PLANNING AND ZONING COMMISSION MEETING
Tuesday, August 27, 2024 • 7:00 p.m.
West Branch City Council Chambers, 110 N. Poplar St.
Council Quorum May Be Present

https://zoom.us/j/5814699699
*or **dial in phone number 1-312-626-6799** with **Meeting ID 581 469 9699***

1. Call to Order
2. Roll Call
3. Approve Agenda/Move to action.
    a. Approve minutes from the May 28, 2024 Special Planning & Zoning Commission meeting.
4. Public Hearing/Non-Consent Agenda. /Move to action.
    a. Approve the revised final Site Plan for Lot 4 of The Meadows, Part 3. / Move to action.
    b. Review a revised Final Plat for Heritage Hill and provide comments.
    c. Discuss Main Street Design Guidelines.
    d. Discuss Economic Development District boundaries.
5. City Staff reports
6. Comments from Chair and Commission Members.
7. Next regular Planning & Zoning Commission meeting Tuesday, September 24, 2024.
8. Adjourn

City of West Branch Special Planning & Zoning Commission Meeting
May 28, 2024
West Branch City Council Chambers, 110 North Poplar Street

Vicechair Ryan Bowers called the Special Planning & Zoning Commission meeting to order at 7:01 p.m.
Roll call
Commission members present:
John Fuller, Ryan Bowers, Madison Conley, Brad Bowers, Ryan Foley.
Absent: Max Kober and Matt Van Scoyoc.
City Staff present: City Admin Adam Kofoed, City Engineer Dave Schechinger, Zoning Administrator Terry Goerdt.
Developers present: Chris Kofoed and Brad Larson.
Public present: Mayor Roger Laughlin, Developers Chris Kofoed and Brad Larson, Engineer Brian Boelk

APPROVE AGENDA/CONSENT AGENDA/MOVE TO ACTION.
Approve the agenda for the May 28, 2024 Planning & Zoning Commission meeting. /Move to action.
Motion by Bower, second by Conley to approve the agenda. Motion carried 5-0.

Approve the minutes for the March 26, 2024 Planning & Zoning Commission meeting. /Move to action.
Motion by Bowers, second by Foley to approve the minutes. Motion carried 5-0.

Approve the minutes for the April 22, 2024 Planning & Zoning Commission meeting. /Move to action.
Motion by Bowers, second by Foley to approve the minutes. Motion carried 5-0.

PUBLIC HEARING/NON-CONSENT AGENDA

Review and approve the Preliminary Plat for The Meadows Part 6. / Move to action.
Engineer Boelk spoke on behalf of the developers. No public members commented.
Commissioner Bowers asked if anything has changed in the plat since last meeting. Engineer Boelk confirmed its very similar if not the same. Commissioner Conley asked about stormwater and Boelk explained the stormwater designs to the board.

Motion by Bower, second by Bowers to approve. Motion carried 5-0

Provide a recommendation for a minor subdivision. / Move to action. Waive the right to review the plat of survey with conditions.
City Administrator Kofoed explained the property owner is wishing to split land to sell for agriculture. Since the property in question is inside the city's two-mile extraterritorial district, the city has to review or waive the final plant.

Motion by Bowers, second by Fuller to waive the right to review the final plat. Passed 5-0.

OLD BUSINESS:

None

Reports

Administrator Goerdt provided the board with positive feedback that Parkside Hills is starting to fill up with new buildings. Goerdt and Commissioner Bowers discussed new zero lots on Dawson.

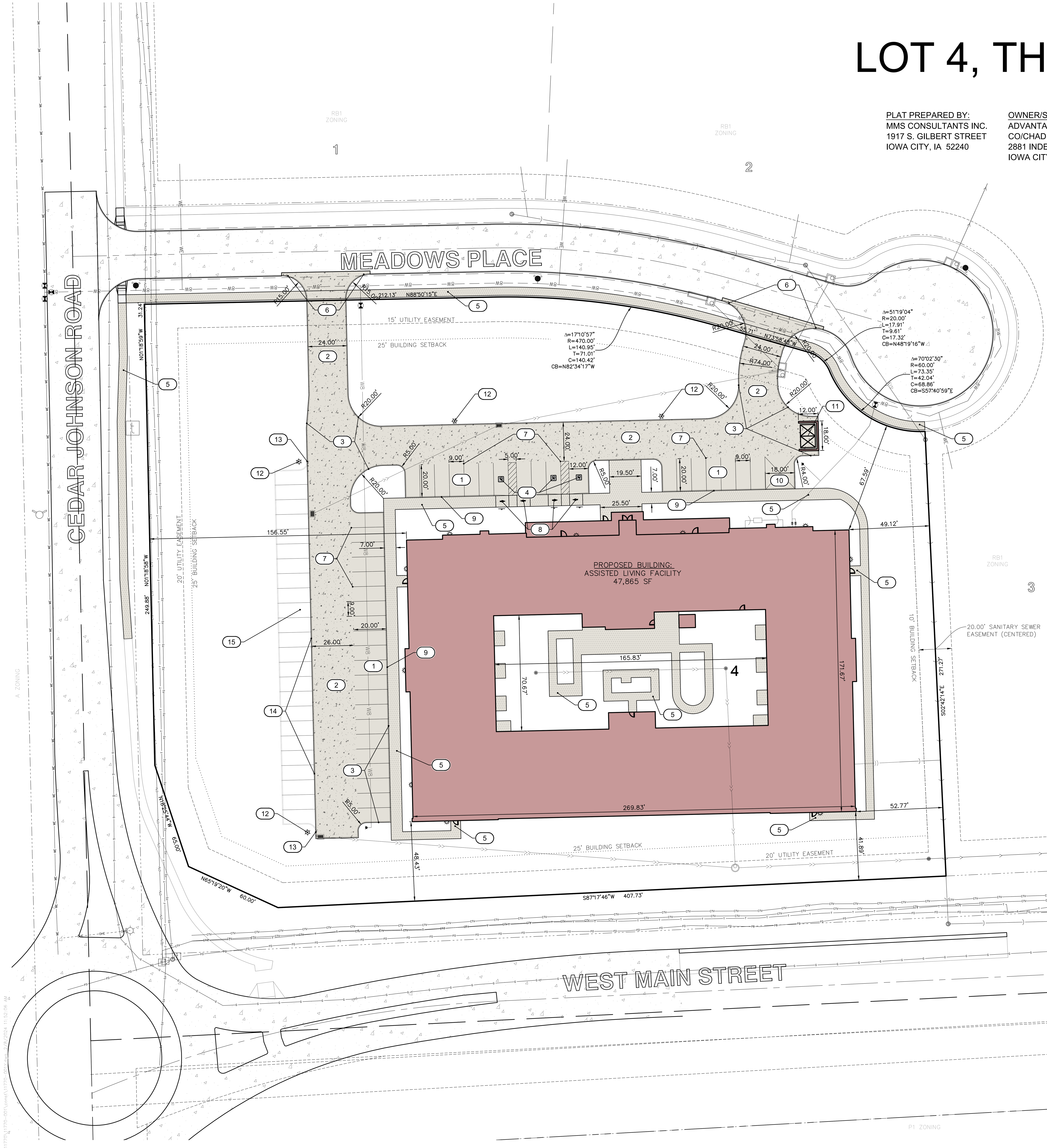
Kofoed explained the city's interest in conducting a comprehensive plan in the next two years.

Adjourn

Motion by Conley, second by Bowers to adjourn the Planning & Zoning Commission meeting. Motion carried on a voice vote. The meeting adjourned at 7:23pm.

Submitted by:
Adam Kofoed
City Administrator

SITE PLAN
LOT 4, THE MEADOWS - PART THREE
WEST BRANCH, IOWA



PLAT PREPARED BY:	OWNER/SUBDIVIDER:	SUBDIVER'S ATTORNEY
MMS CONSULTANTS INC.	ADVANTAGE DEVELOPMENT	KIRSTEN H. FREY
1917 S. GILBERT STREET	CO/CHAD KEUNE	327 2ND STREET SUITE 300
IOWA CITY, IA 52240	2881 INDEPENDENCE ROAD	CORALVILLE, IA 52241
	IOWA CITY, IA 52240	

KEYNOTES

NUMBER	KEYNOTE	DETAIL
1	INSTALL PARKING (SEE PAVING LEGEND TABLE THIS SHEET FOR THICKNESS AND MATERIAL)	
2	INSTALL DRIVEWAY (SEE PAVING LEGEND TABLE THIS SHEET FOR THICKNESS AND MATERIAL)	
3	INSTALL STANDARD 6" CURB AND GUTTER	
4	INSTALL ADA PARKING, SYMBOL, BOLLARD W/ SIGNAGE	
5	INSTALL 4" PCC SIDEWALK	
6	CONNECT DRIVE TO EXISTING PCC PAVEMENT	
7	INSTALL 4" WIDE PAVEMENT MARKINGS (TYP)	
8	INSTALL ADA RAMP	
9	INSTALL THICKENED EDGE SIDEWALK	
10	LOADING SPACE	
11	DUMPSTER LOCATION	
12	INSTALL LIGHT POLE	
13	TRANSITION 6" CURB TO 3" ROLL CURB	
14	INSTALL 3" ROLL CURB	
15	POSSIBLE FUTURE PARKING	

☼ LITHONIA LIGHTING RSX2 LED P2 40K R3S HS
☼ LITHONIA LIGHTING WPXO LED ALO SWW2 MVOLT

LEGAL:
LOT 4, THE MEADOWS SUBDIVISION – PART THREE, IN WEST BRANCH, CEDAR COUNTY, IOWA, IN ACCORDANCE WITH THE RECORDED PLAT THEREOF, CONTAINING 3.78 ACRES AND SUBJECT TO EASEMENTS AND RESTRICTION OF RECORD.

SITE DEVELOPMENT SUMMARY:
ZONING: RB–1
SQUARE FOOTAGE: 164,573 SF COMMERCIAL
PROPOSED USE: COMMERCIAL

DEVELOPMENT CHARACTERISTICS:
LOT 4, THE MEADOWS SUBDIVISION – PART THREE IS TO BE A 3.78 ACRE PARCEL. THE PLAN WILL CONSIST OF 1 (ONE) PROPOSED ASSISTED LIVING FACILITY. THE ASSISTED LIVING FACILITY IS ESTIMATED TO HAVE 12 FULL TIME EMPLOYEES AND 13 PART TIME EMPLOYEES.

DEVELOPMENT SCHEDULE
APPLICANT PLANS TO BEGIN CONSTRUCTION ON FALL 2023, WITH AN ESTIMATED COMPLETION DATE IN FALL 2024.

SITE COVERAGES:

TOTAL LOT AREA	164,573 S.F. (100%)
PROPOSED BUILDING AREA	36,927 S.F. (22.4%)
PROPOSED PAVING AREA	32,865 S.F. (20.0%)
TOTAL IMPERVIOUS AREA	69,792 S.F. (42.4%)
TOTAL OPEN AREA	94,781 S.F. (57.6%)

LOT REQUIREMENTS:
FRONT YARD SETBACK (MEADOWS PLACE) 25 FEET
(CEDAR JOHNSON ROAD) 25 FEET
(WEST MAIN STREET) 25 FEET
SIDE YARD SETBACK 10 FEET

PARKING REQUIREMENTS:
1 SPACE PER EACH 3 BEDS PLUS 1 SPACE FOR EACH 2 EMPLOYEES

49 BEDS / 3 = 17 SPACES
25 EMPLOYEES / 2 = 13 SPACES

TOTAL PARKING REQUIRED = 30 SPACES
TOTAL PARKING PROVIDED = 39 SPACES (3 ADA)

SHEET INDEX

GRAPHIC SCALE IN FEET
0 3 15 30
1"=30'

SURVEY CONTROL

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
200	616079.013	2223336.734	782.780	5/8" REBAR WITH RED PLASTIC CAP LOCATED 33 FEET EAST OF CENTERLINE OF CEDAR JOHNSON ROAD AND 50.6 FEET NORTH OF CENTERLINE OF W MAIN STREET
201	615952.509	2223306.697	785.796	5/8" REBAR WITH RED PLASTIC CAP LOCATED ON THE CENTERLINE OF CEDAR JOHNSON ROAD APPROXIMATELY 41.3 FEET SOUTH OF INTERSECTION WITH W MAIN STREET
203	616782.22	2223320.74	759.839	PIPE FOUND APPROXIMATELY 31.18 FEET EAST OF CEDAR JOHNSON ROAD AND DIRECTLY ON NORTHERN BOUNDARY OF THE MEADOWS SUBDIVISION PART THREE
205	616521.19	2224136.24	741.913	PIPE FOUND APPROXIMATELY 33.9 FEET EAST AND 29.1 FEET NORTH OF NORTHEASTERN BOUNDARY OF THE MEADOWS SUBDIVISION PART THREE

PAVEMENT LEGEND

	MATERIAL	TOTAL*
▨	7" PCC OVER 6" GRANULAR SUBBASE	2,000 SY
▨	6" PCC OVER 6" GRANULAR SUBBASE	852 SY
▨	4" PCC	1,307 SY

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

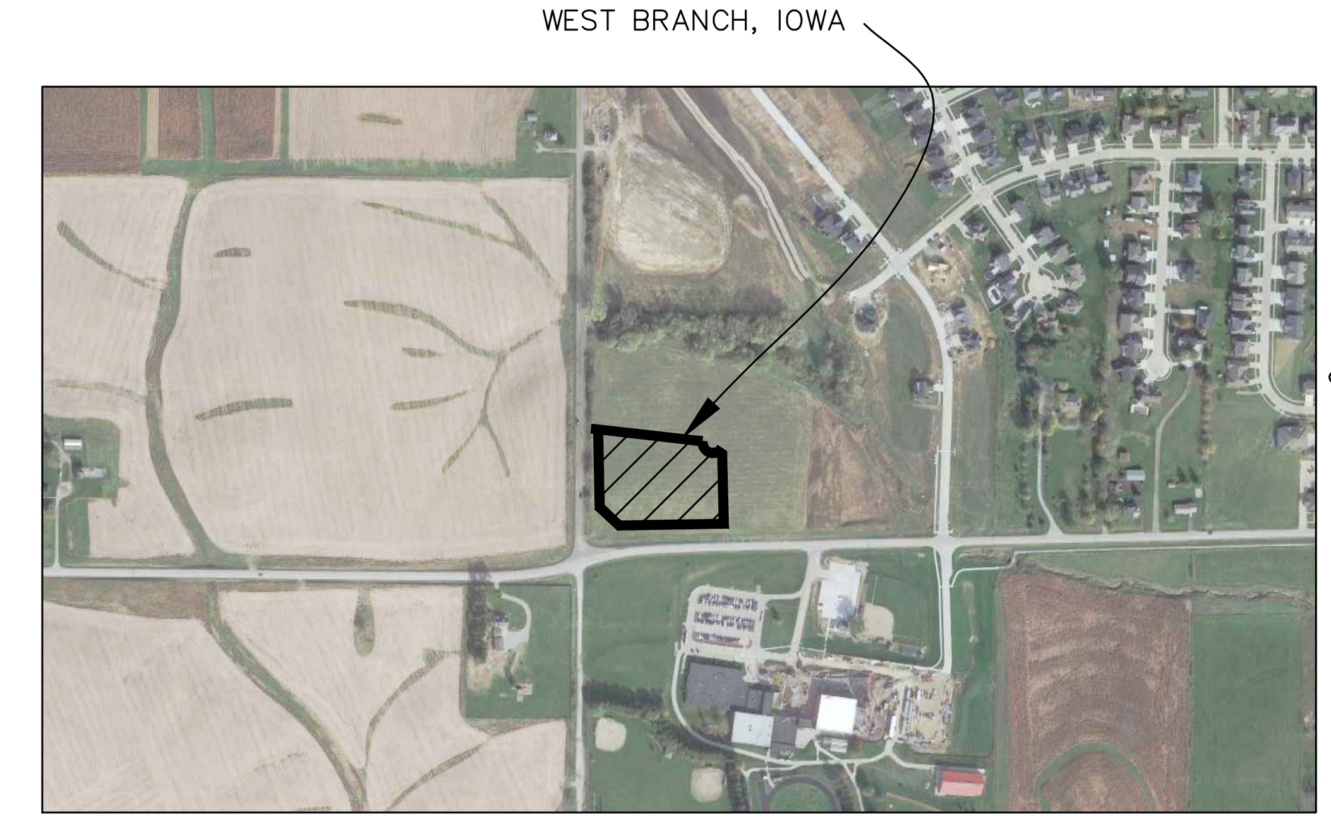
PAVING CONSTRUCTION NOTES
1. PAVEMENT CONSTRUCTION SHALL BE IN ACCORDANCE WITH I.D.O.T. SPECIFICATION SECTION 2301.
2. I.D.O.T. CLASS C–3 CONCRETE SHALL BE USED, UNLESS NOTED OTHERWISE.
3. PAVEMENT JOINTS SHALL CONFORM TO I.D.O.T. STANDARD ROAD PLAN PV–101.
4. SUBGRADE UNDER PROPOSED PAVEMENT SHALL BE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

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
(R) – RECORDED DIMENSIONS
22–1 – CURVE SEGMENT NUMBER

–EXIST– –PROP–
– 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
X – FENCE LINE
– EXISTING SANITARY SEWER
– PROPOSED SANITARY SEWER
– EXISTING STORM SEWER
– PROPOSED STORM SEWER
W – WATER LINES
E – ELECTRICAL LINES
T – TELEPHONE LINES
G – 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.

LOT 4, THE MEADOWS SUBDIVISION - PART THREE
WEST BRANCH, IOWA



LOCATION MAP
NOT TO SCALE

UTILITIES
IOWA 811 ONE CALL℠

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.

LICENSED PROFESSIONAL ENGINEER
RONALD L. AMELON
14201
IOWA
SEAL

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.

______________________________ 20____
RONALD L AMELON, P.E. Iowa Lic. No. 14201

My license renewal date is December 31, 20____.

Pages or sheets covered by this seal:

DRAFT

3.78 AC

MMS
CIVIL ENGINEERS
LAND PLANNERS
LAND SURVEYORS
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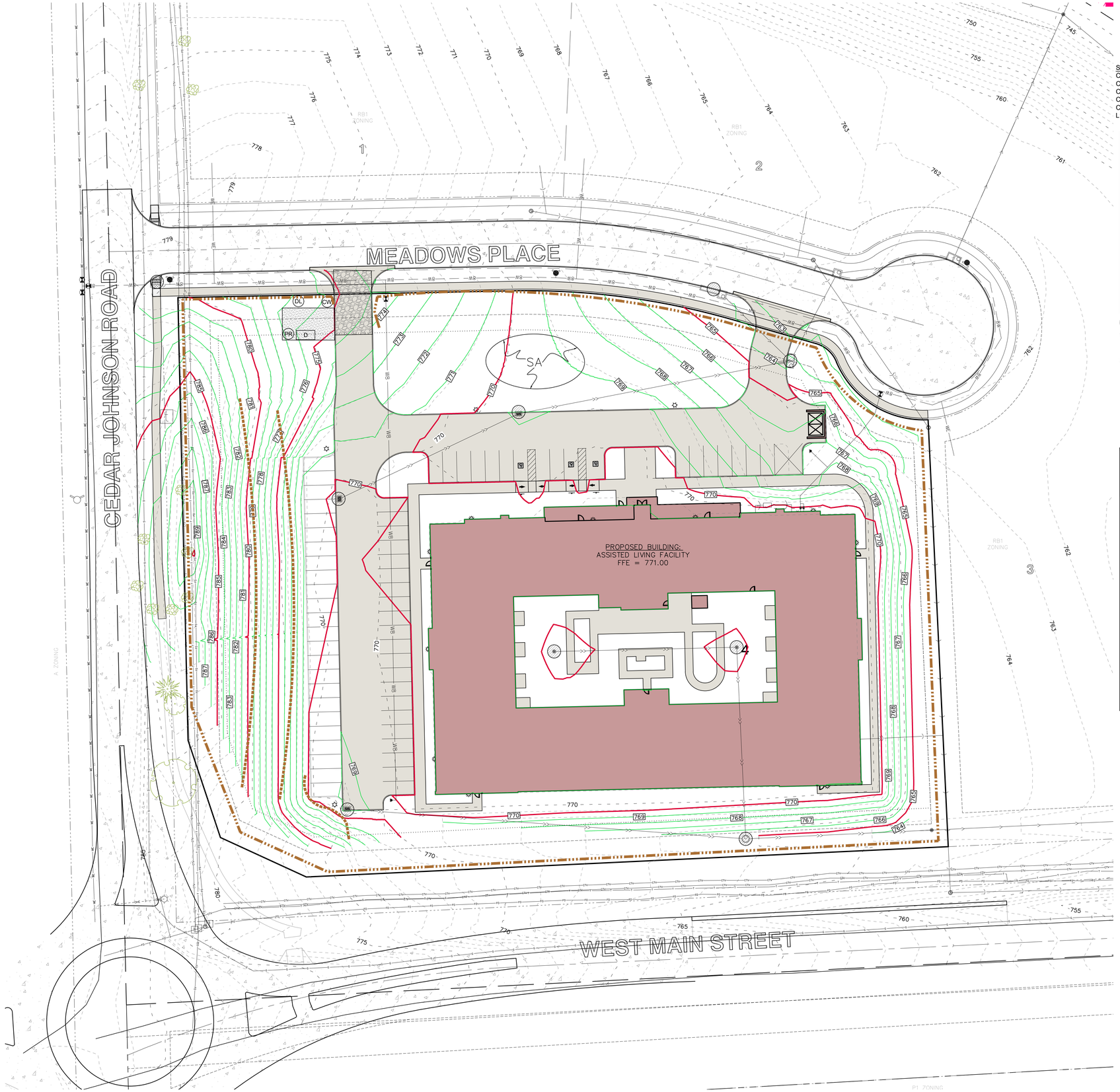
Date	Revision
07/12/23	PER CITY REVIEW -RLC
08/11/23	PER CITY REVIEW -ADP
09/11/23	REVISED WATER SERVICE - HEH
02/08/24	PER FIRE MARSHAL REVIEW -ADP

SITE LAYOUT AND DIMENSION PLAN

LOT 4, THE MEADOWS SUBDIVISION - PART THREE
WEST BRANCH
CEDAR COUNTY
IOWA

MMS CONSULTANTS, INC.

Date: 06-30-23	
Designed by: RLA	Field Book No: FIELDBOOK
Drawn by: ADP	Scale: 1"=30'
Checked by: RLA	Sheet No: C120
Project No: 11770-001	of: 6



SHEET INDEX

0 3 15 30
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- CURVE SEGMENT NUMBER

(E) 22-1

–EXIST–	–PROP–	
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		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
X	X	FENCE LINE
		EXISTING SANITARY SEWER
		PROPOSED SANITARY SEWER
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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.

GRADING AND EROSION CONTROL NOTES

TOTAL SITE AREA: 3.78 ACRES
TOTAL AREA TO BE DISTURBED: 3.78 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 PERIMETER 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:

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

UTILITIES

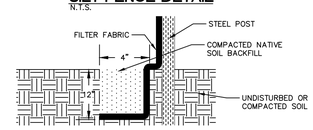
THE CONTRACTOR SHALL NOTIFY IOWA ONE CALL AT 811 OR 800/292-8989 NO LESS THAN 48 HRS. IN ADVANCE OF ANY DIGGING OR EXCAVATION.

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.

IOWA 811 ONE CALL SM

SILT FENCE DETAIL

N.T.S.



INSTALLATION

1. 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.
2. SILT FENCE FABRIC SHALL CONFORM TO I.D.O.T. STANDARD SPECIFICATION SECTION 4196.01.A. SILT FENCING SHALL BE A MINIMUM OF 24" AND A MAXIMUM OF 36" HIGH WHEN COMPLETE.
3. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE FENCE TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, THE FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6" OVERLAP, AND SECURELY SEALED.
4. POSTS SHALL BE SPACED A MAXIMUM OF 8 FEET APART AND DRIVEN SECURELY INTO THE GROUND ALONG THE FENCE ALIGNMENT. POSTS SHALL BE DRIVEN INTO THE GROUND A MINIMUM OF 28".
5. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4" WIDE BY 12" DEEP ALONG THE UPSLOPE SIDE OF THE POSTS.
6. FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE POSTS SUCH THAT THE FABRIC EXTENDS INTO THE TRENCH AS SHOWN ABOVE. THE FABRIC SHALL BE FASTENED A MINIMUM OF THREE PLACES ON EACH POST.
7. THE TRENCH SHALL BE BACK FILLED WITH EXCAVATED MATERIAL AND THOROUGHLY COMPACTED.

MAINTENANCE

1. 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.
2. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO STABILIZING THE UPSLOPE AREAS THE FABRIC SHALL BE REPLACED PROMPTLY.
3. 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.
4. 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.
5. 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

1.) MAXIMUM SLOPE ON CUTS AND FILLS SHALL BE 3:1; HORIZONTAL TO 1: VERTICAL .

2.) NO EXCAVATION SHALL BE ALLOWED WITHIN 2' OF PROPERTY LINES.

3.) 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.

4.) COMPACTION TO BE 95% STANDARD PROCTOR WHERE > 6:1 SLOPE.

5.) 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.

6.) PRIOR TO ANY GRADING A CONSTRUCTION SAFETY FENCE SHALL BE INSTALLED 50 FEET FROM TRUNKS OF TREES TO BE PROTECTED.

7.) 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.

8.) 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.

9.) ALL STREET SUBGRADES SHALL BE CONSTRUCTED AND COMPACTED IN ACCORDANCE WITH SUDAS DESIGN AND CONSTRUCTION STANDARDS AND PROCEDURES.

EROSION CONTROL LEGEND

- FINAL FILTER SOCK
- SILT FENCE
- FILTER SOCK
- PERIMETER SILT FENCE
- EROSION CONTROL MATTING
- TEMPORARY ROCK CONSTRUCTION ENTRANCE/EXIT
- TEMPORARY PARKING AND STORAGE
- CONCRETE TRUCK/EQUIPMENT WASHOUT (CW)
- PORTABLE RESTROOM (PR)
- DOCUMENT LOCATION (PERMITS, SWPPP, INSPECTION FORMS, ETC.) (DL)
- FILTER SOCK INLET PROTECTION
- FILTER SOCK BEHIND CURB AT CURB RAMP
- TEMPORARY SOIL STOCKPILE AREA (SA)
- DIRECTION OF OVERLAND FLOW
- DUMPSTER FOR CONSTRUCTION WASTE (D)
- RIP RAP OUTLET PROTECTION
- OTHER MEASURE: (01) _____
- OTHER MEASURE: (02) _____
- OTHER MEASURE: (03) _____

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.

3.78 AC

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Date	Revision
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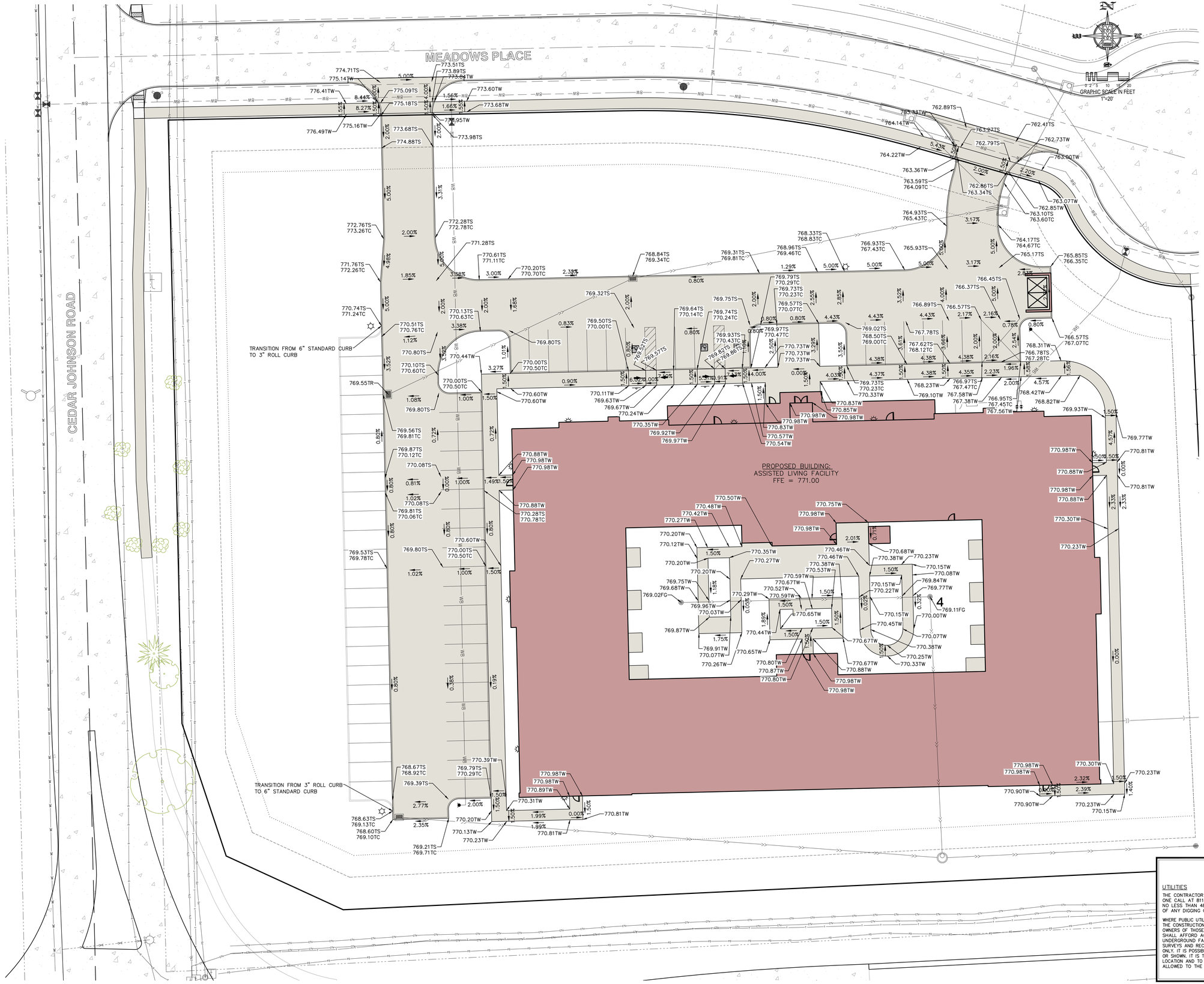
08/11/23	PER CITY REVIEW -ADP
09/11/23	REVISED WATER SERVICE - HEH
02/08/24	PER FIRE MARSHAL REVIEW -ADP

SWPPP AND EROSION CONTROL PLAN

LOT 4, THE MEADOWS SUBDIVISION - PART THREE
WEST BRANCH
CEDAR COUNTY
IOWA

MMS CONSULTANTS, INC.

Date:	06-30-23
Designed by: RLA	Field Book No: FIELDBOOK
Drawn by: ADP	Scale: 1"=30'
Checked by: RLA	Sheet No: C140
Project No: 11770-001	of: 6



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W	W	WATER LINES
E	E	ELECTRICAL LINES
T	T	TELEPHONE LINES
G	G	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.

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

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.

IOWA 811 ONE CALL SM

3.78 AC

CIVIL ENGINEERS
LAND PLANNERS
LAND SURVEYORS
LANDSCAPE ARCHITECTS
ENVIRONMENTAL SPECIALISTS
1917 S. GILBERT ST.
IOWA CITY, IOWA 52240
(319) 351-8282
www.mmsconsultants.net

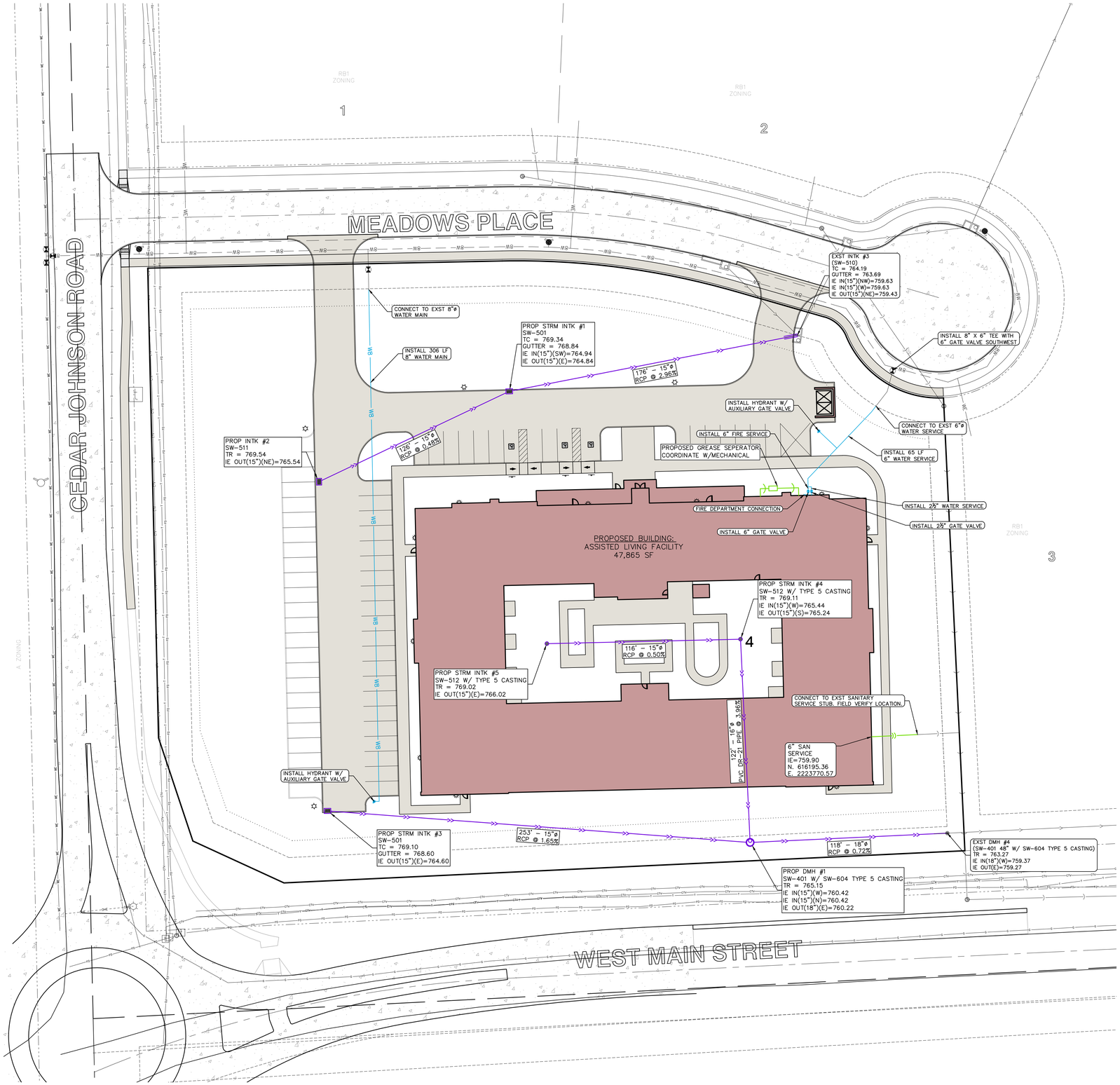
Date	Revision
07/12/23	PER CITY REVIEW -RLC
08/11/23	PER CITY REVIEW -ADP
09/11/23	REVISED WATER SERVICE - HEH
02/08/24	PER FIRE MARSHAL REVIEW -ADP

DETAILED GRADING PLAN

LOT 4, THE MEADOWS SUBDIVISION - PART THREE
WEST BRANCH
CEDAR COUNTY
IOWA

MMS CONSULTANTS, INC.

Date:	06-30-23
Designed by: RLA	Field Book No: FIELDBOOK
Drawn by: ADP	Scale: 1"=20'
Checked by: RLA	Sheet No: C141
Project No: 11770-001	of: 6



3.78 AC

0 3 15 30
GRAPHIC SCALE IN FEET
1"=30'

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
(R)	– RECORDED DIMENSIONS
22-1	– CURVE SEGMENT NUMBER
–EXIST– –PROP–	
	– 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
X X	– FENCE LINE
	– EXISTING SANITARY SEWER
	– PROPOSED SANITARY SEWER
	– EXISTING STORM SEWER
	– PROPOSED STORM SEWER
W	– WATER LINES
E	– ELECTRICAL LINES
T	– TELEPHONE LINES
G	– GAS LINES
	– CONTOUR LINES (1' INTERVAL)
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IOWA ONE CALL SM

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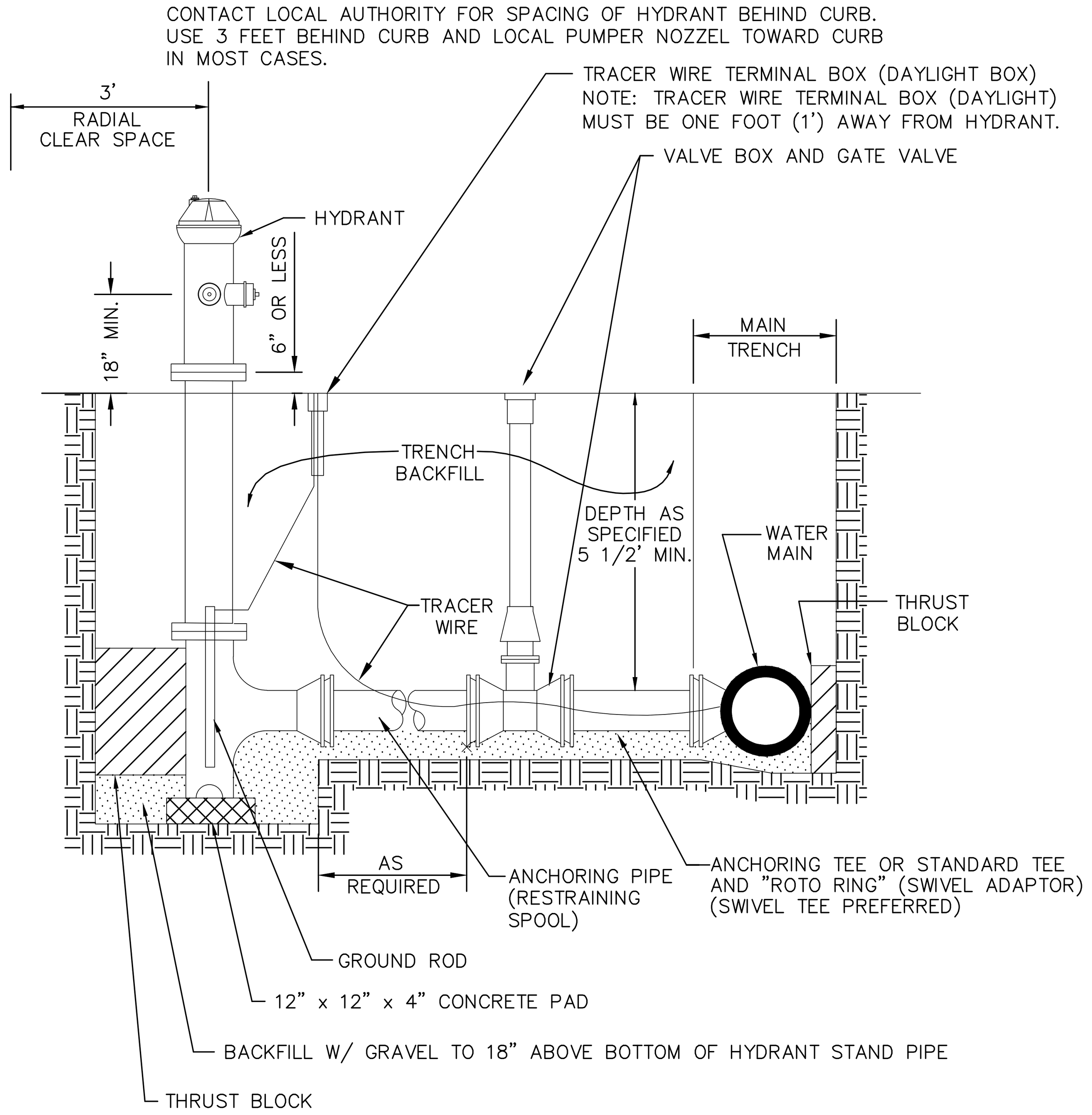
UTILITY PLAN

LOT 4, THE MEADOWS SUBDIVISION - PART THREE
WEST BRANCH
CEDAR COUNTY
IOWA

MMS CONSULTANTS, INC.

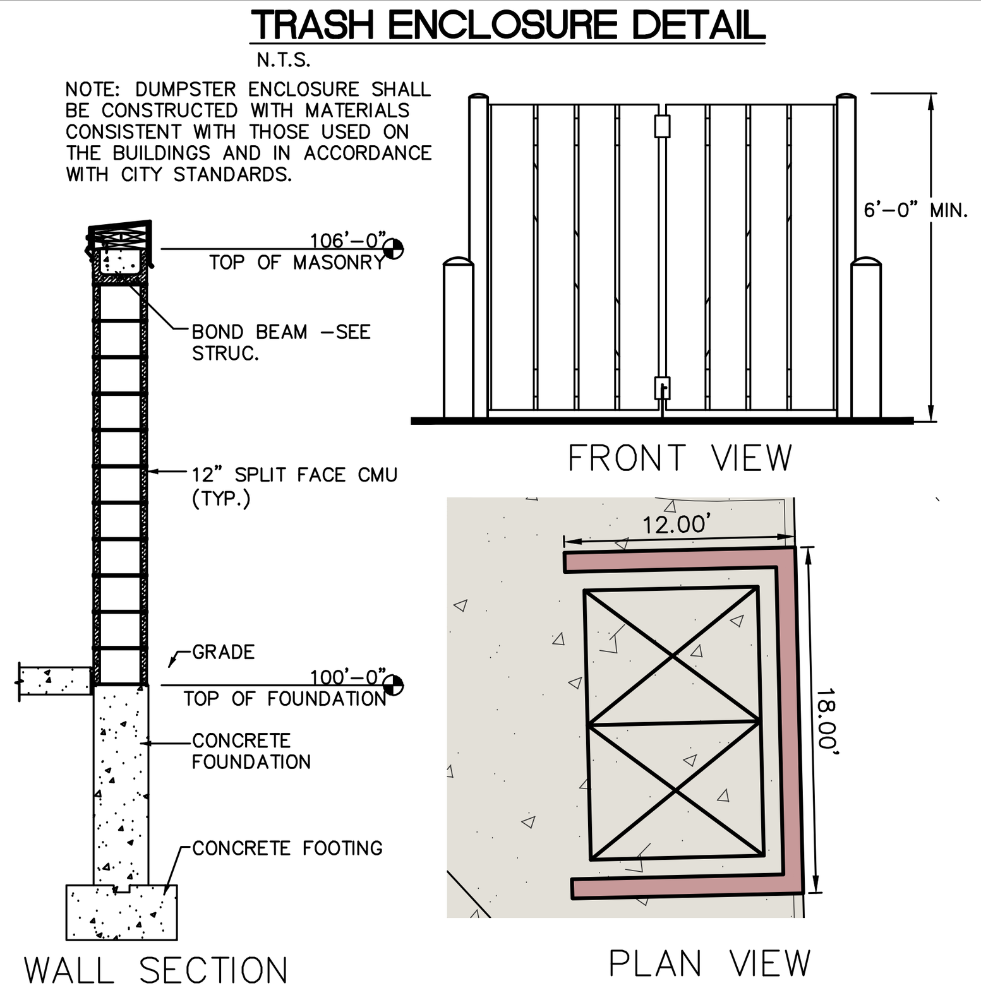
Date:	06-30-23
Designed by: RLA	Field Book No: FIELDBOOK
Drawn by: ADP	Scale: 1"=30'
Checked by: RLA	Sheet No: C160
Project No: 11770-001	of: 6

TYPICAL HYDRANT
N.T.S.



HYDRANT ASSEMBLIES SHALL HAVE THREE NOZZLES (TWO 2 1/2" AND ONE 4 1/2" PUMPER NOZZLE). PUMPER NOZZLE SHALL BE STORZ STYLE. OPERATING UNIT SHALL BE TAPERED 11/16" TO 3/4" SQUARE NUT, OPENING RIGHT (CLOCKWISE).

TRASH ENCLOSURE DETAIL
N.T.S.



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 (2018) AS AMENDED.
2) SANITARY SEWERS SHALL BE PVC TRUSS PIPE (SUDAS 4010.2.01,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 DR-18 PVC PIPE.
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 INFISHEILD 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, IE: 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

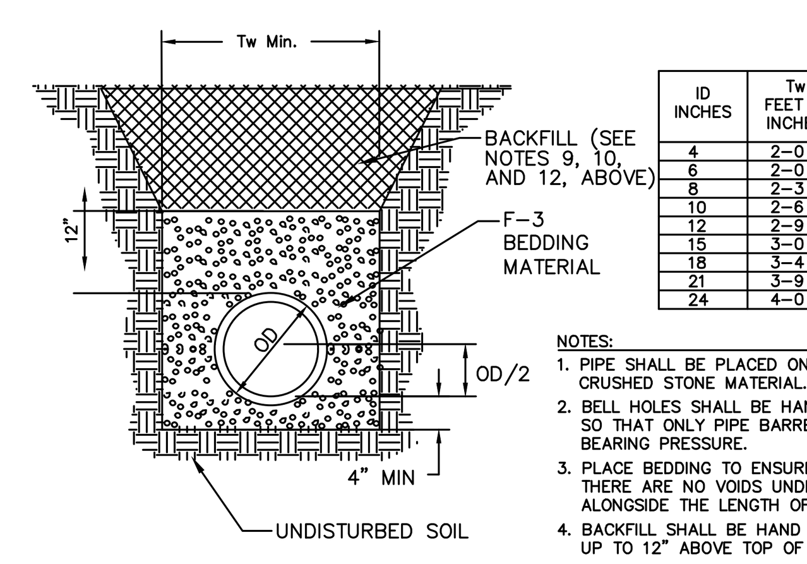
AIR TESTING

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 2.3 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%.



ID INCHES	Tw FEET & INCHES
4	2-0
6	2-0
8	2-3
10	2-6
12	2-9
15	3-0
18	3-4
21	3-9
24	4-0

NOTES:
1. PIPE SHALL BE PLACED ON CLASS 1 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 Tw.

CLASS F-3 BEDDING
FOR SANITARY PVC TRUSS PIPE
SUDAS FIGURE 3010.103 NTS

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.

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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.
9) ALL STORM INTAKES SHALL BE A MINIMUM OF 48 INCHES FROM TOP OF CURB/RIM TO SUBGRADE. IF INVERT ELEVATIONS ARE INSUFFICIENT TO PROVIDE THIS REQUIRED DEPTH, THE CONTRACTOR TO PROVIDE DEEPER STRUCTURE AND POUR CONCRETE FILLET IN INTAKE TO MAKE INTAKE PIPES DRAIN AT INVERT ELEVATIONS LISTED.
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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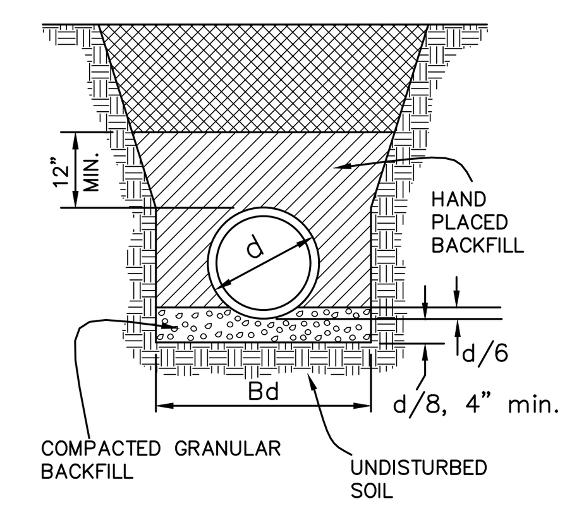


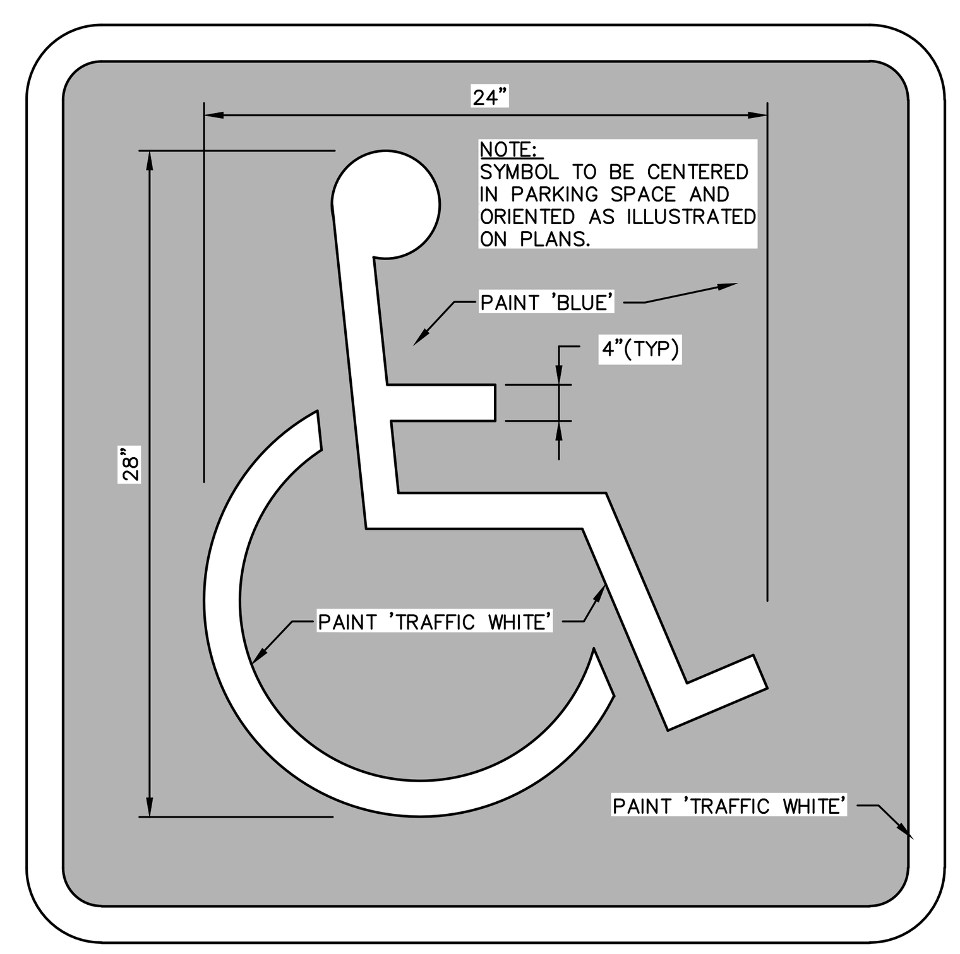
CLASS "C" BEDDING

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 Bd.

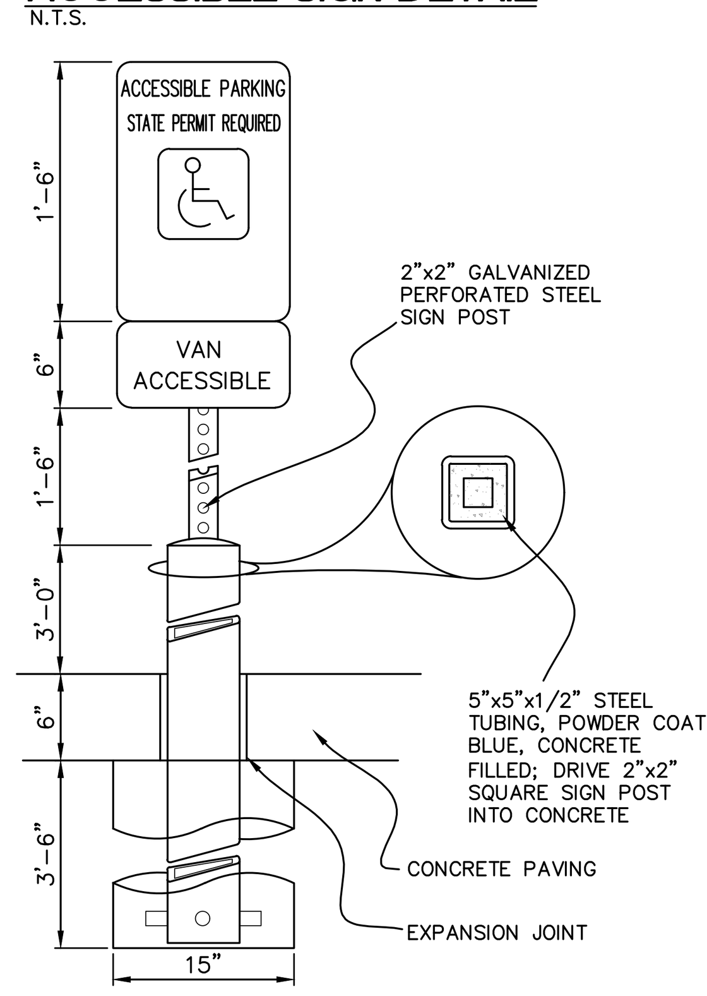
ID INCHES	Bd FEET & INCHES
12	2-3
15	2-9
18	3-0
21	3-3
24	3-6
27	4-0
30	4-3
36	4-9
42	5-6
48	6-3

ACCESSIBLE PARKING SYMBOL
N.T.S.

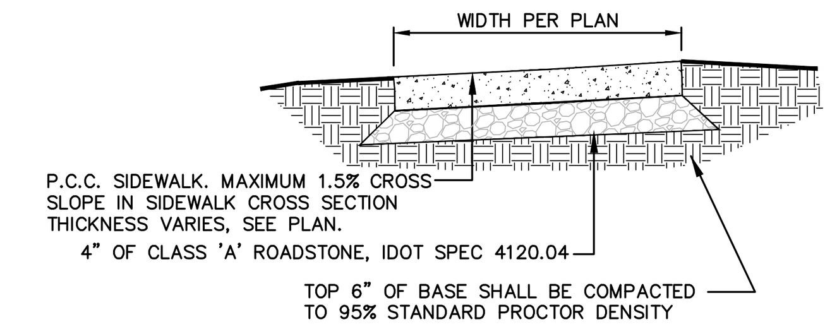
IOWA STANDARD ROAD PLAN
DETAIL: PM-111 "WPSB"



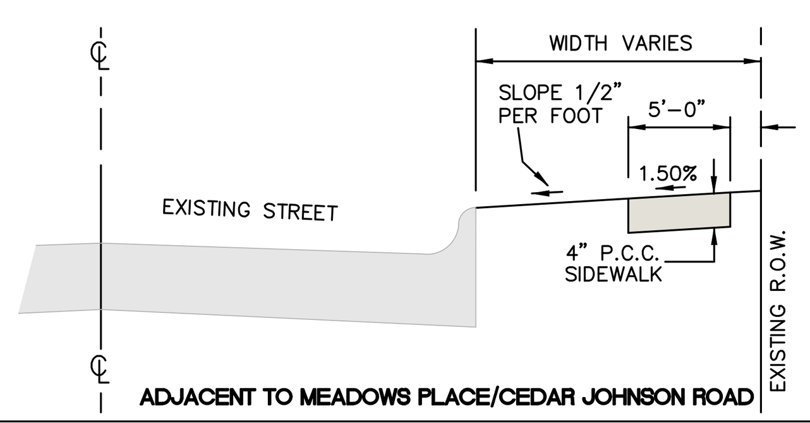
ACCESSIBLE SIGN DETAIL
N.T.S.



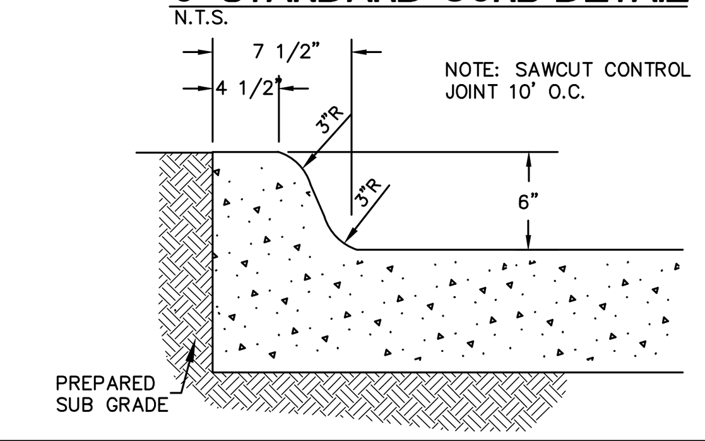
TYPICAL SIDEWALK DETAIL
N.T.S.



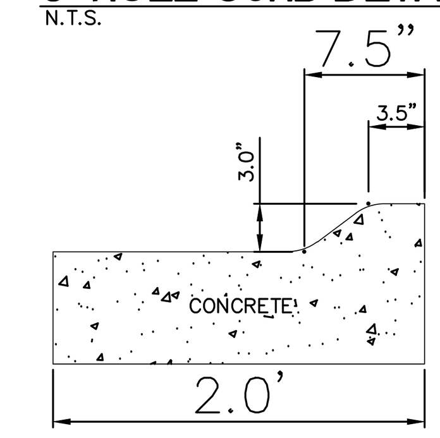
TYPICAL SIDEWALK INSTALLATION
N.T.S.



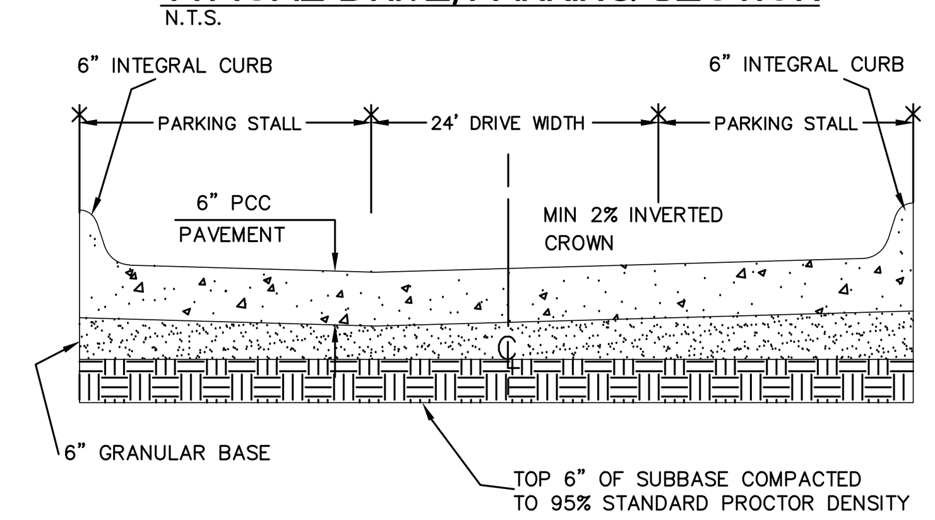
6" STANDARD CURB DETAIL
N.T.S.



3" ROLL CURB DETAIL
N.T.S.



TYPICAL DRIVE/PARKING SECTION
N.T.S.



ACCESSIBLE PARKING DETAIL
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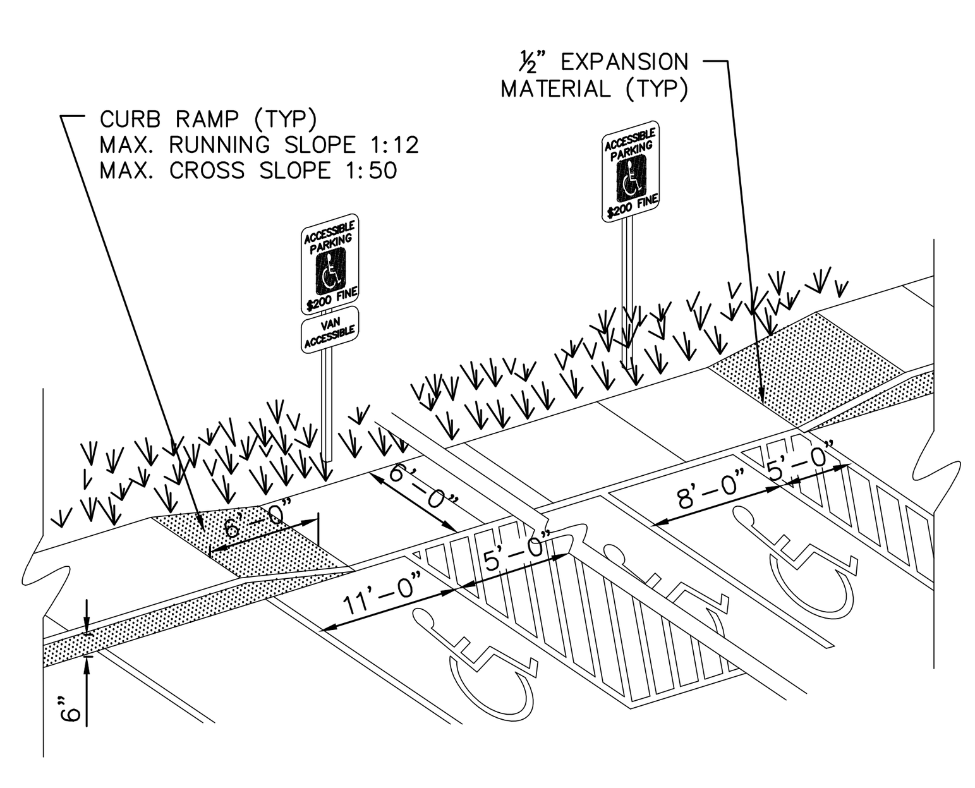

SHEET INDEX
C120 SITE LAYOUT AND DIMENSION PLAN
C140 SWPPP AND EROSION CONTROL PLAN
C141 DETAILED GRADING PLAN
C160 UTILITY PLAN
C500 GENERAL NOTES AND DETAILS
L100 LANDSCAPE PLAN

3.78 AC

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GENERAL NOTES AND DETAILS

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CEDAR COUNTY
IOWA

MMS CONSULTANTS, INC.

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Drawn by: ADP	Scale:
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Project No: 11770-001	C500
	of: 6

LANDSCAPE REQUIREMENTS

25% OPEN SPACE REQUIRED
- 164,573 X 0.25 = 41,143 SF

1 TREE PER 1,500 SF OF OPEN SPACE
- 41,143 / 1,500 = 27 TREES

1 SHRUB PER 1,000 SF OF OPEN SPACE
- 41,143 / 1,000 = 41 SHRUBS

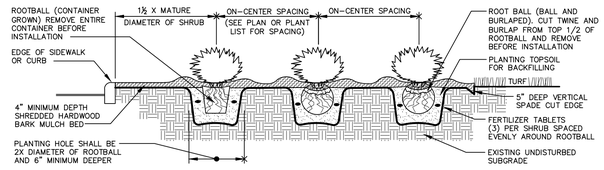
PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	INSTALL SIZE	COMMENT	MATURE H. X W.
	BN	3	Betula nigra	River Birch	2" Cal.	B&B	60' x 45'
	GB	1	Ginkgo biloba `Autumn Gold` TM	Autumn Gold Ginkgo	2" Cal.	B&B	50' x 30'
	GT	1	Gleditsia tracanthos inermis `Skycole` TM	Skyline Thornless Honey Locust	2" Cal.	B&B	45' x 35'
	LT	1	Lnodendron tulipifera	Tulip Tree	2" Cal.	B&B	80' x 50'
	PG	11	Picea glauca `Densata`	Black Hills Spruce	6' Ht.	B&B	40' x 15'
	PS	3	Pinus strobus	Eastern White Pine	6' Ht.	B&B	60' x 35'
	QB	3	Quercus bicolor	Swamp White Oak	2" Cal.	B&B	60' x 60'
	QR	2	Quercus rubra	Red Oak	2" Cal.	B&B	70' x 70'
	TA	2	Tilia americana `Bailyard`	Frontyard® American Linden	2" Cal.	B&B	60' x 40'

SHRUBS, ORNAMENTAL GRASSES & PERENNIALS	CODE	QTY	BOTANICAL NAME	COMMON NAME	INSTALL SIZE	COMMENT	MATURE H. X W.
	JC	21	Juniperus chinensis `Sea Green`	Sea Green Juniper	24" Ht.	Container	4' x 6'
	TO	9	Thuja occidentalis `Little Giant`	Little Giant Arborvitae	24" Ht.	Container	5' x 5'
	VT	20	Viburnum trilobum `Bailey Compact`	Bailey's Compact Viburnum	30" Ht.	Container	6' x 5'

SHRUB PLANTING DETAIL (DECIDUOUS AND EVERGREEN)

N.T.S.



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
- (R) RECORDED DIMENSIONS
- 22-1 CURVE SEGMENT NUMBER

-EXIST-	-PROP-	
		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
X	X	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.

UTILITIES

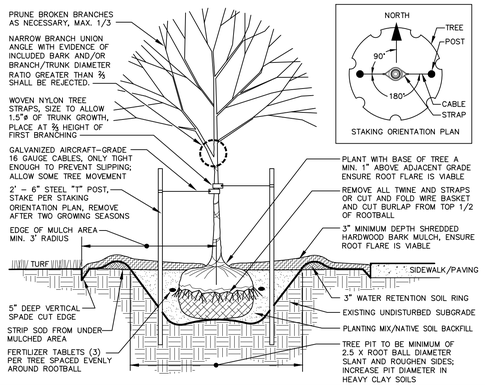
THE CONTRACTOR SHALL NOTIFY IOWA ONE CALL AT 811 OR 800/292-8989 NO LESS THAN 48 HRS. IN ADVANCE OF ANY DIGGING OR EXCAVATION.

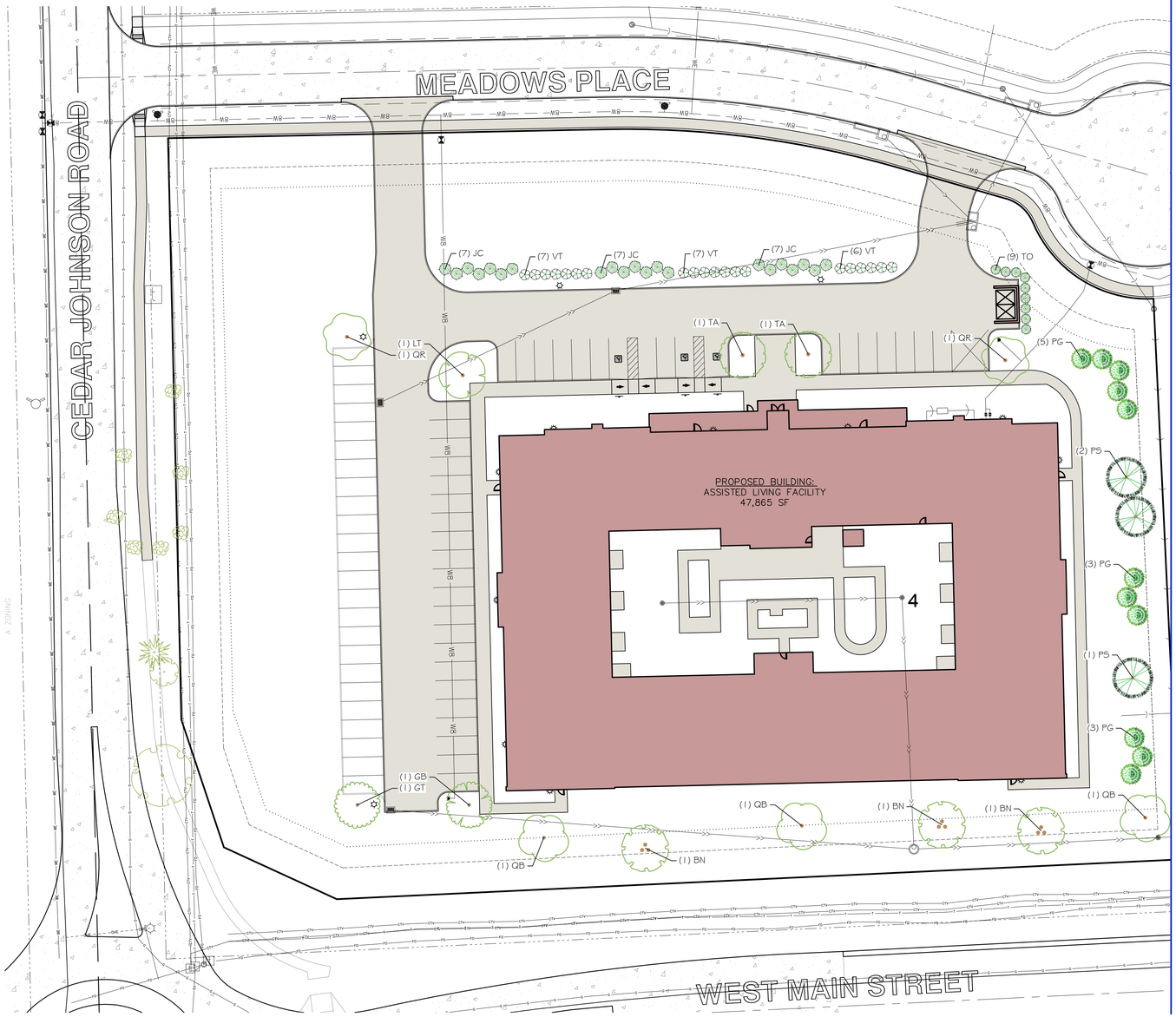
WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR 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.

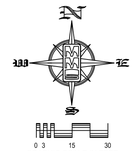
IOWA 811 ONE CALL SM

TYPICAL TREE PLANTING DETAIL

N.T.S.







SHEET INDEX

3.78 AC

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1917 S. GILBERT ST.
IOWA CITY, IOWA 52240
(319) 351-8282
www.mmsconsultants.net

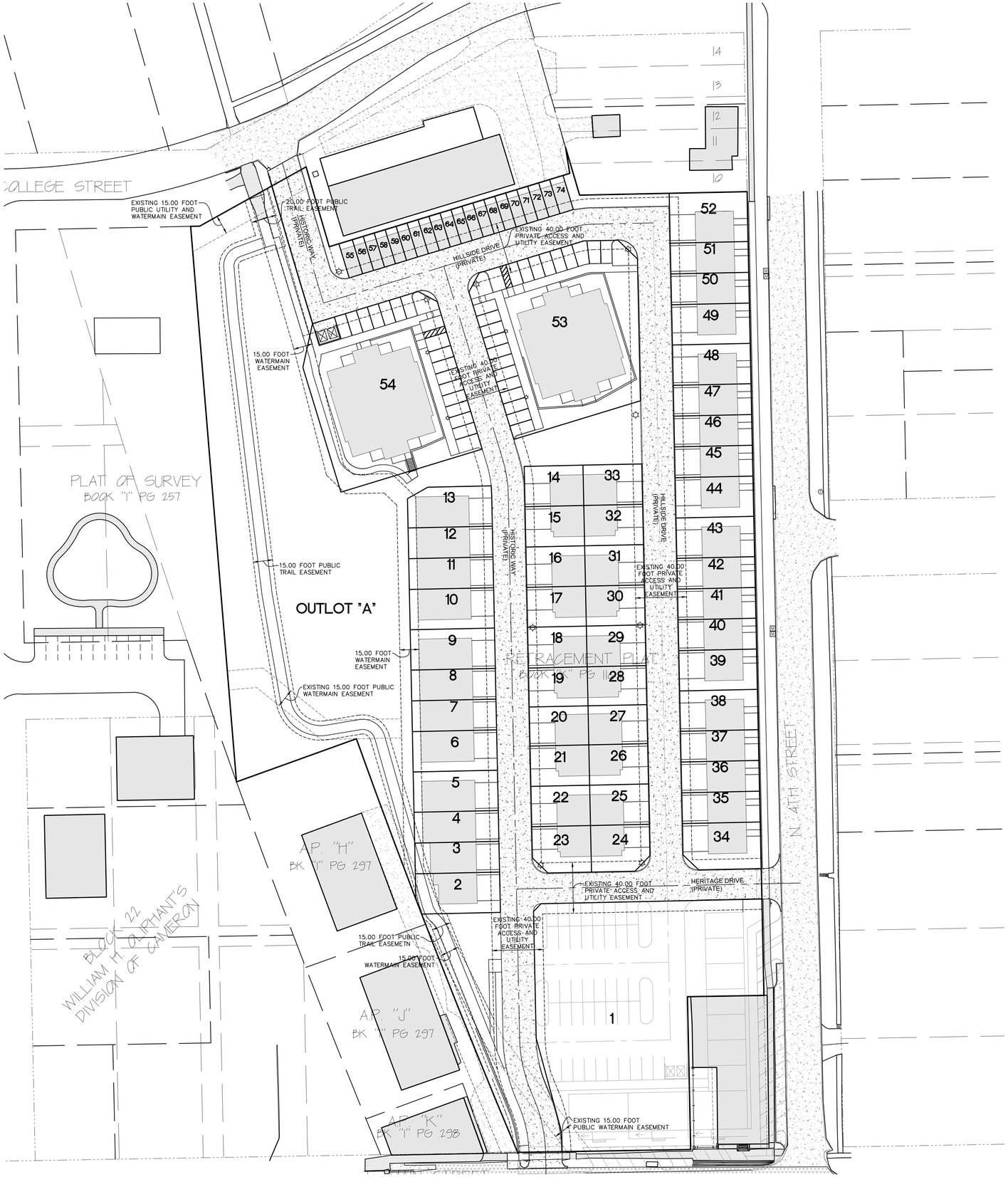
Date	Revision
07/12/23	PER CITY REVIEW -RLC
08/11/23	PER CITY REVIEW -ADP
09/11/23	REVISED WATER SERVICE - HEH
02/08/24	PER FIRE MARSHAL REVIEW -ADP

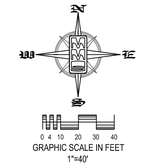
LANDSCAPE PLAN

LOT 4, THE MEADOWS SUBDIVISION - PART THREE
WEST BRANCH
CEDAR COUNTY
IOWA

MMS CONSULTANTS, INC.

Date:	06-30-23
Designed by: RLA	Field Book No: FIELDBOOK
Drawn by: ADP	Scale: 1"=30'
Checked by: RLA	Sheet No: L100
Project No: 11770-001	of: 6





PROJAC

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Date	Revision

LOT EXHIBIT

HERITAGE HILL, LOT 1

WEST BRANCH
CEDAR COUNTY
IOWA

MMS CONSULTANTS, INC.

Date:	05/012024
Designed by: JDM	Field Book No:
Drawn by: HEH	Scale: 1"=40'
Checked by: JDM	Sheet No: 1
Project No: 11186-004	of: 1

FOR COUNTY RECORDER'S USE

LOCATION:	SUBDIVIDER:
LOT 1 OF HERITAGE HILL SUBDIVISION LOCATED IN THE SOUTHWEST QUARTER OF SECTION 5, TOWNSHIP 79 NORTH, RANGE 4 WEST, OF THE FIFTH PRINCIPAL MERIDIAN, WEST BRANCH, CEDAR COUNTY, IOWA	BBCO LLC 32 HUMMINGBIRD LANE IOWA CITY, IOWA 52245-9258
LAND SURVEYOR:	SUBDIVIDER'S ATTORNEY:
RICHARD R. NOWOTNY P.L.S. MMS CONSULTANTS INC. 1917 SOUTH GILBERT STREET IOWA CITY, IOWA, 52240 PHONE: 319-351-8282	JAMES D. HOUGHTON 216 STEVENS DRIVE IOWA CITY, IOWA 52240
DATE OF SURVEY:	PROPRIETOR OR OWNER:
05-16-2022	BBCO LLC 32 HUMMINGBIRD LANE IOWA CITY, IOWA 52245-9258
	DOCUMENT RETURN INFORMATION:
	ATTORNEY

FINAL PLAT

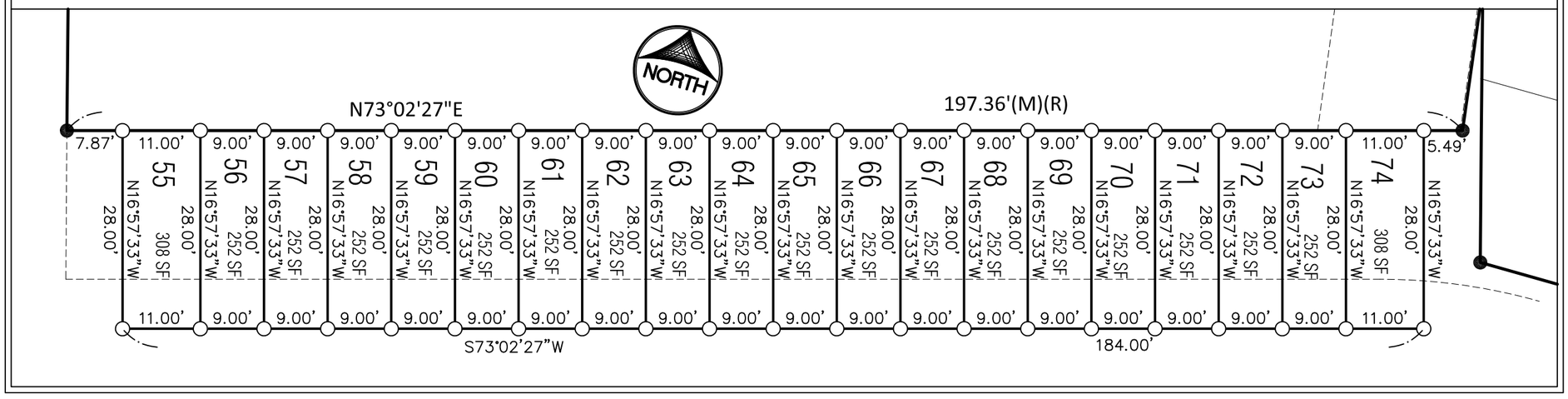
A RESUBDIVISION OF LOT 1 OF HERITAGE HILL SUBDIVISION

HERITAGE HILL SUBDIVISION - PART TWO

SHEET 1 OF 3

WEST BRANCH, CEDAR COUNTY, IOWA

DETAIL ONE - NOT TO SCALE



LEGEND AND NOTES

- – CONGRESSIONAL CORNER, FOUND
- – PROPERTY CORNER(S), FOUND (as noted)
- ○ – PROPERTY CORNERS SET (5/8" Iron Pin w/ yellow, plastic LS Cap embossed with "MMS")
- – PROPERTY &/or BOUNDARY LINES
- – CONGRESSIONAL SECTION LINES
- – RIGHT–OF–WAY LINES
- – CENTER LINES
- – LOT LINES, INTERNAL
- – LOT LINES, PLATTED OR BY DEED
- – EASEMENT LINES, WIDTH & PURPOSE NOTED
- – EXISTING EASEMENT LINES, PURPOSE NOTED
- (R) – RECORDED DIMENSIONS
- (M) – MEASURED DIMENSIONS
- C22–1 – CURVE SEGMENT NUMBER

UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE IN FEET AND HUNDREDTHS
ERROR OF CLOSURE IS LESS THAN 1 FOOT IN 10,000 FEET

NOTES:
1) BEARINGS ARE BASED ON IOWA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE LIBRARY CALIBRATION, UTILIZING THE IOWA REAL TIME NETWORK (RTN) WITH DATUM NAD83(2011) (EPOCH2010.000). THE DISTANCES SHOWN ON THE PLAT ARE HORIZONTAL GROUND DISTANCES AND NOT GRID DISTANCES.

PLAT/PLAN APPROVED
by the
City of West Branch

Mayor Date:

City Clerk Date:

UTILITY EASEMENTS, AS SHOWN HEREON, ARE ADEQUATE FOR THE INSTALLATION AND MAINTENANCE OF THE FACILITIES REQUIRED BY THE FOLLOWING AGENCIES:

ALLIANT ENERGY Date:

LIBERTY COMMUNICATIONS Date:

MEDIACOM Date:

DESCRIPTION - HERITAGE HILL SUBDIVISION - PART TWO

Lot 1 of Heritage Hill Subdivision to West Branch, Iowa, in accordance with the Plat thereof Recorded in Book 1726 at Pages 275-292 of the Records of the Cedar County Recorder's Office.

AND

Auditor's Parcel "O" located in West Branch, Iowa, in accordance with the Plat thereof Recorded in Book "L" at Page159 of the Records of the Cedar County Recorder's Office.

Said resultant tract contains 5.90 Acres, and is subject to easements and restrictions of record.

LICENSED PROFESSIONAL LAND SURVEYOR
RICHARD R. NOWOTNY 17916
IOWA

SEAL

I hereby certify that this land surveying document was prepared and the related survey work was performed by me or under my direct personal supervision and that I am a duly licensed Professional Land Surveyor under the laws of the State of Iowa.

_____ 20____

RICHARD R. NOWOTNY
P.L.S. Iowa Lic. No. 17916

My license renewal date is December 31, 20____.

Pages or sheets covered by this seal:

_____

_____

_____

Signed before me this _____ day of _____ ,20___ .

_____

Notary Public, in and for the State of Iowa.

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Date	Revision
07-09-2024	PER RRN REVIEW - RLW

HERITAGE HILL SUBDIVISION - PART TWO

WEST BRANCH
CEDAR COUNTY
IOWA

FINAL PLAT

MMS CONSULTANTS, INC.

Date:	05-01-2024
Designed by: JDM	Field Book No: 1343
Drawn by: RLW	Scale: 1"=50'
Checked by: RRN	Sheet No: 1
Project No: IOWA CITY 11186-004	of: 3

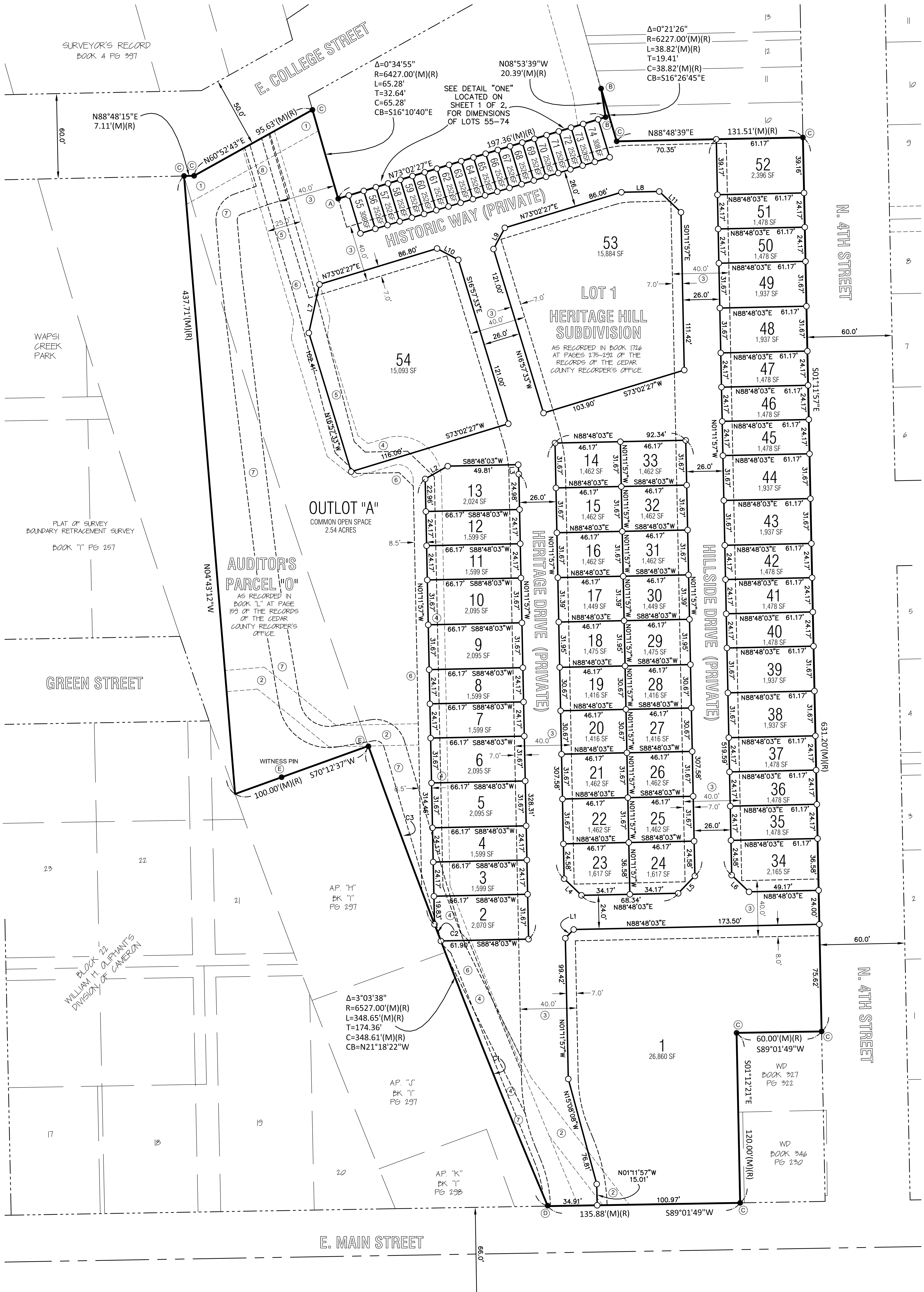
FINAL PLAT

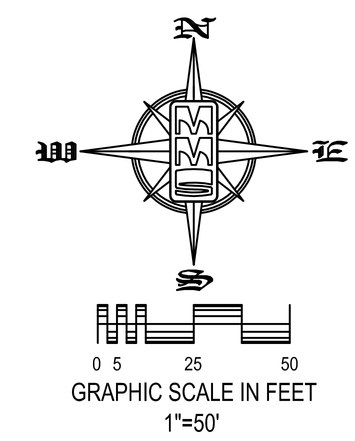
A RESUBDIVISION OF LOT 1 OF HERITAGE HILL SUBDIVISION

HERITAGE HILL SUBDIVISION - PART TWO

SHEET 2 OF 3

WEST BRANCH, CEDAR COUNTY, IOWA





LEGEND AND NOTES

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UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE IN FEET AND HUNDREDTHS
ERROR OF CLOSURE IS LESS THAN 1 FOOT IN 10,000 FEET

CURVE SEGMENT TABLE

CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	BEARING
C1	1°46'17"	6527.00'	201.79'	100.90'	201.79'	N21°57'03"W
C2	0°06'38"	6527.00'	12.58'	6.29'	12.58'	N21°00'35"W
C3	1°10'43"	6527.00'	134.27'	67.14'	134.27'	N20°21'55"W
C4	75°10'37"	12.00'	15.75'	9.24'	14.64'	N32°41'23"E
C5	89°41'06"	28.00'	43.83'	27.85'	39.49'	N54°41'10"W
C6	83°30'09"	14.00'	20.40'	12.50'	18.65'	N57°47'10"W
C7	20°57'29"	95.89'	35.08'	17.74'	34.88'	N11°59'10"W
C8	0°24'36"	6519.50'	46.64'	23.32'	46.64'	S20°56'56"E

LINE SEGMENT TABLE

LINE	LENGTH	BEARING
L1	8.49	N43°48'03"E
L2	18.30	N60°24'38"E
L3	6.70	N03°24'16"W
L4	16.97	N46°11'57"W
L5	16.97	N43°48'03"E
L6	16.97	N46°11'57"W
L7	35.10	N12°23'17"E
L8	26.74	N88°48'03"E
L9	16.97	N28°02'27"E
L10	16.97	S61°57'33"E
L11	21.21	S46°11'57"E
L12	37.60	N16°57'33"W
L13	26.16	N70°17'24"E
L14	37.97	N04°53'54"W
L15	26.25	S80°27'45"W
L16	7.98	N46°06'24"W
L17	15.82	S46°11'57"E
L18	30.00	N88°48'03"E
L19	20.00	S46°11'57"E

NOTES:
1) BEARINGS ARE BASED ON IOWA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE LIBRARY CALIBRATION, UTILIZING THE IOWA REAL TIME NETWORK (RTN) WITH DATUM NAD83(2011) (EPOCH2010.000). THE DISTANCES SHOWN ON THE PLAT ARE HORIZONTAL GROUND DISTANCES AND NOT GRID DISTANCES.

EASEMENT IDENTIFICATION TABLE

LABEL	DESCRIPTION
1	EXISTING 15.00 FOOT PUBLIC UTILITY AND WATERMAIN EASEMENT
2	EXISTING 15.00 FOOT PUBLIC WATERMAIN EASEMENT
3	EXISTING 40.00 FOOT PRIVATE ACCESS AND UTILITY EASEMENT
4	EXISTING 20.00 FOOT PUBLIC TRAIL AND WATERMAIN EASEMENT (TO BE RELEASED)
5	EXISTING 25.00 FOOT PUBLIC TRAIL AND WATERMAIN EASEMENT (TO BE RELEASED)
6	15.00 FOOT WATERMAIN EASEMENT
7	15.00 FOOT PUBLIC TRAIL EASEMENT
8	20.00 FOOT PUBLIC TRAIL EASEMENT

SEE SHEET 3 OF 3 FOR EASEMENT DIMENSIONS

PROPERTY MONUMENTATION TABLE

LABEL	DESCRIPTION
A	FOUND 5\8" REBAR W\ YELLOW PLASTIC LS CAP 13287
B	FOUND 5\8" REBAR W\O LS CAP
C	FOUND 5\8" REBAR W\ YELLOW PLASTIC LS CAP 17916
D	FOUND 5\8" REBAR W\ ILLEGIBLE YELLOW PLASTIC LS CAP
E	FOUND 5\8" REBAR W\ YELLOW PLASTIC LS CAP 14233

MMS CONSULTANTS, INC.

Date: 05-01-2024	
Designed by: JDM	Field Book No: 1343
Drawn by: RLW	Scale: 1"=50'
Checked by: RRN	Sheet No: 2 of: 3
Project No: IOWA CITY 11186-004	

WEST BRANCH
CEDAR COUNTY
IOWA

HERITAGE HILL SUBDIVISION - PART TWO

FINAL PLAT

Date	Revision
07-09-2024	PER RRN REVIEW - RLW

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FINAL PLAT

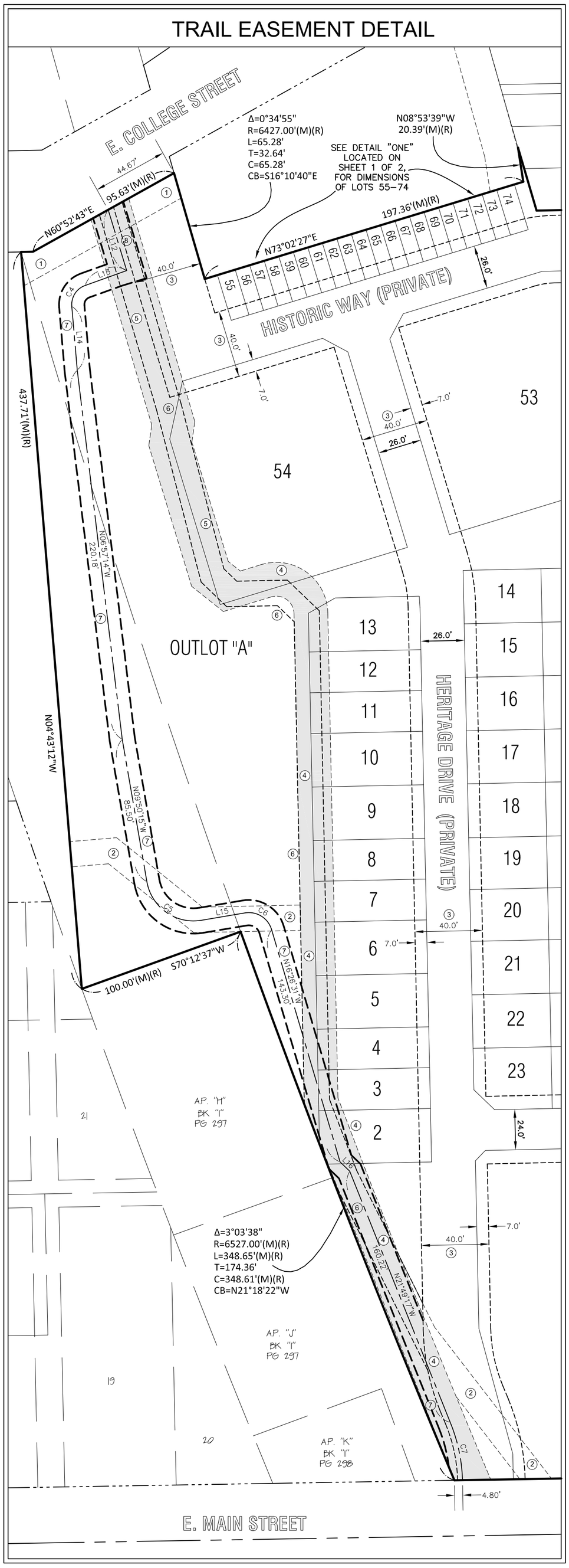
A RESUBDIVISION OF LOT 1 OF HERITAGE HILL SUBDIVISION

HERITAGE HILL SUBDIVISION - PART TWO

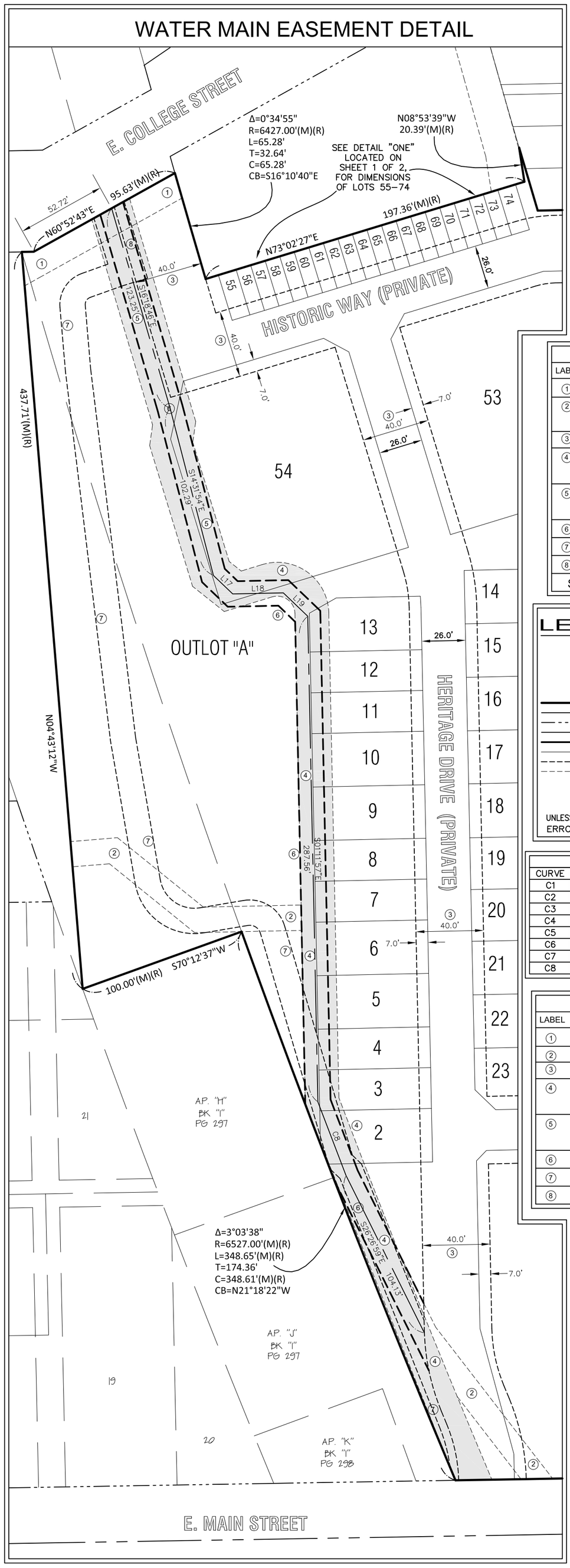
SHEET 3 OF 3

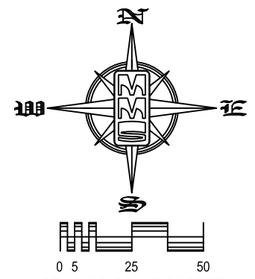
WEST BRANCH, CEDAR COUNTY, IOWA

TRAIL EASEMENT DETAIL



WATER MAIN EASEMENT DETAIL





GRAPHIC SCALE IN FEET
1"=50'

	EASEMENT IDENTIFICATION TABLE
LABEL	DESCRIPTION
①	EXISTING 15.00 FOOT PUBLIC UTILITY AND WATERMAIN EASEMENT
②	EXISTING 15.00 FOOT PUBLIC WATERMAIN EASEMENT (TO BE RELEASED)
③	EXISTING 40.00 FOOT PRIVATE ACCESS AND UTILITY EASEMENT
④	EXISTING 20.00 FOOT PUBLIC TRAIL AND WATERMAIN EASEMENT (TO BE RELEASED)
⑤	EXISTING 25.00 FOOT PUBLIC TRAIL AND WATERMAIN EASEMENT (TO BE RELEASED)
⑥	15.00 FOOT WATERMAIN EASEMENT
⑦	15.00 FOOT PUBLIC TRAIL EASEMENT
⑧	20.00 FOOT PUBLIC TRAIL EASEMENT

SEE SHEET 3 OF 3 FOR EASEMENT DIMENSIONS

LEGEND AND NOTES

- △ – CONGRESSIONAL CORNER, FOUND
- ● – PROPERTY CORNER(S), FOUND (as noted)
- ○ – PROPERTY CORNERS SET (5/8" Iron Pin w/ yellow, plastic LS Cap embossed with "MMS")
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C3	1°10'43"	6527.00'	134.27'	67.14'	134.27'	N20°21'55"W
C4	75°10'37"	12.00'	15.75'	9.24'	14.64'	N32°41'23"E
C5	89°41'06"	28.00'	43.83'	27.85'	39.49'	N54°41'10"W
C6	83°30'09"	14.00'	20.40'	12.50'	18.65'	N57°47'10"W
C7	20°57'29"	95.89'	35.08'	17.74'	34.88'	N11°59'10"W
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L13	26.16	N70°17'24"E
L14	37.97	N04°53'54"W
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Date	Revision
07-09-2024	PER RRN REVIEW - RLW

FINAL PLAT

HERITAGE HILL SUBDIVISION - PART TWO

WEST BRANCH
CEDAR COUNTY
IOWA

MMS CONSULTANTS, INC.

Date:	05-01-2024
Designed by: JDM	Field Book No: 1343
Drawn by: RLW	Scale: 1"=50'
Checked by: RRN	Sheet No: 3
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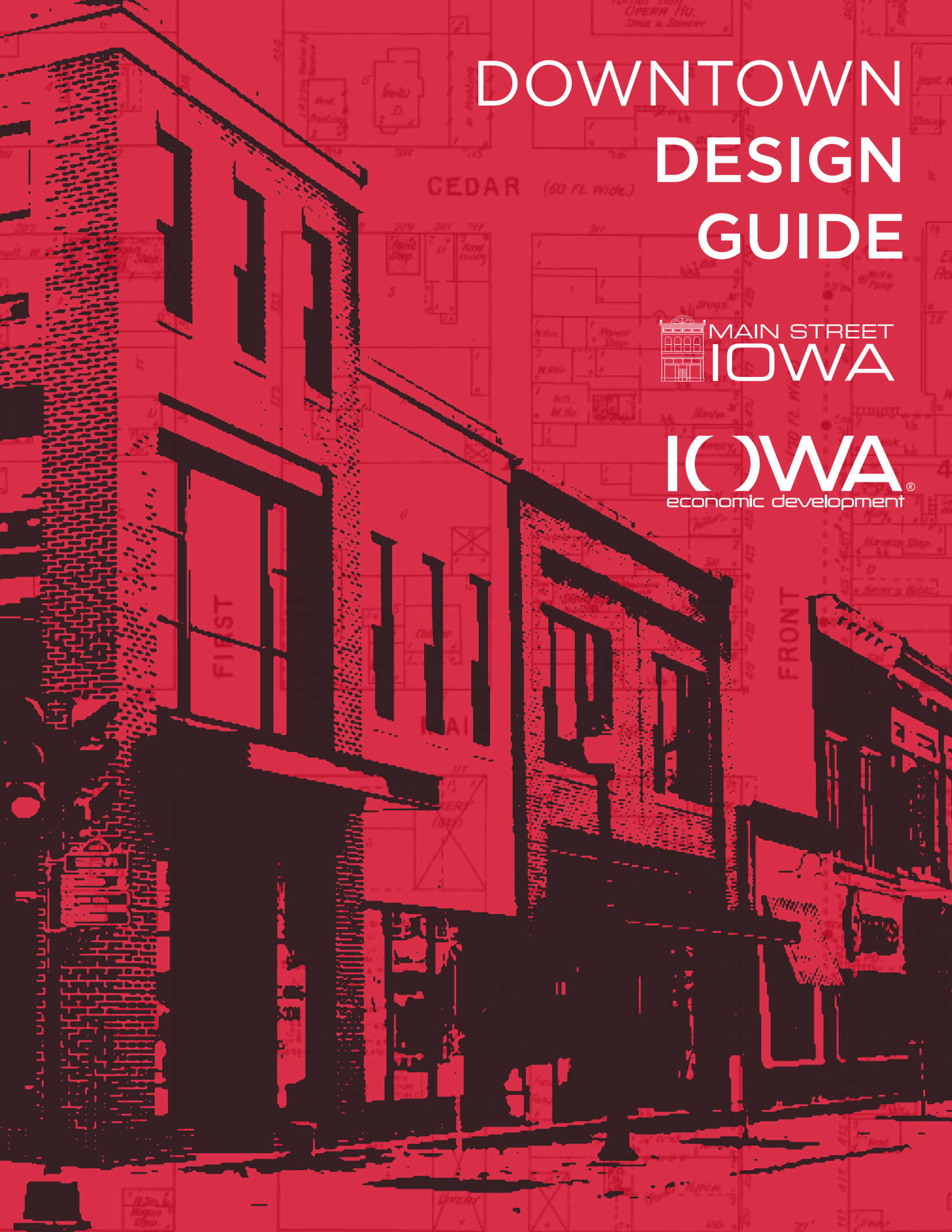
DOWNTOWN DESIGN GUIDE

MAIN STREET IOWA

IOWA® economic development



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PART ONE
INTRODUCTION

INTRODUCTION

The physical elements of your historic commercial district embody the community's past, serve as a venue for its present and contain the potential for its future vibrancy. Downtowns and traditional commercial districts are a home for local businesses, a gathering place for family and friends, and an opportunity to celebrate the diverse cultures that exist in our communities. For these reasons, it is vital that the built environment be maintained and cared for by local stewards.

As a Main Street America™ Coordinating Program, Main Street Iowa follows the four-point approach for downtown revitalization. The four points developed by the National Main Street Center are economic vitality, **design**, organization and promotion. Although this document focuses on the design point, the impact does not stop there. Successful design positively impacts environmental sustainability, economic resiliency and social well-being. In other words, good design can strengthen the other three points.

This document was prepared by Main Street Iowa staff as a guide for local Main Street programs, city staff, downtown development groups, property owners and volunteers as they embark on the revitalization and continued maintenance of the physical assets of their downtowns.

GUIDING PRINCIPLES FOR DESIGN

Main Street Iowa observes and recommends the following principles for design:

1. **Retain and preserve** the historic character of the district and individual properties.
2. **Prioritize rehabilitation** of existing buildings and repair of deteriorated materials and features over new construction or replacement.
3. **Focus on maintenance** to prevent the need for future large-scale rehabilitation or demolition of properties.
4. **Maintain authenticity.** Do not add features to a building that portray a false sense of history, such as ornamentation that never existed. Base any restoration efforts on documentation or physical evidence.
5. **Design for longevity.** Quality materials and quality design contribute to resilience.
6. **Celebrate diversity.** Main Street should be a place where everyone is included and feels welcome. Celebrating diversity can include racial, ethnic, cultural, religious, generational, gender identity, sexual orientation and socioeconomic differences, among others. It contributes to a rich and inviting experience for all visitors and helps set your community apart.
7. **Provide for a living, breathing community.** Retain physical changes over time if they have positively contributed to the building. This means keeping changes that have gained their own historic significance or are necessary to keep the building occupied and thriving.
8. **Consider your neighbor.** Embark on improvements with adjacent properties in mind. New construction should be compatible with the surrounding existing buildings.
9. **Follow sustainable practices.** Sustainability is not only good for the environment but can provide cost savings over time.
10. **Ensure accessibility for all.** Make sure that all people can access and enjoy downtown regardless of their physical ability.

Image: Brad Grefe

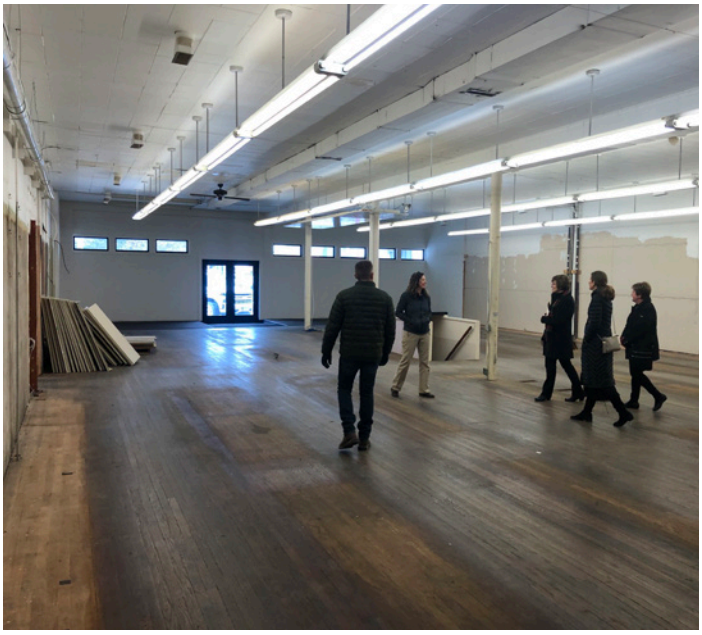
HOW TO USE THE GUIDE

The purpose of this guide is to act as a starting point for improving the physical assets in your Main Street district. It is intended to be an active resource for your community. We encourage you to share the digital file widely, keep your own copy handy, make notes in the margins and continue to reference it throughout the evolution of your Main Street. Don't let it collect dust! It should be referenced during strategic planning and can be adopted in addition to or in lieu of individual community guidelines.*

We recommend reading Sections 1 and 2 first, as they contain general guidance that can act as a foundation for design projects and are intrinsic to the guidance provided in other sections.

The subsequent sections are more specific and should be referenced according to project type. Section 3, Public Space, deals with the design of public improvements for the entire downtown district. Section 4, Existing Buildings, is the most detailed and important section. This section illuminates how to recognize the historic character of individual buildings and provides guidance on appropriate design and treatment. Section 5 delivers guidance on managing change and designing compatible infill construction. Finally, the appendices share some additional tools and resources related to design and construction.

While reading this guide, keep an eye out for language related to things "to do" and things to "avoid." Also keep in mind that small moves are better than no action at all. Incremental improvements can make a big difference over time and larger projects can often be more manageable when broken into phases. Successful design will recognize the **past**, meet the needs of businesses **today** and preserve the physical environment for the **future**.



**This document is a guide and is not regulatory in nature. Local guidelines, or local or state codes and regulations should take precedent over any recommendations made in the Downtown Design Guide.*

PART TWO
FUNDAMENTALS FOR YOUR UNIQUE DISTRICT

FUNDAMENTALS FOR YOUR UNIQUE DISTRICT

CELEBRATING DIVERSITY

Each downtown in Iowa has its own unique characteristics. Your community's individual history, physical environment, and most importantly, the diverse people that make up your community should be celebrated. As you read and apply the concepts in this guide, remember that each person defines style, beauty and taste according to their cultural upbringing and experiences.

Embrace and model the idea that your district is for everyone. Allow varying voices to be heard and represented. One of the ways this can be accomplished is by making sure that your board and design committee have representatives of various ages, gender identities, races, cultures, etc. Use census data as a tool to make sure that the voices at the table are truly representative of your community.

If your district has existing design guidelines, ordinances, façade grant programs or similar design programs in place, reread them with an eye towards inclusivity. Sometimes design frameworks can unintentionally act as a barrier to minority-owned businesses locating within a district. Also consider translating program documents such as façade grant information into multiple languages to help alleviate language barriers and make opportunities available for everyone.

Festival in Valley Junction, West Des Moines. Image: Isenberger.

Streetscape element in Czech Village - New Bohemia Main Street District, Cedar Rapids.

Celebration in Sixth Avenue Corridor, Des Moines.

Mural depicting local heritage in downtown Waterloo.

Here are some other things to keep in mind:

- Design for multiple users. Good accessible spaces benefit everyone.
  - Ramps or accessible paths are beneficial to both individuals with limited mobility and parents with strollers.
  - Benches spaced throughout your downtown are great for older people who may need to sit and rest periodically but can also be a place for people to take their lunch breaks.
  - Sculptural signs or logos with graphics are best for children, people who have impaired vision and for anyone who does not read English.
- Keep reversibility in mind. A store can be designed to successfully express its business's cultural identity while also preserving the original historic features of the building.
  - Signage, awnings, windows displays and trim provide ample opportunity for cultural expression, but can also be reversed in the future if the business changes.
- Avoid creating a pre-determined color palette for your community. This can stifle the cultural expressiveness of your community and excluding some colors may even hurt a business's ability to attract their target market.

By approaching design with the acknowledgment that we preserve for the benefit of the people who live today, we can create an active and vibrant community in which everyone feels welcome.

RESEARCHING COMMUNITY HISTORY

The first step towards celebrating your unique characteristics is gaining a better understanding of what you have. Researching the history of your community is a good way to start. This is a great activity for your design committee. It could also be completed by a smaller group of volunteers or even as part of a local school or university class. A more intensive study can also be done by a professional historian. Gather information on the history of your district as it relates to your city, region and the state by looking at things such as:

- Local Historic District and National Register of Historic Places Nominations, if applicable
- Local and State Historical Society and library documents
- Historic photographs
- Newspapers
- Old city directories

During your research, read secondary sources with the understanding of the voice and viewpoint of the author. Recognize that some histories may not be represented through all sources due to individual biases of the author. Keep an eye out for diverse cultures of downtowns – past, present and future – recognizing significant changes over time and honoring cultural transformation.

Historic photo compared to current photo of street. Historic Image: Newton Historic Preservation Commission Archives.

IDENTIFYING PHYSICAL ASSETS

Once you have a good idea of the overall history of your community, research individual buildings and properties. Good sources to explore include:

- Existing historic property inventories and surveys (iowaculture.gov/history/preservation)
- Sanborn Fire Insurance Maps
- Property records and deeds, abstracts of title (may be found at county courthouse)
- County assessor's records (can be accessed online for most counties)
- Building permits
- Plans or drawings from original and later construction projects

Look at the current condition of the buildings and public spaces in your district to help you understand their individual character, recognize commonalities in design and materials, and identify particularly significant buildings and places. If your district or individual buildings are already listed as local landmarks, local Historic Districts or in the National Register of Historic Places, refer to the narratives included in the nomination(s) and the stated period of significance. Doing this can help you understand the historic context of your district and identify significant buildings and places. Depending on when the nomination was written, most also have a list of "contributing" and "non-contributing" buildings. Any buildings noted as "contributing" to the district have already been determined as significant.

Be aware of what styles of architecture are present in your downtown. Having a general idea of architectural style will go a long way in helping you to understand the value of your buildings. It is important to recognize that each commercial district generally has a mixture of styles; some elaborate and 'high style', some simpler and more utilitarian, and some with modern alterations or additions that may be significant. Some buildings do not easily fit into an architectural classification and might simply be referred to as "vernacular" in style – often a simpler building that reflects local traditions, materials and construction. Each building style present can contribute to the physical character of your downtown and is important to understanding your district's history and significance.

Also remember to identify places that are not currently categorized as "historic," but which are more recently significant to your community. For example, a building can have recent cultural significance or special economic significance. It may have allowed an important business to remain downtown or created a place for community members to gather. It may be exceptionally beautiful and contribute to the aesthetic appeal of your district. It may be related to or tell the story of an event that had a huge impact on your community. Identifying your physical assets will help your design committee or board focus their efforts on supporting the places that make your community special.

If a building you are researching doesn't already have an Iowa Site Inventory form on file at the State Historic Preservation Office, consider contributing. See instructions and get a current form at Historic & Archaeological Inventory | IDCA (iowaculture.gov).

Architectural styles ranging from the late 1800s through the mid-twentieth century can all be historic assets in your downtown.

DETERMINING HISTORIC SIGNIFICANCE

Since every building is unique, the level of significance and how it relates to the rest of your downtown can make a difference in what physical improvements are appropriate. Here are some things to consider when determining historic significance:

- **When it was built.** Did your district gain its significance at a certain period of time? Does it have a defined period of significance?* Was the building built during or after this time?** Many times specific architectural styles were built over a decade or two throughout a district. Generally, buildings over 50 years old are considered historic.
- **Its physical integrity.** How much has the building been altered over the years? What is its overall condition? How much of its original materials are intact? How many original features exist? Is its original form easily recognizable?***
- **Social History.** Does it have significance to the community not related to its design?

Once you understand a building's historical significance, determine its specific **character-defining features**. According to the National Park Service and the Department of the Interior, "Character-defining elements include the overall shape of the building, its materials, craftsmanship, decorative details, interior spaces and features, as well as various aspects of its site and environment."

Keep any character-defining features intact. For more information on determining character-defining features of a building, see Preservation Brief 17 published by the National Park Service.

**If your district is listed in the National Register of Historic Places, use the Period of Significance from the written nomination. Local register nominations or individual property nominations will also list a period of significance.*

***Sometimes a district was constructed over a long period of time and is an eclectic mixture of architectural types. In this case, it may be more important to focus on a building's individual construction period and **integrity**.*

****Refer to historic photographs or any previous photographs of the building to help answer these questions.*

Examples of character-defining features shown include significant building materials, craftsmanship, window placement and styles, historic ghost signs, cornice details and decorative elements.

THE SECRETARY OF THE INTERIOR'S TREATMENT STANDARDS

The next step when undergoing any physical improvements is to determine the appropriate treatment to guide the project. The Secretary of the Interior's Standards for the Treatment of Historic Properties is an important set of federal guidelines we recommend implementing for all properties. The guidelines consist of four different approaches – Preservation, Rehabilitation, Restoration and Reconstruction. Select an approach appropriate to your building's condition and use, then follow treatment standards throughout your improvement project.

Preservation is defined as the act or process of applying measures necessary to sustain the existing form, integrity and materials of a historic property. This treatment standard focuses on the maintenance and repair of existing historic materials and retention of a property's form. It is used when the property's distinctive materials, features and spaces are essentially intact, and when a continuing or new use does not require additions or extensive alterations.

Rehabilitation is defined as the act or process of making a compatible use for a property possible while preserving those portions or features which convey its historical, cultural or architectural values. This can be achieved through repair, alterations and additions. Since this standard acknowledges the need to alter or add to a historic property to meet continuing or changing uses, it is the most common treatment standard used in downtown building rehabilitation projects.

Restoration is defined as the act or process of accurately depicting the form, features and character of a property as it appeared at a particular period of time. This can be accomplished by removing features from other periods in its history and reconstructing missing features from the restoration period. For example, restoration might involve removing infill or siding that was applied over a building to reveal and restore its original features.

Reconstruction is defined as the act or process of depicting, by means of new construction, the form, features and detailing of a non-surviving site, landscape, building, structure or object for the purpose of replicating its appearance at a specific period of time. Reconstruction of an entire building is generally reserved for buildings of outstanding individual significance and is not commonly recommended within a historic downtown area. However, this may be an appropriate approach for a building that has been damaged severely by a fire or a natural disaster.

Rehabilitation of a historic building in downtown Washington included removal of an inappropriate, non-historic slipcover.

Standards for Rehabilitation

"The Standards will be applied taking into consideration the economic and technical feasibility of each project.

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations or related new construction will not destroy historic materials, features and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired."

Note: Refer to the National Park Service's website for the full standards for Preservation, Restoration and Reconstruction. Please note that the Historic Preservation Tax Incentives Program use the Standards for Rehabilitation that are codified separately in 36 CFR 67 and are regulatory for the review of rehabilitation work for that program.

The Guidelines for the Treatment of Historic Properties illustrate the practical application of these treatment standards.

PART THREE
PUBLIC SPACE

PUBLIC SPACE

Public space is instrumental in making your district feel like the centerpiece for your community – a place where people want to gather, linger and explore. Good public spaces can also foster community pride. They are places where locals want to bring their family and friends from out of town. Whether it is district-wide banners and signage, planters, public art, pocket parks, greenspace, activated alleys, or even parking lots, every piece of the public realm is an opportunity to contribute positively to the overall look and feel of your community.

WAYFINDING AND SIGNAGE

Wayfinding is crucial to successful historic commercial districts. If people cannot find your district, they cannot find your businesses, amenities or events, and ultimately, will not spend their money there. It should be clear how to find the commercial district once you enter a community and it should be clear once you enter the district – without having to look at a map. This information can be communicated through wayfinding signage and the overall branding of the area. Creating a unified wayfinding system is not just important for visitors, it can also help reinforce community identity and foster community pride.

- Use design consistent with local Main Street or community branding to reflect and reinforce your unique local identity.
- Install gateway signs or elements at the edges of your Main Street district to define entrances.
- Strategically place directional signs at key intersections and connect to regional pathways such as bicycle trails.
- Determine specific landmarks to include in wayfinding signage. These could include parking, public transportation, public restrooms, the visitor's center, library, anchor businesses and more.
- Consider multiple scales in your signage system – some should be visible from the road for drivers, while others should appeal to pedestrians on the sidewalk.
- Include travel distances to landmarks on your signs – driving time or mileage for things that are farther away or walking time or number of blocks away for things that are closer. Posting walking distances can help make use of underutilized parking that people might otherwise perceive as too far away. Encouraging walking also encourages people to spend more time on Main Street.
- Utilize icons and symbols to communicate quickly and effectively.
- In general, make letters one inch tall for every 40 feet of desired readability.

Gateway arch in Valley Junction, West Des Moines lets you know you have arrived.

Consistent branding should be incorporated into different types and scales of wayfinding signage.

STREETSCAPE

Streetscape components include paving, sidewalk amenities, landscaping, accessibility improvements, lighting and anything else that you can see along public paths. Utilizing these elements should help shape the public space in downtown, provide safety and comfort measures, and balance the needs of all users. For larger scale improvements, work together with local government partners and engage the public and business community early in the planning process.

- Think about your streets in terms of activity "zones" to accommodate multiple activities in the public realm. For example, zones might include: driving lanes, parking, bicycle lane, plantings, pedestrian walkway and outdoor dining/shopping space.
- Design intersections and mid-block crossings with pedestrian safety in mind. Clearly differentiate pedestrian crossings with ground-level markings or by changing the color, texture, or type of ground surface. Bump outs are recommended at the corners of intersections and mid-block crossings to reduce the width for safe pedestrian travel. Retain historic street, sidewalk, or alley pavers and incorporate them into the new design if feasible.
- Consider accessibility and create accessible routes from parking, to sidewalks, to buildings.
  - Integrate curb cuts and truncated domes (ground surface differentiation with small bumps) into the edge of sidewalks at all pedestrian street crossings.
  - Watch for abrupt or steep grade changes. Create ramps to main entrances when necessary. In some cases, creating a ramp can be avoided by altering the sidewalk elevation.
  - Ensure that there is adequate space around all street features to accommodate wheelchairs.
  - Coordinate the appearance of the accessible features throughout your Main Street. For example, using the same handrails for all entrance ramps will greatly improve the appearance of your streets and will avoid making accessibility look like an afterthought.

Mid-block crossings were part of a comprehensive streetscape project in downtown Ottumwa.

- Incorporate greenery and landscaping to soften the streetscape, provide shade and create a more walkable, inviting environment.
- Consider what amenities people need to spend time on your Main Street. Benches, trash cans and bicycle racks are minimum elements that should be readily available.
- Develop a plan to maintain the cleanliness of your district. Consider partnering with local organizations to schedule regular clean up days.

Permeable pavers and bump outs at intersections provide both safety and sustainability improvements in West Union.

- Take sustainability into account in streetscape design. Some examples:
  - Self-watering flowerpots require less water and reduce maintenance needs.
  - Install electric vehicle charging stations as an added amenity that encourages users to linger downtown.
  - Choose the type of lighting best suited to what you want to light – for example, pedestrian lighting should be lower to the ground, while overall streetlighting or lights for a public square would be higher up. Any new lighting should direct light downwards whenever possible for increased energy efficiency and to reduce light pollution.
  - Use pervious pavers to control storm water by facilitating its path back into the soil and filtering it in the process.

Lush planters and artistic benches create a protected seating area in downtown Ames.

PLACEMAKING

Placemaking is both a process and a philosophy. It inspires communities to collectively reimagine and reinvent public spaces, bringing people together from all walks of life and all backgrounds. Placemaking capitalizes on existing physical assets, recognizes potential and re-imagines everyday spaces into places where people linger, share stories, create meaningful connections and make memories that inspire them to keep coming back.

Open Space

Coordinate open public spaces – vacant lots, pedestrian alleys, public squares, parks and other open areas – with streetscape elements. Treatment of these spaces can be the difference between a vibrant downtown district and an underutilized environment with little activity. Good outdoor improvements contribute to better shopping experiences for customers, attract new businesses, increase property values downtown and result in enhanced community pride.

- In general:
  - Retain green spaces and encourage connection to natural features and the landscape.
  - Retain original scale and width of alleys – do not infill with a building or structure when there was not one historically.
  - Utilize signage, gateway features and historical markers to communicate a sense of place and identify edges and boundaries.
- Take stock of your existing open spaces and their uses.
  - Who owns them – the City, an organization, an individual?
  - Who maintains them and handles improvement projects?
  - How are they currently used?
  - Is that the highest and best use?
  - Is the designated use appropriate but the space is underutilized because it is lacking the right amenities? For example, is outdoor seating not used because it is in a sunny spot with no shade?

Plaza improvements in downtown Mason City create a well-defined and multi-functional space.

Overhead lighting in Ottumwa's Canteen Alley provides definition, vibrancy and safety during the evening hours.

Small scale improvements come together to activate a community gathering space in Oskaloosa's "The Alley."

- Consider improvements to your open spaces to support their functions.
  - Reverse-engineer both daily activities and special events to design your open spaces. Do you need any particular infrastructure like water or electricity access?
  - Use public space to support local businesses. Add tables and seating options to public spaces that can be used by patrons of local eateries.
  - Address ground surface issues. Proper drainage of areas with impermeable paving is crucial to a functional space. Dirt or grassy areas can also become soggy if not properly graded or planted.
  - Consider placement of trees and other plantings to facilitate comfortable microclimates. Provide a mixture of shade and sunny areas. Create wind blocks and areas for breezes to circulate. Year-round structures such as pergolas or gazebos can also help for shelter, while seasonal fabric umbrellas or shade sails may also be desirable to create color and visual interest.
  - Add appropriate seating to support the function(s) of the space. For example, stadium-style seating is perfect for outdoor concerts and movies, while moveable seating provides ultimate flexibility for groups of various sizes.
  - Consider improving lighting for areas that are used at night and to improve safety for those that are not active at night.
  - Consider adding recreational and family-friendly opportunities such as play equipment, sports goals, or water features.
  - Consider creating areas for pop-up activities such as business incubation space or designated food truck parking.

A collection of public art installations transformed underutilized alleys into a focal point for Uptown Marion.

Seasonal pop ups activate green space in downtown Waterloo.

Programming and special events bring purposeful activity to pedestrian alley ways.

Public Art

Public art is a great opportunity to represent diverse cultures in your community, add color and visual interest to the street and set your district apart from others. In general, it is important to consider how public art affects your district's appearance, impacts historic structures and materials, and whether people have a direct interaction with the art or just observe it.

Public art can:

- Be usable or functional elements such as benches, trash receptacles, water features to cool off, etc.
- Be stand-alone sculptural pieces or integrated into sidewalks, on buildings and other infrastructure.
- Be a part of a large collection of related pieces scattered throughout your downtown or pieces with individual subjects.
- Enliven existing eye sores or blank canvases and make them more attractive.
- Act as a focal point in a public space, be placed at a node for existing activities, or even create activity.
- Tell the story of your community's history and/or set the stage for its future.

Remember to:

- Consider the historic fabric of your district.
- Create "reversible" artwork, meaning that it can be uninstalled, if necessary, without damaging the building or public space it is on. This might mean installing a mural on panels instead of directly on the building, taking care to use anchors that do not damage the underlying building (e.g. drilling into mortar and not masonry).
- Engage all stakeholders in the implementation of public art – from public meetings and planning events to ribbon cuttings.
- Include maintenance for public art in long-term planning efforts and contracts to ensure they do not get overlooked.
- Consider creating guidelines or review processes for initiating and managing artwork throughout your district.

Sculpture installations bring color and visual interest to the sidewalk in downtown Woodbine.

Large scale murals on side and rear facades add color and vibrancy to downtown while highlighting community pride.

Mural panels in Centerville's square illustrate ties to the community's history.

PARKING

Parking is a common complaint in commercial districts and can be a contentious issue – there is either not enough parking, it is too far away, or it is not convenient for users. While there is no one-size-fits-all approach to parking issues, all districts should be aware of local parking demand, availability, and needs.

- Perceived parking issues are often not an issue of the actual number of available spaces, but poor parking management. People simply do not know where available parking spaces are or whether there are requirements like time limits, fees, etc. Proper wayfinding signage on the way to parking areas and identifying signage at individual spots or lots can help alleviate this issue.
- Understanding and accommodating different needs among user groups is key. Consider designated areas for downtown employees so prime spots in front of storefronts are available for visitors and shoppers. Downtown residents will need parking during evening and overnight hours.
- Create designated accessible parking spaces that meet the design specifications of the Americans with Disabilities Act (ADA). Make sure the parking spaces connect to accessible paths on the street, sidewalks and business entries.
- On street parking is generally preferred in traditional commercial districts, as it increases safety for pedestrians by creating a buffer between the sidewalk and traffic. It is also seen as the most convenient way to access storefronts and creates a visual representation of the visitors to the buildings along the street.
  - Parallel parking may be necessary if streets are too narrow to accommodate angled parking.
  - Angle parking head-in (or 90 degree) parking is more efficient and easier to use than parallel parking but requires a wider street. Some communities have instituted back-in only parking which helps with the safety of entering traffic from a space but can be harder for the driver initially.
- Off street parking can provide supplemental space when street parking is insufficient and when long-term parking is required (like for downtown residents).
  - Lots should be located behind buildings when possible and should be limited to one lot wide when they front the street. Consider 90-degree parking for efficient layouts that maximize available space or 60-degree parking when ease of use is the priority. Incorporate trees and green spaces into parking lots for interest, shading, and stormwater management. Screen lots from the pedestrian sidewalk by providing a visual buffer of landscaping.
  - Parking structures can be effective parts of a downtown parking strategy, but they should be carefully designed to contribute to the overall district aesthetic. Make sure circulation paths within a structure are clearly marked and provide adequate lighting and site lines for safety.

On-street angled parking is both easy to use and maximizes space in West Union.

Dedicated accessible parking spaces ensure access for all and should be integrated into streetscape design.

PART FOUR
EXISTING BUILDINGS

EXISTING BUILDINGS

Existing buildings are one of the biggest assets that you have in your Main Street district. They physically house your businesses and residents and provide venues for events and social gatherings. They contribute to the look and feel of your downtown and provide a sense of place unique to your community. Historic buildings must be properly cared for so they continue to exist for generations to come; once they are gone, they cannot be replaced. This section includes guidance on maintenance and appropriate physical improvements for existing downtown buildings.

MAINTENANCE

Proper building maintenance is critical to downtown building stability and longevity. Building maintenance is important because:

- Deferred maintenance is harder to address and more expensive than small improvements over time. It can also lead to demolition by neglect and cause safety issues.
- Addressing maintenance issues helps prevent future building emergencies which have the potential to close the business(es) temporarily, if not permanently, and impact neighboring buildings and businesses.
- Buildings in disrepair reflect poorly on downtown, while well-maintained buildings foster pride and contribute to the local economy.

Downtown buildings should be maintained in the following conditions:

- Safe and structurally sound: foundation is intact and walls and floors are plumb.
- Sound roof that does not leak.
- Masonry is maintained with no cracks in mortar, no mortar wash out, or missing mortar. All mortar repointing or repairs should match historic mortar mix in color, texture and strength.
- Ornamental features are firmly in place – i.e. pieces of cornice are not in danger of falling off.
- Hazardous materials – most commonly asbestos-containing elements such as tile and lead paint – are either in good (non-friable) condition, encapsulated, or remediated/abated.
- Painted surfaces are sound and not flaking, peeling, chalking, or sun damaged.
- Metal pieces are protected by paint and not rusted.
- Wood elements are not rotten.
- Entrance doors are operable and means of egress is clear.
- Glass elements are not broken or cracked.
- Windows are puttied and weather sealed.
- Fabric awnings are not faded, dirty, ripped or sagging.
- No deteriorated materials should be visible and any that exist should be repaired or replaced in kind.
- Building signage reflects current business.
- Exterior lighting is in good working order and not burnt out.

Building maintenance needs can be identified by inspecting buildings on a regular basis. Inspections should also be done after every incidence of severe weather; as soon as it is safe, walk around the perimeter of the building and go up on the roof, if possible, to check for damage.

Paint failure and deferred maintenance has caused rusting and deterioration of character-defining features.

Mortar used for repointing should match original mortar in color, texture, and strength to protect historic masonry.

Peeling paint on masonry and wood can lead to deterioration of the underlying historic material.

Mark your calendar to ensure these important items are inspected at regular intervals:

Both Spring and Fall:

- Check basement for water and the attic or uppermost level accessible on the interior for leaks during first heavy rain of the season
- Sweep debris from flat or low sloping roofs and clean out gutters and downspouts
- Remove plants growing on or close to walls and foundations
- Check masonry for loose bricks, missing or disintegrating mortar, and cracks in masonry and mortar
- Make sure that the ground slopes away from the building so water does not pool at the base/ foundation
- Inspect roofing to make sure that it slopes adequately and there are no areas where water can pool
- Examine flashing at any junction between a horizontal and vertical or sloping surface (i.e. parapet, chimneys, roof)

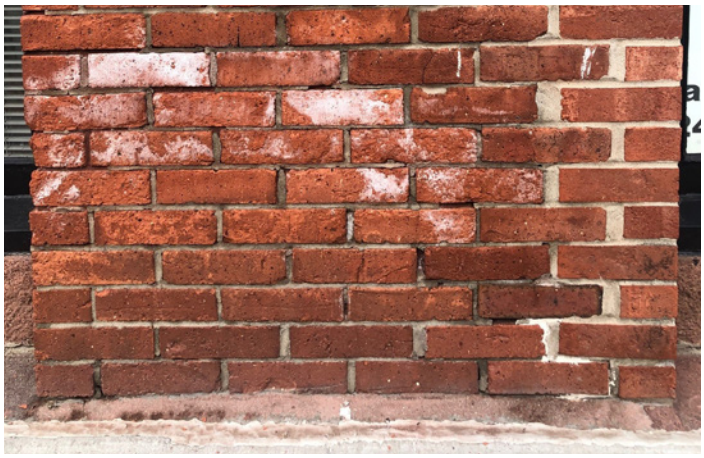
Spring:

- Inspect for damage that may have occurred during freeze-thaw cycles
- Inspect bottom of building for damage caused by salt
- Examine windows for broken glass or putty failure/ poor seal, remove any temporary caulk installed for winter and permanently fix the wood gaps with an epoxy or wood consolidant
- Inspect metal components for rust, scrape and paint with a rust inhibiting paint
- Examine any painted surface for paint failure (cornice, windows, trim, storefront), repaint if needed

Deferred roof maintenance and improper downspouts can cause significant issues due to water infiltration.

Fall:

- Inspect weather stripping around windows and doors and install new if necessary
- Install interior storm windows for winter if applicable, caulk any gaps in wood for a temporary watertight seal



Poor condition of brick and mortar has led to water infiltration, causing material and structural damage.

Deferred window maintenance is unsightly and can also affect the thermal performance of a building.

MATERIALS

As a general rule, keep as much original material as possible and always attempt to repair before considering replacement. In-kind material replacement may be necessary for elements that are beyond repair. If in-kind replacement is not possible, cost prohibitive, or if maintenance issues make another option more sustainable over time, then a compatible replacement can be considered. Quality materials should always be used to ensure longevity and maintain a good appearance over time.

The following is a non-exhaustive list of materials and their general appropriateness for historic Main Street areas.

Primary Materials

Brick and Stone Masonry – Always use a mason who is versed in historic masonry techniques and uses appropriate mortar mixes. Do not sandblast, as it damages the surface of existing masonry. Maintain paint where applied, but do not paint masonry that has never been painted, as it damages the surface of the brick and can even trap moisture within the wall. Never install brick or stone veneer over historic masonry. The application of these materials over existing materials is a band-aid approach which ignores underlying problems with the building and can even damage the building by trapping moisture underneath. Follow all guidance on masonry in Preservation Briefs 1 and 2.

Mortar should be the sacrificial element in masonry; mortar that is too hard can cause damage to the bricks themselves.

Terra Cotta – Terra cotta is often seen as cladding on the exterior of buildings and as decorative cornices. See Preservation Brief 7 for more information on Historic Glazed Architectural Terra Cotta.

Architectural terra cotta is often highly decorative and a significant character-defining feature.

Secondary Materials

Cast Stone – Cast stone can be a historic material and can also be considered in limited quantities as a replacement material when there is difficulty sourcing appropriate in-kind materials. It is not appropriate to apply cast stone or faux stone veneers over historic materials – such as brick masonry – on a building exterior. See Preservation Brief 42 for more information.

Ceramic or Porcelain Tile – Generally seen on storefront bulkheads and exterior flooring in the recessed section of storefronts. Historic ceramic or porcelain tile is also commonly used for interior flooring. Retain where possible. If individual tiles are cracked or missing, replace with pieces that match the original. Ensure a smooth walking surface for floor tiles to maintain safety and accessibility.

Historic ceramic mosaic tile inlay on entry flooring creates a distinct first impression.

Concrete Block – Concrete block is typically used as a structural material or backup wall and is not generally appropriate as an exposed material on the exterior or interior of a building in a historic district. However, painted concrete block exteriors may be appropriate for mid-century building styles.

Precast or Cast-in-Place Concrete – Concrete is appropriate for use in landscape and streetscape designs, as a ground surface for exterior ramps and stairs, and as a building curb in a storefront. Do not use exposed concrete as a major building element – use cast stone instead of concrete for architectural features such as window hoods and columns.

Fabric – Outdoor, UV-rated canvas fabric is the preferred material for awnings on downtown buildings. Use quality materials and maintain regularly to avoid fading and tearing.

Glass – Glass is a huge part of historic appearance and can be found in storefronts, transoms, upper story windows, skylights and doors. Replace glass elements with the same transparency/opacity, texture and tint/color. Glass block is appropriate when part of a historic design but should not be added to buildings where they did not exist historically, especially as infill to historic window or door openings.

Cast Metal, Preformed Metal and Metal Flashing – Keep exterior metal, such as metal cornice elements, handrails and guardrails, and parapet copings finished to avoid rusting and sealed to avoid water infiltration. Retain interior metal tile ceilings where possible and replace missing or damaged pieces with those that match the historic pattern. In general, limit the use of large-format metal panels for new construction within a historic district and do not install new panels over existing commercial buildings where none have existed prior. Historically signigicant slipcovers should be retained as appropriate for the district and building.

Metal Storefronts and Sash – Metal frames for windows and doors are appropriate but should be sensitive to the historic configuration and scale (width and depth of frames) if used. Historic metal windows should be restored when possible.

Prism glass was often used in transoms to direct light further into deep traditional commercial buildings.

Restoration of historic tin ceilings can create a unique focal point for interior spaces.

Structural Metal – Structural steel or cast iron can be exposed in lintels and other historic elements. Take care to keep exterior structural metals protected from corrosion by paint or other appropriate coatings.

Structural Glass Panels – Vitrolite structural glass panels were added to many facades in the 1920s and 30s to add a modern look. We recommend these storefronts be retained as examples of modern design. Structural glass panels should not be added to buildings where they have never been previously.

The historic structural columns and lintel were utilized with new wood elements in the restoration of this storefront.

Structural glass panels and thin aluminum frames are character-defining features of this modern-style storefront.

Many wood windows can be rehabilitated by repairing wood sashes, replacing glazing, and installing new putty.

Stucco/Plaster – Stucco is a historic exterior material that can also be appropriate for compatible infill or new construction buildings. Plaster is appropriate as an interior wall or ceiling material. However, it should not be installed over existing materials that were designed to be exposed, such as metal ceilings and some structural brick walls.

Wood – In general, projects involving wood for architectural elements such as decorative cornices, columns, windows and storefronts, are straightforward and can yield excellent results when properly maintained. Most types of wood must be painted or stained often to protect them from rotting due to weather exposure. Minor repairs can be accomplished by using wood consolidant or epoxies. Moderate repairs can be achieved by cutting out a rotten piece, splicing new wood in and repainting. If too much of a wood element is damaged to be repaired through either of those methods, then replacement of the element in whole can be considered. Replacement pieces should be fabricated to match the original profile of the piece to be replaced. Wood with exposed grain or natural finishes should be of the same or similar wood species.

Widespread use of stucco contributes to the distinctive streamlined character of this theater.

Generally Inappropriate

Exterior Insulation Finishing Systems (EIFS) – Be careful of using products like EIFS on historic buildings, which if not properly detailed or installed, can cause water to enter the assembly and become trapped behind the walls. This can potentially damage the structural components of the wall and/or become a health concern.

Vinyl – Vinyl siding is generally not compatible with downtown districts and should not be applied over historic building materials. Also be aware of existing vinyl products in a building like Vinyl Asbestos Tile (VAT), which is hazardous when cracked or "friable." When VAT is friable, asbestos particles can be released into the air and breathed in. Removal requires abatement or remediation by a specialist. Do not attempt to undergo any projects in an area containing hazardous materials without a certified professional.

Standing Seam Metal Roofing and Siding – Standing seam metal roofing is generally not appropriate for historic commercial buildings in Iowa. As mentioned earlier, metal is appropriate for copings, flashings and crickets, but should not be used as a siding material.

Residential type wood siding, shingles, or shakes - In most cases, avoid the use of vertical or horizontal wood or similar composite siding material. Wood shingle awnings are often added after the period of significance for the Main Street district and are not appropriate.

For more guidance on replacement materials, please refer to Preservation Brief 16.

Vinyl siding creates a residential appearance and should not be used as infill or primary material on downtown buildings.

COLOR SCHEMES

A building's color scheme should be carefully considered for appropriateness and impact.

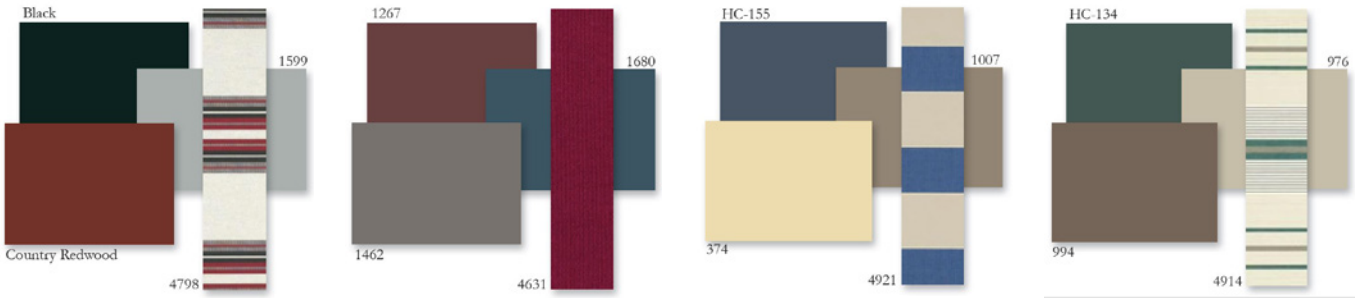
- Look at neighboring buildings and the street as a whole when choosing colors. Colors don't need to match your neighbors, but should be compatible with the overall environment and not be jarring when looking down the street.
- In general, bright or neon hues are not appropriate for historic buildings. Bright hues may be used in some districts depending on neighboring buildings and district identity.
- Use 3-4 colors max (including the base brick color) to sufficiently highlight the façade details.
- Coordinate with awnings and existing brick or stone color.
- Colors specific to individual businesses can be used as accents or in signage.

Remember these things when undergoing a painting project:

- Do not paint a portion of a building that has not been painted historically. In particular, do not paint historic masonry, as it can damage the surface of the brick.
- Always choose compatible exterior-rated paint for exterior areas. For example, latex paint is not recommended over oil because it will have poor adhesion qualities and therefore be more likely to fail. The paint manufacturer can verify compatibility of the substrate for you.

A coordinated color palette compliments the existing brick color and highlights architectural details.

- Make sure the area is dry and clean prior to painting for good adhesion and to assure that moisture does not get trapped behind the paint. Avoid removing paint prior to application of a new layer. If paint has failed and conditions warrant, remove the paint to the next sound layer through the gentlest means possible.
- Always protect adjacent areas before painting to ensure that no historic materials are damaged as a part of a painting project.
- Always paint a sample of colors in a small, inconspicuous place before painting a large area. Colors can appear different according to base coats, sheen (flat to high gloss), natural and artificial light levels, and texture of the substrate.
- See Preservation Brief 10 for further guidance on exterior paint and Preservation Brief 28 for guidance on painting historic interiors.



Examples of complimentary awning and paint schemes for downtown buildings.

STOREFRONTS

Storefronts are one of the most – if not the most – important element of a commercial downtown building. This is because storefronts are a "box for selling." They are a chance to showcase a business and its products, whether retail items for sale, services, or food and beverage. Storefronts also tend to be one of the most commonly altered features of a commercial building over time. Accordingly, storefronts are likely to be involved in the majority of building improvement projects within your Main Street district.

Good storefronts:

- Blur the line between the sidewalk and store interior
- Lure customers in by quickly communicating goods on display
- Provide natural light to interiors and merchandise
- Enhance the rhythm and appearance of the streetscape
- Allow the community to showcase their unique assets and characteristics
- Create a welcoming and well-organized appearance that fosters support for the downtown community as a whole

Understanding the anatomy and elements of a storefront can go a long way in determining appropriate treatment.

- **Opening** – The storefront opening is defined by the lower or storefront cornice, piers or columns, and a curb or the sidewalk. Storefronts were historically designed to fill this entire area and were typically slightly recessed into the opening.
- **Transoms** – Most historic commercial buildings were designed with transom windows above the primary display windows.
- **Display windows** – Large display windows are the primary elements of the storefront. Clear glass should be used to allow for easy viewing of merchandise display and the interior space.
- **Bulkhead** – The bulkhead, or kickplate, raises the storefront off the ground and protects the glass from damage due to snow shoveling, etc. Traditional materials include wood, brick, stone, or wood clad with ceramic tile. Metal panels became popular in assemblies from the 1920s and 1930s.
- **Entrance doors** – Primary entrance doors with glass contribute to the sense of transition from the street to the interior and create a commercial appearance. The primary entrance is recessed in many cases to provide protection from weather while the customer is entering or leaving the store. A recess also highlights where to enter and allows plenty of room for the door to swing out for safe egress.

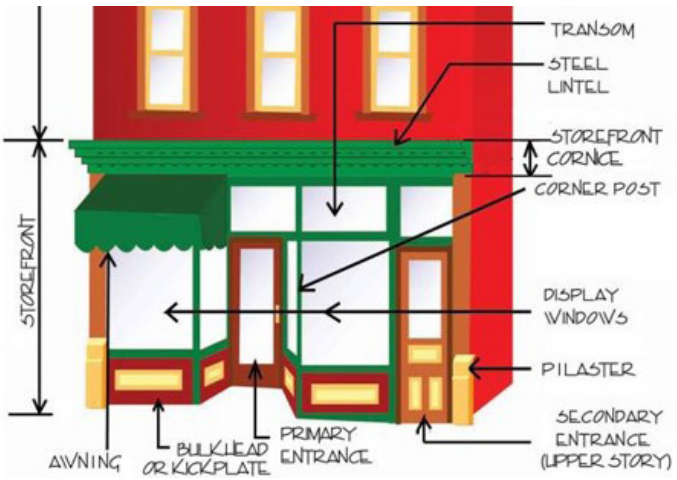


Diagram showing traditional storefront elements.

This reconstructed wood storefront contains traditional elements, highlighted by a three-tone color scheme.

Guidelines for making storefront improvements:

- Retain and repair historic storefront materials and details when possible.
- When rebuilding traditional storefronts, base the configuration and details on historic photographs and physical evidence. Look for physical clues inside the building like shadows or footprints of original recesses. Sometimes original layouts can be determined by “ghost” prints along the ceiling and in the basement. Occasionally, original elements such as transoms or decorative cast iron columns exist behind the alterations.
- Use traditional elements and layouts in new storefront design. New designs should be simple and straightforward – do not add ornate decorations if there is no evidence to support it.
- Traditional materials are preferred for newly constructed storefronts. Wood storefronts can be constructed with simple framing; kickplates and decorative bulkheads can be a simple as a plywood sheet with a 1 x 6 lumber frame. Moldings or bevels can be added if a more ornate bulkhead pattern is visible in the historic photographs. Wood storefronts should be painted.
- Retain or restore the size of the original storefront opening. Do not enlarge the storefront beyond the original opening defined by the cornice and columns, reduce the storefront size, or infill it with bricks or other materials.

This intact historic storefront features a stepped recessed entry, bulkhead tile, and thin metal window frames.

Operable transoms are integrated into this reconstructed storefront for added light and ventilation.

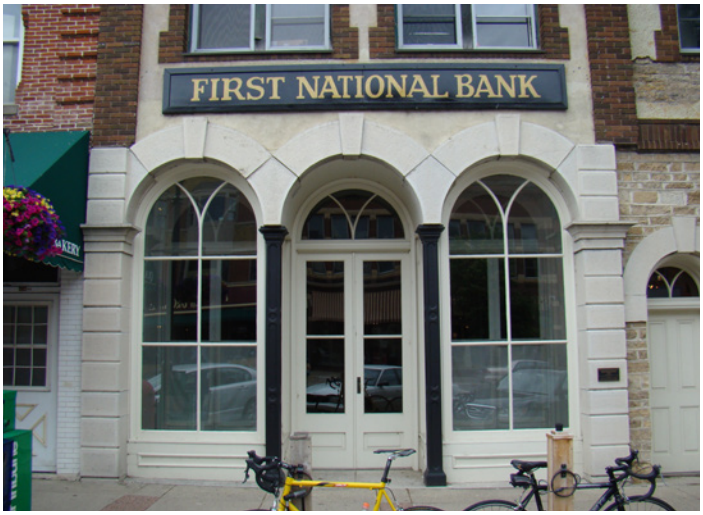
New storefront window frames are constructed between historic cast iron columns.

- Use large expanses of clear glass if replacing storefront glazing. Do not use tinted or mirrored glass or apply opaque film over storefronts.* Consider using insulated glass for better performance, while still retaining the traditional configuration and wood frame.
- Entrance doors should have a large glazing opening to provide a welcoming, commercial storefront appearance. Do not use residential style doors, or doors without glazing openings. Avoid having the door swing out to the sidewalk.

**Vacant commercial spaces are an exception. Film or paper graphics can be temporarily applied to the windows to activate empty spaces and even advertise spaces available for lease.*

- Improve access to main entrances. Remove steps and barriers to entry in favor of ramped or sloped entries when feasible. Install hardware that enables the door(s) to be opened independently by a person regardless of their ability to clasp. Provide adequate maneuvering clearance around doors to allow persons in wheelchairs to be able to open the door independently. Where main entry improvements are not readily achievable, consider alternate entries and access paths at side or rear doors.
- Design of new handrails or accessibility features for entrances should be simple and not detract from the historic character-defining features of the building.
- Secondary entrances shall be differentiated from the primary entrances. Doors to upper story apartments should generally have smaller areas of glazing.
- Install air conditioners, antennas, utilities connections, etc. on secondary facades whenever possible and disguise them when their installation on the primary façade or street side cannot be avoided.
- See Preservation Brief 11 for more guidance on rehabilitating historic storefronts.

These display windows fill the full height of the original storefront opening in this reconstructed storefront.



This storefront features arched openings and divided light windows, reflective of the late 1800s architecture.

This historic storefront alteration has good integrity and has gained its own significance over time.

TRANSOMS

Transom windows, located in the upper portion of the storefront above the large display windows, allowed natural light to penetrate the interior of long and narrow downtown commercial spaces. In some cases, transoms were also operable to control the interior climate of the non-conditioned spaces.

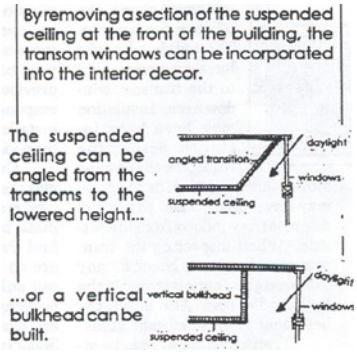
- Transoms can have clear, opaque, frosted, etched, textured, stained or other specialty glass. “Leaded” transoms can also have small 4” square glazing tiles. In modern projects, alternate materials may be used instead of lead, although the appearance should be the same.

- It is common for transoms to have been covered over at some time, often when drop ceilings were installed on the interior or if transoms were damaged. In some cases, transoms were left fully intact behind the siding or other covering and should be uncovered and restored. In other cases, the frames may be partially intact and glazing may just have to be replaced. You can often investigate by looking on the interior side of the window; you may have you push up ceiling tiles or infill paneling to access the transom band.

- If drop ceilings were installed on the interior, removal is recommended when transoms are restored. Sometimes retaining a dropped ceiling may be desired to conceal mechanical, electrical, or plumbing systems. If this is the case, consider removing a section of the drop ceiling closest to the transom so that light can still shine in.

- If energy efficiency of single-panel transom windows is a concern, transom windows can be made more energy efficient by installing a layer of additional glazing, most commonly on the interior of the building. If this is done, frames should be made as inconspicuous as possible.

- If transom restoration is not feasible, a compatible sign panel may be an acceptable alternative. Awnings may also be installed to disguise areas where transoms have been infilled or removed over time.



Section details of drop ceiling alterations to accommodate transom window restoration.

These prism glass transom windows maximize natural light and enhance the interior space.

Restoring transom window openings is a key element in constructing a historically compatible storefront.

Historic transoms are sometimes highly decorative and can contain historic business signage or building names.

SIGNAGE

Good signage has an important influence on the way consumers perceive downtown and its businesses. Easy to read, well-designed and high-quality signs contribute to an overall welcoming feeling in the downtown area and call attention to your individual business. An effective sign not only communicates the location of your business, but also conveys the "flavor" of an individual business while complementing the building's design.

Good signs are:

- Easy to read
- Well-designed
- Made from high quality materials
- Exhibit good craftsmanship
- Reflect the business's brand, personality and identity
- Compliments the building's design and the surrounding environment

Projecting signage with external lighting adds business visibility and vibrancy to the pedestrian realm.

Historic ghost signs can be found on the sides of many buildings and serve as a reminder of a downtown's past.

Recommended types of signs:

- **Historic signs** should be retained when possible.
- **Wall murals or ghost signs** on the sides of blocks should be preserved or restored.
- **Projecting, hanging, or blade signs** should be designed in accordance with local codes if applicable. These types of signs should be mounted at least seven feet from the sidewalk to allow clearance for people to walk underneath.
- **Window signs.** Be careful that signs do not obscure window displays. As a general rule of thumb, signs should take up no more than 30% of the window area.
- **Flush-mounted signs** should be contained to the width of the storefront opening and should not be more than two and a half feet tall. Lettering should be between 8 inches (can be read from 250 feet away) and 18 inches tall (12 inch letters can be read from 400 feet) and occupy no more than 65% of the sign board.
- **Awning signs** can be printed on the valance for a more traditional look or integrated as large-scale graphics on the body of the awning.
- **Individual letter signage.** Often referred to as dimensional letter signs, each letter is individually mounted to the building, generally above the storefront. They can either be mounted directly to the wall or installed with stand-offs or pins for added depth.

Historic neon signage can be retained and restored or retrofitted to reflect new businesses.

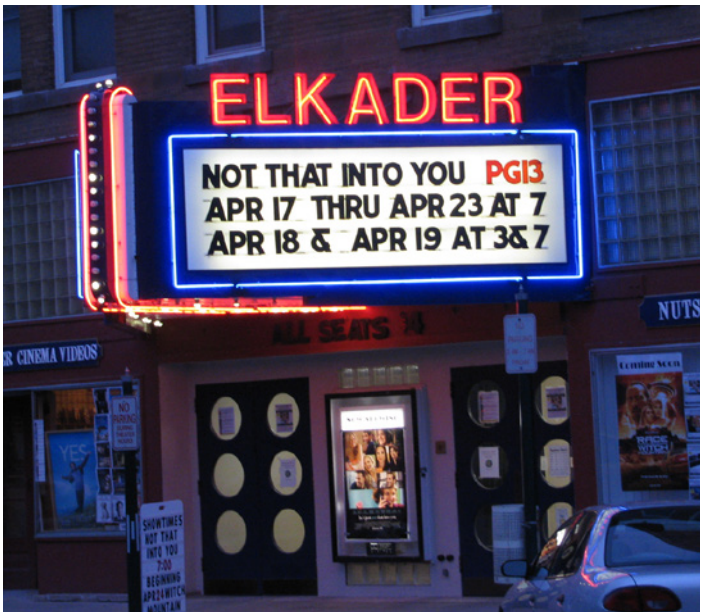
Simple projecting or blade signs are encouraged in pedestrian-oriented downtown settings and increase business visibility.

Occasional use:

- **Sandwich board signs** are effective when utilized to notify customers of restaurant specials or sales. Place signs in locations that will not impede traffic flow or become a safety issue. Note that these signs are typically only out when the business is open and are taken down at night.
- **Freestanding signs** are not common in main street districts, as most buildings have a zero-lot line, and therefore, no space in front of a building for one.
- **Historic neon signs** can be significant to the building's design and should be retained and preserved. New neon signage can be incorporated successfully if at an appropriate scale for the building.

Avoid:

- **Electronic signs** are generally not recommended but can be used for theater marquees in some cases.
- **Flashing signs** are not recommended.
- **Oversized signs.** Design signs to complement the building in size, shape and color. They should not compete with or obscure building features.
- **Internally lit signs** are generally not appropriate because they are typically hard to customize, are the wrong scale for historic buildings and can appear thrown onto the building.



Updates retain the historic character of the original marquee signage, while improving modern usability.

This individually mounted letter signage fits well within the storefront cornice and contributes to a traditional, elegant look.

Additional Guidelines for sign projects:

- Follow any local ordinances regarding allowable sign type, size and location.
- Keep signs simple, straightforward and to the point. In general, limit the colors in your logos to three.
- Mount signs into mortar joints – never drill into brick, stone, or other masonry units.
- Coordinate signage at multiple scales when appropriate. Large signage on the façade is more visible from a distance, while smaller signage on windows and doors appeals more to pedestrians.
- Consider the contrast of lettering and logos. White letters on a black background tend to be the most legible. When using individual letter signage, choose light colored letters for dark walls and dark letters for a light building. Window letters are easiest to read when they are light colored, or gold leafed with a dark outline.
- Install building street numbers by the front door or in transom openings above the entrance.
- Locate signage for second-story businesses on the first floor and next to the path leading up to the second floor. Avoid placing signs above upper story windows, as this is inappropriate in most cases.
- Consider external illumination so signs can be read at night. See the lighting section for more information.

This sign disregards the proportion of the sign panel. A horizontal sign within the orange area would be appropriate.

This integrated canopy signage is a character-defining feature of this mid-century building.

Contrast is important for visibility of storefront window signage. Simple white letters and graphics are highly effective.

The dimension and shape variation of this flush mounted sign adds visual interest and enhances visibility.

AWNINGS

Awnings are a relatively inexpensive way to make a big impact on a building's appearance. Awnings can add color and dimension to the sidewalk, disguise missing transoms or previous inappropriate alterations to the upper storefront area, provide sun shading, and act as a venue for business signage.

- Fabric awnings were historically used on commercial Main Street buildings, installed in either an operable or fixed (permanently open) position. In many cases, the underlying structure of a previous awning remains and can be retained and utilized with replacement fabric.

- Awning shapes and sizes should be proportionate to the corresponding building opening. A rectangular opening should have a traditional rectangular awning with a sloped shape while an arched window should have a rounded awning.

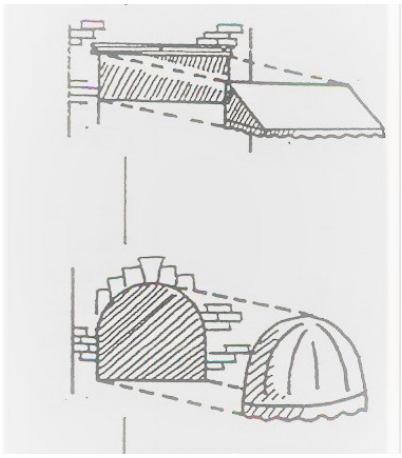
- Consider scale of individual awnings and surroundings. Be sure that the awning does not cover too much of the storefront vertically or extend too far over the sidewalk. Awning width should only extend slightly beyond the storefront to allow it to be anchored and should not conceal the columns. Leave at least 8' clear from the bottom of the awning to the sidewalk.

- Use a scalloped or shaped edge on a fabric awning for a more traditional look. A straight edge or no valance at all will create a contemporary feel. Omitting side panels altogether will also create a more contemporary feel.

- The use of metal awnings and canopies on existing buildings should be limited, as they are generally not appropriate for historic commercial buildings. However, metal awnings or straight canopies can be appropriate for more modern building styles and compatible new construction.

- Use multiple awnings to break up a façade. Awnings should not extend over multiple store fronts.

This operable awning allows shade when needed but can also be raised to reveal the transom windows.



Awnings should match the size and shape of its corresponding opening. Image: National Trust's Building Improvement File.

A fabric awning with a scalloped valance provides a traditional look and compliments the building's color scheme.

- In some cases, awnings on upper windows may be effective and appropriate for covering window openings which have been infilled on the top and cannot be replaced with full-height windows, or to provide sun shading for upper story occupants. Do not install upper story awnings that would obscure ornate window hoods or lintel detailing.
- Coordinate awning colors with the overall color scheme for the building, which can include obvious things such as signage and more subtle sources such as flecks of color in masonry. Balance strong and detailed graphic signs with a solid awning or simple signage designs with a bolder striped awning.
- Awnings should be well maintained and cleaned regularly to remove natural soiling.

This contemporary awning fits well with the building and business.

Individual upper story window awnings provide sun shading and coordinate with the storefront awning.

Awnings should fit within individual storefront openings.

Continuous awnings fixed across multiple storefronts are inappropriate.

Flat metal canopies may be appropriate for specific building types.

LIGHTING

Lighting can illuminate signage and increase legibility at night, create a design feature during the day, and even highlight certain building features. Good lighting adds to the downtown ambiance during evening hours and provides a sense of safety and security.

- Keep light fixtures and schemes simple to avoid overwhelming the building.
- Be deliberate with what you are trying to illuminate and direct lights accordingly. Use up-lighting when highlighting architectural features.
- Gooseneck lights are an excellent way to incorporate external lighting for signage and add an architectural element to the storefront. They can be mounted above individual letter signage, a sign panel and/or an awning.
- Use can lights or small pendant or flush mounted lights in the ceiling area of storefront recesses or canopies to highlight an entrance and increase safety.
- Install any light fixture anchors into mortar joints to avoid damaging masonry units.
- Storefront merchandise and display windows should be lit from the inside, with lighting directed on the display. Windows and storefronts should be lit during evening hours to maintain pedestrian interest and add to district safety and ambience.
- Avoid rope lights or strings of exposed bulbs in storefront windows. However, string lights are appropriate for open public spaces and can be strung between buildings in an alley as a design feature.

Effective building lighting combines internal storefront lighting and external illumination of architectural features.

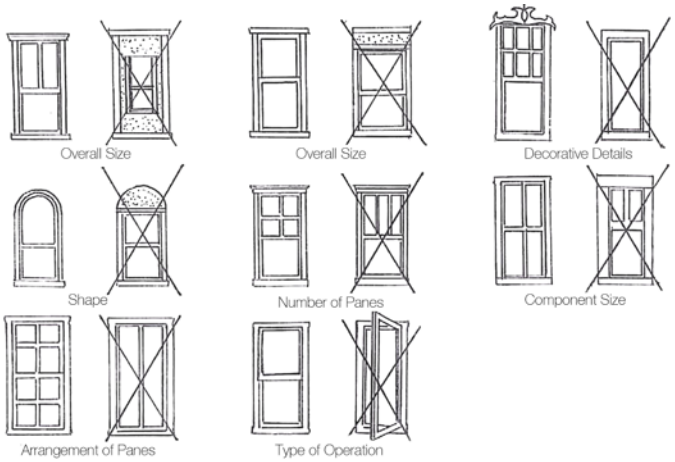
Gooseneck lighting is a great way to provide signage illumination and increase curb appeal.

UPPER STORY WINDOWS

The fenestration (or window opening) pattern has a huge impact on the overall appearance and rhythm of a façade. Windows themselves are also major character-defining features.

- Always prioritize the repair and restoration of existing historic windows.
- If the windows must be replaced due to extremely poor condition, replace them with windows in the same type and configuration. For instance, if the original windows were single hung windows, replace them with single hung. Divided light windows should be kept as divided lights.
- When windows have been altered, look at historic photographs and neighboring buildings for guidance on style and size of appropriate replacement windows.
- Retain the original size of an opening and fill the entire width and height of the opening with glazing when replacements are necessary. Do not block in with masonry or infill any part of an opening with plywood. Do not enlarge openings.
- Use traditional materials for repairs and replacements when possible.
- Concern for energy-efficiency is often cited as a reason to want to replace historic windows. However, installing interior or exterior storm windows can greatly improve efficiency while keeping the historic fabric and appearance intact. Just adding weather stripping or caulking can also make a big difference. When considering replacement, remember that most new windows cannot be repaired or even recycled, and will eventually end up in landfills. Not only can historic windows be recycled but repairing them saves the embodied energy of a new window.

Infilled or reduced window openings are not appropriate.



Common window replacement pitfalls to avoid. Image: National Trust Building Improvement file.

- When windows must be replaced, install operable windows to provide natural ventilation and passively control temperature, saving energy costs. In addition, operable windows can contribute to safety by providing another means of emergency egress and rescue access.
- Keep windows well maintained and paint exposed wood trim to protect from the elements and tie into the overall building color scheme.
- For more guidance, see Preservation Briefs 9 and 13.

Appropriate window replacements fill the entire opening.

CORNICES

Cornices are the visual cap at the top of a building and are instrumental in a building's historic appearance. They come in many shapes and sizes and in most Main Street communities, set buildings apart from each other by their unique expressions. For this reason, it is important to treat them appropriately during building projects.

- Retain and repair existing cornice materials.
- When part or all of a cornice must be replaced, replace in kind with traditional materials when possible. Cornices are often made of brick, stone, or terra cotta, but sometimes have painted wood or metal-covered wood elements. Fiberglass or other lightweight synthetic materials may be an appropriate alternative material when necessary.
- Replacement pieces should be fabricated to match the original profile of the piece being replaced.
- Repoint masonry cornices and repaint wood or metal cornices frequently to avoid deterioration. If cornices are not maintained, they can negatively affect appearance, cause moisture to come into the building and can create safety concerns for pedestrians when elements fall to the sidewalk.
- When new roofs are installed, make sure the coping, drip edge, or other detailing if applicable, is inconspicuous. Do not remove ornamental pieces on cornices or cover over them. Do not raise the parapet or build up the roof behind it. Do not change the roof style. For example, do not install a mansard-style roof where one never existed or install a pitched roof where a "flat" roof was historically.
- Where cornices are missing, use historic photographs or physical evidence as a guide for reproduction. Do not add overly elaborate or decorative cornice elements where they did not exist historically. When in doubt, simpler is best.

Wood cornices are often painted to highlight elaborate details.

Metal cornices should be painted, and missing or damaged pieces should be repaired.

INTERIORS

It is common for the interiors of Main Street buildings to be adapted often according to trends, business changes and use. However, many historic commercial interiors have core features that can transcend use and should be retained.

- Keep existing historic materials and features that remain intact such as metal ceilings and exposed brick walls. Historic ceilings are often intact but hidden behind drop ceilings; remove drop ceilings to restore the original height of a space when possible.
- Retain the volumes of primary spaces where possible to keep the overall feeling and character; avoid subdividing large open spaces. When walls need to be added, consider partial-height walls to section off areas with double-height or tall ceilings. Do not add floors in double-height spaces.
- Retain original wood floors if possible. Often, wood floors remain under other layers of flooring and refinishing can yield good results.
- In upper story spaces, partition walls (non-structural) can usually be altered when necessary to accommodate a new use without major adverse effects. For example, walls often need to be removed to create larger spaces for modern-sized toilet rooms. However, retain character-defining features such as stairs, railings, arches and original trim when possible.
- Plan new partition walls, equipment and built-in furniture with existing window and door openings in mind. Do not cover existing openings, especially those on primary facades.
- Retain skylights where feasible and restore infilled skylights when possible. Historic commercial buildings are often long and narrow, so skylights can provide much needed natural light to interior rooms.
- For upper story living spaces, each bedroom must have at least one operable window to the outside. Depending on your local code and specific building, you may also be required to add a door to access a roof or stairway, or for egress purposes. New openings may have to be created to make upper story housing feasible. However, layouts maximizing the existing openings are preferred when possible. Base the size, rhythm and alignment of any new openings with those of the existing openings. Locate new windows in non-prominent locations on secondary and tertiary facades.

Restored metal ceilings and tile floors add to the ambiance of this downtown bar and restaurant.

The historic skylight and vault were retained as unique features for this upper story living space.

PART FIVE
MANAGING CHANGE

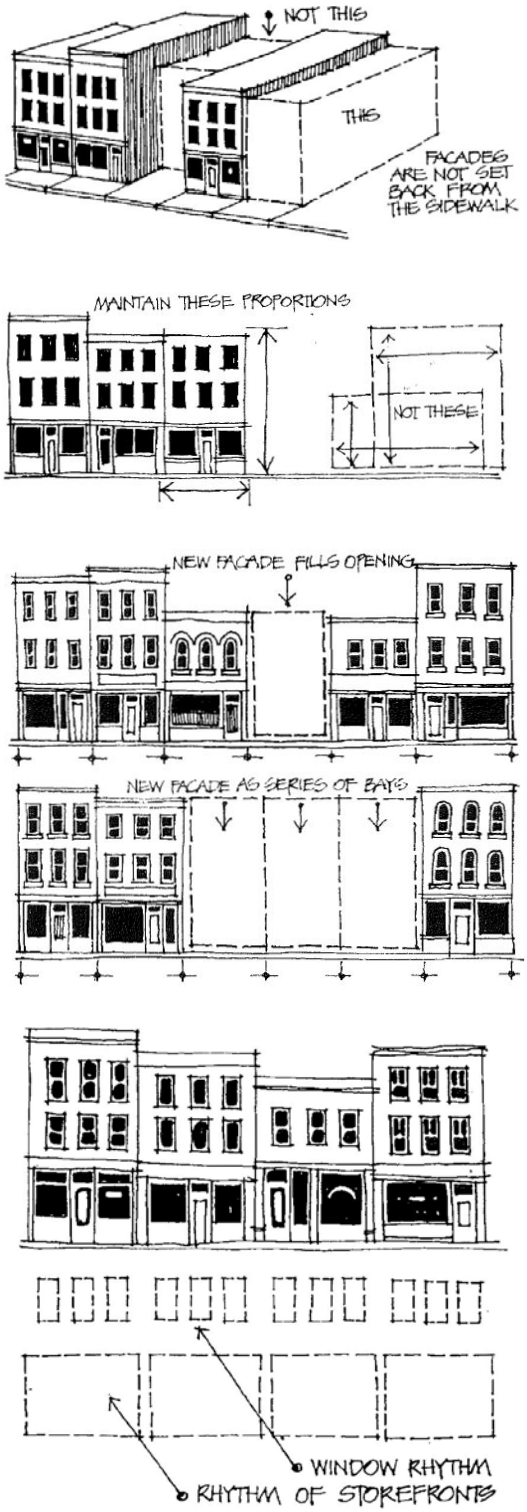
MANAGING CHANGE

New development is a sign of a healthy community and district, but it generally does not come without growing pains. Not all development is appropriate for historic commercial districts; thinking proactively about managing change can help ensure compatible uses, design and scale when potential development situations arise. This section can serve as a starting point for managing change and growth, and the strategies shown here should be tailored to your unique circumstances and assets.

MASTER PLANNING

Master plans are typically created for an entire community and contain segments devoted to the Main Street district and historic assets. A master plan is typically produced every 5-20 years by a municipal planning commission or a task force of citizens working with a planning consultant. Main Street executive directors and boards should serve a major advisory role, either by joining a task force if one exists, or by acting as a technical advisor in conjunction with the municipality. The master planning process normally follows this progression:

1. **Discovery period** – the process of researching history, assessing current physical and market conditions and gaps, taking inventory of properties (see vacant and underutilized property section).
2. **Visioning** – engage community stakeholders through public meetings, and surveys. Main street leaders should ask current business owners questions, listen to the community at large, and then communicate those wishes to the document creators.
3. **Scenario exploration** – predict future development pressures based on the first two steps and imagine how they could impact existing properties and infrastructure. Identify issues that may occur.
4. **Compiling** – take the information gained and define goals.
5. **Production** – writing the draft of the report.
6. **Feedback/revision** – public comment time period and revision based on feedback.
7. **Publish/enact** – final document is codified or adopted by the municipal planning officials or other city enforcement entity.



Design considerations for infill in historic districts. Image: National Trust Building Improvement File.

Something to keep in mind during the master planning process is how to implement the portions of the master plan that directly apply to your district. Zoning overlay districts can be created with the same boundaries as your downtown district to define permitted uses that are in line with the overall goals of Main Street and lay out procedures for design review. Likewise, local historic district designations can be tied to form-based codes. Historic district design guidelines can also live in their own document that is then referenced in an ordinance.

Design review and guideline enforcement can also be triggered as a requirement for all properties that accept municipal grant funding or take part in subsidized loan programs. Regardless of the methodology or terminology used, these tools can help give your plans "teeth" or means of actual enforcement. Advocating for these types of processes will help the local grant and design review boards make – and back up – decisions on individual cases in the future. Similarly, always make sure that the standards in place do not discourage types of development that you want to encourage in your district – such as light manufacturing for breweries or bakery production.

This example of compatible new construction divides the facade into multiple storefronts, maintains proportions similar to other downtown buildings, and utilizes quality, traditional materials.

VACANT AND UNDERUTILIZED PROPERTIES

Most downtown commercial districts have at least one building that is either vacant or underutilized, and most have several. The downsides to completely vacant buildings are obvious – they can reduce the value of surrounding properties, increase crime, increase the probability of a fire on that block, and reduce the tax base for local governments. The downsides to underutilized buildings may not be as obvious. But they can still contribute to the same problems, and in addition, negatively impact value that is harder to directly measure – additional street traffic to businesses, consumers from residential properties, eyes on the street at night, the loss of a service from a professional office, etc.

The first step is identifying these properties. Common types of underutilized properties that could be overlooked include:

- Absentee building owner (perhaps living out of state) lets it sit empty.
- Lower story occupied by business but upper story vacant.
- Property's upper story (or all of it) is used by owner as storage instead of an income-producing use.
- Lower story is occupied as a residence.
- Upper story housing is rundown, and no attempt has been made to occupy or improve it.
- Building has suffered from deferred maintenance, or is not up-to-code, and it is now cost-prohibitive to redevelop it (e.g., structural problems with masonry or a roof failure have caused interior damage).

These are some steps you can take:

- Activate vacant buildings with temporary things such as pop-up shops in storefronts, mobile museums, idea contests. Put historic photographs or creative window displays in empty storefront windows.
- Identify historic assets in danger and nominate them to be on Iowa's Most Endangered Properties list run by Preservation Iowa. This program provides excellent visibility for preservation advocates and opens the door for opportunities for redevelopment.
- Work with the local municipality to enact tools like a vacant building registry and/or a minimum maintenance ordinance. Once such tools are on the books, make sure you are enforcing nuisance properties.
- Require active uses on the lower levels and make ordinances that prohibit residences in street-facing spaces on the main level.
- Audit your zoning to ensure that prohibitive zoning does not contribute to your vacant or underutilized building problem. Make sure uses you want are allowed and that parking requirements are realistic.
- Encourage upper story housing and upper story office use.
- Promote small-scale manufacturing with retail/dining spaces such as bakeries and breweries.
- Sometimes properties need some work to get to a reasonable "white box" condition. Consider local partnerships and funding sources to address structural issues, deferred maintenance needs, or out-of-date infrastructure to make a property more feasible and marketable for new business opportunities.

NEW CONSTRUCTION

While Main Street design prioritizes maintenance and rehabilitation of existing historic buildings, appropriate new or infill construction can be an important part of local district revitalization and expansion efforts. Demolishing existing buildings is rarely recommended downtown, but infill construction can sometimes be necessary on sites where historic buildings have been lost over time, leaving empty lots or "missing teeth" in a downtown block, or when opportunities for expansion exist on district edges. Consider the following for appropriate infill and new construction for commercial and mixed-use downtown buildings:

- Distinguish new construction from historic structures.
- Do not imitate historic styles. Use of historic features may create a false sense of history.
- Use building materials that are compatible or similar to those traditionally used within the district.
- Roof lines should be hidden by parapets, like the traditional commercial buildings.
- Building setbacks should be the same as the rest of the street.
- The primary building elevation should be parallel to the street.
- Building heights and stories should be similar to the surrounding buildings. Generally, this would mean new construction should be "low rise," between one and four stories in height.
- Building widths should be standard throughout the district. Do not infill an existing alley.
- Consider the rhythm of window and door openings present on the existing storefronts on the block and design to fit within this rhythm.
- Design mechanical and HVAC equipment so that it is not visible from the street. Likewise, orient service areas such as garbage cans, service entrances, and other utilities away from the storefront and main façade when possible.
- Keep design at human scale.
- All street-level stories should be designed and used for commercial purposes. We recommend upper levels be used for upper story housing.

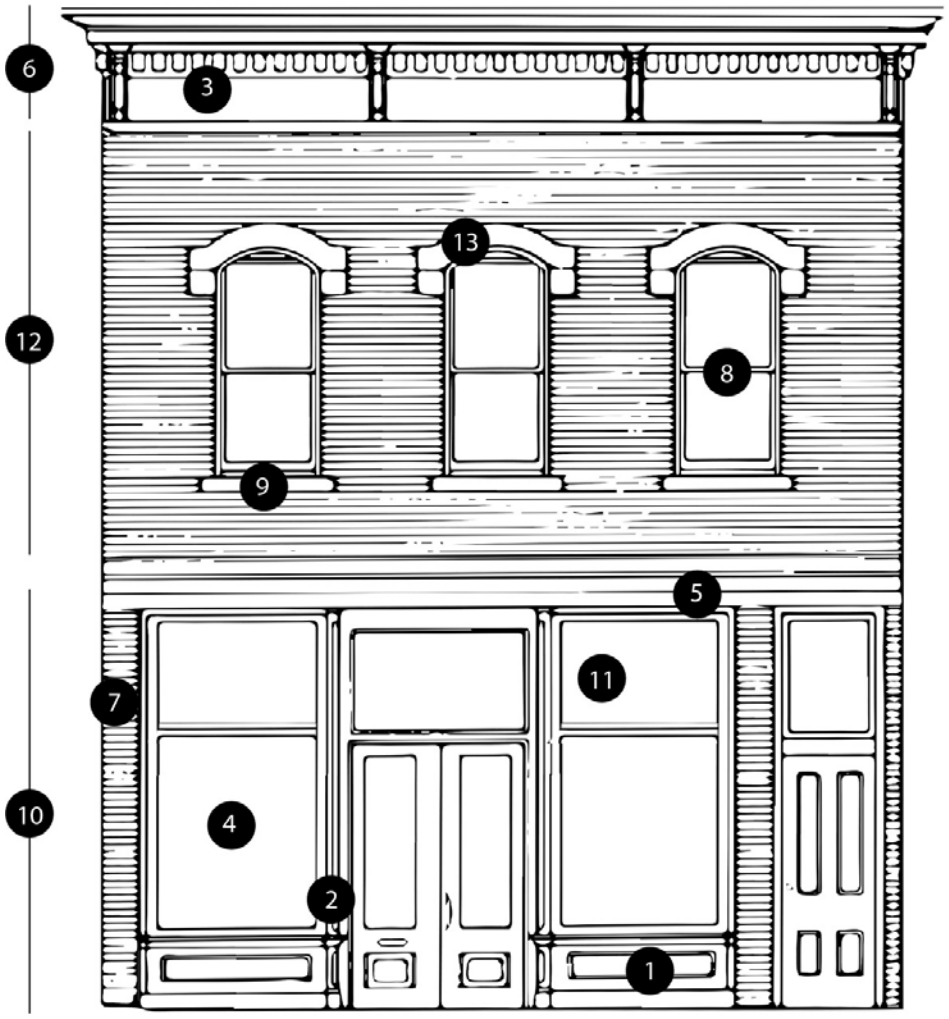
This new construction utilizes traditional materials and building elements.

A glass hyphen joins this rear elevator addition to the original building, and distinguishes it from the historic construction.

APPENDICES

GLOSSARY

1. ***Bulkhead*** – The area on the storefront between the sidewalk and display windows. Typically made of wood, tile or metal.
2. ***Column*** – A vertical element that supports part of a building or structure.
3. ***Cornice*** – The projecting, decorative molding forming the top band of a building wall. May also appear at the storefront level.
4. ***Display Window*** – The main areas of clear glass on a storefront behind which goods are arranged.
5. ***Lintel*** – A structural beam spanning over a door, window or storefront system opening.
6. ***Parapet*** – A low solid stone or brick wall at the top of a building projecting above the roof.



7. ***Pier*** – An upright support; generally masonry on each side of a storefront opening.
8. ***Sash*** – Operable part of a window frame that holds the glazing.
9. ***Sill*** – The horizontal member at the base of a window.
10. ***Storefront*** – The ground-level façade of a commercial space, typically with large areas of glass and a recessed entrance.
11. ***Transom Window*** – Glazed opening above a door or window; may be clear or patterned, one large pane or divided into multiple panes.
12. ***Upper Floors*** – Floors above the retail ground floor; typically non-retail volume. Most multistory Main Street buildings are between 2 and 4 floors.
13. ***Window Hood*** – Projecting element over a window or exterior wall opening.

MAKING IMPROVEMENTS

Every downtown building will have different needs depending on its architectural character, existing condition and use. Some building improvement projects might consist of small-scale cosmetic improvements, while others may require full scale building rehabilitation. Project planning and an understanding of individual building needs is critical to a project's success.

MSI DESIGN CONSULTATION

Main Street Design Assistance is available for projects located within designated Main Street Iowa districts. This service is a benefit of the Main Street network and is available at no cost to local property owners. Design and building rehab specialists can provide on-site or virtual technical assistance and provide recommendations on project planning, historic preservation practices and maintenance needs, and develop conceptual design drawings to help visualize building improvements.

SMALL-SCALE IMPROVEMENTS

Many small-scale improvements, repairs and maintenance needs can be completed by hands-on building owners, design committee members or local volunteers. The National Park Service is the standard for guidance on best practices for the preservation of historic properties. Refer to the Preservation Briefs for in-depth information on various aspects of historic preservation or search by topic for specific needs. Main Street Iowa has also compiled an online resource folder with guidance on a number of topics related to downtown building care and maintenance.

PUTTING TOGETHER A PROJECT TEAM

For larger scale projects, hiring an architect experienced in historic property rehabilitation is recommended. An architect can lead property owners through the design and rehabilitation process, and coordinate with additional professionals as needed. Depending on the complexity of the project and scope of work, a structural engineer, historic preservation consultant or specialized craftsperson may also be a part of the project team. Keep in mind that historic buildings have different characteristics and needs than new construction; so having a team that is well-versed in historic building preservation and rehabilitation is critical! Consider the below when engaging your project team:

- Consult with the local Main Street office when searching for contractors and design professionals; they may have recommendations based on previous projects done in the district. The broader network of Main Street Iowa communities can also be utilized for recommendations from across the state.

- Preservation Iowa, a statewide historic preservation non-profit, maintains an online Consultant Directory to help identity preservation consultants, resources and contractors.

- Engage architects that are licensed to practice in the state of Iowa. AIA Iowa has a directory of licensed members on their website; search for 'Historic Preservation' under services.

- Verify that contractors are licensed and ensured and that their work conforms to federal, state and local requirements. Iowa law requires all plumbing and mechanical contractors to be licensed (search here) and all other contractors to be registered with the Iowa Division of Labor (search here).

- When selecting your project team, ALWAYS ask for references (and be sure to call them!) and examples of applicable previous work. Ask for a cost estimate in writing and a contract for any work that will be completed.

CODES & REGULATIONS

Be aware of different codes and regulations that might apply to building projects depending on your local jurisdiction; many historic building rehabilitation projects will require upgrades to enhance the building's safety. Consult with local officials early on to find out what healthy, safety and welfare measures are required, what building codes allow and whether a building permit is required for the scope of work proposed. Zoning regulations might affect permitted uses, allowable signage or parking requirements. Your district might also have local design guidelines that should be followed to encourage appropriate design or a design review process that requires approval before construction begins. Engaging with local officials at the earliest stage of the planning process possible is key to identifying requirements and achievable solutions.

TOOLS AND RESOURCES

FUNDING AND FINANCING

There are a variety of funding opportunities available for Main Street Iowa programs and downtown building rehabilitation projects. The below listing represents many, but not all, of the funding tools available for public and private planning, design and rehabilitation projects:

Local Funding

Consult with your local Main Street or development office regarding local funding opportunities for downtown building projects. Local funding tools might include local Main Street or economic development grant programs, city incentives, revolving loan programs, local bank partners or community foundations grants.

Main Street Iowa Challenge Grants

Main Street Iowa Challenge Grants are available for brick-and-mortar building projects that contribute to the development of designated Main Street Iowa districts. Challenge Grants support comprehensive building projects that add to the local district economy, incorporate quality design and preservation-based strategies, and support local revitalization efforts.

Community Catalyst Building Remediation Program

The Community Catalyst Building Remediation Program assists communities with the redevelopment or rehabilitation of buildings to stimulate economic growth or reinvestment in the community.

Downtown Housing Grant

The Downtown Housing Grant provides financial assistance for projects supporting local downtown revitalization through new and renovated housing opportunities in communities under 30,000.

Community Development Block Grant Funds (CDBG)

Federal CDBG funds are administered through the Iowa Economic Development Authority (IEDA) and support a number of planning and infrastructure purposes.

- The Downtown Revitalization Fund provides assistance for exterior rehabilitation of blighted downtown buildings.
- The Upper Story Housing Conversion Fund program provides assistance for the conversion of existing downtown building space into new residential units.

State Historic Preservation Tax Credits

The State Historic Preservation Tax Credit Program provides a state income tax credit for the sensitive, substantial rehabilitation of historic buildings. It ensures character-defining features and spaces of buildings are retained and helps revitalize surrounding neighborhoods. The program provides an income tax credit of up to 25% of qualified rehabilitation expenditures (QREs).

Federal Historic Preservation Tax Credits

A 20% income tax credit is available for the rehabilitation of historic, income-producing buildings. Buildings must be certified historic structures by the National Park Service and rehabilitation work must meet the Secretary of the Interior's Standards for Rehabilitation.

Historical Resource Development Program (HRDP)

HRDP funding helps preserve, conserve, interpret, enhance and educate the public about Iowa's historical assets. The Historical Resource Development Program provides funding for documentary collections, historic preservation and museums.

DNR Derelict Building Program

The Derelict Building Program is available for Iowa towns of 5,000 or fewer residents to address neglected commercial or public structures that have sat vacant for at least 6 months. Funds are available for hazardous material inspection and abatement, site assessments, structural engineering and building renovation and deconstruction expenses.

Brownfields & Grayfields Redevelopment Tax Credits

Redevelopment Tax Credits are available for properties known as brownfield and grayfield sites to promote the economic health of communities by reducing potential environmental hazards, cleaning up eyesores, creating new jobs and boosting tax revenue.

Workforce Housing Tax Credits

The Workforce Housing Tax Credit program provides tax benefits to developers providing housing in Iowa communities, with a special focus on projects using abandoned, empty or dilapidated properties. A 'Small Cities' set aside for this program is available to eligible projects within the 88 least populous counties in the state.

Empower Rural Iowa Innovation Grants

The Rural Innovation Grant program supports creative, non-traditional ideas that focus on current issues and challenges faced by rural communities associated with the themes of community investment, growth and connection.

Paint Iowa Beautiful Grants

Paint Iowa Beautiful provides free paint to a variety of public service projects through a partnership between Keep Iowa Beautiful and Diamond Vogel Paint of Orange City.

Tax Incentives for Improving Accessibility

The Disabled Access Credit provides a non-refundable credit for small businesses that incur expenditures for the purpose of providing access to persons with disabilities.

The Architectural Barrier Removal Tax Deduction encourages businesses of any size to remove architectural and transportation barriers to the mobility of persons with disabilities and the elderly.

RELATED ORGANIZATIONS AND RESOURCES

Iowa Downtown Resource Center
The Downtown Resource Center helps communities learn more about the importance of downtown development and specifically how your community can implement strategies to make downtown more viable.

State Historic Preservation Office (SHPO)
The Iowa SHPO office identifies, preserves and protects Iowa's historic and prehistoric resources. It also administers state and federal historic preservation programs and maintains a survey and inventory collection of historic properties in Iowa.

Main Street America™
Main Street America™, a subsidiary of the National Trust for Historic Preservation, is a network of more than 1,200 neighborhoods and communities, rural and urban, who share both a commitment to place and to building stronger communities through preservation-based economic development. Main Street America provides education, outreach, resources and funding opportunities to assist its network members with downtown revitalization efforts.

National Trust for Historic Preservation
The National Trust for Historic Preservation, a privately funded nonprofit organization, works to save America's historic sites; tell the full American story; build stronger communities; and invest in preservation's future.

National Park Service (NPS)
Historic preservation programs of the National Park Service help communities protect and preserve the nation's historic resources. NPS administers the National Register of Historic Places, federal historic preservation tax incentives and many other federal programs that provide services, financial assistance, education, guidance and technical information in support of historic preservation.

Preservation Iowa
Preservation Iowa is a statewide nonprofit organization with a mission of building partnerships that enhance our economic and cultural future through the preservation of Iowa's historic resources. Annual advocacy programs include the Most Endangered Properties listings and the Preservation at its Best Awards.

Iowa Arts Council
The Iowa Arts Council empowers Iowa to build and sustain culturally vibrant communities by cultivating creativity, learning and participation in the arts. Resources and funding opportunities are available to strengthen the vitality and sustainability of arts and culture, film and media, history and historic preservation efforts across Iowa.

Iowa Architectural Foundation (IAF)
The Iowa Architectural Foundation is a nonprofit volunteer-driven organization working to inspire an appreciation for architecture and design in everyone through education and outreach. IAF provides outreach programs and youth and adult education.

Iowa Living Roadways Community Visioning Program
The Community Visioning Program provides small Iowa communities with the planning and design resources needed to make meaningful transportation improvements to the local landscape.

AARP Livable Communities
AARP Livable Communities supports the efforts of neighborhoods, towns, cities and rural areas to be great places for people of all ages. Resources include publications, toolkits and Community Challenge project funding.

PROJECT EXAMPLES

Avoca - before (L) and after (R)

Burlington - before (L) and after (R)

Cedar Rapids - before (L) and after (R)

Clarence - before (L) and after (R)

Conrad - before (L) and after (R)

Dubuque - before (L) and after (R)

Dunlap - before (L) and after (R)

Manning - before (L) and after (R)

Oskaloosa - before (L) and after (R)

Ottumwa - before (L) and after (R)

State Center - before (L) and after (R)

Waterloo - before (L) and after (R)

West Union - before (L) and after (R)

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