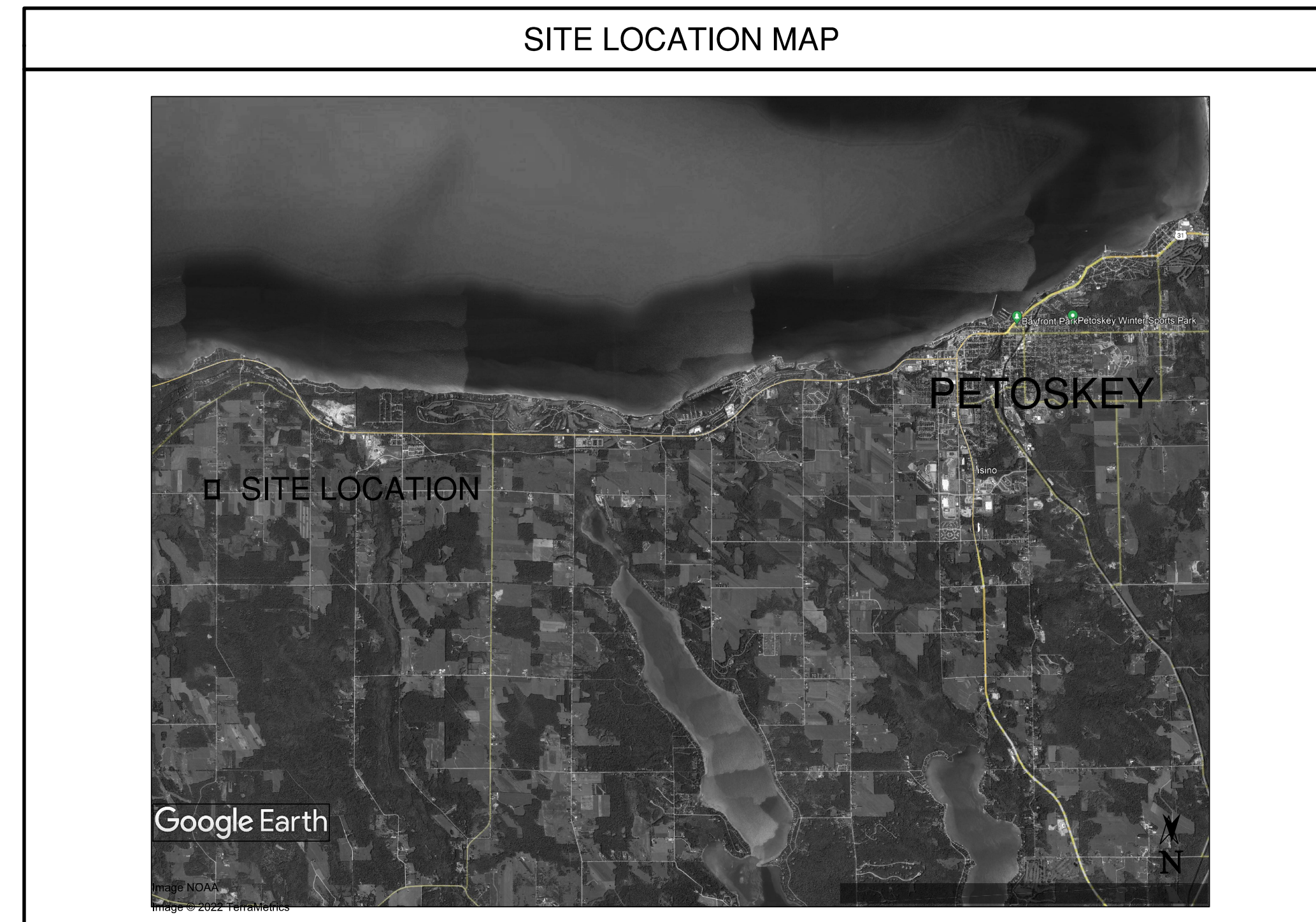


PROPOSED MURRAY ROAD APARTMENT DEVELOPMENT FOR:

# LTBB ODAWA INDIANS

PETOSKEY, MICHIGAN

## SITE/CIVIL BID PACKAGE DRAWING SET 3



SHEET INDEX

T	TITLE SHEET / PROJECT INFORMATION
C1.0	EXISTING CONDITIONS AND DEMOLITION PLAN
C2.0	SESC PLAN
C2.1	SESC DETAILS
C3.0	OVERALL SITE PLAN
C3.1	SITE PLAN
C3.2	SITE DETAILS
C4.0	GRADING PLAN
C5.0	UTILITY PLAN
C5.1	UTILITY PROFILES
C5.2	UTILITY DETAILS

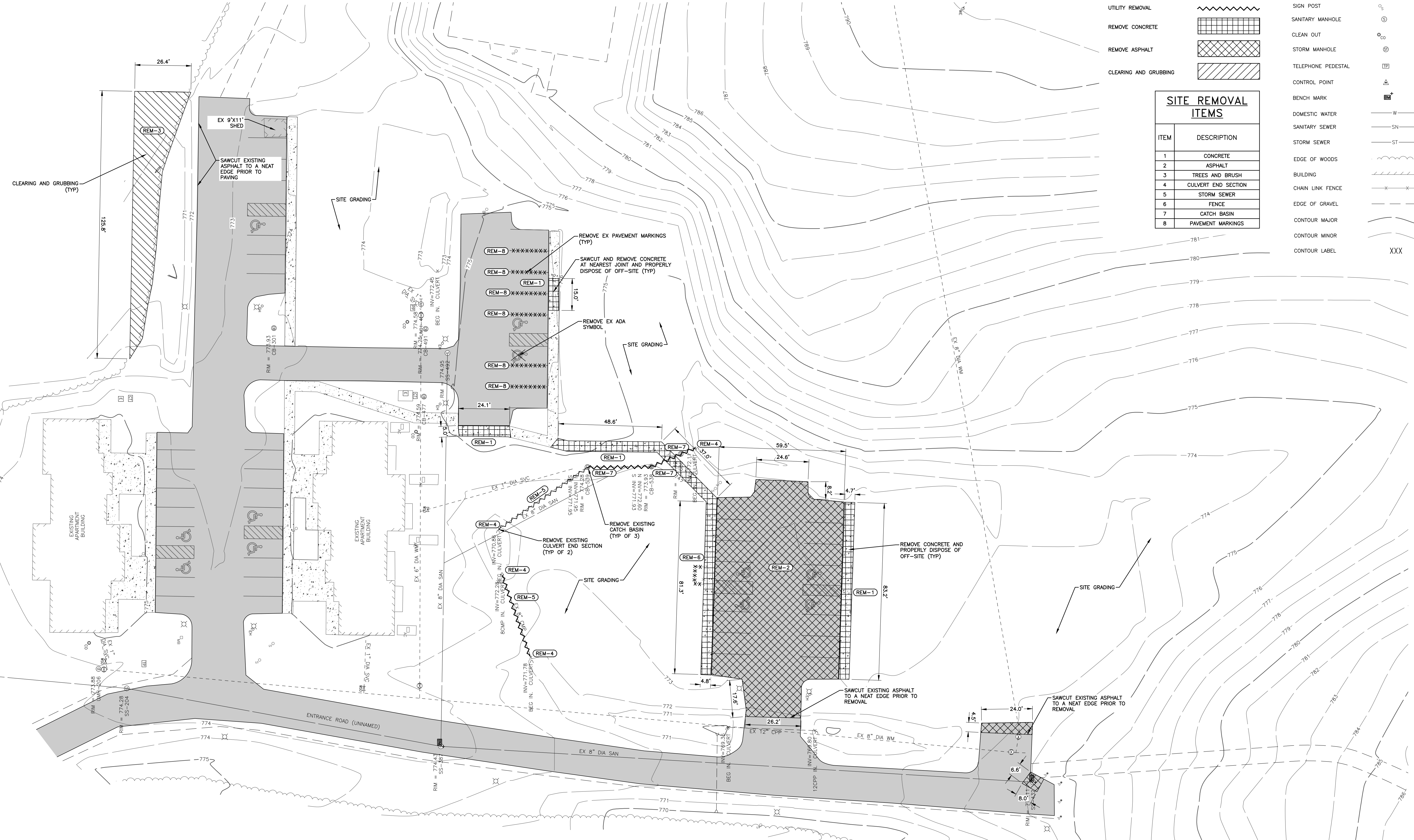
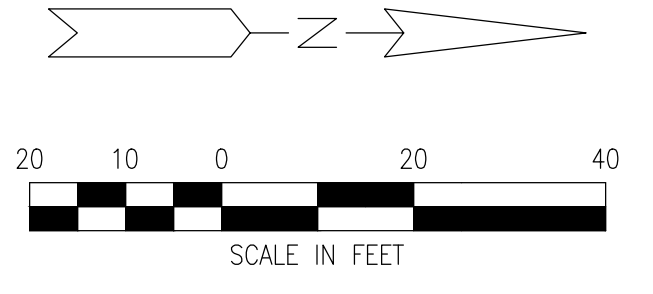
SHEET	DATE	PROJECT NO.	PROJECT TITLE	DRAWING TITLE
	MAY 1, 2020	273-19	LITTLE TRAVERSE BAY BAND OF ODAWA INDIANS	
	NOV 30, 2022		MURRAY ROAD APARTMENT DEVELOPMENT	
	JAN 18, 2023		PETOSKEY, MICHIGAN	
				BUILDINGS 3, 5 & 6
				TITLE SHEET & PROJECT INFORMATION

STATE OF MICHIGAN  
REGISTRATION

**T**



Know what's below.  
Call before you dig.



**PROPOSED LEGEND**

- PAVEMENT MARKING REMOVAL: -XXXXXXXXXXXX-
- UTILITY REMOVAL: ~~~~~~
- REMOVE CONCRETE: [Grid Hatching]
- REMOVE ASPHALT: [Cross-hatch Hatching]
- CLEARING AND GRUBBING: [Diagonal Hatching]

**SITE REMOVAL ITEMS**

ITEM	DESCRIPTION
1	CONCRETE
2	ASPHALT
3	TREES AND BRUSH
4	CULVERT END SECTION
5	STORM SEWER
6	FENCE
7	CATCH BASIN
8	PAVEMENT MARKINGS

**EXISTING LEGEND**

- POWER POLE: [Symbol]
- LAMP POLE: [Symbol]
- SIGN POST: [Symbol]
- SANITARY MANHOLE: [Symbol]
- CLEAN OUT: [Symbol]
- STORM MANHOLE: [Symbol]
- TELEPHONE PEDESTAL: [Symbol]
- CONTROL POINT: [Symbol]
- BENCH MARK: [Symbol]
- DOMESTIC WATER: -W-
- SANITARY SEWER: -SN-
- STORM SEWER: -ST-
- EDGE OF WOODS: [Symbol]
- BUILDING: [Symbol]
- CHAIN LINK FENCE: -X-X-
- EDGE OF GRAVEL: [Symbol]
- CONTOUR MAJOR: [Symbol]
- CONTOUR MINOR: [Symbol]
- CONTOUR LABEL: XXX



621 CH 162 ST S., Suite 1  
Gaylord, MI 49734  
989.732.3584  
www.wadetrims.com



ANTHONY P. ESSON  
ARCHITECT  
PO BOX 479  
GAYLORD, MICHIGAN  
TELEPHONE: (989) 732-0895

DRAWING TITLE  
**EXISTING CONDITIONS AND  
DEMOLITION PLAN**

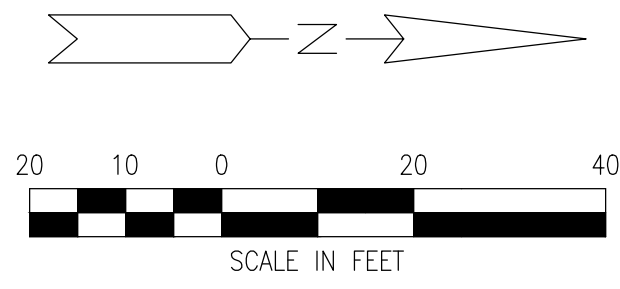
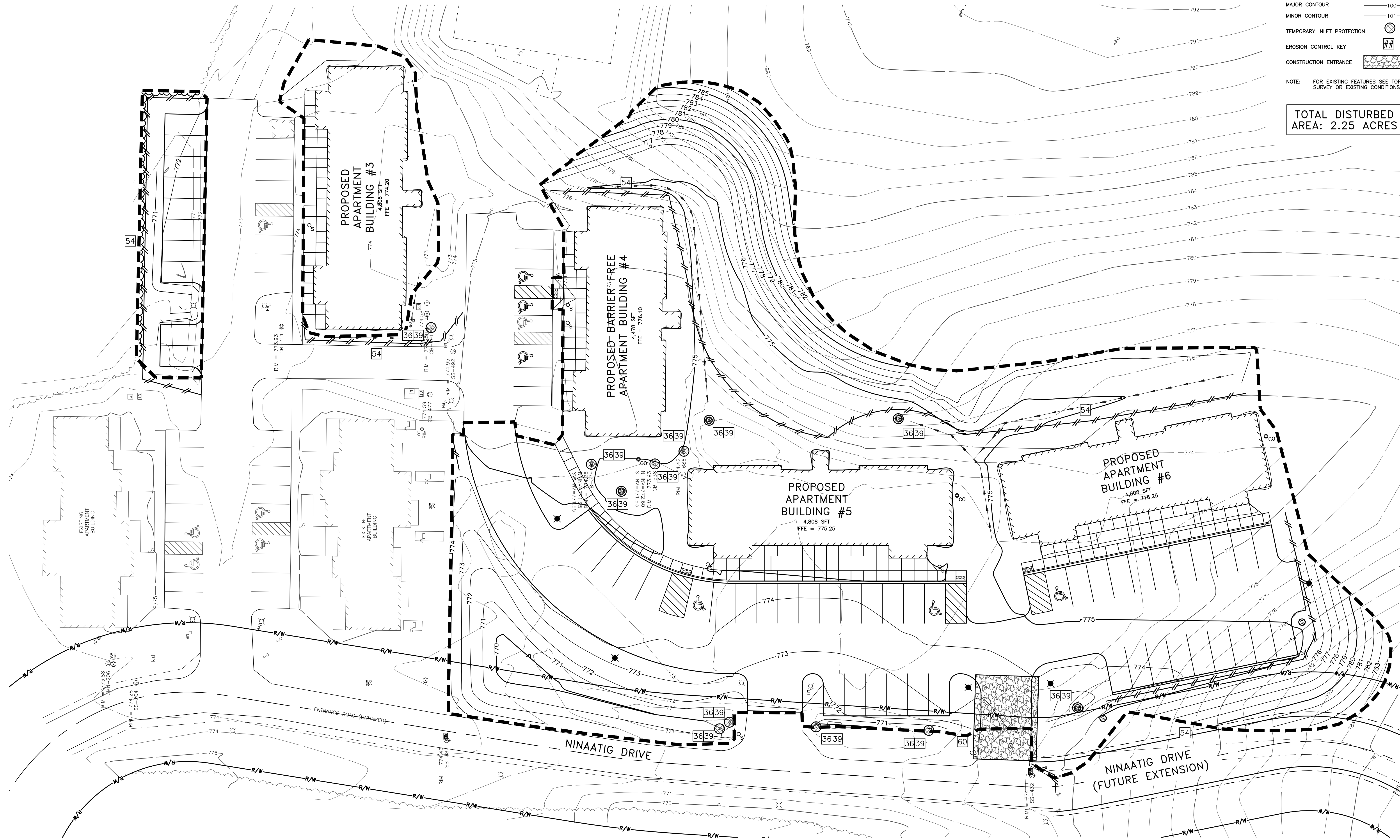
PROJECT TITLE  
**LITTLE TRAVERSE BAY BAND OF ODAWA INDIANS  
MURRAY ROAD APARTMENT DEVELOPMENT**  
PETOSKEY, MICHIGAN

SHEET	DATE	PROJECT NO.
	MAY 11, 2020	273-19
	MAY 10, 2023	

**C1.0**



Know what's below.  
Call before you dig.



**PROPOSED LEGEND**

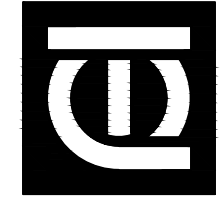
- LIMITS OF DISTURBANCE: [Dashed line symbol]
- TEMPORARY SILT FENCE: [Double line with inward ticks symbol]
- MAJOR CONTOUR: [Long dashed line symbol]
- MINOR CONTOUR: [Short dashed line symbol]
- TEMPORARY INLET PROTECTION: [Circle with cross symbol]
- EROSION CONTROL KEY: [Hatched box symbol]
- CONSTRUCTION ENTRANCE: [Stippled box symbol]

NOTE: FOR EXISTING FEATURES SEE TOPOGRAPHIC SURVEY OR EXISTING CONDITIONS PLAN.

**TOTAL DISTURBED AREA: 2.25 ACRES**



6211 CUM 16 27 S. - Suite 1  
 PO Box 1110  
 Gaylord, MI 49734  
 987.732.3584  
 www.wadetrims.com  
 WPT PROJECT # 0226251016



**ANTHONY P. ESSON ARCHITECT**  
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 GAYLORD, MICHIGAN  
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DRAWING TITLE

SESC PLAN

PROJECT TITLE

LITTLE TRAVERSE BAY BAND OF ODAWA INDIANS  
**MURRAY ROAD APARTMENT DEVELOPMENT**  
 PETOSKEY, MICHIGAN

PROJECT NO.

273-19

DATE

MAY 1, 2020  
 MAY 19, 2020

SHEET

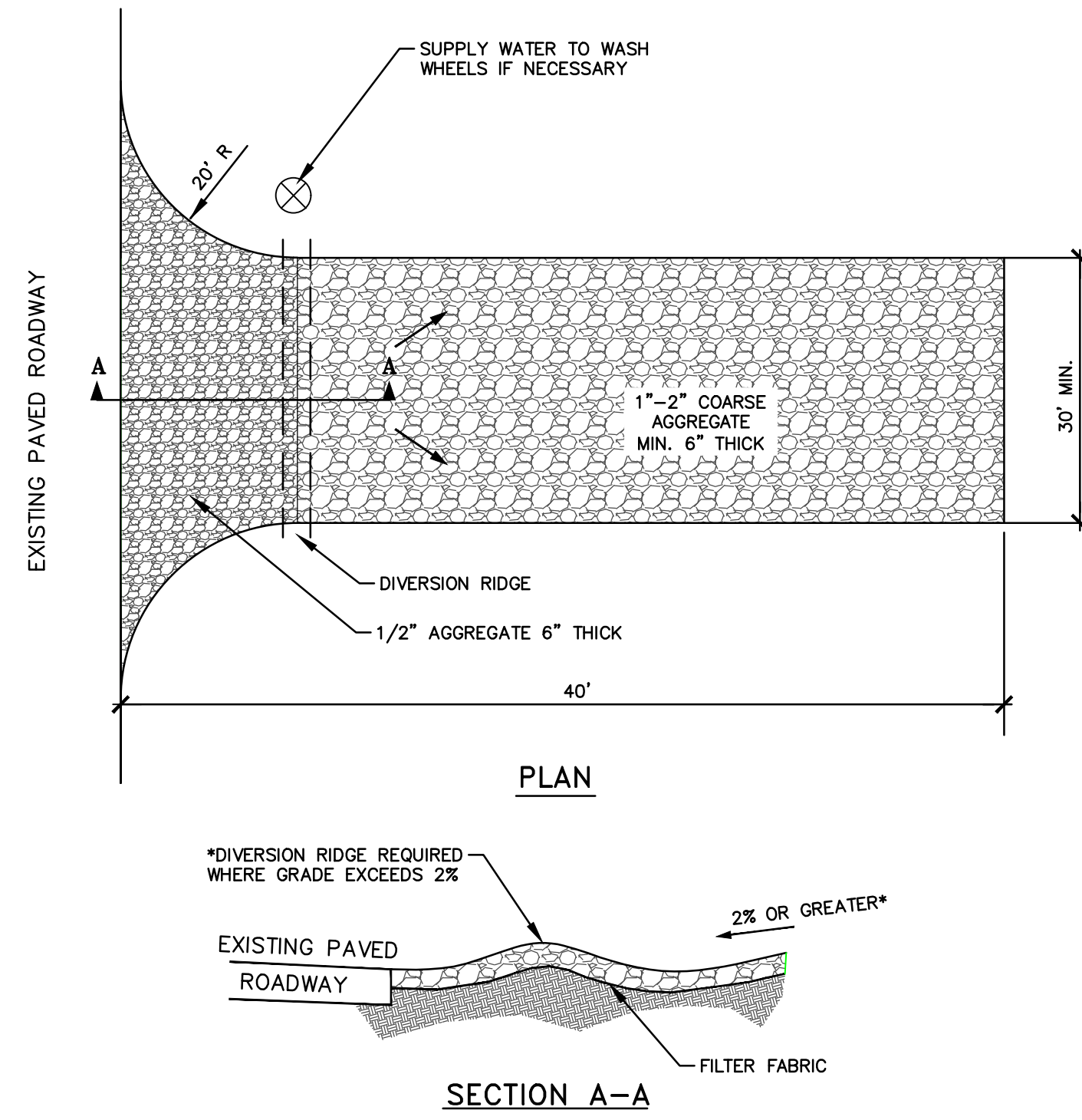
**C2.0**

**MICHIGAN UNIFIED**  
**KEYING SYSTEM**  
**(MODIFIED)**

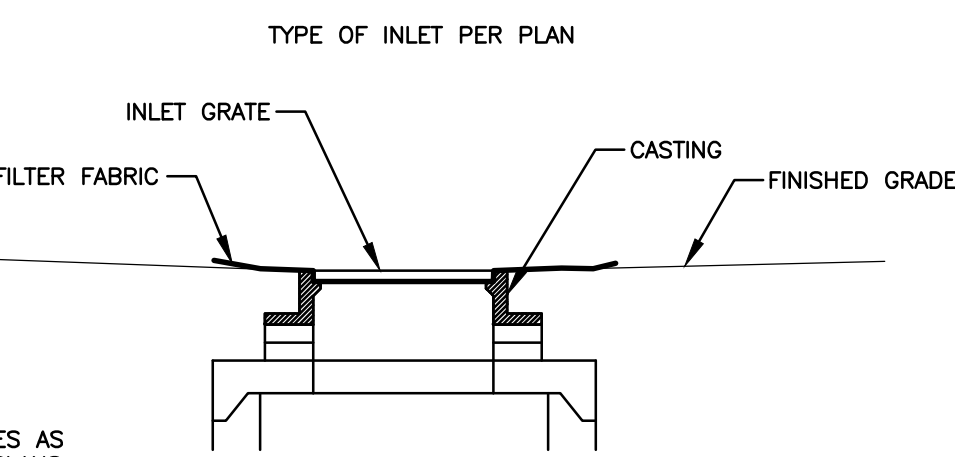
\* indicates applicability of a specific control measure to one or more of the seven problem areas

KEY	DETAIL	CHARACTERISTICS	A	B	C	D	E	F	G
2	Selective Grading	WATER CAN BE DIVERTED TO MINIMIZE EROSION FLATTER SLOPES EASE EROSION PROBLEMS	*					*	*
4	Vegetative Stabilization	MAY UTILIZE A VARIETY OF PLANT MATERIAL TRANSFERS SOIL FILTERS SEDIMENT FROM RUNOFF	*	*	*			*	*
6	Soils with High Water Retention	FACILITATES ESTABLISHMENT OF VEGETATIVE COVER EFFECTIVE FOR BRANCHED AREAS WITH LOW VELOCITY PERSONNEL SHOULD INCLUDE PREPARED TOPSOIL BED	*	*	*			*	*
13	Riprap, Rubble, Cobble	USED WHERE VEGETATION IS NOT EASILY ESTABLISHED EFFECTIVE FOR HIGH VELOCITIES OF HIGH CONCENTRATIONS PREVENTS RUNOFF TO NEARBY SOIL DISPERSES ENERGY FLOW AT SYSTEM OUTLETS	*	*	*				
34	Sediment Basin	TRAPS SEDIMENT RELEASES RUNOFF AT NON-EROSIVE SITES CONTROLS RUNOFF AT SYSTEM OUTLETS CAN BE SOIL MONITORS			*	*			
36	Catch Basin Vortex Protection	COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF MAY USE FILTER CLOTH OVER INLET					*		*
39	Fabric Filter Cloth	CAN UTILIZE MATERIAL FOUND ON SITE EASY TO CONSTRUCT FILTERS SEDIMENT FROM RUNOFF				*			*
54	Silt Fence	USES GEOTEXTILE FABRIC AND POSTS OR HOLES EASY TO CONSTRUCT AND LOCATE AS NECESSARY	*	*			*		*
60	Temporary Construction Entrance	ASSISTS IN REMOVING SOIL FROM THE TIRES OF CONSTRUCTION EQUIPMENT/VEHICLES WHEN EXITING THE CONSTRUCTION SITE THIS REDUCES TRACKING EXCESSIVE SEDIMENT/SOIL ONTO THE ADJACENT ROAD							*

SLOPES  
 STREAMS AND WATERWAYS  
 SURFACE DRAINAGEWAYS  
 ENCLOSED DRAINAGE (Art & Water Control)  
 LARGE FLAREAS  
 BORROW AND STOCKPILE AREAS  
 ADJACENT PROPERTIES



**TEMPORARY GRAVEL CONSTRUCTION ENTRANCE**  
 NO SCALE



NOTE:  
 TYP. ALL STRUCTURES AS INDICATED ON THE PLANS. FABRIC SHALL BE INSPECTED DAILY AND REPLACED IF PLUGGED OR RIPPED.

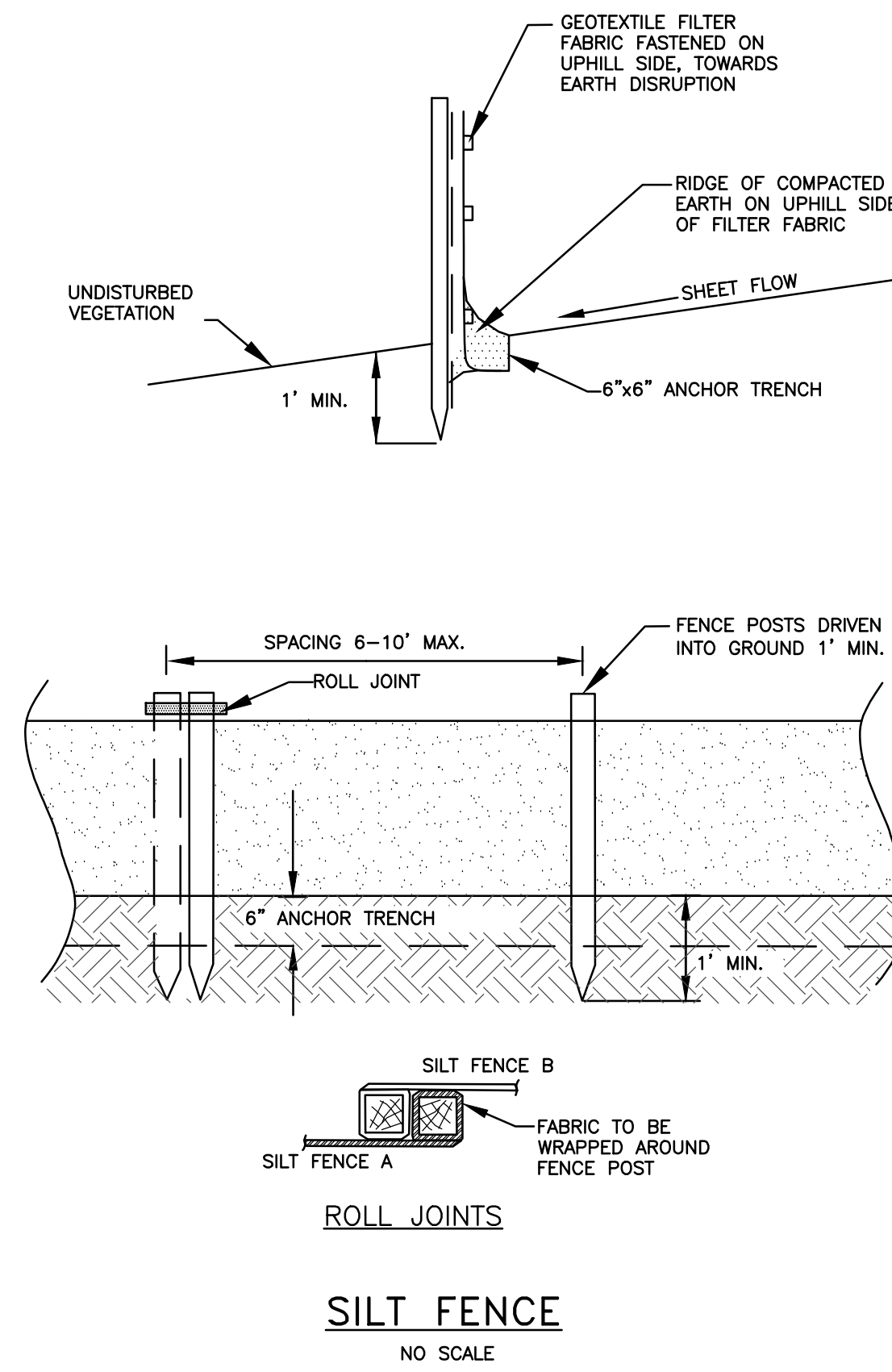
**TYPICAL INLET PROTECTION**  
 NO SCALE

**APPLICATIONS**

1. ASSISTS IN REMOVING SOIL FROM THE TIRES OF CONSTRUCTION EQUIPMENT/VEHICLES WHEN EXITING THE CONSTRUCTION SITE. THIS REDUCES TRACKING EXCESSIVE SEDIMENT/SOIL ONTO THE ADJACENT ROAD.

**DESIGN**

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ON PUBLIC RIGHTS-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.



**SILT FENCE**  
 NO SCALE

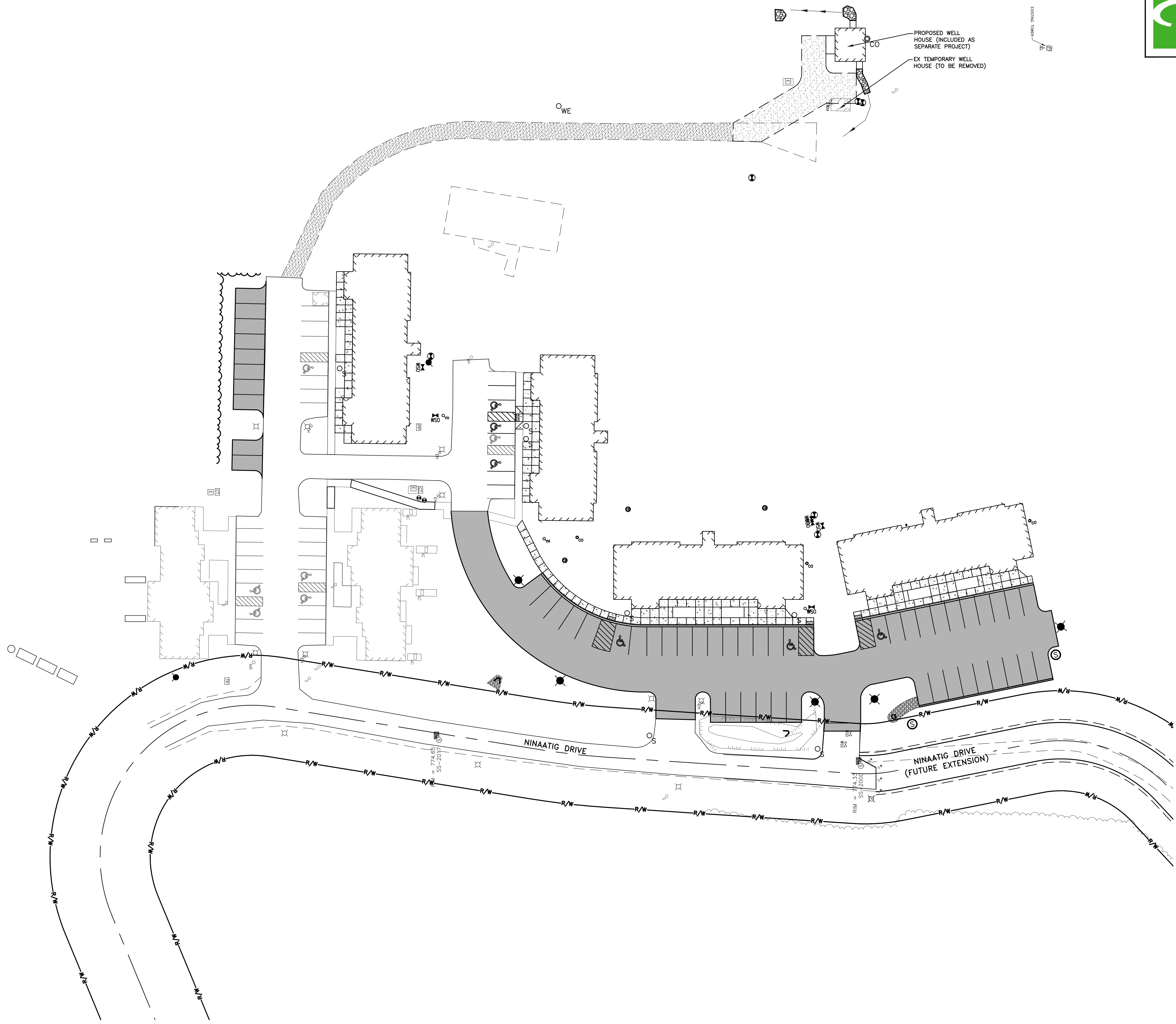
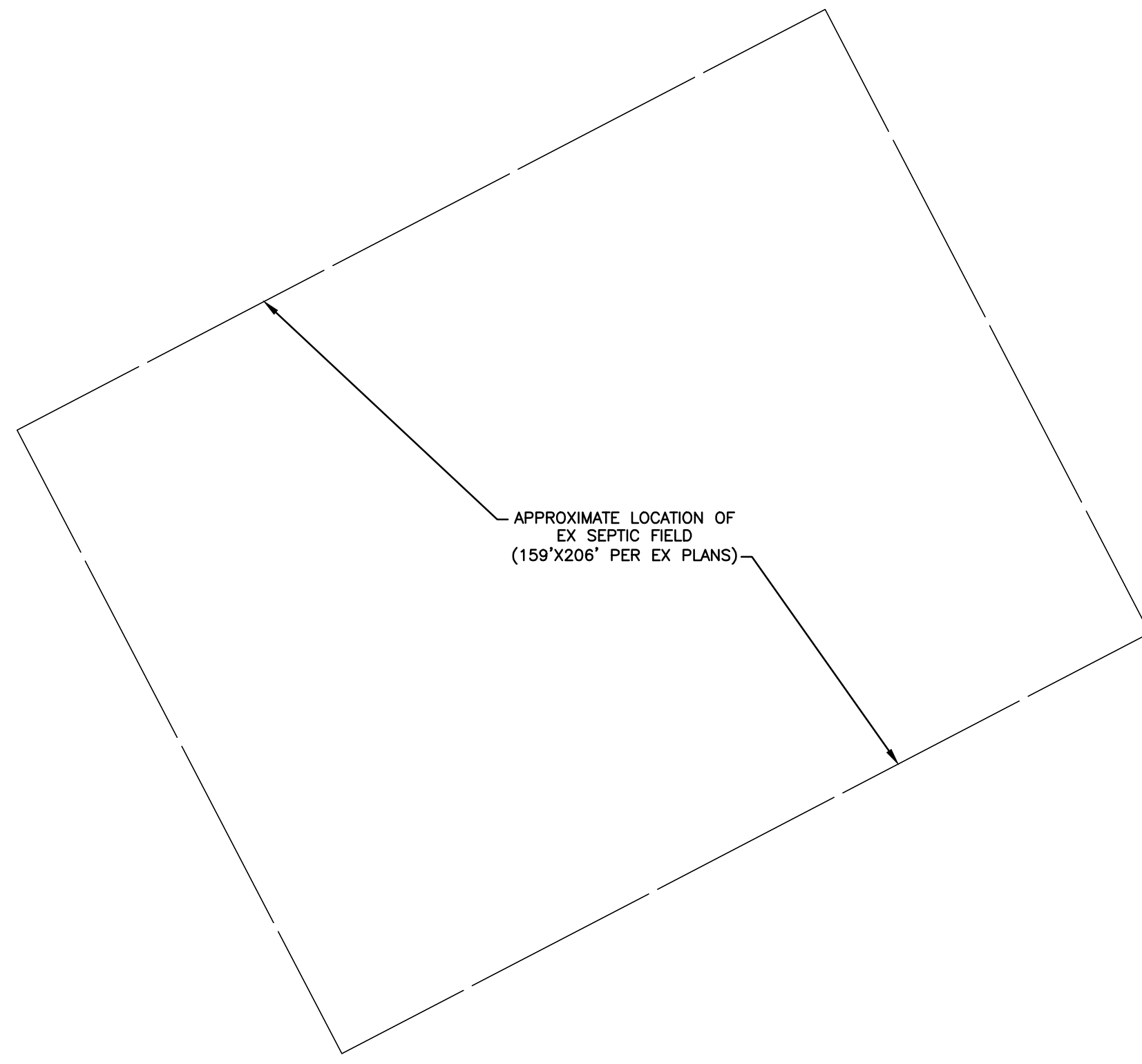
DRAWING TITLE  
**SESC DETAILS**

PROJECT TITLE  
 LITTLE TRAVERSE BAY BAND OF ODAWA INDIANS  
**MURRAY ROAD APARTMENT DEVELOPMENT**  
 PETOSKEY, MICHIGAN

PROJECT NO.  
 273-19

DATE  
 MAY 1, 2020  
 MAY 10, 2020

SHEET  
**C2.1**




 WADE TRIM  
 ANTHONY P. ESSON ARCHITECT

273-19  
 MAY 1, 2020  
 MAY 10, 2020

PROJECT TITLE  
 LITTLE TRAVERSE BAY BAND OF OJAWA INDIANS  
 MURRAY ROAD APARTMENT DEVELOPMENT  
 PETOSKEY, MICHIGAN

DRAWING TITLE  
 OVERALL SITE PLAN

SHEET  
**C3.0**



273-19  
 MAY 1, 2020  
 MAY 10, 2020

273-19  
 MAY 1, 2020  
 MAY 10, 2020

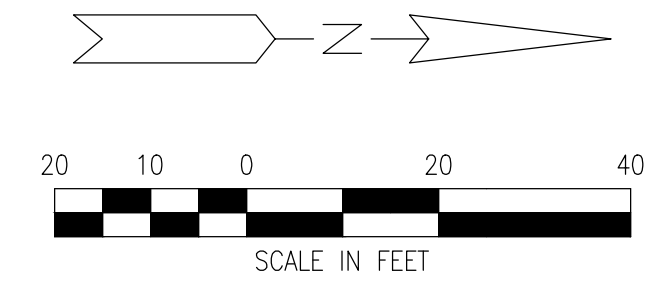
273-19  
 MAY 1, 2020  
 MAY 10, 2020

273-19  
 MAY 1, 2020  
 MAY 10, 2020

273-19  
 MAY 1, 2020  
 MAY 10, 2020

273-19  
 MAY 1, 2020  
 MAY 10, 2020

273-19  
 MAY 1, 2020  
 MAY 10, 2020



**PROPOSED LEGEND**

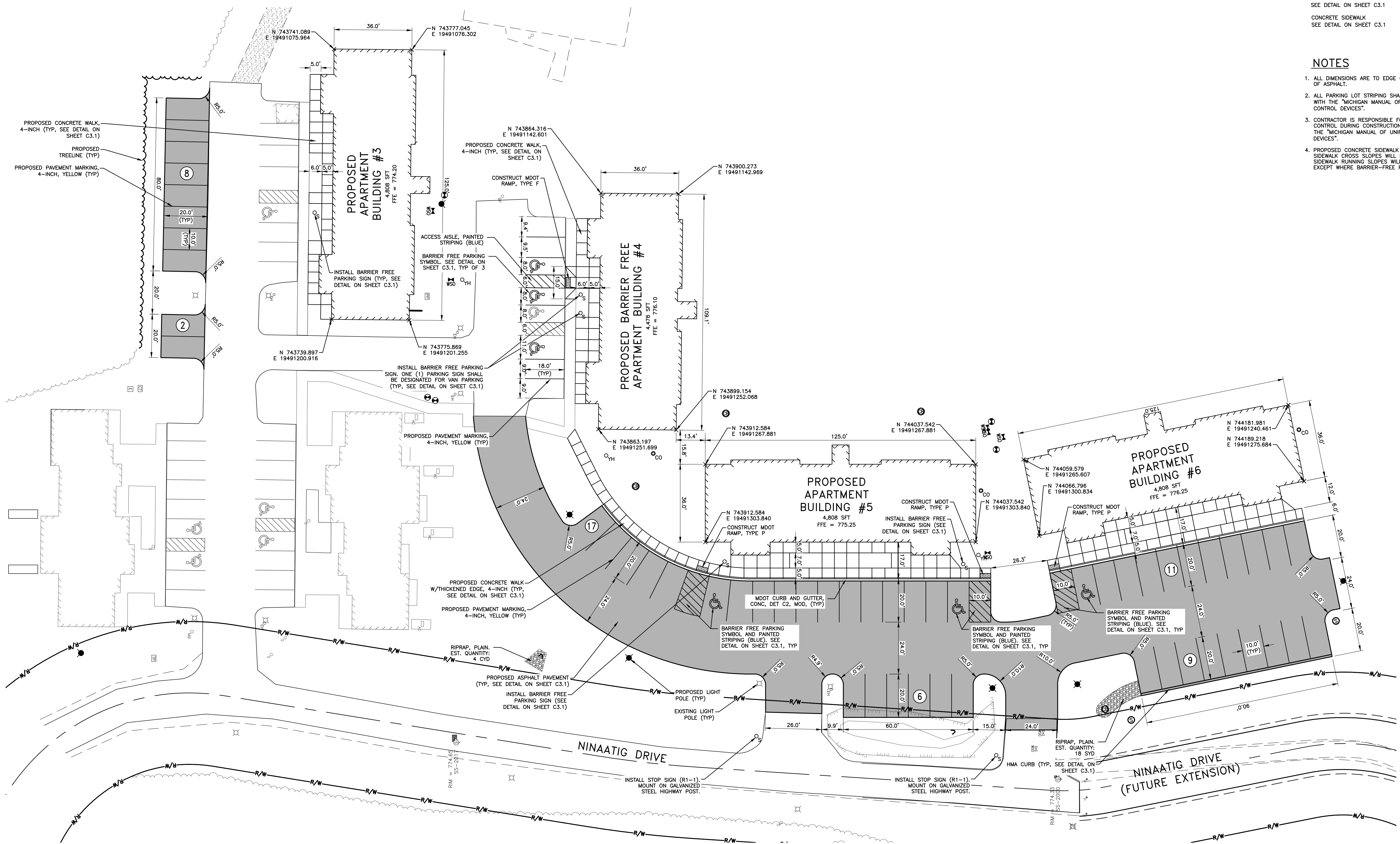
BUILDING LINE	
PARKING COUNT	
SIGN AND SIGN POST	
ASPHALT PAVEMENT	
CONCRETE SIDEWALK	

**NOTES**

1. ALL DIMENSIONS ARE TO EDGE OF SIDEWALK OR EDGE OF ASPHALT.
2. ALL PARKING LOT STRIPING SHALL BE IN ACCORDANCE WITH THE "MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
3. CONTRACTOR IS RESPONSIBLE FOR PROPER TRAFFIC CONTROL DURING CONSTRUCTION IN ACCORDANCE WITH THE "MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
4. PROPOSED CONCRETE SIDEWALK WILL BE ADA COMPLIANT. SIDEWALK CROSS SLOPES WILL NOT EXCEED 2.0% AND SIDEWALK RUNNING SLOPES WILL NOT EXCEED 5.0% EXCEPT WHERE BARRIER-FREE RAMPS ARE LOCATED.

6211 CHURCH ST. S., Suite 1  
 Gaylord, MI 49734  
 987.732.5584  
 www.wade-trim.com  
**WADE TRIM**  
 PROJECT # 226263210

**ANTHONY P. ESSON**  
**ARCHITECT**  
 PO BOX 479  
 GAYLORD, MICHIGAN  
 TELEPHONE: (989) 732-0895



DRAWING TITLE  
**SITE PLAN**

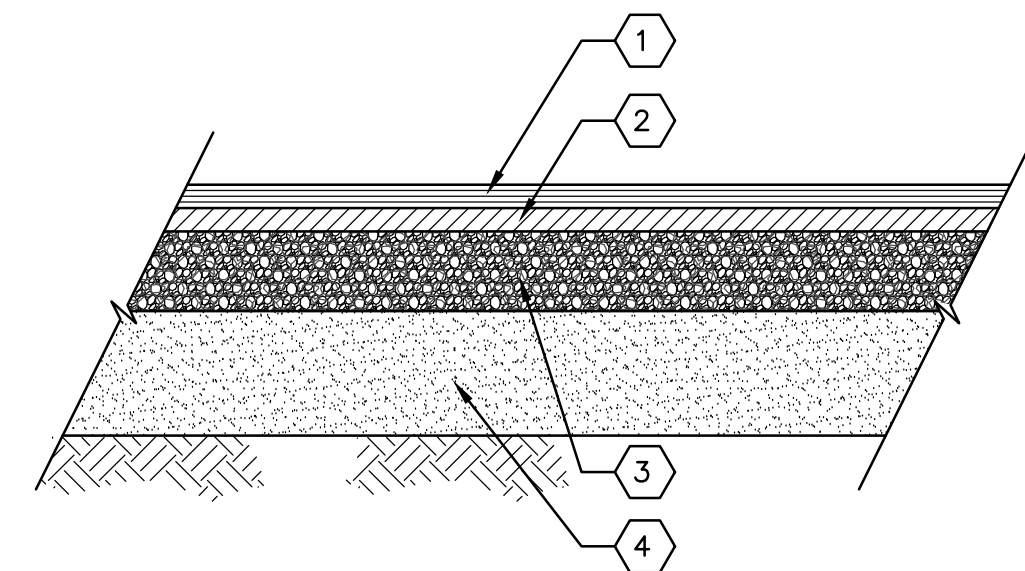
PROJECT TITLE  
LITTLE TRAVERSE BAY BAND OF ODAWA INDIANS  
**MURRAY ROAD APARTMENT DEVELOPMENT**  
PETOSKEY, MICHIGAN

PROJECT NO.  
273-19

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MAY 11, 2020  
MAY 10, 2020

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**C3.1**



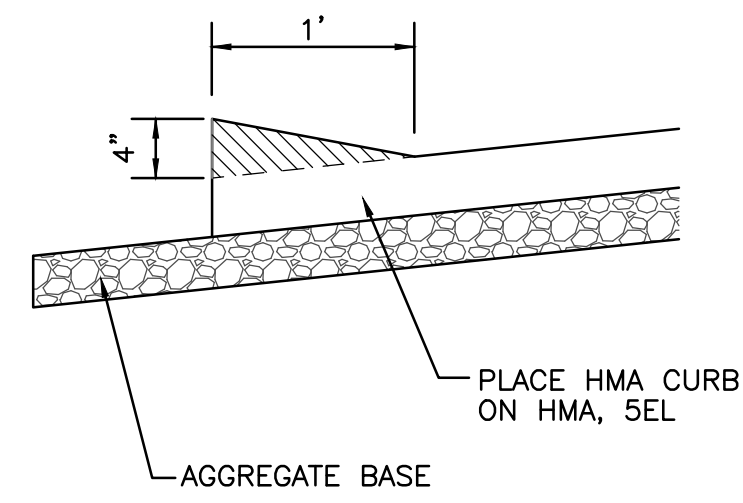


**BITUMINOUS PAVEMENT SECTION**  
NO SCALE

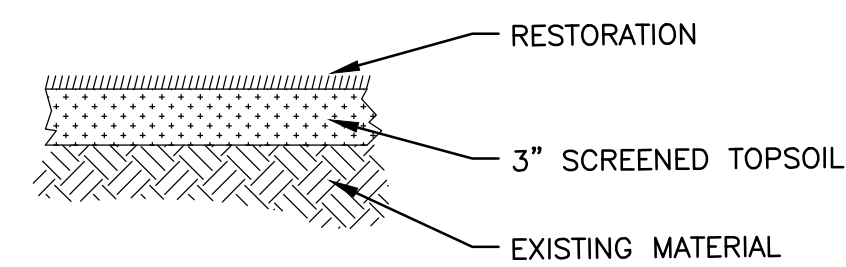
SPECIFICATIONS		
ITEM	THICKNESS	MATERIAL
1	1 1/2"	HMA, SEL
2	1 1/2"	HMA, 4EL
3	8"	MDOT 22A AGGREGATE
4	12"	MDOT CLASS II SAND

REFER TO PROJECT SPECIFICATIONS FOR COMPACTION AND TESTING REQUIREMENTS.

NOTE: HMA CURB TO BE PLACED WITH PAVER (NOT BY HAND).

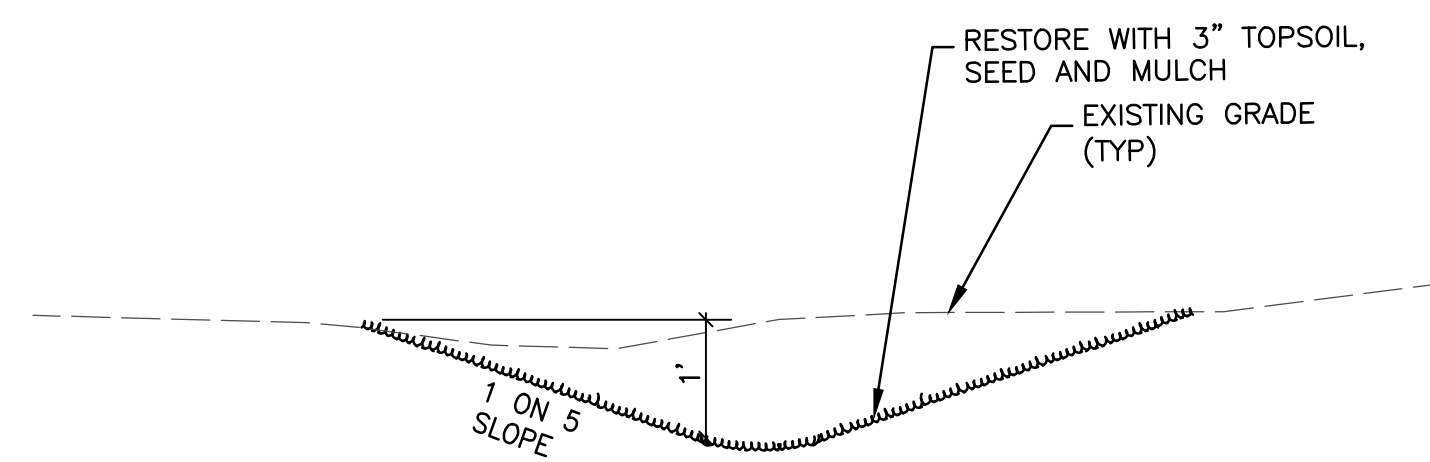


**HMA CURB**  
INSTALL HMA CURB INTEGRALLY WITH PARKING LOT HMA.

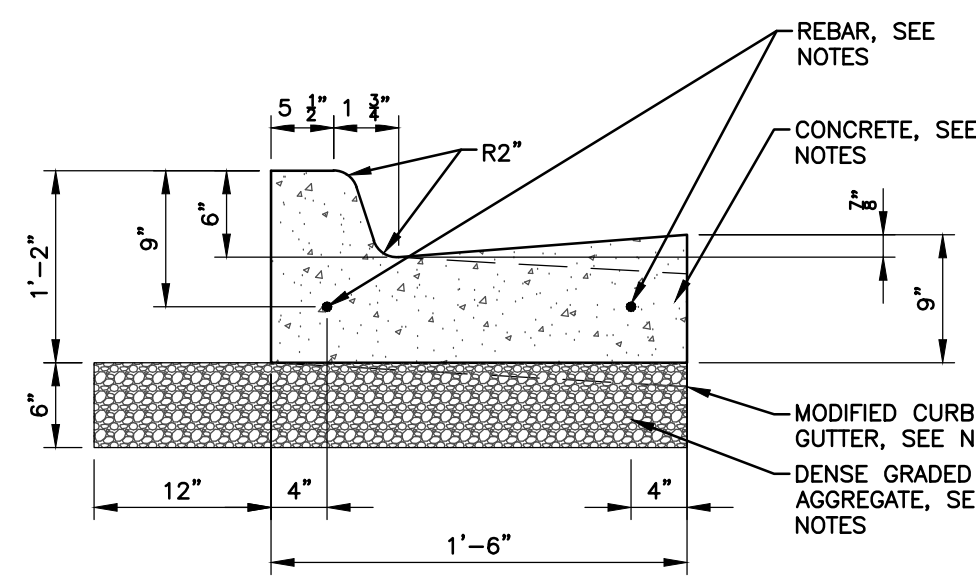


**LAWN AND FIELD RESTORATION SECTION**  
NO SCALE

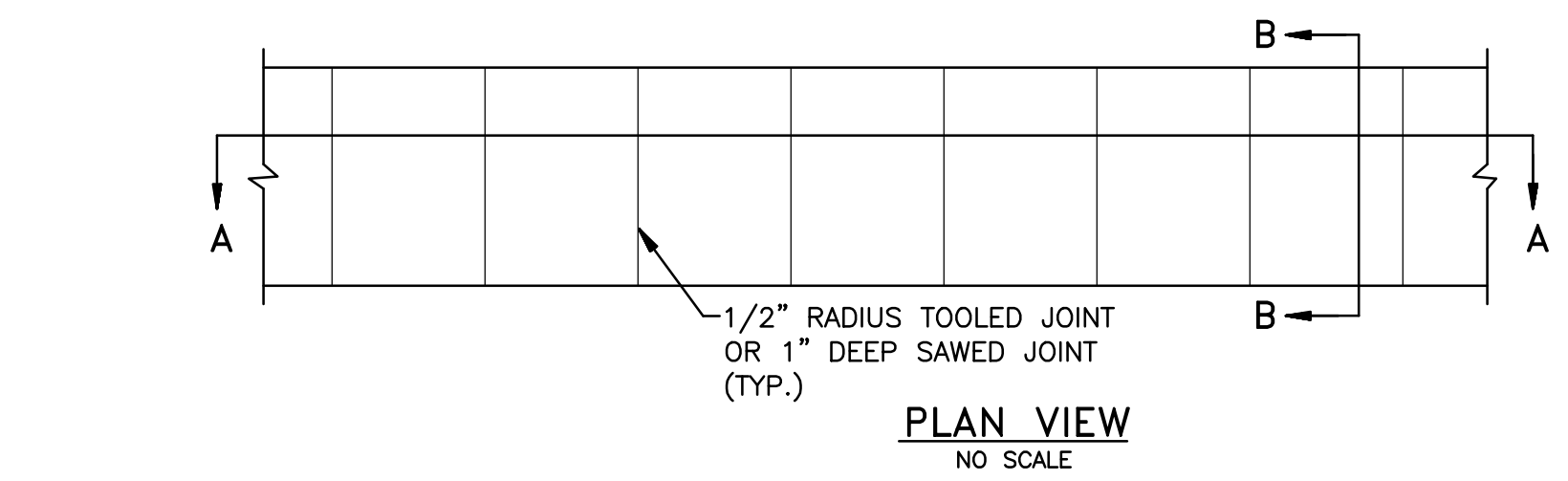
**RESTORATION SPECIFICATION**  
RESTORATION ITEMS SHALL CONFORM TO THE MDOT 2012 STANDARD SPECIFICATION FOR CONSTRUCTION, SEED MIX: MDOT SEEDING MIXTURE TDS FERTILIZER: MDOT CHEMICAL NUTRIENT, CLASS A



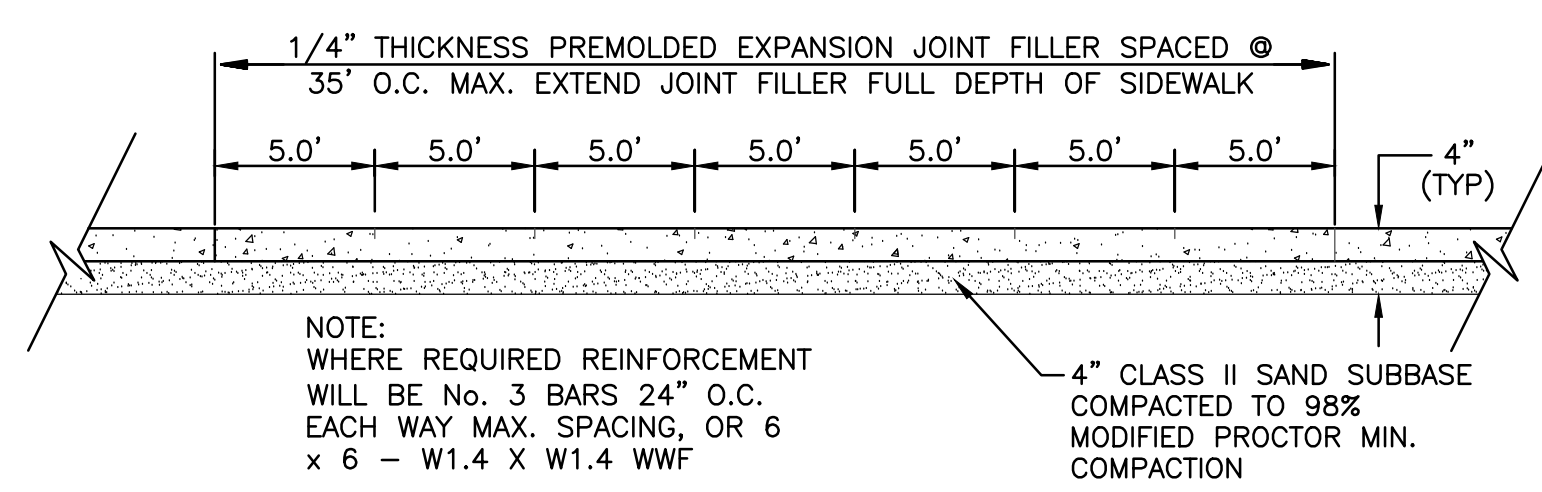
**DRAINAGE SWALE**  
NOT TO SCALE



**18" STANDARD CURB & GUTTER DETAIL**  
NOT TO SCALE

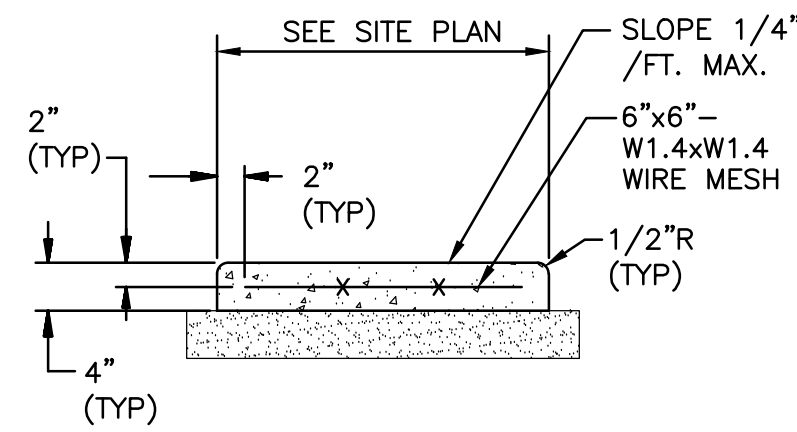


**CONCRETE SIDEWALK**  
NO SCALE

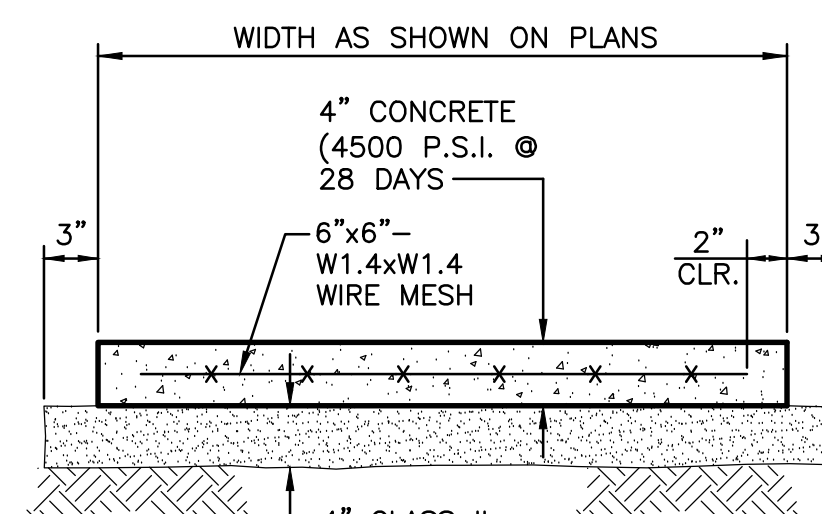


**SECTION A-A**  
NO SCALE

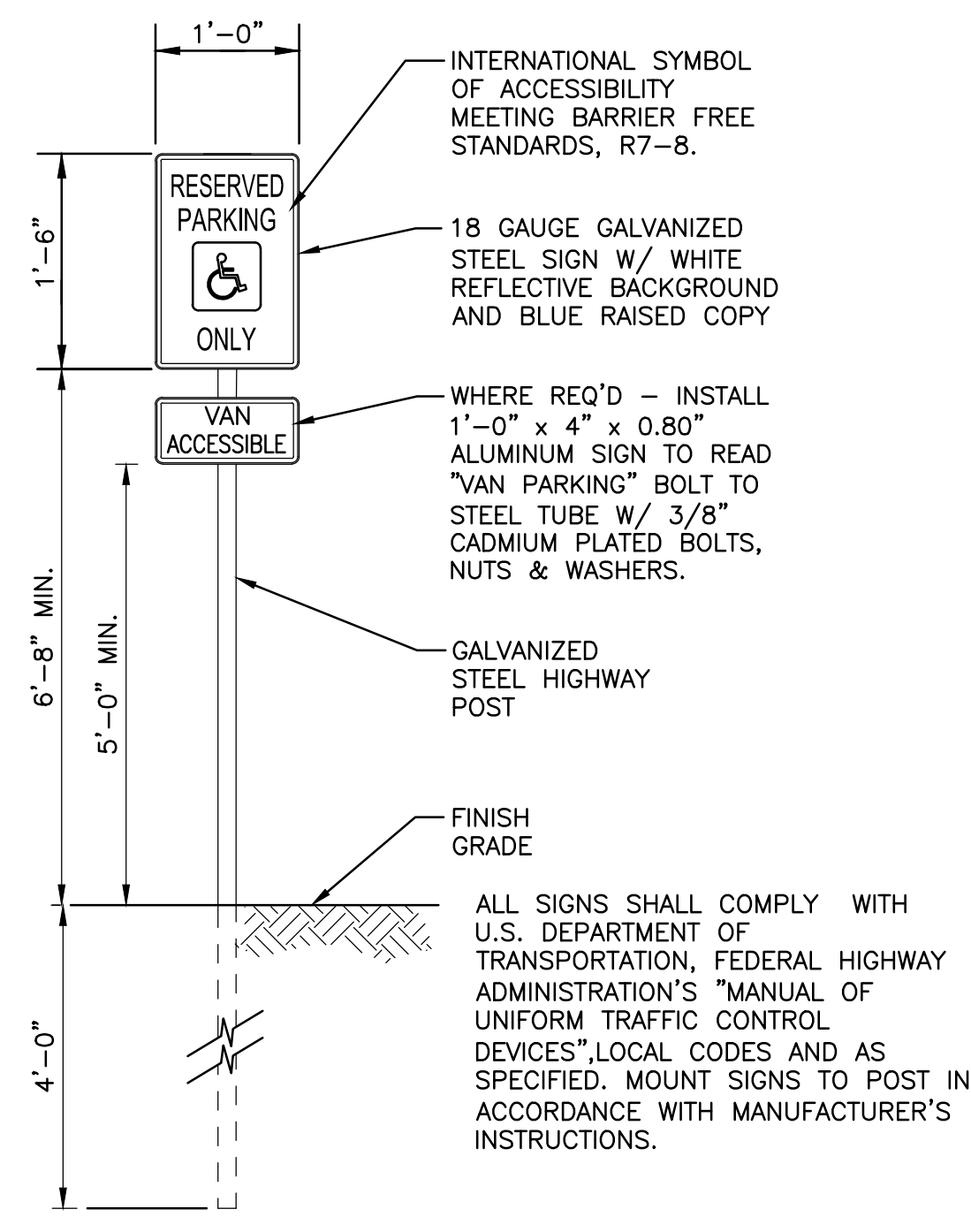
**CONCRETE SIDEWALK**  
NO SCALE



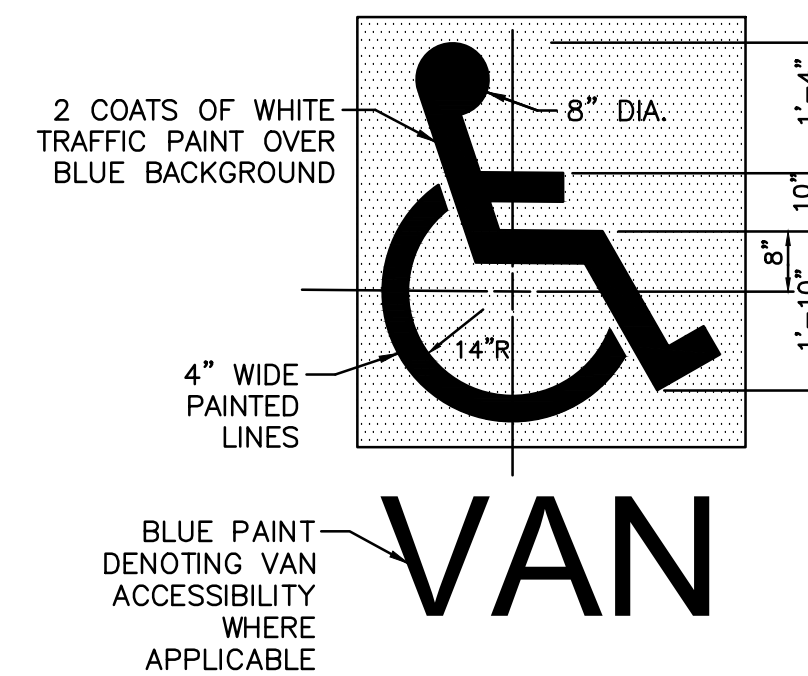
**SECTION B-B**  
NO SCALE



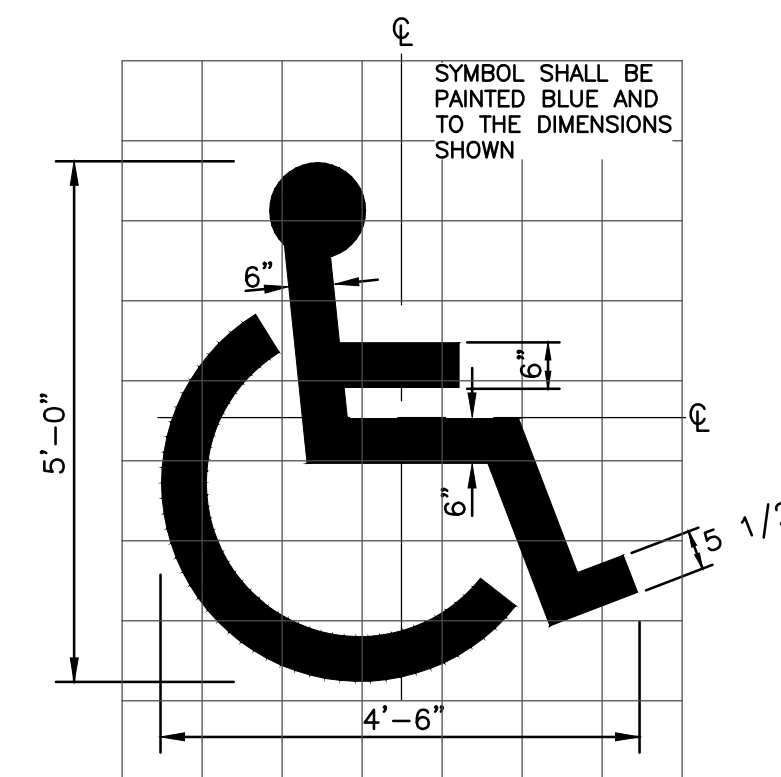
**CONCRETE WALK**  
NO SCALE



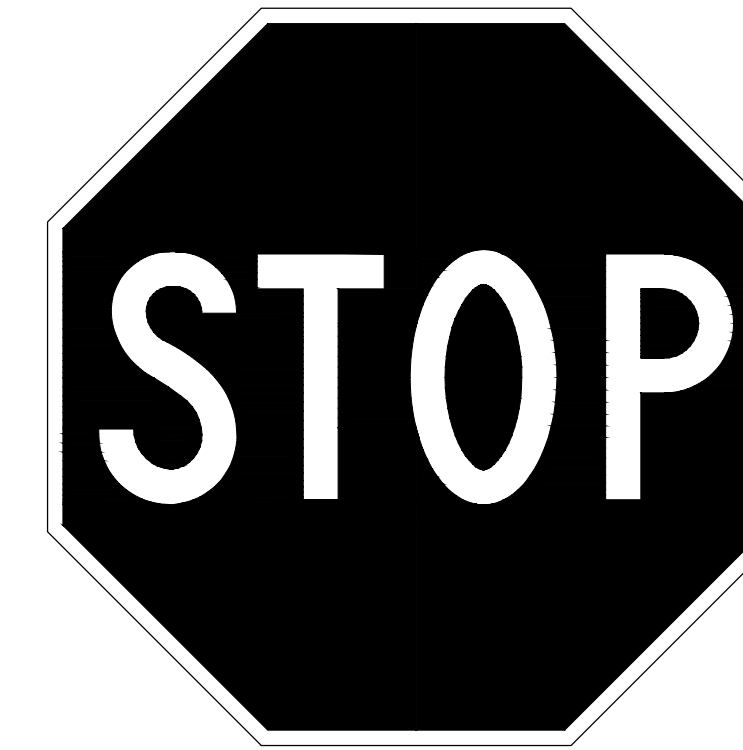
**TYPE I SIGN DETAIL**  
NO SCALE



**ACCESSIBLE SYMBOL**  
N.T.S.

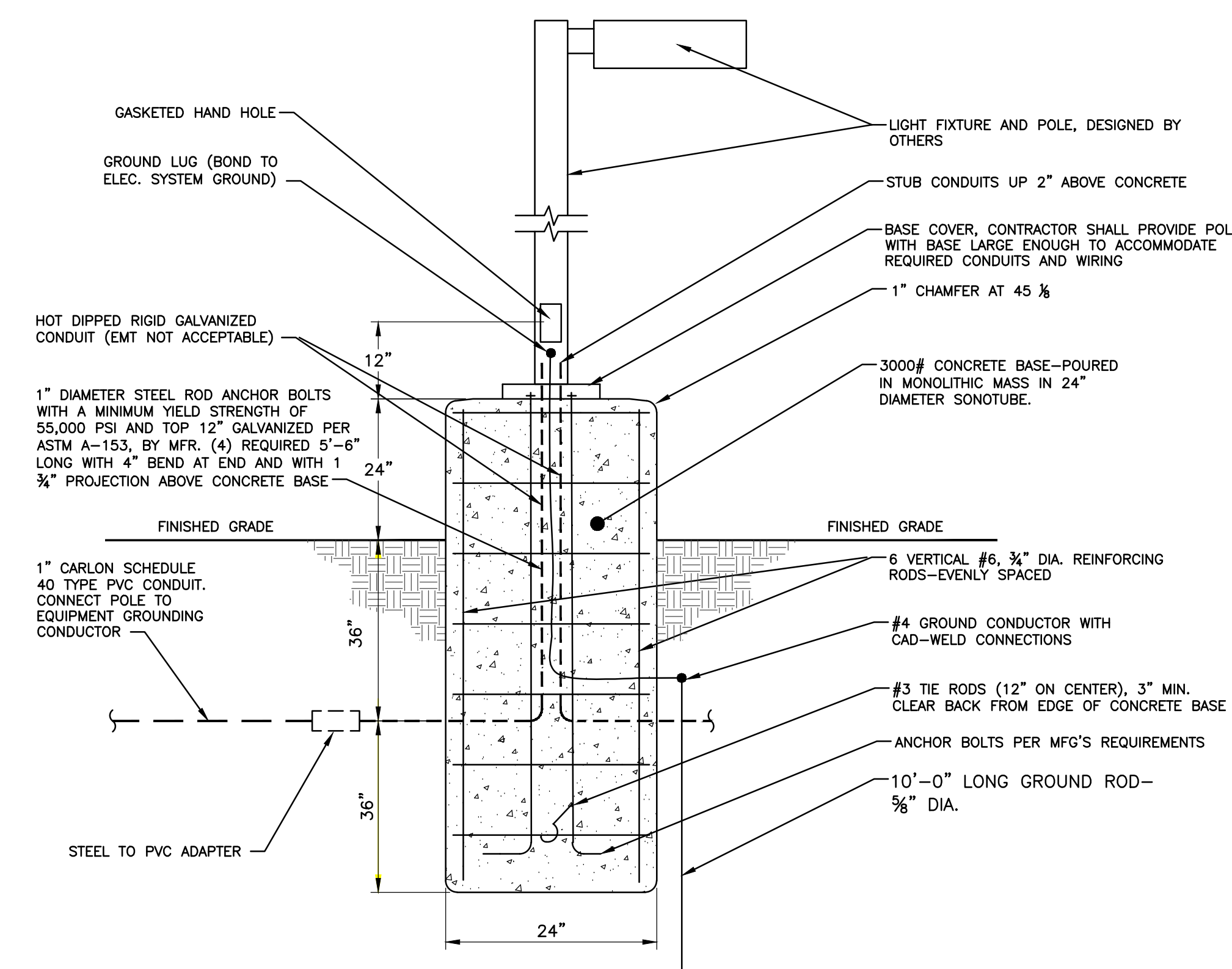


**HANDICAP SYMBOL PAINT DETAIL**  
NO SCALE



COLORS: LEGEND - WHITE (RETROREFLECTIVE)  
BACKGROUND - RED (RETROREFLECTIVE)  
BOTTOM OF SIGN SHALL BE MOUNTED 7'-0" ABOVE GRADE OR AS DIRECTED BY OWNER.

**R1-1 STOP SIGN**



**TYPICAL LIGHT POLE AND FOUNDATION**  
N.T.S.



DRAWING TITLE  
SITE DETAILS

PROJECT TITLE  
LITTLE TRAVERSE BAY BAND OF ODAWA INDIANS  
MURRAY ROAD APARTMENT DEVELOPMENT  
PETOSKEY, MICHIGAN

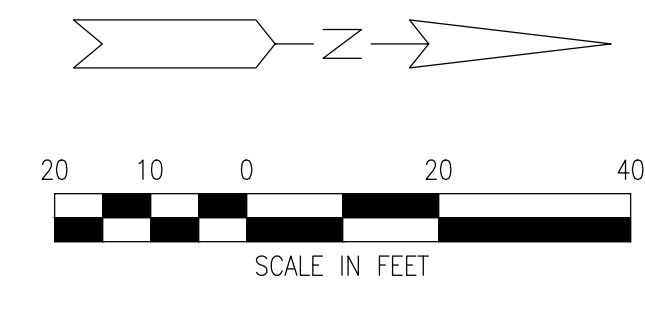
PROJECT NO.  
273-19

DATE  
MAY 1, 2020  
MAY 10, 2020

SHEET  
C3.2

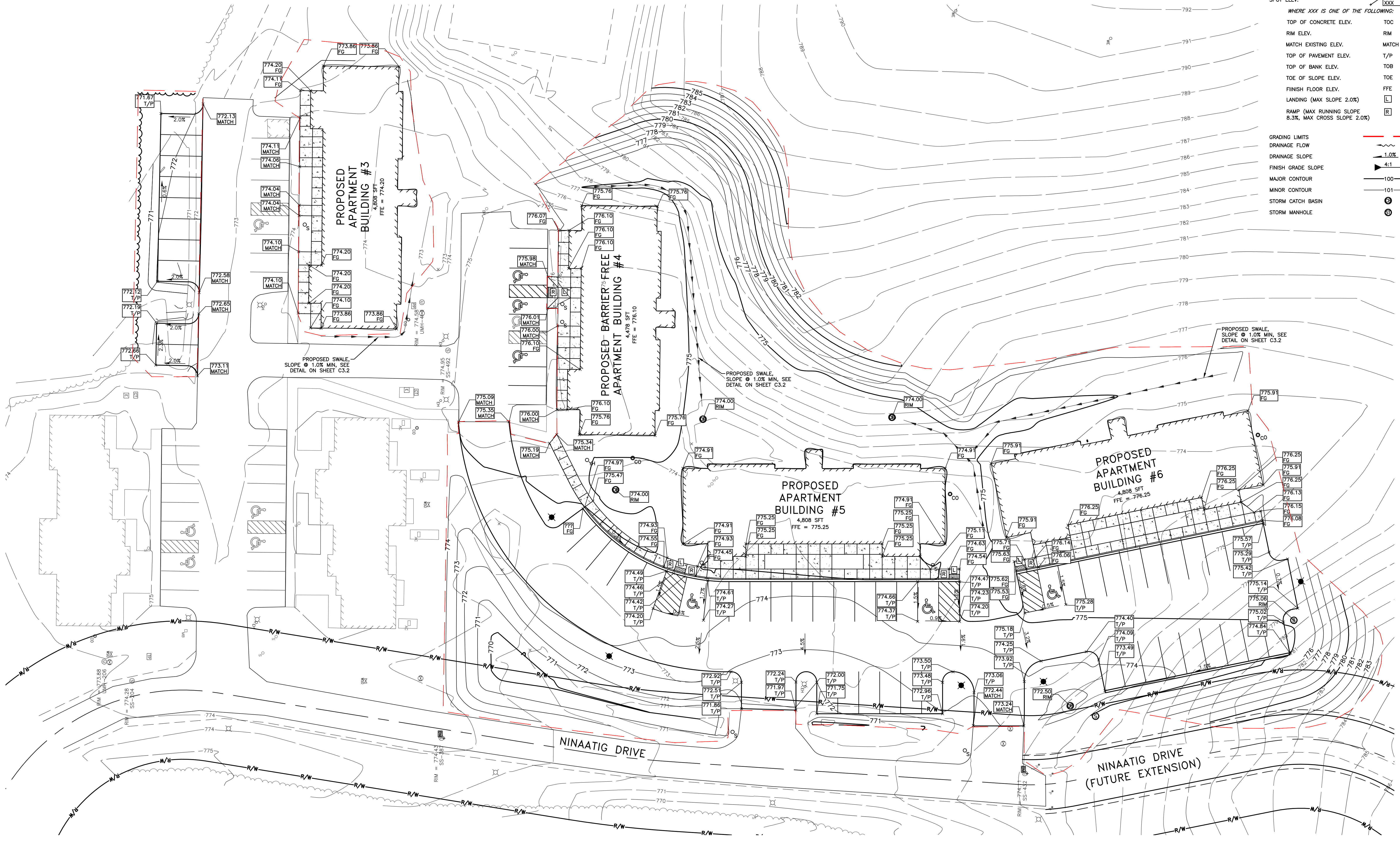
10100 Old US 27 S., Suite 1  
PO Box 4110  
Gaylord, MI 49734  
987.732.3584  
www.wadetrim.com

ANTHONY P. ESSON  
ARCHITECT  
PO BOX 479  
GAYLORD, MICHIGAN  
TELEPHONE: (989) 732-0895



**PROPOSED LEGEND**

- THICKENED EDGE WALK ELEV.  
WHERE: T = TOP OF WALK  
P = PAVEMENT
- SPOT ELEV.
- WHERE XXX IS ONE OF THE FOLLOWING:
- TOP OF CONCRETE ELEV. TOC
  - RIM ELEV. RIM
  - MATCH EXISTING ELEV. MATCH
  - TOP OF PAVEMENT ELEV. T/P
  - TOP OF BANK ELEV. TOB
  - TOE OF SLOPE ELEV. TOE
  - FINISH FLOOR ELEV. FFE
  - LANDING (MAX SLOPE 2.0%)
  - RAMP (MAX RUNNING SLOPE 8.3%, MAX CROSS SLOPE 2.0%)
- GRADING LIMITS
- DRAINAGE FLOW
- DRAINAGE SLOPE
- FINISH GRADE SLOPE
- MAJOR CONTOUR
- MINOR CONTOUR
- STORM CATCH BASIN
- STORM MANHOLE

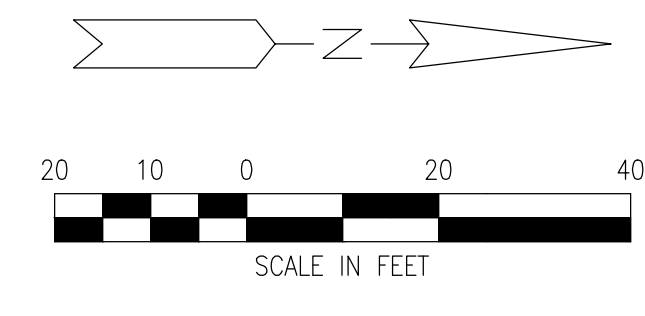



  
 WADE TRIM  
 ANTHONY P. ESSON ARCHITECT  
 GAYLORD, MICHIGAN  
 PO BOX 479  
 TELEPHONE: (989) 732-0895

SHEET	DATE	PROJECT NO.	DRAWING TITLE
	MAY 11, 2020 MAY 19, 2020	273-19	GRADING PLAN
PROJECT TITLE		PROJECT TITLE	
LITTLE TRAVERSE BAY BAND OF OJAWA INDIANS		MURRAY ROAD APARTMENT DEVELOPMENT	
PETOSKEY, MICHIGAN			



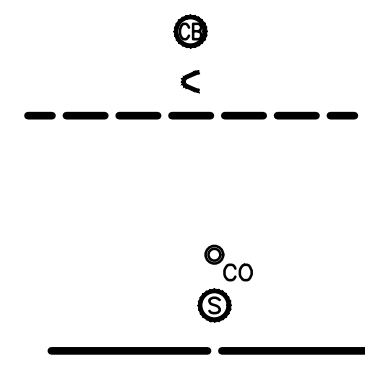




**PROPOSED LEGEND**

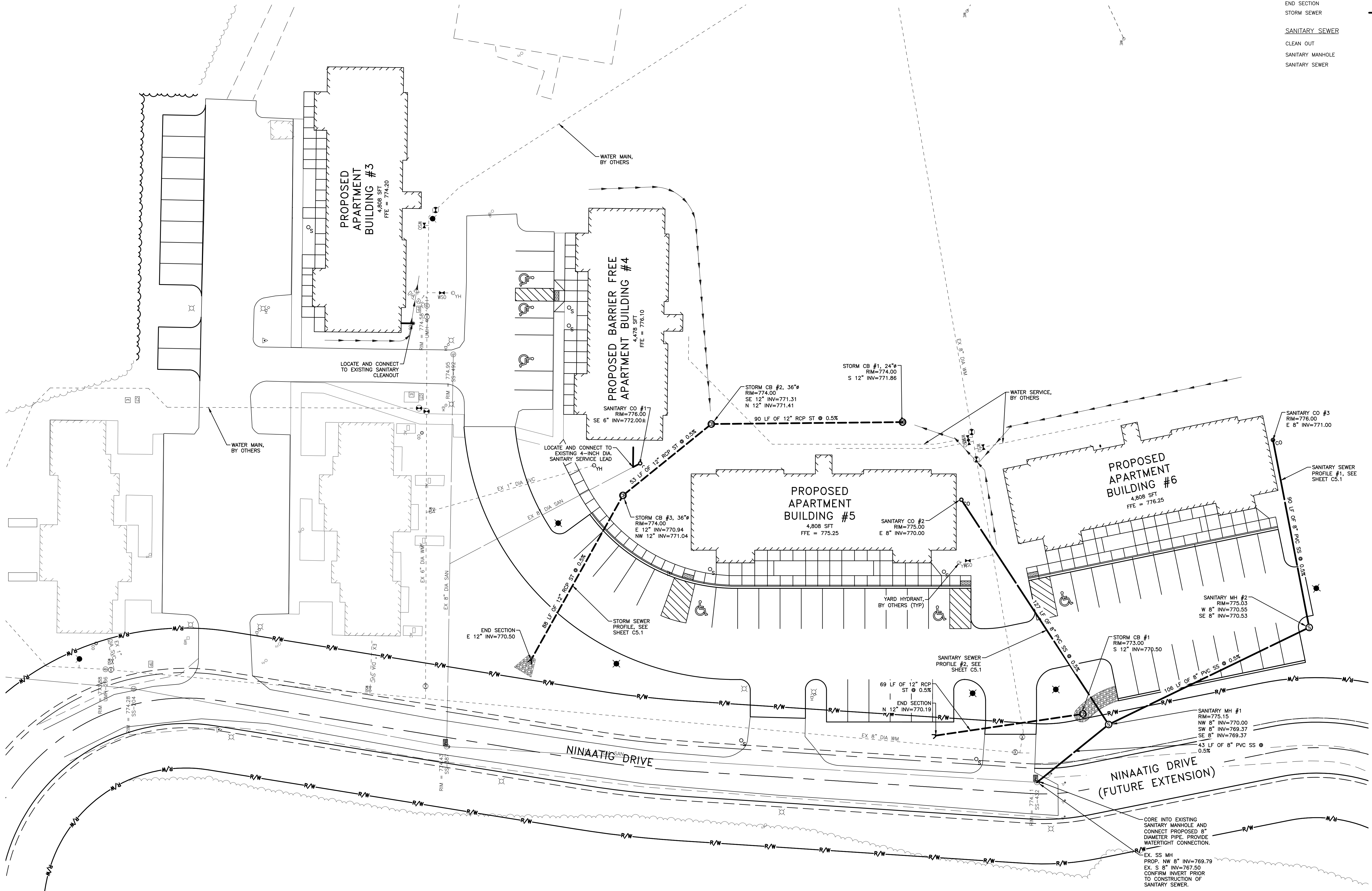
**STORM SEWER/DRAINAGE**  
 CATCH BASIN  
 END SECTION  
 STORM SEWER

**SANITARY SEWER**  
 CLEAN OUT  
 SANITARY MANHOLE  
 SANITARY SEWER



WADE TRIM  
 ANTHONY P. ESSON ARCHITECT

ANTHONY P. ESSON ARCHITECT  
 PO BOX 479  
 GAYLORD, MICHIGAN  
 (989) 732-0895



DRAWING TITLE  
**UTILITY PLAN**

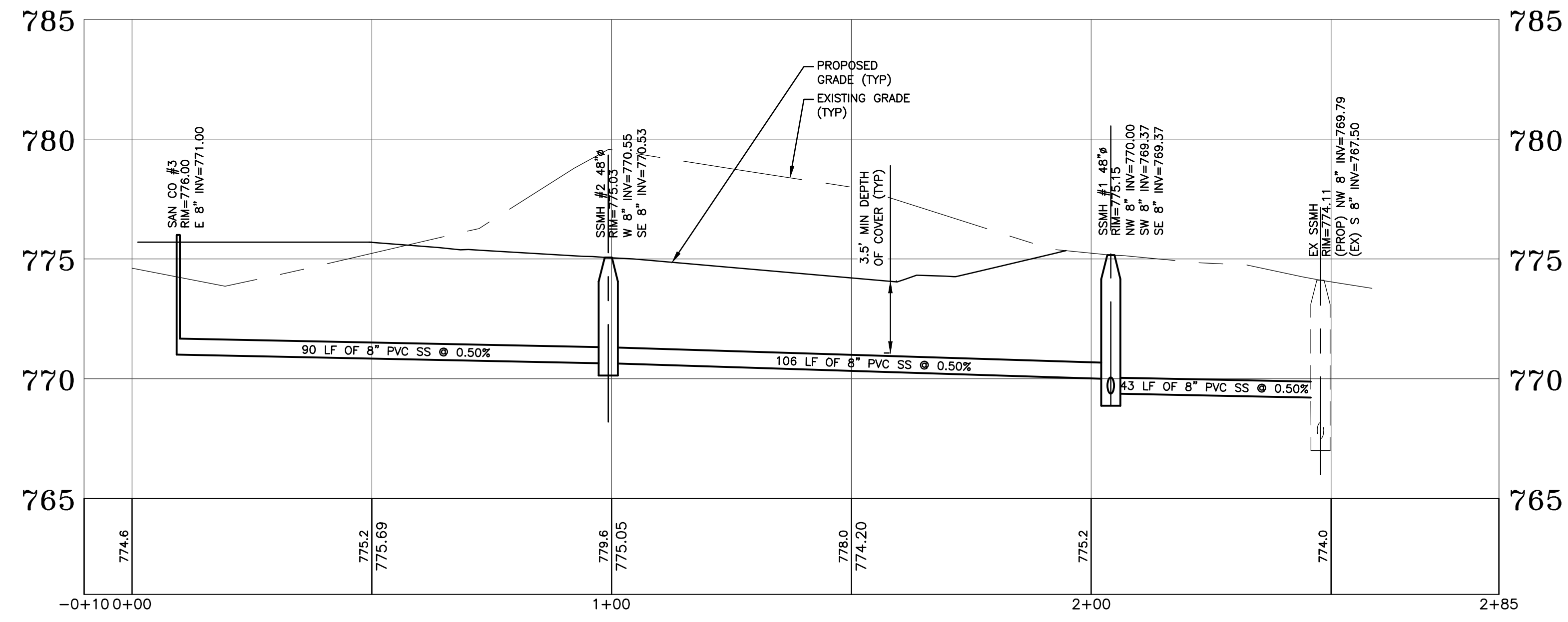
PROJECT TITLE  
**MURRAY ROAD APARTMENT DEVELOPMENT**  
 LITTLE TRAVERSE BAY BAND OF ODAWA INDIANS  
 PETOSKEY, MICHIGAN

PROJECT NO.  
**273-19**

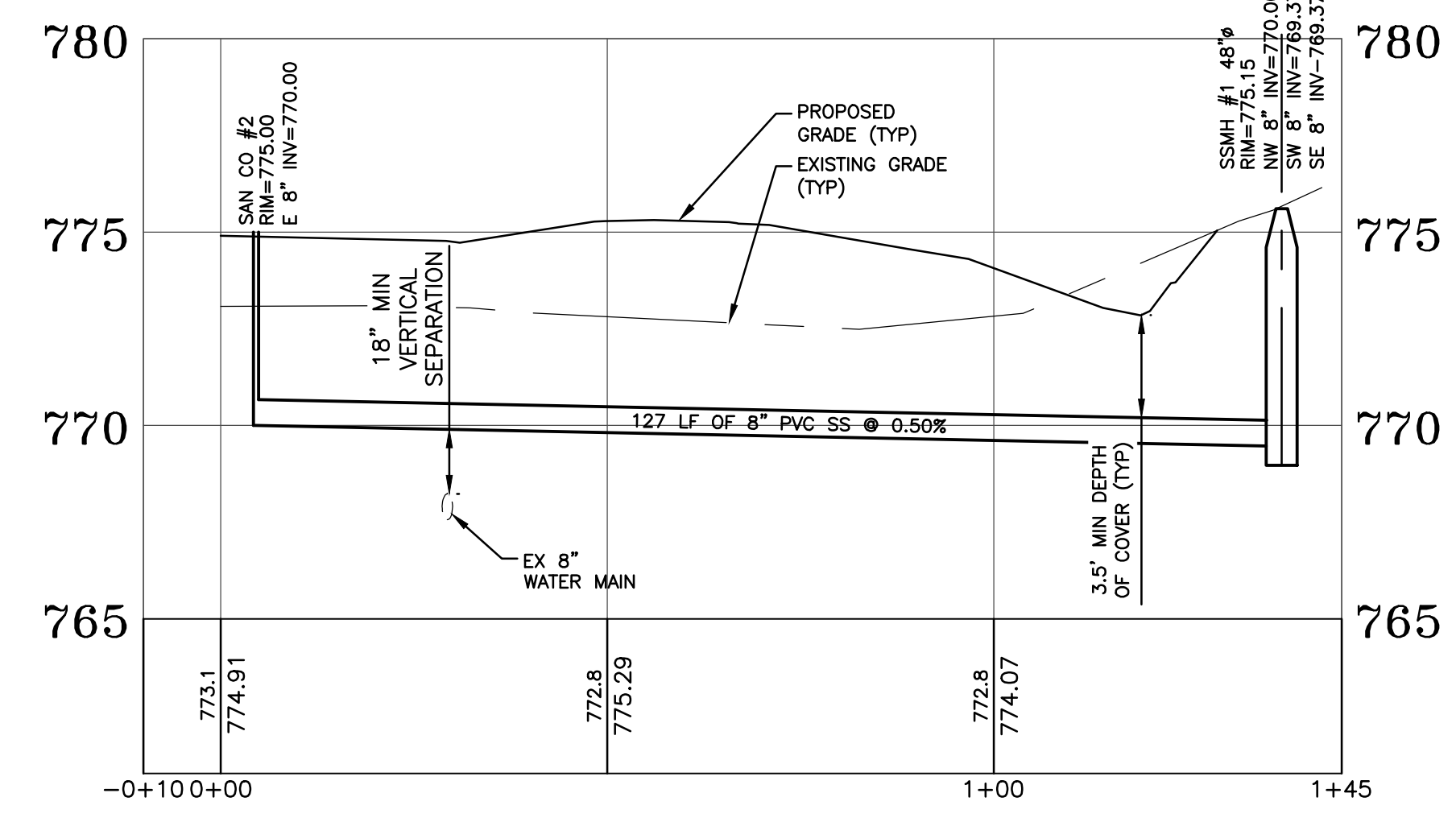
DATE  
 MAY 11, 2020  
 MAY 19, 2020

SHEET  
**C5.0**

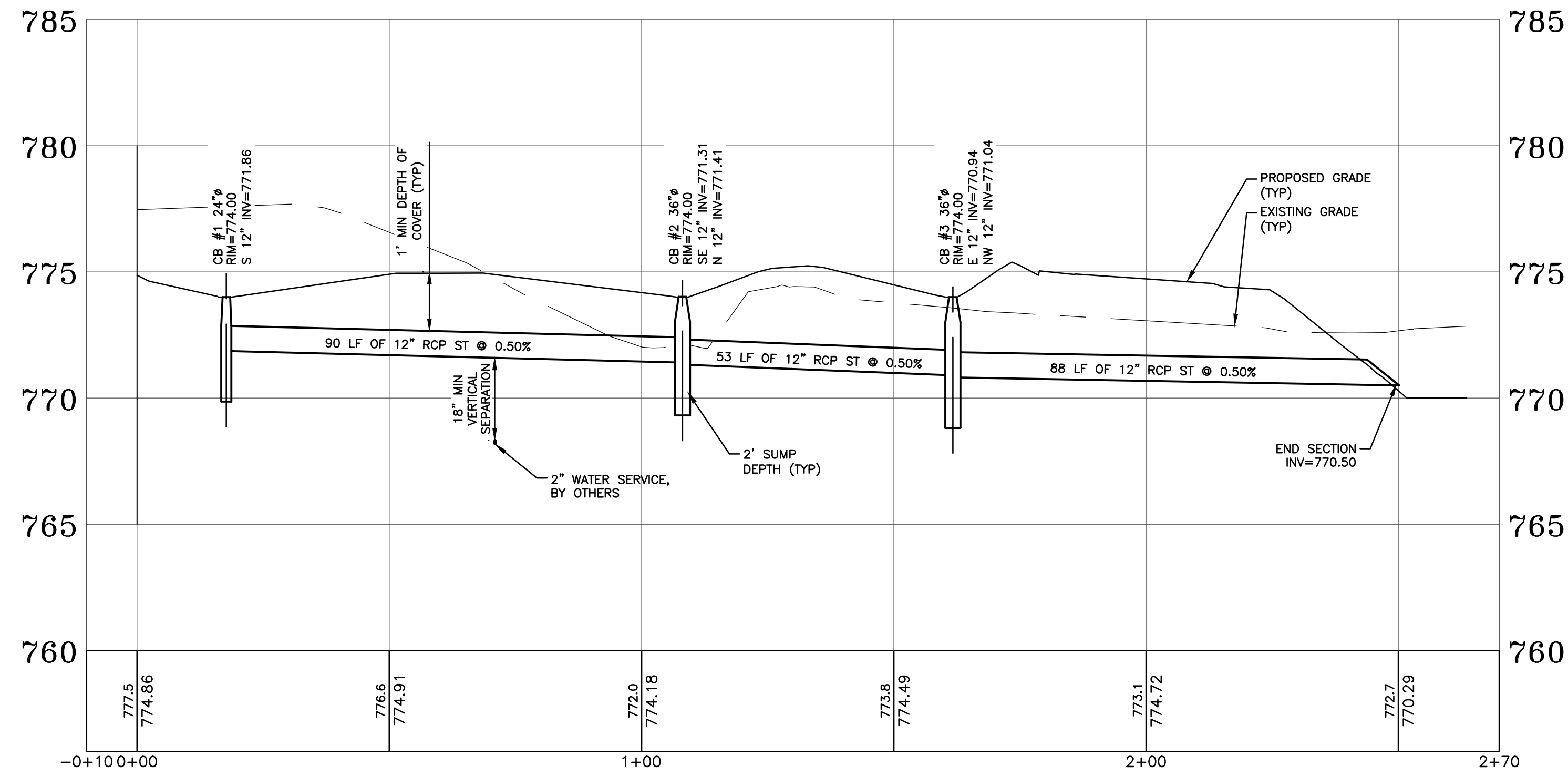




**SANITARY SEWER PROFILE #1**  
 SCALE: 1" = 20' (HORZ)  
 1" = 4' (VERT)

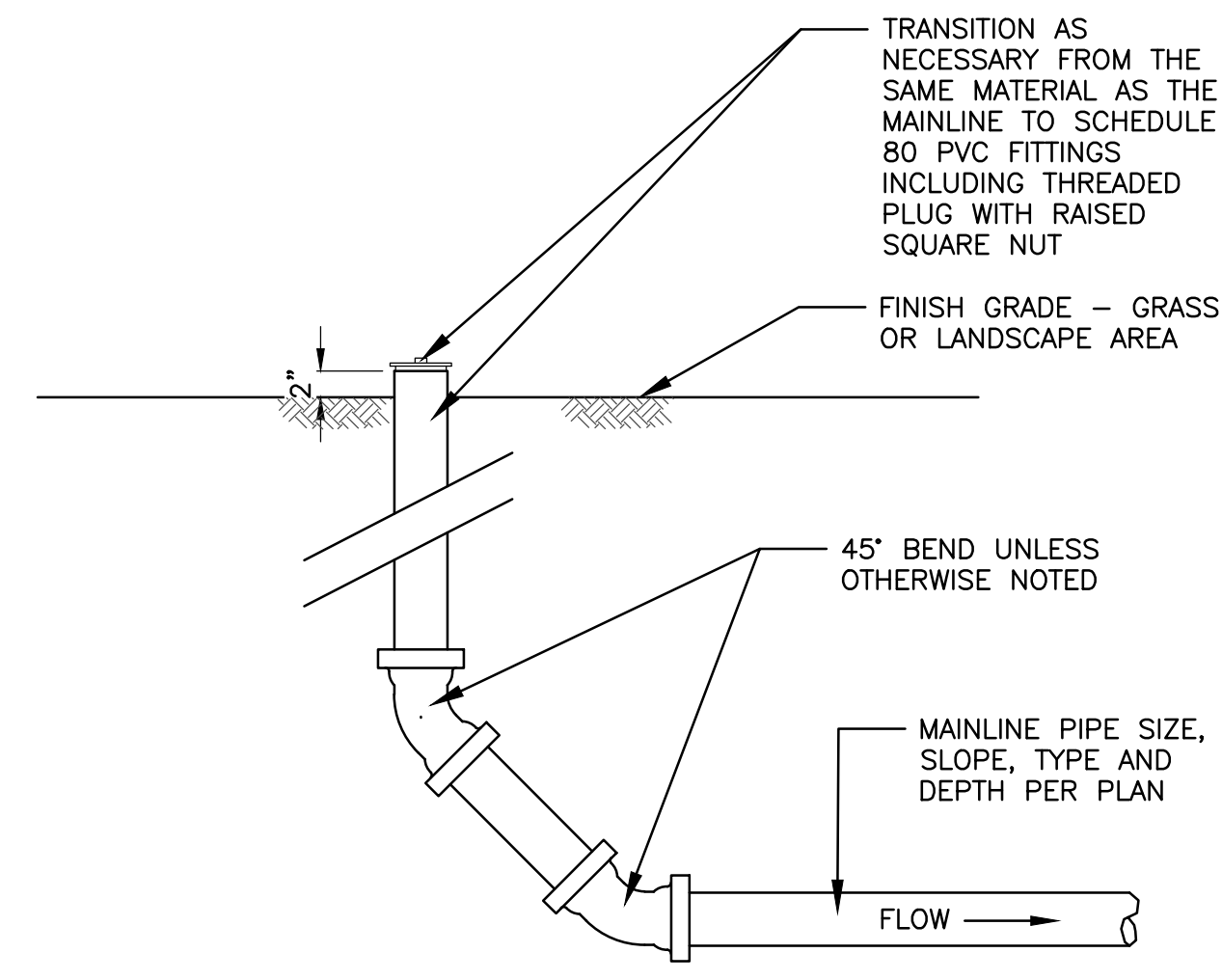


**SANITARY SEWER PROFILE #2**  
 SCALE: 1" = 20' (HORZ)  
 1" = 4' (VERT)

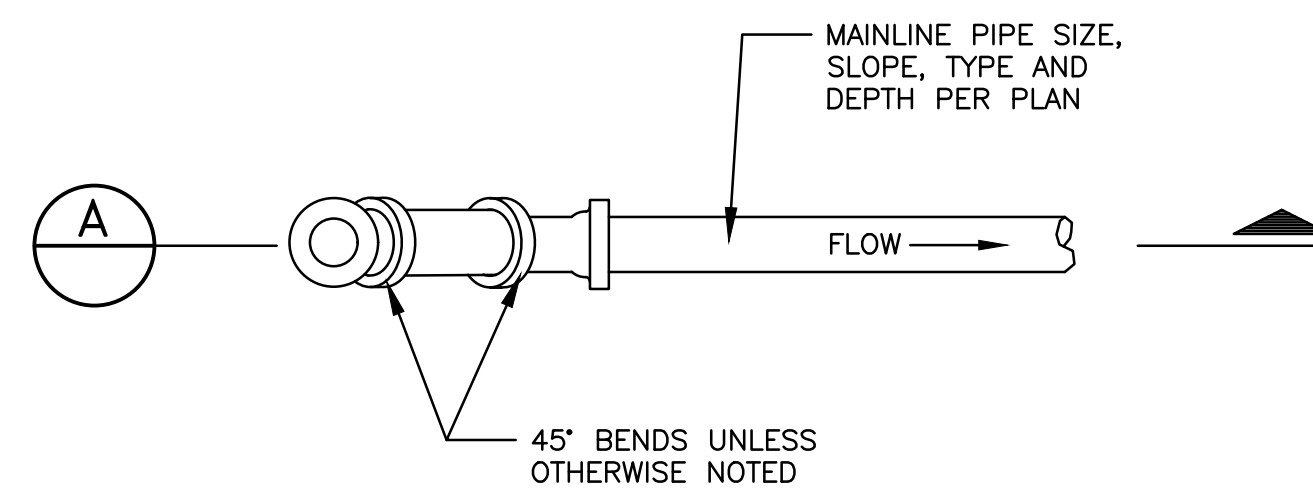


**STORM SEWER PROFILE**  
 SCALE: 1" = 20' (HORZ)  
 1" = 4' (VERT)

SHEET	DATE	PROJECT NO.	PROJECT TITLE	DRAWING TITLE
				UTILITY PROFILES
C5.1	MAY 1, 2020	273-19	LITTLE TRAVERSE BAY BAND OF ODAWA INDIANS MURRAY ROAD APARTMENT DEVELOPMENT PETOSKEY, MICHIGAN	
	MAY 10, 2020			



SECTION A

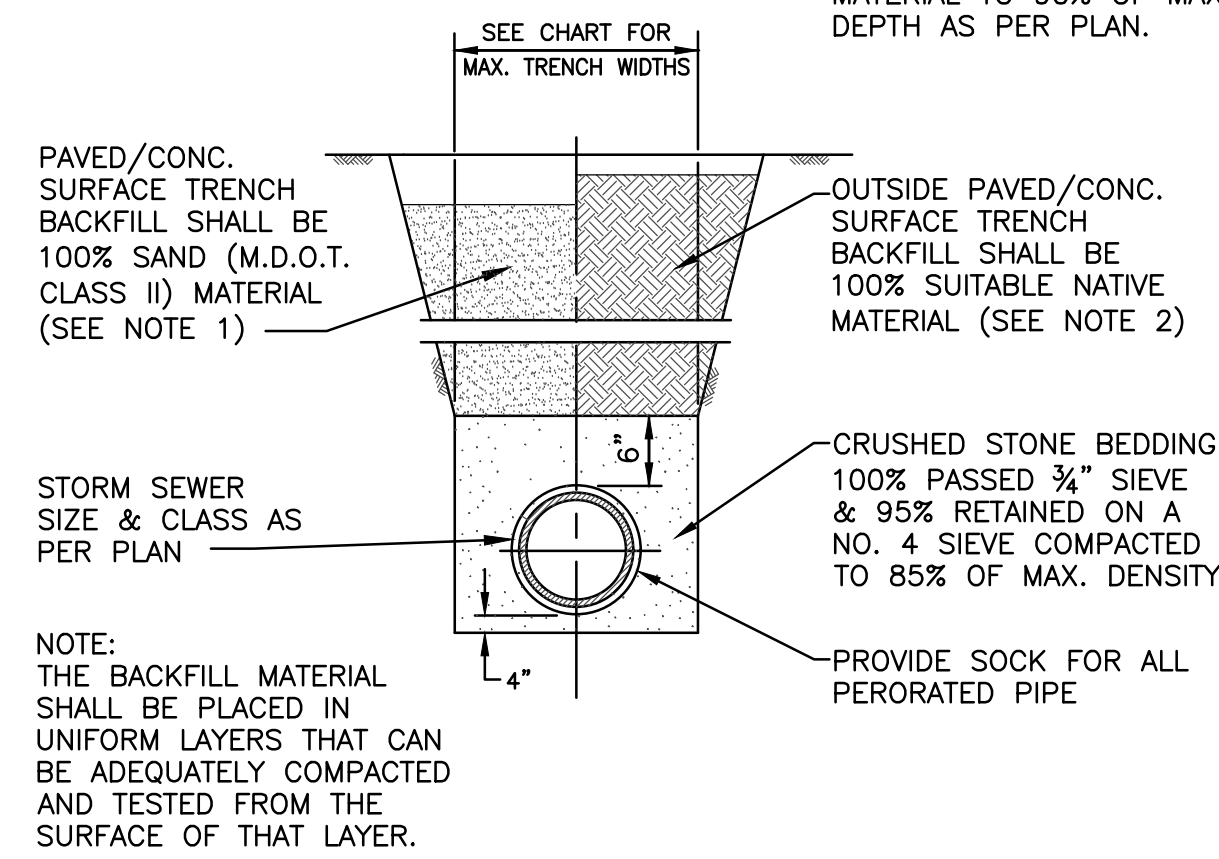


PLAN

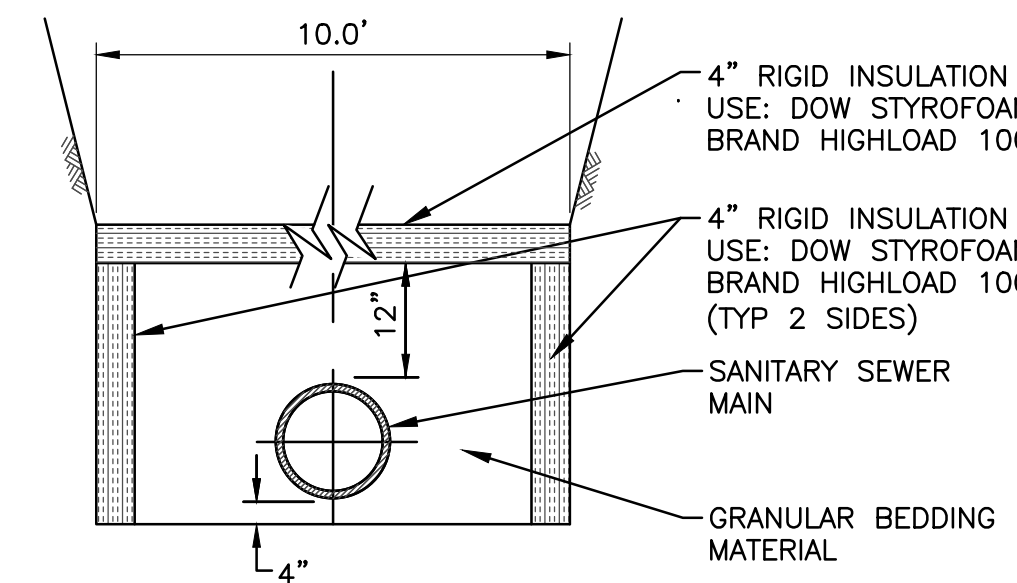
CLEAN OUT DETAIL - II  
NOT TO SCALE

TRENCH WIDTHS	
MAX. WIDTH OF TRENCH 12" ABOVE TOP OF PIPE	
6" THRU 12" PIPE - 30" WIDE	
15" THRU 36" PIPE - O.D. + 16"	
42" THRU 60" PIPE - O.D. + 20"	
OVER 60" PIPE - O.D. + 24"	

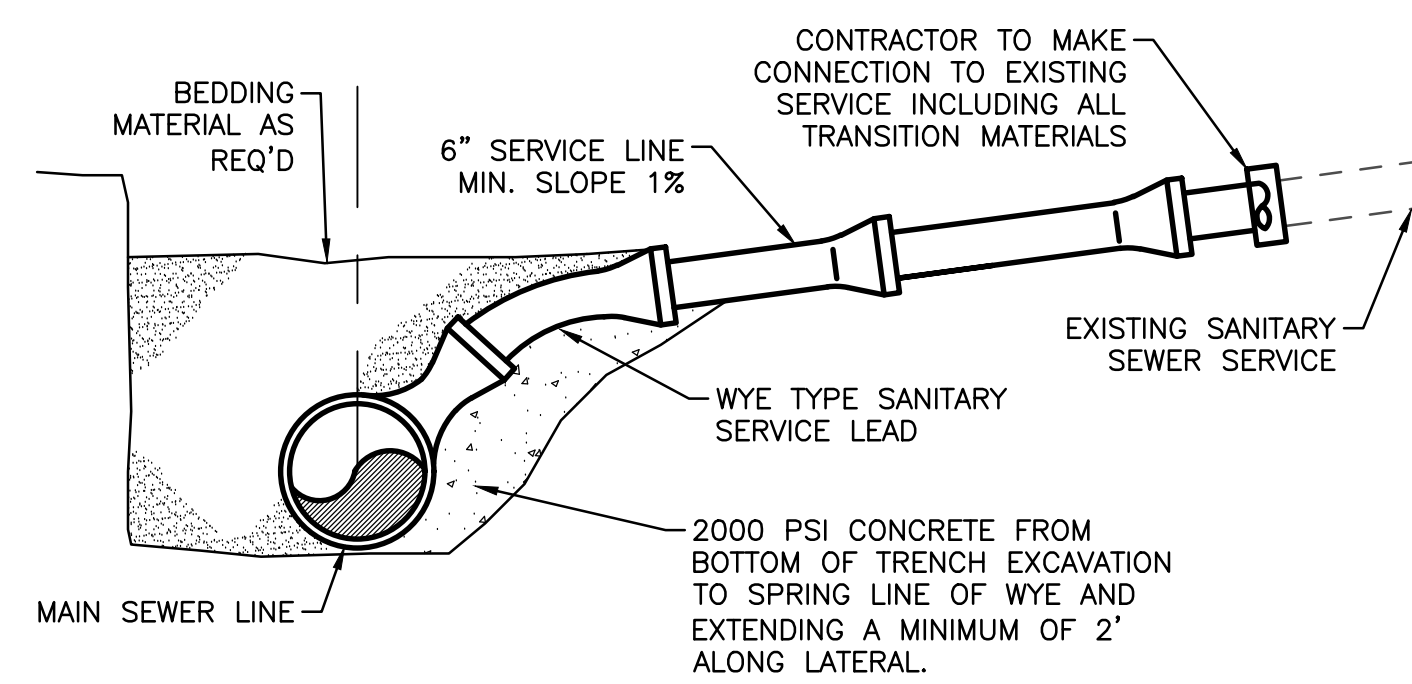
- NOTES:
1. ALL PIPE THAT RUNS UNDER THE PAVED, GRAVEL OR CONCRETE SURFACE AND WITHIN A 1 ON 1 INFLUENCE TO RECEIVE 100% SAND BACKFILL COMPACTED TO 98% OF MAX. DENSITY DEPTH AS PER PLAN.
  2. ALL PIPE THAT RUNS OUTSIDE THE PAVED, GRAVEL OR CONCRETE SURFACE SHALL BE BACKFILLED WITH 100% SUITABLE NATIVE MATERIAL TO 90% OF MAX. DENSITY DEPTH AS PER PLAN.



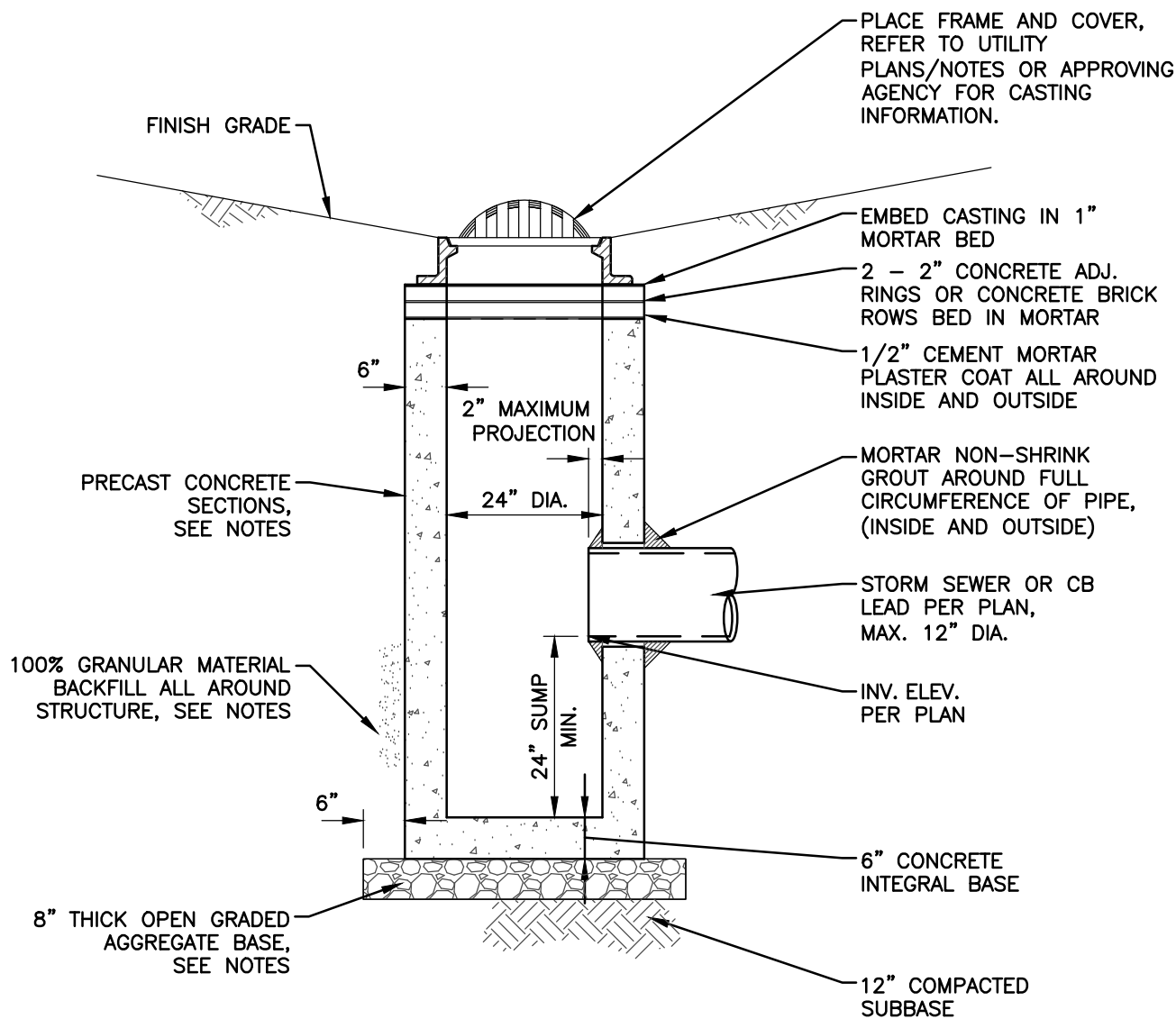
TYPICAL FLEXIBLE PIPE TRENCH DETAIL  
(STORM & SANITARY SEWER)



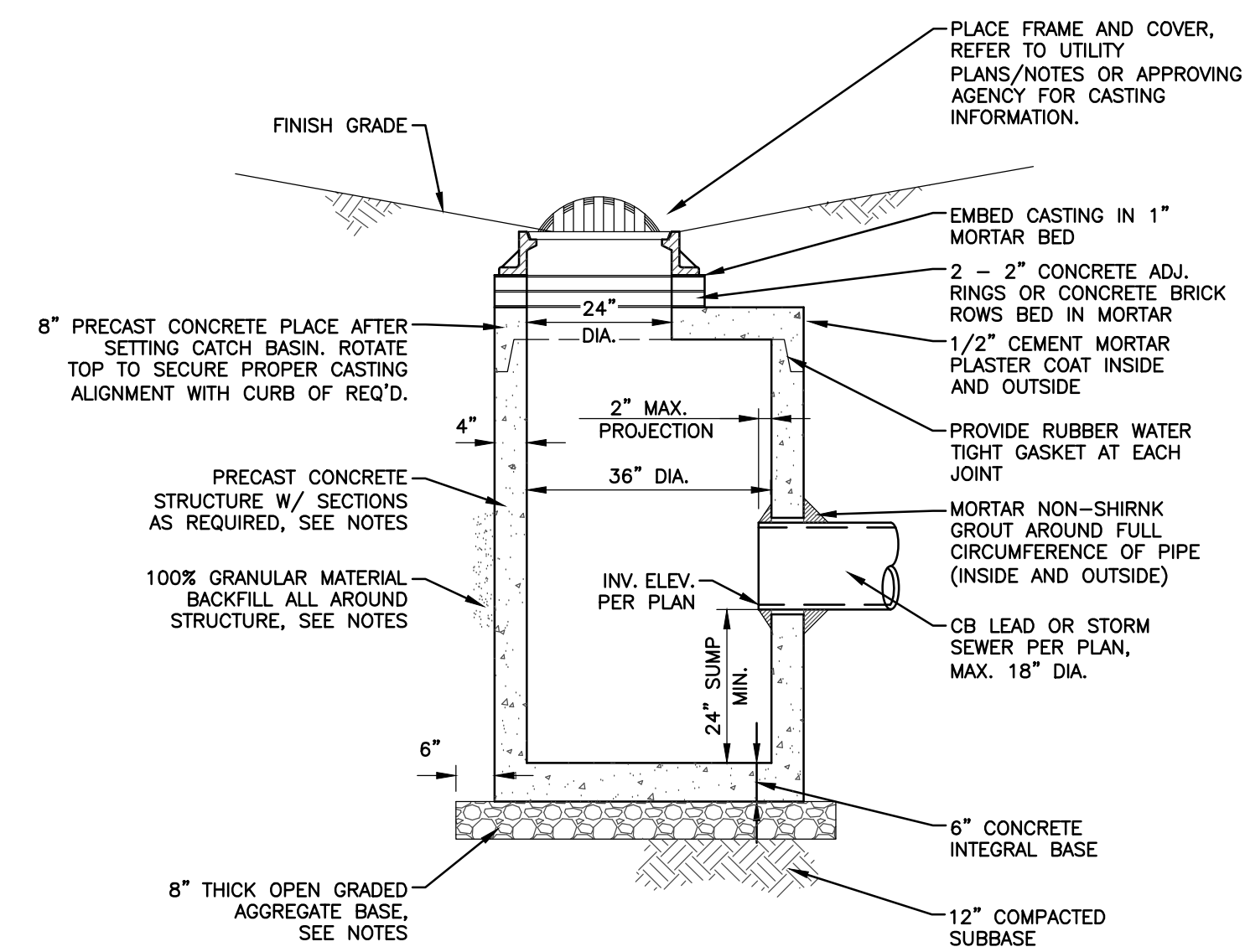
INSULATED PIPE TRENCH DETAIL  
(TYP. FOR UNDER HMA PAVEMENT OR WHERE COVER IS LESS THAN 3.5 FT)



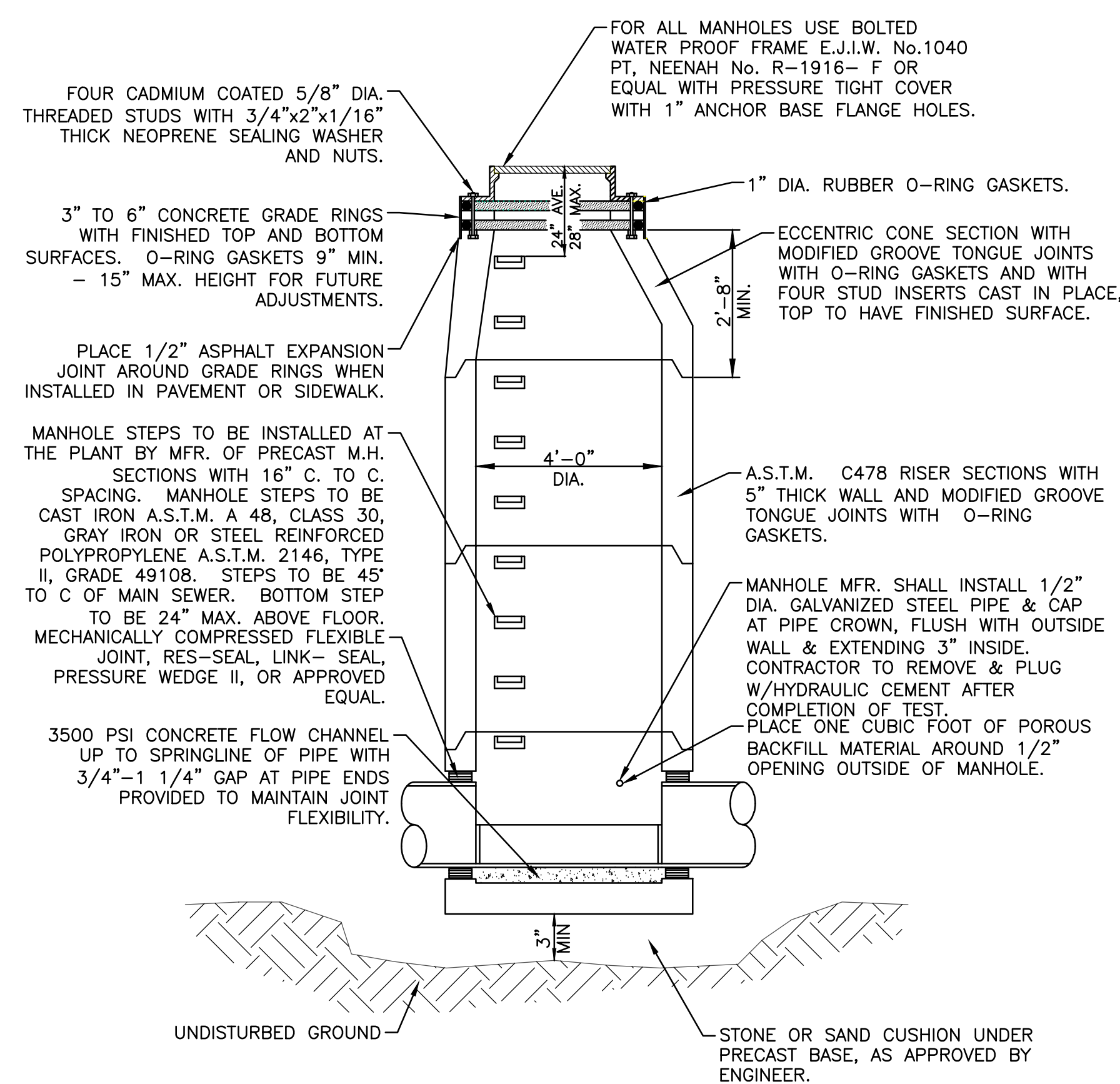
SANITARY SEWER SERVICE CONNECTION DETAIL  
NOT TO SCALE



24" DIA. CATCH BASIN DETAIL  
NOT TO SCALE



36" DIA. CATCH BASIN DETAIL  
NOT TO SCALE



STANDARD SANITARY MANHOLE FOR  
SEWERS 8" THRU 24"  
NOT TO SCALE