# MARATHON COUNTY, WISCONSIN

# VILLAGE OF ROTHSCHILD

## PLAN OF PROPOSED IMPROVEMENT

# CTH "XX"

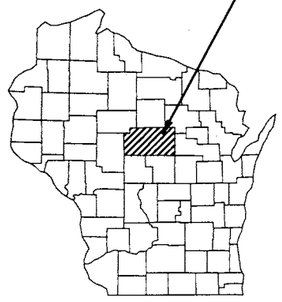
## INDUSTRIAL PARK DRIVE - TRAILWOOD LANE

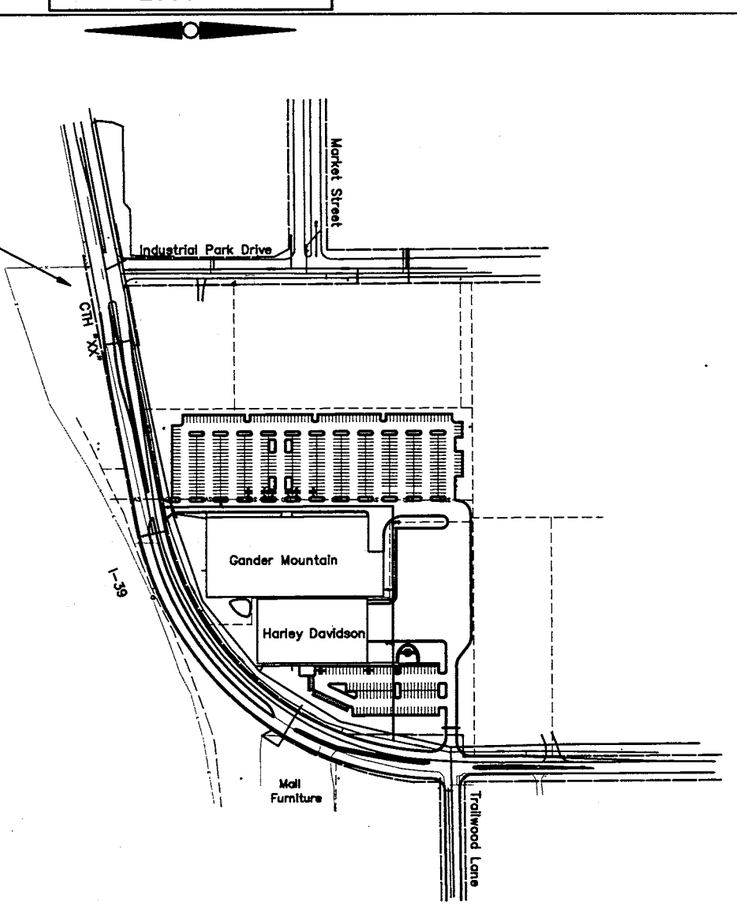
**INDEX OF SHEETS**



**TOTAL SHEETS = 72**

**PROJECT NUMBER**
2003492






N.T.S.

## UTILITIES

WISCONSIN PUBLIC SERVICE
P.O. BOX 1166
WAUSAU, WI 54401
1–800–847–9440

CHARTER COMMUNICATIONS
400 SCOTT ST.
P.O. BOX 1818
WAUSAU, WI 54401
(715) 845–4223

VERIZON
521 4TH ST.
WAUSAU, WI 54403
(715) 847–1511

VILLAGE OF ROTHSCHILD
211 GRAND AVENUE
ROTHSCHILD, WI 54474
(715) 359–3660

DIGGERS HOTLINE
1–800–242–8511

## CONSTRUCTION ENGINEER

SCHNEIDER CONSULTANTS, INC
10208 PARK PLAZA, SUITE A
MOSINEE, WI 54455
(715) 359–9668

**CONVENTIONAL SIGNS**

County Line
Corporate Limits
Property Line
Lot Line
Limited Easement
Existing Right of Way
Proposed New R/W Line
Survey Line
Catch Points
Original Ground
Marsh or Rock Profile
Existing Culvert
Proposed Culvert
Culvert (Profile View)

Combustible Fluids (Under Pressure)
Underground Utilities
WISCONSIN FUEL & LIGHT — GAS
WISCONSIN PUBLIC SERVICE — WPS
GENERAL TELEPHONE — GTE
MOSINEE TELEPHONE — MOSINEE TEL
MARCUS CABLE — TV CABLE
Service Pedestal
Cable Marker
Power Pole
Telephone Pole
Railroads
Marsh
Wooded Area
Silt Fence

** Coordinates on this plan are referenced to an assumed coordinate system

TOTAL NET LENGTH OF CENTERLINE = 2300'

THESE PLANS HAVE BEEN REDUCED FROM THEIR ORIGINAL SIZE BY APPROXIMATELY 50% SCALES AS SHOWN ARE INTENDED FOR THE FULL–SIZE (100%) SHEETS.

ORIGINAL PLANS PREPARED BY
SCHNEIDER CONSULTANTS

WISCONSIN
RICHARD H. SCHNEIDER
E-13654
SCHOFIELD, WI
PROFESSIONAL ENGINEER

7/3/03
Date
RICHARD H. SCHNEIDER, P.E.

## LIST OF STANDARD ABBREVIATIONS

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ABUT | Abutment | DIST | District | MP | Marker Post | RCHECP | Reinforced Concrete Horizontal Elliptical Culvert Pipe | TI | Temporary Interest |
| AP | Access Point | DG | Ditch Grade | M | Marsh | | | TLE | Temporary Limited Easement |
| AC | Acre | DWY | Driveway | ML or M/L | Match Line | | | | |
| AGG | Aggregate | E | East | MATL | Material | RCPA | Reinforced Concrete Pipe Arch | TPM | Temporary Pavement Marking |
| AH | Ahead | X | East Grid Coordinate | Mg | Megagram | | | | |
| ∠ | Angle | EB | Eastbound | m | Meter | RCPCP | Reinforced Concrete Pipe Cattle Pass | TPMRT | Temporary Pavement Marking, Removable Tape |
| ASPH | Asphaltic | ELEC | Electric (al) | mm | Millimeter | | | | |
| AC | Asphalt Cement | EL or ELEV | Elevation | NOM | Nominal | RCPSS | Reinforced Concrete Pipe Storm Sewer | MBM | Thousand Feet Board Measure |
| APM | Asphaltic Plant Mix | EMB | Embankment | NRCPSS | Non Reinforced Concrete Pipe Storm Sewer | | | | |
| AVG | Average | EW | Endwall | | | REBAR | Reinforcement Bar | t | Ton |
| ADT | Average Daily Traffic | ENT | Entrance | NC | Normal Crown | REINF | Reinforcing or Reinforcement | TC | Top of Curb |
| B & B | Balled and Burlapped | ESALS | Equivalent Single Axle Loads | NW or N/W | Normal Water | | | T or TN | Town |
| B & P | Balled and Potted | EXC | Excavation | N | North | REL | Relocate (d) | TRANS | Transition |
| BK | Back | EBS | Excavation Below Subgrade | Y | North Grid Coordinate | REM | Remaining | TL or T/L | Transit Line |
| BF | Back Face | EXIST | Existing | NB | Northbound | REP | Representative | T | Trucks (percent of) |
| BR | Bare Root | EXP | Expansion | NO | Number | REQD | Required | TYP | Typical |
| BRP | Bare Root Potted | FF | Face to Face | OBLIT | Obliterate | RES | Residence or Residentaial | UNCL | Unclassified |
| BL or B/L | Base Line | FP | Fence Post | OL | Out Lot | RW | Retaining Wall | UG | Underground Cable |
| BM | Bench Mark | FERT | Fertilize | OD | Outside Diameter | RT | Right | USH | United States Highway |
| BLK | Block | FE | Field Entrance | PSD | Passing Sight Distance | RHF | Right-Hand Forward | VAR | Variable |
| BR | Bridge | F | Fill | PAVT | Pavement | R/W | Right-of-Way | V | Velocity or Design Speed |
| C | Celsius | FG | Finished Grade | PCP | Pipe Cattle Pass | R | River | VERT | Vertical |
| CB | Catch Basin | FL or F/L | Flow Line | PLE | Permanent Limited Easement | RD | Road | VC | Vertical Curve |
| CL or C/L | Center Line | FT | Foot | | | RDWY | Roadway | VIT | Vitrified |
| CC | Center to Center | FTG | Footing | PU | Pipe Underdrain | SALV | Salvaged | VOL | Volume |
| Δ | Central Angle or Delta | FDN | Foundation | PUDT | Pipe Underdrain Drain Tile | SAN S | Sanitary Sewer | WM | Water Main |
| m3 | Cubic Meter | GN | Grid North | | | SEC | Section | WV | Water Valve |
| CONC | Concrete | ha | Hectare | PUU | Pipe Underdrain Unperforated | SHLDR | Shoulder | W | Well |
| CORR | Corrugated | HR | Handicap Ramp | | | SHR | Shrinkage | W | West |
| CACP | Corrugated Aluminum Culvert Pipe | HT | Height | PT | Point | SW | Sidewalk | WB | Westbound |
| | | HES | High Early Strength | PC | Point of Curvature | S | South | YD | Yard |
| CAPA | Corrugated Aluminum Pipe Arch | CWT | Hundredweight | PI | Point of Intersection | SB | Southbound | | |
| | | HYD | Hydrant | PRC | Point of Reverse Curvature | SP | Special | | |
| CSCP | Corrugated Steel Culvert Pipe | IN DIA | Inch Diameter | | | SC | Special Crossing | | |
| | | INL | Inlet | PT | Point of Tangency | SPECS | Specifications | | |
| CSPA | Corrugated Steel Pipe Arch | ID | Inside Diameter | POC | Point on Curve | SQ | Square | | |
| | | INTERS | Intersection | POT | Point on Tangent | SF or SQ FT | Square Feet | | |
| CSPCP | Corrugated Steel Pipe Cattle Pass | I | Intersection Angle | PVC | Polyvinyl Chloride | m2 | Square Meter | | |
| | | INV | Invert | PCC | Portland Cement Concrete | SY or SQ YD | Square Yard | | |
| CO | County | IP | Iron Pipe or Pin | | | STD | Standard | | |
| CTH | County Trunk Highway | JT | Joint | LB | Pound | SDD | Standard Detail Drawings | | |
| CR | Creek | JCT | Junction | PSI | Pounds Per Square Inch | STH | State Trunk Highways | | |
| CR | Crushed | kg | Kilogram | PE | Private Entrance | STA | Station | | |
| CY or CUYD | Cubic Yard | km | Kilometer | PROJ | Project | SSD | Stopping Sight Distance | | |
| CULT | Cultivated | kPa | Kilopascal | QCD | Quitclaim Deed | SS | Storm Sewer | | |
| CULV | Culvert | LC | Land Contract | R | Radius | SPP | Structural Plate Pipe | | |
| CP | Culvert Pipe | LHF | Left-Hand Forward | RP | Radius Point | SPPA | Structural Plate Pipe Arch | | |
| C & G | Curb and Gutter | L | Length of Curve | RR | Railroad | STR | Structure or Structural | | |
| (D) | Deed | LIN FT or LF | Linear Foot | RY | Railway | SUBD | Subdivision | | |
| DEF | Deformed | L | Liter | R | Range | SE | Superelevation | | |
| D | Degree of Curve | LC | Long Chord of Curve | RECY | Recycled | SURF | Surface | | |
| DHV | Design Hour Volume | LS | Lump Sum | RL or R/L | Reference Line | SL or S/L | Survey Line | | |
| DIA | Diameter | MAINT | Maintenance | RP | Reference Point | T | Tangent | | |
| D | Directional Distribution | MGR | Manager | RCCP | Reinforced Concrete Culvert Pipe | TEL | Telephone | | |
| DISCH | Discharge | MH | Manhole | | | TEMP | Temporary | | |

## GENERAL NOTES

CRUSHED AGGREGATE BASE COURSE, IS CRUSHED STONE

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

DISTURBED AREA WITHIN THE RIGHT-OF-WAY SHALL BE FERTILIZED, SEEDED AND MULCHED AS DIRECTED BY THE ENGINEER.

THE LOCATION OF DRIVEWAYS ARE SHOWN ON PLANS.

TACK COAT HAS BEEN ESTIMATED AT AN APPLICATION RATE OF 0.025 GALLONS PER SQUARE YARD AND WILL BE PLACED BETWEEN LAYERS OF ASPHALTIC PAVEMENT.

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

THE ASPHALTIC CONCRETE PAVEMENT, TYPE E-1, SHALL BE CONSTRUCTED AS FOLLOWS.

5-INCH PAVEMENT: 2-1 1/2-INCH NOMINAL LIFTS; 1-2-INCH NOMINAL LIFT

WHEN THE QUANTITY OF THE ITEM OF BASE OR SURFACE COURSE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

## UTILITY OWNERS:

**GAS DISTRIBUTION:**
Wisconsin Fuel & Light
211 Forest Street
Wausau, WI 54402
Attn.: Dee Medhin
1-715-845-4223

**TELEPHONE:**
Verizon
521 4th Street
Wausau, WI 54403
Attn.: Janet Mitwede
1-715-847-1511

**WATER & SANITARY SEWER:**
Village of Rothschild
211Grand Avenue
Rothschild, WI 54474
Attn.: George Peterson
1-715-359-3660

**ELECTRIC:**
Wisconsin Public Service
1700 Sherman Street
Wausau, WI 54401
Attn.: Clay Vircks
1-715-848-7371

**CABLE TELEVISION:**
Charter Communications
400 Scott Street
Wausau, WI 54401
Attn.: Jeff Kulaf
1-715-845-4223

**DEPARTMENT OF NATURAL RESOURCES:**
Department of Natural Resources
473 Griffith Avenue
Wisconsin Rapids, WI 54494
Attn.: Cameron Bump
1-715-421-7800

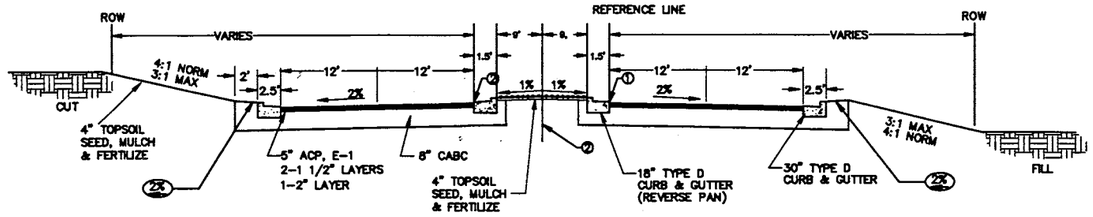
**DIGGERS HOTLINE:**
Diggers Hotline
1-800-242-8511

SHEETS

| PLAN/PROFILE | CROSS- SECTION |
|---|---|
| CTH XX 5.0 - 5.3 | 9.0 - 9.10 |
| TRAILWOOD LANE 5.4 | 9.11 |

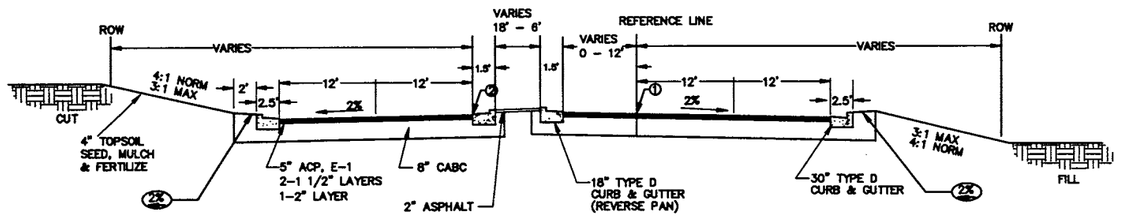
N.T.S.


| LOCATION MAP | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 1.2 |
|---|---|---|---|---|---|



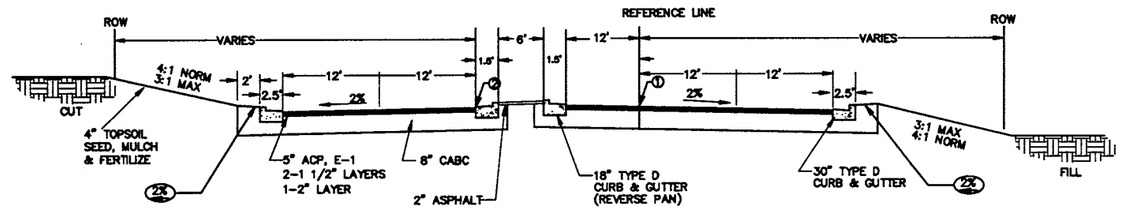

TYPICAL SECTION – CTHXX

STA 0+37.10 – STA 2+45.39
STA 6+9.70 – STA 12+50



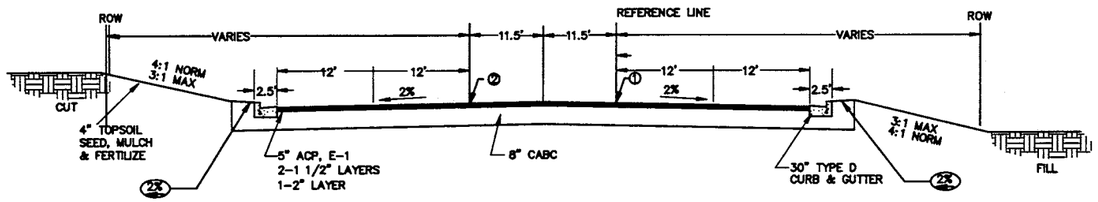

TYPICAL SECTION – CTHXX

STA 2+45.39 – STA 3+65.23



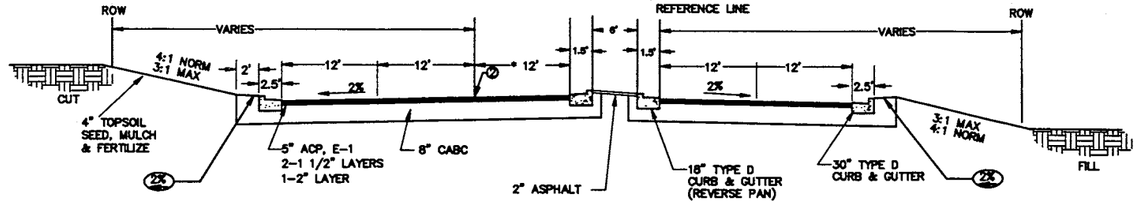

TYPICAL SECTION – CTHXX

STA 3+65.23 – STA 5+35.74



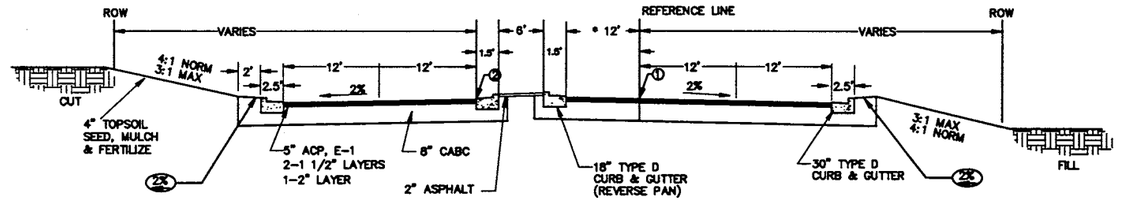

TYPICAL SECTION – CTHXX

STA 5+35.74– STA 6+9.70
STA 12+50– STA 13+18.82
STA 16+87.83– STA 17+68.38



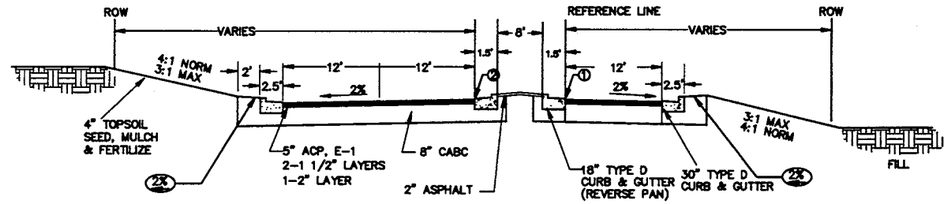

TYPICAL SECTION – CTHXX

STA 13+9.70 – STA 14+38.39
• TRANSITION – 12' @ STA 14+38.39 to 0' @ STA 15+62.81



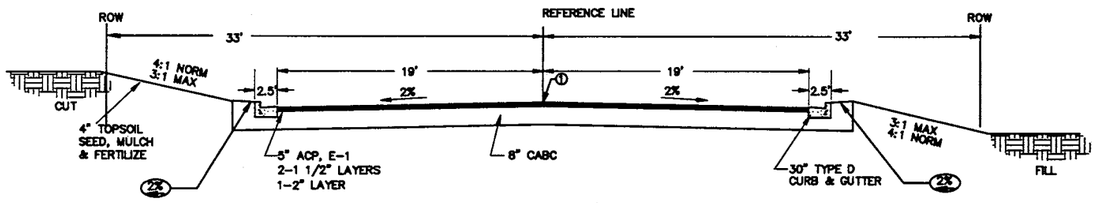

TYPICAL SECTION – CTHXX

STA 14+38.39 – STA 16+87.83
• TRANSITION – 0' @ STA 14+38.39 to 12' @ STA 15+70.91




TYPICAL SECTION – CTHXX

STA 18+12.14 – STA 19+72.10




TYPICAL SECTION – TRAILWOOD LANE

STA 0+00– STA 3+25

① POINT REFFERRED TO ON PROFILE & PLAN REFERENCE LINE

② POINT REFFERRED TO ON PROFILE

| TYPICAL SECTIONS | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 2.0 | |
|---|---|---|---|---|---|---|

Industrial Park Drive

CTH "XX"

I-39

Gander Mountain

Harley Davidson

Mall Furniture

Trailwood Lane

## Stage 2

Complete remaining roadway removals and preparations. Build new Mall Furniture entrance.

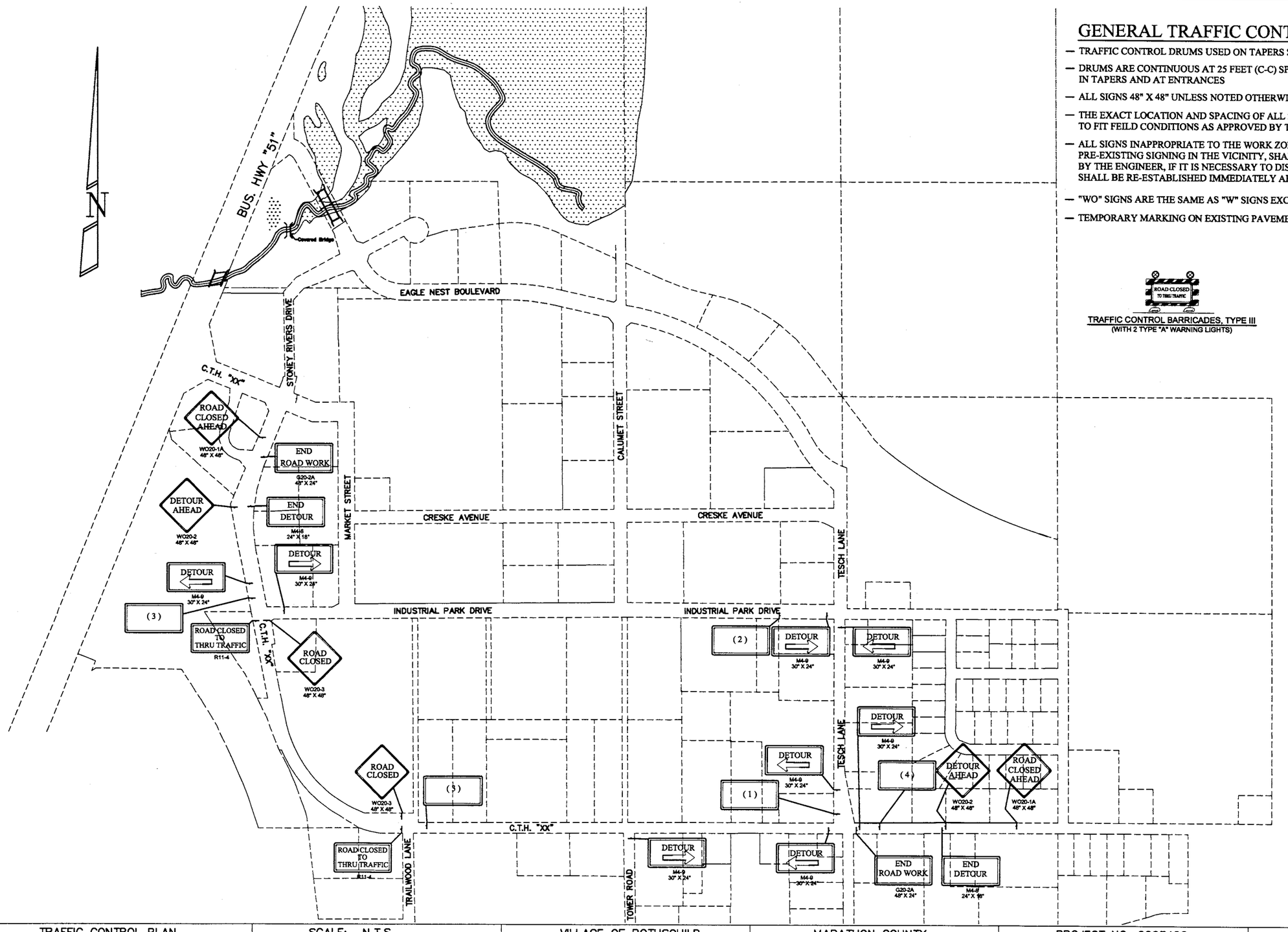
## Stage 3

Place curb & gutter at new entrance. Remove original Mall Furniture entrance. Place remaining curb & gutter.

## Stage 1

Complete east bound lanes to existing Mall Furniture entrance. Complete to be gravel and 2 accessible lanes for semi traffic. Trailwood lane also to be graveled and one side complete prior to closing other lane.

| STAGING PLAN | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 2.3 |
|---|---|---|---|---|---|




## GENERAL TRAFFIC CONTROL NOTES

- TRAFFIC CONTROL DRUMS USED ON TAPERS SHALL HAVE WARNING LIGHTS, TYPE C
- DRUMS ARE CONTINUOUS AT 25 FEET (C-C) SPACING EXCEPT AT CROSS ROADS, IN TAPERS AND AT ENTRANCES
- ALL SIGNS 48" X 48" UNLESS NOTED OTHERWISE
- THE EXACT LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FEILD CONDITIONS AS APPROVED BY THE ENGINEER
- ALL SIGNS INAPPROPRIATE TO THE WORK ZONE TRAFFIC CONTROL (WZTC), INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER, IF IT IS NECESSARY TO DISTURB SIGNS ON SIDEROADS, SAID SIGNS SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER CONSTRUCTION
- "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE
- TEMPORARY MARKING ON EXISTING PAVEMENT TO REMAIN SHALL BE REMOVABLE TAPE

ROAD CLOSED TO THRU TRAFFIC

TRAFFIC CONTROL BARRICADES, TYPE III
(WITH 2 TYPE "A" WARNING LIGHTS)

CTH XX DETOUR
ROAD OPEN TO
TRAIL WOOD LANE
MALL FURNITURE
COUNTRY HEARTH BREAD
CARPENTERS UNION
BRB AUTO BODY
TRUCK COUNTRY
L&S ELETRIC
LAMER BUS
CULLIGAN
POMPS TIRE
48" X 96" (1)

CTH XX DETOUR
MALL FURNITURE
COUNTRY HEARTH BREAD
CARPENTERS UNION
BRB AUTO BODY
TRUCK COUNTRY
L&S ELETRIC
LAMER BUS
CULLIGAN
POMPS TIRE
48" X 96" (2)

CTH XX DETOUR
MALL FURNITURE
COUNTRY HEARTH BREAD
CARPENTERS UNION
BRB AUTO BODY
TRUCK COUNTRY
L&S ELETRIC
LAMER BUS
CULLIGAN
POMPS TIRE
48" X 96" (3)

ROAD OPEN TO
TRAIL WOOD LANE
MALL FURNITURE
COUNTRY HEARTH BREAD
CARPENTERS UNION
BRB AUTO BODY
TRUCK COUNTRY
L&S ELETRIC
LAMER BUS
CULLIGAN
POMPS TIRE
48" X 96" (4)

| TRAFFIC CONTROL PLAN | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 2.4 |
|---|---|---|---|---|---|


| FILL STORAGE PLAN | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 2.5 |
|---|---|---|---|---|---|

GENERAL NOTES
1. ALL RADIUS DIMENSIONS ARE MEASURED TO BACK OF CURB

2. STATION OFFSETS AND COORDINATES SHOWN IN LAYOUT TABLES ARE TO CENTER OF RADIUS.

INDUSTRIAL PARK DRIVE

C.T.H. "XX"

EXISTING CURB

CONCRETE CURB & GUTTER TYPE D 30-INCH

CONCRETE CURB & GUTTER TYPE D 18-INCH

CONCRETE CURB & GUTTER TYPE D 30-INCH

C.T.H. "XX"

0+00

1+00

2+00

PC = 1+71.17

1

2

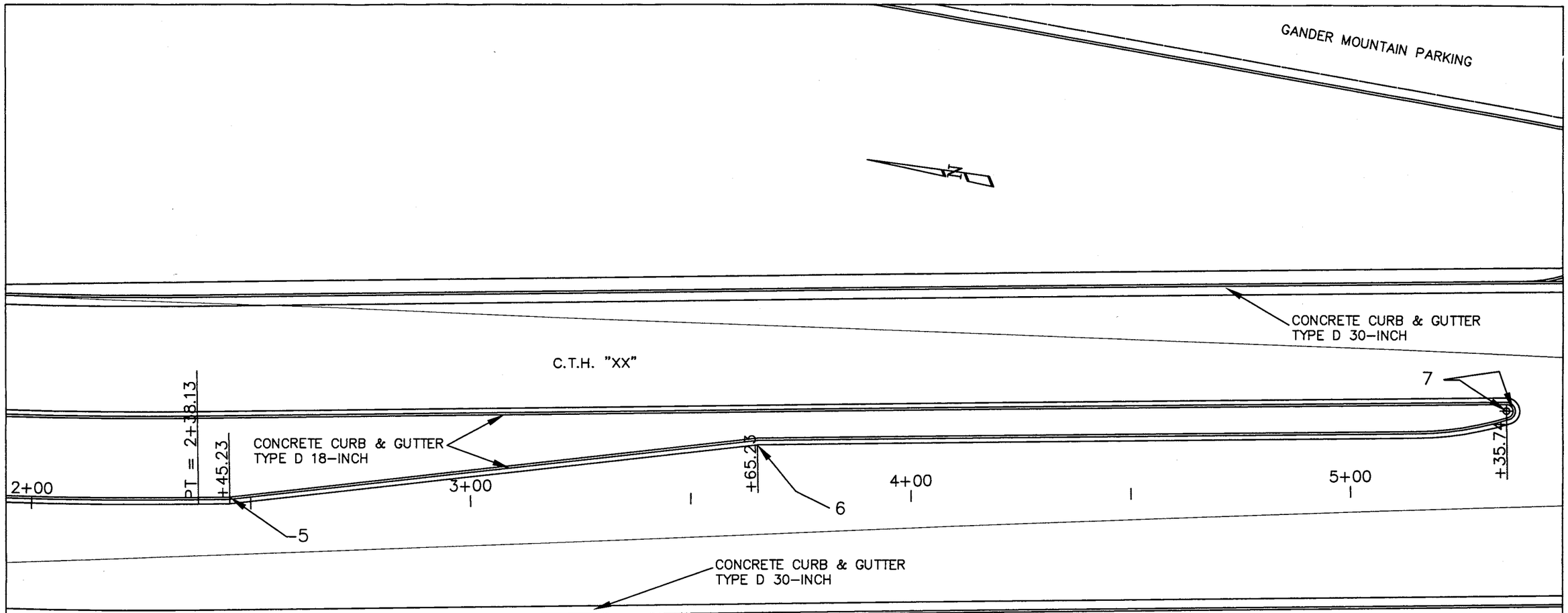
3

4

## MATCH INTO EXISTING CURB TABLE

| LOCATION | | COORDINATES | | | | | |
|---|---|---|---|---|---|---|---|
| NO. | STATION | OFFSET | NORTHING | | EASTING | | RADIUS |
| 1 | 0+37.10 | 0.17 | 166321.54 | | 279212.33 | | - |
| 2 | 1+29.41 | -21.93 | 166232.74 | | 279245.87 | | - |
| 3 | 1+06.89 | -45.99 | 166258.12 | | 279266.90 | | - |
| 4 | 0+49.47 | 23.45 | 166306.34 | | 279190.79 | | - |
| | | | | | | | |

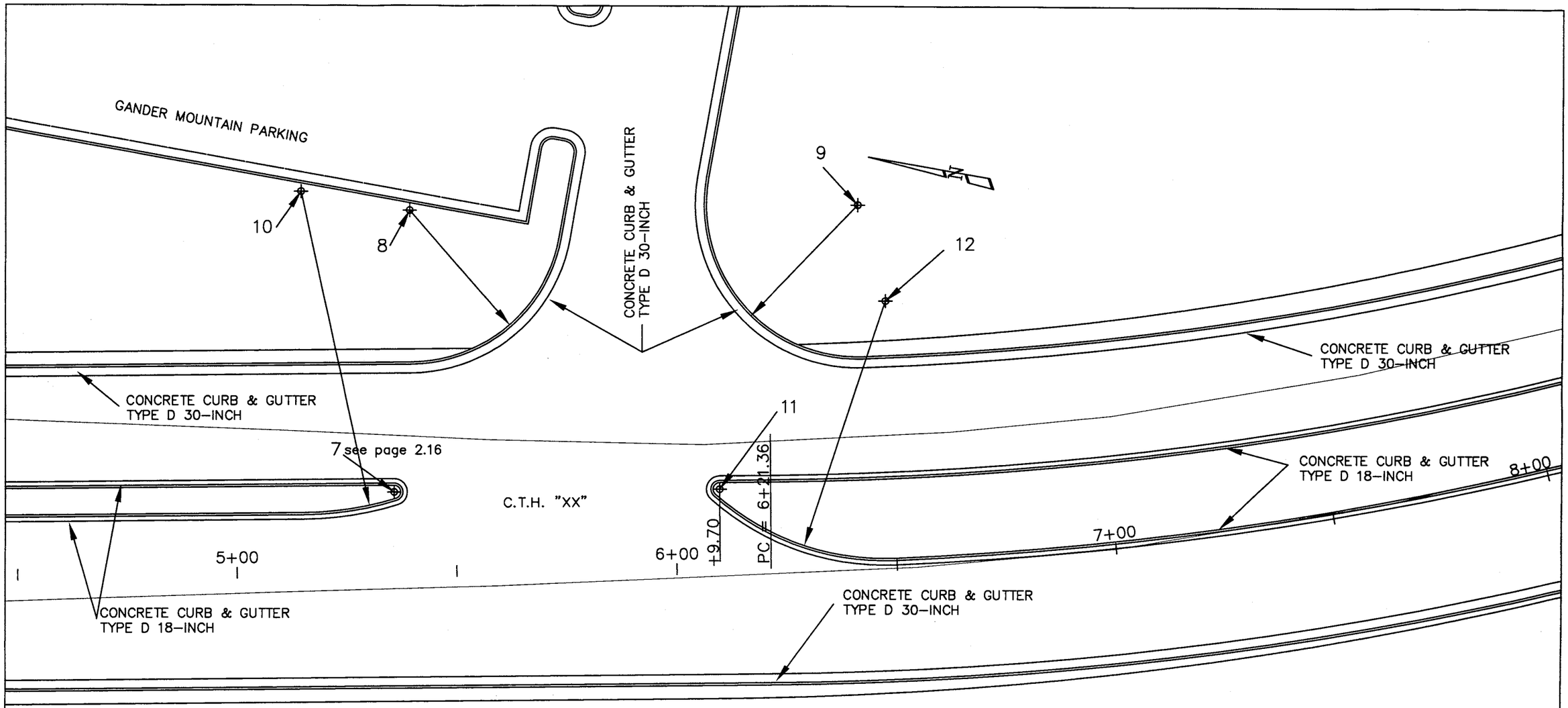
| | | | | | | |
|---|---|---|---|---|---|---|
| INTERSECTION DETAILS | PROJECT NUMBER: 2003492 | HWY: C.T.H. XX & TRAILWOOD LANE | COUNTY:MARATHON | N.T.S. | SHEET NO: 2.6 | E |




GENERAL NOTES
1. ALL RADIUS DIMENSIONS ARE MEASURED TO BACK OF CURB
2. STATION OFFSETS AND COORDINATES SHOWN IN LAYOUT TABLES ARE TO CENTER OF RADIUS.

## RADIUS LAYOUT TABLE

| LOCATION | | | COORDINATES | | | |
|---|---|---|---|---|---|---|
| NO. | STATION | OFFSET | NORTHING | | EASTING | RADIUS |
| 5 | 2+45.23 | 0.00 | 166115.46 | | 279241.16 | - |
| 6 | 3+65.23 | -12.00 | 165999.88 | | 279275.59 | - |
| 7 | 5+35.74 | -18.00 | 165033.56 | | 279313.67 | 1.00 |
| | | | | | | |




GENERAL NOTES
1. ALL RADIUS DIMENSIONS ARE MEASURED TO BACK OF CURB

2. STATION OFFSETS AND COORDINATES SHOWN IN LAYOUT TABLES ARE TO CENTER OF RADIUS.

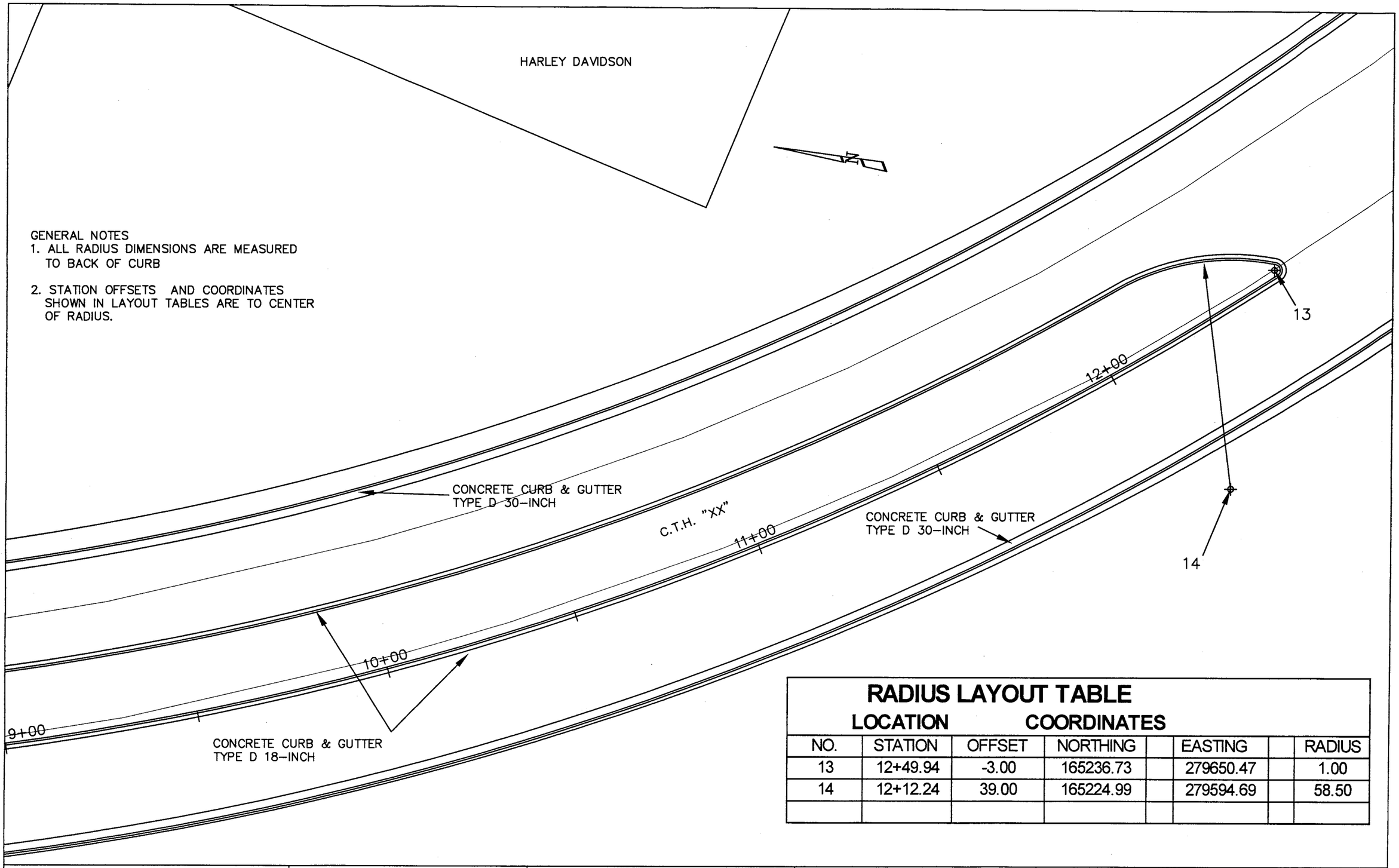
## RADIUS LAYOUT TABLE

| LOCATION | | COORDINATES | | | | |
|---|---|---|---|---|---|---|
| NO. | STATION | OFFSET | NORTHING | | EASTING | | RADIUS |
| 8 | 5+39.84 | -82.00 | 165841.61 | | 279377.29 | | 34.50 |
| 9 | 6+44.00 | -82.00 | 165741.66 | | 279396.79 | | 34.50 |
| 10 | 5+15.25 | -86.50 | 165866.61 | | 279377.07 | | 72.50 |
| 11 | 6+09.70 | -18.00 | 165760.93 | | 279327.63 | | 1.00 |
| 12 | 6+49.86 | -60.00 | 165731.61 | | 279376.51 | | 58.00 |
| | | | | | | | |

HARLEY DAVIDSON

GENERAL NOTES
1. ALL RADIUS DIMENSIONS ARE MEASURED TO BACK OF CURB

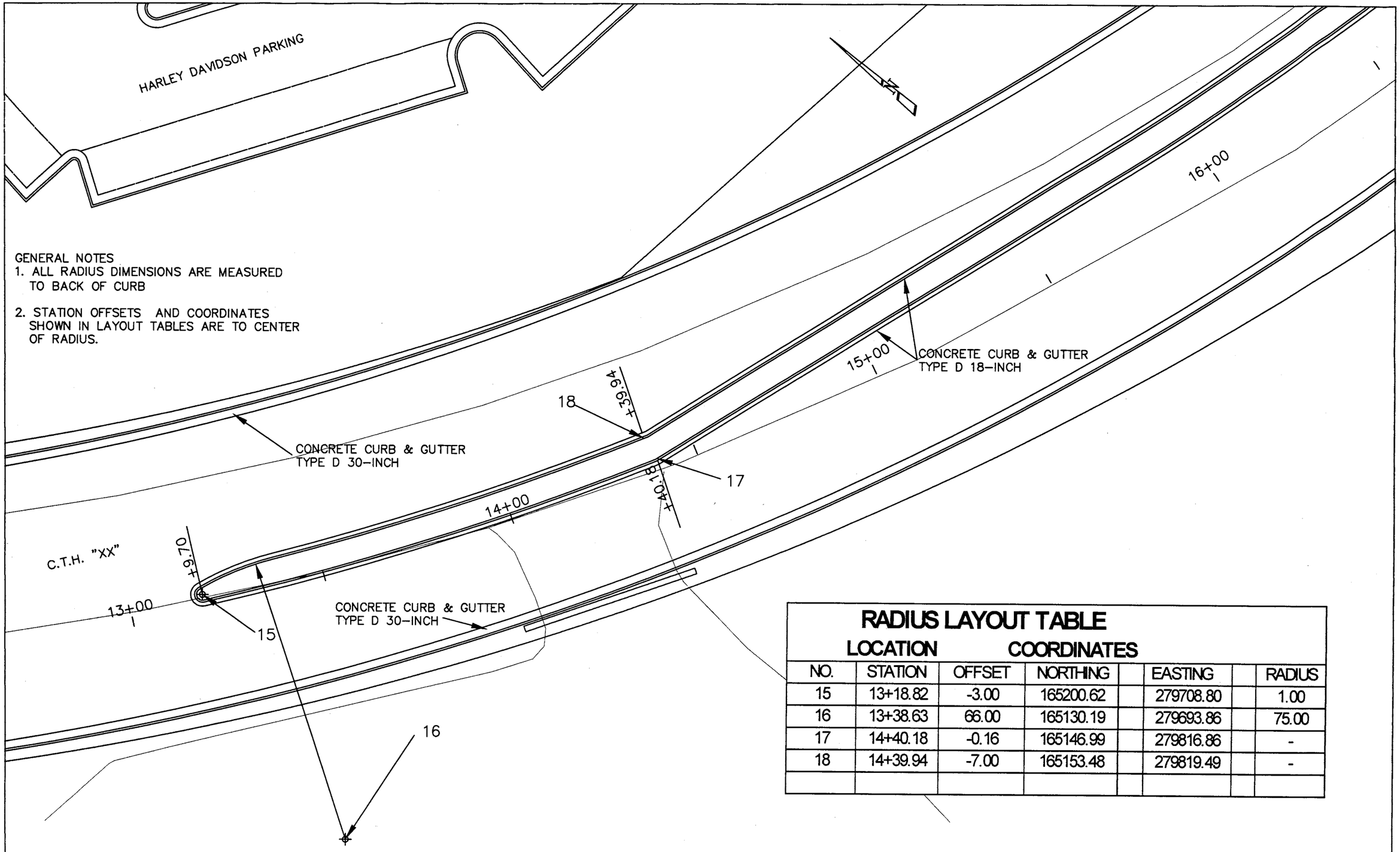
2. STATION OFFSETS AND COORDINATES SHOWN IN LAYOUT TABLES ARE TO CENTER OF RADIUS.




## RADIUS LAYOUT TABLE

| LOCATION | | | COORDINATES | | | | |
|---|---|---|---|---|---|---|---|
| NO. | STATION | OFFSET | NORTHING | | EASTING | | RADIUS |
| 13 | 12+49.94 | -3.00 | 165236.73 | | 279650.47 | | 1.00 |
| 14 | 12+12.24 | 39.00 | 165224.99 | | 279594.69 | | 58.50 |
| | | | | | | | |

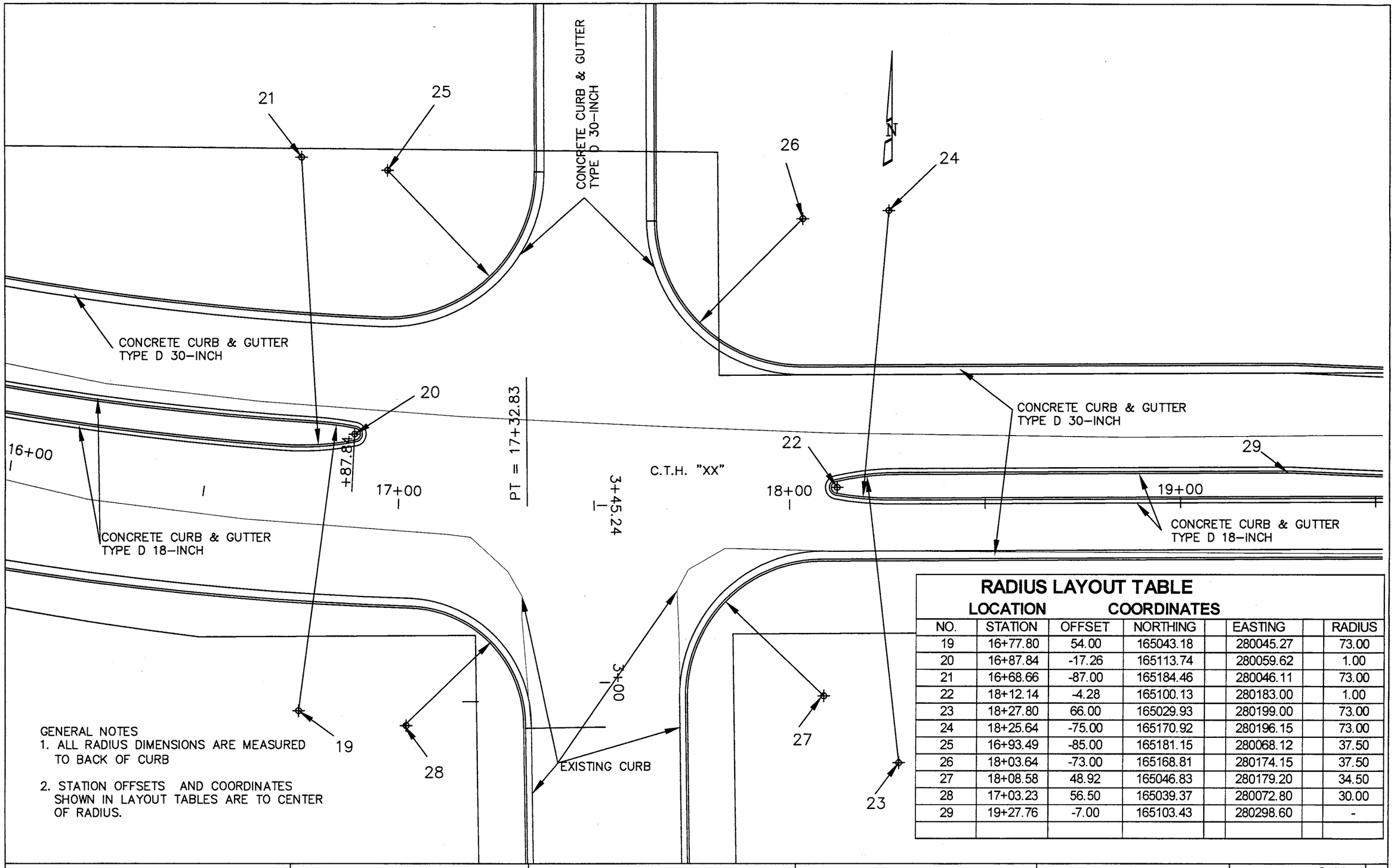
| | | | | | |
|---|---|---|---|---|---|
| INTERSECTION DETAILS | PROJECT NUMBER: 2003492 | HWY: C.T.H. XX & TRAILWOOD LANE | COUNTY:MARATHON | N.T.S. | SHEET NO: 2.9 E |




## RADIUS LAYOUT TABLE

| LOCATION | | COORDINATES | | | | |
|---|---|---|---|---|---|---|
| NO. | STATION | OFFSET | NORTHING | | EASTING | RADIUS |
| 15 | 13+18.82 | -3.00 | 165200.62 | | 279708.80 | 1.00 |
| 16 | 13+38.63 | 66.00 | 165130.19 | | 279693.86 | 75.00 |
| 17 | 14+40.18 | -0.16 | 165146.99 | | 279816.86 | - |
| 18 | 14+39.94 | -7.00 | 165153.48 | | 279819.49 | - |
| | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| INTERSECTION DETAILS | PROJECT NUMBER: 2003492 | HWY: C.T.H. XX & TRAILWOOD LANE | COUNTY: MARATHON | N.T.S. | SHEET NO: 2.10 E |



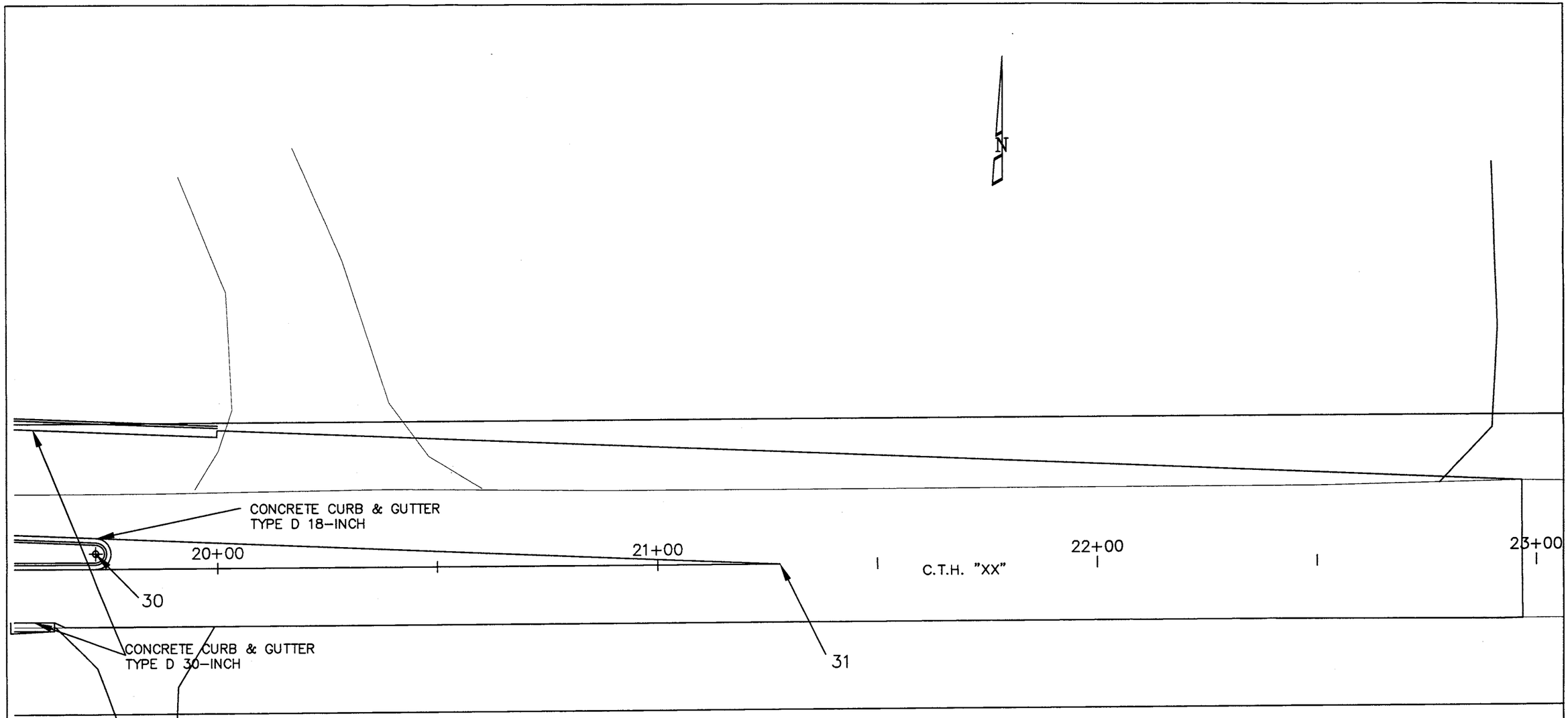

GENERAL NOTES
1. ALL RADIUS DIMENSIONS ARE MEASURED TO BACK OF CURB

2. STATION OFFSETS AND COORDINATES SHOWN IN LAYOUT TABLES ARE TO CENTER OF RADIUS.

## RADIUS LAYOUT TABLE

| | LOCATION | | COORDINATES | | |
|---|---|---|---|---|---|
| NO. | STATION | OFFSET | NORTHING | EASTING | RADIUS |
| 19 | 16+77.80 | 54.00 | 165043.18 | 280045.27 | 73.00 |
| 20 | 16+87.84 | -17.26 | 165113.74 | 280059.62 | 1.00 |
| 21 | 16+68.66 | -87.00 | 165184.46 | 280046.11 | 73.00 |
| 22 | 18+12.14 | -4.28 | 165100.13 | 280183.00 | 1.00 |
| 23 | 18+27.80 | 66.00 | 165029.93 | 280199.00 | 73.00 |
| 24 | 18+25.64 | -75.00 | 165170.92 | 280196.15 | 73.00 |
| 25 | 16+93.49 | -85.00 | 165181.15 | 280068.12 | 37.50 |
| 26 | 18+03.64 | -73.00 | 165168.81 | 280174.15 | 37.50 |
| 27 | 18+08.58 | 48.92 | 165046.83 | 280179.20 | 34.50 |
| 28 | 17+03.23 | 56.50 | 165039.37 | 280072.80 | 30.00 |
| 29 | 19+27.76 | -7.00 | 165103.43 | 280298.60 | - |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| INTERSECTION DETAILS | PROJECT NUMBER: 2003492 | HWY: C.T.H. XX & TRAILWOOD LANE | COUNTY:MARATHON | N.T.S. | SHEET NO: 2.11 E |



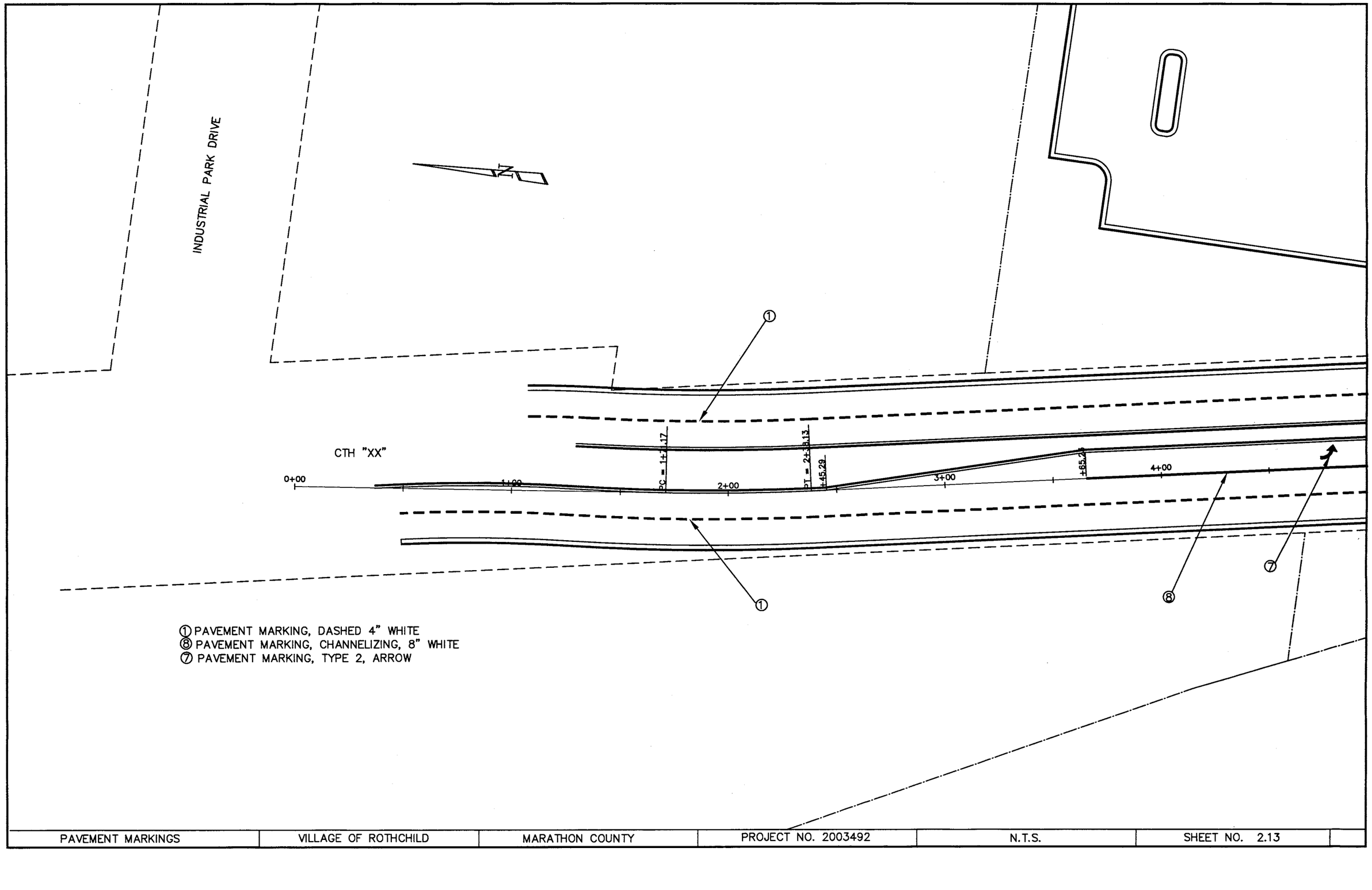

GENERAL NOTES
1. ALL RADIUS DIMENSIONS ARE MEASURED TO BACK OF CURB

2. STATION, OFFSETS AND COORDINATES SHOWN IN LAYOUT TABLES ARE TO CENTER OF RADIUS.

## RADIUS LAYOUT TABLE

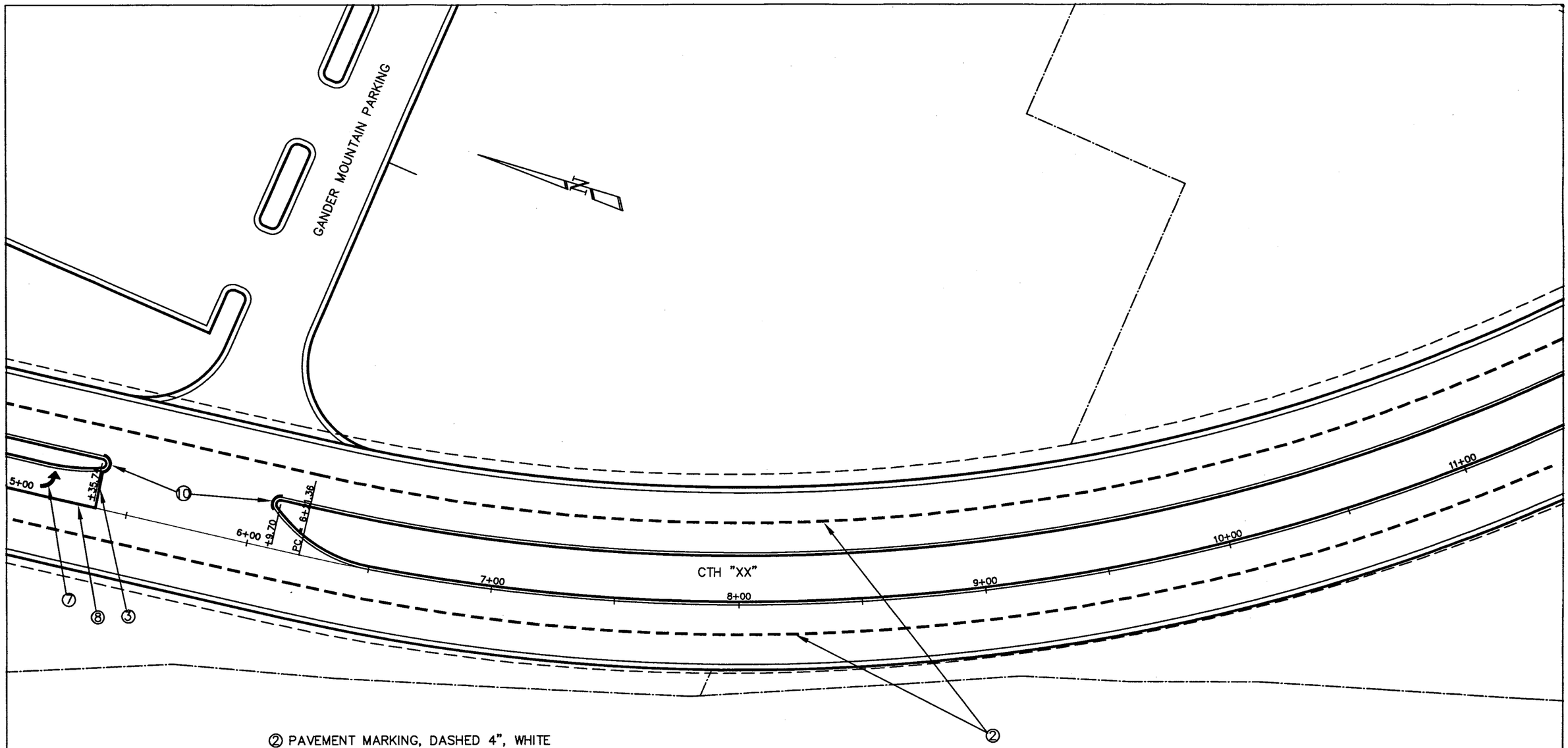
| | LOCATION | | COORDINATES | | | | |
|---|---|---|---|---|---|---|---|
| NO. | STATION | OFFSET | NORTHING | | EASTING | | RADIUS |
| 30 | 19+94.40 | -3 | 165099.76 | | 280365.26 | | 1 |
| 31 | 21+27.80 | 0 | 165097.42 | | 280498.67 | | - |

| | | | | | |
|---|---|---|---|---|---|
| INTERSECTION DETAILS | PROJECT NUMBER: 2003492 | HWY: C.T.H. XX & TRAILWOOD LANE | COUNTY:MARATHON | N.T.S. | SHEET NO: 2.12 E |



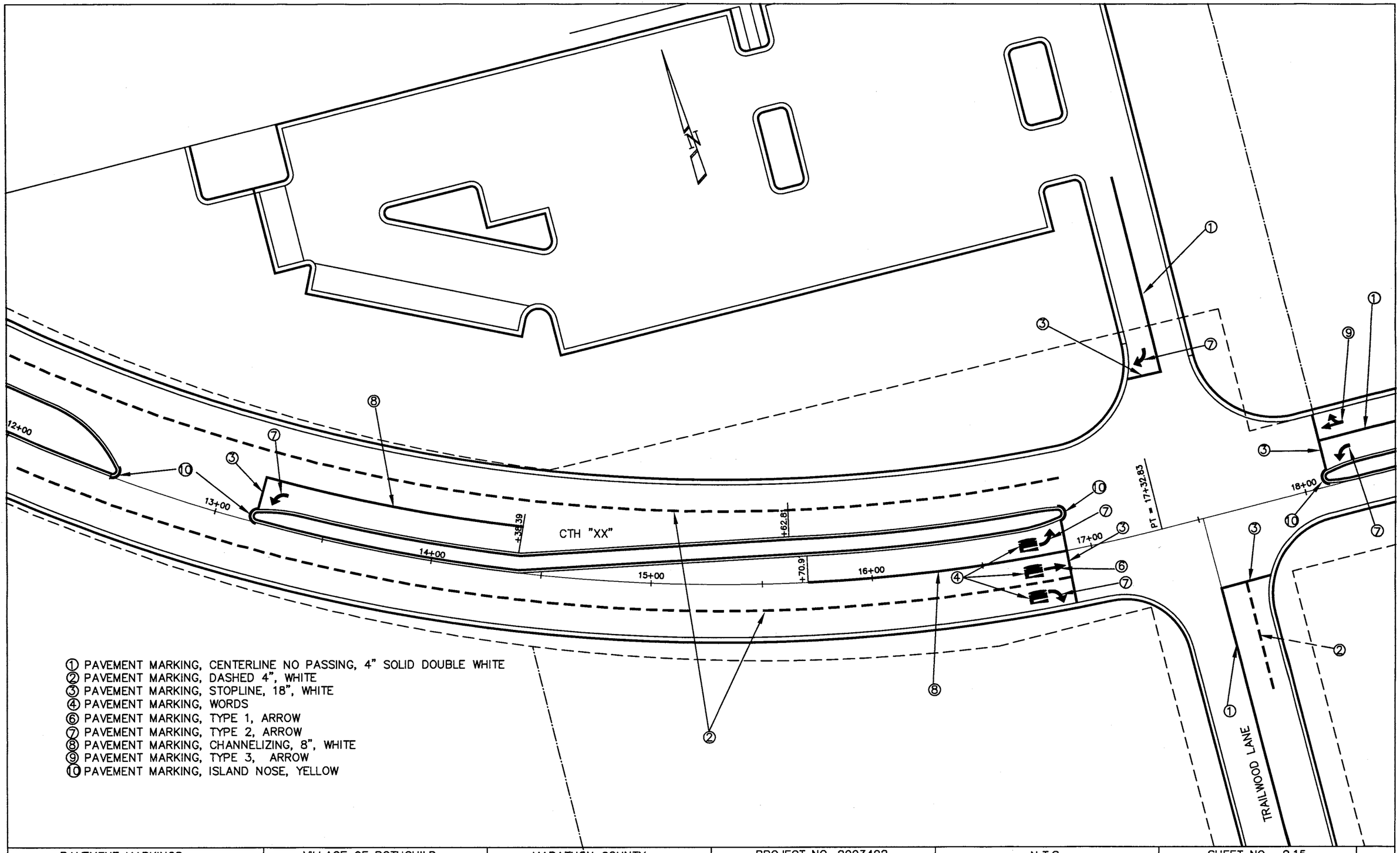

① PAVEMENT MARKING, DASHED 4" WHITE
⑧ PAVEMENT MARKING, CHANNELIZING, 8" WHITE
⑦ PAVEMENT MARKING, TYPE 2, ARROW

| | | | | | |
|---|---|---|---|---|---|
| PAVEMENT MARKINGS | VILLAGE OF ROTHCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | N.T.S. | SHEET NO. 2.13 |



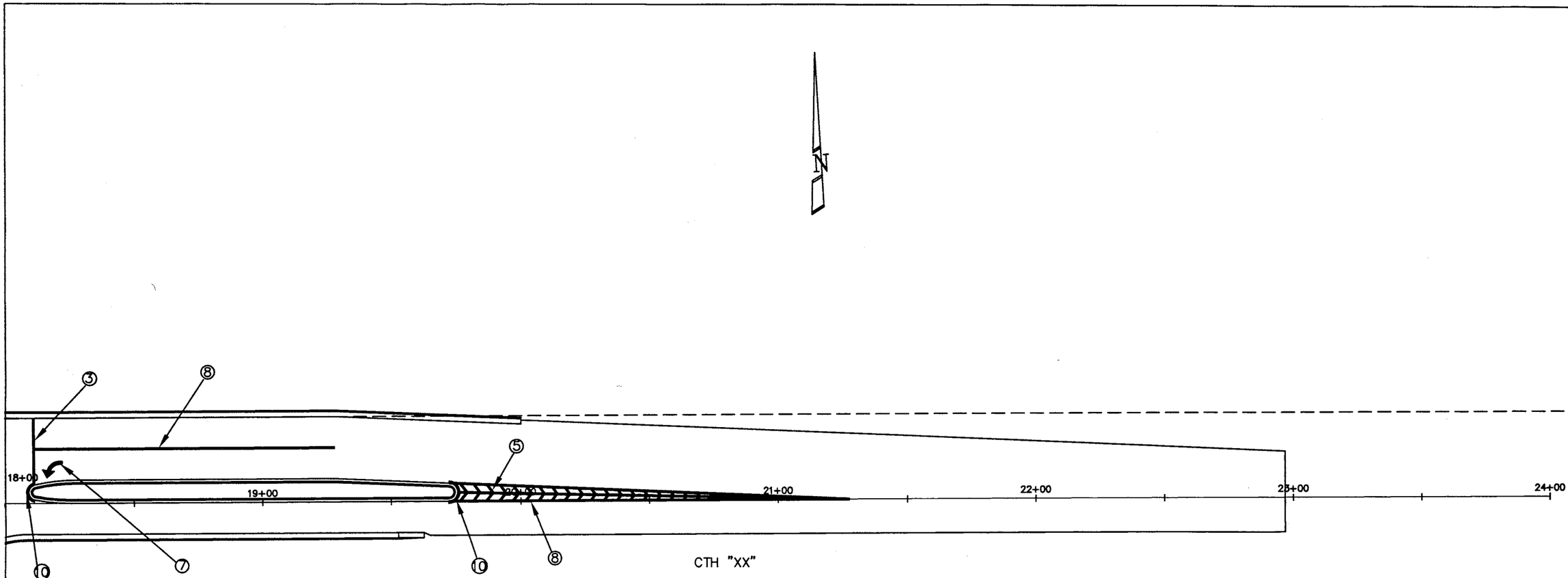

② PAVEMENT MARKING, DASHED 4", WHITE
③ PAVEMENT MARKING, STOPLINE, 18", WHITE
⑦ PAVEMENT MARKING, TYPE 2, ARROW
⑧ PAVEMENT MARKING, CHANNELIZING, 8", WHITE
⑩ PAVEMENT MARKING, ISLAND NOSE, YELLOW

| | | | | | |
|---|---|---|---|---|---|
| PAVEMENT MARKINGS | VILLAGE OF ROTHCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | N.T.S. | SHEET NO. 2.14 |




① PAVEMENT MARKING, CENTERLINE NO PASSING, 4" SOLID DOUBLE WHITE
② PAVEMENT MARKING, DASHED 4", WHITE
③ PAVEMENT MARKING, STOPLINE, 18", WHITE
④ PAVEMENT MARKING, WORDS
⑥ PAVEMENT MARKING, TYPE 1, ARROW
⑦ PAVEMENT MARKING, TYPE 2, ARROW
⑧ PAVEMENT MARKING, CHANNELIZING, 8", WHITE
⑨ PAVEMENT MARKING, TYPE 3, ARROW
⑩ PAVEMENT MARKING, ISLAND NOSE, YELLOW

| PAVEMENT MARKINGS | VILLAGE OF ROTHCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | N.T.S. | SHEET NO. 2.15 |
|---|---|---|---|---|---|




③ PAVEMENT MARKING, STOPLINE, 18", WHITE
⑤ PAVEMENT MARKING DIAGONAL, 12", WHITE (10.0' C–C, TYPICAL)
⑦ PAVEMENT MARKING, TYPE 2, ARROW
⑧ PAVEMENT MARKING, CHANNELIZING, 8", WHITE
⑩ PAVEMENT MARKING, ISLAND NOSE, YELLOW

| PAVEMENT MARKINGS | VILLAGE OF ROTHCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | N.T.S. | SHEET NO. 2.16 | |
|---|---|---|---|---|---|---|

INDUSTRIAL PARK DRIVE

Signs to be moved
replace sign posts

CTH "XX"

0+00 1+00 2+00 3+00 4+00

PC = 1+17.17

PT = 2+38.13

±45.29

±65.23

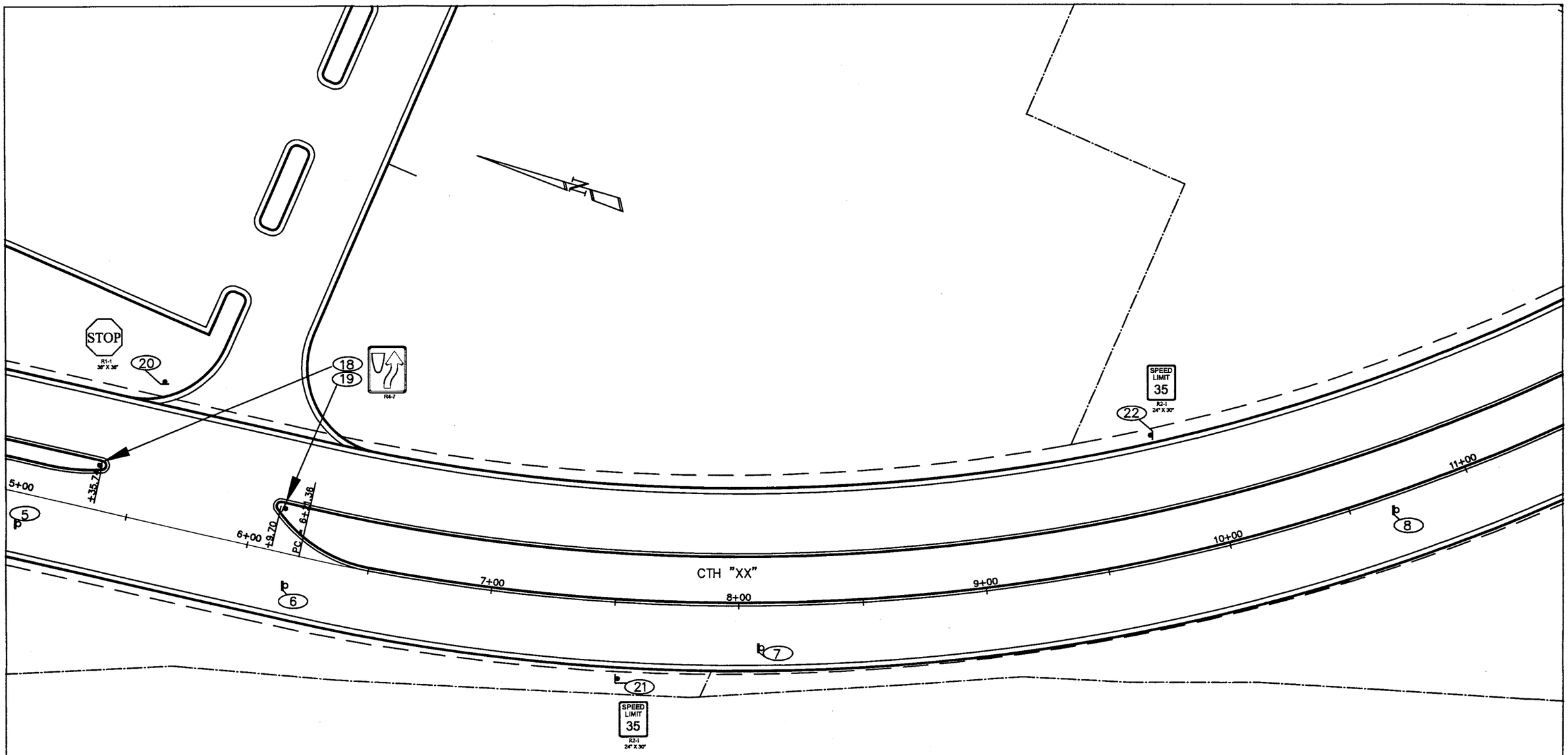
SPEED LIMIT 35
R2-1
24" X 30"

LEFT LANE MUST TURN LEFT
R3-7L
30" X 30"

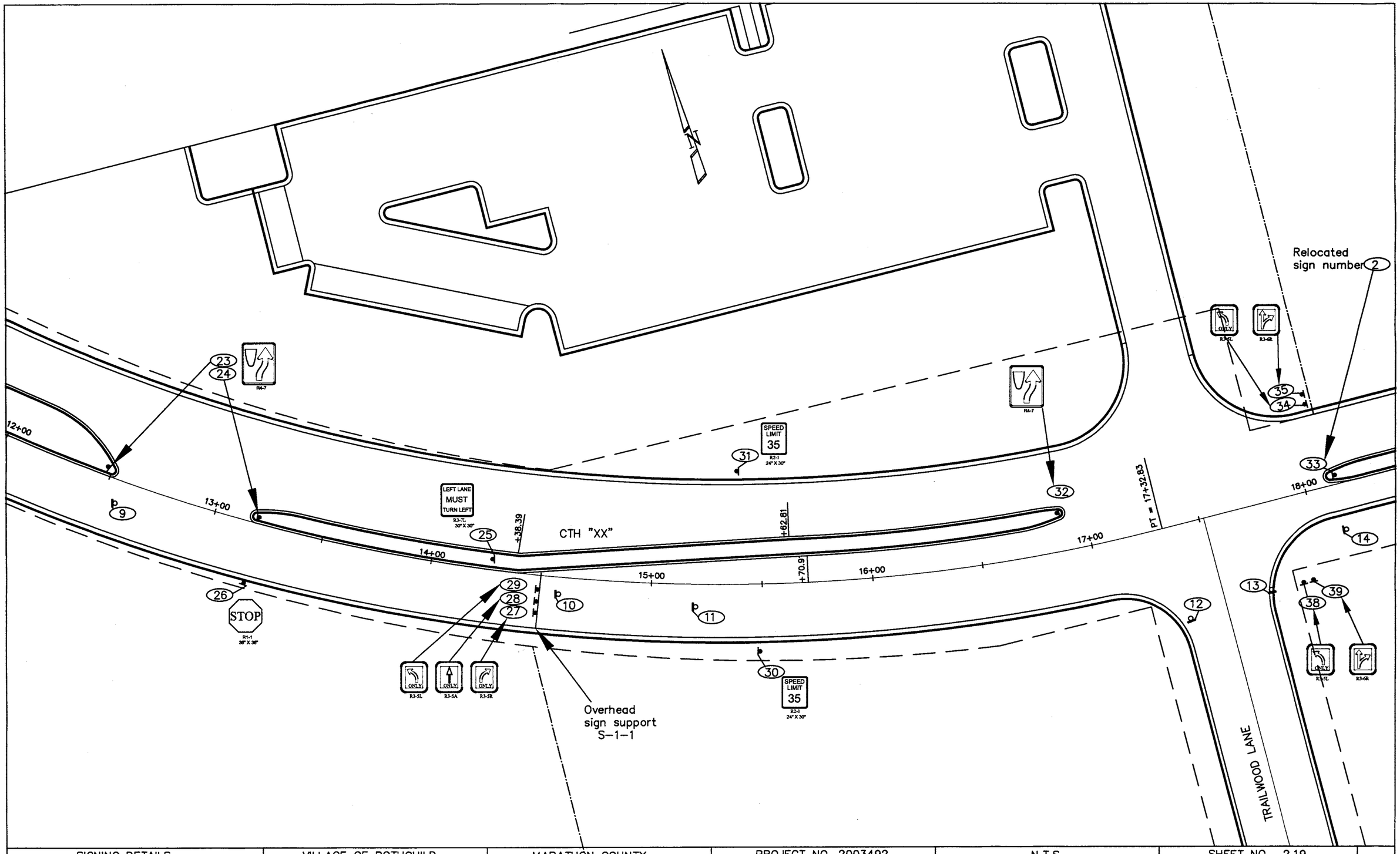
SIGNING LEGEND

- NEW SIGN/ NEW LOCATION
- REMOVE SIGN/ MOVE SIGN

| | | | | | |
|---|---|---|---|---|---|
| SIGNING DETAILS | VILLAGE OF ROTHCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | N.T.S. | SHEET NO. 2.17 |




| SIGNING DETAILS | VILLAGE OF ROTHCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | N.T.S. | SHEET NO. 2.18 | |
|---|---|---|---|---|---|---|




| SIGNING DETAILS | VILLAGE OF ROTHCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | N.T.S. | SHEET NO. 2.19 |
|---|---|---|---|---|---|

N

Relocated
sign number 3

37

18+00 19+00 20+00 21+00 22+00 23+00 24+00

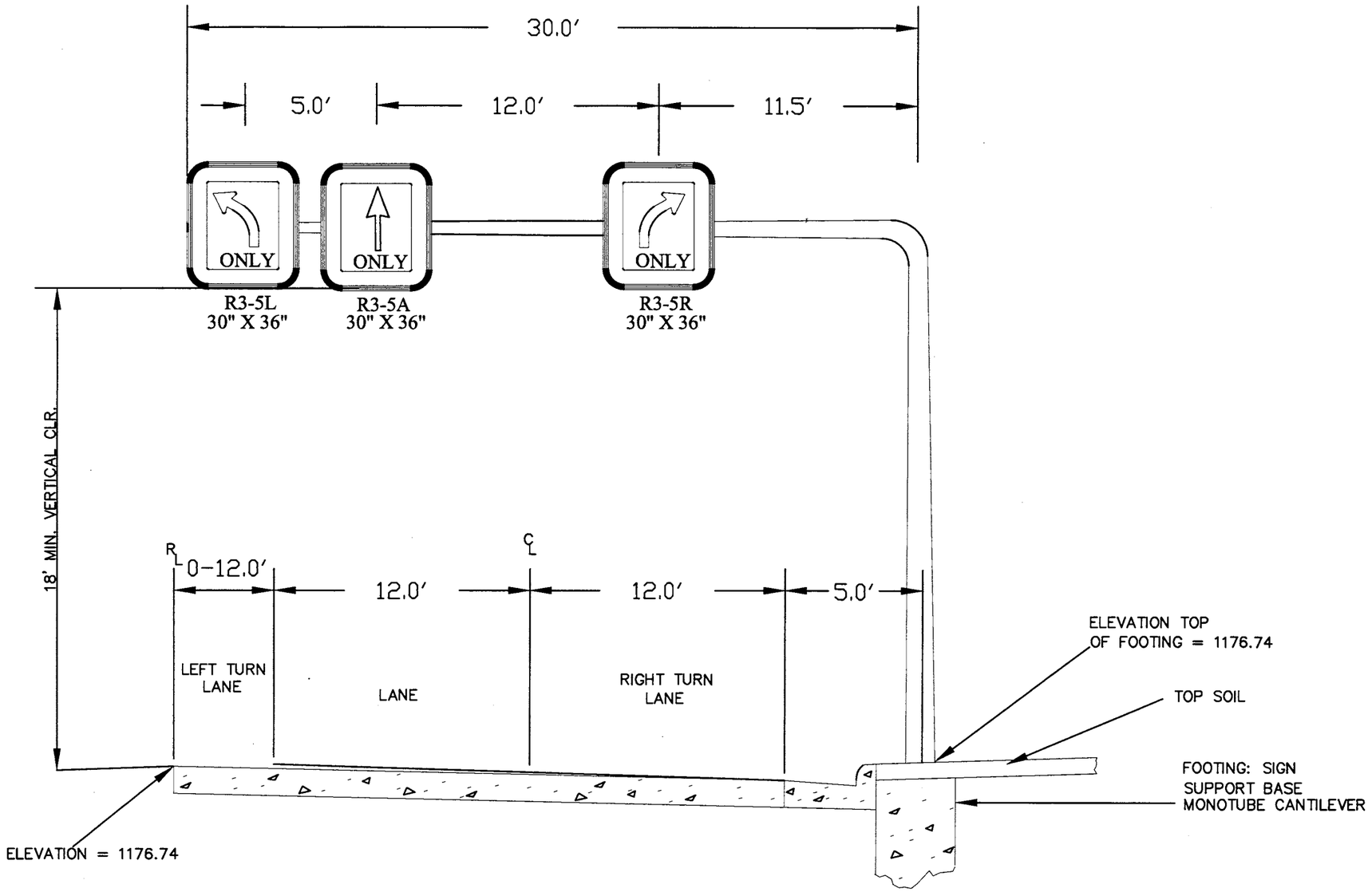
CTH "XX"

36

SPEED LIMIT 35

R2-1
24" X 30"

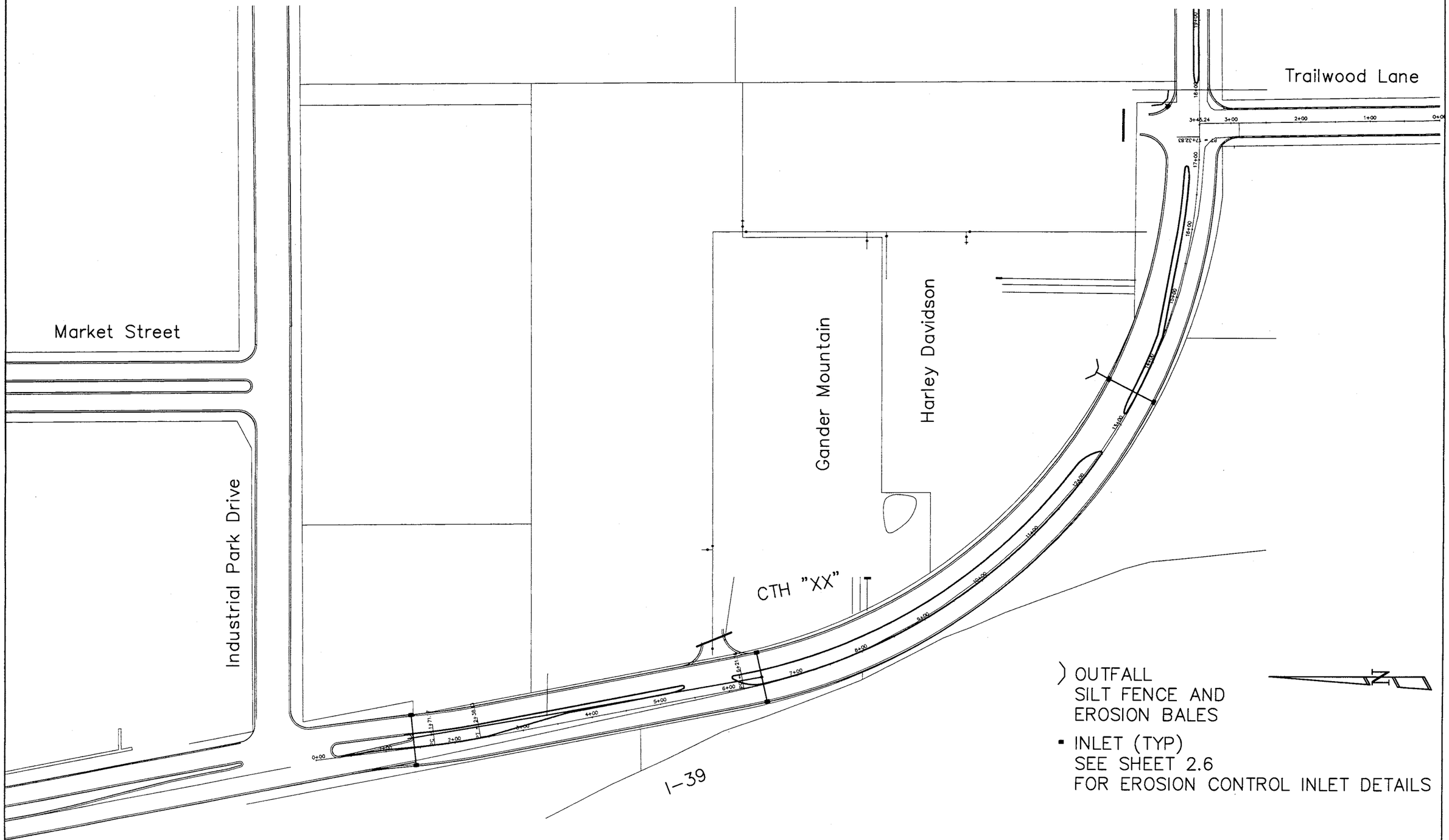
| | | | | | |
|---|---|---|---|---|---|
| SIGNING DETAILS | VILLAGE OF ROTHCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | N.T.S. | SHEET NO. 2.20 |




# OVERHEAD SIGN SUPPORT, S-1-1

## STATION 14+40 RT

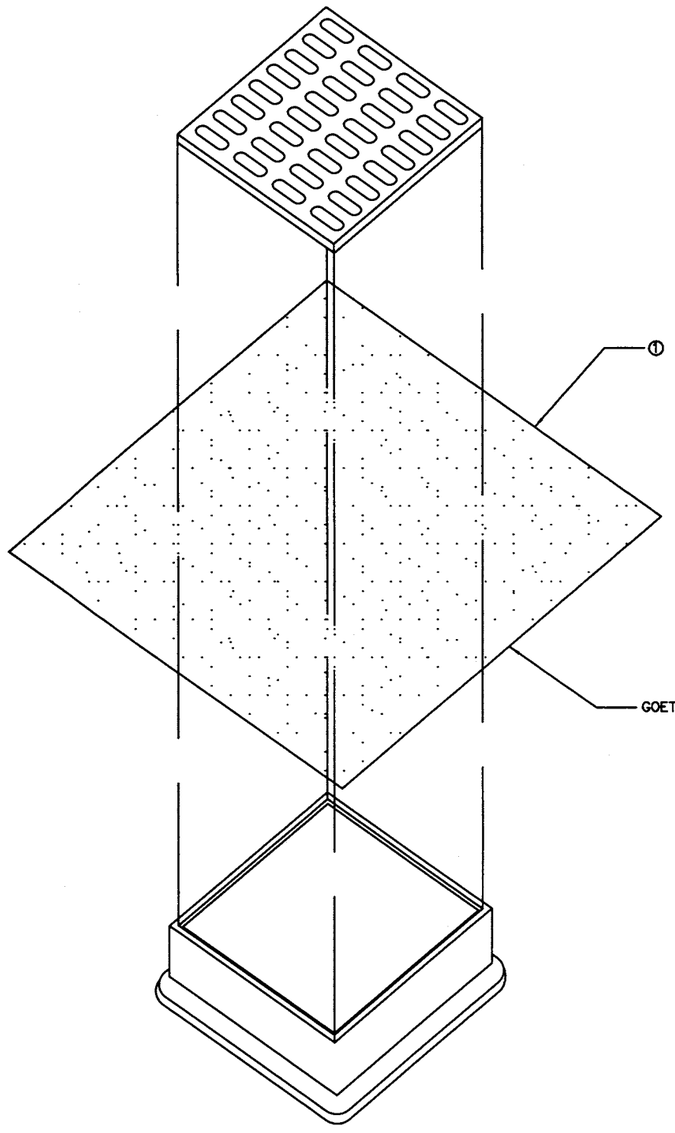
| CONSTRUCTION DETAILS | VILLAGE OF ROTHCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | N.T.S. | SHEET NO. 2.21 | |
|---|---|---|---|---|---|---|




) OUTFALL
SILT FENCE AND
EROSION BALES

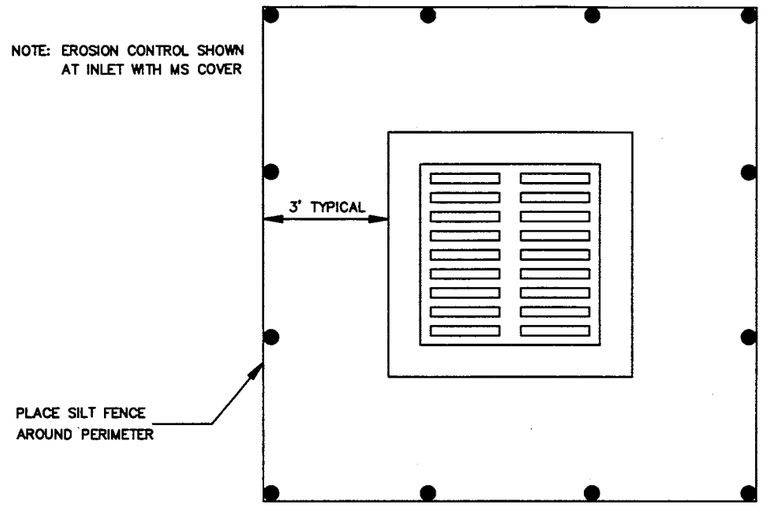
▪ INLET (TYP)
SEE SHEET 2.6
FOR EROSION CONTROL INLET DETAILS

| EROSION CONTROL | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 2.22 |
|---|---|---|---|---|---|




INLET PROTECTION, TYPE B (WITHOUT CURB BOX)

(CAN BE INSTALLED ON ANY INLET TYPE)




EROSION CONTROL DETAIL AT INLETS

EROSION CONTROL DETAIL A

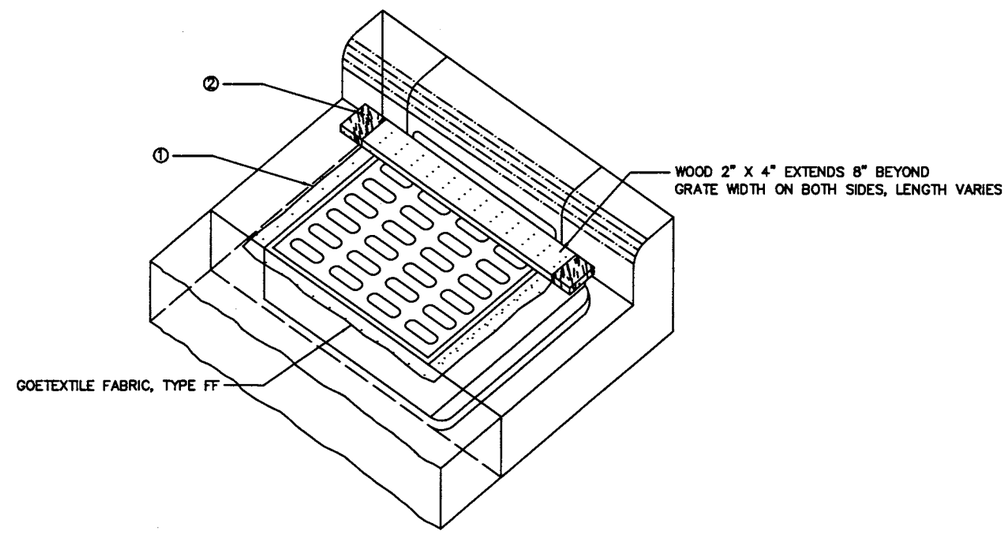
FABRIC SHALL BE PLACED AT THE ENGINEERS DISCRETION.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTIBILITY LIST MAY BE SUBSTITUTED FOR THE INLET PROTECTION TYPE SPECIFIED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN FALL INTO THE INLET ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

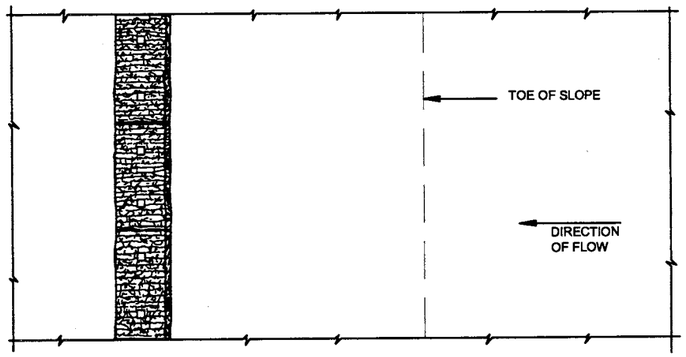
① FABRIC SIZE SHALL BE 8" (MIN) GREATER ON ALL SIDES OF THE INLET COVER TO PROVIDE A HAND HOLD WHEN MAINTENENCE OR REMOVAL IS REQUIRED.

② FOR INLET PROTECTION, TYPE C, WITH A CURB BOX, AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX.

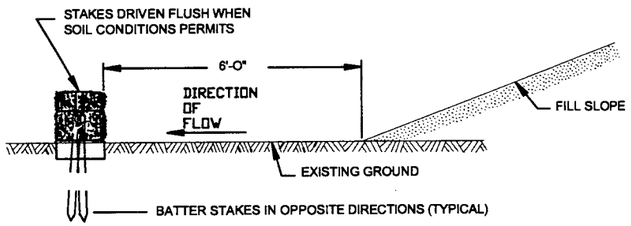



INLET PROTECTION, TYPE C (WITH CURB BOX)

| EROSION CONTROL DETAILS | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 2.23 | |
|---|---|---|---|---|---|---|



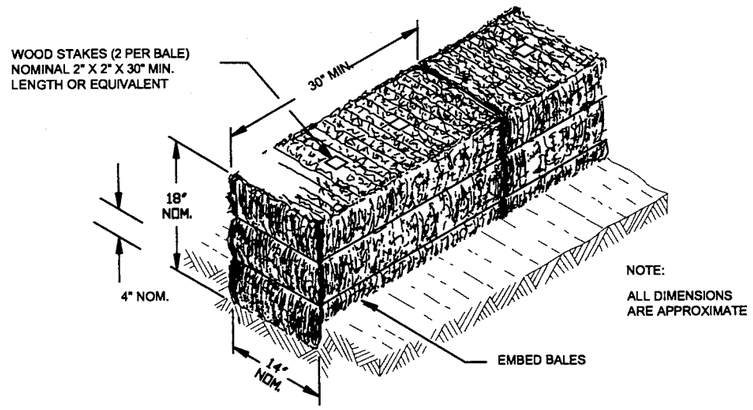

PLAN VIEW

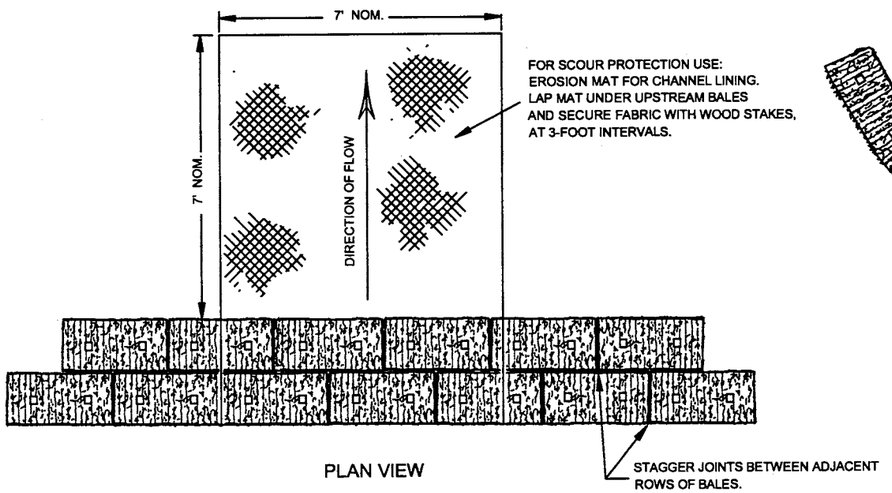



FRONT ELEVATION

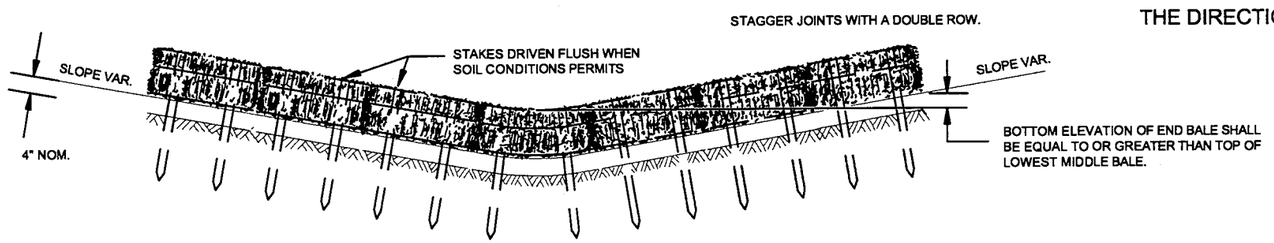
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW



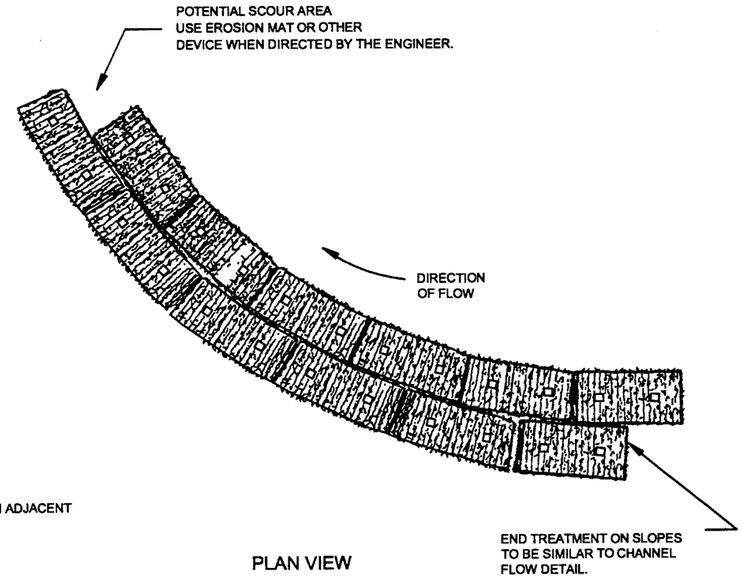




PLAN VIEW




FRONT ELEVATION

EROSION BALES FOR CHANNEL FLOW



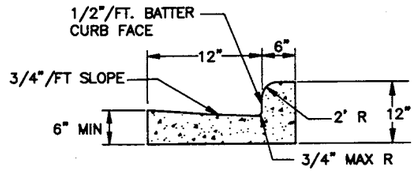

PLAN VIEW

EROSION BALES WHEN ALTERING
THE DIRECTION OF FLOW

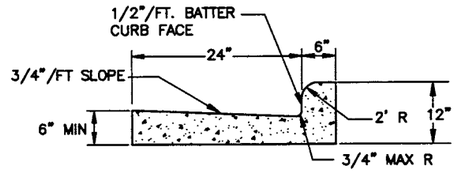
## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

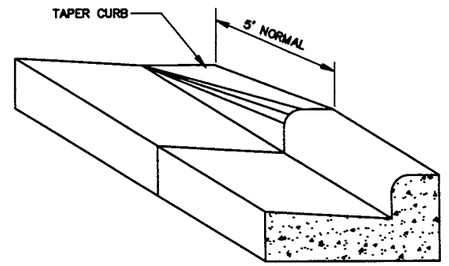
| EROSION CONTROL DETAILS | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 2.24 |
|---|---|---|---|---|---|



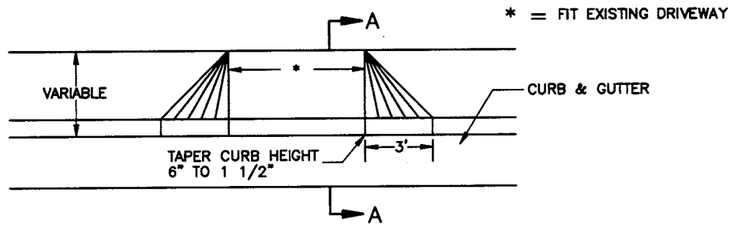

DETAIL OF CURB & GUTTER
18-INCH, TYPE D



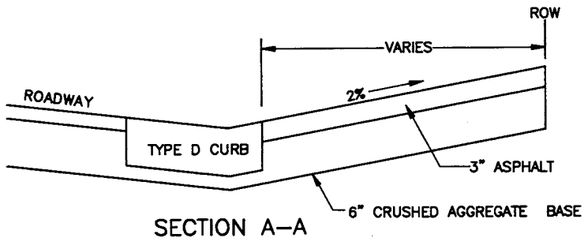

DETAIL OF CURB & GUTTER
30-INCH, TYPE D



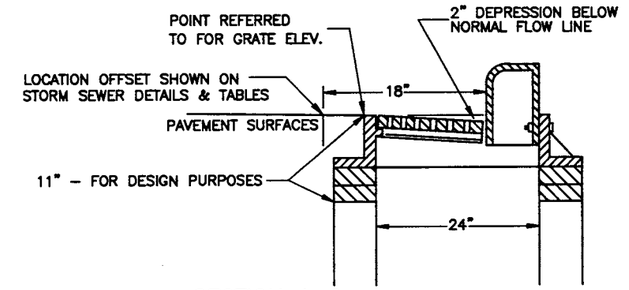

DETAIL OF CURB & GUTTER TERMINI



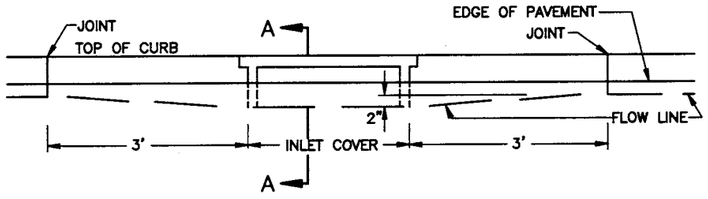

PRIVATE AND COMMERCIAL ENTRANCES




SECTION A–A
TYPICAL DRIVEWAY APPROACH

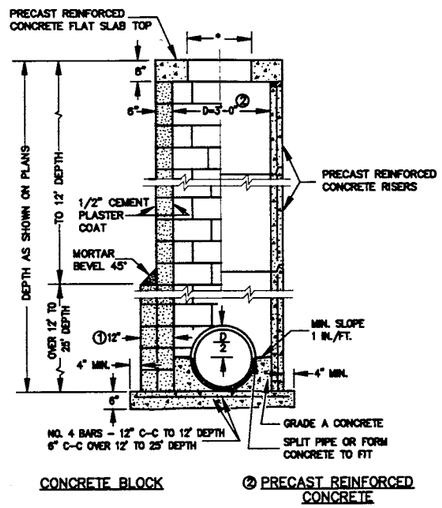



SECTION A–A
DETAIL OF CURB & GUTTER AT INLETS



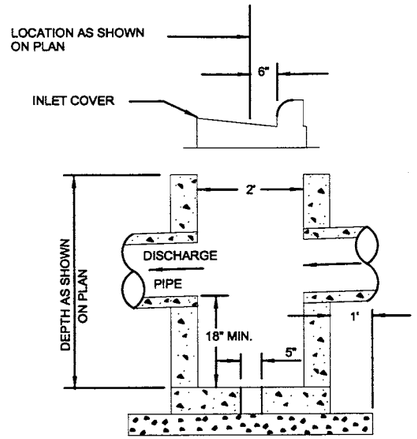

ELEVATION

| CONSTRUCTION DETAILS | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 2.25 |
|---|---|---|---|---|---|



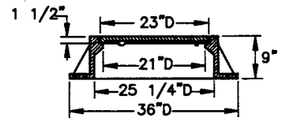

CONCRETE BLOCK ② PRECAST REINFORCED CONCRETE

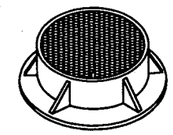
## SPECIAL 60" MANHOLE




NOTE: DETAILS NOT SHOWN SHALL CONFORM TO STANDARD DETAIL DRAWING FOR INLETS TYPE 3

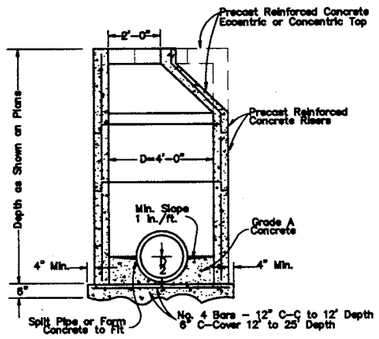
## TYPE 3 INLET



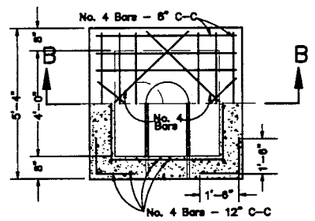



TYPE "J"
(APPROXIMATE WEIGHT 350 LBS.)
FRAME.....235 LBS.
LID..... 115 LBS.

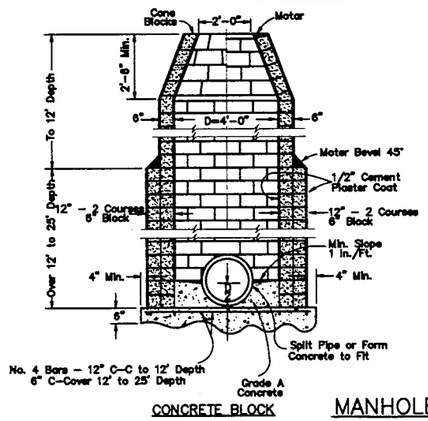
## MANHOLE COVER, TYPE J




PRECAST REINFORCED CONCRETE

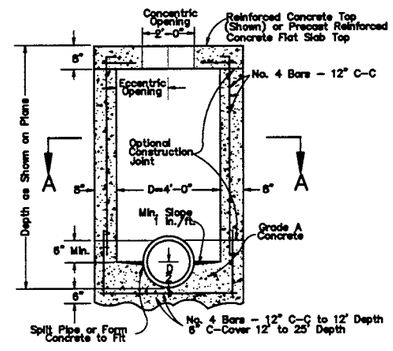



HALF SECTION A-A

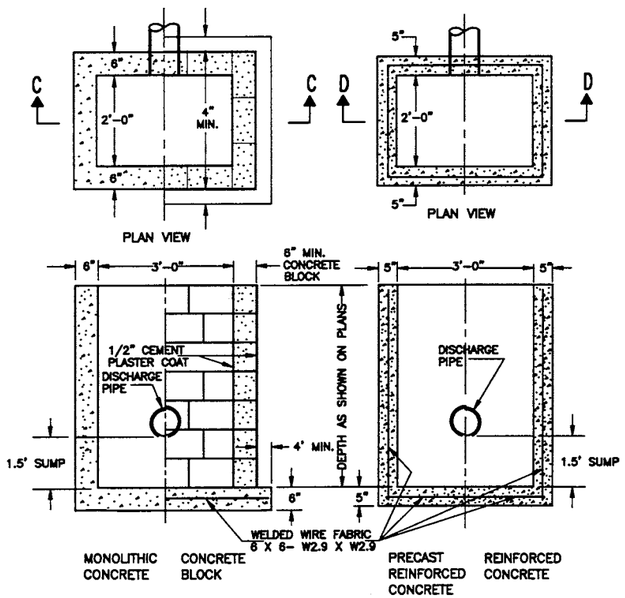



CONCRETE BLOCK

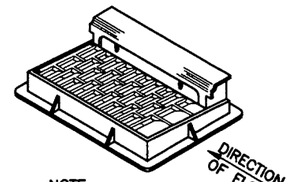
## MANHOLE, TYPE 1



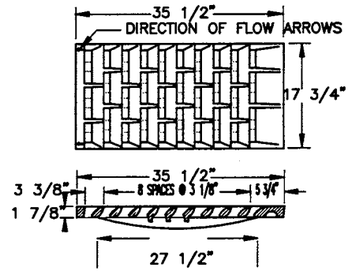

SECTION B-B REINFORCED CONCRETE




## INLET, TYPE 3




NOTE:
GRATE IS NOT REVERSIBLE.
LEFT FLOW GRATE IS SHOWN

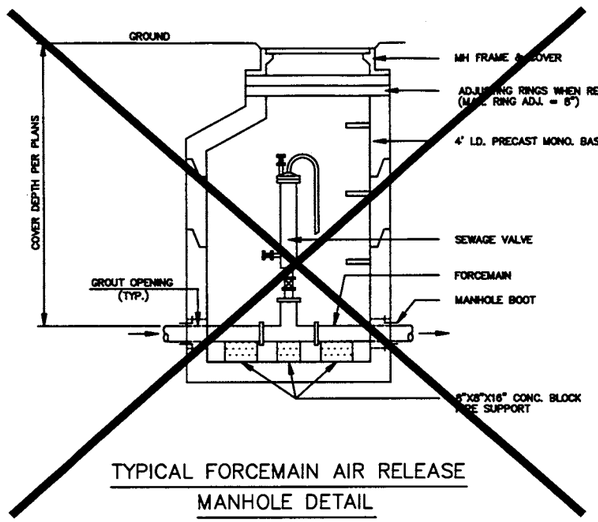



(APPROXIMATE WEIGHT 445 LBS.)
FRAME..... 195 LBS.
GRATE..... 135 LBS.
CURB BOX..... 115 LBS.

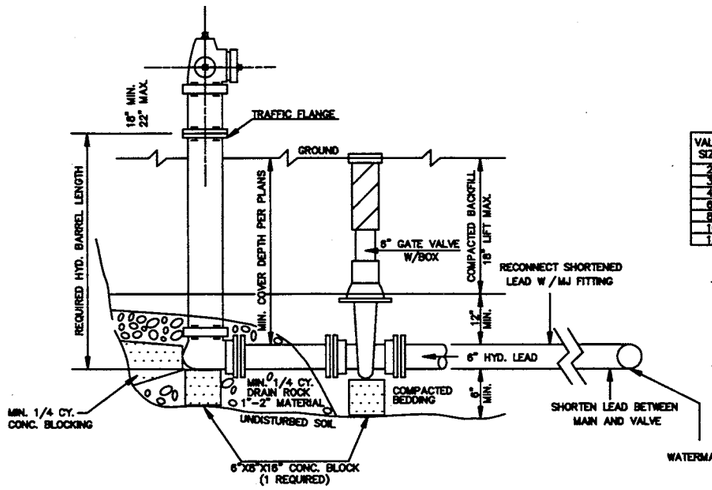
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

## INLET COVER, TYPE H

| WATERMAIN INSTALLATION DETAILS | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 2.26 |
|---|---|---|---|---|---|

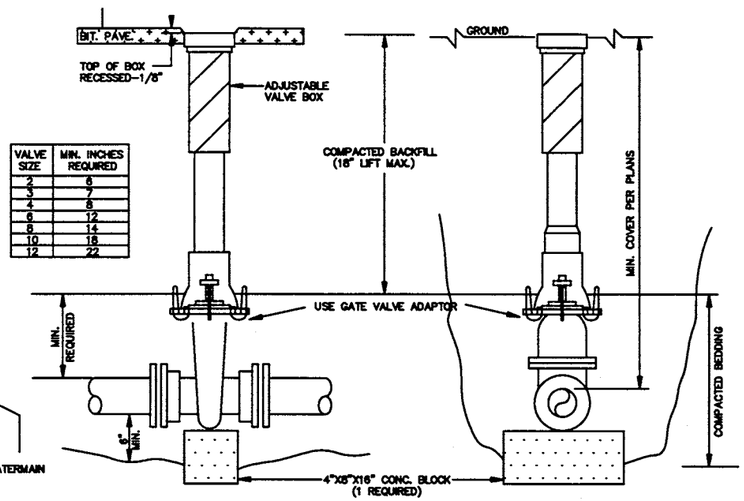



TYPICAL FORCEMAIN AIR RELEASE MANHOLE DETAIL

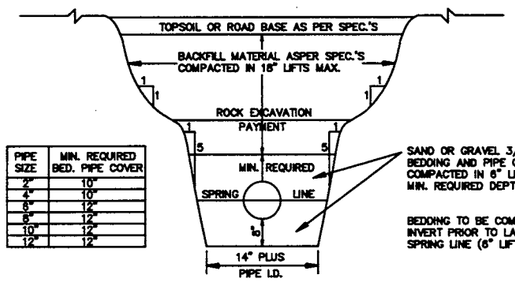



TYPICAL HYDRANT INSTALLATION DETAIL FOR HYDRANT RELOCATION

| VALVE SIZE | MIN. INCHES REQUIRED |
|---|---|
| 2 | 6 |
| 3 | 7 |
| 4 | 8 |
| 6 | 12 |
| 8 | 14 |
| 10 | 18 |
| 12 | 22 |

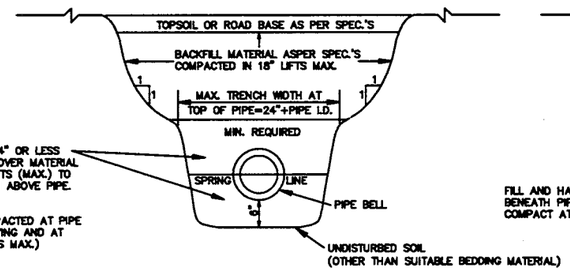



TYPICAL VALVE W/BOX DETAIL

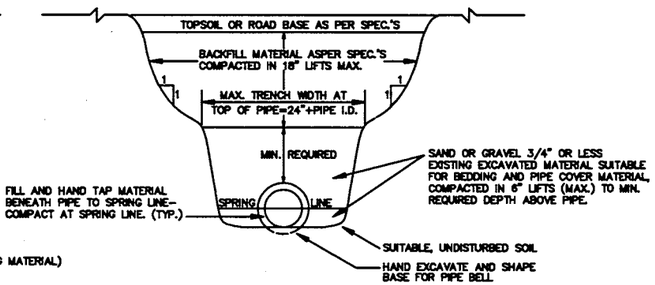



| PIPE SIZE | MIN. REQUIRED BED. PIPE COVER |
|---|---|
| 2" | 10" |
| 4" | 10" |
| 6" | 12" |
| 8" | 12" |
| 10" | 12" |
| 12" | 12" |

ROCK EXCAVATION



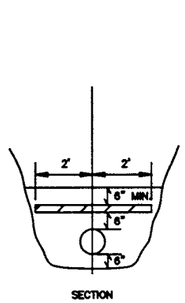

CLASS "B" BEDDING
(PIPE COVER 10' OR GREATER)



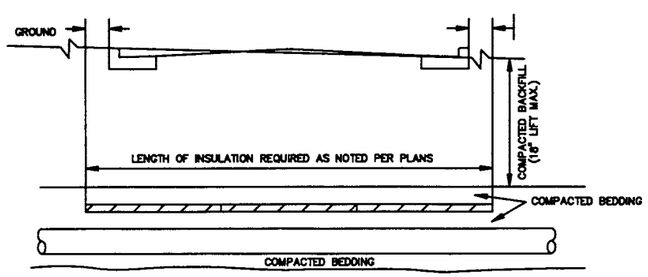

CLASS "C" BEDDING
(PIPE COVER 10' OR LESS)

NOTE: IF TRENCH IS UNSUITABLE, CLASS "B" BEDDING IS REQUIRED.

TYPICAL PIPELINE EXCAVATION AND INSTALLATION DETAILS

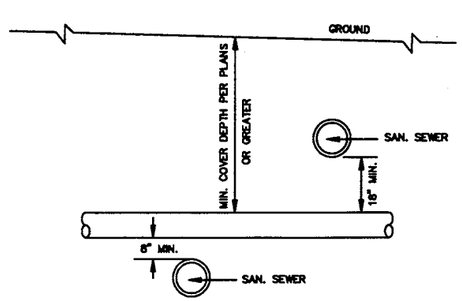



SECTION

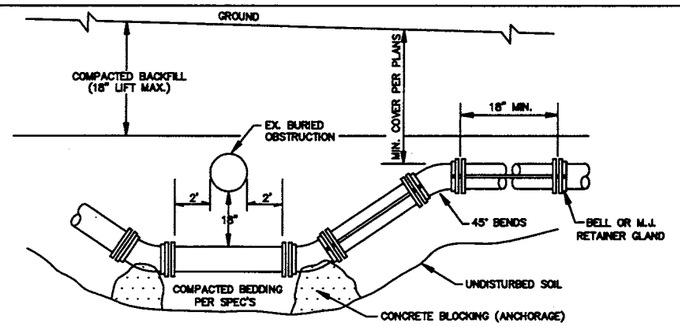



TYPICAL PIPELINE INSTALLATION DETAIL

DEEP FROST PENETRATION AREA WHERE PIPELINE HAS LESS THAN 7 1/2' COVER

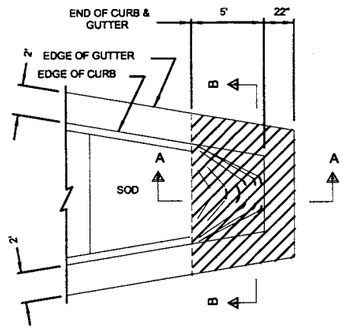


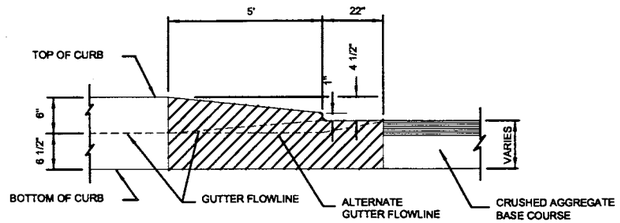

TYPICAL PIPELINE VERTICAL SEPARATION REQUIREMENT



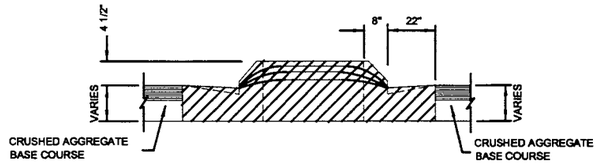

TYPICAL WATERMAIN OFFSET DETAIL

| | | | | | |
|---|---|---|---|---|---|
| WATERMAIN INSTALLATION DETAILS | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 2.27 |



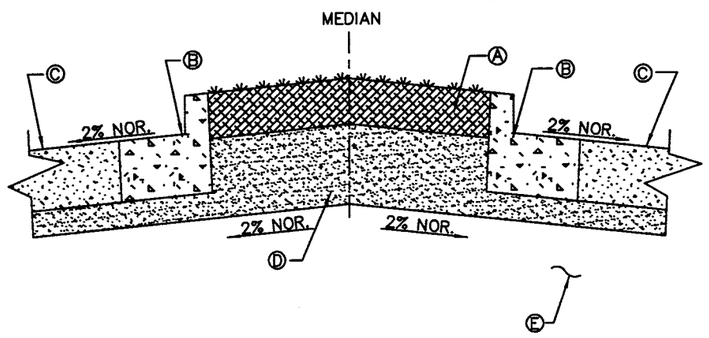




SECTION A-A



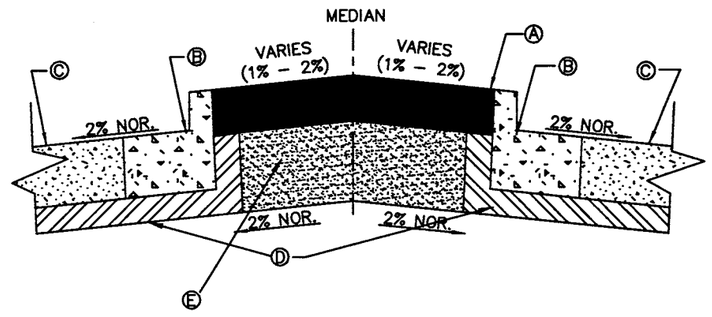

SECTION B-B

CONCRETE MEDIAN NOSE DETAIL




Ⓐ 6–INCH TOPSOIL, SEED, MULCH AND FERTILIZE
Ⓑ CONCRETE CURB AND GUTTER, 18–INCH, TYPE D (REVERSE PAN)
Ⓒ 5–INCH E–1 PAVEMENT
Ⓓ 8–INCH, CGBC, (CRUSHED STONE)
Ⓔ COMPACTED SUBGRADE

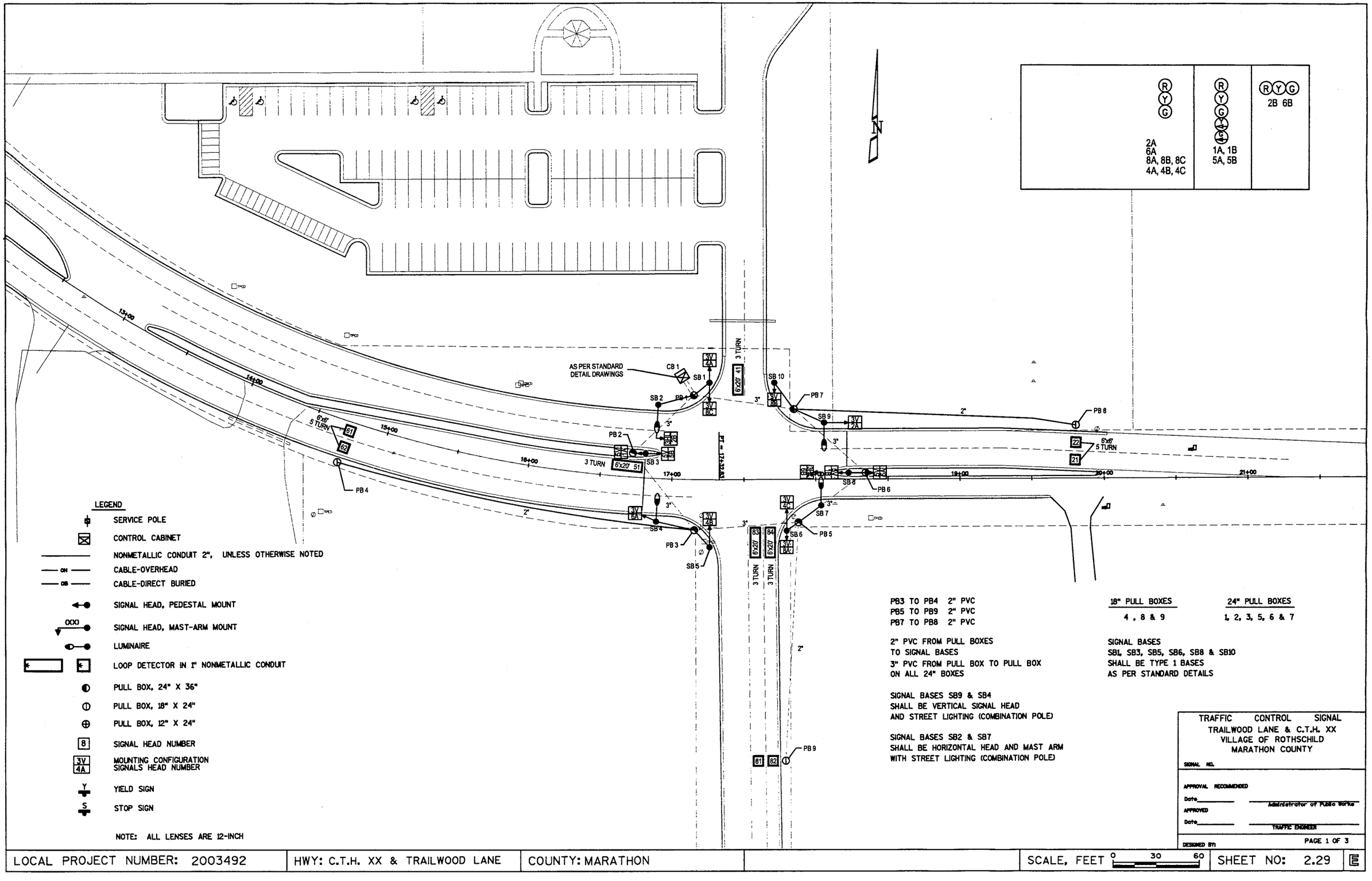
## RAISED GRASS MEDIAN DETAIL (TYPICAL)




Ⓐ 2–INCH ASPHALTIC CONCRETE PAVEMENT, TYPE E–1
Ⓑ CONCRETE CURB AND GUTTER, 18–INCH, TYPE D (REVERSE PAN)
Ⓒ 5–INCH E–1 PAVEMENT
Ⓓ 8–INCH, CGBC, (CRUSHED STONE)
Ⓔ NATIVE SOIL

## RAISED ACP MEDIAN DETAIL (TYPICAL)

| MEDIAN DETAILS | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 2.28 |
|---|---|---|---|---|---|




| R Y G | R Y G | R Y G |
|---|---|---|
| 2A<br>6A<br>8A, 8B, 8C<br>4A, 4B, 4C | 1A, 1B<br>5A, 5B | 2B 6B |

LEGEND

- SERVICE POLE
- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- —OH— CABLE-OVERHEAD
- —DB— CABLE-DIRECT BURIED
- SIGNAL HEAD, PEDESTAL MOUNT
- (XX) SIGNAL HEAD, MAST-ARM MOUNT
- LUMINAIRE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 18" X 24"
- PULL BOX, 12" X 24"
- 8 SIGNAL HEAD NUMBER
- 3V / 4A MOUNTING CONFIGURATION / SIGNALS HEAD NUMBER
- Y YIELD SIGN
- S STOP SIGN

NOTE: ALL LENSES ARE 12-INCH

PB3 TO PB4 2" PVC
PB5 TO PB9 2" PVC
PB7 TO PB8 2" PVC

2" PVC FROM PULL BOXES
TO SIGNAL BASES
3" PVC FROM PULL BOX TO PULL BOX
ON ALL 24" BOXES

SIGNAL BASES SB9 & SB4
SHALL BE VERTICAL SIGNAL HEAD
AND STREET LIGHTING (COMBINATION POLE)

SIGNAL BASES SB2 & SB7
SHALL BE HORIZONTAL HEAD AND MAST ARM
WITH STREET LIGHTING (COMBINATION POLE)

| 18" PULL BOXES | 24" PULL BOXES |
|---|---|
| 4, 8 & 9 | 1, 2, 3, 5, 6 & 7 |

SIGNAL BASES
SB1, SB3, SB5, SB6, SB8 & SB10
SHALL BE TYPE 1 BASES
AS PER STANDARD DETAILS

TRAFFIC CONTROL SIGNAL
TRAILWOOD LANE & C.T.H. XX
VILLAGE OF ROTHSCHILD
MARATHON COUNTY

SIGNAL NO.

APPROVAL RECOMMENDED
Date _____ Administrator of Public Works
APPROVED
Date _____ TRAFFIC ENGINEER
DESIGNED BY:



| LOCAL PROJECT NUMBER: 2003492 | HWY: C.T.H. XX & TRAILWOOD LANE | COUNTY: MARATHON | | SCALE, FEET 0 30 60 | SHEET NO: 2.29 | E |
|---|---|---|---|---|---|---|

## SEQUENCE OF OPERATION

RING 1

| | HEAD NUMBERS | Ø1 R/W | Ø1 CLEAR TO ** | Ø2 R/W | Ø2 CLEAR TO ** | Ø3 R/W | Ø3 CLEAR TO ** | Ø4 R/W | Ø4 CLEAR TO ** | FLASH |
|---|---|---|---|---|---|---|---|---|---|---|
| Ø1 | 1A,1B | G Y - | | - - - | | | | - - - | | - |
| Ø2 | 2A,2B,5A,5B | R R R | | G Y R | | | | R R R | | R |
| Ø3 | | | | | | | | | | |
| Ø4 | 4A,4B,4C | R R R | | R R R | | | | G Y R | | R |
| Ø5 | 5A,5B | - - - | | - - - | | | | - - - | | - |
| Ø6 | 6A,6B,1A,1B | R R R | | R R R | | | | R R R | | R |
| Ø7 | | | | | | | | | | |
| Ø8 | 8A,8B,8C | R R R | | R R R | | | | R R R | | R |

NOT USED

NOT USED

RING 2

| | HEAD NUMBERS | Ø5 R/W | Ø5 CLEAR TO ** Ø8 | Ø6 R/W | Ø6 CLEAR TO ** | Ø7 R/W | Ø7 CLEAR TO ** | Ø8 R/W | Ø8 CLEAR TO ** Ø5 |
|---|---|---|---|---|---|---|---|---|---|
| Ø1 | 1A,1B | - - - | | - - - | | | | - - - | |
| Ø2 | 2A,2B,5A,5B | R R R | | R R R | | | | R R R | |
| Ø3 | | | | | | | | | |
| Ø4 | 4A,4B,4C | R R R | | R R R | | | | R R R | |
| Ø5 | 5A,5B | G Y - | | - - - | | | | - - - | |
| Ø6 | 6A,6B,1A,1B | R R R | | G Y R | | | | R R R | |
| Ø7 | | | | | | | | | |
| Ø8 | 8A,8B,8C | R R R | | R R R | | | | G Y R | |

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

* WHEN CALLED, TIMED STEADY WALK,THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK.

### CHART 1

| PHASE ON | NON-CONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY | PHASES IN CONFLICT WITH PHASE ON |
|---|---|---|
| Ø1 | Ø5,Ø6 | Ø2,Ø4,Ø8 |
| Ø2 | Ø5,Ø6 | Ø1,Ø4,Ø8 |
| Ø3 | | |
| Ø4 | Ø8 | Ø1,Ø2,Ø5,Ø6 |
| Ø5 | Ø1,Ø2 | Ø4,Ø6,Ø8 |
| Ø6 | Ø1,Ø2 | Ø4,Ø5,Ø8 |
| Ø7 | | |
| Ø8 | Ø4 | Ø1,Ø2,Ø5,Ø6 |

## DETECTOR LOGIC

| DETECTOR NUMBER | AMPLIFIER CHANNEL NUMBER | DETECTOR OPERATION: CALLS AND EXTENDS | DETECTOR OPERATION: CALLS ONLY | DETECTOR OPERATION: EXTENDS ONLY | PHASE CALLED | PHASE EXTENDED | DETECTOR DISCONNECT PHASE | CALLING DELAY | EXTENSION STRETCH | SIZE | NUMBER OF TURNS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 1 | X | | | 1 | 1 | | | | | |
| 12 | 1 | X | | | 1 | 1 | | | | | |
| 21 | 2 | X | | | 2 | 2 | | | | | |
| 22 | 2 | X | | | 2 | 2 | | | | | |
| 41 | 3 | X | | | 4 | 4 | | X | | | |
| 51 | 4 | X | | | 5 | 5 | | | | | |
| 61 | 5 | X | | | 6 | 6 | | | | | |
| 62 | 5 | X | | | 6 | 6 | | | | | |
| 81 | 6 | | | X | | 8 | | | X | | |
| 82 | 6 | | | X | | 8 | | | X | | |
| 83 | 7 | X | | | 8 | 8 | | X | | | |
| 84 | 8 | X | | | 8 | 8 | | X | | | |

## CONTROLLER LOGIC

| PHASE NUMBER | PHASE LOCKING | DUAL ENTRY W / Ø | PHASE RECALL |
|---|---|---|---|
| 1 | | Ø6 | |
| 2 | X | Ø6 | X |
| 3 | | | |
| 4 | | Ø8 | |
| 5 | | Ø2 | |
| 6 | X | Ø2 | X |
| 7 | | | |
| 8 | | Ø4 | |

| TYPE OF INTERCONNECT | |
|---|---|
| NONE | X |
| TBC | |
| CLOSED LOOP | |
| HARDWIRE | |
| TONE (FREQ) | |

| TYPE OF PRE-EMPT | |
|---|---|
| NONE | X |
| RAILROAD | |
| EMERGENCY VEHICLE | |

| TYPE OF LIGHTING | |
|---|---|
| NONE | |
| IN TRAFFIC CONTROL CABINET | X |
| IN SEPARATE CONTROL CABINET | |

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NON-CONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT)

C.T.H. XX & Trailwood Lane
TRAFFIC SIGNAL
VILLAGE OF ROTHSCHILD
MARATHON COUNTY

SIGNAL NO.

DATE 06/13/03 SHEET NO. 2 OF 3

LOCAL PROJECT NUMBER: 2003492 | HWY: C.T.H. XX & TRAILWOOD LANE | COUNTY: MARATHON | SCALE, FEET 0 100 200 | SHEET NO: 2.30 | E

## SIGNAL INDICATION WIRE COLOR

| FROM - TO | DISTANCE (L.F.) | JUMPER | CABLE | HEAD NUMBER | NEUTRAL | PHASE | GREEN | YELLOW | RED | ←GREEN | ←YELLOW | WALK | DON'T WALK | PED BUTTON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CB1 - SB2 | 52 | | 21/C | 2B | WHITE | ϕ2 | GREEN | YELLOW | RED | | | | | |
| SB2 - SB1 | 54 | | 21/C | 4A | WHITE | ϕ4 | GREEN/WHT | YELLOW/RED | RED/WHT | | | | | |
| | | | | 8C | WHITE | 8 | BLUE/RED | YELLOW/GR | RED/GR | | | | | |
| CB1 - SB3 | 94 | | 12/C | 1A | WHITE | 1 | GREEN/BLK | YELLOW/BLK | RED/BLK | BLUE/BLK | BLACK/WHT | | | |
| | | | | 5B | WHITE | 5 | GREEN | YELLOW | RED | BLUE | BLACK | | | |
| CB1 - SB4 | 180 | | 21/C | 6A | WHITE | 6 | GREEN/BLK | YELLOW/BLK | RED/BLK | BLUE/BLK | BLACK/WHT | | | |
| SB4 - SB5 | 58 | | 21/C | 4B | WHITE | 4 | GREEN/WHT | YELLOW/RED | RED/WHT | | | | | |
| CB1 - SB7 | 246 | | 21/C | 6B | WHITE | 6 | GREEN/BLK | YELLOW/BLK | RED/BLK | | | | | |
| SB7 - SB6 | 45 | | 21/C | 4C | WHITE | 4 | GREEN/WHT | YELLOW/RED | RED/WHT | | | | | |
| | | | | 8A | WHITE | 8 | BLUE/RED | YELLOW/GR | RED/GR | | | | | |
| CB1 - SB9 | 120 | | 21/C | 2A | WHITE | 2 | GREEN | YELLOW | RED | | | | | |
| SB9 - SB10 | 61 | | 21/C | 8B | WHITE | 8 | BLUE/RED | YELLOW/GR | RED/GR | | | | | |
| CB1 - SB8 | 174 | | 12/C | 1B | WHITE | 1 | GREEN/BLK | YELLOW/BLK | RED/BLK | BLUE/BLK | BLACK/WHT | | | |
| | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | |

(GREEN)
EQUIPMENT GROUNDING AND CONDUCTOR, NO. 10 AWG, XLP (STRANDED)

| FROM | TO | DISTANCE (L.F.) |
|---|---|---|
| CB1 | PB1 | 12 |
| PB1 | PB2 | 58 |
| PB2 | PB3 | 69 |
| PB3 | PB5 | 73 |
| CB1 | PB1 | 12 |
| PB1 | PB7 | 70 |
| PB7 | PB6 | 66 |
| PB6 | PB5 | 58 |
| | | |
| | | |
| | | |
| | | |

(GREEN)
EQUIPMENT GROUNDING AND CONDUCTOR NO. 10 AWG, XLP (STRANDED)

| FROM | TO | DISTANCE (L.F.) |
|---|---|---|
| PB1 | SB1 | 28 |
| PB1 | SB2 | 40 |
| PB2 | SB3 | 23 |
| PB3 | SB4 | 42 |
| PB3 | SB5 | 30 |
| PB5 | SB6 | 24 |
| PB5 | SB7 | 34 |
| PB6 | SB8 | 26 |
| PB7 | SB9 | 37 |
| PB7 | SB10 | 37 |
| | | |
| | | |

LIGHTING
TYPE UF CABLE, 2-CONNECTOR, NO. 12, GROUNDED

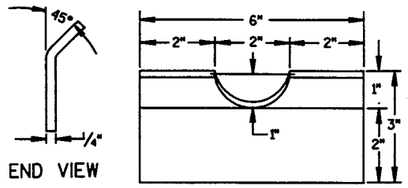
| FROM | TO | DISTANCE (L.F.) |
|---|---|---|
| CB1 | SB2 | 52 |
| SB2 | SB4 | 194 |
| CB1 | SB9 | 120 |
| SB9 | SB7 | 183 |
| | | |

C.T.H. XX and Trallwood Lane
TRAFFIC SIGNAL
VILLAGE OF ROTHSCHILD
MARATHON COUNTY

SIGNAL NO.

DATE 03/13/03 SHEET NO. 3 OF 3

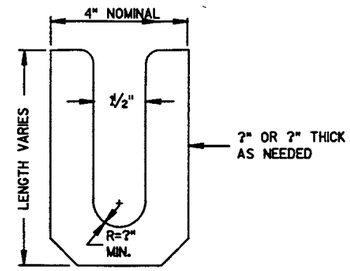
LOCAL PROJECT NUMBER: 2003492 | HWY: C.T.H. XX and Trallwood Lane | COUNTY: MARATHON | SCALE, FEET 0 100 200 | SHEET NO: 2.31




FRONT VIEW

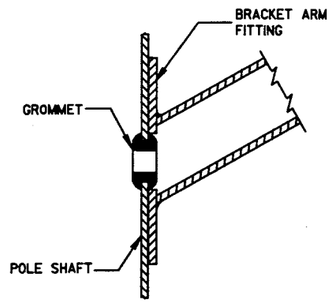
**RECTANGULAR CLAMP SHIM**

(4 TO A SET)

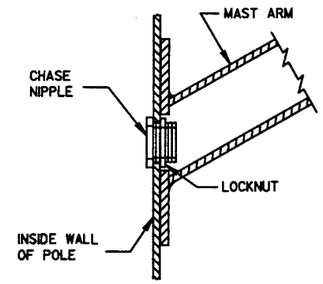



**LEVELING SHIM** (15)

SHALL BE ALUMINUM




**TYPICAL APPLICATION OF GROMMET IN POLE SHAFT**




**TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT**

## GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

(10.) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11.) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

(12.) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13.) OUTSIDE SHIM DIAMETER - (4.5" O.D. FOR LUMINAIRE MAST ARM)
(6.625" O.D. FOR TROMBONE MAST ARM)

(14.) VARIABLE SHIM THICKNESS - (0.10", 0.25", 0.35", 0.53" OR 0.70")

SHIM THICKNESS FOR TROMBONE MAST ARMS MAY BE TYPICALLY 0.25", 0.35", 0.53" OR 0.70".

SHIM THICKNESS FOR LUMINAIRE MAST ARMS MAY BE TYPICALLY 0.10", 0.25" OR 0.35".

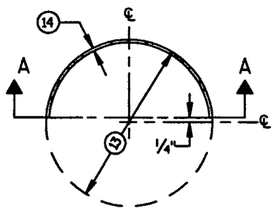
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 1/4" HIGH AND LEGIBLE.

THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

(15.) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



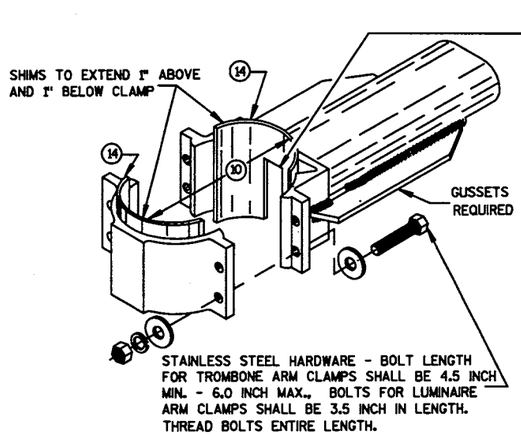

**PLAN VIEW**



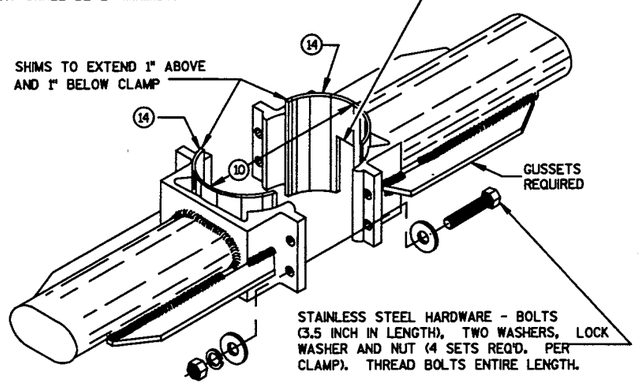

**SECTION A-A**

**CIRCULAR CLAMP SHIM**

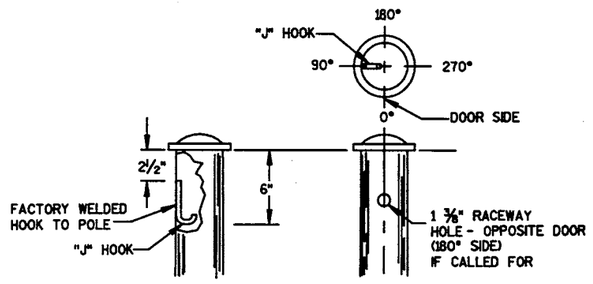
(2 TO A SET)



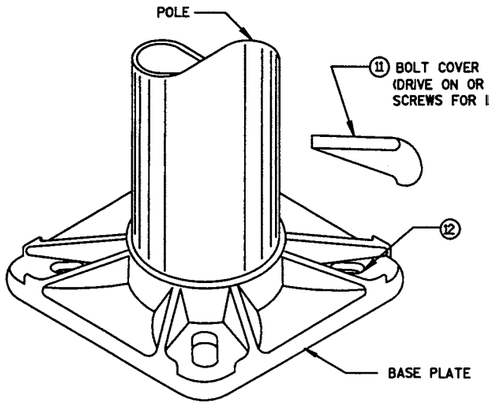

**TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP**



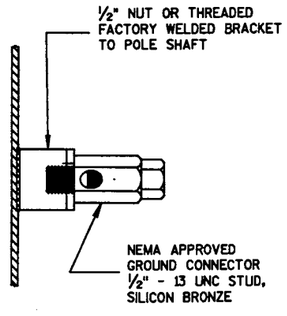

**TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS**

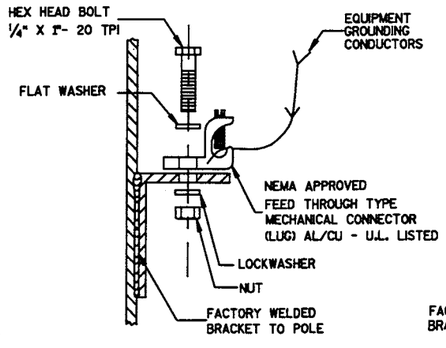


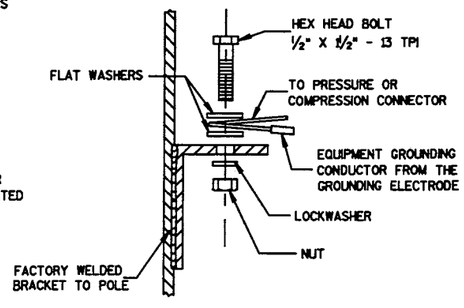

**TYPICAL "J" HOOK LOCATION**




**BASE PLATE**



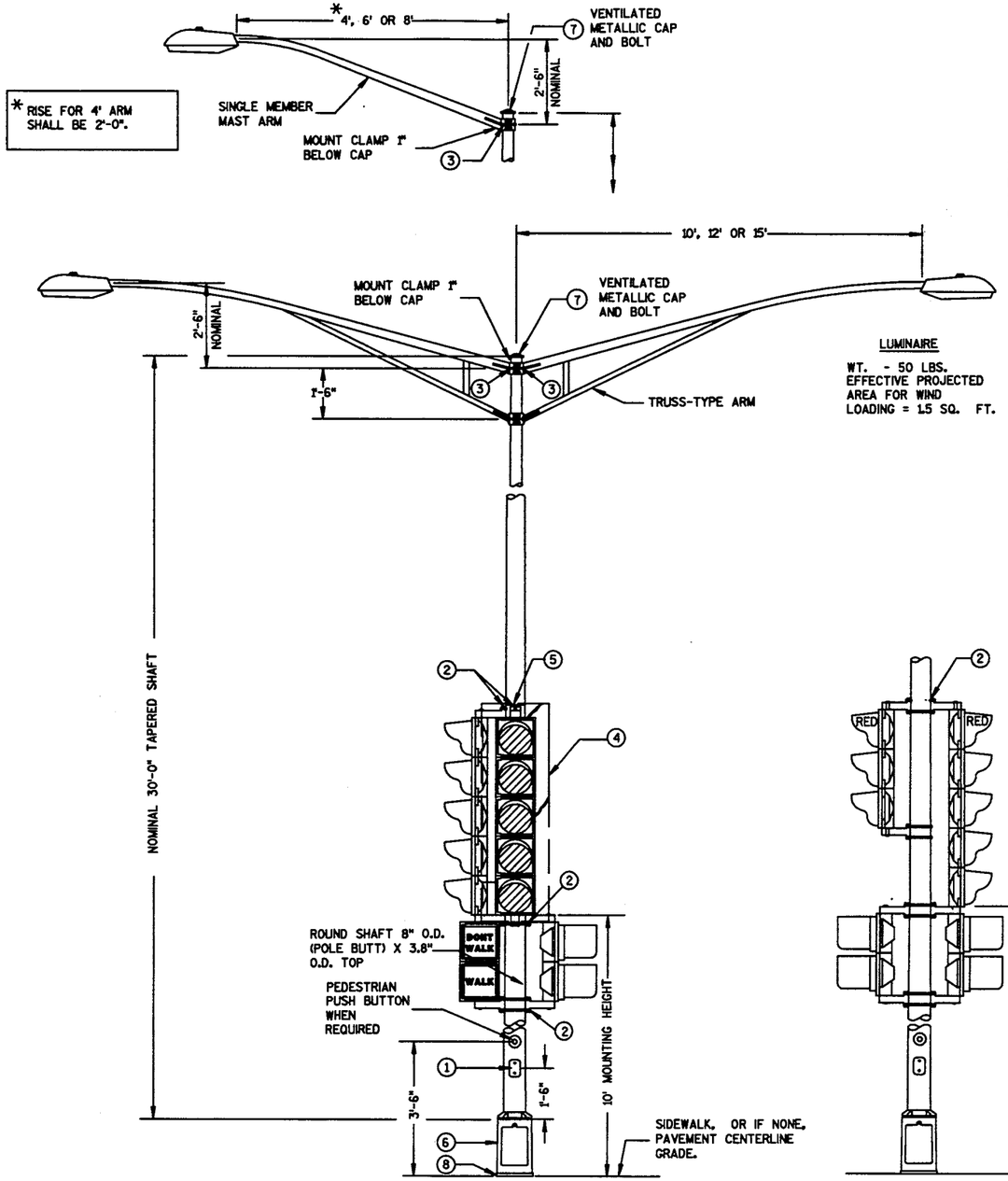

**TYPICAL GROUNDING CONNECTIONS**

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

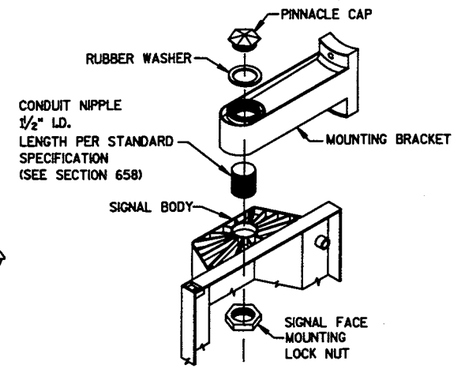
# HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

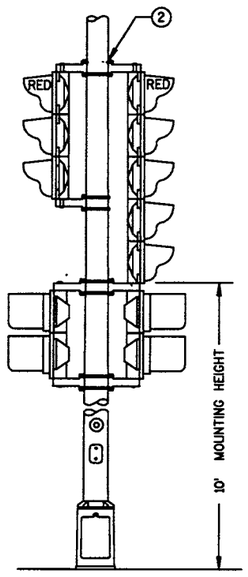
APPROVED
3/5/01
DATE
FHWA



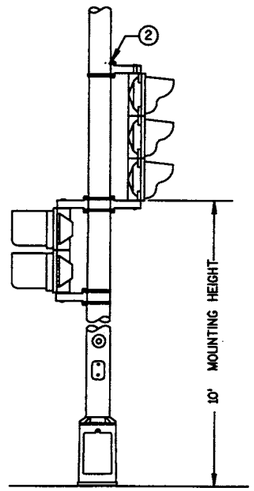

(MAXIMUM LOAD)




**SIGNAL FACE MOUNTING DETAIL**
**(BANDED)**




**TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES**




**TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

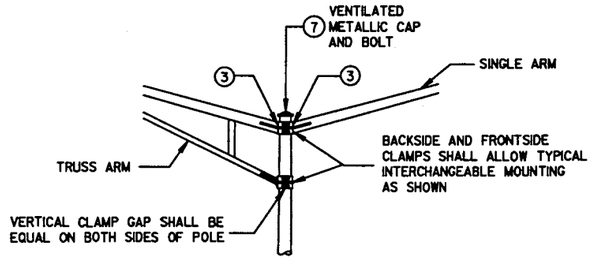
POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

1. 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ?" X ?" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.
2. SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658).
3. GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.
4. SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, WITH SELF-TAPPING STAINLESS STEEL SCREWS.
5. POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.
6. CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
7. FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
8. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.



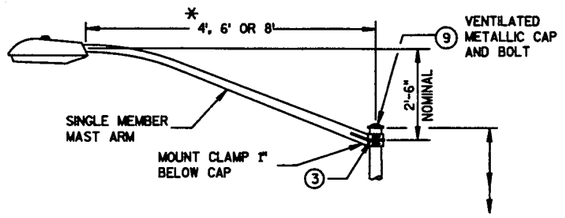

**INTERCHANGEABLE MOUNTING DETAIL**

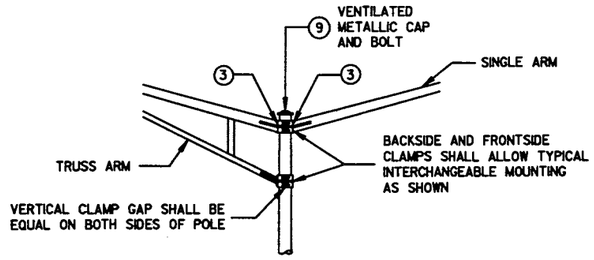
**TYPE 4 POLE MOUNTING CONFIGURATION**

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

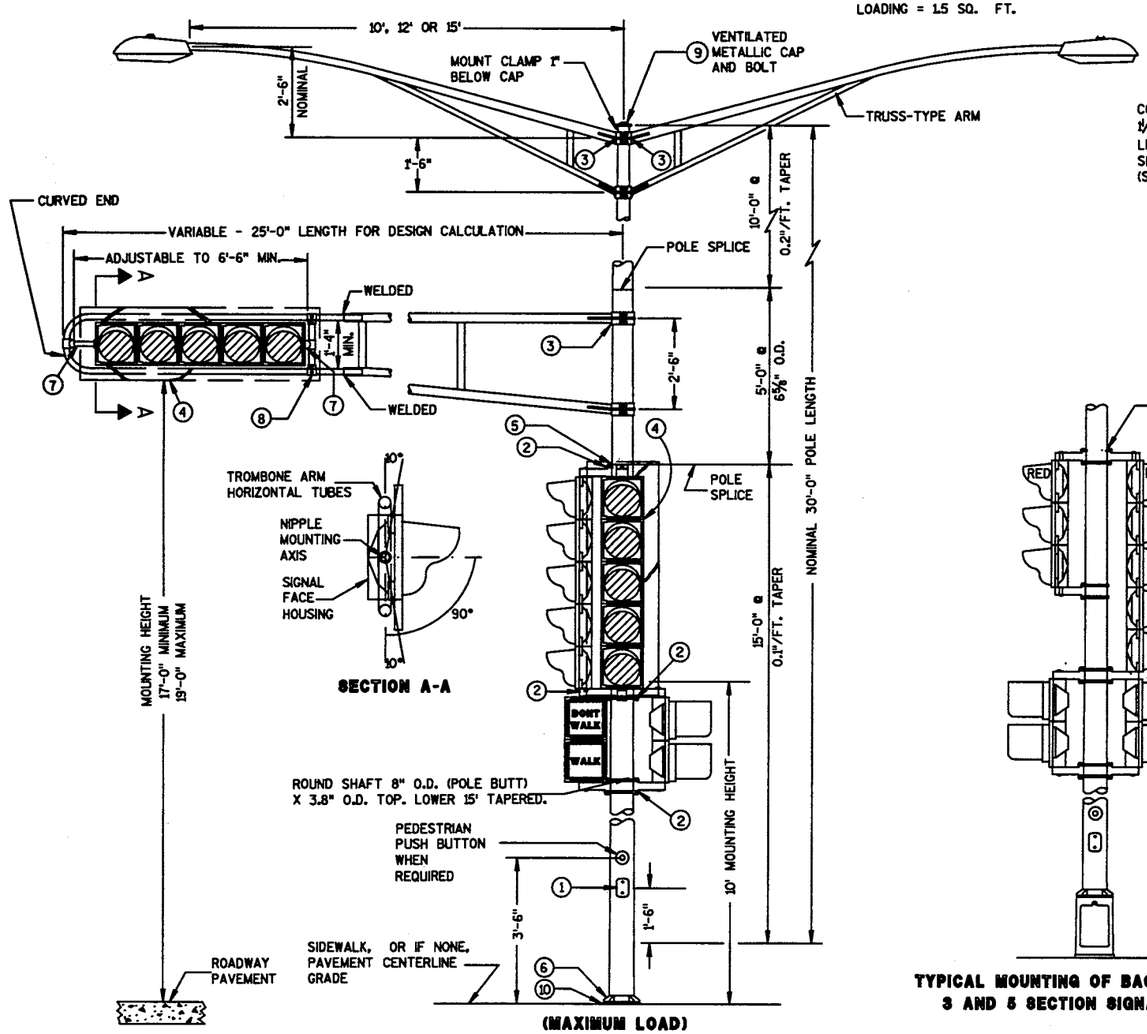
* RISE FOR 4' ARM SHALL BE 2'-0".



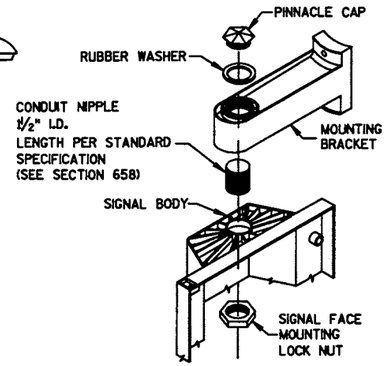

**INTERCHANGEABLE MOUNTING DETAIL**

LUMINAIRE
WT. - 50 LBS.
EFFECTIVE PROJECTED AREA FOR WIND LOADING = 1.5 SQ. FT.

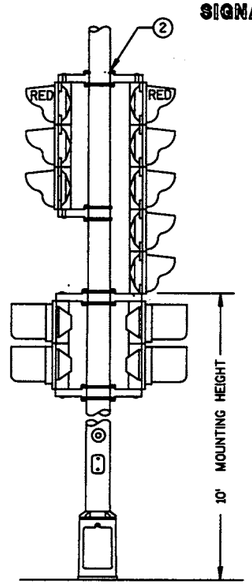



**SECTION A-A**

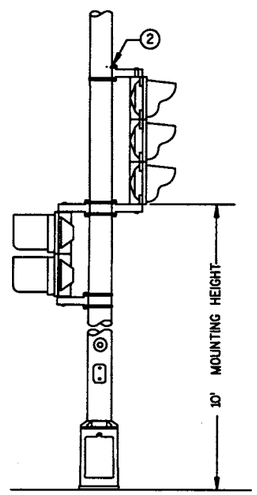
**(MAXIMUM LOAD)**




**SIGNAL FACE MOUNTING DETAIL**
**(BANDED)**




**TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES**




**TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE**

**TYPE 3 POLE MOUNTING CONFIGURATION**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

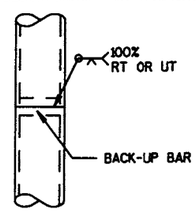
A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652, SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

1. 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ?" X ?" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.
2. SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)
3. GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.
4. SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, WITH SELF-TAPPING STAINLESS STEEL SCREWS.
5. POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.
6. TYPE 3 POLE CONFIGURATIONS SHALL BE MOUNTED DIRECTLY TO THEIR CONCRETE BASES.
7. MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658)
8. VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (1/4 " X ¾" -20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.
9. FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
10. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

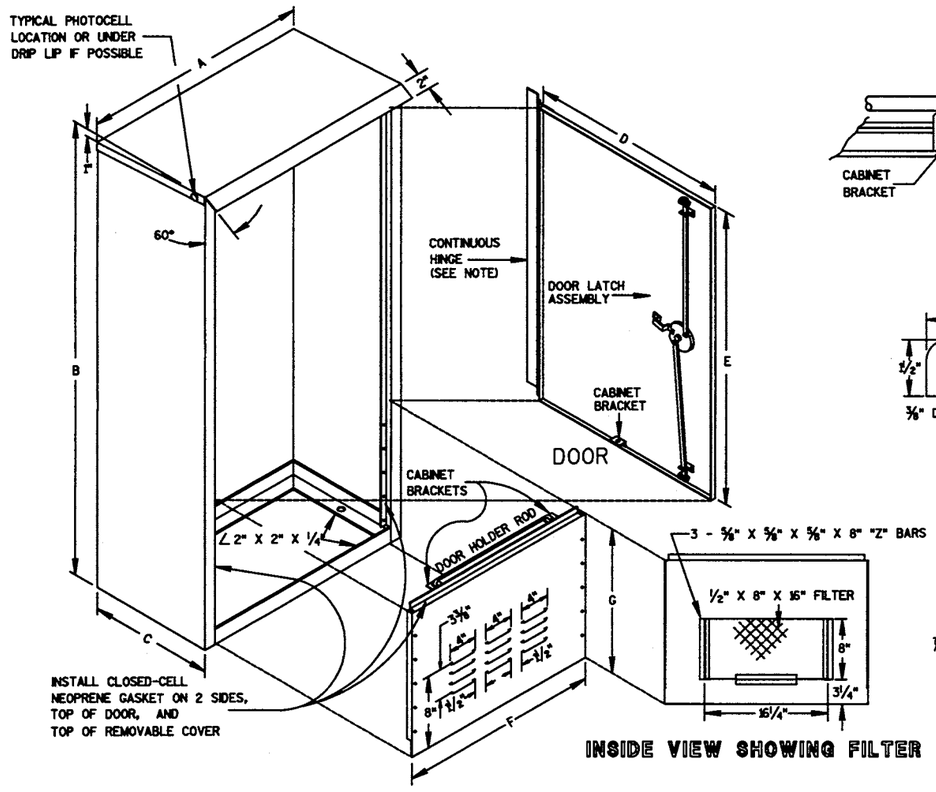
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.




**POLE SPLICE DETAIL**

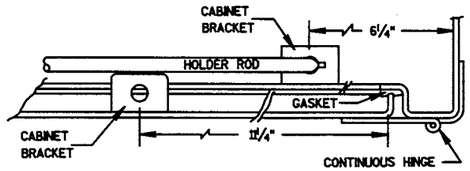
# POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

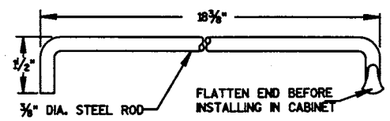



REMOVABLE COVER

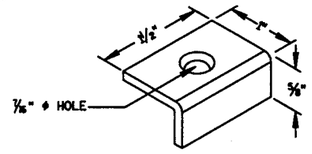
INSIDE VIEW SHOWING FILTER



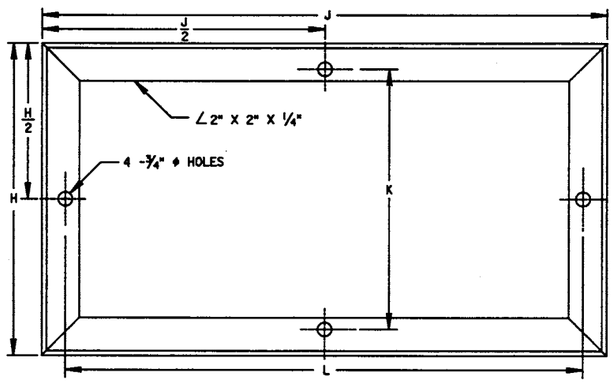

HINGE & DOOR HOLDER




HOLDER ROD



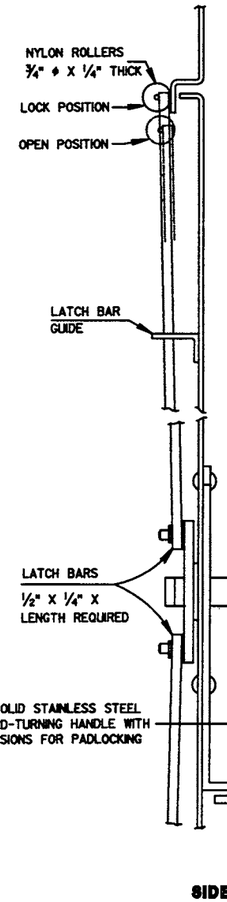

CABINET BRACKET



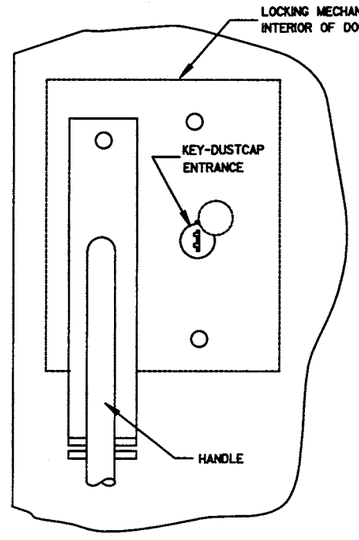

MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

| MARK | CABINET TYPE | | |
|---|---|---|---|
| | 3060 | 3860 | 3866 |
| A | 30 | 38 | 38 |
| B | 60 | 60 | 66 |
| C | 16½ | 16½ | 24 |
| D | 26½ | 34¾ | 33¾ |
| E | 38¾ | 38¾ | 38¾ |
| F | 26½ | 34¾ | 33¾ |
| G | 19 | 19 | 25 |
| H | 16½ | 16½ | 24 |
| H/2 | 8¼ | 8¼ | 12 |
| J | 30 | 38 | 38 |
| J/2 | 15 | 19 | 19 |
| K | 13¾ | 13¾ | 21¼ |
| L | 27½ | 35½ | 35½ |

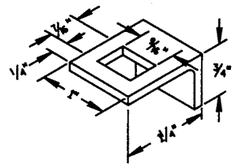



SIDE VIEW




FRONT VIEW

LATCH ASSEMBLY




LATCH BAR GUIDE

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE AN APPROVED TYPE.

DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.

SIGNAL OR LIGHTING CONTROL CABINET

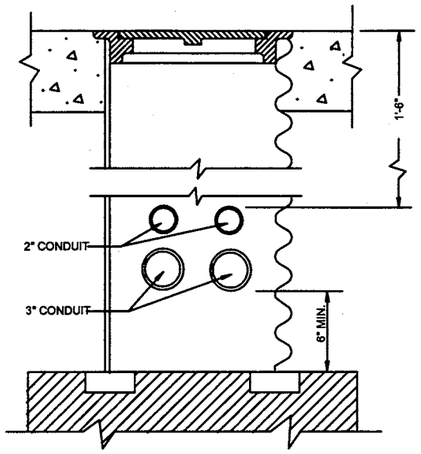
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

DATE
FHWA

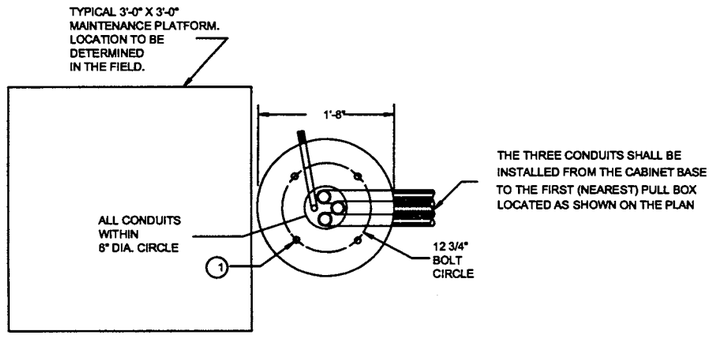
S.D.D. 9 D 2-2

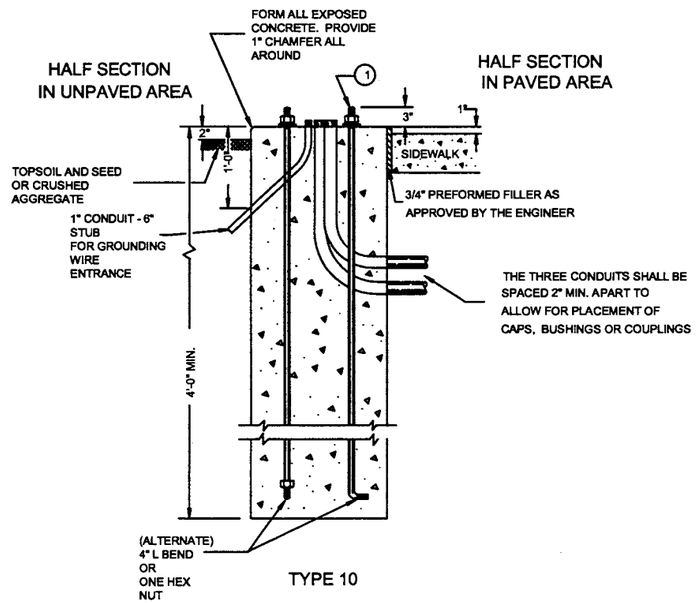
| CONTROL CABINET BASE TYPE | DIMENSIONS | | | | C.Y. CONCRETE (APPROX.) |
|---|---|---|---|---|---|
| | H | I | J | K | |
| TYPE 6 - 30" CABINET | 34" | 60" | 10" | 17" | .64 |
| TYPE 7 - 38" CABINET | 42" | 60" | 10" | 21" | .93 |
| TYPE 8 - 38" CABINET | 42" | 72" | 12" | 21" | 1.29 |
| TYPE 9 - VARIABLE | 54" | 72" | 14" | 27" | 1.56 |
| TYPE 10 - POST MOUNT | AS SHOWN | | | | .32 |



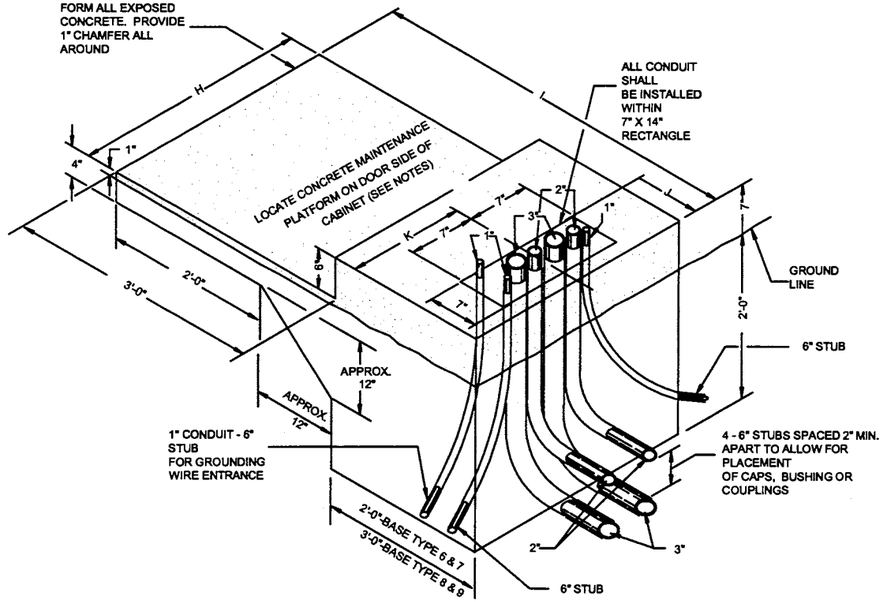

CONDUIT LOCATIONS IN 24" X 36" PULL BOX

(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)




TYPE 10




TYPE 6,7,8 AND 9
(ISOMETRIC VIEW)

CONCRETE CONTROL CABINET BASES

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR 1/2 INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST) PULL BOX LOCATED AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

(1) FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6" ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH A-449, OR ASTM. A-687 (GRADE 105).

| CONTROL BASE DETAIL | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 2.36 | |
|---|---|---|---|---|---|---|

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-325, (92,000 YIELD) HEAVY HEX NUT AND BE GALVANIZED IN ACCORDANCE WITH ASTM A-153, CLASS C.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED AND U.L. LISTED MECHANICAL CONNECTOR (LUG) AL/CU RATED AND SIZED TO ACCEPT #10 AWG STRANDED WIRE, SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

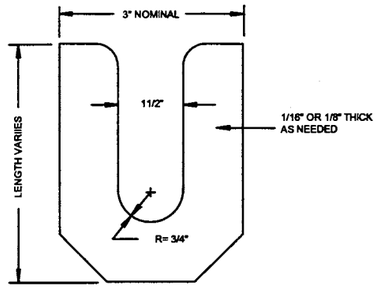
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

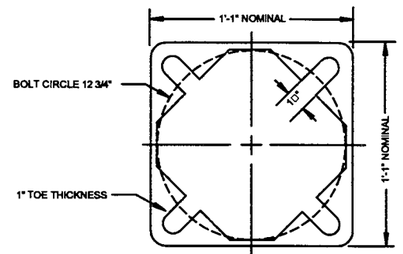
PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 11/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

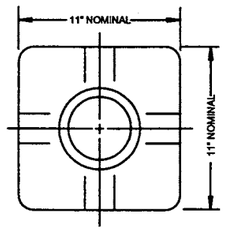
THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.



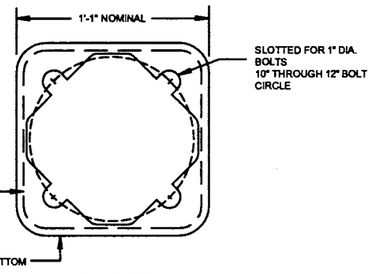

LEVELING SHIM



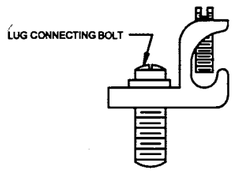

BOTTOM VIEW
(PEDESTAL BASE)



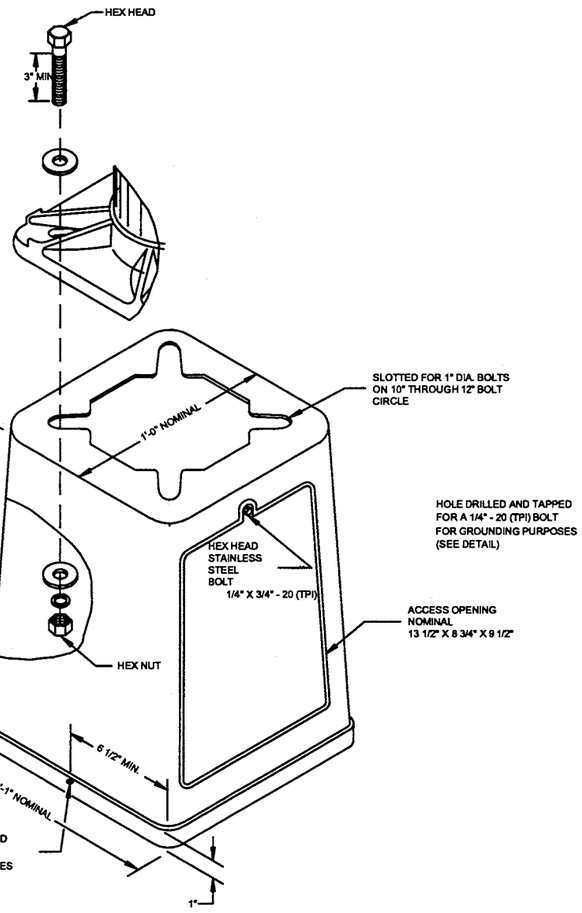

TOP VIEW
(PEDESTAL BASE)




BOTTOM VIEW
(TRANSFORMER BASE)

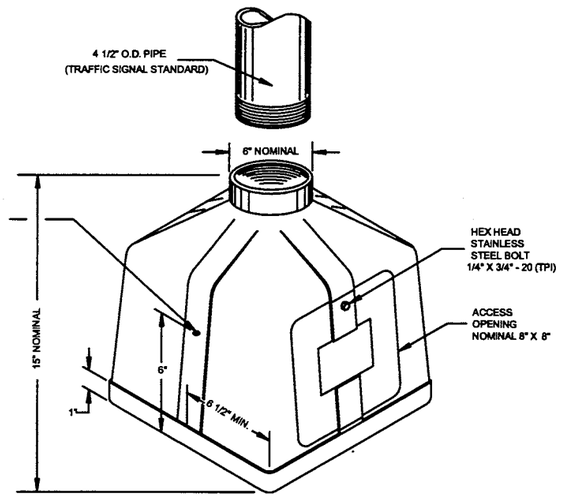



TYPICAL MECHANICAL CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE



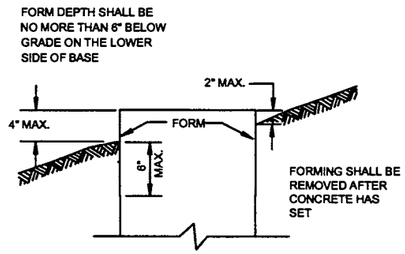

TRANSFORMER BASE
INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 8 POLES

ISOMETRIC VIEW



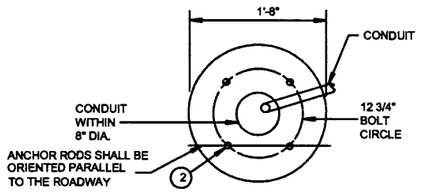

ISOMETRIC VIEW
PEDESTAL BASE

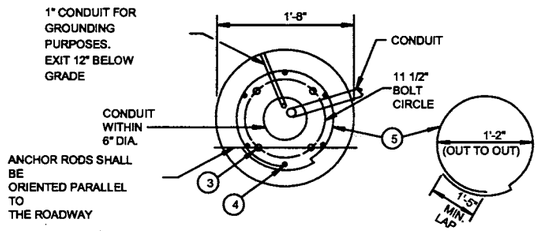
| | | | | | |
|---|---|---|---|---|---|
| SIGNAL AND LIGHTING BASE DETAIL | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 2.37 |




FORMING DETAIL

| QUANTITY REQUIREMENTS | CONCRETE BASE TYPE | | |
|---|---|---|---|
| | 1 | 2 | 5 |
| APPROX. CUBIC YARDS OF CONCRETE | 0.40 | 0.57 | 0.40 |
| LBS. OF HOOP BAR STEEL | NONE | 23 | 16 |
| LBS. OF VERTICAL BAR STEEL | NONE | 60 | 18 |




## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

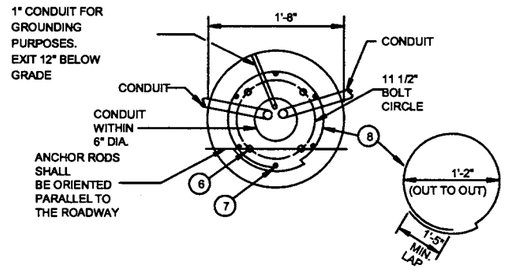
CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.




## GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2 AND TYPE 5 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD, ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 854.2.1 AND 841.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-449, OR ASTM A-687 (GRADE 105).

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

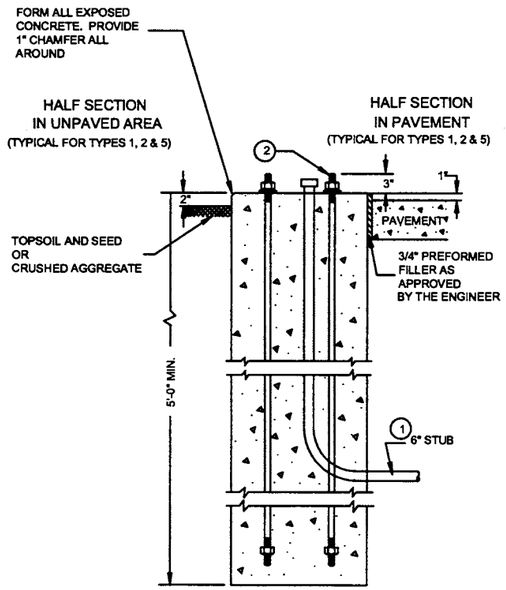
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

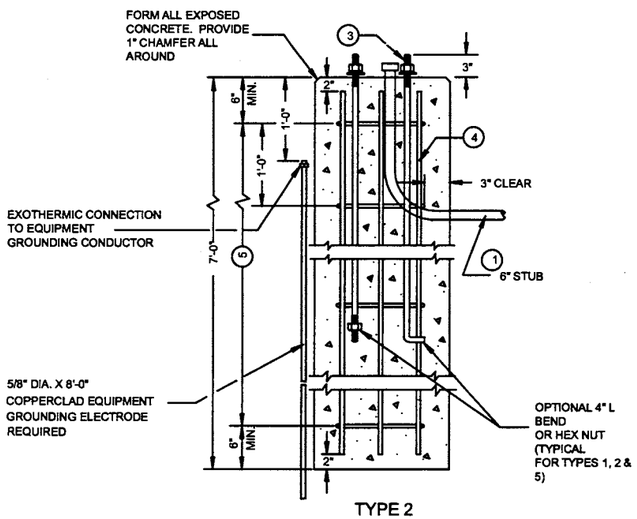
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT

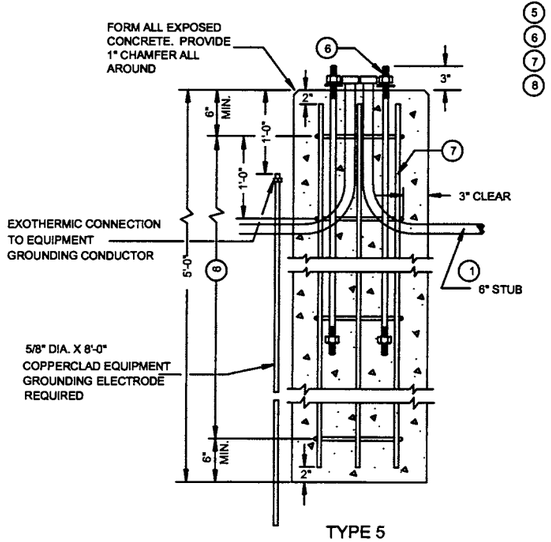
(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.




TYPE 1




TYPE 2




TYPE 5

CONCRETE BASES

| CONCRETE BASES DETAIL | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 2.38 |
|---|---|---|---|---|---|

## TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

| DIMENSION IN INCHES | | TYPE OF PIPE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CORRUGATED STEEL | | | | | | | | | POLYETHYLENE SDR 32.5 |
| PIPE DIAMETER (INSIDE) | A | 12 | 12 | 12 | 18 | 18 | 18 | 24 | 24 | 24 | 12 |
| PIPE LENGTH ** | B | 24 | 30 | 36 | 24 | 30 | 36 | 36 | 42 | 48 | 24 |
| WALL THICKNESS | C | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.064 | 0.4 |
| COVER | D | 10 1/4 | 10 1/4 | 10 1/4 | 18 1/4 | 18 1/4 | 16 1/4 | 22 1/4 | 22 1/4 | 22 1/4 | 10 1/4 |
| FRAME | E | 14 1/2 | 14 1/2 | 14 1/2 | 20 1/2 | 20 1/2 | 20 1/2 | 26 1/2 | 26 1/2 | 26 1/2 | 14 1/2 |
| FRAME | F | 8 1/2 | 8 1/2 | 8 1/2 | 14 1/2 | 14 1/2 | 14 1/2 | 20 1/2 | 20 1/2 | 20 1/2 | 8 1/2 |
| FRAME | G | 11 1/2 | 11 1/2 | 11 1/2 | 17 1/2 | 17 1/2 | 17 1/2 | 23 1/2 | 23 1/2 | 23 1/2 | 11 1/2 |
| WEIGHT IN POUNDS * | | | | | | | | | | | |
| FRAME AND COVER | | 60 | 60 | 60 | 110 | 110 | 110 | 155 | 155 | 155 | 60 |

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

POLYETHYLENE PULL BOXES SHALL NOT BE INSTALLED IN CONCRETE OR ASPHALTIC PAVEMENT. PULL BOXES LOCATED IN THE ROADWAY SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE. THE MECHANICAL CONNECTION (INSIDE AND OUTSIDE) TO THE PULL BOX, SHALL BE TOTALLY AND PERMANENTLY SEALED WITH A SILICONE OR RUBBERIZED CAULKING COMPOUND AS APPROVED BY THE ENGINEER.

GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

DRAIN DUCT SHALL BE MEASURED AND PAID FOR SEPARATELY.

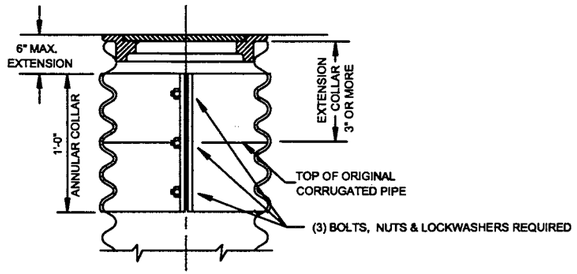
RODENT WIRE SCREEN SHALL BE 1/8" STAINLESS STEEL MESH AND BE INSTALLED WITH A STAINLESS STEEL HOSE CLAMP OF SUFFICIENT SIZE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

CONDUIT DETAIL APPLIES TO THIS DRAWING.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

IF PULL BOX EQUIPMENT GROUNDING IS REQUIRED USING AN EQUIPMENT GROUNDING ELECTRODE IN EACH PULL BOX, THE EQUIPMENT GROUNDING ELECTRODE SHALL BE 5/8" X 8'-0", COPPERCLAD AND BE EXOTHERMICALLY WELDED TO A #4 AWG, COPPER, STRANDED WIRE (BARE OR GREEN INSULATED). THE #4 AWG WIRE SHALL BE 4 FEET IN LENGTH, NEATLY COILED, TAPED AND AVAILABLE FOR USE WHEN REQUIRED.




CORRUGATED PIPE EXTENDER

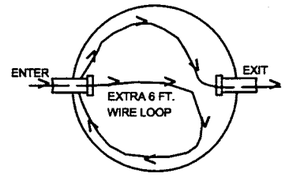
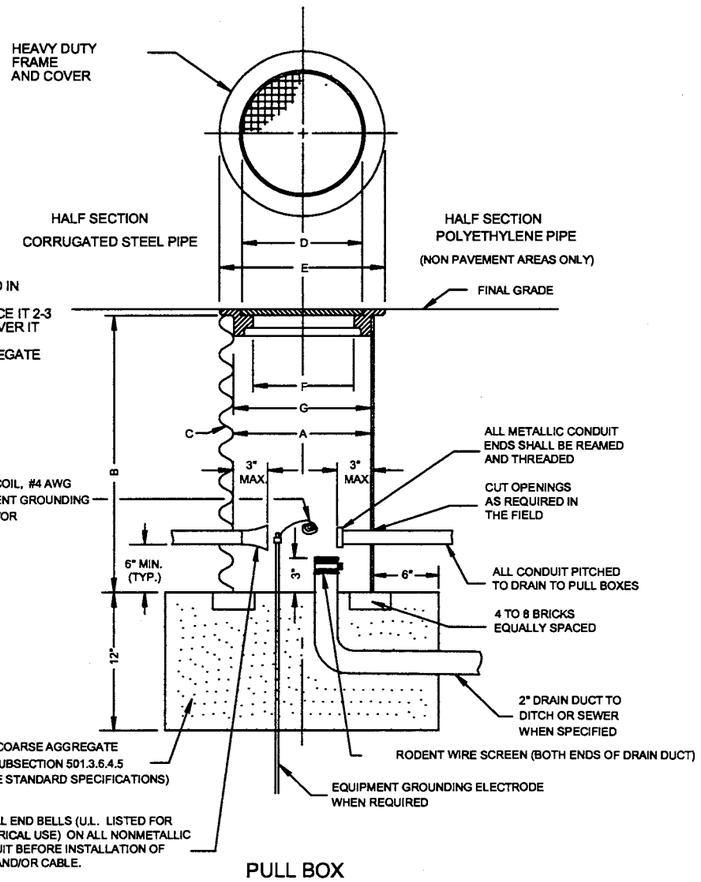
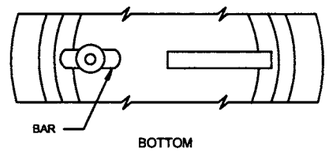
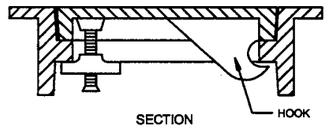



ILLUSTRATION OF WIRE/CABLE PLACEMENT IN PULLBOX



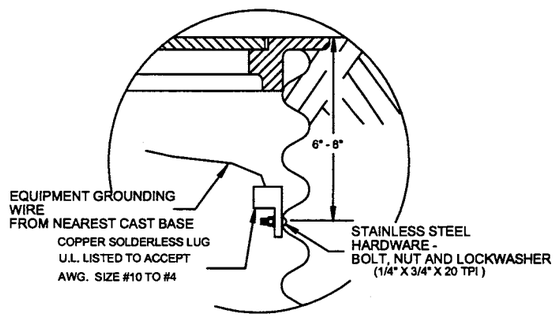

PULL BOX



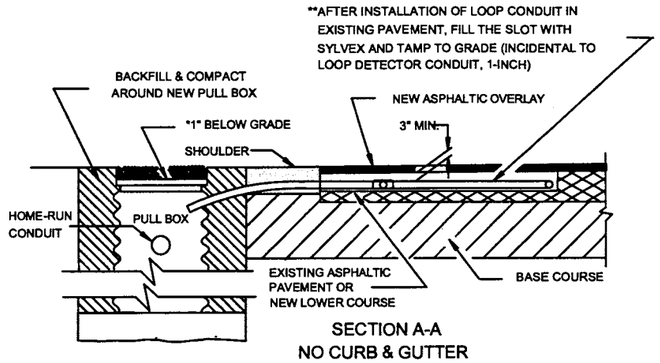

ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



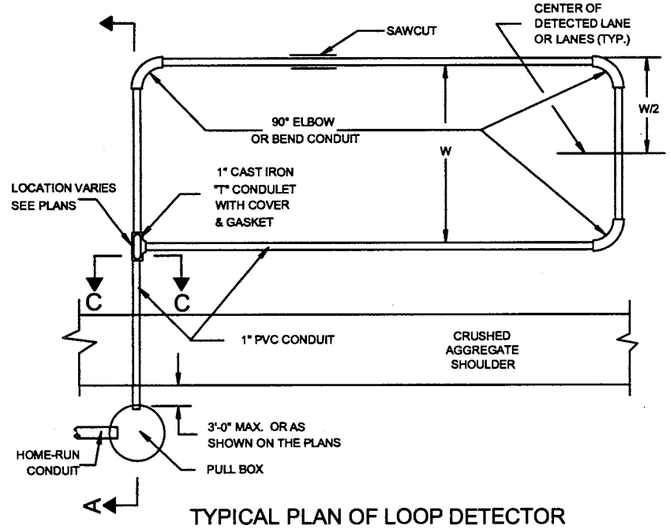

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

| PULL BOX DETAIL | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO.2003492 | SHEET NO. 2.39 |
|---|---|---|---|---|---|




SECTION A-A
NO CURB & GUTTER
LOOP DETECTOR INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.




TYPICAL PLAN OF LOOP DETECTOR

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

THE GROUND RESISTANCE READING OF THE LOOP SHALL READ "INFINITY" TO GROUND ON AN OHMETER USING A MULTIPLIER SCALE OF 1 MEGOHM AND AN INPUT RESISTANCE OF 11 MEGOHMS MINIMUM, BEFORE SPLICING THE LOOP TO THE LEAD-IN CABLE.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

BEFORE PLACING THE 1 INCH CONDUIT IN THE CLEANED OUT SLOT, PLACE SOME OF THE TAR OR EPOXY SEALANT IN THE SLOT TO A DEPTH OF APPROXIMATELY 1/2 INCH. IF THE CONDUIT MUST BE PLACED IN THE BASE COURSE, DO NOT PLACE THE TAR OR EPOXY SEALANT IN THE SLOT.

ONCE THE 2" LOOP SLOT HAS BEEN CHIPPED OUT, THE LOOP INSTALLATION SHALL BE COMPLETED PRIOR TO OPENING THE LANE(S) TO TRAFFIC.

ANTI-SIEZE LUBRICATING MATERIAL SHALL BE USED ON ALL THREADS OF THREADED ASSEMBLIES BEFORE INSTALLATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

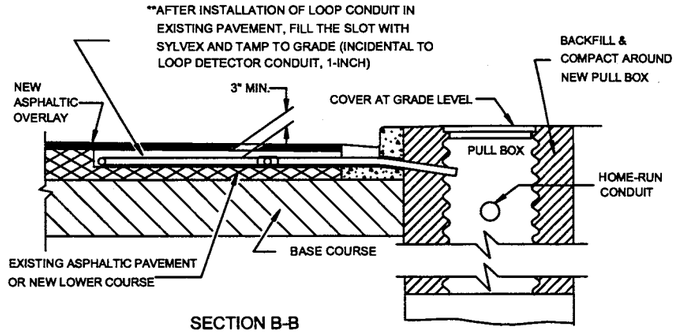
SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

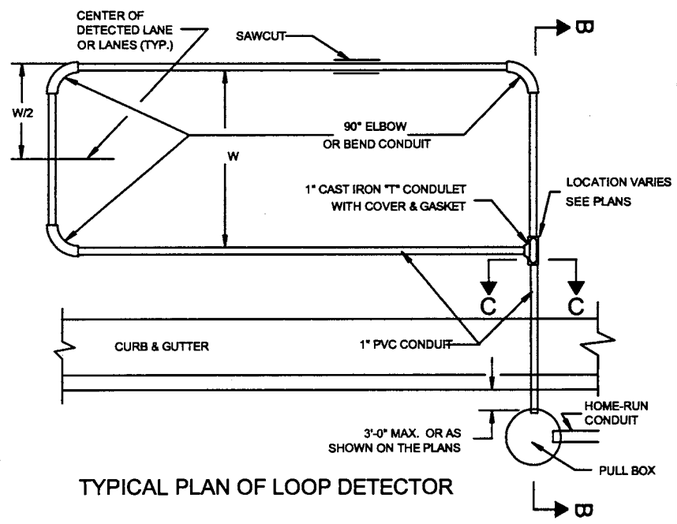
DRIVE A 1 1/2" MAX. PK NAIL INTO THE NEW ASPHALTIC OVERLAY AND ON TOP OF THE CONDULET AFTER THE NEW ASPHALTIC OVERLAY IS INSTALLED, IF REQUIRED BY THE DISTRICT TRAFFIC SECTION.

**AFTER THE SYLVEX HAS BEEN TAMPED, SEAL THE SLOT/SYLVEX/PAVEMENT OPENING WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

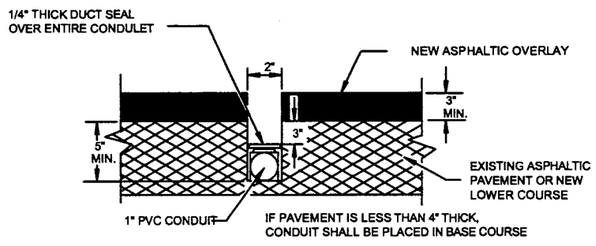
IN THE EVENT SYLVEX IS NOT AVAILABLE, AND FLEXIBLE TYPE EPOXY IS USED AS A LOOP SLOT FILLER, THE 2 INCH SLOT SHALL BE TOTALLY CLEAN AND DRY BEFORE ITS INSTALLATION. EPOXY USE SHALL BE APPROVED BY THE DISTRICT TRAFFIC ENGINEER AND THE FURNISHED EPOXY SHALL BE INSTALLED AFTER WRITTEN APPROVAL BY THE PROJECT ENGINEER.



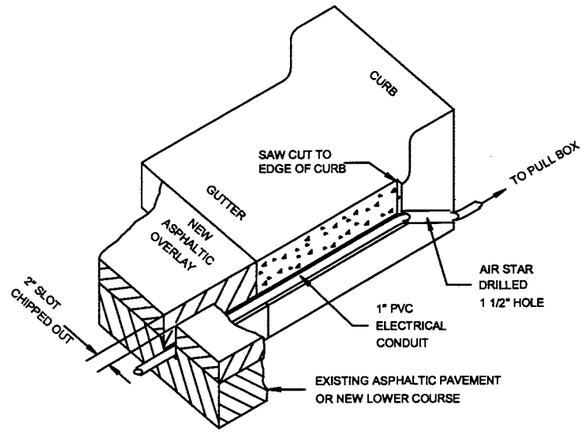

SECTION B-B
CURB & GUTTER
LOOP DETECTOR INSTALLATION DETAIL



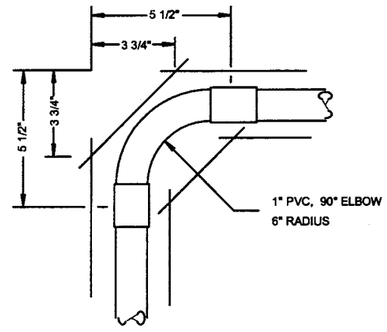

TYPICAL PLAN OF LOOP DETECTOR




SIDE VIEW
SECTION C-C
LOOP DETECTOR SLOT DETAIL

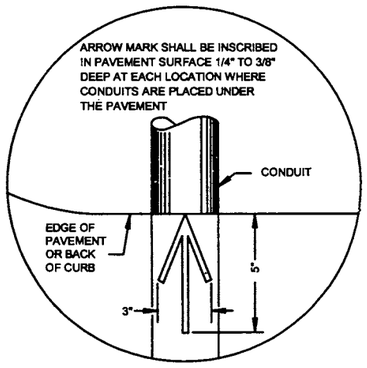



ISOMETRIC VIEW
TYPICAL SAW CUT DETAIL FOR LEAD-IN CONDUIT



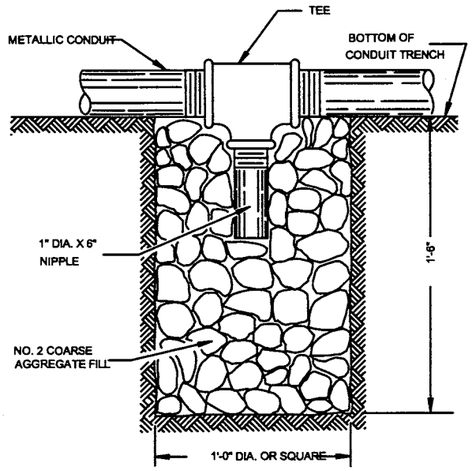

TOP VIEW
CORNER SAW SLOT DETAIL

| LOOP DETECTOR DETAIL | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 2.40 |
|---|---|---|---|---|---|



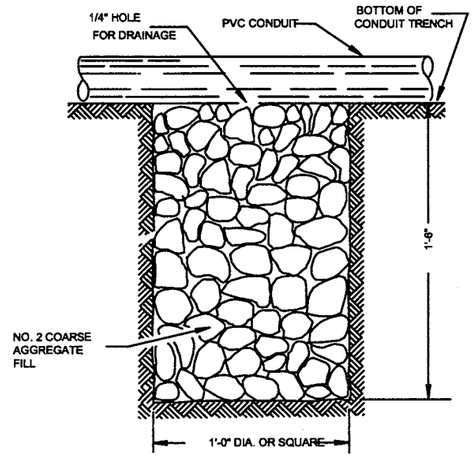

PLAN VIEW

ARROW MARK




NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT




NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

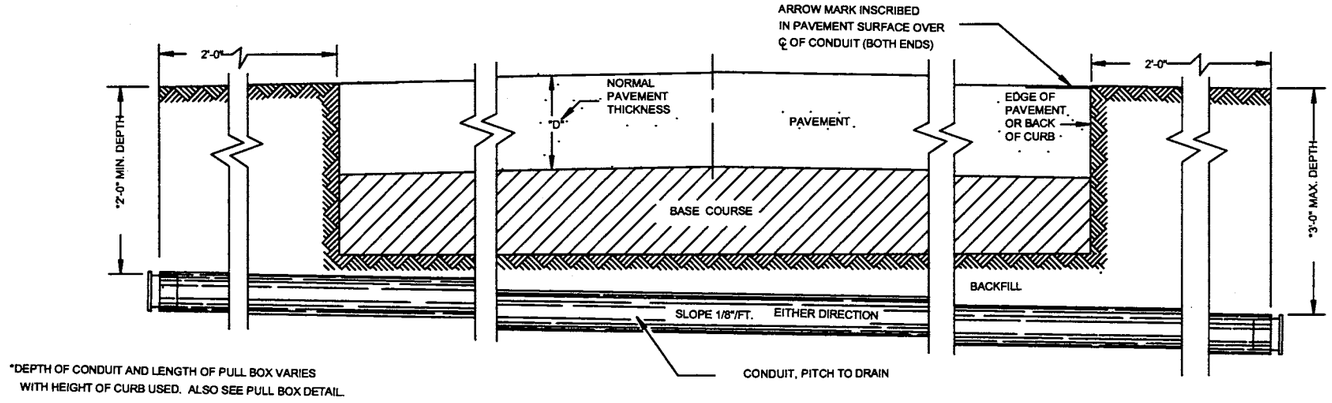
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER.




*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX DETAIL.

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

| NON-METTALIC CONDUIT DETAIL | SCALE: N.T.S. | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO.2003492 | SHEET NO. 2.41 |
|---|---|---|---|---|---|

# ESTIMATE OF QUANTITIES

| ITEM NO. | DESCRIPTION | | QUANTITY |
|---|---|---|---|
| 20335 | REMOVING SMALL PIPE CULVERTS, STATION 6 + 63 RT-LT | EA | 1 |
| 20405 | REMOVING CURB AND GUTTER | LF | 837 |
| 20501 | COMMON EXCAVATION | CY | 19,168 |
| 30404 | CRUSHED AGGREGATE BASE COURSE | TON | 8,223 |
| 40204 | ASPHALTIC MATERIAL FOR TACK COAT | GAL | 699 |
| 40501 | ASPHALTIC MATERIAL FOR PLANT MIXES | TON | 250 |
| 40721 | ASPHALTIC CONCRETE PAVEMENT, TYPE E-1 | TON | 4,139 |
| 52260 | REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE 12-INCH | EA | 1 |
| 52261 | REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE 15-INCH | EA | 2 |
| 60120 | CONCRETE CURB AND GUTTER, 18-INCH, TYPE D | LF | 3,310 |
| 60133 | CONCRETE CURB AND GUTTER, 30-INCH, TYPE D | LF | 4,375 |
| 60825 | REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 12-INCH | LF | 313 |
| 60826 | REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 15-INCH | LF | 573 |
| 61110 | MANHOLES, TYPE 1 | EA | 2 |
| 61122 | INLETS, TYPE 3 | EA | 8 |
| 61129 | RECONSTRUCTING INLETS | EA | 1 |
| 61151 | MANHOLE COVERS, TYPE J | EA | 2 |
| 61167 | INLET COVERS, TYPE H | EA | 7 |
| 61182 | ADJUSTING MANHOLE COVERS | EA | 1 |
| 62003 | CONCRETE MEDIAN SLOPED NOSE | SF | 321 |
| 62505 | SALVAGED TOPSOIL | SY | 6,840 |
| 62702 | MULCHING | SY | 6,840 |
| 62811 | EROSION BALES, DELIVERED | EA | 12 |
| 62812 | EROSION BALES, INSTALLED | EA | 12 |
| 62815 | SILT FENCE, DELIVERED | LF | 40 |
| 62816 | SILT FENCE, INSTALLED | LF | 40 |
| 62817 | SILT FENCE MAINTENANCE | LF | 40 |
| 62870 | INLET PROTECTION, TYPE A | EA | 10 |
| 62872 | INLET PROTECTION, TYPE C | EA | 10 |
| 62905 | FERTILIZER, TYPE B | CWT | 4 |
| 63011 | SEEDING MIXTURE NO. 40 | LB | 124 |
| 63403 | WOOD POSTS 4 X 4-INCH X 14-FOOT | EA | 23 |
| 63702 | SIGNS, TYPE II, REFLECTIVE | SF | 148 |
| 63822 | MOVING SIGNS, TYPE II | EA | 2 |
| 63827 | REMOVING SIGNS, TYPE II | EA | 12 |
| 63830 | REMOVING SMALL SIGN SUPPORTS | EA | 14 |
| 64181 | OVERHEAD SIGN SUPPORT, STRUCTURE S-1-1 | EA | 1 |
| 64301 | TRAFFIC CONTROL, LUMP SUM | LF | 1 |
| 64602 | PAVEMENT MARKING, 4-INCH, EPOXY | LF | 3,826 |
| 64618 | PAVEMENT MARKING, CHANNELIZING, 8-INCH, EPOXY | LF | 507 |
| 64710 | PAVMEMENT MARKING, STOP LINE, 18-INCH, EPOXY | LF | 127 |
| 64730 | PAVEMENT MARKING, ARROWS, TYPE 1, EPOXY | EA | 1 |
| 64734 | PAVEMENT MARKING, ARROWS, TYPE 2, EPOXY | EA | 5 |
| 64738 | PAVEMENT MARKING, ARROWS, TYPE 3, EPOXY | EA | 1 |
| 64758 | PAVEMENT MARKING, WORDS, EPOXY | EA | 3 |
| 64770 | PAVEMENT MARKING, DIAGONAL, 12-INCH, EPOXY | LF | 150 |
| 64790 | PAVEMENT MARKING, ISLAND NOSE, EPOXY | EA | 7 |

| ITEM NO. | DESCRIPTION | | QUANTITY |
|---|---|---|---|
| 65226 | NONMETALLIC CONDUIT, SCHEDULE 80, 1-INCH | LF | 164 |
| 65229 | NONMETALLIC CONDUIT, SCHEDULE 80, 2-INCH | LF | 794 |
| 65231 | NONMETALLIC CONDUIT, SCHEDULE 80, 3-INCH | LF | 418 |
| 65250 | LOOP DETECTOR CONDUIT | LF | 352 |
| 65303 | PULL BOXES, STEEL, 18 X 24-INCH | EA | 3 |
| 65306 | PULL BOXES, STEEL, 24 X 36-INCH | EA | 6 |
| 65401 | CONCRETE BASES, TYPE 1 | EA | 6 |
| 65402 | CONCRETE BASES, TYPE 2 | EA | 4 |
| 65418 | CONCRETE CONTROL CABINET BASES, TYPE 9 | EA | 1 |
| 65425 | PEDESTAL BASES | EA | 6 |
| 65430 | TRANSFORMER BASES, STANDARD 11 1/2-INCH, BOLT CIRCLE | EA | 4 |
| 65524 | TRAFFIC SIGNAL CABLE, 5 CONDUCTOR, NO. 14 | LF | 157 |
| 65526 | TRAFFIC SIGNAL CABLE, 7 CONDUCTOR, NO. 14 | LF | 44 |
| 65530 | TRAFFIC SIGNAL CABLE, 12 CONDUCTOR, NO. 14 | LF | 268 |
| 65536 | TRAFFIC SIGNAL CABLE, 21 CONDUCTOR, NO. 14 | LF | 816 |
| 65545 | TYPE UF CABLE, 2 CONDUCTOR, NO. 12 GROUNDED | LF | 549 |
| 65557 | ELECTRICAL WIRE, TRAFFIC SIGNALS, NO. 10 | LF | 739 |
| 65566 | ELECTRICAL WIRING, LIGHTING, NO. 12 | LF | 160 |
| 65580 | LOOP DETECTOR LEAD IN CABLE | LF | 3,007 |
| 65585 | LOOP DETECTOR WIRE | LF | 1,404 |
| 65615 | ELECTRICAL SERVICE, METER BREAKER PEDESTAL | EA | 1 |
| 65703 | POLES, TYPE 3, AMRON | LF | 2 |
| 65704 | POLES, TYPE 4 | LF | 2 |
| 65732 | TRAFFIC SIGNAL STANDARDS, ALUMINUM, 13-FOOT, BOLT CIRCLE | LF | 4 |
| 65733 | TRAFFIC SIGNAL STANDARDS, ALUMINUM, 15-FOOT | LF | 2 |
| 65802 | TROMBONE ARMS, 15-FOOT | LF | 1 |
| 65803 | TROMBONE ARMS, 20-FOOT | LF | 1 |
| 65826 | TRAFFIC SIGNAL FACES, 3 - 12-INCH, VERTICAL, SPECIAL-LED | EA | 8 |
| 65828 | TRAFFIC SIGNAL FACES, 5 - 12-INCH, VERTICAL, SPECIAL-LED | EA | 4 |
| 65829 | TRAFFIC SIGNAL FACES, 3 - 12-INCH, HORIZONTAL, SPECIAL-LED | EA | 2 |
| 65850 | TRAFFIC SIGNAL MOUNTING HARDWARE, (SB1) LUMP SUM | EA | 6 |
| 65851 | TRAFFIC SIGNAL MOUNTING HARDWARE, (SB2) LUMP SUM | EA | 1 |
| 65852 | TRAFFIC SIGNAL MOUNTING HARDWARE, (SB3) LUMP SUM | EA | 1 |
| 65853 | TRAFFIC SIGNAL MOUNTING HARDWARE, (SB4) LUMP SUM | EA | 1 |
| 65854 | TRAFFIC SIGNAL MOUNTING HARDWARE, (SB5) LUMP SUM | EA | 1 |
| 65855 | TRAFFIC SIGNAL MOUNTING HARDWARE, (SB6) LUMP SUM | EA | 1 |
| 65856 | TRAFFIC SIGNAL MOUNTING HARDWARE, (SB7) LUMP SUM | EA | 1 |
| 65857 | TRAFFIC SIGNAL MOUNTING HARDWARE, (SB8) LUMP SUM | EA | 1 |
| 65858 | TRAFFIC SIGNAL MOUNTING HARDWARE, (SB9) LUMP SUM | EA | 1 |
| 65859 | TRAFFIC SIGNAL MOUNTING HARDWARE, (SB10) LUMP SUM | EA | 1 |
| 65903 | LUMINAIRES, 150 WATTS, H PS | EA | 4 |
| 65935 | LUMINAIRES ARMS, TRUSS TYPE, 4 1/2-INCH CLAMP, 10-FOOT | EA | 4 |
| 66501 | SAWING EXISTING PAVEMENT | LF | 308 |
| 90859 | TRAFFIC SIGNAL CONTROLLER, FULLY ACTIVATED, 8-PHASE | EA | 1 |
| 91006 | EXISTING MANHOLE TIE-INS | EA | 1 |
| 91008 | RELOCATE INLET | EA | 2 |
| 91015 | RELOCATE HYDRANT | EA | 4 |

## STORM SEWER MANHOLE SCHEDULE

| LOCATION | STRUCTURE NUMBER | STATION | OFFSET | FLOWLINE ELEVATION (FT) | INVERT ELEVATION (FT) | INVERT ELEVATION (FT) | SUMP (FT) | DEPTH (FT) | 61110 MANHOLES TYPE 1 (EA) | 61151 MANHOLE COVERS TYPE J (EA) |
|---|---|---|---|---|---|---|---|---|---|---|
| CTH "XX" | MH 1 | 3 + 36.93 | 15.09 L | 1175.40 | 1171.32 | - | 2 | 6.08 | 1 | 1 |
| CTH "XX" | MH 2 | 6 + 50.00 | 10.50 L | 1176.21 | 1171.38 | 1171.63 | 2 | 6.83 | 1 | 1 |
| | | | | | | TOTALS | | 12.91 | 2 | 2 |

## STORM SEWER INLET SCHEDULE

| LOCATION | STRUCTURE NUMBER | STATION | OFFSET | FLANGE ELEVATION (FT) | INVERT ELEVATION (FT) | INVERT ELEVATION (FT) | SUMP (FT) | DEPTH (FT) | 61122 INLETS TYPE 3 (EA) | 61129 RECONSTRUCT INLET (EA) | 61167 INLET COVERS TYPE H (EA) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CTH XX | EX INLET | 1 + 34.63 | 25.76 R | 1174.29 | - | - | - | - | - | 1 | - |
| CTH XX | INLET 1A | 2 + 33.96 | 26.50 R | 1174.15 | 1171.30 | 1171.55 | 2 | 4.85 | 1 | - | 1 |
| CTH XX | INLET 1B | 2 + 33.96 | 47.50 L | 1174.15 | 1171.57 | - | 2 | 4.58 | 1 | - | 1 |
| CTH XX | INLET 2A | 6 + 50.00 | 26.50 R | 1175.02 | 1171.75 | - | 2 | 5.27 | 1 | - | 1 |
| CTH XX | INLET 2B | 6 + 50.00 | 47.50 L | 1175.02 | 1171.75 | - | 2 | 5.27 | 1 | - | 1 |
| CTH XX | INLET 3A | 13 + 50.00 | 26.50 R | 1176.17 | 1174.17 | - | 2 | 4.00 | 1 | - | 1 |
| CTH XX | INLET 3B | 13 + 50.00 | 47.50 L | 1176.17 | 1174.04 | - | 2 | 4.13 | 1 | - | 1 |
| CTH XX | INLET 4A | 17 + 77.99 | 46.50 L | 1176.25 | 1174.02 | - | 2 | 4.23 | 1 | - | - |
| CTH XX | INLET 4B | 17 + 83.46 | 24.83 R | 1176.25 | 1174.25 | - | 2 | 4.00 | 1 | - | 1 |
| | | | | | TOTALS | | | TOTALS | 8 | 1 | 7 |

## STORM SEWER PIPE SCHEDULE

| LOCATION | PIPE LOCATION FROM | | TO | 60825 RCP CL III 12-INCH (FT) | 60826 RCP CL III 15-INCH (FT) | UPPER INVERT (FT) | LOWER INVERT (FT) | SLOPE (FT/FT) | PIPE DROP (FT) |
|---|---|---|---|---|---|---|---|---|---|
| CTH XX | EX MH | - | INLET 1A | - | 109 | 1171.30 | 1171.27 | .0002 | 0.03 |
| CTH XX | INLET 1A | - | MH 1 | - | 111 | 1171.32 | 1171.30 | .0002 | 0.02 |
| CTH XX | MH 1 | - | MH 2 | - | 313 | 1171.38 | 1171.32 | .0002 | 0.06 |
| CTH XX | INLET 1A | - | INLET 1B | 70 | - | 1171.57 | 1171.55 | .0003 | 0.02 |
| CTH XX | MH 1 | - | GANDER POND | - | 40 | 1171.50 | 1171.32 | .0045 | 0.18 |
| CTH XX | MH 2 | - | INLET 2A | 35 | - | 1171.75 | 1171.63 | .0034 | 0.12 |
| CTH XX | MH 2 | - | INLET 2B | 35 | - | 1171.75 | 1171.63 | .0019 | 0.12 |
| CTH XX | INLET 3A | - | INLET 3B | 70 | - | 1174.17 | 1174.04 | .0019 | 0.13 |
| CTH XX | INLET 3B | - | OUTFALL | 21 | - | 1174.04 | 1174.00 | .0033 | 0.04 |
| CTH XX | INLET 4B | - | INLET 4A | 70 | - | 1174.25 | 1174.02 | .0005 | 0.23 |
| CTH XX | INLET 4A | - | OUTFALL | 4 | - | 1174.02 | 1174.00 | - | 0.02 |
| CTH XX | EX INLET | - | EX PIPE | 8 | - | - | - | - | - |
| | | | TOTAL | 313 | 573 | | | | |

## REMOVING CURB AND GUTTER

| LOCATION | STATION | OFFSET | TO | STATION | OFFSET | 20405 REMOVING CURB & GUTTER (LF) | COMMENTS |
|---|---|---|---|---|---|---|---|
| CTH "XX" | 0 + 50.00 | R | - | 1 + 40.00 | R | 90 | |
| CTH "XX" | 0 + 50.00 | R | - | 1 + 40.00 | R | 115 | MEDIAN |
| TRAILWOOD LANE | 0 + 00.00 | R | - | 2 + 90.00 | R | 600 | |
| CTH "XX" | 1 + 10.00 | L | - | 1 + 42.00 | L | 32 | |
| | | | | TOTAL | | 837 | |

## SAWING EXISTING PAVEMENT

| LOCATION | STATION | OFFSET | 66501 SAWING EXISTING PAVEMENT (LF) | |
|---|---|---|---|---|
| CTH "XX" | 0 + 30.00 | R | 48 | |
| CTH "XX" | 1 + 40.00 | L | 48 | |
| CTH "XX" | 23 + 00.00 | L | 30 | |
| TRAILWOOD LANE | 0 + 00.00 | R & L | 38 | |
| CTH "XX" | 12 + 68.79 | R | 68 | MALL FURNITURE |
| CTH "XX" | 13 + 21.18 | R | 30 | MALL FURNITURE |
| CTH "XX" | 14 + 15.49 | R | 46 | MALL FURNITURE |
| | | TOTAL | 308 | |

## REMOVING OLD CULVERTS

| LOCATION | STATION | OFFSET (FT) | 20335 REMOVING OLD CULVERTS (EA) |
|---|---|---|---|
| C.T.H. "XX" | 14 + 10.00 | 28 R | 1 |
| | | TOTALS | 1 |

## ADJUSTING AND RECONSTRUCTING MANHOLES AND INLETS

| LOCATION | STATION | OFFSET (FT) | 91006 EXIST. MANHOLE PIPE TIE-IN (EA) | 61182 ADJUSTING MANHOLE COVERS (EA) | 61129 RECONSTRUCT INLETS (EA) |
|---|---|---|---|---|---|
| C.T.H. "XX" | 1 + 34.63 | 26 R | 1 | | 1 |
| C.T.H. "XX" | 1 + 34.63 | 48.48 L | | 1 | |
| | | TOTALS | 1 | 1 | 1 |

## CONCRETE CURB AND GUTTER SCHEDULE

| LOCATION | STATION | OFFSET | TO | STATION | OFFSET | 60120 CONCRETE CURB & GUTTER 30-INCH, TYPE D (LF) | 90004 CONCRETE CURB & GUTTER 18-INCH, TYPE D (LF) | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| C.T.H. "XX" | 0 + 50.00 | R | - | 17 + 30.00 | R | 1,737 | - | |
| C.T.H. "XX" | 17 + 75.00 | R | - | 19 + 63.00 | R | 215 | - | |
| C.T.H. "XX" | 1 + 07.00 | L | - | 17 + 33.00 | L | 1,587 | - | |
| C.T.H. "XX" | 17 + 75.00 | L | - | 20 + 00.00 | L | 256 | - | |
| TRAILWOOD | 0 + 00.00 | L | - | 2 + 90.00 | L | 290 | - | |
| TRAILWOOD | 0 + 00.00 | R | - | 2 + 90.00 | R | 290 | - | |
| C.T.H. "XX" | 1 + 30.00 | R & L | - | 5 + 36.00 | R & L | - | 911 | MEDIAN |
| C.T.H. "XX" | 6 + 09.00 | L & R | - | 12 + 50.00 | L & R | - | 1,281 | MEDIAN |
| C.T.H. "XX" | 13 + 09.00 | R & L | - | 16 + 88.00 | R & L | - | 739 | MEDIAN |
| C.T.H. "XX" | 18 + 10.00 | L & R | - | 19 + 95.00 | L & R | - | 379 | MEDIAN |
| | | | | TOTALS | | 4,375 | 3,310 | |

## CONCRETE MEDIAN SLOPED NOSE

| LOCATION | STATION | 62003 CONCRETE MEDIAN SLOPED NOSE (SF) |
|---|---|---|
| C.T.H. "XX" | 19 + 60.00 | 51 |
| C.T.H. "XX" | 18 + 13.00 | 43 |
| C.T.H. "XX" | 16 + 87.00 | 42 |
| C.T.H. "XX" | 13 + 10.00 | 43 |
| C.T.H. "XX" | 12 + 50.00 | 50 |
| C.T.H. "XX" | 6 + 09.00 | 49 |
| C.T.H. "XX" | 5 + 35.00 | 43 |
| | TOTAL | 321 |

## HYDRANT RELOCATION

| STATION | OFFSET (FT) | 91015 QUANTITY |
|---|---|---|
| 4 + 02.73 | 46.13' L | 1 |
| 8 + 99.78 | 52.62' L | 1 |
| 14 + 35.65 | 49.18' L | 1 |
| 19 + 50.98 | 34.92' L | 1 |
| | TOTAL | 4 |

## PAVEMENT MARKING, EPOXY

| LOCATION | STATION | TO | STATION | 64602 WHITE 4-INCH (LF) | 64618 WHITE CHANNELIZING 8-INCH (LF) | 64710 WHITE STOP LINE 18-INCH (LF) | 64730 ARROWS TYPE 1 (EA) | 64734 ARROWS TYPE 2 (EA) | 64738 ARROWS TYPE 3 (EA) | 64758 WORDS (EA) | 64770 WHITE DIAGONAL 12-INCH (LF) | 64790 YELLOW ISLAND NOSE (EA) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CTH XX | 0 + 40.00 | - | 21 + 50.00 | 3,376 | 507 | 92 | 1 | 5 | 1 | 3 | 150 | 7 | SEE PAVEMENT MARKING DETAILS |
| TRAILWOOD LANE | 2 + 00.00 | - | 3 + 00.00 | 450 | - | 35 | - | - | - | - | - | - | SEE PAVEMENT MARKING DETAILS |
| | | | TOTALS | 3,826 | 507 | 127 | 1 | 5 | 1 | 3 | 150 | 7 | |

## PAVEMENT SCHEDULE

| LOCATION | STATION | TO | STATION | OFFSET | 40722 ASPHALTIC CONCRETE PAVEMENT TYPE E-1 (TON) | | 40501 ASPHALTIC MATERIAL FOR PLANT MIXES (TON) | 40204 ASPHALT MATERIAL FOR TACK COAT (GAL) | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| CTH XX | 0 + 50.00 | - | 23 + 00.00 | | 3,640 | (5") | 218 | 634 | ROADWAY |
| TRAILWOOD LANE | 0 + 00.00 | - | 3 + 10.00 | | 360 | (5") | 22 | 65 | ROADWAY |
| CTH XX | 12 + 50.00 | | | | 75 | (3") | 5 | - | CE |
| CTH XX | 21 + 10.00 | | | | 9 | (3") | 1 | - | CE |
| CTH XX | 3 + 65.00 | - | 5 + 35.00 | L | 13 | (2") | 1 | - | MEDIAN |
| CTH XX | 13 + 09.00 | - | 16 + 87.00 | L | 29 | (2") | 2 | - | MEDIAN |
| CTH XX | 18 + 10.00 | - | 19 + 95.00 | L | 13 | (2") | 1 | - | |
| | | | TOTAL | | 4,139 | | 250 | 699 | |

## CONCRETE CONTROL CABINET BASES

| | CONTROL CABINET BASE NO. | 65418 CONCRETE CABINET BASE TYPE 9 (EA) |
|---|---|---|
| CTH XX @ TRAILWOOD | CB1 | 1 |

## LANDSCAPING SCHEDULE

| LOCATION | STATION | TO | STATION | 62505 SALVAGED TOPSOIL (SY) | 62702 MULCHING (SY) | 63011 SEEDING MIX NO. 40 (LBS) | 62905 FERTILIZER TYPE B (CWT) | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| CTH XX | 0 + 50.00 | - | 23 + 00.00 | 5,000 | 5,000 | 90 | 3.14 | MAINLINE |
| CTH XX | 0 + 30.00 | - | 3 + 65.00 | 588 | 588 | 11 | 0.37 | MEDIAN |
| CTH XX | 6 + 08.00 | - | 12 + 50.00 | 1,252 | 1,252 | 23 | 0.79 | MEDIAN |
| | | | TOTAL | 6,840 | 6,840 | 124 | 4.30 | |

## TRAFFIC CONTROL

SEE DETAILS

## CRUSHED AGGREGATE BASE COURSE SCHEDULE

| LOCATION | STATION | TO | STATION | | 30404 CABC CRUSHED STONE (TON) |
|---|---|---|---|---|---|
| CTH XX | 0 + 37.00 | - | 23 + 00.00 | | 7,416 |
| CTH XX | 12 + 50.00 | - | | RT | 200 |
| CTH XX | 21 + 10.00 | - | | LT | 23 |
| TRAILWOOD LANE | 0 + 00.00 | - | 3 + 10.00 | | 584 |
| | | | TOTAL | | 8,223 |

## OVERHEAD SIGN SUPPORT SCHEDULE

| LOCATION | STATION | OFFSET (FT) | 64818 STRUCTURE S-1-1 (EA) |
|---|---|---|---|
| CTH XX | 14 + 40.00 | 29' R | 1 |

# SIGNING SCHEDULE

| LOCATION | STATION | OFFSET | SIGN NO. | CODE NO. | SIZE (IN X IN) | 63702 SIGNS TYPE II REFLECTIVE (SF) | 63403 WOOD POSTS 4" X 4" 14-FOOT (EA) | 63822 MOVING SIGNS TYPE II (EA) | 63827 REMOVING SIGNS TYPE II (EA) | 63830 REMOVING SMALL SIGN SUPPORTS (EA) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C.T.H. "XX" | -0 + 18.03 | R | 1 | - | - | - | - | - | 1 | 1 | MOVE SIGN - SEE PLAN NEW LOCATION |
| C.T.H. "XX" | 0 + 34.24 | R | 2 | - | - | - | 1 | 1 | - | 1 | MOVE SIGN - SEE PLAN NEW LOCATION |
| C.T.H. "XX" | 1 + 32.23 | R | 3 | - | - | - | 1 | 1 | - | 1 | REMOVE SIGN |
| C.T.H. "XX" | 1 + 19.30 | R | 4 | - | - | - | - | - | 1 | 1 | REMOVE SIGN |
| C.T.H. "XX" | 5 + 05.30 | R | 5 | - | - | - | - | - | 1 | 1 | REMOVE SIGN |
| C.T.H. "XX" | 6 + 59.43 | R | 6 | - | - | - | - | - | 1 | 1 | REMOVE SIGN |
| C.T.H. "XX" | 8 + 27.98 | R | 7 | - | - | - | - | - | 1 | 1 | REMOVE SIGN |
| C.T.H. "XX" | 10 + 66.33 | R | 8 | - | - | - | - | - | 1 | 1 | REMOVE SIGN |
| C.T.H. "XX" | 12 + 68.17 | R | 9 | - | - | - | - | - | 1 | 1 | REMOVE SIGN |
| C.T.H. "XX" | 14 + 68.57 | R | 10 | - | - | - | - | - | 1 | 1 | REMOVE SIGN |
| C.T.H. "XX" | 15 + 08.28 | R | 11 | - | - | - | - | - | 1 | 1 | REMOVE SIGN |
| C.T.H. "XX" | 17 + 30.46 | R | 12 | - | - | - | - | - | 1 | 1 | REMOVE SIGN |
| C.T.H. "XX" | 17 + 77.48 | R | 13 | - | - | - | - | - | 1 | 1 | REMOVE SIGN |
| C.T.H. "XX" | 18 + 13.36 | R | 14 | - | - | - | - | - | 1 | 1 | REMOVE SIGN |
| C.T.H. "XX" | 1 + 19.93 | L | 15 | R2-1 | 24 x 30 | 5 | 1 | - | - | - | - |
| C.T.H. "XX" | 4 + 07.14 | L | 16 | R2-1 | 24 x 30 | 5 | 1 | - | - | - | - |
| C.T.H. "XX" | 3 + 55.45 | L | 17 | R3-7L | 30 x 30 | 6.25 | 1 | - | - | - | - |
| C.T.H. "XX" | 5 + 35.74 | L | 18 | R4-7 | 24 x 30 | 5 | 1 | - | - | - | - |
| C.T.H. "XX" | 6 + 09.70 | L | 19 | R4-7 | 24 x 30 | 5 | 1 | - | - | - | - |
| C.T.H. "XX" | 5 + 53.86 | L | 20 | R1-1 | 36 x 36 | 9 | 1 | - | - | - | - |
| C.T.H. "XX" | 7 + 20.85 | R | 21 | R2-1 | 24 x 30 | 5 | 1 | - | - | - | - |
| C.T.H. "XX" | 9 + 25.33 | L | 22 | R2-1 | 24 x 30 | 5 | 1 | - | - | - | - |
| C.T.H. "XX" | 12 + 49.22 | L | 23 | R4-7 | 24 x 30 | 5 | 1 | - | - | - | - |
| C.T.H. "XX" | 13 + 09.70 | L | 24 | R4-7 | 24 x 30 | 5 | 1 | - | - | - | - |
| C.T.H. "XX" | 13 + 38.39 | L | 25 | R3-7L | 30 x 30 | 6.25 | 1 | - | - | - | - |
| C.T.H. "XX" | 13 + 06.93 | R | 26 | R1-1 | 36 x 36 | 9 | 1 | - | - | - | - |
| C.T.H. "XX" | 14 + 40.00 | R | 27 | R3-5R | 30 x 36 | 7.5 | - | - | - | - | MOUNTED ON OVERHEAD SIGN SUPPORT |
| C.T.H. "XX" | 14 + 40.00 | R | 28 | R3-5A | 30 x 36 | 7.5 | - | - | - | - | MOUNTED ON OVERHEAD SIGN SUPPORT |
| C.T.H. "XX" | 14 + 40.00 | R | 29 | R3-5L | 30 x 36 | 7.5 | - | - | - | - | MOUNTED ON OVERHEAD SIGN SUPPORT |
| C.T.H. "XX" | 15 + 77.58 | R | 30 | R2-1 | 24 x 30 | 5 | 1 | - | - | - | - |
| C.T.H. "XX" | 15 + 77.58 | L | 31 | R2-1 | 24 x 30 | 5 | 1 | - | - | - | - |
| C.T.H. "XX" | 16 + 87.83 | L | 32 | R4-7 | 24 x 30 | 5 | 1 | - | - | - | - |
| C.T.H. "XX" | 18 + 13.38 | L | 33 | R4-7 | 24 x 30 | 5 | 1 | - | - | - | - |
| C.T.H. "XX" | 18 + 13.38 | L | 34 | R3-5L | 30 x 36 | 7.5 | 1 | - | - | - | - |
| C.T.H. "XX" | 18 + 13.38 | L | 35 | R3-6R | 30 x 36 | 7.5 | 1 | - | - | - | - |
| C.T.H. "XX" | 19 + 00.00 | R | 36 | R2-1 | 24 x 30 | 5 | 1 | - | - | - | - |
| C.T.H. "XX" | 18 + 00.00 | R | 37 | R3-5L | 30 x 36 | 7.5 | 1 | - | - | - | - |
| C.T.H. "XX" | 18 + 00.00 | R | 38 | R3-6R | 30 x 36 | 7.5 | 1 | - | - | - | - |
| | | | | TOTALS | | 148 | 23 | 2 | 12 | 14 | |

# EROSION CONTROL SCHEDULE

| LOCATION | STATION | OFFSET (FT) | 62811 EROSION BALES DELIVERED (EA) | 62812 EROSION BALES INSTALLED (EA) | 62815 SILT FENCE DELIVERED (LF) | 62816 SILT FENCE INSTALLED (LF) | 62817 SILT FENCE MAINTENANCE (LF) | 62870 INLET PROTECTION TYPE A (EA) | 62872 INLET PROTECTION TYPE C (EA) | STRUCTURE NO. |
|---|---|---|---|---|---|---|---|---|---|---|
| CTH "XX" | 1 + 34.63 | 47.00 L | - | - | - | - | - | 1 | 1 | EXISTING INLET |
| CTH "XX" | 1 + 34.63 | 25.76 R | - | - | - | - | - | 1 | 1 | EXISTING INLET |
| CTH "XX" | 2 + 33.96 | 26.50 R | - | - | - | - | - | 1 | 1 | INLET 1a |
| CTH "XX" | 2 + 33.96 | 47.50 L | - | - | - | - | - | 1 | 1 | INLET 1b |
| CTH "XX" | 6 + 50.00 | 26.50 R | - | - | - | - | - | 1 | 1 | INLET 2a |
| CTH "XX" | 6 + 50.00 | 47.50 L | - | - | - | - | - | 1 | 1 | INLET 2b |
| CTH "XX" | 13 + 50.00 | 26.50 R | - | - | - | - | - | 1 | 1 | INLET 3a |
| CTH "XX" | 13 + 50.00 | 47.50 L | - | - | - | - | - | 1 | 1 | INLET 3b |
| CTH "XX" | 13 + 50.00 | 68.00 L | 6 | 6 | 20 | 20 | 20 | - | - | OUTFALL |
| CTH "XX" | 17 + 77.09 | 46.52 L | - | - | - | - | - | 1 | 1 | INLET 4a |
| CTH "XX" | 17 + 83.46 | 24.83 R | - | - | - | - | - | 1 | 1 | INLET 4b |
| CTH "XX" | 17 + 77.09 | 50.00 L | 6 | 6 | 20 | 20 | 20 | - | - | OUTFALL |
| | TOTALS | | 12 | 12 | 40 | 40 | 40 | 10 | 10 | |

## LOOP DETECTOR SCHEDULE

| LOCATION | DETECTOR NUMBER | SIZE (FT) | NUMBER OF TURNS | 65250 LOOP DETECTOR CONDUIT (LF) | 65585 LOOP DETECTOR WIRE (LF) | 65580 LOOP DETECTOR LEAD IN CABLE (LF) |
|---|---|---|---|---|---|---|
| CTH "XX" & TRAILWOOD LANE | LD21 | 6 X 6 | 5 | 24 | 130 | 306 |
| CTH "XX" & TRAILWOOD LANE | LD22 | 6 X 6 | 5 | 24 | 130 | 294 |
| CTH "XX" & TRAILWOOD LANE | LD41 | 6 X 20 | 3 | 52 | 156 | 52 |
| CTH "XX" & TRAILWOOD LANE | LD51 | 6 X 20 | 3 | 52 | 156 | 91 |
| CTH "XX" & TRAILWOOD LANE | LD61 | 6 X 6 | 5 | 24 | 130 | 416 |
| CTH "XX" & TRAILWOOD LANE | LD62 | 6 X 6 | 5 | 24 | 130 | 406 |
| CTH "XX" & TRAILWOOD LANE | LD81 | 6 X 6 | 5 | 24 | 130 | 493 |
| CTH "XX" & TRAILWOOD LANE | LD82 | 6 X 6 | 5 | 24 | 130 | 481 |
| CTH "XX" & TRAILWOOD LANE | LD83 | 6 X 20 | 3 | 52 | 156 | 240 |
| CTH "XX" & TRAILWOOD LANE | LD84 | 6 X 20 | 3 | 52 | 156 | 228 |
| | | | TOTAL | 352 | 1,404 | 3,007 |

## TRAFFIC SIGNAL AND STREET LIGHT BASE SCHEDULE

| LOCATION | SIGNAL BASE NUMBER | 65401 CONCRETE BASE TYPE 1 (EA) | 65402 CONCRETE BASE TYPE 2 (EA) | 65425 PEDESTAL BASE (EA) | 65430 TRANSFORMER BASES STANDARD 11 1/2-INCH (EA) |
|---|---|---|---|---|---|
| CTH "XX" & TRAILWOOD LANE | SB1 | 1 | - | 1 | - |
| CTH "XX" & TRAILWOOD LANE | SB2 | - | 1 | - | 1 |
| CTH "XX" & TRAILWOOD LANE | SB3 | 1 | - | 1 | - |
| CTH "XX" & TRAILWOOD LANE | SB4 | - | 1 | - | 1 |
| CTH "XX" & TRAILWOOD LANE | SB5 | 1 | - | 1 | - |
| CTH "XX" & TRAILWOOD LANE | SB6 | 1 | - | 1 | - |
| CTH "XX" & TRAILWOOD LANE | SB7 | - | 1 | - | 1 |
| CTH "XX" & TRAILWOOD LANE | SB8 | 1 | - | 1 | - |
| CTH "XX" & TRAILWOOD LANE | SB9 | - | 1 | - | 1 |
| CTH "XX" & TRAILWOOD LANE | SB10 | 1 | - | 1 | - |
| | TOTAL | 6 | 4 | 6 | 4 |

## EARTHWORK SCHEDULE

| | (1) 20501 COMMON EXCAVATION (CY) | (2) FOR INFO ONLY REMOVING PAVEMENT (CY) | (3) FOR INFO ONLY TOPSOIL (CY) | (4) *FOR INFO ONLY FILL (CY) | * (5) FOR INFO ONLY EXCESS (CY) | * (4=1-2-3-4) |
|---|---|---|---|---|---|---|
| CTH "XX" | 4,592.67 | 1,050 (5") | 9,135 | 441.00 | 6,544.00 | |
| TRAILWOOD LANE | 14,574.70 | 109 (3") | 1,064 | - | 955.00 | |
| TOTAL | 19,167.37 | 1,159 | 10,199 | 441 | 7,499 | |

* INCLUDES SHRINKAGE

## PULL BOXES SCHEDULE, TRAFFIC SIGNALS

| LOCATION | PULL BOX NUMBER | 65303 STEEL 18" X 24" (EA) | 65306 STEEL 24" X 36" (EA) |
|---|---|---|---|
| CTH "XX" & TRAILWOOD LANE | PB1 | - | 1 |
| CTH "XX" & TRAILWOOD LANE | PB2 | - | 1 |
| CTH "XX" & TRAILWOOD LANE | PB3 | - | 1 |
| CTH "XX" & TRAILWOOD LANE | PB4 | 1 | - |
| CTH "XX" & TRAILWOOD LANE | PB5 | - | 1 |
| CTH "XX" & TRAILWOOD LANE | PB6 | - | 1 |
| CTH "XX" & TRAILWOOD LANE | PB7 | - | 1 |
| CTH "XX" & TRAILWOOD LANE | PB8 | 1 | - |
| CTH "XX" & TRAILWOOD LANE | PB9 | 1 | - |
| | TOTALS | 3 | 6 |

## MANHOLE TIE-INS

| LOCATION | STATION | 91006 MANHOLE TIE-INS (EA) |
|---|---|---|
| CTH "XX' | 1 + 40 | 1 |
| | TOTAL | 1 |

## REINFORCED CONCRETE ARPON ENDWALL FOR CULVERT

| LOCATION | STATION | 52260 12" REINFORCED CONCRETE APRON ENDWALL (EA) | 52261 15" REINFORCED CONCRETE APRON ENDWALL (EA) |
|---|---|---|---|
| CTH "XX" | 3 + 40 | 1 | - |
| CTH "XX" | 13 + 50 | - | 1 |
| CTH "XX" | 17 + 75 | - | 1 |
| | TOTAL | 1 | 2 |

## NONMETALLIC CONDUIT SCHEDULE, TRAFFIC SIGNALS

| LOCATION | FROM | | TO | 65226 1-INCH SCH. 80 (LF) | 65229 2-INCH SCH. 80 (LF) | 65231 3-INCH SCH. 80 (LF) |
|---|---|---|---|---|---|---|
| CTH "XX" & TRAILWOOD LANE | CB1 | - | PB1 | - | - | 20 |
| CTH "XX" & TRAILWOOD LANE | PB1 | - | SB1 | - | 14 | - |
| CTH "XX" & TRAILWOOD LANE | PB1 | - | SB2 | - | 26 | - |
| CTH "XX" & TRAILWOOD LANE | PB1 | - | PB7 | - | - | 70 |
| CTH "XX" & TRAILWOOD LANE | PB1 | - | LD41 | 34 | - | - |
| CTH "XX" & TRAILWOOD LANE | PB1 | - | PB2 | - | - | 58 |
| CTH "XX" & TRAILWOOD LANE | PB2 | - | SB3 | - | 9 | - |
| CTH "XX" & TRAILWOOD LANE | PB2 | - | LD51 | 13 | - | - |
| CTH "XX" & TRAILWOOD LANE | PB2 | - | PB3 | - | - | 68 |
| CTH "XX" & TRAILWOOD LANE | PB3 | - | SB4 | - | 27 | - |
| CTH "XX" & TRAILWOOD LANE | PB3 | - | SB5 | - | 16 | - |
| CTH "XX" & TRAILWOOD LANE | PB3 | - | PB5 | - | - | 78 |
| CTH "XX" & TRAILWOOD LANE | PB3 | - | PB4 | - | 252 | - |
| CTH "XX" & TRAILWOOD LANE | PB4 | - | LD61 | 20 | - | - |
| CTH "XX" & TRAILWOOD LANE | PB4 | - | LD62 | 8 | - | - |
| CTH "XX" & TRAILWOOD LANE | PB5 | - | SB6 | - | 10 | - |
| CTH "XX" & TRAILWOOD LANE | PB5 | - | LD83 | 20 | - | - |
| CTH "XX" & TRAILWOOD LANE | PB5 | - | LD84 | 8 | - | - |
| CTH "XX" & TRAILWOOD LANE | PB5 | - | SB7 | - | 20 | - |
| CTH "XX" & TRAILWOOD LANE | PB5 | - | PB6 | - | - | 58 |
| CTH "XX" & TRAILWOOD LANE | PB6 | - | SB8 | - | 12 | - |
| CTH "XX" & TRAILWOOD LANE | PB6 | - | PB7 | - | - | 66 |
| CTH "XX" & TRAILWOOD LANE | PB7 | - | SB9 | - | 23 | - |
| CTH "XX" & TRAILWOOD LANE | PB7 | - | PB8 | - | 196 | - |
| CTH "XX" & TRAILWOOD LANE | PB7 | - | SB10 | - | 24 | - |
| CTH "XX" & TRAILWOOD LANE | PB8 | - | LD21 | 28 | - | - |
| CTH "XX" & TRAILWOOD LANE | PB8 | - | LD22 | 10 | - | - |
| CTH "XX" & TRAILWOOD LANE | PB5 | - | PB9 | - | 165 | - |
| CTH "XX" & TRAILWOOD LANE | PB9 | - | LD81 | 16 | - | - |
| CTH "XX" & TRAILWOOD LANE | PB9 | - | LD82 | 7 | - | - |
| | | | TOTALS | 164 | 794 | 418 |

# TRAFFIC SIGNAL AND STREET LIGHT SCHEDULE

| LOCATION | SIGNAL NUMBER | 65703 POLES TYPE 3 (EA) | 65704 POLES TYPE 4 (EA) | 65732 TRAFFIC SIGNAL STANDARDS 13-FOOT (EA) | 65733 TRAFFIC SIGNAL STANDARDS 15-FOOT (EA) | 65802 TROMBONE ARM 15-FOOT (EA) | 65803 TROMBONE ARM 20-FOOT (EA) | 65826 TRAFFIC SIGNAL FACES 3-12" VERTICAL (EA) | 65828 TRAFFIC SIGNAL FACES 5-12" HORIZONTAL (EA) | 65829 TRAFFIC SIGNAL FACES 3-12" HORIZONTAL (EA) | 65903 LUMINAIRES UTILITY, 150 WATTS (EA) | 65935 LUMINAIRES ARMS 10-FOOT (EA) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CTH "XX" & TRAILWOOD LANE | SB1 | - | - | 1 | - | - | - | 2 | - | - | - | - |
| CTH "XX" & TRAILWOOD LANE | SB2 | 1 | - | - | - | - | 1 | - | - | 1 | 1 | 1 |
| CTH "XX" & TRAILWOOD LANE | SB3 | - | - | - | 1 | - | - | - | 2 | - | - | - |
| CTH "XX" & TRAILWOOD LANE | SB4 | - | 1 | - | - | - | - | 1 | - | - | 1 | 1 |
| CTH "XX" & TRAILWOOD LANE | SB5 | - | - | 1 | - | - | - | 1 | - | - | - | - |
| CTH "XX" & TRAILWOOD LANE | SB6 | - | - | 1 | - | - | - | 2 | - | - | - | - |
| CTH "XX" & TRAILWOOD LANE | SB7 | 1 | - | - | - | 1 | - | - | - | 1 | 1 | 1 |
| CTH "XX" & TRAILWOOD LANE | SB8 | - | - | - | 1 | - | - | - | 2 | - | - | - |
| CTH "XX" & TRAILWOOD LANE | SB9 | - | 1 | - | - | - | - | 1 | - | - | 1 | 1 |
| CTH "XX" & TRAILWOOD LANE | SB10 | - | - | 1 | - | - | - | 1 | - | - | - | - |
| | TOTALS | 2 | 2 | 4 | 2 | 1 | 1 | 8 | 4 | 2 | 4 | 4 |

# TRAFFIC SIGNAL CABLE AND LIGHTING WIRING

| ROUTE | | HEAD NUMBER | 65524 TRAFFIC SIGNAL CABLE 5 CONDUCTOR, NO. 14 (L.F.) | 65526 TRAFFIC SIGNAL CABLE 7 CONDUCTOR, NO. 14 (L.F.) | 65530 TRAFFIC SIGNAL CABLE 12 CONDUCTOR, NO. 14 (L.F.) | 65536 TRAFFIC SIGNAL CABLE 21 CONDUCTOR, NO. 12 (L.F.) | 65545 TYPE UF CABLE 2 CONDUCTOR, NO.12 GROUNDED (L.F.) | 65566 ELECTRICAL WIRING LIGHTING, NO. 12 (L.F.) |
|---|---|---|---|---|---|---|---|---|
| CB1 | SB2 | 2B | 37 | - | - | 52 | 52 | 40 |
| SB2 | SB1 | 4A & 8C | 22 | - | - | 54 | - | - |
| CB1 | SB3 | 1A & 5B | - | 22 | 94 | - | - | - |
| CB1 | SB4 | 6A | 11 | - | - | 180 | 194 | 40 |
| SB4 | SB5 | 4B | 11 | - | - | 58 | - | - |
| CB1 | SB7 | 6B | 32 | - | - | 246 | 183 | 40 |
| SB7 | SB6 | 4C & 8A | 22 | - | - | 45 | - | - |
| CB1 | SB9 | 2A | 11 | - | - | 120 | 120 | 40 |
| SB9 | SB10 | 8B | 11 | - | - | 61 | - | - |
| CB1 | SB8 | 1B & 5A | - | 22 | 174 | - | - | - |
| | TOTAL | | 157 | 44 | 268 | 816 | 549 | 160 |

## ELECTRICAL WIRING

| ROUTE | | 65557 ELECTRICAL WIRE TRAFFIC SIGNALS, NO. 10 (L.F.) |
|---|---|---|
| CB1 | PB1 | 12 |
| PB1 | PB2 | 58 |
| PB2 | PB3 | 69 |
| PB3 | PB5 | 73 |
| CB1 | PB1 | 12 |
| PB1 | PB7 | 70 |
| PB7 | PB6 | 66 |
| PB6 | PB5 | 58 |
| | TOTAL | 418 |

## ELECTRICAL WIRING

| ROUTE | | 65557 ELECTRICAL WIRE TRAFFIC SIGNALS, NO. 10 (L.F.) |
|---|---|---|
| PB1 | SB1 | 28 |
| PB1 | SB2 | 40 |
| PB2 | SB3 | 23 |
| PB3 | SB4 | 42 |
| PB3 | SB5 | 30 |
| PB5 | SB6 | 24 |
| PB5 | SB7 | 34 |
| PB6 | SB8 | 26 |
| PB7 | SB9 | 37 |
| PB7 | SB10 | 37 |
| | TOTAL | 321 |

CTH XX

Gander Mountain

EX 10" WM

Attach to existing 15" storm sewer at R/W. Locate elev. on existing prior to setting grade on proposed.

Adjust existing inlet and grate. New FLG=1174.29

Inlet 1b
2+33.96 47.50' L
FLG=1174.15

EX MH
1+33.85 14.48' L

Remove Ex. Curb

40'- 15"RCP

MH 1
3+36.93 15.09' L

Shorten hydrant lead to place hydrant and valve behind BOC. (Typical-See Detail.)

312.72'- 15"RCP

Sawcut

108.72'- 15"RCP

70.00'- 12"RCP

110.96'- 15"RCP

32.24' Ex. Pave

MATCH LINE 6+00
SEE SHEET 5.1

Fiber

Inlet EX
1+34.63 25.78' R
Relocate existing inlet and grate. Extend existing 12" pipe
New FLG=1174.29

Inlet 1a
2+33.96 26.50' R

Caution

High Pressure Gas Main

LOW POINT ELEV = 1174.64
LOW POINT STA = 2+33.96
PVI STA = 2+50
PVI ELEV = 1174.60
A.D. = 0.35
K = 283.02
100.0' VC

PVI STA = 5+50
PVI ELEV = 1175.30
A.D. = -0.04
K = 2727.27
100.0' VC

BVCS: 2+00 BVCE: 1174.66
EVCS: 3+00 EVCE: 1174.72
BVCS: 5+00 BVCE: 1175.18
EVCS: 6+00

EX MH
1+33.85 14.48' L
RIM 1175.53

Inlet 1a
2+33.96 26.00' R
FLG= 1174.15

MH 1
3+36.93 15.09' L
RIM 1175.40

-0.12%
0.23%
DESIGN ℄
ORIG ℄

108.72'- 15"RCP @ 0.02%
110.96'- 15"RCP @0.02%
312.72'- 15"RCP @0.02%

INV 15" N&S-1171.27
INV 12" E&W-1171.36

INV 15" N&S-1171.30
INV 12" E-1171.55

INV 15" N,S&E-1171.32

1200 1195 1190 1185 1180 1175 1170 1165 1160

1175.1 | 1174.84 1174.9 | 1174.78 1174.8 | 1174.72 1174.5 | 1174.66 1174.5 | 1174.7 | 1174.72 1175.0 | 1174.83 1175.3 | 1174.95 1175.7 | 1175.07 1176.0 | 1175.18 1176.2 | 1176.5

0+00 1+00 2+00 3+00 4+00 5+00 6+00

| STORM SEWER AND ROAD CONSTRUCTION | SCALE (H)1"=20' (V)1"=2' | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 5.0 |
|---|---|---|---|---|---|

Gander Mountain

Harley Davidson

CTH XX

MATCH LINE 6+00
SEE SHEET 5.0

SEE SHEET 5.2
MATCH LINE 12+00

EX 10" WM

EX 12" SAN

GAS

Fiber

Inlet 2b
6+50 47.50' L
FLG=1175.02

35.00'-
12" RCP

PC 6+24.36

+9.70

MH 2
6+50 10.50' L

Inlet 2g
6+50 26.50' R
FLG=1176.02

Shorten hydrant lead to place hydrant and valve behind BOC. (Typical—See Detail.)

6+00 7+00 8+00 9+00 10+00 11+00 12+00

PVI STA = 11+50
PVI ELEV = 1176.48
A.D. = -0.11
K = 909.09

100.0' VC

EVCE: 1175.40

BVCS: 11+00
BVCE: 1176.38

EVCS: 12+00

MH 2
6+50 10.50' L
RIM 1176.21

INV 15" N=1171.38
INV 12" E&W=1171.63

0.20%

ORIG ℄

DESIGN ℄

1200 1195 1190 1185 1180 1175 1170 1165 1160

| 1177.0 | 1175.50 1177.4 | 1175.60 1177.6 | 1175.69 1177.8 | 1175.79 1177.8 | 1175.89 1177.7 | 1175.99 1177.6 | 1176.09 1177.6 | 1176.18 1177.8 | 1176.28 1177.9 | 1176.38 1178.3 | 1178.3 | 1176.52 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

| STORM SEWER AND ROAD CONSTRUCTION | SCALE (H)1"=20' (V)1"=2' | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 5.1 |
|---|---|---|---|---|---|

MATCH LINE 12+00
SEE SHEET 5.1

Harley Davidson

EX 12" SAN

EX 10" WM

GAS

21'-12"RCP
With apron endwall
outfall 1174.00

Shorten hydrant lead to place hydrant and valve behind BOC. (Typical-See Detail.)

Inlet 3b
13+50 47.50' L
FLG=1176.17

12"RCP

70.00'

Inlet 3a
13+50 26.50' R
FLG=1176.17

Fiber

New Driveway

Remove Driveway

Remove Ex. Culvert

Sawcut

Mall Furniture

CTH XX

4'-12"RCP
With apron endwall
outfall 1174.00

Inlet 4a
17+77.09 46.52' L
FLG=1176.25

70.00'-12"RCP

Inlet 4b
17+83.46 24.83' R
FLG=1176.25

EX 8" WM

EX 8" SAN

TRAILWOOD LANE

SEE SHEET 5.4

SEE SHEET 5.3
MATCH LINE 18+00

PT = 17+32.83

+87.28

+62.81

+38.39

+9.70

+70.9

3+45.24

3+00

13+00

14+00

15+00

16+00

17+00

18+00

PVI STA = 17+50
PVI ELEV = 1177.00
A.D. = 0.33
K = 304.99

100.0' VC

EVCE: 1176.52

BVCS: 17+00
BVCE: 1176.96

EVCS: 18+00

ORIG ℄

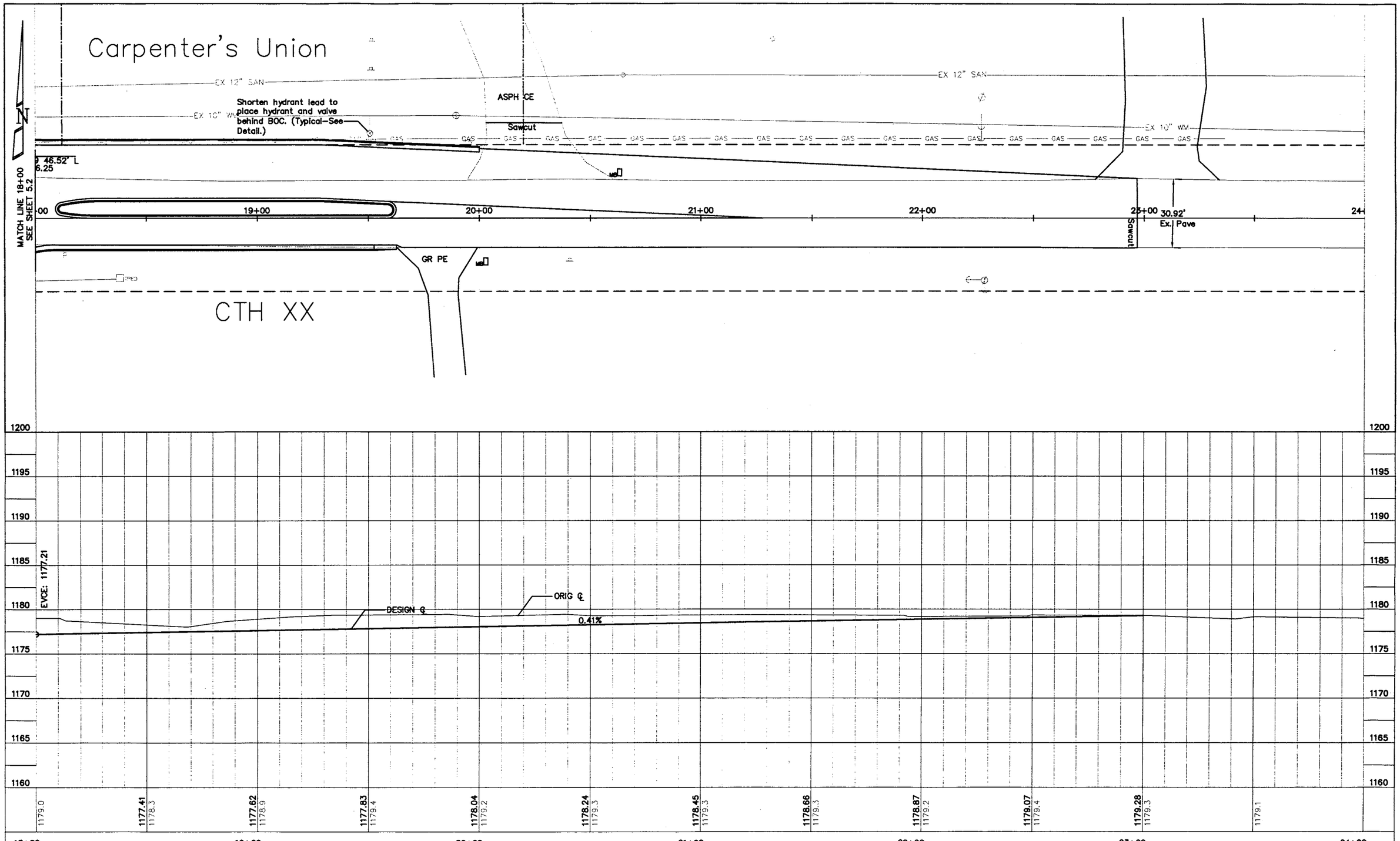
DESIGN ℄

0.09%

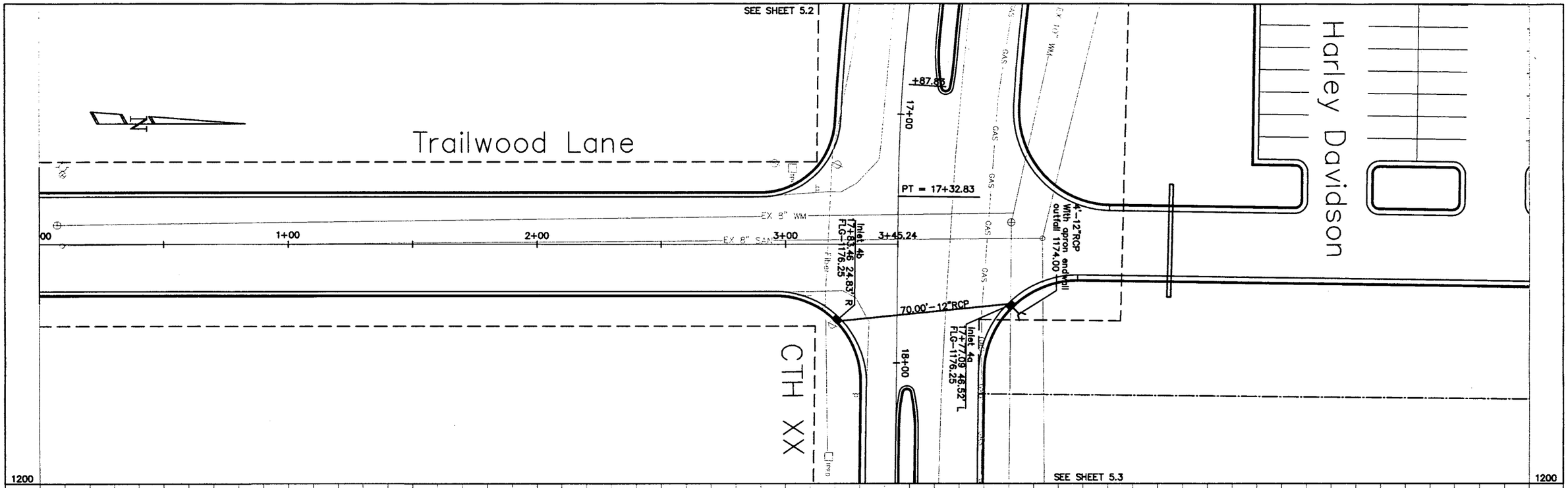
| 1178.5 | 1176.57 1178.6 | 1176.61 1179.0 | 1176.65 1179.1 | 1176.70 1179.1 | 1176.74 1178.9 | 1176.78 1178.9 | 1176.83 1179.0 | 1176.87 1179.2 | 1176.91 1179.3 | 1176.96 1179.2 | 1179.0 | 1177.21 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

12+00 13+00 14+00 15+00 16+00 17+00 18+00

| STORM SEWER AND ROAD CONSTRUCTION | SCALE (H)1"=20' (V)1"=2' | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 5.2 |
|---|---|---|---|---|---|




| | | | | | |
|---|---|---|---|---|---|
| STORM SEWER AND ROAD CONSTRUCTION | SCALE (H)1"=20' (V)1"=2' | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 5.3 |




| STORM SEWER AND ROAD CONSTRUCTION | SCALE (H)1"=20' (V)1"=2' | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | PROJECT NO. 2003492 | SHEET NO. 5.4 |
|---|---|---|---|---|---|

EARTHWORK

SCALE: N.T.S.

VILLAGE OF ROTHSCHILD

MARATHON COUNTY

PROJECT NO. 2003492

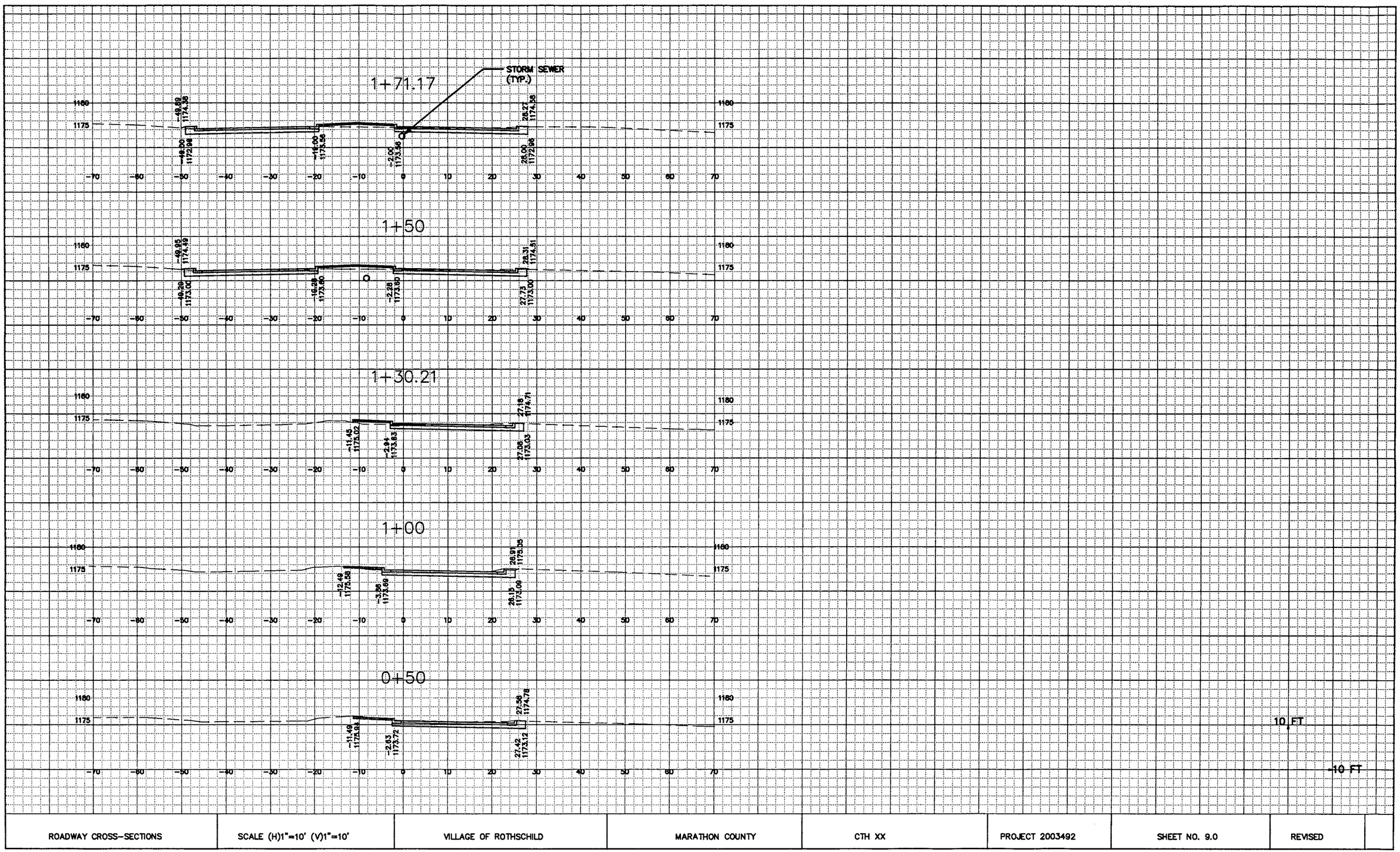
SHEET NO. 9A

# CTH XX

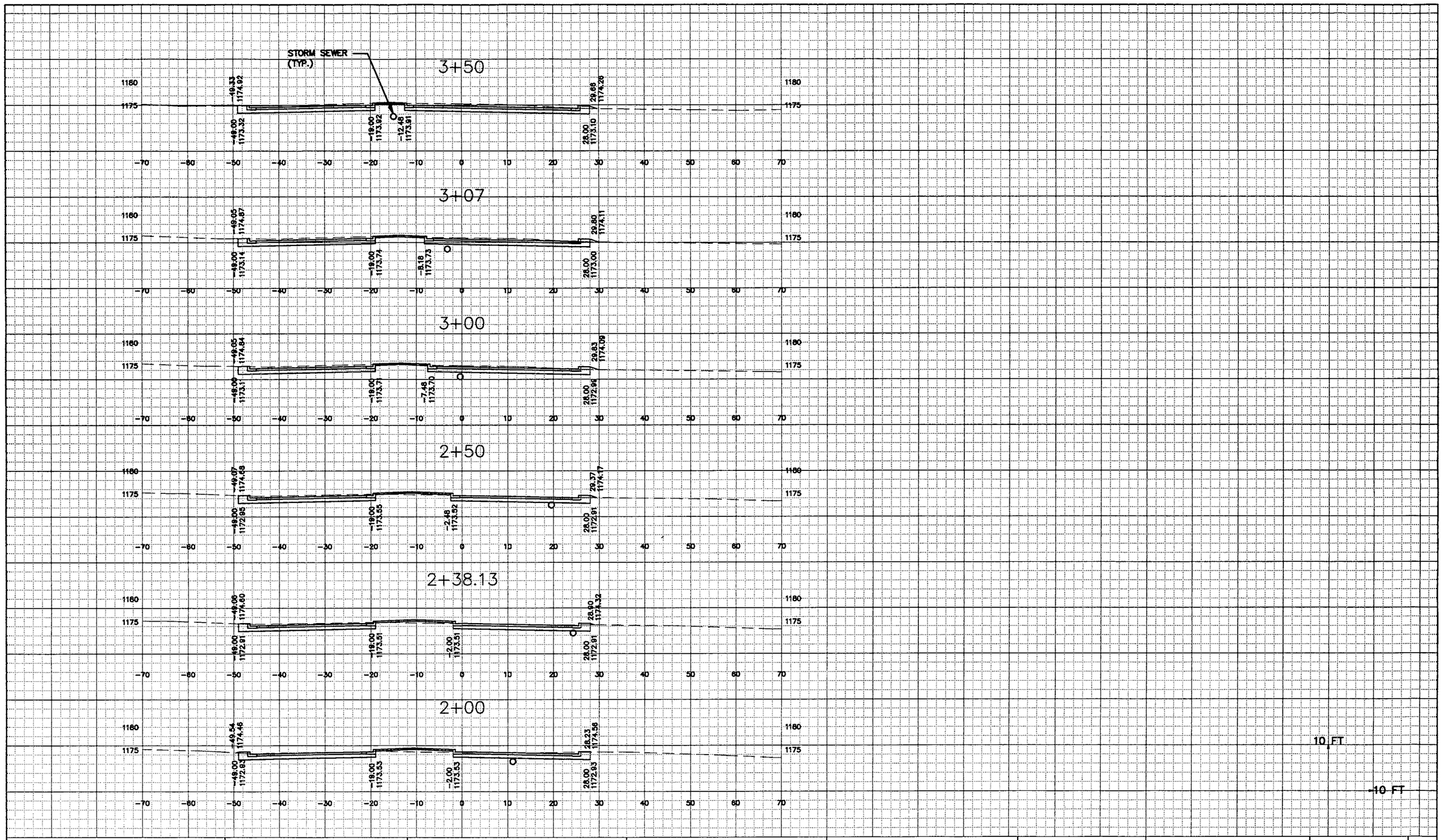
| STATION | AREAS Square Feet | | VOLUMES Cubic Yards | | CUMULATIVE VOLUMES Cubic Yards | |
|---|---|---|---|---|---|---|
| | CUT | FILL | CUT | FILL | CUT | FILL |
| 0+50 | 43.76 | 0.00 | | | | |
| 1+00 | 38.24 | 1.02 | 75.93 | 0.95 | 75.93 | 0.95 |
| 1+30.21 | 35.59 | 3.95 | 41.30 | 2.78 | 117.23 | 3.73 |
| 1+31 | 70.11 | 4.24 | 1.55 | 0.12 | 118.78 | 3.85 |
| 1+50 | 67.81 | 8.12 | 48.53 | 4.35 | 167.31 | 8.20 |
| 1+71.17 | 68.74 | 7.86 | 53.52 | 6.26 | 220.83 | 14.47 |
| 2+00 | 75.95 | 6.05 | 76.49 | 7.35 | 297.32 | 21.82 |
| 2+38.13 | 80.85 | 3.94 | 109.48 | 6.99 | 406.80 | 28.80 |
| 2+50 | 81.62 | 3.29 | 35.70 | 1.59 | 442.50 | 30.39 |
| 3+00 | 95.46 | 0.62 | 163.96 | 3.62 | 606.46 | 34.01 |
| 3+07 | 97.39 | 0.53 | 25.00 | 0.15 | 631.46 | 34.16 |
| 3+50 | 110.35 | 0.46 | 165.42 | 0.79 | 796.88 | 34.95 |
| 4+00 | 114.40 | 0.58 | 208.10 | 0.97 | 1004.99 | 35.91 |
| 4+50 | 114.09 | 1.18 | 211.57 | 1.63 | 1216.55 | 37.54 |
| 5+00 | 106.69 | 4.99 | 204.43 | 5.71 | 1420.98 | 43.26 |
| 5+38.71 | 80.74 | 21.00 | 134.36 | 18.63 | 1555.35 | 61.89 |
| 5+40 | 135.25 | 2.71 | 5.16 | 0.57 | 1560.51 | 62.45 |
| 5+50 | 136.18 | 3.02 | 50.26 | 1.06 | 1610.77 | 63.52 |
| 6+00 | 145.26 | 1.58 | 260.59 | 4.26 | 1871.36 | 67.77 |
| 6+06.73 | 149.78 | 1.25 | 36.77 | 0.35 | 1908.13 | 68.12 |
| 6+21.36 | 112.08 | 5.55 | 70.94 | 1.84 | 1979.07 | 69.97 |
| 6+50 | 103.33 | 5.27 | 113.27 | 5.51 | 2092.34 | 75.47 |
| 7+00 | 95.48 | 4.04 | 182.30 | 8.42 | 2274.64 | 83.89 |
| 7+50 | 91.48 | 6.06 | 171.22 | 9.20 | 2445.85 | 93.09 |
| 8+00 | 95.21 | 4.00 | 170.97 | 9.13 | 2616.82 | 102.22 |
| 8+50 | 92.41 | 5.30 | 171.91 | 8.46 | 2788.73 | 110.69 |
| 9+00 | 80.84 | 10.42 | 158.68 | 14.20 | 2947.42 | 124.89 |
| 9+50 | 79.51 | 8.52 | 146.58 | 17.06 | 3093.99 | 141.95 |
| 10+00 | 82.75 | 10.07 | 147.92 | 16.92 | 3241.92 | 158.86 |
| 10+50 | 88.59 | 12.77 | 155.99 | 20.92 | 3397.91 | 179.78 |
| 11+00 | 96.23 | 17.28 | 168.46 | 27.63 | 3566.37 | 207.41 |
| 11+50 | 92.87 | 18.34 | 172.50 | 32.91 | 3738.86 | 240.32 |
| 12+00 | 90.29 | 11.16 | 166.90 | 27.26 | 3905.76 | 267.57 |
| 12+50 | 130.26 | 5.04 | 200.97 | 14.75 | 4106.73 | 282.32 |
| 12+52.94 | 98.55 | 6.83 | 12.28 | 0.62 | 4119.01 | 282.95 |
| 12+53 | 140.02 | 2.77 | 0.26 | 0.01 | 4119.27 | 282.96 |
| 13+00 | 156.81 | 1.93 | 254.52 | 3.83 | 4373.79 | 286.78 |
| 13+15 | 160.05 | 1.41 | 86.79 | 0.87 | 4460.58 | 287.65 |
| 13+16 | 115.37 | 3.58 | 5.04 | 0.09 | 4465.61 | 287.74 |
| 13+50 | 151.33 | 1.22 | 165.89 | 2.92 | 4631.50 | 290.66 |
| 14+00 | 209.81 | 0.97 | 331.62 | 1.95 | 4963.12 | 292.61 |
| 14+50 | 151.22 | 5.43 | 332.04 | 5.82 | 5295.16 | 298.42 |
| 15+00 | 132.64 | 3.21 | 260.36 | 8.00 | 5555.52 | 306.42 |
| 15+50 | 132.63 | 6.81 | 244.28 | 9.02 | 5799.80 | 315.44 |
| 16+00 | 145.20 | 7.58 | 256.65 | 12.94 | 6056.46 | 328.39 |
| 16+50 | 150.10 | 7.83 | 272.82 | 14.00 | 6329.27 | 342.39 |
| 16+90.91 | 134.50 | 6.72 | 214.44 | 11.06 | 6543.72 | 353.44 |
| 16+91 | 176.42 | 5.85 | 0.51 | 0.02 | 6544.23 | 353.46 |
| 17+00 | 177.24 | 6.41 | 58.25 | 2.11 | 6602.48 | 355.57 |
| 17+32.83 | 215.63 | 0.78 | 236.91 | 4.30 | 6839.39 | 359.87 |
| 17+32.83 | 0.00 | 0.00 | 0.02 | 0.00 | 6839.41 | 359.87 |
| 17+50 | 397.74 | 0.00 | 126.44 | 0.00 | 6965.84 | 359.87 |
| 18+00 | 141.96 | 0.93 | 499.72 | 0.86 | 7465.56 | 360.73 |
| 18+09 | 137.88 | 0.52 | 46.64 | 0.24 | 7512.20 | 360.98 |
| 18+09.14 | 98.46 | 1.63 | 0.61 | 0.01 | 7512.81 | 360.98 |
| 18+50 | 91.98 | 0.18 | 144.10 | 1.38 | 7656.92 | 362.36 |
| 19+00 | 113.29 | 0.00 | 190.07 | 0.17 | 7846.98 | 362.53 |
| 19+50 | 124.43 | 0.00 | 220.12 | 0.00 | 8067.10 | 362.53 |
| 19+98 | 92.00 | 0.00 | 192.39 | 0.00 | 8259.49 | 362.53 |
| 20+00 | 123.01 | 0.00 | 7.96 | 0.00 | 8267.45 | 362.53 |
| 20+50 | 112.51 | 0.00 | 218.07 | 0.00 | 8485.52 | 362.53 |
| 21+00 | 88.39 | 0.89 | 186.01 | 0.83 | 8671.53 | 363.36 |
| 21+50 | 76.70 | 2.17 | 152.85 | 2.84 | 8824.38 | 366.19 |
| 22+00 | 52.86 | 0.03 | 119.96 | 2.04 | 8944.34 | 368.23 |
| 22+50 | 57.59 | 0.00 | 102.27 | 0.03 | 9046.61 | 368.26 |
| 23+00 | 37.56 | 0.00 | 88.10 | 0.00 | 9134.72 | 368.26 |
| | | | 0.00 | 0.00 | 9134.72 | 368.26 |

# TRAILWOOD LANE

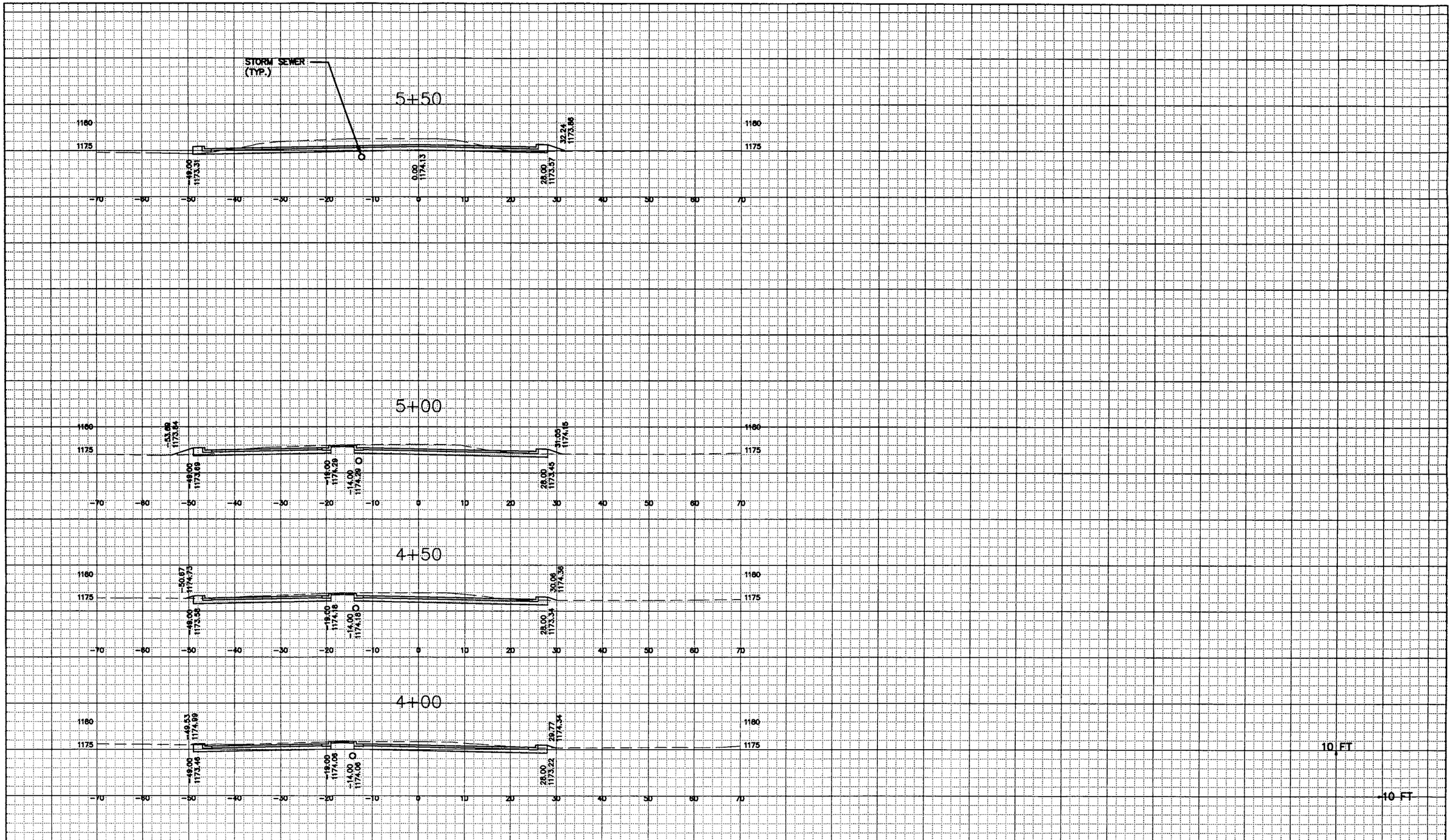
| STATION | AREAS Square Feet | | VOLUMES Cubic Yards | | CUMULATIVE VOLUMES Cubic Yards | |
|---|---|---|---|---|---|---|
| | CUT | FILL | CUT | FILL | CUT | FILL |
| 0+00 | 57.87 | 0.17 | | | | |
| 0+50 | 54.49 | 0.10 | 104.03 | 0.25 | 104.03 | 0.25 |
| 1+00 | 65.50 | 0.00 | 111.10 | 0.09 | 215.13 | 0.34 |
| 1+50 | 88.22 | 0.00 | 142.34 | 0.00 | 357.47 | 0.34 |
| 2+00 | 114.17 | 0.00 | 187.40 | 0.00 | 544.87 | 0.34 |
| 2+50 | 139.15 | 0.00 | 234.55 | 0.00 | 779.42 | 0.34 |
| 2+85.54 | 161.06 | 0.00 | 197.58 | 0.00 | 977.00 | 0.34 |
| 3+00 | 165.96 | 0.00 | 87.57 | 0.00 | 1064.57 | 0.34 |
| | | | 0.00 | 0.00 | 1064.57 | 0.34 |



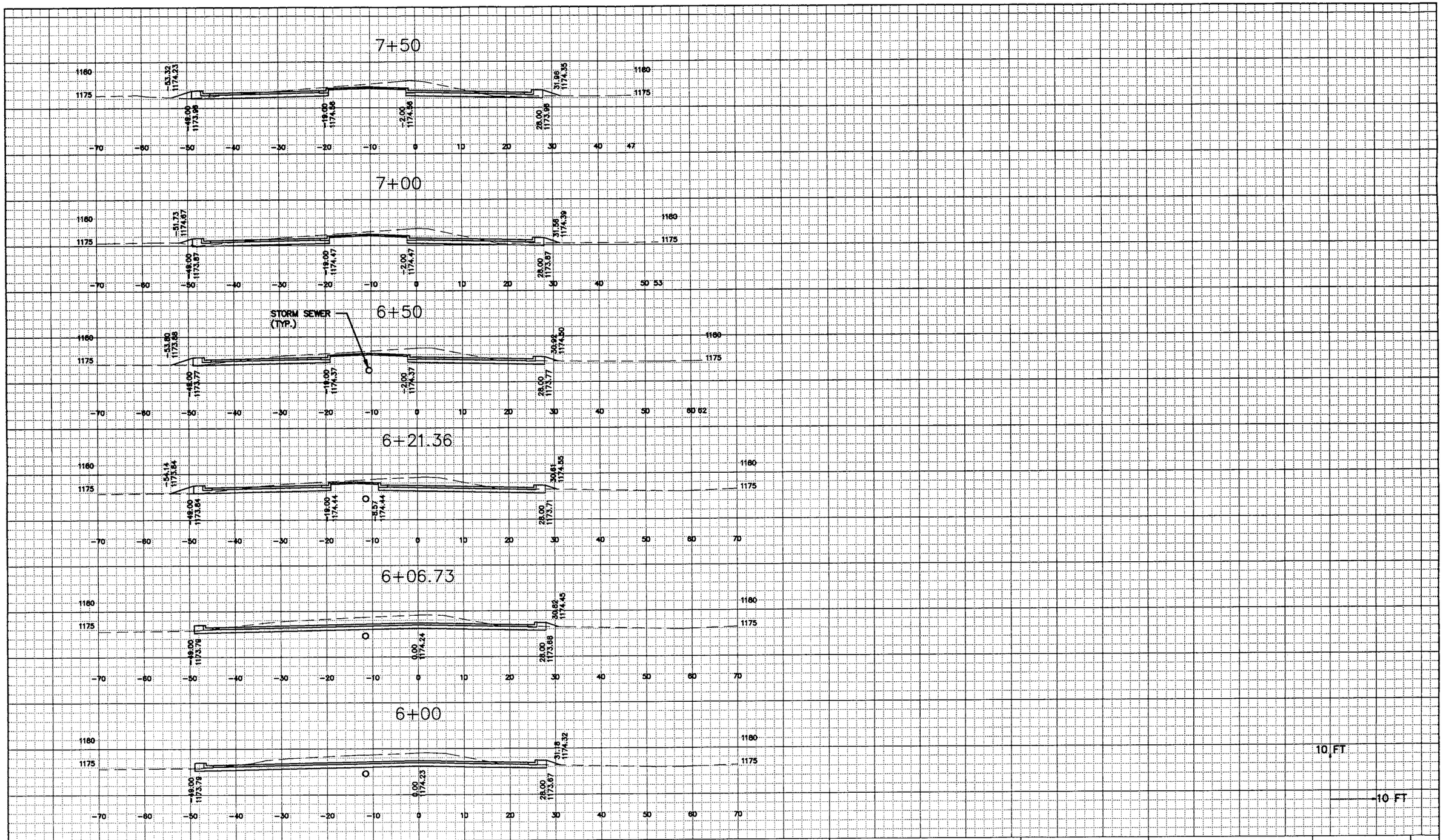

| ROADWAY CROSS-SECTIONS | SCALE (H)1"=10' (V)1"=10' | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | CTH XX | PROJECT 2003492 | SHEET NO. 9.0 | REVISED | |
|---|---|---|---|---|---|---|---|---|




| | | | | | | |
|---|---|---|---|---|---|---|
| ROADWAY CROSS-SECTIONS | SCALE (H)1"=10' (V)1"=10' | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | CTH XX | PROJECT 2003492 | SHEET NO. 9.1 | REVISED |

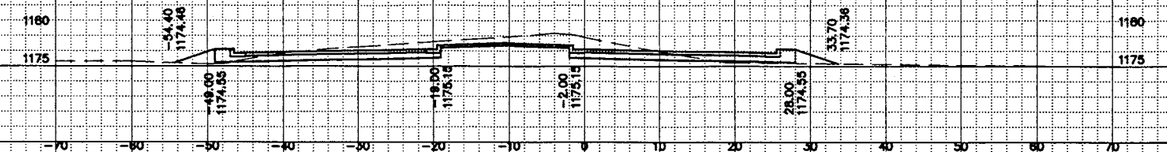



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ROADWAY CROSS-SECTIONS | SCALE (H)1"=10' (V)1"=10' | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | CTH XX | PROJECT 2003492 | SHEET NO. 9.2 | REVISED |

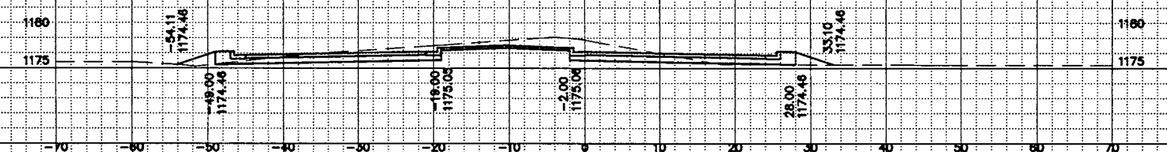



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ROADWAY CROSS-SECTIONS | SCALE (H)1"=10' (V)1"=10' | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | CTH XX | PROJECT 2003492 | SHEET NO. 9.3 | REVISED |

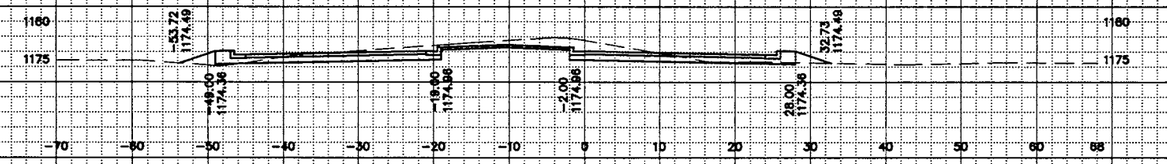
## 10+50



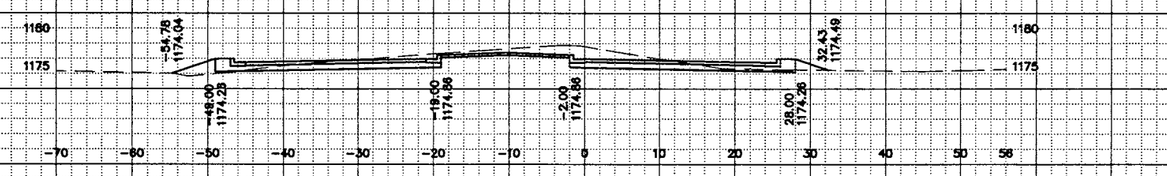

## 10+00



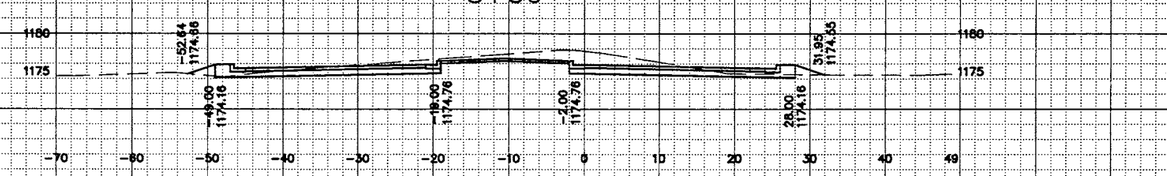

## 9+50



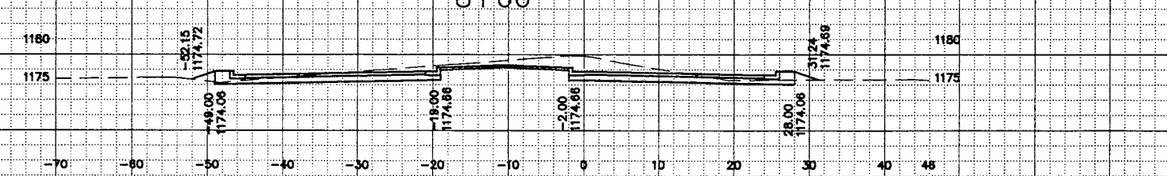

## 9+00




## 8+50




## 8+00

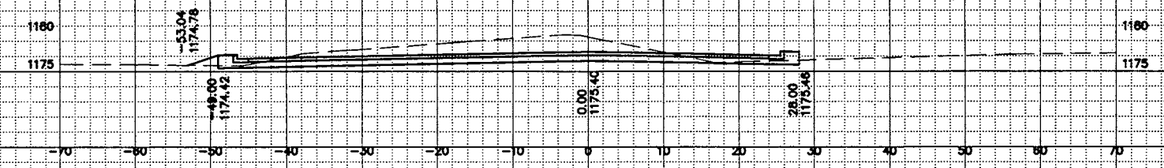



10 FT

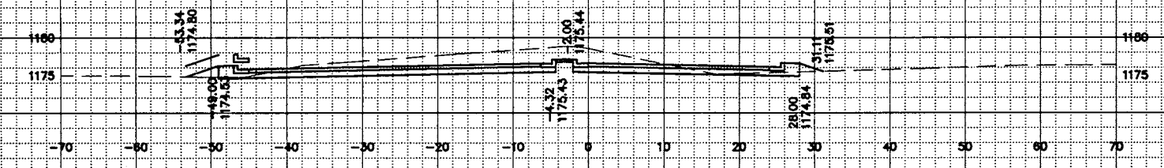
-10 FT

| ROADWAY CROSS-SECTIONS | SCALE (H)1"=10' (V)1"=10' | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | CTH XX | PROJECT 2003492 | SHEET NO. 9.4 | REVISED |
|---|---|---|---|---|---|---|---|

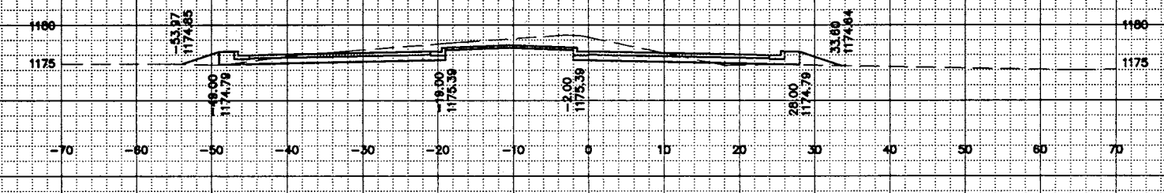
12+53



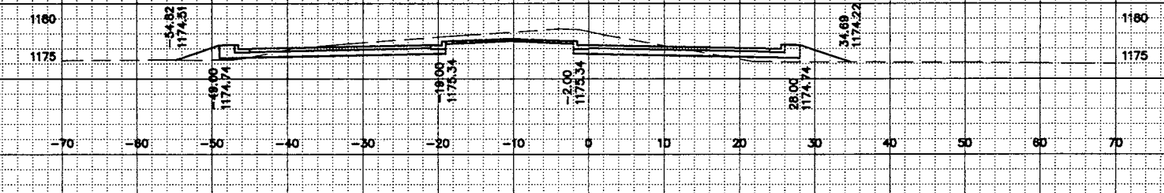

12+50



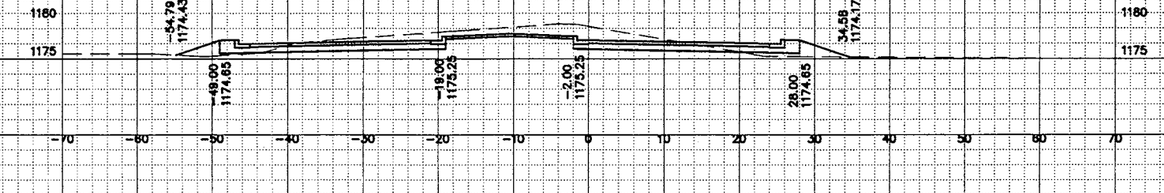

12+00




11+50




11+00

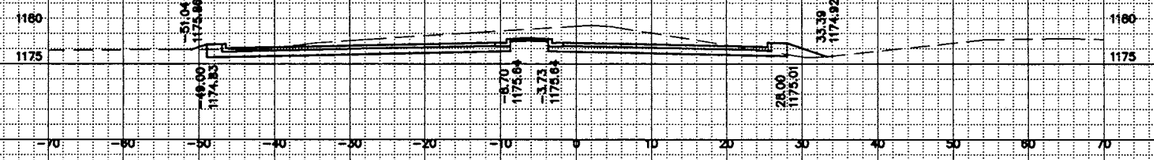



10 FT

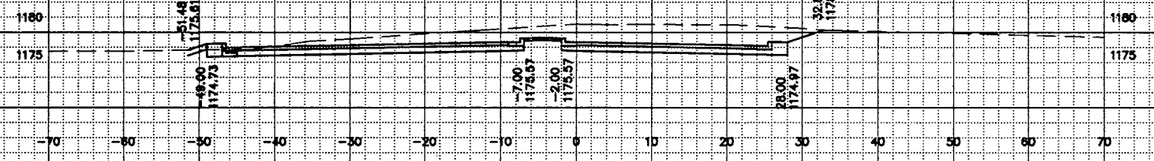
-10 FT

| ROADWAY CROSS-SECTIONS | SCALE (H)1"=10' (V)1"=10' | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | CTH XX | PROJECT 2003492 | SHEET NO. 9.5 | REVISED |
|---|---|---|---|---|---|---|---|

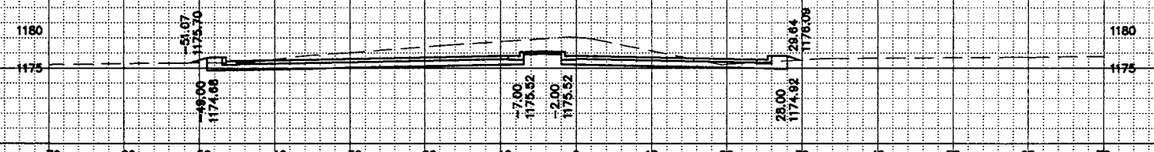
## 14+50



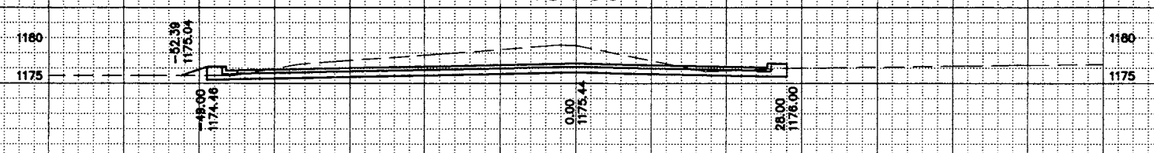

## 14+00




## 13+50




## 13+00

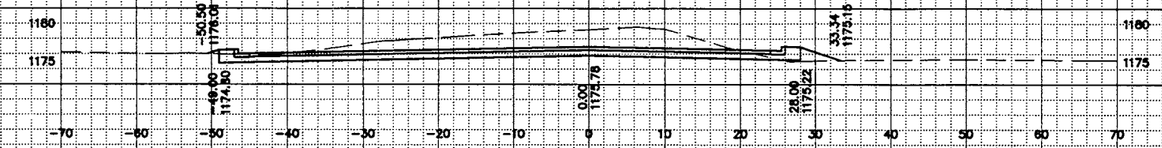



10 FT

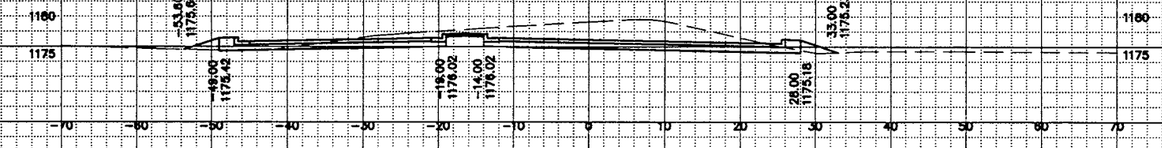
-10 FT

| ROADWAY CROSS-SECTIONS | SCALE (H)1"=10' (V)1"=10' | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | CTH XX | PROJECT 2003492 | SHEET NO. 9.6 | REVISED |
|---|---|---|---|---|---|---|---|

## 16+91



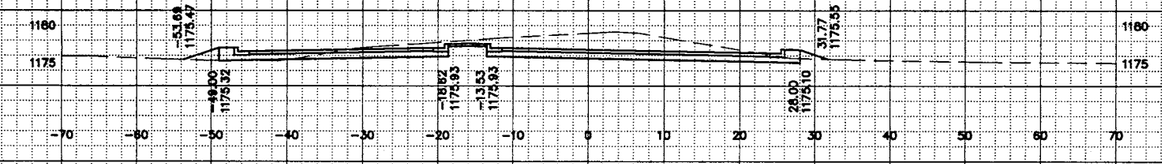

## 16+50



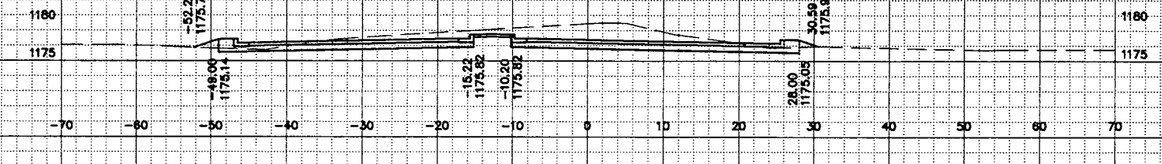

## 16+00




## 15+50



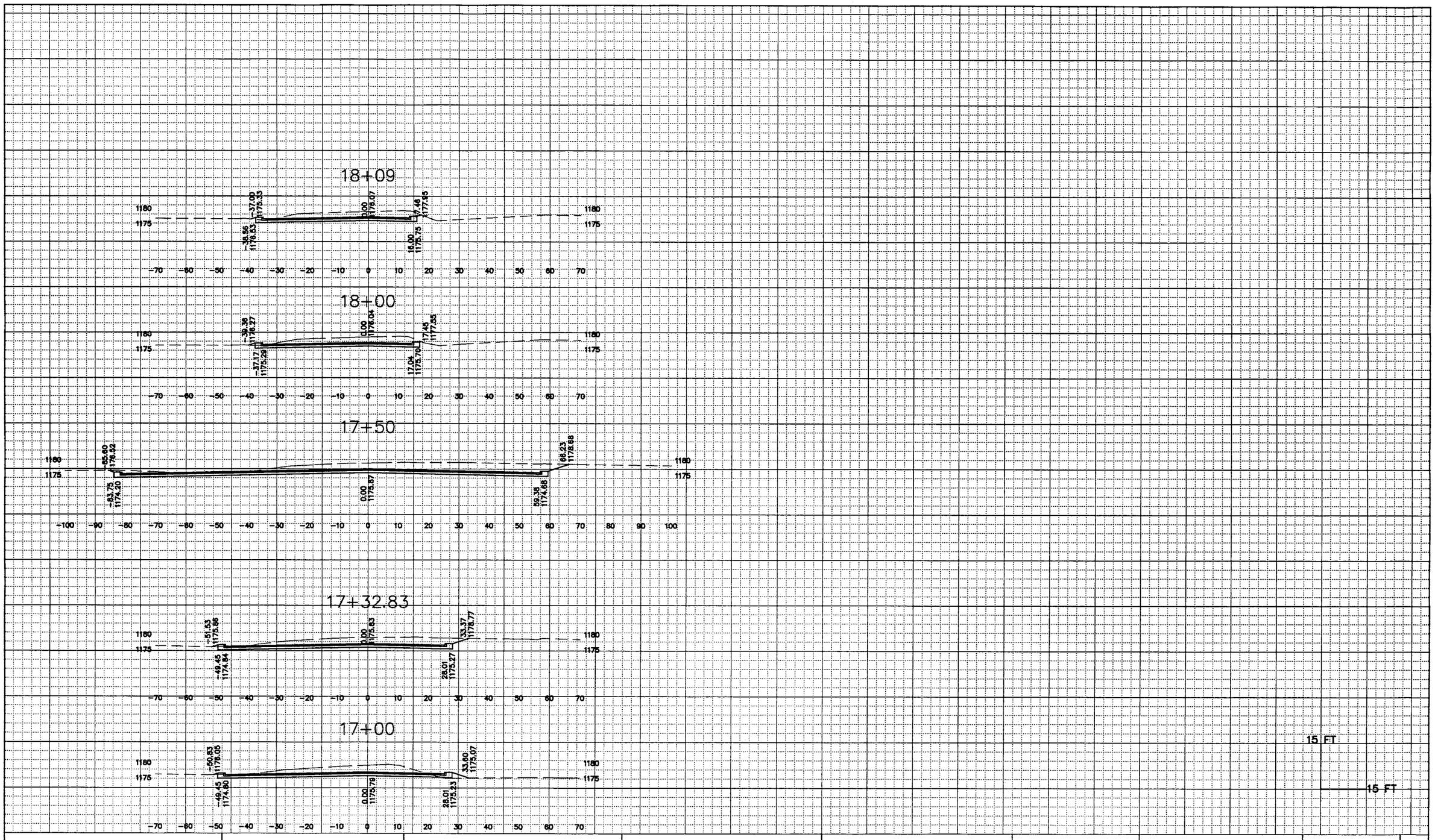

## 15+00



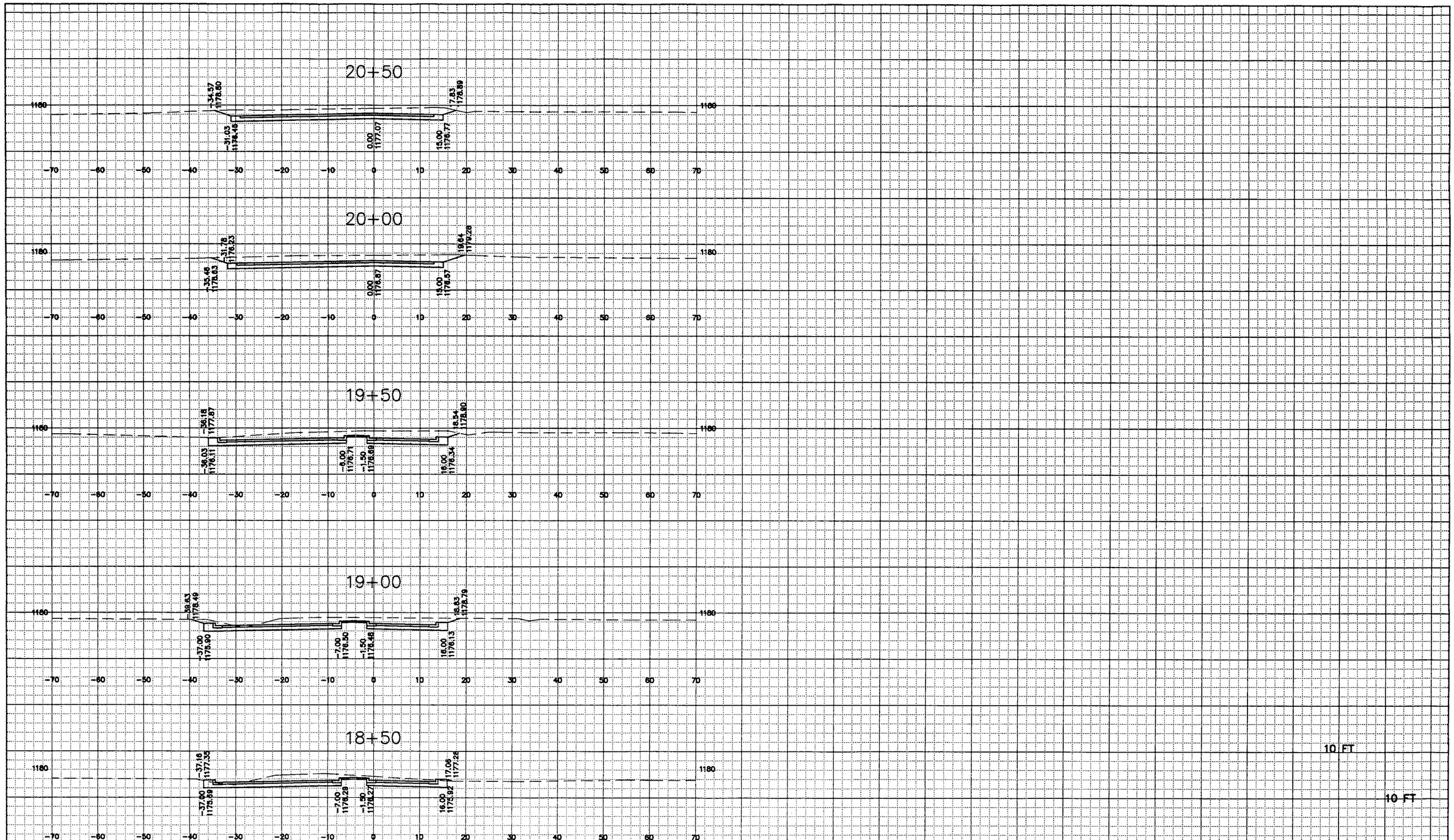

10 FT

-10 FT

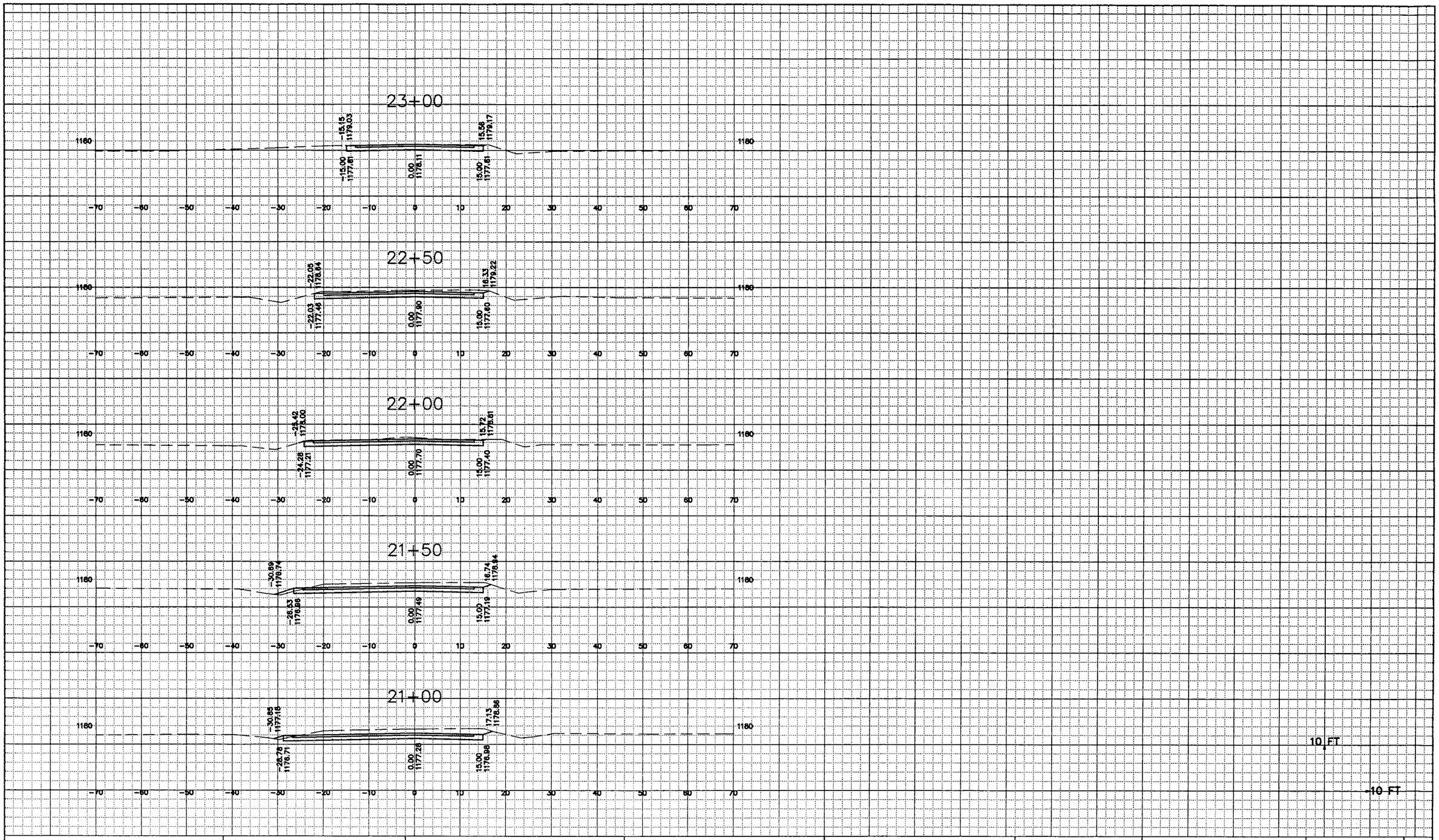
| ROADWAY CROSS-SECTIONS | SCALE (H)1"=10' (V)1"=10' | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | CTH XX | PROJECT 2003492 | SHEET NO. 9.7 | REVISED |
|---|---|---|---|---|---|---|---|



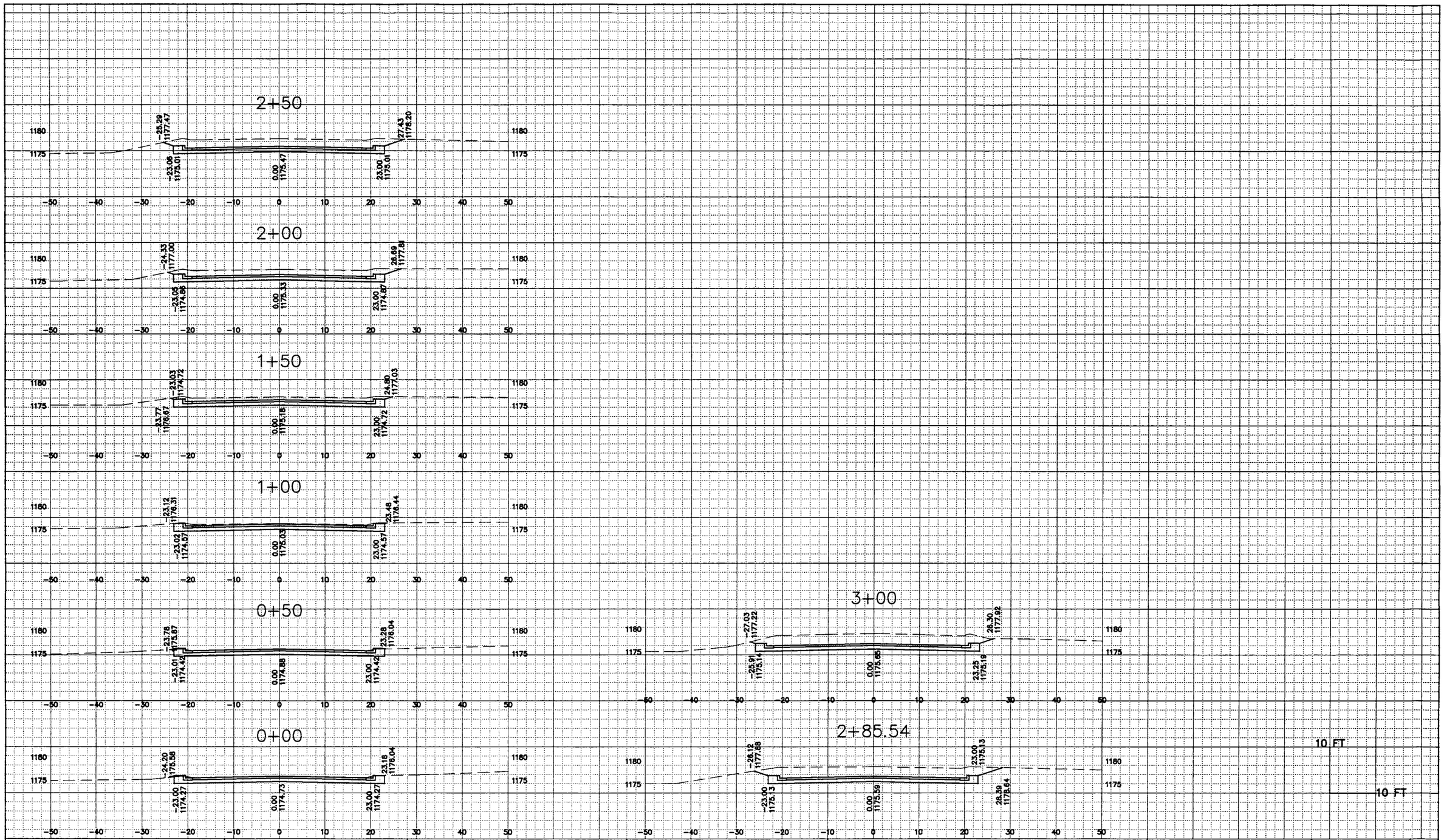

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ROADWAY CROSS-SECTIONS | SCALE (H)1"=10' (V)1"=10' | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | CTH XX | PROJECT 2003492 | SHEET NO. 9.8 | REVISED | |




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ROADWAY CROSS-SECTIONS | SCALE (H)1"=10' (V)1"=10' | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | CTH XX | PROJECT 2003492 | SHEET NO. 9.2 | REVISED |




| ROADWAY CROSS-SECTIONS | SCALE (H)1"=10' (V)1"=10' | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | CTH XX | PROJECT 2003492 | SHEET NO. 9.10 | REVISED |
|---|---|---|---|---|---|---|---|

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|---|---|---|---|---|---|---|---|
| ROADWAY CROSS-SECTIONS | SCALE (H)1"=10' (V)1"=10' | VILLAGE OF ROTHSCHILD | MARATHON COUNTY | Trailwood Lane | PROJECT 2003492 | SHEET NO. 9.11 | REVISED |