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110 N. Poplar Street • PO Box 218 • West Branch, Iowa 52358  
(319) 643-5888 • Fax (319) 643-2305 • [www.westbranchiowa.org](http://www.westbranchiowa.org) • [city@westbranchiowa.org](mailto:city@westbranchiowa.org)

**PLANNING AND ZONING (SPECIAL) COMMISSION MEETING**

**Tuesday, October 12, 2021 • 7:00 p.m.**

**\*\*West Branch City Council Chambers, 110 N. Poplar St.**

*Council Quorum May Be Present*

1. Call to Order
2. Roll Call
3. Approve Agenda/Move to action.
4. Public Hearing/Non-Consent Agenda. /Move to action.
  - a. Review the Site Plan for Lot 11, Parkside Hills.
  - b. Motion to approve the Site Plan for Lot 11, Parkside Hills Subdivision. / Move to action.
5. Old Business
6. City Staff Reports
7. Comments from Chair and Commission Members
8. Next regular Planning & Zoning Commission meeting Tuesday, November 23, 2021.
9. Adjourn

**In-person participation is encouraged, however not required.**

***\*\* Electronic Meeting (Pursuant to Iowa Code section 21.8) An electronic meeting will be available for those not able to attend in person. You can watch and/or participate in the meeting at the following link <https://zoom.us/j/829677991> or dial in phone number 1-312-626-6799 with Meeting ID 829 677 991.***

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**Planning & Zoning Commission Members:** Chair John Fuller, Vice Chair Ryan Bowers, Sally Peck, Emilie Walsh, Brad Bower, Matt Van Scoyoc, Jim Hoffman • **Zoning Administrator:** Terry Goerd

**Mayor:** Roger Laughlin • **Council Members:** Colton Miller, Nick Goodweiler, Jodee Stoolman, Jerry Sexton, Tom Dean

**City Administrator:** Vacant **City Clerk:** Leslie Brick • **Fire Chief:** Kevin Stoolman • **Police Chief:** John Hanna

• **Public Works Director:** Matt Goodale



City of West Branch  
110 N. Poplar Street  
West Branch, IA 52358

## SITE PLAN REVIEW CHECKLIST

Project Name	<u>Parkside Hills Lot 11</u>
Engineer	<u>MMS Consultants</u>
Reviewer	<u>DRS, LB, TG, KS</u>
Reviewed Date	<u>10/5/2021</u>

1. SITE PLAN ☒

- A. Site plans shall only be required whenever any person proposes to place any structure for which a building permit is required under any other section of this Code, on any tract or parcel of and within any district of the West Branch Zoning Ordinance, and for any use, except one and two family dwellings.

2. DESIGN STANDARDS ☒

- A. The design of the proposed improvements shall make adequate provisions for surface and subsurface drainage, for connections to water and sanitary sewer lines, each so designed as to neither overload existing public utility lines nor increase the danger of erosion, flooding, landslide, or other endangerment of adjoining or surrounding property
- B. The proposed improvements shall be designed and located within the property in such manner as not to unduly diminish or impair the use and enjoyment of adjoining property and to this end shall minimize the adverse effects on such adjoining property from automobile headlights, illumination of required perimeter yards, refuse containers, and impairment of light and air.
- C. The proposed development shall have such entrances and exits upon adjacent streets and such internal traffic circulation pattern as will not unduly increase congestion on adjacent or surrounding public streets
- D. The proposed development shall conform to all applicable provisions of the Code of Iowa, as amended, Iowa Statewide Urban Design and Specifications (SUDAS), Iowa Stormwater Management Manual and all applicable provisions of the Code of Ordinances of the City of West Branch, as amended

Veenstra & Kimm, Inc.  
860 22<sup>nd</sup> Avenue, Suite 4  
Coralville, Iowa 52241  
319-466-1000



City of West Branch  
110 N. Poplar Street  
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SITE PLAN:

1. Prepared by a licensed Engineer or Land Surveyor ☒ YES ☐ NO
2. Date of preparation, North point and scale no smaller than 1"=100'.  
Comments: ☒ YES ☐ NO
3. Legal description and address of the property to be developed.  
Comments: ☒ YES ☐ NO
4. Name and address of the record property owner, the applicant, and the person or firm preparing the site plan  
Comments: ☒ YES ☐ NO
5. The existing topography with a maximum of two (2) foot contour intervals. Where existing ground is on a slope of less than two percent (2%), either one (1) foot contours or spot elevations where necessary but not more than fifty (50) feet apart in both directions, shall be indicated on site plan.  
Comments: ☒ YES ☐ NO
6. Existing and proposed utility lines and easements in accordance with Iowa Statewide Urban Design and Specifications (SUDAS) and City of West Branch Subdivision Regulations.  
Comments: ☒ YES ☐ NO
7. Structure Information:
  - a. Total number and type of dwelling units proposed ☒ YES ☐ NO
  - b. Proposed uses for all buildings ☒ YES ☐ NO
  - c. Total floor area of each building ☒ YES ☐ NO
  - d. Estimated number of employees for each proposed use where applicable ☒ YES ☐ NO
  - e. Any other information, including peak demand, which may be necessary to determine the number of off-street parking spaces and loading spaces. ☒ YES ☐ NO
8. Location, shape, and all exterior elevation views of all proposed buildings, for the purpose of understanding the structures and building materials to be used, the location of windows, doors, overhangs, projection height, etc. and the grade relationship to floor elevation, and the number of stories of each existing building to be retained and of each proposed building. ☒ YES ☐ NO
9. Property lines and all required yard setbacks. ☒ YES ☐ NO
10. Location, grade and dimensions of all existing and proposed paved surfaces and all abutting streets. ☒ YES ☐ NO

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11. Complete traffic circulation and parking plan, showing the location and dimensions of all existing and proposed parking stalls, loading areas, entrance and exit drives, sidewalks, dividers, planters, and other similar permanent improvements. ☒ YES ☐ NO
12. Location and type of existing or proposed signs and of any existing or proposed lighting on the property which illuminates any part of any required yard. ☒ YES ☐ NO
13. Location of existing trees six (6) inches or larger in diameter, landslide areas, springs and streams and other bodies of water, and any area subject to flooding by a one hundred (100) year storm on site and downstream off site. ☒ YES ☐ NO
14. Location, amount and type of any proposed landscaping. Location of proposed plantings, fences, walls, or other screening as required by the zoning regulations and the design standards set forth in Section 173.03. ☒ YES ☐ NO
15. A vicinity map at a scale of 1" = 500' or larger, showing the general location of the property, and the adjoining land uses and zoning. ☒ YES ☐ NO
16. Soil tests and similar information, if deemed necessary by the City Engineer, to determine the feasibility of the proposed development in relation to the design standards set forth in Section 173.03. ☐ YES ☐ NO N/A
17. Where possible ownership or boundary problems exist, as determined by the Zoning Administrator, a property survey by a licensed land surveyor may be required. ☐ YES ☐ NO N/A
18. Stormwater Pollution Prevention Plan. ☒ YES ☐ NO
19. Stormwater Management Plan. ☒ YES ☐ NO
20. Pre-Application Conference. ☒ YES ☐ NO
21. Provide 25% of open space
  - a. Said open space shall be unencumbered with any structure, or off-street parking or roadways and drives, and shall be landscaped and maintained with grass, trees and shrubbery. ☒ YES ☐ NO
  - b. Each principal structure of an apartment or office complex on same site shall be separated from any other principal structure in the complex by an open space of not less than sixteen (16) feet. ☒ YES ☐ NO
22. Landscaping Requirements
  - a. Minimum requirements at the time of planting - Two (2) trees minimum or one (1) tree of the following size per 1,500 square feet of open space, whichever is greater: 40 Percent 1½" - 2" caliper diameter. Balance 1" - 1½" caliper diameter. (Evergreen trees shall not be less than three (3) feet in height.) ☒ YES ☐ NO
  - b. Minimum requirements at the time of planting - 6 shrubs, or 1 shrub per 1,000 square feet of open space, whichever is greater. ☒ YES ☐ NO

23. Buffer Required

- a. Any other zoning district, other than an Agricultural A-1 District, that abuts any residential district shall require a buffer as described in this section. The buffer shall be provided by the non-residential use when adjoining a residential district. ☒ YES ☐ NO
- b. All Industrial Districts that abut any other district shall provide a buffer as required by this section. ☒ YES ☐ NO
- c. Any storage area, garbage storage, junk storage or loading docks, and loading areas, in any District shall be screened from public street view by a buffer ☒ YES ☐ NO

24. Buffers

- a. Buffer Wall: A buffer wall shall not be less than six (6) feet in height; constructed of a permanent low maintenance material such as concrete block, cinder block, brick, concrete, precast concrete or tile block; the permanent low-maintenance wall shall be designed by an architect or engineer for both structural adequacy and aesthetic quality. ☐ YES ☐ NO **N/A - Landscaped**
- b. Landscape Buffer: A landscape buffer shall not be less than twenty-five (25) feet in width, designed and landscaped with earth berm and predominant plantings of evergreen type trees, shrubs and plants so as to assure year around effectiveness. ☒ YES ☐ NO

25. Surfacing Requirements.

- a. All off-street parking and loading areas and access roadways shall have a durable and dustless surface paved with asphaltic or Portland cement concrete pavement or pervious pavement. Off-street parking of automobiles, vans, campers, trucks, trailers, tractors, recreational vehicles, boats, construction equipment, and any other mobile vehicles shall be on an asphaltic or Portland cement concrete paved off-street parking area and not parked or stored within the landscaped open space area of the front yard. All off-street parking areas and associated driveways, access roadways and frontage roads, except driveways for single family residences, shall be constructed with permanent, integrally attached 6" high curbing or curbing of alternate height. ☒ YES ☐ NO
- b. Portland Cement Concrete shall have a minimum thickness of five (5) inches. ☒ YES ☐ NO
- c. Asphaltic Cement Concrete shall have a minimum thickness of six (6) inches. ☐ YES ☐ NO
- d. Material utilized in the subgrade shall be well drained and not susceptible to frost boils. Driveways for attached townhouse style residences shall be Portland cement concrete or asphaltic concrete with minimum thickness of five (5) inches and six (6) inches, with well-drained subgrade base and not greater than eighteen (18) feet in width. ☒ YES ☐ NO

26. Landscaping, Screening and Open Space Requirements.

- a. All parking areas be aesthetically improved to reduce obtrusive characteristics that are inherent to their use. ☒ YES ☐ NO
- b. Parking areas shall be effectively screened from general public view and contain shade trees within parking islands where multiple aisles of parking exist. Not less than five (5) percent of the interior parking area shall be landscaped within parking islands. ☒ YES ☐ NO

27. Off-Street Parking Access to Public Streets and Internal Traffic Circulation.

- a. forward movement of the vehicle. ☒ YES ☐ NO
- b. Driveway approach returns shall not extend beyond the side lot line as extended. ☒ YES ☐ NO
- c. The number of ingress/egress access points to public streets from offstreet parking areas located to limit vehicular conflicts, preserve proper traffic safety. ☒ YES ☐ NO

28. Handicap Accessible Parking Requirements - comply with the parking space minimum requirements.

☒ YES ☐ NO

29. Traffic Analysis Requirements. Any project which contains 100 dwelling units or 1,000 average day trips.

N/A - SD Agreement  
☐ YES ☐ NO

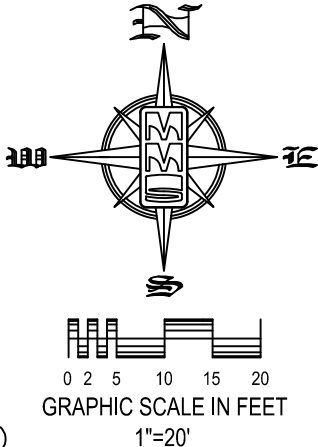
30. Architectural Standards - architectural plans for buildings shall be submitted for review and approval.

☒ YES ☐ NO



KEYNOTES		
NUMBER	KEYNOTE	DETAIL
1	INSTALL DRIVE AND PARKING (SEE PAVING LEGEND TABLE THIS SHEET FOR THICKNESS AND MATERIAL)	
2	INSTALL STANDARD 6" CURB AND GUTTER	
3	INSTALL THICKENED EDGE SIDEWALK	
4	INSTALL 4" PCC SIDEWALK	
5	REMOVE EXISTING CURB AND GUTTER SECTION AND CONNECT TO EXISTING PCC PAVING W/ 'B1'-5' JOINT	
6	INSTALL 4" WIDE PAVEMENT MARKINGS (TYP)	
7	HANDICAP PARKING STRIPING AND SIGNAGE PER DETAIL SHEET 6	
8	INSTALL ADA RAMP	
9	INSTALL 3" ROLL CURB AND GUTTER	
10	TRANSITION TO 6" CURB	
11	TRANSITION TO 3" ROLL CURB	
12	MATCH EXISTING CURB AND GUTTER	
13	INSTALL DUMPSTER ENCLOSURE	
14	RESIDENTIAL 12-PLEX (3 STORY) BUILDING 4 UNITS EACH FLOOR	
15	ATTACHED GARAGE(3 STALLS EACH)	

LEGAL:		
PARKSIDE HILLS -LOT 11 IN WEST BRANCH, CEDAR COUNTY, IOWA, IN ACCORDANCE WITH THE RECORDED PLAT THEREOF, CONTAINING 1.31 ACRES AND SUBJECT TO EASEMENTS AND RESTRICTION OF RECORD.		
SITE DEVELOPMENT SUMMARY:		
ZONING: PUD		
SQUARE FOOTAGE:	57,062 SF	COMMERCIAL
PROPOSED USE:		RESIDENTIAL
DEVELOPMENT CHARACTERISTICS:		
PARKSIDE HILLS -LOT 11 ON SYCAMORE DRIVE IS TO BE A 1.31 ACRE. THE PLAN WILL CONSIST OF 2 (TWO) PROPOSED RESIDENTIAL 12-PLEX BUILDINGS.		
DEVELOPMENT SCHEDULE:		
APPLICANT PLANS TO BEGIN CONSTRUCTION ON FALL 2021, WITH AN ESTIMATED COMPLETION DATE IN FALL 2022.		
SITE COVERAGES:		
TOTAL LOT AREA	57,062 S.F. (100%)	
PROPOSED BUILDING AREA	14,117 S.F. (24.7%)	
PROPOSED PAVING AREA	24,568 S.F. (56.4%)	
TOTAL IMPERVIOUS AREA	38,685 S.F. (67.8%)	
TOTAL OPEN AREA	18,377 S.F. (32.2%)	
LOT REQUIREMENTS:		
FRONT YARD SETBACK	(ELM STREET) 15 FEET	
	(SYCAMORE DRIVE) 20 FEET	
SIDE YARD SETBACK	15 FEET	
REAR YARD SETBACK	20 FEET	
PARKING REQUIREMENTS:		
2 SPACES PER UNIT/ 12 UNITS (TWO BEDROOM EACH) PER BUILDING/ 2 BUILDINGS		
2*(12+12) = 48 SPACES		
TOTAL PARKING REQUIRED = 48 SPACES		
TOTAL PARKING PROVIDED = 48 SPACES (24 PARKING SPACES (2 ADA)+24 GARAGE STALLS)		
SITE LIGHTING SHALL BE PROVIDED ON THE SIDES OF THE BUILDING.		



# SITE PLAN

## PARKSIDE HILLS -LOT 11

### WEST BRANCH, IOWA

PLAT PREPARED BY:  
MMS CONSULTANTS INC.  
1917 S. GILBERT STREET  
IOWA CITY, IA 52240

OWNER/SUBDIVIDER:  
ADVANTAGE DEVELOPMENT  
CO/CHAD KEUNE  
760 LIBERTY WAY  
NORTH LIBERTY, IA 52317

SUBDIVER'S ATTORNEY  
MATTHEW J. ADAM  
1150 5TH STREET, SUITE 170  
CORALVILLE, IA 52241

SHEET INDEX  
C120 SITE LAYOUT AND DIMENSION PLAN  
C140 GRADING AND EROSION CONTROL PLAN  
C141 DETAILED GRADING PLAN: WEST HALF  
C142 DETAILED GRADING PLAN: EAST HALF  
C160 UTILITY PLAN  
C500 GENERAL NOTES AND DETAILS  
L100 LANDSCAPE PLAN

#### PAVING CONSTRUCTION NOTES

- PAVEMENT CONSTRUCTION SHALL BE IN ACCORDANCE WITH I.D.O.T. SPECIFICATION SECTION 2301.
- I.D.O.T. CLASS C-3 CONCRETE SHALL BE USED, UNLESS NOTED OTHERWISE.
- PAVEMENT JOINTS SHALL CONFORM TO I.D.O.T. STANDARD ROAD PLAN PY-101.
- SUBGRADE UNDER PROPOSED PAVEMENT SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY, TO A DEPTH OF SIX (6) INCHES, UNLESS NOTED OTHERWISE.
- ALL SAWED PAVEMENT JOINTS SHALL BE SEALED.

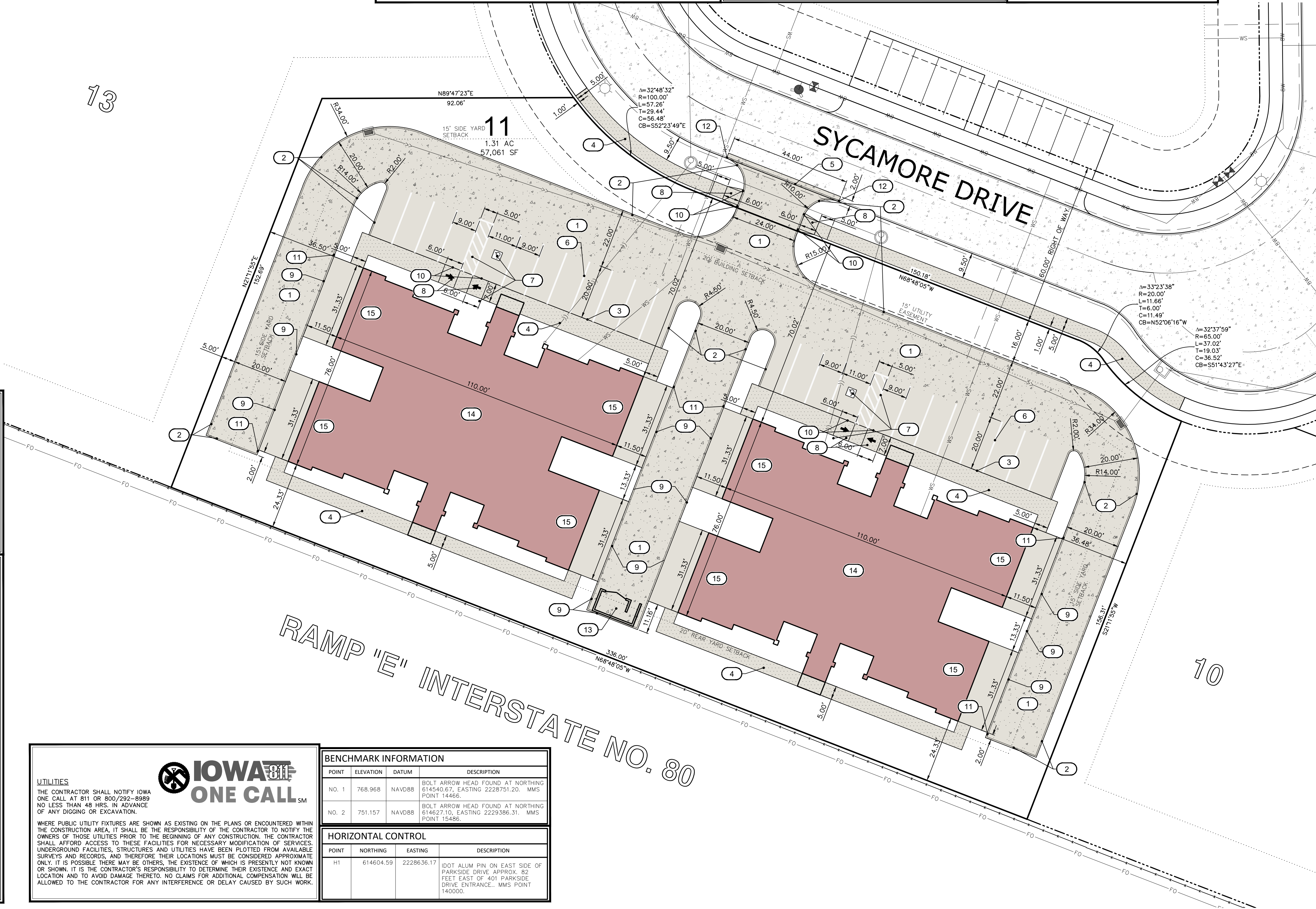
PAVEMENT LEGEND	MATERIAL	TOTAL*
	7" PCC	1,612 SY
	6" PCC	831 SY
	4" PCC	470 SY

\*TOTALS INCLUDE ALL SF OF MATERIAL, INCLUDING OUTSIDE OF PROPERTY LINE

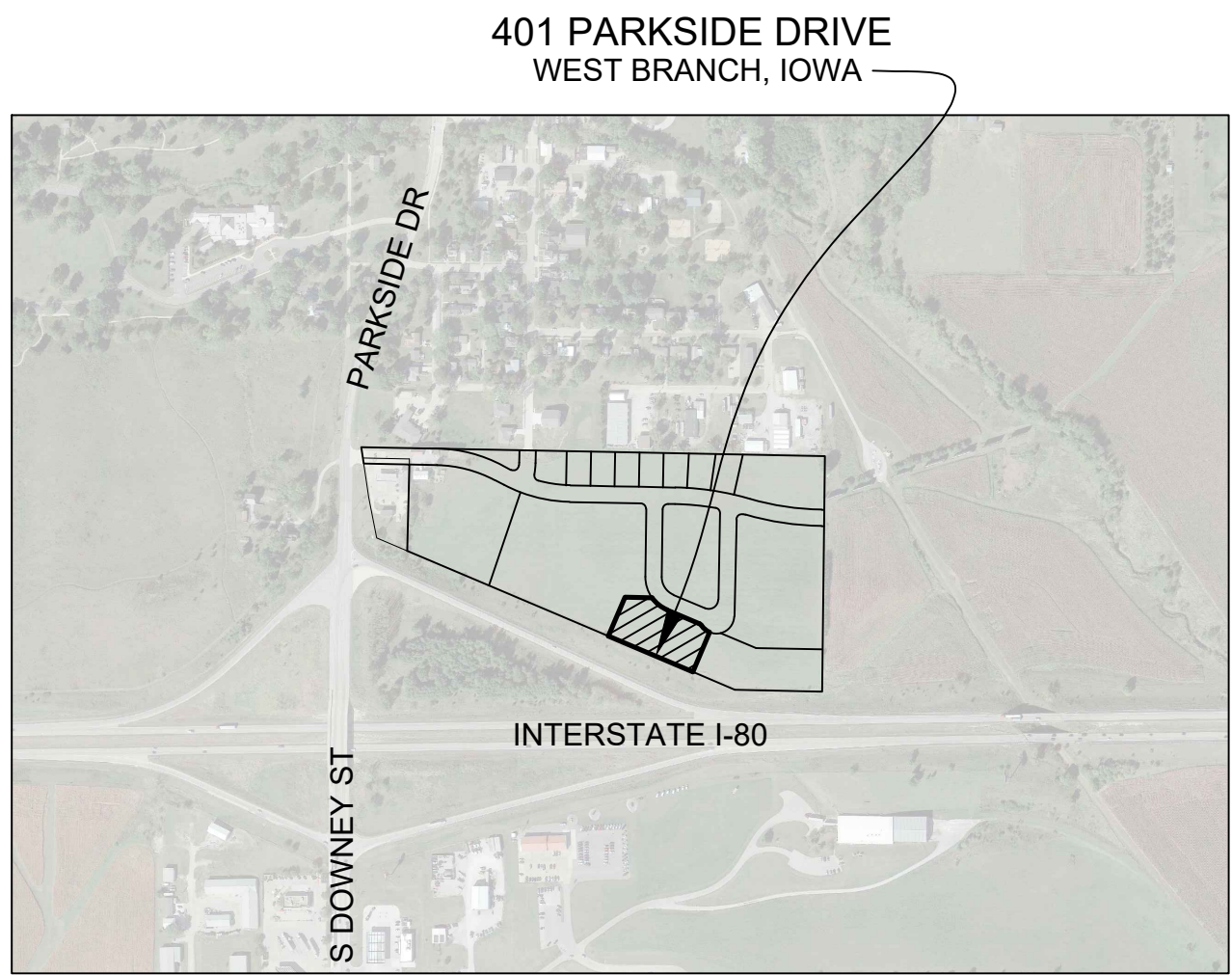
#### STANDARD LEGEND AND NOTES

	PROPERTY &/or BOUNDARY LINES
	CONGRESSIONAL SECTION LINES
	RIGHT-OF-WAY LINES
	EXISTING RIGHT-OF-WAY LINES
	CENTER LINES
	EXISTING CENTER LINES
	LOT LINES, INTERNAL
	LOT LINES, PLATTED OR BY DEED
	PROPOSED EASEMENT LINES
	EXISTING EASEMENT LINES
	BENCHMARK
	RECORDED DIMENSIONS
	CURVE SEGMENT NUMBER
	POWER POLE
	POWER POLE W/DROP
	POWER POLE W/TRANS
	POWER POLE W/LIGHT
	GUY POLE
	LIGHT POLE
	SANITARY MANHOLE
	FIRE HYDRANT
	WATER VALVE
	DRAINAGE MANHOLE
	CURB INLET
	FENCE LINE
	EXISTING SANITARY SEWER
	PROPOSED SANITARY SEWER
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
	WATER LINES
	ELECTRICAL LINES
	TELEPHONE LINES
	GAS LINES
	CONTOUR LINES (1' INTERVAL)
	PROPOSED GROUND
	EXISTING TREE LINE
	EXISTING DECIDUOUS TREE & SHRUB
	EXISTING EVERGREEN TREES & SHRUBS

THE ACTUAL SIZE AND LOCATION OF ALL PROPOSED FACILITIES SHALL BE VERIFIED WITH CONSTRUCTION DOCUMENTS, WHICH ARE TO BE PREPARED AND SUBMITTED SUBSEQUENT TO THE APPROVAL OF THIS DOCUMENT.



	I hereby certify that this engineering document was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.	
	RONALD L. AMELON,	P.E. Iowa Lic. No. 14201
	My license renewal date is December 31, 20 ____.	
	Pages or sheets covered by this seal:	



LOCATION MAP  
NOT TO SCALE

UTILITIES THE CONTRACTOR SHALL NOTIFY IOWA ONE CALL AT 811 OR 800/292-8989 NO LESS THAN 48 HRS. IN ADVANCE OF ANY DIGGING OR EXCAVATION.	
WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THEREOF. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.	
BENCHMARK INFORMATION	
POINT	ELEVATION DATUM DESCRIPTION
NO. 1	768.968 NAVD88 BOLT ARROW HEAD FOUND AT NORTHING 614540.67, EASTING 2228751.20. MMS POINT 14466.
NO. 2	751.157 NAVD88 BOLT ARROW HEAD FOUND AT NORTHING 614627.10, EASTING 2229386.31. MMS POINT 15486.
HORIZONTAL CONTROL	
POINT	NORTHING EASTING DESCRIPTION
H1	614604.59 2228636.17 IDOT ALUM PIN ON EAST SIDE OF PARKSIDE DRIVE APPROX. 82 FEET EAST OF 401 PARKSIDE DRIVE ENTRANCE.. MMS POINT 140000.

#### SITE LAYOUT AND DIMENSION PLAN

LOT 11  
PARKSIDE HILLS  
WEST BRANCH,  
CEDAR COUNTY,  
IOWA

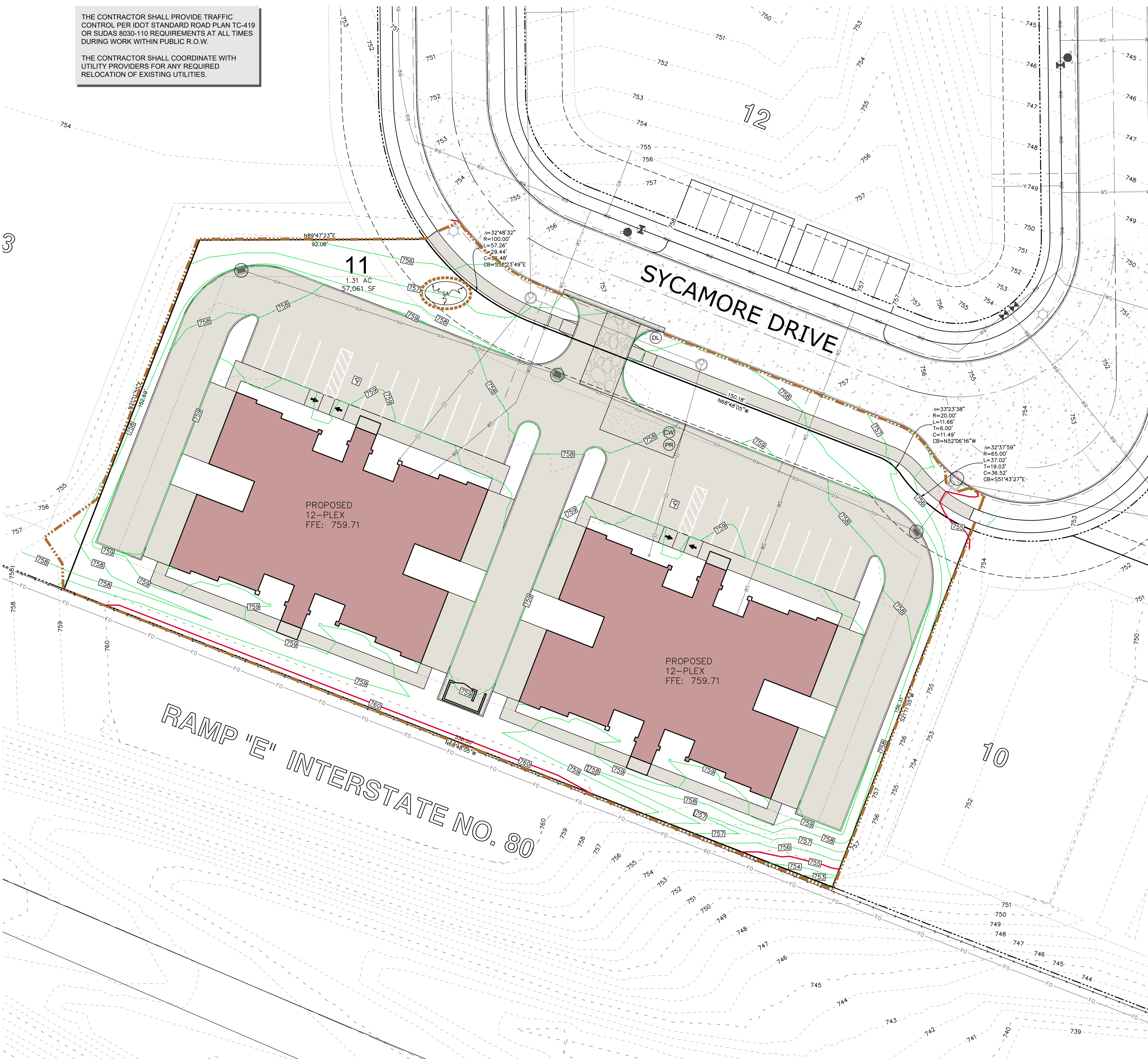
MMS CONSULTANTS, INC.  
Date: 09-17-21  
Designed by: RLA Field Book No: 1273 pg. 47  
Drawn by: BJC/TAV Scale: 1"=20'  
Checked by: RLA Sheet No:  
Project No: C120  
6992-360 of:



3

THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PER IDOT STANDARD ROAD PLAN TC-419 OR SUDAS 8030-110 REQUIREMENTS AT ALL TIMES DURING WORK WITHIN PUBLIC R.O.W.

THE CONTRACTOR SHALL COORDINATE WITH UTILITY PROVIDERS FOR ANY REQUIRED RELOCATION OF EXISTING UTILITIES.



- SHEET INDEX
- C120 SITE LAYOUT AND DIMENSION PLAN
  - C140 GRADING AND EROSION CONTROL PLAN
  - C141 DETAILED GRADING PLAN: WEST HALF
  - C142 DETAILED GRADING PLAN: EAST HALF
  - C160 UTILITY PLAN
  - C500 GENERAL NOTES AND DETAILS
  - L100 LANDSCAPE PLAN

### GRADING AND EROSION CONTROL NOTES

TOTAL SITE AREA: 1.31 ACRES  
TOTAL AREA TO BE DISTURBED: 1.31 ACRES

EROSION CONTROL MEASURES SHOWN SHALL BE USED DURING FILL ACTIVITIES. EROSION CONTROL MEASURES SHALL BE REEVALUATED AND MODIFIED, IF NECESSARY, AT THE TIME OF SITE DEVELOPMENT.

ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES THAT COULD BE USED ON SITE, IF NEEDED, CAN BE FOUND IN APPENDIX D OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) BINDER PREPARED FOR THE SITE. IF ADDITIONAL MEASURES ARE USED, INDICATE THE TYPE AND LOCATION OF SAID MEASURE ON THIS PLAN.

CONTRACTOR SHALL INSTALL A ROCK ENTRANCE AND PERFORM REGULAR CLEANING OF VEHICLES THAT LEAVE THE SITE.

FOLLOWING INSTALLATION OF PERMETER SILT FENCE AND TEMPORARY CONSTRUCTION ENTRANCE THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR TO SCHEDULE A SITE INSPECTION PRIOR TO ANY SOIL DISTURBING ACTIVITIES.

THE CONTRACTOR SHALL FOLLOW THE NPDES PERMIT, SWPPP, AND THE CITY CSR REGULATIONS.

THE EROSION CONTROL CONTRACTOR SHALL INSTALL FILTER SOCKS OR OTHER APPROVED FORM OF INLET PROTECTION AT EACH STREET INTAKE ADJACENT TO THE SITE.

### NOTES:

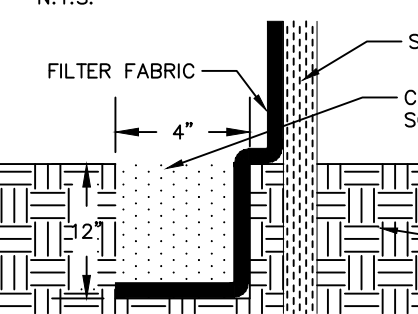
- TEMPORARY STABILIZATION IS REQUIRED ON DISTURBED AREAS AFTER THE 14TH DAY OF INACTIVITY.
- FINAL STABILIZATION SHALL BE IMPLEMENTED WITHIN 14 DAYS OF FINAL GRADING COMPLETION.

### UTILITIES

THE CONTRACTOR SHALL NOTIFY IOWA ONE CALL AT 811 OR 800/292-8889 NO LESS THAN 48 HRS. IN ADVANCE OF ANY DIGGING OR EXCAVATION.

WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

### SILT FENCE DETAIL



### INSTALLATION

- POSTS SHALL BE 1.33 POUNDS PER LINEAL FOOT STEEL WITH A MINIMUM LENGTH OF 5 FEET. STEEL POSTS SHALL HAVE PROJECTIONS FOR FASTENING WIRE TO THEM.
- SILT FENCE FABRIC SHALL CONFORM TO I.D.O.T. STANDARD SPECIFICATION SECTION 4198.01.A. SILT FENCING SHALL BE A MINIMUM OF 24\"/>

### MAINTENANCE

- SILT FENCES SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL EVENT OF 0.5 INCHES OR MORE. DURING PERIODS OF PROLONGED RAIN INSPECTIONS SHALL BE AT LEAST DAILY. ANY REPAIRS NEEDED TO MAINTAIN THE SILT FENCE'S EFFECTIVENESS SHALL BE MADE IMMEDIATELY.
- SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN THE DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE FENCE. SILTS REMOVED SHALL BE PLACED IN A PROTECTED PLACE THAT WILL PREVENT THEIR ESCAPE FROM THE CONSTRUCTION SITE.
- ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER NEEDED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.
- SILT FENCE SHALL REMAIN IN PLACE UNTIL IT IS NO LONGER NEEDED AS DIRECTED BY THE POLLUTION PREVENTION PLAN. GENERALLY SILT FENCES SHALL REMAIN UNTIL THE UPSLOPE AREAS ARE STABILIZED WITH AN ESTABLISHED GRASS COVER AS A MINIMUM.

### GRADING NOTES

- MAXIMUM SLOPE ON CUTS AND FILLS SHALL BE 3.5: HORIZONTAL TO 1: VERTICAL.
- NO EXCAVATION SHALL BE ALLOWED WITHIN 2' OF PROPERTY LINES.
- WHERE HEIGHT OF FILL IS GREATER THAN 30' AN INTERMEDIATE TERRACE OF AT LEAST 6' WIDE SHALL BE ESTABLISHED AT MID HEIGHT. SEE TYPICAL FILL SECTION.
- COMPACTION TO BE 90% MODIFIED PROCTOR WHERE > 6:1 SLOPE.
- ALL TREES OUTSIDE THE LIMITS OF GRADING OPERATIONS SHALL BE SAVED, UNLESS OTHERWISE INDICATED TO BE REMOVED. TREES NEAR THE EDGES OF GRADING LIMITS AND IN THE STORM WATER DETENTION BASIN AREAS SHALL BE SAVED IF POSSIBLE, WITHIN THE REQUIREMENTS OF THE SPECIFICATIONS.
- PRIOR TO ANY GRADING A CONSTRUCTION SAFETY FENCE SHALL BE INSTALLED 50 FEET FROM TRUNKS OF TREES TO BE PROTECTED.
- STABILIZATION SEEDING SHALL BE COMPLETED AS SOON AS POSSIBLE, BUT NOT MORE THAN 14 DAYS UPON COMPLETION OF GRADING IN ANY AREA OF GRADING OPERATIONS. DISTURBED AREAS SHALL BE KEPT AS SMALL AS POSSIBLE TO PREVENT LARGE SCALE EROSION PROBLEMS. IF THE GRADING CONTRACTOR STOPS GRADING OPERATIONS FOR MORE THAN 14 DAYS, THEN STABILIZATION SEEDING SHALL BE DONE ON ALL DISTURBED AREAS.
- SILT FENCE LOCATIONS AND LENGTHS, AS INDICATED, ARE APPROXIMATE ONLY. FINAL LOCATIONS AND LENGTHS WILL BE DETERMINED, AS NEEDED, UPON COMPLETION OF GRADING OPERATIONS IN AN AREA.
- ALL STREET SUBGRADES SHALL BE CONSTRUCTED AND COMPACTED IN ACCORDANCE WITH SUDAS DESIGN AND CONSTRUCTION STANDARDS AND PROCEDURES.

### EROSION CONTROL LEGEND

- |  |                                 |
|--|---------------------------------|
| FINAL FILTER SOCK  | PERMETER SILT FENCE             |
| SILT FENCE   | EROSION CONTROL MATTING         |
| FILTER SOCK  | TEMPORARY SOIL STOCKPILE AREA   |
| TEMPORARY ROCK CONSTRUCTION ENTRANCE/EXIT                  | DIRECTION OF OVERLAND FLOW      |
| TEMPORARY PARKING AND STORAGE                              | DUMPSTER FOR CONSTRUCTION WASTE |
| CONCRETE TRUCK/EQUIPMENT WASHOUT                           | RIP RAP OUTLET PROTECTION       |
| PORTABLE RESTROOM  | OTHER MEASURE: _____            |
| DOCUMENT LOCATION (PERMITS, SWPPP, INSPECTION FORMS, ETC.) | OTHER MEASURE: _____            |
| FILTER SOCK INLET PROTECTION                               | OTHER MEASURE: _____            |
| FILTER SOCK BEHIND CURB AT CURB RAMP                       |                                 |

THE ABOVE LISTED ITEMS ARE SHOWN IN THEIR RECOMMENDED LOCATIONS. IF A CONTROL MEASURE IS ADDED OR MOVED TO A MORE SUITABLE LOCATION, INDICATE THE REVISION ON THIS SHEET. THE BLANKS LEFT FOR OTHER MEASURES SHOULD BE USED IF AN ITEM NOT SHOWN ABOVE IS IMPLEMENTED ON SITE. ADDITIONAL PRACTICES FOR EROSION PREVENTION AND SEDIMENT CONTROL CAN BE FOUND IN APPENDIX D OF THE SWPPP.

### STANDARD LEGEND AND NOTES

- |                               |                                   |
|-------------------------------|-----------------------------------|
| PROPERTY &/or BOUNDARY LINES  | POWER POLE                        |
| CONGRESSIONAL SECTION LINES   | POWER POLE W/DRIP                 |
| RIGHT-OF-WAY LINES            | POWER POLE W/TRANS                |
| EXISTING RIGHT-OF-WAY LINES   | POWER POLE W/LIGHT                |
| CENTER LINES                  | LIGHT POLE                        |
| EXISTING CENTER LINES         | GUY POLE                          |
| LOT LINES, INTERNAL           | WATER VALVE                       |
| LOT LINES, PLATTED OR BY DEED | SANITARY MANHOLE                  |
| PROPOSED EASEMENT LINES       | FIRE HYDRANT                      |
| EXISTING EASEMENT LINES       | DRAINAGE MANHOLE                  |
| BENCHMARK                     | CURB INLET                        |
| RECORDED DIMENSIONS           | EXISTING SANITARY SEWER           |
| CURVE SEGMENT NUMBER          | PROPOSED SANITARY SEWER           |
|                               | EXISTING STORM SEWER              |
|                               | PROPOSED STORM SEWER              |
|                               | WATER LINES                       |
|                               | ELECTRICAL LINES                  |
|                               | TELEPHONE LINES                   |
|                               | GAS LINES                         |
|                               | PROPOSED GROUND                   |
|                               | EXISTING TREE LINE                |
|                               | EXISTING DECIDUOUS TREE & SHRUB   |
|                               | EXISTING EVERGREEN TREES & SHRUBS |

THE ACTUAL SIZE AND LOCATION OF ALL PROPOSED FACILITIES SHALL BE VERIFIED WITH CONSTRUCTION DOCUMENTS, WHICH ARE TO BE PREPARED AND SUBMITTED SUBSEQUENT TO THE APPROVAL OF THIS DOCUMENT.



CIVIL ENGINEERS  
LAND PLANNERS  
LAND SURVEYORS  
LANDSCAPE ARCHITECTS  
ENVIRONMENTAL SPECIALISTS

1917 S. GILBERT ST.  
IOWA CITY, IOWA 52240  
(319) 351-8282  
[www.mmsconsultants.net](http://www.mmsconsultants.net)

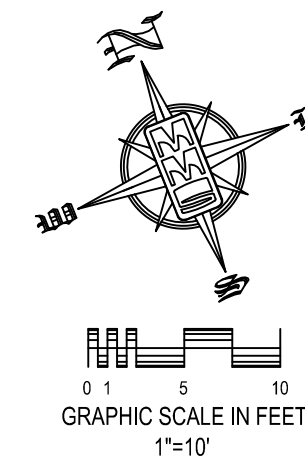
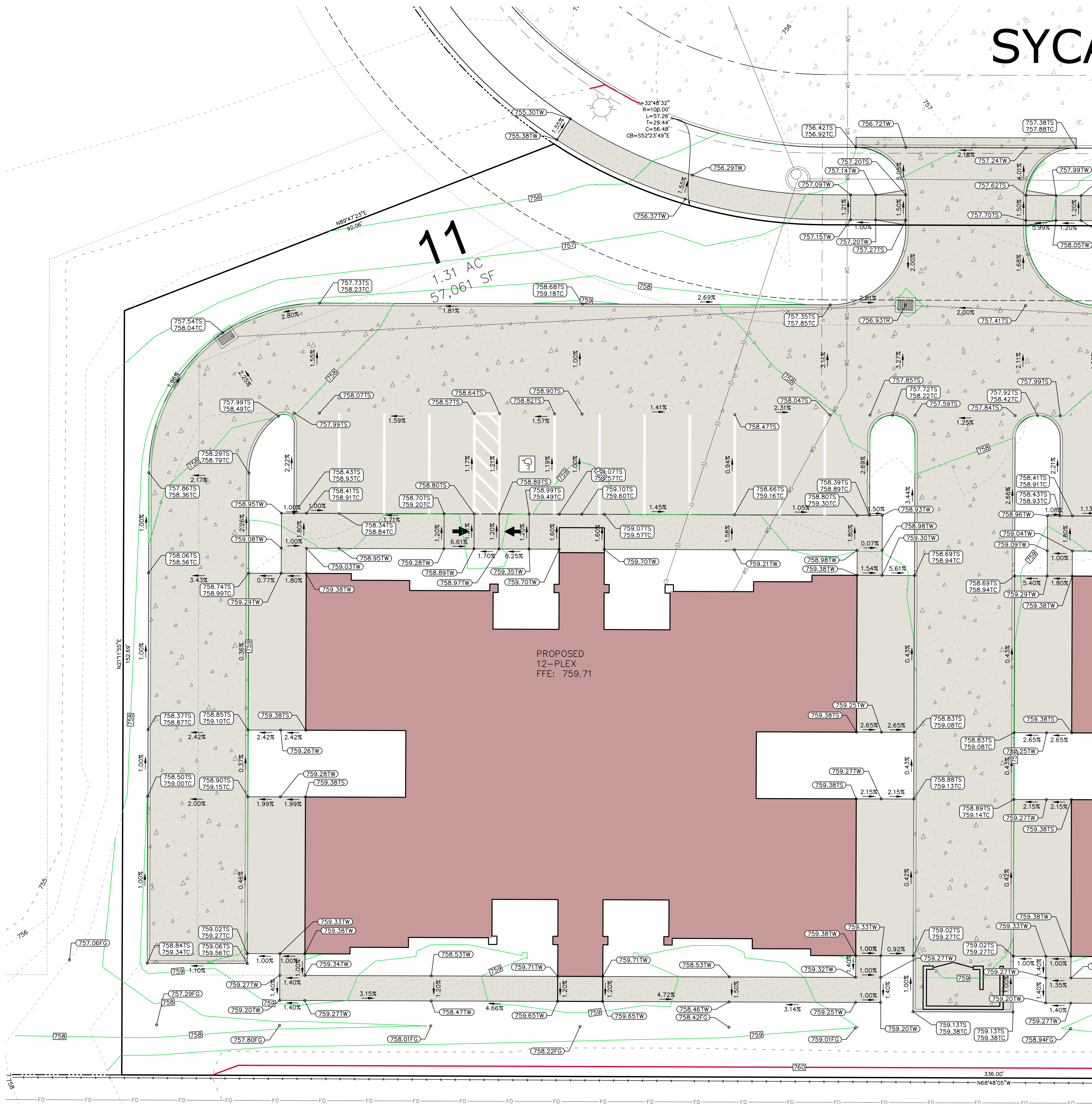
Date	Revision
10/07/21	PER CITY REVIEW TAVIRLA

### GRADING AND EROSION CONTROL PLAN & SWPPP

LOT 11  
PARKSIDE HILLS  
WEST BRANCH,  
CEDAR COUNTY,  
IOWA

MMS CONSULTANTS, INC.  
Date: 09-17-21  
Designed by: RLA Field Book No: 1273 pg. 47  
Drawn by: BJC/TAV Scale: 1"=20'  
Checked by: RLA Sheet No: C140  
Project No: 6992-360 of:





**STANDARD LEGEND AND NOTES**

- PROPERTY &/or BOUNDARY LINES
- CONGRESSIONAL SECTION LINES
- RIGHT-OF-WAY LINES
- EXISTING RIGHT-OF-WAY LINES
- CENTER LINES
- EXISTING CENTER LINES
- LOT LINES, INTERNAL
- LOT LINES, PLATTED OR BY DEED
- PROPOSED EASEMENT LINES
- EXISTING EASEMENT LINES
- BENCHMARK
- RECORDED DIMENSIONS
- CURVE SEGMENT NUMBER

**EXIST -**

- POWER POLE
- POWER POLE W/DROP
- POWER POLE W/TRANS
- POWER POLE W/LIGHT
- GUY POLE
- LIGHT POLE
- SANITARY MANHOLE
- FIRE HYDRANT
- WATER VALVE
- DRAINAGE MANHOLE
- CURB INLET
- FENCE LINE
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- WATER LINES
- ELECTRICAL LINES
- TELEPHONE LINES
- GAS LINES
- CONTOUR LINES (1' INTERVAL)
- PROPOSED GROUND
- EXISTING TREE LINE
- EXISTING DECIDUOUS TREE & SHRUB
- EXISTING EVERGREEN TREES & SHRUBS

**PROPOSED -**

- POWER POLE
- POWER POLE W/DROP
- POWER POLE W/TRANS
- POWER POLE W/LIGHT
- GUY POLE
- LIGHT POLE
- SANITARY MANHOLE
- FIRE HYDRANT
- WATER VALVE
- DRAINAGE MANHOLE
- CURB INLET
- FENCE LINE
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- EXISTING EVERGREEN TREES & SHRUBS

THE ACTUAL SIZE AND LOCATION OF ALL PROPOSED FACILITIES SHALL BE VERIFIED WITH CONSTRUCTION DOCUMENTS, WHICH ARE TO BE PREPARED AND SUBMITTED SUBSEQUENT TO THE APPROVAL OF THIS DOCUMENT.

**UTILITIES**

THE CONTRACTOR SHALL NOTIFY IOWA ONE CALL AT 811 OR 800/292-8989 NO LESS THAN 48 HRS. IN ADVANCE OF ANY DIGGING OR EXCAVATION.

WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

**GRADING LEGEND**

- 0000.00EG - EXISTING GRADE
  - 0000.00FG - FINISHED GRADE
  - 0000.00TC - TOP CURB
  - 0000.00TS - TOP SLAB
  - 0000.00TW - TOP WALK
  - 0000.00TR - TOP RIM
  - 0000.00WB - BOTTOM WALL\*
  - 0000.00WT - TOP WALL\*
- \*REPRESENT GROUND ELEVATION AT WALL

**SHEET INDEX**

- C120 SITE LAYOUT AND DIMENSION PLAN
- C140 GRADING AND EROSION CONTROL PLAN
- C141 DETAILED GRADING PLAN: WEST HALF
- C142 DETAILED GRADING PLAN: EAST HALF
- C160 UTILITY PLAN
- C500 GENERAL NOTES AND DETAILS
- L100 LANDSCAPE PLAN

**DETAILED GRADING PLAN: WEST HALF**

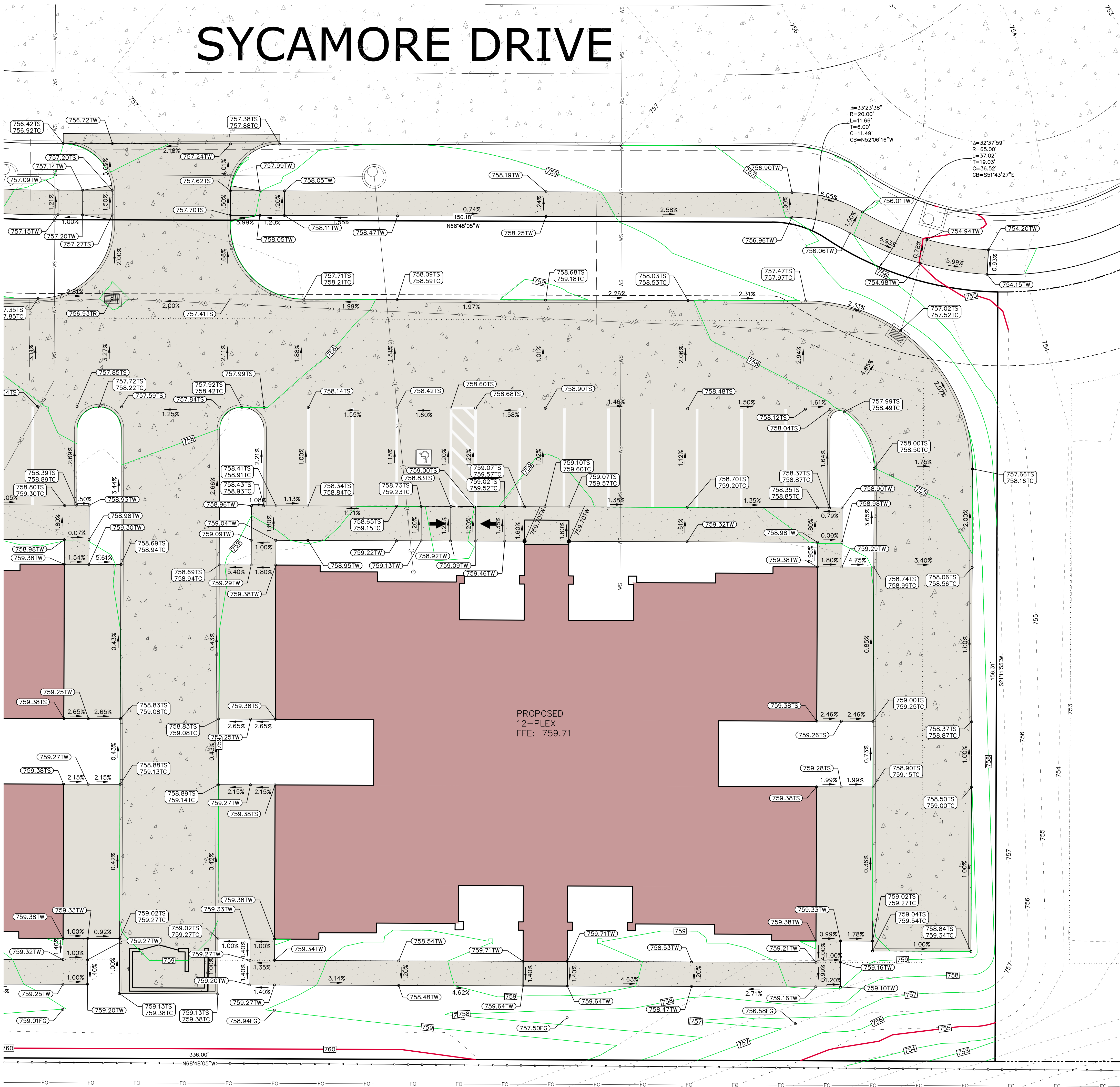
**LOT 11**  
**PARKSIDE HILLS**  
WEST BRANCH,  
CEDAR COUNTY,  
IOWA

**MMS CONSULTANTS, INC.**

Date:	09-17-21
Designed by:	RLA
Drawn by:	BJC/TAV
Checked by:	RLA
Project No:	6992-360
Field Book No:	1273 pg. 47
Scale:	1"=10'
Sheet No:	C141
of:	



SYCAMORE DRIVE



**STANDARD LEGEND AND NOTES**

- PROPERTY &/or BOUNDARY LINES
- CONGRESSIONAL SECTION LINES
- RIGHT-OF-WAY LINES
- EXISTING RIGHT-OF-WAY LINES
- CENTER LINES
- EXISTING CENTER LINES
- LOT LINES, INTERNAL
- LOT LINES, PLATTED OR BY DEED
- PROPOSED EASEMENT LINES
- EXISTING EASEMENT LINES
- BENCHMARK
- RECORDED DIMENSIONS
- CURVE SEGMENT NUMBER

**EXISTING**

- POWER POLE
- POWER POLE W/DROP
- POWER POLE W/TRANS
- POWER POLE W/LIGHT
- GUY POLE
- WATER VALVE
- DRAINAGE MANHOLE
- CURB INLET
- FENCE LINE
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- WATER LINES
- ELECTRICAL LINES
- TELEPHONE LINES
- GAS LINES
- CONTOUR LINES (1' INTERVAL)
- PROPOSED GROUND
- EXISTING TREE LINE
- EXISTING DECIDUOUS TREE & SHRUB
- EXISTING EVERGREEN TREES & SHRUBS

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**SHEET INDEX**

- C120 SITE LAYOUT AND DIMENSION PLAN
- C140 GRADING AND EROSION CONTROL PLAN
- C141 DETAILED GRADING PLAN: WEST HALF
- C142 DETAILED GRADING PLAN: EAST HALF
- C160 UTILITY PLAN
- C500 GENERAL NOTES AND DETAILS
- L100 LANDSCAPE PLAN

**GRADING LEGEND**

- 0000.00EG - EXISTING GRADE
- 0000.00FG - FINISHED GRADE
- 0000.00TC - TOP CURB
- 0000.00TS - TOP SLAB
- 0000.00TW - TOP WALK
- 0000.00TR - TOP RIM
- 0000.00WB - BOTTOM WALL\*
- 0000.00WT - TOP WALL\*

\*REPRESENT GROUND ELEVATION AT WALL

**UTILITIES**

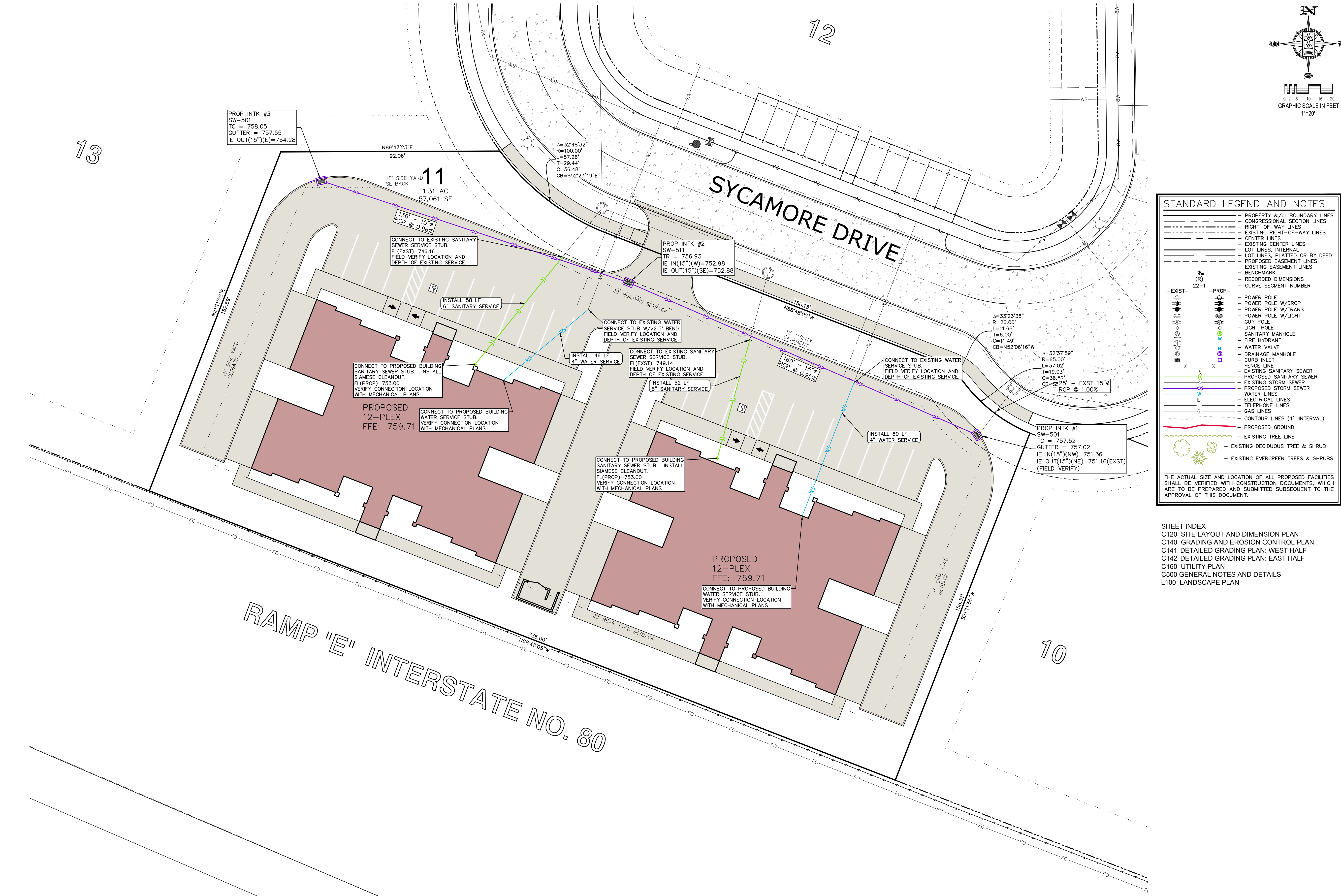
THE CONTRACTOR SHALL NOTIFY IOWA ONE CALL AT 811 OR 800/292-8989 NO LESS THAN 48 HRS. IN ADVANCE OF ANY DIGGING OR EXCAVATION.

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**IOWA ONE CALL**

**DETAILED GRADING PLAN: EAST HALF**





**UTILITIES**

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**IOWA ONE CALL**

CIVIL ENGINEERS  
LAND PLANNERS  
LAND SURVEYORS  
LANDSCAPE ARCHITECTS  
ENVIRONMENTAL SPECIALISTS

1917 S. GILBERT ST.  
IOWA CITY, IOWA 52240  
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Date	Revision
10/07/21	PER CITY REVIEW TAVIRLA

SITE UTILITY PLAN

LOT 11  
PARKSIDE HILLS  
WEST BRANCH,  
CEDAR COUNTY,  
IOWA

MMS CONSULTANTS, INC.

Date: 09-17-21

Designed by: RLA Field Book No: 1273 pg. 47

Drawn by: BJC/TAV Scale: 1"=20'

Checked by: RLA Sheet No:

Project No: C160

6992-360 of:



SANITARY SEWER AND WATERMAIN NOTES

- 1) SANITARY SEWER & WATER MAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) SPECIFICATIONS (2016) AS AMENDED.
- 2) SANITARY SEWERS SHALL BE PVC TRUSS PIPE (SUDAS 4010.01.E), CONTECH A-2000, OR CITY ENGINEER APPROVED EQUAL, AS NOTED ON THE PLANS. SANITARY SEWER SERVICE LINES SHALL BE PVC SDR-23.5 WITH GASKETED JOINTS.
- 3) WATER MAINS SHALL BE DIP CLASS 52 WITH NITRILE GASKETS.
- 4) CONTRACTOR TO PROVIDE FERNCO STRONG BACK RC 1000 SERIES COUPLINGS FOR DISSIMILAR PIPE CONNECTIONS.
- 5) GRANULAR TRENCH BACKFILL SHALL BE CRUSHED STONE CONFORMING TO I.D.O.T. STANDARD SPECIFICATION 4120.04 WITH 1" MAXIMUM AGGREGATE SIZE. COMPACT TO 90% MODIFIED PROCTOR DENSITY.
- 6) ALL SANITARY SEWERS SHADED ON THE PROFILE VIEW AND ALL SANITARY SEWERS AND WATER MAINS UNDER PAVING OR WITHIN 5 FEET OF PAVEMENT SHALL BE BACKFILLED WITH EITHER OF THE FOLLOWING COMPACTED TO 90% MODIFIED PROCTOR DENSITY:
- A. SUITABLE EXCAVATED MATERIAL. IF EXCAVATED MATERIAL IS NOT SUITABLE, THEN
- B. CRUSHED STONE AS SPECIFIED FOR GRANULAR TRENCH BACKFILL.
- 7) ALL SANITARY SEWER SERVICE LINES CROSSING STREET RIGHT-OF-WAY SHALL BE BACKFILLED IN ACCORDANCE WITH THE PRECEDING NOTE.
- 8) CONTRACTOR SHALL PROVIDE SUDAS CLASS F-3 BEDDING FOR ALL PVC TRUSS SANITARY SEWERS UNLESS OTHERWISE NOTED.
- 9) ENTRY INTO EXISTING CITY MANHOLE TO BE BY CORE DRILL AND SEAL BY "LINK-SEAL" PENETRATION SEAL OR CITY ENGINEER APPROVED EQUAL.
- 10) ALL MANHOLES TO BE TURNED OVER TO CITY SHALL:
- 1) WILL NOT SHOW STEPS.
- 2) WILL HAVE EXTERNAL CHIMNEY SEAL BY INFILSEILD UNIBAND, CRETEX, OR APPROVED EQUAL.
- 3) WILL HAVE MANHOLE FRAME AND LID TO BE NEENAH R-1642 SELF-SEALING WITH CITY LOGO.
- 4) WILL HAVE RISERS RINGS OF CRETEX PRO-RING, AMERICAN HIGHWAY PRODUCTS RUBBER ADJUSTMENT RING OR STANDARD PCC. IF PCC RINGS ARE USED, SHIMS TO LEVEL MANHOLE FRAME MADE OF MATERIALS OTHER THAN PCC OR THE RING MATERIAL DISCUSSED ABOVE WILL NOT BE ALLOWED, I.E. WOOD, BRICK, ROCKS, ETC.
- 5) WILL USE LINK-SEALS PENETRATION SEALS FOR PIPE PENETRATIONS.

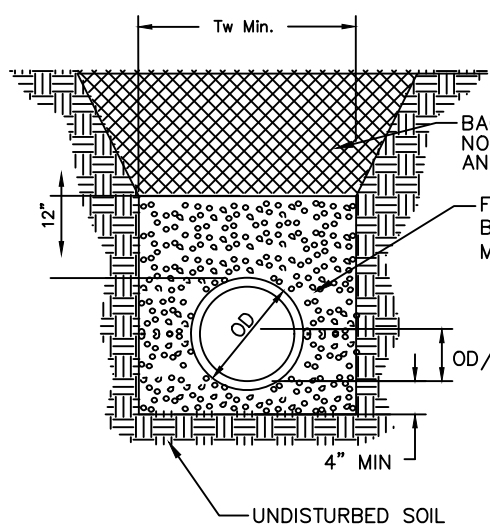
- ALL SANITARY SEWER SERVICE LINES SHALL BE EXTENDED :
- 9) TO THE UTILITY EASEMENT LINE FOR THOSE LOCATIONS WHERE THE LOTS BEING SERVED ARE ON THE OPPOSITE SIDE OF THE STREET FROM THE SEWER MAIN.
- 10) TO THE UTILITY EASEMENT LINE FOR THOSE LOCATIONS WHERE THE LOTS BEING SERVED ARE ADJACENT TO THE SEWER MAIN.
- 11) THE END OF ALL SANITARY SEWER SERVICES MUST BE MARKED WITH A WOOD 2 x 4 PAINTED GREEN.
- 12) ALL SANITARY SEWER MANHOLES IN PAVING AREAS OR AREAS SUBJECT TO WATER INUNDATION SHALL BE PROVIDED WITH CRETEX EXTERIOR CHIMNEY SEAL OR APPROVED EQUAL. ALL SANITARY MANHOLES IN PAVING SHALL HAVE 3-PIECE FLOATING CASTING

AIR TESTING

- 13) ALL SANITARY SEWER AND SERVICE LINES SHALL BE AIR TESTED TO PASS THE FOLLOWING TEST:
- NOTE: CITY REPRESENTATIVE MUST BE PRESENT DURING TESTING.
- A. PERFORM FROM MANHOLE-TO-MANHOLE AFTER BACKFILL.
- B. PLACE PNEUMATIC PLUGS: (1) SEALING LENGTH: EQUAL TO OR GREATER THAN PIPE DIAMETER, (2) CAPABLE OF RESISTING INTERNAL TEST PRESSURE WITHOUT EXTERNAL BRACING OR BLOCKING.
- C. INTRODUCE LOW-PRESSURE AIR INTO SEALED LINE AND ACHIEVE INTERNAL AIR PRESSURE OF 5 psi & MAINTAIN FOR A MINIMUM OF 5 MINUTES.
- D. LIMIT INTERNAL PRESSURE IN SEALED LINE BELOW 8 PSIG.
- E. ALLOW 2 MINUTES MINIMUM FOR AIR PRESSURE TO STABILIZE. DISCONNECT LOW-PRESSURE AIR HOSE FROM CONTROL PANEL.
- F. MINIMUM TIME FOR PRESSURE TO DROP FROM 3.5 TO 2.5 PSIG GREATER THAN MAXIMUM PRESSURE EXERTED BY GROUNDWATER ABOVE PIPE INVERT:

PIPE DIAMETER IN INCHES	TIME IN MINUTES
4	2.0
6	3.0
8	4.0
10	5.0
12	5.5
15	7.5

- G. IN AREAS WHERE GROUND WATER IS KNOWN TO EXIST, THE HEIGHT OF WATER ABOVE THE TOP OF THE PIPE BEING TESTED, IN FEET, SHALL BE DETERMINED AND THAT HEIGHT DIVIDED BY 2.5 TO ESTABLISH THE PRESSURE THAT WILL BE ADDED TO ALL READINGS ABOVE. ALTERNATIVELY, THE ENGINEER MAY ALLOW THE CONTRACTOR TO MEASURE INFILTRATION INTO THE SEWER BY USING A V-NOTCH WEIR OR OTHER SUITABLE DEVICE.
- H. LOCATE, REPAIR AND RETEST LEAKS.
- I. AIR TESTING SHALL BE CONSIDERED INCIDENTAL TO SANITARY SEWER CONSTRUCTION.
- ALL PVC TRUSS SEWERS SHALL HAVE A DEFLECTION TEST PERFORMED AS FOLLOWS:
- A) DEFLECTION TEST SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS.
- B) DEFLECTION TEST TO BE CONDUCTED USING A RIGID BALL OR MANDREL WITH A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. NO MECHANICAL PULLING DEVICES ALLOWED.
- C) NO PIPE SHALL EXCEED A DEFLECTION OF 5%.



CLASS F-3 BEDDING FOR SANITARY PVC TRUSS PIPE SUDAS FIGURE 3010.103 N.T.S.

THE FOLLOWING MINIMUM CLEARANCES MUST BE MAINTAINED :

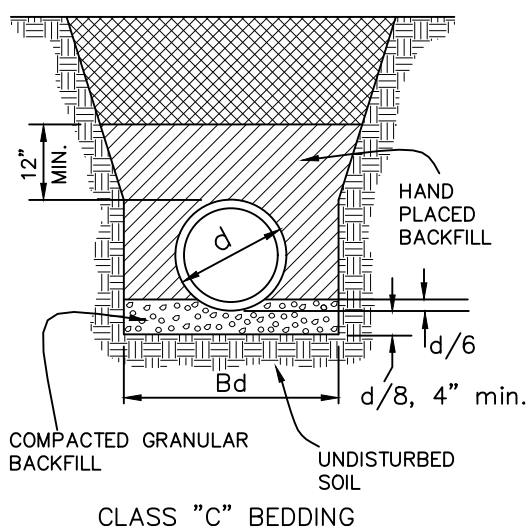
- 14) WATER MAIN SHALL BE LOCATED 10 FEET HORIZONTALLY DISTANT FROM ALL SANITARY SEWER AND STORM SEWER.
- 15) WATER MAIN SHALL NOT PASS THROUGH NOR CONTACT A SEWER OR A SEWER MANHOLE. A MINIMUM HORIZONTAL SEPARATION OF 3 FEET SHALL BE MAINTAINED.
- 16) VERTICAL SEPARATION OF WATER MAINS CROSSING OVER ANY SANITARY SEWER SHOULD BE A MINIMUM OF 18-INCHES, MEASURED OUTSIDE TO OUTSIDE FROM THE CLOSEST EDGE OF EACH PIPE. IF PHYSICAL CONDITIONS PROHIBIT THIS SEPARATION, THE WATER MAIN SHALL NOT BE PLACED CLOSER THAN 6-INCHES ABOVE A SEWER OR 18-INCHES BELOW A SEWER. THE SEPARATION DISTANCE SHALL BE THE MAXIMUM FEASIBLE IN ALL CASES.
- 17) WHERE THE WATER MAIN CROSSES SEWER, ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO BOTH JOINTS ARE AS FAR AS POSSIBLE FROM THE SEWER. THE WATER AND SEWER PIPES MUST BE ADEQUATELY SUPPORTED AND HAVE WATER TIGHT JOINTS. A LOW PERMEABILITY SOIL SHALL BE USED FOR BACKFILL MATERIAL WITHIN 10-FEET OF THE POINT OF CROSSING.
- 18) NOMINAL DEPTH OF WATER MAIN = 5.5 FEET TO TOP OF PIPE.
- 19) EXISTING OR PROPOSED VALVE BOXES THAT FALL WITHIN PAVEMENT MUST HAVE A SLIP-TYPE VALVE BOX.
- 20) THE ENTIRE WATERMAIN SYSTEM, INCLUDING SERVICES TAPS IF APPLICABLE, SHALL BE PRESSURE TESTED PER AWWA C600. THE TEST SHALL BE PERFORMED AT A MINIMUM OF 150 psi FOR 2 HOURS WITH A MAXIMUM LOSS OF 5 psi.
- 21) WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH SPECIFICATIONS.
- 22) FIRE HYDRANTS SHALL BE MUELLER SUPER CENTURIAN 250 OR APPROVED CITY EQUAL THAT OPEN RIGHT.
- 23) BED WATER MAIN ON NATIVE MATERIAL, DIG IN BELLS, AND BACKFILL WITH SUITABLE MATERIAL.
- 24) ALL CONCRETE SANITARY MANHOLES SHALL HAVE CONSHIELD ANTI-MICROBIALADDITIVE INCORPORATED IN THE CONCRETE MIX.

WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS, OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THOSE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THAT THERE MAY BE OTHER FACILITIES IN THE CONSTRUCTION AREA, THE EXISTENCE OF WHICH IS NOT PRESENTLY KNOWN OR SHOWN HEREON. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION, AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

STORM SEWER NOTES

- 1) STORM SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD DETAILED SPECIFICATIONS AND DETAILED SPECIFICATION REQUIREMENTS PREPARED FOR THIS PROJECT. CITY OF WEST BRANCH DESIGN AND CONSTRUCTION STANDARDS AND PROCEDURES SHALL PREVAIL.
- 2) ALL STORM SEWERS SHALL BE CLASS 3 RCP UNLESS NOTED OTHERWISE IN THE PLANS.
- 3) AT PLACES WHERE A FLARED END SECTION IS REQUIRED, PIPE LENGTH INCLUDES THE FLARED END. THE LAST TWO JOINTS ARE TO BE TIED WHERE FLARED END SECTIONS ARE REQUIRED.
- 4) ALL RCP STORM SEWERS SHALL BE PROVIDED WITH CLASS "C" BEDDING, UNLESS NOTED OTHERWISE. PVC SEWERS SHALL BE PROVIDED WITH CRUSHED STONE ENCASEMENT.
- 5) STORM SEWERS SHADED ON THE PROFILE VIEW SHALL BE BACKFILLED WITH EITHER OF THE FOLLOWING COMPACTED TO 90% MODIFIED PROCTOR DENSITY:
- A. SUITABLE EXCAVATED MATERIAL. IF EXCAVATED MATERIAL IS NOT SUITABLE, THEN
- B. CRUSHED STONE AS SPECIFIED FOR GRANULAR TRENCH BACKFILL SHALL BE USED.
- 6) GRANULAR TRENCH BACKFILL SHALL BE CRUSHED STONE CONFORMING TO I.D.O.T. STANDARD SPECIFICATION 4120.04 WITH 1" MAXIMUM AGGREGATE SIZE. COMPACT TO 90% MODIFIED PROCTOR DENSITY.
- 7) ALL STORM SEWERS SHALL HAVE CONFINED "O" RING GASKETS. STORM SEWERS 36" AND SMALLER SHALL HAVE BELL AND SPIGOT JOINTS, STORM SEWERS LARGER THAN 36" MAY HAVE TONGUE AND GROOVE JOINTS. NO MASTIC JOINTS ALLOWED.
- 8) ALL PIPE SHALL BE CERTIFIED.
- 10) LIFT HOLES IN STORM SEWER WILL NOT BE ALLOWED.
- 11) PROVIDE CONCRETE FILLETS IN ALL NEW & EXISTING DRAINAGE STRUCTURES PER REFERENCED DETAILS.

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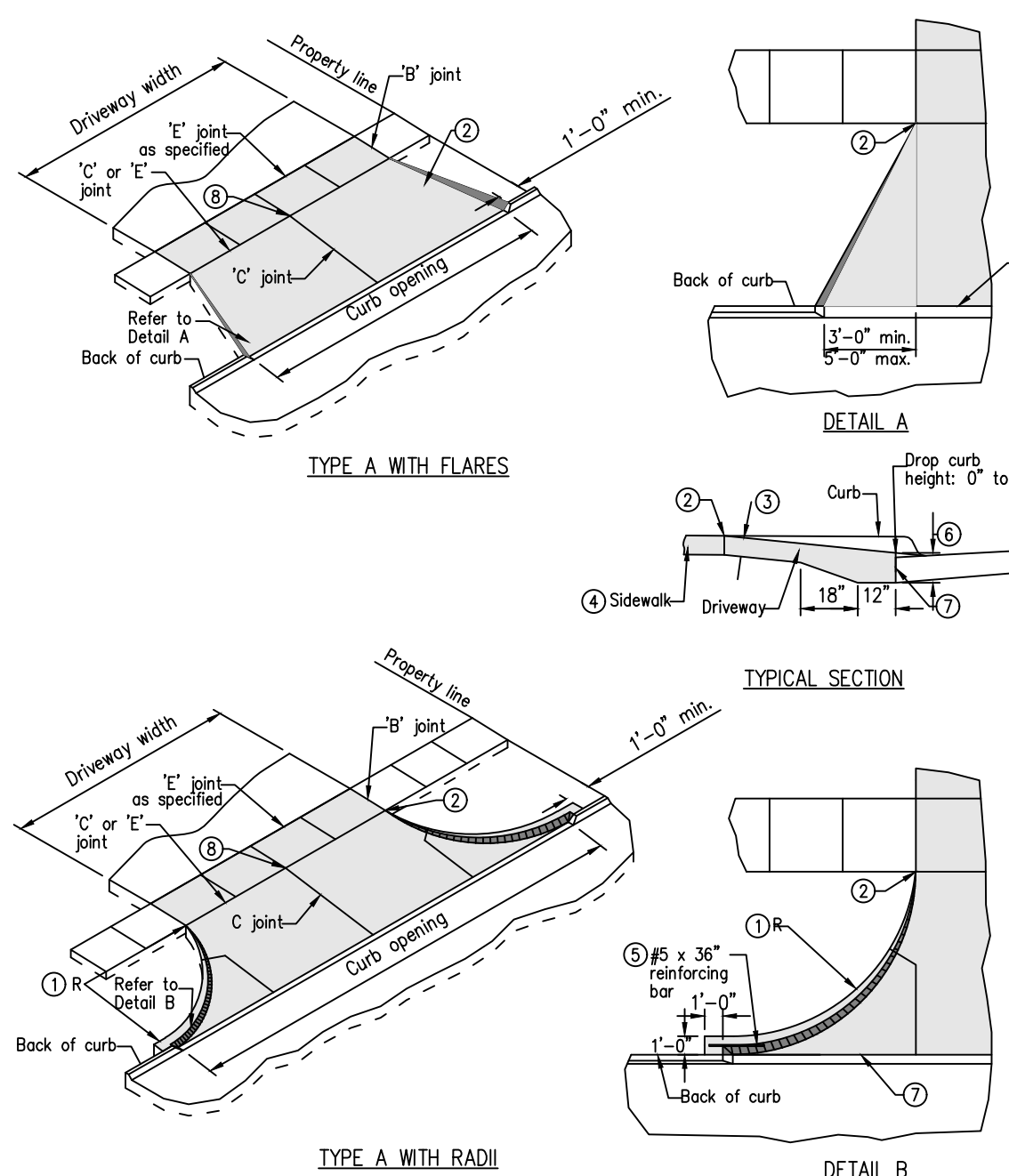
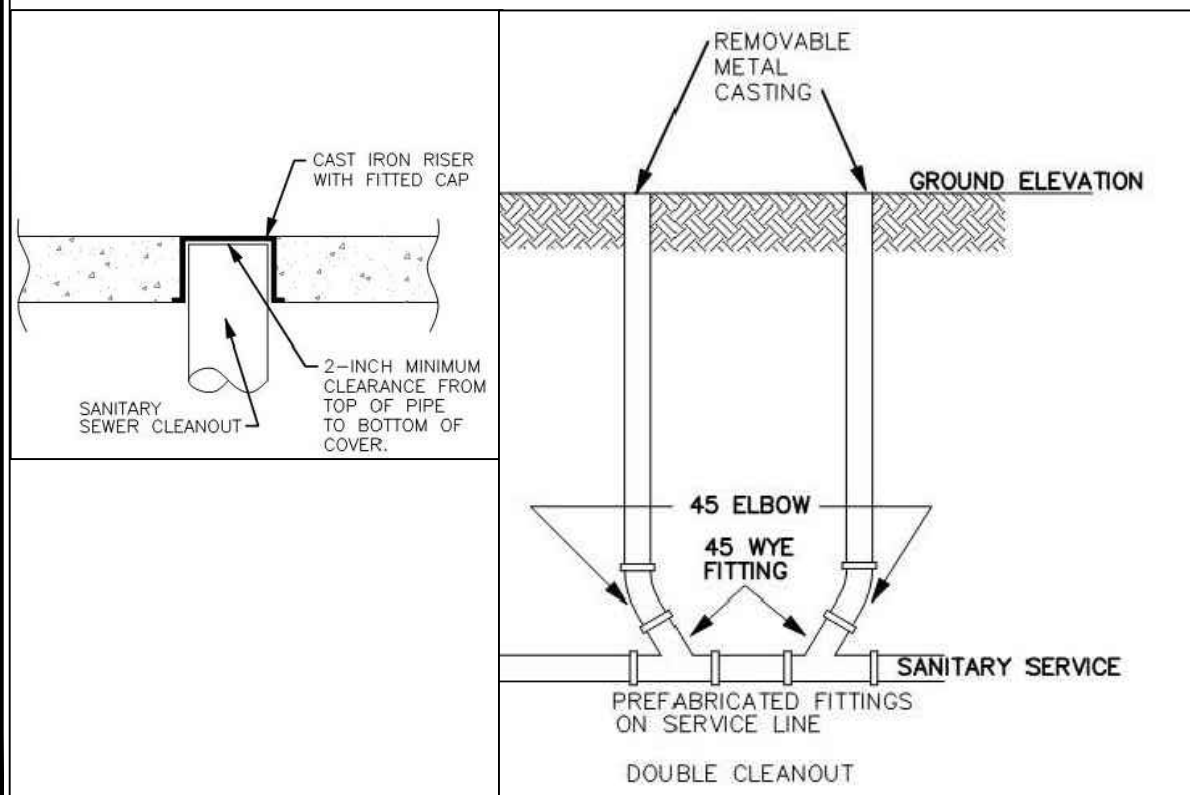
CLASS "C" BEDDING

- NOTES:
1. PIPE SHALL BE PLACED ON CRUSHED STONE MATERIAL.
2. BELL HOLES SHALL BE HAND SHAPED SO THAT ONLY PIPE BARREL RECEIVES BEARING PRESSURE.
3. PLACE BEDDING TO ENSURE THAT THERE ARE NO VOIDS UNDER OR ALONGSIDE THE LENGTH OF PIPE.
4. BACKFILL SHALL BE HAND TAMPED UP TO 12" ABOVE TOP OF PIPE.
5. SEE TABLE FOR ALLOWABLE TRENCH WIDTH Bg.

ID INCHES	Bd FEET & INCHES
12	2-3
15	2-9
18	3-0
21	3-3
24	3-6
27	4-0
30	4-3
36	4-9
42	5-6
48	6-3

SIAMESE DETAIL

N.T.S.



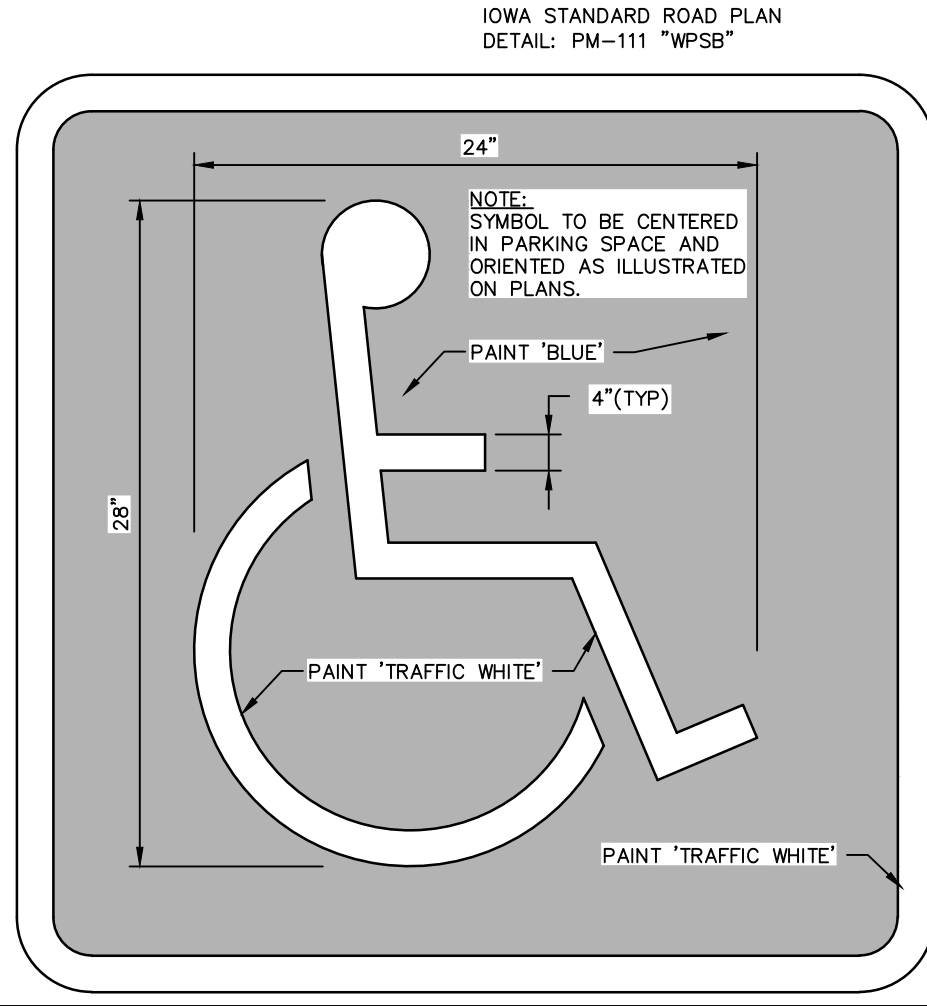
- ① Driveway radius (R). Residential: 10 foot minimum, 15 foot maximum. Commercial and Industrial: As specified in the contract documents.
- ② Transition the curb height to 0 inches at end of taper/radius or at the front edge of sidewalk. Do not extend raised curb across sidewalk.
- ③ Pavement thickness. Residential: 6 inches minimum. Commercial and industrial: 7 inches minimum.
- ④ Sidewalk thickness through driveway to match thickness of driveway.
- ⑤ Center reinforcing bar vertically in the pavement.
- ⑥ Match thickness of adjacent roadway, 8 inches minimum.
- ⑦ Provide 1" joint at back of curb unless 18" joint is specified.
- ⑧ For alleys, invert the pavement crown 2% toward center of alley.
- ⑨ Target cross slope of 1.5% with a maximum cross slope of 2.0%. If specified in the contract documents, construct the sidewalk through the driveway 5 feet wide to serve as a passing space.
- ⑩ If cross slope of adjacent sidewalk panel exceeds 2.0%, remove and replace to transition from existing sidewalk to sidewalk through driveway. If elevation change requires a curb ramp, comply with figure 7030.205; verify need for detectable warning panel with Engineer.

REVISION
NEW
FIGURE 7030.101
SHEET 1 OF 1

CONCRETE DRIVEWAY, TYPE A

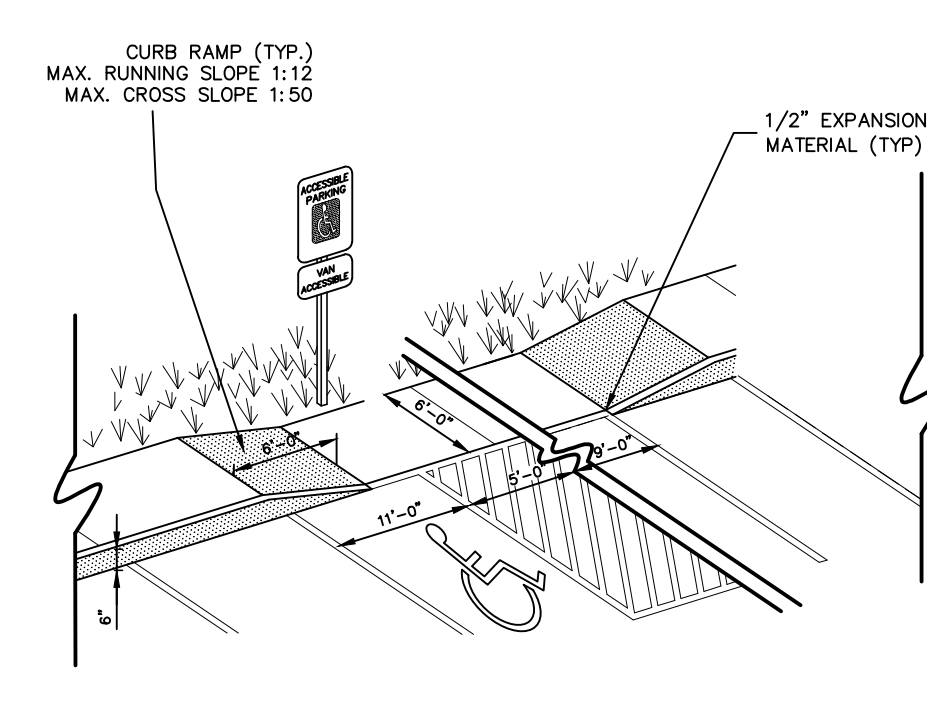
ACCESSIBLE PARKING SYMBOL

N.T.S.



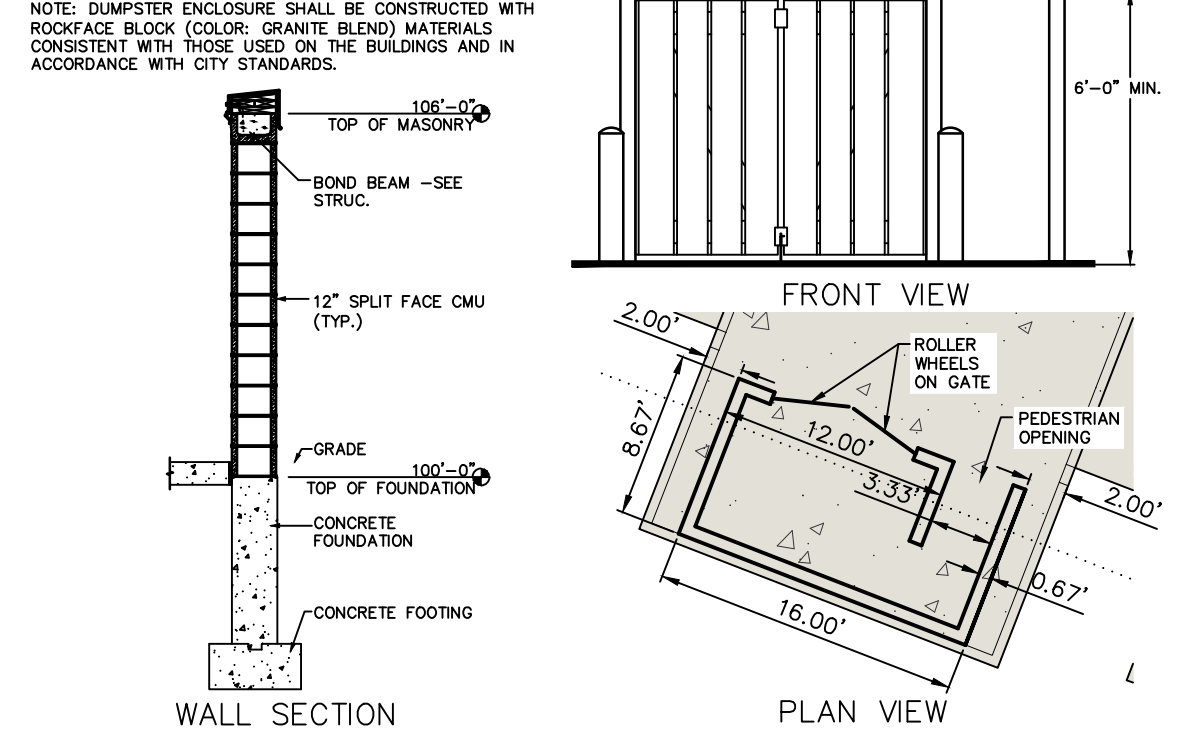
ACCESSIBLE PARKING DETAIL

N.T.S.



TRASH ENCLOSURE DETAIL

N.T.S.



SHEET INDEX

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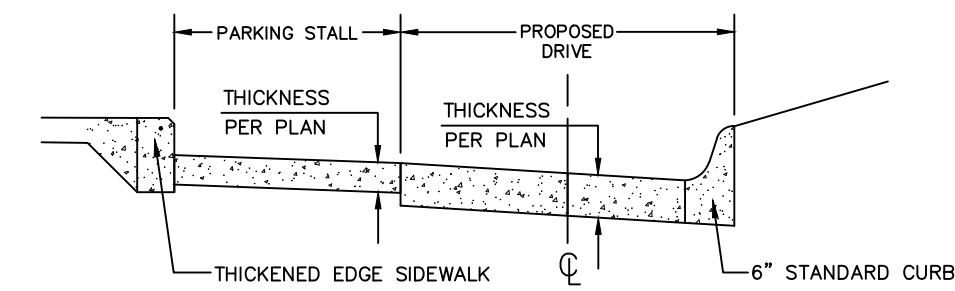
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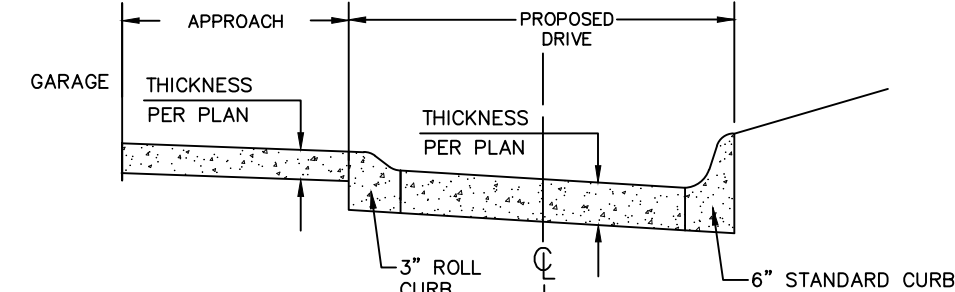
TYPICAL DRIVE / PARKING SECTION

N.T.S.



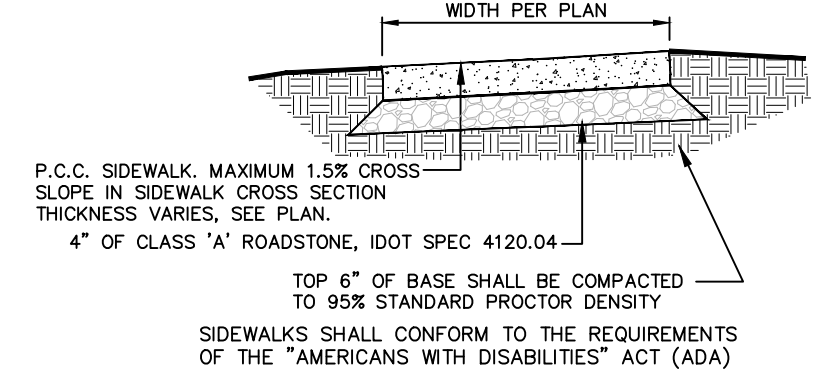
TYPICAL DRIVE/GARAGE APPROACH SECTION

N.T.S.



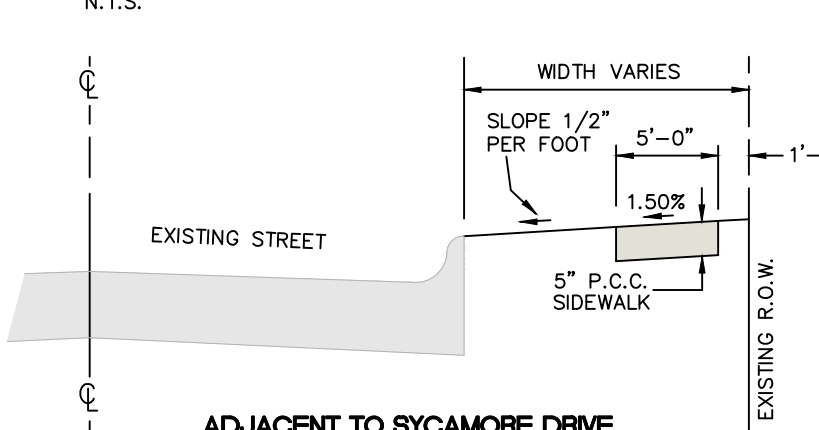
TYPICAL SIDEWALK DETAIL

N.T.S.



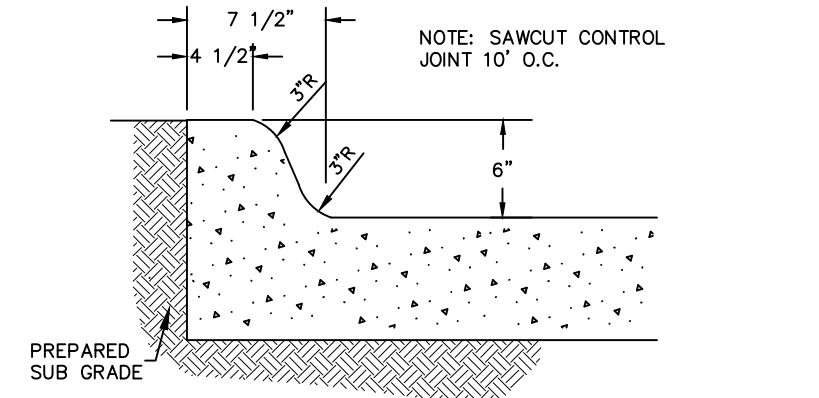
TYPICAL SIDEWALK INSTALLATION

N.T.S.



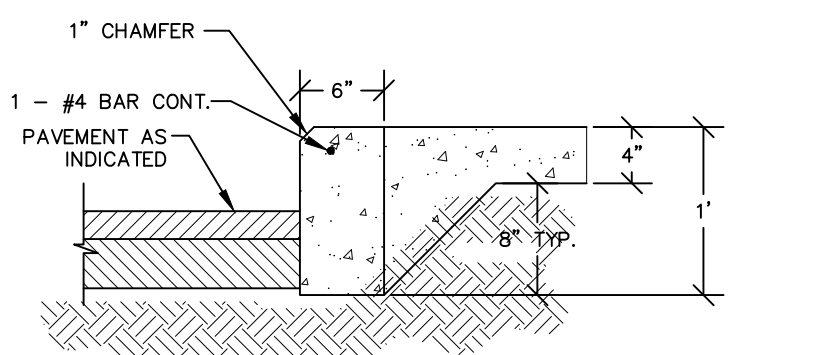
6" STANDARD CURB DETAIL

N.T.S.



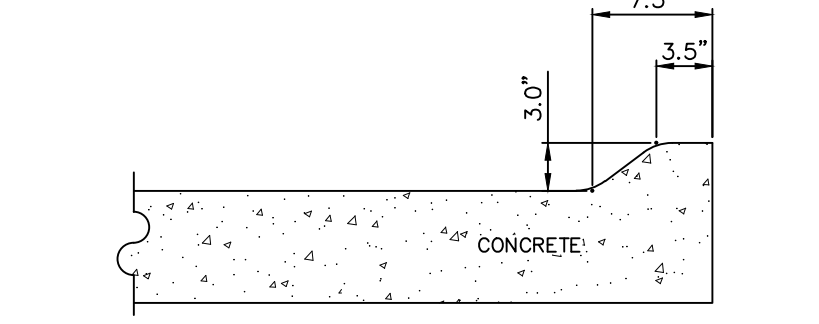
SIDEWALK THICKENED EDGE

N.T.S.



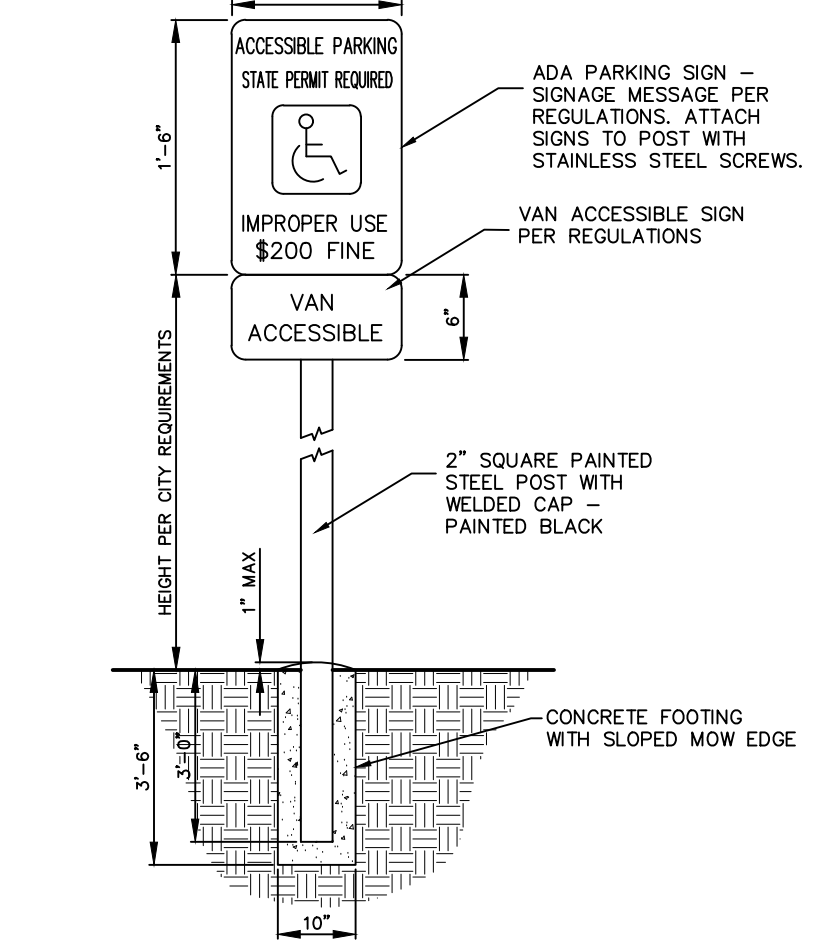
3" ROLL CURB DETAIL

N.T.S.



ACCESSIBLE SIGN DETAIL

N.T.S.



CIVIL ENGINEERS  
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Project No: C500

6992-360 of:



Diagram illustrating the components and specifications for a tree staking and mulching system:

- PRUNE BROKEN BRANCHES AS NECESSARY, MAX. 1/3**
- NARROW BRANCH UNION ANGLE WITH EVIDENCE OF INCLUDED BARK AND/OR BRANCH/TRUNK DIAMETER RATIO GREATER THAN 2/3 SHALL BE REJECTED.**
- WOVEN NYLON TREE STRAPS, SIZE TO ALLOW 1.5" OF TRUNK GROWTH, PLACE AT 1/3 HEIGHT OF FIRST BRANCHING.**
- GALVANIZED AIRCRAFT-GRADE 16 GAUGE CABLES, ONLY TIGHT ENOUGH TO PREVENT SLIPPING; ALLOW SOME TREE MOVEMENT**
- 2" - 6" STEEL "T" POST, STAKE PER STAKING ORIENTATION PLAN. REMOVE AFTER TWO GROWING SEASONS**
- MULCH AREA MIN. 3' RADIUS**
- TURF**
- 5" DEEP VERTICAL SLICE OUT EDGE**
- STRIP 500 FROM UNDE-MULCHED AREA**
- FERTILIZER TABLETS (3) PER TREE SPACED EVENLY AROUND ROOTBALL**
- PLANT WITH BASE OF TREE A MIN. 1" ABOVE ADJACENT GRADE**
- ENSURE ROOT FLARE IS VISIBLE**
- REMOVE ALL TWINE AND STRAPS OR CUT AND FOLD WIRE BASKET IN AND CUT BURGLAP FROM TOP 1/2 OF ROOTBALL**
- 3" MINIMUM DEPTH SHREDDED HARDWOOD BARK MULCH, ENSURE ROOT FLARE IS VISIBLE**
- 3" WATER RETENTION SOIL RING**
- EXISTING UNDISTURBED SUBGRADE**
- PLANTING MIX/NATIVE SOIL BACKFILL**
- TREE PIT TO BE MINIMUM OF 2.5 X FOOT BALL DIAMETER SLANT AND ROUGHEN SIDES; INCREASE PIT DIAMETER IN HEAVY CLAY SOILS**
- SIDEWALK/PAVING**

**STAKING ORIENTATION PLAN**

The plan shows a top-down view of the tree's base. A North arrow points towards the top of the page. A "TREE POST" is indicated by a dot. A "CABLE STRAP" is shown as a line connecting two dots. Angles of 90° and 180° are marked relative to the North arrow.

Diagram illustrating the cross-section of a tree pit installation, showing the layers and components involved in planting a tree.

Labels and components shown in the diagram:

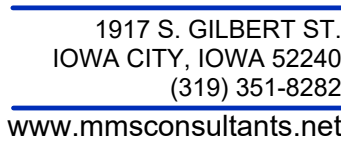
- ROOTBALL (CONTAINER GROWN) REMOVE ENTIRE CONTAINER BEFORE INSTALLATION
- DIAMETER OF SHRUB
- ON-CENTER SPACING (SEE PLAN OR PLANT LIST FOR SPACING)
- ROOT BALL (BALL AND BURLAP). CUT TWINE AND BURLAP FROM TOP 1/2 OF ROOTBALL AND REMOVE BEFORE INSTALLATION
- EDGE OF SIDEWALK OR CURB
- 4" MINIMUM DEPTH SHREDDED HARDWOOD BARK MULCH BED
- PLANTING TOSOL FOR BACKFILLING
- 5" DEEP VERTICAL SPADE CUT EDGE
- FERTILIZER TABLETS (3) PER SHRUB SPACED EVENLY AROUND ROOTBALL
- EXISTING UNDISTURBED SUBGRADE
- PLANTING HOLE SHALL BE 2X DIAMETER OF ROOTBALL AND 6" MINIMUM DEEPER

WHERE PUBLIC UTILITY PIPES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY RECORDS, RECORDS, SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXISTENCE AND EXACT LOCATION OF ALL SUCH DAMAGED CLAIMS. NO ADDITIONAL CHARGES SHALL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

1 SHRUBS PER 1,000 SF OF OPEN SPACE = 14 SHRUBS  
- 36 PROVIDED

PLANT LIST - TREES						
QTY	KEY	TAXONOMIC NAME	COMMON NAME	INSTALL SIZE	COMMENT	MATURE SIZE (HxW)
8	06	OLESTHA TRACANTHOS 'NICKOLE'	GRYLENE HONEYLOCUST	2" CAL.	D & D	48' x 35'
17	NS	PIEA IDEAS	HORRAY SPRUCE	75" x 11"	D & D	75' x 35'
4	06	QUERCUS PALUSTRIS	PIN OAK	2" CAL.	D & D	60' x 40'
4	06	QUERCUS BICOLOR	SWAMP WHITE OAK	2" CAL.	D & D	70' x 50'

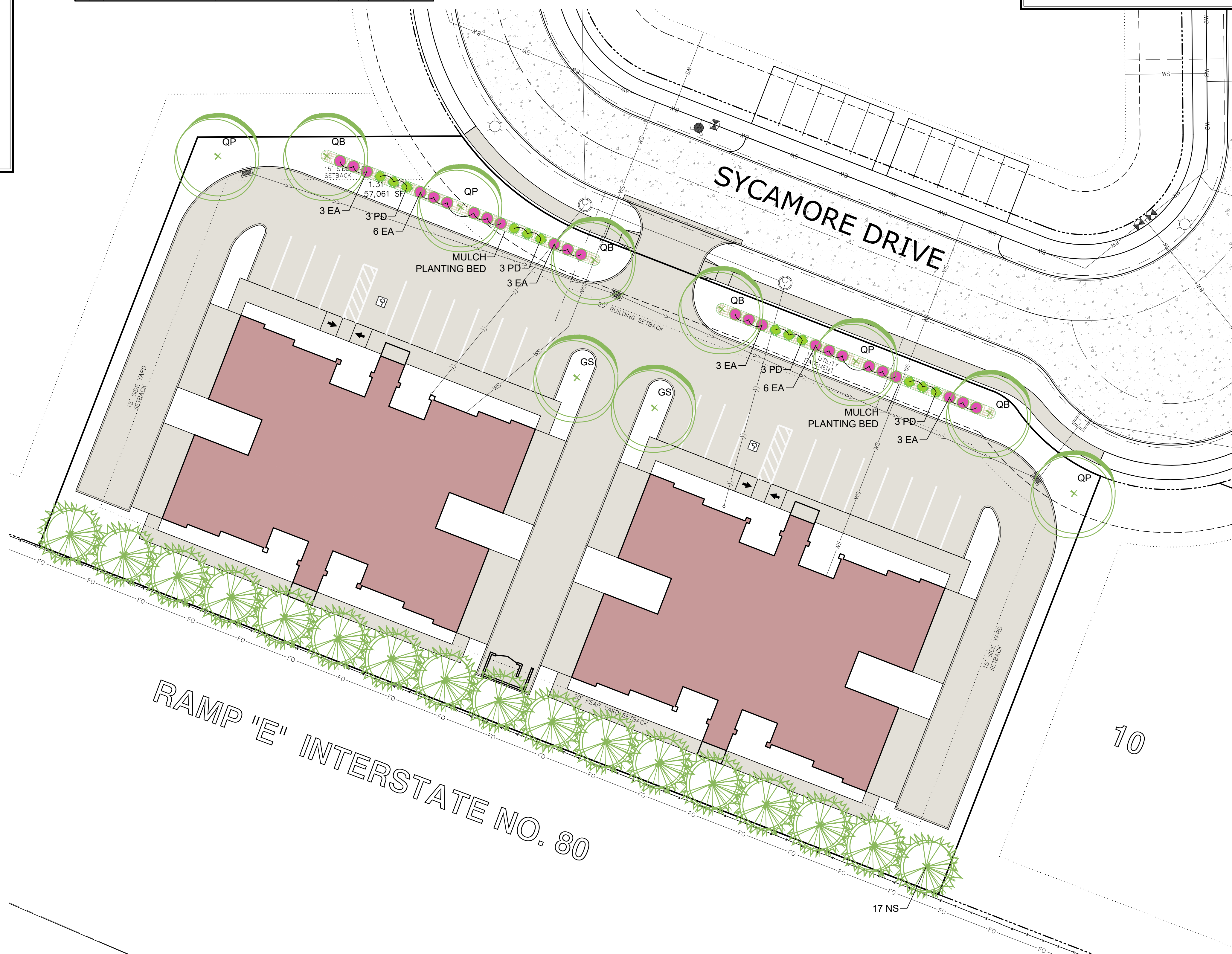
THE ACTUAL SIZE AND LOCATION OF ALL PROPOSED FACILITIES SHALL BE VERIFIED WITH CONSTRUCTION DOCUMENTS, WHICH ARE TO BE PREPARED AND SUBMITTED SUBSEQUENT TO THE APPROVAL OF THIS DOCUMENT.



Date	Revision
10/07/21	PER CITY REVIEW TAV/RLA

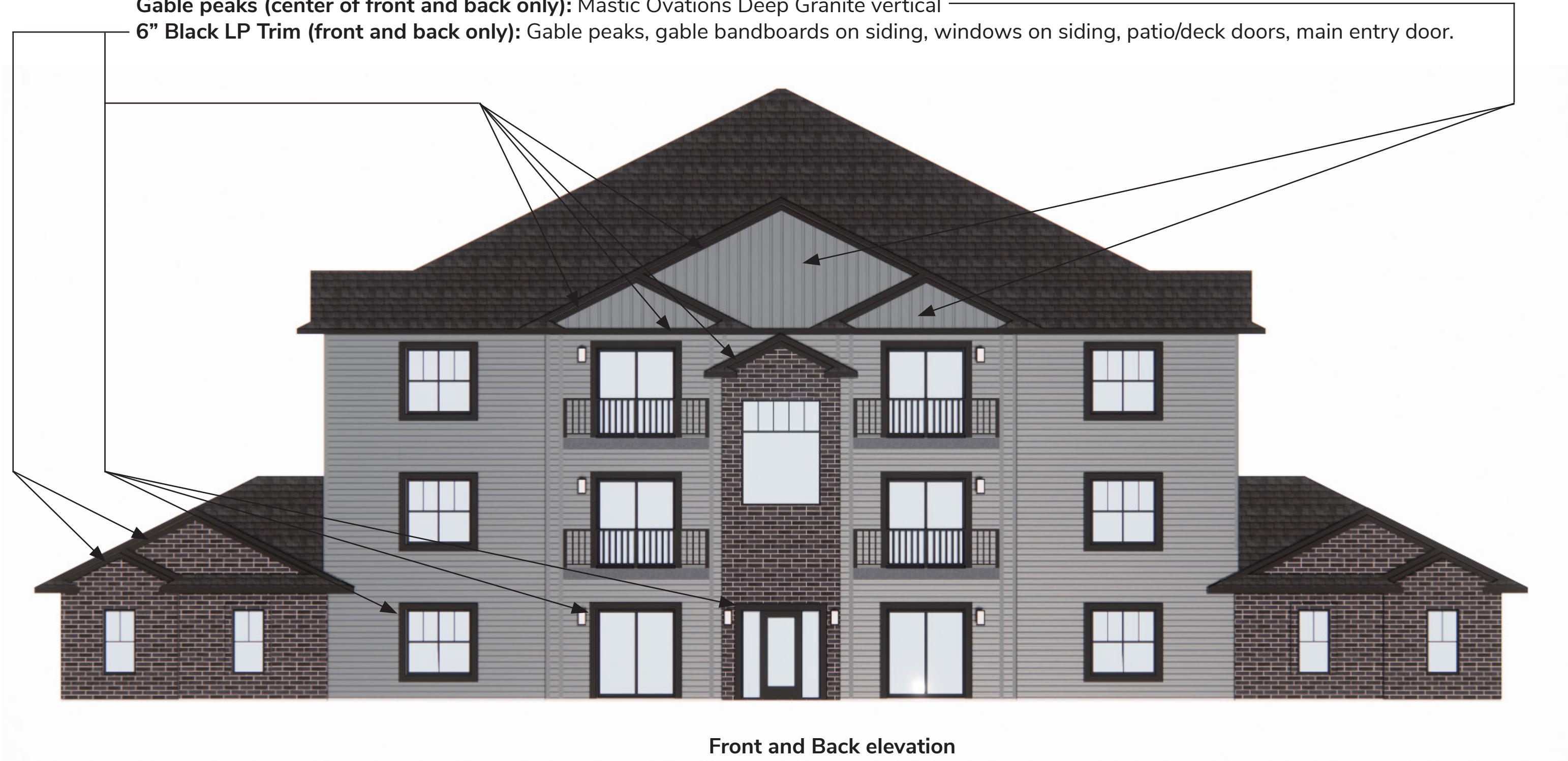
LOT 11  
PARKSIDE HILLS  
WEST BRANCH,  
CEDAR COUNTY,  
IOWA

6992-360	of:
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**Roof:** Timberline Natural Shadows - Charcoal  
**Soffit, fascia:** Black  
**Front, back, and sides:** Mastic Ovations Deep Granite horizontal  
**Gable peaks (center of front and back only):** Mastic Ovations Deep Granite vertical  
**6" Black LP Trim (front and back only):** Gable peaks, gable bandboards on siding, windows on siding, patio/deck doors, main entry door.





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Side elevation