

*The Residences at Stow Acres*  
*Comprehensive Permit Application*

**5. Site Development Plans**  
**(33 Sheet Plan Set)**

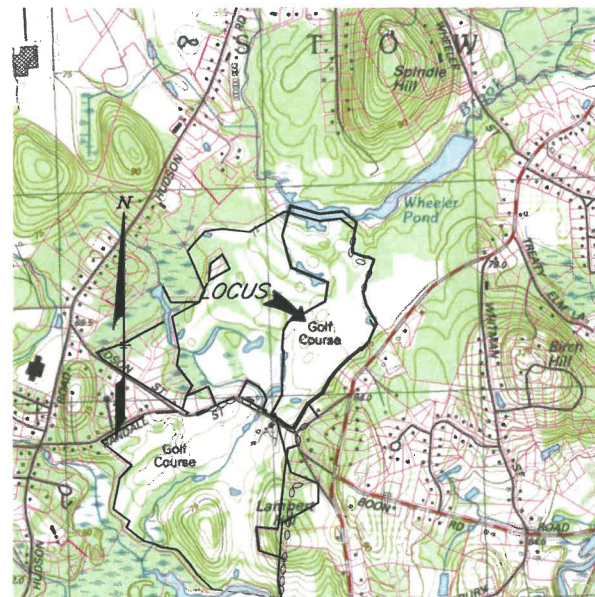
# PRELIMINARY COMPREHENSIVE PERMIT PLAN

FOR  
THE RESIDENCES AT STOW ACRES  
0 RANDALL ROAD  
STOW, MASSACHUSETTS

NOVEMBER 21, 2023

## PLAN INDEX

SHEET 1	TITLE SHEET
SHEET 2	MASTER PLAN
SHEET 3-7	EXISTING CONDITIONS PLAN
SHEET 8-12	SITE DEVELOPMENT AND GRADING PLAN
SHEET D	PLAN AND PROFILE
SHEET 13-18	STOW ACRES DRIVE
SHEET 18	ALLEY 1
SHEET 19	ALLEY 2
SHEET 20	AUGUSTA LANE
SHEET 21	SAWGRASS PLACE
SHEET 22	PEBBLE BEACH LANE
SHEET 23	ALLEY 3
SHEET 24-25	ST ANDREWS LANE
SHEET 26	ALLEY A, ALLEY B, ALLEY C
SHEET 27-29	CONSTRUCTION DETAILS
SHEET 30-33	EROSION AND SEDIMENT CONTROL PLAN



**LOCUS PLAN**  
SCALE: 1"=1,200'



**ENGINEER/SURVEYOR**  
STAMSKI AND MCNARY, INC.  
1000 MAIN STREET  
ACTON, MASSACHUSETTS 01720  
(978) 263-8585



### RECORD OWNER

STOW HOLDINGS LLC  
258 ANDOVER STREET  
GEORGETOWN, MA

### REFERENCE

MIDDLESEX REGISTRY OF DEEDS  
SOUTH DISTRICT  
DEED BOOK 67309 PAGE 266  
PLAN No. 76 OF 2002

STOW TOWN MAPS  
MAP R11 PARCEL 25B-3

### ZONING DISTRICT

RESIDENTIAL  
RECREATION/CONSERVATION  
(SEE TOWN MAPS FOR  
ZONE LINE LOCATION)

### DATUM

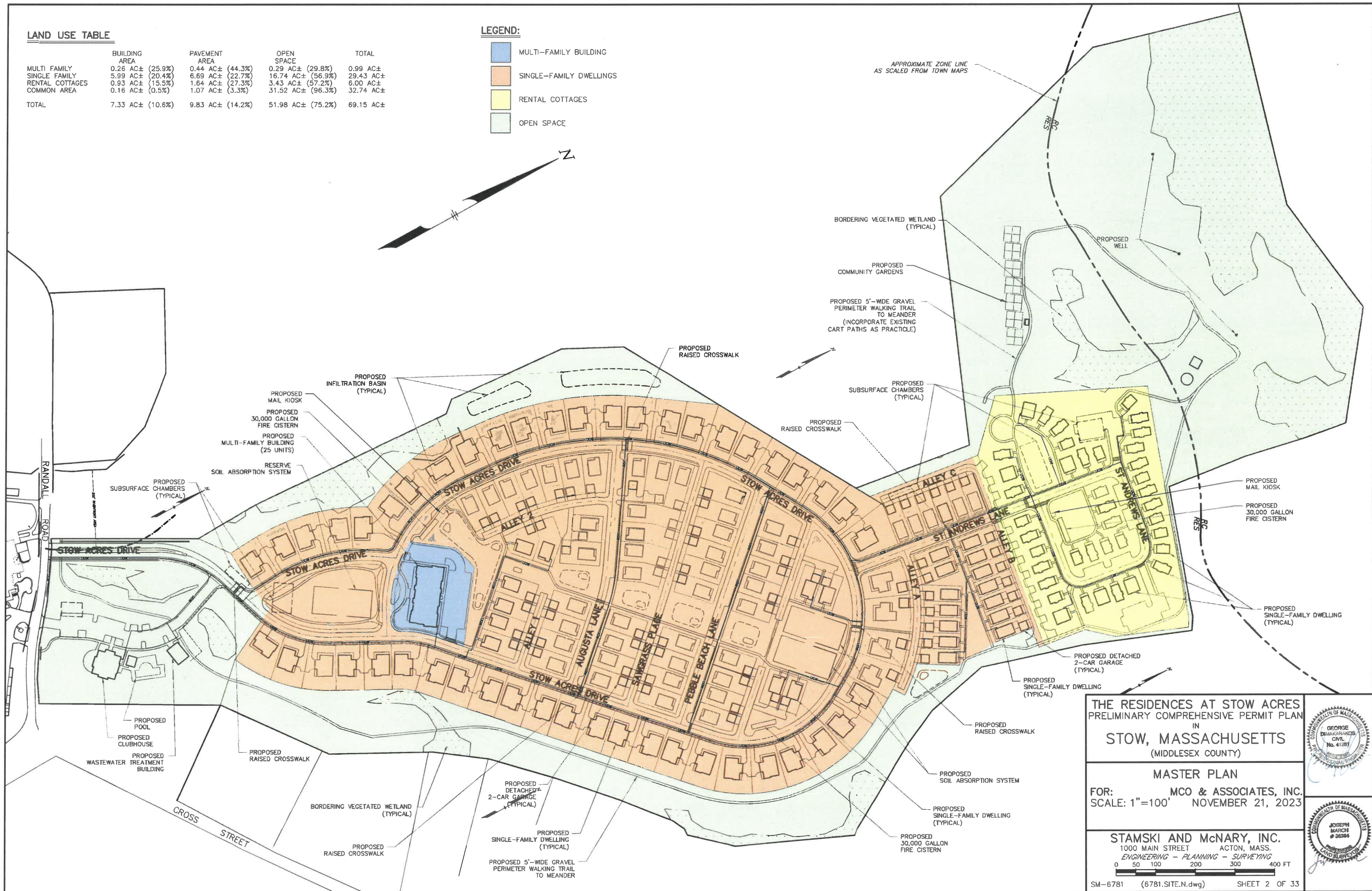
NAD 83

**LAND USE TABLE**

	BUILDING AREA	PAVEMENT AREA	OPEN SPACE	TOTAL
MULTI FAMILY	0.26 AC± (25.9%)	0.44 AC± (44.3%)	0.29 AC± (29.8%)	0.99 AC±
SINGLE FAMILY	5.99 AC± (20.4%)	6.89 AC± (22.7%)	16.74 AC± (56.9%)	29.43 AC±
RENTAL COTTAGES	0.93 AC± (15.5%)	1.64 AC± (27.3%)	3.43 AC± (57.2%)	6.00 AC±
COMMON AREA	0.16 AC± (0.5%)	1.07 AC± (3.3%)	31.52 AC± (96.3%)	32.74 AC±
<b>TOTAL</b>	<b>7.33 AC± (10.6%)</b>	<b>9.83 AC± (14.2%)</b>	<b>51.98 AC± (75.2%)</b>	<b>69.15 AC±</b>

**LEGEND:**

- MULTI-FAMILY BUILDING
- SINGLE-FAMILY DWELLINGS
- RENTAL COTTAGES
- OPEN SPACE

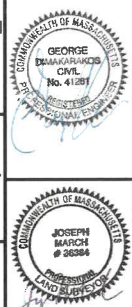


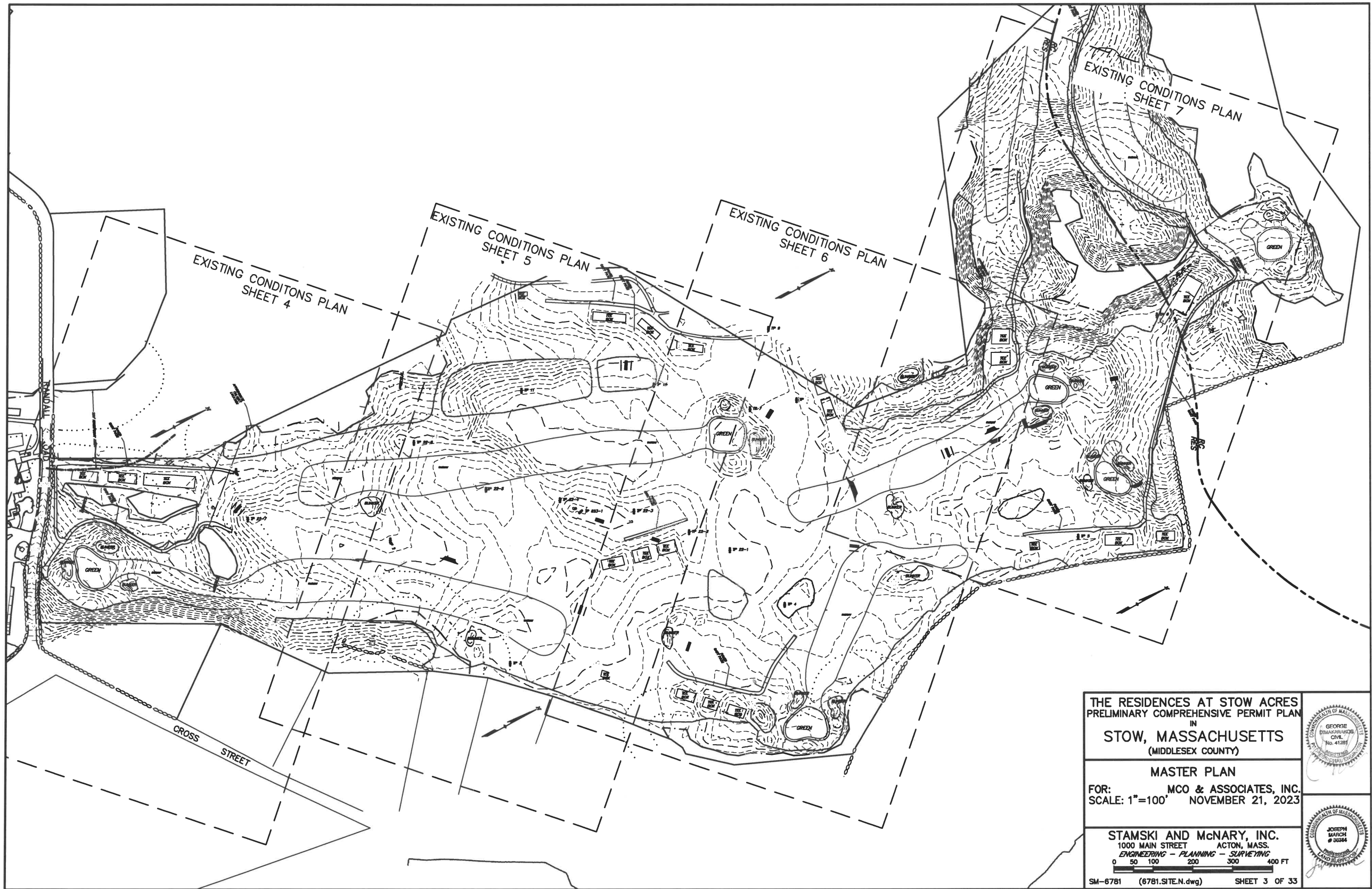
**THE RESIDENCES AT STOW ACRES**  
 PRELIMINARY COMPREHENSIVE PERMIT PLAN  
 IN  
**STOW, MASSACHUSETTS**  
 (MIDDLESEX COUNTY)

**MASTER PLAN**  
 FOR: **MCO & ASSOCIATES, INC.**  
 SCALE: 1"=100' NOVEMBER 21, 2023

**STAMSKI AND McNARY, INC.**  
 1000 MAIN STREET ACTON, MASS.  
 ENGINEERING - PLANNING - SURVEYING  
 0 50 100 200 300 400 FT

SM-6781 (6781.SITE.N.dwg) SHEET 2 OF 33





THE RESIDENCES AT STOW ACRES  
 PRELIMINARY COMPREHENSIVE PERMIT PLAN  
 IN  
 STOW, MASSACHUSETTS  
 (MIDDLESEX COUNTY)

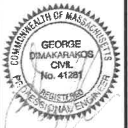
MASTER PLAN

FOR: MCO & ASSOCIATES, INC.  
 SCALE: 1"=100' NOVEMBER 21, 2023

STAMSKI AND McNARY, INC.  
 1000 MAIN STREET ACTON, MASS.  
 ENGINEERING - PLANNING - SURVEYING

0 50 100 200 300 400 FT

SM-6781 (6781.SITE.N.dwg) SHEET 3 OF 33



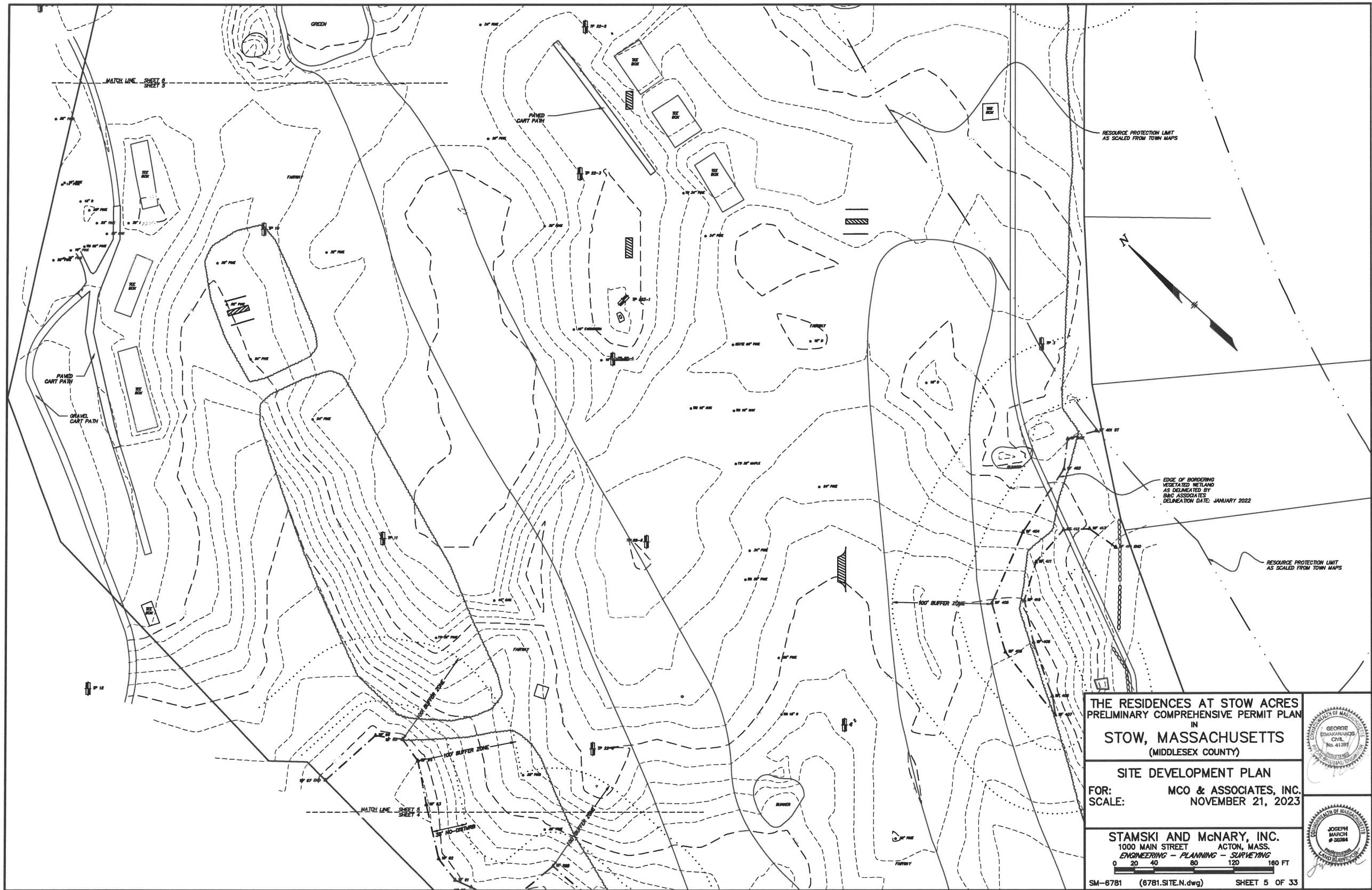


THE RESIDENCES AT STOW ACRES  
 PRELIMINARY COMPREHENSIVE PERMIT PLAN  
 IN  
**STOW, MASSACHUSETTS**  
 (MIDDLESEX COUNTY)

**SITE DEVELOPMENT PLAN**  
 FOR: MCO & ASSOCIATES, INC.  
 SCALE: NOVEMBER 21, 2023

**STAMSKI AND McNARY, INC.**  
 1000 MAIN STREET ACTON, MASS.  
 ENGINEERING - PLANNING - SURVEYING  
 0 20 40 80 120 180 FT  
 SM-6781 (6781.SITE.N.dwg) SHEET 4 OF 33





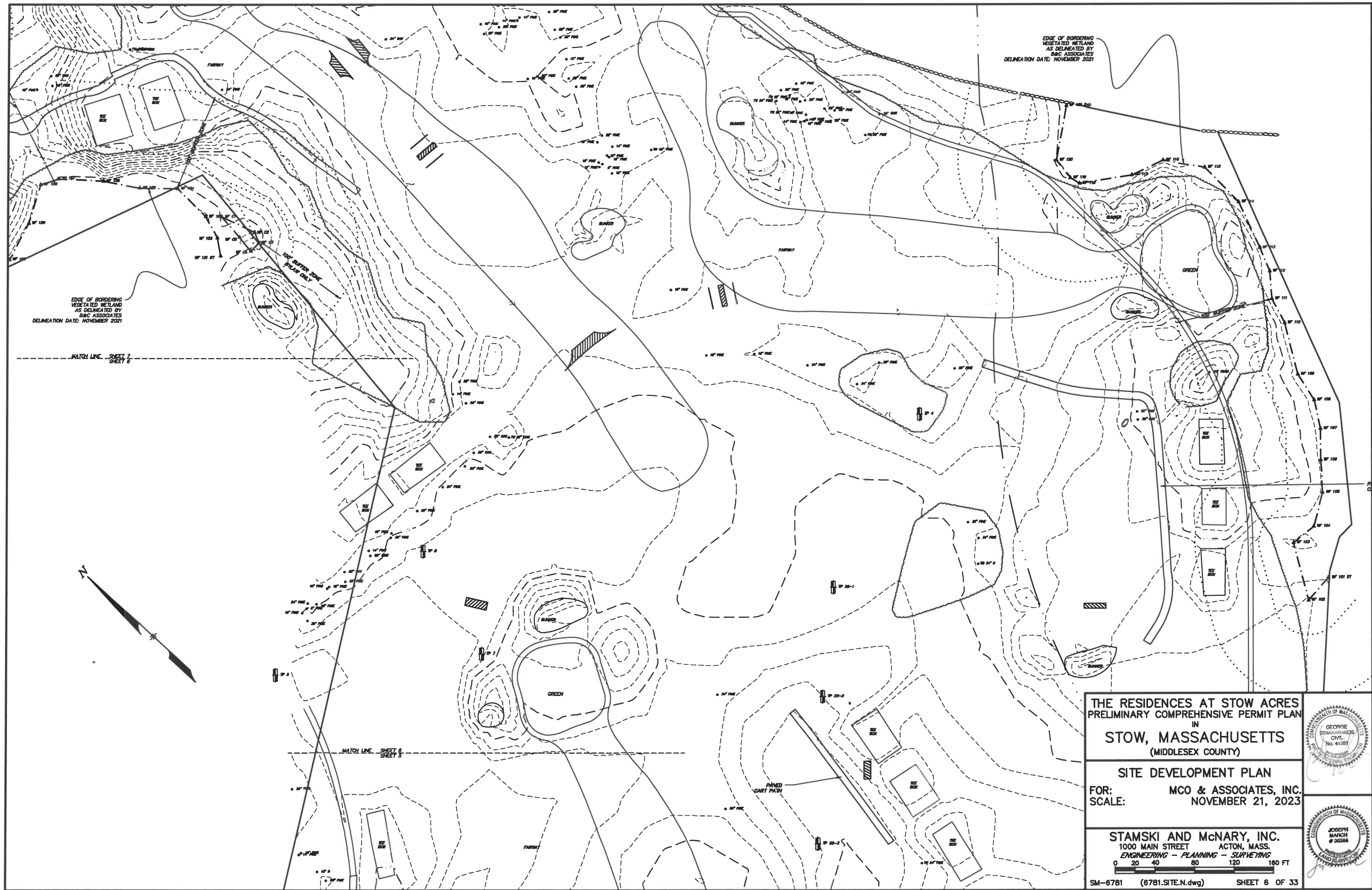
THE RESIDENCES AT STOW ACRES  
 PRELIMINARY COMPREHENSIVE PERMIT PLAN  
 IN  
**STOW, MASSACHUSETTS**  
 (MIDDLESEX COUNTY)

**SITE DEVELOPMENT PLAN**  
 FOR: MCO & ASSOCIATES, INC.  
 SCALE: NOVEMBER 21, 2023

**STAMSKI AND McNARY, INC.**  
 1000 MAIN STREET ACTON, MASS.  
 ENGINEERING - PLANNING - SURVEYING  
 0 20 40 80 120 180 FT

SM-6781 (6781.SITE.N.dwg) SHEET 5 OF 33



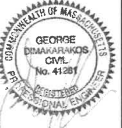


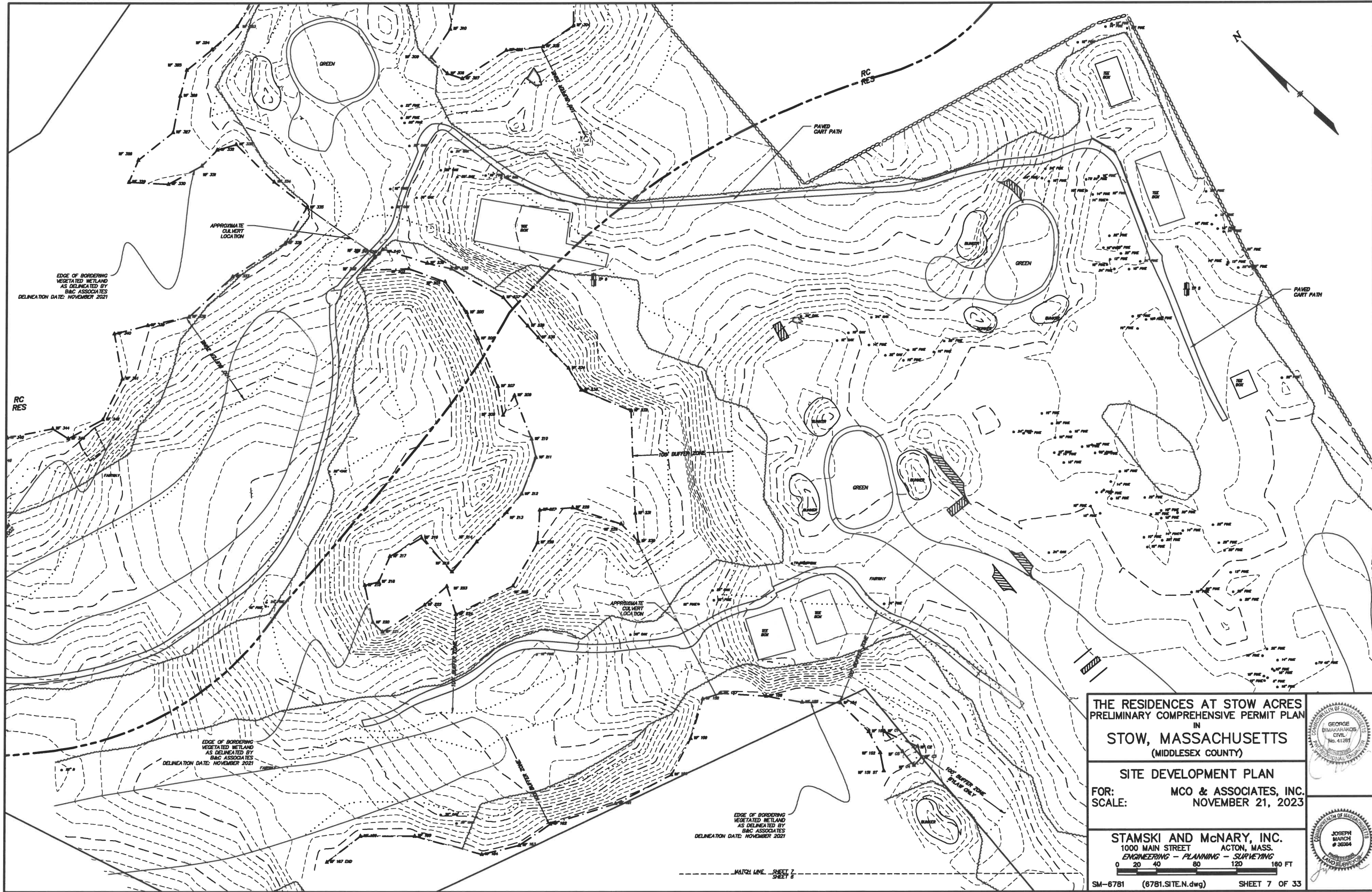
THE RESIDENCES AT STOW ACRES  
 PRELIMINARY COMPREHENSIVE PERMIT PLAN  
 IN  
**STOW, MASSACHUSETTS**  
 (MIDDLESEX COUNTY)

**SITE DEVELOPMENT PLAN**  
 FOR: MCO & ASSOCIATES, INC.  
 SCALE: NOVEMBER 21, 2023

**STAMSKI AND McNARY, INC.**  
 1000 MAIN STREET ACTON, MASS.  
 ENGINEERING - PLANNING - SURVEYING  
 0 20 40 60 120 180 FT

SM-6781 (6781.SITE.N.dwg) SHEET 6 OF 33





EDGE OF BORDERING VEGETATED WETLAND AS DELINEATED BY BAC ASSOCIATES DELINEATION DATE: NOVEMBER 2021

APPROXIMATE CULVERT LOCATION

RC RES

APPROXIMATE CULVERT LOCATION

EDGE OF BORDERING VEGETATED WETLAND AS DELINEATED BY BAC ASSOCIATES DELINEATION DATE: NOVEMBER 2021

EDGE OF BORDERING VEGETATED WETLAND AS DELINEATED BY BAC ASSOCIATES DELINEATION DATE: NOVEMBER 2021

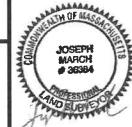
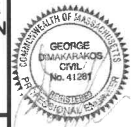
MATCH LINE SHEET 7 SHEET 6

THE RESIDENCES AT STOW ACRES  
 PRELIMINARY COMPREHENSIVE PERMIT PLAN  
 IN  
 STOW, MASSACHUSETTS  
 (MIDDLESEX COUNTY)

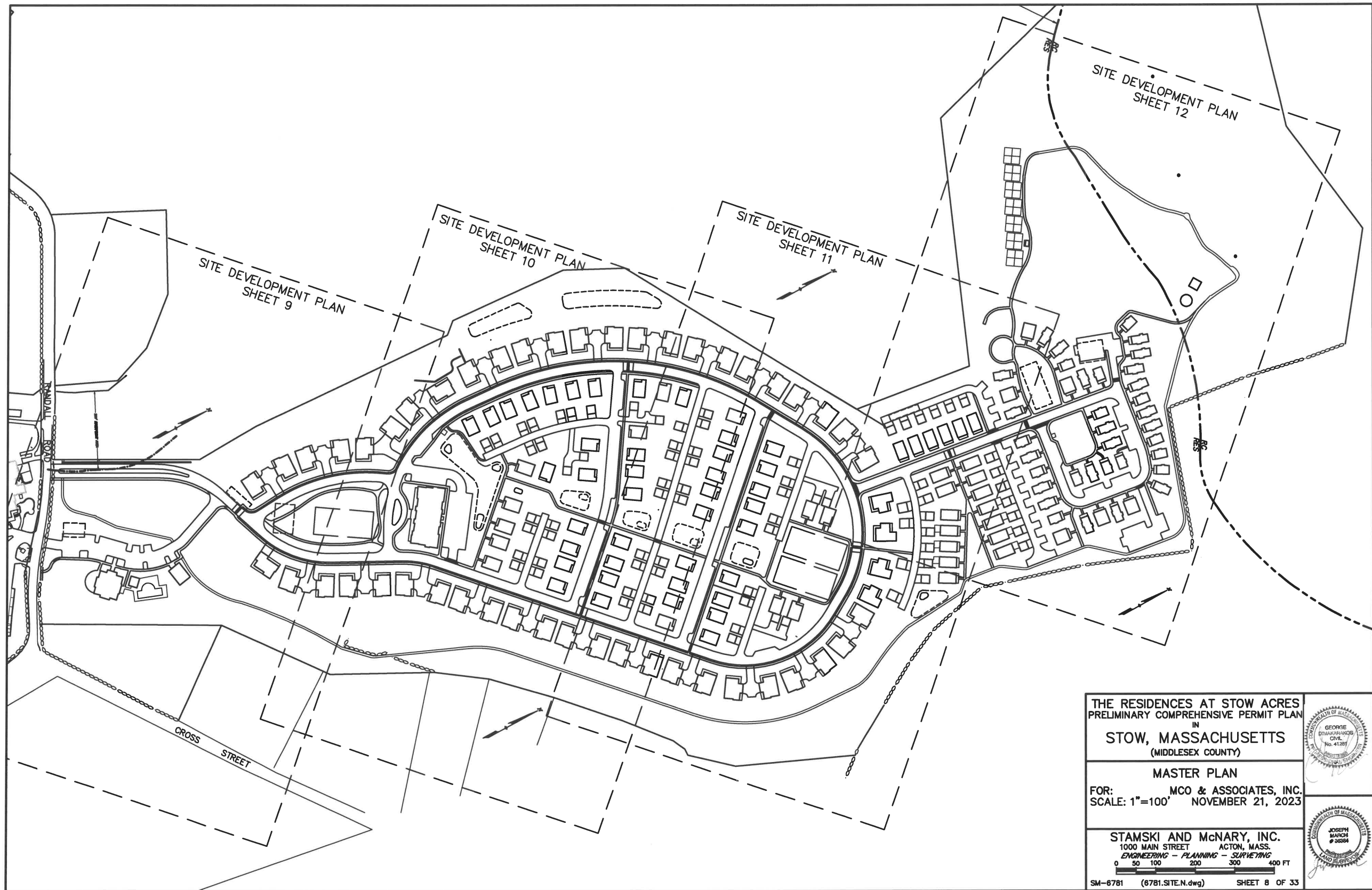
SITE DEVELOPMENT PLAN  
 FOR: MCO & ASSOCIATES, INC.  
 SCALE: NOVEMBER 21, 2023

STAMSKI AND McNARY, INC.  
 1000 MAIN STREET ACTON, MASS.  
 ENGINEERING - PLANNING - SURVEYING

SM-6781 (6781.SITE.N.dwg) SHEET 7 OF 33







THE RESIDENCES AT STOW ACRES  
 PRELIMINARY COMPREHENSIVE PERMIT PLAN  
 IN  
 STOW, MASSACHUSETTS  
 (MIDDLESEX COUNTY)

MASTER PLAN

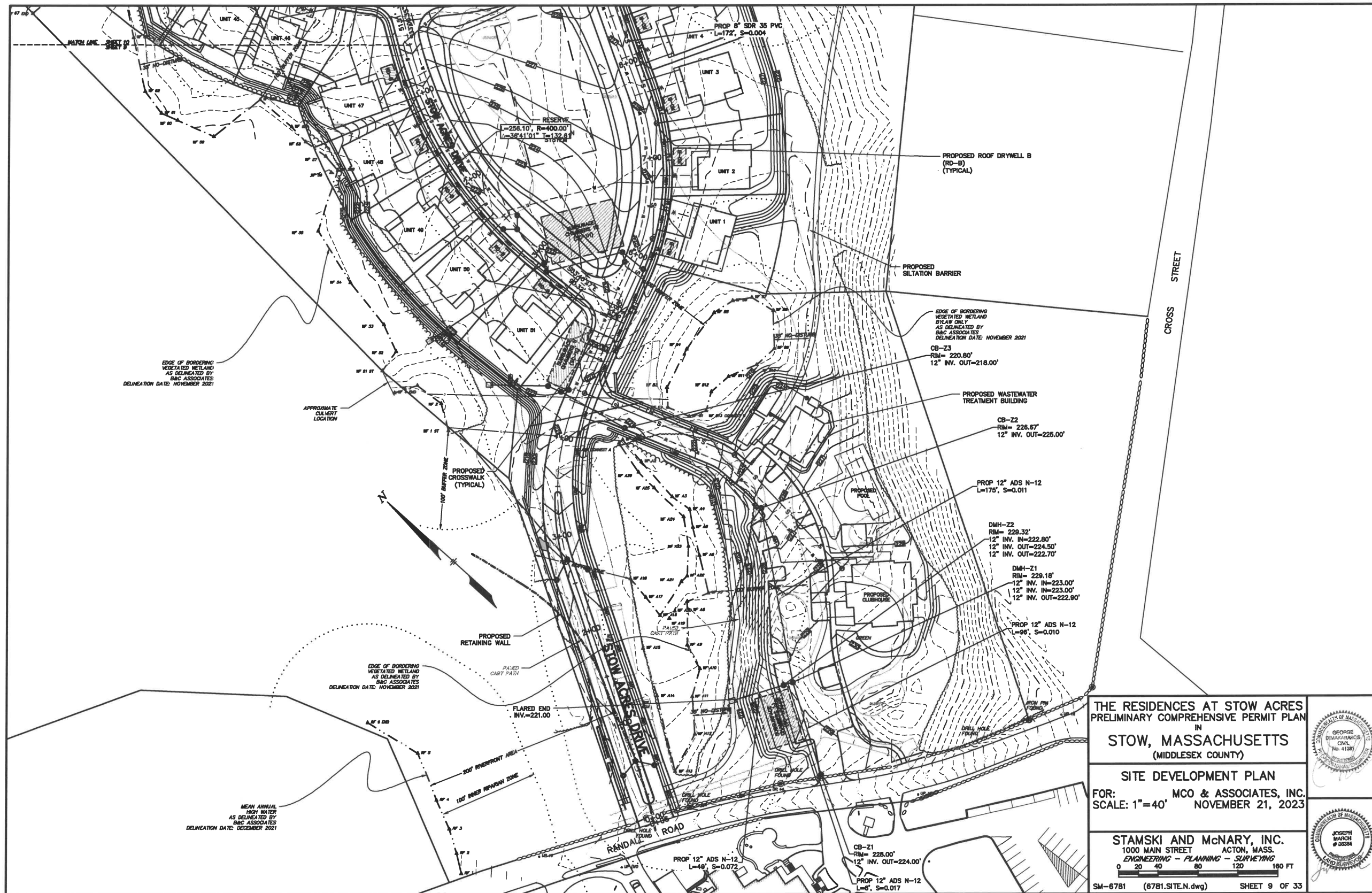
FOR: MCO & ASSOCIATES, INC.  
 SCALE: 1"=100' NOVEMBER 21, 2023

STAMSKI AND McNARY, INC.  
 1000 MAIN STREET ACTON, MASS.  
 ENGINEERING - PLANNING - SURVEYING

0 50 100 200 300 400 FT

SM-6781 (6781.SITE.N.dwg) SHEET 8 OF 33



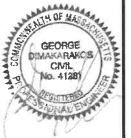


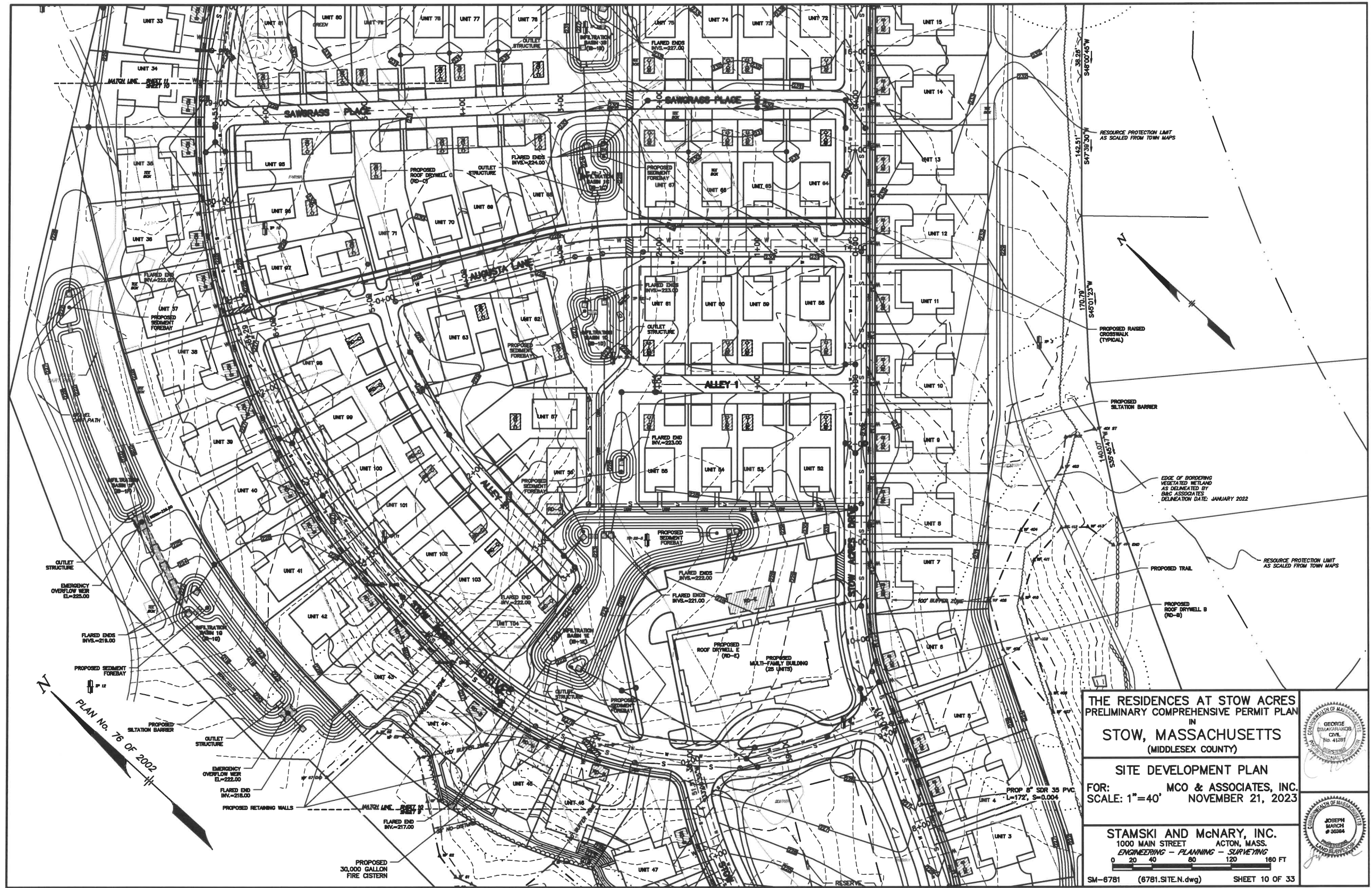
**THE RESIDENCES AT STOW ACRES**  
 PRELIMINARY COMPREHENSIVE PERMIT PLAN  
 IN  
**STOW, MASSACHUSETTS**  
 (MIDDLESEX COUNTY)

**SITE DEVELOPMENT PLAN**  
 FOR: MCO & ASSOCIATES, INC.  
 SCALE: 1"=40' NOVEMBER 21, 2023

**STAMSKI AND McNARY, INC.**  
 1000 MAIN STREET ACTON, MASS.  
 ENGINEERING - PLANNING - SURVEYING

SM-6781 (6781.SITE.N.dwg) SHEET 9 OF 33

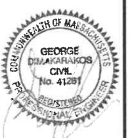




PLAN No. 78 OF 2002

THE RESIDENCES AT STOW ACRES  
 PRELIMINARY COMPREHENSIVE PERMIT PLAN  
 IN  
 STOW, MASSACHUSETTS  
 (MIDDLESEX COUNTY)

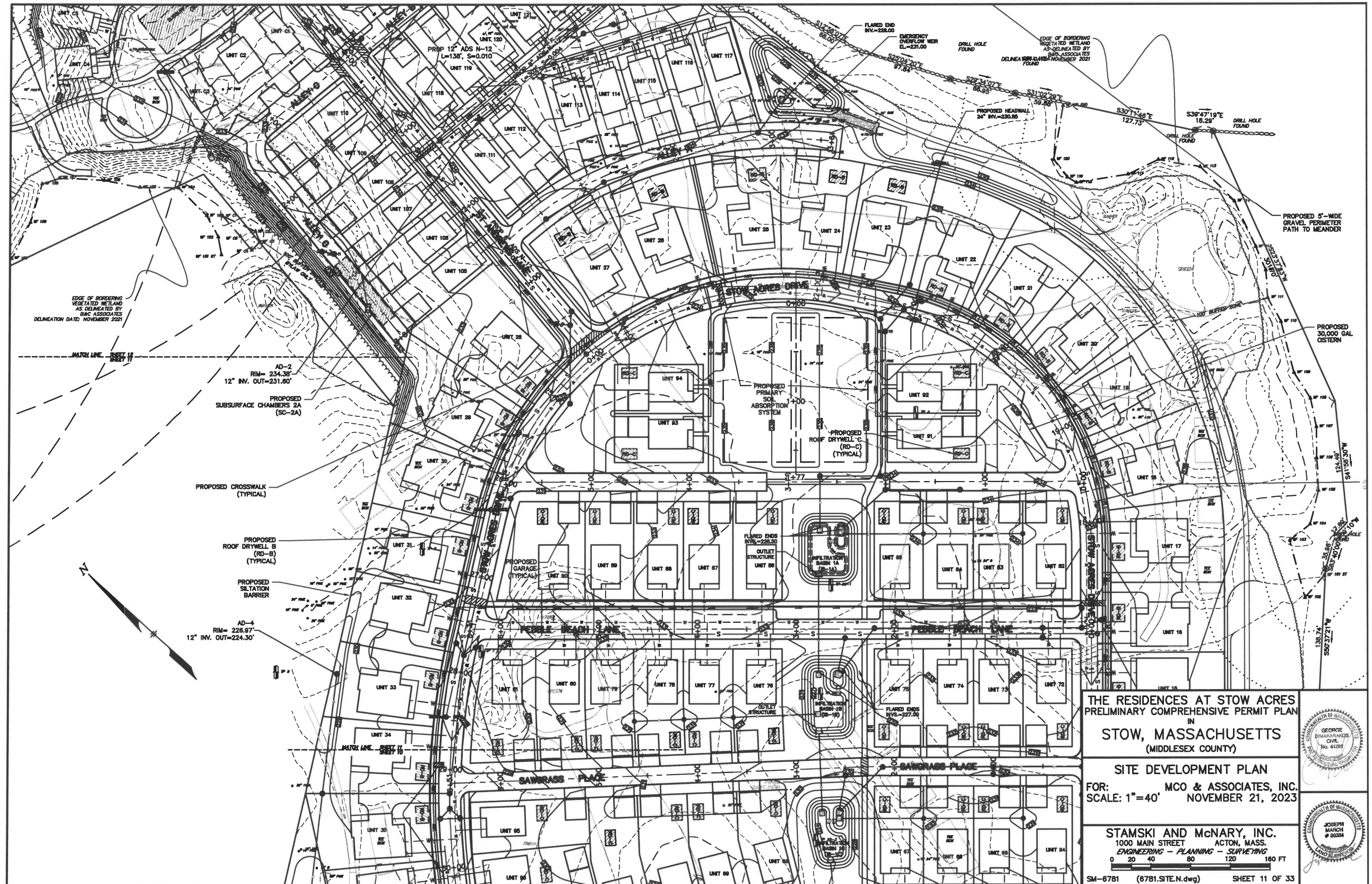
SITE DEVELOPMENT PLAN  
 FOR: MCO & ASSOCIATES, INC.  
 SCALE: 1"=40' NOVEMBER 21, 2023



STAMSKI AND McNARY, INC.  
 1000 MAIN STREET ACTON, MASS.  
 ENGINEERING - PLANNING - SURVEYING

0 20 40 80 120 160 FT

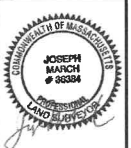
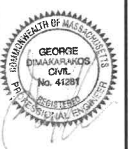
SM-6781 (6781.SITE.N.dwg) SHEET 10 OF 33

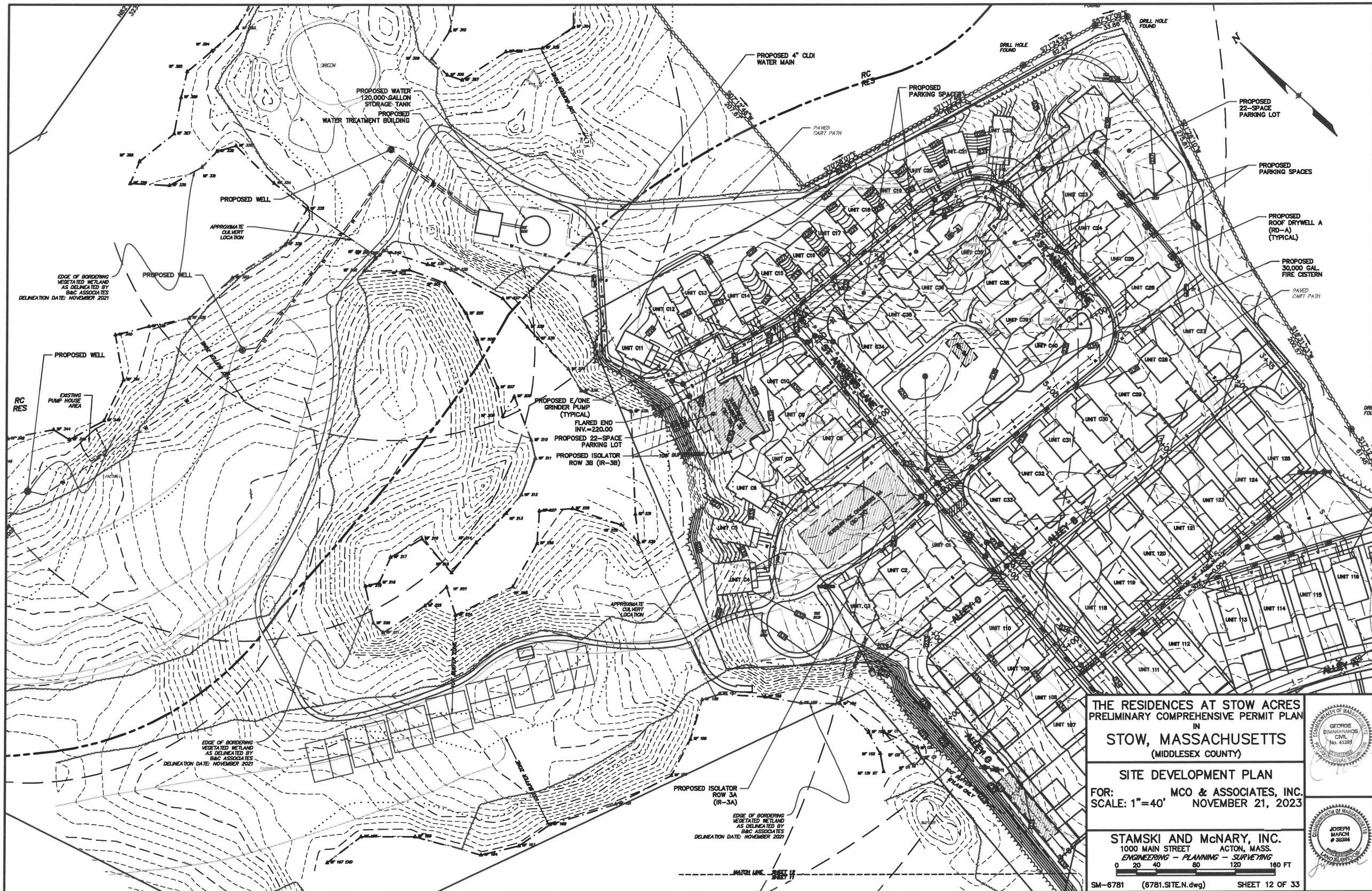


THE RESIDENCES AT STOW ACRES  
 PRELIMINARY COMPREHENSIVE PERMIT PLAN  
 IN  
 STOW, MASSACHUSETTS  
 (MIDDLESEX COUNTY)

SITE DEVELOPMENT PLAN  
 FOR: MCO & ASSOCIATES, INC.  
 SCALE: 1"=40' NOVEMBER 21, 2023

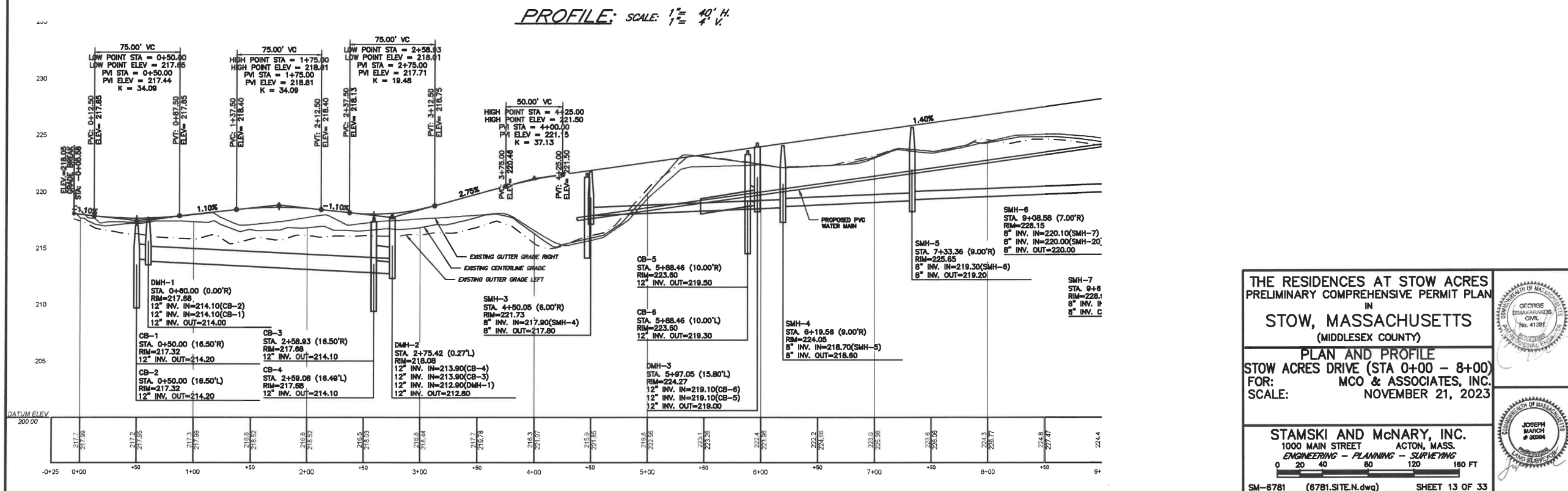
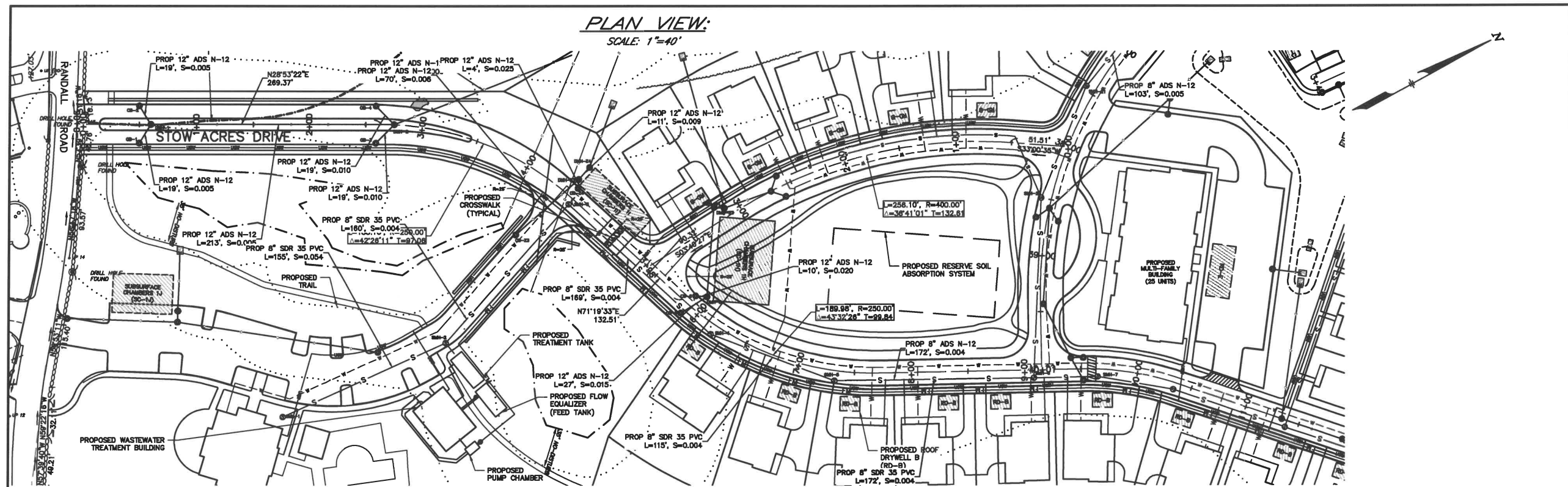
STAMSKI AND McNARY, INC.  
 1000 MAIN STREET ACTON, MASS.  
 ENGINEERING - PLANNING - SURVEYING  
 0 20 40 80 120 160 FT  
 SM-6781 (6781.SITE.N.dwg) SHEET 11 OF 33





THE RESIDENCES AT STOW ACRES  
 PRELIMINARY COMPREHENSIVE PERMIT PLAN  
 IN  
 STOW, MASSACHUSETTS  
 (MIDDLESEX COUNTY)  
 SITE DEVELOPMENT PLAN  
 FOR: MCO & ASSOCIATES, INC.  
 SCALE: 1"=40' NOVEMBER 21, 2023  
 STAMSKI AND McNARY, INC.  
 1000 MAIN STREET ACTON, MASS.  
 ENGINEERING - PLANNING - SURVEYING  
 0 20 40 80 120 160 FT  
 SM-6781 (6781.SITE.N.dwg) SHEET 12 OF 33





**THE RESIDENCES AT STOW ACRES**  
PRELIMINARY COMPREHENSIVE PERMIT PLAN  
IN  
**STOW, MASSACHUSETTS**  
(MIDDLESEX COUNTY)

**PLAN AND PROFILE**  
STOW ACRES DRIVE (STA 0+00 - 8+00)  
FOR: **MCO & ASSOCIATES, INC.**  
SCALE: **NOVEMBER 21, 2023**

---

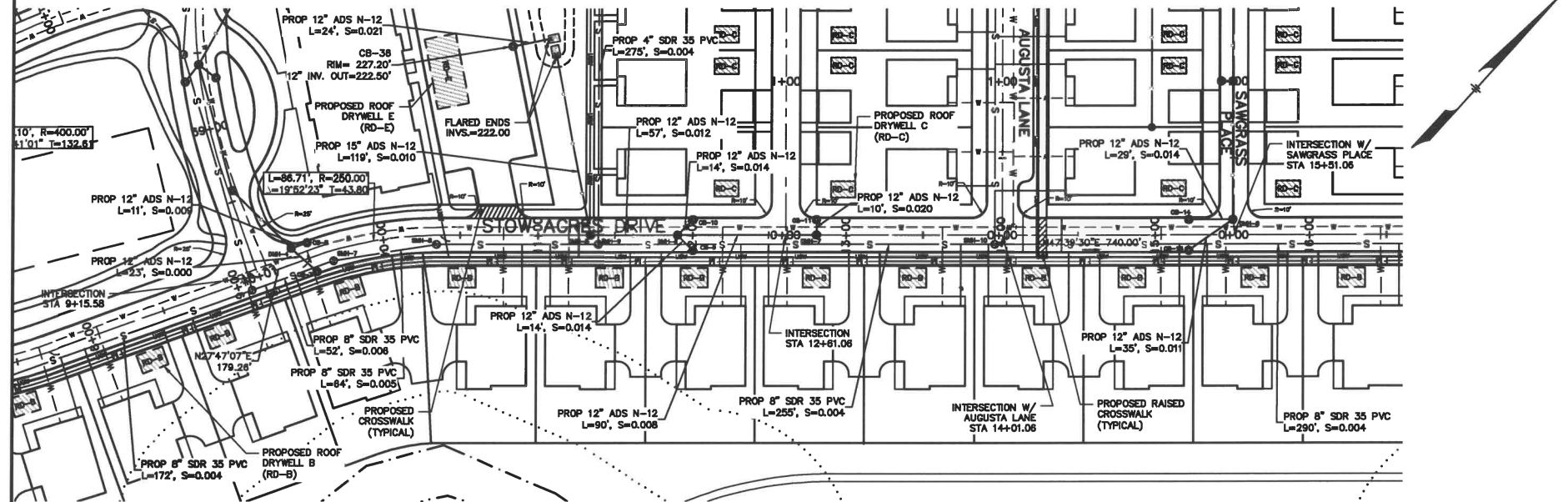
**STAMSKI AND McNARY, INC.**  
1000 MAIN STREET ACTON, MASS.  
ENGINEERING - PLANNING - SURVEYING

0 20 40 80 120 160 FT

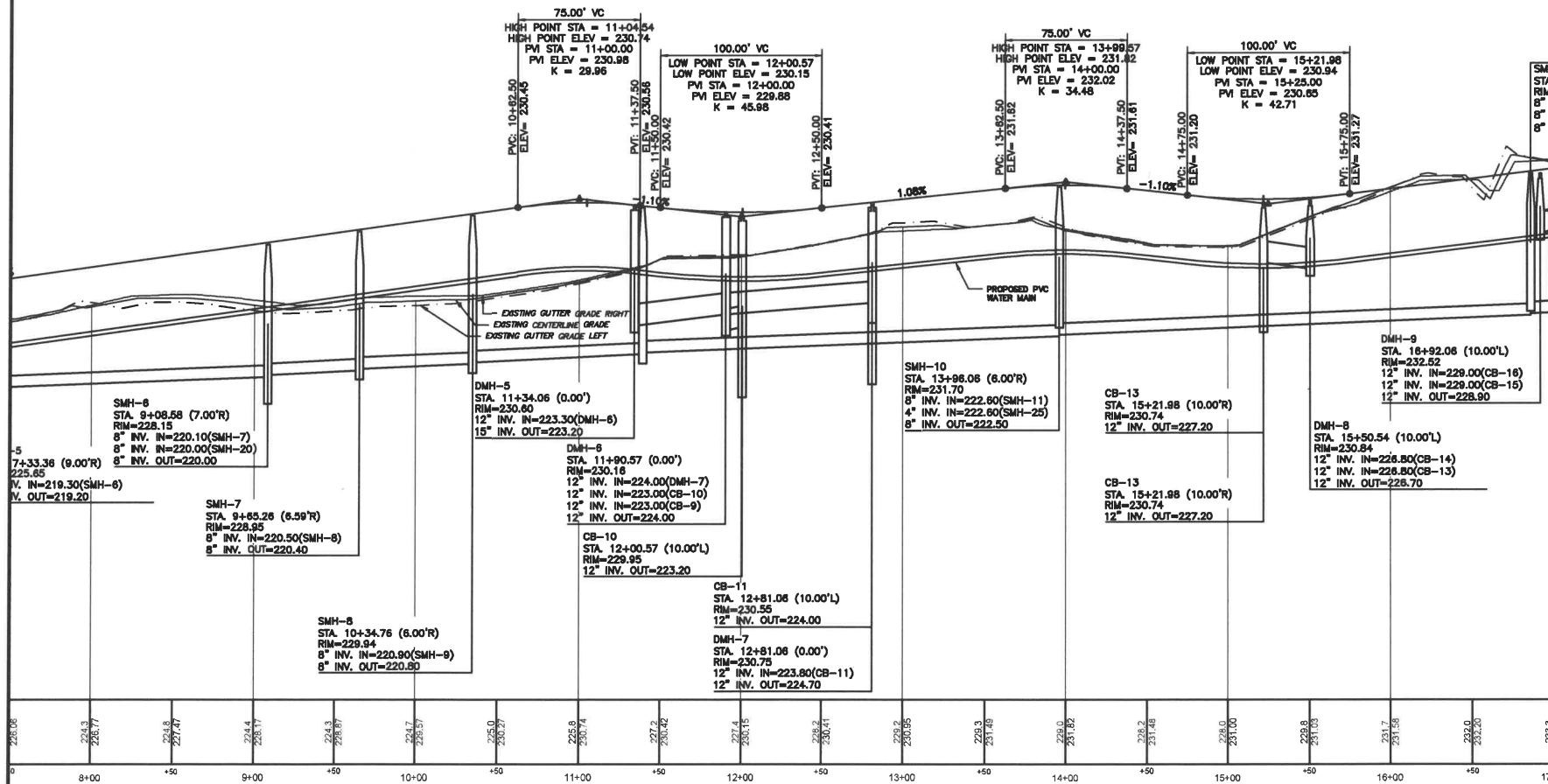
SM-6781 (6781.SITE.N.dwg) SHEET 13 OF 33



**PLAN VIEW:**  
SCALE: 1"=40'

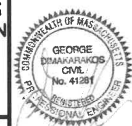


**PROFILE:** SCALE: 1"= 40' H.  
1"= 4' V.

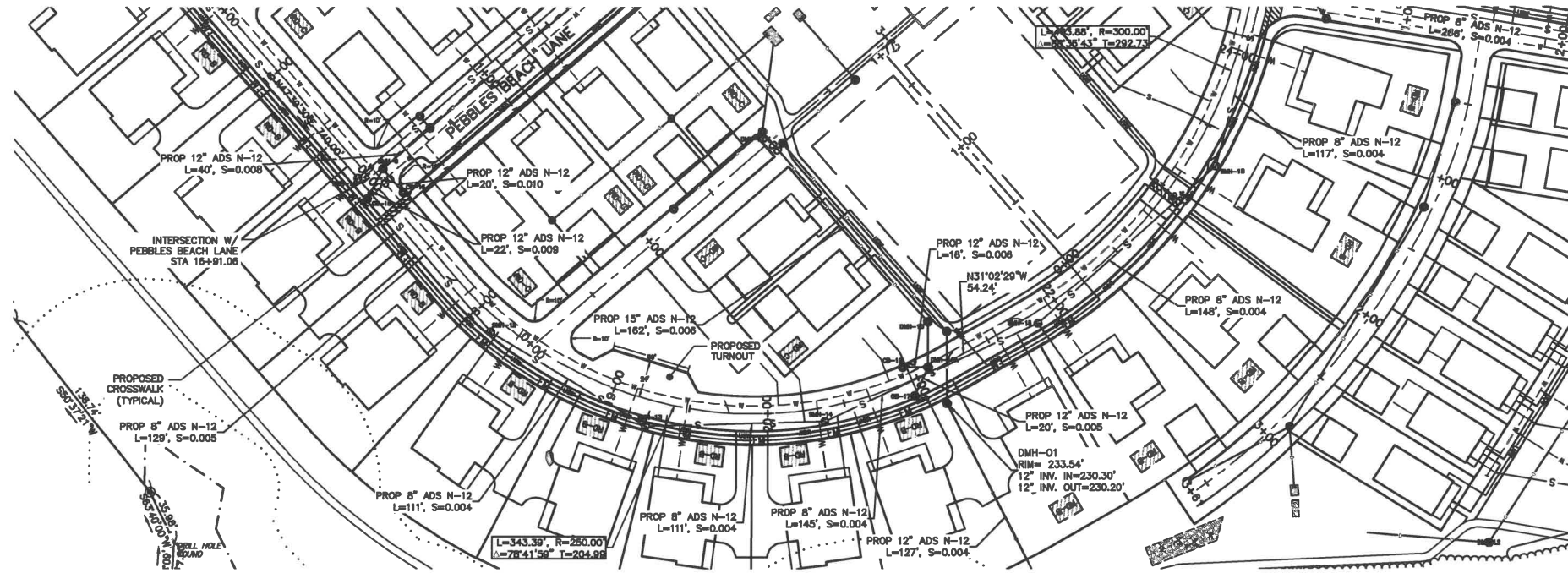


THE RESIDENCES AT STOW ACRES  
PRELIMINARY COMPREHENSIVE PERMIT PLAN  
IN  
STOW, MASSACHUSETTS  
(MIDDLESEX COUNTY)  
PLAN AND PROFILE  
STOW ACRES DRIVE (STA 8+00 - 16+00)  
FOR: MCO & ASSOCIATES, INC.  
SCALE: NOVEMBER 21, 2023

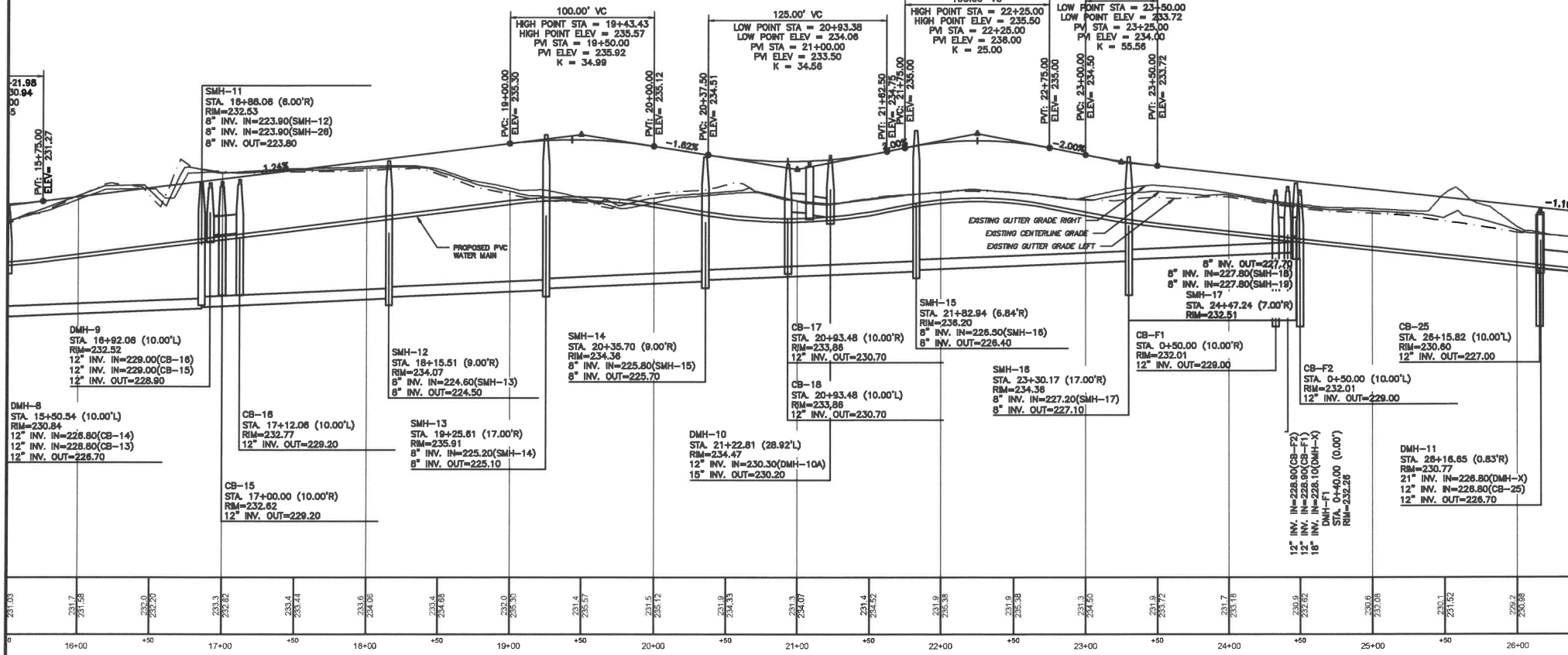
STAMSKI AND McNARY, INC.  
1000 MAIN STREET ACTON, MASS.  
ENGINEERING - PLANNING - SURVEYING  
0 20 40 80 120 160 FT  
SM-6781 (6781.SITE.N.dwg) SHEET 14 OF 33



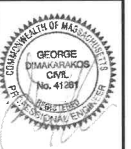
**PLAN VIEW:**  
SCALE: 1"=40'



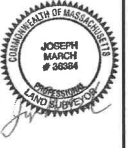
**PROFILE:** SCALE: 1"=40' H.  
1"=4' V.



THE RESIDENCES AT STOW ACRES  
PRELIMINARY COMPREHENSIVE PERMIT PLAN  
IN  
STOW, MASSACHUSETTS  
(MIDDLESEX COUNTY)  
PLAN AND PROFILE  
STOW ACRES DRIVE (STA 16+00 - 24+00)  
FOR: MCO & ASSOCIATES, INC.  
SCALE: NOVEMBER 21, 2023

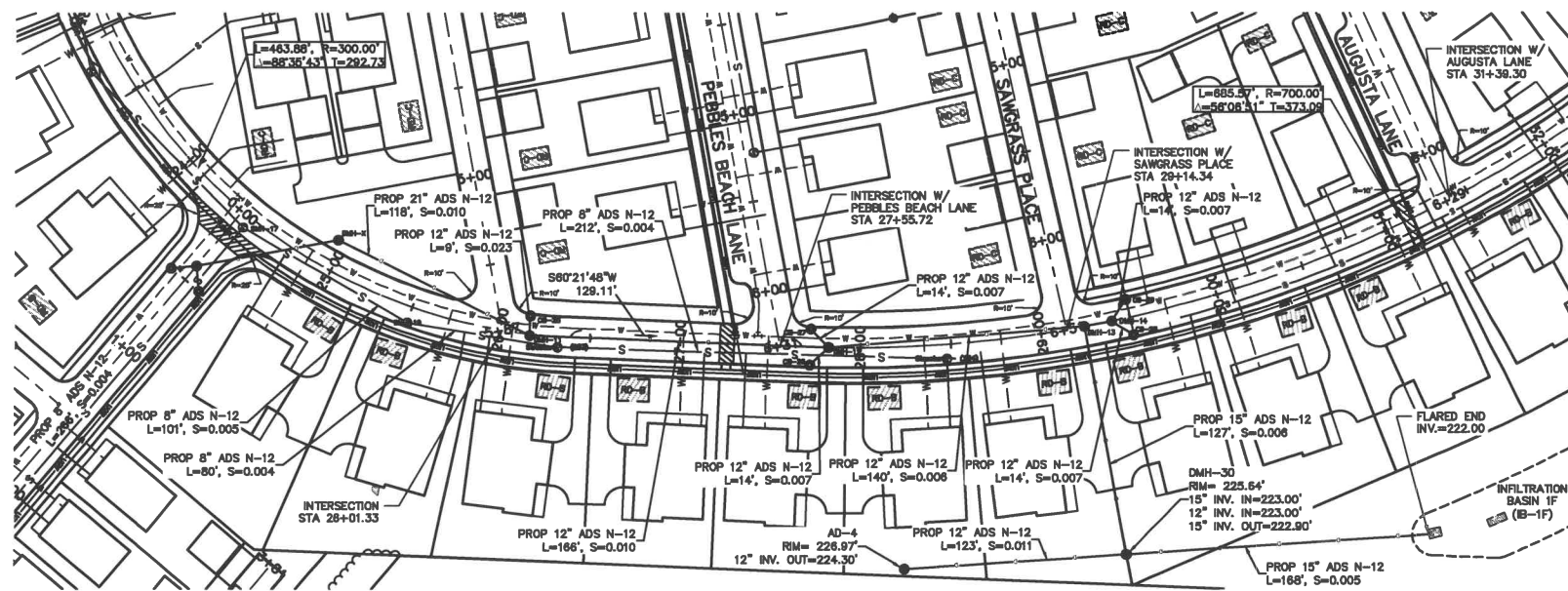


STAMSKI AND McNARY, INC.  
1000 MAIN STREET ACTON, MASS.  
ENGINEERING - PLANNING - SURVEYING  
SM-6781 (6781.SITE.N.dwg) SHEET 15 OF 33

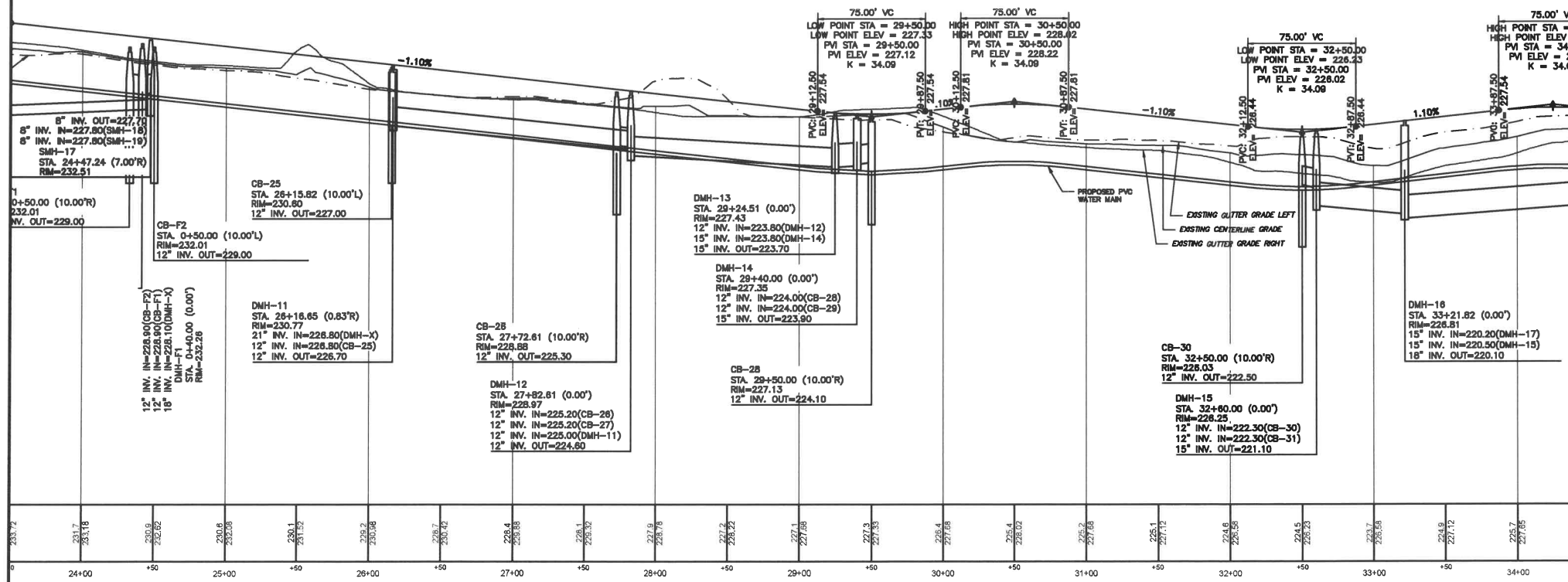




**PLAN VIEW:**  
SCALE: 1"=40'

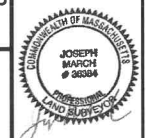
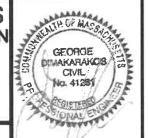


**PROFILE:** SCALE: 1"= 40' H.  
1"= 4' V.

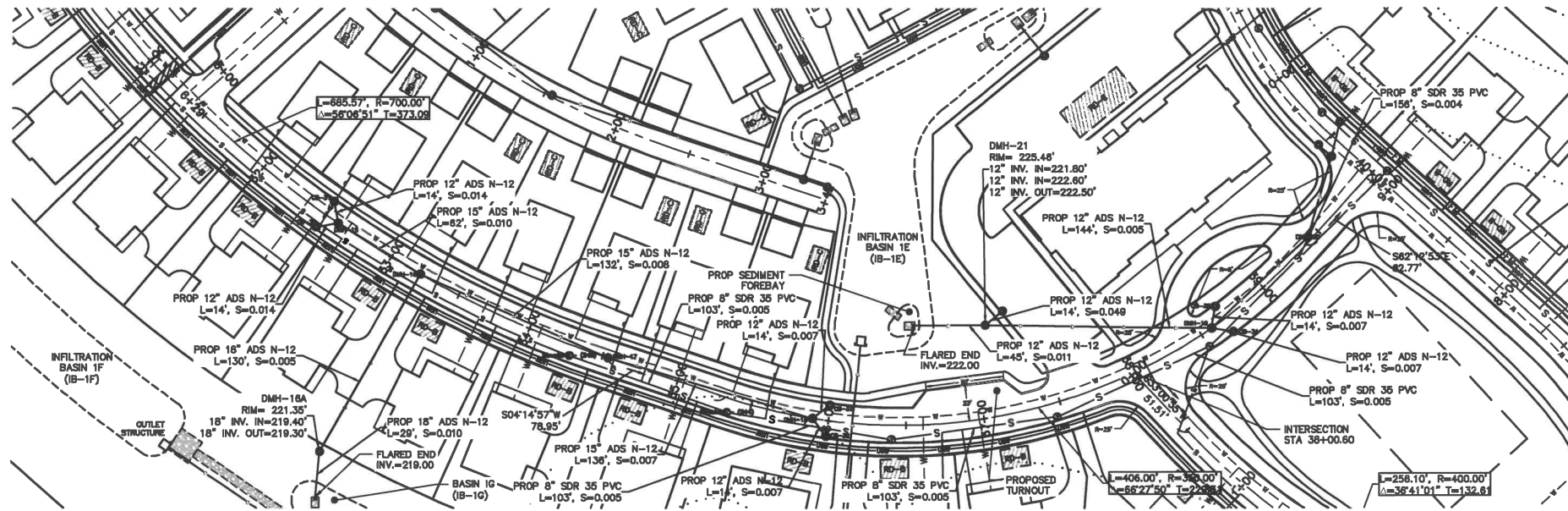


THE RESIDENCES AT STOW ACRES  
PRELIMINARY COMPREHENSIVE PERMIT PLAN  
IN  
STOW, MASSACHUSETTS  
(MIDDLESEX COUNTY)  
PLAN AND PROFILE  
STOW ACRES DRIVE (STA 24+00 - 32+00)  
FOR:  
MCO & ASSOCIATES, INC.  
SCALE:  
NOVEMBER 21, 2023

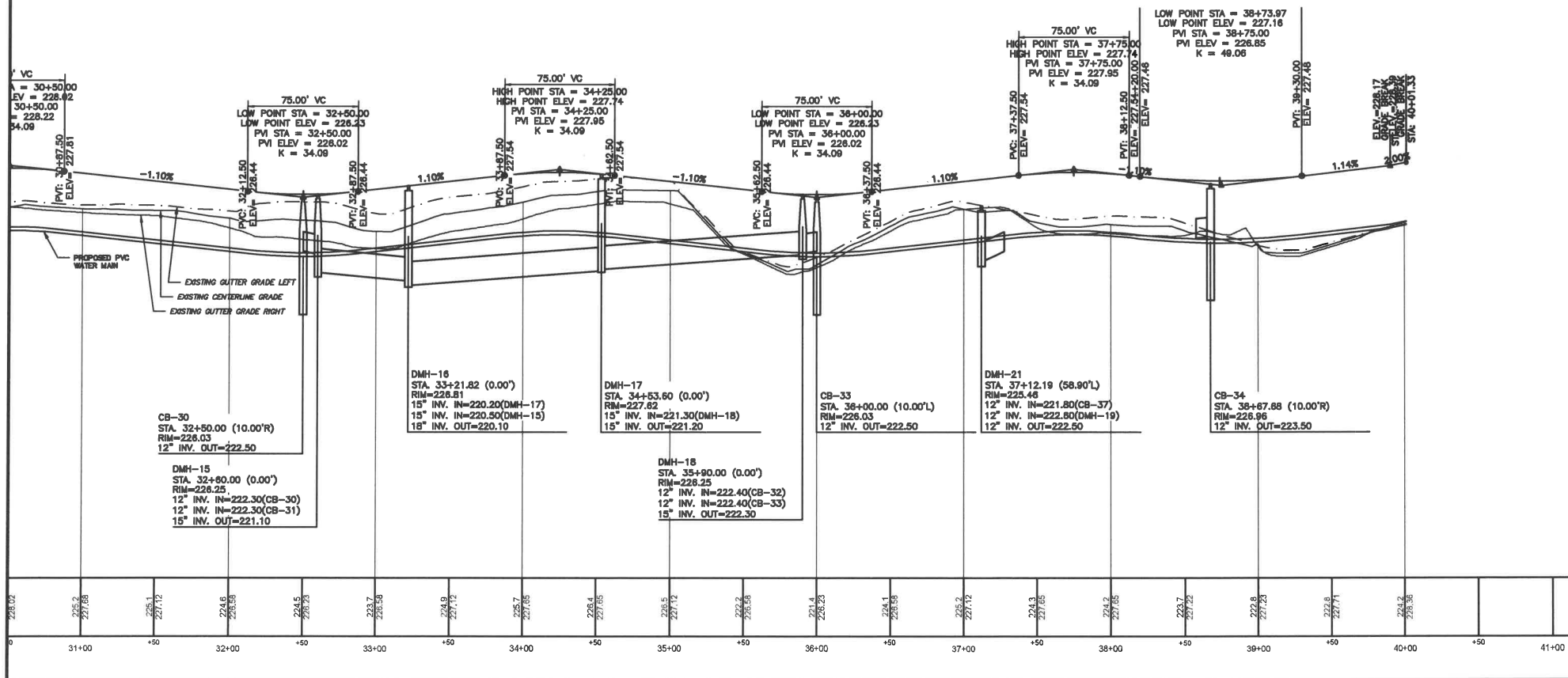
STAMSKI AND McNARY, INC.  
1000 MAIN STREET ACTON, MASS.  
ENGINEERING - PLANNING - SURVEYING  
0 20 40 80 120 160 FT  
SM-6781 (6781.SITE.N.dwg) SHEET 16 OF 33



**PLAN VIEW:**  
SCALE: 1"=40'



**PROFILE:** SCALE: 1"=40' H., 4"=100' V.



THE RESIDENCES AT STOW ACRES  
PRELIMINARY COMPREHENSIVE PERMIT PLAN  
IN  
STOW, MASSACHUSETTS  
(MIDDLESEX COUNTY)

PLAN AND PROFILE  
STOW ACRES DRIVE (STA 32+00 - 40+01)  
FOR: MCO & ASSOCIATES, INC.  
SCALE: NOVEMBER 21, 2023

STAMSKI AND McNARY, INC.  
1000 MAIN STREET ACTON, MASS.  
ENGINEERING - PLANNING - SURVEYING

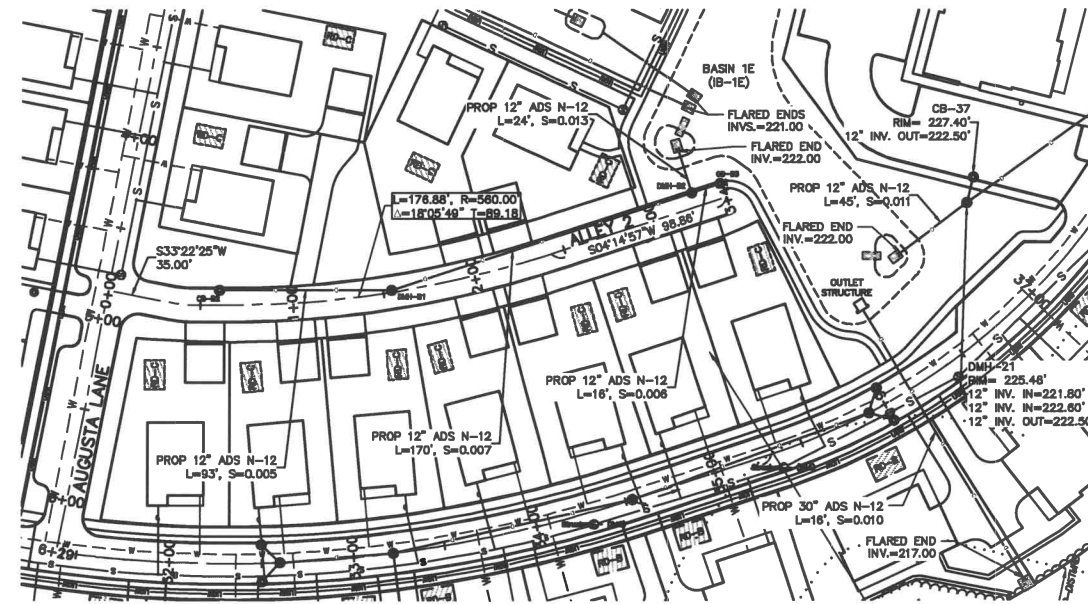
0 20 40 80 120 160 FT

SM-6781 (6781.SITE.N.dwg) SHEET 17 OF 33

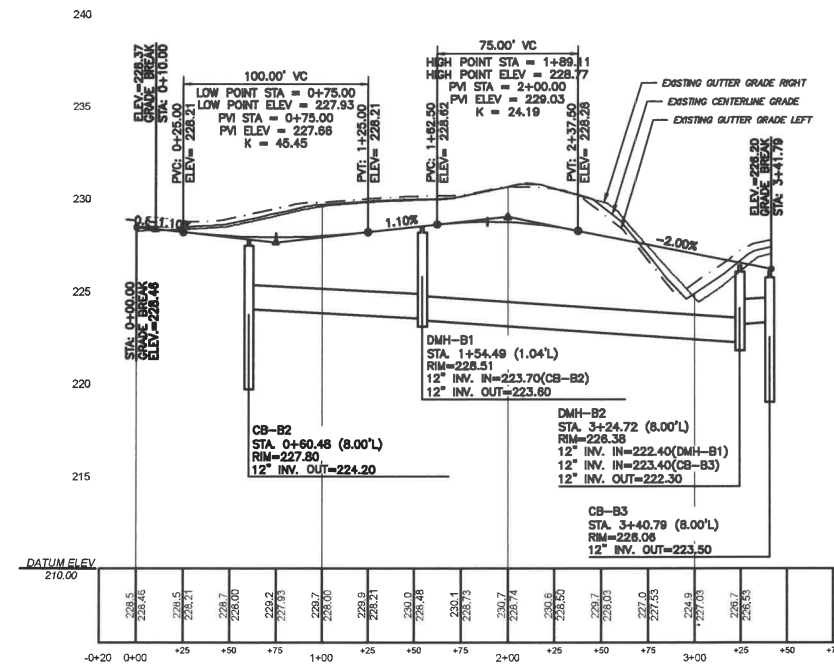




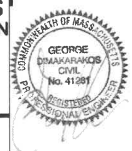
**PLAN VIEW:**  
SCALE: 1"=40'



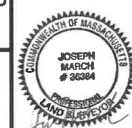
**PROFILE:** SCALE: 1"= 40' H.  
1"= 4' V.



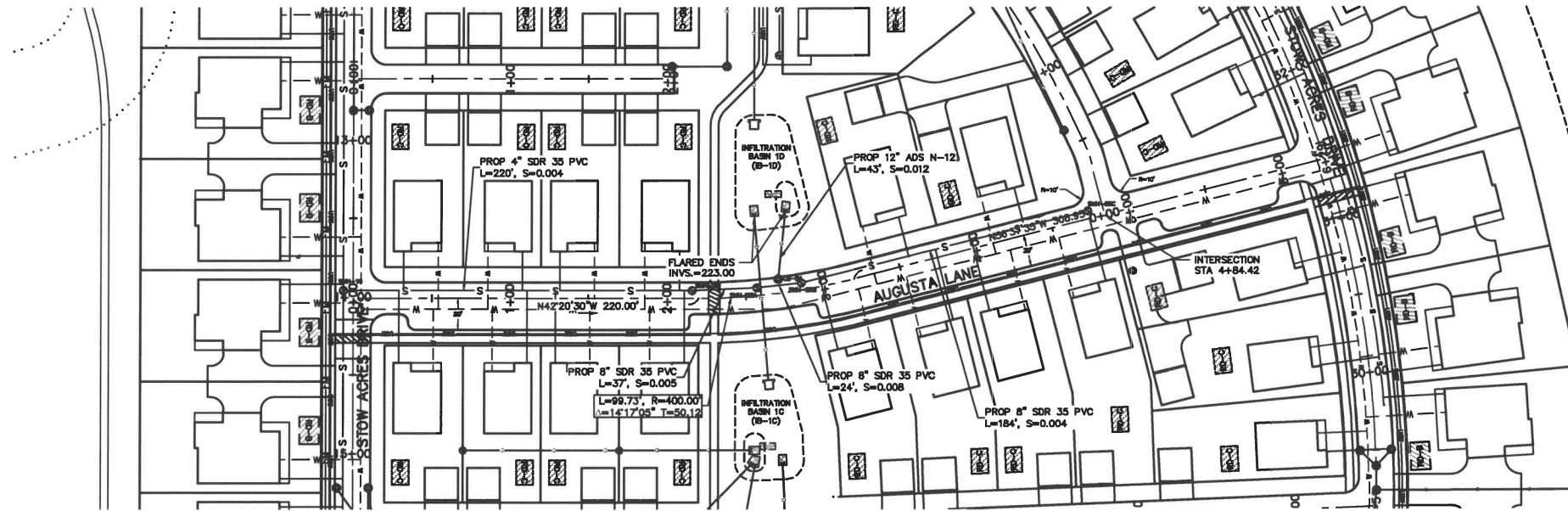
THE RESIDENCES AT STOW ACRES  
PRELIMINARY COMPREHENSIVE PERMIT PLAN  
IN  
STOW, MASSACHUSETTS  
(MIDDLESEX COUNTY)  
PLAN AND PROFILE  
ALLEY 2  
FOR: MCO & ASSOCIATES, INC.  
SCALE: NOVEMBER 21, 2023



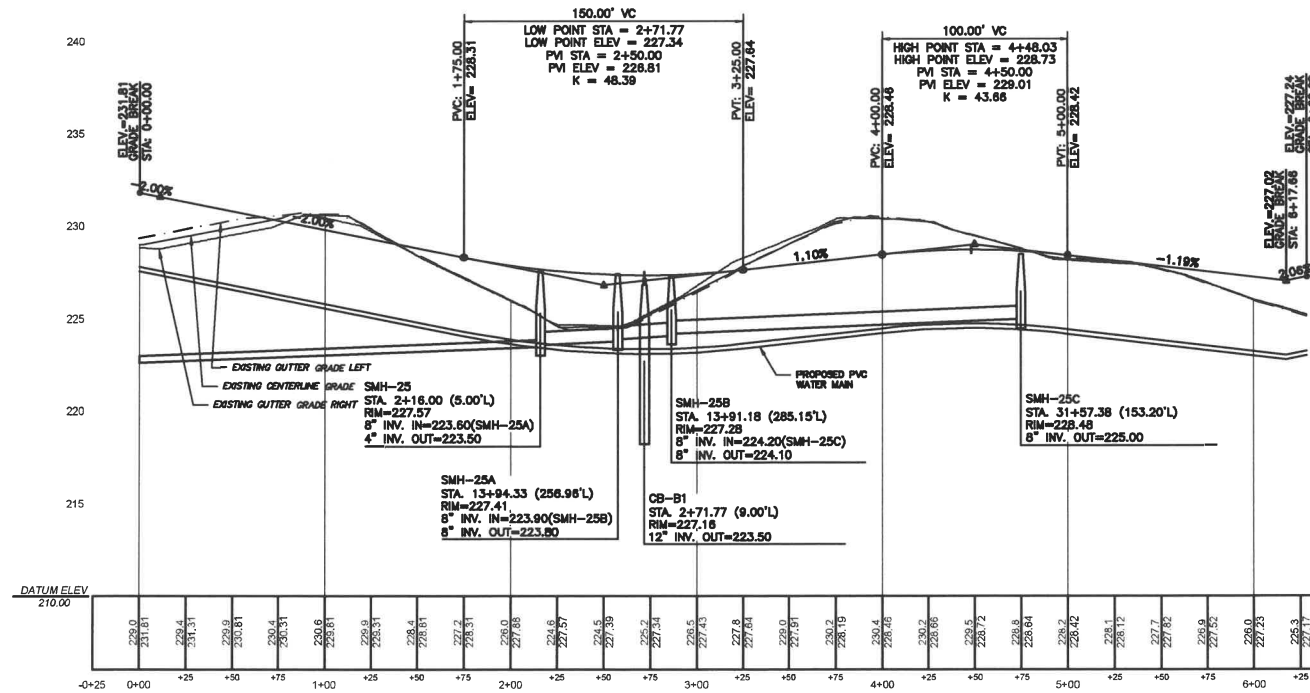
STAMSKI AND McNARY, INC.  
1000 MAIN STREET ACTON, MASS.  
ENGINEERING - PLANNING - SURVEYING  
0 20 40 60 120 160 FT  
SM-6781 (6781.SITE.N.dwg) SHEET 19 OF 33



**PLAN VIEW:**  
SCALE: 1"=40'

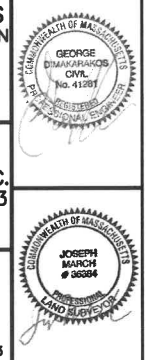


**PROFILE:** SCALE: 1"= 40' H.  
1"= 4' V.

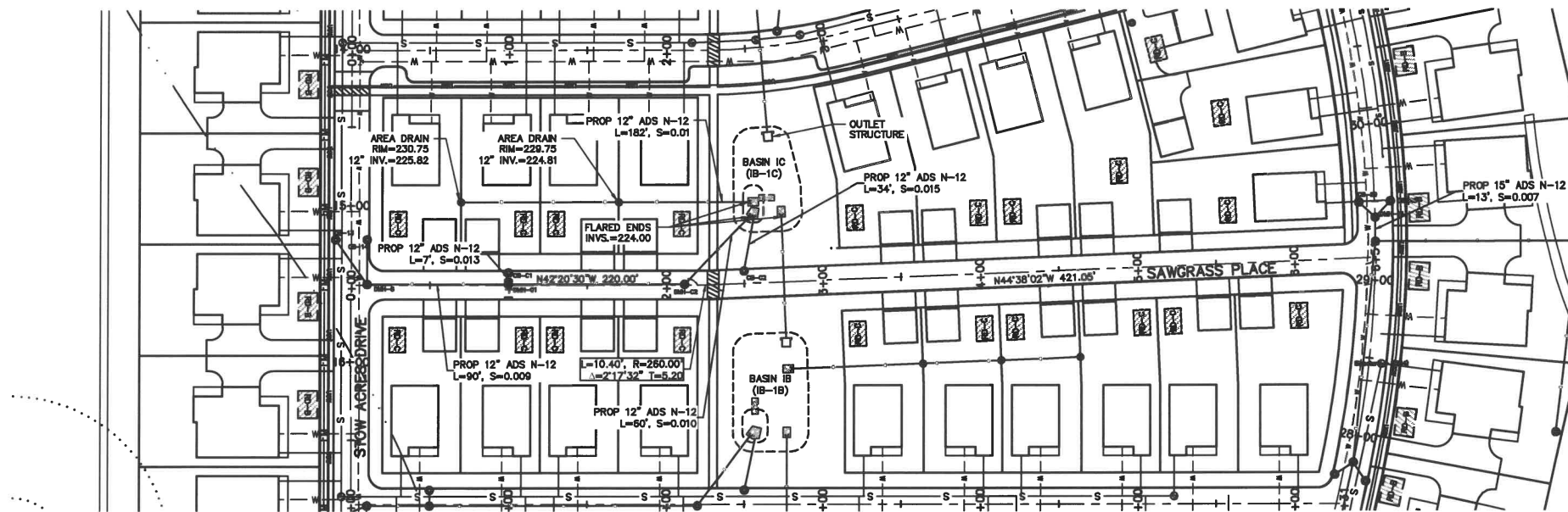


THE RESIDENCES AT STOW ACRES  
PRELIMINARY COMPREHENSIVE PERMIT PLAN  
IN  
STOW, MASSACHUSETTS  
(MIDDLESEX COUNTY)  
PLAN AND PROFILE  
AUGUSTA LANE  
MCO & ASSOCIATES, INC.  
NOVEMBER 21, 2023

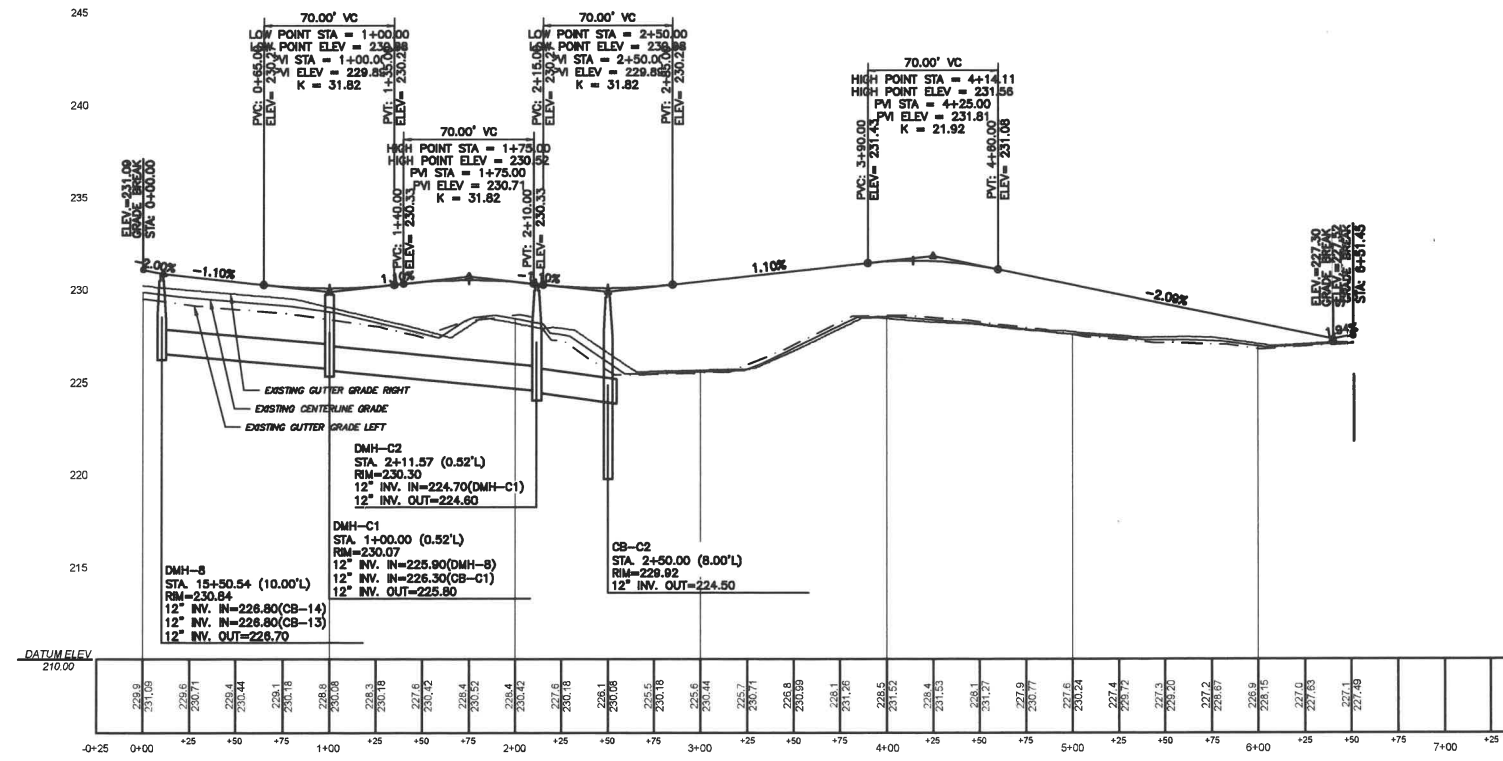
STAMSKI AND McNARY, INC.  
1000 MAIN STREET ACTON, MASS.  
ENGINEERING - PLANNING - SURVEYING  
0 20 40 80 120 160 FT  
SM-6781 (6781.SITE.N.dwg) SHEET 20 OF 33



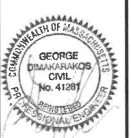
**PLAN VIEW:**  
SCALE: 1"=40'



**PROFILE:** SCALE: 1"= 40' H.  
1"= 4' V.

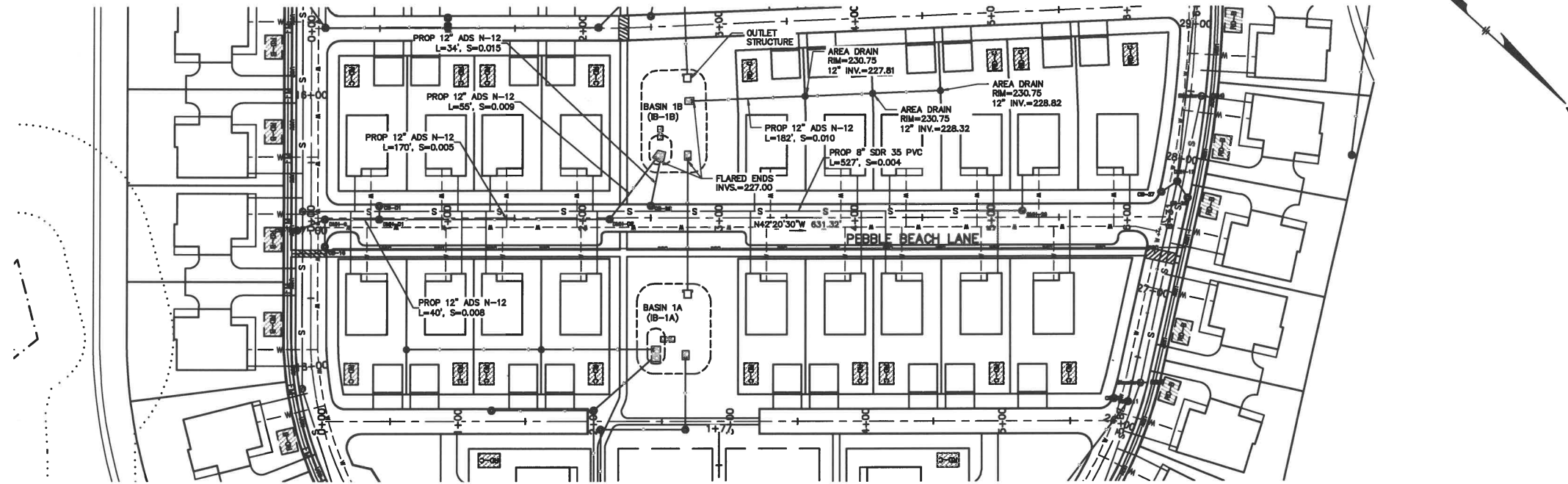


THE RESIDENCES AT STOW ACRES  
PRELIMINARY COMPREHENSIVE PERMIT PLAN  
IN  
STOW, MASSACHUSETTS  
(MIDDLESEX COUNTY)  
PLAN AND PROFILE  
SAWGRASS PLACE  
FOR:  
MCO & ASSOCIATES, INC.  
SCALE:  
NOVEMBER 21, 2023

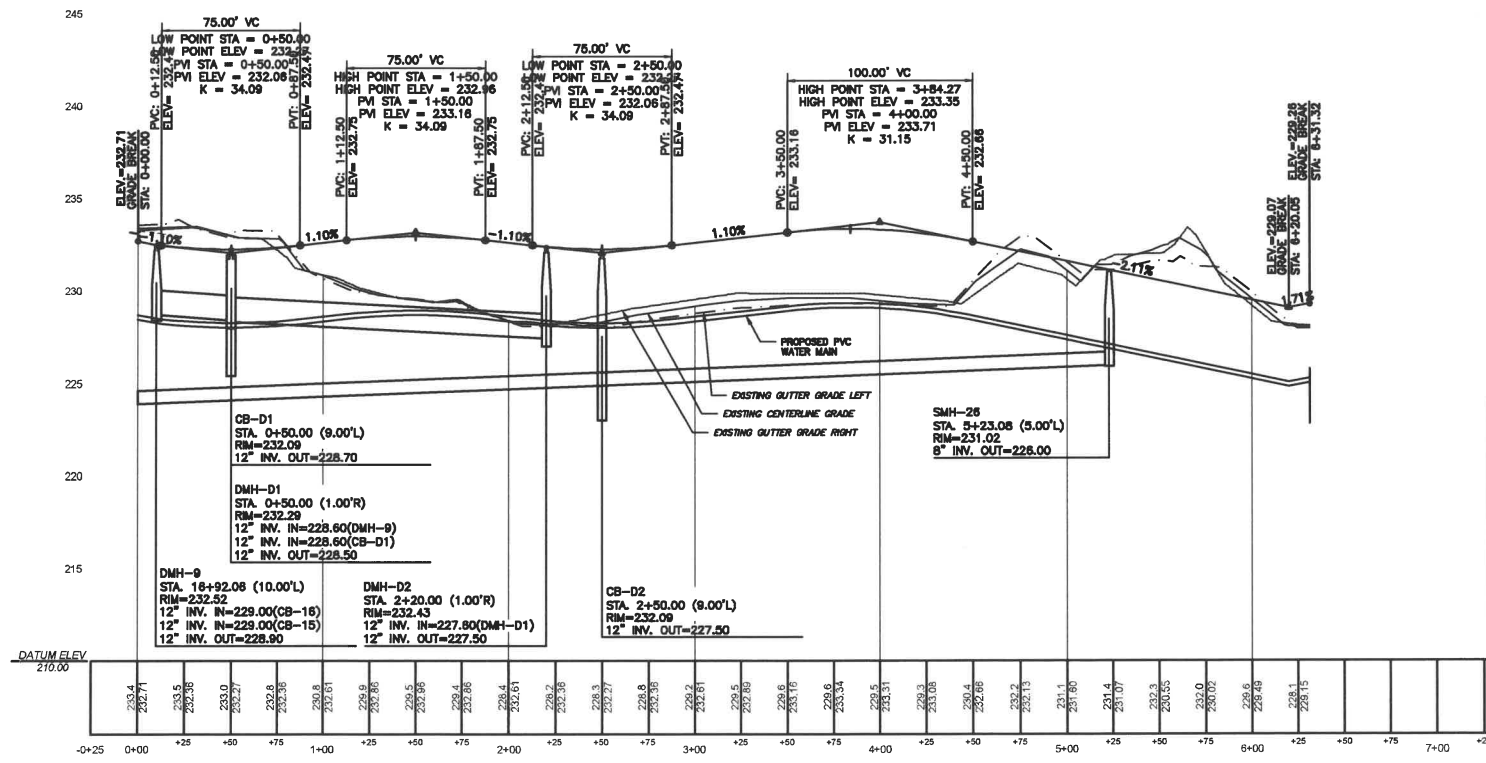


STAMSKI AND McNARY, INC.  
1000 MAIN STREET ACTON, MASS.  
ENGINEERING - PLANNING - SURVEYING  
0 20 40 80 120 160 FT

**PLAN VIEW:**  
SCALE: 1"=40'



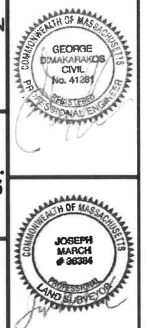
**PROFILE:** SCALE: 1"=40' H.



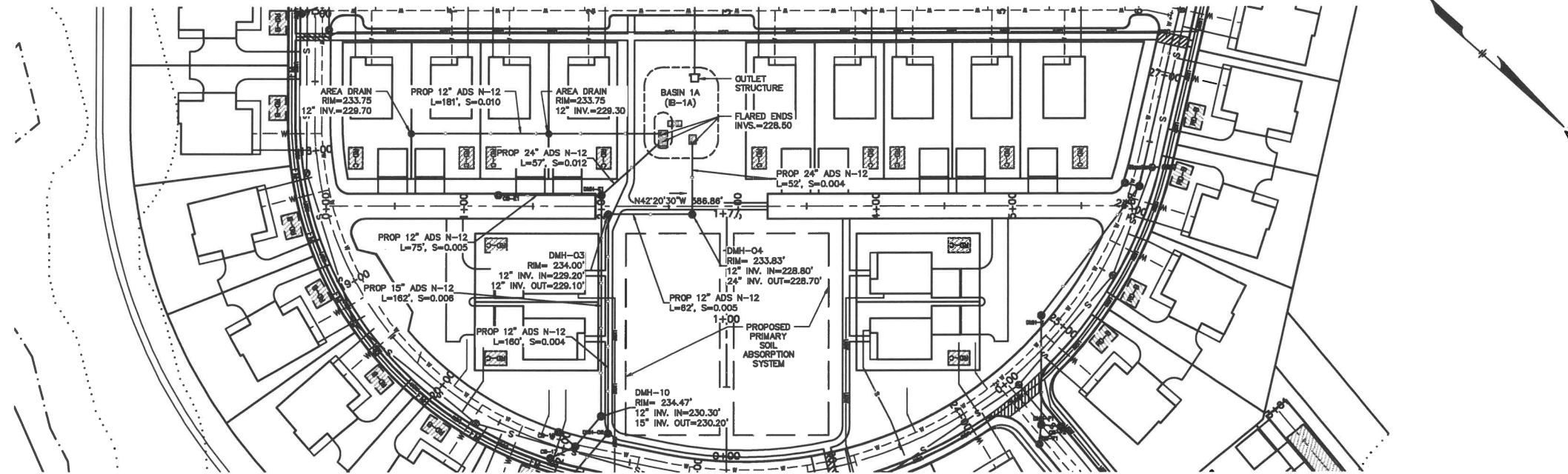
THE RESIDENCES AT STOW ACRES  
PRELIMINARY COMPREHENSIVE PERMIT PLAN  
IN  
STOW, MASSACHUSETTS  
(MIDDLESEX COUNTY)  
PLAN AND PROFILE  
PEBBLE BEACH LANE  
FOR: MCO & ASSOCIATES, INC.  
SCALE: NOVEMBER 21, 2023

STAMSKI AND McNARY, INC.  
1000 MAIN STREET ACTON, MASS.  
ENGINEERING - PLANNING - SURVEYING  
0 20 40 60 120 180 FT

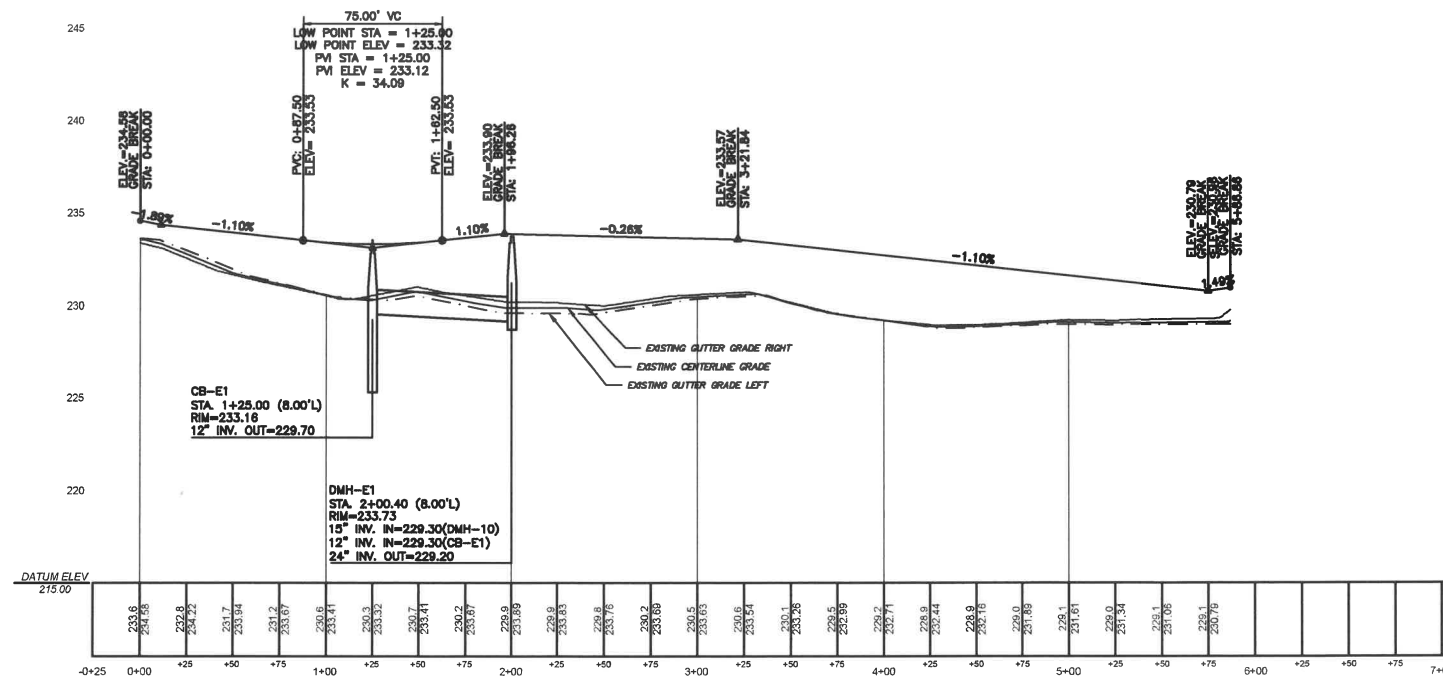
SM-6781 (6781.SITE.N.dwg) SHEET 22 OF 33



**PLAN VIEW:**  
SCALE: 1"=40'



**PROFILE:** SCALE: 1"= 40' H.  
1"= 4' V.



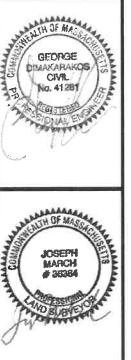
THE RESIDENCES AT STOW ACRES  
PRELIMINARY COMPREHENSIVE PERMIT PLAN  
IN  
STOW, MASSACHUSETTS  
(MIDDLESEX COUNTY)

PLAN AND PROFILE  
ALLEY 3  
FOR: MCO & ASSOCIATES, INC.  
SCALE: NOVEMBER 21, 2023

STAMSKI AND McNARY, INC.  
1000 MAIN STREET ACTON, MASS.  
ENGINEERING - PLANNING - SURVEYING

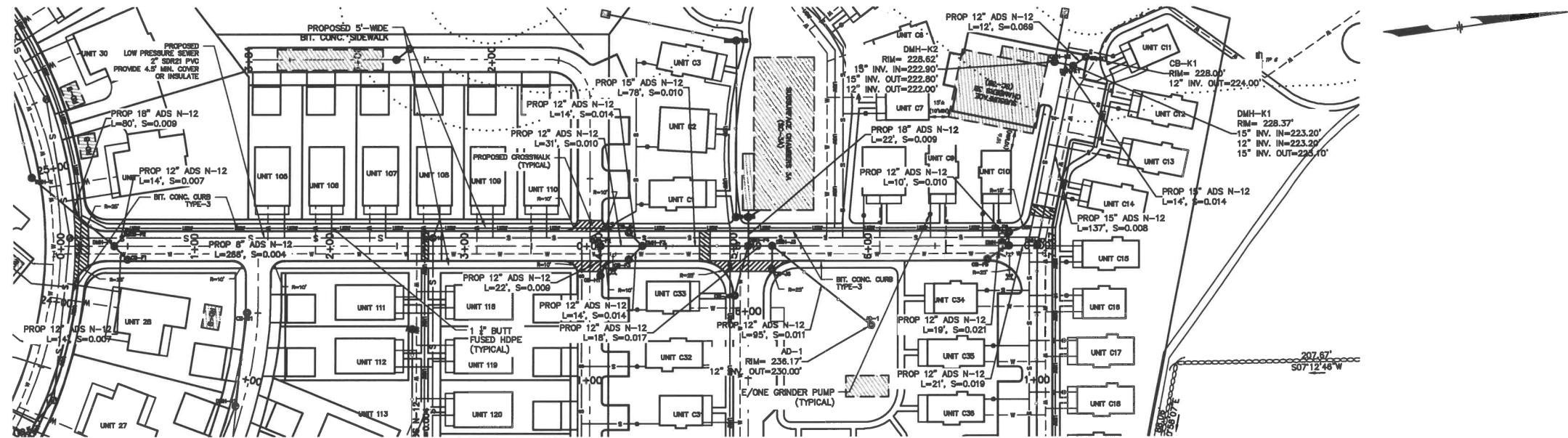
0 20 40 60 120 160 FT

SM-6781 (6781.SITE.N.dwg) SHEET 23 OF 33

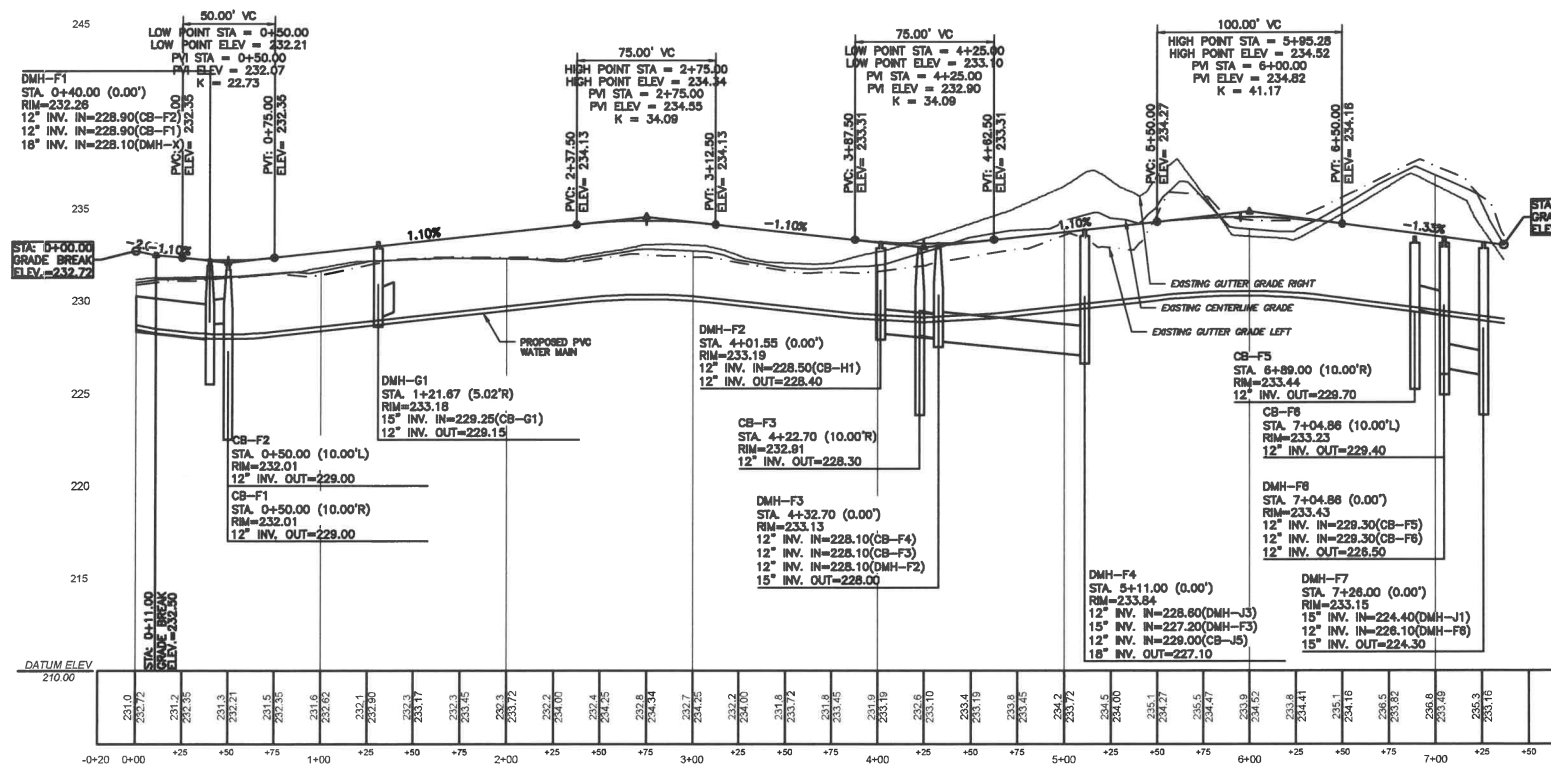




**PLAN VIEW:**  
SCALE: 1"=40'



**PROFILE:** SCALE: 1"=40' H.  
1"=4' V.

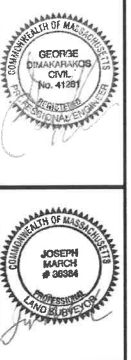


THE RESIDENCES AT STOW ACRES  
PRELIMINARY COMPREHENSIVE PERMIT PLAN  
IN  
STOW, MASSACHUSETTS  
(MIDDLESEX COUNTY)

PLAN AND PROFILE  
ST ANDREWS LANE  
FOR:  
MCO & ASSOCIATES, INC.  
SCALE:  
NOVEMBER 21, 2023

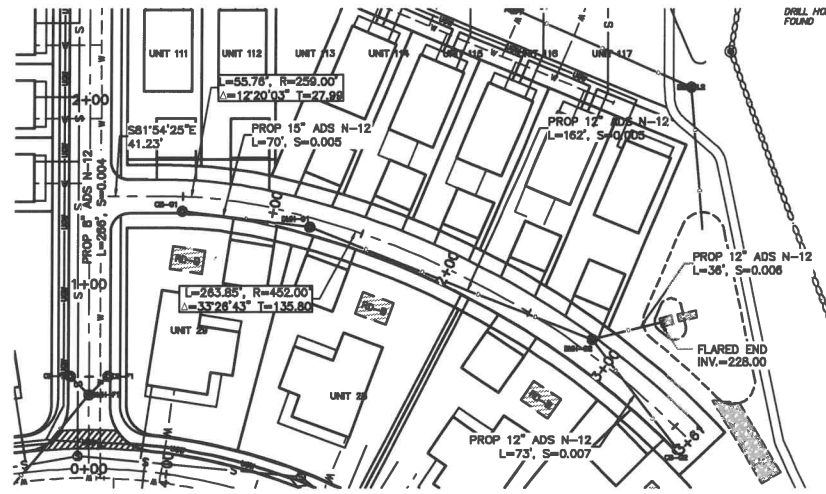
STAMSKI AND McNARY, INC.  
1000 MAIN STREET ACTON, MASS.  
ENGINEERING - PLANNING - SURVEYING

SM-6781 (6781.SITE.N.dwg) SHEET 24 OF 33

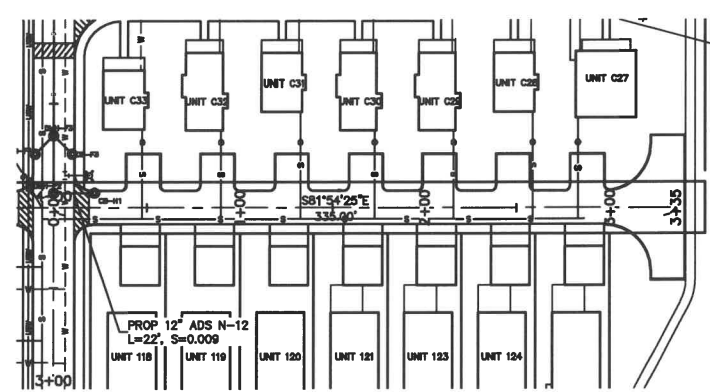




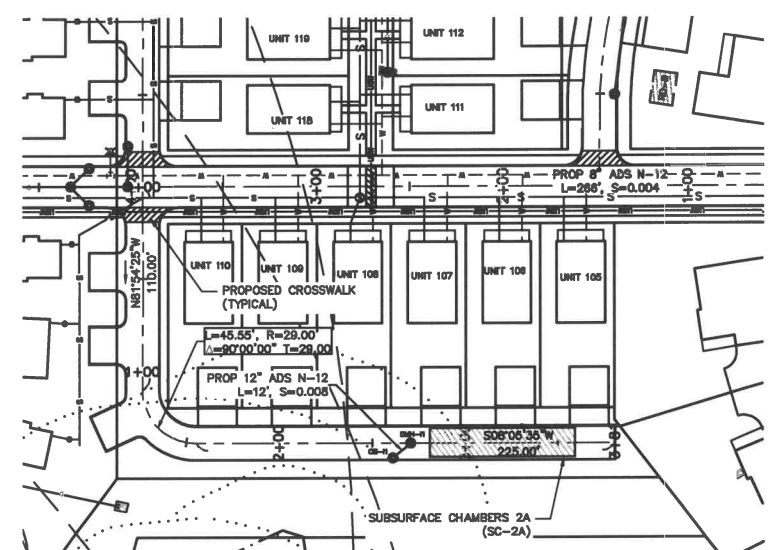
**ALLEY A PLAN VIEW:**  
SCALE: 1"=40'



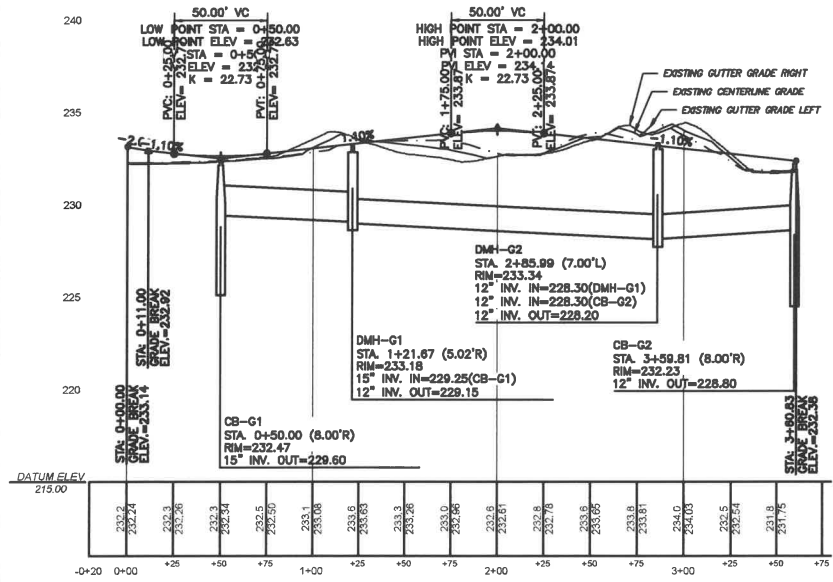
**ALLEY B PLAN VIEW:**  
SCALE: 1"=40'



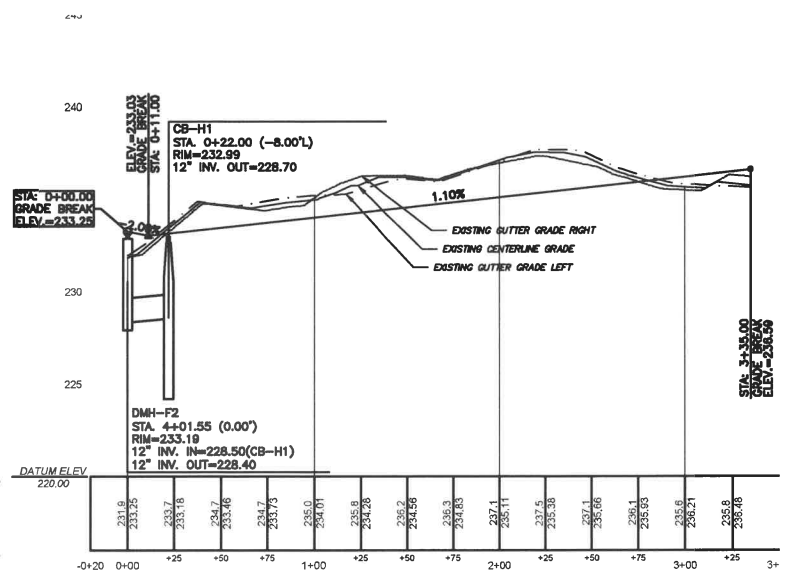
**ALLEY C PLAN VIEW:**  
SCALE: 1"=40'



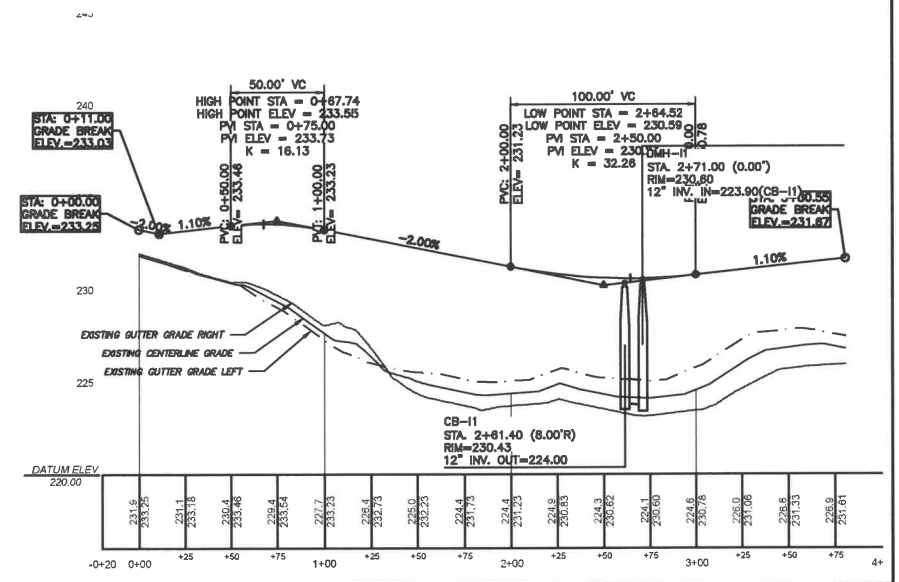
**ALLEY A PROFILE: SCALE: 1"=40' H, 1"=4' V.**



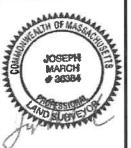
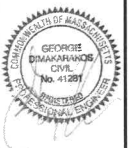
**ALLEY B PROFILE: SCALE: 1"=40' H, 1"=4' V.**



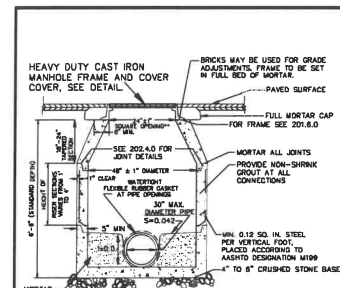
**ALLEY C PROFILE: SCALE: 1"=40' H, 1"=4' V.**



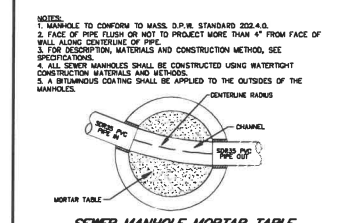
THE RESIDENCES AT STOW ACRES  
PRELIMINARY COMPREHENSIVE PERMIT PLAN  
IN  
STOW, MASSACHUSETTS  
(MIDDLESEX COUNTY)  
PLAN AND PROFILE  
ALLEY A, ALLEY B, ALLEY C  
FOR:  
MCO & ASSOCIATES, INC.  
SCALE: NOVEMBER 21, 2023



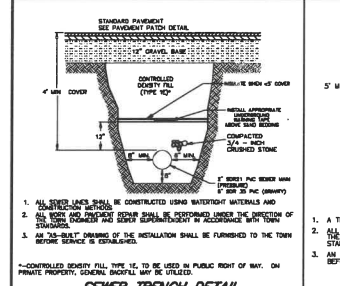
STAMSKI AND McNARY, INC.  
1000 MAIN STREET ACTON, MASS.  
ENGINEERING - PLANNING - SURVEYING  
0 20 40 80 120 160 FT  
SM-6781 (6781.SITE.N.dwg) SHEET 26 OF 33



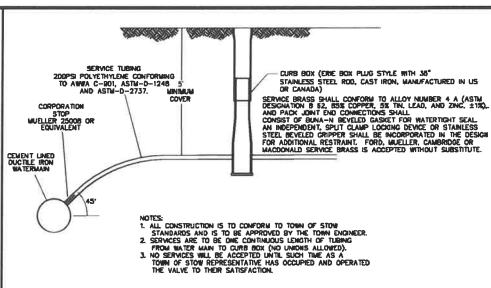
**HEAVY DUTY CAST IRON MANHOLE FRAME AND COVER**  
NOT TO SCALE



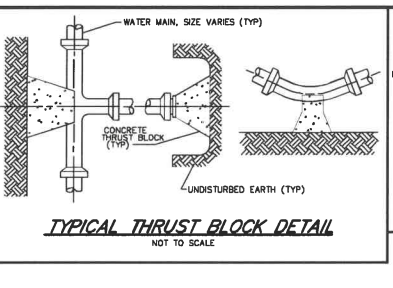
**PRECAST CONCRETE SEWER MANHOLE DETAIL**  
NOT TO SCALE



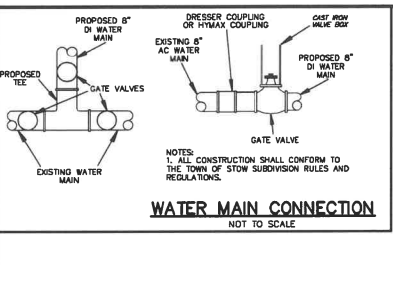
**SEWER MANHOLE MORTAR TABLE**  
NOT TO SCALE



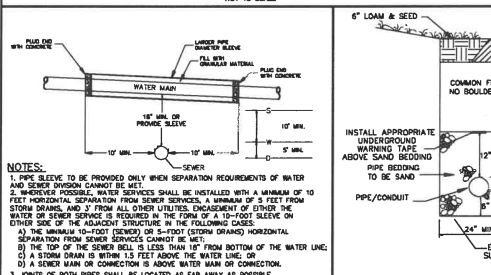
**WATER SERVICE TUBING CONNECTION DETAIL**  
NOT TO SCALE



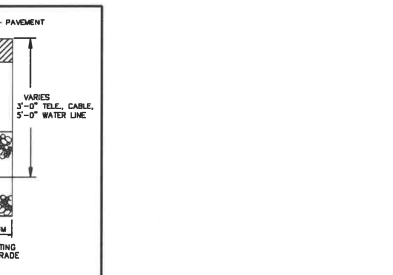
**TYPICAL THRUST BLOCK DETAIL**  
NOT TO SCALE



**WATER MAIN CONNECTION**  
NOT TO SCALE



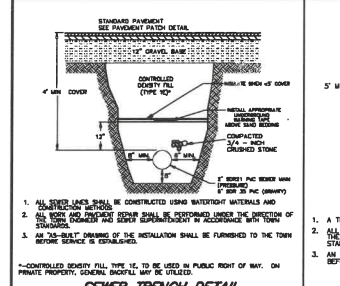
**WATER & SEWER CROSSING DETAIL**  
NOT TO SCALE



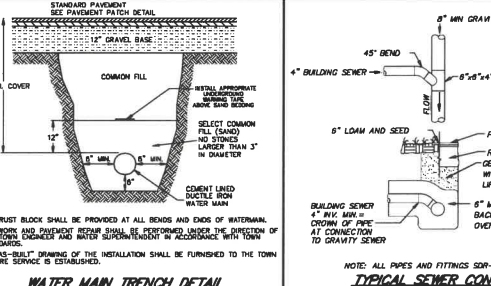
**PIPE TRENCH DETAIL**  
NOT TO SCALE



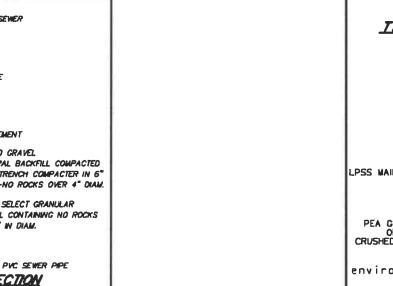
**TYPICAL SEWER SERVICE LATERAL CONNECTION**  
NOT TO SCALE



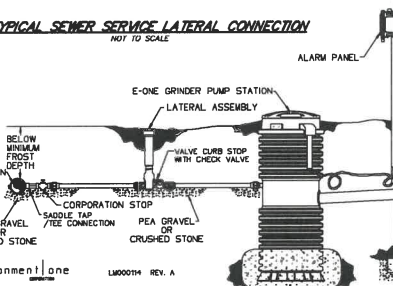
**SEWER TRENCH DETAIL**  
NOT TO SCALE



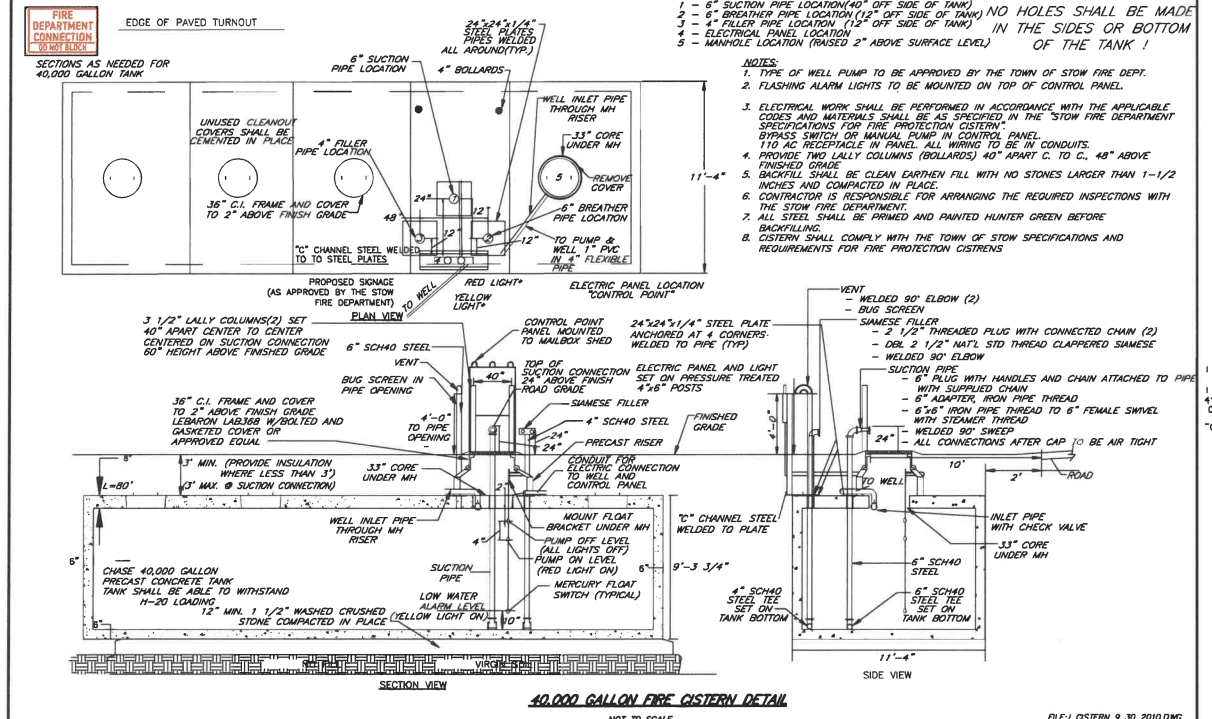
**WATER MAIN TRENCH DETAIL**  
NOT TO SCALE



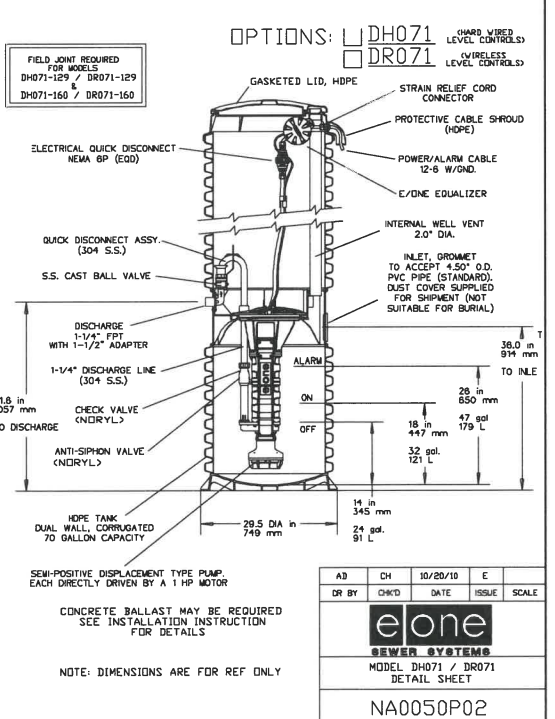
**TYPICAL SEWER CONNECTION**  
NOT TO SCALE



**TYPICAL SEWER CONNECTION**  
NOT TO SCALE



**40,000 GALLON FIRE CISTERN DETAIL**  
NOT TO SCALE



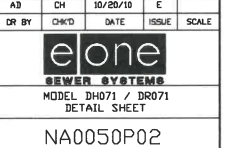
**40,000 GALLON FIRE CISTERN DETAIL**  
NOT TO SCALE

THE RESIDENCES AT STOW ACRES  
PRELIMINARY COMPREHENSIVE PERMIT PLAN  
IN  
STOW, MASSACHUSETTS  
(MIDDLESEX COUNTY)

PLAN AND PROFILE  
FOR: MCO & ASSOCIATES, INC.  
SCALE: NOVEMBER 21, 2023

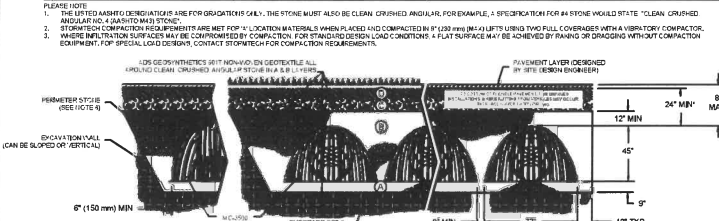
STAMSKI AND McNARY, INC.  
1000 MAIN STREET ACTON, MASS.  
ENGINEERING - PLANNING - SURVEYING  
0 20 40 80 120 160 FT

SM-6781 (6781.SITE.N.dwg) SHEET OF 33



**ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS**

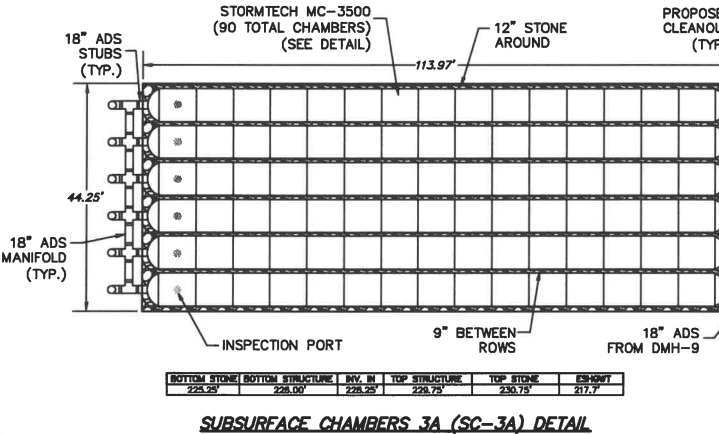
MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATION	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL MATERIAL FOR LAYER OF STONE FROM THE TOP OF THE CHAMBER TO THE FINISHED GRADE SURFACE. CHECK PLANS FOR PAVED DRIVE AND SIDEWALKS. CHECK PLANS FOR PAVED DRIVE AND SIDEWALKS. CHECK PLANS FOR PAVED DRIVE AND SIDEWALKS.	NA	
C	INTERIOR FILL MATERIAL FOR LAYER OF STONE FROM THE TOP OF THE CHAMBER TO THE FINISHED GRADE SURFACE. CHECK PLANS FOR PAVED DRIVE AND SIDEWALKS. CHECK PLANS FOR PAVED DRIVE AND SIDEWALKS. CHECK PLANS FOR PAVED DRIVE AND SIDEWALKS.	ASHTO M31 A-1, A-2, A-3	NO COMPACTON REQUIRED.
B	FOUNDATION STONE FILL BELOW CHAMBERS FROM THE BOTTOM OF THE CHAMBER TO THE FINISHED GRADE SURFACE. CHECK PLANS FOR PAVED DRIVE AND SIDEWALKS. CHECK PLANS FOR PAVED DRIVE AND SIDEWALKS. CHECK PLANS FOR PAVED DRIVE AND SIDEWALKS.	ASHTO M31 A-1, A-2, A-3	NO COMPACTON REQUIRED.
A	FOUNDATION STONE FILL BELOW CHAMBERS FROM THE BOTTOM OF THE CHAMBER TO THE FINISHED GRADE SURFACE. CHECK PLANS FOR PAVED DRIVE AND SIDEWALKS. CHECK PLANS FOR PAVED DRIVE AND SIDEWALKS. CHECK PLANS FOR PAVED DRIVE AND SIDEWALKS.	ASHTO M31 A-1, A-2, A-3	NO COMPACTON REQUIRED.



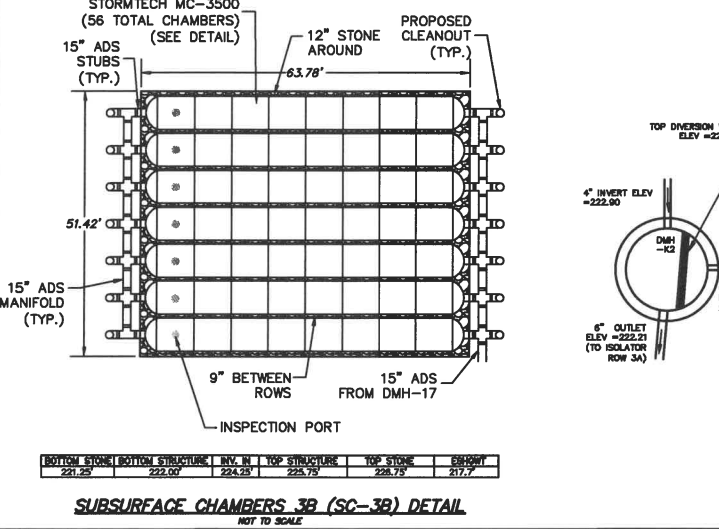
**NOTES:**

- THE LISTED AASHTO DESIGNATION ARE FOR GUIDANCE ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR A STONE WOULD STATE "CLEAN, CRUSHED, ANGULAR, 3/4" TO 1 1/2" STONE".
- STORMTECH COMPACTION REQUIREMENTS ARE NET TOP OF LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 12" MIN MAX LIFT. THE FULL COVERAGES WITH A VIBRATORY COMPACTOR.
- WHERE INSTALLATION SUPERVISORS MAY BE COMPLETED BY CONTRACTOR. FOR FINISHED SURFACE LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY FINISHING OR DRAGGING WITHOUT COMPACTOR. EQUIPMENT FOR SPECIAL LOAD DESIGN, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
- USE OF SYNTHETIC GEOTEXTILES SHALL BE APPROVED BY THE ENGINEER. ALL GEOTEXTILES SHALL BE CLEAN, CRUSHED, ANGULAR, 3/4" TO 1 1/2" STONE.
- MC-3500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2822 STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS.
- WHERE CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2822 STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS.
- ACCEPTABLE FILL MATERIAL TABLE AND IS PROVIDED MATERIAL LOCATION, DESIGN, COMPACTON, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDEDMENT, AND FILL MATERIALS.
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING CAPACITY (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE VETN CONSIDERATION FOR THE WAIVER OF EXPECTED SOIL WEAR AND CORROSION.
- FOUNDATION STONE MUST BE EMBEDED HORIZONTALLY TO THE EMBEDEDMENT WALL FOR BOTH VERTICAL AND SLOPED EMBEDEDMENT WALLS.
- ONCE LAYERS OF STONE ARE PLACED UP TO THE FINISHED GRADE, WATER EMBEDEDMENT WALLS SHALL BE USED TO REPLACE THE MATERIAL REQUIREMENTS TO LAYER C TO TOP OF THE SITE DESIGN ENGINEER'S ARCHITECTURE.

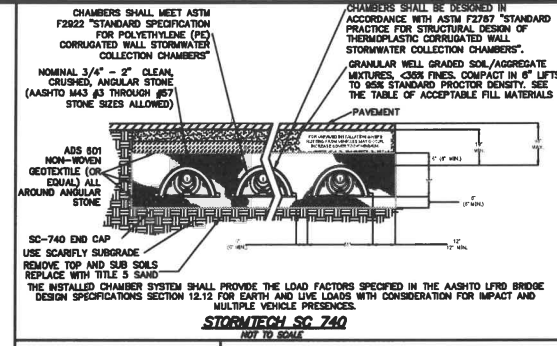
**MC-3500 TYPICAL CROSS-SECTION**  
NOT TO SCALE



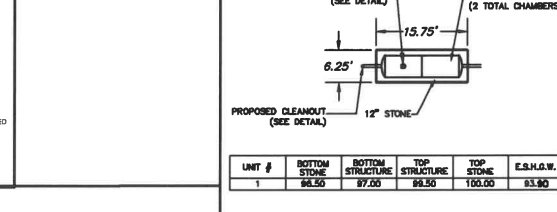
**SUBSURFACE CHAMBERS 3A (SC-3A) DETAIL**  
NOT TO SCALE



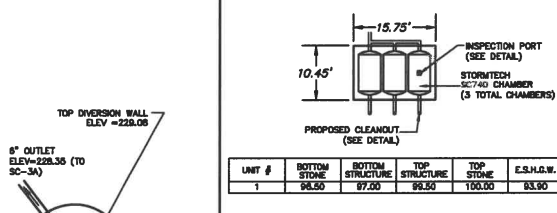
**SUBSURFACE CHAMBERS 3B (SC-3B) DETAIL**  
NOT TO SCALE



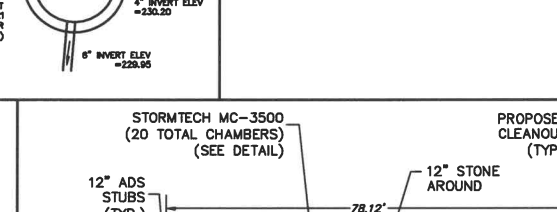
**STORMTECH SC 740**  
NOT TO SCALE



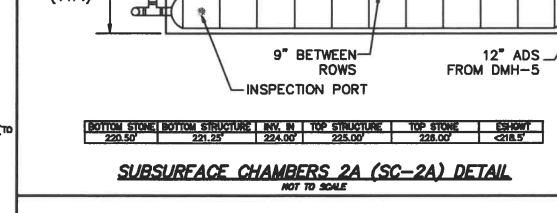
**ROOF DRYWELL A (RD-A) DETAIL**  
NOT TO SCALE



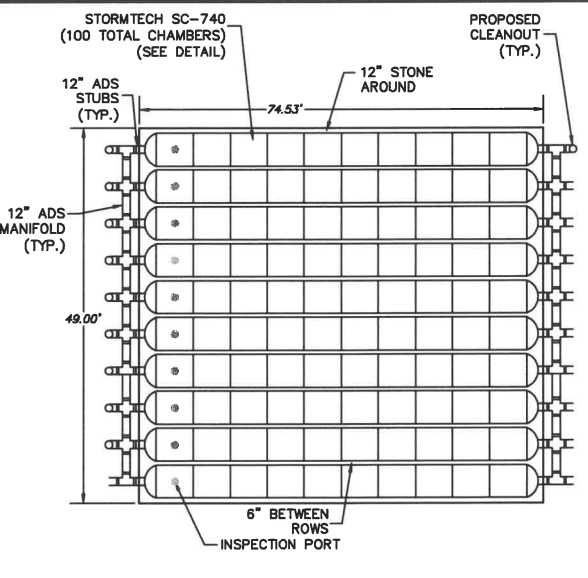
**ROOF DRYWELL B (RD-B) DETAIL**  
NOT TO SCALE



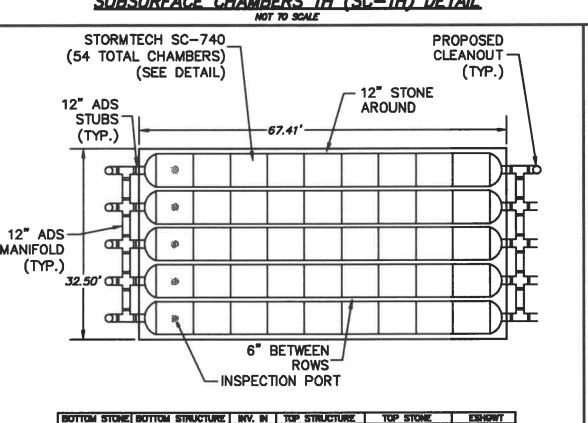
**SUBSURFACE CHAMBERS 2A (SC-2A) DETAIL**  
NOT TO SCALE



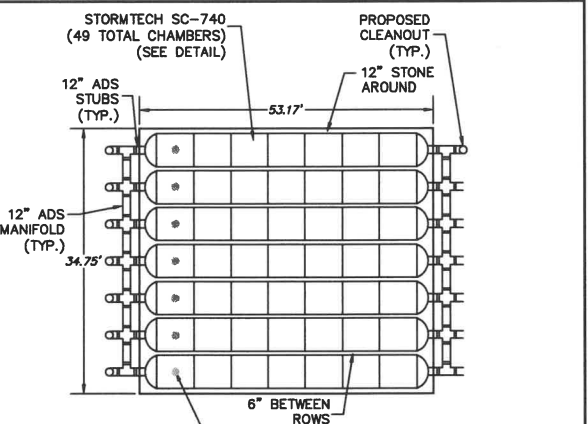
**SUBSURFACE CHAMBERS 2B (SC-2B) DETAIL**  
NOT TO SCALE



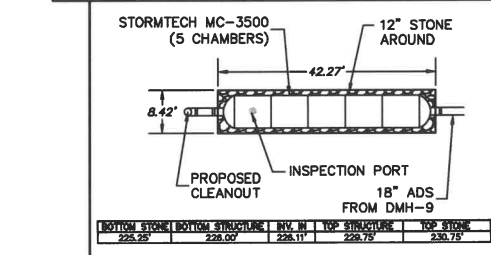
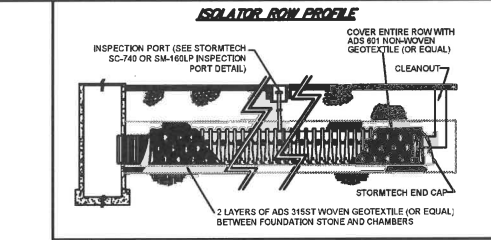
**SUBSURFACE CHAMBERS 1H (SC-1H) DETAIL**  
NOT TO SCALE



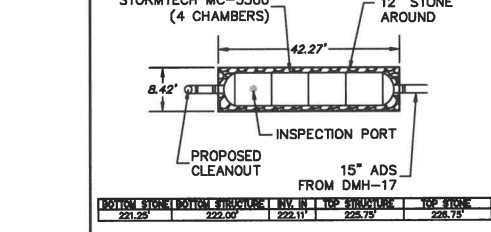
**SUBSURFACE CHAMBERS 1I (SC-1I) DETAIL**  
NOT TO SCALE



**SUBSURFACE CHAMBERS 1J (SC-1J) DETAIL**  
NOT TO SCALE



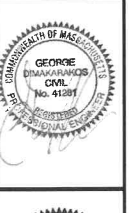
**ISOLATOR ROW 3A (IR-3A) DETAIL**  
NOT TO SCALE



**ISOLATOR ROW 3B (IR-3B) DETAIL**  
NOT TO SCALE

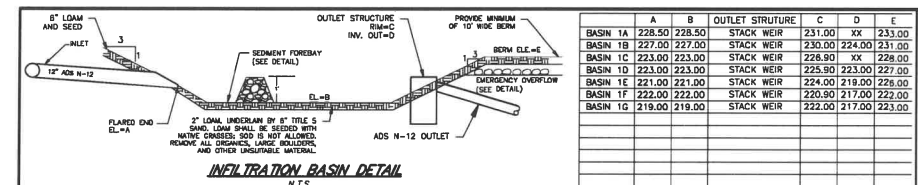
THE RESIDENCES AT STOW ACRES  
PRELIMINARY COMPREHENSIVE PERMIT PLAN  
IN  
STOW, MASSACHUSETTS  
(MIDDLESEX COUNTY)

PLAN AND PROFILE  
FOR:  
SCALE: MCO & ASSOCIATES, INC.  
NOVEMBER 21, 2023

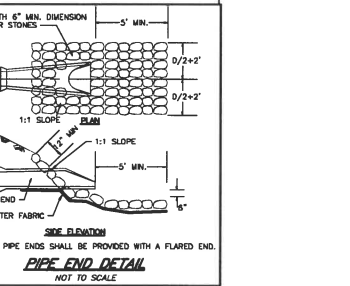
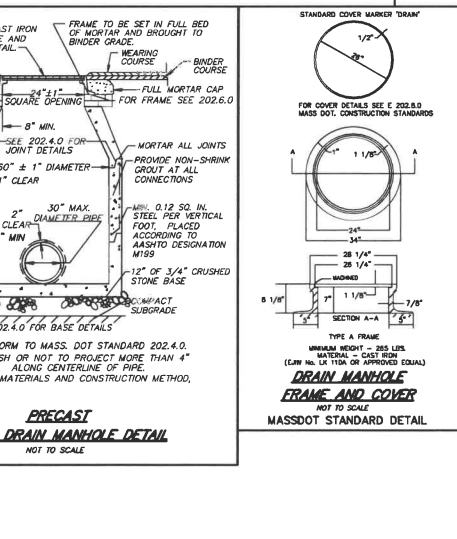
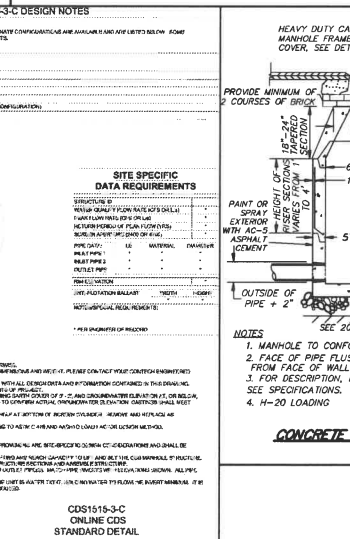
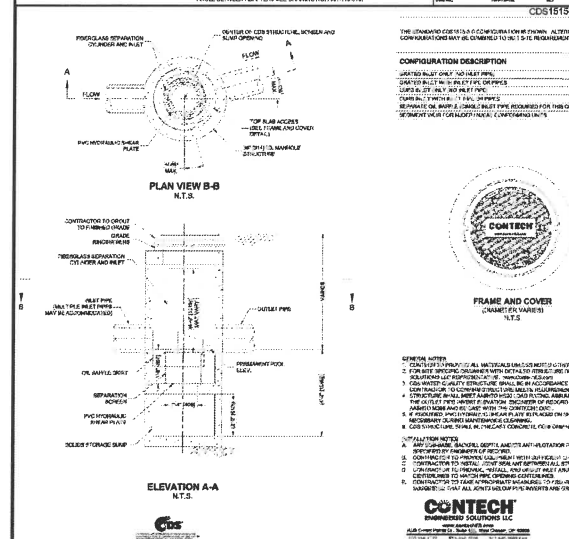
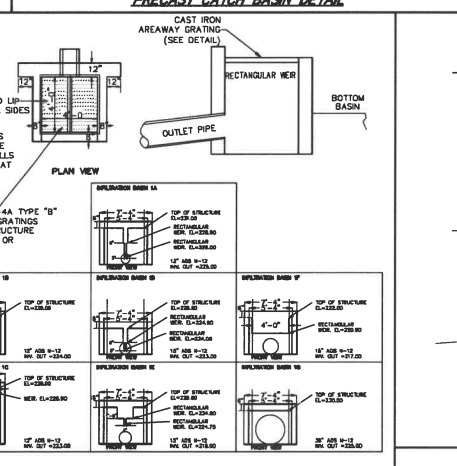
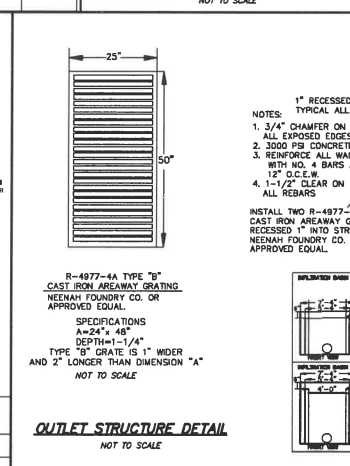
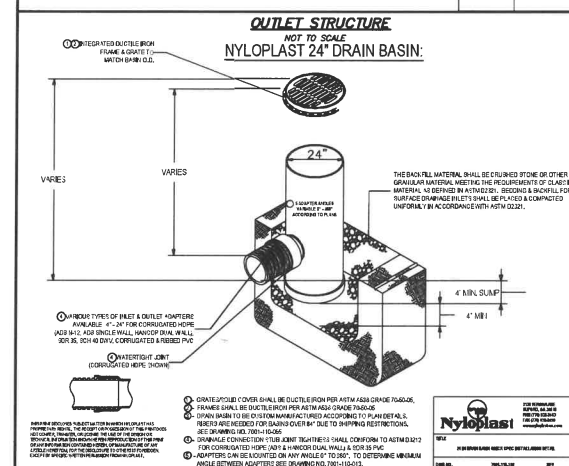
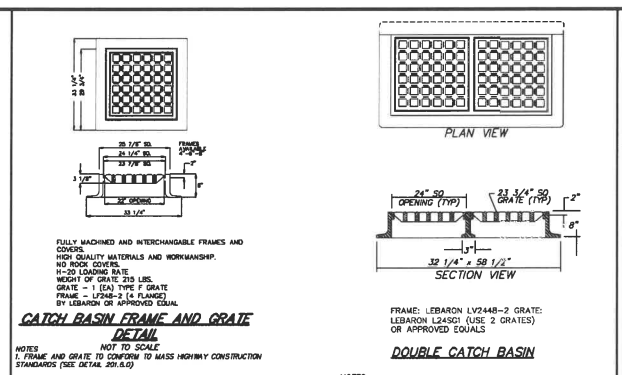
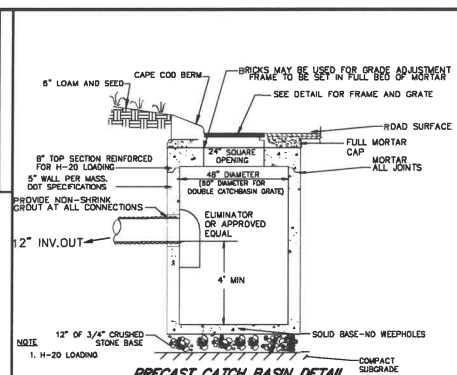
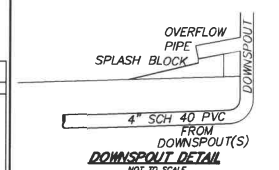
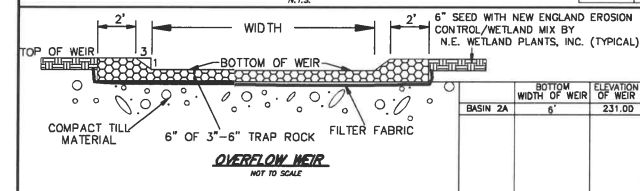


STAMSKI AND McNARY, INC.  
1000 MAIN STREET ACTON, MASS.  
ENGINEERING - PLANNING - SURVEYING





	A	B	OUTLET STRUCTURE	C	D	E
BASIN 1A	228.50	228.50	STACK WEIR	231.00	XX	233.00
BASIN 1B	227.00	227.00	STACK WEIR	230.00	224.00	231.00
BASIN 1C	223.00	223.00	STACK WEIR	228.90	XX	228.00
BASIN 1D	223.00	223.00	STACK WEIR	225.90	223.00	227.00
BASIN 1E	221.00	221.00	STACK WEIR	224.00	218.00	228.00
BASIN 1F	222.00	222.00	STACK WEIR	220.90	217.00	222.00
BASIN 1G	219.00	219.00	STACK WEIR	222.00	217.00	223.00

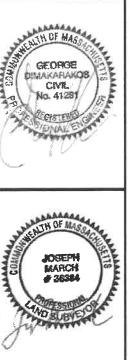


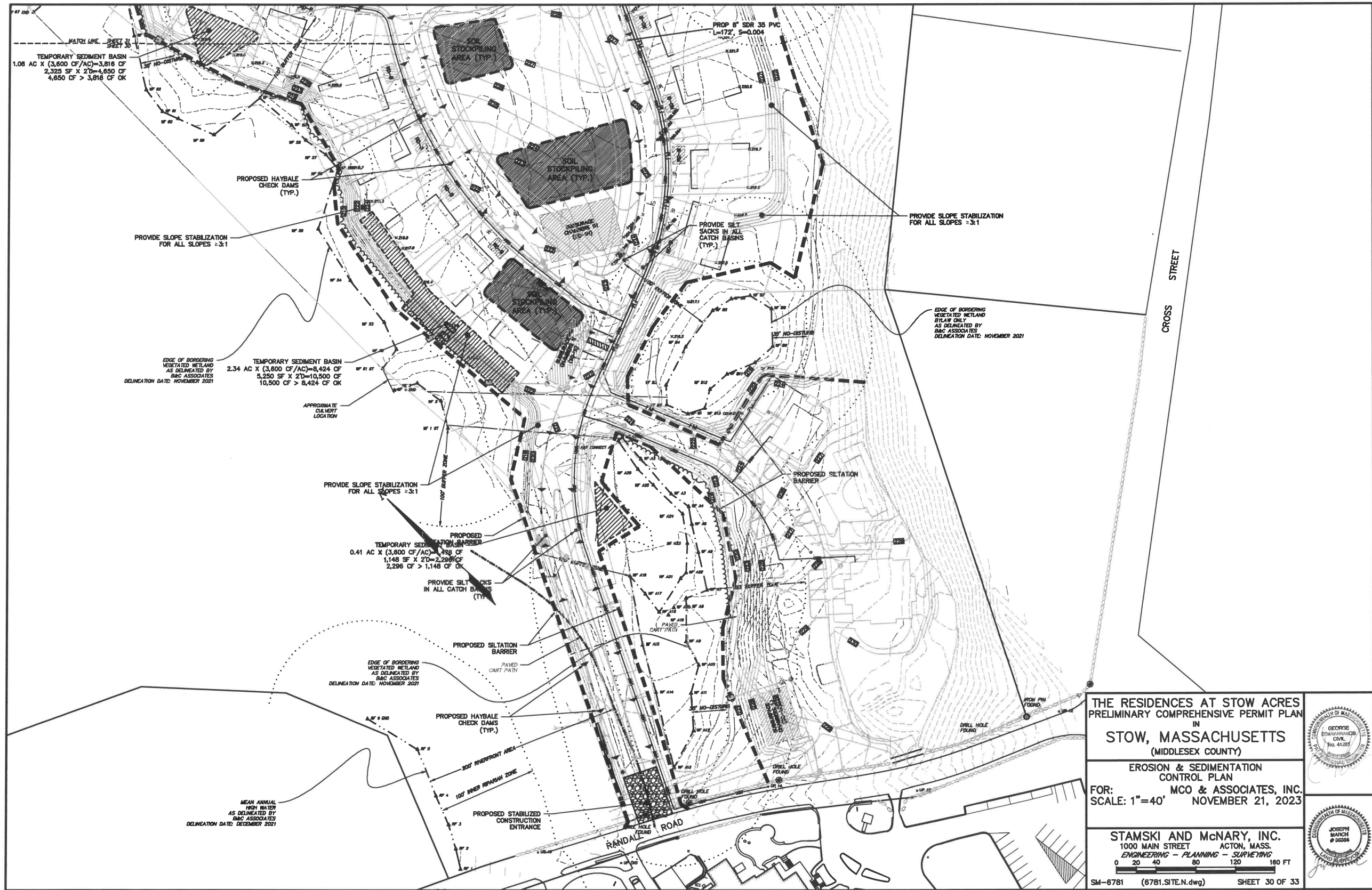
THE RESIDENCES AT STOW ACRES  
 PRELIMINARY COMPREHENSIVE PERMIT PLAN  
 IN  
 STOW, MASSACHUSETTS  
 (MIDDLESEX COUNTY)

PLAN AND PROFILE  
 FOR: MCO & ASSOCIATES, INC.  
 SCALE: NOVEMBER 21, 2023

STAMSKI AND McNARY, INC.  
 1000 MAIN STREET ACTON, MASS.  
 ENGINEERING - PLANNING - SURVEYING

SM-6781 (6781.SITE.N.dwg) SHEET OF 33

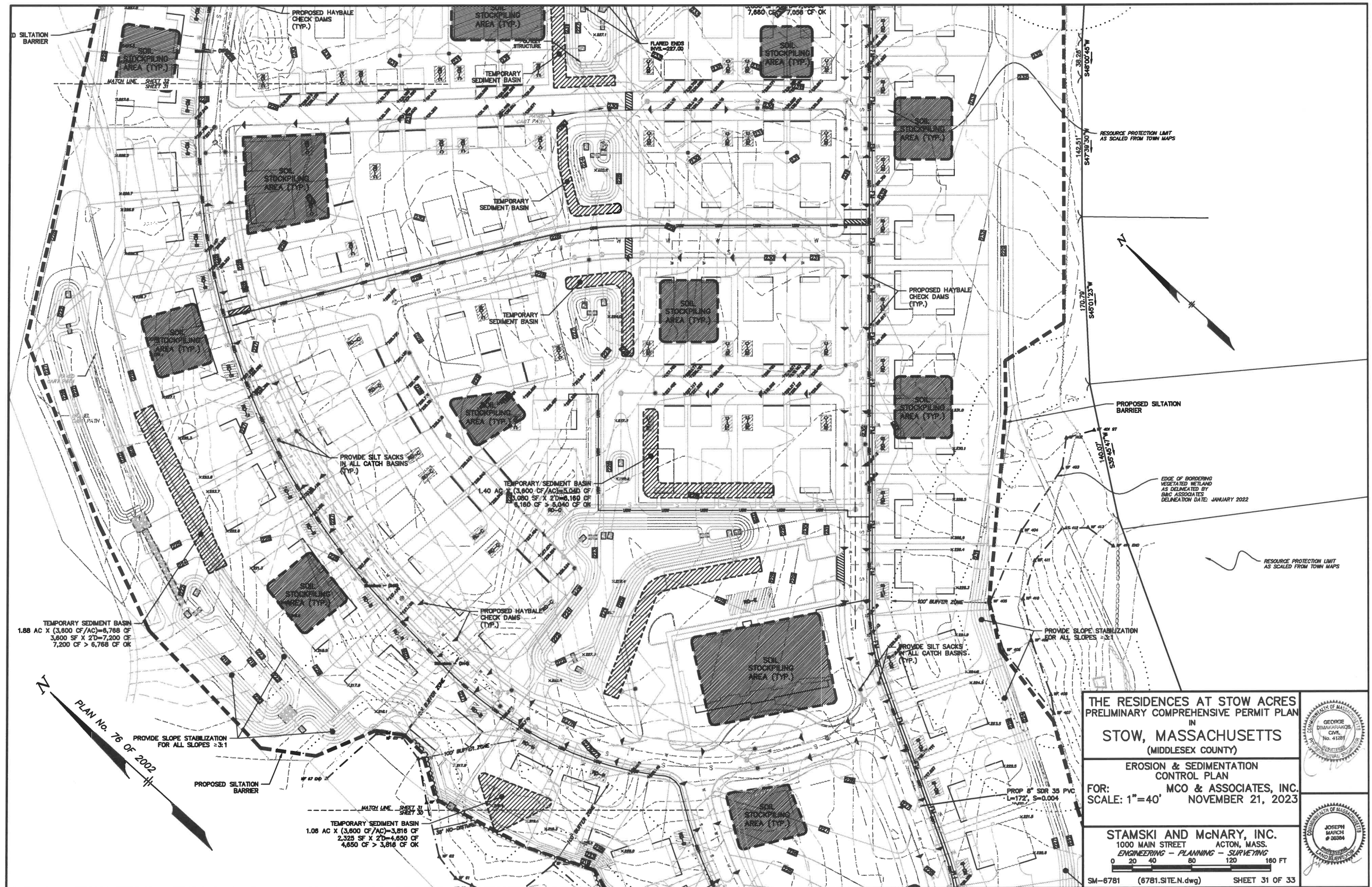




**THE RESIDENCES AT STOW ACRES**  
 PRELIMINARY COMPREHENSIVE PERMIT PLAN  
 IN  
**STOW, MASSACHUSETTS**  
 (MIDDLESEX COUNTY)  
 EROSION & SEDIMENTATION  
 CONTROL PLAN  
 FOR: **MCO & ASSOCIATES, INC.**  
 SCALE: 1"=40'      NOVEMBER 21, 2023

**STAMSKI AND McNARY, INC.**  
 1000 MAIN STREET      ACTON, MASS.  
 ENGINEERING - PLANNING - SURVEYING  
 0 20 40 80 120 160 FT  
 SM-6781      (6781.SITE.N.dwg)      SHEET 30 OF 33





TEMPORARY SEDIMENT BASIN  
 1.88 AC X (3,600 CF/AC)=6,768 CF  
 3,600 SF X 2'D=7,200 CF  
 7,200 CF > 6,768 CF OK

PROVIDE SLOPE STABILIZATION  
 FOR ALL SLOPES > 3:1

PROPOSED SILTATION BARRIER

PLAN No. 76 OF 2022

TEMPORARY SEDIMENT BASIN  
 1.06 AC X (3,600 CF/AC)=3,816 CF  
 2,325 SF X 2'D=4,650 CF  
 4,650 CF > 3,816 CF OK

TEMPORARY SEDIMENT BASIN  
 1.40 AC X (3,600 CF/AC)=5,040 CF  
 3,080 SF X 2'D=6,160 CF  
 6,160 CF > 5,040 CF OK

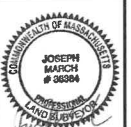
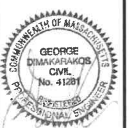
THE RESIDENCES AT STOW ACRES  
 PRELIMINARY COMPREHENSIVE PERMIT PLAN  
 IN  
 STOW, MASSACHUSETTS  
 (MIDDLESEX COUNTY)

EROSION & SEDIMENTATION  
 CONTROL PLAN

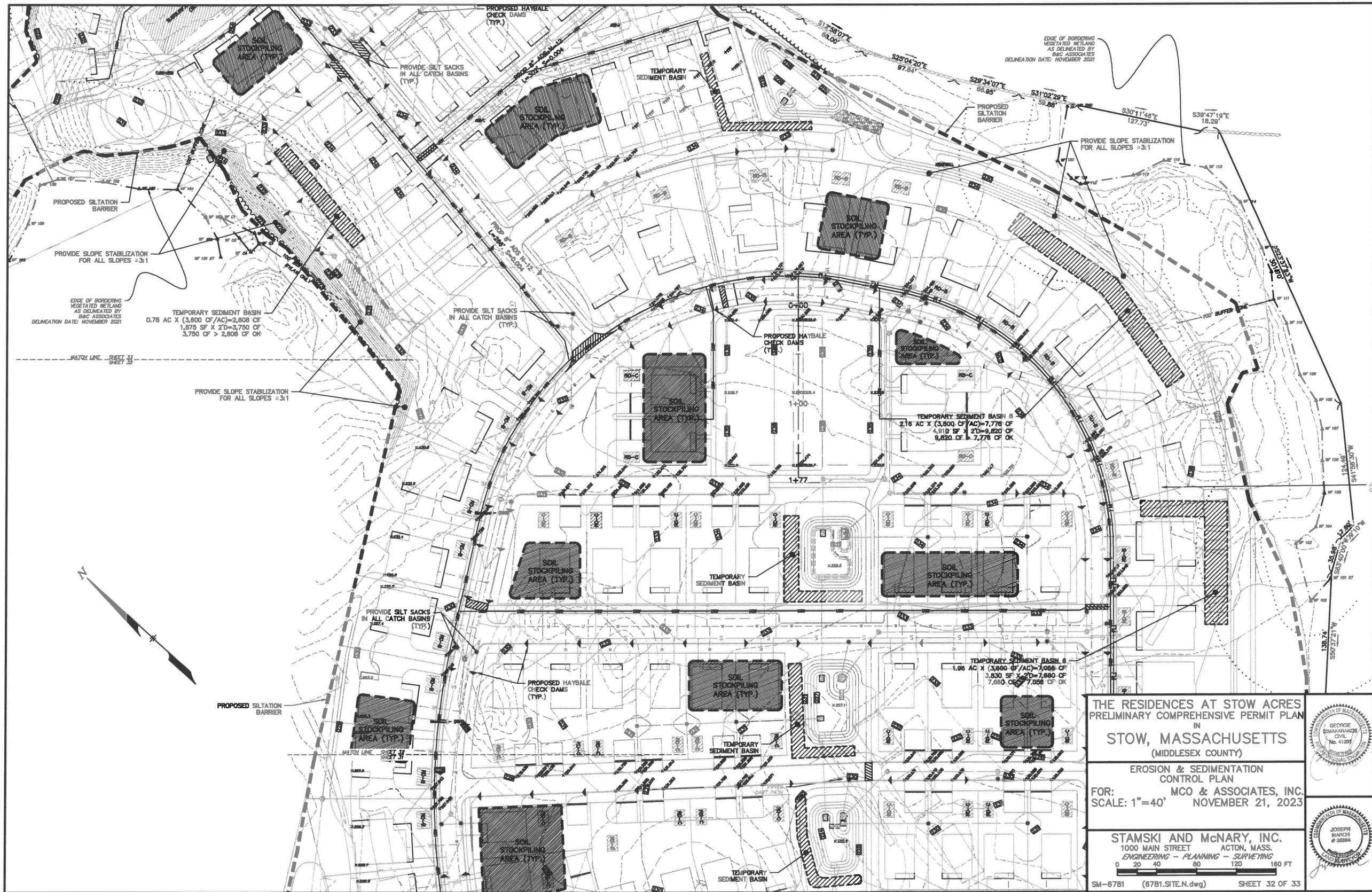
FOR: MCO & ASSOCIATES, INC.  
 SCALE: 1"=40' NOVEMBER 21, 2023

STAMSKI AND McNARY, INC.  
 1000 MAIN STREET ACTON, MASS.  
 ENGINEERING - PLANNING - SURVEYING

SM-6781 (6781.SITE.N.dwg) SHEET 31 OF 33







EDGE OF BORDERING VEGETATED WETLAND AS DELINEATED BY B&C ASSOCIATES DELINEATION DATE: NOVEMBER 2021

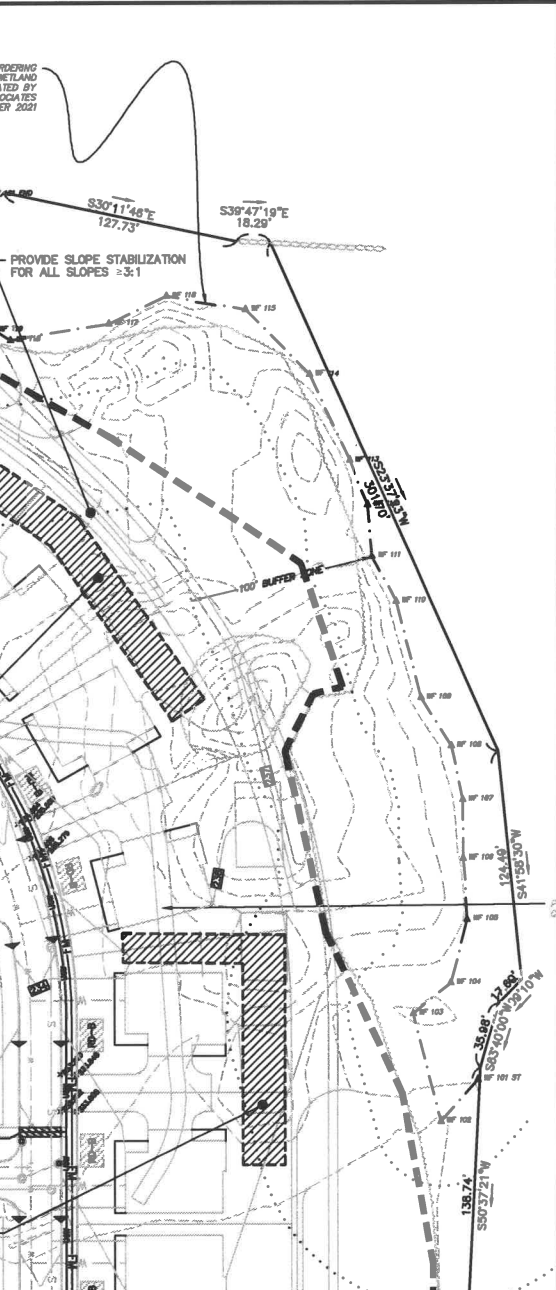
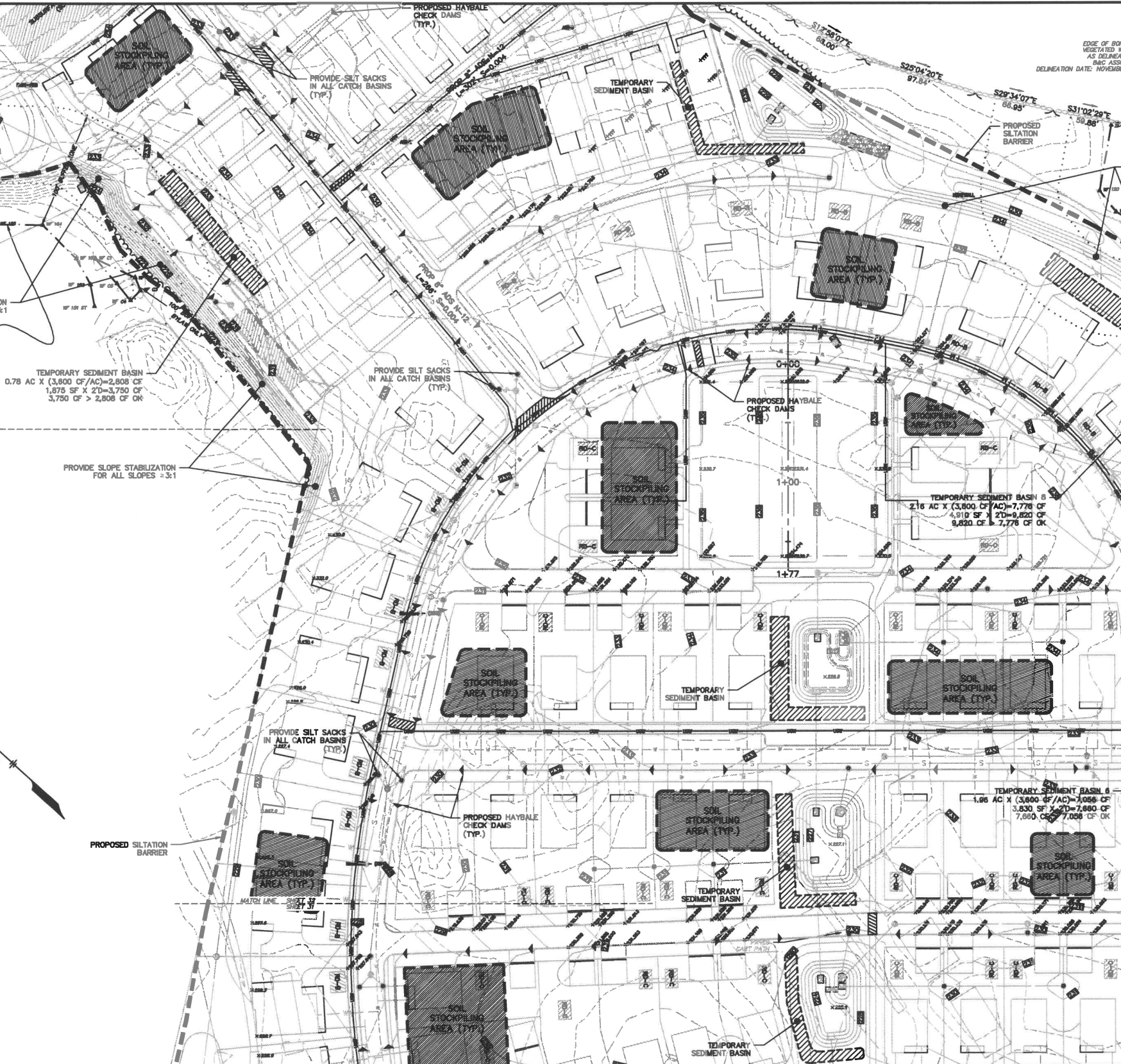
PROVIDE SLOPE STABILIZATION FOR ALL SLOPES = 3:1

PROPOSED SILTATION BARRIER

PROVIDE SILT SACKS IN ALL CATCH BASINS (TYP.)

TEMPORARY SEDIMENT BASIN 0.78 AC X (3,800 CF/AC)=2,808 CF 1,875 SF X 2D=3,750 CF 3,750 CF > 2,808 CF OK

MATCH LINE SHEET 31 SHEET 32



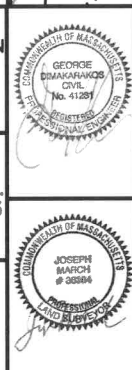
THE RESIDENCES AT STOW ACRES  
 PRELIMINARY COMPREHENSIVE PERMIT PLAN  
 IN  
 STOW, MASSACHUSETTS  
 (MIDDLESEX COUNTY)

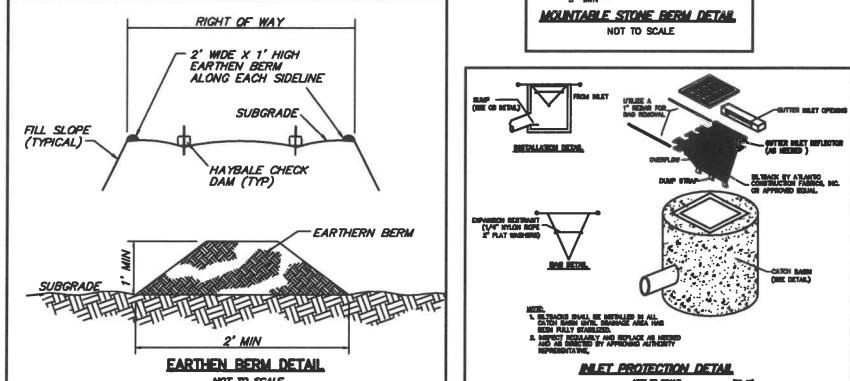
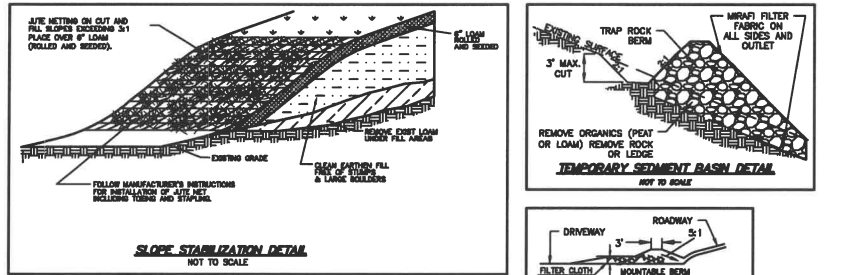
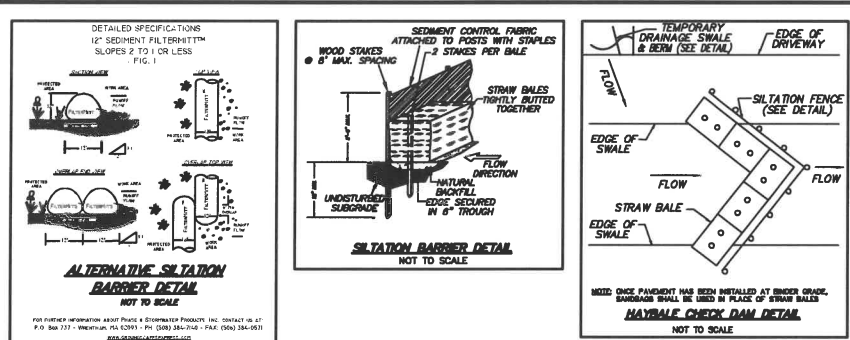
EROSION & SEDIMENTATION  
 CONTROL PLAN

FOR:  
 MCO & ASSOCIATES, INC.  
 SCALE: 1"=40' NOVEMBER 21, 2023

STAMSKI AND McNARY, INC.  
 1000 MAIN STREET ACTON, MASS.  
 ENGINEERING - PLANNING - SURVEYING

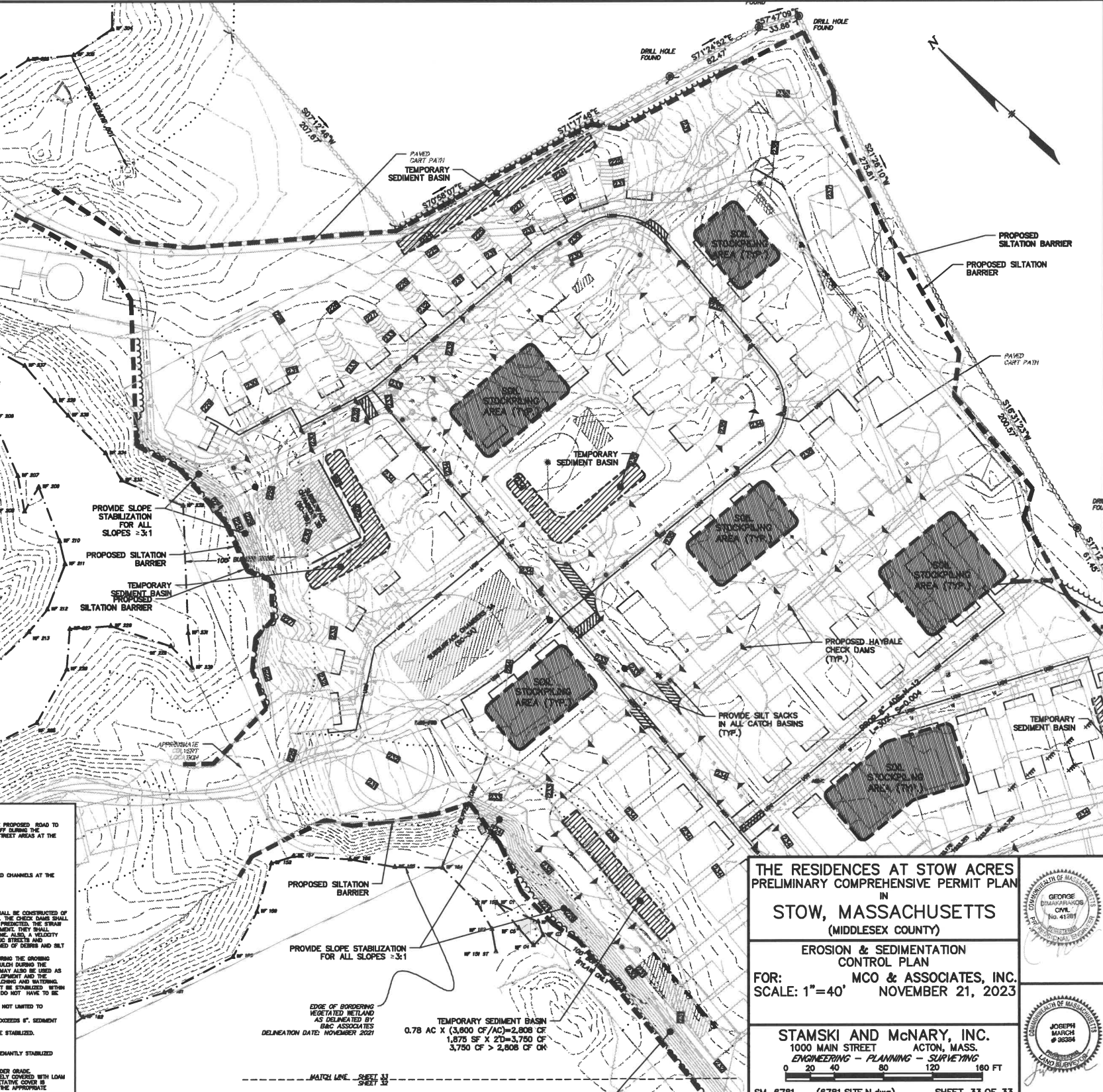
SM-6781 (6781.SITE.N.dwg) SHEET 32 OF 33





**EROSION AND SEDIMENTATION CONTROL NOTES**

1. THE LIMIT OF WORK LINE SHALL BE CLEARLY MARKED BY FIELD SURVEY PRIOR TO CONSTRUCTION WITHIN DESIGNATED AREA. LIMIT OF WORK LINE SHALL NOT EXCEED THE LINE SHOWN.
2. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED FOR EACH PHASE PRIOR TO ANY CONSTRUCTION ON THE SITE. CONSTRUCTION IS ENCOURAGED TO USE TRAFFICWAY IN LIAISON WITH SILTATION BARRIERS. JUTE NETTING OR HYDRO SEEDING WITH A BONDED FIBER MATS SHALL BE USED ON STEEP SLOPES.
3. DURING DEVELOPMENT AND CONSTRUCTION, APPROPRIATE PROTECTIVE MEASURES SHALL BE PROVIDED TO MINIMIZE CHANNELS FROM SURFACE WATER TO THE CUT FACE OF EXCAVATIONS OR THE SLOPE SURFACE OF FILL.
4. LAND SHALL BE DEVELOPED IN INCREMENTS OF WORKABLE SIZE WHICH CAN BE COMPLETED DURING A SINGLE CONSTRUCTION PERIOD. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COORDINATED WITH THE SEQUENCE OF GRADING, DEVELOPMENT, AND CONSTRUCTION OPERATIONS. CONTROL MEASURES SUCH AS HYDROSEEDING, BERM, INTERCEPT TRENCHES, TRENCHES, AND SEDIMENT TRAPS SHALL BE PUT INTO EFFECT PRIOR TO THE COMMENCEMENT OF EACH INCREMENT OF THE DEVELOPMENT/CONSTRUCTION PROCESS.
5. THE CONTRACTOR SHALL IMPROVE AND REPAIR ALL EROSION CONTROL DEVICES WHEN INTENSE RAINFALL IS PREDICTED. THE CONTRACTOR'S REPRESENTATIVE SHALL INSPECT THE CONSTRUCTION SITE AT LEAST EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 0.5 INCHES OR MORE. AREAS WHERE CONSTRUCTION IS ADJACENT TO THE EROSION CONTROL DEVICES SHALL BE INSPECTED AT LEAST TWICE FOR WEAR AREAS WITH SITES THAT HAVE BEEN FINALLY STABILIZED MUST BE INSPECTED AT LEAST ONCE A MONTH.
6. STOCK PILES SHALL BE SET BACK A MINIMUM OF 5 FEET FROM THE EDGE OF PAVEMENT. ALL STOCK PILES SHALL BE COVERED WITH SILT FENCES OR STRAW BALES TO PREVENT EROSION FROM EXPOSING THE STOCK PILES. STOCK PILES SHALL BE STABILIZED WITH SEED OR MULCH IF NOT USED WITHIN 21 DAYS. SOIL STOCK PILES SHALL BE COVERED WITH TEMPORARY VEGETATION OR FARTHING WITH TAMPULIN SHEETS.
7. DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN A ONE FOOT HIGH BY TWO FOOT WIDE EARTHEN BERM ALONG THE EDGE OF THE ROAD TO PREVENT ROAD TO SEDIMENT BASINS. STRAW BALES MAY BE UTILIZED TO DIVERT RUNOFF FROM THE ROAD LOW POINTS TO THE SEDIMENT BASIN DURING CONSTRUCTION UNTIL THE DRAINAGE SYSTEM IS INSTALLED (SEE EARTHEN BERM DETAIL).
8. A MOUNTAINABLE STONE BERM (SEE DETAIL) SHALL BE INSTALLED FOR ANY STRETCH OF ROAD WHERE CONSTRUCTION MOVES FORWARD AND PERFORMS CORRECTIVE ACTIONS AS APPROPRIATE.
9. ALL CATCH BASINS AND MANHOLE BINS SHALL BE COVERED WITH SILT BAGS DURING CONSTRUCTION. CATCH BASIN BINS ARE TO BE SET AT BRIDGE GRADE UNLESS IT IS TRUE TO APPLY THE PREVIOUS REQUIREMENTS. CATCH BASIN BINS SHALL REMAIN AT BRIDGE GRADE FOR NO MORE THAN 2 WEEKS PRIOR TO FINAL PAVING. SEE INLET PROTECTION DETAIL.
10. ALL CATCH BASIN BINS AND DRAINAGE BASINS SHALL BE CLEANED DURING AND FOLLOWING CONSTRUCTION. PROTECTION DETAIL.
11. SEDIMENT BASINS (DRAIN BASINS, DE-SILTING BASINS, OR SILT TRAPS) SHALL BE INSTALLED IN CONJUNCTION WITH THE BERM DRAINING OPERATIONS AND MAINTAINED THROUGH THE DEVELOPMENT PROCESS TO REMOVE SEDIMENT FROM RUNOFF WATERS DRAINING FROM LAND UNDERGOING DEVELOPMENT. SEDIMENT BASINS SHALL BE INSTALLED OUTSIDE OF INFILTRATION BASINS AND PROPOSED SLOPE LEACHING AREAS.
12. THE DEVELOPER IS REQUIRED TO CLEAN UP ANY SAND, SILT, OR DEBRIS WHICH EXPOSES FROM THE SITE ONTO ANY PUBLIC STREET OR PRIVATE PROPERTY AND TO REMOVE SILT OR DEBRIS THAT ENTERS ANY EXISTING DRAINAGE SYSTEM INCLUDING CATCH BASIN TRAPS, PIPE LINES, MANHOLES AND DITCHES.
13. VELOCITY CHECK DAMS - STRAW BALES WILL BE USED AROUND THE CATCH BASINS ON THE PROPOSED ROAD TO PROTECT THEM FROM THE EXCESSIVE FORCE OF CHECK DAMS TO SLIP THE RUNOFF DURING THE CONSTRUCTION. THE DEVELOPER SHALL PROVIDE VELOCITY CHECK DAMS IN ALL UNPAVED STREET AREAS AT THE INTERVALS INDICATED BELOW:  
GRADE OF THE ROAD:  
LESS THAN 100' 100 FEET  
40' TO 100' 20 FEET  
OVER 100' 10 FEET  
THE DEVELOPER SHALL PROVIDE VELOCITY CHECK DAMS IN ALL UN-VEGETATED OR UNPAVED CHANNELS AT THE INTERVALS INDICATED BELOW:  
GRADE OF THE CHANNEL:  
LESS THAN 30' 100 FEET  
30' TO 60' 20 FEET  
OVER 60' 10 FEET  
\*CHECK DAMS IN UNPAVED DRIVES AND UN-VEGETATED OR UNPAVED GRADED CHANNELS SHALL BE CONSTRUCTED OF STAKED STRAW BALES OR OTHER EROSION RESISTANT MATERIALS APPROVED BY THE BOARD. THE CHECK DAMS SHALL BE INSTALLED AT THE END OF EACH WORKING DAY, AND IN THE EVENT OF RAINFALL BEING PREDICTED, THE STRAW BALES SHALL BE SECURELY STAKED TO PREVENT OVERLAPPING, FLUTTERING, OR DISPLACEMENT. THEY SHALL EXTEND COMPLETELY ACROSS THE STREET OR CHANNEL AT RIGHT ANGLES TO THE CENTERLINE. ALSO, A VELOCITY CHECK DAM SHALL BE PROVIDED ALONG THE ENTRANCE OF THE LOT TO PROTECT THE PUBLIC STREET AND ADJACENT PROPERTIES FROM THE HAZARDS OF EROSION. ALL CHECK DAMS SHALL BE CLEANED OF DEBRIS AND SILT PERIODICALLY.
14. ALL CUT AND FILL SLOPES SHALL BE IMMEDIATELY COVERED WITH 8" LOAM AND SEEDS DURING THE GROWING SEASON (MARCH THROUGH MAY) AND OCTOBER 15) OR COVERED WITH A HAY MULCH DURING THE NON-GROWING SEASON (NOVEMBER 1 TO APRIL 1 AND JUNE AND JULY). STUMP OPERATIONS MAY ALSO BE USED AS AN ALTERNATIVE TO HAY MULCH AND SHALL ALSO BE USED AS MULCH BETWEEN LOT DEVELOPMENT AND THE ROADWAY. PERMANENT SEEDING MAY BE DONE IN PEAK SUMMER MONTHS WITH PROPER WEEDING AND WATERING.
15. DISTURBED AREAS WHERE CONSTRUCTION HAS PERMANENTLY OR TEMPORARILY CEASED MUST BE STABILIZED WITHIN 14 DAYS OF THE LAST DISTURBANCE. AREAS WHICH WILL BE REDEVELOPED WITHIN 21 DAYS DO NOT HAVE TO BE STABILIZED.
16. ADDITIONAL EROSION CONTROL MEASURES SHALL BE STOCK-PILED ON-SITE, INCLUDING BUT NOT LIMITED TO CRUSHED STONE, STRAW BALES, SILT FENCE, AND EROSION CONTROL MATS.
17. THE SEDIMENT SHALL BE REMOVED BEHIND ALL STRAW BALES AND SILT FENCES IF DEPTH EXCEEDS 8". SEDIMENT SHALL BE REMOVED TO OUTSIDE THE BUFFER ZONE OF THE WETLANDS WHERE APPLICABLE.
18. THE EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL ALL TEMPORARY SURFACES ARE STABILIZED.
19. REMOVAL OF EXISTING VEGETATION SHALL BE WITHIN THE LIMIT OF WORK AREA.
20. ALL EXISTING SOIL SHALL REMAIN ON-SITE IN AREAS TO BE DESIGNATED BY THE OWNER.
21. DISTURBED SOIL RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS OF REMOVAL.
22. ALL DRAINAGE BASINS SHALL BE FUNCTIONAL AT BRIDGE GRADE.
23. SAND BAGS SHALL BE USED IN PLACE OF VELOCITY CHECK DAMS WHEN ROAD ARE AT BRIDGE GRADE.
24. FILLING FINAL SURFACE OF ROADWAY UNTIL DISTURBED AREAS SHALL BE IMMEDIATELY COVERED WITH LOAM AND SEED. WEEDY AREAS SHALL BE CLOSELY MONITORED UNTIL ADEQUATE GRASS OR VEGETATIVE COVER IS ESTABLISHED. CONTRACTOR SHALL EVALUATE THE AREA FOR SIGNS OF EROSION AND TAKE THE APPROPRIATE CORRECTIVE ACTION.



THE RESIDENCES AT STOW ACRES  
PRELIMINARY COMPREHENSIVE PERMIT PLAN  
IN  
STOW, MASSACHUSETTS  
(MIDDLESEX COUNTY)

EROSION & SEDIMENTATION  
CONTROL PLAN

FOR:  
MCO & ASSOCIATES, INC.  
NOVEMBER 21, 2023

STAMSKI AND McNARY, INC.  
1000 MAIN STREET  
ACTON, MASS.  
ENGINEERING - PLANNING - SURVEYING

SM-6781 (6781.SITE.N.dwg) SHEET 33 OF 33

GEORGE  
DUMAS-PRANCE  
CIVIL  
No. 41581

JOSEPH  
MARCUS  
No. 28304