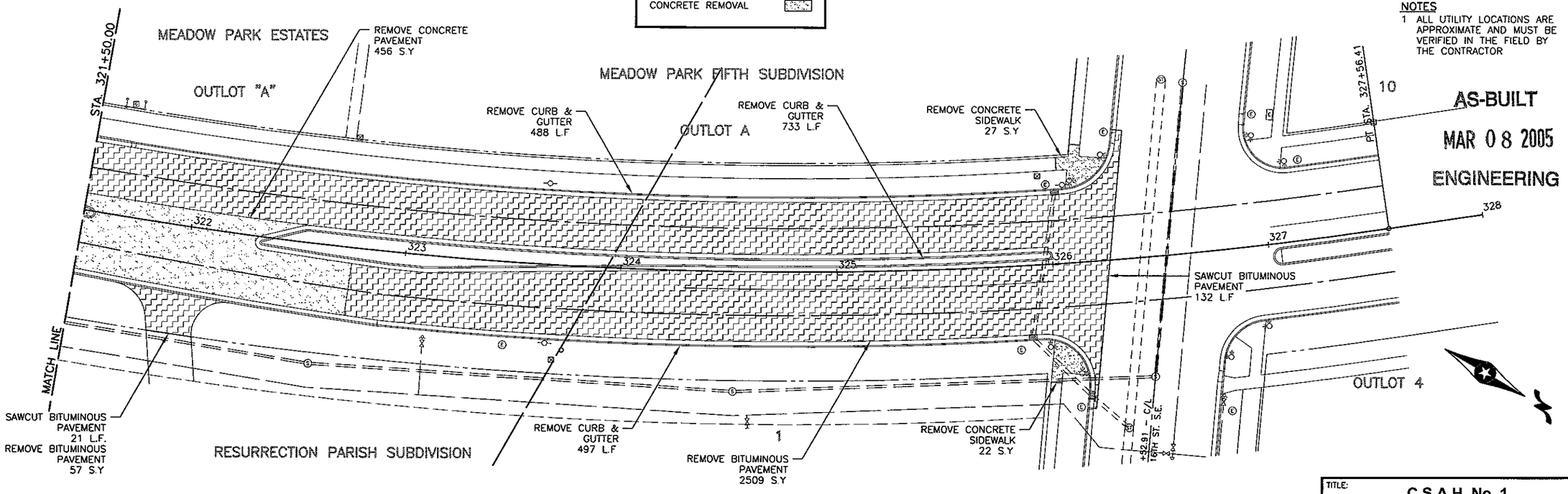
Sheet No. 20 of 66 Sheets

FILE NAME: C01-CR07.DWG DATE: 04-18-03



LEGEND
BITUMINOUS REMOVAL
CONCRETE REMOVAL

0 25 50
SCALE IN FEET



NOTES
1 ALL UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR

AS-BUILT
MAR 0 8 2005
ENGINEERING

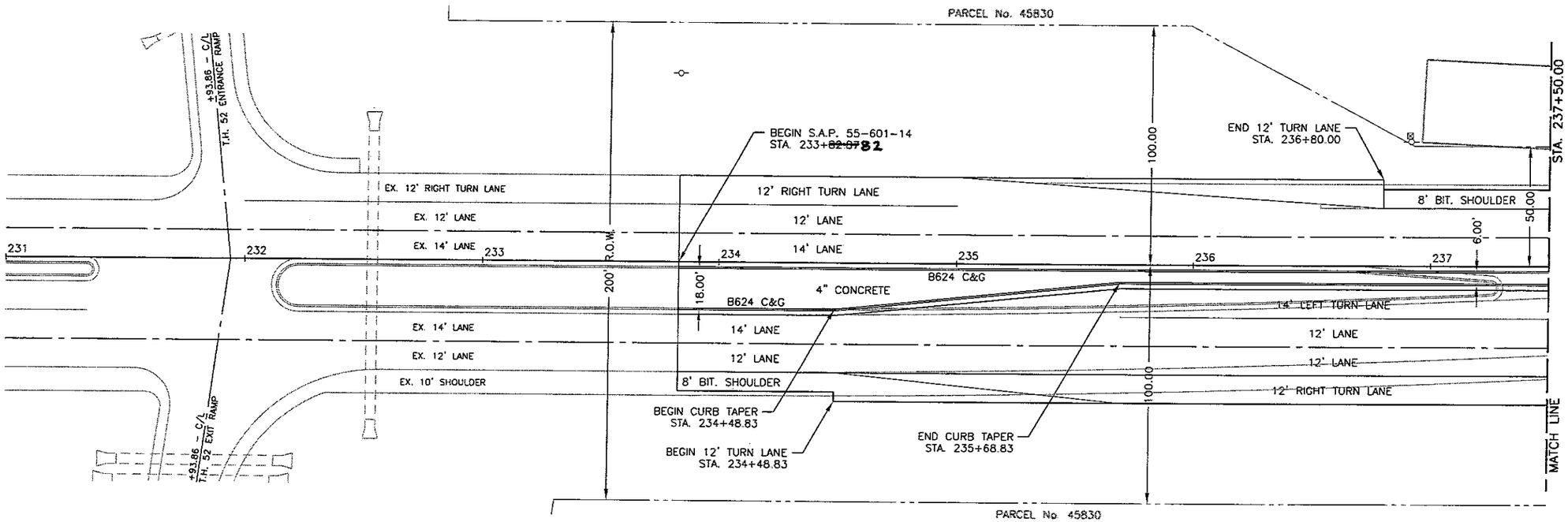
CERTIFIED BY Karen M Pieniek REG. NO. 19917 8/15 2003
LICENSED PROFESSIONAL ENGINEER

TITLE:
C.S.A.H. No. 1
REMOVAL PLAN
STA. 315+25.00 to STA. 326+26.53

S.A.P. 55-601-14

Sheet No. 21 of 66 Sheets

FILE NAME: C01-CR08.DWG DATE: 07-08-03



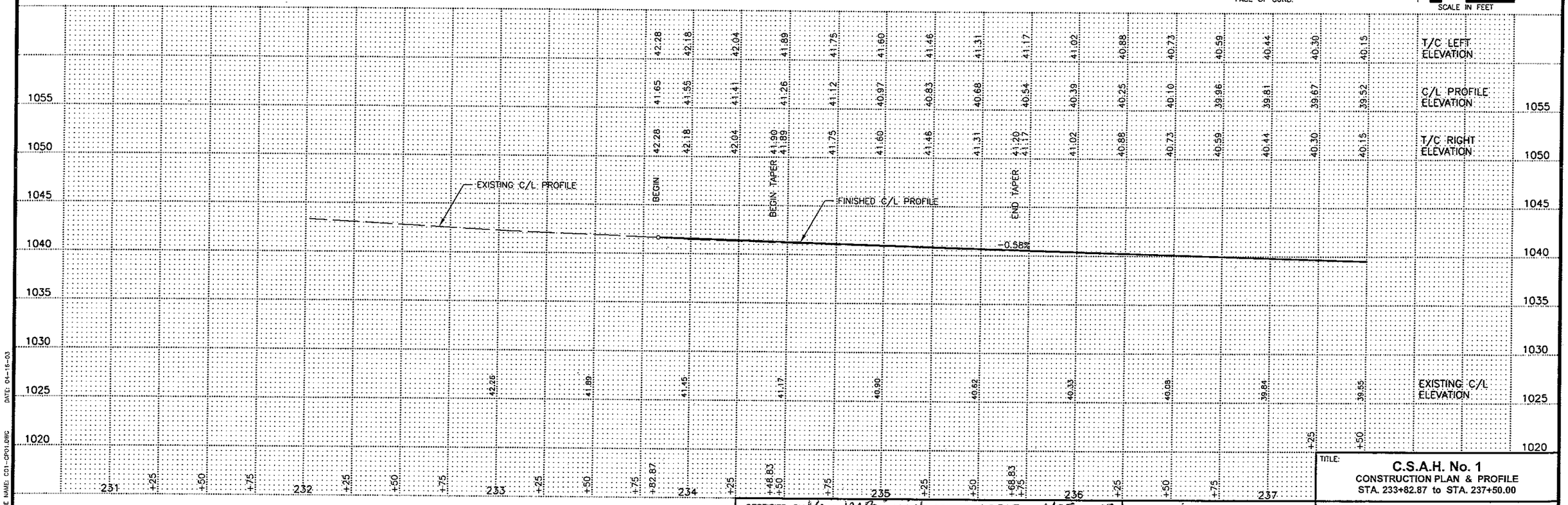
AS-BUILT

MAR 0 8 2005

ENGINEERING

NOTES
1 ALL DIMENSIONS SHOWN ARE TO FACE OF CURB.

0 25 50
SCALE IN FEET



DATE: 04-16-03
FILE NAME: C01-GP01.DWG

CERTIFIED BY Kevin M Brunner REG. NO 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

TITLE:
C.S.A.H. No. 1
CONSTRUCTION PLAN & PROFILE
STA. 233+82.87 to STA. 237+50.00

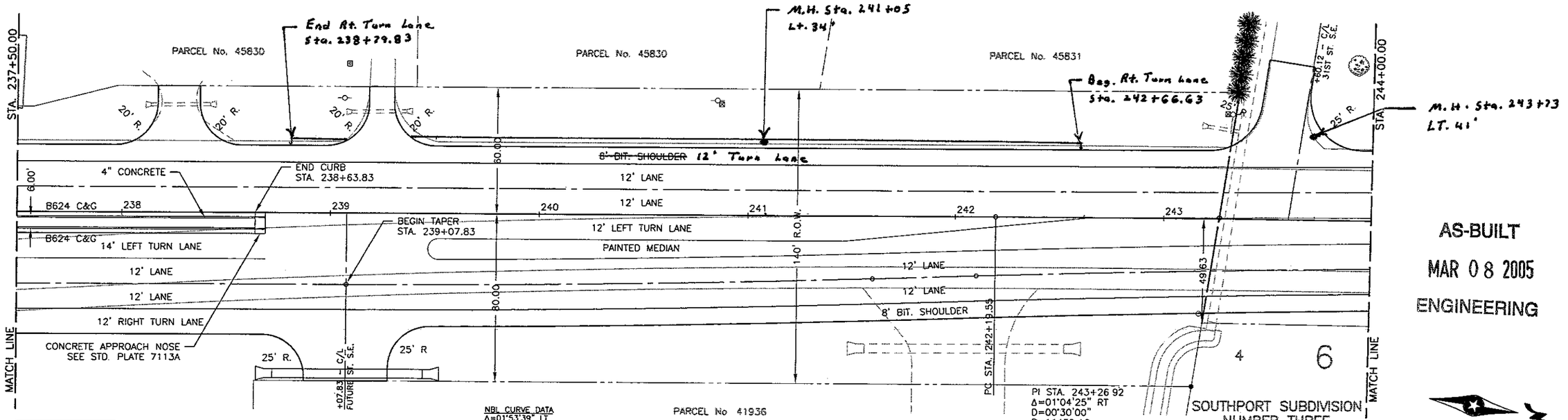
S.A.P. 55-601-14

Sheet No. 22 of 66 Sheets

STA. 238+27.03 – DRIVEWAY LT
INPLACE 18" C.M.P
20' ENTRANCE

STA. 239+24.10 – DRIVEWAY LT
INPLACE 18" C.M.P
12' ENTRANCE

STA. 243+60.12 – 31ST ST S.E.
NO INPLACE CULVERT
22' STREET APPROACH



STA. 239+07.83 – FUTURE ST.
INSTALL 42" x 72.00 L.F RCP-A – 76.50' RT
INSTALL 2 – 42" RCP-A APRONS
CONSTRUCT 40' STREET APPROACH

NBL CURVE DATA
Δ=01°53'39" LT
D=00°45'00"
R=7639.44
L=252.54
P.C. STA. 239+07.83 – 34.00' RT
P.T. STA. 241+60.32 – 29.83' RT

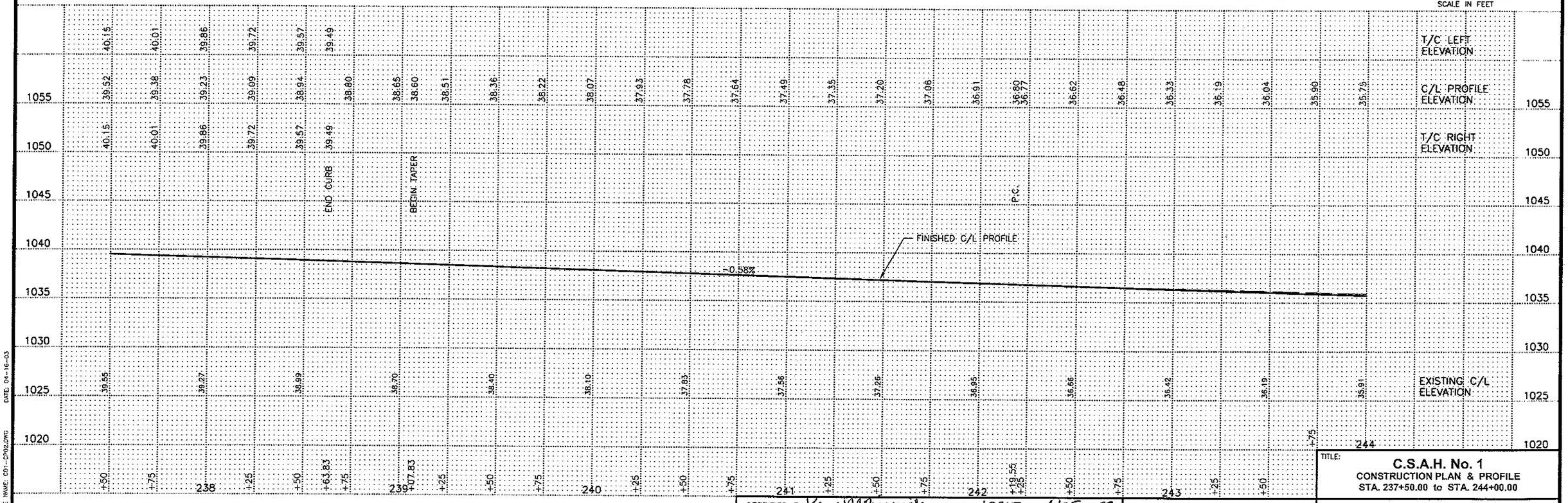
STA. 242+00.00 – ENTRANCE RT
SALVAGE 42" x 96 L.F. RCP-A
SALVAGE 2 – 42" RCP-A APRONS
REMOVE ENTRANCE

PI STA. 243+26.92
Δ=01°04'25" RT
D=00°30'00"
R=11459.16
L=214.73
T=107.37
X=625496.4950
Y=152979.3533

NOTES
1 ALL DIMENSIONS SHOWN ARE TO FACE OF CURB.

AS-BUILT
MAR 08 2005
ENGINEERING

0 25 50
SCALE IN FEET



CERTIFIED BY Kurt M Bruemmer REG. NO 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

TITLE:
C.S.A.H. No. 1
CONSTRUCTION PLAN & PROFILE
STA. 237+50.00 to STA. 244+00.00

Sheet No. 23 of 66 Sheets

DATE: 04-16-03
FILE NAME: C01-CP02.DWG

SBL CURVE DATA
Δ=01°04'25" RT
R=11471.16
L=214.95
P.C. STA. 245+39.50 – 15.99' LT
P.T. STA. 247+54.44 – 18.00' LT

SOUTHPORT SUBDIVISION NUMBER SIX

STA. 244+00.00

STA. 250+50.00

9 8 7 1 6 5 4

8' BIT. SHOULDER
12' LANE
12' LANE
12' LEFT TURN LANE
12' LANE
12' LANE
8' BIT. SHOULDER

50.00

50.00

100' R.O.W.

244 245 246 247 248 249 250

MATCH LINE

P.T. STA. 244+34.28

END TAPER
STA. 244+63.21

4 3 6 2 1 3 5

SOUTHPORT SUBDIVISION NUMBER THREE

±93.01 – C/L 31ST ST. S.E.

MATCH LINE

NBL CURVE DATA
Δ=01°53'39" RT
D=00°45'00"
R=7639.44
L=252.54
P.C. STA. 242+10.30 – 28.17' RT
P.T. STA. 244+63.21 – 21.45' RT

NBL CURVE DATA
Δ=01°04'25" RT
R=11435.16
L=214.28
P.C. STA. 245+40.17 – 20.01' RT
P.T. STA. 247+54.44 – 18.00' RT

AS-BUILT
MAR 0 8 2005
ENGINEERING

NOTES
1. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB.

0 25 50
SCALE IN FEET

1050 1045 1040 1035 1030 1025 1020 1015

35.75 35.61 35.55 35.46 35.38 35.32 35.17 35.03 34.88 34.74 34.59 34.45 34.30 34.16 34.01 33.87 33.72 33.58 33.43 33.29 33.14 33.00 32.85 32.71 32.56 32.42 32.27 32.13 31.98

C/L PROFILE ELEVATION

P.T.

END TAPER

FINISHED C/L PROFILE

-0.58%

35.91 35.60 35.29 34.92 34.56 34.21 33.87 33.56 33.25 33.01 32.78 32.49 32.21 31.94

EXISTING C/L ELEVATION

244 +25 +34.28 +50 +63.21 +75 245 +25 +50 +75 246 +25 +50 +75 247 +25 +50 +75 248 +25 +50 +75 249 +25 +50 +75 250

DATE: 04-16-03

FILE NAME: C01-GP03.DWG

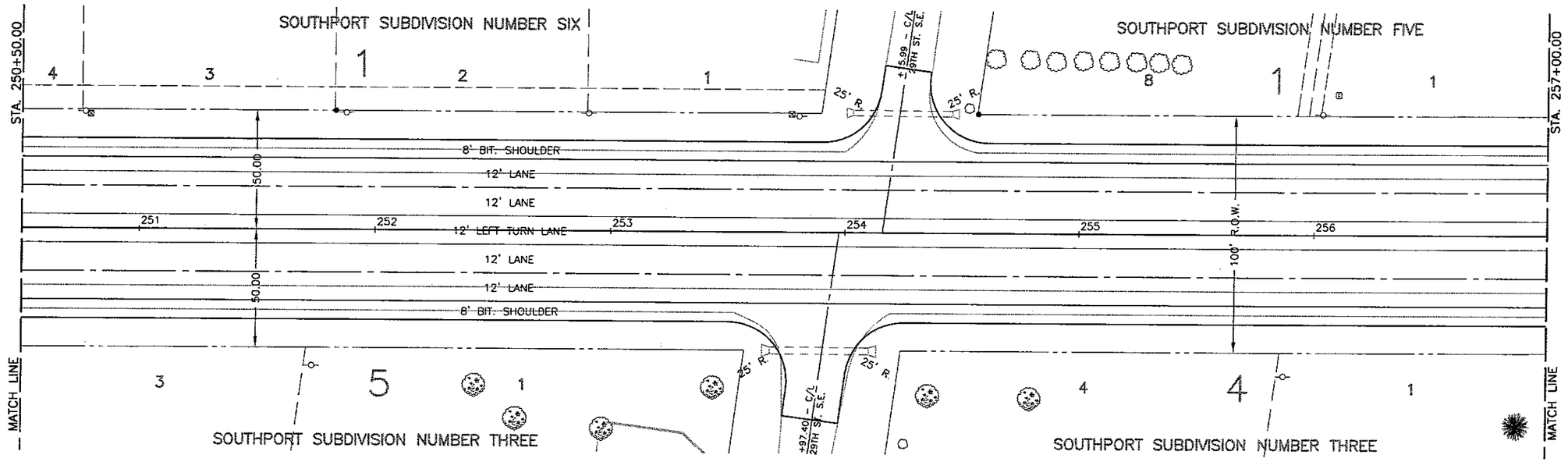
CERTIFIED BY Kevin M Bremer REG. NO. 19917 4/25 20 03
LICENSED PROFESSIONAL ENGINEER

TITLE:
C.S.A.H. No. 1
CONSTRUCTION PLAN & PROFILE
STA. 244+00.00 to STA. 250+50.00

S.A.P. 55-601-14

Sheet No. 24 of 66 Sheets

STA. 254+15.99 – 29TH ST. S.E.
INPLACE 24" CMP–A
20' STREET APPROACH

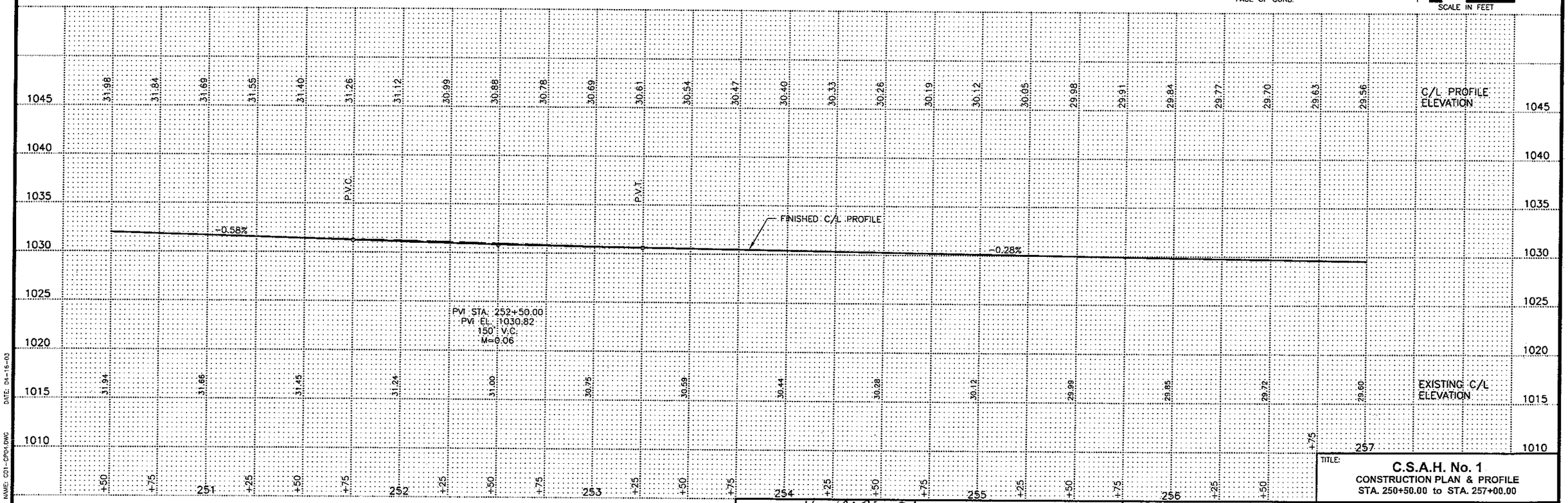


STA. 253+97.40 – 29TH ST. S.E.
INPLACE 30" CMP–A
24' STREET APPROACH

AS-BUILT
MAR 08 2005
ENGINEERING

NOTES
1. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB.

0 25 50
SCALE IN FEET



CERTIFIED BY Kevin M Brenner REG NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

TITLE:
C.S.A.H. No. 1
CONSTRUCTION PLAN & PROFILE
STA. 250+50.00 to STA. 257+00.00

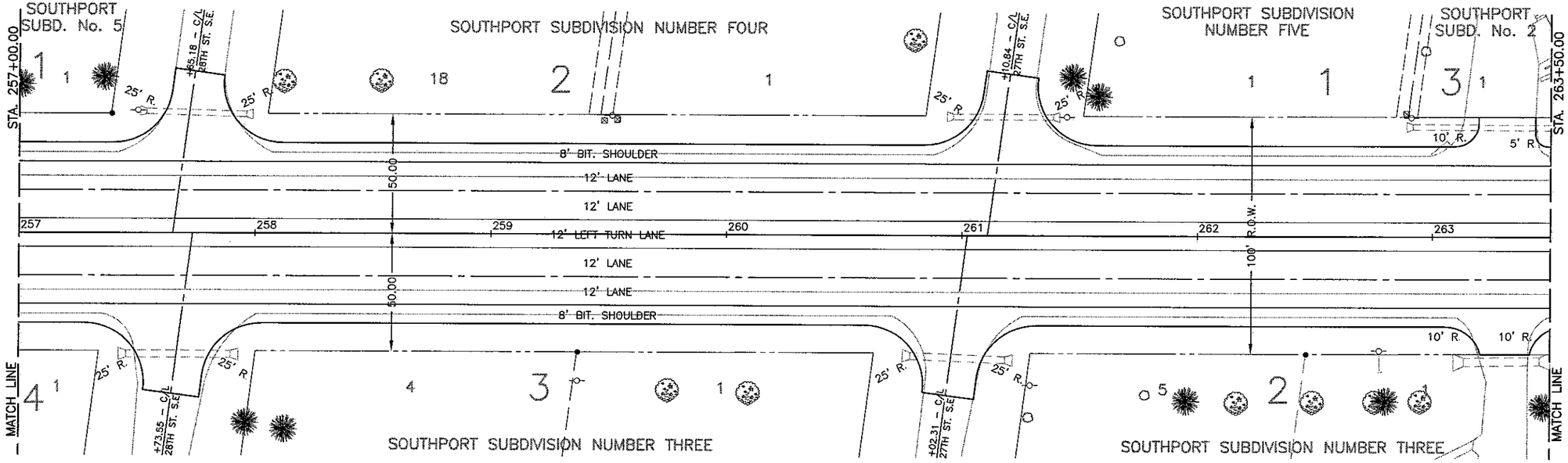
Sheet No. 25 of 66 Sheets

DATE: 04-16-03
FILE NAME: C01-CP04.DWG

STA. 257+65.18 – 28TH ST. S.E.
INPLACE 24" CMP–A
21' STREET APPROACH

STA. 261+10.84 – 27TH ST S.E.
INPLACE 24" CMP–A
22' STREET APPROACH

STA. 263+31.48 – DRIVEWAY LT
INPLACE 24" CMP–A
24' ENTRANCE



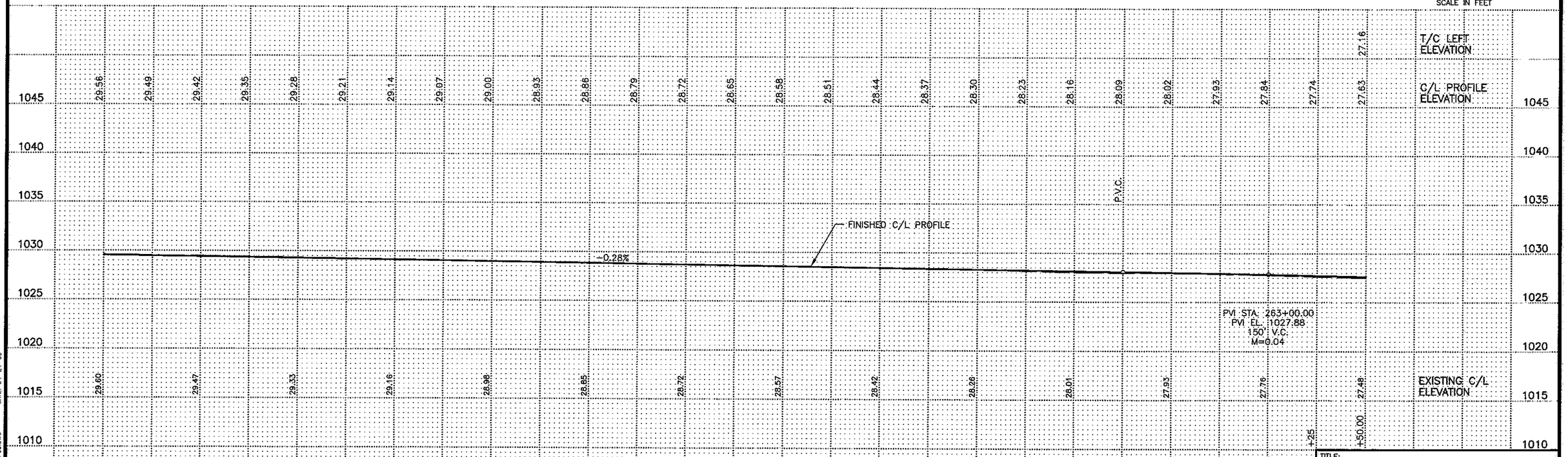
STA. 257+73.55 – 28TH ST. S.E.
INPLACE 30" CMP–A
24' STREET APPROACH

STA. 261+02.31 – 27TH ST. S.E.
INPLACE 30" CMP–A
22' STREET APPROACH

STA. 263+30.73 – DRIVEWAY RT
INPLACE 36" CMP–A
20' ENTRANCE

NOTES
1. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB.

0 25 50
SCALE IN FEET



AS-BUILT
MAR 0 8 2005
ENGINEERING

CERTIFIED BY Kevin M. Kuennen REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

TITLE:
C.S.A.H. No. 1
CONSTRUCTION PLAN & PROFILE
STA. 257+00.00 to STA. 263+50.00

Sheet No. 26 of 66 Sheets

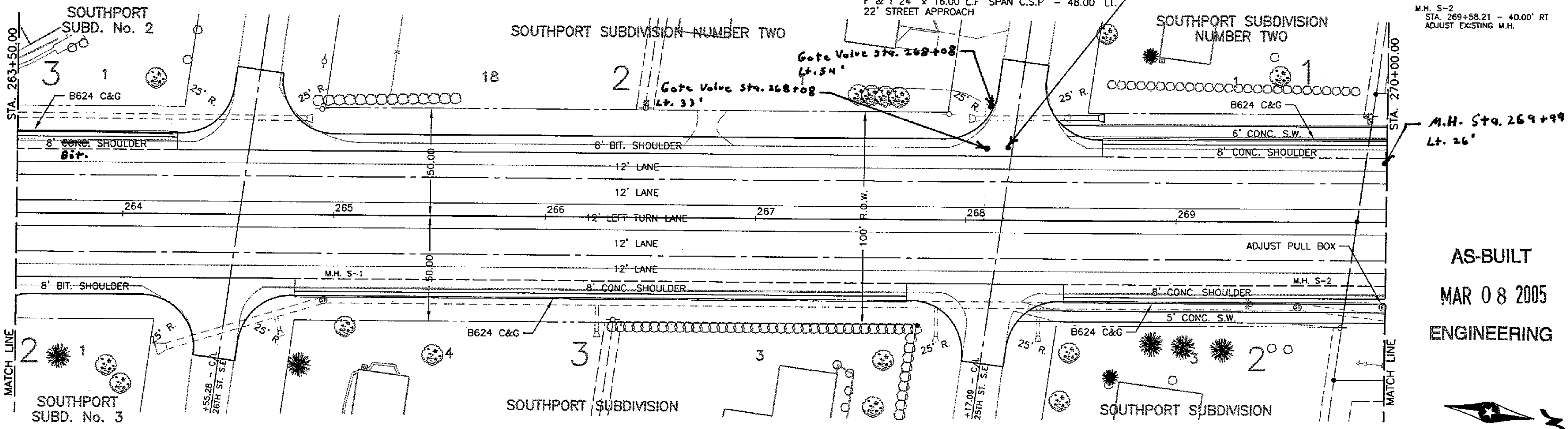
DATE: 04-24-03
FILE NAME: C01-CP05.DWG

STA. 264+55.28 – 26TH ST. S.E.
INPLACE 24" CMP–A
22' STREET APPROACH

STA. 268+17.09 – 25TH ST S.E
INPLACE 24" CMP–A
SALVAGE OUTLET APRON
F & I 24" x 16.00 L.F SPAN C.S.P – 48.00' LT.
22' STREET APPROACH

M.H. S–1
STA. 264+95.67 – 40.00' RT
ADJUST EXISTING M.H.

M.H. S–2
STA. 269+58.21 – 40.00' RT
ADJUST EXISTING M.H.



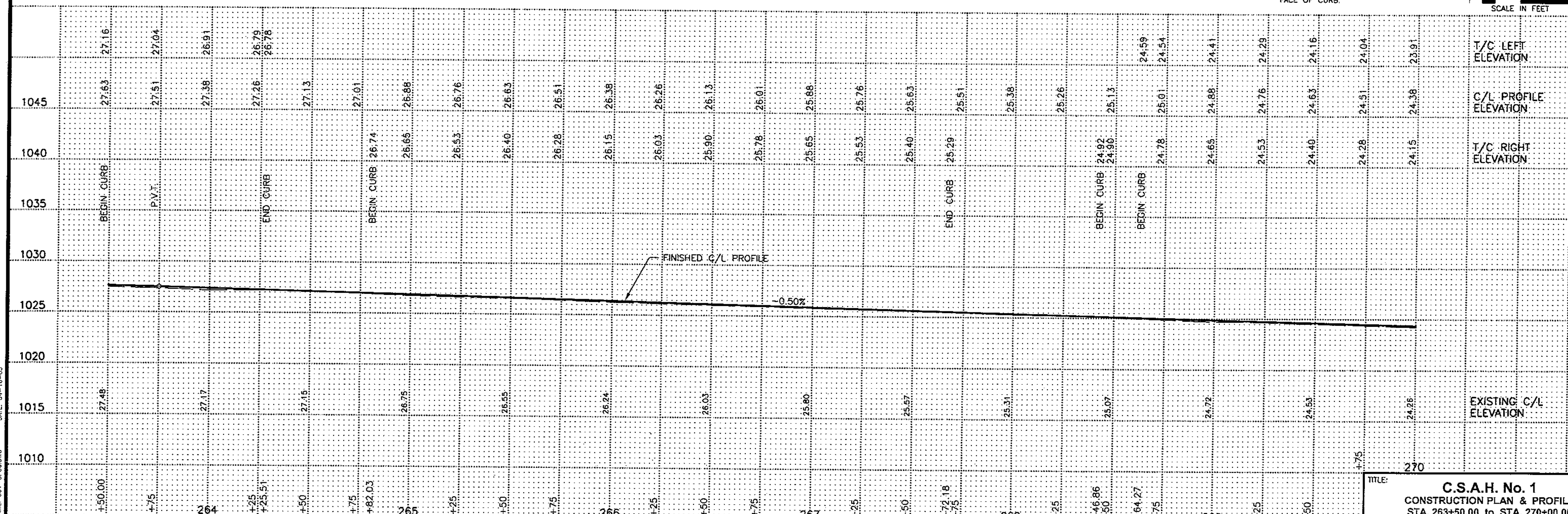
STA. 264+55.28 – 26TH ST S.E.
INPLACE 36" CMP
20' STREET APPROACH

STA. 268+17.09 – 25TH ST S.E
INPLACE 36" CMP
20' STREET APPROACH

NOTES
1 ALL DIMENSIONS SHOWN ARE TO FACE OF CURB.

0 25 50
SCALE IN FEET

AS-BUILT
MAR 0 8 2005
ENGINEERING



FILE NAME: C01-CP06.DWG DATE: 04-16-03

CERTIFIED BY [signature] LICENSED PROFESSIONAL ENGINEER REG. NO. 19917 4/25 2003

S.A.P. 55-601-14

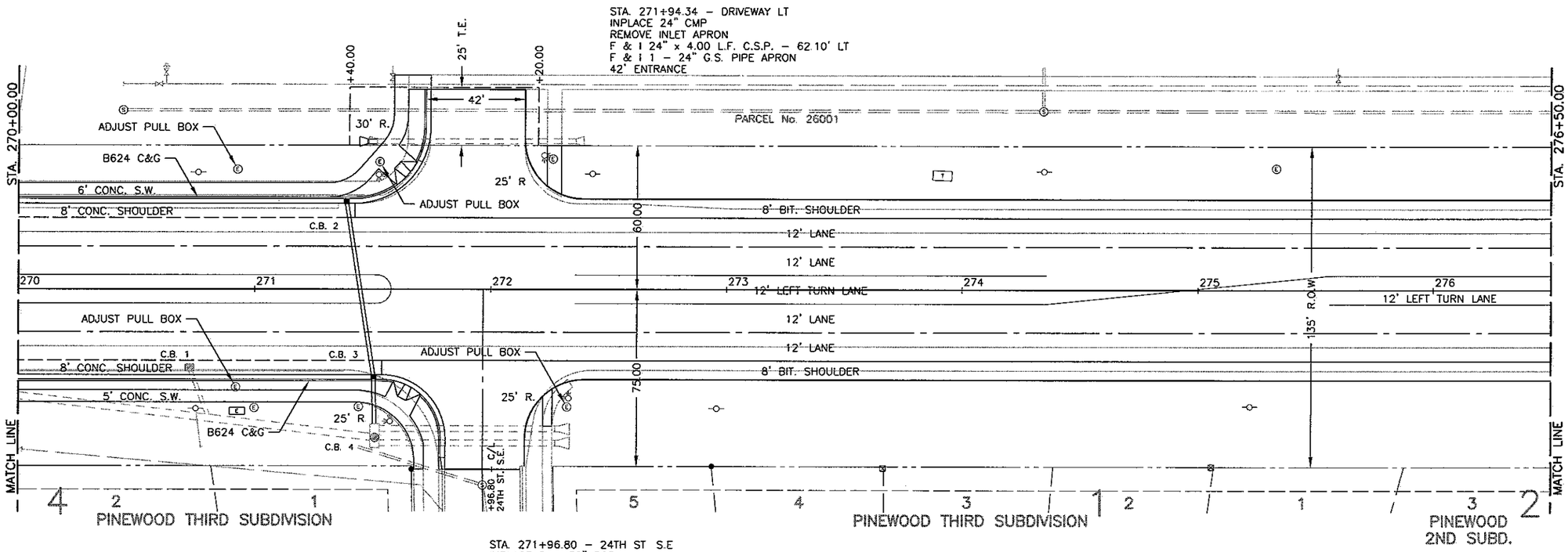
TITLE:
C.S.A.H. No. 1
CONSTRUCTION PLAN & PROFILE
STA. 263+50.00 to STA. 270+00.00

Sheet No. 27 of 66 Sheets

STA. 271+94.34 – DRIVEWAY LT
INPLACE 24" CMP
REMOVE INLET APRON
F & I 24" x 4.00 L.F. C.S.P. – 62.10' LT
F & I 1 – 24" G.S. PIPE APRON
42" ENTRANCE

C.B. 1
STA. 270+72.63 – 33.50' RT
REMOVE EXISTING C.B.
PLUG 12" C.M.P OUTLET

C.B. 2
STA. 271+38.84 – 37.00' LT
CONST. DRAINAGE STRUCTURE DESIGN H
TOP CURB EL. 23.22
TOP GRATE EL. 22.55
OUT. EL. 19.55 TO C.B. 3
~~74.90~~ 75 L.F 12" R.C.P CL. 5
C.B. 3
STA. 271+50.45 – 37.00' RT
CONST. DRAINAGE STRUCTURE DESIGN G
TOP CURB EL. 23.40
TOP GRATE EL. 22.73
INL. EL. 18.80 FROM C.B. 2
OUT. EL. 18.70 TO C.B. 4
~~25.51~~ 23 L.F 12" R.C.P CL. 5
C.B. 4
STA. 271+51.07 – 62.50' RT
EXISTING CATCH BASIN
TOP GRATE EL. 21.98
INL. EL. 18.45 FROM C.B. 3
EX. OUT EL. 18.00

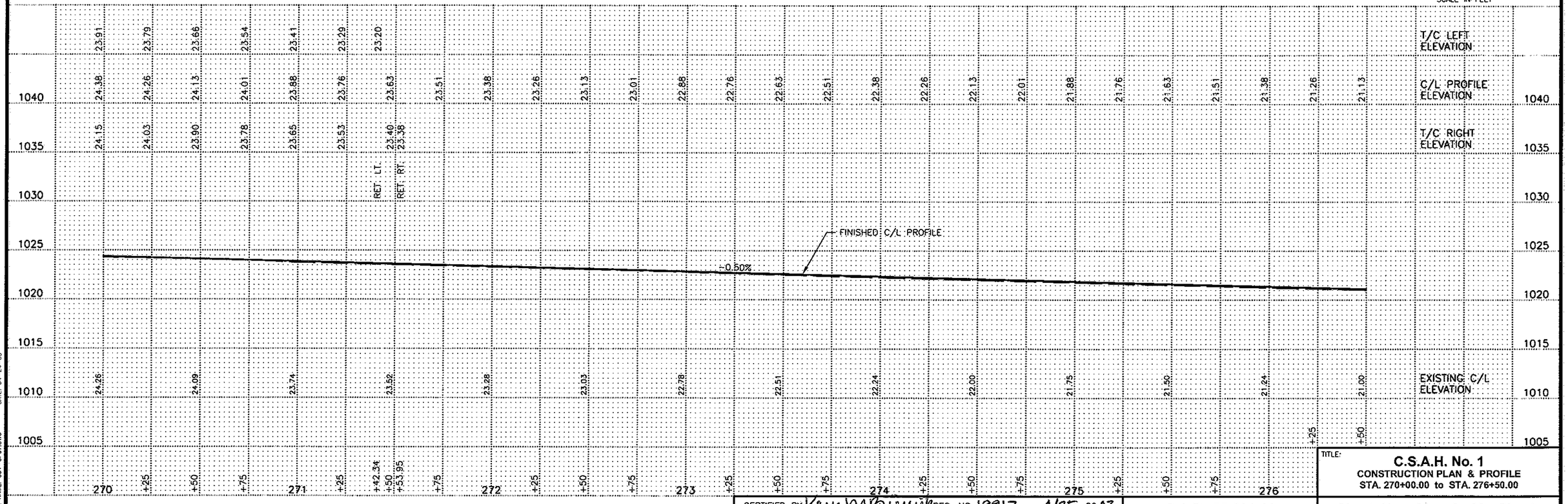


STA. 271+96.80 – 24TH ST S.E
INPLACE 2 – 30" RCP
35.67' STREET APPROACH

AS-BUILT
MAR 08 2005
ENGINEERING

NOTES
1 ALL DIMENSIONS SHOWN ARE TO FACE OF CURB.

0 25 50
SCALE IN FEET



DATE: 04-24-03
FILE NAME: C01-CP07.DWG

CERTIFIED BY Kurt M Bauman LICENSED PROFESSIONAL ENGINEER REG. NO 19917 4/25 2003

S.A.P. 55-601-14

TITLE:
C.S.A.H. No. 1
CONSTRUCTION PLAN & PROFILE
STA. 270+00.00 to STA. 276+50.00

Sheet No. 28 of 66 Sheets

STA. 278+25.41 – DRIVEWAY LT
INPLACE 24" CMP
40' ENTRANCE

M.H. 1
STA. 278+29.38 – 75.05' LT
ADJUST EXISTING M.H.

STA. 276+50.00

STA. 283+00.00

+00.00

25' T.E.

+50.00

M.H. 1

PARCEL No. 26001

30' R.

35' R.

ADJUST PULL BOX

8' BIT. SHOULDER

60.00

12' RIGHT TURN LANE

12' LANE

ADJUST PULL BOX

12' LANE

277

278

279

280

281

282

12' LEFT TURN LANE

12' LEFT TURN LANE

12' PAINTED MEDIAN

135' R.O.W.

12' LANE

12' LANE

8' BIT. SHOULDER

8' BIT. SHOULDER

75.00

25' R.

25' R.

C/L STA. 23RD ST. S.E.

+26.05

BEGIN 12' TURN LANE
STA. 281+85.56

MATCH LINE

MATCH LINE

PINEWOOD FIRST SUBDIVISION

PINEWOOD FIRST SUBDIVISION

PINEWOOD SECOND SUBDIVISION

PINEWOOD MANOR

STA. 278+26.05 – 23RD ST S.E.
INPLACE 3 – 27" RCP
31 67' STREET APPROACH

AS-BUILT

MAR 0 8 2005

ENGINEERING

NOTES
1 ALL DIMENSIONS SHOWN ARE TO FACE OF CURB.

0 25 50
SCALE IN FEET

1035
1030
1025
1020
1015
1010
1005
1000

21.13 21.01 20.88 20.76 20.63 20.51 20.38 20.26 20.13 20.01 19.88 19.76 19.63 19.51 19.38 19.26 19.14 19.05 18.98 18.93 18.91 18.91 18.91 18.93 18.97 19.04 19.13 19.23

C/L PROFILE ELEVATION

P.V.C.

LOW PT.

P.V.T.

FINISHED C/L PROFILE

-0.50%

+0.40%

PVI STA. 281+50.00
PVI EL. 1018.63
250' V.C.
M=0.28

21.00 20.76 20.54 20.31 20.05 19.80 19.62 19.43 19.27 19.11 19.12 19.13 19.23 19.35

EXISTING C/L ELEVATION

+50 +75 277 +25 +50 +75 278 +25 +50 +75 279 +25 +50 +75 280 +25 +50 +75 281 +25 +50 +63.89 +75 282 +25 +50 +75 283

CERTIFIED BY Lance M Boehnen REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

TITLE:
C.S.A.H. No. 1
CONSTRUCTION PLAN & PROFILE
STA. 276+50.00 to STA. 283+00.00

Sheet No. 29 of 66 Sheets

FILE NAME: C01-CP08.DWG
DATE: 04-24-03

M.H. T-1
STA. 283+87.44 – 39.34' LT
ADJUST EXISTING M.H.

M.H. 2
STA. 284+71.66 – 50.00' RT
ADJUST EXISTING M.H.

STA. 287+17.27 – 111.50' LT
75.00' R. C/L CONC. S.W

STA. 289+00.00 – 111.50' LT
75.00' R. C/L CONC. S.W.

STA. 289+52.53 – 29.00' RT
75.00' R. C/L CONC. S.W.

W-1
STA. 287+24.54 – 45.00' RT =
W.A. STA. 287+24.54
ADJUST EXISTING M.H.

W-2
STA. 287+30.00 – 45.00' RT =
W.A. STA. 287+30.00
F & I 12" x 45° BEND

W-3
STA. 287+32.12 – 47.12' RT =
W.A. STA. 287+33.00
F & I 12" x 45° VERTICAL BEND

W-4
STA. 287+40.00 – 55.00' RT =
W.A. STA. 287+44.14
F & I 12" x 45° BEND

W-5
STA. 287+51.75 – 55.00' RT =
W.A. STA. 287+55.89
F & I 12" x 45° VERTICAL BEND

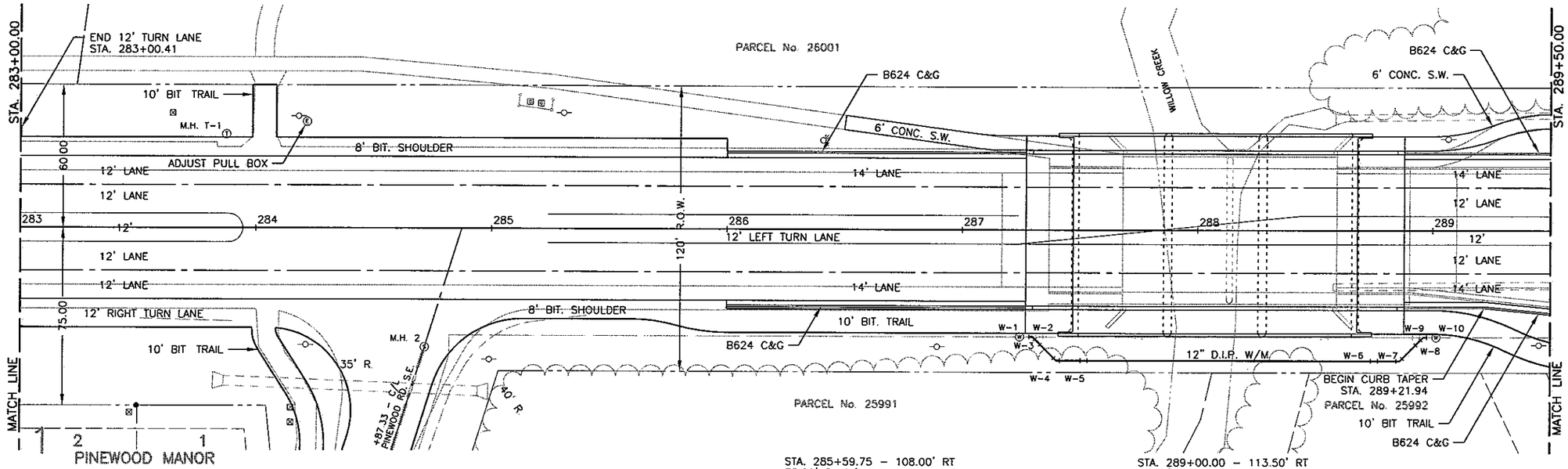
W-6
STA. 288+75.00 – 55.00' RT =
W.A. STA. 288+79.14
F & I 12" x 45° VERTICAL BEND

W-7
STA. 288+86.00 – 55.00' RT =
W.A. STA. 288+90.14
F & I 12" x 45° BEND

W-8
STA. 288+93.88 – 47.12' RT =
W.A. STA. 289+01.28
F & I 12" x 45° VERTICAL BEND

W-9
STA. 288+96.00 – 45.00' RT =
W.A. STA. 289+04.28
F & I 12" x 45° BEND

W-10
STA. 289+01.59 – 45.00' RT =
W.A. STA. 289+09.87
ADJUST EXISTING M.H.



STA. 284+87.33 – PINEWOOD RD. S.E.
INPLACE 42" CMP-A
28' STREET APPROACH

STA. 285+59.75 – 108.00' RT
75.00' R C/L BIT TRAIL

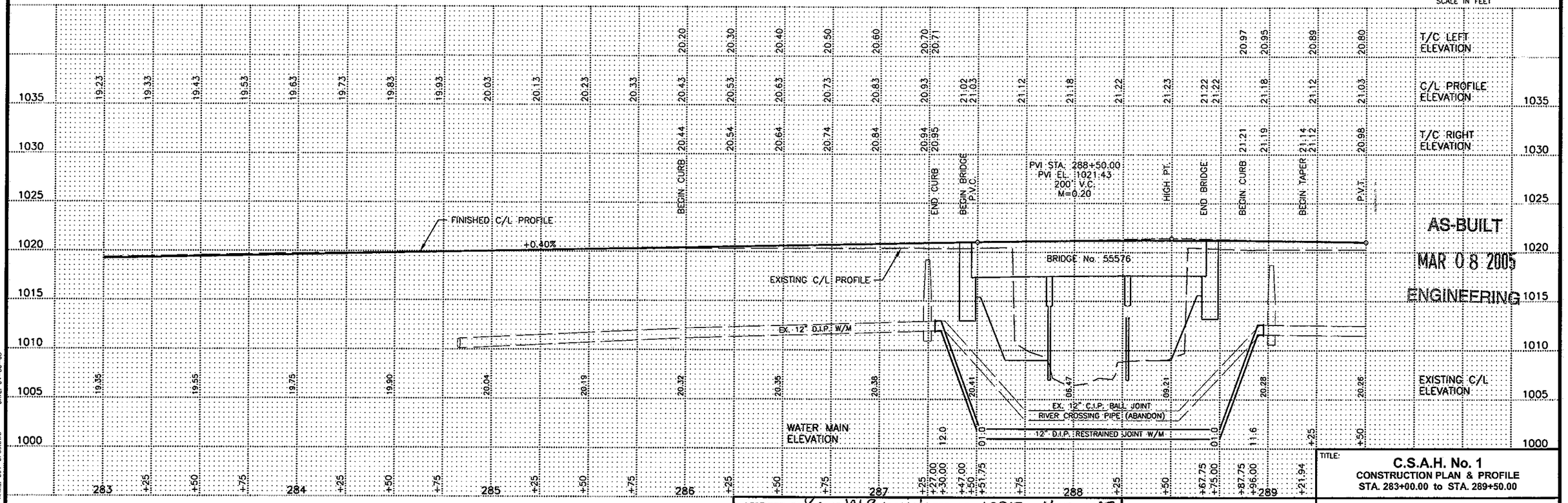
STA. 286+00.00 – 36.50' LT
75.00' R. C/L BIT TRAIL

STA. 289+00.00 – 113.50' RT
75.00' R. C/L BIT TRAIL

STA. 289+66.41 – 21.00' LT
75.00' R. C/L BIT TRAIL

NOTES
1 ALL DIMENSIONS SHOWN ARE TO FACE OF CURB.

SCALE IN FEET 0 25 50



AS-BUILT
MAR 08 2005
ENGINEERING

DATE: 04-30-03
FILE NAME: C01-CP09.DWG

CERTIFIED BY Kevin M Polomik REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

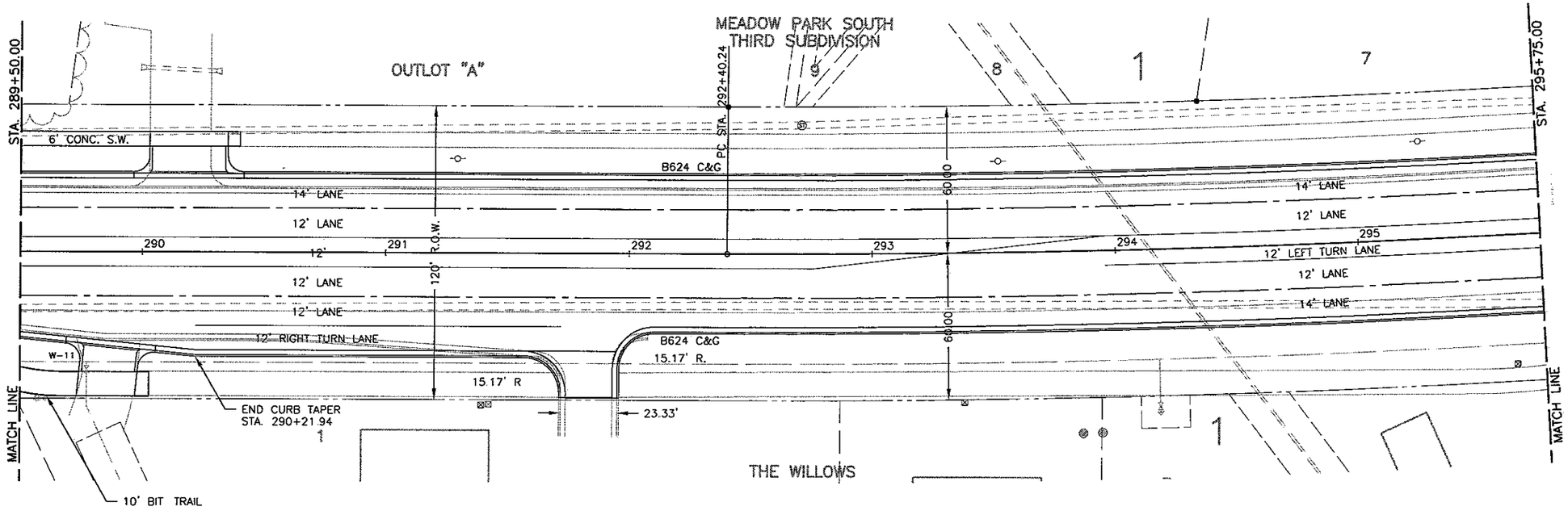
TITLE:
C.S.A.H. No. 1
CONSTRUCTION PLAN & PROFILE
STA. 283+00.00 to STA. 289+50.00

S.A.P. 55-601-14

Sheet No. 30 of 66 Sheets

STA. 290+18.91 – DRIVEWAY LT
INPLACE 18" CMP
32' ENTRANCE

W-11
STA. 289+77.30 – 48.00 RT
ADJUST GATE VALVE BOX

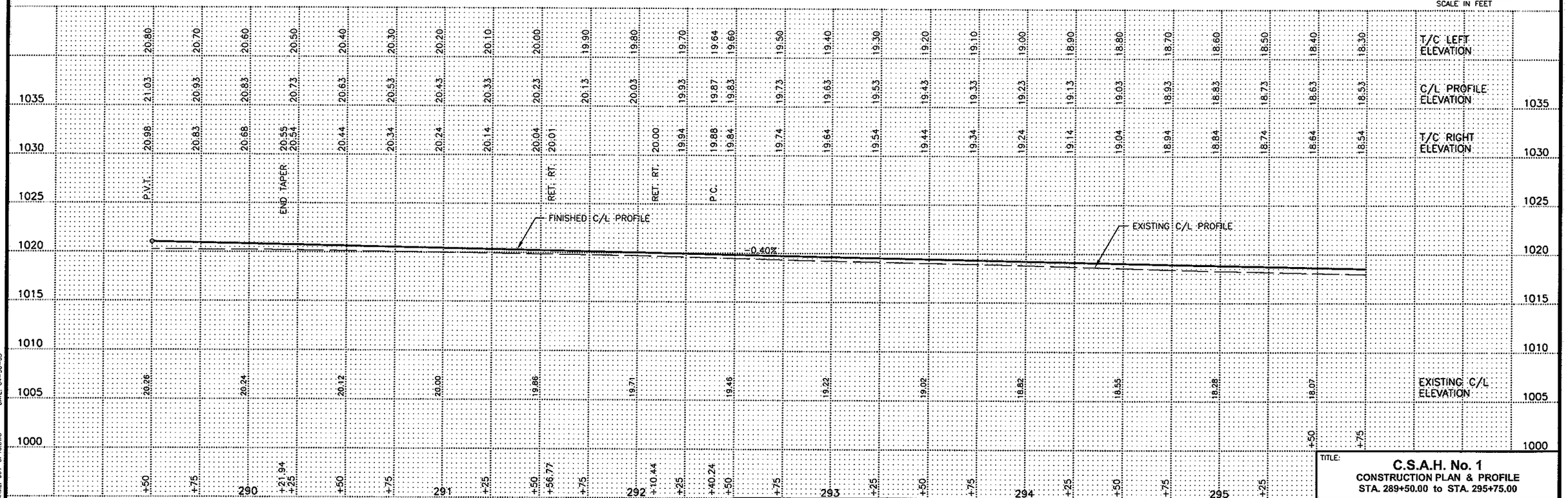


STA. 289+91.08 – DRIVEWAY RT
24' ENTRANCE

STA. 291+83.60 – DRIVEWAY RT
23.33' ENTRANCE

NOTES
1. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB.

SCALE IN FEET
0 25 50



AS-BUILT
MAR 08 2005
ENGINEERING

CERTIFIED BY Kaye M Bienias REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

TITLE:
C.S.A.H. No. 1
CONSTRUCTION PLAN & PROFILE
STA. 289+50.00 to STA. 295+75.00

Sheet No. 31 of 66 Sheets

DATE: 04-30-03
FILE NAME: C01-CP10.DWG

4" R.S.C. & PULL BOX

STA. 296+47.12 – 20TH ST S.E.
52.00' STREET APPROACH

M.H. T-2
STA. 295+75.00 – 38.83' LT
ADJUST EXISTING M.H.

SBL CURVE DATA
Δ=06°25'13" LT
R=5711.58
L=640.01
P.C. STA. 292+40.24 – 18.00' LT
P T STA. 298+82.27 – 18.00' LT

MEADOW PARK TWELFTH SUBDIVISION

W-12
STA. 296+00.14 – 45.00' RT
ADJUST GATE VALVE BOX

W-13
STA. 296+12.04 – 45.00' RT
ADJUST GATE VALVE BOX

W-14
STA. 296+23.14 – 42.89' LT
ADJUST GATE VALVE BOX

W-15
STA. 296+18.16 – 48.74' LT
R & S 6" HYDRANT
R & S 6" GATE VALVE & BOX
F & I 6" PLUG

STA. 295+75.00

STA. 302+25.00

34.00 R.

32.00' R.

C.B. 6

C.B. 7

C.B. 5

M.H. T-2

M.H. S-5

M.H. S-3

M.H. S-4

BEGIN TAPER
STA. 298+82 27

END TAPER
STA. 302+16 12

PT STA. 300+09.57

B624 C&G

14' LANE

12' LANE

12' LEFT TURN LANE

PAINTED MEDIAN

100' R.O.W.

50.00

C.B. 5
STA. 296+00.14 – 31.02' LT
REMOVE EXISTING C.B.
CONST. DRAINAGE STRUCTURE DESIGN G
TOP CURB EL. 18.20
TOP GRATE EL. 17.53
OUT. EL. 12.97 TO EX. 12" R.C.P
REMOVE 5.30 L.F 12" R.C.P

C.B. 6
STA. 296+31.54 – 52.34' LT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 17.45
TOP CURB EL. 18.31
TOP GRATE EL. 17.64

C.B. 7
STA. 296+87.31 – 67.63' LT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 17.04
TOP CURB EL. 17.85
TOP GRATE EL. 17 18

296 297 298 299 300 301 302

W-12 W-13

MATCH LINE

PARCEL No. 54341

PARCEL No. 54340

PARCEL No. 60318

PI STA. 296+25.48
Δ=07°41'36" LT
D=01°00'00"
R=5729.58
L=769.33
T=385.24
X=624756 5826
Y=158226.0118

M.H. S-3
STA. 296+00.00 – 30.00' RT
REMOVE EXISTING M.H.
PLUG 36" C.M.P. INLET
PLUG 36" C.M.P OUTLET

M.H. S-4
STA. 296+95.45 – 30.00' RT
REMOVE EXISTING M.H.
PLUG 36" C.M.P. INLET
PLUG 36" C.M.P OUTLET

M.H. S-5
STA. 296+51.72 – 51.67' LT
ADJUST EXISTING M.H.
REPLACE EX. FRAME & COVER
WITH NEENAH R-1916-C OR
APPROVED EQUAL
EXISTING RING EL. 17 79
RING EL. 17.97

NBL CURVE DATA
Δ=08°57'59" LT
R=5747.58
L=899.45
P.C. STA. 292+40.24 – 18.00' RT
P T STA. 301+37.26 – 16.58' RT

BEGIN TAPER (PT)
STA. 301+37 26

NOTES
1 ALL DIMENSIONS SHOWN ARE TO FACE OF CURB.

0 25 50
SCALE IN FEET

T/C LEFT ELEVATION

C/L PROFILE ELEVATION

T/C RIGHT ELEVATION

EXISTING C/L ELEVATION

RET LT. RET LT. TAPER LT. P.V.C. P.T. P.V.T. TAPER RT. TAPER LT.

EXISTING C/L PROFILE

FINISHED C/L PROFILE

-0.40%

-0.88%

PVI STA. 300+00.00
PVI EL. 1016.83
150' V.C.
M=0.09

1030 1025 1020 1015 1010 1005 1000 995

AS-BUILT
MAR 08 2005
ENGINEERING

Revised See Sheet 32A

DATE: 04-30-03

FILE NAME: C01-GP11.DWG

CERTIFIED BY Kaye M Brenneke REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

TITLE:
C.S.A.H. No. 1
CONSTRUCTION PLAN & PROFILE
STA. 295+75.00 to STA. 302+25.00

Sheet No. 32 of 66 Sheets

4" R.S.C. & PULL BOX

STA. 296+47.12 – 20TH ST. S.E.
52.00' STREET APPROACH

M.H. T-2
STA. 295+75.00 – 38.83' LT
ADJUST EXISTING M.H.

SBL CURVE DATA
Δ=06°25'13" LT.
R=5711.58
L=640.01
P.C. STA. 292+40.24 – 18.00' LT.
P.T. STA. 298+82.27 – 18.00' LT.

MEADOW PARK TWELFTH SUBDIVISION

STA. 295+75.00

34.00' R.

C.B. 6

M.H. T-2

W-15

W-14

M.H. S-5

C.B. 7

32.00' R.

C.B. 5

4" R.S.C. & PULL BOX

296

12" R.C.P. ST S.

M.H. S-3

C.B. 22

W-12

W-13

W-13A

25.00' R.

C.B. 23

MATCH LINE

12" R.C.P. ST. S.

C.B. 24

PARCEL No. 54341

PI STA. 296+25.48
Δ=07°41'36" LT.
D=01°00'00"
R=5729.58
L=769.33
T=385.24
X=624756.5826
Y=158226.0118

BEGIN TAPER
STA. 298+82.27

B624 C&G

14' LANE

12' LANE

297

298

12' LEFT TURN LANE

299

12' LANE

M.H. S-4

14' LANE

100' R.O.W.

4" R.S.C. & PULL BOX

M.H. S-3
STA. 296+00.00 – 30.00' RT
REMOVE EXISTING M.H.
PLUG 36" C.M.P. INLET
PLUG 36" C.M.P OUTLET

M.H. S-4
STA. 296+95.45 – 30.00' RT
REMOVE EXISTING M.H.
PLUG 36" C.M.P. INLET
PLUG 36" C.M.P. OUTLET

M.H. S-5
STA. 296+51.72 – 51.67' LT
ADJUST EXISTING M.H.
REPLACE EX. FRAME & COVER
WITH NEENAH R-1916-C OR
APPROVED EQUAL
EXISTING RING EL. 17.79
RING EL. 17.97

PARCEL No. 54340

NBL CURVE DATA
Δ=08°57'59" LT.
R=5747.58
L=899.45
P.C. STA. 292+40.24 – 18.00' RT.
P.T. STA. 301+37.26 – 16.58' RT.

PT STA. 300+09.57

300

PAINTED MEDIAN

50.00

50.00

12' LANE

14' LANE

301

302

END TAPER
STA. 302+16.12

B624 C&G

BEGIN TAPER (PT)
STA. 301+37.26

C.B. 22
STA. 295+80.46 – 31.00' RT.
CONST. DRAINAGE STRUCTURE DESIGN G
TOP CURB EL. 18.52
TOP GRATE EL. 17.85
INL. EL. 13.84 FROM C.B. 23
OUT. EL. 13.79 TO C.B. 5
~~65.67~~ 65.00 L.F 12" R.C.P CL. 5

C.B. 23
STA. 296+08.52 – 65.47' RT.
CONSTRUCT DRAINAGE STRUCTURE DESIGN ~~H~~ G
TOP CURB EL. 18.22
TOP GRATE EL. 17.55
INL. EL. 14.25 FROM C.B. 24
OUT. EL. 14.20 TO C.B. 22
~~44.60~~ 45.00 L.F. 12" R.C.P CL. 5

C.B. 24
STA. 296+56.92 – 75.47' RT.
CONSTRUCT DRAINAGE STRUCTURE DESIGN H
TOP CURB EL. 18.32
TOP GRATE EL. 17.65
OUT. EL. 14.65 TO C.B. 23
50.00 L.F 12" R.C.P CL. 5

PARCEL No. 60318

MATCH LINE

NOTES
1 ALL DIMENSIONS SHOWN ARE TO FACE OF CURB.

W-12
STA. 296+00.14 – 45.00' RT.
ADJUST GATE VALVE BOX

W-13
STA. 296+12.04 – 45.00' RT.
ADJUST GATE VALVE BOX

W-13A
STA. 296+25.55 – 50.94' RT
ADJUST GATE VALVE BOX

W-14
STA. 296+23.14 – 42.89' LT
ADJUST GATE VALVE BOX

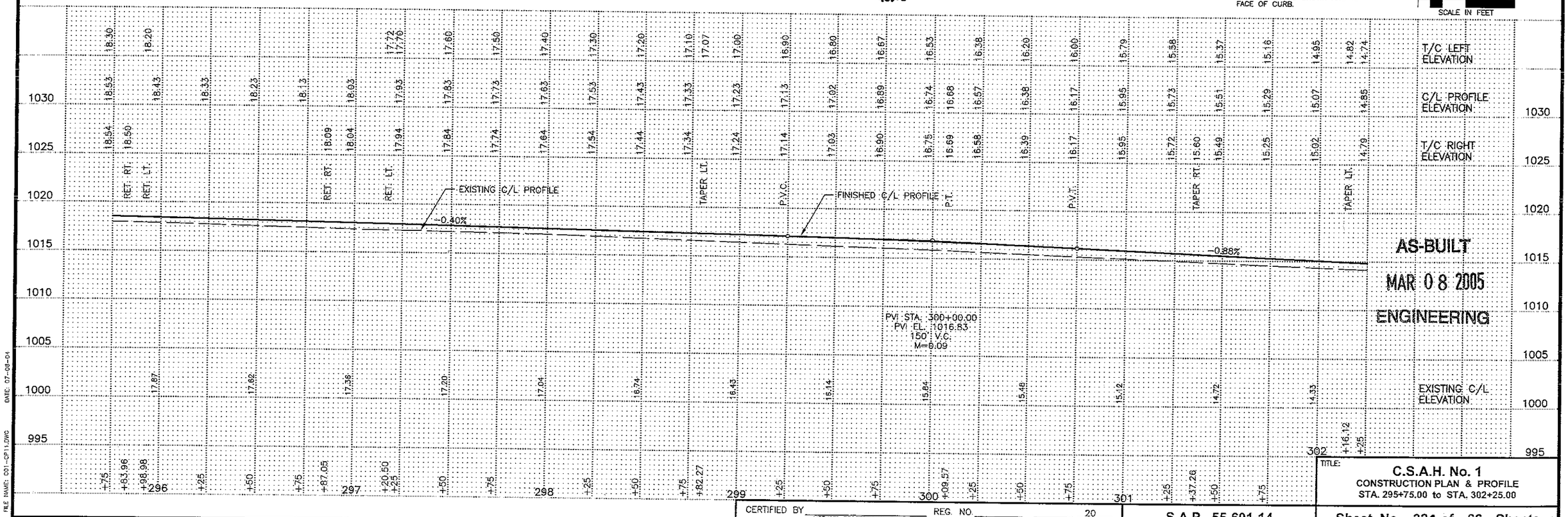
W-15
STA. 296+18.16 – 48.74' LT
R & S 6" HYDRANT
R & S 6" GATE VALVE & BOX
F & I 6" PLUG

C.B. 5
STA. 296+00.14 – 31.02' LT.
REMOVE EXISTING C.B.
CONST. DRAINAGE STRUCTURE DESIGN G
TOP CURB EL. 18.20
TOP GRATE EL. 17.53
INL. EL. 13.27 FROM C.B. 22
OUT. EL. 13.25 TO EX. 12" R.C.P
REMOVE 5.30 L.F 12" R.C.P

C.B. 6
STA. 296+31.54 – 52.34' LT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 17.45
TOP CURB EL. 18.31
TOP GRATE EL. 17.64

C.B. 7
STA. 296+87.31 – 67.63' LT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 17.04
TOP CURB EL. 17.85
TOP GRATE EL. 17.18

0 25 50
SCALE IN FEET



DATE: 07-09-04

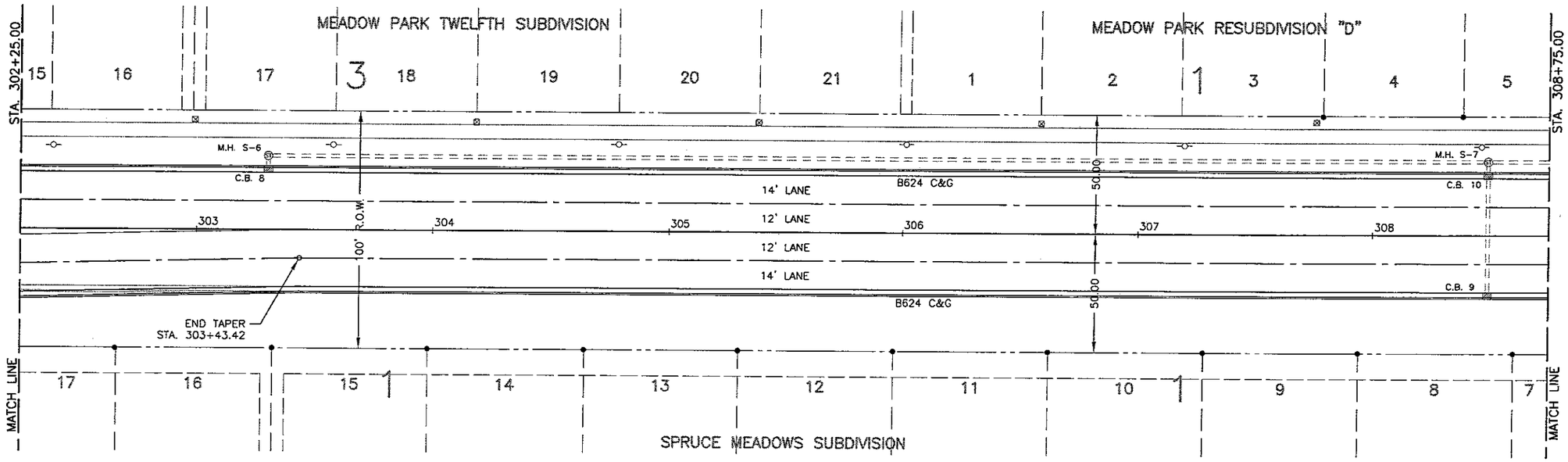
FILE NAME: D01-CP11.DWG

CERTIFIED BY _____ REG. NO. _____ _____ 20__
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

TITLE:
C.S.A.H. No. 1
CONSTRUCTION PLAN & PROFILE
STA. 295+75.00 to STA. 302+25.00

Sheet No. 32A of 66 Sheets



C.B. 8
STA. 303+30.00 – 25.00' LT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 13.20
TOP CURB EL. 13.82
TOP GRATE EL. 13.15

C.B. 9
STA. 308+49.12 – 25.00' RT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 09.86
TOP CURB EL. 10.44
TOP GRATE EL. 09.77

C.B. 10
STA. 308+49.12 – 25.00' LT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 09.80
TOP CURB EL. 10.44
TOP GRATE EL. 09.77

AS-BUILT

MAR 0 8 2005

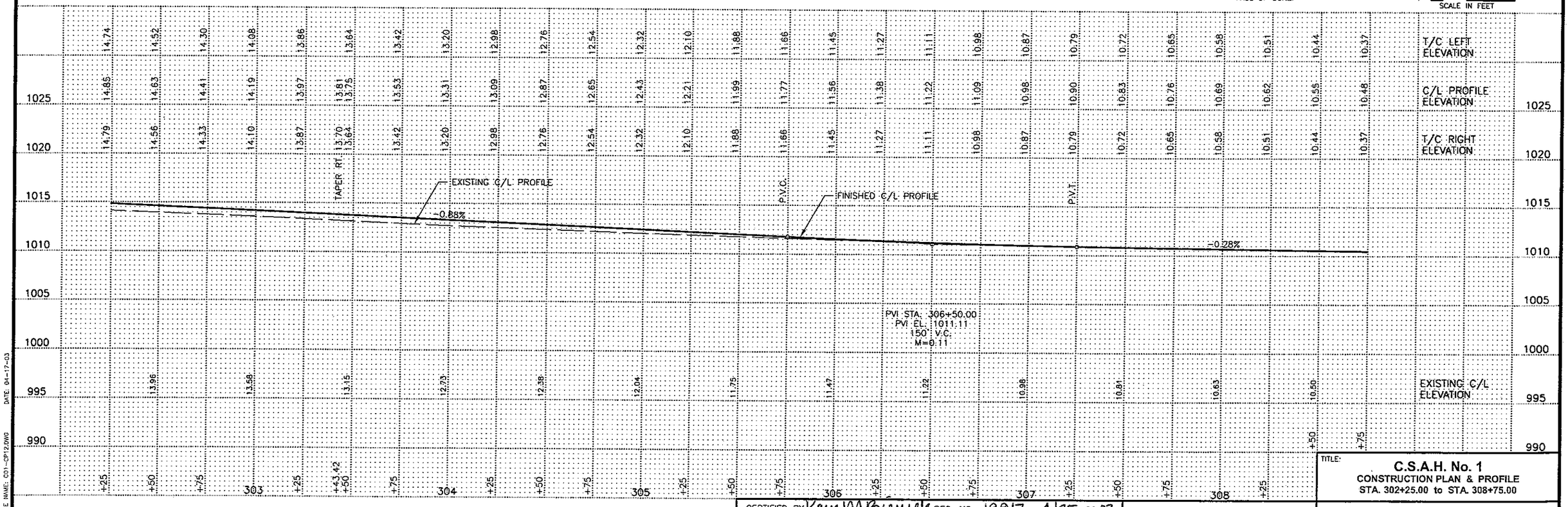
ENGINEERING

M.H. S-6
STA. 303+30.00 – 31.00' LT
ADJUST EXISTING M.H.

M.H. S-7
STA. 308+49.12 – 31.00' LT
ADJUST EXISTING M.H.

NOTES
1 ALL DIMENSIONS SHOWN ARE TO FACE OF CURB.

0 25 50
SCALE IN FEET



DATE: 04-17-03

FILE NAME: C01-CP12.DWG

CERTIFIED BY Kayel M Brenner REG. NO 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

TITLE:
C.S.A.H. No. 1
CONSTRUCTION PLAN & PROFILE
STA. 302+25.00 to STA. 308+75.00

S.A.P. 55-601-14

Sheet No. 33 of 66 Sheets

M.H. 3
STA. 313+63.26 – 30.00' RT
ADJUST EXISTING M.H.
REPLACE EX. FRAME & COVER WITH NEENAH R–1916–C OR APPROVED EQUAL.
EXISTING RING EL. 09.23
RING EL. 08.92

M.H. 4
STA. 313+84.26 – 30.00' RT
ADJUST EXISTING M.H.
REPLACE EX. FRAME & COVER WITH NEENAH R–1916–C OR APPROVED EQUAL.
EXISTING RING EL. 09.33
RING EL. 08.89

W–16
STA. 313+52.26 – 31.00' RT
ADJUST GATE VALVE BOX

W–17
STA. 313+96.26 – 19.00' RT
ADJUST GATE VALVE BOX

STA. 313+63.26 – 16 1/2 ST. S.E.
35.00' STREET APPROACH

C.B. 11
STA. 312+97.98 – 37.00' RT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 08.55
TOP CURB EL. 09.14
TOP GRATE EL. 08.47

C.B. 12
STA. 312+97.98 – 25.00' LT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 08.90
TOP CURB EL. 09.26
TOP GRATE EL. 08.59

C.B. 13
STA. 313+46.60 – 52.27' LT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 08.79
TOP CURB EL. 09.51
TOP GRATE EL. 08.84

C.B. 14
STA. 313+79.60 – 52.42' LT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 08.54
TOP CURB EL. 09.17
TOP GRATE EL. 08.50

C.B. 15
STA. 313+99.92 – 25.00' LT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 08.64
TOP CURB EL. 09.36
TOP GRATE EL. 08.69

C.B. 16
STA. 313+48.26 – 60.50' RT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 09.46
TOP CURB EL. 10.12
TOP GRATE EL. 09.45

C.B. 17
STA. 313+48.26 – 56.00' RT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 09.33
TOP CURB EL. 09.94
TOP GRATE EL. 09.27

C.B. 18
STA. 313+78.26 – 56.00' RT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 09.35
TOP CURB EL. 10.09
TOP GRATE EL. 09.42

C.B. 19
STA. 314+08.43 – 25.00' RT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 09.07
TOP CURB EL. 09.38
TOP GRATE EL. 08.71

STA. 308+75.00

MEADOW PARK RESUBDIVISION "D"

5 | 6 | 1 | 7 | 8 | 9 | 10 | 1 | 11 | 12

MEADOW PARK FIFTH SUBDIVISION

19 | 1 | 18

STA. 315+25.00

15.17' R.

C.B. 13

+63.26 – C/L 16 1/2 ST. S.E.

C.B. 14

M.H. S–8

B624 C&G

C.B. 12

C.B. 15

14' LANE

12' LANE

309 | 310 | 311 | 312 | 313 | M.H. S–9 | 314 | 315

12' LANE

14' LANE

M.H. 3 | M.H. 4 | W–17 | W–16

C.B. 19

B624 C&G

14' RIGHT TURN LANE

C.B. 11

BEGIN CURB TAPER
STA. 310+27.26

15.17' R.

25.67' R.

C.B. 17
C.B. 16

C.B. 18

PARCEL No. 55926

MATCH LINE

7 | 6 | 5 | 4 | 3 | 2 | 1

END CURB TAPER
STA. 311+47.26

SPRUCE MEADOWS SUBDIVISION

MATCH LINE

M.H. S–8
STA. 312+97.98 – 31.00' LT
ADJUST EXISTING M.H.

M.H. S–9
STA. 313+73.26 – C/L
ADJUST EXISTING M.H.
REPLACE EX. FRAME & COVER WITH NEENAH R–1916–C OR APPROVED EQUAL
EXISTING RING EL. 09.63
RING EL. 09.41

STA. 313+63.26 – SPRUCE MEADOWS DR. S.E.
32.00' STREET APPROACH

NOTES
1. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB.

0 25 50
SCALE IN FEET

T/C LEFT ELEVATION
C/L PROFILE ELEVATION
T/C RIGHT ELEVATION
EXISTING C/L ELEVATION

1025 | 1020 | 1015 | 1010 | 1005 | 1000 | 995 | 990

BEGIN TAPER
END TAPER
FINISHED C/L PROFILE
P.V.C.
LOW PT.
RET. LT.
RET. RT.
P.V.T.

–0.28%
+0.32%

PVI STA. 313+25.00
PVI EL. 1009.22
200' V.C.
M=0.15

AS-BUILT
MAR 08 2005
ENGINEERING

+75 | 309 | +25 | +50 | +75 | 310 | +25 | +27.26 | +50 | +75 | 311 | +25 | +47.26 | +50 | +75 | 312 | +25 | +50 | +75 | 313 | +18.33 | +25 | +30.43 | +32.09 | +50 | +75 | +95.77 | 314 | +04.93 | +25 | +50 | +75 | 315 | +25

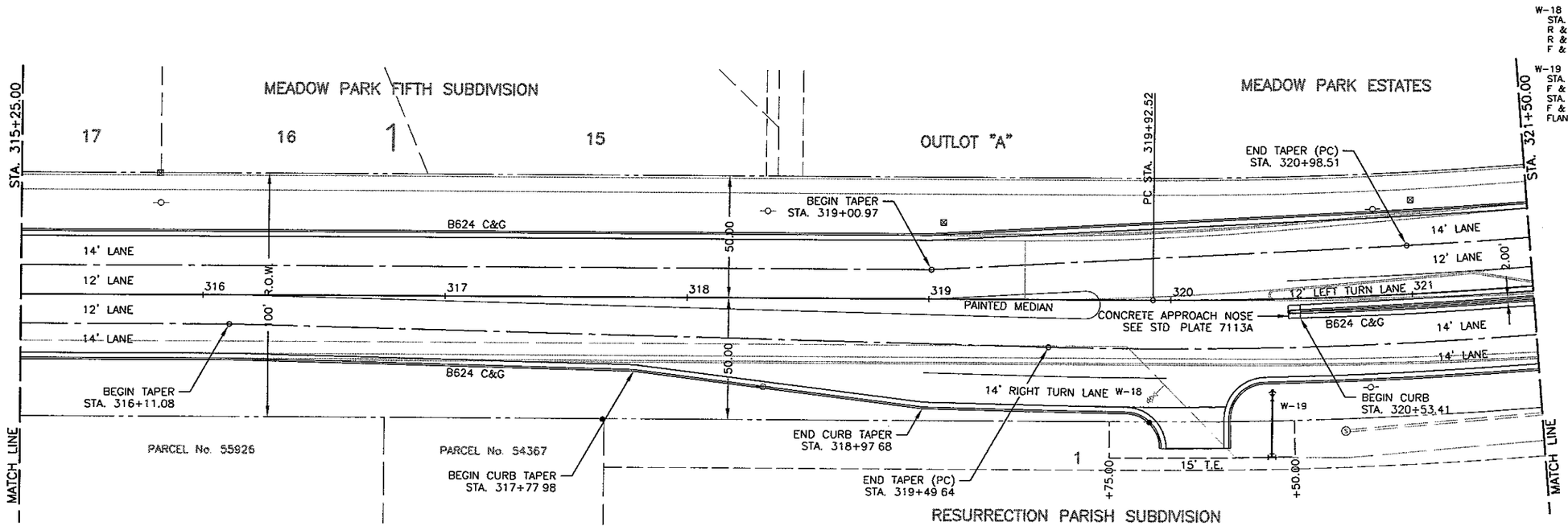
DATE: 04-17-03
FILE NAME: C01-CP13.DWG

CERTIFIED BY Kevin M Boerner REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

TITLE:
C.S.A.H. No. 1
CONSTRUCTION PLAN & PROFILE
STA. 308+75.00 to STA. 315+25.00

S.A.P. 55-601-14

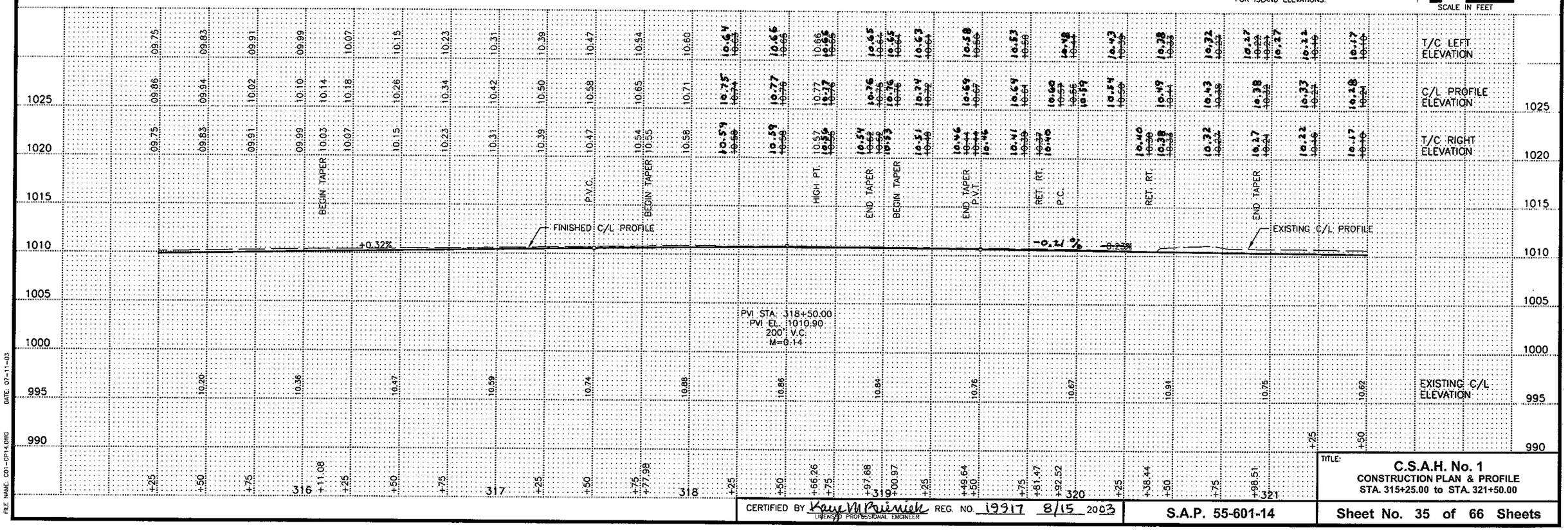
Sheet No. 34 of 66 Sheets



AS-BUILT

MAR 0 8 2005

ENGINEERING



DATE: 07-11-03

FILE NAME: C01-CP14.DWG

CERTIFIED BY Kaye M Poirier REG. NO. 19917 8/15 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

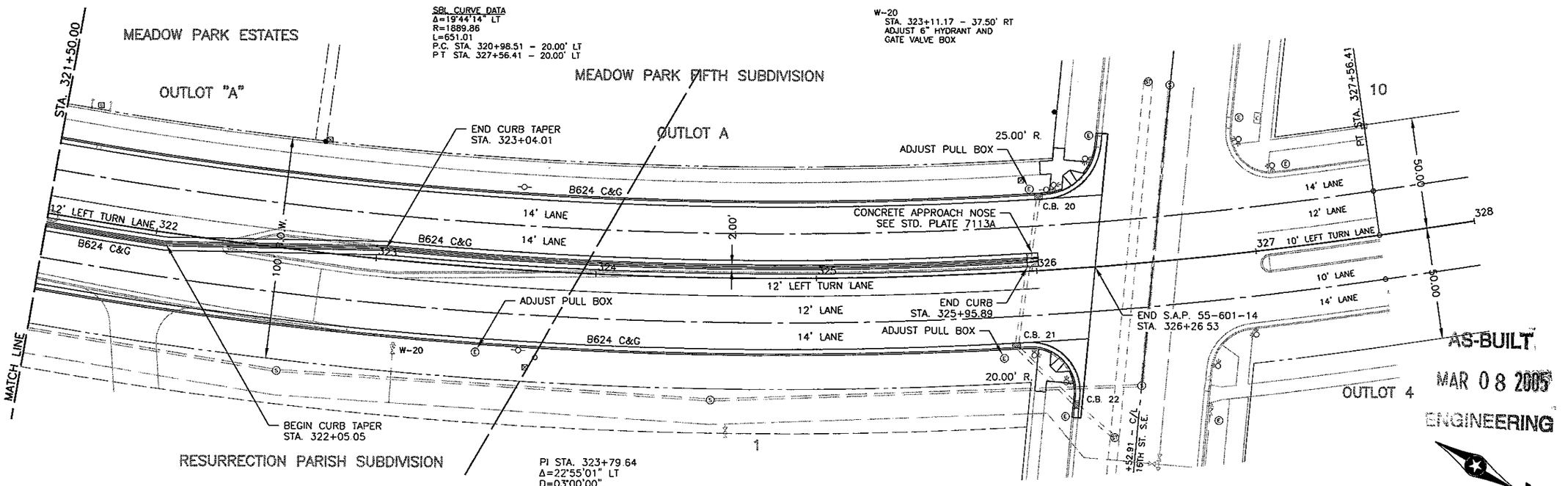
TITLE:
C.S.A.H. No. 1
CONSTRUCTION PLAN & PROFILE
STA. 315+25.00 to STA. 321+50.00

Sheet No. 35 of 66 Sheets

C.B. 20
STA. 326+02.62 – 33.00' LT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 08.49
TOP CURB EL. 09.06
TOP GRATE EL. 08.59

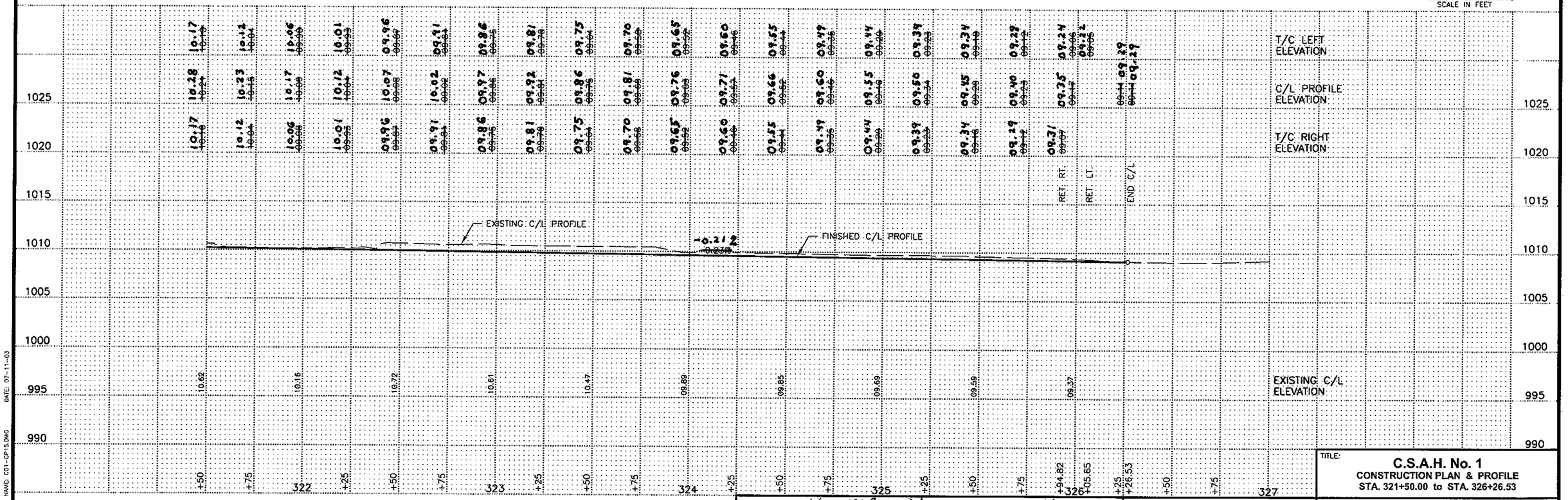
C.B. 21
STA. 325+89.17 – 33.00' RT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 08.42
TOP CURB EL. 09.08
TOP GRATE EL. 08.41

C.B. 22
STA. 326+14.27 – 61.80' RT
ADJUST EXISTING C.B.
EXISTING GRATE EL. 08.08
TOP CURB EL. 08.71
TOP GRATE EL. 08.04



NOTES
1. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB.
2. SEE INTERSECTION DETAIL SHEETS FOR ISLAND ELEVATIONS.

0 25 50
SCALE IN FEET



DATE: 07-11-03
FILE NAME: C01-CP15.DWG

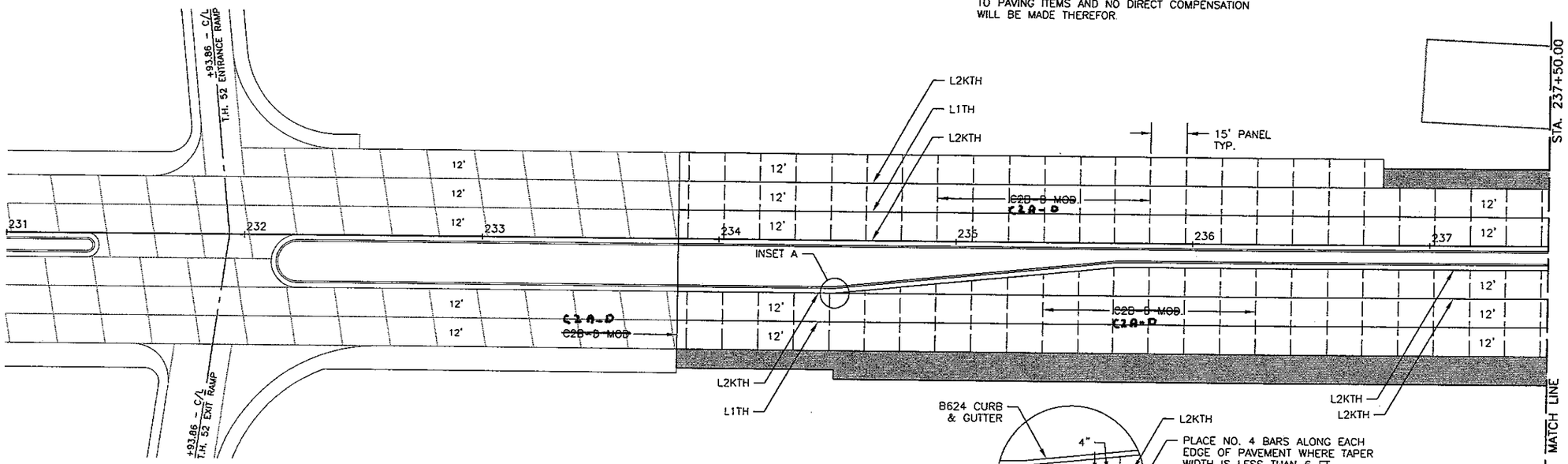
CERTIFIED BY Kevin M Roemich REG NO. 19917 8/15 2003
LICENSED PROFESSIONAL ENGINEER

TITLE:
C.S.A.H. No. 1
CONSTRUCTION PLAN & PROFILE
STA. 321+50.00 to STA. 326+26.53

S.A.P. 55-601-14

Sheet No. 36 of 66 Sheets

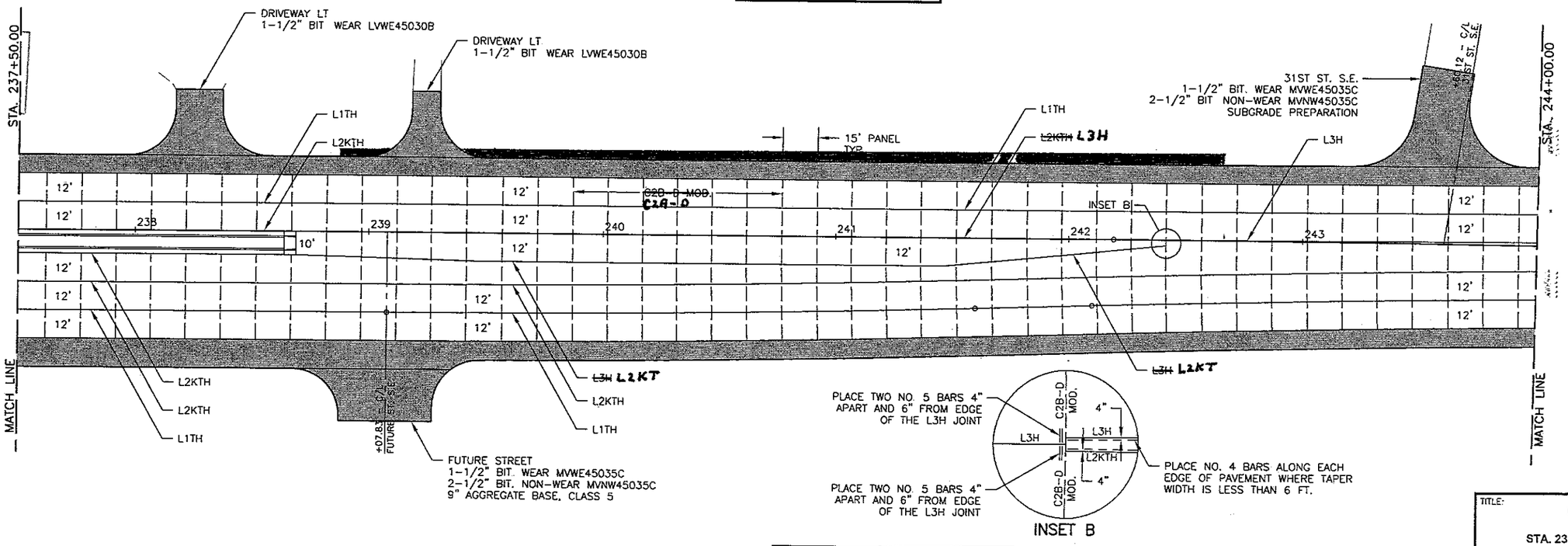
NOTES
1 CONSTRUCTION HEADER JOINTS SHALL BE INCIDENTAL TO PAVING ITEMS AND NO DIRECT COMPENSATION WILL BE MADE THEREFOR.



INSET A

LEGEND
BITUMINOUS SURFACING

0 25 50
SCALE IN FEET



AS-BUILT
MAR 08 2005
ENGINEERING

CERTIFIED BY Kaye M Previch REG. NO. 19917 4/25 20 03
LICENSED PROFESSIONAL ENGINEER

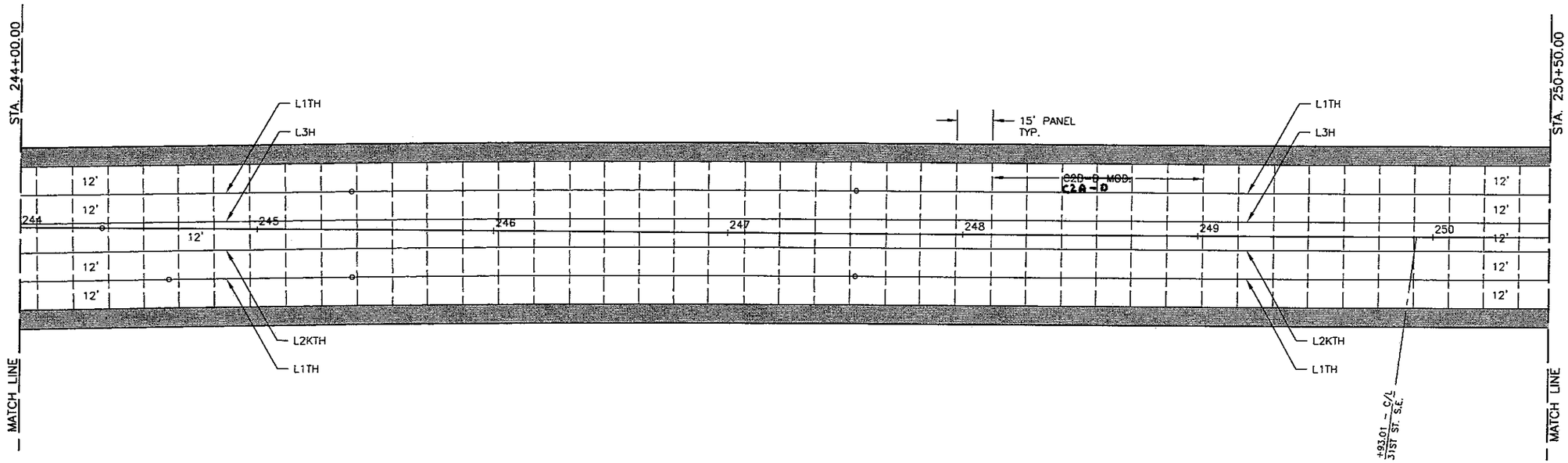
S.A.P. 55-601-14

TITLE:
C.S.A.H. No. 1
SURFACING PLAN
STA. 233+82.87 to STA. 244+00.00

Sheet No. 37 of 66 Sheets

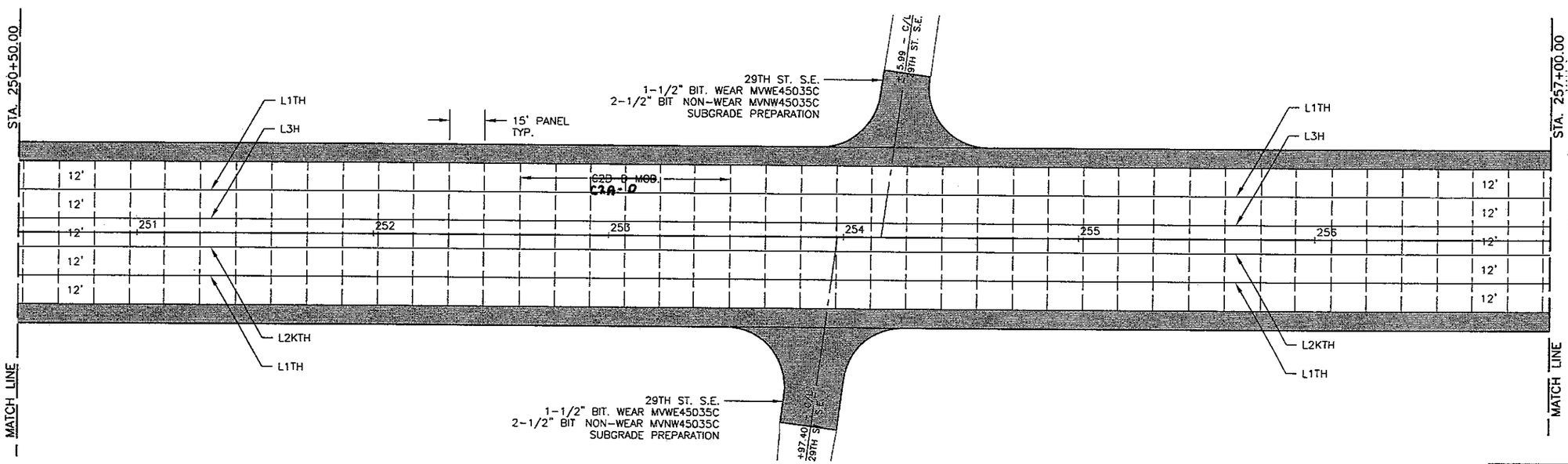
FILE NAME: C01-IL01.DWG DATE: 04-18-03

NOTES
1 CONSTRUCTION HEADER JOINTS SHALL BE INCIDENTAL TO PAVING ITEMS AND NO DIRECT COMPENSATION WILL BE MADE THEREFOR.



LEGEND
BITUMINOUS SURFACING

0 25 50
SCALE IN FEET



AS-BUILT
MAR 0 8 2005
ENGINEERING

CERTIFIED BY Lane M Bierwerth REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

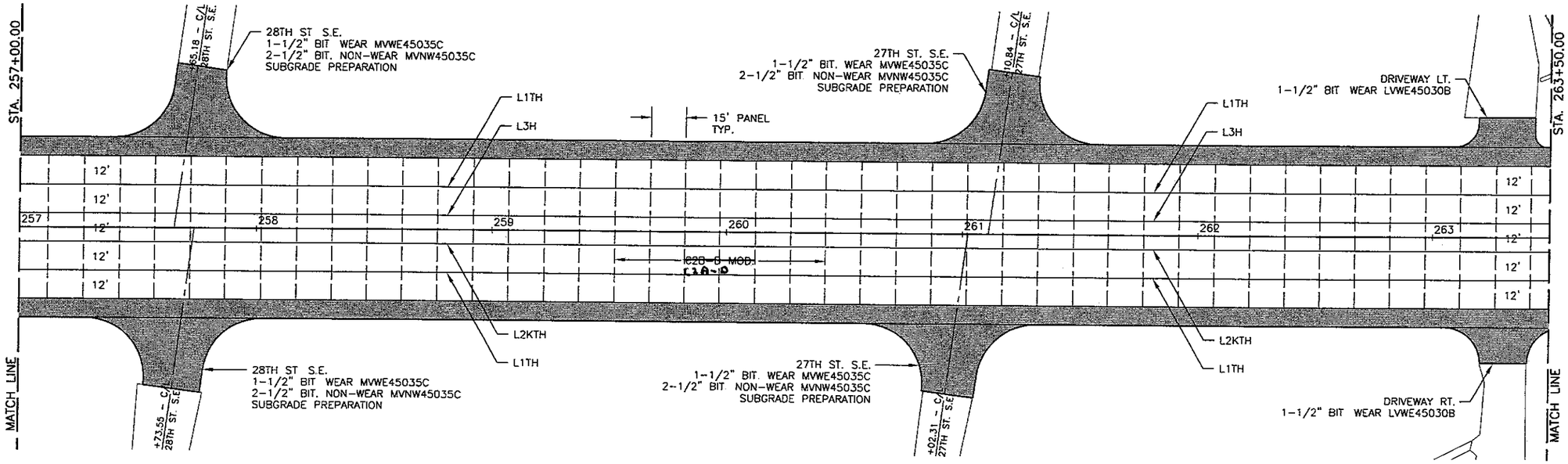
TITLE:
C.S.A.H. No. 1
SURFACING PLAN
STA. 244+00.00 to STA. 257+00.00

Sheet No. 38 of 66 Sheets

FILE NAME: C01-IL02.DWG DATE: 04-15-03

NOTES

1 CONSTRUCTION HEADER JOINTS SHALL BE INCIDENTAL TO PAVING ITEMS AND NO DIRECT COMPENSATION WILL BE MADE THEREFOR.

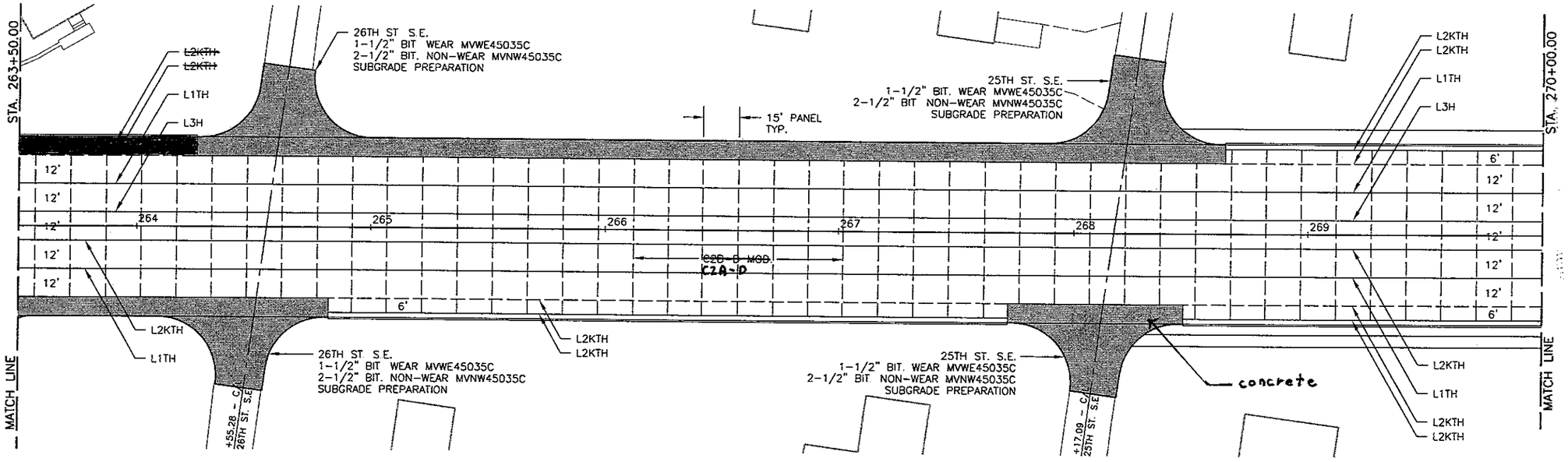


LEGEND

BITUMINOUS SURFACING

0 25 50

SCALE IN FEET



AS-BUILT

MAR 0 8 2005

ENGINEERING

CERTIFIED BY Kane M Brenneh REG. NO 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

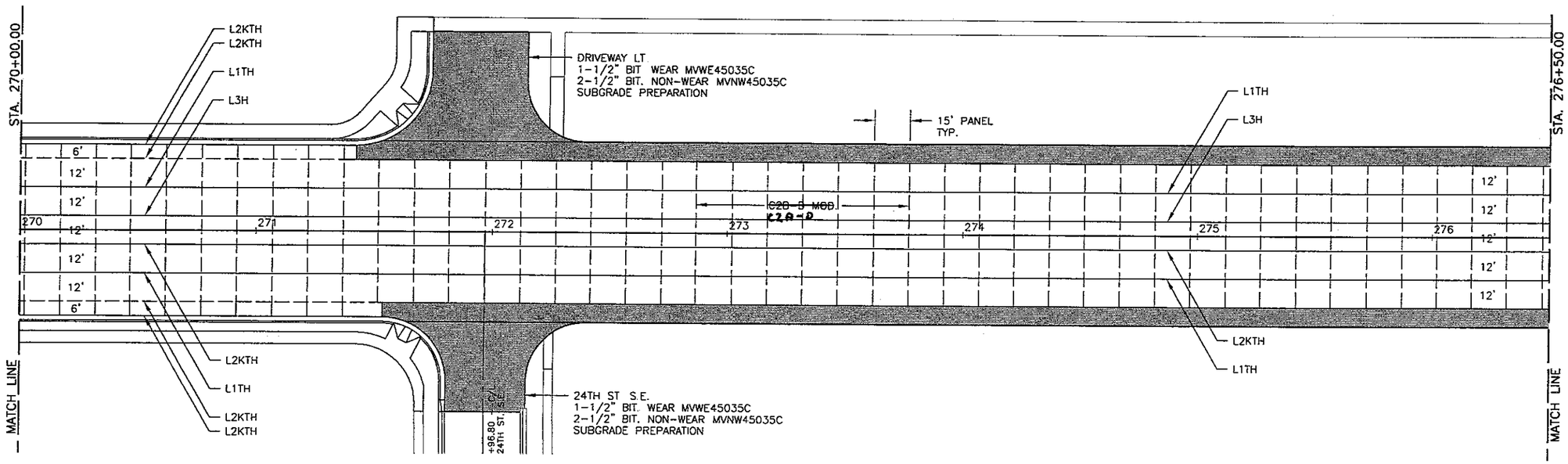
S.A.P. 55-601-14

TITLE:
C.S.A.H. No. 1
SURFACING PLAN
STA. 257+00.00 to STA. 270+00.00

Sheet No. 39 of 66 Sheets

FILE NAME: C01-JL03.DWG DATE: 04-18-03

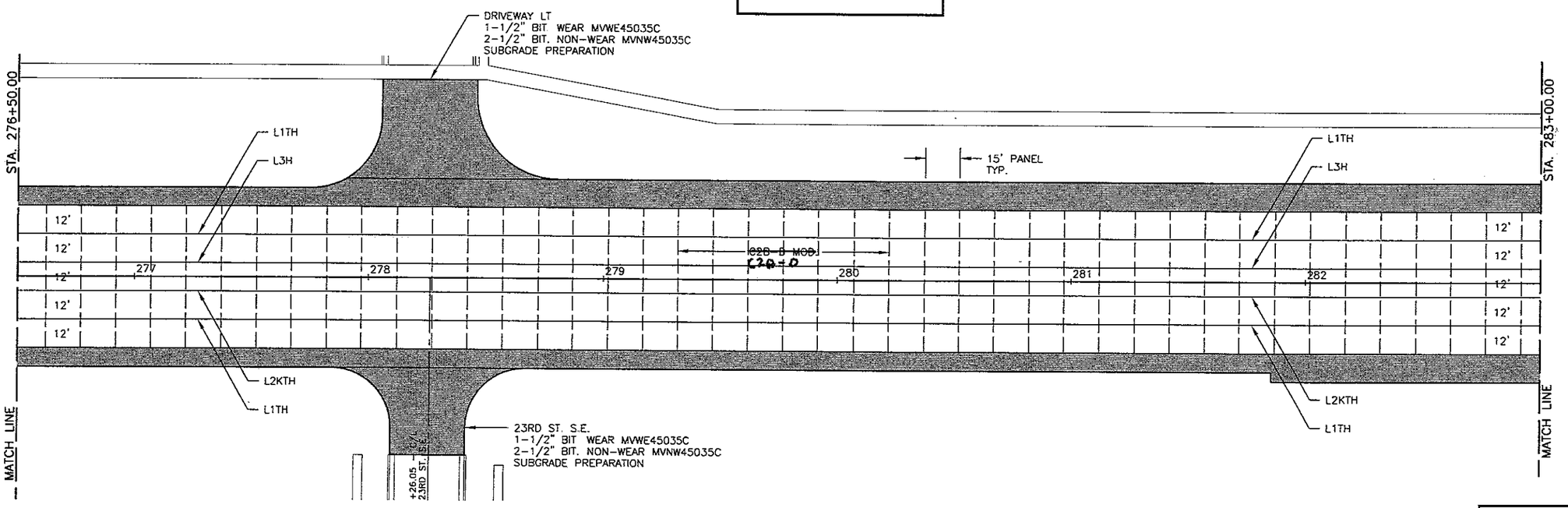
NOTES
1 CONSTRUCTION HEADER JOINTS SHALL BE INCIDENTAL TO PAVING ITEMS AND NO DIRECT COMPENSATION WILL BE MADE THEREFOR.



LEGEND

BITUMINOUS SURFACING

0 25 50
SCALE IN FEET



AS-BUILT
MAR 0 8 2005
ENGINEERING

CERTIFIED BY Vaye M Paumen REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

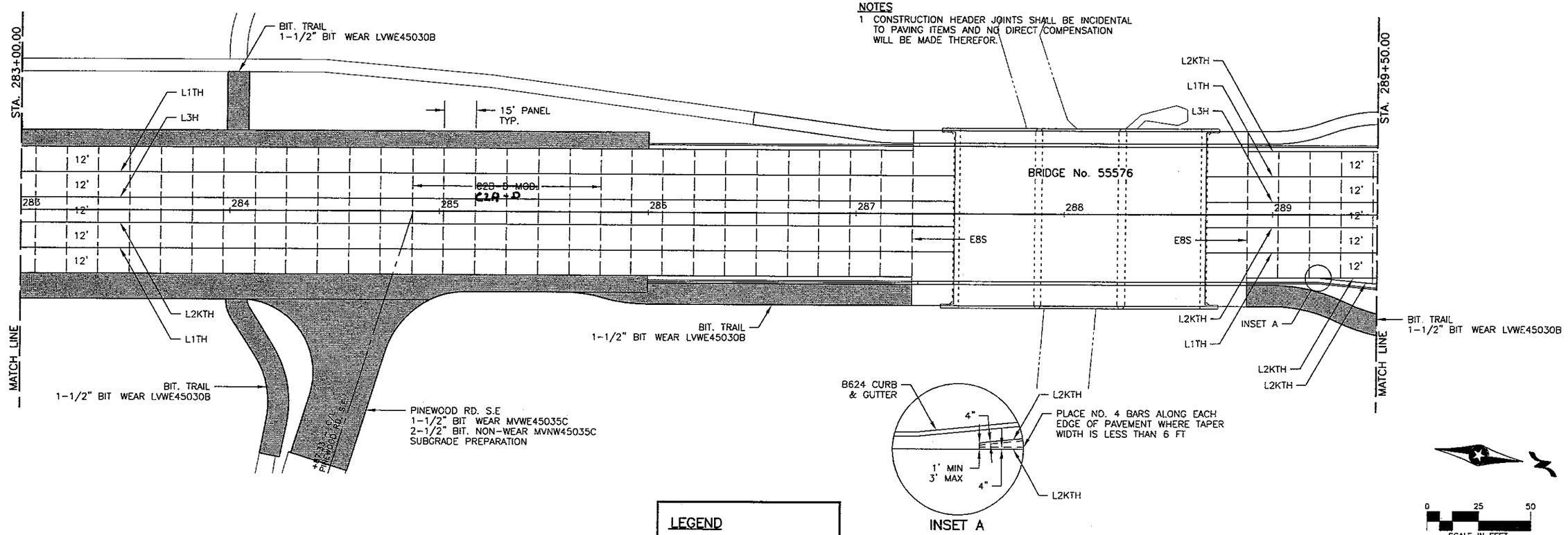
TITLE:
C.S.A.H. No. 1
SURFACING PLAN
STA. 270+00.00 to STA. 283+00.00

Sheet No. 40 of 66 Sheets

FILE NAME: C01--ALO4.DWG DATE: 04-18-03

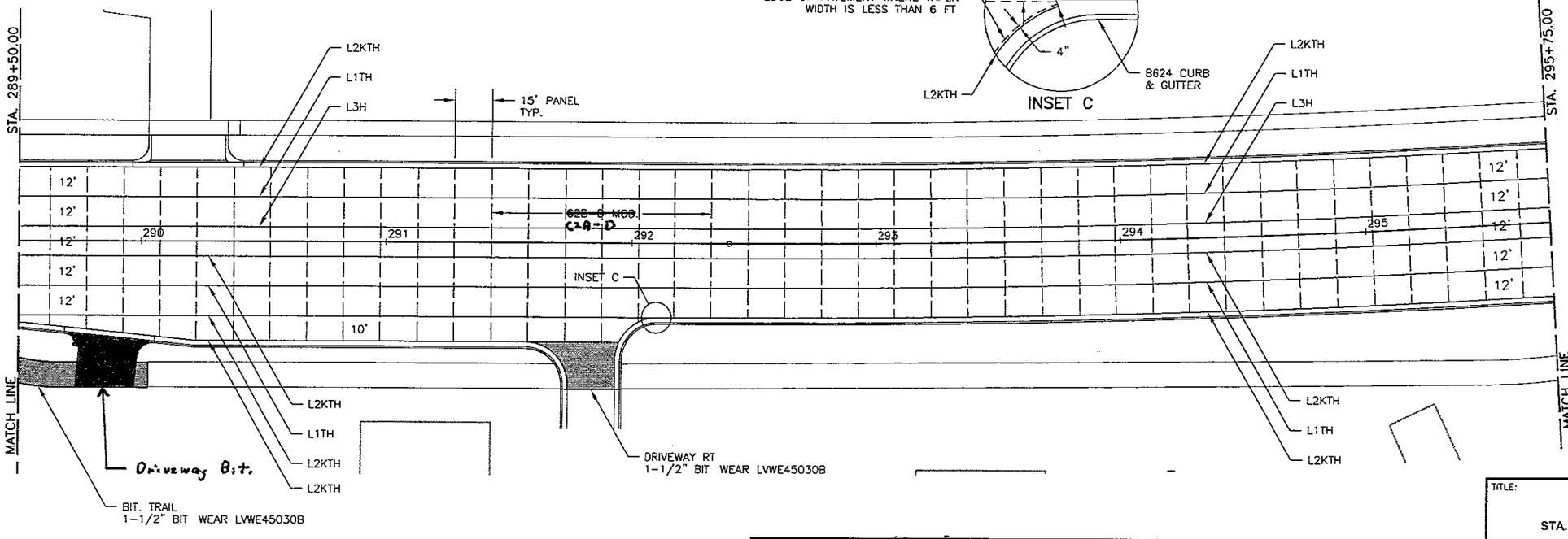
NOTES

1 CONSTRUCTION HEADER JOINTS SHALL BE INCIDENTAL TO PAVING ITEMS AND NO DIRECT COMPENSATION WILL BE MADE THEREFOR.



LEGEND

BITUMINOUS SURFACING



AS-BUILT

MAR 0 8 2005

ENGINEERING

FILE NAME: C01-0205.DWG DATE: 04-21-03

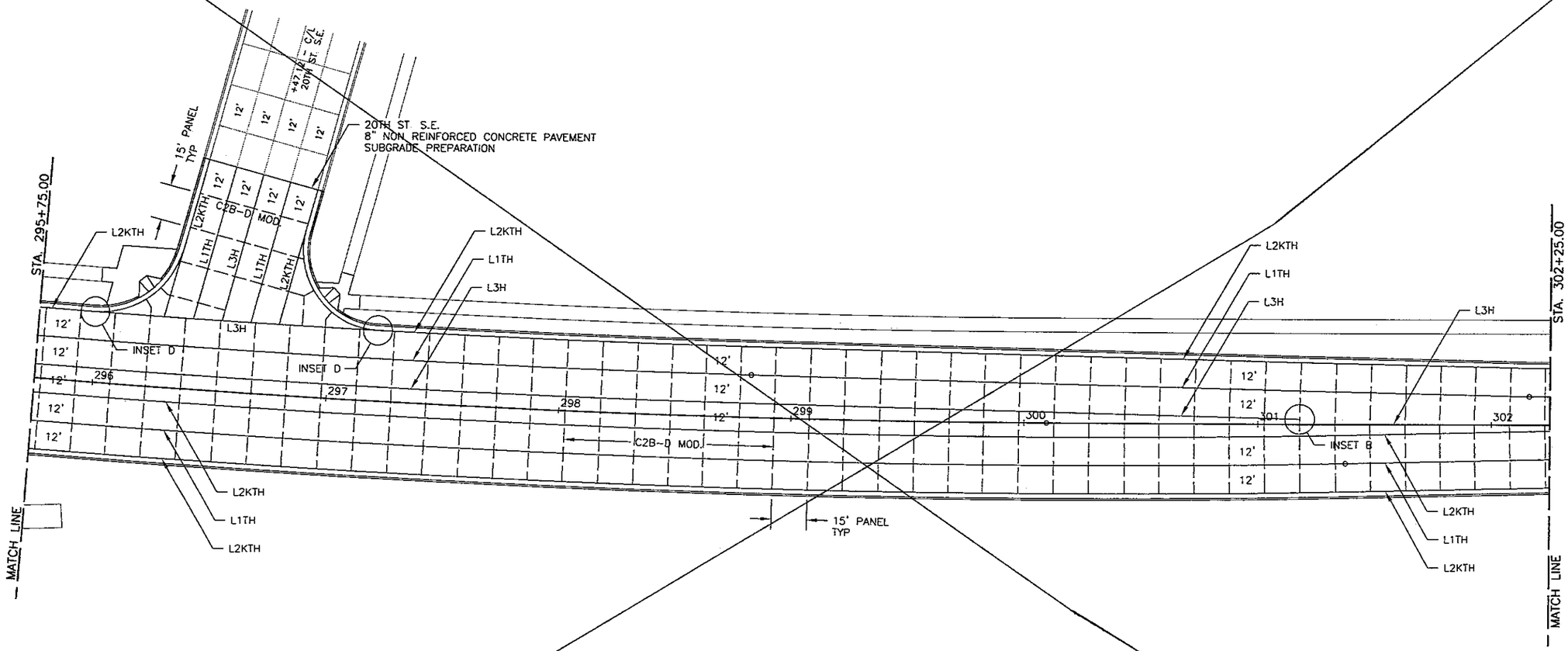
CERTIFIED BY Kaye M Bremer REG. NO 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

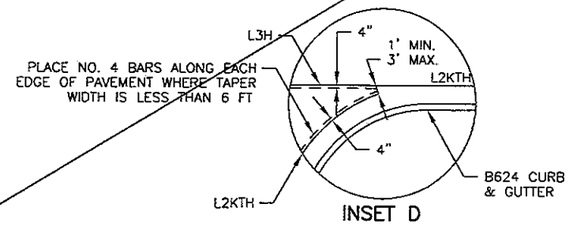
TITLE:
C.S.A.H. No. 1
SURFACING PLAN
STA. 283+00.00 to STA. 295+75.00

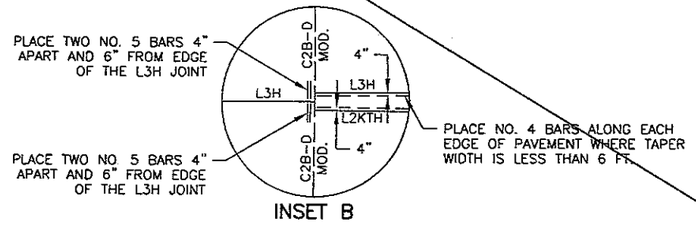
S.A.P. 55-601-14

Sheet No. 41 of 66 Sheets

NOTES
1 CONSTRUCTION HEADER JOINTS SHALL BE INCIDENTAL TO PAVING ITEMS AND NO DIRECT COMPENSATION WILL BE MADE THEREFOR







AS-BUILT

MAR 0 8 2005

ENGINEERING

0 25 50
SCALE IN FEET

Revised See Sheet 42A

CERTIFIED BY Kurt M Bauerle REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

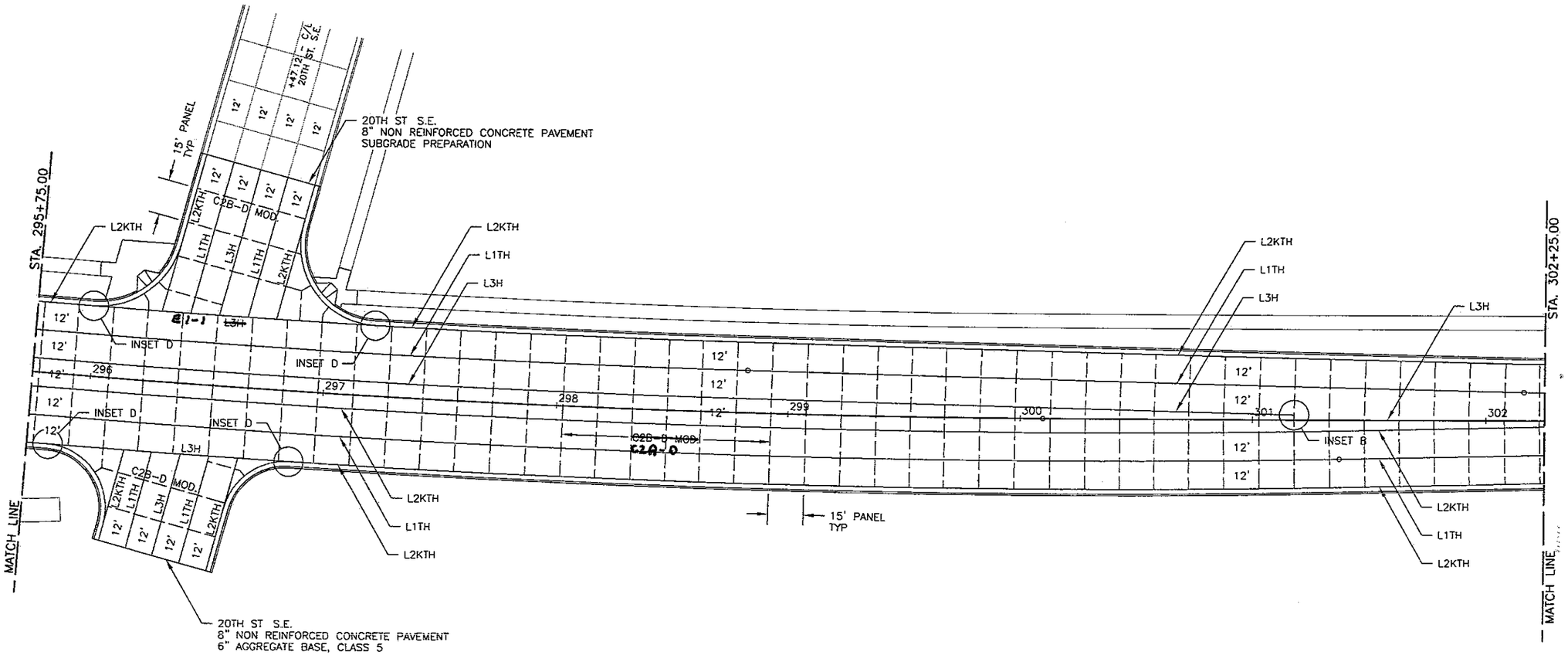
S.A.P. 55-601-14

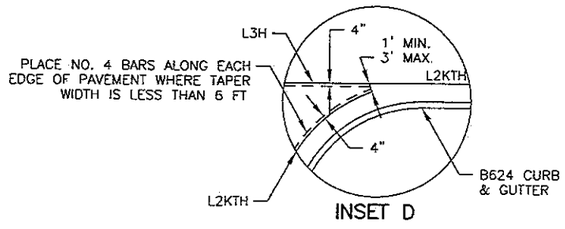
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C.S.A.H. No. 1
SURFACING PLAN
STA. 295+75.00 to STA. 302+25.00

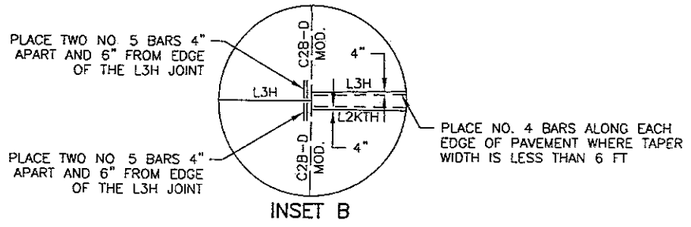
Sheet No. 42 of 66 Sheets

FILE NAME: 601-JL06.DWG DATE: 04-18-03

NOTES
1 CONSTRUCTION HEADER JOINTS SHALL BE INCIDENTAL TO PAVING ITEMS AND NO DIRECT COMPENSATION WILL BE MADE THEREFOR.







AS-BUILT
MAR 08 2005
ENGINEERING

0 25 50
SCALE IN FEET

DATE: 03-22-04
FILE NAME: C01-JL06.DWG

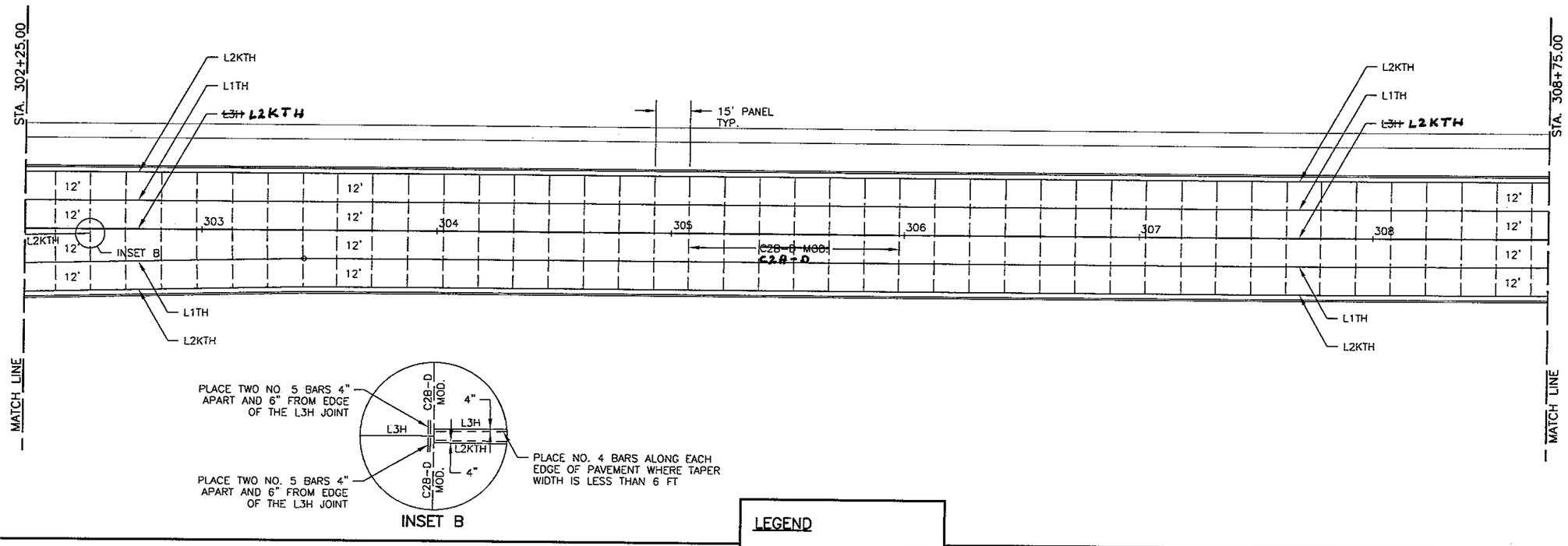
CERTIFIED BY _____ REG. NO. _____ _____ 20__
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

TITLE:
C.S.A.H. No. 1
SURFACING PLAN
STA. 295+75.00 to STA. 302+25.00

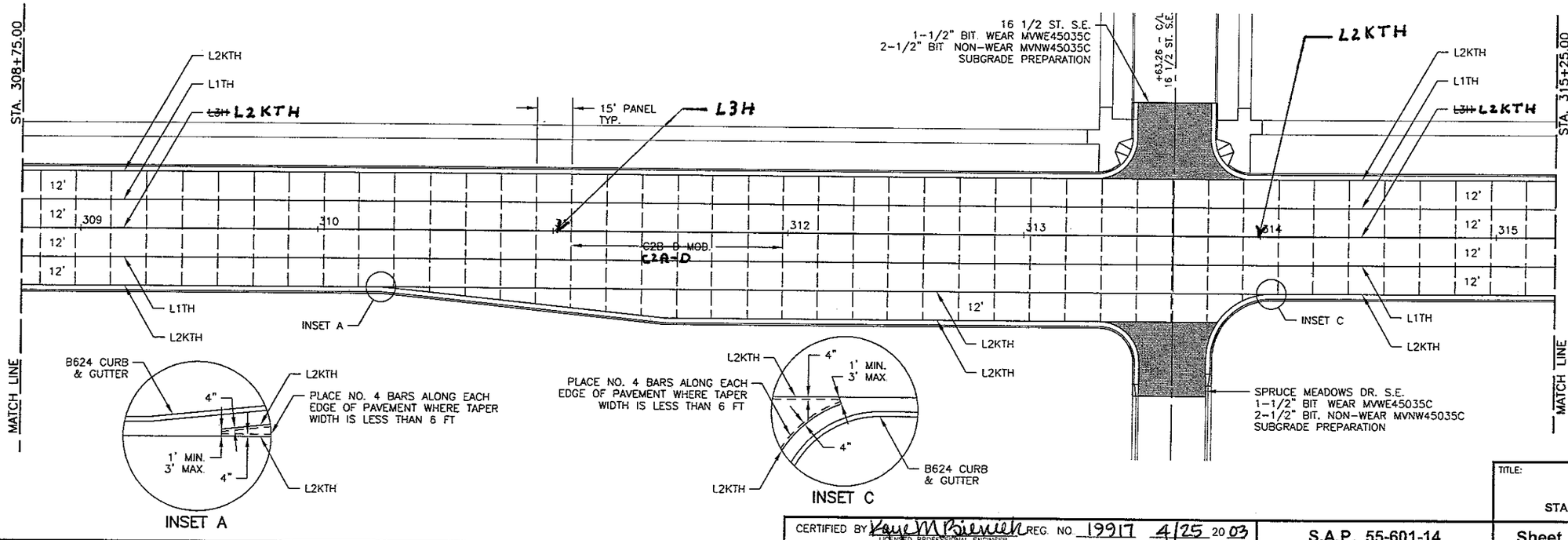
Sheet No. 42A of 66 Sheets

NOTES
1 CONSTRUCTION HEADER JOINTS SHALL BE INCIDENTAL TO PAVING ITEMS AND NO DIRECT COMPENSATION WILL BE MADE THEREFOR.



LEGEND

BITUMINOUS SURFACING



AS-BUILT
MAR 0 8 2005
ENGINEERING

CERTIFIED BY Kaye M Bienert REG. NO 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

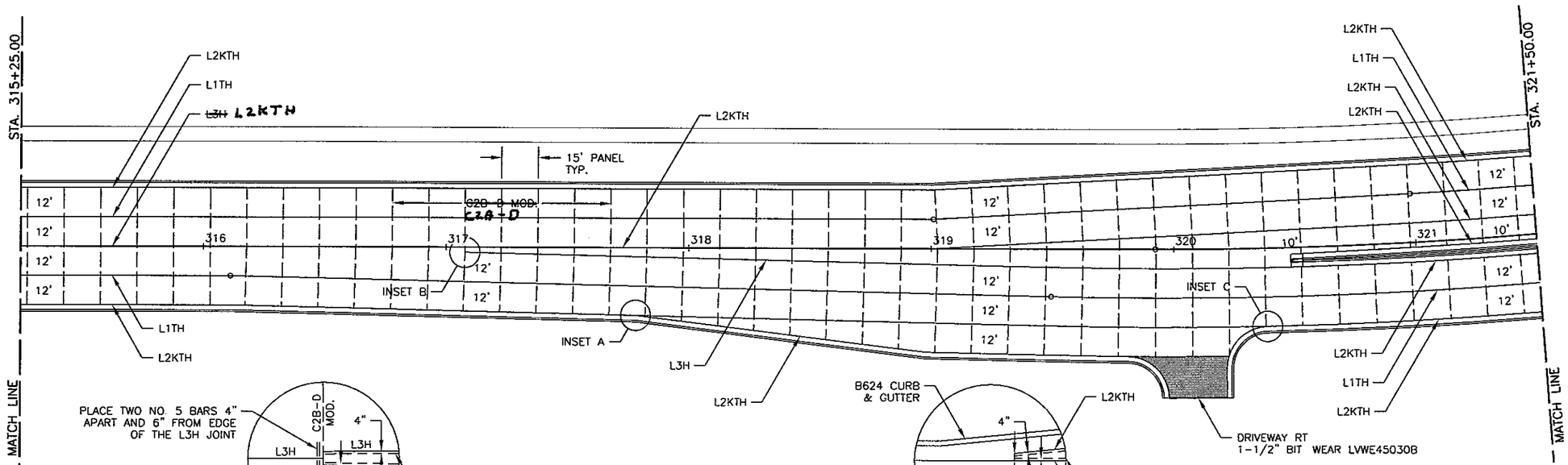
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C.S.A.H. No. 1
SURFACING PLAN
STA. 302+25.00 to STA. 315+25.00

S.A.P. 55-601-14

Sheet No. 43 of 66 Sheets

FILE NAME: C01-UL07.DWG DATE: 04-18-03

NOTES
1 CONSTRUCTION HEADER JOINTS SHALL BE INCIDENTAL TO PAVING ITEMS AND NO DIRECT COMPENSATION WILL BE MADE THEREFOR.



INSET B

INSET A

LEGEND

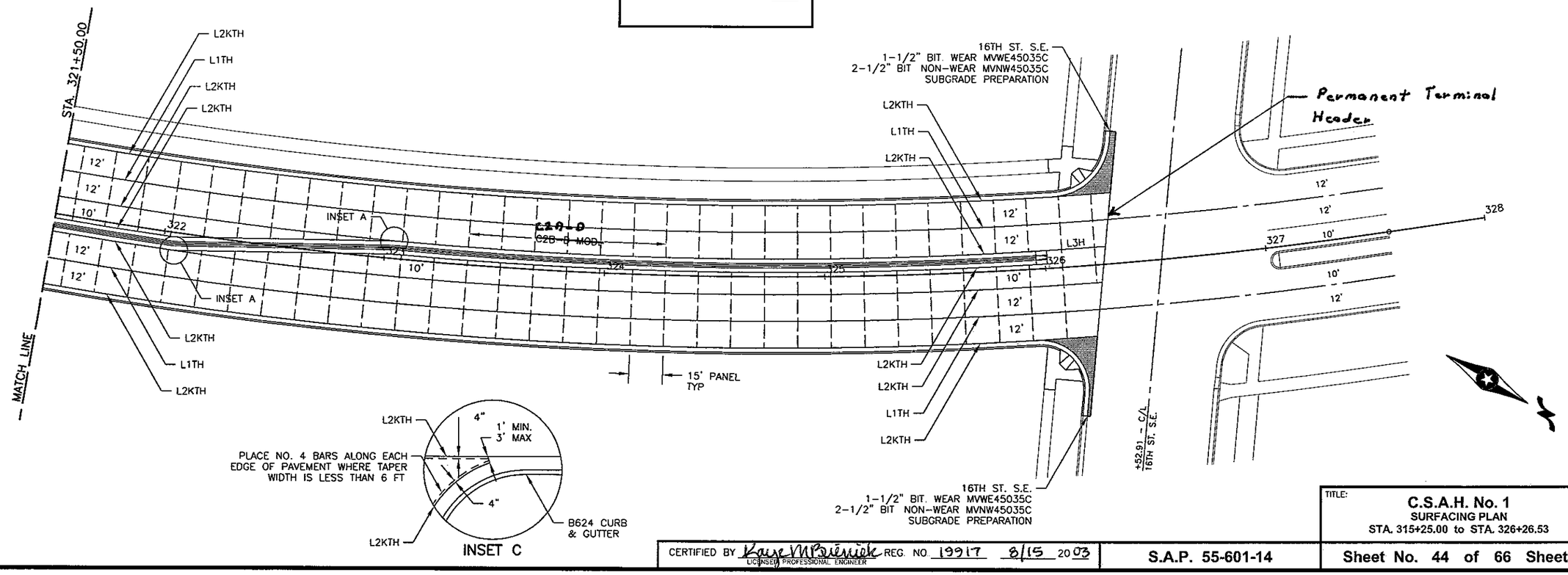
BITUMINOUS SURFACING

AS-BUILT

MAR 0 8 2005

ENGINEERING

0 25 50
SCALE IN FEET



INSET C

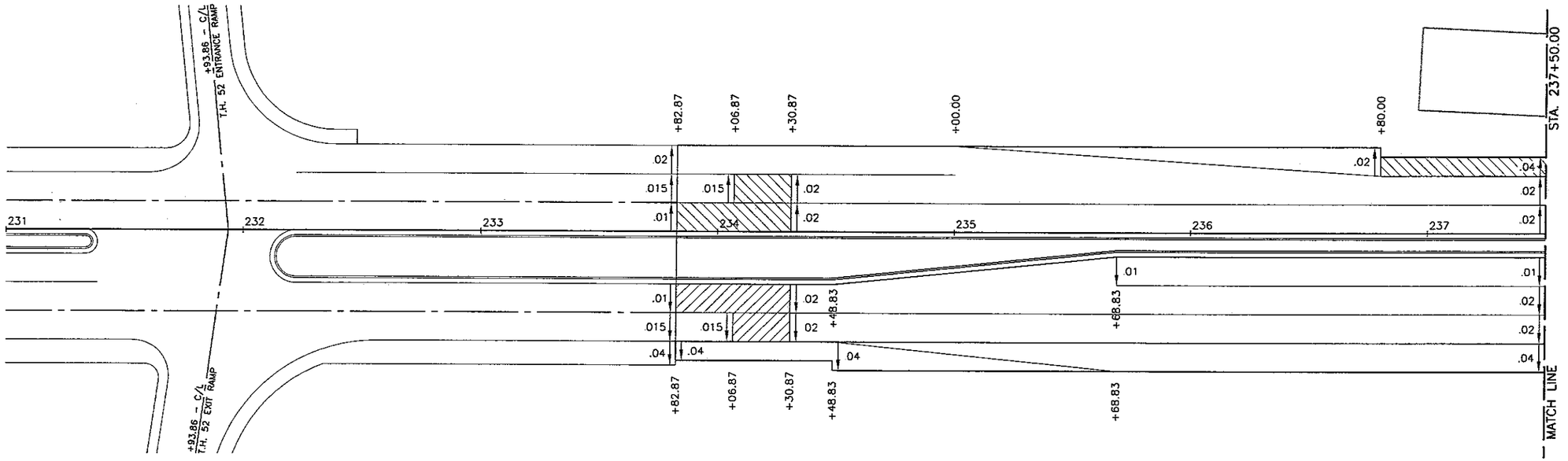
CERTIFIED BY Kaye M Bierwirth REG. NO. 19917 8/15 2003
LICENSED PROFESSIONAL ENGINEER

TITLE:
C.S.A.H. No. 1
SURFACING PLAN
STA. 315+25.00 to STA. 326+26.53

S.A.P. 55-601-14

Sheet No. 44 of 66 Sheets

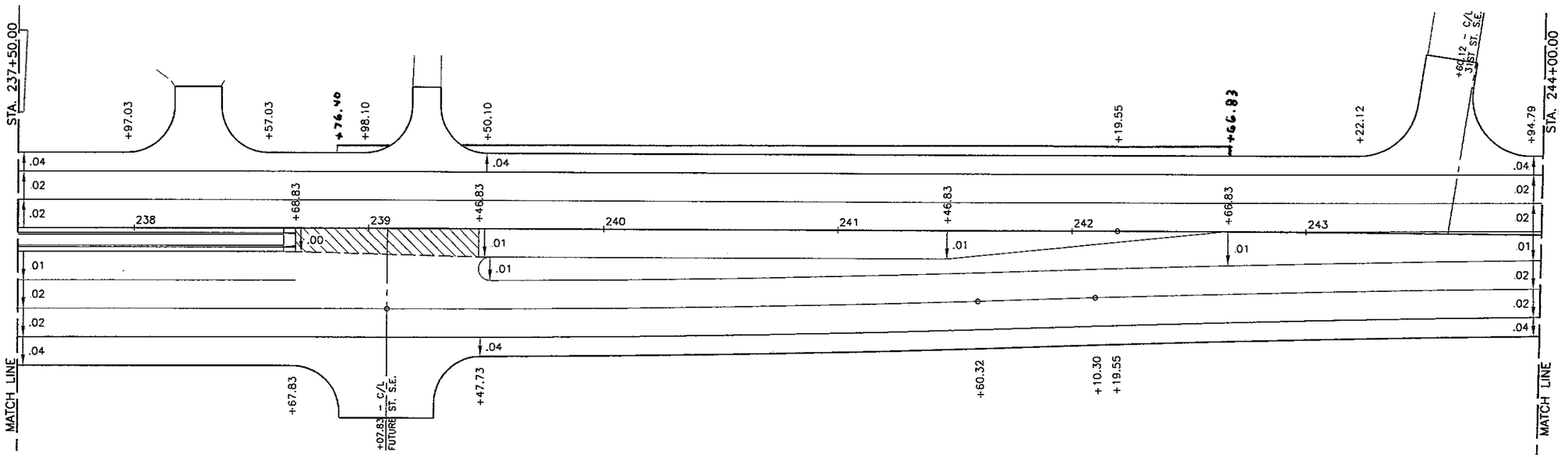
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LEGEND

CROSS SLOPE TRANSITION AREA

0 25 50
SCALE IN FEET



AS-BUILT
MAR 08 2005
ENGINEERING

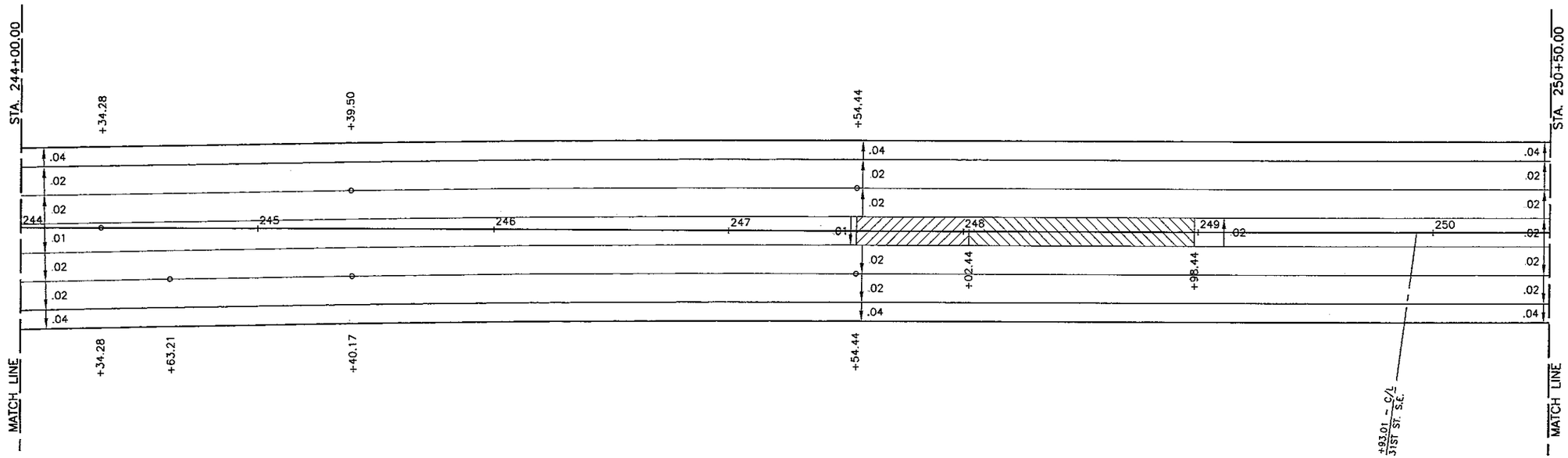
DATE: 04-18-03
FILE NAME: C01-S001.DWG

CERTIFIED BY Kayer M Buenker REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

TITLE:
C.S.A.H. No. 1
SUPERELEVATION PLAN
STA. 233+82.87 to STA. 244+00.00

S.A.P. 55-601-14

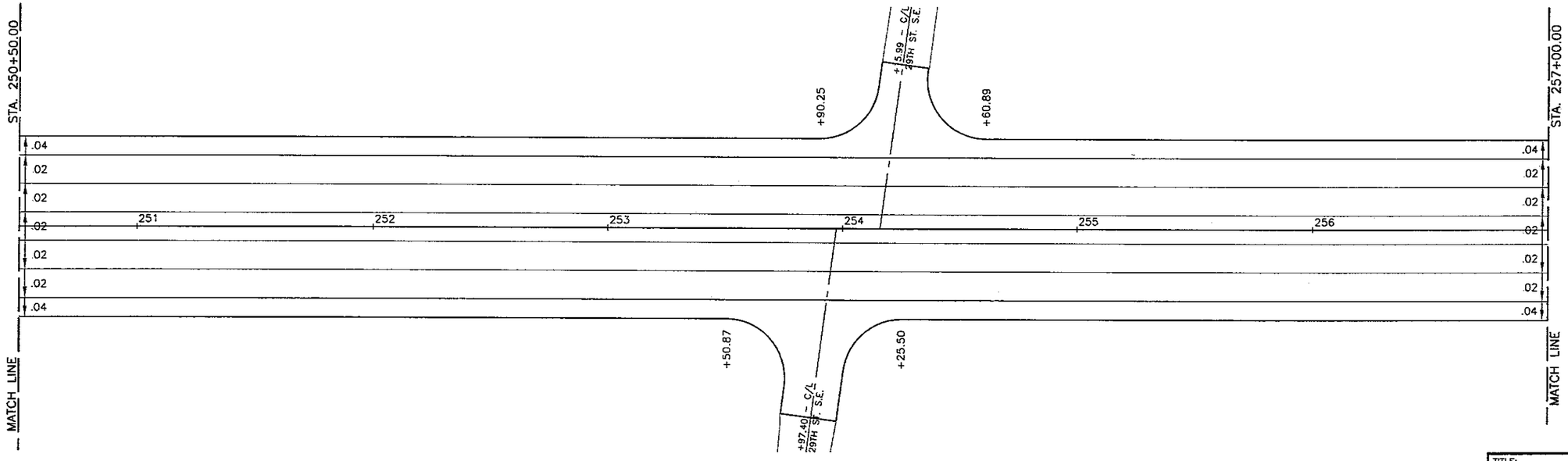
Sheet No. 45 of 66 Sheets





LEGEND

CROSS SLOPE TRANSITION AREA



AS-BUILT

MAR 0 8 2005

ENGINEERING

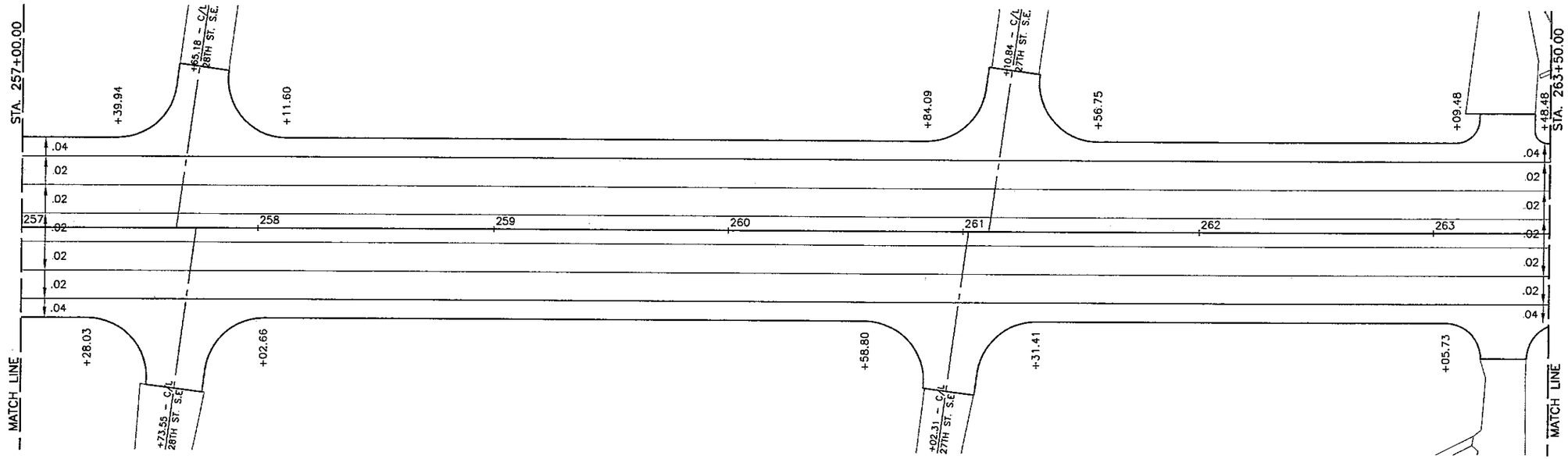
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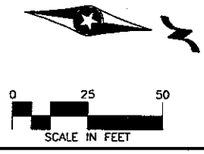
CERTIFIED BY Kayell Bruemmer REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

TITLE: C.S.A.H. No. 1
SUPERELEVATION PLAN
STA. 244+00.00 to STA. 257+00.00

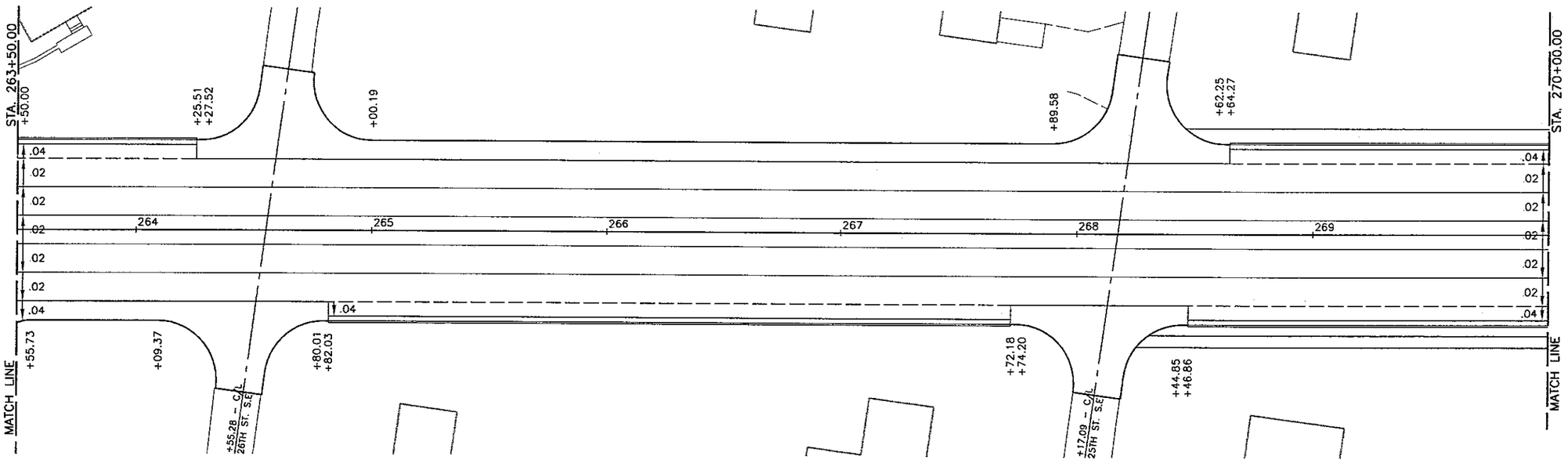
Sheet No. 46 of 66 Sheets





LEGEND

CROSS SLOPE TRANSITION AREA



AS-BUILT

MAR 0 8 2005

ENGINEERING

TITLE:

C.S.A.H. No. 1

SUPERELEVATION PLAN

STA. 257+00.00 to STA. 270+00.00

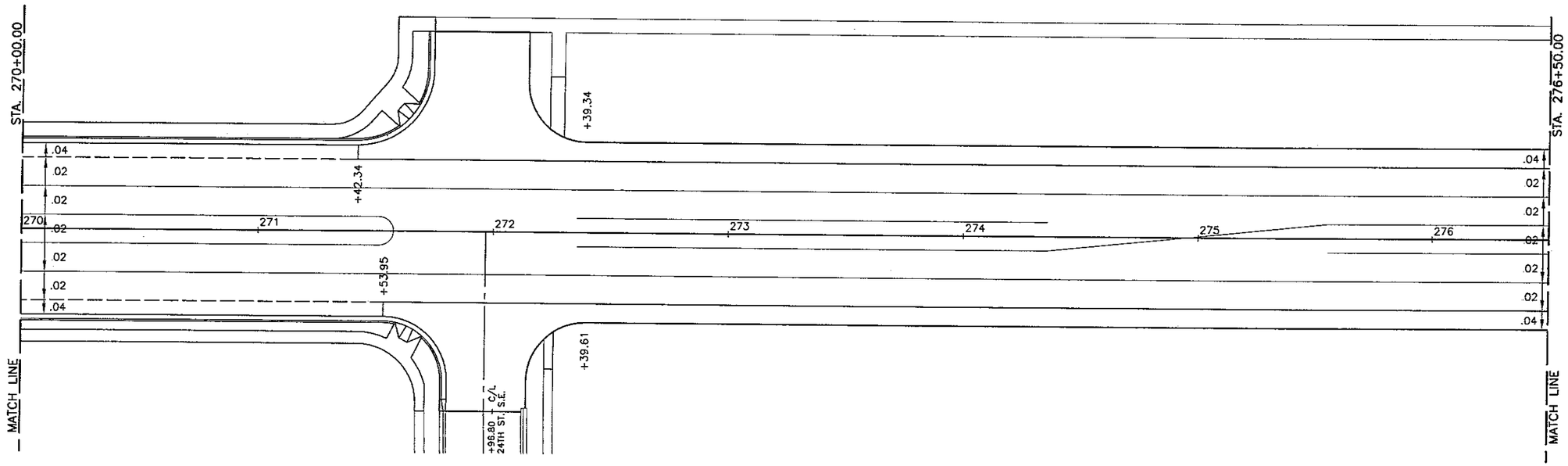
CERTIFIED BY Kane M Bruemmer REG NO. 19917 4/25 2003

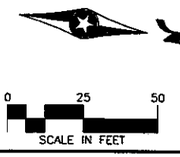
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S.A.P. 55-601-14

Sheet No. 47 of 66 Sheets

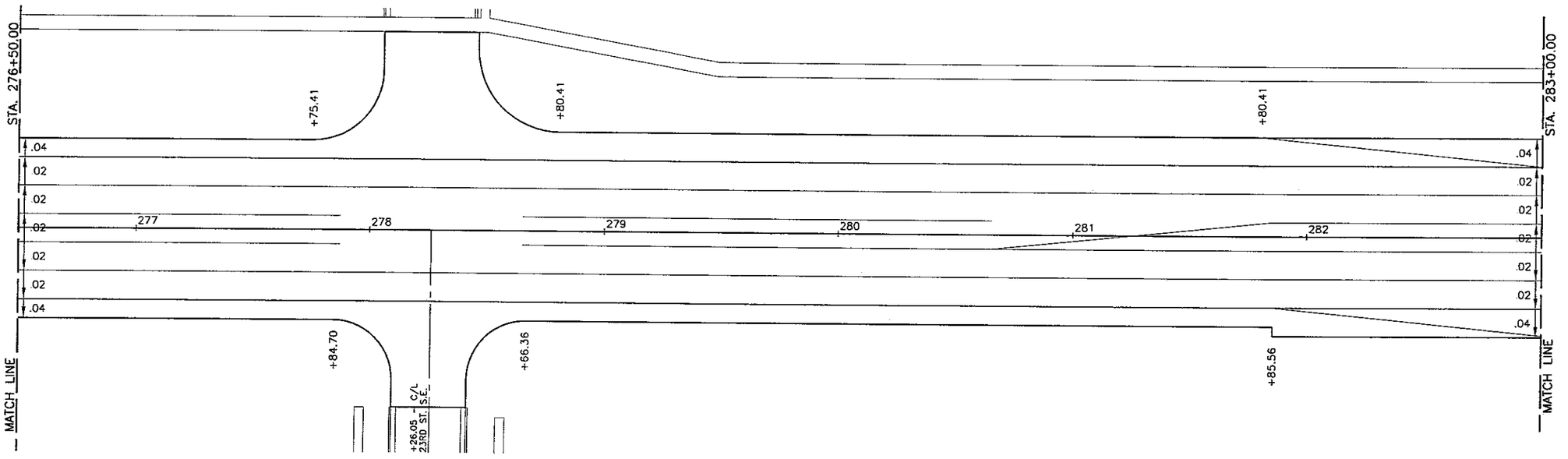
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LEGEND

CROSS SLOPE TRANSITION AREA



AS-BUILT

MAR 0 8 2005

ENGINEERING



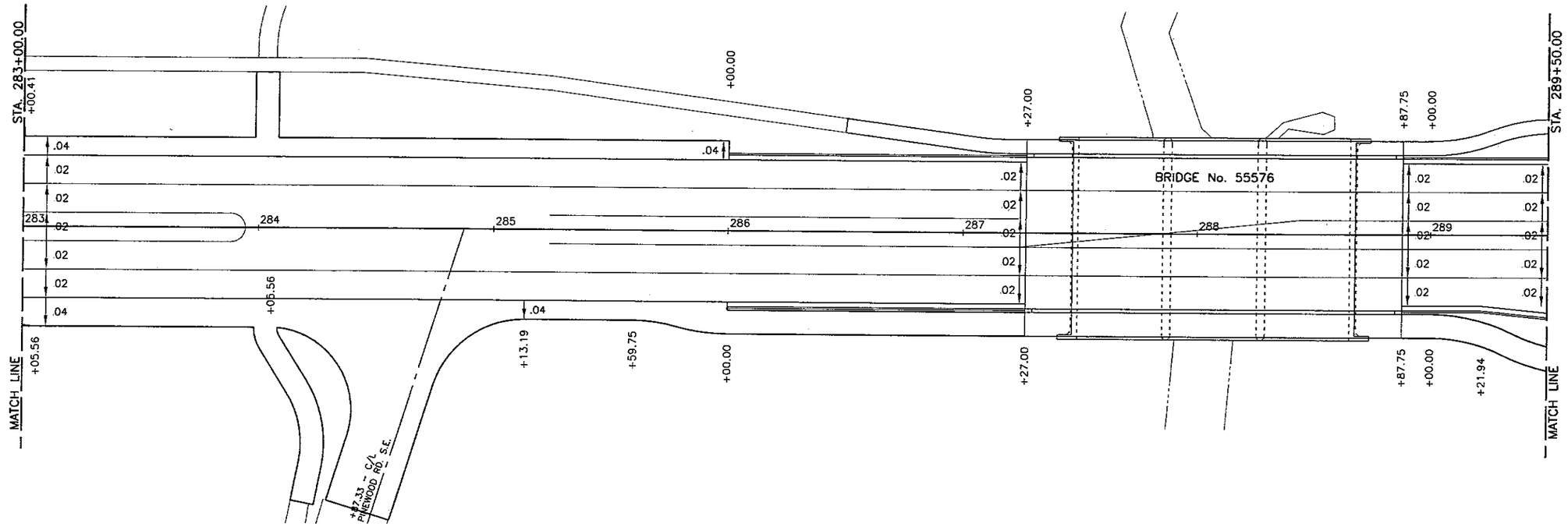
CERTIFIED BY Kayne M Brenneh REG. NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

TITLE:
C.S.A.H. No. 1
SUPERELEVATION PLAN
STA. 270+00.00 to STA. 283+00.00

Sheet No. 48 of 66 Sheets

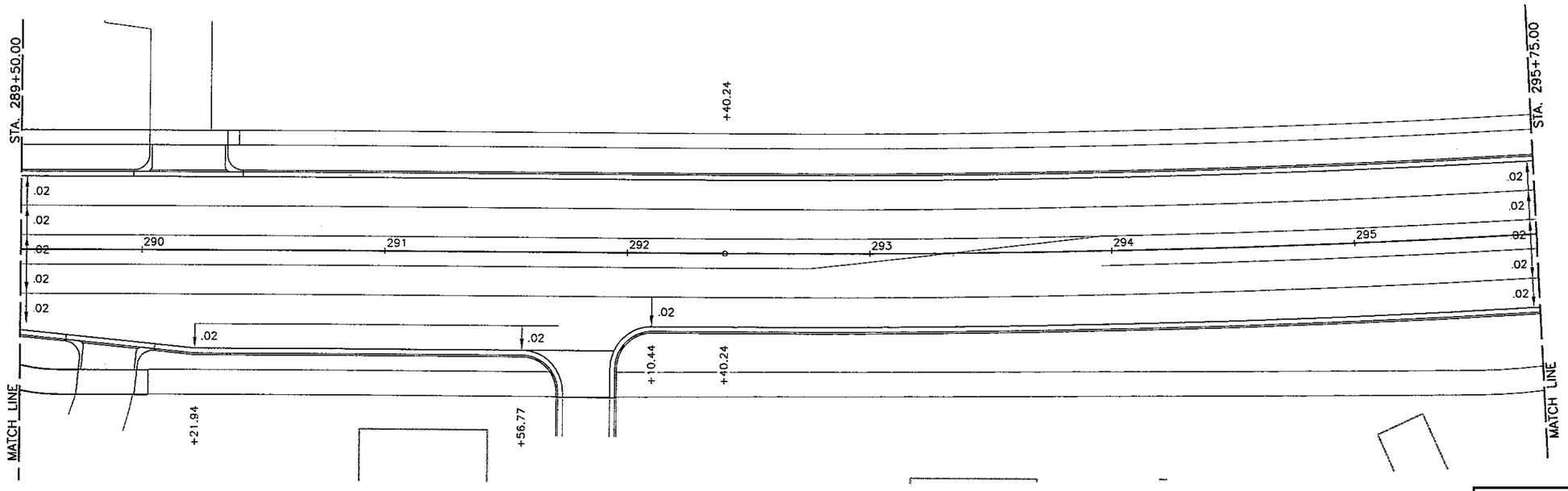
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LEGEND

CROSS SLOPE TRANSITION AREA

0 25 50
SCALE IN FEET



AS-BUILT

MAR 0 8 2005

ENGINEERING

DATE: 01-21-03

FILE NAME: 001-5905.DWG

CERTIFIED BY Karen M Kriemelmeyer LICENSED PROFESSIONAL ENGINEER REG NO. 19917 4/25 2003

TITLE: C.S.A.H. No. 1
SUPERELEVATION PLAN
STA. 283+00.00 to STA. 295+75.00

S.A.P. 55-601-14

Sheet No. 49 of 66 Sheets

STA. 295+75.00

+98.98

+20.50

+82.27

+09.57

+16.12

STA. 302+25.00

+9.13 - C/L 20TH ST. S.E.

.022 .005 .026 .052

.02

296 297 298 299 300 301 302

MATCH LINE

+09.57

+37.26

MATCH LINE

AS-BUILT

MAR 0 8 2005

ENGINEERING

0 25 50

SCALE IN FEET

LEGEND

CROSS SLOPE TRANSITION AREA

Revised
See Sheet 50A

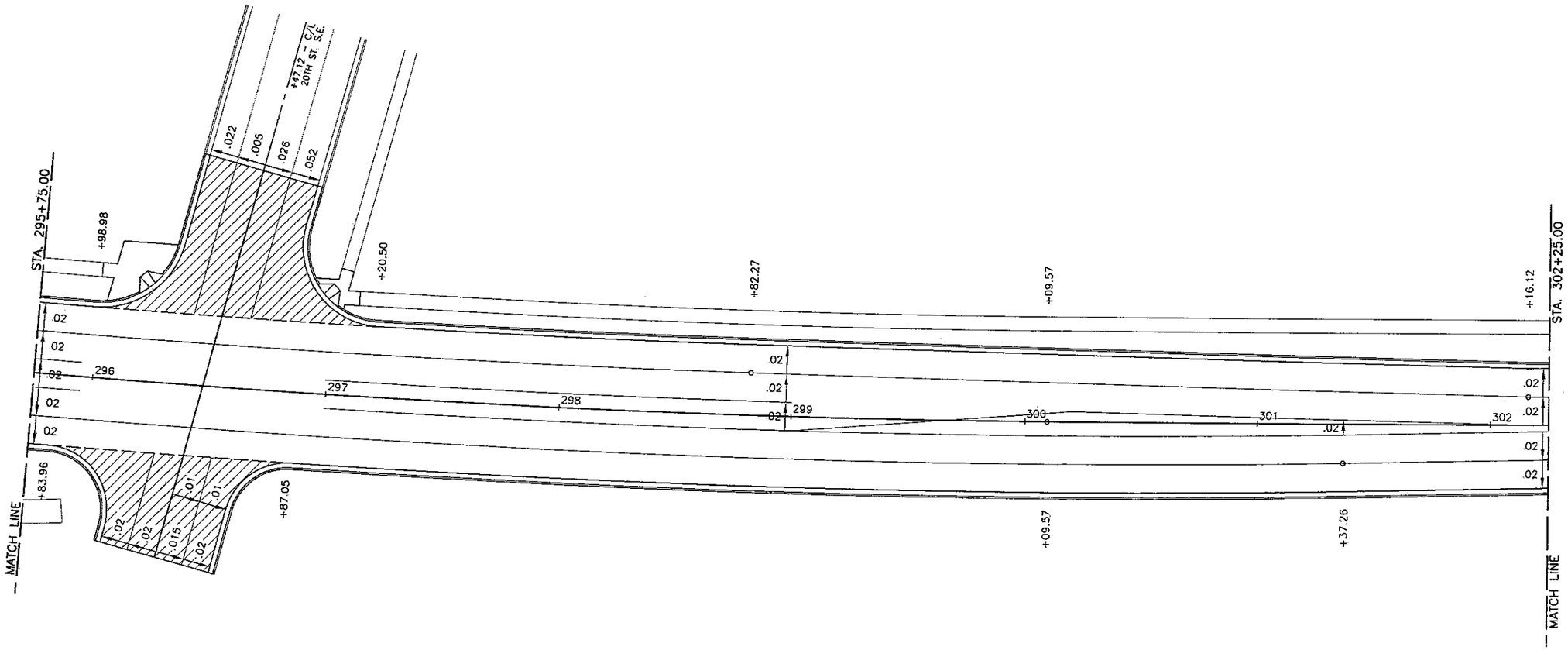
FILE NAME: C01-SD06.DWG DATE: 04-18-03

CERTIFIED BY Kayce M Bierman REG NO. 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

TITLE: C.S.A.H. No. 1
SUPERELEVATION PLAN
STA. 295+75.00 to STA. 302+25.00

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LEGEND

CROSS SLOPE TRANSITION AREA

AS-BUILT

MAR 0 8 2005

ENGINEERING

0 25 50

SCALE IN FEET

FILE NAME: C01-SB06.DWG DATE: 03-22-04

CERTIFIED BY _____ REG. NO. _____ _____ 20__

LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

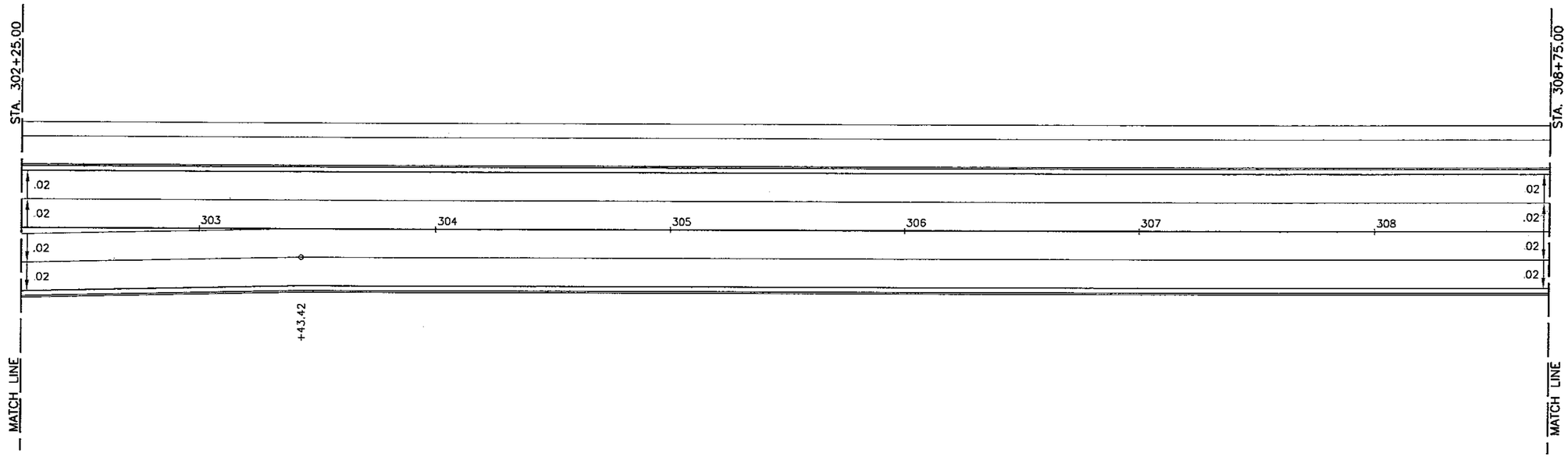
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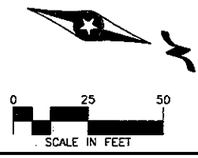
C.S.A.H. No. 1

SUPERELEVATION PLAN

STA. 295+75.00 to STA. 302+25.00

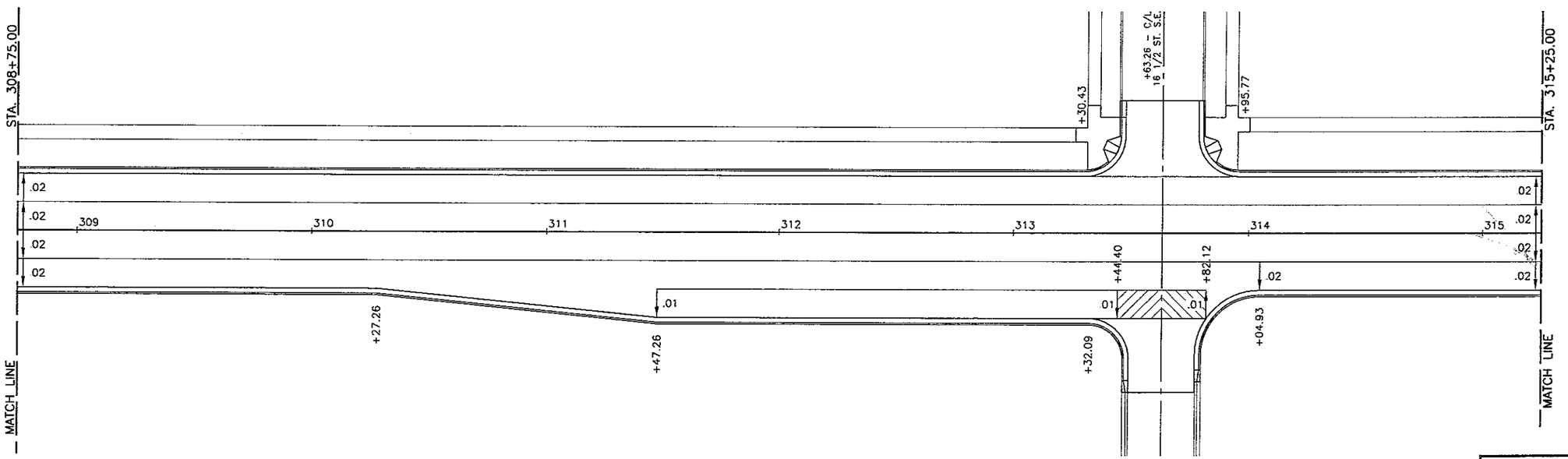
Sheet No. 50A of 66 Sheets





LEGEND

CROSS SLOPE TRANSITION AREA



AS-BUILT

MAR 0 8 2005

ENGINEERING

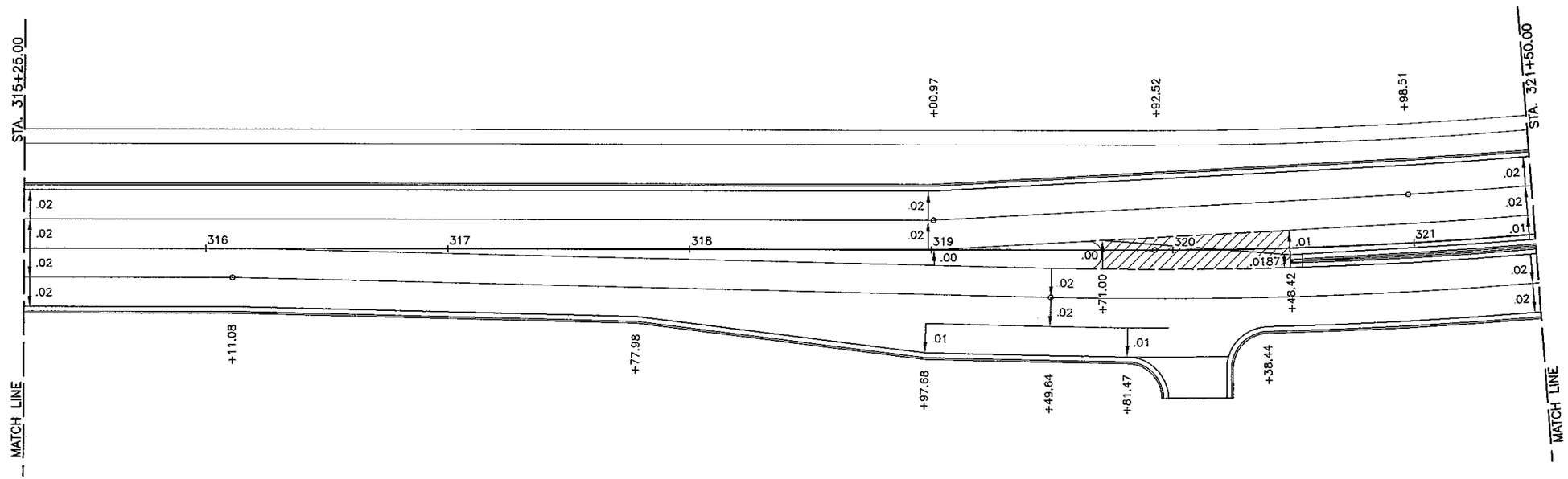
CERTIFIED BY Kaye M Bruemmer REG. NO 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

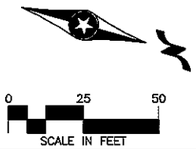
S.A.P. 55-601-14

TITLE:
C.S.A.H. No. 1
SUPERELEVATION PLAN
STA. 302+25.00 to STA. 315+25.00

Sheet No. 51 of 66 Sheets

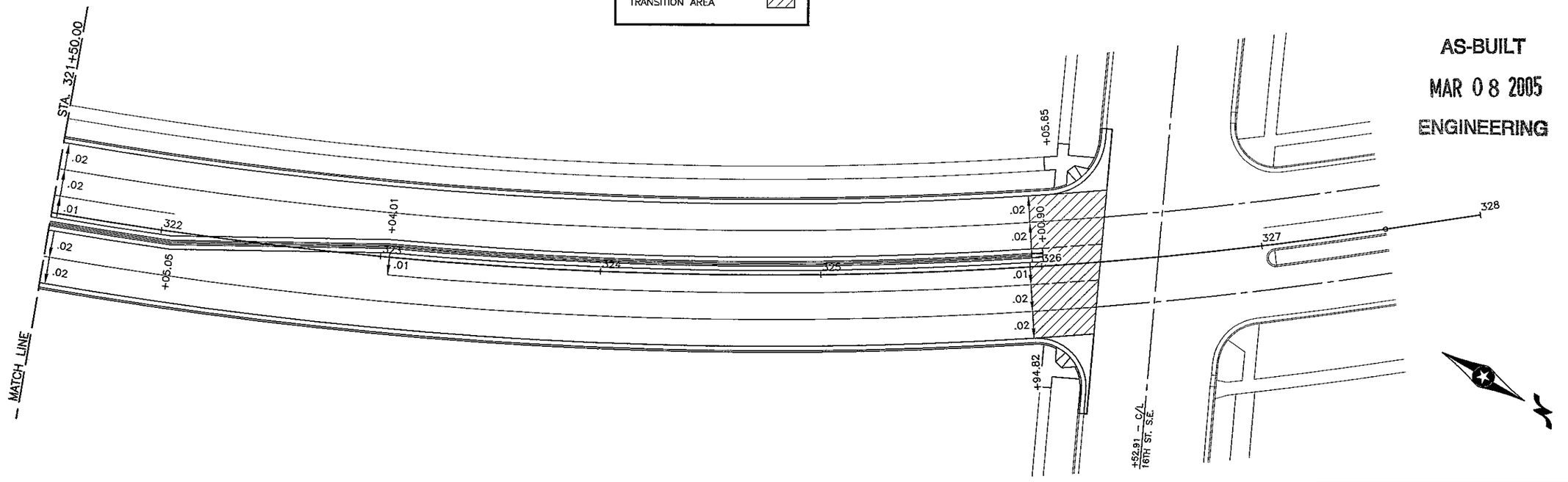
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LEGEND

CROSS SLOPE TRANSITION AREA



AS-BUILT

MAR 0 8 2005

ENGINEERING

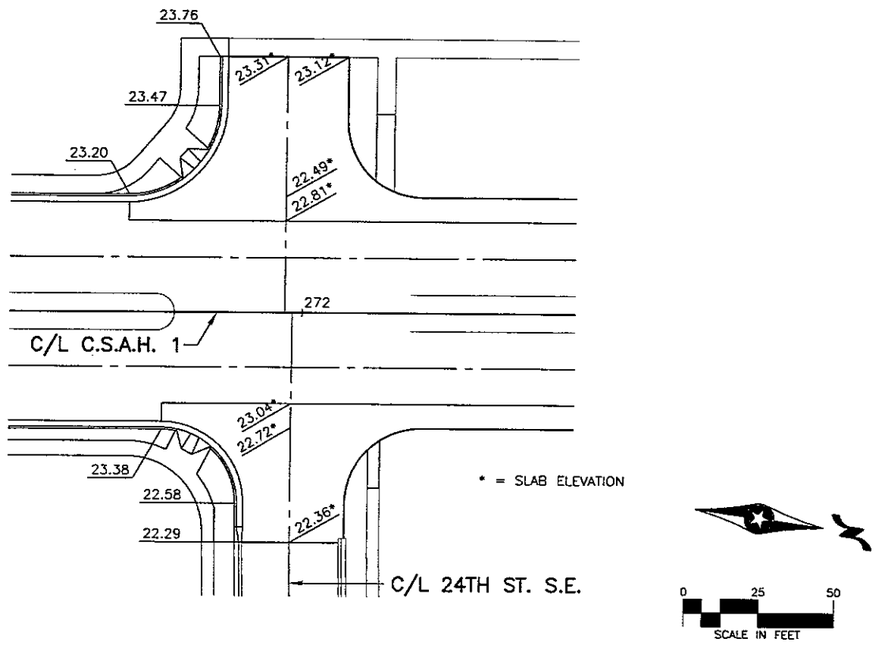
TITLE:
C.S.A.H. No. 1
SUPERELEVATION PLAN
STA. 315+25.00 to STA. 326+26.53

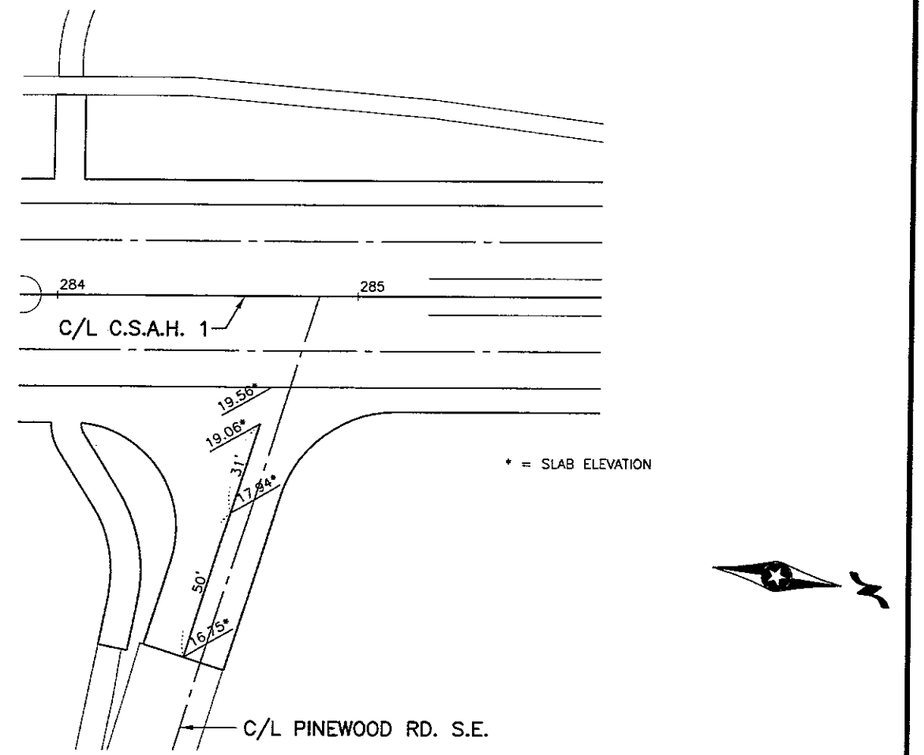
CERTIFIED BY Kayen M Bienick REG. NO. 19917 8/15 2003
LICENSED PROFESSIONAL ENGINEER

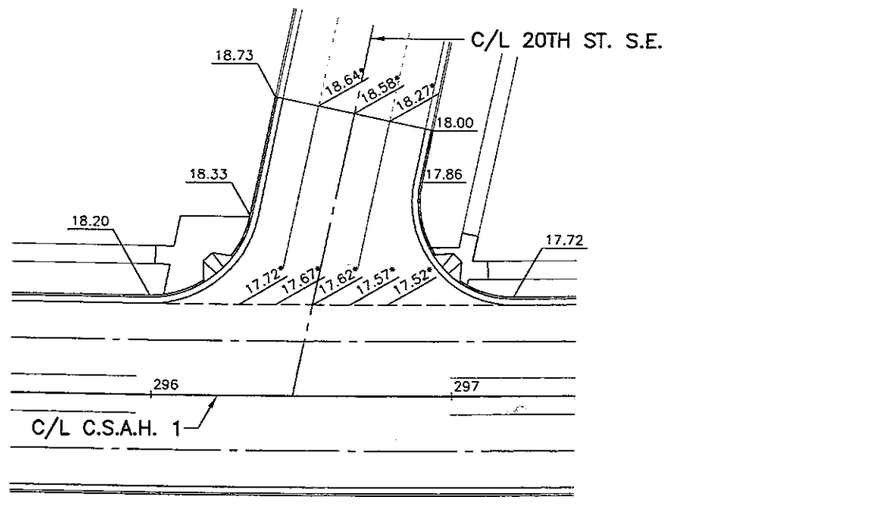
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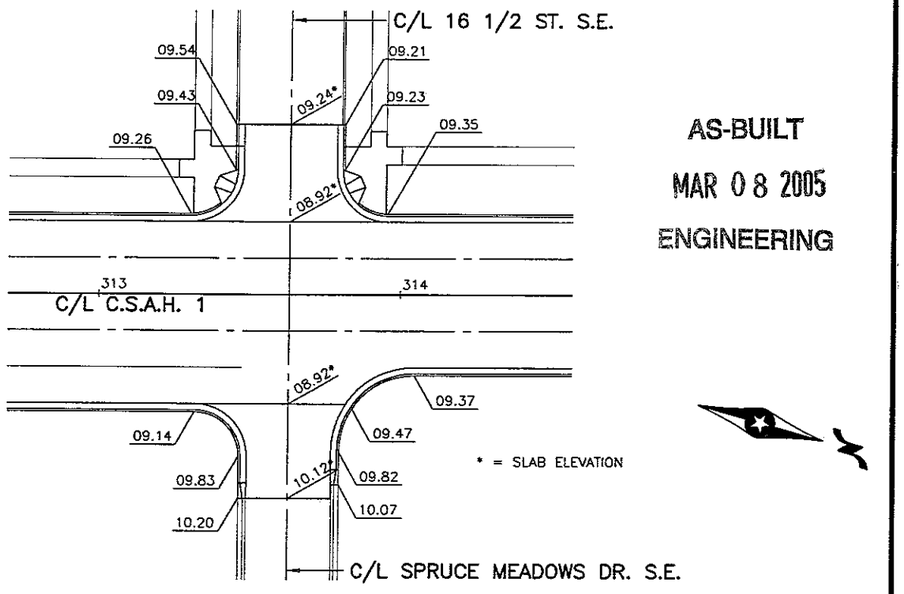
Sheet No. 52 of 66 Sheets

FILE NAME: C01-S008.DWG DATE: 07-08-03









AS-BUILT

MAR 0 8 2005

ENGINEERING

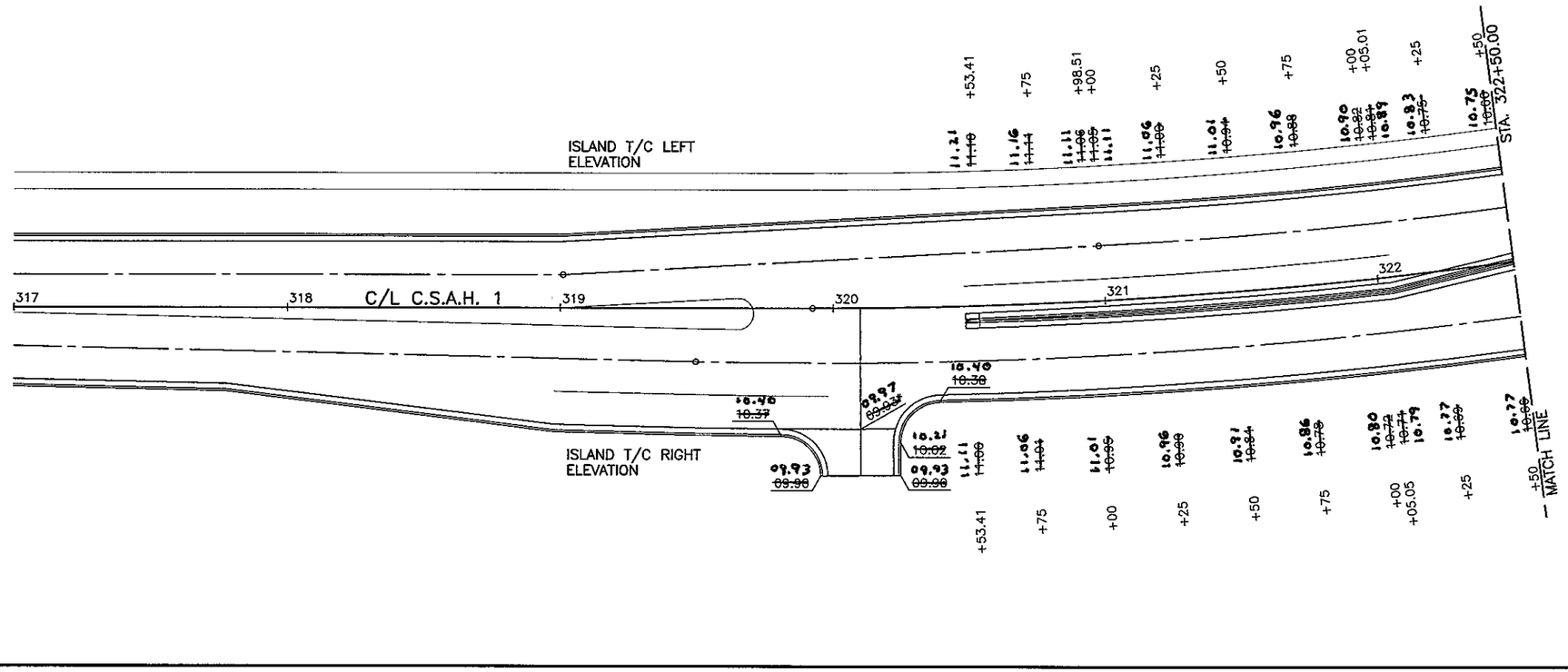
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CERTIFIED BY Kaye M Bierwirth REG. NO 19917 4/25 2003
LICENSED PROFESSIONAL ENGINEER

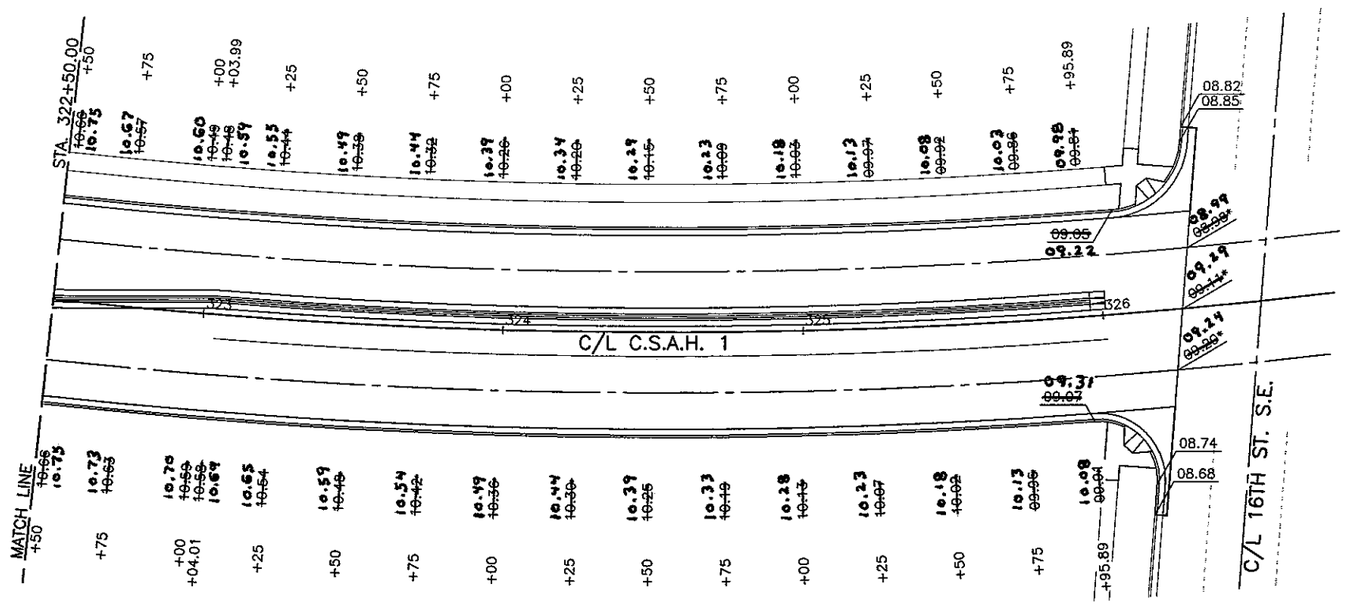
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Sheet No. 53 of 66 Sheets

FILE NAME: C01-RD01.DWG DATE: 04-18-03



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SCALE IN FEET



AS-BUILT
MAR 0 8 2005
ENGINEERING

* = SLAB ELEVATION

FILE NAME: C01-1002.DWG DATE: 07-11-03

CERTIFIED BY Kevin M Reinisch REG. NO. 19917 8/15 2003
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-601-14

TITLE:
INTERSECTION DETAILS

Sheet No. 54 of 66 Sheets