



Date: September 5th, 2022

To: Dan Osoba, Planner II
City of Aurora Planning Department

From: Garrett Graham
PCS Group Inc.
P.O. Box 18287
Denver, CO 80218

This document is a response to the Harmony SP5 second submission review comments we received on July 14, 2022.

Application Number: DA-1925-11

Case Numbers: 2013-7001-05; 2022-4006-00; 2022-3006-00

Responses are below in **RED**:

Second Submission Review

PLANNING DEPARTMENT COMMENTS

1. Community Questions, Comments and Concerns

1A. No comments were received from neighborhood groups or adjacent property owners during this review.

1B. Please see the comments from the following outside agency referrals attached to the end of this letter. Provide a response to these comments in your 2nd submission.

- Xcel Energy
 - **PCS Response: Per coordination with Dan Osoba on 8/16, Xcel Energy has no more further comments on this second Site Plan submission review.**
- Mile High Flood District: Haey Koesters, MHFD This is in response to the request for our comments concerning the referenced project. We appreciate the opportunity to review this proposal and have no comment, as this project does not include any major drainage features.
 - **PCS Response: Per coordination with Dan Osoba on 8/16, MHFD has no more further Site Plan comments on this second submission review.**
 - **WPS Response: Comments were received for the Prelim Drainage Report. We have addressed the comments and created letters specifically for MHFD and Xcel Energy. The PDR has been submitted separately from this Prelim Plan and the MHFD comments are included in that submittal. The Xcel Energy comments are included in this submittal set.**

2. Completeness and Clarity Comments

Site Plan Comments

Sheet 1.0

2A. Add percentages to the acreage area calculations to equal 100%.

WPS Response: This was not done. These numbers will not equal 100%. There is open space, landscaping, and hard surface in tracts, lots, and ROW. percentages added to lot, tract, and ROW areas.



3. Zoning and Land Use Comments

Site Plan Comments

Sheet 1.3

3A. The grouping of 5 lots (two instances; see redlines) are double fronting and a minor adjustment request will be required (administrative). Please request the adjustment in your next submission to include justification and mitigation measures for the requested listed in the letter of introduction and site plan cover sheet.

PCS Response: Administrative adjustment language has been provided on the cover sheet for the remaining double frontage lots and 2-turn rule lots.

3B. FYI – the reverse corner side setbacks will apply to the lots shown in the redlines.

PCS Response: Acknowledged.

4. Access and Connectivity Issues

Site Plan Comments

Generally

4A. Label the width of the open space or tract area, typical on all sheets. The minimum width of the tract or open space area is 30-feet.

WPS Response: Labeled all widths of open space and tract areas on all plan sheets

Sheet 1.3

4B. The lots proposed on Tennessee Place do not comply with the 2-turn rule (<https://aurora.municipal.codes/UDO/146-4.5.3.B>). They are no longer double fronted, but do not comply with the access and connectivity standard. Can Tennessee be extended to Trussville? Staff will also entertain a minor adjustment request for the 21 lots out of compliance. Similar to the above request, please list it on the letter of introduction and site plan cover sheet along with justification and mitigation measures.

PCS Response: Administrative adjustment language has been provided on the cover sheet for the 2-turn rule lots.

4C. Even though the block called out in the redlines is less than 700-feet in width, the pedestrian connection should continue through to Shady Grove Street. This corridor will give direct access to the neighborhood park.

PCS Response: We have not provided this additional connection through to Shady Grove Street.

5. Addressing (Phil Turner / 303-739-7357 / pcturner@auroragov.org)

5A. Addressing comments have been resolved.

WPS Response: Acknowledged, thank you.

6. Environmental Issues (Dan Osoba / 303-739-7121 / dosoba@auroragov.org)

6A. The scanned copy of the signed avigation easement was received; however, the notary stamp is very faint and illegible. Please rescan the copy and send it in with your next review.

WPS Response: A more clear scan has been included with this submittal.



7. Landscape Issues (Tammy Cook / 954-684-0532 / tdcook@auroragov.org / Comments in teal, red text)

Cover Sheet-C1.0

- Make sure the sheet numbering is consistent throughout the plan set.
 - WPS Response: Numbering is consistent throughout the plan set. "OF 35" has been added.
 - PCS Response: AS well, numbering is consistent throughout the plan set. "OF 35" has been added for the 35 landscape site plan sheets.

- The numbering should be cumulative.

PCS Response: Sheet numbering has been updated to be cumulative seperate between the civil site plan sheets and then landscape site plan sheets.

Sheet-L0.0

- Only include the required landscape notes from the City's Landscape Manual.

PCS Response: The Landscape Notes have been updated to separate the COA Standard Notes and our Typical Landscape Notes. There are notes that have been requested by the planning department and other department reviewers that are also listed in the Typical Landscape Notes.

- Make sure the sheet numbering is consistent throughout the plan set.

PCS Response: Sheet numbering has been updated with total sheet count.

- The numbering should be cumulative.

PCS Response: Sheet numbering has been updated with total sheet count.

- Provide labels for the streets in the key map.

PCS Response: Major street labels have been added to the key map.

Sheet-L0.1

- Make sure the sheet numbering is consistent throughout the plan set.

PCS Response: Sheet numbering has been updated with total sheet count.

- The numbering should be cumulative.

PCS Response: Sheet numbering has been updated with total sheet count.

Sheet L0.2

- Only include the required landscape notes from the City's Landscape Manual

PCS Response: The Landscape Notes have been updated to separate the COA Standard Notes and our Typical Landscape Notes. There are notes that have been requested by the planning department and other department reviewers that are also listed in the Typical Landscape Notes. These notes are shown on Sheet L0.0.

- Have consistent sheet numbering in the entire plan set. The other sheets have sheet X of X. That type of numbering should be carried through.

PCS Response: Sheet numbering has been updated with total sheet count.



- The total sheet count for the entire set should be noted.

PCS Response: Total sheet for the entire set have been noted in the bottom right hand corner of the title block alongside the current sheet number.

- Remove the contractor notes from the Landscape Notes as the city does not review landscape construction drawings.

PCS Response: The Landscape Notes have been updated to separate the COA Standard Notes and our Typical Landscape Notes. There are notes that have been requested by the planning department and other department reviewers that are also listed in the Typical Landscape Notes. These notes are shown on Sheet L0.0.

Sheet L0.2

- Tree Calipers shall be included in the Plant Schedule Not B&B Provide the percentage of sod to demonstrate that it does not exceed the maximum 33% for the site. Provide the square footage of the overall landscape area.

PCS Response: Tree caliper sizes have ben added to planting schedule alongside B&B notation. The percentage of sod calculation is already provided within this plan set on sheet L0.4 Water Use Plan.

- Show the Planting Symbols on this sheet.

PCS Response: Planting symbols have been added to this sheet.

- Tree Heights shall be noted for Evergreen Trees.

PCS Response: Tree heights have now been noted.

- Calipers shall be noted for Ornamental trees

PCS Response: Calipers have been added for ornamental trees.

- Provide the square footage of the overall landscape area.

PCS Response: Overall landscape square footage is shown on sheet L0.4.

- 5 Gallon shall be noted for Perennials, Deciduous Shrubs, Evergreen Shrubs and Ornamental Grasses.

PCS Response: Container size has been added for deciduous shrubs, evergreen shrubs, ornamental grasses and perennials. However, perennials have only been shown as 1-gallon containers.

Sheet L0.3

- Please refer to this as Curbside Landscaping not Tree Lawn Planting.

PCS Response: Text has been updated.

- For Street Tree Requirement, please provide a lineal footage for each side of the roadway as a separate line item to demonstrate compliance. For example: E. Exposition Avenue North Side and South Side.

PCS Response: We have not made this split between east vs. west or north vs. south side of streets. This has not been a prior comment made by the COA on previous Harmony Site Plans.



- Note where the buffers are less than 20' are provided at the property line a Street Frontage landscape buffer is required and should be noted with the requirements.

PCS Response: There are no buffers along street frontages that are less than 20ft wide. Dimensions have been added to the plans to show this.

- Change the 1 Gallon Ornamental grasses to 5 Gallon.

PCS Response: Ornamental grasses have been updated to be 5-gallon.

- Include in requirements 1 tree per 4,000 SF

PCS Response: Open space tract planting requirements have been updated.

- Remove extra shrub reference from the table.

PCS Response: Extra shrub reference has been removed.

- Provide separate column for Ornamental Grasses to demonstrate that they do not exceed 40% of the total required shrubs.

PCS Response: Per conversations with Kelly Bish – for the tract landscaping, there is no requirement for grasses to be less than 40% (there is only a maximum percentage for curbside landscaping).

- Also include shrubs required 10 shrubs per 4,000 SF

PCS Response: This shrub requirement has been updated.

Sheet L0.6

- Note that on Arterial and Collector Roadways a 18" X18" column is required every 60 feet.

PCS Response: Acknowledged, note has been added.

Sheet L0.8

- Revise ornamental grasses to 5 Gallon not 1 Gallon.

PCS Response: For residential lot landscaping, 1 gal ornamental grasses are allowed per the UDO.

- Include maximum sod square footage -not to exceed 33%.

PCS Response: There is not enough room on 45ft wide lot to allow for the minimum 400sf of turf so therefore turf is not allowed within the front yards of this particular size product, Re: Front Yard Note #5 of both Type A and Type B lots. So this maximum square footage note for turf has not been added.

Sheet L0.9

- Revise ornamental grasses to 5 Gallon not 1 Gallon.

PCS Response: For residential lot landscaping, 1 gal ornamental grasses are allowed per the UDO.

- Include maximum sod square footage -not to exceed 33%.

PCS Response: For lot Type C: A note has been added for the maximum sod square footage. However, per the UDO for residential lot landscaping, the maximum is as follows: Turf option: min. = 400 sq. Ft. Max. = 40% or 1,000 sq. Ft., whichever is less; must be contiguous. For lot Type D: the size of the lot does not allow for the above criteria to be met so note #5 states that no sod is allowed.



Sheet L0.10

- Revise ornamental grasses to 5 Gallon not 1 Gallon.

PCS Response: For residential lot landscaping, 1 gal ornamental grasses are allowed per the UDO.

- Include maximum sod square footage -not to exceed 33%.

PCS Response: For lot Type E: A note has been added for the maximum sod square footage. However, per the UDO for residential lot landscaping, the maximum is as follows: Turf option: min. = 400 sq. Ft. Max. = 40% or 1,000 sq. Ft., whichever is less; must be contiguous. For lot Type F: the size of the lot does not allow for the above criteria to be met so note #5 states that no sod is allowed.

Sheet L1.0

- Note if the landscape buffer width is less than 20 feet a Street Frontage landscape buffer shall be required.

PCS Response: A dimension has been added to show that is buffer is greater than 20ft in width.

- Label Landscape buffer width.

PCS Response: A dimension has been added to show that is buffer is greater than 20ft in width.

- Include 50' dimension to stop sign.

PCS Response: 50ft dimension from stop sign has been added.

- Tree conflict with water/sewer connections.

PCS Response: The locations of the trees in the curbside landscaping in front of the residential lots are only an approximation since the driveways and the utility stubs to the residence will need to be determined with actual home builder plans. Therefore, the locations of the landscaping, driveways and utility stubs are conceptual. Actual locations will be determined by the builder, and it will be responsibility of builder to place trees at safe distance from utilities. Note #2 has been added to the legend to clarify this.

- Tree conflict with water connection on S. Quantock Ct.

PCS Response: See previous utility and landscape conflict response.

Sheet L1.1

- Shift this street tree south outside of the 50' dimension from the stop sign.

PCS Response: The tree has been relocated and a 50ft dimension from stop sign has been added.

- Note that curbside landscaping shall be provided by School Site.

PCS Response: No curbside landscape would be required on the back sides of these lots.

Sheet L1.2

- Note that a non-street perimeter buffer is required along this property line and must be included in this site plan submittal package.

PCS Response: A 10' ROW Landscaping Buffer has been added with the required # of trees & shrubs. A chart has been added to the Landscape Calculations Sheet.



- Provide adjustment to light pole in walkway.

WPS Response: The light pole has been moved.

- Provide required 8' clearance around the fire hydrant.

PCS Response: An 8' clearance from fire hydrant has been provided; any shrub that is adjacent to a fire hydrant is less than 2' in height.

- Review locations of tree to water connections on S. Quantock Ct.

PCS Response: See previous utility and landscape conflict response.

- Review locations of tree to water connections on S. Riverwood Street.

PCS Response: See previous utility and landscape conflict response.

- Review location of tree to water connection.

PCS Response: See previous utility and landscape conflict response.

- Review distance of tree to water connection on E. Ada Pl.

PCS Response: See previous utility and landscape conflict response.

Sheet L1.3

- Review locations of tree to water connections on S. Scottsburg Ct.

PCS Response: See previous utility and landscape conflict response.

- Review locations of tree to water connections on S. Robertsdale Ct.

PCS Response: See previous utility and landscape conflict response.

- Note that curbside landscaping shall be provided by School Site

PCS Response: Acknowledged, however, the sidewalk surrounding the school site is an 8' wide attached walk so there is no curbside planting. But a note has been added to state that any landscape near the walk/within ROW will be provided by the school.

Sheet L1.5

- Review locations of tree to water connections on E. Ida Pl.

PCS Response: See previous utility and landscape conflict response.

- Review locations of tree to water connections on E. Kentucky Pl.

PCS Response: See previous utility and landscape conflict response.

- Show 50' dimension from stop sign.

PCS Response: 50ft dimension from stop sign has been added.

Sheet L1.6

- Review locations of tree to water connections on E. Ford Pl

PCS Response: See previous utility and landscape conflict response.



Sheet L1.7

- Note that curbside landscaping shall be provided by School Site.

PCS Response: Acknowledged. However, the sidewalk surrounding the school site is an 8' wide attached walk so there is no curbside planting. But a note has been added to state that any landscape near the walk/within ROW will be provided by the school.

- Review locations of tree to water connections on E. Kentucky Pl.

PCS Response: See previous utility and landscape conflict response.

- Leave planting open for access at this location on S. Shady Grove St.

PCS Response: Acknowledged, this planting has been removed for access crossing S. Shady Grove Street.

- Note if the landscape buffer width is less than 20 feet a Street Frontage landscape buffer shall be required.

PCS Response: A dimension has been added to show that is buffer is greater than 20ft in width.

- Review locations of tree to water connections on E. Ford Pl.

PCS Response: See previous utility and landscape conflict response.

- Note 50' dimension to stop sign.

PCS Response: 50ft dimension from stop sign has been added.

- Note if the landscape buffer width is less than 20 feet a Street Frontage landscape buffer shall be required.

PCS Response: A dimension has been added to show that is buffer is greater than 20ft in width.

Sheet L1.8

- Note 50' dimension to stop sign.

PCS Response: 50ft dimension from stop sign has been added.

- Conflict with tree and sewer connection on S. Queensburg Ct.

PCS Response: See previous utility and landscape conflict response.

- Conflict with trees and water connections E. Kentucky Pl.

PCS Response: See previous utility and landscape conflict response.

- Provide curbside landscaping along this perimeter.

PCS Response: This area of curbside landscape is greater than 10ft in width and is planted with bluegrass sod. A dimension has been provided to clarify this curbside landscape width.

- Consider adding another street tree at this location on S. Queensburg Ct.

PCS Response: Another tree could not be added in this location because of the 50ft setback needed from the stop sign.



- Show 50' dimension to stop sign.

PCS Response: 50ft dimension from stop sign has been added.

- Show Clear Sight Triangle

PCS Response: The sight triangle has been added and all shrubs have been verified to be less than 26" in height.

- A non-street perimeter buffer is required along this property line and must be included in this site plan submittal package.

PCS Response: This non-street perimeter buffer will be part of the future multi-family development and will not be a part of this site plan.

Sheet L1.9

- Planting call-out in not visible.

PCS Response: Plant label has been moved.

- Conflict with street tree and water connection on S. Quantock Ct.

PCS Response: See previous utility and landscape conflict response.

- Conflict with street tree and water connection on E. Tennessee PL.

PCS Response: See previous utility and landscape conflict response.

- Provide tree and shrub planting for Tract L.

PCS Response: Acknowledged, tree and shrub planting have been added to Tract L per open space tract planting minimum requirements.

- Tree to be adjusted due to drainage easement requirements.

PCS Response: Tree and utility conflicts have been addressed.

- Conflict with street tree and water connection on E. Tennessee Dr.

PCS Response: See previous utility and landscape conflict response.

- Show 50' dimension to stop sign.

PCS Response: 50ft dimension from stop sign has been added.

Sheet L1.10

- Conflict with street tree and water connection on S. Scottsburg Ct.

PCS Response: See previous utility and landscape conflict response.

- Conflict with street tree and water connection on S. Robertsdale Ct.

PCS Response: See previous utility and landscape conflict response.

- Tree conflict with drainage easement.

PCS Response: Tree and utility conflicts have been addressed.



- Conflict with street tree and water connection on E. Tennessee Dr.

PCS Response: See previous utility and landscape conflict response.

Sheet L1.11

- Conflict with street tree and sewer connection on E. Tennessee Pl.

PCS Response: See previous utility and landscape conflict response.

- Please label buffer width. Note if the landscape buffer width is less than 20 feet a Street Frontage landscape buffer shall be required.

PCS Response: A dimension has been added to show that is buffer is at minimum 20ft wide.

- Tree conflict with drainage easement shift tree south.

PCS Response: See previous utility and landscape conflict response.

- Two locations on plant to show clearance around fire hydrant.

PCS Response: An 8' clearance from fire hydrant has been provided; any shrub that is adjacent to a fire hydrant is less than 2' in height.

- Tree conflict with drainage easement.

PCS Response: Tree and utility conflicts have been addressed.

- Show 50' dimension from stop sign.

PCS Response: 50ft dimension from stop sign has been added.

- Note if the landscape buffer width is less than 20 feet a Street Frontage landscape buffer shall be required.

PCS Response: A dimension has been added to show that is buffer is at minimum 20ft wide.

Sheet L1.12

- Show 8-foot clearance around fire hydrant.

PCS Response: An 8' clearance from fire hydrant has been provided; any shrub that is adjacent to a fire hydrant is less than 2' in height.

- Provide 50' dimension to stop sign.

PCS Response: 50ft dimension from stop sign has been added.

- Note if the landscape buffer width is less than 20 feet a Street Frontage landscape buffer shall be required.

PCS Response: A dimension has been added to show that is buffer is greater than 20ft in width.

Sheet L1.13

- Note if the landscape buffer width is less than 20 feet a Street Frontage landscape buffer shall be required.

PCS Response: A dimension has been added to show that is buffer is greater than 20ft in width.



- Provide 50' dimension to stop sign.

PCS Response: 50ft dimension from stop sign has been added.

- Conflicts with street tree and water or sewer connection on E. Mississippi Dr.

PCS Response: See previous utility and landscape conflict response.

- Provide 8-foot clearance around fire hydrant.

PCS Response: An 8' clearance from fire hydrant has been provided; any shrub that is adjacent to a fire hydrant is less than 2' in height.

Sheet L1.14

- Show 8-foot clearance around fire hydrant.

PCS Response: An 8' clearance from fire hydrant has been provided; any shrub that is adjacent to a fire hydrant is less than 2' in height.

- Label clear visibility triangle. Ensure plant material is no more than 26" height

PCS Response: There is no sight distance triangle required at this knuckle.

- Label buffer width and note if the landscape buffer width is less than 20 feet a Street Frontage landscape buffer shall be required.

PCS Response: A dimension has been added to show that is buffer is greater than 20ft in width.

Sheet L2.0

Remove construction notes from plan set as the city does not review construction drawings.

PCS Response: We have retained these notes on the site plan drawings. Drawings currently have "NOT FOR CONSTRUCTION NOTE" on top left corner of each landscape site plan sheet for clarification.

REFERRAL COMMENTS FROM OTHER DEPARTMENTS AND AGENCIES

8. Civil Engineering (Kristin Tanabe / 303-739-7306 / KTanabe@auroragov.org / Comments in green)

Final Plat Comments

8A. Drainage easements for ponds need to extend to the ROW at the maintenance access or provide an access easement from the drainage easement to the ROW, typical.

WPS Response: **Access easements have been added for all maintenance roads outside of ROW and drainage easements.**

Site Plan Comments

Sheet 1.0

8B. The Site Plan will not be approved by public works until the preliminary drainage letter/report is approved.

WPS Response: Noted, thank you.

Sheet 2.1

8C. Maintenance access needs to be a minimum of 8' wide with 2' recovery zone on each side. The centerline radius is required to be 50' minimum or the access shall be widened.

WPS Response: The maintenance roads are now labeled as 10 concrete paths with 1' recovery



zones on each side. All roads adhere to the 50' centerline radius minimum as requested.

Sheet 3.1

8D. Label the slope in the swale, minimum 2% or provide a concrete pan.

WPS Response: Added slope labels in all swales.

8E. The minimum slope in the bottom of the pond is 2%.

WPS Response: Added slope labels to all pond bottoms to show 2% min.

Sheet 3.2

8F. The minimum slope in the bottom of the pond is 2%.

WPS Response: Added slope labels to all pond bottoms to show 2% min.

Sheet 3.4

8G. The minimum slope in the bottom of the pond is 2%.

WPS Response: Added slope labels to all pond bottoms to show 2% min.

Sheet 3.5

8H. The minimum slope in the bottom of the pond is 2%.

WPS Response: Added slope labels to all pond bottoms to show 2% min.

8I. Label slopes in tracts. The minimum slope in all non-paved areas is 2%.

WPS Response: Slope labels added to tract areas to ensure 2% minimums.

Sheet 3.8

8J. Label slopes in tracts. The minimum slope in all non-paved areas is 2%.

WPS Response: Slope labels added to tract areas to ensure 2% minimums.

Sheet 3.9

8K. Label slopes in tracts. The minimum slope in all non-paved areas is 2%.

WPS Response: Slope labels added to tract areas to ensure 2% minimums.

7. Traffic Engineering (Brianna Medema / 303-739-7336 / bmedema@auroragov.org / Comments in amber)

Traffic Impact Report Comments

7A. For future reference movement, approach and total intersection LOS and delay should be provided for all signalized intersections.

LSC Response: The additional information has been added to the level of service table.

7B. No Table 9.

LSC Response: The reference has been updated to the correct table number.

7C. The applicant is the same as Harmony Phase 5? Make it consistent, typical.

LSC Response: Revised as requested.



7D. Add 2024 total site traffic graphic.

LSC Response: The additional graphic has been added as requested.

7E. ADT is not consistent with peak hour traffic.

LSC Response: A typographical error has been corrected.

7F. Add relevant pages from NEATS i.e. 2040 traffic volumes.

LSC Response: Added as requested.

PIP Amended Sheets Comments

7G. The TIS shows a Stop sign controlled intersection. See the locations shown on the redlines.

Response: The roundabout is called out in the TIS as a roundabout. It is built with Filing 14 to the North.

Site Plan Comments

Sheet 2.0

7H. Previous comment not addressed: label all accesses as full movement, right-in/right-out, etc.

WPS Response: A note was added to the sheet to address all movement classifications of each intersection.

Sheet 2.1

7I. The mail kiosk cannot be located within intersection sight triangles, within intersection areas, and within 30' from a downstream stop sign, typical.

WPS Response: All mailboxes on site have been moved to meet these requirements.

Sheet 2.4

7J. Move the ramps and provide edge to edge alignment.

WPS Response: Ramps moved to this location as requested.

7K. Add a pedestrian ramp.

WPS Response: Ramp moved to this location from the east.

Sheet 2.5

7L. Remove the ramps shown.

WPS Response: Please see below response for 7M.

7M. Align the path with the pedestrian ramp.

WPS Response: This ramp provides maintenance access to the ponds and channel and cannot be removed. Left trail and ped ramp in place. Additional reconfiguration can be discussed and agreed on at the construction drawing level.

7N. Shift the ramp to align with the receiving ramp.

WPS Response: Ramps shifted to this location as requested.

7O. Align the pedestrian ramp with edge to edge alignment per the redlines.

WPS Response: Ramps shifted to this location as requested.



7P. Show the pedestrian ramp.

WPS Response: Viewport has been extended to show the intersection.

7Q. Add the pedestrian ramps to the locations shown on the redlines.

WPS Response: Ramps added at this location as requested.

Sheet 2.6

7R. Show the receiving ramps per the redlines.

WPS Response: Receiving ramps added at this location as requested.

7S. Remove the pedestrian ramp.

WPS Response: Ramps removed at this location as requested.

Sheet 2.7

7T. Add pedestrian ramps with edge to edge alignment. There are several locations, please see the redlines.

WPS Response: Ramps shifted to this location as requested.

7U. The kiosk is in the sight triangle, relocate it.

WPS Response: All mailboxes on site have been moved to meet these requirements.

7V. Delete the ramp.

WPS Response: Ramps moved to this location as requested.

Sheet 2.8

7W. Add pedestrian ramps.

WPS Response: Ramps added at this location as requested.

7X. Remove the pedestrian ramp.

WPS Response: Ramp removed at this location as requested.

7Y. Add a pedestrian ramp, move the ramp to provide edge to edge alignment and move the inlet.

WPS Response: Ramps added and shifted at this location as requested.

7Z. Show the receiving ramps.

WPS Response: Receiving ramps added at this location as requested.

Sheet 2.9

7AA. Move the west side ramp opposite one of the east side ramps with edge to edge alignment. Remove the east side ramp that does not have a receiving west side ramp. See the redlines for details.

WPS Response: Ramps added and shifted at this location as requested.

7BB. Show the pedestrian ramp.

WPS Response: Receiving ramps added at this location as requested.



Landscape Plan Comments

Sheet L1.1

7CC. Move or remove the tree to provide a minimum 50' spacing from the stop sign. Verify/update for all intersections.

PCS Response: Tree location has been updated to be space a minimum 50ft away from stop sign. In addition to this a dimension has been added to demonstrate 50ft offset from stop signs.

8. Fire / Life Safety (Mark Apodaca / 303-739-7656 / mapodaca@auroragov.org / Comments in blue)

Site Plan Comments

Sheet 1.0

8A. Remove the construction type.

WPS Response: Removed construction type from table.

8B. The information must be consistent.

WPS Response: Removed construction type from table to avoid inconsistencies.

Sheet 2.2

8C. Provide a mail kiosk at the location shown on the redlines; the mail kiosk must have access (curb ramps) from the street and interior sidewalk. A curb ramp will be needed from the adjacent street and leading up to the mail kiosk, typical.

WPS Response: All mailboxes on site have been moved to meet these requirements

8D. Move the mail kiosk to sheet 2.5 location per the redlines.

WPS Response: All mailboxes on site have been moved to meet these requirements.

Sheet 2.4

8E. Provide a mail kiosk at the location shown on the redlines; the mail kiosk must have access (curb ramps) from the street and interior sidewalk. A curb ramp will be needed from the adjacent street and leading up to the mail kiosk, typical.

WPS Response: All mailboxes on site have been moved to meet these requirements.

Sheet 2.5

8F. Provide a mail kiosk at the location shown on the redlines; the mail kiosk must have access (curb ramps) from the street and interior sidewalk. A curb ramp will be needed from the adjacent street and leading up to the mail kiosk, typical.

WPS Response: All mailboxes on site have been moved to meet these requirements.

Sheet 2.8

8G. Provide a mail kiosk at one of the locations shown on the redlines; the mail kiosk must have access (curb ramps) from the street and interior sidewalk. A curb ramp will be needed from the adjacent street and leading up to the mail kiosk, typical.

WPS Response: All mailboxes on site have been moved to meet these requirements.

Sheet 2.9



8H. Move the mail kiosk to the location shown on sheet 2.8.

WPS Response: All mailboxes on site have been moved to meet these requirements.

9. Aurora Water (Daniel Pershing / 303-326-7646 / ddpershi@auroragov.org / Comments in red)
Utility Conformance Letter

9A. Please elaborate more on the change being proposed. Provide reasoning and specifics to how the change may or may not affect the existing MUS.

WPS Response: Added additional explanation that the original master utility study assumed a larger population and unit count than is actually proposed.

9B. Please reference 101 gpd/capita as stated in Aurora Water Standards.

WPS Response: Revised to 0.07 gpm/capita.

9C. Please revise the population column to 2.77 and update the remainder of table 2.

WPS Response: Revised to 2.77 throughout tables and report.

9D. Provide gross acreage for commercial use.

WPS Response: Added column for acreage values and summation.

9E. Include I&I in calculations.

WPS Response: I&I calculations added to table.

9F. Highlight the portion of the exhibit that this amendment is covering. See the comment on several sheets.

WPS Response: Highlighted CSP5 areas included in this report which are being changed.

9G. Include channel diagrams showing the updated d/D for design points referenced in the routing diagram.

Response The channel diagrams have been added to the MUS report appendix.

Site Plan Comments

Sheet 4.0

9H. Please coordinate the sampling station location for this site with Aurora Water. Email ddpershi@auroragov.org to start the process.

WPS Response: Coordination has been started with Daniel Pershing as of 7-28-2022 per email conversations.

9I. No more than 12 units can be served off a dead end feed for water. Please revise.

WPS Response: Added a connection from Tennessee Dr to S Trussville St. Also looped the water within the open space tract from E Mississippi Dr north to Tennessee Dr.

9J. Regional improvements are anticipated in Powhaton. Coordinate the timing of these improvements with Aurora Water.

WPS Response: Coordination has been started on the timing of these improvements.



9K. Dimension the typical 10' separation between water and sanitary.

WPS Response: Added separation dimension on the lot typical template.

10. Parks Recreation and Open Space (Curtis Bish / 303-739-7131 / cbish@auroragov.org)
Subdivision Plat Comments

10A. The park is still not platted as its own tract. Subdivide per the redlines?

WPS Response: The park has been platted as a lot with an access easement to the ROW.

Landscape Plan Comments

Sheet L2.4

10B. Is this shade sail being proposed within a park? I do not see it anywhere on the landscape plan sheets.

PCS Response: This shade sail is not being used and has been removed from the detail sheets.

11. Real Property (Maurice Brooks / 303-739-7294 / mbrooks@auroragov.org / Comments in magenta)
Site Plan and Plat Comments

11A. See the red line comments on the plat and site plan. The configurations of the Lots and Blocks will change because of the combining of the Blocks into larger units to include more Lots. Send in the separate documents listed on the first page of the plat. Make sure the Lot and Block designations match between the plat and the site plan. Lot 1, Block 14 (current configuration) needs to have direct Access to the street R.O.W., dedicate an Access easement on the plat to accommodate this situation.

WPS Response: The lot and block numbers have been revised to match the orientation provided to us.

11B. The Lots and Blocks change is a major change and will impact most of the plat and site plan area. This will reduce the number of Blocks and increase the number of Lots per Block as a result. The main reason is the misconception that Tracts separate the Block designation, to wit only the Street R.O.W.'s are the true separators between the Blocks.

WPS Response: The lot and block numbers have been revised to match the orientation provided to us.

12. Revenue (Diana Porter / 303-739-7395 / dsporter@auroragov.org) 12A. Storm Drain Development Fee due: $125.675/\text{acres} \times \$1,242.00 = \$156,088.35$

PCS Response: Acknowledged, we will ensure that these fees will be paid.

Commercial users with meters one and one-half inches and smaller with landscaped areas not served by a separate irrigation system shall be charged an outdoor fee based upon the total landscaped area.

PCS Response: Acknowledged.

13. Public Art (Roberta Bloom / 303-739-6747 / rbloom@auroragov.org)

Master Plan – Amended Sheets Comments

13A. Continue to coordinate with Roberta Bloom on the Public Art Plan.

PCS Response: Acknowledged, we will continue to work with Roberta.

N:\PROJECTS\30175604 SAND CREEK\CADD\SURVEY\PLATS\HARMONY F15-COVER\NOTES.DWG, BPWILSON, 5/18/22

Send in the updated Title Commitment

Send in the closure sheet for the description.

Send in the State Monument Records for the aliquot corners used in the plat.

Send in the Certificate of Taxes Due show they are paid in full up to and through the plat approval date of recording. Obtained from the County Treasurer's office.

LEGAL DESCRIPTION:

KNOW ALL PEOPLE BY THESE PRESENTS, THAT THE UNDERSIGNED WARRANT THEY ARE THE OWNERS OF A PARCEL OF LAND BEING A PART OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE CENTER QUARTER CORNER OF SAID SECTION 16, BEING MONUMENTED BY A FOUND 2-1/2 INCH DIAMETER ALUMINUM PIPE WITH A 3-1/4 INCH ALUMINUM CAP STAMPED "T4S R65W C1/4 S16 2008 PLS 35593" FROM WHENCE THE SOUTH QUARTER CORNER OF SAID SECTION 16, BEING MONUMENTED BY A FOUND NO. 6 REBAR WITH A 3-1/4 INCH DIAMETER ALUMINUM CAP STAMPED "T4S R65W 1/4 S16/S21 2017 PLS 24657", BEARS SOUTH 00°29'32" EAST, A DISTANCE OF 2627.72 FEET, WITH ALL BEARINGS CONTAINED HEREIN BEING RELATIVE THERETO.

THENCE SOUTH 00°29'32" EAST, ALONG THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 16, A DISTANCE OF 222.65 FEET, TO THE POINT OF BEGINNING;

THENCE CONTINUING ALONG SAID EAST LINE THE FOLLOWING TWO (2) COURSES;

1. SOUTH 00°29'32" EAST, A DISTANCE OF 1200.00 FEET;
2. CONTINUING SOUTH 00°29'32" EAST, A DISTANCE OF 1148.08 FEET TO A POINT ON THE NORTHERLY RIGHT OF WAY LINE OF EAST MISSISSIPPI AVENUE, AS RECORDED IN THE RECORDS OF THE ARAPAHOE COUNTY CLERK AND RECORDER AT RECEPTION NUMBER B8075583;

THENCE ALONG SAID NORTHERLY RIGHT OF WAY LINE THE FOLLOWING TWO (2) COURSES:

1. SOUTH 89°20'37" WEST, A DISTANCE OF 1000.00 FEET;
2. CONTINUING SOUTH 89°20'37" WEST, A DISTANCE OF 987.10 FEET;

THENCE NORTH 00°33'55" WEST, A DISTANCE OF 867.47 FEET;

THENCE SOUTH 89°26'05" WEST, A DISTANCE OF 494.69 FEET TO A POINT OF CURVATURE;

THENCE ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 25.00 FEET, A CENTRAL ANGLE OF 89°52'26", AN ARC LENGTH OF 39.21 FEET, THE CHORD OF WHICH BEARS SOUTH 44°29'52" WEST, 35.32 FEET TO A POINT OF CUSP, SAID POINT BEING A POINT ON THE EASTERLY RIGHT OF WAY LINE OF POWHATON ROAD, AS RECORDED IN THE RECORDS OF SAID CLERK AND RECORDER AT RECEPTION NUMBER B7066149;

THENCE NORTH 00°26'22" WEST, ALONG SAID EASTERLY RIGHT OF WAY LINE, A DISTANCE OF 862.54 FEET;

THENCE NORTH 89°23'35" EAST, A DISTANCE OF 499.00 FEET;

THENCE NORTH 00°26'22" WEST, A DISTANCE OF 827.00 FEET TO A POINT ON THE SOUTHERLY BOUNDARY OF PROPOSED HARMONY SUBDIVISION FILING NO. 14;

THENCE ALONG SAID SOUTHERLY BOUNDARY THE FOLLOWING TWELVE (12) COURSES:

1. NORTH 89°23'35" EAST, A DISTANCE OF 906.39 FEET;
2. NORTH 89°23'35" EAST, A DISTANCE OF 914.61 FEET;
3. SOUTH 78°05'44" EAST, A DISTANCE OF 16.16 FEET;
4. NORTH 89°23'35" EAST, A DISTANCE OF 68.95 FEET TO A POINT OF CURVATURE;
5. ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 40.00 FEET, A CENTRAL ANGLE OF 42°24'03", AN ARC LENGTH OF 29.60 FEET, THE CHORD OF WHICH BEARS SOUTH 69°24'24" EAST, 28.93 FEET TO A POINT OF COMPOUND CURVATURE;
6. ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 54.50 FEET, A CENTRAL ANGLE OF 23°31'52", AN ARC LENGTH OF 22.38 FEET, THE CHORD OF WHICH BEARS SOUTH 36°26'26" EAST, 22.23 FEET TO A POINT OF COMPOUND CURVATURE;
7. ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 204.50 FEET, A CENTRAL ANGLE OF 19°00'37", AN ARC LENGTH OF 67.85 FEET, THE CHORD OF WHICH BEARS SOUTH 15°10'12" EAST, 67.54 FEET TO A POINT OF TANGENCY;
8. SOUTH 05°49'38" EAST, A DISTANCE OF 9.98 FEET;
9. SOUTH 00°29'32" EAST, A DISTANCE OF 40.15 FEET;
10. SOUTH 15°15'19" EAST, A DISTANCE OF 15.70 FEET;
11. SOUTH 00°29'32" EAST, A DISTANCE OF 21.76 FEET;
12. NORTH 86°52'48" EAST, A DISTANCE OF 39.54 FEET, TO THE POINT OF BEGINNING,

SAID PARCEL CONTAINING A CALCULATED AREA OF 5,474,403 SQUARE FEET OR 125.675 ACRES, MORE OR LESS.

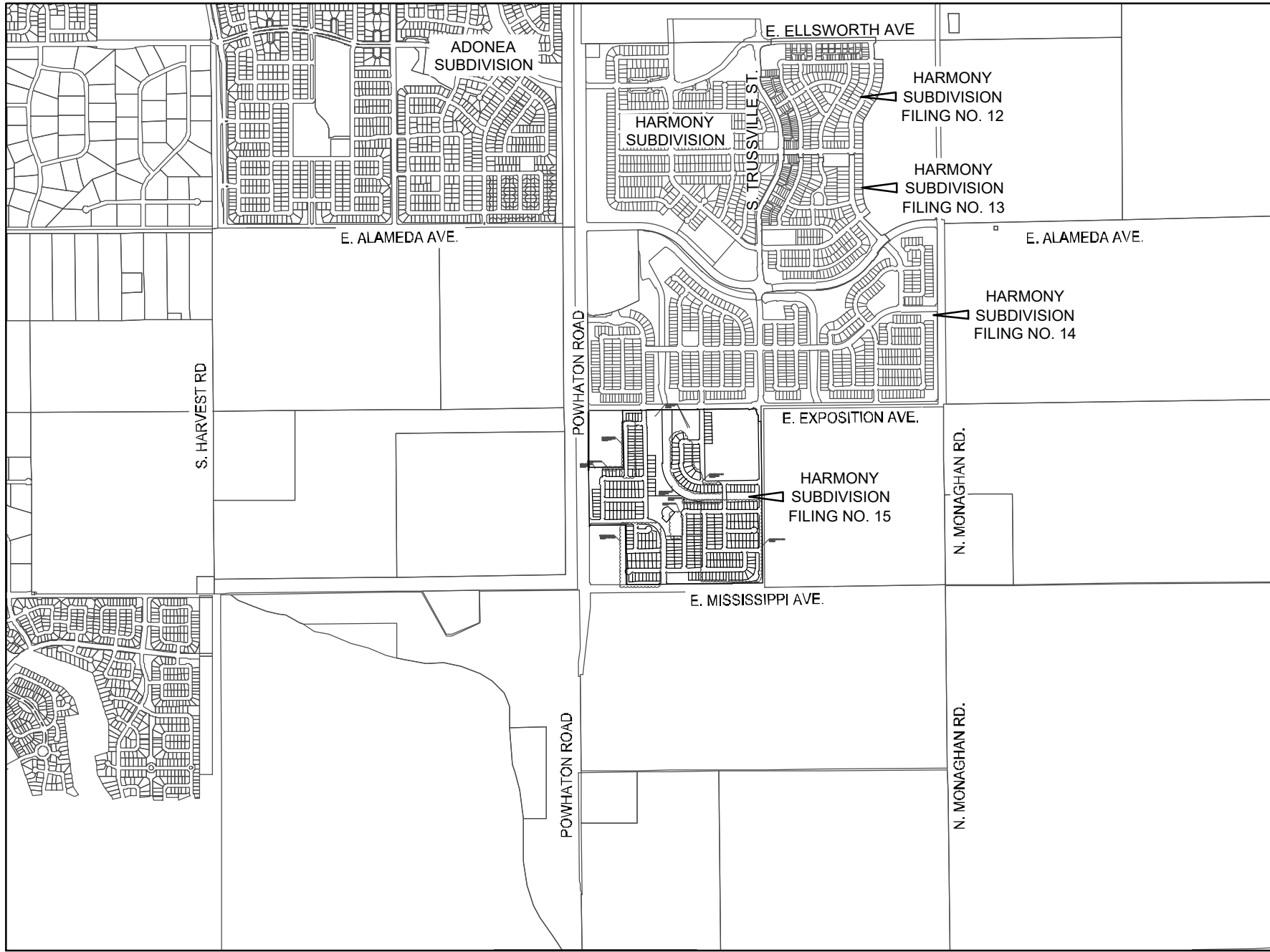
HAVE LAID OUT, PLATTED, AND SUBDIVIDED THE SAME INTO LOTS, BLOCKS, AND TRACTS AS SHOWN ON THIS PLAT, UNDER THE NAME AND STYLE OF HARMONY SUBDIVISION FILING NO. 15, AND BY THESE PRESENTS DO HEREBY DEDICATE TO THE CITY OF AURORA, COLORADO, FOR THE PERPETUAL USE OF THE PUBLIC, THE STREETS AND EASEMENTS AS SHOWN HEREON AND NOT PREVIOUSLY DEDICATED TO THE PUBLIC.

MORTGAGE HOLDER:

THE UNDERSIGNED, BCMP MORTGAGE INVESTMENT CORPORATION, AS MORTGAGE HOLDER ON PART OR ALL OF THE HEREIN SHOWN REAL PROPERTY, DOES HEREBY AGREE AND CONSENT TO THE PLATTING OF SAID PROPERTY AS SHOWN HEREON.

MORTGAGE HOLDER AS

A PART OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE 6th P.M., CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO
SHEET 1 OF 11



VICINITY MAP
SCALE: 1" = 2000'

NOTES:

1. RIGHT-OF-WAY FOR INGRESS AND EGRESS FOR SERVICE AND EMERGENCY VEHICLES IS GRANTED OVER, ACROSS, ON, AND THROUGH ANY AND ALL PRIVATE ROADS, WAYS, AND FIRE LANES NOW OR HEREAFTER ESTABLISHED ON THE DESCRIBED PROPERTY. THE SAME ARE HEREBY DESIGNATED AS FIRE LANES AND EMERGENCY AND SERVICE VEHICLE ROADS, AND SHALL BE POSTED "NO PARKING - FIRE LANE".
2. BASIS OF BEARINGS: BEARINGS ARE BASED IN ACCORDANCE WITH THE CITY OF AURORA HORIZONTAL CONTROL, UPON THE EAST LINE OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, BEARING SOUTH 00°29'32" WEST, 2627.72 FEET AND BEING MONUMENTED AT THE CENTER QUARTER OF SAID SECTION 16 BY A FOUND 2-1/2 INCH DIAMETER ALUMINUM PIPE WITH A 3-1/4 INCH ALUMINUM CAP STAMPED "T4S R65W C1/4 S16 2008 PLS 35593" AND AT THE SOUTH 1/4 CORNER OF SAID SECTION 16 BY A FOUND NO. 6 REBAR WITH A 3-1/4 INCH DIAMETER ALUMINUM CAP STAMPED "T4S R65W 1/4 S16/S21 2017 PLS 24657".
3. THE EASEMENT AREA WITHIN EACH LOT OR TRACT IS TO BE CONTINUOUSLY MAINTAINED BY THE OWNER OF THE LOT OR TRACT EXCEPTING THE CITY OF AURORA FROM SUCH RESPONSIBILITY. ANY STRUCTURES INCONSISTENT WITH THE USE GRANTED IN THE EASEMENT ARE PROHIBITED.
4. TRACTS A, B, C, D, E, F, G, H, I, J, K, L, M, AND N ARE TO BE PRIVATELY OWNED AND MAINTAINED.
5. ALL OWNERS OF LOTS ADJACENT TO POWHATON ROAD, E. EXPOSITION AVENUE, S. TRUSSVILLE STREET, AND E. MISSISSIPPI AVENUE SHALL BE REQUIRED TO COMPLY WITH REQUIREMENTS OF THE AURORA CITY CODE RESTRICTING THE ABILITY TO BUILD A FENCE ALONG THOSE STREETS OR THE TYPES AND SIZES OF FENCES THAT CAN BE BUILT ALONG THOSE STREETS.
6. THE OWNERS OR OCCUPANTS OF THE LANDS HEREIN DESCRIBED SHALL HAVE NO RIGHT OR CAUSE OF ACTION, EITHER IN LAW OR IN EQUITY, FOR DAMAGES OR INJURY TO ANY PERSON OR PROPERTY ARISING OUT OF OR RESULTING DIRECTLY OR INDIRECTLY, FROM THE OVERFLIGHT OF AIRCRAFT, OR FOR DAMAGES OR INJURY TO ANY PERSON OR PROPERTY RESULTING FROM ANY NOISE, NUISANCE, VIBRATIONS OF ANY KIND OR DESCRIPTION RESULTING, DIRECTLY OR INDIRECTLY, FROM AIRCRAFT OVERFLIGHTS PROVIDED, THAT NOTHING CONTAINED IN THE FOREGOING EASEMENT SHALL DIVEST THE OWNERS OR OCCUPANTS, THEIR HEIRS, SUCCESSORS ADMINISTRATORS OR ASSIGNS, OF ANY RIGHT OR CAUSE OF ACTION FOR DAMAGES TO ANY PERSON OR PROPERTY RESULTING FROM THE NEGLIGENT OPERATION OF AIRCRAFT OVERFLIGHTS OVER THE DESCRIBED PREMISES AT ANY ALTITUDE ABOVE GROUND LEVEL.
7. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR LAND BOUNDARY MONUMENT OR ACCESSORY, COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUTE 18-4--508, C.R.S.
8. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY WESTWOOD TO DETERMINE OWNERSHIP OR EASEMENTS OF RECORD, FOR ALL INFORMATION REGARDING EASEMENTS, RIGHTS-OF-WAY, AND TITLE OF RECORD, WESTWOOD RELIED UPON LAND TITLE GUARANTEE COMPANY PROPERTY INFORMATION BINDER NO. RND70754700, HAVING AN EFFECTIVE DATE OF DECEMBER 20, 2021 AT 5:00 P.M.
9. THE LINEAL UNIT USED IN THE PREPARATION OF THIS PLAT IS THE U.S. SURVEY FOOT AS DEFINED BY THE UNITED STATES DEPARTMENT OF COMMERCE, NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY.
10. ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.
11. THE EASEMENTS HEREON SHOWN AND LABELED 6' GAS EASEMENT (6' G.E.) AND 5' GAS EASEMENT (5' G.E.) ARE FOR THE EXCLUSIVE USE AS GAS EASEMENTS; EXCEPT OTHER UTILITIES, SERVICE WALKS, AND DRIVEWAYS MAY CROSS SAID EASEMENTS AT SUBSTANTIALLY RIGHT ANGLES.
12. NON-EXCLUSIVE SIDEWALK EASEMENTS ARE HEREBY GRANTED TO THE CITY OF AURORA FOR PURPOSES OF MAINTAINING, RECONSTRUCTING, CONTROLLING AND USING SUCH SIDEWALKS TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS, PROVIDED THE CITY SHALL NOT INTERFERE WITH ANY OTHER STRUCTURES OR IMPROVEMENTS.
13. PERMANENT STRUCTURES, IMPROVEMENTS, OBJECTS, BUILDINGS, WELLS, WATER METERS AND OTHER OBJECTS THAT MAY INTERFERE WITH THE UTILITY FACILITIES OR USE THEREOF (INTERFERING OBJECTS) SHALL NOT BE PERMITTED WITHIN SAID UTILITY EASEMENTS AND THE UTILITY PROVIDERS, AS GRANTEEES, MAY REMOVE ANY INTERFERING OBJECTS AT NO COST TO SUCH GRANTEEES, INCLUDING, WITHOUT LIMITATION, VEGETATION, PUBLIC SERVICE COMPANY OF COLORADO (PSCO) AND ITS SUCCESSORS RESERVE THE RIGHT TO REQUIRE ADDITIONAL EASEMENTS AND TO REQUIRE THE PROPERTY OWNER TO GRANT PSCO AN EASEMENT ON ITS STANDARD FORM.

OWNER:

MELCOR/TC AURORA LLC, A COLORADO LIMITED LIABILITY COMPANY

SIGNATURE

PRINT NAME PRINT TITLE

NOTARIAL:

STATE OF COLORADO)
COUNTY OF)SS

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS ____ DAY OF _____, 20____ A.D.

BY _____ AS _____ OF MELCOR/TC AURORA LLC, A COLORADO LIMITED LIABILITY COMPANY.

WITNESS MY HAND AND OFFICIAL SEAL

NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

SURVEYOR'S CERTIFICATE:

I, WILLIAM F. HESSELBACH JR, A COLORADO LICENSED PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY THAT I WAS IN RESPONSIBLE CHARGE OF THE SURVEY WORK USED IN THE PREPARATION OF THIS PLAT; THE POSITIONS OF THE PLATTED POINTS SHOWN HEREON HAVE AN ACCURACY OF NOT LESS THAN ONE (1) FOOT IN TEN THOUSAND (10,000) FEET PRIOR TO ADJUSTMENTS; AND ALL BOUNDARY MONUMENTS AND CONTROL CORNERS SHOWN HEREON WERE IN PLACE AS DESCRIBED ON MAY 01, 2021.

WILLIAM F. HESSELBACH JR, PLS NO. 25369
FOR AND ON BEHALF OF WESTWOOD

COVENANTS:

THE UNDERSIGNED OWNERS, FOR THEMSELVES, THEIR HEIRS, SUCCESSORS AND ASSIGNS, COVENANT AND AGREE WITH THE CITY OF AURORA;

NO STRUCTURE CONSTRUCTED ON ANY PORTION OF THE PLATTED LAND SHOWN HEREIN SHALL BE OCCUPIED OR USED UNLESS AND UNTIL ALL PUBLIC IMPROVEMENTS, AS DEFINED BY CHAPTER 146 OF THE CITY CODE OF AURORA, COLORADO, ARE IN PLACE AND ACCEPTED BY THE CITY OR CASH FUNDS OR OTHER SECURITY FOR THE SAME ARE ESCROWED WITH THE CITY OF AURORA AND A CERTIFICATE OF OCCUPANCY HAS BEEN ISSUED BY THE CITY;

ALL ELECTRICAL, COMMUNITY UTILITY LINES AND SERVICES, AND STREET LIGHTING CIRCUITS, EXCEPT AS PROVIDED IN SECTION 126-505 OF THE CITY CODE AS THE SAME MAY BE AMENDED FROM TIME TO TIME, SHALL BE INSTALLED UNDERGROUND;

ALL CROSSINGS OR ENCROACHMENTS, INCLUDING BUT NOT LIMITED, TO PRIVATE LANDSCAPE IRRIGATION SYSTEMS, UNDERDRAINS, OR PRIVATE UTILITIES INTO EASEMENTS OWNED BY THE CITY OF AURORA ARE ACKNOWLEDGED BY THE UNDERSIGNED AS BEING SUBJECT TO THE CITY OF AURORA'S USE AND OCCUPANCY OF SAID EASEMENTS AND RIGHTS-OF-WAY, THE UNDERSIGNED, THEIR SUCCESSORS AND ASSIGNS, HEREBY AGREE TO INDEMNIFY AND HOLD HARMLESS THE CITY OF AURORA FOR ANY LOSS, DAMAGE, OR REPAIR TO PRIVATE LANDSCAPE IRRIGATION SYSTEMS, UNDERDRAINS, OR PRIVATE UTILITIES THAT MAY RESULT FROM THE CITY OF AURORA'S USE AND OCCUPANCY OR EXERCISE OF ITS RIGHTS IN SAID EASEMENTS AND RIGHTS OF WAY. THE UNDERSIGNED, ITS SUCCESSORS AND ASSIGNS, FURTHER AGREES TO REMOVE, REPAIR, REPLACE, RELOCATE, MODIFY, OR OTHERWISE ADJUST SAID PRIVATE LANDSCAPE IRRIGATION SYSTEMS, UNDERDRAINS, PRIVATE DETENTION POND AND DRAINAGE FEATURES, OR PRIVATE UTILITIES UPON REQUEST FROM THE CITY OF AURORA AND AT NO EXPENSE TO THE CITY OF AURORA.

CITY OF AURORA APPROVALS:

THE FOREGOING INSTRUMENT IS APPROVED FOR FILING AND CONVEYANCE OF STREETS AND EASEMENTS, AS SHOWN HEREON AND IS ACCEPTED BY THE CITY OF AURORA, COLORADO, THIS ____ DAY OF _____, 20____ A.D. SUBJECT TO THE CONDITION THAT THE CITY SHALL UNDERTAKE MAINTENANCE OF ANY SUCH STREETS ONLY AFTER CONSTRUCTION HAS BEEN COMPLETED BY THE SUBDIVIDER TO THE CITY OF AURORA SPECIFICATIONS.

CITY ENGINEER DATE

PLANNING DIRECTOR DATE

Send in the Title Commitment updated to be within 120 calendar days of the plat recording date

SENT IN

no 5' GE shown hereon (delete)

REMOVED

REMOVED

Delete this Note - it is not a Plat note

add the 1"x3" rectangle for the Recorder's information

ADDED

ENGINEER/SURVEYOR

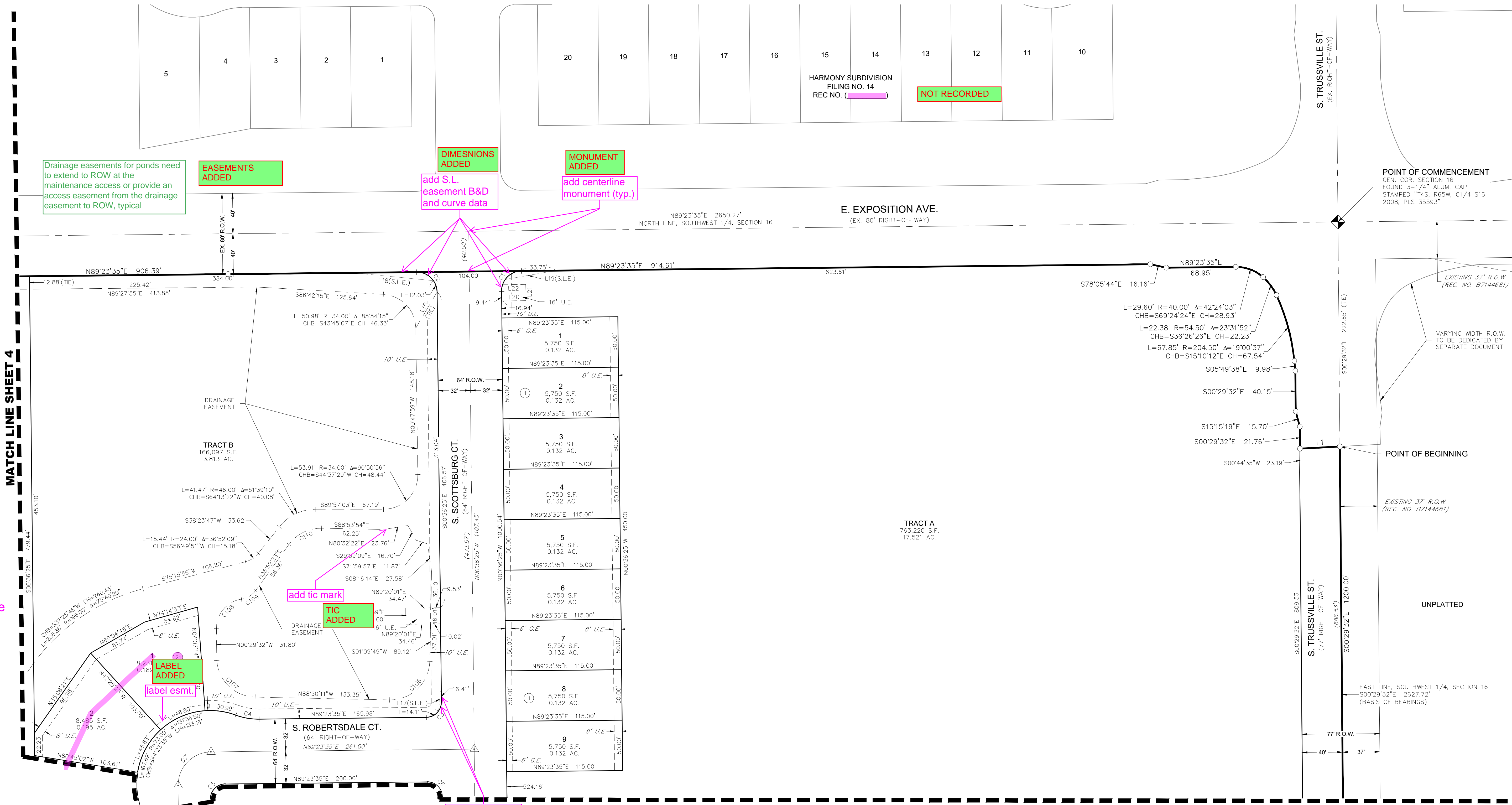
Westwood
10333 E. Dry Creek Rd., Suite 240
Englewood, CO 80112
Tel: (720) 482-9526 / Fax: (720) 482-9546

A PART OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE 6th P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO
SHEET 2 OF 11



HARMONY SUBDIVISION FILING NO. 15

A PART OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE 6th P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO
SHEET 3 OF 11

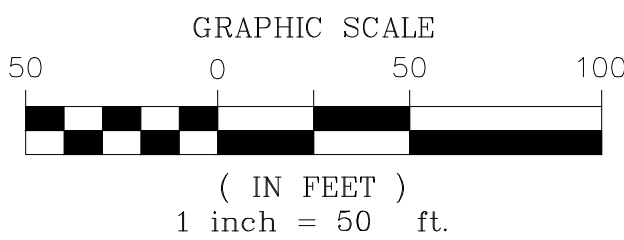
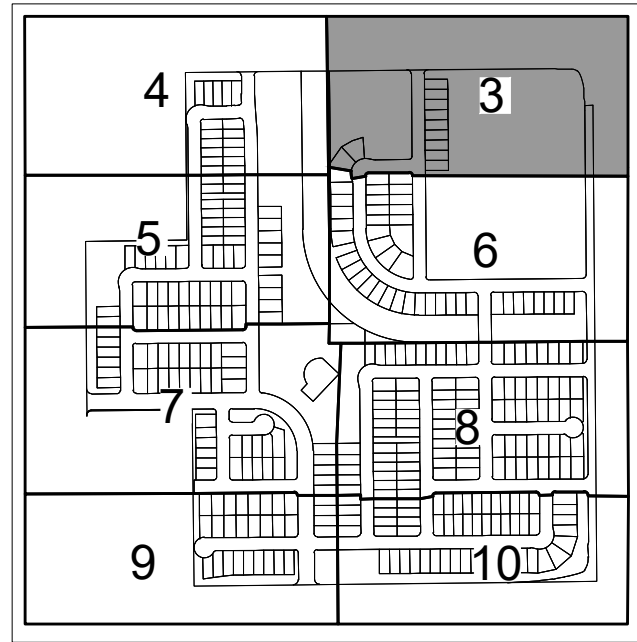


MATCH LINE SHEET 4

MATCH LINE SHEET 6

KEY MAP

LEGEND	
	FOUND SECTION CORNER AS DESCRIBED
	SET NO. 5 REBAR, 30" LONG, w/1-1/4" ORANGE PLASTIC CAP STAMPED WESTWOOD PLS 25369
	RECOVERED NO. 5 REBAR, 30" LONG, w/1-1/4" ORANGE PLASTIC CAP STAMPED WESTWOOD PLS 25369
	MONUMENT BOXES WITH 30" 3/4" REBAR WITH CAP BEARING THE REGISTRATION NUMBER OF THE RESPONSIBLE SURVEYOR, TO BE SET AFTER CONSTRUCTION IS COMPLETED PER SECTION 147-47 AURORA CITY CODE AND PER SEC. 38-51-105-9(A & B) COLORADO REVISED STATUTES.
	BLOCK NUMBER
	DRAINAGE EASEMENT
	UTILITY EASEMENT
	ACCESS AND UTILITY EASEMENT
	SIDEWALK EASEMENT
	GAS EASEMENT
	SIGHT LINE EASEMENT
	RIGHT-OF-WAY



NOTE: SEE SHEET 12 FOR LINE & CURVE TABLES

HARMONY SUBDIVISION FILING NO. 15 FINAL PLAT J.N. R0033209.00 PREPARED: 06/03/2022 REVISED: SHEET 3 OF 11

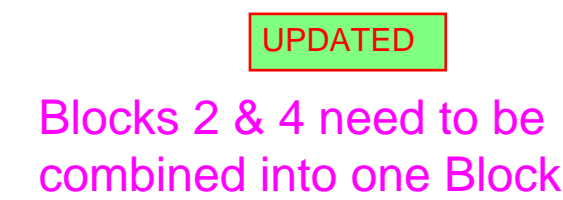
ENGINEER/SURVEYOR






Westwood

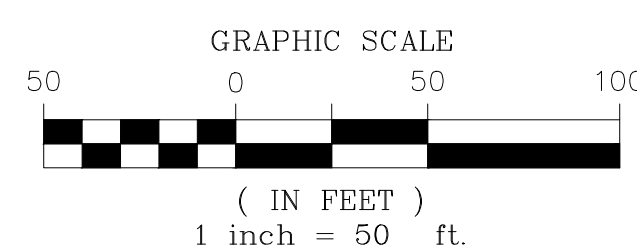
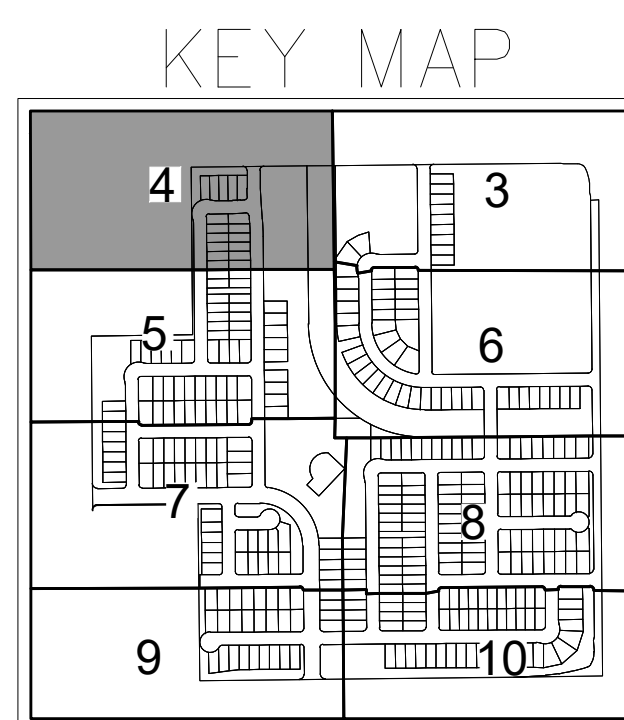
10333 E. Dry Creek Rd., Suite 240
Englewood, CO 80112
Tel: (720) 482-9526 / Fax: (720) 482-9546

N:\PROJECTS\30175604 SAND CREEK\CAD\SURVEY\PLAT\HARMONY F15 - PLAT SHEETS.DWG, AALAMAR, 5/10/22

A PART OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE 6th P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO
SHEET 4 OF 11



LEGEND	
	FOUND SECTION CORNER AS DESCRIBED
	SET NO. 5 REBAR, 30' LONG, w/1"-1/4" ORANGE PLASTIC CAP STAMPED WESTWOOD PL 23369
	RECOVERED NO. 5 REBAR, 30' LONG, w/1"-1/4" ORANGE PLASTIC CAP STAMPED WESTWOOD PL 23569
	MONUMENT BOXES WITH 30', 3/4" REBAR WITH CAP BEARING THE REGISTRATION NUMBER OF THE RESPONSIBLE SURVEYOR, TO BE SET AFTER CONSTRUCTION IS COMPLETED PER SECTION 147-47 AURORA CITY CODE AND PER SEC. 38-51-105-(A & B) COLORADO REVISED STATUTES.
	BLOCK NUMBER
D.E.	DRAINAGE EASEMENT
U.E.	UTILITY EASEMENT
A.U.E.	ACCESS AND UTILITY EASEMENT
S.W.E.	SIDEWALK EASEMENT
G.E.	GAS EASEMENT
S.L.E.	SIGHT LINE EASEMENT
R.O.W.	RIGHT-OF-WAY



NOTE: SEE SHEET 12 FOR LINE & CURVE TABLES

ENGINEER/SURVEYOR

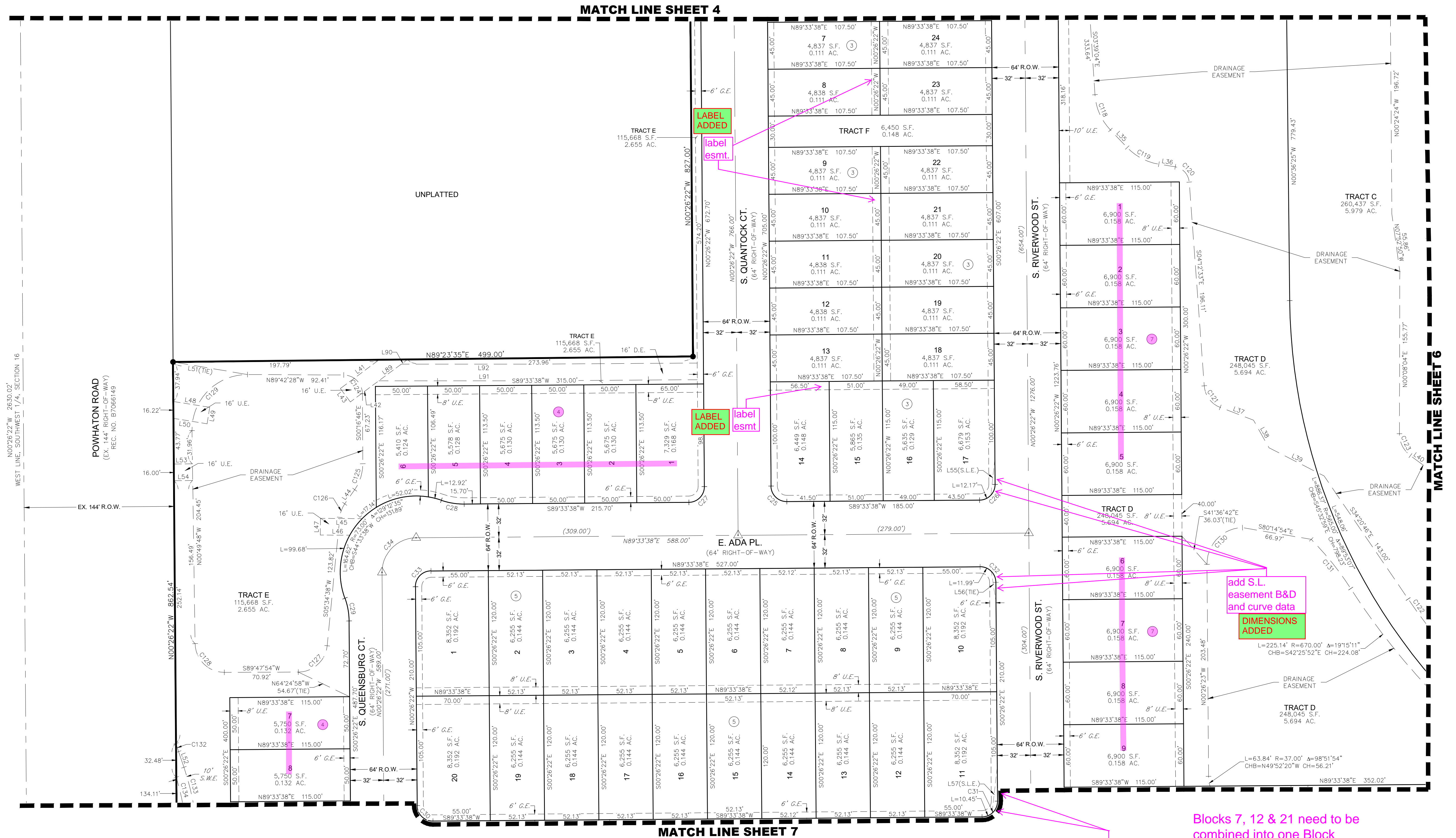
Westwood

10333 E. Dry Creek Rd., Suite 240
Englewood, CO 80112
Tel: (720) 482-9526 / Fax: (720) 482-9546

HARMONY SUBDIVISION FILING NO. 15 FINAL PLAT J.N. R0033209.00 PREPARED: 05/03/2022 REVISED: SHEET 4 OF 11

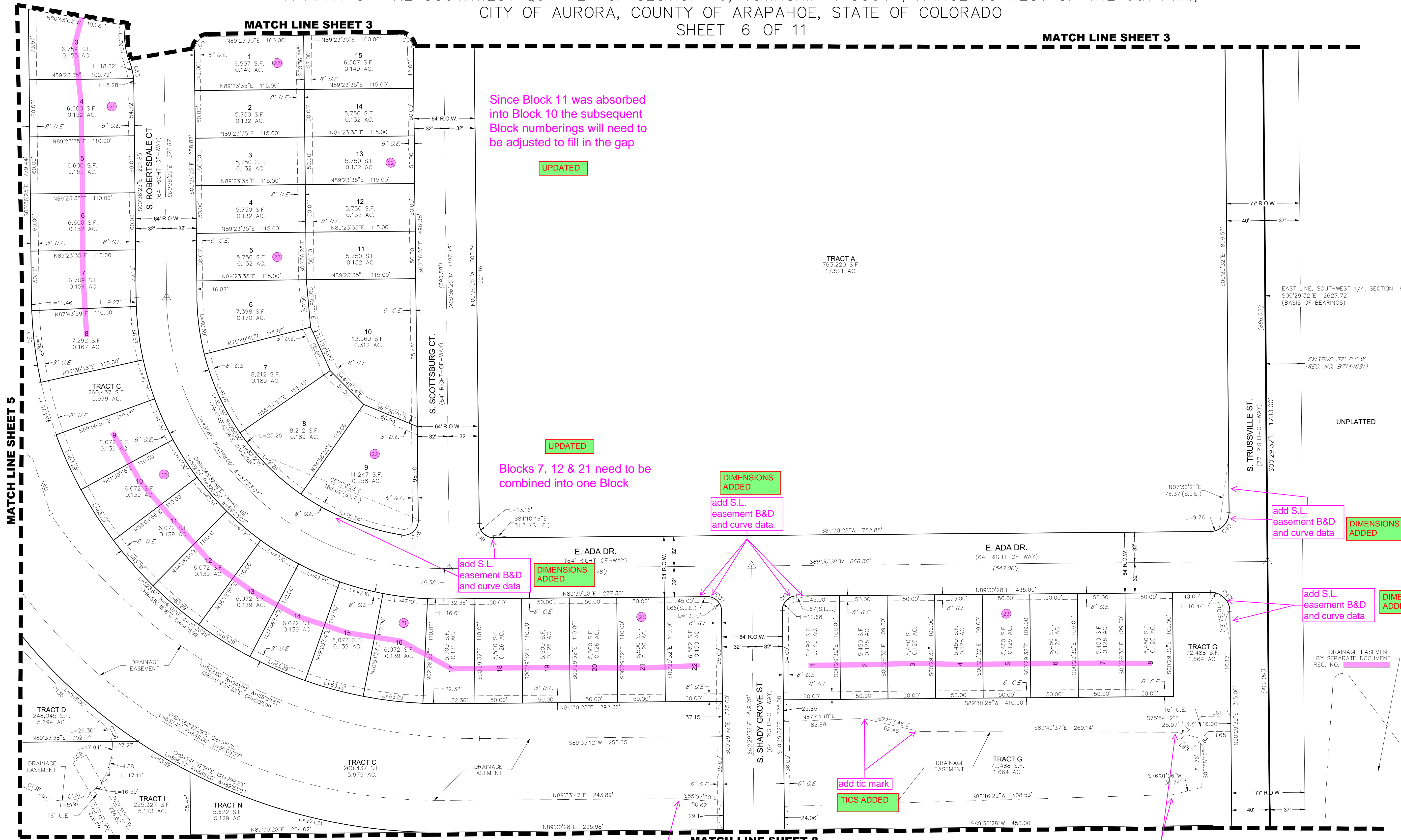
HARMONY SUBDIVISION FILING NO. 15

A PART OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE 6th P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO
SHEET 5 OF 11

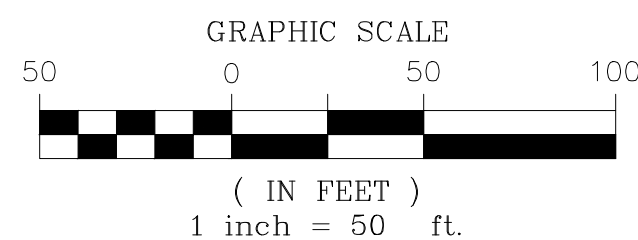
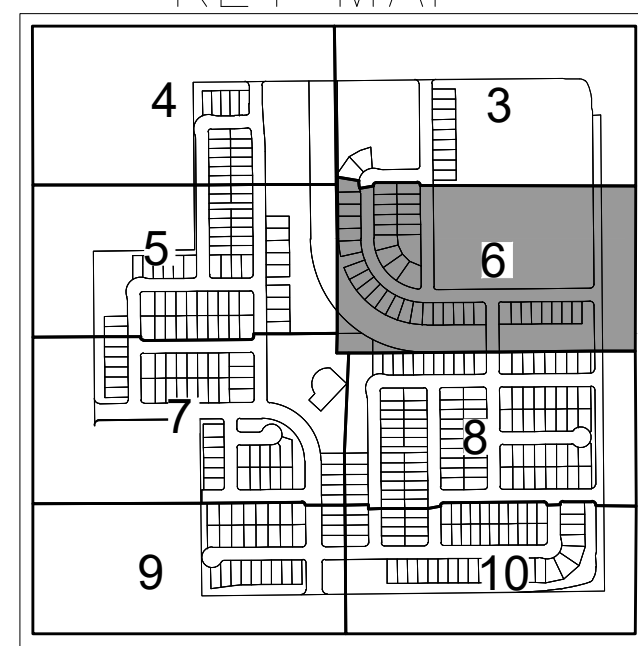


HARMONY SUBDIVISION FILING NO. 15

A PART OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE 6th P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO
SHEET 6 OF 11



LEGEND	
	FOUND SECTION CORNER AS DESCRIBED
	SET NO. 5 REBAR, 30" LONG, w/1-1/4" ORANGE PLASTIC CAP, STAMPED WESTWOOD PLS 25369
	RECOVERED NO. 5 REBAR, 30" LONG, w/1-1/4" ORANGE PLASTIC CAP, STAMPED WESTWOOD PLS 25369
	MONUMENT BOXES WITH 30", 3/4" REBAR WITH CAP BEARING THE REGISTRATION NUMBER OF THE RESPONSIBLE SURVEYOR, TO BE SET AFTER CONSTRUCTION IS COMPLETED PER SECTION 147-47 AURORA CITY CODE AND PER SEC. 38-51-105-9(A & B) COLORADO REVISED STATUTES.
	BLOCK NUMBER
	D.E. DRAINAGE EASEMENT
	U.E. UTILITY EASEMENT
	A.U.E. ACCESS AND UTILITY EASEMENT
	S.W.E. SIDEWALK EASEMENT
	G.E. GAS EASEMENT
	S.L.E. SIGHT LINE EASEMENT
	R.O.W. RIGHT-OF-WAY



NOTE: SEE SHEET 12 FOR LINE & CURVE TABLES

ENGINEER/SURVEYOR

Westwood
10333 E. Dry Creek Rd., Suite 240
Englewood, CO 80112
Tel: (720) 482-9526 / Fax: (720) 482-9546

HARMONY SUBDIVISION FILING NO. 15

A PART OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE 6th P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO
SHEET 7 OF 11

UPDATED

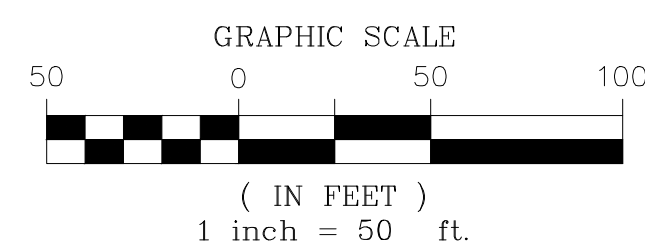
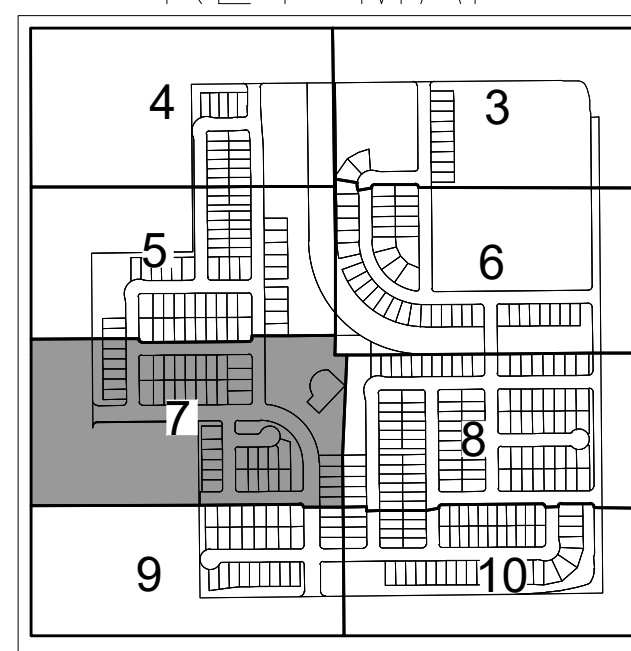
Since Block 11 was absorbed
into Block 10 the subsequent
Block numberings will need to
be adjusted to fill in the gap



MATCH LINE SHEET 8

KEY MAP

LEGEND	
	FOUND SECTION CORNER AS DESCRIBED
	SET NO. 5 REBAR, 30" LONG, w/1-1/4" ORANGE PLASTIC CAP STAMPED WESTWOOD PLS 25369
	RECOVERED NO. 5 REBAR, 30" LONG, w/1-1/4" ORANGE PLASTIC CAP STAMPED WESTWOOD PLS 25369
	MONUMENT BOXES WITH 30", 3/4" REBAR WITH CAP BEARING THE REGISTRATION NUMBER OF THE RESPONSIBLE SURVEYOR, TO BE SET AFTER CONSTRUCTION IS COMPLETED PER SECTION 147-47 AURORA CITY CODE AND PER SEC. 38-51-105-9(A & B) COLORADO REVISED STATUTES.
	BLOCK NUMBER
	D.E. DRAINAGE EASEMENT
	U.E. UTILITY EASEMENT
	A.U.E. ACCESS AND UTILITY EASEMENT
	S.W.E. SIDEWALK EASEMENT
	G.E. GAS EASEMENT
	S.L.E. SIGHT LINE EASEMENT
	R.O.W. RIGHT-OF-WAY



NOTE: SEE SHEET 12 FOR LINE & CURVE TABLES

ENGINEER/SURVEYOR

Westwood

10333 E. Dry Creek Rd., Suite 240
Englewood, CO 80112
Tel: (720) 482-9526 / Fax: (720) 482-9546

HARMONY SUBDIVISION FILING NO. 15

A PART OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE 6th P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO

SHEET 8 OF 11

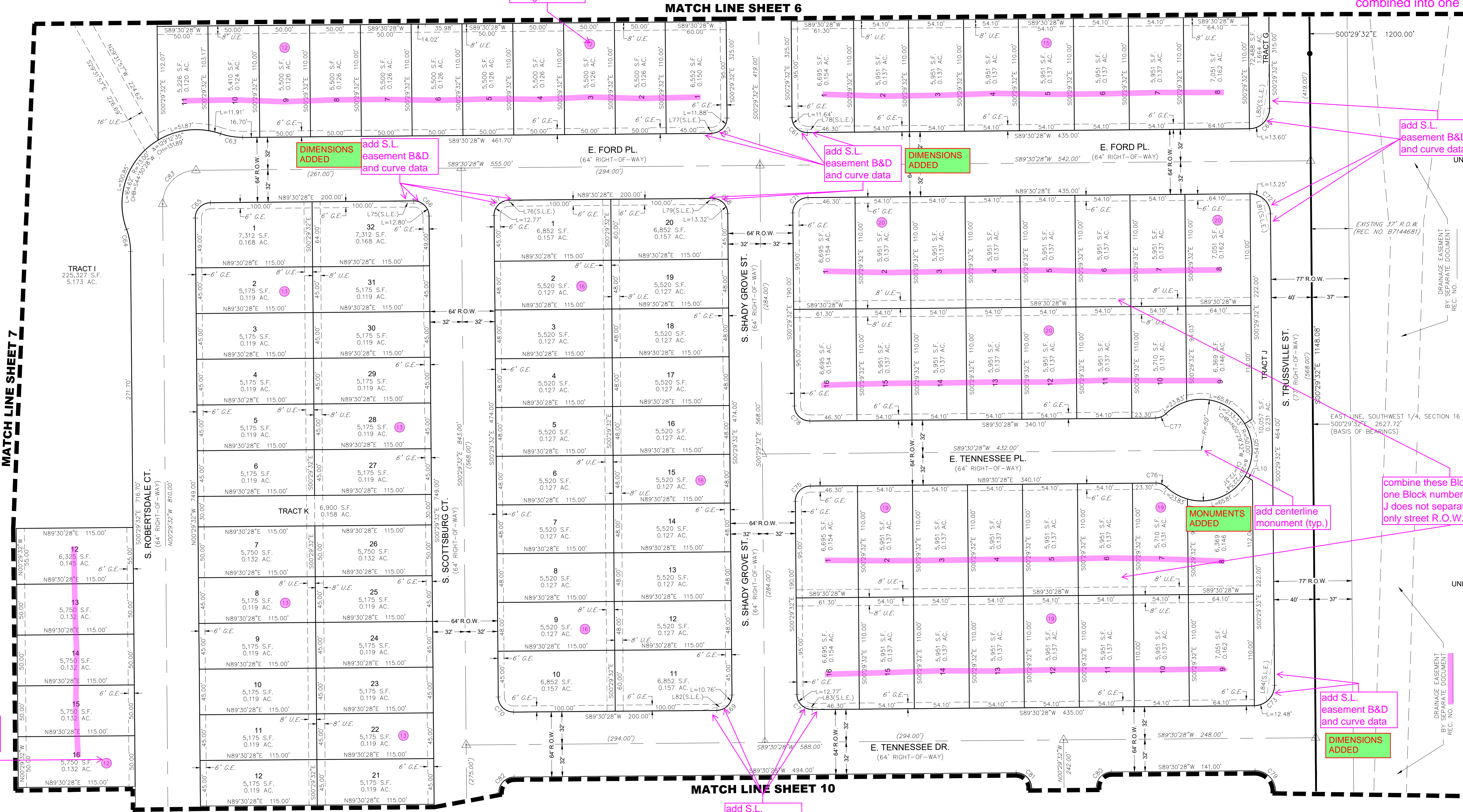
Blocks 12 & 21 need to be combined into one Block

This Block number may be changed

Blocks 15 & 23 need to be combined into one Block

Since Block 11 was absorbed into Block 10 the subsequent Block numberings will need to be adjusted to fill in the gap

Blocks 19 & 20 need to be combined into one Block



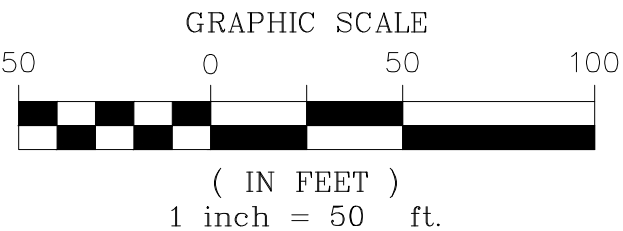
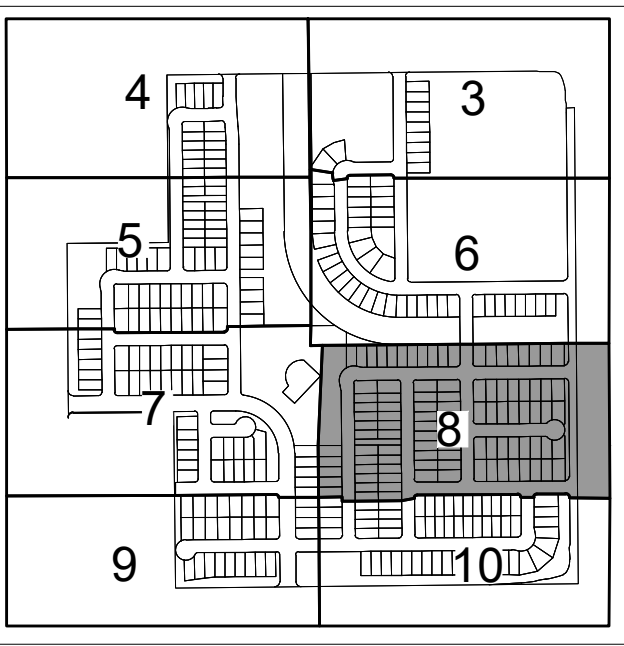
MATCH LINE SHEET 7

MATCH LINE SHEET 6

MATCH LINE SHEET 10

KEY MAP

LEGEND	
	FOUND SECTION CORNER AS DESCRIBED
	SET NO. 5 REBAR, 30" LONG, w/1-1/4" ORANGE PLASTIC CAP STAMPED WESTWOOD PLS 25369
	RECOVERED NO. 5 REBAR, 30" LONG, w/1-1/4" ORANGE PLASTIC CAP STAMPED WESTWOOD PLS 25369
	MONUMENT BOXES WITH 30" 3/4" REBAR WITH CAP BEARING THE REGISTRATION NUMBER OF THE RESPONSIBLE SURVEYOR, TO BE SET AFTER CONSTRUCTION IS COMPLETED PER SECTION 147-47 AURORA CITY CODE AND PER SEC. 38-51-105-9(A & B) COLORADO REVISED STATUTES.
	BLOCK NUMBER
	DRAINAGE EASEMENT
	UTILITY EASEMENT
	ACCESS AND UTILITY EASEMENT
	SIDEWALK EASEMENT
	GAS EASEMENT
	SIGHT LINE EASEMENT
	RIGHT-OF-WAY



NOTE: SEE SHEET 12 FOR LINE & CURVE TABLES

HARMONY SUBDIVISION FILING NO. 15

A PART OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE 6th P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO
SHEET 9 OF 11

UPDATED

Since Block 11 was absorbed
into Block 10 the subsequent
Block numberings will need to
be adjusted to fill in the gap

UPDATED

This Block
number may be
changed

MATCH LINE SHEET 7

MATCH LINE SHEET 10

UPDATED

with Block 11 changing to 10 on this
page. There may have to be shifts in
the numbering of some or more Block
throughout the Subdivision to
accommodate this change

MONUMENTS
ADDED
add centerline
monument (typ.)

UPDATED
change to 10

renumber these to 17 - 25,
Block 10 - the Tract L is not
a separator between Blocks,
only street R.O.W.'s

UPDATED

add centerline
monument (typ.)
MONUMENTS
ADDED

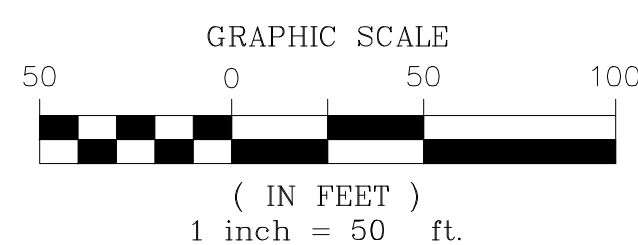
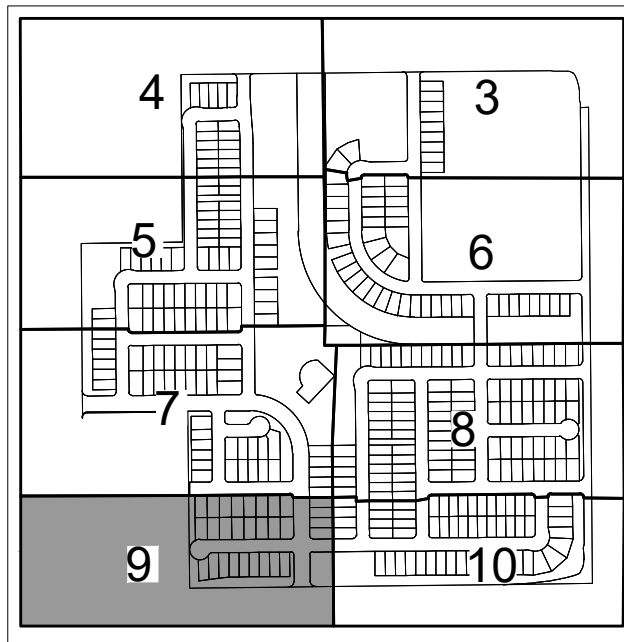
NOT
RECORDED

DRAINAGE EASEMENT
BY SEPARATE DOCUMENT
REC. NO.

LEGEND

◆	FOUND SECTION CORNER AS DESCRIBED
●	SET NO. 5 REBAR, 30" LONG, w/1-1/4" ORANGE PLASTIC CAP STAMPED WESTWOOD PLS 25369
○	RECOVERED NO. 5 REBAR, 30" LONG, w/1-1/4" ORANGE PLASTIC CAP STAMPED WESTWOOD PLS 25369
△	MONUMENT BOXES WITH 30", 3/4" REBAR WITH CAP BEARING THE REGISTRATION NUMBER OF THE RESPONSIBLE SURVEYOR, TO BE SET AFTER CONSTRUCTION IS COMPLETED PER SECTION 147-47 AURORA CITY CODE AND PER SEC. 38-51-105-9(A & B) COLORADO REVISED STATUTES.
⊗	BLOCK NUMBER
D.E.	DRAINAGE EASEMENT
U.E.	UTILITY EASEMENT
A.U.E.	ACCESS AND UTILITY EASEMENT
S.W.E.	SIDEWALK EASEMENT
G.E.	GAS EASEMENT
S.L.E.	SIGHT LINE EASEMENT
R.O.W.	RIGHT-OF-WAY

KEY MAP



NOTE: SEE SHEET 12 FOR LINE & CURVE TABLES

ENGINEER/SURVEYOR

Westwood

10333 E. Dry Creek Rd., Suite 240
Englewood, CO 80112
Tel: (720) 482-9526 / Fax: (720) 482-9546

HARMONY SUBDIVISION FILING NO. 15

A PART OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE 6th P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO
SHEET 10 OF 11

UPDATED

Since Block 11 was absorbed
into Block 10 the subsequent
Block numberings will need to
be adjusted to fill in the gap

MATCH LINE SHEET 8



MATCH LINE SHEET 9

This Block
number may be
changed

UPDATED

The park is still not platted as
its own tract. Subdivide here?

PARK TRACT ADDED

NOT RECORDED

UNPLATTED

UNPLATTED

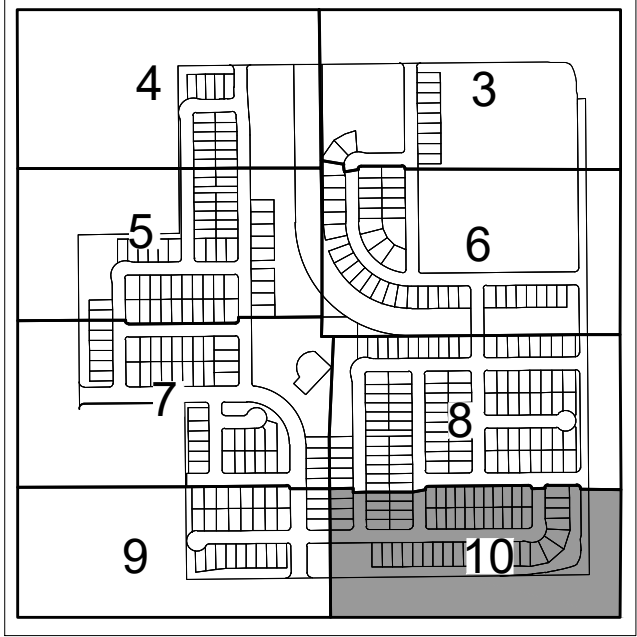
DRAINAGE EASEMENT
BY SEPARATE DOCUMENT
REC. NO. [REDACTED]

NOT RECORDED

LEGEND

◆	FOUND SECTION CORNER AS DESCRIBED
●	SET NO. 5 REBAR, 30" LONG, w/1-1/4" ORANGE PLASTIC CAP STAMPED WESTWOOD PLS 25369
○	RECOVERED NO. 5 REBAR, 30" LONG, w/1-1/4" ORANGE PLASTIC CAP STAMPED WESTWOOD PLS 25369
△	MONUMENT BOXES WITH 30", 3/4" REBAR WITH CAP BEARING THE REGISTRATION NUMBER OF THE RESPONSIBLE SURVEYOR, TO BE SET AFTER CONSTRUCTION IS COMPLETED PER SECTION 147-47 AURORA CITY CODE AND PER SEC. 38-51-105-9(A & B) COLORADO REVISED STATUTES.
⊗	BLOCK NUMBER
D.E.	DRAINAGE EASEMENT
U.E.	UTILITY EASEMENT
A.U.E.	ACCESS AND UTILITY EASEMENT
S.W.E.	SIDEWALK EASEMENT
G.E.	GAS EASEMENT
S.L.E.	SIGHT LINE EASEMENT
R.O.W.	RIGHT-OF-WAY

KEY MAP



GRAPHIC SCALE



(IN FEET)
1 inch = 50 ft.

NOTE: SEE SHEET 12 FOR LINE & CURVE TABLES

ENGINEER/SURVEYOR

Westwood

10333 E. Dry Creek Rd., Suite 240
Englewood, CO 80112
Tel: (720) 482-9526 / Fax: (720) 482-9546

HARMONY SUBDIVISION FILING NO. 15

A PART OF THE SOUTHWEST QUARTER OF SECTION 16, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE 6th P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO
SHEET 11 OF 11

CURVE TABLE					
CURVE NO.	RADIUS	DELTA	LENGTH	CHORD DIRECTION	CHORD LENGTH
C1	20.00'	90°00'00"	31.42'	S44°23'35"W	28.28'
C2	20.00'	90°00'00"	31.42'	N45°36'25"W	28.28'
C3	15.00'	90°00'00"	23.56'	N44°23'35"E	21.21'
C4	65.00'	20°48'25"	23.60'	S80°12'13"E	23.48'
C5	15.00'	90°00'00"	23.56'	S44°23'35"W	21.21'
C6	15.00'	90°00'00"	23.56'	N45°36'25"W	21.21'
C7	33.00'	90°00'00"	51.84'	S44°23'35"W	46.67'
C8	20.00'	90°00'00"	31.42'	S44°23'35"W	28.28'
C9	968.00'	4°46'36"	80.70'	S02°59'43"E	80.68'
C10	1032.00'	4°56'40"	89.06'	N02°54'42"W	89.03'
C11	15.00'	90°00'00"	23.56'	N50°23'01"W	21.21'
C12	532.00'	4°56'40"	45.91'	N87°05'18"E	45.89'
C13	15.00'	90°00'00"	23.56'	S44°33'38"W	21.21'
C14	65.00'	19°36'18"	22.24'	N10°14'30"W	22.13'
C15	73.00'	129°12'35"	164.62'	S44°33'38"W	131.89'
C16	65.00'	19°36'18"	22.24'	S80°38'13"E	22.13'
C17	468.00'	4°56'40"	40.39'	N87°05'18"E	40.37'
C18	15.00'	87°25'38"	22.89'	N40°54'10"E	20.73'
C19	1032.00'	2°12'14"	39.70'	S01°42'32"E	39.69'
C20	20.00'	90°00'00"	31.42'	N45°36'24"W	28.28'
C21	1000.00'	4°46'36"	83.37'	S02°59'43"E	83.35'
C22	500.00'	4°56'40"	43.15'	N87°05'18"E	43.13'
C23	33.00'	90°00'00"	51.84'	S44°33'38"W	46.67'
C24	968.00'	4°56'40"	83.53'	N02°54'42"W	83.51'
C25	15.00'	89°59'57"	23.56'	S45°26'23"E	21.21'
C26	15.00'	90°00'00"	23.56'	N44°33'38"E	21.21'
C27	15.00'	90°00'00"	23.56'	N44°33'38"E	21.21'
C28	65.00'	19°36'18"	22.24'	S80°38'13"E	22.13'
C29	65.00'	19°36'18"	22.24'	N10°14'30"W	22.13'
C30	15.00'	90°00'00"	23.56'	S45°26'22"E	21.21'
C31	15.00'	90°00'00"	23.56'	N44°33'38"E	21.21'
C32	15.00'	90°00'00"	23.56'	N45°26'22"W	21.21'
C33	15.00'	90°00'00"	23.56'	S44°33'38"W	21.21'
C34	33.00'	90°00'00"	51.84'	S44°33'38"W	46.67'
C35	65.00'	20°48'25"	23.60'	N11°00'38"W	23.48'

CURVE TABLE					
CURVE NO.	RADIUS	DELTA	LENGTH	CHORD DIRECTION	CHORD LENGTH
C36	430.00'	11°47'19"	88.47'	S06°30'05"E	88.32'
C37	15.00'	90°00'00"	23.56'	N45°29'32"W	21.21'
C38	15.00'	99°47'42"	26.13'	N49°17'26"E	22.95'
C39	15.00'	89°53'07"	23.53'	S45°32'59"E	21.19'
C40	20.00'	90°00'00"	31.42'	N44°30'28"E	28.28'
C41	15.00'	90°00'00"	23.56'	S44°30'28"W	21.21'
C42	20.00'	90°00'00"	31.42'	N45°29'32"W	28.28'
C43	15.00'	90°00'00"	23.56'	N44°33'38"E	21.21'
C44	25.00'	89°59'59"	39.27'	S45°26'22"E	35.36'
C45	25.00'	90°00'00"	39.27'	S44°33'38"W	35.36'
C46	15.00'	90°00'00"	23.56'	N45°26'22"W	21.21'
C47	15.00'	90°00'00"	23.56'	N44°33'38"E	21.21'
C48	15.00'	90°00'00"	23.56'	S44°33'38"W	21.21'
C49	15.00'	90°00'00"	23.56'	N45°26'22"W	21.21'
C50	15.00'	90°00'00"	23.56'	N44°33'38"E	21.21'
C51	15.00'	90°00'00"	23.56'	S45°26'22"E	21.21'
C52	15.00'	90°00'00"	23.56'	S44°33'38"W	21.21'
C53	15.00'	90°03'10"	23.58'	N44°32'03"E	21.22'
C54	15.00'	90°00'00"	23.56'	S45°26'22"E	21.21'
C55	15.00'	90°00'00"	23.56'	S44°33'38"W	21.21'
C56	15.00'	63°30'10"	16.62'	N57°48'33"E	15.79'
C57	15.00'	90°00'00"	23.56'	S45°26'22"E	21.21'
C58	15.00'	89°56'50"	23.55'	N45°27'57"W	21.20'
C59	15.00'	82°16'47"	21.54'	S41°34'45"E	19.74'
C60	20.00'	90°00'00"	31.42'	N44°30'28"E	28.28'
C61	15.00'	90°00'00"	23.56'	S45°29'32"E	21.21'
C62	15.00'	90°00'00"	23.56'	N44°30'28"E	21.21'
C63	65.00'	19°36'18"	22.24'	S80°41'23"E	22.13'
C64	65.00'	19°36'18"	22.24'	N10°17'41"W	22.13'
C65	15.00'	90°00'00"	23.56'	S44°30'28"W	21.21'
C66	15.00'	90°00'00"	23.56'	N45°29'32"W	21.21'
C67	15.00'	90°00'00"	23.56'	S44°30'28"W	21.21'
C68	15.00'	90°00'00"	23.56'	N45°29'32"W	21.21'
C69	15.00'	90°00'00"	23.56'	N44°30'28"E	21.21'
C70	15.00'	90°00'00"	23.56'	S45°29'32"E	21.21'

CURVE TABLE					
CURVE NO.	RADIUS	DELTA	LENGTH	CHORD DIRECTION	CHORD LENGTH
C71	15.00'	90°00'00"	23.56'	S44°30'28"W	21.21'
C72	20.00'	90°00'00"	31.42'	N45°29'32"W	28.28'
C73	20.00'	90°00'00"	31.42'	N44°30'28"E	28.28'
C74	15.00'	90°00'00"	23.56'	S45°29'32"E	21.21'
C75	15.00'	90°00'00"	23.56'	S44°30'28"W	21.21'
C76	15.00'	43°41'27"	11.44'	N68°38'48"W	11.16'
C77	15.00'	43°41'27"	11.44'	N67°39'44"E	11.16'
C78	15.00'	90°00'00"	23.56'	S45°29'32"E	21.21'
C79	20.00'	90°00'00"	31.42'	N45°29'32"W	28.28'
C80	15.00'	90°00'00"	23.56'	S44°30'28"W	21.21'
C81	15.00'	90°00'00"	23.56'	N45°29'32"W	21.21'
C82	15.00'	90°00'00"	23.56'	S44°30'28"W	21.21'
C83	33.00'	90°00'00"	51.84'	S44°30'28"W	46.67'
C84	15.00'	90°03'10"	23.58'	N44°32'03"E	21.22'
C85	15.00'	63°30'05"	16.62'	S57°48'36"W	15.79'
C86	15.00'	89°46'58"	23.51'	N45°32'53"W	21.17'
C87	25.00'	90°00'00"	39.27'	N44°20'37"E	35.36'
C88	25.00'	90°00'00"	39.27'	S45°39'23"E	35.36'
C89	15.00'	90°09'51"	23.60'	S44°25'32"W	21.24'
C90	15.00'	90°00'00"	23.56'	S45°29'32"E	21.21'
C91	15.00'	90°00'00"	23.56'	N44°30'28"E	21.21'
C92	15.00'	90°00'00"	23.56'	S45°29'32"E	21.21'
C93	15.00'	90°00'00"	23.56'	N44°30'28"E	21.21'
C94	15.00'	90°00'00"	23.56'	S45°29'32"E	21.21'
C95	15.00'	90°00'00"	23.56'	N44°30'28"E	21.21'
C96	65.00'	19°36'18"	22.24'	S10°17'41"E	22.13'
C97	65.00'	19°36'18"	22.24'	N80°41'23"W	22.13'
C98	1951.00'	4°41'10"	159.57'	N87°00'01"E	159.52'
C99	1461.34'	2°34'10"	65.53'	N83°22'24"E	65.53'
C100	1460.85'	0°27'43"	11.78'	N81°13'11"E	11.78'
C101	472.01'	10°56'40"	90.16'	N75°36'13"E	90.02'
C102	32.00'	34°27'33"	19.25'	N52°54'06"E	18.96'
C103	92.00'	42°33'37"	68.34'	N14°23'31"E	66.78'
C104	843.00'	3°53'23"	57.23'	S04°56'36"E	57.22'
C105	33.00'	90°00'00"	51.84'	N44°30'28"E	46.67'

CURVE TABLE					
CURVE NO.	RADIUS	DELTA	LENGTH	CHORD DIRECTION	CHORD LENGTH
C106	39.00'	90°00'00"	61.26'	N46°09'49"E	55.15'
C107	39.00'	85°01'34"	57.88'	S46°19'24"E	52.71'
C108	29.00'	82°13'22"	41.62'	S40°37'09"W	38.14'
C109	21.00'	45°51'27"	16.81'	N58°48'06"E	16.36'
C110	39.00'	55°17'02"	37.63'	S63°30'54"W	36.19'
C111	29.00'	90°00'13"	45.55'	S44°27'48"W	41.01'
C112	61.00'	89°13'26"	94.99'	N44°04'25"E	85.68'
C113	29.00'	92°20'12"	46.74'	S42°31'02"W	41.84'
C114	35.00'	72°23'59"	44.23'	S53°11'35"W	41.34'
C115	35.00'	90°10'03"	55.08'	N45°31'23"W	49.57'
C116	35.00'	90°00'00"	54.98'	N44°33'38"E	49.50'
C117	20.00'	89°34'42"	31.27'	S45°39'01"E	28.18'
C118	54.00'	40°02'53"	37.74'	S23°40'30"E	36.98'
C119	54.00'	37°05'18"	34.96'	S62°14'36"E	34.35'
C120	16.00'	76°34'43"	21.38'	N42°29'54"W	19.83'
C121	24.00'	64°51'11"	27.17'	S36°38'08"E	25.74'
C122	549.00'	56°05'27"	537.45'	S62°23'29"E	516.25'
C123	26.00'	53°34'20"	24.31'	S26°39'06"E	23.43'
C124	18.00'	89°25'42"	28.09'	N44°59'37"W	25.33'
C125	43.00'	35°19'57"	26.52'	N17°23'12"E	26.10'
C126	27.00'	29°28'33"	13.89'	S20°18'54"W	13.74'
C127	28.00'	84°13'16"	41.16'	N47°41'16"E	37.55'
C128	28.00'	89°22'18"	43.68'	S45°30'57"E	39.38'
C129	53.00'	91°07'20"	84.29'	S44°43'52"W	75.68'
C130	35.00'	88°55'42"	54.32'	S44°01'28"W	49.03'
C131	292.00'	11°53'32"	60.61'	N38°44'51"W	60.50'
C132	326.00'	1°27'15"	8.27'	S18°01'08"E	8.27'
C133	244.00'	35°59'51"	153.30'	N00°44'50"W	150.79'
C134	234.00'	33°18'17"	136.02'	N00°26'22"W	134.11'
C135	670.00'	1°15'11"	225.14'	S42°25'52"E	224.08'
C136	37.00'	68°28'36"	44.23'	N17°48'40"W	41.64'
C137	49.00'	100°06'28"	85.61'	N66°29'22"E	75.13'
C138	305.00'	35°50'53"	190.83'	N81°22'50"W	187.73'
C139	471.00'	3°37'30"	29.80'	S15°22'40"W	29.80'

LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L1	S86°52'48"W	39.54'
L2	S05°23'01"E	19.64'
L3	N84°36'59"E	19.32'
L4	S84°36'59"W	20.38'
L5	N00°36'25"W	90.00'
L6	N84°36'59"E	66.32'
L7	N36°50'43"W	18.89'
L8	N00°26'22"W	35.68'
L9	N00°26'22"W	18.00'
L10	N59°31'32"W	8.31'
L11	S58°32'28"W	8.31'
L12	N00°26'22"W	18.00'
L13	S74°45'49"W	16.40'
L14	S80°59'19"W	28.41'
L15	S15°10'13"W	19.24'
L16	S30°37'43"W	41.54'
L17	S05°54'05"W	25.41'
L18	S84°25'18"E	80.55'
L19	N80°02'06"E	50.59'
L20	N89°22'09"E	23.98'
L21	S00°37°51"E	16.00'
L22	N89°22'09"E	22.87'

LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L23	S88°41'08"W	34.67'
L24	N89°23'35"E	20.70'
L25	S46°49'33"E	26.53'
L26	N43°10'27"E	16.00'
L27	S46°49'33"E	32.96'
L28	N89°23'35"E	27.03'
L29	N89°23'35"E	33.63'
L30	N81°49'45"E	68.51'
L31	S84°24'00"E	81.49'
L32	S10°25'00"E	65.93'
L33	S89°55'11"W	25.72'
L34	S89°55'11"W	16.69'
L35	S43°41'57"E	23.28'
L36	S80°47'15"E	15.96'
L37	S69°03'44"E	34.18'
L38	S29°20'43"E	30.40'
L39	S62°53'55"E	59.40'
L40	N53°26'16"W	30.23'
L41	S53°26'27"W	46.29'
L42	S53°26'27"W	34.18'
L43	N36°33'33"W	16.00'
L44	N35°03'11"E	16.66'

LINE TABLE		
LINE NO.	DIRECTION	LENGTH
L45	S89°40'54"E	40.29'
L46	S89°40'54"E	28.42'
L47	N00°19'06"E	16.00'
L48	N81°00'05"W	35.37'
L49	S08°59'55"W	16.00'
L50	N81°00'05"W	32.71'
L51	S80°26'17"E	72.45'
L52	S18°44'45"E	15.81'
L53	S89°27'36"W	17.89'
L54	S89°27'36"W	18.00'
L55	S06°06'33"W	36.13'
L56	S08°40'09"E	29.66'
L57	S06°21'41"W	45.39'
L58	S16°26'08"W	9.97'
L59	N60°28'03"E	9.97'
L60	N17°51'34"W	61.52'
L61	S89°31'49"W	31.22'
L62	S41°31'26"W	32.19'
L63	S48°28'34"E	16.00'
L64	S41°31'26"W	25.06'
L65	S89°31'49"W	24.10'
L66	N84°01'01"W	31.81'

HARMONY – PHASE 5

MASTER UTILITY STUDY AMENDMENT

AURORA, COLORADO

Prepared for:

Melcor/TC, LLC c/o Marathon Land Company
9750 West Cambridge Place
Littleton, CO 80127
Phone: (303) 920-9400

Prepared by:

APPROVED FOR ONE YEAR FROM THIS DATE _____

City Engineer Date Westwood Professional Services
10333 E. Dry Creek Road, Suite 240
Englewood, Colorado 80112
Contact: Brian P. Wilson, P.E.
Phone: (720) 249-3588
Email: brian.wilson@westwoodps.com

Water Department Date

Fire Department Date

Preparation Date:
May 23, 2022

FACSIMILE
This electronic plan is a facsimile of the signed and sealed pdf set

CO Professional Engineer Date
Brian P. Wilson, P.E. No. 0050067

ENGINEER'S STATEMENT:

This utility study "Harmony – Master Utility Conformance Letter" was prepared under my direct supervision in accordance with the provisions of the City of Aurora Standards and Specifications Regarding Water, Sanitary Sewer and Storm Drainage Infrastructure. I understand that the City of Aurora does not and will not assume liability for facilities designed by others.

Brian P. Wilson, P.E. 0050067 Date
CVL Consultants of Colorado, Inc.

This page is intentionally blank.

TABLE OF CONTENTS

Introduction.....	1
General Description & Location	1
Scope of Work	2
Topographic Conditions.....	2
Water Distribution System	2
Demands.....	2
Water Demands.....	3
Sanitary System and Flows	4
Wastewater Design Criteria.....	4
Conclusion	5
References	6

FIGURES

Figure-1 Location Map.....2

TABLES

Table 1.....2

Table 2.....3

Table 3.....3

Table 4.....4

Table 5.....5

INTRODUCTION

GENERAL DESCRIPTION & LOCATION

Harmony CSP 5 Filing 15 contains a total of approximately 167 acres and is solely residential with development to include 358 detached single-family units (SFD). The Harmony development is located in the southern 1/2 of Section 9, the southwest, northwest, and northeast 1/4 of Section 16, and the northern 1/2 of Section 15, Township 4 South, Range 65 West of the 6th Principal Meridian, in the City of Aurora, Colorado. Harmony CSP 5 Filing 15 is bound on the north by Exposition Ave, to the south by future Powhatan Road, to the east by future South Trussville Street, and to the west by existing Powhatan Road. *Parklands (formerly Eastern Hills)* is located east, south, and west of the proposed development, and is currently in the conceptual/preliminary planning stage. Figure-1 clearly depicts the overall Harmony project in context to the surrounding roadways and known developments.

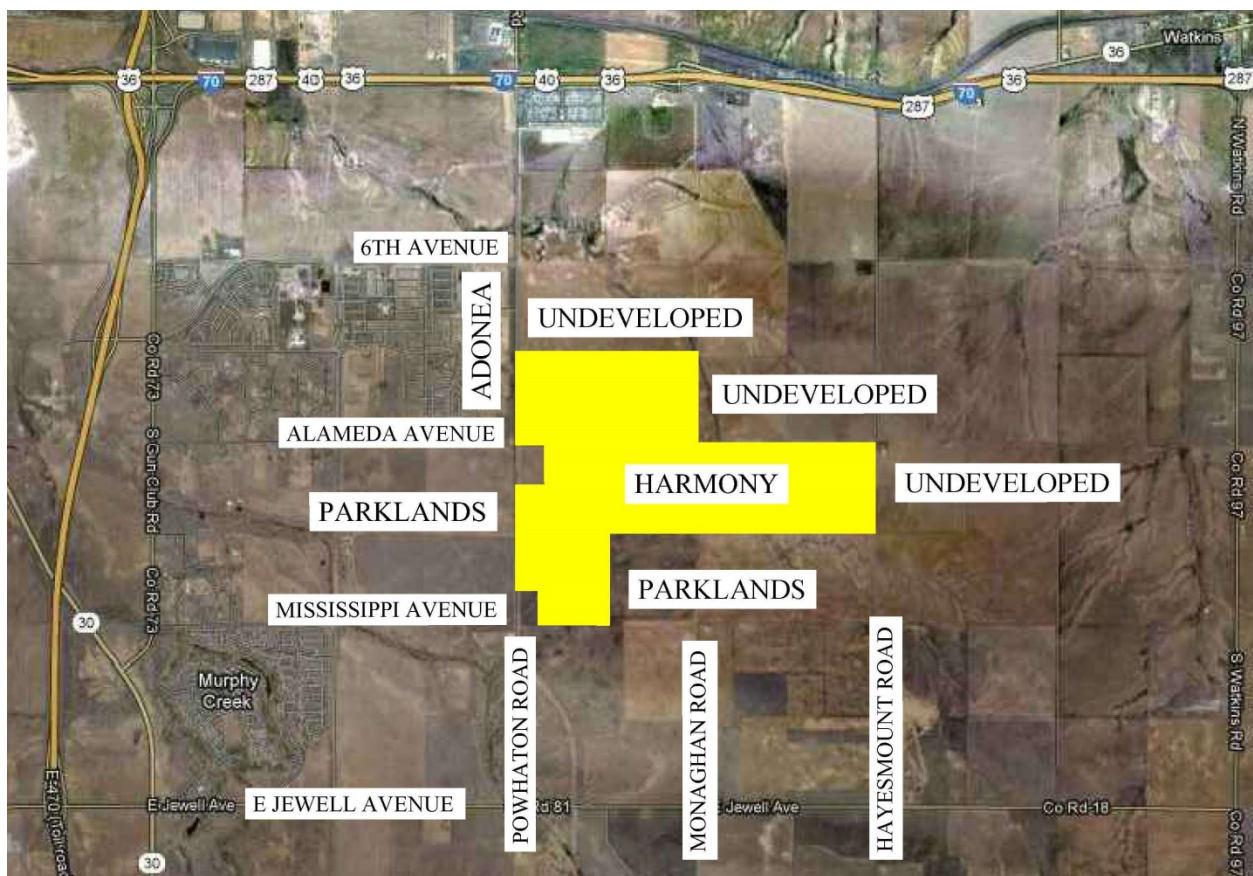


Figure 1
Location Map

SCOPE OF WORK

The purpose of this Master Utility Report Amendment is to amend the approved “Master Utility Report” (Ref. 1) for Harmony prepared by CVL Consultants to the current proposed layout and unit count. The proposed water and sewer system must meet the criteria set forth by the guidelines of the *Standards and Specifications Regarding Water, Sanitary Sewer and Storm Drainage Infrastructure* (Ref. 2) manual prepared by the City of Aurora (COA). Westwood will work in conjunction with the client and the COA to ensure that the water distribution and sanitary sewer systems are compatible with existing facilities and planned development.

TOPOGRAPHIC CONDITIONS

Harmony CSP 5 is currently undeveloped land. A small southwestern portion of the site slopes from the southwest to the northwest, while the majority eastern portion generally drains to the center of the site at an existing culvert low point. The total elevation of the southwestern portion is approximately 35 feet, dropping from 5680 feet above mean sea level to 5640 feet above MSL. The total elevation change in the eastern portion is approximately 40 feet, dropping from 5680 feet above MSL at the southern boundary to 5640 feet above MSL at the northern boundary. From the *City of Aurora’s Water Capital Improvement Plan (CIP)*, (2009), it is shown that the proposed development is entirely within pressure Zone 4.

Please elaborate more on the change being proposed. Provide reasoning and specifics to how change may or may not affect existing MUS.

Added additional explanation that the original master utility study assumed a larger population and unit count than is actually proposed.

Table 1 – City of Aurora Pressure Zones

Zone	Static Hydraulic Grade Line, (ft)	Service Elevation Range, (ft)	Static Pressure Range, (psig)
Zone 4	5850	5589-5711	60-113

From the *City of Aurora Wastewater Utility Plan – Volume I: Report* (Ref. 4) the proposed development falls within the service area Subarea 2 – Environs/Eastern Prairie Developing Area and part of the First Creek drainage basin.

WATER DISTRIBUTION SYSTEM

It is known that the proposed development is entirely within pressure Zone 4.

revised to 0.07gpm/capita

Please reference 101 gpd/capita as stated in AW Standards

DEMANDS

The following is a list of criteria used to develop the water demands for the proposed site:

- Single Family Average Day demand = 0.11 gpm/capita
- Single Family Max Day Factor + Fire Flow = 2.8 x average day demand + 1500 gpm (fire flow)
- Single Family Peak Hour Factor = 4.5 x average day demand

All potable water will be supplied by the City of Aurora's water distribution system. The proposed Harmony CSP 5 water distribution system will connect to the COA's system in four locations, all of which are to be constructed as part of Harmony CSP4. The first location will be at the existing 12" water stub located along South Trussville Street just south of the roundabout. The second location shall be located at existing 16" water stub at the intersection of Exposition Avenue and Powhatan Road. The third and fourth locations shall be connected to existing 8" water stubs at the intersection of S Riverwood St and S Scottsburg Ct.

WATER DEMANDS

The summary of current water demands calculated for the proposed water distribution system for Harmony CSP 5 is presented in Table 2. The summary of previous water demands calculated for the proposed water distribution system for Harmony CSP is presented in Table 3. As stated previously within this report, the demands were determined using assumptions and requirements outlined in the *Standards and Specifications Regarding Water, Sanitary Sewer and Stormwater Infrastructure* (Ref. 2). The residential populations were based on 2.77 persons per acreage dwelling unit. Average day demands were calculated using the average water demand rate. Maximum day and peak hour demands were calculated using peaking factors shown above.

Table 2 - New Calculated Water Demand

Planning Area	Recreation Type	Residences	Population (Persons/SFD)	Demand (gpm/cap)	Max Population	Average Day Demand (gpm)	Max Day + Fire Flow Demand (gpm)	Max Hour Demand (gpm)
CSP 5	SFD	358	3.2	0.11	1,146	126.06	1,626.06	567.27
CSP 5	School					5.00	3,512.60	16.10
CSP 5 Total		358			1,146	131.06	5,138.66	583.37

Table 3 – Master Utility Report Calculated Water Demand for CSP 5

Planning Area	Area (ac)	Density (units/ac)	Max units	Population (Persons/SFD)	Demand (gpm/cap)	Max Population	Average Day Demand (gpm)	Max Day Demand (gpm)	Max Hour Demand (gpm)
PA-8	42.0	8.0	336	3.2	.11	1075	118.27	331.16	532.22
PA-9	37.0	8.0	37	3.2	.11	118	13.02	36.47	58.61
PA-10	22.6	8.0	260	3.2	.11	832	91.52	256.26	411.84
Total			633			2025	222.81	623.89	1,002.67

SANITARY SYSTEM AND FLOWS

The summary of current sanitary sewer demands calculated for the proposed sanitary sewer system for Harmony CSP 5 is presented in Table 4. The summary of previous sanitary sewer system for Harmony CSP 5 is presented in Table 5. The Harmony CSP 5 Filing 15 has a total of 358 residences, all detached single-family units. The flows from these residences will be carried by PVC pipes to two existing 8" stubs located where Exposition Avenue intersects with S Riverwood St and S Scottsburg Ct. Population estimates are based on 2.77 capita per dwelling unit for single-family units.

WASTEWATER DESIGN CRITERIA

This section describes the design criteria incorporated in developing the wastewater collection system for Harmony. These design criteria were adopted from the *Standards and Specifications Regarding Water, Sanitary Sewer and Storm Drainage Infrastructure* (Ref. 2):

- Population – 2.77 people per SFD/SFA/MF.
- Average Daily Flow – 68 gpcd for residential areas, 10 gpcd for schools, 4000 gallons per day/acre for commercial areas, and 5000 gallons per day for community centers, fire stations, and churches.
- Peaking Factor (PF) = $5 \div p^{0.167}$, where p = population in thousands and PF is no greater than 4.0 and no less than 1.7.
- The flow velocity shall not exceed ten (10) fps flowing full of ½ full using Manning's Formula and (n=0.011 for PVC) or (n=0.013 for RCP). Minimum slope shall be 0.4% with a minimum velocity of two (2) fps at least one pipe diameter.
- Depth of flow in pipes should not exceed 10% for pipes 12 inches or smaller and 90% for pipes larger than 12 inches
- Minimum drop through a manhole from inlet to outlet or same diameter pipe shall be:
 1. 0.2 ft. on straight through run
 2. 0.3 ft. on deflected bends greater than 45 degrees
- Minimum of 4 inch diameter pipe for service lines

Added I&I columns

Include I&I in calculations

Table 4 - New Calculated Sanitary Sewer Demand for CSP 5

Residence Type	Demand (gpd/cap)	Residences	Occupancy	Population (Thousands of People)	Average Day Flow (gpd)	Peaking Factor $4 > 5 \div p^{0.167} > 1.7$	Peak Daily Flow (gpd)
SFD	68	358	2.77	0.991	67,432	4	269,728
School	10			0.688	6,880	4	27,520
Total		358		1.679	74,312		297,248

Table 5 – Master Utility Report Calculated Sanitary Sewer Demand for CSP 5

Planning Area	Residence Type	Demand (gpd/cap)	Residences	Occupancy	Population (Thousands of People)	Average Day Flow (gpd)	Peaking Factor $4 > 5 \div p^{0.167} > 1.7$	Peak Daily Flow (gpd)
PA-8	SFD	80	336	3.9	1.310	104,832	4	419,328
PA-9	SFD	80	296	4.5	1.332	106,560	4	426,240
PA-10	SFD	80	181	2.4	0.434	34,752	4	139,008
	Total		813		3.076	246,144		984,576

CONCLUSION

The proposed Harmony CSP5 water system will have a smaller demand than the previously reviewed “Master Utility Report” (Ref. 1) and conforms to the *Standards and Specifications Regarding Water, Sanitary Sewer and Storm Drainage Infrastructure* (Ref. 2). The proposed Harmony CSP5 sanitary system will serve 358 residences and will outfall to the existing sanitary sewer stubs located at Exposition Avenue. The flows for the proposed sanitary system are significantly smaller than the previously reviewed “Master Utility Report” (Ref. 1) and conforms to the *Standards and Specifications Regarding Water, Sanitary Sewer and Storm Drainage Infrastructure* (Ref. 2).

REFERENCES

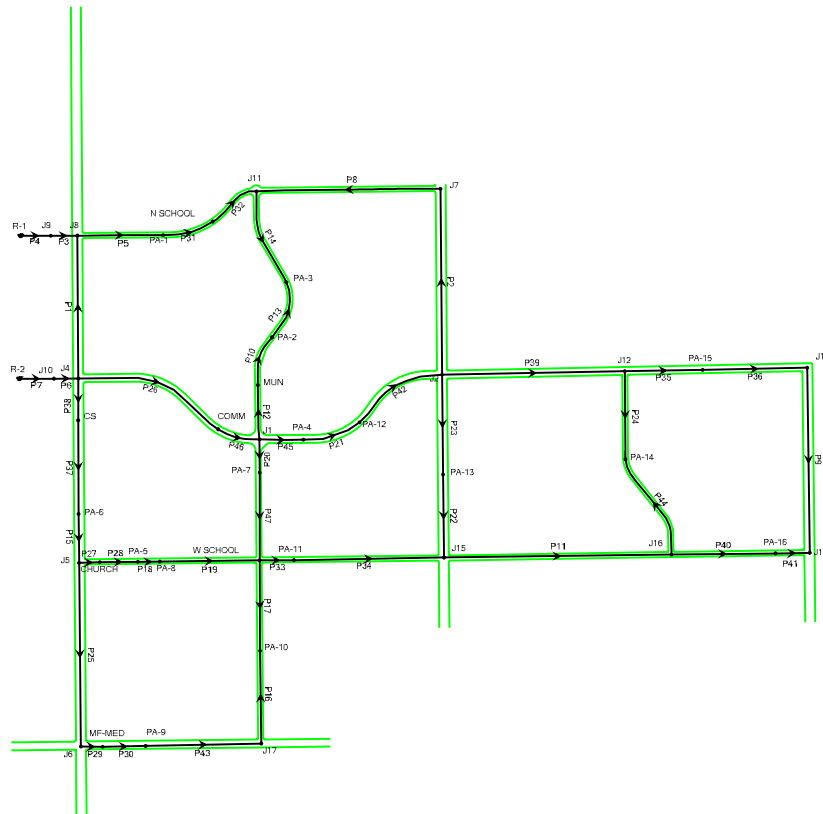
1. **Master Utility Report**, CVL Consultants, June 1, 2016.
2. **Standards and Specifications Regarding Water, Sanitary Sewer and Storm Drainage Infrastructure**, City of Aurora, January 2012.
3. **Treated Water Distribution System 2025 Capital Improvement Plan**, City of Aurora, February 2009.
4. **City of Aurora Wastewater Utility Plan – Volume I: Report**, Camp Dresser & McKee, Inc., January 15, 2003.

Appendix A

Water Distribution Demands and WaterGEMS Results

WATER SYSTEM SCHEMATIC

HARMONY



WATER DEMANDS

HARMONY
Master Utility Report
Water Demand Calculations

Land Use	Avg. Day (gpm/cap)	Max Day (gpm/cap)	Max Hour (gpm/cap)	Occupancy	Density (units/ac)
SINGLE FAMILY	0.11	2.8:1 of Avg	4.5:1 of Avg	3.20	8.0
SINGLE FAMILY-Attach	0.11	2.8:1 of Avg	4.5:1 of Avg	2.10	11.0
Multi Family - MEDIUM	0.11	2.8:1 of Avg	4.5:1 of Avg	1.70	15.0
Multi Family - LARGE	0.11	2.8:1 of Avg	4.5:1 of Avg	1.70	11.0

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
CHURCH	1.00	4.00	10.00

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
REC. CENTER	5.00	12.60	16.10

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
SCHOOL	5.00	12.60	16.10

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
COMMERCIAL	22.66	72.52	95.19

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
FIRE STATION	5.00	12.60	16.10

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
COMMUNITY CENTER	5.00	12.60	16.10

Label	Description	Area (ac)	Max Units**	Density (units/ac)	Occupancy (persons/unit)	Max Population	Avg. Day Demand (gpm)	Max Day Demand (gpm)	Peak Hour Demand (gpm)	Comments
PA-1	SINGLE FAMILY	12.6	101	8.0	3.20	323	35.55	99.55	159.98	
	Total						35.55	99.55	159.98	
PA-17	NORTH SCHOOL SITE	10.0				688	5.00	12.60	16.10	K-8
	Total						5.00	12.60	16.10	
PA-2	SINGLE FAMILY	107.8	862	8.0	3.20	2758	303.42	849.59	1365.41	
	Total						303.42	849.59	1365.41	
COMM	COMMUNITY CENTER	7.5					5.00	12.60	16.10	
	Total						5.00	12.60	16.10	
PA-3	SINGLE FAMILY	115.2	922	8.0	3.20	2950	324.54	908.72	1460.45	
	Total						324.54	908.72	1460.45	
PA-64	MUNICIPAL	2.8					5.00	12.60	16.10	FIRE STATION
	Total						5.00	12.60	16.10	
PA-4	SINGLE FAMILY- ATTACHED	62.0	496	8.0	2.10	1042	114.58	320.81	515.59	
	Total						114.58	320.81	515.59	
*CS	COMMERCIAL	20.0					22.66	72.52	95.19	GROCERY RELATED
	Total						22.66	72.52	95.19	
PA-5	SINGLE FAMILY	15.5	124	8.0	3.20	397	43.65	122.21	196.42	
	Total						43.65	122.21	196.42	
PA-6	SINGLE FAMILY - ATTACHED	18.4	147	8.0	2.10	309	33.96	95.08	152.81	
	Total						33.96	95.08	152.81	
PA-7	SINGLE FAMILY	51.5	412	8.0	3.20	1318	145.02	406.07	652.61	
	Total						145.02	406.07	652.61	
*CHURCH	CHURCH	11.4					1.00	4.00	10.00	CHURCH SITE
	Total						1.00	4.00	10.00	
*MF-MED	MF-OFFSITE	10.4	208	20.0	1.70	354	38.90	108.91	175.03	
	Total						38.90	108.91	175.03	
PA-8	SINGLE FAMILY	42.0	336	8.0	3.20	1075	118.27	331.16	532.22	
	Total						118.27	331.16	532.22	
PA-9	SINGLE FAMILY	37.0	37	1.0	3.20	118	13.02	36.47	58.61	
	Total						13.02	36.47	58.61	

* NOT A PART OF THE HARMONY FDP, BUT IS INCLUDED IN THIS WATERCAD ANALYSIS

**MAX UNITS AND MAX POPULATION WILL BE UP TO BUT NOT EXCEEDING THE NUMBER SHOWN.

HARMONY
Master Utility Report
Water Demand Calculations

Land Use	Avg. Day (gpm/cap)	Max Day (gpm/cap)	Max Hour (gpm/cap)	Occupancy	Density (units/ac)
SINGLE FAMILY	0.11	2.8:1 of Avg	4.5:1 of Avg	3.20	8.0
SINGLE FAMILY-Attach	0.11	2.8:1 of Avg	4.5:1 of Avg	2.10	11.0
Multi Family - MEDIUM	0.11	2.8:1 of Avg	4.5:1 of Avg	1.70	15.0
Multi Family - LARGE	0.11	2.8:1 of Avg	4.5:1 of Avg	1.70	11.0

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
CHURCH	1.00	4.00	10.00

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
REC. CENTER	5.00	12.60	16.10

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
SCHOOL	5.00	12.60	16.10

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
COMMERCIAL	22.66	72.52	95.19

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
FIRE STATION	5.00	12.60	16.10

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
COMMUNITY CENTER	5.00	12.60	16.10

Label	Description	Area (ac)	Max Units**	Density (units/ac)	Occupancy (persons/unit)	Max Population	Avg. Day Demand (gpm)	Max Day Demand (gpm)	Peak Hour Demand (gpm)	Comments
PA-10	SINGLE FAMILY	22.6	260	11.5	3.20	832	91.52	256.26	411.84	
	Total						91.52	256.26	411.84	
PA-18	WEST SCHOOL SITE	18.1				688	5.00	12.60	16.10	K-8
	Total						5.00	12.60	16.10	
PA-11	SINGLE FAMILY	23.1	66	2.9	3.20	211	23.23	65.05	104.54	
	Total						23.23	65.05	104.54	
PA-12	SINGLE FAMILY	83.4	314	3.8	3.20	1005	110.53	309.48	497.38	
	Total						110.53	309.48	497.38	
PA-13	SINGLE FAMILY	64.5	195	3.0	3.20	624	68.64	192.19	308.88	
	Total						68.64	192.19	308.88	
PA-14	SINGLE FAMILY	64.6	195	3.0	3.20	624	68.64	192.19	308.88	
	Total						68.64	192.19	308.88	
PA-15	SINGLE FAMILY	72.6	345	4.8	3.20	1104	121.44	340.03	546.48	
	Total						121.44	340.03	546.48	
PA-16	SINGLE FAMILY - ATTACHED	47.0	75	1.6	2.10	158	17.33	48.51	77.96	
	Total						17.33	48.51	77.96	

MODEL TOTAL		5,095				16,578	1,555.74	4,360.75	6,973.96	
HARMONY TOTAL		4,887				16,225	1,493.19	4,175.32	6,693.74	On-Site

* NOT A PART OF THE HARMONY FDP, BUT IS INCLUDED IN THIS WATERCAD ANALYSIS

**MAX UNITS AND MAX POPULATION WILL BE UP TO BUT NOT EXCEEDING THE NUMBER SHOWN.

HARMONY
Master Utility Report
Water Demand Calculations

Land Use	Avg. Day (gpm/cap)	Max Day (gpm/cap)	Max Hour (gpm/cap)	Occupancy	Density (units/ac)
SINGLE FAMILY	0.11	2.8:1 of Avg	4.5:1 of Avg	3.20	8.0
SINGLE FAMILY-Attach	0.11	2.8:1 of Avg	4.5:1 of Avg	2.10	11.0
Multi Family - MEDIUM	0.11	2.8:1 of Avg	4.5:1 of Avg	1.70	15.0
Multi Family - LARGE	0.11	2.8:1 of Avg	4.5:1 of Avg	1.70	11.0

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
CHURCH	1.00	4.00	10.00

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
REC. CENTER	5.00	12.60	16.10

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
SCHOOL	5.00	12.60	16.10

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
COMMERCIAL	22.66	72.52	95.19

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
FIRE STATION	5.00	12.60	16.10

Land Use	Avg. Day (gpm)	Max Day (gpm)	Max Hour (gpm)
COMMUNITY CENTER	5.00	12.60	16.10

OFF-SITE WATER CALCULATIONS*										
Label	Description	Area (ac)	Max Units**	Density (units/ac)	Occupancy (persons/unit)	Max Population	Avg. Day Demand (gpm)	Max Day Demand (gpm)	Peak Hour Demand (gpm)	Comments
J6 Parklands	PARKLANDS CONNECTION	58.0	290	5.0	3.20	928	102.08	285.82	459.36	
J14 Parklands	PARKLANDS CONNECTION	58.0	290	5.0	3.20	928	102.08	285.82	459.36	
J15 Parklands	PARKLANDS CONNECTION	58.0	290	5.0	3.20	928	102.08	285.82	459.36	
J2 Undeveloped	UNDEVELOPED CONNECTION	40.0	200	5.0	3.20	640	70.40	197.12	316.80	
J12 Undeveloped	UNDEVELOPED CONNECTION	40.0	200	5.0	3.20	640	70.40	197.12	316.80	
J7 Sun Meadows	SUN MEADOWS CONNECTION	60.0	300	5.0	3.20	960	105.60	295.68	475.20	
J8 Sun Meadows	SUN MEADOWS CONNECTION	60.0	300	5.0	3.20	960	105.60	295.68	475.20	

AVERAGE DAY

HARMONY

Active Scenario: AVERAGE DAY

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Material	Hazen-Williams C	Velocity (ft/s)	Flow (gpm)	Headloss Gradient (ft/1000ft)
P1	J4	J8	2,046	16	PVC	130.0	0.04	24.82	0.001
P2	J7	J2	2,662	16	PVC	130.0	0.20	-125.86	0.013
P3	J9	J8	10	12	PVC	130.0	1.10	387.35	0.439
P4	J9	R-1	1	12	PVC	130.0	1.10	-387.35	0.488
P5	J8	PA-1	1,232	12	PVC	130.0	0.87	306.58	0.284
P6	J4	J10	10	24	PVC	130.0	1.42	-2,004.45	0.293
P7	J10	R-2	1	24	PVC	130.0	1.42	-2,004.45	0.488
P8	J11	J7	2,642	12	PVC	130.0	0.06	-20.26	0.002
P9	J13	J14	2,650	16	PVC	130.0	0.14	86.02	0.007
P10	MUN	PA-2	742	12	PVC	130.0	0.97	341.67	0.347
P11	J16	J15	3,264	12	PVC	130.0	0.12	-42.30	0.007
P12	J1	MUN	780	12	PVC	130.0	0.98	346.67	0.357
P13	PA-2	PA-3	869	12	PVC	130.0	0.11	38.25	0.006
P14	PA-3	J11	1,409	12	PVC	130.0	0.81	-286.29	0.250
P15	J5	PA-6	700	16	PVC	130.0	0.72	-452.93	0.144
P16	J17	PA-10	1,328	12	PVC	130.0	0.24	83.84	0.026
P17	PA-10	W SCHOOL	1,295	12	PVC	130.0	0.02	-7.68	0.000
P18	PA-5	PA-8	315	12	PVC	130.0	0.48	170.44	0.096
P19	PA-8	W SCHOOL	1,434	12	PVC	130.0	0.15	52.17	0.011
P20	J1	PA-7	475	12	PVC	130.0	0.61	214.62	0.147
P21	PA-4	PA-12	863	24	PVC	130.0	0.55	771.54	0.053
P22	J15	PA-13	1,188	16	PVC	130.0	0.09	-58.52	0.003
P23	PA-13	J2	1,430	16	PVC	130.0	0.20	-127.16	0.014
P24	J12	PA-14	1,262	12	PVC	130.0	0.17	59.73	0.014
P25	J5	J6	2,632	16	PVC	130.0	0.38	237.84	0.044
P26	J4	COMM	2,256	24	PVC	130.0	1.04	1,470.07	0.177
P27	J5	CHURCH	297	12	PVC	130.0	0.61	215.09	0.146
P28	CHURCH	PA-5	548	12	PVC	130.0	0.61	214.09	0.146
P29	J6	MF-MED	313	16	PVC	130.0	0.22	135.76	0.016
P30	MF-MED	PA-9	617	16	PVC	130.0	0.15	96.86	0.008
P31	PA-1	N SCHOOL	751	12	PVC	130.0	0.77	271.03	0.226
P32	N SCHOOL	J11	794	12	PVC	130.0	0.75	266.03	0.218
P33	W SCHOOL	PA-11	491	12	PVC	130.0	0.31	109.09	0.042
P34	PA-11	J15	2,158	12	PVC	130.0	0.24	85.86	0.027
P35	J12	PA-15	1,120	24	PVC	130.0	0.15	207.46	0.005
P36	PA-15	J13	1,502	24	PVC	130.0	0.06	86.02	0.001
P37	PA-6	CS	1,342	16	PVC	130.0	0.78	-486.89	0.164
P38	CS	J4	599	16	PVC	130.0	0.81	-509.55	0.179
P39	J2	J12	2,623	24	PVC	130.0	0.24	337.59	0.012
P40	J16	PA-16	1,494	12	PVC	130.0	0.09	33.39	0.005
P41	PA-16	J14	492	12	PVC	130.0	0.05	16.06	0.001
P42	PA-12	J2	1,436	24	PVC	130.0	0.47	661.01	0.040
P43	PA-9	J17	1,662	16	PVC	130.0	0.13	83.84	0.006
P44	PA-14	J16	1,571	12	PVC	130.0	0.03	-8.91	0.001
P45	J1	PA-4	630	24	PVC	130.0	0.63	886.12	0.070
P46	COMM	J1	621	24	PVC	130.0	1.03	1,447.41	0.171
P47	PA-7	W SCHOOL	1,258	12	PVC	130.0	0.20	69.60	0.018

HARMONY

Active Scenario: AVERAGE DAY

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
CHURCH	5,646.55	1.00	87.8	5,849.52
COMM	5,630.53	22.66	94.8	5,849.60
CS	5,628.18	22.66	95.9	5,849.89
J1	5,641.98	0.00	89.8	5,849.49
J2	5,643.16	70.40	89.2	5,849.34
J4	5,629.30	0.00	95.5	5,850.00
J5	5,647.47	0.00	87.4	5,849.57
J6	5,672.32	102.08	76.6	5,849.45
J7	5,618.35	105.60	99.9	5,849.31
J8	5,612.42	105.60	102.8	5,850.00
J9	5,609.31	0.00	104.1	5,850.00
J10	5,624.26	0.00	97.7	5,850.00
J11	5,620.07	0.00	99.2	5,849.30
J12	5,681.12	70.40	72.8	5,849.31
J13	5,711.38	0.00	59.7	5,849.31
J14	5,685.26	102.08	71.0	5,849.29
J15	5,677.09	102.08	74.5	5,849.32
J16	5,660.25	0.00	81.8	5,849.30
J17	5,672.78	0.00	76.4	5,849.43
MF-MED	5,670.87	38.90	77.3	5,849.45
MUN	5,635.82	5.00	92.3	5,849.21
N SCHOOL	5,617.48	5.00	100.4	5,849.48
PA-1	5,620.06	35.55	99.3	5,849.65
PA-2	5,629.95	303.42	94.8	5,848.96
PA-3	5,630.21	324.54	94.6	5,848.95
PA-4	5,651.51	114.58	85.6	5,849.45
PA-5	5,645.18	43.65	88.4	5,849.44
PA-6	5,636.98	33.96	92.0	5,849.67
PA-7	5,641.60	145.02	89.9	5,849.42
PA-8	5,646.41	118.27	87.8	5,849.41
PA-9	5,671.39	13.02	77.0	5,849.44
PA-10	5,656.85	91.52	83.3	5,849.40
PA-11	5,657.56	23.23	83.0	5,849.38
PA-12	5,666.02	110.53	79.3	5,849.40
PA-13	5,669.05	68.64	78.0	5,849.32
PA-14	5,682.61	68.64	72.1	5,849.30
PA-15	5,713.00	121.44	59.0	5,849.31
PA-16	5,680.75	17.33	72.9	5,849.29
W SCHOOL	5,652.03	5.00	85.4	5,849.40

HARMONY

Active Scenario: AVERAGE DAY

ID	Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
473	R-1	5,850.00	387.35	5,850.00
591	R-2	5,850.00	2,004.45	5,850.00

MAX DAY

HARMONY

Active Scenario: MAX DAY

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Material	Hazen-Williams C	Velocity (ft/s)	Flow (gpm)	Headloss Gradient (ft/1000ft)
P1	J4	J8	2,046	16	PVC	130.0	0.11	69.21	0.004
P2	J7	J2	2,662	16	PVC	130.0	0.59	-369.99	0.099
P3	J9	J8	10	12	PVC	130.0	3.03	1,067.98	2.832
P4	J9	R-1	1	12	PVC	130.0	3.03	-1,067.98	2.930
P5	J8	PA-1	1,232	12	PVC	130.0	2.39	841.51	1.841
P6	J4	J10	10	24	PVC	130.0	3.90	-5,502.06	2.051
P7	J10	R-2	1	24	PVC	130.0	3.90	-5,502.06	1.953
P8	J11	J7	2,642	12	PVC	130.0	0.21	-74.31	0.021
P9	J13	J14	2,650	16	PVC	130.0	0.39	247.12	0.047
P10	MUN	PA-2	742	12	PVC	130.0	2.71	954.61	2.326
P11	J16	J15	3,264	12	PVC	130.0	0.29	-103.66	0.038
P12	J1	MUN	780	12	PVC	130.0	2.74	967.21	2.383
P13	PA-2	PA-3	869	12	PVC	130.0	0.30	105.03	0.039
P14	PA-3	J11	1,409	12	PVC	130.0	2.28	-803.68	1.691
P15	J5	PA-6	700	16	PVC	130.0	1.99	-1,245.40	0.938
P16	J17	PA-10	1,328	12	PVC	130.0	0.63	223.52	0.158
P17	PA-10	W SCHOOL	1,295	12	PVC	130.0	0.09	-32.73	0.005
P18	PA-5	PA-8	315	12	PVC	130.0	1.32	464.45	0.612
P19	PA-8	W SCHOOL	1,434	12	PVC	130.0	0.38	133.30	0.061
P20	J1	PA-7	475	12	PVC	130.0	1.71	602.97	0.993
P21	PA-4	PA-12	863	24	PVC	130.0	1.47	2,071.75	0.334
P22	J15	PA-13	1,188	16	PVC	130.0	0.27	-169.65	0.023
P23	PA-13	J2	1,430	16	PVC	130.0	0.58	-361.84	0.095
P24	J12	PA-14	1,262	12	PVC	130.0	0.50	175.76	0.101
P25	J5	J6	2,632	16	PVC	130.0	1.04	654.72	0.285
P26	J4	COMM	2,256	24	PVC	130.0	2.85	4,019.85	1.139
P27	J5	CHURCH	297	12	PVC	130.0	1.68	590.67	0.955
P28	CHURCH	PA-5	548	12	PVC	130.0	1.66	586.67	0.944
P29	J6	MF-MED	313	16	PVC	130.0	0.59	368.90	0.098
P30	MF-MED	PA-9	617	16	PVC	130.0	0.41	259.98	0.051
P31	PA-1	N SCHOOL	751	12	PVC	130.0	2.10	741.97	1.458
P32	N SCHOOL	J11	794	12	PVC	130.0	2.07	729.37	1.413
P33	W SCHOOL	PA-11	491	12	PVC	130.0	0.81	284.88	0.248
P34	PA-11	J15	2,158	12	PVC	130.0	0.62	219.83	0.153
P35	J12	PA-15	1,120	24	PVC	130.0	0.42	587.15	0.032
P36	PA-15	J13	1,502	24	PVC	130.0	0.18	247.12	0.007
P37	PA-6	CS	1,342	16	PVC	130.0	2.14	-1,340.48	1.074
P38	CS	J4	599	16	PVC	130.0	2.25	-1,413.00	1.184
P39	J2	J12	2,623	24	PVC	130.0	0.59	833.31	0.062
P40	J16	PA-16	1,494	12	PVC	130.0	0.25	87.23	0.028
P41	PA-16	J14	492	12	PVC	130.0	0.11	38.70	0.006
P42	PA-12	J2	1,436	24	PVC	130.0	1.25	1,762.27	0.248
P43	PA-9	J17	1,662	16	PVC	130.0	0.36	223.52	0.039
P44	PA-14	J16	1,571	12	PVC	130.0	0.05	-16.43	0.001
P45	J1	PA-4	630	24	PVC	130.0	1.70	2,392.58	0.436
P46	COMM	J1	621	24	PVC	130.0	2.81	3,962.75	1.109
P47	PA-7	W SCHOOL	1,258	12	PVC	130.0	0.56	196.91	0.125

HARMONY

Active Scenario: MAX DAY

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
CHURCH	5,646.55	4.00	86.7	5,846.89
COMM	5,630.53	57.10	93.8	5,847.41
CS	5,628.18	72.51	95.7	5,849.27
J1	5,641.98	0.00	88.6	5,846.72
J2	5,643.16	197.12	87.7	5,845.80
J4	5,629.30	0.00	95.5	5,849.98
J5	5,647.47	0.00	86.4	5,847.17
J6	5,672.32	285.82	75.3	5,846.42
J7	5,618.35	295.68	98.3	5,845.54
J8	5,612.42	295.68	102.8	5,849.97
J9	5,609.31	0.00	104.1	5,850.00
J10	5,624.26	0.00	97.7	5,850.00
J11	5,620.07	0.00	97.5	5,845.48
J12	5,681.12	70.40	71.2	5,845.64
J13	5,711.38	0.00	58.1	5,845.59
J14	5,685.26	285.82	69.3	5,845.47
J15	5,677.09	285.82	72.9	5,845.64
J16	5,660.25	0.00	80.2	5,845.51
J17	5,672.78	0.00	75.1	5,846.29
MF-MED	5,670.87	108.92	75.9	5,846.39
MUN	5,635.82	12.60	90.4	5,844.86
N SCHOOL	5,617.48	12.60	99.1	5,846.60
PA-1	5,620.06	99.54	98.5	5,847.70
PA-2	5,629.95	849.58	92.2	5,843.13
PA-3	5,630.21	908.71	92.1	5,843.10
PA-4	5,651.51	320.82	84.3	5,846.44
PA-5	5,645.18	122.22	87.0	5,846.37
PA-6	5,636.98	95.09	91.2	5,847.83
PA-7	5,641.60	406.06	88.5	5,846.25
PA-8	5,646.41	331.16	86.4	5,846.18
PA-9	5,671.39	36.46	75.7	5,846.36
PA-10	5,656.85	256.26	81.9	5,846.08
PA-11	5,657.56	65.04	81.5	5,845.97
PA-12	5,666.02	309.48	77.9	5,846.16
PA-13	5,669.05	192.19	76.4	5,845.67
PA-14	5,682.61	192.19	70.5	5,845.51
PA-15	5,713.00	340.03	57.4	5,845.60
PA-16	5,680.75	48.52	71.3	5,845.47
W SCHOOL	5,652.03	12.60	84.0	5,846.09

HARMONY

Active Scenario: MAX DAY

ID	Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
473	R-1	5,850.00	1,067.98	5,850.00
591	R-2	5,850.00	5,502.06	5,850.00

MAX DAY WITH
FIRE FLOW ANALYSIS

HARMONY

Active Scenario: MAX DAY + FIRE FLOW

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Material	Hazen-Williams C	Velocity (ft/s)	Flow (gpm)	Headloss Gradient (ft/1000ft)
P1	J4	J8	2,046	16	PVC	130.0	0.11	69.21	0.004
P2	J7	J2	2,662	16	PVC	130.0	0.59	-369.99	0.099
P3	J9	J8	10	12	PVC	130.0	3.03	1,067.98	2.832
P4	J9	R-1	1	12	PVC	130.0	3.03	-1,067.98	2.930
P5	J8	PA-1	1,232	12	PVC	130.0	2.39	841.51	1.841
P6	J4	J10	10	24	PVC	130.0	3.90	-5,502.06	2.051
P7	J10	R-2	1	24	PVC	130.0	3.90	-5,502.06	1.953
P8	J11	J7	2,642	12	PVC	130.0	0.21	-74.31	0.021
P9	J13	J14	2,650	16	PVC	130.0	0.39	247.12	0.047
P10	MUN	PA-2	742	12	PVC	130.0	2.71	954.61	2.326
P11	J16	J15	3,264	12	PVC	130.0	0.29	-103.66	0.038
P12	J1	MUN	780	12	PVC	130.0	2.74	967.21	2.383
P13	PA-2	PA-3	869	12	PVC	130.0	0.30	105.03	0.039
P14	PA-3	J11	1,409	12	PVC	130.0	2.28	-803.68	1.691
P15	J5	PA-6	700	16	PVC	130.0	1.99	-1,245.40	0.938
P16	J17	PA-10	1,328	12	PVC	130.0	0.63	223.52	0.158
P17	PA-10	W SCHOOL	1,295	12	PVC	130.0	0.09	-32.73	0.005
P18	PA-5	PA-8	315	12	PVC	130.0	1.32	464.45	0.612
P19	PA-8	W SCHOOL	1,434	12	PVC	130.0	0.38	133.30	0.061
P20	J1	PA-7	475	12	PVC	130.0	1.71	602.97	0.993
P21	PA-4	PA-12	863	24	PVC	130.0	1.47	2,071.75	0.334
P22	J15	PA-13	1,188	16	PVC	130.0	0.27	-169.65	0.023
P23	PA-13	J2	1,430	16	PVC	130.0	0.58	-361.84	0.095
P24	J12	PA-14	1,262	12	PVC	130.0	0.50	175.76	0.101
P25	J5	J6	2,632	16	PVC	130.0	1.04	654.72	0.285
P26	J4	COMM	2,256	24	PVC	130.0	2.85	4,019.85	1.139
P27	J5	CHURCH	297	12	PVC	130.0	1.68	590.67	0.955
P28	CHURCH	PA-5	548	12	PVC	130.0	1.66	586.67	0.944
P29	J6	MF-MED	313	16	PVC	130.0	0.59	368.90	0.098
P30	MF-MED	PA-9	617	16	PVC	130.0	0.41	259.98	0.051
P31	PA-1	N SCHOOL	751	12	PVC	130.0	2.10	741.97	1.458
P32	N SCHOOL	J11	794	12	PVC	130.0	2.07	729.37	1.413
P33	W SCHOOL	PA-11	491	12	PVC	130.0	0.81	284.88	0.248
P34	PA-11	J15	2,158	12	PVC	130.0	0.62	219.83	0.153
P35	J12	PA-15	1,120	24	PVC	130.0	0.42	587.15	0.032
P36	PA-15	J13	1,502	24	PVC	130.0	0.18	247.12	0.007
P37	PA-6	CS	1,342	16	PVC	130.0	2.14	-1,340.48	1.074
P38	CS	J4	599	16	PVC	130.0	2.25	-1,413.00	1.184
P39	J2	J12	2,623	24	PVC	130.0	0.59	833.31	0.062
P40	J16	PA-16	1,494	12	PVC	130.0	0.25	87.23	0.028
P41	PA-16	J14	492	12	PVC	130.0	0.11	38.70	0.006
P42	PA-12	J2	1,436	24	PVC	130.0	1.25	1,762.27	0.248
P43	PA-9	J17	1,662	16	PVC	130.0	0.36	223.52	0.039
P44	PA-14	J16	1,571	12	PVC	130.0	0.05	-16.43	0.001
P45	J1	PA-4	630	24	PVC	130.0	1.70	2,392.58	0.436
P46	COMM	J1	621	24	PVC	130.0	2.81	3,962.75	1.109
P47	PA-7	W SCHOOL	1,258	12	PVC	130.0	0.56	196.91	0.125

HARMONY

Active Scenario: MAX DAY + FIRE FLOW

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
CHURCH	5,646.55	4.00	86.7	5,846.89
COMM	5,630.53	57.10	93.8	5,847.41
CS	5,628.18	72.51	95.7	5,849.27
J1	5,641.98	0.00	88.6	5,846.72
J2	5,643.16	197.12	87.7	5,845.80
J4	5,629.30	0.00	95.5	5,849.98
J5	5,647.47	0.00	86.4	5,847.17
J6	5,672.32	285.82	75.3	5,846.42
J7	5,618.35	295.68	98.3	5,845.54
J8	5,612.42	295.68	102.8	5,849.97
J9	5,609.31	0.00	104.1	5,850.00
J10	5,624.26	0.00	97.7	5,850.00
J11	5,620.07	0.00	97.5	5,845.48
J12	5,681.12	70.40	71.2	5,845.64
J13	5,711.38	0.00	58.1	5,845.59
J14	5,685.26	285.82	69.3	5,845.47
J15	5,677.09	285.82	72.9	5,845.64
J16	5,660.25	0.00	80.2	5,845.51
J17	5,672.78	0.00	75.1	5,846.29
MF-MED	5,670.87	108.92	75.9	5,846.39
MUN	5,635.82	12.60	90.4	5,844.86
N SCHOOL	5,617.48	12.60	99.1	5,846.60
PA-1	5,620.06	99.54	98.5	5,847.70
PA-2	5,629.95	849.58	92.2	5,843.13
PA-3	5,630.21	908.71	92.1	5,843.10
PA-4	5,651.51	320.82	84.3	5,846.44
PA-5	5,645.18	122.22	87.0	5,846.37
PA-6	5,636.98	95.09	91.2	5,847.83
PA-7	5,641.60	406.06	88.5	5,846.25
PA-8	5,646.41	331.16	86.4	5,846.18
PA-9	5,671.39	36.46	75.7	5,846.36
PA-10	5,656.85	256.26	81.9	5,846.08
PA-11	5,657.56	65.04	81.5	5,845.97
PA-12	5,666.02	309.48	77.9	5,846.16
PA-13	5,669.05	192.19	76.4	5,845.67
PA-14	5,682.61	192.19	70.5	5,845.51
PA-15	5,713.00	340.03	57.4	5,845.60
PA-16	5,680.75	48.52	71.3	5,845.47
W SCHOOL	5,652.03	12.60	84.0	5,846.09

HARMONY

Active Scenario: MAX DAY + FIRE FLOW

ID	Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
473	R-1	5,850.00	1,067.98	5,850.00
591	R-2	5,850.00	5,502.06	5,850.00

MAX DAY WITH FF AT PA-15

HARMONY

Active Scenario: MAX DAY FF AT PA-15

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Material	Hazen-Williams C	Velocity (ft/s)	Flow (gpm)	Headloss Gradient (ft/1000ft)
P1	J4	J8	2,046	16	PVC	130.0	0.10	65.05	0.004
P2	J7	J2	2,662	16	PVC	130.0	0.24	-151.56	0.019
P3	J9	J8	10	12	PVC	130.0	3.42	1,204.01	3.613
P4	J9	R-1	1	12	PVC	130.0	3.42	-1,204.01	3.418
P5	J8	PA-1	1,232	12	PVC	130.0	2.76	973.38	2.411
P6	J4	J10	10	24	PVC	130.0	4.67	-6,581.21	2.832
P7	J10	R-2	1	24	PVC	130.0	4.67	-6,581.21	2.930
P8	J11	J7	2,642	12	PVC	130.0	0.41	144.12	0.070
P9	J13	J14	2,650	16	PVC	130.0	0.20	126.59	0.014
P10	MUN	PA-2	742	12	PVC	130.0	2.80	985.98	2.470
P11	J16	J15	3,264	12	PVC	130.0	0.75	-263.63	0.215
P12	J1	MUN	780	12	PVC	130.0	2.83	998.58	2.528
P13	PA-2	PA-3	869	12	PVC	130.0	0.39	136.41	0.063
P14	PA-3	J11	1,409	12	PVC	130.0	2.19	-772.31	1.571
P15	J5	PA-6	700	16	PVC	130.0	2.31	-1,449.35	1.241
P16	J17	PA-10	1,328	12	PVC	130.0	0.91	320.95	0.309
P17	PA-10	W SCHOOL	1,295	12	PVC	130.0	0.18	64.70	0.016
P18	PA-5	PA-8	315	12	PVC	130.0	1.62	570.98	0.898
P19	PA-8	W SCHOOL	1,434	12	PVC	130.0	0.68	239.82	0.180
P20	J1	PA-7	475	12	PVC	130.0	1.66	585.39	0.941
P21	PA-4	PA-12	863	24	PVC	130.0	2.08	2,937.31	0.637
P22	J15	PA-13	1,188	16	PVC	130.0	0.23	-143.24	0.017
P23	PA-13	J2	1,430	16	PVC	130.0	0.54	-335.43	0.083
P24	J12	PA-14	1,262	12	PVC	130.0	0.39	136.33	0.063
P25	J5	J6	2,632	16	PVC	130.0	1.20	752.15	0.368
P26	J4	COMM	2,256	24	PVC	130.0	3.47	4,899.21	1.643
P27	J5	CHURCH	297	12	PVC	130.0	1.98	697.20	1.300
P28	CHURCH	PA-5	548	12	PVC	130.0	1.97	693.20	1.286
P29	J6	MF-MED	313	16	PVC	130.0	0.74	466.33	0.151
P30	MF-MED	PA-9	617	16	PVC	130.0	0.57	357.41	0.093
P31	PA-1	N SCHOOL	751	12	PVC	130.0	2.64	929.03	2.211
P32	N SCHOOL	J11	794	12	PVC	130.0	2.60	916.43	2.157
P33	W SCHOOL	PA-11	491	12	PVC	130.0	1.34	471.25	0.629
P34	PA-11	J15	2,158	12	PVC	130.0	1.15	406.21	0.478
P35	J12	PA-15	1,120	24	PVC	130.0	1.23	1,736.99	0.241
P36	PA-15	J13	1,502	24	PVC	130.0	0.09	126.59	0.002
P37	PA-6	CS	1,342	16	PVC	130.0	2.46	-1,544.44	1.396
P38	CS	J4	599	16	PVC	130.0	2.58	-1,616.95	1.520
P39	J2	J12	2,623	24	PVC	130.0	1.38	1,943.71	0.297
P40	J16	PA-16	1,494	12	PVC	130.0	0.59	207.76	0.138
P41	PA-16	J14	492	12	PVC	130.0	0.45	159.24	0.084
P42	PA-12	J2	1,436	24	PVC	130.0	1.86	2,627.82	0.519
P43	PA-9	J17	1,662	16	PVC	130.0	0.51	320.95	0.076
P44	PA-14	J16	1,571	12	PVC	130.0	0.16	-55.87	0.012
P45	J1	PA-4	630	24	PVC	130.0	2.31	3,258.13	0.772
P46	COMM	J1	621	24	PVC	130.0	3.43	4,842.10	1.608
P47	PA-7	W SCHOOL	1,258	12	PVC	130.0	0.51	179.33	0.105

HARMONY

Active Scenario: MAX DAY FF AT PA-15

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
CHURCH	5,646.55	4.00	86.3	5,845.93
COMM	5,630.53	57.10	93.3	5,846.26
CS	5,628.18	72.51	95.6	5,849.06
J1	5,641.98	0.00	88.0	5,845.26
J2	5,643.16	197.12	86.7	5,843.48
J4	5,629.30	0.00	95.5	5,849.97
J5	5,647.47	0.00	86.0	5,846.32
J6	5,672.32	285.82	74.9	5,845.35
J7	5,618.35	295.68	97.4	5,843.43
J8	5,612.42	295.68	102.8	5,849.96
J9	5,609.31	0.00	104.1	5,850.00
J10	5,624.26	0.00	97.7	5,850.00
J11	5,620.07	0.00	96.7	5,843.62
J12	5,681.12	70.40	69.9	5,842.70
J13	5,711.38	0.00	56.7	5,842.43
J14	5,685.26	285.82	68.0	5,842.40
J15	5,677.09	285.82	71.9	5,843.34
J16	5,660.25	0.00	78.9	5,842.64
J17	5,672.78	0.00	74.6	5,845.12
MF-MED	5,670.87	108.92	75.5	5,845.30
MUN	5,635.82	12.60	89.8	5,843.29
N SCHOOL	5,617.48	12.60	98.6	5,845.33
PA-1	5,620.06	44.35	98.2	5,846.99
PA-2	5,629.95	849.58	91.5	5,841.46
PA-3	5,630.21	908.71	91.4	5,841.40
PA-4	5,651.51	320.82	83.6	5,844.78
PA-5	5,645.18	122.22	86.6	5,845.23
PA-6	5,636.98	95.09	90.9	5,847.18
PA-7	5,641.60	406.06	87.9	5,844.82
PA-8	5,646.41	331.16	85.9	5,844.94
PA-9	5,671.39	36.46	75.2	5,845.24
PA-10	5,656.85	256.26	81.3	5,844.71
PA-11	5,657.56	65.04	80.8	5,844.38
PA-12	5,666.02	309.48	77.1	5,844.23
PA-13	5,669.05	192.19	75.4	5,843.36
PA-14	5,682.61	192.19	69.2	5,842.62
PA-15	5,713.00	1,610.40	56.0	5,842.44
PA-16	5,680.75	48.52	70.0	5,842.44
W SCHOOL	5,652.03	12.60	83.4	5,844.68

HARMONY

Active Scenario: MAX DAY FF AT PA-15

ID	Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
473	R-1	5,850.00	1,204.01	5,850.00
591	R-2	5,850.00	6,581.21	5,850.00

MAX HOUR

HARMONY

Active Scenario: MAX HOUR

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Material	Hazen-Williams C	Velocity (ft/s)	Flow (gpm)	Headloss Gradient (ft/1000ft)
P1	J4	J8	2,046	16	PVC	130.0	0.18	111.65	0.011
P2	J7	J2	2,662	16	PVC	130.0	0.96	-599.64	0.242
P3	J9	J8	10	12	PVC	130.0	4.84	1,706.63	6.836
P4	J9	R-1	1	12	PVC	130.0	4.84	-1,706.63	6.836
P5	J8	PA-1	1,232	12	PVC	130.0	3.81	1,343.08	4.377
P6	J4	J10	10	24	PVC	130.0	6.21	-8,760.57	4.834
P7	J10	R-2	1	24	PVC	130.0	6.21	-8,760.57	4.883
P8	J11	J7	2,642	12	PVC	130.0	0.35	-124.44	0.053
P9	J13	J14	2,650	16	PVC	130.0	0.64	399.24	0.114
P10	MUN	PA-2	742	12	PVC	130.0	4.35	1,534.37	5.601
P11	J16	J15	3,264	12	PVC	130.0	0.46	-161.64	0.087
P12	J1	MUN	780	12	PVC	130.0	4.40	1,550.47	5.710
P13	PA-2	PA-3	869	12	PVC	130.0	0.48	168.98	0.094
P14	PA-3	J11	1,409	12	PVC	130.0	3.66	-1,291.45	4.071
P15	J5	PA-6	700	16	PVC	130.0	3.18	-1,993.97	2.241
P16	J17	PA-10	1,328	12	PVC	130.0	1.01	354.36	0.371
P17	PA-10	W SCHOOL	1,295	12	PVC	130.0	0.16	-57.48	0.013
P18	PA-5	PA-8	315	12	PVC	130.0	2.10	740.19	1.452
P19	PA-8	W SCHOOL	1,434	12	PVC	130.0	0.59	207.97	0.138
P20	J1	PA-7	475	12	PVC	130.0	2.75	969.17	2.392
P21	PA-4	PA-12	863	24	PVC	130.0	2.34	3,298.73	0.790
P22	J15	PA-13	1,188	16	PVC	130.0	0.44	-274.56	0.057
P23	PA-13	J2	1,430	16	PVC	130.0	0.93	-583.44	0.230
P24	J12	PA-14	1,262	12	PVC	130.0	0.81	285.34	0.248
P25	J5	J6	2,632	16	PVC	130.0	1.67	1,047.36	0.680
P26	J4	COMM	2,256	24	PVC	130.0	4.54	6,406.95	2.701
P27	J5	CHURCH	297	12	PVC	130.0	2.69	946.61	2.290
P28	CHURCH	PA-5	548	12	PVC	130.0	2.66	936.61	2.244
P29	J6	MF-MED	313	16	PVC	130.0	0.94	588.00	0.232
P30	MF-MED	PA-9	617	16	PVC	130.0	0.66	412.95	0.122
P31	PA-1	N SCHOOL	751	12	PVC	130.0	3.36	1,183.10	3.460
P32	N SCHOOL	J11	794	12	PVC	130.0	3.31	1,167.00	3.374
P33	W SCHOOL	PA-11	491	12	PVC	130.0	1.28	450.97	0.580
P34	PA-11	J15	2,158	12	PVC	130.0	0.98	346.44	0.356
P35	J12	PA-15	1,120	24	PVC	130.0	0.67	945.72	0.078
P36	PA-15	J13	1,502	24	PVC	130.0	0.28	399.24	0.016
P37	PA-6	CS	1,342	16	PVC	130.0	3.43	-2,146.79	2.569
P38	CS	J4	599	16	PVC	130.0	3.58	-2,241.96	2.784
P39	J2	J12	2,623	24	PVC	130.0	0.92	1,301.46	0.141
P40	J16	PA-16	1,494	12	PVC	130.0	0.39	138.10	0.065
P41	PA-16	J14	492	12	PVC	130.0	0.17	60.12	0.014
P42	PA-12	J2	1,436	24	PVC	130.0	1.99	2,801.35	0.583
P43	PA-9	J17	1,662	16	PVC	130.0	0.57	354.36	0.091
P44	PA-14	J16	1,571	12	PVC	130.0	0.07	-23.54	0.002
P45	J1	PA-4	630	24	PVC	130.0	2.71	3,814.34	1.034
P46	COMM	J1	621	24	PVC	130.0	4.49	6,333.99	2.644
P47	PA-7	W SCHOOL	1,258	12	PVC	130.0	0.90	316.58	0.301

HARMONY

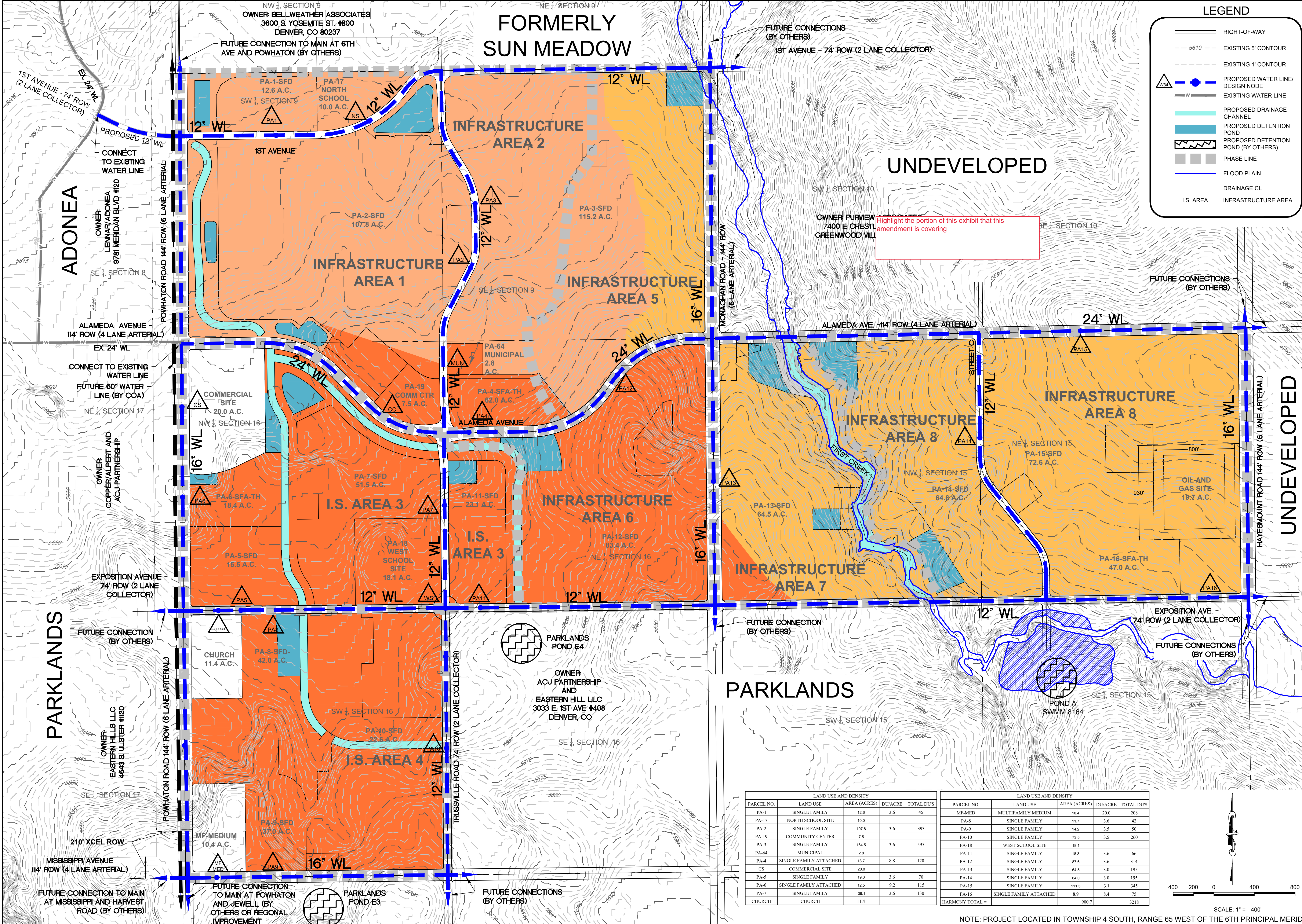
Active Scenario: MAX HOUR

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
CHURCH	5,646.55	10.00	84.8	5,842.58
COMM	5,630.53	72.97	92.3	5,843.85
CS	5,628.18	95.17	95.2	5,848.28
J1	5,641.98	0.00	86.6	5,842.21
J2	5,643.16	316.80	85.2	5,840.04
J4	5,629.30	0.00	95.5	5,849.95
J5	5,647.47	0.00	84.7	5,843.26
J6	5,672.32	459.36	73.2	5,841.47
J7	5,618.35	475.20	95.6	5,839.40
J8	5,612.42	475.20	102.8	5,849.92
J9	5,609.31	0.00	104.1	5,849.99
J10	5,624.26	0.00	97.7	5,850.00
J11	5,620.07	0.00	94.8	5,839.26
J12	5,681.12	70.40	68.6	5,839.67
J13	5,711.38	0.00	55.5	5,839.56
J14	5,685.26	459.36	66.6	5,839.26
J15	5,677.09	459.36	70.3	5,839.64
J16	5,660.25	0.00	77.5	5,839.36
J17	5,672.78	0.00	72.9	5,841.17
MF-MED	5,670.87	175.05	73.8	5,841.40
MUN	5,635.82	16.10	87.4	5,837.76
N SCHOOL	5,617.48	16.10	97.1	5,841.93
PA-1	5,620.06	159.98	97.1	5,844.53
PA-2	5,629.95	1,365.39	88.1	5,833.60
PA-3	5,630.21	1,460.43	88.0	5,833.52
PA-4	5,651.51	515.61	82.2	5,841.56
PA-5	5,645.18	196.43	84.9	5,841.35
PA-6	5,636.98	152.82	89.9	5,844.83
PA-7	5,641.60	652.59	86.3	5,841.08
PA-8	5,646.41	532.21	84.1	5,840.90
PA-9	5,671.39	58.59	73.5	5,841.32
PA-10	5,656.85	411.84	79.5	5,840.68
PA-11	5,657.56	104.54	79.1	5,840.41
PA-12	5,666.02	497.38	75.7	5,840.88
PA-13	5,669.05	308.88	73.8	5,839.71
PA-14	5,682.61	308.88	67.8	5,839.36
PA-15	5,713.00	546.48	54.8	5,839.58
PA-16	5,680.75	77.99	68.6	5,839.26
W SCHOOL	5,652.03	16.10	81.6	5,840.70

HARMONY

Active Scenario: MAX HOUR

ID	Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
473	R-1	5,850.00	1,706.63	5,850.00
591	R-2	5,850.00	8,760.57	5,850.00



LEGEND

RIGHT-OF-WAY

EXISTING 5' CONTOUR

EXISTING 1' CONTOUR

PROPOSED WATER LINE/DESIGN NODE

EXISTING WATER LINE

PROPOSED DRAINAGE CHANNEL

PROPOSED DETENTION POND

PROPOSED DETENTION POND (BY OTHERS)

PHASE LINE

FLOOD PLAIN

DRAINAGE CL

I.S. AREA

INFRASTRUCTURE AREA

SCALE: AS SHOWN

DRAWN BY: BW

SHEET NUMBER: WL

FILE NO: 30214901

CHECKED BY: CN

DATE: JUNE 1, 2016

PRELIMINARY WATERLINE LAYOUT

SCALE: 1" = 400'

NOTE: PROJECT LOCATED IN TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN

Westwood

10333 E DRY CREEK RD. SUITE 240
ENGLEWOOD, CO 80112
TEL: 720.482.9226

Westwoods.com
Westwood Professional Services, Inc.

Revisions

No.

Date

Init.

Appr.

Date

Appendix B

Wastewater Demands and Routing Calculations

HARMONY DEVELOPMENT
CITY OF AURORA
ON-SITE SANITARY SEWER PEAK ROUTING CALCULATIONS

PLANNING AREA	TYPE OF DEVELOPMENT	AREA (AC)	MAX. UNITS***	MAXIMUM DENSITY (DU/AC)	OCCUPANCY (PERSONS/DU)	AVG DAY FLOW (GPD/CAP)	AVG DAY FLOW (GPD)	MAX POPULATION*** (THOUSANDS)	PEAKING FACTOR (PF)	PEAK DAILY FLOW (GPD)	PEAK DAILY FLOW (CFS)	INFILTRATION 10% OF AVG DAY FLOW (GPD)	PEAK DAY FLOW WITH INFILTRATION (GPD)
PA-1	SFD	12.6	101	8.0	3.3	80	26,664	0.333	4.0	106,656	0.17	2,666	109,322
PA-17-NORTH SCHOOL	SCHOOL	10.0	1		688	10	6,880	0.688	4.0	27,520	0.04	688	28,208
PA-2	SFD	107.8	862	8.0	4.4	80	303,424	3.793	4.0	1,213,696	1.88	30,342	1,244,038
PA-19-COMMUNITY CENTER	COMM	7.5					5,000	0.001	4.0	20,000	0.03	500	20,500
PA-3	SFD	115.2	922	8.0	4.4	80	324,544	4.057	4.0	1,284,331	1.99	32,454	1,316,785
PA-4	SFA-TH	62.0	496	8.0	2.1	80	83,328	1.042	4.0	333,312	0.52	8,333	341,645
CS	COMMERCIAL SITE	20.0			(Equivalent Popul.) 50	(GPD/Acre) 4,000	80,000	0.050	4.0	320,000	0.50	8,000	328,000
PA-5	SFD	15.5	124	8.0	6.7	80	66,464	0.831	4.0	265,856	0.41	6,646	272,502
PA-6	SFA-TH	18.4	147	8.0	5.4	80	63,504	0.794	4.0	254,016	0.39	6,350	260,366
PA-7	SFD	51.5	412	8.0	3.7	80	121,952	1.524	4.0	487,808	0.75	12,195	500,003
CHURCH	CHURCH	11.4					5,000	0.001	4.0	20,000	0.03	500	20,500
MF-MED	MF-MEDIUM	10.4	208	20.0	1.7	80	28,288	0.354	4.0	113,152	0.18	2,829	115,981
PA-8	SFD	42.0	336	8.0	3.9	80	104,832	1.310	4.0	419,328	0.65	10,483	429,811
PA-9	SFD	37.0	296	8.0	4.5	80	106,560	1.332	4.0	426,240	0.66	10,656	436,896
PA-10	SFD	22.6	181	8.0	2.4	80	34,752	0.434	4.0	139,008	0.22	3,475	142,483

***MAX UNITS AND MAX POPULATION WILL BE UP TO BUT NOT EXCEEDING THE NUMBER SHOWN.

HARMONY DEVELOPMENT CITY OF AURORA

Include channel diagrams showing updated d/D for design points referenced in routing diagram

PLANNING AREA	TYPE OF DEVELOPMENT	AREA (AC)	MAX. UNITS	MAXIMUM DENSITY (DU/AC)	OCCUPANCY (PERSONS/DU)	AVG DAY FLOW (GPD/CAP)	AVG DAY FLOW (GPD)	POPULATION (THOUSANDS)				INFILTRATION 10% OF AVG DAY FLOW (GPD)	PEAK DAY FLOW WITH INFILTRATION (GPD)
PA-18- WEST SCHOOL	SCHOOL	18.1	1		688	10	6,880	0.688	4.0	27,520	0.04	688	28,208
PA-11	SFD	23.1	185	8.0	3.5	80	51,800	0.648	4.0	207,200	0.32	5,180	212,380
PA-12	SFD	83.4	667	8.0	3.2	80	170,752	2.134	4.0	683,008	1.06	17,075	700,083
PA-64- MUNICIPAL	FIRE STATION	2.8					5,000	0.001	4.0	20,000	0.03	500	20,500
PA-13	SFD	64.5	516	8.0	2.8	80	115,584	1.445	4.0	462,336	0.72	11,558	473,894
PA-14	SFD	64.6	517	8.0	2.6	80	107,536	1.344	4.0	430,144	0.67	10,754	440,898
PA-15	SFD	72.6	581	8.0	3.6	80	167,328	2.092	4.0	669,312	1.04	16,733	686,045
PA-16	SFA-TH	47.0	517	11.0	8.4	80	347,424	4.343	3.9	1,359,322	2.10	34,742	1,394,064

OFF-SITE SANITARY SEWER PEAK FLOW CALCULATIONS*

PLANNING AREA	TYPE OF DEVELOPMENT	AREA (AC)	MAX. UNITS	MAXIMUM DENSITY (DU/AC)	OCCUPANCY (PERSONS/DU)	AVG DAY FLOW (GPD/CAP)	AVG DAY FLOW (GPD)	POPULATION (THOUSANDS)	PEAKING FACTOR (PF)	PEAK DAILY FLOW (GPD)	PEAK DAILY FLOW (CFS)	INFILTRATION 10% OF AVG DAY FLOW (GPD)	PEAK DAY FLOW WITH INFILTRATION (GPD)
Parklands F-13*	NAC & SFD	43.0	225				57,600	0.720	4.0	230,400	0.36	5,760	236,160
Parklands F-12*	SFD	24.0	145				37,018	0.464	4.0	148,072	0.23	3,702	151,774
Parklands F-7*	CP, CAC, SFA, SFD	282.0	1896				485,366	6.067	2.78	1,349,317	2.09	48,537	1,697,000
Parklands F-1*	CP, NP, NAC SFD	466.0	2334				596,788	7.469	2.57	1,533,745	2.37	59,679	2,182,000
Sun Meadows** SM Offsite 2	SFD/MF COMM/RETAIL	60.0	320			80	60,638	0.758	4.0	242,552	0.38	6,064	248,616
Sun Meadows** PA-1	CAC-Shopping Ctr	18.5	19		25	2000	37,000	0.463	4.0	148,000	0.23	3,700	151,700
Sun Meadows** PA-4,9,12	School-Elem SFD/SFA/MF-MED	85.0	680				184,080	3.176	4.0	736,320	1.14	18,408	754,728
Sun Meadows** PA-21	MF-MED	9.9	158		1.7	80	21,542	0.269	4.0	86,168	0.13	2,154	88,322
Sun Meadows** PA-22,23	CAC-Shopping Ctr MF-MED	38.3	289				79,539	0.994	4.0	318,156	0.49	7,954	326,110
Sun Meadows** PA-13,15	SFD/SFA/MF-MED Park	46.9	275				75,042	0.939	4.0	300,168	0.46	7,504	307,672
Sun Meadows** PA-26	SFD/SFA/MF-MED	12.8	102		3.2	80	26,214	0.328	4.0	104,856	0.16	2,621	107,477
Undeveloped SM Offsite 1	SFD/MF COMM/RETAIL	160.5	857			80	162,208	2.028	4.0	648,832	1.00	16,221	665,053

* Source: Sanitary Sewer Analysis calculations/exhibits by Meurer & Associates dated 7/5/2005 for Parklands (formerly Eastern Hills)

** Source: Master Utilities Report for Sun Meadow, CVL Consultants of Colorado, Inc., Oct. 5, 2005

***MAX UNITS AND MAX POPULATION WILL BE UP TO BUT NOT EXCEEDING THE NUMBER SHOWN.

HARMONY DEVELOPMENT
CITY OF AURORA
ON-SITE SANITARY SEWER PEAK ROUTING CALCULATIONS - (PERMANENT GRAVITY SYSTEM)

DESIGN POINT	PLANNING AREA	DESCRIPTION	AREA (AC)	UNITS	MAXIMUM DENSITY (DU/AC)	OCCUPANCY (PERSONS/DU)	AVG DAY FLOW (GPD/CAP)	PERCENTAGE OF PLANNING AREA	AVG DAY FLOW (GPD)	POPULATION (THOUSANDS)	PEAKING FACTOR (PF)	PEAK DAILY FLOW (GPD)	INFILTRATION 10% OF AVG DAY FLOW (GPD)	PEAK DAY FLOW WITH INFILTRATION (GPD)	PEAK DAY FLOW WITH INFILTRATION (CFS)	COMMENTS
SS2	PA-1, 2, 3, NORTH SCHOOL		201.4	1,532					536,974	7.314	3.6	1,925,786	53,697	1,979,483	3.06	to DP SS1, 12"
SS2	PA-1	SFD	12.6	101	8.0	3.3	80	100%	26,664	0.333	4.0	106,656	2,666	109,322	0.17	
SS2	PA-2 (40%)	SFD	107.8	862	8.0	4.4	80	40%	121,370	1.517	4.0	485,478	12,137	497,615	0.77	
SS3	PA-2, 3, NORTH SCHOOL		145.7	1,086					388,941	5.464	3.8	1,464,510	38,894	1,503,404	2.33	to DP SS2 - 12"
SS3	PA-18- NORTH SCHOOL	SCHOOL	10	1		688.0	10	100%	6,880	0.688	4.0	27,520	688	28,208	0.04	
SS3	PA-2 (35%)	SFD	107.8	862	8.0	4.4	80	35%	106,198	1.327	4.0	424,794	10,620	435,413	0.67	
SS4	PA-3		97.9	784					275,862	3.448	4.0	1,103,450	27,586	1,131,036	1.75	to DP SS3 - 12"
SS4	PA-3 (70%)	SFD	115.2	922	8.0	4.4	80	70%	227,181	2.840	4.0	908,723	22,718	931,441	1.44	
SS5	PA-3		17.3	138					48,682	0.609	4.0	194,726	4,868	199,595	0.31	to DP SS4 - 8"
SS5	PA-3 (15%)	SFD	115.2	922	8.0	4.4	80	15%	48,682	0.609	4.0	194,726	4,868	199,595	0.31	

DESIGN POINT	PLANNING AREA	DESCRIPTION	AREA (AC)	UNITS	MAXIMUM DENSITY (DU/AC)	OCCUPANCY (PERSONS/DU)	AVG DAY FLOW (GPD/CAP)	PERCENTAGE OF PLANNING AREA	AVG DAY FLOW (GPD)	POPULATION (THOUSANDS)	PEAKING FACTOR (PF)	PEAK DAILY FLOW (GPD)	INFILTRATION 10% OF AVG DAY FLOW (GPD)	PEAK DAY FLOW WITH INFILTRATION (GPD)	PEAK DAY FLOW WITH INFILTRATION (CFS)	COMMENTS
SS8	PA-2, 4, 5, 6, 7, 8, 9, 10, 11, 12, WEST SCHOOL, CS, CHURCH, MF-MED, F-12,13, COMM, MUNICIPAL		519.7	3,640					1,104,586	13.276	3.2	3,586,053	110,459	3,696,512	5.72	to DP SS7, 15"
SS8	COMMERCIAL SITE	CS	20.0			(Equivalent Popul.) 50.0	4,000	100%	(GPD/Acre) 80,000	0.050	4.0	320,000	8,000	328,000	0.51	
SS9	PA-4, 5, 6, 7, 8, 9, 10, 11, 12, WEST SCHOOL, CHURCH, MF-MED, F-12,13, COMM, MUNICIPAL		499.7	3,640					1,024,586	13.226	3.2	3,328,429	102,459	3,430,888	5.31	to DP SS8 - 15"
SS9	PA-2 (25%)	SFD	107.8	862	8.0	4.4	80	25%	75,856	0.948	4.0	303,424	7,586	311,010	0.48	
SS10	PA-4, 11,12, COMM, MUNICIPAL		178.8	1349.0					315,880	3.826	4.0	1,262,360	31,588	1,293,948	2.00	to DP SS9 - 8"
SS10	PA-4	SFD	62.0	496	8.0	2.1	80	100%	83,328	1.042	4.0	333,312	8,333	341,645	0.53	
SS10	COMMUNITY CENTER		7.5					100%	5,000	0.001	4.000	20,000	500	20,500	0.03	
SS19	PA-64 - MUNICIPAL		2.8	1					5,000	0.001	4.0	20,000	500	20,500	0.03	to DP SS10 - 8"
SS19	PA-64 - MUNICIPAL	SFD	2.8	1				100%	5,000	0.001	4.0	20,000	500	20,500	0.03	
SS11	PA-12		83.4	667					170,752	2.134	4.0	683,008	17,075	700,083	1.08	to DP SS10 - 8"
SS11	PA-12	SFD	83.4	667	8.0	3.2	80	100%	170,752	2.134	4.0	683,008	17,075	700,083	1.08	
SS12	PA-11		23.1	185					51,800	0.648	4.0	207,200	5,180	212,380	0.33	to DP SS10 - 8"
SS12	PA-11	SFD	23.1	185	8.0	3.5	80	100%	51,800	0.648	4.0	207,200	5,180	212,380	0.33	
SS13	PA-5, 6, 7, 8, 9, 10, CHURCH MF-MED, WEST SCHOOL, F-12,13		293.9	2,075					632,850	8.452	3.5	2,215,466	63,285	2,278,751	3.53	to DP SS9 - 12"
SS13	PA-7	SFD	51.5	412	8.0	3.7	80	100%	121,952	1.524	4.0	487,808	12,195	500,003	0.77	

HARMONY DEVELOPMENT
CITY OF AURORA
ON-SITE SANITARY SEWER PEAK ROUTING CALCULATIONS - (PERMANENT GRAVITY SYSTEM)

DESIGN POINT	PLANNING AREA	DESCRIPTION	AREA (AC)	UNITS	MAXIMUM DENSITY (DU/AC)	OCCUPANCY (PERSONS/DU)	AVG DAY FLOW (GPD/CAP)	PERCENTAGE OF PLANNING AREA	AVG DAY FLOW (GPD)	POPULATION (THOUSANDS)	PEAKING FACTOR (PF)	PEAK DAILY FLOW (GPD)	INFILTRATION 10% OF AVG DAY FLOW (GPD)	PEAK DAY FLOW WITH INFILTRATION (GPD)	PEAK DAY FLOW WITH INFILTRATION (CFS)	COMMENTS
SS14	PA-5, 6		33.9	271					129,968	1.625	4.0	519,872	12,997	532,869	0.82	to DP SS13 - 8"
SS14	PA-6	SFA	18.4	147	8.0	5.4	80	100%	63,504	0.794	4.0	254,016	6,350	260,366	0.40	
SS15	PA-5		15.5	124					66,464	0.831	4.0	265,856	6,646	272,502	0.42	to DP SS14 - 8"
SS15	PA-5	SFD	15.5	124	8.0	6.7	80	100%	66,464	0.831	4.0	265,856	6,646	272,502	0.42	
SS16	PA-8, 9, 10, WEST SCHOOL CHURCH, MF-MED, F-12,13		208.5	1,392					380,930	5.303	3.8	1,441,500	38,093	1,479,593	2.29	to DP SS13 - 12"
SS16	PA-10 (70%)	SFD	22.6	181	8.0	2.4	80	70%	24,326	0.304	4.0	97,306	2,433	99,738	0.15	
SS17	PA-8, CHURCH		53.4	336					109,832	1.311	4.0	439,328	10,983	450,311	0.70	to DP SS16 - 8"
SS17	PA-8	SFD	42.0	336	8.0	3.9	80	100%	104,832	1.310	4.0	419,328	10,483	429,811	0.67	
SS18	CHURCH		11.4	0					5,000	0.001	4.0	20,000	500	20,500	0.03	to DP SS17 - 8"
SS18	CHURCH	SFD	11.4	0				100%	5,000	0.001	4.0	20,000	500	20,500	0.03	
SS20	PA-9, PA-10, MF-MED		54.2	558					145,274	1.816	4.0	581,094	14,527	595,622	0.92	to DP SS19 - 8"
SS20	PA-10 (30%)	SFD	22.6	181	8.0	2.4	80	30%	10,426	0.130	4.0	41,702	1,043	42,745	0.07	
SS20	PA-9	SFD	37.0	296	8.0	4.5	80	100%	106,560	1.332	4.0	426,240	10,656	436,896	0.68	
SS21	MF-MED		10.4	208					28,288	0.354	4.0	113,152	2,829	115,981	0.18	to DP SS20 - 8"
SS21	MF-MEDIUM	MF-MEDIUM	10.4	208	20.0	1.7	80	100%	28,288	0.354	4.0	113,152	2,829	115,981	0.18	
SS22	WEST SCHOOL, PARK F-12 PARK F-13		85.1	371					101,498	1.872	4.0	405,992	10,150	416,142	0.64	to DP SS16 - 8"
SS22	PA-19- WEST SCHOOL	SCHOOL	18.1	1		688.0	10	100%	6,880	0.688	4.0	27,520	688	28,208	0.04	
SS22	PARKLAND F-12	OFFSITE	24.0	145				100%	37,018	0.464	4.0	148,072	3,702	151,774	0.23	
SS23	PARK F-13		43.0	225					57,600	0.720	4.0	230,400	5,760	236,160	0.37	to DP SS22 - 8"
SS23	PARKLAND F-13	OFFSITE	43.0	225				100%	57,600	0.720	4.0	230,400	5,760	236,160	0.37	

SM DP 11	PA-3,12-17 PARK F-1,7, SM-OFF-1,2 SM PA-4,9,26,10,12,13,15,21-23		1445.9	9,199					2,514,971	32.323	2.8	7,037,439	251,497	7,288,936	11.28	Tie to replaced SS Line at 6th Ave/Pow Upsize from 18" to 24"
SM DP 11	SM OFF-2	SFD/MF COMM/RETAIL	60.0	320.0			80	100%	60,638	0.758	4.0	242,552	6,064	248,616	0.38	
SM DP 10	PA-3,12-17,PARK F-1,7 SM OFF-1,PA-4,9,26,10,12,13,15,21-23		1385.9	8,879					2,454,333	31.565	2.8	6,895,031	245,433	7,140,464	11.05	to SM DP 11 - 24"
SM DP 10	SM PA-1	CAC-Shopping Ctr	18.5	19.0		25.0	2,000	100%	37,000	0.463	4.0	148,000	3,700	151,700	0.23	
SM DP 9	PA-3,12-17,PARK F-1,7 SM OFF-1,PA-4,9,26,12,13,15,21-23		1367.4	8,860					2,417,333	31.102	2.8	6,807,865	241,733	7,049,599	10.91	to SM DP 10 - 24"
SM DP 9	SM PA-4,9,12	School-Elem SFD/SFA/MF-MED	85.0	680.0				100%	184,080	3.176	4.0	736,320	18,408	754,728	1.17	
SM DP 7	PA-3,12-17 PARK F-1,7 SM OFF-1,PA-26,13,15,22,23,21		1282.4	8,180					2,233,253	27.926	2.9	6,403,606	223,325	6,626,931	10.25	to SM DP 9 - 18"
SM DP 7	SM PA-21	MF-MED	9.9	158.0		1.7	80	100%	21,542	0.269	4.0	86,168	2,154	88,322	0.14	

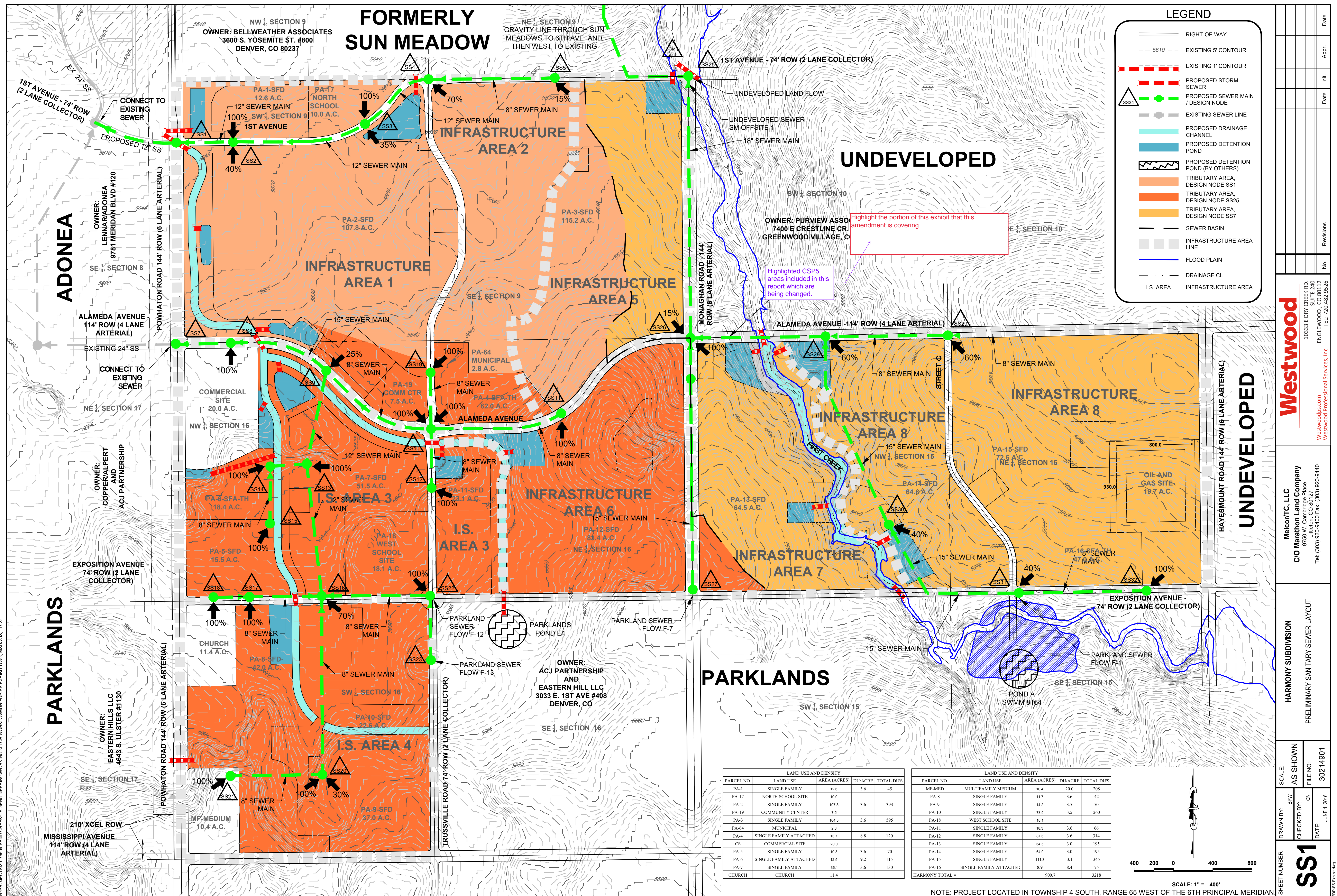
HARMONY DEVELOPMENT
CITY OF AURORA
ON-SITE SANITARY SEWER PEAK ROUTING CALCULATIONS - (PERMANENT GRAVITY SYSTEM)

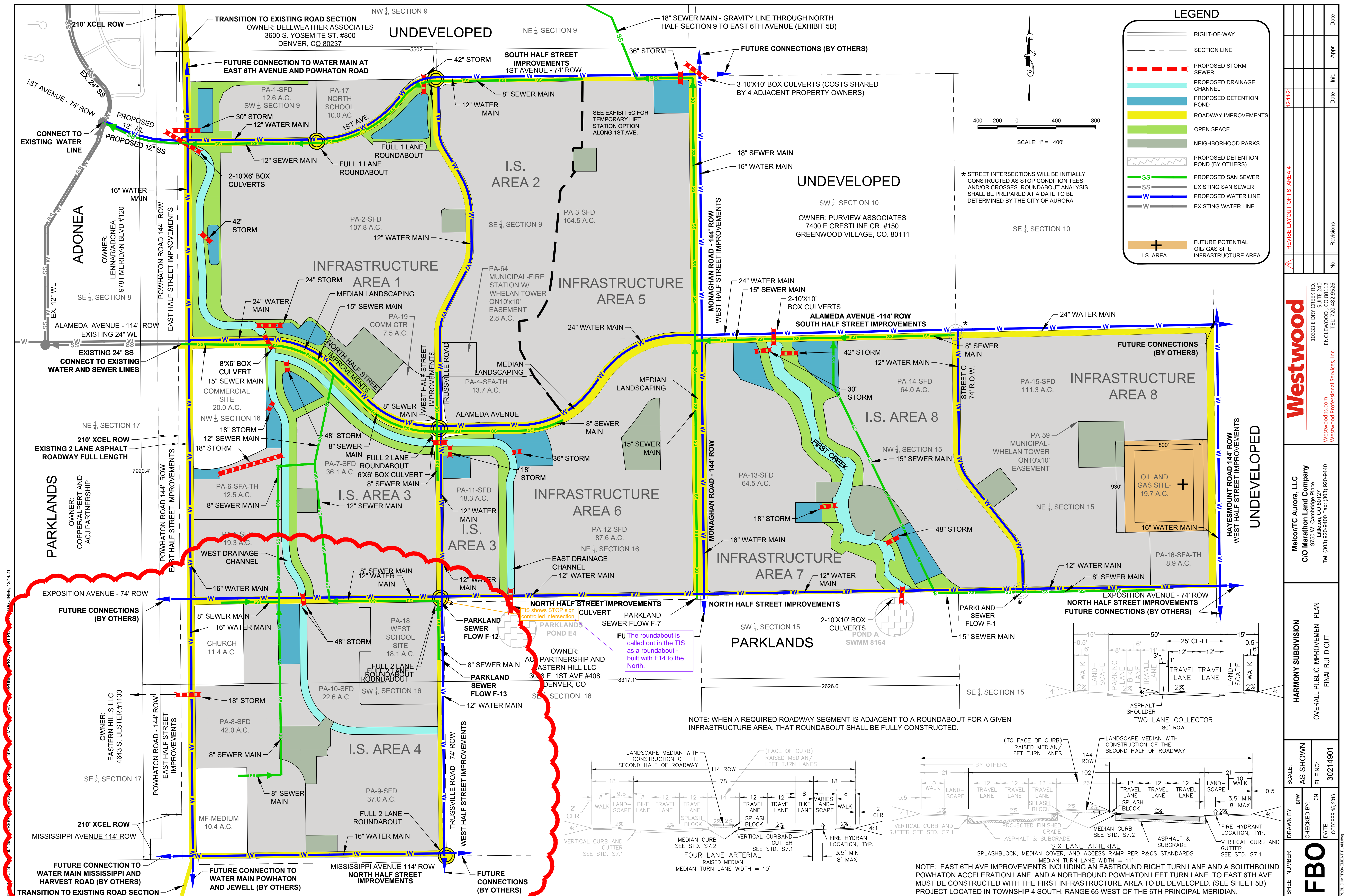
DESIGN POINT	PLANNING AREA	DESCRIPTION	AREA (AC)	UNITS	MAXIMUM DENSITY (DU/AC)	OCCUPANCY (PERSONS/DU)	AVG DAY FLOW (GPD/CAP)	PERCENTAGE OF PLANNING AREA	AVG DAY FLOW (GPD)	POPULATION (THOUSANDS)	PEAKING FACTOR (PF)	PEAK DAILY FLOW (GPD)	INFILTRATION 10% OF AVG DAY FLOW (GPD)	PEAK DAY FLOW WITH INFILTRATION (GPD)	PEAK DAY FLOW WITH INFILTRATION (CFS)	COMMENTS
SM DP 6	PA-3,12-17,PARK F-1,7 SM OFF-1,PA-26,13,15,22,23		1272.5	8,022					2,211,711	27.657	2.9	6,352,096	221,171	6,573,267	10.17	to SM DP 7 - 18"
SM DP 6	SM PA-22,23	CAC-Shopping Ctr MF-MED	38.3	289.0				100%	79,539	0.994	4.0	318,156	7,954	326,110	0.50	
SM DP 3	PA-3,12-17,PARK F-1,7 SM OFF-1,PA-26,13,15		1234.2	7,733					2,132,172	26.663	2.9	6,161,204	213,217	6,374,421	9.86	to SM DP 6 - 18"
SM DP 3	SM PA-13,15	SFD/SFA/MF-MED Park	46.9	275.0				100%	75,042	0.939	4.0	300,168	7,504	307,672	0.48	
SM DP 24	PA-3,12-17,PARK F-1,7 SM OFF-1,PA-26		1187.3	7,458					2,057,130	25.724	2.9	5,980,057	205,713	6,185,770	9.57	to SM DP 3 - 18"
SM DP 2	SM PA-26	SFD/SFA/MF-MED	12.8	102.0		3.2	80	100%	26,214	0.328	4.0	104,856	2,621	107,477	0.17	
SM DP 1	PA-3,12,13,14,15,16,17, PARK F-1,7, SM OFF-1		1174.5	7,356					2,030,916	25.396	2.9	5,916,519	203,092	6,119,611	9.47	to SM DP 2 - 18"
SM DP 1/ SS 25	SM OFF-1	SFD/MF COMM/RETAIL	160.5	857.0			80	100%	162,208	2.028	4.0	648,832	16,221	665,053	1.03	
SS 26	PA-3,12,13,14,15,16 PARK F-1,7		1014.0	6,499					1,868,708	23.368	3.0	5,520,162	186,871	5,707,033	8.83	to DP SS25 - 18"
SS 26	PA-3 (15%)	SFD	115.2	922	8.0	4.4	80	15%	48,682	0.609	4.0	194,726	4,868	199,595	0.31	
SS 26	PA-13	SFD	64.5	516	8.0	2.8	80	100%	115,584	1.445	4.0	462,336	11,558	473,894	0.73	
SS27	PARK F-7		282.0	1,896					485,366	6.067	2.8	1,349,317	48,537	1,397,854	2.16	to DP SS27 - 15"
SS27	PARKLAND F-7	OFFSITE	282.0	1,896				100%	485,366	6.067	2.8	1,349,317	48,537	1,397,854	2.16	
SS28	PA-14,15,16, PARK F-1		650.2	3,949					1,219,076	15.248	3.2	3,867,285	121,908	3,989,192	6.17	to DP SS26 - 15"
SS28	PA-14 (60)	SFD	64.6	517	8.0	2.6	80	60%	64,522	0.807	4.0	258,086	6,452	264,539	0.41	
SS29	PA-15 (60%)		43.6	349					100,397	1.255	4.0	401,587	10,040	411,627	0.64	to DP SS29 - 8"
SS30	PA-15 (60%)	SFD	72.6	581	8.0	3.6	80	60%	100,397	1.255	4.0	401,587	10,040	411,627	0.64	
SS30	PA-14, 15, 16, PARKLAND F-1		567.9	3,290					1,054,158	13.186	3.3	3,426,226	105,416	3,531,642	5.47	to DP SS29 - 15"
SS30	PA-14 (40%)	SFD	64.6	517	8.0	2.6	80	40%	43,014	0.538	4.0	172,058	4,301	176,359	0.27	
SS31	PA-15, 16, Park-F1		542.0	3,083					1,011,143	12.648	3.3	3,309,348	101,114	3,410,463	5.28	to DP SS32 - 15"
SS31	PA-15 (40%)	SFD	72.6	581	8.0	3.6	80	40%	66,931	0.837	4.0	267,725	6,693	274,418	0.42	
SS31	Parklands-F1	Offsite	466.0	2,334				100%	596,788	7.469	2.6	1,533,745	59,679	2,182,000	3.38	
SS32	PA-16		47.0	517					347,424	4.343	3.9	1,359,322	34,742	1,394,064	2.16	to DP SS30 - 8"
SS32	PA-16	SFA	47.0	517	11.0	8.4	80	100%	347,424	4.343	3.9	1,359,322	34,742	1,394,064	2.16	

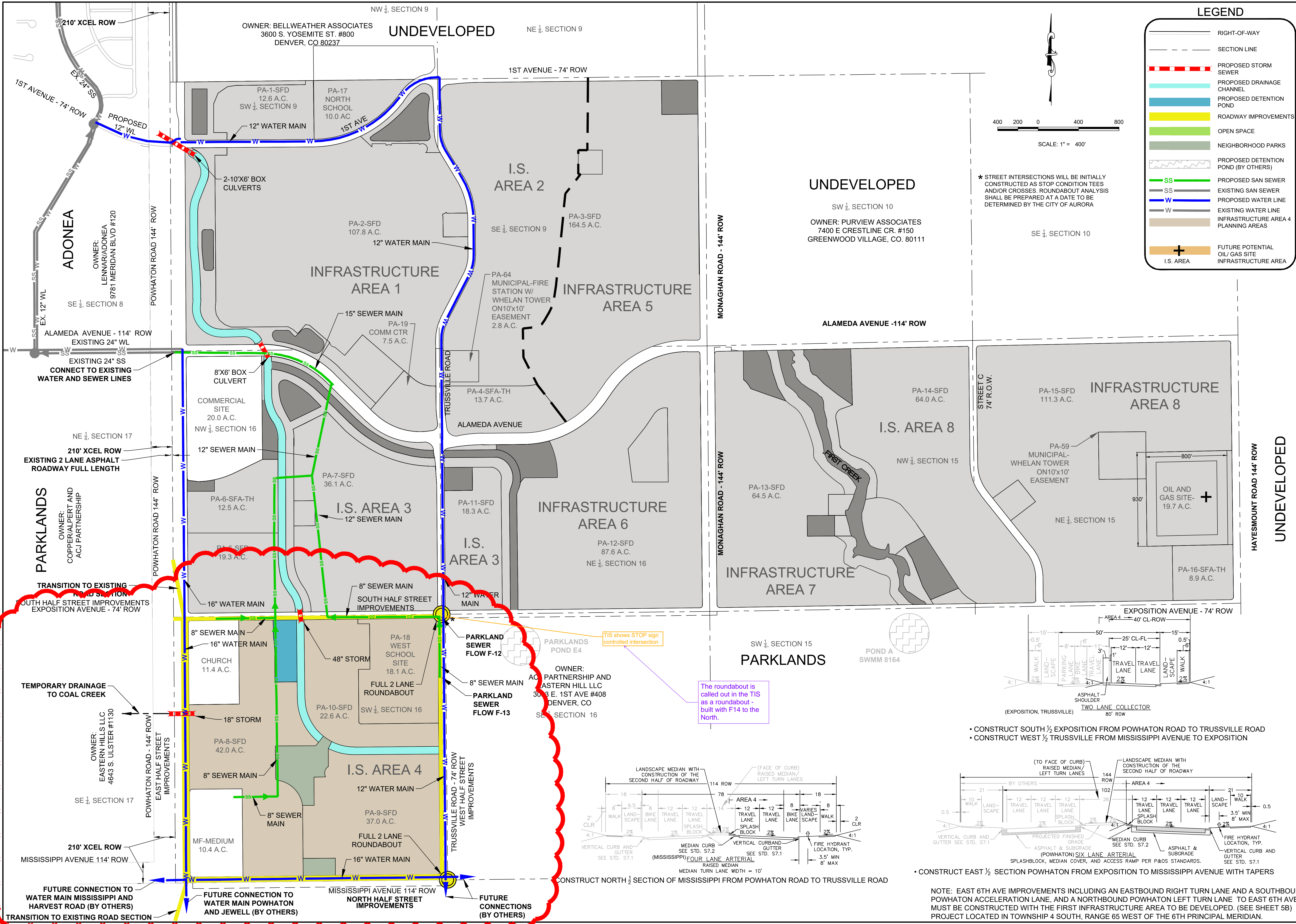
NOTES:

Peaking Factor = $5/p^{0.167}$, p = population in thousands, where $1.7 < PF > 4$ Sanitary Sewer loading rates, factors, and calculations based on City of Aurora Public Utility Improvements Standards and Specifications Chapter 4

(p) - in Planning Area and Description columns represent portion of the total Planning Area described





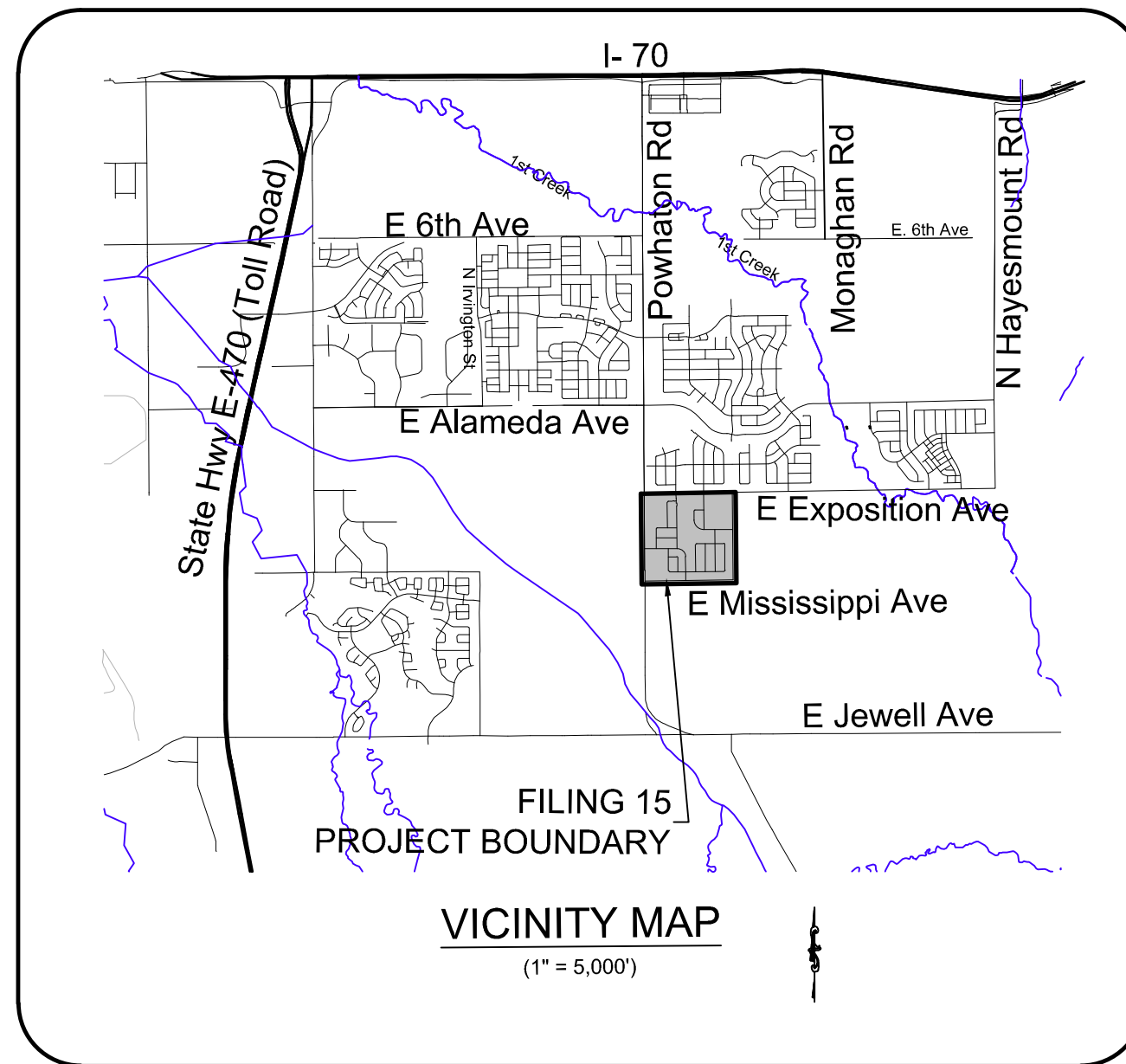


12/4/21		REVISE LAYOUT OF I.S. AREA 4	No.	Revisions	Date	Init.	Appr.	Date
Melcor/TC Aurora, LLC		C/O Marathon Land Company	HARMONY SUBDIVISION					
10333 E DRY CREEK RD.		SUITE 240	PUBLIC IMPROVEMENT PLAN					
9750 W. Cambridge Place		ENGLEWOOD, CO 80150	PHASE 4					
Tel: (303) 920-9400 Fax: (303) 920-9440		Westwood Professional Services, Inc.	SCALE: AS SHOWN					
			DRAWN BY: BPW					
			CHECKED BY: CN					
			DATE: OCTOBER 15, 2016					
			FILE NO: 30214901					
			SHEET NUMBER 4					
			PUBLIC IMPROVEMENT PLAN (P&OS)					

Sheet Number	Sheet Title
1.0	COVER SHEET
1.1	GENERAL NOTES
1.2	LOT MATRIX
1.3	OVERALL LOT TYPE
2.0	OVERALL SITE PLAN
2.1	AREA SITE PLAN
2.2	AREA SITE PLAN
2.3	AREA SITE PLAN
2.4	AREA SITE PLAN
2.5	AREA SITE PLAN
2.6	AREA SITE PLAN
2.7	AREA SITE PLAN
2.8	AREA SITE PLAN
2.9	AREA SITE PLAN
3.0	OVERALL GRADING PLAN
3.1	AREA GRADING PLAN
3.2	AREA GRADING PLAN
3.3	AREA GRADING PLAN
3.4	AREA GRADING PLAN
3.5	AREA GRADING PLAN
3.6	AREA GRADING PLAN
3.7	AREA GRADING PLAN
3.8	AREA GRADING PLAN
3.9	AREA GRADING PLAN
4.0	OVERALL UTILITY PLAN
4.1	AREA UTILITY PLAN
4.2	AREA UTILITY PLAN
4.3	AREA UTILITY PLAN
4.4	AREA UTILITY PLAN
4.5	AREA UTILITY PLAN
4.6	AREA UTILITY PLAN
4.7	AREA UTILITY PLAN
4.8	AREA UTILITY PLAN
4.9	AREA UTILITY PLAN
5.0	PHASING PLAN

HARMONY SITE PLAN NO. 5

A PART OF THE NORTH HALF OF SECTION 16, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE 6th P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO



The site plan will not be approved by public works until the preliminary drainage letter/report is approved

Acknowledged.

OWNER'S SIGNATURES
HARMONY SITE PLAN NO. 5

This Site Plan and any amendments hereto, upon approval by the City of Aurora and recording, shall be binding upon the applicants therefore, their successors and assigns. This plan shall limit and control the issuance and validity of all building permits, and shall restrict and limit the construction, location, use, occupancy and operation of all land and structures within this plan to all conditions, requirements, locations and limitations set forth herein. Abandonment, withdrawal or amendment of this plan may be permitted only upon approval of the City of Aurora.

In witness thereof, _____ has caused these presents to be executed this _____ day of _____ AD. _____.

By: _____ Corporate
(Principals or Owners) Seal

State of Colorado)ss

County of _____)

The foregoing instrument was acknowledged before me this _____ day of _____ AD, _____ by _____

(Principals or Owners)

Witness my hand and official seal

Notary
Seal

My commission expires _____

Notary Business Address: _____

DATA TABLE	
LAND AREA WITHIN PROPERTY LINES	126.675 AC
NUMBER OF UNITS PROPOSED	358
NUMBER OF BUILDINGS PROPOSED	
CONSTRUCTION TYPE (V-B)	358
OCCUPANCY CLASS (R-3)	
NUMBER OF STORIES	1-3
MAXIMUM HEIGHT OF BUILDINGS	38'-0"
HARD SURFACE AREA	2.39 AC.
OPEN SPACE	23.64 AC.
LANDSCAPE AREA	9.78 AC.
LOT AREA	49.69 AC
TRACT AREA	48.02 AC
PUBLIC R.O.W. AREA	27.97 AC
PHASED NATIVE GRASS (IF APPLICABLE)	N/A
PRESENT ZONING CLASSIFICATION	R-2 MEDIUM DENSITY DISTRICT
PERMITTED MAXIMUM SIGN AREA	96 SQ. FT. & 6' MAX HEIGHT / 2 PER ENTRANCE ON ARTERIAL/Collector STREETS ONLY
PROPOSED SIGN TYPE AND SQ. FT.	NEIGHBORHOOD DISTRICT IDENTIFICATION
PARKING SPACES REQUIRED	2 PER UNIT + 2 GUEST SPACES / 1022 PARKING SPACES / 1022 GUEST PARKING SPACES)
PARKING SPACES PROVIDED (GARAGE/DRIVE-ON-STREET)	2 PER UNIT + 2 GUEST SPACES MINIMUM
HANDICAP SPACES REQUIRED	N/A
HANDICAP SPACES PROVIDED	N/A

Add percentages to the acreage area calculations to equal 100%.

This was not done. These numbers will not equal 100%. There is open space, landscaping, and hard surface in tracts, lots, and ROW. percentages added to lot, tract, and ROW areas.

CITY OF ALBUQUERQUE

City Attorney: _____ Date: _____

Planning Director: _____ Date: _____

AMENDMENTS

Numbering is consistent throughout the plan set. "OF 35" has been added.

Make sure the sheet numbering is consistent throughout the plan set. The numbering should be cumulative. It should say XX of total pages.

LOT TYPE	GARAGE ORIENTATION	C.O.A. LOT SIZE DESIGNATION	CSP1	CSP2	PP3	PP4	SP5	TOTAL LOT COUNTS
SINGLE FAMILY (TYPE 2)	FRONT(SIDE) LOAD	STANDARD	35	0	71	98	69	273
SINGLE FAMILY (TYPE 3)	FRONT LOAD	STANDARD	269	186	172	298	199	1124
SINGLE FAMILY (TYPE 4)	FRONT LOAD	SMALL	0	0	74	147	90	311
MOTOR COURT HOME (TYPE 6)	MOTOR COURT	SMALL	0	0	0	200	0	200
DUPLEX	ALLEY LOAD	SMALL	0	0	122	0	0	122
TOWNHOME	ALLEY LOAD	N/A	0	0	42	0	0	42
TOWNHOME GREENCOURT	ALLEY LOAD	SMALL	0	0	30	0	0	30
		TOTAL	304	186	511	743	358	2102
TOTAL LOTS COUNTING TOWARDS SMALL LOT REQUIREMENTS (EXCLUDES NON-GREENCOURT TOWNHOMES)						PERCENTAGE		LOT COUNT
						100%		2072
TOTAL SMALL RESIDENTIAL LOTS (MAX 50%)						25%		511
FRONT-LOADED SMALL RESIDENTIAL LOTS (MAX 35%)						15%		311
STANDARD RESIDENTIAL LOTS (MIN. 40%)						67%		1397
TOTAL LOTS WITH 60' WIDTH OR GREATER (MIN. 10%)						13%		273
REQUIRED PRODUCT MIX (MAX 60% OF SINGLE TYPE)				SINGLE FAMILY (TYPE 2)	13%		244	
				SINGLE FAMILY (TYPE 3)	54%		1124	
				SINGLE FAMILY (TYPE 4)	15%		311	
				MOTOR COURT HOME (TYPE 6)	10%		200	
				DUPLEX (TYPE 8)	6%		122	
				TOWNHOME (TYPE 9)	2%		42	

LOT TYPE	LOT SIZE (W' X D')	GARAGE ORIENTATION	C.O.A. LOT SIZE DESIGNATION	PPS	TOTAL LOT COUNTS
SINGLE FAMILY (TYPE 2)	60' X 110'	FRONT(SIDE) LOAD	STANDARD	69	69
SINGLE FAMILY (TYPE 3)	50' X 110'	FRONT LOAD	STANDARD	199	199
SINGLE FAMILY (TYP3 4)	45' X 110'	FRONT LOAD	SMALL	90	90
			TOTAL	358	358
				PERCENTAGE	LOT COUNT
TOTAL LOTS COUNTING TOWARDS SMALL LOT REQUIREMENTS (EXCLUDES NON-GREENCOURT TOWNHOMES)				100%	358
TOTAL SMALL RESIDENTIAL LOTS (MAX 50%)				25%	90
FRONT-LOADED SMALL RESIDENTIAL LOTS (MAX 35%)				25%	90
STANDARD RESIDENTIAL LOTS (MIN 40%)				75%	268
TOTAL LOTS WITH 60' WIDTH OR GREATER (MIN. 10%)				19%	69
REQUIRED PRODUCT MIX (MAX 60% OF SINGLE TYPE)			SINGLE FAMILY (TYPE 2)	19%	69
			SINGLE FAMILY (TYPE 3)	56%	199
			SINGLE FAMILY (TYPE 4)	25%	90
			TOWNHOME GREENCOURT (TYPE 7)	0	0

****FUTURE PHASES OF HARMONY SUBDIVISION WILL BE DEVELOPED TO COMPLY WITH BOTH THE COA LOT TYPE REQUIREMENTS AND APPROVED HARMONY FDP MAXIMUM UNIT COUNT.**

APPLICANT:

**MELCOR/
TC AURORA, LLC**
C/O MARATHON LAND COMPANY
9750 W. CAMBRIDGE PLACE
LITTLETON CO 80127
TEL: (303) 920-9400
FAX: (303) 920-9440
CONTACT: JAMES SPEHALSKI

PLANNER/
LANDSCAPE
ARCHITECT:

PCS GROUP, INC.
200 KALAMATH STREET
DENVER CO 80223
TEL: (303) 531-4905
CONTACT: JOHN PRESTWICH

SURVEYOR/
ENGINEER:

Westwood

Westwoodps.com
Westwood Professional Services, Inc.

Westwood

10333 E DRY CREEK RD.
SUITE 240
ENGLEWOOD, CO 80112
TEL: 720.482.9526

Westwoodps.com
Westwood Professional Services, Inc.


Meicor/IC Aurora, LLC
C/O Marathon Land Company
9750 W. Cambridge Place
Littleton, CO 80127
Tel: (303) 920-9400 Fax: (303) 920-9440

**HARMONY SUBDIVISION
CIVIL SITE PLAN NO. 5
COVER SHEET**

DATE:	MAY, 2022	BPW	DJG	AS SHOWN
		CHECKED BY:		
		FILE NO:	8130214922	

1.0

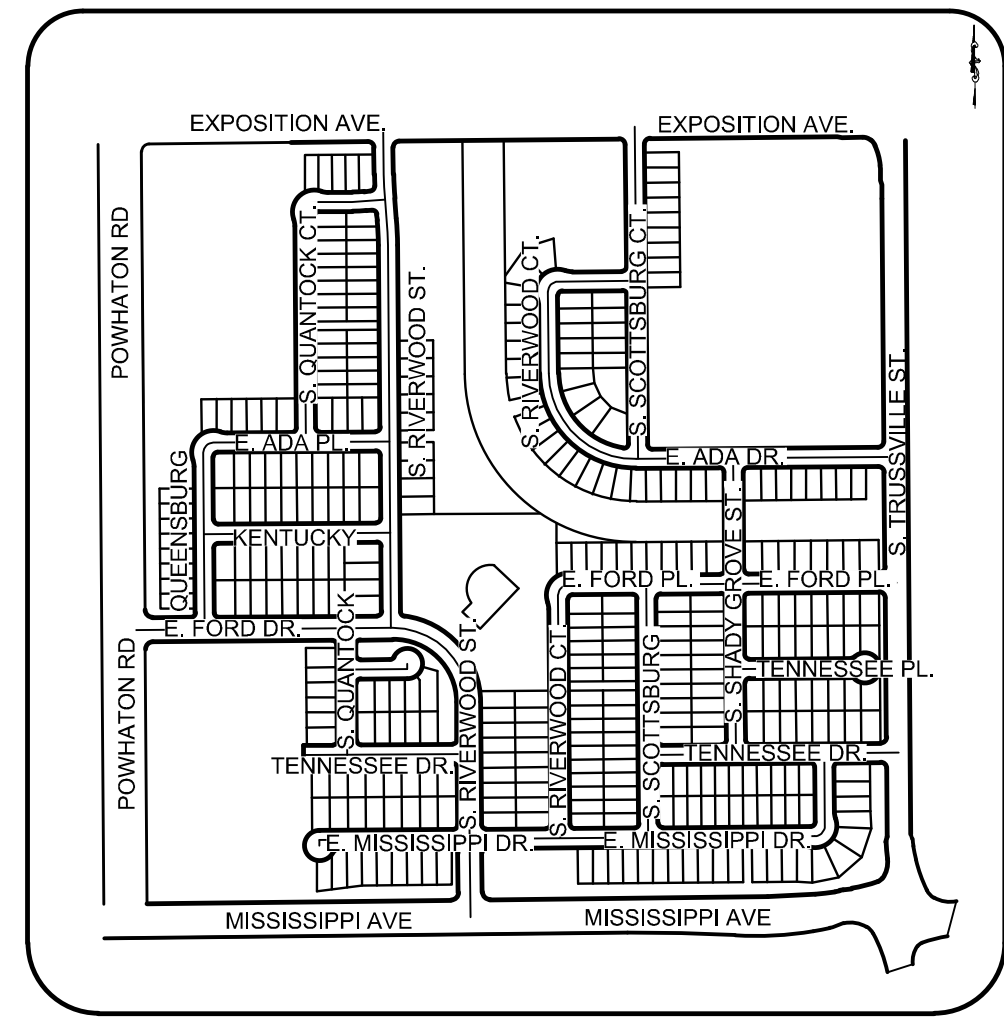
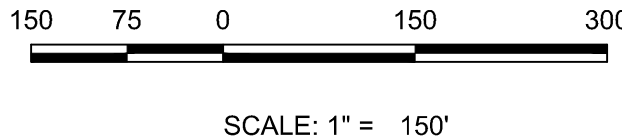
1. THE DEVELOPER, HIS SUCCESSORS AND ASSIGNS, INCLUDING THE HOMEOWNERS OR MERCHANTS ASSOCIATION SHALL BE RESPONSIBLE FOR INSTALLATION, MAINTENANCE AND REPLACEMENT OF ALL FIRE LANE SIGNS AS REQUIRED BY THE CITY OF AURORA.
2. ALL SIGNS MUST CONFORM TO THE HARMONY FDP AND THE CITY OF AURORA SIGN CODE.
3. RIGHT OF WAY FOR INGRESS AND EGRESS FOR SERVICE AND EMERGENCY VEHICLES IS GRANTED OVER, ACROSS, ON AND THROUGH ANY AND ALL PRIVATE ROADS AND WAYS NOW OR HEREAFTER ESTABLISHED ON THE DESCRIBED PROPERTY, AND THE SAME ARE HEREBY DESIGNATED AS "SERVICE/EGRESS/EGRESS - RIGHT-OF-WAY FOR INGRESS AND EGRESS FOR SERVICE AND EMERGENCY VEHICLES".
4. THE APPLICANT HAS THE OBLIGATION TO COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT.
5. THE DEVELOPER, HIS SUCCESSORS AND ASSIGNS, SHALL BE RESPONSIBLE FOR INSTALLATION, MAINTENANCE AND REPLACEMENT OF ALL LANDSCAPING MATERIALS SHOWN OR INDICATED ON THE APPROVED SITE PLAN OR LANDSCAPE PLAN ON FILE IN THE PLANNING DEPARTMENT. ALL LANDSCAPING WILL BE INSTALLED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.
6. ALL CROSSINGS OR ENCROACHMENTS INTO EASEMENTS AND RIGHTS-OF-WAY OWNED BY THE CITY OF AURORA ("CITY") IDENTIFIED AS BEING PRIVATELY-OWNED AND MAINTAINED HEREIN ARE ACKNOWLEDGED BY THE UNDERSIGNED AS BEING SUBJECT TO CITY'S USE AND OCCUPANCY OF SAID EASEMENTS OR RIGHTS-OF-WAY. THE UNDERSIGNED, ITS SUCCESSORS AND ASSIGNS, FURTHER AGREES TO REMOVE, REPAIR, REPLACE, RELOCATE, MODIFY, OR OTHERWISE ADJUST SAID CROSSINGS OR ENCROACHMENTS UPON REQUEST FROM THE CITY AND AT NO EXPENSE TO THE CITY. THE CITY HAS THE RIGHT TO TAKE FULL USE OF THE EASEMENTS OR RIGHTS-OF-WAY AS MAY BE NECESSARY OR CONVENIENT AND THE CITY RETAINS ALL RIGHTS TO OPERATE, MAINTAIN, INSTALL, REPAIR, REMOVE OR RELOCATE ANY CITY FACILITIES LOCATED WITHIN SAID EASEMENTS, AND RIGHTS-OF-WAY AT ANY TIME AND IN SUCH A MANNER AS IT DEEMS NECESSARY OR CONVENIENT.
7. THE APPROVAL OF THIS DOCUMENT DOES NOT CONSTITUTE FINAL APPROVAL OF GRADING, DRAINAGE, UTILITY, PUBLIC IMPROVEMENTS AND BUILDING PLANS. CONSTRUCTION PLANS MUST BE REVIEWED AND APPROVED BY THE APPROPRIATE AGENCY PRIOR TO THE ISSUANCE OF BUILDING PERMITS.
8. ALL BUILDING ADDRESS NUMBERS SHALL COMPLY WITH THE AURORA CITY CODE, SECTION 126, ARTICLE VI-NUMBERING OF BUILDINGS.
9. ALL ROOFTOP MECHANICAL EQUIPMENT AND VENTS GREATER THAN EIGHT (8) INCHES IN DIAMETER MUST BE SCREENED. SCREENING MAY BE DONE EITHER WITH AN EXTENDED PARAPET WALL OR A FREESTANDING SCREEN WALL. SCREENS SHALL BE AT LEAST AS HIGH AS THE EQUIPMENT THEY HIDE. IF EQUIPMENT IS VISIBLE BECAUSE SCREENS DON'T MEET THE MINIMUM HEIGHT REQUIREMENT, THE DIRECTOR OF PLANNING MAY REQUIRE CONSTRUCTION MODIFICATIONS PRIOR TO THE ISSUANCE OF A PERMANENT CERTIFICATE OF OCCUPANCY.
10. NOTWITHSTANDING ANY SURFACE IMPROVEMENTS, LANDSCAPING, PLANTING OR CRACKS SHOWN IN THESE SITE OR CONSTRUCTION PLANS, OR ACTUALLY CONSTRUCTED OR PUT IN PLACE, ALL UTILITY EASEMENTS MUST REMAIN UNOBSTRUCTED AND FULLY ACCESSIBLE ALONG THEIR ENTIRE LENGTH TO ALLOW FOR ADEQUATE MAINTENANCE EQUIPMENT. ADDITIONALLY, NO INSTALLATION, PLANTING, CHANGE IN THE SURFACE, ETC., SHALL INTERFERE WITH THE OPERATION OF THE UTILITY LINES PLACED WITHIN THE EASEMENT. BY SUBMITTING THESE SITE OR CONSTRUCTION PLANS FOR APPROVAL, THE LANDOWNER RECOGNIZES AND ACCEPTS THE TERMS, CONDITIONS AND REQUIREMENTS OF THIS NOTE.
11. FINAL GRADE SHALL BE AT LEAST SIX (6) INCHES BELOW ANY EXTERIOR WOOD SIDING ON THE PREMISES.
12. ALL INTERESTED PARTIES ARE HEREBY ALERTED THAT THIS SITE PLAN IS SUBJECT TO ADMINISTRATIVE CHANGES AND AS SHOWN ON THE ORIGINAL SITE PLAN ON FILE IN THE AURORA CITY PLANNING OFFICE AT THE MUNICIPAL BUILDING. A COPY OF THE OFFICIAL CURRENT PLAN MAY BE PURCHASED THERE. LIKEWISE, SITE PLANS ARE REQUIRED TO AGREE WITH THE PLANNED SUBDIVISION PLAT OF RECORD AT THE TIME OF A BUILDING PERMIT. ANY PLAT MUST BE AMENDED TO AGREE WITH THE PLAT AS NEEDED, OR VICE VERSA.
13. ERRORS IN APPROVED SITE PLANS RESULTING FROM COMPUTATIONS OR INCONSISTENCIES IN THE DRAWINGS MADE BY THE APPLICANT ARE THE RESPONSIBILITY OF THE PROPERTY OWNER OF RECORD. WHERE FOUND, THE CURRENT MINIMUM CODE REQUIREMENTS WILL APPLY AT THE TIME OF BUILDING PERMIT. PLEASE BE SURE THAT ALL PLAN COMPUTATIONS ARE CORRECT.
14. ALL REPRESENTATIONS AND COMMITMENTS MADE BY APPLICANTS AND PROPERTY OWNERS AT PUBLIC HEARINGS REGARDING THIS PLAN ARE BINDING UPON THE APPLICANT, PROPERTY OWNER, AND ITS HEIRS, SUCCESSORS, AND ASSIGNS.
15. ARCHITECTURAL FEATURES, SUCH AS BAY WINDOWS, FIREPLACES, ROOF OVERHANGS, GUTTERS, EAVES, FOUNDATIONS, FOOTINGS, CANTILEVERED WALLS, ETC. ARE NOT ALLOWED TO ENCROACH INTO ANY EASEMENT OR FIRE LANE.
16. ALL STREET TRAFFIC SIGNS PROVIDED BY THE HARMONY DEVELOPMENT SHALL BE FURNISHED AND INSTALLED PER MUTCD STANDARDS.
17. FIRE LANE AND HANDRAILS SHALL BE PROVIDED WITH DETAILS, HANDICAPPED PARKING SALT DETAILS, AND LOCATIONS SHALL BE APPROVED WITH THE CIVIL PLANS, "SIGNAGE AND STRIPING" PACKAGE.
18. NEW AND EXISTING BUILDINGS SHALL BE PROVIDED WITH APPROVED ADDRESS IDENTIFICATION THAT IS LEGIBLE AND PLACED IN A POSITION THAT IS VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. NUMBERS SHALL BE NOT LESS THAN 4" HIGH WITH A MINIMUM STROKE WIDTH OF 1/2 INCH. (2015 IFC, 505.1)
19. IN LOCATIONS WHERE UTILITY EASEMENTS OVERLAP DRAINAGE EASEMENTS, ONLY SUBSURFACE UTILITIES SHALL BE PERMITTED WITHIN THE PORTION OF THE UTILITY EASEMENT THAT OVERLAPS THE DRAINAGE EASEMENT. INSTALLATION OF ABOVE GROUND UTILITIES WITHIN A DRAINAGE EASEMENT REQUIRES PRIOR WRITTEN APPROVAL BY THE CITY ENGINEER.
20. THE STREETLIGHT OR PEDESTRIAN LIGHT INSTALLATION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE DESIGNED, FUNDED, AND CONSTRUCTED BY THE CITY OF AURORA. PRIOR TO THE STREET LIGHT INSTALLATION, THE CITY ENGINEER SHALL HAVE THE RESPONSIBILITY OF THE CITY OF AURORA ONCE THEY HAVE BEEN ACCEPTED. STREET LIGHT AND/OR PEDESTRIAN PHOTOMETRICS PLANS SHALL BE PREPARED AND SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL AND SHALL BECOME A PART OF THE APPROVED CIVIL CONSTRUCTION PLANS FOR THE PROJECT. AN ELECTRICAL PLAN SHOWING SITE LOCATION OF LIGHTS, ELECTRICAL ONE LINE AND GROUNDING DETAILS SHALL BE SUBMITTING TO THE PERMIT CENTER FOR REVIEW BY THE BUILDING DEPARTMENT. THE OWNER IS RESPONSIBLE FOR OBTAINING AN ADDRESS FOR THE METER(S) FROM THE PLANNING DEPARTMENT. A BUILDING PERMIT FOR THE METER AND A PUBLIC INSPECTIONS PERMIT FOR THE STREET LIGHTS ARE REQUIRED. CERTIFICATE OF OCCUPANCIES WILL NOT BE ISSUED UNTIL THE STREET AND/OR PEDESTRIAN LIGHTING PLANS ARE APPROVED, CONSTRUCTED, AND INITIALLY ACCEPTED.
21. ALL BUILDING ADDRESS NUMBERS SHALL COMPLY WITH CITY CODE OF THE CITY OF AURORA-VOLUME II - CHAPTER 126 - ARTICLE VII - SECTIONS 126.01 THROUGH 126.03.
22. THE APPLICANT HAS THE OBLIGATION TO COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA)
23. ACCESSIBLE EXTERIOR ROUTES SHALL BE PROVIDED FROM PUBLIC TRANSPORTATION STOPS, ACCESSIBLE PARKING AND ACCESSIBLE PASSENGER LOADING ZONES AND PUBLIC SIDEWALKS TO 60% OF THE ACCESSIBLE BUILDING ENTRANCE THEY SERVE. THE ACCESSIBLE ROUTE BETWEEN ACCESSIBLE PARKING AND ACCESSIBLE BUILDING ENTRANCES SHALL BE THE MOST PRACTICAL DIRECT ROUTE. THE ACCESSIBLE ROUTE MUST BE LOCATED WITHIN A SIDEWALK. NO SLOPE ALONG THIS ROUTE MAY EXCEED 1:20 WITHOUT PROVIDING A RAMP WITH A MAXIMUM SLOPE OF 1:12 AND HANDRAILS. CROSSWALKS ALONG THIS ROUTE SHALL BE WIDE ENOUGH TO WHOLLY CONTAIN THE CURB RAMP WITH A MINIMUM WIDTH OF 36" AND SHALL BE PAINTED WITH WHITE STRIPES. THE CITY OF AURORA ENFORCES HANDICAPPED ACCESSIBILITY REQUIREMENTS BASED ON THE 2015 INTERNATIONAL BUILDING CODE, CHAPTER 11, AND THE ICC A117-1-2009.
24. THE DEVELOPER, OWNER AND ASSIGNS ARE RESPONSIBLE FOR COMPLYING WITH THE FEDERALLY MANDATED REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA).
25. THE 2015 INTERNATIONAL FIRE CODE, SECTION 510, REQUIRES ALL BUILDINGS TO BE ASSESSED FOR ADEQUATE EMERGENCY RESPONDER RADIO COVERAGE (ERRC). AT THE TIME THE STRUCTURE IS AT FINAL FRAME AND FINAL ELECTRICAL INSPECTIONS, THE GENERAL CONTRACTOR (GC) WILL BE REQUIRED TO HIRE AN APPROVED AND QUALIFIED INDEPENDENT 3RD PARTY TO ASSESS THE RADIO FREQUENCY LEVELS WITHIN THE STRUCTURE. ONCE COMPLETED, THE 3RD PARTY WILL PROVIDE THE RESULTS OF THE TEST TO BOTH THE GC AND THE AURORA BUILDING DIVISION AS TO WHETHER THE STRUCTURE PASSED OR FAILED THE PRELIMINARY RADIO SURVEILLANCE. A STRUCTURE THAT HAS PASSED THIS SURVEILLANCE REQUIRES NO FURTHER ACTION BY THE GC. A FAILED RADIO SURVEILLANCE WILL REQUIRE A LICENSED CONTRACTOR TO SUBMIT PLANS TO THE AURORA BUILDING DIVISION TO OBTAIN A BUILDING PERMIT FOR THE INSTALLATION OF AN ERRC SYSTEM PRIOR TO INSTALLATION. THIS ASSESSMENT AND INSTALLATION IS AT THE OWNER OR DEVELOPERS EXPENSE. FUTURE INTERIOR OR EXTERIOR MODIFICATIONS TO THE STRUCTURE AFTER THE ORIGINAL CERTIFICATE OF OCCUPANCY IS ISSUED WILL REQUIRE A REASSESSMENT OF THE RADIO FREQUENCY COVERAGE.
26. EMERGENCY INGRESS AND EGRESS - RIGHT-OF-WAY FOR INGRESS AND EGRESS FOR SERVICE AND EMERGENCY VEHICLES IS GRANTED OVER, AND ACROSS, ON AND THROUGH ANY AND ALL PRIVATE ROADS AND WAYS NOW OR HEREAFTER ESTABLISHED ON THE DESCRIBED PROPERTY, AND THE SAME ARE HEREBY DESIGNATED AS "SERVICE/EGRESS/EGRESS - RIGHT-OF-WAY FOR INGRESS AND EGRESS FOR SERVICE AND EMERGENCY VEHICLES".
27. THE DEVELOPER, HIS SUCCESSORS AND ASSIGNS, INCLUDING THE HOMEOWNERS OR MERCHANTS ASSOCIATION SHALL BE RESPONSIBLE FOR INSTALLATION, MAINTENANCE AND REPLACEMENT OF ALL FIRE LANE SIGNS.
28. THE DEVELOPER IS RESPONSIBLE FOR SIGNING AND STRIPING ALL PUBLIC STREETS. THE DEVELOPER IS REQUIRED TO PLACE TRAFFIC CONTROL, STREET NAME, AND GUIDE SIGNS ON ALL PUBLIC STREETS AND PRIVATE STREETS APPROACHING AN INTERSECTION WITH A PUBLIC STREET. SIGNS SHALL BE FURNISHED AND INSTALLED PER THE MOST CURRENT EDITIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE MUTCD STANDARDS.
29. PARKS, RECREATION IMPROVEMENTS, TRAILS, AND OPEN SPACE AREAS PROVIDED TO SATISFY CITY LAND DEDICATION REQUIREMENTS IN ACCORDANCE WITH APPROVED DEVELOPMENT PLANS OR PROVIDED BY A METROPOLITAN DISTRICT OR OTHER APPROPRIATE JURISDICTION OR OWNERS ASSOCIATION IN ACCORDANCE WITH APPROVED METROPOLITAN DISTRICT SERVICE PLANS SHALL BE OPEN TO THE GENERAL PUBLIC.

SHEET NUMBER 1.1	DRAWN BY: DJG		SCALE:	HARMONY SUBDIVISION CIVIL SITE PLAN NO. 5 GENERAL NOTES	Melcor/TC Aurora, LLC C/O Marathon Land Company 9750 W. Cambridge Place Littleton, CO 80127 Tel: (303) 920-9400 Fax: (303) 920-9440	 10333 E DRY CREEK RD. SUITE 240 ENGLEWOOD, CO 80112 TEL: 720.482.9536						
	CHECKED BY:	FILE NO.										
	DATE:											
	MAY, 2022	8130214922										
							No.	Revisions	Date	Int.	Appr.	

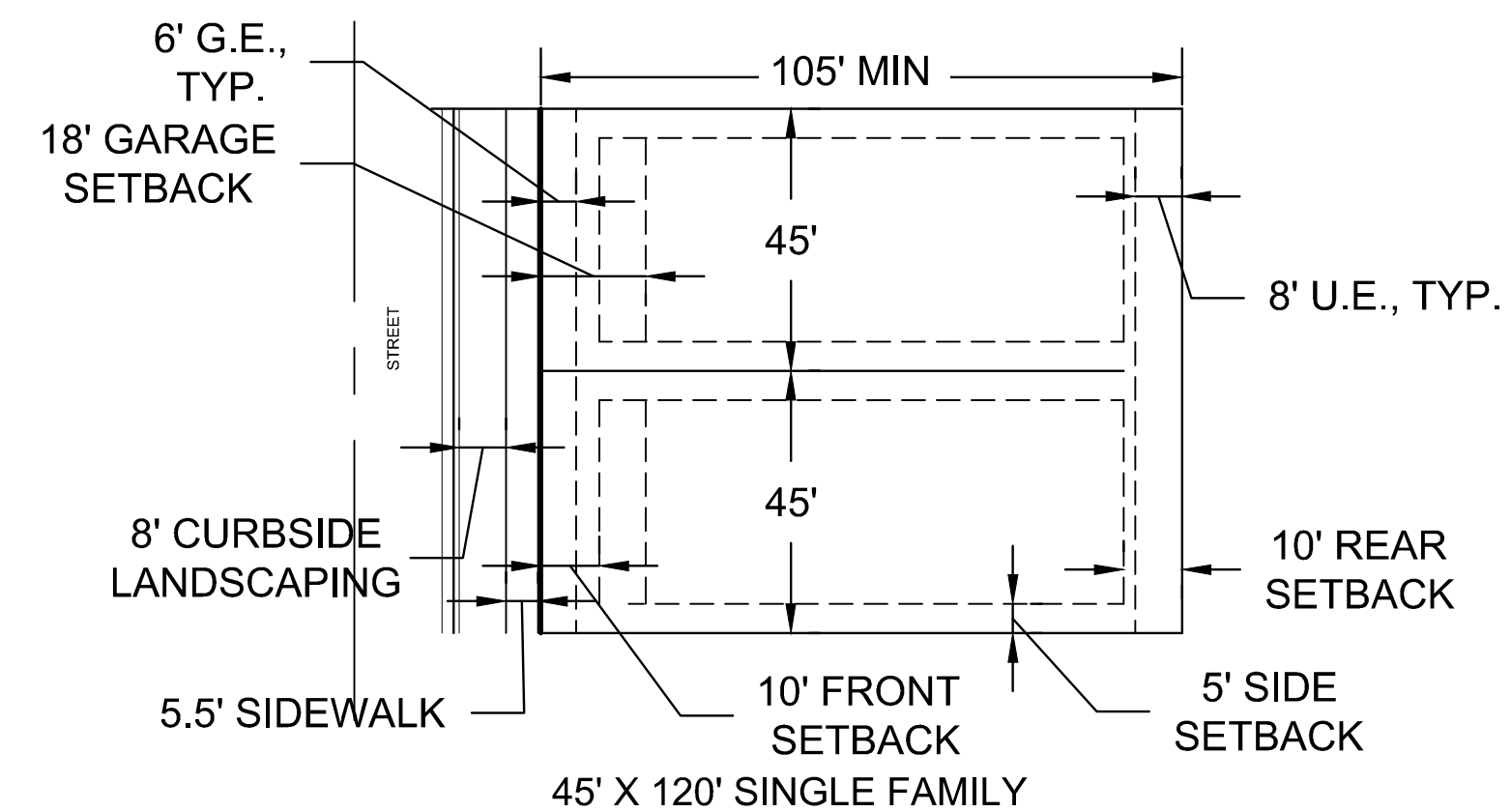
Some of these Lots and Blocks will be pinked into larger Block areas

FILING #	BLOCK #	LOT #	SQUARE FOOTAGE	FRONTAGE	SETBACKS				CLASSIFICATION
					FRONT	SIDE	SIDE*		
			FT	FT	FT	FT			
15	1	1	5750	50.00	10	5			STANDARD SINGLE FAMILY
15	1	2	5750	50.00	10	5			STANDARD SINGLE FAMILY
15	1	3	5750	50.00	10	5			STANDARD SINGLE FAMILY
15	1	4	5750	50.00	10	5			STANDARD SINGLE FAMILY
15	1	5	5750	50.00	10	5			STANDARD SINGLE FAMILY
15	1	6	5750	50.00	10	5			STANDARD SINGLE FAMILY
15	1	7	5750	50.00	10	5			STANDARD SINGLE FAMILY
15	1	8	5750	50.00	10	5			STANDARD SINGLE FAMILY
15	1	9	5750	50.00	10	5			STANDARD SINGLE FAMILY
15	2	1	6130	37.50	10	5	10		SMALL SINGLE FAMILY
15	2	2	5621	45.01	10	5			SMALL SINGLE FAMILY
15	2	3	5625	45.00	10	5			SMALL SINGLE FAMILY
15	2	4	5552	45.79	10	5			SMALL SINGLE FAMILY
15	2	5	5333	45.98	10	5			SMALL SINGLE FAMILY
15	3	1	5327	45.00	10	5	10		SMALL SINGLE FAMILY
15	3	2	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	3	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	4	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	5	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	6	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	7	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	8	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	9	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	10	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	11	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	12	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	13	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	14	6449	41.50	10	5	10		LARGE SINGLE FAMILY
15	3	15	5865	51.00	10	5			STANDARD SINGLE FAMILY
15	3	16	5635	49.00	10	5			STANDARD SINGLE FAMILY
15	3	17	6679	43.50	10	5	10		LARGE SINGLE FAMILY
15	3	18	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	19	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	20	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	21	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	22	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	23	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	24	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	25	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	26	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	27	4838	45.00	10	5			SMALL SINGLE FAMILY
15	3	28	4836	45.00	10	5			SMALL SINGLE FAMILY
15	3	29	4795	45.04	10	5			SMALL SINGLE FAMILY
15	3	30	5275	40.12	10	5	10		STANDARD SINGLE FAMILY
15	4	1	7329	50.00	10	5	10		LARGE SINGLE FAMILY
15	4	2	5675	50.00	10	5			STANDARD SINGLE FAMILY
15	4	3	5675	50.00	10	5			STANDARD SINGLE FAMILY
15	4	4	5675	50.00	10	5			STANDARD SINGLE FAMILY
15	4	5	5578	50.85	10	5			STANDARD SINGLE FAMILY
15	4	6	5410	52.02	10	5			STANDARD SINGLE FAMILY
15	4	7	5750	50.00	10	5			STANDARD SINGLE FAMILY
15	4	8	5750	50.00	10	5			STANDARD SINGLE FAMILY
15	4	9	5750	50.00	10	5			STANDARD SINGLE FAMILY
15	4	10	5750	50.00	10	5			STANDARD SINGLE FAMILY
15	4	11	5750	50.00	10	5			STANDARD SINGLE FAMILY
15	4	12	5750	50.00	10	5			STANDARD SINGLE FAMILY
15	4	13	5750	50.00	10	5			STANDARD SINGLE FAMILY
15	4	14	5750	50.00	10	5			STANDARD SINGLE FAMILY
15	5	1	8352	55.00	10	5	10		LARGE SINGLE FAMILY
15	5	2	6255	52.13	10	5			STANDARD SINGLE FAMILY
15	5	3	6255	52.13	10	5			STANDARD SINGLE FAMILY
15	5	4	6255	52.13	10	5			STANDARD SINGLE FAMILY
15	5	5	6255	52.13	10	5			STANDARD SINGLE FAMILY
15	5	6	6255	52.13	10	5			STANDARD SINGLE FAMILY
15	5	7	6255	52.13	10	5			STANDARD SINGLE FAMILY
15	5	8	6255	52.13	10	5			STANDARD SINGLE FAMILY
15	5	9	6255	52.13	10	5			STANDARD SINGLE FAMILY
15	5	10	8352	55.00	10	5	10		LARGE SINGLE FAMILY
15	5	11	8352	55.00	10	5	10		LARGE SINGLE FAMILY
15	5	12	6255	52.13	10	5			STANDARD SINGLE FAMILY
15	5	13	6255	52.13	10	5			STANDARD SINGLE FAMILY
15	5	14	6255	52.13	10	5			STANDARD SINGLE FAMILY
15	5	15	6255	52.13	10	5			STANDARD SINGLE FAMILY
15	5	16	6255	52.13	10	5			STANDARD SINGLE FAMILY
15	5	17	6255	52.13	10	5			STANDARD SINGLE FAMILY
15	5	18	6255	52.13	10	5			STANDARD SINGLE FAMILY
15	5	19	6255	52.13	10	5			STANDARD SINGLE FAMILY
15	5	20	8352	55.00	10	5	10		LARGE SINGLE FAMILY
15	6	1	8562	55.00	10	5	10		LARGE SINGLE FAMILY
15	6	2	6411	52.13	10	5			STANDARD SINGLE FAMILY
15	6	3	6411	52.13	10	5			STANDARD SINGLE FAMILY
15	6	4	6411	52.13	10	5			STANDARD SINGLE FAMILY
15	6	5	6411	52.13	10	5			STANDARD SINGLE FAMILY
15	6	6	6411	52.13	10	5			STANDARD SINGLE FAMILY
15	6	7	6411	52.13	10	5			STANDARD SINGLE FAMILY
15	6	8	6411	52.13	10	5			STANDARD SINGLE FAMILY
15	6	9	8256	53.00	10	5	10		LARGE SINGLE FAMILY
15	6	10	6717	55.00	10	5			STANDARD SINGLE FAMILY
15	6	11	6717	55.00	10	5			STANDARD SINGLE FAMILY
15	6	12	8256	53.00	10	5	10		LARGE SINGLE FAMILY

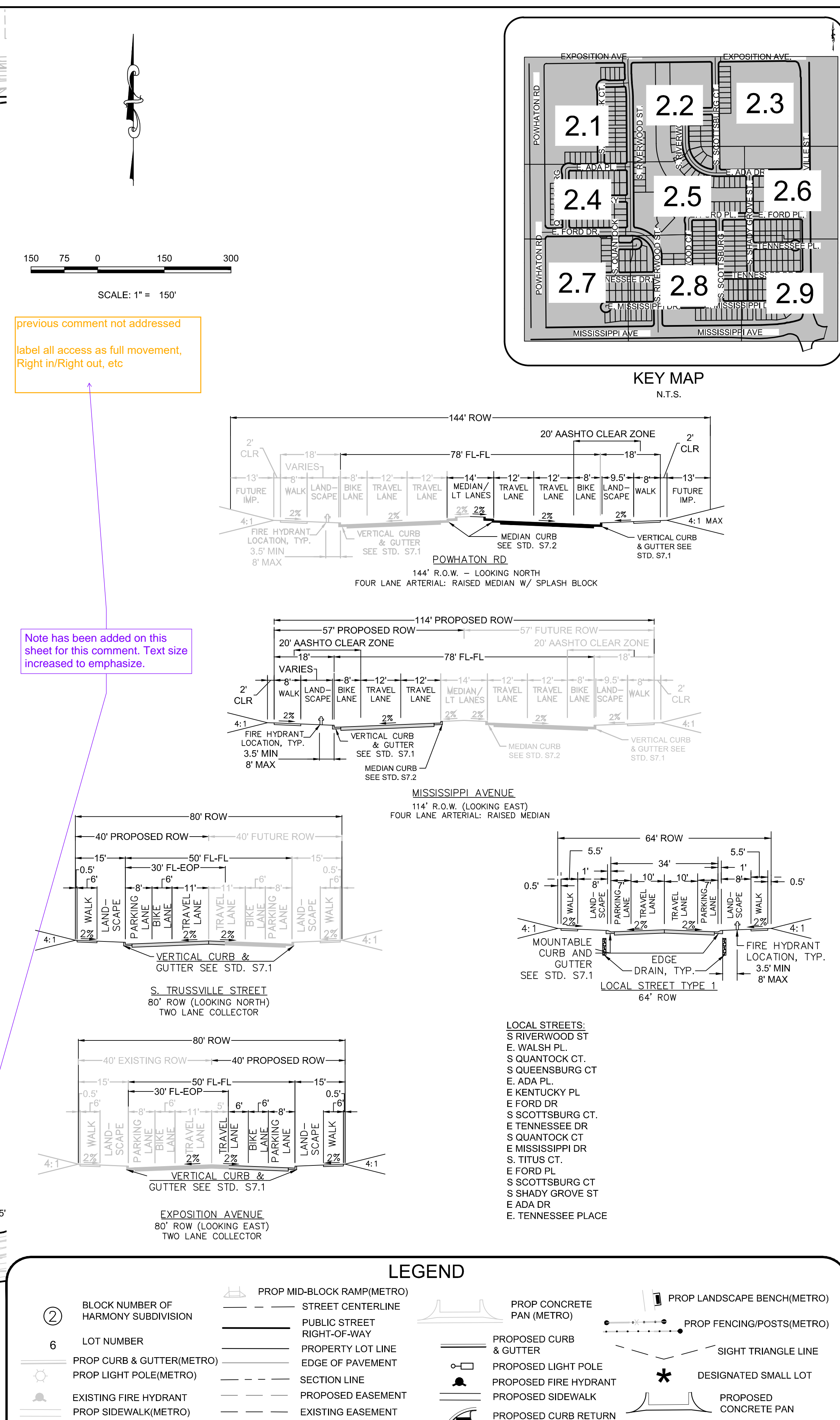
FILING #	BLOCK #	LOT #	SQUARE	FRONTAGE	SETBACKS			CLASSIFICATION
			FOOTAGE	FT	FRONT	SIDE	SIDE*	
15	6	13	6411	52.13	10	5		STANDARD SINGLE FAMILY
15	6	14	6411	52.13	10	5		STANDARD SINGLE FAMILY
15	6	15	6411	52.13	10	5		STANDARD SINGLE FAMILY
15	6	16	6411	52.13	10	5		STANDARD SINGLE FAMILY
15	6	17	6411	52.13	10	5		STANDARD SINGLE FAMILY
15	6	18	6411	52.13	10	5		STANDARD SINGLE FAMILY
15	6	19	6411	52.13	10	5		STANDARD SINGLE FAMILY
15	6	20	8562	55.00	10	5	10	LARGE SINGLE FAMILY
15	7	1	6900	60.00	10	5		LARGE SINGLE FAMILY
15	7	2	6900	60.00	10	5		LARGE SINGLE FAMILY
15	7	3	6900	60.00	10	5		LARGE SINGLE FAMILY
15	7	4	6900	60.00	10	5		LARGE SINGLE FAMILY
15	7	5	6900	60.00	10	5		LARGE SINGLE FAMILY
15	7	6	6900	60.00	10	5		LARGE SINGLE FAMILY
15	7	7	6900	60.00	10	5		LARGE SINGLE FAMILY
15	7	8	6900	60.00	10	5		LARGE SINGLE FAMILY
15	7	9	6900	60.00	10	5		LARGE SINGLE FAMILY
15	8	1	6579	64.50	10	5		LARGE SINGLE FAMILY
15	8	2	5100	50.00	10	5		STANDARD SINGLE FAMILY
15	8	3	5100	50.00	10	5		STANDARD SINGLE FAMILY
15	8	4	5100	50.00	10	5		STANDARD SINGLE FAMILY
15	8	5	5100	50.00	10	5		STANDARD SINGLE FAMILY
15	8	6	6072	45.00	10	5	10	LARGE SINGLE FAMILY
15	9	1	6772	47.00	10	5	10	LARGE SINGLE FAMILY
15	9	2	5500	50.00	10	5		STANDARD SINGLE FAMILY
15	9	3	5500	50.00	10	5		STANDARD SINGLE FAMILY
15	9	4	5617	40.88	10	5		STANDARD SINGLE FAMILY
15	9	5	8643	36.73	10	5		LARGE SINGLE FAMILY
15	9	6	6600	60.00	10	5		LARGE SINGLE FAMILY
15	9	7	5500	50.00	10	5		STANDARD SINGLE FAMILY
15	9	8	5500	50.00	10	5		STANDARD SINGLE FAMILY
15	9	9	5500	50.00	10	5		STANDARD SINGLE FAMILY
15	9	10	6772	47.00	10	5	10	LARGE SINGLE FAMILY
15	10	1	6600	60.00	10	5		LARGE SINGLE FAMILY
15	10	2	6600	60.00	10	5		LARGE SINGLE FAMILY
15	10	3	6600	60.00	10	5		LARGE SINGLE FAMILY
15	10	4	6600	60.00	10	5		LARGE SINGLE FAMILY
15	10	5	6600	60.00	10	5		LARGE SINGLE FAMILY
15	10	6	6600	60.00	10	5		LARGE SINGLE FAMILY
15	10	7	6600	60.00	10	5		LARGE SINGLE FAMILY
15	10	8	7102	50.01	10	5	10	LARGE SINGLE FAMILY
15	10	9	7102	49.99	10	5	10	LARGE SINGLE FAMILY
15	10	10	6600	60.00	10	5		LARGE SINGLE FAMILY
15	10	11	6600	60.00	10	5		LARGE SINGLE FAMILY
15	10	12	6600	60.00	10	5		LARGE SINGLE FAMILY
15	10	13	6600	60.00	10	5		LARGE SINGLE FAMILY
15	10	14	6600	60.00	10	5		LARGE SINGLE FAMILY
15	10	15	6600	60.00	10	5		LARGE SINGLE FAMILY
15	10	16	6650	61.08	10	5		LARGE SINGLE FAMILY
15	11	1	5215	58.95	10	5		STANDARD SINGLE FAMILY
15	11	2	6375	56.97	10	5		STANDARD SINGLE FAMILY
15	11	3	6151	50.00	10	5		STANDARD SINGLE FAMILY
15	11	4	6000	50.00	10	5		STANDARD SINGLE FAMILY
15	11	5	6000	50.00	10	5		STANDARD SINGLE FAMILY
15	11	6	6000	50.00	10	5		STANDARD SINGLE FAMILY
15	11	7	6000	50.00	10	5		STANDARD SINGLE FAMILY
15	11	8	6000	50.00	10	5		STANDARD SINGLE FAMILY
15	11	9	6000	50.00	10	5		STANDARD SINGLE FAMILY
15	12	1	6552	45.00	10	5	10	LARGE SINGLE FAMILY
15	12	2	5500	50.00	10	5		STANDARD SINGLE FAMILY
15	12	3	5500	50.00	10	5		STANDARD SINGLE FAMILY
15	12	4	5500	50.00	10	5		STANDARD SINGLE FAMILY
15	12	5	5500	50.00	10	5		STANDARD SINGLE FAMILY
15	12	6	5500	50.00	10	5		STANDARD SINGLE FAMILY
15	12	7	5500	50.00	10	5		STANDARD SINGLE FAMILY
15	12	8	5500	50.00	10	5		STANDARD SINGLE FAMILY
15	12	9	5500	50.00	10	5		STANDARD SINGLE FAMILY
15	12	10	5410	50.85	10	5		STANDARD SINGLE FAMILY
15	12	11	5226	51.87	10	5		STANDARD SINGLE FAMILY
15	12	12	6325	55.00	10	5		STANDARD SINGLE FAMILY
15	12	13	5750	50.00	10	5		STANDARD SINGLE FAMILY
15	12	14	5750	50.00	10	5		STANDARD SINGLE FAMILY
15	12	15	5750	50.00	10	5		STANDARD SINGLE FAMILY
15	12	16	5750	50.00	10	5		STANDARD SINGLE FAMILY
15	12	17	5750	50.00	10	5		STANDARD SINGLE FAMILY
15	12	18	5750	50.00	10	5		STANDARD SINGLE FAMILY
15	12	19	5750	50.00	10	5		STANDARD SINGLE FAMILY
15	12	20	6277	40.00	10	5	10	STANDARD SINGLE FAMILY
15	12	21	6277	40.00	10	5	10	STANDARD SINGLE FAMILY
15	12	22	5750	50.00	10	5		STANDARD SINGLE FAMILY
15	12	23	5750	50.00	10	5		STANDARD SINGLE FAMILY
15	12	24	5750	50.00	10	5		STANDARD SINGLE FAMILY
15	12	25	5750	50.00	10	5		STANDARD SINGLE FAMILY
15	12	26	5750	50.00	10	5		STANDARD SINGLE FAMILY
15	12	27	5750	50.00	10	5		STANDARD SINGLE FAMILY
15	12	28	5750	50.00	10	5		STANDARD SINGLE FAMILY
15	12	29	6352	55.09	10	5		STANDARD SINGLE FAMILY
15	13	1	7312	49.00	10	5	10	LARGE SINGLE FAMILY
15	13	2	5175	45.00	10	5		SMALL SINGLE FAMILY
15	13	3	5175	45.00	10	5		SMALL SINGLE FAMILY



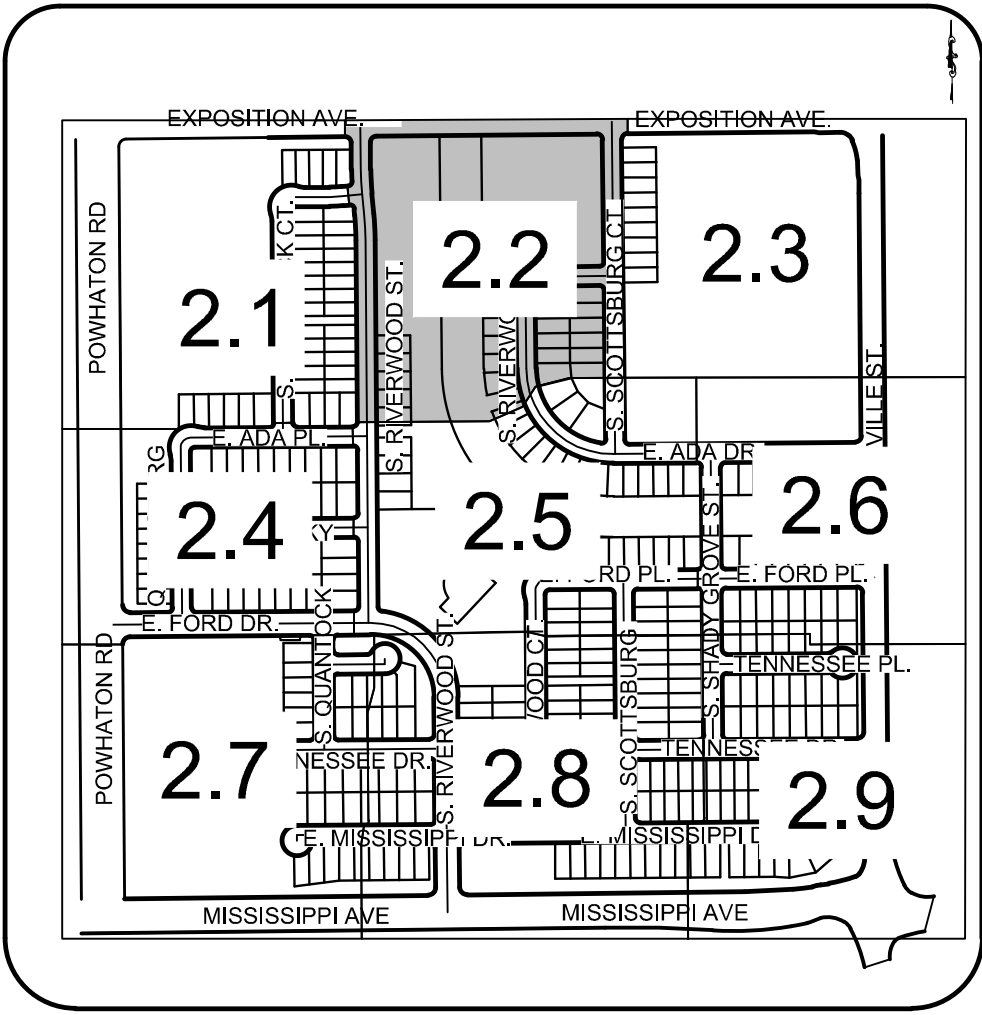
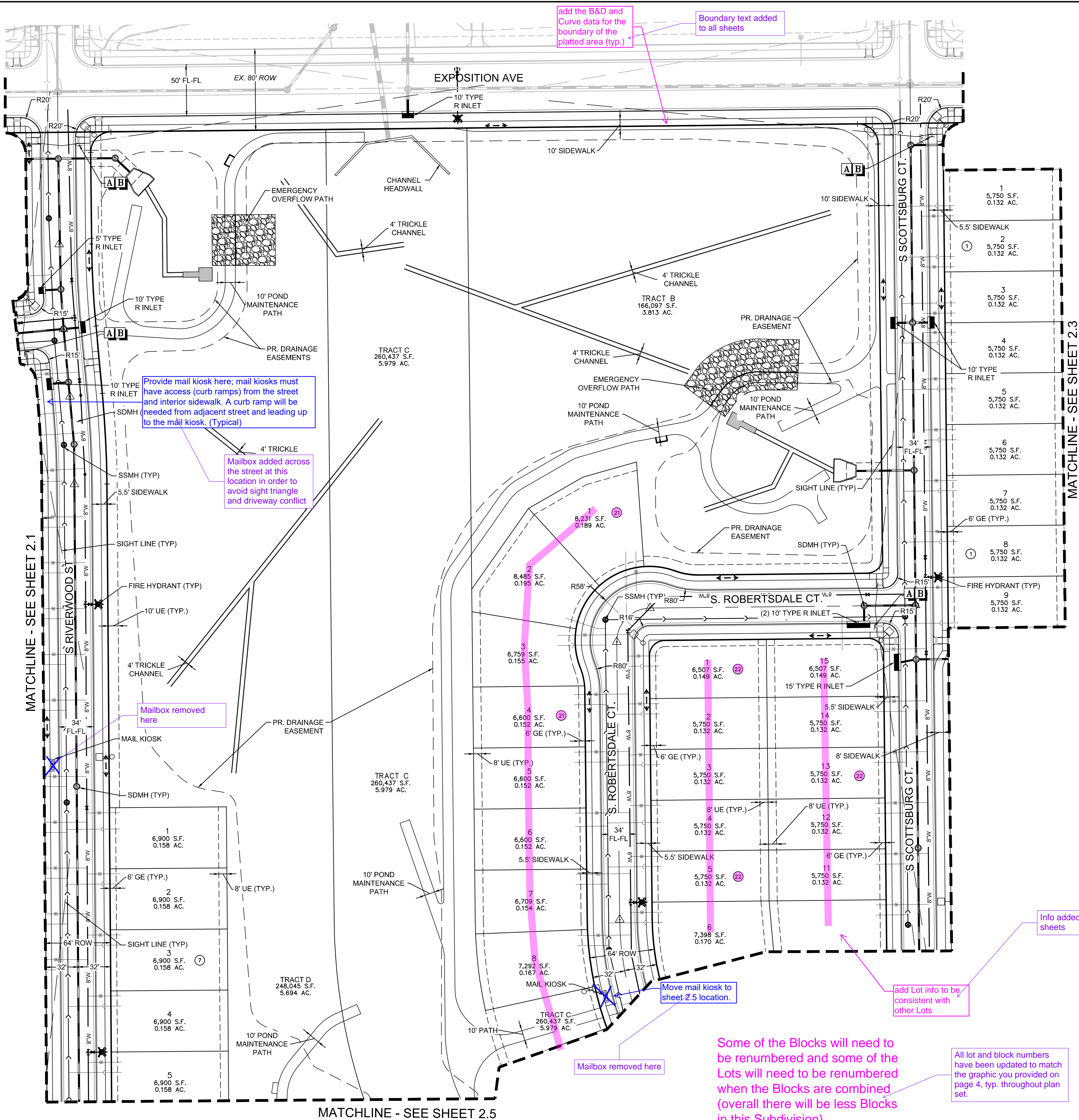
KEY MAP
N.T.S.



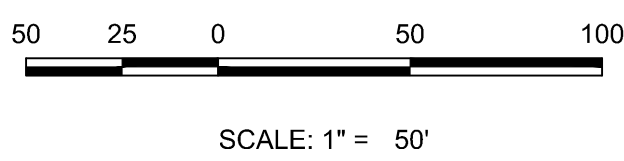
SHEET NUMBER 1.3	DRAWN BY:	DJG	SCALE:	HARMONY SUBDIVISION CIVIL SITE PLAN NO. 5 OVERALL LOT TYPE	Melcor/TTC Aurora, LLC C/O Marathon Land Company 9750 W. Cambridge Place Littleton, CO 80127 Tel: (303) 920-9400 Fax: (303) 920-9440	Westwood 10333 E DRY CREEK RD. SUITE 240 ENGLEWOOD, CO 80112 TEL: 720.482.9526 Westwoodps.com <i>Westwood Professional Services, Inc.</i>	<table><tr><td>No.</td><td>Revisions</td><td>Date</td><td>Init.</td><td>Appr.</td><td>Date</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>	No.	Revisions	Date	Init.	Appr.	Date																								
	No.	Revisions	Date					Init.	Appr.	Date																											
CHECKED BY:	BPW	FILE NO:	8130214922																																		
DATE:	MAY, 2022																																				



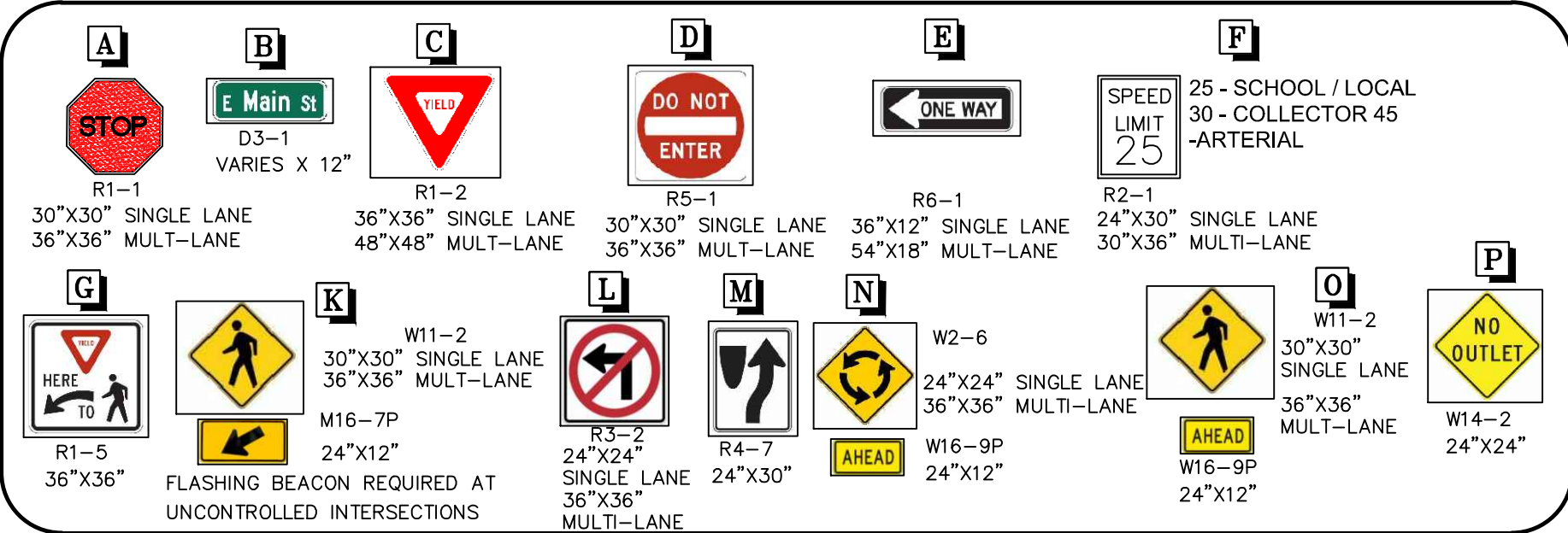
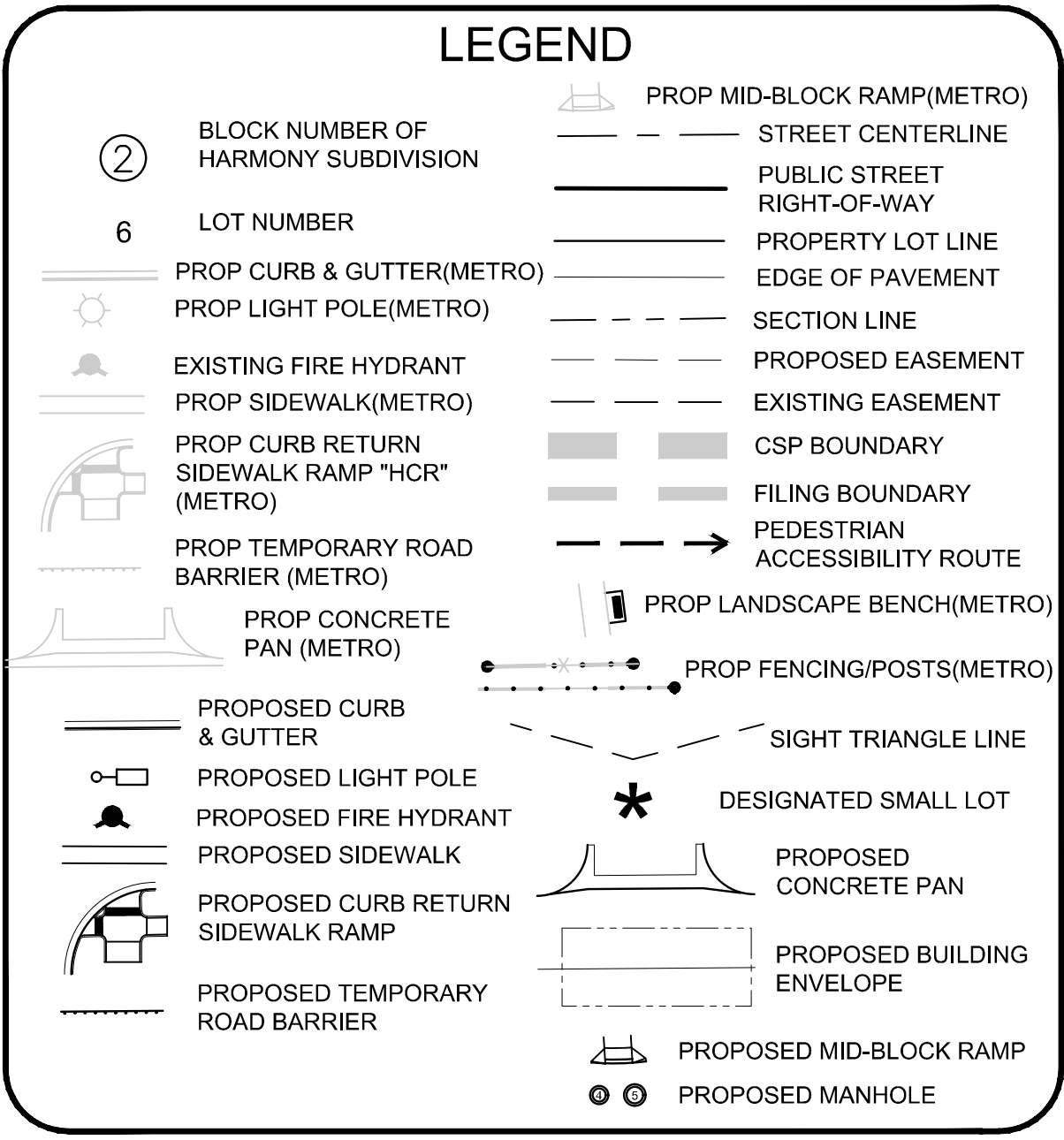
SHEET NUMBER <div>2.0</div>	DRAWN BY:	DUG	SCALE:	HARMONY SUBDIVISION CIVIL SITE PLAN NO. 5 OVERALL SITE PLAN	Melcor/TC Aurora, LLC C/O Marathon Land Company 9750 W. Cambridge Place Littleton, CO 80127 Tel: (303) 920-9400 Fax: (303) 920-9440	<div>Westwood</div> <div>10333 E DRY CREEK RD. SUITE 240 ENGLEWOOD, CO 80112 TEL: 720.482.9526 Westwoodps.com Westwood Professionals Services, Inc.</div>						
	CHECKED BY:	BPM	FILE NO:									
	DATE:	MAY, 2022	8130214922									
	No.	Revisions	Date	Inlt.	Appr.							

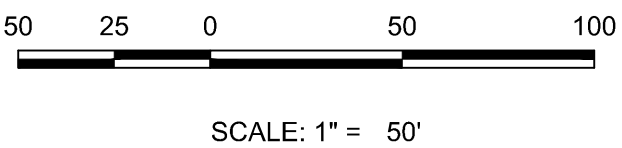
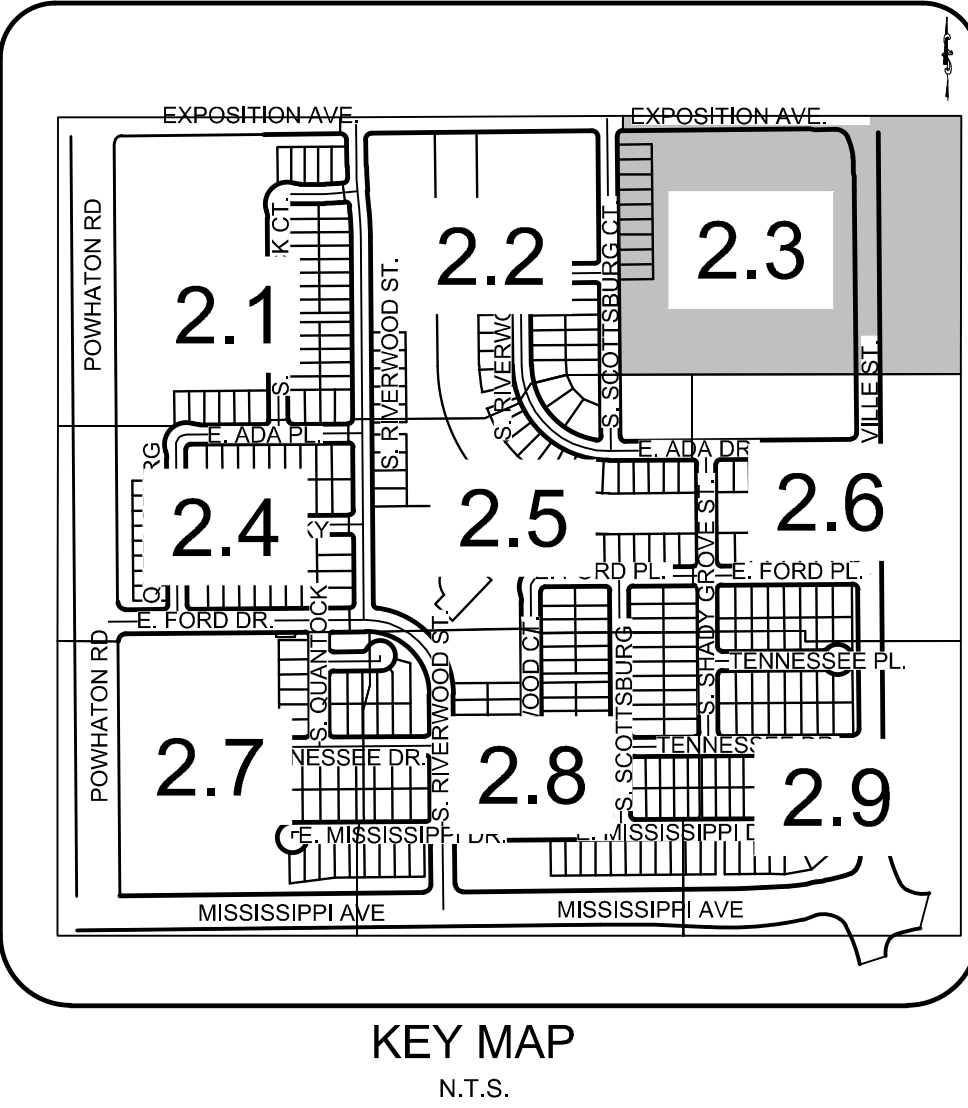
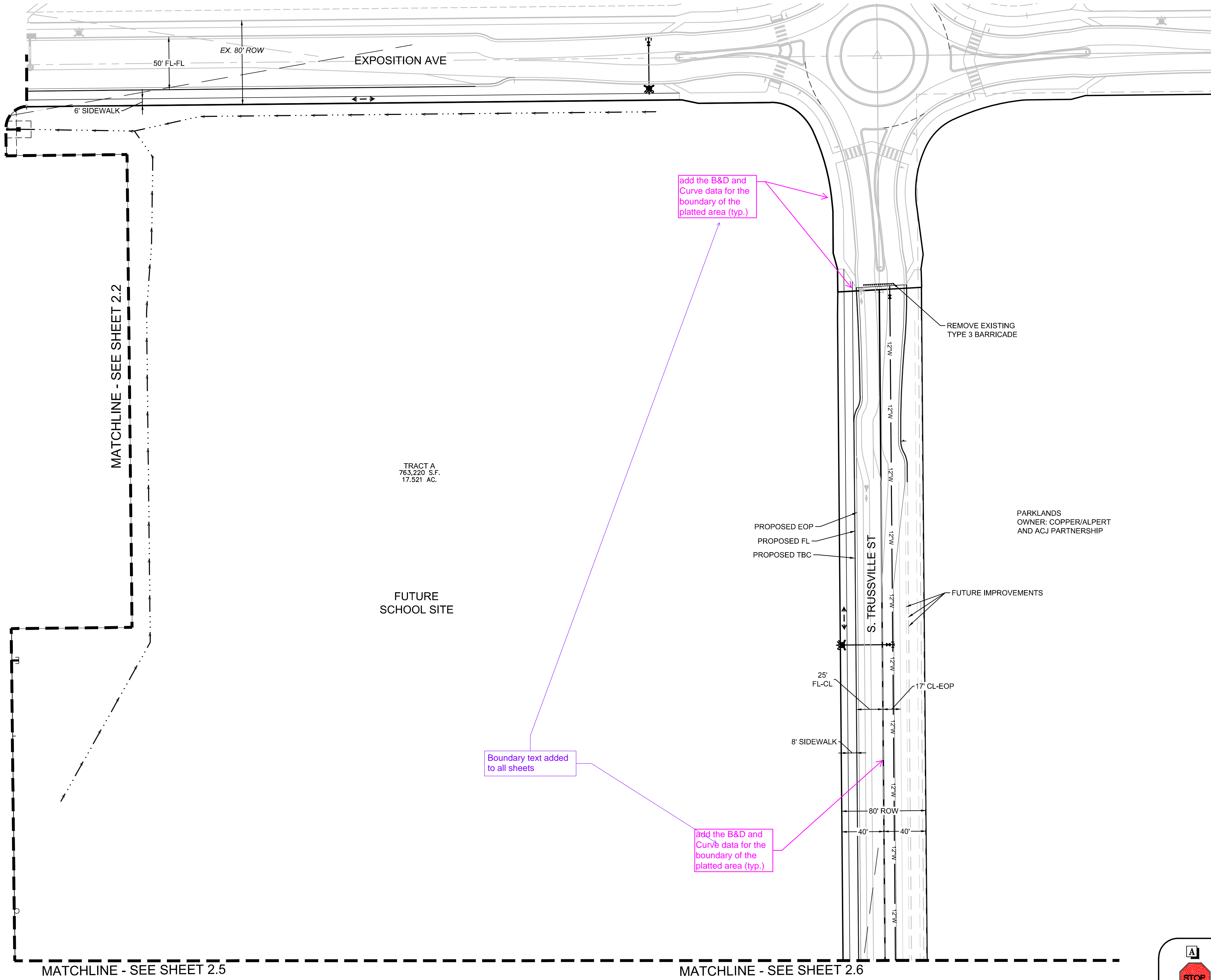


KEY MAP
N.T.S.



- NOTES:
1. SEE SHEET 2.0 OVERALL SITE PLAN FOR CROSS SECTION DETAILS.
 2. ALL ALLEYS ARE PRIVATELY OWNED & MAINTAINED BY THE METROPOLITAN DISTRICT.
 3. STREET LIGHT LOCATIONS ARE CONCEPTUAL AND FINAL STREET LIGHT LOCATIONS WILL BE DETERMINED WITH PHOTOMETRIC ANALYSIS IN THE LIGHTING PLANS SUBMITTED WITH THE CIVIL PLANS. LIGHT FIXTURE TYPE TO BE INCLUDED WITH THIS PHOTOMETRIC PLAN.
 4. ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED.
 5. FENCING DESIGN, TYPE AND LOCATION ARE ON THE LANDSCAPING SHEETS.
 6. SIGNAGE AND STRIPING WILL BE PROVIDED WITH THE CIVIL PLANS.





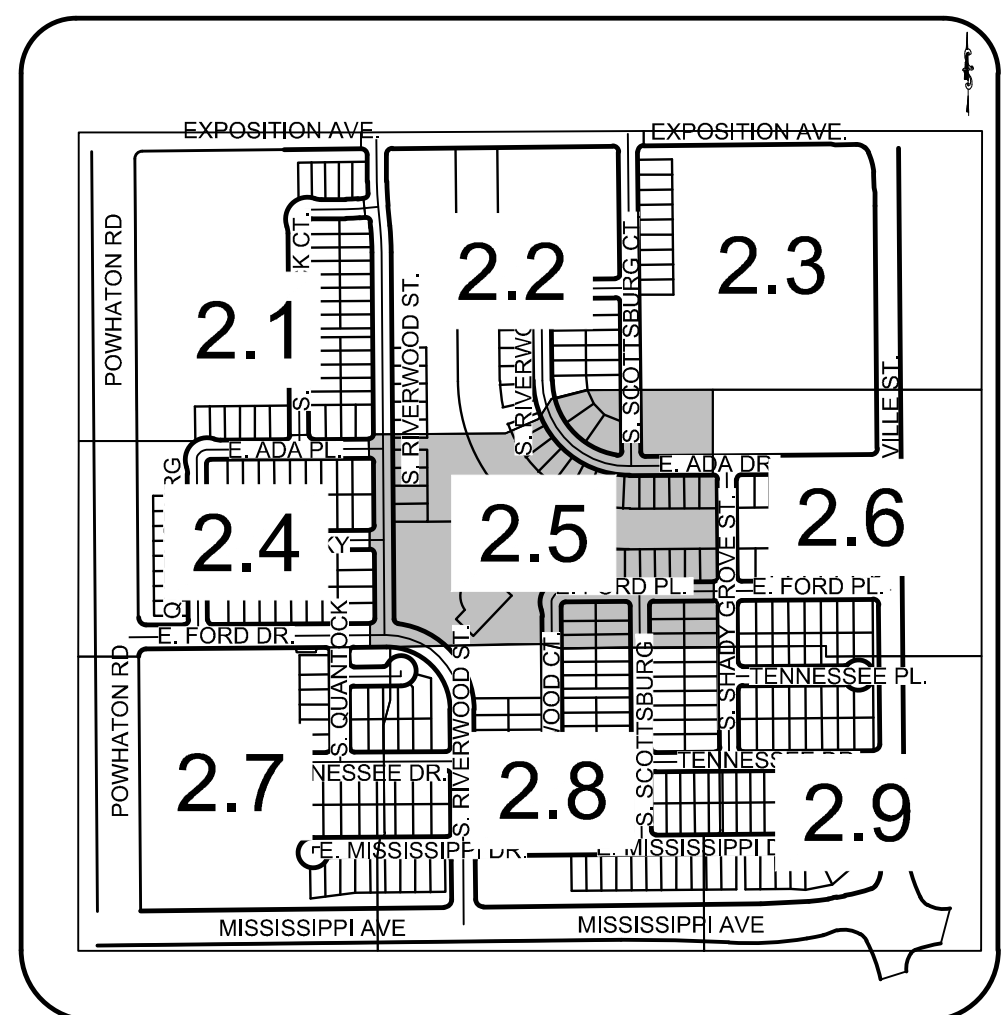
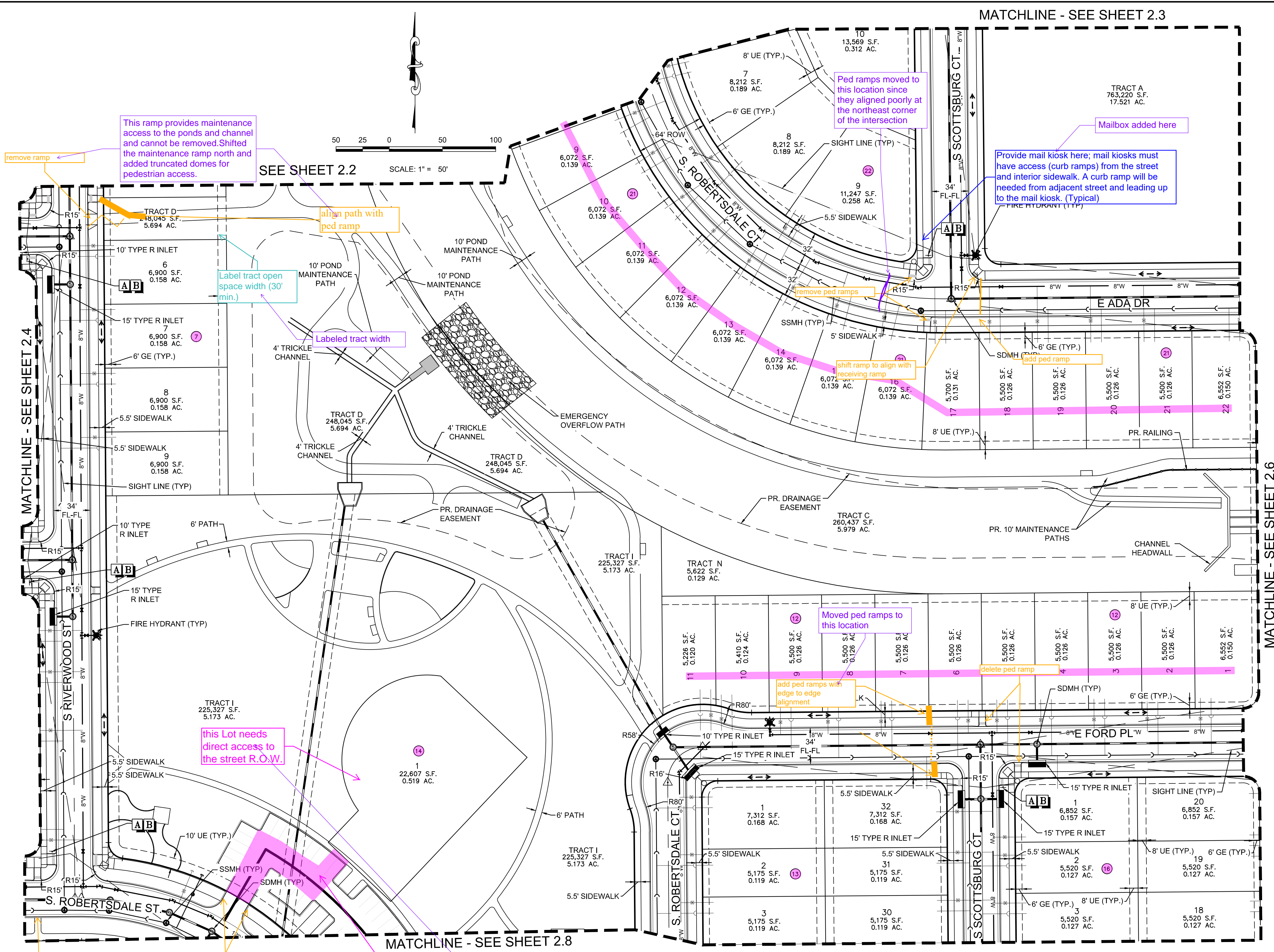
- NOTES:
- SEE SHEET 2.0 OVERALL SITE PLAN FOR CROSS SECTION DETAILS.
 - ALL ALLEYS ARE PRIVATELY OWNED & MAINTAINED BY THE METROPOLITAN DISTRICT.
 - STREET LIGHT LOCATIONS ARE CONCEPTUAL AND FINAL STREET LIGHT LOCATIONS WILL BE DETERMINED WITH PHOTOMETRIC ANALYSIS IN THE LIGHTING PLANS SUBMITTED WITH THE CIVIL PLANS. LIGHT FIXTURE TYPE TO BE INCLUDED WITH THIS PHOTOMETRIC PLAN.
 - ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED.
 - FENCING DESIGN, TYPE AND LOCATION ARE ON THE LANDSCAPING SHEETS.
 - SIGNAGE AND STRIPING WILL BE PROVIDED WITH THE CIVIL PLANS.

LEGEND

② BLOCK NUMBER OF HARMONY SUBDIVISION	— STREET CENTERLINE
6 LOT NUMBER	— PUBLIC STREET RIGHT-OF-WAY
— PROP CURB & GUTTER(METRO)	— PROPERTY LOT LINE
— PROP LIGHT POLE(METRO)	— EDGE OF PAVEMENT
— EXISTING FIRE HYDRANT	— SECTION LINE
— PROP SIDEWALK(METRO)	— PROPOSED EASEMENT
— PROP CURB RETURN SIDEWALK RAMP "HCR" (METRO)	— EXISTING EASEMENT
— PROP TEMPORARY ROAD BARRIER (METRO)	— CSP BOUNDARY
— PROP CONCRETE PAN (METRO)	— FILING BOUNDARY
— PROPOSED CURB & GUTTER	— PEDESTRIAN ACCESSIBILITY ROUTE
— PROPOSED LIGHT POLE	— PROP LANDSCAPE BENCH(METRO)
— PROPOSED FIRE HYDRANT	— PROP FENCING/POSTS(METRO)
— PROPOSED SIDEWALK	— SIGHT TRIANGLE LINE
— PROPOSED CURB RETURN SIDEWALK RAMP	— DESIGNATED SMALL LOT
— PROPOSED TEMPORARY ROAD BARRIER	— PROPOSED CONCRETE PAN
	— PROPOSED BUILDING ENVELOPE
	— PROPOSED MID-BLOCK RAMP
	— PROPOSED MANHOLE

A R1-1 30"x30" SINGLE LANE 36"x36" MULTI-LANE	B D3-1 VARIES X 12"	C R1-2 36"x36" SINGLE LANE 48"x48" MULTI-LANE	D R5-1 30"x30" SINGLE LANE 36"x36" MULTI-LANE	E R6-1 36"x12" SINGLE LANE 54"x18" MULTI-LANE	F R2-1 24"x30" SINGLE LANE 30"x36" MULTI-LANE
G R1-5 36"x36"	H W11-2 30"x30" SINGLE LANE 36"x36" MULTI-LANE	I M16-7P 24"x12"	J R3-2 24"x24" SINGLE LANE 36"x36" MULTI-LANE	K R4-7 24"x30"	L W2-6 24"x24" SINGLE LANE 36"x36" MULTI-LANE
M W16-9P 24"x12"	N W16-9P 24"x12"	O W11-2 30"x30" SINGLE LANE 36"x36" MULTI-LANE	P W14-2 24"x24"		

SHEET NUMBER	2.3	DRAWN BY: DJG	CHECKED BY: BPW	DATE: MAY 2022	SCALE: AS SHOWN	FILE NO: 8130214922	HARMONY SUBDIVISION CIVIL SITE PLAN NO. 5 AREA SITE PLAN	Melcor/TC Aurora, LLC C/O Marathon Land Company 9750 W. Cambridge Place Littleton, CO 80127 Tel: (303) 920-9400 Fax: (303) 920-9440	Westwood 10333 E DRY CREEK RD. SUITE 240 ENGLEWOOD, CO 80112 TEL: 720.482.9526 Westwoodps.com Westwood Professional Services, Inc.	Revisions	No.	Init.	Apr.	Date



- NOTES:
1. SEE SHEET 2.0 OVERALL SITE PLAN FOR CROSS SECTION DETAILS.
 2. ALL ALLEYS ARE PRIVATELY OWNED & MAINTAINED BY THE METROPOLITAN DISTRICT.
 3. STREET LIGHT LOCATIONS ARE CONCEPTUAL AND FINAL STREET LIGHT LOCATIONS WILL BE DETERMINED WITH PHOTOMETRIC ANALYSIS IN THE LIGHTING PLANS SUBMITTED WITH THE CIVIL PLANS. LIGHT FIXTURE TYPE TO BE INCLUDED WITH THIS PHOTOMETRIC PLAN.
 4. ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED.
 5. FENCING DESIGN, TYPE AND LOCATION ARE ON THE LANDSCAPING SHEETS.
 6. SIGNAGE AND STRIPING WILL BE PROVIDED WITH THE CIVIL PLANS.

LEGEND

②	BLOCK NUMBER OF HARMONY SUBDIVISION	—	PROP MID-BLOCK RAMP(METRO)
6	LOT NUMBER	—	STREET CENTERLINE
—	PROP CURB & GUTTER(METRO)	—	PUBLIC STREET RIGHT-OF-WAY
—	PROP LIGHT POLE(METRO)	—	PROPERTY LOT LINE
—	EXISTING FIRE HYDRANT	—	EDGE OF PAVEMENT
—	PROP SIDEWALK(METRO)	—	SECTION LINE
—	PROP CURB RETURN SIDEWALK RAMP "HCR" (METRO)	—	PROPOSED EASEMENT
—	PROP TEMPORARY ROAD BARRIER (METRO)	—	EXISTING EASEMENT
—	PROP CONCRETE PAN (METRO)	—	CSP BOUNDARY
—	PROPOSED CURB & GUTTER	—	FILING BOUNDARY
—	PROPOSED LIGHT POLE	—	PEDESTRIAN ACCESSIBILITY ROUTE
—	PROPOSED FIRE HYDRANT	—	PROP LANDSCAPE BENCH(METRO)
—	PROPOSED SIDEWALK	—	PROP FENCING/POSTS(METRO)
—	PROPOSED CURB RETURN SIDEWALK RAMP	—	SIGHT TRIANGLE LINE
—	PROPOSED TEMPORARY ROAD BARRIER	—	DESIGNATED SMALL LOT
		—	PROPOSED CONCRETE PAN
		—	PROPOSED BUILDING ENVELOPE
		—	PROPOSED MID-BLOCK RAMP
		—	PROPOSED MANHOLE

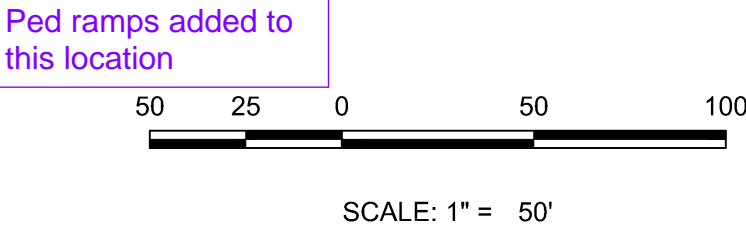
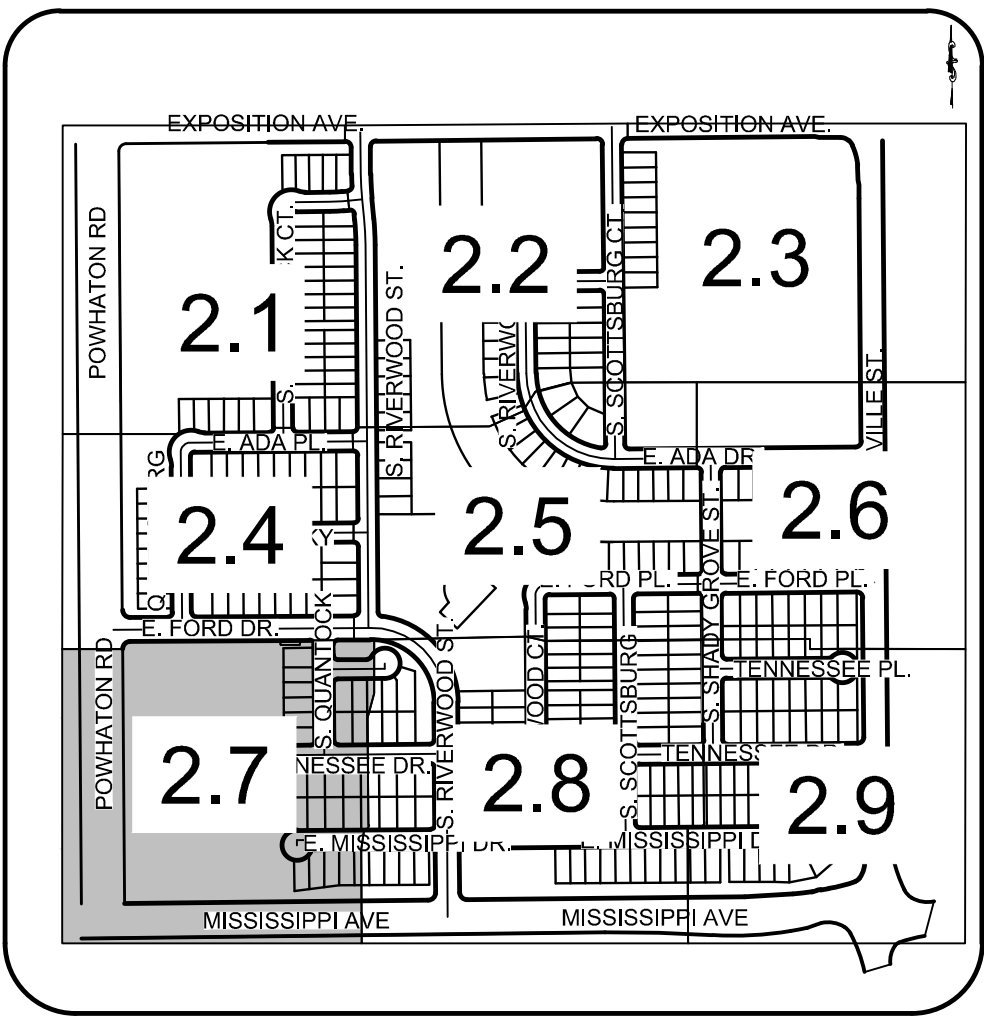
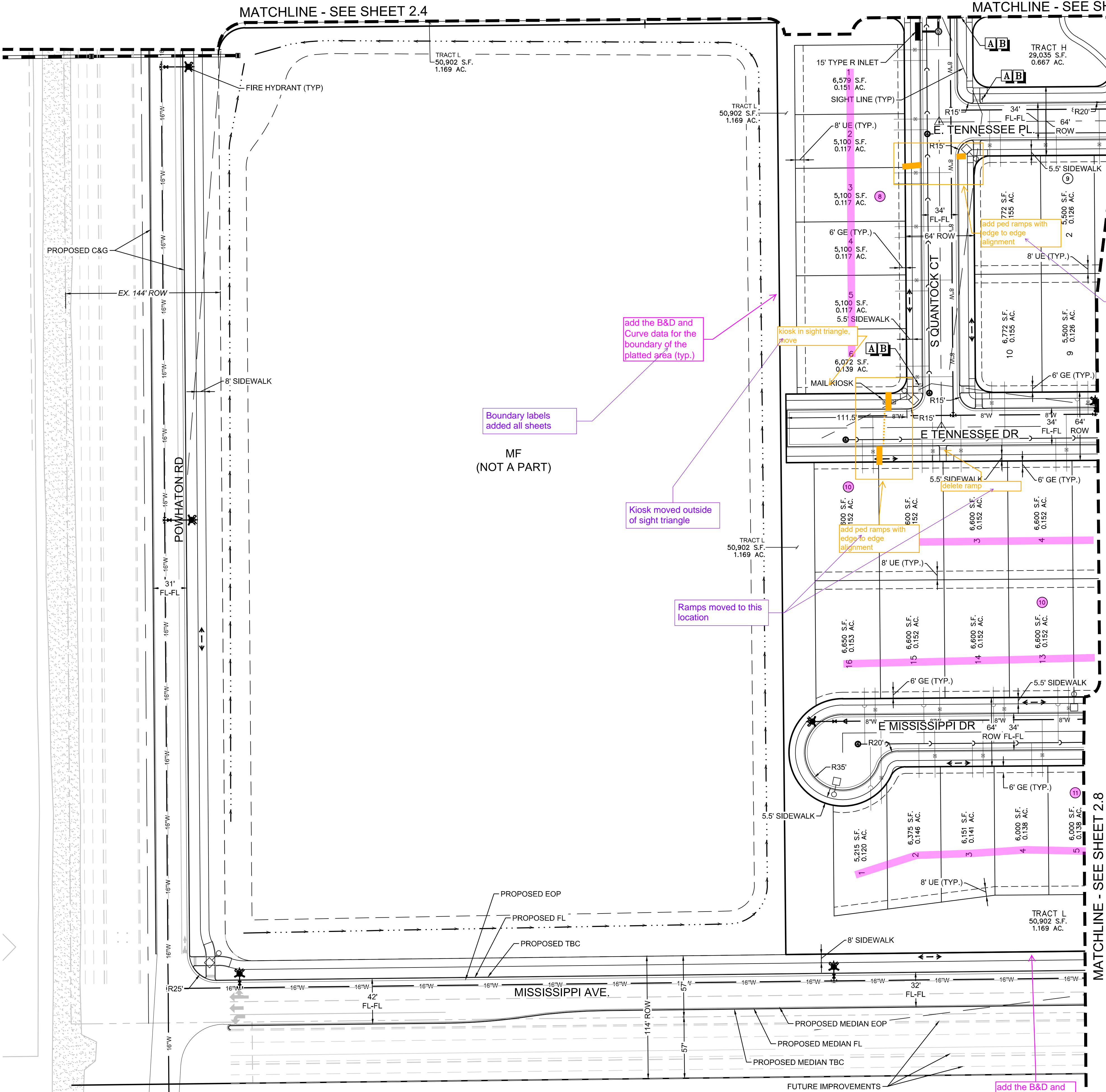
TRAFFIC CONTROL

A STOP R1-1 30"x30" SINGLE LANE 36"x36" MULTI-LANE	B Main St VARIES X 12"	C YIELD R1-2 36"x36" SINGLE LANE 48"x48" MULTI-LANE	D DO NOT ENTER R5-1 30"x30" SINGLE LANE 36"x36" MULTI-LANE	E ONE WAY R6-1 36"x12" SINGLE LANE 54"x18" MULTI-LANE	F SPEED LIMIT 25 R2-1 24"x30" SINGLE LANE 30"x36" MULTI-LANE
G HERE TO R1-5 36"x36"	H FLASHING BEACON REQUIRED AT UNCONTROLLED INTERSECTIONS	I W11-2 30"x30" SINGLE LANE 36"x36" MULTI-LANE	J W16-7P 24"x12"	K W11-2 30"x30" SINGLE LANE 36"x36" MULTI-LANE	L W16-9P 24"x12"
M W11-2 30"x30" SINGLE LANE 36"x36" MULTI-LANE	N W16-9P 24"x12"	O W11-2 30"x30" SINGLE LANE 36"x36" MULTI-LANE	P NO OUTLET W14-2 24"x24"		

Some of the Blocks will need to be renumbered and some of the Lots will need to be renumbered when the Blocks are combined (overall there will be less Blocks in this Subdivision)

All lot and block numbers have been updated to match the graphic you provided on page 4, typ. throughout plan set.

SHEET NUMBER	DRAWN BY: DJG	CHECKED BY: BPW	DATE: MAY 2022	SCALE: AS SHOWN	FILE NO: 8130214922	HARMONY SUBDIVISION CIVIL SITE PLAN NO. 5 AREA SITE PLAN	Melcor/TC Aurora, LLC C/O Marathon Land Company 9750 W. Cambridge Place Littleton, CO 80127 Tel: (303) 920-9400 Fax: (303) 920-9440	Westwood 10333 E DRY CREEK RD. SUITE 240 ENGLEWOOD, CO 80112 TEL: 720.482.9526 Westwoodpa.com Westwood Professional Services, Inc.	Revisions	No.	Date	Init.	Appr.	Date



- NOTES:
1. SEE SHEET 2.0 OVERALL SITE PLAN FOR CROSS SECTION DETAILS.
 2. ALL ALLEYS ARE PRIVATELY OWNED & MAINTAINED BY THE METROPOLITAN DISTRICT.
 3. STREET LIGHT LOCATIONS ARE CONCEPTUAL AND FINAL STREET LIGHT LOCATIONS WILL BE DETERMINED WITH PHOTOMETRIC ANALYSIS IN THE LIGHTING PLANS SUBMITTED WITH THE CIVIL PLANS. LIGHT FIXTURE TYPE TO BE INCLUDED WITH THIS PHOTOMETRIC PLAN.
 4. ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED.
 5. FENCING DESIGN, TYPE AND LOCATION ARE ON THE LANDSCAPING SHEETS.
 6. SIGNAGE AND STRIPING WILL BE PROVIDED WITH THE CIVIL PLANS.

LEGEND

PROPOSED CURB & GUTTER (METRO)	PROPOSED MID-BLOCK RAMP (METRO)
PROPOSED LIGHT POLE (METRO)	STREET CENTERLINE
EXISTING FIRE HYDRANT	PUBLIC STREET
PROPOSED SIDEWALK (METRO)	RIGHT-OF-WAY
PROPOSED CURB RETURN SIDEWALK RAMP "HCR" (METRO)	PROPERTY LOT LINE
PROPOSED TEMPORARY ROAD BARRIER (METRO)	EDGE OF PAVEMENT
PROPOSED CONCRETE PAN (METRO)	SECTION LINE
PROPOSED CURB & GUTTER	PROPOSED EASEMENT
PROPOSED LIGHT POLE	EXISTING EASEMENT
PROPOSED FIRE HYDRANT	CSP BOUNDARY
PROPOSED SIDEWALK	FILING BOUNDARY
PROPOSED CURB RETURN SIDEWALK RAMP	PEDESTRIAN ACCESSIBILITY ROUTE
PROPOSED TEMPORARY ROAD BARRIER	PROPOSED LANDSCAPE BENCH (METRO)
	PROPOSED FENCING/POSTS (METRO)
	SIGHT TRIANGLE LINE
	DESIGNATED SMALL LOT
	PROPOSED CONCRETE PAN
	PROPOSED BUILDING ENVELOPE
	PROPOSED MID-BLOCK RAMP
	PROPOSED MANHOLE

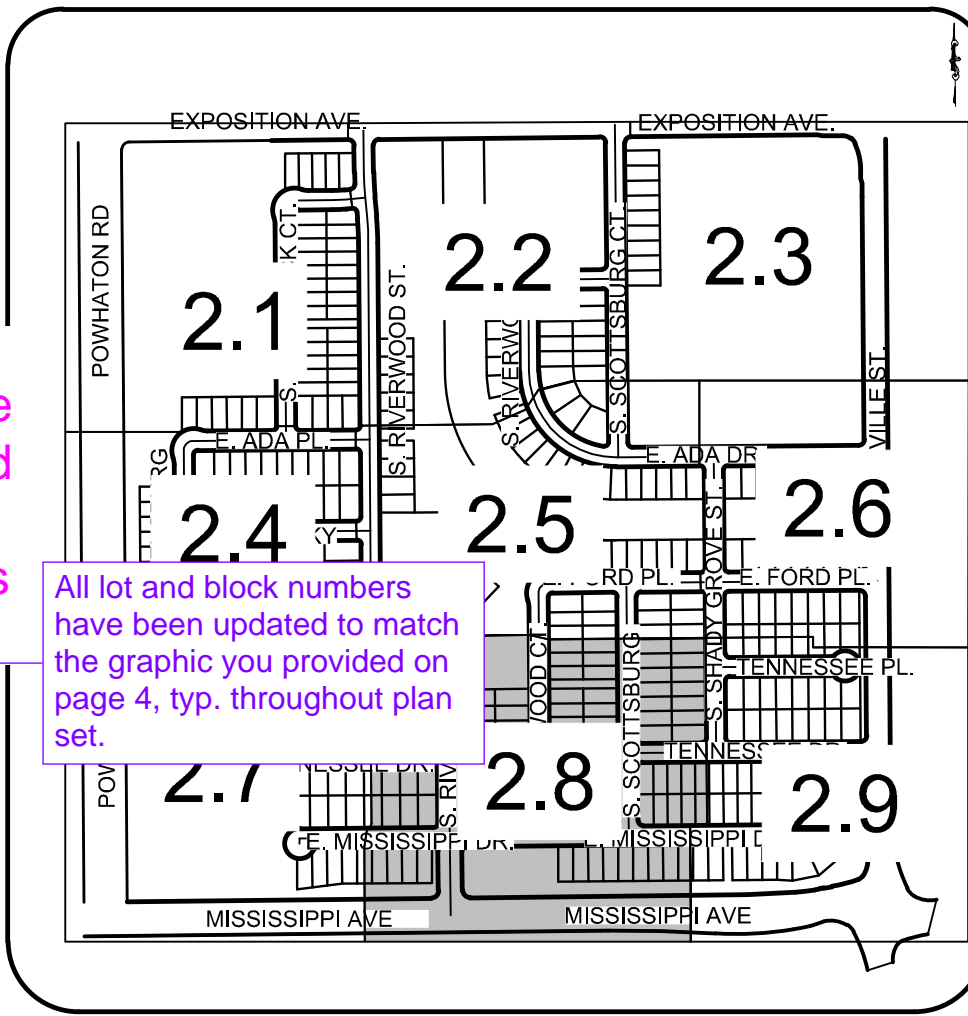
A STOP R1-1 30"x30" SINGLE LANE 36"x36" MULT-LANE	B Main St D3-1 VARIES X 12"	C YIELD R1-2 36"x36" SINGLE LANE 48"x48" MULT-LANE	D DO NOT ENTER R5-1 30"x30" SINGLE LANE 36"x36" MULT-LANE	E ONE WAY R6-1 24"x12" SINGLE LANE 54"x18" MULT-LANE	F SPEED LIMIT 25 R2-1 25 - SCHOOL / LOCAL 30 - COLLECTOR 45 -ARTERIAL
G HERE TO R1-5 36"x36"	H FLASHING BEACON REQUIRED AT UNCONTROLLED INTERSECTIONS	I NO LEFT TURN R3-2 24"x12" SINGLE LANE 36"x36" MULT-LANE	J AHEAD R4-7 24"x30"	K W11-2 30"x30" SINGLE LANE 36"x36" MULT-LANE	L W16-9P 24"x12"
M W16-9P 24"x12"	N W16-9P 24"x12"	O W11-2 30"x30" SINGLE LANE 36"x36" MULT-LANE	P NO OUTLET W14-2 24"x24"		

SHEET NUMBER 2.7	DRAWN BY: DJG CHECKED BY: BPW DATE: MAY 2022	SCALE: AS SHOWN FILE NO: 8130214922	HARMONY SUBDIVISION CIVIL SITE PLAN NO. 5 AREA SITE PLAN	Melcor/TC Aurora, LLC C/O Marathon Land Company 9750 W. Cambridge Place Littleton, CO 80127 Tel: (303) 920-9400 Fax: (303) 920-9440	Westwood 10333 E DRY CREEK RD. SUITE 240 ENGLEWOOD, CO 80112 TEL: 720.482.9526 Westwoodpa.com Westwood Professional Services, Inc.	Revisions	No.	Date	Appr.	Date	

MATCHLINE - SEE SHEET 2.5

MATCHLINE - SEE SHEET 2.7

MATCHLINE - SEE SHEET 2.9



KEY MAP
N.T.S.

- NOTES:
1. SEE SHEET 2.0 OVERALL SITE PLAN FOR CROSS SECTION DETAILS.
 2. ALL ALLEYS ARE PRIVATELY OWNED & MAINTAINED BY THE METROPOLITAN DISTRICT.
 3. STREET LIGHT LOCATIONS ARE CONCEPTUAL AND FINAL STREET LIGHT LOCATIONS WILL BE DETERMINED WITH PHOTOMETRIC ANALYSIS IN THE LIGHTING PLANS SUBMITTED WITH THE CIVIL PLANS. LIGHT FIXTURE TYPE TO BE INCLUDED WITH THIS PHOTOMETRIC PLAN.
 4. ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED.
 5. FENCING DESIGN, TYPE AND LOCATION ARE ON THE LANDSCAPING SHEETS.
 6. SIGNAGE AND STRIPING WILL BE PROVIDED WITH THE CIVIL PLANS.

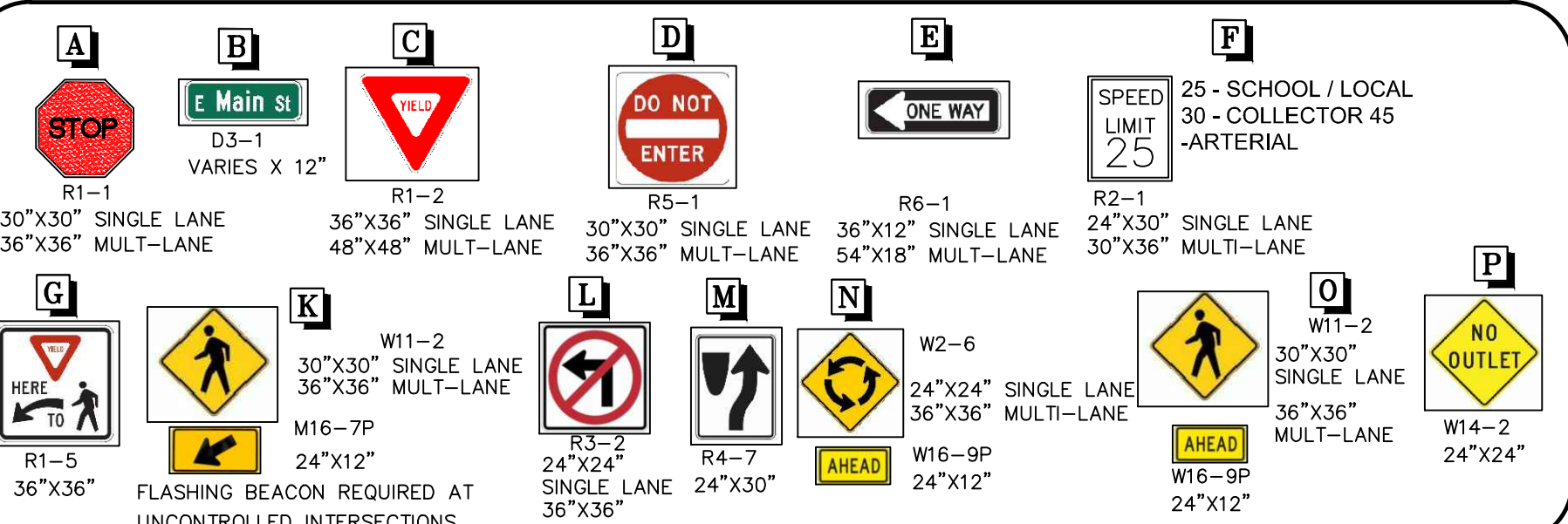
LEGEND

- | | | | |
|-------|-------------------------------------|-------|----------------------------|
| ② | BLOCK NUMBER OF HARMONY SUBDIVISION | — — — | PROP MID-BLOCK RAMP(METRO) |
| 6 | LOT NUMBER | — — — | STREET CENTERLINE |
| — — — | PROP CURB & GUTTER(METRO) | — — — | PUBLIC STREET RIGHT-OF-WAY |
| — — — | PROP LIGHT POLE(METRO) | — — — | PROPERTY LOT LINE |
| — — — | EXISTING FIRE HYDRANT | — — — | EDGE OF PAVEMENT |
| — — — | PROP SIDEWALK(METRO) | — — — | SECTION LINE |
| — — — | ROAD CLOSURE DETAIL | — — — | PROPOSED EASEMENT |
| | | — — — | EXISTING EASEMENT |
| | | — — — | GEN BOUNDARY |

I'm looking for some clarity on the context of the proposed locations. While you received the comment from Civil on the need for ramps to be located at the mail kiosks, those ramps can be up to 50' away from the mail kiosks and still meet the requirement. A primary concern is that it appears these kiosks will be on someone's home frontage and therefore adjacent to private driveways, which may present issues with backing drivers' line of sight (in addition to the aesthetic issues).

For reference, at a stop sign, a mail kiosk should be placed 30' in advance of the stop sign, but no more than 50' away from that intersection's curb ramp and still be an eligible location. The suggested location Steve noted in his comments do appear to meet criteria. Can you see who made the green comment? I can coordinate with that reviewer, if necessary. The comment on your snip appears at a different kiosk location where the 50' max distance would have been more difficult to meet, so either relocation or addition of curb ramps was going to be needed there.

- For future reference, the criteria we look at placing mail kiosks:
- 1) Outside of AASHTO sight triangles
 - 2) Curb ramps within 50'
 - 3) 30' upstream of any stop sign (for visibility of the stop sign)
 - 4) Preferred to keep away from home frontage/private driveways for their visibility
 - 5) Outside of intersections (to avoid conflicting kiosk movements with the intersection turning movements, etc)



Westwood		No.		Revisions		Date		Date	
Melcor/TC Aurora, LLC		C/O Marathon Land Company		9750 W. Cambridge Place Littleton, CO 80127		Tel: (303) 920-9400 Fax: (303) 920-9440			
SCALE: AS SHOWN		DRAWN BY: DJG		CHECKED BY: BPW		FILE NO: 8130214922		DATE: MAY 2022	
SHEET NUMBER		2.8							

move west side ramp
opposite one of the east
side ramps with edge to
edge alignment.
remove east side ramp
that does not have
receiving west side
ramp

Moved ramps north to
lot line, removed
south crossing ped
ramp

show ped ramp

Ped ramp now shown
on this sheet

Pedestrian
connection should
be added to the
walk on Trussville.

tract and area labeled

Removed this ramp

Receiving ramp
linework added

Some of the Blocks will need to
be renumbered and some of the
Lots will need to be renumbered
when the Blocks are combined
(overall there will be less Blocks
in this Subdivision)

All lot and block numbers
have been updated to match
the graphic you provided on
page 4, typ. throughout plan
set.

PARKLANDS
OWNER: COPPER/ALPERT
AND ACJ PARTNERSHIP

add the B&D and
Curve data for the
boundary of the
platted area (typ.)

boundary labels
added all sheets

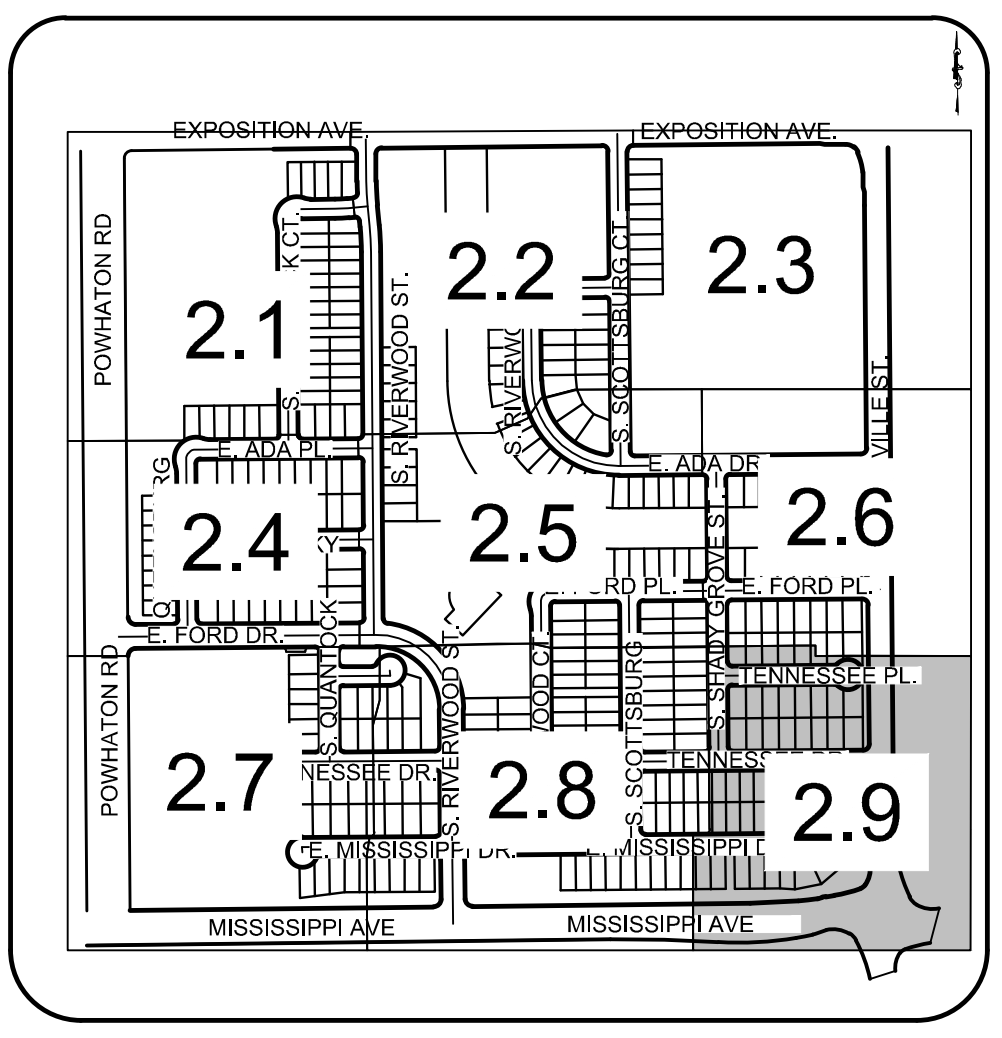
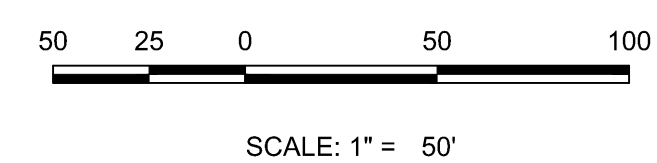
add the B&D and
Curve data for the
boundary of the
platted area (typ.)

Move this mail
kiosk to sheet 2.8
locations.

Label width of the
open space
separation area of
the tract (30' min.)

tract dimension
added

kiosk removed and
relocated



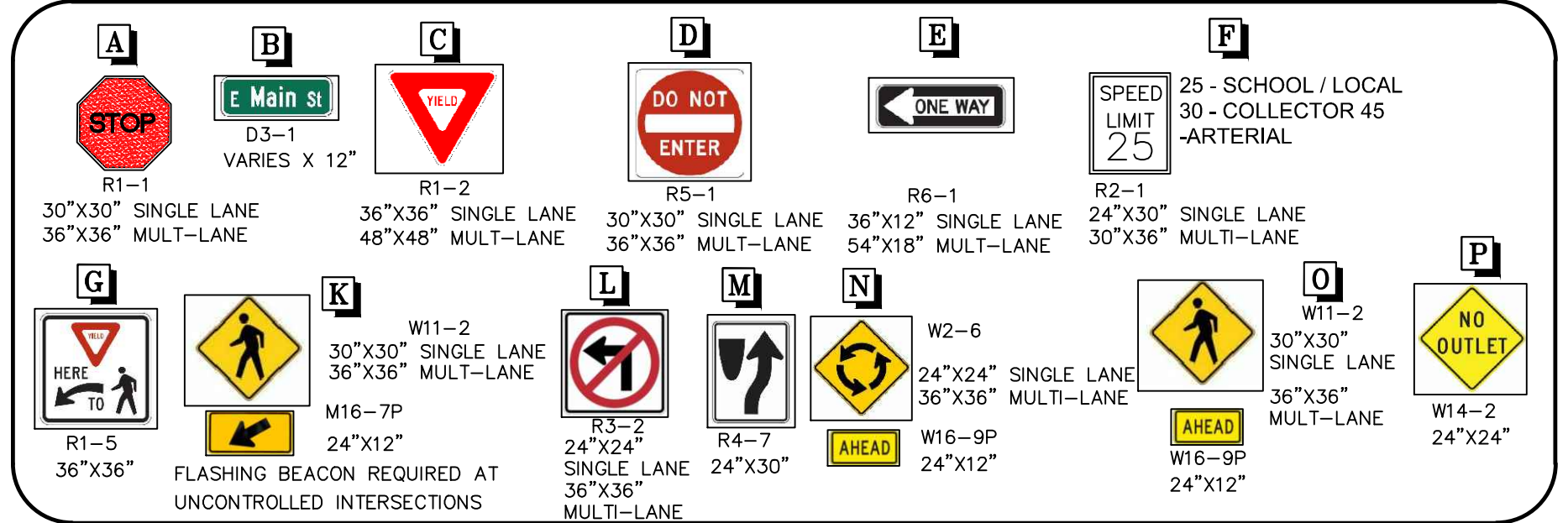
KEY MAP

N.T.S.

LEGEND

- ② BLOCK NUMBER OF HARMONY SUBDIVISION
- 6 LOT NUMBER
- PROP CURB & GUTTER (METRO)
- PROP LIGHT POLE (METRO)
- EXISTING FIRE HYDRANT
- PROP SIDEWALK (METRO)
- PROP CURB RETURN SIDEWALK RAMP "HCR" (METRO)
- PROP TEMPORARY ROAD BARRIER (METRO)
- PROP CONCRETE PAN (METRO)
- PROPOSED CURB & GUTTER
- PROPOSED LIGHT POLE
- PROPOSED FIRE HYDRANT
- PROPOSED SIDEWALK
- PROPOSED CURB RETURN SIDEWALK RAMP
- PROPOSED TEMPORARY ROAD BARRIER
- PROP MID-BLOCK RAMP (METRO)
- STREET CENTERLINE
- PUBLIC STREET
- RIGHT-OF-WAY
- PROPERTY LOT LINE
- EDGE OF PAVEMENT
- SECTION LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- CSP BOUNDARY
- FILING BOUNDARY
- PEDESTRIAN ACCESSIBILITY ROUTE
- PROP LANDSCAPE BENCH (METRO)
- PROP FENCING/POSTS (METRO)
- SIGHT TRIANGLE LINE
- DESIGNATED SMALL LOT
- PROPOSED CONCRETE PAN
- PROPOSED BUILDING ENVELOPE
- PROPOSED MID-BLOCK RAMP
- PROPOSED MANHOLE

NOTES:
1. SEE SHEET 2.0 OVERALL SITE PLAN FOR CROSS SECTION DETAILS.
2. ALL ALLEYS ARE PRIVATELY OWNED & MAINTAINED BY THE METROPOLITAN DISTRICT.
3. STREET LIGHT LOCATIONS ARE CONCEPTUAL AND FINAL STREET LIGHT LOCATIONS WILL BE DETERMINED WITH PHOTOMETRIC ANALYSIS IN THE LIGHTING PLANS SUBMITTED WITH THE CIVIL PLANS. LIGHT FIXTURE TYPE TO BE INCLUDED WITH THIS PHOTOMETRIC PLAN.
4. ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED.
5. FENCING DESIGN, TYPE AND LOCATION ARE ON THE LANDSCAPING SHEETS.
6. SIGNAGE AND STRIPING WILL BE PROVIDED WITH THE CIVIL PLANS.



Westwood

10333 E DRY CREEK RD.
SUITE 240
ENGLEWOOD, CO 80112
TEL: 720.482.9526

Melcor/TC Aurora, LLC
C/O Marathon Land Company
9750 W. Cambridge Place
Littleton, CO 80127
Tel: (303) 920-9400 Fax: (303) 920-9440

HARMONY SUBDIVISION
CIVIL SITE PLAN NO. 5
AREA SITE PLAN

SCALE:
AS SHOWN

DRAWN BY:
D.J.G.

CHECKED BY:
B.P.W.

DATE:
MAY, 2022

2.9

SHEET NUMBER

No.

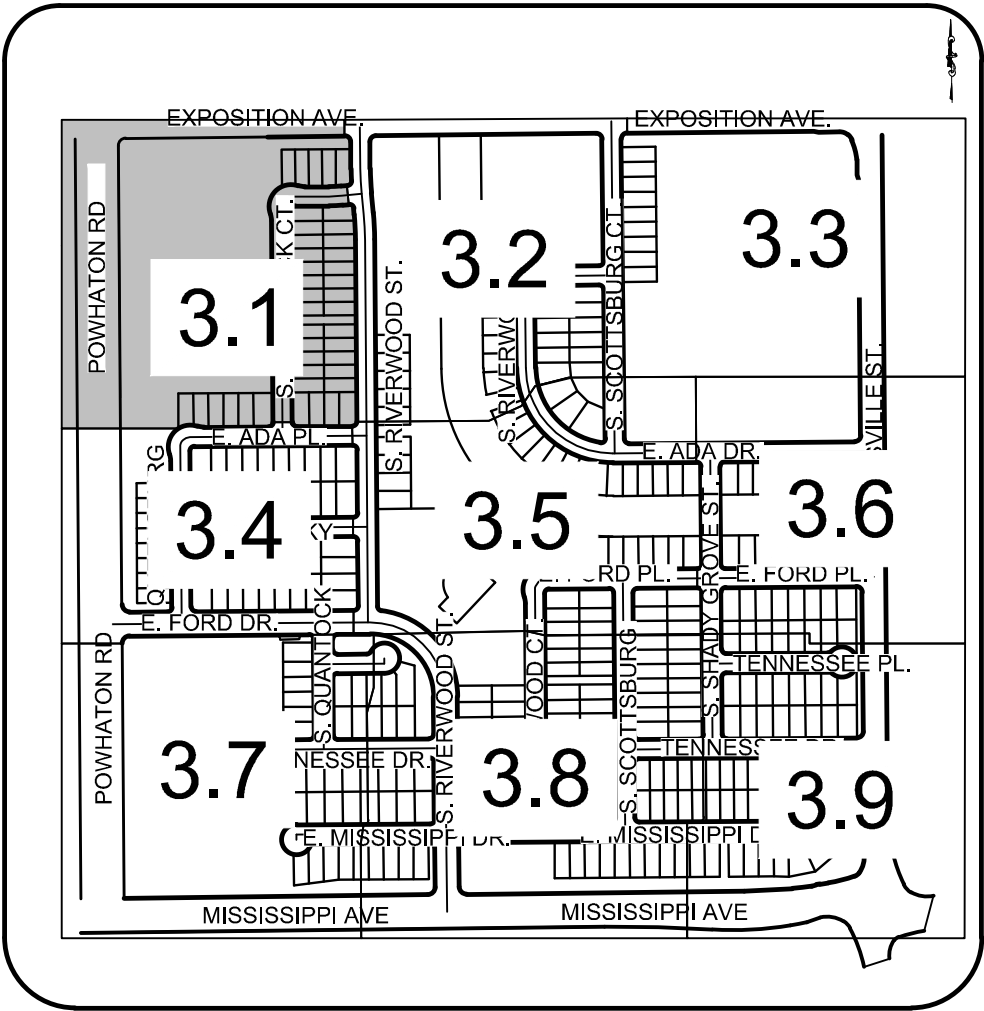
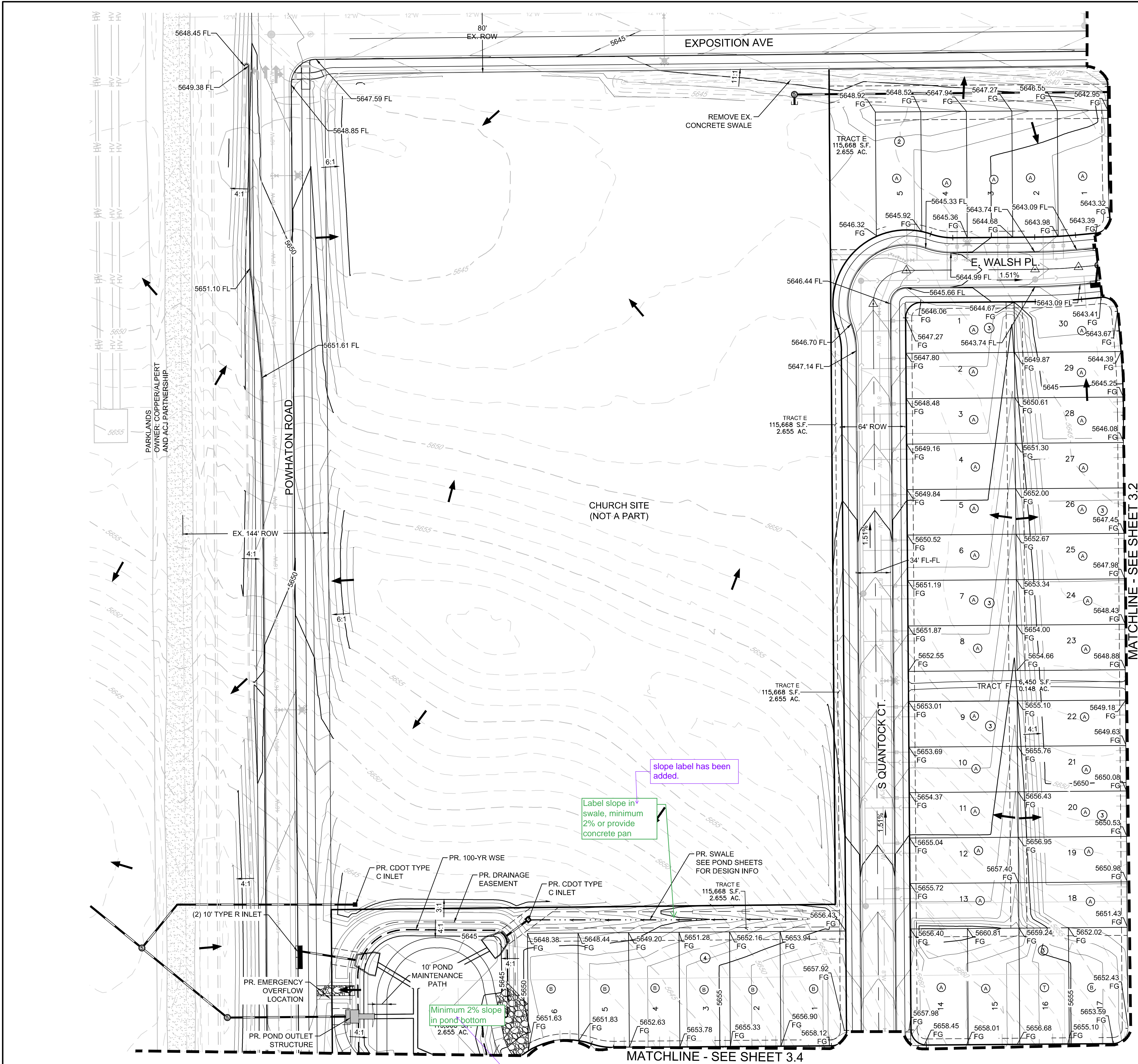
Revisions

Date

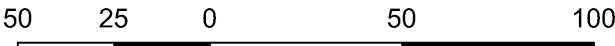
Init.

Appr.

Date



KEY MAP
N.T.S.



SCALE: 1" = 50'

NOTES:

- 1. ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED
- 2. PONDS SHALL BE OWNED AND MAINTAINED BY THE DEVELOPER

LEGEND	
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED OVERLAND FLOW
	CSP BOUNDARY
	PROPOSED STORM INLET
	PROPOSED FLARED END SECTION
	PROPOSED STORM DRAIN

SHEET NUMBER

3.1

DRAWN BY:

DJG

CHECKED BY:

BPW

DATE:

MAY 2022

SCALE:

AS SHOWN

FILE NO:

8130214922

HARMONY SUBDIVISION

CIVIL SITE PLAN NO. 5

AREA GRADING PLAN

Melcor/TC Aurora, LLC

C/O Marathon Land Company

9750 W. Cambridge Place

Littleton, CO 80127

Tel: (303) 920-9400 Fax: (303) 920-9440

Westwood

10333 E DRY CREEK RD.

SUITE 240

ENGLEWOOD, CO 80112

TEL: 720.482.9526

Westwoodps.com

Westwood Professional Services, Inc.

No.

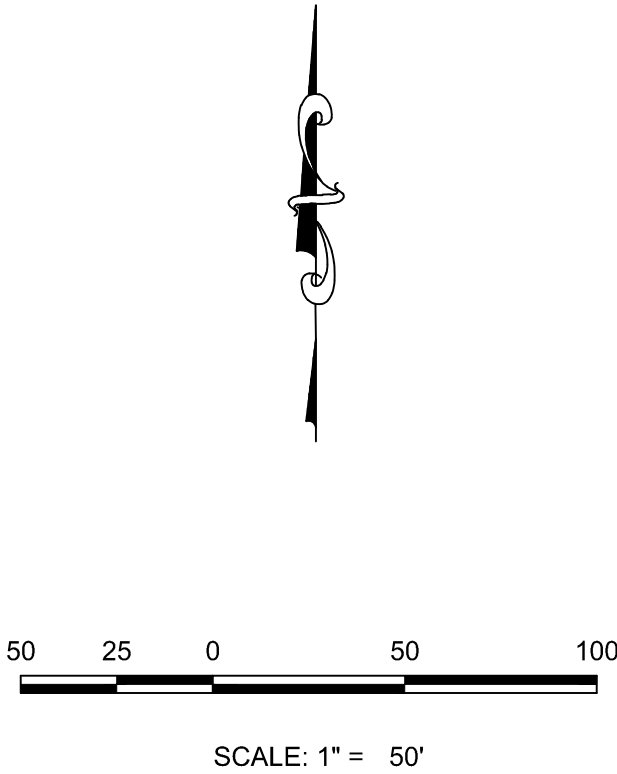
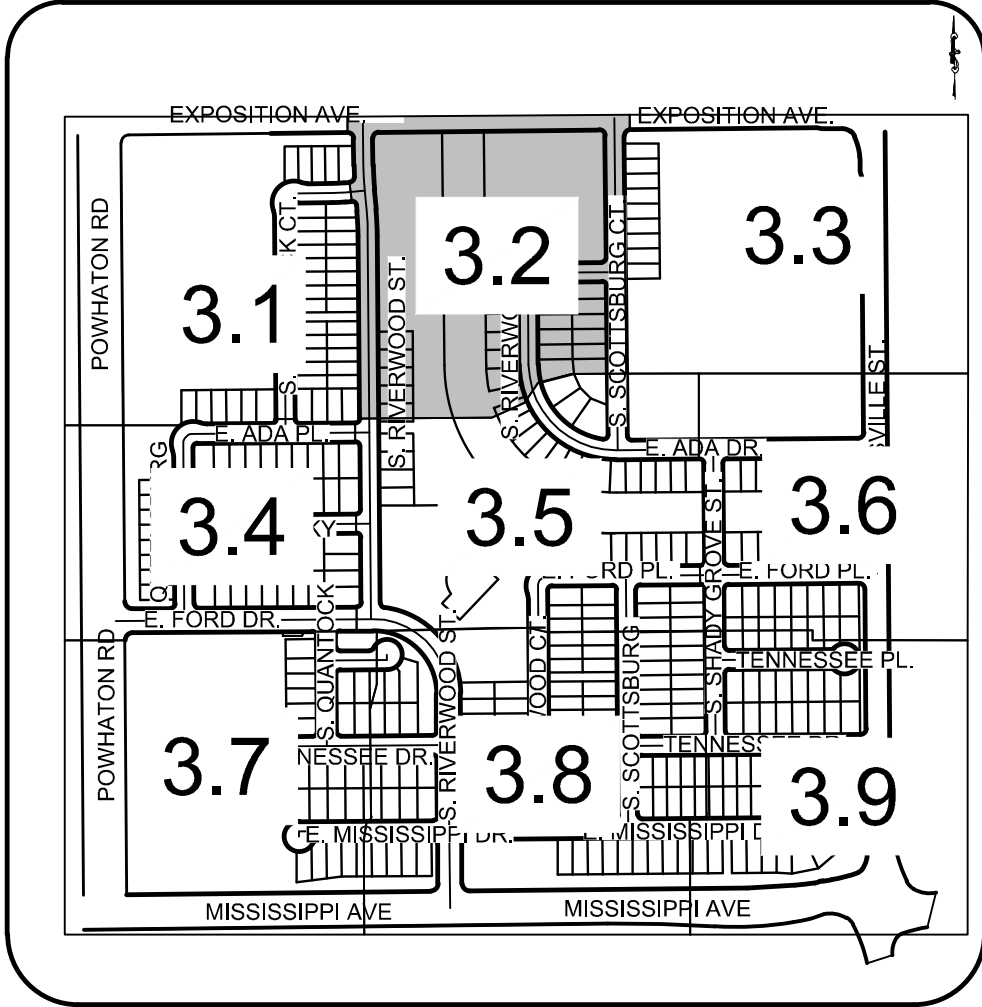
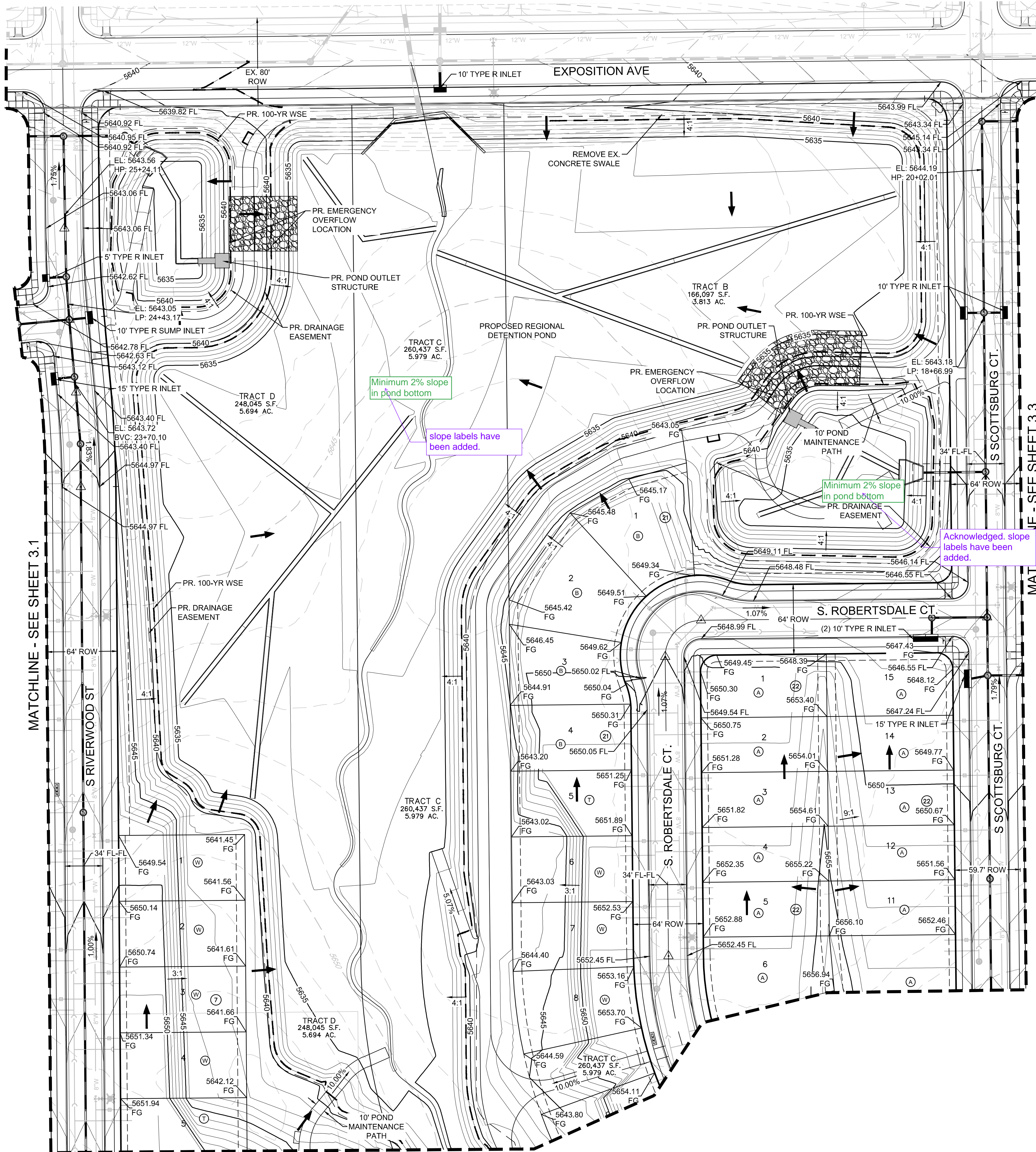
Revisions

Date

Init.

Appr.

Date

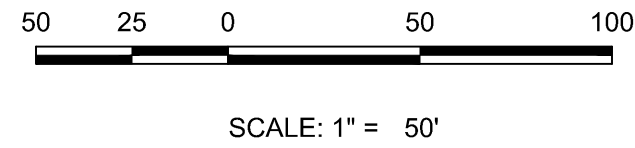
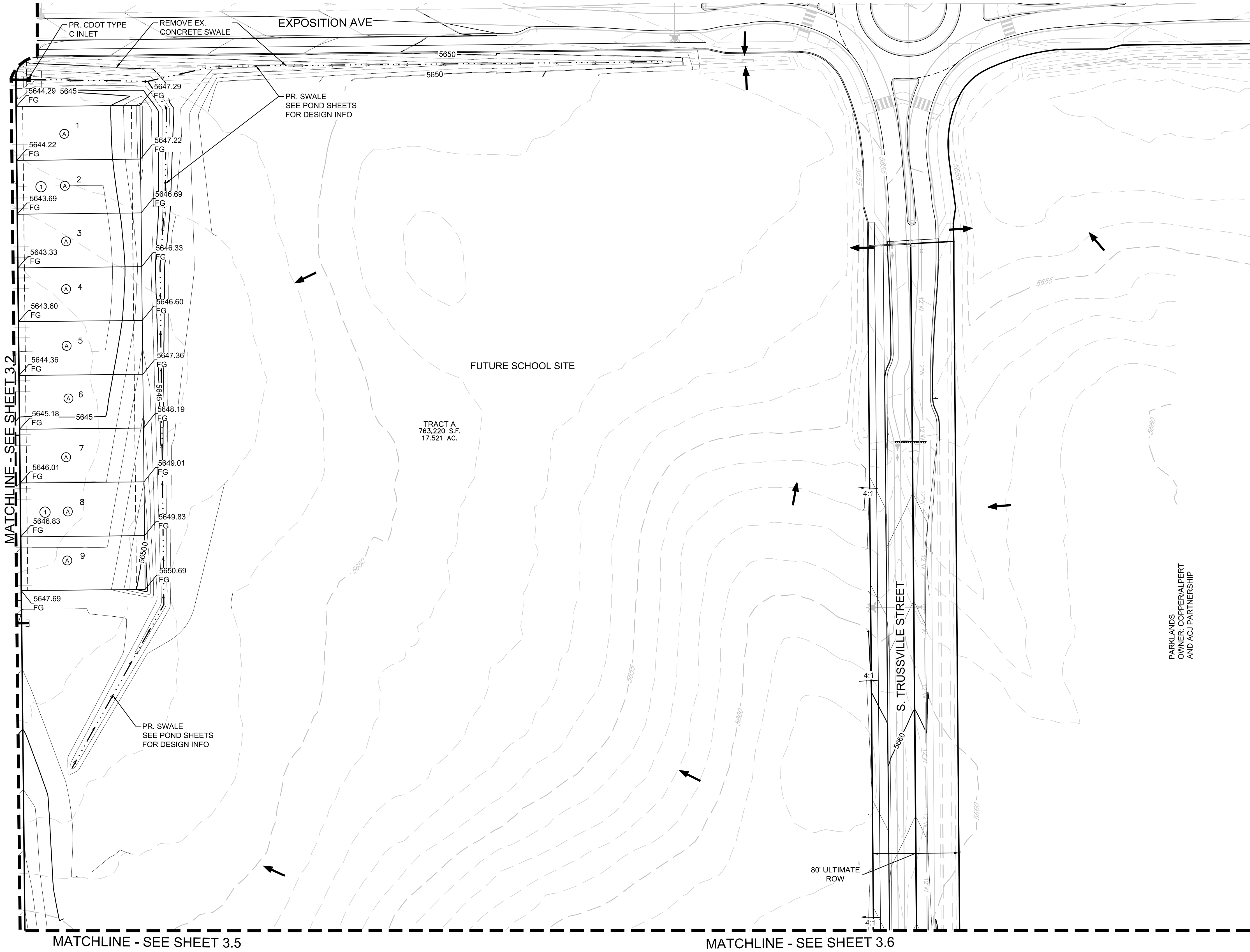


NOTES:

- ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED
- PONDS SHALL BE OWNED AND MAINTAINED BY THE DEVELOPER

LEGEND	
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED OVERLAND FLOW
	CSP BOUNDARY
	PROPOSED STORM INLET
	PROPOSED FLARED END SECTION
	PROPOSED STORM DRAIN

SHEET NUMBER	DRAWN BY: DJG	CHECKED BY: BPW	DATE: MAY 2022	SCALE: AS SHOWN	FILE NO: 8130214922	HARMONY SUBDIVISION CIVIL SITE PLAN NO. 5 AREA GRADING PLAN	Melcor/TC Aurora, LLC C/O Marathon Land Company 10333 E DRY CREEK RD., SUITE 240 ENGLEWOOD, CO 80112 Tel: (303) 920-9400 Fax: (303) 920-9440	Westwood Westwoodpa.com Westwood Professional Services, Inc.	Revisions			Date		
									No.	Init.	Apr.	Date		



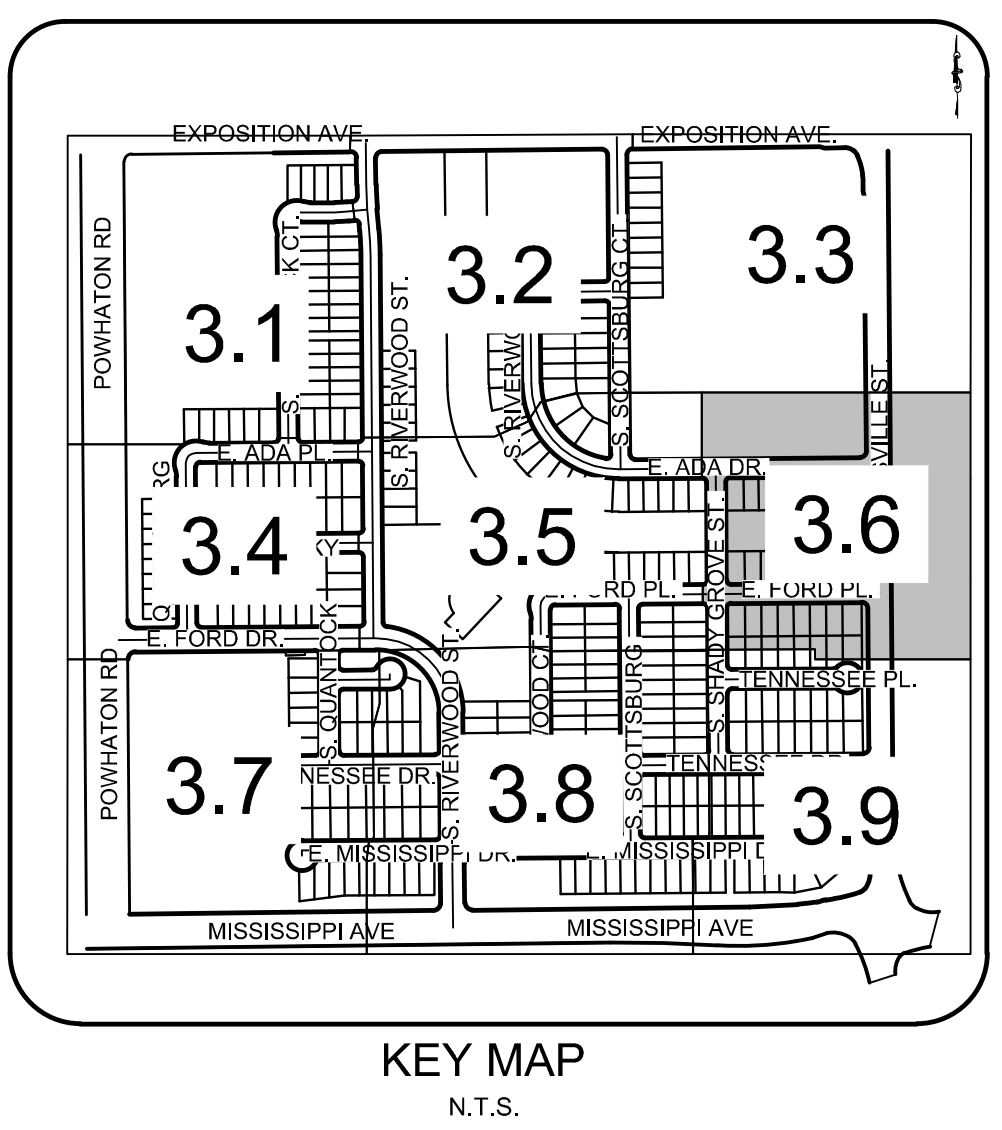
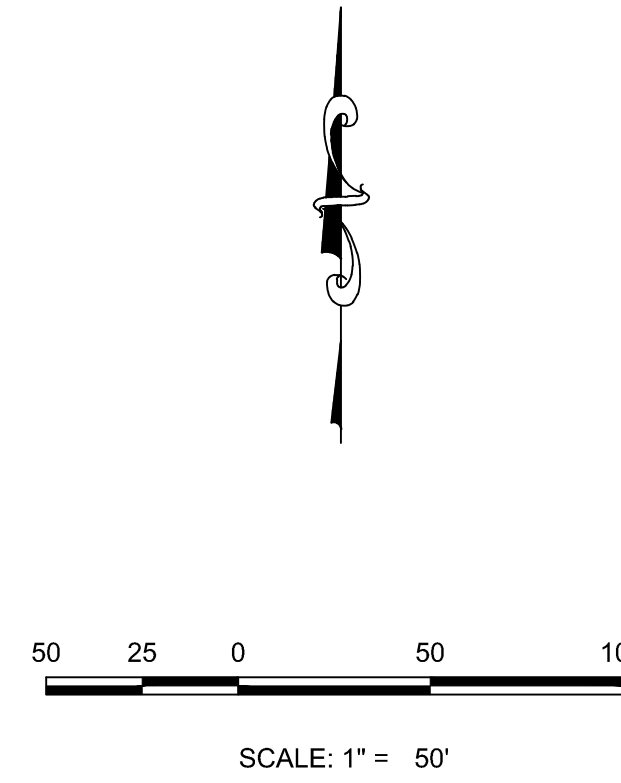
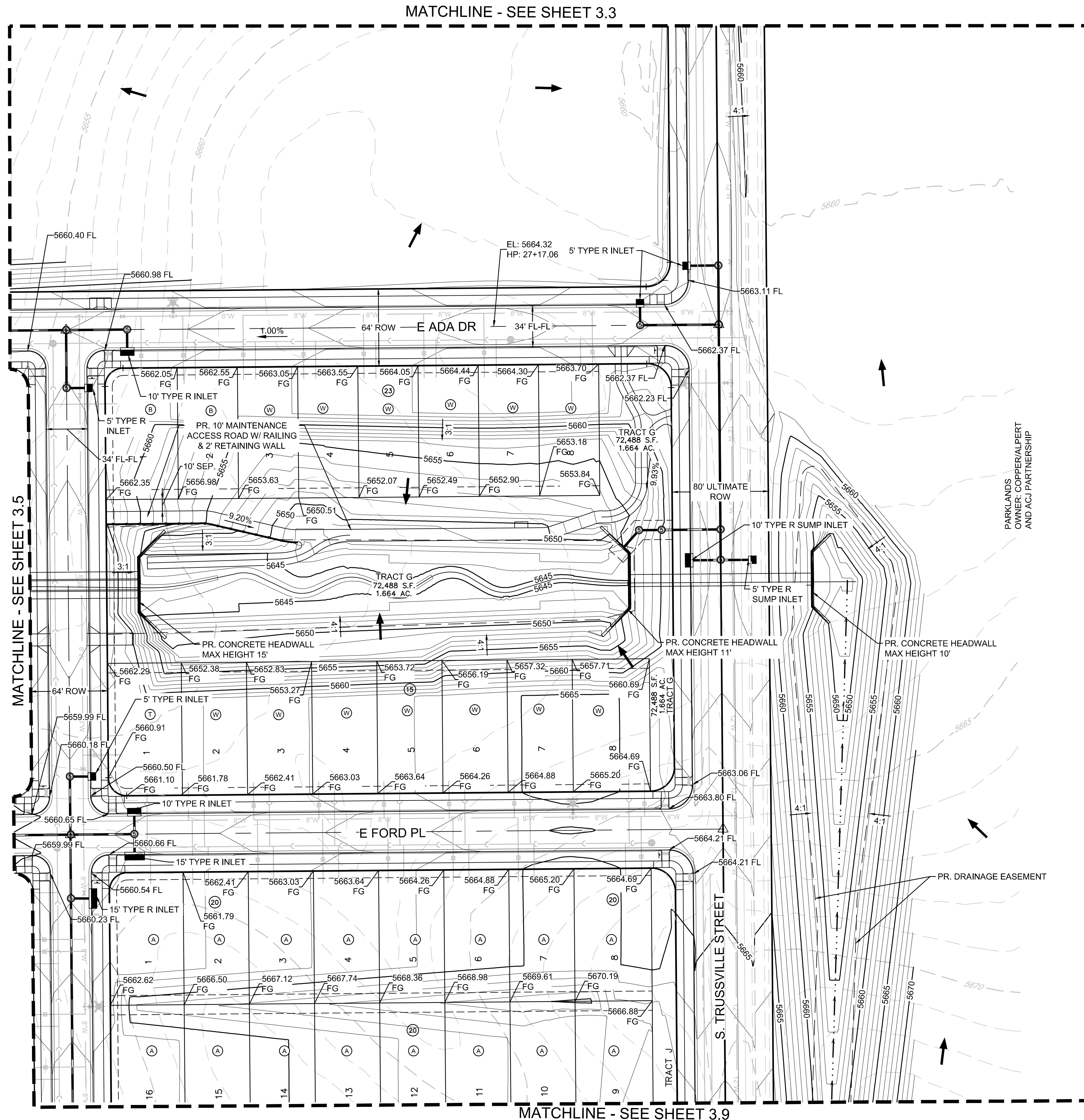
KEY MAP
N.T.S.

NOTES:

1. ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED
2. PONDS SHALL BE OWNED AND MAINTAINED BY THE DEVELOPER

LEGEND	
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED OVERLAND FLOW
	CSP BOUNDARY
	PROPOSED STORM INLET
	PROPOSED FLARED END SECTION
	PROPOSED STORM DRAIN

SHEET NUMBER 3.3	DRAWN BY: DJG	SCALE: AS SHOWN	HARMONY SUBDIVISION CIVIL SITE PLAN NO. 5 AREA GRADING PLAN	Melcor/TC Aurora, LLC C/O Marathon Land Company 9750 W. Cambridge Place Littleton, CO 80127 Tel: (303) 920-9400 Fax: (303) 920-9440	Westwood Westwoodps.com Westwood Professional Services, Inc.	10333 E DRY CREEK RD. SUITE 240 ENGLEWOOD, CO 80112 TEL: 720.482.9526	Revisions	No.	Apr.	Date
	CHECKED BY: BPW	FILE NO: 8130214922					Date	Init.		

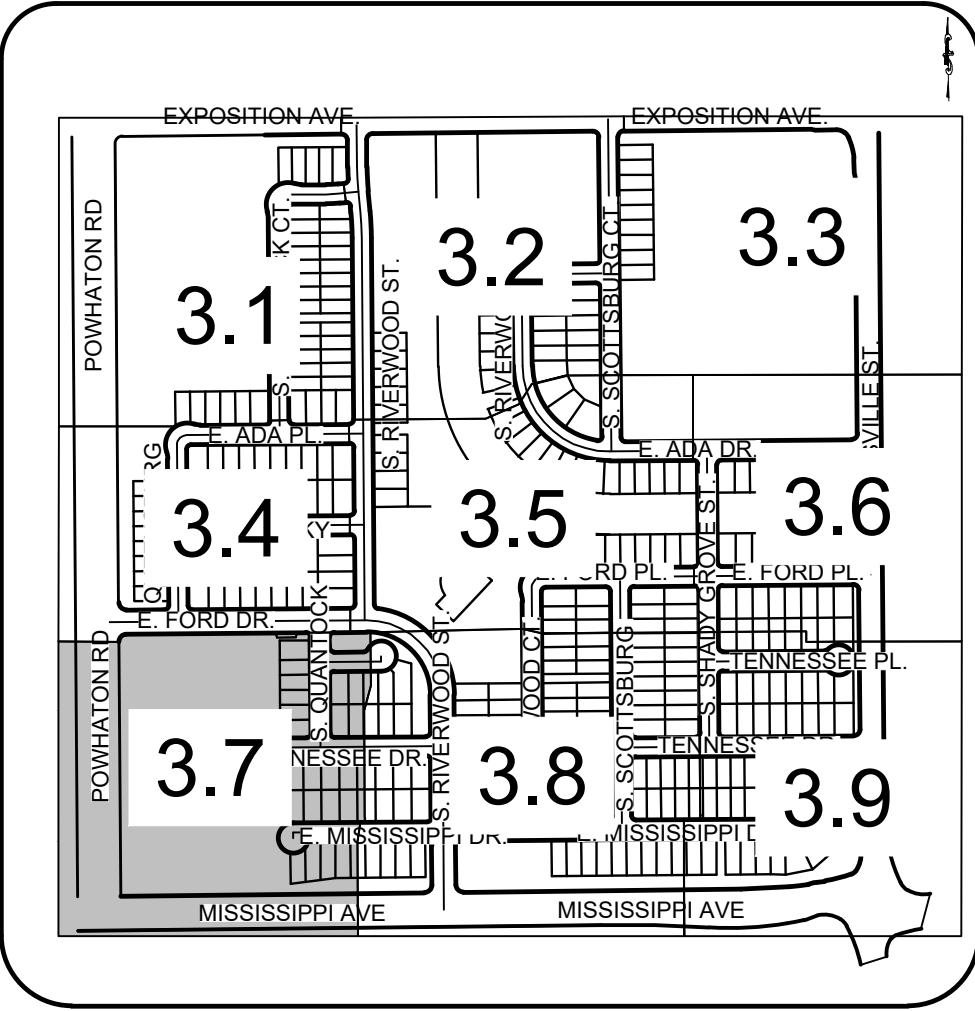
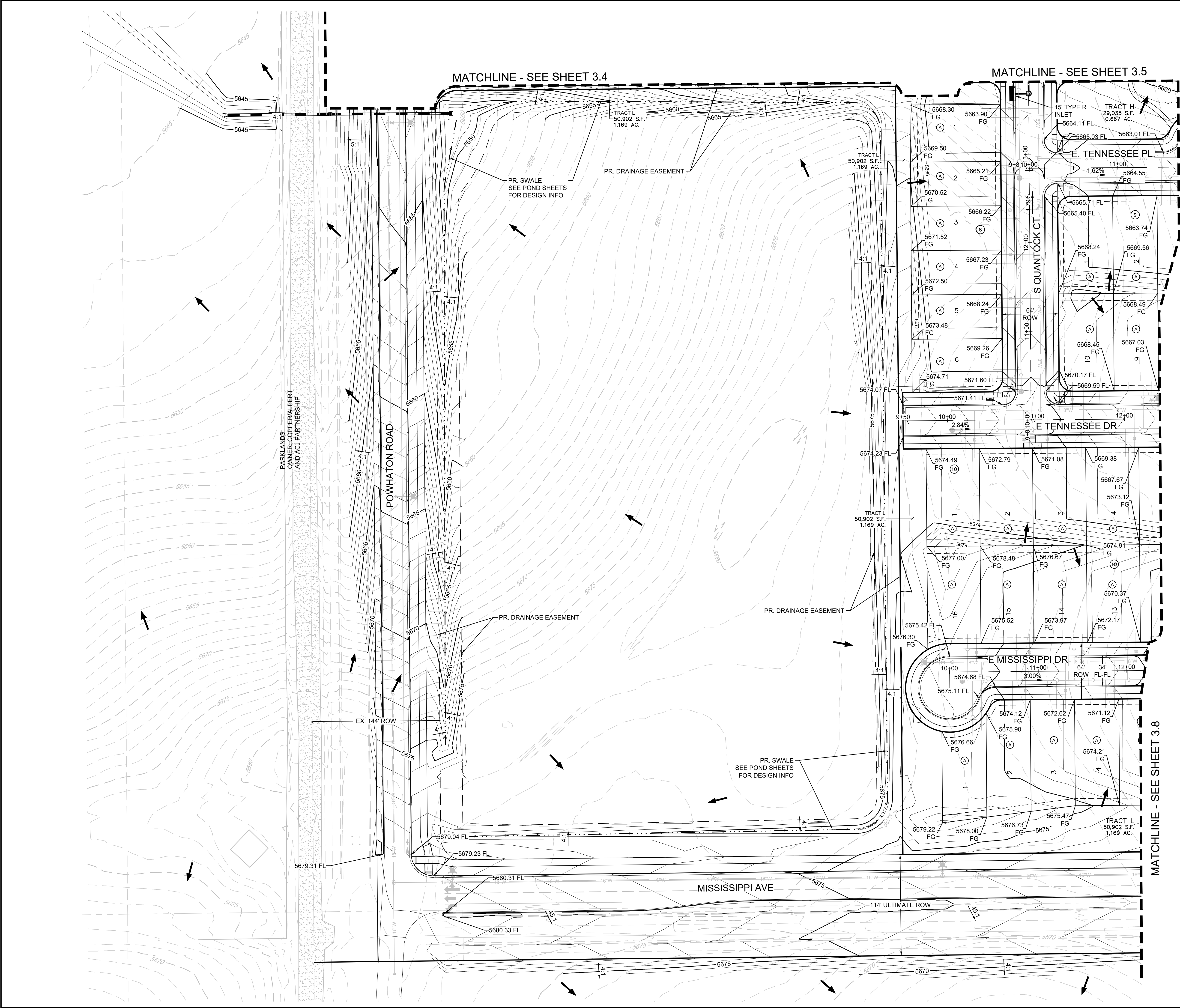


NOTES:

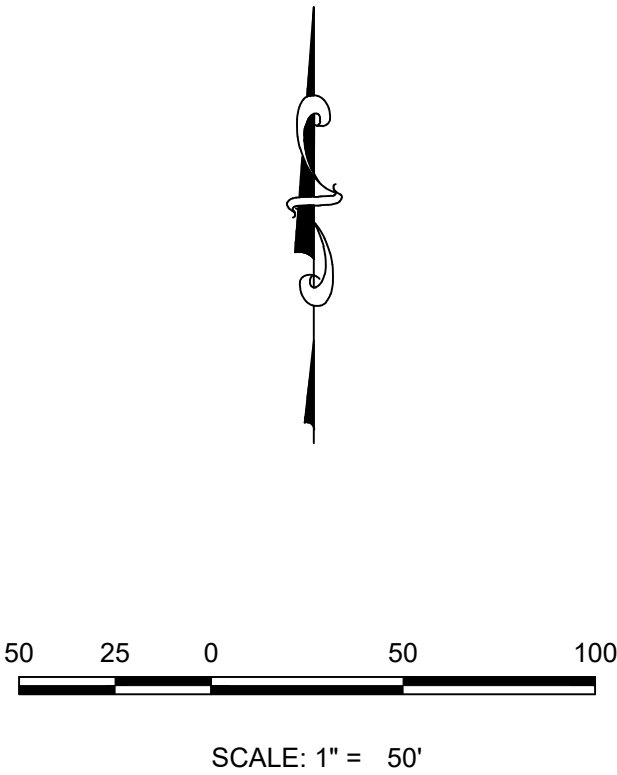
- ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED
- PONDS SHALL BE OWNED AND MAINTAINED BY THE DEVELOPER

LEGEND	
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED OVERLAND FLOW
	CSP BOUNDARY
	PROPOSED STORM INLET
	PROPOSED FLARED END SECTION
	PROPOSED STORM DRAIN

SHEET NUMBER	3.6	DRAWN BY:	DJG	SCALE:	AS SHOWN	FILE NO:	8130214922	DATE:	MAY 2022	Revisions	No.	Date			
		CHECKED BY:	BPW												
HARMONY SUBDIVISION CIVIL SITE PLAN NO. 5 AREA GRADING PLAN										Melcor/TC Aurora, LLC C/O Marathon Land Company 9750 W. Cambridge Place Littleton, CO 80127 Tel: (303) 920-9400 Fax: (303) 920-9440			Westwood 10333 E DRY CREEK RD. SUITE 240 ENGLEWOOD, CO 80112 TEL: 720.482.9526 Westwoodps.com Westwood Professional Services, Inc.		



KEY MAP
N.T.S.

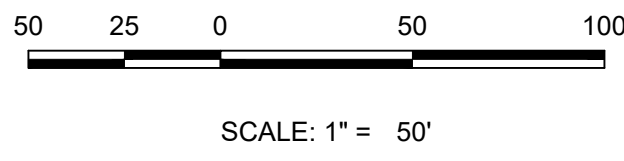
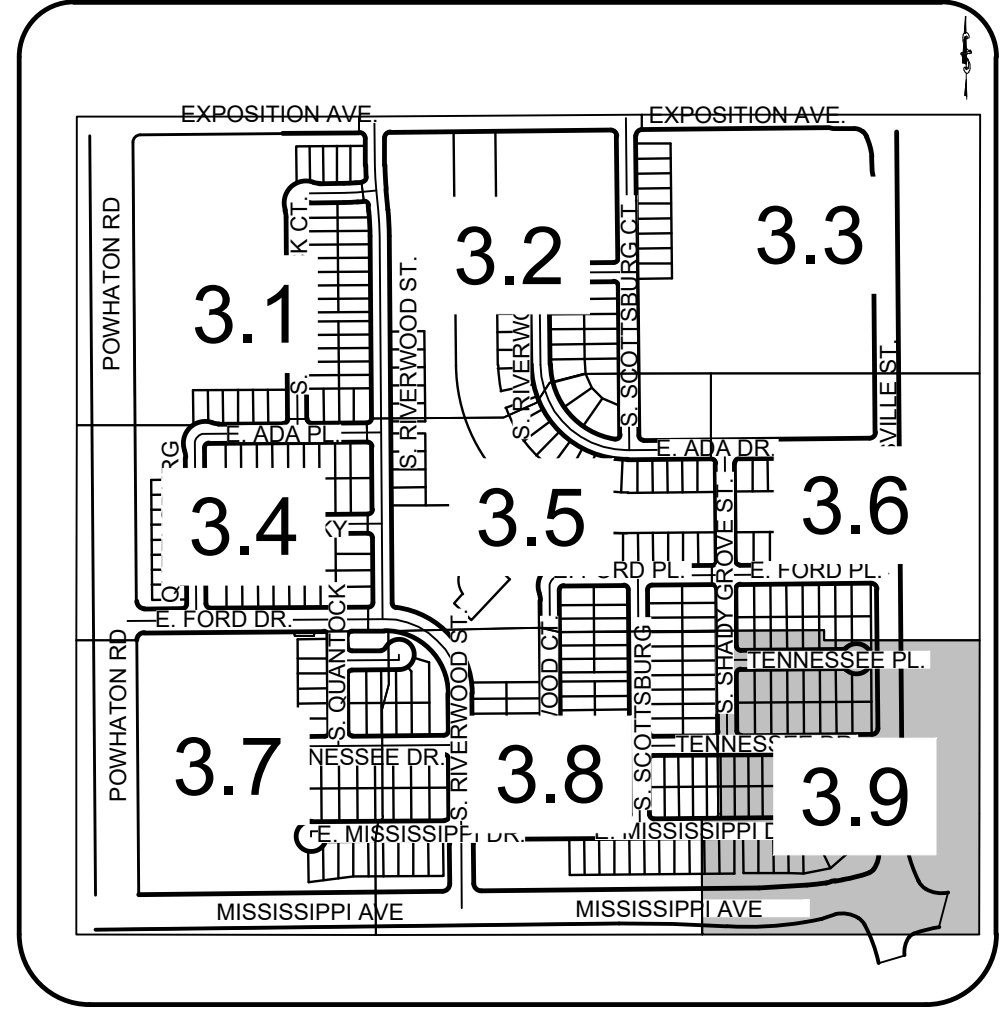
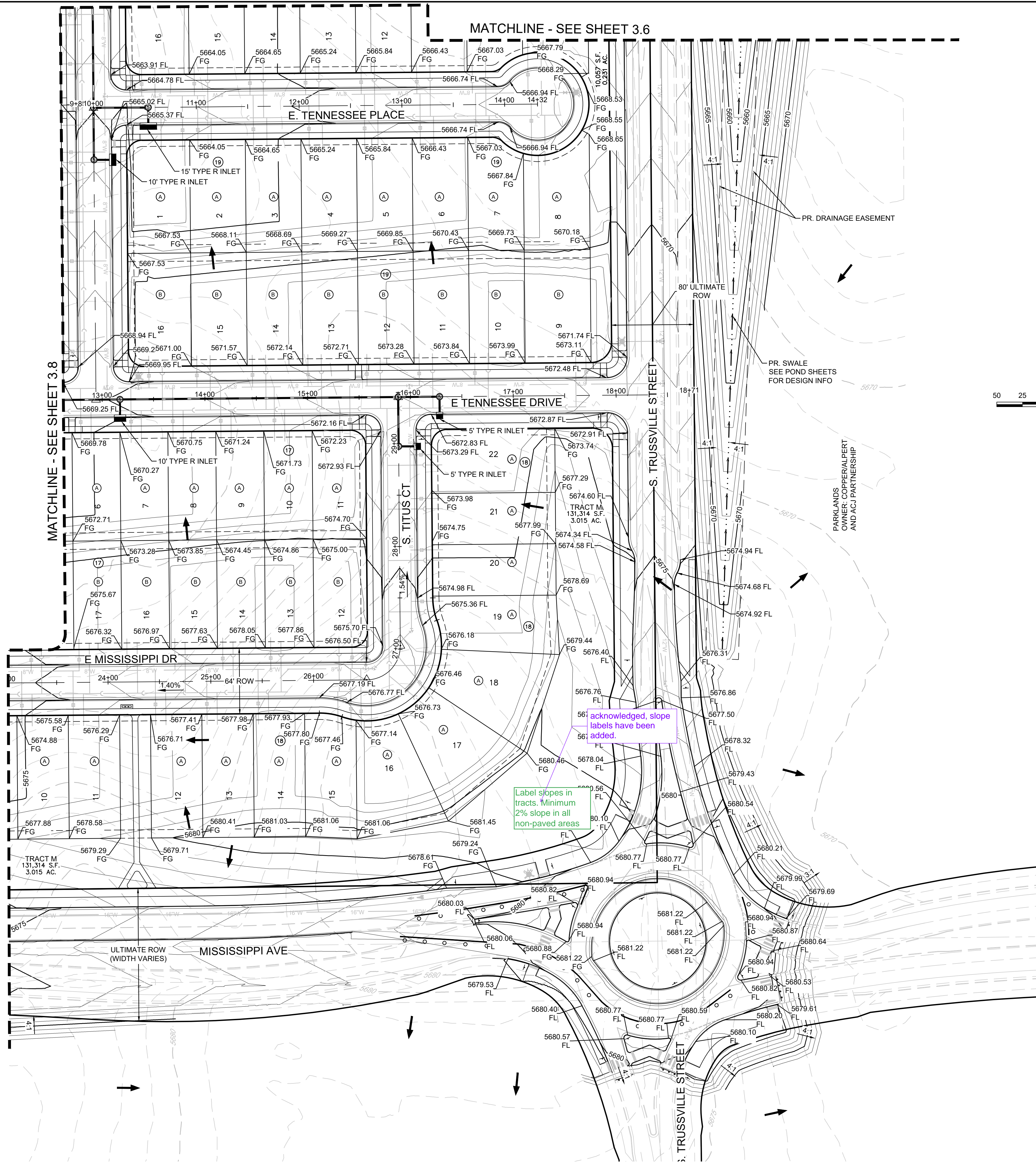


NOTES:

1. ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED
2. PONDS SHALL BE OWNED AND MAINTAINED BY THE DEVELOPER

LEGEND	
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED OVERLAND FLOW
	CSP BOUNDARY
	PROPOSED STORM INLET
	PROPOSED FLARED END SECTION
	PROPOSED STORM DRAIN

SHEET NUMBER	3.7	
	DRAWN BY: DJG	CHECKED BY: BPW
SCALE: AS SHOWN	FILE NO: 8130214922	
	DATE: MAY, 2022	
HARMONY SUBDIVISION CIVIL SITE PLAN NO. 5 AREA GRADING PLAN		
Melcor/TC Aurora, LLC C/O Marathon Land Company 9750 W. Cambridge Place Littleton, CO 80127 Tel: (303) 920-9400 Fax: (303) 920-9440		
Westwood 10333 E DRY CREEK RD. SUITE 240 ENGLEWOOD, CO 80112 TEL: 720.482.9526 Westwoodps.com Westwood Professional Services, Inc.		
Revisions		No.
Date		Apr.
Date		Init.
Date		Apr.
Date		Apr.

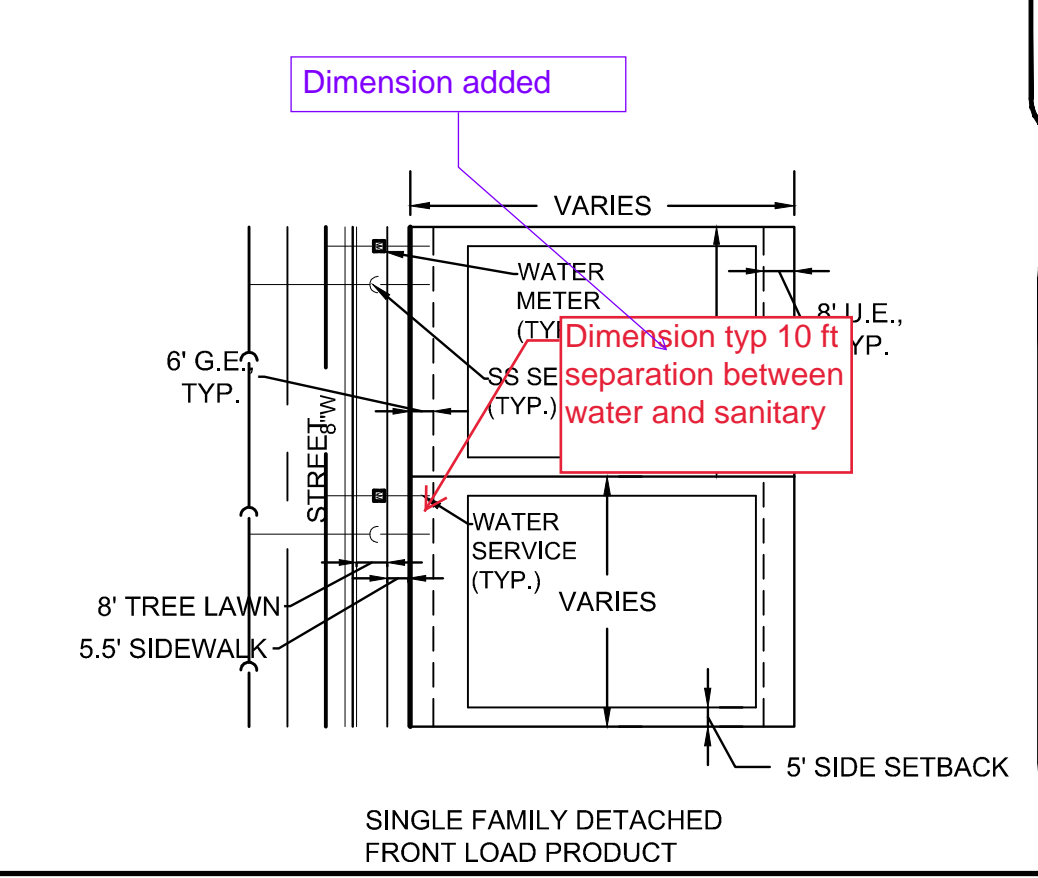


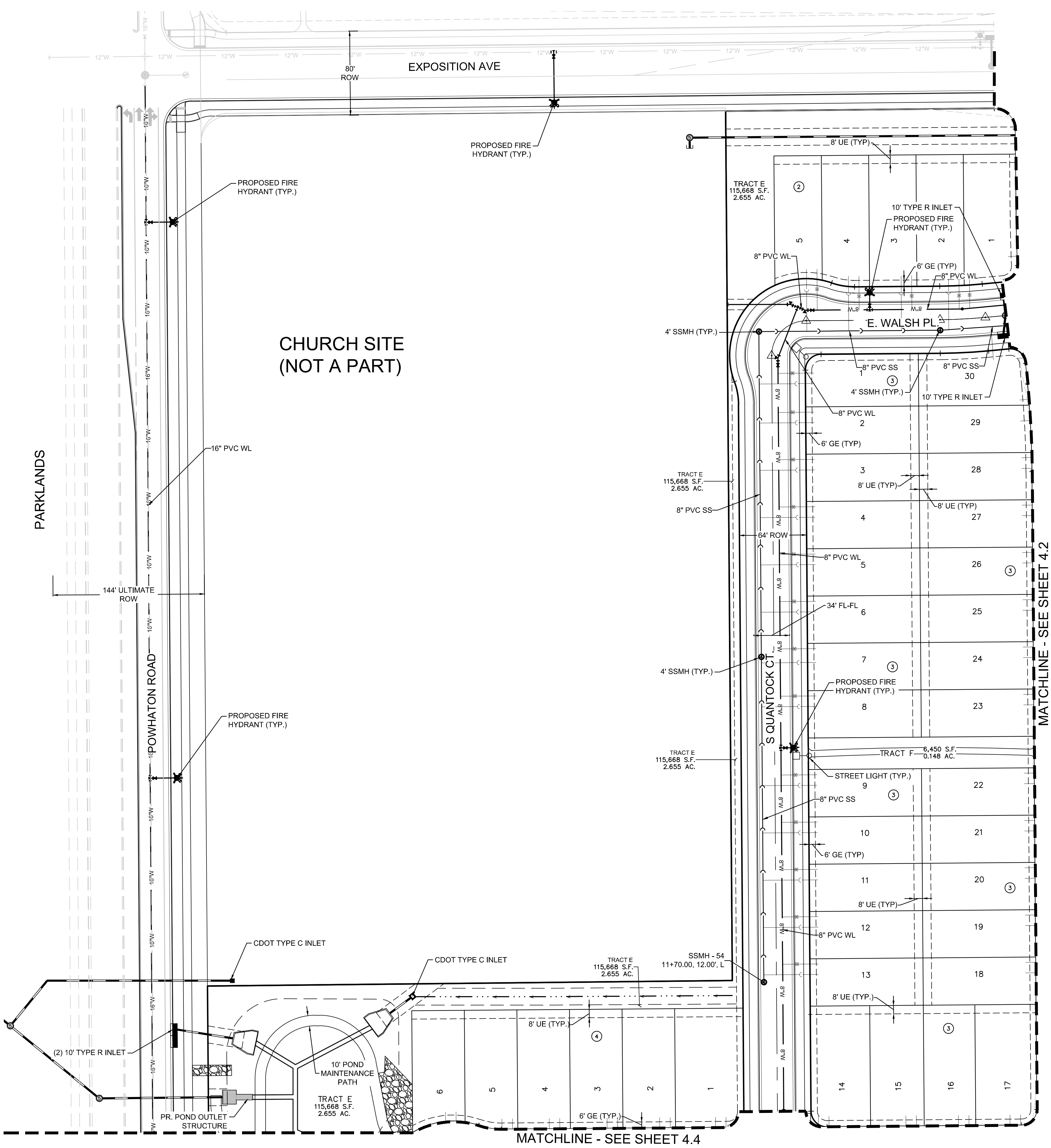
NOTES:

- ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED
- PONDS SHALL BE OWNED AND MAINTAINED BY THE DEVELOPER

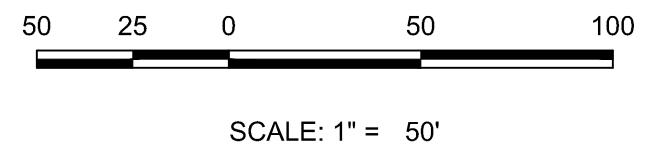
LEGEND	
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED OVERLAND FLOW
	CSP BOUNDARY
	PROPOSED STORM INLET
	PROPOSED FLARED END SECTION
	PROPOSED STORM DRAIN

SHEET NUMBER	3.9	DRAWN BY:	DJG	SCALE:	AS SHOWN	HARMONY SUBDIVISION CIVIL SITE PLAN NO. 5 AREA GRADING PLAN	Melcor/TC Aurora, LLC C/O Marathon Land Company 9750 W. Cambridge Place Littleton, CO 80127 Tel: (303) 920-9400 Fax: (303) 920-9440	Westwood 10333 E DRY CREEK RD. SUITE 240 ENGLEWOOD, CO 80112 TEL: 720.482.9526 Westwoodps.com Westwood Professional Services, Inc.	No.	Revisions		Date	Appr.	Date	
		CHECKED BY:	BPW	FILE NO:	8130214922										
		DATE:	MAY, 2022												





KEY MAP
N.T.S.



NOTES:

- 1) ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED
- 2) UNDER DRAINS ARE PRIVATE UNLESS OTHERWISE NOTED

UTILITY LEGEND

	PROPOSED 8" WATERLINE UNLESS OTHERWISE NOTED		PROPOSED CAP W/ BLOW OFF
	PROPOSED GATE VALVE		EXISTING TREE
	PROPOSED 8" SANITARY SEWER WITH MANHOLE UNLESS OTHERWISE NOTED		PROPOSED FLARED END SECTION
	FILING NO 12 BOUNDARY		PROPOSED STORM DRAIN WITH MANHOLE
	PROPOSED IRRIGATION SLEEVE		EASEMENT LINE
	CENTERLINE		PROPOSED SWALE
	RIGHT-OF-WAY		PROPOSED AREA INLET
	PROPERTY LINE		AIR RELEASE VALVE
	PROPOSED WATER METER		STREET LIGHT
	PROPOSED IRRIGATION		LOT NUMBER
	PROPOSED UNDER DRAIN		BLOCK NUMBER
	PROPOSED 6" FIRE HYDRANT ASSEMBLY		
	EXISTING FIRE HYDRANT		

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVT	POINT OF VERTICAL TANGENT
BVC	BEGIN VERTICAL CURVE	RCBC	REINFORCED CONCRETE BOX CULVERT
BVP	BEGIN VERTICAL PROFILE	RCP	REINFORCED CONCRETE PIPE
EL	ELEVATION	ROW	RIGHT OF WAY
EP	EDGE OF PAVEMENT	RW	RAW WATER LINE
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SO	EDGE OF 6" SHOULDER OFFSET
FL	FLOW LINE	SS	SANITARY SEWER
HP	HIGH POINT	STA	STATION
INV	INVERT	TC	TOP OF CURB
K	CURVATURE COEFFICIENT	T.O.S.	TOP OF PIPE
LF	LINEAR FEET	UE	UTILITY EASEMENT
MH	MANHOLE	VC	VERTICAL CURVE
N.T.S.	NOT TO SCALE	WL	WATER LINE
PL	PROPERTY LINE	WSE	WATER SURFACE ELEVATION
PVC	POLYVINYL CHLORIDE		
PVI	POINT OF VERTICAL INTERSECTION		

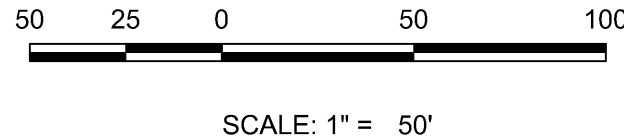
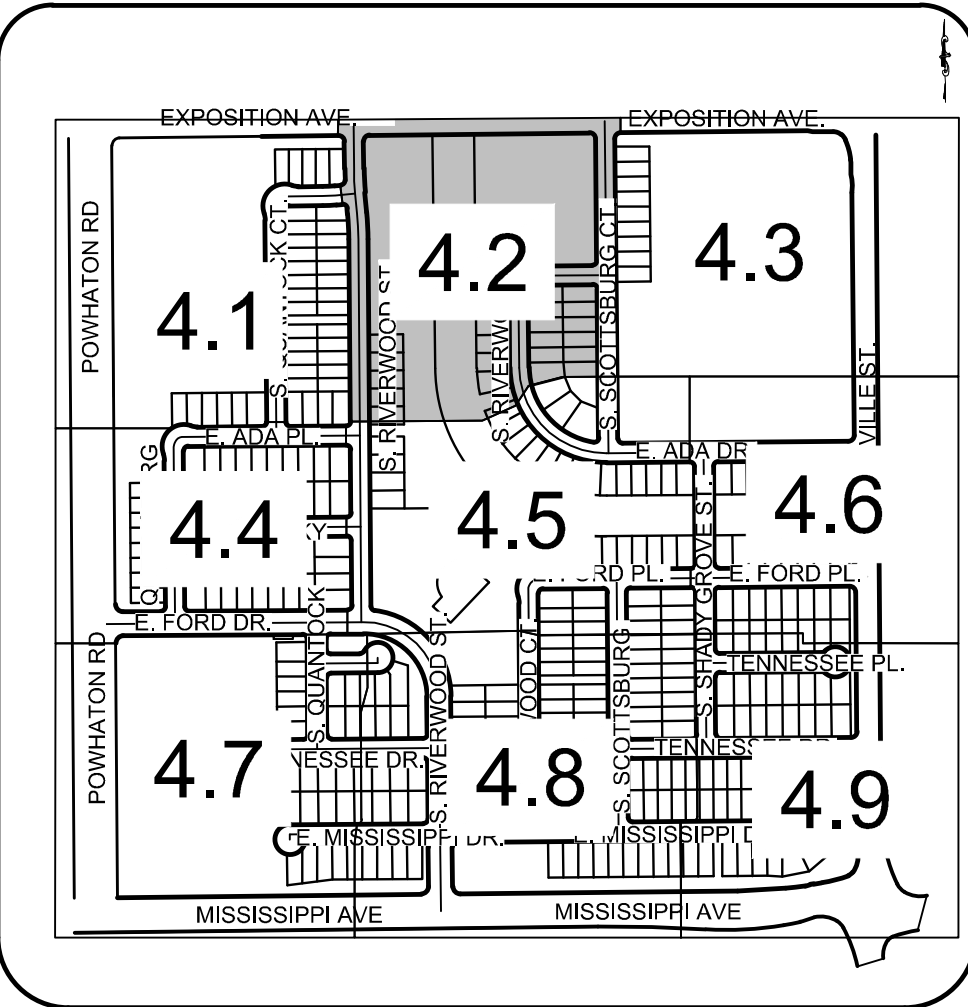
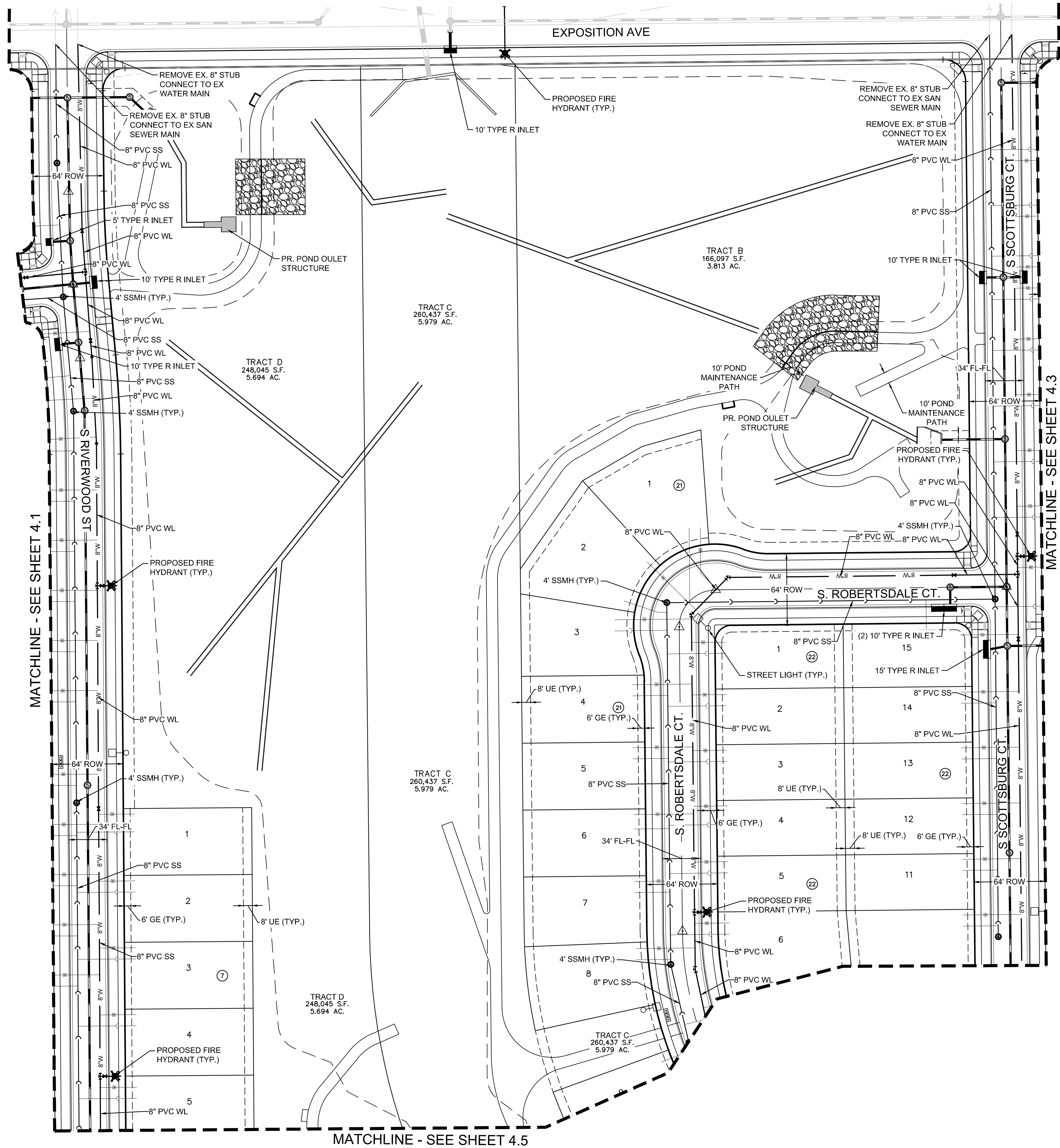
Westwood
10333 E DRY CREEK RD.
SUITE 240
ENGLEWOOD, CO 80112
TEL: 720.482.9526
Westwoodps.com
Westwood Professional Services, Inc.

Melcor/TC Aurora, LLC
C/O Marathon Land Company
9750 W. Cambridge Place
Littleton, CO 80127
Tel: (303) 920-9400 Fax: (303) 920-9440

HARMONY SUBDIVISION
CIVIL SITE PLAN NO. 5
AREA UTILITY PLAN

SCALE: AS SHOWN
DRAWN BY: DJG
CHECKED BY: BPW
FILE NO: 8130214922
DATE: MAY, 2022

SHEET NUMBER
4.1



NOTES:

1) ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED
2) UNDER DRAINS ARE PRIVATE UNLESS OTHERWISE NOTED

UTILITY LEGEND			
	PROPOSED 8" WATERLINE UNLESS OTHERWISE NOTED		PROPOSED CAP W/ BLOW OFF
	PROPOSED GATE VALVE		EXISTING TREE
	PROPOSED 8" SANITARY SEWER WITH MANHOLE UNLESS OTHERWISE NOTED		PROPOSED FLARED END SECTION
	FILING NO 12 BOUNDARY		PROPOSED STORM INLET
	PROPOSED IRRIGATION SLEEVE		PROPOSED STORM DRAIN WITH MANHOLE
	CENTERLINE		EASEMENT LINE
	RIGHT-OF-WAY		PROPOSED SWALE
	PROPERTY LINE		PROPOSED AREA INLET
	PROPOSED WATER METER		AIR RELEASE VALVE
	PROPOSED IRRIGATION		STREET LIGHT
	PROPOSED UNDER DRAIN		LOT NUMBER
	PROPOSED 6" FIRE HYDRANT ASSEMBLY		BLOCK NUMBER
	EXISTING FIRE HYDRANT		

ABBREVIATIONS			
AD	ANGLE DIFFERENCE	PVT	POINT OF VERTICAL TANGENT
BVC	BEGIN VERTICAL CURVE	RCBC	REINFORCED CONCRETE BOX CULVERT
BVP	BEGIN VERTICAL PROFILE	RCP	REINFORCED CONCRETE PIPE
EL	ELEVATION	ROW	RIGHT OF WAY
EP	EDGE OF PAVEMENT	RW	RAW WATER LINE
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SO	EDGE OF 6" SHOULDER OFFSET
FL	FLOW LINE	SS	SANITARY SEWER
HP	HIGH POINT	STA	STATION
INV	INVERT	TC	TOP OF CURB
K	CURVATURE COEFFICIENT	T.O.S.	TOP OF PIPE
LF	LINEAR FEET	UE	UTILITY EASEMENT
MH	MANHOLE	VC	VERTICAL CURVE
N.T.S.	NOT TO SCALE	WL	WATER LINE
PL	PROPERTY LINE	WSE	WATER SURFACE ELEVATION
PVC	POLYVINYL CHLORIDE		
PVI	POINT OF VERTICAL INTERSECTION		

Westwood

10333 E DRY CREEK RD.
SUITE 240
ENGLEWOOD, CO 80112
TEL: 720.482.9526

Melcor/TC Aurora, LLC

C/O Marathon Land Company

9750 W. Cambridge Place
Littleton, CO 80127
Tel: (303) 920-9400 Fax: (303) 920-9440

HARMONY SUBDIVISION

CIVIL SITE PLAN NO. 5

AREA UTILITY PLAN

SCALE: AS SHOWN

FILE NO: 8130214922

DRAWN BY: DJG

CHECKED BY: BPW

DATE: MAY, 2022

SHEET NUMBER

4.2

No.

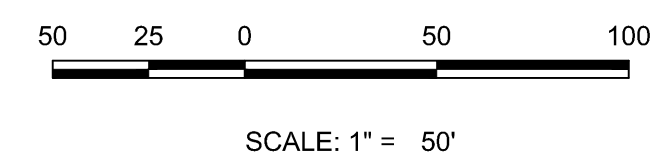
Revisions

Date

Init.

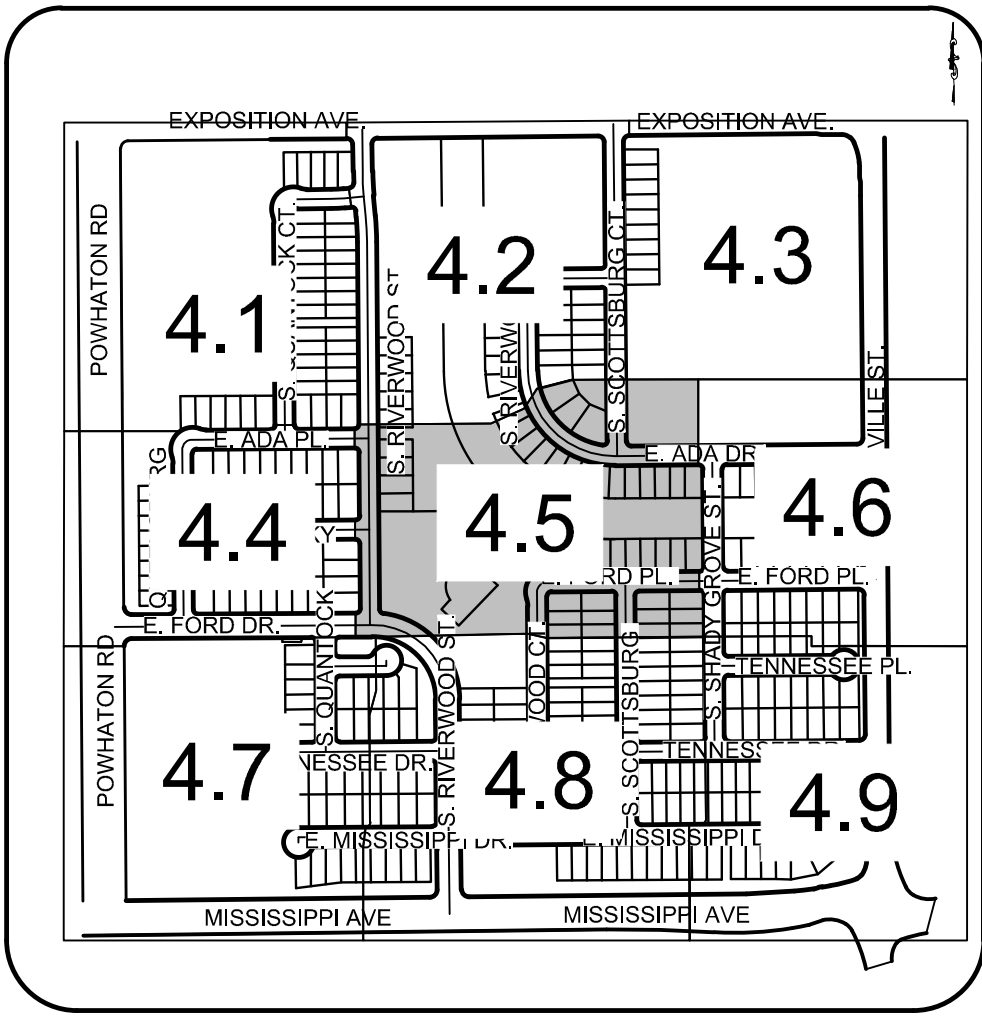
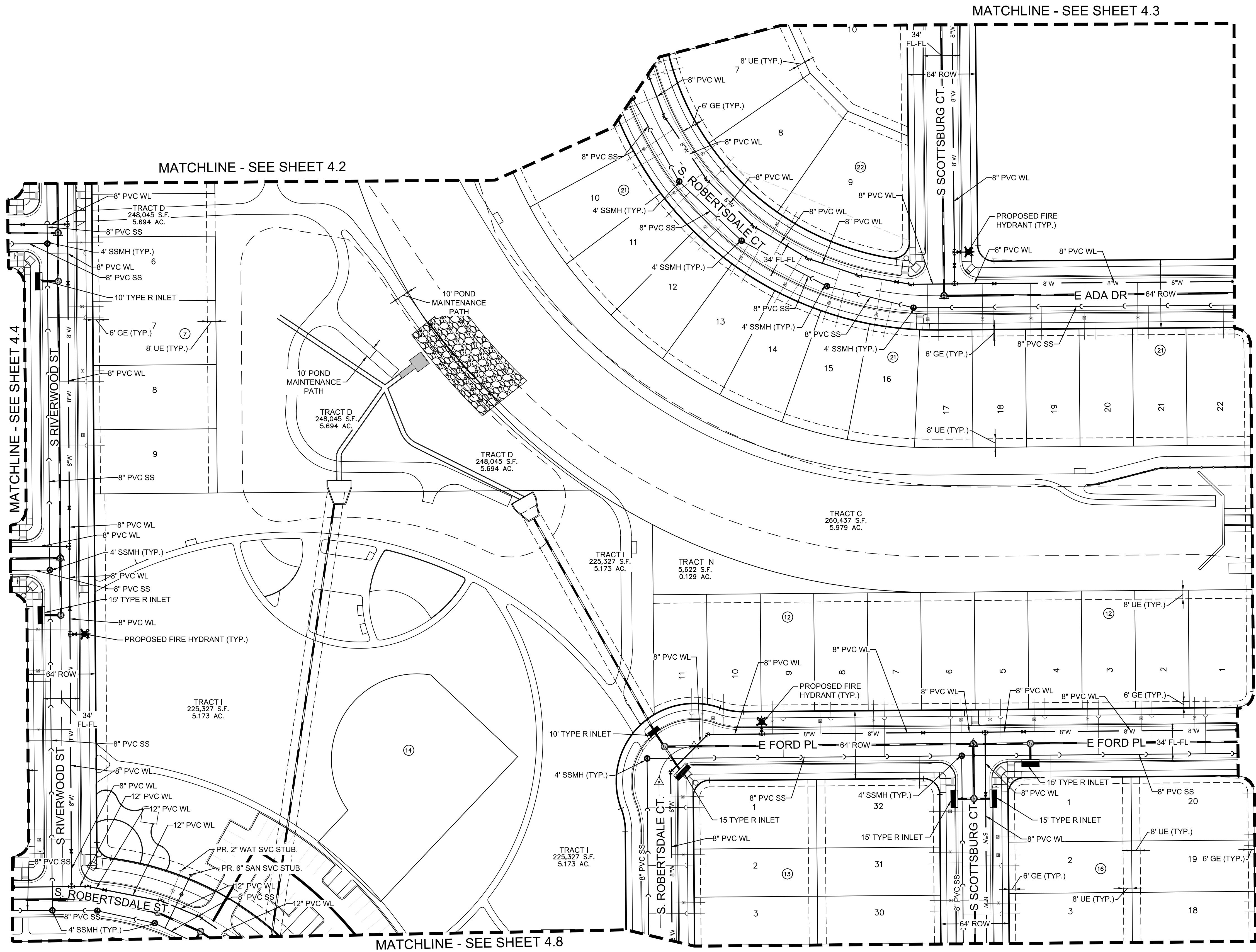
Appr.

Date

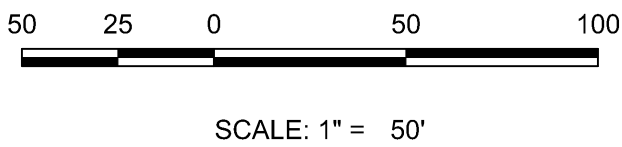


1) ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED
2) UNDER DRAINS ARE PRIVATE UNLESS OTHERWISE NOTED

SHEET NUMBER 4.3	DRAWN BY:	DJG	SCALE:	HARMONY SUBDIVISION CIVIL SITE PLAN NO. 5 AREA UTILITY PLAN	Melcor/TC Aurora, LLC CIO Marathon Land Company 9750 W. Cambridge Place Littleton, CO 80127 Tel: (303) 920-9400 Fax: (303) 920-9440	Westwoodps.com Westwood Professional Services, Inc.	10333 E DRY CREEK RD. SUITE 240 ENGLEWOOD, CO 80112 TEL: 720.482.9526	Westwood						
	CHECKED BY:	BWP	FILE NO:											
	DATE:	MAY, 2022	8130214922											
No.	Revisions	Date	Init.	Appr.	Date									



KEY MAP
N.T.S.



NOTES:

- 1) ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED
2) UNDER DRAINS ARE PRIVATE UNLESS OTHERWISE NOTED

UTILITY LEGEND

	PROPOSED 8" WATERLINE UNLESS OTHERWISE NOTED		PROPOSED CAP W/ BLOW OFF
	PROPOSED GATE VALVE		EXISTING TREE
	PROPOSED 8" SANITARY SEWER WITH MANHOLE UNLESS OTHERWISE NOTED		PROPOSED FLARED END SECTION
	FILING NO 12 BOUNDARY		PROPOSED STORM INLET
	PROPOSED IRRIGATION SLEEVE		PROPOSED STORM DRAIN WITH MANHOLE
	CENTERLINE		EASEMENT LINE
	RIGHT-OF-WAY		PROPOSED SWALE
	PROPERTY LINE		PROPOSED AREA INLET
	PROPOSED WATER METER		AIR RELEASE VALVE
	PROPOSED IRRIGATION		STREET LIGHT
	PROPOSED UNDER DRAIN		LOT NUMBER
	PROPOSED 6" FIRE HYDRANT ASSEMBLY		BLOCK NUMBER
	EXISTING FIRE HYDRANT		

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVT	POINT OF VERTICAL TANGENT
BVC	BEGIN VERTICAL CURVE	RCBC	REINFORCED CONCRETE BOX CULVERT
BVP	BEGIN VERTICAL PROFILE	RCP	REINFORCED CONCRETE PIPE
EL	ELEVATION	ROW	RIGHT OF WAY
EP	EDGE OF PAVEMENT	RW	RAW WATER LINE
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SO	EDGE OF 6" SHOULDER OFFSET
FL	FLOW LINE	SS	SANITARY SEWER
HP	HIGH POINT	STA	STATION
INV	INVERT	TC	TOP OF CURB
K	CURVATURE COEFFICIENT	T.O.S.	TOP OF PIPE
LF	LINEAR FEET	UE	UTILITY EASEMENT
MH	MANHOLE	VC	VERTICAL CURVE
N.T.S.	NOT TO SCALE	WL	WATER LINE
PL	PROPERTY LINE	WSE	WATER SURFACE ELEVATION
PVC	POLYVINYL CHLORIDE		
PVI	POINT OF VERTICAL INTERSECTION		

Westwood
10333 E DRY CREEK RD.
SUITE 240
ENGLEWOOD, CO 80112
TEL: 720.482.9526
Westwoodpa.com
Westwood Professional Services, Inc.

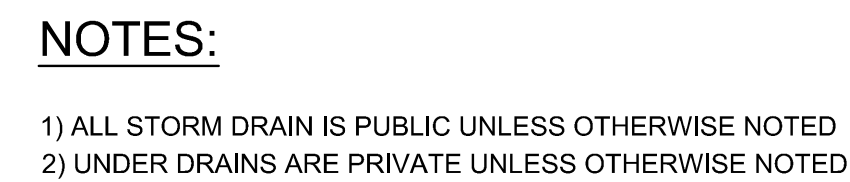
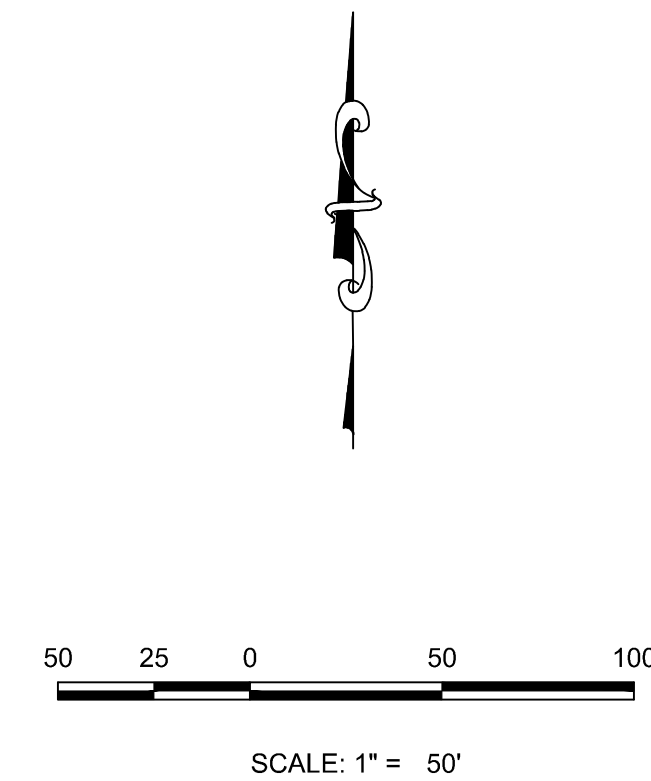
MelcorTC Aurora, LLC
C/O Marathon Land Company
9750 W. Cambridge Place
Littleton, CO 80127
Tel: (303) 920-9400 Fax: (303) 920-9440

HARMONY SUBDIVISION
CIVIL SITE PLAN NO. 5
AREA UTILITY PLAN

SCALE: AS SHOWN
FILE NO: 8130214922
DRAWN BY: DJG
CHECKED BY: BPW
DATE: MAY, 2022

SHEET NUMBER
4.5

No.	Revisions	Date	Init.	Appr.	Date

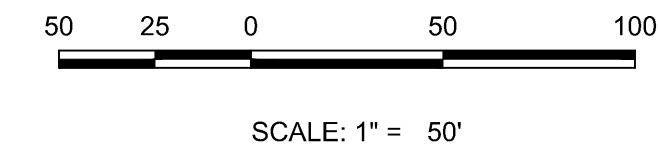


UTILITY LEGEND

	PROPOSED 8" WATERLINE UNLESS OTHERWISE NOTED		PROPOSED CAP W/ BLOW OFF
	PROPOSED GATE VALVE		EXISTING TREE
	PROPOSED 8" SANITARY SEWER WITH MANHOLE UNLESS OTHERWISE NOTED		PROPOSED FLARED END SECTION
	FILING NO 12 BOUNDARY		PROPOSED STORM INLET
	PROPOSED IRRIGATION SLEEVE		PROPOSED STORM DRAIN WITH MANHOLE
	CENTERLINE		EASEMENT LINE
	RIGHT-OF-WAY		PROPOSED SWALE
	PROPERTY LINE		PROPOSED AREA INLET
	PROPOSED WATER METER		AIR RELEASE VALVE
	PROPOSED IRRIGATION		STREET LIGHT
	PROPOSED UNDER DRAIN	11	LOT NUMBER
	PROPOSED 6" FIRE HYDRANT ASSEMBLY		LOT NUMBER
	EXISTING FIRE HYDRANT		

ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVT	POINT OF VERTICAL TANGENT
BVC	BEGIN VERTICAL CURVE	RCCB	REINFORCED CONCRETE BOX CULVERT
BVP	BEGIN VERTICAL PROFILE	RCP	REINFORCED CONCRETE PIPE
EL	ELEVATION	ROW	RIGHT OF WAY
EP	EDGE OF PAVEMENT	RW	RAW WATER LINE
EVG	END VERTICAL CURVE	ST	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SO	EDGE OF 6" SHOULDER OFFSET
FL	FLOW LINE	SS	SANITARY SEWER
HP	HIGH POINT	STA	STATION
INV	INVERT	TC	TOP OF CURB
K	CURVATURE COEFFICIENT	T.O.S.	TOP OF PIPE
LF	LINEAR FEET	UE	UTILITY EASEMENT
MH	MANHOLE	VC	VERTICAL CURVE
N.T.S.	NOT TO SCALE	WL	WATER LINE
PL	PROPERTY LINE	WSE	WATER SURFACE ELEVATION
PVC	POLYVINYL CHLORIDE		
PVI	POINT OF VERTICAL INTERSECTION		

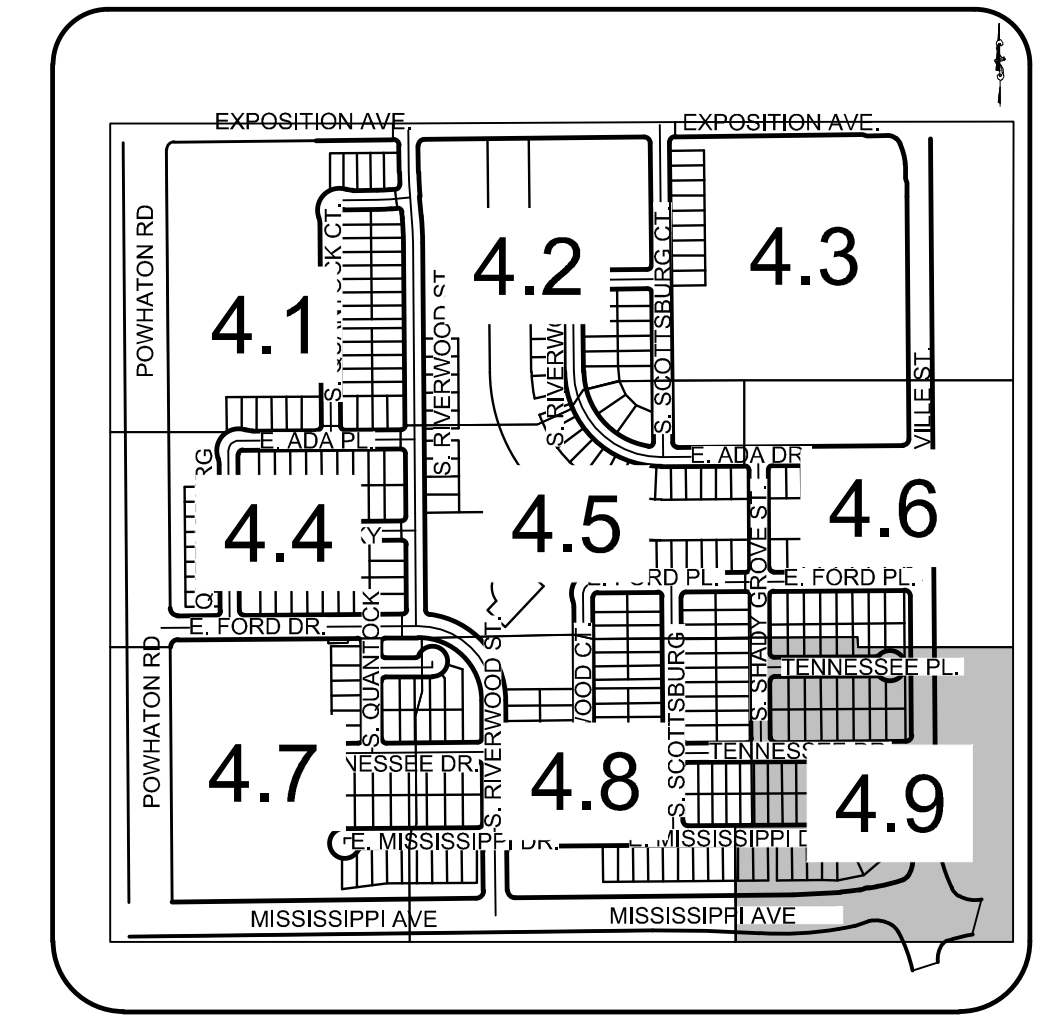


1) ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED
2) UNDER DRAINS ARE PRIVATE UNLESS OTHERWISE NOTED

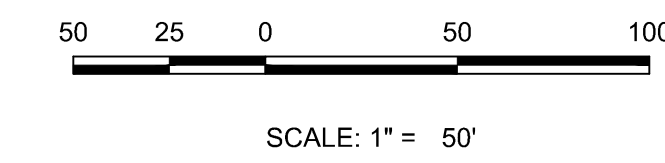
ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVT	POINT OF VERTICAL TANGENT
BVC	BEGIN VERTICAL CURVE	RCBC	REINFORCED CONCRETE BOX
BVP	BEGIN VERTICAL PROFILE		CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	RW	RAW WATER LINE
EVP	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
FL	FLOW LINE	SO	EDGE OF 6' SHOULDER OFFSET
HF	HIGH POINT	SS	SANITARY SEWER
INV	INVERT	STA	STATION
K	CURVATURE COEFFICIENT	TC	TOP OF CURB
LH	LINEAR FEET	T.O.S.	TOP OF PIPE
MF	MANHOLE	UE	UTILITY EASEMENT
N.T.S.	NOT TO SCALE	VC	VERTICAL CURVE
PL	PROPERTY LINE	WL	WATER LINE
PVC	POLYVINYL CHLORIDE	WSE	WATER SURFACE ELEVATION
PVI	POINT OF VERTICAL INTERSECTION		

[illegible]




























KEY MAP
N.T.S.



NOTES:

- 1) ALL STORM DRAIN IS PUBLIC UNLESS OTHERWISE NOTED
2) UNDER DRAINS ARE PRIVATE UNLESS OTHERWISE NOTED

UTILITY LEGEND

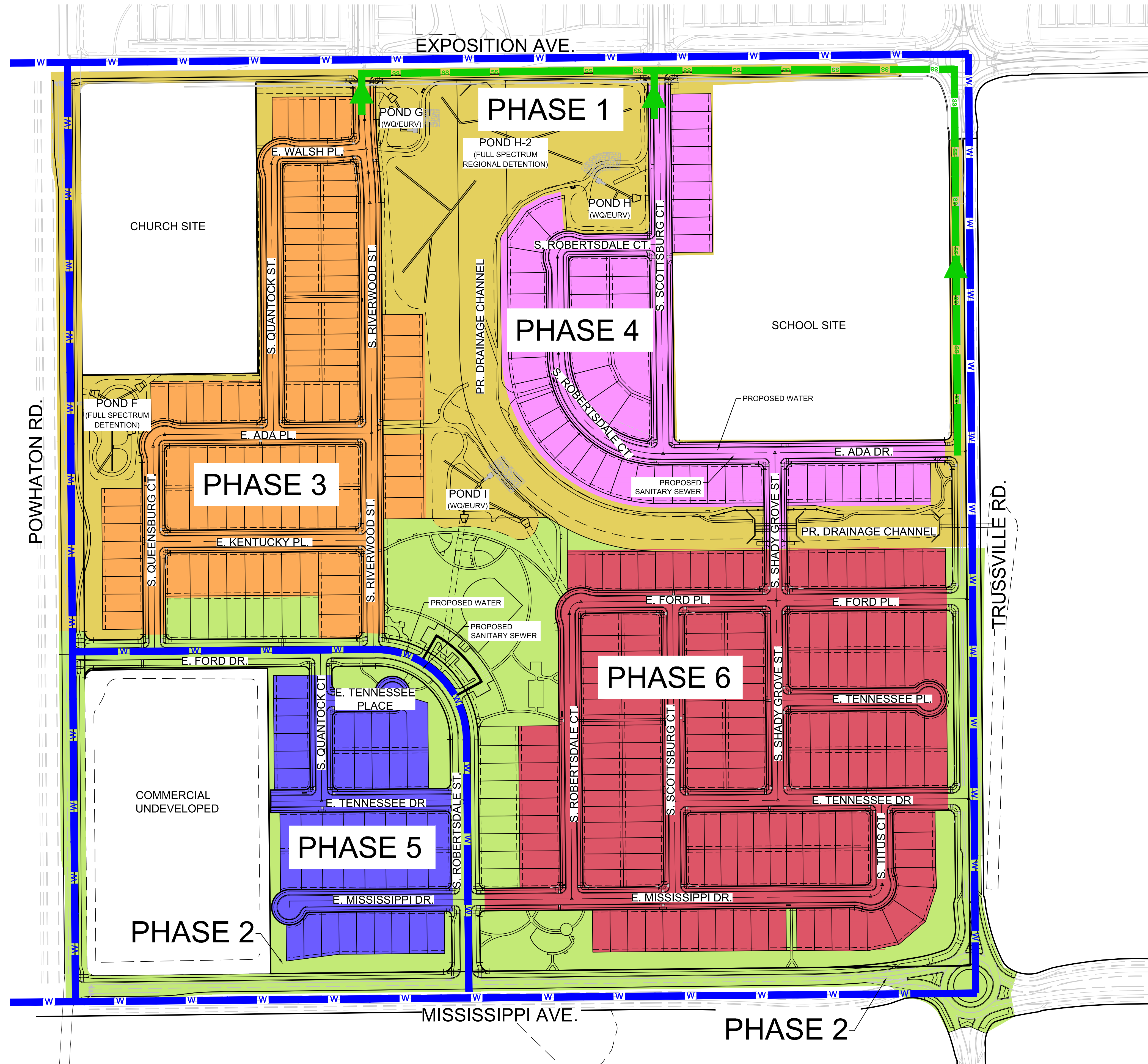
	PROPOSED 8" WATERLINE UNLESS OTHERWISE NOTED		PROPOSED CAP W/ BLOW OFF
	PROPOSED GATE VALVE		EXISTING TREE
	PROPOSED 8" SANITARY SEWER WITH MANHOLE UNLESS OTHERWISE NOTED		PROPOSED FLARED END SECTION
	FILING NO 12 BOUNDARY		PROPOSED STORM INLET
	PROPOSED IRRIGATION SLEEVE		PROPOSED STORM DRAIN WITH MANHOLE
	CENTERLINE		EASEMENT LINE
	RIGHT-OF-WAY		PROPOSED SWALE
	PROPERTY LINE		PROPOSED AREA INLET
	PROPOSED WATER METER		AIR RELEASE VALVE
	PROPOSED IRRIGATION		STREET LIGHT
	PROPOSED UNDER DRAIN		LOT NUMBER
	PROPOSED 6" FIRE HYDRANT ASSEMBLY		BLOCK NUMBER
	EXISTING FIRE HYDRANT		







ABBREVIATIONS

AD	ANGLE DIFFERENCE	PVT	POINT OF VERTICAL TANGENT
BVC	BEGIN VERTICAL CURVE	RCBC	REINFORCED CONCRETE BOX CULVERT
BVP	BEGIN VERTICAL PROFILE	RCP	REINFORCED CONCRETE PIPE
EL	ELEVATION	ROW	RIGHT OF WAY
EP	EDGE OF PAVEMENT	RW	RAW WATER LINE
EVC	END VERTICAL CURVE	SD	STORM DRAIN
EVP	END VERTICAL PROFILE	SL	SECTION LINE
FG	FINISHED GROUND	SS	EDGE OF 6' SHOULDER OFFSET
FL	FLOW LINE	SO	SANITARY SEWER
HP	HIGH POINT	STA	STATION
INV	INVERT	TC	TOP OF CURB
K	CURVATURE COEFFICIENT	T.O.S.	TOP OF PIPE
LF	LINEAR FEET	UE	UTILITY EASEMENT
MH	MANHOLE	VC	VERTICAL CURVE
N.T.S.	NOT TO SCALE	WL	WATER LINE
PL	PROPERTY LINE	WSE	WATER SURFACE ELEVATION
PVC	POLYVINYL CHLORIDE		
PVI	POINT OF VERTICAL INTERSECTION		

SHEET NUMBER 4.9	DRAWN BY: DJG	CHECKED BY: BWP	DATE: MAY, 2022	SCALE: AS SHOWN	FILE NO: 8130214922	HARMONY SUBDIVISION CIVIL SITE PLAN NO. 5 AREA UTILITY PLAN	Melcor/TC Aurora, LLC C/O Marathon Land Company 9750 W. Cambridge Place Littleton, CO 80127 Tel: (303) 920-9400 Fax: (303) 920-9440	 Westwoodps.com 10333 E DRY CREEK RD. ENGLEWOOD, CO 80112 TEL: 720.482.9536 <i>Westwood Professional Services, Inc.</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
--------------------------------	----------------------	------------------------	------------------------	------------------------	----------------------------	---	---	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

HARMONY FILING 15 PHASING PLAN



- | | |
|---|---------|
|  | PHASE 1 |
|  | PHASE 2 |
|  | PHASE 3 |
|  | PHASE 4 |
|  | PHASE 5 |
|  | PHASE 6 |

150 75 0 150 300

SCALE: 1" = 150'

FILING 15 IMPROVEMENTS:

ON-SITE INFRASTRUCTURE

1. WATER, SANITARY SEWER AND STORM DRAIN UTILITIES AS DEFINED WITHIN THE CONSTRUCTION PLAN DOCUMENTS, INCLUDING A PROPOSED DRAINAGE CHANNEL AND REGIONAL POND.
2. CURB, GUTTER AND ASPHALT AS DEFINED WITHIN THE CONSTRUCTION PLAN DOCUMENTS. SIGNAGE AND LIGHTING AS DEFINED WITHIN THE CONSTRUCTION PLAN DOCUMENTS.
3. LANDSCAPING SHALL BE PROVIDED.
4. STREET LANDSCAPING SHALL BE COMPLETED AS ADJACENT PROPERTY PARCELS ARE CONSTRUCTED.
6. ALL ITEMS IN THE SPECIFIC PHASE (INCLUDING THOSE ITEMS CONSTRUCTED IN PREVIOUS PHASES) SHALL BE INITIALLY ACCEPTED PRIOR TO THE FIRST CERTIFICATE OF OCCUPANCY IN THE SUBJECT PHASE.

FILING 15 - PHASING

GENERAL NOTES:

1. THE DEVELOPER SHALL PROVIDE TWO DISTINCT POINTS OF EMERGENCY ACCESS TO THE OVERALL SITE AND A LOOPED WATER SUPPLY TO EACH PHASE OF THE DEVELOPMENT. THE DEVELOPER SHALL CONSTRUCT, WITH APPROVED PLAN REVISION FROM THE CITY, ANY OFF SITE ROADWAY OR EMERGENCY CROSSINGS IMPROVEMENTS PER CITY STANDARDS NECESSARY TO FACILITATE EMERGENCY VEHICULAR ACCESS TO THIS SITE.
2. ALL ROADWAYS INTERNAL TO EACH PHASE WITHIN THE FILING NO. 15 BOUNDARY SHALL BE CONSTRUCTED TO FULL WIDTH INCLUDING STRIPING, SIDEWALKS, MEDIAN, STORM DRAIN, INLETS, STREET LIGHTING, ETC. AS SHOWN ON THE FILING 15 CD'S.

PHASE 1:

PHASE 1 SHALL INCLUDE THE FOLLOWING ROADWAYS:
WEST HALF OF S. TRUSSVILLE ST. FROM NORTH ROUNDABOUT TO SOUTH EDGE OF
PR. DRAINAGE CHANNEL
SOUTH HALF OF EXPOSITION AVE FROM POWHATON RD TO TRUSSVILLE ST
EAST HALF OF POWHATON RD FROM EXPOSITION AVE TO (FUTURE) E. FORD DR.
PHASE 1 SHALL INCLUDE THE CONSTRUCTION OF POND G, POND F, POND H, POND I,
THE REGIONAL DETENTION POND H-2, AND THE CHANNEL FROM THE REGIONAL DETENTION
POND TO TRUSSVILLE ST
OPEN SPACE TRACTS EAST OF POWHATON RD SHOWN WITHIN PHASE 1 SHALL BE
CONSTRUCTED IN PHASE 1

PHASE 2:

PHASE 2 SHALL INCLUDE THE FOLLOWING ROADWAYS AND ADJACENT HOMES WHERE APPLICABLE:

WEST HALF OF S. TRUSSVILLE ST. FROM PR. DRAINAGE CHANNEL TO THE PR. SOUTHEAST
ROUNDABOUT

NORTH HALF OF E. MISSISSIPPI AVE. FROM POWHATAN RD TO PR. SOUTHEAST
ROUNDABOUT

EAST HALF OF POWHATAN RD. FROM E. FORD DR. TO E. MISSISSIPPI AVE.
E. FORD DR. FROM POWHATAN RD. TO S. RIVERWOOD ST.

S. ROBERTSDALE ST. FROM S. RIVERWOOD ST. TO MISSISSIPPI AVE.

PHASE 2 SHALL INCLUDE THE CONSTRUCTION OF THE NEIGHBORHOOD PARK AND PUBLIC ART
INSTALLATION

OPEN SPACE TRACTS EAST OF S. TRUSSVILLE ST. AND NORTH OF E. MISSISSIPPI AVE. SHOWN
WITHIN PHASE 2 SHALL BE CONSTRUCTED IN PHASE 2.

PHASE 3:

PHASE 3 SHALL INCLUDE THE FOLLOWING ROADWAYS AND ALL ADJACENT HOMES:
S. RIVERWOOD ST.
E. WALSH PL.
E. ADA PL.
S. QUANTOCK ST.
S. QUEENSBURG CT.
E. KENTUCKY PL.

PHASE 4:

PHASE 4 SHALL INCLUDE THE FOLLOWING ROADWAYS AND ALL ADJACENT HOMES:
S. ROBERTSDALE CT. FROM S SCOTTSBURG CT. TO E. ADA DR.
S. SCOTTSBURG CT. FROM EXPOSITION AVE. TO E. ADA DR.
E. ADA DR.
S. SHADY GROVE ST. FROM E. ADA DR. TO SOUTH EDGE OF PR. DRAINAGE CHANNEL

PHASE 5:

PHASE 5 SHALL INCLUDE THE FOLLOWING ROADWAYS AND ALL ADJACENT HOMES:
S. QUANTOCK CT. FROM E. FORD DR. TO E. TENNESSEE DR.
E. TENNESSEE DR. TO S. ROBERTSDALE ST.
E. MISSISSIPPI DR. TO S. ROBERTSDALE ST.
E. TENNESSEE PL. FROM S. QUANTOCK CT.

PHASE 6:

PHASE 6 SHALL INCLUDE THE FOLLOWING ROADWAYS AND ALL ADJACENT HOMES:
E. MISSISSIPPI DR. FROM S. ROBERTSDALE ST. TO S. TITUS CT
S. TITUS CT.
E. FORD PL.
S. ROBERTSDALE CT. FROM E. MISSISSIPPI DR. TO E. FORD PL.
S. FITZSBURG CT. FROM E. FORD PL. TO E. MISSISSIPPI DR.
S. SHADY GROVE, FROM SOUTH EDGE OF PR. DRAINAGE CHANNEL TO E. TENNESSEE DR.
E. TENNESSEE DR. FROM S. SCOTTSBURG CT. TO TRUSSVILLE RD
E. TENNESSEE PL. FROM S. SHADY GROVE ST.

<div>SHEET NUMBER</div> <div>5.0</div>	DRAWN BY:	SCALE: AS SHOWN	<div>HARMONY SUBDIVISION CIVIL SITE PLAN NO. 5 PHASING PLAN</div>	<div>MelcorITC Aurora, LLC C/O Marathon Land Company 9750 W. Cambridge Place Littleton, CO 80127 Tel: (303) 923-9940 Fax: (303) 920-9440</div>	<div><div>Westwood</div><div>10333 E DRY CREEK RD. SUITE 240 ENGLEWOOD, CO 80112 TEL: 720.482.2526</div><div>Westwoodps.com Westwood Professional Services, Inc.</div></div>					
	CHECKED BY:	FILE NO:								
	BPW	8130214922								
	DATE:									
		MAY, 2022								
No.	Revisions	Date	Init.	Appr.	Date					



LSC TRANSPORTATION CONSULTANTS, INC.

1889 York Street
Denver, CO 80206
(303) 333-1105
FAX (303) 333-1107
E-mail: lsc@lscdenver.com

April 29, 2022

Mr. James Spehalski
Marathon Land Company
9750 W. Cambridge Place
Littleton, CO 80127

comments provided on
07/05/22 seg

1. see comments throughout
report

2. for future reference
movement, approach and
total intersection LOS and
delay should be provided for
all signalized intersections

Responses by Chris McGranahan
LSC Transportation Consultants, Inc.
August 25, 2022

Re: Harmony Phase 5
Aurora, CO
LSC #210910

Dear Mr. Spehalski:

In response to your request, LSC Transportation Consultants, Inc. has prepared this traffic impact analysis for the proposed Harmony Phase 5 development. As shown on Figure 1, the site is located south of E. Exposition Avenue and east of S. Powhaton Road in eastern Aurora, Colorado.

REPORT CONTENTS

The report contains the following: the existing roadway and traffic conditions in the vicinity of the site including the lane geometries, traffic controls, posted speed limits, etc.; the existing weekday peak-hour traffic volumes; the existing daily traffic volumes in the area; the typical weekday site-generated traffic volume projections for the site; the assignment of the projected traffic volumes to the area roadways; the projected 2024 and 2040 background and resulting total traffic volumes on the area roadways; the site's projected traffic impacts; and any recommended roadway improvements to mitigate the site's traffic impacts.

RECENT TRAFFIC STUDIES


LSC prepared a traffic impact study (TIS) for the entire Harmony Master Plan dated March 9, 2017. LSC also prepared site-specific traffic reports for the ASP Harmony Ridge P-8 School, dated October 12, 2018, Harmony Phase 3, dated November 4, 2020, and Harmony Phase 4, dated July 16, 2021.

LAND USE AND ACCESS

Table 1 shows a comparison of the land uses assumed in the 2017 Master TIS and the existing, approved, currently proposed, and currently anticipated future land uses. Since completion of the Master TIS, Harmony Phases 1 and 2, which were included in the Master TIS as Planning Areas 1 and 2, have been approved and a majority of the homes within Phase 1 have been constructed. APS Harmony Ridge P-8 school, which was included in the Master TIS as Planning Area 17, and the Harmony Community Center, which was included in the Master TIS as Plan-


Summary of Comments on HarmonyPhase5-TIS_rev2 redlines With LSC Response (002).pdf

Page: 1


 Number: 1 Author: segomez Subject: Text Box Date: 7/5/2022 2:06:59 PM
comments provided on 07/05/22 seg

1. see comments throughout report

2. for future reference movement, approach and total intersection LOS and delay should be provided for all signalized intersections

 Author: kdferrin Subject: Sticky Note Date: 8/19/2022 5:15:03 PM
LSC Response:

1. See responses throughout
2. The additional information has been added to the level of service table

 Number: 2 Author: lsc Subject: Text Box Date: 8/25/2022 2:48:35 PM

Responses by Chris McGranahan
LSC Transportation Consultants, Inc.
August 25, 2022

Table 3 (Page 1 of 2)
95th Percentile Queue Lengths
Harmony Phase 5
Aurora, CO
LSC #210910; April, 2022


Intersection No. & Location	2040	Turn Lane Lengths Proposed ⁽¹⁾ (feet)	95th Percentile Queue Length	
	Assumed Posted Speed Limit (mph)		2040 Total	
			AM Peak (feet)	PM Peak (feet)
1) <u>S. Powhaton Road/E. Exposition Avenue</u>				
EB Left	35	200	33	46
EB Through/Right	35	---	18	19
WB Left	35	250	232	175
WB Through/Right	35	---	83	71
NB Left	45	275	5	8
NB Through	45	---	166	223
NB Right	45	275	19	36
SB Left	45	275	82	117
SB Through/Right	45	---	163	267
2) <u>E. Exposition Avenue/Phase 5 W. Access/Phase 4</u>				
NB Approach	25	---	10	15
EB Left	35	200	<3	3
WB Left	35	200	<3	3
EB Right	35	200	<3	<3
SB Approach	25	---	10	10
3) <u>E. Exposition Avenue/Phase 5 E. Access/Phase 4 E. Access</u>				
NB Approach	25	---	8	5
EB Left	35	200	<3	3
WB Left	35	200	<3	<3
EB Right	35	200	<3	<3
SB Approach	25	---	8	5
4) <u>E. Exposition Avenue/Trussville Road</u>				
EB Approach	35	---	25	50
WB Approach	35	---	50	25
NB Approach	35	---	25	25
SB Approach	35	---	<3	<3
5) <u>S. Powhaton Road/RIRO Access</u>				
NB Right	45	275	<3	<3
WB Right	25	---	3	3
6) <u>Trussville Road/North Site Access/Future Access</u>				
NB Left	35	200	<3	<3
EB Approach	25	---	3	<3
WB Approach	25	---	3	3
SB Left	35	200	<3	<3

Notes:


- (1) Auxiliary turn lane lengths on arterial roadways are based on 45 mph and the NR-B classification in the *CDOT State Highway Access Code* and the 95th percentile queue length. A redirect taper of 45:1 is appropriate for 45 mph and 20:1 for 35 mph. The lengths shown are consistent with Recommended Improvements shown in Table 9.

No Table 9

1

 Number: 1 Author: segomez Subject: Callout Date: 7/5/2022 1:41:13 PM

No Table 9

 Author: kdferrin Subject: Sticky Note Date: 8/17/2022 8:50:05 AM

LSC Response: The reference has been updated to the correct table number


Table 6 (1 of 2)
Recommended Improvements to Public Street Network
Harmony Phase 5
Aurora, CO
LSC #210910; April, 2022


Inter-section No.	Intersection Location	Recommended Improvements by 2024 ⁽¹⁾	Responsibility	Recommended Improvements by 2040 ⁽¹⁾	Responsibility
	S. Powhatan Road	Construct east half of the ultimate cross section	Harmony Phase 5	Construct west half of the ultimate cross section	Others
	E. Exposition Avenue	Construct the north half between S. Powhatan Road and Monaghan Road Construct the south half between S. Powhatan Road and Trussville Road	Harmony Phase 4 Harmony Phase 5	Construct west of S. Powhatan Road and east of Monaghan Road	Others
	E. Mississippi Avenue	Construct north half of the ultimate cross section between S. Powhatan Road and Trussville Road	Harmony Phase 5	Construct south half of the ultimate cross section between S. Powhatan Road and Trussville Road Construct west of S. Powhatan Road and east of Trussville Road	Others Others
	Trussville Road	Construct between E. Exposition Avenue and E. Alameda Avenue Construct the west half between E. Mississippi Avenue and E. Exposition Avenue	Harmony Phase 4 Harmony Phase 5	Construct south of E. Mississippi Avenue	Others
#1	S. Powhatan Road/ E. Exposition Avenue	WB LT - construct lane - 1 @ 250 feet and 120-foot transition taper	Harmony Phase 4	EB LT - construct lane - 1 @ 200 feet and 120-foot transition taper for each	Others
		NB RT - construct lane - 1 @ 275 feet and 160-foot transition taper	Harmony Phase 4	NB LT - construct lane - 1 @ 275 feet and 160-foot transition taper	Others
		SB LT - construct lane - 1 @ 275 feet and 160-foot transition taper	Harmony Phase 4	WB to NB RT Accel - construct lane - 1 @ 390 feet and 160-foot transition taper	Applicant
				Traffic signalization when warranted	Applicant/Others
#2	E. Exposition Avenue/ West Site Access	EB LT - construct lane 1 @ 200 feet and 120-foot transition taper	Harmony Phase 4		
		EB RT - construct lane 1 @ 200 feet and 120-foot transition taper	Harmony Phase 5		
		WB LT - construct lane - 1 @ 200 feet and 120-foot transition taper	Harmony Phase 5		
#3	E. Exposition Avenue/ East Site Access	EB LT - construct lane 1 @ 200 feet and 120-foot transition taper	Harmony Phase 4		
		EB RT - construct lane 1 @ 200 feet and 120-foot transition taper	Harmony Phase 5		
		WB LT - construct lane - 1 @ 200 feet and 120-foot transition taper	Harmony Phase 5		
#4	E. Exposition Avenue/ Trussville Road	Construct as modern one-lane roundabout	Harmony Phase 4		
#5	S. Powhatan Road/ Right-In/Right-Out Access	NB RT - construct lane - 1 @ 275 feet and 160-foot transition taper	Harmony Phase 5		
#6	Trussville Road/ Site Access	NB LT - construct lane 1 @ 200 feet and 100-foot transition taper (or stripe Trussville Road with a center two-way left-turn lane)	Harmony Phase 5	SB LT - construct lane 1 @ 200 feet and 100-foot transition taper (or stripe Trussville Road with a center two-way left-turn lane)	Others

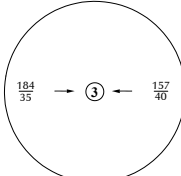
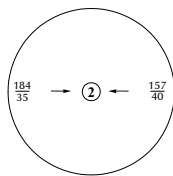
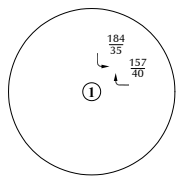
applicant same as
Harmony Phase 5?
Make consistent, typ.

1

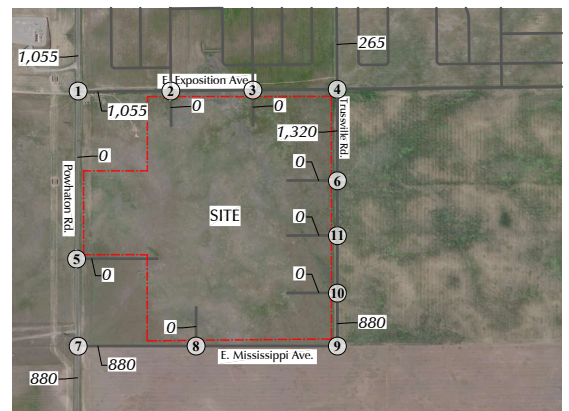
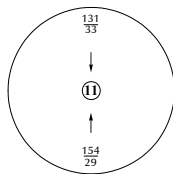
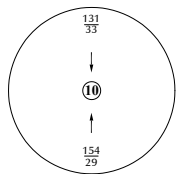
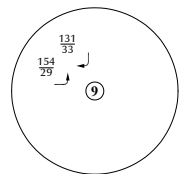
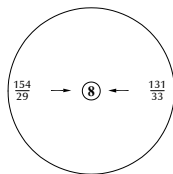
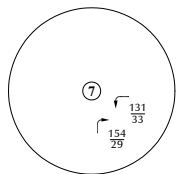
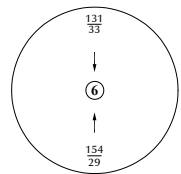
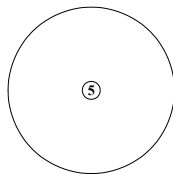
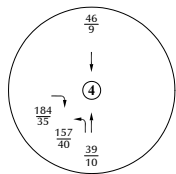
(1) A transition taper of 13.5:1 was used for S. Powhatan Road and E. Mississippi Avenue based on a posted speed limit of 45 mph (160 feet). Dual left-turn lanes have transition taper lengths of 325 feet. An appropriate redirect taper for 45 mph is 45:1
A transition taper of 10:1 was used for Trussville Road and E. Exposition Avenue based on a posted speed limit of 35 mph (120 feet). An appropriate redirect taper for 35 mph is 20:1

 Number: 1 Author: segomez Subject: Callout Date: 7/5/2022 2:01:21 PM
applicant same as Harmony Phase 5?. Make consistent, typ.

 Author: kdferrin Subject: Sticky Note Date: 8/17/2022 8:50:20 AM
LSC Response: Revised as requested




LEGEND:
 $\frac{26}{35}$ = AM Peak Hour Traffic
 $\frac{35}{40}$ = PM Peak Hour Traffic
 1,000 = Average Daily Traffic




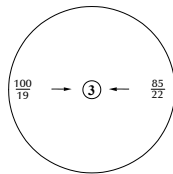
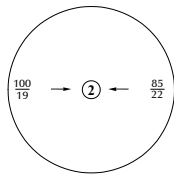
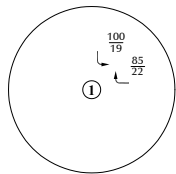
1 2024 total site traffic graphic

Figure 9
 Year 2024 Assignment of
 School Site-Generated Traffic
 Harmony Phase 5 (LSC #210910)

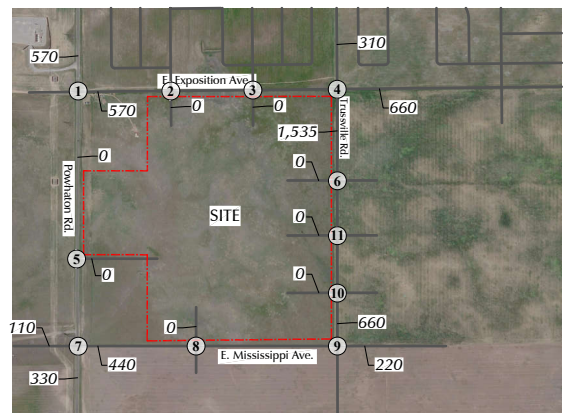
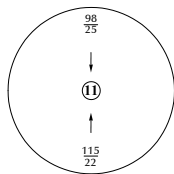
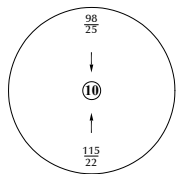
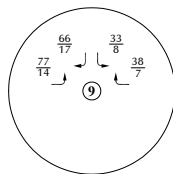
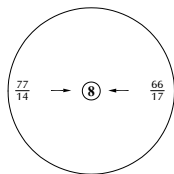
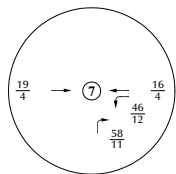
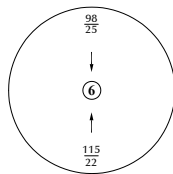
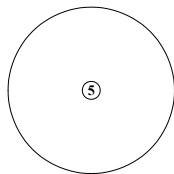
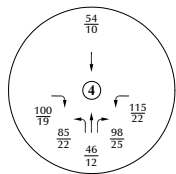


 Number: 1 Author: segomez Subject: Text Box Date: 7/5/2022 1:12:48 PM
add 2024 total site traffic graphic

 Author: kdferrin Subject: Sticky Note Date: 8/17/2022 8:50:37 AM
LSC Response: The additional graphic has been added as requested



LEGEND:
 $\frac{26}{35}$ = AM Peak Hour Traffic
 $\frac{35}{22}$ = PM Peak Hour Traffic
 1,000 = Average Daily Traffic

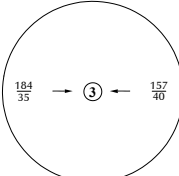
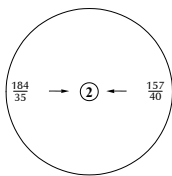
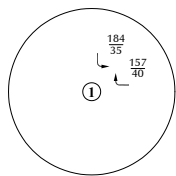


1 2040 total site traffic graphic

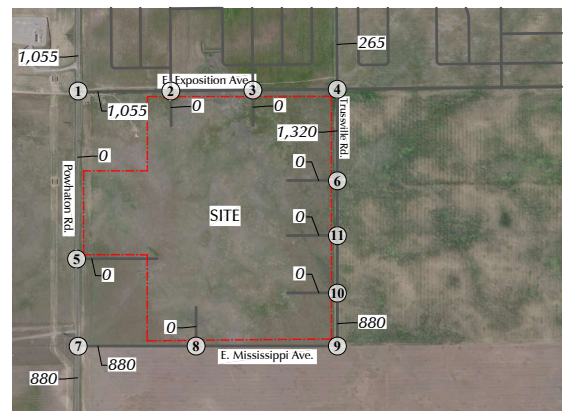
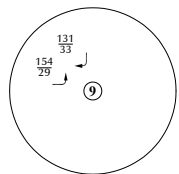
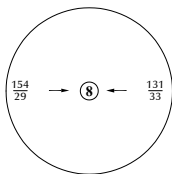
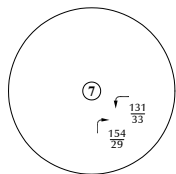
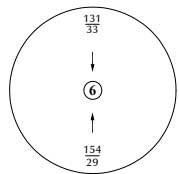
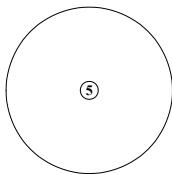
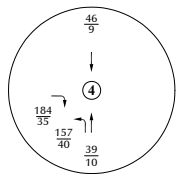


Figure 11
 Year 2040 Assignment of
 School Site-Generated Traffic
 Harmony Phase 5 (LSC #210910)

Page: 29



LEGEND:
 $\frac{26}{35}$ = AM Peak Hour Traffic
 $\frac{26}{35}$ = PM Peak Hour Traffic
 1,000 = Average Daily Traffic



add 2024 total site traffic graphic



Figure 9
 Year 2024 Assignment of
 School Site-Generated Traffic
 Harmony Phase 5 (LSC #210910)

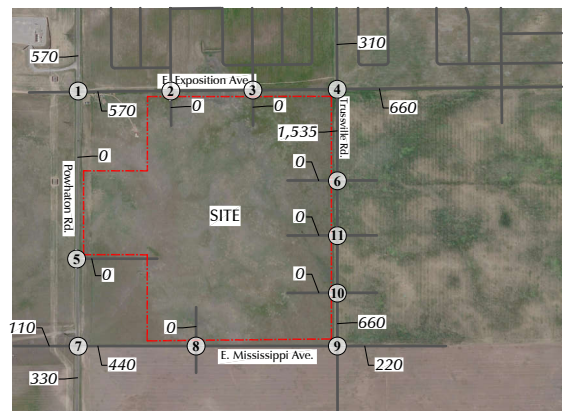
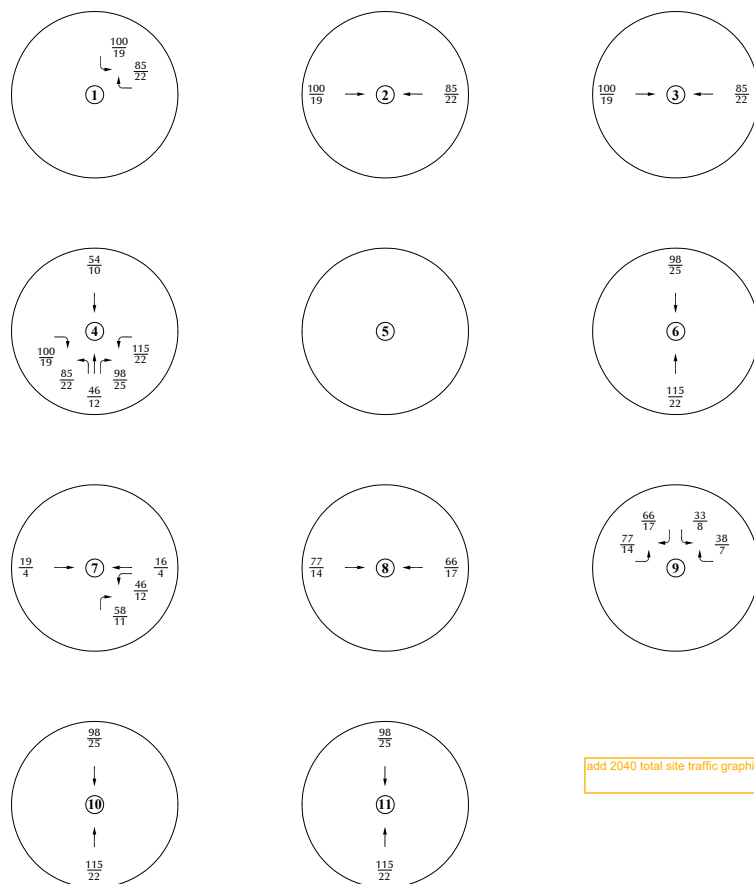
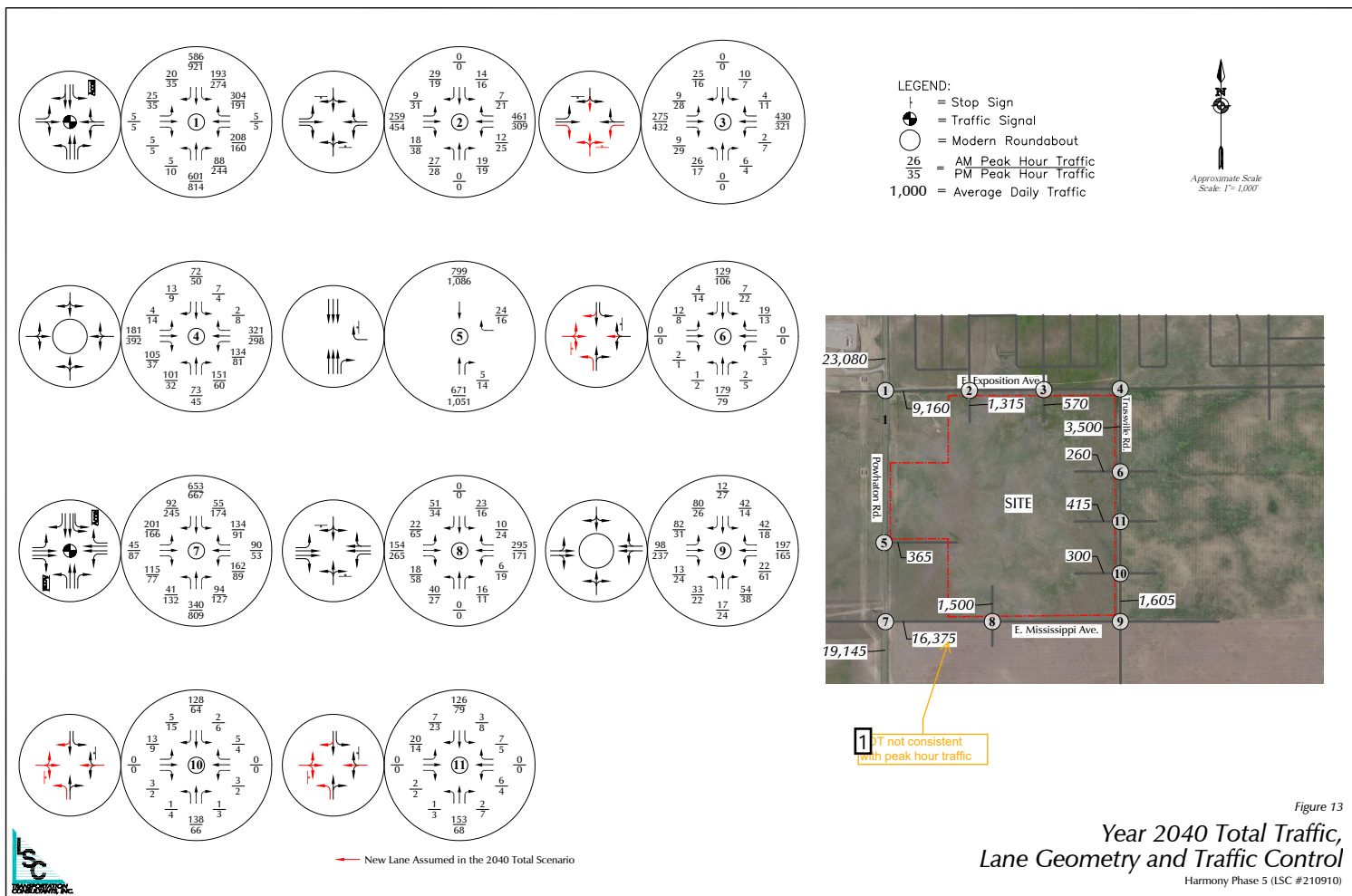



Figure 11


*Year 2040 Assignment of
School Site-Generated Traffic*

Harmony Phase 5 (LSC #210910)

LSC Response: The additional graphic has been added as requested




 Number: 1 Author: segomez Subject: Callout Date: 7/5/2022 1:17:15 PM
ADT not consistent with peak hour traffic


 Author: kdferrin Subject: Sticky Note Date: 8/19/2022 7:46:54 AM
LSC Response: A typographical error has been corrected

Key Pages from Harmony Master TIA

add relevant pages from NEATS i.e.
2040 traffic volumes

1

 Number: 1 Author: segomez Subject: Text Box Date: 7/5/2022 1:42:33 PM
add relevant pages from NEATS i.e. 2040 traffic volumes

 Author: kdferrin Subject: Sticky Note Date: 8/17/2022 8:50:56 AM
LSC Response: Added as requested
