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STANDARD PLATES

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

PLATE NO.	DESCRIPTION
3000L	REINFORCED CONCRETE PIPE (5 SHEETS)
3000G	GASKET JOINT FOR R.C. PIPE (2 SHEETS)
4011E	PRECAST CONCRETE BASE
4020D	MANHOLE OR CATCH BASIN
4101D	RING CASTING FOR MANHOLE OR CATCH BASIN
4101F	COVER CASTING FOR MANHOLE
4140D	SPECIAL GRATE CASTINGS FOR CATCH BASIN
4180J	MANHOLE OR CATCH BASIN STEP
7035M	CONCRETE WALK & CURB RETURNS AT ENTRANCES
7036F	PEDESTRIAN CURB RAMP
7103H	CONCRETE CURB AND GUTTERS (DESIGN B & DESIGN V)
7111V	INSTALLATION OF CATCH BASIN CASTINGS
8000I	STANDARD BARRICADES
8110D	TRAFFIC SIGNAL BRACKETING (POLE MOUNTED)
8112D	PEDESTRIAN FOUNDATION (PEDESTAL MOUNTED)
8114A	R.V.C. MANHOLE / FULL BOX (2 SHEETS)
8120D	PEDESTRIAN PUSH BUTTON INSTALLATION
8120L	POLE FOUNDATION (P&S)
8121E	TRANSFORMER BASE WITH POLE (2 SHEETS)
8122D	PEDESTAL AND PEDESTAL BASE
8123E	POLE AND MAST ARM (LUMINAIRE AND TRAFFIC LIGHTS) (2 SHEETS)
8124E	MAST ARM SIGNAL HEAD MOUNTS (3 SHEETS)
8126G	POLE FOUNDATION (P&SO AND P&IO)

CONSTRUCTION NOTES

WATER, GAS, ELECTRIC, TELEPHONE, SEWER, AND T.V. CABLE LINES SHOWN ON THE DRAWINGS AND CROSS-SECTIONS ARE PLOTTED FROM THE BEST INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION, BUT MAY NOT REFLECT ACTUAL LOCATIONS OR ELEVATIONS. THE CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES BEFORE BEGINNING CONSTRUCTION WHICH MAY BE AFFECTED BY A UTILITY CONTACT. THE CONTRACTOR SHALL GIVE 48 HOURS NOTICE TO THE OWNERS OF ALL KNOWN UTILITIES BEFORE STARTING ANY OPERATIONS AFFECTING THESE PROPERTIES, OR BEGINNING EXCAVATION IN THE VICINITY OF THOSE PROPERTIES. THE CONTRACTORS ATTENTION IS DIRECTED TO SECTION 1507 IN THE STANDARD SPECIFICATIONS.

UTILITY COMPANIES WILL RELOCATE THEIR FACILITIES CONCURRENTLY WITH THE CONSTRUCTION OPERATIONS UNDER THIS CONTRACT. CONTRACTOR SHALL SCHEDULE CONSTRUCTION IN COOPERATION WITH THE UTILITY COMPANIES.

PROVIDE FOR REMOVAL AND DISPOSAL (OUTSIDE THE CONSTRUCTION ZONE) OF ALL INFRASTRUCTURE THAT WILL INTERFERE WITH CONSTRUCTION. DISPOSAL OF ITEMS REMOVED UNDER THIS CONTRACT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF 2104.3C3.

EXCESS EXCAVATED AND UNSUITABLE MATERIALS SHALL BE DISPOSSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF 2104.3C2 AND 2105.30.

SODDING QUANTITIES ALONG ROADWAY SLOPES ARE BASED ON 50000G UNITS FROM THE BACK OF THE CURB TO THE CONSTRUCTION LIMITS.

COMPACTION IN GRADING ITEMS & AGGREGATE BASE SHALL BE ACCOMPLISHED IN ACCORDANCE WITH SPEC. 2105.3F2 "QUALITY COMPACTION METHOD".

COMPACTION OF BITUMINOUS SURFACE ITEMS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH SPEC. 2360.6B "MAXIMUM DENSITY METHOD".

WHEN EXCAVATING ADJACENT TO INFRASTRUCTURE, NO MATERIAL SHALL BE REMOVED FROM INSIDE AN APPROXIMATE 2:1 SLOPED LINE DRAWN DOWNWARD AND OUTWARD FROM THE BOTTOM OF THE INFRASTRUCTURE. WHEN CONNECTION TO EXISTING BITUMINOUS PAVEMENT IS REQUIRED, THE EDGE OF EXISTING PAVEMENT SHALL BE CUT TO A NEAT LINE PRIOR TO CONSTRUCTING ASPHALT SURFACING.

STABILIZING AGGREGATE SHALL BE APPLIED IF NECESSARY TO ACHIEVE SATISFACTORY SURFACE STABILITY AS DETERMINED BY THE ENGINEER. THE MATERIAL SHALL SATISFY THE REQUIREMENTS OF SECTION 3149.2C AND SHALL BE APPLIED IN ACCORDANCE WITH SECTION 2105.3G OF THE STANDARD SPECIFICATIONS.

THERE IS NO PAY ITEM FOR CONNECTING TO EXISTING STORM MANHOLES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF RC PIPE BY THE LINEAL FOOT.

THERE IS NO PAY ITEM FOR CONNECTING TO EXISTING PIPE. REMOVE EXISTING PIPE TO NEAREST JUNT AS DIRECTED. THE CONNECTING OF THE PIPES SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF NEW RC PIPE SLOWER BY THE LINEAL FOOT.

CHART A

PROFILE GRADES

STATION	PROFILE GRADE	REMARKS
1+19	951.04	MATCH
1+25	951.07	
1+50	951.19	
1+75	951.29	
2+00	951.41	
2+25	951.74	
2+50	951.83	
2+75	951.87	
3+00	951.88	
3+25	951.87	
3+50	952.08	PI
3+75	952.19	
4+00	952.31	
4+25	952.42	
4+50	952.53	
4+75	952.43	
5+00	952.34	
5+25	952.24	
5+50	952.22	
5+75	952.44	
6+00	952.67	PI
6+25	952.69	
6+50	952.76	
6+75	952.82	
7+00	952.94	
7+25	953.07	
7+50	953.22	
7+75	953.44	
8+00	953.57	
8+25	953.70	
8+50	953.84	PVC
8+75	953.98	
9+00	954.21	
9+25	954.51	
9+50	954.87	
9+75	955.31	
10+00	955.81	
10+25	956.39	
10+50	957.03	
10+75	957.71	
10+83	957.84	MATCH

CHART INDEX

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QUANTITY NOTES

- SAW CUT SHALL BE FULL DEPTH
- FOR DUST CONTROL.
- ALL PEDESTRIAN RAMPS SHALL HAVE DETECTABLE WARNING PLATES.
- BITUMINOUS PATCHING MAY BE USED AS DIRECTED BY THE ENGINEER.
- INCLUDES CASTING ASSEMBLY WHICH BECOMES THE PROPERTY OF THE CONTRACTOR.
- SEE SPECIAL PROVISIONS.
- TO BE USED FOR SANITARY SEWER SERVICE REPLACEMENT - LOCATIONS TO BE DETERMINED IN THE FIELD.
- THIS PAY ITEM IS TO BE USED IN LOCATIONS DETERMINED BY THE ENGINEER IN THE FIELD. THE REQUIREMENTS OF SPECIFICATION 1505 ARE HEREBY DELETED FOR THIS ITEM.
- THIS PAY ITEM IS NOT FOR TRENCH PROTECTION. TRENCH PROTECTION IS THE CONTRACTOR'S RESPONSIBILITY.
- BITUMINOUS PAVEMENT REMOVAL INCLUDES BITUMINOUS ENTRANCES AND BITUMINOUS WALKS.

ASBUILT PLAN

CONFORMING TO

CONST. RECORDS

DONE BY: J.B.

DATE: 1-30-08

BASIS FOR ESTIMATED QUANTITIES

2350E&2360 MIXES - BITUMINOUS MIXTURES - 110 LBS PER 1" THICKNESS PER SQ. YD.

2357.502 - BITUMINOUS MATERIAL FOR TACK COAT ESTIMATED AT 0.05 GAL. PER SQ. YD. PER APPLICATION

2575.532 - FERTILIZER APPLICATION RATE 350 LBS/ACRE

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QU



SHEET 10 OF 55 SHEETS

SHEET 11 OF 55 SHEETS

EARTHWORK COMPUTATIONS*

STATION	AREAS		VOLUMES		CUMULATIVE VOLUMES	
	CUT	FILL	CUT	FILL	CUT	FILL
1+00	0.00	0.00	126.14	0.78	126.14	0.78
1+50	136.23	0.84	52.97	0.19	179.11	0.98
1+60	149.80	0.21	215.57	0.99	394.68	1.98
2+00	141.22	1.13	286.51	1.04	681.19	3.01
2+50	168.20	0.00	319.43	0.02	1000.62	3.03
3+00	176.79	0.02	329.46	0.10	1330.08	3.12
3+50	179.03	0.08	393.82	0.08	1723.89	3.21
4+05	207.63	0.00	97.97	0.00	1821.87	3.21
4+18	199.33	0.00	223.73	0.16	2045.60	3.37
4+50	178.21	0.27	342.48	0.00	2388.08	3.97
5+00	191.67	0.38	156.45	0.22	2544.54	4.19
5+21	210.67	0.20	215.88	0.68	2760.42	4.87
5+50	191.32	1.07	395.05	0.99	3155.47	5.86
6+00	235.34	0.00	376.33	4.25	3531.81	10.12
6+50	171.10	4.59	163.06	3.47	3694.87	13.59
6+74	195.78	3.21	179.28	2.36	3874.15	15.95
7+00	176.57	1.70	124.94	1.16	3999.09	17.11
7+19	178.53	1.60	204.19	1.58	4203.27	18.69
7+50	177.15	1.15	112.00	0.34	4315.27	19.03
7+66	200.84	0.00	243.10	0.12	4558.37	19.14
8+00	185.26	0.18	348.46	0.25	4906.83	19.40
8+50	191.07	0.09	63.84	0.01	4970.66	19.41
8+59	191.95	0.00	285.28	0.00	5255.95	19.41
9+00	183.79	0.00	203.92	0.13	5459.87	19.55
9+29	195.92	0.25	143.61	0.10	5603.48	19.64
9+50	173.37	0.00	307.98	0.00	5911.46	19.65
10+00	159.25	0.00	285.12	0.00	6196.59	19.65
10+50	148.68	0.00	50.06	0.00	6246.64	19.65
10+59	151.65	0.00	115.14	0.00	6361.78	19.65
11+00	0.00	0.00	0.00	0.00	6361.78	19.65

*AVERAGE END EARTHWORK COMPUTATIONS DATED 4/18/06

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.

Samuel E. Sch
Date 2/11/07 Lic. No. 20452

CHART K

EARTHWORK SUMMARY	
WHITE BEAR AVENUE	
COMMON EXCAVATION (EV)(P) (SEE NOTES BELOW)	
6,362 C.Y. (EV) -	
1,764 C.Y. BITUMINOUS PAVEMENT (EV) =	4,598 C.Y. (EV)
COMMON BORROW (CV)(P)	
20 C.Y. EMB. + 217 C.Y. BEHIND CURB	237 C.Y. (CV)
SELECT GRANULAR BORROW (CV)(P)	
	3,371 C.Y. (CV)
TOPSOIL BORROW (LV)	
	101 C.Y. (LV)

NOTES

THE 1,764 C.Y. OF BITUMINOUS SUBTRACTED FROM COMMON EXCAVATION IS BEING PAID AS ITEM 2104.505 "REMOVE BITUMINOUS PAVEMENT" BY THE SQUARE YARD.

EXCESS COMMON EXCAVATION SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THE COST FOR DISPOSAL SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND NO ADDITIONAL COMPENSATION WILL BE PAID OUTSIDE THE PRICE BID FOR COMMON EXCAVATION.

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: *Samuel E. Sch*
DATE: 1-30-08

28-112

EARTHWORK TABULATION & SUMMARY

S.P. No. 62-665-42

Sheet No. 12 of 55 Sheets

CHART C

THE FOLLOWING LIST SHOWS THE CONTACT PERSONS AT THE UTILITY COMPANIES INVOLVED IN THIS PROJECT.

ST. PAUL SANITARY SEWER 651-266-6234

ST. PAUL WATER DOLLY LUDDEN 651-266-6880

XCEL ELECTRIC JASON McROBERTS 651-229-5504 FAX 651-229-2383

XCEL GAS JEFF SCHMIDT 651-229-2029 FAX 651-229-2383

COMCAST CABLE T.V. ROB LUCAS 651-755-2580

QWEST TELEPHONE PAT FLINN 651-714-7523 FAX 651-730-1385 PAGER 612-622-6288

ST. PAUL TRAFFIC SIGNALS JAMES MUNTAN 651-266-6213 FAX 651-281-4559

CHART D

NATURAL GAS				
STATION	LOCATION	ITEM	OWNER	REMARKS
1+00 - 12+00	RT	2" PE	XCEL	
5+60	RT	VALVE	XCEL	
5+70	LT / RT	MAIN	XCEL	CROSSING
6+42	RT	VALVE	XCEL	

NOTE: STATIONING AND RT. / LT. FROM SECTION LINE.

CHART F

TELEPHONE				
STATION	LOCATION	ITEM	OWNER	REMARKS
5+83	LT.	VAULT	QWEST	MANHOLE # 8
5+83	LT.	VAULT	QWEST	MANHOLE # 9
5+83 - 12+00	LT.	CONDUIT 4 DUCT	QWEST	
5+83	LT / RT	CONDUIT 4 DUCT	QWEST	
5+83	LT.	BURIED CABLE	QWEST	
7+56	LT.	VAULT	QWEST	MANHOLE # 20
7+56	LT / RT	BURIED CABLE	QWEST	
11+00	LT / RT	BURIED CABLE	QWEST	
11+00 - 12+00	LT	BURIED CABLE	QWEST	

CHART E

POWER (XCEL)				
STATION	LOCATION	ITEM	OWNER	REMARKS
0+00	RT	POLE	XCEL	O.K.
1+00	RT	POLE	XCEL	RELOCATE BY OTHERS
3+00	RT	POLE	XCEL	RELOCATE BY OTHERS
4+00	RT	POLE	XCEL	RELOCATE BY OTHERS
6+34	RT	POLE	XCEL	RELOCATE BY OTHERS
7+49	RT	POLE	XCEL	RELOCATE BY OTHERS
8+00	RT	POLE	XCEL	RELOCATE BY OTHERS
10+00	RT	POLE	XCEL	O.K.

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: *Samuel E. Sch*
DATE: 1-30-08

28-112

CHARTS B - H

S.P. No. 62-665-42

Sheet No. 13 of 55 Sheets

CHART I

CONCRETE TABULATION						
STATION TO STATION	LOCATION	CURB & GUTTER B624	4" CONCRETE WALK SQ. FT.	6" CONCRETE PAVEMENT SQ. YD.	COMMERCIAL 6" CONCRETE PAVEMENT SQ. YD.	DETECTABLE WARNING PLATES SQ. FT.
1+19 TO MARYLAND	LT.	481	1,808			
MARYLAND TO 11+45	LT.	545	1,855			
1+19 TO MARYLAND	RT	481	1,743			
MARYLAND TO 10+80	RT	480	979			
1+19 TO 10+80	LT. & RT.		1675			
HO # 1161	LT			15.0		
HO # 1164	RT					2.3
HO # 1167	LT			18.0		
HO # 1168	RT				22.9	2.1
ROSE AVE. (ALLEY)	RT					
HO # 1171	LT			18.0		
HO # 1172	RT					0.5
HO # 1179	LT			18.0		
AMOCO	RT				42.4	
AMOCO	RT				42.4	
PAPPPY'S	LT				35.1	
STA 7+64	RT				22.8	
STA 7+64 (ALLEY)	RT					
HO # 1225	LT			18.0		
HO # 1228	LT			22.9		
HO # 1231	LT					
HO # 1239	LT			21.8		0.5
HO # 1243	LT					
PED RAMPS (ALL RADII)				103.3		120
TOTAL		1897	6,060	257.9	208.0	5.4

NOTE: 6" CONCRETE PAVEMENT QUANTITY INCLUDES RESIDENTIAL ENTRANCES AND PEDESTRIAN CURB RAMPS.

CHART J

AGGREGATE & BITUMINOUS SUMMARY FOR ROADWAY & ENTRANCES							
STATION TO STATION	LOCATION	AGG BASE CL. 7	SELECT GRANULAR C.Y.	BITUMINOUS MIXTURE			TACK COAT GALLON
				SPW E 440F	SPW N 8 440B	LVW E 45030B	
STA. 1+19 TO STA. 11+60	LT & RT	1.366	3,371	1,296	972		589
ROADWAY							
ENTRANCES, PED RAMPS & LOTS	LT & RT	104					113
STA. 1+19 TO STA. 11+60	LT & RT	183					
4" SIDEWALK							
TOTAL		1,653	3,371	1,296	972	113	589

CHART L

TURF ESTABLISHMENT AND EROSION CONTROL				
TURF ESTABLISHMENT		EROSION CONTROL		
STATION TO STATION	LOCATION	SOD TYPE LAWN	COMMERCIAL FERTILIZER ANALYSIS 22-05-10	6" BIOROLL (TYPE 2) UNFT.
STA. 1+50 TO STA. 6+00	RT. BLVD.	180	12	
STA. 1+50 TO STA. 4+00	RT.	240	15	
STA. 1+50 TO STA. 6+00	LT. BLVD.	100	6	
STA. 1+50 TO STA. 6+00	LT.	290	18	
STA. 6+00 TO STA. 11+75	RT. BLVD.	105	7	
STA. 6+00 TO STA. 9+50	RT.	70	5	
STA. 6+00 TO STA. 11+50	LT. BLVD.	140	9	
STA. 6+00 TO STA. 11+75	LT.	70	5	
MISC LOCATIONS				150
TOTAL		1205.0	77.0	150

COMMERCIAL FERTILIZER ANALYSIS 22-05-10 COMPUTED AT AN APPLICATION RATE = 350# PER ACRE

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CHARTS I, J, & L

S.P. No. 62-665-42

SHEET NO. 14 OF 55 SHEETS

CHART G

ARC LIGHTS				
STATION	LOCATION	ITEM	OWNER	REMARKS
0+60	RT	LIGHT	ST. PAUL	REMOVE / SALVAGE
2+38	LT	LIGHT	ST. PAUL	REMOVE / SALVAGE
3+44	RT	LIGHT	AMOCO	RELOCATE BY OTHERS
3+85	RT	LIGHT	ST. PAUL	REMOVE / SALVAGE
5+38	RT	LIGHT	AMOCO	RELOCATE BY OTHERS
7+82	LT	LIGHT	ST. PAUL	REMOVE / SALVAGE
9+68	RT	LIGHT	ST. PAUL	REMOVE / SALVAGE
11+25	LT	LIGHT	ST. PAUL	REMOVE / SALVAGE

CHART H

WATERMAIN				
STATION	LOCATION	ITEM	OWNER	REMARKS
1+00 - 12+00	LT	12" WATERMAIN	ST. PAUL	
2+19	LT	VALVE	ST. PAUL	ADJUST
2+19	RT	HYDRANT	ST. PAUL	RELOCATE BY S.P.R.W.A.
4+00	LT	VALVE	ST. PAUL	ADJUST
5+09	LT	VALVE	ST. PAUL	ADJUST
5+69	LT	VALVE	ST. PAUL	ADJUST
6+04	LT / RT	12" WATERMAIN	ST. PAUL	
6+10	RT	12" WATERMAIN	ST. PAUL	
6+10	RT	VALVE	ST. PAUL	ADJUST
6+28	RT	HYDRANT	ST. PAUL	O.K.
6+28	LT	VALVE	ST. PAUL	ADJUST
6+87	LT	HYDRANT	ST. PAUL	RELOCATE BY S.P.R.W.A.
6+82	LT	VALVE	ST. PAUL	ADJUST
9+28	RT	VALVE	ST. PAUL	ADJUST

CHART B

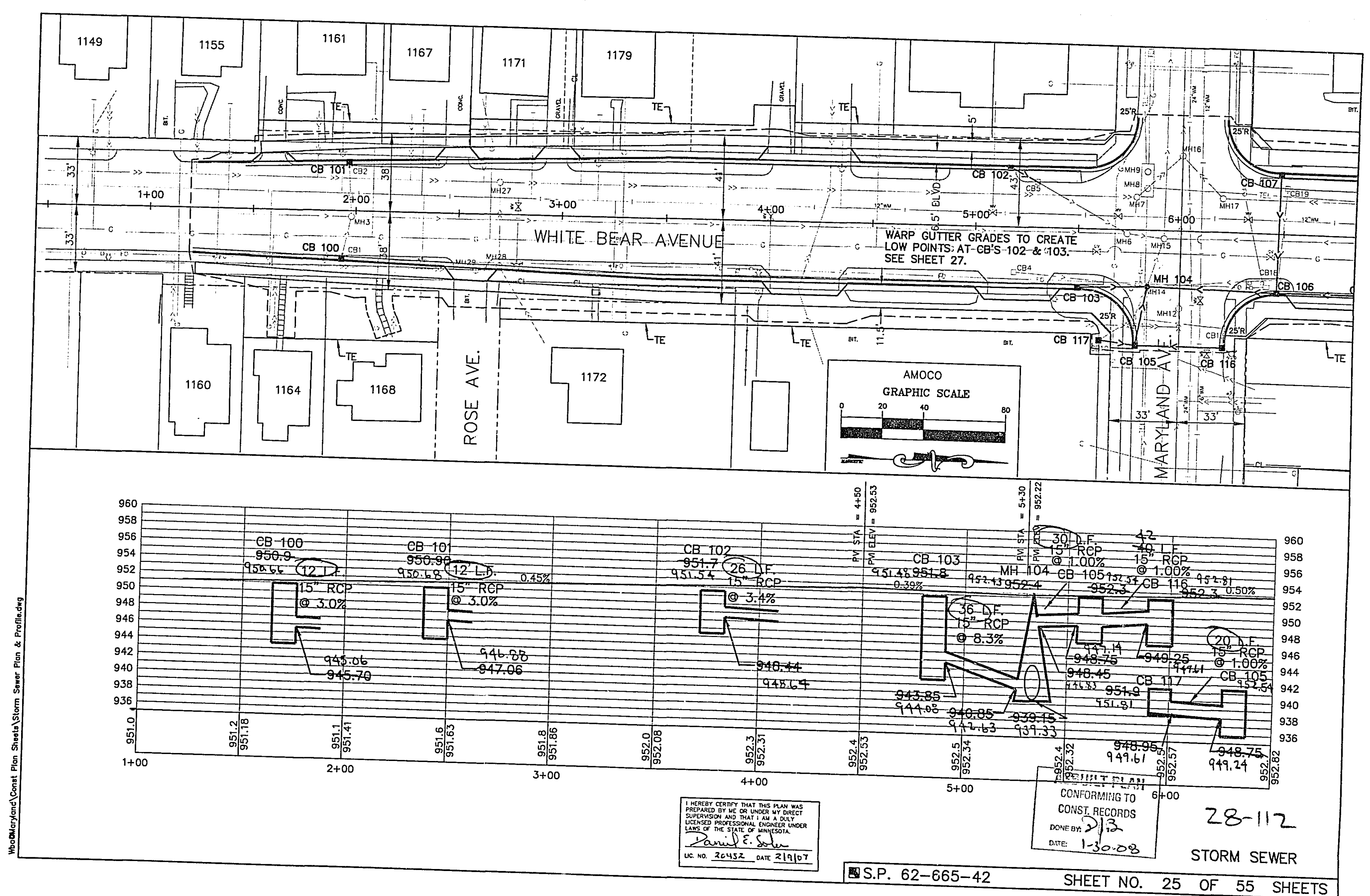
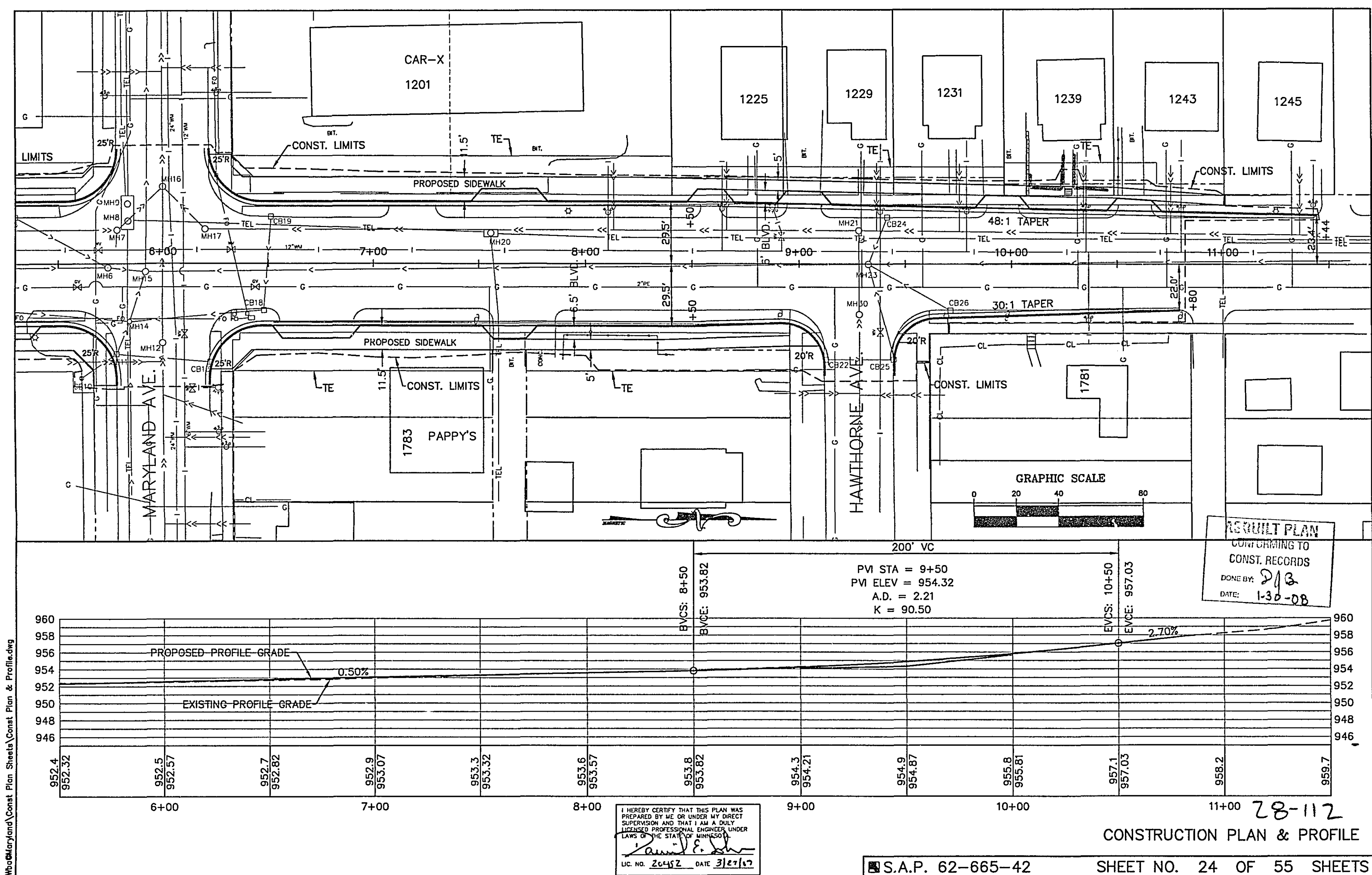
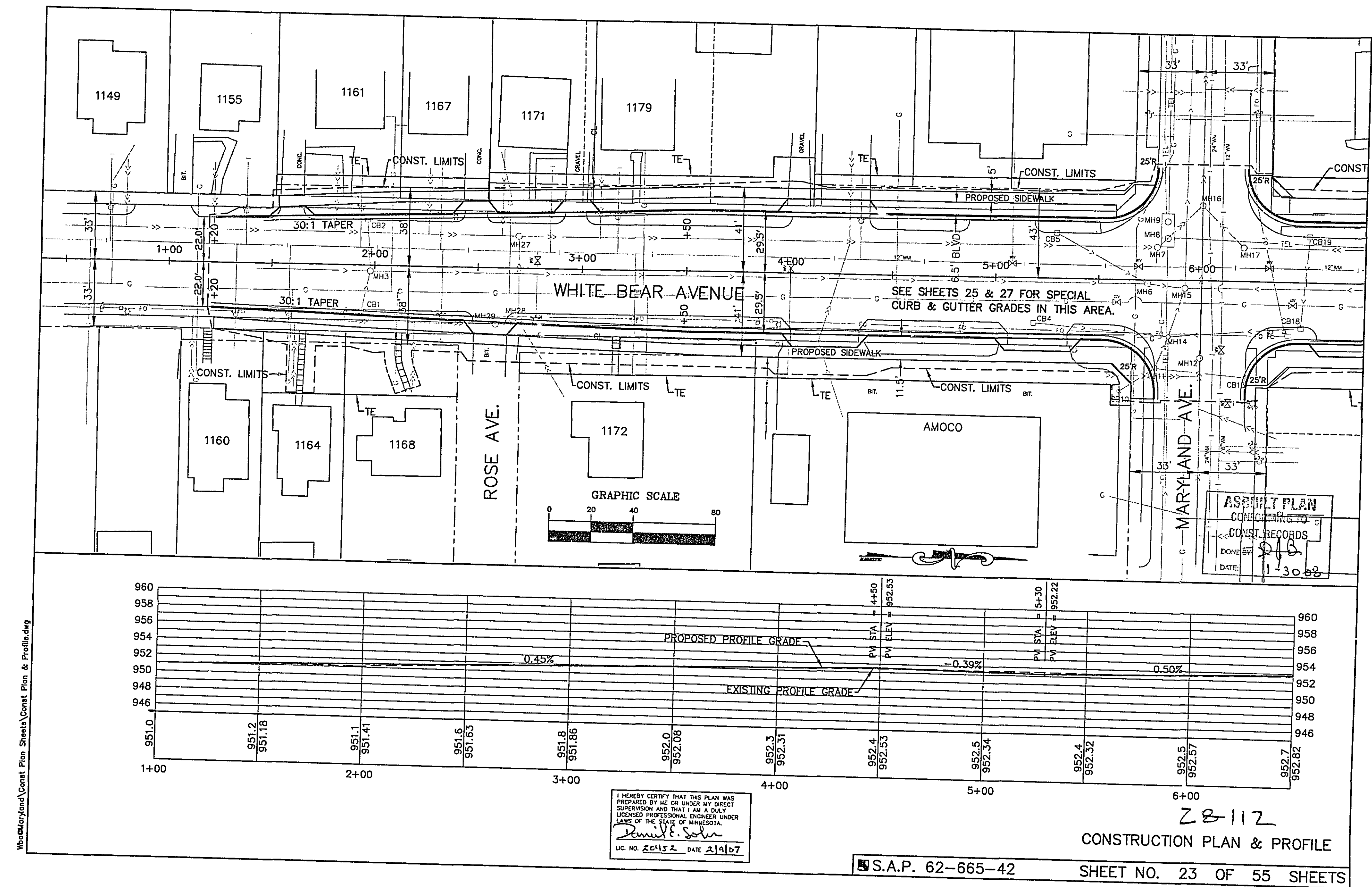
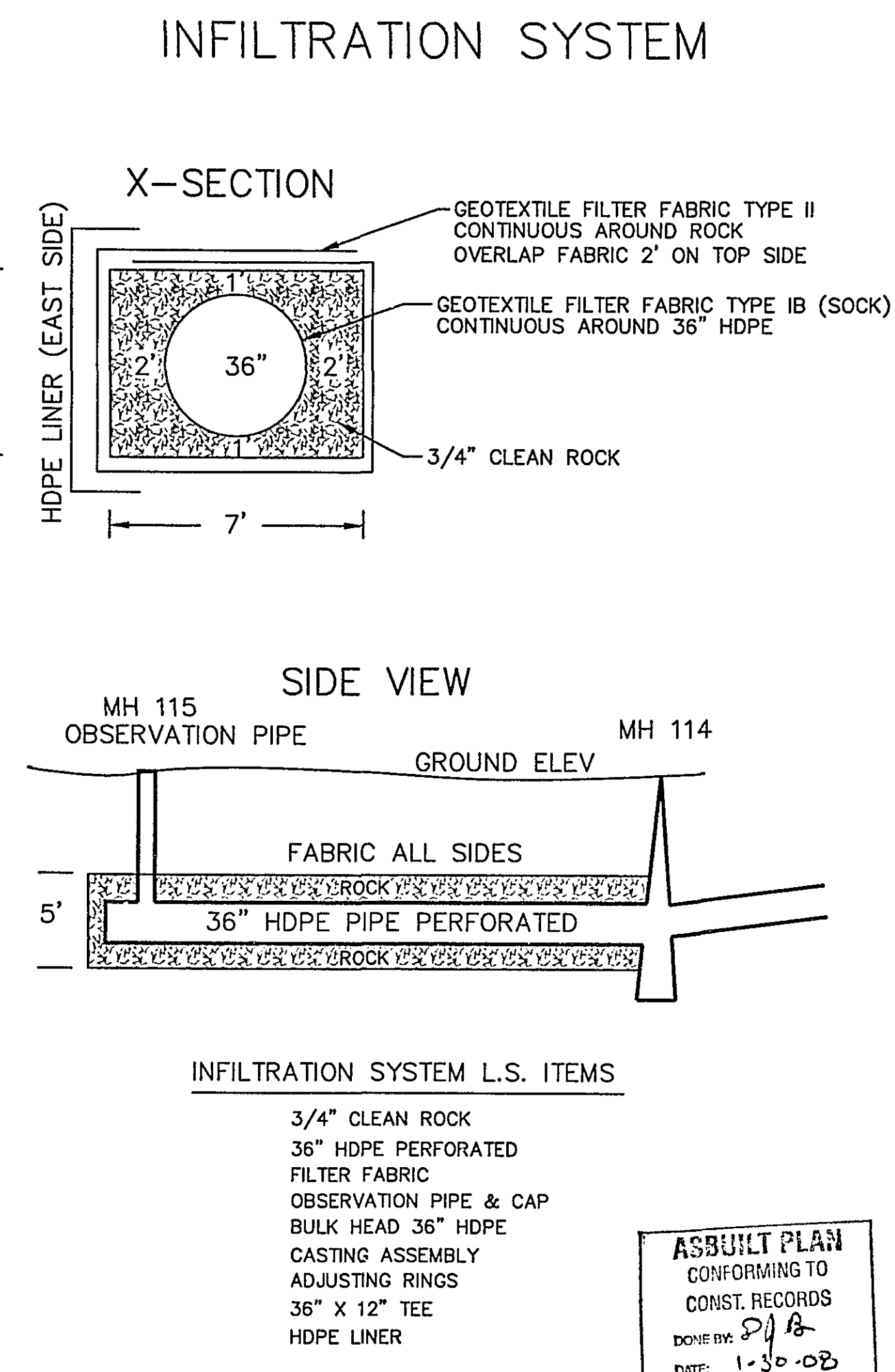
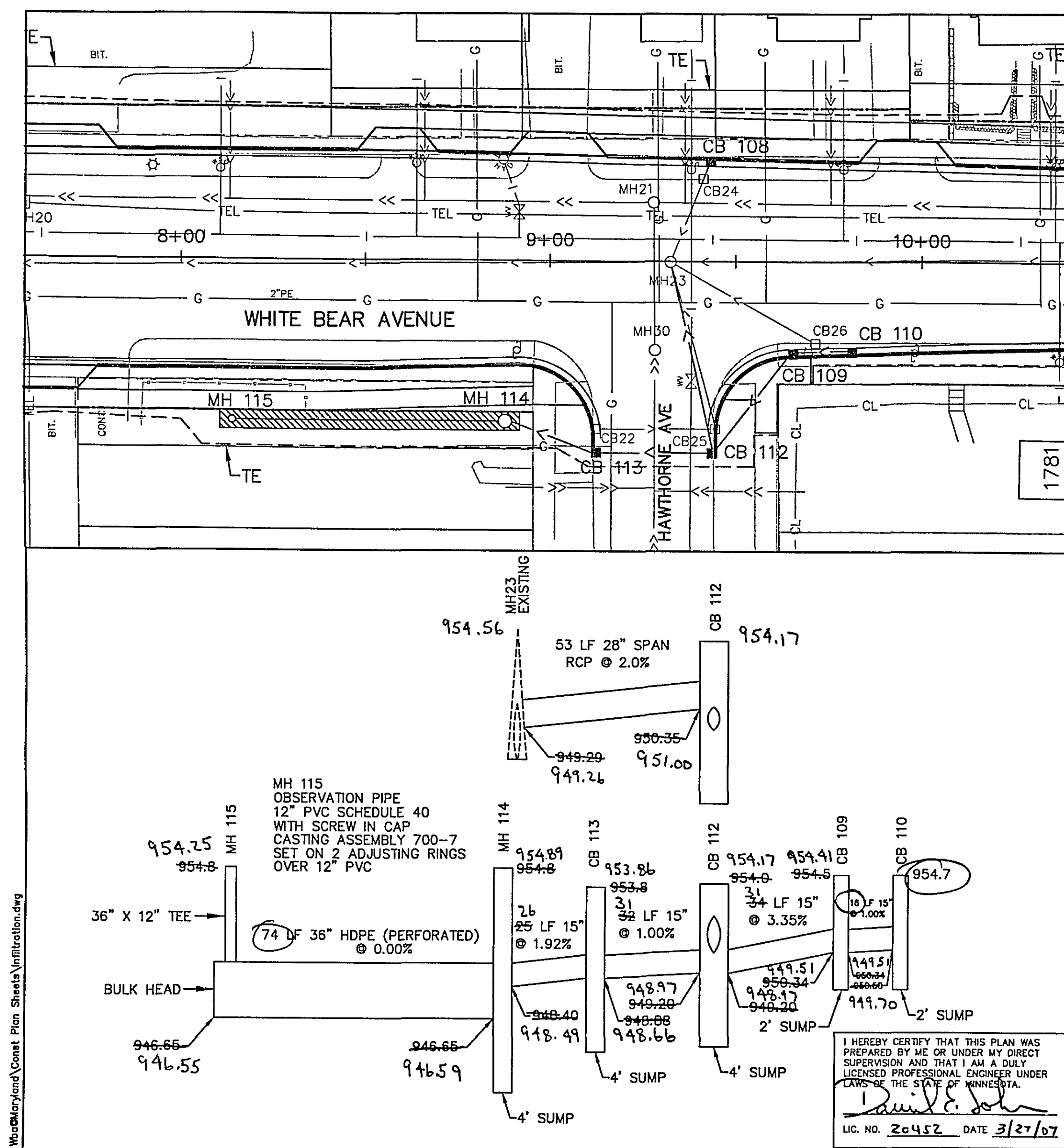
PERMANENT PAVEMENT MARKINGS				POLYPREFORM TAPE				PAVEMENT MESSAGES		
LOCATION	4" SOLID LINE	4" BROKEN LINE	4" DOUBLE LINE	12" SOLID LINE	12" SOLID LINE	12" SOLID LINE	12" SOLID LINE	LEFT TURN ARROW	RIGHT TURN ARROW	SIGN COLLAR
WHITE BEAR AVE AT MARYLAND	WHITE (TAPE)	WHITE (TAPE)	WHITE (TAPE)	WHITE (TAPE)	WHITE (TAPE)	WHITE (TAPE)	WHITE (TAPE)	(TAPE)	(TAPE)	(TAPE)
UN. FT.	UN. FT.	UN. FT.	UN. FT.	UN. FT.	UN. FT.	UN. FT.	UN. FT.	EACH	EACH	EACH
270	481	1435	460	75	5	0	5			
TOTAL	270	481	1435	460	75	5	0	5		

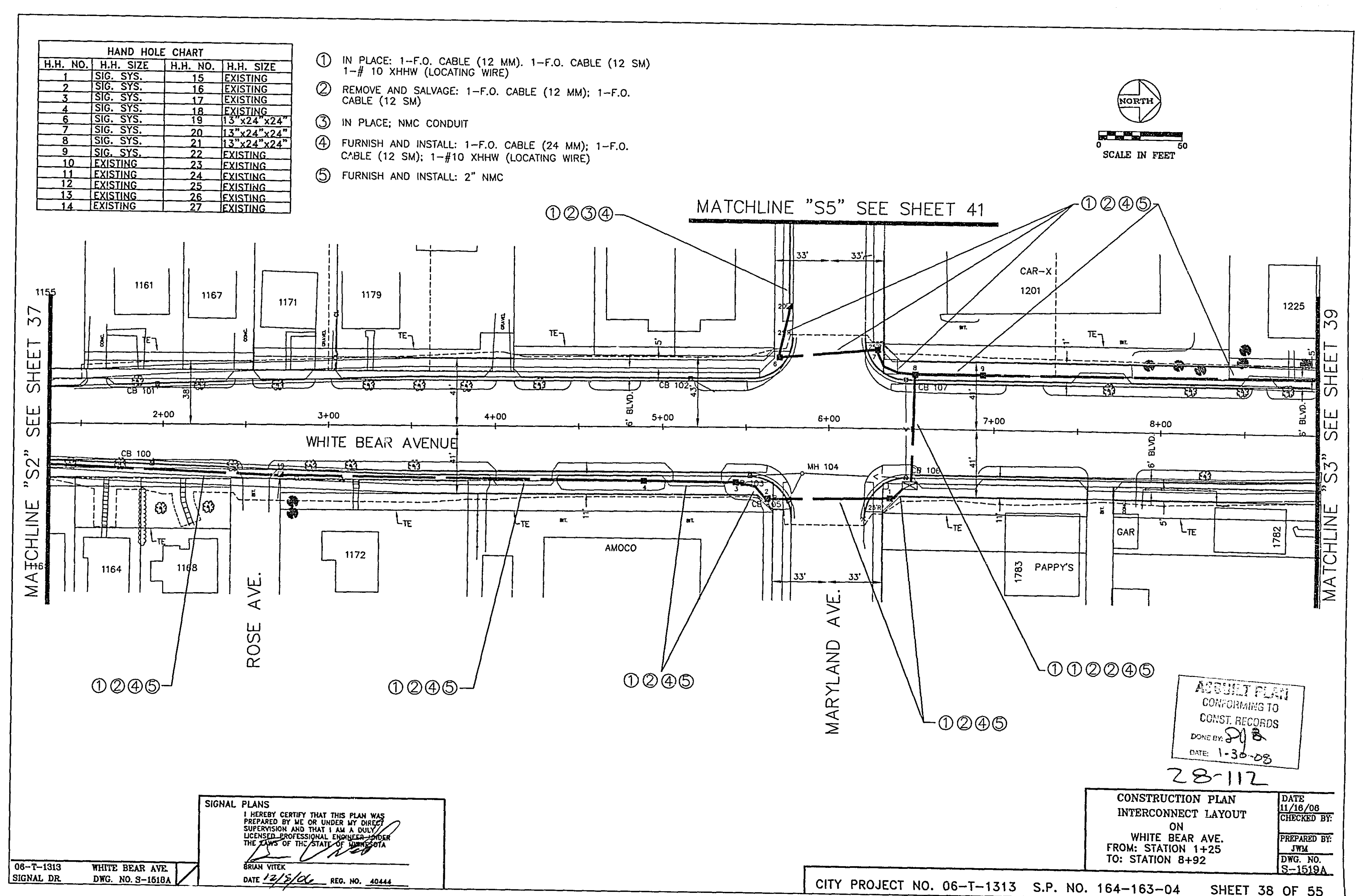
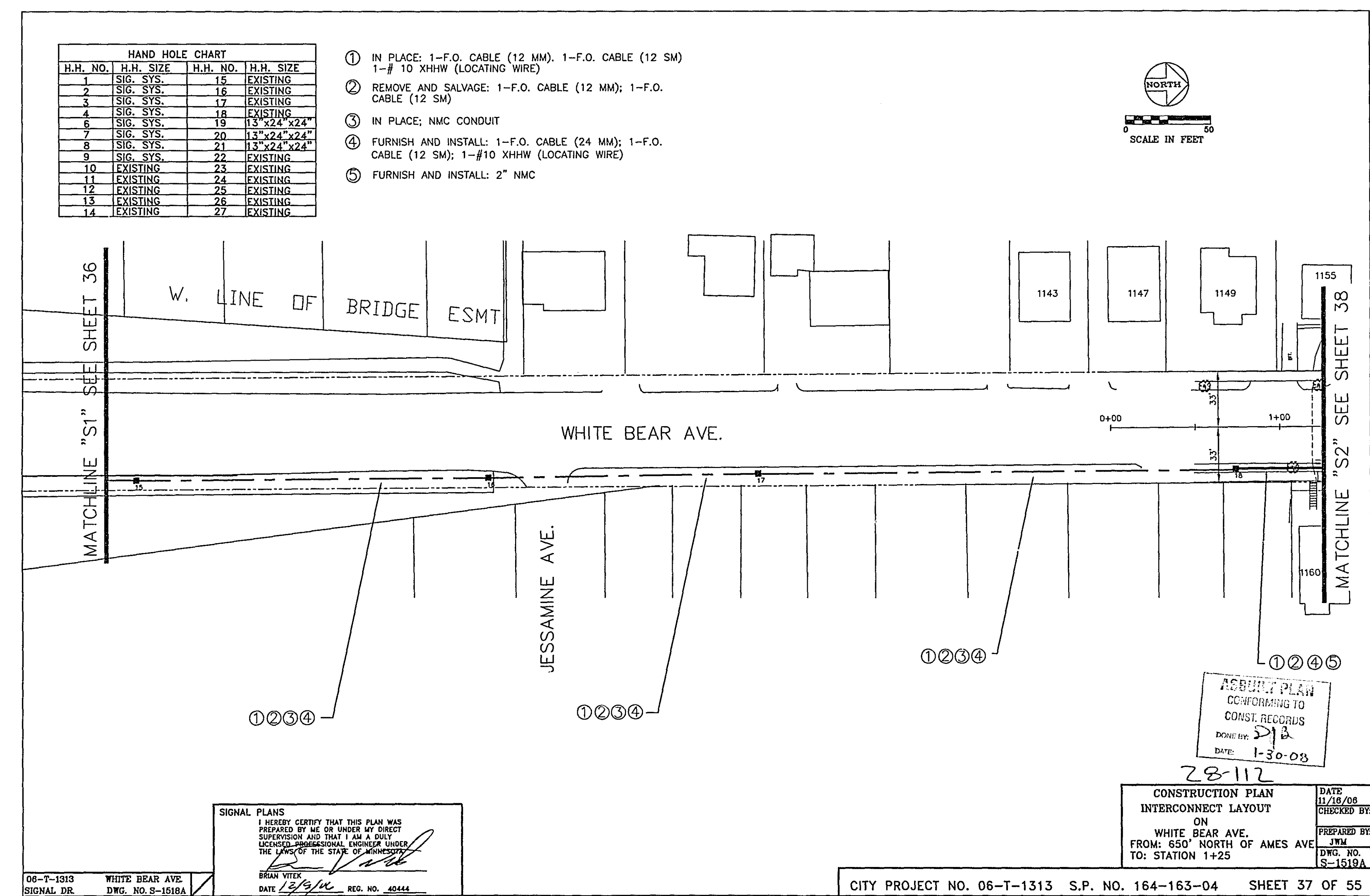
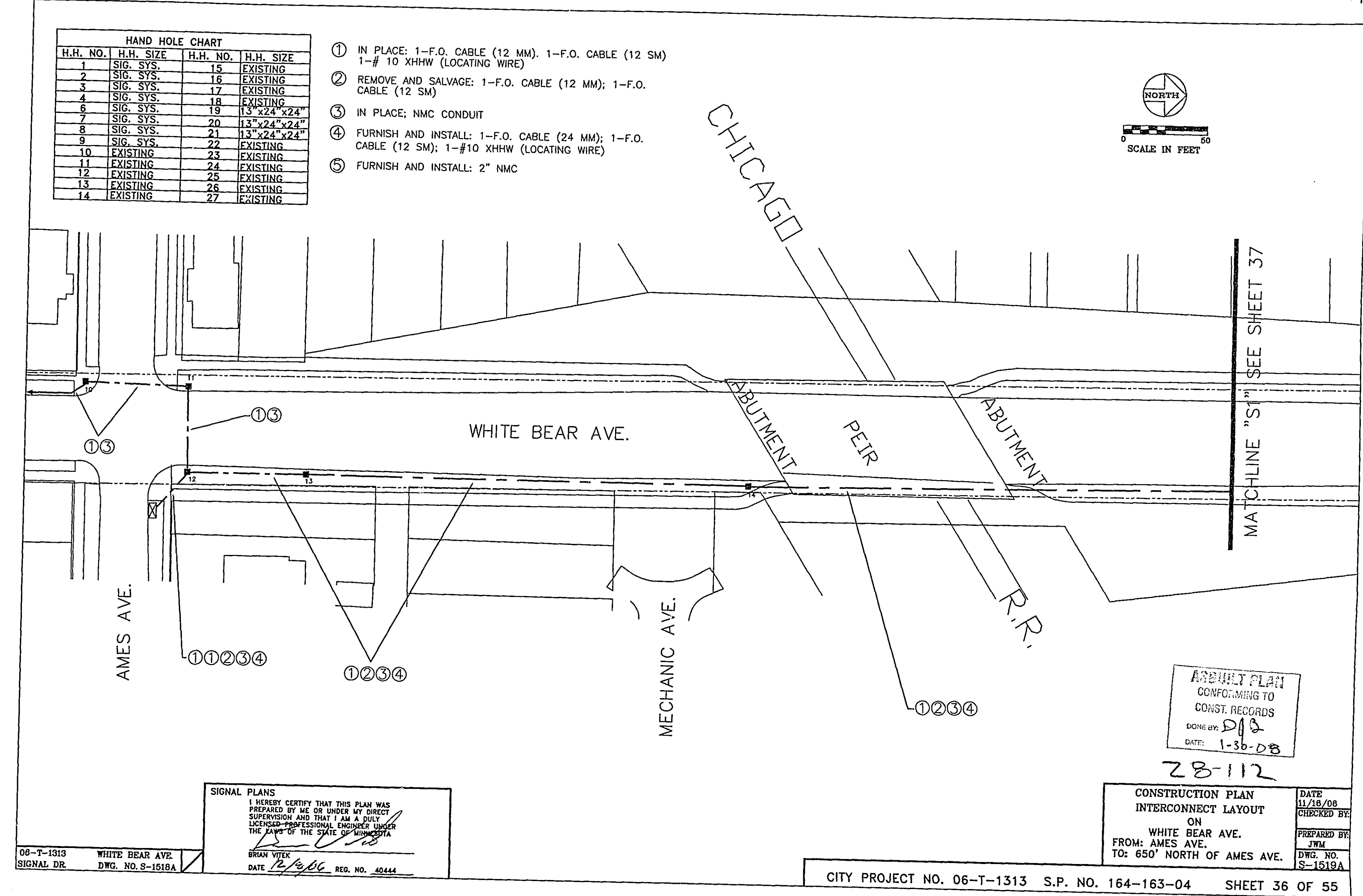
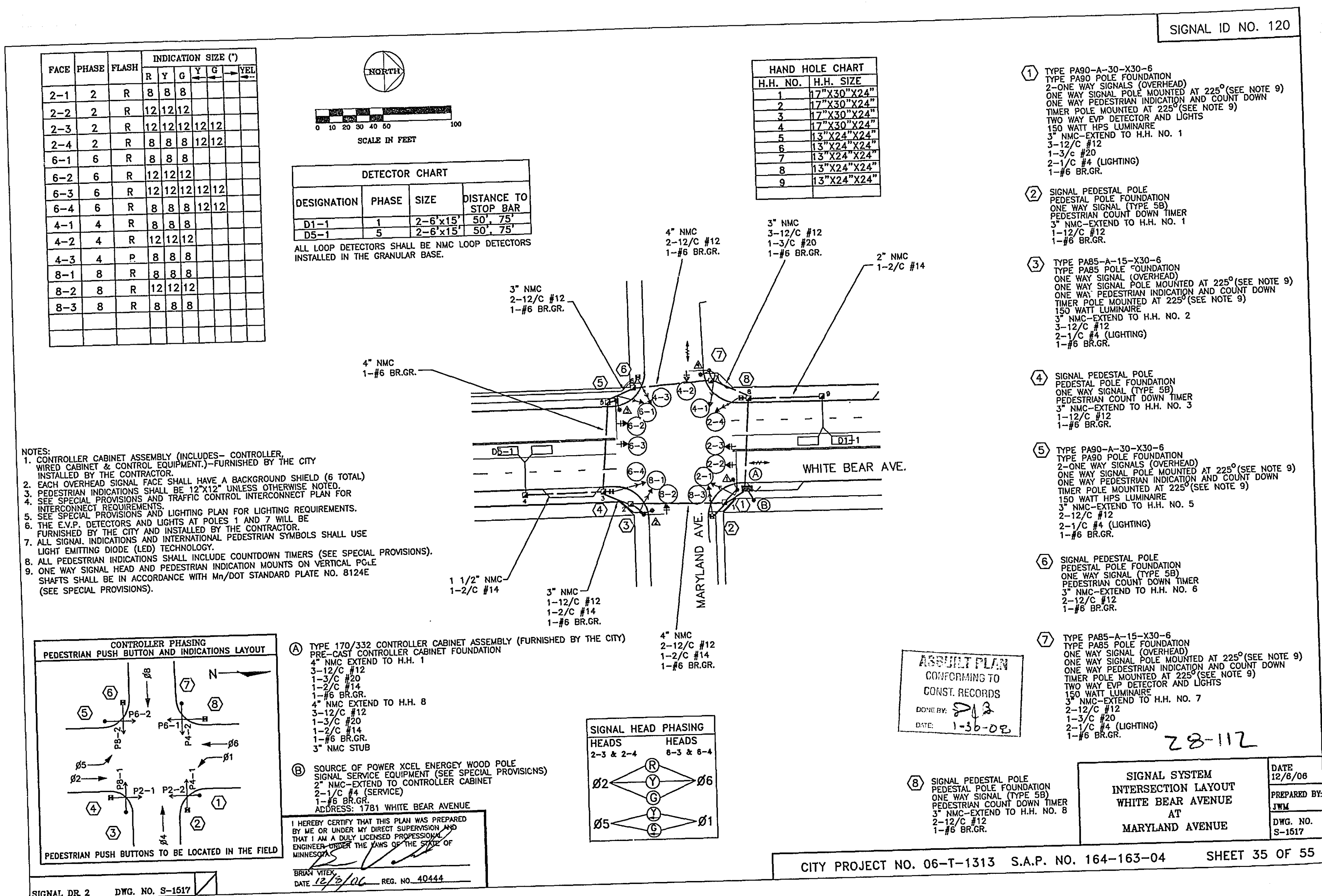
I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

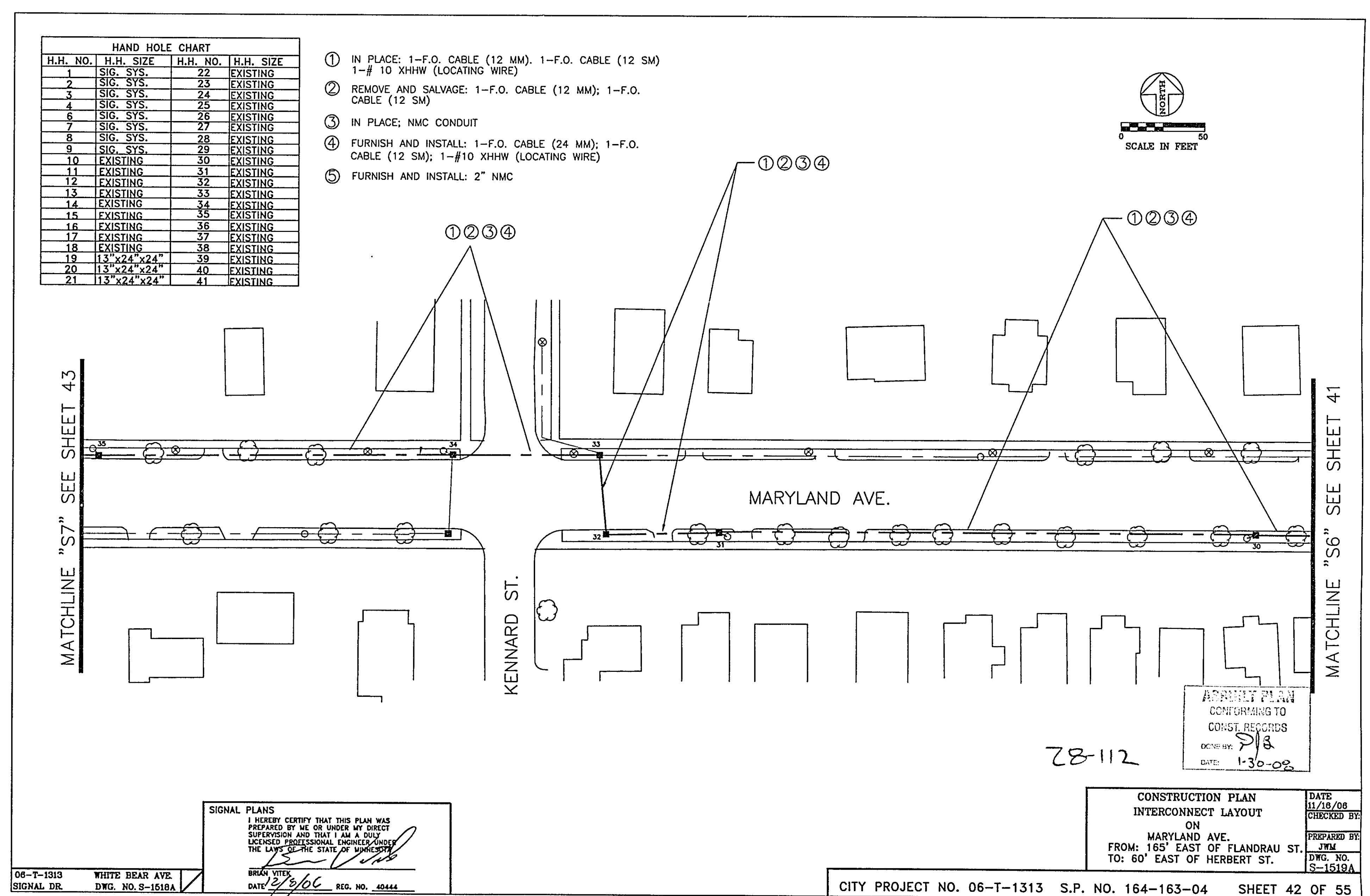
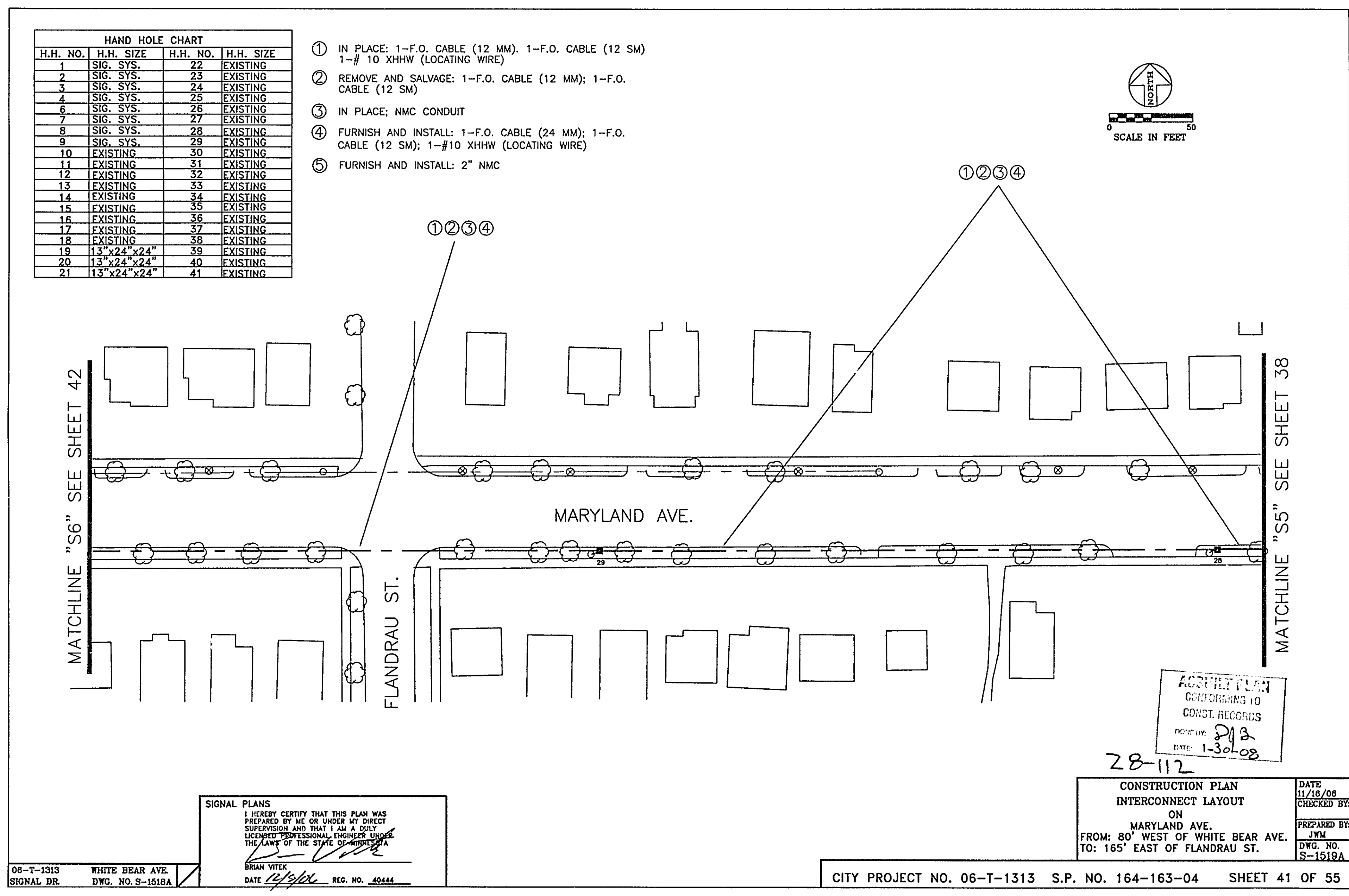
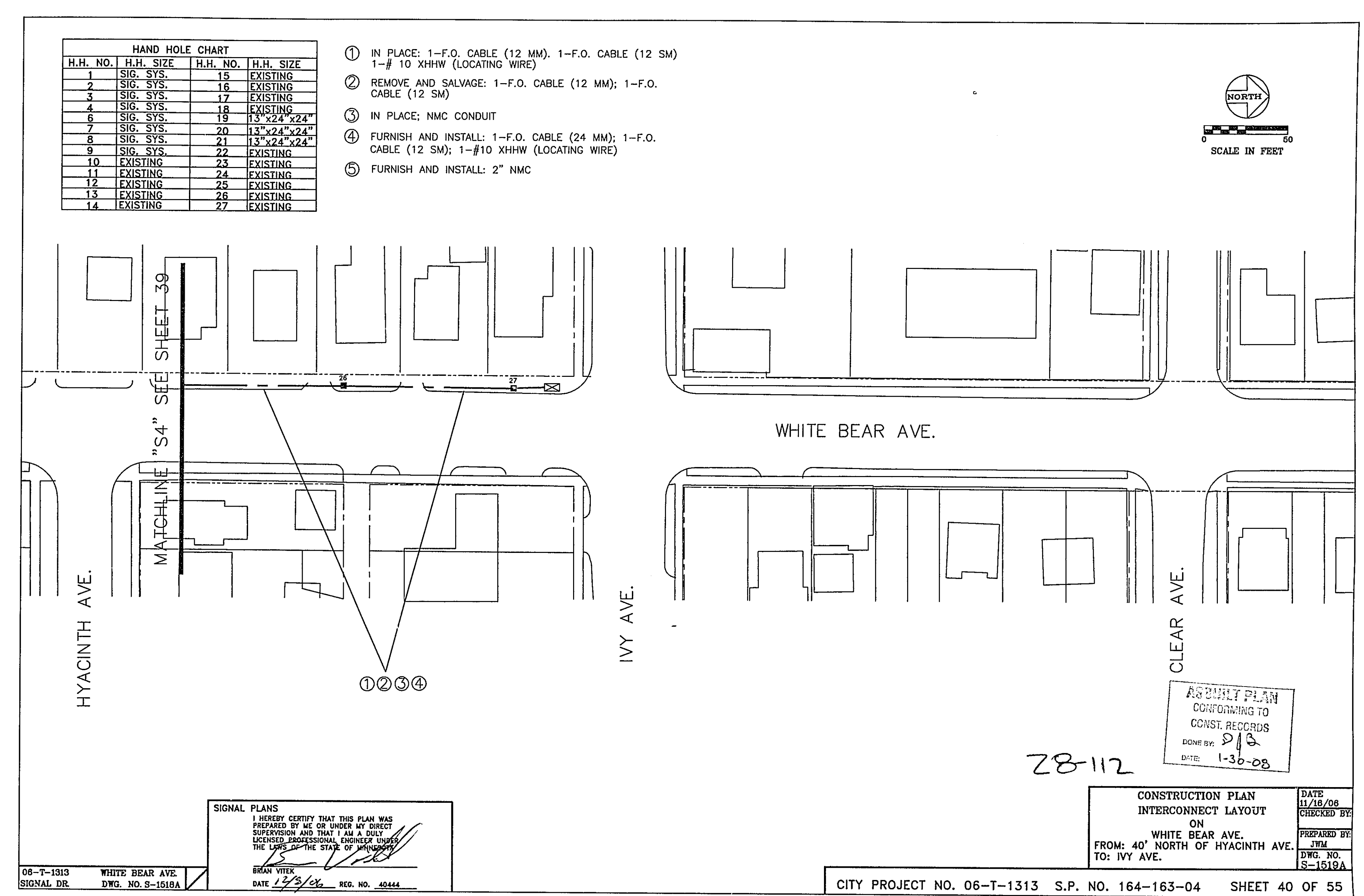
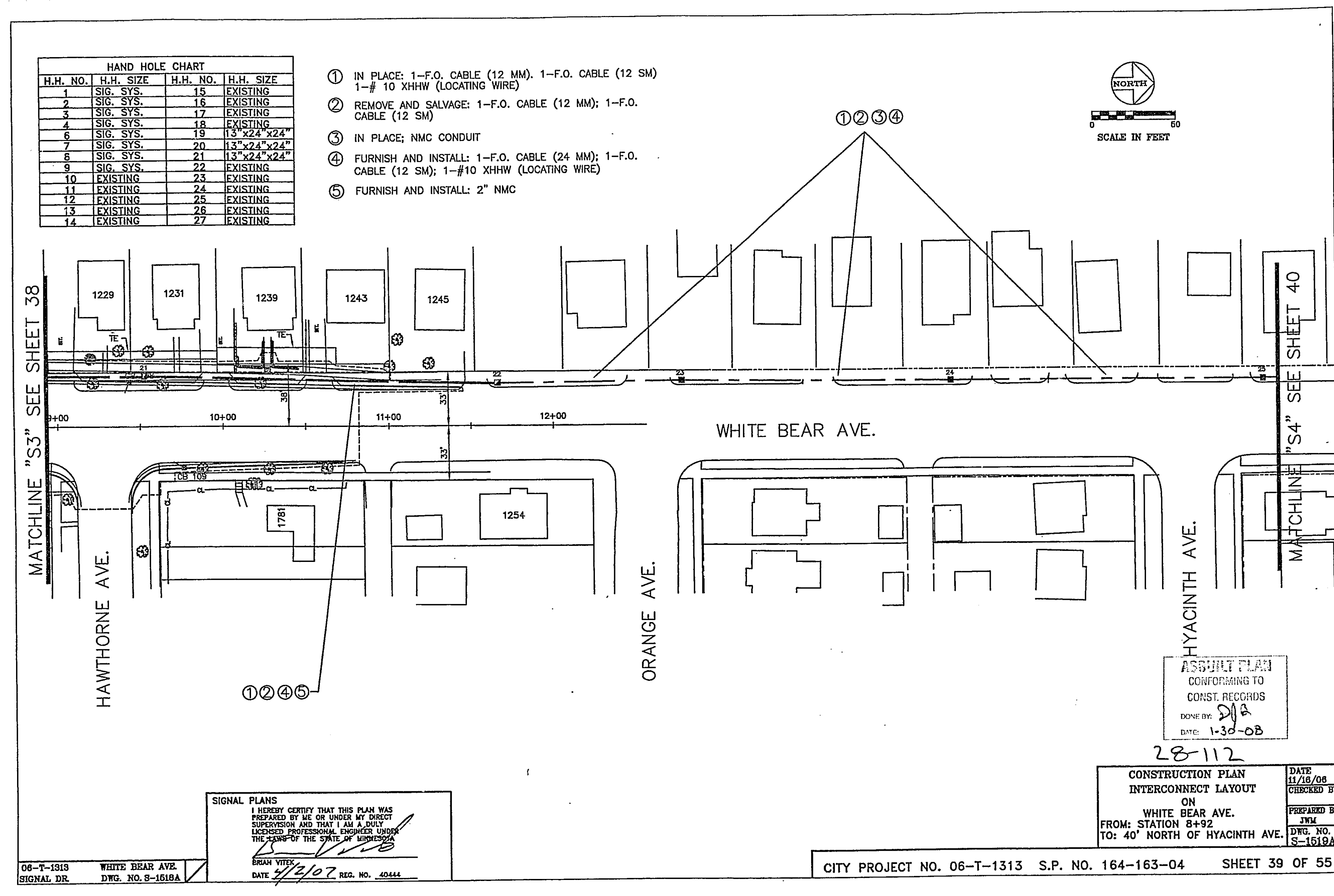
Samuel E. Sch
Date 2/11/07 Lic. No. 20452

CHART M

CLEARING AND GRUBBING			
STATION TO STATION	LOCATION	CLEARING	GRUBBIN
		TREE	TREE
1+44	RT	1	1
1+73	RT	1	1
1+83	LT	1	1
2+22	LT	1	1
2+40	RT	1	1
2+69	LT	1	1
2+90	RT	1	1
3+13	RT	1	1
3+23	LT	1	1
3+53	RT	1	1
3+54	LT	1	1
3+84	LT	1	1
7+68	LT	1	1
7+91	LT	1	1
8+09	LT	1	1
8+20	LT	2	2
8+24	RT	1	1
8+49	LT	2	2
8+76	LT	1	1
8+89	LT	1	1
9+07	RT	1	1
9+20	LT	2	2
9+34	LT	1	1
9+55	LT	1	1
9+67	LT	1	1
9+87	RT	1	1
10+22	LT	1	1
10+28	RT	1	1
10+62	RT	1	1
TOTAL		31	32

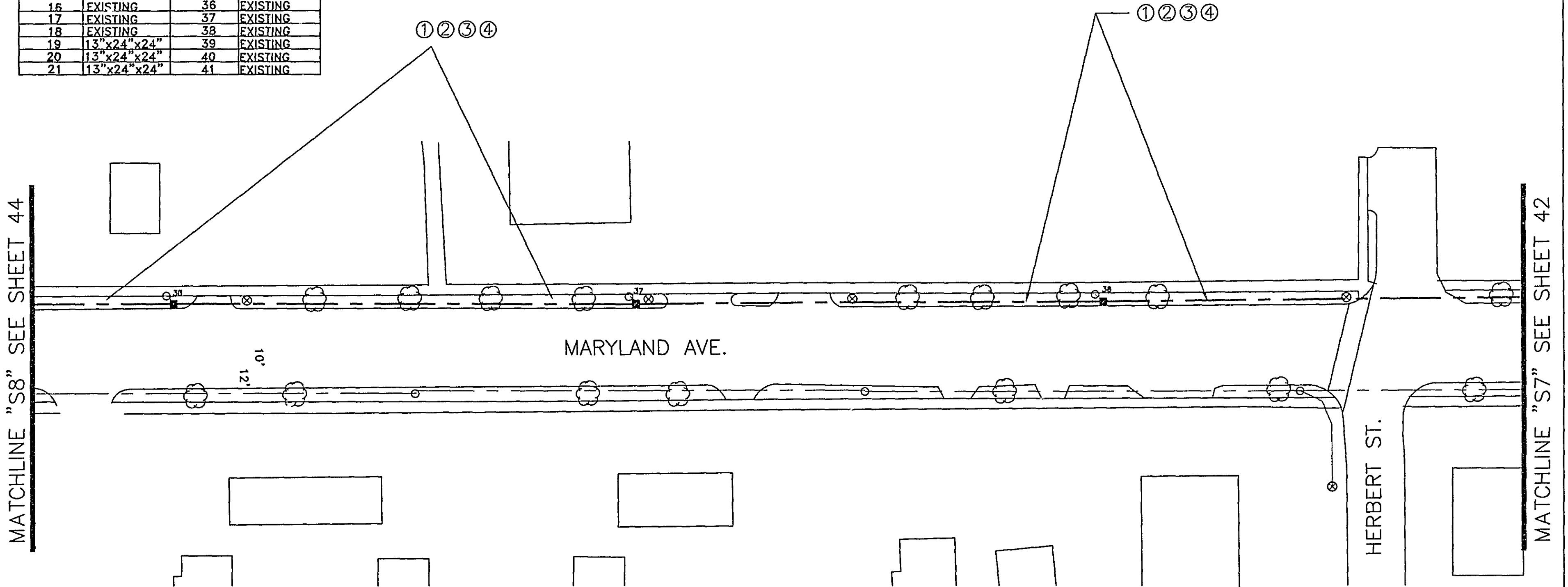
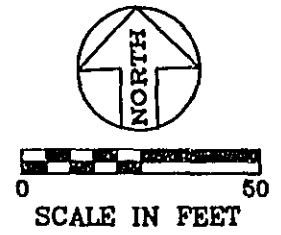






HAND HOLE CHART			
H.H. NO.	H.H. SIZE	H.H. NO.	H.H. SIZE
1	SIG. SYS.	22	EXISTING
2	SIG. SYS.	23	EXISTING
3	SIG. SYS.	24	EXISTING
4	SIG. SYS.	25	EXISTING
6	SIG. SYS.	26	EXISTING
7	SIG. SYS.	27	EXISTING
8	SIG. SYS.	28	EXISTING
9	SIG. SYS.	29	EXISTING
10	EXISTING	30	EXISTING
11	EXISTING	31	EXISTING
12	EXISTING	32	EXISTING
13	EXISTING	33	EXISTING
14	EXISTING	34	EXISTING
15	EXISTING	35	EXISTING
16	EXISTING	36	EXISTING
17	EXISTING	37	EXISTING
18	EXISTING	38	EXISTING
19	13"x24"x24"	39	EXISTING
20	13"x24"x24"	40	EXISTING
21	13"x24"x24"	41	EXISTING

- ① IN PLACE: 1-F.O. CABLE (12 MM). 1-F.O. CABLE (12 SM)
1-# 10 XHHW (LOCATING WIRE)
- ② REMOVE AND SALVAGE: 1-F.O. CABLE (12 MM); 1-F.O. CABLE (12 SM)
- ③ IN PLACE; NMC CONDUIT
- ④ FURNISH AND INSTALL: 1-F.O. CABLE (24 MM); 1-F.O. CABLE (12 SM); 1-#10 XHHW (LOCATING WIRE)
- ⑤ FURNISH AND INSTALL: 2" NMC



SIGNAL PLANS
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

BRIAN VITEK
DATE 12/8/06 REG. NO. 40444

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DATE 1-30-08

CONSTRUCTION PLAN
INTERCONNECT LAYOUT
ON
MARYLAND AVE.
FROM: 60' EAST OF HERBERT ST.
TO: 280' EAST OF HAZELWOOD ST.

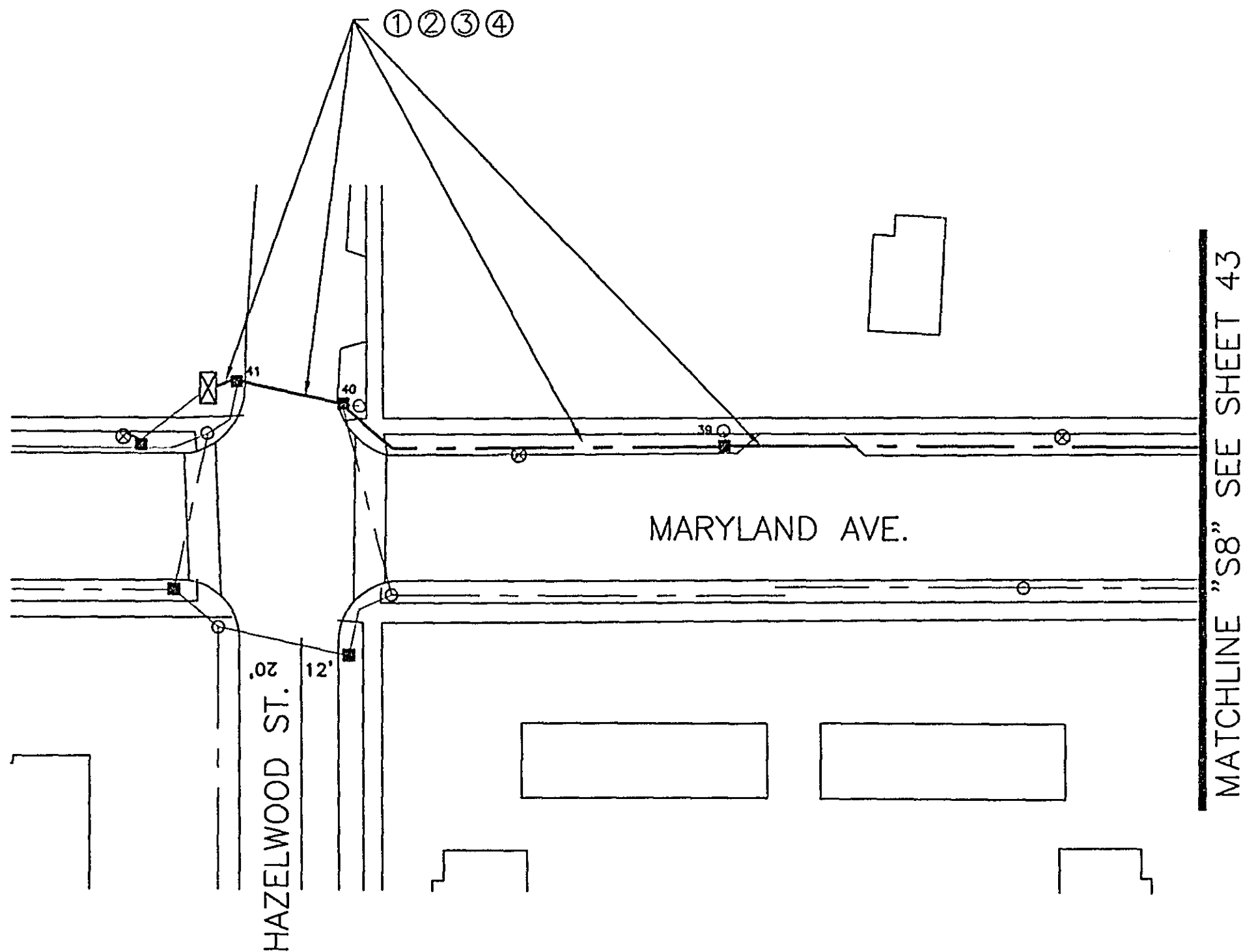
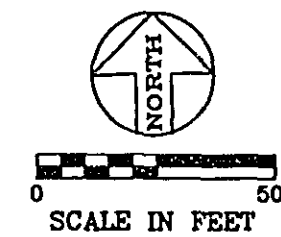
DATE 11/16/08
CHECKED BY:
PREPARED BY:
JWM
DWG. NO.
S-1519A

06-T-1313 WHITE BEAR AVE.
SIGNAL DR. DWG. NO. S-1518A

CITY PROJECT NO. 06-T-1313 S.P. NO. 164-163-04 SHEET 43 OF 55

HAND HOLE CHART			
H.H. NO.	H.H. SIZE	H.H. NO.	H.H. SIZE
1	SIG. SYS.	22	EXISTING
2	SIG. SYS.	23	EXISTING
3	SIG. SYS.	24	EXISTING
4	SIG. SYS.	25	EXISTING
6	SIG. SYS.	26	EXISTING
7	SIG. SYS.	27	EXISTING
8	SIG. SYS.	28	EXISTING
9	SIG. SYS.	29	EXISTING
10	EXISTING	30	EXISTING
11	EXISTING	31	EXISTING
12	EXISTING	32	EXISTING
13	EXISTING	33	EXISTING
14	EXISTING	34	EXISTING
15	EXISTING	35	EXISTING
16	EXISTING	36	EXISTING
17	EXISTING	37	EXISTING
18	EXISTING	38	EXISTING
19	13"x24"x24"	39	EXISTING
20	13"x24"x24"	40	EXISTING
21	13"x24"x24"	41	EXISTING

- ① IN PLACE: 1-F.O. CABLE (12 MM). 1-F.O. CABLE (12 SM)
1-# 10 XHHW (LOCATING WIRE)
- ② REMOVE AND SALVAGE: 1-F.O. CABLE (12 MM); 1-F.O. CABLE (12 SM)
- ③ IN PLACE; NMC CONDUIT
- ④ FURNISH AND INSTALL: 1-F.O. CABLE (24 MM); 1-F.O. CABLE (12 SM); 1-#10 XHHW (LOCATING WIRE)
- ⑤ FURNISH AND INSTALL: 2" NMC



SIGNAL PLANS
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

BRIAN VITEK
DATE 12/8/06 REG. NO. 40444

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DATE 1-30-08

CONSTRUCTION PLAN
INTERCONNECT LAYOUT
ON
MARYLAND AVE.
FROM: 280' EAST OF HAZELWOOD ST.
TO: HAZELWOOD ST.

DATE 11/16/08
CHECKED BY:
PREPARED BY:
JWM
DWG. NO.
S-1519A

06-T-1313 WHITE BEAR AVE.
SIGNAL DR. DWG. NO. S-1518A

CITY PROJECT NO. 06-T-1313 S.P. NO. 164-163-04 SHEET 44 OF 55