PLANS OF

2000 ROAD IMPROVEMENTS PROGRAM

BOROUGH OF MADISON
MORRIS COUNTY, NEW JERSEY
JUNE, 2000

BOROUGH COUNCIL

JOHN J, DUNNE, Mayor
NINO A. COVIELLO, Council Member - President
MARK RENART PECK, Council Member
ELEANOR "PEACHIE" ATTONITO, Council Member
PETER R. FLEMMING Sr., Council Member
ELLWOOD R. KERKESLAGER, Council Member
MARY-ANNA HOLDEN, Council Member

BOROUGH ADMINISTRATOR

JAMES R. ALLISON

BOROUGH ENGINEER

STANLEY J. SCHREK, PE, RA, PP

ASSISTANT ENGINEER

DONALD A. DiBELLO

BOROUGH ATTORNEY

JOSEPH MEZZACCA, JR, ESQ

- ELM STREET
- ELMER STREET
- HAMILTON STREET
- PARKSIDE AVENUE
- SHERWOOD AVENUE
- WEST STREET

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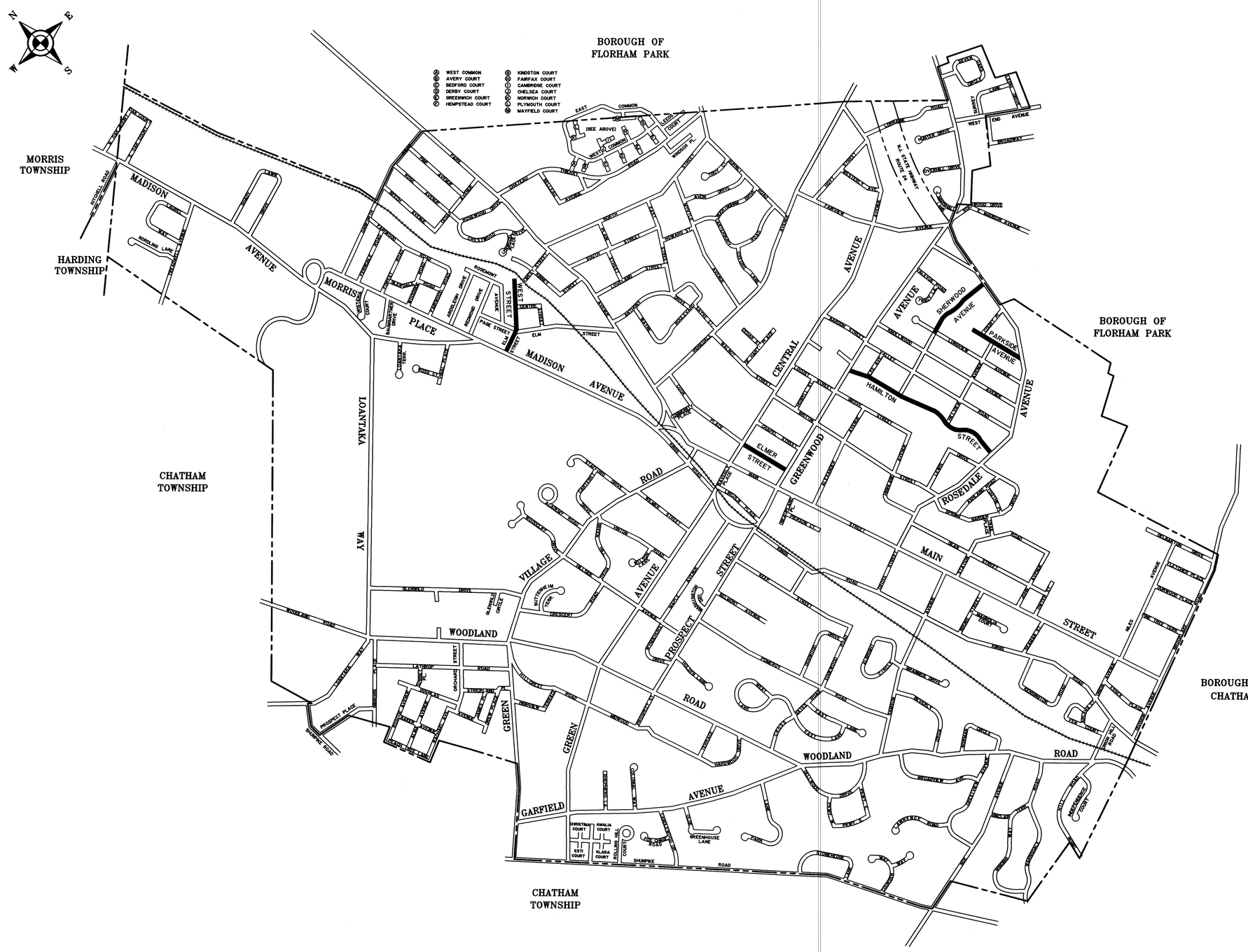
1989 STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTIONS
AND CURRENT A.W.W.A. STANDARDS TO GOVERN



800' 0 800' 1600'
1"=800'

NO.	REVISIONS	DATE	BY	CHK.	APPR

2000 ROAD IMPROVEMENT LOCATION PLAN

BOROUGH OF MADISON
DEPARTMENT OF ENGINEERING
HARTLEY DODGE MEMORIAL
MADISON, MORRIS COUNTY, N.J. 07940
(973) 593-3063

DATE

STANLEY J. SCHREK, P.E.
PROFESSIONAL ENGINEER N.J. LIC. NO. 28275

SCALE: 1" = 800'±
DATE: 6-6-00
DWG. NO. 2 of 13

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE LOCAL POLICE DEPARTMENT FOR TRAFFIC OPERATIONS AND PARKING PROHIBITIONS DURING CONSTRUCTION.

2. ANY DAMAGE TO UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR, AND ALL COSTS FOR REPAIRS SHALL BE BORNE BY THE CONTRACTOR.

3. ALL DISTURBED SHRUBS, FENCING, SIGNS, MAIL BOXES, DRIVES, ETC., SHALL BE RESTORED TO THEIR ORIGINAL CONDITION, AND TO THE SATISFACTION OF THE OWNER. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS RESTORATION, UNLESS SPECIFIED ELSEWHERE.

4. ALL PROPERTY CORNERS OR MONUMENTS REMOVED DURING CONSTRUCTION SHALL BE REPLACED BY A NEW JERSEY LICENSED LAND SURVEYOR, AT NO SEPARATE COST TO THE OWNER.

5. ALL EXISTING UTILITY CASTINGS, COVERS AND GRATES TO BE REMOVED ARE THE PROPERTY OF THE BOROUGH OF MADISON AND SHALL BE DELIVERED TO THE PUBLIC WORKS DEPARTMENT. PAYMENT WILL NOT BE MADE FOR NEW CASTINGS, COVERS AND GRATES UNLESS THE OLD ONES ARE RETURNED.

6. ALL MILLED MATERIALS ARE TO BE DISPOSED OF IN ACCORDANCE WITH APPROVED NJDOT/NJDEP METHODS AND MEANS, OR TRANSPORTED AT THE DIRECTION OF THE ENGINEER.

7. PRIVATE UTILITY COMPANIES MUST BE CONTACTED BY THE CONTRACTOR SO THAT PRIVATELY OWNED CASTINGS MAY BE RESET BY THE UTILITY COMPANY.

8. UNSUITABLE SUBBASE MATERIAL WHICH HAS BEEN UNCOVERED DURING CONSTRUCTION SHALL BE REMOVED AND REPLACED AT THE DIRECTION OF THE ENGINEER. ROADWAY EXCAVATION, UNCLASSIFIED SHALL BE PERFORMED TO REMOVE UNSUITABLE SUBBASE MATERIAL. SUBBASE MATERIAL SHALL BE REPLACED WITH DENSE GRADED AGGREGATE BASE COURSE. ROADWAY EXCAVATION, UNCLASSIFIED, AND DENSE GRADED AGGREGATE BASE COURSE WHICH HAVE BEEN INSTALLED ON AN "IF AND WHERE DIRECTED" BASIS, WILL BE PAID FOR AT THE UNIT PRICE BID FOR THOSE ITEMS.

9. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ACCESS RAMPS AT ALL CURB OPENINGS FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL ALSO PROVIDE AND MAINTAIN RAMPS AROUND ALL EXPOSED CASTINGS, BOTH PUBLIC AND PRIVATE, WHICH HAVE BEEN UNCOVERED OR RESET DURING CONSTRUCTION.

10. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO MAINTAIN DUST CONTROL AS REQUIRED OR DIRECTED BY THE ENGINEER. ALL VEHICLES SHALL BE CLEAN AND ALL ROADWAYS SHALL BE MAINTAINED AS DIRECTED BY THE ENGINEER.

11. ALL PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE STANDARDS OF THE CURRENT "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

12. IF NOT OTHERWISE INDICATED, NEW PAVEMENT MARKINGS SHOULD CONFORM TO THE FOLLOWING:

    CENTER LINES: 2-4" WIDE YELLOW LINES, 4" APART.

    STOP LINES: 12" WIDE WHITE LINES (4' MIN. FROM CROSSWALK)

    CROSSWALKS 6" WIDE WHITE LINES, 6' MIN. WIDTH, MATCH PROPOSED STRIPING WITH EXISTING LANE AND CENTER LINES.

13. CONTRACTOR SHALL NOTIFY ENGINEER WHEN TRAFFIC STRIPS AND TRAFFIC PAINT HAVE BEEN LAID OUT PRIOR TO PAINTING. THE ENGINEER WILL INSPECT AND APPROVE LAYOUT PRIOR TO CONTRACTOR PAINTING TRAFFIC STRIPS AND TRAFFIC MARKINGS.

14. NO SEPARATE PAYMENT WILL BE MADE FOR THE REMOVAL OF EXISTING CURBS, SIDEWALKS, ETC., THE COST FOR THE REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR SIMILAR NEW ITEMS IN THE PROPOSAL.

15. ALL INLET GRATES ARE TO BE BICYCLE SAFE TYPE. ALL INLET GRATES WHICH ARE NOT THE BICYCLE SAFE TYPE SHALL BE REMOVED AND REPLACED WITH A BICYCLE SAFE GRATE. REMOVED GRATES SHALL BECOME THE PROPERTY OF THE BOROUGH.

GENERAL NOTES

1. THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, A989 EDITION, AS PUBLISHED BY THE NEW JERSEY STATE HIGHWAY DEPARTMENT, THE PLANS, TECHNICAL SPECIFICATIONS, ADVERTISEMENT, CONTRACTOR'S PROPOSAL AND INCLUDING BUT NOT LIMITED TO THE AMENDMENTS CONTAINED HERINAFTER SHALL COMPRISE THE CONTRACT.

2. THE CONTRACTOR IS TO REFER TO THE SUPPLEMENTAL SPECIFICATION, WHICH INDICATES WHEN THE STANDARD SPECIFICATIONS, AND/OR THE AMENDMENTS THAT FOLLOW SHOULD APPLY.

3. THE CONTRACTOR SHALL COMPLY WITH ALL LAWS, ORDINANCES, RULES ORDERS AND REGULATIONS RELATING TO THE PERFORMANCE OF THE WORK, THE PROTECTION OF ADJACENT PROPERTY AND THE MAINTAINANCE OF PASSAGEWAYS.

4. NO CONSTRUCTION, MAINTENANCE OR UTILITY WORK ON, UNDER OR ABOVE THE PROJECT ROAD THAT WILL OBSTRUCT, INTERFERE WITH AND/OR DETOUR TRAFFIC ON THE ROAD, SHALL BE PERFORMED BEFORE THE HOUR OF 7:00 AM OR AFTER 5:00 PM. THE CONTRACTOR'S WORK HOURS SHALL CONFORM TO LOCAL ORDINANCE. THE CONTRACTOR SHALL NOT DEVIATE FROM THE ABOVE WORK HOURS WITHOUT OBTAINING WRITTEN PERMISSION FROM THE CHIEF OF POLICE PRIOR TO THE START OF CONSTRUCTION.

5. EACH AND EVERY PROVISION OF LAW AND CLAUSE REQUIRED BY LAW TO BE INSERTED IN THIS CONTRACT SHALL BE READ AND ENFORCED AS THOUGH IT WERE INCLUDED HEREIN, AND IF THROUGH MISTAKE OR OTHERWISE ANY SUCH PROVISION IS NOT INSERTED, OR IS NOT CORRECTLY INSERTED, THEN UPON THE APPLICATION OF EITHER PARTY, THE CONTRACT SHALL FORTHWITH BE PHYSICALLY AMENDED TO MAKE SUCH INSERTION OR CORRECTION.

6. THE CONTRACTOR WILL BE FURNISHED WITH FIVE (5) SETS OF PLANS AND SPECIFICATIONS. ONE (1) COPY OF THE PLANS AND SPECIFICATIONS FURNISHED TO THE CONTRACTOR MUST BE KEPT CONSTANTLY ON THE PROJECT SITE. ANYTHING SHOWN ON THE PLANS AND NOT MENTIONED IN THE SPECIFICATIONS, OR MENTIONED IN THE SPECIFICATIONS AND NOT SHOWN ON THE PLANS, AND ALL WORK AND MATERIALS NECESSARY FOR THE COMPLETION OF THE WORK ACCORDING TO THE INTENT AND MEANING OF THE CONTRACT DOCUMENTS, SHALL BE FURNISHED, PERFORMED AND DONE, AS IF THE SAME WERE BOTH MENTIONED IN THE SPECIFICATIONS AND SHOWN ON THE DRAWINGS. ANY CONFLICT OR INCONSISTENCY BETWEEN THE PLANS AND SPECIFICATIONS, OR ANY DISCREPANCY BETWEEN THE FIGURES AND SCALE OF DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER, WHOSE DECISION THEREON SHALL BE CONCLUSIVE. THE DECISION OF THE ENGINEER AS TO WHICH SPECIFICATION WILL BE CONCLUSIVE AND FINAL.

7. IN THE EVENT THE MEANING OF ANY PORTION OF THE SPECIFICATIONS OR DRAWINGS OR ANY SUPPLEMENTARY DRAWINGS OR INSTRUCTIONS OF THE ENGINEER IS DOUBTFUL, THE SAME SHALL BE UNDERSTOOD TO CALL FOR THE BEST TYPE OF CONSTRUCTION, BOTH AS TO MATERIAL AND WORKMANSHIP, WHICH REASONABLY CAN BE INTERPRETED.

8. IN THE EVENT A SITUATION ARISES IN WHICH MATERIALS NOT SPECIFIED ON THE PLANS OR INDICATED IN THE SUPPLEMENTAL SPECIFICATION ARE TO BE USED FOR EXTRA WORK, THEN THE STANDARDS SPECIFICATIONS OR THE SUPPLEMENTS WHICHEVER GOVERNS, WILL BE USED.

9. THE CONTRACTOR'S ATTENTION IS SPECIFICALLY DIRECTED TO GENERAL CONDITIONS, WHICH REQUIRES THAT HE POST A ONE (1) YEAR MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE FINAL CONTRACT AMOUNT.

10. THE GENERAL CONDITIONS OF THE CONTRACT INDICATES THAT THE CONTRACTOR MUST NOTIFY THE ENGINEER OF ANY INTENDED OVERTIME WORK. FURTHER, THE BOROUGH MUST BE REINBURSED BY DEDUCTION OF MONTHLY PAYMENTS FOR THE OVERTIME WORK PERFORMED BY THE INSPECTOR AND/OR BOROUGH PERSONNEL.

11. ALL TRENCHES UNLESS OTHERWISE INDICATED IN THE SPECIFICATIONS AND/OR AMENDMENTS, SHALL HAVE BACKFILL MATERIAL AS SPECIFIED IN SUBSECTION 207.06. THE ENGINEER AT HIS DISCRETION, MAY PERMIT THE USE OF EXCAVATED OR OTHER SUITABLE MATERIAL TO BE USED AS BACKFILL ON TRENCHES OUTSIDE THE CURB LINES.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL EXCESS MATERIALS EXCAVTED OF WHATEVER NATURE AT HIS OWN EXPENSE. THE BOROUGH IS NOT OBLIGATED TO SUPPLY A DISPOSAL SITE. THE CONTRACTOR MUST NOT DEPOSIT THE EXCESS MATERIALS IN THE BOROUGH LIMITS WITHOUT EXPRESS PERMISSION OF THE BOROUGH ENGINEER.

13. THE CONTRACTUAL TIME OF COMPLETION FOR THIS PROJECT IS PROVIDED IN THE SPECIFICATIONS.

14. THE CONTRACTOR IS NOTIFIED THAT THE SPECIFICATIONS IN SUBSECTION 110, INDICATE THAT HE MUST MAINTAIN TRAFFIC AND ACCESS TO RESIDENCES. HE IS ALSO NOTIFIED TO ASSURE FOR GARBAGE COLLECTION AND EMERGENCY VECHICLES.

15. PAYMENT FOR PIPES SHALL BE ON THE BASIS OF HORIZONTAL LINEAR FEET. THE UNIT PRICE PER LINEAR FEET SHALL INCLUDE THE COST FOR CONSTRUCTION LAYOUT, EXCAVATION, BEDDING AND BACKFILLING WITH SPECIFIED MATERIAL.

GENERAL NOTES

16. EXISTING FENCES SHALL BE REMOVED AND SHALL BE RESET AT THE LOCATION ACCEPTABLE TO THE OWNER AND THE ENGINEER. THE COST TO REMOVE AND RESET FENCES SHALL BE INCLUDED IN VARIOUS ITEMS IN THE PROPOSAL.

17. THE CONTRACTOR IS RESPONSIBLE TO OBEY ALL THE SAFETY AND HEALTH REGULATIONS. THE OWNER ASSUMES NO RESPOSIBILITY FOR THE SAFETY OF THE WORK PERFORMED.

18. THIS CONTRACT INCLUDES STATE WAGE RATES.

19. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL HAVE ALL UNDERGROUND UTILITIES LOCATED AND PHYSICALLY MARKED OUT WITHIN THE LIMITS OF THE PROJECT (CALL 1-800-272-1000) THE CONTRACTOR SHALL PROVIDE TEST HOLES IN AREAS OF POSSIBLE CONFLICT TO VERIFY THE DEPTH AND LOCATION OF THE UTILITY. PAYMENT SHALL BE MADE FOR THIS ITEM. NO SEPERATE PAYMENT SHALL BE MADE FOR DELAYS THAT MAY BE NECESSARY TO RELOCATE UTILITIES OR THE PROPOSED LOCATION OF DRAINAGE STRUCTURES.

20. THE CONTRACTOR SHALL APPLY THE SURFACE WITHIN 72 HOURS OF THE MILLING OPERATION.

21. **ALL ROAD AND DRIVEWAY SEAMS ARE TO BE HOT IRONED WITH APPROPRIATE TOOLS**

NO.	REVISIONS	DATE	BY	CHK.	APPR

2000 ROADWAY IMPROVEMENT
CONSTRUCTION & GENERAL NOTES

BOROUGH OF MADISON
DEPARTMENT OF ENGINEERING
HARTLEY DODGE MEMORIAL
MADISON, MORRIS COUNTY, N.J. 07940
(973) 593-3063

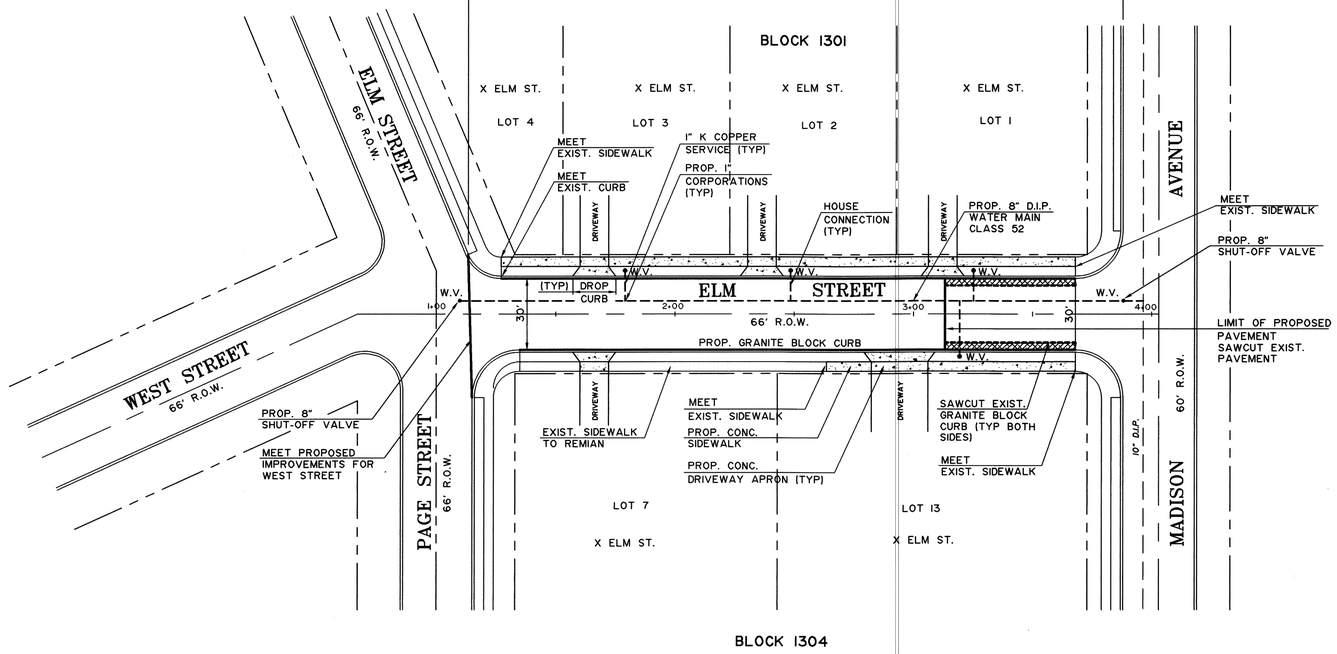
DATE

STANLEY J. SCHREK, P.E.
PROFESSIONAL ENGINEER N.J. LIC. NO. 28275

SCALE: N.T.S.
DATE: 6-5-00
DWG. NO. 3 of 13

CONSTRUCT:		
100%	L.S.	MAINTENANCE AND PROTECTION OF TRAFFIC
40	M-HRS	POLICE TRAFFIC DIRECTORS
1220	S.Y.	MILLING, 2" THICK
200	TONS	BITUMINOUS CONCRETE SURFACE COURSE, 2" THICK, MIX I-5
60	TONS	BITUMINOUS CONCRETE BASE COURSE, 4" THICK, MIX I-2
195.5	S.Y.	D.G.A. 6" THICK
100	L.F.	ROOF DRAINS (SDR, 35)
100%	L.S.	REINSTALL TRAFFIC LOOPS

CONSTRUCT:		
510	L.F.	GRANITE BLOCK CURB
215	S.Y.	CONCRETE SIDEWALK, 4" THICK, 5' WIDE
140	S.Y.	CONCRETE DRIVEWAY APRON, 6" THICK
107	S.Y.	DRIVEWAY RESTORATION MIX I-5
100%	L.S.	LANDSCAPE RESTORATION TO INCLUDE TOPSOIL, 4" THICK, FERTILIZING, SEEDING, TYPE "A" & STRAW MULCH
400	L.F.	8" DUCTILE IRON PIPE CL 52
5	UNIT	WATER SERVICE CONNECTIONS
2	UNIT	8" GATE VALVES



GENERAL NOTES

1. R.O.W. LINES, PROPERTY LINES AND LOT INFORMATION SHOWN ON THIS PLAN ARE BASED UPON BOROUGH OF MADISON TAX MAPS.
2. ROADWAY AND ROADWAY UTILITIES ARE BASED UPON FIELD OBSERVATIONS PERFORMED BY THE BOROUGH OF MADISON ENGINEERING DEPARTMENT AND ARE APPROXIMATE IN LOCATION.

30 20' 10' 0 30' 60'
1"=30'

NO.	REVISIONS	DATE	BY	CHK.	APPR

ELM STREET ROADWAY IMPROVEMENT

℄ STA. 1+15 TO ℄ STA. 4+03

BOROUGH OF MADISON
DEPARTMENT OF ENGINEERING
HARTLEY DODGE MEMORIAL
MADISON, MORRIS COUNTY, N.J. 07940
(973) 593-3063

DATE

STANLEY J. SCHREK, P.E.
PROFESSIONAL ENGINEER N.J. LIC. NO. 28275

SCALE: 1" = 30'
DATE: 6-5-00
DWG. NO. 4 of 13

CONSTRUCT:

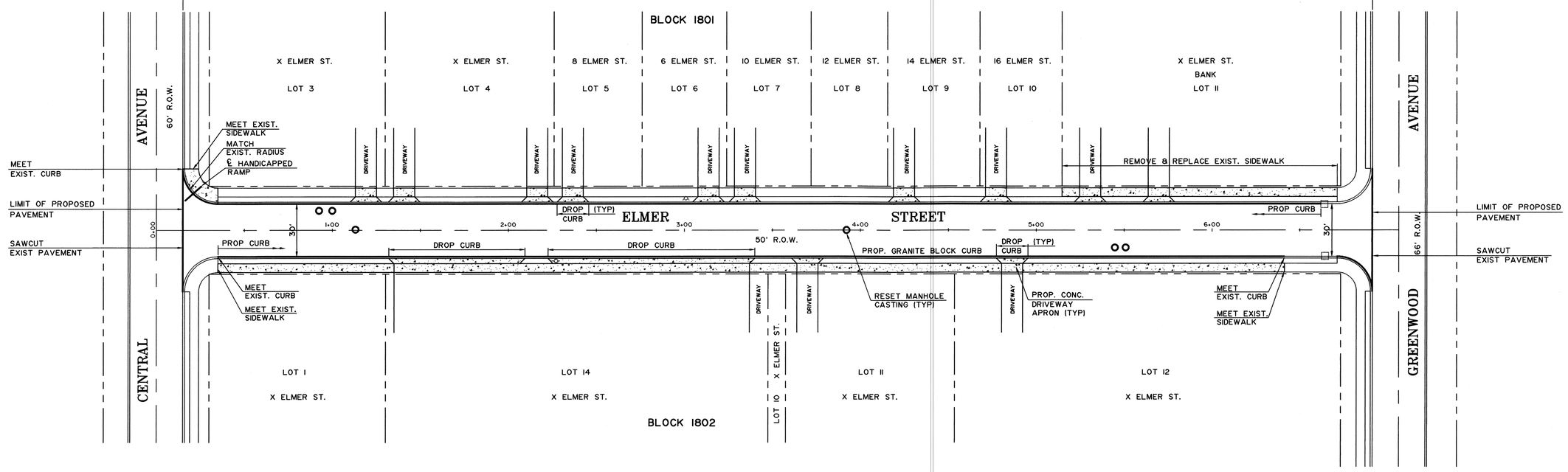
100%	L.S.	MAINTENANCE AND PROTECTION OF TRAFFIC
250	M-HRS	POLICE TRAFFIC DIRECTORS
2600	S.Y.	MILLING, 2" THICK
450	TONS	BITUMINOUS CONCRETE SURFACE COURSE, 2" THICK, MIX I-5
115	TONS	BITUMINOUS STABILIZED BASE COURSE, 4" THICK, MIX I-2

CONSTRUCT:

1650	L.F.	GRANITE BLOCK CURB
520	S.Y.	CONCRETE SIDEWALK, 4" THICK, 5' WIDE
485	S.Y.	CONCRETE DRIVEWAY APRON, 6" THICK
100	S.Y.	DRIVEWAY RESTORATION MIX I-5
100%	L.S.	LANDSCAPE RESTORATION TO INCLUDE TOPSOIL, 4" THICK, FERTILIZING, SEEDING, TYPE "A" & STRAW MULCH

CONSTRUCT:

2	UNIT	RESET MANHOLE CASTINGS
450	S.Y	D.G.A. 6" THICK
100	L.F.	ROOF DRAINS
4	UNIT.	RAISE BELL TEL. MANHOLE, BY OTHERS



GENERAL NOTES

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2. ROADWAY AND ROADWAY UTILITIES ARE BASED UPON FIELD OBSERVATIONS PERFORMED BY THE BOROUGH OF MADISON ENGINEERING DEPARTMENT AND ARE APPROXIMATE IN LOCATION.

30 20' 10' 0 30' 60'
1"=30'

NO.	REVISIONS	DATE	BY	CHK.	APPR

ELMER STREET ROADWAY IMPROVEMENT

℄ STA. 0+15 TO ℄ STA. 6+90

BOROUGH OF MADISON
DEPARTMENT OF ENGINEERING
HARTLEY DODGE MEMORIAL
MADISON, MORRIS COUNTY, N.J. 07940
(973) 593-3063

DATE

STANLEY J. SCHREK, P.E.
PROFESSIONAL ENGINEER N.J. LIC. NO. 28275

SCALE: 1" = 30'
DATE: 6-5-00
DWG. NO. 5 of 13

CONSTRUCT:

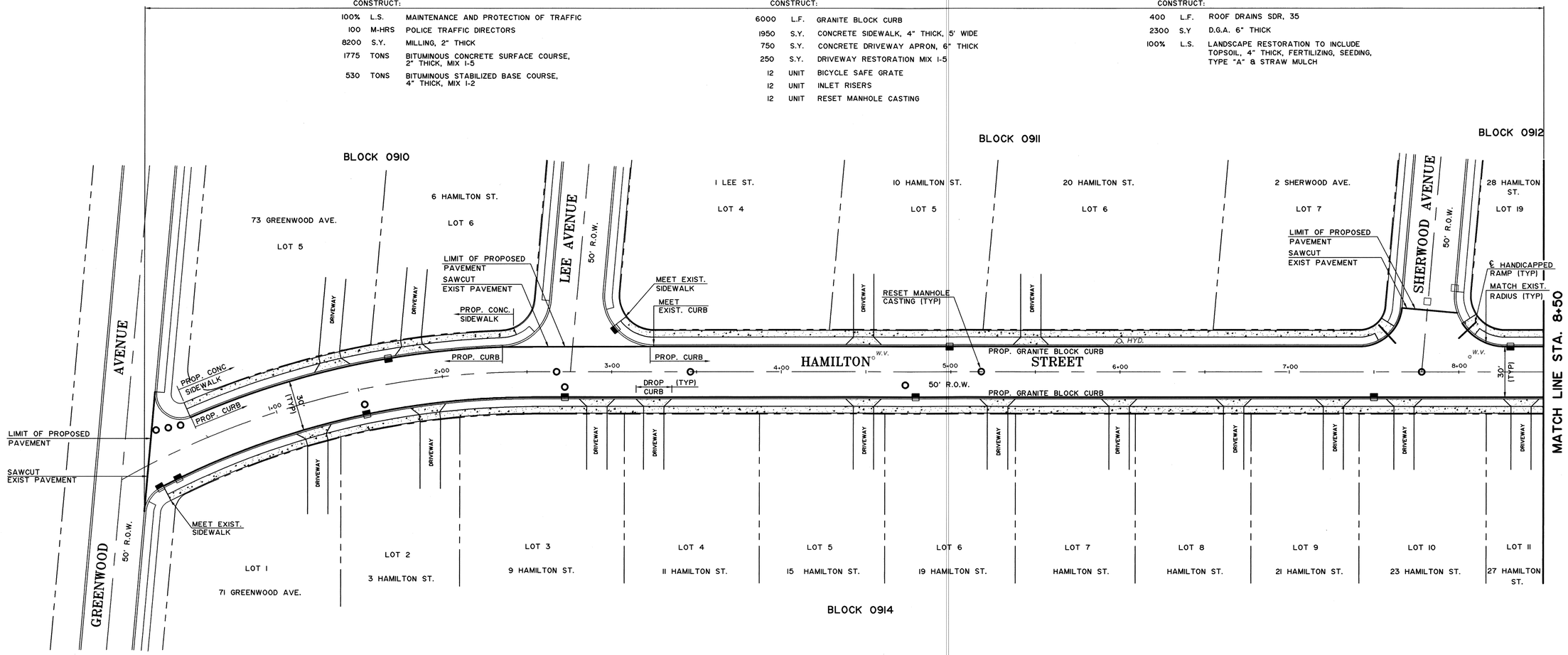
100%	L.S.	MAINTENANCE AND PROTECTION OF TRAFFIC
100	M-HRS	POLICE TRAFFIC DIRECTORS
8200	S.Y.	MILLING, 2" THICK
1775	TONS	BITUMINOUS CONCRETE SURFACE COURSE, 2" THICK, MIX I-5
530	TONS	BITUMINOUS STABILIZED BASE COURSE, 4" THICK, MIX I-2

CONSTRUCT:

6000	L.F.	GRANITE BLOCK CURB
1950	S.Y.	CONCRETE SIDEWALK, 4" THICK, 5' WIDE
750	S.Y.	CONCRETE DRIVEWAY APRON, 6" THICK
250	S.Y.	DRIVEWAY RESTORATION MIX I-5
12	UNIT	BICYCLE SAFE GRATE
12	UNIT	INLET RISERS
12	UNIT	RESET MANHOLE CASTING

CONSTRUCT:

400	L.F.	ROOF DRAINS SDR, 35
2300	S.Y	D.G.A. 6" THICK
100%	L.S.	LANDSCAPE RESTORATION TO INCLUDE TOPSOIL, 4" THICK, FERTILIZING, SEEDING, TYPE "A" & STRAW MULCH



GENERAL NOTES

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2. ROADWAY AND ROADWAY UTILITIES ARE BASED UPON FIELD OBSERVATIONS PERFORMED BY THE BOROUGH OF MADISON ENGINEERING DEPARTMENT AND ARE APPROXIMATE IN LOCATION.

30 20' 10' 0 30' 60'
1"=30'

NO.	REVISIONS	DATE	BY	CHK.	APPR

HAMILTON STREET ROADWAY IMPROVEMENT

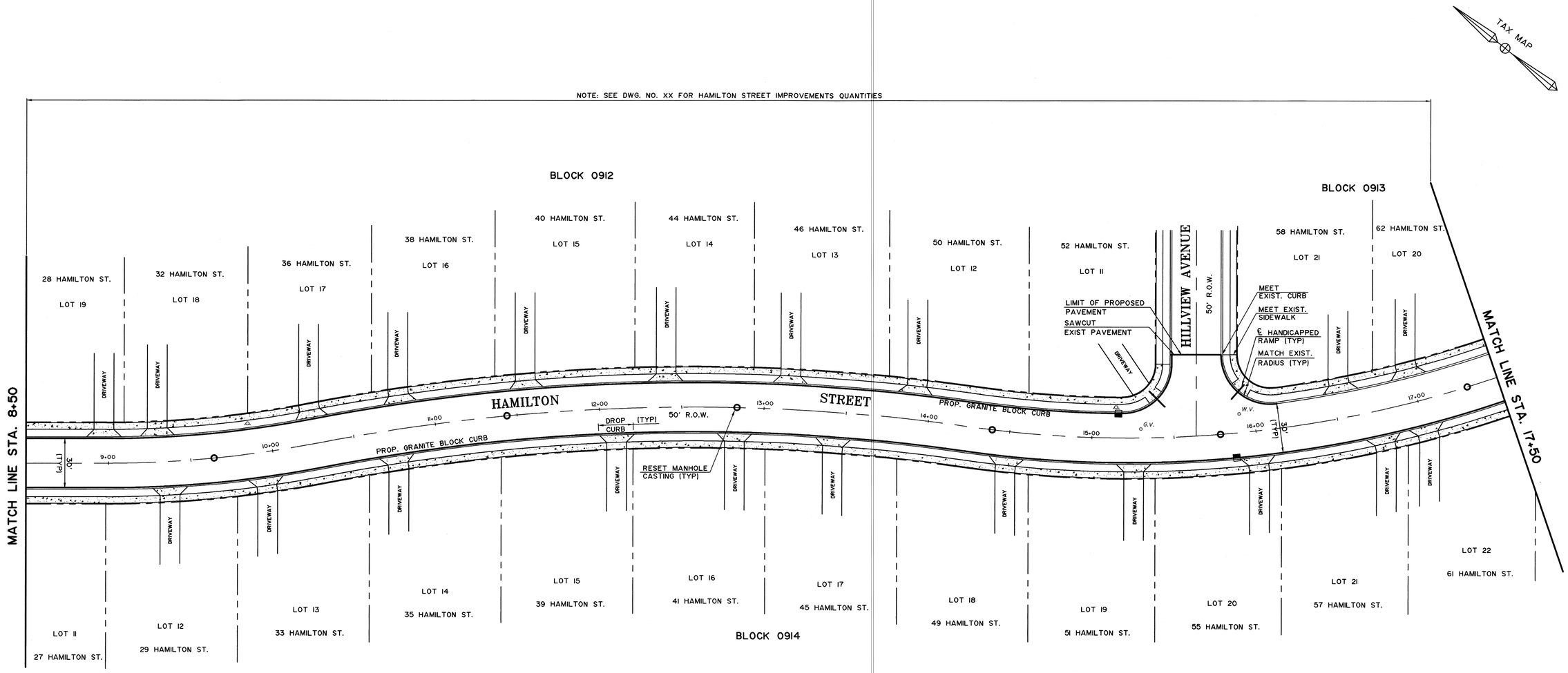
℄ STA. 0+15 TO ℄ STA. 8+50

BOROUGH OF MADISON
DEPARTMENT OF ENGINEERING
HARTLEY DODGE MEMORIAL
MADISON, MORRIS COUNTY, N.J. 07940
(973) 593-3063

DATE

STANLEY J. SCHREK, P.E.
PROFESSIONAL ENGINEER N.J. LIC. NO. 28275

SCALE: 1" = 30'
DATE: 6-5-00
DWG. NO. 6 of 13



GENERAL NOTES

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30 20' 10' 0 30' 60'
1"=30'

NO.	REVISIONS	DATE	BY	CHK.	APPR

HAMILTON STREET ROADWAY IMPROVEMENT

℄ STA. 8+50 TO ℄ STA. 17+50

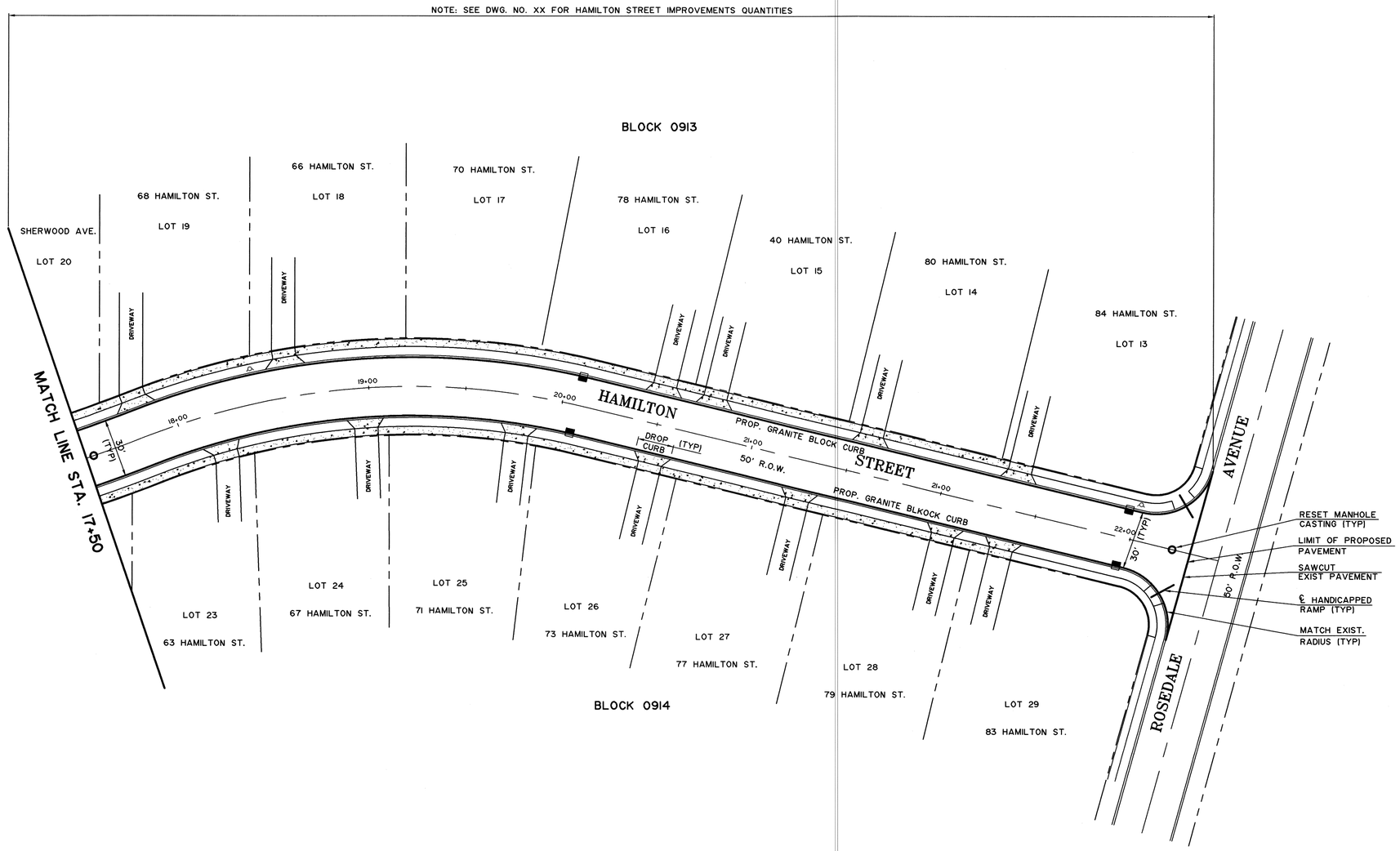
BOROUGH OF MADISON
DEPARTMENT OF ENGINEERING
HARTLEY DODGE MEMORIAL
MADISON, MORRIS COUNTY, N.J. 07940
(973) 593-3063

DATE

STANLEY J. SCHREK, P.E.
PROFESSIONAL ENGINEER N.J. LIC. NO. 28275

SCALE: 1" = 30'
DATE: 6-5-00
DWG. NO. 7 of 13

NOTE: SEE DWG. NO. XX FOR HAMILTON STREET IMPROVEMENTS QUANTITIES



GENERAL NOTES

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30 20' 10' 0 30' 60'
1"=30'

NO.	REVISIONS	DATE	BY	CHK.	APPR

HAMILTON STREET ROADWAY IMPROVEMENT

℄ STA. 17+50 TO ℄ STA. 22+50

BOROUGH OF MADISON
DEPARTMENT OF ENGINEERING

HARTLEY DODGE MEMORIAL
MADISON, MORRIS COUNTY, N.J. 07940
(973) 593-3063

DATE

STANLEY J. SCHREK, P.E.
PROFESSIONAL ENGINEER N.J. LIC. NO. 28275

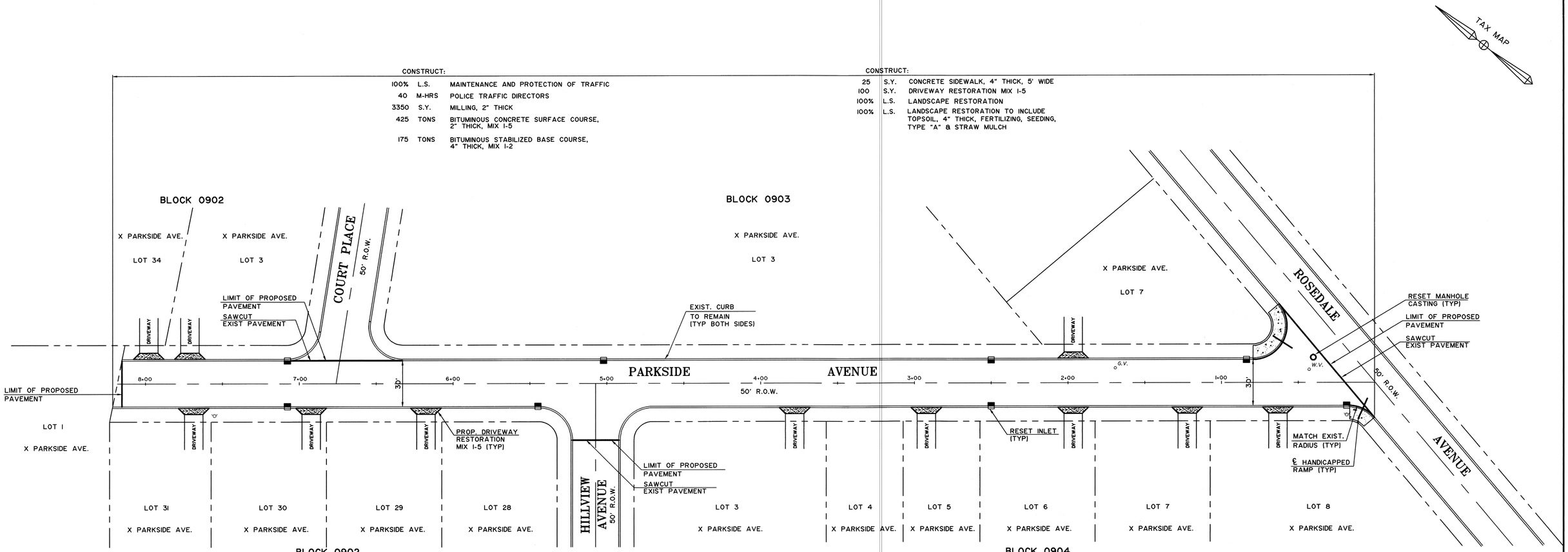
SCALE: 1" = 30'
DATE: 6-5-00
DWG. NO. 8 of 13

CONSTRUCT:

100%	L.S.	MAINTENANCE AND PROTECTION OF TRAFFIC
40	M-HRS	POLICE TRAFFIC DIRECTORS
3350	S.Y.	MILLING, 2" THICK
425	TONS	BITUMINOUS CONCRETE SURFACE COURSE, 2" THICK, MIX I-5
175	TONS	BITUMINOUS STABILIZED BASE COURSE, 4" THICK, MIX I-2

CONSTRUCT:

25	S.Y.	CONCRETE SIDEWALK, 4" THICK, 5' WIDE
100	S.Y.	DRIVEWAY RESTORATION MIX I-5
100%	L.S.	LANDSCAPE RESTORATION
100%	L.S.	LANDSCAPE RESTORATION TO INCLUDE TOPSOIL, 4" THICK, FERTILIZING, SEEDING, TYPE "A" & STRAW MULCH



GENERAL NOTES

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30 20' 10' 0 30' 60'
1"=30'

NO.	REVISIONS	DATE	BY	CHK.	APPR

PARKSIDE AVENUE
ROADWAY IMPROVEMENT
℄ STA. 0+20 TO ℄ STA. 8+20

BOROUGH OF MADISON
DEPARTMENT OF ENGINEERING
HARTLEY DODGE MEMORIAL
MADISON, MORRIS COUNTY, N.J. 07940
(973) 593-3063

DATE

STANLEY J. SCHREK, P.E.
PROFESSIONAL ENGINEER N.J. LIC. NO. 28275

SCALE: 1" = 30'
DATE: 6-5-00
DWG. NO. 9 of 13

CONSTRUCT:

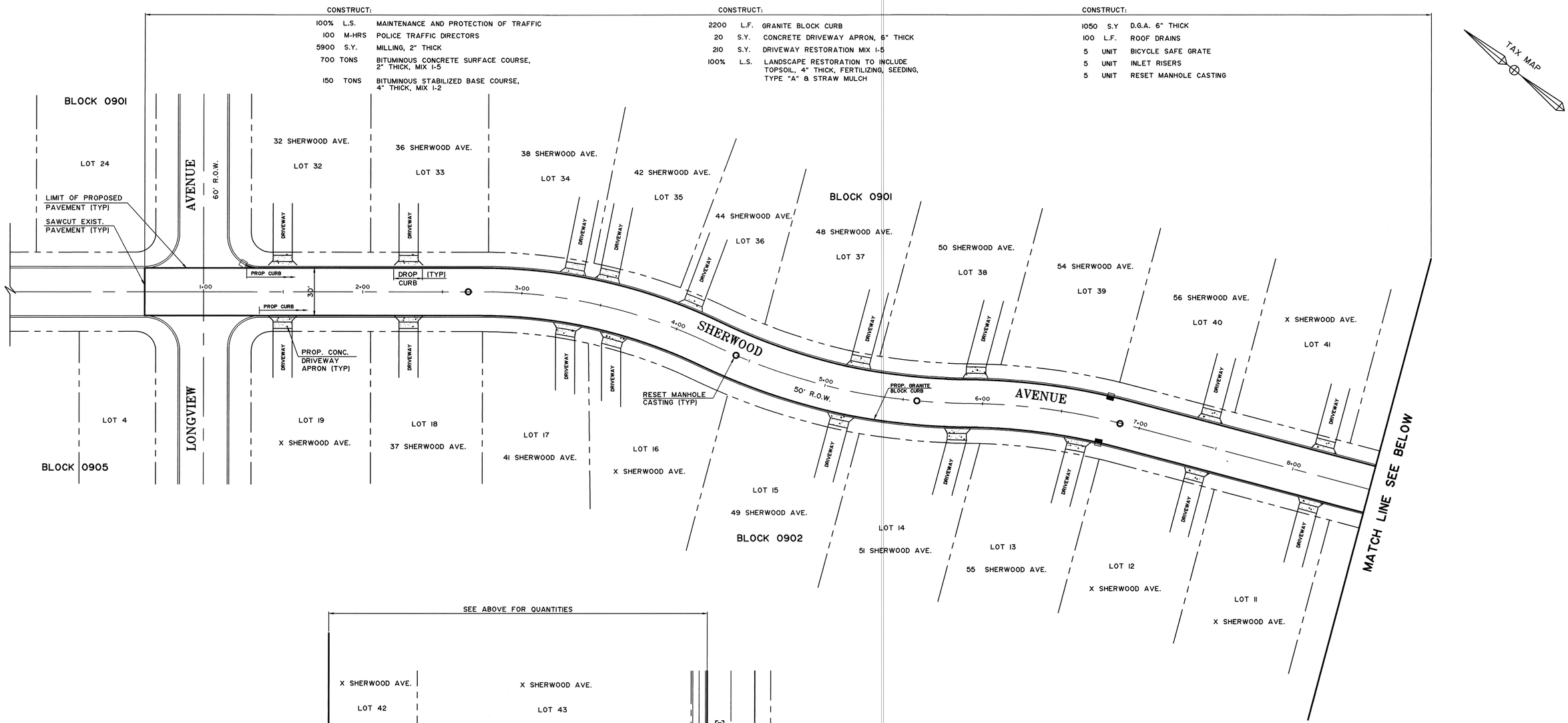
100%	L.S.	MAINTENANCE AND PROTECTION OF TRAFFIC
100	M-HRS	POLICE TRAFFIC DIRECTORS
5900	S.Y.	MILLING, 2" THICK
700	TONS	BITUMINOUS CONCRETE SURFACE COURSE, 2" THICK, MIX I-5
150	TONS	BITUMINOUS STABILIZED BASE COURSE, 4" THICK, MIX I-2

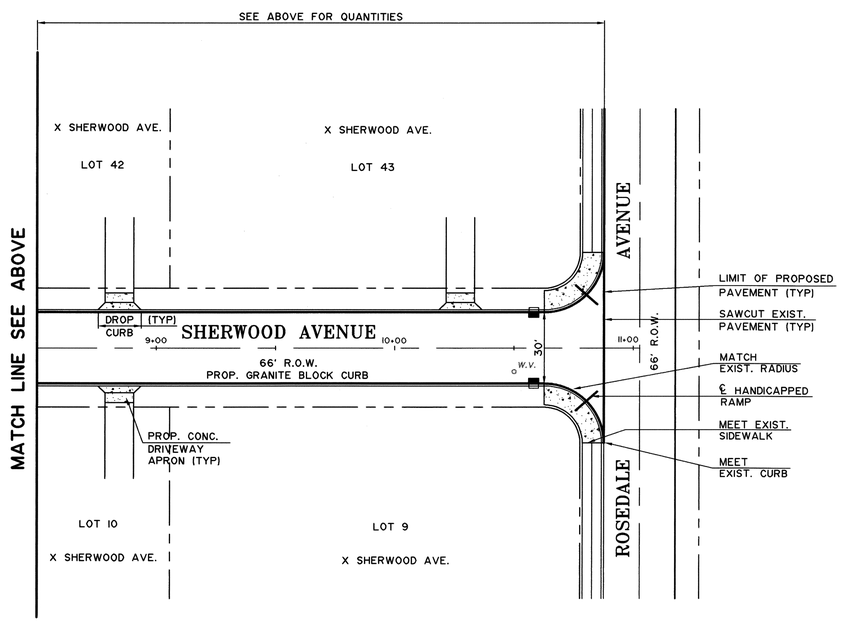
CONSTRUCT:

2200	L.F.	GRANITE BLOCK CURB
20	S.Y.	CONCRETE DRIVEWAY APRON, 6" THICK
210	S.Y.	DRIVEWAY RESTORATION MIX I-5
100%	L.S.	LANDSCAPE RESTORATION TO INCLUDE TOPSOIL, 4" THICK, FERTILIZING, SEEDING, TYPE "A" & STRAW MULCH

CONSTRUCT:

1050	S.Y	D.G.A. 6" THICK
100	L.F.	ROOF DRAINS
5	UNIT	BICYCLE SAFE GRATE
5	UNIT	INLET RISERS
5	UNIT	RESET MANHOLE CASTING





GENERAL NOTES

1. R.O.W. LINES, PROPERTY LINES AND LOT INFORMATION SHOWN ON THIS PLAN ARE BASED UPON BOROUGH OF MADISON TAX MAPS.
2. ROADWAY AND ROADWAY UTILITIES ARE BASED UPON FIELD OBSERVATIONS PERFORMED BY THE BOROUGH OF MADISON ENGINEERING DEPARTMENT AND ARE APPROXIMATE IN LOCATION.

30 20' 10' 0 30' 60'
1"=30'

NO.	REVISIONS	DATE	BY	CHK.	APPR

SHERWOOD AVENUE ROADWAY IMPROVEMENT

℄ STA. 0+60 TO ℄ STA. 10+88

BOROUGH OF MADISON
DEPARTMENT OF ENGINEERING
HARTLEY DODGE MEMORIAL
MADISON, MORRIS COUNTY, N.J. 07940
(973) 593-3063

DATE

STANLEY J. SCHREK, P.E.
PROFESSIONAL ENGINEER N.J. LIC. NO. 28275

SCALE: 1" = 30'
DATE: 6-5-00
DWG. NO. 10 of 13

CONSTRUCT:

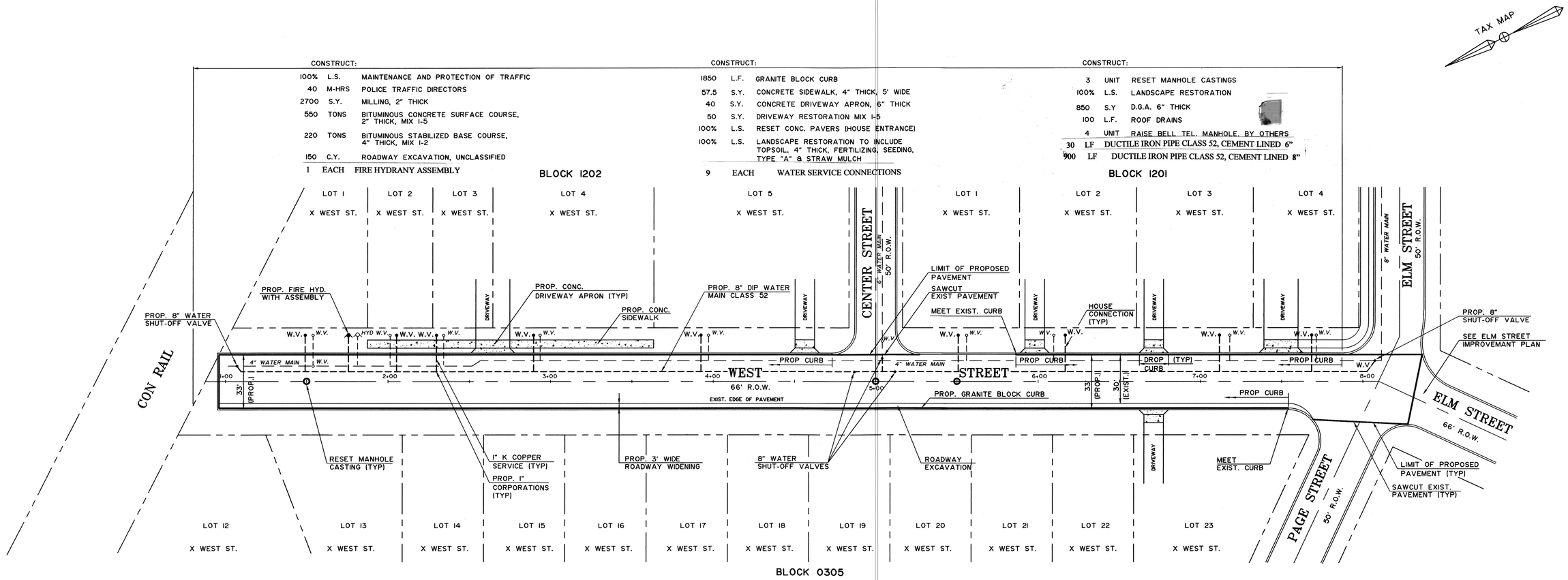
100%	L.S.	MAINTENANCE AND PROTECTION OF TRAFFIC
40	M-HRS	POLICE TRAFFIC DIRECTORS
2700	S.Y.	MILLING, 2" THICK
550	TONS	BITUMINOUS CONCRETE SURFACE COURSE, 2" THICK, MIX I-5
220	TONS	BITUMINOUS STABILIZED BASE COURSE, 4" THICK, MIX I-2
150	C.Y.	ROADWAY EXCAVATION, UNCLASSIFIED
1	EACH	FIRE HYDRANY ASSEMBLY

CONSTRUCT:

1850	L.F.	GRANITE BLOCK CURB
57.5	S.Y.	CONCRETE SIDEWALK, 4" THICK, 5' WIDE
40	S.Y.	CONCRETE DRIVEWAY APRON, 6" THICK
50	S.Y.	DRIVEWAY RESTORATION MIX I-5
100%	L.S.	RESET CONC. PAVERS (HOUSE ENTRANCE)
100%	L.S.	LANDSCAPE RESTORATION TO INCLUDE TOPSOIL, 4" THICK, FERTILIZING, SEEDING, TYPE "A" & STRAW MULCH
9	EACH	WATER SERVICE CONNECTIONS

CONSTRUCT:

3	UNIT	RESET MANHOLE CASTINGS
100%	L.S.	LANDSCAPE RESTORATION
850	S.Y	D.G.A. 6" THICK
100	L.F.	ROOF DRAINS
4	UNIT	RAISE BELL TEL. MANHOLE, BY OTHERS
30	LF	DUCTILE IRON PIPE CLASS 52, CEMENT LINED 6"
900	LF	DUCTILE IRON PIPE CLASS 52, CEMENT LINED 8"



GENERAL NOTES

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30 20' 10' 0 30' 60'
1"=30'

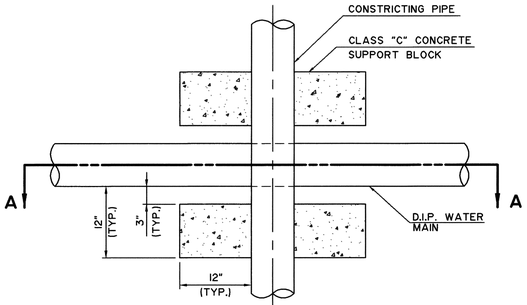
NO.	REVISIONS	DATE	BY	CHK.	APPR

WEST STREET
ROADWAY & WATER IMPROVEMENT
℄ STA. 0+80 TO ℄ STA. 7+90

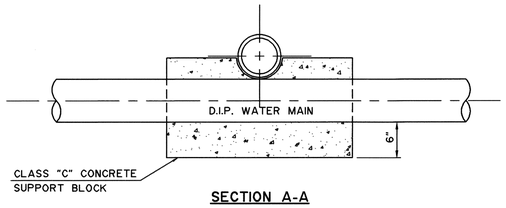
BOROUGH OF MADISON
DEPARTMENT OF ENGINEERING
HARTLEY DODGE MEMORIAL
MADISON, MORRIS COUNTY, N.J. 07940
(973) 593-3063

DATE
STANLEY J. SCHREK, P.E.
PROFESSIONAL ENGINEER N.J. LIC. NO. 28275

SCALE: 1" = 30'
DATE: 6-5-00
DWG. NO. 11 of 13



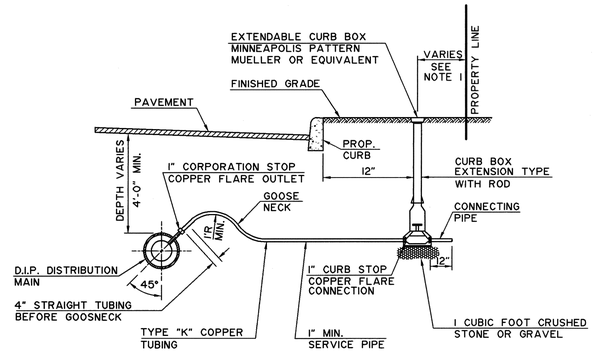
PLAN



SECTION A-A

TYPICAL CONCRETE SUPPORT BLOCK

N.T.S.

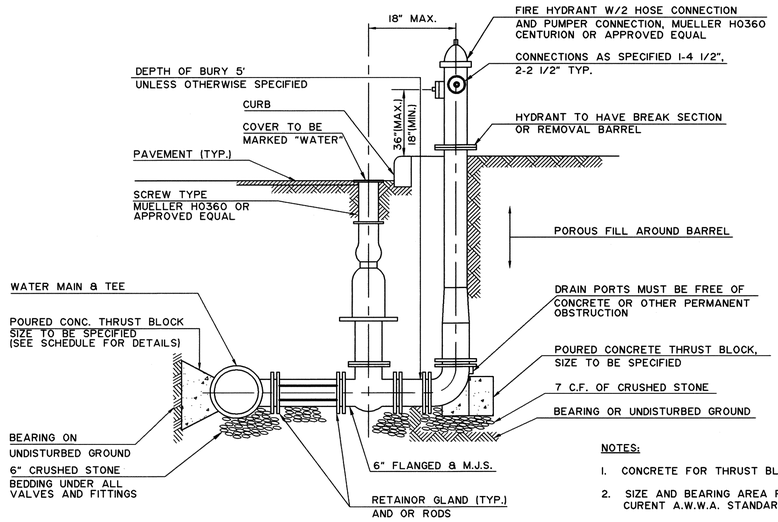


NOTE:

1. CURB STOP TO BE LOCATED 8' FROM PROPERTY LINE , OR AS DIRECTED.
2. BACKFILL SHALL BE HAND PLACED SAND FOR A DEPTH OF 1 FOOT OVER SERVICE.
3. SERVICE PIPE SHALL BE CONSTRUCTED AT 90° TO THE CURB LINE.
4. A TUBING BENDER APPROVED BY THE ENGINEER MUST BE USED FOR ALL BENDS AND GOOSENECK.

SERVICE CONNECTION

N.T.S.



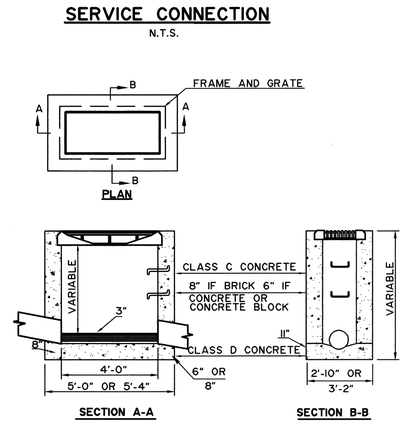
ELEVATION

NOTES:

1. CONCRETE FOR THRUST BLOCKS TO BE N.J.D.O.T., CLASS"C".
2. SIZE AND BEARING AREA FOR THRUST BLOCKS SHALL CONFORM TO CURENT A.W.W.A. STANDARDS OR SHALL BE DESIGNED OM THE PLANS.
3. FINISH PAINTING AND MARKING SHALL BE DESIGNED ON THE PLANS OR CONTRACT DOCUMENTS OR SHALL BE AS DIRECTED BY THE ENGINEER.
4. TYPICAL HYDRANT LOCATION ADJACENT TO ROADWAY, FOR SPECIAL LOCATION REFER TO PLANS.
5. SPECIAL HYDRENT ARRANGEMENT OR SETTINGS TO BE DETAILED BY CONTRACTOR AND SUBJECT TO THE ENGINEER'S APPROVAL.
6. ALL CONNECTIONS TO BE MECHANICAL JOINT OR LOCK RING TYPE JOINT AS SPECIFIED.

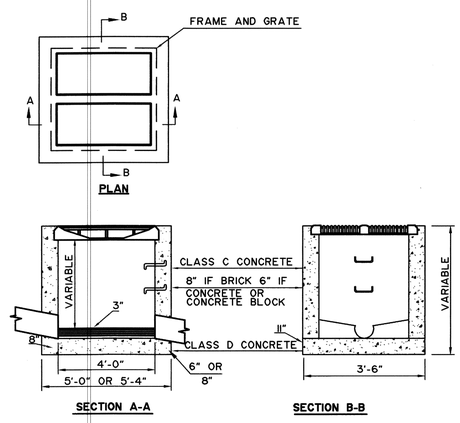
TYPICAL FIRE HYDRANT ASSEMBLY DETAILS

N.T.S.



A TYPE INLET

N.T.S.



E TYPE INLET

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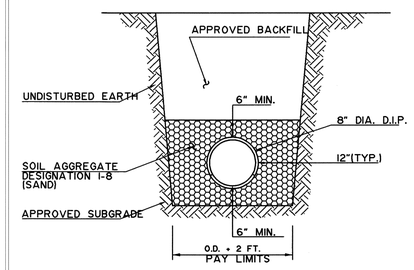
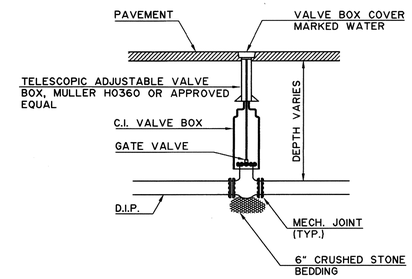


NOTES:

1. IN ALL CASES, EXCAVATE 6" BELOW INVERT OF PIPE AND FILL WITH SAND BEDDING.
2. BACKFILL TO A HEIGHT OF 6" ABOVE PIPE SHALL BE SAND. ABOVE SAND SHALL BE APPROVED SUITABLE EXCAVATED MATERIAL.
3. WHERE PIPE INVERTS ARE IN SOFT ORGANIC SOIL AT LEAST 2 FEET OF CRUSHED STONE SHALL BE USED FOR BEDDING. UNDERLAIN BY A LAYER OF FILTER FABRIC SUCH AS MIRAFI OR EQUAVALENT AS DIRECTED BY THE ENGINEER.
4. WHERE PIPE INVERTS ARE IN FULL CONDITION, SAID FILL IS TO BE CONTROLLED COMPACTED FILL. (SEE NOTES FOR TYPICAL ROAD SECTION)

WATER MAIN BEDDING

N.T.S.



GATE VALVE ASSEMBLY

N.T.S.

NOTES:

1. SIZE AND BEARING FOR THRUST BLOCK SHALL CONFORM TO CURRENT A.W.W.A. STANDARDS, OR SHALL BE DESIGNATED ON THE PLANS.
2. CONCRETE FOR THE THRUST BLOCKS TO BE N.J.D.O.T., CLASS "C".
3. ALL CONNECTIONS TO BE MECHANICAL JOINT, OR LOCK RING TYPE JOINTS, AS SPECIFIED.

DIAMETER OF PIPE (d)	22 ½° ELBOW	45° ELBOW	90° ELBOW	TEE	PLUG
	"A"	"A"	"A"	"A"	"A"
6"	1.1	2.1	4.0	2.8	
8"	1.9	3.7	6.8	4.8	
10"	2.8	5.6	10.3	7.3	
12"	4.0	7.9	14.5	10.3	
16"	7.0	13.6	25.2	17.8	
20"	10.7	21.0	38.9	27.5	
24"	15.3	30.0	55.5	39.2	

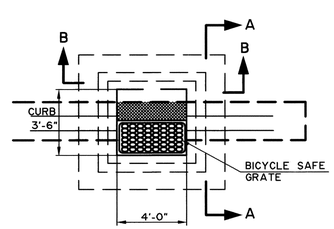
"A" - CONTACT BEARING AREA OF BLOCK WITH EARTH, IN SQUARE FEET

NOTES:

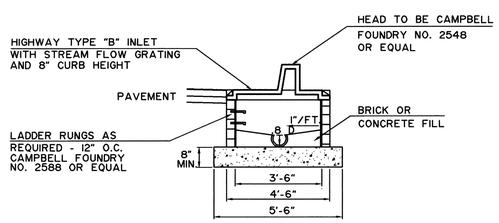
1. BEARING AREAS ARE BASED ON UNDISTURBED SOIL WITH A BEARING CAPCITY
2. ALL CONCRETE THRUST BLOCKS SHALL BE CLASS "C".
3. THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH.
4. TEST PRESSURE = 150 P.S.I.

THRUST BLOCK TABLE

N.T.S.



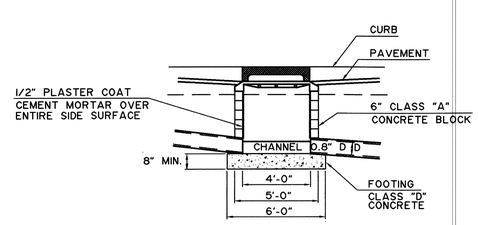
PLAN



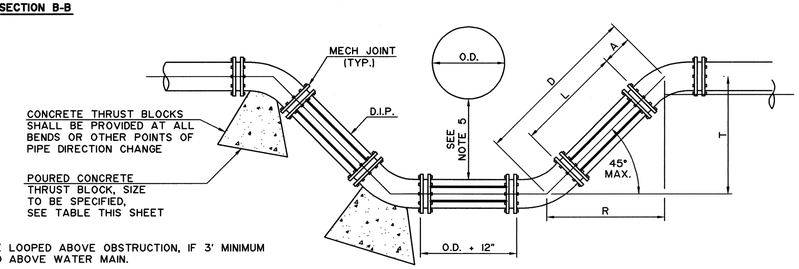
SECTION A-A

B TYPE INLET

N.T.S.



SECTION B-B



NOTES:

1. WATER MAIN MAY BE LOOPED ABOVE OBSTRUCTION, IF 3' MINIMUM COVER IS MAINTAINED ABOVE WATER MAIN.
2. WATER MAIN LOOPS SHALL BE DUCTILE IRON CEMENT LINED PIPE. ALL JOINTS SHALL BE MECHANICAL JOINT. ALL FITTINGS SHALL BE MECHANICAL JOINT CAST IRON.
3. OFFSETS MAY BE SUBSTITUTED FOR A OR T UP TO 24" IF APPROVED BY THE ENGINEER.
4. CONCRETE THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS OR OTHER POINTS OF PIPE DIRECTION CHANGE.
5. MINIMUM CLEARANCE BETWEEN OBSTRUCTING PIPE AND WATER MAIN SHALL BE 18" MINIMUM. CLEARANCE BETWEEN WATER MAIN AND OTHER OBSTRUCTIONS SHALL BE 6". IF 18" MINIMUM CLEARANCE IS NOT PROVIDED BETWEEN OBSTRUCTING PIPE AND WATER MAIN, THE WATER MAIN SHALL BE CONCRETE ENCASED. (SEE DETAIL THIS SHEET)
6. TIE RODS SHALL BE UTILIZED TO RESTRAIN PIPE JOINTS. DETAILS OF THE TIE ROD ASSEMBLY SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. TIE RODS SHALL BE SUFFICENT TO RESTRAIN THE THRUST DEVELOPED AT 100 P.S.I. WORKING PRESSURE.

MECHANICAL JOINTS

ANGLE	"D" EQUALS	"R" EQUALS	"L"* EQUALS
45°	Tx1.414	Tx1.000	D-2A
22 ½°	Tx2.613	Tx2.414	D-2A
11 ¼°	Tx5.126	Tx5.027	D-2A

* CUT THE PIPE SOMEWHAT SHORTER THAN THEORETICAL TO ALLOW FOR SOME SLIGHT CLEARANCE IN THE JOINTS.

LOOPING WATER MAIN

N.T.S.

NO.	REVISIONS	DATE	BY	CHK.	APPR

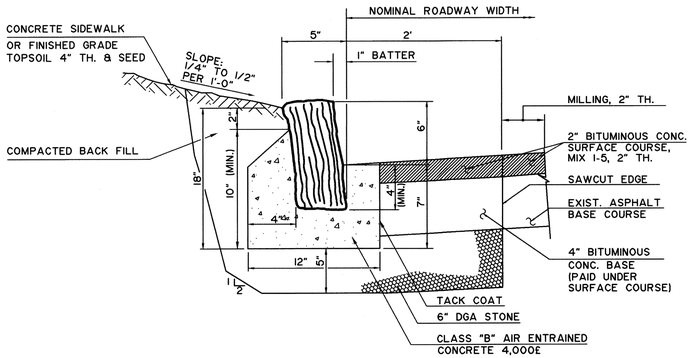
2000 ROAD IMPROVEMENTS PROGRAM
CONSTRUCTION DETAILS

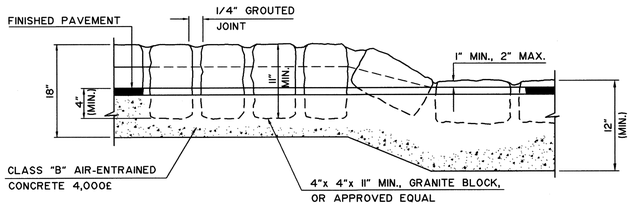
BOROUGH OF MADISON
DEPARTMENT OF ENGINEERING
HARTLEY DODGE MEMORIAL
MADISON, MORRIS COUNTY, N.J. 07940
(973) 593-3063

DATE

STANLEY J. SCHREK, P.E.
PROFESSIONAL ENGINEER N.J. LIC. NO. 28275

SCALE: N.T.S.
DATE: 6-5-00
DWG. NO. 12 of 13



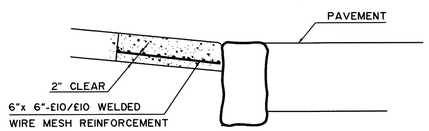


NOTES:

1. CONSTRUCTION AT DRIVEWAY APRONS SIMILAR TO DETAILS ABOVE.
2. JOINTS TO BE CLEANED AND DAMP PRIOR TO POINTING.

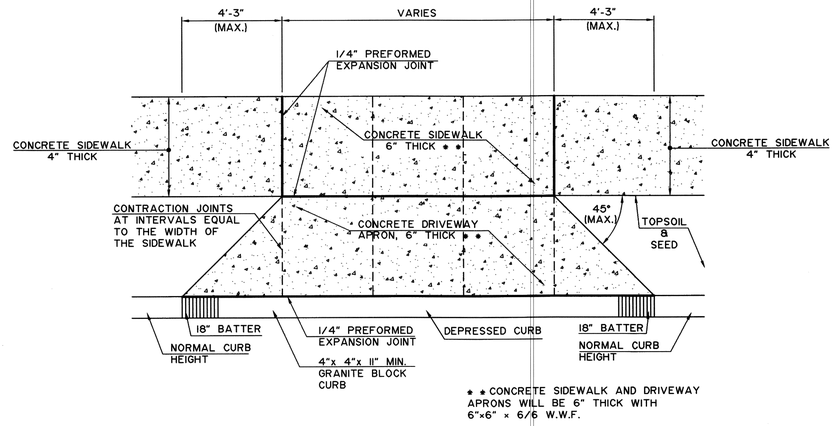
GRANITE BLOCK CURB

ITEM NO. 6E21J
N.T.S.



HANDICAPPED ACCESS RAMP DETAIL

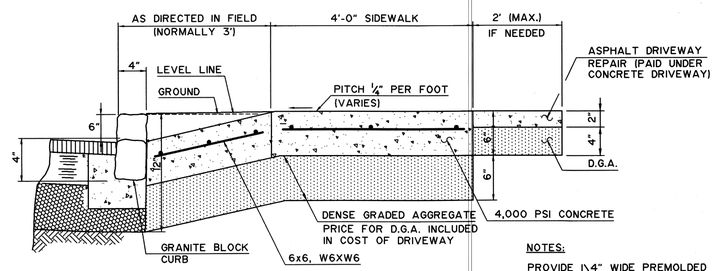
N.T.S.



* * CONCRETE SIDEWALK AND DRIVEWAY APRONS WILL BE 6" THICK WITH 6"x6" x 6/6 W.W.F.

CONCRETE DRIVEWAY APRON DETAIL

N.T.S.



CONCRETE DRIVEWAY APRON DETAIL

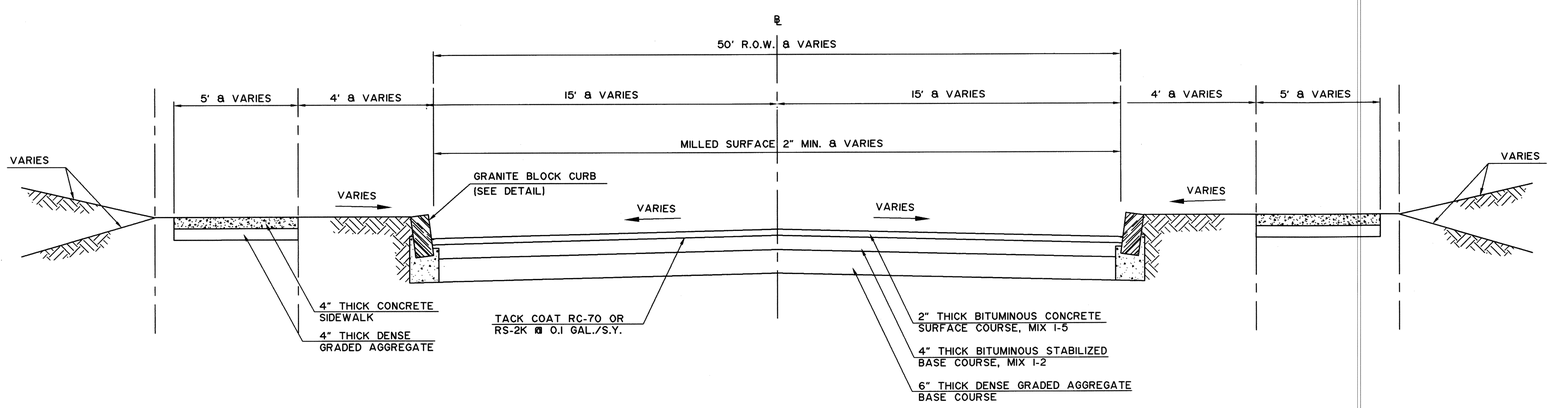
N.T.S.

NOTES:

PROVIDE 1\4" WIDE PREMOLDED EXPANSION MATERIAL AT 20' O.C. AND CONSTRUCTION JOINTS AT 10' O.C., TRANSVERSELY.

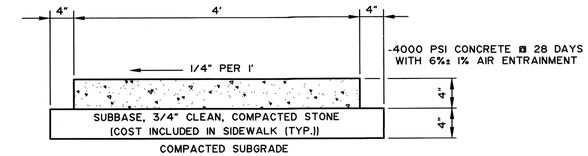
SCORE DRIVEWAY APRON AS DIRECTED BY THE ENGINEER.

CONCRETE SHALL BE "CLASS B" OR EQUAL TO 4000 P.S.I. ULTIMATE STRENGTH AT THE END OF 28 DAYS.

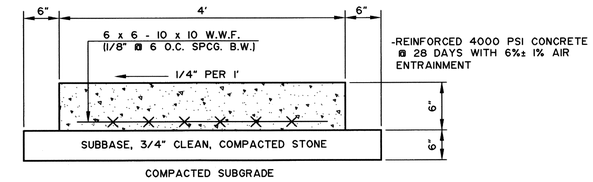


TYPICAL ROADWAY SECTION

N.T.S.



TYPICAL SIDEWALK



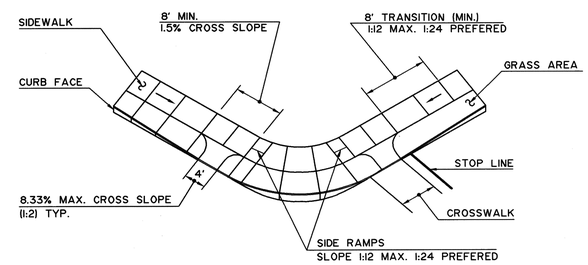
SIDEWALK AT DRIVEWAYS

GENERAL NOTES:

1. ANY CONCRETE PLACED BETWEEN NOVEMBER 15 AND APRIL 1 MUST CONFORM TO ARTICLES 501.11 AND 501.17 OF THE N.J.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1989 EDITION, USING 2% CALCIUM CHLORIDE, HOT WATER, COVERED W/SALT HAY.
2. WHERE SIDEWALK CROSSES A DRIVEWAY, THE MINIMUM THICKNESS SHALL BE 6 INCHES AND REINFORCED WITH 6"x 6", E5 WIRE MESH.
3. SLUMP TEST: 3"- 4".
4. EXPANSION JOINTS EVERY 20', CONSTRUCTION JOINTS EVERY 4' AT A DEPTH OF 1/4 THICKNESS OF CONCRETE.

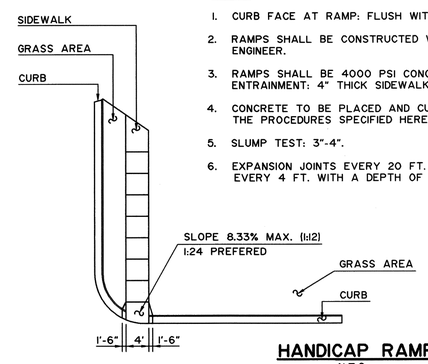
CONCRETE SIDEWALK DETAIL

N.T.S.



NOTES:

1. CURB FACE AT RAMP: FLUSH WITH PAVEMENT
2. RAMPS SHALL BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER.
3. RAMPS SHALL BE 4000 PSI CONCRETE WITH 6%± 1% AIR ENTRAINMENT: 4" THICK SIDEWALK, FULL DEPTH CURB.
4. CONCRETE TO BE PLACED AND CURED IN ACCORDANCE WITH THE PROCEDURES SPECIFIED HEREIN.
5. SLUMP TEST: 3"-4".
6. EXPANSION JOINTS EVERY 20 FT. AND CONSTRUCTION JOINTS EVERY 4 FT. WITH A DEPTH OF 1/4" THICKNESS OF CONCRETE.



HANDICAP RAMP

N.T.S.

NO.	REVISIONS	DATE	BY	CHK.	APPR

2000 ROAD IMPROVEMENTS PROGRAM
CONSTRUCTION DETAILS

BOROUGH OF MADISON
DEPARTMENT OF ENGINEERING
HARTLEY DODGE MEMORIAL
MADISON, MORRIS COUNTY, N.J. 07940
(973) 593-3063

DATE

STANLEY J. SCHREK, P.E.
PROFESSIONAL ENGINEER N.J. LIC. NO. 28275

SCALE: N.T.S.
DATE: 6-5-00
DWG. NO. 13 of 13