



C&S Engineers, Inc.
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COGAN AVENUE
RECONSTRUCTION
CITY OF PLATTSBURGH

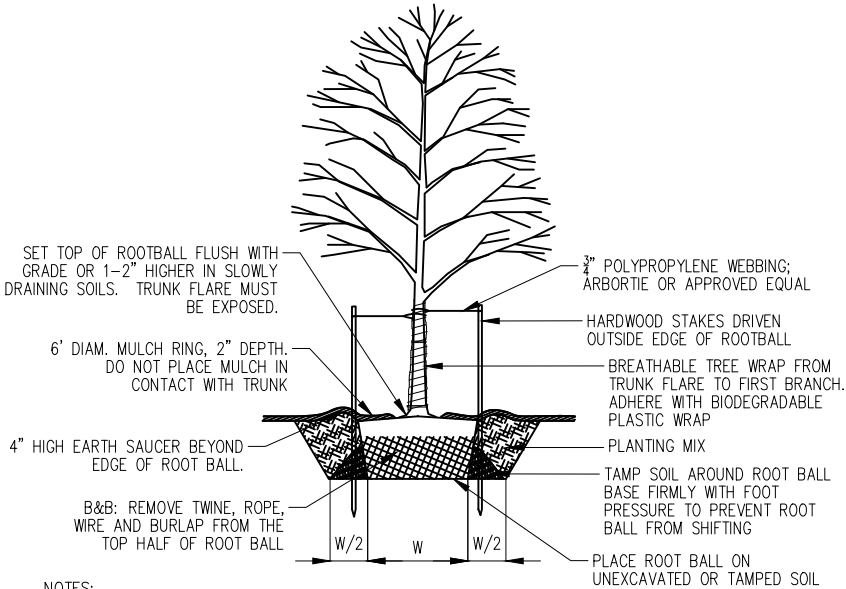
MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: A54.003.001		
DATE: MARCH 2021		
DRAWN BY: S. GALLAGHER		
DESIGNED BY: M. GRIDLEY		
CHECKED BY: T. HUMPHREY		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

LANDSCAPE
DETAILS

LAD-01

SHEET 31 OF 59

Mer 04_2021 - 8:59am
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NOTES:

1. STAKE TREES AS DIRECTED BY THE ENGINEER IN CHARGE. STAKING WILL BE REQUIRED WHEN ROOT BALLS ARE VERY SANDY OR WET CLAY, WHEN SOIL IS VERY SOFT, OR WHEN PLANTING LOCATIONS ARE WINDY.
2. TIGHTEN ARBOTIE ONLY ENOUGH TO KEEP FROM SLIPPING. ALLOW FOR SOME TRUNK MOVEMENT.
3. PRUNE ONLY CROSSING LIMBS, CO-DOMINANT LEADERS AND BROKEN OR DEAD BRANCHES.
4. TREE WRAP SHALL BE INSTALLED AT TIME OF PLANTING AND REMOVED 12 MONTHS AFTER PLANTING.

DECIDUOUS TREE PLANTING DETAIL

TABLE OF TREE REMOVALS								
ITEM 614.060104 - TREE REMOVAL OVER 4 INCHES TO 6 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED								
ITEM 614.060304 - TREE REMOVAL OVER 12 INCHES TO 18 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED								
ITEM 614.060404 - TREE REMOVAL OVER 18 INCHES TO 24 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED								
ITEM 614.060504 - TREE REMOVAL OVER 24 INCHES TO 36 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED								
ITEM 614.060704 - TREE REMOVAL OVER 48 INCHES TO 60 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED								
ITEM 614.0701 PRE-EXISTING STUMP REMOVAL UP TO 24 INCH DIAMETER AT 6 INCHES ABOVE GRADE								
STATION	OFFSET (FT)	SIDE	ITEM 614.060104 (EA)	ITEM 614.060304 (EA)	ITEM 614.060404 (EA)	ITEM 614.060504 (EA)	ITEM 614.060704 (EA)	ITEM 614.0701 (EA)
3+97	26	LT		1				
5+64	24	RT		1				
6+46	24	RT			1			
7+16	25	RT			1			
7+52	24	RT			1			
11+39	19	LT		1				
11+50	31	RT	1					
11+95	20	LT				1		
12+28	29	RT						1
12+68	21	LT					1	
13+55	25	RT		1				
15+35	23	RT				1		
16+92	24	LT		1				
TOTAL:			1	5	3	2	1	1

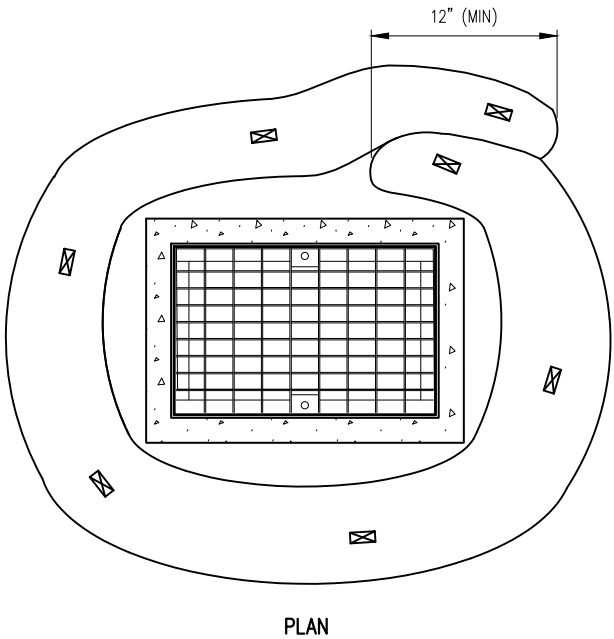
TABLE OF TREE PLANTINGS					
ITEM 611.0161 - PLANTING - MAJOR DECIDUOUS TREES - 2 1/2 INCH CALIPER BALL & BURLAP, FIELD POTTED OR FIELD BOXED					
STATION	OFFSET (FT)	SIDE	CANADA RED CHOKECHERRY (PRUNUS VIRGINIANA 'CANADA SELECT')	JAPANESE LILAC (TILIA CORDATA)	LITTLE LEAF LINDEN (SYRINGA RETICULATA)
3+98	32	LT	1		
5+66	31	RT		1	
6+47	30	RT			1
7+16	30	RT			1
7+52	29	RT			1
11+61	25	RT			1
11+95	34	LT	1		
12+68	35	LT	1		
13+55	30	RT			1
15+36	29	RT			1
16+82	40	LT		1	
TOTAL:			3	2	6

SEDIMENT AND EROSION CONTROL NOTES

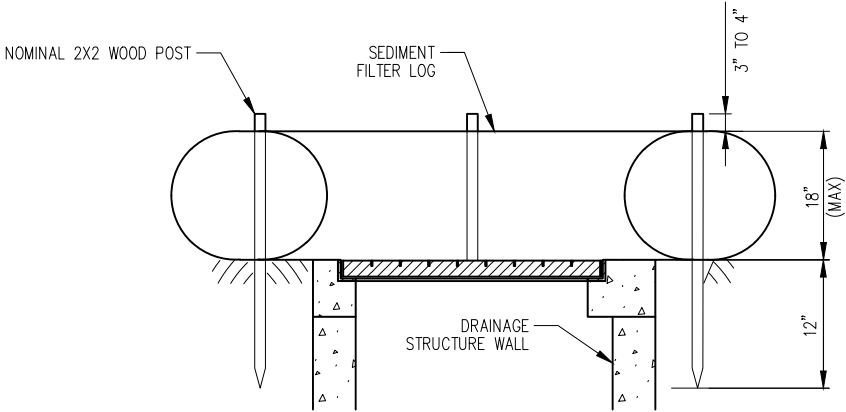
1. THE CONTRACTOR SHALL COMPLY WITH THE STORMWATER POLLUTION PREVENTION REQUIREMENTS IN THE CONTRACT DOCUMENTS. REFER TO THE PROJECT PLANS, DETAILS AND NOTES FOR SOIL AND EROSION CONTROL REQUIREMENTS, ADDITIONAL EROSION CONTROL MEASURES MAY BE NECESSARY, IF DEEMED BY THE ENGINEER.
2. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE ENGINEER IN CHARGE HIS WRITTEN SCHEDULE AND PROPOSED MEASURES FOR TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL WORK AND SCHEDULE OF OPERATIONS AS REQUIRED BY SECTION 209 OF THE NYSDOT STANDARD SPECIFICATIONS.
3. SOIL EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE INSTALLED AND FULLY FUNCTIONAL PRIOR TO ANY SITE DISTURBANCE. SOIL EROSION AND SEDIMENT CONTROL FACILITIES ARE TO BE MAINTAINED DURING CONSTRUCTION AND REMOVED UPON COMPLETION OF CONSTRUCTION.
4. ALL EROSION CONTROLS SHALL REMAIN IN PLACE UNTIL THE NEW SLOPES ARE STABILIZED WITH SEEDING AND/OR SLOPE PROTECTION.
5. THE LOCATION OF EROSION AND SEDIMENT MEASURES AS INDICATED IN THE CONTRACT DOCUMENTS, MAY REQUIRE FIELD ADJUSTMENT DEPENDING ON THE SEQUENCE OF CONSTRUCTION ACTIVITIES, CONSTRUCTION METHODS AND/OR ACTUAL FIELD CONDITIONS. THE ENGINEER SHALL BE NOTIFIED OF ANY SIGNIFICANT FIELD CHANGES TO THE EROSION AND SEDIMENT CONTROL MEASURES INDICATED IN THE CONTRACT DOCUMENTS.
6. OTHER EROSION CONTROL MEASURES MAY BE REQUIRED A.O.B.E. IN ADDITION TO SCHEMES SHOWN.
7. ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PREVENT MIGRATION INTO WATER BY SILT, SEDIMENT, FUELS, SOLVENTS, LUBRICANTS, CONCRETE LEACHATE OR ANY OTHER POLLUTANT ASSOCIATED WITH CONSTRUCTION PROCEDURES.
8. MEASURES SHALL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS, AFTER EACH RAINFALL OF 1/2 INCH OR MORE WITHIN A 12 HOUR PERIOD, OR DAILY DURING PROLONGED RAINFALL. MEASURES SHALL BE CLEANED AND REPAIRED AS REQUIRED.
9. ANY DISTURBED AREAS WHICH ARE LEFT EXPOSED MORE THAN 7 DAYS AND ARE NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE TEMPORARY SEEDING AND MULCHING (ITEM 209.1003) AS ORDERED BY THE ENGINEER. MULCH SHALL BE MAINTAINED UNTIL SUITABLE VEGETATIVE COVER IS ESTABLISHED.
10. ANY GRADED AREAS NOT SUBJECT TO FURTHER DISTURBANCE OR CONSTRUCTION TRAFFIC SHALL BE ESTABLISHED WITH PERMANENT VEGETATIVE COVER, AS PER CONTRACT SPECIFICATIONS, WITHIN 7 DAYS OF FINAL GRADING.
11. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORM WATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
12. RING ANY TEMPORARY STOCKPILES OR TOPSOIL OR FILL WITH SILT FENCES AS SHOWN IN THE SILT FENCE DETAIL ON STANDARD SHEET 209-01 TO CONTROL EROSION OF THE PILE. PILES EXPOSED FOR LONGER THAN TWO WEEKS SHALL BE STABILIZED WITH A TEMPORARY SEEDING.
13. ALL METHODS AND EQUIPMENT PROPOSED BY THE CONTRACTOR TO ACCOMPLISH THE WORK SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER IN CHARGE.
14. ON THE SAME DAY THAT EXCAVATION IS PERFORMED FOR THE REPLACEMENT OF SIDEWALK, GRAVEL BASE COURSE SHALL BE PLACED TO THE DIMENSIONS SHOWN ON THE PLANS.
15. ALL ROADWAYS SHALL BE KEPT CLEAN OF MUD AND DEBRIS. SOIL SHALL NOT BE STOCKPILED ON THE ROADWAY, AND SHALL BE REMOVED FROM THE ROADWAY AT THE END OF EACH WORKDAY.
16. ALL AREAS OF CONSTRUCTION SHALL BE LEFT IN STABLE CONDITION AT THE END OF EACH WORKDAY.
17. IN ACCORDANCE WITH SECTIONS 107-12 AND 209-3.01 OF THE NYSDOT STANDARD SPECIFICATIONS, THE CONTRACTOR SHALL DESIGNATE AN "EROSION AND SEDIMENT CONTROL SUPERVISOR" FOR THE PROJECT. THE SUPERVISOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE EROSION AND SEDIMENT CONTROL PLAN AND FOR INSPECTING AND MAINTAINING THE CONTROL MEASURES. THE NAME AND QUALIFICATIONS (TRAINING AND EXPERIENCE) OF THIS INDIVIDUAL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO STARTING EARTHWORK.

CONCRETE MANAGEMENT NOTES

1. DURING CONSTRUCTION, NO WET OR FRESH CONCRETE OR LEACHATE SHALL BE ALLOWED TO ESCAPE TO ANY WATERS NOR SHALL WASHINGS FROM CONCRETE TRUCKS, MIXERS OR OTHER DEVICES BE ALLOWED TO ENTER ANY WATERS.
2. CONCRETE TRUCKS AND TRANSFER CHUTES MAY BE WASHED-OUT ON-SITE IN AN AREA APPROVED BY THE EIC. UTILIZE A CONCRETE WASHOUT TO COLLECT ALL WASH WATER AND CONCRETE WASTE.
3. THE WASHOUT AREA SHALL BE LOCATED AWAY FROM STORM DRAINS, OPEN DITCHES OR WATER BODIES.
4. SIGNS SHALL BE POSTED THROUGHOUT THE JOB SITE, DIRECTING CREWS AND CONCRETE TRUCKS TO CONCRETE WASHOUTS.
5. UPON COMPLETION OF THE CONCRETE WORK, BREAK UP, REMOVE, AND HAUL AWAY SOLID CONCRETE THAT HAS ACCUMULATED IN THE WASHOUT.



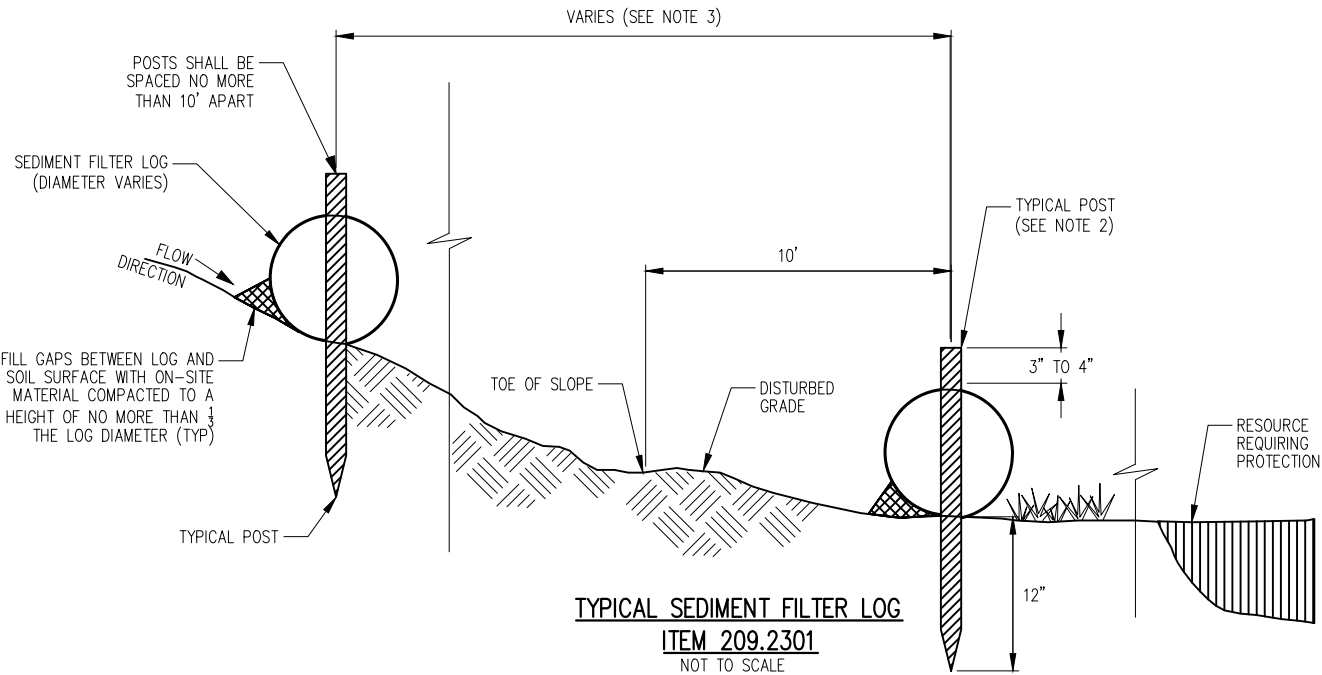
PLAN
DRAINAGE STRUCTURE INLET PROTECTION – TEMPORARY
(SEDIMENT FILTER LOG)



CROSS SECTIONS
DRAINAGE STRUCTURE INLET PROTECTION – TEMPORARY
(SEDIMENT FILTER LOG)
ITEM 209.1703

SEE TABLE OF INLET PROTECTION ON MST-03 FOR LOCATIONS

- NOTES:
1. SEDIMENT FILTER LOGS SHALL BE SECURED TO THE SOIL SURFACE WITH WOODEN POSTS SPACED AT A MAXIMUM OF 2' APART. WHEN USED ON A PAVED SURFACE, THE LOG ENDS SHALL BE FASTENED WITH PLASTIC TIES OR IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.



TYPICAL SEDIMENT FILTER LOG
ITEM 209.2301
NOT TO SCALE

SEE TABLE OF SEDIMENT FILTER LOG ON MST-03 FOR LOCATIONS

- NOTES:
1. FOR LOCATIONS THAT WARRANT PLACEMENT OF SEDIMENT FILTER LOGS AT THE BASE OF SLOPES, SEDIMENT FILTER LOGS SHALL BE PLACED AT A MINIMUM OF 10 FEET FROM THE TOE OF THE SLOPE, TO PROVIDE ADEQUATE AREA FOR SEDIMENT STORAGE AND FACILITATE MAINTENANCE OF THE SEDIMENT CONTAINMENT AREA.
2. WOOD POSTS FOR SEDIMENT FILTER LOGS SHALL BE NOMINAL 2'X2'. THE LENGTH OF FILTER LOG POSTS SHALL BE 16" GREATER THAT THE DIAMETER OF THE LOG.
3. SEDIMENT FILTER LOG POSTS SHALL BE SPACED NO MORE THAN 10 FEET APART. ENDS OF LOGS SHALL BE OVERLAPPED BY 24 INCHES AND STAKED SIDE BY SIDE. THE MAXIMUM SLOPE LENGTH (DISTANCE BETWEEN ROWS) SHALL FOLLOW THE SEDIMENT FILTER LOG MAX SLOPE LENGTH TABLE ON NYSDOT STANDARD SHEET 209-01.

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COMPANIES

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DRAWN BY: K. NOWODWORSKI		
DESIGNED BY: K. NOWODWORSKI		
CHECKED BY: T. HUMPHREY		
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EROSION CONTROL
NOTES AND DETAILS

ECD-01

SHEET 32 OF 59

GENERAL NOTES

1. REFER TO THE “OWNERS REQUIREMENTS FOR WATER MAINS AND APPURTENANCES” ON THIS SHEET FOR ADDITIONAL REQUIREMENTS.
2. ALL FITTINGS SHALL BE MECHANICALLY RESTRAINED AND SHALL HAVE A MINIMUM COVER DEPTH OF FIVE FEET.
3. WHERE PORTIONS OF DUCTILE IRON PIPE WATER MAIN IS REQUIRED TO BE FULLY RESTRAINED, RESTRAINED JOINT PIPE (FLEX–RING JOINT PIPE, TR FLEX PIPE OR EQUAL) MAY BE USED.
4. REFER TO THE 663 SERIES OF THE NYSDOT STANDARD SHEETS FOR ADDITIONAL WATER MAIN INSTALLATION DETAILS AND NOTES.
5. THE DEPTHS OF EXISTING UTILITIES ARE UNKNOWN. WHERE THE NEW WATER MAIN CROSSES AN EXISTING UTILITY, THE CONTRACTOR SHALL PROCEED WITH CARE NOT TO DISTURB THE EXISTING UTILITY. SHOULD THE CONTRACTOR DISCOVER A CONFLICT, NOTIFY THE E.I.C. IMMEDIATELY.
6. THE CONTRACTOR SHALL ABANDON ALL EXISTING VALVES AND VALVE BOXES TO THE SATISFACTION OF THE CITY OF PLATTSBURGH REPRESENTATIVE AND THE E.I.C.
7. THE EXISTING WATER MAIN IS TO BE ABANDONED. CAP THE EXISTING WATER MAIN AS REQUIRED AND FILL WITH FLOWABLE FILL (CLSM).

WATER SERVICE AND SHUT DOWN NOTES

1. SHUT DOWN OF WATER SERVICE TO ANY SIDE ROAD CONNECTION OR BUILDING FACILITY SHALL BE LIMITED TO 2 HOURS WHILE CONNECTION IS TRANSFERRED FROM THE EXISTING WATER MAIN.
2. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF PLATTSBURGH TO PROVIDE WRITTEN NOTICES TO WATER USERS THAT WILL BE IMPACTED BY A WATER SHUTDOWN. NO USERS SHALL BE OUT OF SERVICE FOR MORE THAN 2 HOURS WITHOUT PRIOR APPROVAL FROM THE CITY OF PLATTSBURGH.
3. ANY WATER SHUTDOWNS THAT WILL IMPACT WATER SUPPLY SHALL BE COORDINATED A MINIMUM OF ONE WEEK IN ADVANCE WITH THE CITY OF PLATTSBURGH, AND WILL NEED TO BE PERFORMED DURING OFF–PEAK HOURS.
4. ALL CURB VALVE BOXES MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL LOCATE ALL VALVE BOXES WITH ASSISTANCE FROM THE CITY. ALL VALVE BOXES SHALL REMAIN EXPOSED AT GRADE AT THE COMPLETION OF THE PROJECT.
5. THE CONTRACTOR SHALL ALERT THE CITY PLATTSBURGH AND THE E.I.C. IF ANY PRIVATE SERVICE CONNECTIONS ARE LEAD OR GALVANIZED PIPE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTING ALL EXISTING SERVICE CONNECTIONS TO THE NEW WATER MAIN TO THE SATISFACTION OF THE CITY OF PLATTSBURGH REPRESENTATIVE AND THE E.I.C. SPLICING OF WATER SERVICE PIPE BETWEEN THE MAIN AND CURB BOX IS NOT PERMITTED.

OWNERS REQUIREMENTS FOR WATER MAINS AND APPURTENANCES

GENERAL:
THE FOLLOWING ARE THE REQUIREMENTS OF THE OWNER OF THE WATER SYSTEM FOR THIS CONTRACT. ALL MANUFACTURER OR PROPRIETARY MATERIAL DESIGNATIONS ARE THE REQUIREMENT OF THE OWNER. APPROVAL OF AN EQUAL ITEM OTHER THAN THAT SPECIFIED MUST BE GRANTED BY THE OWNER

THE OWNER MUST REVIEW AND APPROVE ALL MATERIALS AND DETAILS PRIOR TO INSTALLATION. THE ESTIMATED TIME REQUIRED FOR APPROVAL BY THE OWNER DURING CONSTRUCTION IS 7 BUSINESS DAYS.

CONTACT INFORMATION
OWNER: CITY OF PLATTSBURGH DEPARTMENT OF PUBLIC WORKS
ADDRESS: 215 IDAHO AVENUE
CITY, STATE, ZIP: PLATTSBURGH, NEW YORK, 12901
CONTACT:

MATERIALS:

1. PIPE

A. TYPE OF MATERIAL: DUCTILE IRON PIPE (DIP), PRESSURE CLASS 350/THICKNESS CLASS 52 (AWWA STANDARD C–151)

B. LINING: DOUBLE CEMENT LINING

C. TYPE OF JOINT: PUSH–ON

D. BEDDING REQUIREMENTS: 12” SAND ENVELOPE (ALL SIDES)

E. WARNING TAPE: PROVIDE APPROPRIATELY LABELED DETECTABLE UNDERGROUND WARNING UTILITY TAPE
2. FITTINGS & ADAPTORS

A. MECHANICAL JOINT: COMPACT DUCTILE IRON (AWWA STANDARD C–153)

B. LINING: DOUBLE CEMENT LINING

C. BOLT THROUGH MJ X MJ ADAPTORS: INFACOT CORP FOSTER ADAPTOR (OR APPROVED EQUAL)
3. THRUST RESTRAINT

A. ALL FITTINGS, VALVES & HYDRANTS: RESTRAINED MECHANICAL JOINT OR EBBA IRON MEGALUG TRANSITION GASKET

B. TIE RODS ARE NOT ALLOWED
4. RESILIENT WEDGE GATE VALVES/TAPPING VALVES

A. APPROVED MANUFACTURERS: KENNEDY VALVE CO & MUELLER CO.

B. MECHANICAL JOINT, NON RISING STEM, OPEN LEFT (COUNTER–CLOCKWISE) WITH STAINLESS STEEL BONNET BOLTS

C. VALVE BOXES: (2) PIECE, 5 1/4” SCREW TYPE, CAST IRON WITH DROP LID MARKED “WATER”
5. HYDRANTS

A. APPROVED MANUFACTURER: CLOW VALVE CO., MODEL F–2640 “EDDY” WITH DRAIN

B. MAIN VALVE OPENING: 5–1/4”

C. PUMPER NOZZLE: ONE, 4–1/2” NST

D. HOSE NOZZLE: TWO, 2–1/2” NST

E. OPERATING NUT: SQUARE 7/8” X 7/8”, OPEN LEFT (COUNTER–CLOCKWISE)

F. DEPTH OF BURY: 5’–0”

G. COLOR: RED
6. SERVICE PIPE (WATER MAIN TO CURB BOX):

A. ALL SERVICE PIPES, 3/4” TO 1–1/4” SHALL BE TYPE “K” COPPER ASTM B–88
7. SERVICE CORPORATION STOP:

A. 3/4” TO 1–1/4” SHALL BE BALL TYPE, AWWA TAPER THREAD INLET AND COMPRESSION OUTLET.

B. BRONZE SERVICE SADDLE – DOUBLE STRAP REQUIRED FOR >1”

C. APPROVED MANUFACTURE: MUELLER CO.
8. SERVICE CURB STOP:

A. 3/4” TO 1–1/4” SHALL BE BALL TYPE, COMPRESSION INLET AND COMPRESSION OUTLET

B. APPROVED MANUFACTURE: MUELLER CO.
9. SERVICE CURB BOX:

A. 3/4” TO 1–1/4” – CAST IRON EXTENSION TYPE

B. APPROVED MANUFACTURE: MUELLER CO.

WATER MAIN HYDROSTATIC PRESSURE TESTING AND DISINFECTION PROCEDURES

1. EXECUTION OF THE HYDROSTATIC PRESSURE TEST

A. HYDROSTATIC PRESSURE TEST AND LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE WITH AWWA C600.

B. PRESSURE TEST ALL WATER MAINS FROM MAIN LINE VALVE TO MAIN LINE VALVE OR TAPPING VALVE UNLESS OTHERWISE SPECIFIED. TESTING SHALL BE MADE ON SECTIONS NOT TO EXCEED IN 2000 FEET OF LENGTH.

C. THE CONTRACTOR SHALL FURNISH ALL EQUIPMENT, CONNECTIONS, PIPING, METERS, MEASURING, DEVICES, PUMPS, AND TEMPORARY ENCLOSURES NECESSARY TO PERFORM THE REQUIRED TESTS.

D. PRIOR TO FORMAL TESTING, THE MAINS SHALL BE THOROUGHLY FLUSHED. FILL TEST SECTION OF PIPE WITH WATER OF APPROVED QUALITY, AND REMOVE ALL AIR FROM TEST SECTION. WATER FOR TESTING AND FLUSHING SHALL BE OBTAINED FROM EXISTING WATER SYSTEM BY THE CONTRACTOR, FROM THE OWNER. ARRANGEMENTS SHALL BE MADE WITH THE WATER SYSTEM OPERATOR FOR PAYMENT OF WATER USED IF REQUIRED.

E. AFTER FILLING THE WATER MAIN AND PRIOR TO APPLICATION OF PRESSURE TEST, THE TEST SECTION SHALL BE MAINTAINED AT THE WORKING PRESSURE FOR A SUFFICIENT PERIOD OF TIME FOR IT TO STABILIZE. THIS MAY REQUIRE SEVERAL CYCLES OF PRESSURIZING AND BLEEDING TRAPPED AIR PRIOR TO BEGINNING TEST.

F. USING A PUMP CONNECTED TO THE PIPE, RAISE THE WATER PRESSURE TO 150 PSI. TEST PRESSURE SHALL BE BASED ON THE ELEVATION OF THE LOWEST POINT UNDER TEST. USE A 300 PSI MAXIMUM TEST GAUGE TO MEASURE THE PRESSURE. THE PUMP, PIPE, CONNECTIONS, GAUGES, AND MEASURING DEVICES SHALL BE CALIBRATED TO THE SATISFACTION OF THE ENGINEER.

G. THE HYDROSTATIC TEST SHALL BE OF AT LEAST A 2–HOUR DURATION AND THE TEST PRESSURE SHALL NOT VARY BY MORE THAN +/-5 PSI.

F. TEST PRESSURE SHALL BE MAINTAINED WITHIN THIS TOLERANCE BY ADDING MAKEUP WATER IN ACCORDANCE WITH AWWA C600.

G. IF ANY TEST REQUIRES A QUANTITY OF MAKEUP WATER GREATER THAN THE TESTING ALLOWANCE SPECIFIED IN AWWA C600, THE WATER MAIN SHALL BE REPAIRED OR REPLACED. ALL VISIBLE LEAKS ARE TO BE REPAIRED REGARDLESS OF THE ALLOWANCE USED FOR TESTING. RETEST ALL SECTIONS OF PIPE THAT FAIL PRESSURE TEST.
2. EXECUTION OF DISINFECTING AND HEALTH SAMPLING

A. BEFORE THE MAIN IS CHLORINATED AND AFTER COMPLETION OF A SUCCESSFUL PRESSURE TEST, THE MAIN SHALL BE FLUSHED TO ELIMINATE AIR POCKETS AND REMOVE PARTICULATES. THE FLUSHING VELOCITY IN THE MAIN SHALL NOT BE LESS THAN 3.0 FT/SEC.

B. PROVIDE 24 HOURS NOTICE TO THE OWNER PRIOR TO FLUSHING ANY SECTION OF MAIN. OWNER SHALL REVIEW AND APPROVE BOTH TIME AND RATE OF FLUSHING.

C. ALL WATER MAINS AND APPURTENANCES SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C651, AND THE REQUIREMENTS OF NYS DEPARTMENT OF HEALTH, USING THE CONTINUOUS FEED METHOD. THE REQUIREMENTS OF NYS DEPARTMENT OF HEALTH SHALL GOVERN WHEN THERE IS A CONFLICT.

D. RETAIN CHLORINATED WATER IN PIPE OR STRUCTURE AT LEAST TWENTY–FOUR (24) HOURS, UNLESS OTHERWISE DIRECTED. OPERATE ALL VALVES AND HYDRANTS WITHIN DISINFECTION SECTION DURING RETENTION PERIOD.


E. AFTER THE RETENTION PERIOD, THOROUGHLY FLUSH THE PIPE AND/OR STRUCTURE UNTIL WATER IN IT HAS A CHLORINE RESIDUAL COMPARABLE TO THAT OF THE WATER IN THE ADJACENT PUBLIC WATER SUPPLY SYSTEM. DISPOSE OF CHLORINATED WATER FROM ANY PIPE OR STRUCTURE SUCH THAT IT WILL NOT CAUSE DAMAGE TO ANY VEGETATION, FISH, OR ANIMAL LIFE.

F. SCHEDULE HEALTH SAMPLING OF THE TEST SECTION(S) A MINIMUM OF 24 HOURS IN ADVANCE. AT A MINIMUM, 1 SAMPLE SHALL BE COLLECTED EVERY 1,200 FEET OF NEW MAIN, PLUS ONE FROM THE END OF LINE AND AT LEAST ONE FROM EACH BRANCH GREATER THAN ONE PIPE LENGTH. TWO CONSECUTIVE SAMPLES SHALL BE TAKEN AND ANALYZED BY THE CONTRACTOR. THE CONTRACTOR SHALL FORWARD ALL RESULTS TO THE E.I.C. FOR REVIEW.


G. THE CONTRACTOR IS RESPONSIBLE TO ATTAIN A CHLORINE RESIDUAL OF 0.3 TO 0.5 MG/L. FLUSH AND RE–CHLORINATE ALL SECTIONS OF PIPE THAT FAIL THE HEALTH SAMPLE TEST IN ACCORDANCE WITH AWWA C651.


H. ALL APPURTENANCES AND SECTIONS OF WATER MAIN THAT CANNOT NORMALLY BE DISINFECTED SHALL BE SWABBED BY THE CONTRACTOR, TO THE SATISFACTION OF THE WATER SYSTEM OPERATOR. THE CONTRACTOR SHALL ALSO DISINFECT ALL EXISTING WATER LINES AND APPURTENANCES WHICH WERE BROKEN, DAMAGED, CONTAMINATED, OR SUSPECTED OF BEING CONTAMINATED AS A RESULT OF WORK DONE WITH THIS PROJECT.

I. THE DESIGN ENGINEER IS RESPONSIBLE FOR CERTIFYING TO THE WATER SYSTEM OPERATOR AND THE DEPARTMENT OF HEALTH THAT THE WATER MAIN WAS INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THAT THE FLUSHING, TESTING, AND DISINFECTION WAS PERFORMED IN ACCORDANCE WITH THESE REQUIREMENTS. THE DESIGN ENGINEER SHALL SUBMIT THIS CERTIFICATION ALONG WITH THE PRESSURE TEST AND BACTERIOLOGICAL TESTING RESULTS TO THE WATER SYSTEM OPERATOR AND THE CLINTON COUNTY HEALTH DEPARTMENT. THE WATER MAIN CANNOT BE PLACED IN SERVICE UNTIL AN APPROVAL OF COMPLETED WORKS IS RECEIVED FROM THE CLINTON COUNTY HEALTH DEPARTMENT.



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WATER MAIN
NOTES

WMN-01

SHEET 33 OF 59

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F:\Project\A54 – City of Plattsburgh\A54+003001 – Cogan Avenue\Design\CADD\Sheet Files\WMN_01.dwg

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TABLE OF WATER SERVICE CONNECTIONS				
ITEM 663.0603 - COPPER WATER SERVICE PIPE 3/4" (LF)				
ITEM 663.2503 - WATER SERVICE CONNECTION, 3/4" (EA)				
ITEM 663.44 - REMOVE AND DISPOSE OF EXISTING WATER SERVICE CONNECTION (EA)				
SHEET NUMBER	COGAN AVE HOUSE NUMBER	ITEM 663.0603 (LF)	ITEM 663.2503 (EA)	ITEM 663.44 (EA)
DUP-03	9	55	1	1
	10	15	1	1
	11	45	1	1
	12	20	1	1
DUP-04	13	60	1	1
	14	16	1	1
	16	15	1	1
	18	15	1	1
DUP-05	47 HALEY DR	60	1	1
	17	60	1	1
	19	60	1	1
	20	15	1	1
	21	60	1	1
	22	10	1	1
	23	60	1	1
DUP-06	24	10	1	1
	25	60	1	1
	26	10	1	1
	27	60	1	1
	28	15	1	1
	29	65	1	1
	30	20	1	1
DUP-07	31	60	1	1
	32	10	1	1
	33	55	1	1
	34	10	1	1
	35	60	1	1
	36	15	1	1
	37	60	1	1
	38	10	1	1
	39	60	1	1
	40	10	1	1

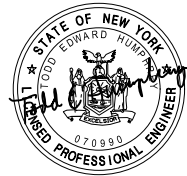
TABLE OF VALVES					
ITEM 663.1006 - RESILIENT WEDGE VALVE AND VALVE BOX, 6" (EA)					
ITEM 663.1008 - RESILIENT WEDGE VALVE AND VALVE BOX, 8" (EA)					
ITEM 663.1014 - RESILIENT WEDGE VALVE AND VALVE BOX, 14" (EA)					
APPROX STATION	APPROX OFFSET (FT)	ITEM 663.1006 (EA)	ITEM 663.1008 (EA)	ITEM 663.1014 (EA)	NOTES
W 0+04	CL		1		
W 3+75	5 RT	1			HYDRANT
W 4+20	CL		1		
W 4+25	5 RT		1		
W 4+30	CL		1		
W 6+41	CL		1		
W 6+46	5 LT		1		
W 6+51	CL		1		
W 7+75	5 RT	1			HYDRANT
W 7+80	CL		1		
W 11+90	5 RT	1			HYDRANT
W 11+95	CL		1		
W 16+10	5 RT	1			HYDRANT
W 16+32	CL		1		
W 16+34	5 RT			1	
W 16+34	53 LT			1	

TABLE OF WATER MAIN					
ITEM 663.0106 - DUCTILE IRON CEMENT LINED WATER PIPE, 6" (LF)					
ITEM 663.0108 - DUCTILE IRON CEMENT LINED WATER PIPE, 8" (LF)					
ITEM 663.0114 - DUCTILE IRON CEMENT LINED WATER PIPE, 14" (LF)					
FROM HCL STATION	TO HCL STATION	ITEM 663.0106 (LF)	ITEM 663.0108 (LF)	ITEM 663.0114 (LF)	NOTES
W 0+00	W 16+34		1634		MAIN LINE
W 3+75		7			HYDRANT CONNECTION
W 4+26 RT			10		TERRACE WAY CONNECTION
W 4+26 RT	W 4+36 RT	30			TERRACE WAY CONNECTION
W 6+45			75		HALEY DRIVE CONNECTION
W 7+75		7			HYDRANT CONNECTION
W 11+90		7			HYDRANT CONNECTION
W 16+10		7			HYDRANT CONNECTION
W 16+34				30	PARK AVENUE CONNECTION

TABLE OF HYDRANTS			
ITEM 663.1301 - HYDRANT (EA)			
ITEM 663.43 - REMOVE AND DISPOSE EXISTING HYDRANT (EA)			
HCL STATION	OFFSET (FT)	ITEM 663.1301 (EA)	ITEM 663.43 (EA)
W 3+75	7 RT	1	
W 4+46	18 RT		1
W 7+75	7 RT	1	
W 7+90	CL		1
W 11+75	4 RT		1
W 11+90	7 RT	1	
W 15+67	2 LT		1
W 16+10	7 RT	1	



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COGAN AVENUE
RECONSTRUCTION
CITY OF PLATTSBURGH

MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: A54.003.001		
DATE: MARCH 2021		
DRAWN BY: S.GALLAGHER		
DESIGNED BY: K.MCARDELL		
CHECKED BY: T.HUMPHREY		

NO ALTERATION PERMITTED HEREON
EXCEPT AS PROVIDED UNDER SECTION
7209 SUBDIVISION 2 OF THE NEW YORK
EDUCATION LAW

WATER MAIN
TABLES

WMT-01

SHEET 34 OF 59

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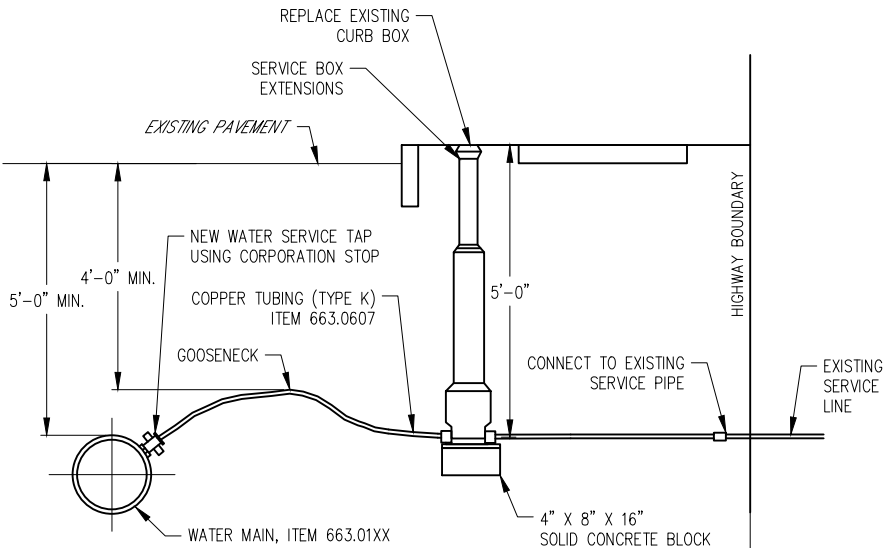
CITY OF PLATTSBURGH

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WATER MAIN
DETAILS

WMD-01

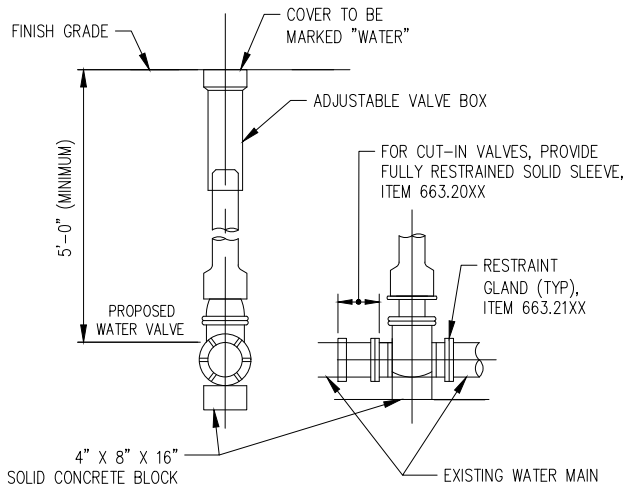
SHEET 35 OF 59



WATER SERVICE CONNECTION
NOT TO SCALE

NOTES:

1. WATER SERVICE TAPS ON A NEW OR EXISTING MAIN SHALL BE PLACED AT THE 2 O'CLOCK OR 10 O'CLOCK POSITION AND SHALL BE PLACED A MINIMUM OF 18" APART ALONG THE LENGTH OF THE MAIN.
2. ALL FITTINGS INCLUDING CORPORATION STOP, CURB STOP, COUPLINGS, ELBOWS, ETC. SHALL BE BRASS.
3. REFER TO WATER SERVICE NOTES ON DWG. WMN-01.
4. ABANDON ALL EXISTING WATER SERVICE CONNECTIONS IN PLACE.
5. REFER TO TABLE OF WATER SERVICE CONNECTIONS ON DWG. WMT-01 FOR LOCATIONS.

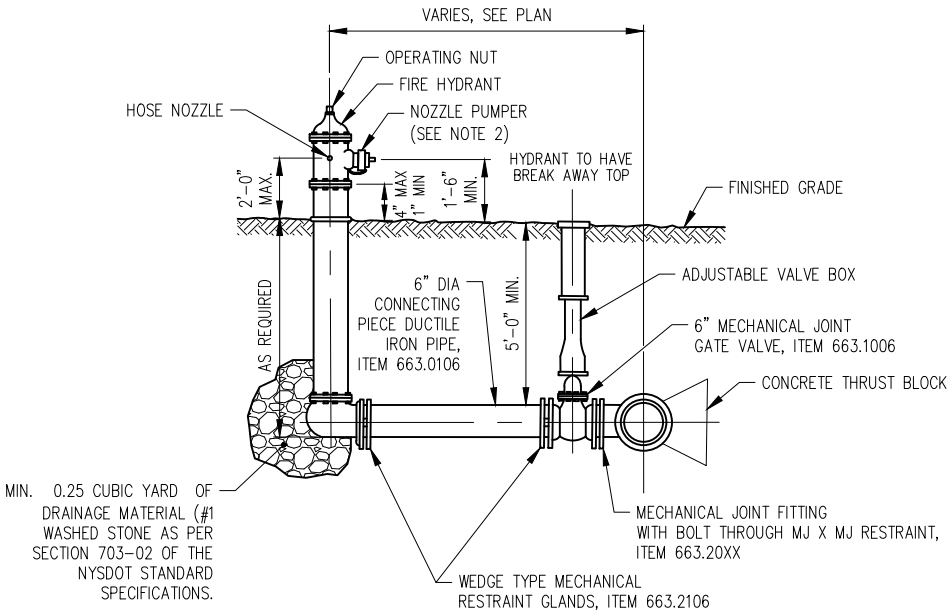


SIDE ELEVATION FRONT ELEVATION

WATER VALVE INSTALLATION
NOT TO SCALE

NOTES:

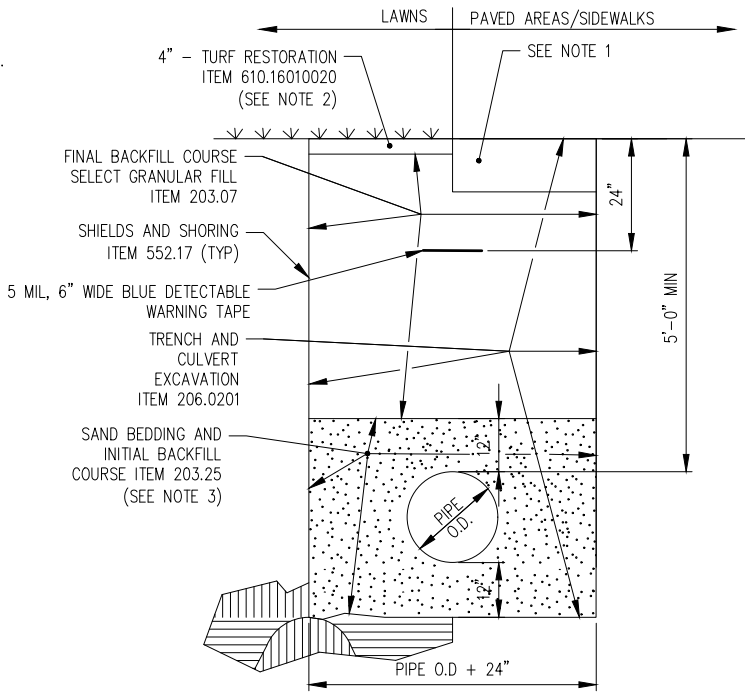
1. VALVE SHALL BE OPEN LEFT .
2. SEE DWG. WMT-01 FOR VALVE LOCATIONS.



FIRE HYDRANT ASSEMBLY
NOT TO SCALE

NOTES:

1. REFER TO TABLE OF HYDRANTS ON DWG. WMT-01 FOR LOCATIONS.
2. ORIENTATE PUMPER NOZZLE PERPENDICULAR TO EDGE OF ROADWAY.
3. HYDRANTS SHALL BE UL LISTED, AND CONFORM TO AWWA STANDARD C-502.
4. HYDRANTS SHALL HAVE A "BREAK AWAY" TOP.

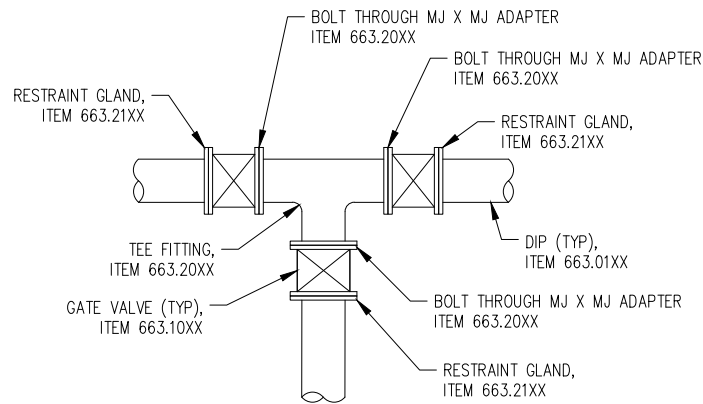


PIPE TRENCH WATER MAIN
NOT TO SCALE

NOTES:

1. FOR ROADWAYS, SEE DWG. TYP-01.
2. FOR TURF RESTORATION, SIDEWALKS AND DRIVEWAYS DETAILS SEE DWG. MSD-01.
3. SAND BACKFILL MEETING REQUIREMENTS OF ITEM 203.25 SHALL ENCASE PIPE A MINIMUM OF 12" ON ALL SIDES.

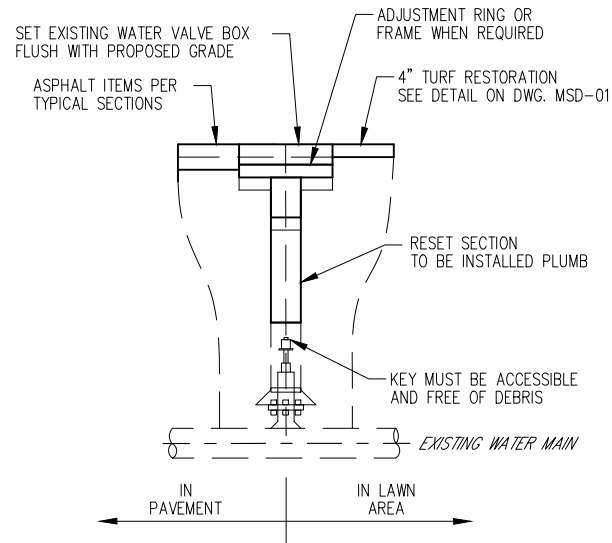
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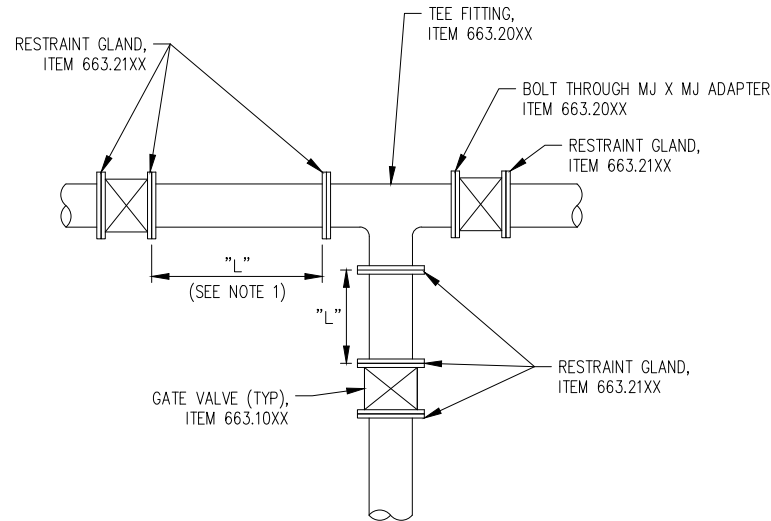
**TYPICAL VALVE INSTALLATION AT
BRANCH CONNECTIONS**
NOT TO SCALE

NOTES:

1. VALVE SPACING ON PLANS ARE SHOWN FOR CLARITY. USE THIS CONFIGURATION WHEREVER POSSIBLE.
2. IN AREAS OF CONFLICT WHERE THIS DETAIL CANNOT BE USED, SEE ALTERNATE VALVE INSTALLATION THIS SHEET.



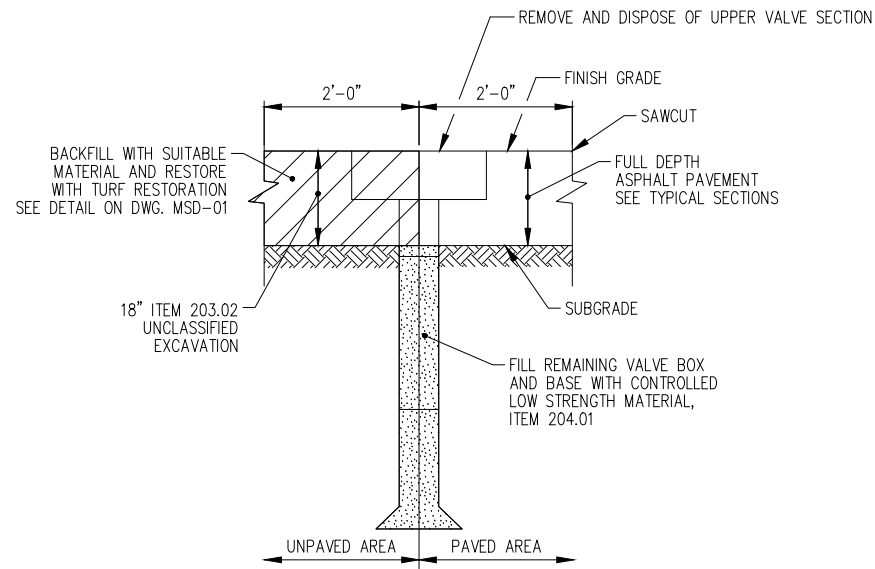
ADJUST WATER VALVE BOX
NOT TO SCALE



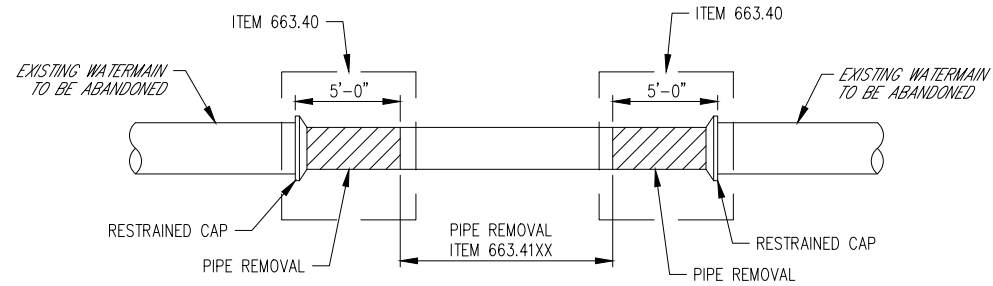
**ALTERNATE VALVE INSTALLATION AT BRANCH
CONNECTIONS TO AVOID CONFLICTS**
NOT TO SCALE

NOTE:

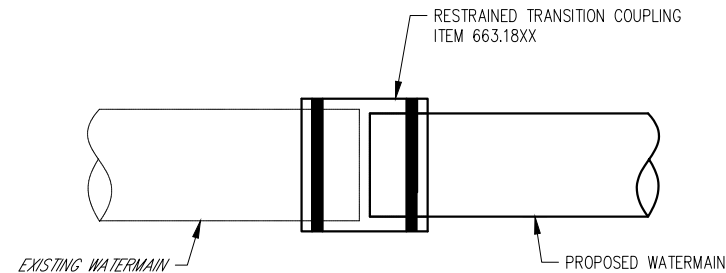
1. THE LENGTH "L" OF DUCTILE IRON PIPE (ITEM 663.01XX) SHALL BE AS DETERMINED IN THE FIELD TO AVOID CONFLICT. THE PIPE BETWEEN THE FITTING AND THE VALVE SHALL BE FULLY RESTRAINED.



ABANDON WATER VALVE BOX
NOT TO SCALE



DISCONNECT AND CAP EXISTING WATERMAIN
NOT TO SCALE



CONNECTION TO EXISTING WATERMAINS
NOT TO SCALE

NOTES:

1. CONTRACTOR SHALL CONFIRM OUTSIDE DIAMETER OF EXISTING WATERMAIN TO DETERMINE CORRECT SIZE OF RESTRAINED TRANSITION COUPLING.
2. INSTALLATION OF RESTRAINED TRANSITION COUPLING SHALL BE PER THE MANUFACTURER'S REQUIREMENTS.

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**COGAN AVENUE
RECONSTRUCTION**
CITY OF PLATTSBURGH

MARK	DATE	DESCRIPTION
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PROJECT NO: A54.003.001		
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DRAWN BY: S.GALLAGHER		
DESIGNED BY: K.MCARDELL		
CHECKED BY: T.HUMPHREY		
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**WATER MAIN
DETAILS**

WMD-02

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TABLE OF DRAINAGE																				
ITEM 603.9812 - SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN 12 INCH DIAMETER						ITEM 604.51020415 - STORM WATER TREATMENT SYSTEM (SWTS) OVER 4.5 CFS UP TO 6 CFS														
ITEM 603.9815 - SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN 15 INCH DIAMETER						ITEM 621.03 - CLEANING CLOSED DRAINAGE SYSTEMS														
ITEM 604.070701 - ALTERING STORM MANHOLE OR CATCHBASIN						ITEM 621.04 - CLEANING DRAINAGE STRUCTURES														
ITEM C604.302192 - 30" X 30" RECTANGULAR PRECAST DRAINAGE STRUCTURE						ITEM C655.0903 - CATCHBASIN FRAME AND GRATE														
ITEM C604.4048 - ROUND PRECAST CONCRETE MANHOLE TYPE 48						ITEM C655.1202 - MANHOLE FRAME AND COVER														
ITEM C604.4060 - ROUND PRECAST CONCRETE MANHOLE TYPE 60																				
STRUCTURE NUMBER	HCL STATION	OFFSET (FT) SEE NOTES	SIDE	WORK TO BE PERFORMED	RIM ELEV.	INVERT ELEV.	ITEM 603.9812		ITEM 603.9815	ITEM 604.070701	ITEM C604.302192		ITEM C604.4048	ITEM C604.4060	ITEM 604.51020415		ITEM 621.03	ITEM 621.04	ITEM C655.0903	ITEM C655.1202
							LF	LF			EA	LF			LF	LF				
DS 2-1	2+13.9	12.0	RT	ALTER EXISTING MANHOLE. PROVIDE NEW 36" SOLID MANHOLE FRAME AND COVER SET FLUSH WITH PROPOSED GRADE. CLEAN EXISTING DRAINAGE STRUCTURE AND 120 FEET OF EXISTING MAIN TO DS 2-4.	250.99					1							120	1		1
DS 2-2	1+88.0	17.6	LT	ALTER EXISTING CATCHBASIN. PROVIDE NEW 36" SQUARE CAST FRAME AND GRATE. SET FLUSH WITH PROPOSED GRADE. CLEAN EXISTING DRAINAGE STRUCTURE AND 12" PIPE TO DS 2-1.	251.54					1							40	1	1	
DS 2-3	1+90.0	23.0	RT	ALTER EXISTING CATCHBASIN. PROVIDE NEW 36" SQUARE CAST FRAME AND GRATE. SET FLUSH WITH PROPOSED GRADE. CLEAN EXISTING DRAINAGE STRUCTURE AND 12" PIPE TO DS 2-1.	252.09					1							27	1	1	
DS 2-4	3+32.0	4.0	RT	PROVIDE NEW 4' DIAMETER MH WITH 36" SOLID MANHOLE WITH FRAME AND COVER. CORE STRUCTURE TO INTERCEPT EXISTING 10" DRAIN. CONNECT EXISTING 21" DIAMETER STORM TRUNK TO NEW MANHOLE WITH 5 LF OF 21" SICPP NORTH AND 5 LF OF 21" SICPP SOUTH WITH APPROVED PIPE COUPLER AND CONCRETE COLLAR. CLEAN 182 FEET OF EXISTING MAIN TO DS 3-1.	248.25	N:238.70 S:238.60 E:242.50						9.4					182			1
DS 2-5	3+31.4	8.3	LT	REMOVE EXISTING DRAINAGE STRUCTURE. SEE DETAIL ON DRD-01.	NA	NA														
DS 2-6	3+31.6	14.8	LT	PROVIDE NEW 30" X30" CB WITH 36" SQUARE CAST WITH FRAME AND GRATE. DRAIN TO DS 2-4 WITH 16 LF OF 12" SICPP. CORE STRUCTURE TO INTERCEPT EXISTING 6" DRAIN.	248.05	E:245.75 W:244.85	16.0				4.8								1	
DS 2-7	3+31.0	17.9	RT	ALTER EXISTING CATCHBASIN. PROVIDE NEW 36" SQUARE CAST FRAME AND GRATE. SET FLUSH WITH PROPOSED GRADE. CLEAN EXISTING DRAINAGE STRUCTURE AND 10" PIPE TO DS 2-4.	248.48	W:246.20				1							15	1	1	
DS 3-1	5+13.0	1.5	LT	PROVIDE NEW 5' DIAMETER MH WITH 36" SOLID MANHOLE FRAME AND COVER. CONNECT EXISTING 21" DIAMETER STORM TRUNK TO NEW MANHOLE WITH 5 LF OF 21" SICPP NORTH AND 5 LF OF 21" SICPP SOUTH WITH APPROVED PIPE COUPLER AND CONCRETE COLLAR. CLEAN 193 FEET OF EXISTING MAIN TO DS 4-1.	244.03	N:235.78 S:235.74 E:240.25 NW:240.15 SW:239.90							8.0				193			1
DS 3-2	5+13.0	17.8	LT	PROVIDE NEW 30" X30" CB WITH 36" SQUARE CAST FRAME AND GRATE. DRAIN TO DS 3-1 WITH 14.3 LF OF 12" SICPP.	243.70	W:240.50	14.3				5.0								1	
DS 3-3	4+88.5	30.1	RT	PROVIDE NEW 30" X30" CB WITH 36" SQUARE CAST WITH FRAME AND GRATE. DRAIN TO DS 3-1 WITH 30 LF OF 15" SICPP. CONNECT EXISTING 12" PIPE TO STRUCTURE WITH 5 LF OF 12" SICPP WEST WITH APPROVED PIPE COUPLER AND CONCRETE COLLAR. REMOVE EXISTING STRUCTURE.	244.20	E:240.75		30.0			5.3								1	
DS 3-4	5+39.3	22.4	RT	PROVIDE NEW 30" X30" CB WITH 36" SQUARE CAST WITH FRAME AND GRATE. DRAIN TO DS 3-1 WITH 32 LF OF 12" SICPP.	243.73	E:240.50	32.0				4.9								1	
DS 4-1	7+06.5	6.5	LT	PROVIDE NEW 4' DIAMETER MH WITH 36" SOLID MANHOLE WITH FRAME AND COVER. CONNECT EXISTING 21" DIAMETER STORM TRUNK TO NEW MANHOLE WITH 5 LF OF 21" SICPP NORTH AND 5 LF OF 21" SICPP SOUTH WITH APPROVED PIPE COUPLER AND CONCRETE COLLAR. CLEAN 191 FEET OF EXISTING MAIN TO DS 4-8.	242.21	N:234.42 S:234.40 E:236.85 W:238.55						7.6					191			1
DS 4-2	7+06.5	17.8	LT	PROVIDE NEW 30" X30" CB WITH 36" SQUARE CAST WITH FRAME AND GRATE. DRAIN TO DS 4-1 WITH 9.8 LF OF 12" SICPP.	242.15	W:237.00 S:237.10	9.8				6.1								1	
DS 4-3	7+05.8	24.9	LT	REMOVE EXISTING DRAINAGE STRUCTURE. SEE DETAIL ON DRD-01.	NA	NA														
DS 4-4	7+33.2	39.4	LT	PROVIDE NEW 30" X30" CB WITH 36" SQUARE CAST WITH FRAME AND GRATE. DRAIN TO DS 4-2 WITH 32 LF OF 15" SICPP.	241.74	W:237.75 S:237.85		32.0			5.5								1	
DS 4-5	7+69.6	35.9	LT	PROVIDE NEW 30" X30" CB WITH 36" SQUARE CAST WITH FRAME AND GRATE. DRAIN TO DS 4-4 WITH 32 LF OF 12" SICPP.	241.71	N:238.50	32.0				4.8								1	
DS 4-6	7+06.5	9.8	RT	PROVIDE NEW 30" X30" CB WITH 36" SQUARE CAST WITH FRAME AND GRATE. DRAIN TO DS 4-1 WITH 13 LF OF 12" SICPP.	241.99	E:238.80	13.0				5.0								1	
DS 4-7	7+06.3	12.8	RT	REMOVE EXISTING DRAINAGE STRUCTURE. SEE DETAIL ON DRD-01.	NA	NA														
DS 4-8	8+97.3	5.4	LT	PROVIDE NEW 4' DIAMETER MH WITH 36" SOLID MANHOLE WITH FRAME AND COVER. CONNECT EXISTING 21" DIAMETER STORM TRUNK TO NEW MANHOLE WITH 5 LF OF 21" SICPP NORTH AND 5 LF OF 21" SICPP SOUTH WITH APPROVED PIPE COUPLER AND CONCRETE COLLAR. CLEAN 204 FEET OF EXISTING MAIN TO DS 5-1.	240.69	N/S:233.09 E:237.05 W:237.15						7.4					204			1
DS 4-9	8+97.3	17.8	LT	PROVIDE NEW 30" X30" CB WITH 36" SQUARE CAST WITH FRAME AND GRATE. DRAIN TO DS 4-8 WITH 9 LF OF 12" SICPP. REMOVE EXISTING STRUCTURE.	240.44	W:237.25	9.0				4.8								1	
DS 4-10	8+97.3	9.8	RT	PROVIDE NEW 30" X30" CB WITH 36" SQUARE CAST WITH FRAME AND GRATE. DRAIN TO DS 4-8 WITH 12 LF OF 12" SICPP.	240.60	W:237.40	12.0				4.8								1	
SHEET TOTAL							138.1	62.0	4	51.0	24.4	8.0	0	972	4	13	5			

- NOTES:
- CATCH BASINS SHALL BE 30" X 30" (42" OUTSIDE) PRECAST CONCRETE AS MANUFACTURED BY JEFFERSON CONCRETE, WATERTOWN, NEW YORK OR APPROVED EQUAL.
 - 2.0' SUMP IS INCLUDED IN ALL CATCH BASIN LENGTHS
 - MANHOLES SHALL BE PRECAST CONCRETE AS MANUFACTURED BY JEFFERSON CONCRETE, WATERTOWN, NEW YORK OR APPROVED EQUAL.
 - LIQUID ASPHALT COATING SHALL BE APPLIED TO THE EXTERIOR OF ALL MEW CONCRETE STRUCTURES AND SHALL MEET ASTM D4479 TYPE II, ASTM D41 AND ASTM D449 SPECIFICATIONS.
 - CATCH BASIN FRAME AND GRATE SHALL BE #5419Z AND 5419M AS SUPPLIED BY THE EJ GROUP, INC OR APPROVED EQUAL.
 - MANHOLE FRAME AND COVER SHALL BE #1405Z AND 1207Z1 AS SUPPLIED BY THE EJ GROUP, INC OR APPROVED EQUAL.
 - MANHOLE AND CATCH BASINS INSTALLATIONS OVER EXISTING TRUNK LINE INCLUDE 5 LF LENGTH OF 21" SICPP, PIPE COUPLER, AND CONCRETE COLLARS FOR CONNECTIONS.
 - CORE OR PROVIDE PRECAST KNOCKOUTS IN CATCH BASINS FOR ACCEPTANCE OF UNDERDRAIN PIPE.
 - ITEM DENOTED BY A 'C' ARE CITY SPECIFICATIONS AND MODIFY THE NYSDOT STANDARD SPECIFICATIONS BY THE NOTES AND DETAILS IN THESE PLANS AND IN THE PROPOSAL BOOK.

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COMPANIES

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COGAN AVENUE
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CITY OF PLATTSBURGH

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DRAINAGE
TABLES

DRT-01

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TABLE OF DRAINAGE (CONTINUED)																	
ITEM 603.9812 - SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN 12 INCH DIAMETER					ITEM 604.51020415 - STORM WATER TREATMENT SYSTEM (SWTS) OVER 4.5 CFS UP TO 6 CFS												
ITEM 603.9815 - SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN 15 INCH DIAMETER					ITEM 621.03 - CLEANING CLOSED DRAINAGE SYSTEMS												
ITEM 604.070701 - ALTERING STORM MANHOLE OR CATCHBASIN					ITEM 621.04 - CLEANING DRAINAGE STRUCTURES												
ITEM C604.302192 - 30" X 30" RECTANGULAR PRECAST DRAINAGE STRUCTURE					ITEM C655.0903 - CATCHBASIN FRAME AND GRATE												
ITEM C604.4048 - ROUND PRECAST CONCRETE MANHOLE TYPE 48					ITEM C655.1202 - MANHOLE FRAME AND COVER												
ITEM C604.4060 - ROUND PRECAST CONCRETE MANHOLE TYPE 60																	
STRUCTURE NUMBER	HCL STATION	OFFSET (FT) SEE NOTES	SIDE	WORK TO BE PERFORMED	RIM ELEV.	INVERT ELEV.	ITEM 603.9812	ITEM 603.9815	ITEM 604.070701	ITEM C604.302192	ITEM C604.4048	ITEM C604.4060	ITEM 604.51020415	ITEM 621.03	ITEM 621.04	ITEM C655.0903	ITEM C655.1202
							LF	LF	EA	LF	LF	LF	EA	LF	EA	EA	EA
DS 5-1	11+00.9	4.2	LT	ALTER EXISTING MANHOLE. PROVIDE NEW 36" SOLID MANHOLE FRAME AND COVER SET FLUSH WITH PROPOSED GRADE. CLEAN EXISTING DRAINAGE STRUCTURE AND PIPE LATERAL. CLEAN 23 FEET OF EXISTING MAIN TO DS 5-2.	239.06	NA			1					23	1		1
DS 5-2	11+24.0	4.8	LT	PROVIDE NEW 4' DIAMETER MH WITH 36" SOLID MANHOLE WITH FRAME AND COVER. CONNECT EXISTING 21" DIAMETER STORM TRUNK TO NEW MANHOLE WITH 5 LF OF 21" SICPP NORTH AND 5 LF OF 21" SICPP SOUTH WITH APPROVED PIPE COUPLER AND CONCRETE COLLAR. CLEAN 181 FEET OF EXISTING MAIN TO DS 6-1.	238.86	S:231.50 E:235.20 W:235.35					7.1			181			1
DS 5-3	11+24.0	17.8	LT	PROVIDE NEW 30" X 30" CB WITH 36" SQUARE CAST WITH NEW FRAME AND GRATE SET FLUSH WITH PROPOSED GRADE. DRAIN TO DS 5-2 WITH 10 LF OF 12" SICPP. REMOVE EXISTING STRUCTURE.	238.60	W:235.40	10.0			4.8						1	
DS 5-4	11+24.0	9.8	RT	PROVIDE NEW 30" X 30" CB WITH 36" SQUARE CAST WITH NEW FRAME AND GRATE SET FLUSH WITH PROPOSED GRADE. DRAIN TO DS 5-2 WITH 12 LF OF 12" SICPP. REMOVE EXISTING STRUCTURE.	238.76	E:235.55	12.0			4.8						1	
DS 6-1	13+05.0	6.7	LT	PROVIDE NEW 4' DIAMETER MH WITH 36" SOLID MANHOLE WITH FRAME AND COVER. CONNECT EXISTING 21" DIAMETER STORM TRUNK TO NEW MANHOLE WITH 5 LF OF 21" SICPP NORTH AND 5 LF OF 21" SICPP SOUTH WITH APPROVED PIPE COUPLER AND CONCRETE COLLAR. CLEAN 155 FEET OF EXISTING MAIN TO DS 7-1.	237.35	S:230.21 E:233.75 W:233.80					6.9			155			1
DS 6-2	13+05.0	17.8	LT	PROVIDE NEW 30" X 30" CB WITH 36" SQUARE CAST WITH NEW FRAME AND GRATE SET FLUSH WITH PROPOSED GRADE. DRAIN TO DS 6-1 WITH 9.7 LF OF 12" SICPP.	237.13	W:233.90	9.7			4.9						1	
DS 6-3	13+05.0	9.8	RT	PROVIDE NEW 30" X 30" CB WITH 36" SQUARE CAST WITH NEW FRAME AND GRATE SET FLUSH WITH PROPOSED GRADE. DRAIN TO DS 6-1 WITH 14 LF OF 12" SICPP.	237.29	E:234.10	14.0			4.8						1	
DS 7-1	14+59.7	3.9	LT	PROVIDE NEW 4' DIAMETER MH WITH 36" SOLID MANHOLE WITH FRAME AND COVER. CONNECT EXISTING 21" DIAMETER STORM TRUNK TO NEW MANHOLE WITH 5 LF OF 21" SICPP NORTH AND 5 LF OF 21" SICPP SOUTH WITH APPROVED PIPE COUPLER AND CONCRETE COLLAR. CLEAN 43 FEET OF EXISTING MAIN TO DS 7-4.	236.49	S:229.12 E:232.80 W:232.95					7.1			43			1
DS 7-2	14+57.0	17.8	LT	PROVIDE NEW 30" X 30" CB WITH 36" SQUARE CAST WITH NEW FRAME AND GRATE SET FLUSH WITH PROPOSED GRADE. DRAIN TO DS 7-1 WITH 11.8 LF OF 12" SICPP.	236.21	W:233.00	11.8			4.8						1	
DS 7-3	14+59.7	9.8	RT	PROVIDE NEW 30" X 30" CB WITH 36" SQUARE CAST WITH NEW FRAME AND GRATE SET FLUSH WITH PROPOSED GRADE. DRAIN TO DS 7-1 WITH 11 LF OF 12" SICPP.	236.37	E:233.15	11.0			4.8						1	
DS 7-4	15+02.4	3.0	LT	REMOVE EXISTING MANHOLE. PROVIDE NEW 5' DIAMETER SWTS MANHOLE WITH 36" SOLID FRAME AND COVER SET FLUSH WITH PROPOSED GRADE. CONNECT EXISTING 21" DIAMETER STORM TRUNK TO NEW MANHOLE WITH 5 LF OF 21" SICPP NORTH AND 5 LF OF 21" SICPP SOUTH WITH APPROVED PIPE COUPLER AND CONCRETE COLLAR. CLEAN 224 FEET OF EXISTING MAIN TO DS 8-1.	236.59	S:228.58							1	224			1
DS 7-5	15+01.8	17.6	LT	REMOVE EXISTING DRAINAGE STRUCTURE AND PIPE TO DS 7-4. SEE DETAIL ON DRD-01.	NA	NA											
DS 7-6	15+03.3	10.2	RT	REMOVE EXISTING DRAINAGE STRUCTURE AND PIPE TO DS 7-4. SEE DETAIL ON DRD-01.	NA	NA											
DS 8-1	17+26.1	5.7	LT	ALTER EXISTING MANHOLE. PROVIDE NEW 36" SOLID MANHOLE FRAME AND COVER SET FLUSH WITH PROPOSED GRADE. CLEAN EXISTING DRAINAGE STRUCTURE. CLEAN 11 FEET OF EXISTING MAIN TO DS 8-2 AND 24 FEET OF EXISTING MAIN TO DS 8-3.	238.91	N/S:227.53			1					35	1		1
DS 8-2	17+28.6	16.1	LT	ALTER EXISTING MANHOLE. PROVIDE NEW 36" SOLID MANHOLE FRAME AND COVER SET FLUSH WITH PROPOSED GRADE. CLEAN EXISTING DRAINAGE STRUCTURE.	238.76	W:227.51			1						1		1
DS 8-3	17+49.1	0.1	RT	ALTER EXISTING MANHOLE. PROVIDE NEW 36" SOLID MANHOLE FRAME AND COVER SET FLUSH WITH PROPOSED GRADE. CLEAN EXISTING DRAINAGE STRUCTURE.	239.27	N:227.95 S:234.50			1						1		1
DS 8-4	17+67.6	18.7	RT	PROVIDE NEW 30" X 30" CB WITH 36" SQUARE CAST WITH NEW FRAME AND GRATE. SET FLUSH WITH PROPOSED GRADE. DRAIN TO DS 8-3 WITH 23 LF OF 12" SICPP. CONNECT TO DS 8-3 AT EXISTING 12" INVERT FROM DS 8-5.	238.96	N:235.00 E:235.25	23.0			5.6						1	
DS 8-5	17+65.5	16.5	RT	REMOVE EXISTING DRAINAGE STRUCTURE AND PIPE TO DS 8-3. SEE DETAIL ON DRD-01.	NA	NA											
DS 8-6	17+79.3	30.7	LT	PROVIDE NEW 30" X 30" CB WITH 36" SQUARE CAST WITH NEW FRAME AND GRATE SET FLUSH WITH PROPOSED GRADE. DRAIN TO DS 8-5 WITH 48 LF OF 12" SICPP. REMOVE EXISTING STRUCTURE AND PIPE TO DS 8-5.	239.10	W:235.90	48.0			4.8						1	
SHEET TOTAL DRT-01							138.1	62.0	4	51.0	24.4	8.0	0	972	4	13	5
SHEET TOTAL DRT-02							139.5	0	4	39.3	21.1	0	1	661	4	8	8
TOTALS							277.6	62.0	8	90.3	45.5	8.0	1	1633	8	21	13

NOTES:

- CATCH BASINS SHALL BE 30" X 30" (42" OUTSIDE) PRECAST CONCRETE AS MANUFACTURED BY JEFFERSON CONCRETE, WATERTOWN, NEW YORK OR APPROVED EQUAL.
- 2.0' SUMP IS INCLUDED IN ALL CATCH BASIN LENGTHS
- MANHOLES SHALL BE PRECAST CONCRETE AS MANUFACTURED BY JEFFERSON CONCRETE, WATERTOWN, NEW YORK OR APPROVED EQUAL.
- LIQUID ASPHALT COATING SHALL BE APPLIED TO THE EXTERIOR OF ALL MEW CONCRETE STRUCTURES AND SHALL MEET ASTM D4479 TYPE II, ASTM D41 AND ASTM D449 SPECIFICATIONS.
- CATCH BASIN FRAME AND GRATE SHALL BE #5419Z AND 5419M AS SUPPLIED BY THE EJ GROUP, INC OR APPROVED EQUAL.
- MANHOLE FRAME AND COVER SHALL BE #1405Z AND 1207Z1 AS SUPPLIED BY THE EJ GROUP, INC OR APPROVED EQUAL.
- MANHOLE AND CATCH BASINS INSTALLATIONS OVER EXISTING TRUNK LINE INCLUDE 5 LF LENGTH OF 21" SICPP, PIPE COUPLER, AND CONCRETE COLLARS FOR CONNECTIONS.
- CORE OR PROVIDE PRECAST KNOCKOUTS IN CATCH BASINS FOR ACCEPTANCE OF UNDERDRAIN PIPE.
- ITEM DENOTED BY A 'C' ARE CITY SPECIFICATIONS AND MODIFY THE NYSDOT STANDARD SPECIFICATIONS BY THE NOTES AND DETAILS IN THESE PLANS AND IN THE PROPOSAL BOOK.

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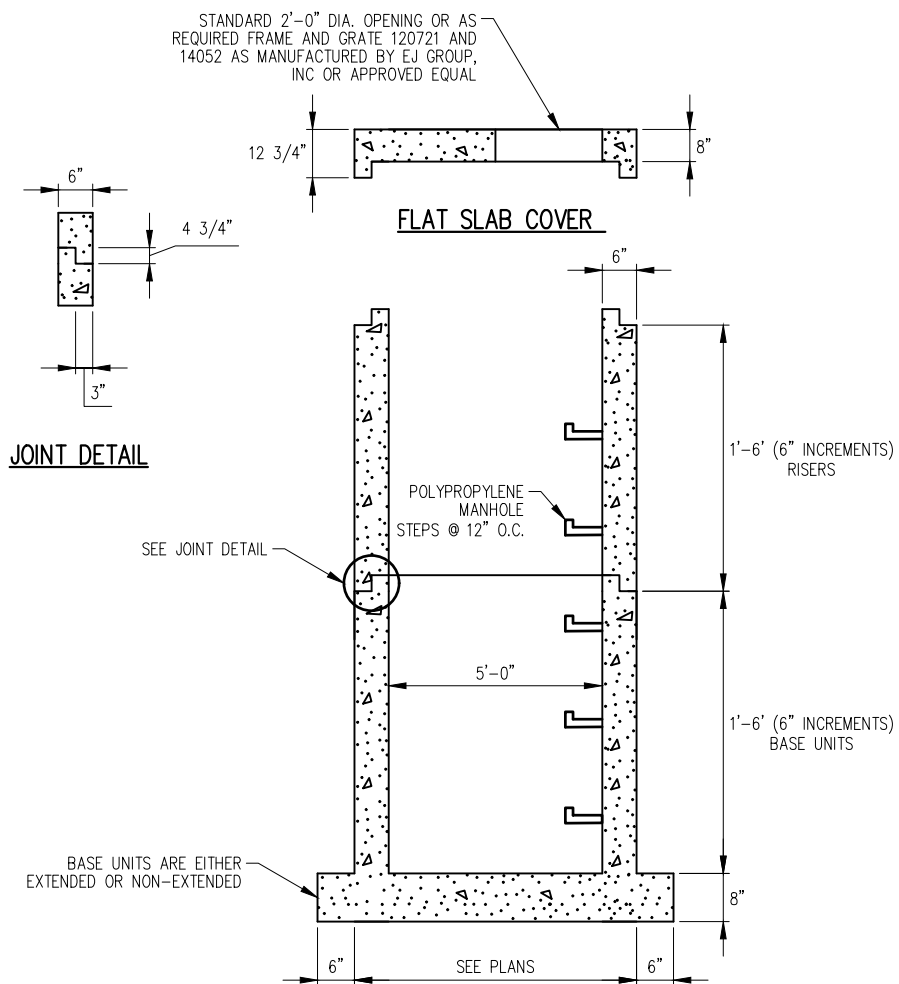
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DRAINAGE
TABLES

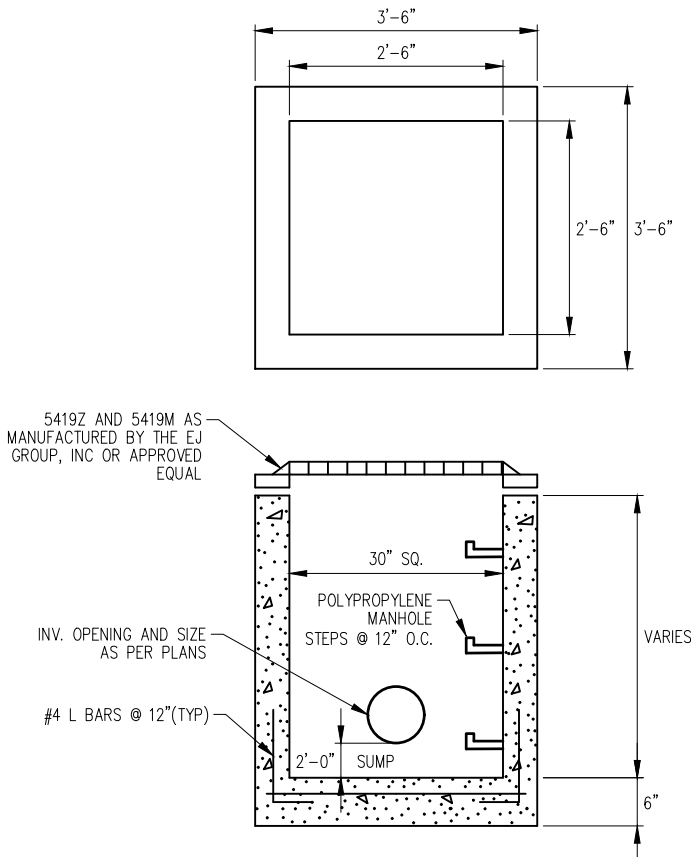
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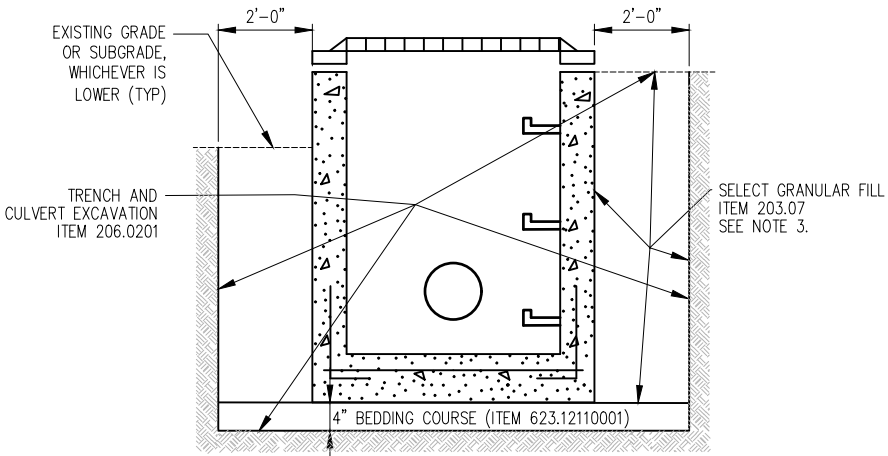
MANHOLE DETAIL
ITEM C604.4048 AND C604.4060
NOT TO SCALE

- NOTES:
- DESIGNED IN ACCORDANCE TO ASTM C478 WITH AASHTO HS 20 LOADING
 - JOINT SEALED IN ACCORDANCE WITH ASTM C990
 - MANHOLE STEPS: ASTM C478
 - REINFORCEMENT TO ASTM A615, A497, GRADE 60
 - CONCRETE TO BE MIN. 5000PSI @ 28 DAYS
 - AIR ENTRAINED 5%-8%
 - INVERT OPENINGS AS SPECIFIED
 - LIQUID ASPHALT COATING SHALL BE APPLIED TO THE EXTERIOR OF ALL NEW CONCRETE STRUCTURES AND SHALL MEET ASTM D4479 TYPE II, ASTM D41 AND ASTM D449 SPECIFICATIONS
 - TOP SLAB COVER SHALL MEET HS 25 LOADING



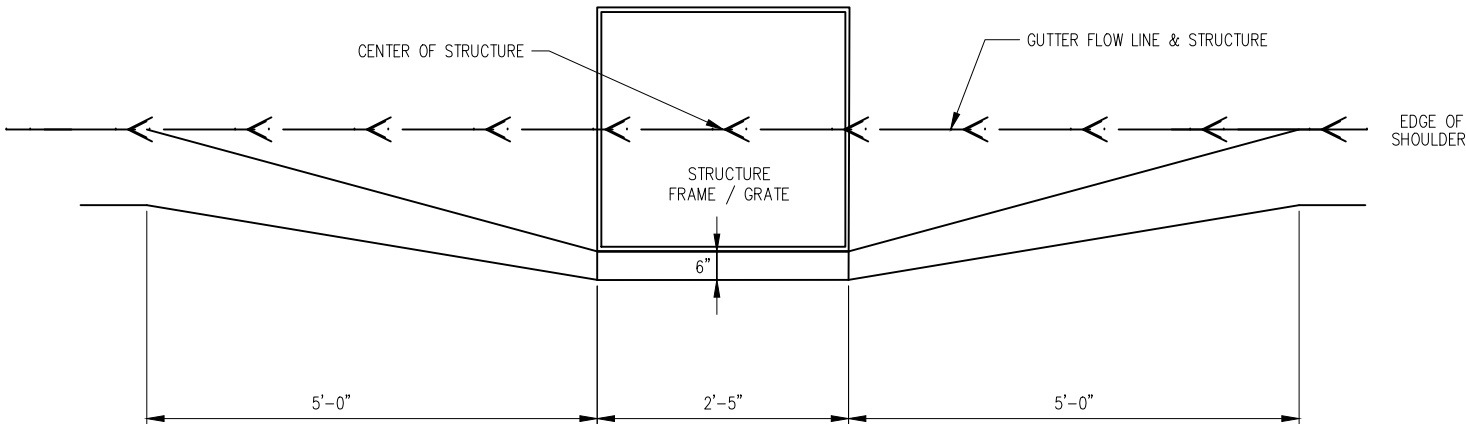
CATCH BASIN DETAIL
ITEM C604.302192
NOT TO SCALE

- NOTES:
- CONCRETE TO BE MIN. 5000 PSI @ 28 DAYS
 - AIR ENTRAINED 5%-8%
 - REINFORCED PER NYSDOT STANDARDS SHEETS 604-5 TO 604-8 (HS-20 LOADING)
 - REINFORCEMENT ASTM 4615
 - LIQUID ASPHALT COATING SHALL BE APPLIED TO THE EXTERIOR OF ALL NEW CONCRETE STRUCTURES AND SHALL MEET ASTM D4479 TYPE II, ASTM D41 AND ASTM D449 SPECIFICATIONS
 - CATCH BASIN STEPS: ASTM C478



STRUCTURE EXCAVATION AND BACKFILL
NOT TO SCALE

- NOTES:
- DETAIL SHOWN ABOVE IS FOR A GENERIC DRAINAGE STRUCTURE OR MANHOLE. SEE DUP DRAWINGS FOR DRAINAGE STRUCTURE AND SEWER MANHOLE LOCATIONS.
 - EACH STRUCTURE SHALL SIT ON A 4" THICK LEVELING BED OF NO. 1 STONE, ITEM 623.1211001.
 - REFER TO DWG TYP-01 FOR TYPICAL ROADWAY SECTIONS AND DWG. DRD-02 FOR PIPE TRENCH DETAILS AND BACKFILL ITEMS.
 - REFER TO NYSDOT 604 STANDARD SHEETS FOR ADDITIONAL DETAILS.



DISCHARGE OF SHOULDER TIP-UP GUTTER INTO DRAINAGE STRUCTURE DS 3-2
NOT TO SCALE



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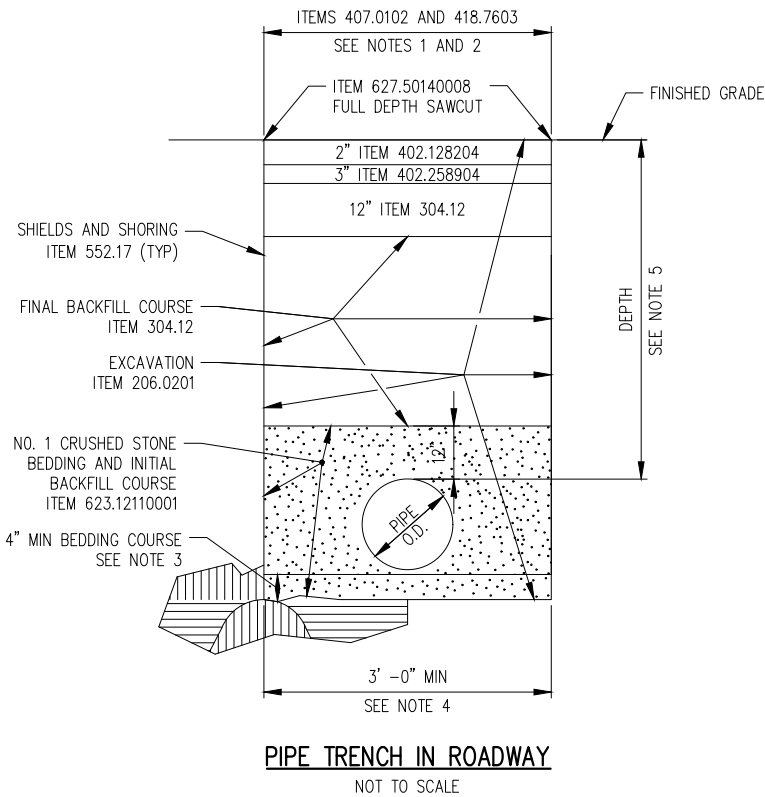
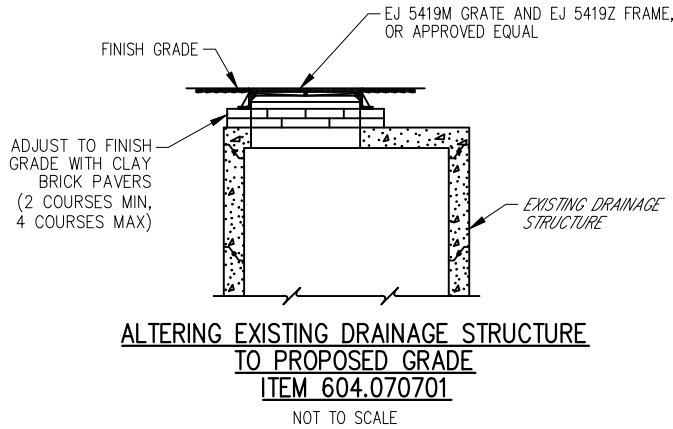
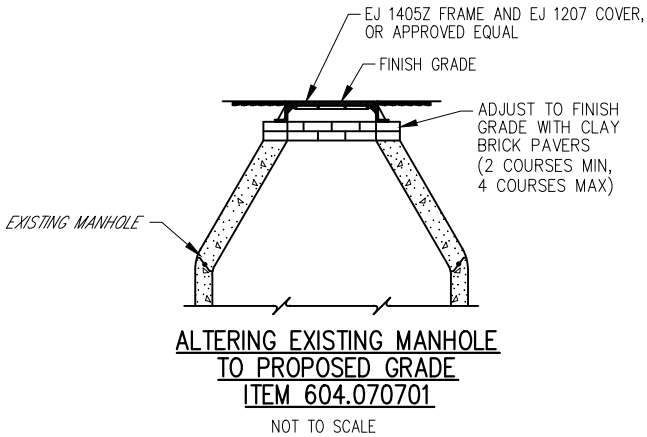
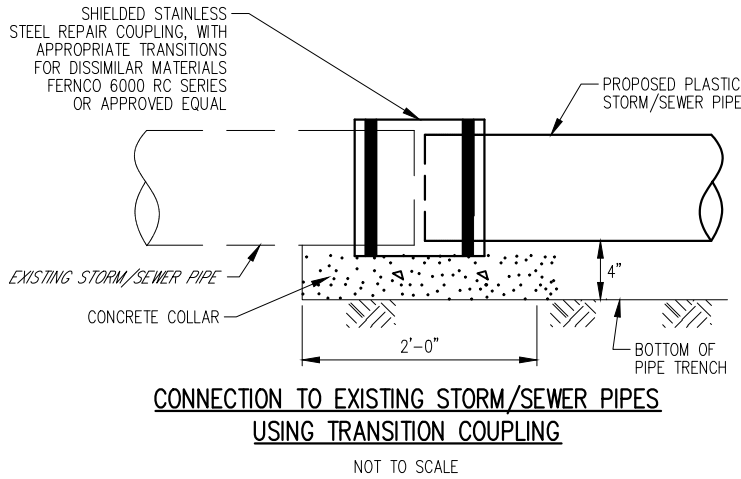
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**DRAINAGE
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DRD-01

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- NOTES:
- ITEM 407.0102 – DILUTED TACK COAT SHALL BE USED BETWEEN ALL NEW HMA COURSES.
 - ASPHALT PAVEMENT JOINT ADHESIVE (ITEM 418.7603) SHALL BE USED ON VERTICAL FACES FOR ALL JOINTS IN THE HMA TOP COURSE, INCLUDING CURBS AND DRAINAGE STRUCTURES.
 - IF UNSTABLE OR UNSUITABLE SOIL CONDITIONS ARE ENCOUNTERED NEAR THE PIPE INVERT ELEVATION, A MINIMUM OF 12" AND MAXIMUM OF 2'-0" OF MATERIAL SHALL BE EXCAVATED A.O.B.E. AND REPLACED WITH NO. 1 CRUSHED STONE BEDDING, ITEM 623.12110001.
 - THE TRENCH WIDTH SHALL BE DETERMINED IN ACCORDANCE WITH ASTM D2321 WHERE THE WIDTH (W) IS THE GREATER OF (O.D. + 16) OR (1.25*O.D. + 12) ROUNDED UP TO THE NEAREST 6 INCHES. THE MINIMUM TRENCH WIDTH IS 3'-0".
 - FINAL BACKFILL UNDER LAWN AREAS SHALL BE SUITABLE MATERIAL PER ITEM 206.0201 SPECIFICATIONS. FINAL BACKFILL COURSE UNDER DRIVEWAYS AND SIDEWALKS SHALL BE ITEM 304.12.



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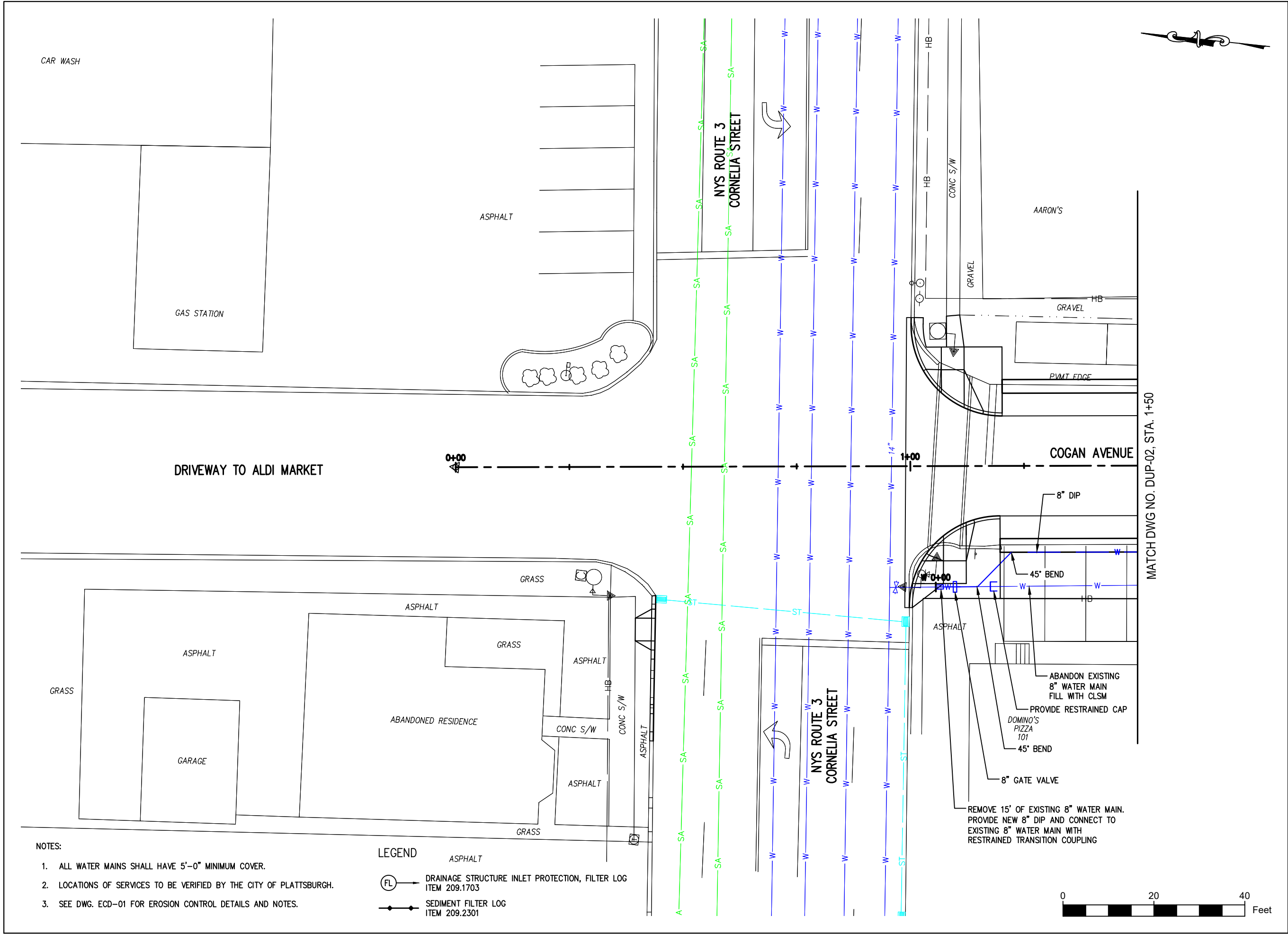
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**DRAINAGE
DETAILS**

DRD-02

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NOTES:

1. ALL WATER MAINS SHALL HAVE 5'-0" MINIMUM COVER.
2. LOCATIONS OF SERVICES TO BE VERIFIED BY THE CITY OF PLATTSBURGH.
3. SEE DWG. ECD-01 FOR EROSION CONTROL DETAILS AND NOTES.

LEGEND

- ASPHALT
- (FL) → DRAINAGE STRUCTURE INLET PROTECTION, FILTER LOG
ITEM 209.1703
- SEDIMENT FILTER LOG
ITEM 209.2301

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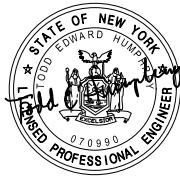
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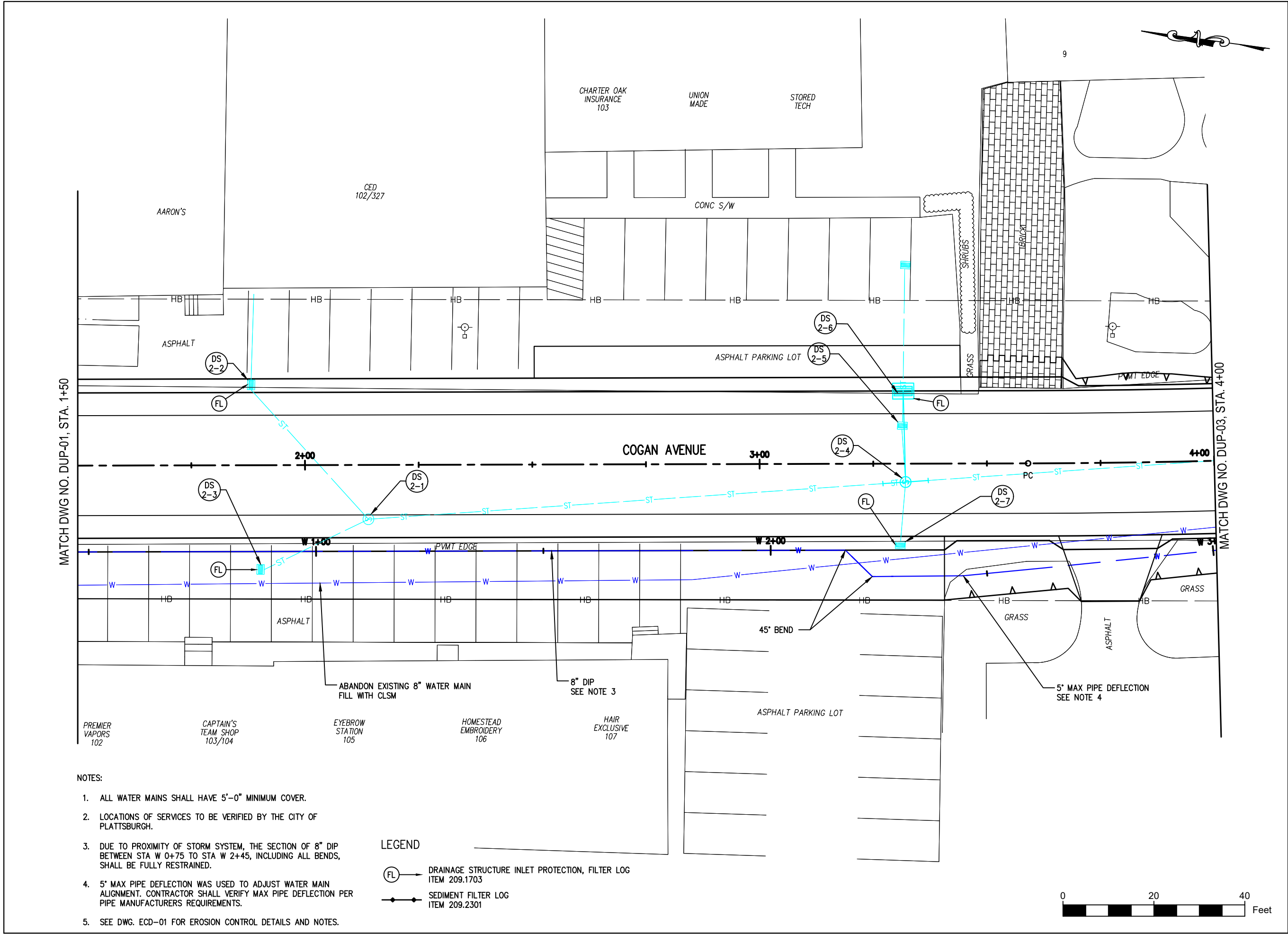
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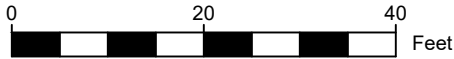


NOTES:

1. ALL WATER MAINS SHALL HAVE 5'-0" MINIMUM COVER.
2. LOCATIONS OF SERVICES TO BE VERIFIED BY THE CITY OF PLATTSBURGH.
3. DUE TO PROXIMITY OF STORM SYSTEM, THE SECTION OF 8" DIP BETWEEN STA W 0+75 TO STA W 2+45, INCLUDING ALL BENDS, SHALL BE FULLY RESTRAINED.
4. 5' MAX PIPE DEFLECTION WAS USED TO ADJUST WATER MAIN ALIGNMENT. CONTRACTOR SHALL VERIFY MAX PIPE DEFLECTION PER PIPE MANUFACTURERS REQUIREMENTS.
5. SEE DWG. ECD-01 FOR EROSION CONTROL DETAILS AND NOTES.

LEGEND

- (FL) → DRAINAGE STRUCTURE INLET PROTECTION, FILTER LOG
ITEM 209.1703
- ◆— SEDIMENT FILTER LOG
ITEM 209.2301



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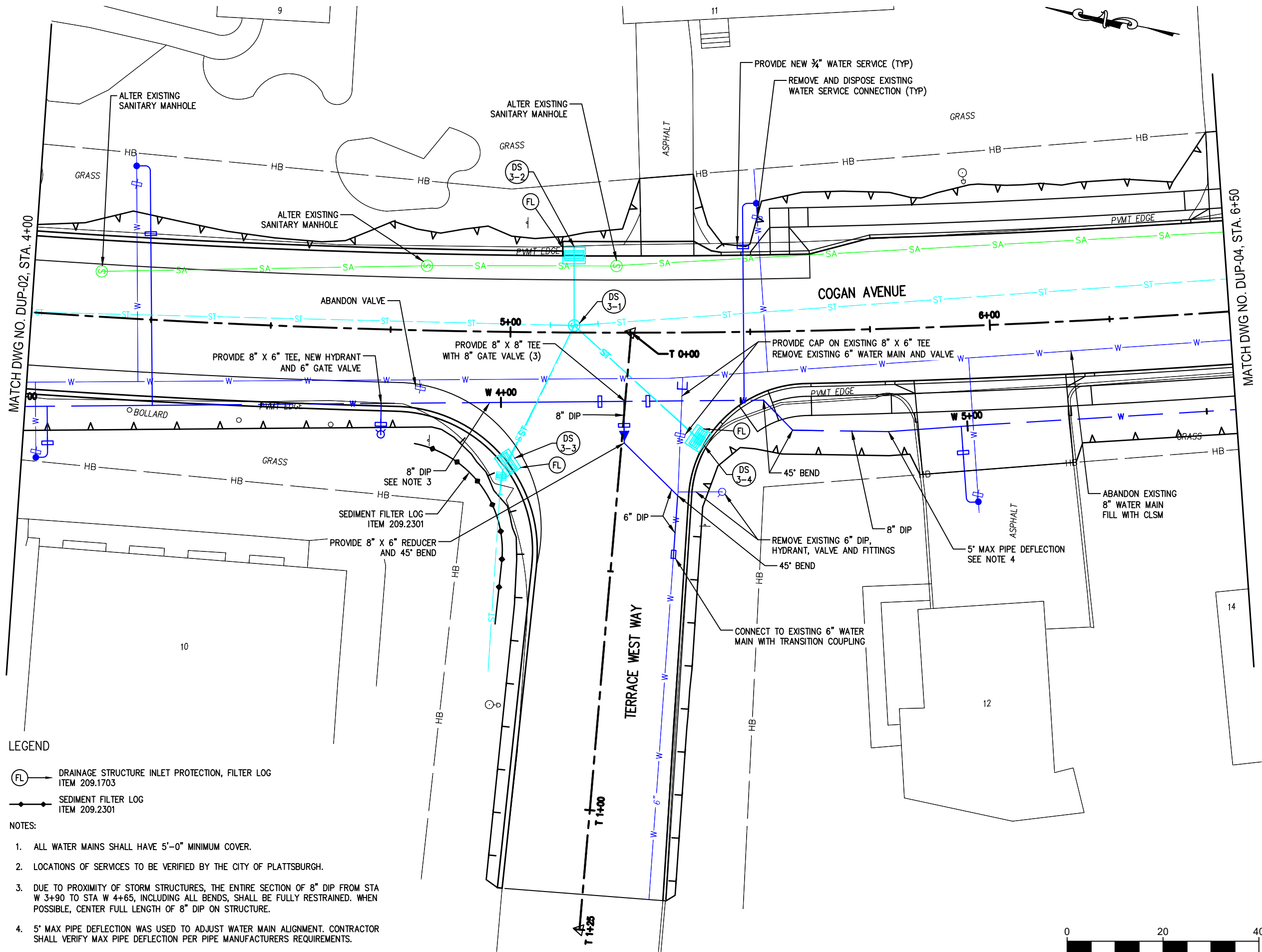
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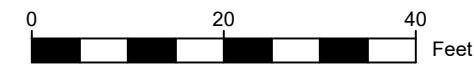
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LEGEND

- (FL) DRAINAGE STRUCTURE INLET PROTECTION, FILTER LOG ITEM 209.1703
- SEDIMENT FILTER LOG ITEM 209.2301

- NOTES:
- ALL WATER MAINS SHALL HAVE 5'-0" MINIMUM COVER.
 - LOCATIONS OF SERVICES TO BE VERIFIED BY THE CITY OF PLATTSBURGH.
 - DUE TO PROXIMITY OF STORM STRUCTURES, THE ENTIRE SECTION OF 8" DIP FROM STA W 3+90 TO STA W 4+65, INCLUDING ALL BENDS, SHALL BE FULLY RESTRAINED. WHEN POSSIBLE, CENTER FULL LENGTH OF 8" DIP ON STRUCTURE.
 - 5" MAX PIPE DEFLECTION WAS USED TO ADJUST WATER MAIN ALIGNMENT. CONTRACTOR SHALL VERIFY MAX PIPE DEFLECTION PER PIPE MANUFACTURERS REQUIREMENTS.
 - SEE DWG. ECD-01 FOR EROSION CONTROL DETAILS AND NOTES.



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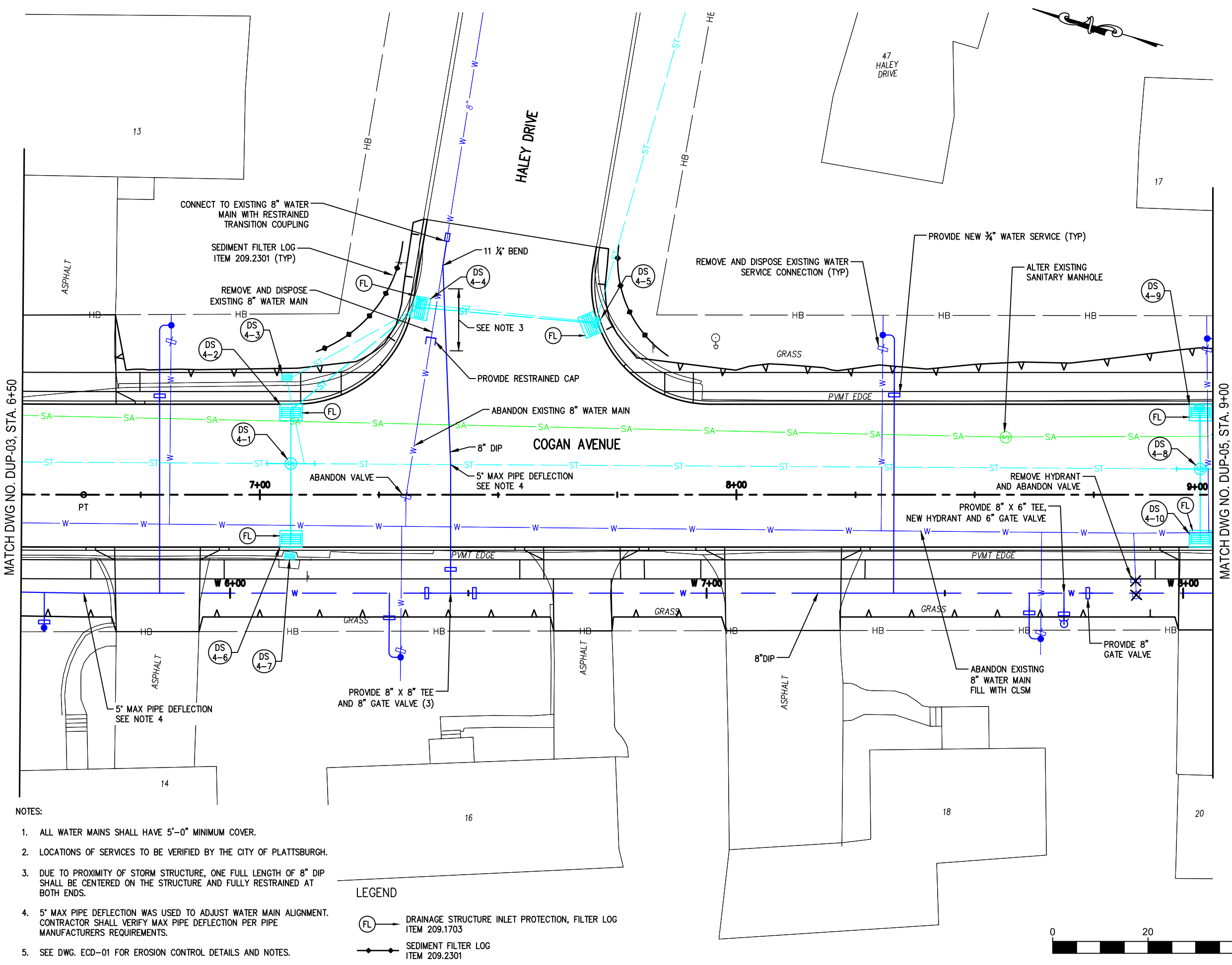
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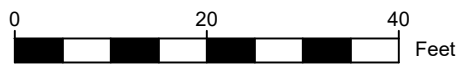


- NOTES:
1. ALL WATER MAINS SHALL HAVE 5'-0" MINIMUM COVER.
 2. LOCATIONS OF SERVICES TO BE VERIFIED BY THE CITY OF PLATTSBURGH.
 3. DUE TO PROXIMITY OF STORM STRUCTURE, ONE FULL LENGTH OF 8" DIP SHALL BE CENTERED ON THE STRUCTURE AND FULLY RESTRAINED AT BOTH ENDS.
 4. 5' MAX PIPE DEFLECTION WAS USED TO ADJUST WATER MAIN ALIGNMENT. CONTRACTOR SHALL VERIFY MAX PIPE DEFLECTION PER PIPE MANUFACTURERS REQUIREMENTS.
 5. SEE DWG. ECD-01 FOR EROSION CONTROL DETAILS AND NOTES.

LEGEND

(FL) → DRAINAGE STRUCTURE INLET PROTECTION, FILTER LOG
ITEM 209.1703

—●— SEDIMENT FILTER LOG
ITEM 209.2301





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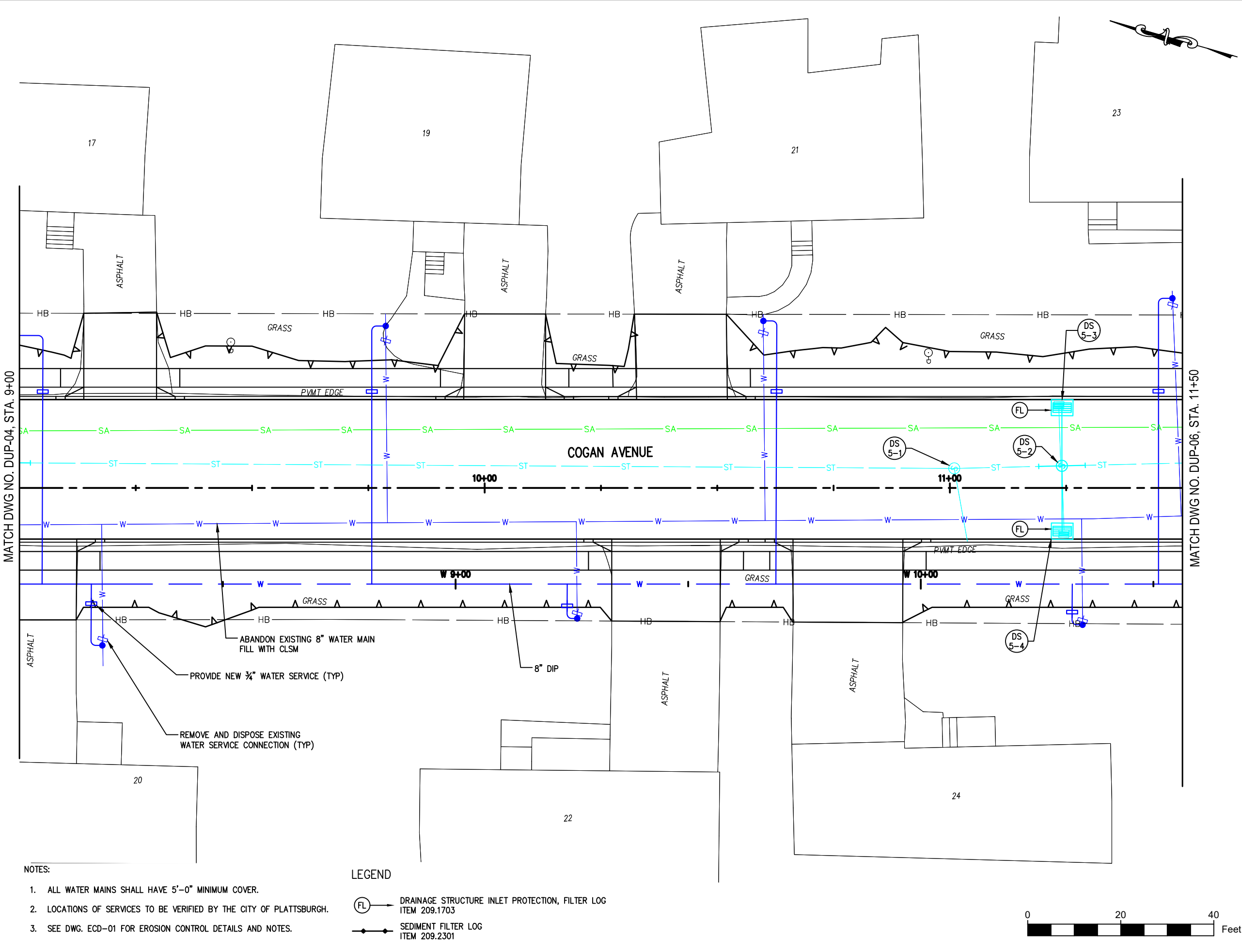
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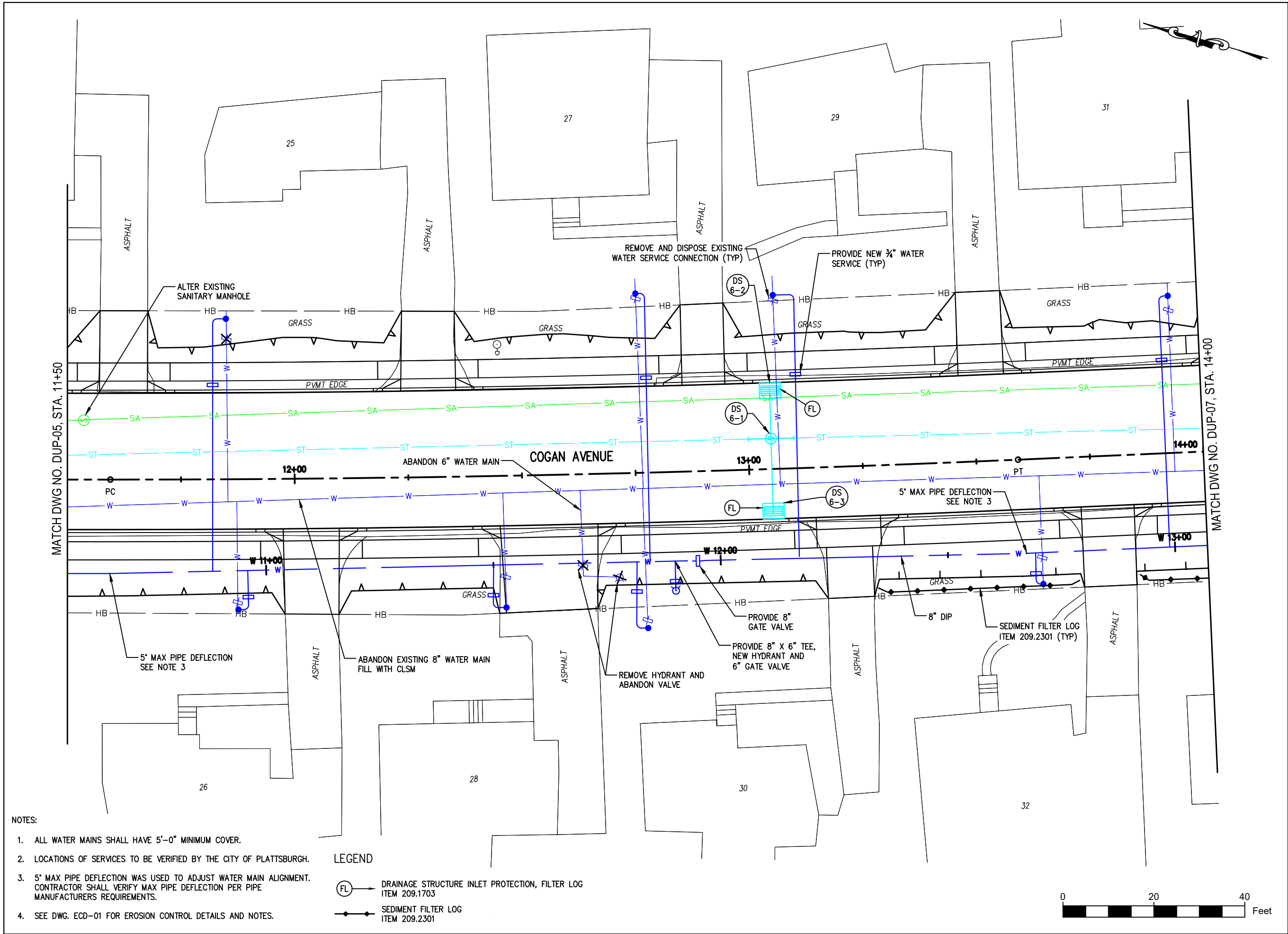
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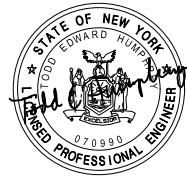
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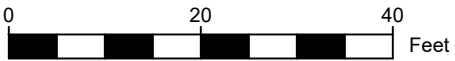
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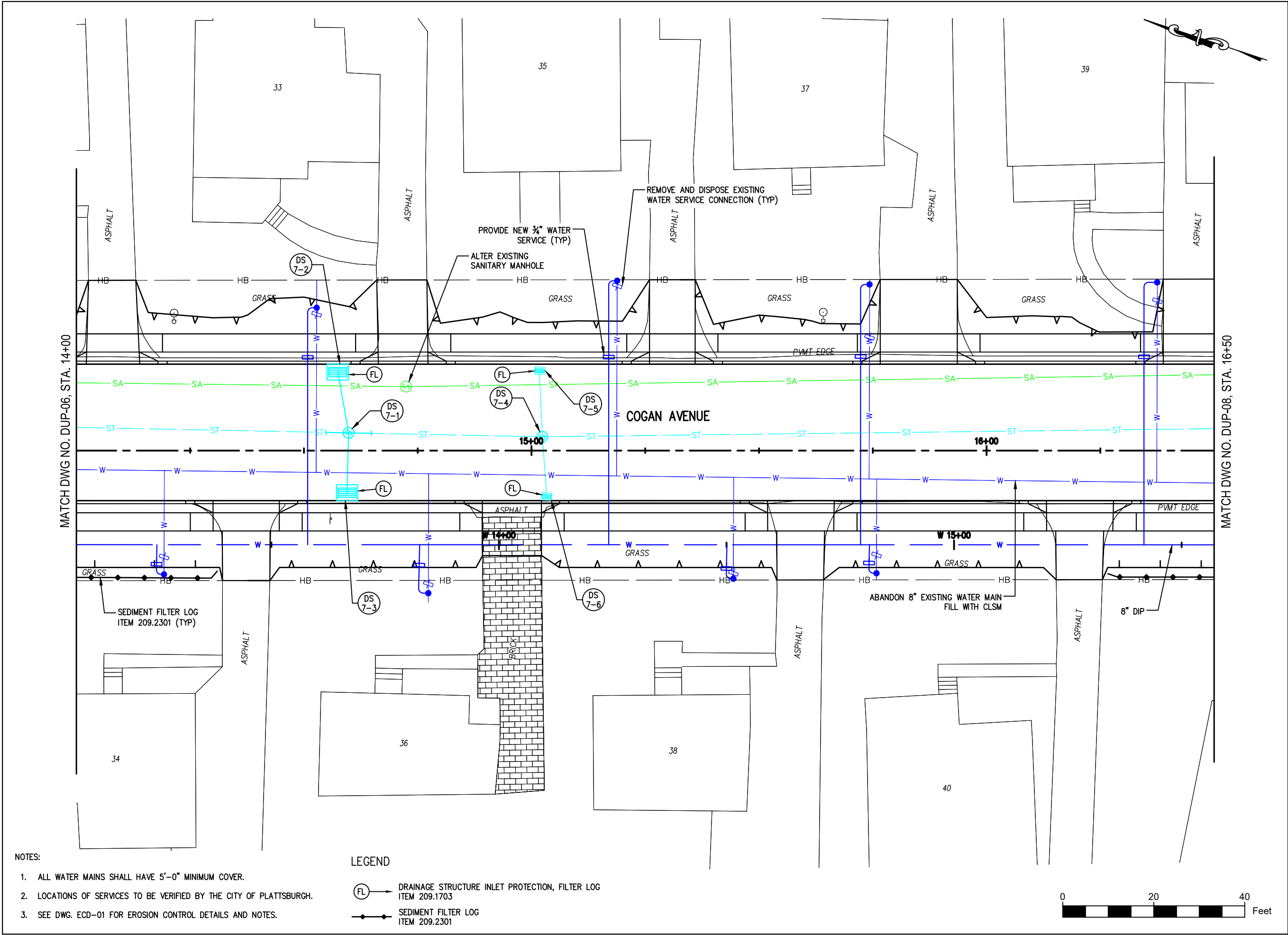
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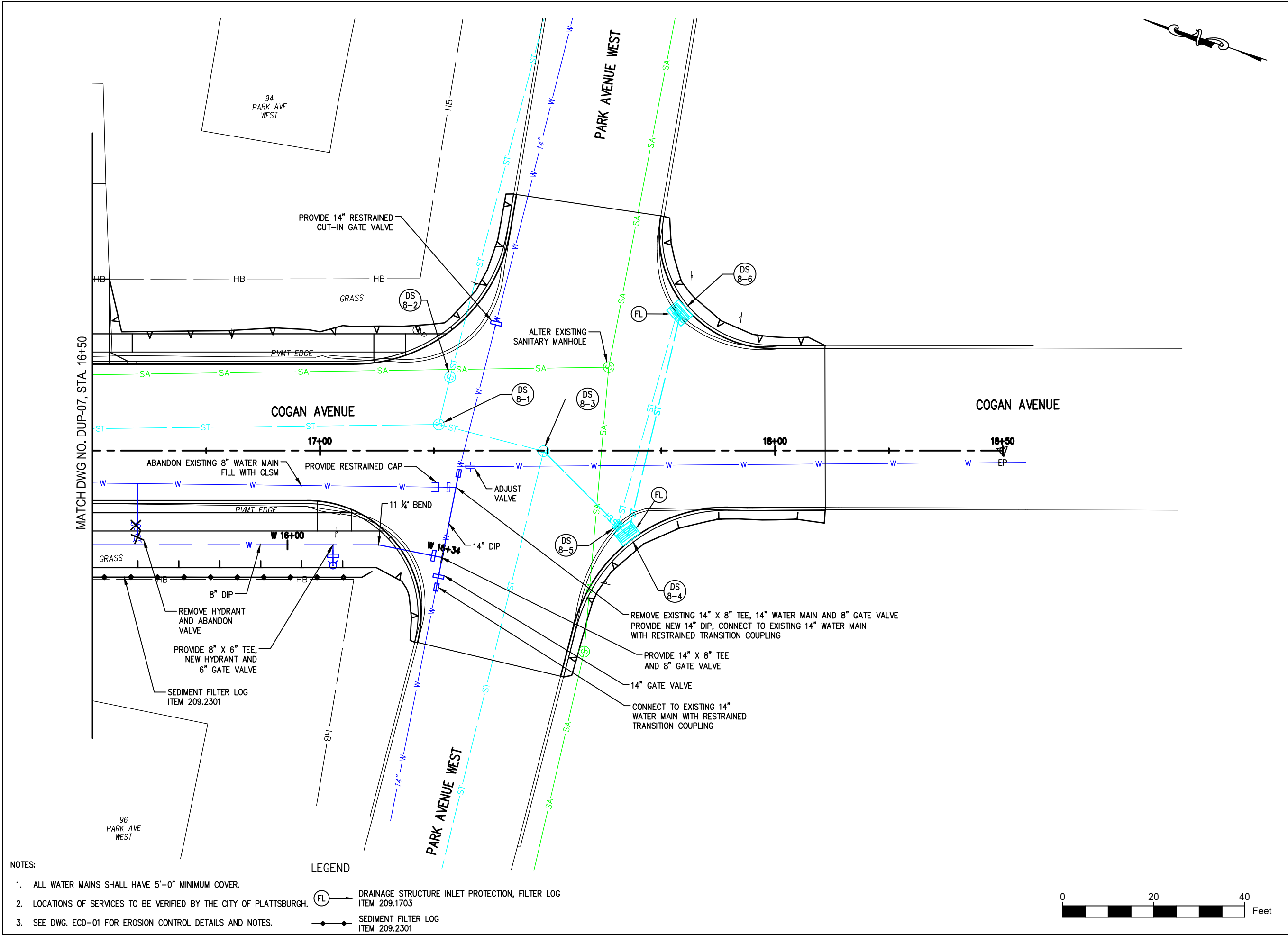
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DUP-08

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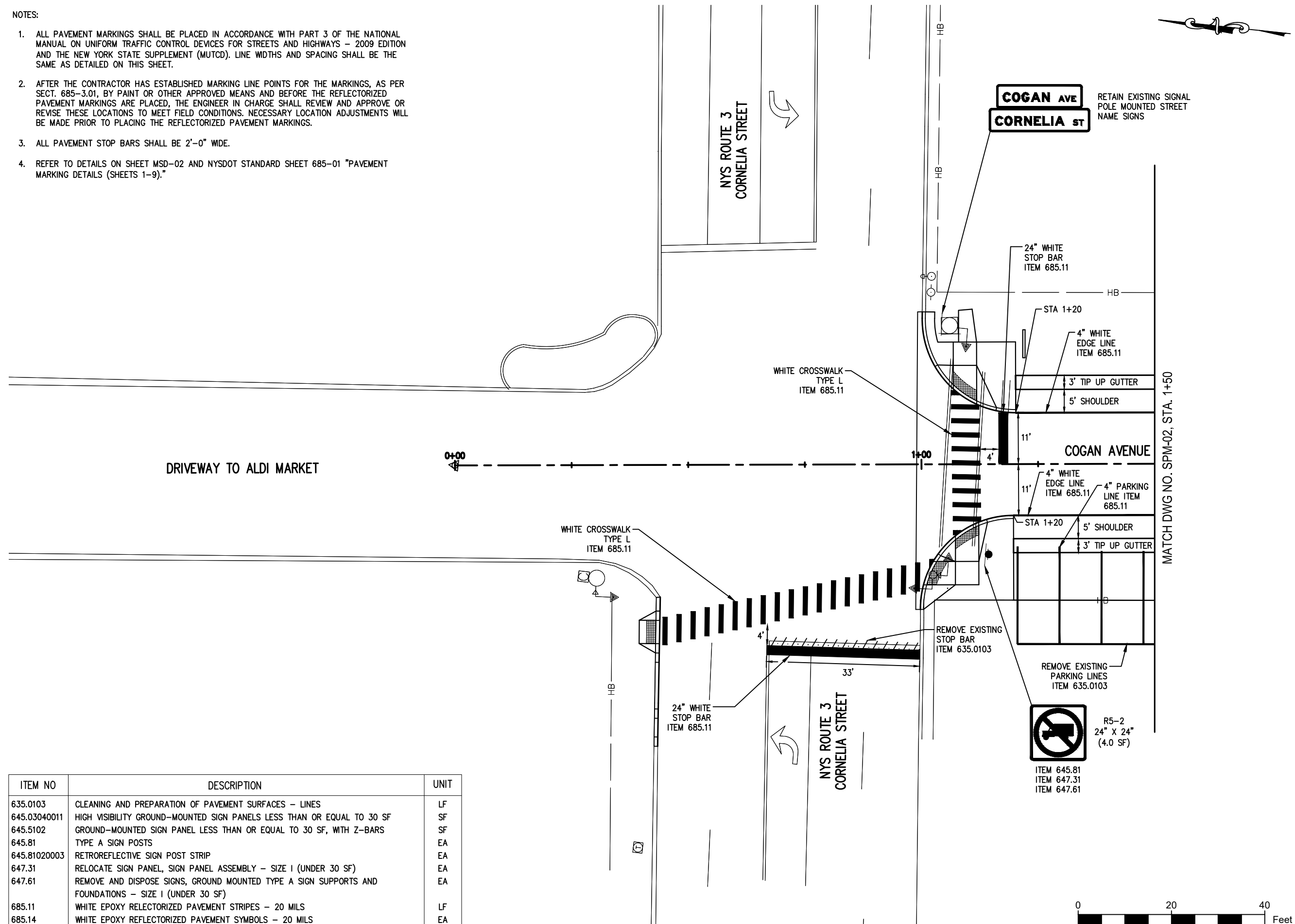
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- NOTES:
1. ALL WATER MAINS SHALL HAVE 5'-0" MINIMUM COVER.
 2. LOCATIONS OF SERVICES TO BE VERIFIED BY THE CITY OF PLATTSBURGH.
 3. SEE DWG. ECD-01 FOR EROSION CONTROL DETAILS AND NOTES.

- LEGEND
- FL → DRAINAGE STRUCTURE INLET PROTECTION, FILTER LOG
ITEM 209.1703
 - — SEDIMENT FILTER LOG
ITEM 209.2301

1. ALL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH PART 3 OF THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS – 2009 EDITION AND THE NEW YORK STATE SUPPLEMENT (MUTCD). LINE WIDTHS AND SPACING SHALL BE THE SAME AS DETAILED ON THIS SHEET.
2. AFTER THE CONTRACTOR HAS ESTABLISHED MARKING LINE POINTS FOR THE MARKINGS, AS PER SECT. 685-3.01, BY PAINT OR OTHER APPROVED MEANS AND BEFORE THE REFLECTORIZED PAVEMENT MARKINGS ARE PLACED, THE ENGINEER IN CHARGE SHALL REVIEW AND APPROVE OR REVISE THESE LOCATIONS TO MEET FIELD CONDITIONS. NECESSARY LOCATION ADJUSTMENTS WILL BE MADE PRIOR TO PLACING THE REFLECTORIZED PAVEMENT MARKINGS.
3. ALL PAVEMENT STOP BARS SHALL BE 2'-0" WIDE.
4. REFER TO DETAILS ON SHEET MSD-02 AND NYSDOT STANDARD SHEET 685-01 "PAVEMENT MARKING DETAILS (SHEETS 1-9)."



ITEM NO	DESCRIPTION	UNIT
635.0103	CLEANING AND PREPARATION OF PAVEMENT SURFACES – LINES	LF
645.03040011	HIGH VISIBILITY GROUND-MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SF	SF
645.5102	GROUND-MOUNTED SIGN PANEL LESS THAN OR EQUAL TO 30 SF, WITH Z-BARS	SF
645.81	TYPE A SIGN POSTS	EA
645.81020003	RETROREFLECTIVE SIGN POST STRIP	EA
647.31	RELOCATE SIGN PANEL, SIGN PANEL ASSEMBLY – SIZE I (UNDER 30 SF)	EA
647.61	REMOVE AND DISPOSE SIGNS, GROUND MOUNTED TYPE A SIGN SUPPORTS AND FOUNDATIONS – SIZE I (UNDER 30 SF)	EA
685.11	WHITE EPOXY RELECTORIZED PAVEMENT STRIPES – 20 MILS	LF
685.14	WHITE EPOXY REFLECTORIZED PAVEMENT SYMBOLS – 20 MILS	EA



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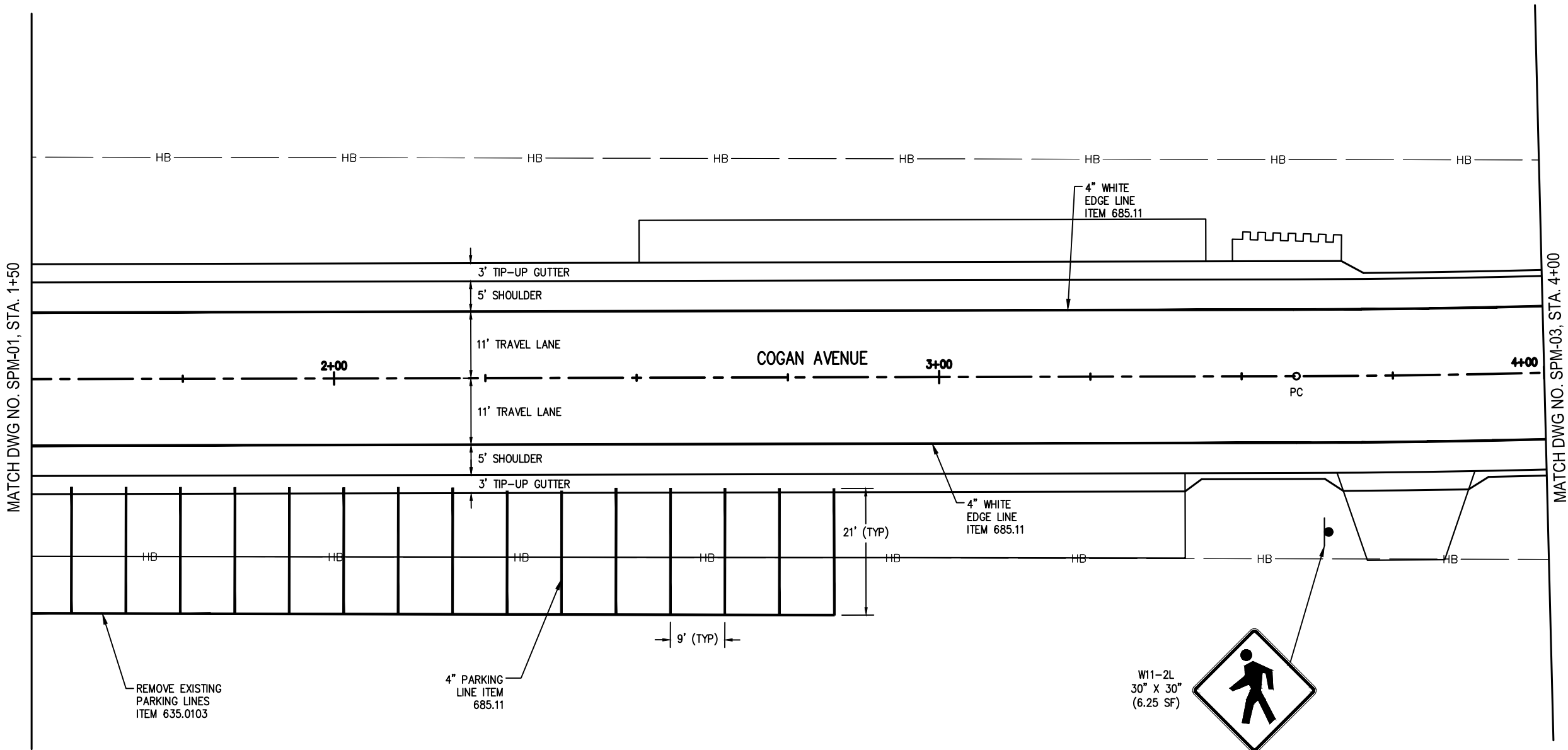
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MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO:	A54.003.001	
DATE:	MARCH 2021	
DRAWN BY:	S.GALLAGHER	
DESIGNED BY:	K. McARDELL	
CHECKED BY:	T. HUMPHREY	
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SIGN AND PAVEMENT MARKING PLAN

SPM-01

SHEET 49 OF 59



W11-2L
30" X 30"
(6.25 SF)

W16-9P
24" X 12"
(2.0 SF)



ITEM 645.03040011
ITEM 645.81
ITEM 645.81020003



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SIGN AND
PAVEMENT MARKING
PLAN

SPM-02

SHEET 50 OF 59

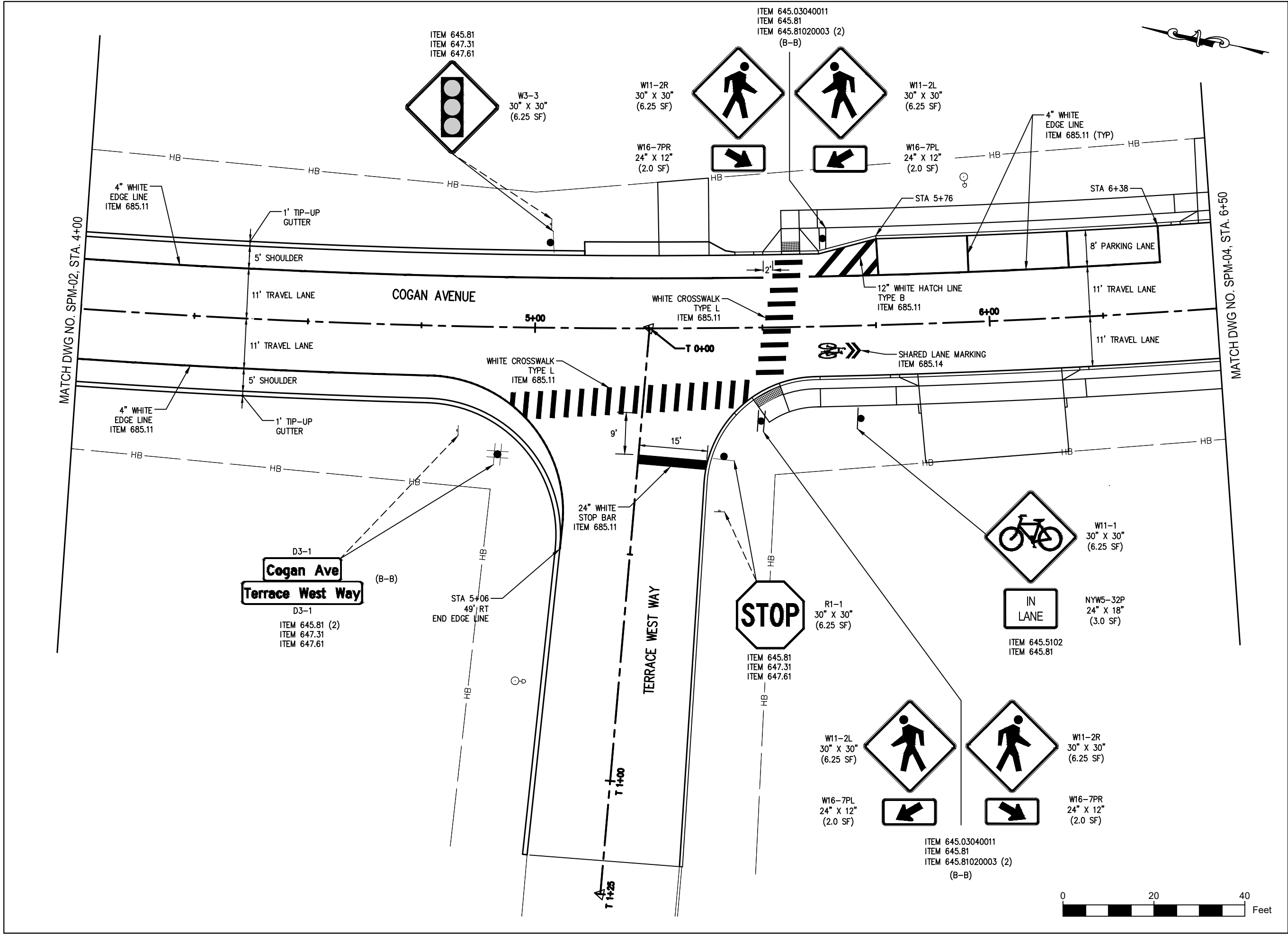


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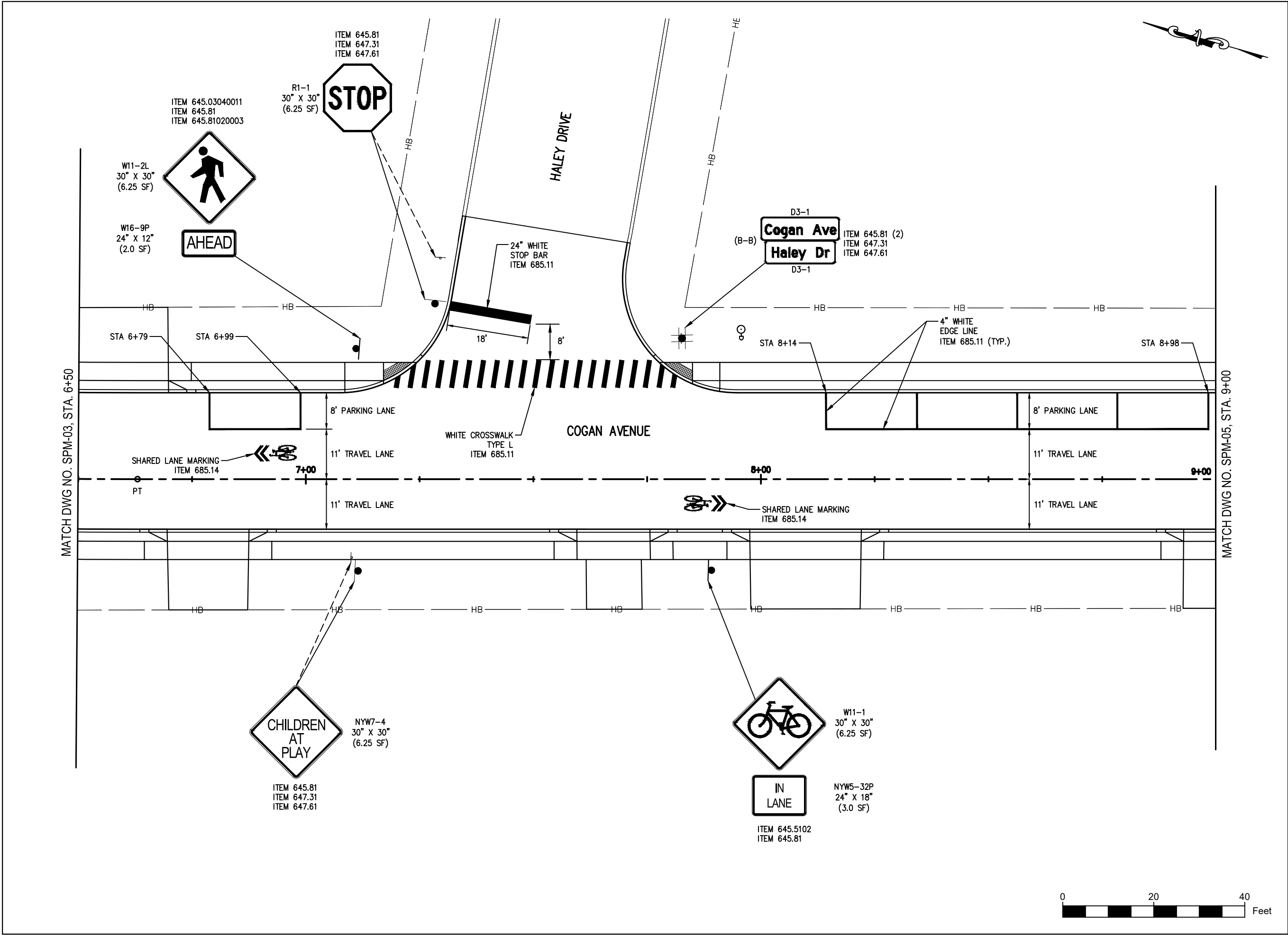
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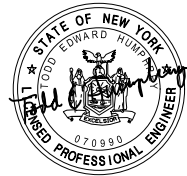
SIGN AND
PAVEMENT MARKING
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SPM-03

SHEET 51 OF 59



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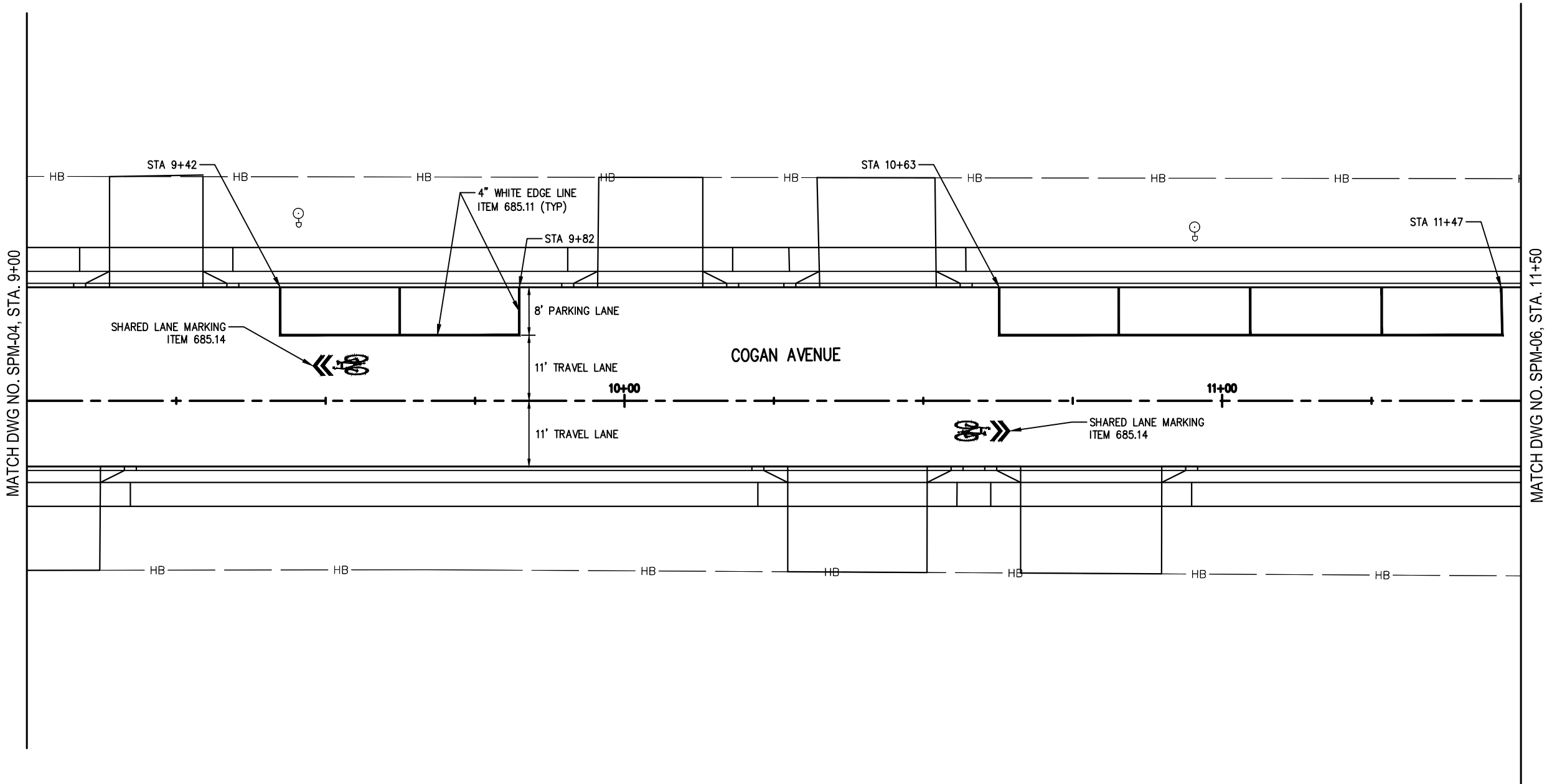
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SIGN AND
PAVEMENT MARKING
PLAN

SPM-04

SHEET 52 OF 59

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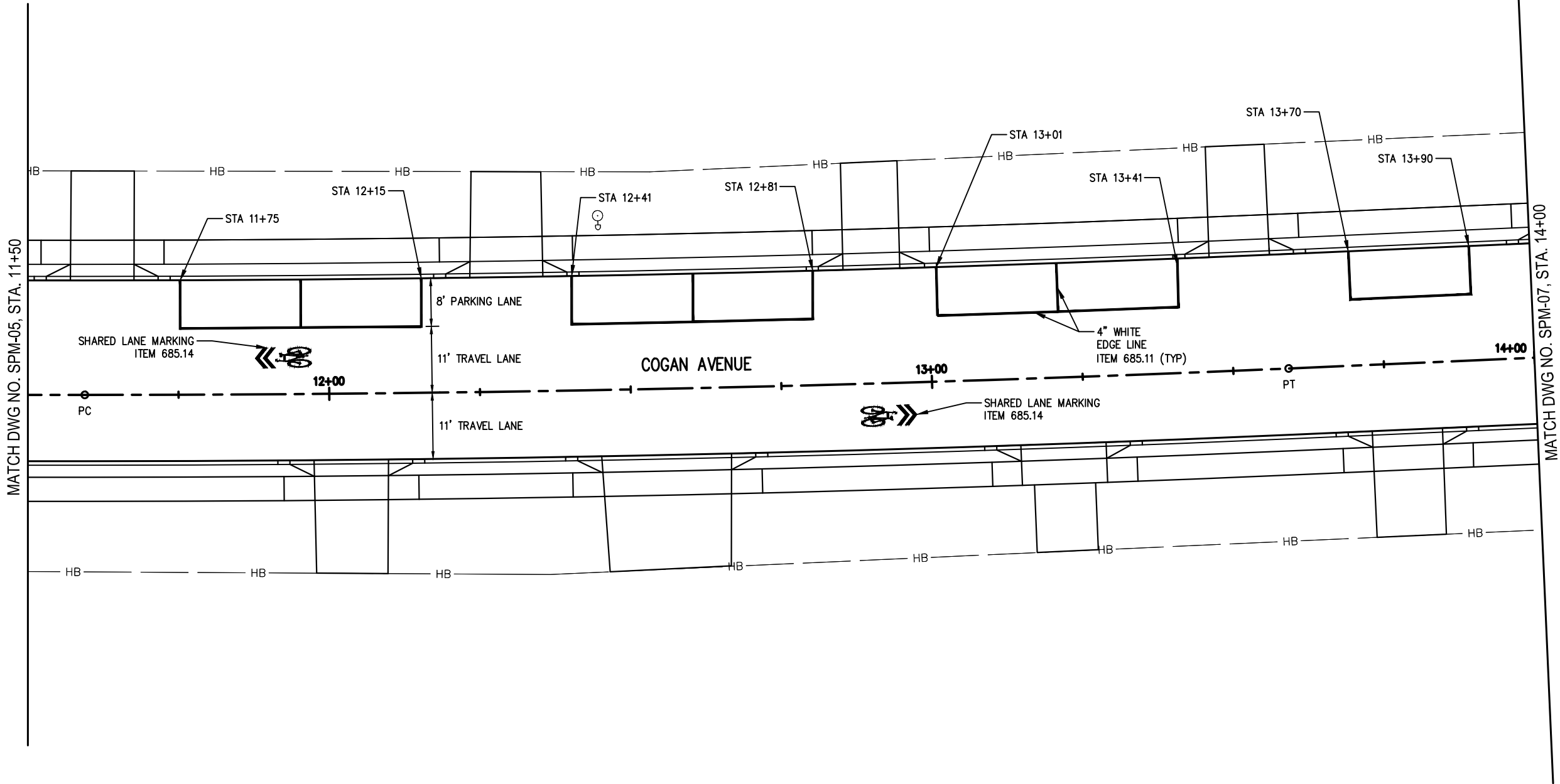
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SIGN AND
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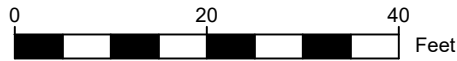
SHEET 53 OF 59

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MATCH DWG NO. SPM-05, STA. 11+50

MATCH DWG NO. SPM-07, STA. 14+00



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SIGN AND
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PLAN

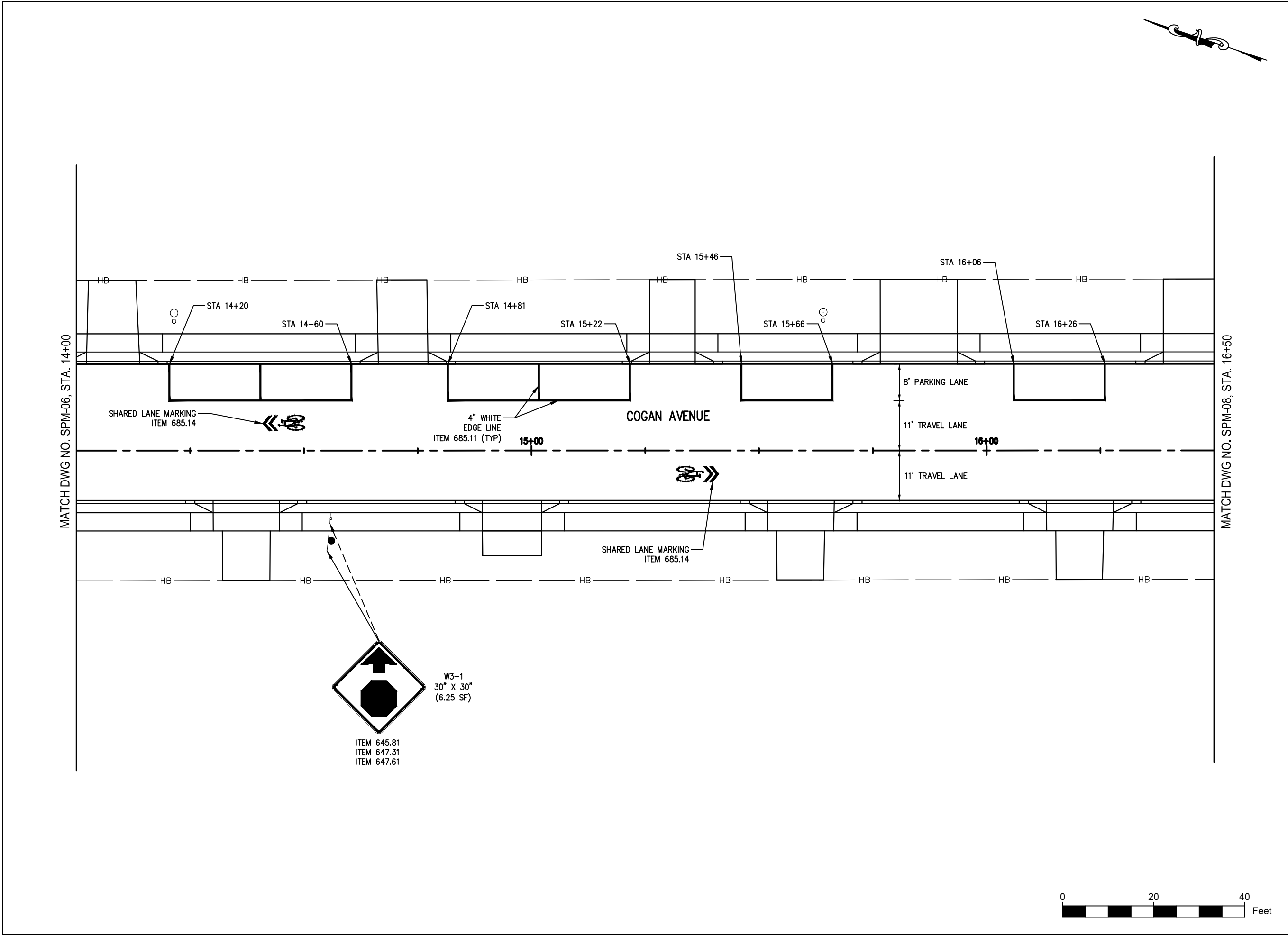
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SHEET 54 OF 59



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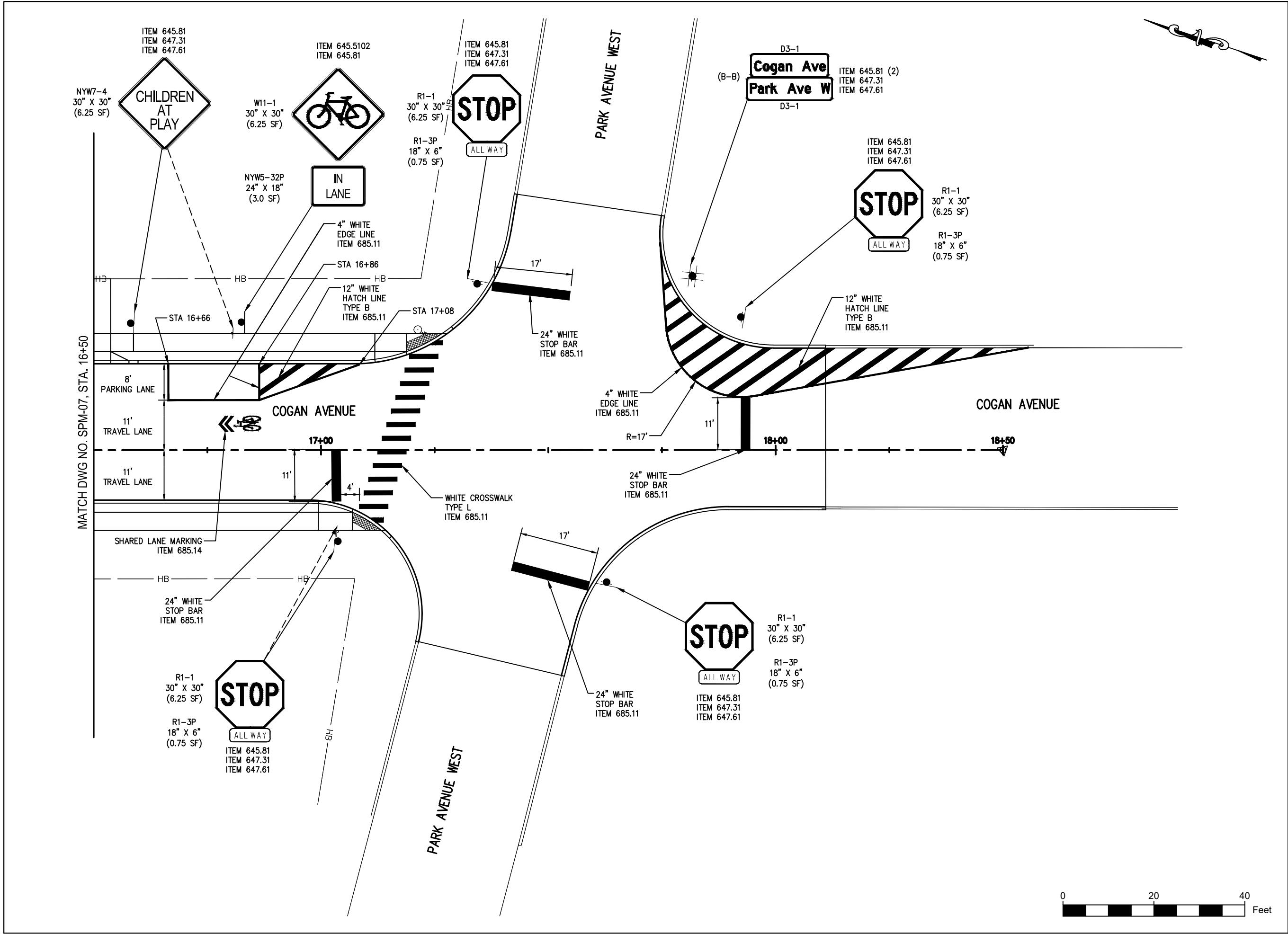
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SIGN AND
PAVEMENT MARKING
PLAN

SPM-07

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**SIGN AND
PAVEMENT MARKING
PLAN**

SPM-08

SHEET 56 OF 59

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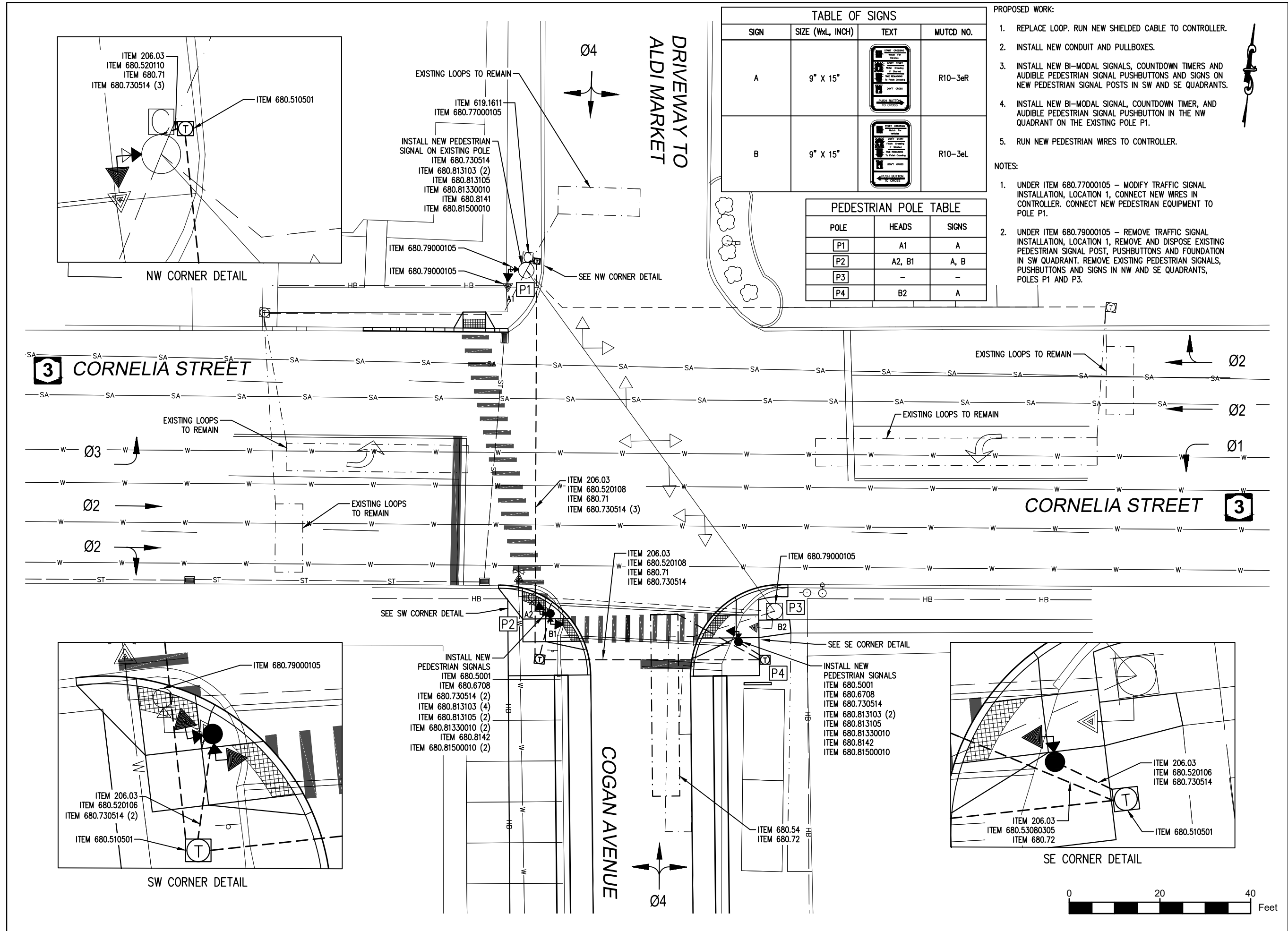


TABLE OF SIGNS			
SIGN	SIZE (WxL, INCH)	TEXT	MUTCD NO.
A	9" X 15"		R10-3eR
B	9" X 15"		R10-3eL

PEDESTRIAN POLE TABLE		
POLE	HEADS	SIGNS
P1	A1	A
P2	A2, B1	A, B
P3	-	-
P4	B2	A

- PROPOSED WORK:
1. REPLACE LOOP. RUN NEW SHIELDED CABLE TO CONTROLLER.
 2. INSTALL NEW CONDUIT AND PULLBOXES.
 3. INSTALL NEW BI-MODAL SIGNALS, COUNTDOWN TIMERS AND AUDIBLE PEDESTRIAN SIGNAL PUSHBUTTONS AND SIGNS ON NEW PEDESTRIAN SIGNAL POSTS IN SW AND SE QUADRANTS.
 4. INSTALL NEW BI-MODAL SIGNAL, COUNTDOWN TIMER, AND AUDIBLE PEDESTRIAN SIGNAL PUSHBUTTON IN THE NW QUADRANT ON THE EXISTING POLE P1.
 5. RUN NEW PEDESTRIAN WIRES TO CONTROLLER.

- NOTES:
1. UNDER ITEM 680.77000105 - MODIFY TRAFFIC SIGNAL INSTALLATION, LOCATION 1, CONNECT NEW WIRES IN CONTROLLER. CONNECT NEW PEDESTRIAN EQUIPMENT TO POLE P1.
 2. UNDER ITEM 680.79000105 - REMOVE TRAFFIC SIGNAL INSTALLATION, LOCATION 1, REMOVE AND DISPOSE EXISTING PEDESTRIAN SIGNAL POST, PUSHBUTTONS AND FOUNDATION IN SW QUADRANT. REMOVE EXISTING PEDESTRIAN SIGNALS, PUSHBUTTONS AND SIGNS IN NW AND SE QUADRANTS, POLES P1 AND P3.



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**TRAFFIC
SIGNAL PLAN**

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TRAFFIC SIGNAL POLES

1. EXPOSED FOUNDATION SURFACES SHALL BE FINISHED IN A WORKMAN LIKE MANNER. REINFORCEMENT BARS SHALL HAVE A MINIMUM OF 3 INCHES OF COVER. FOUNDATIONS SHALL BE AT THE SAME ELEVATION AS EXISTING OR PROPOSED FINISH WALKWAY SURFACES. FOUNDATIONS IN TURF AREAS SHALL BE 2 INCHES ABOVE FINAL GRADE.
2. BASE PLATES SHALL BE WRAPPED WITH A STAINLESS STEEL SCREEN. SCREEN OPENING SIZE SHALL BE APPROXIMATELY 1/4 INCH. THE SCREEN IS SECURED TO THE BASE PLATE WITH A STAINLESS STEEL BAND. THE SCREEN SHALL BE INSTALLED FROM THE FOUNDATION SURFACE TO JUST BELOW THE TOP OF THE BASE PLATE. THE SCREEN WRAPS THE FULL PERIMETER OF THE BASE PLATE WITH A 3 INCH OVERLAP. THE OVERLAP SHALL FACE AWAY FROM TRAFFIC.

ELECTRICAL CABLE SPLICES

1. ALL CABLE SPLICES MADE IN CABLE RUNS TO BE LOCATED BELOW GROUND WILL BE ACCOMPLISHED USING METHOD NO. 2 (TWO COMPONENT ELECTRICAL INSULATING RESIN REJACKETING MATERIALS) AS DESCRIBED IN SECTION 680-3.16 OF THE N.Y.S. STANDARD SPECIFICATIONS.
2. EXTRA CONDUCTORS IN SIGNAL CABLE RUNS SHALL NOT BE CUT SHORT BUT WILL BE TAPED BACK ON ITS OWN CABLE FOR FUTURE USE.
3. OVERHEAD CABLE SPLICES WILL NOT BE ALLOWED.

CONDUIT AND CONDUIT EXCAVATION

1. CAPPED CONDUIT SHALL BE THE SIZE SHOWN ON THE PLANS AND SHALL EXTEND A MINIMUM OF 6 FEET OUTSIDE ALL POLE FOUNDATIONS OR PULLBOXES.
2. EXCAVATION FOR THE INSTALLATION OF UNDERGROUND CONDUIT IN PAVEMENT AREAS SHALL BE MADE WITH AN APPROPRIATE WHEEL EXCAVATOR. THE TRENCH WIDTH SHALL BE KEPT TO A MINIMUM AND THE DEPTH SHALL BE IN CONFORMANCE WITH THE N.Y.S. STANDARD SPECIFICATIONS.
3. IN PAVEMENT AREAS TRENCH BACKFILL SHALL BE CONTROLLED LOW STRENGTH MATERIAL TO THE BOTTOM OF THE ASPHALT COURSE. IT SHALL CONFORM TO THE N.Y.S. STANDARD SPECIFICATIONS.
4. ALL CONDUIT CONNECTIONS SHALL BE WATERTIGHT.
5. ALL SIGNAL CONDUITS SHALL BE BONDED WITH A #6 BARE STRANDED COPPER GROUND WIRE.
6. ALL COUPLINGS AND BUSHINGS SHALL BE MECHANICALLY THREADED. COMPRESSION OR SLIP TYPE COUPLINGS OR BUSHINGS SHALL NOT BE ALLOWED.

GROUNDING

1. ALL SIGNAL POLES OR PEDESTRIAN STATIONS SHALL BE GROUNDED IN CONFORMANCE WITH THE DETAILS SHOWN ON STANDARD SHEET 680-04, WITH THE EXCEPTION OF THE DETAIL "GROUND ROD INSTALLATION", THE "GROUND ROD INSTALLATION" DETAIL SHALL NOT BE INSTALLED IN THIS CONTRACT.
2. USE AT LEAST A 15 INCH DIAMETER REINFORCED CONCRETE PULLBOX FOR GROUNDING ROD INSTALLATION.
3. CLAY TILE PIPE DETAILED ON STANDARD SHEET 680-04 SHALL NOT BE USED.
4. GROUND WIRE FOR CABINETS OR POLES SHALL BE INSTALLED IN ITS OWN 1 INCH P.V.C. PLASTIC CONDUIT AND RUN TO THE NEAREST GROUND ROD LOCATION AS SHOWN ON STANDARD SHEET 680-04.
5. CONSTRUCTION SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE.
6. ALL GROUND TESTING SHALL BE COMPLETED AND ACCEPTED PRIOR TO SIGNAL START UP.

PULLBOXES

1. UNLESS OTHERWISE SHOWN. ALL PULLBOXES SHALL BE INSTALLED OUTSIDE OF THE PAVEMENT OR SHOULDER AREAS.
2. THE FINISHED GROUND SURFACE ON A BACK SLOPE IN THE VICINITY OF THE PULLBOX SHALL BE ADJUSTED SO THAT NO FILL SHALL SPILL ON THE TOP OF THE BOX AND THE MAXIMUM DISTANCE FROM THE TOP OF THE BOX TO THE FINISHED GROUND AT THE BOX SHALL NOT EXCEED 4 INCHES. ALL MATERIALS AND LABOR NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE PULLBOX.
3. ALL PULLBOXES INSTALLED IN THE SIDEWALK SHALL BE FLUSH WITH THE WALK.
4. MAXIMUM DEPTH TO CONDUIT ENTRANCE SHALL BE 3 FEET.

WORK AFFECTING SIGNALS AND COORDINATION WITH OWNER

1. THE CONTRACTOR SHALL NOTIFY THE CITY OF PLATTSBURGH IN WRITING AT LEAST TEN (10) WORKING DAYS IN ADVANCE OF ANY OF HIS OPERATIONS THAT WILL AFFECT THE EXISTING SIGNAL, SUCH AS PAVEMENT REMOVAL OR NEW SIGNAL ITEM INSTALLATIONS. THE TRAFFIC DEPARTMENT SHALL PERFORM ALL NECESSARY WORK REQUIRED IN THE EXISTING CONTROLLER CABINET, HOWEVER, AT THE OVERHEAD REBUILD SITES THE CONTRACTOR WILL BE REQUIRED TO MAKE THE CONNECTIONS FOR THE OUTPUTS TO THE HEADS ON THE TERMINAL STRIP IN THE CABINET.
2. FINAL SIGNAL HEAD LOCATIONS SHALL BE FIELD REVIEWED AND APPROVED BY THE CITY OF PLATTSBURGH.
3. ALL WIRING SHALL BE COMPLETED IN A NEAT AND WORKMAN LIKE MANNER.

CONDUITS

1. ALL SIGNAL CONDUITS SHALL BE BONDED WITH A #6 BARE STRANDED COPPER GROUND WIRE.
2. ALL COUPLINGS AND BUSHINGS SHALL BE MECHANICALLY THREADED. COMPRESSION OR SLIP TYPE COUPLINGS OR BUSHINGS SHALL NOT BE ALLOWED.

PEDESTRIAN SIGNALS

1. ALL PEDESTRIAN PUSH BUTTONS SHALL CONFORM TO THE AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS.
2. ALL PEDESTRIAN PUSH BUTTONS SHALL BE LOCATED PARALLEL WITH THE APPROPRIATE CROSSWALK. ALSO, ALL INDICATIONS SHALL BE INSTALLED AWAY FROM TURNING VEHICULAR TRAFFIC UNLESS OTHERWISE SHOWN ON THE PLAN SHEET.
3. ALL PEDESTRIAN SIGNS SHALL BE 9 INCHES X 15 INCHES (R10-3e) REGARDLESS OF THE SIZE OF POLE THEY ARE INSTALLED ON AND SHALL BE ALUMINUM MATERIAL. SIGNS SHALL BE MOUNTED ON YELLOW BRACKET MATCHING COLOR OF PUSH BUTTON.
4. ON STANDARD SHEET NO. 680-10, ONLY TOP MOUNT POST INSTALLATION SHALL BE ALLOWED.
5. ON STANDARD SHEET NO. 680-10, THE PEDESTRIAN INDICATIONS SHALL BE BANDED TO THE POLE AND HAVE ONE BOLT THROUGH THE TOP BRACKET.
6. PEDESTRIAN HEAD HOUSINGS SHALL BE FEDERAL YELLOW IN COLOR.
7. PEDESTRIAN SIGNAL HEADS SHALL BE ALUMINUM AND MANUFACTURED BY PEEK TRAFFIC CORPORATION.
8. STANDARD SPECIFICATION 680.67XX IS MODIFIED ALLOWING ONLY ALUMINUM TRAFFIC SIGNAL POLES UNLESS OTHERWISE SHOWN ON THE PLANS.

UTILITIES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL UTILITY WORK WITH THE RESPECTIVE OWNERS DURING CONSTRUCTION.
2. CONTRACTOR IS TO CONTACT DIG SAFELY NEW YORK AT 811 FOR MARK OUT OF ALL UNDERGROUND SIGNAL CONDUIT AND LOOP WIRE PRIOR TO ANY DIGGING. ANY BROKEN SIGNAL WIRE CAN NOT BE SPLICED. A NEW RUN OF WIRE FROM THE POLE TO THE FURTHEST END MUST BE REPLACED.

EMERGENCY REPAIR

1. THE CONTRACTOR SHALL PROVIDE THE LOCAL POLICE THE NAME, ADDRESS, AND TELEPHONE NUMBER OF A PERSON OR PERSONS AUTHORIZED OUTSIDE THE NORMAL CONTRACT WORKING HOURS TO SECURE AND USE LABOR, MATERIALS, AND EQUIPMENT FOR EMERGENCY REPAIRS TO MAKE SAFE THE ENTIRE AREA OF THE CONTRACT. DUPLICATE COPIES OF SUCH NOTICES SHALL BE FILED WITH THE EIC, TRAFFIC SIGNAL MAINTENANCE, AND THE CITY OF PLATTSBURGH.

AUDIBLE WIRING

1. THE MANUFACTURER'S SUGGESTED CABLES (OR EQUIVALENTS) SHALL BE USED WITH AUDIBLE PEDESTRIAN SIGNAL (APS) UNITS. THE QUANTITY OF CABLE REQUIRED AT THIS LOCATION SHALL BE DETERMINED BY THE CONTRACTOR IN ACCORDANCE WITH THE APS MANUFACTURER'S INSTALLATION DETAILS AND PROCEDURES.
2. REFER TO THE MANUFACTURER'S INSTALLATION AND PROCEDURE MANUALS FOR DETAILS.

APS

1. CONTRACTOR SHALL ORDER APS BUTTONS FROM MANUFACTURER WITH STREET NAME MESSAGES PRE-INSTALLED. CONTRACTOR SHALL PROVIDE COPIES OF THE ASSOCIATED ELECTRONIC WAVE FILES TO THE CITY OF PLATTSBURGH.
2. APS PUSH BUTTONS SHALL BE POLARA ENGINEERING BDL3 BULLDOG III SERIES VANDAL RESISTANT ADA PUSH BUTTON.

CONTROLLER

1. CITY OF PLATTSBURGH TO PROGRAM THE CONTROLLER.

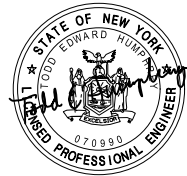
SALVAGE ITEMS

1. EXISTING PEDESTRIAN POLES, CABINETS, PUSH BUTTONS, AND SIGN PANELS REMOVED BY CONTRACTOR SHALL BE RETAINED BY THE CITY, FOR PICKUP BY THE CITY OF PLATTSBURGH DPW.

TABLE OF TRAFFIC SIGNAL ITEMS			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
206-03	CONDUIT EXCAVATION AND BACK-FILL INCLUDING SURFACE RESTORATION	LF	17'
519-1511	MAINTAIN TRAFFIC SIGNAL EQUIPMENT REQUIREMENTS	NM	5
580-5001	POLE EXCAVATION AND CONCRETE FOUNDATION	CY	-
680-510501	PULL BOX RECTANGULAR 26 X 18 INCH REINFORCED CONCRETE	EA	3
680-520106	CONDUIT, METAL STEEL, ZNC COATED, 2"	LF	15
680-520108	CONDUIT, METAL STEEL, ZNC COATED, 3"	LF	134
680-520110	CONDUIT, METAL STEEL, ZNC COATED, 4"	LF	6
680-53080305	CONDUIT, FLEXIBLE, LIGHT TIGHT NON METALLIC, 1"	LF	21
680-54	VOLTA NCE LOOP INSTALLATION	LF	140
580-5708	TRAFFIC SIGNAL POLE POST TOP MOUNT, 8 FEET MOUNTING HEIGHT	EA	2
680-71	SHIELDED LEAD-IN CABLE	LF	160
680-72	VOLTA NCE LOOP WIRE	LF	330
680-730514	SIGNAL CABLE, 5 CONDUCTORS, 14 AWG	LF	430
680-77000105	MODIFY TRAFFIC SIGNAL INSTALLATION LOCATION 1	EA_LOC	-
680-78000105	REMOVE TRAFFIC SIGNAL INSTALLATION LOCATION 1	EA_LOC	-
680-813103	PEDESTRIAN SIGNAL SECTION - TYPE 1, 12 INCH	EA	8
680-813105	PEDESTRIAN SIGNAL MODULE - 12 INCH BI-MODAL, HAND MAN SYMBOLS, LED	EA	4
680-81330310	AUDIBLE PEDESTRIAN SIGNAL	EA	4
580-8141	PEDESTRIAN SIGNAL BRACKET MOUNT ASSEMBLY	EA	-
580-8142	PEDESTRIAN SIGNAL POST TOP MOUNT ASSEMBLY	EA	2
680-81500010	PEDESTRIAN COUNT-DOWN TIMER MODULE	EA	4



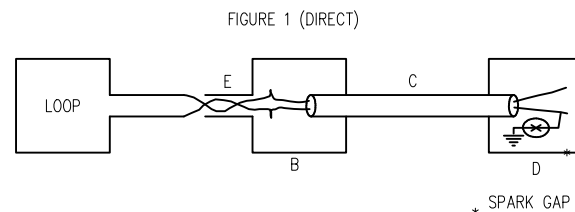
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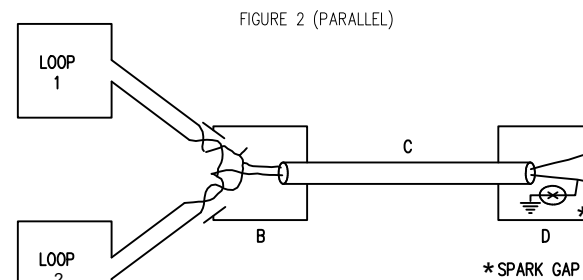
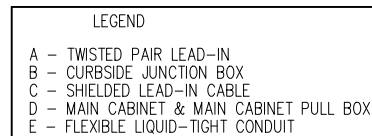
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TRAFFIC SIGNAL NOTES		
TSN-01		
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NOTE: THE TOTAL COMBINED LENGTH OF THE TWISTED PAIR IS 100 FT MAX.

THE ROAD LOOP IS CONNECTED THROUGH THE ENCAPSULATED LOOP LEAD-IN WIRES (TWISTED PAIR) TO THE MAIN SHIELDED LEAD-IN CABLE AT THE CURBSIDE JUNCTION BOX WHICH IN TURN RETURNS TO THE TERMINAL BLOCK IN THE MAIN CABINET.



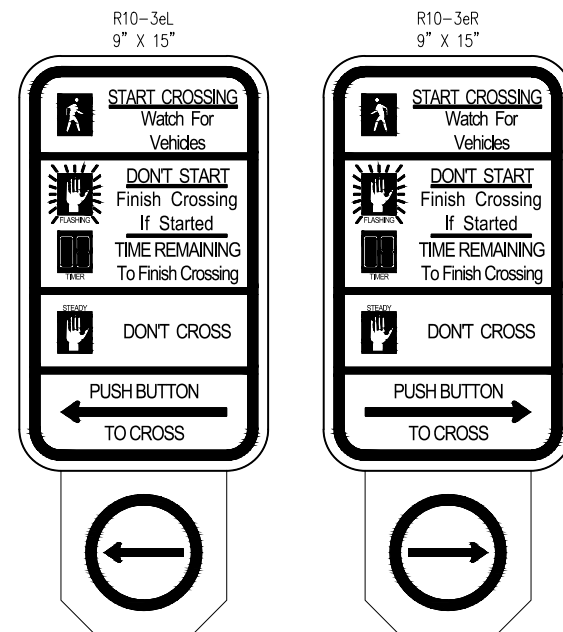
NOTE: THE TOTAL COMBINED LENGTH OF THE TWISTED PAIR IS 100 FEET MAX.

TWO ROAD LOOPS WHEN LOCATED ADJACENT TO EACH OTHER. THESE ENCAPSULATED LOOP AND LOOP LEAD-IN WIRES (TWISTED PAIR) ARE CONNECTED IN PARALLEL WITHIN THE CURBSIDE JUNCTION BOX AND THEN PROCEED THROUGH THE SHIELDED LEAD-IN CABLE WHICH IN TURN GOES TO THE TERMINAL BLOCK IN THE MAIN CABINET.

THE CONFIGURATION OF FIGURE 2 MAY BE EXPANDED TO ACCOMMODATE ADDITIONAL LOOPS (UP TO 4) OF THE SAME PHASE.

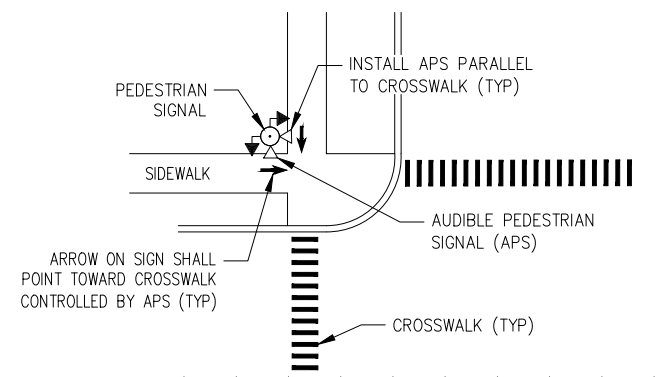
INDUCTANCE LOOP WIRING

NOT TO SCALE



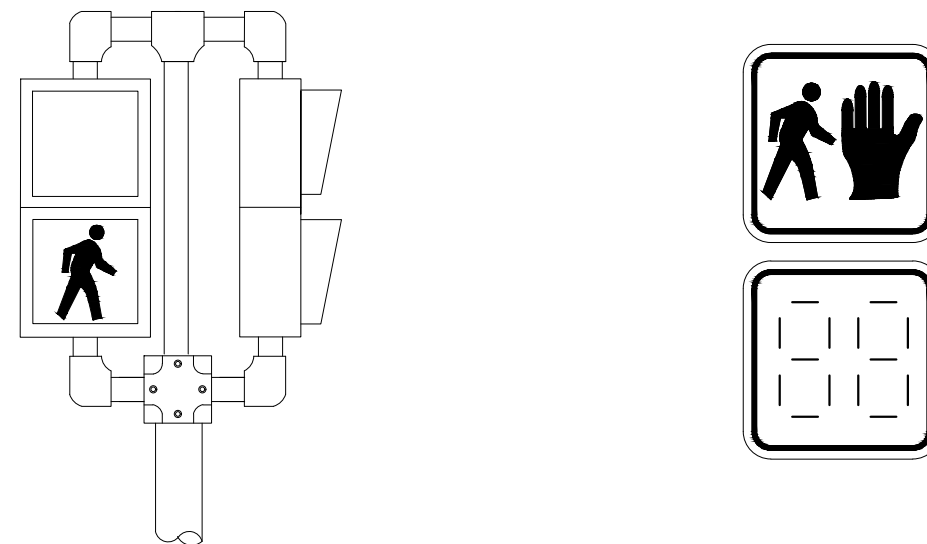
APS PUSH BUTTON AND SIGN

NOT TO SCALE



AUDIBLE PEDESTRIAN SIGNAL (APS) INSTALLATION SCHEMATIC

NOT TO SCALE

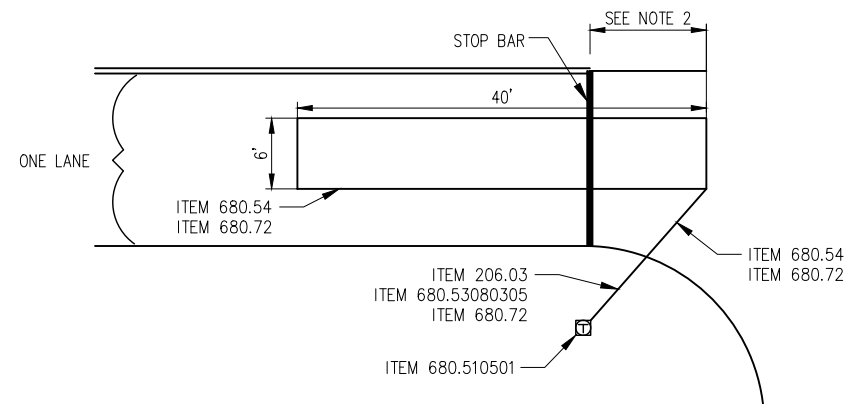


PEDESTRIAN SIGNAL HEAD MOUNTING

NOT TO SCALE

NOTE:

1. POST TOP MOUNT PEDESTRIAN SIGNAL HEADS IN THIS CONTRACT (BI-DIRECTIONAL) SHALL BE INSTALLED WITH A REINFORCING PLATE AND TUBING AS SHOWN IN THE DETAIL.



INDUCTANCE LOOP INSTALLATION

NOT TO SCALE

NOTES:

1. IN NEW CONSTRUCTION OF ASPHALT PAVEMENTS, THE LOOP SHOULD BE PLACED BELOW THE TOP COURSE, PREFERABLY IN THE BINDER.
2. LOOPS TYPICALLY SHOULD EXTEND 10' BEYOND STOP BAR BUT SHALL NOT EXTEND BEYOND EXTENSION OF CROSS STREET CURB LINE.



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**COGAN AVENUE
RECONSTRUCTION**

CITY OF PLATTSBURGH

MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO:	A54.003.001	
DATE:	MARCH 2021	
DRAWN BY:	S. GALLAGHER	
DESIGNED BY:	K. WESSEL	
CHECKED BY:	T. HUMPHREY	
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW.		

TRAFFIC SIGNAL DETAILS

TSD-01

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