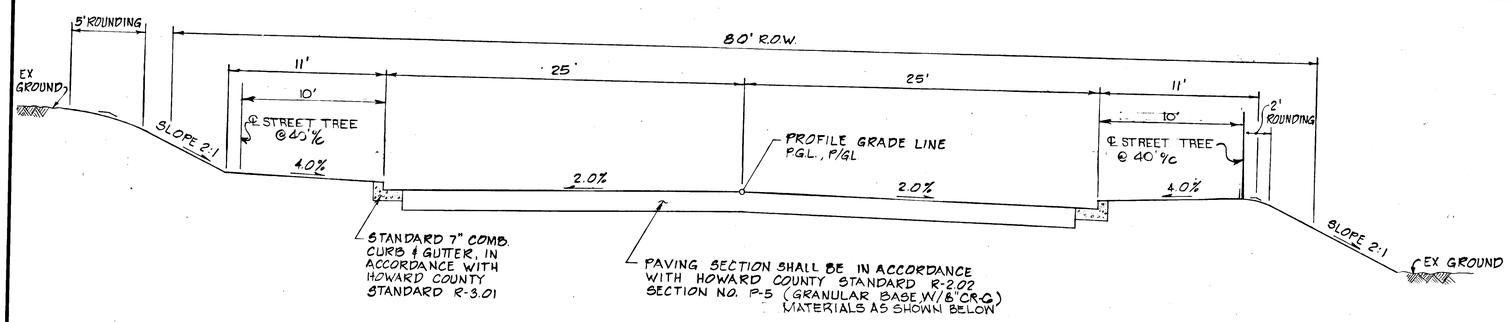
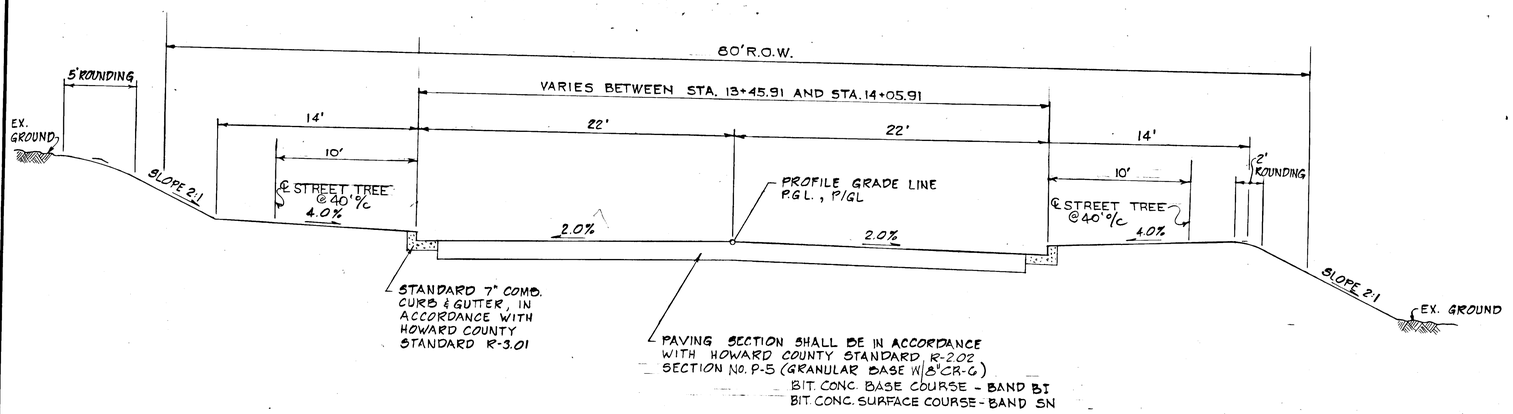
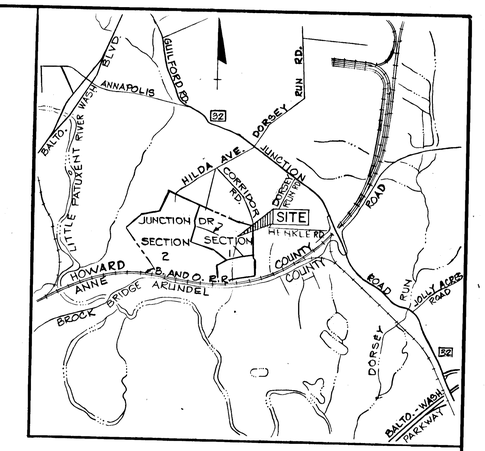


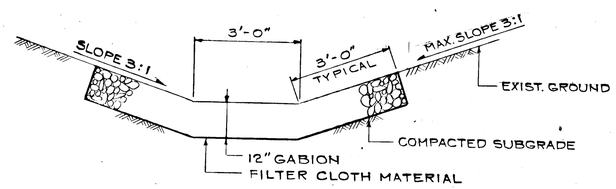

TYPICAL SECTION - JUNCTION DRIVE
STA. 9+85.00 TO STA. 13+45.91
(INDUSTRIAL ROAD 40 MPH)
MINOR COLLECTOR
SCALE: 1" = 5'



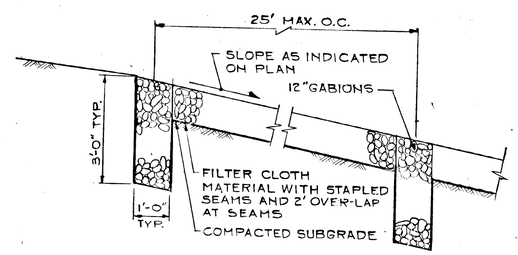

TYPICAL SECTION - JUNCTION DRIVE
STA. 13+45.91 TO STA. 62+73.91
(INDUSTRIAL ROAD 40 MPH)
MINOR COLLECTOR
SCALE: 1" = 5'




VICINITY MAP
SCALE: 1" = 2000'




TYPICAL GABION DITCH
SCALE: 1" = 2'




TOE WALL AND ANCHORING DETAIL
SCALE: 1" = 2'

## GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS, SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
2. ALL UTILITY COMPANIES SHALL BE NOTIFIED 24 HOURS IN ADVANCE OF CONSTRUCTION.
3. ALL INLETS SHALL BE HOWARD COUNTY STANDARDS UNLESS OTHERWISE SHOWN.
4. ALL STREET CURB RETURNS SHALL HAVE A 30.0' RADIUS UNLESS OTHERWISE NOTED.
5. STORM DRAIN TRENCHES WITHIN ROAD RIGHTS-OF-WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
6. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
7. THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES WHERE DIRECTED BY THE ENGINEER A MINIMUM OF TWO WEEKS IN ADVANCE OF ANY CONSTRUCTION.
8. TEMPORARY COMPACTED 18" HIGH EARTH FILL DIVERSION DIKES SHALL BE CONSTRUCTED ABOVE THE LIPS OF FILL SLOPES ON THE R.O.W. CONCURRENTLY WITH THE INITIAL GRADING AND DIRECTED TO UNDISTURBED SOD AREAS AT THE END OF EACH DAY.
9. THE CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY DEPT. OF INSPECTIONS AND PERMITS AT LEAST 5 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS. TELEPHONE NO. 992-2436.
10. ALL DISTURBED SLOPE AREAS TO BE STABILIZED AS SOON AS GRADING IS COMPLETED.
11. ALL REINFORCED CONCRETE FOR STORM DRAIN STRUCTURES SHALL HAVE A MINIMUM OF 28 DAYS STRENGTH OF 3500 P.S.I..
12. ALL SWALES AND SLOPES SHALL BE PERMANENTLY SEEDED. SEEDING SHALL BE IN ACCORDANCE WITH SECTION 701 TURF ESTABLISHMENT OF THE SPECIFICATIONS. SEED MIX SHALL BE NO. 2.
13. TRAFFIC CONTROL DEVICES AND THEIR INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 1971 REVISED EDITION.
14. STABILENKA (FILTER CLOTH T-100) OR EQUAL SHALL BE PLACED UNDER ALL STONE RIP-RAP AND/OR GABION (FULL WIDTH AND LENGTH OF STONE).
15. STONE OR RIP-RAP SHALL BE AS SPECIFIED ON THE DRAWINGS. ALL RIP-RAP SHALL BE UNPAVED.
16. STUBS FOR 6" P.V.C. UNDERDRAIN PIPE TO BE INSTALLED AT CENTER OF EACH WALL OF EVERY INLET.
17. 250 WATT MERCURY VAPOR LAMP PENDANT MOUNTED ON 30 FOOT HIGH GALVANIZED STEEL POLE: SHOWN THUS ● L.P. (BY BGE AT OWNERS COST)
18. 1½" DIAMETER, 8' HIGH TREE: SHOWN THUS
19. PROVIDE & MAINTAIN INLET PROTECTION TO ALL NEW INLETS UNTIL CONTRIBUTING AREA HAS BEEN STABILIZED; SHOWN THUS I.P.
20. BEDDING FOR STORMDRAINS SHALL BE IN ACCORDANCE WITH HOWARD COUNTY STANDARD PLATE G.2.01 FOR "TRENCH WITH GRAVEL BACKFILL BELOW SUBGRADE."

OFFICE OF PLANNING & ZONING
CHIEF - DIVISION OF LAND DEVELOPMENT — DATE AND ZONING ADMINISTRATION
12-14-84

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 12-17-84
12-17-84

WHITNEY BAILEY COX & MAGNANI
CONSULTING ENGINEERS
1850 York Road
Timonium Md. 21093
301-252-6060

STATE OF MARYLAND — JOHN KEVIN KOLB — REGISTERED PROFESSIONAL ENGINEER

DES: J.K.
DRN: J.K.
CHK: P.D.
DATE: 11-1-84

| BY | NO. | REVISION | DATE |
|---|---|---|---|
| WBCM | 3 | REVISIONS TO SHEETS 2,3 & 5 | 4/25/85 |
| WBCM | 2 | REVISIONS TO SHEETS 2,5 & 6 | 2/20/85 |
| WBCM | 1 | REVISIONS TO SHEETS 2,3,8 & 6 | 2/9/85 |

TYPICAL SECTIONS AND VICINITY MAP

600' SCALE MAP NO. 48 BLOCK NO. 19

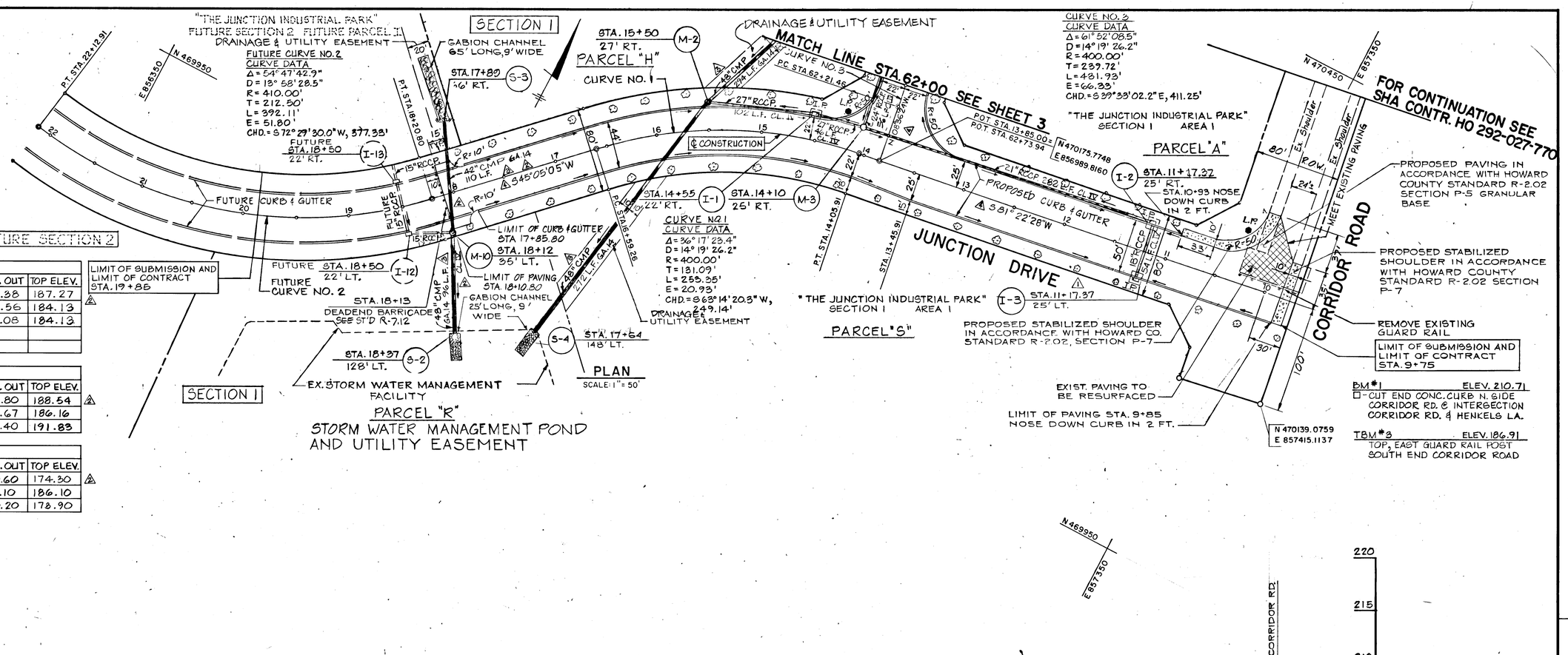
JUNCTION INDUSTRIAL PARK SECTION I
ELECTION DISTRICT GILFORD NO. 6

OWNER: JUNCTION LIMITED PARTNERSHIP P.O. BOX 125 GLEN ARM, MARYLAND 21057

SCALE AS SHOWN

SHEET 1 OF 15

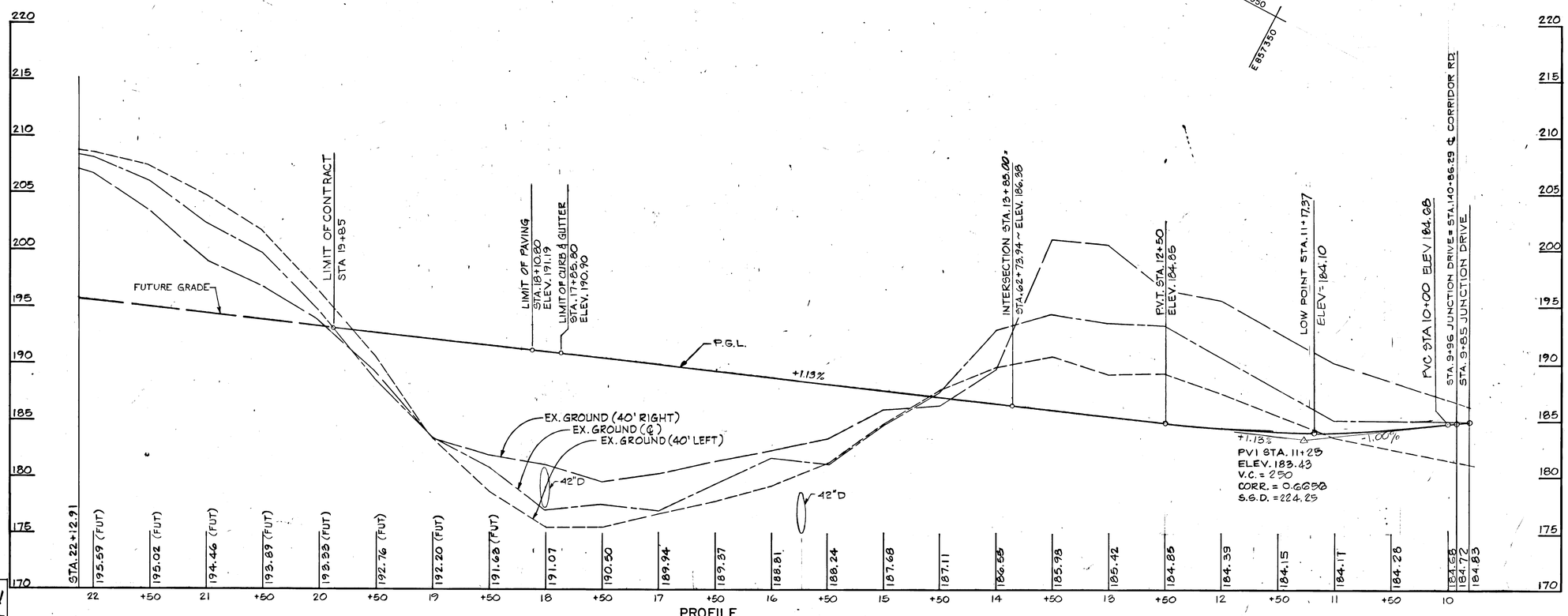
F-84-201




| INLET SCHEDULE | | | | | |
|---|---|---|---|---|---|
| NO. | TYPE | Q | INV. IN. | INV. OUT | TOP ELEV. |
| I-1 | A-5 W/DEFLECT | 1.92 | 177.58 | 177.38 | 187.27 |
| I-2 | A-5 | 1.75 | 179.81 | 179.56 | 184.13 |
| I-3 | A-5 | 2.88 | — | 180.08 | 184.13 |
| | | | | | |
| | | | | | |

| MANHOLE SCHEDULE | | | | | |
|---|---|---|---|---|---|
| NO. | TYPE | SIZE | INV. IN. | INV. OUT | TOP ELEV. |
| M-2 | HO. CO. STD. G5.11 | 60" | 177.35(E) 176.00(N) | 175.80 | 188.54 |
| M-3 | HO. CO. STD. G5.13 | 60" | 178.17(E) 177.92(N) | 177.67 | 186.16 |
| M-10 | HO. CO. STD. G5.11 | 60" | 166.71(W) 175.60(N) | 176.40 | 191.83 |

| STRUCTURE SCHEDULE | | | | | |
|---|---|---|---|---|---|
| NO. | TYPE | SIZE | INV. IN. | INV. OUT | TOP ELEV. |
| S-2 | METAL END SECTION WITH TOE PLATE | 42" | — | 170.60 | 174.30 |
| S-3 | TYPE 'A' HEADWALL | 42" | — | 181.10 | 186.10 |
| S-4 | CONC. END SECTION | 42" | — | 170.20 | 178.90 |




PROFILE
SCALE: HORIZ 1" = 50' VERT 1" = 5'

OFFICE OF PLANNING & ZONING
12-14-84
CHIEF - DIVISION OF LAND DEVELOPMENT — DATE AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 12-17-84

WHITNEY BAILEY COX & MAGNANI
CONSULTING ENGINEERS
1850 York Road
Timonium Md. 21093
301-252-6060

DES: J.K.
DRN: R.G.
CHK: P.D.
DATE: 11-1-84

| BY | NO. | REVISION | DATE |
|---|---|---|---|
| WBCM | 4 | BEARING CHANGE | |
| WBCM | 3 | PIPE SIZE AND/OR TYPE CHANGED | 4/24/85 |
| WBCM | 2 | PIPE TYPE & INVERTS CHANGED, SHADING ADDED | 2/20/85 |
| WBCM | 1 | STATION NO. CHANGED | 2/9/85 |

PLAN AND PROFILE
JUNCTION DRIVE
STA. 10+00 TO STA. 18+10.80

600' SCALE MAP NO. 48 BLOCK NO. 19

JUNCTION INDUSTRIAL PARK SECTION I
ELECTION DISTRICT GILFORD NO. 6

OWNER: JUNCTION LIMITED PARTNERSHIP P.O. BOX GLEN ARM, MARYLAND 21057

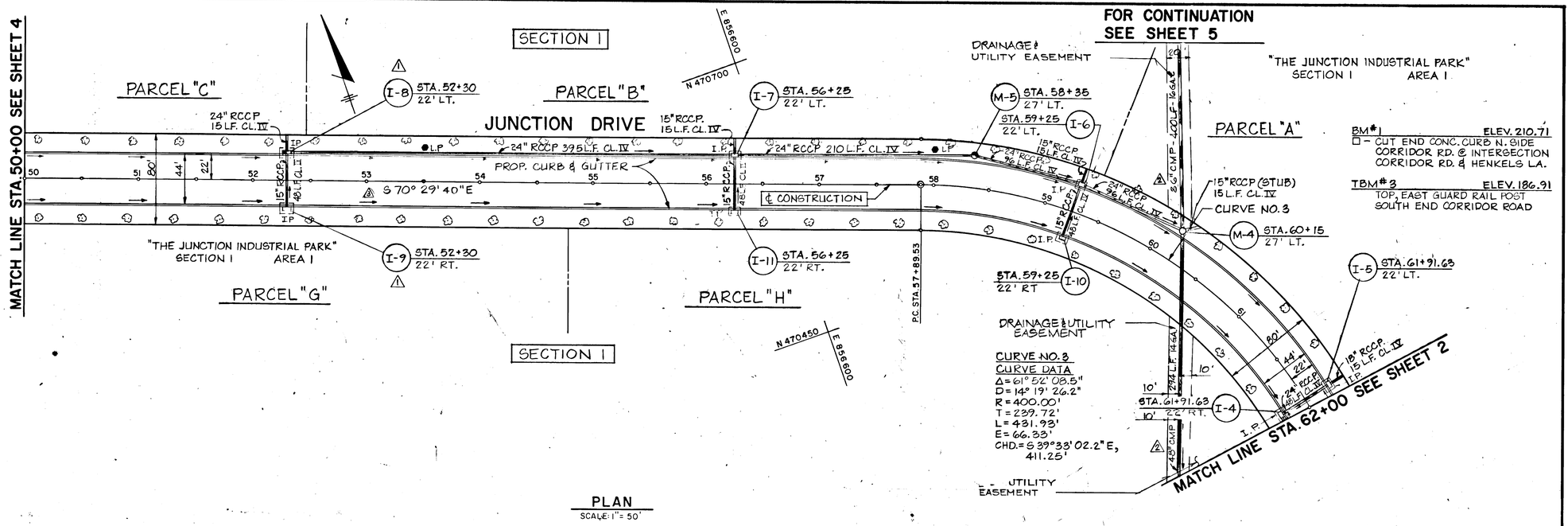
SCALE AS SHOWN

SHEET 2 OF 15

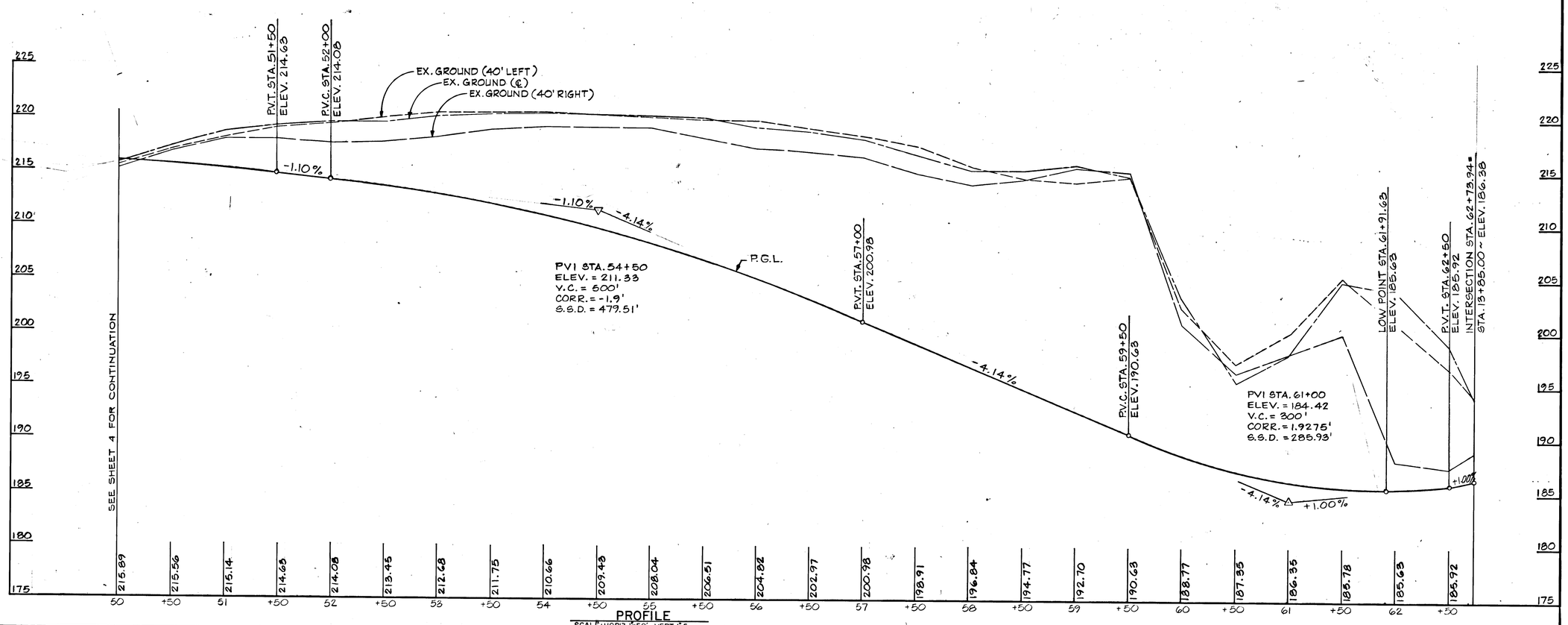
F-84-204

| INLET SCHEDULE | | | | | |
|---|---|---|---|---|---|
| NO. | TYPE | Q | INV. IN | INV. OUT | TOP ELEV. |
| I-4 | A-5 | 1.88 | 180.45 | 180.25 | 185.73 |
| I-5 | A-5 | 1.83 | 181.91 | 181.41 | 185.73 |
| I-6 | A-5 W/DEFLECT. | 1.30 | 196.66(N) 186.10 (S) 188.40(S) (N) | 185.96 | 191.77 |
| I-7 | A-5 W/DEFLECT. | 1.55 | 196.82 (N) 196.27 200.60(S) (N) | 196.07 | 204.01 |
| I-8 | A-5 W/DEFLECT. | 1.83 | 208.57 (N) 209.91 (S) | 208.17 | 213.44 |
| I-9 | A-5 W/DEFLECT. | 1.56 | — | 210.16 | 213.44 |
| I-10 | A-5 W/DEFLECT. | 1.39 | — | 188.64 | 191.77 |
| I-11 | A-5 W/DEFLECT. | 1.35 | — | 200.84 | 204.01 |

| MANHOLE SCHEDULE | | | | | |
|---|---|---|---|---|---|
| NO. | TYPE | SIZE | INV. IN | INV. OUT | TOP ELEV. |
| M-4 | HO.CO.STD.G.5.11 | 60" | 181.50(N) 183.42 182.50(W) (NE) | 181.00 | 188.60 |
| M-5 | HO.CO.STD.G.5.12 | 48" | 189.24 | 189.04 | 195.69 |




PLAN
SCALE: 1" = 50'




PROFILE
SCALE: HORIZ 1"=50' VERT 1"=5

OFFICE OF PLANNING & ZONING
CHIEF - DIVISION OF LAND DEVELOPMENT — DATE AND ZONING ADMINISTRATION 12-14-84

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 12-17-84

WHITNEY BAILEY COX & MAGNANI
CONSULTING ENGINEERS
1850 York Road
Timonium Md. 21093
301-252-6060

DES: J.K.
DRN: R.G.
CHK: P.D.
DATE: 11-1-84

| BY | NO. | REVISION | DATE |
|---|---|---|---|
| WBCM | 3 | REVISE BEARING | 7/22/85 |
| WBCM | 2 | PIPE SIZE AND/OR TYPE CHANGED | 4/26/85 |
| WBCM | 1 | RELOCATE I-8 & I-9 | 2/9/85 |

PLAN AND PROFILE
JUNCTION DRIVE
STA. 50+00 TO STA. 62+73.94

600' SCALE MAP NO. 48 BLOCK NO. 19

JUNCTION INDUSTRIAL PARK SECTION I
ELECTION DISTRICT GILFORD NO. 6

OWNER: JUNCTION LIMITED PARTNERSHIP P.O. BOX 125 GLEN ARM, MARYLAND 21057

SCALE AS SHOWN

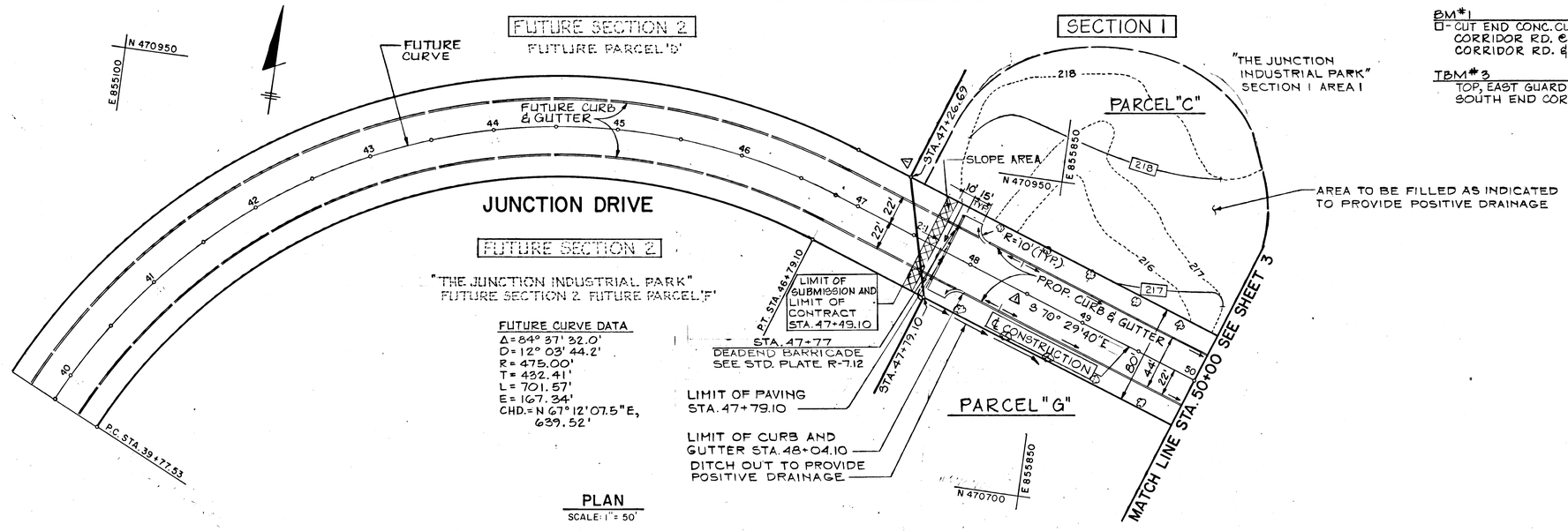
SHEET 3 OF 15

#1111

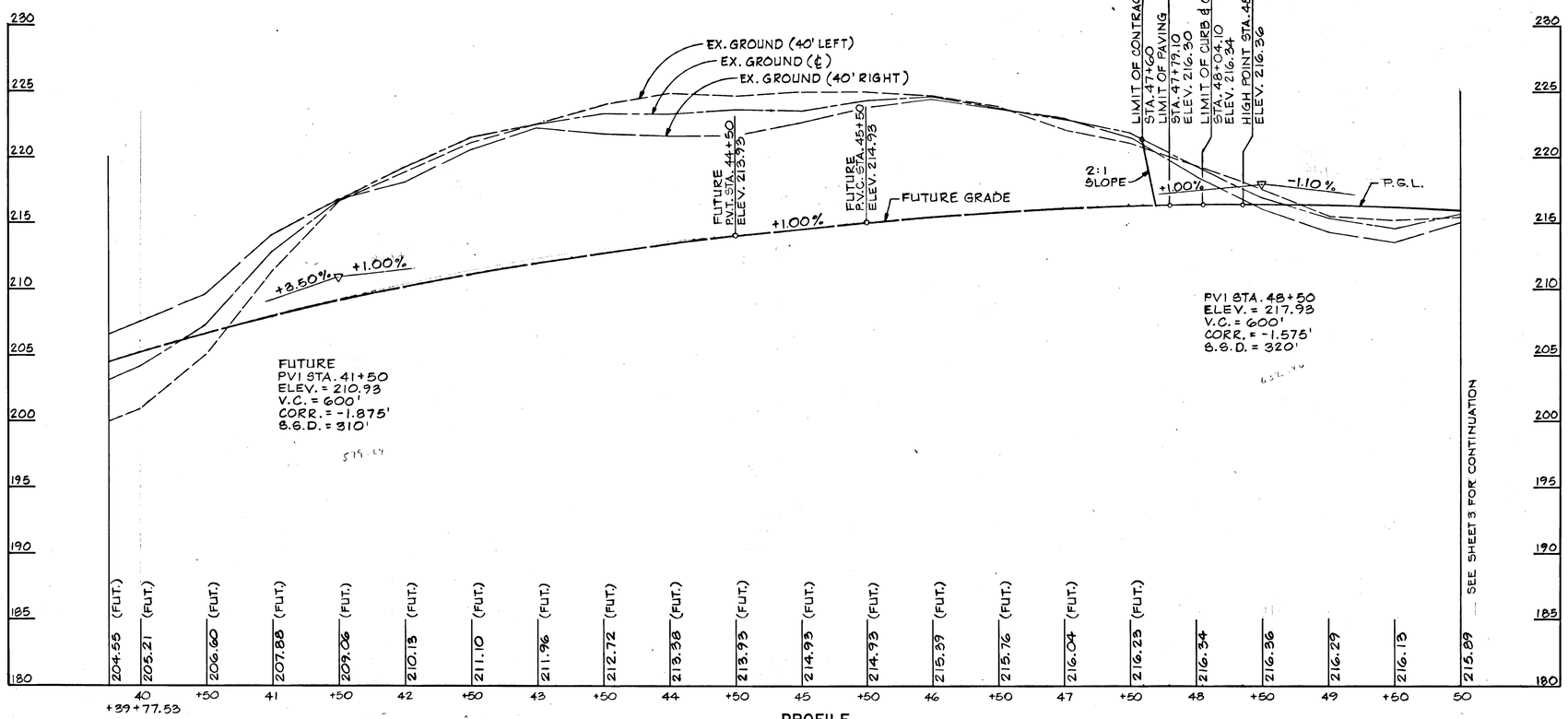
F-84-204

BM#1 ELEV. 210.71
□- CUT END CONC. CURB N. SIDE CORRIDOR RD. ℄ INTERSECTION CORRIDOR RD. & HENKELS LA.

TBM#3 ELEV. 186.91
TOP, EAST GUARD RAIL POST SOUTH END CORRIDOR ROAD




PLAN
SCALE: 1" = 50'




PROFILE
SCALE: HORIZ 1"=50' VERT 1"=5

OFFICE OF PLANNING & ZONING
CHIEF - DIVISION OF LAND DEVELOPMENT — DATE AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 12-17-84

WHITNEY BAILEY COX MAGNANI
CONSULTING ENGINEERS
1850 York Road
Timonium Md. 21093
301-252-6060

| | | | | |
|---|---|---|---|---|
| DES: J.K. | | | | |
| DRN: R.G. | | | | |
| CHK: P.D. | | | | |
| DATE: 11-1-84 | WBCM | 1 | REV BEARING & STATION | 7/24/85 |
| | BY | NO. | REVISION | DATE |

PLAN AND PROFILE
JUNCTION DRIVE
STA. 47+60 TO STA. 50+00

600' SCALE MAP NO. 48 BLOCK NO. 19

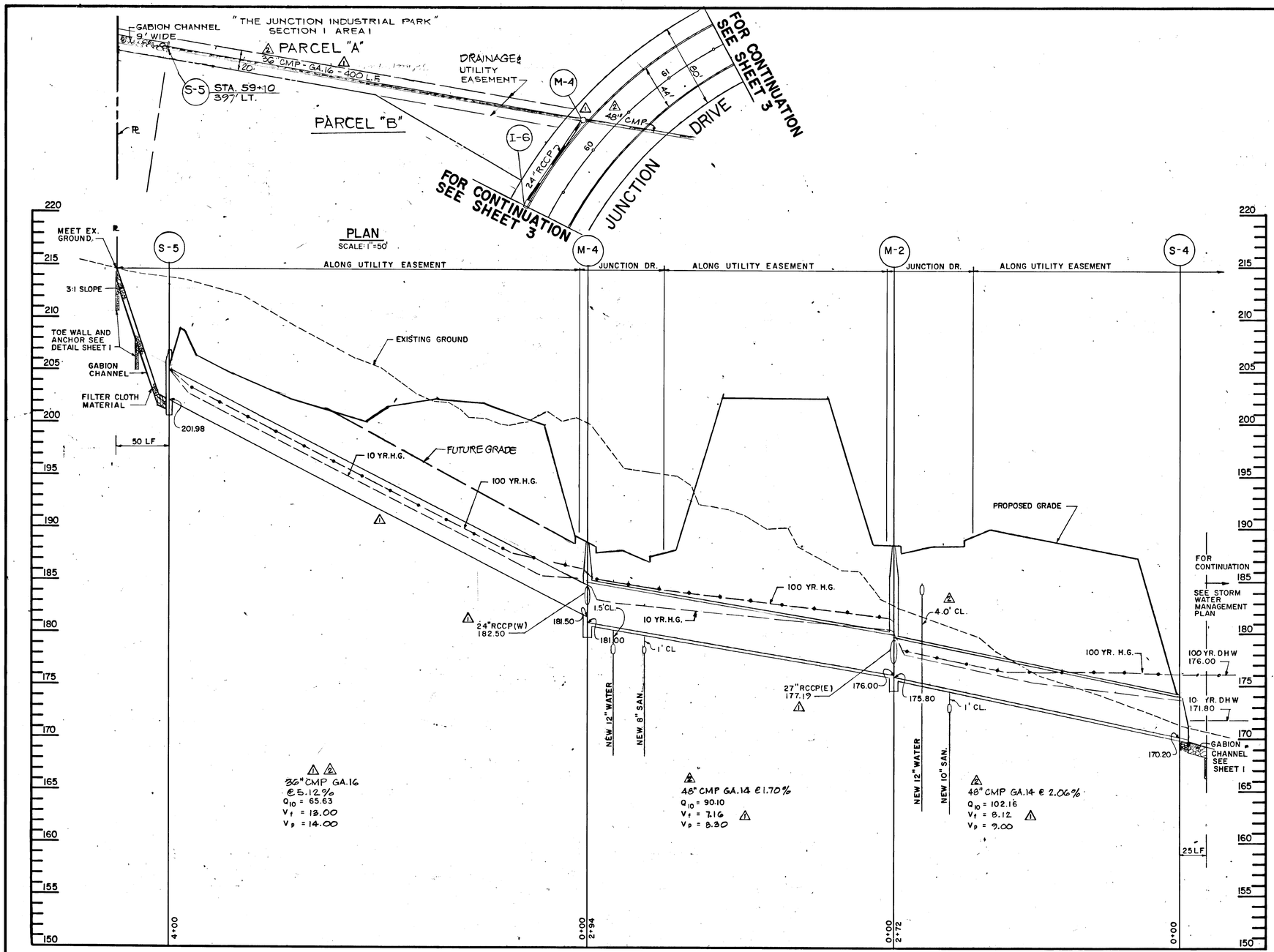
JUNCTION INDUSTRIAL PARK SECTION 1
ELECTION DISTRICT GILFORD NO. 6

OWNER: JUCTION LIMITED PARTERSHIP P.O. BOX 125 GLEN ARM, MARYLAND 21057

SCALE AS SHOWN

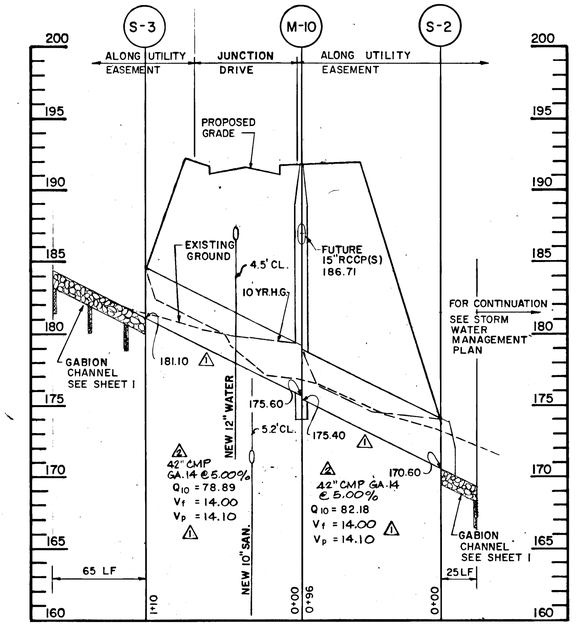
SHEET 4 OF 15

F-84-204




STORM DRAIN PROFILES

SCALE: HORZ. 1"=50'
VERT. 1"=5'




| STRUCTURE SCHEDULE | | | | | |
|---|---|---|---|---|---|
| NO. | TYPE | SIZE | INV. IN | INV. OUT | TOP ELEV. |
| S-5 | TYPE 'C' HEADWALL | 36" | - | 201.98 | 205.98 |

OFFICE OF PLANNING & ZONING
12-14-84
CHIEF - DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 12-17-84

WHITNEY BAILEY COX & MAGNANI
CONSULTING ENGINEERS
1850 York Road
Timonium, Md. 21093
301-252-6060

DES: E.B.
DRN: G.G
CHK: P.D.
DATE: 11-1-84

| BY | NO. | REVISION | DATE |
|---|---|---|---|
| WBCM | 2 | PIPE TYPE AND/OR SIZE CHANGED | 4/25/85 |
| WBCM | 1 | PIPE TYPE & VELOCITIES CHANGED | 2/28/85 |

STORM DRAIN PLAN AND PROFILES

600' SCALE MAP NO. 48 BLOCK NO. 19

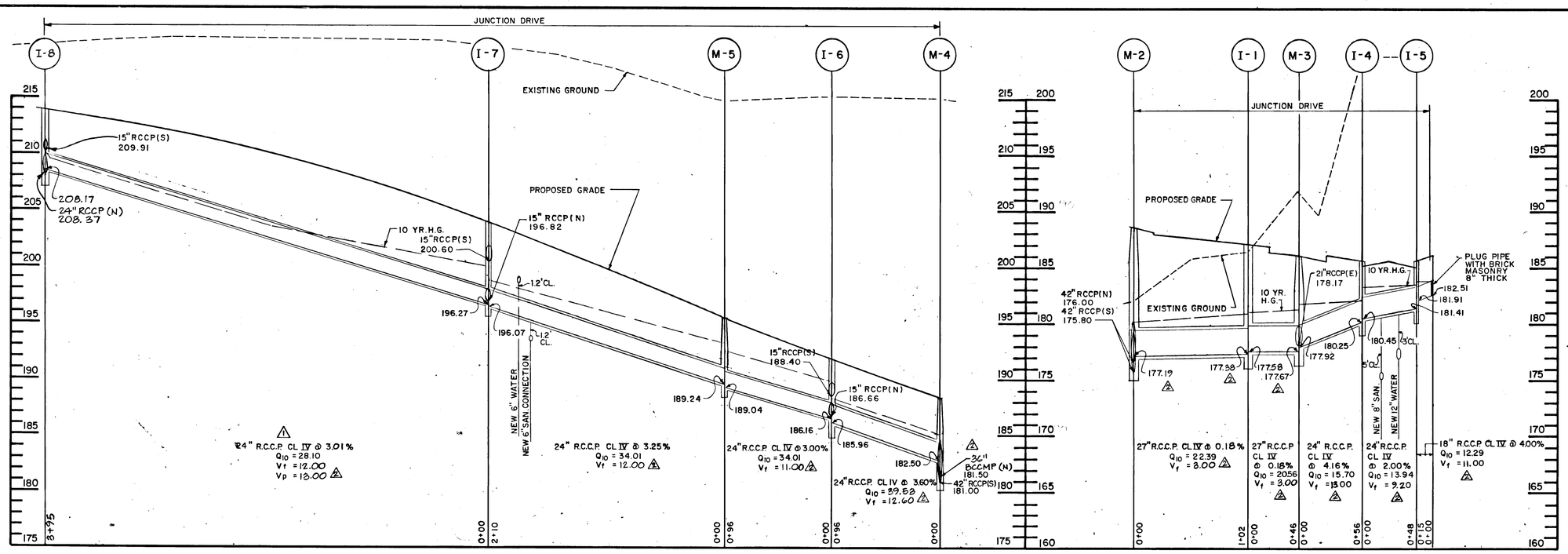
JUNCTION INDUSTRIAL PARK SECTION 1
ELECTION DISTRICT GILFORD NO. 6

OWNER: JUNCTION LIMITED PARTNERSHIP P.O. BOX 125 GLEN ARM, MARYLAND 21057

SCALE AS SHOWN

SHEET 5 OF 15

F-84-204




## STORM DRAIN PROFILES

SCALE: HORZ. 1" = 50'
VERT. 1" = 5'

OFFICE OF PLANNING & ZONING

12-14-84

CHIEF - DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

OFFICE OF PLANNING & ZONING

CHIEF - DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE 12-17-84

WHITNEY BAILEY COX & MAGNANI CONSULTING ENGINEERS
1850 York Road
Timonium Md. 21093
301- 252 - 6060

| | | | |
|---|---|---|---|
| DES: E.B. | | | |
| DRN: G.G. | | | |
| CHK: P.D. | WBCM | 4 | INVERTS & VELOCITIES CHANGED, STUB REMOVED 2/28/85 |
| DATE: 11-1-84 | WBCM | 1 | REVISE PROFILE I-7 TO I-8 2/1/85 |
| | BY | NO. | REVISION DATE |

STORM DRAIN PROFILES

600' SCALE MAP NO. 48 BLOCK NO. 19

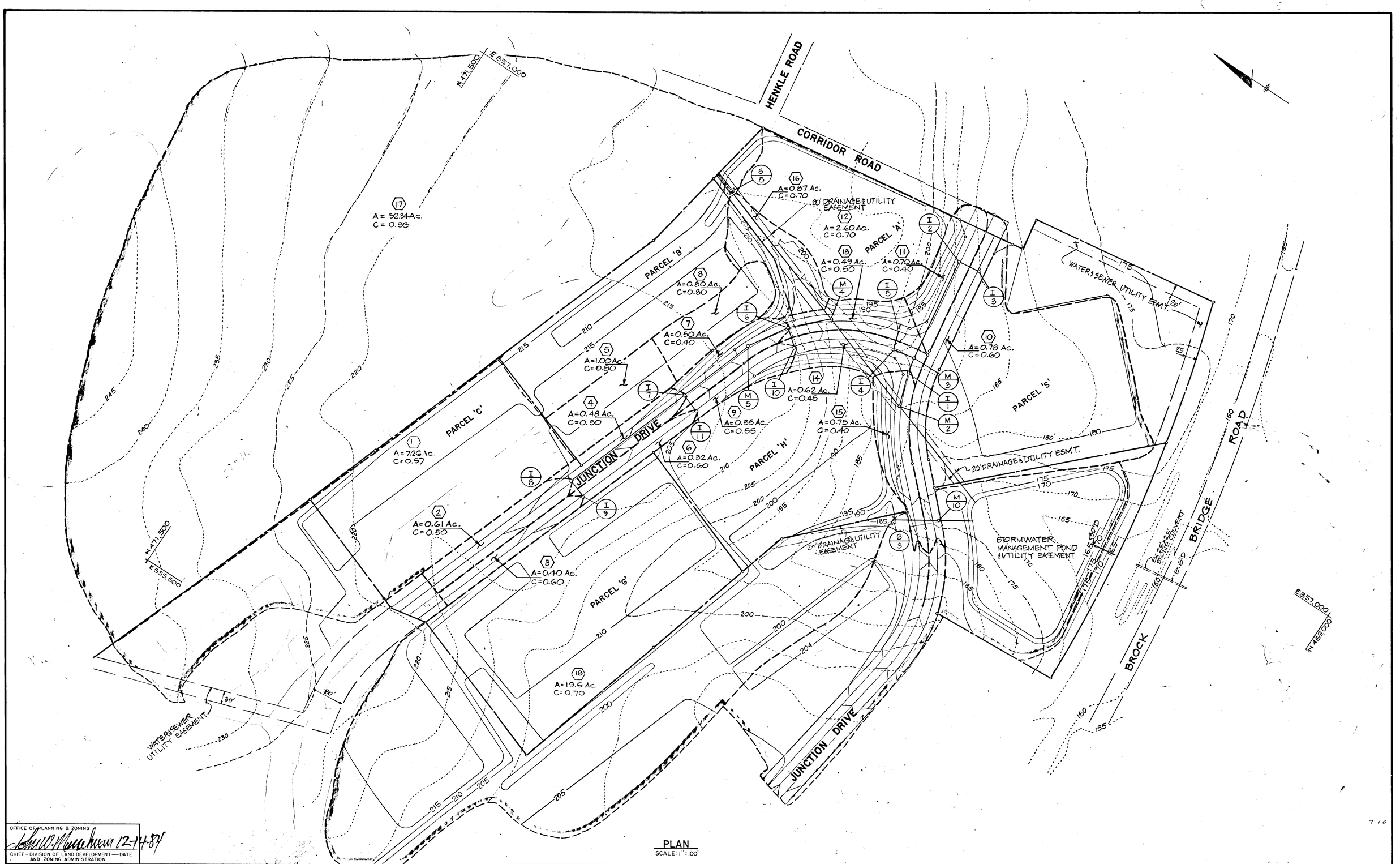
JUNCTION INDUSTRIAL PARK SECTION I
ELECTION DISTRICT GILFORD NO. 6

OWNER: JUNCTION LIMITED PARTNERSHIP P.O. BOX 125
GLEN ARM, MARYLAND 21057

SCALE AS SHOWN

SHEET 6 OF 15

F-84-204




PLAN
SCALE: 1" = 100'

OFFICE OF PLANNING & ZONING
CHIEF - DIVISION OF LAND DEVELOPMENT — DATE AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 12-17-84

WHITNEY BAILEY COX & MAGNANI
CONSULTING ENGINEERS
1850 York Road
Timonium Md. 21093
301-252-6060

| | | | | |
|---|---|---|---|---|
| DES: J.J.K. | | | | |
| DRN: G.G. | | | | |
| CHK: P.D. | | | | |
| DATE: 11-1-84 | BY | NO. | REVISION | DATE |

DRAINAGE AREA MAP

600' SCALE MAP NO. 48 BLOCK NO. 19

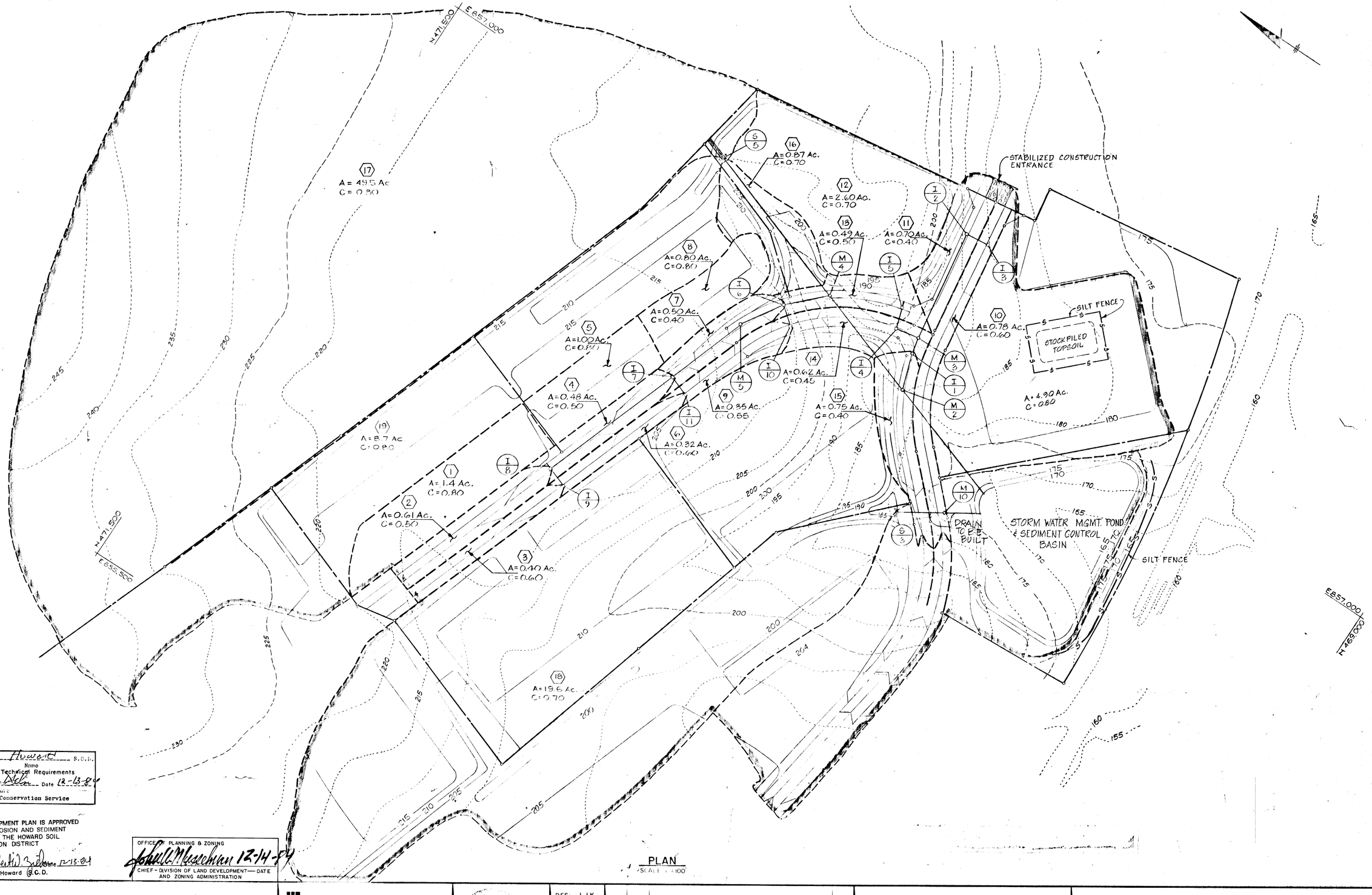
JUNCTION INDUSTRIAL PARK SECTION I
ELECTION DISTRICT GILFORD NO. 6

OWNER: JUNCTION LIMITED PARTNERSHIP P.O. BOX 125 GLEN ARM, MARYLAND 21057

SCALE AS SHOWN

SHEET 7 OF 15

F-84-204




PLAN
SCALE 1" = 100'

Reviewed for Howard S.C.D.
Name
and meets Technical Requirements
Signature Date 12-13-84
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
Approved Date 12-13-84
Howard S.C.D.

OFFICE OF PLANNING & ZONING
12-14-84
CHIEF - DIVISION OF LAND DEVELOPMENT — DATE AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 12-17-84

WHITNEY BAILEY COX & MAGNANI
CONSULTING ENGINEERS
1850 York Road
Timonium Md. 21093
301-252-6060

DES: J.J.K.
DRN: G.G.
CHK: P.D.
DATE 10-22-84

| BY | NO. | REVISION | DATE |
|---|---|---|---|

DRAINAGE AREA MAP FOR SEDIMENT CONTROL BASIN

600' SCALE MAP NO. 48 BLOCK NO. 19

JUNCTION INDUSTRIAL PARK SECTION I
ELECTION DISTRICT GILFORD NO. 6

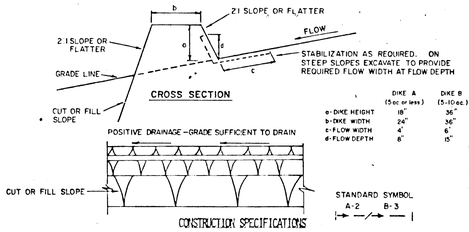
OWNER: JUNCTION LIMITED PARTNERSHIP

SCALE AS SHOWN

SHEET 8 OF 15

# 111

F-84-204




| | DIKE A (5 ac or less) | DIKE B (5-10 ac) |
|---|---|---|
| e-DIKE HEIGHT | 18" | 36" |
| b-DIKE WIDTH | 24" | 36" |
| c-FLOW WIDTH | 4' | 6' |
| d-FLOW DEPTH | 8" | 15" |

CONSTRUCTION SPECIFICATIONS

1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON, (B) FLOW CHANNEL AS PER THE CHART BELOW.

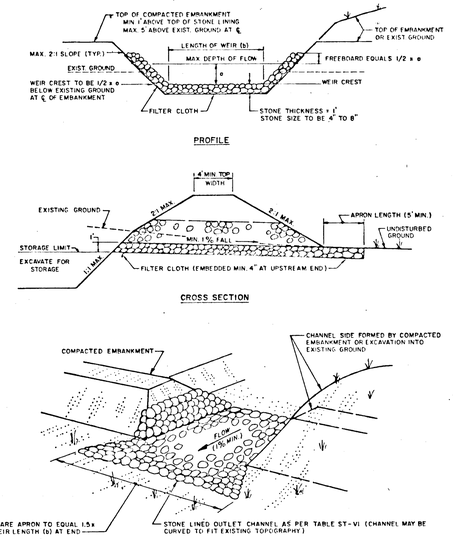
FLOW CHANNEL STABILIZATION

| TYPE OF TREATMENT | CHANNEL GRADE | DIKE A | DIKE B |
|---|---|---|---|
| 1 | .5-3.0% | SEED AND STRAW MULCH | SEED AND STRAW MULCH |
| 2 | 3.1-5.0% | SEED AND STRAW MULCH | SEED USING JUTE, OR EXCELSIOR; SOD; 2" STONE |
| 3 | 5.1-8.0% | SEED WITH JUTE, OR SOD; 2" STONE | LINED RIP-RAP 4-8" |
| 4 | 8.1-20% | LINED RIP-RAP 4-8" | ENGINEERING DESIGN |

A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.
C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.

7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

## EARTH DIKE




## RIPRAP OUTLET SEDIMENT TRAP




CONSTRUCTION SPECIFICATIONS

1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

## STABILIZED CONSTRUCTION ENTRANCE

GENERAL NOTES:

1. REFER TO USDA-SOIL CONSERVATION SERVICE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS" FOR STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED HEREIN.
2. WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, MINOR FIELD ADJUSTMENTS CAN AND WILL BE MADE TO INSURE THE CONTROL OF ANY SEDIMENT. CHANGES IN SEDIMENT CONTROL PRACTICES REQUIRE PRIOR APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
3. AT THE END OF EACH WORKING DAY, ALL SEDIMENT CONTROL PRACTICES WILL BE INSPECTED AND LEFT IN OPERATIONAL CONDITION.
4. ANY DISTURBED EARTH LEFT FOR PERIODS EXCEEDING 30 DAYS SHALL BE STABILIZED ACCORDING TO TEMPORARY STABILIZATION SPECIFICATIONS.
5. ANY CHANGE TO THE GRADING PROPOSED ON THIS PLAN REQUIRES RE-SUBMISSION TO HOWARD COUNTY SOIL CONSERVATION DISTRICT FOR APPROVAL.
6. DUST CONTROL WILL BE PROVIDED FOR ALL DISTURBED AREAS. REFER TO USDA-SOIL CONSERVATION SERVICE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS", PP 62.01 AND 62.02 FOR ACCEPTABLE METHODS AND SPECIFICATIONS FOR DUST CONTROL.
7. ANY VARIATION FROM THE SEQUENCE OF OPERATIONS STATED ON THIS PLAN REQUIRES THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE HOWARD COUNTY SOIL CONSERVATION DISTRICT PRIOR TO THE INITIATION OF THE CHANGE.

SEDIMENT CONTROL & POND CONSTRUCTION

By the Developer:

"I certify that all development and/or construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I will provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion."

10/18/84
Junction, Limited Partnership
Lee N. Koehler, General Partner

By the Engineer:

"I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservatoin District. I have notified the developer that he must provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion."

Brian Jones — 10/22/84
Brian Jones — DATE

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

U.S. SOIL CONSERVATION SERVICE — 12-13-84 DATE

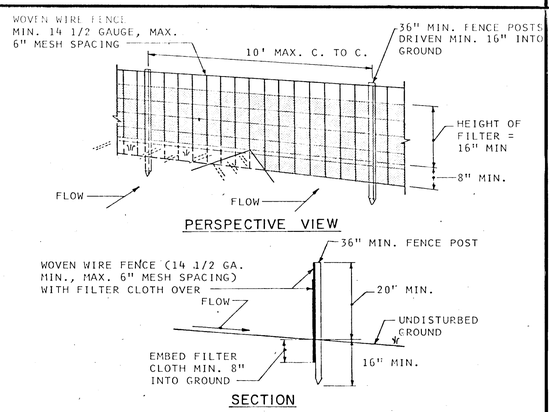
These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

HOWARD SOIL CONSERVATION DISTRICT — 12-13-84 DATE

SEQUENCE OF OPERATIONS FOR EROSION AND SEDIMENT CONTROL

| | | TIME FOR COMPLETION |
|---|---|---|
| 1. | NOTIFY HOWARD COUNTY SEDIMENT CONTROL INSPECTOR TWO WORKING DAYS PRIOR TO BEGINNING ANY WORK. | |
| 2. | BEGIN MINOR CLEARING OPERATIONS FOR CONSTRUCTION OF SEDIMENT BASIN | 2 DAYS |
| 3. | INSTALL SEDIMENT BASIN, SILT FENCE, AND STABILIZED CONSTRUCTION ENTRANCE, EARTH BERM AND STONE OUTLET SEDIMENT TRAP | 1 WEEK |
| 4. | CLEAR & GRUB REMAINDER OF SITE AND STRIP TOPSOIL | 2 WEEKS |
| 5. | GRADE SITE AND INSTALL STORM DRAINS | 4 WEEKS |
| 6. | SEED AND MULCH OR SOD ALL DISTURBED AREAS UNLESS NOTED OTHERWISE ON THE PLANS | 1 WEEK |
| 7. | REMOVE COLLECTED SILT AND SEDIMENT FROM BASIN AND REMOVE DEWATERING DEVICE AFTER RECEIVING APPROVAL BY SEDIMENT CONTROL INSPECTOR | 1 WEEK |
| 8. | INSTALL AND STABILIZE STORM WATER MANAGEMENT FACILITY | 1 WEEK |

9. ALL TIMES FOR COMPLETION ARE SUBJECT TO MODIFICATION.



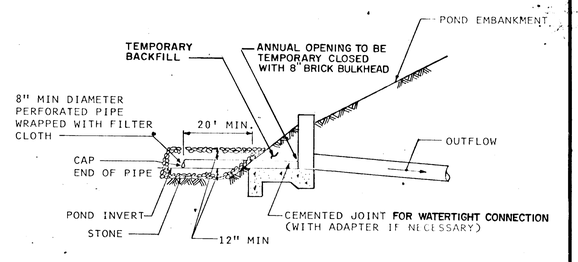

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD
FENCE: WOVEN WIRE, 14½ GA, 6" MAX. MESH OPENING

FILTER CLOTH: FILTER X, MIRAFI 100X, STABINEKA T140N OR APPROVED EQUAL
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

## SILT FENCE




## SEDIMENT BASIN DEWATERING DEVICE

OFFICE OF PLANNING & ZONING
12-14-84
CHIEF - DIVISION OF LAND DEVELOPMENT — DATE AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

12-17-84
CHIEF, BUREAU OF ENGINEERING — DATE

WHITNEY BAILEY COX & MAGNANI
CONSULTING ENGINEERS
1850 York Road
Timonium Md. 21093
301-252-6060

DES: J.J.K.
DRN: G.G.
CHK: P.D.
DATE: 10-22-84

| BY | NO. | REVISION | DATE |
|---|---|---|---|

MISCELLANEOUS DETAILS

600' SCALE MAP NO. 48 BLOCK NO. 19

JUNCTION INDUSTRIAL PARK SECTION I
ELECTION DISTRICT GILFORD NO. 6

OWNER: JUNCTION LIMITED PARTNERSHIP

SCALE AS SHOWN

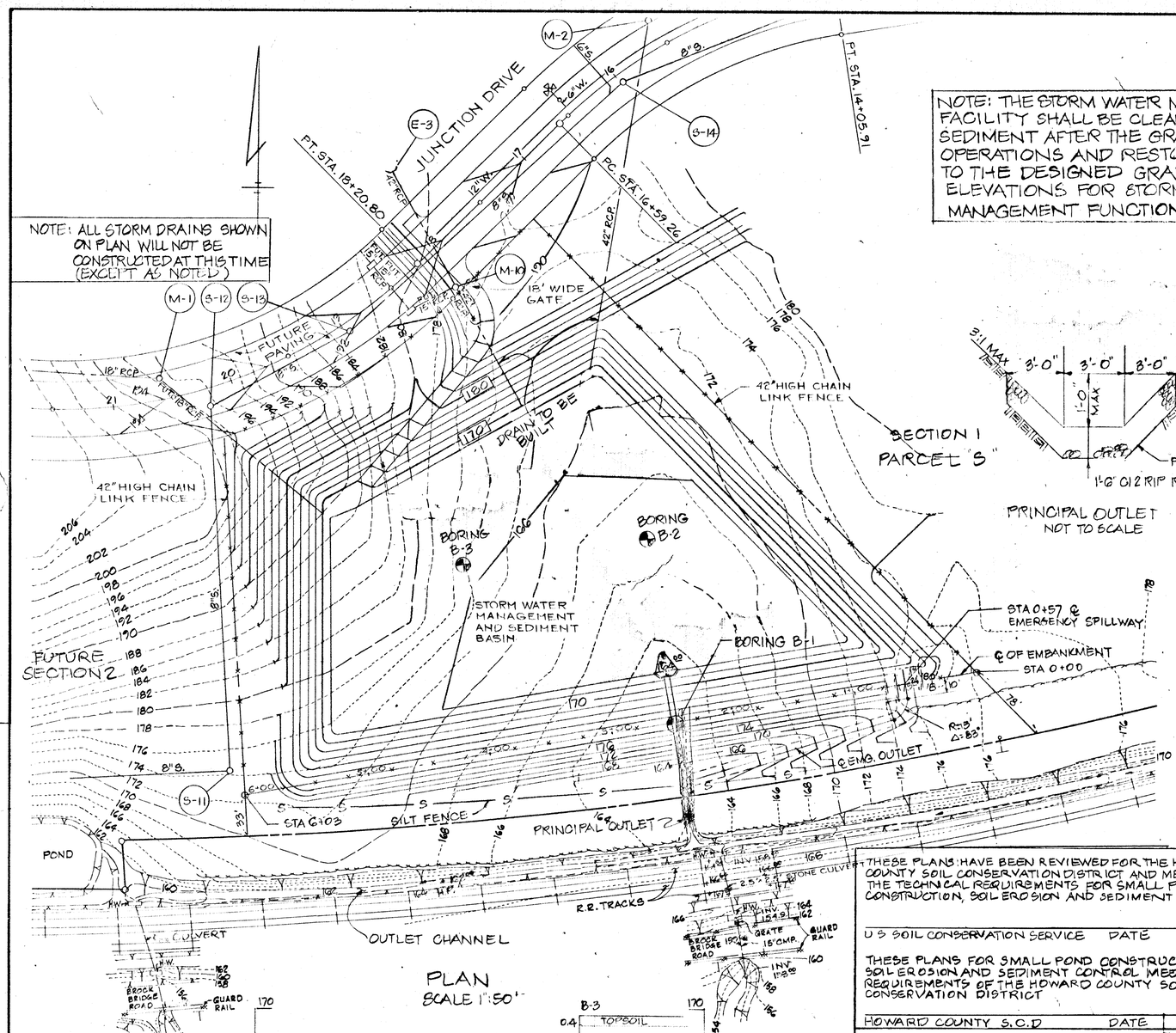
SHEET 9 OF 15

#1111

F-84-207

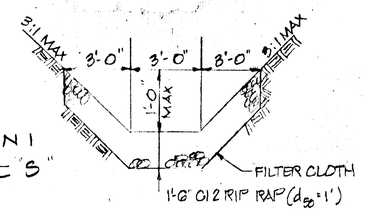
NOTE: ALL STORM DRAINS SHOWN ON PLAN WILL NOT BE CONSTRUCTED AT THIS TIME (EXCEPT AS NOTED)

NOTE: THE STORM WATER MANAGEMENT FACILITY SHALL BE CLEANED OF SEDIMENT AFTER THE GRADING OPERATIONS AND RESTORED TO THE DESIGNED GRADES AND ELEVATIONS FOR STORM WATER MANAGEMENT FUNCTIONS

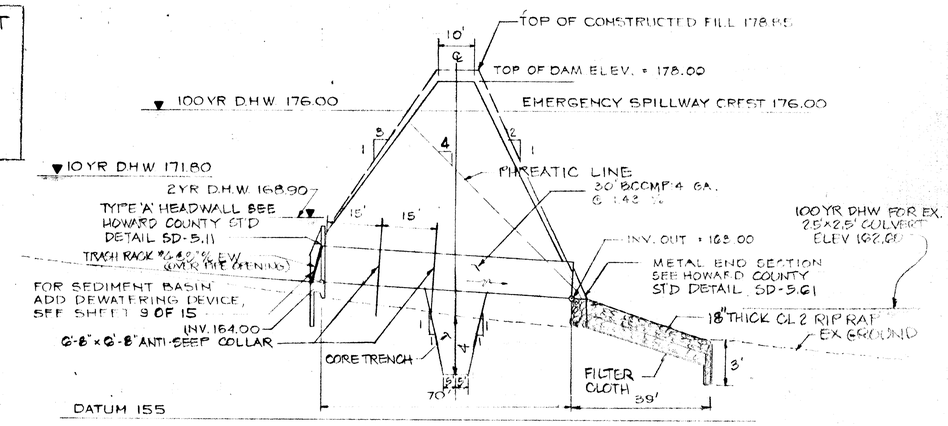



PLAN
SCALE 1":50'

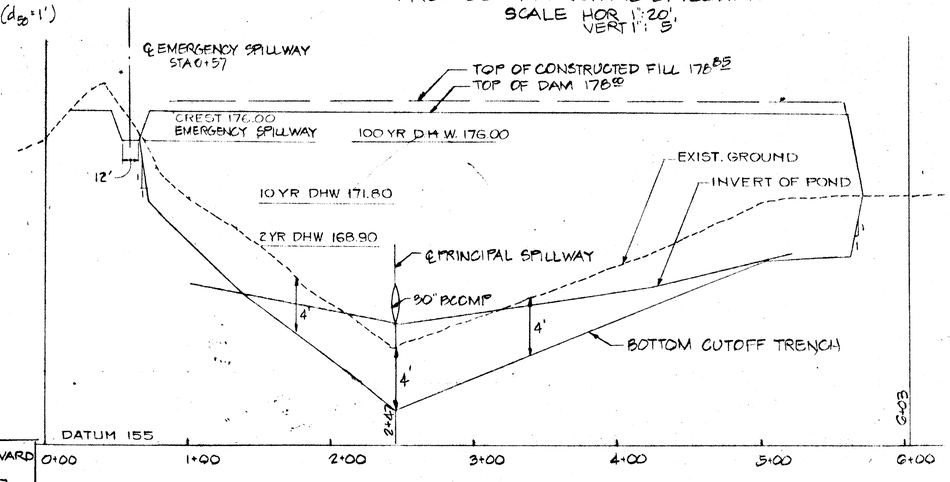
SECTION 1
PARCEL "S"




PRINCIPAL OUTLET
NOT TO SCALE




PROFILE PRINCIPAL SPILLWAY
SCALE HOR 1":20'
VERT 1": 5'



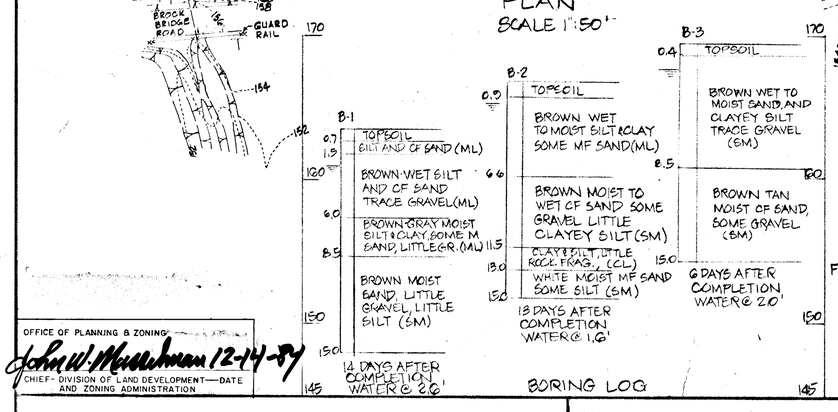

CROSS-SECTION ALONG ℄ EMBANKMENT
SCALE: HORZ 1":50'
VERT 1": 5'

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL

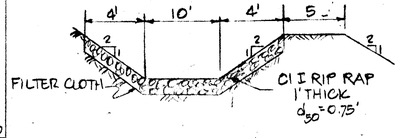
U S SOIL CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT

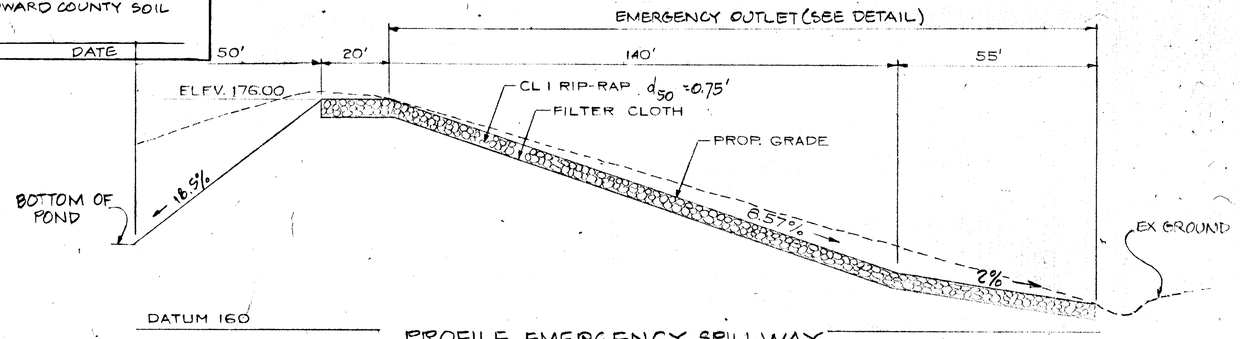
HOWARD COUNTY S.C.D DATE




BORING LOG




EMERGENCY OUTLET
NOT TO SCALE




PROFILE EMERGENCY SPILLWAY
HORZ 1":20'
VERT 1": 5'

OFFICE OF PLANNING & ZONING
John W. Mueller 12-14-84
CHIEF- DIVISION OF LAND DEVELOPMENT—DATE AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 12-17-84

WHITNEY BAILEY COX & MAGNANI
CONSULTING ENGINEERS
1850 York Road
Timonium Md. 21093
301-252-6060

| | | | | |
|---|---|---|---|---|
| DES: P.D. | | | | |
| DRN: P.D. | | | | |
| CHK: B.D.J. | | | | |
| DATE 10-22-84 | BY | NO | REVISION | DATE |

SEDIMENT CONTROL BASIN

600' SCALE MAP NO. ____ BLOCK NO. ____

JUNCTION INDUSTRIAL PARK SECTION I
ELECTION DISTRICT GILFORD NO. 6

OWNER: JUNCTION LIMITED PARTNERSHIP

SCALE AS SHOWN

SHEET 10 OF 15

#1111

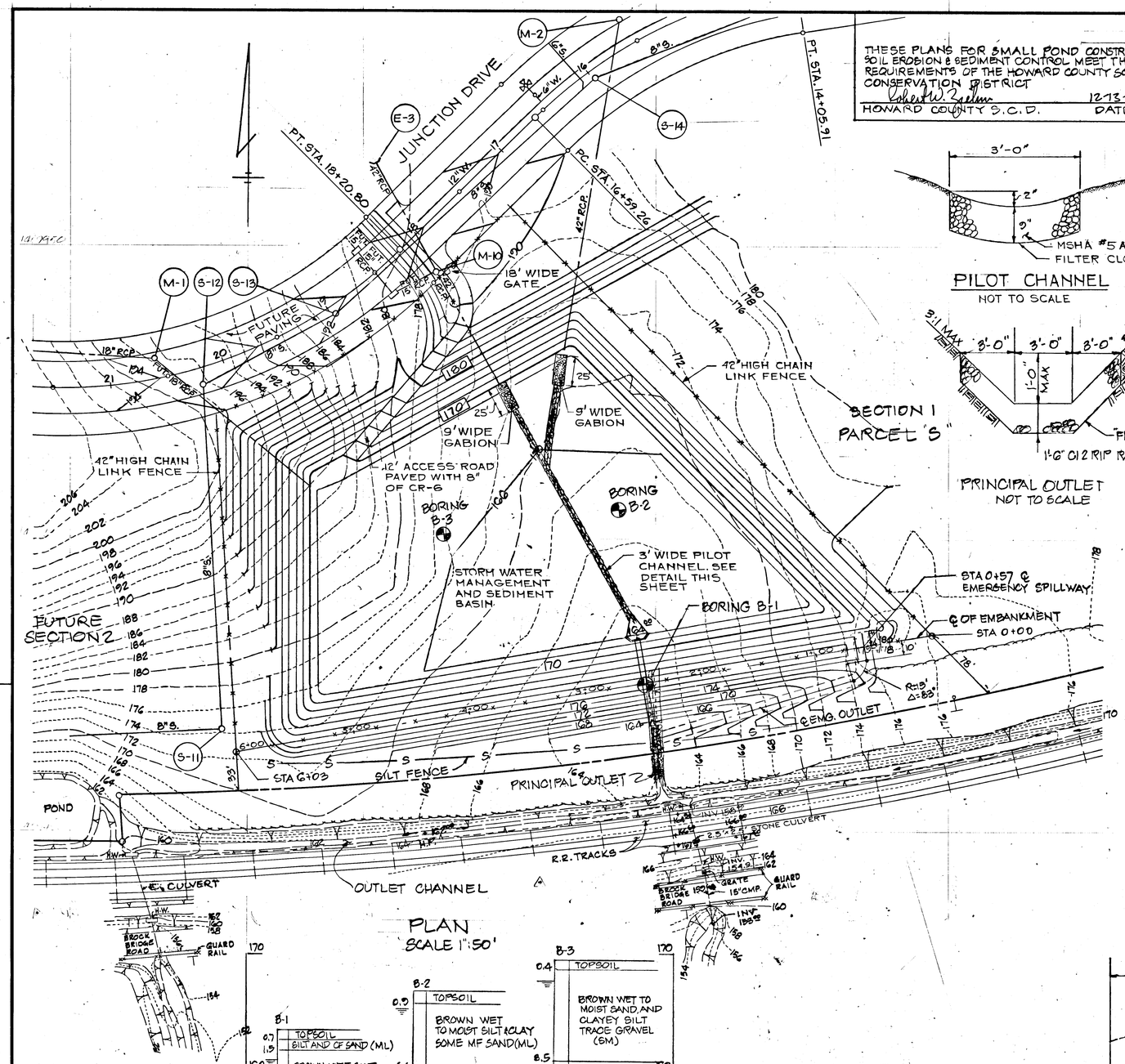
F-84-204

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION & SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT

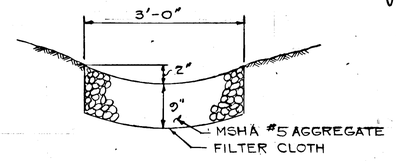
Robert W. Zellm 12-13-84
HOWARD COUNTY S.C.D. DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION & SEDIMENT CONTROL

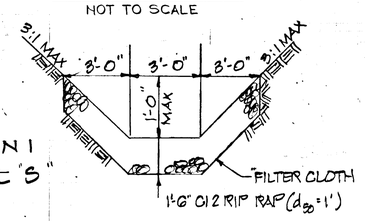
J. Ernest Hahn 12-13-84
U.S. SOIL CONSERVATION SERVICE DATE




PLAN
SCALE 1":50'




PILOT CHANNEL
NOT TO SCALE




PRINCIPAL OUTLET
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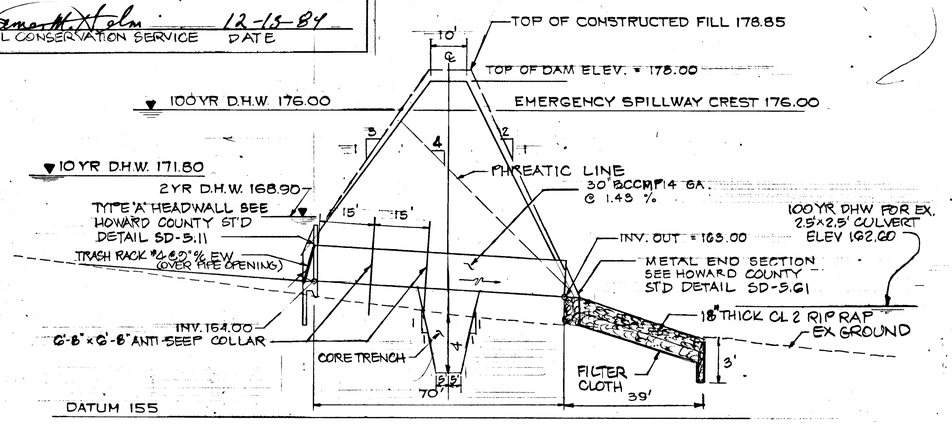
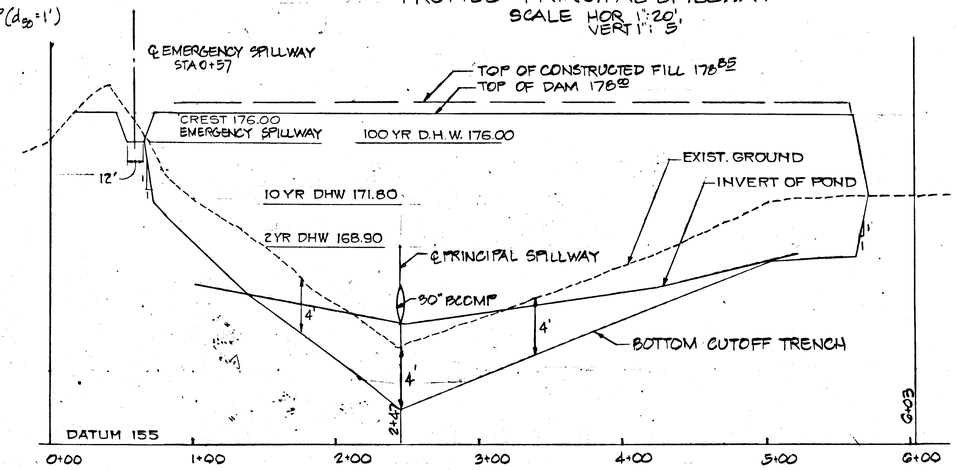
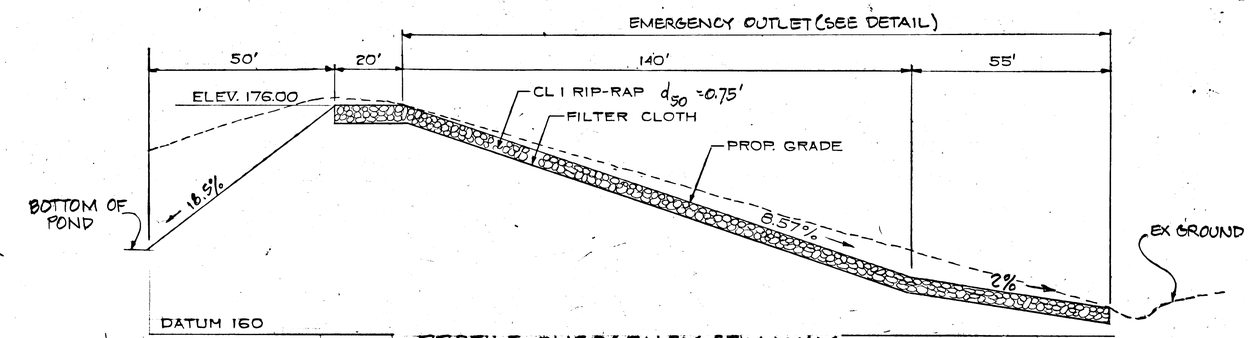



PROFILE PRINCIPAL SPILLWAY
SCALE HOR 1":20'
VERT 1": 5'




CROSS-SECTION ALONG ℄ EMBANKMENT
SCALE: HORZ 1":50'
VERT 1": 5'




PROFILE EMERGENCY SPILLWAY
HORZ 1": 20'
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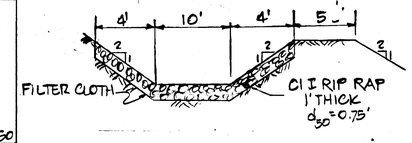


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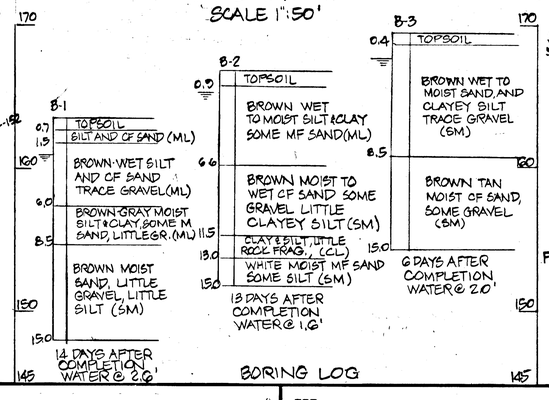



BORING LOG

OFFICE OF PLANNING & ZONING
John W. Muchow 12-14-84
CHIEF - DIVISION OF LAND DEVELOPMENT — DATE AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 12-17-84

WHITNEY BAILEY COX & MAGNANI
CONSULTING ENGINEERS
1850 York Road
Timonium Md. 21093
301-252-6060

DES: J.J.K.
DRN: P.D.
CHK: P.D.
DATE: 11-22-84

| BY | NO. | REVISION | DATE |
|---|---|---|---|

STORM WATER MANAGEMENT PLAN

600' SCALE MAP NO. 48 BLOCK NO. 19

JUNCTION INDUSTRIAL PARK SECTION I
ELECTION DISTRICT GILFORD NO. 6

OWNER: JUNCTION LIMITED PARTNERSHIP

SCALE AS SHOWN

SHEET 11 OF 15

#1711

F-84-204

## SITE PREPARATION :

AREAS UNDER THE EMBANKMENT, AND STRUCTURAL WORKS SHALL BE CLEARED AND GRUBBED. THE TOPSOIL SHALL BE STRIPPED TO REMOVE ALL TREES, VEGATATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL. CHANNEL BANKS AND SHARP BREAKS SHALL BE SLOPED TO NO STEEPER THEN 1:1.

AREAS COVERED BY THE POND WILL BE CLEARED OF ALL TREES, BRUSH, LOGS, FENCES, RUBBISH AND OTHER OBJECTIONABLE MATERIAL UNLESS OTHERWISE DESIGNATED ON THE PLANS.

ALL CLEARED AND GRUBBED MATERIAL SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE DAM AS DIRECTED BY THE OWNER OR HIS REPRESENTATIVE. A SUFFICIENT QUANTITY OF TOPSOIL WILL BE STOCKPILED IN A SUITABLE LOCATION FOR USE ON THE EMBANKMENT AND OTHER DESIGNATED AREAS.

## EARTH FILL :

MATERIAL : THE FILL MATERIAL SHALL BE TAKEN FROM APPROVED DESIGNATED BORROW AREA OR AREAS. IT SHALL BE FREE OF ROOTS STUMPS, WOOD, RUBBISH, OVERSIZED STONES, FROZEN OR OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE CONSTRUCTED TO AN ELEVATION WHICH PROVIDES FOR ANTICIPATED SETTLEMENT TO THE DESIGN ELEVATION. THE FILL HEIGHT ALL ALONG THE LENGTH OF THE EMBANKMENT SHALL BE INCREASED ABOVE THE DESIGN ELEVATION (INCLUDING FREEBOARD) AS SHOWN ON THE PLANS. RELATIVELY PERVIOUS MATERIALS SUCH AS SAND AND GRAVEL (UNIFIED SOIL CLASSES GW, GP, SW, & SP) SHALL NOT BE PLACED IN THE EMBANKMENT.

PLACEMENT : AREAS ON WHICH FILL IS TO BE PLACED SHALL BE SCARIFIED PRIOR TO PLACEMENT OF FILL. FILL MATERIALS SHALL BE PLACED IN 8-INCH MAXIMUM THICKNESS (BEFORE COMPACTION) LAYERS WHICH ARE TO BE CONTINUOUS OVER THE ENTIRE LENGTH OF THE FILL. THE MOST POROUS MATERIAL SHALL BE PLACED IN THE DOWNSTREAM PORTIONS OF THE EMBANKMENT.

COMPACTION : THE MOVEMENT OF HAULING AND SPREADING EQUIPMENT OVER THE FILL SHALL BE CONTROLLED SO THAT THE ENTIRE SURFACE OF EACH LIFT SHALL BE TRAVERSED BY NOT LESS THEN ONE TREAD TRACK OF THE EQUIPMENT OR COMPACTION SHALL BE ACHIEVED BY A MINIMUM OF FOUR COMPLETE PASSES OF A SHEEPSFOOT, RUBBER TIRED OR VIBRATORY ROLLER. FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SUCH THAT THE REQUIRED DEGREE OF COMPACTION CAN BE OBTAINED WITH THE EQUIPMENT USED.

CUTOFF TRENCH AND CORE WALL : WHERE SPECIFIED, A CUTOFF TRENCH SHALL BE EXCAVATED ALONG OR PARALLEL TO THE CENTERLINE OF THE EMBANKMENT AS SHOWN ON THE PLANS. THE BOTTOM WITH OF THE TRENCH SHALL BE SIX FEET. THE DEPTH SHALL BE AT LEAST FOUR FEET OR AS SHOWN ON THE PLANS. THE SIDE SLOPES OF THE TRENCH SHALL BE 1 TO 1 OR FLATTER. THE BACKFILL MATERIAL FOR THE CUTOFF TRENCH AND CORE WALL SHALL BE THE MOST IMPERVIOUS MATERIAL AVAILABLE AND SHALL BE COMPACTED WITH EQUIPMENT OR ROLLERS TO ASSURE MAXIMUM DENSITY AND MINIMUM PERMEABILITY. TRENCH SHALL BE DEWATERED DURING BACKFILLING-COMPACTING OPERATIONS.

## CONCRETE :

MATERIALS :

1. CEMENT · NORMAL PORTLAND CEMENT SHALL CONFORM TO THE LATEST ASTM SPECIFICATION C·150.
2. WATER - THE WATER USED IN CONCRETE SHALL BE CLEAN, FREE FROM OIL, ACID, ALKALI, SCALES, ORGANIC MATTER OR OTHER OBJECTIONABLE SUBSTANCES.
3. SAND - THE SAND USED IN CONCRETE SHALL BE CLEAN, HARD, STRONG AND DURABLE, AND SHALL BE WELL GRADED WITH 100 PERCENT PASSING A ONE-QUARTER INCH SIEVE. LIMESTONE SHALL NOT BE USED.
4. COARSE AGGREGATE - THE COARSE AGGREGATE USED SHALL BE CLEAN, HARD, STRONG, AND DURABLE, AND FREE FROM CLAY OR DIRT. IT SHALL BE WELL GRADED WITH A MAXIMUM SIZE OF ONE AND ONE-HALF (1-1/2) INCHES.
5. REINFORCING STEEL - THE REINFORCING STEEL SHALL BE DEFORMED BARS OF INTERMEDIATE GRADE BILLET STEEL AND WIRE FABRIC CONFORMING TO ASTM SPECIFICATION A-815.

DESIGN MIX : THE CONCRETE SHALL BE MIXED IN THE FOLLOWING PROPORTIONS, MEASURED BY WEIGHT. THE WATER-CEMENT RATIO SHALL BE 5-1/2 TO 6 U.S. GALLONS OF WATER PER 94 POUND BAG OF CEMENT. THE PROPORTIONS OF MATERIALS FOR THE TRIAL MIX SHALL BE 1:2:3 1/2. THE COMBINATION OF AGGREGATES MAY BE ADJUSTED TO PRODUCE A PLASTIC AND WORKABLE MIX THAT WILL NOT PRODUCE HARSHNESS IN PLACING OR HONEYCOMBING IN THE STRUCTURE.

MIXING : THE CONCRETE INGREDIENTS SHALL BE MIXED IN BATCH MIXERS UNTIL THE MIXTURE IS HOMOGENEOUS AND OF UNIFORM CONSISTENCY. THE MIXING OF EACH BATCH SHALL CONTINUE FOR NOT LESS THAN ONE AND ONE-HALF (1-1/2) MINUTES AFTER ALL THE INGREDIENTS, EXCEPT THE FULL AMOUNT OF WATER, ARE IN THE MIXER. THE MINIMUM MIXING TIME IS PREDICATED ON PROPER CONTROL OF THE SPEED OF ROTATION OF THE MIXER AND OF THE INTRODUCTION OF THE MATERIALS, INCLUDING WATER, INTO THE MIXER. WATER SHALL BE ADDED PRIOR TO, DURING, AND FOLLOWING THE MIXER-CHARGING OPERATIONS. EXCESSIVE OVERMIXING REQUIRING THE ADDITION OF WATER TO PRESERVE THE REQUIRED CONCRETE CONSISTENCY SHALL NOT BE PERMITTED. TRUCK MIXING WILL BE ALLOWED PROVIDED THAT THE USE OF THIS METHOD SHALL CAUSE NO VIOLATION OF ANY APPLICABLE PROVISIONS OF THE SPECIFICATION GIVEN HERE.

## CONCRETE (CONTINUED) :

REINFORCING STEEL : ALL REINFORCING MATERIAL SHALL BE FREE OF DIRT, RUST, SCALE, OIL, PAINT OR ANY OTHER COATINGS. THE STEEL SHALL BE ACCURATELY PLACED AND SECURELY TIED AND BLOCKED INTO POSITION SO THAT NO MOVEMENT OF STEEL WILL OCCUR DURING PLACEMENT OF CONCRETE.

CONSOLIDATING : CONCRETE SHALL BE CONSOLIDATED WITH INTERNAL TYPE MECHANICAL VIBRATORS. VIBRATION SHALL BE SUPPLEMENTED BY SPADING AND HAND TAMPING AS NECESSARY TO INSURE SMOOTH AND DENSE CONCRETE ALONG FORM SURFACES, IN CORNERS, AND AROUND EMBEDDED ITEMS.

FINISHING : DEFECTIVE CONCRETE, HONEYCOMBED AREAS. VOIDS LEFT BY THE REMOVAL OF THE RODS, RIDGES ON ALL CONCRETE SURFACES PERMANENTLY EXPOSED TO VIEW OR EXPOSED TO WATER ON THE FINISHED STRUCTURE, SHALL BE REPAIRED IMMEDIATELY AFTER THE REMOVAL OF FORMS. ALL VOIDS SHALL BE REAMED AND COMPLETELY FILLED WITH DRY-PATCHING MORTAR.

PROTECTION AND CURING : EXPOSED SURFACES OF CONCRETE SHALL BE PROTECTED FROM THE DIRECT RAYS OF THE SUN FOR AT LEAST THE FIRST THREE (3) DAYS. ALL CONCRETE SHALL BE KEPT CONTINUOUSLY MOIST FOR AT LEAST TEN (10) DAYS AFTER BEING PLACED. MOISTURE MAY BE APPLIED BY SPAYING OR SPRINKLING AS NECESSARY TO PREVENT THE CONCRETE FROM DRYING. CONCRETE SHALL NOT BE EXPOSED TO FREEZING DURING THE CURING PERIOD. CURING COMPOUNDS MAY ALSO BE USED.

PLACING TEMPERATURE : CONCRETE MAY NOT BE PLACED AT TEMPERATURE BELOW 37 DEGREES F. WITH THE TEMPERATURE FALLING, OR 34 DEGREES F. WITH THE TEMPERATURE RISING.

## STRUCTURAL BACKFILL :

BACKFILL MATERIAL SHALL BE OF THE TYPE AND QUALITY CONFORMING TO THAT SPECIFIED FOR THE ADJOINING FILL MATERIAL. THE FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED FOUR INCHES IN THICKNESS AND COMPACTED BY HAND TAMPERS OR OTHER COMPACTION EQUIPMENT. THE MATERIAL NEEDS TO FILL COMPLETELY ALL SPACES UNDER AND ADJACENT TO THE PIPE. AT NO TIME DURING THE BACKFILLING OPERATION SHALL DRIVEN EQUIPMENT BE ALLOWED TO OPERATE CLOSER THAN FOUR FEET, MEASURED HORIZONTALLY, TO ANY PART OF A STRUCTURE. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR DRIVE EQUIPMENT OVER ANY PART OF A CONCRETE STRUCTURE OR PIPE UNLESS THERE IS A COMPACTED FILL OF TWENTY-FOUR INCHES OR GREATER OVER THE STRUCTURE OR PIPE.

## STABILIZATION :

ALL BORROW AREAS SHALL BE GRADED TO PROVIDE PROPER DRAINAGE AND LEFT IN A SIGHTLY CONDITION. ALL EXPOSED SURFACES OF THE EMBANKMENT, SPILLWAY, SPOIL AND BORROW AREAS, AND BERMS SHALL BE STABILIZED BY SEEDING, FERTILIZING, AND MULCHING (IF REQUIRED) IN ACCORDANCE WITH THE VEGATATIVE TREATMENT SPECIFICATIONS SHOWN ON OR ACCOMPANYING THE DRAWINGS.

## CORRUGATED METAL PIPE :

MATERIALS : (STEEL PIPE) - THIS PIPE AND ITS APPURENANCES SHALL BE GALVANIZED AND FULLY BITUMINOUS COATED AND SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. SPECIFICATIONS M-190 TYPE A WITH WATERTIGHT COUPLING BANDS. ANY BITUMINOUS COATING DAMAGED OR OTHERWISE REMOVED SHALL BE REPLACED WITH COLD APPLIED BITUMINOUS COATING COMPOUND.

CONNECTIONS : ALL CONNECTIONS WITH PIPE MUST BE COMPLETELY WATERTIGHT. THE DRAIN PIPE OR BARREL CONNECTION TO THE RISER SHALL BE WELDED ALL AROUND WHEN THE PIPE AND RISER ARE METAL. WATERTIGHT COUPLING BANDS SHALL BE USED AT ALL JOINTS. ANTISEEP COLLARS SHALL BE CONNECTED TO THE PIPE IN SUCH A MANNER AS TO BE COMPLETELY WATERTIGHT. (DIMPLE BANDS ARE NOT CONSIDERED A WATERTIGHT CONNECTION.).

BEDDING : THE PIPE SHALL BE FIRMLY AND UNIFORMLY BEDDED THROUGHOUT ITS ENTIRE LENGTH. WHERE ROCK OR SOFT, SPONGY OR OTHER UNSTABLE SOIL IS ENCOUNTERED, ALL SUCH MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE EARTH COMPACTED TO PROVIDE ADEQUATE SUPPORT.

## CHAIN LINK FENCE

MATERIALS: FABRIC SHALL CONFORM TO ASTM-491. IT SHALL BE GALVANIZED, 96A WIRE WITH 2" SQUARE WOVEN MESH. TOTAL HEIGHT OF FENCE TO BE 3'-6". FENCE POSTS, RAILS, GATES AND ACCESSORIES SHALL BE IN ACCORDANCE WITH FEDERAL SPEC. RR-F-191.

EXECUTION: ALL FENCING SHALL BE INSTALLED BY PROPERLY TRAINED CREW, TO LINE AND GRADE AS INDICATED. FENCE INSTALLATION SHALL BE IN ACCORDANCE WITH THE FENCE MANUFACTURER.

BY THE DEVELOPER :

"I CERTIFY THAT ALL DEVELOPEMENT AND / OR CONSTRUCTION WILL BE DONE IN ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD COUNTY SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

JUNCTION LIMITED PARTNERSHIP

DEVELOPER [signature] DATE 10/18/84

LEED. KOUTTLE, GENERAL PARTNER

BY THE ENGINEER :

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD COUNTY SOIL CONSERVATION DISTRICT WITH AN "AS BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

[signature] 10-22-84

ENGINEER- BRIAN JONES DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL

[signature] 12-13-84

U.S. SOIL CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

[signature] 12-13-84

HOWARD COUNTY S.C.D DATE

OFFICE OF PLANNING & ZONING

[signature] 12-14-84

CHIEF- DIVISION OF LAND DEVELOPMENT — DATE AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[signature] 12-17-84

CHIEF, BUREAU OF ENGINEERING DATE

WHITNEY BAILEY COX MAGNANI CONSULTING ENGINEERS
1850 York Road
Timonium Md. 21093
301-252-6060

DES: J.J.K.
DRN: J.J.K.
CHK: P.D.
DATE: 10-22-84

| BY | NO. | REVISION | DATE |
|---|---|---|---|

STORM WATER MANAGEMENT NOTES & DETAILS

600' SCALE MAP NO. 48 BLOCK NO. 19

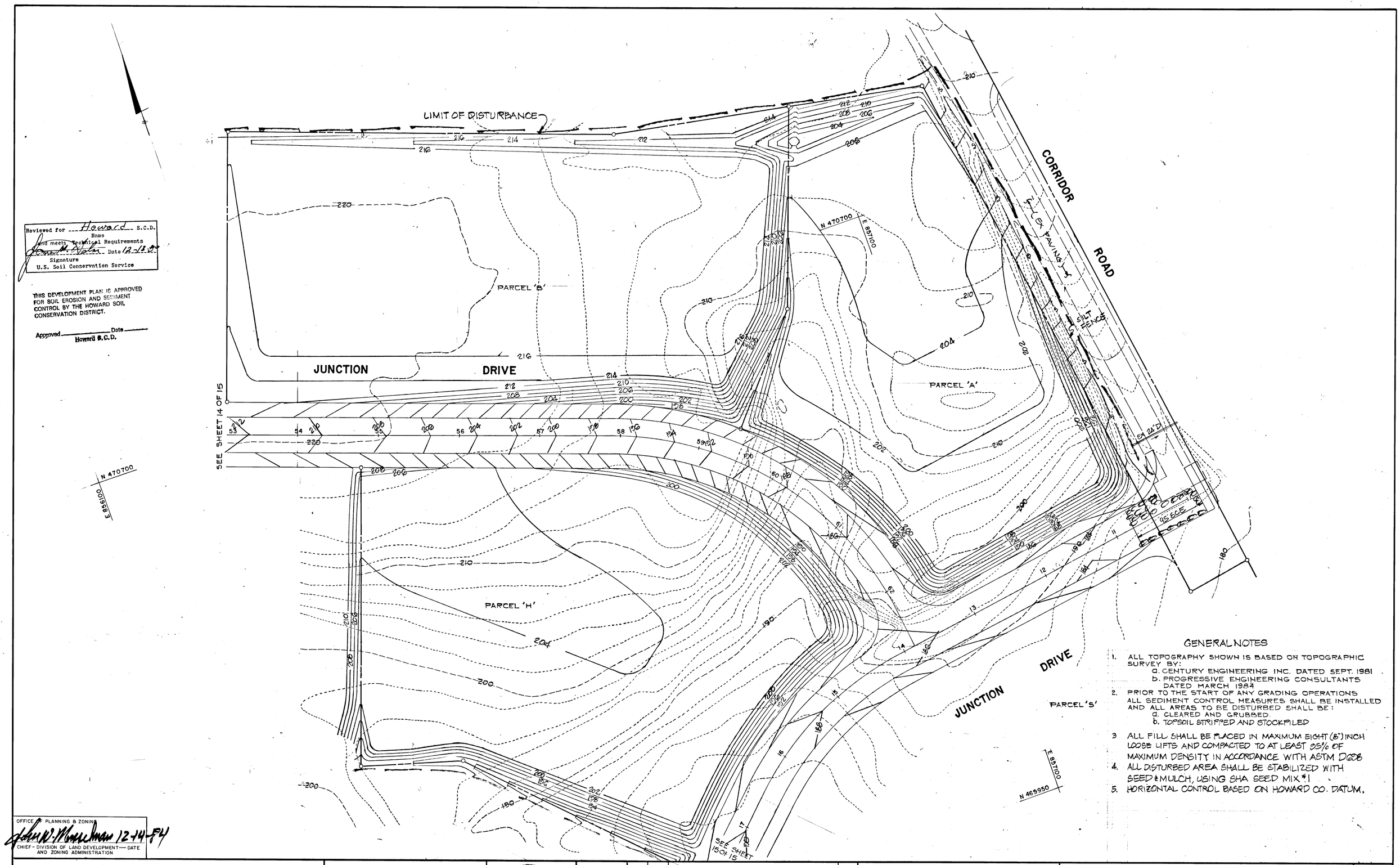
JUNCTION INDUSTRIAL PARK SECTION I
ELECTION DISTRICT GILFORD NO. 6

OWNER: JUNCTION LIMITED PARTNERSHIP

SCALE AS SHOWN

SHEET 12 OF 15

F-84-204




Reviewed for Howard S.C.D.
Name
and meets Technical Requirements
Date 12-13-84
Signature
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Approved _____ Date _____
Howard S.C.D.

## GENERAL NOTES

1. ALL TOPOGRAPHY SHOWN IS BASED ON TOPOGRAPHIC SURVEY BY:
   a. CENTURY ENGINEERING INC. DATED SEPT. 1981
   b. PROGRESSIVE ENGINEERING CONSULTANTS DATED MARCH 1984
2. PRIOR TO THE START OF ANY GRADING OPERATIONS ALL SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND ALL AREAS TO BE DISTURBED SHALL BE:
   a. CLEARED AND GRUBBED
   b. TOPSOIL STRIPPED AND STOCKPILED
3. ALL FILL SHALL BE PLACED IN MAXIMUM EIGHT (8") INCH LOOSE LIFTS AND COMPACTED TO AT LEAST 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698
4. ALL DISTURBED AREA SHALL BE STABILIZED WITH SEED & MULCH, USING SHA SEED MIX #1
5. HORIZONTAL CONTROL BASED ON HOWARD CO. DATUM.

OFFICE OF PLANNING & ZONING
John W. Moreshman 12-14-84
CHIEF - DIVISION OF LAND DEVELOPMENT — DATE AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William E. Riley 12-17-84
CHIEF, BUREAU OF ENGINEERING DATE

#1111

WHITNEY BAILEY COX MAGNANI
CONSULTING ENGINEERS
1850 York Road
Timonium Md. 21093
301-252-6060

STATE OF MARYLAND — WILLIAM E. RIDLEY — REGISTERED PROFESSIONAL ENGINEER

| | | | | |
|---|---|---|---|---|
| DES: P.D. | | | | |
| DRN: P.D. | | | | |
| CHK: B.D.J. | | | | |
| DATE: 10-22-84 | BY | NO. | REVISION | DATE |

ROUGH GRADING PLAN FOR JUNCTION INDUSTRIAL PARK

600' SCALE MAP NO. _____ BLOCK NO. _____

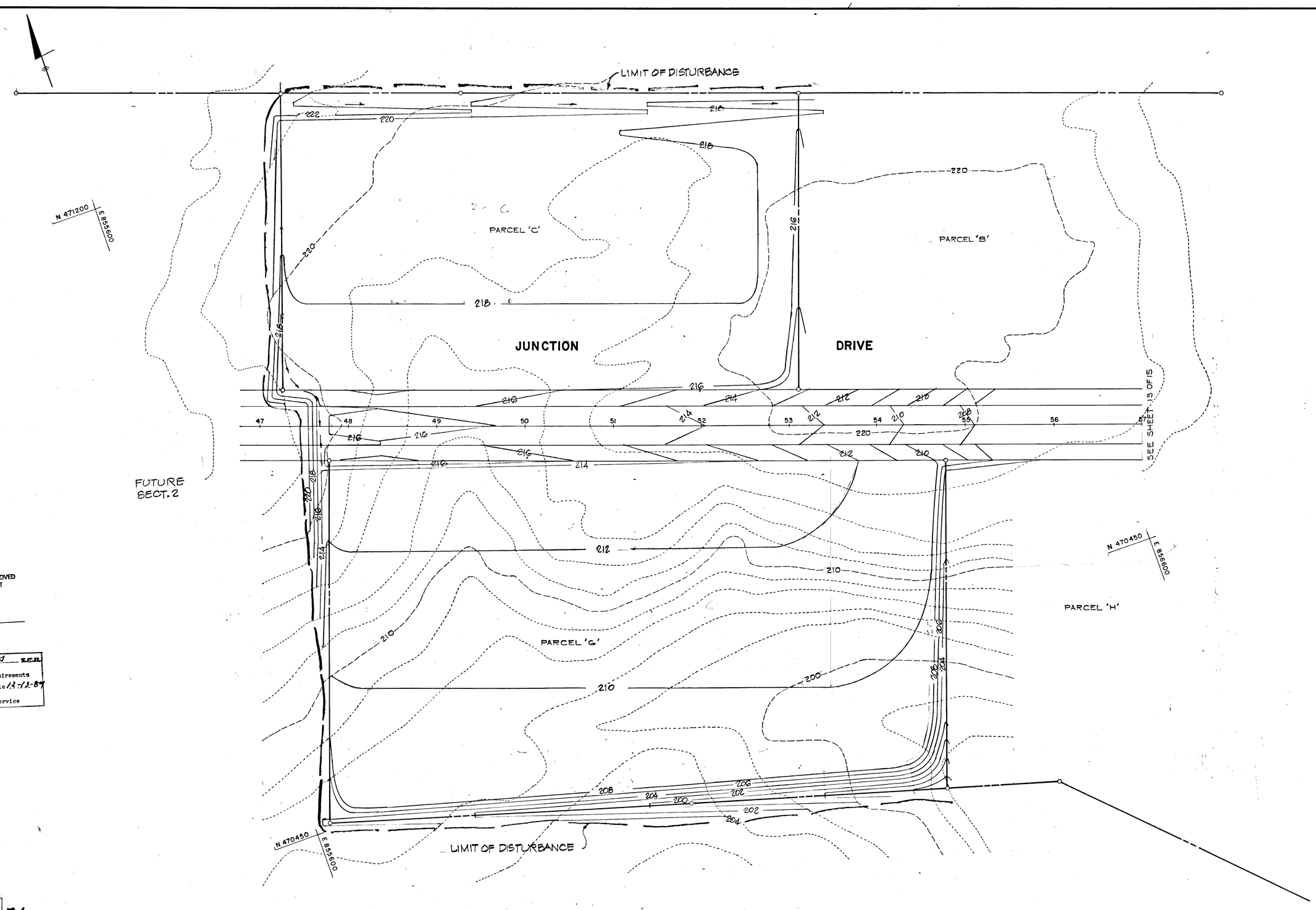
JUNCTION INDUSTRIAL PARK SECTION I
ELECTION DISTRICT GILFORD NO. 6

OWNER: JUNCTION LIMITED PARTNERSHIP

SCALE AS SHOWN

SHEET 13 OF 15

F-84-201




THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Approved _____ Date _____
Howard S.C.D.

Reviewed for Howard scd
Name
and meets Technical Requirements
Date 12-12-84
Signature
U.S. Soil Conservation Service

OFFICE OF PLANNING & ZONING
12-14-84
CHIEF - DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

#1111

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 12-17-84

WHITNEY BAILEY COX AGNANI
CONSULTING ENGINEERS
1850 York Road
Timonium Md. 21093
301-252-6060

STATE OF MARYLAND

| | | | | | |
|---|---|---|---|---|---|
| DES: P.D. | | | | | |
| DRN: P.D. | | | | | |
| CHK: B.D.J. | | | | | |
| DATE 10-22-84 | BY | NO. | REVISION | DATE | |

ROUGH GRADING PLAN FOR JUNCTION INDUSTRIAL PARK

600' SCALE MAP NO. _____ BLOCK NO. _____

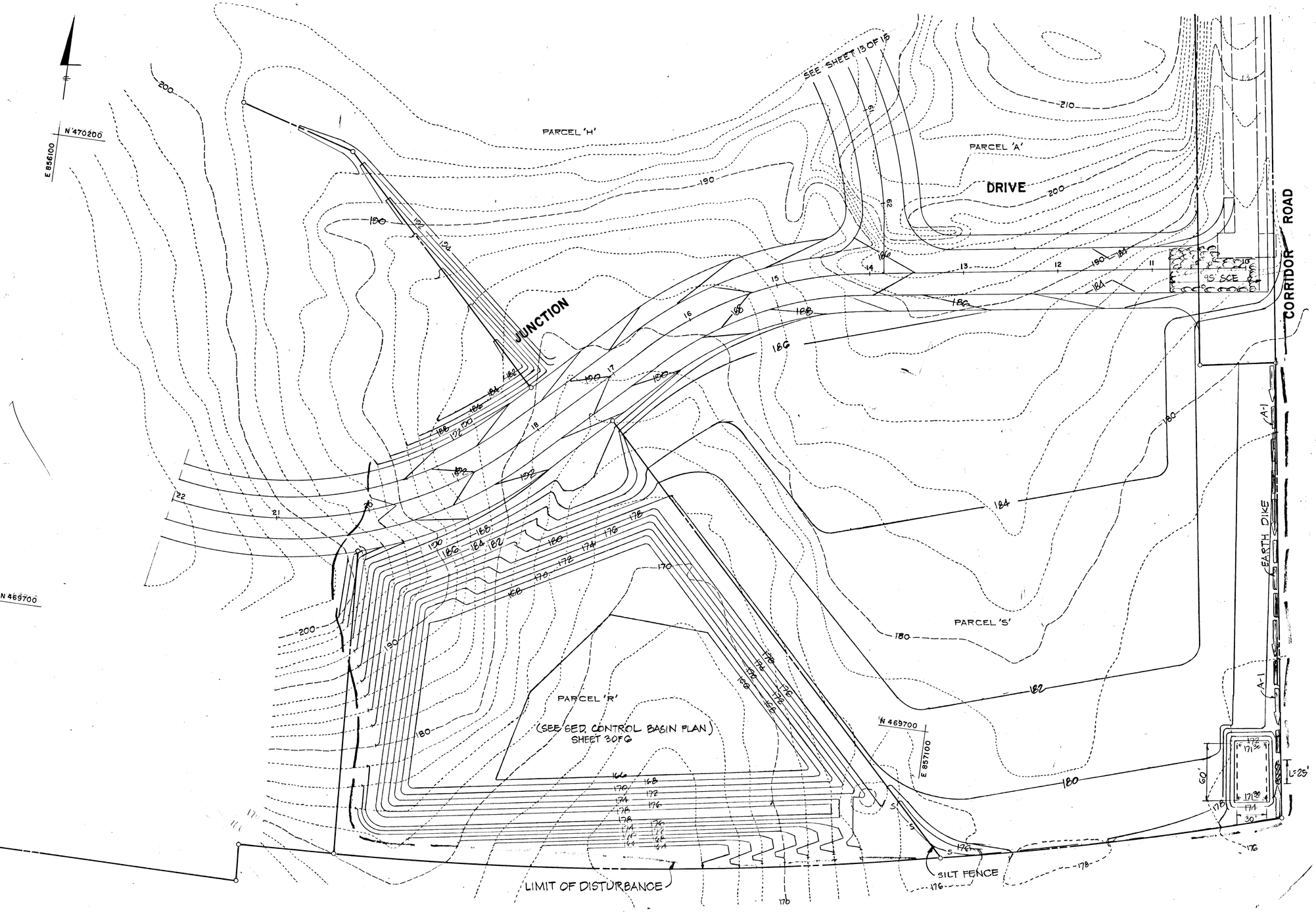
JUNCTION INDUSTRIAL PARK SECTION I
ELECTION DISTRICT GILFORD NO. 6

OWNER: JUNCTION LIMITED PARTNERSHIP

SCALE AS SHOWN

SHEET 14 OF 15

F-84-204




Reviewed for Howard S.C.D.
Name
and meets Technical Requirements
Signature Date 12-13-84
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Approved Date 12-13-84
Howard S.C.D.

OFFICE OF PLANNING & ZONING
CHIEF - DIVISION OF LAND DEVELOPMENT — DATE AND ZONING ADMINISTRATION 12-14-84

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING 12-17-84
DATE

WHITNEY BAILEY COX MAGNANI
CONSULTING ENGINEERS
1850 York Road
Timonium Md. 21093
301-252-6060

DES: P.D.
DRN: P.D.
CHK: B.D.J.
DATE: 11-22-84

| BY | NO. | REVISION | DATE |
|---|---|---|---|

ROUGH GRADING PLAN FOR JUNCTION INDUSTRIAL PARK

600 SCALE MAP NO. BLOCK NO

JUNCTION INDUSTRIAL PARK SECTION I
ELECTION DISTRICT GILFORD NO. 6

OWNER: JUNCTION LIMITED PARTNERSHIP

SCALE AS SHOWN

SHEET 15 OF 15

F-84-204