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(e•a)

THE GROVE OUTLOT A, SOUTHWEST VILLAGE 1ST ADD.

GRADING & EROSION LEGEND

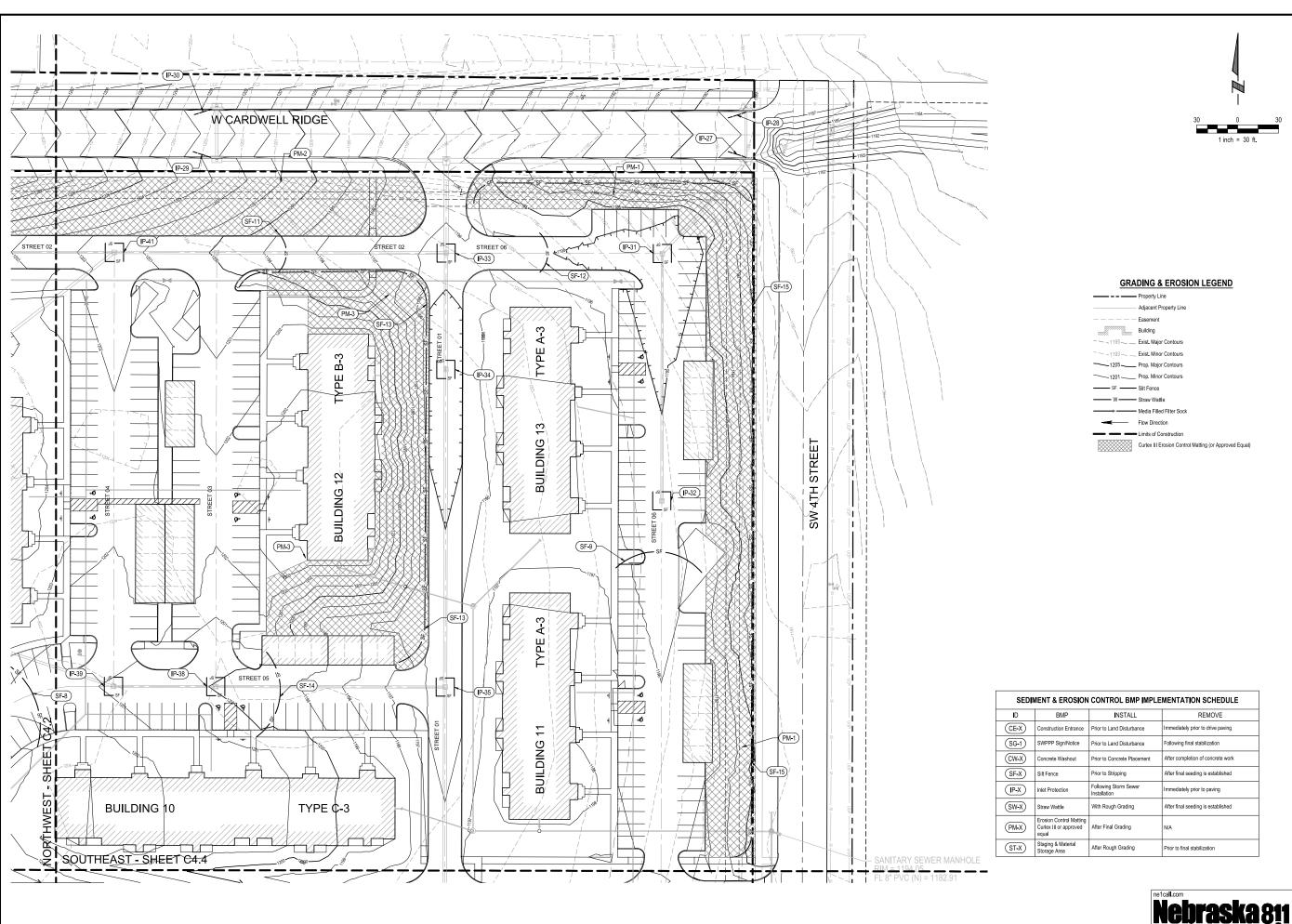
__ Exist. Major Contours - Limits of Construction

Curlex III Erosion Control Matting (or Approved Equal)

| SEDIMENT & EROSION CONTROL BMP IMPLEMENTATION SCHEDULE | | | | | | | |
|--|--|---------------------------------------|------------------------------------|--|--|--|--|
| ID | BMP | INSTALL | REMOVE | | | | |
| CE-X | Construction Entrance | Prior to Land Disturbance | Immediately prior to drive paving | | | | |
| SG-1 | SWPPP Sign/Notice | Prior to Land Disturbance | Following final stabilization | | | | |
| CW-X | Concrete Washout | Prior to Concrete Placement | After completion of concrete work | | | | |
| SF-X | Silt Fence | Prior to Stripping | After final seeding is established | | | | |
| IP-X | Inlet Protection | Following Storm Sewer Installation | Immediately prior to paving | | | | |
| (SW-X) | Straw Wattle | With Rough Grading | After final seeding is established | | | | |
| PM-X | Erosion Control Matting Curlex III or approved equal | After Final Grading | N/A | | | | |
| (ST-X) | Staging & Material Storage Area | After Rough Grading | Prior to final stabilization | | | | |





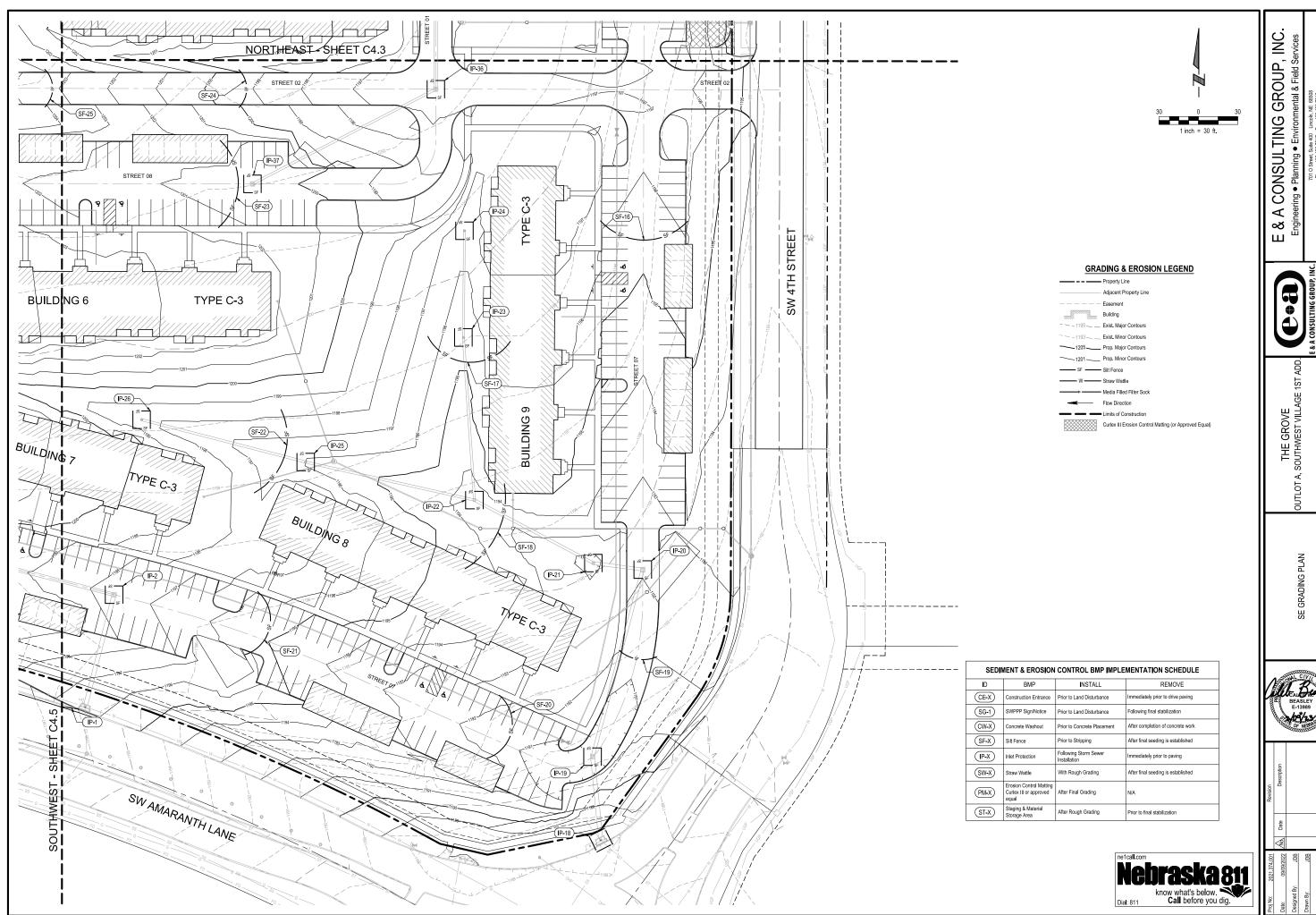


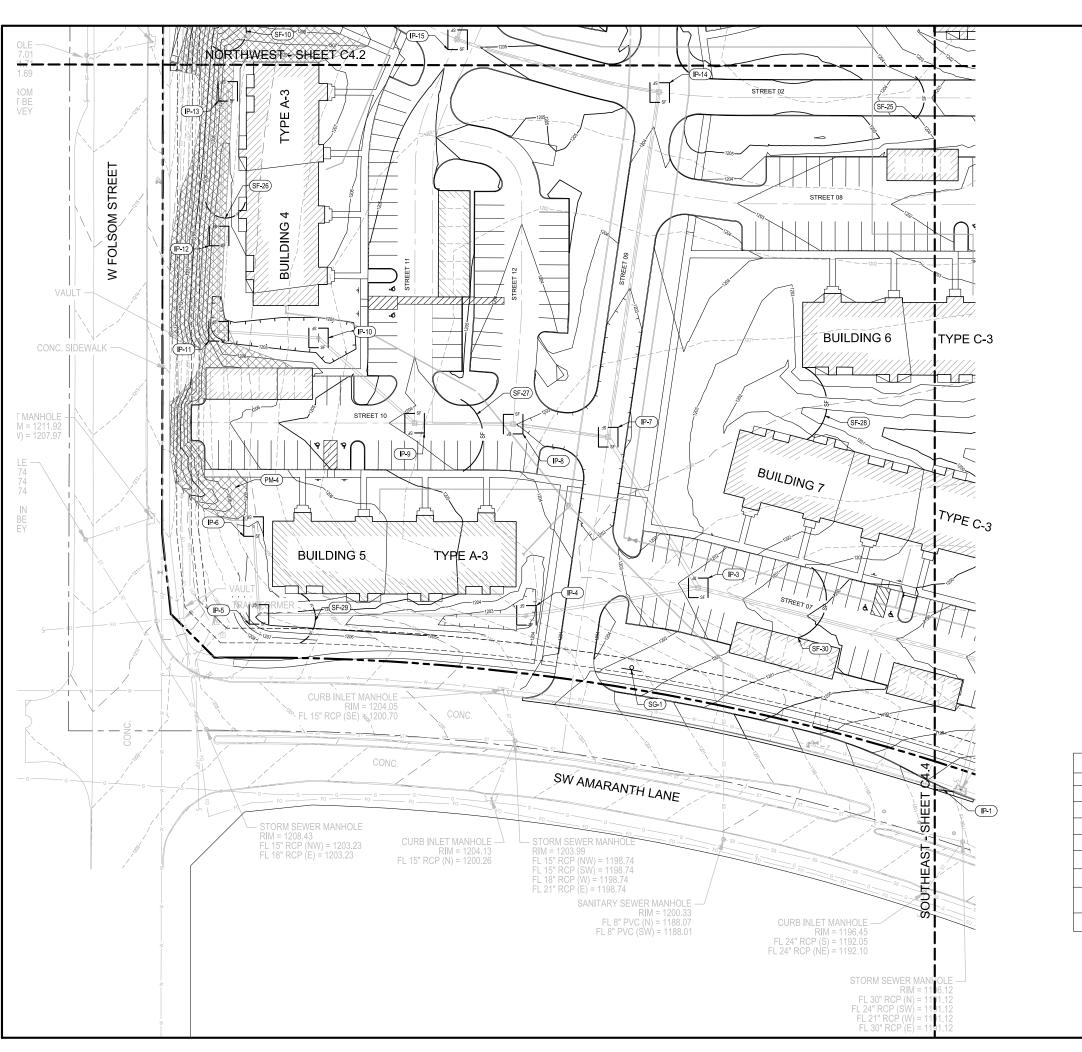


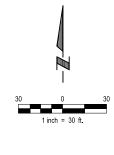
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GRADING & EROSION LEGEND

- Easement - - 1195 __ _ Exist. Major Contours 1205 Prop. Major Contours

Limits of Construction

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ADD.

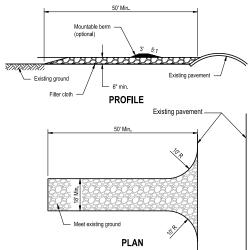
THE GROVE OUTLOT A, SOUTHWEST VILLAGE 1ST .

<u>NOTES</u>

- Acceptable silt fence specifications- AOS (#20 50 Sieve) Water Flow Rate (50 gpm/ sq. ft. - 125 gpm/ sq.ft), Tensile Strength (Grab) - (Min. 120 Warp or greater and
- On each new run of silt fence spray paint the beginning of the run with 0+00 and spray paint the end with the date of installation and LF of the run.
- Silt fence should be securely fastened to each steel support post or to woven wire which is in turn attached to the steel fence posts. A minimum of 3 ties are required for each post. To be located in the top 12"of the silt fence.
- Steel posts which support the silt fence shall be installed on a slight angle toward the anticipated runoff source.

 (Indine all posts 20° Max. from vertical, toward flow)
- Silt fence shall be trenched in with a silt fence plow so that the downslope face of the trench is flat and perpendicular
- Silt fence shall be removed when it has served its usefulness so as not to block or impede storm flow or
- Sediment trapped by this practice shall be uniformly distributed on the source area prior to topsoiling.

SILT FENCE NOT TO SCALE



NOTES

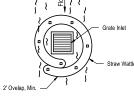
- 1. The stone size shall be 2" diameter or a reclaimed
- broken concrete equivalent.

 2. Contractor to construct the road to the length required

- Contractor to construct the road to the length required but not less than 50.
 The thickness of the stone shall be 6°.
 The width of the construction entrance shall be 18' minimum, but in no case less than the full width at points where ingress and egress occurs.
 Filter doth will be placed over the entire area prior to placing of stone, filter will not be required on a single family residence lot.
 All surface runoff flowing or diverted towards the construction entrance shall be nined across the
- construction entrance shall be piped across the
- construction entrance shall be piped across the entrance, if piping is impractical, a mountable berm with 5h:1v will be permitted. The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public inflhs-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanury of any massives used to the sediment. and/or cleanout of any measures used to trap sediment. all sediment spilled, dropped, tracked, or washed onto
- public rights of way must be removed immediately.

 Wheels shall be cleaned to remove sediment prior to entrance onto public right- of-way, when washing is required, it shall be done on an area stabilized with stone which drains into an approved sediment trapping

STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE



INLET PROTECTION - PLAN VIEW NOT TO SCALE

Compact trench soil at 4" spacing or as specified

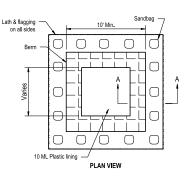
WATTLE SECTION VIEW NOT TO SCALE

NOTES:

- Install wattle on the contour at a constant elevation.

 Space stakes at 4' max. Install additional stakes as necessary to prevent movement and undermining
 - STRAW WATTLE INSTALLATION DETAIL NOT TO SCALE

Shape area around washout to prevent surface runoff from entering Secure entire perimeter of plastic liner with Excavate and/or berm soil or other media to establish required depth SECTION A-A *Concrete washout referenced from: CALIFORNIA STORMWATER BMP HANDBOOK, CONSTRUCTION.



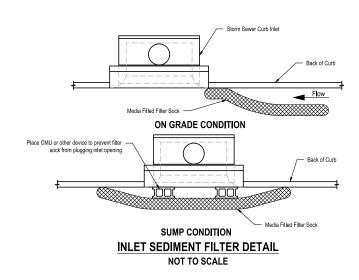
NOTES

- 1. Temporary concrete washout facilities shall be located a minimum of 50 ft from storm drain inlets, open drainage facilities, and watercourses. each facility shall be
- located away from construction traffic or access to prevent disturbance or tracking.

 2.A sign shall be installed adjacent to each washout facility for inform concrete equipment operators to utilize the proper facilities.

 3. Temporary concrete washout facilities shall be constructed and maintained in sufficient quantity and size to contain all fiquid and concrete washes facilities.
- Temporary concrete washout facilities shall be constructed and maintained in sufficient quantity and size to contain all liquid and concrete waste generated by washout operations.
 Washout of concrete trucks shall be performed in designated areas only.
 Chorly concrete from mixer truck chutes shall be washed into concrete washout. Concrete washout from concrete pumper bins can be washed into concrete pumper trucks and discharged into designated washout area or properly disposed of offsite.
 Choice concrete wastes are washed into the designated area and allowed to harden, the concrete shall be broken up, removed, and disposed of properly.
 TLath and flagging shall be of the commercial type.
 Plastic lining materials shall be a minimum of 10 mil polyethylene sheeting and shall be free of holes, tears, or other defects that compromise the impermeability of the

CONCRETE WASHOUT NOT TO SCALE



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DETAILS



GRADING AND SWPPP GENERAL NOTES

- All project procedures, materials, bonds and reserves shall conform to the City of Lincoln's 2023 Standard Specifications, and any additions thereto. It will be the responsibility of the Contractor to be aware of the contents of the aforementioned specifications. The aforementioned publication can be found at: https://www.lincoln.ne.gov/City/Departments/LTU/Transportation/Standards/Standard-Specs
- 2. Barricades shall conform to 2023 Lincoln Standard Plans, Specifications, Traffic Control Guidelines, and/or the "Manual on Uniform Traffic Control Devices", and any additions thereto, whichever is more stringent.
- 3. Utilities are shown as a convenience for the Contractor. The locations of all aerial and underground utilities may or may not be indicated in these plans. The Contractor shall notify all utility companies before work is started to verify utility locations. No excavation will be permitted in the area until all utilities have been located and identified to the satisfaction of all parties and then, only with extreme care to avoid any possibility of damage. The Contractor will be responsible for repair of utilities damaged during construction
- 4. The Contractor shall maintain positive drainage in existing road ditches and culverts draining into the project area.
- Topsoil shall be stripped to a depth of at least 6" and stockpiled on site for ribution in future unpaved areas upon completion of grading. The location of the stripping stockpiles are at the discretion of the Contractor: however, stockpiles must be located within an area protected by stormwater pollution prevention
- 6. Following stripping operations and removal of any observed unsuitable soils, the exposed soils shall be proof-rolled with a fully loaded, tandem axle dump truck providing a minimum gross weight of 25 tons, or other equipment with an equivalent subgrade loading. Unsuitable soils observed during proof rolling shall be improved by scarification to a minimum 9" depth and re-compacted. Scarified soils which cannot be re-compacted to there recommended degree shall be undercut and replaced with stable fill
- 7 Fill placed on a slope steeper than a 5H:1V shall be benched before placing fill, with a maximum riser height on the order of 2', separated by horizontal steps that are wide enough to accommodate compaction equipment
- 8. Fill and backfill material shall be impervious material (clay/silt), free of frost, snow. ice, concrete, brick, stone, refuse, cinder ashes, organic matter, or any other material deemed unsuitable by the Engineer.
- 9 Diversion berms and ditches shall be constructed as necessary throughout the term of the project to properly control sediment erosion and protect adjacent properties as directed by the Engineer. This work will not be paid for directly but shall be subsidiary to items for which direct payment is made.
- 10. Existing ditches and eroded areas shall be undercut a minimum of 12 inches on all bottoms and sides prior to placement of any fill. Separate payment will not be made
- 11. The Contractor shall monitor perimeter silt fencing and install additional silt fencing if necessary or as directed by the Engineer. Payment shall be made at the unit price for "Install Silt Fence". (See the Erosion Control Feature Maintenance Schedule).
- 12. No tree removal shall occur between April 1 and July 15, unless a migratory bird inventory has been completed and no nesting of migratory birds is found. Tree removal between June 1 and July 31 shall further require a bat roosting inventory.
- 13. The Contractor shall comply with all OSHA regulations.
- 14. The Owner retains salvage rights to all buildings structures, and the contents therein; however, the Contractor is responsible for the demolition and removal of all structures following the salvage operations.
- 15. The Contractor shall obtain all necessary demolition permits prior to beginning
- 16. The cost of the demolition permit, pre-demolition inspections, utility disconnect expenses, and any other expenses necessary to comply with demolition permits and regulations shall be paid for by the Contractor
- 17 The Contractor shall obtain all necessary nermits
- 18. The Contractor shall maintain and preserve utilities traversing and servicing premises as long as those utilities are required
- 19. Where open excavations are not backfilled within 24 hours, the Contractor shall encircle the open area by a standard snow fence.
- 20. All rubbish, unsuitable material, debris, equipment, etc., resulting from demolition work shall be disposed of properly and in a legal manner.
- 21. The Contractor shall control dust during demolition and removals.

| TEMPORARY SEEDING SPECIES & RATES | | | | |
|---------------------------------------|---------------|--|--|--|
| Species | Seeding Rate | | | |
| Spring Oats ^{1,3} | 2 bu./Ac. | | | |
| Barley ^{1,3} | 2 bu./Ac. | | | |
| Perennial Ryegrass ¹ | 30-40 lbs/Ac. | | | |
| Orchard Grass ¹ | 20-25 lbs/Ac. | | | |
| Grain Sorghum (drilled) ² | 10-20 lbs/Ac. | | | |
| Forage Sorghum (drilled) ² | 10-20 lbs/Ac. | | | |
| Hybrid Sundangrass ² | 20-30 lbs/Ac. | | | |
| Winter Wheat ⁴ | 1.5 bu./Ac. | | | |
| Winter Rye ⁴ | 1.5 bu./Ac. | | | |
| | | | | |

March 15 - May 15

² May 16 - July 15

3 July 16 - October 15 ⁴ August 16 - October 15

October 15 - March 15 No Planting, Use Mulches

MONITORING & RECORDS:

- Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. If the permit has requirements related to sewage sludge use and disposal activities, corresponding records must be retained for a period of at least five years (or longer as required by 40 CFR Part 503). This period may be extended by request of the Director at any
- Records of monitoring information shall include:
- The date(s), exact place, time and methods of sampling or measurements; c.2.
- The individual(s) who performed the sampling or mea The date(s) analyses were performed;
- The individual(s) who performed the analyses; The analytical techniques or methods used; and
- The results of such analyses
- Monitoring must be conducted according to test procedures approved under NDEE Title 119, Chapter 27 002 unless another method is required under 40 CFR Subchapters N - Effluent Guidelines and Standards Parts 425 to 471 or O - Sewer Sludge Parts 501 and 503.
- e. Falsifies, Tampers, or Knowingly Renders Inaccurate.
- On actions brought by EPA, the CWA provides that any person who falsifies, tampers with, orknowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction: be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years or both. If a conviction of a person is for a violation committed after a first conviction of such person under this section, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years,
- On action brought by the State, The Nebraska Environmental Protection Act provides that any personwho falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished pursuant to Neb. Stat. §81-1508.01.
- f. The Department may require increases in the monitoring frequencies set forth in this permit to address new information concerning a discharge, evidence of potential noncompliance, suspect water quality in a discharge, evidence of water quality impacts in the receiving stream or waterway, or other similar concerns. The Department may require monitoring for additional parameters not specified in this permit to address new information concerning a discharge, evidence of potential noncompliance suspect water quality in a discharge, evidence of water quality impacts in the receiving stream or waterway, or other similar concerns

ALLOWABLE NON-STORM WATER DISCHARGES:

The permittee is authorized for the following

- Discharges from firefighting activities Fire Hydrant Flushings:
- Water used to wash vehicles where detergents are not used
- Water used to control dust
- Potable water including uncontaminated water line flushings:
- Routine external building wash down that oes not use detergents:
- Pavement wash water where spills or leaks of toxic or harzardous material have not occured (unless all spilled material has been recovered) and where detergents are not used;
- Uncontaminated air conditioning or compressor condensate;
- Uncontaminated groundwater or spring water:
- Foundation or footing drains where flows are not contaminated with process materials such as solvent; and
- Landscape irrigation.

SEDIMENT AND EROSION CONTROL MAINTENANCE REQUIREMENTS

Construction may require the disturbance of existing drainage and erosion control measures. The CONTRACTOR shall make himself aware of the existing drainage and erosion control measures prior to bidding this work. A copy of the Grading and Erosion Control Plan is available for review at the office of the Engineer. The function of these items must be maintained throughout construction with emphasis place don restoring their integrity prior to any rainfall event. Erosion control improvements have been constructed on this site, including terraces, silt fencing, and temporary sediment basins. The CONTRACTOR shall be responsible for prompt reconstruction of any erosion control improvements disturbed by his operations. All disturbed erosion control improvements shall be fully reconstructed at the end of each working day prior to leaving the site.

The CONTRACTOR must adhere to good housekeeping best management practices at all times. Good housekeeping best management practices focus on keeping the work site clean and orderly while handling materials and waste in a manner that eliminates the potential for pollutant runo

The Contractor shall seed all non-payed areas disturbed by construction

The Contractor shall place silt fence as shown and as directed by the Engineer to prevent sediment from leaving the construction site.

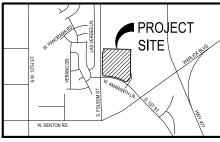
INSPECTION/MAINTENANCE SCHEDULE:

The following Maintenance Schedule has been provided. The INSPECTOR must perform the Inspections. Inspections shall be conducted according to one of the following

- A minimum of once every seven days, excluding business hours.
- Within 24 hours after a 1/4" rainfall event or the occurrence of runoff from snow melt sufficient to cause a discharge, excluding non-business hours.

The following Maintenance Schedule has been provided. The OPERATOR/CONTRACTOR must perform all needed maintenance. Furthermore, all erosion control features requiring maintenance may not be listed below. The OPERATOR/CONTRACTOR and INSPECTOR must perform their respective duties on all BMP's that are not listed below as well.

- Construction Entrance The entrance shall be maintained in a condition which will prevent tracking or flow of sediment onto public rights-of-way. This may require periodic top dressing with additional stone or the washing and reworking of existing stone as conditions demand and repair and/or cleanout of any structures used to trap sediment. All materials spilled, dropped, washed, or tracked from vehicles onto roadways or into storm drains must be removed immediately. The use of water trucks to remove materials dropped, washed, or tracked onto roadways will not be permitted under any circumstances
- Silt Fence The maintenance measures are as follows; (2.1) silt fences shall be inspected immediately after each rainfall and at least daily during prolonged rainfall, any required repairs shall be made immediately; (2.2) close attention shall be paid to the repair of damaged silt fence resulting from end runs and undercutting; (2.3) should the fabric on a silt fence decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly; (2.4) sediment deposits must be removed when the level of deposition reaches approximately one-half the height of the barrier; and (2.5) any sediment deposits remaining in place after the silt fence is no longer required shall be dressed to conform to the existing grade, prepared and seeded.
- Storm Drain Inlet Protection The maintenance measures are as follows; (3.1) structures shall be inspected after each rain and repairs made as necessary and (3.2) structures shall be removed and the area stabilized when the remaining drainage area has been properly stabilized.
- Temporary Seeding Areas which fail to establish vegetative cover adequate to nt rill erosion will be re-seeded as soon as such areas are identified. Control
- Permanent Seeding The maintenance measures are as follows: (9.1) in general, a stand of vegetation cannot be determined to be fully established until it has been maintained for one full year after planting; (9.2) new seedlings shall be supplied with adequate moisture, supply water as needed, especially late in the season, in abnormally hot or dry conditions, or on adverse sites, water applications shall be controlled to prevent excessive runoff; (9.3) inspect all seeded areas for failures and make necessary repairs, replacements, and reseedings within the planting season, if possible: [9,3a] if stand is inadequate for erosion control, over seed and fertilize using half of the rates originally specified; [9.3b] if stand is 60% damaged, re-establish following seedbed and seeding recommendations; [9.3c] if stand has less than 40% cover, re-evaluate choice of plant materials and quantities of lime and fertilizer, the soil must be tested to determine if acidity or nutrient imbalances are responsible, re-establish the stand following seedbed and seeding
- Mulching All mulches and soil coverings should be inspected periodically (particularly after rainstorms) to check for erosion. Where erosion is observed in mulched areas, additional mulch should be applied. Nets and mats should be inspected after rainstorms for dislocation or failure. If washouts or breakage occur, reinstall netting or matting as necessary after repairing damage to the slope or ditch. Inspections should take place until grasses are firmly established. Where mulch is used in conjunction with ornamental plantings, inspect periodically throughout the year to determine if mulch is maintaining coverage of the soil surface: repair as needed.
- Soil Stabilization Blankets & Matting All soil stabilization blankets and matting should be inspected periodically following installation, particularly after rainstorms to check for erosion and undermining. Any dislocation or failure should be repaired immediately. If washouts or breakage occurs, reinstall the material after repairing damage to the slope or ditch. Continue to monitor these areas until which time they become permanently stabilized; at that time an annual inspection should be
- Street Cleaning/Sweeping The maintenance measures are as follows; (12.1) evaluate access points daily for sediment tracking; (12.2) when tracked or spilled sediment is found on paved surfaces, it will be removed daily, during times of heavy track-out such as during rains, cleaning may be done several times throughout the day; (12.3) unknown spills or objects will not be mixed with the sediment; and (12.4) if sediment is mixed with other pollutants, it will be disposed of properly at an authorized landfill.



STORMWATER MANAGEMENT TEAM

DEVELOPER/OWNER: Edward Rose & Sons (269) 321-7836 Kirsten_Rimes@edwardrose.com

E & A Consulting Group, Inc. (402) 420-7217 ronnen@eacg.con

GENERAL CONTRACTOR: INSPECTOR:

VICINITY MAP

| SITE INFORMATION | | | | | | |
|---|-------------------------|---------------------------------------|---------------------|--|--|--|
| 11/01/2022 05/10/2024 Estimated Start Date Estimated End Date | | CSW-202207157 NDEE NOI Number | | | | |
| The Grove Apartments | | S. Folsom St. & W. Amaranth Ln. | | | | |
| Project Name | | Address | | | | |
| Southwest Village 6th Addition Subdivision Name | | LINCOLN City | LANCASTER County | | | |
| 40.74666°N Latitude | 96.72833°W Longitude | NERBASKA State | 68523 Zip Code | | | |
| Total Site Area (Acres) | 25.21 | Estimated Permit Duration (Months) 18 | | | | |
| Disturbed Area (Acres) | 25.21 | | | | | |
| Undisturbed Area (Acres) | 25.21 | | | | | |

CONSTRUCTION ACTIVITIES & SCHEDULING

APPROXIMATE END DATE ACTIVITY

Install all BMP's needed and associated with the Prior to any stripping of existing vegetation or grading. 12/10/2022 Grading Phase such as stabilized construction entrances, silt basins, riser pipes, outlet pipes, silt traps silt fence, diversions, terraces, etcetera

After Installing all BMP's needed and associated with 12/21/2022 Proceed with stripping of existing vegetation and grading in accordance with the grading plan, while the Grading Phase. Furthermore, INSPECTOR disturbing no more than is necessary. approval must be obtained before the start of any

Proceed with infrastructure installation. Infrastructure installation must occur prior to any development.

Implement the installation of Temporary Seeding, Permanent Seeding, and/or Mulching.

Stabilization measures must be initiated as soon as 09/10/2023 possible in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or

07/10/2023

Implement the Installation all BMP's needed and associated with the Building Phase

Proceed with removal of BMP's.

Building Phase BMP's must be installed concurrently 04/10/2024 with lot development

stripping of existing vegetation or grading.

BMP's may not be removed until each impacted drainage basin has been fully developed. Full development shall mean installation of pavement buildings, and utilities, landscaping, and fully established permanent seeding. Furthermore INSPECTOR approval must be obtained before the removal of any BMP's

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