

Capital Project Nos.

- HW - 416
- HW - 200
- WM - 1
- WM - 6
- TF - 502
- EP - 7
- TF - 1
- SE - 725

RECOMMENDED BY:
NEW YORK STATE DEPARTMENT OF TRANSPORTATION

M. MICHAEL FRANCESE, P.E.
REGIONAL DIRECTOR
REGION II

DATE

CITY OF NEW YORK

DEPARTMENT OF TRANSPORTATION

BUREAU OF HIGHWAYS

DIVISION OF ROADWAY ENGINEERING

P.I.N. 84193 HWMN775

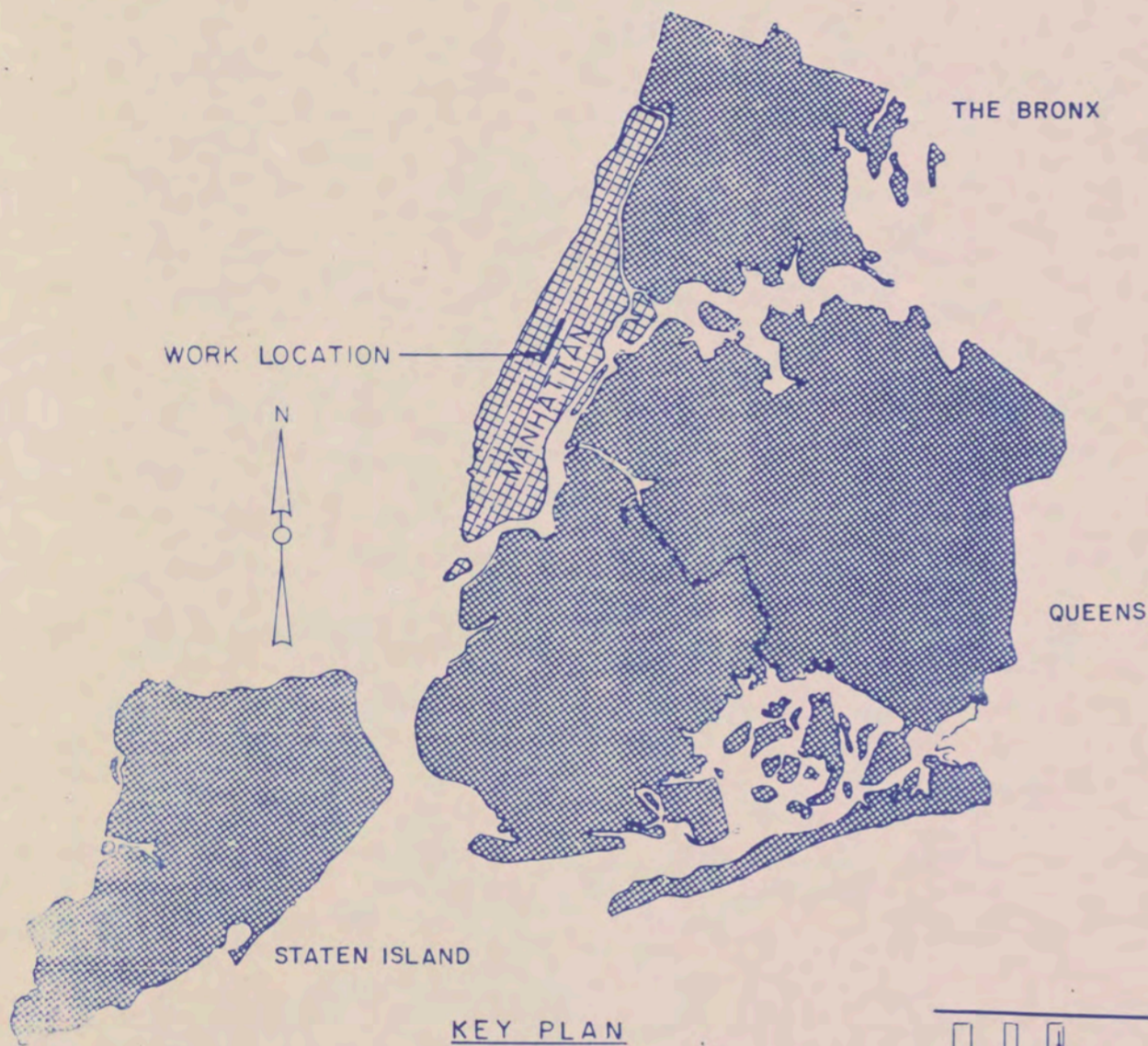
(FORMERLY CONTRACT NO. HW-416)

RECONSTRUCTION OF

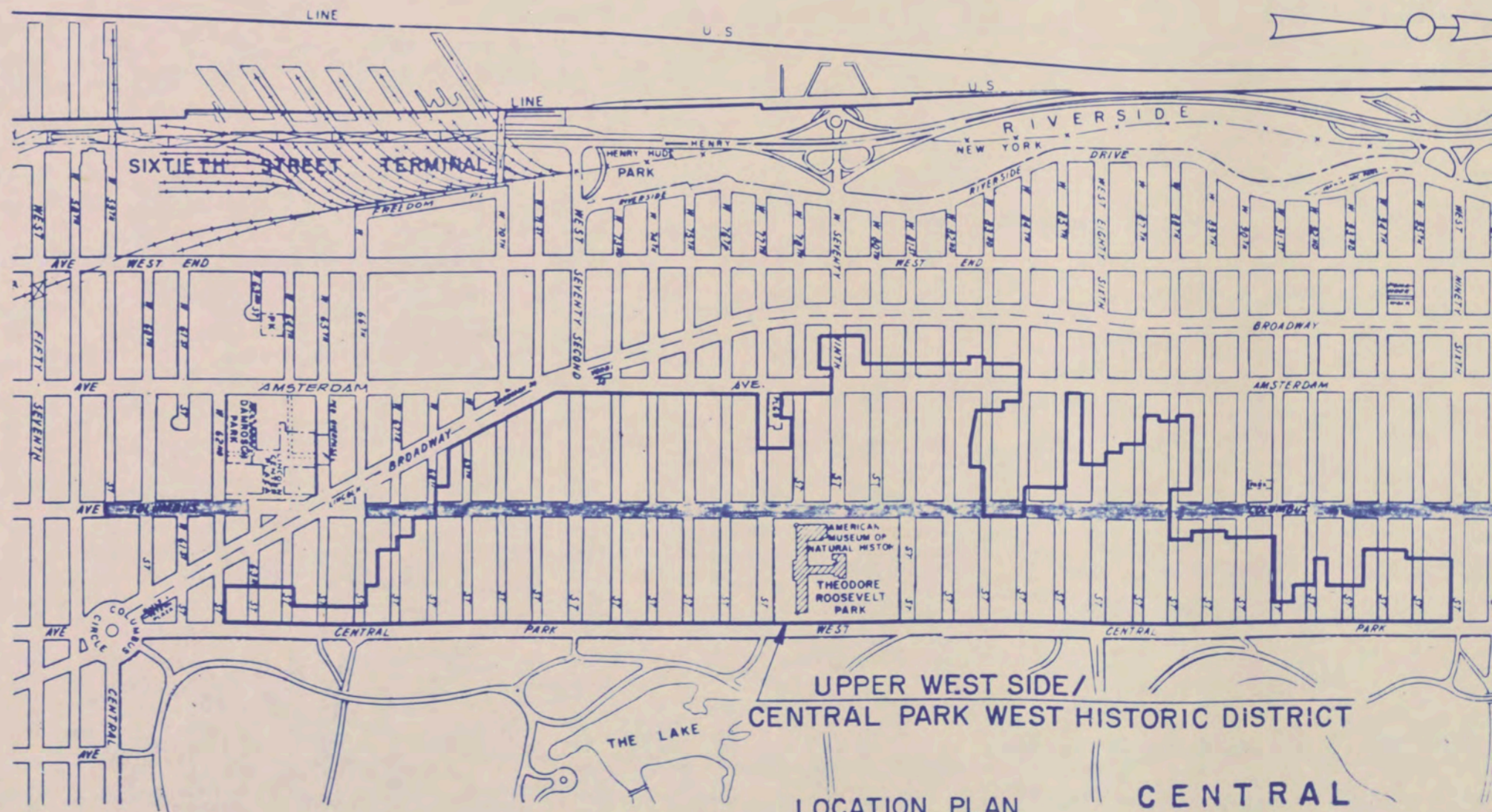
COLUMBUS AVENUE

FROM WEST 59th STREET TO WEST 110th STREET
(EXCLUDING INTERSECTION AT BROADWAY)
INCLUDING WATER MAIN WORK, TRAFFIC, STREET LIGHTING,
SEWER WORK TOGETHER WITH ALL WORK INCIDENTAL THEREON

BOROUGH OF MANHATTAN



KEY PLAN



UPPER WEST SIDE/
CENTRAL PARK WEST HISTORIC DISTRICT

LOCATION PLAN

CENTRAL

COMMUNITY BOARD NO. 7

DANIEL FRANKFURT, P.C. consulting engineers
800 SECOND AVENUE NEW YORK, N.Y.

DRAWN BY
CHECKED BY

FED RD. REG NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
U 7155	NEW YORK		1	87
N.Y.S.D.O.T. PROJECT IDENTIFICATION NO. X755-34				

STATE OF NEW YORK

DEPARTMENT OF TRANSPORTATION

BUREAU OF HIGHWAYS

DIVISION OF ROADWAY ENGINEERING

P.I.N. 84193 HWMN775

(FORMERLY CONTRACT NO. HWM-416CW)

RECONSTRUCTION OF COLUMBUS AVENUE

FROM WEST 59th STREET TO WEST 110th STREET
(EXCLUDING INTERSECTION AT BROADWAY)
INCLUDING WATER MAIN WORK, TRAFFIC, STREET LIGHTING AND
LANDSCAPE WORK TOGETHER WITH ALL WORK INCIDENTAL THERETO

BOROUGH OF MANHATTAN

APPROVED: PRELIMINARY
APR 12 1993
THE ART COMMISSION

APPROVED: FINAL
APR 12 1993
THE ART COMMISSION

Submission 18276
File # 5558
Exhibit C
Certificate 18276
ART COMMISSION
OF THE CITY OF NEW YORK

DEPARTMENT OF TRANSPORTATION

[Signature]
LUCIUS J. RICCIO, PH. D., P. E.
COMMISSIONER

12/23/92
DATE

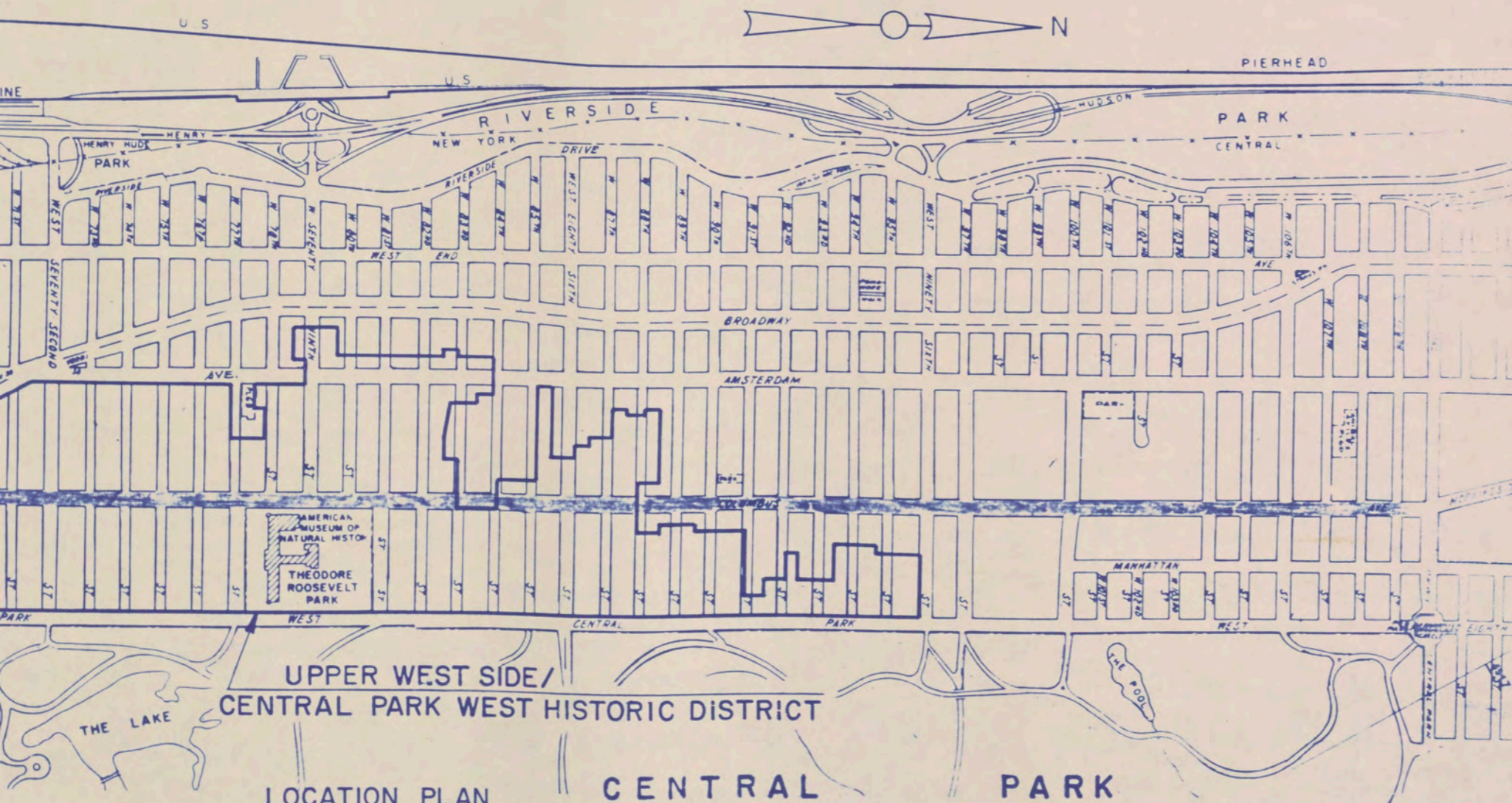
[Signature]
CHRIS ANNE HALPIN, P. E.
DEPUTY COMMISSIONER

12/22/92
DATE

REVIEWED AND RECOMMENDED BY:

[Signature]
BARNEY L. GRECA, P. E.
ASSISTANT COMMISSIONER

1/14/93
DATE



LOCATION PLAN
COMMUNITY BOARD NO. 7

RECEIVED
JAN 25 1993
ART COMMISSION
OF THE CITY OF NEW YORK

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LEGEND

	<u>EXISTING</u>	<u>NEW</u>
LEGAL GRADE	LG 95.0	
CURB		
BUS STOP		
DEPRESSED CURB		
DIRECTION OF SURFACE DRAINAGE		
DIRECTION OF TRAFFIC		
COMBINED SEWER		
CATCH BASINS		
WATER MAINS		
ACCESS MANHOLE		
HYDRANT		
WATER VALVE		
REDUCER		
CAP		
CONNECTION		
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LIMIT OF NEW PAVEMENT		
WIDTH OF SIDEWALKS AND ROADWAY		
EXISTING TO REMAIN		
EXISTING SUPERSEDED BY NEW DIMENSIONS		
PROPOSED DIMENSIONS		

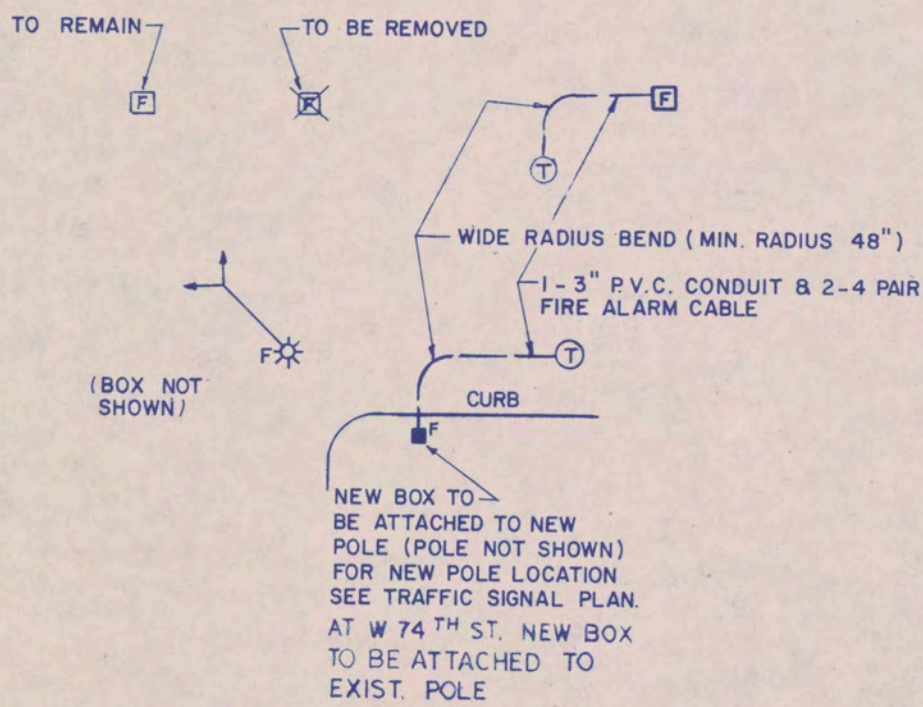
LEGEND

EXISTING

NEW

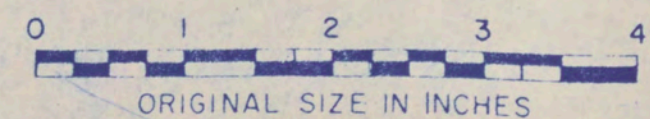
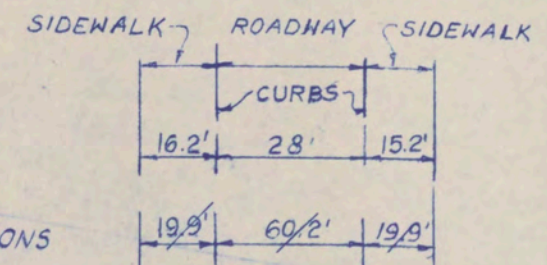
FIRE ALARM INDEPENDENT POST

FIRE ALARM BOX ATTACHED TO TRAFFIC SIGNAL OR STREET LIGHTING POLE



METRIC CONVERSION

1 INCH	=	2.54 CENTIMETERS
1 FOOT	=	0.3048 METER
1 MILE	=	1.609 KILOMETERS
<u>AREA</u>		
1 SQUARE FOOT	=	0.0929 SQUARE METER
1 SQUARE YARD	=	0.8361 SQUARE METER
<u>VOLUME</u>		
1 CUBIC FOOT	=	0.02832 CUBIC METER
1 CUBIC YARD	=	0.7646 CUBIC METER
1 GALLON	=	3.785 LITERS
<u>VELOCITY</u>		
1 MILE PER HOUR	=	1.6093 KILOMETERS PER HOUR
<u>WEIGHT</u>		
1 OUNCE	=	28.349 GRAMS
1 POUND	=	0.4536 KILOGRAM
1 TON (2000 LBS.)	=	907.18 KILOGRAMS



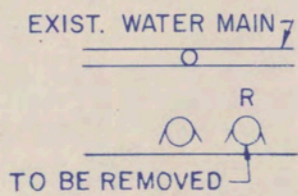
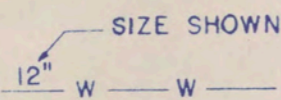
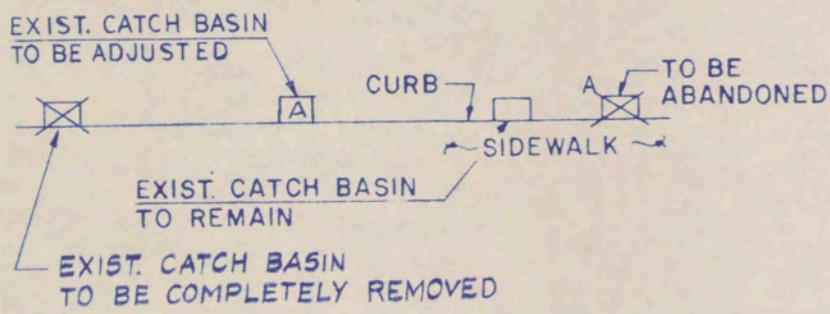
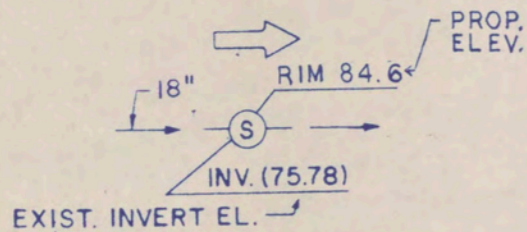
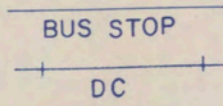
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	NEW YORK				

NYS DOT PROJECT IDENTIFICATION NO.

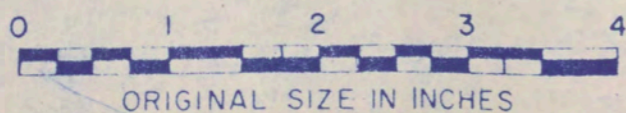
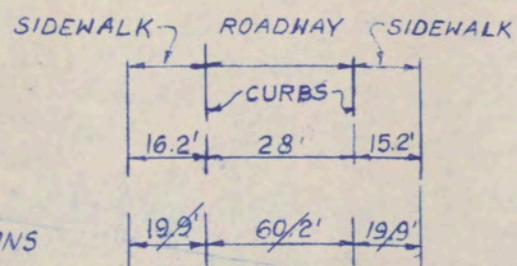
LEGEND

EXISTING

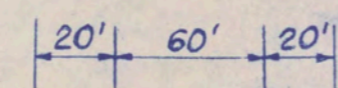
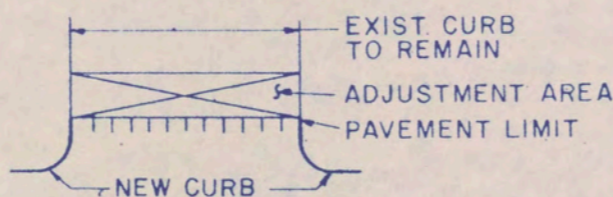
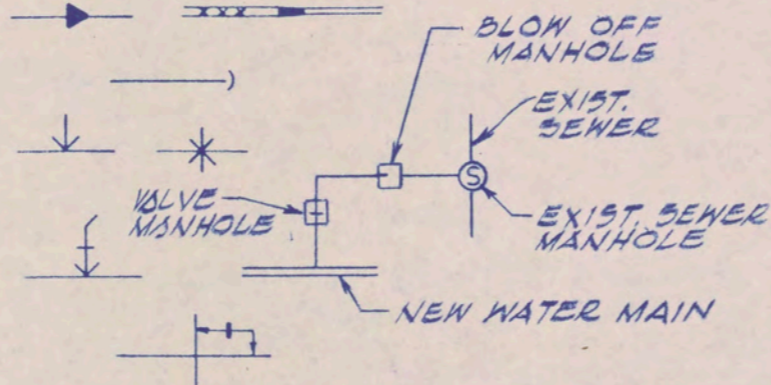
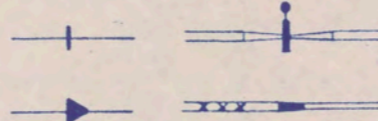
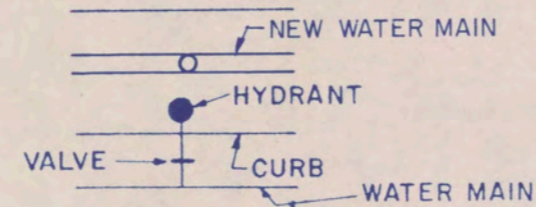
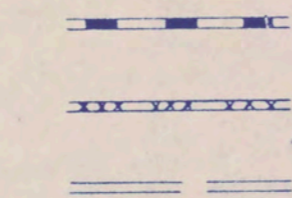
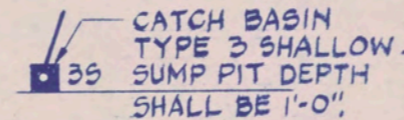
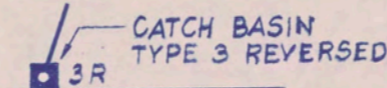
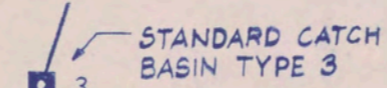
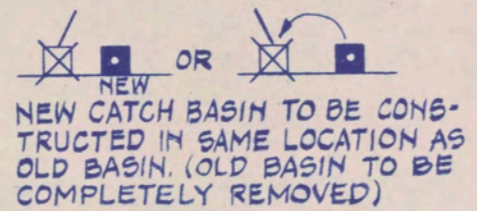
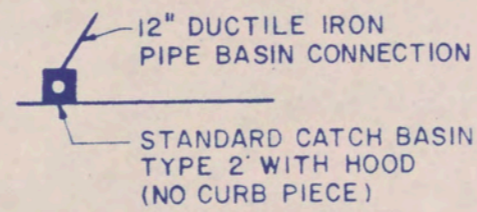
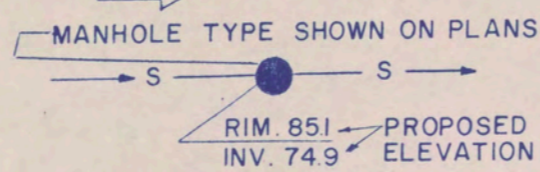
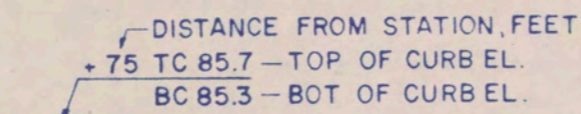
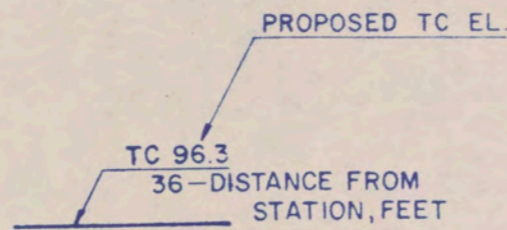
LG 95.0



W.V.



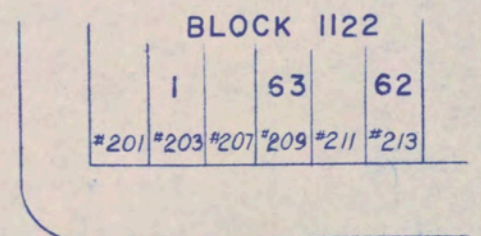
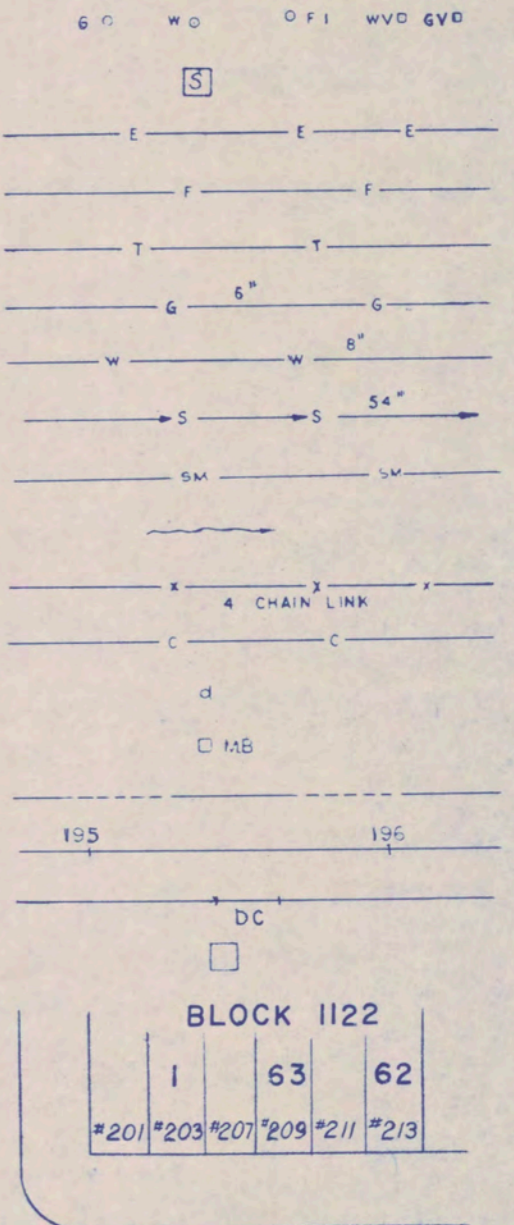
NEW



SURVEY LEGEND

EXISTING

- CATCH BASIN
- HYDRANT (HIGH PRESSURE)
- WOOD POLE WITH STREET LIGHT
- METAL TRAFFIC POLE (WALK CONTROL ONLY)
- METAL STREET LIGHT POLE
- METAL TRAFFIC SIGNAL POLE
- MANHOLES (TYPE IN CIRCLE, S, E, T, F, W)
- FIRE ALARM POST
- CON EDISON VAULT
- TRAFFIC PULL BOX
- CELLAR VAULT DOORS
- WINDOW WELL COVER
- TREE (SIZED AND TYPE)
- PARKING METERS
- GAS, WATER OR FUEL INLET VALVES
- STEPS
- UNDERGROUND ELECTRICAL CONDUIT
- UNDERGROUND FIRE ALARM CONDUIT
- UNDERGROUND TELEPHONE CONDUIT
- GAS PIPE LINE AND SIZE
- WATER PIPE LINE AND SIZE
- SEWER PIPE LINE AND SIZE
- STEAM LINE
- DIRECTION OF SURFACE DRAINAGE
- FENCE LINE AND TYPE
- TRAFFIC SIGNAL CONDUIT
- STREET SIGN
- MAIL BOX
- LOT LINE
- BASE LINE
- DROP CURB
- TREE WELL
- BLOCK
- LOT
- HOUSE NUMBER



DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK
COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59th ST. TO W. 110th ST.
(EXCLUDING INTERSECTION AT BROADWAY)
TABLE OF CONTENTS LEGEND, METRIC
CONVERSION AND ABBREVIATIONS
SCALE: DATE:

NOTES

1. GENERAL

- 1.01 ELEVATION 0.0 IS 2.75 FT. ABOVE MEAN SEA LEVEL AS ESTABLISHED BY THE U.S.C. & G SURVEY AT SANDY HOOK, N. J.
- 1.02 BLOCK INTERIOR ANGLES, BLOCK LENGTHS AND LEGAL GRADES WERE OBTAINED FROM THE FINAL MAPS OF THE BOROUGH OF MANHATTAN
- 1.03 EXISTING UNDERGROUND AND OVERHEAD UTILITIES AS SHOWN HERE HAVE BEEN DETERMINED BY STANDARD SURVEYING METHODS AND AVAILABLE RECORDS. NEITHER THE EXACT LOCATION NOR THE INFORMATION OF THESE EXISTING UTILITIES IS GUARANTEED TO BE COMPLETE OR CORRECT.
- 1.04 BUS ROUTES AFFECTED BY THE PROJECT WILL OR MAY REQUIRE BUS DIVERSIONS. ARRANGEMENTS SHALL BE MADE THROUGH MR. A SCHIAVONE, GENERAL SUPERINTENDENT SURFACE TRANSIT, NEW YORK CITY TRANSIT AUTHORITY.
- 1.05 ALL COMMUNICATIONS AND COORDINATION MEETINGS RELATIVE TO THIS PROJECT BETWEEN THE CONTRACTOR AND ANY AGENCY, UTILITY COMPANY OR ORGANIZATION WILL BE CONDUCTED AND/OR APPROVED BY THE ENGINEER.
- 1.06

NEW YORK CITY MAINTENANCE NOTE

ALL WORK DONE UNDER THIS CONTRACT WHEN COMPLETED WILL BE MAINTAINED BY THE CITY OF NEW YORK IN ACCORDANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION AGREEMENT WITH THE CITY OF NEW YORK FOR MAINTENANCE OF IMPROVEMENTS OF THE STATE ARTERIAL HIGHWAYS SYSTEM FUNDED UNDER THE NEW YORK STATE FAUS, TOPICS, TITLE II PROGRAMS DATED FEBRUARY 3, 1977, OR ANY OTHER FEDERAL AID MADE AVAILABLE BY TITLE 23, U.S.C.

ALL EXISTING SANITARY AND OTHER SEWERS NOT DEEMED TO BE PART OF THE PROJECT BY THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION COMMISSIONER, WATER MAINS, HYDRANTS, AND OTHER MUNICIPALLY OR PRIVATELY OWNED FACILITIES WITHIN THE LIMITS OF THE R.O.W. WHICH REMAIN IN SERVICE UNCHANGED AND ALL SUCH FACILITIES RELOCATED OR PROTECTED AS PART OF THE WORK PERFORMED UNDER THE PROJECT WHETHER CROSSING LOCATED WITHIN OR ADJACENT TO THE R.O.W. WILL BE MAINTAINED AS THE CASE MAY BE BY THE MUNICIPALITY OR BY THE AGENCY OR UNIT HAVING CONTROL OR JURISDICTION THEREOF AT NO COST OR EXPENSE TO THE STATE.

APPROVED PURSUANT TO THE ABOVE REFERENCE AGREEMENT AND WITH THE UNDERSTANDING THAT THE STATE WILL NOT FURNISH MAINTENANCE PAYMENTS.

- 1.07 ALL SHEETING PLACED UNDER THIS CONTRACT, NO MATTER UNDER WHICH ITEMS, SHALL BE REMOVED, AND THE COST SHALL BE DEEMED INCLUDED IN THE PRICES BID FOR ALL SCHEDULED ITEMS. THE SHEETING SHALL CONFORM TO THE REQUIREMENTS OF TITLE 29 CODE OF FEDERAL REGULATIONS, PART 1924, SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION. (OSHA)
- 1.08 THE FOLLOWING SHALL PERTAIN TO ALL ITEMS HAVING BACKFILL: "THE BACKFILLING SHALL COMPLY WITH SUBSECTION 4.11.3 OF THE STANDARD SPECIFICATIONS, AND THE COST THEREOF SHALL BE DEEMED INCLUDED IN THE PRICES BID FOR ALL RELATED ITEMS."
- 1.09 IN THE EVENT OF ANY DISCREPANCY BETWEEN THE ESTIMATE OF QUANTITIES SHEET OF THE CONTRACT PLANS AND THE BID PAGES OF THE SPECIFICATIONS, THE BID SCHEDULE ("B" SHEETS) SHALL GOVERN.
- 1.10 IN CONNECTION WITH THIS PROJECT, TEST BORING DATA IS AVAILABLE FOR INSPECTION AT THE FOLLOWING OFFICES:
A - DEPARTMENT OF GENERAL SERVICES
SUBSURFACE EXPLORATION SECTION
MUNICIPAL BUILDING - 17TH FLOOR
NEW YORK, NEW YORK 10007
- 1.11 ALL HYDRANTS, LIGHT POLES, TREES OR OTHER FIXED OBJECTS THAT ARE TO BE CONSTRUCTED, PLANTED, RESET OR RELOCATED AS A RESULT OF THE PROJECT SHALL BE CONSTRUCTED OR PLANTED SO AS TO PROVIDE AT LEAST ONE AND ONE HALF (1 1/2) FOOT CLEAR DISTANCE FROM THE FACE OF THE CURB TO THE FACE OF THE OBJECT. ALL STREET HARDWARE SHALL BE INSTALLED WITH A 1.5 FEET OFFSET MINIMUM, FROM THE FACE OF CURB.

2. GRADING WORK

- 2.01 REMOVAL OF ALL SHRUBBERY, DEBRIS, FENCES AND OTHER ENCROACHMENTS WHICH INTERFERE WITH THE NEW WORK ARE DEEMED INCLUDED IN THE PRICES BID FOR ALL SCHEDULED ITEMS.

3. CURB WORK

- 3.01 CURBS AND DEPRESSED CURBS IN DRIVEWAYS ARE TO BE CONSTRUCTED WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 3.02 ALL NEW STEEL FACED CONCRETE CURB WITH RADIUS GREATER THAN 100 FEET WILL BE PAID FOR AS STRAIGHT CURB. ALL NEW STEEL FACED CONCRETE CURB WITH RADIUS LESS THAN OR EQUAL TO 100 FEET WILL BE PAID FOR AS CORNER CURB.
- 3.03 ALL NEW CORNERS ARE TO BE STEEL FACED CONCRETE CURB AND TURNED TO A 12 FT. RADIUS, UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER. ALL CORNER STEEL FACING IS TO BE SHOP FABRICATED.
- 3.04 COST OF THE FOLLOWING ARE TO BE INCLUDED IN THE UNIT PRICES BID FOR VARIOUS SCHEDULED ITEMS:
PAINTING CURBS YELLOW, ADJACENT TO FIRE HYDRANTS (15' FEET ON EITHER SIDE), AND AT BUS STOPS LENGTH AS DESIGNATED, AS PER BUREAU OF TRAFFIC OPERATIONS STANDARDS.

- 3.05 WHEN NEW CURBING IS TO BE EXTENDED INTO CROSS STREETS, IT SHALL BE CONCRETE CURB, UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED ON BY THE ENGINEER. WHERE CURB BEYOND THE CORNER IS NOT STEEL FACED CONCRETE CURB, STEEL CURB IS TO BE EXTENDED TO CLEAR PEDESTRIAN RAMPS AND/OR TO THE NEW CATCH BASINS AS CONSTRUCTED, CLEAR OF THE PEDESTRIAN CROSSWALK. THE COST OF THE ADDITIONAL TANGENT LENGTH OF STEEL FACED CONCRETE CURB WILL BE PAID FOR UNDER ITEM 4.09CD.
- 3.06 WHERE NEW CURBING IS REQUIRED ADJACENT TO EXISTING CONCRETE SIDEWALK, WHICH IS NOT TO BE REPLACED, A CONCRETE SAW-CUT SHALL BE MADE ALONG A LINE PARALLEL TO AND TWO (2) FEET BACK FROM THE NEW CURB. THE COST OF THE SAW-CUT IS INCLUDED IN THE PRICES BID FOR THE CURB ITEMS.
- 3.07 GUTTER LINE PROFILE SHALL BE 7" BELOW PROPOSED TOP OF CURB PROFILE.

4. SIDEWALK WORK

- 4.01 SIDEWALK PEDESTRIAN RAMPS ARE TO BE INSTALLED AT ALL CORNERS, UNLESS OTHERWISE DIRECTED, AND THE COST FOR SUCH TO BE INCLUDED IN THE SIDEWALK AND STEEL FACED CORNER CURB ITEMS USED.
- 4.02 LOCATION AND EXTENT OF NEW SIDEWALK IS TO BE CONSTRUCTED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 4.03 THRU 4.06 NO TEXT
- 4.07 THE CONTRACTOR SHALL RESET/ADJUST ANCHORAGE FOR SECURITY GATES WITHIN SIDEWALK AREAS, AS NECESSARY OR AS DIRECTED BY THE ENGINEER. COST OF THIS WORK SHALL BE DEEMED INCLUDED IN PRICES BID FOR SIDEWALK WORK.
- 4.08 AT ALL PROPOSED BUS PADS NEW CONTINUOUS SIDEWALK SHALL BE CONSTRUCTED FOR THE ENTIRE LENGTH OF THE BUS PAD, FROM CURB TO FENCE LINE/PROPERTY LINE OR AS DIRECTED BY THE ENGINEER.

5. DRAINAGE WORK

- 5.01 ALL PROPOSED DRAINAGE WORK SHALL BE DONE IN CONFORMANCE WITH THE LATEST STANDARDS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (N.Y.C.D.E.P.).
- 5.02 ALL EXISTING SEWER MANHOLES WITHIN THE CONTRACT LIMITS SHALL BE ADJUSTED, AS NECESSARY, SO THAT THEY WILL BE FLUSH WITH THE FINISHED GRADES AFTER COMPLETION OF THE WORK. ANY MANHOLES WHICH HAVE DAMAGED, WORN OR NON-STANDARD FRAMES AND COVERS SHALL BE PROVIDED WITH NEW TWENTY-SEVEN (27) INCH CASTINGS IN ACCORDANCE WITH THE LATEST STANDARDS OF N.Y.C.D.E.P.
- 5.03 ANY DAMAGE TO EXISTING SEWERS, MANHOLES, BASINS AND CONNECTIONS CAUSED BY THE CONTRACTOR'S WORK SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR, AS DIRECTED BY THE ENGINEER, AT NO COST TO THE CITY.
- 5.04 WHERE THE HEIGHT OF AN EXISTING MANHOLE PERMITS MORE THAN ONE BASIN CONNECTION TO BE MADE ON THE SAME WALL, SPECIAL PRECAUTION SHALL BE TAKEN TO PROTECT THE STRUCTURAL INTEGRITY OF THE MANHOLE. THE MINIMUM CLEARANCE BETWEEN THE OUTSIDE WALLS OF ANY TWO BASIN CONNECTIONS OR BETWEEN A BASIN CONNECTION AND A SEWER, VERTICALLY OR HORIZONTALLY, SHALL BE 12 INCHES.
- 5.05 THE COST OF RAISING OR LOWERING CITY-OWNED MANHOLE, BASIN AND INLET HEADS TO PROPOSED GRADES WILL BE DEEMED INCLUDED IN THE PRICES BID FOR ALL THE SCHEDULED ITEMS WHEN THE VERTICAL UPWARD MOVEMENT OF ALL HEADS IS TWENTY-FOUR (24) INCHES OR LESS, WHEN THE VERTICAL DOWNWARD MOVEMENT OF MANHOLE HEADS IS SIX (6) INCHES OR LESS AND WHEN THE VERTICAL DOWNWARD MOVEMENT OF BASIN HEADS IS THREE (3) INCHES OR LESS, UNLESS OTHERWISE PROVIDED OR DIRECTED, AND WHERE THE ADJUSTMENT IS WITHIN THE BRICK WORK LIMIT. WHEN THE EXISTING STRUCTURE CONSISTS OF A BRICK CHIMNEY OR A CONCRETE ROOF SLAB OR BRICK ON CONCRETE WALLS, THE MAXIMUM ALLOWABLE HEIGHT OF BRICK AFTER ADJUSTMENT SHALL BE TWENTY-FOUR (24) INCHES. ALL OTHER ADJUSTMENTS WILL BE PAID FOR UNDER THE APPROPRIATE MANHOLE, BASIN, OR INLET MODIFICATION ITEMS.
- 5.06 ALL EXISTING SEWERS, MANHOLES, BASINS AND CONNECTIONS WITHIN THE LIMITS OF THIS CONTRACT AND CONTIGUOUS THERETO ARE TO BE REPAIRED, IF DAMAGED, CLEANED, FLUSHED AND OTHERWISE MADE OPERABLE TO THE SATISFACTION OF THE ENGINEER, ITEM #6.50. WHERE THE EXISTING BASIN CONNECTIONS ARE FOUND TO BE DAMAGED OR IN DETERIORATING CONDITION THEY SHOULD BE REPLACED WITH NEW 12" DIAMETER DUCTILE IRON PIPE IN ACCORDANCE WITH LATEST N.Y.C.D.E.P. STANDARDS.
- 5.07 ALL ABANDONED BASINS, INLETS AND DRAINAGE STRUCTURES AS SHOWN ON THE CONTRACT PLANS ARE TO BE DEMOLISHED AND BULKHEADED IN ACCORDANCE WITH ITEM NO. 6.57.
- 5.08 CATCH BASINS SHALL NOT, UNDER ANY CIRCUMSTANCES, BE CONNECTED TO A SANITARY SEWER. CATCH BASINS SHALL NOT BE LOCATED WITHIN PEDESTRIAN CROSSWALKS.
- 5.09 ALL NEW CATCH BASIN CONNECTIONS SHALL BE CONNECTED TO EXISTING SEWERS AT MANHOLES, WITH 12" DIAMETER DUCTILE IRON PIPE, CLASS 56, WITH INTERNALLY LOCKED "PUSH-ON" JOINTS LAID ON 6" OF BROKEN STONE FOR THE ENTIRE WIDTH OF THE TRENCH AND FOR ONE-HALF THE PIPE DIAMETER. THE BROKEN STONE SHALL BE HARD UNWEATHERED STONE UNIFORMLY GRADED FROM 1/4" TO 3/4" IN DIAMETER. IT SHALL CONFORM TO COMMERCIAL 1/4" TO 3/4" STONE. ALL NEW CATCH BASINS SHALL HAVE A HOOD ON THE OUTLET PIPE.

5.10 ALL CATCH BASINS SHOWN ON THE PLANS AND INDICATED ON THE DRAWING TO N.Y.C.D.E.P. DIVISION DRAWING.

5.11 WHERE THE CONTRACT DRAWING SHOWS THE SAME LOCATION AS THE CONTRACTOR ELECTS, FOR THE NEW CATCH BASIN ADJUSTMENT, THE CONTRACTOR SHALL PERFORM ALL WORK ON THE EXISTING BASIN, AS PER THE SPECIFICATIONS, AND THE COST OF THE WORK SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

5.12 SLOPE ON ALL NEW CATCH BASINS SHALL BE A MINIMUM OF 2% AND A MAXIMUM OF 6% DROP BETWEEN BASIN AND MANHOLE.

6. WATER MAIN WORK

6.01 THE CONTRACTOR SHALL LOCATE ALL WATER MAINS, BOX HEADS, AND SHALL INSTALL ALL WATER MAINS TO THE SATISFACTION OF THE CONTRACTOR'S ATTENTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL VALVE BOXES WHICH RESULT OF HIS OPERATION.

6.02 EXISTING WATER HYDRANTS AND VALVES SHALL BE REPAIRED TO THE PLANS, AND AS DIRECTED BY THE ENGINEER. SPECIFICATIONS OF THE BUREAU OF WATER SUPPLY, BUREAU OF WATER SUPPLY.

6.03 ALL NEW WATER MAIN WORK SHALL BE CONSTRUCTED TO THE PLANS AND IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF THE BUREAU OF WATER SUPPLY.

6.04 EXCEPT WHERE NOTED OTHERWISE, ALL WATER MAINS SHALL BE REPLACED IN SAME LOCATION.

6.05 FOR WATER MAINS CROSSINGS UNDER EXISTING SIDEWALKS, SEE NOTE S2, SHEET #4.

6.06 ALL HORIZONTAL CLEARANCE BETWEEN EXISTING SEWERS AND WATER MAINS SHALL BE AS SHOWN ON SHEET S2, SHEET #4.

6.07 WHERE A HYDRANT TO BE RELOCATED TO A BREAKAWAY TYPE, IT SHALL BE A BREAKAWAY TYPE HYDRANT WHICH WILL BE PROVIDED BY THE CITY.

6.08 ALL HYDRANT VALVE BOXES SHALL BE ADJUSTED TO NEW GRADE.

6.09 THE CONTRACTOR SHALL PROVIDE ALL WATER MAINS WITHIN THE BUREAU OF WATER SUPPLY LIMITS.

6.10 THE CONTRACTOR SHALL NOTIFY THE BUREAU OF WATER SUPPLY 72 HOURS PRIOR TO START OF WORK.

6.11 FOR EXISTING SEWER HOUSES, SEE NOTE #4.

6.12 PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL DETERMINE BY TEST PITS, THE LOCATION AND DEPTH OF ALL EXISTING WATER MAINS, OTHER MEANS NECESSARY, THE LIMITS OF THE PROPOSED WORK, THE ELEVATION OF THE HOUSE TIE, THE LOCATION OF THE EXISTING WATER MAINS, AND THE LOCATION OF THE EXISTING WATER MAINS. THE CONTRACTOR SHALL INFORM THE ENGINEER, IN WRITING, OF ANY DIFFICULTIES HE MIGHT ENCOUNTER IN EXISTING HOUSE CONNECTIONS TO SEWERS. NO SPECIAL PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE CONTRACT PRICE. FOR ADDITIONAL NOTES REFER TO SHEETS W1 THROUGH W21 AND W22.

ROCK INFORMATION NOTE

WATER MAIN PROFILES INDICATED ON THE PLANS AND INDICATED ARE APPROXIMATE LOCATIONS OF ROCKS. THE LOCATION AND DEPTH OF ALL ROCKS INDICATED ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL ROCKS. THEY ARE NOT GUARANTEED TO BE GUIDED BY FIELD CONDITIONS. THE CONTRACTOR SHALL BE GUIDED BY FIELD CONDITIONS FOR EARTH (UNCLASSIFIED) AND ROCK. BASED ON ACTUAL QUANTITIES.

FED ROAD REG NO	STATE	FEDERAL PROJECT	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				

NYS DOT PROJECT IDENTIFICATION NO

TO BE EXTENDED INTO CROSS STREETS, IT SHALL BE OTHERWISE SHOWN ON THE PLANS OR DIRECTED ON CURB BEYOND THE CORNER IS NOT STEEL FACED CURB IS TO BE EXTENDED TO CLEAR PEDESTRIAN NEW CATCH BASINS AS CONSTRUCTED, CLEAR OF THE THE COST OF THE ADDITIONAL TANGENT LENGTH OF CURB WILL BE PAID FOR UNDER ITEM 4.09CD.

REQUIRED ADJACENT TO EXISTING CONCRETE NOT TO BE REPLACED, A CONCRETE SAW-CUT SHALL BE PARALLEL TO AND TWO (2) FEET BACK FROM THE NEW SAW-CUT IS INCLUDED IN THE PRICES BID FOR SHALL BE 7" BELOW PROPOSED TOP OF CURB PROFILE.

AMPS ARE TO BE INSTALLED AT ALL CORNERS, CTED, AND THE COST FOR SUCH TO BE INCLUDED IN L FACED CORNER CURB ITEMS USED.

F NEW SIDEWALK IS TO BE CONSTRUCTED AS SHOWN RECTED BY THE ENGINEER.

RESET/ADJUST ANCHORAGE FOR SECURITY GATES, AS NECESSARY OR AS DIRECTED BY THE IS WORK SHALL BE DEEMED INCLUDED IN PRICES BID

ADS NEW CONTINUOUS SIDEWALK SHALL BE NTIRE LENGTH OF THE BUS PAD, FROM CURB TO NE OR AS DIRECTED BY THE ENGINEER.

WORK SHALL BE DONE IN CONFORMANCE WITH THE HE DEPARTMENT OF ENVIRONMENTAL PROTECTION

HOLES WITHIN THE CONTRACT LIMITS SHALL BE Y, SO THAT THEY WILL BE FLUSH WITH THE COMPLETION OF THE WORK. ANY MANHOLES WHICH NON-STANDARD FRAMES AND COVERS SHALL BE NTY-SEVEN (27) INCH CASTINGS IN ACCORDANCE ARDS OF N.Y.C.D.E.P.

G SEWERS, MANHOLES, BASINS AND CONNECTIONS TOR'S WORK SHALL BE REPAIRED OR REPLACED BY RECTED BY THE ENGINEER, AT NO COST TO THE CITY.

N EXISTING MANHOLE PERMITS MORE THAN ONE BASIN ON THE SAME WALL, SPECIAL PRECAUTION SHALL BE STRUCTURAL INTEGRITY OF THE MANHOLE. THE WEN THE OUTSIDE WALLS OF ANY TWO BASIN N A BASIN CONNECTION AND A SEWER, VERTICALLY L BE 12 INCHES.

R LOWERING CITY-OWNED MANHOLE, BASIN AND INLET DES WILL BE DEEMED INCLUDED IN THE PRICES BID ITEMS WHEN THE VERTICAL UPWARD MOVEMENT OF OUR (24) INCHES OR LESS, WHEN THE VERTICAL MANHOLE HEADS IS SIX (6) INCHES OR LESS AND NWARD MOVEMENT OF BASIN HEADS IS THREE (3) S OTHERWISE PROVIDED OR DIRECTED, AND WHERE HIN THE BRICK WORK LIMIT. WHEN THE EXISTING A BRICK CHIMNEY OR A CONCRETE ROOF SLAB OR LS, THE MAXIMUM ALLOWABLE HEIGHT OF BRICK L BE TWENTY-FOUR (24) INCHES. ALL OTHER AID FOR UNDER THE APPROPRIATE MANHOLE, BASIN, ITEMS.

MANHOLES, BASINS AND CONNECTIONS WITHIN THE CT AND CONTIGUOUS THERETO ARE TO BE REPAIRED, FLUSHED AND OTHERWISE MADE OPERABLE TO THE NGINEER, ITEM #6.50. WHERE THE EXISTING BASIN TO BE DAMAGED OR IN DETERIORATING CONDITION ED WITH NEW 12" DIAMETER DUCTILE IRON PIPE IN T N.Y.C.D.E.P. STANDARDS.

INLETS AND DRAINAGE STRUCTURES AS SHOWN ON E TO BE DEMOLISHED AND BULKHEADED IN NO. 6.57.

T, UNDER ANY CIRCUMSTANCES, BE CONNECTED TO A H BASINS SHALL NOT BE LOCATED WITHIN

IN CONNECTIONS SHALL BE CONNECTED TO T MANHOLES, WITH 12" DIAMETER DUCTILE 56, WITH INTERNALLY LOCKED "PUSH-ON" OF BROKEN STONE FOR THE ENTIRE WIDTH FOR ONE-HALF THE PIPE DIAMETER. THE L BE HARD UNWEATHERED STONE UNIFORMLY TO 3/4" IN DIAMETER. IT SHALL CONFORM TO 3/4" STONE. ALL NEW CATCH BASINS ON THE OUTLETING PIPE.

- 5.10 ALL CATCH BASINS SHALL BE TYPE 2 UNLESS OTHERWISE INDICATED ON THE DRAWINGS. FOR FURTHER INFORMATION REFER TO N.Y.C.D.E.P. DIVISION OF SEWER DESIGN STANDARD DRAWING.
- 5.11 WHERE THE CONTRACT DRAWINGS SPECIFY A NEW CATCH BASIN IN THE SAME LOCATION AS THE EXISTING CATCH BASIN AND THE CONTRACTOR ELECTS, FOR HIS OWN CONVENIENCE, TO RELOCATE THE NEW CATCH BASIN ADJACENT TO THE PRE-EXISTING LOCATION WHILE MAINTAINING BASIN AND PIPE CONNECTION, CONTRACTOR SHALL PERFORM ALL WORK ASSOCIATED WITH ABANDONING THE EXISTING BASIN, AS PER SECTION 6.57 OF THE STANDARD SPECIFICATIONS, AND THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE NEW BASIN (ITEM 6.13).
- 5.12 SLOPE ON ALL NEW CATCH BASIN CONNECTIONS SHALL BE A MINIMUM OF 2% AND A MAXIMUM OF 4%, PROVIDED THE TOTAL DROP BETWEEN BASIN AND BASIN/MANHOLE SHALL BE AT LEAST 6 INCHES.

6. WATER MAIN WORK

- 6.01 THE CONTRACTOR SHALL LOCATE ALL EXISTING WATER MAIN VALVE BOX HEADS, AND SHALL INDICATE THEM IN THE FIELD TO THE SATISFACTION OF THE ENGINEER. FURTHERMORE, THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT HE WILL BE RESPONSIBLE FOR THE REPLACEMENT AND RESETTING OF ALL VALVE BOXES WHICH ARE DAMAGED OR DISTURBED AS A RESULT OF HIS OPERATIONS.
- 6.02 EXISTING WATER HYDRANTS ARE TO BE RELOCATED AS SHOWN ON THE PLANS, AND AS DIRECTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, BUREAU OF WATER SUPPLY.
- 6.03 ALL NEW WATER MAIN WORK IS TO BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST STANDARDS AND SPECIFICATIONS OF THE BUREAU OF WATER SUPPLY.
- 6.04 EXCEPT WHERE NOTED OTHERWISE, NEW WATER MAINS ARE BEING REPLACED IN SAME LOCATION AS THE EXISTING.
- 6.05 FOR WATER MAINS CROSSING EXISTING SEWERS:
SEE NOTE S2, SHEET #4.
- 6.06 ALL HORIZONTAL CLEARANCE BETWEEN NEW WATER MAIN INSTALLED PARALLEL TO EXISTING SEWERS ARE TO CONFORM TO THE NOTE S2, SHEET #4.
- 6.07 WHERE A HYDRANT TO BE RELOCATED OR RESET IS NOT A BREAKAWAY TYPE, IT SHALL BE REPLACED WITH A BREAKAWAY TYPE HYDRANT WHICH WILL BE FURNISHED TO THE CONTRACTOR BY THE CITY.
- 6.08 ALL HYDRANT VALVE BOXES AND MAIN LINE VALVE BOXES TO BE ADJUSTED TO NEW GRADE.
- 6.09 THE CONTRACTOR SHALL PROVIDE AND INSTALL HYDRANT FENDERS AT ALL HYDRANTS WITHIN THE PROJECT LIMITS IN ACCORDANCE WITH THE BUREAU OF WATER SUPPLY STANDARDS.
- 6.10 THE CONTRACTOR SHALL NOTIFY THE BUREAU OF WATER SUPPLY 72 HOURS PRIOR TO START OF HYDRANT WORK.
- 6.11 FOR EXISTING SEWER HOUSE CONNECTIONS SEE NOTES S4, SHEET #4.
- 6.12 PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL DETERMINE BY TEST PITS, TELEVISION INSPECTION, OR ANY OTHER MEANS NECESSARY, FOR EACH AND EVERY HOUSE WITHIN THE LIMITS OF THE PROPOSED WATER MAIN, THE LOCATION AND ELEVATION OF THE HOUSE TRAPS, HOUSE CONNECTION, ETC., AND THE LOCATION OF THE EXISTING SEWER TO WHICH THEY ARE CONNECTED. BASED ON HIS FINDING, THE CONTRACTOR SHALL INFORM THE ENGINEER, IN WRITING, OF ANY ANTICIPATED DIFFICULTIES HE MIGHT ENCOUNTER IN RECONNECTING THESE EXISTING HOUSE CONNECTIONS TO THE PROPOSED AND EXISTING SEWERS. NO SPECIAL PAYMENT WILL BE MADE FOR THIS WORK. THE COST SHALL BE INCLUDED IN BID ITEMS.
- 6.13 FOR ADDITIONAL NOTES PERTAINING TO WATER MAIN WORK SEE NOTES W1 THROUGH W21 AND S1 THROUGH S9 ON SHEET NO. 4.
- 6.14 ROCK INFORMATION NOTE

WATER MAIN PROFILES INDICATE A REFERENCE TO "POSSIBLE ROCK". THE LOCATION AND ELEVATION OF POSSIBLE ROCK INDICATED ARE APPROXIMATIONS OF DATA TAKEN FROM ROCK DATA MAPS FOUND IN THE OFFICE OF THE CITY OF NEW YORK DEPARTMENT OF GENERAL SERVICES, AND HAVE NOT BEEN FIELD VERIFIED. THEY ARE SHOWN FOR THE CONTRACTOR'S USE AND ARE NOT GUARANTEED TO BE CORRECT. THE CONTRACTOR SHALL BE GUIDED BY FIELD CONDITIONS, AND PAYMENT QUANTITIES FOR EARTH (UNCLASSIFIED) AND ROCK EXCAVATIONS SHALL BE BASED ON ACTUAL QUANTITIES ENCOUNTERED.

7. TRAFFIC WORK

- 7.01 "REGULATORY" AND/OR "NO PARKING - CONSTRUCTION" SIGNS USED DURING THE CONSTRUCTION PERIOD ARE TO BE FURNISHED BY THE CONTRACTOR, AS REQUIRED. THE CONTRACTOR SHALL INSTALL THESE SIGNS WHERE DIRECTED BY THE ENGINEER, AND, WHEN NO LONGER REQUIRED, SHALL CAREFULLY REMOVE THESE SIGNS AND DELIVER THEM TO THE BUREAU OF TRAFFIC. THESE SIGNS WILL BE MEASURED FOR PAYMENT UNDER ITEM 6.25. THE COST OF SAID REMOVING AND DELIVERING SHALL BE DEEMED INCLUDED IN THE PRICE BID FOR ITEM 6.25. A CREDIT OF \$50 WILL BE TAKEN FOR EACH SIGN NOT SO DELIVERED. RELOCATION OF SIGNS SHALL NOT ENTITLE THE CONTRACTOR TO ADDITIONAL PAYMENT.
- 7.02 ENGINEER SHALL NOTIFY THE BUREAU OF TRAFFIC OPERATIONS, HIGHWAY CONTROL DIVISION (718-830-7516) TO VERIFY ALL THERMOPLASTIC MARKINGS DETAIL DRAWINGS, 7 CALENDAR DAYS PRIOR TO START OF WORK ON PAVEMENT MARKINGS.
- 7.03 THE CONTRACTOR SHALL NOTIFY THE BUREAU OF TRAFFIC OPERATIONS, DIVISION OF PARKING (718-830-7504), 48 HOURS PRIOR TO START OF WORK, TO HAVE PARKING METERS REMOVED. THE FOLLOWING INFORMATION MUST BE GIVEN: (1) PARKING METER NUMBERS, (2) LOCATION OF METERS, AND (3) DATE WHEN METERS CAN BE RE-INSTALLED.
- 7.04 ALL REGULATORY AND WARNING TRAFFIC SIGNS SHALL CONFORM WITH THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD) AND TO THE STANDARD SIGN LIST OF THE NEW YORK CITY BUREAU OF TRAFFIC WHICH CONFORMS TO THE MUTCD.
- 7.05 FOR ADDITIONAL NOTES ON MAINTENANCE OF TRAFFIC SEE SHEETS #39 TO #45 OF THESE CONTRACT DOCUMENTS.

8. FIRE ALARM WORK

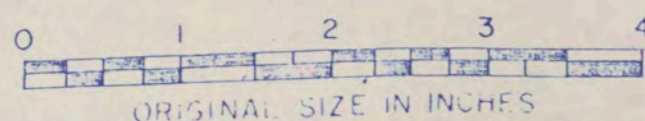
- 8.01 ALL EXISTING FIRE DEPARTMENT COMMUNICATION FACILITIES SHALL BE PROTECTED AND PROVISIONS MADE FOR THEIR CONTINUOUS OPERATION DURING CONSTRUCTION.
- 8.02 NEW FIRE ALARM FACILITIES ARE TO BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE N.Y.C. FIRE DEPARTMENT.
- 8.03 THE CONTRACTOR SHALL NOTIFY THE BUREAU OF FIRE COMMUNICATION (PHONE NO. 718-403-1626) FORTY-EIGHT HOURS PRIOR TO START OF CONSTRUCTION.
- 8.04 FOR ADDITIONAL NOTES PERTAINING TO FIRE WORK SEE NOTES F1 THRU F4 ON SHEET #4

9. OTHER UTILITIES WORK

- 9.01 THE CONTRACTOR IS ALERTED TO THE RULES AND REGULATIONS OF INDUSTRIAL CODE RULE 53 AND IS DIRECTED TO COMPLY. THE CITY SHALL NOT BE LIABLE FOR ANY COSTS INCURRED BY THE CONTRACTOR AS A RESULT OF THE COMPLIANCE, NON-COMPLIANCE, OR IMPROPER COMPLIANCE BY THE FRANCHISED OPERATORS OF UNDERGROUND FACILITIES, WITH SUB-PART 53-3 OF RULE 53 OF THE INDUSTRIAL CODE.
- 9.02 NO TEXT
- 9.03 ALL UTILITY POLES WILL BE REMOVED AND/OR RELOCATED BY OTHERS.
- 9.04 THE ENGINEER WILL CONTACT THE SPECIAL PROJECT UNIT, COMMUNICATIONS DIVISION OF THE POLICE DEPARTMENT (212-577-7641/42) IF ANY RELOCATION OR DISCONNECTION OF POLICE DEPARTMENT FACILITIES IS REQUIRED.

10. PAVEMENT WORK

- 10.01 ALL HEADERS ABUTTING THE NEW PAVEMENT SHALL BE REMOVED WHERE DIRECTED BY THE ENGINEER; THE PRICE OF SAME WILL BE INCLUDED IN THE PRICE BID FOR EXCAVATION.
- 10.02 ASPHALTIC CONCRETE MIXTURE IS TO BE USED IN THE AREAS OF ADJUSTMENT, AND AS DIRECTED BY THE ENGINEER. SEE ITEM NO. 4.02CB.
- 10.03 FINISHED ROADWAY PAVEMENT AT THE APEX OF ALL CORNERS SHALL BE CONSTRUCTED TO ELEVATIONS SO AS TO PROVIDE POSITIVE SURFACE DRAINAGE FROM THE APEX TOWARDS THE CATCH BASINS, WHERE APPLICABLE.



DEPARTMENT OF TRANSPORTATION CITY OF NEW YORK	
COLUMBUS AVENUE RECONSTRUCTION FROM W. 59 th ST. TO W. 110 th ST. (EXCLUDING INTERSECTION AT BROADWAY)	
GENERAL NOTES	
SCALE:	DATE:

12. LANDSCAPING WORK

- 11.01 REPLACEMENT TREES SHALL BE PLANTED WITHIN THE PROJECT SITE IN ACCORDANCE WITH DEPARTMENT OF PARKS AND RECREATION (D.P.R.) STANDARDS.
- 11.02 CONTRACTOR SHALL OBTAIN THE NECESSARY TREE PLANTING PERMIT FROM D.P.R. PRIOR TO START OF WORK. ALL NECESSARY TREE PLANTING SHALL BE PERFORMED BY QUALIFIED ARBORISTS.
- 11.03 NO TREE SHALL BE REMOVED BY THE CONTRACTOR UNTIL HE IS SPECIFICALLY ORDERED IN WRITING TO DO SO BY THE ENGINEER.
- 11.04 TREE STAKES ARE TO BE REMOVED BY THE CONTRACTOR NOT LESS THAN ONE YEAR AFTER PLANTING OF SAID TREES AND PRIOR TO THE FINAL ACCEPTANCE OF THE WORK.
- 11.05 TREE PITS SHALL BE PROVIDED FOR ALL NEW TREES AND FOR EXISTING TREES. PITS SHALL BE FIVE (5) FEET X FOUR (4) FEET UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED, AND SHALL BE CONSTRUCTED WITH NEW GRANITE BLOCK (ITEM 606 AC).
- 11.06 FOR ADDITIONAL NOTES REGARDING LANDSCAPING WORK SEE NOTES P1 THROUGH P4 ON THIS SHEET.

12. BUS STOP SHELTER WORK

- 12.01 THE CONTRACTOR IS HEREBY NOTIFIED THAT GANNETT TRANSIT, 750 THIRD AVENUE, NEW YORK, NY 10017 HAS BEEN AUTHORIZED, IN ACCORDANCE WITH AN APPROVED FRANCHISE AGREEMENT WITH THE NEW YORK CITY BOARD OF ESTIMATE, TO INSTALL BUS SHELTERS AT APPROVED LOCATIONS WITHIN THE GEOGRAPHIC AREA OF COLUMBUS AVENUE - WHICH INCLUDES THE PROJECT LIMITS OF THIS PROJECT.
- 12.02 THE CONTRACTOR IS HEREBY NOTIFIED THAT THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION, THROUGH THE DEPARTMENT OF GENERAL SERVICES BUS STOP SHELTER UNIT, THAT GANNETT TRANSIT PROPOSES TO INSTALL BUS SHELTERS INCLUDING ELECTRICAL HOOK-UP AT THE FOLLOWING LOCATIONS WITHIN THE LIMITS OF THIS PROJECT:
 - A. MN00242 - SW COLUMBUS AT WEST 72ND STREET
 - B. MN00601 - SW COLUMBUS BETWEEN WEST 88TH STREET & WEST 89TH STREET
 - C. MN00605 - SW COLUMBUS BETWEEN WEST 93RD STREET & WEST 94TH STREET
 - D. MN00606 - SW COLUMBUS BETWEEN WEST 83RD STREET & WEST 84TH STREET
 - E. MN00607 - SW COLUMBUS AT WEST 75TH STREET
- 12.03 THE CONTRACTOR IS HEREBY REQUIRED TO NOTIFY, IN WRITING, GANNETT TRANSIT 750 THIRD AVENUE NEW YORK CITY THIRTY (30) DAYS PRIOR TO THE COMMENCEMENT OF ANY CONTRACT WORK AT/OR IN THE VICINITY OF ANY PROPOSED BUS SHELTER LOCATIONS.
- 12.04 THE CONTRACTOR IS HEREBY NOTIFIED THAT PRIVATELY OWNED BUS SHELTERS ARE PRESENTLY LOCATED WITHIN THE LIMITS OF THIS CONTRACT.
 - MN1039 - SW COLUMBUS AT WEST 110TH STREET
 - MN1052 - SW COLUMBUS BETWEEN WEST 96TH & WEST 97TH STREET
 - MN0242 - SW COLUMBUS AT WEST 78TH STREET
 - MN0244 - SW COLUMBUS BETWEEN WEST 69TH & WEST 68TH STREET
 - MN0245 - NW COLUMBUS AT WEST 66TH STREET
 - MN0247 - NW COLUMBUS AT WEST 60TH STREET
 - MN0770 - SW COLUMBUS AT WEST 108TH STREET
 - MN0771 - SW COLUMBUS AT WEST 106TH STREET
 - MN0772 - SW COLUMBUS AT WEST 102ND STREET
 - MN0773 - SW COLUMBUS AT WEST 100TH STREET
 - MN0775 - SW COLUMBUS AT WEST 86TH STREET
 - MN0776 - SW COLUMBUS AT WEST 81ST STREET
 - MN0778 - SW COLUMBUS BETWEEN WEST 71ST STREET & WEST 72ND STREET
 - MN9007 - SW COLUMBUS AT WEST 97TH STREET
- 12.05 THE CONTRACTOR IS HEREBY REQUIRED TO NOTIFY, IN WRITING, THE GANNETT TRANSIT, 750 THIRD AVENUE, NEW YORK, NY 10017 THIRTY (30) DAYS PRIOR TO THE COMMENCEMENT OF ANY CONTRACT WORK AT/OR IN THE VICINITY OF EXISTING PRIVATELY OWNED BUS SHELTERS, LISTED IN PARAGRAPHS 12.02 AND 12.04.
- 12.06 THE CONTRACTOR IS HEREBY REQUIRED TO NOTIFY, IN WRITING, THE CITY OF NEW YORK DEPARTMENT OF GENERAL SERVICES BUS STOP SHELTER UNIT, THIRTY (30) DAYS PRIOR TO THE COMMENCEMENT OF ANY CONTRACT WORK IN THE VICINITY OF ANY EXISTING BUS SHELTERS.
- 12.07 THE CONTRACTOR IS HEREBY REQUIRED TO NOTIFY IN WRITING THE CITY OF NEW YORK DEPARTMENT OF GENERAL SERVICES BUS STOP SHELTER UNIT, THIRTY (30) DAYS PRIOR TO THE COMMENCEMENT OF ANY CONTRACT WORK AT OR IN THE VICINITY OF A PROPOSED BUS STOP SHELTER LOCATION.
- 12.08 THE CONTRACTOR SHALL EXERCISE EXTREME CARE WHEN WORKING AT AND/OR IN THE VICINITY OF EXISTING BUS STOP SHELTERS. ANY DAMAGE TO EXISTING BUS STOP SHELTERS, INCLUDING ALL ELECTRICAL SERVICE LINES, CAUSED BY THE CONTRACTORS' OPERATIONS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR, AS DIRECTED BY THE ENGINEER, AT NO COST TO THE CITY.

12.09 SEE DETAIL ON DWG. NO. 6 FOR SIDEWALK SAWCUTTING IN VICINITY OF BUS STOP SHELTERS.

13. STREET LIGHTING WORK

- 13.01 THE CONTRACTOR SHALL FURNISH, INSTALL AND REMOVE ALL NECESSARY STREET LIGHTING EQUIPMENT PRIOR TO NEW PAVING.
- 13.02 NEW INSTALLATION SHALL BE ENERGIZED BEFORE REMOVAL OF EXISTING POLES.
- 13.03 THE CONTRACTORS SHALL NOTIFY THE BUREAU OF TRAFFIC, DIVISION OF STREET LIGHTING, DEPARTMENT OF TRANSPORTATION AT LEAST 72 HOURS PRIOR TO START OF WORK (212) 669-8314.
- 13.04 ANY DAMAGE TO THE EXISTING STREET LIGHTING EQUIPMENT AS A RESULT OF THE CONTRACTORS WORK AND/OR WORK FORCE SHALL BE REPLACED OR REPAIRED AT NO COST TO THE CITY.

N.Y.C. D.E.P. BUREAU OF WATER SUPPLY NOTES

WATER MAIN WORK

- W1 BEFORE COMMENCING WORK, THE CONTRACTOR SHALL NOTIFY ALL INVOLVED AGENCIES.
 - W2 THE DRAWINGS SHOWING PROPOSED WATER MAINS AND APPURTENANCES TO BE LAID ARE DIAGRAMMATICAL ONLY. EXCEPT WHERE OTHERWISE INDICATED, OR ORDERED, REPLACEMENT WATER MAINS ARE TO BE CONSTRUCTED IN THE SAME LOCATION AS THE EXISTING WATER MAINS. THE EXACT LOCATION AT WHICH THE WATER MAIN SHALL BE LAID, AND THE VALVES, HYDRANTS, AND OTHER APPURTENANCES SET, WILL BE DETERMINED BY THE ENGINEER AS THE WORK PROGRESSES. HOWEVER, THE EXACT LOCATION OF THE NEW WATER MAIN SHALL BE IN CONFORMANCE WITH NOTE NO. S2B ON THIS SHEET, REGARDING EXISTING SEWERS.
 - W3 PROPOSED ALIGNMENT OF TRUNK MAINS ARE BASED UPON THE BEST SUBSURFACE INFORMATION AVAILABLE. THIS INFORMATION IS NOT, HOWEVER, GUARANTEED, AND THE LOCATION OF THE MAIN MAY BE VARIED FROM THAT SHOWN.
 - W4 THE CONTRACTOR IS TO VERIFY BY TEST PITS ELEVATIONS OF SEWER CROSSINGS AND OTHER SUBSURFACE OBSTRUCTIONS TO DETERMINE THE EXACT GEOMETRY OF THE NEW WATER MAIN CONSTRUCTION, AS APPROVED OR ORDERED BY THE ENGINEER. PAYMENT SHALL BE MADE UNDER ITEM 8.62.
 - W5 ELEVATIONS SHOWN HEREIN REFER TO THE DATUM ELEVATION 0.00, WHICH IS 2.75 FT. ABOVE THE MEAN SEAL LEVEL AS ESTABLISHED BY U.S.C. AND G SURVEY AT SANDY HOOK, N.J.
 - W6 FROST: THE ATTENTION OF THE CONTRACTOR IS CALLED TO THE FACT THAT WORK MAY BE REQUIRED DURING THE PERIOD FROM DECEMBER 15TH TO MARCH 15TH. THE ENGINEER RESERVES THE RIGHT, HOWEVER, TO DISCONTINUE WORK AT ANY TIME BETWEEN THIS PERIOD IF, IN HIS OPINION, WEATHER OR FROST CONDITIONS ARE SUCH THAT SATISFACTORY WORK OR BACKFILL CANNOT BE PERFORMED. WATER SUPPLY SHUTDOWNS OF DISTRIBUTION MAINS WILL NOT BE PERMITTED UNLESS THE 9 AM TEMPERATURE IS AT LEAST 27 DEGREES F AND RISING. NO ALLOWANCE OTHER THAN AN EXTENSION OF THE TIME WILL BE ALLOWED THE CONTRACTOR BECAUSE OF SUCH DISCONTINUANCE.
 - W7 ALL EXCAVATION SHALL BE DONE BY HAND WITHIN ONE FOOT OF EXISTING SEWERS, HOUSE CONNECTION DRAINS AND OTHER UTILITIES.
 - W8 THE STEEL PIPE SHALL COMPLY WITH STANDARD B.W.S. SPECIFICATION ENTITLED "SPECIFICATION FOR FURNISHING, DELIVERING AND LAYING STEEL PIPE AND APPURTENANCES," DATED APRIL, 1972, REVISED FEBRUARY 1990. THE STEEL PIPE SHALL HAVE MINIMUM YIELD POINT OF 30,000 PSI AND THICKNESS AS INDICATED IN THE TABLE BELOW.
- NOTE: APPLICABLE PIPE WALL THICKNESS SHALL BE DETERMINED BY THE HEIGHT OF COVER FROM THE TOP OF PIPE TO THE EXISTING STREET SURFACE OR TO THE LEGAL GRADE ELEVATION, WHICHEVER IS HIGHER.

DIAM. OF PIPE IN INCHES	COVER IN FEET	PIPE WALL THICKNESS IN INCHES REQUIRED FOR THE FOLLOWING STEEL YIELD POINTS (SEE NOTE ON LOADING CONDITIONS BELOW)				
		45 KSI	42 KSI	40 KSI	38 KSI	30 KSI
30" & 36"	2.5 TO 3.0	3/8				
	3.0 TO 7.0	3/8				
	7.0 TO 11.0	3/8			1/2	
	11.0 TO 13.0	3/8	1/2			
48"	2.5 TO 3.0	1/2				
	3.0 TO 7.0	1/2				
	7.0 TO 11.0	1/2			5/8	
	11.0 TO 13.0	5/8				

THE ABOVE REQUIREMENTS ARE BASED ON EARTH BACKFILL OF 100 LBS/CU. FT. AND FOR H2O WHEEL LOAD OF 20,000 LBS. (16,000 LBS. PLUS 25% IMPACT). FOR SOIL WEIGHTS OVER 100 LBS/CU. FT. THE PIPE WALL THICKNESS SHALL BE CHECKED AND REVISED, IF NECESSARY, TO SUIT ACTUAL LOADING CONDITIONS. WHERE THE COVER EXCEEDS THAT SHOWN IN THE ABOVE TABLE, DESIGN CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

NO EXTRA PAYMENT WILL BE MADE TO THE CONTRACTOR WHERE PIPE WALL THICKNESS, DUE TO DESIGN CALCULATIONS, EXCEEDS THAT SPECIFIED IN BID ITEMS.

W9 THE DU 'SPECIF JOINTS MECHANIC 1990.

W10 ALL DUC UNDER TI LOCK GA APPROVE IRON WA ORDERED

W11 THE CON DURING CONTRACT CONTINGE PROCEDUR INCLUDES UTILITY

W12 THE CON BRACING LICENSED INCLUDED SHEETING VICINITY DESIGNED DRAWINGS OF SOLDI ENGINEER CONSTRUCT CONTRACT T.A. REQ IN THE B

W13 ALL FIT MECHANIC SPECIFIED

W14 BELL-JOI LEAD JOI

W15 RESTRAIN BE IN AV

W16 WHERE HYI SHALL BE

W17 HYDRANTS B.W.S. S HYDRANTS

W18 OPEN ENDS CONCRETE

W19 ALL CHAM BACKFILL

W20 THE LOCAT HYDRANT THE DRAWI

W21 DESIGN CA BENDS AND IN STANDA APPROVAL

S1. WATER MAI THE INFL RESTRAINE

S2. WITHIN ON DRAINS, A BY HAND.

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3. IF A MAINT BY A THE S ACT A CLEAR APPRO PRESS HOWE

4. IF BR SAID REQUI 12" A

FED ROAD REG NO	STATE	FEDERAL PROJECT	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				

N.Y.S.O.T. PROJECT IDENTIFICATION NO

ON DWG. NO. 6 FOR SIDEWALK SAWCUTTING IN
OF BUS STOP SHELTERS.

WORK
CONTRACTOR SHALL FURNISH, INSTALL AND REMOVE ALL
STREET LIGHTING EQUIPMENT PRIOR TO NEW PAVING.

ILLATION SHALL BE ENERGIZED BEFORE REMOVAL OF
POLES.

ACTORS SHALL NOTIFY THE BUREAU OF TRAFFIC,
F STREET LIGHTING, DEPARTMENT OF TRANSPORTATION
2 HOURS PRIOR TO START OF WORK (212) 669-8314.

TO THE EXISTING STREET LIGHTING EQUIPMENT AS
OF THE CONTRACTORS WORK AND/OR WORK FORCE SHALL
D OR REPAIRED AT NO COST TO THE CITY.

OF WATER SUPPLY NOTES

WATER MAIN WORK

COMMENCING WORK, THE CONTRACTOR SHALL NOTIFY ALL
AGENCIES.

INGS SHOWING PROPOSED WATER MAINS AND
ICES TO BE LAID ARE DIAGRAMMATICAL ONLY. EXCEPT
RWISE INDICATED, OR ORDERED, REPLACEMENT WATER
TO BE CONSTRUCTED IN THE SAME LOCATION AS THE
WATER MAINS. THE EXACT LOCATION AT WHICH THE
SHALL BE LAID, AND THE VALVES, HYDRANTS, AND
URTAINANCES SET, WILL BE DETERMINED BY THE
AS THE WORK PROGRESSES. HOWEVER, THE EXACT
OF THE NEW WATER MAIN SHALL BE IN CONFORMANCE
NO. S2B ON THIS SHEET, REGARDING EXISTING

ALIGNMENT OF TRUNK MAINS ARE BASED UPON THE BEST
INFORMATION AVAILABLE. THIS INFORMATION IS
ER, GUARANTEED, AND THE LOCATION OF THE MAIN
IED FROM THAT SHOWN.

ACTOR IS TO VERIFY BY TEST PITS ELEVATIONS OF
SSINGS AND OTHER SUBSURFACE OBSTRUCTIONS TO
THE EXACT GEOMETRY OF THE NEW WATER MAIN
ON, AS APPROVED OR ORDERED BY THE ENGINEER.
ALL BE MADE UNDER ITEM 8.62.

SHOWN HEREIN REFER TO THE DATUM ELEVATION
IS 2.75 FT. ABOVE THE MEAN SEAL LEVEL AS
D BY U.S.C. AND G SURVEY AT SANDY HOOK, N.J.

ATTENTION OF THE CONTRACTOR IS CALLED TO THE
WORK MAY BE REQUIRED DURING THE PERIOD FROM
5TH TO MARCH 15TH. THE ENGINEER RESERVES THE
EVER, TO DISCONTINUE WORK AT ANY TIME BETWEEN
OD IF, IN HIS OPINION, WEATHER OR FROST
ARE SUCH THAT SATISFACTORY WORK OR BACKFILL
PERFORMED. WATER SUPPLY SHUTDOWNS OF
ON MAINS WILL NOT BE PERMITTED UNLESS THE 9 AM
IS AT LEAST 27 DEGREES F AND RISING. NO
OTHER THAN AN EXTENSION OF THE TIME WILL BE
E CONTRACTOR BECAUSE OF SUCH DISCONTINUANCE.

TION SHALL BE DONE BY HAND WITHIN ONE FOOT OF
SEWERS, HOUSE CONNECTION DRAINS AND OTHER

PIPE SHALL COMPLY WITH STANDARD B.W.S.
ION ENTITLED "SPECIFICATION FOR FURNISHING,
AND LAYING STEEL PIPE AND APPURTENANCES,"
L, 1972, REVISED FEBRUARY 1990. THE STEEL PIPE
E MINIMUM YIELD POINT OF 30,000 PSI AND
AS INDICATED IN THE TABLE BELOW.

PLICABLE PIPE WALL THICKNESS SHALL BE DETERMINED
THE HEIGHT OF COVER FROM THE TOP OF PIPE TO
EXISTING STREET SURFACE OR TO THE LEGAL GRADE
VATION, WHICHEVER IS HIGHER.

PIPE WALL THICKNESS IN INCHES REQUIRED
FOR THE FOLLOWING STEEL YIELD POINTS
(SEE NOTE ON LOADING CONDITIONS BELOW)

	45 KSI	42 KSI	40 KSI	38 KSI	30 KSI
0	3/8				
0	3/8				
0	3/8		>	1/2	
0	3/8	1/2			
0	1/2				
0	1/2				
0	1/2		>	5/8	
0	5/8				

REQUIREMENTS ARE BASED ON EARTH BACKFILL OF 100
AND FOR H20 WHEEL LOAD OF 20,000 LBS.
S. PLUS 25% IMPACT). FOR SOIL WEIGHTS OVER
FT. THE PIPE WALL THICKNESS SHALL BE CHECKED
D, IF NECESSARY, TO SUIT ACTUAL LOADING
WHERE THE COVER EXCEEDS THAT SHOWN IN THE
DESIGN CALCULATIONS SHALL BE SUBMITTED TO
R FOR APPROVAL.

YMENT WILL BE MADE TO THE CONTRACTOR WHERE
THICKNESS, DUE TO DESIGN CALCULATIONS, EXCEEDS
ED IN BID ITEMS.

W9 THE DUCTILE IRON PIPE SHALL COMPLY WITH B.W.S.
'SPECIFICATIONS FOR DUCTILE CAST IRON PIPE WITH PUSH-ON
JOINTS AND GRAY-IRON AND DUCTILE IRON FITTINGS WITH
MECHANICAL JOINTS," DATED APRIL 1979, REVISED FEBRUARY
1990.

W10 ALL DUCTILE IRON WATER MAINS, 12-INCH DIA. AND LESS,
UNDER THIS CONTRACT SHALL HAVE RESTRAINED JOINTS-FIELD
LOCK GASKETS, MANUFACTURED BY U.S. PIPE COMPANY OR
APPROVED EQUAL. 20-INCH DIA. AND 24-INCH DIA. DUCTILE
IRON WATER MAINS SHALL HAVE RESTRAINED JOINTS WHERE
ORDERED BY THE ENGINEER.

W11 THE CONTRACTOR IS TO USE AN APPROVED SHEETING METHOD
DURING THE WATER MAIN CONSTRUCTION. SHOULD THE
CONTRACTOR UTILIZE THE KRINGS METHOD, APPROVAL IS
CONTINGENT UPON THE CONTRACTOR'S SUBMITTAL OF A DETAILED
PROCEDURE FOR THE INSTALLATION OF THE SYSTEM, WHICH
INCLUDES METHODS FOR THE ACCOMMODATION OF UNDERGROUND
UTILITY SERVICES, BOTH CITY AND PRIVATELY OWNED.

W12 THE CONTRACTOR SHALL SUBMIT FOR REVIEW SHEETING AND
BRACING DESIGN, PREPARED BY A PROFESSIONAL ENGINEER,
LICENSED IN THE STATE OF NEW YORK. THE COST SHALL BE
INCLUDED IN THE BID ITEM "FURNISHING AND PLACING TIGHT
SHEETING." WHERE SHEETING IS TO BE PLACED IN THE
VICINITY OF TRANSIT AUTHORITY FACILITIES, IT SHALL BE
DESIGNED AND PLACED ACCORDING TO THE T.A. REQUIREMENTS.
DRAWINGS AND CONSTRUCTION PROCEDURES INCLUDING AUGERING
OF SOLDIER BEAMS, IF REQUIRED, SHALL BE SUBMITTED TO THE
ENGINEER AND TRANSIT AUTHORITY FOR APPROVAL BEFORE
CONSTRUCTION. NO EXTRA PAYMENT WILL BE MADE TO THE
CONTRACTOR FOR ANY ADDITIONAL COSTS NEEDED TO COMPLY WITH
T.A. REQUIREMENTS BUT COSTS WILL BE DEEMED TO BE INCLUDED
IN THE BID ITEM FOR TIGHT SHEETING.

W13 ALL FITTINGS SUPPLIED BY THE CONTRACTOR SHALL BE
MECHANICAL-JOINT OR RESTRAINED JOINT FITTINGS, AS
SPECIFIED OR ORDERED.

W14 BELL-JOINT CLAMPS SHALL BE FURNISHED AND INSTALLED ON
LEAD JOINTS, AS ORDERED BY THE ENGINEER.

W15 RESTRAINT OF JOINTS FOR DUCTILE IRON WATER MAINS SHALL
BE IN ACCORDANCE WITH B.W.S. STD. DWG. NO. 44387-L R.

W16 WHERE HYDRANTS ARE DENOTED BY "R", THE EXISTING HYDRANTS
SHALL BE REMOVED.

W17 HYDRANTS ON THE TRUNK MAIN SHALL BE PAINTED RED. (SEE
B.W.S. STANDARD SPECIFICATIONS FORM NO. 8 "SETTING
HYDRANTS", REVISED FEBRUARY, 1989).

W18 OPEN ENDS OF ALL ABANDONED MAINS SHALL BE PLUGGED WITH
CONCRETE FOR A MINIMUM LENGTH OF THREE FEET.

W19 ALL CHAMBERS ON MAINS THAT ARE ABANDONED SHALL BE
BACKFILLED WITH APPROVED MATERIAL.

W20 THE LOCATIONS OF EXISTING HYDRANTS TO BE REMOVED AND NEW
HYDRANT FENDERS TO BE INSTALLED WHICH ARE NOT SHOWN ON
THE DRAWINGS ARE TO BE AS DIRECTED BY THE ENGINEER.

W21 DESIGN CALCULATIONS AND FABRICATION SHOP DRAWINGS FOR
BENDS AND ALSO FOR STEEL OUTLETS AND TEES NOT INCLUDED
IN STANDARD DRAWING NO. 38226-Y-A, SHALL BE SUBMITTED FOR
APPROVAL BEFORE FABRICATION.

WORK AFFECTING SEWERS

S1. WATER MAINS OF 20 INCHES IN DIAMETER AND LESS LAID WITHIN
THE INFLUENCE LINE OF SEWER TRENCHES SHALL HAVE
RESTRAINED JOINTS.

S2. WITHIN ONE FT. OF EXISTING SEWERS, HOUSE CONNECTIONS,
DRAINS, AND OTHER UTILITIES, ALL EXCAVATION SHALL BE DONE
BY HAND.

A. SEWER ELEVATIONS AT WATER MAIN CROSSINGS SHALL BE
VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO
COMMENCEMENT OF THE WORK.

B. FOR WATER MAINS CROSSING EXISTING SEWERS:

THE MINIMUM CLEARANCE BETWEEN THE TOP OF AN EXISTING
SEWER AND THE OUTSIDE BOTTOM OF THE TRUNK MAIN (PIPE
WALL THICKNESS TO BE TAKEN INTO CONSIDERATION) SHALL
BE 12 INCHES. IN ORDER TO MAINTAIN THE PROPER
CLEARANCE, THE FOLLOWING ALTERNATIVE SHALL BE
CONSIDERED AND APPLIED, AS DIRECTED BY THE ENGINEER:

1. THE USE OF THE BEVELED CONNECTION IN LIEU OF
BENDS SHALL BE INVESTIGATED IF THE DEGREE OF
INTERFERENCE IS OF A MINOR NATURE; OTHERWISE,
BENDS AND/OR REDUCERS SHALL BE USED.
2. THE COVER ON THE PIPE MAY BE REDUCED TO TWO AND
ONE HALF (2.5) FT.
3. IF A 12-INCH MINIMUM CLEARANCE CANNOT BE
MAINTAINED, THE WATER MAIN SHALL BE SUPPORTED
BY A PIER OF APPROVED DESIGN ON EACH SIDE OF
THE SEWER. THE PIPE SHALL THEN BE DESIGNED TO
ACT AS A BEAM BETWEEN THESE SUPPORTS. THE
CLEARANCE SPACE IS TO BE FILLED WITH LAYERS OF
APPROVED MATERIAL TO AVOID EXCESSIVE BEARING
PRESSURE ON THE SEWER PIPE. IN NO CASE,
HOWEVER, SHALL THIS CLEARANCE BE LESS THAN 6".
4. IF BROKEN STONE BEDDING IS USED FOR WATER MAIN,
SAID BEDDING SHALL BE DISCONTINUOUS, IF
REQUIRED, OVER THE SEWER WITHIN A DISTANCE OF
12" AWAY EACH SIDE OF THE CROSSING SEWER.

C. FOR WATER MAINS INSTALLED PARALLEL TO EXISTING
SEWERS:

UNLESS OTHERWISE ORDERED BY THE ENGINEER, THE
HORIZONTAL CLEARANCE BETWEEN NEW WATER MAIN
INSTALLED PARALLEL TO EXISTING SEWERS ARE TO CONFORM
TO THE FOLLOWING:

- A) HORIZONTAL CLEARANCE BETWEEN OUTSIDE OF NEW
WATER MAINS AND CENTERLINE OF SEWER SHALL NOT
BE LESS THAN 6 FEET PLUS ONE HALF SEWER
DIAMETER WHERE DEPTH TO BOTTOM OF SEWER CRADLE
IS LESS THAN 10 FEET.
- B) WHERE DEPTH IS 10 FEET OR MORE TO BOTTOM OF
SEWER CRADLE, THE HORIZONTAL CLEARANCE SHALL
BE INCREASED BY 1 FOOT FOR EACH ADDITIONAL 5
FEET OF DEPTH OVER THE 10 FEET, OR PORTION
THEREOF.

S3. AT BLOW-OFF CONNECTIONS, A MINIMUM CLEARANCE OF 1'-6"
SHALL BE MAINTAINED BETWEEN THE BOTTOM OF THE TRUNK MAIN
AND THE TOP OF THE SEWER CONNECTED INTO.

S4. ALL EXISTING SEWER HOUSE CONNECTIONS SHALL BE
CONTINUOUSLY MAINTAINED DURING CONSTRUCTION OF THE WATER
MAINS. IF ANY HOUSE CONNECTION MUST BE DISCONNECTED FOR
CONSTRUCTION PURPOSES, FLOW MUST BE MAINTAINED BY PLUMING
OR OTHER SUITABLE MEANS, AS DIRECTED BY THE ENGINEER AND
IN SUCH A MANNER THAT NO-BACK-UPS OCCUR. ANY AND ALL
EXISTING SEWERS, HOUSE CONNECTIONS OR OTHER SEWER

APPURTENANCES WHICH ARE TO REMAIN, AND WHICH MUST BE
DISTURBED FOR CONSTRUCTION PURPOSES, SHALL BE RESTORED
TO THEIR ORIGINAL CONDITION AFTER COMPLETION OF THE WORK.
DAMAGES DONE AS A RESULT OF THE WORK SHALL BE REPAIRED
AT NO COST TO THE CITY.

S5. ALL PROPOSED DRAINAGE WORK SHALL BE DONE IN CONFORMANCE
WITH THE LATEST STANDARDS OF THE DEPARTMENT OF
ENVIRONMENTAL PROTECTION.

S6. ABANDONED DRAINAGE STRUCTURES AS SHOWN ON CONTRACT PLANS
ARE TO BE CUT DOWN TWO (2) FEET BELOW SUBGRADE AND FILLED
WITH COMPACTED CLEAN SAND. BASIN CONNECTIONS NOT
REQUIRED SHALL BE BULKHEADED AT BOTH ENDS.

S7. NEW CATCH BASIN CONNECTIONS SHALL BE 12" DIAMETER DUCTILE
IRON PIPE, CLASS 56 WITH INTERNALLY LOCKED "PUSH-ON"
JOINTS ON 6" OF BROKEN STONE WHICH SHALL BE HARD
UNWEATHERED STONE UNIFORMLY GRADED FROM 1/4" TO 3/4" IN
DIAMETER. IT SHALL CONFORM TO COMMERCIAL 1/4" TO 3/4"
STONE.

S8. ALL NEW PROPOSED CATCH BASINS SHOULD BE CONNECTED TO AN
EXISTING SEWER AT A SEWER MANHOLE.

S9. CARE SHALL BE TAKEN NOT TO DAMAGE EXISTING SEWERS DURING
CONSTRUCTION. ANY DAMAGE CAUSED BY THE CONTRACTOR'S
OPERATION SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXTRA
COST TO THE CITY.

FIRE DEPARTMENT FACILITIES

F1. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING HIS
OPERATION TO ENSURE CONTINUOUS FIRE ALARM SERVICE IN THE
AREA.

F2. DUCT LINES CARRYING FIRE DEPARTMENT CABLES AND/OR DUCT
LINES CARRYING TRANSIT AUTHORITY CABLES, CROSSING OR IN
CLOSE PROXIMITY TO THE NEW WORK, SHALL BE PROPERLY
SUPPORTED AND PROTECTED.

F3. WHERE EXISTING FIRE DEPARTMENT CONDUIT IS PARALLEL TO,
AND LESS THAN 2'-6" FROM THE EDGE OF THE NEW WATER MAIN,
A NEW CONDUIT, CABLES AND MANHOLES, AS REQUIRED, SHALL
BE INSTALLED AT LOCATIONS ORDERED BY THE ENGINEER.

F4. FOR NEW YORK FIRE DEPARTMENT REQUIREMENTS, SEE GENERAL
CONDITIONS OF THE CONTRACT SPECIFICATIONS.

TREES AND PARKS

P1. ANY TREE BRANCHES THAT WOULD INTERFERE WITH THE
CONSTRUCTION WORK SHALL BE TIED BACK TOWARD THE CENTER
OF THE TREE TO PREVENT INJURY TO IT.

P2. ANY ACCIDENTAL INJURY TO THE TREES SHALL BE REPAIRED BY
COMPETENT TREE SURGEONS TO THE SATISFACTION OF THE
ENGINEER AND PARKS DEPARTMENT.

P3. EXISTING TREES IN THE PROXIMITY OF CONSTRUCTION SHALL BE
PROTECTED AGAINST DAMAGE.

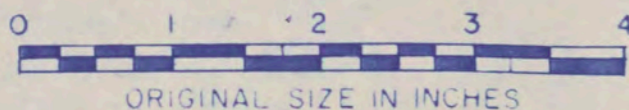
P4. COMPENSATORY PRUNING SHALL BE PERFORMED PRIOR TO THE
START OF CONSTRUCTION, TO GIVE ADEQUATE ROOM FOR
CONSTRUCTION EQUIPMENT AND TO OFFSET ANY ROOT DAMAGE
RESULTING FROM CONSTRUCTION ACTIVITY. THROUGHOUT THE
COURSE OF THE CONTRACT ADDITIONAL PRUNING MAY BE REQUIRED
TO CORRECT ANY TIEBACK OR CONSTRUCTION INJURY.

DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59th ST. TO W. 110th ST.
(EXCLUDING INTERSECTION AT BROADWAY)

GENERAL NOTES

SCALE: DATE:



NEW YORK CITY TRANSIT AUTHORITY GENERAL NOTES

1. THE TRANSIT AUTHORITY RESERVES THE RIGHT TO PLACE INSPECTORS, FLAGMEN OR OTHER PERSONNEL IN THE SUBWAY STRUCTURES DURING CONSTRUCTION OF THE PROJECT LINKED BY A TELEPHONE SYSTEM, IF DEEMED NECESSARY, TO OBSERVE THE EFFECTS OF THE CONSTRUCTION ON THE TRANSIT FACILITIES. IT IS EXPECTED THAT SUCH PERSONNEL WILL BE NECESSARY WHEN THE CONSTRUCTION COMES WITHIN TWENTY-FIVE FEET OF THE SUBWAY STRUCTURE. HOWEVER, THE TRANSIT AUTHORITY FURTHER RESERVES THE RIGHT TO PLACE SUCH PERSONNEL WHENEVER, IN ITS OPINION, THE PROJECT CONDITIONS WARRANT SUCH PLACEMENT, REGARDLESS OF DISTANCE. THE COST OF SUCH PERSONNEL, TELEPHONE INSTALLATION AND ANY RE-ROUTES, DIVERSIONS OF SERVICE, WORK TRAINS, ETC., MADE NECESSARY BY THE PROJECT, WILL BE PAID FOR DIRECTLY BY THE CITY.
2. IF ANY PORTION OF THE SUBWAY STRUCTURE OR FINISH IS DAMAGED AS A RESULT OF THE CONTRACTOR'S WORK, IT SHALL BE REPAIRED OR REPLACED WITH THE SAME MATERIALS IN PLACE, SUBJECT TO THE APPROVAL OF THE TRANSIT AUTHORITY'S ENGINEER AND AT THE EXPENSE OF THE CONTRACTOR.
3. ALL LUMBER AND PLYWOOD USED FOR PROTECTION OF SUBWAY FACILITIES AT STREET LEVEL MUST BE FIRE RETARDANT; BELOW STREET LEVEL, USE FIREPROOF MATERIAL.
4. SUBWAY EMERGENCY EXITS MUST BE KEPT CLEAR AT ALL TIMES.
5. IN EXCAVATING OVER OR NEAR THE SUBWAY ROOF, SPECIAL CARE SHALL BE EXERCISED SO THAT THE THIN CONCRETE PROTECTION OF THE SUBWAY WATERPROOFING IS NOT DAMAGED.
6. STANDARD TRANSIT AUTHORITY INSURANCE CLAUSES MUST BE INCORPORATED IN THE PROJECT'S CONTRACT DOCUMENTS. PROOF THAT THE NECESSARY INSURANCE IS IN EFFECT WILL BE REQUIRED BEFORE WORK CAN COMMENCE.
7. BUS ROUTES AFFECTED BY THE PROJECT WILL OR MAY REQUIRE BUS DIVERSIONS. THESE ARRANGEMENTS SHALL BE MADE THROUGH:

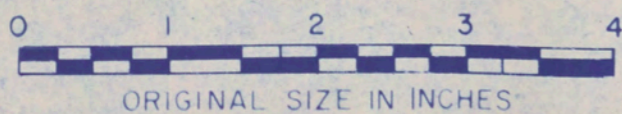
LARRY GOULD
ACTING DIRECTOR
OFFICE OF OPERATIONS ANALYSIS
NEW YORK CITY TRANSIT AUTHORITY
151 LAWRENCE STREET ROOM 3007
BROOKLYN, NEW YORK 11201

ATT. KARL STRICKER TELEPHONE NUMBER (718) 802-3116

8. DUCT LINES MUST BE MAINTAINED AND PROTECTED DURING CONSTRUCTION. ANY INTERFERENCE WITH DUCT LINES SHOULD BE VERIFIED WITH THE ELECTRICAL DEPARTMENT.
9. WHERE MANHOLES ARE ENCOUNTERED:
 - A) THEY SHALL BE PROTECTED AND RAISED OR LOWERED AS REQUIRED, TO MATCH THE NEW STREET GRADE.
 - B) IF MANHOLE COVERS ARE RAISED OR LOWERED, PROTECT CABLES IN MANHOLE BY WOOD SHEETING OF 2" NOMINAL THICKNESS.
 - C) PRIOR TO THE START OF CONSTRUCTION OPERATIONS AFFECTING MANHOLES AND DUCT LINES, SEVEN DAYS NOTICE MUST BE GIVEN TO MR. M. FRADUA, MANAGER, CONTRACT INSPECTIONS, DEPARTMENT OF TRACK AND STRUCTURES, AT (718) 330-4358.
10. THERE SHALL BE NO MACHINE EXCAVATION WITHIN 3 FEET OF POWER DUCT LINES OR ANY OTHER T.A. FACILITIES UNTIL THEY HAVE BEEN CAREFULLY EXPOSED BY HAND EXCAVATION.
11. CONSTRUCTION WORK DONE NEAR VENT GRATINGS AND HATCHES SHALL BE AS FOLLOWS:
 - A) PROTECTIVE SHIELDS MUST BE PROVIDED OVER VENT GRATINGS.
 - B) NO BUILDING MATERIAL, VEHICLES OR CONSTRUCTION EQUIPMENT IS TO BE STORED OR RUN OVER VENT, GRATINGS, HATCHES OR EMERGENCY EXITS.
 - C) DETAILS OF SIDEWALK RECONSTRUCTION AROUND VENT GRATINGS, HATCHES AND EMERGENCY EXITS ARE TO BE SUBMITTED TO THE TRANSIT AUTHORITY FOR APPROVAL.
12. WHEREVER A NEW SIDEWALK IS BEING PLACED ADJACENT TO TRANSIT AUTHORITY STRUCTURES THE FOLLOWING WILL BE REQUIRED:
 - A) THE TOP OF THE NEW SIDEWALK SHALL BE FLUSH WITH THE SUBWAY VENT GRATINGS, HATCHES AND EMERGENCY EXITS.
 - B) THE SLOPE OF THE NEW SIDEWALK SHALL BE SUCH THAT THE DRAINAGE BE AWAY FROM THESE STRUCTURES.
 - C) A 1/2" PREMOLDED FILLER SHALL BE INSTALLED BETWEEN THE NEW SIDEWALK AND THE TRANSIT AUTHORITY STRUCTURE.
 - D) WHERE SIDEWALK ELEVATIONS ARE BEING CHANGED DETAILS OF PROPOSED WORK AROUND TRANSIT AUTHORITY STRUCTURES ARE TO BE SUBMITTED FOR APPROVAL.
13. VIBRATORY HAMMERS WILL NOT BE PERMITTED WITHIN 75 FEET OF SUBWAY STRUCTURES. HOERAMS WILL NOT BE PERMITTED WITHIN 25 FEET OF SUBWAY STRUCTURES.
14. AT LEAST SEVEN WORKING DAYS PRIOR TO THE START OF CONSTRUCTION OPERATIONS, NOTIFICATION MUST BE GIVEN TO MR. M. FRADUA, MANAGER, DEPARTMENT OF TRACK AND STRUCTURES, AT (718) 330-4358.

FED. ROAD REG. NO.	STATE	FEDERAL PROJECT	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				

N.Y.S.D.O.T. PROJECT IDENTIFICATION NO.

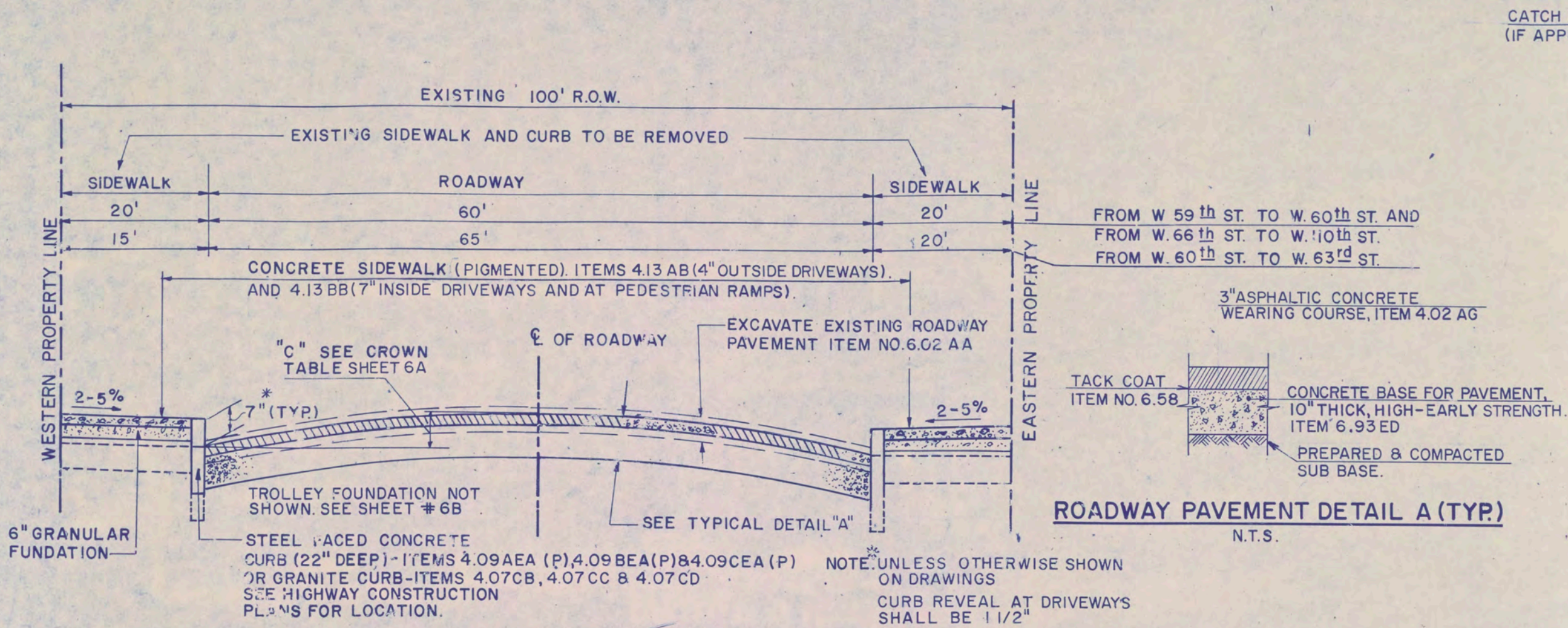


DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59th ST. TO W. 110th ST.
(EXCLUDING INTERSECTION AT BROADWAY)

GENERAL NOTES

SCALE: _____ DATE: _____



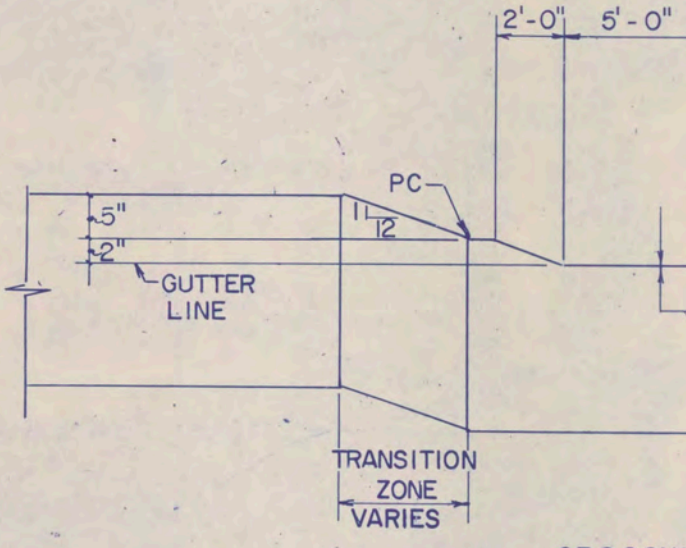
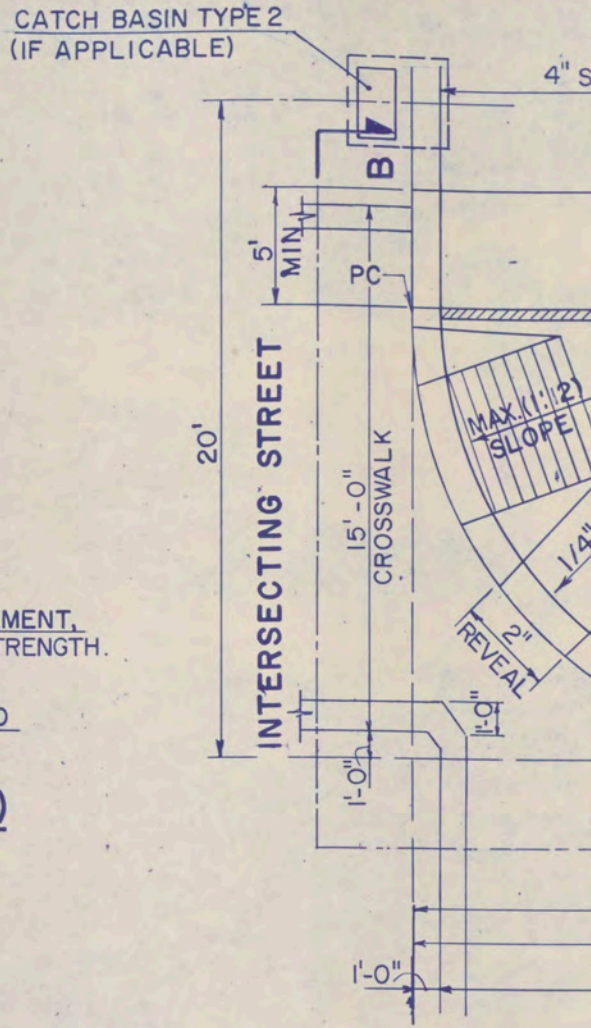
TYPICAL CROSS - SECTION

N.T.S.

	CURB LENGTHS	FEET
NO. 1	STRAIGHT SECTIONS	NOTE 2 4'-12'
NO. 2	CURVED SECTIONS	NOTE 3 3'-8'
NO. 3	TRANSITION CURB (CORNERS) STRAIGHT OR CURVED	5
NO. 4	TRANSITION CURB (DRIVEWAYS)	5

NOTE - PEDESTRIAN RAMPS AND CURBS

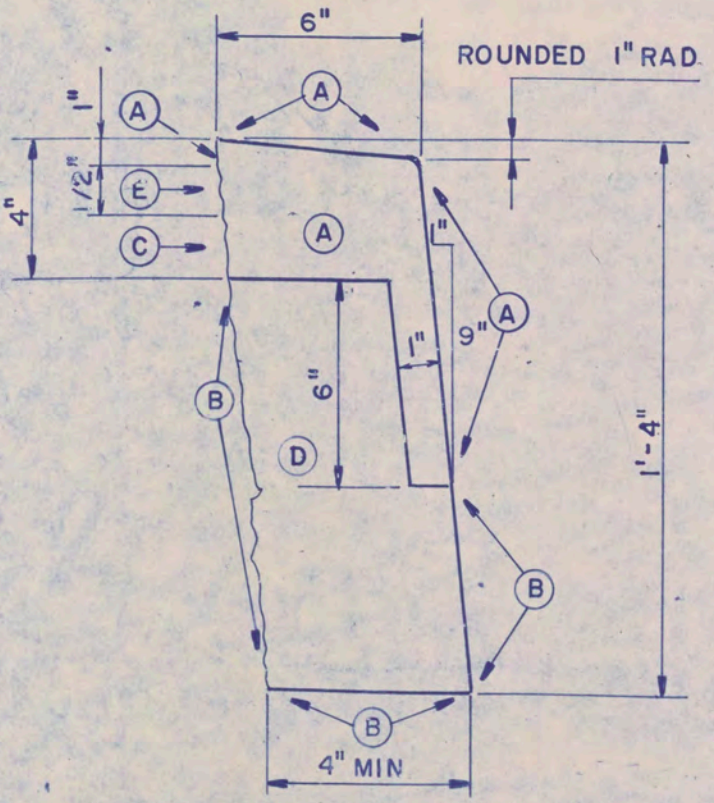
1. NEW GRANITE CURB SHALL BE AS DETAILED ON THIS SHEET AND AS CALLED FOR IN SPECIFICATIONS.
2. 80% OF NO. 1 SHALL BE 6FT. OR GREATER.
3. 80% OF NO. 2 SHALL BE 4FT. OR GREATER.
4. PEDESTRIAN RAMPS IN THE SIDEWALK ADJACENT TO MUSEUM OF NATURAL HISTORY SHALL BE PAVED WITH HEXAGONAL ASPHALTIC BLOCK. SECTION B-B OF THE STANDARD DETAIL SHALL BE REGARDED AS SCHEMATIC ONLY. ACTUAL PROFILE WILL NOT BE ANGULAR BUT SHALL CONSIST OF A SERIES OF TANGENTS AND CURVES. HEXAGONAL ASPHALTIC BLOCKS OF THE PEDESTRIAN RAMPS SHALL MEET THE ADJACENT SIDEWALK HEXAGONAL PAVING IN A SMOOTH CONTINUATION OF THE SIDEWALK BLOCK PATTERN, WITH MINIMAL USE OF CUT BLOCKS.
5. CONTRACTOR TO PREPARE SHOP DRAWINGS FOR NEW GRANITE CURB AND SUBMIT THEM TO THE ENGINEER FOR APPROVAL.
6. TOP OF CURB TO BE DRESSED TO A SURFACE EQUAL TO 4 CUT WORK, IN SMOOTHNESS, WITH NO DRILL HOLES.
7. IN CONSTRUCTING CURBS IN THE VICINITY OF EXISTING TREES, CURBS SHALL BRIDGE MAJOR ROOTS TO AVOID CUTTING OR DEBARKING OF ROOTS. MAJOR ROOTS ARE IDENTIFIED AS BEING 2" DIAMETER OR GREATER.



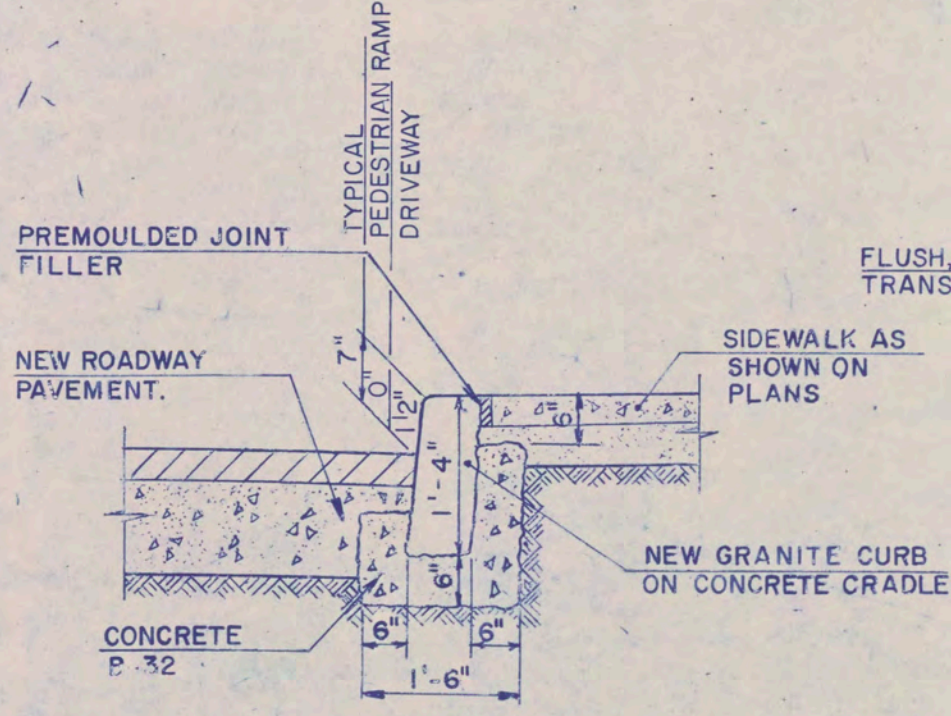
CROSSWALK
ALONG COLUMBUS AV.
ACROSS COLUMBUS AV.
AT W.72ND., W.79TH., W.
W.106TH., ST. INTERSE
AT ALL OTHER INTER

ELEVATION

TYPICAL PEDESTRIAN



SYMBOL	SURFACE FINISH	
	NO PROJECTION OVER	NO DEPRESSION OVER
(A)	1/8"	1/8"
(B)	1 1/2"	1 1/2"
(C)	1/2"	1"
(D)	0"	1"
(E)	1/8"	1/2"



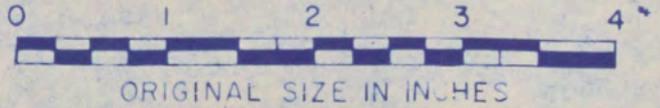
GRANITE CURB DETAIL

N.T.S.

DIMENSIONS AND FINISH ON GRANITE CURB

NOTE: GRANITE CURBS ARE TO BE GREY IN COLOR AND THAT COLOR OF PROPOSED CURB WILL BE SUBJECT TO REVIEW AND PRIOR APPROVAL BY THE N.Y.C. LANDMARK PRESERVATION COMMISSION.

DANIEL FRANKFURT, P.C. consulting engineers
800 SECOND AVENUE NEW YORK, N.Y.



FED. ROAD REG. NO.	STATE	FEDERAL PROJECT NO.	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				

N.Y.S.D.O.T. PROJECT IDENTIFICATION NO.

STANDARD AND REFERENCE DRAWINGS

THE LATEST REVISIONS OF THE NEW YORK CITY BUREAU OF TRAFFIC, DIVISION OF ROADWAY DESIGN APPLICABLE REFERENCE STANDARDS THAT HAVE BEEN AUTHORIZED UP TO THE START OF ADVERTISING SHALL BE CONSIDERED AS PART OF THESE CONTRACT DOCUMENTS.

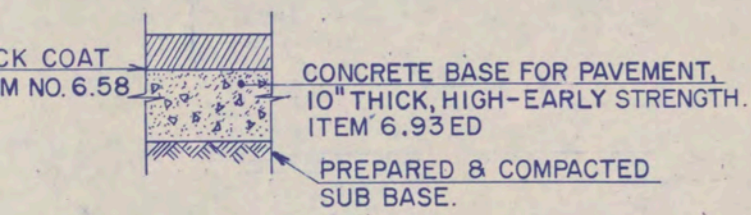
- H-1000AA R79 STANDARD PROJECT SIGN-TYPEAA
- H-1038 R79 TYPE III BREAKAWAY BARRICADE.
- H-1005 R79 REINFORCED CONCRETE PAVEMENT FOR BUS STOPS.
- H-1010 R79 STEEL FACED CURB/STEEL FACING TYPE D
- H-1015 R79 STEEL FACED DROP CURB/DRIVEWAYS
- H-1034 R79 TYPICAL CONSTRUCTION JOINTS FOR CONCRETE BASE FOR PAVEMENT
- H-1040 R79 TRANSVERSE CONSTRUCTION JOINTS FOR CONCRETE BASE
- H-1042A R87 STANDARD TRENCH RESTORATION
- H-1044 CONCRETE CURB
- H-1045 CONCRETE SIDEWALK
- H-1046 STREET TREE PLANTING DETAIL
- H-1047 TYPICAL CURB DETAIL AT EXISTING TREES
- H-1048 PROJECT NOTIFICATION SIGN TYPE-A
- H-1049 PLASTIC BARREL
- H-1053 R87 DETAILS FOR CONSTRUCTING AREAS OF ADJUSTMENT AND TRANSITION SECTIONS
- MS-1000 NEW YORK CITY/COMPARISON OF DATUM PLANES
- DESIGN DIRECTIVE NO. 45 - NEW SEWER DESIGN STANDARDS, DRAWINGS NO. 25: TYPE 2 CATCH BASIN; DRAWING NO. 42: TYPE 3 CATCH BASIN.

NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS

- 619-2R2 TEMPORARY TIMBER SAFETY CURB

FROM W 59th ST. TO W. 60th ST. AND
FROM W. 66th ST. TO W. 110th ST.
FROM W. 60th ST. TO W. 63rd ST.

3" ASPHALTIC CONCRETE WEARING COURSE, ITEM 4.02 AG



ROADWAY PAVEMENT DETAIL A (TYP.)
N.T.S.

DOWN
WAYS

CURBS

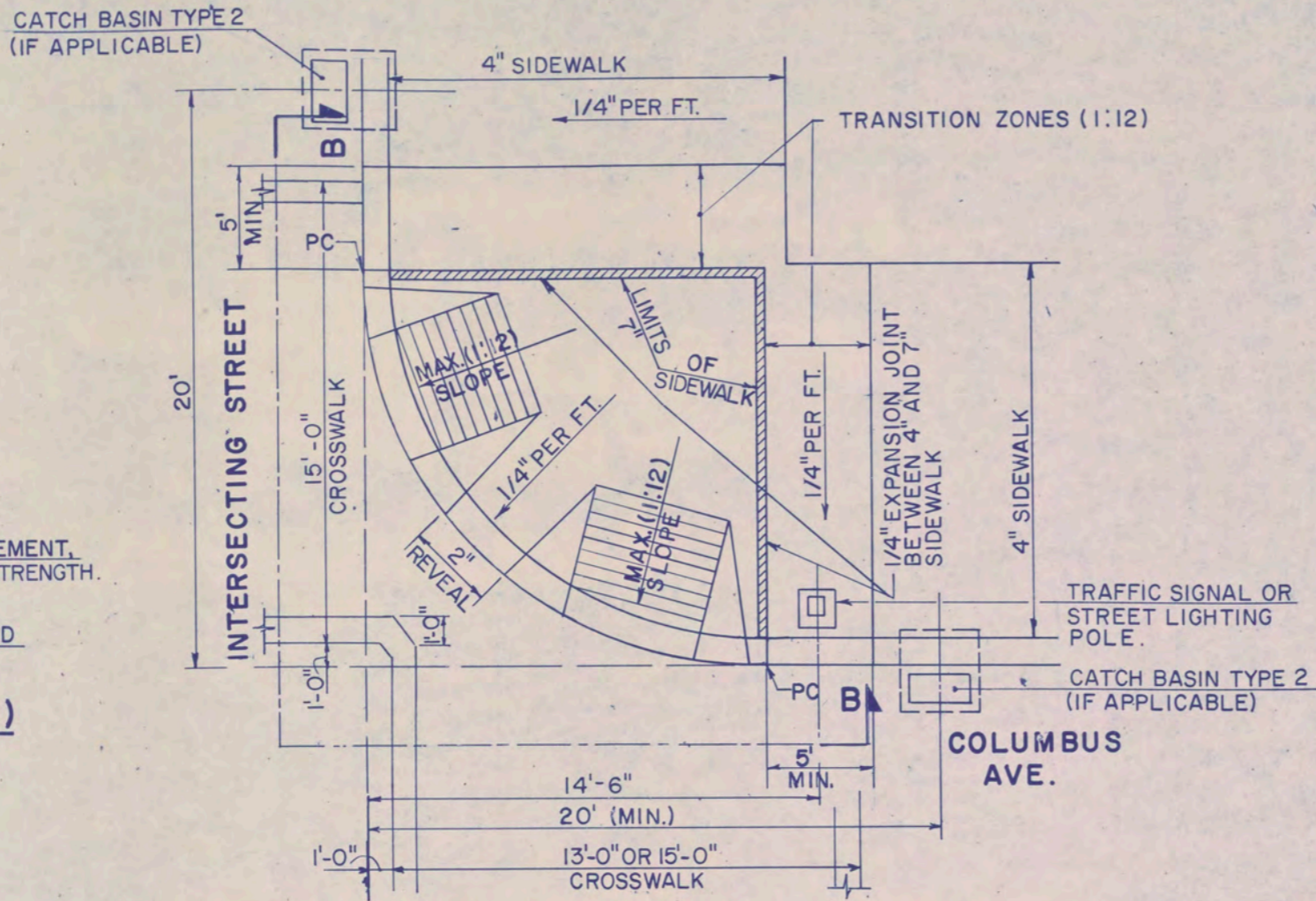
LED ON THIS SHEET AND AS

R.
R.
ACENT TO MUSEUM OF NATURAL
AGONAL ASPHALTIC BLOCK.
LL SHALL BE REGARDED AS
NOT BE ANGULAR BUT SHALL
AND CURVES. HEXAGONAL
AN RAMPS SHALL MEET THE
IN A SMOOTH CONTINUATION
MINIMAL USE OF CUT BLOCKS.

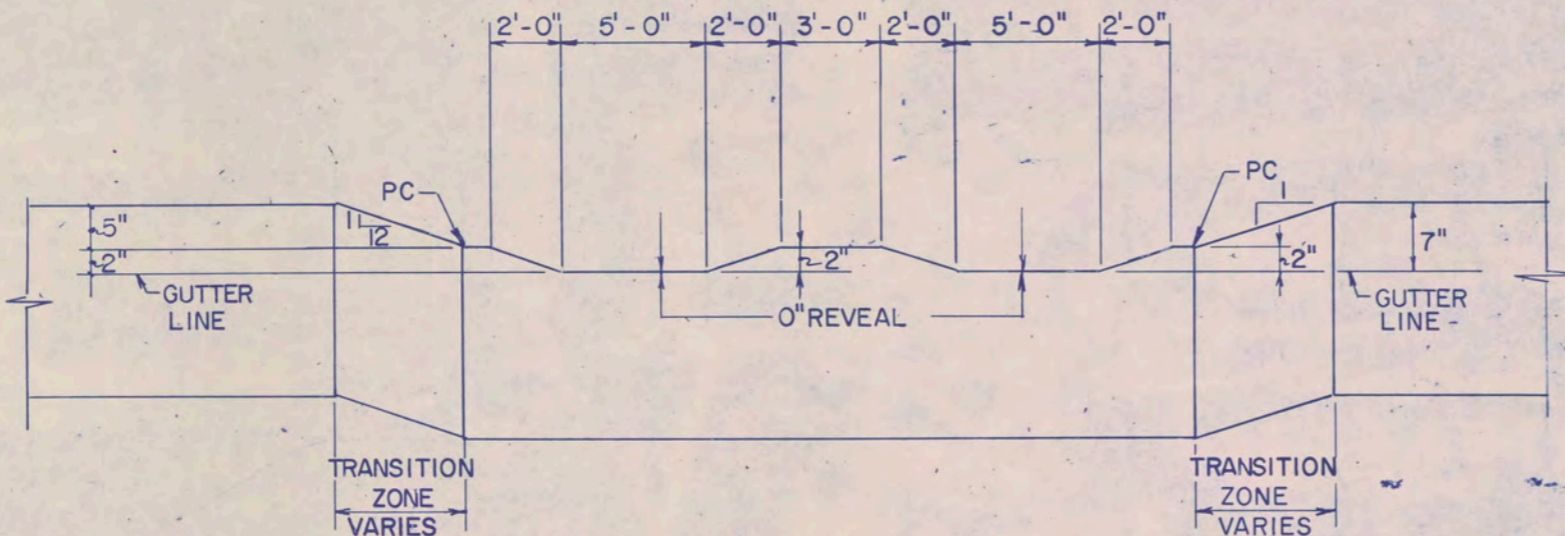
FOR NEW GRANITE CURB AND
ROVAL.

FACE EQUAL TO 4 CUT WORK,

Y OF EXISTING TREES, CURBS
CUTTING OR DEBARKING OF
AS BEING 2" DIAMETER OR



PLAN



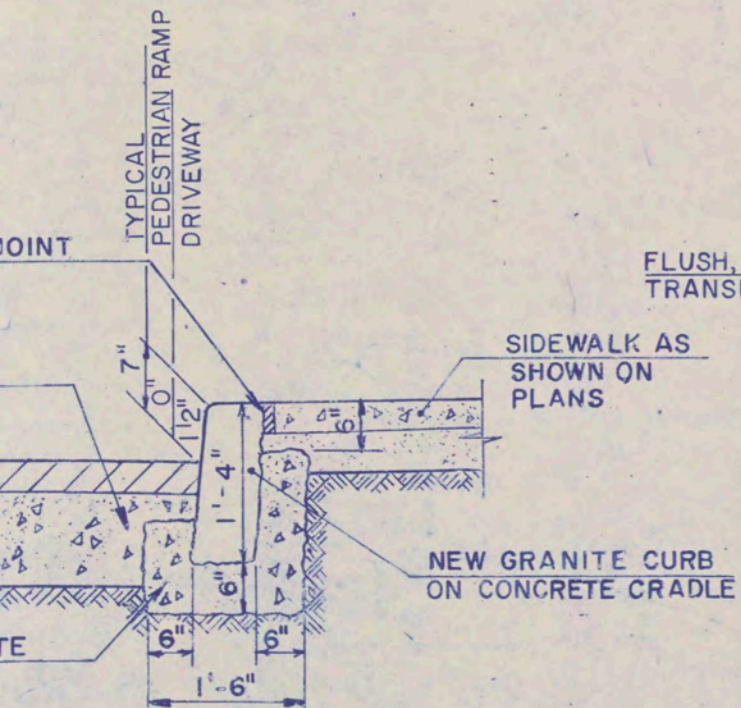
CROSSWALK WIDTH

- ALONG COLUMBUS AVE. 15 FEET
- ACROSS COLUMBUS AVE.
AT W.72ND., W.79TH., W.86TH., W.96TH.
W.106TH., ST. INTERSECTIONS. 15 FEET
- AT ALL OTHER INTERSECTIONS 13 FEET

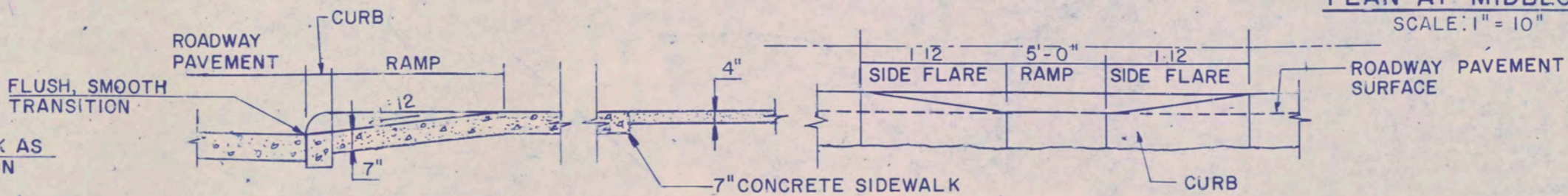
ELEVATION B-B

N.T.S.

TYPICAL PEDESTRIAN RAMPS AT STREET CORNER



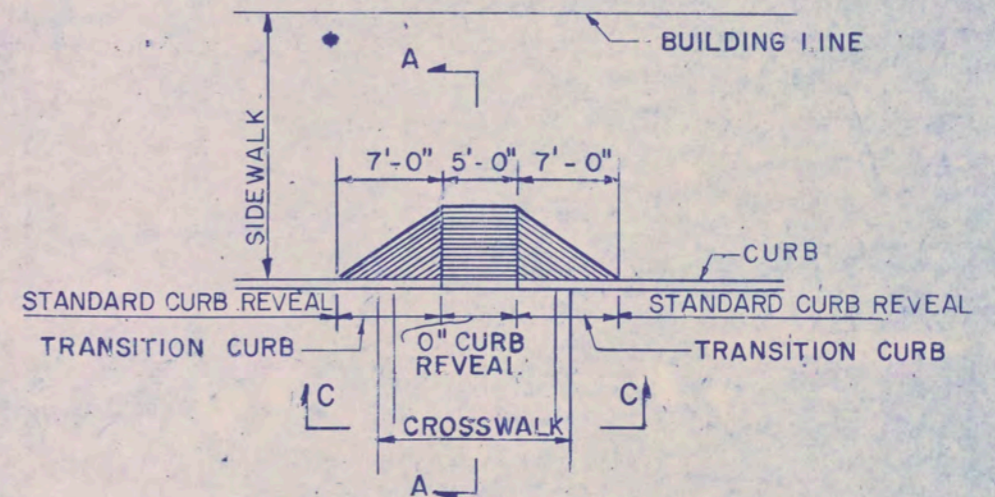
GRANITE CURB DETAIL
N.T.S.



SECTION A-A
N.T.S.

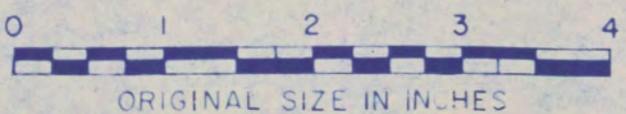
SECTION C-C
N.T.S.

TYPICAL MIDBLOCK PEDESTRIAN RAMP DETAIL



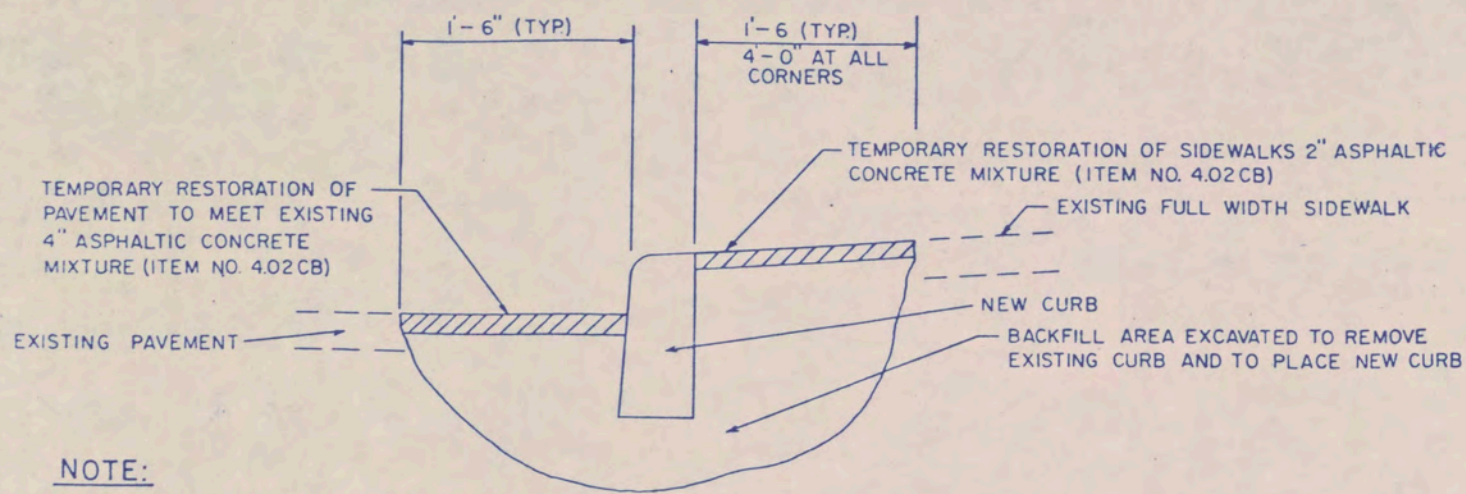
PLAN AT MIDBLOCK

SCALE: 1" = 10"



ORIGINAL SIZE IN INCHES

DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK
COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59th ST. TO W. 110th ST.
(EXCLUDING INTERSECTION AT BROADWAY)
LIST OF STANDARD DRAWINGS,
TYPICAL CROSS-SECTION AND
SPECIAL DETAILS
SCALE: DATE:

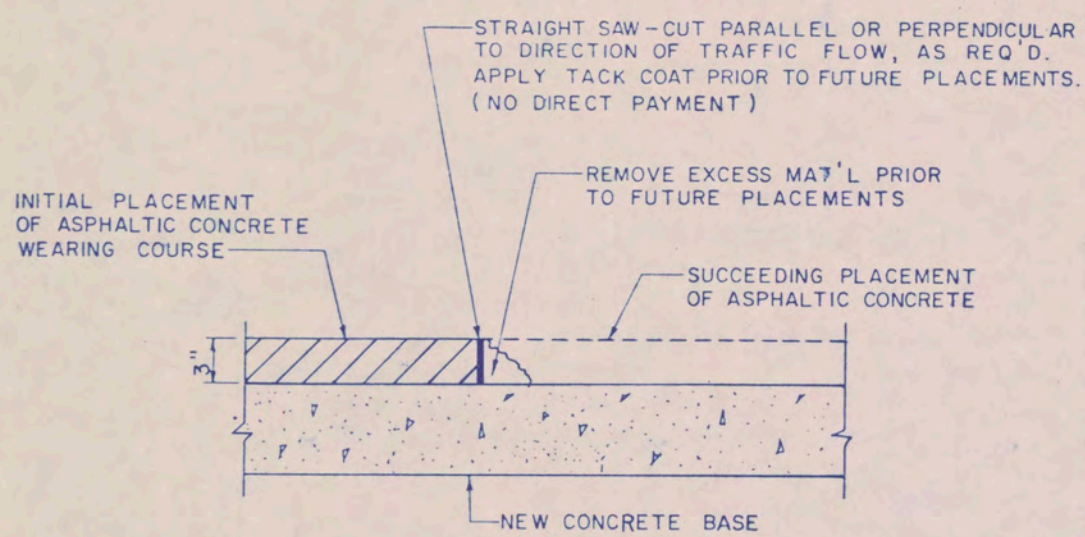


NOTE:

TEMPORARY RESTORATIONS TO BE DONE IMMEDIATELY AFTER SETTING OF NEW CURB

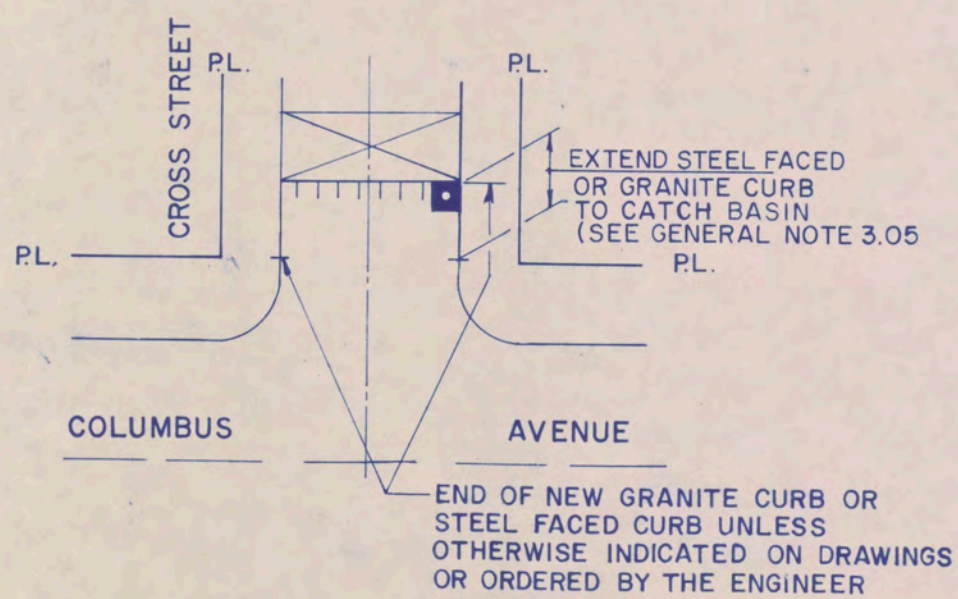
TEMPORARY CURB LINE RESTORATION DETAIL

N.T.S.



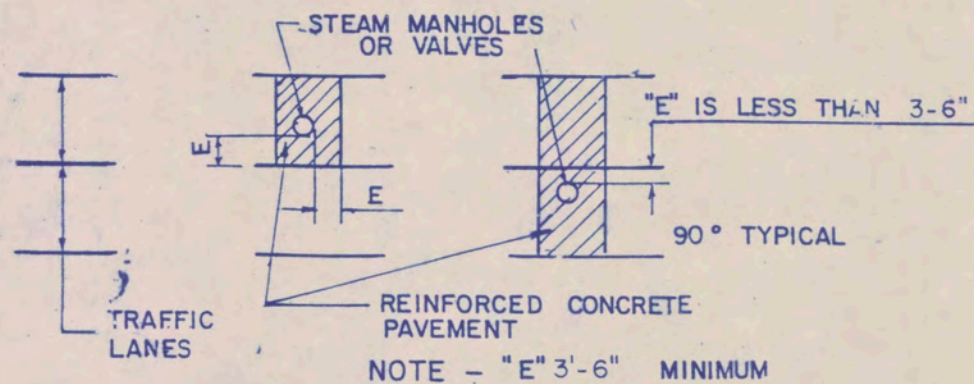
COLD JOINT SAW-CUT DETAIL FOR NEW ASPHALTIC CONCRETE WEARING COURSE

N.T.S.

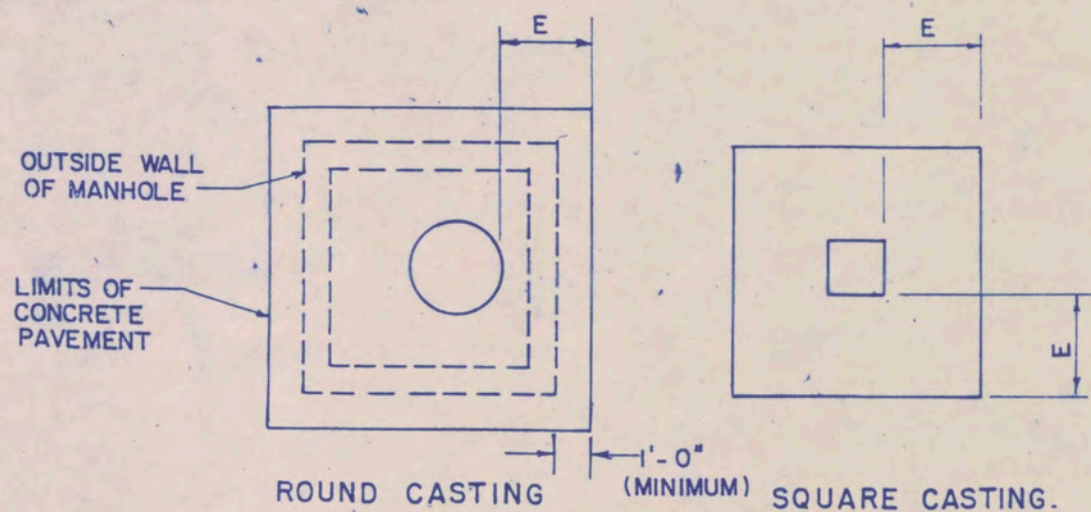


CURB DETAIL AT INTERSECTION

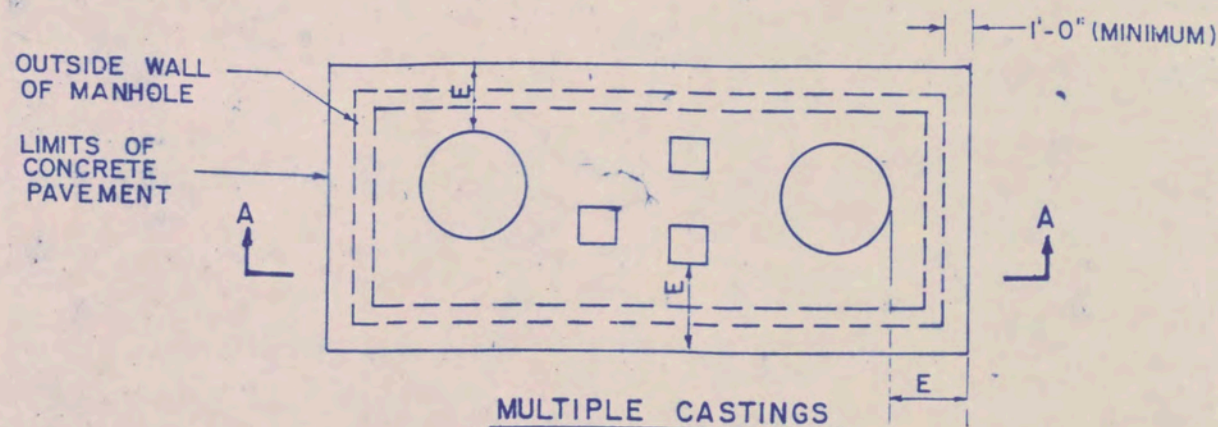
N.T.S.



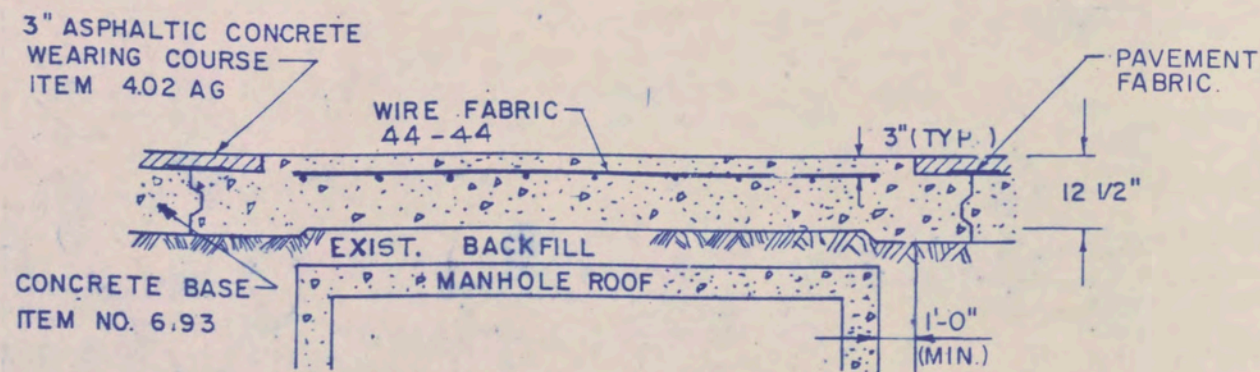
PLAN



DETAIL 1



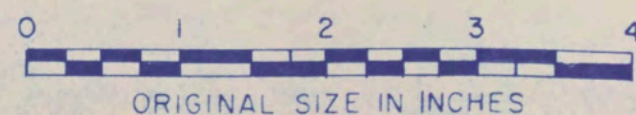
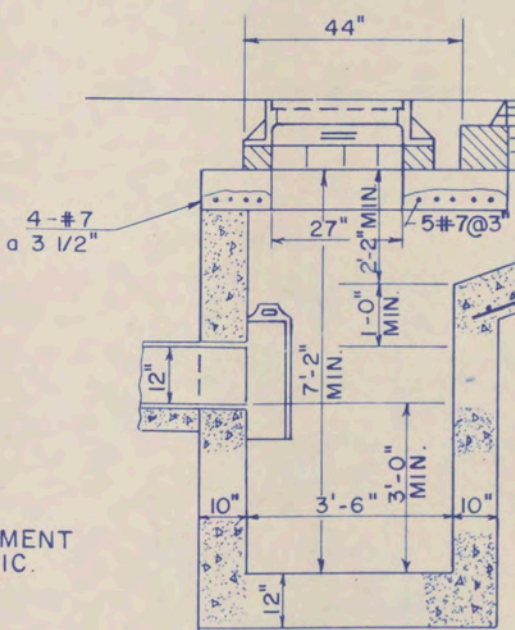
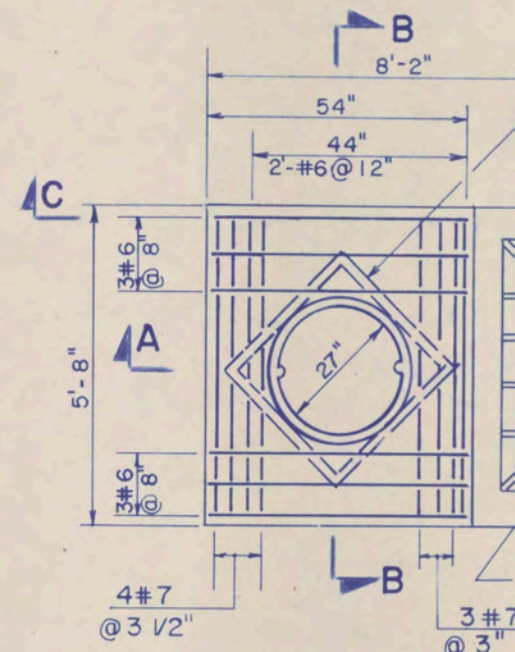
DETAIL 2



NOTE:

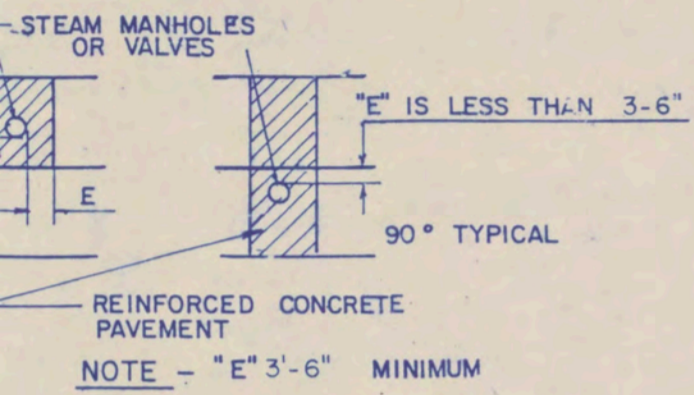
SEE SHEETS NOS. 15 & 15B FOR LOCATION OF CONC. COLLARS AROUND STEAM MANHOLES.

SECTION A-A CONCRETE COLLARS FOR STEAM MANHOLES AND VALVES

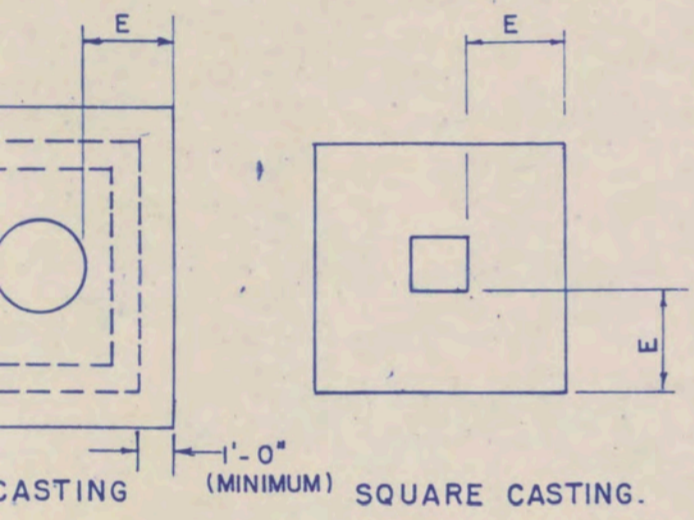


FED ROAD REG NO	STATE	FEDERAL PROJECT	AID NO	SHEET NO	TOTAL SHEETS
	NEW YORK				

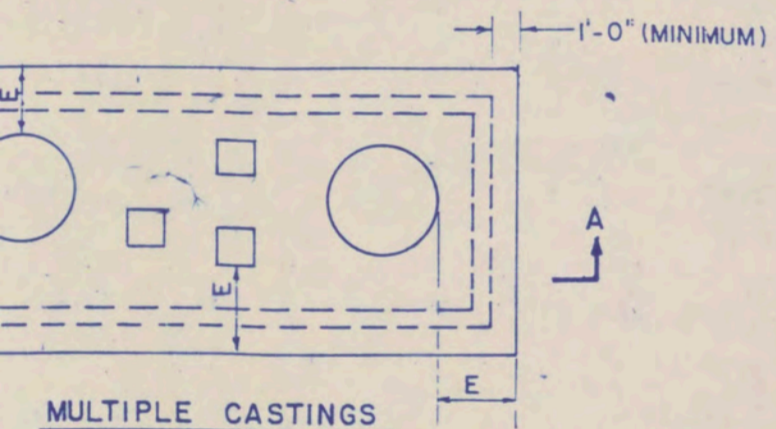
NYS DOT PROJECT IDENTIFICATION NO



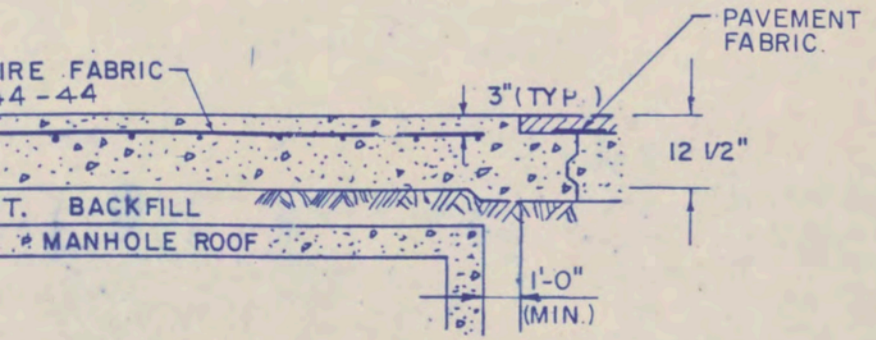
PLAN.



DETAIL 1

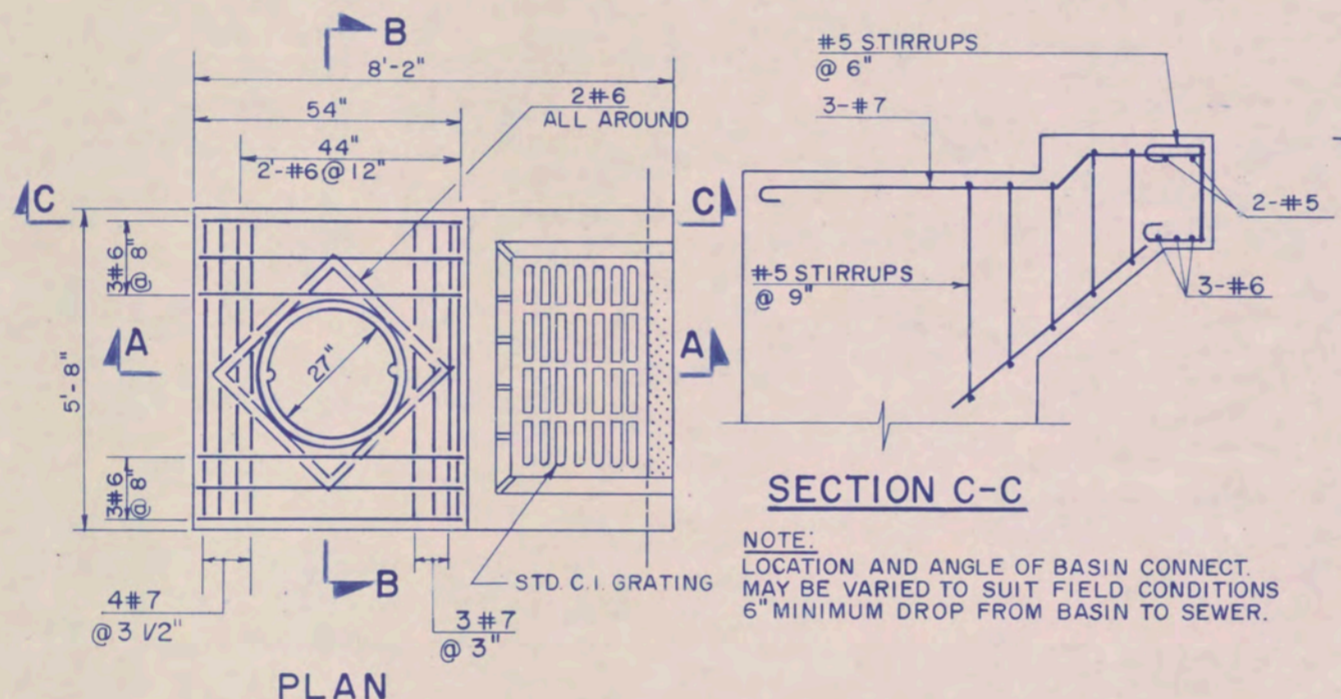
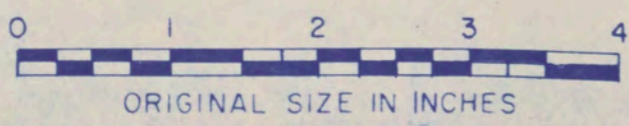


DETAIL 2



SECTION A-A

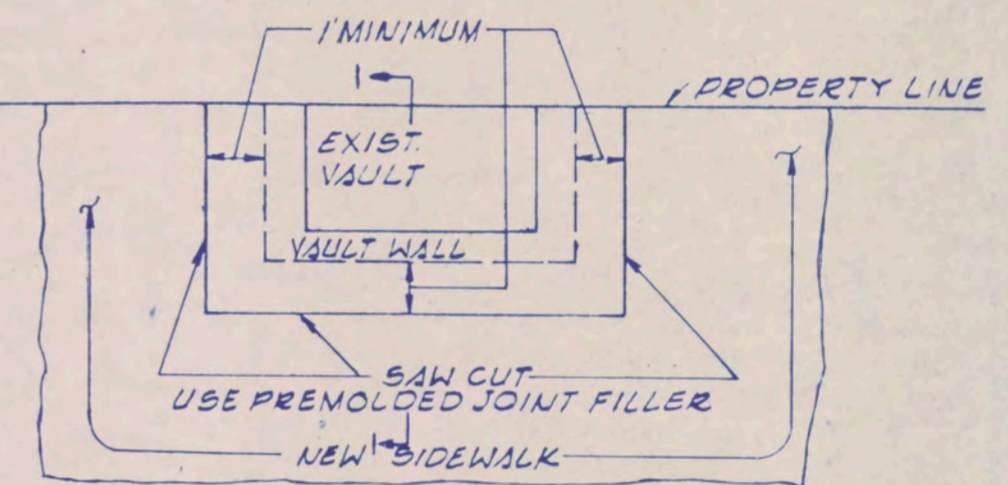
CONCRETE COLLARS FOR STEAM MANHOLES AND VALVES



PLAN

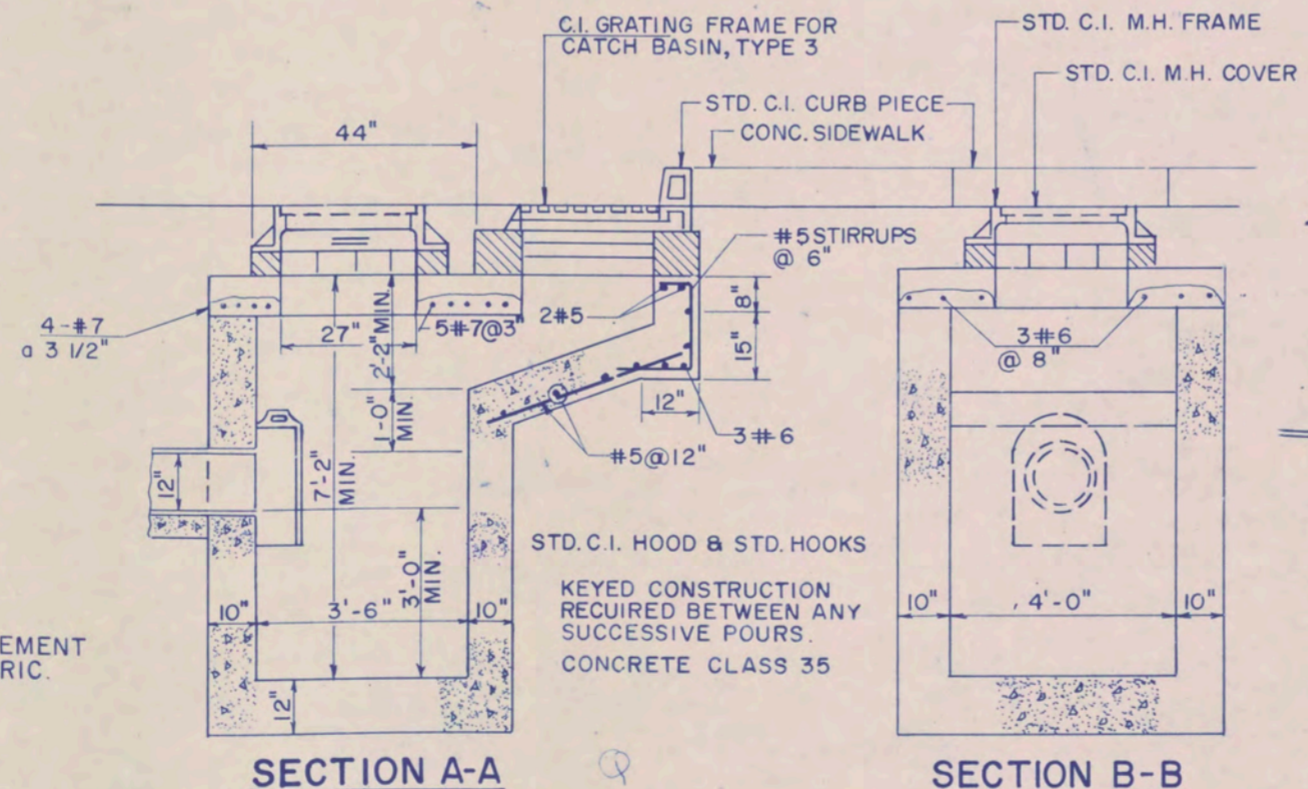
SECTION C-C

NOTE: LOCATION AND ANGLE OF BASIN CONNECT. MAY BE VARIED TO SUIT FIELD CONDITIONS. 6" MINIMUM DROP FROM BASIN TO SEWER.



SIDEWALK TREATMENT AT VAULTS

N.T.S.

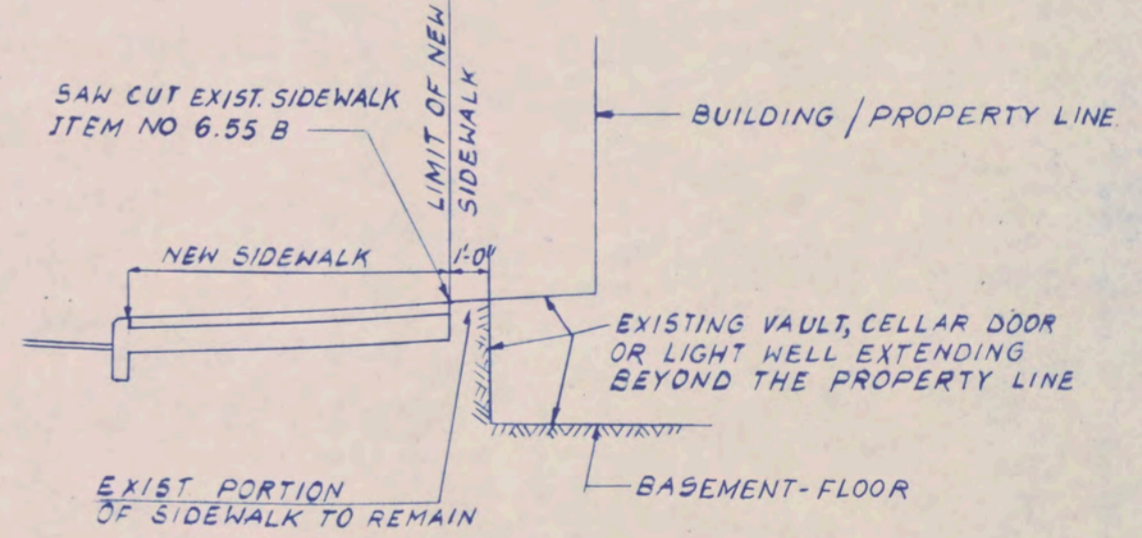


SECTION A-A

SECTION B-B

SPECIAL CATCH BASIN WITH CURB PIECE TYPE 3R (REVERSED)

N.T.S.



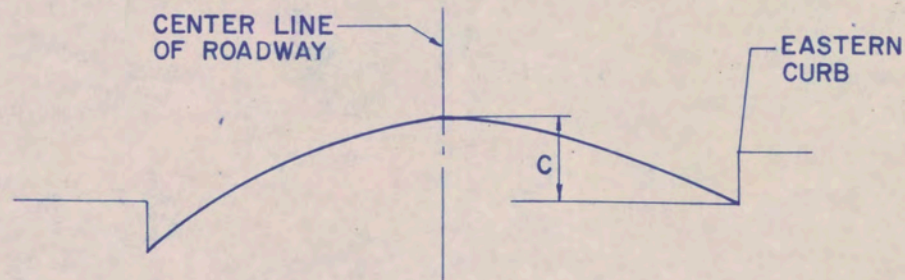
SECTION I-I

DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK
COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59th ST. TO W. 110th ST.
(EXCLUDING INTERSECTION AT BROADWAY)
SPECIAL DETAILS
SCALE: DATE:

VAULT SIZES TABLE

BLOCK #	LOT #	SIZES
1115	57	18' X 100'
1119	1	11' X 38'
1120	64	16' X 100'
1121	1	5' X 100'
1121	64	11.5' X 17.5'
1122	1	5' X 100'
1123	3	5' X 25'
1123	4	5' X 20'
1123	64	5' X 20'
1124	1	5' X 110'
1124	62	20' X 40' & 10' X 7'
1125	1	4' X 110'
1125	62	4' X 90'
1126	1	18' X 100'
1126	61	18' X 112'
1127	3	5' X 50'
1128	1	17' X 100'
1128	61	40' X 4.5' & 65' X 6'
1195	1	19' X 43'
1197	4	6' X 25'
1197	64	6' X 25'
1197	63	6' X 25'
1197	61	6' X 45'
1198	1	6.5' X 50'
1198	64	6' X 75'
1200	64	6' X 110' & 12' X 10.5' & 14' X 6'
1842	2	6' X 25'
1842	62	5.5' X 25'
1843	2	5.5' X 15'
1843	4	5' X 25'
1843	64	5' X 25'
1843	63	5' X 25'
1843	62	5' X 25'
1138	35	5' X 25'
1140	29	5' X 12'
1141	32	5' X 5'
1143	31	55' X 17' & 26' X 5'
1143	32	5' X 25'
1143	33	13.5' X 120'
1144	32	22.5' X 18'
1144	33	5' X 100'
1145	33	5' X 100'
1146	30	12' X 25' & 5' X 6'
1146	31	18' X 18'
1146	32	18' X 75' & 5' X 50'
1147	30	5.5' X 20'
1147	33	5' X 85'
1149	31	5' X 100' & 13' X 40'
1150	29	5' X 60'
1211	29	5' X 48'
1211	31	5' X 27'
1211	32	5' X 25'
1211	135	5' X 20'
1212	29	5' X 205' & 7' X 15'
1213	30	6' X 25'
1213	32	5' X 50'
1215	29	6' X 55'
1216	33	5' X 103'
1217	35	6' X 95'
1217	136	6' X 195'
1852	15	3' X 7'
1859	33	6' X 50'
1859	35	6' X 50'
1860	31	6' X 25'
1861	29	6' X 25'

PAVEMENT CROWN TABLE
AT COLUMBUS AVENUE



BETWEEN STREETS	STA. +	CROWN C (IN.)
W. 59th St.		
	264+34	12½
	265+00	13½
	266+09	12
W. 60th St.		
	267+08	14 3/4
	268+00	13½
	268+87	11½
W. 61st St.		
	269+52	12½
	270+50	14 3/4
	271+48	17
W. 62nd St.		
	272+12.5	13
	273+00	13½
	274+14	11½
W. 63rd St. Pavement Limit		
W. 66th St. Pavement Limit		
	283+00	12
	284+00	9 3/4
	284+60	9
W. 67th St.		
	285+22	10½
	286+50	9 3/4
	287+21	11½
W. 68th St.		
	287+83	12½
	289+00	11½
	289+82	10½
W. 69th St.		
	290+43	7½
	291+50	8½
	292+42	9
W. 70th St.		
	293+04	13
	294+00	13
	295+03	12
W. 71st St.		
	295+57	10½
	296+00	13 3/4
	297+00	7½
	297+65	9
W. 72nd St.		
	298+65	13 3/4
	299+50	12½
	300+64	12
W. 73rd St.		
	301+26	9
	302+50	8½
	303+37	12
W. 74th St.		
	303+98	10½
	304+50	9 3/4
	305+00	12½
	306+01	9 3/4
W. 75th St.		
	306+54	12
	307+50	12½
	308+65	12
W. 76th St.		
	309+18	10½
	310+00	9
	311+20	9
W. 77th St.		

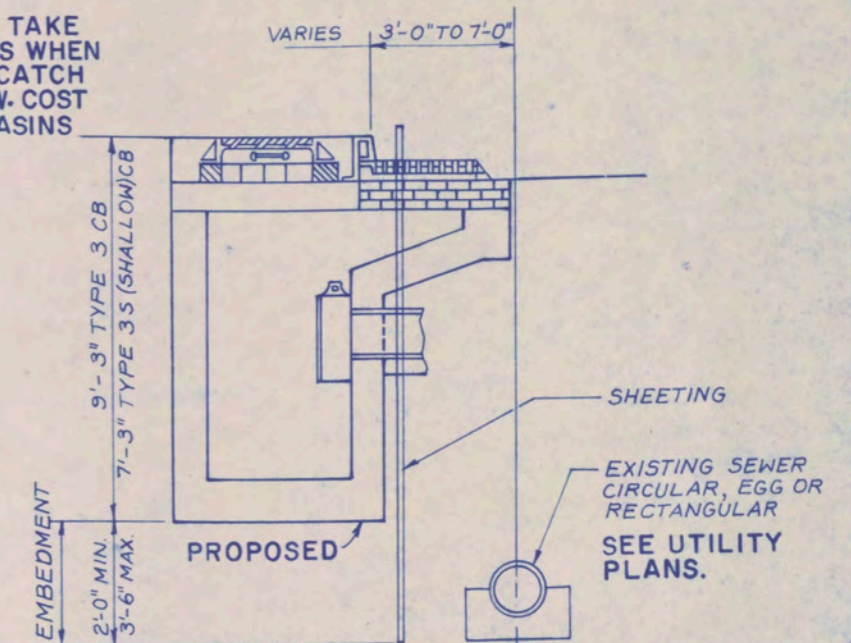
BETWEEN STREETS	STA. +	CROWN C (IN.)
W. 77th St.		
	312+21	13½
	313+00	8½
	313+86	9 3/4
W. 78th St.		
	314+55	12
	316+00	11½
	316+55	12
W. 79th St.		
	317+55	14½
	318+50	13 3/4
	319+60	13 3/4
W. 80th St.		
	320+26	13
	321+00	14 3/4
	321+94	15½
W. 81st St.		
	322+82	15½
	324+00	12½
	324+91	13
W. 82nd St.		
	325+45	11½
	326+50	9 3/4
	327+47	9 3/4
W. 83rd St.		
	328+09	9 3/4
	329+00	9
	330+20	9
W. 84th St.		
	330+81	13½
	332+00	11½
	332+84	10½
W. 85th St.		
	333+46	13
	334+50	15½
	335+53	12
W. 86th St.		
	336+45	9
	337+50	9 3/4
	338+50	9
W. 87th St.		
	339+11	11½
	340+00	12½
	341+11	11½
W. 88th St.		
	341+75	12
	343+00	12½
	343+70	12½
W. 89th St.		
	344+36	12½
	345+50	13
	346+34	9 3/4
W. 90th St.		
	346+96	14½
	348+00	13
	348+95	13
W. 91th St.		

FED ROAD REG NO	STATE	FEDERAL PROJECT	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				

N.Y.S.D.O.T PROJECT IDENTIFICATION NO.

NOTE:

CONTRACTOR SHALL TAKE SPECIAL PRECAUTIONS WHEN DRIVING SHEETING AT CATCH BASINS NOTED BELOW. COST INCLUDED IN CATCH BASINS ITEMS.

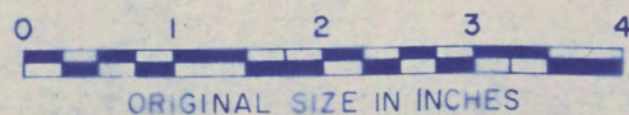


CATCH BASIN SHEETING NEAR ADJACENT SEWER
(SEE TABLE BELOW FOR CATCH BASIN LOCATION)

STA. +	CATCH BASIN LOCATION
ON COLUMBUS AVENUE	
282+63	N.E. CORNER AT W. 66TH ST.
285+22	N.E. CORNER AT W. 67TH ST.
294+82	S.E. CORNER AT W. 71ST ST.
294+89	S.W. CORNER AT W. 71ST ST.
295+76	N.E. CORNER AT W. 71ST ST.
297+64	N.W. CORNER AT W. 72ND ST.
303+28	S.W. CORNER AT W. 74TH ST.
303+98	N.W. CORNER AT W. 74TH ST.
313+86	S.W. CORNER AT W. 78TH ST.
314+55	N.W. CORNER AT W. 78TH ST.
316+55	S.W. CORNER AT W. 79TH ST.
317+57	N.W. CORNER AT W. 79TH ST.
320+26	N.W. CORNER AT W. 80TH ST.
324+70	S.W. CORNER AT W. 82ND ST.
327+47	S.W. CORNER AT W. 83RD ST.
333+54	N.W. CORNER AT W. 85TH ST.
336+45	N.W. CORNER AT W. 86TH ST.
339+11	N.W. CORNER AT W. 87TH ST.
341+75	N.W. CORNER AT W. 88TH ST.
344+44	N.W. CORNER AT W. 89TH ST.
349+57	N.W. CORNER AT W. 91ST ST.
ON SIDE STREETS	
332+96	W. 85TH ST. S.W. CORNER
332+96	W. 85TH ST. S.E. CORNER
351+69	W. 92ND ST. S.E. CORNER
351+98	W. 92ND ST. N.E. CORNER

BETWEEN STREETS	STA. +	CROWN C (IN.)
W. 77th St.	312+21	13 1/2
	313+00	8 1/2
	313+86	9 3/4
W. 78th St.	314+55	12
	316+00	11 1/2
	316+55	12
W. 79th St.	317+55	14 1/2
	318+50	13 3/4
	319+60	13 3/4
W. 80th St.	320+26	13
	321+00	14 3/4
	321+94	15 1/2
W. 81st St.	322+82	15 1/2
	324+00	12 1/2
	324+91	13
W. 82nd St.	325+45	11 1/2
	326+50	9 3/4
	327+47	9 3/4
W. 83rd St.	328+09	9 3/4
	329+00	9
	330+20	9
W. 84th St.	330+81	13 1/2
	332+00	11 1/2
	332+84	10 1/2
W. 85th St.	333+46	13
	334+50	15 1/2
	335+53	12
W. 86th St.	336+45	9
	337+50	9 3/4
	338+50	9
W. 87th St.	339+11	11 1/2
	340+00	12 1/2
	341+11	11 1/2
W. 88th St.	341+75	12
	343+00	12 1/2
	343+70	12 1/2
W. 89th St.	344+36	12 1/2
	345+50	13
	346+34	9 3/4
W. 90th St.	346+96	14 1/2
	348+00	13
	348+95	13
W. 91th St.		

BETWEEN STREETS	STA. +	CROWN C (IN.)	
W. 91st St.	349+57	12 1/2	
	350+50	11 1/2	
	351+49	12	
W. 92nd St.	352+18	12	
	353+00	12 1/2	
	354+18	10 1/2	
W. 93rd St.	354+77	11 1/2	
	355+50	10 1/2	
	356+74	12	
W. 94th St.	357+29	13 1/2	
	358+50	14 1/2	
	359+41	9	
W. 95th St.	359+95	10 1/2	
	361+00	13	
	362+00	13 3/4	
W. 96th St.	362+91	7 1/2	
	364+00	13	
	365+02	12	
W. 97th St.	366+00	15 1/2	
	367+00	6 3/4	
	367+92	12 1/2	
	369+00	12 1/2	
	370+00	15 1/2	
	371+00	10 1/2	
	372+00	6 3/4	
	373+10	12 1/2	
	W. 100th St.	373+64	14 1/2
		374+00	12
375+00		14 1/2	
376+00		13	
377+00		14 3/4	
378+00		14 3/4	
379+00		13	
380+00		13	
381+00		14 3/4	
382+00		11 1/2	
383+17	12		
W. 104th St.	383+91	13	
	385+00	11 1/2	
	385+99	13 1/2	
W. 105th St.	386+53	12	
	387+50	8 1/2	
	388+66	13 1/2	
W. 106th St.	389+50	16	
	390+50	12 1/2	
	391+52	16	
W. 107th St.	392+16	13 1/2	
	393+00	13 1/2	
	394+16	14 1/2	
W. 108th St.	394+78	15 1/4	
	396+00	11 1/2	
	396+79	14 1/2	
W. 109th St.	397+40	15 1/2	
	398+50	7 1/2	

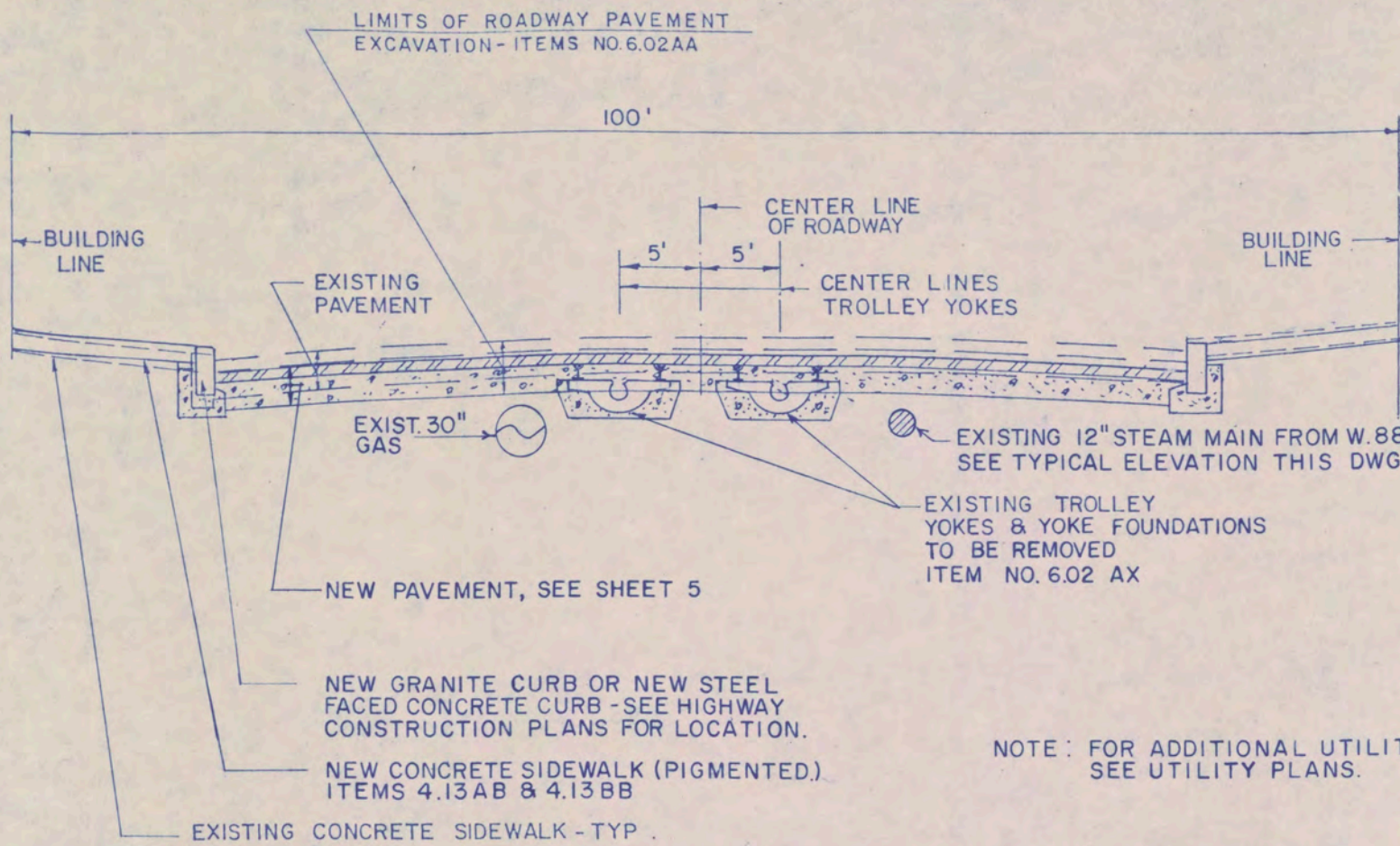


DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

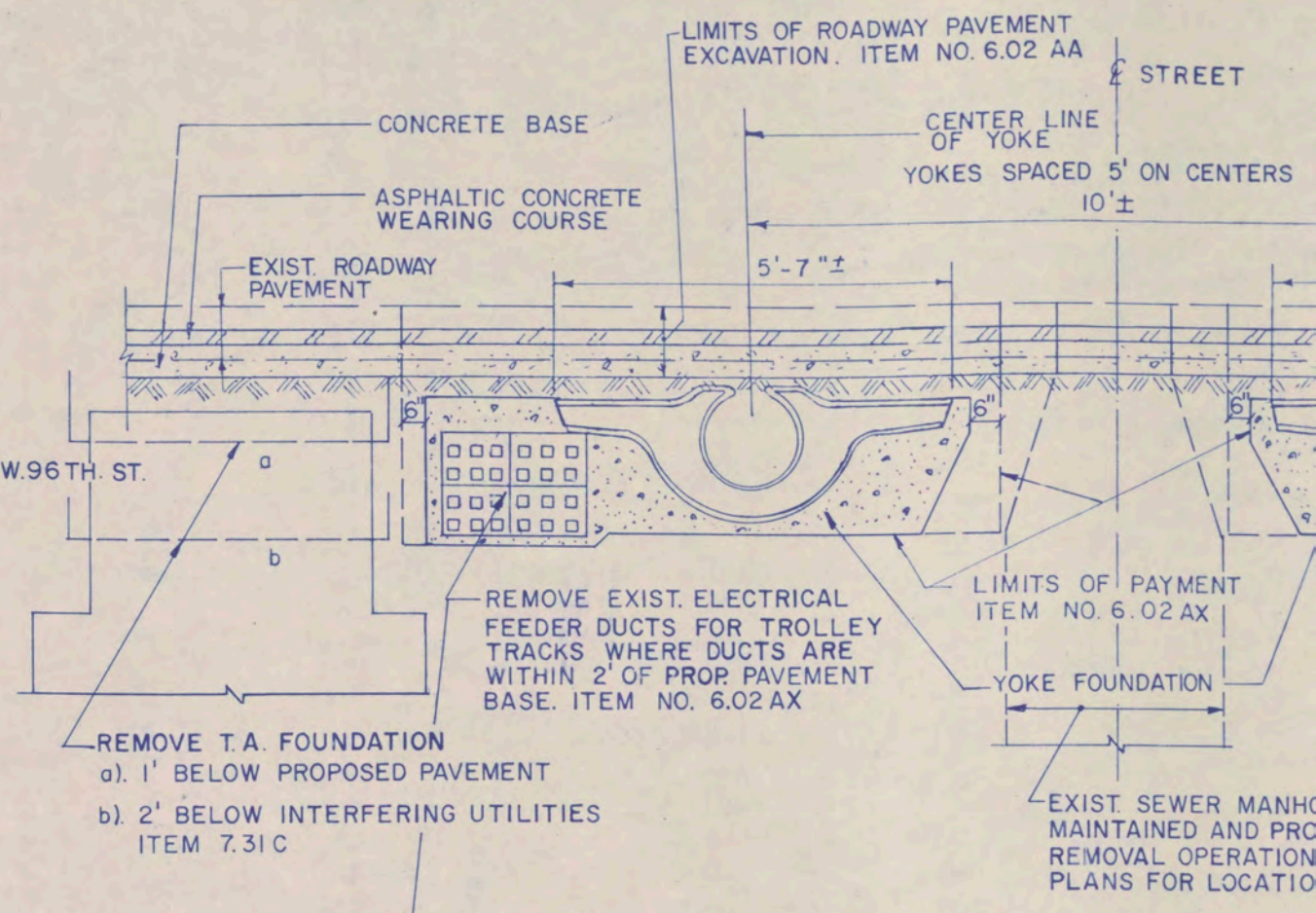
COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59th ST. TO W. 110th ST.
(EXCLUDING INTERSECTION AT BROADWAY)

**VAULT LOCATIONS
AND SPECIAL DETAILS**

SCALE: _____ DATE: _____

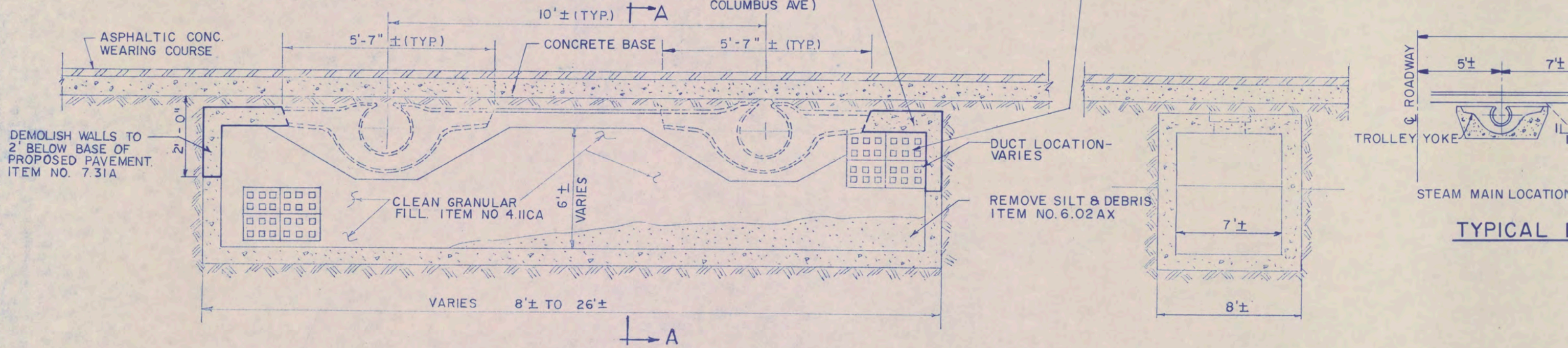


TYPICAL CROSS SECTION OF COLUMBUS AVE
LOOKING NORTH
N.T.S.



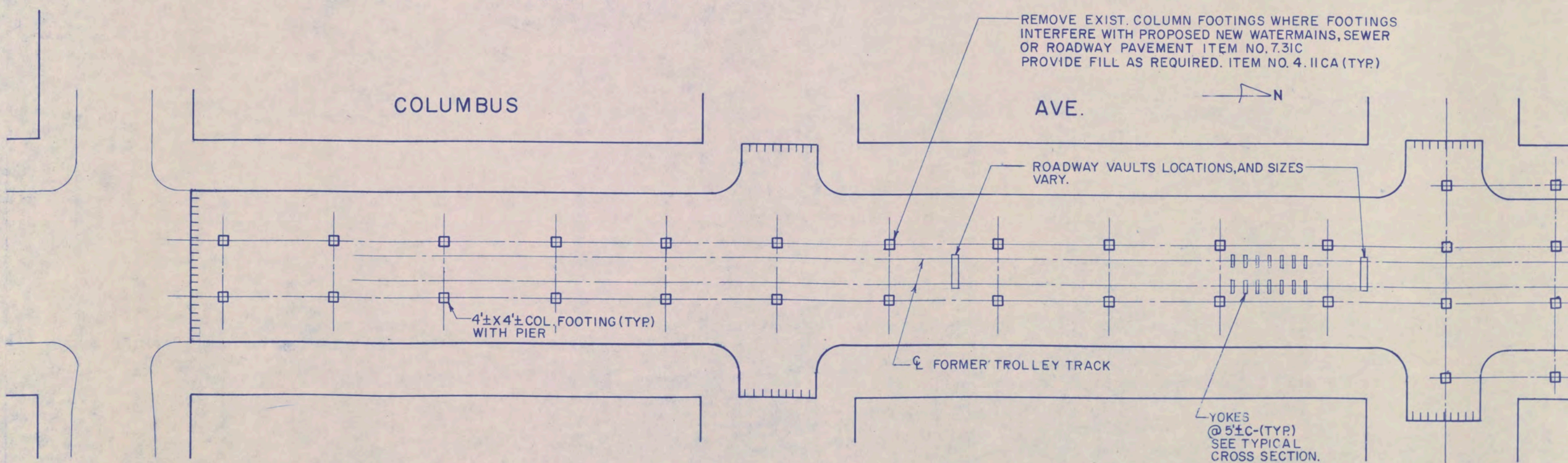
SECTION OF ROADWAY SHOWING TROLLEY
N.T.S.

TROLLEY YOKES AND FOUNDATIONS MAY BE FOUND AT COLUMBUS AVE. THROUGHOUT THE PROJECT LENGTH AND AT W. 106TH ST. (WEST OF COLUMBUS AVE.) & AT W. 109TH ST. (EAST OF COLUMBUS AVE.)



SECTION OF ROADWAY SHOWING VAULT ALONG ELECTRICAL FEEDER DUCTS OF
ABANDONED TROLLEY SYSTEM.
N.T.S.

SECTION A-A



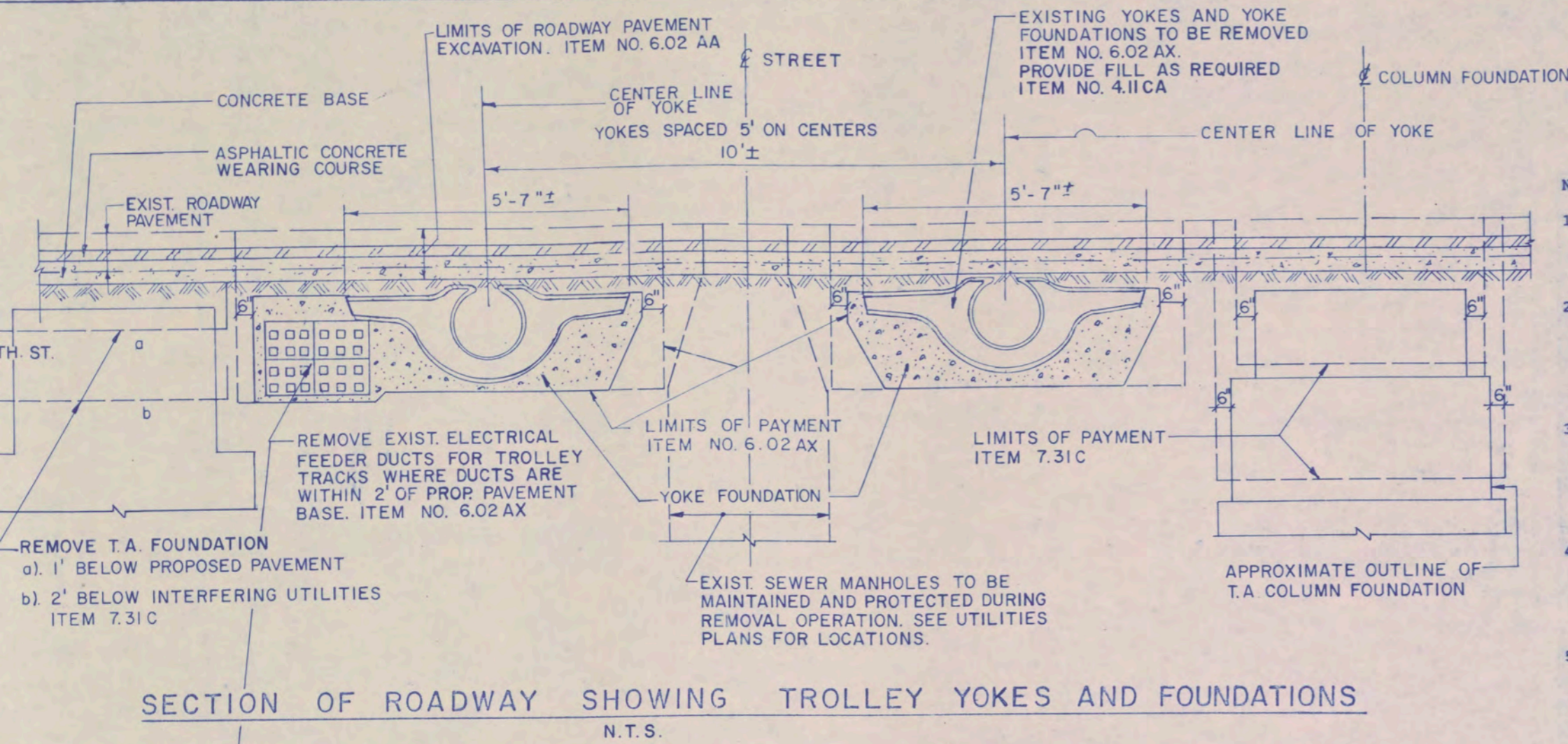
TYPICAL PLAN OF TROLLEY TRACKS AND FOUNDATIONS AND
COLUMN FOOTING LOCATION OF THE FORMER EL. STRUCTURE

SCALE: 1" = 30'

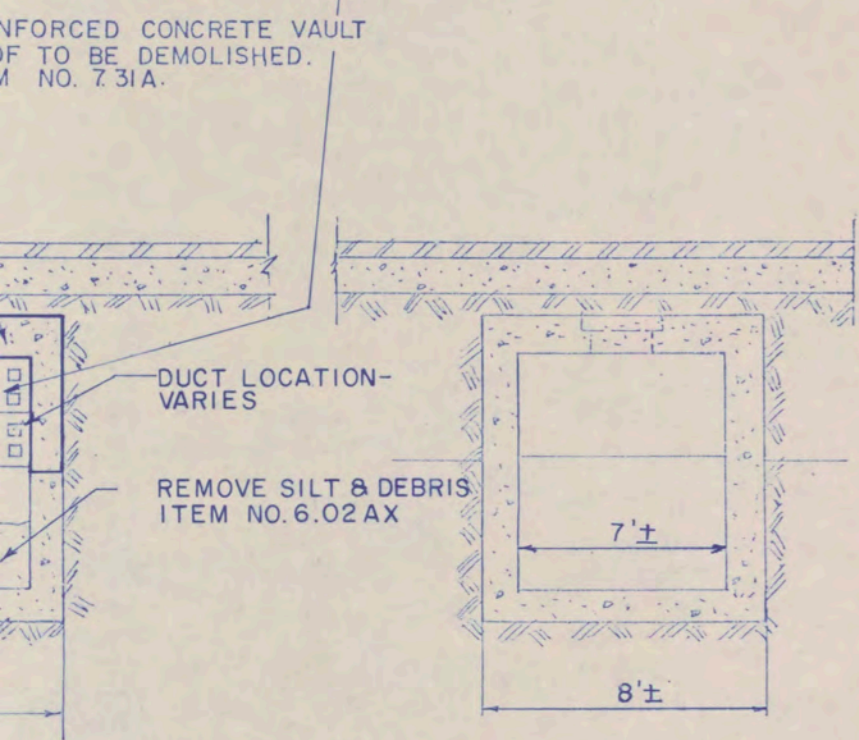
PLAN OF FOUNDATION AT W. 59TH ST. & W. 104TH ST.

FED. ROAD REG. No.	STATE	FEDERAL PROJECT	AID No.	SHEET No.	TOTAL SHEETS
	NEW YORK				

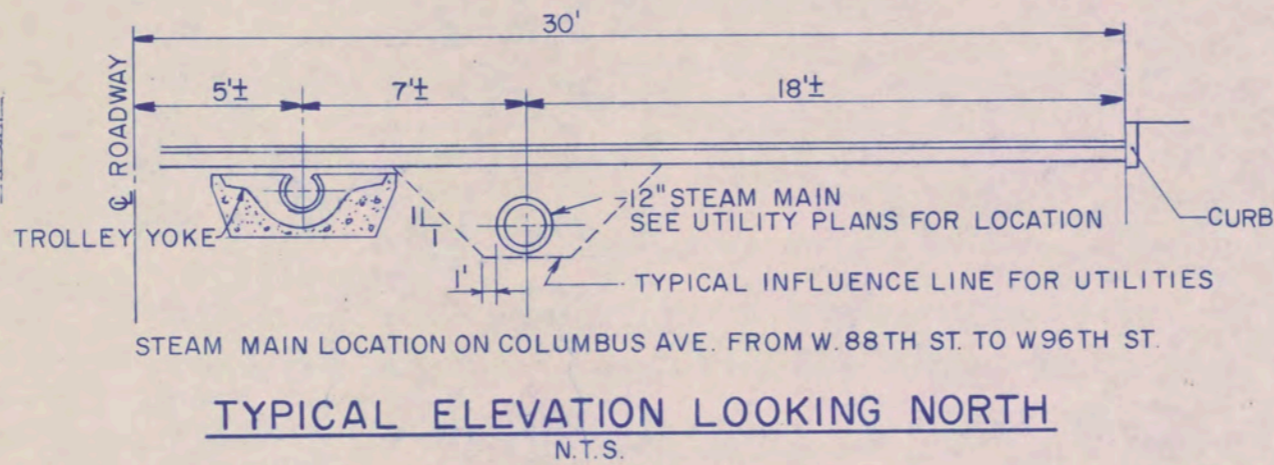
N.Y.S.D.O.T. PROJECT IDENTIFICATION No.



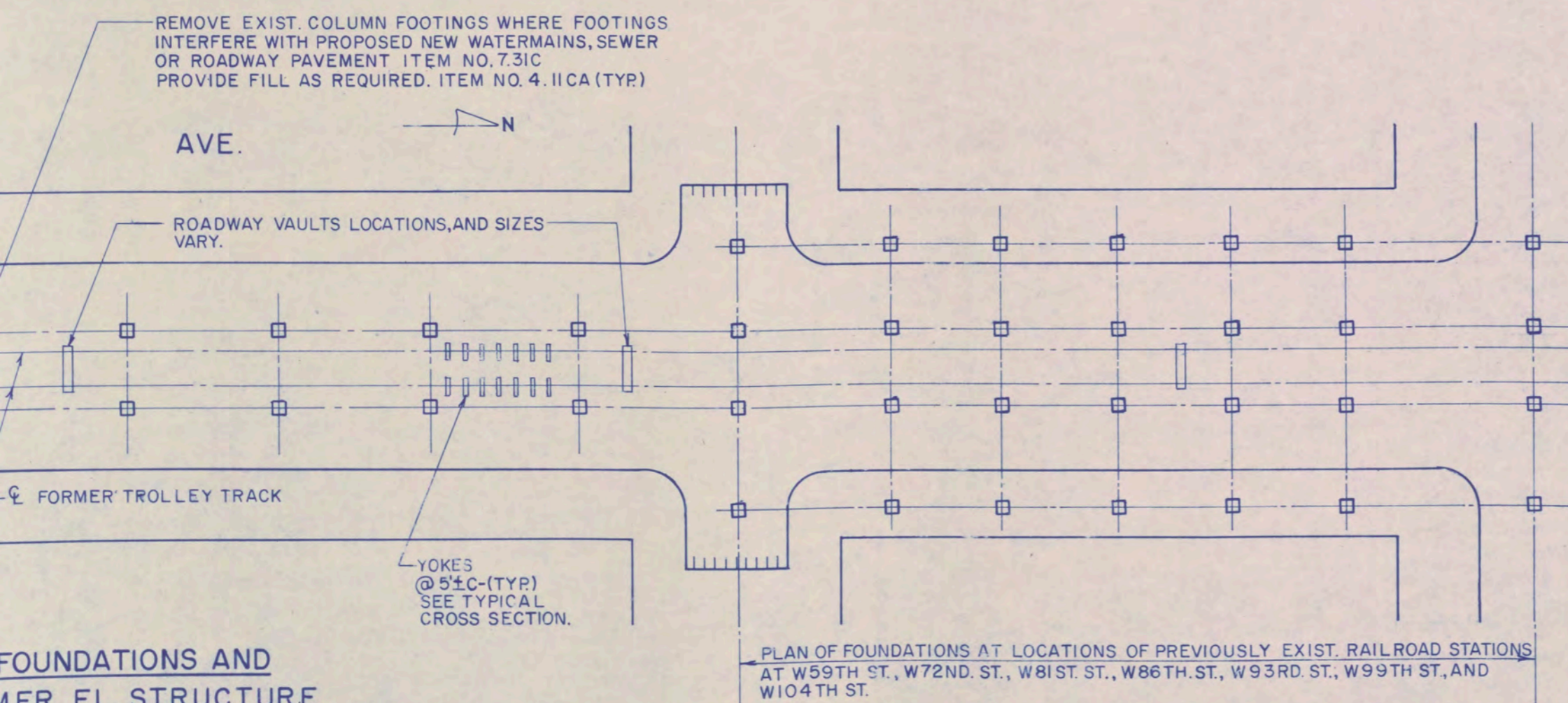
SECTION OF ROADWAY SHOWING TROLLEY YOKES AND FOUNDATIONS
N.T.S.



DETAILS OF SECTION A-A

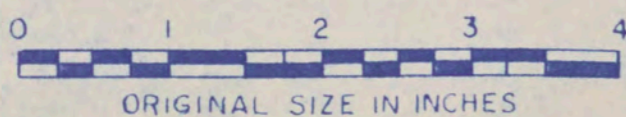


TYPICAL ELEVATION LOOKING NORTH
N.T.S.



FOUNDATIONS AND REMNANTS OF OLD EL. STRUCTURE

PLAN OF FOUNDATIONS AT LOCATIONS OF PREVIOUSLY EXIST. RAILROAD STATIONS AT W59TH ST., W72ND. ST., W81ST. ST., W86TH. ST., W93RD. ST., W99TH ST., AND W104TH ST.



NOTES (TROLLEY SYSTEM)

1. VAULTS, YOKES, DUCTS, AND FOUNDATIONS THAT ARE REMNANTS OF A TROLLEY CAR SYSTEM WHICH WAS OPERATED IN COLUMBUS AVENUE PREVIOUSLY, ARE LOCATED BENEATH THE PAVEMENTS OF THESE ROADWAYS.
2. THE INFORMATION GIVEN ON THIS SHEET REGARDING VAULTS, YOKES, DUCTS, AND FOUNDATIONS, WHICH ARE REMNANTS OF THE TROLLEY SYSTEM, WERE OBTAINED FROM UTILITY RECORDS AND TEST PITS. THE CITY SHALL NOT BE LIABLE FOR ANY DISCREPANCIES. THE EXACT LOCATIONS, DIMENSIONS AND MATERIALS USED SHALL BE ESTABLISHED BY THE CONTRACTOR IN THE FIELD.
3. THE LOCATION OF ABANDONED ELECTRICAL FEEDER DUCT LINES, RUNNING ALONG THE OLD TROLLEY TRACKS, VARIES BOTH VERTICALLY AND HORIZONTALLY. WHERE ANY SECTION OF THESE DUCT LINES ARE LOCATED WITHIN THE (2) FEET OF THE PROPOSED CONCRETE BASE FOR PAVEMENT THAT SECTION OF DUCT SHALL BE EXCAVATED AND REMOVED. PAID FOR UNDER ITEM NO. 6.02AX.
4. CAST IRON YOKES ARE LOCATED AT FIVE (5) FEET CENTER TO CENTER ALONG EACH TROLLEY TRACK THAT EXISTED PREVIOUSLY. ALL YOKES, CONCRETE FOUNDATIONS FOR YOKES, AND SECTIONS OF CONCRETE RUNNING BETWEEN YOKES SHALL BE EXCAVATED AND REMOVED FROM THE SITE. PAID FOR UNDER ITEM NO. 6.02AX.
5. VAULTS ALONG THE ELECTRICAL FEEDER DUCTS FOR THE OLD TROLLEY TRACKS ARE TO BE DEMOLISHED BY REMOVING THEIR ROOFS, CUTTING THE BRICK AND/OR MASONRY WALLS TO A DEPTH OF (2) FEET BELOW THE PROPOSED CONCRETE BASE FOR THE NEW PAVEMENT, AND REMOVING ALL DEBRIS AND SLIT IN THE VAULTS FROM THE SITE. PAID FOR UNDER ITEMS 7.31A & 6.02AX.
6. VAULT WALLS SHALL BE PERFORATED ALONG THEIR BASES TO PREVENT ACCUMULATION OF WATER. COST INCLUDED IN PRICE BIL FOR ITEM NO. 7.31A.
7. AFTER COMPLETION OF VAULT DEMOLITION AND EXCAVATION OF DUCTS, AND YOKE FILL EXCAVATIONS WITH CLEAN, GRANULAR, COMPACTED MATERIAL. PAID FOR UNDER ITEM 4.11CA.
8. DEMOLITION AND REMOVAL OF ANY STRUCTURE SUCH AS CONCRETE TRUSS BLOCKS AT BENDS ALONG THE OLD TROLLEY TRACKS, OTHER THAN VAULTS, YOKES AND FOUNDATIONS FOR YOKES, ENCOUNTERED DURING CONSTRUCTION, SHALL BE PERFORMED AS DIRECTED BY THE ENGINEER. PAID FOR UNDER ITEM NO. 7.31B.
9. THE CONTRACTOR SHALL EXERCISE CAUTION IN EXCAVATION FOR AND REMOVING TROLLEY YOKES AND APPURTENANCES. EACH YOKE SHALL BE FREED FROM ITS FOUNDATIONS AND SIDE RESTRAINTS, AS DIRECTED BY THE ENGINEER, BEFORE ANY ATTEMPT IS MADE TO REMOVE IT: YOKES SHALL NOT BE TORN FROM THEIR SUPPORTS. YOKES SHALL ONLY BE LIFTED VERTICALLY. YOKES SHALL NOT ROCKED, DRAGGED OR PULLED LATEROALLY. ANY EXCAVATION WITHIN THE INFLUENCE LINE OF UTILITIES MUST BE LIMITED TO TEN (10) FEET IN LENGTH ALONG THE LENGTH OF THE UTILITY.

NOTE:

LOCATIONS SHOWN FOR UNDERGROUND FOUNDATIONS AND FOOTINGS OF ABANDONED RAILROAD SYSTEM ARE BASED ON THE BEST AVAILABLE INFORMATION. THE ACTUAL LOCATION OF FOUNDATIONS AND FOOTINGS ENCOUNTERED DURING THE PROPOSED CONSTRUCTION OPERATIONS MAY VARY FROM LOCATIONS INDICATED HERE.

DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59th ST. TO W. 110th ST.
(EXCLUDING INTERSECTION AT BROADWAY)

TYPICAL CROSS SECTIONS AND
DETAILS OF OLD TROLLEY SYSTEM
SCALE: AS SHOWN DATE:

5

4

3

2

TREE NO.	STATION	RIGHT EAST	LEFT WEST	CASE NO.	COMMENTS
465	337+68		L	6,7	
464	338+00		L	6,7	
301	338+12	R		6,7	
463	338+32		L	6,7	
462	339+35		L	6,7	
302	339+36	R			REMOVE
461	339+73		L	6,7	
460	339+94		L	6,7	
459	340+16		L	6,7	
303	340+87	R			REPLACE
458	341+93		L	6,7	
304	342+04	R		6,7	
457	342+22		L	6,7	
302A	339+58	R			REPLACE
302B	339+84	R			REPLACE
303	339+07	R			REPLACE
305	342+33	R		6,7	
456	342+55		L	6,7	
306	342+71	R		6,7	
455	342+84		L	6,7	
307	342+77	R		6,7	
454	343+11		L	6,7	
453	343+41		L	6,7	
308	343+42	R		6,7	
452	344+54		L	6,7	
309	344+61	R		3,6,7	
310	344+62	R		3,6,7	
311	344+81	R		6,7	
312	344+81	R		3,6,7	
451	344+85		L	6,7	
313	345+01	R		6,7	
450	345+13		L	6,7	
314	345+20	R		6,7	
315	345+21	R		6,7	
316	345+42	R		6,7	
317	345+42	R		6,7	
449	345+43		L	6,7	
318	345+67	R		6,7	
448	345+74		L	6,7	
447	345+94		L	6,7	
319	346+07	R		6,7	
320	346+08	R		6,7	
321	346+93	R		3,6,7	
322	347+19	R		6,7	
446	347+24		L	6,7	
323	347+42	R		6,7	
445	347+52		L	3,6,7	
324	347+63	R		6,7	
444	347+81		L	6,7	
326	348+02	R		3,6,7	
327	348+23	R		3,6,7	
442	348+30		L	6,7	
328	348+42	R		6,7	
441	348+62		L		REPLACE
329	348+63	R		6,7	
330	348+82	R		6,7	
331	349+55	R		3,6,7	
440	349+58		L	6,7	
439	349+73		L	6,7	
438	349+87		L	6,7	
332	349+92	R		6,7	
437	349+99		L	6,7	
333	350+12	R		6,7,3	
436	350+32		L		REMOVE
435	350+46		L	6,7	
334	350+71	R		6,7	
434	350+73		L	6,7	
335	350+90	R		6,7	
336	351+09	R		6,7	
433	351+13		L	6,7	
432	351+46		L	6,7	
431	352+26		L	6,7	
337	352+40	R		6,7	
430	352+56		L	3,6,7	
338	352+65	R		6,7,3	
429	352+85		L	6,7	

TREE NO.	STATION	RIGHT EAST	LEFT WEST	CASE NO.	COMMENTS
339	352+91	R		6,7	
428	353+14		L	6,7	
340	353+16	R		6,7	
427	353+37		L	6,7	
341	353+41	R		3,6,7	
426	353+60		L	6,7	
425	353+94		L	6,7	
424	355+00		L		REMOVE
423	355+07		L	6,7	
422	355+21		L		REMOVE
342	355+26	R		6,7	
421	355+40		L	6,7	
420	355+58		L	6,7	
419	355+63		L		REMOVE
343	355+91	R		6,7	
418	356+00		L	6,7	
344	356+22	R		6,7	
417	356+37		L	6,7	
345	356+54	R		6,7	
416	357+16		L	6,7	
346	357+59	R		6,7	
415	357+63		L	6,7	
347	357+80	R		6,7	
414	357+85		L	6,7	
348	358+00	R		6,7	
413	358+02		L	6,7	
412	358+24		L	6,7	
349	358+55	R		3,6,7	
411	358+73		L	6,7	
350	358+75	R		6,7	
410	358+92		L	6,7	
351	358+96	R		3,6,7	
409	359+10		L	6,7	
408	359+21		L	6,7	
352	360+00	R		6,7	
353	360+21	R		6,7	
354	360+41	R		6,7	
355	360+51	R		6,7	
407	360+57		L	6,7	
406	360+91		L	6,7	
356	361+17	R		6,7	
405	361+29		L	6,7	
357	361+36	R		6,7	
404	361+50		L	6,7	
358	361+57	R		6,7	
359	361+77	R		6,7	
403	363+20		L	6,7	
360	363+29	R		6,7	
402	363+50		L	6,7	
361	363+54	R		6,7	
401	364+79		L	6,7	
362	364+44	R		6,7	
400	364+45		L	6,7	
399	364+74		L	6,7	
363	364+92	R		6,7	
398	365+69		L	3,6,7	
397	367+14		L	3,6,7	
364	384+38	R		7,7	
396	384+55		L	6,7	
365	384+80	R		6,7	
395	385+06		L	6,7	
366	385+08	R		6,7	
367	385+59	R		6,7	
394	385+60		L	6,7	
368	386+68	R		3,6,7	
393	386+78		L	3,6,7	
369	386+91	R		3,6,7	
370	387+35	R			REMOVE
371	387+60	R			REMOVE
372	387+88	R		6,7	
373	388+07	R		6,7	
374	388+26	R		6,7	
375	389+90	R		6,7	
392	390+00		L	6,7	
391	390+49		L	6,7	
390	390+86		L	3,6,7,2A	5 X 5 PIT

TREE NO.	STATION	RIGHT EAST	LEFT WEST	CASE NO.	COMMENTS
376	390+87	R		6,7	
377	391+40	R		6,7	
378	392+07	R		6,7	
379	392+27	R		6,7	
380	392+45	R		6,7	
381	392+63	R		6,7	
389	395+40		L	6,7	
388	396+58		L	6,7	
382	397+55	R		6,7	
387	397+60		L	6,7,3	
383	397+80	R		6,7	
384	398+10	R		6,7	
385	398+40	R		6,7	
386	400+13		L	3,6,7,2A	MAINTAIN TREE PIT

TREE PITS SHALL BE HAND EXCAVATED

CITY OF NEW YORK
DEPARTMENT OF TRANSPORTATION
COLUMBUS AVENUE
FROM W. 59TH STREET TO W. 110TH STREET
(EXCLUDING INTERSECTION AT BROADWAY)
BOROUGH OF MANHATTAN

TREE MITIGATION MEASURES

SHEET GC OF 87

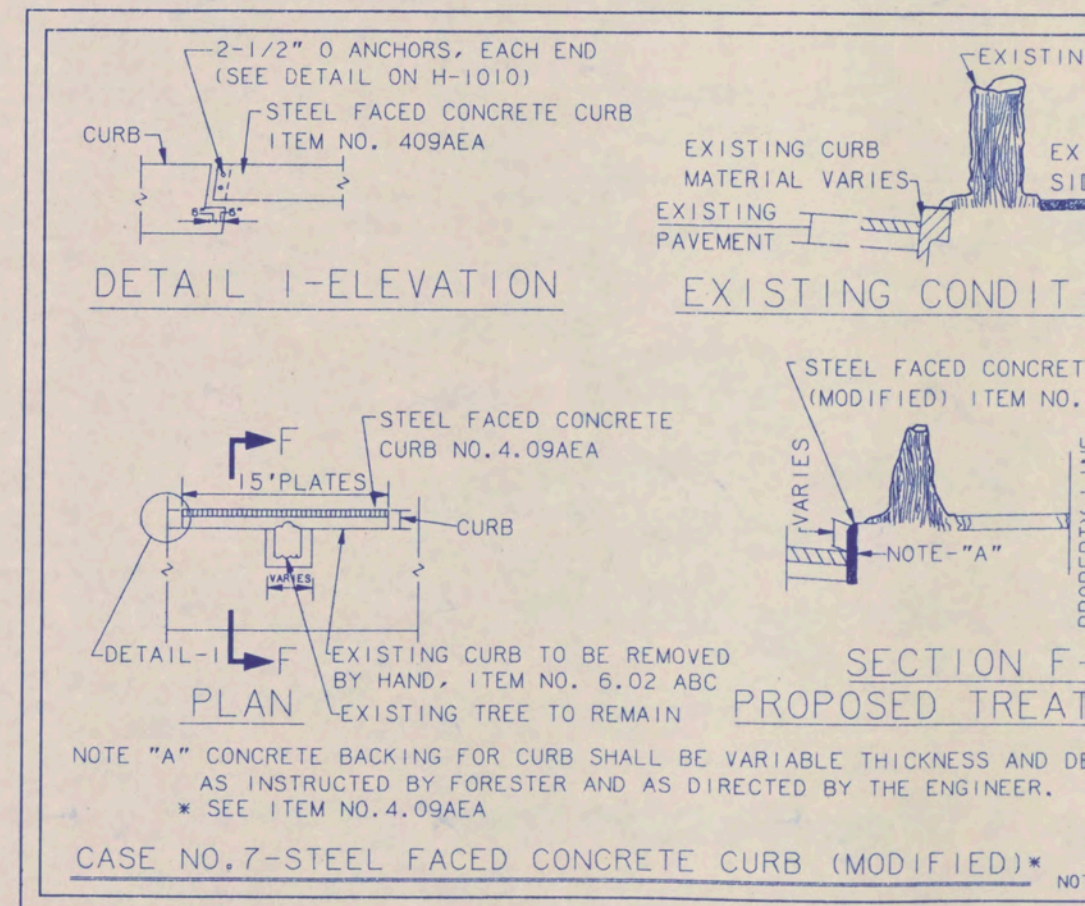
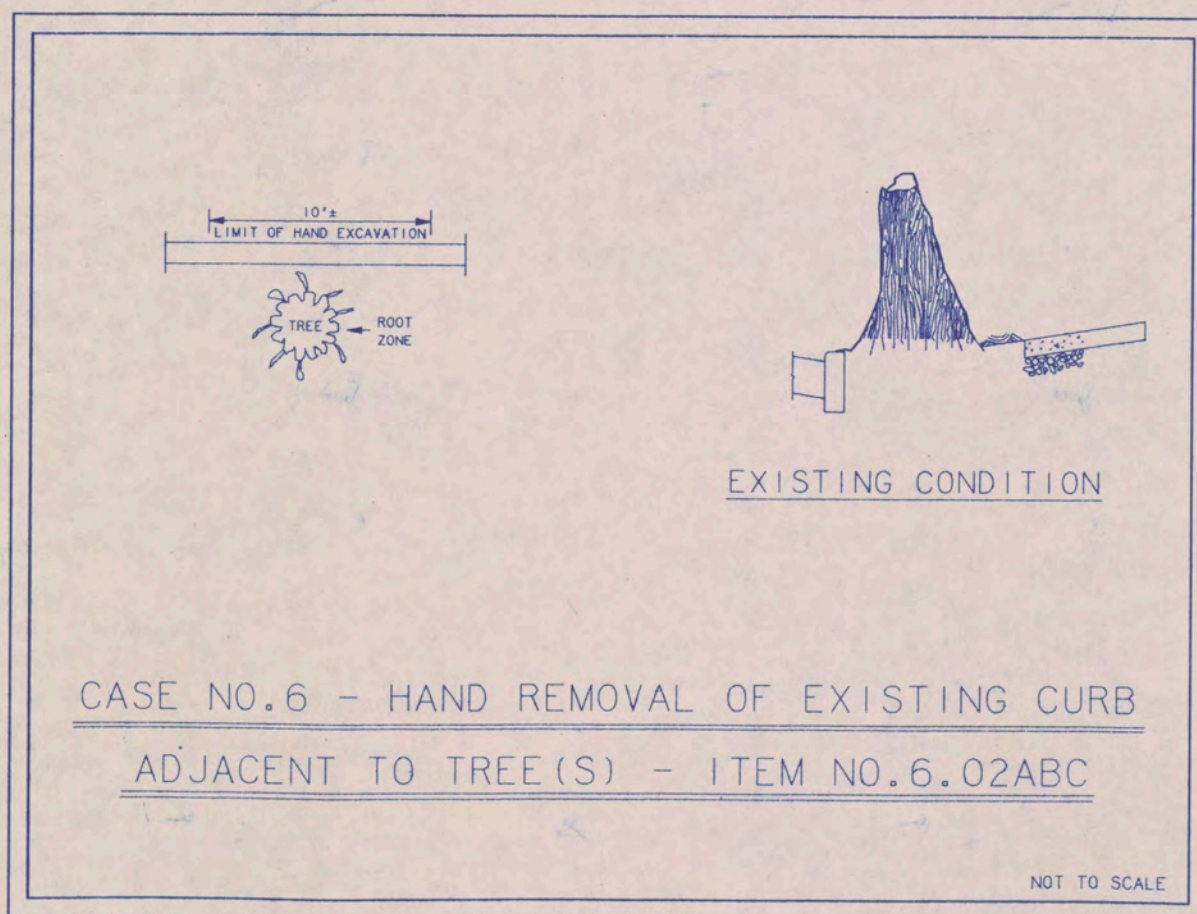
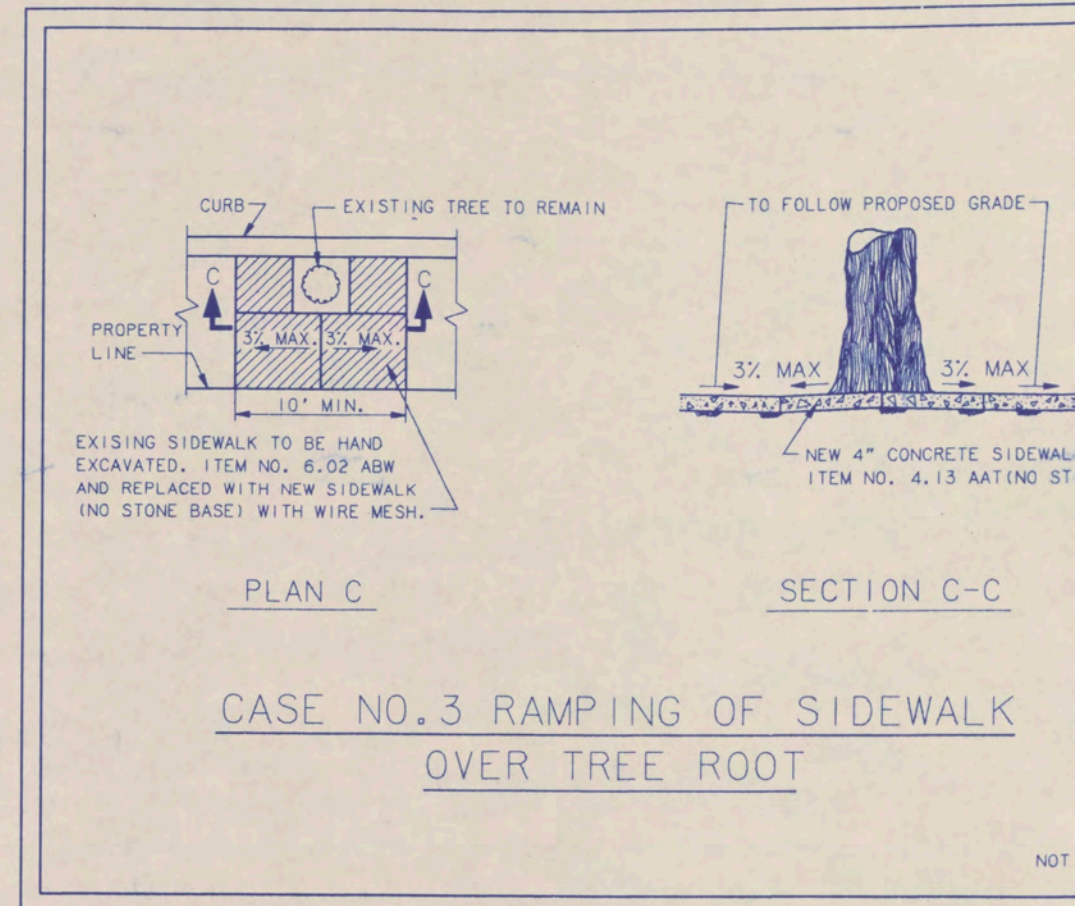
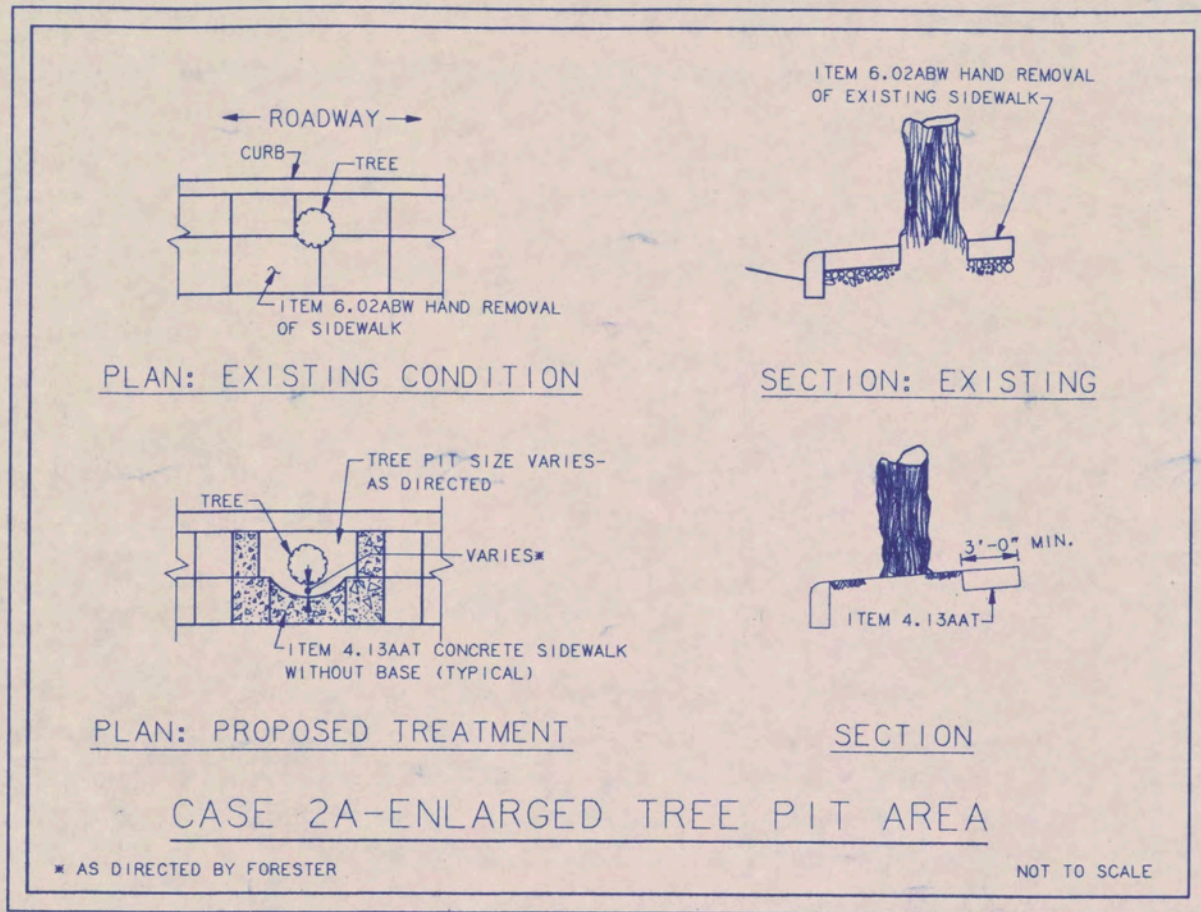
CONTRACT NO. HWM-416CW

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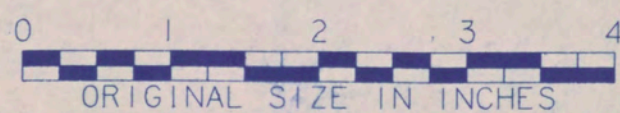
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SCALE: NONE

DRAWN BY: AMAN
CHECKED BY:



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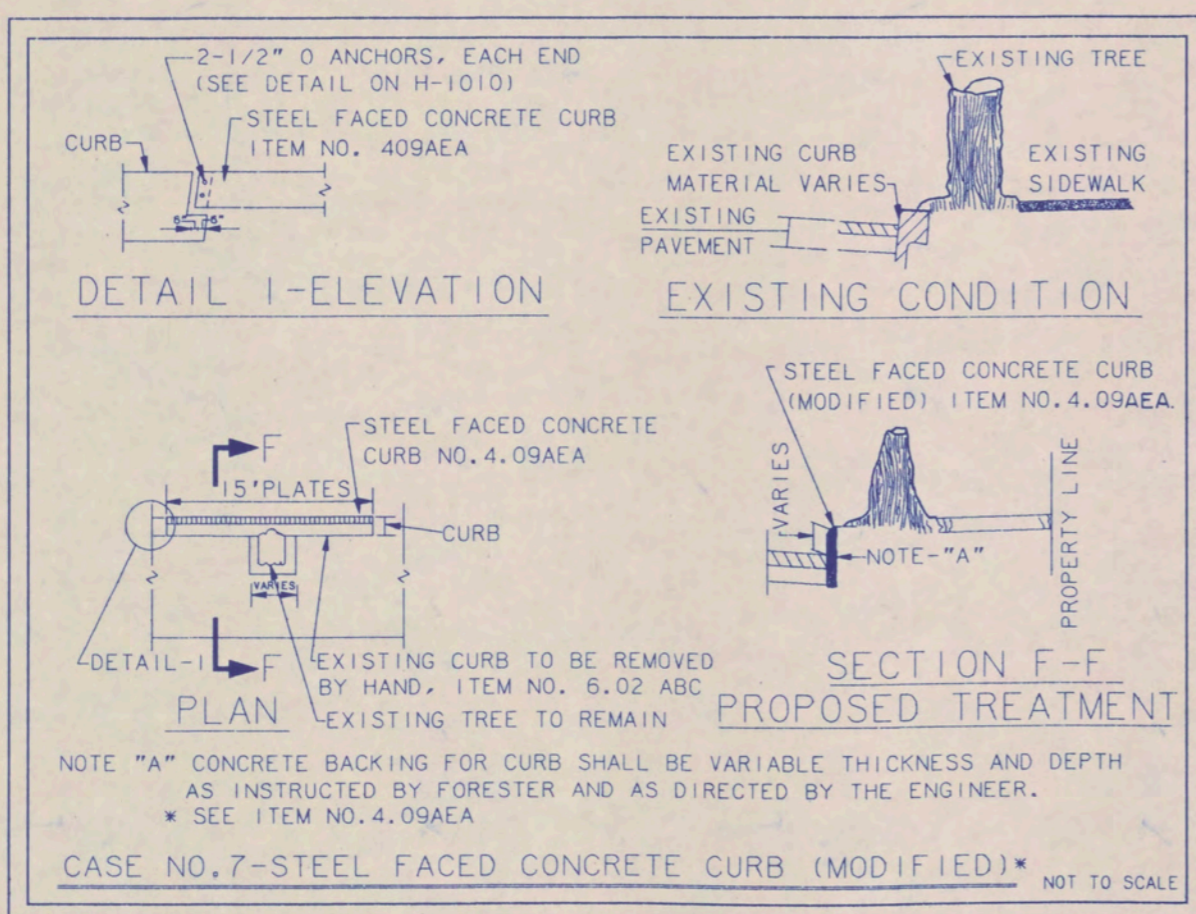
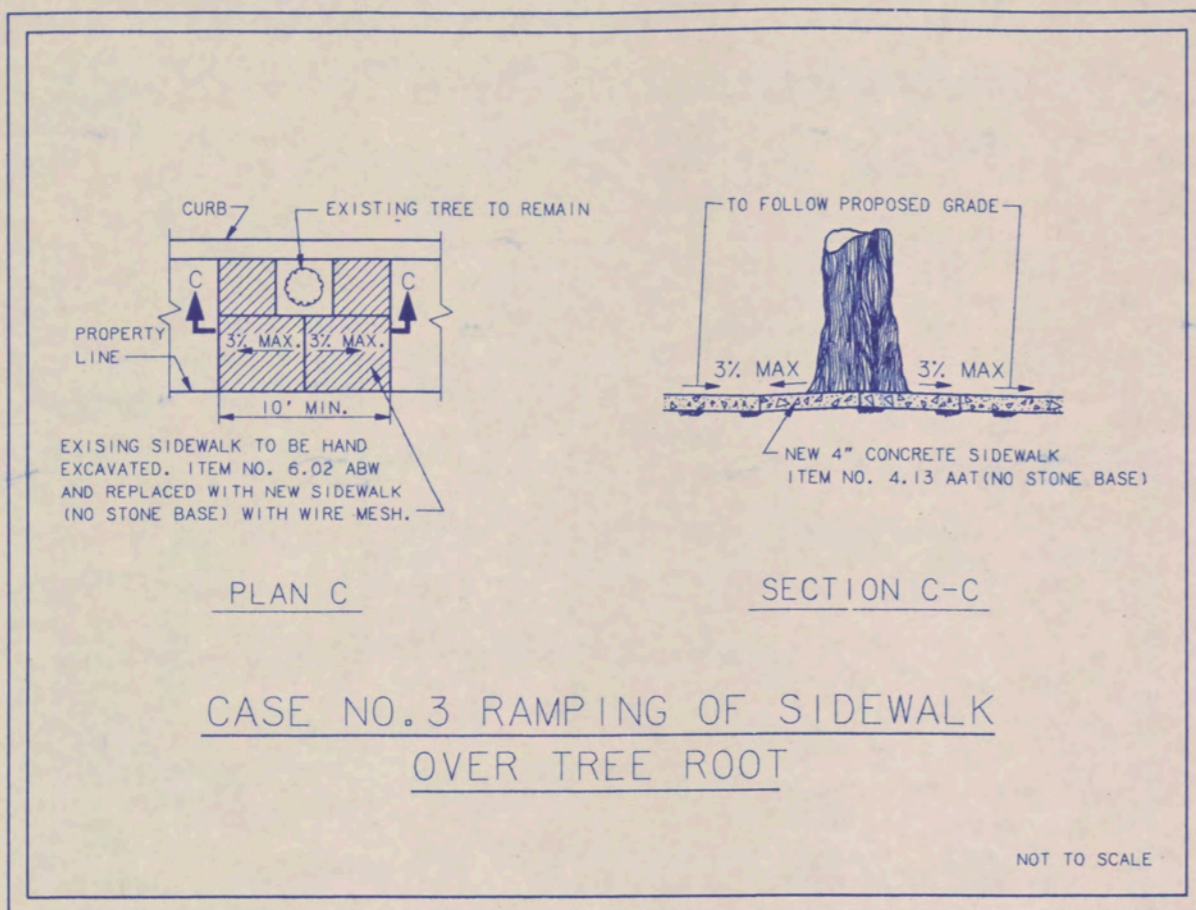
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2

FED. ROAD REG. No.	STATE	FEDERAL AID PROJECT No.	SHEET No.	TOTAL SHEETS
	NEW YORK			

N.Y.S.D.O.T. PROJECT IDENTIFICATION No.



CITY OF NEW YORK
DEPARTMENT OF TRANSPORTATION
COLUMBUS AVENUE
FROM W. 59TH STREET TO W. 110TH STREET
(EXCLUDING INTERSECTION AT BROADWAY)
BOROUGH OF MANHATTAN

TREE MITIGATION MEASURES

SHEET GD OF 87

CONTRACT NO. HWM-416CW

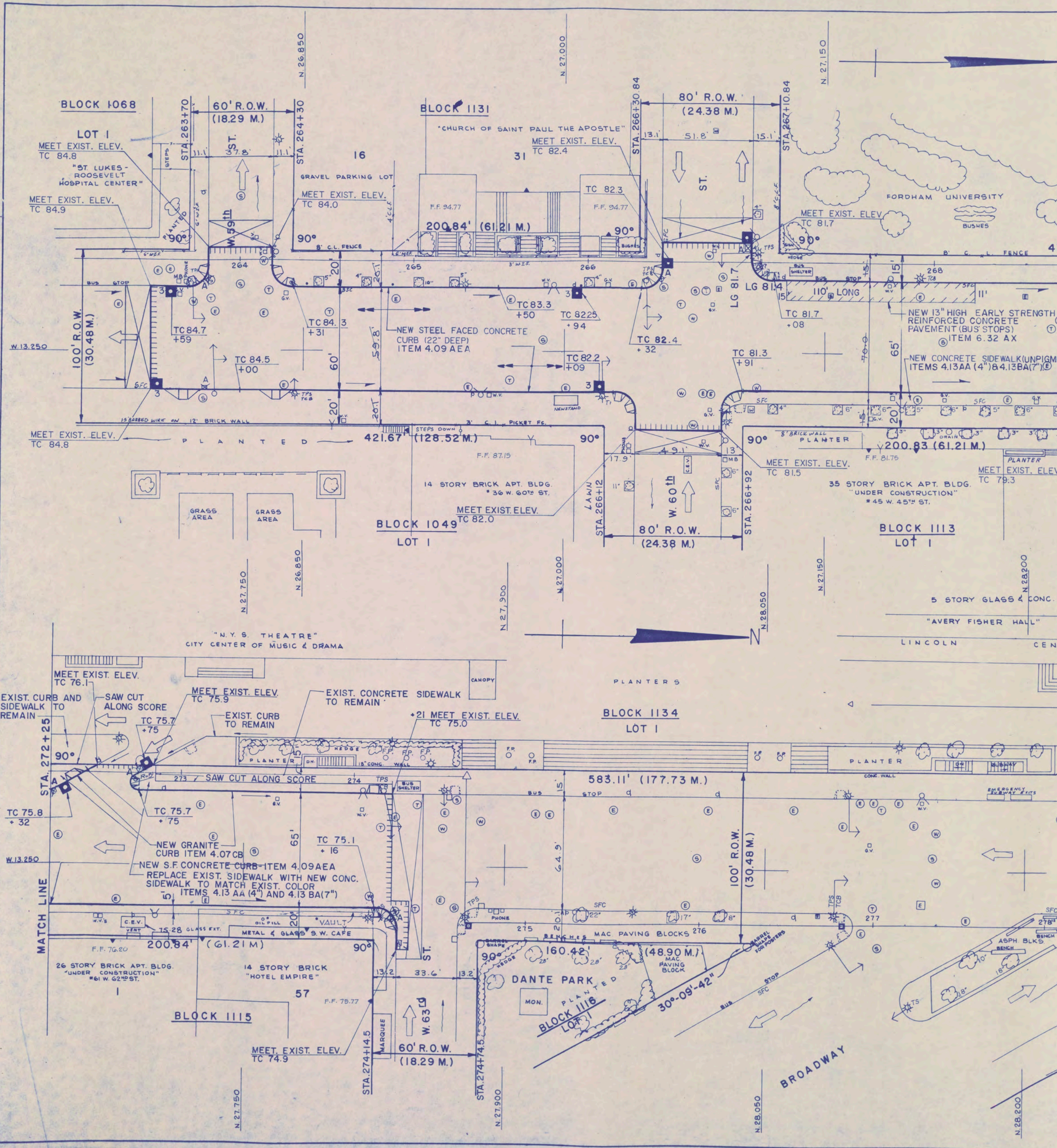
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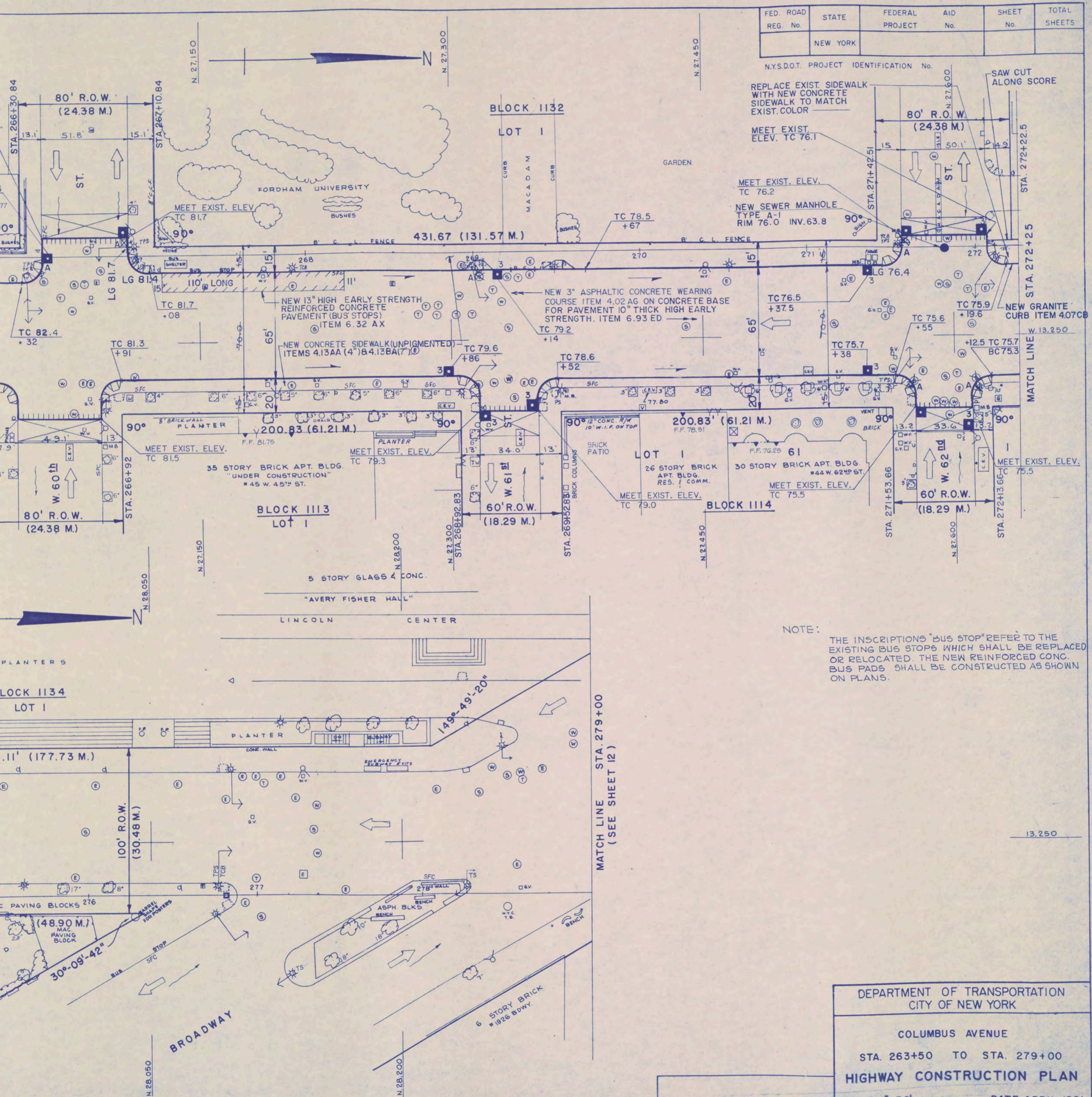
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CHECKED BY

FED. ROAD REG. No.	STATE	FEDERAL PROJECT	AID No.	SHEET No.	TOTAL SHEETS
	NEW YORK				

N.Y.S.DOT. PROJECT IDENTIFICATION No.



REPLACE EXIST. SIDEWALK WITH NEW CONCRETE SIDEWALK TO MATCH EXIST. COLOR

MEET EXIST. ELEV. TC 76.1

MEET EXIST. ELEV. TC 76.2

NEW SEWER MANHOLE TYPE A-1 RIM 76.0 INV. 63.8

80' R.O.W. (24.38 M.)

STA. 272+22.5

STA. 272+25

NEW GRANITE CURB ITEM 4.07CB

TC 75.9 +19.6

TC 75.6 +55

TC 75.7 +38

TC 75.5

MEET EXIST. ELEV. TC 75.5

60' R.O.W. (18.29 M.)

STA. 271+53.66

STA. 272+13.66

W. 62nd

W. 13.250

W. 62nd

W. 13.250

W. 62nd

W. 13.250

NOTE:
THE INSCRIPTIONS "BUS STOP" REFER TO THE EXISTING BUS STOPS WHICH SHALL BE REPLACED OR RELOCATED. THE NEW REINFORCED CONC. BUS PADS SHALL BE CONSTRUCTED AS SHOWN ON PLANS.

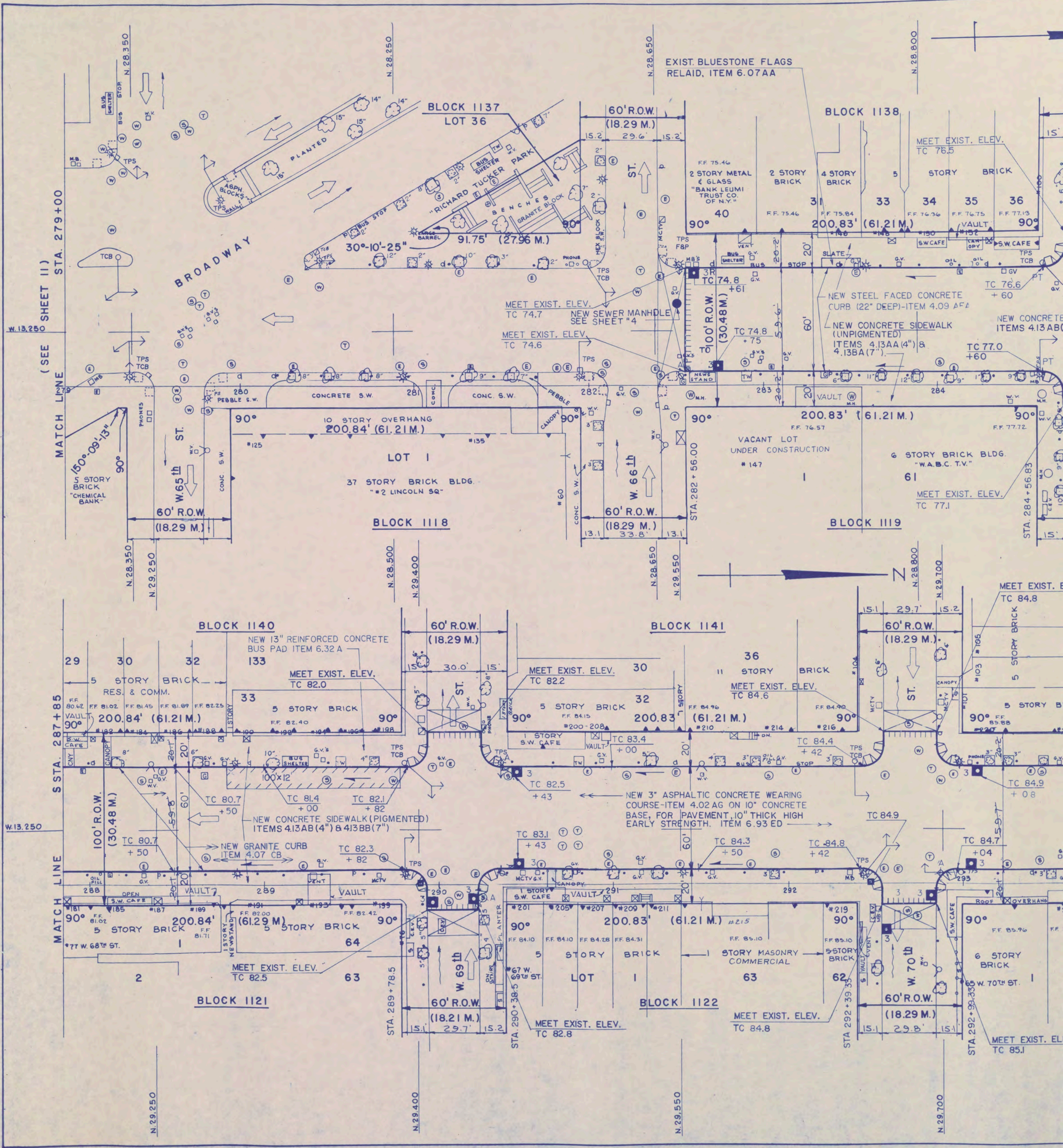
DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

COLUMBUS AVENUE
STA. 263+50 TO STA. 279+00

HIGHWAY CONSTRUCTION PLAN

SCALE: 1"=30' DATE: APRIL, 1981

DRAWN BY
CHECKED BY



(SEE SHEET II)
MATCH LINE

S STA. 287+85
MATCH LINE

N. 29,250

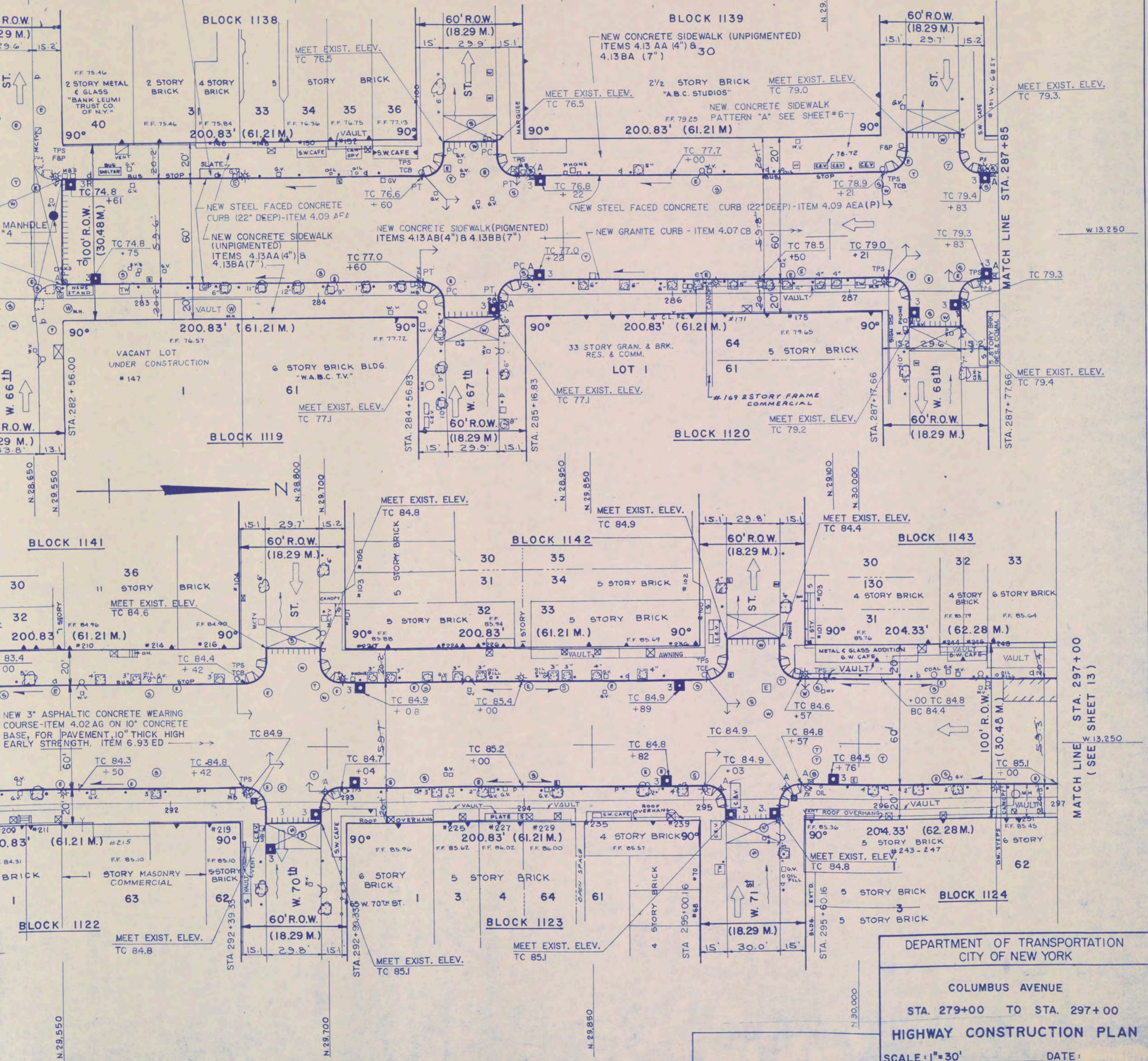
N. 29,400

N. 29,550

N. 29,700

FED. ROAD REG. No.	STATE	FEDERAL PROJECT	AID No.	SHEET No.	TOTAL SHEETS
	NEW YORK				

N.Y.S.D.O.T. PROJECT IDENTIFICATION No.

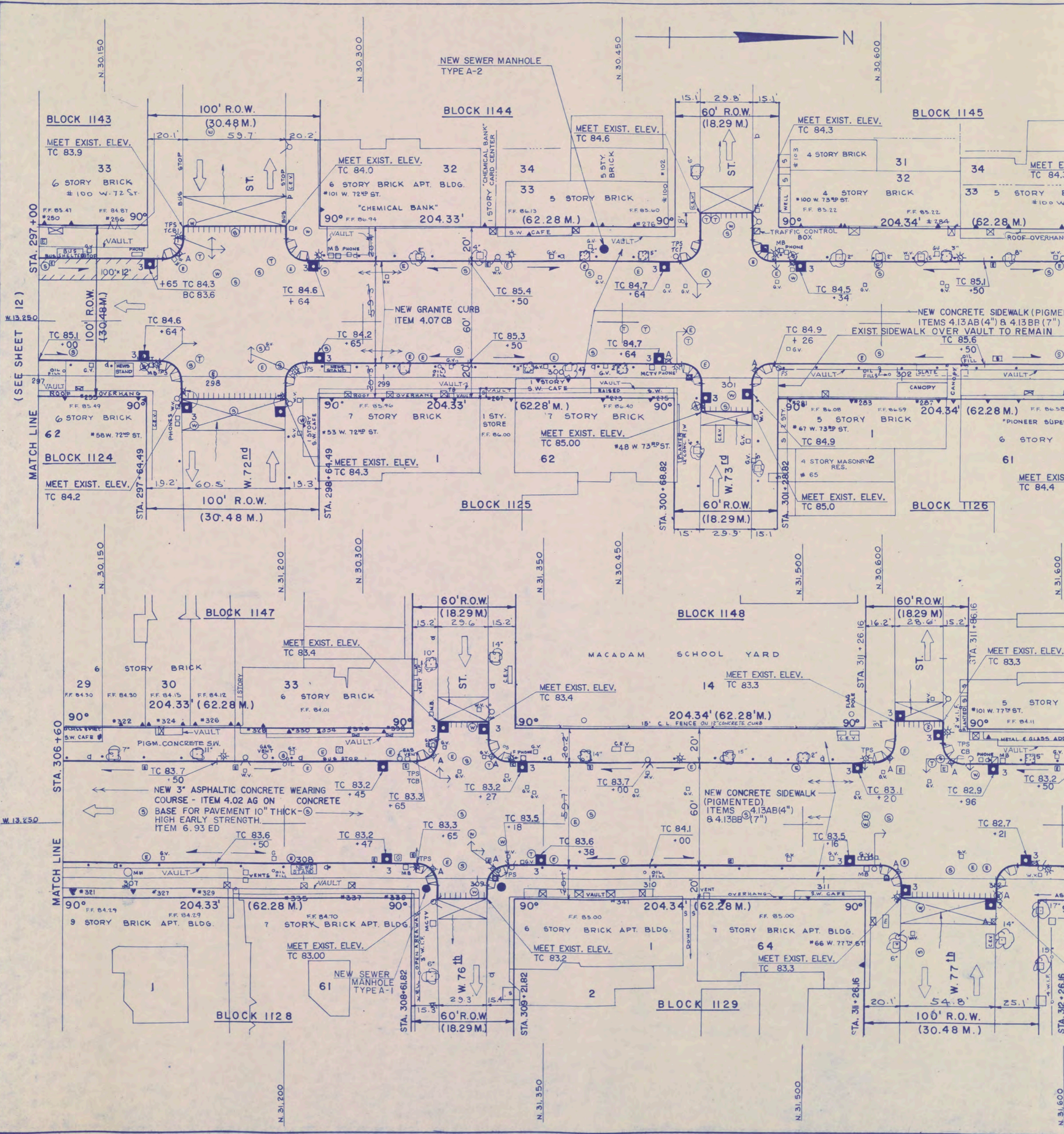


DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

COLUMBUS AVENUE
STA. 279+00 TO STA. 297+00

HIGHWAY CONSTRUCTION PLAN

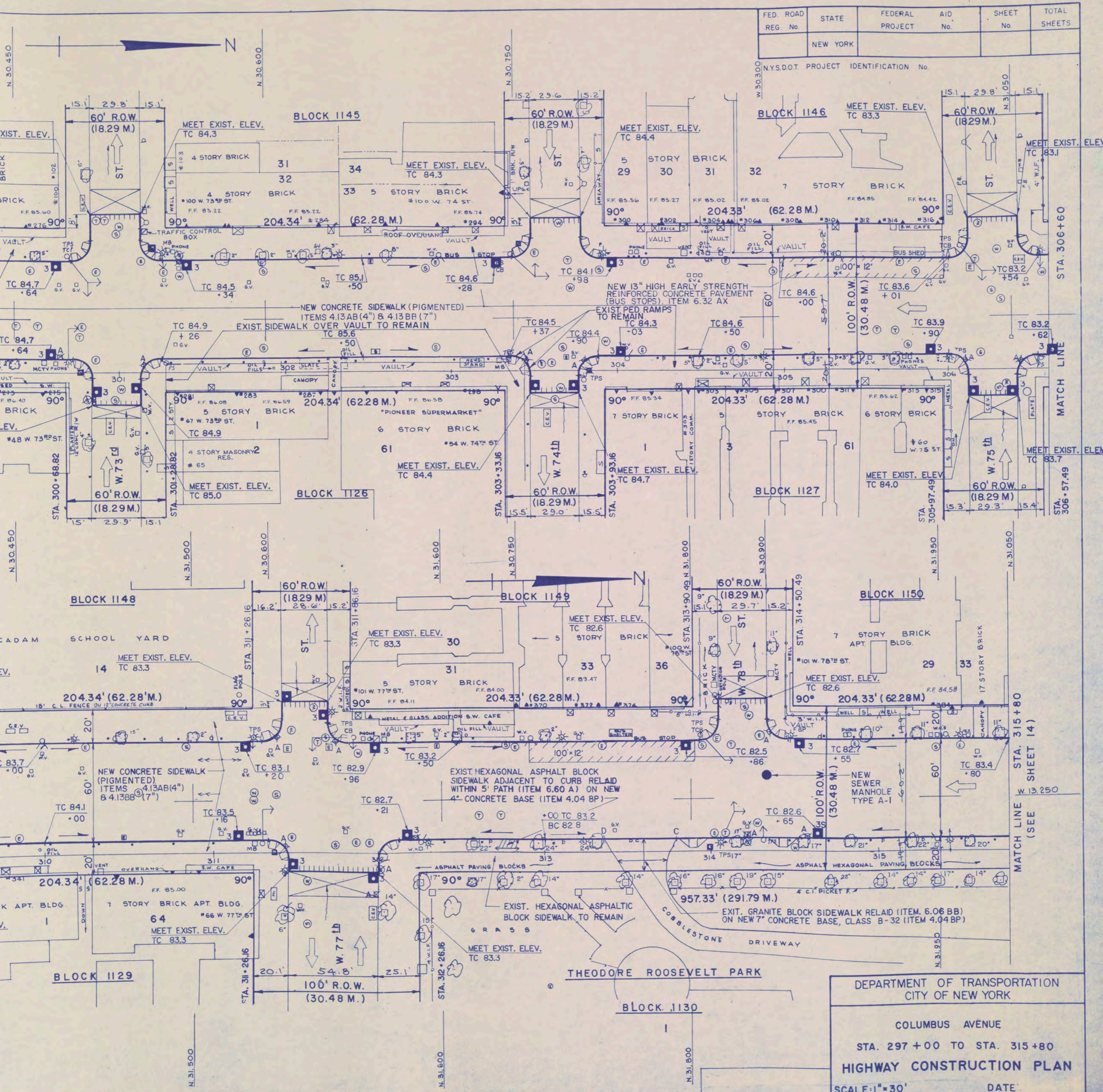
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DRAWN BY
CHECKED BY

FED. ROAD REG. No.	STATE	FEDERAL PROJECT	AID No.	SHEET No.	TOTAL SHEETS
	NEW YORK				

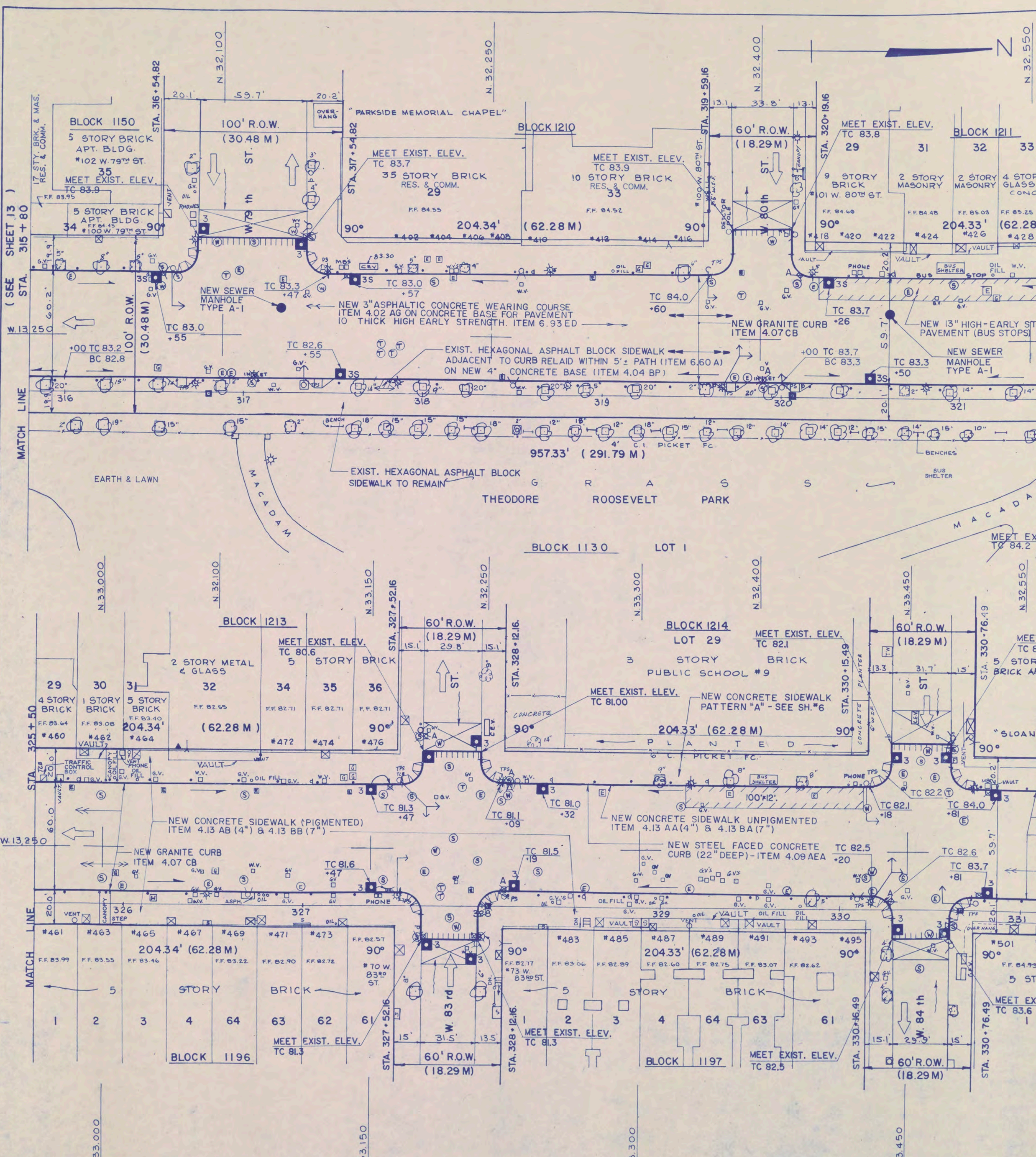
N.Y.S.D.O.T. PROJECT IDENTIFICATION No.



DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

COLUMBUS AVENUE
STA. 297+00 TO STA. 315+80
HIGHWAY CONSTRUCTION PLAN

SCALE: 1" = 30' DATE:

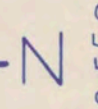


(SEE SHEET 13)
STA. 315 + 80

MATCH LINE

MATCH LINE

DRAWN BY
CHECKED BY



BLOCK 1150
5 STORY BRICK
APT. BLDG.
#102 W. 79th ST.
35
MEET EXIST. ELEV.
TC 83.9

"PARKSIDE MEMORIAL CHAPEL"
MEET EXIST. ELEV.
TC 83.7
35 STORY BRICK
RES. & COMM.
29
FF. 84.55

BLOCK 1210
MEET EXIST. ELEV.
TC 83.9
10 STORY BRICK
RES. & COMM.
33
FF. 84.52

MEET EXIST. ELEV.
TC 83.8
29
9 STORY BRICK
01 W. 80th ST.
FF. 84.60

BLOCK 1211
MEET EXIST. ELEV.
TC 85.5
34
5 STY BRICK
APTS.
FF. 85.42

5 STORY BRICK
APT. BLDG.
#100 W. 79th ST.
34
MEET EXIST. ELEV.
TC 83.9

204.34' (62.28 M)
90°

60' R.O.W.
(18.29 M)
80th ST.

204.33' (62.28 M)
90°

NEW 3" ASPHALTIC CONCRETE WEARING COURSE
ITEM 4.02 AG ON CONCRETE BASE FOR PAVEMENT
10 THICK HIGH EARLY STRENGTH. ITEM 6.93 ED

NEW GRANITE CURB +26
ITEM 4.07 CB

NEW 13" HIGH-EARLY STRENGTH
PAVEMENT (BUS STOPS) ITEM 6.32 A

EXIST. HEXAGONAL ASPHALT BLOCK SIDEWALK
ADJACENT TO CURB RELAID WITHIN 5' ± PATH (ITEM 6.60 A)
ON NEW 4" CONCRETE BASE (ITEM 4.04 BP)

NEW SEWER
MANHOLE
TYPE A-1

EXIST. HEXAGONAL ASPHALT BLOCK
SIDEWALK TO REMAIN

THEODORE ROOSEVELT PARK

BLOCK 1130 LOT 1

BLOCK 1213
MEET EXIST. ELEV.
TC 80.6
5 STORY BRICK
FF. 82.71
204.34' (62.28 M)
90°

BLOCK 1214
LOT 29
MEET EXIST. ELEV.
TC 82.1
3 STORY
PUBLIC SCHOOL #9
FF. 86.44

MEET EXIST. ELEV.
TC 83.3
5 STORY
BRICK APPTS.
FF. 86.44

NEW CONCRETE SIDEWALK (PIGMENTED)
ITEM 4.13 AB (4") & 4.13 BB (7")

NEW CONCRETE SIDEWALK UNPIGMENTED
ITEM 4.13 AA (4") & 4.13 BA (7")

NEW STEEL FACED CONCRETE
CURB (22" DEEP) - ITEM 4.09 AEA

NEW GRANITE CURB
ITEM 4.07 CB

NEW GRANITE
ITEM 4.07 CB

204.34' (62.28 M)
90°

204.33' (62.28 M)
90°

90°

BLOCK 1196
MEET EXIST. ELEV.
TC 81.3

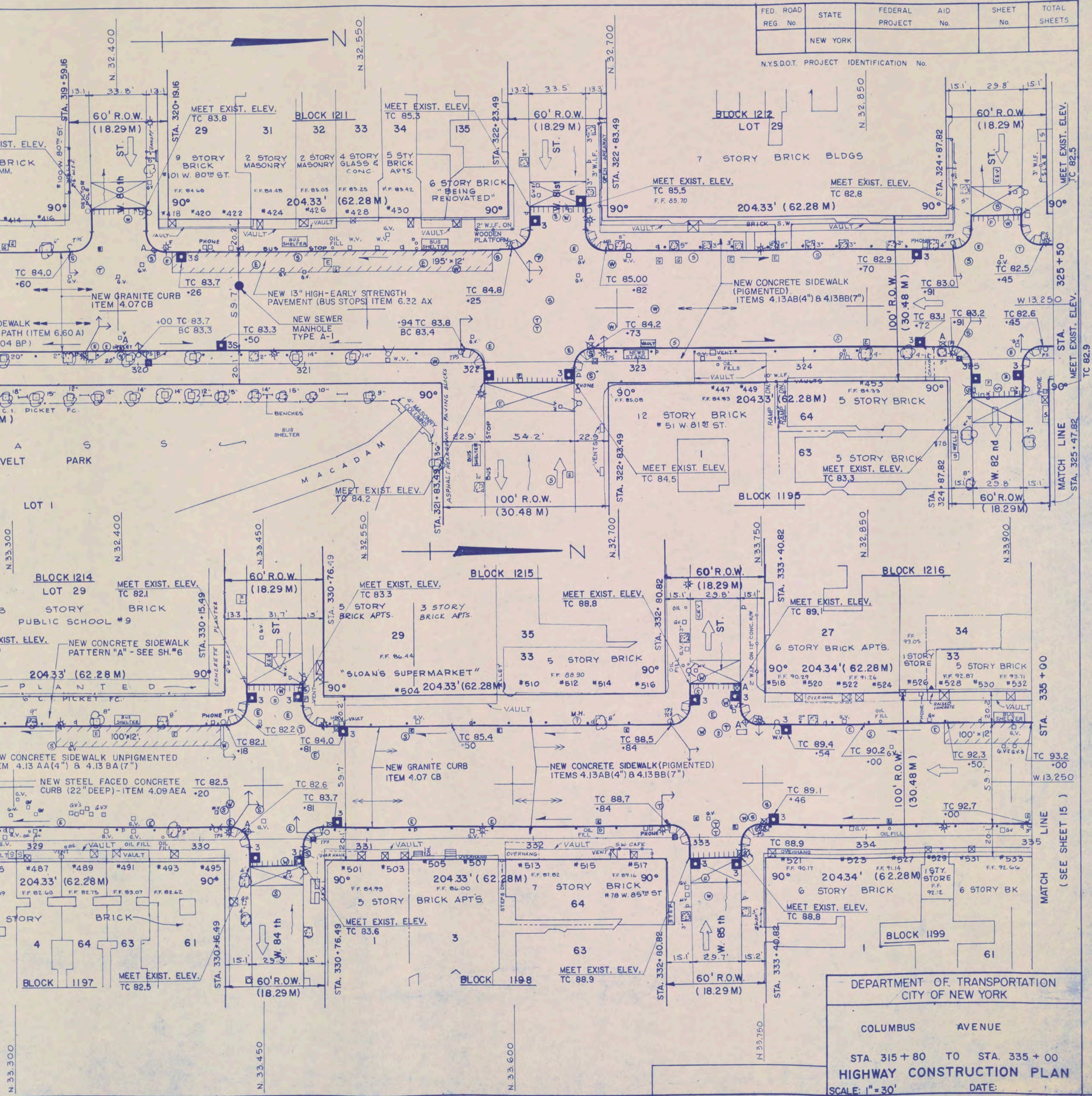
BLOCK 1197
MEET EXIST. ELEV.
TC 82.5

BLOCK 1197
MEET EXIST. ELEV.
TC 82.5

MEET EXIST. ELEV.
TC 83.6

FED. ROAD REG. No.	STATE	FEDERAL PROJECT	AID No.	SHEET No.	TOTAL SHEETS
	NEW YORK				

N.Y.S.D.O.T. PROJECT IDENTIFICATION No.



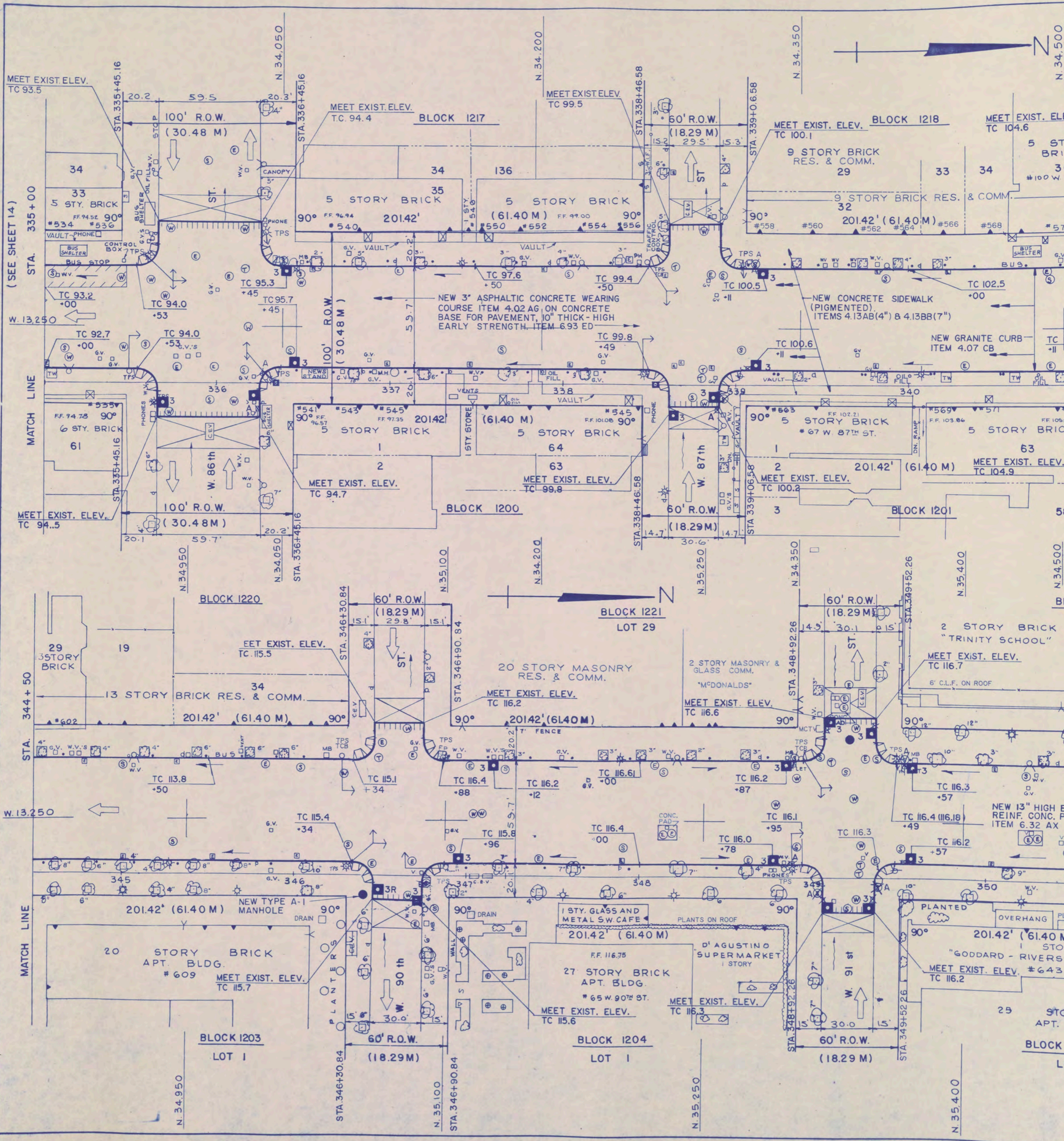
DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

COLUMBUS AVENUE

STA. 315 + 80 TO STA. 335 + 00

HIGHWAY CONSTRUCTION PLAN

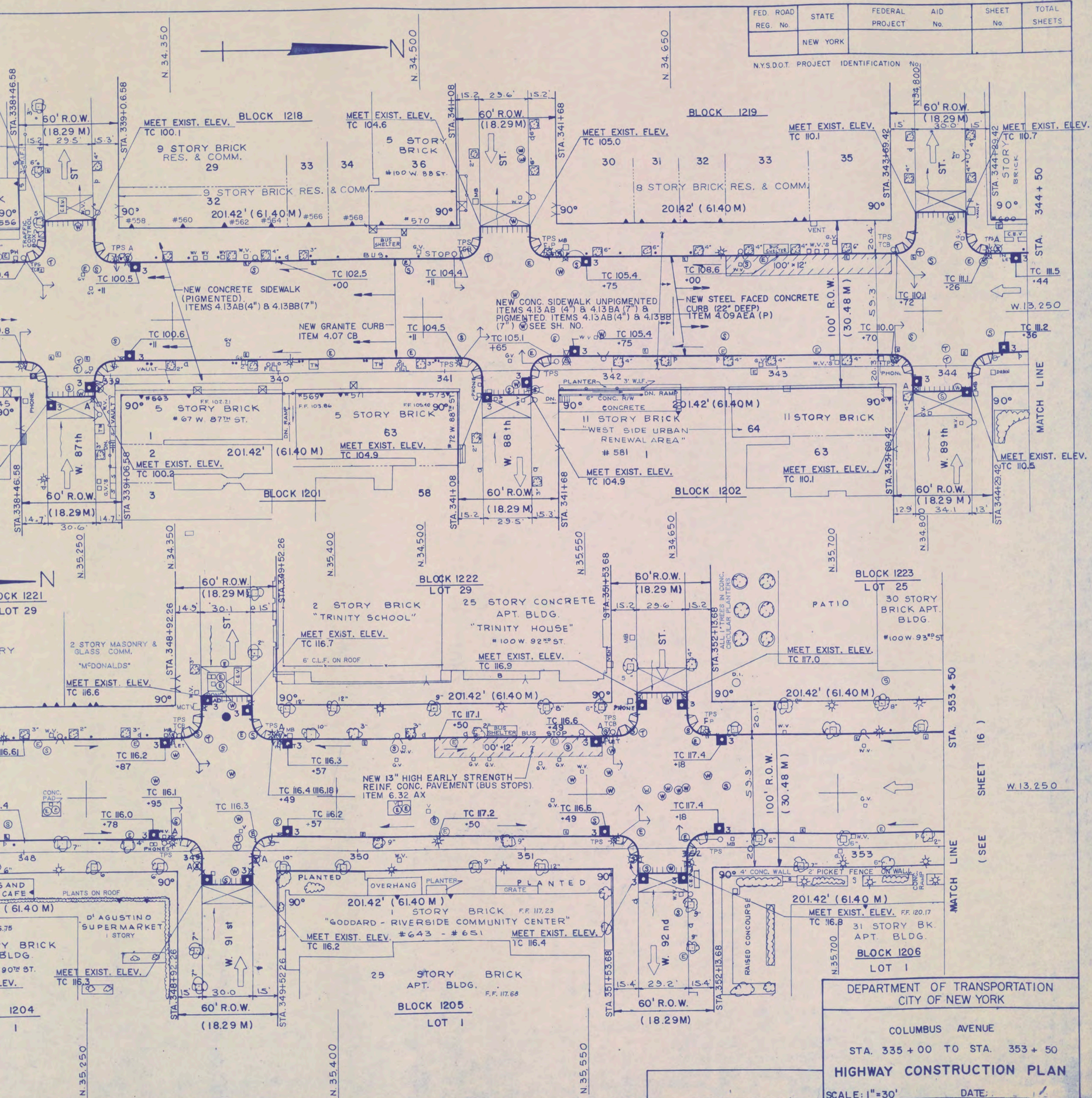
SCALE: 1" = 30' DATE:



DRAWN BY
CHECKED BY

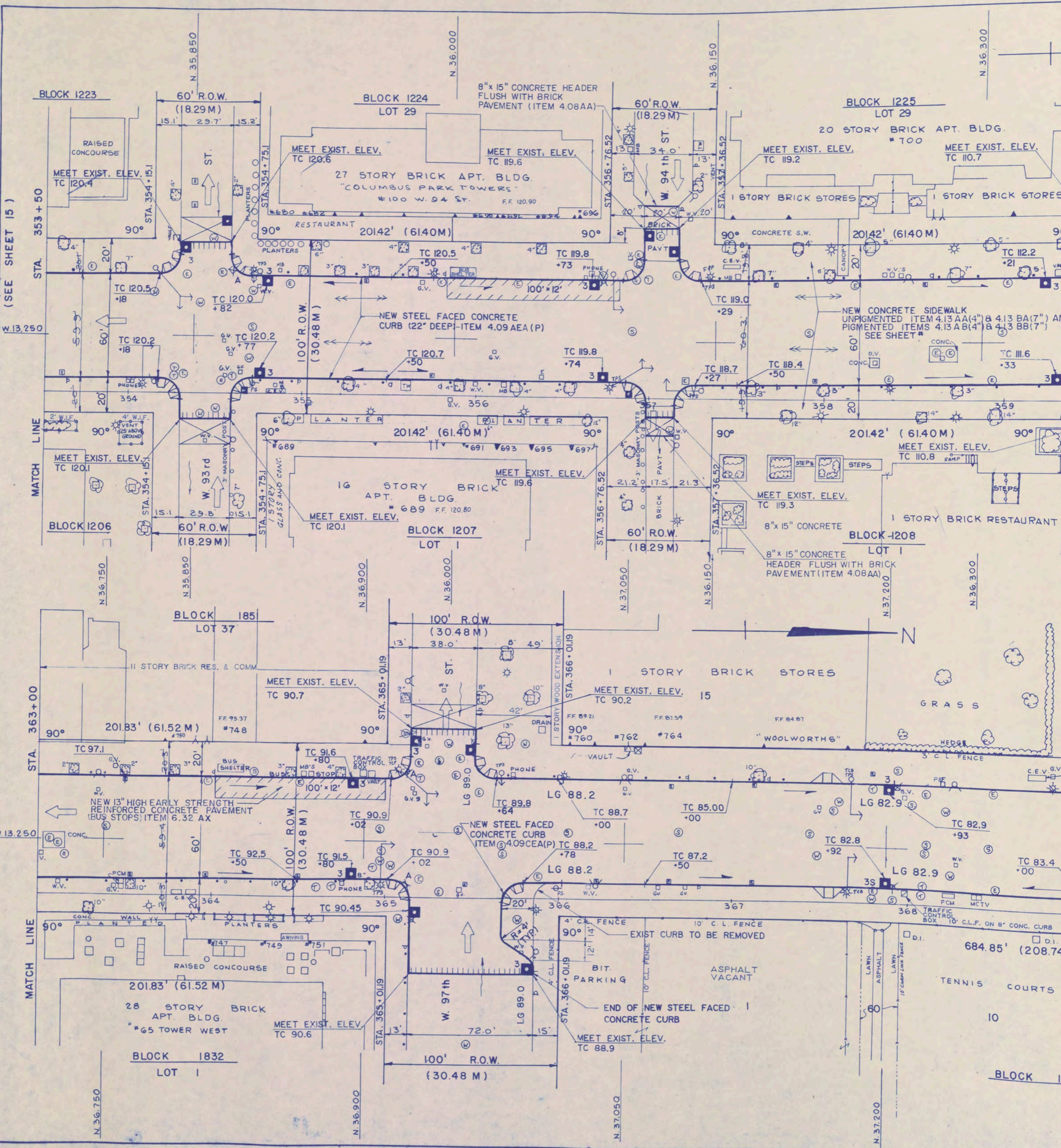
FED. ROAD REG. No.	STATE	FEDERAL PROJECT	AID No.	SHEET No.	TOTAL SHEETS
	NEW YORK				

N.Y.S.D.O.T. PROJECT IDENTIFICATION No.



DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

COLUMBUS AVENUE
STA. 335 + 00 TO STA. 353 + 50
HIGHWAY CONSTRUCTION PLAN
SCALE: 1"=30' DATE: / /



(SEE SHEET 15)

STA. 353+50

MATCH LINE

STA. 363+00

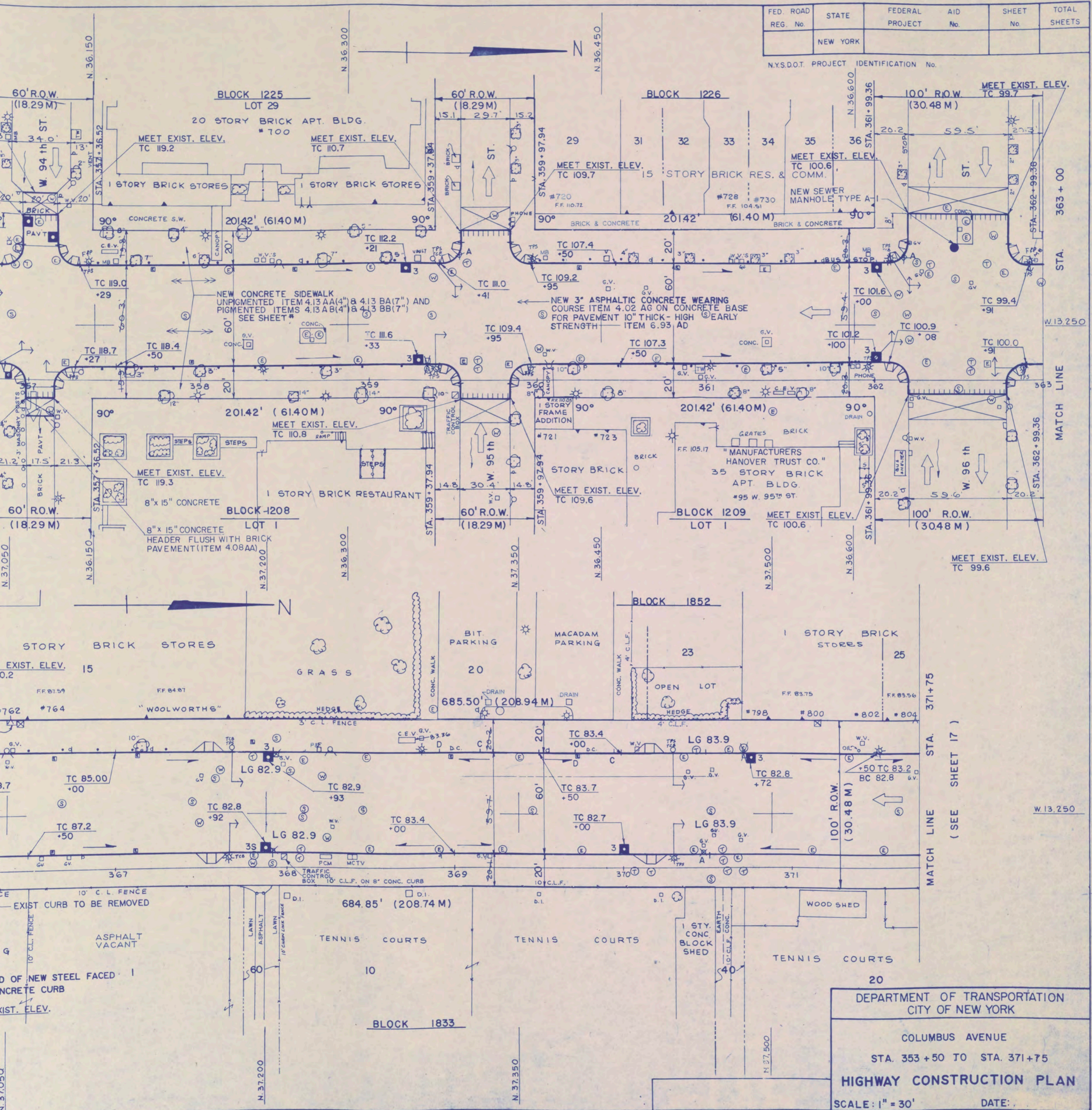
MATCH LINE

DRAWN BY
CHECKED BY

BLOCK 18

FED. ROAD REG. No.	STATE	FEDERAL PROJECT	AID No.	SHEET No.	TOTAL SHEETS
	NEW YORK				

N.Y.S.D.O.T. PROJECT IDENTIFICATION No.

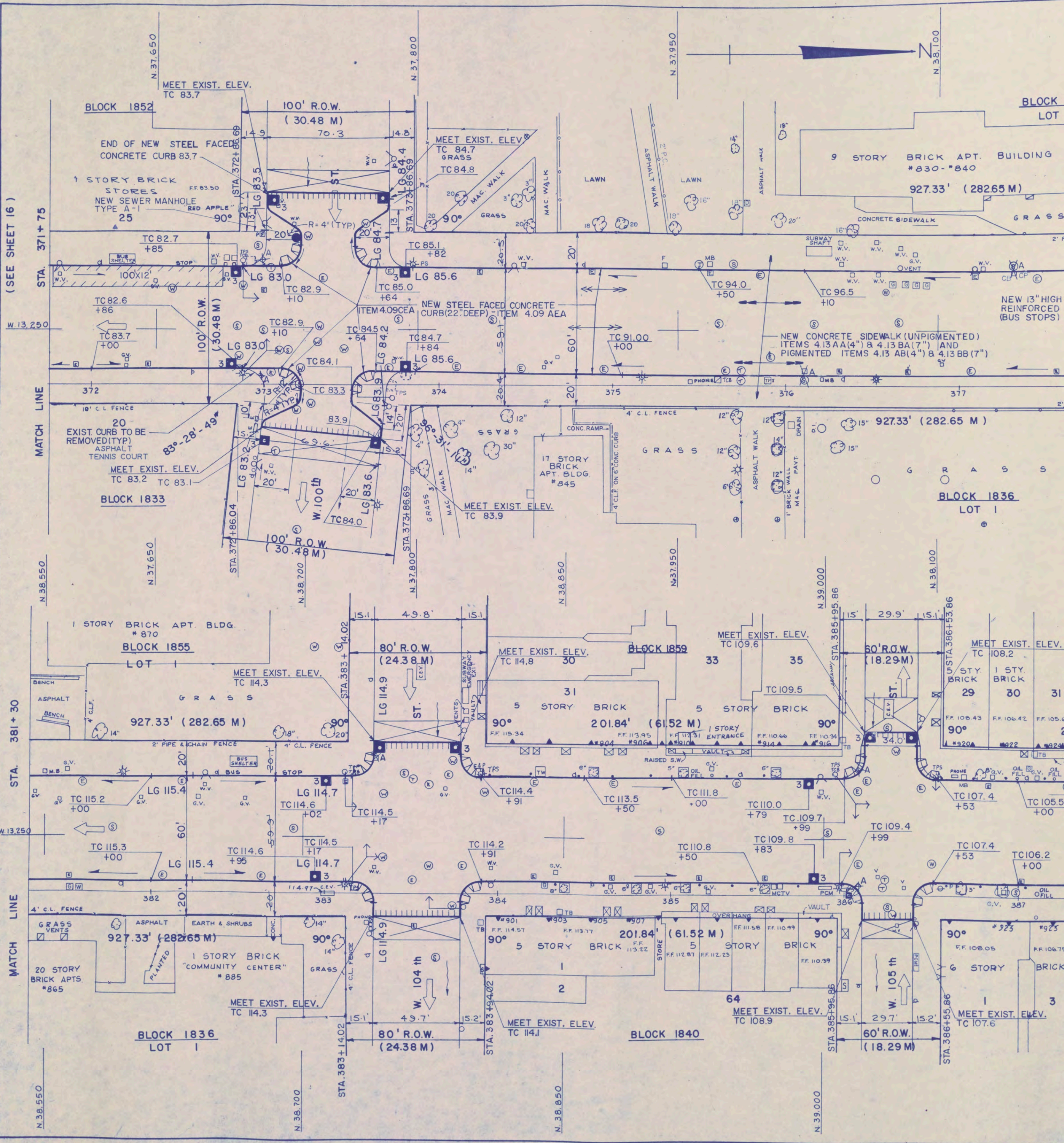


DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

COLUMBUS AVENUE
STA. 353+50 TO STA. 371+75

HIGHWAY CONSTRUCTION PLAN

SCALE: 1" = 30' DATE:

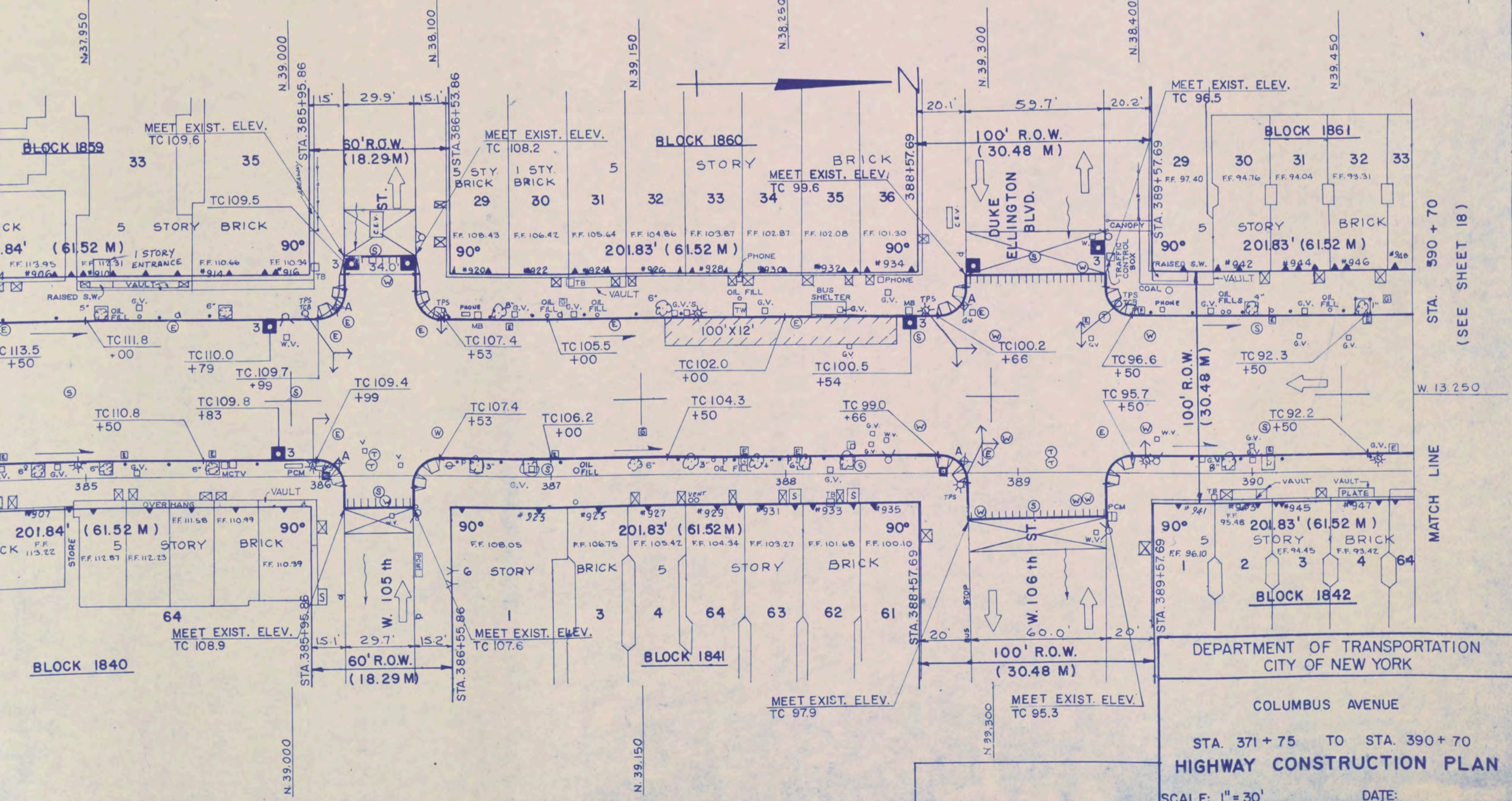
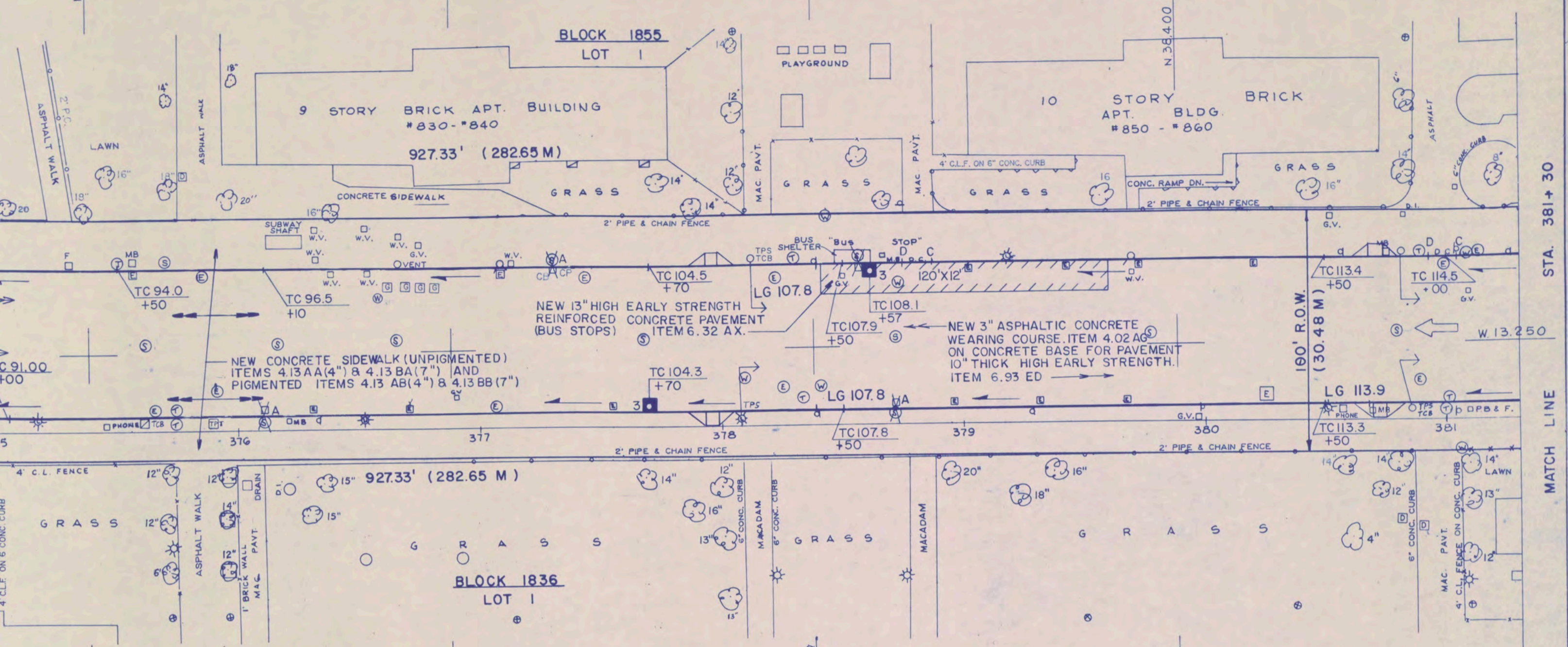


(SEE SHEET 16)

DRAWN BY
CHECKED BY

FED. ROAD REG. No.	STATE	FEDERAL PROJECT	AID No.	SHEET No.	TOTAL SHEETS
	NEW YORK				

N.Y.S.D.O.T. PROJECT IDENTIFICATION No.



DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

COLUMBUS AVENUE

STA. 371+75 TO STA. 390+70

HIGHWAY CONSTRUCTION PLAN

SCALE: 1" = 30' DATE:

N 39,600

N 39,750

N 39,900

N 40,050

MEET EXIST. ELEV.
TC 88.6

MEET EXIST. ELEV.
TC 82.7

MEET EXIST. ELEV.
TC 78.0

BLOCK 1861

BLOCK 1862

BLOCK 1863

SHEET 17

STA. 390 + 70

W 13,250

(SEE

MATCH LINE

5 STORY BRICK
1 STORY
"SUPERMARKET"
33
34
36
FF. 92.65
FF. 92.00
FF. 90.50
#948 #950
90°

LOT II
4 STORY BRICK SCHOOL
J.H.S. # 54

5 STORY BRICK
29 30 31 32 33 34 35
FF. 83.01
FF. 82.20
FF. 81.35
FF. 81.71
FF. 80.08
FF. 79.83
#980 #982 #984 #986 #988 #990 #992
90°

MEET EXIST. ELEV.
TC 88.1

MEET EXIST. ELEV.
TC 83.3

201.84' (61.52 M)

201.83' (61.52 M)

100' R.O.W.
(30.48 M)

60' R.O.W.
(18.29 M)

60' R.O.W.
(18.29 M)

TC 88.3
+52

TC 89.2
+54

TC 87.5
+16

NEW 13" HIGH-EARLY STRENGTH REINFORCED
CONCRETE PAVEMENT (BUS STOPS)
ITEM 6.32 AX

NEW STEEL FACED CONCRETE
CURB (22" DEEP) ITEM 4.09 AEA

NEW CONCRETE SIDEWALK UNPIGMENTED
ITEMS 4.13 AA (4") & 4.13 BA (7") AND
PIGMENTED - ITEMS 4.13 AB (4") &
4.13 BB (7"). SEE SHEET *

TC 84.2
+50

TC 82.6
+16

TC 81.5
+78

TC 80.5
+60

TC 79.9
+79

BLOCK 1842

BLOCK 1843

BLOCK 1844

MEET EXIST. ELEV.
TC 87.0

MEET EXIST. ELEV.
TC 86.7

MEET EXIST. ELEV.
TC 82.1

MEET EXIST. ELEV.
TC 81.3

MEET EXIST. ELEV.
TC 76.9

W. 107th

W. 108th

60' R.O.W.
(18.29 M)

60' R.O.W.
(18.29 M)

N 39,600

N 39,750

N 39,900

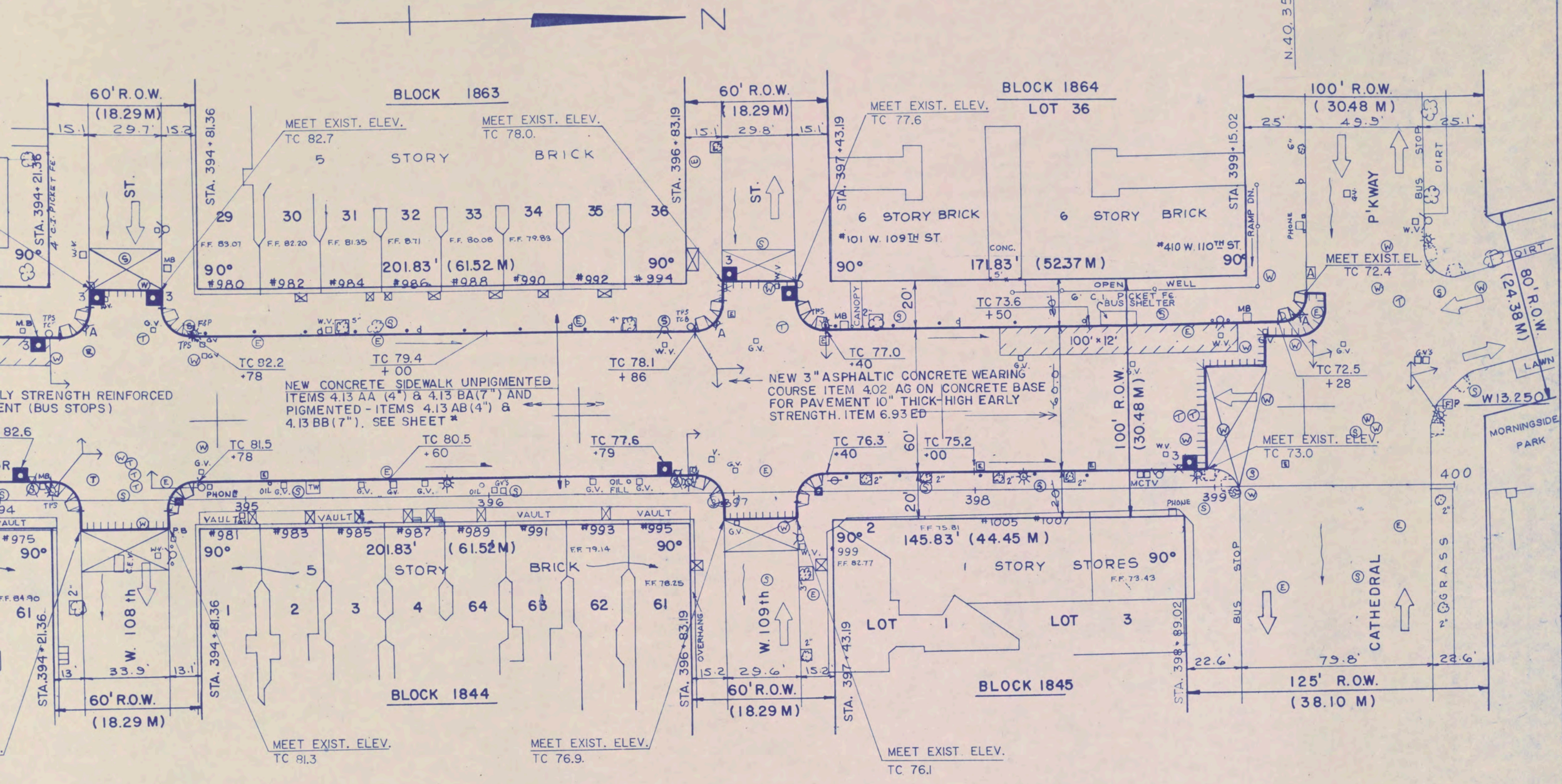
N 40,050

DRAWN BY

CHECKED BY

FED. ROAD REG. No.	STATE	FEDERAL PROJECT	AID No.	SHEET No.	TOTAL SHEETS
	NEW YORK				

N.Y.S.D.O.T. PROJECT IDENTIFICATION No.



N 39.900

N 40.050

N 40.200

N 40.350

N 39.900

N 40.050

N 40.200

N 40.350

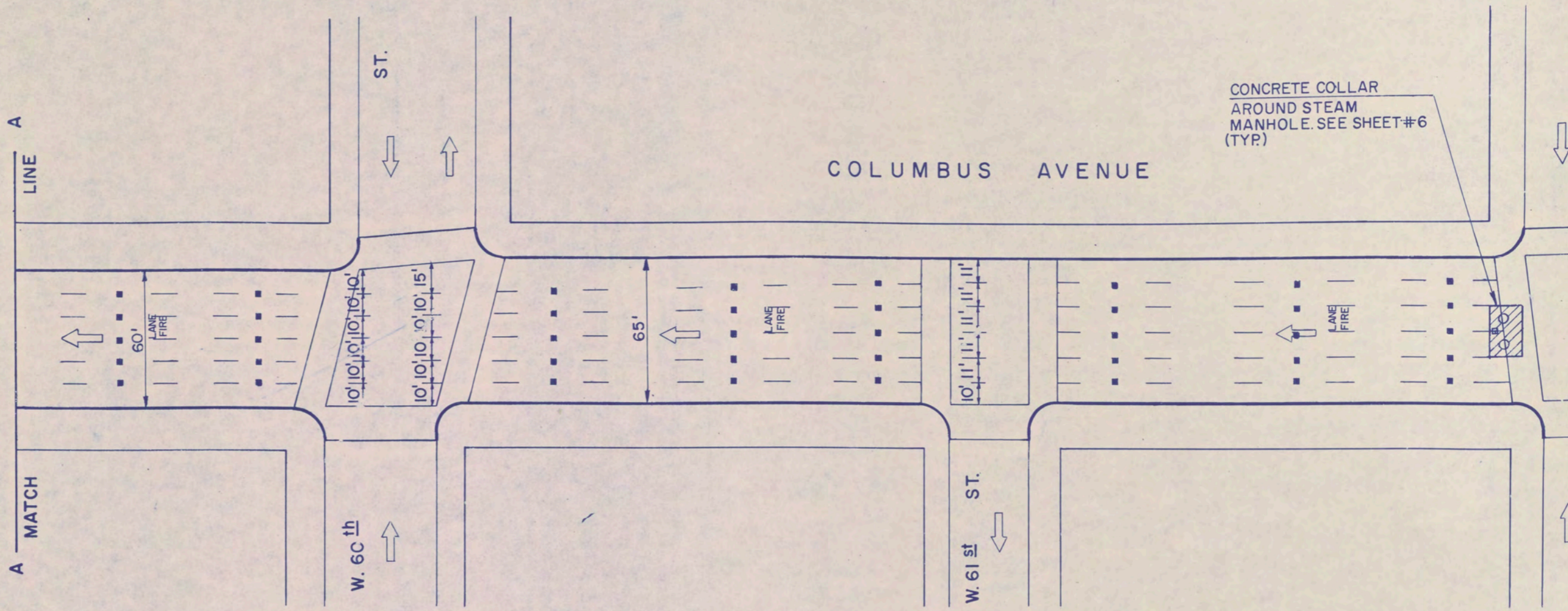
DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

COLUMBUS AVENUE

STA. 390+70 TO STA. 400+00

HIGHWAY CONSTRUCTION PLAN

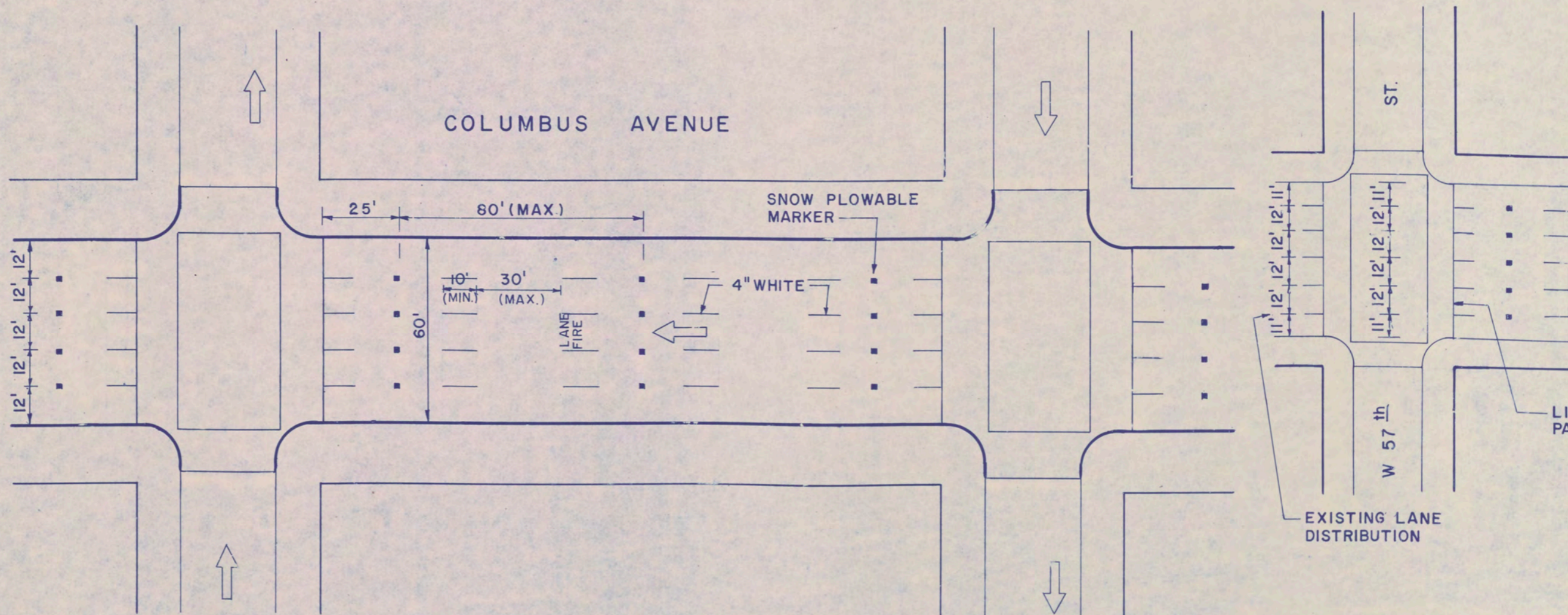
SCALE: 1" = 30' DATE:



PAVEMENT MARKING LAYOUT

FROM W. 59th ST. TO W. 63rd ST.

SCALE: 1" = 40'



TYPICAL PAVEMENT MARKING LAYOUT

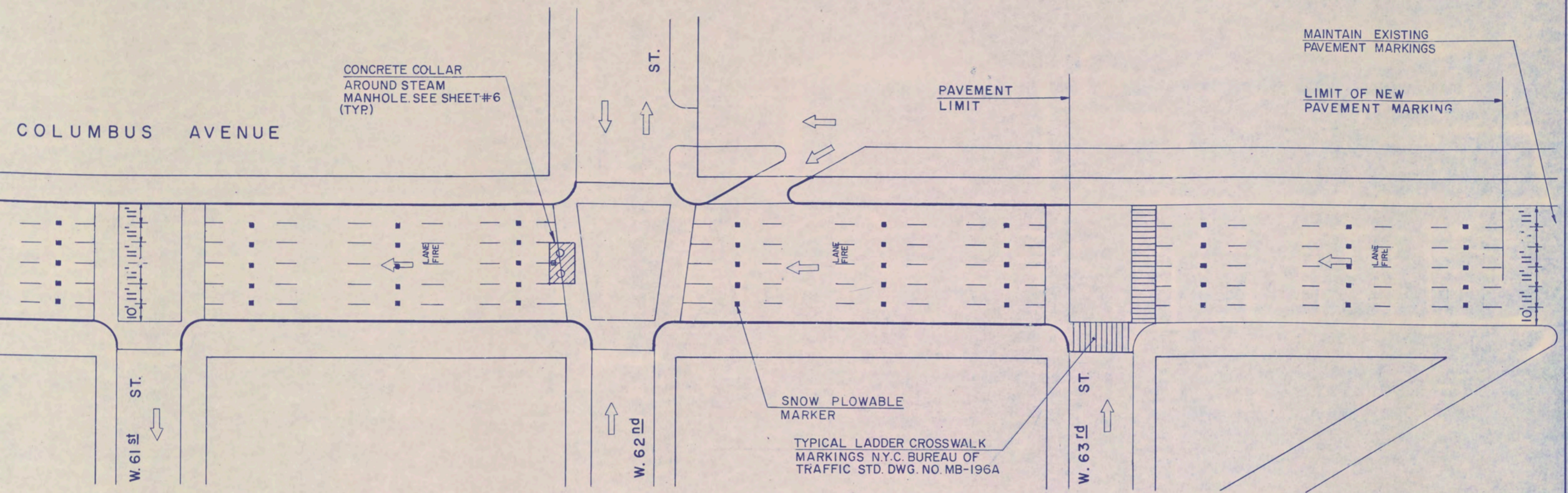
FROM W. 66th ST. TO W. 110th ST.

SCALE: 1" = 30'

NOTE: FOR TYPICAL CROSSWALK LAYOUT SEE DWG. NO. 5

FED. ROAD REG. NO.	STATE	FEDERAL PROJECT	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				

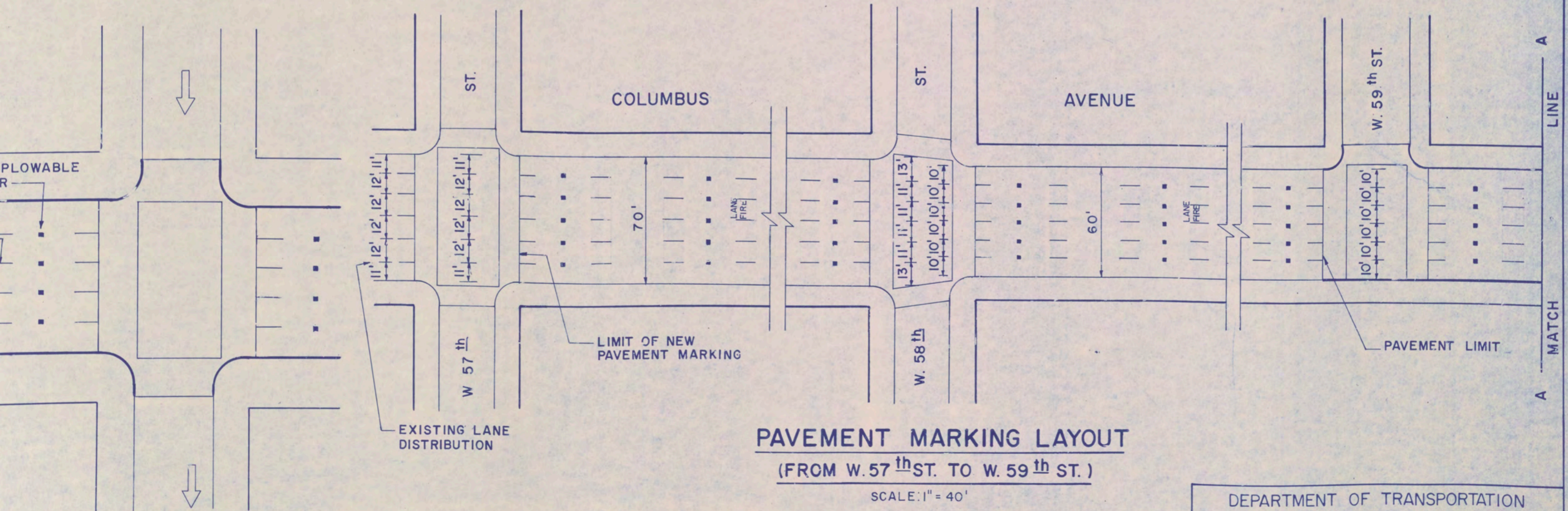
N.Y.S.D.O.T. PROJECT IDENTIFICATION NO.



PAVEMENT MARKING LAYOUT

FROM W. 59th ST. TO W. 63rd ST.

SCALE: 1" = 40'

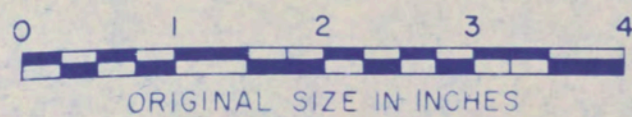


PAVEMENT MARKING LAYOUT

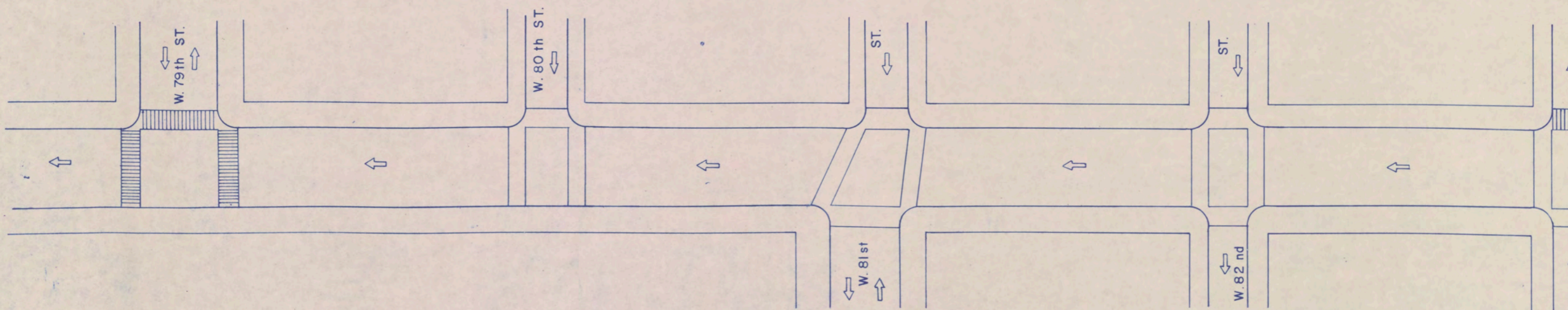
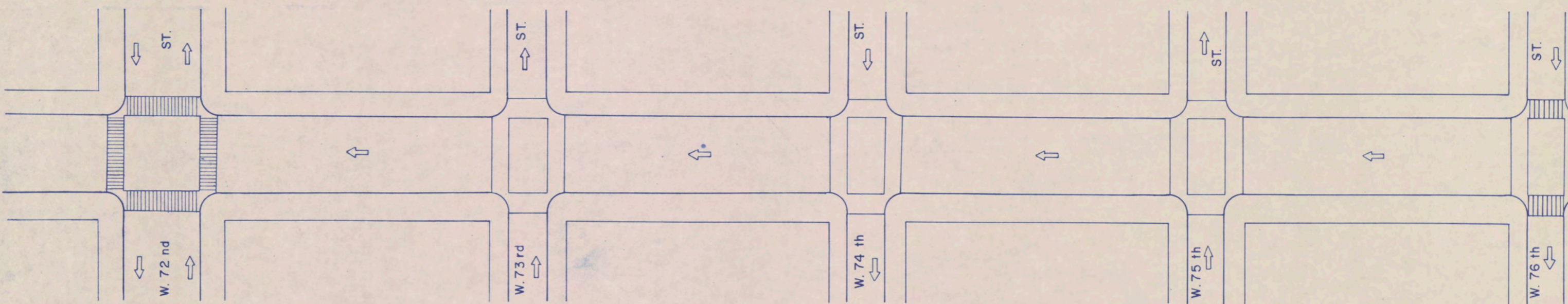
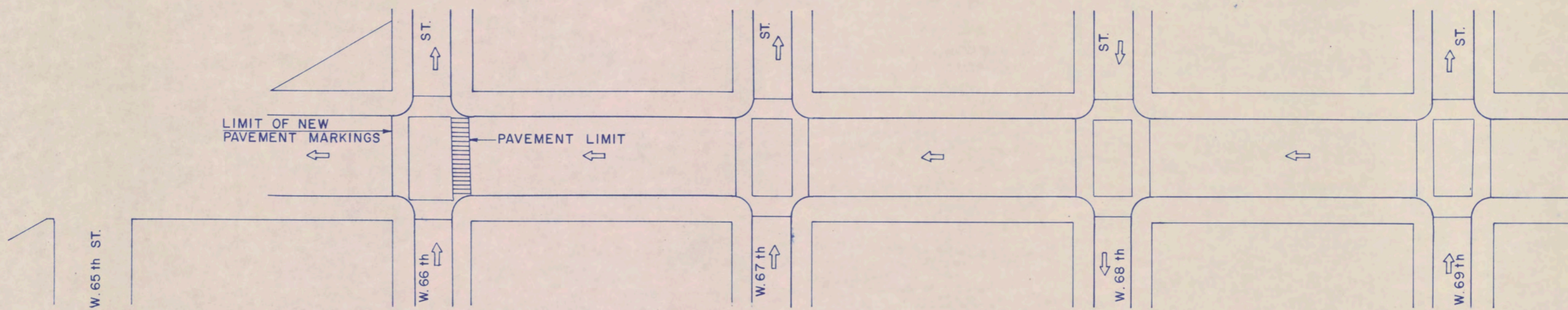
(FROM W. 57th ST. TO W. 59th ST.)

SCALE: 1" = 40'

NOTE: FOR TYPICAL CROSSWALK LAYOUT SEE DWG. NO. 5

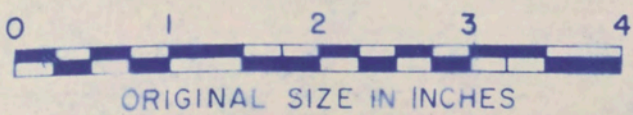
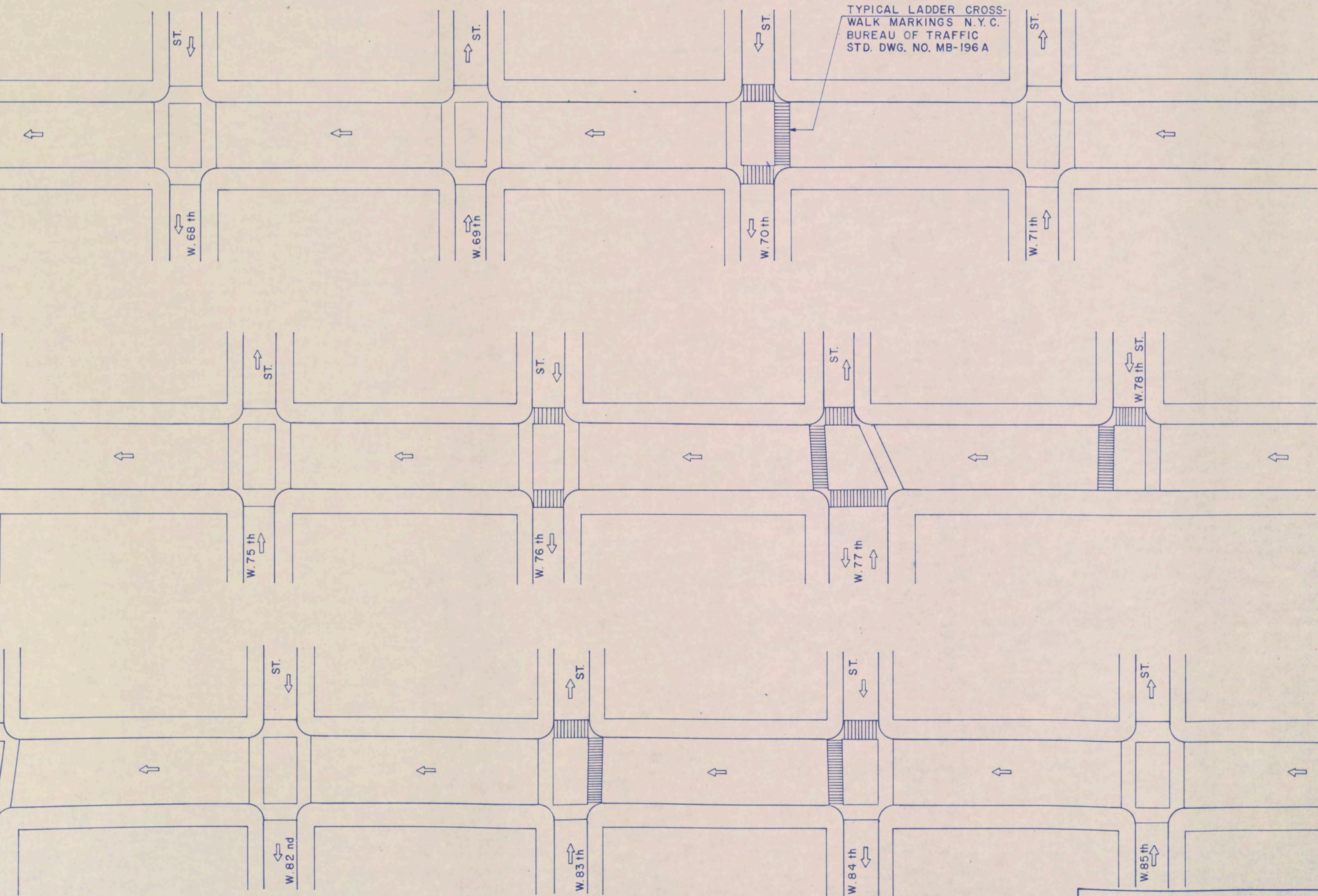


DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK
COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59th ST. TO W. 110th ST.
(EXCLUDING INTERSECTION AT BROADWAY)
PAVEMENT MARKING PLAN
SCALE: AS SHOWN DATE:



FED ROAD REG NO	STATE	FEDERAL PROJECT	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				

N.Y.S.DOT PROJECT IDENTIFICATION NO

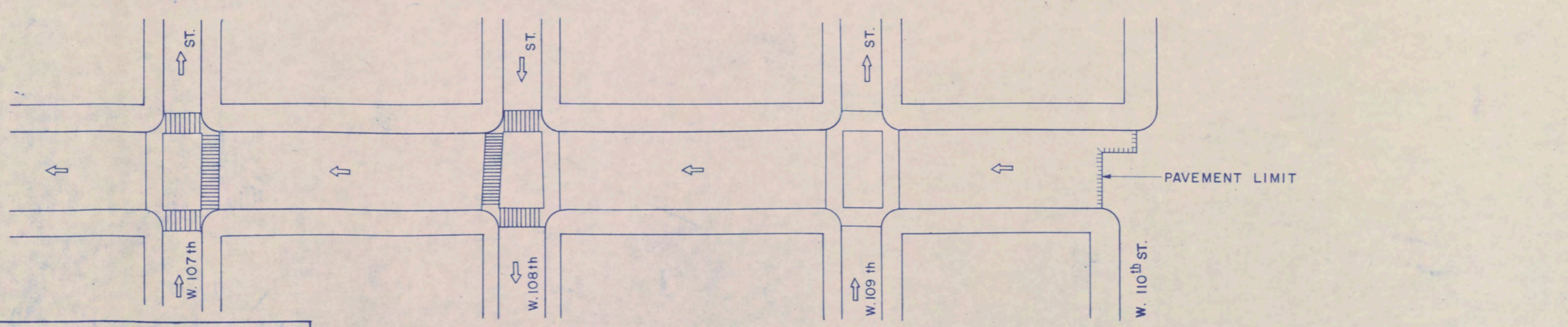
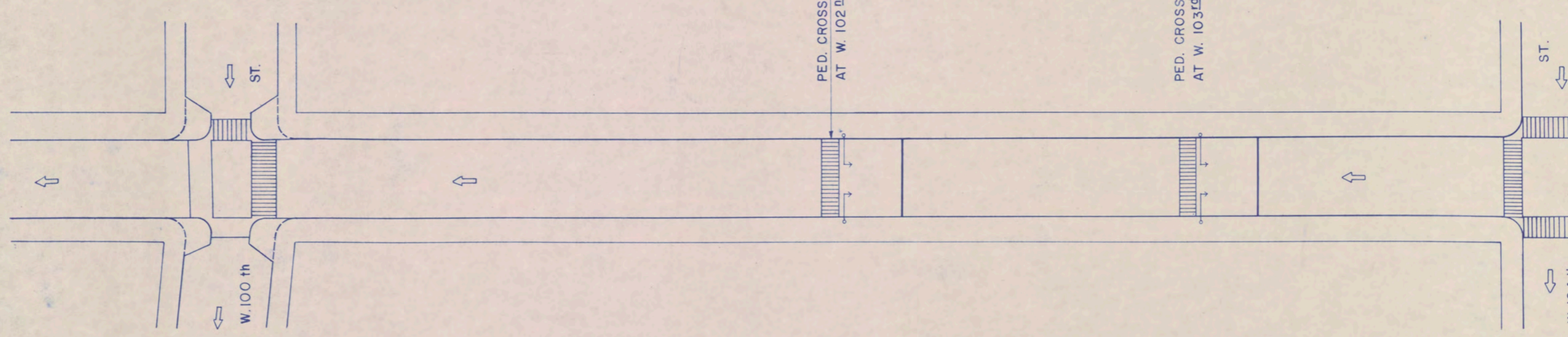
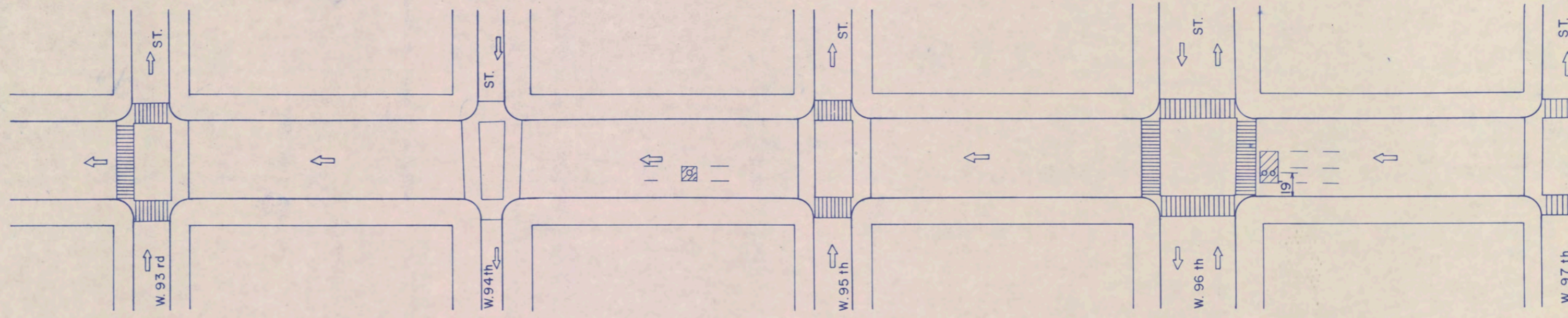
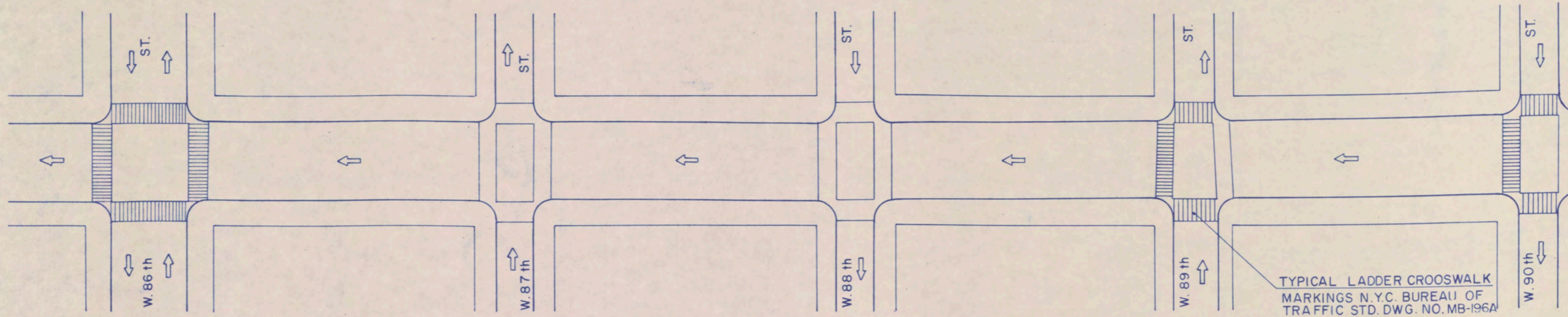


DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

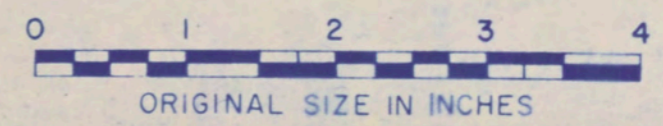
**COLUMBUS AVENUE
PAVEMENT MARKING PLAN**

SCALE: 1" = 60' DATE:

SEE SHEET # 15B
FOR CONTINUATION




DANIEL FRANKFURT, P.C. consulting engineers
 800 SECOND AVENUE NEW YORK, N.Y.

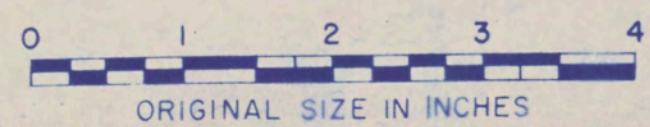
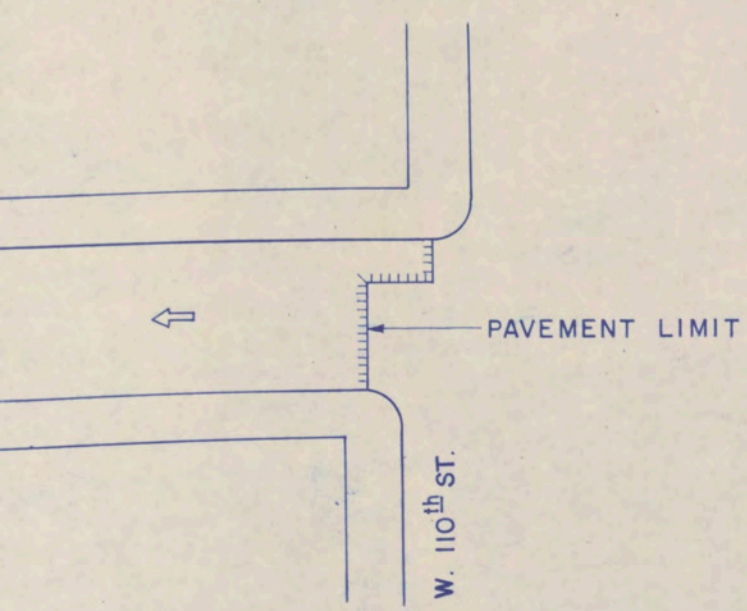
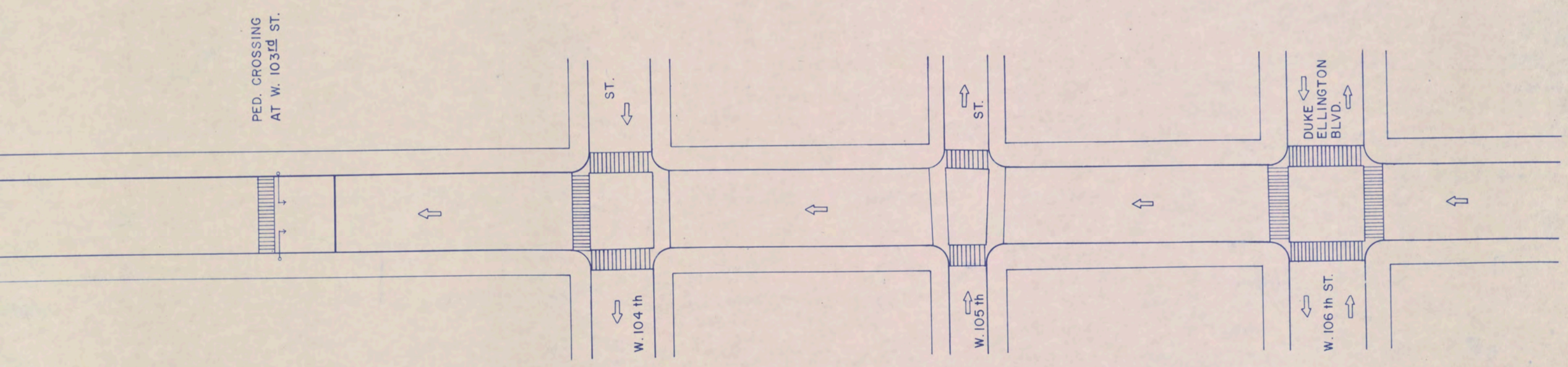
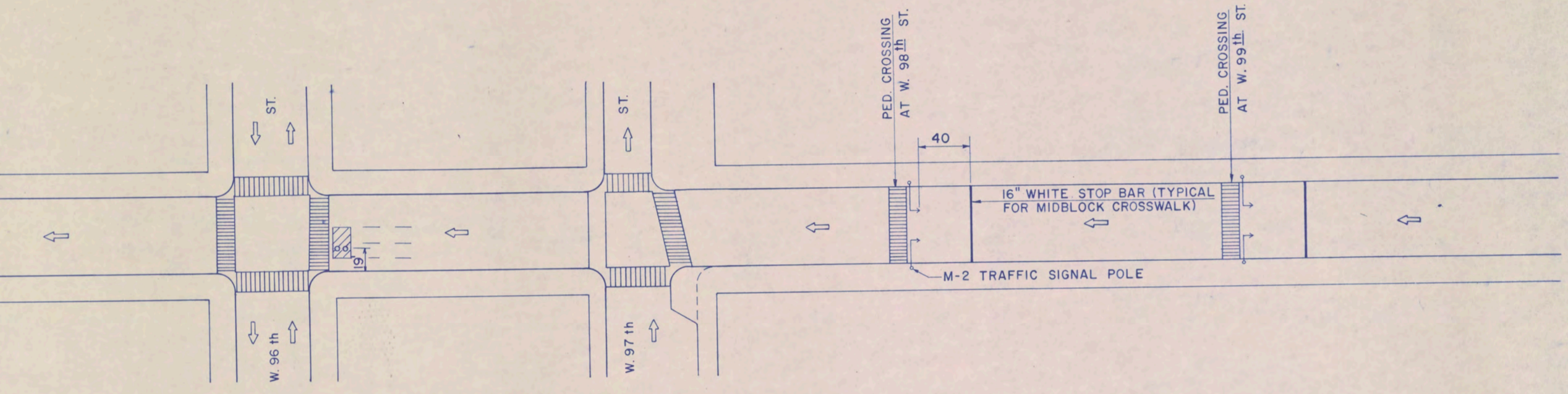
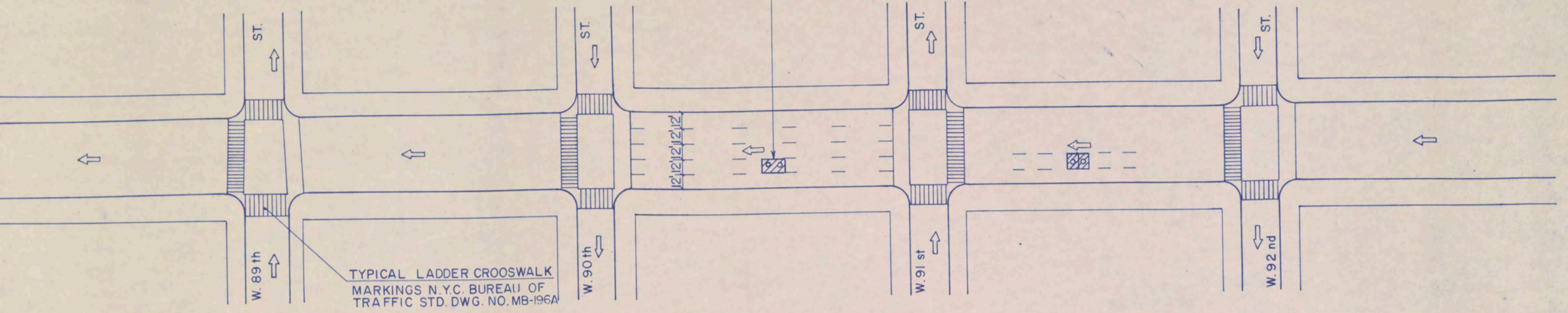


FED ROAD REG NO	STATE	FEDERAL PROJECT	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				

N.Y.S.D.O.T. PROJECT IDENTIFICATION NO.

CONCRETE COLLARS AROUND STEAM MANHOLES. SEE SHEET NO. 6 (TYP.)

TYPICAL LADDER CROSSWALK MARKINGS N.Y.C. BUREAU OF TRAFFIC STD. DWG. NO. MB-196A

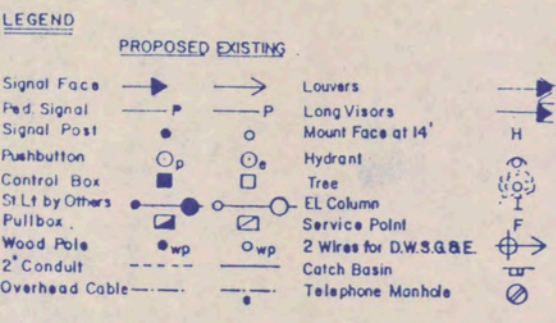
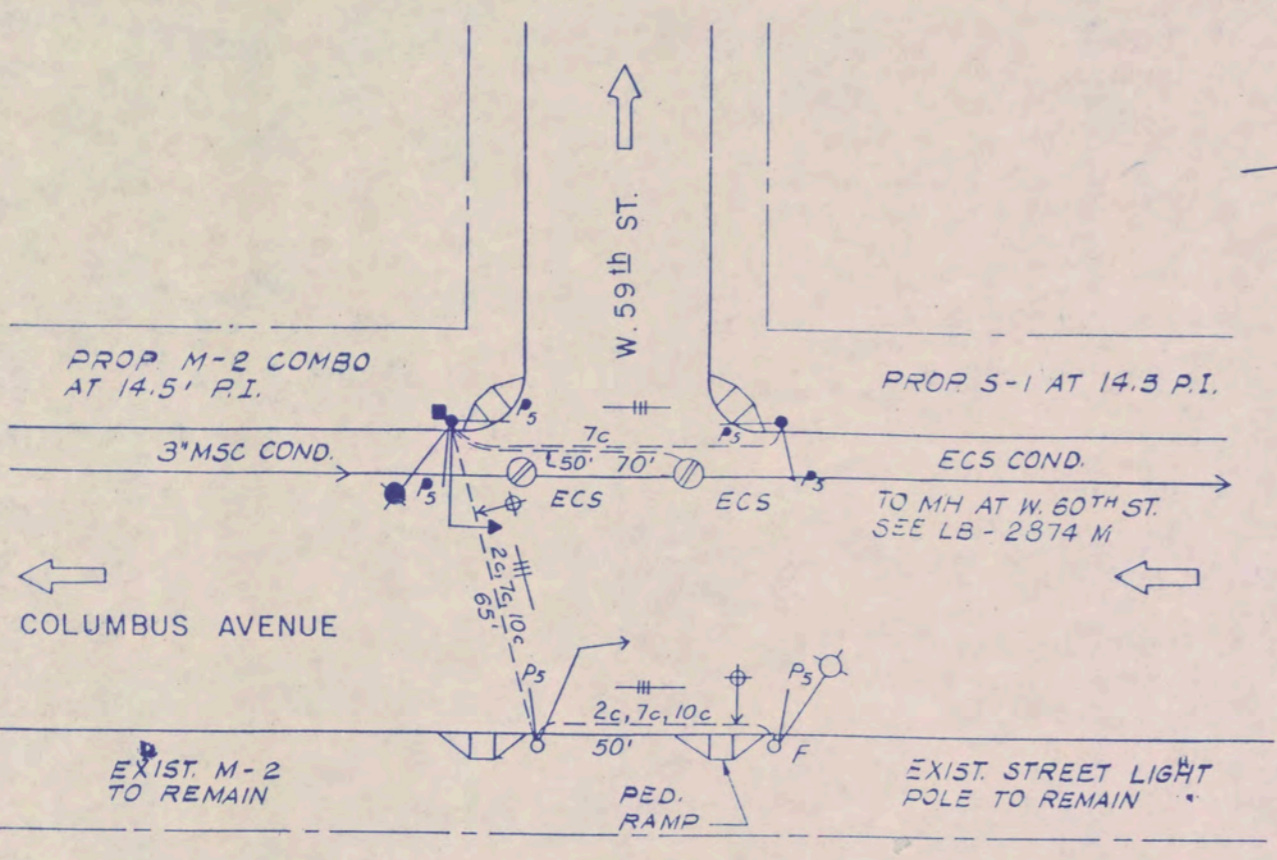


DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

**COLUMBUS AVENUE
PAVEMENT MARKING PLAN**

SCALE: 1" = 60' DATE:

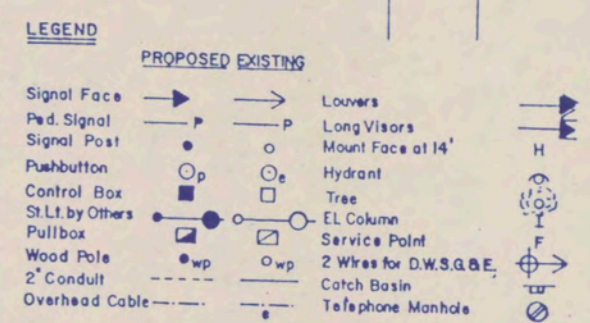
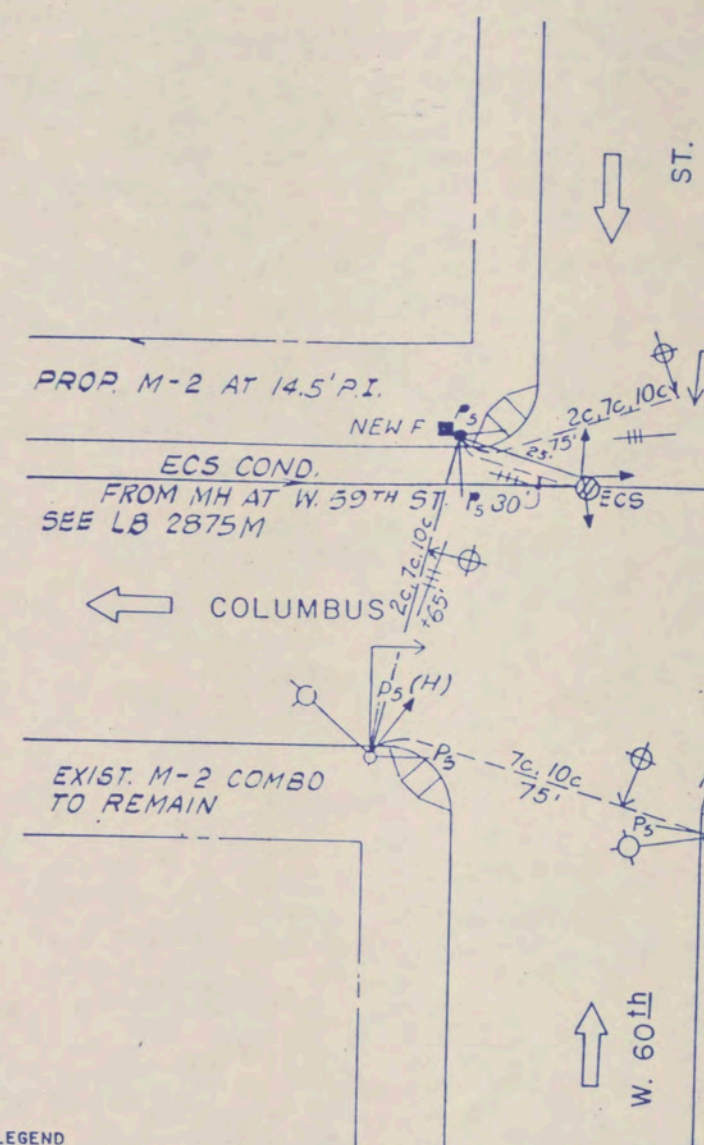
90 HY
E#



NOTES:

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

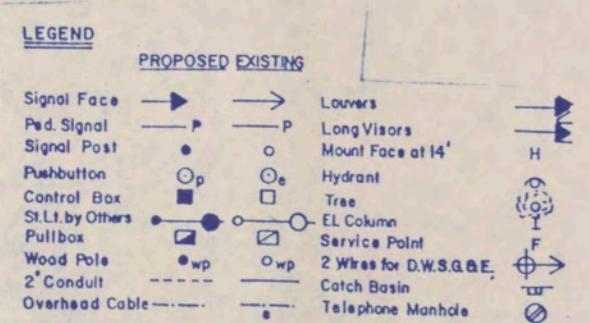
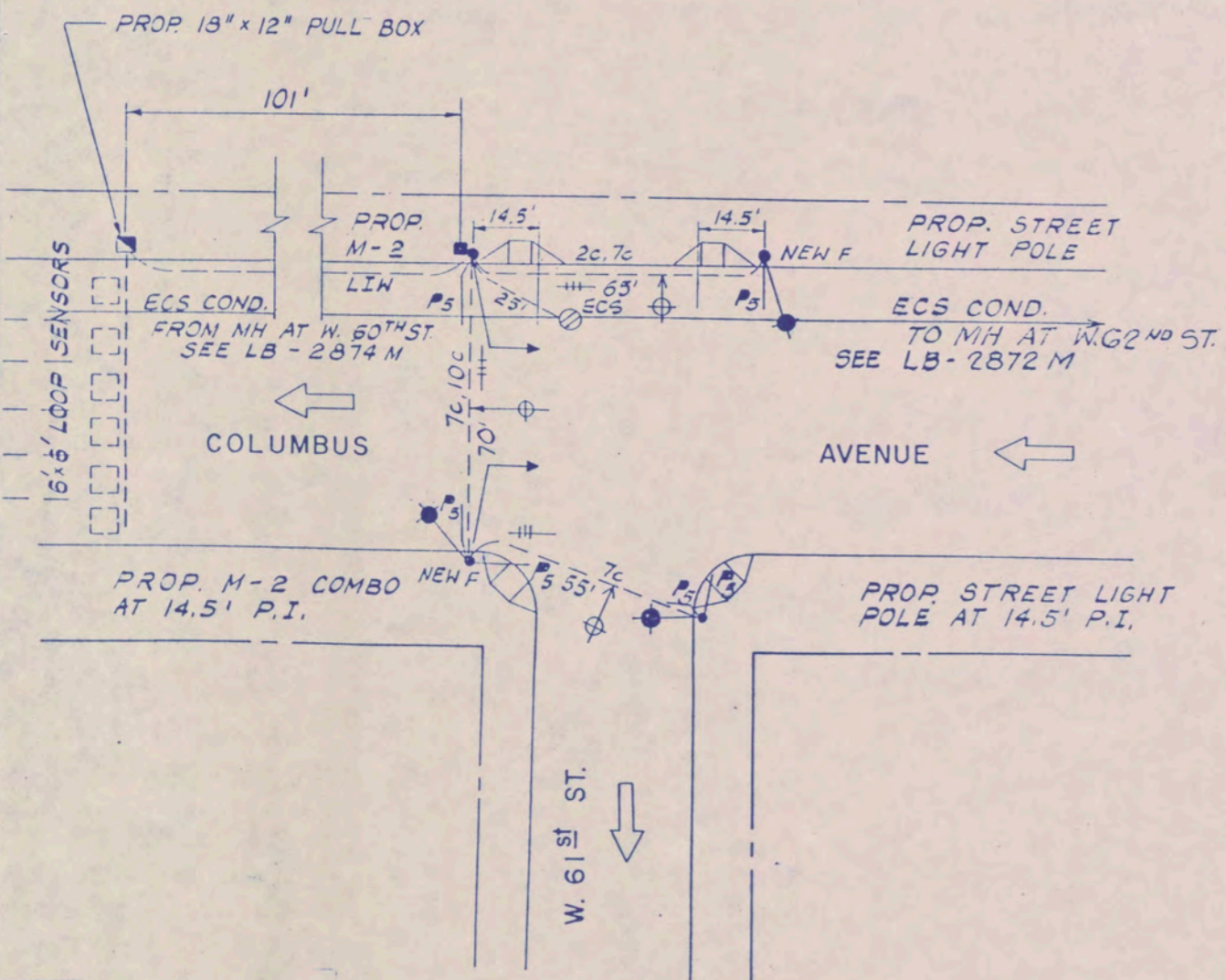
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NO.	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-II QUEENS PLAZA NORTH L.I.C., N.Y. 11010				
COLUMBUS AVENUE & W. 59th ST.				
APPROVED	Drawn by	DRAWING NO.		
BY COMMISSIONER	Checked by	LB 2875 M		
	Scale: 1" = 30'			
	Date			



NOTES:

1. CONTR...
2. EXIST. MUST

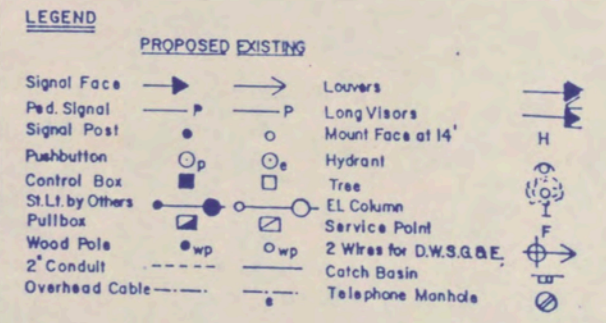
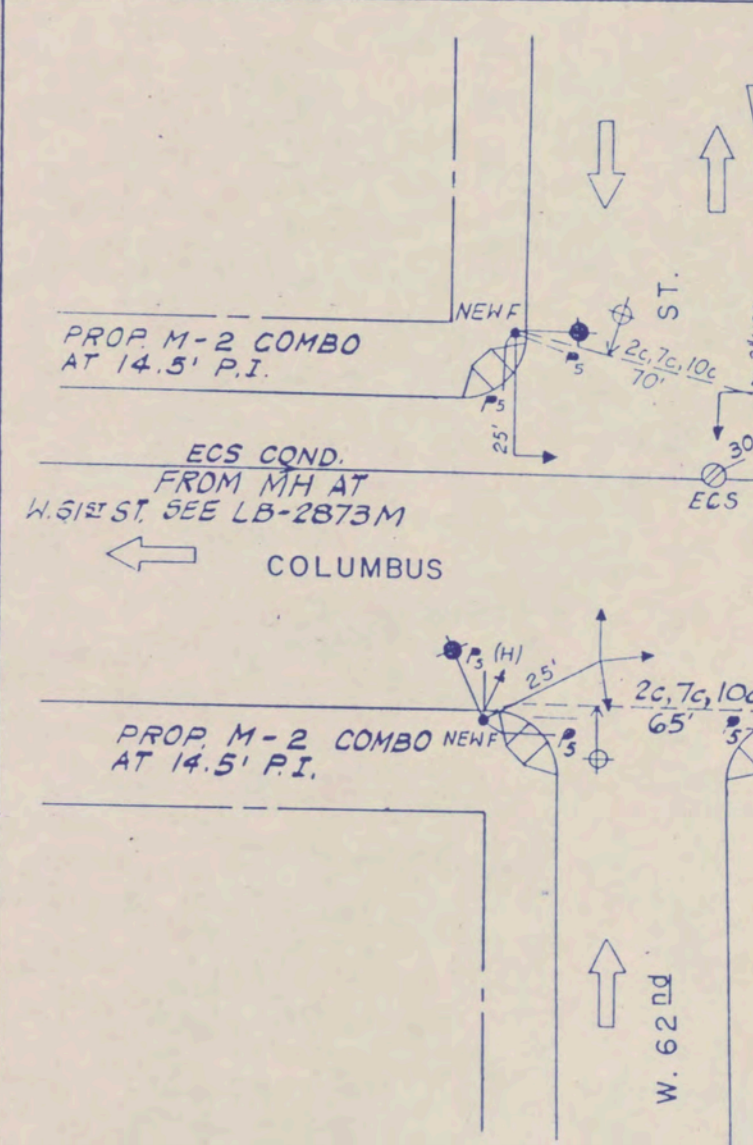
90 HY
E#



NOTES:

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

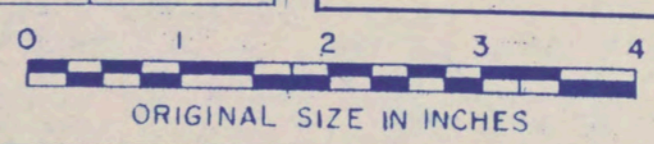
7				
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NO.	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-II QUEENS PLAZA NORTH L.I.C., N.Y. 11010				
COLUMBUS AVENUE & W. 61st ST.				
APPROVED	Drawn by	DRAWING NO.		
BY COMMISSIONER	Checked by	LB 2873 M		
	Scale: 1" = 30'			
	Date			



NOTES:

1. CONTR...
2. EXIST. MUST

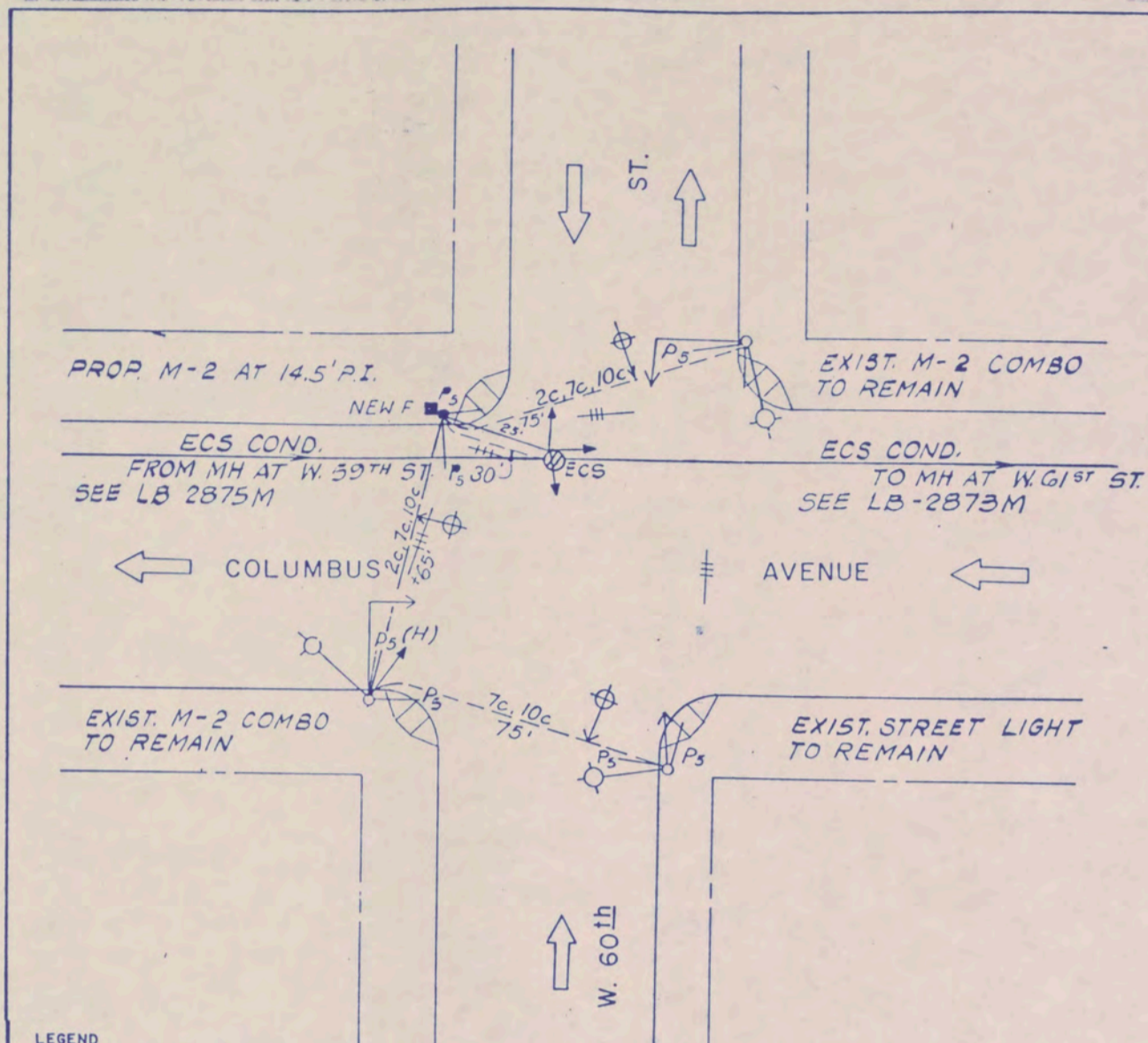
DANIEL FRANKFURT, P.C. consulting engineers
800 SECOND AVENUE NEW YORK, N.Y.



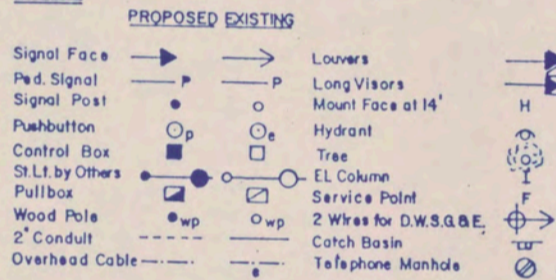
FED ROAD REG NO	STATE	FEDERAL PROJECT	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				

NYS DOT PROJECT IDENTIFICATION NO.

90 HY
E#



LEGEND



NOTES

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO	DATE	BY	DESCRIPTION	I.A.S.
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REVISIONS
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
28-11 QUEENS PLAZA NORTH
L.I.C., N.Y. 11010

COLUMBUS AVENUE
& W. 60th ST.

APPROVED BY	Drawn by	DRAWING NO.
COMMISSIONER	Checked by	Scale 1" = 30'
	Date	LB-2874.M.

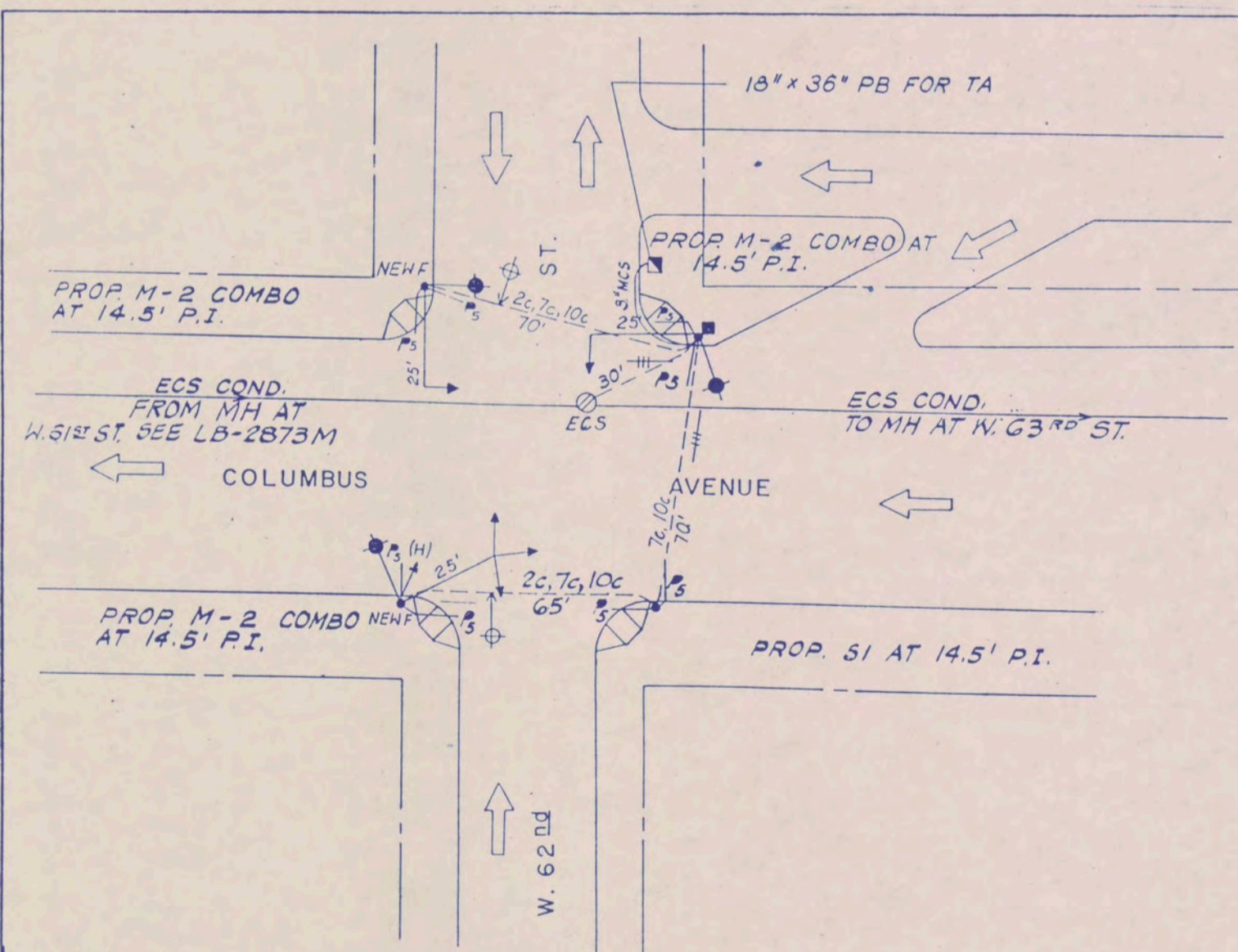
DATE	BY	DESCRIPTION	I.A.S.
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REVISIONS
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
QUEENS PLAZA NORTH
L.I.C., N.Y. 11010

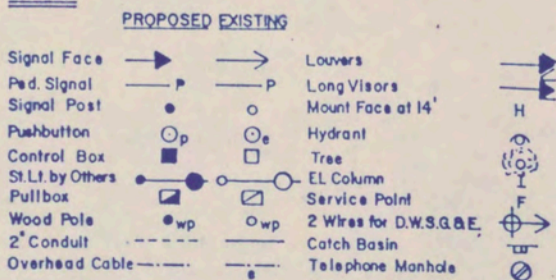
COLUMBUS AVENUE
& W. 59th ST.

Drawn by	DRAWING NO.
Checked by	Scale 1" = 30'
Date	LB-2875.M.

90 HY
E#



LEGEND



NOTES

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO	DATE	BY	DESCRIPTION	I.A.S.
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REVISIONS
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
28-11 QUEENS PLAZA NORTH
L.I.C., N.Y. 11010

COLUMBUS AVENUE
& W. 62nd ST.

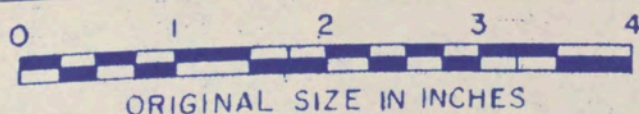
APPROVED BY	Drawn by	DRAWING NO.
COMMISSIONER	Checked by	Scale 1" = 30'
	Date	LB-2872.M.

DATE	BY	DESCRIPTION	I.A.S.
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REVISIONS
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
QUEENS PLAZA NORTH
L.I.C., N.Y. 11010

COLUMBUS AVENUE
& W. 61st ST.

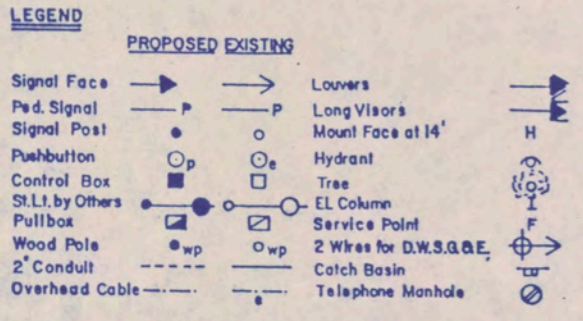
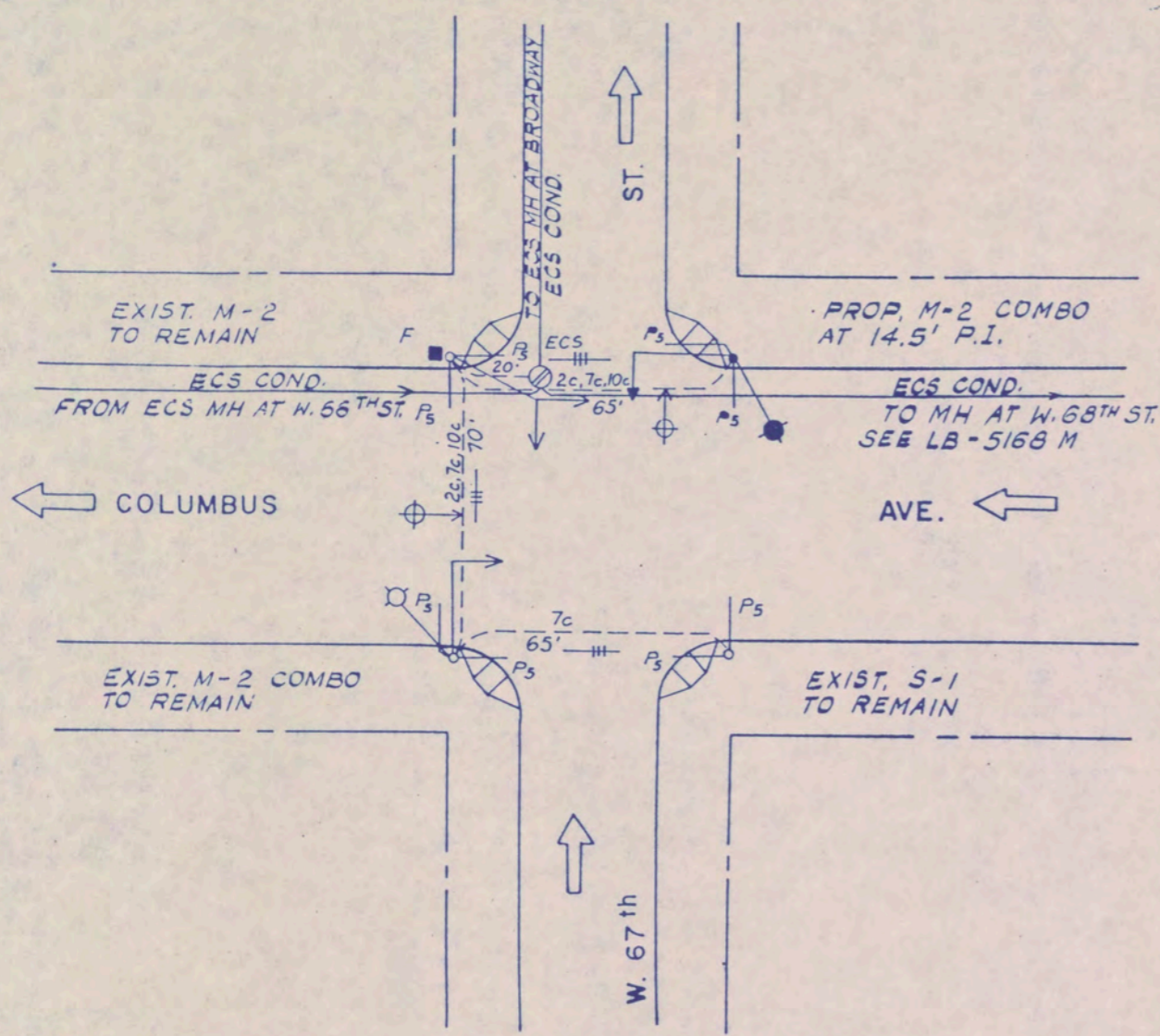
Drawn by	DRAWING NO.
Checked by	Scale 1" = 30'
Date	LB-2873.M.



DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK
COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59th ST. TO W. 110th ST.
(EXCLUDING INTERSECTION AT BROADWAY)
TRAFFIC SIGNAL PLAN

SCALE: AS SHOWN DATE:

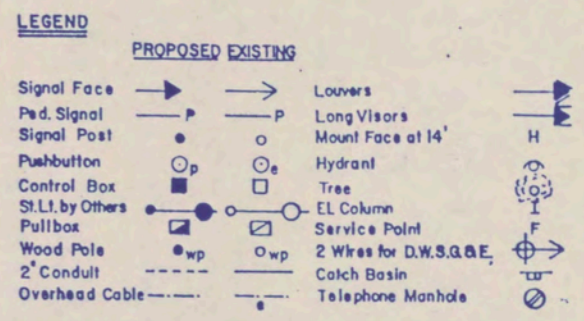
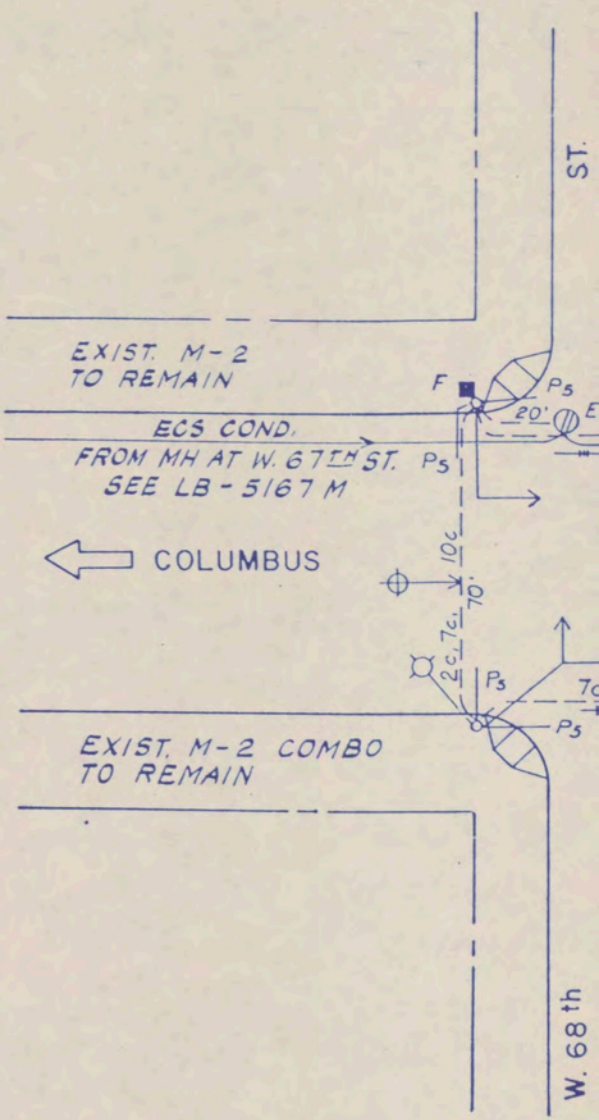
90 HY
E#



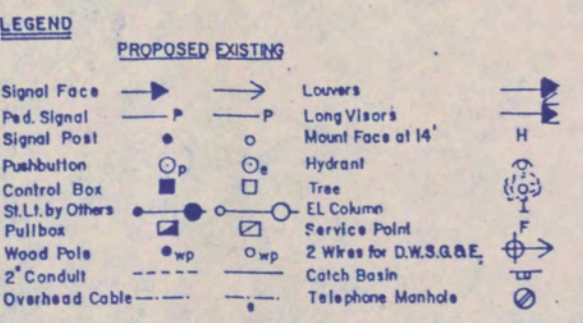
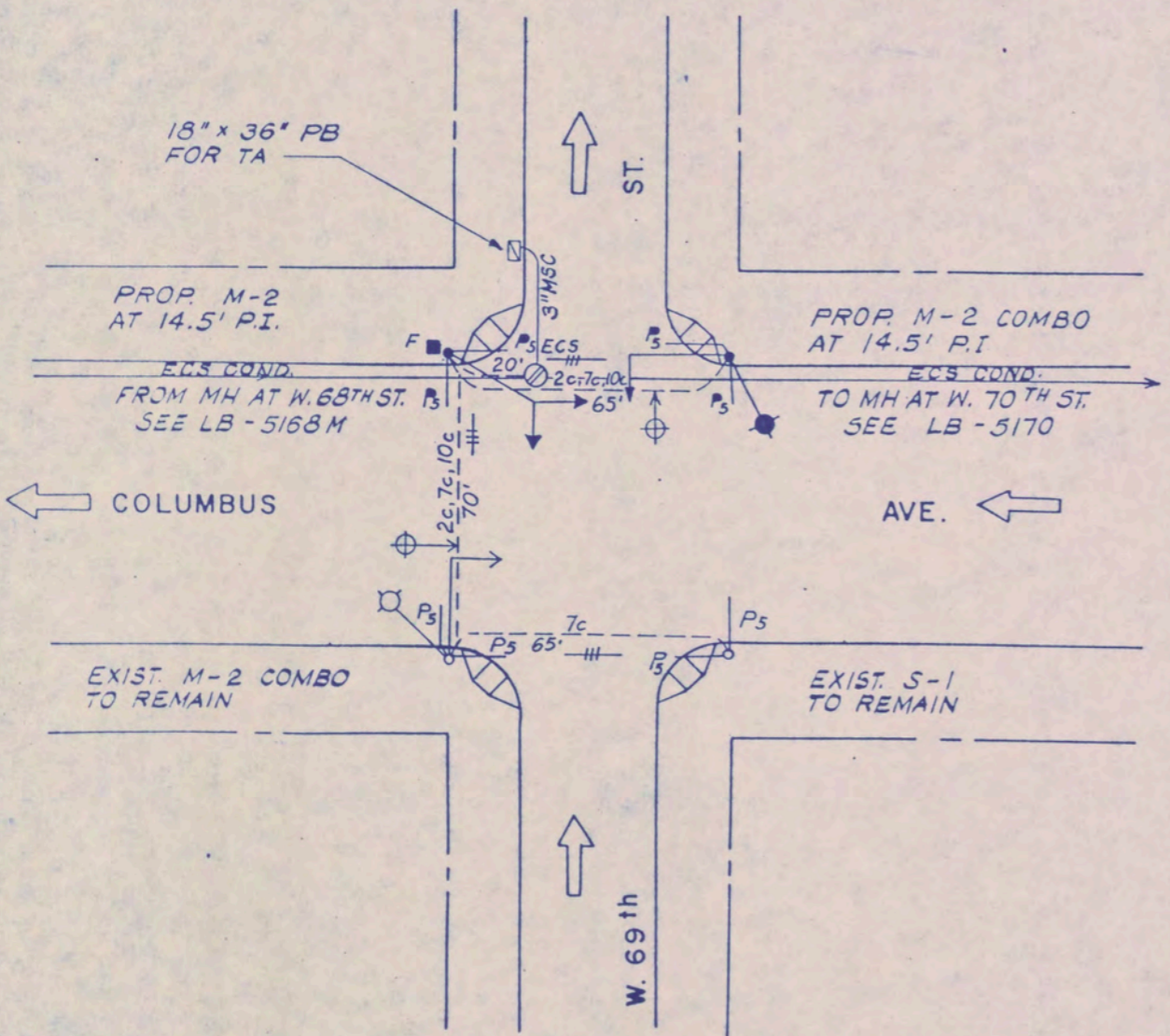
NOTES:

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE & W. 67th ST.				
APPROVED	Drawn by	Checked by	DRAWING NO.	
BY	COMMISSIONER	Date	Scale 1"=30'	LB-5167 M



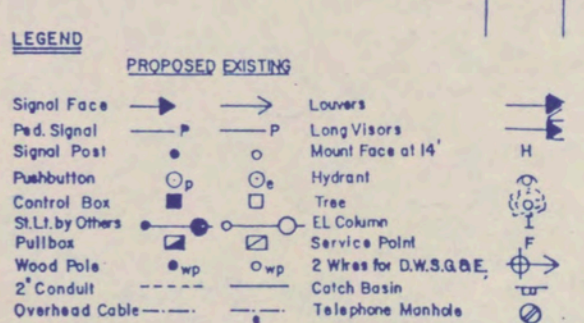
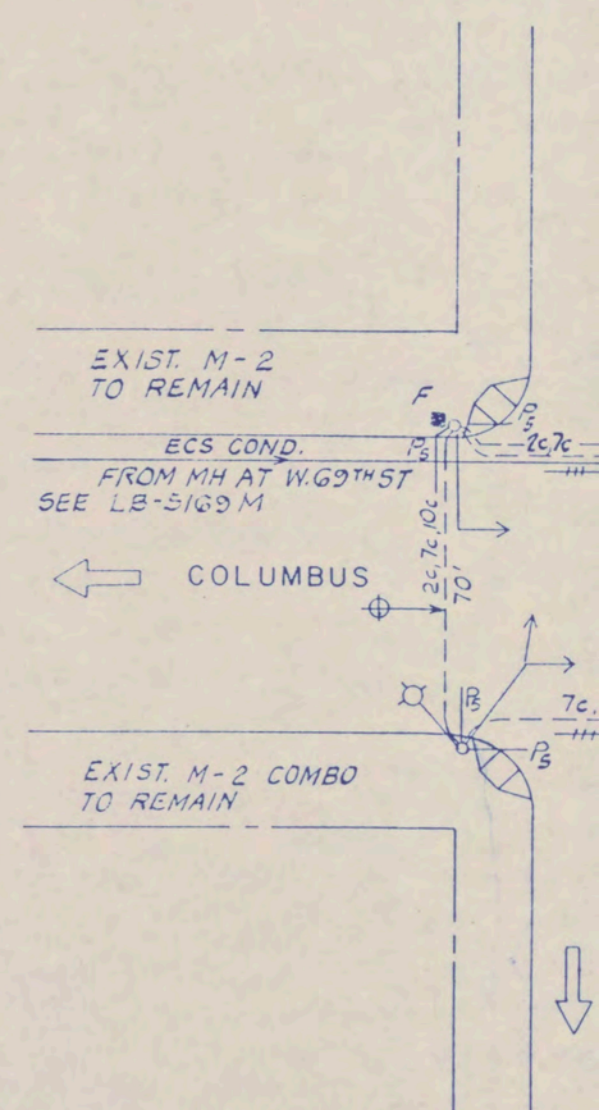
90 HY
E#



NOTES:

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

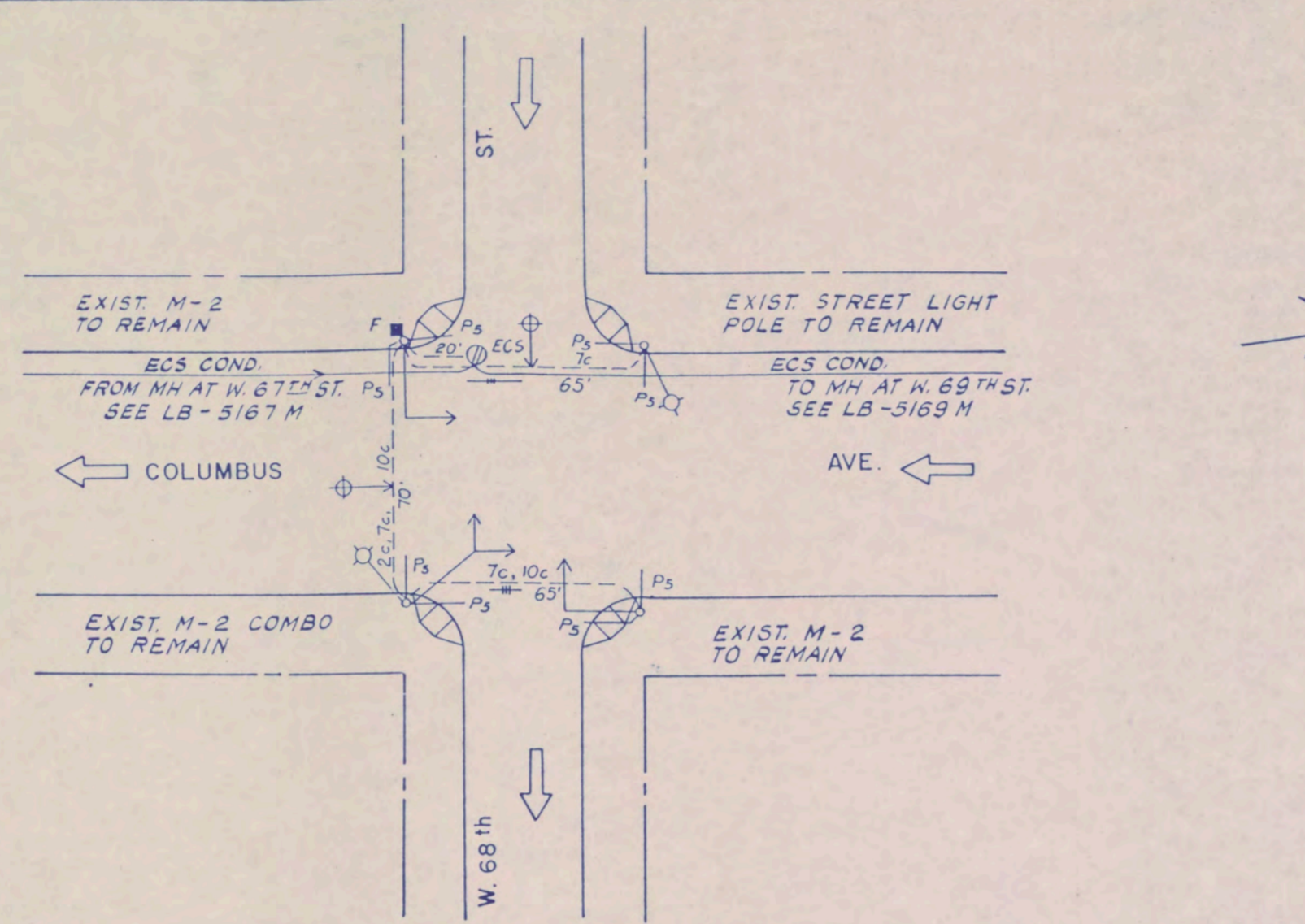
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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE & W. 69th ST.				
APPROVED	Drawn by	Checked by	DRAWING NO.	
BY	COMMISSIONER	Date	Scale 1"=30'	LB-5169 M



90 HY
E#

FED ROAD REG NO	STATE	FEDERAL PROJECT	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				
N.Y.S.DOT PROJECT IDENTIFICATION NO					

90 HY
E#



LEGEND

Signal Face	→	→	Louvers	⊥
Ped. Signal	→	→	Long Visors	⊥
Signal Post	○	○	Mount Face at 14'	⊥
Pushbutton	○	○	Hydrant	⊥
Control Box	□	□	Tree	⊥
St.LI. by Others	○	○	EL Column	⊥
Pullbox	□	□	Service Point	⊥
Wood Pole	○	○	2 Wires for D.W.S.G.&E.	⊥
2" Conduit	---	---	Catch Basin	⊥
Overhead Cable	---	---	Telephone Manhole	⊥

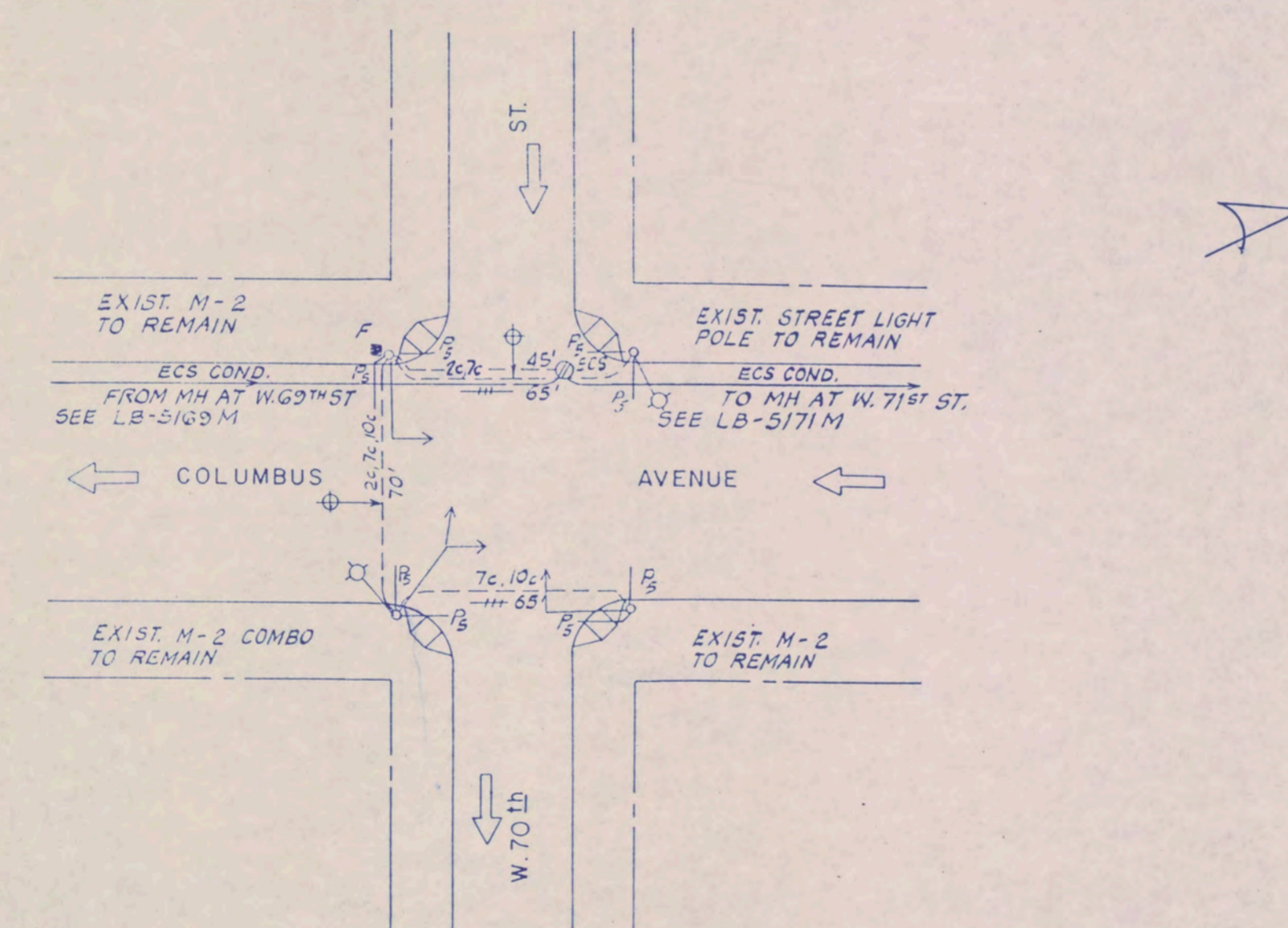
- NOTES:**
1. CONTROLLER TO BE FIXED TIME.
 2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE & W. 67 TH ST.				
APPROVED BY	Drawn by	Checked by	DRAWING NO	
COMMISSIONER			LB-5167 M	
	Scale	Date		
	1" = 30'			

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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE & W. 68 TH ST.				
APPROVED BY	Drawn by	Checked by	DRAWING NO	
COMMISSIONER			LB-5168 M	
	Scale	Date		
	1" = 30'			

90 HY
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90 HY
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LEGEND

Signal Face	→	→	Louvers	⊥
Ped. Signal	→	→	Long Visors	⊥
Signal Post	○	○	Mount Face at 14'	⊥
Pushbutton	○	○	Hydrant	⊥
Control Box	□	□	Tree	⊥
St.LI. by Others	○	○	EL Column	⊥
Pullbox	□	□	Service Point	⊥
Wood Pole	○	○	2 Wires for D.W.S.G.&E.	⊥
2" Conduit	---	---	Catch Basin	⊥
Overhead Cable	---	---	Telephone Manhole	⊥

- NOTES:**
1. CONTROLLER TO BE FIXED TIME.
 2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE & W. 69 TH ST.				
APPROVED BY	Drawn by	Checked by	DRAWING NO	
COMMISSIONER			LB-5169 M	
	Scale	Date		
	1" = 30'			

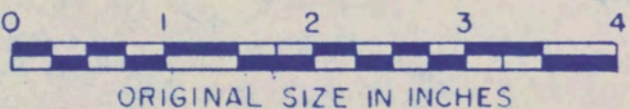
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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE & W. 70 TH ST.				
APPROVED BY	Drawn by	Checked by	DRAWING NO	
COMMISSIONER			LB-5170 M	
	Scale	Date		
	1" = 30'			

DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

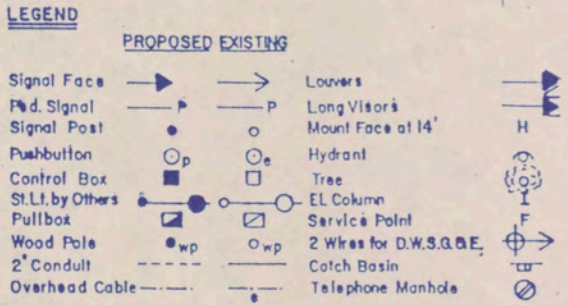
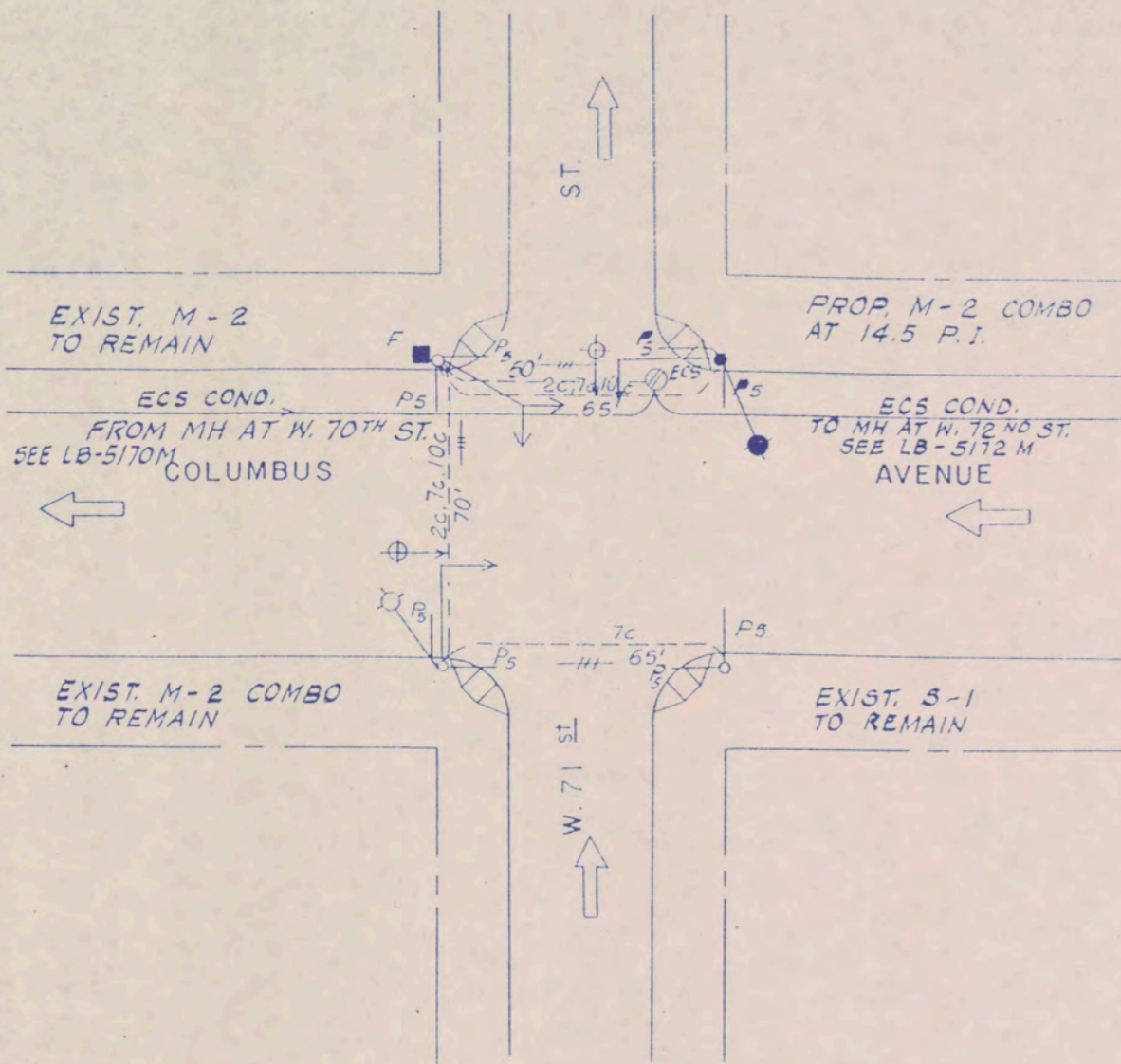
COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59TH ST. TO W. 110TH ST.
(EXCLUDING INTERSECTION AT BROADWAY)

TRAFFIC SIGNAL PLAN

SCALE: AS SHOWN DATE:



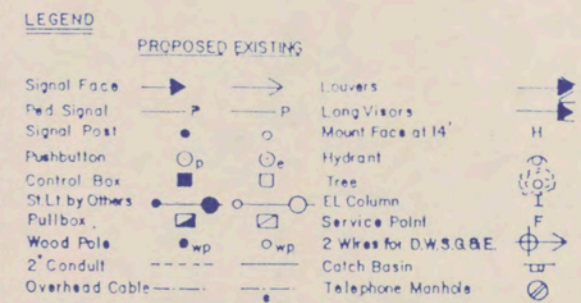
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NOTES

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO.	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE 8 W. 71 ST.				
APPROVED	Drawn by	DRAWING NO.		
BY	Checked by	Scale: 1" = 30'	LB-5171M	
COMMISSIONER	Date:			

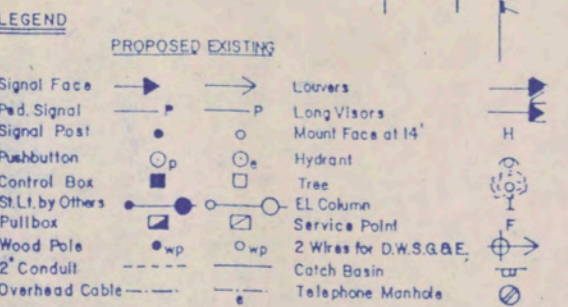
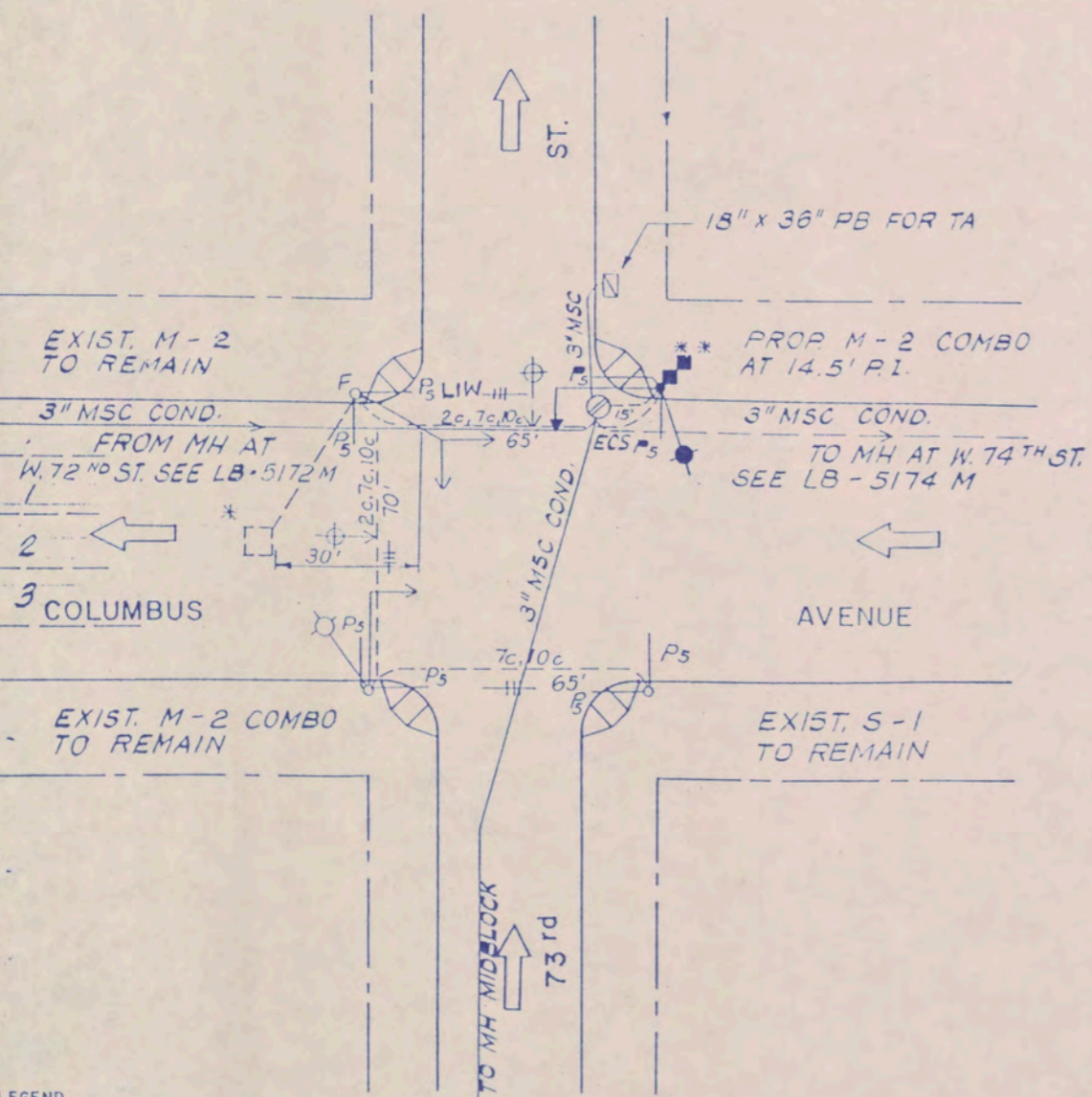


NOTES

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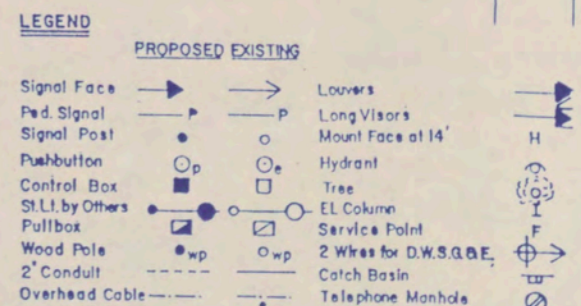
90 HY
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NOTES:

1. CONTROLLER TO BE FIXED TIME.
 2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.
- * INSTALL 6' x 6' LOOP SENSOR IN CENTER OF 2nd MOVING LANE.
- ** POWER SUPPLY, INSTALL GROUNDWIRE AS DIRECTED BY THE ENGINEER.

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NO.	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE 8 W. 73 ST.				
APPROVED	Drawn by	DRAWING NO.		
BY	Checked by	Scale: 1" = 30'	LB-5173M	
COMMISSIONER	Date:			

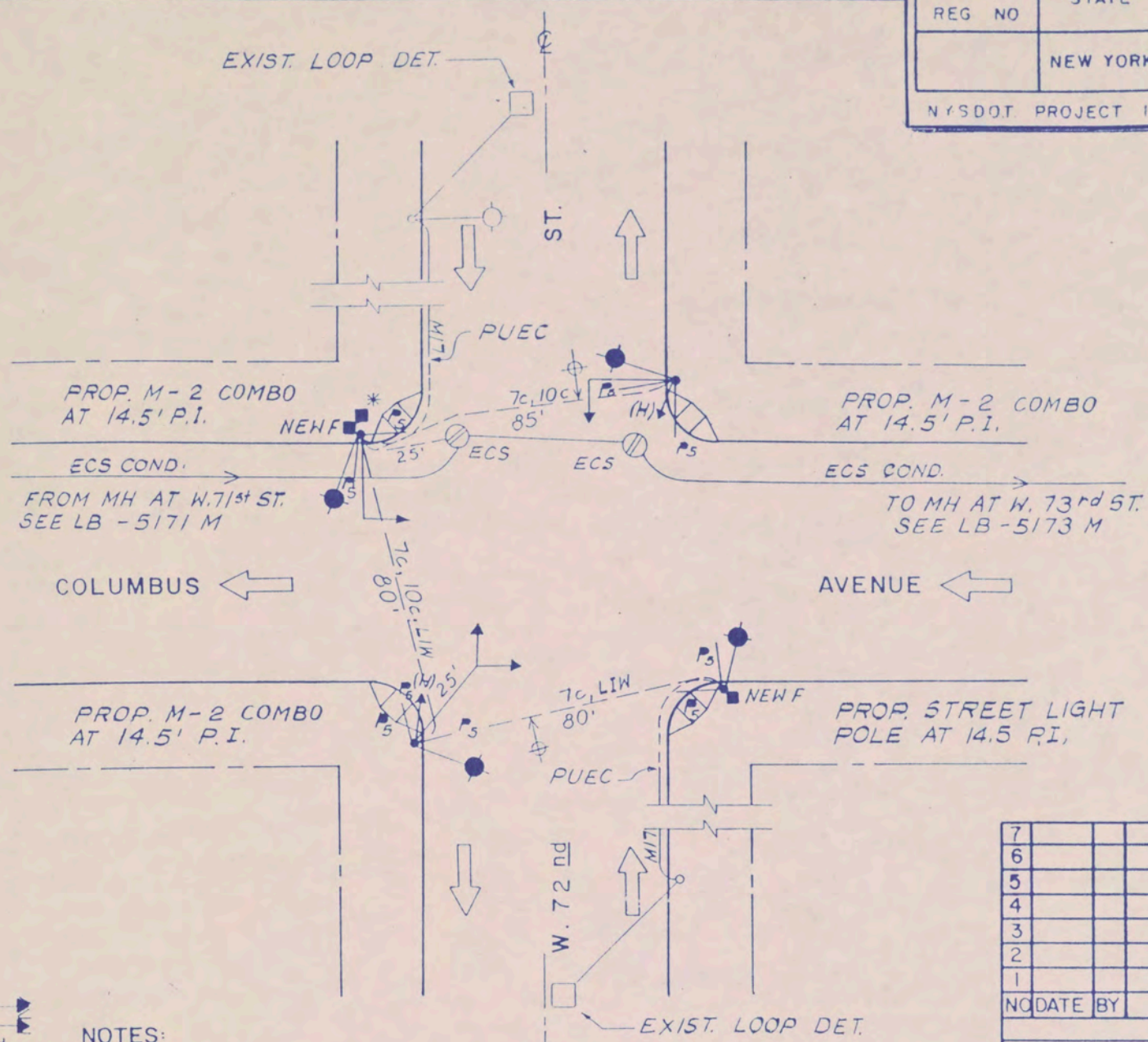


NOTES

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FED ROAD REG NO	STATE	FEDERAL PROJECT	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				
NYS DOT PROJECT IDENTIFICATION NO					



LEGEND

PROPOSED	EXISTING	
Signal Face	→	Lowers
Ped. Signal	→	Long Visors
Signal Post	○	Mount Face at 14'
Pushbutton	○	Hydrant
Control Box	□	Tree
St. Lt. by Others	○	EL Column
Pullbox	□	Service Point
Wood Pole	○	2 Wires for D.W.S.G.B.E.
2" Conduit	---	Catch Basin
Overhead Cable	---	Telephone Manhole

NOTES:

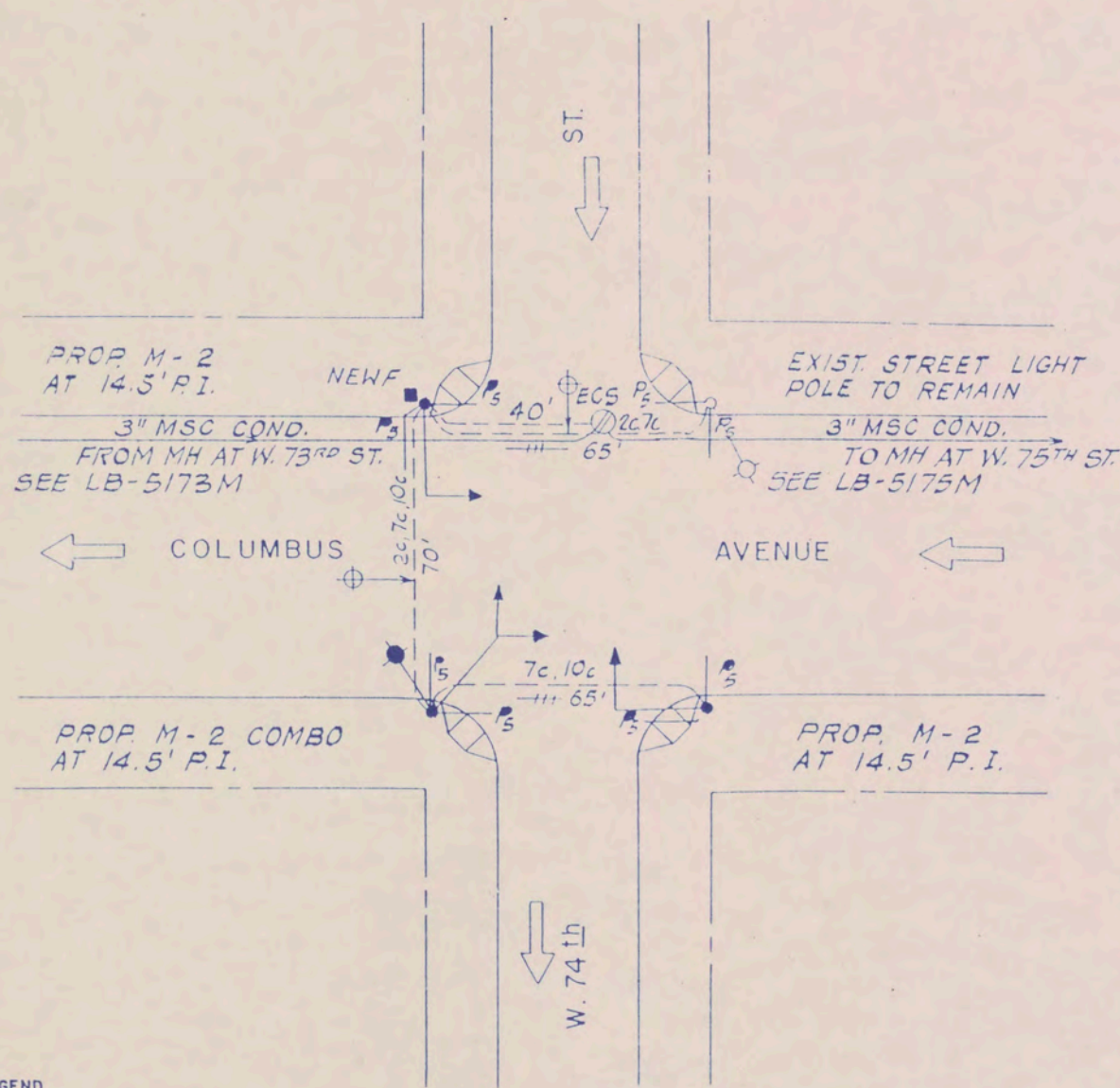
- CONTROLLER TO BE FIXED TIME.
 - EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.
- * AUX. CABINET.

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REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & W 72 nd ST.			
APPROVED	Drawn by	DRAWING NO.	
By	Checked by	LB-5172M	
COMMISSIONER	Date	Scale: 1" = 30'	

DATE	BY	DESCRIPTION	I.A.S.
REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & W 71 st ST.			
APPROVED	Drawn by	DRAWING NO.	
By	Checked by	LB-5171M	
COMMISSIONER	Date	Scale: 1" = 30'	

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LEGEND

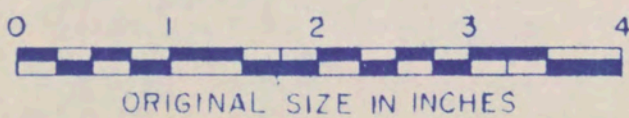
PROPOSED	EXISTING	
Signal Face	→	Lowers
Ped. Signal	→	Long Visors
Signal Post	○	Mount Face at 14'
Pushbutton	○	Hydrant
Control Box	□	Tree
St. Lt. by Others	○	EL Column
Pullbox	□	Service Point
Wood Pole	○	2 Wires for D.W.S.G.B.E.
2" Conduit	---	Catch Basin
Overhead Cable	---	Telephone Manhole

NOTES:

- CONTROLLER TO BE FIXED TIME.
- EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

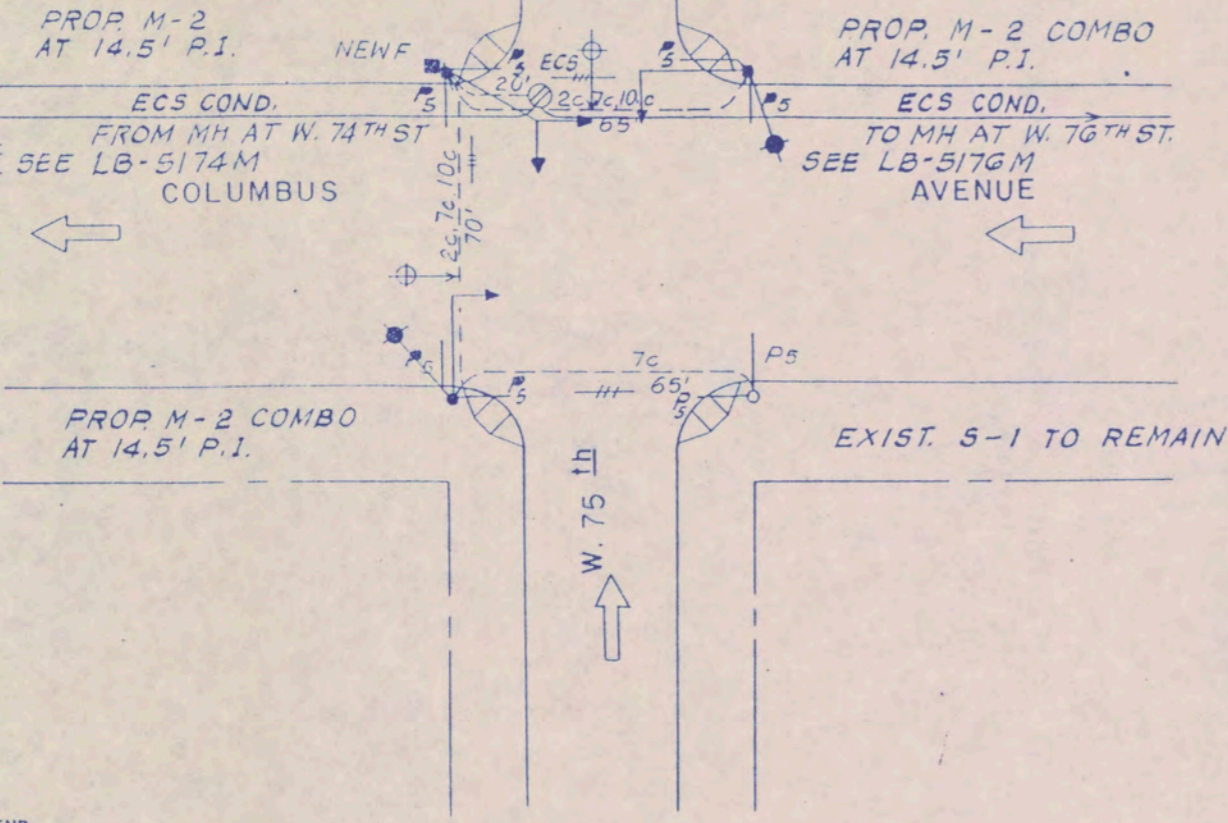
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REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & W 74 th ST.			
APPROVED	Drawn by	DRAWING NO.	
By	Checked by	LB-5174M	
COMMISSIONER	Date	Scale: 1" = 30'	

DATE	BY	DESCRIPTION	I.A.S.
REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & W 73 th ST.			
APPROVED	Drawn by	DRAWING NO.	
By	Checked by	LB-5173M	
COMMISSIONER	Date	Scale: 1" = 30'	



DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK
COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59th ST. TO W. 110th ST.
(EXCLUDING INTERSECTION AT BROADWAY)
TRAFFIC SIGNAL PLAN
SCALE: AS SHOWN DATE:

90 HY
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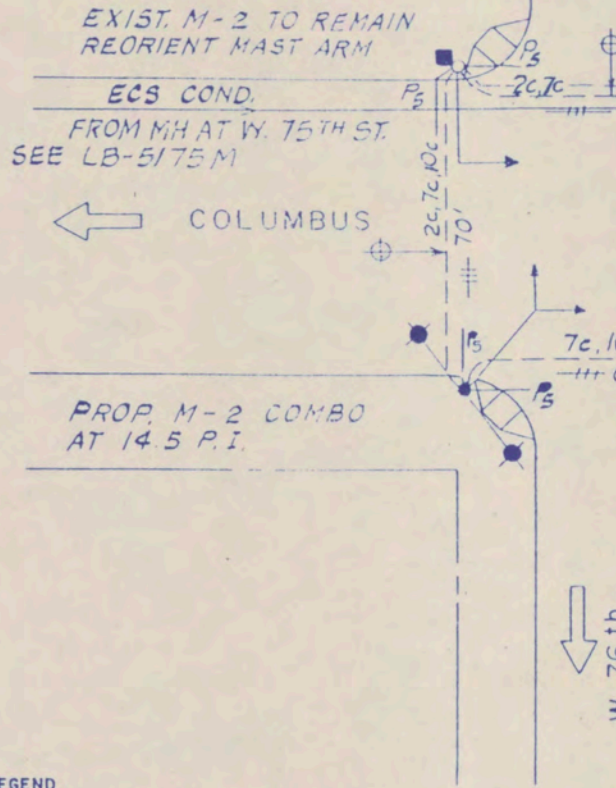


LEGEND

PROPOSED		EXISTING	
Signal Face	→	Louvers	↔
Ped. Signal	→	Long Visors	↔
Signal Post	•	Mount Face at 14'	H
Pushbutton	○	Hydrant	⊕
Control Box	□	Tree	⊕
ST.LI. by Others	○	EL Column	⊕
Pullbox	□	Service Point	⊕
Wood Pole	•	2 Wires for D.W.S.G.B.E.	⊕
2" Conduit	---	Catch Basin	⊕
Overhead Cable	---	Telephone Manhole	⊕

- NOTES**
1. CONTROLLER TO BE FIXED TIME.
 2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

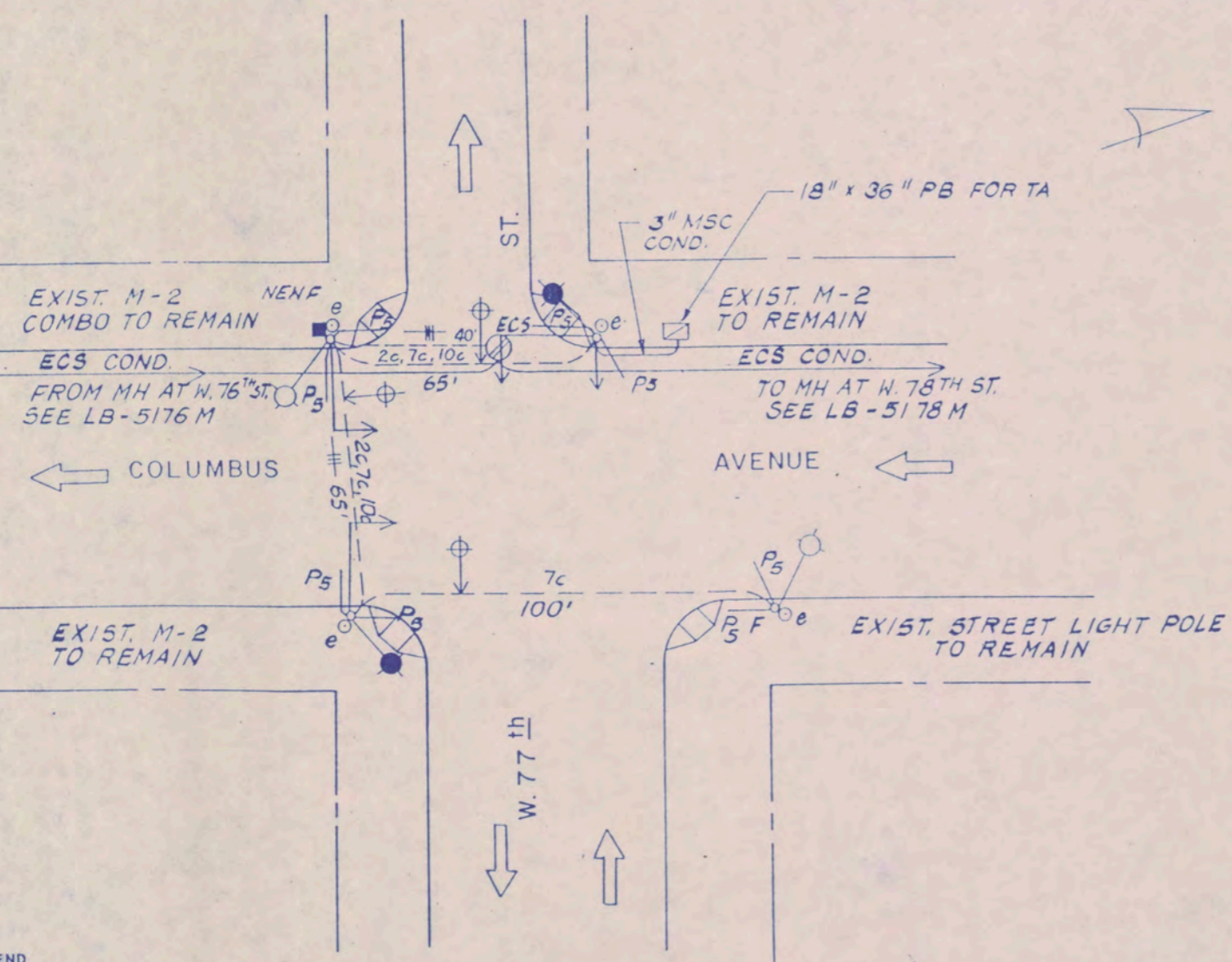
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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11010				
COLUMBUS AVENUE & W. 75th ST.				
APPROVED	Drawn by	DRAWING NO.		
BY	Checked by	Scale 1" = 30'	LB-5175M	
COMMISSIONER	Date			



LEGEND

PROPOSED		EXISTING	
Signal Face	→	Louvers	↔
Ped. Signal	→	Long Visors	↔
Signal Post	•	Mount Face at 14'	H
Pushbutton	○	Hydrant	⊕
Control Box	□	Tree	⊕
ST.LI. by Others	○	EL Column	⊕
Pullbox	□	Service Point	⊕
Wood Pole	•	2 Wires for D.W.S.G.B.E.	⊕
2" Conduit	---	Catch Basin	⊕
Overhead Cable	---	Telephone Manhole	⊕

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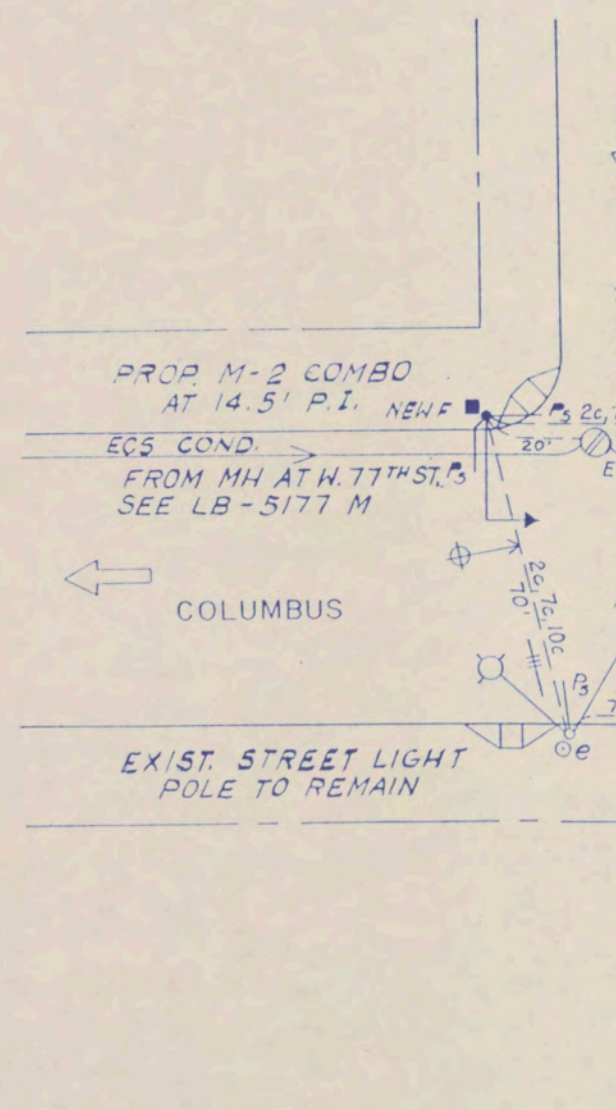


LEGEND

PROPOSED		EXISTING	
Signal Face	→	Louvers	↔
Ped. Signal	→	Long Visors	↔
Signal Post	•	Mount Face at 14'	H
Pushbutton	○	Hydrant	⊕
Control Box	□	Tree	⊕
ST.LI. by Others	○	EL Column	⊕
Pullbox	□	Service Point	⊕
Wood Pole	•	2 Wires for D.W.S.G.B.E.	⊕
2" Conduit	---	Catch Basin	⊕
Overhead Cable	---	Telephone Manhole	⊕

- NOTES**
1. CONTROLLER TO BE FIXED TIME.
 2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.
 3. REMOVE ALL PED. PUSHBUTTONS.

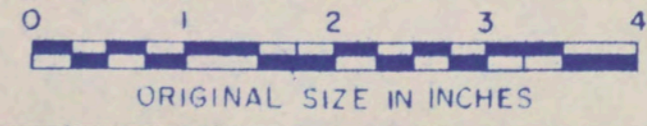
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REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11010				
COLUMBUS AVENUE & W. 77th ST.				
APPROVED	Drawn by	DRAWING NO.		
BY	Checked by	Scale 1" = 30'	LB-5177M	
COMMISSIONER	Date			



LEGEND

PROPOSED		EXISTING	
Signal Face	→	Louvers	↔
Ped. Signal	→	Long Visors	↔
Signal Post	•	Mount Face at 14'	H
Pushbutton	○	Hydrant	⊕
Control Box	□	Tree	⊕
ST.LI. by Others	○	EL Column	⊕
Pullbox	□	Service Point	⊕
Wood Pole	•	2 Wires for D.W.S.G.B.E.	⊕
2" Conduit	---	Catch Basin	⊕
Overhead Cable	---	Telephone Manhole	⊕

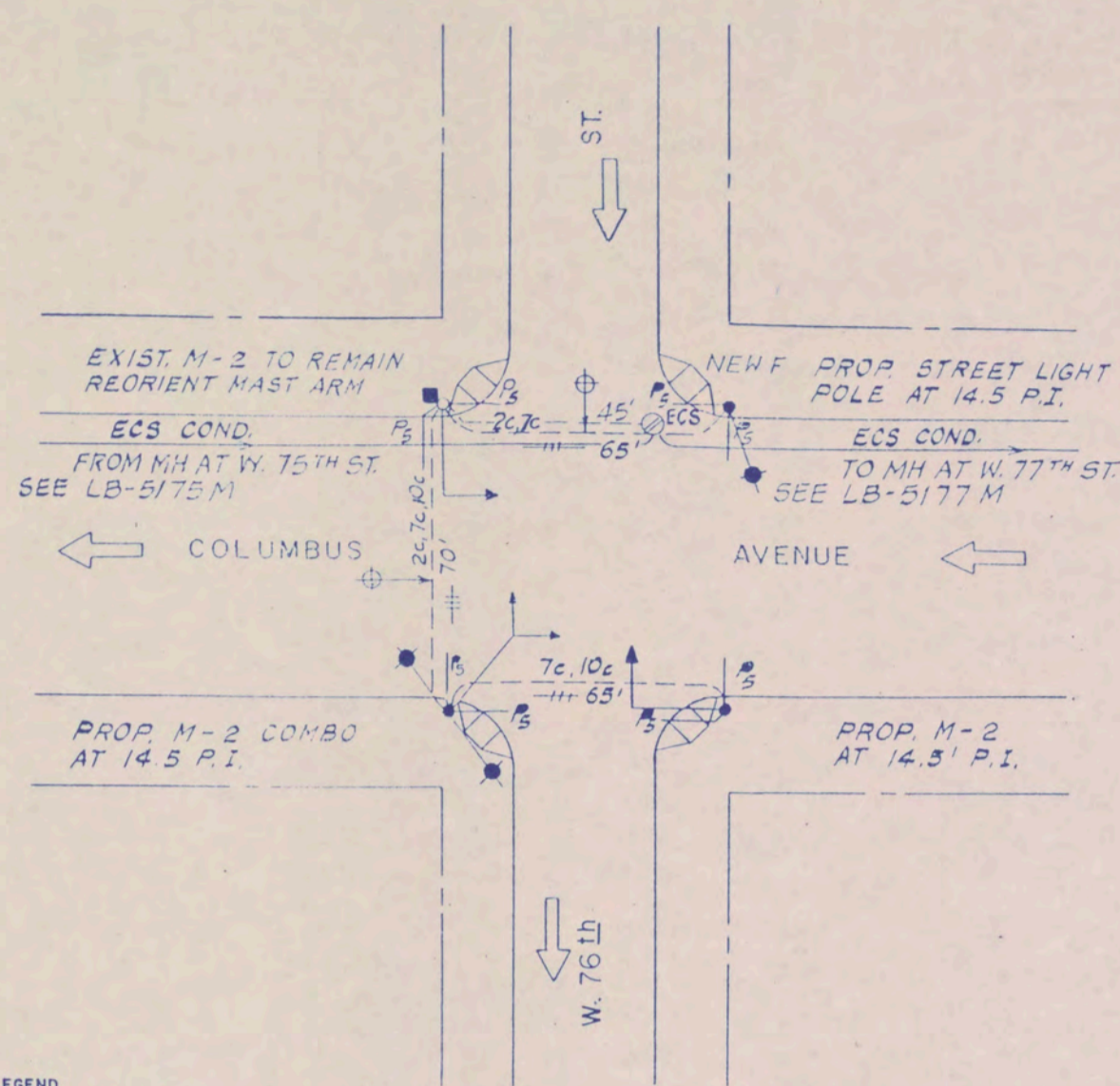
DANIEL FRANKFURT, P.C. consulting engineers
800 SECOND AVENUE NEW YORK, N.Y.



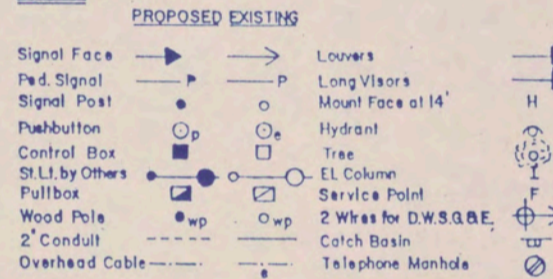
FED. ROAD REG NO	STATE	FEDERAL PROJECT	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				

NYSDOT PROJECT IDENTIFICATION NO

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LEGEND



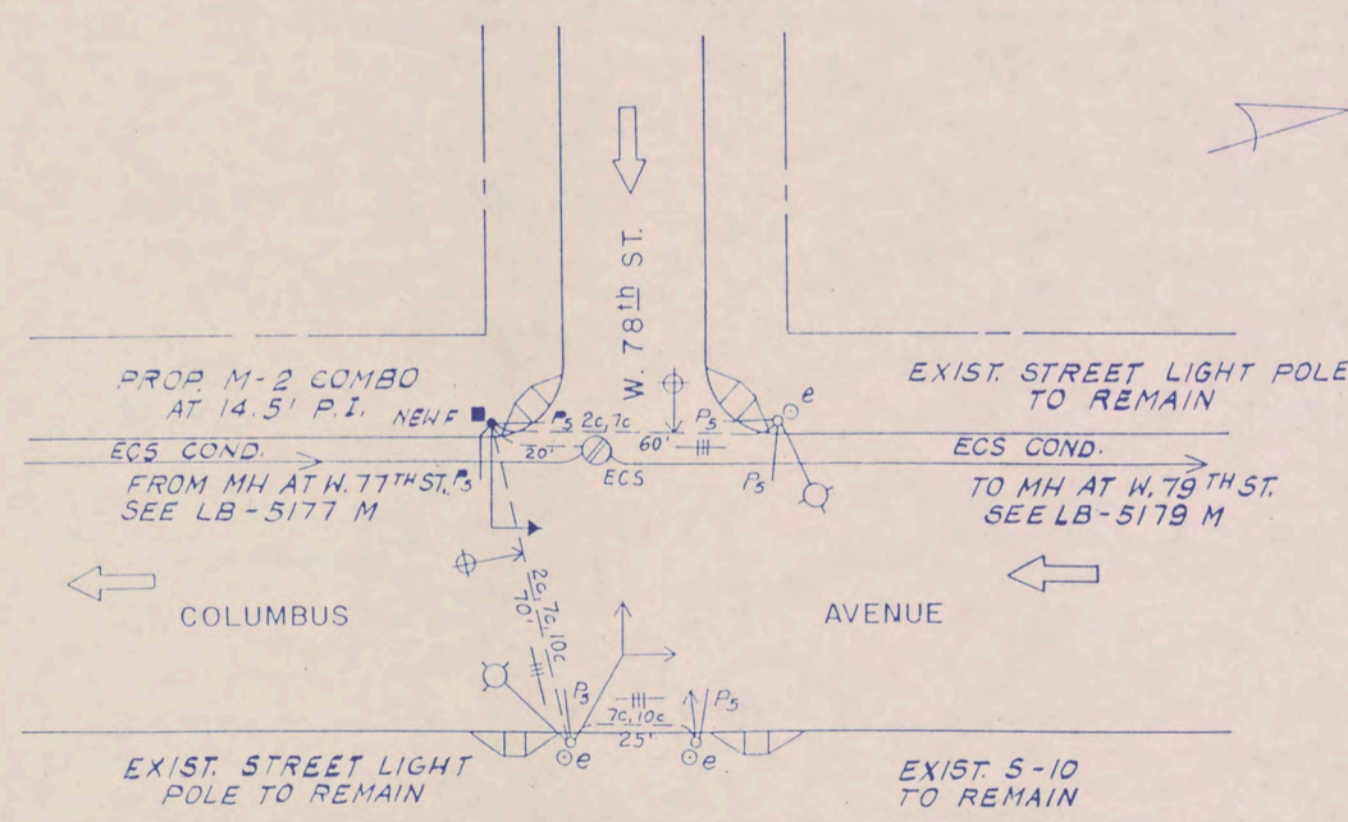
NOTES:

- CONTROLLER TO BE FIXED TIME.
- EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

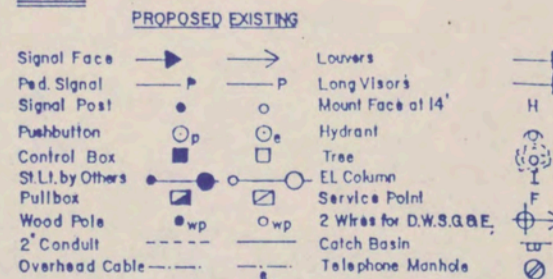
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REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & W. 75th ST.			
APPROVED	Drawn by	Checked by	DRAWING NO.
BY	COMMISSIONER	Date	Scale: 1" = 30'
			LB-5175 M

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REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & W. 76th ST.			
APPROVED	Drawn by	Checked by	DRAWING NO.
BY	COMMISSIONER	Date	Scale: 1" = 30'
			LB-5176 M

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LEGEND

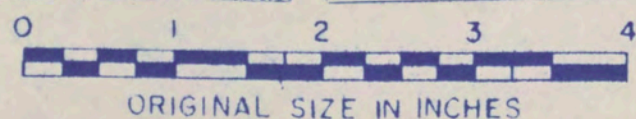


NOTES:

- CONTROLLER TO BE FIXED TIME.
- EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.
- REMOVE ALL PED. PUSHBUTTONS.

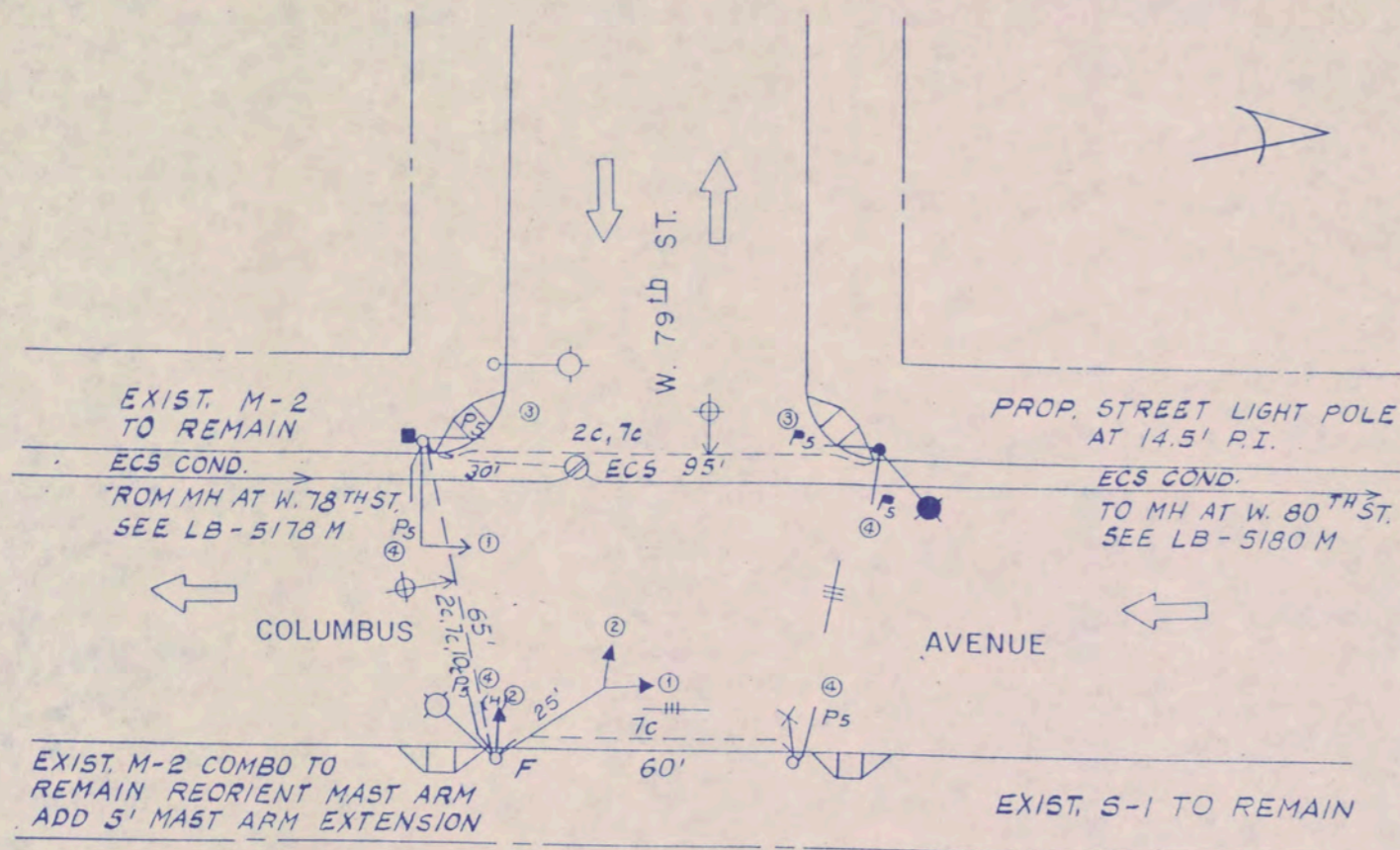
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REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & W. 77th ST.			
APPROVED	Drawn by	Checked by	DRAWING NO.
BY	COMMISSIONER	Date	Scale: 1" = 30'
			LB-5177 M

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NO	DATE	BY	DESCRIPTION I.A.S.
REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & W. 78th ST.			
APPROVED	Drawn by	Checked by	DRAWING NO.
BY	COMMISSIONER	Date	Scale: 1" = 30'
			LB-5178 M



DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK
COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59th ST. TO W. 110th ST.
(EXCLUDING INTERSECTION AT BROADWAY)
TRAFFIC SIGNAL PLAN
SCALE: AS SHOWN DATE:

90 HY
E#



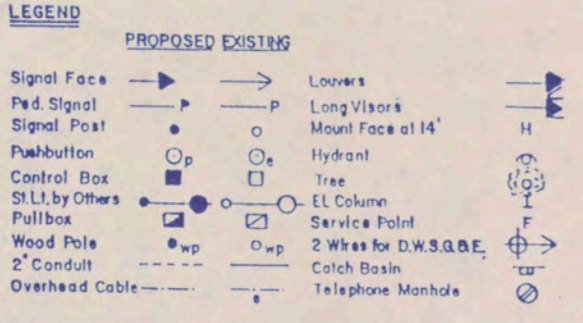
	1	2	3	4		D-1
	R	R	DW	DW		90
	A	A	WK	WK		SEC
	G	G			OFFSET 98%	9%
Ø A	G	R	WK	DW		38
PED-CL	G	R	FDW	DW	ooooo	11
VEH-CL	A	R	DW	DW	←	4
	R	R	DW	DW		2
Ø B	R	R	DW	WK		10
Ø C	R	G	DW	WK		18
PED-CL	R	G	DW	FL DW	ooooo	11
VEH-CL	R	A	DW	DW	↓	4
	R	R	DW	DW		2

NOTE: FOR COMPUTER CONTROL PHASE B TIME TO BE CONSIDER PART OF Ø "A" SPLIT.

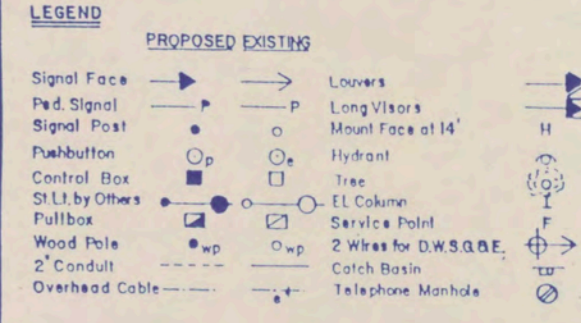
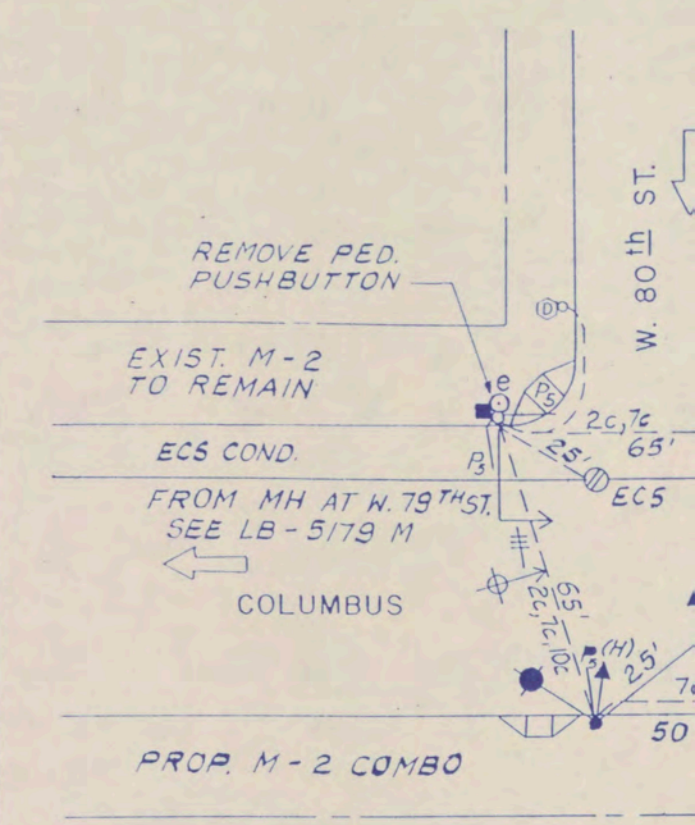
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REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11011				

COLUMBUS AVENUE & W. 79th ST.
APPROVED BY COMMISSIONER
DRAWN BY
CHECKED BY
SCALE 1"=30'
DRAWING NO. LB 5179 M

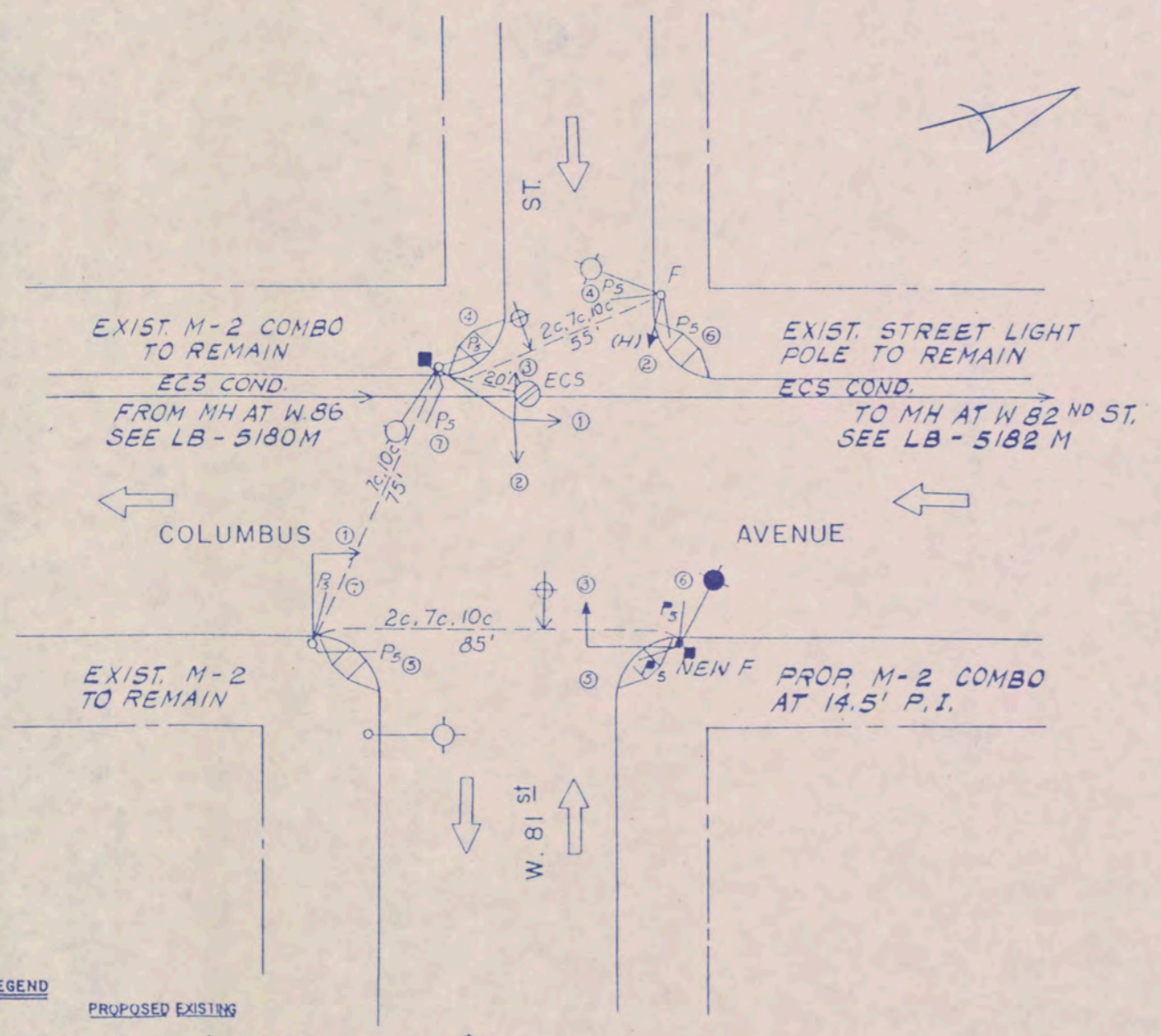


- NOTES**
- CONTROLLER TO BE FIXED TIME.
 - EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.



- NOTES**
- CONTROLLER TO BE FIXED TIME.
 - EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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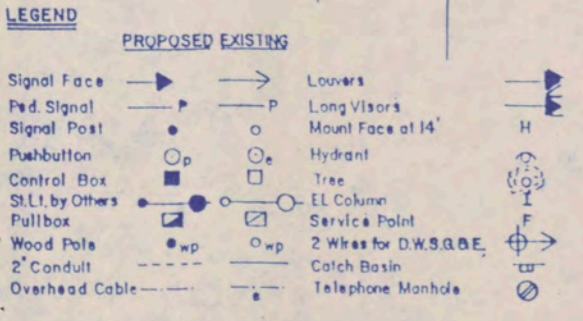


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	R	R	R	DW	DW	DW	DW		90
	A	A	A	WK	WK	WK	WK		SEC
	G	G						OFFSET 84%	9%
Ø A	G	R	R	WK	WK	DW	DW		23
PED-CL	G	R	R	WK	FL DW	DW	DW	ooooo	10
VEH-CL	A	R	R	WK	DW	DW	DW	←	4
CL	R	R	R	WK	DW	DW	DW		2
Ø B	R	G	R	WK	DW	WK	DW		13
PED-CL	R	G	R	FL DW	DW	WK	DW	ooooo	9
VEH-CL	R	A	R	DW	DW	WK	DW	←	4
CL	R	R	R	DW	DW	WK	DW		2
Ø C	R	R	G	DW	DW	WK	WK		11
PED-CL	R	R	G	DW	DW	FL DW	FL DW	ooooo	11
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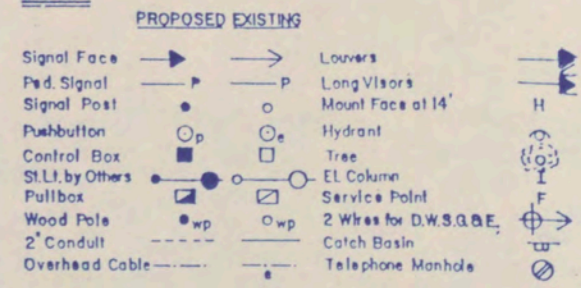
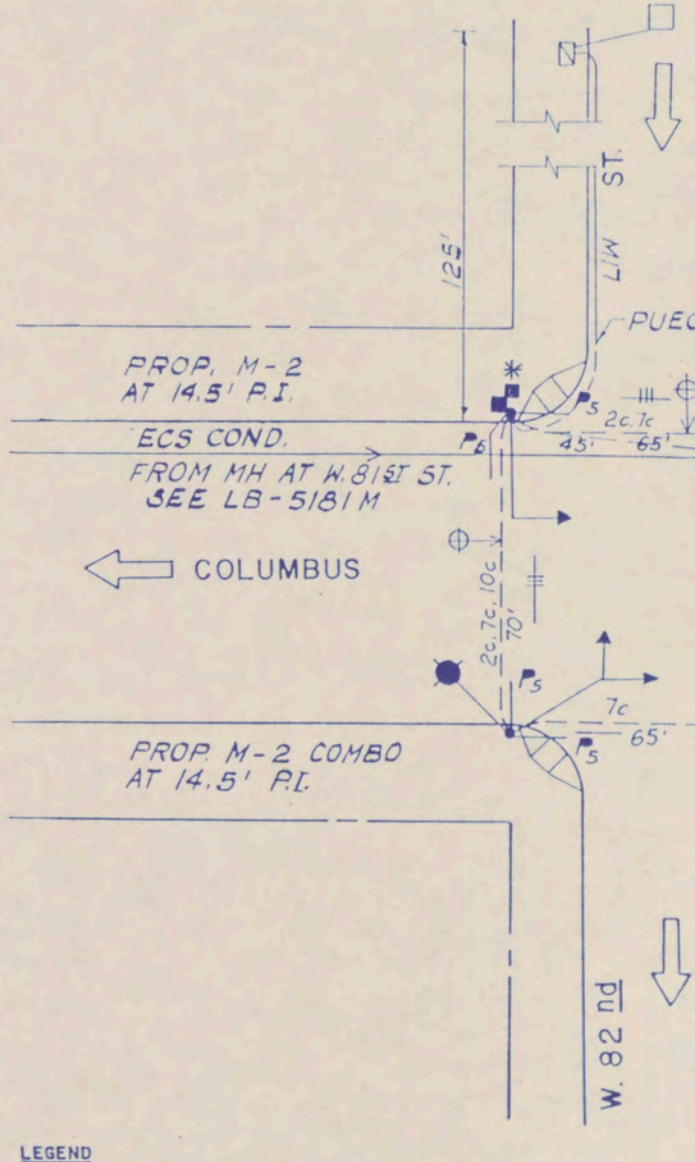
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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11011				

COLUMBUS AVENUE & W. 81st ST.
APPROVED BY COMMISSIONER
DRAWN BY
CHECKED BY
SCALE 1"=30'
DRAWING NO. LB 5181 M



- NOTES**
- CONTROLLER TO BE FIXED TIME.
 - EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.



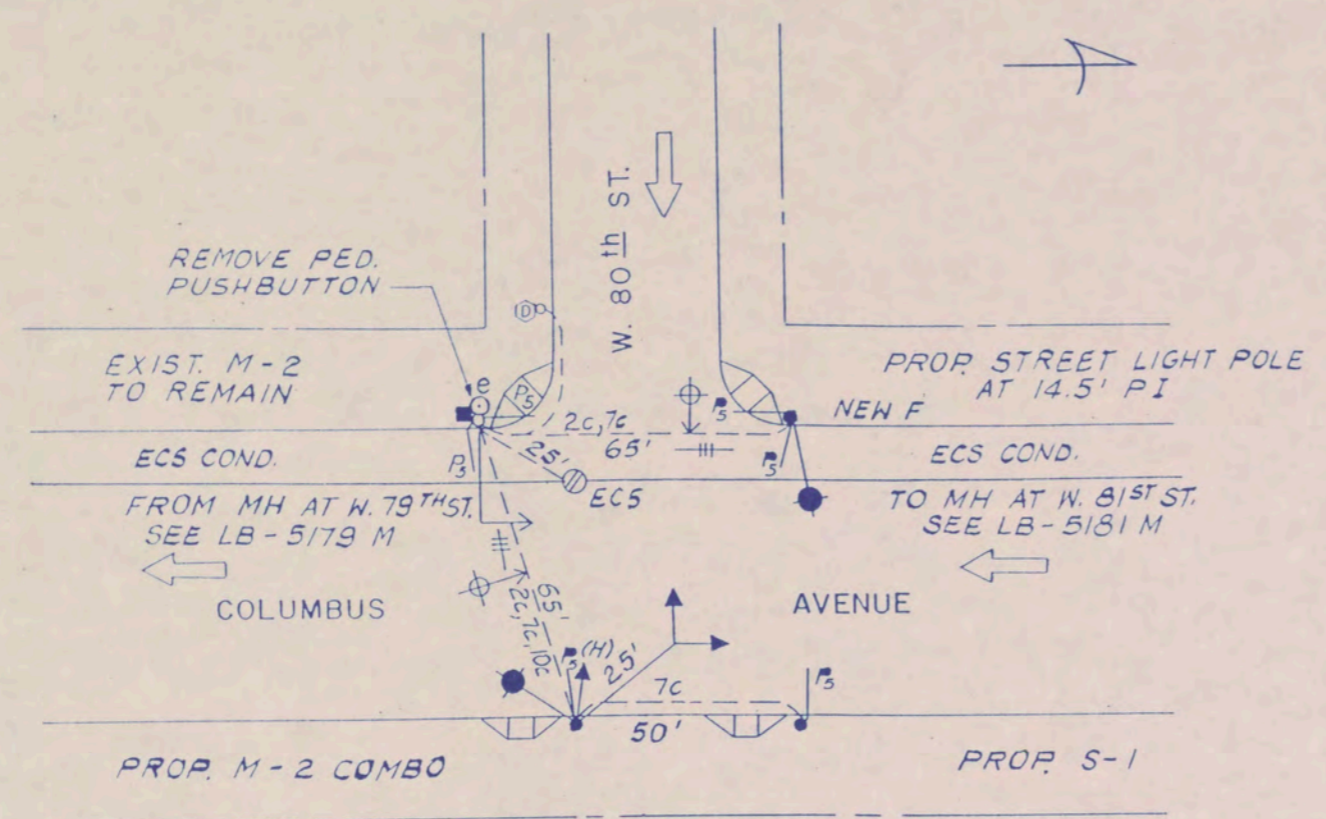
- NOTES**
- CONTROLLER TO BE FIXED TIME.
 - EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

FED ROAD REG NO	STATE	FEDERAL PROJECT	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				
NYS DOT PROJECT IDENTIFICATION NO.					

90 HY
E#

1	2	3	4	D-1
R	R	DW	DW	90
A	A	WK	WK	SEC
G	G			CYCLE
				%
				38
				11
				4
				2
				10
				18
				11
				4
				2

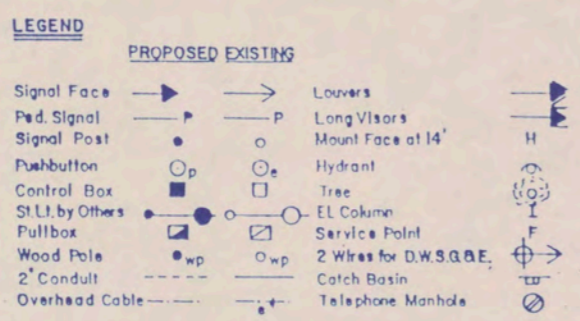
OFFSET 98%



90 HY
E#

FOR COMPUTER CONTROL PHASE B
ME TO BE CONSIDER PART OF
"A" SPLIT.

DATE	BY	DESCRIPTION	I.A.S.
REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-II QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & W. 79th ST.			
APPROVED	Drawn by	Checked by	DRAWING NO.
COMMISSIONER	Scale: 1"=30'	Date	LB 5179 M



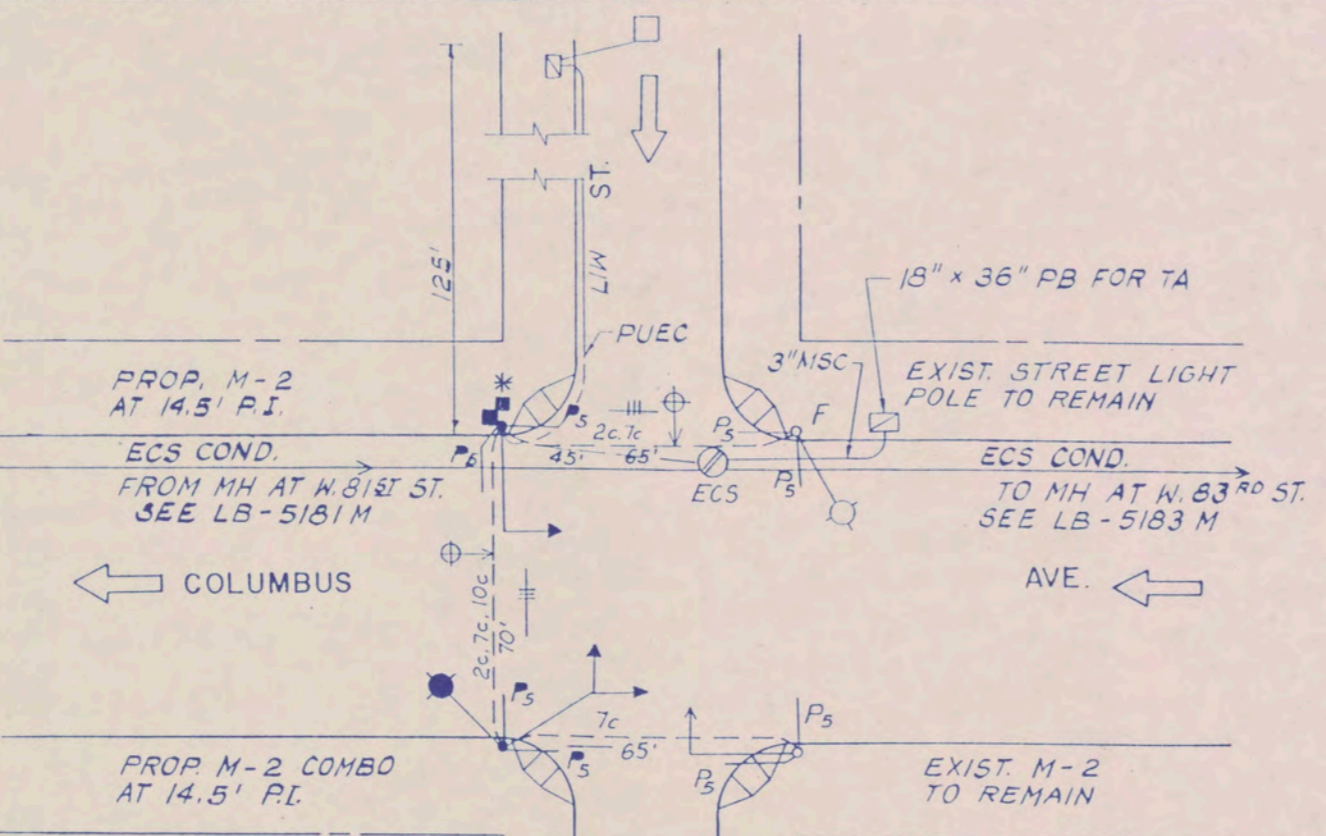
- NOTES:
- CONTROLLER TO BE FIXED TIME.
 - EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO	DATE	BY	DESCRIPTION I.A.S.
REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-II QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & W. 80th ST.			
APPROVED	Drawn by	Checked by	DRAWING NO.
COMMISSIONER	Scale: 1"=30'	Date	LB 5180 M

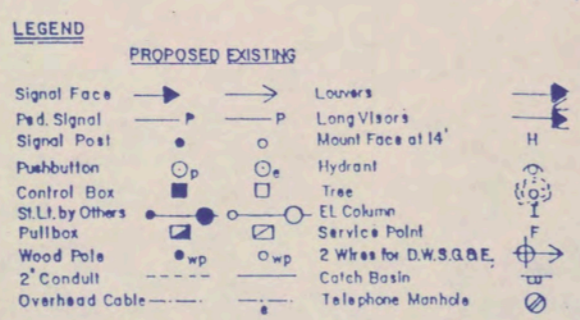
90 HY
E#

4	5	6	7	D-1
W	DW	DW	DW	90
K	WK	WK	WK	SEC
				CYCLE
				%
				28
				10
				4
				2
				13
				9
				4
				2
				11
				11
				4
				2

OFFSET 84%



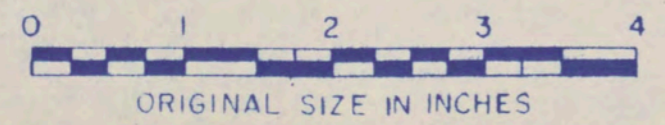
90 HY
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- NOTES:
- CONTROLLER TO BE FIXED TIME.
 - EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO	DATE	BY	DESCRIPTION I.A.S.
REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-II QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & W. 81st ST.			
APPROVED	Drawn by	Checked by	DRAWING NO.
COMMISSIONER	Scale: 1"=30'	Date	LB 5182 M

DATE	BY	DESCRIPTION	I.A.S.
REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-II QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & W. 81st ST.			
APPROVED	Drawn by	Checked by	DRAWING NO.
COMMISSIONER	Scale: 1"=30'	Date	LB-5181 M



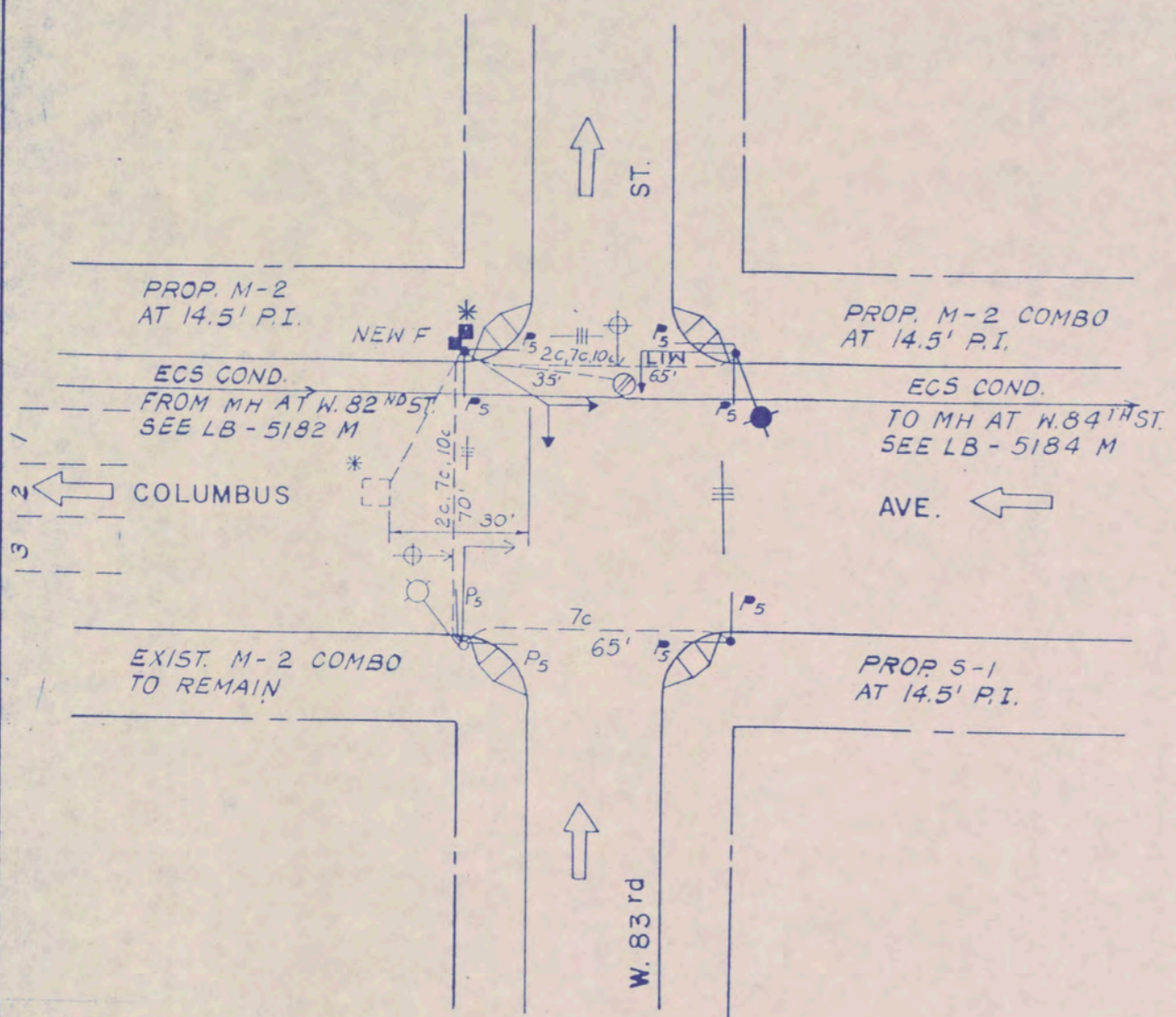
DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59th ST. TO W. 110th ST.
(EXCLUDING INTERSECTION AT BROADWAY)

TRAFFIC SIGNAL PLAN

SCALE: AS SHOWN DATE:

90 HY
E#



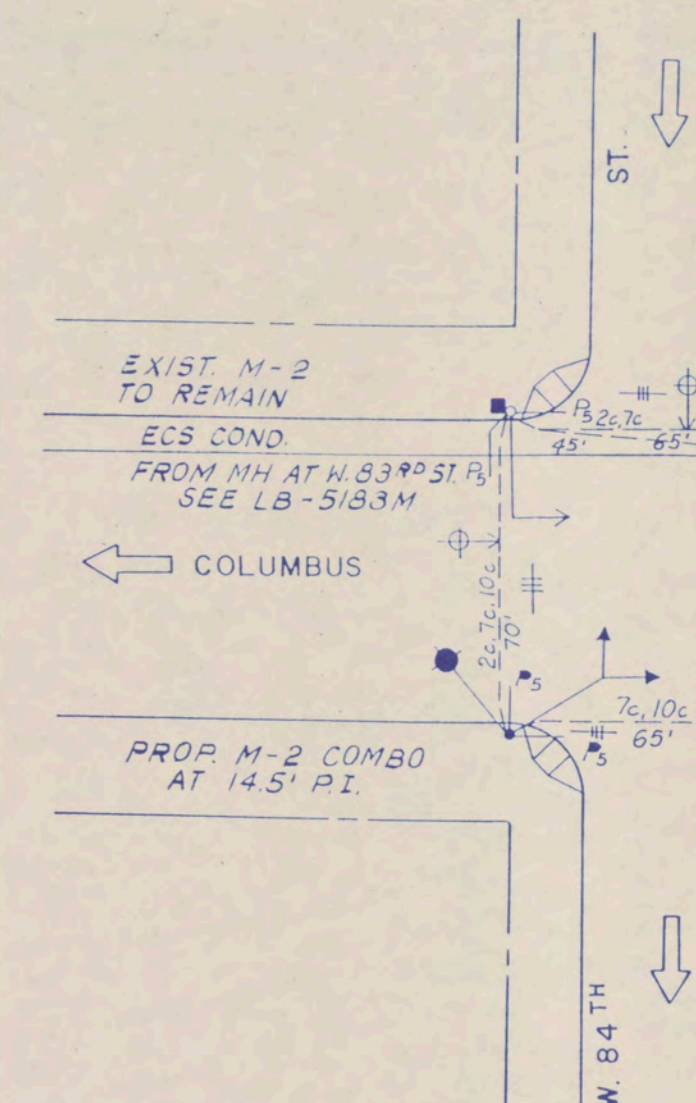
LEGEND

PROPOSED	EXISTING		
Signal Face	→	Loovers	↕
Ped. Signal	→	Long Visors	↕
Signal Post	○	Mount Face at 14'	↕
Pushbutton	○	Hydrant	○
Control Box	□	Tree	○
St. Lt. by Others	○	EL Column	○
Pullbox	□	Service Point	○
Wood Pole	●	2 Wires for D.W.S.G.B.E.	○
2" Conduit	---	Catch Basin	○
Overhead Cable	---	Telephone Manhole	○

NOTES:

1. CONTROLLER TO BE FIXED TIME.
 2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.
- * INSTALL 6' x 6' LOOP SENSOR IN CENTER OF 2ND MOVING LANE.

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NO	DATE	BY	DESCRIPTION	IAS
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE & W. 83RD ST.				
APPROVED	Drawn by	Checked by	DRAWING NO	
BY COMMISSIONER	Date	Date	LB 5183 M	



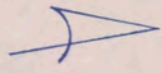
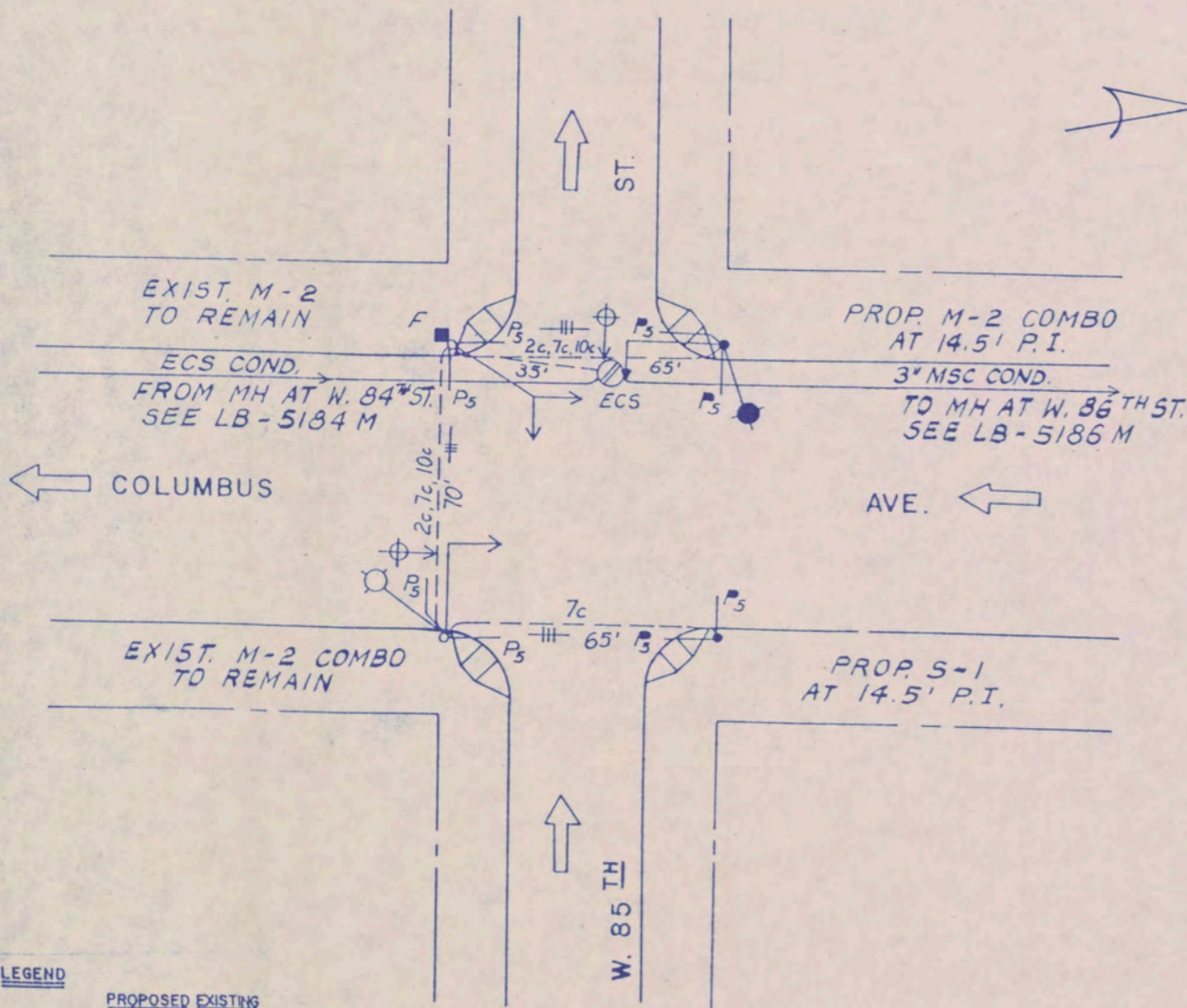
LEGEND

PROPOSED	EXISTING		
Signal Face	→	Loovers	↕
Ped. Signal	→	Long Visors	↕
Signal Post	○	Mount Face at 14'	↕
Pushbutton	○	Hydrant	○
Control Box	□	Tree	○
St. Lt. by Others	○	EL Column	○
Pullbox	□	Service Point	○
Wood Pole	●	2 Wires for D.W.S.G.B.E.	○
2" Conduit	---	Catch Basin	○
Overhead Cable	---	Telephone Manhole	○

NOTES:

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

90 HY
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LEGEND

PROPOSED	EXISTING		
Signal Face	→	Loovers	↕
Ped. Signal	→	Long Visors	↕
Signal Post	○	Mount Face at 14'	↕
Pushbutton	○	Hydrant	○
Control Box	□	Tree	○
St. Lt. by Others	○	EL Column	○
Pullbox	□	Service Point	○
Wood Pole	●	2 Wires for D.W.S.G.B.E.	○
2" Conduit	---	Catch Basin	○
Overhead Cable	---	Telephone Manhole	○

NOTES:

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO	DATE	BY	DESCRIPTION	IAS
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE & W. 85TH ST.				
APPROVED	Drawn by	Checked by	DRAWING NO	
BY COMMISSIONER	Date	Date	LB 5185 M	

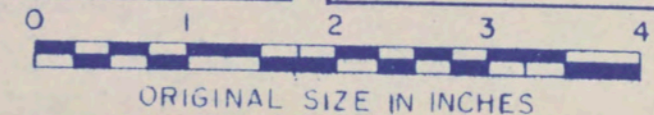
LEGEND

PROPOSED	EXISTING		
Signal Face	→	Loovers	↕
Ped. Signal	→	Long Visors	↕
Signal Post	○	Mount Face at 14'	↕
Pushbutton	○	Hydrant	○
Control Box	□	Tree	○
St. Lt. by Others	○	EL Column	○
Pullbox	□	Service Point	○
Wood Pole	●	2 Wires for D.W.S.G.B.E.	○
2" Conduit	---	Catch Basin	○
Overhead Cable	---	Telephone Manhole	○

NOTES:

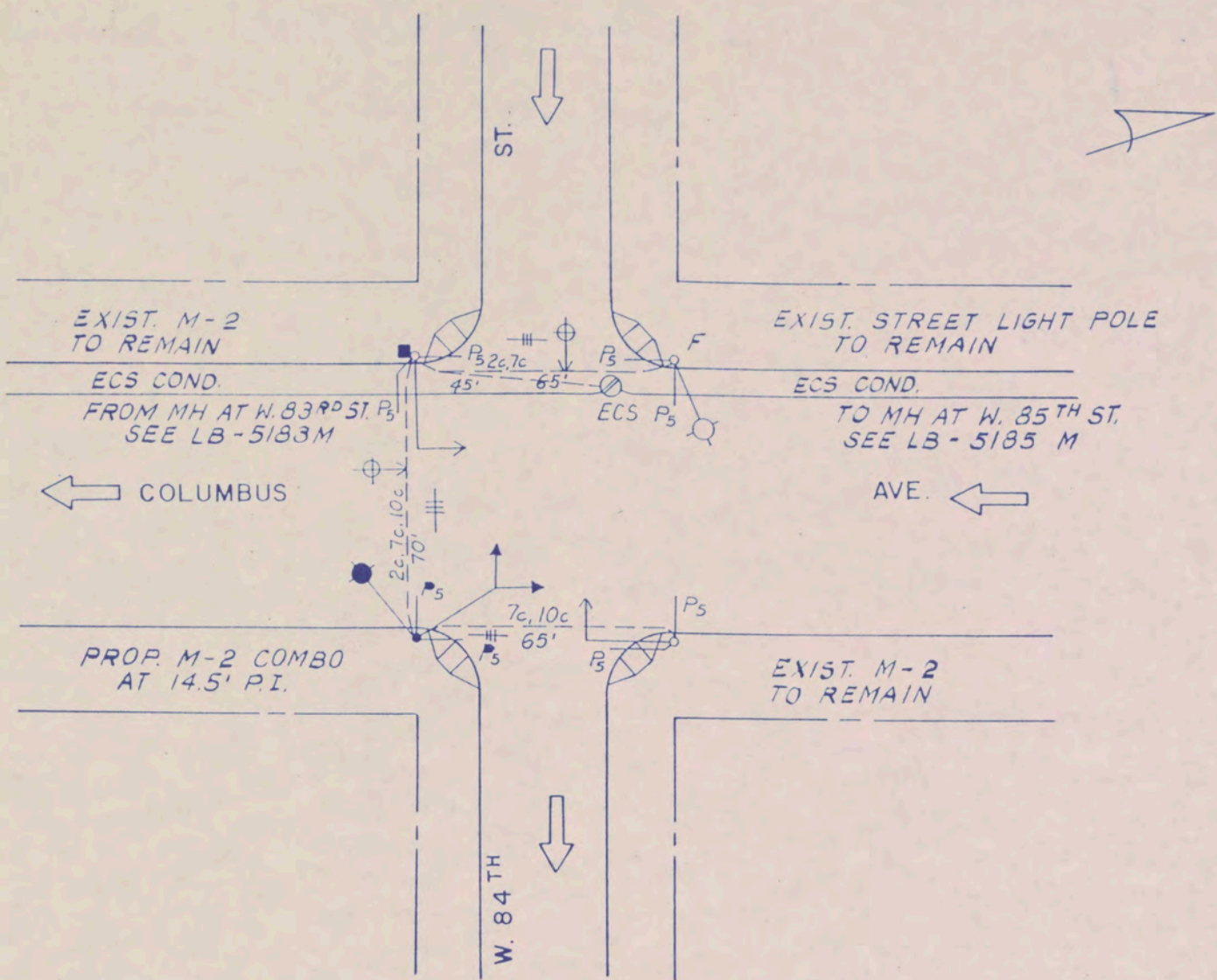
1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

DANIEL FRANKFURT, P.C. consulting engineers
 800 SECOND AVENUE NEW YORK, N.Y.



FED ROAD REG NO	STATE	FEDERAL PROJECT	AID NO	SHEET NO.	TOTAL SHEETS
	NEW YORK				
NYS DOT PROJECT IDENTIFICATION NO					

90 HY
E#



90 HY
E#

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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE & W. 83rd ST.				
APPROVED BY	Drawn by	Checked by	Scale	DRAWING NO.
COMMISSIONER			1" = 30'	LB-5183 M

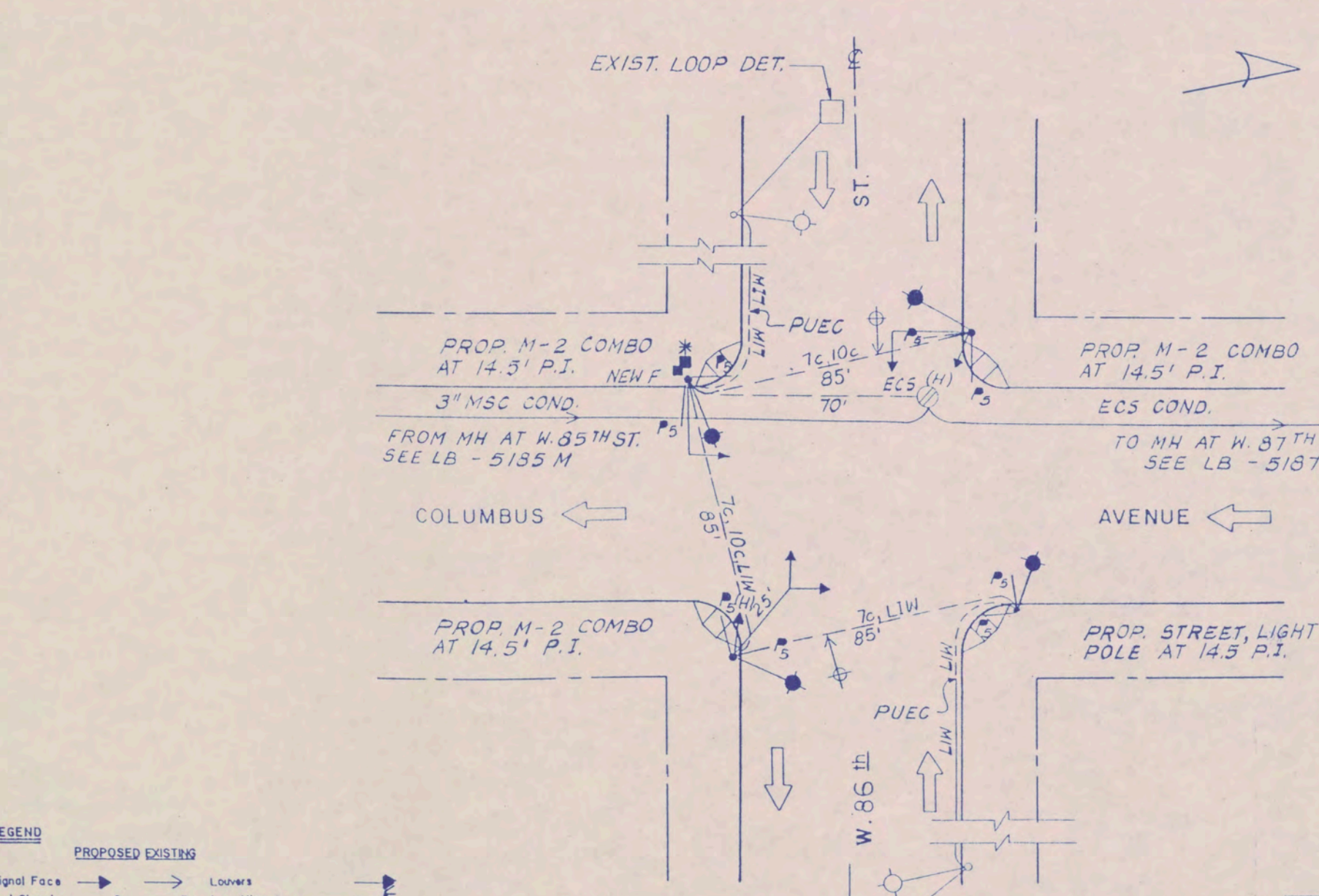
LEGEND

PROPOSED	EXISTING	LOUVERS	→
Signal Face	→	Long Visors	→
Ped. Signal	→	Mount Face at 14'	→
Signal Post	→	Hydrant	→
Pushbutton	→	Tree	→
Control Box	→	EL Column	→
SI LI by Others	→	Service Point	→
Pullbox	→	2 Wires for D.W.S.G.A.E.	→
Wood Pole	→	Catch Basin	→
2" Conduit	→	Telephone Manhole	→
Overhead Cable	→		

- NOTES**
- CONTROLLER TO BE FIXED TIME.
 - EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE & W. 84th ST.				
APPROVED BY	Drawn by	Checked by	Scale	DRAWING NO.
COMMISSIONER			1" = 30'	LB-5184 M

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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE & W. 85th ST.				
APPROVED BY	Drawn by	Checked by	Scale	DRAWING NO.
COMMISSIONER			1" = 30'	LB-5185 M

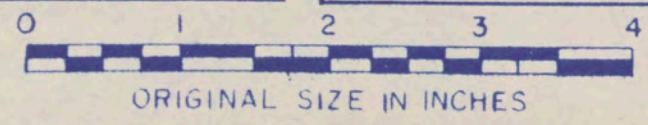
LEGEND

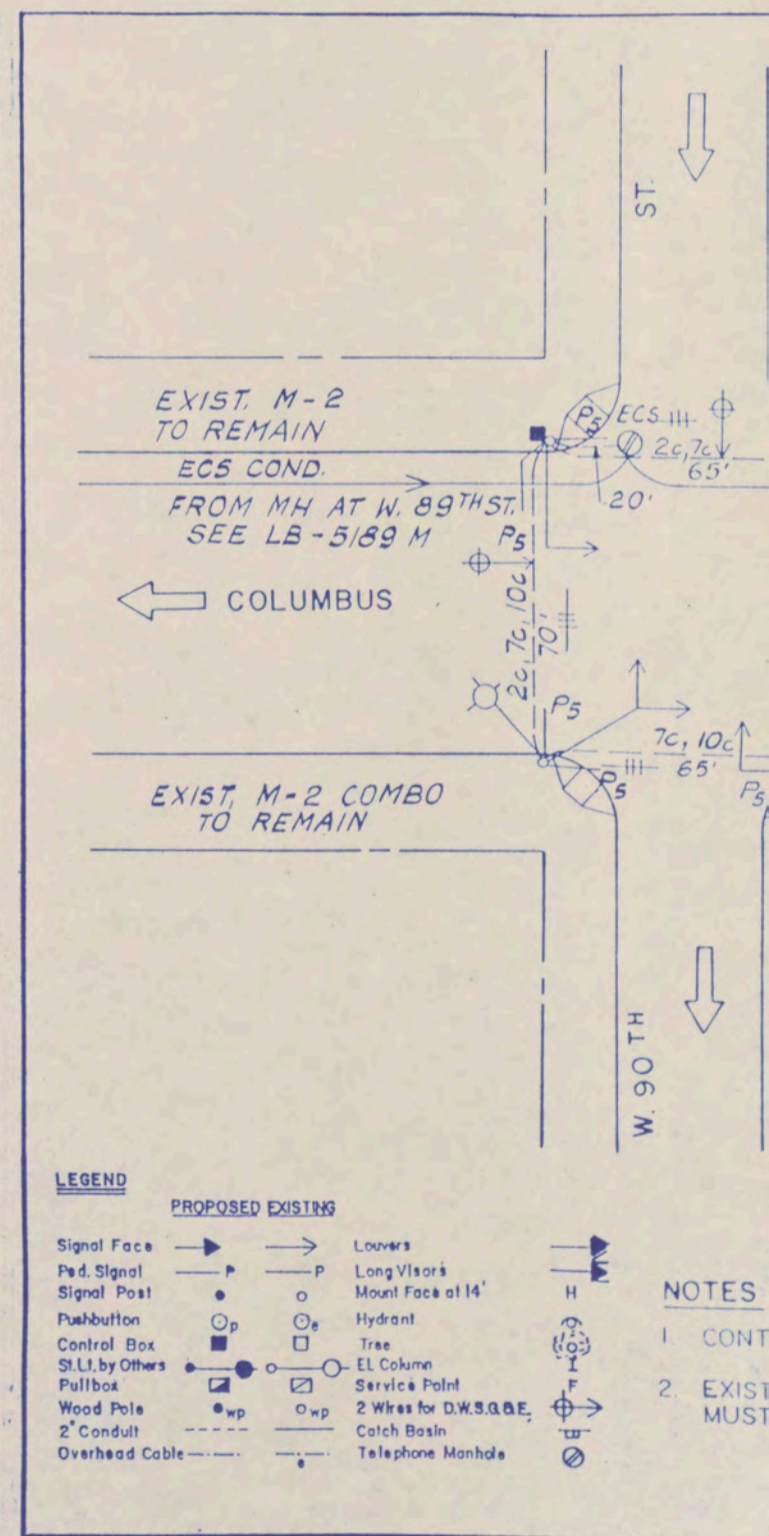
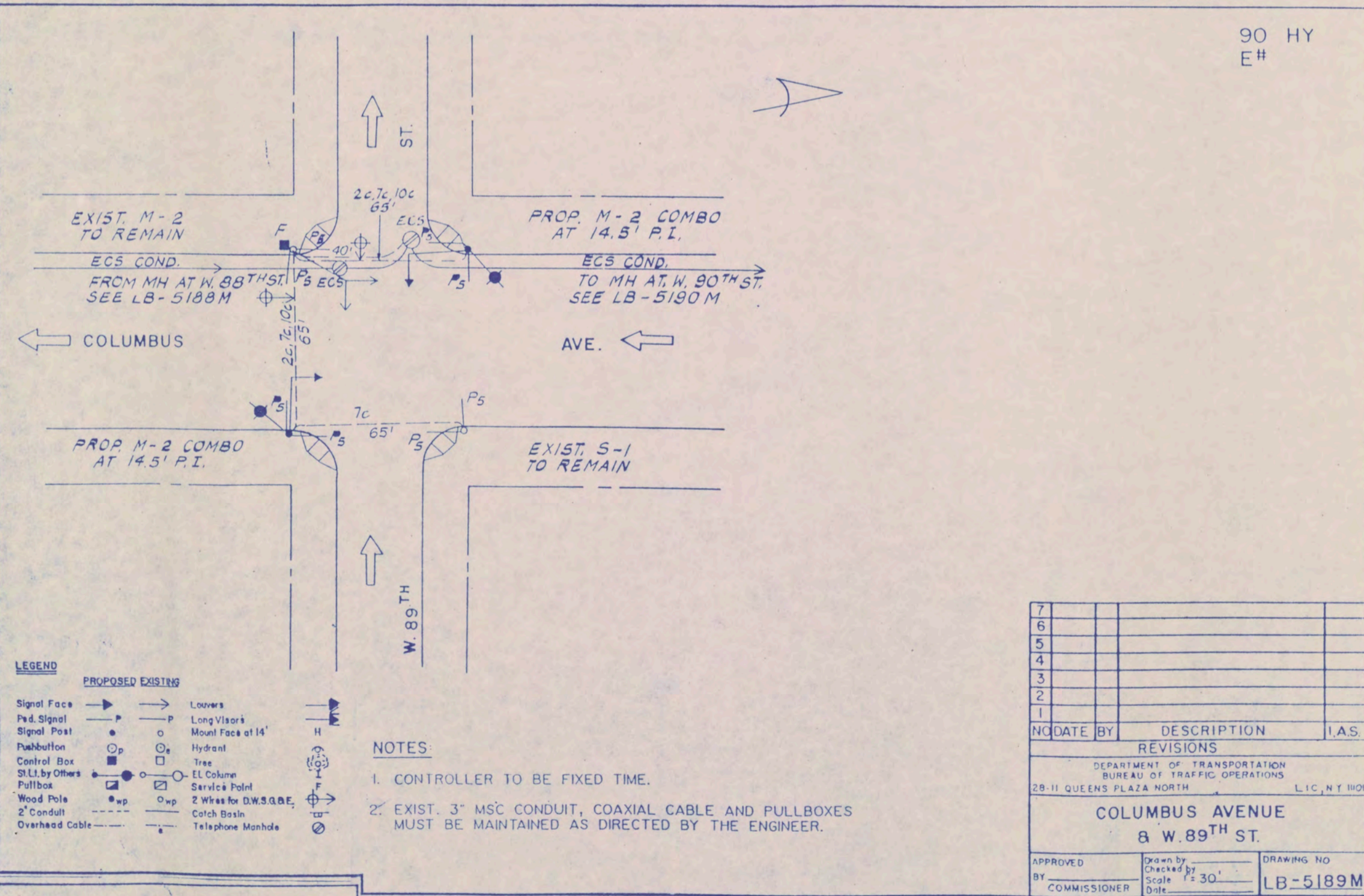
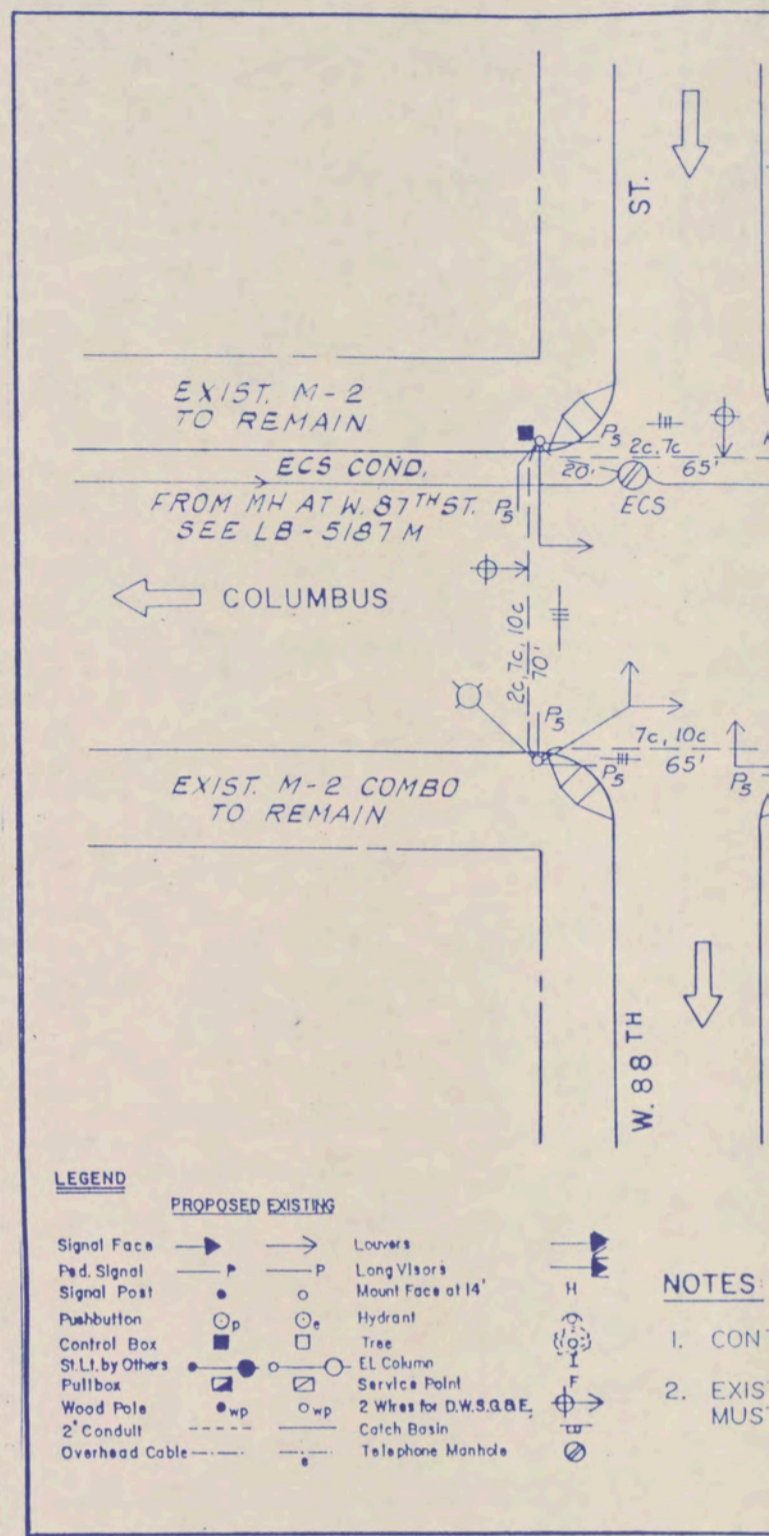
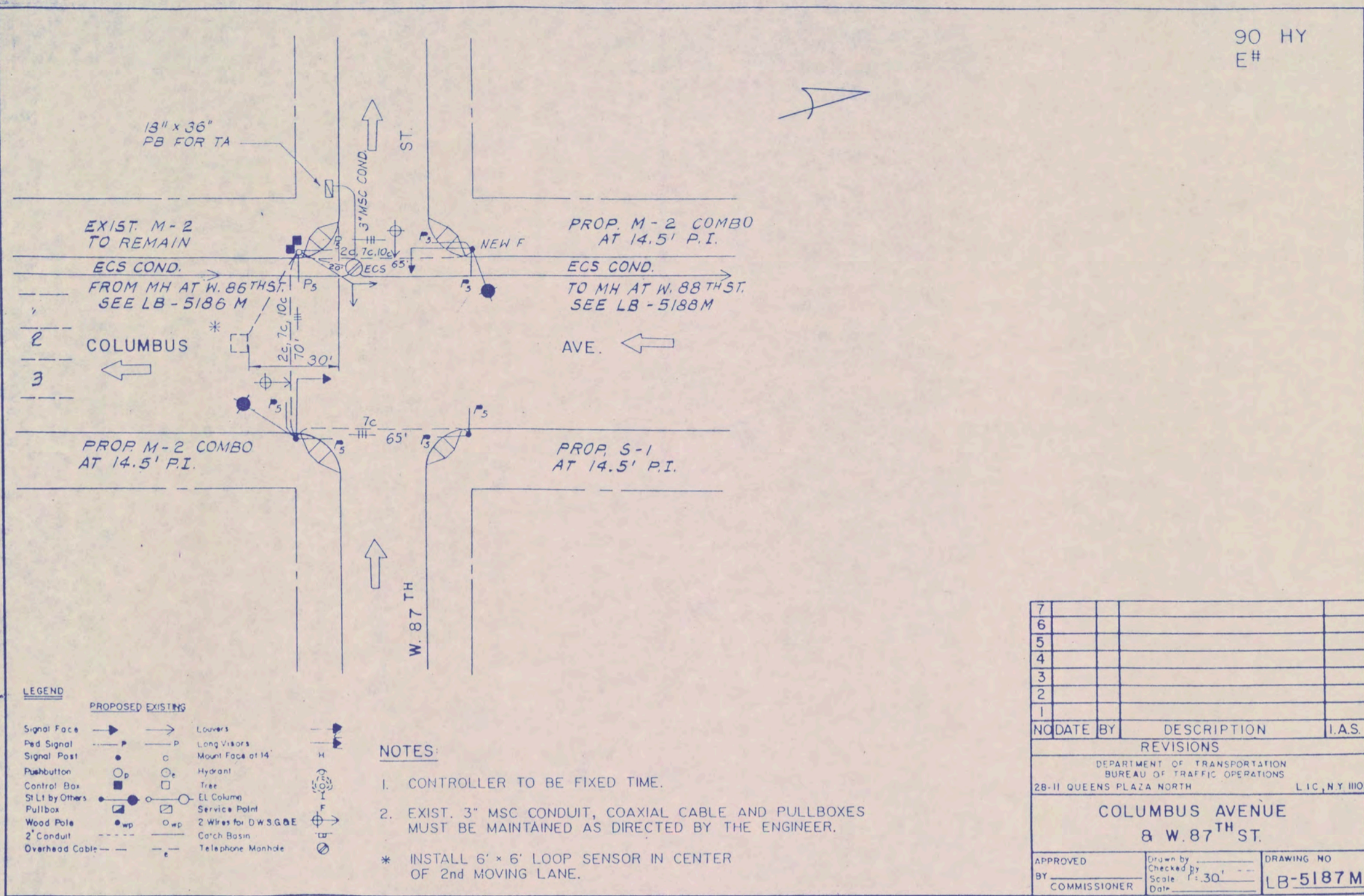
PROPOSED	EXISTING	LOUVERS	→
Signal Face	→	Long Visors	→
Ped. Signal	→	Mount Face at 14'	→
Signal Post	→	Hydrant	→
Pushbutton	→	Tree	→
Control Box	→	EL Column	→
SI LI by Others	→	Service Point	→
Pullbox	→	2 Wires for D.W.S.G.A.E.	→
Wood Pole	→	Catch Basin	→
2" Conduit	→	Telephone Manhole	→
Overhead Cable	→		

- NOTES**
- CONTROLLER TO BE FIXED TIME.
 - EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE & W. 86th ST.				
APPROVED BY	Drawn by	Checked by	Scale	DRAWING NO.
COMMISSIONER			1" = 30'	LB-5186 M

DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK
COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59th ST. TO W. 110th ST.
(EXCLUDING INTERSECTION AT BROADWAY)
TRAFFIC SIGNAL PLAN
SCALE: AS SHOWN DATE:



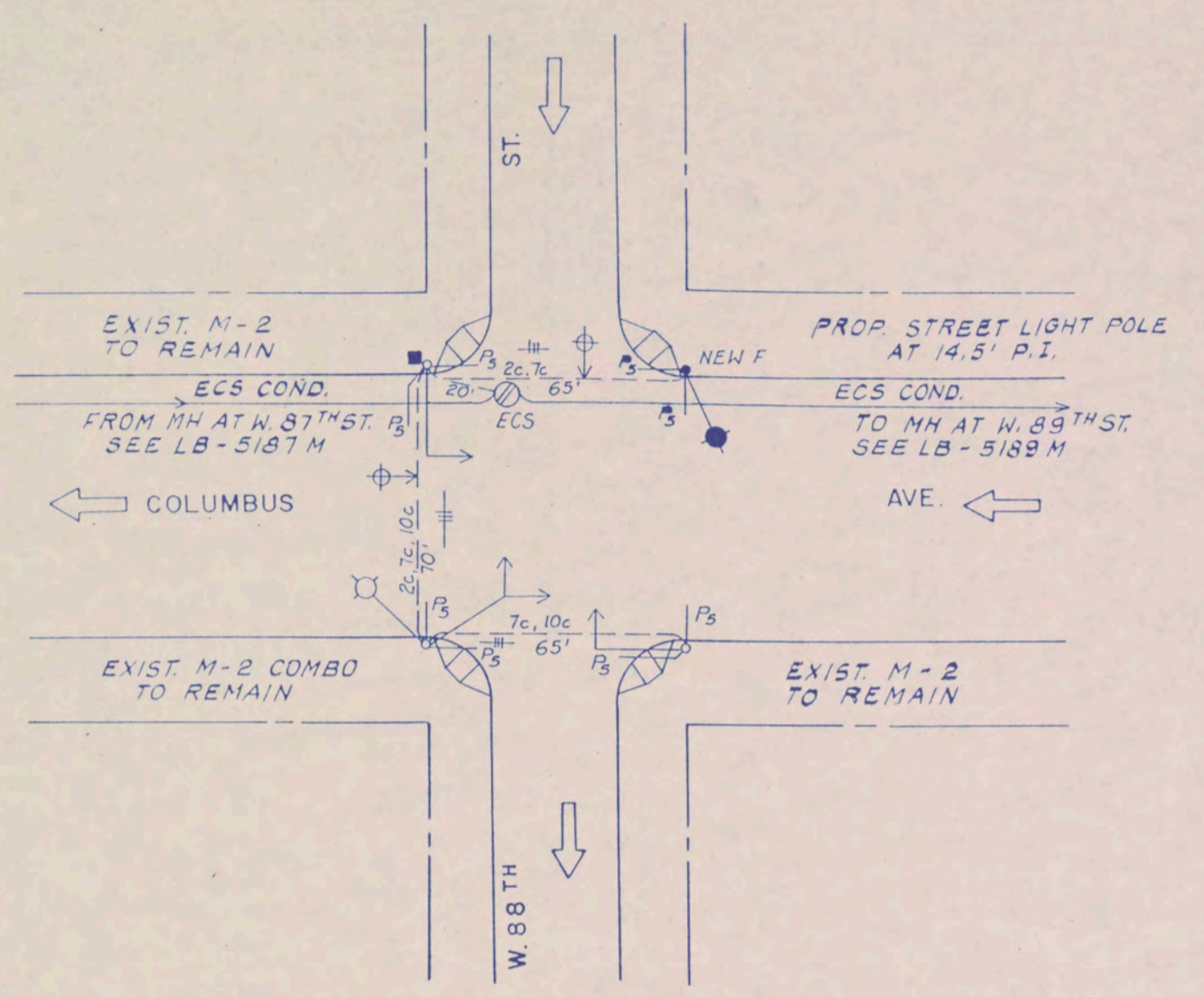


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FED ROAD REG NO	STATE	FEDERAL PROJECT	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				

NYS DOT PROJECT IDENTIFICATION NO.

90 HY
E#



LEGEND

PROPOSED	EXISTING	DESCRIPTION
→	→	Signal Face
●	○	Pad Signal
○	○	Signal Post
○	○	Pushbutton
□	□	Control Box
○	○	ST.LI. by Others
○	○	Pullbox
○	○	Wood Pole
○	○	2" Conduit
○	○	Overhead Cable
→	→	Louvers
→	→	Long Visors
→	→	Mount Face at 14'
○	○	Hydrant
○	○	Tree
○	○	EL Column
○	○	Service Point
○	○	2 Wires for D.W.S.G.B.E.
○	○	Catch Basin
○	○	Telephone Manhole

- NOTES:**
1. CONTROLLER TO BE FIXED TIME.
 2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO DATE BY DESCRIPTION I.A.S.

REVISIONS

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001

COLUMBUS AVENUE & W. 88TH ST.

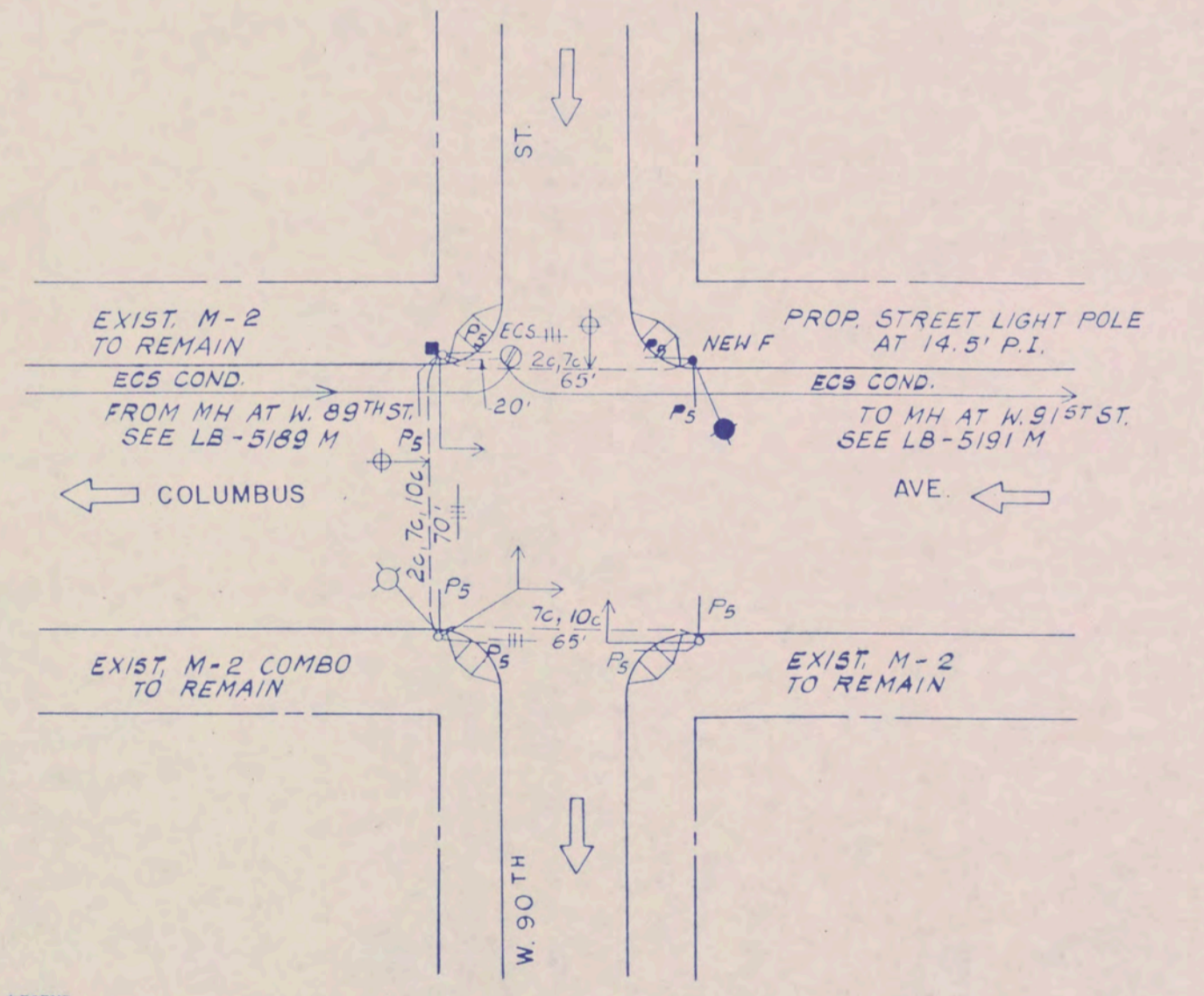
APPROVED BY COMMISSIONER

Drawn by Checked by Scale 1" = 30' Date

DRAWING NO. LB-5188 M

90 HY
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LEGEND

PROPOSED	EXISTING	DESCRIPTION
→	→	Signal Face
●	○	Pad Signal
○	○	Signal Post
○	○	Pushbutton
□	□	Control Box
○	○	ST.LI. by Others
○	○	Pullbox
○	○	Wood Pole
○	○	2" Conduit
○	○	Overhead Cable
→	→	Louvers
→	→	Long Visors
→	→	Mount Face at 14'
○	○	Hydrant
○	○	Tree
○	○	EL Column
○	○	Service Point
○	○	2 Wires for D.W.S.G.B.E.
○	○	Catch Basin
○	○	Telephone Manhole

- NOTES:**
1. CONTROLLER TO BE FIXED TIME.
 2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO DATE BY DESCRIPTION I.A.S.

REVISIONS

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001

COLUMBUS AVENUE & W. 90TH ST.

APPROVED BY COMMISSIONER

Drawn by Checked by Scale 1" = 30' Date

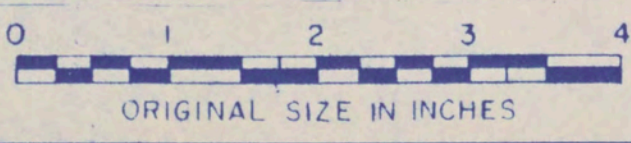
DRAWING NO. LB-5190 M

DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

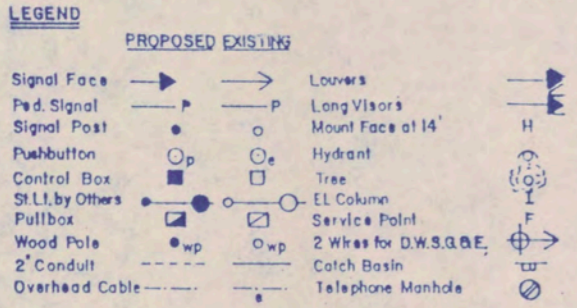
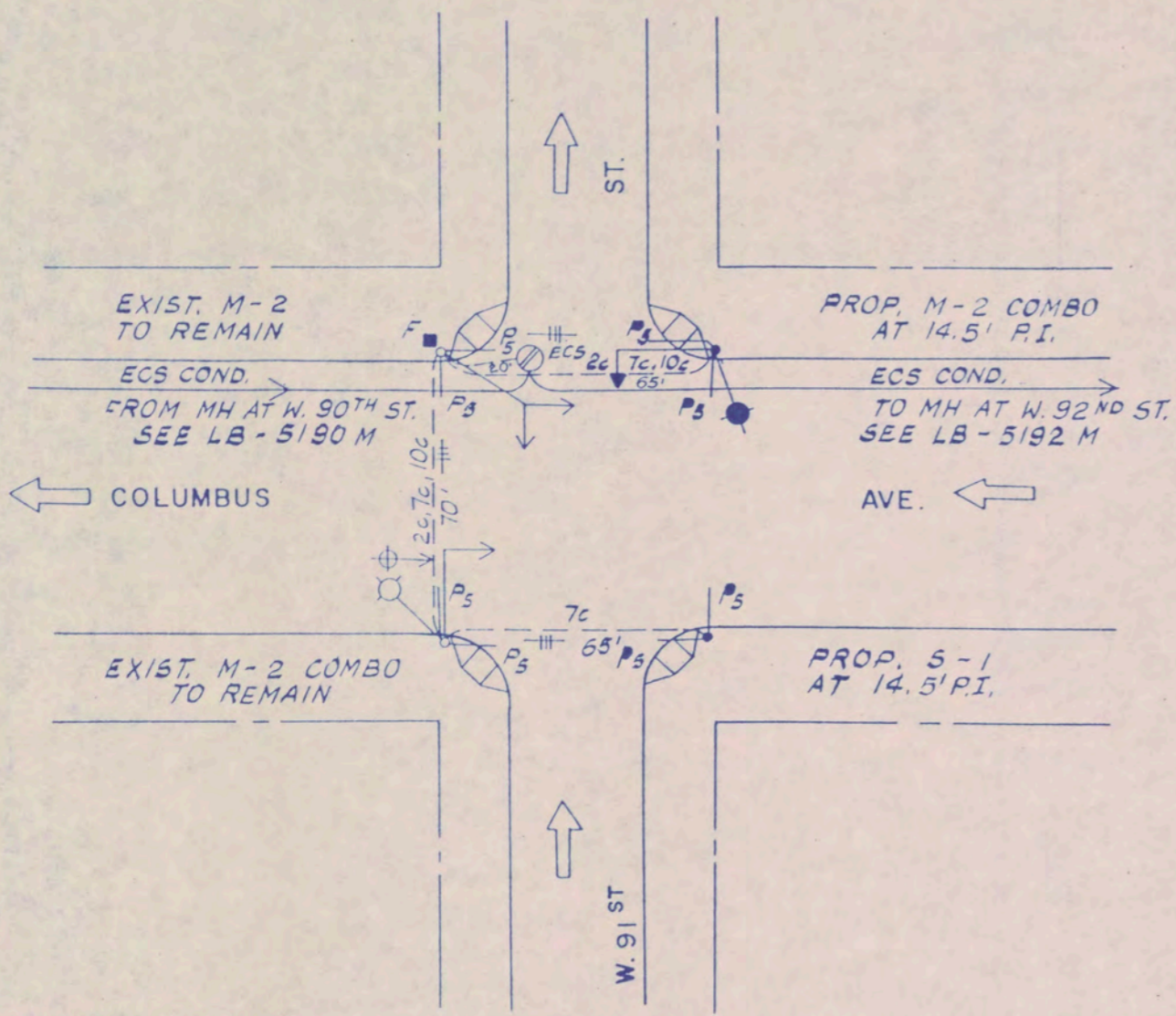
COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59TH ST. TO W. 110TH ST.
(EXCLUDING INTERSECTION AT BROADWAY)

TRAFFIC SIGNAL PLAN

SCALE: AS SHOWN DATE:



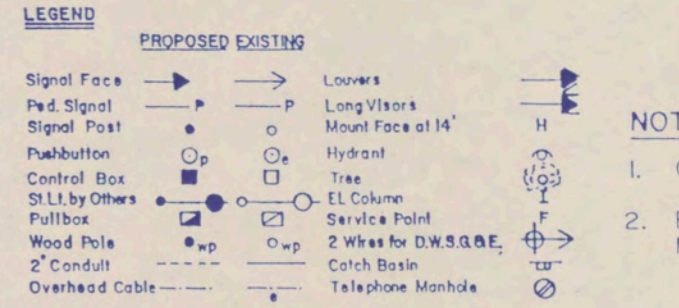
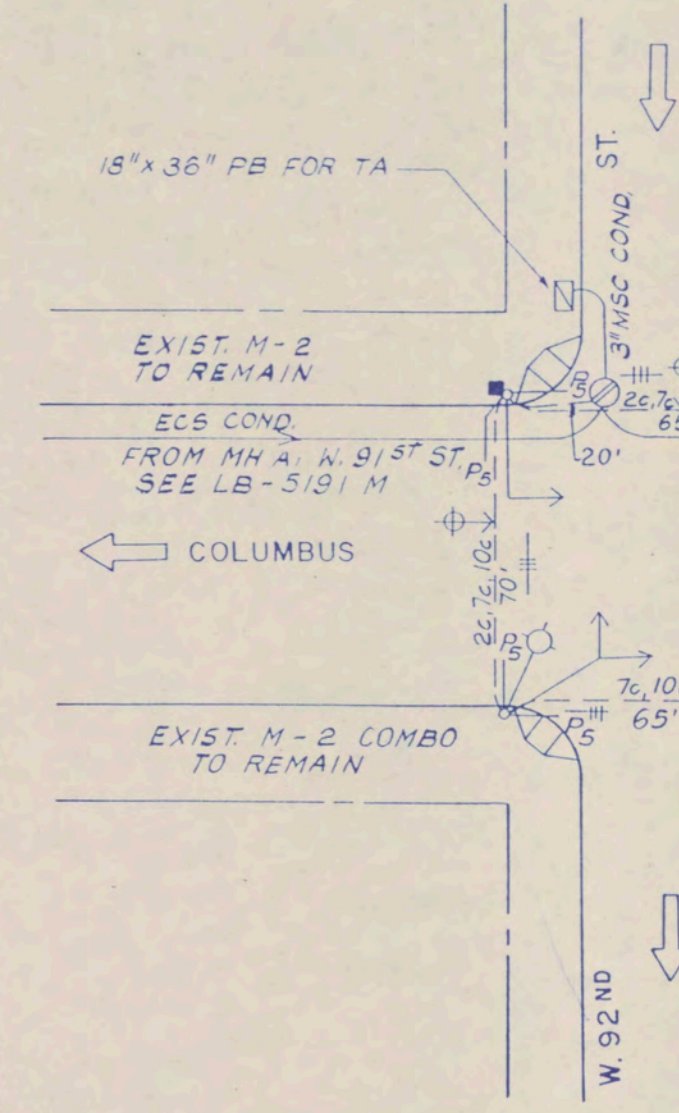
90 HY
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NOTES:

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

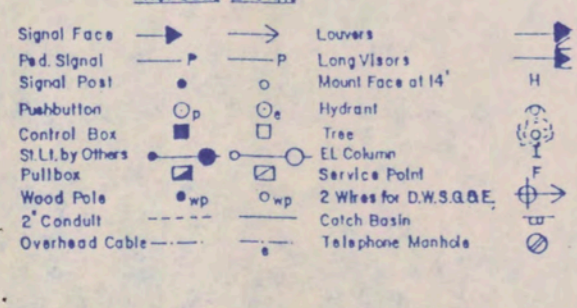
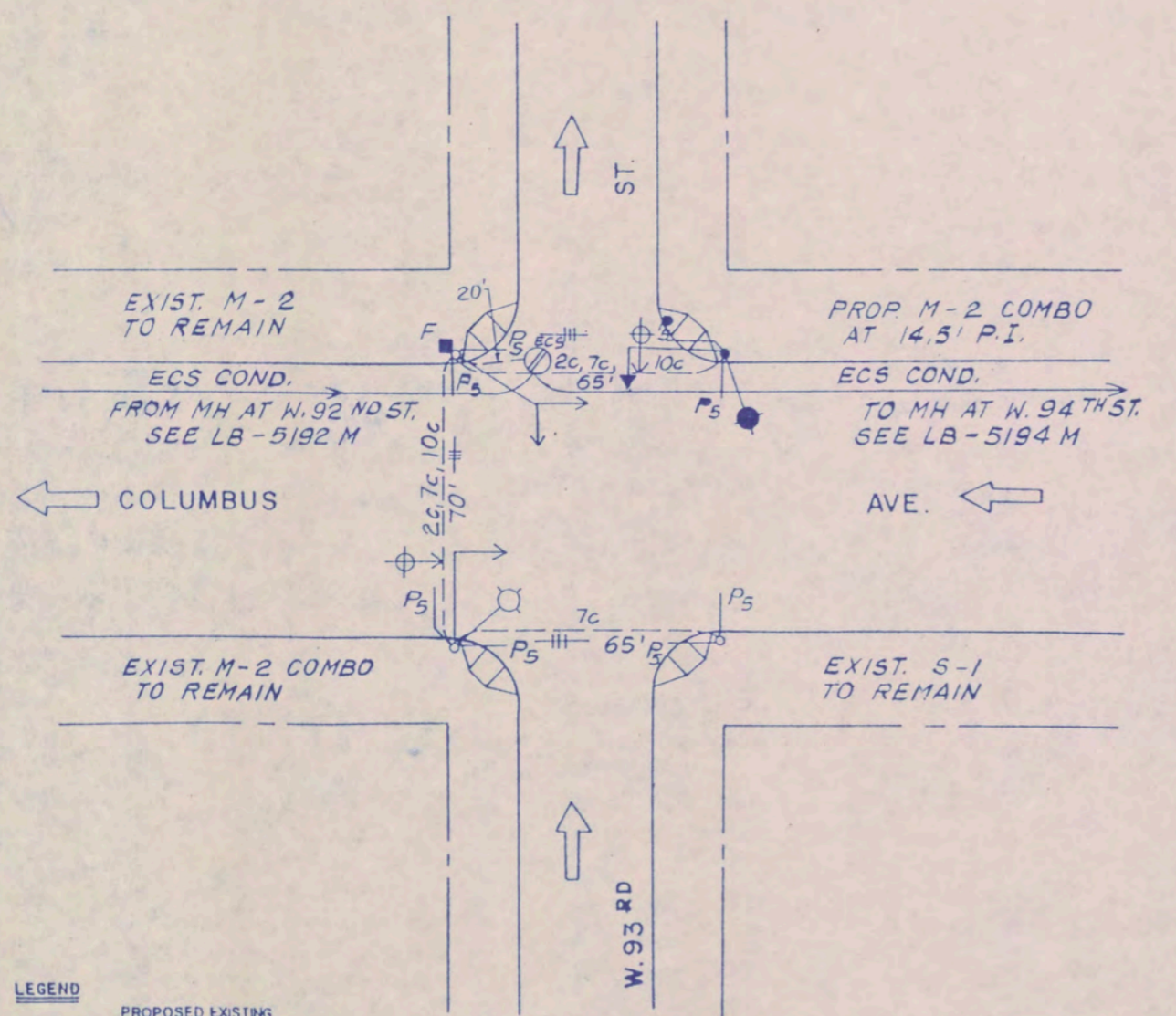
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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-II QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE & W. 91ST ST.				
APPROVED	Drawn by	DRAWING NO		
BY	Checked by	Scale 1" = 30'	LB-5191 M	
COMMISSIONER	Date			



NOTES:

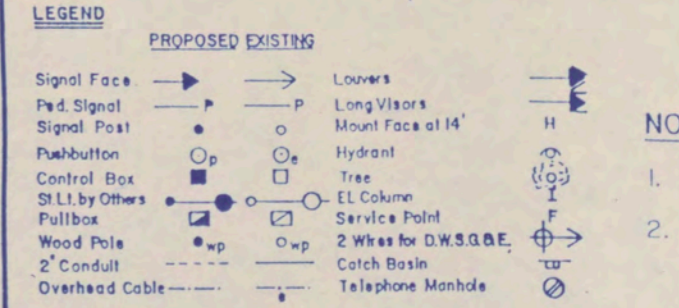
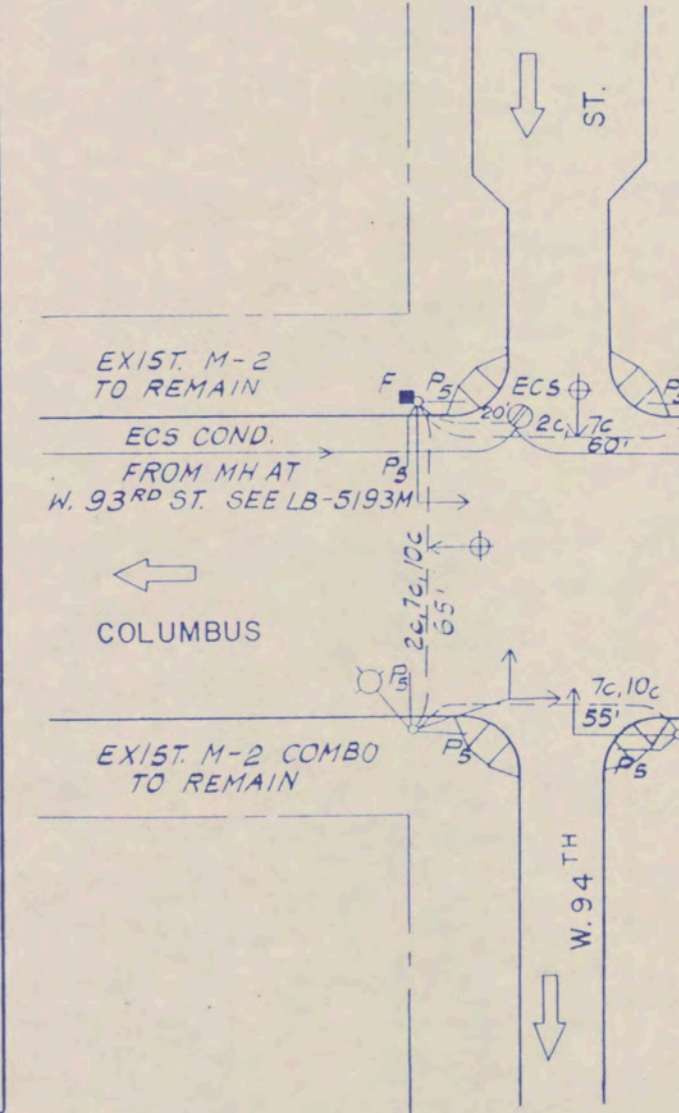
1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-II QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE & W. 93RD ST.				
APPROVED	Drawn by	DRAWING NO		
BY	Checked by	Scale 1" = 30'	LB-5193 M	
COMMISSIONER	Date			



NOTES:

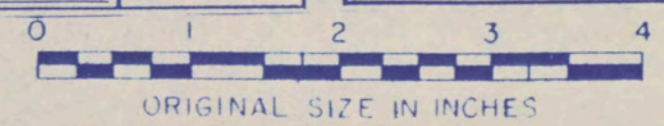
1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.



NOTES:

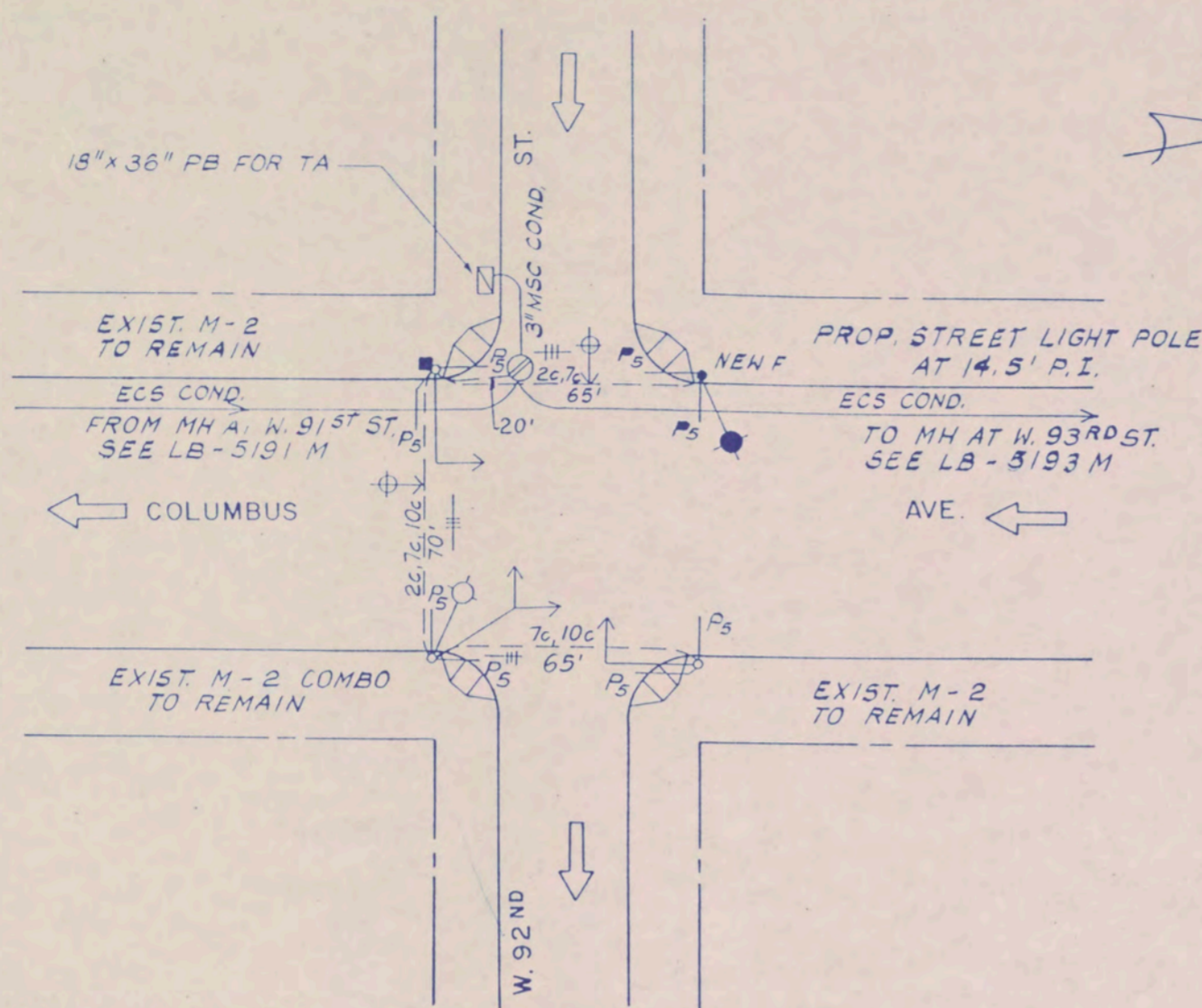
1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

DANIEL FRANKFURT, P.C. consulting engineers
800 SECOND AVENUE NEW YORK, N.Y.



FED ROAD REG NO	STATE	FEDERAL PROJECT	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				
NYS DOT PROJECT IDENTIFICATION NO					

90 HY
E#



90 HY
E#

LEGEND

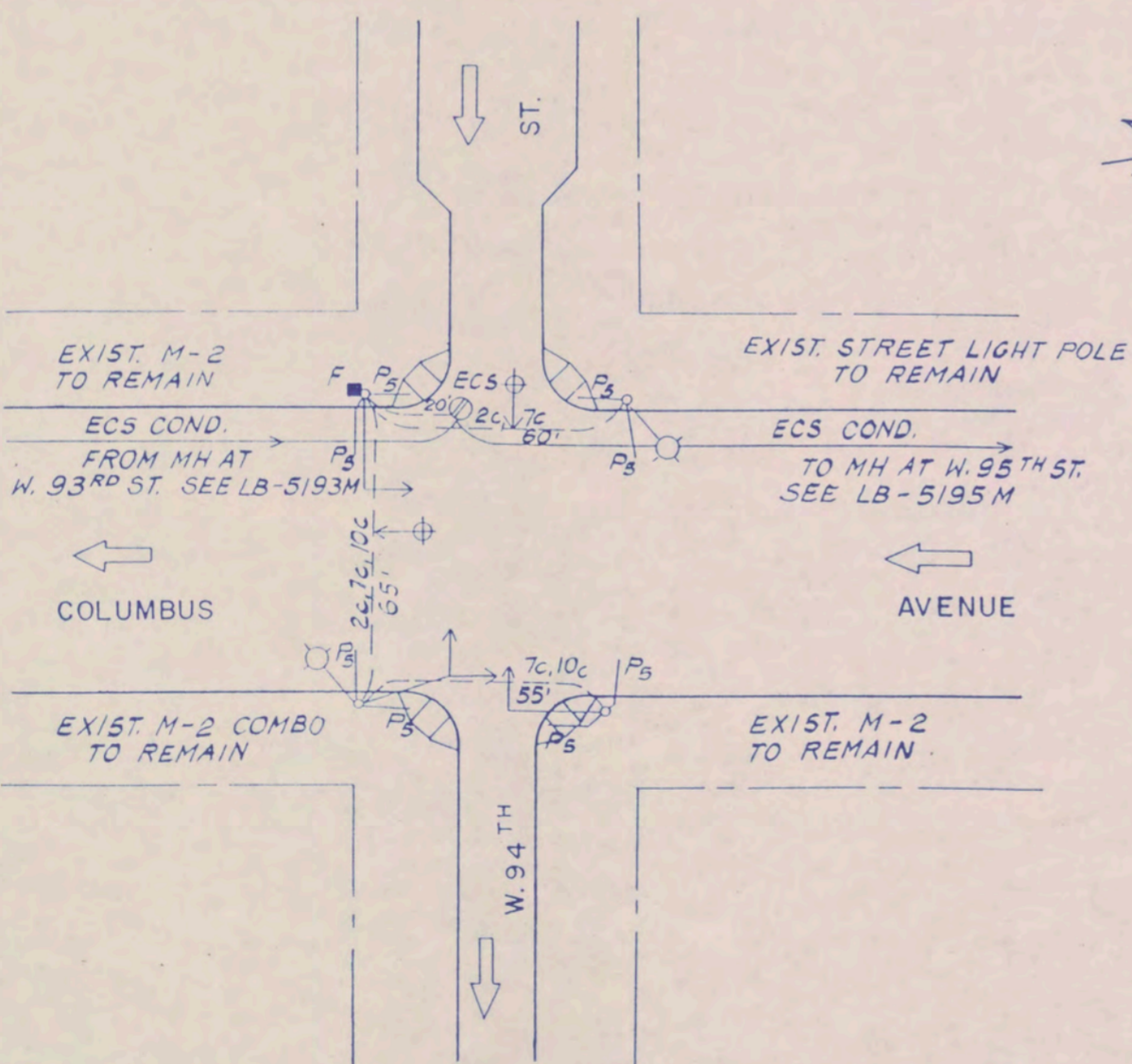
PROPOSED	EXISTING		
Signal Face	→	Loovers	⬇
Fed. Signal	→	Long Visors	⬇
Signal Post	●	Mount Face at 14'	⬇
Pushbutton	○	Hydrant	⬇
Control Box	□	Tree	⬇
SI LI. by Others	○	EL Column	⬇
Pullbox	□	Service Point	⬇
Wood Pole	●	2 Wires for D.W.S.G.B.E.	⬇
2" Conduit	---	Catch Basin	⬇
Overhead Cable	---	Telephone Manhole	⬇

NOTES:

- CONTROLLER TO BE FIXED TIME.
- EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO	DATE	BY	DESCRIPTION	I.A.S.	
REVISIONS					
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001					
COLUMBUS AVENUE & W. 92 ND ST.					
APPROVED	Drawn by	Checked by	Scale	DRAWING NO.	
BY	COMMISSIONER	Date	1" = 30'	LB-5192 M	

90 HY
E#



90 HY
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LEGEND

PROPOSED	EXISTING		
Signal Face	→	Loovers	⬇
Fed. Signal	→	Long Visors	⬇
Signal Post	●	Mount Face at 14'	⬇
Pushbutton	○	Hydrant	⬇
Control Box	□	Tree	⬇
SI LI. by Others	○	EL Column	⬇
Pullbox	□	Service Point	⬇
Wood Pole	●	2 Wires for D.W.S.G.B.E.	⬇
2" Conduit	---	Catch Basin	⬇
Overhead Cable	---	Telephone Manhole	⬇

NOTES:

- CONTROLLER TO BE FIXED TIME.
- EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

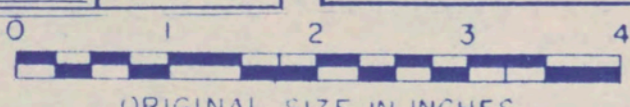
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NO	DATE	BY	DESCRIPTION	I.A.S.	
REVISIONS					
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001					
COLUMBUS AVENUE & W. 94 TH ST.					
APPROVED	Drawn by	Checked by	Scale	DRAWING NO.	
BY	COMMISSIONER	Date	1" = 30'	LB-5194 M	

DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

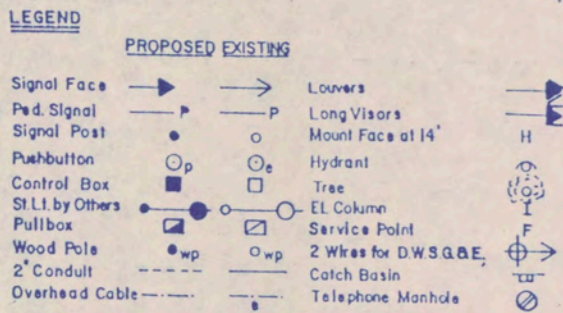
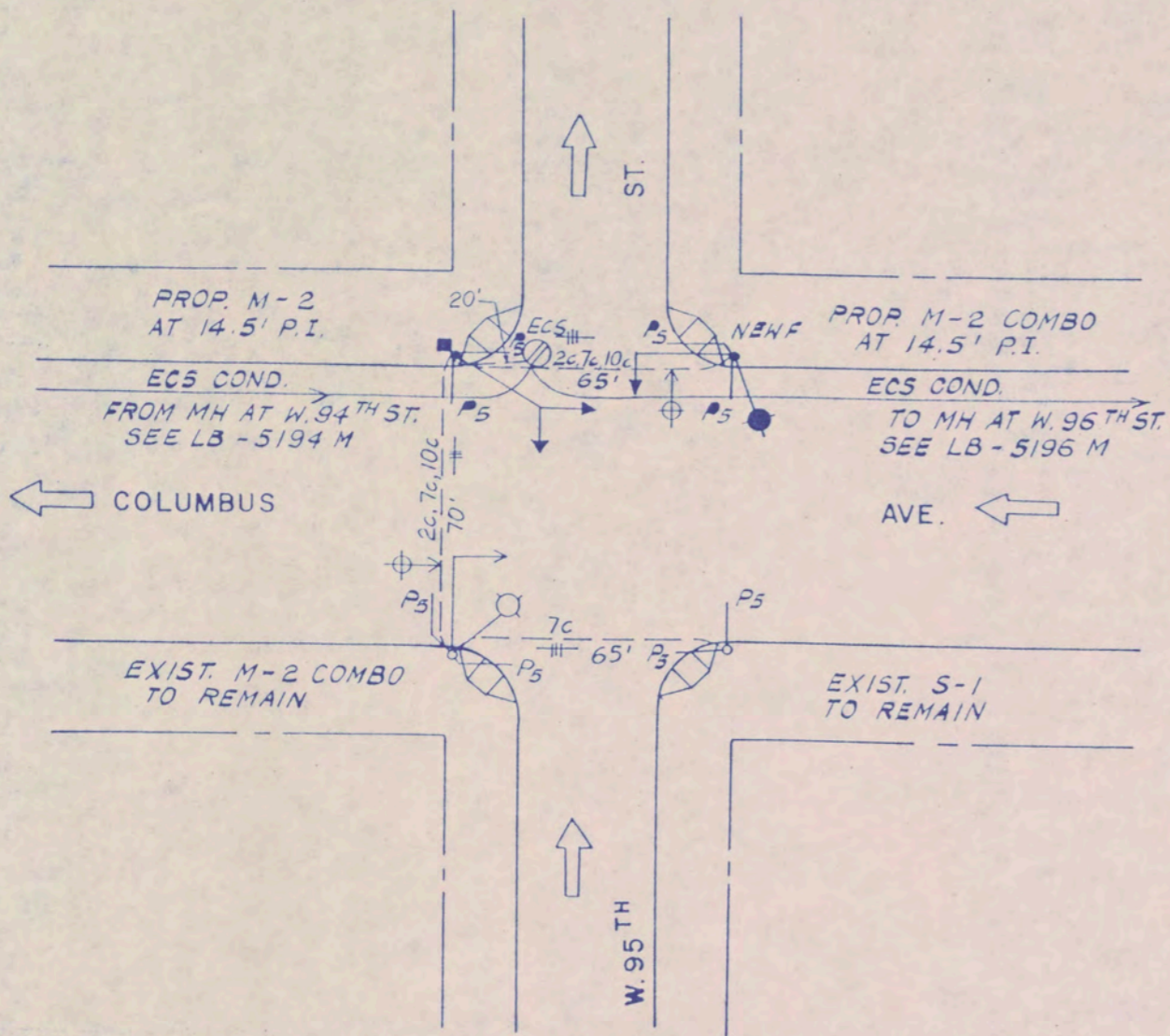
COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59TH ST. TO W. 110TH ST.
(EXCLUDING INTERSECTION AT BROADWAY)

TRAFFIC SIGNAL PLAN

SCALE: AS SHOWN DATE:



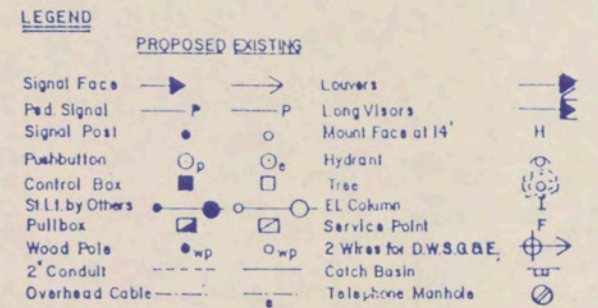
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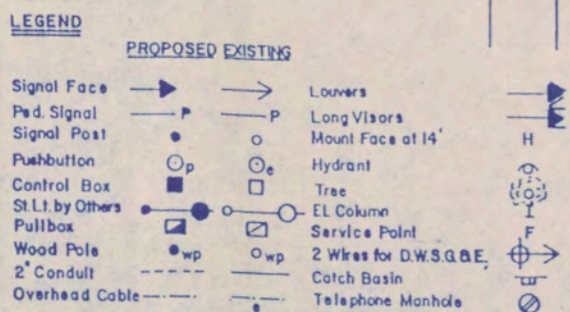
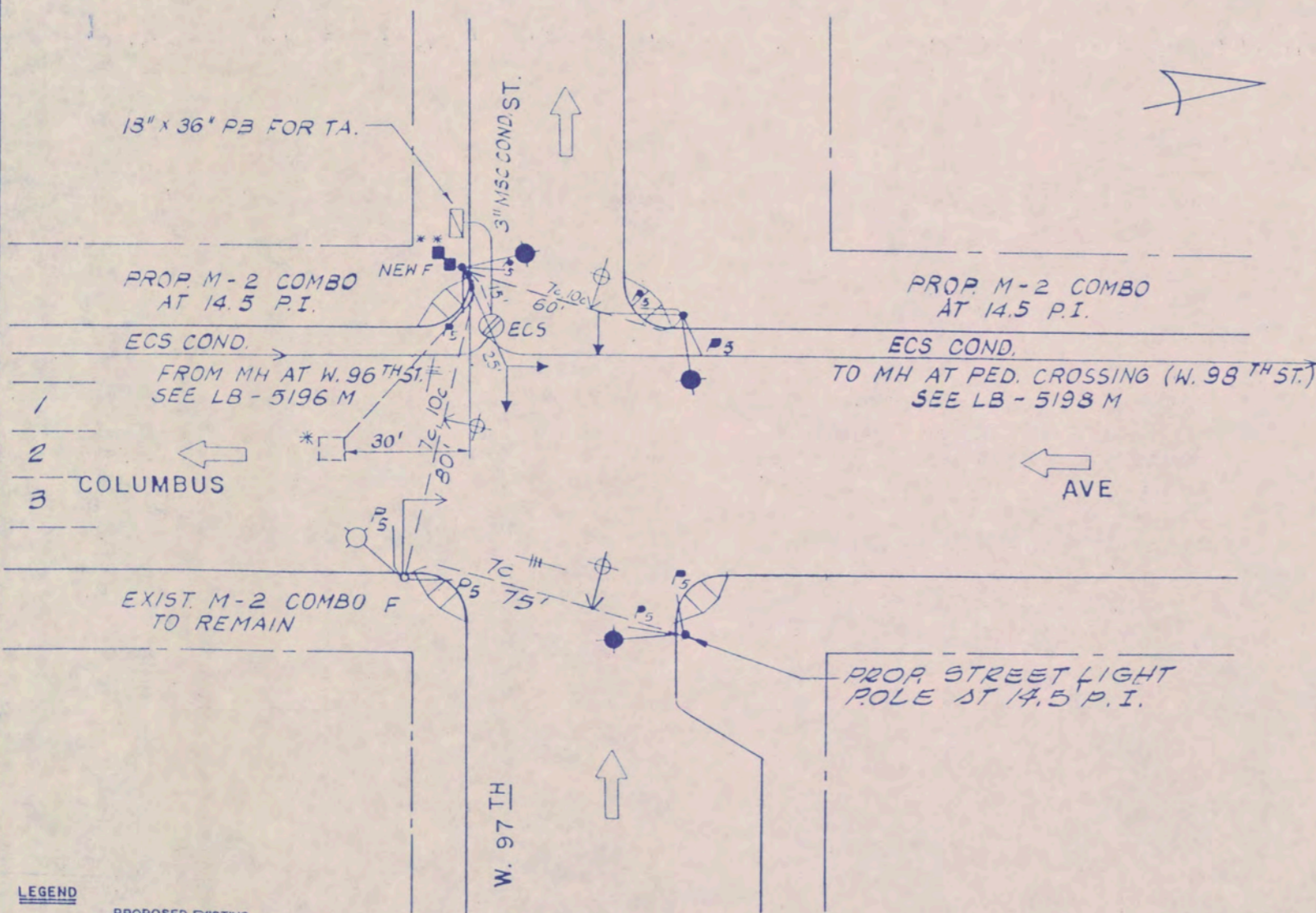
NOTES:

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11011				
COLUMBUS AVENUE & W. 95TH ST.				
APPROVED	Drawn by	DRAWING NO.		
BY COMMISSIONER	Checked by	Scale: 1" = 30'	LB-5195 M	
	Date:			



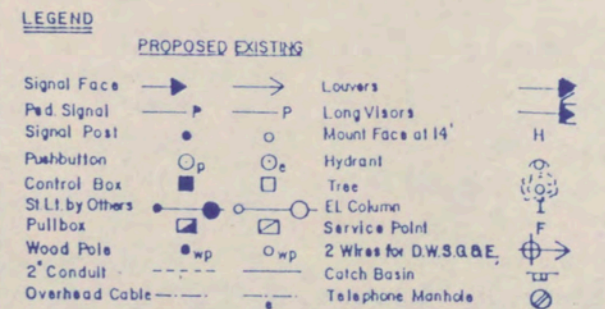
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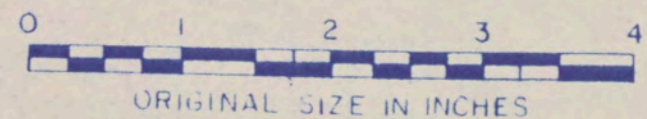
NOTES:

1. CONTROLLER TO BE FIXED TIME.
 2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.
- * INSTALL 6' x 6' LOOP SENSOR IN CENTER OF 2nd MOVING LANE.
- ** POWER SUPPLY, INSTALL GROUNDWIRE AS DIRECTED BY THE ENGINEER.

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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11011				
COLUMBUS AVENUE & W. 97TH ST.				
APPROVED	Drawn by	DRAWING NO.		
BY COMMISSIONER	Checked by	Scale: 1" = 30'	LB-5197 M	
	Date:			



DANIEL FRANKFURT, P.C. consulting engineers
800 SECOND AVENUE NEW YORK NY

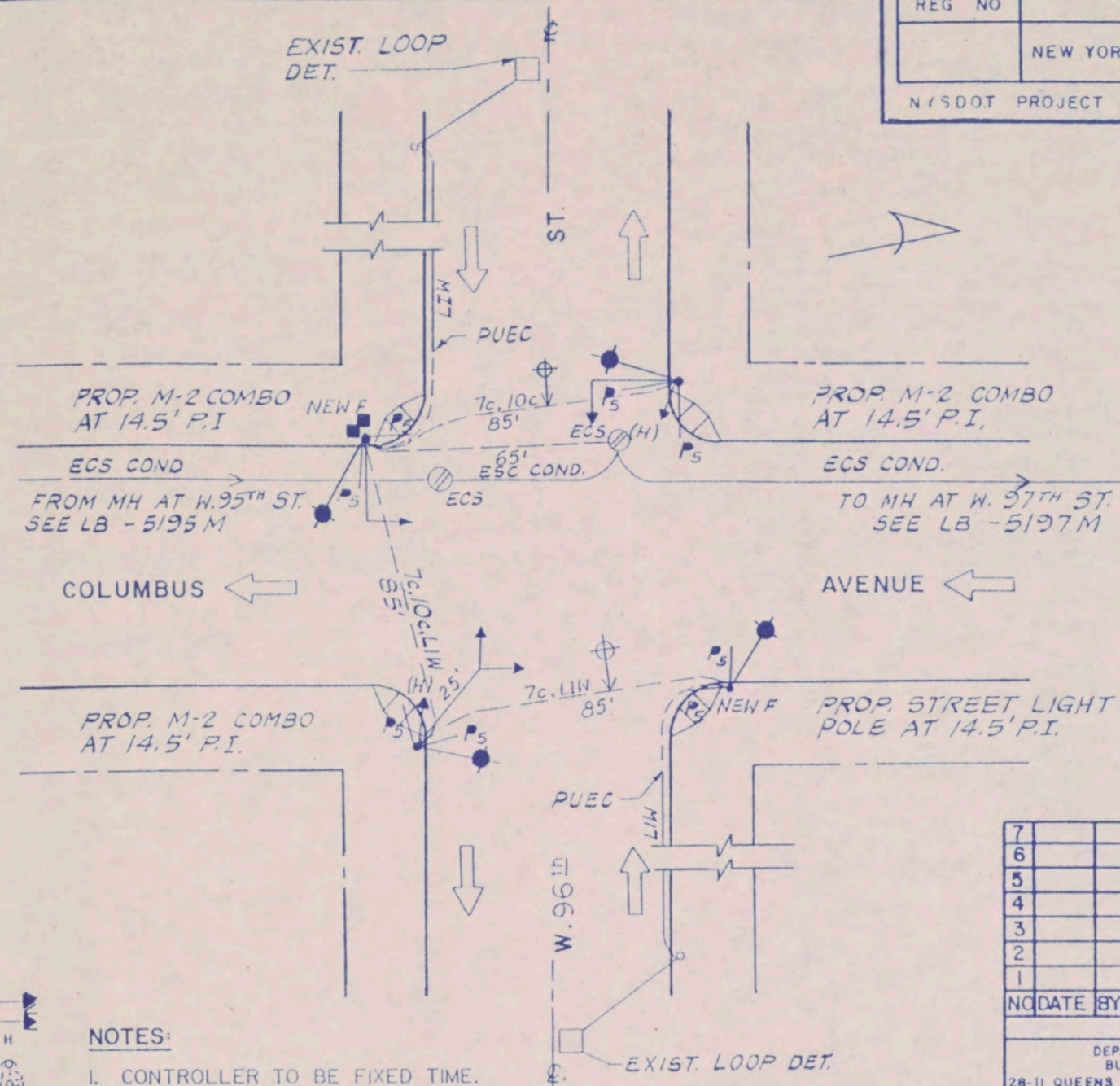


FED ROAD REG NO	STATE	FEDERAL PROJECT NO.	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				

NYS DOT PROJECT IDENTIFICATION NO

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LEGEND

PROPOSED	EXISTING	DESCRIPTION
▶	▶	Signal Face
●	●	Ped. Signal
○	○	Signal Post
○	○	Pushbutton
□	□	Control Box
○	○	St. Lt. by Others
○	○	Pullbox
○	○	Wood Pole
○	○	2" Conduit
○	○	Overhead Cable
○	○	Louvers
○	○	Long Visors
○	○	Mount Face at 14'
○	○	Hydrant
○	○	Tree
○	○	EL Column
○	○	Service Point
○	○	2 Wires for D.W.S.G.B.E.
○	○	Catch Basin
○	○	Telephone Manhole

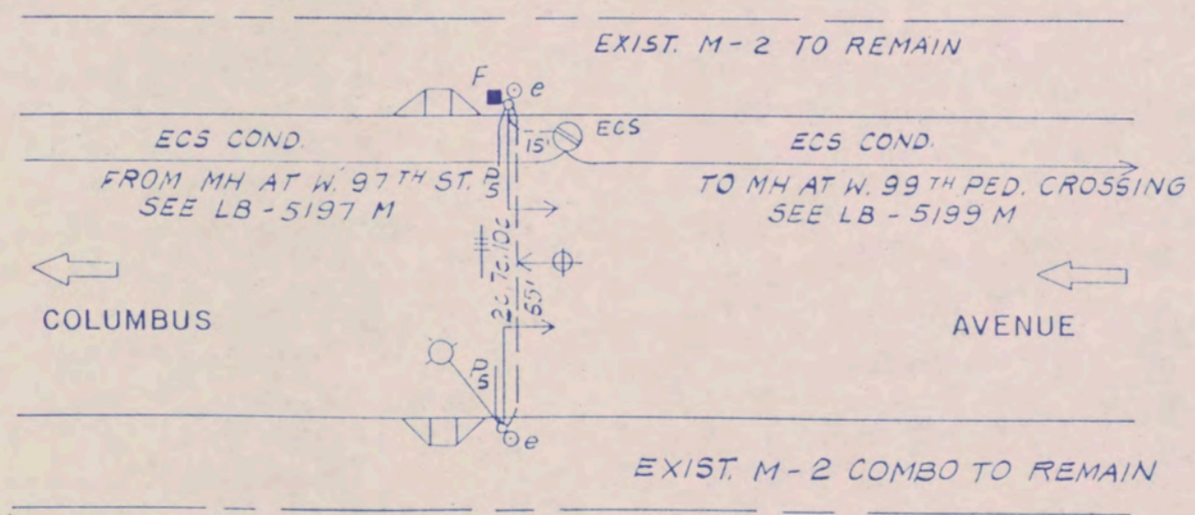
- NOTES:**
1. CONTROLLER TO BE FIXED TIME.
 2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO.	DATE	BY	DESCRIPTION
REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & W. 96TH ST.			
APPROVED BY	Drawn by	Checked by	DRAWING NO.
COMMISSIONER			LB-5196 M

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NO.	DATE	BY	DESCRIPTION
REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & W. 95TH ST.			
APPROVED BY	Drawn by	Checked by	DRAWING NO.
COMMISSIONER			LB-5195 M

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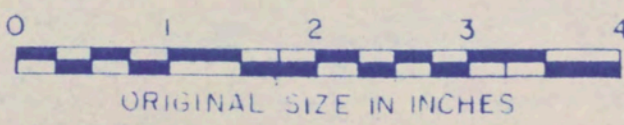
LEGEND

PROPOSED	EXISTING	DESCRIPTION
▶	▶	Signal Face
●	●	Ped. Signal
○	○	Signal Post
○	○	Pushbutton
□	□	Control Box
○	○	St. Lt. by Others
○	○	Pullbox
○	○	Wood Pole
○	○	2" Conduit
○	○	Overhead Cable
○	○	Louvers
○	○	Long Visors
○	○	Mount Face at 14'
○	○	Hydrant
○	○	Tree
○	○	EL Column
○	○	Service Point
○	○	2 Wires for D.W.S.G.B.E.
○	○	Catch Basin
○	○	Telephone Manhole

- NOTES:**
1. CONTROLLER TO BE FIXED TIME.
 2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

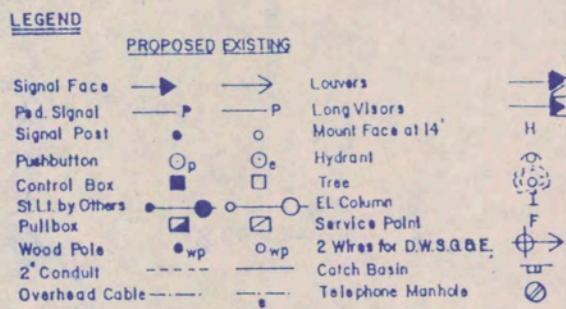
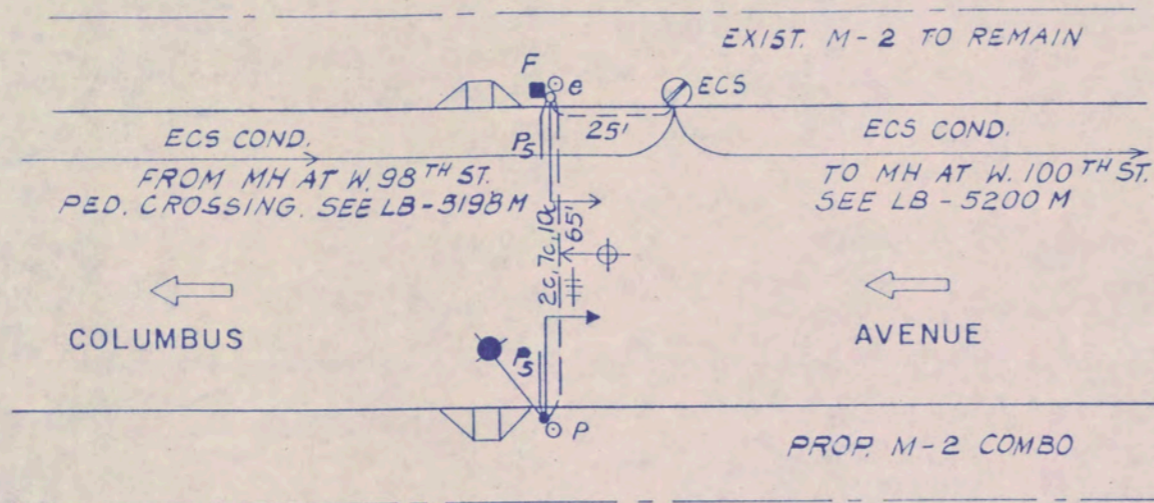
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NO.	DATE	BY	DESCRIPTION
REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & PED. CROSSING (98TH ST.)			
APPROVED BY	Drawn by	Checked by	DRAWING NO.
COMMISSIONER			LB-5198 M

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NO.	DATE	BY	DESCRIPTION
REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & W. 97TH ST.			
APPROVED BY	Drawn by	Checked by	DRAWING NO.
COMMISSIONER			LB-5197 M



DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK
COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59TH ST. TO W. 110TH ST.
(EXCLUDING INTERSECTION AT BROADWAY)
TRAFFIC SIGNAL PLAN
SCALE: AS SHOWN DATE:

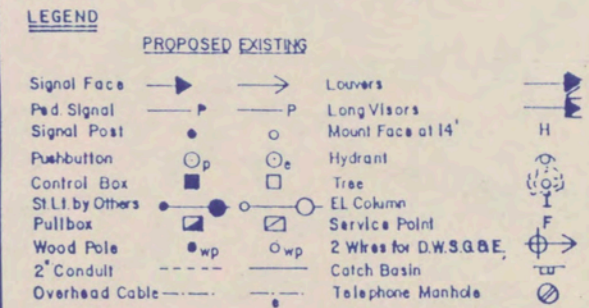
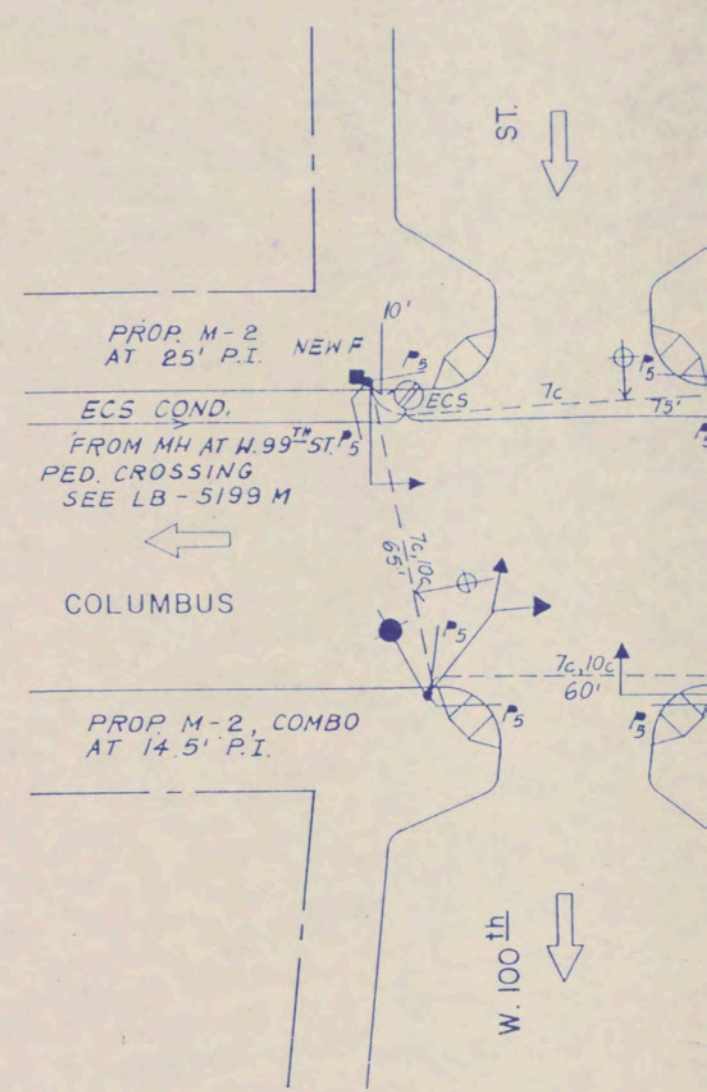
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NOTES:

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

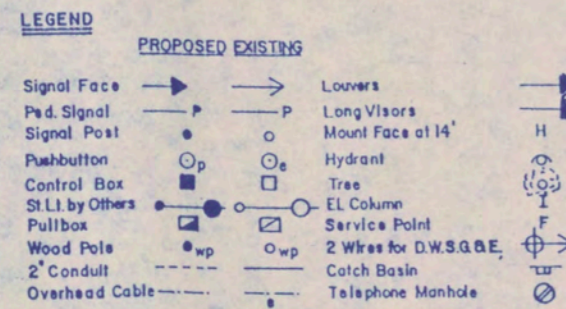
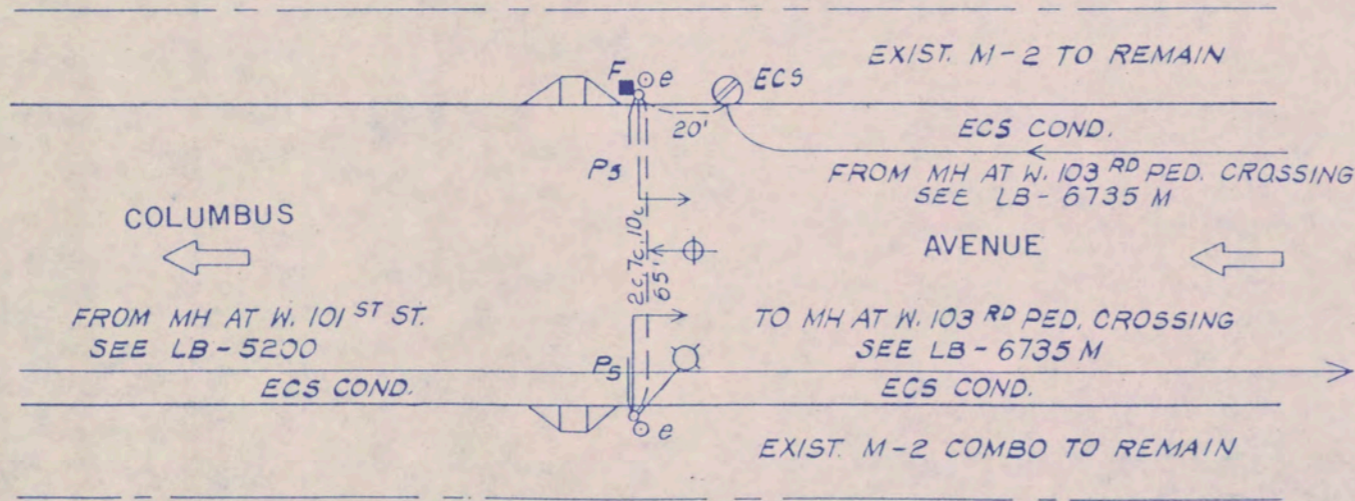
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NO	DATE	BY	DESCRIPTION
REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-II QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & PED. CROSSING (99TH ST.)			
APPROVED	Drawn by	DRAWING NO.	
BY	Checked by	LB-5199 M	
COMMISSIONER	Scale: 1" = 30'	Date:	



NOTES:

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

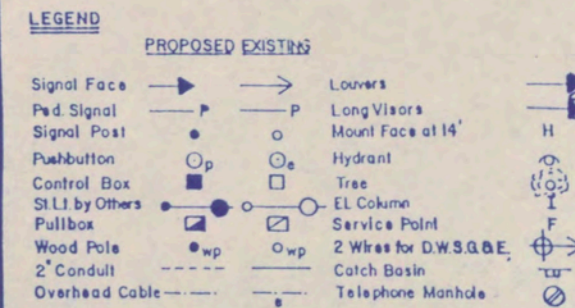
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NOTES:

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO	DATE	BY	DESCRIPTION
REVISIONS			
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-II QUEENS PLAZA NORTH L.I.C., N.Y. 11001			
COLUMBUS AVENUE & PED. CROSSING (102ND ST.)			
APPROVED	Drawn by	DRAWING NO.	
BY	Checked by	LB 5201 M	
COMMISSIONER	Scale: 1" = 30'	Date:	



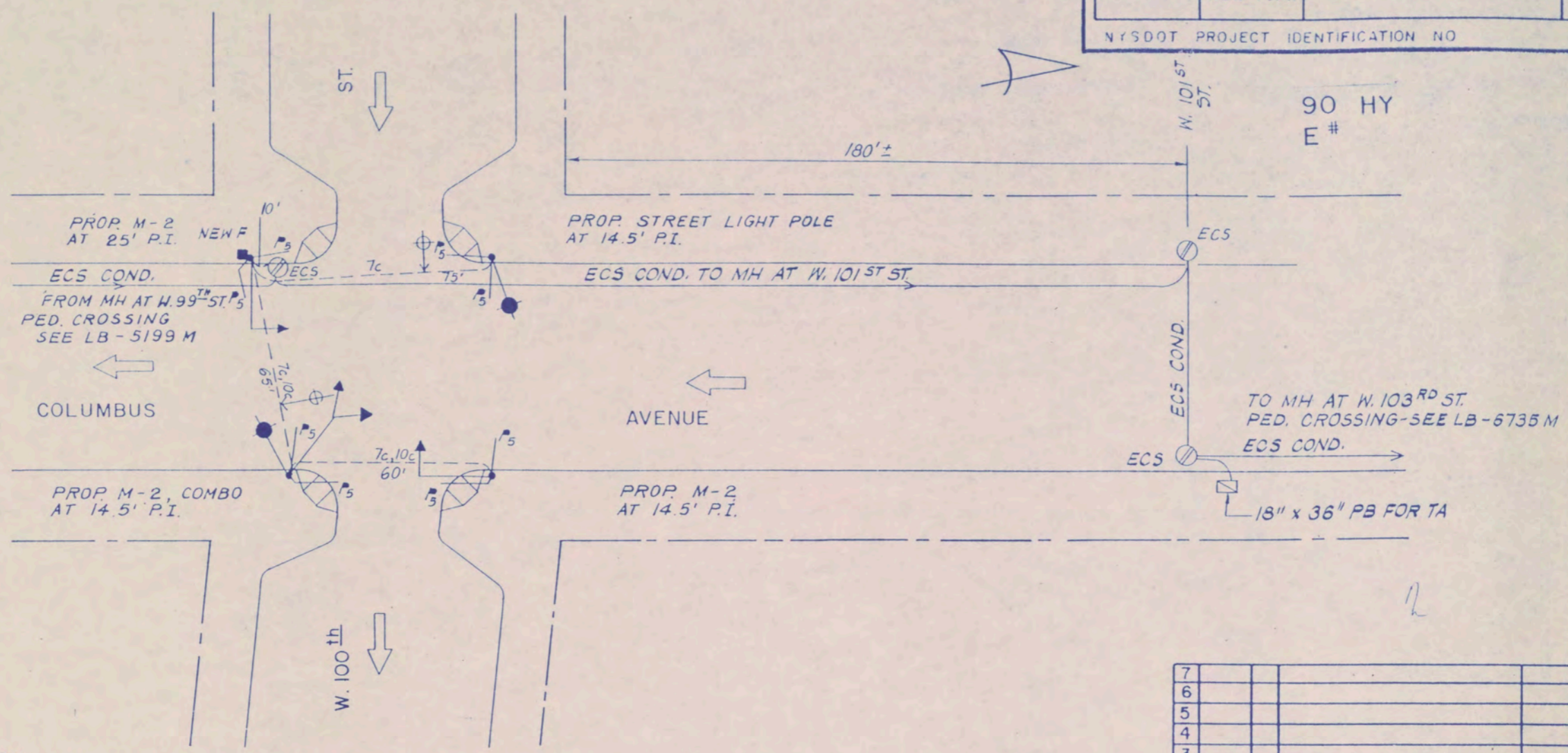
NOTES:

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

FED ROAD REG NO	STATE	FEDERAL PROJECT NO	AID NO	SHEET NO	TOTAL SHEETS
	NEW YORK				

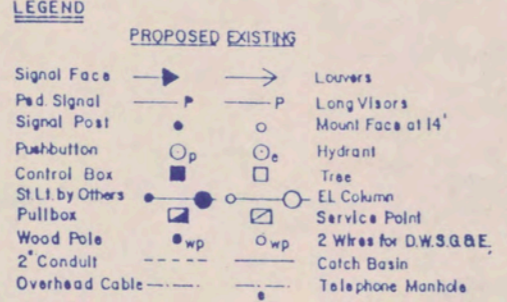
NYS DOT PROJECT IDENTIFICATION NO

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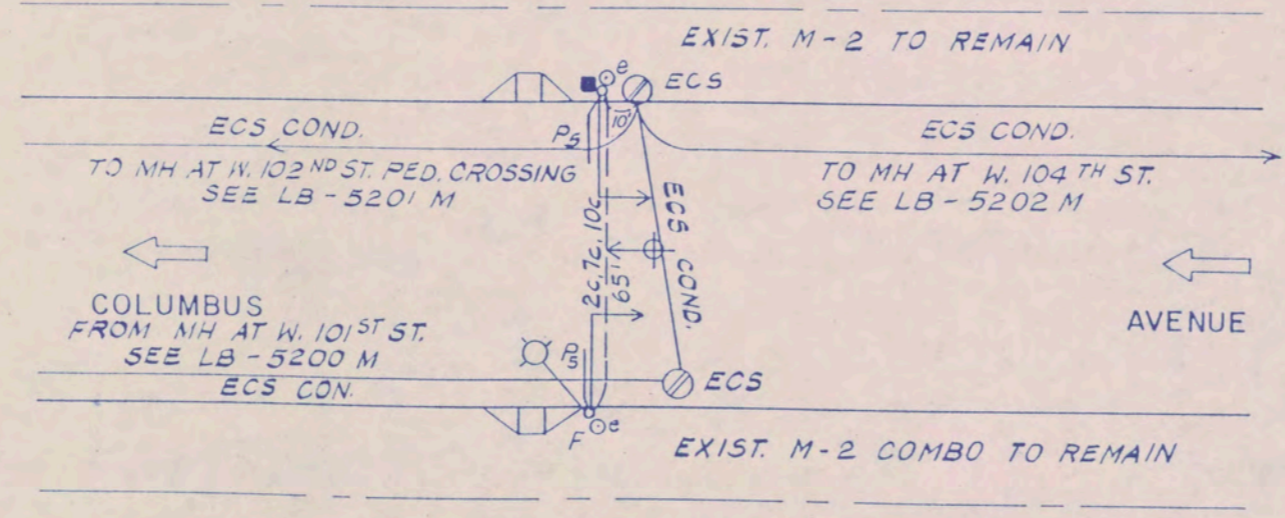
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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11011				
COLUMBUS AVENUE & PED. CROSSING (99TH ST.)				
APPROVED BY	Drawn by	Checked by	DRAWING NO.	
COMMISSIONER			LB-5199 M	

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REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11011				
COLUMBUS AVENUE & W. 100TH ST.				
APPROVED BY	Drawn by	Checked by	DRAWING NO.	
COMMISSIONER			LB-5200 M	



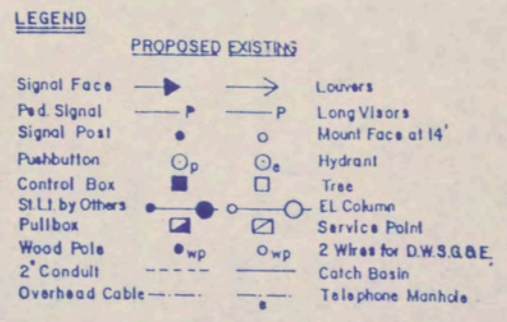
- NOTES:**
- CONTROLLER TO BE FIXED TIME.
 - EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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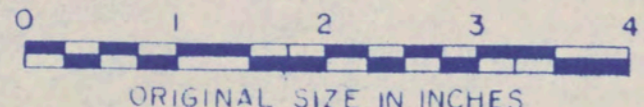


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REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11011				
COLUMBUS AVENUE & PED. CROSSING (102ND ST.)				
APPROVED BY	Drawn by	Checked by	DRAWING NO.	
COMMISSIONER			LB 5201 M	

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REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11011				
COLUMBUS AVENUE & PED. CROSSING (103RD ST.)				
APPROVED BY	Drawn by	Checked by	DRAWING NO.	
COMMISSIONER			LB-6735 M	



- NOTES:**
- CONTROLLER TO BE FIXED TIME.
 - EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.



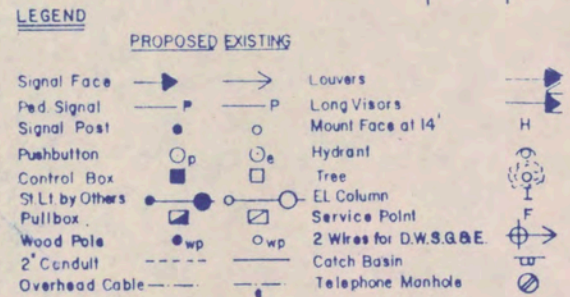
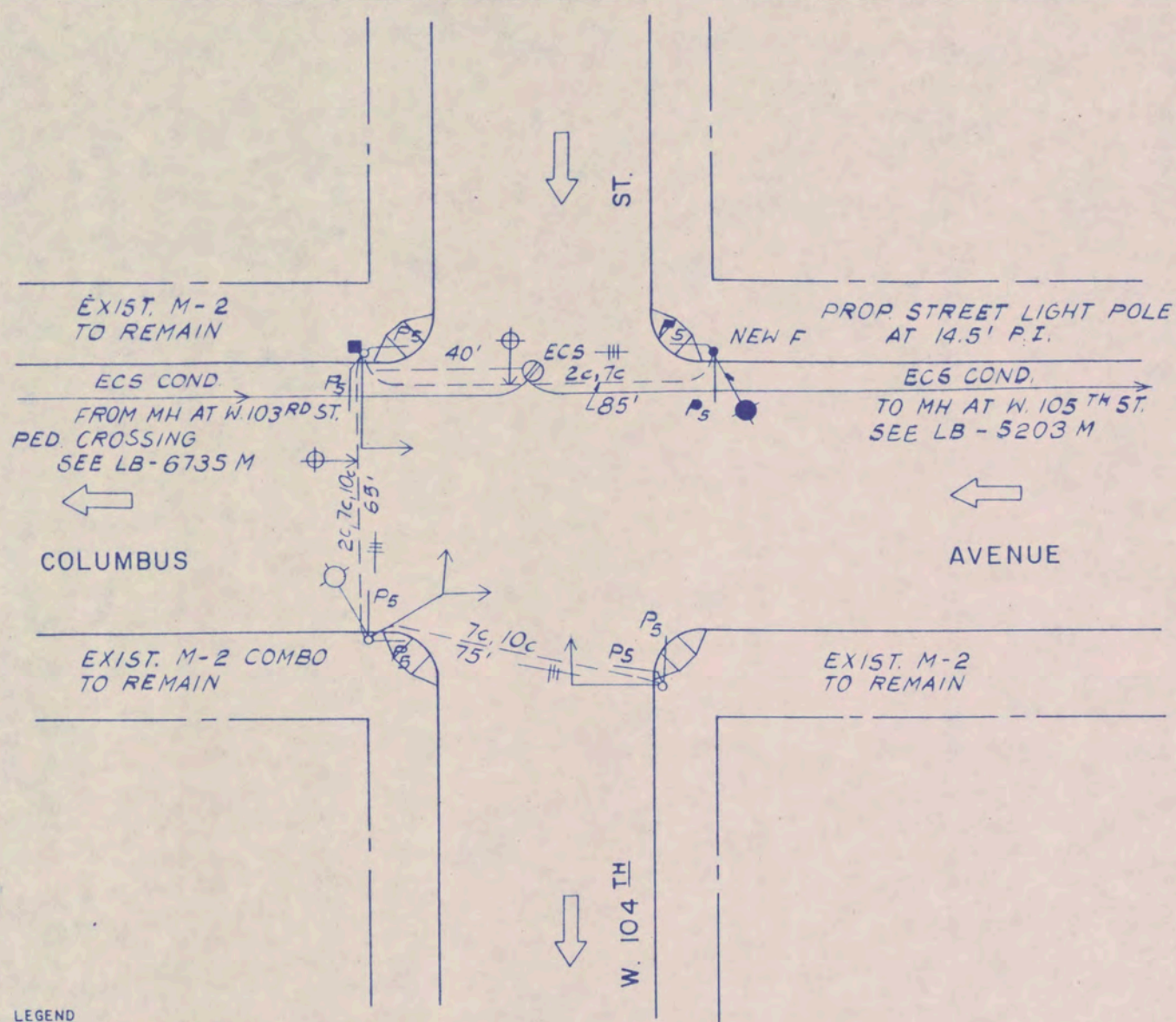
DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK

COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59TH ST. TO W. 110TH ST.
(EXCLUDING INTERSECTION AT BROADWAY)

TRAFFIC SIGNAL PLAN

SCALE: AS SHOWN DATE:

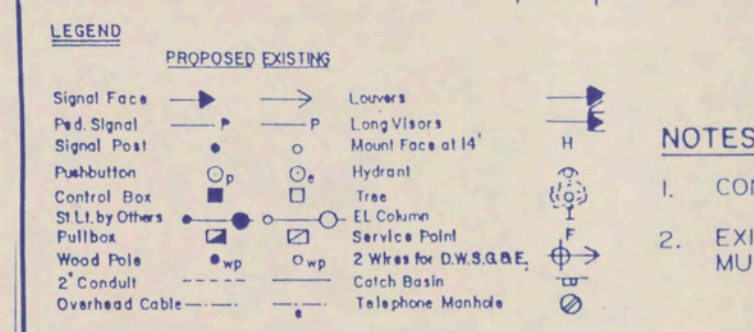
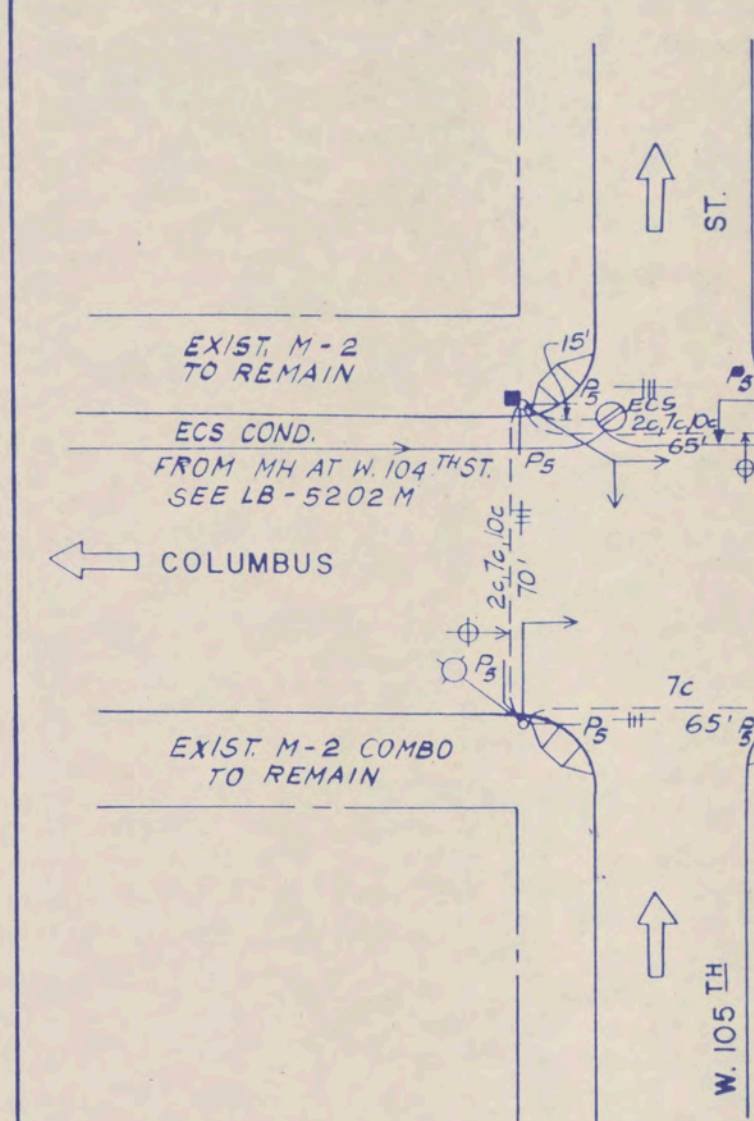
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NOTES:

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

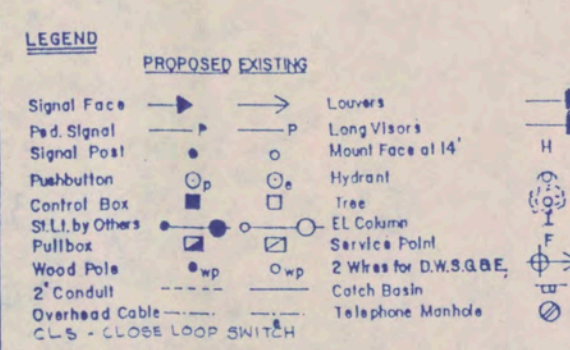
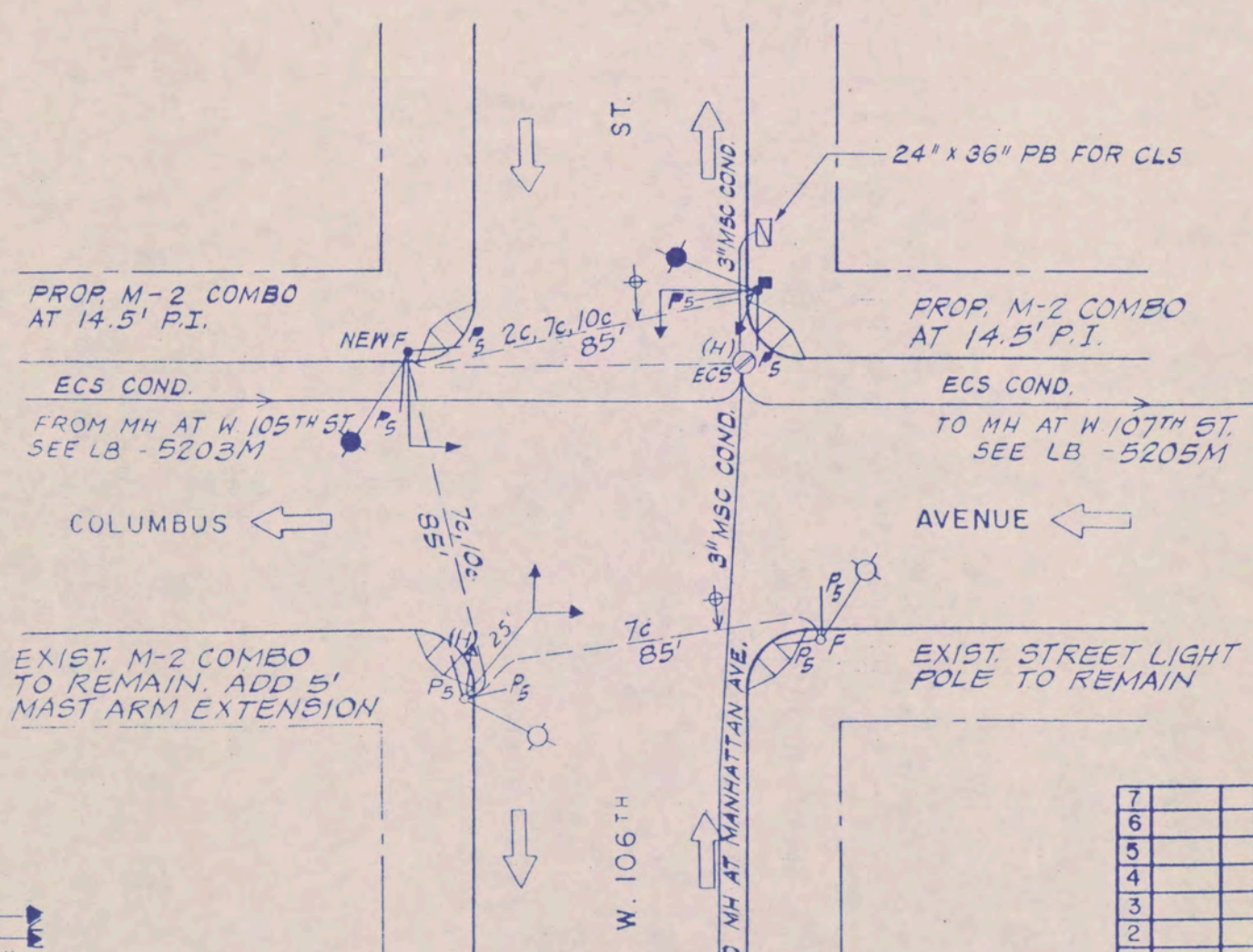
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REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-II QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE & W. 104TH ST.				
APPROVED	Drawn by	Checked by	DRAWING NO.	
BY	COMMISSIONER	Date	Scale: 1" = 30'	LB-5202M



NOTES:

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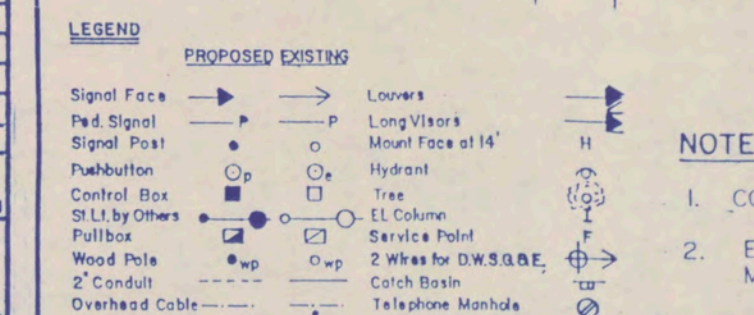
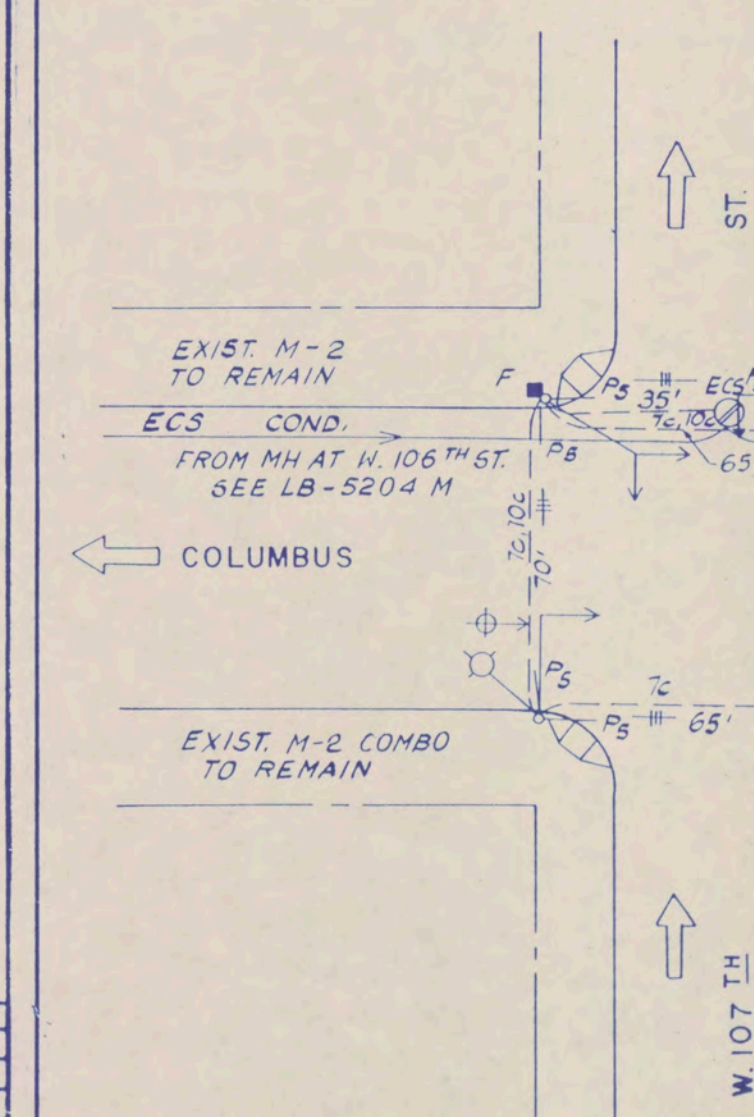
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NOTES:

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

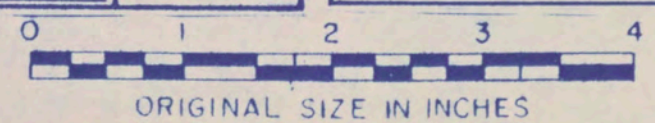
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REVISIONS				
DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC OPERATIONS 28-II QUEENS PLAZA NORTH L.I.C., N.Y. 11001				
COLUMBUS AVENUE & W. 106TH ST.				
APPROVED	Drawn by	Checked by	DRAWING NO.	
BY	COMMISSIONER	Date	Scale: 1" = 30'	LB-5204M



NOTES:

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DANIEL FRANKFURT, P.C. consulting engineers
800 SECOND AVENUE NEW YORK, N.Y.

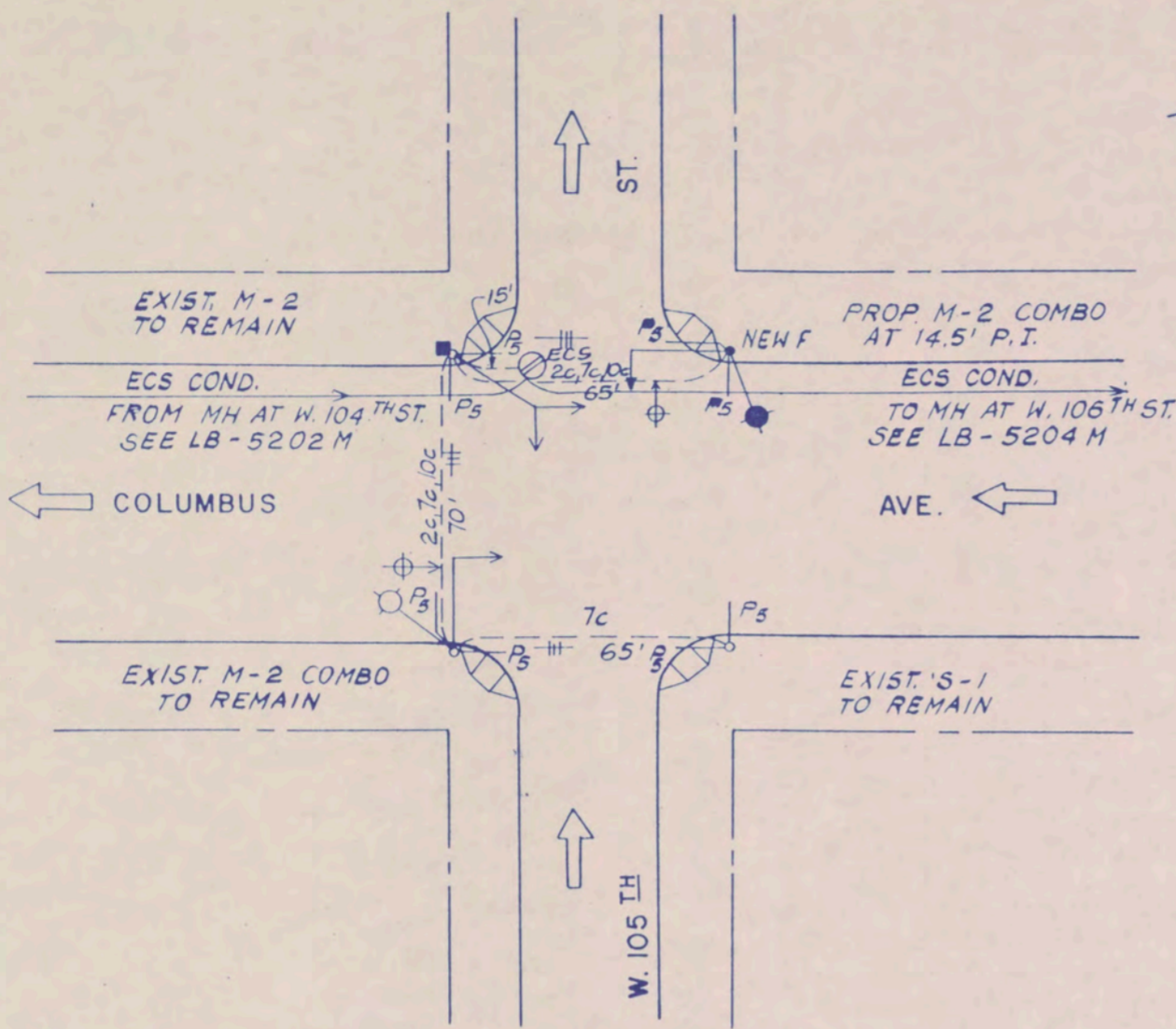


FED. ROAD REG. NO.	STATE	FEDERAL PROJECT NO.	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				

NYS DOT PROJECT IDENTIFICATION NO.

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90 HY
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LEGEND

PROPOSED	EXISTING	DESCRIPTION
▶	▶	Signal Face
▶	▶	Lead Signal
○	○	Signal Post
○	○	Pushbutton
□	□	Control Box
○	○	SI Lt. by Others
○	○	Pullbox
○	○	Wood Pole
○	○	2" Conduit
○	○	Overhead Cable
○	○	Lovers
○	○	Long Vissors
○	○	Mount Face at 14'
○	○	Hydrant
○	○	Tree
○	○	EL Column
○	○	Service Point
○	○	2 Wires for D.W.S.G.B.E.
○	○	Catch Basin
○	○	Telephone Manhole

NOTES:

- CONTROLLER TO BE FIXED TIME.
- EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

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NO DATE BY DESCRIPTION I.A.S.

REVISIONS

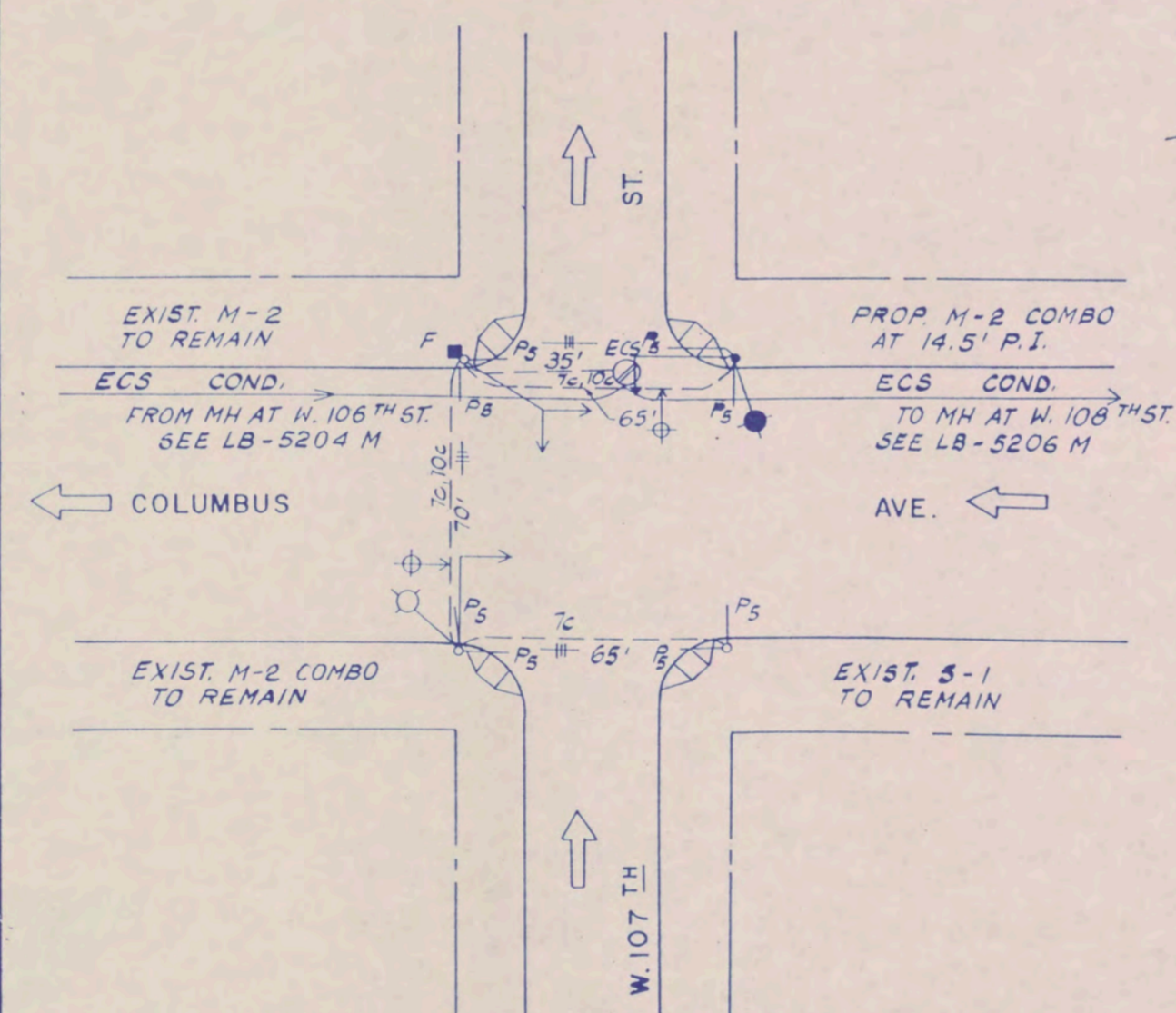
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001

COLUMBUS AVENUE
& W. 105TH ST.

APPROVED BY COMMISSIONER
Drawn by _____
Checked by _____
Scale: 1" = 30'
Date _____
DRAWING NO. LB-5203M

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90 HY
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LEGEND

PROPOSED	EXISTING	DESCRIPTION
▶	▶	Signal Face
▶	▶	Lead Signal
○	○	Signal Post
○	○	Pushbutton
□	□	Control Box
○	○	SI Lt. by Others
○	○	Pullbox
○	○	Wood Pole
○	○	2" Conduit
○	○	Overhead Cable
○	○	Lovers
○	○	Long Vissors
○	○	Mount Face at 14'
○	○	Hydrant
○	○	Tree
○	○	EL Column
○	○	Service Point
○	○	2 Wires for D.W.S.G.B.E.
○	○	Catch Basin
○	○	Telephone Manhole

NOTES:

- CONTROLLER TO BE FIXED TIME.
- EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

7			
6			
5			
4			
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1			

NO DATE BY DESCRIPTION I.A.S.

REVISIONS

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001

COLUMBUS AVENUE
& W. 107TH ST.

APPROVED BY COMMISSIONER
Drawn by _____
Checked by _____
Scale: 1" = 30'
Date _____
DRAWING NO. LB 5205M

7			
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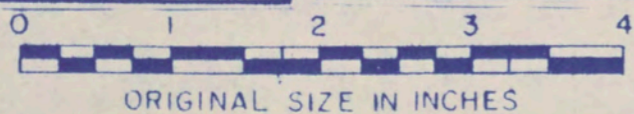
NO DATE BY DESCRIPTION I.A.S.

REVISIONS

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001

COLUMBUS AVENUE
& W. 106TH ST.

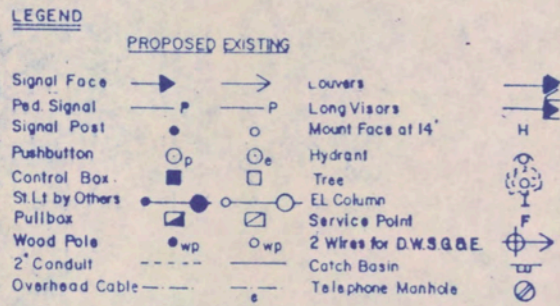
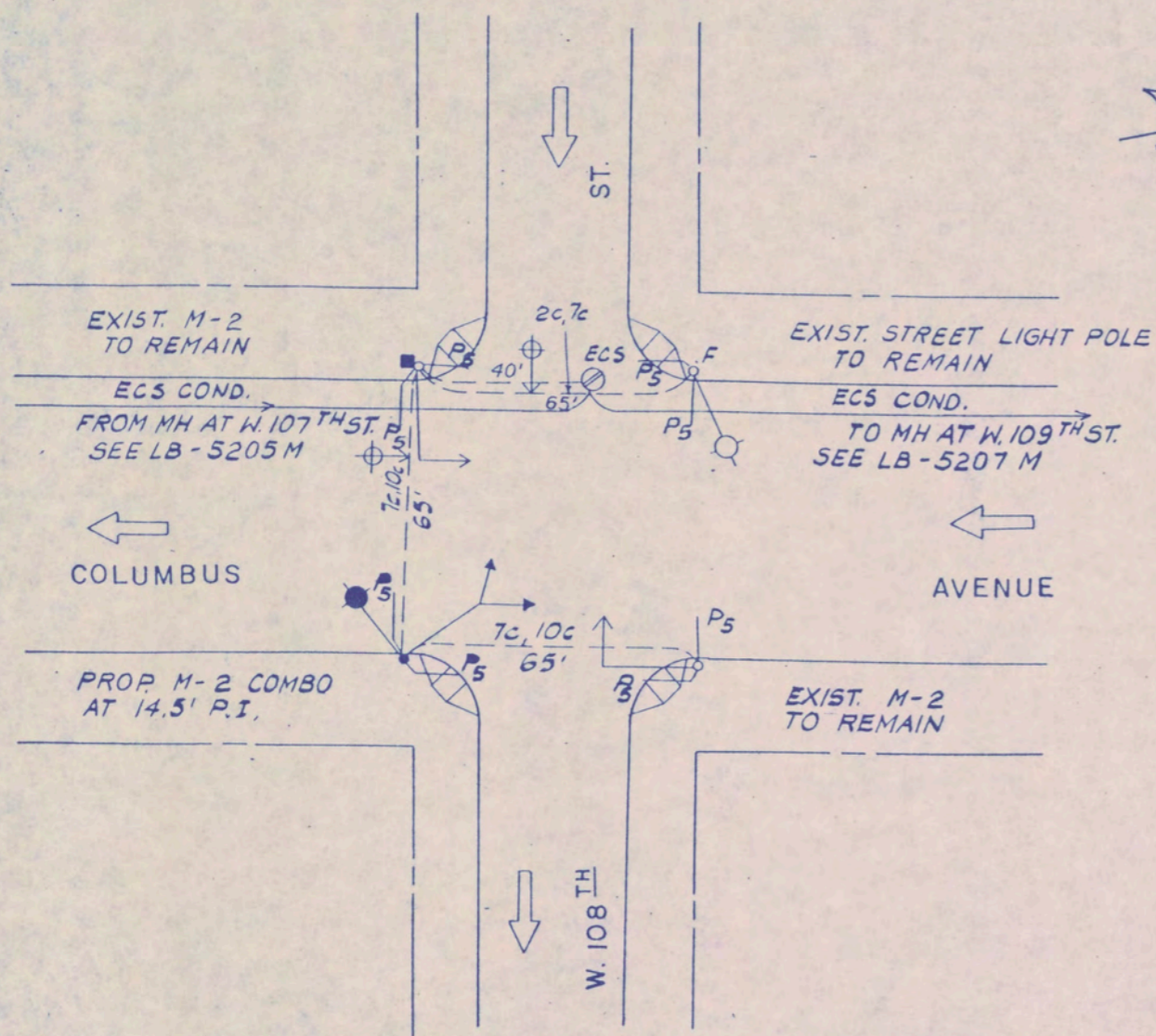
APPROVED BY COMMISSIONER
Drawn by _____
Checked by _____
Scale: 1" = 30'
Date _____
DRAWING NO. LB-5204M



DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK
COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59TH ST. TO W. 110TH ST.
(EXCLUDING INTERSECTION AT BROADWAY)
TRAFFIC SIGNAL PLAN

SCALE: AS SHOWN DATE:

90 HY
E#



NOTES:

1. CONTROLLER TO BE FIXED TIME.
2. EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

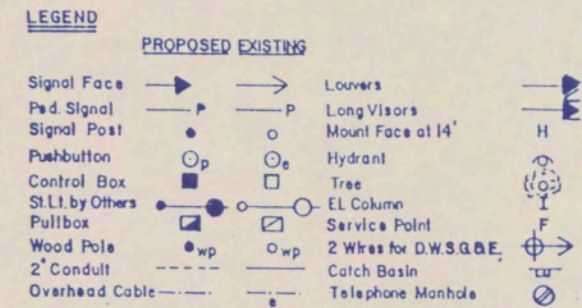
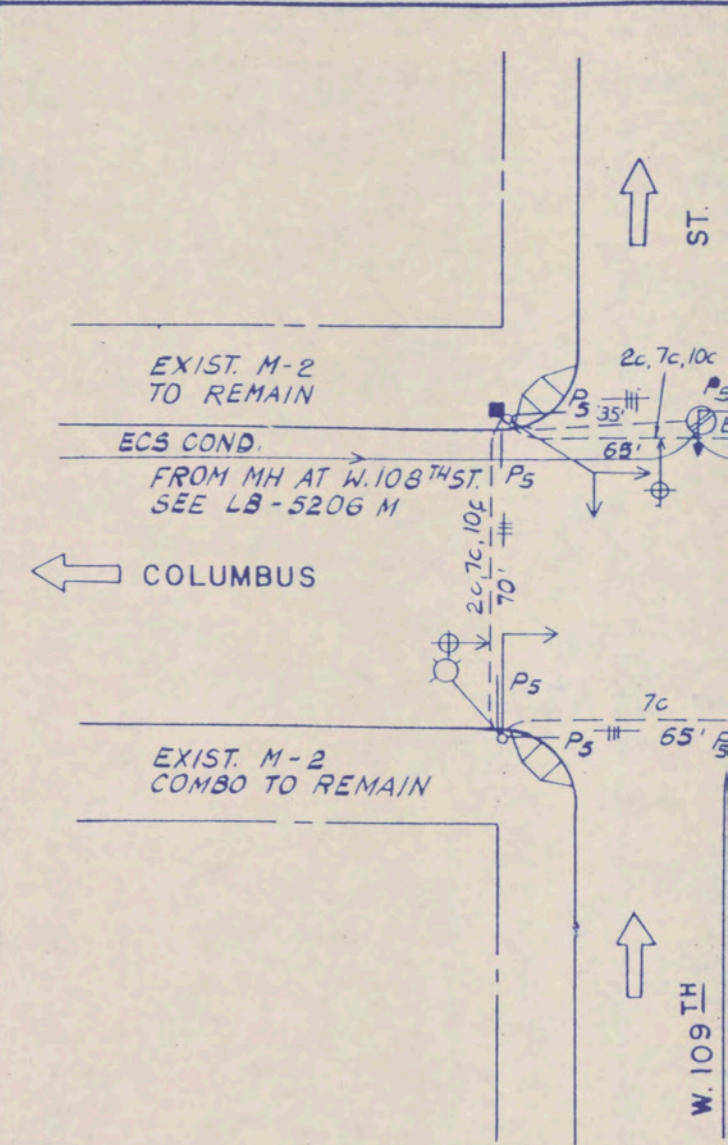
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NO.	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
29-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11011

**COLUMBUS AVENUE
& W. 108TH ST.**

APPROVED BY	Drawn by	DRAWING NO.
COMMISSIONER	Checked by	LB-5206M
	Scale: 1" = 30'	
	Date:	



NOTES:

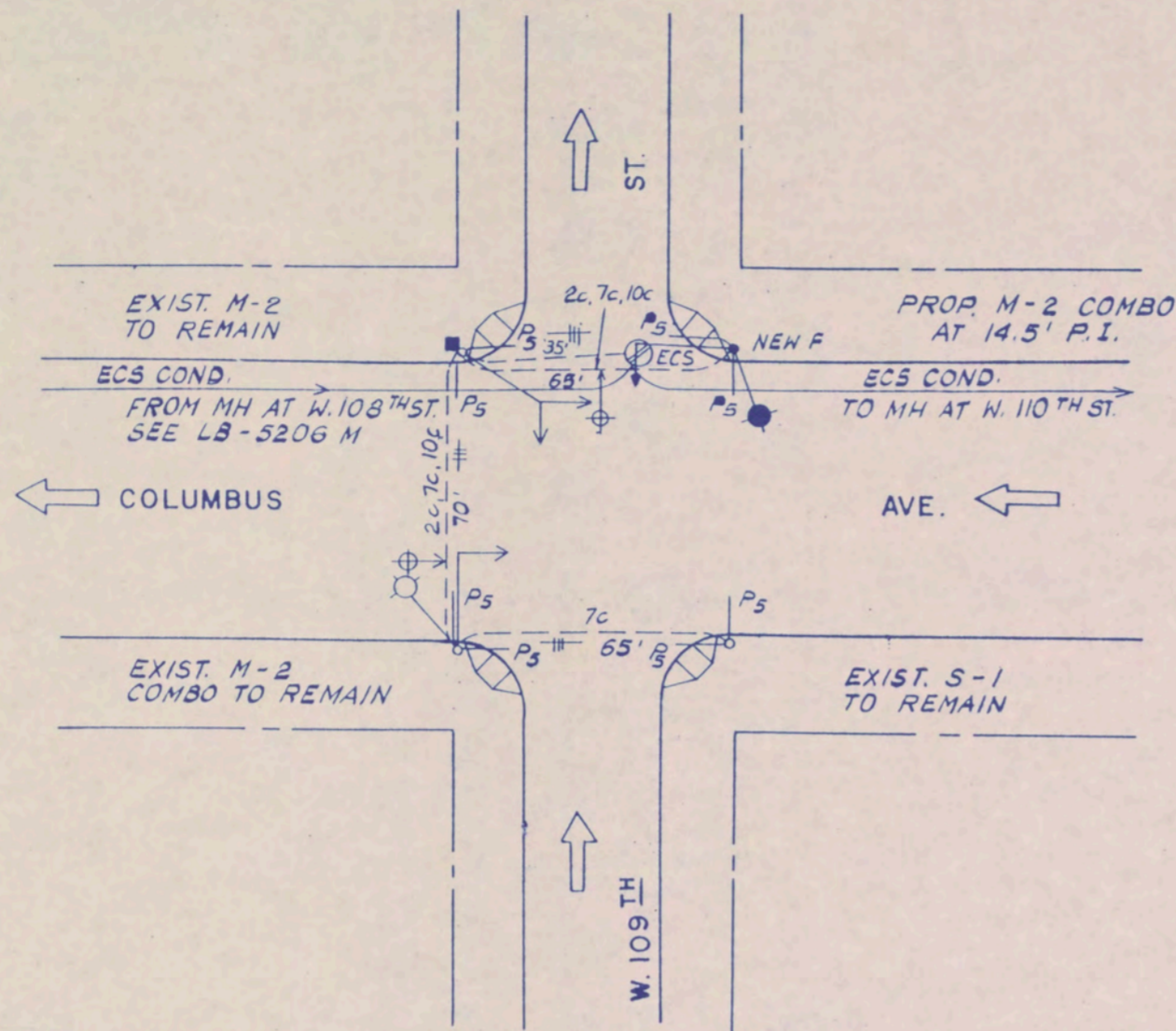
1. CO
2. EXI
- MU

90 HY
E#

FED ROAD REG NO	STATE	FEDERAL PROJECT	AID NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK				

NYS DOT PROJECT IDENTIFICATION NO

90 HY
E#



12

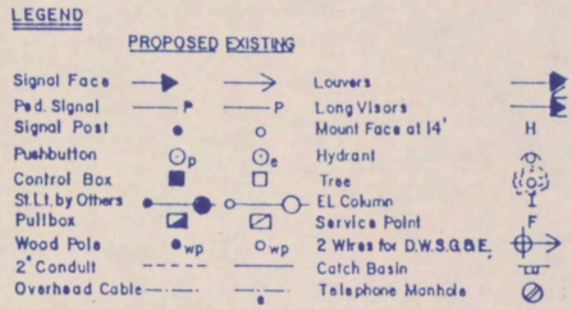
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1			

NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				

DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001

**COLUMBUS AVENUE
& W. 108TH ST.**

APPROVED BY: COMMISSIONER
Checked by: _____
Scale: 1" = 30'
Date: _____
DRAWING NO. LB-5206M



- NOTES:**
- CONTROLLER TO BE FIXED TIME.
 - EXIST. 3" MSC CONDUIT, COAXIAL CABLE AND PULLBOXES MUST BE MAINTAINED AS DIRECTED BY THE ENGINEER.

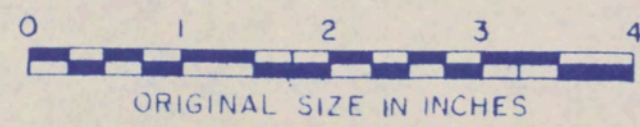
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NO	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				

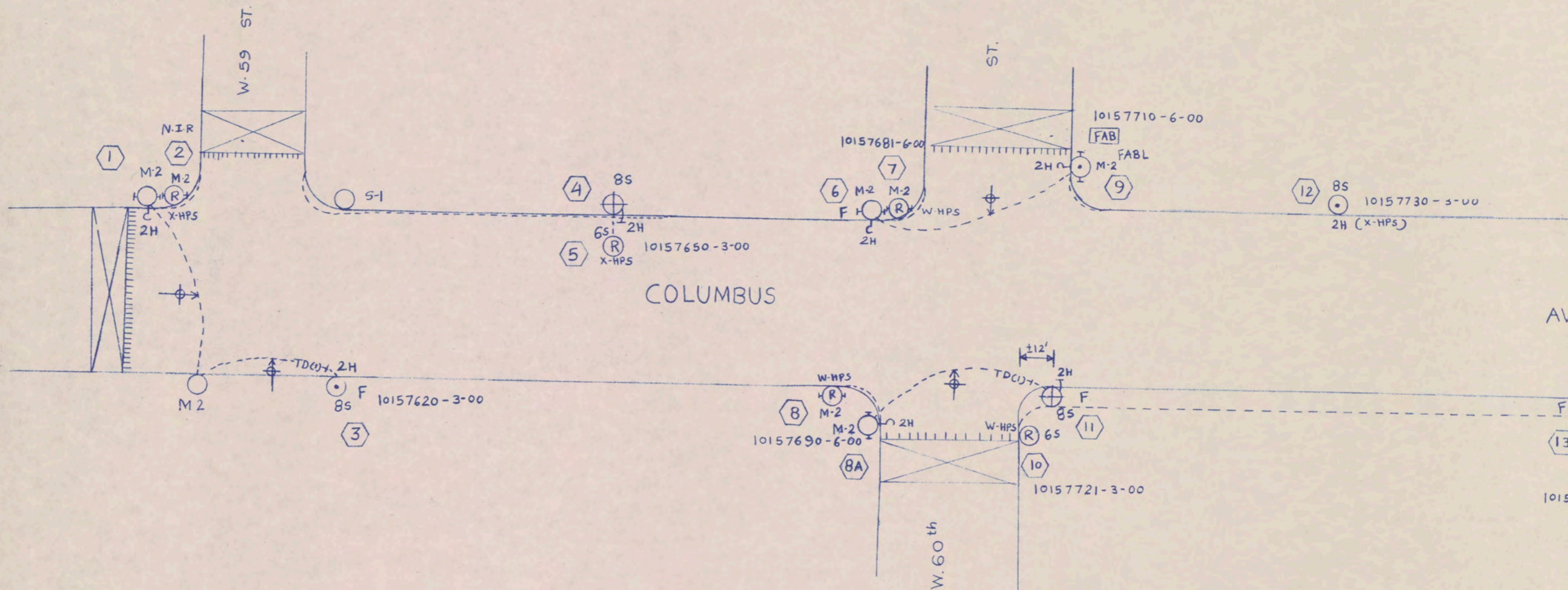
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
28-11 QUEENS PLAZA NORTH L.I.C., N.Y. 11001

**COLUMBUS AVENUE
& W. 109TH ST.**

APPROVED BY: COMMISSIONER
Checked by: _____
Scale: 1" = 30'
Date: _____
DRAWING NO. LB-5207M



DEPARTMENT OF TRANSPORTATION
CITY OF NEW YORK
COLUMBUS AVENUE RECONSTRUCTION
FROM W. 59TH ST. TO W. 110TH ST.
(EXCLUDING INTERSECTION AT BROADWAY)
TRAFFIC SIGNAL PLAN
SCALE: AS SHOWN DATE: _____



LEGEND:

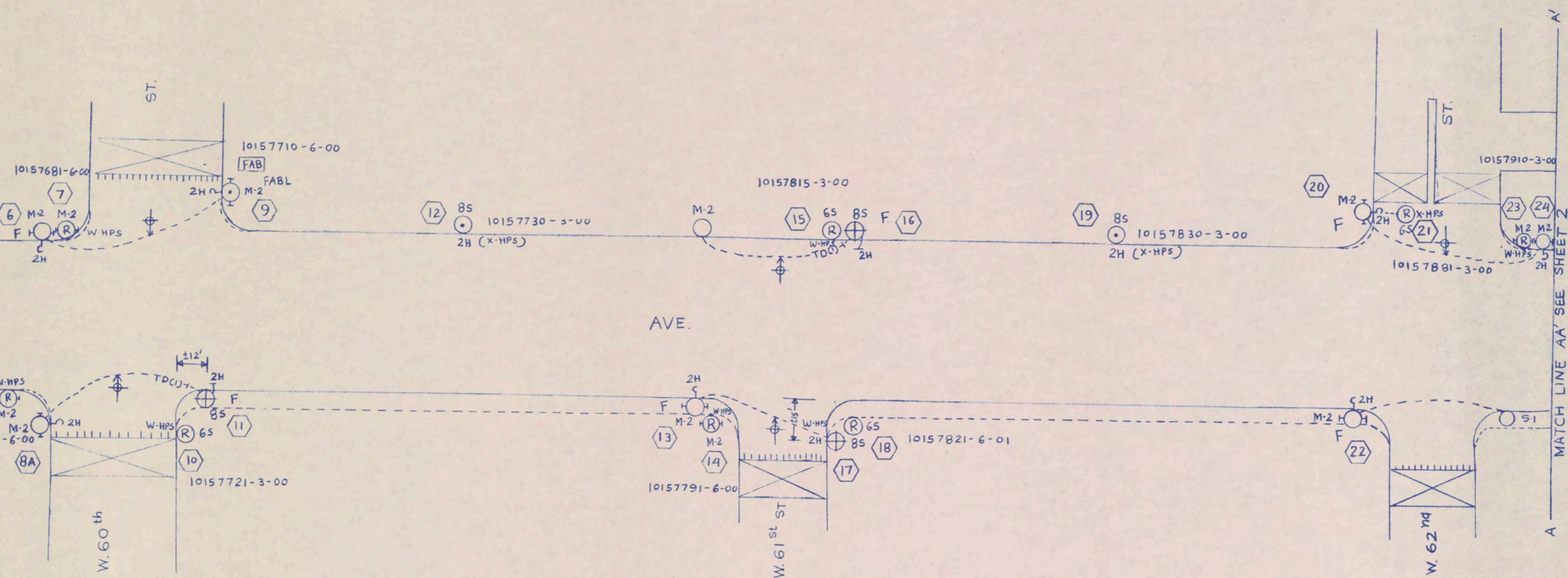
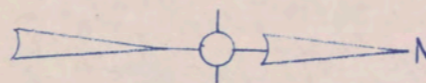
- EXISTING LAMPPOST (TYPE AS INDICATED) WITH HPS LUMINAIRE TO REMAIN.
- ⊙ REMOVE EXISTING LAMPPOST, LUMINAIRE, CONTROL AND PORTION OF FOUNDATION (TYPE AND WATTAGE AS INDICATED)
- ⊕ FURNISH AND INSTALL LAMPPOST, (TYPE AS INDICATED) FOUNDATION, HPS LUMINAIRE (TYPE AS INDICATED) AND SOLID STATE P.E.C.
- ⊙ REMOVE EXISTING 18" OR 6' SHAFT EXTENSION, 6' EXTENSION ARM, LUMINAIRE AND CONTROL FROM EXISTING M-2 POLE. FURNISH & INSTALL 6' SHAFT EXTENSION, 8S ARM, 250 WATT HPS LUMINAIRE AND P.E.C.
- ⊙ EXISTING TRAFFIC M-2 POLE WITHOUT STREET LIGHT. FURNISH & INSTALL 6' SHAFT EXTENSION, 8S ARM, 250 WATT HPS LUMINAIRE AND P.E.C.
- ⊙ REMOVE EXISTING 25' SHAFT TRANSFORMER BASE, LUMINAIRE, CONTROL AND ARM. FURNISH & INSTALL ON EXISTING FOUNDATION A TRANSFORMER BASE, 25' SHAFT, 8S ARM, 250 WATT HPS LUMINAIRE AND P.E.C.
- ⊙ REMOVE LUMINAIRE, P.E.C., EXTENSION ARM AND SHAFT EXTENSION FROM TRAFFIC M-2 POLE. WATTAGE AS INDICATED.
- [FAB] REMOVE FIRE ALARM BRACKET AND LUMINAIRE.
- [FABL] FURNISH & INSTALL FIRE ALARM BRACKET AND LUMINAIRE WITH ORANGE GLOBE AND 7 WATT FLUORESCENT LAMP WITH BALLAST.
- L FURNISH & INSTALL 2' ARM AND 100 WATT HPS LUMINAIRE.
- ←R EXISTING 150 WATT HPS FLOODLIGHT TO BE REMOVED.
- ←RM EXISTING 400 WATT MV FLOODLIGHT TO BE REMOVED.
- ← FURNISH & INSTALL 150 WATT HPS FLOODLIGHT. (DIRECTION AS INDICATED.)
- 2H INDICATES 250 W. HPS TO BE INSTALLED.
- F FACILITY POINT.
- 8S FS POST (BASE, 25' SHAFT, 8S ARM)
- ⊕ PROVIDE 2#10 SERVICE CABLES TO ENERGIZE STREET LIGHTS.
- X-HPS EXISTING 400 WATT HPS LUMINAIRE TO BE REMOVED
- W-HPS EXISTING 250 WATT HPS LUMINAIRE TO BE REMOVED.
- V-HPS EXISTING 150 WATT HPS LUMINAIRE TO BE REMOVED.
- TDCUT PROVIDE 2" RIGID BEND FOR SIGNAL DIVISION. USE NUMBER AS INDICATED.
- ⊙W REMOVE WOOD POLE WITH ALL ATTACHMENTS.
- 6S FS POST (BASE, 25' SHAFT, 6S ARM)
-] WHERE ATTACHED TO SYMBOL INDICATES NEW INDIVIDUALLY SERVICE TO BE INSTALLED.

NOTE

1. ANY DAMAGE TO THE STREET LIGHTS BY CONTRACTOR'S WORK AND/OR Vandalism IS TO BE REPAIRED AT CONTRACTOR'S EXPENSE.
2. RESET FOUNDATION AND LAMPPOSTS TO ORIGINAL POSITION.
3. THIS WORK IS PART OF THE PROJECT NO. HWM-416.
4. ALL PHOTO ELECTRICAL CONTRACTOR'S EQUIPMENT IS TO BE REMOVED FROM THE PROJECT AREA.

ZIP CODE

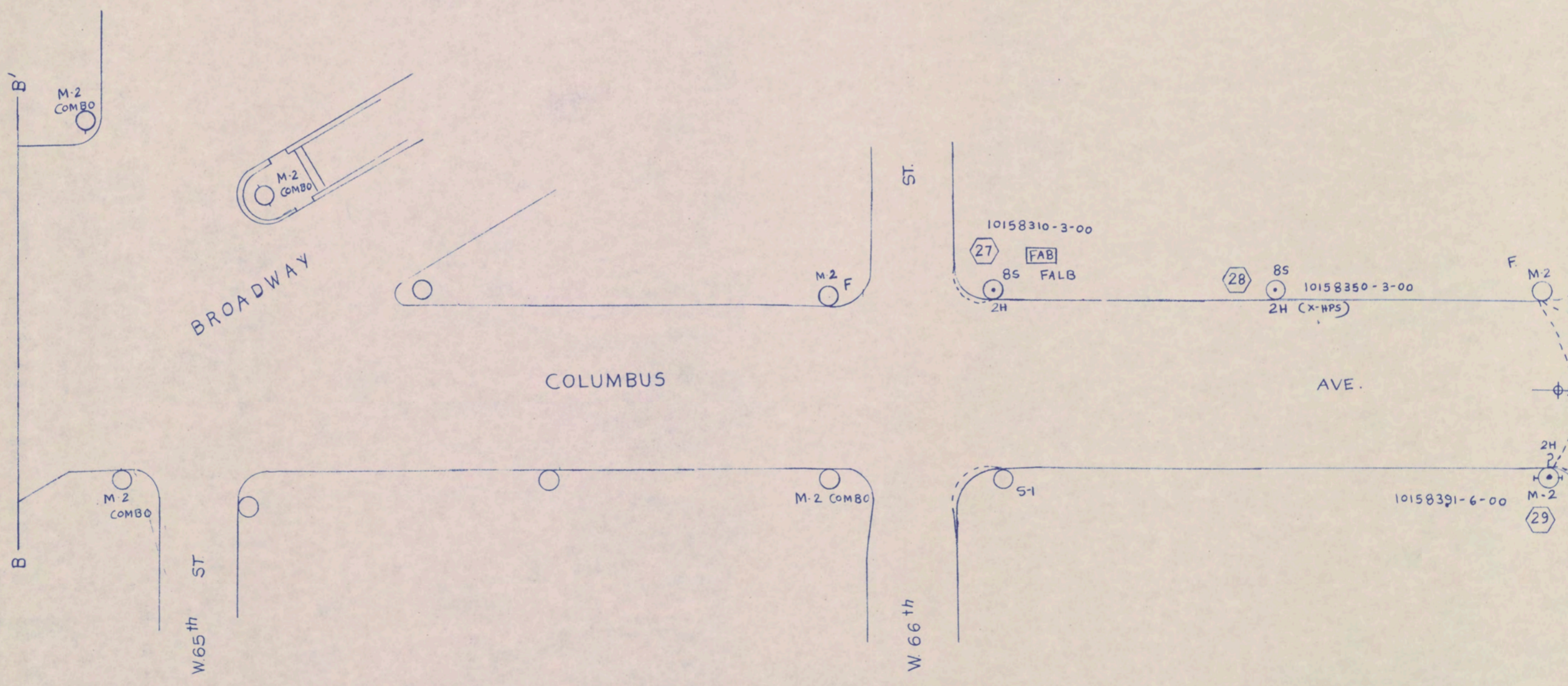
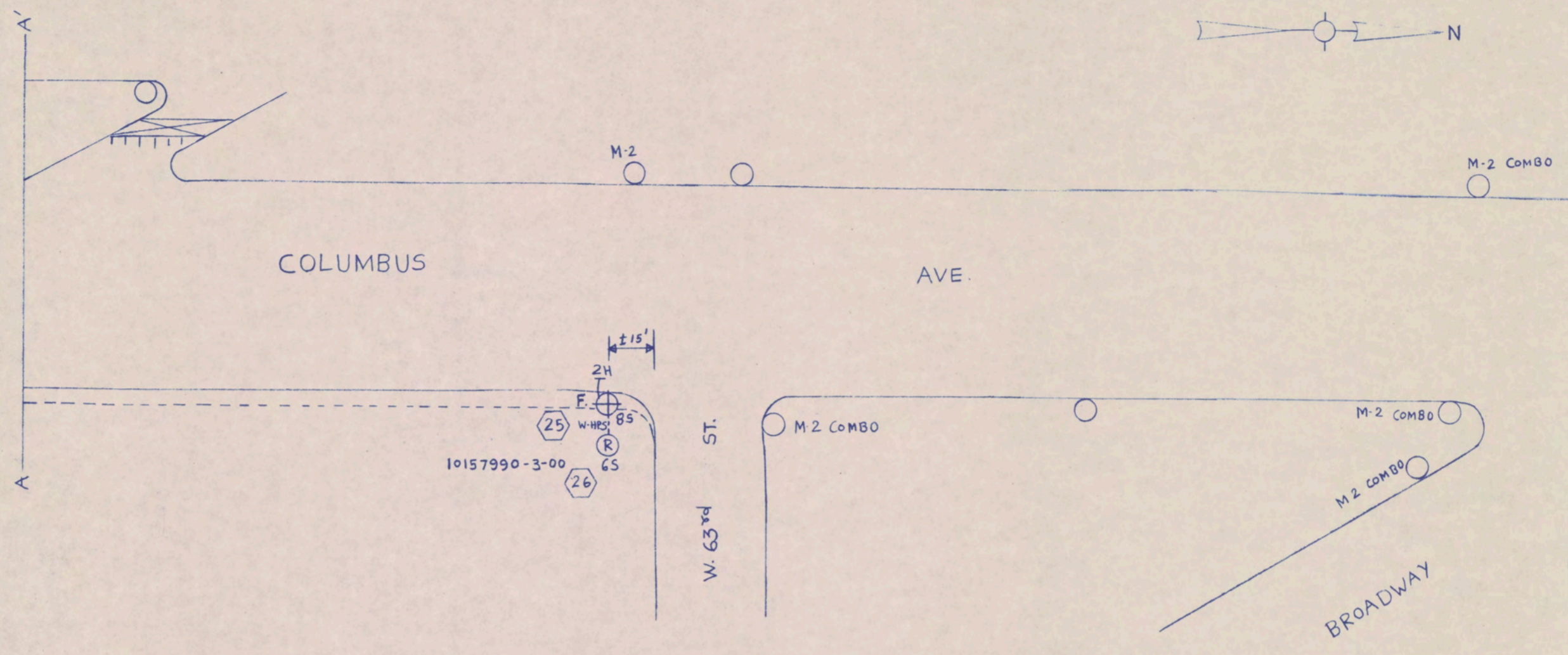
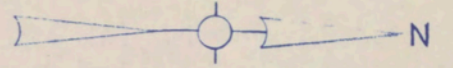
MAINTENANCE AREA



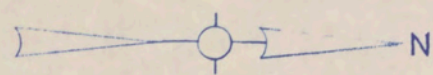
- 1 ANY DAMAGE TO THE STREET LIGHTING EQUIPMENT AS A RESULT OF THE CONTRACTOR'S WORK AND/OR WORK FORCE SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.
- 2 RESET FOUNDATION AND LAMPOST TO NEW GRADE IF REQUIRED.
- 3 THIS WORK IS PART OF THE DEPARTMENT OF HIGHWAYS CONTRACT NO. HWM-416.
4. ALL PHOTO ELECTRICAL CONTROLS (PEC) TO BE SOLID STATE ALL EQUIPMENT IS TO BE FURNISHED BY THE CONTRACTOR.

LAST KEY NO. (24)

NO.	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
CITY OF NEW YORK DEPARTMENT OF TRANSPORTATION DIVISION OF STREET LIGHTING				
CONTRACT NO. HWM-416CW			JOB NO.	
COLUMBUS AVE FROM W. 59 TH ST. TO W. 109 TH ST. MANHATTAN				
PROJ. ENG. D. CHOKSHI	SECT. ENG. <i>Rome</i>	DEPUTY CHIEF P.E. <i>Wepturne</i>	CONTROL NO.	
DATE: 3/30/92	SCALE: 1" = 30'	SHEET 1 OF 9	DRAWING NO. M-30198	



MAINTENANCE AREA --- ZIP CODE ---



AVE.

M-2 COMBO

M-2 COMBO

M-2 COMBO

BROADWAY

MATCH LINE BB' SEE BELOW

B

ST.

10158310-3-00

27 FAB
85 FALB
2H

28 85
2H (X-HP5)
10158350-3-00

AVE.

ST.

10158410-3-00

30 31
65 W-HP5
2H M-2

F

M-2

F

M-2

10158510-3-00

34 85
2H

MATCH LINE CC' SEE SHEET 3

W 66th

S-1

10158391-6-00

29 2H
M-2

W 67th

S-1

32 2H (X-HP5)
65
10158450-3-00

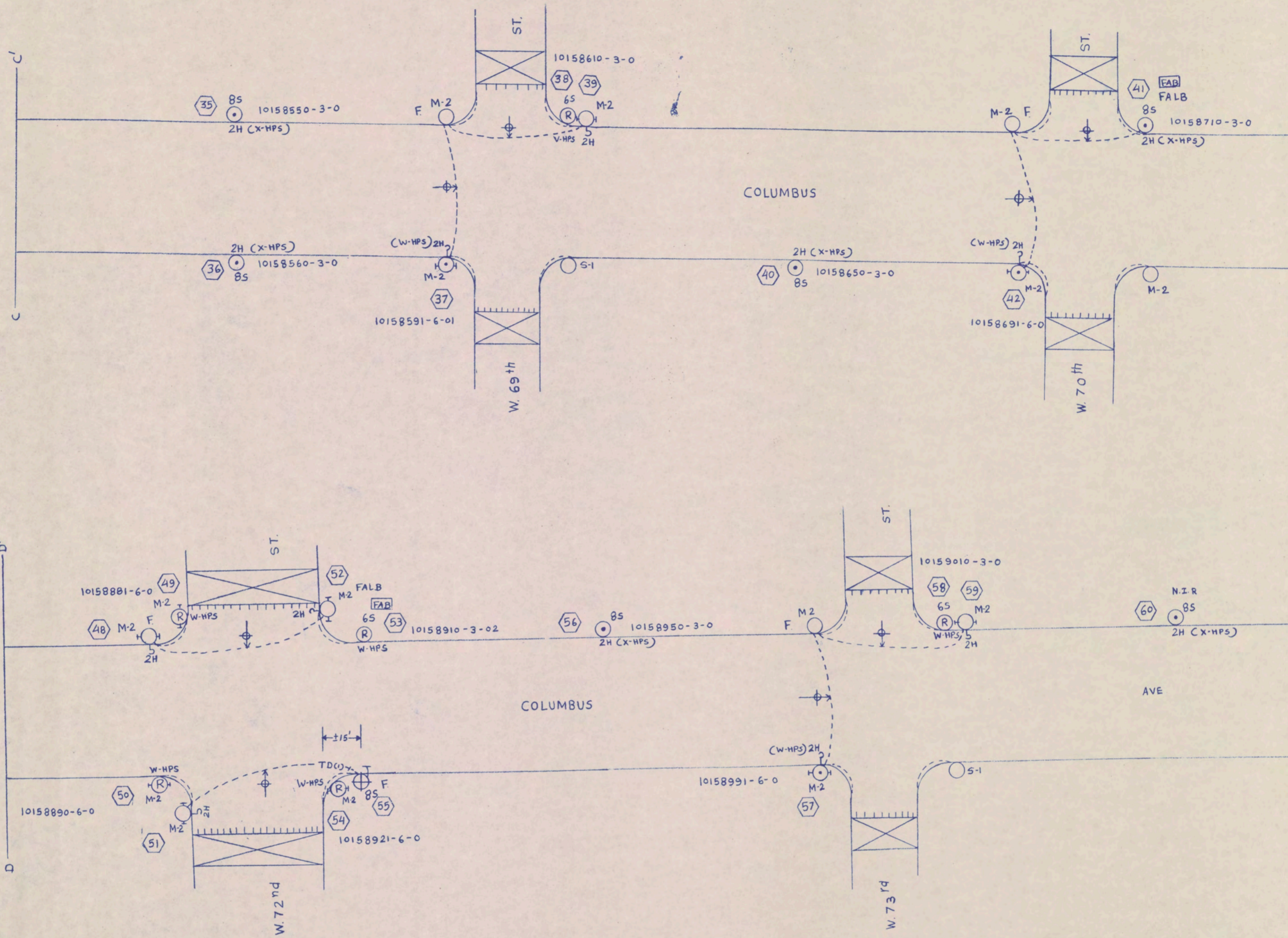
33 2H
M-2
10158491-6-00

W 68th

M-2

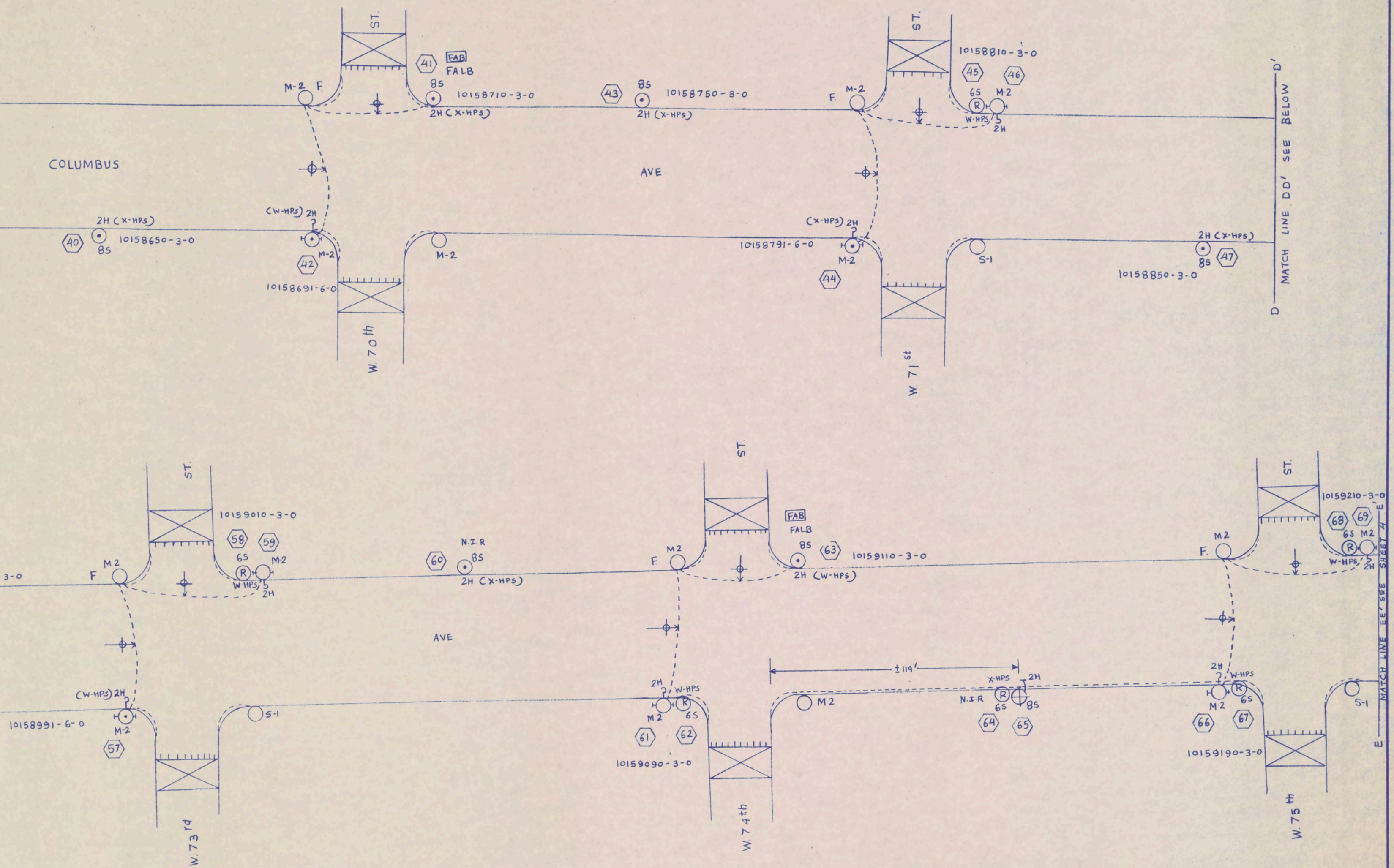
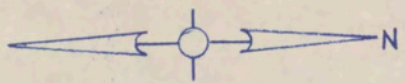
LAST KEY NO. 34

NO.	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
CITY OF NEW YORK DEPARTMENT OF TRANSPORTATION DIVISION OF STREET LIGHTING				
CONTRACT NO. HWM-416CW JOB NO.				
COLUMBUS AVE FROM W. 59 th ST. TO W. 109 th ST. MANHATTAN				
PROJ. ENG. D. CHOKSHI	SECT. ENG. <i>[Signature]</i>	ASS. DEPUTY CHIEF P. E. Neptune	CONTROL NO.	
DATE 3/30/92	SCALE: 1" = 30'	SHEET 2 OF 9	DRAWING NO. M-30198	



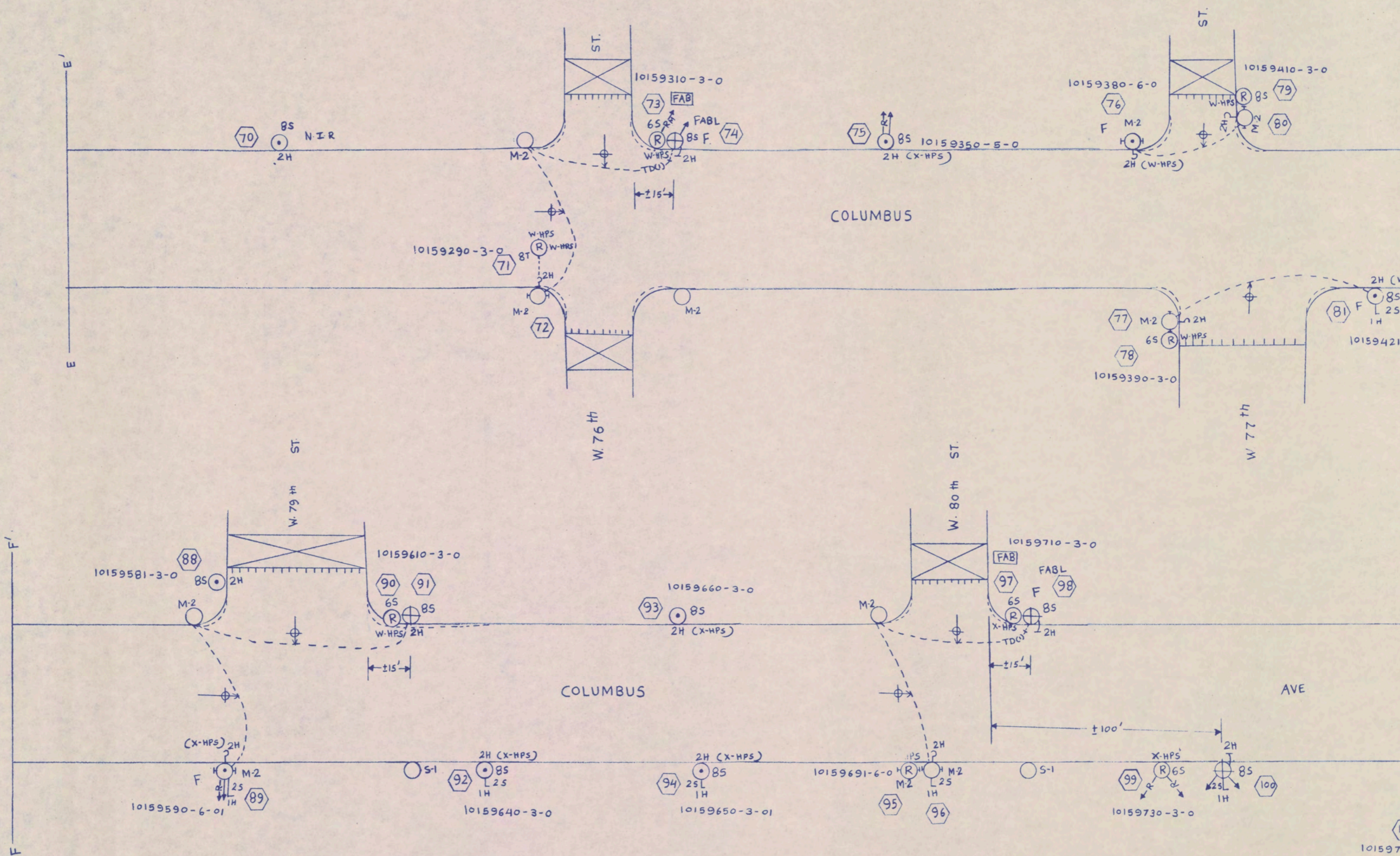
MAINTENANCE AREA --- ZIP CODE ---

LAST KEY NO. 69



LAST KEY No. 69

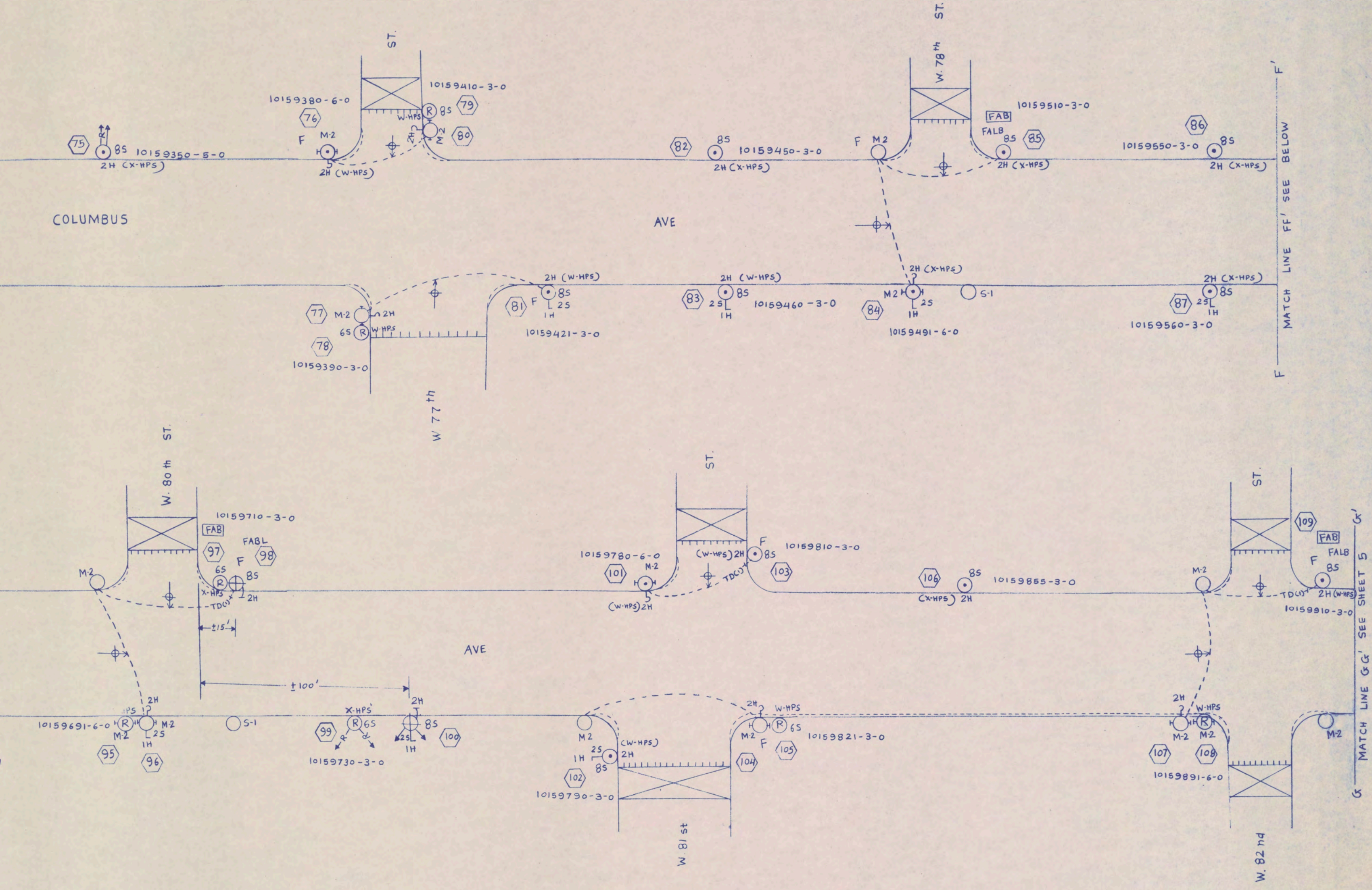
NO.	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
CITY OF NEW YORK DEPARTMENT OF TRANSPORTATION DIVISION OF STREET LIGHTING				
CONTRACT NO. HWM-416CW			JOB NO.	
COLUMBUS AVE FROM W. 59 TH ST TO W. 109 TH ST MANHATTAN				
PROJ. ENG. D. CHOKSHI	SECT. ENG. <i>[Signature]</i>	DEPUTY CHIEF P.E. <i>[Signature]</i>	CONTROL NO.	
DATE-3/30/92	SCALE: 1" = 30'	SHEET 3 OF 9	DRAWING NO. M-30198	





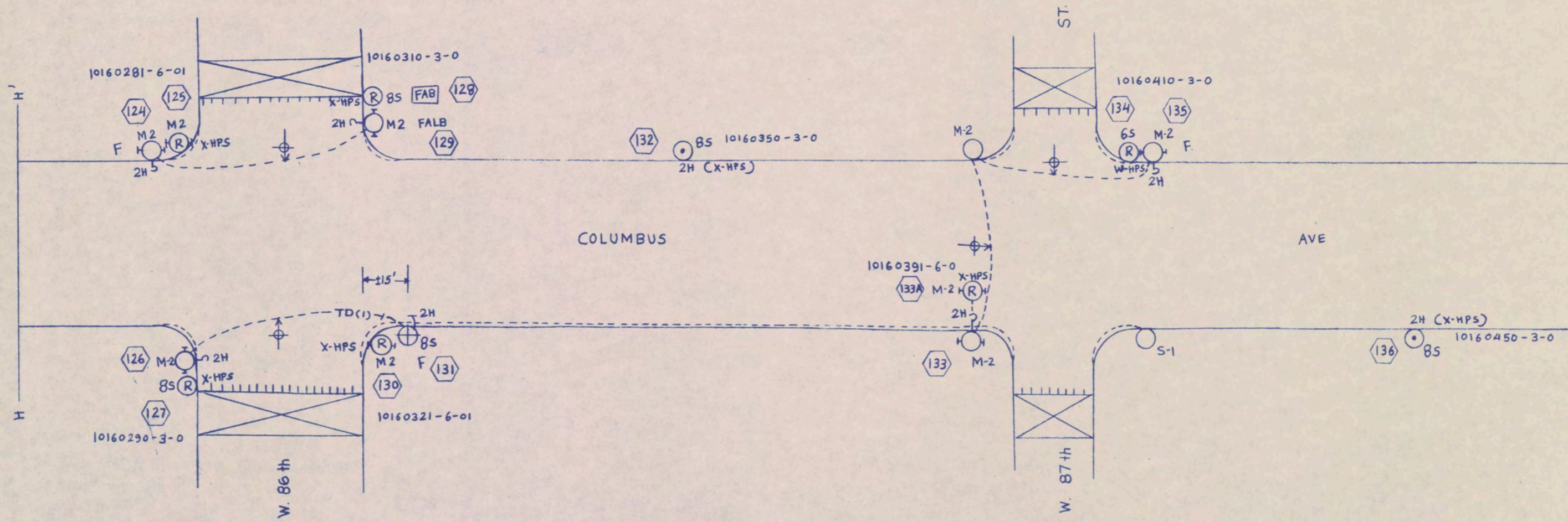
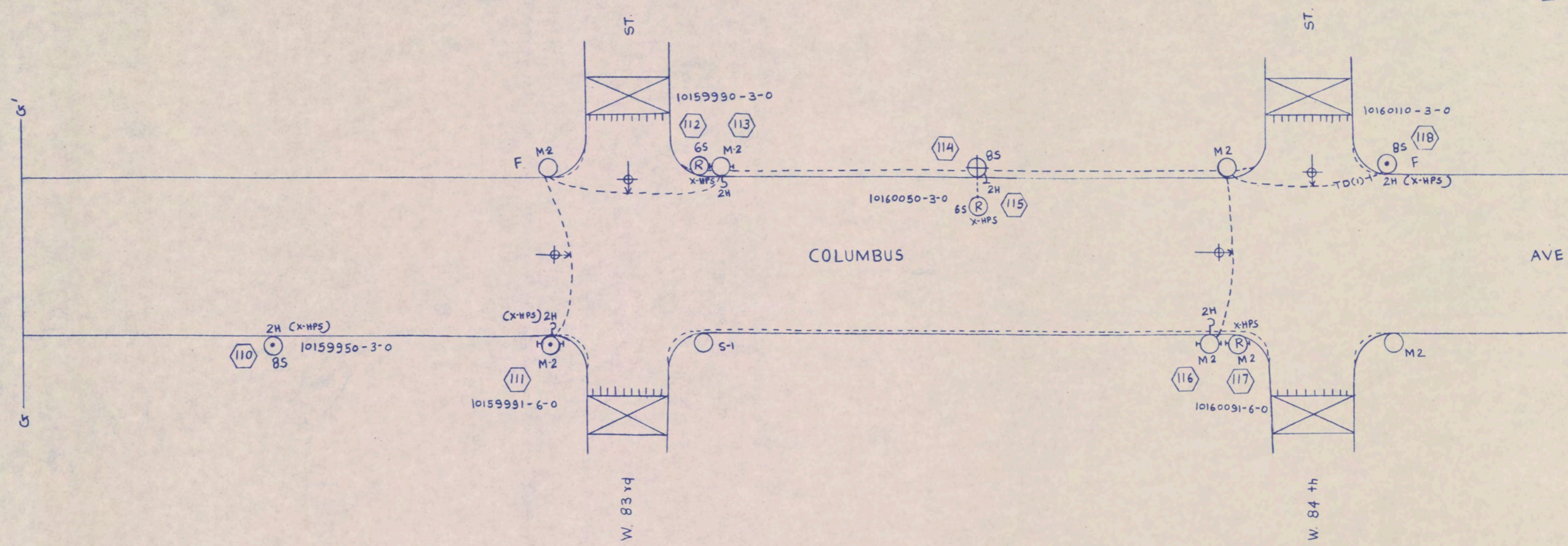
COLUMBUS

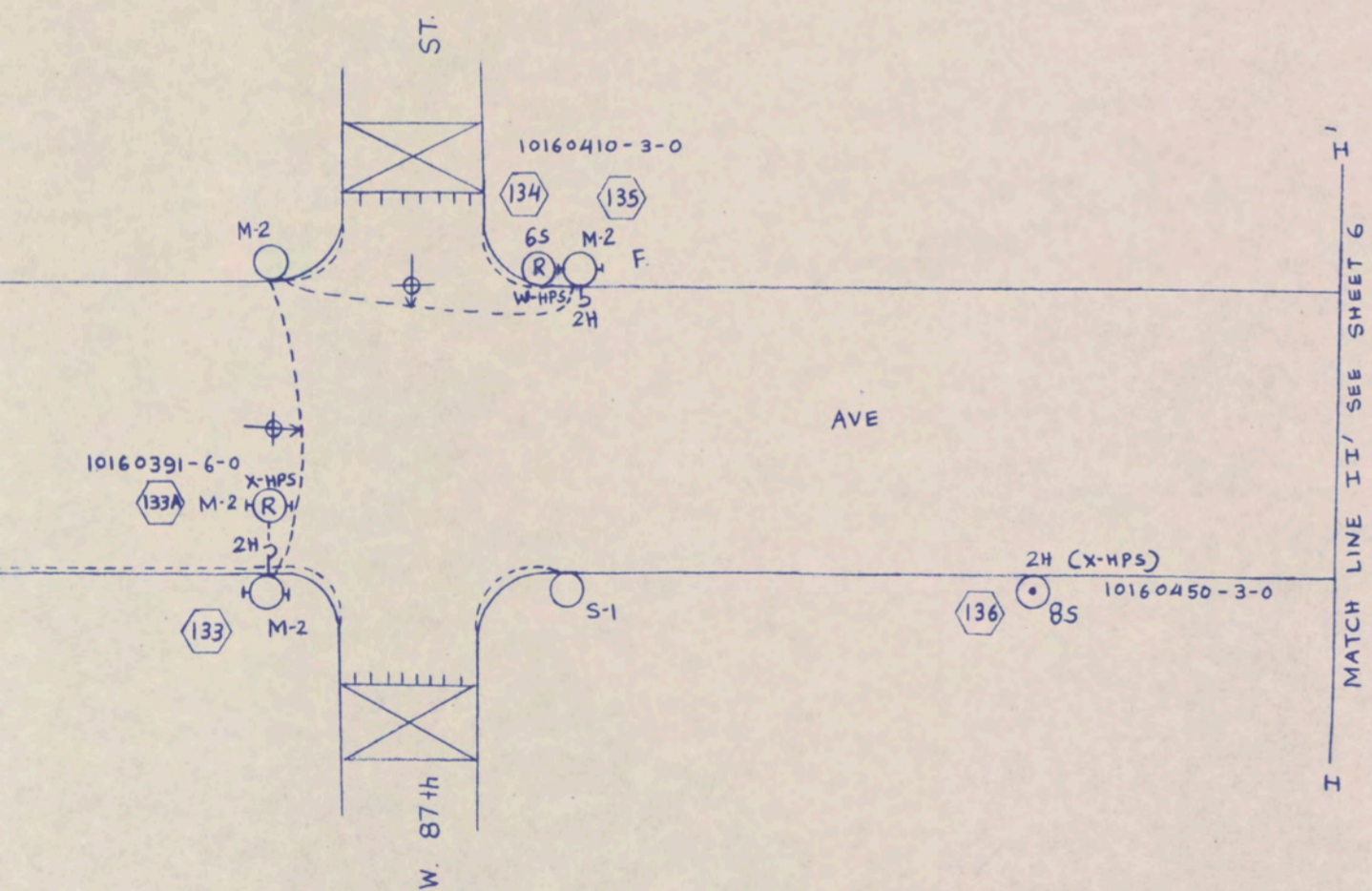
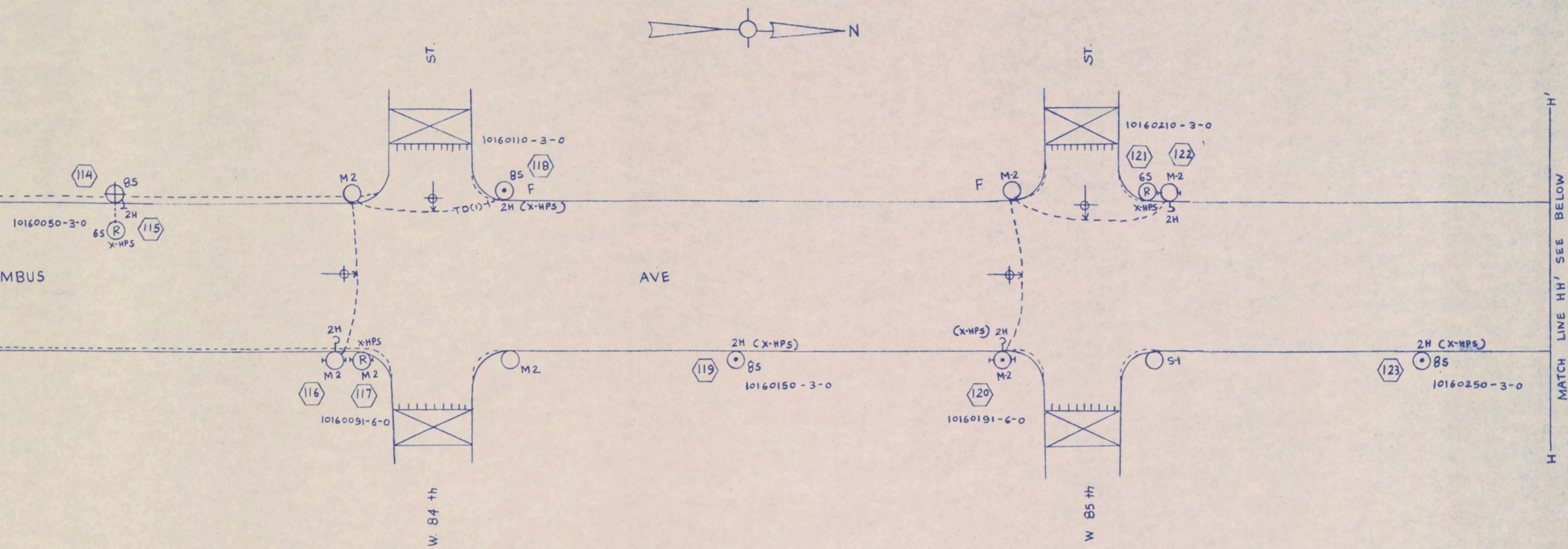
AVE



LAST KEY NO. 109

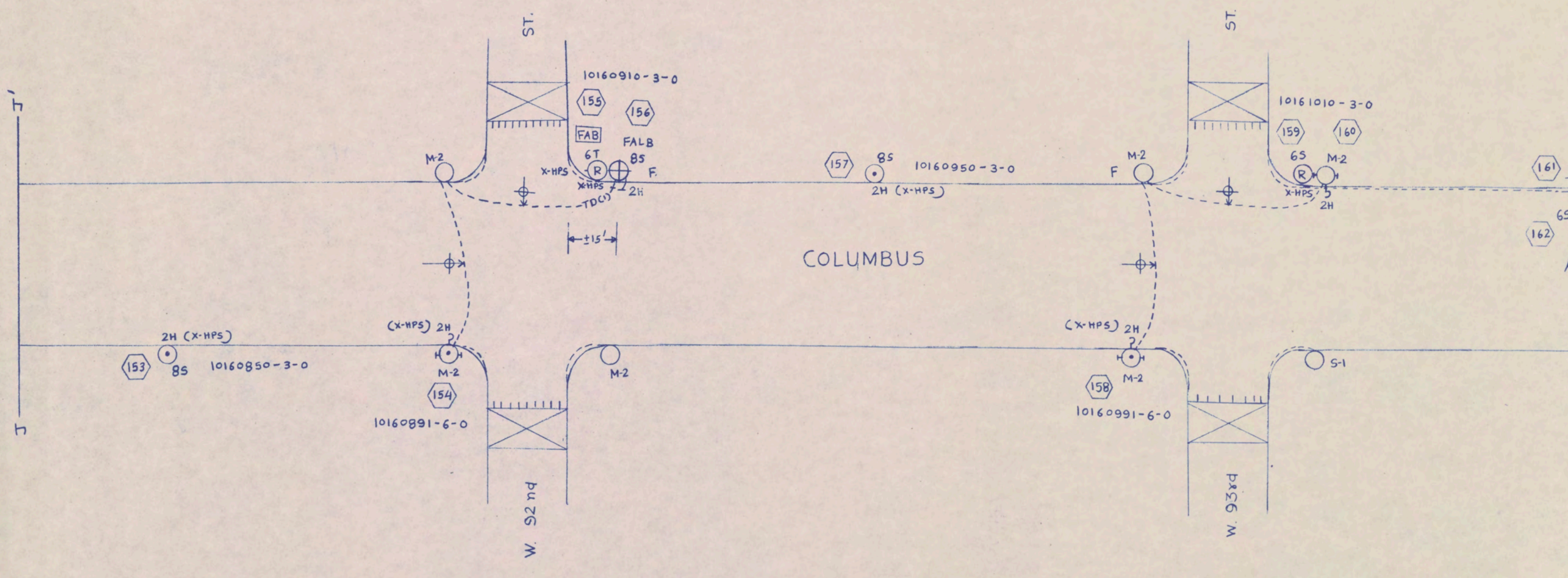
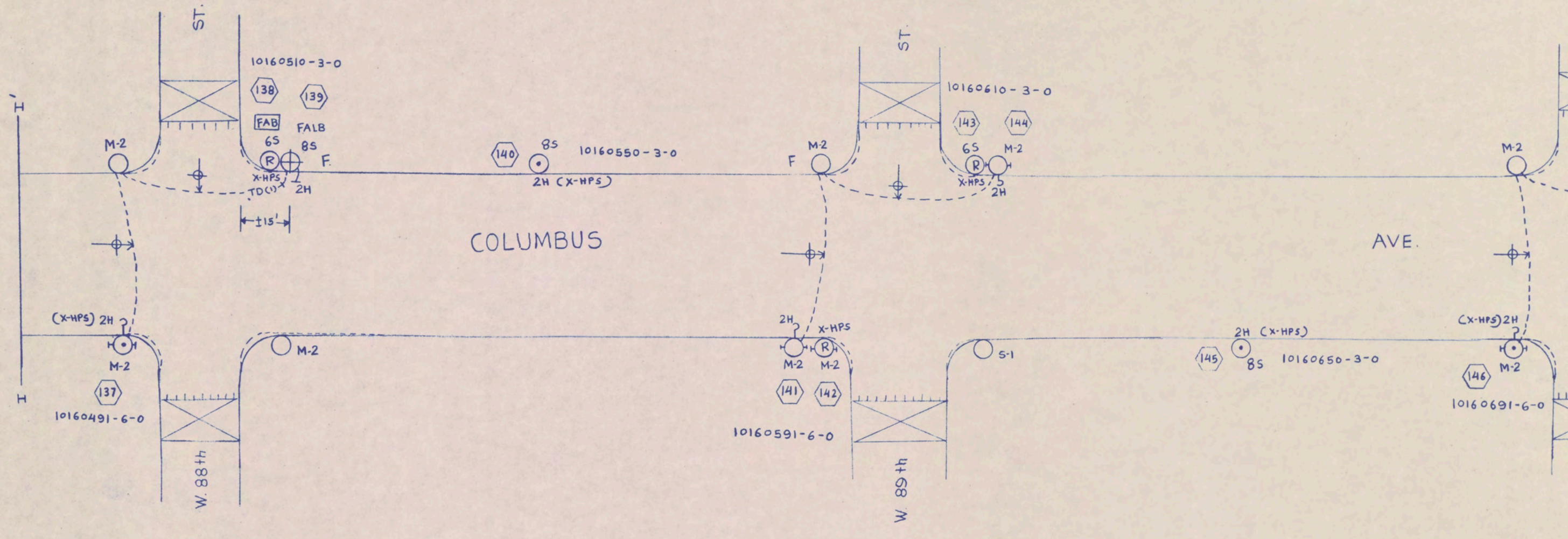
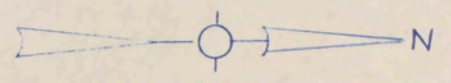
NO.	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
CITY OF NEW YORK DEPARTMENT OF TRANSPORTATION DIVISION OF STREET LIGHTING				
CONTRACT NO. HWM-416CW			JOB NO.	
COLUMBUS AVE FROM W 59 TH ST TO W 109 TH ST MANHATTAN				
PROJ. ENG. D. CHOKSHI	SECT. ENG. <i>[Signature]</i>	ASST. DEPUTY CHIEF P.E. Neptune	CONTROL NO.	
DATE 3/30/92	SCALE: 1" = 30'	SHEET 4 OF 9	DRAWING NO. M-30198	





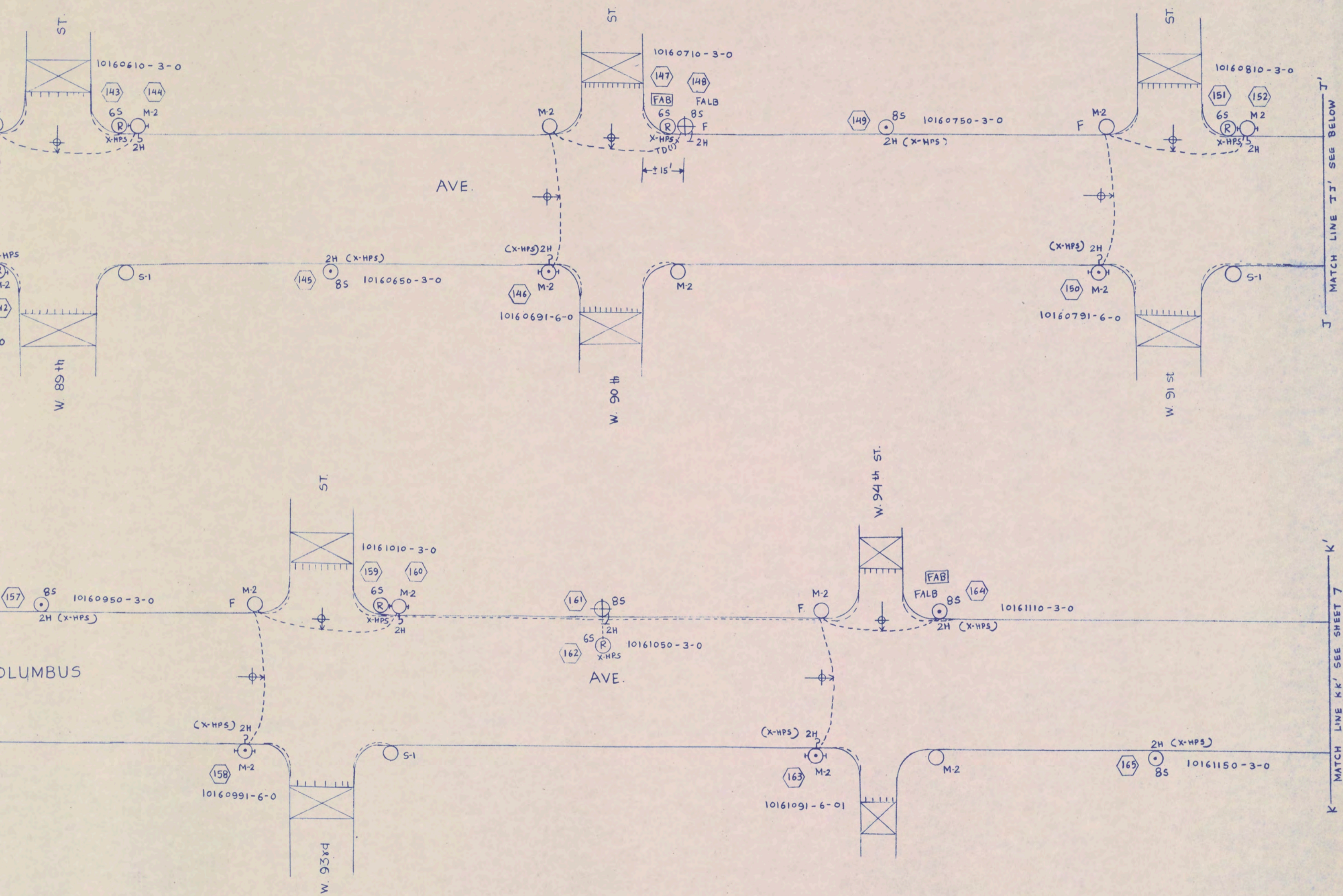
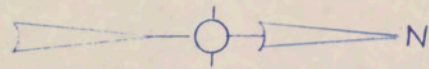
AST KEY NO. 136

NO.	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
CITY OF NEW YORK DEPARTMENT OF TRANSPORTATION DIVISION OF STREET LIGHTING				
CONTRACT NO. HWM-416CW			JOB NO.	
COLUMBUS AVE FROM W. 59 TH ST. TO W. 109 TH ST. MANHATTAN				
PROJ. ENG. D. CHOKSHI	SECT. ENG. <i>[Signature]</i>	PROPERTY CHIEF P.C. <i>[Signature]</i>	CONTROL NO.	
DATE 3/30/92	SCALE 1" = 30'	SHEET 5 OF 9	DRAWING NO. M-30198	



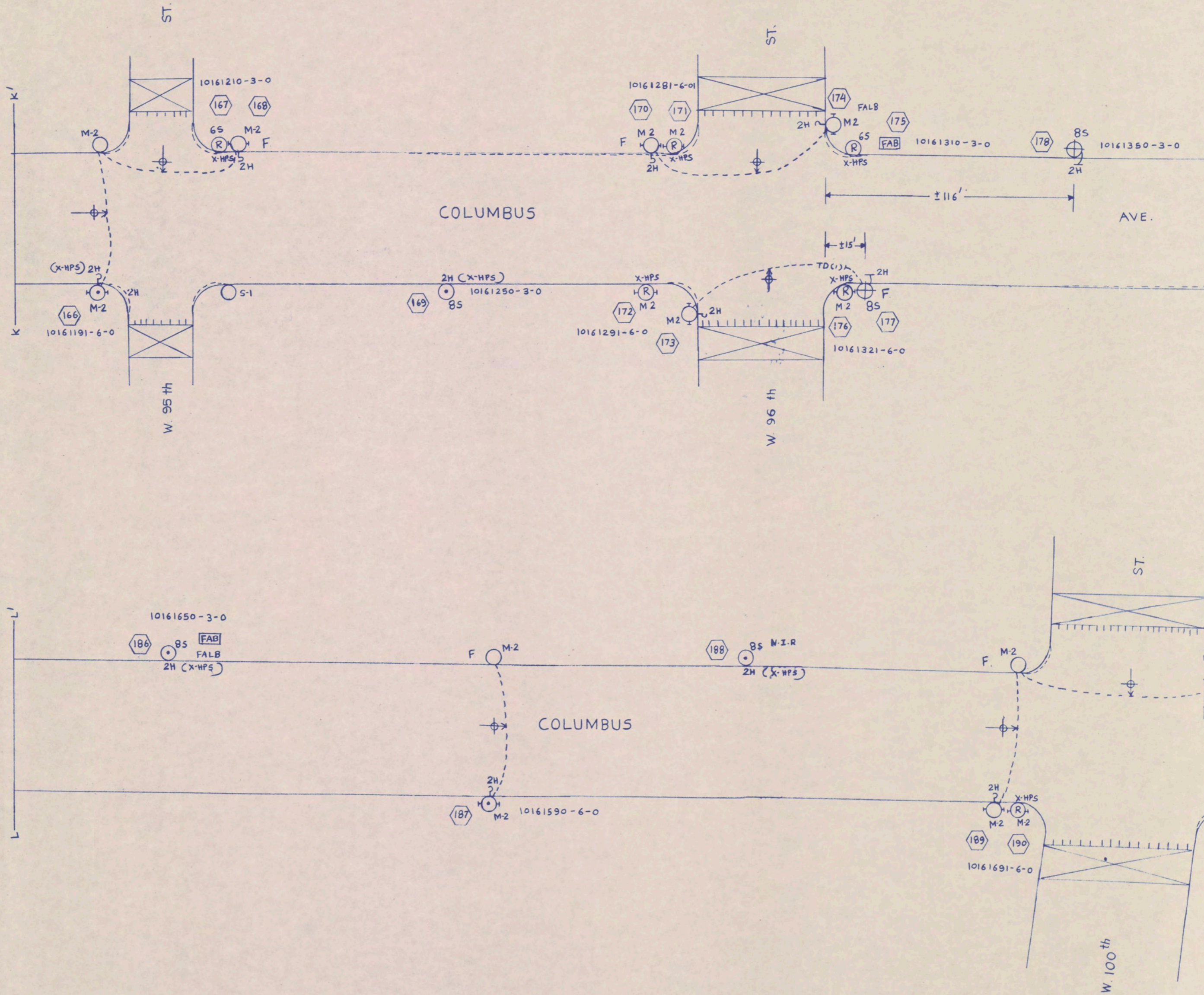
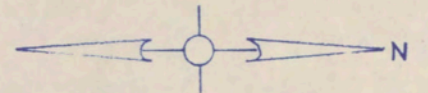
MAINTENANCE AREA --- ZIP CODE ---

LAST KEY NO 165



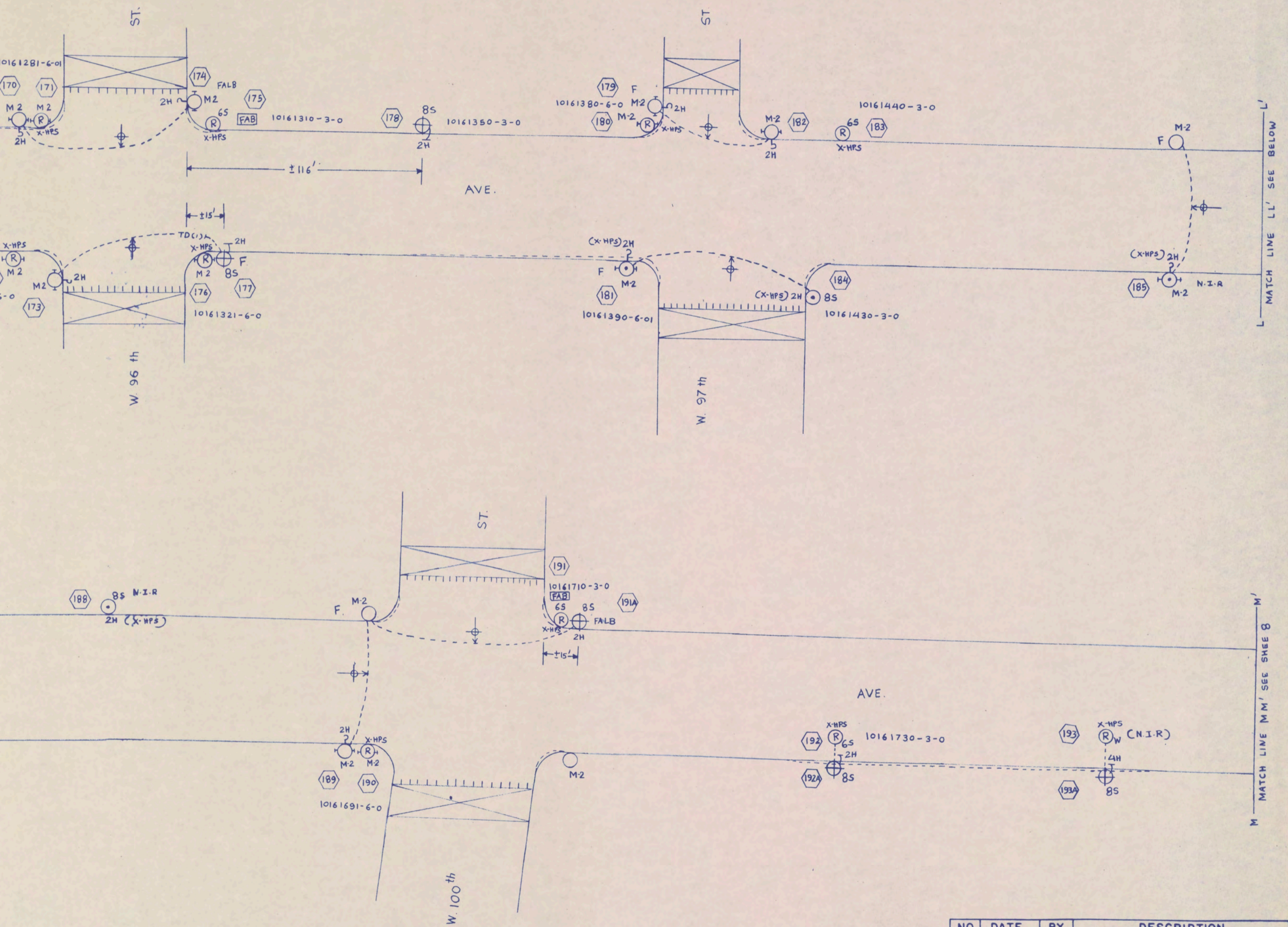
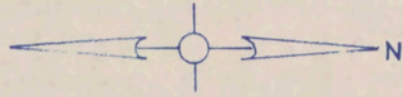
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NO.	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
CITY OF NEW YORK DEPARTMENT OF TRANSPORTATION DIVISION OF STREET LIGHTING				
CONTRACT NO. HWM - 416CW			JOB NO.	
COLUMBUS AVE. FROM W. 85 TH ST. TO W. 109 TH ST. MANHATTAN				
PROJ. ENG. D. CHOKSHI	SECT. ENG. <i>Hoey</i>	ASST. CHIEF P.E. Neptune	CONTROL NO.	
DATE - 3/30/92	SCALE: 1" = 30'	SHEET 6 OF 9	DRAWING NO. M - 30198	



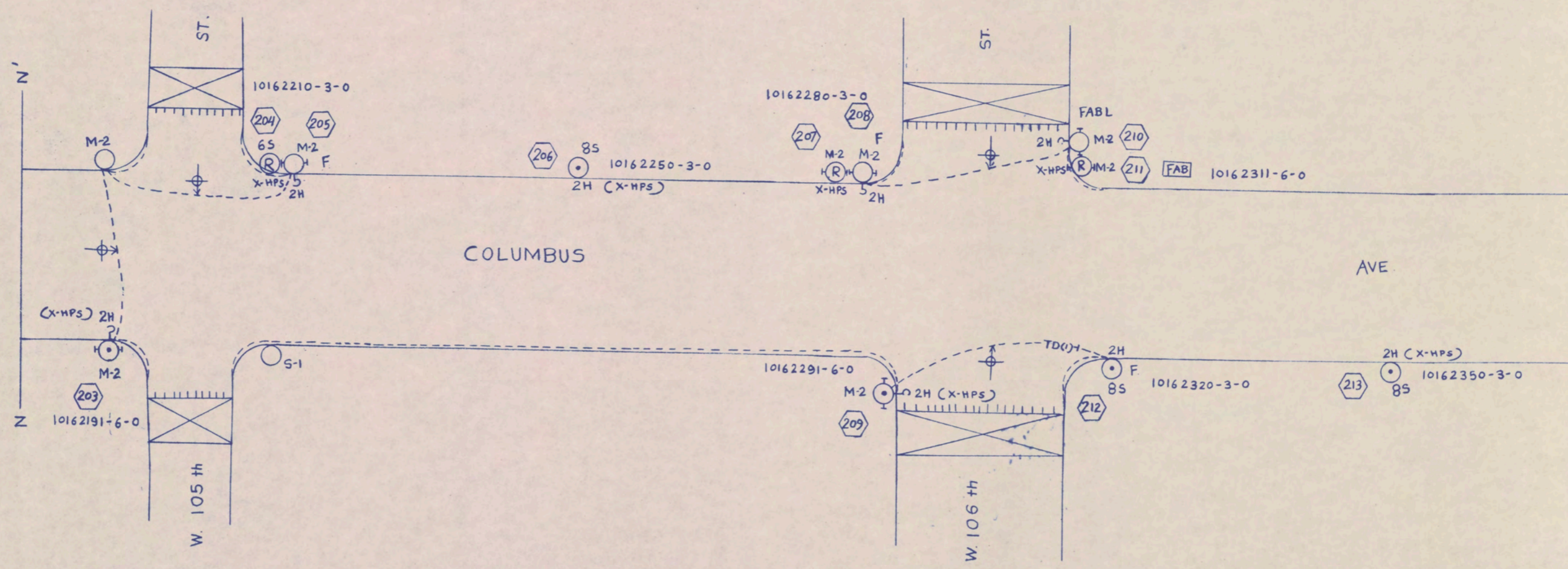
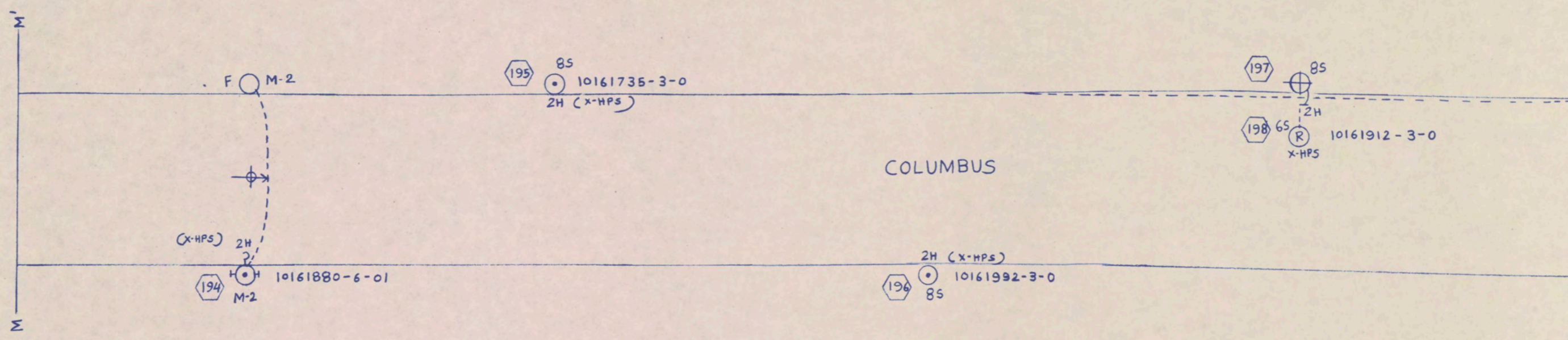
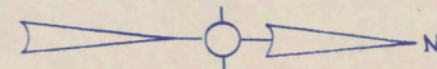
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LAST KEY NO. 193A

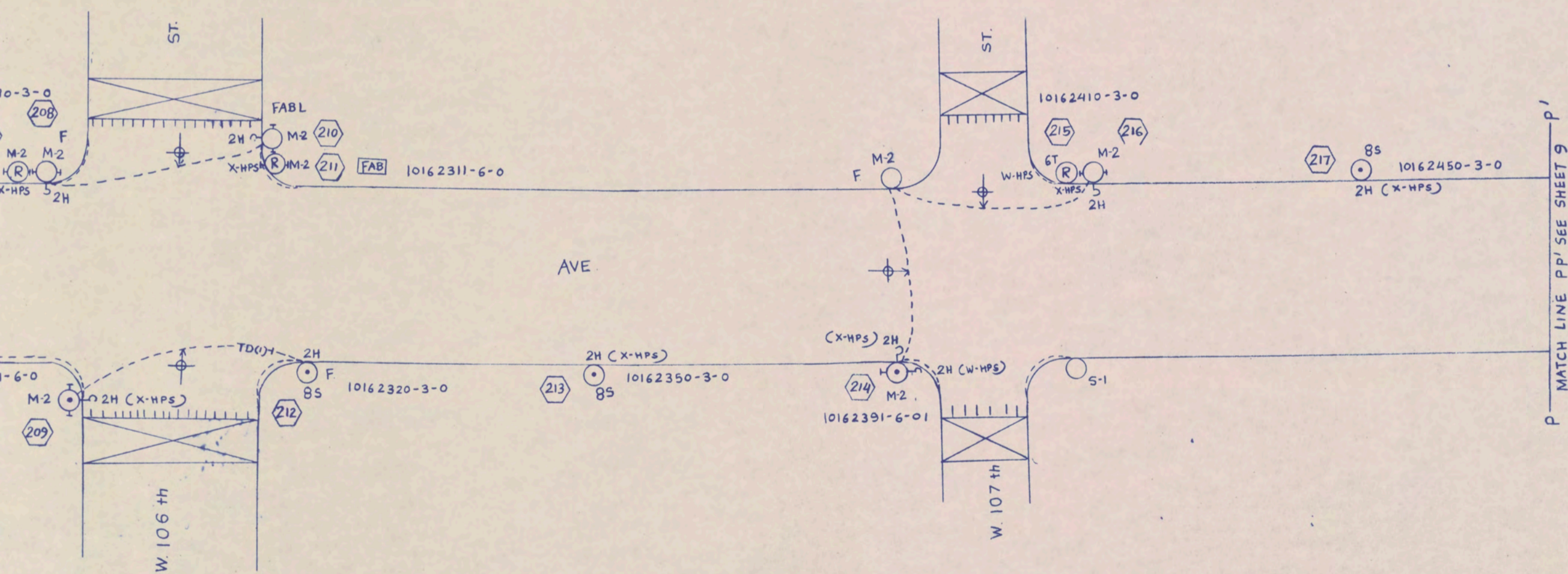
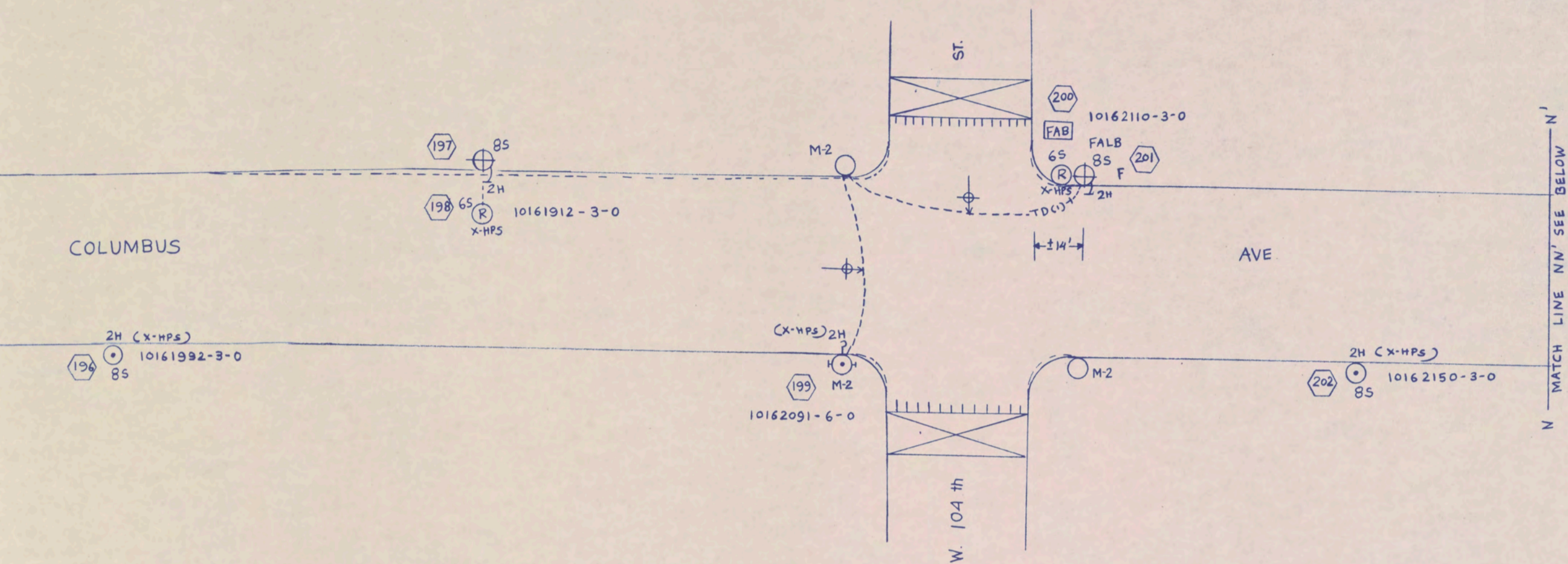
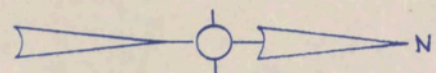


LAST KEY NO. 193A

NO.	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
CITY OF NEW YORK DEPARTMENT OF TRANSPORTATION DIVISION OF STREET LIGHTING				
CONTRACT NO. HWM - 416CW			JOB NO.	
COLUMBUS AVE. FROM W 59 TH ST. TO W 109 TH ST MANHATTAN.				
PROJ. ENG. D. CHOKSHI	SECT. ENG. <i>[Signature]</i>	DEPUTY CHIEF P.E. <i>[Signature]</i>	CONTROL NO.	
DATE: 3/30/92	SCALE: 1"=30'	SHEET 7 OF 9		DRAWING NO. M - 30198

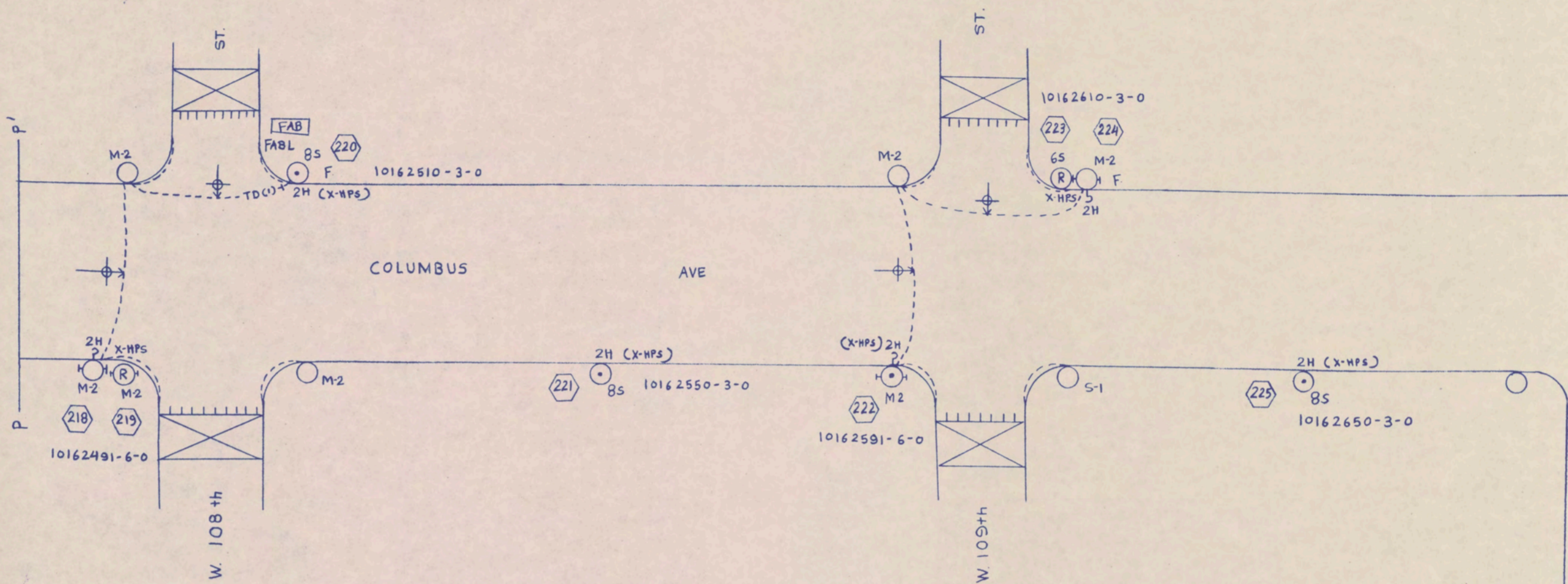
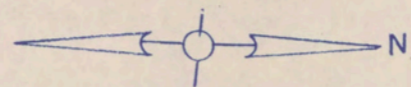


MAINTENANCE AREA --- ZIP CODE ---



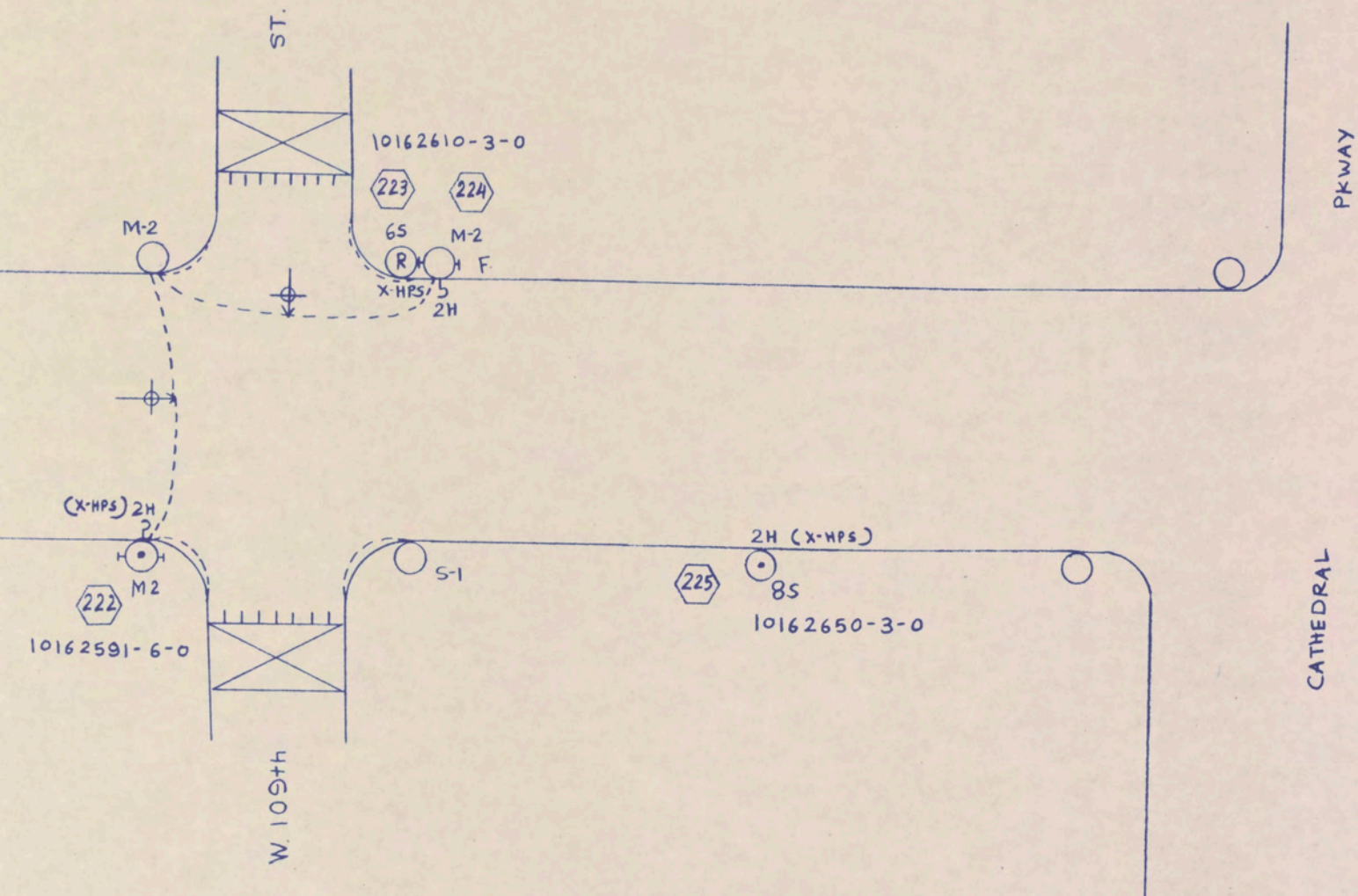
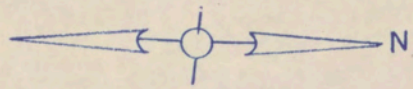
LAST KEY NO. 217

NO.	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
CITY OF NEW YORK DEPARTMENT OF TRANSPORTATION DIVISION OF STREET LIGHTING				
CONTRACT NO. HWM-416CW			JOB NO.	
COLUMBUS AVE. FROM W. 59 TH ST. TO W. 109 TH ST. MANHATTAN				
PROJ. ENG. D. CHOKSHI	SECT. ENG. <i>[Signature]</i>	ASST. DEPUTY CHIEF P. E. Neptune	CONTROL NO.	
DATE 3/30/92	SCALE: 1" = 30'	SHEET 8 OF 9		DRAWING NO. M-30198



MAINTENANCE AREA ----- ZIP CODE -----

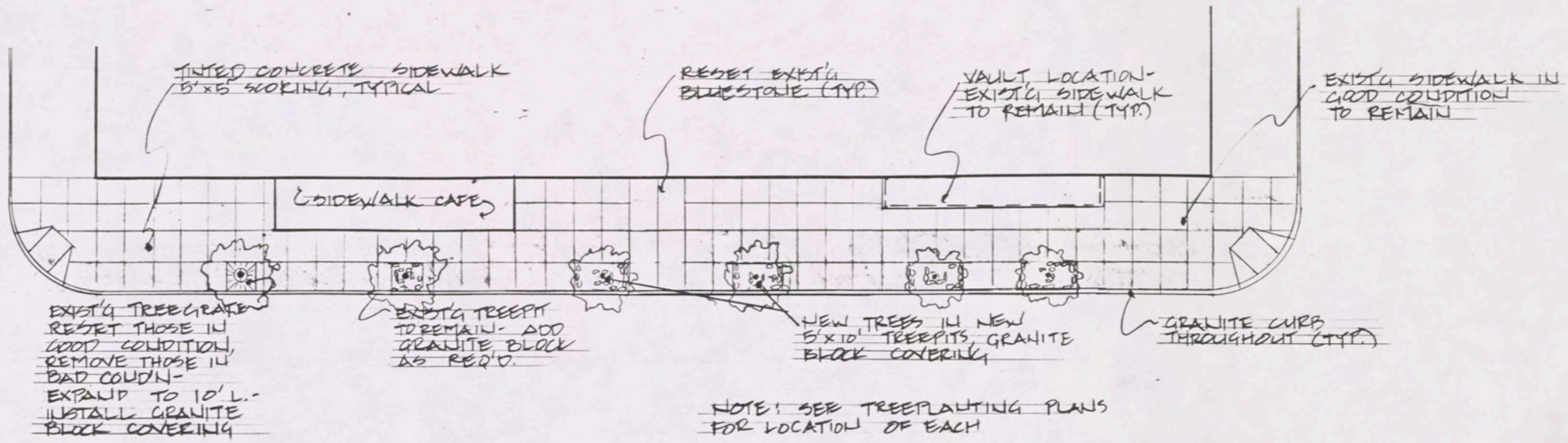
LAST KEY NO. 225



NO. 225

NO.	DATE	BY	DESCRIPTION	IAS
REVISIONS				
CITY OF NEW YORK DEPARTMENT OF TRANSPORTATION DIVISION OF STREET LIGHTING				
CONTRACT NO. HWM-416CW			JOB NO.	
COLUMBUS AVE. FROM W 59 TH ST TO W 109 TH ST MANHATTAN				
PROJ ENG D. CHOKSHI	SECT ENG <i>[Signature]</i>	DEPUTY CHIEF P.C. <i>[Signature]</i>	CONTROL NO.	
DATE 3/30/92	SCALE 1" = 30'	SHEET 9 OF 9		DRAWING NO M-30198

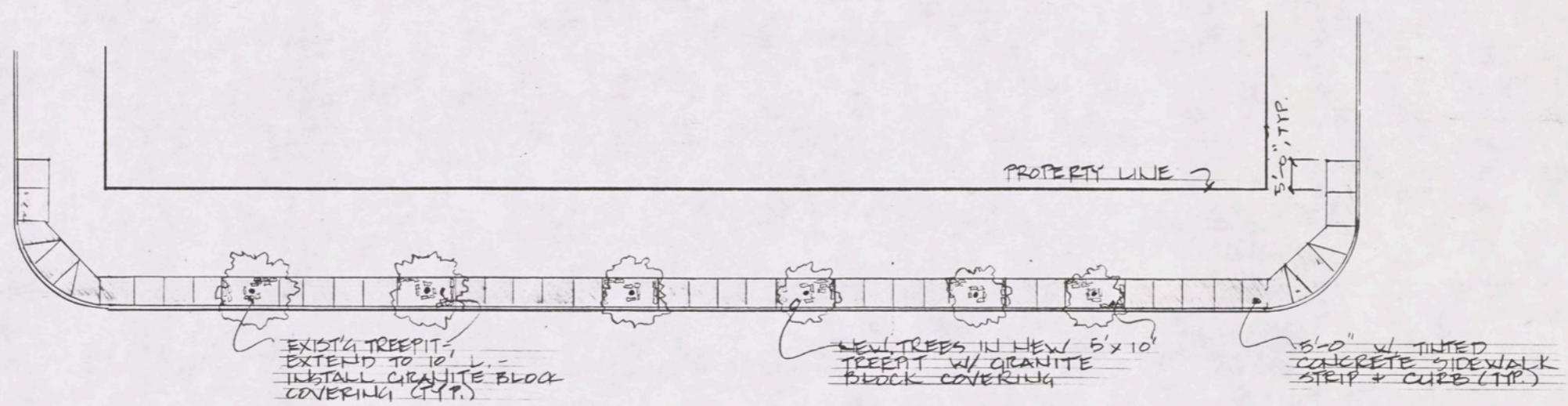
NOTE: SIDEWALK REPLACEMENT AS REQUIRED IN TINTED CONCRETE AS PER SCOFFIELD COOL GRAY #3 OR APPROVED EQUAL



1 TYPICAL LANDMARK BLOCK

NOTE: LANDMARK TREATMENT TO BE LIKE W. 66TH ST. AND CONTINUES TO W. 80TH ST.

1" = 20'-0"



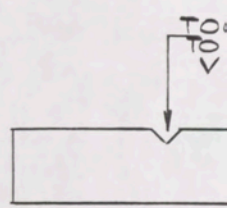
2 TYPICAL BLOCK - W. 88TH ST TO W. 110TH ST

NOTE: SEE TREEPLANTING PLANS FOR BLOCKS BETWEEN W. 59TH ST + W. 63RD ST.

1" = 20'-0"

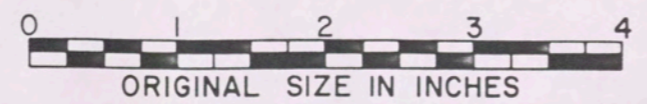
PLAN

KEY	
AS	AN "K"
Z	ZI "E"
HL	TR "M"
GR	KA "A"
SN	LI "S"
PO	QU "B"
W/O	QU "F"
ST	SO "P"
L	T "C"
JE	U "J"
GT	ZE "A"



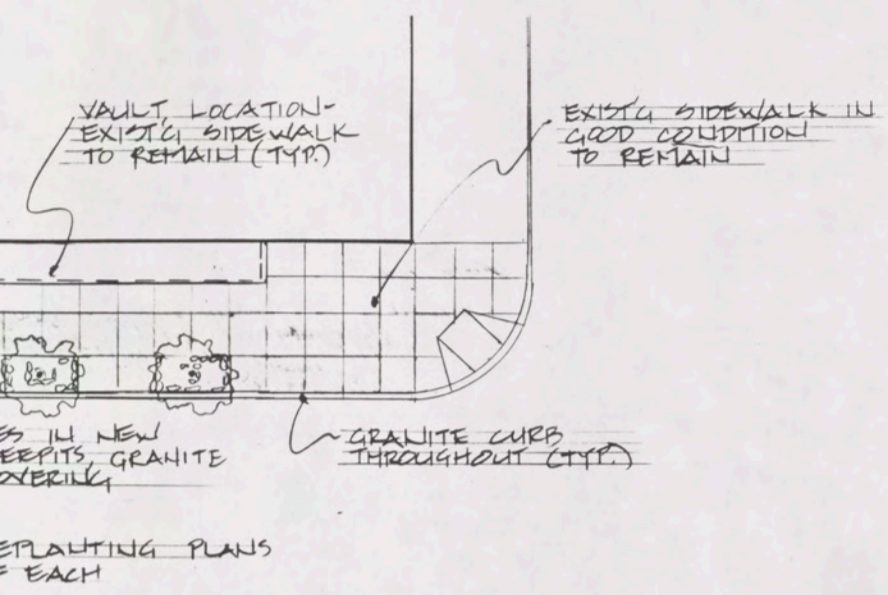
TYPICAL TOO

DRAWN BY: _____
 CHECKED BY: _____

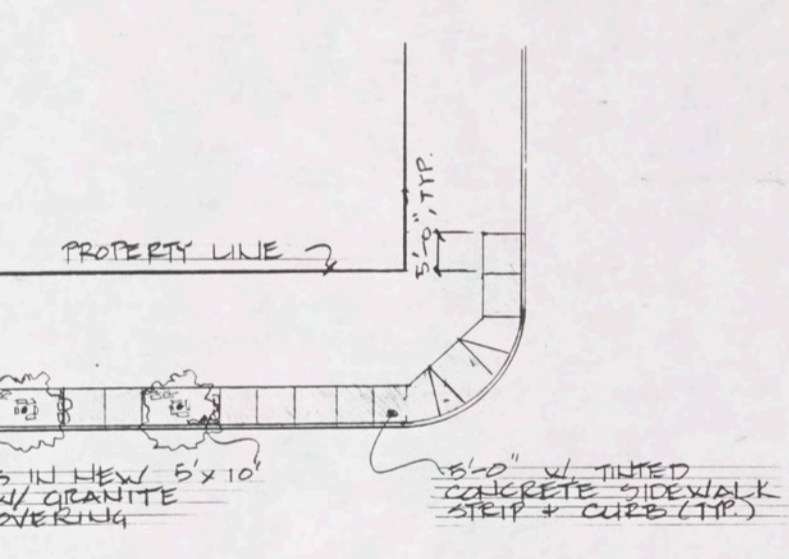


PLANT LIST

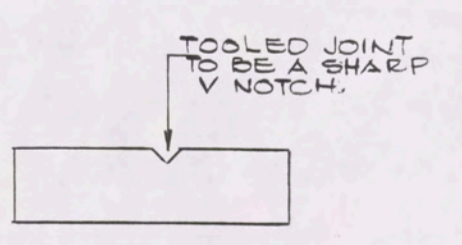
KEY	LATIN NAME	COMMON NAME	ROOTS	SIZE	QUANT.
PS	AMELANCHIER "ROBIN HILL PINK"	PINK SHADBLW AMELANCHIER	B+B	2 1/2" - 3"	21
Z	GINGKO BILOBA "PRINCETON SENTRY"	PRINCETON SENTRY BRAND GINKGO	B+B	3" - 3 1/2"	76
HL	GLEDTISIA TRIACANTHUS INERMIS "SHADE MASTER"	SHADEMASTER HONEY LOCUST	B+B	3" - 3 1/2"	26
GR	KOELREUTERIA PANICULATA	GOLDEN RAIN TREE	B+B	3" - 3 1/2"	17
EQ	LIQUIDAMBAR STYRACIFLUA	SWEET GUM	B+B	3" - 3 1/2"	3
PO	QUERCUS PALUSTRIS	PIN OAK	B+B	3" - 3 1/2"	57
WO	QUERCUS PHELLOS	WILLOW OAK	B+B	2 1/2" - 3"	34
ST	SOPHORA JAPONICA "REGENT"	REGENT BRAND SCHOLAR TREE	B+B	3" - 3 1/2"	90
L	TILIA CORDATA "GREEN SPIRE"	GREEN SPIRE BRAND LITTLE LEAF LINDEN	B+B	3" - 3 1/2"	39
JE	ILICUS JAPONICA	JAPANESE ELM	B+B	3" - 3 1/2"	6
GZ	ZELKOYA SEPPATA "GREEN VASE"	GREEN VASE ZELKOYA	B+B	3" - 3 1/2"	9



1" = 20'-0"



1" = 20'-0"



TYPICAL TOOLED JOINT

GENERAL NOTE: THIS DRAWING TO BE COORDINATED W/ TREE PLANTING PLANS AS PREPARED BY OFFICE OF URBAN DESIGN. CONTACT O.U.D. W/ ANY QUESTIONS OR DISCREPANCIES BETWEEN DRAWINGS.

CITY OF NEW YORK
DEPARTMENT OF TRANSPORTATION

COLUMBUS AVENUE

OFFICE OF URBAN DESIGN - U.D. 1
TYPICAL BLOCK PLANS

SHEET 67 OF 87 CONTRACT NO. HWM416CW

8

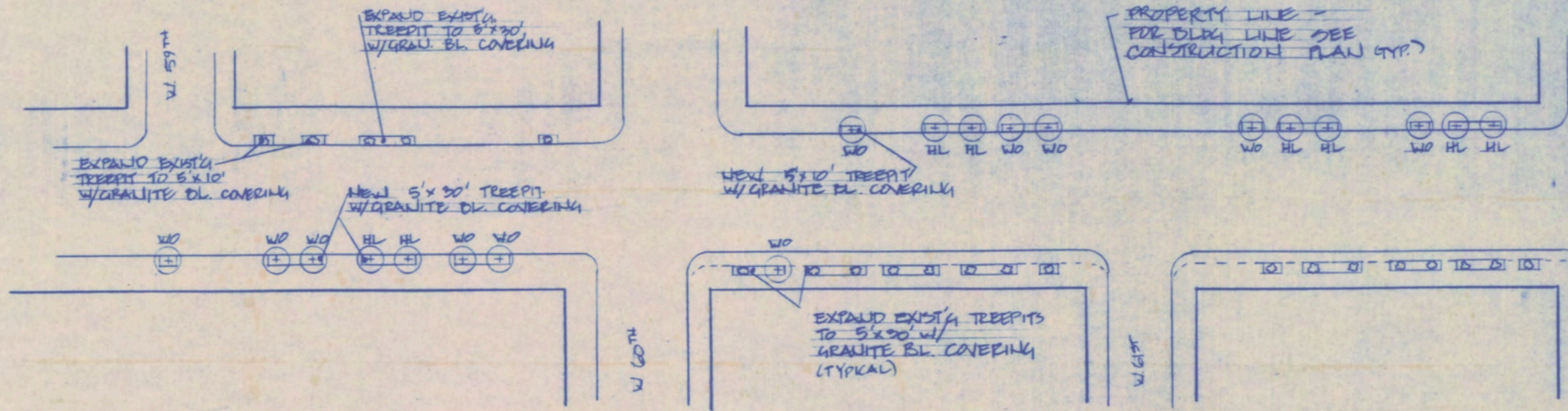
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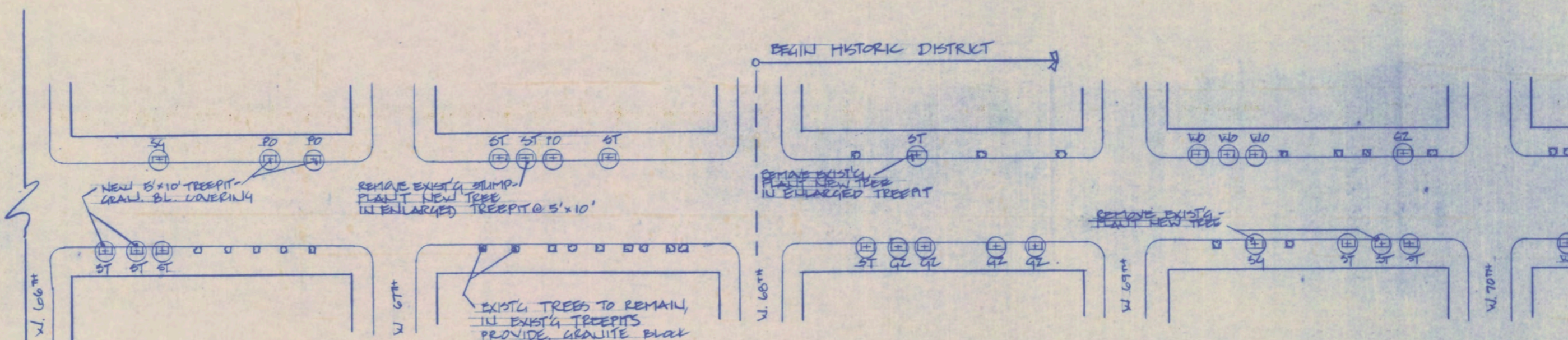
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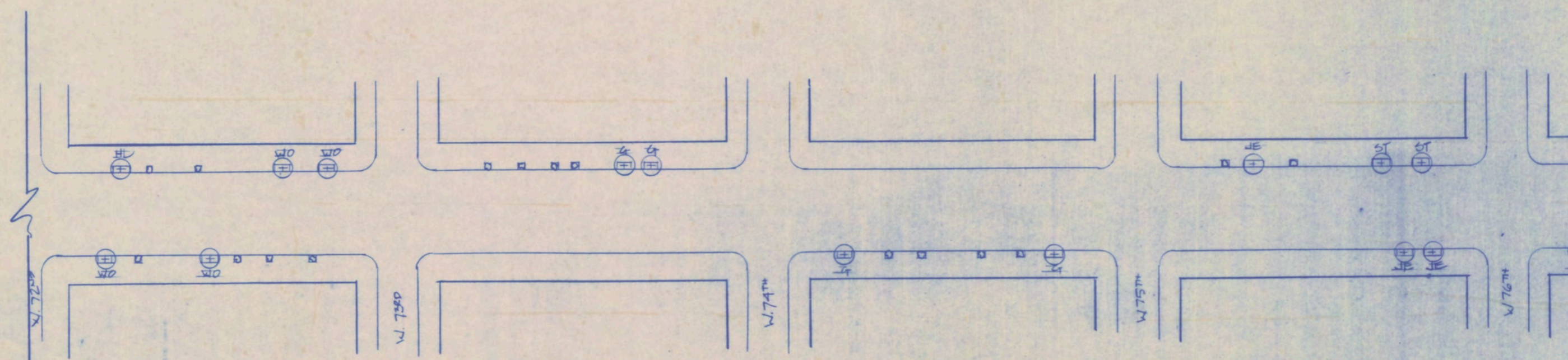
D



C

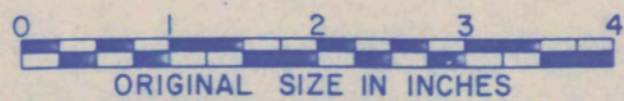


B



A

DRAWN BY: _____
 CHECKED BY: _____



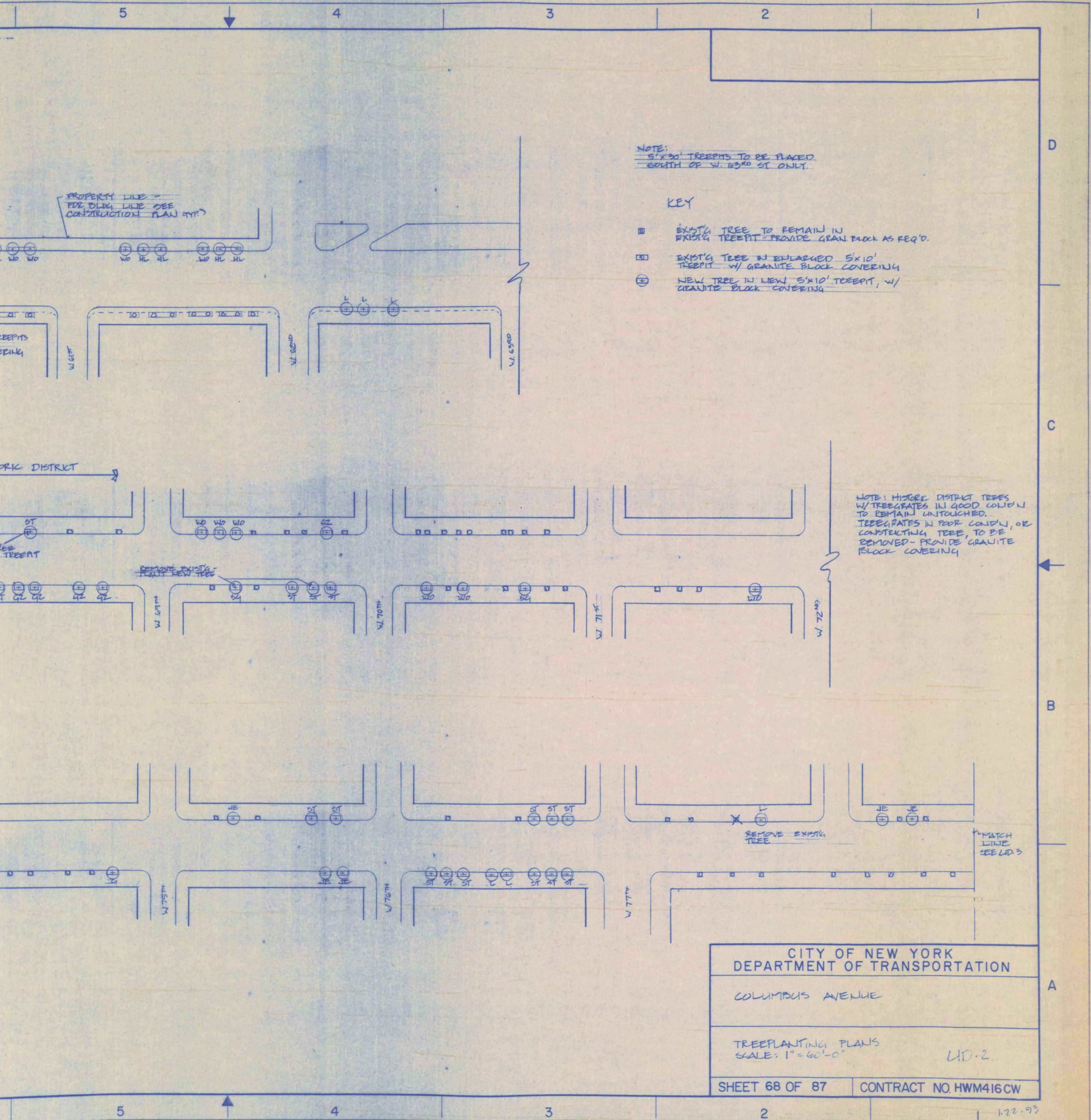
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NOTE:
 5'x30' TREEPITS TO BE PLACED
 SOUTH OF W. 63RD ST ONLY.

KEY

- EXIST'G TREE TO REMAIN IN EXIST'G TREEPIT - PROVIDE GRAN. BLOCK AS REQ'D.
- EXIST'G TREE IN ENLARGED 5'x10' TREEPIT - W/ GRANITE BLOCK COVERING
- ⊕ NEW TREE IN NEW 5'x10' TREEPIT, W/ GRANITE BLOCK COVERING

NOTE: HISTORIC DISTRICT TREES W/ TREEGRATES IN GOOD CONDN TO REMAIN UNTOUCHED. TREEGRATES IN POOR CONDN, OR CONSTRUCTING TREE, TO BE REMOVED - PROVIDE GRANITE BLOCK COVERING

CITY OF NEW YORK
 DEPARTMENT OF TRANSPORTATION

COLUMBUS AVENUE

TREEPLANTING PLANS
 SCALE: 1" = 60'-0"

LD-2

SHEET 68 OF 87

CONTRACT NO. HWM416CW

1.22.93

8

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4

D

MATCH
LINE
SEE 402

W. 79th

W. 80th

W. 81st

W. 82nd

PROPERTY LINE - FOR
BUILDING LINE SEE
CONSTRUCTION PLAN (TYP)

C

END HISTORIC DISTRICT

STA. 334+50

EXISTING TREES IN
ENLARGED 5'x10'
TRESPASS - TYPICAL NORTH
OF 8th ST.

REMOVE EXISTING
PLANT NEW TREE

REMOVE EXISTING TREE

REMOVE EXISTING
PLANT NEW TREE

CONTRACT
HWM 416 CW-1

CONTRACT
HWM 416 CW-2

B

PROPERTY LINE (TYP)
FOR BUILDING LINE SEE
CONSTRUCTION PLAN

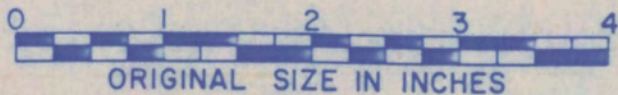
REMOVE EXISTING
PLANT NEW TREE

EXISTING TREES IN
ENLARGED 5'x10'
TRESPASS (TYP)

REMOVE EXISTING
PLANT NEW TREE

A

DRAWN BY: _____
CHECKED BY: _____



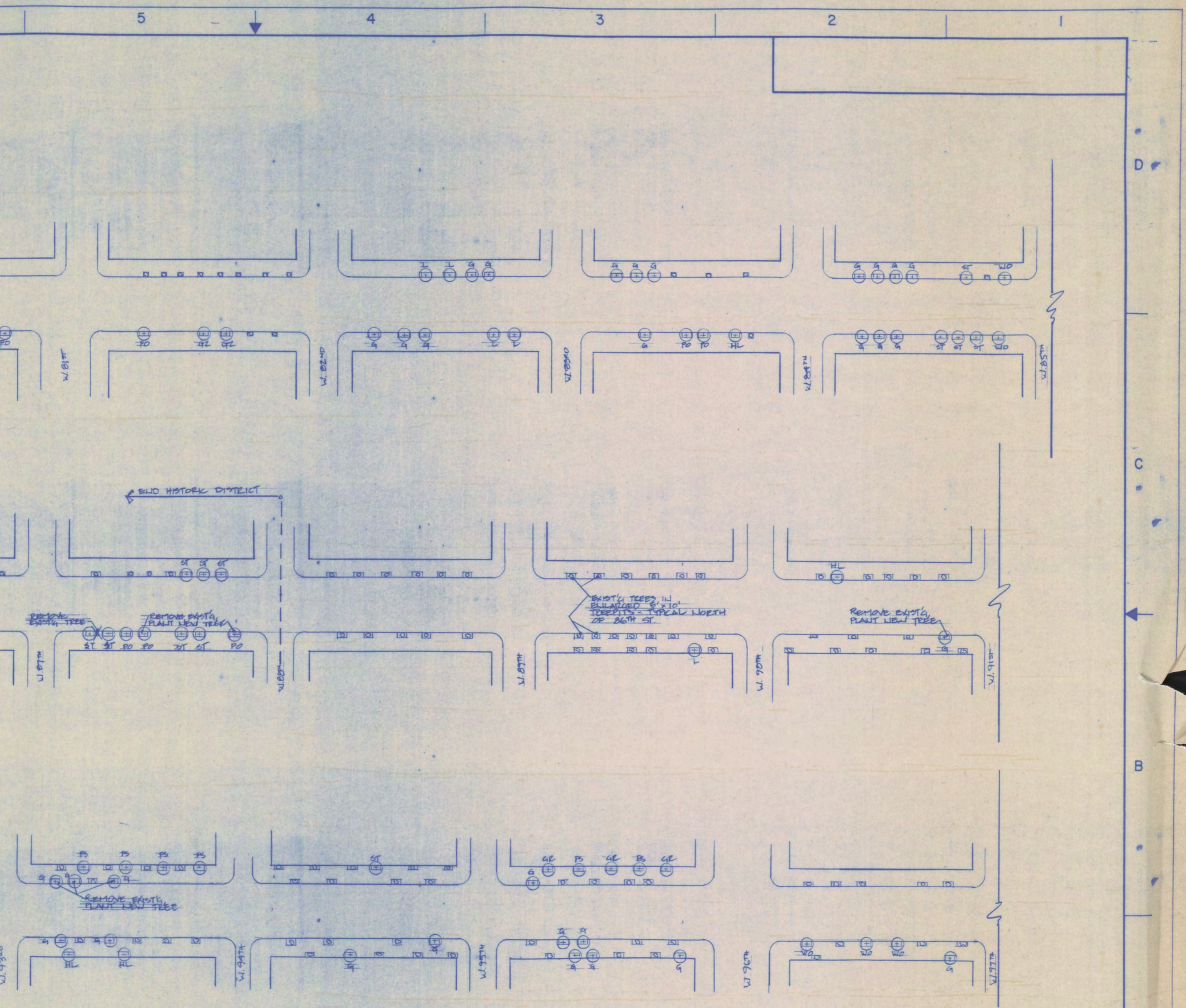
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CITY OF NEW YORK DEPARTMENT OF TRANSPORTATION	
COLUMBUS AVENUE	
TREEPLANTING PLANS SCALE: 1" = 60'-0" (TYP.)	LD-3
SHEET 69 OF 87	CONTRACT NO. HWM416CW

8

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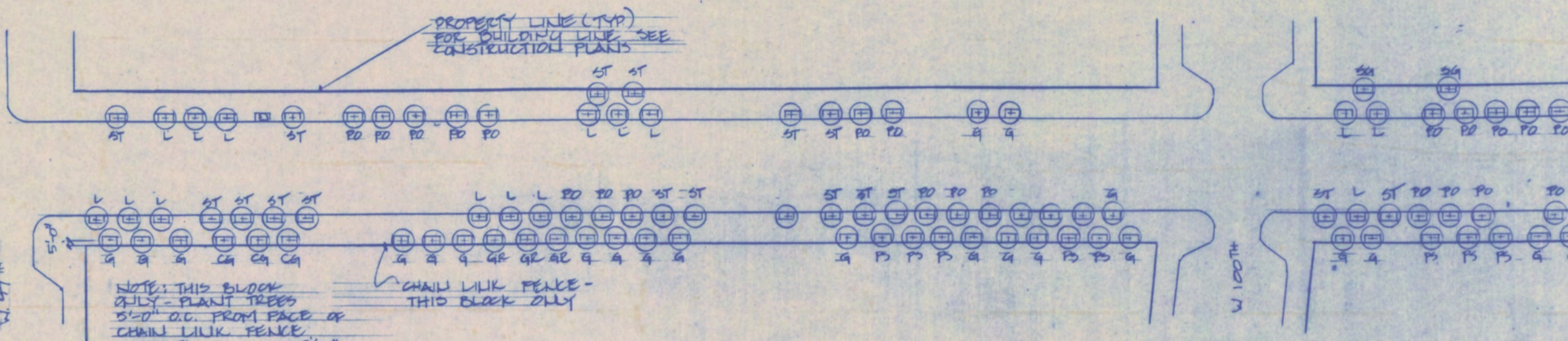
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D

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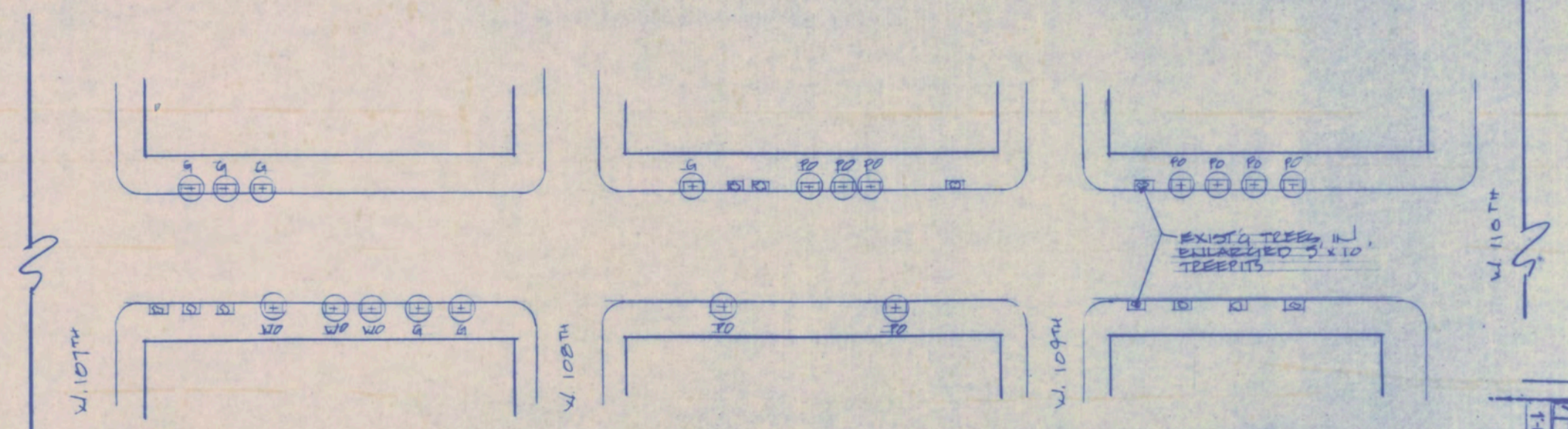
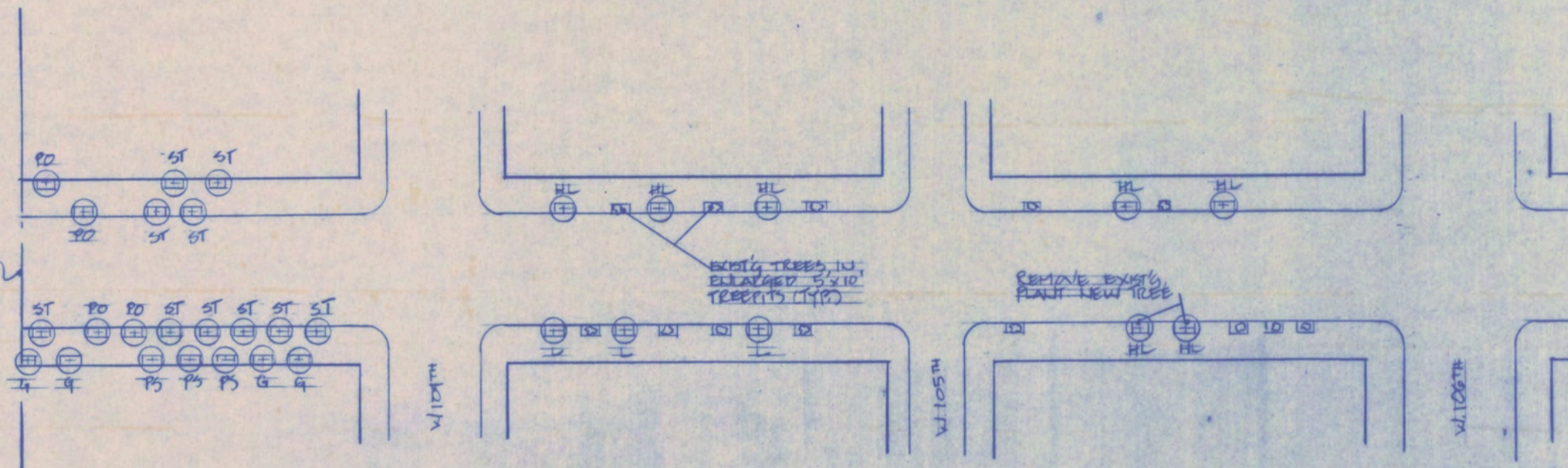
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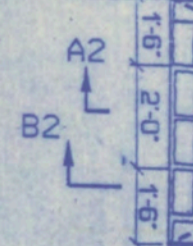
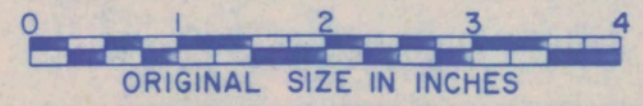
NOTE: THIS BLOCK
ONLY - PLANT TREES
5'-0" O.C. FROM FACE OF
CHAIN LINK FENCE.
TREEPITS WILL BE 7'-6" x
10'-0" W/ GRANITE BLOCK TO
EDGE OF PROPERTY LINE

CHAIN LINK FENCE -
THIS BLOCK ONLY

MATCH LINE



DRAWN BY: _____
CHECKED BY: _____



PLA
TRE
(ST

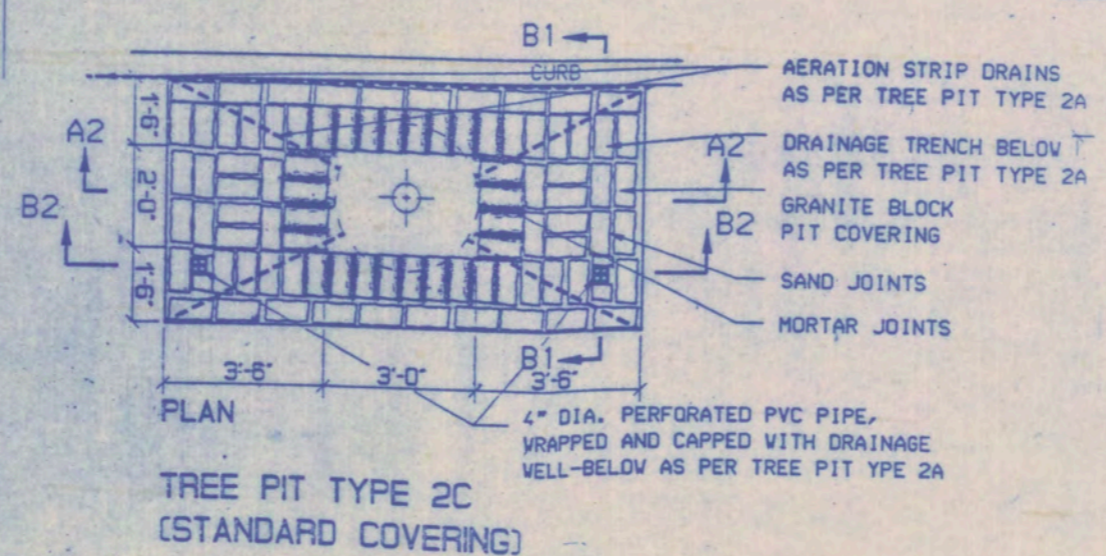
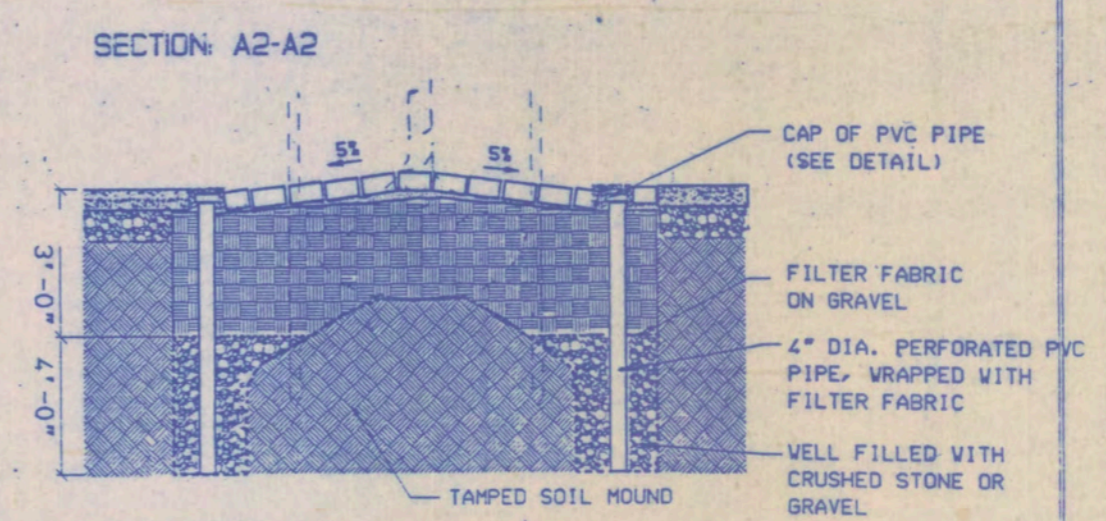
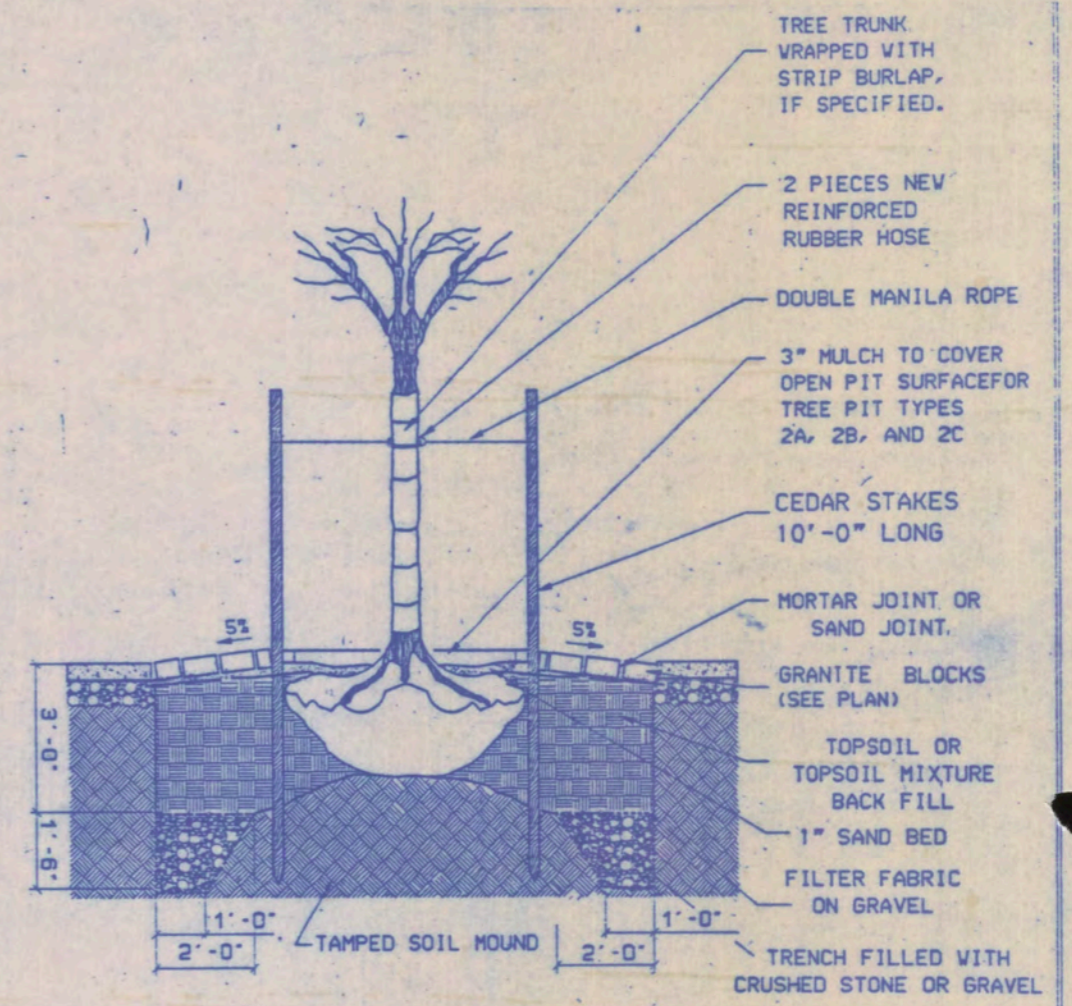
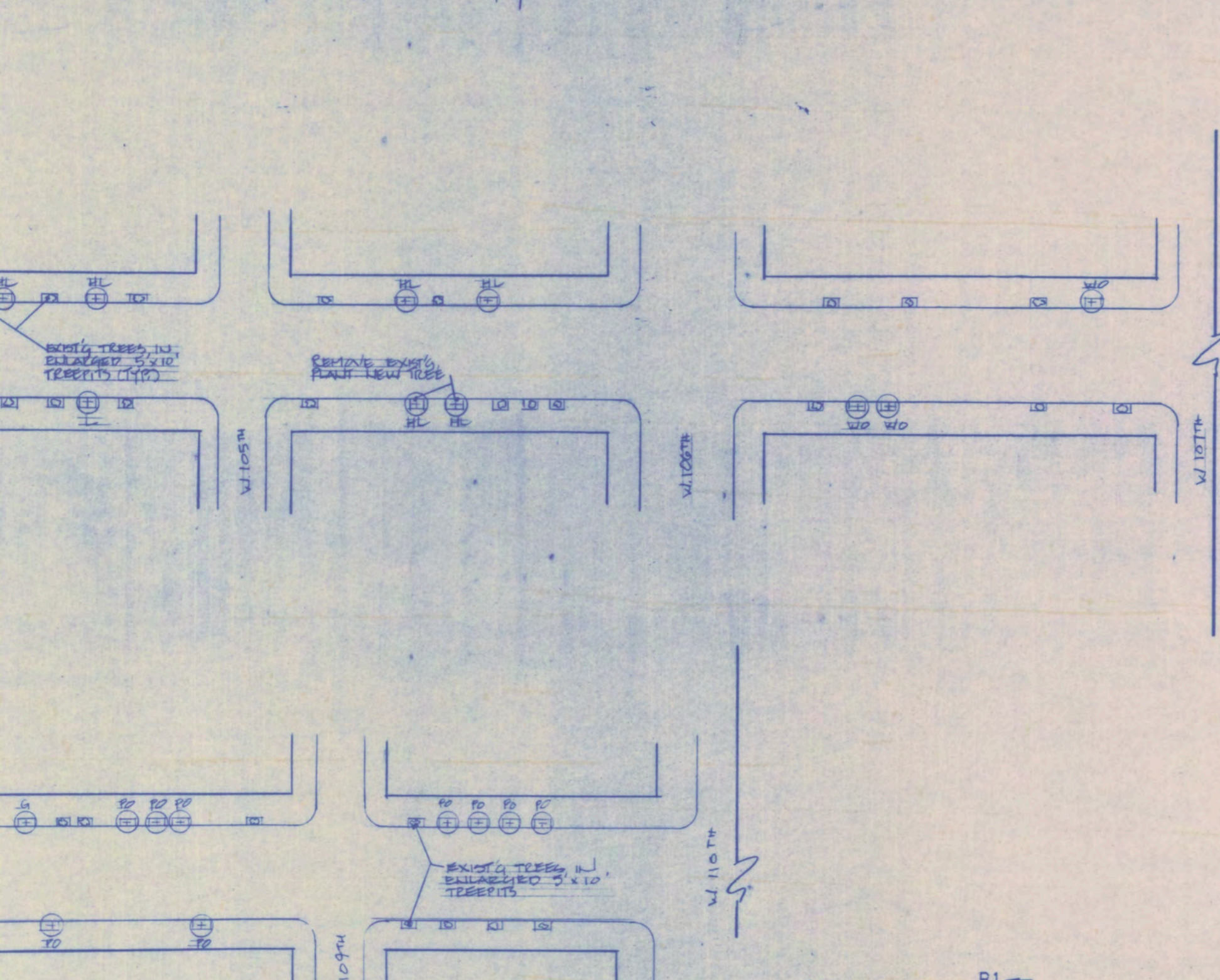
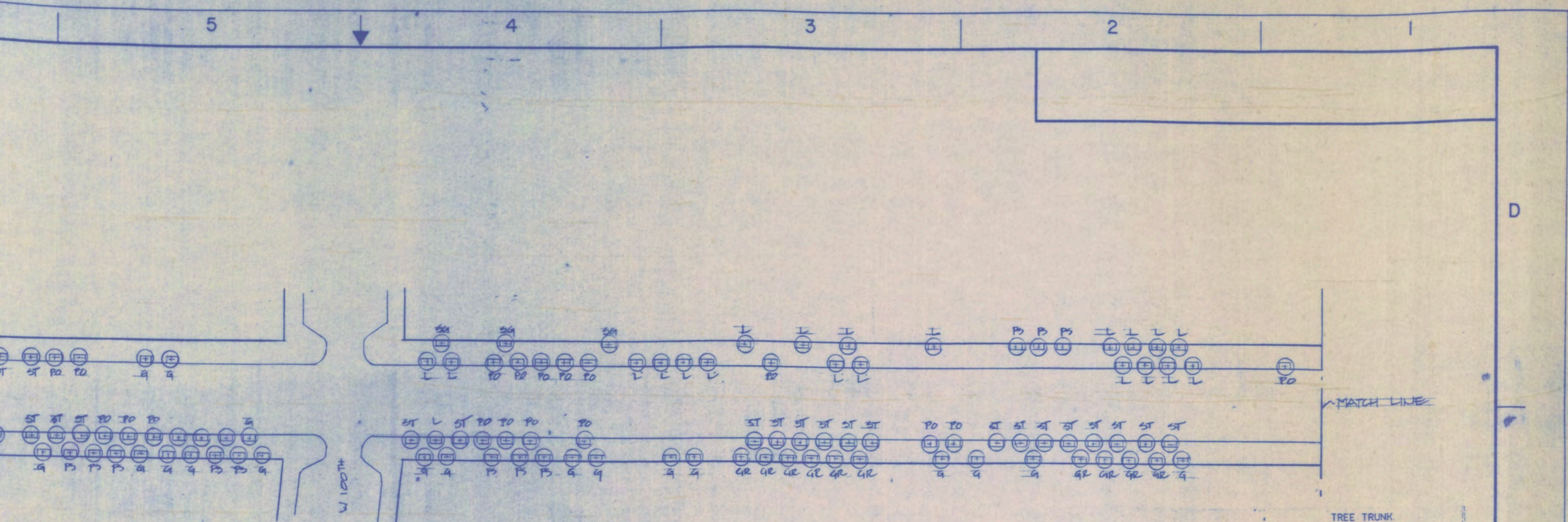
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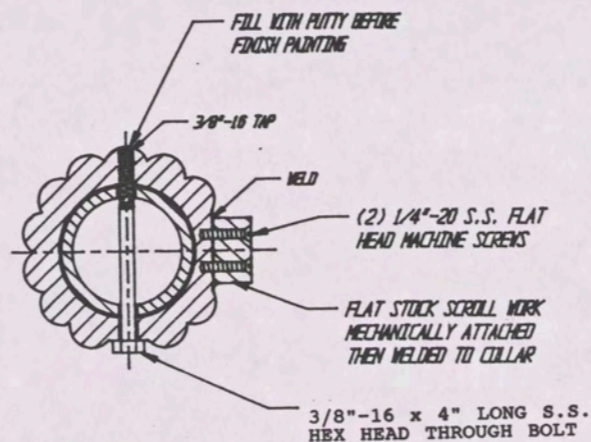
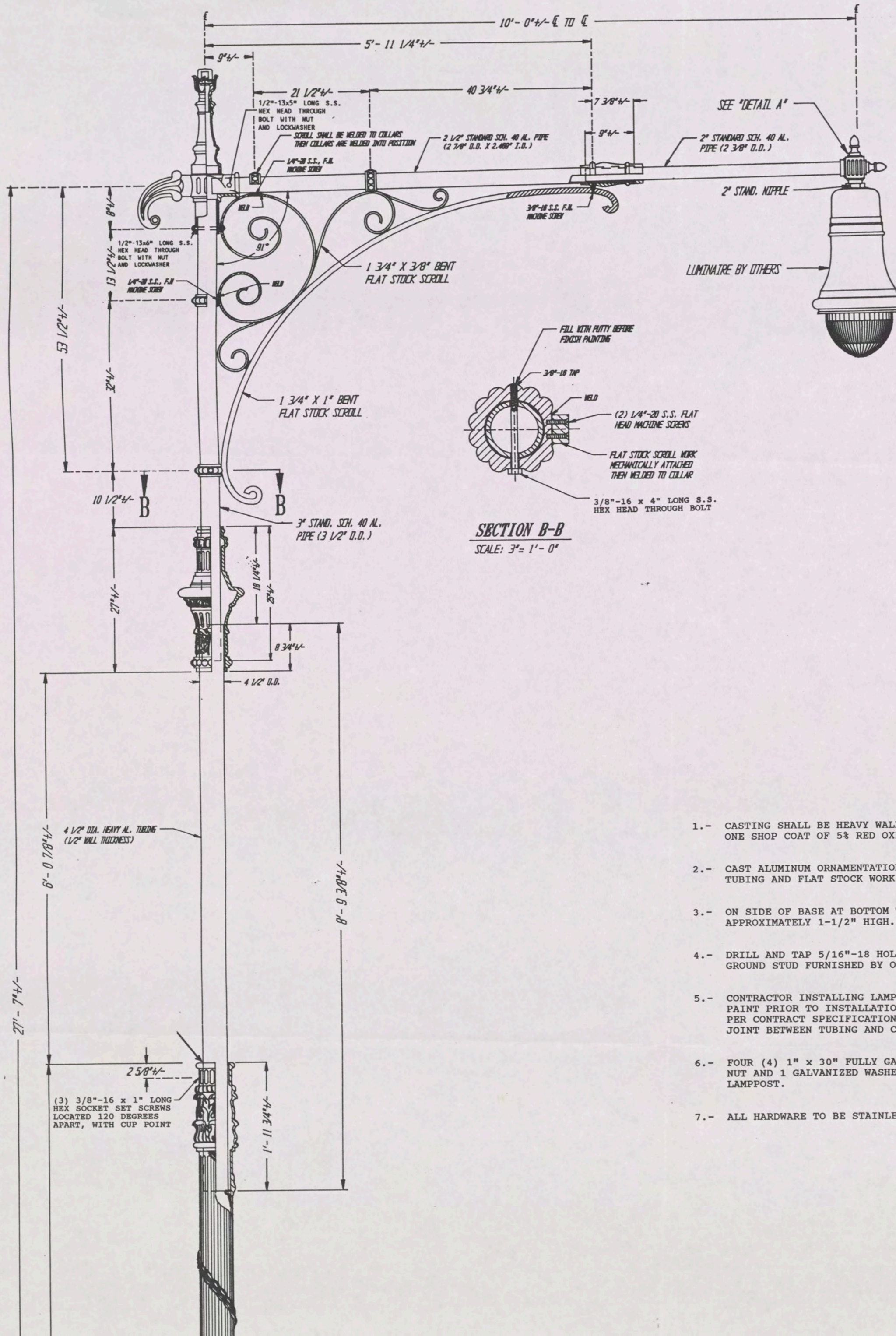
CITY OF NEW YORK
DEPARTMENT OF TRANSPORTATION

COLUMBUS AVENUE

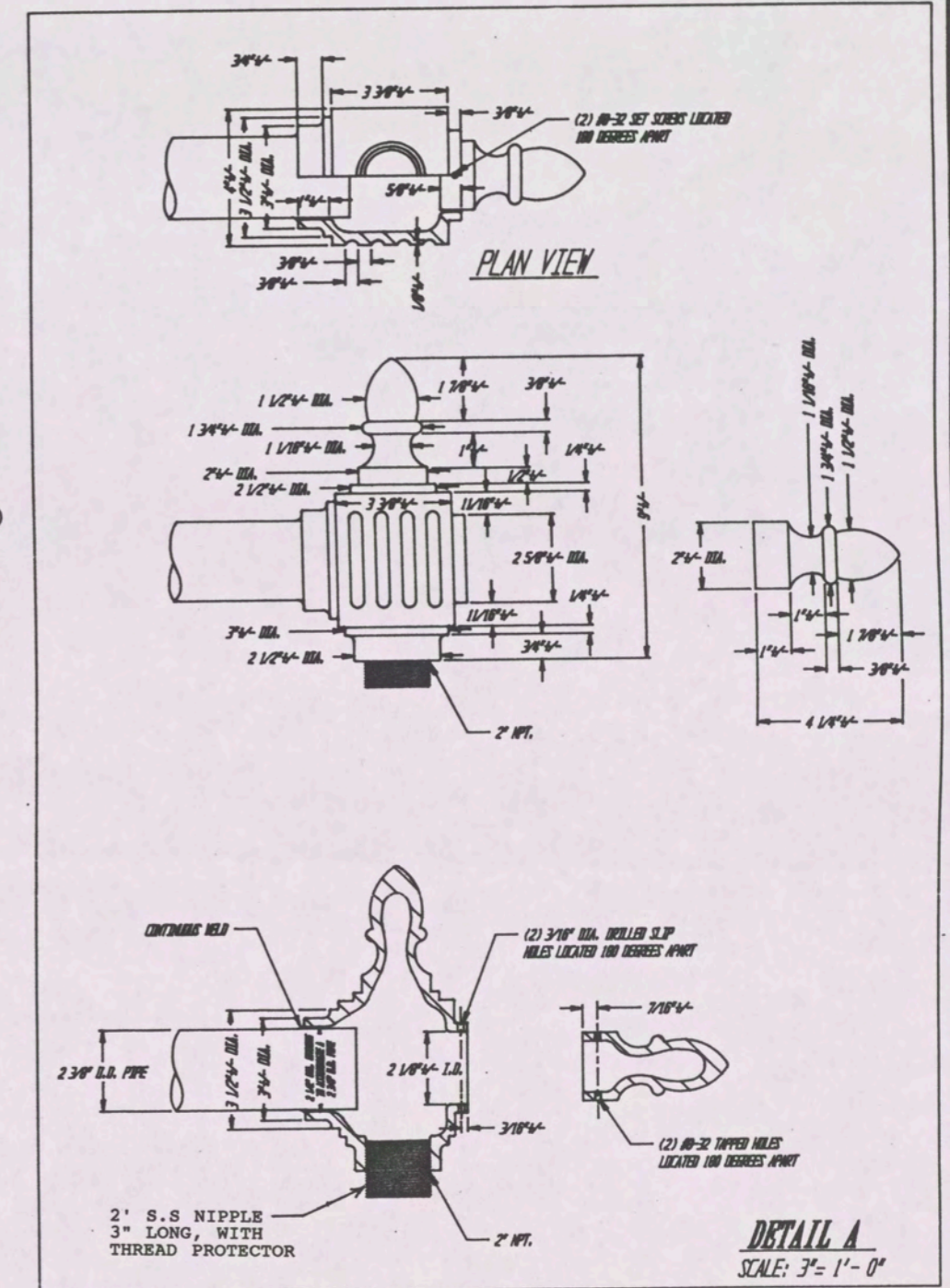
TREEPLANTING PLANS
SCALE: 1" = 60'-0"

4D. 4

SHEET 70 OF 87 CONTRACT NO. HWM416CW



SECTION B-B
SCALE: 3" = 1'-0"



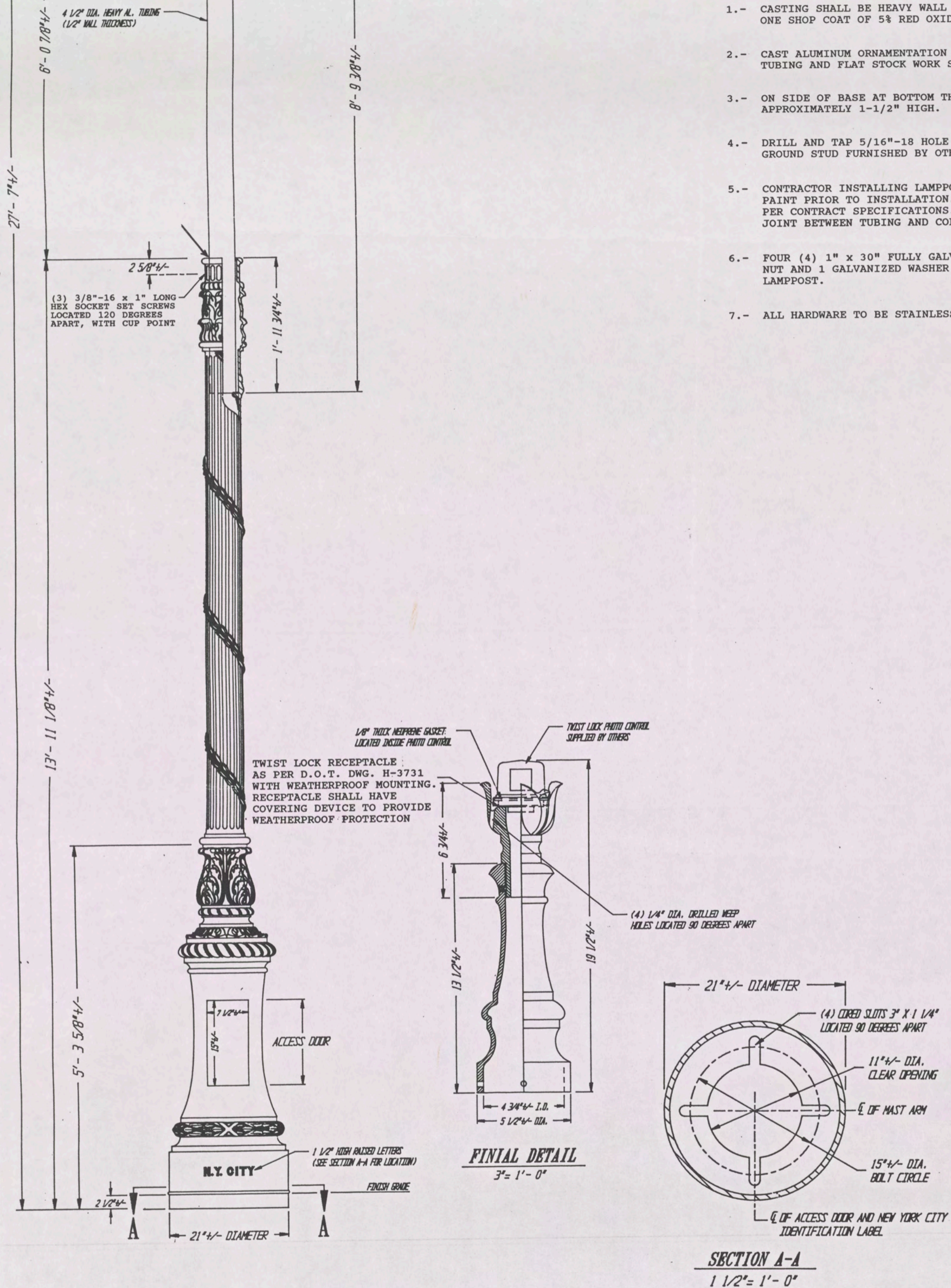
DETAIL A
SCALE: 3" = 1'-0"

NOTES

- 1.- CASTING SHALL BE HEAVY WALL A-48-83 CLASS 30 GRAY IRON, PAINTED ONE SHOP COAT OF 5 1/2 RED OXIDE PRIMER.
- 2.- CAST ALUMINUM ORNAMENTATION SHALL BE 356-T6 ALLOY. ALUMINUM PIPE, TUBING AND FLAT STOCK WORK SHALL BE 6061-T6 ALLOY.
- 3.- ON SIDE OF BASE AT BOTTOM THE LETTERS "N.Y. CITY" SHALL BE CAST APPROXIMATELY 1-1/2" HIGH.
- 4.- DRILL AND TAP 5/16"-18 HOLE INSIDE OF BASE OPPOSITE DOOR FOR GROUND STUD FURNISHED BY OTHERS.
- 5.- CONTRACTOR INSTALLING LAMPPPOST SHALL APPLY ONE FINISH COAT OF PAINT PRIOR TO INSTALLATION. TYPE AND COLOR OF PAINT SHALL BE AS PER CONTRACT SPECIFICATIONS. AFTER INSTALLATION HE SHALL CAULK JOINT BETWEEN TUBING AND COLUMN WITH LEAD WOOL.
- 6.- FOUR (4) 1" x 30" FULLY GALVANIZED ANCHOR BOLTS WITH 1 GALVANIZED NUT AND 1 GALVANIZED WASHER PER BOLT SHALL BE FURNISHED FOR EACH LAMPPPOST.
- 7.- ALL HARDWARE TO BE STAINLESS STEEL.

NOTES

- 1.- CASTING SHALL BE HEAVY WALL A-48-83 CLASS 30 GRAY IRON, PAINTED ONE SHOP COAT OF 5% RED OXIDE PRIMER.
- 2.- CAST ALUMINUM ORNAMENTATION SHALL BE 356-T6 ALLOY. ALUMINUM PIPE, TUBING AND FLAT STOCK WORK SHALL BE 6061-T6 ALLOY.
- 3.- ON SIDE OF BASE AT BOTTOM THE LETTERS "N.Y. CITY" SHALL BE CAST APPROXIMATELY 1-1/2" HIGH.
- 4.- DRILL AND TAP 5/16"-18 HOLE INSIDE OF BASE OPPOSITE DOOR FOR GROUND STUD FURNISHED BY OTHERS.
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- 6.- FOUR (4) 1" x 30" FULLY GALVANIZED ANCHOR BOLTS WITH 1 GALVANIZED NUT AND 1 GALVANIZED WASHER PER BOLT SHALL BE FURNISHED FOR EACH LAMPOST.
- 7.- ALL HARDWARE TO BE STAINLESS STEEL.



NO.	DATE	BY	DESCRIPTION	I.A.S.
REVISIONS				
CITY OF NEW YORK DEPARTMENT OF TRANSPORTATION DIVISION OF STREET LIGHTING				
CONTRACT NO.			JOB NO.	
TYPE "M" LAMPOST (27'-7")				
PROJ. ENG. J. CENTENO	SECT. ENG.	ASST. CHIEF P. C. C. C.	CONTROL NO.	
DATE MAY 22, 1992	SCALE: 1" = 1'	SHEET 1 OF 1	DRAWING NO. H-5260	

