

**APPLICATION FOR  
URBAN DESIGN COMMISSION  
REVIEW AND APPROVAL**

**AGENDA ITEM # \_\_\_\_\_**  
**Project # \_\_\_\_\_**  
**Legistar # \_\_\_\_\_**

DATE SUBMITTED: July 16, 2014

**Action Requested**

Informational Presentation

Initial Approval and/or Recommendation

UDC MEETING DATE: July 23, 2014

Final Approval and/or Recommendation

**PLEASE PRINT!**

**PLEASE PRINT!**

PROJECT ADDRESS: 1936 Tennyson Lane

ALDERMANIC DISTRICT: Alderman Larry Palm

OWNER/DEVELOPER (Partners and/or Principals) ARCHITECT/DESIGNER/OR AGENT:  
Rita Giovannoni, President Dan Kabara, Senior Associate

ILI Senior Housing – Tennyson Lane, LLC Engberg Anderson

2970 Chapel Valley Road, Suite 203

Madison, WI 53711

CONTACT PERSON: Dan Kabara, Senior Associate, Engberg Anderson

Address: 320 East Buffalo, Suite 500

Milwaukee, WI 53202

Phone: (414) 944-9146

Fax: \_\_\_\_\_

E-mail address: danielk@engberganderson.com

**TYPE OF PROJECT:**

(See Section A for:)

Planned Unit Development (PUD)

General Development Plan (GDP)

Specific Implementation Plan (SIP)

Planned Community Development (PCD)

General Development Plan (GDP)

Specific Implementation Plan (SIP)

Planned Residential Development (PRD)

New Construction or Exterior Remodeling in an Urban Design District \* (A public hearing is required as well as a fee)

School, Public Building or Space (Fee may be required)

New Construction or Addition to or Remodeling of a Retail, Hotel or Motel Building Exceeding 40,000 Sq. Ft.

Planned Commercial Site

(See Section B for:)

New Construction or Exterior Remodeling in C4 District (Fee required)

(See Section C for:)

R.P.S.M. Parking Variance (Fee required)

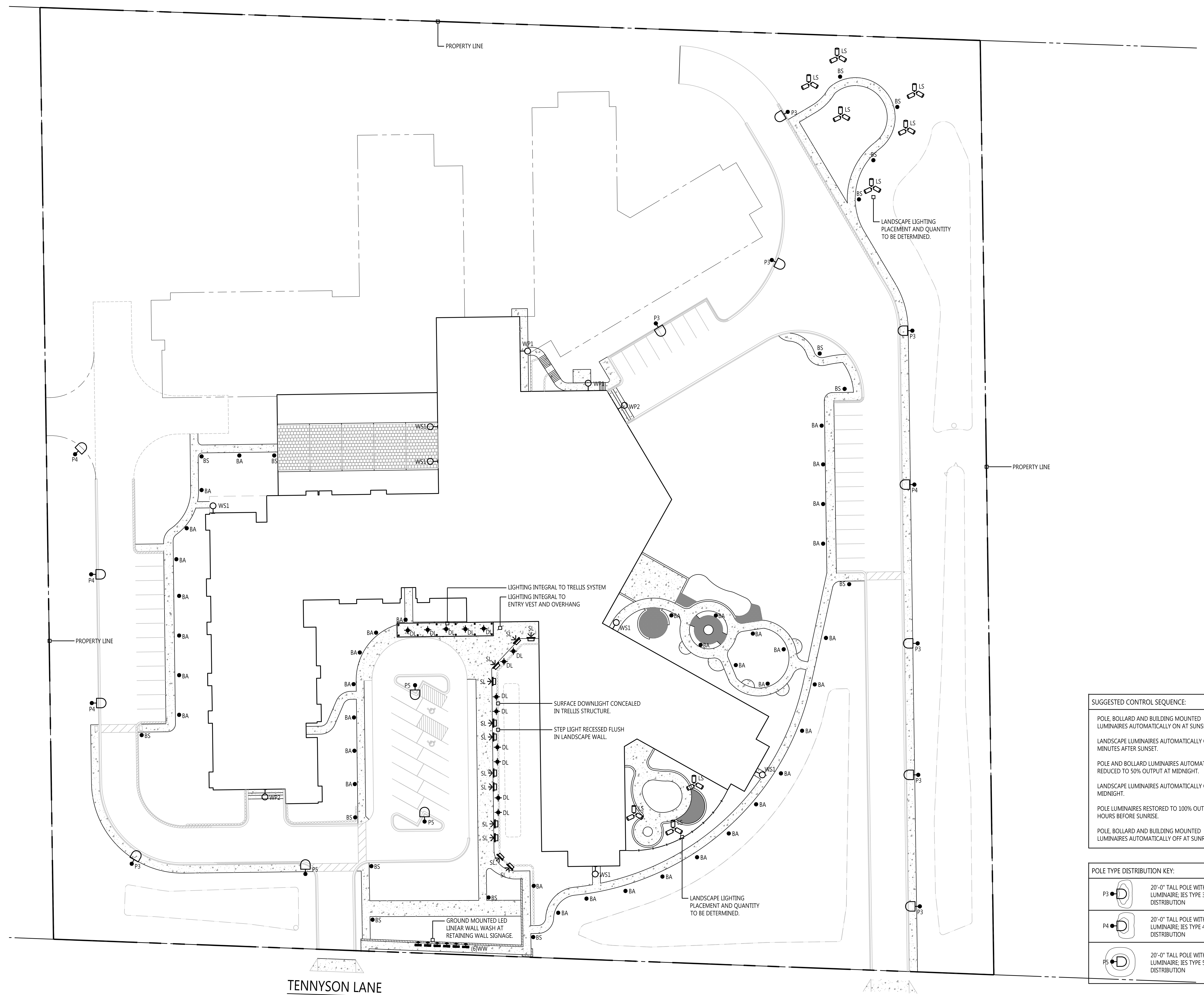
(See Section D for:)

Comprehensive Design Review\* (Fee required)

Street Graphics Variance\* (Fee required)

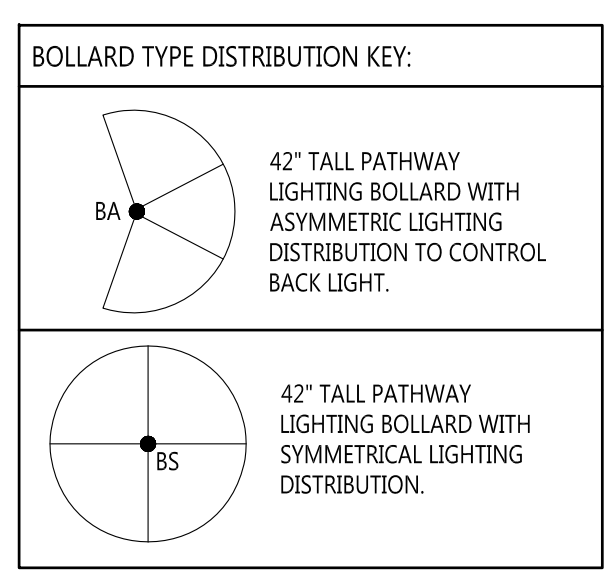
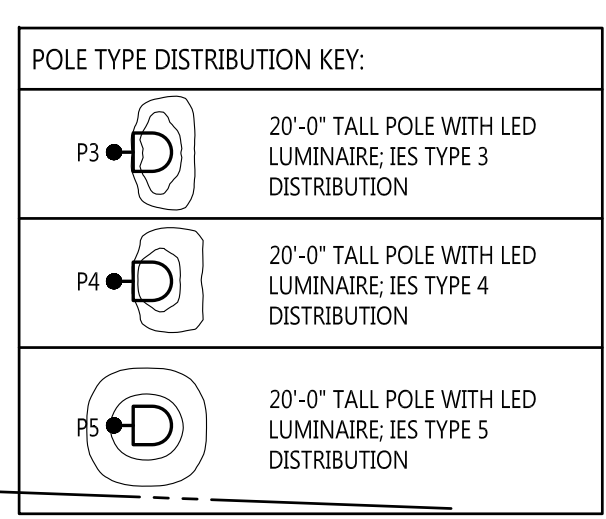
Other \_\_\_\_\_

\*Public Hearing Required (Submission Deadline 3 Weeks in Advance of Meeting Date)



**SUGGESTED CONTROL SEQUENCE:**

- POLE, BOLLARD AND BUILDING MOUNTED LUMINAIRES AUTOMATICALLY ON AT SUNSET.
- LANDSCAPE LUMINAIRES AUTOMATICALLY ON 30 MINUTES AFTER SUNSET.
- POLE AND BOLLARD LUMINAIRES AUTOMATICALLY REDUCED TO 50% OUTPUT AT MIDNIGHT.
- LANDSCAPE LUMINAIRES AUTOMATICALLY OFF AT MIDNIGHT.
- POLE LUMINAIRES RESTORED TO 100% OUTPUT TWO HOURS BEFORE SUNRISE.
- POLE, BOLLARD AND BUILDING MOUNTED LUMINAIRES AUTOMATICALLY OFF AT SUNRISE.



**CALCULATION SUMMARY**

LABEL	CALCTYPE	UNITS	MIN	AVG	AVG/MIN
OVERALL SITE	ILLUMINANCE	FC	0.0	0.17	N/A
EAST ENTRANCE DRIVE	ILLUMINANCE	FC	0.4	0.93	2.33
EAST PARKING	ILLUMINANCE	FC	0.5	0.78	1.56
SOUTH PARKING	ILLUMINANCE	FC	0.3	1.26	4.20
STAFF PARKING	ILLUMINANCE	FC	0.5	0.95	1.90
WEST ENTRANCE DRIVE	ILLUMINANCE	FC	0.3	1.05	3.50
WEST PARKING	ILLUMINANCE	FC	0.6	0.92	1.53



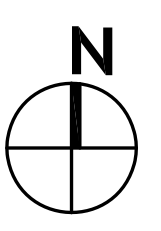
# Tennyson Senior Living Community

**PRELIMINARY SITE LIGHTING PLAN**

1" = 30'-0"

May 7, 2014

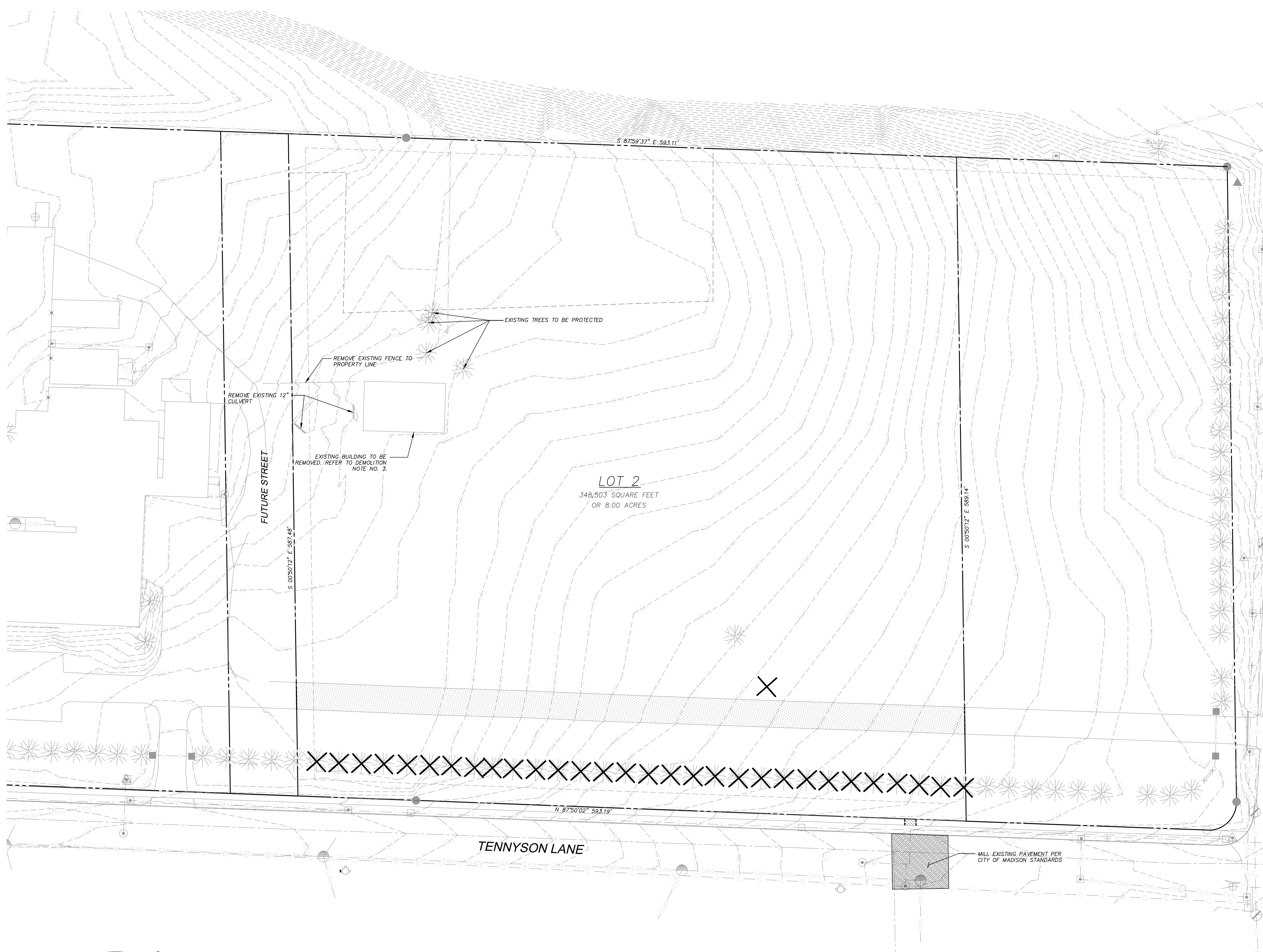
Engberg Anderson Project No. 132290











**LEGEND (PROPOSED)**

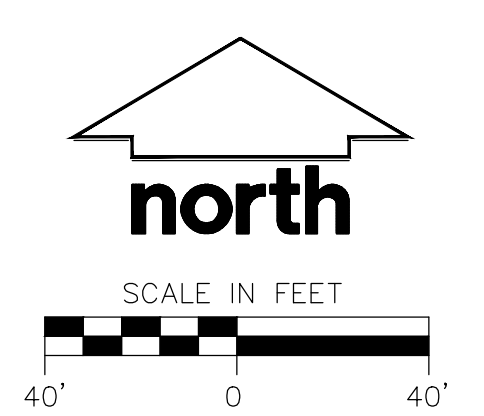
PROPERTY LINE  
LIMITS OF DISTURBANCE  
SAWCUT  
ASPHALT/BASE REMOVAL  
CONCRETE/BASE REMOVAL  
CONCRETE/BASE REMOVAL  
REMOVE / RELOCATE TREE

**GENERAL NOTES**

- REFER TO THE EXISTING CONDITIONS SURVEY, PROVIDED BY OTHERS, FOR EXISTING CONDITIONS NOTES AND LEGEND. JSD DOES NOT TAKE RESPONSIBILITY FOR ANY BENCHMARKS LOCATED ON THE SURVEY PROVIDED BY OTHERS.
- ALL WORK IN THE ROW SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION AND CITY OF MADISON REQUIREMENTS.
- NO SITE GRADING OUTSIDE OR DOWNSLOPE OF PROPOSED SILT FENCE LOCATION. NO LAND DISTURBANCE BEYOND PROPERTY LINES UNLESS OTHERWISE SHOWN.
- THIS PROJECT HAS BEEN DESIGNED AND WILL BE CONSTRUCTED IN COMPLIANCE WITH ALL OF THE WDNR WRAPP PERMIT APPLICATION STANDARDS.

**DEMOLITION NOTES**

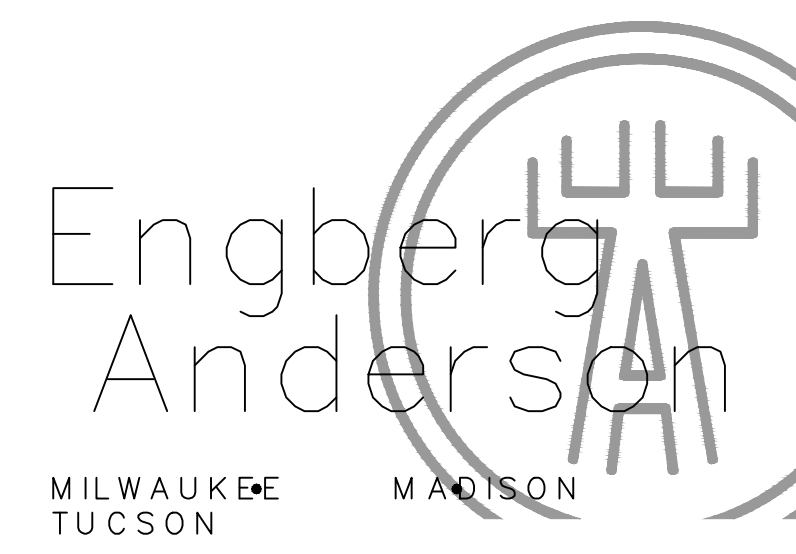
- THIS PLAN INDICATES ITEMS ON THE PROPERTY INTENDED FOR DEMOLITION BASED ON THE CURRENT SITE DESIGN THAT HAVE BEEN IDENTIFIED BY A REASONABLE OBSERVATION OF THE EXISTING CONDITIONS THROUGH FIELD SURVEY RECONNAISSANCE, "DIGGER'S HOTLINE" LOCATION, AND GENERAL "STANDARD OF CARE". THERE MAY BE ADDITIONAL ITEMS THAT CAN NOT BE IDENTIFIED BY A REASONABLE ABOVE-GROUND OBSERVATION, OF WHICH THE ENGINEER WOULD HAVE NO KNOWLEDGE OR MAY BE A PART OF ANOTHER DESIGN DISCIPLINE. IT IS THE CONTRACTOR'S/BIDDER'S RESPONSIBILITY TO REVIEW THE PLANS, INSPECT THE SITE AND PROVIDE HIS OWN DUE DILIGENCE TO INCLUDE IN HIS BID WHAT ADDITIONAL ITEMS, IN HIS OPINION, MAY BE NECESSARY FOR DEMOLITION. ANY ADDITIONAL ITEMS IDENTIFIED BY THE CONTRACTOR/BIDDER SHALL BE IDENTIFIED IN THE BID AND REPORTED TO THE ENGINEER OF RECORD. JSD TAKES NO RESPONSIBILITY FOR ITEMS ON THE PROPERTY THAT COULD NOT BE LOCATED BY A REASONABLE OBSERVATION OF THE PROPERTY OR OF WHICH THEY WOULD HAVE NO KNOWLEDGE.
- ALL PERIMETER EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO THE START OF DEMOLITION ACTIVITIES. CONTRACTOR SHALL KEEP ALL STREETS FREE AND CLEAR OF ALL CONSTRUCTION RELATED DIRT, DUST AND DEBRIS.
- BUILDING REMOVALS SHALL BE BY A QUALIFIED CONTRACTOR. CONTRACTOR TO FOLLOW ALL DEMOLITION REGULATIONS, DISCONNECT ALL UTILITIES, OBTAIN ALL APPLICABLE PERMITS AND DISPOSE OF ALL BUILDING MATERIALS IN APPROPRIATE LANDFILLS. NO PORTIONS OF THE BUILDING SHALL NOT BE BURIED ON SITE. ANY CONTAMINATED SOILS SHALL BE REMOVED TO A LANDFILL IN ACCORDANCE WITH APPROPRIATE STATE AND FEDERAL REGULATIONS. THE OWNER WILL PROVIDE ENVIRONMENTAL DOCUMENTATION AVAILABLE. THIS CONTRACTOR SHALL SUBMIT THE RECYCLING PLAN PER CITY OF MADISON REQUIREMENTS.
- ABANDONED/REMOVED ITEMS SHALL BE DISPOSED OF OFF SITE UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL INSTALL A PEDESTRIAN FENCE AROUND ALL EXCAVATIONS TO BE LEFT OPEN OVERNIGHT AS REQUIRED.
- CONTRACTOR TO REMOVE EXISTING UTILITY PIPE OR PROVIDE PIPE BACK-FILLING AFTER REMOVAL OF EXISTING UTILITIES WITHIN BUILDING FOOTPRINT USING "LOW DENSITY CONCRETE/FLOWABLE FILL".
- RESTORATION OF THE EXISTING ROADWAY RIGHT-OF-WAYS ARE CONSIDERED INCIDENTAL AND SHOULD BE PART OF THE COST OF THE UNDERGROUND IMPROVEMENTS, DEMOLITION AND REMOVAL. THIS INCLUDES CURB & GUTTER, SIDEWALK, TOPSOIL, SEEDING AND MULCHING.
- GRANULAR BACKFILL MATERIALS ARE REQUIRED IN ALL UTILITY TRENCHES UNDER SIDEWALKS AND PROPOSED PAVED AREAS; ALL UTILITY TRENCH BACKFILL SHALL BE COMPACTED PER SPECIFICATIONS.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR:
  - EXAMINING ALL SITE CONDITIONS RELATIVE TO THE CONDITIONS INDICATED ON THE ENGINEERING DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER AND RESOLVED PRIOR TO THE START OF CONSTRUCTION.
  - VERIFYING UTILITY ELEVATIONS AND NOTIFYING ENGINEER OF ANY DISCREPANCIES. NO WORK SHALL BE PERFORMED UNTIL THE DISCREPANCIES ARE RESOLVED.
  - NOTIFYING ALL UTILITIES PRIOR TO THE REMOVAL OF ANY UNDERGROUND UTILITIES.
  - NOTIFYING THE DESIGN ENGINEER AND LOCAL CONTROLLING MUNICIPALITY 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR APPROPRIATE CONSTRUCTION INSPECTION.
- ANY SANITARY SEWER, SANITARY SEWER SERVICES, WATER MAIN, WATER SERVICES, STORM SEWER, OR OTHER UTILITIES, WHICH ARE DAMAGED BY THE CONTRACTORS, SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY DURING THE CONSTRUCTION OF THESE IMPROVEMENTS.
- THIS SITE IS PART OF A PARCEL THAT WAS IDENTIFIED IN THE BUREAU OF REMEDIATION AND REDEVELOPMENT TRACKING SYSTEM (BRRTS) 03-13-553975. SEE ENVIRONMENTAL DOCUMENTS PROVIDED BY THE OWNER FOR SPECIFIC REQUIREMENTS.



**JSD Professional Services, Inc.**  
• Engineers • Surveyors • Planners

"BUILDING RELATIONSHIPS WITH A COMMITMENT TO CLIENT SATISFACTION THROUGH TRUST, QUALITY AND EXPERIENCE"

MADISON REGIONAL OFFICE  
161 HORIZON DRIVE, SUITE 101  
VERONA, WISCONSIN 53593  
608.848.5060 PHONE | 608.848.2255 FAX



# Tennyson Senior Living Community

DEMOLITION PLAN  
1" = 40'-0"  
JULY 9, 2014  
Engberg Anderson Project No. 132290

**C100**

**LEGEND (PROPOSED)**

- PROPERTY LINE
- BUILDING FIRST FLOOR
- BUILDING LOWER LEVEL
- FUTURE BUILDING ADDITION
- EDGE OF PAVEMENT
- TEMPORARY PAVEMENT EDGE
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- 18" STANDARD CURB AND GUTTER
- 18" REJECT CURB AND GUTTER
- STONE RETAINING WALL (SEE LANDSCAPE PLANS FOR DETAILS)
- FENCE LINE (SEE LANDSCAPE PLANS FOR DETAILS)
- MODULAR BLOCK / LIMESTONE ROCK RETAINING WALL
- STORMWATER MANAGEMENT AREA

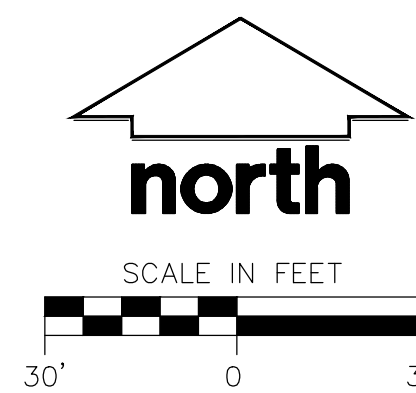
**GENERAL NOTES**

1. REFER TO THE EXISTING CONDITIONS SURVEY, PROVIDED BY OTHERS, FOR EXISTING CONDITIONS NOTES AND LEGEND. JSD DOES NOT TAKE RESPONSIBILITY FOR ANY BENCHMARKS LOCATED ON THE SURVEY PROVIDED BY OTHERS.
2. ALL WORK IN THE ROW SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION AND CITY OF MADISON REQUIREMENTS.
3. NO SITE GRADING OUTSIDE OR DOWNSLOPE OF PROPOSED SILT FENCE LOCATION. NO LAND DISTURBANCE BEYOND PROPERTY LINES UNLESS OTHERWISE SHOWN.
4. THIS PROJECT HAS BEEN DESIGNED AND WILL BE CONSTRUCTED IN COMPLIANCE WITH ALL OF THE WDNR WRAPP PERMIT APPLICATION STANDARDS.

**SITE PLAN NOTES**

1. ALL DIMENSIONS TO FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL RADII TO FACE OF CURB UNLESS OTHERWISE NOTED.
3. ALL PRIVATE CURB AND GUTTER SHALL BE 18" STANDARD CURB AND GUTTER. ANY REQUIRED REPLACEMENT OF PUBLIC CURB AND GUTTER SHALL MATCH EXISTING AND MEET THE REQUIREMENTS OF THE CITY OF VERONA.
4. CONTRACTOR SHALL PROVIDE CONTROL JOINTS AND CONSTRUCTION JOINTS OF ONE-QUARTER CONCRETE THICKNESS AT AN EQUAL RATIO OF LENGTH TO WIDTH WHEREVER POSSIBLE WITH A MAXIMUM LENGTH BETWEEN JOINTS OF 8' ON CENTER.
5. CONTRACTOR SHALL PROVIDE EXPANSION JOINTS IN SIDEWALKS AT A MAXIMUM 24' ON CENTER.
6. EXTERIOR CONCRETE SURFACES SHALL BE BROOM FINISHED.
7. ALL CONCRETE SURFACES TO BE SEALED WITH TYPE TK-26UV CONCRETE SEALANT.
8. USE 4" WIDE, HIGH VISIBILITY YELLOW LATEX PAINT FOR STALL LINES.
9. MARK AND STRIPE ADA PARKING SPACES APPROPRIATELY.
10. 2' x 4' TRUNCATED DOME SECTIONS SHALL BE PLACED AT ALL ADA RAMPS.
11. BIKE RACKS SHALL BE LOCATED ON A 4" THICK CONCRETE PAD OVER 4" OF AGGREGATE BASE. EACH BIKE PARKING STALL SHALL BE AT LEAST 2'x6'. BIKE RACK SHALL BE APPROVED BY OWNER AND INSTALLED INTEGRAL TO THE CONCRETE PAD.
12. DETAILS OF WALK LAYOUT WILL BE PROVIDED IN ELECTRONIC FORMAT FOR LAYOUT.
13. SEE LANDSCAPE PLANS FOR HARDSCAPE AND LANDSCAPE OF SPECIAL GARDEN AREAS AS NOTED.

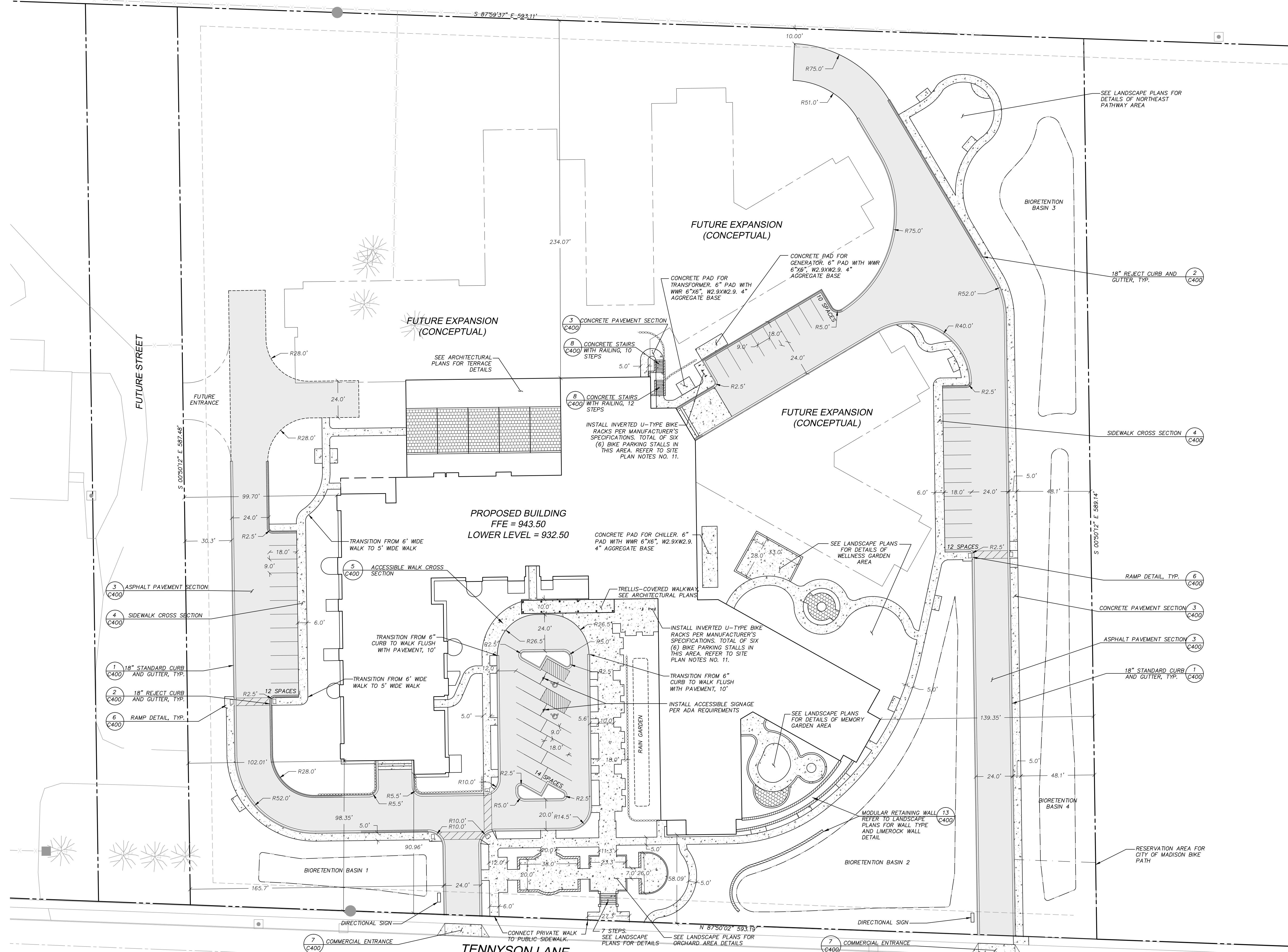
SITE INFORMATION BLOCK	
Site Location	Madison, WI
Site Acreage (Total)	6.00
Disturbed Area	291,450 S.F.
Existing Site Zoning	PD-GDP
Proposed use of property:	300 UNIT SENIOR HOUSING AND ASSISTED LIVING FACILITY
Building Information:	
Number of stories (above grade)	2
Building height	18-20'
Total square footage of building	42,610 S.F.
Number of surface parking stalls:	
Large car	46
Accessible	2
Number of underground parking stalls:	
Large car	86
Accessible	0
Number of bicycle stalls shown:	12
Existing Impervious Surface Area	17,266 S.F.
Existing Pervious Surface Area	331,214 S.F.
Existing Impervious Surface Area Ratio	0.050
Proposed Impervious Surface Area	119,901 S.F.
Proposed Pervious Surface Area	228,602 S.F.
Proposed Impervious Surface Area Ratio	0.344
Usable Open Space	188,678 S.F.



**JSD Professional Services, Inc.**  
 • Engineers • Surveyors • Planners

"BUILDING RELATIONSHIPS WITH A COMMITMENT TO CLIENT SATISFACTION THROUGH TRUST, QUALITY AND EXPERIENCE"

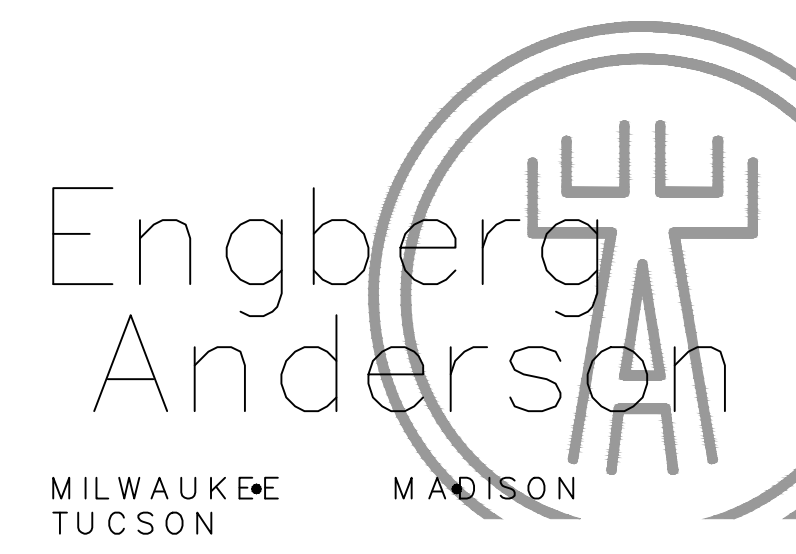
MADISON REGIONAL OFFICE  
 161 HORIZON DRIVE, SUITE 101  
 VERONA, WISCONSIN 53593  
 608.848.5060 PHONE | 608.848.2255 FAX



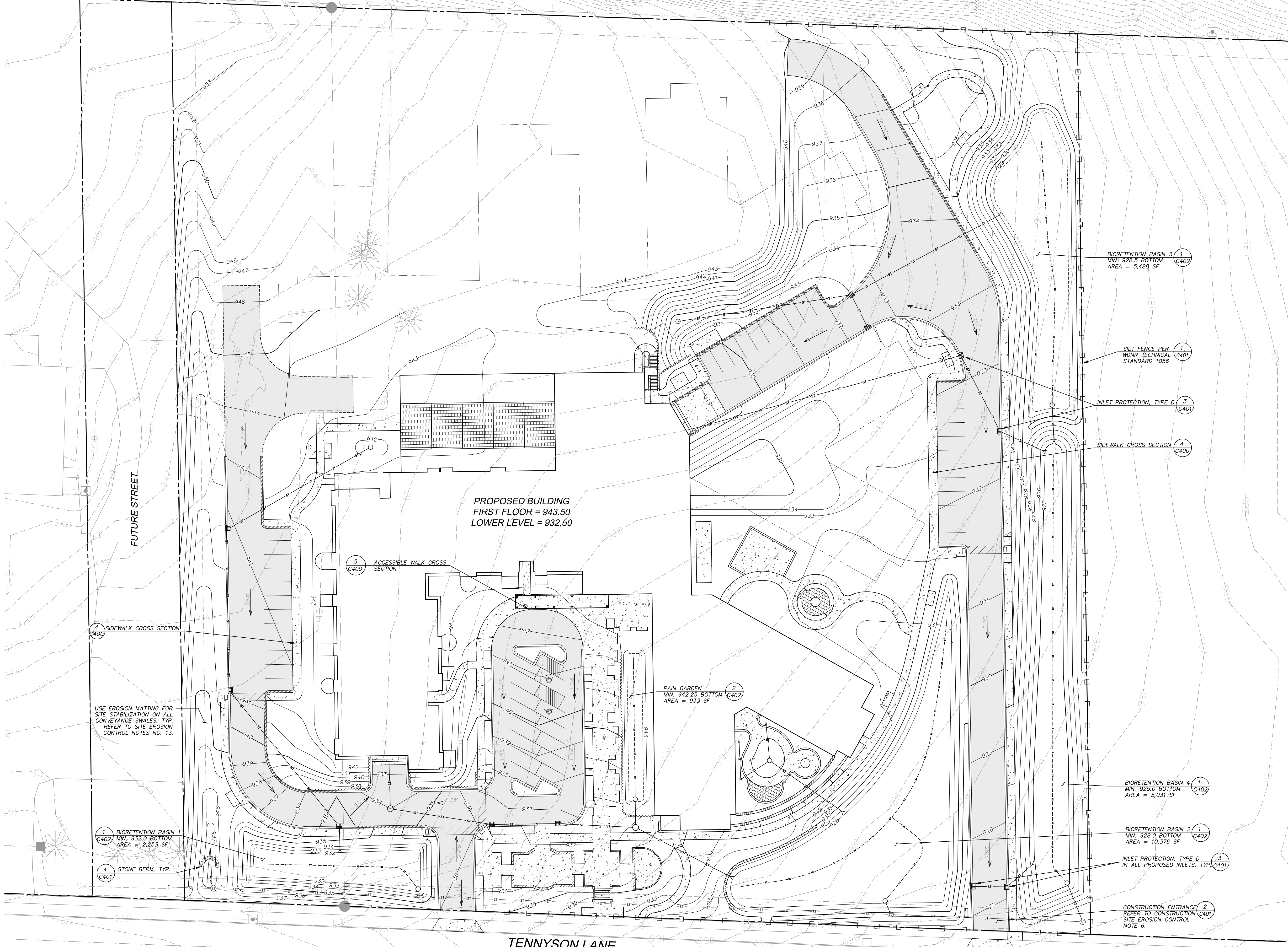
# Tennyson Senior Living Community

SITE PLAN  
 1" = 30'-0"  
 JULY 9, 2014

Engberg Anderson Project No. 132290



**C101**



**LEGEND (PROPOSED)**

---	PROPERTY LINE
---	BUILDING FIRST FLOOR
---	BUILDING LOWER LEVEL
---	FUTURE BUILDING ADDITION
---	PROPOSED 1 FOOT CONTOUR
---	PROPOSED 5 FOOT CONTOUR
---	EDGE OF PAVEMENT
---	TEMPORARY PAVEMENT EDGE
---	SILT FENCE
---	ASPHALT PAVEMENT
---	CONCRETE PAVEMENT
---	18" STANDARD CURB AND GUTTER
---	18" REJECT CURB & GUTTER
---	STONE RETAINING WALL (SEE LANDSCAPE PLANS FOR DETAILS)
---	FENCE LINE (SEE LANDSCAPE PLANS FOR DETAILS)

- GENERAL NOTES**
- REFER TO THE EXISTING CONDITIONS SURVEY, PROVIDED BY OTHERS, FOR EXISTING CONDITIONS NOTES AND LEGEND. JSD DOES NOT TAKE RESPONSIBILITY FOR ANY BENCHMARKS LOCATED ON THE SURVEY PROVIDED BY OTHERS.
  - ALL WORK IN THE ROW SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION AND CITY OF MADISON REQUIREMENTS.
  - NO SITE GRADING OUTSIDE OR DOWNSLOPE OF PROPOSED SILT FENCE LOCATION. NO LAND DISTURBANCE BEYOND PROPERTY LINES UNLESS OTHERWISE SHOWN.
  - THIS PROJECT HAS BEEN DESIGNED AND WILL BE CONSTRUCTED IN COMPLIANCE WITH ALL OF THE WDNR WRAPP PERMIT APPLICATION STANDARDS.

- CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS**
- ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE DESIGNED AND IMPLEMENTED IN ACCORDANCE WITH THE CURRENT DEPARTMENT OF NATURAL RESOURCES EROSION AND SEDIMENT CONTROL TECHNICAL STANDARDS WHICH ARE AVAILABLE AT: <http://www.dnr.state.wis.us/funof/stormwater/techstds.htm>
  - INSTALL EROSION CONTROL MEASURES PRIOR TO ANY SITE WORK, INCLUDING GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIALS AS SHOWN ON PLAN. MODIFICATIONS TO SEDIMENT CONTROL DESIGN MAY BE CONDUCTED TO MEET UNFORESEEN FIELD CONDITIONS IF MODIFICATIONS CONFORM TO WDNR TECHNICAL STANDARDS.
  - INSPECTIONS AND MAINTENANCE OF ALL EROSION CONTROL MEASURES SHALL BE ROUTINE (ONCE PER WEEK MINIMUM) TO ENSURE PROPER FUNCTION OF EROSION CONTROLS AT ALL TIMES. EROSION CONTROL MEASURES ARE TO BE IN WORKING ORDER AT THE END OF EACH WORK DAY.
  - INSPECT EROSION CONTROL MEASURES AFTER EACH 1/2" OR GREATER RAINFALL. REPAIR ANY DAMAGE OBSERVED DURING THE INSPECTION.
  - EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER.
  - INSTALL A TRACKING PAD, 50' LONG AND NO LESS THAN 12" THICK BY USE OF 3" CLEAR STONE. TRACKING PADS ARE TO BE MAINTAINED BY THE CONTRACTOR IN A CONDITION WHICH WILL PREVENT THE TRACKING OF MUD OR DRY SEDIMENT ONTO THE ADJACENT PUBLIC STREETS AFTER EACH WORKING DAY OR MORE FREQUENTLY AS REQUIRED BY THE MUNICIPALITY.
  - INSTALL EROSION CONTROLS ON THE DOWNSTREAM SIDE OF STOCKPILES AND PROVIDE TEMPORARY SEEDING ON STOCKPILES WHICH ARE TO REMAIN IN PLACE FOR MORE THAN 7 DAYS.
  - INSTALL CHECK DAMS WITHIN DRAINAGE DITCHES AND IN FRONT OF SILT FENCING IN ANY LOW AREA ALL IN ACCORDANCE WITH WDNR TECHNICAL STANDARDS.
  - EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, SANITARY SEWER, WATER MAIN, ETC.):  
A. PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.  
B. BACKFILL, COMPACT, AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.  
C. DISCHARGE TRENCH WATER INTO A SEDIMENTATION BASIN OR FILTERING TANK IN ACCORDANCE WITH THE DEWATERING TECHNICAL STANDARD NO. 1061 PRIOR TO RELEASE INTO THE STORM SEWER, RECEIVING STREAM, OR DRAINAGE DITCH.
  - INSTALL TYPE D INLET PROTECTION AROUND ALL STORM SEWER INLETS AND CATCH BASINS THAT MAY RECEIVE RUNOFF FROM AREAS UNDER CONSTRUCTION.
  - APPLY ANIONIC POLYMER TO DISTURBED AREAS IF EROSION BECOMES PROBLEMATIC.
  - ADDITIONAL EROSION CONTROL MEASURES, AS REQUESTED BY STATE INSPECTORS, LOCAL INSPECTORS, AND/OR ENGINEER SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.
  - ALL SLOPES EXCEEDING 5:1 (20%) AND DRAINAGE SWALES SHALL BE STABILIZED WITH CLASS I, TYPE B EROSION MATTING OR APPLICATION OF A WDOT APPROVED POLYMER SOIL STABILIZATION TREATMENT OR A COMBINATION THEREOF, AS REQUIRED. CONTRACTOR SHALL PROVIDE PRODUCT SPECIFICATIONS TO PROJECT ENGINEER FOR APPROVAL. SLOPES 3:1 (33%) SHALL BE STABILIZED AS SOON AS PRACTICABLE FOLLOWING GRADING ACTIVITIES ARE COMPLETE.
  - CONTRACTOR/OWNER SHALL FILE A NOTICE OF TERMINATION UPON VEGETATIVE STABILIZATION AND/OR PROPERTY SALE IN ACCORDANCE WITH WISCONSIN SAFETY AND PROFESSIONAL SERVICES REQUIREMENTS.
  - CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO CONTROL DUST ARISING FROM CONSTRUCTION OPERATIONS. REFER TO WDNR TECHNICAL STANDARD 1068.
  - CONTRACTOR TO PROVIDE SOLID LID OR METAL PLATE ON ALL OPEN MANHOLES DURING CONSTRUCTION TO MINIMIZE SEDIMENT FROM ENTERING THE STORM SEWER SYSTEM.
  - ALL APRON ENDWALLS SHALL BE PROVIDED WITH RIP RAP PER DETAILS.

- GRADING AND SEEDING NOTES**
- ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED IMMEDIATELY FOLLOWING GRADING ACTIVITIES. SEED MIX TO BE IN ACCORDANCE WITH LANDSCAPE PLAN.
  - ALL PROPOSED GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL VERIFY ALL GRADES. MAKE SURE ALL AREAS DRAIN PROPERLY AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
  - CONTRACTOR SHALL PROTECT ADJACENT PROPERTIES WITH SILT FENCING FOR EROSION CONTROL UNTIL CONSTRUCTION IS COMPLETED AND NOTICE OF TERMINATION FILED.
  - CONTRACTOR SHALL CHISEL-PLow OR DEEP TILL WITH DOUBLE TINES ALL STORMWATER MANAGEMENT FACILITIES JUST PRIOR TO SEEDING AND MULCHING TO PROMOTE INFILTRATION.
  - CONTRACTOR SHALL WATER ALL NEWLY SEEDING AREAS DURING THE SUMMER MONTHS WHENEVER THERE IS A 7 DAY LAPSE WITH NO SIGNIFICANT RAINFALL.
  - CONTRACTOR TO DEEP TILL ALL COMPACTED PEROVIOUS SURFACES PRIOR TO SEEDING AND MULCHING.
  - THE CONTRACTOR SHALL NOTIFY THE CITY OF MADISON TWO (2) WORKING DAYS IN ADVANCE OF ANY SOIL DISTURBING ACTIVITY.
  - IF GRADING ACTIVITIES STOP ON ANY PORTION OF LAND FOR 14 OR MORE CALENDAR DAYS, THE AREA IN QUESTION MUST BE TEMPORARILY STABILIZED.
  - ALL SLOPES 2:1 OR GREATER SHALL BE TEMPORARILY SEEDING, MULCHED, OR OTHER MEANS OF COVER PLACED ON THEM WITHIN 2 WEEKS OF DISTURBANCE. ALL SLOPES 3:1 OR GREATER SHALL BE TEMPORARILY SEEDING, MULCHED, OR OTHER MEANS OF COVER PLACED ON THEM AS SOON AS PRACTICABLE.

**JSD Professional Services, Inc.**  
 • Engineers • Surveyors • Planners

"BUILDING RELATIONSHIPS WITH A COMMITMENT TO CLIENT SATISFACTION THROUGH TRUST, QUALITY AND EXPERIENCE"

MADISON REGIONAL OFFICE  
 161 HORIZON DRIVE, SUITE 101  
 VERONA, WISCONSIN 53593  
 608.848.5060 PHONE | 608.848.2255 FAX

**north**

SCALE IN FEET

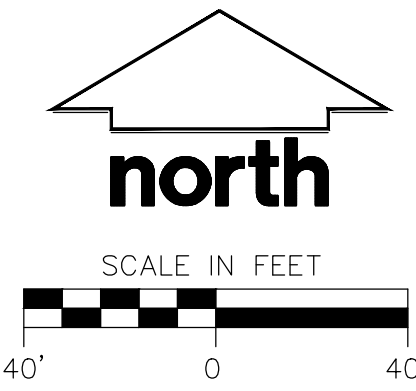


# Tennyson Senior Living Community

GRADING & EROSION CONTROL PLAN  
 1" = 30'-0"  
 JULY 9, 2014  
 Engberg Anderson Project No. 132290

**C200**





**LEGEND (PROPOSED)**

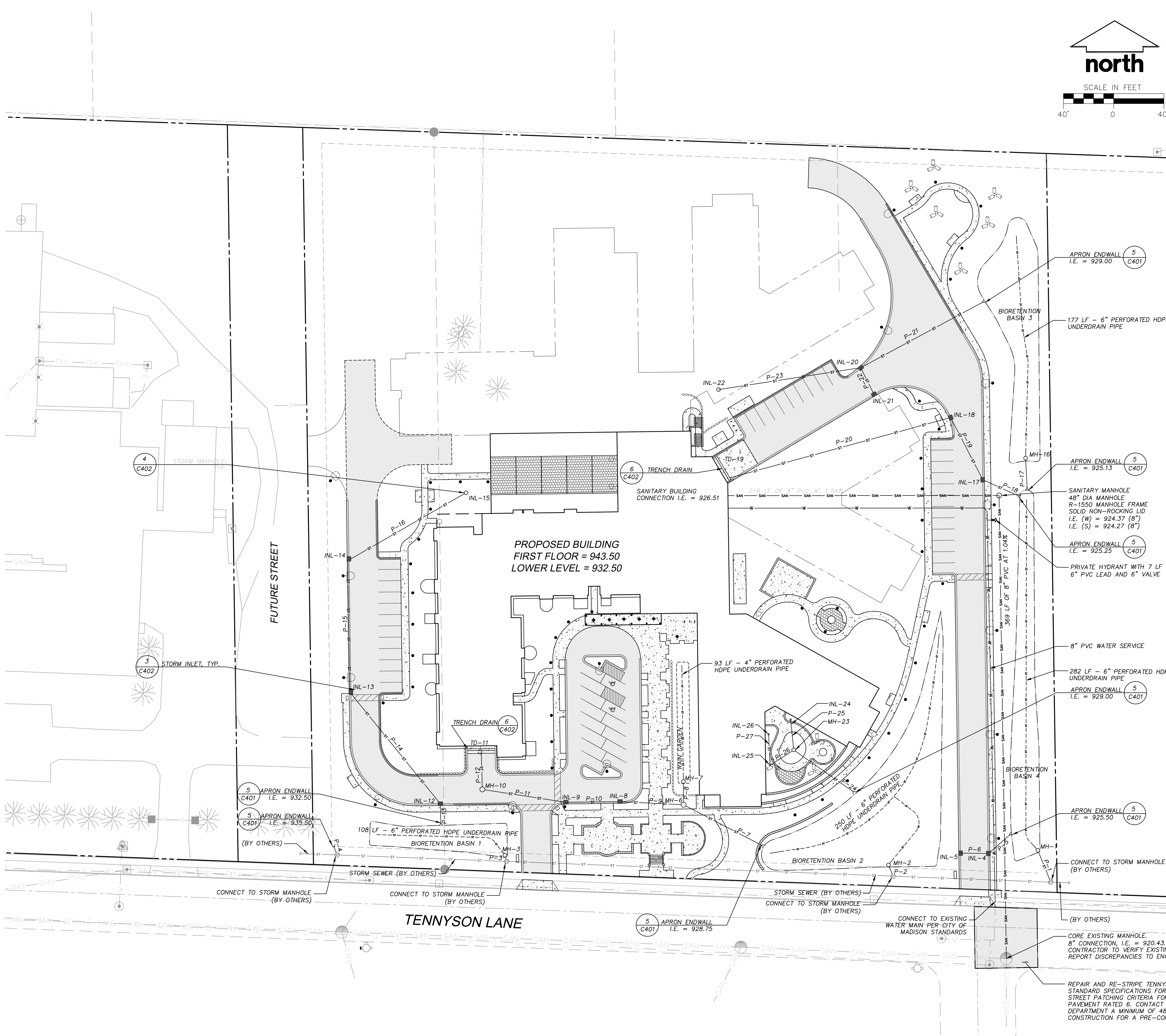
- PROPERTY LINE
- BUILDING FIRST FLOOR
- BUILDING LOWER LEVEL
- FUTURE BUILDING ADDITION
- EDGE OF PAVEMENT
- TEMPORARY PAVEMENT EDGE
- TRENCH PATCH LIMITS
- ST --- ST STORM SEWER
- SAN --- SAN SANITARY SEWER
- ST --- ST WATER SERVICE
- ST --- ST STORM SEWER (BY OTHERS)
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- 18" STANDARD CURB AND GUTTER
- 18" REJECT CURB & GUTTER
- STONE RETAINING WALL (SEE LANDSCAPE PLANS FOR DETAILS)
- FENCE LINE (SEE LANDSCAPE PLANS FOR DETAILS)
- STORMWATER MANAGEMENT AREA
- SITE LIGHTING FIXTURES (SEE LIGHTING PLANS FOR DETAILS)

**GENERAL NOTES**

1. REFER TO THE EXISTING CONDITIONS SURVEY, PROVIDED BY OTHERS, FOR EXISTING CONDITIONS NOTES AND LEGEND. JSD DOES NOT TAKE RESPONSIBILITY FOR ANY BENCHMARKS LOCATED ON THE SURVEY PROVIDED BY OTHERS.
2. ALL WORK IN THE ROW SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION AND CITY OF MADISON REQUIREMENTS.
3. NO SITE GRADING OUTSIDE OR DOWNSLOPE OF PROPOSED SILT FENCE LOCATION. NO LAND DISTURBANCE BEYOND PROPERTY LINES UNLESS OTHERWISE SHOWN.
4. THIS PROJECT HAS BEEN DESIGNED AND WILL BE CONSTRUCTED IN COMPLIANCE WITH ALL OF THE WDNR WRAPP PERMIT APPLICATION STANDARDS.

**UTILITY NOTES**

1. ALL WORK IN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF MADISON STANDARD CONSTRUCTION SPECIFICATIONS (STANDARD SPECIFICATIONS).
2. DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.
3. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS WITHIN THE PLAN BECOME APPARENT, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
4. LENGTHS OF ALL UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM PLAN. LENGTHS SHALL BE VERIFIED IN THE FIELD DURING CONSTRUCTION.
5. ALL CONSTRUCTION SIGNING TO BE IN ACCORDANCE WITH THE CITY OF MADISON AND WISCONSIN DEPARTMENT OF TRANSPORTATION REQUIREMENTS.
6. PROVIDE DE-WATERING ACTIVITIES AND PERMITS AS NECESSARY PER WDNR REQUIREMENTS AND WDNR TECHNICAL STANDARD 1061.
7. ALL PRIVATE WATER MAIN AND WATER SERVICES SHALL BE INSTALLED WITH A 6' MINIMUM BURY.
8. THE CONTRACTOR SHALL INSTALL A PEDESTRIAN FENCE AROUND ALL EXCAVATIONS TO BE LEFT OPEN OVER NIGHT AS REQUIRED.
9. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH ENGINEERING PLANS DESIGNED TO MEET ORDINANCES AND REQUIREMENTS OF THE MUNICIPALITY AND WISDOT, WDCOMM, AND WDNR.
10. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR:
  - EXAMINING ALL SITE CONDITIONS RELATIVE TO THE CONDITIONS INDICATED ON THE ENGINEERING DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER AND RESOLVED PRIOR TO THE START OF CONSTRUCTION.
  - OBTAINING ALL PERMITS INCLUDING PERMITS, TAP FEES, METER DEPOSITS, BONDS, AND ALL OTHER FEES REQUIRED FOR PROPOSED WORK TO OBTAIN OCCUPANCY.
  - VERIFYING UTILITY ELEVATIONS AND NOTIFYING ENGINEER OF ANY DISCREPANCY. NO WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS RESOLVED.
  - NOTIFYING ALL UTILITIES PRIOR TO THE INSTALLATION OF ANY UNDERGROUND IMPROVEMENTS.
  - NOTIFYING THE DESIGN ENGINEER AND MUNICIPALITY 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR APPROPRIATE CONSTRUCTION OBSERVATION.
11. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE ENGINEER WITH AS-BUILT CONDITIONS OF THE DESIGNATED IMPROVEMENTS IN ORDER THAT THE APPROPRIATE DRAWINGS CAN BE PREPARED, IF REQUIRED. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE ENGINEER AS WORK PROGRESSES.
12. THE PRIME CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL CONSTRUCTION WITH OTHER CONTRACTORS INVOLVED WITH CONSTRUCTION OF THE PROPOSED DEVELOPMENT AND FOR REPORTING ANY ERRORS OR DISCREPANCIES BETWEEN THESE PLANS AND PLANS PREPARED BY OTHERS.
13. ANY SANITARY SEWER, SANITARY SEWER SERVICES, WATER MAIN, WATER SERVICES, STORM SEWER, OR OTHER UTILITIES, WHICH ARE DAMAGED BY THE CONTRACTORS, SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
14. CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY DURING THE CONSTRUCTION OF IMPROVEMENTS.
15. OPEN PICK HOLES IN SANITARY MANHOLE CASTING LIDS ARE PROHIBITED.
16. ALL PRIVATE SANITARY BUILDING PIPE AND TUBING SHALL CONFORM TO SPS 384.30-2.
17. ALL PRIVATE STORM BUILDING PIPE AND TUBING SHALL CONFORM TO SPS 384.30-3.
18. ALL PRIVATE PIPE AND TUBING FOR WATER SERVICE SHALL CONFORM TO SPS 384.30-4.
19. ALL PRIVATE PIPE SHALL BE INSTALLED PER SPS 382.40-8 INCLUDING AT LEAST 8' OF HORIZONTAL DISTANCE BETWEEN WATER PIPING AND SANITARY SEWER FROM CENTER OF PIPE TO CENTER OF PIPE AND 6" OF SEPARATION BETWEEN STORM SEWER AND WATER PIPING.
20. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST AND EROSION DURING CONSTRUCTION AT HIS EXPENSE. STREETS SHALL BE WATERED TO CONTROL DUST WHEN ORDERED BY THE ENGINEER.
21. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO BE IN CONFORMANCE WITH THE CITY EROSION CONTROL AND STORMWATER ORDINANCE, AND DNR ADMINISTRATIVE RULE NR 216 AT ALL TIMES.



**PROPOSED STORM SEWER STRUCTURES SCHEDULE**

LABEL	INVERT ELEV. (FT)	RIM ELEV. (FT)	DEPTH (FT)	STRUCTURE DESCRIPTION	GRATE
STMNH NO. 1	922.00	926.00	4.00	36" DIA MANHOLE	R-4380-32, IN BELL GRATE
STMNH NO. 2	925.00	928.50	3.50	36" DIA MANHOLE	R-4380-32, IN BELL GRATE
STMNH NO. 3	929.00	933.00	4.00	36" DIA MANHOLE	R-4380-32, IN BELL GRATE
STMNH NO. 4	925.67	927.15	1.48	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMNH NO. 5	925.83	927.35	1.52	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMNH NO. 6	929.10	937.00	7.90	48" DIA MANHOLE	R-2050, COMBINATION INLET FRAME, TYPE D GRATE
STMNH NO. 7	929.33	942.75	13.42	36" DIA MANHOLE	R-4380-32, IN BELL GRATE
STMNH NO. 8	929.40	936.75	7.35	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMNH NO. 9	929.67	936.25	6.58	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMNH NO. 10	930.06	934.00	3.94	48" DIA MANHOLE	R-2050, COMBINATION INLET FRAME, TYPE D GRATE
TRENCH DRAIN NO. 11	930.26	932.45	2.19	18" WIDE TRENCH DRAIN	R-4990-FX, TYPE C COVER
STMNH NO. 12	932.65	934.75	2.10	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMNH NO. 13	935.05	941.11	6.06	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMNH NO. 14	936.21	941.62	5.41	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMNH NO. 15	938.43	941.50	3.07	36" DIA MANHOLE	R-4380-32, IN BELL GRATE
STMNH NO. 16	925.25	928.75	3.50	36" DIA MANHOLE	R-4380-32, IN BELL GRATE
STMNH NO. 17	925.40	932.50	7.10	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMNH NO. 18	925.73	933.28	7.55	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
TRENCH DRAIN NO. 19	926.26	928.45	2.19	18" WIDE TRENCH DRAIN	R-4990-FX, TYPE C COVER
STMNH NO. 20	929.55	932.50	2.95	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMNH NO. 21	929.72	932.50	2.78	2X3' BOX	R-3067, INLET FRAME, TYPE R GRATE
STMNH NO. 22	930.22	934.50	4.28	48" DIA MANHOLE	R-2050, COMBINATION INLET FRAME, TYPE D GRATE
STMNH NO. 23	929.57	942.50	12.93	36" DIA MANHOLE	R-4380-32, IN BELL GRATE
STMNH NO. 24	938.60	943.35	4.75	12" ADS DRAIN BASIN	12" SQUARE, H-10, CAST IRON FRAME
STMNH NO. 25	938.60	943.35	4.75	12" ADS DRAIN BASIN	12" SQUARE, H-10, CAST IRON FRAME
STMNH NO. 26	938.65	943.40	4.75	12" ADS DRAIN BASIN	12" SQUARE, H-10, CAST IRON FRAME

**PROPOSED STORM SEWER PIPE SCHEDULE**

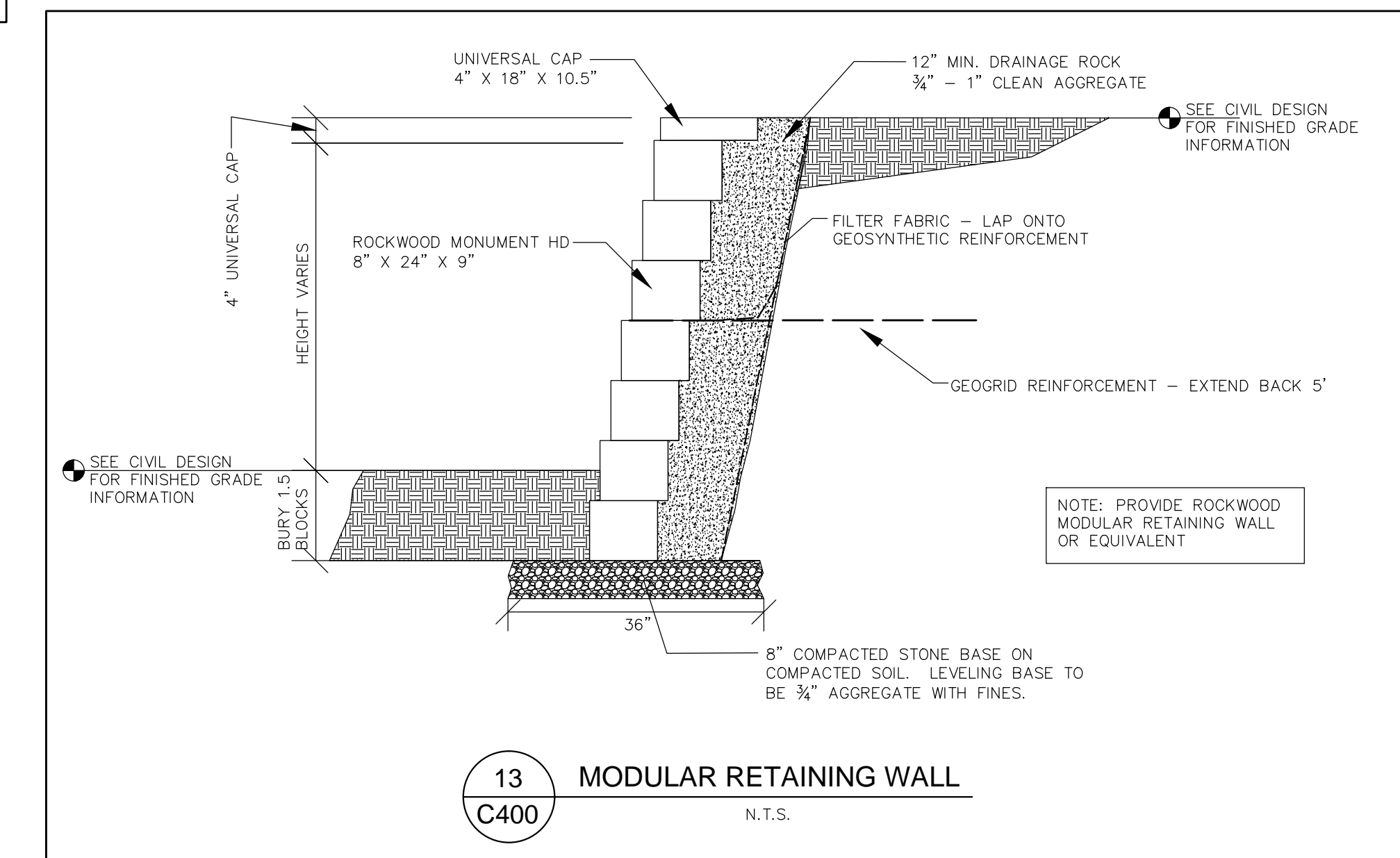
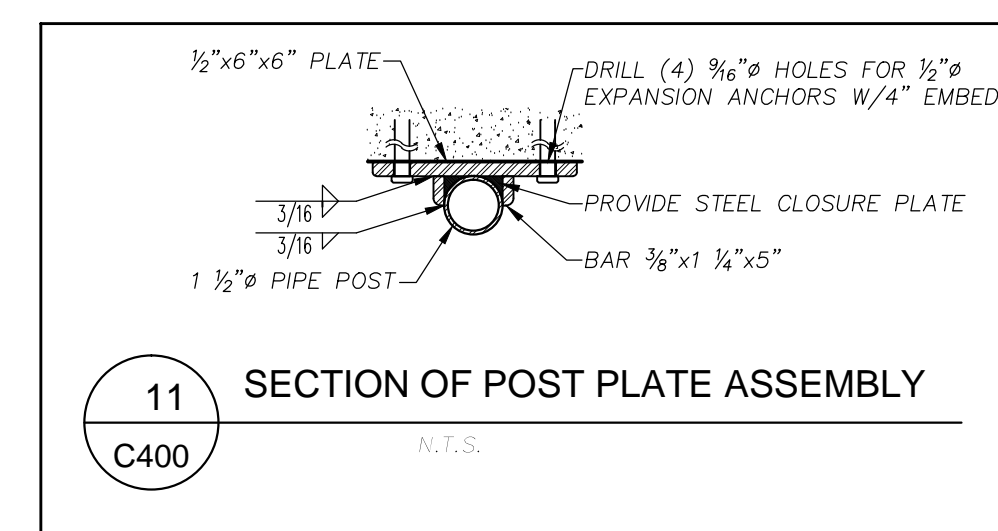
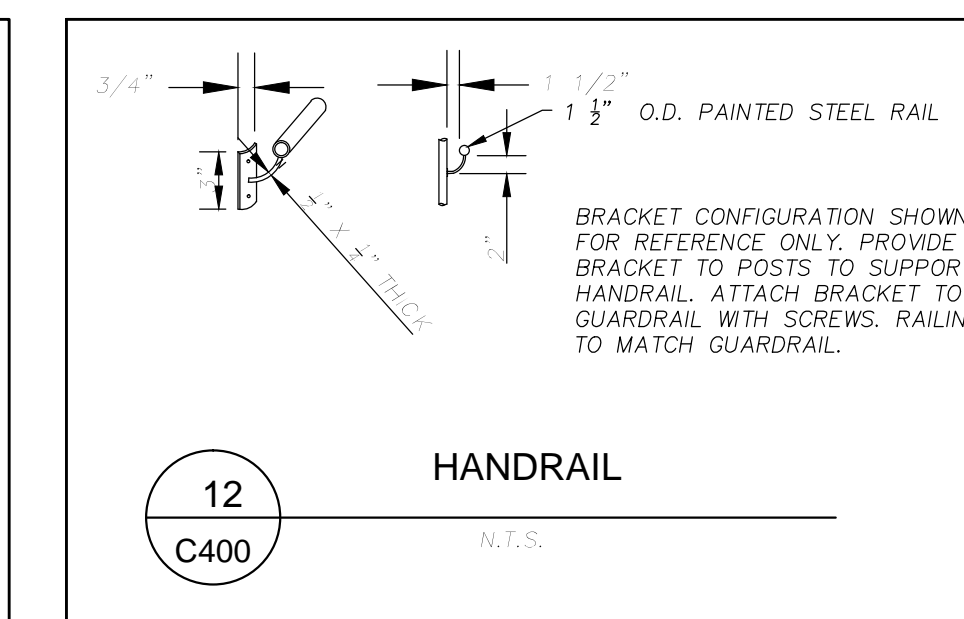
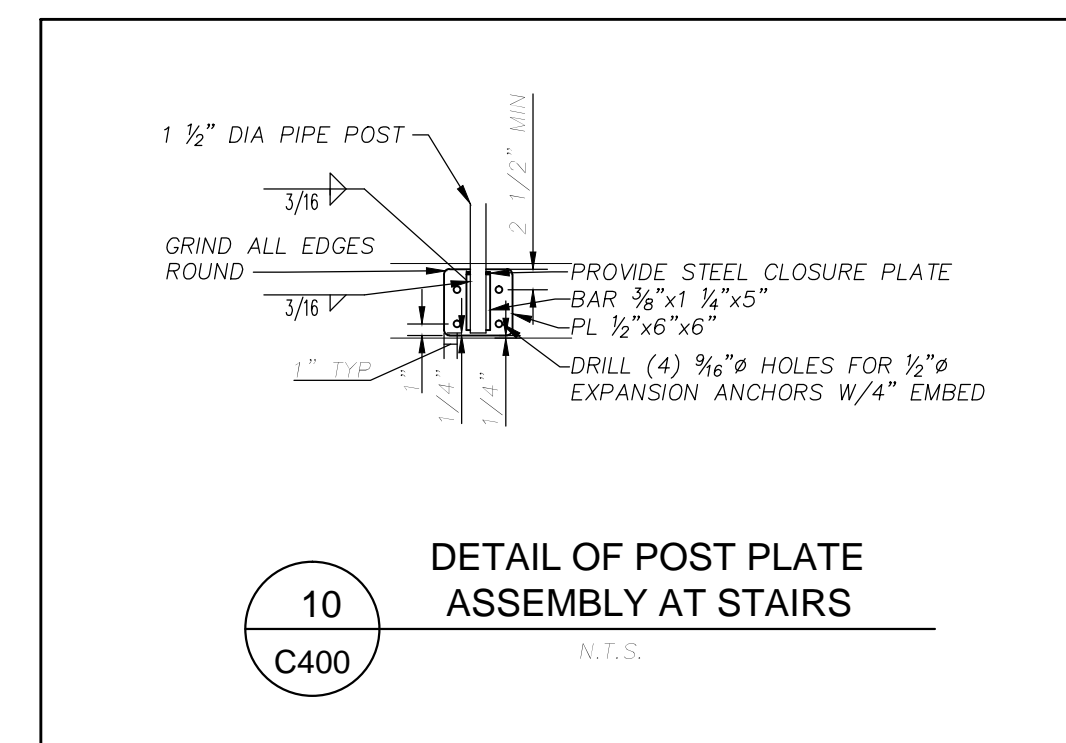
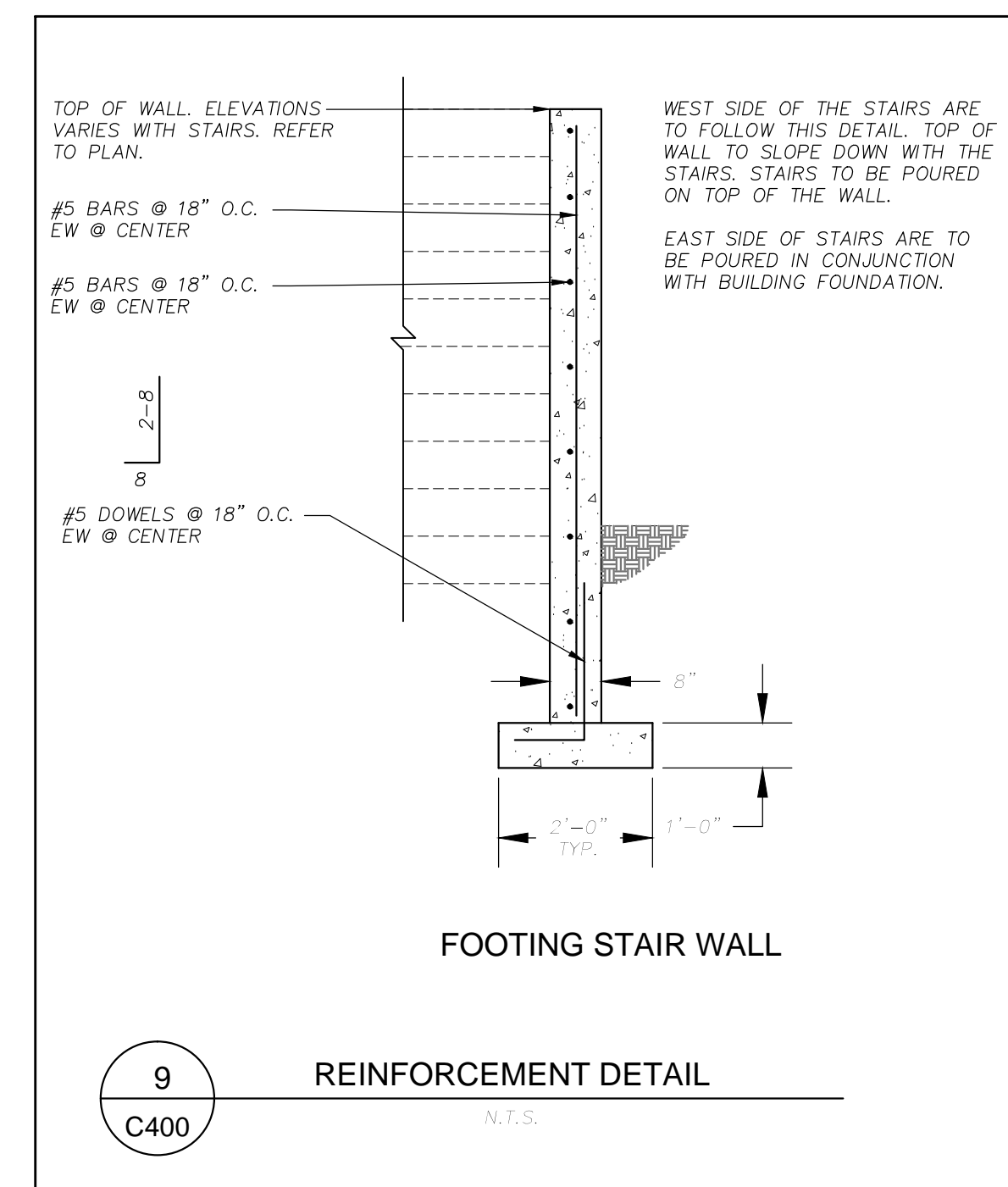
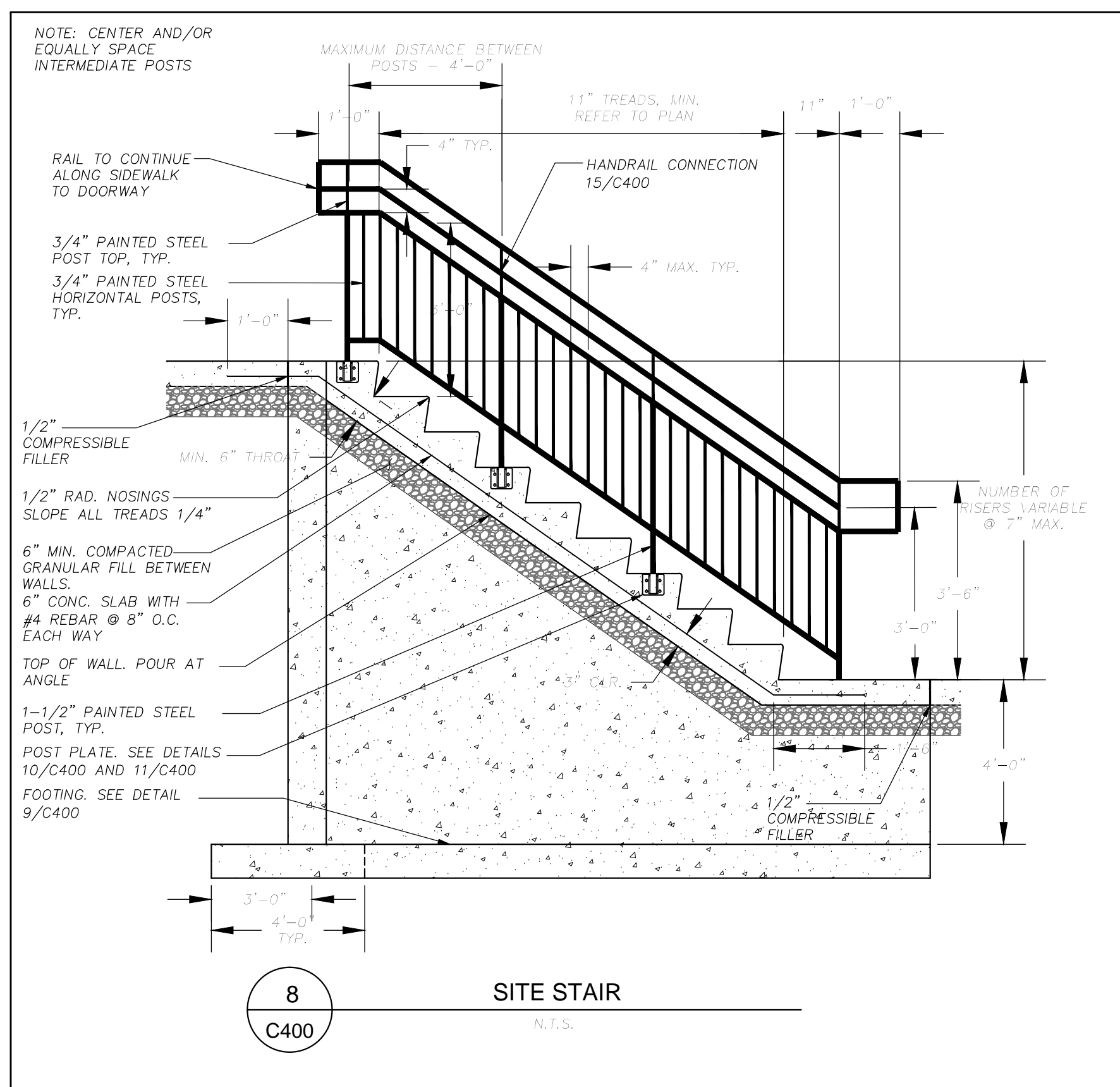
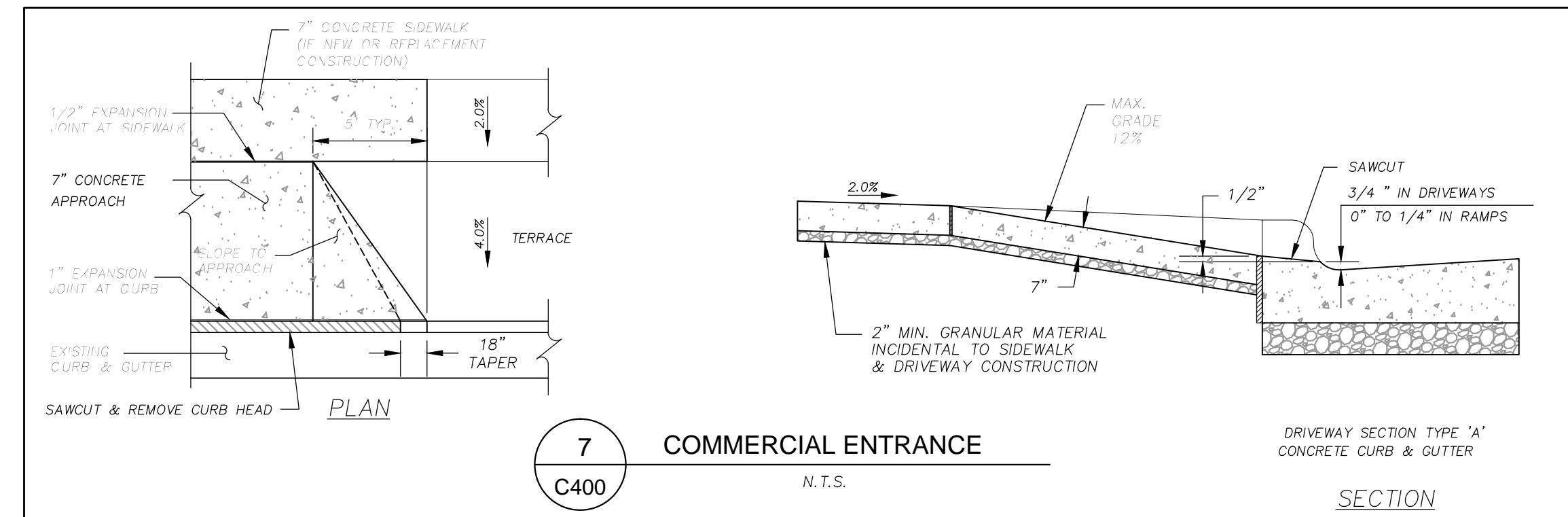
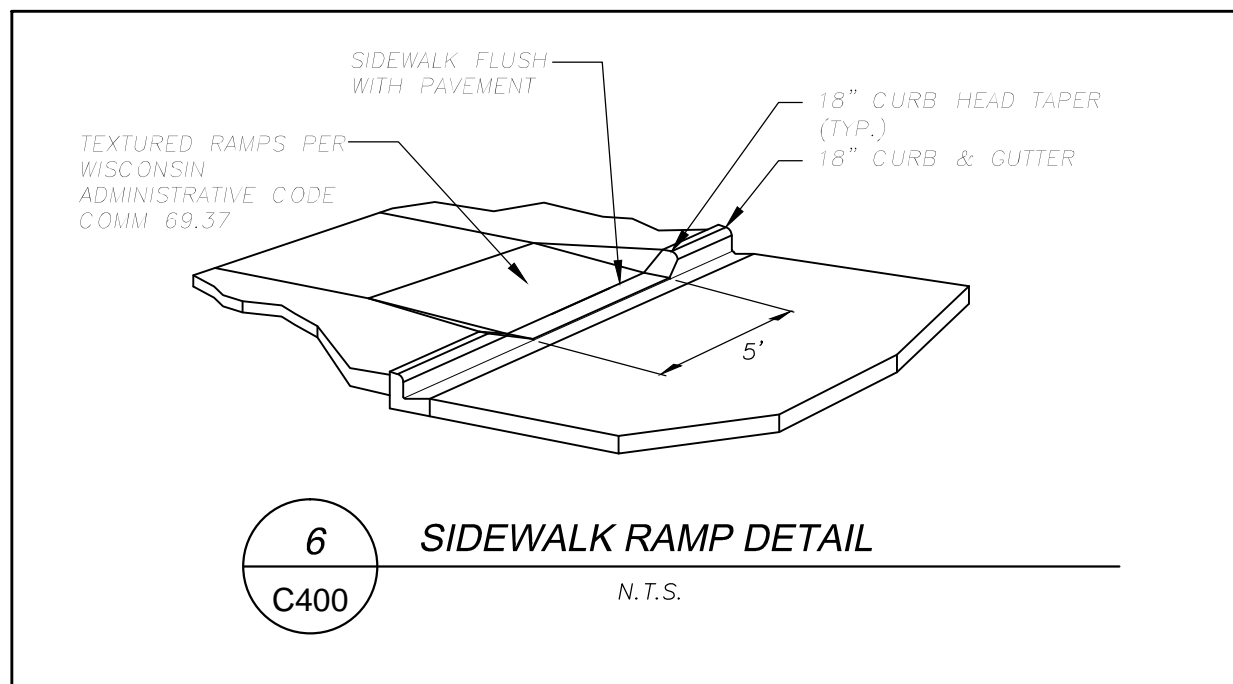
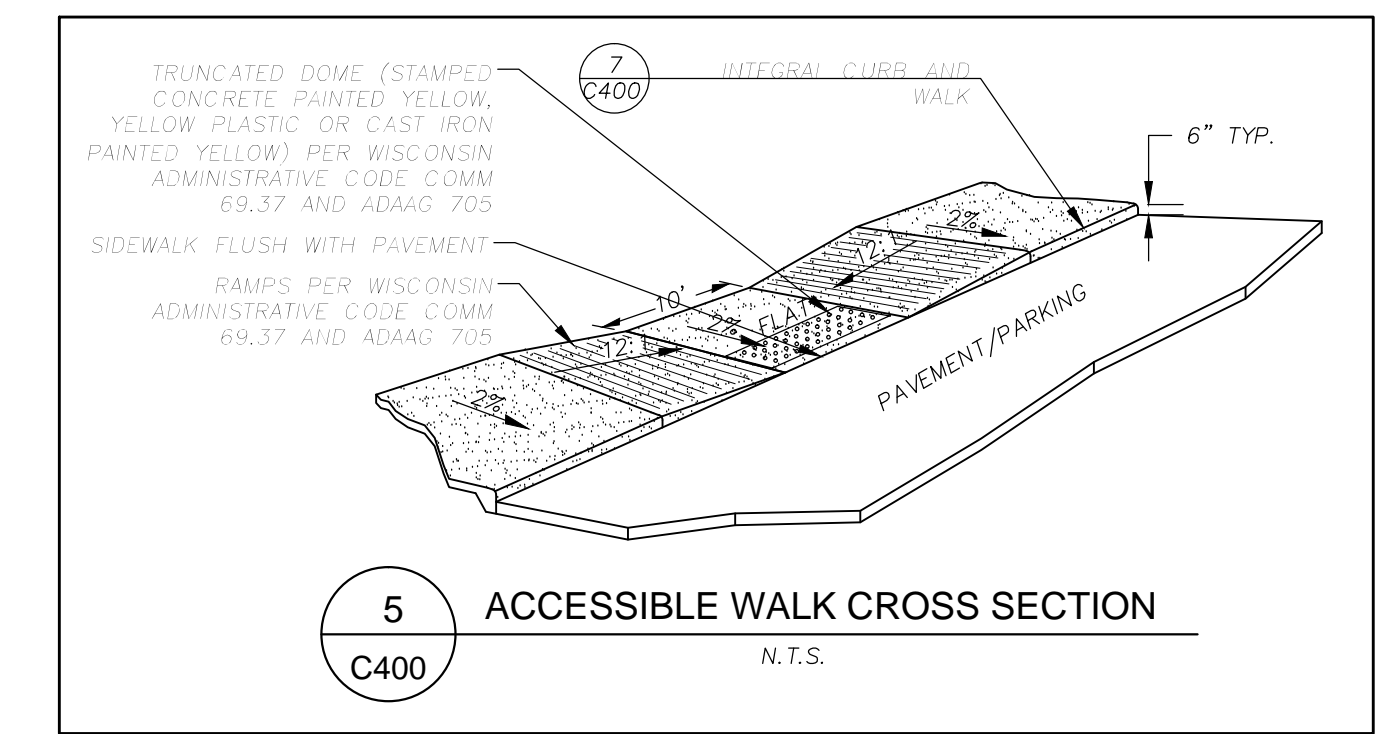
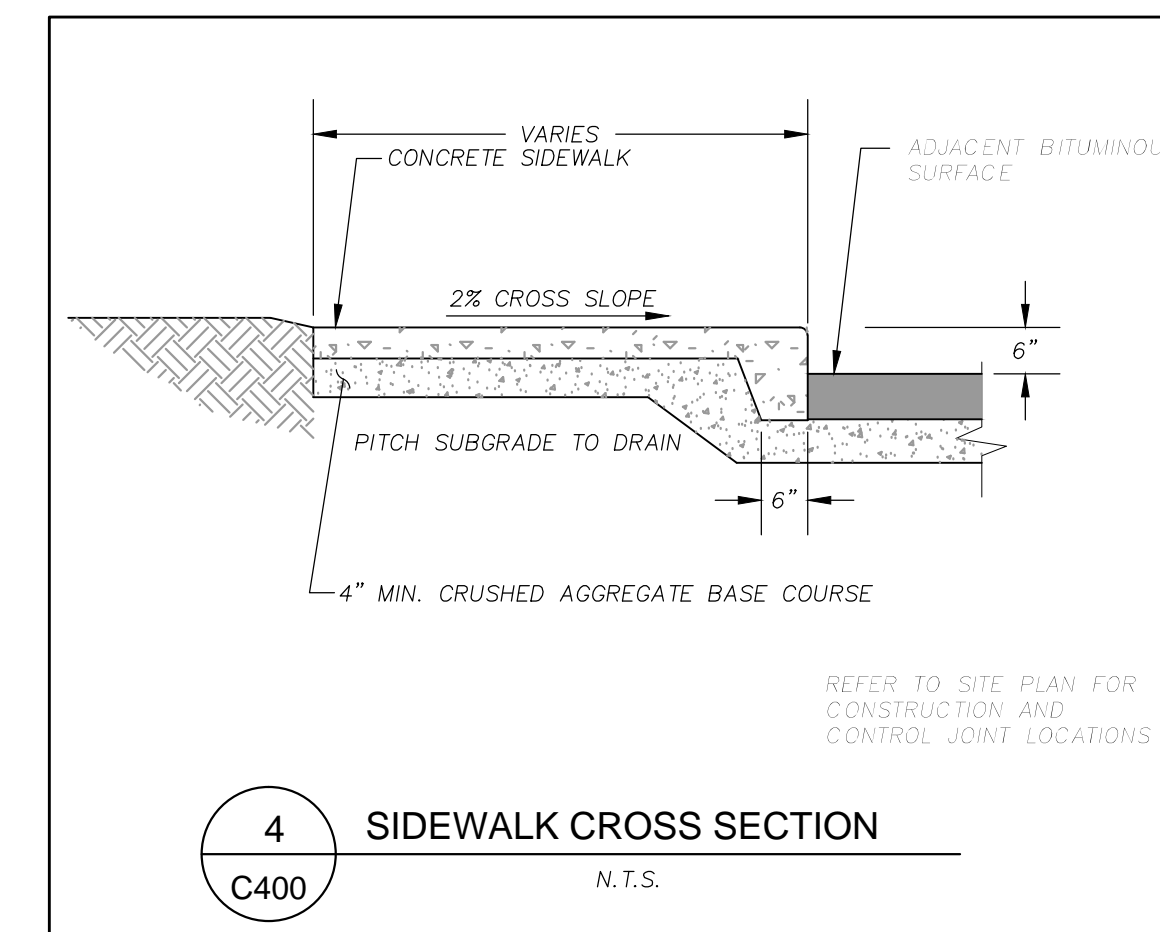
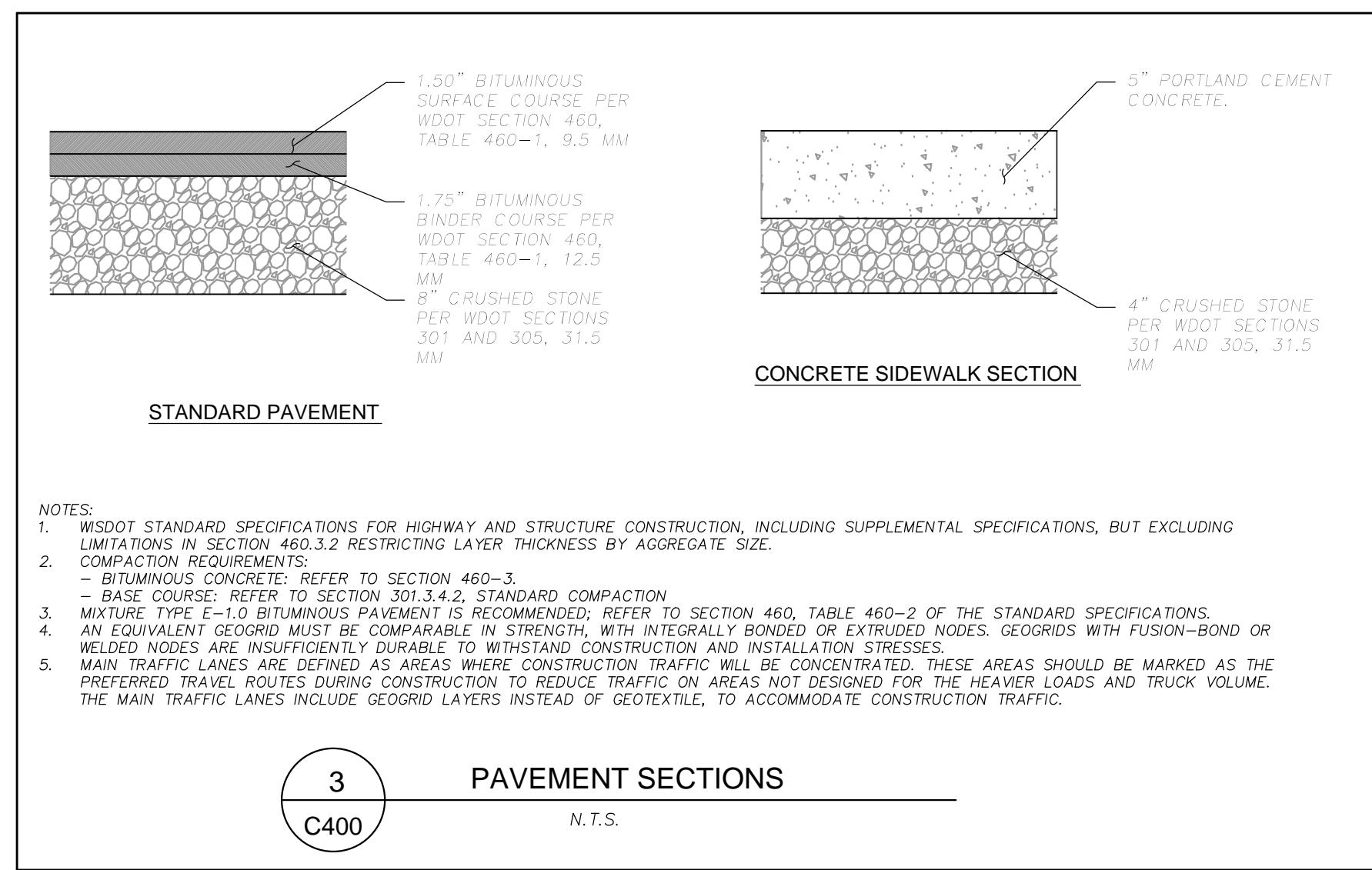
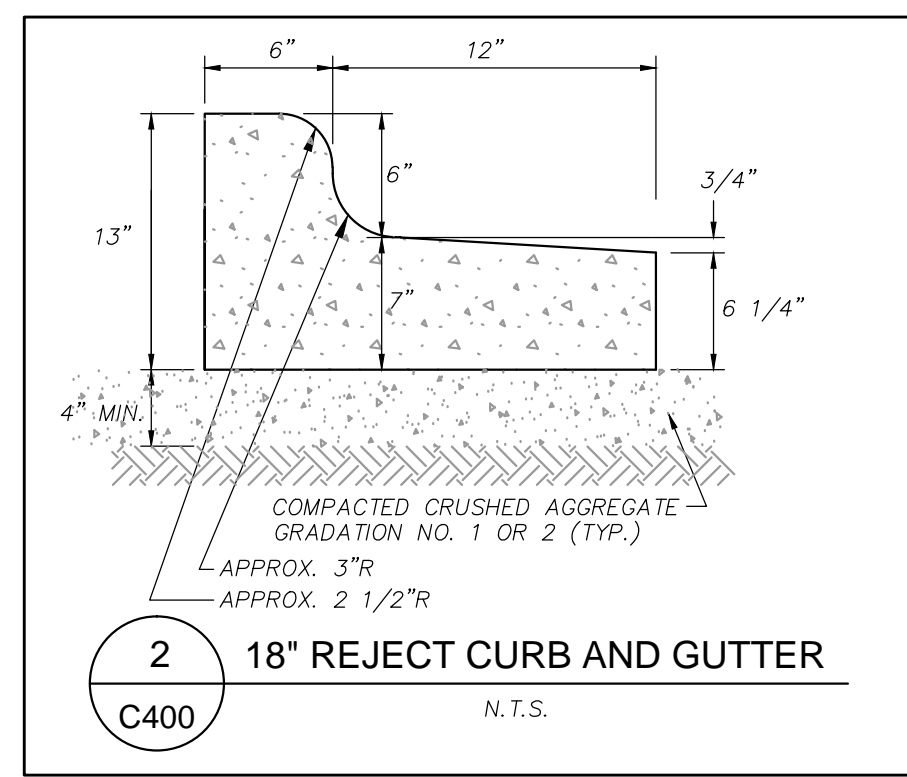
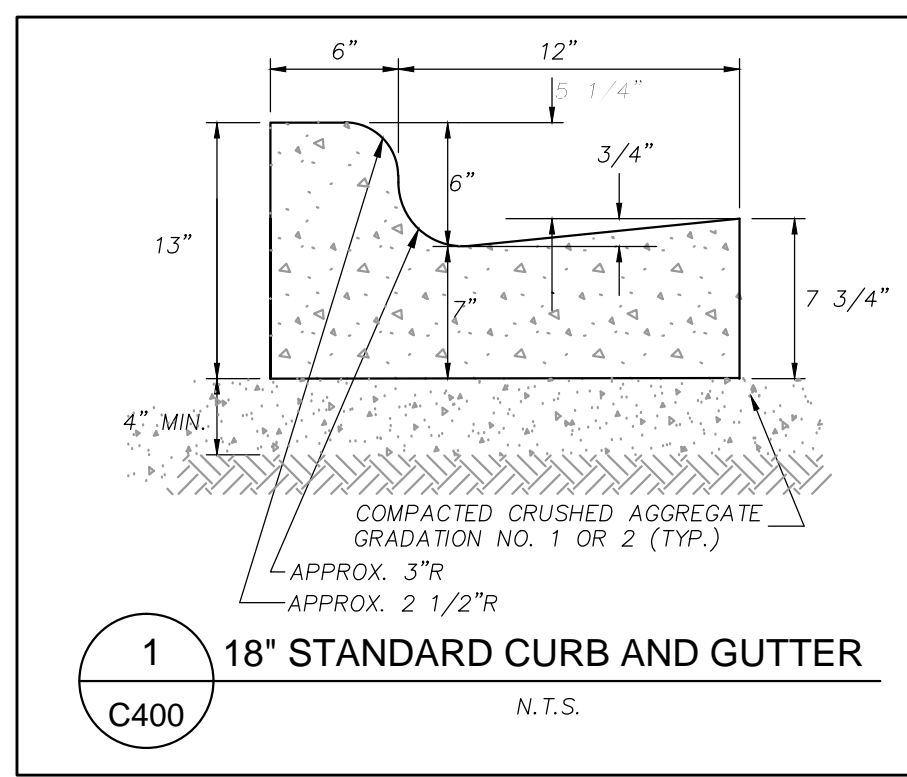
PIPE LABEL	FROM	TO	LENGTH (FT)	INVERT	DISCHARGE	SLOPE	PIPE SIZE
P-1	STMNH NO. 1	PROPOSED MANHOLE	26	922.00	921.61	1.50%	8"HDPE
P-2	STMNH NO. 2	PROPOSED MANHOLE	8	925.00	924.92	1.00%	8"HDPE
P-3	STMNH NO. 3	PROPOSED MANHOLE	4	929.00	928.93	2.00%	8"HDPE
P-4	APRON ENDWALL	PROPOSED MANHOLE	6	935.50	935.38	2.00%	12"HDPE
P-5	STMNH NO. 4	APRON ENDWALL	22	925.67	925.50	0.75%	8"HDPE
P-6	STMNH NO. 5	APRON ENDWALL	22	925.83	925.72	0.50%	8"DI
P-7	STMNH NO. 6	APRON ENDWALL	70	929.10	928.75	0.50%	12"HDPE
P-8	STMNH NO. 7	STMNH NO. 6	19	929.33	929.15	1.00%	8"HDPE
P-9	STMNH NO. 8	STMNH NO. 6	51	929.40	929.15	0.50%	10"HDPE
P-10	STMNH NO. 9	STMNH NO. 8	43	929.67	929.45	0.50%	10"HDPE
P-11	STMNH NO. 10	STMNH NO. 9	67	930.06	929.72	0.50%	10"HDPE
P-12	TRENCH DRAIN NO. 11	STMNH NO. 10	182	930.26	930.11	0.50%	10"HDPE
P-13	STMNH NO. 12	APRON ENDWALL	15	932.65	932.50	1.00%	12"HDPE
P-14	STMNH NO. 13	STMNH NO. 12	115	935.05	932.75	2.00%	10"HDPE
P-15	STMNH NO. 14	STMNH NO. 13	106	936.21	935.15	1.00%	10"HDPE
P-16	STMNH NO. 15	STMNH NO. 14	106	938.43	936.31	2.00%	10"HDPE
P-17	STMNH NO. 16	APRON ENDWALL	23	925.25	925.13	0.50%	8"HDPE
P-18	STMNH NO. 17	APRON ENDWALL	31	925.40	925.25	0.50%	10"HDPE
P-19	STMNH NO. 18	STMNH NO. 17	56	925.73	925.45	0.50%	10"HDPE
P-20	TRENCH DRAIN NO. 19	STMNH NO. 18	182	926.26	925.78	0.26%	10"HDPE
P-21	STMNH NO. 20	APRON ENDWALL	110	929.55	929.00	0.50%	10"HDPE
P-22	STMNH NO. 21	STMNH NO. 20	24	929.72	929.60	0.50%	10"HDPE
P-23	STMNH NO. 22	STMNH NO. 20	115	930.22	929.65	0.50%	10"HDPE
P-24	STMNH NO. 23	APRON ENDWALL	57	929.57	929.00	1.00%	8"HDPE
P-25	STMNH NO. 24	STMNH NO. 23	24	938.60	938.36	1.00%	8"HDPE
P-26	STMNH NO. 25	STMNH NO. 23	21	938.60	938.39	1.00%	8"HDPE
P-27	STMNH NO. 26	STMNH NO. 25	23	938.65	938.42	1.00%	8"HDPE

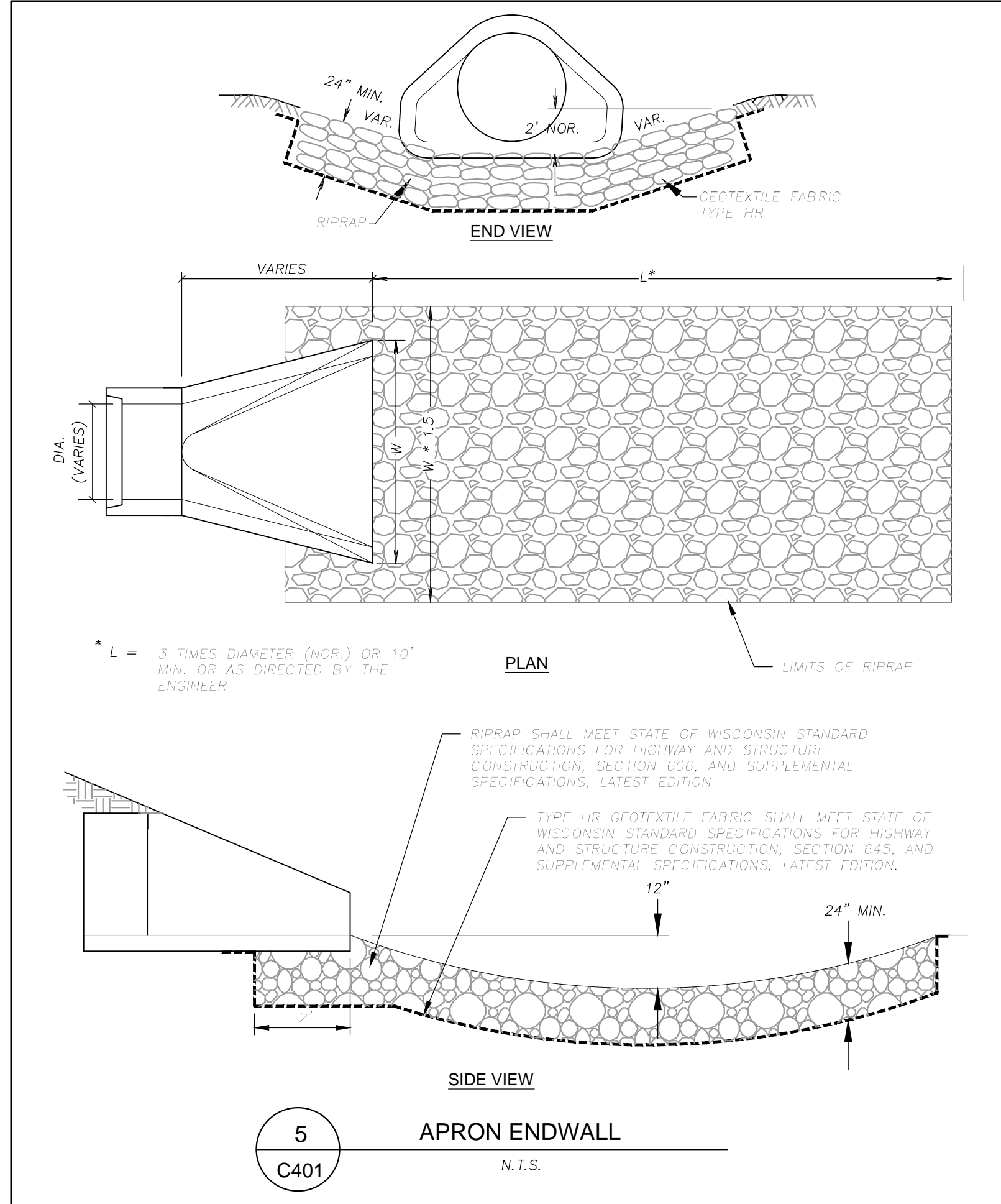
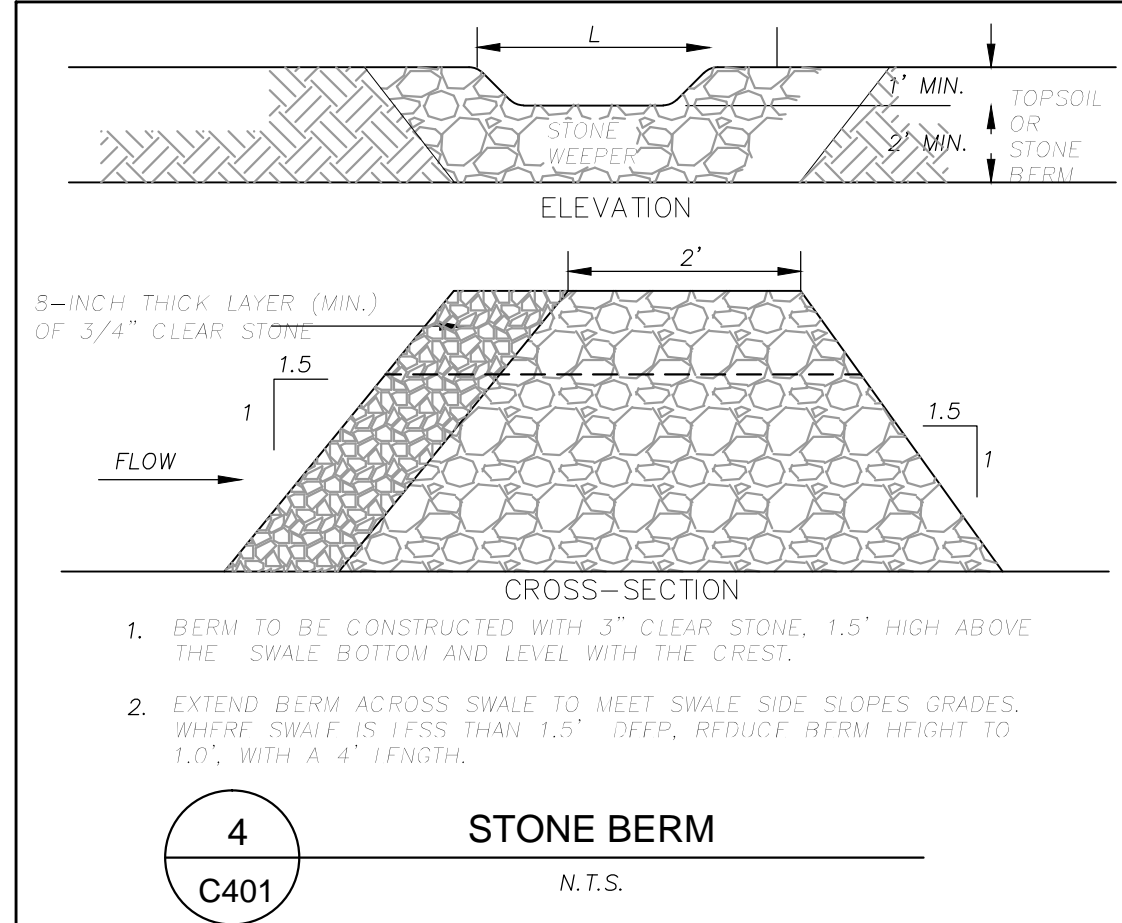
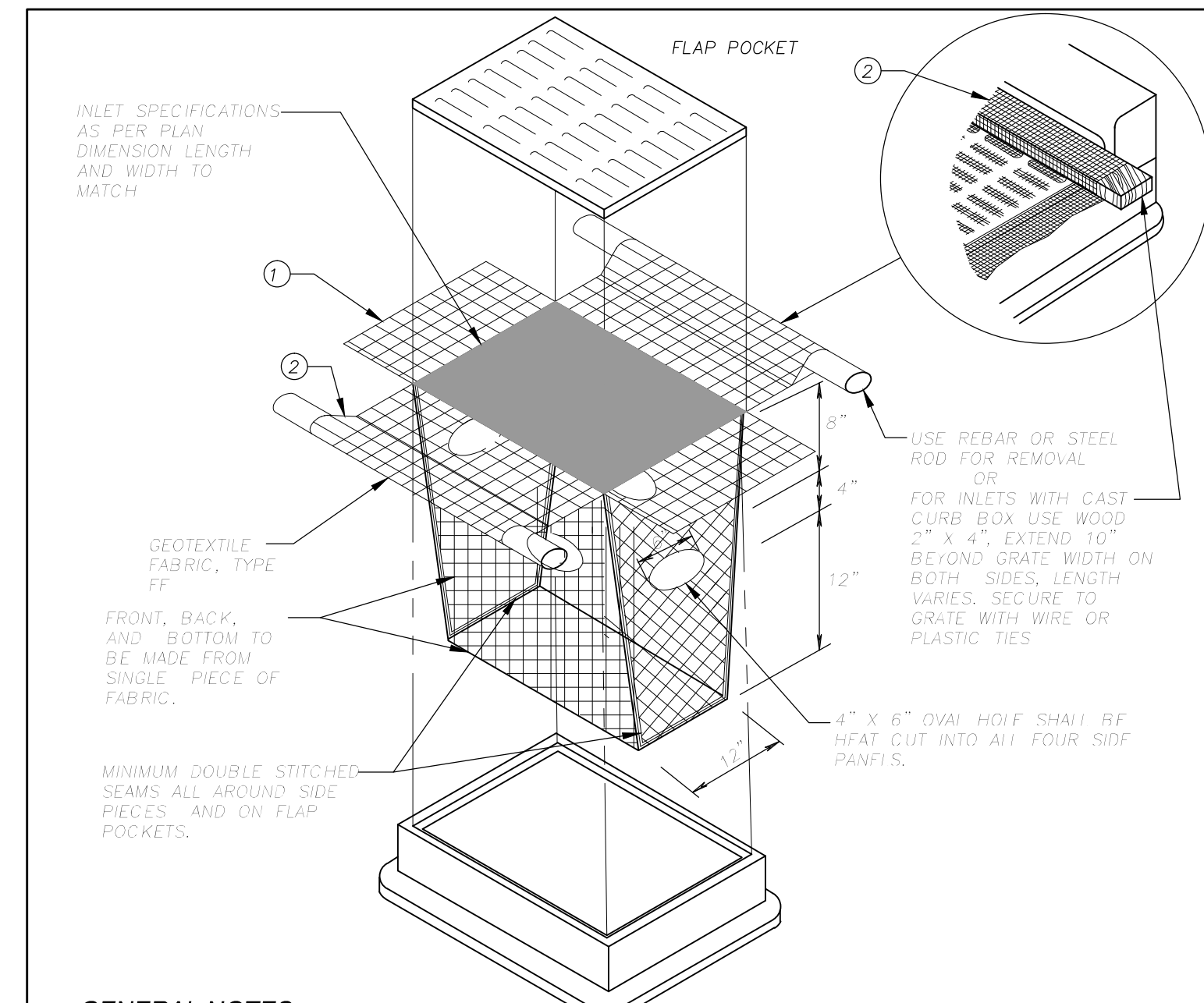
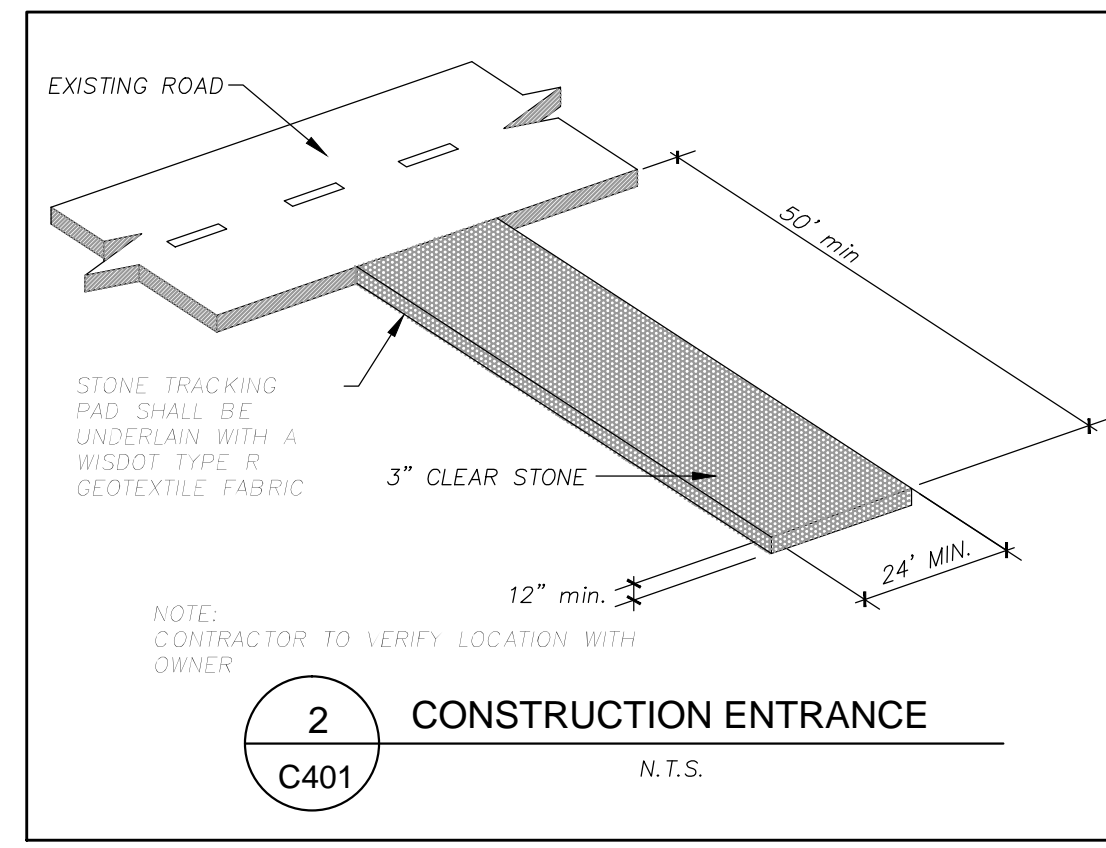
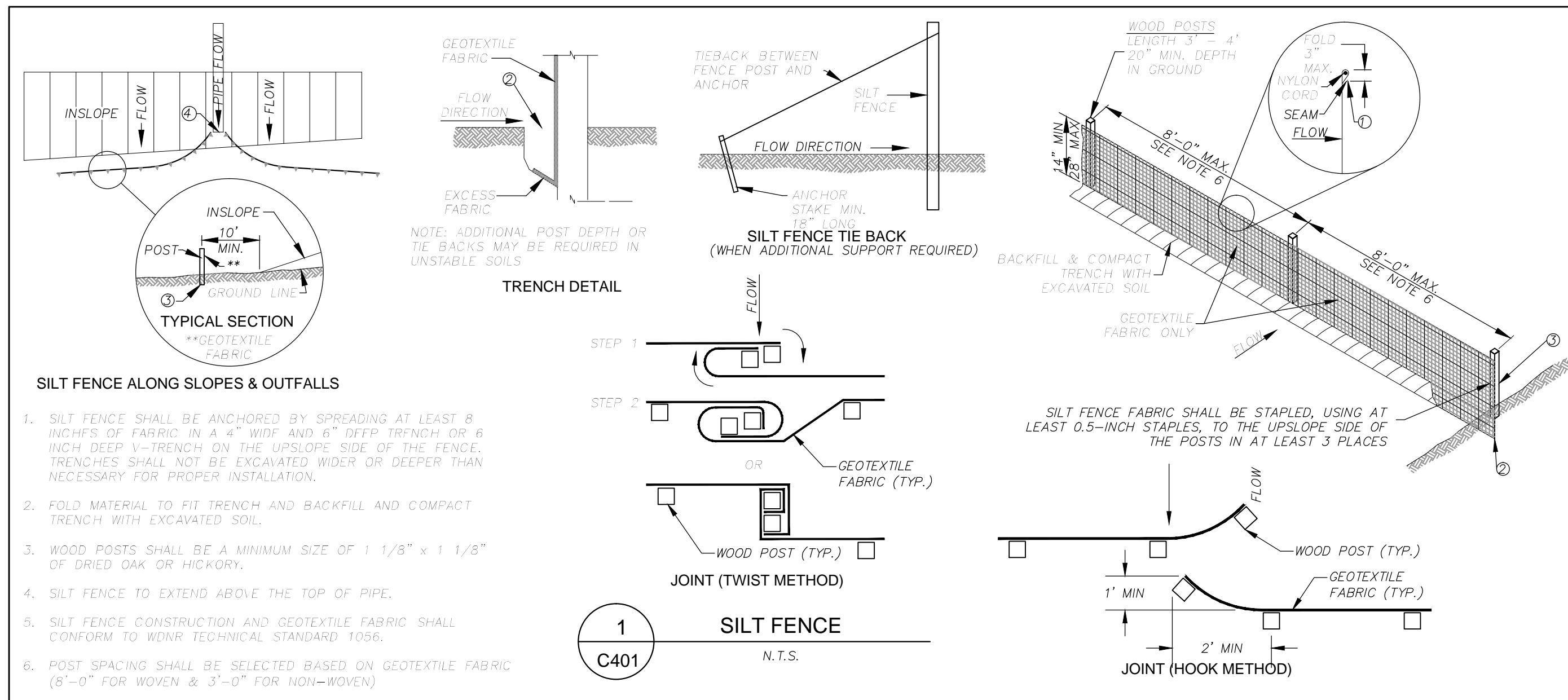


Tennyson Senior Living Community

UTILITY PLAN  
 1" = 40'-0"  
 JULY 9, 2014  
 Engberg Anderson Project No. 132290

C300





**GENERAL NOTES**

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

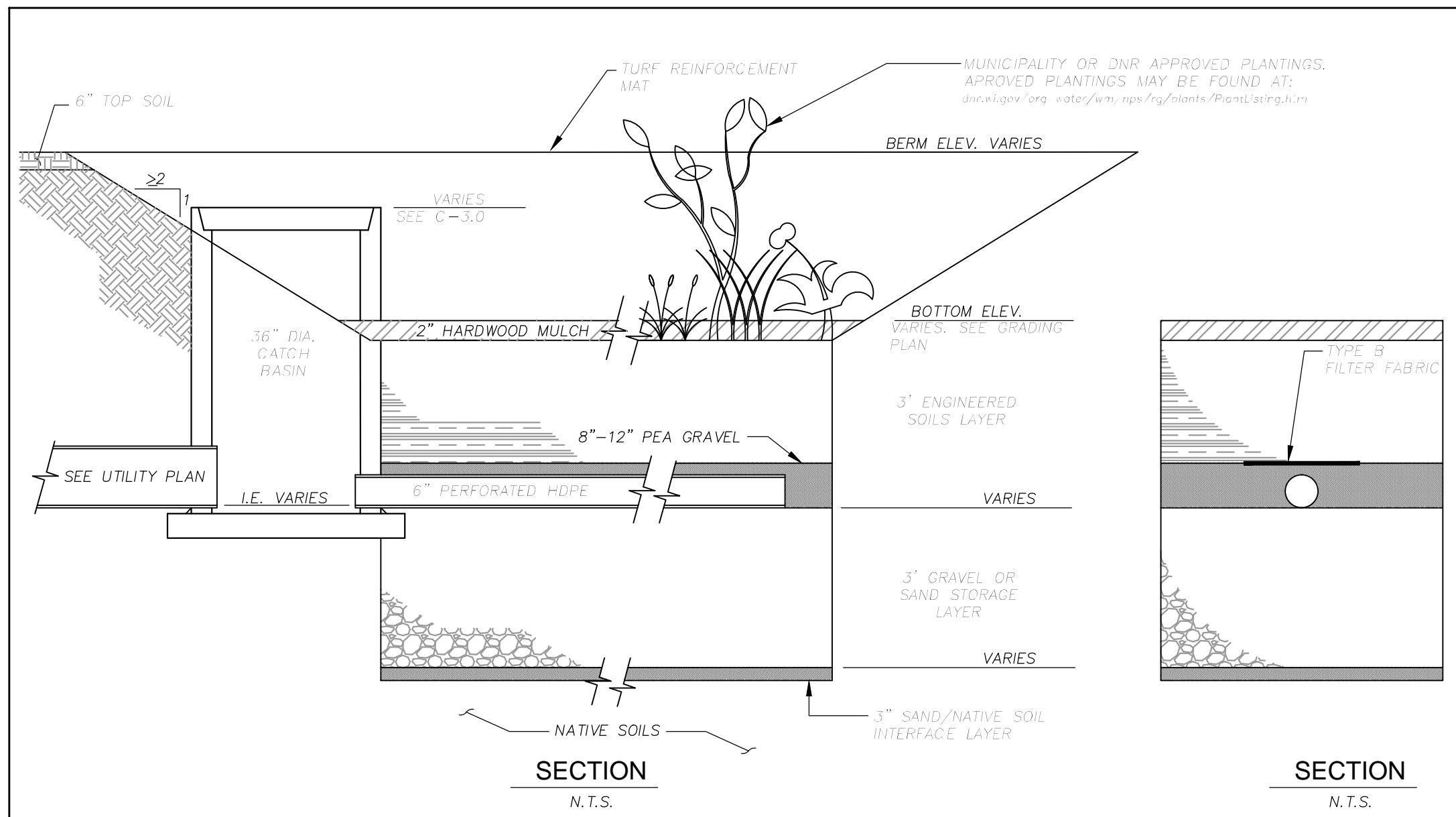
FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2x4.

**INSTALLATION NOTES**

INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3", WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.



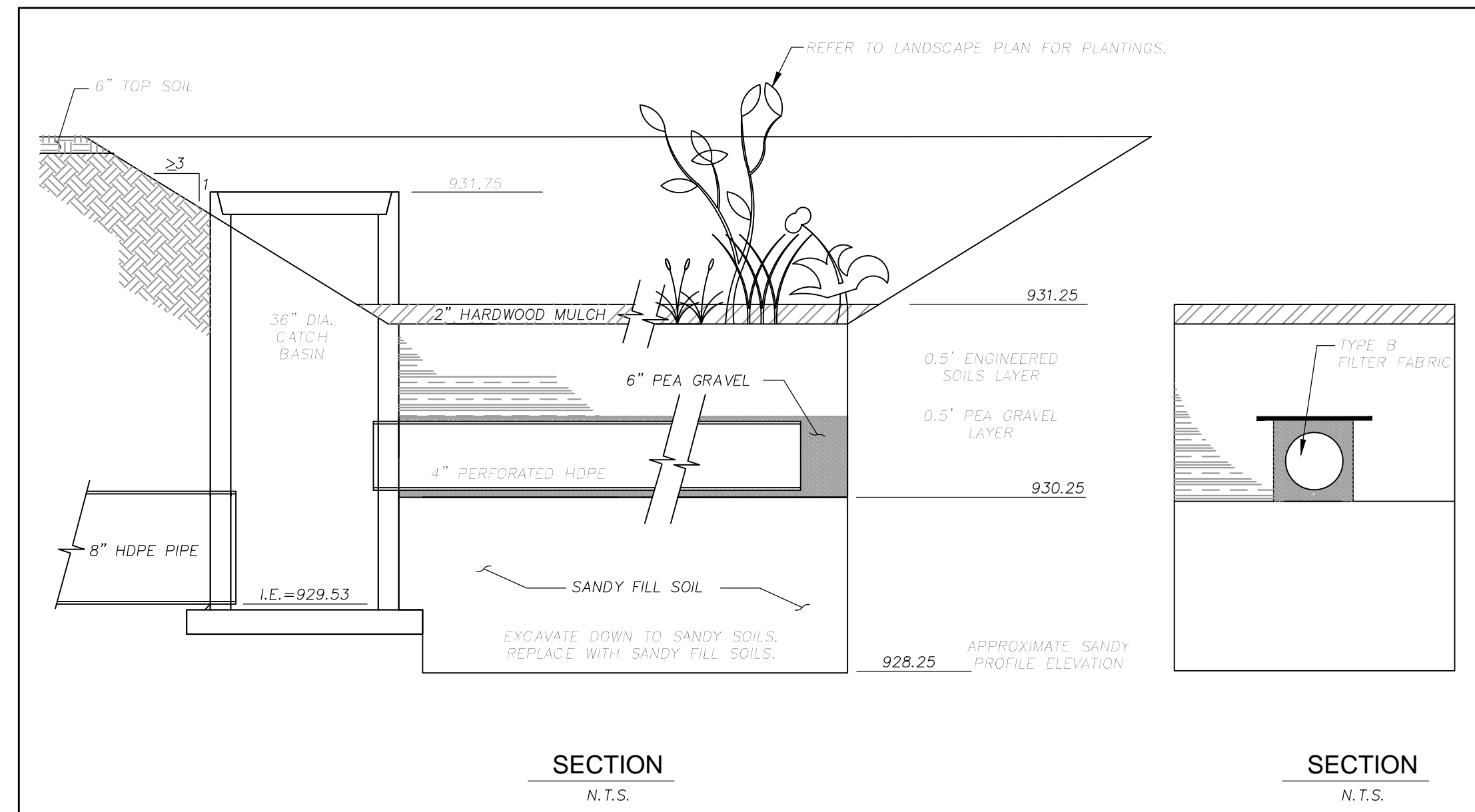
**GENERAL NOTES:**

1. ALL CONSTRUCTION PRACTICES SHALL MEET THE SPECIFICATIONS OF THE WDNR TECHNICAL STANDARD 1004 - BIORETENTION FOR INFILTRATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COPY OF THIS STANDARD AND CONSTRUCT THE BIORETENTION DEVICE IN ACCORDANCE WITH THE REQUIREMENTS OUTLINED THEREIN.
2. CONTRACTOR SHALL INSTALL 36" OF ENGINEERED SOIL CONSISTING OF: 70% ASTM C-33 SAND, 30% CERTIFIED COMPOST (SEE GENERAL NOTE 3).
3. CERTIFIED COMPOST SHALL CONSIST OF: >40% ORGANIC MATTER, <60% ASH CONTENT, pH OF 6-8, AND MOISTURE CONTENT OF 35-50% BY WEIGHT.
4. SAND/NATIVE SOIL INFILTRATION LAYER SHALL BE FORMED BY A LAYER OF SAND 3 INCHES DEEP, WHICH IS VERTICALLY MIXED WITH THE NATIVE SOIL TO A DEPTH OF 2-4 INCHES.
5. FILTER FABRIC SHALL BE PLACED ABOVE THE PERFORATED PIPE, BETWEEN THE PEA GRAVEL AND THE ENGINEERED SOIL, A WIDTH OF 4 FEET CENTERED OVER THE FLOW LINE OF THE PIPE.
6. ANNUAL RYE GRASS SHALL BE SEEDING AT 40 LB/ACRE WITH THE SEED MIX IN THE AREAS SURROUNDING THE BASIN, ON SIDE SLOPES, AND OVER ANY LAND THAT DISCHARGES INTO THE BASIN FOR EROSION CONTROL WHEN BASIN IS BROUGHT ON-LINE. ROOTSTOP AND PLUGS ARE REQUIRED TO ESTABLISH VEGETATION AT THE INVERT OF THE BASIN.
7. RUNOFF MUST INFILTRATE WITHIN 48-HOURS. BASINS UNABLE TO MAINTAIN THESE RATES MUST BE DEEP TILLED, REGRADED, AND IF NECESSARY REPLANTED TO RESTORE ORIGINAL INFILTRATION RATES.
8. ALL WORK TO BE CONDUCTED IN CONFORMANCE WITH APPLICABLE LOCAL, REGIONAL, AND STATE STORMWATER STANDARDS FOR THE PROJECT SITE AS APPROVED BY THE REGULATORY ENGINEER.
9. OWNER OR CONTRACTOR MUST CONSULT LANDSCAPE ARCHITECT OR ECOLOGICAL PLANTING AGENCY FOR APPROPRIATE PLANTS AND PLANTING CONFIGURATIONS.

INFILTRATION DEVICES ARE DESIGNED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR), COUNTY, MUNICIPALITY, AND ENGINEERING STANDARD OF CARE. ALL DESIGNATED INFILTRATION AREAS (E.G., RAIN GARDENS, INFILTRATION BASINS, BIORETENTION DEVICES) SHALL BE FENCED PRIOR TO CONSTRUCTION AND REMAIN UNDISTURBED AND PROTECTED DURING THE CONSTRUCTION OF PROPOSED SITE IMPROVEMENTS. PROPOSED BIORETENTION DEVICES SHALL NOT BE CONSTRUCTED UNTIL THE DEVICE'S CONTRIBUTING WATERSHED AREA MEETS ESTABLISHED VEGETATION REQUIREMENTS SET FORTH WITHIN THE RESPECTIVE WDNR TECHNICAL STANDARDS. IF THE LOCATION OF THE INFILTRATION AREA CONFLICTS WITH CONSTRUCTION STAGING AND/OR CONSTRUCTION TRAFFIC AND IS DISTURBED, COMPACTION MITIGATION WILL BE REQUIRED AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR IS REQUIRED TO PROVIDE QUALIFIED STAFF FOR INSPECTION AND OBSERVATION OF THE CONSTRUCTION ACTIVITIES RELATING TO ALL JOB SITE REGULATORY COMPLIANCE INCLUDING THE PROTECTION AND CONSTRUCTION OF ALL STORMWATER MANAGEMENT FEATURES. ANY OBSERVATION OF PLAN OR SITE DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

**1 BIORETENTION DEVICE**  
C402 N.T.S.



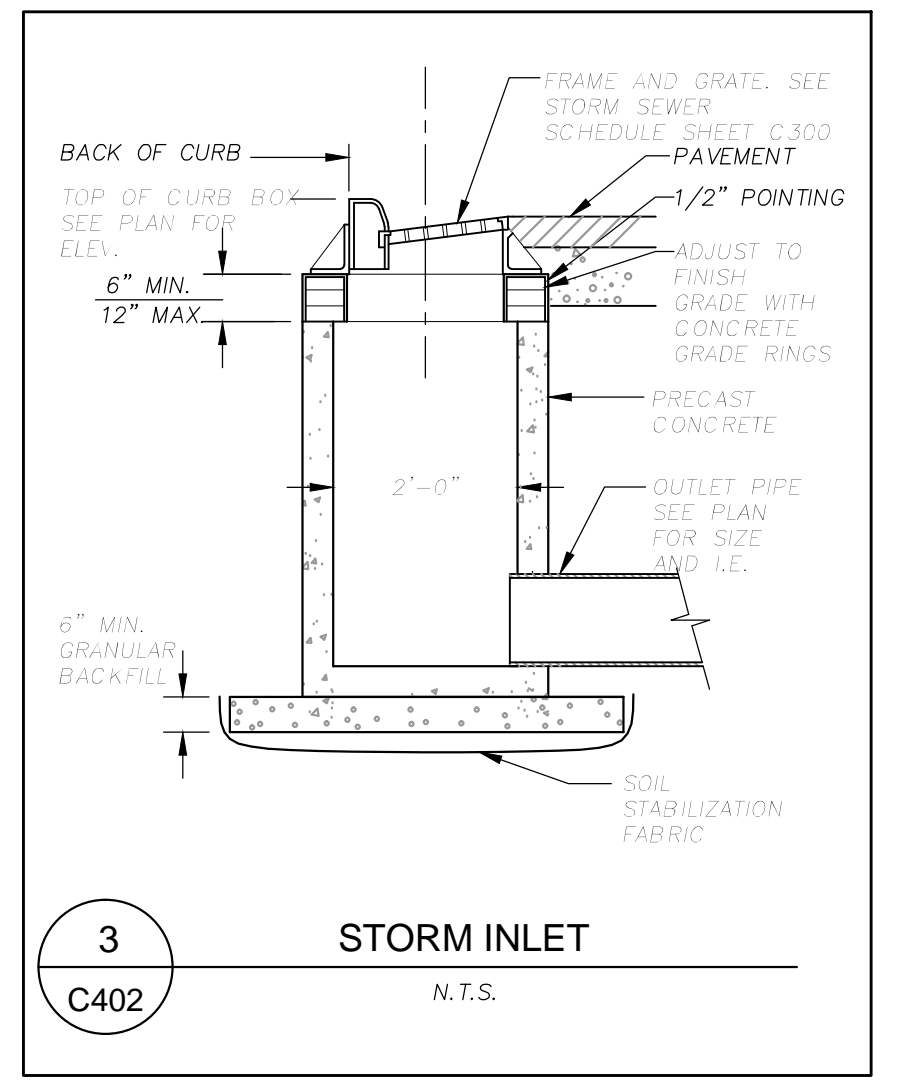
**GENERAL NOTES:**

1. CONTRACTOR SHALL INSTALL 6" OF ENGINEERED SOIL CONSISTING OF: 70% ASTM C-33 SAND AND 30% CERTIFIED COMPOST (SEE GENERAL NOTE 2).
2. CERTIFIED COMPOST SHALL CONSIST OF: >40% ORGANIC MATTER, <60% ASH CONTENT, pH OF 6-8, AND MOISTURE CONTENT OF 35-50% BY WEIGHT.
3. CONFIRM WITH GEOTECHNICAL ENGINEER THAT THE SANDY SOIL PROFILE HAS BEEN REACHED PRIOR TO BACKFILLING THE RAIN GARDEN.
4. SANDY FILL MUST HAVE AN EQUAL OR HIGHER INFILTRATION RATE THAN THE BOTTOM OF THE INFILTRATION BASIN AS CONFIRMED BY A GEOTECHNICAL ENGINEER.
5. FILTER FABRIC SHALL BE PLACED ABOVE THE PERFORATED PIPE, BETWEEN THE PEA GRAVEL AND THE ENGINEERED SOIL, A WIDTH OF 4 FEET CENTERED OVER THE FLOW LINE OF THE PIPE.
6. RUNOFF MUST INFILTRATE WITHIN 48-HOURS. BASINS UNABLE TO MAINTAIN THESE RATES MUST BE DEEP TILLED, REGRADED, AND IF NECESSARY REPLANTED TO RESTORE ORIGINAL INFILTRATION RATES.
7. ALL WORK TO BE CONDUCTED IN CONFORMANCE WITH APPLICABLE LOCAL, REGIONAL, AND STATE STORMWATER STANDARDS FOR THE PROJECT SITE AS APPROVED BY THE REGULATORY ENGINEER.
8. OWNER OR CONTRACTOR MUST CONSULT LANDSCAPE ARCHITECT OR ECOLOGICAL PLANTING AGENCY FOR APPROPRIATE PLANTS AND PLANTING CONFIGURATIONS.

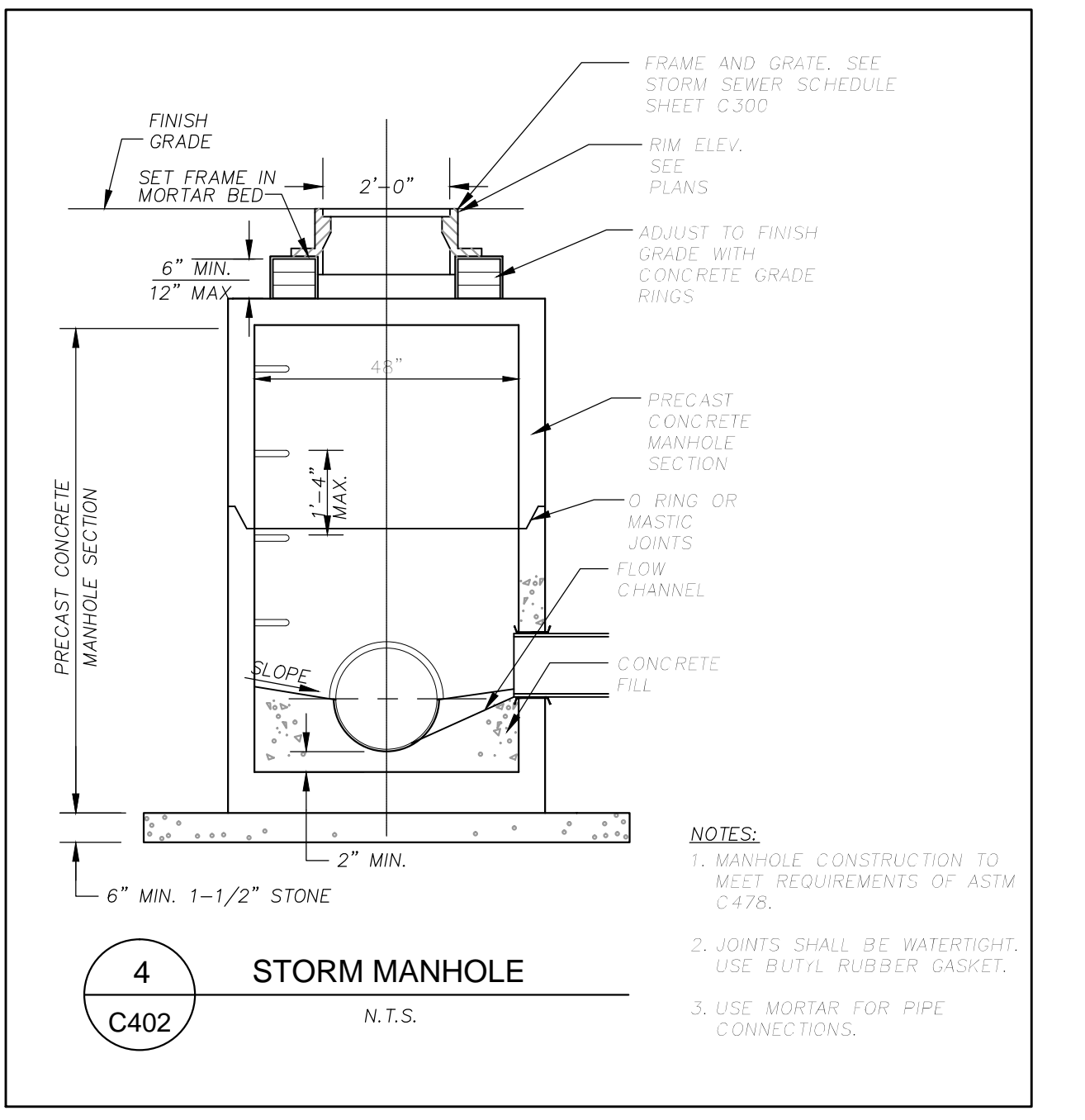
INFILTRATION DEVICES ARE DESIGNED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR), COUNTY, MUNICIPALITY, AND ENGINEERING STANDARD OF CARE. ALL DESIGNATED INFILTRATION AREAS (E.G., RAIN GARDENS, INFILTRATION BASINS, BIORETENTION DEVICES) SHALL BE FENCED PRIOR TO CONSTRUCTION AND REMAIN UNDISTURBED AND PROTECTED DURING THE CONSTRUCTION OF PROPOSED SITE IMPROVEMENTS. PROPOSED BIORETENTION DEVICES SHALL NOT BE CONSTRUCTED UNTIL THE DEVICE'S CONTRIBUTING WATERSHED AREA MEETS ESTABLISHED VEGETATION REQUIREMENTS SET FORTH WITHIN THE RESPECTIVE WDNR TECHNICAL STANDARDS. IF THE LOCATION OF THE INFILTRATION AREA CONFLICTS WITH CONSTRUCTION STAGING AND/OR CONSTRUCTION TRAFFIC AND IS DISTURBED, COMPACTION MITIGATION WILL BE REQUIRED AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR IS REQUIRED TO PROVIDE QUALIFIED STAFF FOR INSPECTION AND OBSERVATION OF THE CONSTRUCTION ACTIVITIES RELATING TO ALL JOB SITE REGULATORY COMPLIANCE INCLUDING THE PROTECTION AND CONSTRUCTION OF ALL STORMWATER MANAGEMENT FEATURES. ANY OBSERVATION OF PLAN OR SITE DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

**2 RAIN GARDEN**  
C402 N.T.S.

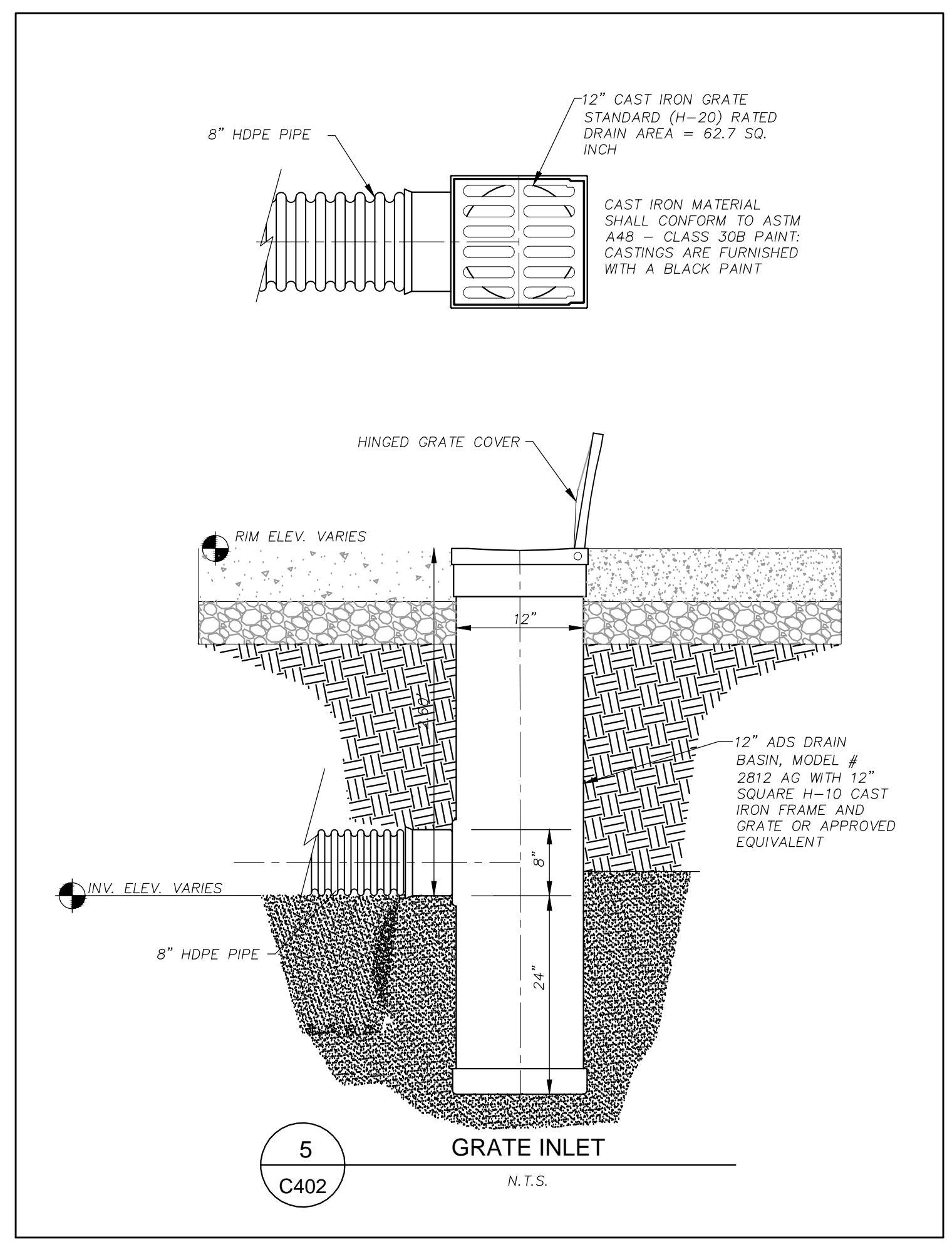


**3 STORM INLET**  
C402 N.T.S.

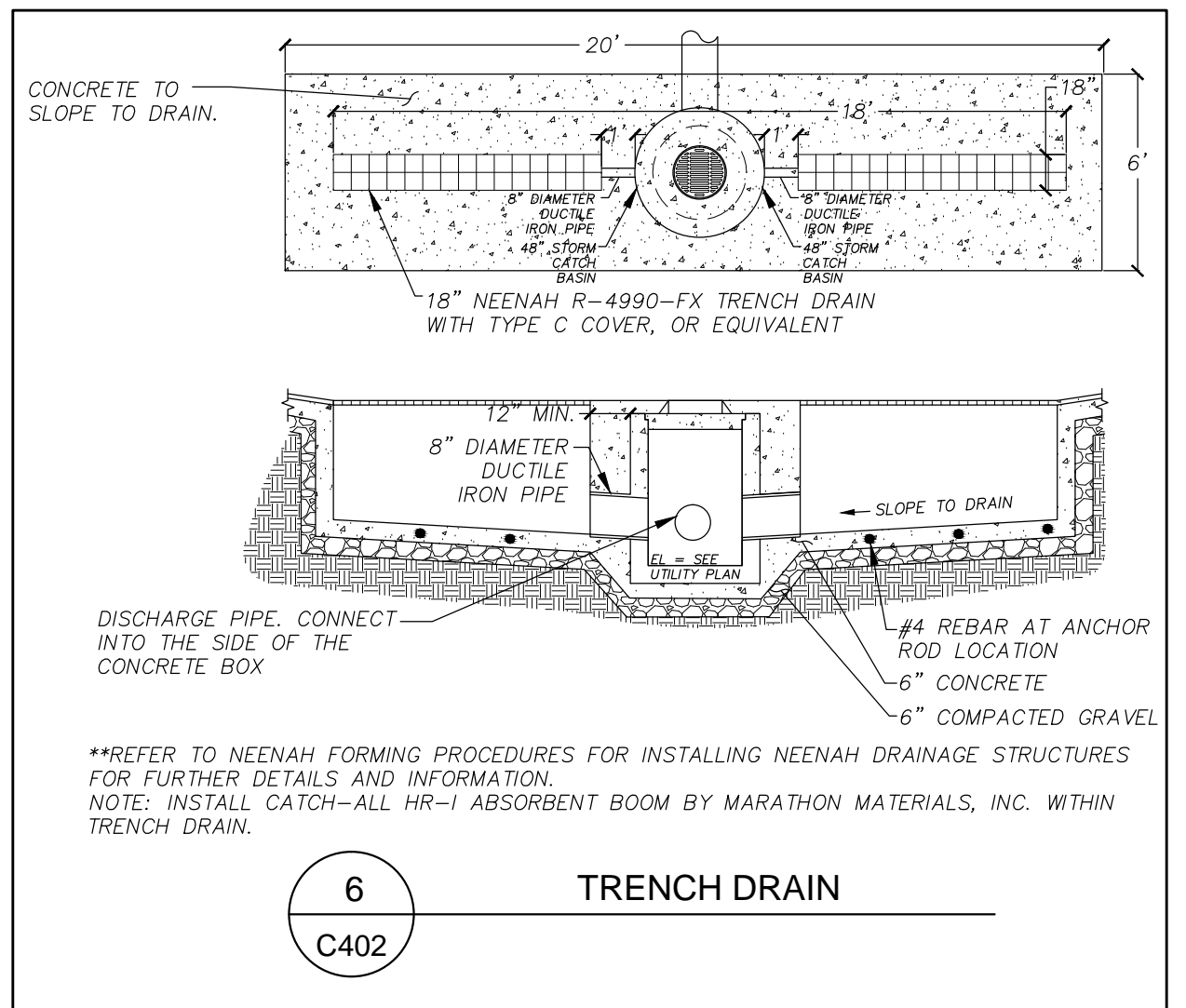


**4 STORM MANHOLE**  
C402 N.T.S.

- NOTES:**
1. MANHOLE CONSTRUCTION TO MEET REQUIREMENTS OF ASTM C478.
  2. JOINTS SHALL BE WATER TIGHT. USE BUTYL RUBBER GASKET.
  3. USE MORTAR FOR PIPE CONNECTIONS.



**5 GRATE INLET**  
C402 N.T.S.



**6 TRENCH DRAIN**  
C402



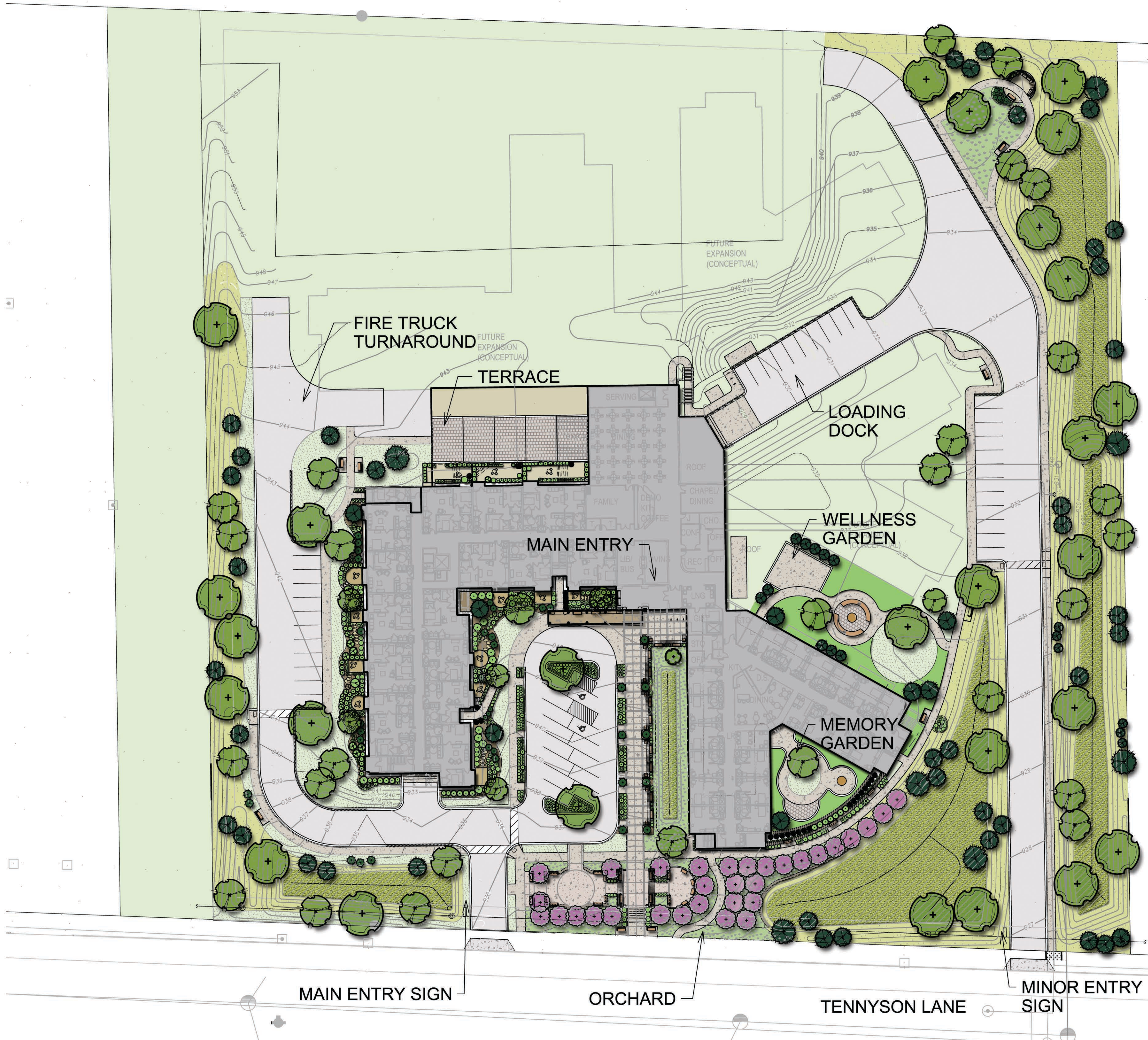
# Tennyson Senior Living Community

## STORMWATER DETAILS

JULY 9, 2014

Engberg Anderson Project No. 132290

**C402**



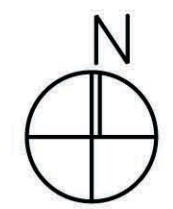
- SEED MIX A - LAWN
- SEED MIX B - NO MOW FESCUE
- SEED MIX C - PRAIRIE
- BIORETENTION PLUGS

Plant List Key	Botanical Name	Common Name	Size	Root Cond.	Comments
<b>Large Shade Trees</b>					
AR	<i>Acer freemanii</i> 'Armstrong'	Armstrong Freeman Maple	5	2 1/2" Cal.	B&B
AS	<i>Acer x freemanii</i> 'Sienna PP 11322'	Sienna Glen Maple	5	2 1/2" Cal.	B&B
AP	<i>Acer saccharum</i> 'Apollo'	Apollo Sugar Maple	1	2 1/2" Cal.	B&B
GB	<i>Ginkgo biloba</i> 'SFS-LG42'	Golden Colonel Ginkgo	6	2 1/2" Cal.	B&B
GD	<i>Gymnocladia dioica</i> 'Espresso'	Espresso Kentucky Coffee Tree	6	1 1/2" Cal.	B&B
GS	<i>Quercus schubertii</i>	Shubert's Oak, Hybrid Swamp Bur Oak	11	2 1/2" Cal.	B&B
<b>Evergreen Trees</b>					
AC	<i>Abies concolor</i>	White fir	3	8" H	B&B
JV	<i>Juniperus virginiana</i> 'Carolee'	Carolee Juniper	15	8" H	B&B
JJ	<i>Juniperus x 'J.N. Seland Blue'</i>	Star Power Juniper	8	8" H	B&B
LL	<i>Larix laricina</i>	American Larch	9	8" H	B&B
PS	<i>Pinus strobus</i> 'Densata'	Black Hills Spruce	4	8" H	B&B
PS	<i>Pinus pungens</i> 'Sister Dwarf'	Sister Blue Dwarf Colorado Spruce	4	8" H	B&B
PE	<i>Pinus leucodermis</i> 'Emerald Arrow'	Emerald Arrow Bosnian Pine	18	8" H	B&B
PM	<i>Pinus leucodermis</i> 'Mint Truffle'	Mint Truffle Bosnian Pine	5	8" H	B&B
PT	<i>Pinus mitis</i> 'Tennessee'	Tennessee Mugo Pine	9	8" H	B&B
TD	<i>Taxodium distichum</i> var. <i>distichum</i>	Bald Cypress	2	8" H	B&B
<b>Ornamental Trees</b>					
AB	<i>Acer palmatum</i> 'Bloodgood'	Bloodgood Japanese Maple	3	1 1/2" Cal.	B&B
AA	<i>Amelanchier alnifolia</i> 'Obelisk'	Shining Quail Serrisberry	14	1 1/2" Cal.	B&B
AD	<i>Amelanchier grandiflora</i> 'Princess Diana'	Princess Diana Serrisberry	7	1 1/2" Cal.	B&B
AL	<i>Amelanchier x laevis</i> 'Cumulus'	Cumulus Allegheny Serrisberry	2	1 1/2" Cal.	B&B
CJ	<i>Carpinus caroliniana</i> 'J.N. Strain'	J. N. Strain Musclewood	3	1 1/2" Cal.	B&B
CC	<i>Cornus canadensis</i> 'Columbus Strain'	Columbus Strain Eastern Redbud	5	1 1/2" Cal.	B&B
CV	<i>Chionanthus virginicus</i>	Fringe Tree	5	1 1/2" Cal.	B&B
HM	<i>Hepacodium miconoides</i>	Sevenson Flower	2	1 1/2" Cal.	B&B
MA	<i>Maackia amurensis</i>	Amur Maackia	3	1 1/2" Cal.	B&B
PP	<i>Prunus persica</i>	Peach	3	1 1/2" Cal.	B&B
PC	<i>Prunus caryocarpa</i> 'Cleveland Select'	Cleveland Select Pear	4	1 1/2" Cal.	B&B
SS	<i>Salix 'Scarletani'</i>	Scarlet Curly Willow	4	1 1/2" Cal.	B&B
<b>Edible Orchard Plants</b>					
MC	<i>Malus x domestica</i> 'Cortland'	Cortland Semi-dwarf Apple	4	1 1/2" Cal.	B&B
MG	<i>Malus x domestica</i> 'Golden Delicious'	Golden Delicious Apple	4	1 1/2" Cal.	B&B
PD	<i>Prunus domestica</i>	Plum	5	1 1/2" Cal.	B&B
PP	<i>Prunus persica</i>	Peach	3	1 1/2" Cal.	B&B
PL	<i>Prunus 'Luscious'</i>	Luscious Pear	4	1 1/2" Cal.	B&B
PY	<i>Prunus 'Summerisp'</i>	Summerisp Pear	4	1 1/2" Cal.	B&B
<b>Deciduous Shrubs</b>					
Am	<i>Aronia melanocarpa</i> 'Motor/Innocent Beauty'	Innocent Beauty Black Chokeberry	25	24" H	Cort.
Ch	<i>Cornus 'Hesse'</i>	Hesse Cornelian	13	18" spr.	Cort.
Hs	<i>Hydrangea arborescens</i> 'Alice's In Wonderland'	Smooth Hydrangea	14	24" H	Cort.
Sp	<i>Spiraea balleana</i> 'Toi'	For Breeze! Spirea	12	24" H	Cort.
Vd	<i>Viburnum dentatum</i> 'Christom'	Blue Muffin Arrowwood Viburnum	2	30" H	Cort.
<b>Evergreen Shrubs</b>					
Bg	<i>Buxus x Green Heart'</i>	Green Heart Boxwood	26		Cort.
Ja	<i>Juniperus sibirica</i> 'Arcadia'	Arcadia Juniper	9	18-24" Spr.	Cort.
Mi	<i>Microbiota decussata</i>	Siberian Cypress	14	24-30" Spr.	Cort.
Pm	<i>Pinus mitis</i> 'Slovenland'	Slovenland Mugo Pine	34	12" H	Cort.
Th	<i>Thuja x media</i> 'Ezra's Gold'	Ezra's Gold Blue Spruce	8	24-30" Spr.	Cort.
To	<i>Thuja occidentalis</i> 'Dorcadus Spire'	Dorcadus Spire Arborvitae	26	6" H	Cort.
<b>Perennials &amp; Groundcovers</b>					
ar	<i>Achillea racemosa</i> 'Criminella racemosa'	Fairy Candles	14	45"	Cort.
ab	<i>Asarabacca x Blue Fortune</i>	Blue Fortune Anise Hyssop	47	45"	Cort.
at	<i>Allium tanguticum</i> 'Summer Beauty'	Summer Beauty Allium	198	1 qt.	Cort.
ad	<i>Aruncus dioicus</i>	Goats Beard	5	45"	Cort.
on	<i>Galium aparine</i> 'Montrose White'	Lesser Galium	80	45"	Cort.
ec	<i>Echinacea purpurea</i> 'Meadow'	Purple Coneflower	7	45"	Cort.
ep	<i>Echinacea purpurea</i> 'Magnus'	Purple Coneflower	49	45"	Cort.
eu	<i>Eupatorium 'Phantom'</i>	Phantom Joe Pye Weed	6	45"	Cort.
gb	<i>Geranium x carolinense</i> 'Bikovo'	Bikovo Geranium	62	45"	Cort.
gd	<i>Geranium 'Dixie'</i>	Dixie Hardy Geranium	45	45"	Cort.
hh	<i>Hemerocallis 'Happy Returns'</i>	Happy Returns Day Lily	42	45"	Cort.
hr	<i>Heuchera 'Raspberry Ice'</i>	Raspberry Ice Heuchera	29	1 qt.	Cort.
hk	<i>Hosta 'Krossa Regal'</i>	Krossa Regal Hosta	15	1 qt.	Cort.
ls	<i>Liatris spicata</i>	Liatris Spicata	14	45"	Cort.
md	<i>Moradia didyma</i>	Bee Balm	12	45"	Cort.
rf	<i>Nepeta x faassenii</i> 'Walker's Low'	Walker's Low Catmint	11	45"	Cort.
pd	<i>Plantago digitalis</i>	Foxglove Beardtongue	12	45"	Cort.
pb	<i>PolYGONUM biflorum</i>	Soldanella Seed	17	45"	Cort.
sn	<i>Salvia nemorosa</i> 'Caradonna'	Caradonna Salvia	37	45"	Cort.
<b>Grasses &amp; Sedges</b>					
gca	<i>Calamagrostis canadensis</i> 'Karl Foerster'	Karl Foerster Feather Reed Grass	36	45"	Cort.
gdc	<i>Dactyloctenium aegyptium</i>	Tall Hair Grass	50	45"	Cort.
gpr	<i>Panicum virgatum</i> 'RUBY Ribbons'	Ruby Ribbons Switch Grass	44	45"	Cort.
gpc	<i>Panicum virgatum</i> 'Shenandoah'	Shenandoah Switch Grass	83	45"	Cort.
gph	<i>Pennisetum glaucum</i> 'Hamelin'	Hamelin Dwarf Fountain Grass	41	45"	Cort.
gga	<i>Sesleria autumnalis</i>	Autumn Moor Grass	12	45"	Cort.
ggh	<i>Sporobolus heterolepis</i>	Prairie Dropseed	19	45"	Cort.
<b>Ferns</b>					
fcc	<i>Onoclea sensibilis</i>	Sensitive Fern	17	45"	Cort.
<b>Vines</b>					
wf	<i>Wisteria frutescens</i> 'Amethyst Falls'	Amethyst Falls American Wisteria	31	5 gal.	Cort.
<b>Seed Mix A - Lawn (Boulevard Blend by Earth Carpet)</b>					
	<i>Festuca arundinacea</i>	Turf-type Tall Fescue			30%
	<i>Festuca rubra</i> L. var. <i>rubra</i>	Creeping Red Fescue			25%
	<i>Puccinellia</i>	Alkali Grass			25%
	<i>Lolium hybridum</i> Huskiss	Intermediate Ryegrass			20%
<b>Seed Mix B - No Mow Fescue Mix (Care Free Blend by Earth Carpet)</b>					
	<i>Festuca glauca</i>	Blue Fescue			10%
	<i>Festuca rubra</i> L. var. <i>rubra</i>	Creeping Red Fescue			30%
	<i>Festuca rubra</i> L. var. <i>commutata</i>	Creeping Fescue			35%
	<i>Festuca longifolia</i>	Hard Fescue			25%
<b>Seed Mix C - Prairie Mix (Butterfly Prairie Seed Mix by Prairie Nursery)</b>					
	<i>Aster laevis</i>	Smooth Aster	515	2 1/2"	pot
	<i>Asclepias tuberosa</i>	Swamp Milkweed	515	2 1/2"	pot
	<i>Carex flacca</i>	Blue Sedge	1800	2 1/2"	pot
	<i>Carex vulpinoidea</i>	Rox Sedge	1800	2 1/2"	pot
	<i>Echinacea purpurea</i>	Purple Coneflower	515	2 1/2"	pot
	<i>Glycyrrhiza sibirica</i>	Fowl Manna Grass	1800	2 1/2"	pot
	<i>Liatris spicata</i>	Liatris Spicata	515	2 1/2"	pot
	<i>Rudbeckia hirta</i>	Black-eyed Susan	515	2 1/2"	pot
	<i>Solidago rigida</i>	Stiff Goldenrod	515	2 1/2"	pot
	<i>Solidago speciosa</i>	Showy Goldenrod	515	2 1/2"	pot
	<i>Sporobolus heterolepis</i>	Prairie Dropseed	1800	2 1/2"	pot
	<i>Verbena stricta</i>	Hairy Verban			
<b>Bioretention &amp; Rain Garden Plant Mix</b>					
	<i>Aster laevis</i>	Smooth Aster	515	2 1/2"	pot
	<i>Asclepias incarnata</i>	Swamp Milkweed	515	2 1/2"	pot
	<i>Carex flacca</i>	Blue Sedge	1800	2 1/2"	pot
	<i>Carex vulpinoidea</i>	Rox Sedge	1800	2 1/2"	pot
	<i>Echinacea purpurea</i>	Purple Coneflower	515	2 1/2"	pot
	<i>Glycyrrhiza sibirica</i>	Fowl Manna Grass	1800	2 1/2"	pot
	<i>Liatris spicata</i>	Liatris Spicata	515	2 1/2"	pot
	<i>Rudbeckia hirta</i>	Black-eyed Susan	515	2 1/2"	pot
	<i>Solidago rigida</i>	Stiff Goldenrod	515	2 1/2"	pot
	<i>Solidago speciosa</i>	Showy Goldenrod	515	2 1/2"	pot
	<i>Sporobolus heterolepis</i>	Prairie Dropseed	1800	2 1/2"	pot



# Tennyson Senior Living Community

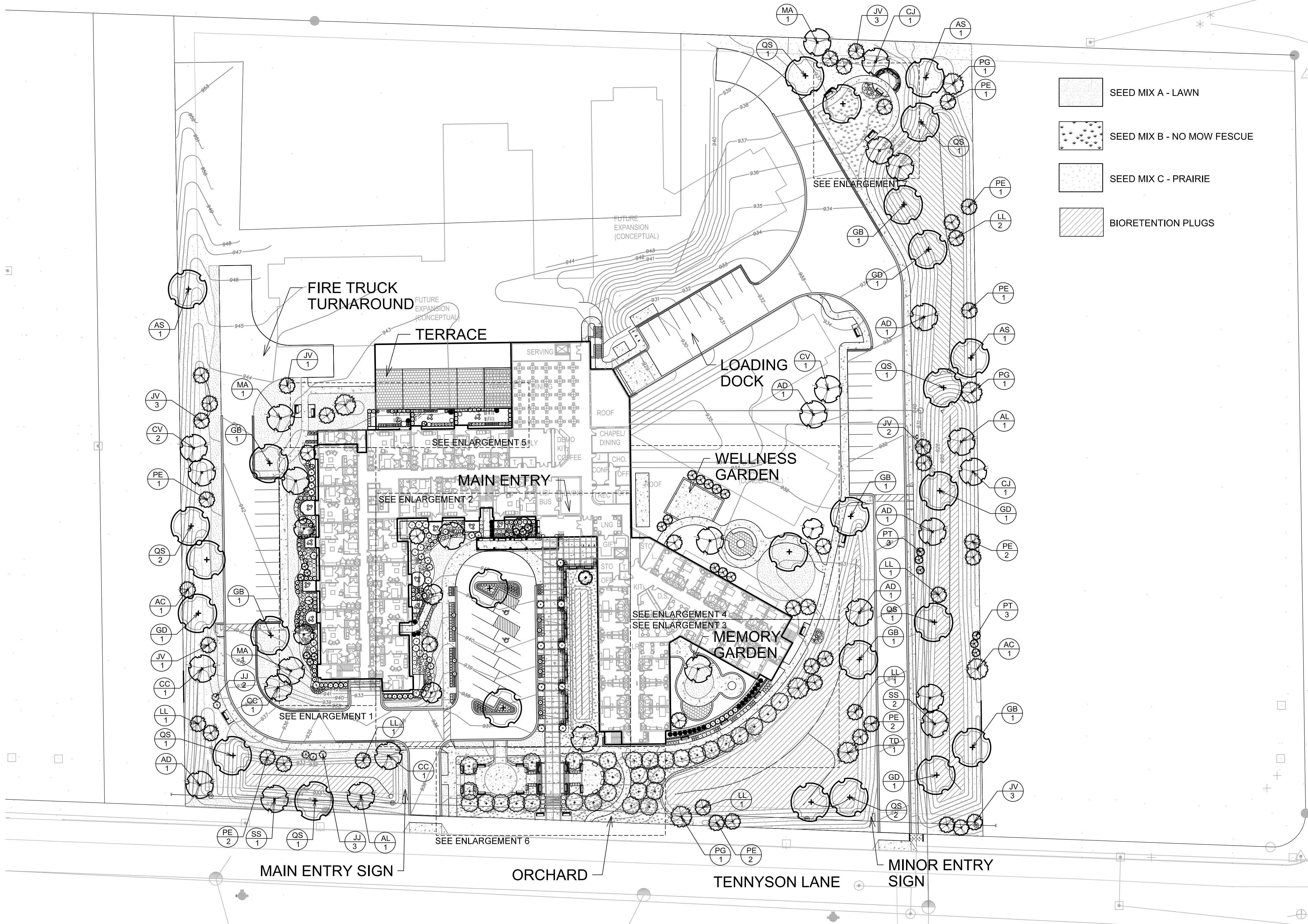
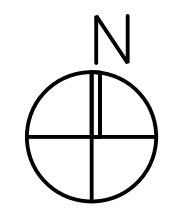
LANDSCAPE PLAN  
 1" = 40'-0"  
 July 16, 2014  
 Engberg Anderson Project No. 132290



Mix species randomly in planting, space 18" on center, ratio of grasses to flowers is 70:30 in planting area (Total Area 10,288 sf)

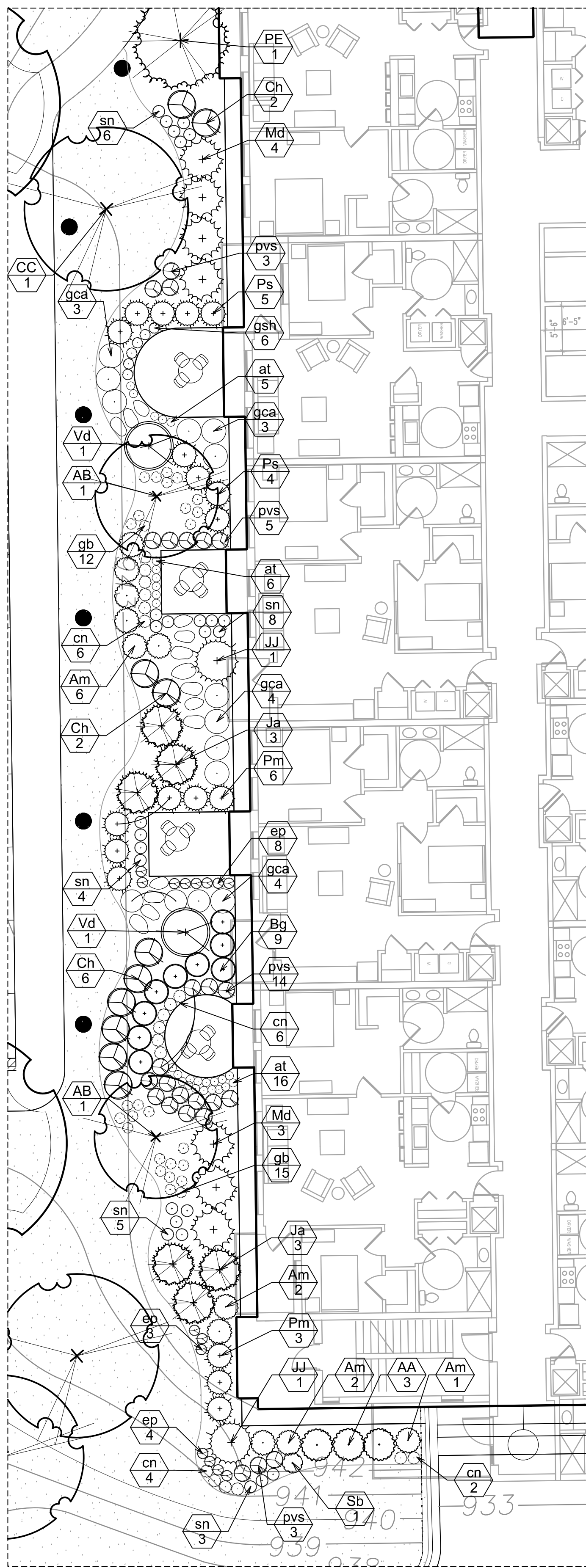
# Tennyson Senior Living Community

LANDSCAPE PLAN  
1" = 40'-0"  
July 16, 2014  
Engberg Anderson Project No. 132290

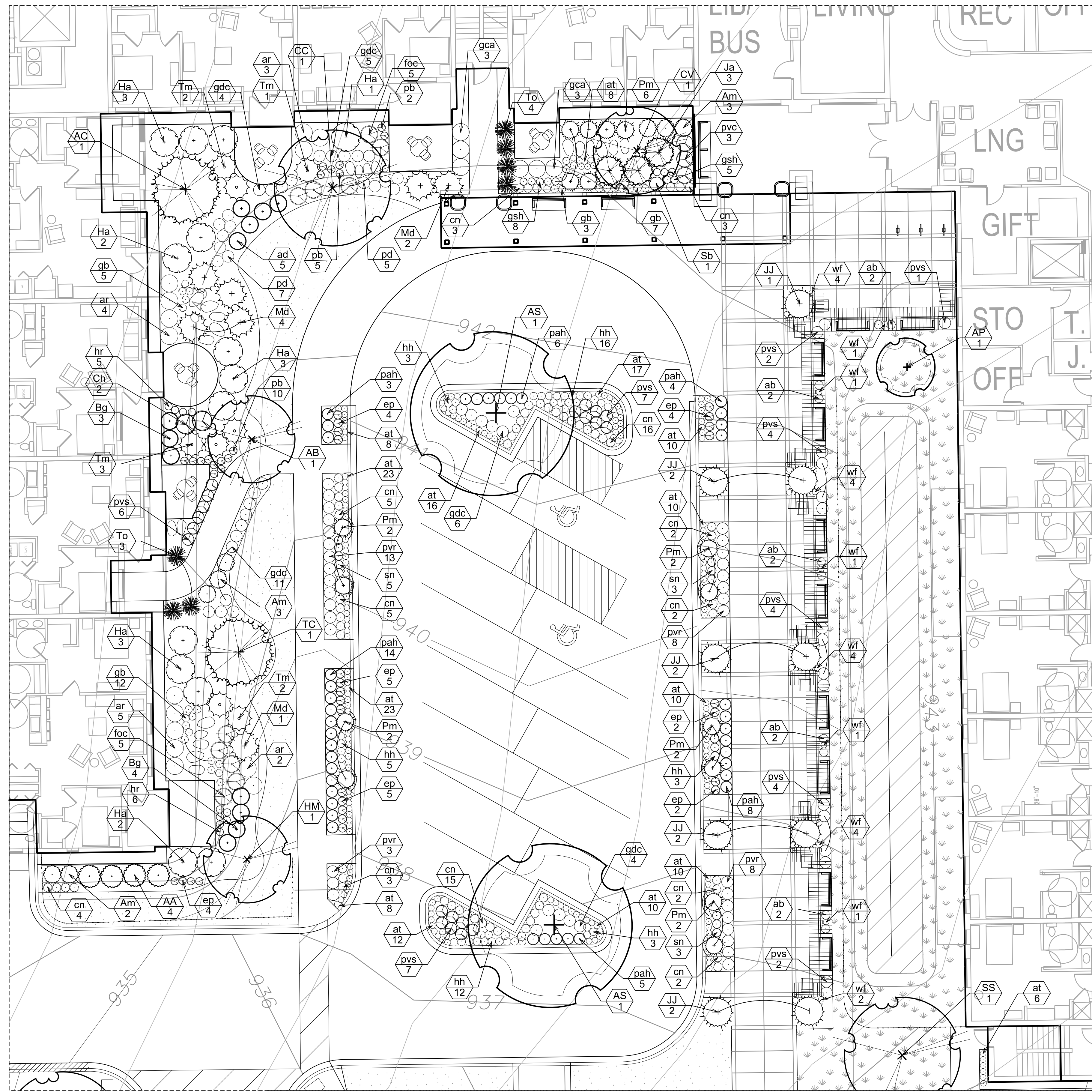


Key	Botanical Name	Common Name	Size	Root Cond.	Comments
<b>Large Shade Trees</b>					
AR	<i>Acer freemanii</i> 'Armstrong'	Armstrong Freeman Maple	5	2 1/2" Cal.	B&B
AS	<i>Acer x freemanii</i> 'Sienna PP 11322'	Sienna Glen Maple	5	2 1/2" Cal.	B&B
AP	<i>Acer saccharum</i> 'Apollo'	Apollo Sugar Maple	1	2 1/2" Cal.	B&B
GB	<i>Ginkgo biloba</i> 'F.S.-UGA2'	Golden Colonnade Ginkgo	6	2 1/2" Cal.	B&B
GD	<i>Gymnocladia dioica</i> 'Espresso'	Espresso Kentucky Coffee Tree	6	1 1/2" Cal.	B&B
QS	<i>Quercus schuettei</i>	Schuette's Oak, Hybrid Swamp Bur Oak	11	2 1/2" Cal.	B&B
<b>Evergreen Trees</b>					
AC	<i>Abies concolor</i>	White fir	3	8" H.	B&B
JV	<i>Juniperus virginiana</i> 'Carovani'	Carovani Juniper	15	8" H.	B&B
JJ	<i>Juniperus x 'J.N. Selot Blue'</i>	Star Power Juniper	8	8" H.	B&B
LL	<i>Larix laricina</i>	American Larch	9	8" H.	B&B
PG	<i>Pinus glauca</i> 'Densa1'	Black Hills Spruce	4	8" H.	B&B
PS	<i>Pinus pungens</i> 'Sister Dwarf'	Sister Blue Dwarf Colorado Spruce	4	8" H.	B&B
PE	<i>Pinus leucodermis</i> 'Emerald Arrow'	Emerald Arrow Bosnian Pine	18	8" H.	B&B
PM	<i>Pinus leucodermis</i> 'Mint Truffle'	Mint Truffle Bosnian Pine	5	8" H.	B&B
PT	<i>Pinus mugo</i> 'Tannenbaum'	Tannenbaum Mugo Pine	9	8" H.	B&B
TD	<i>Taxodium distichum</i> var. <i>distichum</i>	Bald Cypress	2	8" H.	B&B
<b>Ornamental Trees</b>					
AB	<i>Acer palmatum</i> 'Bloodgood'	Bloodgood Japanese Maple	3	1 1/2" Cal.	B&B
AA	<i>Amandorla alnifolia</i> 'Obelisk'	Standing Queen Serviceberry	14	1 1/2" Cal.	B&B
AD	<i>Amandorla grandiflora</i> 'Princess Diana'	Princess Diana Serviceberry	7	1 1/2" Cal.	B&B
AL	<i>Amandorla x laevis</i> 'Cumulus'	Cumulus Allegory Serviceberry	2	1 1/2" Cal.	B&B
CJ	<i>Carpinus caroliniana</i> 'J.N. Strain'	J. N. Strain Musclewood	3	1 1/2" Cal.	B&B
CC	<i>Cornus canadensis</i> 'Columbus Strain'	Columbus Strain Eastern Redbud	5	1 1/2" Cal.	B&B
CV	<i>Chionanthus virginicus</i>	Fringe Tree	5	1 1/2" Cal.	B&B
HM	<i>Hepacodium miconioides</i>	Sevenson Flower	2	1 1/2" Cal.	B&B
MA	<i>Maackia amurensis</i>	Amur Maackia	3	1 1/2" Cal.	B&B
PP	<i>Prunus pennsylvanica</i>	Royal Redbloss Crabapple	3	1 1/2" Cal.	B&B
PC	<i>Pyrus calleryana</i> 'Cleveland Select'	Cleveland Select Pear	4	1 1/2" Cal.	B&B
SS	<i>Salix 'Scarazani'</i>	Scarlet Curly Willow	4	1 1/2" Cal.	B&B
<b>Edible Orchard Plants</b>					
MC	<i>Malus x domestica</i> 'Cortland'	Cortland Semi-dwarf Apple	4	1 1/2" Cal.	B&B
MG	<i>Malus x domestica</i> 'Golden Delicious'	Golden Delicious Apple	4	1 1/2" Cal.	B&B
PD	<i>Prunus domestica</i>	Plum	5	1 1/2" Cal.	B&B
PP	<i>Prunus persica</i>	Peach	3	1 1/2" Cal.	B&B
PL	<i>Pyrus 'Luscious'</i>	Luscious Pear	4	1 1/2" Cal.	B&B
PY	<i>Pyrus 'Summerispy'</i>	Summerispy Pear	4	1 1/2" Cal.	B&B
<b>Deciduous Shrubs</b>					
Am	<i>Aronia melanocarpa</i> 'Morton/Tropicus Beauty'	Tropicus Beauty Black Chokeberry	25	24" H.	Cort.
Ch	<i>Coloreaster 'Hesse'</i>	Hesse Coloreaster	13	18" spr.	Cort.
Hg	<i>Hydrangea arborescens</i> 'Albela Incredibil'	Smooth Hydrangea	14	24" H.	Cort.
Sp	<i>Spiraea ballica</i> 'Toi'	Princess Diana Spirea	2	12" H.	Cort.
Vd	<i>Viburnum dentatum</i> 'Christom'	Blue Mufin Arrowwood Viburnum	2	30" H.	Cort.
<b>Evergreen Shrubs</b>					
Bg	<i>Buxus x Green Mound'</i>	Green Mound Boxwood	26		Cort.
Ja	<i>Juniperus sibirica</i> 'Arcadia'	Arcadia Juniper	9	18-24" Spr.	Cort.
Md	<i>Microbiota doliceolata</i>	Siberian Cypress	14	24-30" Spr.	Cort.
Pm	<i>Pinus mugo</i> 'Slowmound'	Slowmound Mugo Pine	34	12" H.	Cort.
Tm	<i>Taxus x media</i> 'Ewelwood'	Raylow New	8	24-30" Spr.	Cort.
To	<i>Thuja occidentalis</i> 'DoGwood's Spire'	DoGwood's Spire Arborvitae	26	6' H.	Cort.
<b>Perennials &amp; Groundcovers</b>					
ar	<i>Achillea racemosa</i> (Crimulga racemosa)	Fairy Candles	14	4.5"	Cort.
ab	<i>Agastache x Blue Fortune'</i>	Blue Fortune Anise Hyssop	47	4.5"	Cort.
at	<i>Allium triquetrum</i> 'Summer Beauty'	Summer Beauty Allium	198	1 qt.	Cort.
ad	<i>Aruncus dioicus</i>	Goats Beard	5	4.5"	Cort.
on	<i>Calamintha nepota</i> 'Montrose White'	Lesser Calamint	80	4.5"	Cort.
ec	<i>Echinacea sibirica</i> 'Meadowlark'	Pink Meadowlark Purple Coneflower	7	4.5"	Cort.
ep	<i>Echinacea purpurea</i> 'Magnus'	Purple Coneflower	49	4.5"	Cort.
eu	<i>Eupatorium 'Phantom'</i>	Phantom Joe Pye Weed	6	4.5"	Cort.
gb	<i>Geranium x carolinense</i> 'Bikovo'	Bikovo Geranium	62	4.5"	Cort.
gd	<i>Geranium 'Dixie'</i>	Dixie Hardy Geranium	45	4.5"	Cort.
hh	<i>Hemerocallis 'Happy Returns'</i>	Happy Returns Daylily	42	4.5"	Cort.
hr	<i>Heuchera 'Raspberry Ice'</i>	Raspberry Ice Heuchera	29	1 qt.	Cort.
hk	<i>Hosta 'Krossa Regal'</i>	Krossa Regal Hosta	15	1 qt.	Cort.
ls	<i>Liatris spicata</i>	Liatris Spicata	14	4.5"	Cort.
md	<i>Moradia didyma</i>	Bee Balm	12	4.5"	Cort.
rf	<i>Nepeta x faassenii</i> 'Walker's Low'	Walker's Low Catmint	11	4.5"	Cort.
pd	<i>Peristemon digitalis</i>	Foxglove Beardtongue	12	4.5"	Cort.
pb	<i>Poligonatum biflorum</i>	Soldier's Seal	17	4.5"	Cort.
sn	<i>Salvia nemorosa</i> 'Caradonna'	Caradonna Salvia	37	4.5"	Cort.
<b>Grasses &amp; Sedges</b>					
gga	<i>Calamagrostis scutellifolia</i> 'Karl Foerster'	Karl Foerster Feather Reed Grass	36	4.5"	Cort.
gds	<i>Dactylis glomerata</i>	Tuff-type Tall Fescue	50	4.5"	Cort.
pr	<i>Panicum virgatum</i> 'Ruby Ribbons'	Ruby Ribbons Switch Grass	44	4.5"	Cort.
ps	<i>Panicum virgatum</i> 'Shenandoah'	Shenandoah Switch Grass	83	4.5"	Cort.
pah	<i>Pennisetum alopecuroides</i> 'Hamelin'	Hamelin Dwarf Fountain Grass	41	4.5"	Cort.
gaa	<i>Sesleria autumnalis</i>	Autumnal Grass	12	4.5"	Cort.
gh	<i>Sporobolus heterolepis</i>	Prairie Dropseed	19	4.5"	Cort.
<b>Ferns</b>					
fcc	<i>Onoclea sensibilis</i>	Cinnamon Fern	17	4.5"	Cort.
<b>Vines</b>					
wf	<i>Wisteria frutescens</i> 'Amethyst Falls'	Amethyst Falls American Wisteria	31	5 gal.	Cort.
<b>Seed Mix A - Lawn (Boulevard Blend by Earth Carpet)</b>					
	<i>Festuca arundinacea</i>	Turf-type Tall Fescue			30%
	<i>Festuca rubra</i> L. var. <i>rubra</i>	Creeping Red Fescue			25%
	<i>Puccinellia</i>	Alkali Grass			25%
	<i>Lolium hybridum</i> 'Husker'	Intermediate Ryegrass			20%
<b>Seed Mix B - No Mow Fescue Mix (Care Free Blend by Earth Carpet)</b>					
	<i>Festuca glauca</i>	Blue Fescue			10%
	<i>Festuca rubra</i> L. var. <i>rubra</i>	Creeping Red Fescue			30%
	<i>Festuca rubra</i> L. var. <i>commutata</i>	Creeping Fescue			35%
	<i>Festuca longifolia</i>	Hard Fescue			25%
<b>Seed Mix C - Prairie Mix (Butterfly Prairie Seed Mix by Prairie Nursery)</b>					
	<i>Aster laevis</i>	Smooth Aster	515	2 1/2"	pot
	<i>Asclepias incarnata</i>	Swamp Milkweed	515	2 1/2"	pot
	<i>Carex flacca</i>	Blue Sedge	1800	2 1/2"	pot
	<i>Carex vulpocarpa</i>	Rox Sedge	1800	2 1/2"	pot
	<i>Echinacea purpurea</i>	Purple Coneflower	515	2 1/2"	pot
	<i>Glyceria striata</i>	Fowl Mania Grass	1800	2 1/2"	pot
	<i>Liatris spicata</i>	Liatris Spicata	515	2 1/2"	pot
	<i>Rudbeckia hirta</i>	Black-eyed Susan	515	2 1/2"	pot
	<i>Solidago rigida</i>	Stiff Goldenrod	515	2 1/2"	pot
	<i>Solidago speciosa</i>	Show Goldenrod	515	2 1/2"	pot
	<i>Sporobolus heterolepis</i>	Prairie Dropseed	1800	2 1/2"	pot
	<i>Verbena stricta</i>	Hairy Verban			
<b>Bioretention &amp; Rain Garden Plant Mix</b>					
	<i>Aster laevis</i>	Smooth Aster	515	2 1/2"	pot
	<i>Asclepias incarnata</i>	Swamp Milkweed	515	2 1/2"	pot
	<i>Carex flacca</i>	Blue Sedge	1800	2 1/2"	pot
	<i>Carex vulpocarpa</i>	Rox Sedge	1800	2 1/2"	pot
	<i>Echinacea purpurea</i>	Purple Coneflower	515	2 1/2"	pot
	<i>Glyceria striata</i>	Fowl Mania Grass	1800	2 1/2"	pot
	<i>Liatris spicata</i>	Liatris Spicata	515	2 1/2"	pot
	<i>Rudbeckia hirta</i>	Black-eyed Susan	515	2 1/2"	pot
	<i>Solidago rigida</i>	Stiff Goldenrod	515	2 1/2"	pot
	<i>Solidago speciosa</i>	Show Goldenrod	515	2 1/2"	pot
	<i>Sporobolus heterolepis</i>	Prairie Dropseed	1800	2 1/2"	pot

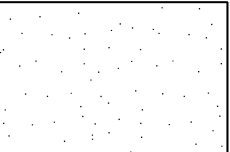
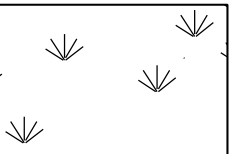
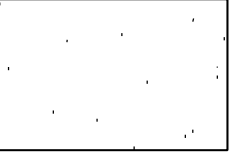

14 lb/1000 sf (Total Area 48,177 sf = 12 lb Seeding)  
mix species randomly in planting, space 18" on center, ratio of grasses to flowers is 70:30 in planting area (Total Area 10,288 sf)



1 FRONT YARD PLANTINGS  
1"=10'-0" @ FULL SIZE SHEET (24X36)



2 FRONT YARD AND ENTRY PLANTING  
1"=10'-0" @ FULL SIZE SHEET (24X36)

-  SEED MIX A - LAWN
-  SEED MIX B - NO MOW FESCUE
-  SEED MIX C - PRAIRIE
-  BIORETENTION PLUGS

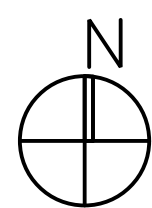
# Tennyson Senior Living Community

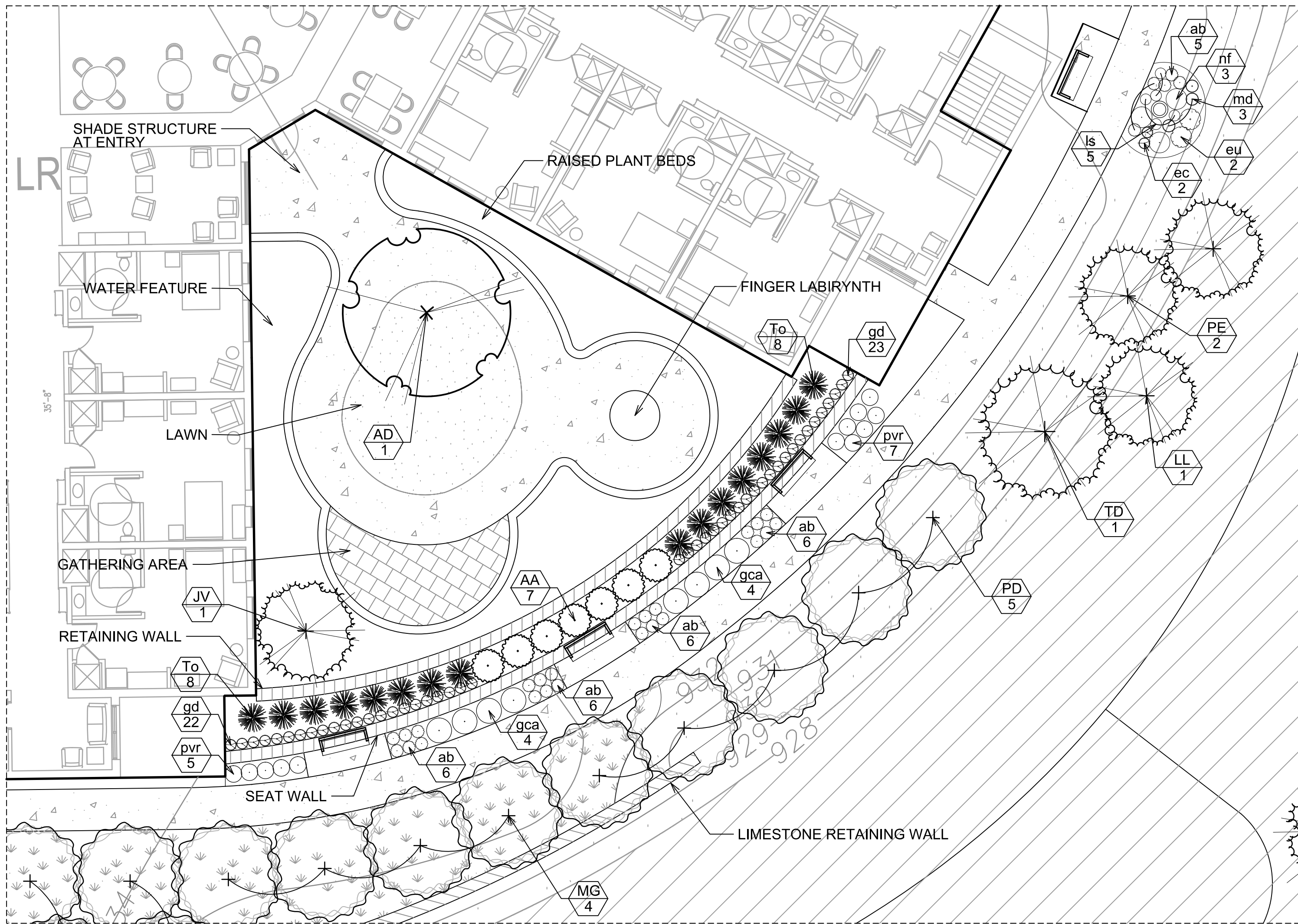
LANDSCAPE PLAN ENLARGEMENT

1" = 10'-0"

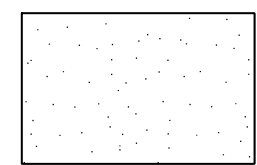
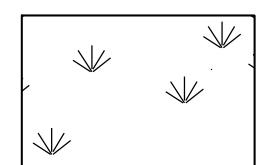
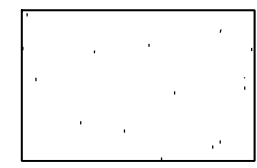

July 16, 2014

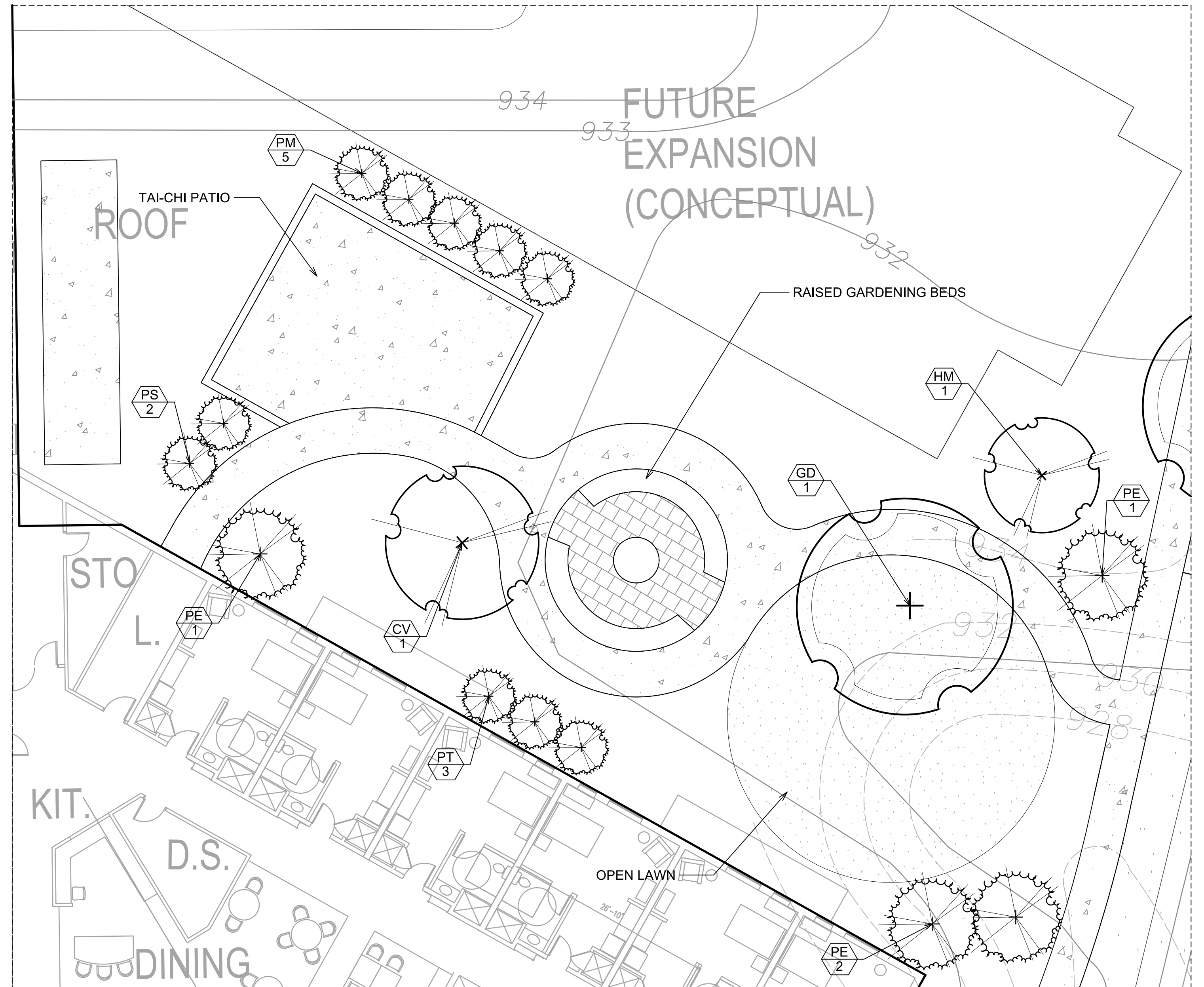
Engberg Anderson Project No. 132290





3 MEMORY GARDEN CONCEPT  
1"=10'-0" @ FULL SIZE SHEET (24X36)

-  SEED MIX A - LAWN
-  SEED MIX B - NO MOW FESCUE
-  SEED MIX C - PRAIRIE
-  BIORETENTION PLUGS



4 WELLNESS GARDEN CONCEPT  
1"=10'-0" @ FULL SIZE SHEET (24X36)

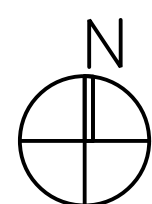
# Tennyson Senior Living Community

LANDSCAPE PLAN ENLARGEMENT

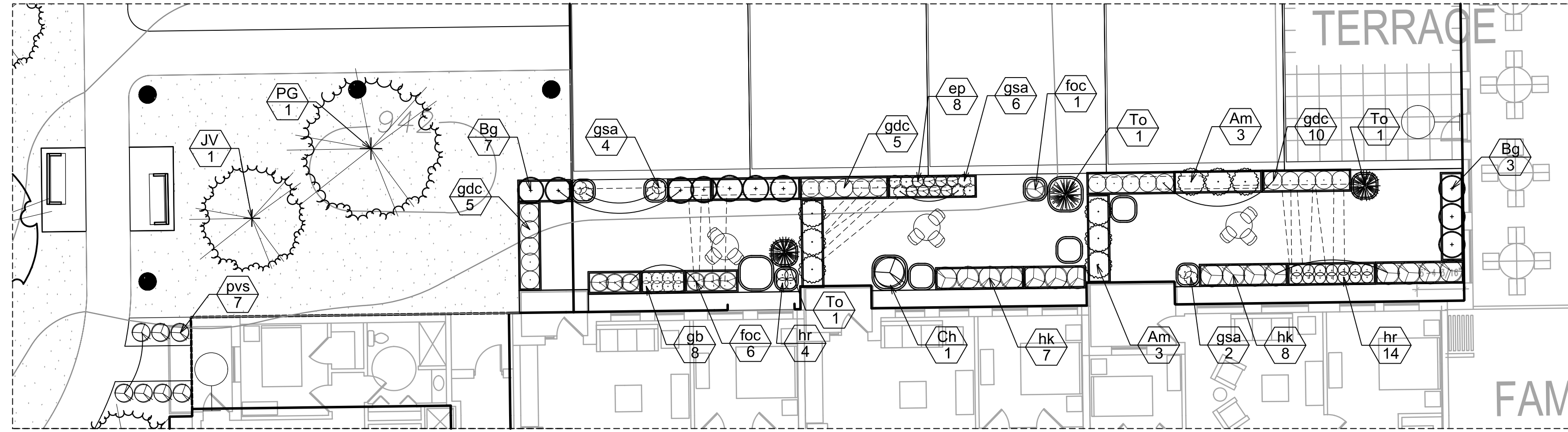
1" = 10'-0"

July 16, 2014

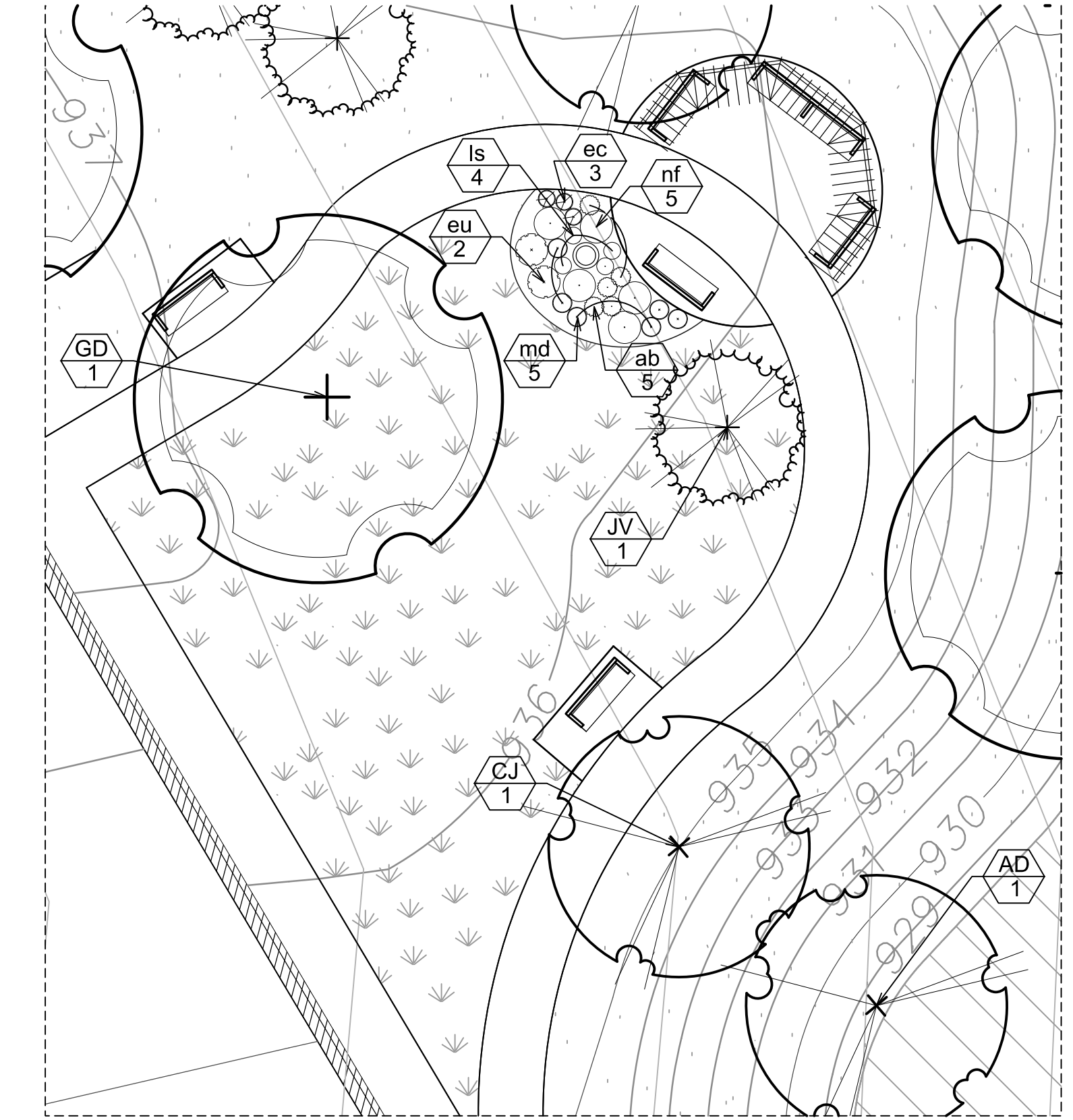
Engberg Anderson Project No. 132290



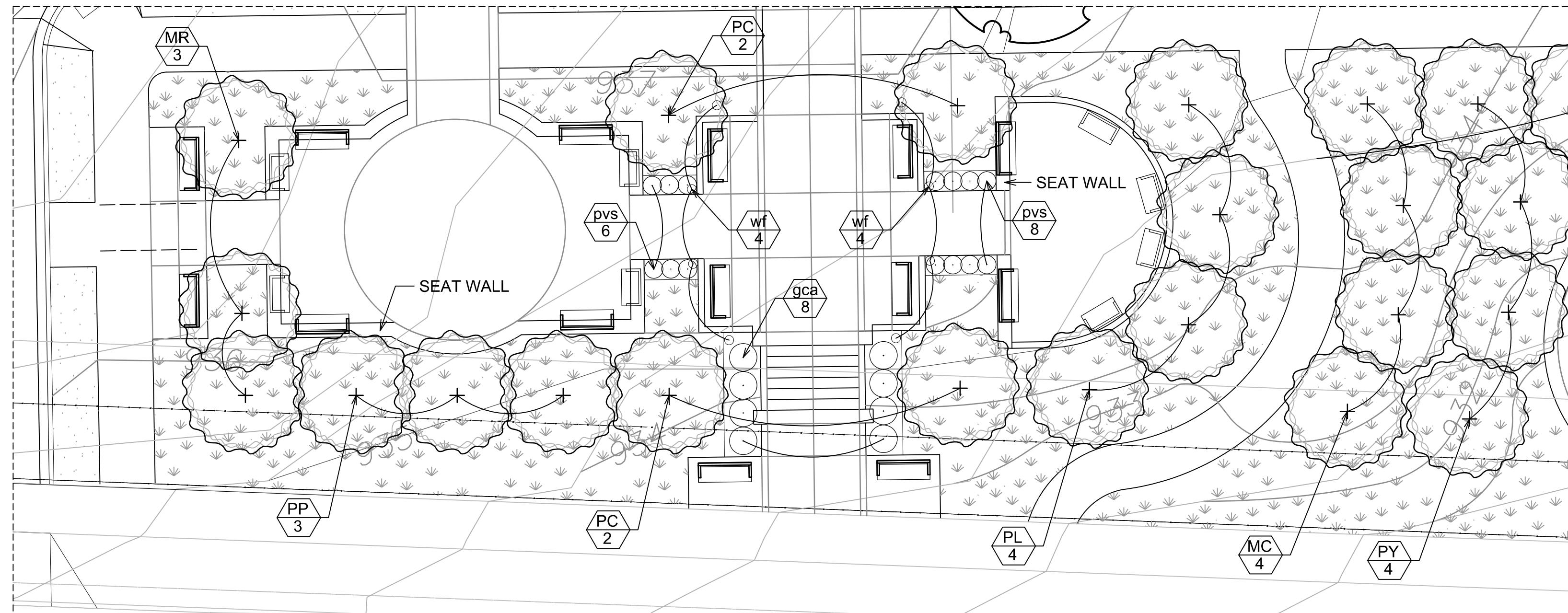




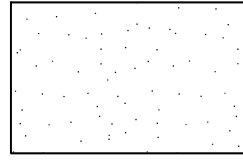
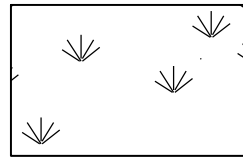
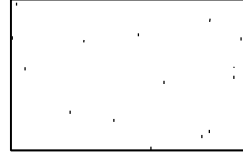

5 TERRACE  
1"=10'-0" @ FULL SIZE SHEET (24X36)

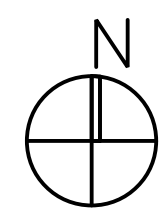


7 NORTHEAST PATHWAY  
1"=10'-0" @ FULL SIZE SHEET (24X36)



6 ORCHARD  
1"=10'-0" @ FULL SIZE SHEET (24X36)

-  SEED MIX A - LAWN
-  SEED MIX B - NO MOW FESCUE
-  SEED MIX C - PRAIRIE
-  BIORETENTION PLUGS





1 Independent Living - West Elevation  
SCALE: 1/8" = 1'-0"



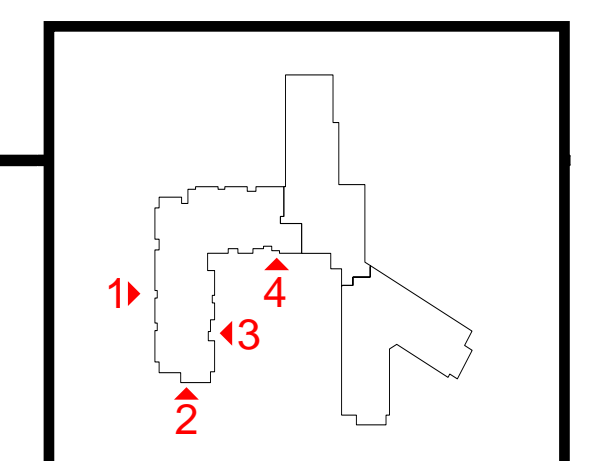
2 Independent Living - South Elevation  
SCALE: 1/8" = 1'-0"



3 Independent Living - East Elevation  
SCALE: 1/8" = 1'-0"



4 Independent Living & Center - South Elevation  
SCALE: 1/8" = 1'-0"





1 Assisted Living - West Elevation  
SCALE: 1/8" = 1'-0"



2 Assisted Living - South Elevation  
SCALE: 1/8" = 1'-0"



3 Assisted Living Courtyard - East Elevation  
SCALE: 1/8" = 1'-0"



4 Assisted Living Courtyard - South Elevation  
SCALE: 1/8" = 1'-0"



5 Assisted Living Courtyard - Southwest Elevation  
SCALE: 1/8" = 1'-0"



6 Assisted Living - Southeast Elevation  
SCALE: 1/8" = 1'-0"

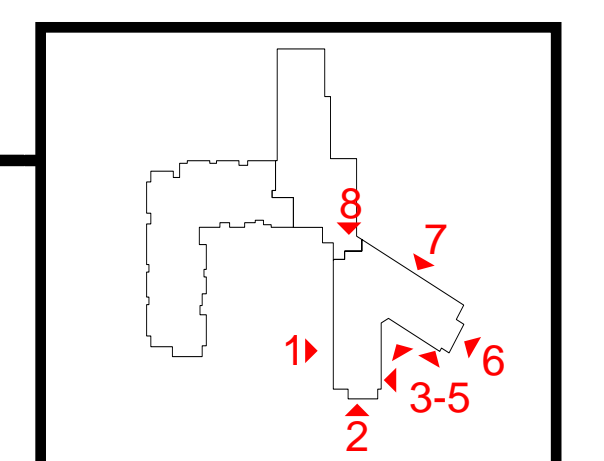


7 Assisted Living - Northeast Elevation  
SCALE: 1/8" = 1'-0"



8 Assisted Living - North Elevation  
SCALE: 1/8" = 1'-0"

METAL PANELS  
FIBER CEMENT PANELS  
BRICK





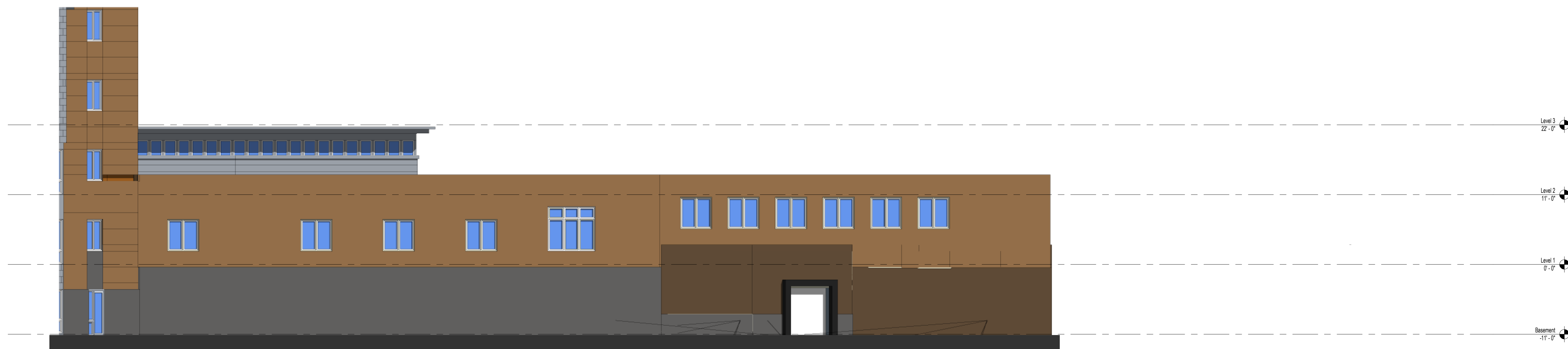
1 Independent Living East Wing - North Elevation  
SCALE: 1/8" = 1'-0"

2 Independent Living East Wing - East Elevation  
SCALE: 1/8" = 1'-0"

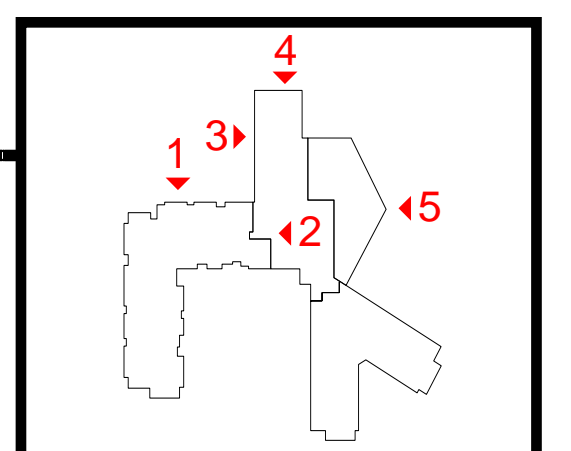


4 Community Center - North Elevation  
SCALE: 1/8" = 1'-0"

3 Community Center - West Elevation  
SCALE: 1/8" = 1'-0"



5 Community Center - East Elevation  
SCALE: 1/8" = 1'-0"





VIEW FROM SOUTHEAST



VIEW FROM SOUTHWEST



# Tennyson Senior Living Community

LOWER LEVEL PLAN

1" = 20'-0"

June 18, 2014

Engberg Anderson Project No. 132290





# Tennyson Senior Living Community

FIRST FLOOR PLAN

1" = 20'-0"

June 18, 2014

Engberg Anderson Project No. 132290





# Tennyson Senior Living Community

SECOND FLOOR PLAN

1" = 20'-0"

June 18, 2014

Engberg Anderson Project No. 132290







## Tennyson Senior Living Community

THIRD, FOURTH AND FIFTH FLOOR PLAN (NO CBRF AT 5TH FLOOR)

1" = 20'-0"

June 18, 2014

Engberg Anderson Project No. 132290

